STORMWATER POLLUTION PREVENTION PLAN

French-American School of New York

336 RIDGEWAY
CITY OF WHITE PLAINS, NEW YORK

Applicant/Operator/ Owner:

French-American School of New York
525 Fenimore Road
Mamaroneck, NY 10543

Prepared by:

Project 10170

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I. INTRODUCTION

This Stormwater Pollution Prevention Plan (SWPPP) has been prepared for the French-American School of New York (FASNY) and is intended to present the physical conditions, planning and engineering criteria as well as demonstrate that the development is designed in accordance with the requirements of the City of White Plains and the New York State Department of Environmental Conservation (NYSDEC) SPDES General Permit for Stormwater Discharges from Construction Activity (Permit No. GP-0-15-002). The SWPPP has been designed to ensure that the quantity and quality of stormwater runoff during and after development are not substantially altered from pre-development conditions.

The project includes a 640 student school on a ±28 acre property, previously occupied by the Ridgeway Country Club (RCC) at 336 Ridgeway, located between Gedney Esplanade and Ridgeway, in the City of White Plains in Westchester County, New York (hereinafter referred to as the "Site"). The location of the proposed improvements are within the portion of the Site between Ridgeway and Gedney Esplanade. In addition to the residential homes bordering the western edge of the property, the Site is adjoined by grass fields to the north and east, and Westchester Hills Golf Club across Ridgeway to the south.

II. STORMWATER MANAGEMENT PLANNING

In order to be eligible for coverage under the NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activity (Permit No. GP-0-15-002), effective January 29, 2015, the SWPPP includes stormwater management practices (SMP's) from the publication "New York State Stormwater Management Design Manual," last revised January 2015.

A SWPPP has been prepared for this project because it is a construction activity that involves soil disturbances of one (1) or more acres of land.

The proposed SMP’s have been designed such that the quantity and quality of stormwater runoff during and after construction are not adversely altered or are enhanced when compared to pre-

development conditions. Based on these criteria, the project and its SWPPP are eligible for coverage under SPDES General Permit GP-0-15-002, subject to approval by the City of White Plains as a designated Municipal Separate Storm Sewer System (MS4) under the general permit.

Based on the GIS information provided by the website of the New York State Office of Parks, Recreation and Historic Places, the Site does not contain, nor is it immediately adjacent to any properties listed on the State or National Register of Historic Places.

III. STUDY METHODOLOGY

Runoff rates were calculated based upon the standards set forth by the United States Department of Agriculture Natural Resources Conservation Service Technical Release 55, Urban Hydrology for Small Watersheds (TR-55), dated June 1986. The methodology set forth in TR-55 considers a multitude of characteristics for watershed areas including soil types, soil permeability, vegetative cover, time of concentration, topography, rainfall intensity, ponding areas, etc.

The 1, 10, 25, 50 & 100 year storm recurrence intervals were reviewed in the design of the stormwater management facilities (see Appendices A & B Existing & Proposed Hydrologic Calculations).
Anticipated drainage conditions were analyzed taking into account the rate of runoff which will result from the construction of buildings, parking areas and other impervious surfaces associated with the Site development.

Base Data and Design Criteria

For the stormwater management analysis, the following base information and methodology were used:

1. The Site drainage patterns and outfall facilities were reviewed by JMC personnel for the purpose of gathering background data and confirming existing mapping of the watershed areas.

2. An Existing Drainage Area Map was developed from the topographical survey. The drainage area map reflects the existing conditions within and around the project area.

3. A Proposed Drainage Area Map was developed from the proposed grading design superimposed over the topographical survey. The drainage area map reflects the proposed conditions within the project area and the existing conditions to remain in the surrounding area.

4. The United States Department of Agriculture (USDA) Web Soil Survey of the Site available on its website at http://websoilsurvey.nrcd.usda.gov.

5. The United States Department of Agriculture Natural Resources Conservation Service National Engineering Handbook, Section 4 - Hydrology", dated March 1985.

6. The United States Department of Agriculture Natural Resources Conservation Service Technical Report No. 55, Urban Hydrology for Small Watersheds (TR-55), dated June 1986.

7. United States Department of Commerce Weather Bureau Technical Release No. 40 Rainfall Frequency Atlas of the United States.

8. The time of concentration was calculated using the methods described in Chapter 3 of TR-55, Second Edition, June 1986. Manning's kinematics wave equation was used to determine the travel time of sheet flow. The 2-year 24 hour precipitation amount of 3.44 inches was used in the equation for all storm events. The travel time for shallow concentrated flow was computed using Figure 3-1 and Table 3-1 of TR-55. Manning's Equation was used to determine the travel time for channel reaches.

9. All hydrologic calculations were performed with the Bentley PondPack software package.

10. The New York State Stormwater Management Design Manual, revised January 2015.

11. New York Standards and Specifications for Erosion and Sediment Control, July 2016.

12. The storm flows for the 1, 10, 25, 50 & 100 year recurrence interval storms were analyzed for the total watershed areas. The Type III distribution design storm for a 24 hour duration was used and the mass rainfall for each design storm was taken from the Extreme Precipitation in New York & New England developed by the Natural Resource Conservation Service (NRCS) and the Northeast Regional Climate Center (NRCC) as follows:

24 Hour Rainfall Amounts

Design Storm Recurrence Interval	Inches of Rainfall
1 Year	**2.84**
10 Year	**5.11**
25 Year	**6.40**
50 Year	**7.59**
100 Year	**9.01**

IV. EXISTING CONDITIONS

The Site is currently located in the R1-30 Residential One Family Zoning District (R1-30 District), and is approximately 28 acres in size. This portion of the property was previously part of the overall Ridgeway Country Club. The site currently includes: (1) four holes of the 18 hole golf course; (2) a 53,735 square foot club house and accessory buildings housing, among other things, offices, locker rooms, saunas, a banquet hall and grill room; (3) eight tennis courts; (4) a swimming pool, (5) parking for approximately 123 vehicles and (6) golf driving range.

Parcel A (designated on Tax Maps as Section 131.14, Block 9, Lot 3) is ±28 acres in size. It is bound by Ridgeway to the south, Hathaway Lane to the east and Gedney Esplanade to the north. The western edge of the parcel is bound by single-family homes. Parcel A contains a majority of the former Country Club facilities, including:

- Clubhouse Building (main entrance, offices, dining/banquet facilities)
- Annex Building (locker room, maintenance, cart storage)
- Pool
- Paved Parking areas (±123 spaces)
- 10 Tennis Courts (8 in southwest corner, 2 in northeast corner of parcel)
- Pro Shop Building
- Driving Range
- 4 of 18 Golf Holes (#10, 11, 12 and 18)

Access to the Club on Parcel A is via three (3) curb cuts on Ridgeway, and one (1) on Hathaway Lane.

The Site's topography is varied with elevations ranging between ±262 feet and ±300 feet North American Vertical Datum (NAVD 1988). The Site is located within the Mamaroneck River drainage basin which is within the Lower Long Island Sound drainage basin. Stormwater runoff from the development area drains north to south, where it ultimately discharges into the City of White Plains drainage system which consists of a 48 inch by 24 inch concrete box culvert along Ridgeway. The onsite drainage system consists of a network of underground stormwater pipe which eventually discharges into two parallel 30 inch diameter reinforced concrete pipes (RCP) prior to entering the existing system under Ridgeway.

Topography and soils are natural features and drainage patterns of the project Site have been identified and utilized to develop Drawings DA-1 "Existing Drainage Area Map" which is included in Appendix H.

Based on the United States Department of Agriculture (USDA) Web Soil Survey, the on-site soils are generally moderately drained and belong to hydrological groups B, C & D. The soil types, boundaries and drainage areas/designations are depicted on Drawings DA-1 within Appendix H.

One Design Point (1) was identified for comparing peak rates and volumes of runoff in existing and proposed conditions. Two drainage areas were identified in existing conditions based on the existing drainage divides on and off-site. Refer to Drawings DA-1 in Appendix H.

The following is a description of each of the drainage areas analyzed in the existing conditions analysis:

Design Point #1

Design Point #1 is located at an existing catch basin on the north side of Ridgeway just east of the existing tennis courts near the middle of the frontage of the Site. All of the contributing drainage area flows either overland or through existing pipes and eventually meets at the existing catch basin. The following drainage areas ultimately contribute runoff to this design point, as described below:

- Existing Drainage Area 1A (EDA-1A) is 33.07 acres in size and consists of the entire Site bordered by Ridgeway, Gedney Esplanade, Hathaway Lane and several residential homes along Murchison Place, Hotel Drive and Macy Road. The Curve Number (CN) and Time of Concentration (Tc) for this drainage area are 78 and 27 minutes, respectively. A small portion of the former golf course north of Gedney Esplanade drains south across Gedney Esplanade and onto the Site. EDA-1A also drains south from some residential homes along Macy Road, across the golf course and eventually into an existing drain inlet at the northeast corner of the existing tennis courts. The runoff is piped into an existing drainage system with two parallel 30 inch diameter pipes before exiting the Site and connecting to an existing drain inlet within Ridgeway designated as Design Point #1.

- Existing Drainage Area 1B (EDA-1B) is 19.01 acres in size and consists of many residential homes, roadways and a portion of the golf course north of Gedney Esplanade. The Curve Number (CN) and Time of Concentration (Tc) for this drainage area are 77 and 26 minutes, respectively. EDA-1B drains south across the golf course to the existing drainage system in Gedney Esplanade. Several catch basins in Gedney Esplanade collect this runoff at Junction

1B before it is piped to a manhole in Gedney Esplanade midway between Macy Road and Oxford Road. The system conveys the runoff south onto Parcel A through a series of pipes and manholes approximately 1,500 linear feet which is designated as Reach 1B. There are several underdrains located within the golf course that collect runoff that infiltrates through the fairways, rough areas, etc. and discharge it into the series of pipes travelling across the Site. As the system traverses the Site from Gedney Esplanade to Ridgeway, the pipe begins as 30 inch diameter, then increases to 36 inch diameter, then 42 inch diameter and finally two parallel 30 inch diameter pipes before exiting the Site and connecting to an existing drain inlet within Ridgeway designated as Design Point #1.

The peak rates of runoff to the design points from the drainage areas for each storm are shown in the table below:

Table 1
Summary of Peak Rates of Runoff in Existing Conditions
(Cubic Feet per Second)

Storm Recurrence Interval	DP-1
1 year	33.94
10 year	98.50
25 year	138.22
50 year	175.67
100 year	211.21

The volumes of runoff to each design point are shown in the table below, as well as the total volume of runoff produced by the entire contributing drainage area:

Table 2
Summary of Runoff Volumes in Existing Conditions
(Cubic Feet)

Storm Recurrence Interval	DP-1
1 year	188,380
10 year	524,171
25 year	736,693
50 year	939,992
100 year	1,203,042

V. PROPOSED CONDITIONS

The project includes a 640 student school consisting of the following proposed buildings and facilities:

- Upper School for Grades 6 through 12 and a Performing Arts Center, Greenhouse Classroom and Gymnasium for the School.
- Tennis Courts, Running Track, Multipurpose Playing Fields, Softball/Baseball Field, parking areas, access driveways, sidewalks, landscaping, Gate House and stormwater management basins throughout the Site.

The proposed work includes the construction of an Upper School, Gymnasium, Greenhouse Classroom and Performing Arts Center. A portion of the existing building adjacent to Ridgeway will remain. Bus and vehicle drop-off traffic loops will be constructed adjacent to the new buildings. Parking will be provided in multiple areas to serve the Upper Schools' needs. Athletic fields will occupy the western portion of the property. The existing tennis courts will be removed and six new tennis courts will be constructed as hard surfaces. Stormwater management facilities will occupy the area adjacent to Ridgeway south of the tennis courts.

Under future conditions, stormwater runoff from the impervious surfaces on the developed Site, including roadways, parking areas, driveways, sporting facilities and sidewalks will be collected and conveyed by vegetated swales, catch basins, underdrains and drains conveyed by a network of high density polyethylene (HDPE) drain pipe installed underground which discharge to the proposed stormwater management basins. Runoff from a portion of the building rooftops will be collected into roof drains which will discharge into stormwater practices including green roofs and subsurface infiltration system which treat stormwater prior to entering the underground storm pipes which will convey stormwater to the proposed stormwater management basin. Runoff from portions of the landscaped areas will either continue to flow off-site similar to existing conditions or be conveyed into the stormwater management basins. Vegetated swales, catch basins and underdrains will be installed at strategic locations and the Site will be graded to direct runoff into these facilities for collection, treatment and conveyance to the stormwater management basins.

This section describes the design and analysis of the proposed conditions used to demonstrate that the SWPPP meets the requirements of the General Permit.

The Five Step Process For Stormwater Site Planning and Practice Selection

The project's design and its SWPPP have been developed in accordance with the NYSDEC's "Five Step Process for Stormwater Site Planning and Practice Selection" of the New York State Design Manual, as described below:

Step 1: Site Planning

The project has been designed to protect natural resources, minimize disturbances and restore golf course surfaces to natural land coverage types. The property is located between Ridgeway and Gedney Esplanade with the main driveway off of Hathaway Lane. The Site's slopes vary throughout the property and there is a minimal amount of undisturbed land coverage.

The access driveways onto the campus will be provided from a new driveway in Hathaway Lane. The design of the proposed Site topography will minimize earthwork cuts and fills to the maximum extent practicable and utilize a significant amount of erosion controls and stabilization.

The following practices and Site features were incorporated in the Site design:

- Preserving hydrology - Maintaining drainage divides
- Floodplain considerations - The Site is not located within the 100 year flood zone.
- Vegetative cover – The maximum amount of existing vegetative cover has been provided.
- Topography (contour lines, existing flow paths, steep slopes, etc.) has been maintained or disturbed to the minimum extent practicable.
- Soil (hydrologic soil groups, etc.)
- Depths to groundwater and other restrictive layers of soil.

Step 2: Determine Water Quality Treatment Volume (WQv)

This initial calculation of WQv must be revised after green infrastructure techniques are applied. The following method has been used to calculate the WQv.

90% Rule - According to the New York State Stormwater Design Manual, Section 4.1, the water quality volume is determined by the 90% rule. The method is based on 90% of the average annual stormwater runoff volume which must be provided due to impervious surfaces. The WQv is directly related to the amount of impervious cover created at a site. The rainfall depth depends on the location of the site within the state. From this depth of rainfall, the required water quality volume is calculated.

Step 3: Runoff Reduction Volumes (RRv) by Applying Green Infrastructure Techniques and Standard SMP's

Handling of the Runoff Reduction Volume (RRv) is required for the project since it is new development. As permitted in the NYS Stormwater Design Manual, green infrastructure

techniques and standard stormwater management practices with RRv capacity can be credited towards the required WQv discussed above when implemented in accordance with the Manual.

Green infrastructure techniques are grouped into two categories:

- Practices resulting in a reduction of contributing area such as preservation/restoration of conservation areas, tree planting, riparian buffers, etc.
- Practices resulting in a reduction of contributing volume such as vegetated swales, pervious pavers, bioretention systems and infiltration systems.

Apply a combination of green infrastructure techniques and standard SMPs with RRv capacity to provide 100% of the WQv calculated in Step 2. If the RRv calculated in this step is greater than or equal to the WQv in Step 2, the RRv requirement has been met and Step 4 can be skipped. If the RRv provided cannot meet or exceed 100% of the WQv, the project must, at a minimum, reduce a percentage of the runoff from impervious areas to be constructed on the Site which is referred to as the Minimum RRv. The percent reduction is based on the Hydrologic Soil Group(s) (HSG) of the Site and is defined as Specific Reduction Factor.

The following green infrastructure techniques and practices are provided in the Design Manual:

- **Conservation of Natural Areas**
  - The majority of the Site has been previously disturbed. Accordingly, no areas can be subtracted from the contributing area for the WQv calculation.
- **Sheet flow to Riparian Buffers or Filter Strips**
  - This practice can be used for small impervious areas adjacent to well vegetated groundcover with low slopes. The proposed impervious areas are not adjacent to vegetated areas with low slopes. More acceptable green practices are being used for the impervious areas on site.
- **Vegetated Swales**
  - The use of sheet flow into vegetated swales has been implemented for smaller drainage areas wherever possible on the site throughout the parking lots and along the

shoulders of the roadways instead of using catch basins and pipes. Each vegetated swale has sufficient flow length, bottom width, longitudinal slope and depth in accordance with the requirements.

- **Tree Planting / Tree Pits**
  - The project includes extensive tree planting as part of the proposed landscaping plan. The trees proposed meet the minimum caliper and height requirements. However, the amount of plantings are not substantial enough to provide any significant RRv and were subsequently not calculated and credited toward the RRv requirement. Therefore the RRv analysis is conservative.
- **Disconnection of Rooftop Runoff**
  - This practice is applicable to the small structures and buildings. Runoff from the building will be treated with other green practices more suitable for the proposed building design and current site conditions.
- **Stream Daylighting**
  - This practice is limited to redevelopment projects as defined in Chapter 9. The property does not contain any portions of streams that were covered up and piped in the past for development.
- **Green Roofs**
  - This practice is utilized for portions of the rooftops of the school buildings. The portions of the proposed buildings with green roofs will be constructed with an extensive type green roof which will provide hydrologic source control and water quality volume for the rooftop runoff. The green roof must provide volume reduction equal to or greater than the required minimum RRv. This reduction is achieved when runoff is captured, routed through green infrastructure, infiltrated to the ground, reused, reduced by evapotranspiration and eventually removed from the stormwater discharge from the site. After determining the minimum RRv required, which depends on factors such as the Hydrologic Soil Group (HSG) and the amount of impervious area within the targeted drainage area, the remaining water quality volume is directed to a standard practice.

- **Stormwater Planters**
  - This practice filters runoff from portions of building rooftops. Small drainage areas, less than 15,000 square feet can be collected by gutters and roof drain leaders and discharged into stormwater planters that will filter or infiltrate the smaller storms and then discharge the higher storms through risers/standpipes directly into the underground storm pipes to the proposed stormwater management basins. Stormwater Planters act as small basins that treat stormwater as it flows through plant material and a soil matrix and is discharged to the storm drain system. Rooftop runoff from the proposed buildings are treated in other green practices more suitable for the proposed site conditions.
- **Rain Barrels and Cisterns**
  - Rain barrels and cisterns are more suitable for residential buildings. More appropriate green practices are utilized for rooftop runoff from the proposed buildings.
- **Porous Paving**
  - Porous pavement can be used to provide RRv when the soil on-site is classified as hydrologic soil group A or B. The paved areas of the site are not acceptable for porous pavement because they will be high traffic areas or other more suitable practices are used.
- **Standard Practices with RRv Capacity**
  - **Bioretention** – This practice is not proposed to be utilized.
  - **Infiltration System –** A subsurface infiltration system is proposed to treat and retain runoff from the rooftop of the Upper School building and the proposed parking areas. This practice is located in an area where the existing grade is being raised and the groundwater was identified at a lower depth.

The Minimum RRv capacity required must be provided by green infrastructure techniques to verify that the RRv requirement has been met. The RRv that is provided by the green infrastructure techniques can then be subtracted from the Total Required WQv that must be provided by the SMP's.

Step 4: Apply Standard Stormwater Management Practices to Address Remaining Water Quality Volume

The standard SMP's must be designed to meet additional water quality volume requirements that cannot be addressed by applying the green infrastructure techniques by themselves. The standard SMP's proposed are:

- Ponds

  Wet Extended Detention Ponds (P-3)

  Description

  Pond that treats a portion of the Water Quality Volume by detaining storm flows above a permanent pool for a specified minimum detention time.

  Each Wet Extended Detention Pond has a forebay for pretreatment, an aquatic bench and a permanent pool for treatment, a 12 foot wide maintenance access path, 4 foot horizontal to 1 foot vertical side slopes for added safety and ease for maintenance and outlet control structures to slowly release the water quantity storms to reduce the peak flow rates and provide channel protection.

- Infiltration Systems

  Manufactured Infiltration System

  - StormTech Chamber System

  Description

An infiltration practice that stores the water quality volume in subsurface chambers before it is infiltrated. Manufactured Infiltration Systems (StormTech Chambers) provide infiltration for the stormwater runoff contributing 90% towards the runoff reduction volume.

The combination of the green infrastructure techniques and extended detention practices combine to exceed the WQv requirements as demonstrated in Appendix C.

Step 5: Apply Volume and Peak Rate Control Practices to Meet Water Quantity Requirements

All of the proposed stormwater management practices combine to meet the volume and peak rate water quantity requirements as required in the General Permit and Stormwater Design Manual. The Channel Protection Volume (CPv), Overbank Flood Control (Qp) and Extreme Flood Control (Qf) must be met for the plan to be completed. This is accomplished by using standard SMP's such as Wet Extended Detention Ponds (P-3) to meet water quantity requirements. The following standards must be met:

Stream Channel Protection (CPv)

Stream Channel Protection Volume Requirements (CPv) are designed to protect stream channels from erosion. This goal is accomplished by providing 24-hour extended detention of the one-year, 24-hour storm event, remained from runoff reduction. Reduction of runoff for meeting stream channel protection objectives, where Site conditions allow, is encouraged and the volume reduction achieved through green infrastructure can be deducted from CPv. Detention time has been calculated using the plug flow calculation method.

Overbank Flood (Qp) which is the 10 year storm.

Overbank flood control (10-year storm) are met by the design of the SWPPP to provide storage to attenuate the post development 10-year, 24-hour peak discharge rate (Qp) below predevelopment rates.

Extreme Storm (Qf) which is the 100 year storm.

Extreme Flood Control (100-year storm) requirements are met by the design of the SWPPP to provide storage of runoff to attenuate the post development 100-year, 24-hour peak discharge rate (Qf) below predevelopment rates.

Based on the foregoing, this project is eligible for coverage under NYSDEC SPDES General Permit No. GP-0-15-002.

All practices exceed the required elements of SMP criteria as outlined in Chapter 6 of the NYS Stormwater Management Design Manual. A summary of each category is provided below.

1. Feasibility – Ponds are designed based upon unique physical environmental considerations noted in the NYS Stormwater Management Design Manual (NYSSMDM) Table 7.2 "Physical Feasibility Matrix".

2. Conveyance – The design conveys runoff to the designed pond in a manner that is safe, minimizes erosion and disruption to natural drainage channel and promotes filtering and infiltration.

3. Pretreatment – All ponds provide pretreatment in accordance with NYSSMDM design guidelines.

4. Treatment Geometry – The plan provides water quality treatment in accordance with NYSSMDM guidelines noted Table 6.1 "Water Quality Volume Distributing in Pond Design".

5. Environmental/Landscaping –Extensive landscaping has been provided for each proposed practice to enhance pollutant removal and provide aesthetic enhancement to the Site.

6. Maintenance – Maintenance for the environmental practices has been provided and is within the SWPPP Report as required. Maintenance access is provided in the design plans.

Soil observations and tests have been performed throughout the project site especially within the limits of the proposed stormwater management facilities. Refer to the Report on Subsurface Soil and Foundation Investigation prepared by Carlin-Simpson & Associates, last revised October 2, 2014, within the Appendix. All testing has been performed in accordance with the New York State Stormwater Management Design Manual.

In order to determine the post-development rates of runoff generated on-site, the following drainage areas were analyzed in the post-development conditions. These areas are graphically depicted on Drawings DA-2 "Proposed Drainage Area Map" located in Appendix H.

Similar to existing conditions, one Design Point (1) were identified when comparing peak rates of runoff in existing and proposed conditions. Unlike existing conditions, several sub-drainage areas were identified in proposed conditions based on the proposed drainage divides and specific contributing drainage areas to different SMP's and green infrastructure techniques. However, the Design Point remains the same.

The following is a description of each of the drainage areas analyzed in the proposed conditions analysis:

Design Point #1

Design Point #1 is the existing catch basin on the north side of Ridgeway just east of the existing tennis courts near the middle of the frontage of Parcel A. The contributing drainage area flows through the proposed network of HDPE drain pipe to Stormwater Management Basin 1A which discharges through an outlet control structure to a proposed 42 inch diameter pipe to a new structure that will replace the existing catch basin on Ridgeway. The following drainage areas

ultimately contribute runoff to this design point, as described below:

Sub drainage areas contributing to this design point employ numerous source control Runoff Reduction Volume Methods. The required Minimum RRv is provided by green practices for all improvement areas as demonstrated in Appendix C and described below.

Design Point #1 **WQv / RRv Calculations Summary – See Appendix C**	
Initial Required WQv	54,498 c.f.
Adjusted Required WQv (Area Practice)	54,498 c.f. (No credit taken)
Minimum RRv Required	7,339 c.f.
RRv Provided	24,471 c.f.
Net WQv Required	30,027 c.f.

The entire WQv could not be provided solely by green practices for Design Point #1 due to the various site constraints. However, standard SMP's are implemented to treat the remaining Net WQv.

Green practices implemented in the project design within the contributing drainage areas to Design Point #1:

- Vegetated Swales – Portions of parking lots and roadways are graded to sheet flow into Vegetated Swales to promote infiltration through the grass and to provide a longer Tc for the runoff instead of using catch basins and pipes. The vegetated swales are in HSG 'C' soils and are therefore eligible for a 15% reduction of the required RRv.

- Tree Planting / Tree Pits - The project includes extensive tree planting as part of the proposed landscaping plan. However, the amount of plantings are not substantial enough to provide any significant RRv and were subsequently not calculated and credited toward the RRv requirement. Therefore the RRv analysis is conservative.

- Green Roofs - This practice is utilized for portions of the rooftops of the upper school building.

- Standard Practices with RRv Capacity
  - Infiltration Practices – A subsurface infiltration system is proposed beneath the turf field and will be used to offset the increase in volume being discharged to the design point.

The RRv provided using the vegetated swales, green roofs and infiltration practices have been subtracted from the WQv required, CPv required and the minimum RRv required at Design Point #1.

Green practices NOT implemented in the project design within the contributing drainage areas to Design Point #1:

- Conservation of Natural Areas - The majority of the Site has been previously disturbed. Accordingly, no areas can be subtracted from the contributing area for the WQv calculation.

- Sheet flow to Riparian Buffers or Filter Strips - This practice can be used for small impervious cover adjacent to well vegetated areas with low slopes. The proposed impervious areas on site do not have dense vegetated areas with acceptable slopes and length adjacent to them. More acceptable green practices are being used for the impervious areas on site.

- Stream Daylighting - This practice is limited to redevelopment projects as defined in Chapter 9. No streams exist on site.

- Bioretention areas - This practice is not proposed to be utilized.

- Rain Gardens - This practice is not practical for this project since a contributing drainage area is limited to 1,000 square feet of rooftop. This practice is typically used in a residential application.

- Stormwater Planters - Rooftop runoff from the proposed buildings are treated in other green practices more suitable for the proposed site conditions.

- Rain Barrels and Cisterns - Rain barrels and cisterns are more suitable for residential buildings. More appropriate green practices are utilized for rooftop runoff from the proposed buildings.

The following drainage areas ultimately contribute runoff to this design point, as described below:

- Proposed Drainage Area 1A (PDA-1A) is 12.31 acres in size and includes a portion of the site, bordered by Ridgeway, Gedney Esplanade, Hathaway Lane. PDA-1A consists of portions of the converted proposed Upper School, tennis courts, running track, multipurpose turf playing field, parking areas, access driveways, sidewalks, landscaping and lawn areas. The Curve Number (CN) and Time of Concentration (Tc) for this drainage area are 83 and 6 minutes, respectively.

  It should be noted that the field area within the running track which will be constructed of a pervious artificial turf material has been modeled as grass areas with a curve number of 74. However, JMC performed a sensitivity analysis with the field area being modeled as impervious area with a curve number of 98 to confirm that the Stormwater Management Basin designed for this drainage area can meet the water quantity standards regardless of the coverage type at Design Point #1 when compared to existing conditions.

  Stormwater runoff from PDA-1A drains into the proposed drainage system and is conveyed to Stormwater Management Basin 1A which is a standard SMP designed as a Wet Extended Detention Pond (P-3). The proposed drainage system discharges the runoff into the forebay for pretreatment. The forebay is required to provide 10% of the net water quality volume required and the permanent pool is required to provide at least 50% of the Net Water Quality Volume required.

The forebay is large enough to store 10% of the net water quality volume required. The permanent pool is large enough to provide greater than 100% of the Water Quality Volume required below the outlet orifice. The required 100% Water Quality Volume Extended Detention Elevation in the pond is 262.16, therefore the permanent pool is set at elevation 262.20 which is approximately 28 inches above the seasonal high ground water at elevation 259.90. Refer to Appendix I for soil testing information.

The required stream channel protection volume (CPv) is provided by setting an orifice (referred to as the CPv orifice) at or above the elevation corresponding to 100% Water Quality Volume Extended Detention Elevation (which is elevation 262.20). The CPv orifice is set at elevation 262.20 and sized to assure that the CPv above it will be detained and slowly released over a 24 hour period. After the CPv orifice is determined, the quantity controls can be determined to assure that the peak flow rates from the 1, 10, 25, 50 and 100 year storm events are reduced. OCS A-2 has a 5-1/2 inch diameter CPv orifice at invert 262.20, an overflow riser at elevation 264.30 and a 42 inch diameter outlet pipe at elevation 256.50. The runoff exiting OCS A-2 is discharged into a proposed 42 inch diameter pipe before exiting the Site and connecting to an existing drain inlet (that is proposed to be replaced) within Ridgeway, designated as Design Point #1.

- Proposed Drainage Area 1A-1 (PDA-1A-1) is 17.28 acres in size and includes some disturbed and mostly undisturbed portions of the property and off-site areas consisting of residential homes along Murchison Place, Hotel Drive and Macy Road. PDA 1A-1 also includes proposed soccer, baseball/softball field and meadow areas. The Curve Number (CN) and Time of Concentration (TC) for this drainage area are 76 and 21 minutes, respectively. Stormwater runoff from this area flows south overland and gets collected in the proposed storm drainage system near the southwest corner of the proposed tennis court. The runoff is conveyed to Stormwater Management Basin 1A on the detention side of the pond. Stream Channel Protection Volume (CPv) and detention for 1, 10, 25, 50 and 100 year storm events is achieved within the basin using the outlet controls described in PDA-1A.

Portions of the parking lot and roadway north of the school, are graded to sheet flow into Vegetated Swales 1A-1, 1A-2, 1A-3 and 1A-4 instead of using catch basins and pipes to promote infiltration through the grass and to provide a longer Tc for the runoff. The vegetated swales are in HSG 'C' soils and are therefore eligible for a 15% reduction of the required RRv.

- Proposed Drainage Area 1A-2 (PDA-1A-2)) is 5.44 acres in size and includes the central courtyard area, performing arts building, parking lot, vegetated swales, green roof and landscaped areas. A portion of the rooftop of the Upper School building is designed as Green Roof. The RRv provided using the green roof can be subtracted from the net WQv required and the minimum RRv required at Design Point 1. The curve number and time of concentration for this area are 92 and 6 minutes, respectively. Stormwater runoff from this area flows overland and gets collected in the proposed storm drainage system and is routed to the proposed subsurface infiltration system located below the turf field. The system is designed to infiltrate the 10 year storm. The RRv provided using the subsurface infiltration system can be subtracted from the net WQv required and the minimum RRv required at Design Point 1.

- Proposed Drainage Area 1B (PDA-1B) is 18.80 acres in size and consists of many residential homes, roadways, and a portion of the golf course located on the north side of Gedney Esplanade, The Curve Number (CN) and Time of Concentration (Tc) for this drainage area are 76 and 27 minutes, respectively.

PDA-1B drains south across the golf course to the existing drainage system in Gedney Esplanade. Several catch basins in Gedney Esplanade collect this runoff at Junction 1 before it is piped to a manhole in Gedney Esplanade midway between Macy Road and Oxford Road. The system conveys the runoff south onto Parcel A through a series of pipes and manholes approximately 1,500 linear feet in length which is designated as Reach 1B. As the pipe traverses the Site from Gedney Esplanade to Ridgeway, the pipe is redirected in a more hydraulically efficient alignment and connects to the existing drain inlet within Ridgeway designated as Design Point #1.

Table 3
Summary of Proposed Peak Rates of Runoff in Proposed Conditions
(Cubic Feet per Second)

Storm Recurrence Interval	DP-1
1 year	12.42
10 year	75.17
25 year	118.20
50 year	155.11
100 year	193.13

The reductions in peak rates of runoff from existing to proposed conditions are shown on the table below:

Table 4
Percent Reductions in Peak Rates of Runoff (Existing vs. Proposed Conditions)
(Cubic Feet per Second)

Design Point	Storm Recurrence Interval	Existing Peak Runoff Rate	Proposed Peak Runoff Rate	Percent Reduction (%)
1	1 year	33.94	12.42	63.41
	10 year	98.50	75.17	23.69
	25 year	138.22	118.19	14.48
	50 year	175.67	155.11	11.70
	100 year	211.21	193.13	8.56

The volumes of runoff to each design point are shown in the following Table:

Table 5
Summary of Runoff Volumes in Proposed Conditions
(Cubic Feet)

Storm Recurrence Interval	DP-1
1 year	181,271
10 year	496,044
25 year	701,622
50 year	908,246
100 Year	1,160,475

The Reductions in Runoff Volumes for the entire contributing drainage area of analysis when comparing existing and proposed conditions are shown in Table 6 below:

Table 6
Summary of Runoff Volumes (Existing vs. Proposed Conditions)
(Cubic Feet)

Storm Recurrence Interval	Total Existing Volume	Total Proposed Volume	Percent Reduction (%)
1 year	188,380	181,271	3.77
10 year	524,171	496,044	5.37
25 year	736,693	701,622	4.76
50 year	939,992	908,246	3.38
100 Year	1,203,042	1,160,475	3.54

As demonstrated in Table 4, the proposed stormwater improvements will result in reductions of peak rates of runoff for all storms and design points analyzed. As demonstrated in Table 6, the proposed stormwater improvements will also result in reductions of stormwater runoff volume from the contributing drainage areas for the 1, 10, 25, 50 & 100 year storms when comparing existing and proposed conditions.

VI. SOIL EROSION & SEDIMENT CONTROL

A potential impact of the proposed development on any soils or slopes will be that of erosion and transport of sediment during construction. An Erosion and Sediment Control Management Program will be established for the proposed development, beginning at the start of construction and continuing throughout its course, as outlined in the "New York State Standards and Specifications for Erosion and Sediment Control," dated July 2016. A continuing maintenance program will be implemented for the control of sediment transport and erosion control after construction and throughout the useful life of the project.

The Operator shall have a qualified professional conduct an assessment of the Site prior to the commencement of construction and certify that the appropriate erosion and sediment controls, as shown on the Sediment & Erosion Control Plans, have been adequately installed to ensure overall preparedness of the Site for the commencement of construction. In addition, the Operator shall have a qualified professional conduct one site inspection at least every seven calendar days and at least two site inspections every seven calendar days when greater than five acres of soil is disturbed at any one time.

A waiver to disturb greater than five acres of soil (only at certain stages in the construction process) will be requested to accommodate the construction of the project.

Prior to the commencement of construction activity, the owner or operator must identify the contractor(s) and subcontractor(s) that will be responsible for installing, constructing, repairing, replacing, inspecting and maintaining the erosion and sediment control practices included in the SWPPP; and the contractor(s) and subcontractor(s) that will be responsible for constructing the post-construction stormwater management practices included in the SWPPP. The owner or operator shall have each of the contractors and subcontractors identify at least one person from their company that will be responsible for implementation of the SWPPP. This person shall be known as the trained contractor. The owner or operator shall ensure that at least one trained contractor is on-site on a daily basis when soil disturbance activities are being performed.

The owner or operator shall have each of the contractors and subcontractors identified above sign a copy of the certification statement provided in Appendix D before they commence any construction activity.

Prior to the start of construction, the limit of disturbance shall be staked out by the construction manager.

Soil Description

As provided by the United States Department of Agriculture, Soil Conservation Service "Web Soil Survey," soil classifications which exist on the subject site are described below.

Soils are placed into four hydrologic groups: A, B, C, and D. In the definitions of the classes, infiltration rate is the rate at which water enters the soil at the surface and is controlled by the surface conditions. Transmission rate is the rate at which water moves in the soil and is controlled by soil properties. Definitions of the classes are as follows:

A. (Low runoff potential). The soils have a high infiltration rate even when thoroughly wetted. They chiefly consist of deep, well drained to excessively drained sands or gravels. They have a high rate of water transmission.

B. The soils have a moderate infiltration rate when thoroughly wetted. They chiefly are moderately deep to deep, moderately well drained to well drained soils that have moderately fine to moderately coarse textures. They have a moderate rate of water transmission.

C. The soils have a slow infiltration rate when thoroughly wetted. They chiefly have a layer that impedes downward movement of water or have moderately fine to fine texture. They have a slow rate of water transmission.

D. (High runoff potential). The soils have a very slow infiltration rate when thoroughly wetted. They chiefly consist of clay soils that have a high swelling potential, soils that have a

permanent high water table, soils that have a claypan or clay layer at or near the surface, and shallow soils over nearly impervious material. They have a very slow rate of water transmission.

A soil's tendency to erode is also described in the USDA web soil survey. The ratings in this interpretation indicate the hazard of soil loss from unsurfaced areas. The ratings are based on soil erosion factor K, slope, and content of rock fragments. The hazard is described as "slight," "moderate," or "SEVERE." A rating of "slight" indicates that little or no erosion is likely; "moderate" indicates that some erosion is likely, that the temporarily unsurfaced / unstabilized during construction may require occasional maintenance, and that simple erosion-control measures are needed; and "SEVERE" indicates that significant erosion is expected, that the roads or trails require frequent maintenance, and that erosion-control measures are needed.

Per the Soil Survey, the following soils listed below are present at the site. Following this list is a detailed description of each soil type found on the property:

Symbol	**Description**	**Hydrologic Soil Group**
PnB	Paxton fine sandy loam, 2 to 8 percent slopes	C
RdB	Ridgebury loam, 3 to 8 percent slopes	B/D
UpB	Urban land-Paxton complex, 2 to 8 percent slopes	

<u>On-Site Pollution Prevention</u>

There are temporary pollution prevention measures used to control litter and construction debris on Site, such as:

- Silt Fence
- Silt Sack
- Excavated Drop Inlet Protection
- Curb Drop Inlet Protection

- Stone & Block Drop Inlet Protection
- Temporary Sediment Traps
- Stabilized Construction Entrance
- Erosion Control Matting

There will be inlet protection provided for all storm drains and inlets with the use of curb gutter inlet protection structures and stone & block drop inlet protection, which keep silt, sediment and construction litter and debris out of the on-site stormwater drainage system.

Temporary Control Measures

Temporary control measures and facilities will include silt fences, interceptor swales, stabilized construction entrances, temporary seeding, mulching and sediment basins with temporary riser and anti-vortex devices.

Throughout the construction of the proposed development, temporary control facilities will be implemented to control on-site erosion and sediment transfer. Interceptor swales, if required, will be used to direct stormwater runoff to temporary sediment basins for settlement. The sediment basins will be constructed as part of this project will to remove sediment and pollutants from the stormwater runoff produced during construction. Descriptions of the temporary sediment & erosion controls that will be used during the development of the Site including silt fence, stabilized construction entrance, seeding, mulching and inlet protection are as follows:

1. Silt Fence is constructed using a geotextile fabric. The fence will be either 18 inches or 30 inches high. The height of the fence can be increased in the event of placing these devices on uncompacted fills or extremely loose undisturbed soils. The fences will not be placed in areas which receive concentrated flows such as ditches, swales and channels nor will the filter fabric material be placed across the entrance to pipes, culverts, spillway structures, sediment traps or basins.

2. Stabilized Construction Entrance consists of AASHTO No. 1 rock. The rock entrance will be a minimum of 50 feet in length by 20 feet in width by 8 inches in depth.

3. Seeding will be used to create a vegetative surface to stabilize disturbed earth until at least 70% of the disturbed area has a perennial vegetative cover. This amount is required to adequately function as a sediment and erosion control facility. Grass lining will also be used to line temporary channels and the surrounding disturbed areas.

4. Mulching is used as an anchor for seeding and disturbed areas to reduce soil loss due to storm events. These areas will be mulched with straw at a rate of 3 tons per acre such that the mulch forms a continuous blanket. Mulch must be placed after seeding or within 48 hours after seeding is completed.

5. Inlet Protection will be provided for all stormwater basins and inlets with the use of curb & gutter inlet protection and stone & block inlet protection structures, which will keep silt, sediment and construction debris out of the storm system. Existing structures within existing paved areas will be protected using "Silt Sacks" inside the structures.

6. Erosion Control Matting will be utilized on slopes and within swales, where applicable, to provide stabilization in advance of vegetation being established. Such matting will be biodegradable to facilitate long term growth of vegetation in swales, on slopes and within stormwater management facilities.

7. Sediments Traps will be used with the permanent SMP's until their contributing areas drainage are stabilized. Once stabilized, the temporary risers will be removed and final grading/planting of the basins will be completed for permanent use as Stormwater Management basins.

8. Stone Check Dams are small barriers of crushed stone which will be laid across the grass swales which are approximately 12 inches high, located every one foot of elevation change along the swales so that the crest elevation of the downstream dam is at the same elevation of the toe of the upstream dam.

The contractor shall be responsible for maintaining the temporary sediment and erosion control measures throughout construction. This maintenance will include, but not be limited to, the following tasks:

1. For dust control purposes, moisten all exposed graded areas with water at least twice a day in those areas where soil is exposed and cannot be planted with a temporary cover due to construction operations or the season (December through March).

2. Inspection of erosion and sediment control measures shall be performed at the end of each construction day and immediately following each rainfall event. All required repairs shall be immediately executed by the contractor.

3. Sediment deposits shall be removed when they reach approximately ⅓ the height of the silt fence. All such sediment shall be properly disposed of in fill areas on the Site, as directed by the Owner's Field Representative. Fill shall be protected following disposal with mulch, temporary and/or permanent vegetation and be completely circumscribed on the downhill side by silt fence.

4. Rake all exposed areas parallel to the slope during earthwork operations.

5. Following final grading, the disturbed area shall be stabilized with a permanent surface treatment (i.e. turf grass, meadow, pavement or sidewalk). During rough grading, areas which are not to be disturbed for fourteen or more days shall be stabilized with the temporary seed mixture, as defined on the plans. Seed all piles of dirt in exposed soil areas that will not receive a permanent surface treatment.

<u>Concrete Material and Equipment Management</u>

Concrete washouts shall be used to contain concrete and liquids when the chutes of concrete mixers and hoppers of concrete pumps are rinsed out after delivery. The washout facilities consolidate solid for easier disposal and prevent runoff of liquids. The wash water is alkaline and

contains high levels of chromium, which can leach into the ground and contaminate groundwater. It can also migrate to a storm drain, which can increase the pH of area waters and harm aquatic life. Solids that are improperly disposed of can clog storm drain pipes and cause flooding. Installing concrete washout facilities not only prevents pollution but also is a matter of good housekeeping at your construction site.

Prefabricated concrete washout containers can be delivered to the site to provide maintenance and disposal of materials. Regular pick-ups of solid and liquid waste materials will be necessary. To prevent leaks on the job site, ensure that prefabricated washout containers are watertight. A self-installed concrete washout facility can be utilized although they are much less reliable than prefabricated containers and are prone to leaks. There are many design options for the washout, but they are preferably built below-grade to prevent breaches and reduce the likelihood of runoff. Above-grade structures can also be used if they are sized and constructed correctly and are diligently maintained. One of the most common problems with self-installed concrete washout facilities is that they can leak or be breached as a result of constant use, therefore the contractor shall be sure to use quality materials and inspect the facilities on a daily basis.

Washouts must be sized to handle solids, wash water, and rainfall to prevent overflow. Concrete Washout Systems, Inc. estimates that 7 gallons of wash water are used to wash one truck chute and 50 gallons are used to wash out the hopper of a concrete pump truck.

For larger sites, a below-grade washout should be at least 10 feet wide and sized to contain all liquid and solid waste expected to be generated in between cleanout periods. A minimum of 12-inches of freeboard must be provided. The pit must be lined with plastic sheeting of at least 10-mil thickness without holes or tears to prevent leaching of liquids into the ground. Concrete wash water should never be placed in a pit that is connected to the storm drain system or that drains to nearby waterways.

An above-grade washout can be constructed at least 10 feet wide by 10 feet long and sized to contain all liquid and solid waste expected to be generated in between cleanout periods. A minimum of 4-inches of freeboard must be provided. The washout structures can be constructed

with staked straw bales or sandbags double-or triple lined with plastic sheeting of at least 10-mil thickness without holes or tears.

Concrete washout facilities shall not be located within 50 feet of storm drains, open ditches, or water bodies and should be placed in locations that allow for convenient access for concrete trucks. The contractor shall check all concrete washout facilities daily to determine if they have been filled to 75 percent capacity, which is when materials need to be removed. Both above-and below-ground self-installed washouts should be inspected daily to ensure that plastic linings are intact and sidewalls have not been damaged by construction activities. Prefabricated washout containers should be inspected daily as well as to ensure the container is not leaking or nearing 75 percent capacity. Inspectors should also note whether the facilities are being used regularly. Additional signage for washouts may be needed in more convenient locations if concrete truck operators are not utilizing them.

The washout structures must be drained or covered prior to predicted rainstorms to prevent overflows. Hardened solids either whole or broken must be removed and then they may be reused onsite or hauled away for recycling.

Once materials are removed from the concrete washout, a new structure must be built or excavated, or if the previous structure is still intact, inspect it for signs of weakening or damage and make any necessary repairs. Line the structure with new plastic that is free of holes or tears and replace signage if necessary. It is very important that new plastic be used after every cleaning because pumps and concrete removal equipment can damage the existing liner.

Construction Site Chemical Control

The purpose of this management measure is to prevent the generation of nonpoint source pollution from construction sites due to improper handling and usage of nutrients and toxic substances, and to prevent the movement of toxic substances from the construction site.

Many potential pollutants other than sediment are associated with construction activities. These pollutants include pesticides; fertilizers used for vegetative stabilization; petrochemicals; construction chemicals such as concrete products, sealers, and paints; wash water associated with these products; paper; wood; garbage; and sanitary waste.

Disposal of excess pesticides and pesticide-related wastes should conform to registered label directions for the disposal and storage of pesticides and pesticide containers set forth in applicable Federal, State and local regulations that govern their usage, handling, storage, and disposal.

Pesticides should be disposed of through either a licensed waste management firm or a treatment, storage and disposal (TSD) facility. Containers should be triple-rinsed before disposal, and rinse waters should be reused as product.
Other practices include setting aside a locked storage area, tightly closing lids, storing in a cool, dry place, checking containers periodically for leaks or deterioration, maintaining a list of products in storage, using plastic sheeting to line the storage areas, and notifying neighboring property owners prior to spraying.

When storing petroleum products, follow these guidelines:

- Create a shelter around the area with cover and wind protection;
- Line the storage area with a double layer of plastic sheeting or similar material;
- Create an impervious berm around the perimeter with a capacity of 110 percent greater than that of the largest container;
- Clearly label all products;
- Keep tanks off the ground; and
- Keep lids securely fastened.

Post spill procedure information and have persons trained in spill handling on site or on call at all times. Materials for cleaning up spills should be kept on site and easily available. Spills should be cleaned up immediately and the contaminated material properly disposed of. Maintain and wash equipment and machinery in confined areas specifically designed to control runoff.

Thinners or solvents should not be discharged into sanitary or storm systems when cleaning machinery. Use alternative methods for cleaning larger equipment parts, such as high-pressure, high-temperature water washes, or steam cleaning. Equipment-washing detergents can be used, and wash water may be discharged into sanitary sewers if solids are removed from the solution first. (This practice should be verified with the local sewer authority.) Small parts can be cleaned with degreasing solvents, which can then be reused or recycled.

Solid Waste Management and Portable Sanitary Management

The purpose of this management measure is to prevent the potential for solid waste such as construction debris, trash, etc. from construction sites due to improper handling and storage. Debris and litter should be removed periodically from the BMP's and surrounding areas to prevent clogging of pipes and structures. All construction material shall be stored in designated staging areas. Roll-off containers shall be placed on site and all empty containers, construction debris and litter shall be placed in the containers.

Portable sanitary units may be utilized on-site or bathrooms will be provided within construction trailers. A sanitation removal company will be hired to pump/remove any sanitary waste. In the event that portable sanitary units are used and then cleaned after being emptied, the rinse water may not be disposed of to the storm drain system. It shall be contained for later disposal if it can't be disposed of on-site. Remove paper and trash before cleaning the portable sanitary units. The portable sanitary units shall be located away from the storm drain system if possible. Provide overhead cover for wash areas if possible. Maintain spill response material and equipment on site to eliminate the potential for contaminants and wash water from entering the storm drain system.

Permanent Control Measures and Facilities for Long Term Protection

Towards the completion of construction, permanent sediment and erosion control measures will be developed for long term erosion protection. The following permanent control measures and facilities have been proposed to be implemented for the project:

1. Vegetated Swales will function to provide additional treatment of stormwater runoff by

removal of pollutants and will promote infiltration to improve runoff volume and flow rate reduction and increase the Time of Concentration (Tc).

2. Wet Extended Detention Ponds (NYSDEC Standard Practice P-3) which are standard SMP's that treat the majority of the water quality volume through extended detention. Each Wet Extended Detention Pond has a forebay for pretreatment, an aquatic bench and a permanent pool for treatment, a 12 foot wide maintenance access path, 4 foot horizontal to 1 foot vertical side slopes for added safety and ease for maintenance and outlet control structures to slowly release the water quantity storms to reduce the peak flow rates and for channel protection.

3. Subsurface Infiltration System (NYSDEC Standard Practice I-2) which is a standard SMP that will be used to treat the runoff volume generated from a portion of the developed area and provide additional water quality and runoff volume reduction. The smaller storms will be retained and the higher storms will be released gradually. Refer to the Proposed Hydrologic Calculations and Runoff Reduction and Water Quality Volume Sizing Calculations, in Appendices 'B' & 'C'.

   The StormTech SC-310 Recharge Chambers are domed shaped fully opened bottom corrugated chambers with perforated side walls. Chambers allow stormwater to be stored within the dome void until it can infiltrate into the ground. They are able to be used for residential, commercial or industrial applications and provide an easy way to treat and dispose of stormwater runoff underground. Water is infiltrated into the ground through the chambers and surrounding clean/washed, crushed, angular stone and will replenish the groundwater as a natural condition. Acceptable backfill material for the chambers is defined as granular well-graded soil/aggregate mixtures, less than 35% fines according to the manufacturer's specifications.

   The Isolator Row is a row of StormTech chambers that is surrounded with filter fabric and connected to a closely located manhole for easy access. The fabric-wrapped chambers provide for settling and filtration of sediment as stormwater rises in the Isolator Row and ultimately passes through the filter fabric. The open bottom chambers and perforated sidewalls allow

stormwater to flow both vertically and horizontally out of the chambers. Sediments are captured in the Isolator Row protecting the storage access of the adjacent stone and chambers from sediment accumulation.

The Isolator Row is designed to capture the "first flush" and offers the versatility to be sized on a volume basis or flow rate basis. An upstream manhole not only provides access to the Isolator Row but includes a high flow weir such that stormwater flow rates or volumes that exceed the capacity of the Isolator Row overtop the over flow weir and discharge through a manifold to the other standard chambers. By treating stormwater prior to entry into the chamber system, the service life can be extended and pollutants such as hydrocarbons can be captured.

4. Catch Basins will be used to remove some of the coarse sand and grit sediment before entering the drainage system. Each catch basin will be constructed with an 36 inch deep sump.

5. Seeding of at least 70% perennial vegetative cover will be used to produce a permanent uniform erosion resistant surface. The seeded areas will be mulched with straw at a rate of 3 tons per acre such that the mulch forms a continuous blanket.

6. Rip-Rap Energy Dissipators At discharge points from the stormwater drainage system into the stormwater management basins, rip-rap pads consisting of angular rocks will be placed to dissipate velocity and reduce the risk of erosion. The rip-rap pads will be 10 feet wide by 10 feet long.

7. Sumps in Catch Basins Each catch basin will be constructed with an 18 inch deep sump. This measure will remove coarse sand and grit from the runoff prior to entering the stormwater drainage system.

Specifications for Soil Restoration

Prior to the final stabilization of the disturbed areas, soil restoration will be required for all vegetated areas to recover the original properties and porosity of the soil. Soil Restoration Requirements are provided on Table 7 below:

Table 7

Soil Restoration Requirements

Type of Soil Disturbance	Soil Restoration Requirement		Comments/Examples
No soil disturbance	Restoration not permitted		Preservation of Natural Features
Minimal soil disturbance	Restoration not required		Clearing and grubbing
Areas where topsoil is stripped only – no change in grade	HSG A&B	HSG C&D	Protect area from any ongoing construction activities
	apply 6 inches of topsoil	Aerate* and apply 6 inches of topsoil	
Areas of cut or fill	HSG A&B	HSG C&D	Clearing and grubbing
	Aerate and apply 6 inches of topsoil	Apply full Soil Restoration**	
Heavy traffic areas on site (especially) in a zone 5-25 feet around buildings but not within a 5 foot perimeter around foundation walls)	Apply full Soil Restoration (decompaction and compost enhancement)		
Areas where Runoff Reduction and/or Infiltration practices are applied	Restoration not required, but may be applied to enhance the reduction specified for appropriate practices.		Keep construction equipment from crossing these areas. To protect newly installed practice from any ongoing construction activities construct a single phase operation fence area.
Redevelopment projects	Soil Restoration is required on redevelopment projects in areas where existing impervious area will be converted to pervious area.		

* Aeration includes the use of machines such as tractor-drawn implements with coulters making a narrow slit in the soil, a roller with many spikes making indentations in the soil, or prongs which function like a mini-subsoiler.

** Per "Deep Ripping and De-compaction, DEC 2008."

During periods of relatively low to moderate subsoil moisture, the disturbed subsoils are returned to rough grade and the following full soil restoration steps applied:

1. Apply 3 inches of compost over subsoil.

2. Till compost into subsoil to a depth of at least 12 inches using a cat-mounted ripper, tractor-mounted disc, or tiller, mixing, and circulating air and compost into subsoils.

3. Rock-pick until uplifted stone/rock materials of four inches and larger size are cleaned off the site.

Specifications for Final Stabilization of Graded Areas

Final stabilization of graded areas consists of the placement of topsoil and installation of landscaping (unless the area is to be paved, or a building is to be constructed in the location). Topsoil is to be spread as soon as grading operations are completed. Topsoil is to be placed to a minimum depth of six inches on all embankments, planting areas and seeding/sod areas. The subgrade is to be scarified to a depth of two inches to provide a bond of the topsoil with the subsoil. Topsoil is to be raked to an even surface and cleared of all debris, roots, stones and other unsatisfactory material.

Planting operations shall be conducted under favorable weather conditions as follows:

- Permanent Lawns - April 15 (provided soil is frost-free and not excessively moist) to May 15; August 15 to October 15.

- Temporary Lawn Seeding - if outside of the time periods noted above, the areas shall be seeded immediately on completion of topsoil operations with annual ryegrass (Italian rye) at a rate of six pounds per 1,000 square feet. Temporary lawn installation is permitted provided the soil is frost-free and not excessively moist. The permanent lawn is to be installed the next planting season.

On slopes with a grade of 3 horizontal to 1 vertical or greater, and in swales, a geotextile netting or mat shall be installed for stabilization purposes as shown on the Plans. Seeded areas are to be mulched with straw or hay at an application rate of 70-90 pounds per 1,000 s.f. Straw or hay mulch must be spread uniformly and anchored immediately after spreading to prevent wind blowing. Mulches must be inspected periodically and in particular after rainstorms to check for erosion. If erosion is observed, additional mulch must be applied. Netting shall be inspected after rainstorms for dislocation or failure; any damage shall be repaired immediately.

All denuded surfaces which will be exposed for a period of over two months or more shall be temporarily hydroseeded with (a) perennial ryegrass at a rate of 40 lbs per acre (1.0 lb per 1000 square feet); (b) Certified "Aroostook" winter rye (cereal rye) @ 100 lb per acre (2.5 lb/1000 s.f.) to be used in the months of October and November.

Permanent turfgrass cover is to consist of a seed mixture as follows:

(a) <u>Sunny Sites</u>

Kentucky Bluegrass	2.0-2.6 pounds/1000 square feet
Perennial Ryegrass	0.6-0.7 pounds/1000 square feet
Fine Fescue	0.4-0.6 pounds/1000 square feet

(b) <u>Shady Sites</u>

Kentucky Bluegrass	0.8-1.0 pounds/1000 square feet
Perennial Ryegrass	0.6-0.7 pounds/1000 square feet
Fine Fescue	2.6-3.3 pounds/1000 square feet

All plant materials shall comply with the standards of the American Association Of Nurserymen with respect to height and caliper as described in its publication American Standard for Nursery Stock, latest edition.

VII. CONSTRUCTION PHASE AND POST-CONSTRUCTION MAINTENANCE

During the construction phase and following construction of the project, a number of maintenance measures will be taken with respect to the site maintenance. Measures to be taken included the following:

1. During Construction

A comprehensive sediment and erosion control plan will be in place during the construction period. Maintenance measures for sediment and erosion controls will include:

A qualified professional acceptable to the Engineering Consultant of the City of White Plains will be hired by the owner or operator to monitor the installation and maintenance of the sediment and erosion control plans. The qualified professional shall report directly to the Engineering Consultant and shall be responsible for ensuring compliance with the design of the sediment and erosion control plans.

The qualified professional so hired will inspect all sediment and erosion control measures at least every seven calendar days. In the event that there has been a variance with the design of the sediment and erosion control measures so that the ability of the measures to adequately perform the intended function is lessened or compromised and/or the facilities are not adequately maintained, the qualified professional shall be required to report such variance to the Engineering Consultant within 48 hours and shall be empowered to order immediate repairs to the sediment and erosion control measures.

The qualified professional will also be responsible for observing the adequacy of the vegetation growth (trees, shrubs, groundcovers and turfgrasses) in newly graded areas and for ordering additional plantings in the event that the established plant materials do not adequately protect the ground surface from erosion.

The engineer of record must have a representative present during the installation of the proposed stormwater facilities.

All stormwater infrastructure installed during construction shall be inspected and cleaned as required. Upon completion of each phase of construction, all pavements and storm drain systems within or affected by the site disturbance shall be cleaned of all accumulated sediment in conjunction with the removal of all temporary sediment and erosion control devices.

2. Following Construction

Site maintenance activities on the Site will include:

- Grounds maintenance, including regular mowing of lawns;
- Mowing of meadow areas once a year;
- Planting of trees, shrubs and groundcovers; pruning of trees and shrubs;
- Application of fertilizer and herbicides;
- Maintenance of stormwater management area;

Grounds maintenance on the Site will be performed by landscaping contractor.

Fertilizer is typically applied twice in the year - once in the spring and once in the fall. The application of fertilizer is usually necessary to maintain healthy lawn growth due to competition for nutrients with trees and shrubs and since the clippings are often removed. It is not recommended that fertilizer be applied during the summer. It is at this time that lawns are typically dormant.

Fertilizers come in three basic types: (1) Organic; (2) Soluble synthetic and (3) Slow release.

Organic fertilizers are derived from plant or animal waste. Since they are heavier and bulkier than other fertilizers, it is necessary to apply a much greater amount at one time. Soluble synthetic fertilizers are predictable with determining the exact impact on a lawn. However more applications are necessary since their effect is often short term. Slow release fertilizers have a high percentage of nitrogen so quantities that need be handled at one time are smaller. Slow release fertilizers will be utilized by the project.

A complete fertilizer contains all three of the primary nutrients - nitrogen (N), phosphorus (P) and potassium in the form of potash (K). Typically, a 3-1-2 ratio of nutrients (N-P-K) is used for lawn applications.

Fertilizer shall be applied by the landscape contractor in accordance with the manufacturer's instructions. The application of fertilizer does require some skill on the part of the operator. Should there be a spill of fertilizer, the landscape contractor shall be required to scrape or vacuum it up. The area will then be watered in accordance with the manufacturer's instructions to ensure that the fertilizer becomes soluble and available to plants and does not run off.

FASNY will be responsible for the long-term operation and maintenance of the permanent stormwater management practices. The permanent stormwater management practices shall be maintained in accordance with the Maintenance Inspection Checklists provided in Appendix G.

VIII. CONCLUSIONS

This SWPPP has been prepared to describe the project's pre and post-development stormwater management improvements and its sediment and erosion control improvements to be utilized during construction in a manner which will assure compliance with the substantive intent of the general permit. The proposed permanent improvements and the interim improvements to be utilized during construction have been designed in accordance with the requirements of the:

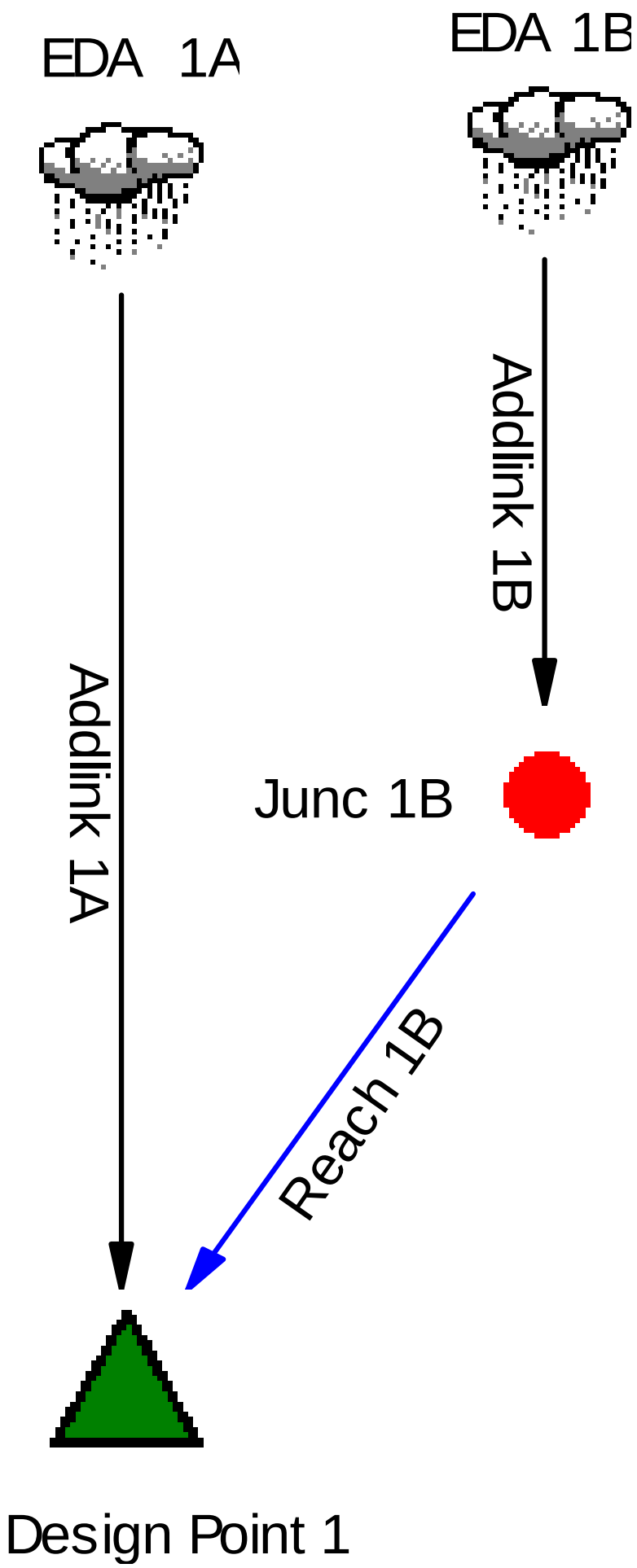
- New York State Department of Environmental Conservation (NYSDEC) SPDES General Permit No. GP-0-15-002, effective January 29, 2015.
- City of White Plains
- New York State Stormwater Management Design Manual.

The project employs a variety of SMP's and green infrastructure techniques and practices to enhance stormwater quality and reduce peak rates of runoff associated with the proposed improvements. These measures include Wet Extended Detention Ponds, Green Roofs, Subsurface Infiltration System, Vegetated Swales, Tree Planting, etc. These improvements will also mitigate runoff volumes from the proposed improvements as runoff volumes will be slightly reduced or maintained in all the analyzed storms.

Based on the foregoing, it is our professional opinion that the proposed improvements will provide water quantity and quality enhancements which meet the project's regulatory thresholds. With proper implementation of the project's Stormwater Pollution Prevention Plan, the existing and proposed improvements are not anticipated to have any adverse impacts to the Site or its downstream areas.

APPENDIX A

EXISTING HYDROLOGIC CALCULATIONS


EDA 1A
EDA 1B
Addlink 1B
Addlink 1A
Junc 1B
Reach 1B
Design Point 1

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********** MASTER SUMMARY **********

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Westchester..... 1
Design Storms 2.02

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EDA 1A..... Tc Calcs 3.01

EDA 1B..... Tc Calcs 3.04

********** CN CALCULATIONS **********

EDA 1A..... Runoff CN-Area 4.01

EDA 1B..... Runoff CN-Area 4.02

********** RUNOFF HYDROGRAPHS **********

EDA 1A..... 1
Unit Hyd. (HYG output) 5.01

EDA 1A..... 10
Unit Hyd. (HYG output) 5.03

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EDA 1A..... 25
Unit Hyd. (HYG output) 5.05

EDA 1A..... 50
Unit Hyd. (HYG output) 5.07

EDA 1A..... 100
Unit Hyd. (HYG output) 5.10

EDA 1B..... 1
Unit Hyd. (HYG output) 5.13

EDA 1B..... 10
Unit Hyd. (HYG output) 5.15

EDA 1B..... 25
Unit Hyd. (HYG output) 5.17

EDA 1B..... 50
Unit Hyd. (HYG output) 5.19

EDA 1B..... 100
Unit Hyd. (HYG output) 5.22

********** REACH ROUTING **********

REACH 1B..... Reach E-V-Q Table 6.01

REACH 1B..... 1
Reach Routing (HYG output) 6.04

REACH 1B..... 10
Reach Routing (HYG output) 6.06

REACH 1B..... 25
Reach Routing (HYG output) 6.08

REACH 1B..... 50
Reach Routing (HYG output) 6.10

REACH 1B..... 100
Reach Routing (HYG output) 6.13

********** HYG ADDITION **********

DESIGN POINT 1.. 1
Node: Addition Summary 7.01

Table of Contents (continued)

DESIGN POINT 1.. 10
Node: Addition Summary 7.04

DESIGN POINT 1.. 25
Node: Addition Summary 7.07

DESIGN POINT 1.. 50
Node: Addition Summary 7.10

DESIGN POINT 1.. 100
Node: Addition Summary 7.14

MASTER DESIGN STORM SUMMARY

Network Storm Collection: Westchester

Return Event	Total Depth in	Rainfall Type	RNF ID
1	2.8400	Synthetic Curve	TypeIII 24hr
10	5.1100	Synthetic Curve	TypeIII 24hr
25	6.4000	Synthetic Curve	TypeIII 24hr
50	7.5900	Synthetic Curve	TypeIII 24hr
100	9.0100	Synthetic Curve	TypeIII 24hr

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID	Type	Return Event	HYG Vol cu.ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage cu.ft
*DESIGN POINT 1	JCT	1	188380	--	12.3500	33.94		
*DESIGN POINT 1	JCT	10	524171		12.3500	98.50		
*DESIGN POINT 1	JCT	25	736693		12.3000	138.22		
*DESIGN POINT 1	JCT	50	939992		12.3000	175.67		
*DESIGN POINT 1	JCT	100	1203042		12.3000	211.21		
EDA 1A	AREA	1	122011		12.3500	22.08		
EDA 1A	AREA	10	336775		12.3000	63.15		
EDA 1A	AREA	25	472317		12.3000	88.61		
EDA 1A	AREA	50	601840		12.3000	112.52		
EDA 1A	AREA	100	760083		12.3000	141.26		
EDA 1B	AREA	1	66372		12.3500	12.11		
EDA 1B	AREA	10	187399		12.3000	35.91		
EDA 1B	AREA	25	264380		12.3000	50.71		
EDA 1B	AREA	50	338155		12.3000	64.65		
EDA 1B	AREA	100	428471		12.3000	81.44		

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID	Type	Return Event	HYG Vol cu.ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage cu.ft
JUNC 1B	JCT	1	66372		12.3500	12.11		
JUNC 1B	JCT	10	187399		12.3000	35.91		
JUNC 1B	JCT	25	264380		12.3000	50.71		
JUNC 1B	JCT	50	338155		12.3000	64.65		
JUNC 1B	JCT	100	428471		12.3000	81.44		

Title... Project Date: 4/19/2011
Project Engineer: ss
Project Title: Watershed
Project Comments:

DESIGN STORMS SUMMARY

Design Storm File,ID = Westchester

Storm Tag Name = 1

Data Type, File, ID = Synthetic Storm TypeIII 24hr
Storm Frequency = 1 yr
Total Rainfall Depth= 2.8400 in
Duration Multiplier = 1
Resulting Duration = 24.0000 hrs
Resulting Start Time= .0000 hrs Step= .1000 hrs End= 24.0000 hrs

Storm Tag Name = 10

Data Type, File, ID = Synthetic Storm TypeIII 24hr
Storm Frequency = 10 yr
Total Rainfall Depth= 5.1100 in
Duration Multiplier = 1
Resulting Duration = 24.0000 hrs
Resulting Start Time= .0000 hrs Step= .1000 hrs End= 24.0000 hrs

Storm Tag Name = 25

Data Type, File, ID = Synthetic Storm TypeIII 24hr
Storm Frequency = 25 yr
Total Rainfall Depth= 6.4000 in
Duration Multiplier = 1
Resulting Duration = 24.0000 hrs
Resulting Start Time= .0000 hrs Step= .1000 hrs End= 24.0000 hrs

Storm Tag Name = 50

Data Type, File, ID = Synthetic Storm TypeIII 24hr
Storm Frequency = 50 yr
Total Rainfall Depth= 7.5900 in
Duration Multiplier = 1
Resulting Duration = 24.0000 hrs
Resulting Start Time= .0000 hrs Step= .1000 hrs End= 24.0000 hrs

Storm Tag Name = 100

Data Type, File, ID = Synthetic Storm TypeIII 24hr
Storm Frequency = 100 yr
Total Rainfall Depth= 9.0100 in
Duration Multiplier = 1
Resulting Duration = 24.0000 hrs
Resulting Start Time= .0000 hrs Step= .1000 hrs End= 24.0000 hrs

DESIGN STORMS SUMMARY

Design Storm File,ID = Westchester

Storm Tag Name = 1

Data Type, File, ID = Synthetic Storm TypeIII 24hr
Storm Frequency = 1 yr
Total Rainfall Depth= 2.8400 in
Duration Multiplier = 1
Resulting Duration = 24.0000 hrs
Resulting Start Time= .0000 hrs Step= .1000 hrs End= 24.0000 hrs

Storm Tag Name = 10

Data Type, File, ID = Synthetic Storm TypeIII 24hr
Storm Frequency = 10 yr
Total Rainfall Depth= 5.1100 in
Duration Multiplier = 1
Resulting Duration = 24.0000 hrs
Resulting Start Time= .0000 hrs Step= .1000 hrs End= 24.0000 hrs

Storm Tag Name = 25

Data Type, File, ID = Synthetic Storm TypeIII 24hr
Storm Frequency = 25 yr
Total Rainfall Depth= 6.4000 in
Duration Multiplier = 1
Resulting Duration = 24.0000 hrs
Resulting Start Time= .0000 hrs Step= .1000 hrs End= 24.0000 hrs

Storm Tag Name = 50

Data Type, File, ID = Synthetic Storm TypeIII 24hr
Storm Frequency = 50 yr
Total Rainfall Depth= 7.5900 in
Duration Multiplier = 1
Resulting Duration = 24.0000 hrs
Resulting Start Time= .0000 hrs Step= .1000 hrs End= 24.0000 hrs

Storm Tag Name = 100

Data Type, File, ID = Synthetic Storm TypeIII 24hr
Storm Frequency = 100 yr
Total Rainfall Depth= 9.0100 in
Duration Multiplier = 1
Resulting Duration = 24.0000 hrs
Resulting Start Time= .0000 hrs Step= .1000 hrs End= 24.0000 hrs

```
::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::
TIME OF CONCENTRATION CALCULATOR
::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::


-----------------------------------------------------------------------


Segment #1:  Tc: TR-55 Sheet

Mannings n          .2400
Hydraulic Length   150.00 ft
2yr, 24hr P        3.5000 in
Slope             .030000 ft/ft

Avg.Velocity          .16 ft/sec

                                         Segment #1 Time:     .2675 hrs
-----------------------------------------------------------------------

Segment #2:  Tc: TR-55 Shallow

Hydraulic Length  1482.00 ft
Slope             .021000 ft/ft
Unpaved

Avg.Velocity         2.34 ft/sec

                                         Segment #2 Time:     .1761 hrs
-----------------------------------------------------------------------

Segment #3:  Tc: TR-55 Channel

Flow Area          4.9100 sq.ft
Wetted Perimeter     7.85 ft
Hydraulic Radius      .63 ft
Slope             .007600 ft/ft
Mannings n          .0130
Hydraulic Length   182.00 ft

Avg.Velocity         7.31 ft/sec

                                         Segment #3 Time:     .0069 hrs
-----------------------------------------------------------------------

                                               =========================
                                                Total Tc:     .4504 hrs
                                               =========================
```

```
 ----------------------------------------------------------------------
 Tc Equations used...
 ----------------------------------------------------------------------


 ==== SCS TR-55 Sheet Flow ==============================================

      Tc = (.007 * ((n * Lf)**0.8)) / ((P**.5) * (Sf**.4))

      Where:  Tc = Time of concentration, hrs
              n  = Mannings n
              Lf = Flow length, ft
              P  = 2yr, 24hr Rain depth, inches
              Sf = Slope, %


 ==== SCS TR-55 Shallow Concentrated Flow ===============================

      Unpaved surface:
      V  = 16.1345 * (Sf**0.5)

      Paved surface:
      V  = 20.3282 * (Sf**0.5)

      Tc = (Lf / V) / (3600sec/hr)

      Where:  V  = Velocity, ft/sec
              Sf = Slope, ft/ft
              Tc = Time of concentration, hrs
              Lf = Flow length, ft
```

```
==== SCS Channel Flow ==================================================

     R  = Aq / Wp
     V  = (1.49 * (R**(2/3)) * (Sf**-0.5)) / n

     Tc = (Lf / V) / (3600sec/hr)

     Where:  R  = Hydraulic radius
             Aq = Flow area, sq.ft.
             Wp = Wetted perimeter, ft
             V  = Velocity, ft/sec
             Sf = Slope, ft/ft
             n  = Mannings n
             Tc = Time of concentration, hrs
             Lf = Flow length, ft
```

```
::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::
TIME OF CONCENTRATION CALCULATOR
::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::


-----------------------------------------------------------------------


Segment #1:  Tc: TR-55 Sheet

Mannings n          .2400
Hydraulic Length   150.00 ft
2yr, 24hr P        3.5000 in
Slope             .023300 ft/ft

Avg.Velocity          .14 ft/sec

                                         Segment #1 Time:     .2959 hrs
-----------------------------------------------------------------------

Segment #2:  Tc: TR-55 Shallow

Hydraulic Length  1100.00 ft
Slope             .019000 ft/ft
Unpaved

Avg.Velocity         2.22 ft/sec

                                         Segment #2 Time:     .1374 hrs
-----------------------------------------------------------------------

                                                ==========================
                                                 Total Tc:     .4333 hrs
                                                ==========================
```

```
 ----------------------------------------------------------------------
 Tc Equations used...
 ----------------------------------------------------------------------


 ==== SCS TR-55 Sheet Flow ==============================================

      Tc = (.007 * ((n * Lf)**0.8)) / ((P**.5) * (Sf**.4))

      Where:  Tc = Time of concentration, hrs
              n  = Mannings n
              Lf = Flow length, ft
              P  = 2yr, 24hr Rain depth, inches
              Sf = Slope, %


 ==== SCS TR-55 Shallow Concentrated Flow ===============================

      Unpaved surface:
      V  = 16.1345 * (Sf**0.5)

      Paved surface:
      V  = 20.3282 * (Sf**0.5)

      Tc = (Lf / V) / (3600sec/hr)

      Where:  V  = Velocity, ft/sec
              Sf = Slope, ft/ft
              Tc = Time of concentration, hrs
              Lf = Flow length, ft
```

RUNOFF CURVE NUMBER DATA
::

Soil/Surface Description	CN	Area acres	Impervious Adjustment %C	%UC	Adjusted CN
Impervious Areas	98	5.800			98.00
Lawns, Good Condition, HSG C	74	26.210			74.00
Woods, Good Condition, HSG C	70	1.060			70.00
COMPOSITE AREA & WEIGHTED CN --->		33.070			78.08 (78)

::

RUNOFF CURVE NUMBER DATA
::

Soil/Surface Description	CN	Area acres	Impervious Adjustment %C	%UC	Adjusted CN
Impervious Areas	98	2.750			98.00
Lawns, Good Condition, HSG C	74	15.280			74.00
Woods, Good Condition, HSG C	70	.980			70.00

COMPOSITE AREA & WEIGHTED CN ---> 19.010 77.27 (77)
::

SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 1 year storm
Duration = 24.0000 hrs Rain Depth = 2.8400 in
Rain Dir = S:\2010\10170\PondPack\2016-10-14_BD\
Rain File -ID = - TypeIII 24hr
Unit Hyd Type = Default Curvilinear
HYG Dir = S:\2010\10170\PondPack\2016-10-14_BD\
HYG File - ID = work_pad.hyg - EDA 1A 1
Tc = .4504 hrs
Drainage Area = 33.070 acres Runoff CN= 78
Calc.Increment= .06006 hrs Out.Incr.= .0500 hrs
HYG Volume = 122011 cu.ft

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
10.2500	.00	.00	.00	.01	.02
10.5000	.03	.05	.07	.09	.12
10.7500	.15	.18	.22	.25	.29
11.0000	.33	.38	.42	.47	.53
11.2500	.59	.66	.73	.82	.91
11.5000	1.02	1.14	1.29	1.49	1.77
11.7500	2.16	2.69	3.36	4.23	5.39
12.0000	7.07	9.35	12.13	15.17	18.10
12.2500	20.44	21.72	22.08	21.68	20.71
12.5000	19.34	17.76	16.13	14.52	12.97
12.7500	11.54	10.27	9.19	8.32	7.58
13.0000	6.97	6.44	5.99	5.60	5.27
13.2500	4.99	4.75	4.54	4.36	4.21
13.5000	4.09	3.98	3.89	3.80	3.72
13.7500	3.65	3.58	3.51	3.45	3.38
14.0000	3.32	3.25	3.19	3.13	3.08
14.2500	3.02	2.97	2.92	2.88	2.84
14.5000	2.81	2.77	2.74	2.71	2.67
14.7500	2.64	2.61	2.58	2.55	2.52
15.0000	2.49	2.45	2.42	2.39	2.36
15.2500	2.33	2.30	2.27	2.23	2.20
15.5000	2.17	2.14	2.11	2.07	2.04
15.7500	2.01	1.98	1.94	1.91	1.88
16.0000	1.84	1.81	1.78	1.75	1.72
16.2500	1.69	1.66	1.64	1.61	1.59
16.5000	1.58	1.56	1.54	1.53	1.51
16.7500	1.49	1.48	1.46	1.45	1.43
17.0000	1.42	1.40	1.39	1.37	1.36
17.2500	1.34	1.33	1.32	1.30	1.29
17.5000	1.27	1.26	1.24	1.23	1.21

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
17.7500	1.20	1.18	1.17	1.15	1.14
18.0000	1.12	1.11	1.09	1.08	1.06
18.2500	1.05	1.04	1.03	1.02	1.01
18.5000	1.01	1.00	.99	.99	.98
18.7500	.98	.97	.97	.97	.96
19.0000	.96	.95	.95	.94	.94
19.2500	.93	.93	.93	.92	.92
19.5000	.91	.91	.90	.90	.89
19.7500	.89	.89	.88	.88	.87
20.0000	.87	.86	.86	.85	.85
20.2500	.85	.84	.84	.83	.83
20.5000	.83	.82	.82	.82	.81
20.7500	.81	.81	.80	.80	.80
21.0000	.79	.79	.79	.78	.78
21.2500	.78	.77	.77	.77	.76
21.5000	.76	.75	.75	.75	.74
21.7500	.74	.74	.73	.73	.73
22.0000	.72	.72	.72	.71	.71
22.2500	.71	.70	.70	.70	.69
22.5000	.69	.69	.68	.68	.68
22.7500	.67	.67	.67	.66	.66
23.0000	.65	.65	.65	.64	.64
23.2500	.64	.63	.63	.63	.62
23.5000	.62	.62	.61	.61	.61
23.7500	.60	.60	.59	.59	.59
24.0000	.58	.57	.55	.51	.45
24.2500	.39	.32	.25	.19	.14
24.5000	.11	.08	.06	.05	.04
24.7500	.03	.02	.02	.01	.01
25.0000	.01	.00	.00	.00	.00
25.2500	.00	.00			

SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 10 year storm
Duration = 24.0000 hrs Rain Depth = 5.1100 in
Rain Dir = S:\2010\10170\PondPack\2016-10-14_BD\
Rain File -ID = - TypeIII 24hr
Unit Hyd Type = Default Curvilinear
HYG Dir = S:\2010\10170\PondPack\2016-10-14_BD\
HYG File - ID = work_pad.hyg - EDA 1A 10
Tc = .4504 hrs
Drainage Area = 33.070 acres Runoff CN= 78
Calc.Increment= .06006 hrs Out.Incr.= .0500 hrs
HYG Volume = 336775 cu.ft

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
7.9500	.00	.00	.00	.01	.02
8.2000	.03	.04	.06	.07	.09
8.4500	.12	.14	.16	.19	.22
8.7000	.25	.28	.31	.34	.38
8.9500	.41	.45	.49	.53	.57
9.2000	.61	.66	.70	.75	.80
9.4500	.85	.90	.95	1.00	1.06
9.7000	1.11	1.17	1.23	1.29	1.35
9.9500	1.41	1.47	1.54	1.61	1.67
10.2000	1.75	1.82	1.91	1.99	2.08
10.4500	2.18	2.28	2.39	2.49	2.61
10.7000	2.72	2.84	2.96	3.09	3.22
10.9500	3.35	3.49	3.63	3.78	3.94
11.2000	4.13	4.34	4.58	4.85	5.17
11.4500	5.51	5.88	6.32	6.84	7.54
11.7000	8.56	9.97	11.81	14.12	16.98
11.9500	20.64	25.66	32.19	39.89	47.96
12.2000	55.36	60.82	63.15	62.92	60.69
12.4500	57.04	52.50	47.61	42.78	38.15
12.7000	33.80	29.83	26.35	23.42	21.05
12.9500	19.07	17.42	16.02	14.82	13.79
13.2000	12.93	12.19	11.55	11.01	10.55
13.4500	10.16	9.83	9.55	9.31	9.09
13.7000	8.88	8.69	8.52	8.35	8.18
13.9500	8.02	7.86	7.70	7.54	7.39
14.2000	7.25	7.11	6.99	6.87	6.77
14.4500	6.67	6.58	6.49	6.40	6.32
14.7000	6.24	6.16	6.08	6.01	5.93
14.9500	5.85	5.78	5.70	5.62	5.55
15.2000	5.47	5.39	5.32	5.24	5.16

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
15.4500	5.09	5.01	4.93	4.85	4.78
15.7000	4.70	4.62	4.54	4.46	4.39
15.9500	4.31	4.23	4.15	4.07	4.00
16.2000	3.93	3.86	3.80	3.74	3.69
16.4500	3.64	3.60	3.56	3.52	3.48
16.7000	3.44	3.41	3.37	3.33	3.30
16.9500	3.26	3.23	3.19	3.16	3.12
17.2000	3.09	3.06	3.02	2.99	2.95
17.4500	2.92	2.88	2.85	2.81	2.78
17.7000	2.74	2.71	2.67	2.64	2.60
17.9500	2.57	2.53	2.50	2.47	2.43
18.2000	2.40	2.37	2.35	2.32	2.30
18.4500	2.29	2.27	2.26	2.24	2.23
18.7000	2.22	2.21	2.20	2.18	2.17
18.9500	2.16	2.15	2.14	2.13	2.12
19.2000	2.11	2.10	2.09	2.08	2.07
19.4500	2.06	2.05	2.04	2.03	2.02
19.7000	2.01	2.00	1.99	1.98	1.97
19.9500	1.96	1.94	1.93	1.92	1.91
20.2000	1.90	1.89	1.89	1.88	1.87
20.4500	1.86	1.85	1.84	1.83	1.83
20.7000	1.82	1.81	1.80	1.79	1.78
20.9500	1.78	1.77	1.76	1.75	1.75
21.2000	1.74	1.73	1.72	1.72	1.71
21.4500	1.70	1.69	1.68	1.68	1.67
21.7000	1.66	1.65	1.64	1.64	1.63
21.9500	1.62	1.61	1.61	1.60	1.59
22.2000	1.58	1.57	1.57	1.56	1.55
22.4500	1.54	1.53	1.52	1.52	1.51
22.7000	1.50	1.49	1.49	1.48	1.47
22.9500	1.46	1.45	1.45	1.44	1.43
23.2000	1.42	1.41	1.40	1.40	1.39
23.4500	1.38	1.37	1.37	1.36	1.35
23.7000	1.34	1.33	1.33	1.32	1.31
23.9500	1.30	1.29	1.26	1.21	1.13
24.2000	1.01	.86	.70	.56	.43
24.4500	.32	.24	.19	.14	.11
24.7000	.08	.06	.05	.04	.03
24.9500	.02	.01	.01	.01	.01
25.2000	.00	.00	.00	.00	

SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 25 year storm
Duration = 24.0000 hrs Rain Depth = 6.4000 in
Rain Dir = S:\2010\10170\PondPack\2016-10-14_BD\
Rain File -ID = - TypeIII 24hr
Unit Hyd Type = Default Curvilinear
HYG Dir = S:\2010\10170\PondPack\2016-10-14_BD\
HYG File - ID = work_pad.hyg - EDA 1A 25
Tc = .4504 hrs
Drainage Area = 33.070 acres Runoff CN= 78
Calc.Increment= .06006 hrs Out.Incr.= .0500 hrs
HYG Volume = 472317 cu.ft

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
6.9500	.00	.00	.00	.01	.01
7.2000	.02	.03	.05	.06	.08
7.4500	.10	.12	.15	.17	.19
7.7000	.22	.24	.27	.29	.32
7.9500	.35	.38	.41	.44	.47
8.2000	.50	.54	.57	.61	.65
8.4500	.69	.74	.78	.83	.88
8.7000	.93	.98	1.04	1.09	1.15
8.9500	1.21	1.27	1.33	1.40	1.46
9.2000	1.53	1.60	1.67	1.75	1.82
9.4500	1.90	1.97	2.05	2.13	2.22
9.7000	2.30	2.39	2.47	2.56	2.65
9.9500	2.74	2.84	2.93	3.03	3.13
10.2000	3.24	3.35	3.47	3.60	3.74
10.4500	3.88	4.03	4.18	4.35	4.51
10.7000	4.68	4.85	5.03	5.22	5.40
10.9500	5.59	5.79	5.99	6.20	6.44
11.2000	6.71	7.02	7.37	7.77	8.23
11.4500	8.73	9.28	9.91	10.68	11.70
11.7000	13.20	15.26	17.95	21.31	25.42
11.9500	30.65	37.73	46.86	57.51	68.57
12.2000	78.58	85.80	88.61	87.89	84.42
12.4500	79.02	72.49	65.54	58.74	52.25
12.7000	46.20	40.70	35.88	31.83	28.56
12.9500	25.84	23.56	21.64	19.99	18.58
13.2000	17.40	16.39	15.52	14.78	14.14
13.4500	13.61	13.17	12.79	12.45	12.15
13.7000	11.88	11.62	11.38	11.14	10.92
13.9500	10.70	10.48	10.27	10.06	9.85
14.2000	9.66	9.48	9.31	9.15	9.01

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
14.4500	8.88	8.75	8.63	8.52	8.41
14.7000	8.30	8.19	8.09	7.98	7.88
14.9500	7.77	7.67	7.57	7.46	7.36
15.2000	7.26	7.16	7.05	6.95	6.85
15.4500	6.74	6.64	6.54	6.43	6.33
15.7000	6.23	6.12	6.02	5.91	5.81
15.9500	5.70	5.60	5.49	5.39	5.29
16.2000	5.20	5.11	5.03	4.95	4.88
16.4500	4.82	4.76	4.70	4.65	4.60
16.7000	4.55	4.50	4.45	4.41	4.36
16.9500	4.31	4.26	4.22	4.17	4.13
17.2000	4.08	4.03	3.99	3.94	3.90
17.4500	3.85	3.80	3.76	3.71	3.67
17.7000	3.62	3.57	3.53	3.48	3.43
17.9500	3.39	3.34	3.30	3.25	3.21
18.2000	3.16	3.13	3.09	3.06	3.04
18.4500	3.01	2.99	2.97	2.96	2.94
18.7000	2.92	2.91	2.89	2.88	2.86
18.9500	2.85	2.84	2.82	2.81	2.79
19.2000	2.78	2.77	2.75	2.74	2.72
19.4500	2.71	2.70	2.68	2.67	2.66
19.7000	2.64	2.63	2.61	2.60	2.59
19.9500	2.57	2.56	2.55	2.53	2.52
20.2000	2.50	2.49	2.48	2.47	2.46
20.4500	2.45	2.43	2.42	2.41	2.40
20.7000	2.39	2.38	2.37	2.36	2.35
20.9500	2.34	2.33	2.32	2.31	2.30
21.2000	2.29	2.28	2.27	2.25	2.24
21.4500	2.23	2.22	2.21	2.20	2.19
21.7000	2.18	2.17	2.16	2.15	2.14
21.9500	2.13	2.12	2.11	2.10	2.09
22.2000	2.08	2.07	2.06	2.04	2.03
22.4500	2.02	2.01	2.00	1.99	1.98
22.7000	1.97	1.96	1.95	1.94	1.93
22.9500	1.92	1.91	1.90	1.89	1.88
23.2000	1.87	1.85	1.84	1.83	1.82
23.4500	1.81	1.80	1.79	1.78	1.77
23.7000	1.76	1.75	1.74	1.73	1.72
23.9500	1.71	1.69	1.66	1.59	1.48
24.2000	1.32	1.12	.92	.73	.56
24.4500	.42	.32	.24	.19	.14
24.7000	.11	.08	.06	.05	.03
24.9500	.03	.02	.01	.01	.01
25.2000	.01	.00	.00	.00	.00

SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 50 year storm
Duration = 24.0000 hrs Rain Depth = 7.5900 in
Rain Dir = S:\2010\10170\PondPack\2016-10-14_BD\
Rain File -ID = - TypeIII 24hr
Unit Hyd Type = Default Curvilinear
HYG Dir = S:\2010\10170\PondPack\2016-10-14_BD\
HYG File - ID = work_pad.hyg - EDA 1A 50
Tc = .4504 hrs
Drainage Area = 33.070 acres Runoff CN= 78
Calc.Increment= .06006 hrs Out.Incr.= .0500 hrs
HYG Volume = 601840 cu.ft

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
6.2500	.00	.00	.01	.01	.02
6.5000	.03	.04	.06	.08	.10
6.7500	.12	.14	.16	.18	.21
7.0000	.23	.26	.29	.32	.34
7.2500	.37	.40	.44	.47	.50
7.5000	.53	.57	.60	.64	.67
7.7500	.71	.75	.79	.83	.87
8.0000	.91	.95	.99	1.03	1.08
8.2500	1.13	1.18	1.23	1.29	1.35
8.5000	1.41	1.48	1.55	1.62	1.69
8.7500	1.76	1.84	1.92	2.00	2.08
9.0000	2.17	2.25	2.34	2.43	2.52
9.2500	2.62	2.72	2.81	2.91	3.02
9.5000	3.12	3.23	3.33	3.44	3.55
9.7500	3.67	3.78	3.90	4.02	4.14
10.0000	4.26	4.38	4.51	4.64	4.78
10.2500	4.93	5.09	5.26	5.43	5.62
10.5000	5.82	6.02	6.23	6.45	6.67
10.7500	6.90	7.13	7.36	7.60	7.85
11.0000	8.10	8.36	8.63	8.94	9.28
11.2500	9.68	10.14	10.67	11.26	11.91
11.5000	12.63	13.45	14.45	15.78	17.73
11.7500	20.42	23.93	28.28	33.58	40.29
12.0000	49.30	60.85	74.26	88.09	100.50
12.2500	109.31	112.52	111.28	106.60	99.55
12.5000	91.12	82.23	73.58	65.37	57.71
12.7500	50.78	44.71	39.63	35.52	32.10
13.0000	29.25	26.83	24.77	23.01	21.53
13.2500	20.26	19.18	18.25	17.46	16.80
13.5000	16.25	15.77	15.35	14.98	14.63

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
13.7500	14.31	14.01	13.72	13.44	13.17
14.0000	12.90	12.63	12.37	12.12	11.88
14.2500	11.65	11.44	11.25	11.07	10.91
14.5000	10.75	10.60	10.46	10.32	10.19
14.7500	10.06	9.92	9.79	9.67	9.54
15.0000	9.41	9.28	9.16	9.03	8.90
15.2500	8.77	8.65	8.52	8.39	8.27
15.5000	8.14	8.01	7.88	7.76	7.63
15.7500	7.50	7.37	7.24	7.11	6.98
16.0000	6.86	6.73	6.60	6.48	6.36
16.2500	6.26	6.15	6.06	5.98	5.90
16.5000	5.83	5.76	5.69	5.63	5.57
16.7500	5.51	5.45	5.39	5.33	5.27
17.0000	5.22	5.16	5.10	5.05	4.99
17.2500	4.93	4.88	4.82	4.76	4.71
17.5000	4.65	4.59	4.54	4.48	4.42
17.7500	4.37	4.31	4.25	4.20	4.14
18.0000	4.08	4.03	3.97	3.92	3.87
18.2500	3.82	3.78	3.74	3.71	3.68
18.5000	3.66	3.63	3.61	3.59	3.57
18.7500	3.55	3.53	3.52	3.50	3.48
19.0000	3.46	3.45	3.43	3.41	3.39
19.2500	3.38	3.36	3.34	3.33	3.31
19.5000	3.29	3.28	3.26	3.24	3.22
19.7500	3.21	3.19	3.17	3.16	3.14
20.0000	3.12	3.11	3.09	3.07	3.06
20.2500	3.04	3.03	3.01	3.00	2.98
20.5000	2.97	2.96	2.94	2.93	2.92
20.7500	2.90	2.89	2.88	2.86	2.85
21.0000	2.84	2.82	2.81	2.80	2.79
21.2500	2.78	2.76	2.75	2.74	2.72
21.5000	2.71	2.70	2.68	2.67	2.66
21.7500	2.64	2.63	2.62	2.61	2.60
22.0000	2.58	2.57	2.56	2.54	2.53
22.2500	2.52	2.51	2.49	2.48	2.47
22.5000	2.45	2.44	2.43	2.41	2.40
22.7500	2.39	2.38	2.37	2.35	2.34
23.0000	2.33	2.31	2.30	2.29	2.27
23.2500	2.26	2.25	2.23	2.22	2.21
23.5000	2.20	2.18	2.17	2.16	2.15
23.7500	2.13	2.12	2.11	2.09	2.08
24.0000	2.06	2.02	1.94	1.81	1.61
24.2500	1.37	1.12	.89	.68	.51
24.5000	.39	.30	.23	.17	.13
24.7500	.10	.07	.06	.04	.03

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
25.0000	.02	.02	.01	.01	.01
25.2500	.00	.00	.00	.00	

SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 100 year storm
Duration = 24.0000 hrs Rain Depth = 9.0100 in
Rain Dir = S:\2010\10170\PondPack\2016-10-14_BD\
Rain File -ID = - TypeIII 24hr
Unit Hyd Type = Default Curvilinear
HYG Dir = S:\2010\10170\PondPack\2016-10-14_BD\
HYG File - ID = work_pad.hyg - EDA 1A 100
Tc = .4504 hrs
Drainage Area = 33.070 acres Runoff CN= 78
Calc.Increment= .06006 hrs Out.Incr.= .0500 hrs
HYG Volume = 760083 cu.ft

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
5.5000	.00	.00	.01	.01	.02
5.7500	.03	.05	.06	.08	.10
6.0000	.12	.14	.16	.18	.21
6.2500	.23	.26	.28	.31	.34
6.5000	.36	.39	.42	.46	.49
6.7500	.52	.56	.59	.63	.66
7.0000	.70	.74	.78	.82	.86
7.2500	.90	.95	.99	1.04	1.08
7.5000	1.13	1.18	1.22	1.27	1.32
7.7500	1.37	1.42	1.48	1.53	1.58
8.0000	1.64	1.70	1.75	1.81	1.87
8.2500	1.94	2.01	2.09	2.17	2.25
8.5000	2.34	2.43	2.52	2.62	2.72
8.7500	2.82	2.92	3.03	3.14	3.25
9.0000	3.37	3.48	3.60	3.72	3.85
9.2500	3.97	4.10	4.23	4.36	4.50
9.5000	4.63	4.77	4.91	5.05	5.20
9.7500	5.34	5.49	5.64	5.79	5.95
10.0000	6.10	6.26	6.42	6.59	6.77
10.2500	6.96	7.17	7.38	7.61	7.86
10.5000	8.11	8.37	8.64	8.92	9.20
10.7500	9.49	9.79	10.09	10.39	10.70
11.0000	11.02	11.34	11.69	12.08	12.52
11.2500	13.03	13.61	14.28	15.05	15.88
11.5000	16.80	17.85	19.13	20.84	23.34
11.7500	26.79	31.28	36.84	43.58	52.08
12.0000	63.40	77.86	94.55	111.69	126.94
12.2500	137.61	141.26	139.36	133.21	124.15
12.5000	113.42	102.19	91.32	81.02	71.46
12.7500	62.81	55.25	48.92	43.81	39.56

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
13.0000	36.01	33.02	30.46	28.27	26.44
13.2500	24.87	23.53	22.38	21.40	20.58
13.5000	19.90	19.31	18.79	18.33	17.90
13.7500	17.51	17.14	16.78	16.43	16.10
14.0000	15.76	15.44	15.12	14.81	14.51
14.2500	14.23	13.97	13.74	13.52	13.32
14.5000	13.13	12.94	12.77	12.60	12.43
14.7500	12.27	12.11	11.95	11.79	11.63
15.0000	11.48	11.32	11.16	11.01	10.85
15.2500	10.70	10.54	10.38	10.23	10.07
15.5000	9.92	9.76	9.60	9.45	9.29
15.7500	9.13	8.98	8.82	8.66	8.51
16.0000	8.35	8.19	8.04	7.89	7.75
16.2500	7.61	7.49	7.38	7.27	7.18
16.5000	7.09	7.00	6.92	6.85	6.77
16.7500	6.70	6.63	6.55	6.48	6.41
17.0000	6.34	6.27	6.20	6.14	6.07
17.2500	6.00	5.93	5.86	5.79	5.72
17.5000	5.65	5.58	5.52	5.45	5.38
17.7500	5.31	5.24	5.17	5.10	5.03
18.0000	4.96	4.89	4.83	4.76	4.70
18.2500	4.64	4.59	4.55	4.51	4.47
18.5000	4.44	4.41	4.39	4.36	4.34
18.7500	4.31	4.29	4.27	4.25	4.23
19.0000	4.21	4.18	4.16	4.14	4.12
19.2500	4.10	4.08	4.06	4.04	4.02
19.5000	4.00	3.98	3.96	3.94	3.92
19.7500	3.89	3.87	3.85	3.83	3.81
20.0000	3.79	3.77	3.75	3.73	3.71
20.2500	3.69	3.67	3.66	3.64	3.62
20.5000	3.60	3.59	3.57	3.55	3.54
20.7500	3.52	3.51	3.49	3.47	3.46
21.0000	3.44	3.43	3.41	3.40	3.38
21.2500	3.37	3.35	3.34	3.32	3.30
21.5000	3.29	3.27	3.26	3.24	3.22
21.7500	3.21	3.19	3.18	3.16	3.15
22.0000	3.13	3.12	3.10	3.09	3.07
22.2500	3.06	3.04	3.02	3.01	2.99
22.5000	2.97	2.96	2.94	2.93	2.91
22.7500	2.90	2.88	2.87	2.85	2.84
23.0000	2.82	2.80	2.79	2.77	2.76
23.2500	2.74	2.72	2.71	2.69	2.68
23.5000	2.66	2.65	2.63	2.62	2.60
23.7500	2.59	2.57	2.55	2.54	2.52
24.0000	2.50	2.45	2.35	2.19	1.95

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
24.2500	1.66	1.36	1.08	.83	.62
24.5000	.47	.36	.28	.21	.16
24.7500	.12	.09	.07	.05	.04
25.0000	.03	.02	.02	.01	.01
25.2500	.01	.00	.00	.00	

SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 1 year storm
Duration = 24.0000 hrs Rain Depth = 2.8400 in
Rain Dir = S:\2010\10170\PondPack\2016-10-14_BD\
Rain File -ID = - TypeIII 24hr
Unit Hyd Type = Default Curvilinear
HYG Dir = S:\2010\10170\PondPack\2016-10-14_BD\
HYG File - ID = work_pad.hyg - EDA 1B 1
Tc = .4333 hrs
Drainage Area = 19.010 acres Runoff CN= 77
Calc.Increment= .05777 hrs Out.Incr.= .0500 hrs
HYG Volume = 66372 cu.ft

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
10.5000	.00	.00	.01	.01	.02
10.7500	.03	.04	.06	.08	.10
11.0000	.12	.14	.16	.19	.22
11.2500	.25	.29	.33	.37	.42
11.5000	.48	.54	.62	.73	.89
11.7500	1.10	1.38	1.75	2.22	2.89
12.0000	3.82	5.10	6.69	8.42	10.06
12.2500	11.33	12.01	12.11	11.80	11.19
12.5000	10.40	9.52	8.62	7.73	6.88
12.7500	6.11	5.45	4.88	4.41	4.03
13.0000	3.71	3.44	3.21	3.01	2.84
13.2500	2.69	2.56	2.45	2.37	2.29
13.5000	2.23	2.18	2.13	2.08	2.04
13.7500	2.00	1.97	1.93	1.90	1.86
14.0000	1.83	1.79	1.76	1.72	1.69
14.2500	1.66	1.64	1.61	1.59	1.57
14.5000	1.55	1.53	1.51	1.49	1.48
14.7500	1.46	1.44	1.43	1.41	1.39
15.0000	1.37	1.36	1.34	1.32	1.31
15.2500	1.29	1.27	1.25	1.24	1.22
15.5000	1.20	1.18	1.16	1.15	1.13
15.7500	1.11	1.09	1.07	1.06	1.04
16.0000	1.02	1.00	.98	.97	.95
16.2500	.93	.92	.91	.89	.88
16.5000	.87	.86	.85	.85	.84
16.7500	.83	.82	.81	.80	.79
17.0000	.79	.78	.77	.76	.75
17.2500	.75	.74	.73	.72	.71
17.5000	.70	.70	.69	.68	.67
17.7500	.66	.65	.65	.64	.63

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
18.0000	.62	.61	.60	.60	.59
18.2500	.58	.58	.57	.57	.56
18.5000	.56	.56	.55	.55	.55
18.7500	.54	.54	.54	.54	.53
19.0000	.53	.53	.53	.52	.52
19.2500	.52	.52	.51	.51	.51
19.5000	.51	.51	.50	.50	.50
19.7500	.50	.49	.49	.49	.49
20.0000	.48	.48	.48	.48	.47
20.2500	.47	.47	.47	.46	.46
20.5000	.46	.46	.46	.45	.45
20.7500	.45	.45	.45	.44	.44
21.0000	.44	.44	.44	.44	.43
21.2500	.43	.43	.43	.43	.42
21.5000	.42	.42	.42	.42	.41
21.7500	.41	.41	.41	.41	.41
22.0000	.40	.40	.40	.40	.40
22.2500	.39	.39	.39	.39	.39
22.5000	.38	.38	.38	.38	.38
22.7500	.37	.37	.37	.37	.37
23.0000	.36	.36	.36	.36	.36
23.2500	.35	.35	.35	.35	.35
23.5000	.35	.34	.34	.34	.34
23.7500	.34	.33	.33	.33	.33
24.0000	.32	.32	.30	.28	.25
24.2500	.21	.17	.13	.10	.07
24.5000	.05	.04	.03	.02	.02
24.7500	.01	.01	.01	.01	.00
25.0000	.00	.00	.00	.00	.00

SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 10 year storm
Duration = 24.0000 hrs Rain Depth = 5.1100 in
Rain Dir = S:\2010\10170\PondPack\2016-10-14_BD\
Rain File -ID = - TypeIII 24hr
Unit Hyd Type = Default Curvilinear
HYG Dir = S:\2010\10170\PondPack\2016-10-14_BD\
HYG File - ID = work_pad.hyg - EDA 1B 10
Tc = .4333 hrs
Drainage Area = 19.010 acres Runoff CN= 77
Calc.Increment= .05777 hrs Out.Incr.= .0500 hrs
HYG Volume = 187399 cu.ft

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
8.2000	.00	.00	.00	.01	.01
8.4500	.02	.03	.04	.05	.06
8.7000	.08	.09	.11	.13	.15
8.9500	.17	.19	.21	.23	.25
9.2000	.27	.30	.32	.35	.37
9.4500	.40	.43	.45	.48	.51
9.7000	.54	.58	.61	.64	.67
9.9500	.71	.74	.78	.81	.85
10.2000	.89	.94	.98	1.03	1.08
10.4500	1.13	1.19	1.25	1.31	1.37
10.7000	1.43	1.50	1.57	1.64	1.71
10.9500	1.78	1.86	1.93	2.02	2.11
11.2000	2.21	2.33	2.47	2.63	2.80
11.4500	2.99	3.20	3.44	3.74	4.16
11.7000	4.75	5.55	6.60	7.93	9.54
11.9500	11.71	14.58	18.37	22.87	27.58
12.2000	31.77	34.75	35.91	35.44	33.87
12.4500	31.58	28.91	26.12	23.37	20.73
12.7000	18.30	16.13	14.26	12.69	11.39
12.9500	10.32	9.44	8.71	8.09	7.55
13.2000	7.09	6.69	6.35	6.06	5.83
13.4500	5.63	5.46	5.32	5.19	5.08
13.7000	4.97	4.86	4.77	4.68	4.58
13.9500	4.49	4.40	4.32	4.23	4.15
14.2000	4.07	3.99	3.92	3.86	3.80
14.4500	3.75	3.70	3.65	3.60	3.56
14.7000	3.51	3.47	3.42	3.38	3.34
14.9500	3.29	3.25	3.21	3.16	3.12
15.2000	3.08	3.04	2.99	2.95	2.91
15.4500	2.86	2.82	2.77	2.73	2.69

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
15.7000	2.64	2.60	2.56	2.51	2.47
15.9500	2.42	2.38	2.33	2.29	2.25
16.2000	2.21	2.17	2.14	2.11	2.08
16.4500	2.05	2.03	2.00	1.98	1.96
16.7000	1.94	1.92	1.90	1.88	1.86
16.9500	1.84	1.82	1.80	1.78	1.76
17.2000	1.74	1.72	1.70	1.68	1.66
17.4500	1.64	1.63	1.61	1.59	1.57
17.7000	1.55	1.53	1.51	1.49	1.47
17.9500	1.45	1.43	1.41	1.39	1.37
18.2000	1.35	1.34	1.32	1.31	1.30
18.4500	1.29	1.28	1.27	1.27	1.26
18.7000	1.25	1.25	1.24	1.23	1.23
18.9500	1.22	1.22	1.21	1.21	1.20
19.2000	1.19	1.19	1.18	1.18	1.17
19.4500	1.16	1.16	1.15	1.15	1.14
19.7000	1.13	1.13	1.12	1.12	1.11
19.9500	1.11	1.10	1.09	1.09	1.08
20.2000	1.08	1.07	1.07	1.06	1.06
20.4500	1.05	1.05	1.04	1.04	1.03
20.7000	1.03	1.02	1.02	1.01	1.01
20.9500	1.01	1.00	1.00	.99	.99
21.2000	.98	.98	.97	.97	.97
21.4500	.96	.96	.95	.95	.94
21.7000	.94	.93	.93	.93	.92
21.9500	.92	.91	.91	.90	.90
22.2000	.89	.89	.89	.88	.88
22.4500	.87	.87	.86	.86	.85
22.7000	.85	.85	.84	.84	.83
22.9500	.83	.82	.82	.81	.81
23.2000	.80	.80	.79	.79	.79
23.4500	.78	.78	.77	.77	.76
23.7000	.76	.75	.75	.75	.74
23.9500	.74	.73	.71	.69	.63
24.2000	.56	.47	.38	.29	.22
24.4500	.17	.12	.09	.07	.05
24.7000	.04	.03	.02	.02	.01
24.9500	.01	.01	.00	.00	.00
25.2000	.00	.00			

SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 25 year storm
Duration = 24.0000 hrs Rain Depth = 6.4000 in
Rain Dir = S:\2010\10170\PondPack\2016-10-14_BD\
Rain File -ID = - TypeIII 24hr
Unit Hyd Type = Default Curvilinear
HYG Dir = S:\2010\10170\PondPack\2016-10-14_BD\
HYG File - ID = work_pad.hyg - EDA 1B 25
Tc = .4333 hrs
Drainage Area = 19.010 acres Runoff CN= 77
Calc.Increment= .05777 hrs Out.Incr.= .0500 hrs
HYG Volume = 264380 cu.ft

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
7.2500	.00	.00	.00	.01	.01
7.5000	.02	.03	.04	.05	.07
7.7500	.08	.09	.11	.12	.14
8.0000	.15	.17	.18	.20	.22
8.2500	.24	.26	.28	.30	.32
8.5000	.34	.37	.39	.42	.45
8.7500	.48	.51	.54	.57	.60
9.0000	.63	.67	.70	.74	.78
9.2500	.82	.85	.89	.93	.98
9.5000	1.02	1.06	1.11	1.15	1.20
9.7500	1.25	1.30	1.35	1.40	1.45
10.0000	1.50	1.55	1.61	1.66	1.72
10.2500	1.79	1.85	1.93	2.00	2.08
10.5000	2.17	2.25	2.34	2.43	2.53
10.7500	2.63	2.73	2.83	2.93	3.04
11.0000	3.15	3.26	3.38	3.51	3.67
11.2500	3.84	4.05	4.28	4.54	4.82
11.5000	5.12	5.47	5.92	6.54	7.42
11.7500	8.60	10.16	12.11	14.45	17.57
12.0000	21.65	26.97	33.25	39.73	45.42
12.2500	49.36	50.71	49.80	47.39	44.01
12.5000	40.14	36.15	32.25	28.55	25.14
12.7500	22.11	19.51	17.33	15.53	14.05
13.0000	12.83	11.83	10.97	10.22	9.59
13.2500	9.04	8.57	8.18	7.85	7.58
13.5000	7.35	7.16	6.98	6.82	6.67
13.7500	6.53	6.40	6.27	6.15	6.03
14.0000	5.90	5.78	5.67	5.55	5.44
14.2500	5.34	5.25	5.16	5.08	5.01
14.5000	4.94	4.87	4.81	4.75	4.69

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
14.7500	4.63	4.57	4.51	4.45	4.39
15.0000	4.33	4.28	4.22	4.16	4.10
15.2500	4.04	3.99	3.93	3.87	3.81
15.5000	3.75	3.69	3.63	3.58	3.52
15.7500	3.46	3.40	3.34	3.28	3.22
16.0000	3.16	3.10	3.05	2.99	2.94
16.2500	2.89	2.84	2.80	2.76	2.73
16.5000	2.69	2.66	2.63	2.60	2.57
16.7500	2.55	2.52	2.49	2.47	2.44
17.0000	2.41	2.39	2.36	2.34	2.31
17.2500	2.28	2.26	2.23	2.21	2.18
17.5000	2.15	2.13	2.10	2.08	2.05
17.7500	2.02	2.00	1.97	1.94	1.92
18.0000	1.89	1.87	1.84	1.81	1.79
18.2500	1.77	1.75	1.74	1.72	1.71
18.5000	1.70	1.69	1.68	1.67	1.66
18.7500	1.65	1.64	1.63	1.63	1.62
19.0000	1.61	1.60	1.59	1.59	1.58
19.2500	1.57	1.56	1.55	1.55	1.54
19.5000	1.53	1.52	1.52	1.51	1.50
19.7500	1.49	1.48	1.48	1.47	1.46
20.0000	1.45	1.44	1.44	1.43	1.42
20.2500	1.41	1.41	1.40	1.39	1.39
20.5000	1.38	1.38	1.37	1.36	1.36
20.7500	1.35	1.34	1.34	1.33	1.33
21.0000	1.32	1.32	1.31	1.30	1.30
21.2500	1.29	1.29	1.28	1.27	1.27
21.5000	1.26	1.26	1.25	1.24	1.24
21.7500	1.23	1.23	1.22	1.22	1.21
22.0000	1.20	1.20	1.19	1.19	1.18
22.2500	1.17	1.17	1.16	1.15	1.15
22.5000	1.14	1.14	1.13	1.13	1.12
22.7500	1.11	1.11	1.10	1.10	1.09
23.0000	1.08	1.08	1.07	1.07	1.06
23.2500	1.05	1.05	1.04	1.04	1.03
23.5000	1.02	1.02	1.01	1.01	1.00
23.7500	.99	.99	.98	.98	.97
24.0000	.96	.94	.90	.84	.73
24.2500	.61	.50	.39	.29	.22
24.5000	.16	.12	.09	.07	.05
24.7500	.04	.03	.02	.02	.01
25.0000	.01	.01	.00	.00	.00
25.2500	.00	.00			

SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 50 year storm
Duration = 24.0000 hrs Rain Depth = 7.5900 in
Rain Dir = S:\2010\10170\PondPack\2016-10-14_BD\
Rain File -ID = - TypeIII 24hr
Unit Hyd Type = Default Curvilinear
HYG Dir = S:\2010\10170\PondPack\2016-10-14_BD\
HYG File - ID = work_pad.hyg - EDA 1B 50
Tc = .4333 hrs
Drainage Area = 19.010 acres Runoff CN= 77
Calc.Increment= .05777 hrs Out.Incr.= .0500 hrs
HYG Volume = 338155 cu.ft

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
6.5000	.00	.00	.00	.01	.01
6.7500	.02	.03	.04	.05	.06
7.0000	.07	.09	.10	.12	.13
7.2500	.15	.16	.18	.20	.22
7.5000	.23	.25	.27	.29	.31
7.7500	.33	.35	.37	.39	.41
8.0000	.44	.46	.48	.51	.53
8.2500	.56	.59	.62	.65	.68
8.5000	.72	.75	.79	.83	.87
8.7500	.91	.95	.99	1.04	1.08
9.0000	1.13	1.18	1.23	1.28	1.33
9.2500	1.38	1.43	1.49	1.54	1.60
9.5000	1.66	1.72	1.78	1.84	1.90
9.7500	1.96	2.03	2.09	2.16	2.23
10.0000	2.29	2.36	2.43	2.51	2.59
10.2500	2.67	2.76	2.86	2.96	3.06
10.5000	3.17	3.29	3.41	3.53	3.65
10.7500	3.78	3.91	4.04	4.18	4.32
11.0000	4.46	4.60	4.76	4.93	5.13
11.2500	5.36	5.62	5.93	6.27	6.64
11.5000	7.03	7.50	8.08	8.90	10.04
11.7500	11.60	13.64	16.18	19.21	23.23
12.0000	28.45	35.21	43.14	51.28	58.34
12.2500	63.14	64.65	63.30	60.07	55.64
12.5000	50.63	45.52	40.53	35.82	31.50
12.7500	27.68	24.39	21.64	19.37	17.50
13.0000	15.97	14.71	13.63	12.70	11.89
13.2500	11.21	10.62	10.13	9.72	9.38
13.5000	9.10	8.85	8.63	8.43	8.24
13.7500	8.07	7.90	7.75	7.59	7.44

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
14.0000	7.29	7.14	6.99	6.85	6.71
14.2500	6.59	6.47	6.36	6.26	6.17
14.5000	6.09	6.00	5.93	5.85	5.77
14.7500	5.70	5.62	5.55	5.48	5.40
15.0000	5.33	5.26	5.19	5.12	5.04
15.2500	4.97	4.90	4.83	4.76	4.68
15.5000	4.61	4.54	4.47	4.39	4.32
15.7500	4.25	4.17	4.10	4.03	3.95
16.0000	3.88	3.81	3.74	3.67	3.60
16.2500	3.54	3.49	3.43	3.39	3.34
16.5000	3.30	3.27	3.23	3.19	3.16
16.7500	3.12	3.09	3.06	3.03	2.99
17.0000	2.96	2.93	2.90	2.86	2.83
17.2500	2.80	2.77	2.74	2.70	2.67
17.5000	2.64	2.61	2.58	2.54	2.51
17.7500	2.48	2.45	2.41	2.38	2.35
18.0000	2.32	2.28	2.25	2.22	2.19
18.2500	2.17	2.15	2.13	2.11	2.09
18.5000	2.08	2.07	2.05	2.04	2.03
18.7500	2.02	2.01	2.00	1.99	1.98
19.0000	1.97	1.96	1.95	1.94	1.93
19.2500	1.92	1.91	1.90	1.89	1.88
19.5000	1.87	1.86	1.85	1.84	1.83
19.7500	1.83	1.82	1.81	1.80	1.79
20.0000	1.78	1.77	1.76	1.75	1.74
20.2500	1.73	1.72	1.71	1.71	1.70
20.5000	1.69	1.68	1.67	1.67	1.66
20.7500	1.65	1.64	1.64	1.63	1.62
21.0000	1.61	1.61	1.60	1.59	1.59
21.2500	1.58	1.57	1.57	1.56	1.55
21.5000	1.54	1.54	1.53	1.52	1.51
21.7500	1.51	1.50	1.49	1.48	1.48
22.0000	1.47	1.46	1.46	1.45	1.44
22.2500	1.43	1.43	1.42	1.41	1.40
22.5000	1.40	1.39	1.38	1.37	1.37
22.7500	1.36	1.35	1.35	1.34	1.33
23.0000	1.32	1.32	1.31	1.30	1.29
23.2500	1.29	1.28	1.27	1.26	1.26
23.5000	1.25	1.24	1.24	1.23	1.22
23.7500	1.21	1.21	1.20	1.19	1.18
24.0000	1.17	1.15	1.10	1.02	.89
24.2500	.75	.61	.47	.36	.27
24.5000	.20	.15	.11	.09	.06
24.7500	.05	.04	.03	.02	.01
25.0000	.01	.01	.01	.00	.00

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                          HYDROGRAPH ORDINATES (cfs)
    Time  |               Output Time increment = .0500 hrs
    hrs   |    Time on left represents time for first value in each row.
 ---------|-------------------------------------------------------------
  25.2500 |         .00         .00
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SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 100 year storm
Duration = 24.0000 hrs Rain Depth = 9.0100 in
Rain Dir = S:\2010\10170\PondPack\2016-10-14_BD\
Rain File -ID = - TypeIII 24hr
Unit Hyd Type = Default Curvilinear
HYG Dir = S:\2010\10170\PondPack\2016-10-14_BD\
HYG File - ID = work_pad.hyg - EDA 1B 100
Tc = .4333 hrs
Drainage Area = 19.010 acres Runoff CN= 77
Calc.Increment= .05777 hrs Out.Incr.= .0500 hrs
HYG Volume = 428471 cu.ft

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
5.7500	.00	.00	.00	.01	.01
6.0000	.02	.03	.04	.05	.06
6.2500	.07	.09	.10	.11	.13
6.5000	.14	.16	.18	.19	.21
6.7500	.23	.25	.27	.28	.30
7.0000	.33	.35	.37	.39	.41
7.2500	.44	.46	.48	.51	.53
7.5000	.56	.58	.61	.64	.67
7.7500	.69	.72	.75	.78	.81
8.0000	.84	.87	.90	.94	.97
8.2500	1.01	1.05	1.09	1.13	1.18
8.5000	1.23	1.28	1.33	1.38	1.44
8.7500	1.50	1.55	1.61	1.67	1.74
9.0000	1.80	1.86	1.93	2.00	2.07
9.2500	2.14	2.21	2.28	2.35	2.43
9.5000	2.51	2.58	2.66	2.74	2.82
9.7500	2.90	2.99	3.07	3.16	3.24
10.0000	3.33	3.42	3.51	3.61	3.71
10.2500	3.82	3.93	4.06	4.19	4.33
10.5000	4.47	4.62	4.77	4.93	5.09
10.7500	5.25	5.42	5.59	5.76	5.94
11.0000	6.12	6.30	6.50	6.72	6.97
11.2500	7.27	7.61	8.00	8.44	8.91
11.5000	9.42	10.02	10.77	11.83	13.31
11.7500	15.32	17.94	21.20	25.08	30.18
12.0000	36.76	45.26	55.17	65.27	73.96
12.2500	79.77	81.44	79.53	75.29	69.59
12.5000	63.21	56.73	50.44	44.52	39.11
12.7500	34.32	30.22	26.78	23.95	21.62
13.0000	19.71	18.14	16.79	15.64	14.64

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
13.2500	13.79	13.06	12.45	11.94	11.52
13.5000	11.17	10.86	10.59	10.34	10.11
13.7500	9.90	9.69	9.50	9.30	9.11
14.0000	8.93	8.74	8.56	8.39	8.22
14.2500	8.06	7.92	7.79	7.67	7.55
14.5000	7.45	7.35	7.25	7.15	7.06
14.7500	6.97	6.88	6.79	6.70	6.61
15.0000	6.52	6.43	6.34	6.25	6.16
15.2500	6.07	5.99	5.90	5.81	5.72
15.5000	5.63	5.54	5.45	5.36	5.27
15.7500	5.19	5.10	5.01	4.92	4.83
16.0000	4.74	4.65	4.56	4.48	4.40
16.2500	4.32	4.25	4.19	4.13	4.08
16.5000	4.03	3.98	3.94	3.89	3.85
16.7500	3.81	3.77	3.73	3.69	3.65
17.0000	3.61	3.57	3.53	3.49	3.45
17.2500	3.41	3.37	3.33	3.29	3.25
17.5000	3.22	3.18	3.14	3.10	3.06
17.7500	3.02	2.98	2.94	2.90	2.86
18.0000	2.82	2.78	2.74	2.71	2.67
18.2500	2.64	2.61	2.59	2.57	2.55
18.5000	2.53	2.51	2.50	2.49	2.47
18.7500	2.46	2.45	2.43	2.42	2.41
19.0000	2.40	2.39	2.37	2.36	2.35
19.2500	2.34	2.33	2.31	2.30	2.29
19.5000	2.28	2.27	2.26	2.24	2.23
19.7500	2.22	2.21	2.20	2.18	2.17
20.0000	2.16	2.15	2.14	2.13	2.11
20.2500	2.10	2.09	2.08	2.07	2.06
20.5000	2.06	2.05	2.04	2.03	2.02
20.7500	2.01	2.00	1.99	1.98	1.97
21.0000	1.96	1.95	1.95	1.94	1.93
21.2500	1.92	1.91	1.90	1.89	1.88
21.5000	1.88	1.87	1.86	1.85	1.84
21.7500	1.83	1.82	1.81	1.80	1.80
22.0000	1.79	1.78	1.77	1.76	1.75
22.2500	1.74	1.73	1.72	1.71	1.71
22.5000	1.70	1.69	1.68	1.67	1.66
22.7500	1.65	1.64	1.64	1.63	1.62
23.0000	1.61	1.60	1.59	1.58	1.57
23.2500	1.56	1.55	1.54	1.54	1.53
23.5000	1.52	1.51	1.50	1.49	1.48
23.7500	1.47	1.47	1.46	1.45	1.44
24.0000	1.42	1.39	1.34	1.24	1.09
24.2500	.91	.74	.57	.43	.32

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
24.5000	.24	.18	.14	.10	.08
24.7500	.06	.04	.03	.02	.02
25.0000	.01	.01	.01	.00	.00
25.2500	.00	.00			

MODIFIED PULS REACH DATA

```
HYG Dir          = S:\2010\10170\PondPack\2016-10-14_BD\
Inflow  HYG file = work_pad.hyg - JUNC 1B          1
Outflow HYG file = work_pad.hyg - REACH 1B         1

Reach Link Data  = REACH 1B
Reach Length     = 1579.00 ft
Approx. Total Tt = .0762 hrs  (based on Wtd.Q = 4.67 cfs)
Reach Channel    = Pipes  (Chn-Circular)
Overflow Elev.   = 277.33 ft
Overflow Channel = NONE

No Infiltration

INITIAL CONDITIONS
----------------------------------
Starting WS Elev   =   274.62 ft
Starting Volume    =        0 cu.ft
Starting Outflow   =      .00 cfs
Starting Infiltr.  =      .00 cfs
Starting Total Qout=      .00 cfs
Time Increment     =    .0500 hrs
```

Elevation ft	Outflow cfs	Storage cu.ft	Area sq.ft	Infilt. cfs	Q Total cfs	2S/t + O cfs
274.62	.00	0	0	.00	.00	.00
274.68	.05	52	1301	.00	.05	.63
274.74	.21	147	1821	.00	.21	1.84
274.80	.50	268	2206	.00	.50	3.48
274.86	.92	410	2518	.00	.92	5.47
274.92	1.47	569	2784	.00	1.47	7.79
274.98	2.15	743	3014	.00	2.15	10.41
275.04	2.96	931	3217	.00	2.96	13.30
275.10	3.90	1129	3397	.00	3.90	16.44
275.16	4.96	1338	3558	.00	4.96	19.82
275.22	6.14	1556	3702	.00	6.14	23.43
275.28	7.44	1782	3831	.00	7.44	27.23
275.34	8.85	2015	3947	.00	8.85	31.24
275.40	10.36	2255	4051	.00	10.36	35.42
275.46	11.97	2501	4144	.00	11.97	39.76
275.52	13.69	2752	4226	.00	13.69	44.26
275.58	15.48	3008	4299	.00	15.48	48.91
275.64	17.37	3268	4361	.00	17.37	53.68
275.70	19.33	3531	4415	.00	19.33	58.56
275.76	21.36	3798	4461	.00	21.36	63.55

MODIFIED PULS REACH DATA

```
HYG Dir          = S:\2010\10170\PondPack\2016-10-14_BD\
Inflow  HYG file = work_pad.hyg - JUNC 1B          1
Outflow HYG file = work_pad.hyg - REACH 1B         1

Reach Link Data  = REACH 1B
Reach Length     = 1579.00 ft
Approx. Total Tt = .0762 hrs  (based on Wtd.Q = 4.67 cfs)
Reach Channel    = Pipes  (Chn-Circular)
Overflow Elev.   = 277.33 ft
Overflow Channel = NONE

No Infiltration

INITIAL CONDITIONS
----------------------------------
Starting WS Elev   =   274.62 ft
Starting Volume    =        0 cu.ft
Starting Outflow   =      .00 cfs
Starting Infiltr.  =      .00 cfs
Starting Total Qout=      .00 cfs
Time Increment     =    .0500 hrs
```

Elevation ft	Outflow cfs	Storage cu.ft	Area sq.ft	Infilt. cfs	Q Total cfs	2S/t + O cfs
275.82	23.45	4066	4497	.00	23.45	68.63
275.88	25.60	4337	4526	.00	25.60	73.79
275.94	27.80	4609	4546	.00	27.80	79.02
276.00	30.04	4882	4559	.00	30.04	84.29
276.06	32.32	5156	4563	.00	32.32	89.61
276.12	34.62	5430	4563	.00	34.62	94.95
276.18	36.94	5703	4563	.00	36.94	100.31
276.24	39.27	5976	4563	.00	39.27	105.66
276.30	41.60	6247	4563	.00	41.60	111.00
276.36	43.92	6516	4563	.00	43.92	116.31
276.42	46.22	6782	4563	.00	46.22	121.58
276.48	48.49	7046	4563	.00	48.49	126.78
276.54	50.72	7307	4563	.00	50.72	131.91
276.60	52.91	7563	4563	.00	52.91	136.95
276.66	55.03	7815	4563	.00	55.03	141.87
276.72	57.09	8062	4563	.00	57.09	146.67
276.78	59.05	8303	4563	.00	59.05	151.31
276.84	60.92	8538	4563	.00	60.92	155.78
276.90	62.67	8765	4563	.00	62.67	160.06
276.96	64.30	8984	4563	.00	64.30	164.12

MODIFIED PULS REACH DATA

```
HYG Dir          = S:\2010\10170\PondPack\2016-10-14_BD\
Inflow  HYG file = work_pad.hyg - JUNC 1B          1
Outflow HYG file = work_pad.hyg - REACH 1B         1

Reach Link Data  = REACH 1B
Reach Length     = 1579.00 ft
Approx. Total Tt = .0762 hrs  (based on Wtd.Q = 4.67 cfs)
Reach Channel    = Pipes  (Chn-Circular)
Overflow Elev.   = 277.33 ft
Overflow Channel = NONE

No Infiltration

INITIAL CONDITIONS
----------------------------------
Starting WS Elev   =   274.62 ft
Starting Volume    =        0 cu.ft
Starting Outflow   =      .00 cfs
Starting Infiltr.  =      .00 cfs
Starting Total Qout=      .00 cfs
Time Increment     =    .0500 hrs
```

Elevation ft	Outflow cfs	Storage cu.ft	Area sq.ft	Infilt. cfs	Q Total cfs	2S/t + O cfs
277.02	65.77	9195	4563	.00	65.77	167.93
277.08	67.07	9395	4563	.00	67.07	171.46
277.14	68.18	9584	4563	.00	68.18	174.67
277.20	69.05	9760	4563	.00	69.05	177.50
277.26	69.66	9922	4563	.00	69.66	179.91
277.32	69.94	10067	4563	.00	69.94	181.80
277.33	69.94	10093	4563	.00	69.94	182.09

POND ROUTED TOTAL OUTFLOW HYG...
HYG file = S:\2010\10170\PondPack\2016-10-14_BD\work_pad.hyg
HYG ID = REACH 1B
HYG Tag = 1

Peak Discharge = 11.93 cfs
Time to Peak = 12.4000 hrs
HYG Volume = 66369 cu.ft

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
10.5000	.00	.00	.00	.00	.00
10.7500	.01	.01	.02	.03	.03
11.0000	.05	.07	.09	.11	.14
11.2500	.16	.19	.23	.27	.31
11.5000	.36	.41	.47	.55	.66
11.7500	.80	.99	1.26	1.62	2.11
12.0000	2.80	3.78	5.11	6.74	8.47
12.2500	10.07	11.25	11.85	11.93	11.61
12.5000	11.00	10.23	9.39	8.52	7.66
12.7500	6.86	6.12	5.49	4.94	4.49
13.0000	4.10	3.77	3.51	3.27	3.06
13.2500	2.89	2.74	2.61	2.50	2.40
13.5000	2.32	2.26	2.20	2.15	2.10
13.7500	2.06	2.02	1.98	1.95	1.91
14.0000	1.88	1.84	1.81	1.77	1.74
14.2500	1.71	1.68	1.65	1.62	1.60
14.5000	1.58	1.56	1.54	1.52	1.50
14.7500	1.48	1.47	1.45	1.43	1.42
15.0000	1.40	1.38	1.37	1.35	1.33
15.2500	1.32	1.30	1.28	1.26	1.25
15.5000	1.23	1.21	1.19	1.18	1.16
15.7500	1.14	1.12	1.10	1.09	1.07
16.0000	1.05	1.03	1.01	.99	.98
16.2500	.96	.94	.93	.92	.90
16.5000	.89	.88	.87	.86	.85
16.7500	.84	.84	.83	.82	.81
17.0000	.80	.79	.79	.78	.77
17.2500	.76	.75	.75	.74	.73
17.5000	.72	.71	.70	.70	.69
17.7500	.68	.67	.66	.65	.65
18.0000	.64	.63	.62	.61	.60

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
18.2500	.60	.59	.58	.58	.57
18.5000	.57	.56	.56	.56	.55
18.7500	.55	.55	.54	.54	.54
19.0000	.54	.53	.53	.53	.53
19.2500	.52	.52	.52	.52	.51
19.5000	.51	.51	.51	.50	.50
19.7500	.50	.50	.50	.49	.49
20.0000	.49	.49	.48	.48	.48
20.2500	.48	.47	.47	.47	.47
20.5000	.47	.46	.46	.46	.46
20.7500	.46	.45	.45	.45	.45
21.0000	.45	.44	.44	.44	.44
21.2500	.44	.43	.43	.43	.43
21.5000	.43	.43	.42	.42	.42
21.7500	.42	.42	.41	.41	.41
22.0000	.41	.41	.40	.40	.40
22.2500	.40	.40	.39	.39	.39
22.5000	.39	.39	.38	.38	.38
22.7500	.38	.38	.38	.37	.37
23.0000	.37	.37	.37	.36	.36
23.2500	.36	.36	.36	.35	.35
23.5000	.35	.35	.35	.34	.34
23.7500	.34	.34	.34	.33	.33
24.0000	.33	.33	.32	.31	.29
24.2500	.27	.24	.21	.18	.16
24.5000	.13	.11	.09	.07	.06
24.7500	.05	.04	.04	.03	.03
25.0000	.02	.02	.02	.02	.01
25.2500	.01	.01	.01	.01	.01
25.5000	.01	.00	.00	.00	.00

POND ROUTED TOTAL OUTFLOW HYG...
HYG file = S:\2010\10170\PondPack\2016-10-14_BD\work_pad.hyg
HYG ID = REACH 1B
HYG Tag = 10

Peak Discharge = 35.58 cfs
Time to Peak = 12.3500 hrs
HYG Volume = 187396 cu.ft

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
8.2000	.00	.00	.00	.00	.00
8.4500	.00	.01	.01	.02	.02
8.7000	.03	.04	.05	.07	.09
8.9500	.11	.12	.14	.16	.18
9.2000	.20	.23	.26	.28	.31
9.4500	.34	.36	.39	.42	.45
9.7000	.48	.51	.54	.58	.61
9.9500	.64	.68	.71	.75	.78
10.2000	.82	.86	.90	.95	1.00
10.4500	1.05	1.10	1.16	1.21	1.27
10.7000	1.33	1.40	1.46	1.53	1.61
10.9500	1.68	1.75	1.83	1.90	1.99
11.2000	2.08	2.18	2.31	2.44	2.59
11.4500	2.76	2.95	3.17	3.42	3.73
11.7000	4.18	4.79	5.62	6.72	8.11
11.9500	9.91	12.31	15.51	19.58	24.22
12.2000	28.81	32.61	34.95	35.58	34.78
12.4500	33.01	30.64	27.98	25.26	22.59
12.7000	20.07	17.77	15.73	13.97	12.50
12.9500	11.26	10.24	9.40	8.68	8.08
13.2000	7.54	7.10	6.70	6.37	6.08
13.4500	5.85	5.65	5.48	5.33	5.20
13.7000	5.08	4.97	4.87	4.78	4.69
13.9500	4.59	4.50	4.41	4.33	4.24
14.2000	4.16	4.08	4.00	3.93	3.87
14.4500	3.81	3.76	3.71	3.66	3.61
14.7000	3.56	3.52	3.47	3.43	3.39
14.9500	3.34	3.30	3.26	3.21	3.17
15.2000	3.13	3.09	3.04	3.00	2.96
15.4500	2.92	2.87	2.83	2.79	2.74
15.7000	2.70	2.66	2.61	2.57	2.52

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
15.9500	2.48	2.44	2.39	2.35	2.30
16.2000	2.26	2.22	2.18	2.15	2.12
16.4500	2.09	2.06	2.04	2.02	1.99
16.7000	1.97	1.95	1.93	1.91	1.89
16.9500	1.87	1.85	1.83	1.81	1.79
17.2000	1.77	1.75	1.73	1.71	1.69
17.4500	1.67	1.65	1.63	1.61	1.59
17.7000	1.57	1.55	1.54	1.52	1.50
17.9500	1.48	1.46	1.44	1.42	1.40
18.2000	1.38	1.36	1.35	1.33	1.32
18.4500	1.31	1.30	1.29	1.28	1.27
18.7000	1.27	1.26	1.25	1.25	1.24
18.9500	1.23	1.23	1.22	1.21	1.21
19.2000	1.20	1.20	1.19	1.19	1.18
19.4500	1.17	1.17	1.16	1.16	1.15
19.7000	1.14	1.14	1.13	1.13	1.12
19.9500	1.11	1.11	1.10	1.10	1.09
20.2000	1.09	1.08	1.07	1.07	1.06
20.4500	1.06	1.05	1.05	1.04	1.04
20.7000	1.04	1.03	1.03	1.02	1.02
20.9500	1.01	1.01	1.00	1.00	1.00
21.2000	.99	.99	.98	.98	.97
21.4500	.97	.96	.96	.96	.95
21.7000	.95	.94	.94	.93	.93
21.9500	.92	.92	.92	.91	.91
22.2000	.90	.90	.89	.89	.88
22.4500	.88	.88	.87	.87	.86
22.7000	.86	.85	.85	.84	.84
22.9500	.84	.83	.83	.82	.82
23.2000	.81	.81	.80	.80	.79
23.4500	.79	.79	.78	.78	.77
23.7000	.77	.76	.76	.75	.75
23.9500	.75	.74	.73	.72	.69
24.2000	.65	.59	.52	.45	.38
24.4500	.32	.26	.21	.17	.14
24.7000	.12	.09	.08	.06	.05
24.9500	.04	.04	.03	.03	.02
25.2000	.02	.02	.02	.01	.01
25.4500	.01	.01	.01	.01	.00
25.7000	.00	.00	.00		

POND ROUTED TOTAL OUTFLOW HYG...
HYG file = S:\2010\10170\PondPack\2016-10-14_BD\work_pad.hyg
HYG ID = REACH 1B
HYG Tag = 25

Peak Discharge = 50.17 cfs
Time to Peak = 12.3500 hrs
HYG Volume = 264377 cu.ft

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
7.2500	.00	.00	.00	.00	.00
7.5000	.01	.01	.01	.02	.02
7.7500	.03	.04	.05	.07	.08
8.0000	.10	.12	.13	.15	.16
8.2500	.18	.20	.22	.24	.27
8.5000	.29	.31	.34	.36	.39
8.7500	.41	.44	.47	.50	.53
9.0000	.57	.60	.64	.67	.71
9.2500	.75	.78	.82	.86	.90
9.5000	.94	.99	1.04	1.08	1.13
9.7500	1.17	1.22	1.27	1.32	1.37
10.0000	1.42	1.47	1.53	1.58	1.64
10.2500	1.70	1.76	1.83	1.90	1.97
10.5000	2.05	2.13	2.22	2.32	2.41
10.7500	2.50	2.60	2.70	2.80	2.91
11.0000	3.01	3.13	3.24	3.37	3.50
11.2500	3.65	3.83	4.03	4.27	4.53
11.5000	4.80	5.12	5.50	5.98	6.66
11.7500	7.58	8.85	10.51	12.58	15.21
12.0000	18.70	23.28	29.02	35.43	41.64
12.2500	46.66	49.60	50.17	48.80	46.09
12.5000	42.58	38.71	34.80	31.02	27.47
12.7500	24.25	21.41	18.98	16.94	15.24
13.0000	13.84	12.69	11.71	10.88	10.16
13.2500	9.55	9.01	8.56	8.17	7.85
13.5000	7.58	7.35	7.16	6.98	6.82
13.7500	6.67	6.53	6.40	6.27	6.15
14.0000	6.03	5.91	5.79	5.67	5.56
14.2500	5.45	5.35	5.26	5.17	5.09
14.5000	5.01	4.94	4.88	4.82	4.76
14.7500	4.69	4.63	4.57	4.52	4.46

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
15.0000	4.40	4.34	4.28	4.22	4.17
15.2500	4.11	4.05	3.99	3.93	3.88
15.5000	3.82	3.76	3.70	3.64	3.59
15.7500	3.53	3.47	3.41	3.35	3.29
16.0000	3.23	3.17	3.11	3.06	3.00
16.2500	2.95	2.90	2.85	2.81	2.77
16.5000	2.74	2.70	2.67	2.64	2.61
16.7500	2.58	2.56	2.53	2.50	2.47
17.0000	2.45	2.42	2.40	2.37	2.34
17.2500	2.32	2.29	2.27	2.24	2.21
17.5000	2.19	2.16	2.14	2.11	2.09
17.7500	2.06	2.03	2.01	1.98	1.96
18.0000	1.93	1.90	1.88	1.85	1.83
18.2500	1.80	1.78	1.76	1.74	1.73
18.5000	1.72	1.70	1.69	1.68	1.67
18.7500	1.66	1.65	1.65	1.64	1.63
19.0000	1.62	1.61	1.60	1.60	1.59
19.2500	1.58	1.57	1.57	1.56	1.55
19.5000	1.54	1.53	1.53	1.52	1.51
19.7500	1.50	1.50	1.49	1.48	1.47
20.0000	1.46	1.46	1.45	1.44	1.43
20.2500	1.43	1.42	1.41	1.41	1.40
20.5000	1.39	1.39	1.38	1.37	1.37
20.7500	1.36	1.35	1.35	1.34	1.34
21.0000	1.33	1.32	1.32	1.31	1.31
21.2500	1.30	1.30	1.29	1.28	1.28
21.5000	1.27	1.27	1.26	1.25	1.25
21.7500	1.24	1.24	1.23	1.22	1.22
22.0000	1.21	1.21	1.20	1.20	1.19
22.2500	1.18	1.18	1.17	1.16	1.16
22.5000	1.15	1.15	1.14	1.13	1.13
22.7500	1.12	1.12	1.11	1.11	1.10
23.0000	1.09	1.09	1.08	1.08	1.07
23.2500	1.06	1.06	1.05	1.04	1.04
23.5000	1.03	1.03	1.02	1.02	1.01
23.7500	1.00	1.00	.99	.99	.98
24.0000	.97	.96	.94	.91	.86
24.2500	.78	.69	.58	.48	.40
24.5000	.33	.26	.21	.17	.14
24.7500	.12	.10	.08	.06	.05
25.0000	.04	.04	.03	.03	.02
25.2500	.02	.02	.02	.01	.01
25.5000	.01	.01	.01	.01	.00
25.7500	.00	.00	.00		

POND ROUTED TOTAL OUTFLOW HYG...
HYG file = S:\2010\10170\PondPack\2016-10-14_BD\work_pad.hyg
HYG ID = REACH 1B
HYG Tag = 50

Peak Discharge = 63.81 cfs
Time to Peak = 12.3500 hrs
HYG Volume = 338151 cu.ft

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
6.5000	.00	.00	.00	.00	.00
6.7500	.00	.01	.01	.02	.02
7.0000	.03	.04	.05	.06	.08
7.2500	.10	.11	.13	.14	.16
7.5000	.18	.20	.21	.24	.26
7.7500	.28	.30	.32	.34	.36
8.0000	.39	.41	.43	.45	.48
8.2500	.50	.53	.56	.59	.62
8.5000	.65	.69	.72	.76	.80
8.7500	.83	.87	.91	.96	1.01
9.0000	1.05	1.10	1.15	1.20	1.25
9.2500	1.30	1.35	1.40	1.46	1.52
9.5000	1.57	1.63	1.69	1.75	1.81
9.7500	1.87	1.94	2.00	2.07	2.13
10.0000	2.20	2.27	2.34	2.41	2.49
10.2500	2.57	2.65	2.74	2.83	2.93
10.5000	3.04	3.15	3.27	3.39	3.51
10.7500	3.63	3.76	3.89	4.03	4.17
11.0000	4.30	4.45	4.59	4.75	4.92
11.2500	5.13	5.37	5.64	5.94	6.28
11.5000	6.66	7.07	7.56	8.21	9.11
11.7500	10.35	12.04	14.23	16.94	20.39
12.0000	24.89	30.76	38.02	46.04	53.67
12.2500	59.70	63.15	63.81	62.10	58.57
12.5000	53.93	48.85	43.76	38.89	34.36
12.7500	30.26	26.68	23.61	21.05	18.93
13.0000	17.17	15.72	14.51	13.47	12.58
13.2500	11.80	11.14	10.57	10.10	9.70
13.5000	9.37	9.08	8.83	8.62	8.42
13.7500	8.23	8.06	7.89	7.73	7.58
14.0000	7.43	7.28	7.13	6.99	6.85

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
14.2500	6.71	6.59	6.47	6.36	6.26
14.5000	6.17	6.09	6.01	5.93	5.85
14.7500	5.77	5.70	5.63	5.55	5.48
15.0000	5.41	5.33	5.26	5.19	5.12
15.2500	5.05	4.97	4.90	4.83	4.76
15.5000	4.69	4.62	4.54	4.47	4.40
15.7500	4.33	4.25	4.18	4.11	4.03
16.0000	3.96	3.89	3.82	3.75	3.68
16.2500	3.62	3.56	3.50	3.45	3.40
16.5000	3.35	3.31	3.27	3.24	3.20
16.7500	3.17	3.13	3.10	3.06	3.03
17.0000	3.00	2.97	2.94	2.90	2.87
17.2500	2.84	2.81	2.78	2.74	2.71
17.5000	2.68	2.65	2.62	2.58	2.55
17.7500	2.52	2.49	2.46	2.42	2.39
18.0000	2.36	2.33	2.29	2.26	2.23
18.2500	2.20	2.18	2.15	2.13	2.12
18.5000	2.10	2.09	2.07	2.06	2.05
18.7500	2.04	2.02	2.01	2.00	1.99
19.0000	1.98	1.97	1.96	1.95	1.94
19.2500	1.93	1.93	1.92	1.91	1.90
19.5000	1.89	1.88	1.87	1.86	1.85
19.7500	1.84	1.83	1.82	1.81	1.80
20.0000	1.79	1.78	1.77	1.76	1.75
20.2500	1.74	1.73	1.73	1.72	1.71
20.5000	1.70	1.69	1.69	1.68	1.67
20.7500	1.66	1.65	1.65	1.64	1.63
21.0000	1.63	1.62	1.61	1.60	1.60
21.2500	1.59	1.58	1.58	1.57	1.56
21.5000	1.55	1.55	1.54	1.53	1.52
21.7500	1.52	1.51	1.50	1.49	1.49
22.0000	1.48	1.47	1.47	1.46	1.45
22.2500	1.45	1.44	1.43	1.42	1.42
22.5000	1.41	1.40	1.39	1.39	1.38
22.7500	1.37	1.37	1.36	1.35	1.34
23.0000	1.34	1.33	1.32	1.31	1.31
23.2500	1.30	1.29	1.28	1.28	1.27
23.5000	1.26	1.25	1.25	1.24	1.23
23.7500	1.23	1.22	1.21	1.20	1.20
24.0000	1.19	1.17	1.15	1.11	1.04
24.2500	.93	.83	.70	.58	.47
24.5000	.39	.31	.25	.20	.17
24.7500	.14	.11	.09	.07	.06
25.0000	.05	.04	.04	.03	.03
25.2500	.02	.02	.02	.01	.01

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
25.5000	.01	.01	.01	.01	.01
25.7500	.00	.00	.00	.00	

```
POND ROUTED TOTAL OUTFLOW HYG...
HYG file = S:\2010\10170\PondPack\2016-10-14_BD\work_pad.hyg
HYG ID   = REACH 1B
HYG Tag  =    100
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Peak Discharge =        69.94 cfs
Time to Peak   =      12.2500 hrs
HYG Volume     =       442957 cu.ft
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WARNING: Hydrograph truncated on right side.
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HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
5.7500	.00	.00	.00	.00	.00
6.0000	.01	.01	.01	.02	.02
6.2500	.03	.04	.05	.06	.08
6.5000	.09	.11	.12	.14	.16
6.7500	.17	.19	.21	.23	.25
7.0000	.28	.30	.32	.34	.36
7.2500	.38	.41	.43	.45	.48
7.5000	.50	.53	.56	.59	.61
7.7500	.64	.67	.70	.73	.76
8.0000	.78	.81	.85	.88	.91
8.2500	.95	.99	1.02	1.07	1.11
8.5000	1.15	1.20	1.25	1.30	1.35
8.7500	1.41	1.46	1.52	1.59	1.65
9.0000	1.71	1.77	1.84	1.90	1.97
9.2500	2.04	2.11	2.18	2.26	2.33
9.5000	2.41	2.48	2.56	2.64	2.72
9.7500	2.80	2.88	2.97	3.05	3.14
10.0000	3.23	3.32	3.41	3.50	3.59
10.2500	3.70	3.80	3.92	4.05	4.18
10.5000	4.32	4.46	4.61	4.76	4.92
10.7500	5.08	5.25	5.42	5.59	5.76
11.0000	5.93	6.11	6.31	6.51	6.74
11.2500	7.00	7.30	7.65	8.05	8.49
11.5000	8.97	9.51	10.15	11.00	12.17
11.7500	13.80	16.00	18.84	22.34	26.75
12.0000	32.47	39.87	48.90	58.65	67.36
12.2500	69.94	69.94	69.94	69.94	69.94
12.5000	69.94	69.94	69.94	69.94	69.94

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
12.7500	69.94	42.09	30.32	26.12	23.33
13.0000	21.14	19.34	17.84	16.55	15.44
13.2500	14.49	13.67	12.97	12.38	11.89
13.5000	11.49	11.14	10.83	10.56	10.31
13.7500	10.09	9.87	9.67	9.47	9.28
14.0000	9.09	8.91	8.72	8.55	8.37
14.2500	8.21	8.06	7.92	7.78	7.66
14.5000	7.55	7.44	7.34	7.25	7.15
14.7500	7.06	6.96	6.87	6.78	6.69
15.0000	6.60	6.52	6.43	6.34	6.25
15.2500	6.16	6.07	5.99	5.90	5.81
15.5000	5.72	5.63	5.54	5.45	5.37
15.7500	5.28	5.19	5.10	5.01	4.92
16.0000	4.83	4.74	4.66	4.57	4.49
16.2500	4.41	4.33	4.26	4.20	4.14
16.5000	4.09	4.03	3.99	3.94	3.90
16.7500	3.86	3.82	3.78	3.74	3.70
17.0000	3.66	3.62	3.58	3.54	3.50
17.2500	3.46	3.42	3.38	3.34	3.30
17.5000	3.26	3.22	3.18	3.14	3.10
17.7500	3.06	3.03	2.99	2.95	2.91
18.0000	2.87	2.83	2.79	2.76	2.72
18.2500	2.68	2.65	2.62	2.60	2.57
18.5000	2.55	2.54	2.52	2.50	2.49
18.7500	2.48	2.46	2.45	2.44	2.42
19.0000	2.41	2.40	2.39	2.38	2.36
19.2500	2.35	2.34	2.33	2.32	2.31
19.5000	2.29	2.28	2.27	2.26	2.25
19.7500	2.24	2.22	2.21	2.20	2.19
20.0000	2.18	2.16	2.15	2.14	2.13
20.2500	2.12	2.11	2.10	2.09	2.08
20.5000	2.07	2.06	2.05	2.04	2.03
20.7500	2.02	2.01	2.00	1.99	1.98
21.0000	1.98	1.97	1.96	1.95	1.94
21.2500	1.93	1.92	1.92	1.91	1.90
21.5000	1.89	1.88	1.87	1.86	1.85
21.7500	1.84	1.83	1.83	1.82	1.81
22.0000	1.80	1.79	1.78	1.77	1.76
22.2500	1.76	1.75	1.74	1.73	1.72
22.5000	1.71	1.70	1.69	1.68	1.67
22.7500	1.67	1.66	1.65	1.64	1.63
23.0000	1.62	1.61	1.60	1.59	1.58
23.2500	1.58	1.57	1.56	1.55	1.54
23.5000	1.53	1.52	1.51	1.51	1.50
23.7500	1.49	1.48	1.47	1.46	1.45

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
24.0000	1.44	1.43	1.40	1.35	1.26
24.2500	1.14	.99	.84	.70	.56
24.5000	.45	.37	.29	.23	.19
24.7500	.16	.13	.10	.08	.07
25.0000	.05	.04	.04	.03	.03
25.2500	.03	.02			

SUMMARY FOR HYDROGRAPH ADDITION
at Node: DESIGN POINT 1

HYG Directory: S:\2010\10170\PondPack\2016-10-14_BD\

Upstream Link ID	Upstream Node ID	HYG file	HYG ID	HYG tag
ADDLINK 1A	EDA 1A	work_pad.hyg	EDA 1A	1
REACH 1B	JUNC 1B	work_pad.hyg	REACH 1B	1

INFLOWS TO: DESIGN POINT 1

HYG file	HYG ID	HYG tag	Volume cu.ft	Peak Time hrs	Peak Flow cfs
work_pad.hyg	EDA 1A	1	122011	12.3500	22.08
work_pad.hyg	REACH 1B	1	66369	12.4000	11.93

TOTAL FLOW INTO: DESIGN POINT 1

HYG file	HYG ID	HYG tag	Volume cu.ft	Peak Time hrs	Peak Flow cfs
work_pad.hyg	DESIGN POINT 1	1	188380	12.3500	33.94

TOTAL NODE INFLOW...
HYG file = S:\2010\10170\PondPack\2016-10-14_BD\work_pad.hyg
HYG ID = DESIGN POINT 1
HYG Tag = 1

Peak Discharge = 33.94 cfs
Time to Peak = 12.3500 hrs
HYG Volume = 188380 cu.ft

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
10.2500	.00	.00	.00	.01	.02
10.5000	.03	.05	.07	.09	.12
10.7500	.16	.19	.23	.28	.33
11.0000	.38	.44	.51	.58	.66
11.2500	.75	.85	.96	1.09	1.23
11.5000	1.38	1.56	1.76	2.04	2.43
11.7500	2.96	3.68	4.63	5.85	7.50
12.0000	9.87	13.13	17.24	21.91	26.57
12.2500	30.52	32.98	33.94	33.61	32.32
12.5000	30.34	27.99	25.52	23.03	20.63
12.7500	18.40	16.39	14.69	13.25	12.07
13.0000	11.06	10.22	9.50	8.87	8.34
13.2500	7.88	7.49	7.15	6.86	6.62
13.5000	6.41	6.24	6.08	5.95	5.82
13.7500	5.71	5.60	5.49	5.39	5.29
14.0000	5.19	5.10	5.00	4.90	4.81
14.2500	4.73	4.65	4.58	4.51	4.44
14.5000	4.39	4.33	4.28	4.23	4.18
14.7500	4.13	4.08	4.03	3.98	3.93
15.0000	3.89	3.84	3.79	3.74	3.69
15.2500	3.65	3.60	3.55	3.50	3.45
15.5000	3.40	3.35	3.30	3.25	3.20
15.7500	3.15	3.10	3.05	2.99	2.94
16.0000	2.89	2.84	2.79	2.74	2.69
16.2500	2.65	2.60	2.57	2.53	2.50
16.5000	2.47	2.44	2.41	2.39	2.36
16.7500	2.34	2.31	2.29	2.27	2.24
17.0000	2.22	2.20	2.17	2.15	2.13
17.2500	2.11	2.08	2.06	2.04	2.01
17.5000	1.99	1.97	1.94	1.92	1.90
17.7500	1.87	1.85	1.83	1.80	1.78

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
18.0000	1.76	1.73	1.71	1.69	1.67
18.2500	1.65	1.63	1.61	1.60	1.59
18.5000	1.57	1.56	1.55	1.55	1.54
18.7500	1.53	1.52	1.51	1.51	1.50
19.0000	1.49	1.49	1.48	1.47	1.47
19.2500	1.46	1.45	1.44	1.44	1.43
19.5000	1.42	1.42	1.41	1.40	1.40
19.7500	1.39	1.38	1.38	1.37	1.36
20.0000	1.36	1.35	1.34	1.34	1.33
20.2500	1.32	1.32	1.31	1.30	1.30
20.5000	1.29	1.29	1.28	1.28	1.27
20.7500	1.26	1.26	1.25	1.25	1.24
21.0000	1.24	1.23	1.23	1.22	1.22
21.2500	1.21	1.21	1.20	1.20	1.19
21.5000	1.19	1.18	1.17	1.17	1.16
21.7500	1.16	1.15	1.15	1.14	1.14
22.0000	1.13	1.13	1.12	1.12	1.11
22.2500	1.11	1.10	1.09	1.09	1.08
22.5000	1.08	1.07	1.07	1.06	1.06
22.7500	1.05	1.05	1.04	1.04	1.03
23.0000	1.02	1.02	1.01	1.01	1.00
23.2500	1.00	.99	.99	.98	.97
23.5000	.97	.96	.96	.95	.95
23.7500	.94	.94	.93	.93	.92
24.0000	.91	.90	.87	.82	.75
24.2500	.66	.56	.46	.38	.30
24.5000	.24	.19	.15	.12	.10
24.7500	.08	.06	.05	.04	.04
25.0000	.03	.03	.02	.02	.02
25.2500	.01	.01	.01	.01	.01
25.5000	.01	.00	.00	.00	.00

SUMMARY FOR HYDROGRAPH ADDITION
at Node: DESIGN POINT 1

HYG Directory: S:\2010\10170\PondPack\2016-10-14_BD\

Upstream Link ID	Upstream Node ID	HYG file	HYG ID	HYG tag
ADDLINK 1A	EDA 1A	work_pad.hyg	EDA 1A	10
REACH 1B	JUNC 1B	work_pad.hyg	REACH 1B	10

INFLOWS TO: DESIGN POINT 1

HYG file	HYG ID	HYG tag	Volume cu.ft	Peak Time hrs	Peak Flow cfs
work_pad.hyg	EDA 1A	10	336775	12.3000	63.15
work_pad.hyg	REACH 1B	10	187396	12.3500	35.58

TOTAL FLOW INTO: DESIGN POINT 1

HYG file	HYG ID	HYG tag	Volume cu.ft	Peak Time hrs	Peak Flow cfs
work_pad.hyg	DESIGN POINT 1	10	524171	12.3500	98.50

```
TOTAL NODE INFLOW...
HYG file = S:\2010\10170\PondPack\2016-10-14_BD\work_pad.hyg
HYG ID   = DESIGN POINT 1
HYG Tag  =     10
-----------------------------------
Peak Discharge =        98.50 cfs
Time to Peak   =      12.3500 hrs
HYG Volume     =       524171 cu.ft
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HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
7.9500	.00	.00	.00	.01	.02
8.2000	.03	.04	.06	.08	.10
8.4500	.12	.15	.18	.21	.24
8.7000	.28	.32	.36	.41	.46
8.9500	.52	.58	.63	.69	.75
9.2000	.82	.89	.96	1.03	1.11
9.4500	1.18	1.26	1.34	1.42	1.50
9.7000	1.59	1.68	1.77	1.86	1.96
9.9500	2.05	2.15	2.25	2.35	2.46
10.2000	2.57	2.69	2.81	2.94	3.08
10.4500	3.23	3.38	3.54	3.71	3.88
10.7000	4.06	4.24	4.42	4.62	4.82
10.9500	5.03	5.24	5.45	5.68	5.93
11.2000	6.20	6.52	6.89	7.30	7.76
11.4500	8.27	8.83	9.49	10.26	11.28
11.7000	12.73	14.75	17.44	20.85	25.09
11.9500	30.55	37.97	47.71	59.47	72.18
12.2000	84.16	93.43	98.10	98.50	95.47
12.4500	90.04	83.14	75.59	68.04	60.74
12.7000	53.87	47.60	42.08	37.39	33.54
12.9500	30.34	27.66	25.42	23.50	21.87
13.2000	20.47	19.28	18.26	17.38	16.63
13.4500	16.01	15.49	15.04	14.64	14.29
13.7000	13.97	13.67	13.39	13.12	12.86
13.9500	12.61	12.36	12.11	11.87	11.63
14.2000	11.40	11.19	10.99	10.81	10.64
14.4500	10.48	10.34	10.20	10.06	9.93
14.7000	9.81	9.68	9.56	9.44	9.32
14.9500	9.20	9.08	8.96	8.84	8.72
15.2000	8.60	8.48	8.36	8.24	8.12
15.4500	8.00	7.88	7.76	7.64	7.52

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
15.7000	7.40	7.28	7.16	7.03	6.91
15.9500	6.79	6.66	6.54	6.42	6.30
16.2000	6.19	6.09	5.99	5.89	5.81
16.4500	5.74	5.67	5.60	5.53	5.47
16.7000	5.41	5.36	5.30	5.24	5.19
16.9500	5.13	5.08	5.02	4.97	4.91
17.2000	4.86	4.81	4.75	4.70	4.64
17.4500	4.59	4.54	4.48	4.43	4.37
17.7000	4.32	4.26	4.21	4.15	4.10
17.9500	4.05	3.99	3.94	3.89	3.83
18.2000	3.78	3.74	3.70	3.66	3.63
18.4500	3.60	3.57	3.55	3.52	3.50
18.7000	3.48	3.47	3.45	3.43	3.41
18.9500	3.40	3.38	3.36	3.35	3.33
19.2000	3.31	3.30	3.28	3.26	3.25
19.4500	3.23	3.22	3.20	3.18	3.17
19.7000	3.15	3.14	3.12	3.10	3.09
19.9500	3.07	3.05	3.04	3.02	3.01
20.2000	2.99	2.97	2.96	2.95	2.93
20.4500	2.92	2.90	2.89	2.88	2.87
20.7000	2.85	2.84	2.83	2.81	2.80
20.9500	2.79	2.78	2.77	2.75	2.74
21.2000	2.73	2.72	2.71	2.69	2.68
21.4500	2.67	2.66	2.64	2.63	2.62
21.7000	2.60	2.59	2.58	2.57	2.56
21.9500	2.55	2.53	2.52	2.51	2.50
22.2000	2.48	2.47	2.46	2.45	2.43
22.4500	2.42	2.41	2.40	2.38	2.37
22.7000	2.36	2.35	2.34	2.32	2.31
22.9500	2.30	2.29	2.27	2.26	2.25
23.2000	2.23	2.22	2.21	2.20	2.18
23.4500	2.17	2.16	2.15	2.14	2.12
23.7000	2.11	2.10	2.08	2.07	2.06
23.9500	2.05	2.03	2.00	1.93	1.83
24.2000	1.66	1.45	1.22	1.01	.81
24.4500	.64	.50	.39	.31	.25
24.7000	.20	.16	.12	.10	.08
24.9500	.06	.05	.04	.04	.03
25.2000	.02	.02	.02	.01	.01
25.4500	.01	.01	.01	.01	.00
25.7000	.00	.00	.00		

SUMMARY FOR HYDROGRAPH ADDITION
at Node: DESIGN POINT 1

HYG Directory: S:\2010\10170\PondPack\2016-10-14_BD\

Upstream Link ID	Upstream Node ID	HYG file	HYG ID	HYG tag
ADDLINK 1A	EDA 1A	work_pad.hyg	EDA 1A	25
REACH 1B	JUNC 1B	work_pad.hyg	REACH 1B	25

INFLOWS TO: DESIGN POINT 1

HYG file	HYG ID	HYG tag	Volume cu.ft	Peak Time hrs	Peak Flow cfs
work_pad.hyg	EDA 1A	25	472317	12.3000	88.61
work_pad.hyg	REACH 1B	25	264377	12.3500	50.17

TOTAL FLOW INTO: DESIGN POINT 1

HYG file	HYG ID	HYG tag	Volume cu.ft	Peak Time hrs	Peak Flow cfs
work_pad.hyg	DESIGN POINT 1	25	736693	12.3000	138.22

```
TOTAL NODE INFLOW...
HYG file = S:\2010\10170\PondPack\2016-10-14_BD\work_pad.hyg
HYG ID   = DESIGN POINT 1
HYG Tag  =     25
-----------------------------------
Peak Discharge =       138.22 cfs
Time to Peak   =      12.3000 hrs
HYG Volume     =       736693 cu.ft
-----------------------------------
```

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
6.9500	.00	.00	.00	.01	.01
7.2000	.02	.03	.05	.07	.08
7.4500	.11	.13	.15	.18	.21
7.7000	.24	.27	.31	.34	.39
7.9500	.43	.48	.52	.57	.62
8.2000	.67	.72	.77	.83	.89
8.4500	.96	1.03	1.10	1.17	1.24
8.7000	1.32	1.40	1.48	1.56	1.65
8.9500	1.75	1.84	1.94	2.04	2.14
9.2000	2.24	2.35	2.46	2.57	2.68
9.4500	2.80	2.92	3.04	3.17	3.30
9.7000	3.43	3.56	3.69	3.83	3.97
9.9500	4.11	4.25	4.40	4.55	4.71
10.2000	4.88	5.05	5.23	5.43	5.64
10.4500	5.85	6.08	6.32	6.57	6.83
10.7000	7.09	7.36	7.63	7.92	8.20
10.9500	8.50	8.80	9.12	9.45	9.81
11.2000	10.21	10.67	11.20	11.80	12.50
11.4500	13.25	14.08	15.03	16.18	17.68
11.7000	19.85	22.84	26.80	31.82	38.00
11.9500	45.87	56.43	70.14	86.52	104.00
12.2000	120.22	132.46	138.22	138.06	133.21
12.4500	125.11	115.06	104.25	93.54	83.27
12.7000	73.66	64.94	57.29	50.81	45.50
12.9500	41.08	37.41	34.33	31.70	29.47
13.2000	27.56	25.93	24.53	23.33	22.32
13.4500	21.46	20.75	20.14	19.61	19.14
13.7000	18.70	18.29	17.91	17.54	17.19
13.9500	16.84	16.51	16.17	15.84	15.52
14.2000	15.22	14.93	14.66	14.41	14.18
14.4500	13.97	13.77	13.58	13.40	13.22

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
14.7000	13.05	12.89	12.72	12.55	12.39
14.9500	12.23	12.07	11.91	11.75	11.59
15.2000	11.42	11.26	11.10	10.94	10.78
15.4500	10.62	10.46	10.30	10.14	9.97
15.7000	9.81	9.65	9.49	9.32	9.16
15.9500	8.99	8.83	8.67	8.51	8.35
16.2000	8.20	8.06	7.93	7.81	7.70
16.4500	7.59	7.50	7.41	7.32	7.24
16.7000	7.16	7.08	7.01	6.93	6.86
16.9500	6.79	6.71	6.64	6.57	6.50
17.2000	6.42	6.35	6.28	6.21	6.14
17.4500	6.06	5.99	5.92	5.85	5.78
17.7000	5.71	5.63	5.56	5.49	5.42
17.9500	5.34	5.27	5.20	5.13	5.06
18.2000	4.99	4.93	4.87	4.83	4.78
18.4500	4.74	4.71	4.68	4.65	4.62
18.7000	4.60	4.57	4.55	4.52	4.50
18.9500	4.48	4.46	4.43	4.41	4.39
19.2000	4.37	4.35	4.33	4.30	4.28
19.4500	4.26	4.24	4.22	4.20	4.17
19.7000	4.15	4.13	4.11	4.09	4.07
19.9500	4.04	4.02	4.00	3.98	3.96
20.2000	3.94	3.92	3.90	3.88	3.86
20.4500	3.84	3.83	3.81	3.79	3.77
20.7000	3.76	3.74	3.72	3.71	3.69
20.9500	3.67	3.66	3.64	3.63	3.61
21.2000	3.59	3.58	3.56	3.55	3.53
21.4500	3.51	3.50	3.48	3.46	3.44
21.7000	3.43	3.41	3.40	3.38	3.36
21.9500	3.35	3.33	3.32	3.30	3.28
22.2000	3.27	3.25	3.23	3.22	3.20
22.4500	3.18	3.17	3.15	3.13	3.12
22.7000	3.10	3.09	3.07	3.05	3.04
22.9500	3.02	3.00	2.99	2.97	2.95
23.2000	2.94	2.92	2.90	2.88	2.87
23.4500	2.85	2.84	2.82	2.80	2.79
23.7000	2.77	2.75	2.74	2.72	2.70
23.9500	2.69	2.66	2.62	2.54	2.39
24.2000	2.18	1.90	1.61	1.31	1.04
24.4500	.82	.65	.51	.39	.32
24.7000	.25	.20	.16	.12	.10
24.9500	.07	.06	.05	.04	.04
25.2000	.03	.02	.02	.02	.01
25.4500	.01	.01	.01	.01	.01
25.7000	.00	.00	.00	.00	

SUMMARY FOR HYDROGRAPH ADDITION
at Node: DESIGN POINT 1

HYG Directory: S:\2010\10170\PondPack\2016-10-14_BD\

Upstream Link ID	Upstream Node ID	HYG file	HYG ID	HYG tag
ADDLINK 1A	EDA 1A	work_pad.hyg	EDA 1A	50
REACH 1B	JUNC 1B	work_pad.hyg	REACH 1B	50

INFLOWS TO: DESIGN POINT 1

HYG file	HYG ID	HYG tag	Volume cu.ft	Peak Time hrs	Peak Flow cfs
work_pad.hyg	EDA 1A	50	601840	12.3000	112.52
work_pad.hyg	REACH 1B	50	338151	12.3500	63.81

TOTAL FLOW INTO: DESIGN POINT 1

HYG file	HYG ID	HYG tag	Volume cu.ft	Peak Time hrs	Peak Flow cfs
work_pad.hyg	DESIGN POINT 1	50	939992	12.3000	175.67

```
TOTAL NODE INFLOW...
HYG file = S:\2010\10170\PondPack\2016-10-14_BD\work_pad.hyg
HYG ID   = DESIGN POINT 1
HYG Tag  =     50
-----------------------------------
Peak Discharge =       175.67 cfs
Time to Peak   =      12.3000 hrs
HYG Volume     =       939992 cu.ft
-----------------------------------
```

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
6.2500	.00	.00	.01	.01	.02
6.5000	.03	.04	.06	.08	.10
6.7500	.12	.15	.17	.20	.23
7.0000	.26	.30	.33	.38	.42
7.2500	.47	.52	.56	.61	.66
7.5000	.71	.76	.82	.88	.93
7.7500	.99	1.05	1.11	1.17	1.23
8.0000	1.29	1.35	1.42	1.49	1.56
8.2500	1.63	1.71	1.79	1.88	1.97
8.5000	2.07	2.17	2.27	2.37	2.48
8.7500	2.60	2.71	2.83	2.96	3.09
9.0000	3.22	3.35	3.49	3.63	3.77
9.2500	3.92	4.07	4.22	4.37	4.53
9.5000	4.69	4.86	5.03	5.20	5.37
9.7500	5.54	5.72	5.90	6.08	6.27
10.0000	6.46	6.65	6.85	7.06	7.27
10.2500	7.50	7.74	8.00	8.27	8.55
10.5000	8.86	9.18	9.50	9.84	10.18
10.7500	10.53	10.89	11.25	11.63	12.01
11.0000	12.40	12.80	13.22	13.69	14.21
11.2500	14.81	15.51	16.30	17.20	18.19
11.5000	19.29	20.52	22.01	24.00	26.84
11.7500	30.77	35.96	42.51	50.52	60.68
12.0000	74.18	91.61	112.28	134.13	154.17
12.2500	169.00	175.67	175.09	168.70	158.12
12.5000	145.05	131.08	117.34	104.26	92.07
12.7500	81.04	71.39	63.24	56.57	51.03
13.0000	46.42	42.56	39.28	36.48	34.11
13.2500	32.06	30.32	28.82	27.56	26.50
13.5000	25.61	24.85	24.19	23.60	23.05
13.7500	22.54	22.07	21.62	21.17	20.74

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
14.0000	20.32	19.91	19.50	19.10	18.72
14.2500	18.36	18.03	17.72	17.44	17.17
14.5000	16.92	16.69	16.47	16.25	16.04
14.7500	15.83	15.62	15.42	15.22	15.02
15.0000	14.82	14.62	14.42	14.22	14.02
15.2500	13.82	13.62	13.43	13.23	13.03
15.5000	12.83	12.63	12.43	12.23	12.03
15.7500	11.83	11.62	11.42	11.22	11.02
16.0000	10.82	10.62	10.42	10.23	10.05
16.2500	9.87	9.71	9.56	9.42	9.30
16.5000	9.18	9.07	8.96	8.86	8.77
16.7500	8.67	8.58	8.49	8.39	8.30
17.0000	8.21	8.12	8.04	7.95	7.86
17.2500	7.77	7.68	7.60	7.51	7.42
17.5000	7.33	7.24	7.15	7.06	6.98
17.7500	6.89	6.80	6.71	6.62	6.53
18.0000	6.44	6.35	6.27	6.18	6.10
18.2500	6.02	5.96	5.90	5.84	5.80
18.5000	5.76	5.72	5.68	5.65	5.62
18.7500	5.59	5.56	5.53	5.50	5.47
19.0000	5.45	5.42	5.39	5.37	5.34
19.2500	5.31	5.29	5.26	5.23	5.21
19.5000	5.18	5.15	5.13	5.10	5.07
19.7500	5.05	5.02	4.99	4.97	4.94
20.0000	4.91	4.89	4.86	4.83	4.81
20.2500	4.78	4.76	4.74	4.71	4.69
20.5000	4.67	4.65	4.63	4.61	4.59
20.7500	4.56	4.54	4.52	4.50	4.48
21.0000	4.46	4.44	4.42	4.40	4.39
21.2500	4.37	4.35	4.33	4.30	4.28
21.5000	4.26	4.24	4.22	4.20	4.18
21.7500	4.16	4.14	4.12	4.10	4.08
22.0000	4.06	4.04	4.02	4.00	3.98
22.2500	3.96	3.94	3.92	3.90	3.88
22.5000	3.86	3.84	3.82	3.80	3.78
22.7500	3.76	3.74	3.72	3.70	3.68
23.0000	3.66	3.64	3.62	3.60	3.58
23.2500	3.56	3.54	3.52	3.50	3.48
23.5000	3.46	3.44	3.42	3.40	3.38
23.7500	3.36	3.34	3.32	3.30	3.28
24.0000	3.25	3.19	3.09	2.92	2.64
24.2500	2.30	1.95	1.59	1.26	.99
24.5000	.78	.61	.48	.37	.30
24.7500	.23	.19	.15	.11	.09
25.0000	.07	.06	.05	.04	.03

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
25.2500	.03	.02	.02	.01	.01
25.5000	.01	.01	.01	.01	.01
25.7500	.00	.00	.00	.00	

SUMMARY FOR HYDROGRAPH ADDITION
at Node: DESIGN POINT 1

HYG Directory: S:\2010\10170\PondPack\2016-10-14_BD\

Upstream Link ID	Upstream Node ID	HYG file	HYG ID	HYG tag
ADDLINK 1A	EDA 1A	work_pad.hyg	EDA 1A	100
WARNING: Adding in hydrograph that is truncated on right...				
REACH 1B	JUNC 1B	work_pad.hyg	REACH 1B	100

INFLOWS TO: DESIGN POINT 1

HYG file	HYG ID	HYG tag	Volume cu.ft	Peak Time hrs	Peak Flow cfs
work_pad.hyg	EDA 1A	100	760083	12.3000	141.26
work_pad.hyg	REACH 1B	100	442957	12.2500	69.94

TOTAL FLOW INTO: DESIGN POINT 1

HYG file	HYG ID	HYG tag	Volume cu.ft	Peak Time hrs	Peak Flow cfs
work_pad.hyg	DESIGN POINT 1	100	1203042	12.3000	211.21

```
TOTAL NODE INFLOW...
HYG file = S:\2010\10170\PondPack\2016-10-14_BD\work_pad.hyg
HYG ID   = DESIGN POINT 1
HYG Tag  =    100
-----------------------------------
Peak Discharge =       211.21 cfs
Time to Peak   =      12.3000 hrs
HYG Volume     =      1203042 cu.ft
-----------------------------------
```

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
5.5000	.00	.00	.01	.01	.02
5.7500	.03	.05	.06	.08	.10
6.0000	.12	.15	.17	.20	.23
6.2500	.26	.29	.33	.37	.41
6.5000	.46	.50	.55	.60	.64
6.7500	.69	.75	.80	.86	.92
7.0000	.98	1.04	1.10	1.16	1.22
7.2500	1.29	1.35	1.42	1.49	1.56
7.5000	1.63	1.71	1.78	1.86	1.94
7.7500	2.01	2.09	2.17	2.26	2.34
8.0000	2.42	2.51	2.60	2.69	2.78
8.2500	2.89	3.00	3.11	3.23	3.36
8.5000	3.49	3.63	3.77	3.92	4.07
8.7500	4.23	4.39	4.56	4.73	4.90
9.0000	5.08	5.26	5.44	5.63	5.82
9.2500	6.01	6.21	6.41	6.62	6.83
9.5000	7.04	7.26	7.47	7.69	7.92
9.7500	8.14	8.37	8.61	8.85	9.09
10.0000	9.33	9.58	9.83	10.09	10.37
10.2500	10.66	10.97	11.30	11.66	12.03
10.5000	12.43	12.83	13.25	13.68	14.12
10.7500	14.57	15.03	15.50	15.98	16.46
11.0000	16.95	17.46	18.00	18.59	19.25
11.2500	20.02	20.91	21.93	23.10	24.37
11.5000	25.77	27.37	29.28	31.84	35.51
11.7500	40.59	47.28	55.68	65.92	78.83
12.0000	95.87	117.73	143.45	170.33	194.30
12.2500	207.55	211.21	209.31	203.15	194.09
12.5000	183.37	172.14	161.27	150.97	141.40
12.7500	132.75	97.34	79.24	69.93	62.90
13.0000	57.15	52.35	48.29	44.82	41.88

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
13.2500	39.36	37.19	35.35	33.78	32.47
13.5000	31.38	30.45	29.63	28.89	28.22
13.7500	27.60	27.01	26.45	25.91	25.38
14.0000	24.86	24.34	23.84	23.36	22.89
14.2500	22.44	22.03	21.65	21.30	20.98
14.5000	20.67	20.38	20.11	19.84	19.58
14.7500	19.33	19.07	18.82	18.57	18.33
15.0000	18.08	17.83	17.59	17.34	17.10
15.2500	16.86	16.61	16.37	16.13	15.88
15.5000	15.64	15.39	15.15	14.90	14.66
15.7500	14.41	14.16	13.92	13.67	13.42
16.0000	13.18	12.94	12.69	12.46	12.23
16.2500	12.02	11.82	11.64	11.47	11.32
16.5000	11.17	11.04	10.91	10.79	10.67
16.7500	10.56	10.44	10.33	10.22	10.11
17.0000	10.00	9.89	9.78	9.67	9.56
17.2500	9.46	9.35	9.24	9.13	9.02
17.5000	8.91	8.81	8.70	8.59	8.48
17.7500	8.37	8.27	8.16	8.05	7.94
18.0000	7.84	7.73	7.62	7.52	7.42
18.2500	7.33	7.24	7.17	7.11	7.05
18.5000	7.00	6.95	6.91	6.87	6.83
18.7500	6.79	6.75	6.72	6.69	6.65
19.0000	6.62	6.59	6.55	6.52	6.49
19.2500	6.45	6.42	6.39	6.36	6.32
19.5000	6.29	6.26	6.23	6.19	6.16
19.7500	6.13	6.10	6.07	6.03	6.00
20.0000	5.97	5.94	5.90	5.87	5.84
20.2500	5.81	5.78	5.75	5.73	5.70
20.5000	5.67	5.65	5.62	5.60	5.57
20.7500	5.54	5.52	5.49	5.47	5.44
21.0000	5.42	5.39	5.37	5.35	5.32
21.2500	5.30	5.28	5.25	5.23	5.20
21.5000	5.18	5.15	5.13	5.10	5.08
21.7500	5.05	5.03	5.00	4.98	4.96
22.0000	4.93	4.91	4.88	4.86	4.84
22.2500	4.81	4.79	4.76	4.73	4.71
22.5000	4.68	4.66	4.64	4.61	4.59
22.7500	4.56	4.54	4.52	4.49	4.47
23.0000	4.44	4.42	4.39	4.37	4.34
23.2500	4.32	4.29	4.27	4.24	4.22
23.5000	4.19	4.17	4.15	4.12	4.10
23.7500	4.07	4.05	4.02	4.00	3.97
24.0000	3.94	3.87	3.75	3.54	3.21
24.2500	2.79	2.35	1.92	1.52	1.19

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
24.5000	.92	.73	.57	.44	.35
24.7500	.28	.22	.17	.14	.11
25.0000	.08	.07	.05	.04	.04
25.2500	.03	.02	.00	.00	

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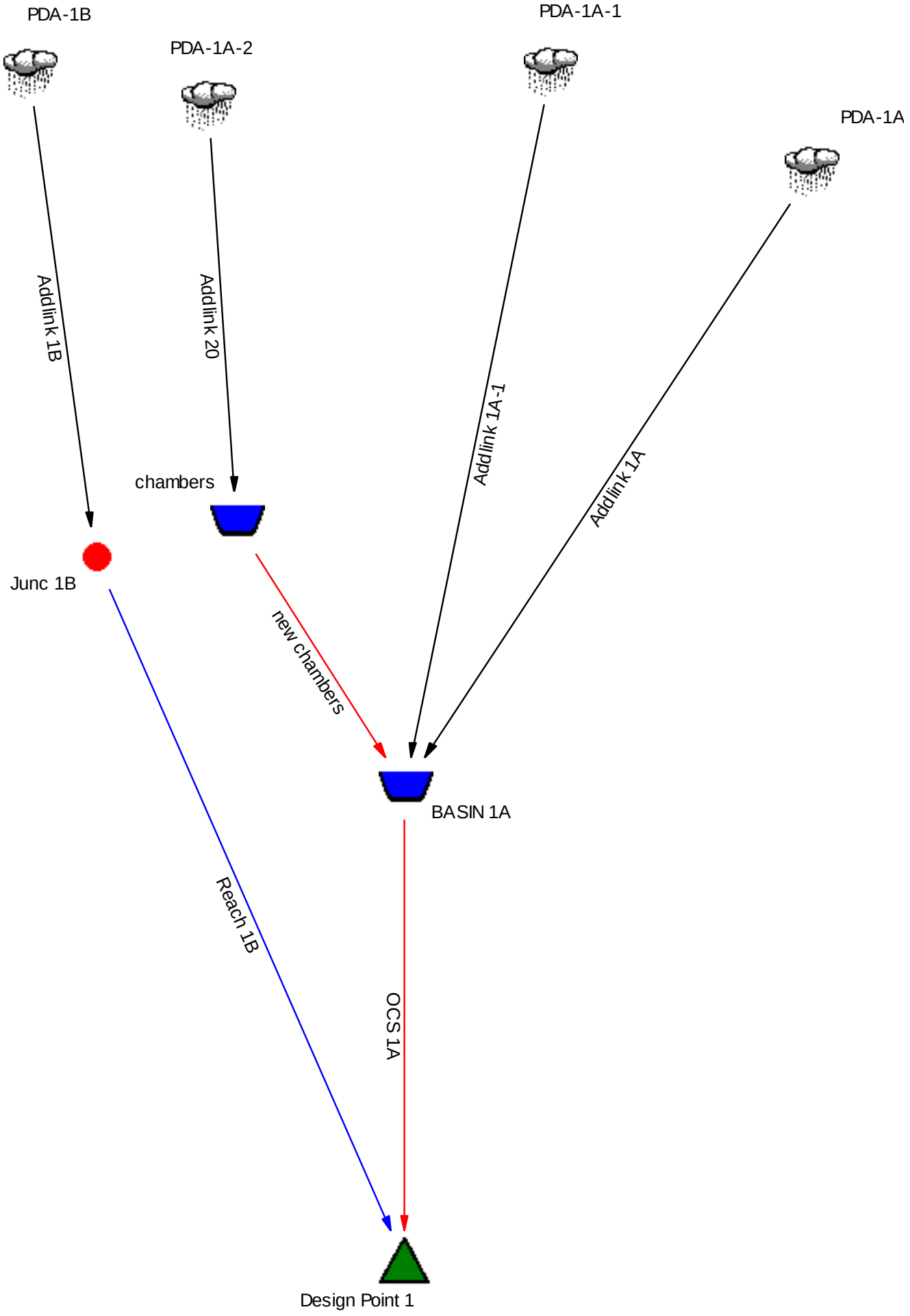
APPENDIX B

PROPOSED HYDROLOGIC CALCULATIONS


PDA-1B
PDA-1A-2
PDA-1A-1
PDA-1A
Addlink 1B
Addlink 20
Addlink 1A-1
Addlink 1A
chambers
Junc 1B
new chambers
BASIN 1A
Reach 1B
OCS 1A
Design Point 1

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CHAMBERS..... 100
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MASTER DESIGN STORM SUMMARY

Network Storm Collection: Westchester

Return Event	Total Depth in	Rainfall Type	RNF ID
1	2.8400	Synthetic Curve	TypeIII 24hr
10	5.1100	Synthetic Curve	TypeIII 24hr
25	6.4000	Synthetic Curve	TypeIII 24hr
50	7.5900	Synthetic Curve	TypeIII 24hr
100	9.0100	Synthetic Curve	TypeIII 24hr

```
-------------------------------
ICPM CALCULATION TOLERANCES
-------------------------------
Target Convergence=     .000 cfs +/-
Max. Iterations   =       35 loops
ICPM   Time Step  =    .0500 hrs
Output Time Step  =    .0500 hrs
ICPM Ending Time  = 180.0000 hrs
-------------------------------
```

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID	Type	Return Event	HYG Vol cu.ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage cu.ft
BASIN 1A	POND	1	115938		12.1500	24.07		
BASIN 1A	POND	10	311046		12.1500	65.81		
BASIN 1A	POND	25	440521		12.1500	91.17		
BASIN 1A	POND	50	574189		12.1500	114.92		
BASIN 1A	POND	100	737112		12.1500	144.90		

```
--------------------------------
ICPM CALCULATION TOLERANCES
--------------------------------
Target Convergence=     .000 cfs +/-
Max. Iterations   =       35 loops
ICPM   Time Step  =    .0500 hrs
Output Time Step  =    .0500 hrs
ICPM Ending Time  = 180.0000 hrs
--------------------------------
```

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID	Type	Return Event	HYG Vol cu.ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage cu.ft
BASIN 1A	OUT POND	1	115639		16.1500	1.49	264.31	138503
BASIN 1A	OUT POND	10	310740		12.4000	41.09	264.87	164179
BASIN 1A	OUT POND	25	440209		12.3500	69.48	265.11	175540
BASIN 1A	OUT POND	50	573872		12.3000	94.06	265.30	184163
BASIN 1A	OUT POND	100	736793		12.3000	115.62	265.59	197804
CHAMBERS	POND	1	39698		12.1000	10.82		
CHAMBERS	POND	10	82872		12.1000	21.65		
CHAMBERS	POND	25	107878		12.1000	27.72		
CHAMBERS	POND	50	131075		12.1000	33.29		
CHAMBERS	POND	100	158852		12.1000	39.89		
CHAMBERS	OUT POND	1	0		.0500	.00	265.08	14460
CHAMBERS	OUT POND	10	0		.0500	.00	265.70	39692
CHAMBERS	OUT POND	25	7199		13.6000	.83	266.15	52511
CHAMBERS	OUT POND	50	24287		12.7000	3.26	266.41	59250
CHAMBERS	OUT POND	100	44991		12.4500	6.43	266.83	68199
*DESIGN POINT 1	JCT	1	181271		12.4000	12.42		
*DESIGN POINT 1	JCT	10	496044		12.4000	75.17		
*DESIGN POINT 1	JCT	25	701622		12.3500	118.19		
*DESIGN POINT 1	JCT	50	908246		12.3000	155.11		
*DESIGN POINT 1	JCT	100	1160475		12.3500	193.13		

```
--------------------------------
ICPM CALCULATION TOLERANCES
--------------------------------
Target Convergence=     .000 cfs +/-
Max. Iterations   =       35 loops
ICPM   Time Step  =    .0500 hrs
Output Time Step  =    .0500 hrs
ICPM Ending Time  = 180.0000 hrs
--------------------------------
```

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID	Type	Return Event	HYG Vol cu.ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage cu.ft
JUNC 1B	JCT	1	65630		12.3500	11.75		
JUNC 1B	JCT	10	185304		12.3500	34.60		
JUNC 1B	JCT	25	261424		12.3000	48.84		
JUNC 1B	JCT	50	334375		12.3000	62.32		
JUNC 1B	JCT	100	423683		12.3000	78.57		
PDA-1A	AREA	1	58935		12.1000	16.49		
PDA-1A	AREA	10	146296		12.1000	40.49		
PDA-1A	AREA	25	199485		12.1000	54.51		
PDA-1A	AREA	50	249657		12.1000	67.46		
PDA-1A	AREA	100	310405		12.1000	82.85		
PDA-1A-1	AREA	1	57004		12.3000	11.10		
PDA-1A-1	AREA	10	164750		12.2500	34.08		
PDA-1A-1	AREA	25	233837		12.2500	48.49		
PDA-1A-1	AREA	50	300245		12.2500	62.10		
PDA-1A-1	AREA	100	381715		12.2500	78.52		
PDA-1A-2	AREA	1	39698		12.1000	10.82		
PDA-1A-2	AREA	10	82872		12.1000	21.65		
PDA-1A-2	AREA	25	107878		12.1000	27.72		
PDA-1A-2	AREA	50	131075		12.1000	33.29		
PDA-1A-2	AREA	100	158852		12.1000	39.89		

```
--------------------------------
ICPM CALCULATION TOLERANCES
--------------------------------
Target Convergence=     .000 cfs +/-
Max. Iterations   =       35 loops
ICPM   Time Step  =    .0500 hrs
Output Time Step  =    .0500 hrs
ICPM Ending Time  = 180.0000 hrs
--------------------------------
```

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID	Type	Return Event	HYG Vol cu.ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage cu.ft
PDA-1B	AREA	1	65630		12.3500	11.75		
PDA-1B	AREA	10	185304		12.3500	34.60		
PDA-1B	AREA	25	261424		12.3000	48.84		
PDA-1B	AREA	50	334375		12.3000	62.32		
PDA-1B	AREA	100	423683		12.3000	78.57		

Title... Project Date: 5/29/2014
Project Engineer: ND
Project Title: FASNY
Project Comments:
Revised coverage for all Drainage Areas (calculated
by BD)

DESIGN STORMS SUMMARY

Design Storm File,ID = Westchester

Storm Tag Name = 1

Data Type, File, ID = Synthetic Storm TypeIII 24hr
Storm Frequency = 1 yr
Total Rainfall Depth= 2.8400 in
Duration Multiplier = 1
Resulting Duration = 24.0000 hrs
Resulting Start Time= .0000 hrs Step= .1000 hrs End= 24.0000 hrs

Storm Tag Name = 10

Data Type, File, ID = Synthetic Storm TypeIII 24hr
Storm Frequency = 10 yr
Total Rainfall Depth= 5.1100 in
Duration Multiplier = 1
Resulting Duration = 24.0000 hrs
Resulting Start Time= .0000 hrs Step= .1000 hrs End= 24.0000 hrs

Storm Tag Name = 25

Data Type, File, ID = Synthetic Storm TypeIII 24hr
Storm Frequency = 25 yr
Total Rainfall Depth= 6.4000 in
Duration Multiplier = 1
Resulting Duration = 24.0000 hrs
Resulting Start Time= .0000 hrs Step= .1000 hrs End= 24.0000 hrs

Storm Tag Name = 50

Data Type, File, ID = Synthetic Storm TypeIII 24hr
Storm Frequency = 50 yr
Total Rainfall Depth= 7.5900 in
Duration Multiplier = 1
Resulting Duration = 24.0000 hrs
Resulting Start Time= .0000 hrs Step= .1000 hrs End= 24.0000 hrs

Title... Project Date: 5/29/2014
Project Engineer: ND
Project Title: FASNY
Project Comments:
Revised coverage for all Drainage Areas (calculated
by BD)

DESIGN STORMS SUMMARY

Design Storm File,ID = Westchester

Storm Tag Name = 100

Data Type, File, ID = Synthetic Storm TypeIII 24hr
Storm Frequency = 100 yr
Total Rainfall Depth= 9.0100 in
Duration Multiplier = 1
Resulting Duration = 24.0000 hrs
Resulting Start Time= .0000 hrs Step= .1000 hrs End= 24.0000 hrs

DESIGN STORMS SUMMARY

Design Storm File,ID = Westchester

Storm Tag Name = 1

Data Type, File, ID = Synthetic Storm TypeIII 24hr
Storm Frequency = 1 yr
Total Rainfall Depth= 2.8400 in
Duration Multiplier = 1
Resulting Duration = 24.0000 hrs
Resulting Start Time= .0000 hrs Step= .1000 hrs End= 24.0000 hrs

Storm Tag Name = 10

Data Type, File, ID = Synthetic Storm TypeIII 24hr
Storm Frequency = 10 yr
Total Rainfall Depth= 5.1100 in
Duration Multiplier = 1
Resulting Duration = 24.0000 hrs
Resulting Start Time= .0000 hrs Step= .1000 hrs End= 24.0000 hrs

Storm Tag Name = 25

Data Type, File, ID = Synthetic Storm TypeIII 24hr
Storm Frequency = 25 yr
Total Rainfall Depth= 6.4000 in
Duration Multiplier = 1
Resulting Duration = 24.0000 hrs
Resulting Start Time= .0000 hrs Step= .1000 hrs End= 24.0000 hrs

Storm Tag Name = 50

Data Type, File, ID = Synthetic Storm TypeIII 24hr
Storm Frequency = 50 yr
Total Rainfall Depth= 7.5900 in
Duration Multiplier = 1
Resulting Duration = 24.0000 hrs
Resulting Start Time= .0000 hrs Step= .1000 hrs End= 24.0000 hrs

Storm Tag Name = 100

Data Type, File, ID = Synthetic Storm TypeIII 24hr
Storm Frequency = 100 yr
Total Rainfall Depth= 9.0100 in
Duration Multiplier = 1
Resulting Duration = 24.0000 hrs
Resulting Start Time= .0000 hrs Step= .1000 hrs End= 24.0000 hrs

```
::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::
TIME OF CONCENTRATION CALCULATOR
::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::


-----------------------------------------------------------------------


Segment #1:  Tc: TR-55 Sheet

Mannings n          .0160
Hydraulic Length   100.00 ft
2yr, 24hr P        3.5000 in
Slope             .020000 ft/ft

Avg.Velocity         1.07 ft/sec

                                         Segment #1 Time:     .0261 hrs
-----------------------------------------------------------------------

Segment #2:  Tc: TR-55 Shallow

Hydraulic Length   669.00 ft
Slope             .032000 ft/ft
Paved

Avg.Velocity         3.64 ft/sec

                                         Segment #2 Time:     .0511 hrs
-----------------------------------------------------------------------

Segment #3:  Tc: TR-55 Channel

Flow Area          1.7700 sq.ft
Wetted Perimeter     4.71 ft
Hydraulic Radius      .38 ft
Slope             .005000 ft/ft
Mannings n          .0120
Hydraulic Length   110.00 ft

Avg.Velocity         4.57 ft/sec

                                         Segment #3 Time:     .0067 hrs
-----------------------------------------------------------------------
```

Segment #4: Tc: TR-55 Channel

Flow Area	3.1400	sq.ft
Wetted Perimeter	6.28	ft
Hydraulic Radius	.50	ft
Slope	.005000	ft/ft
Mannings n	.0120	
Hydraulic Length	386.00	ft

Avg.Velocity 5.53 ft/sec

Segment #4 Time: .0194 hrs

==========
Total Tc: .1032 hrs
==========

```
 ----------------------------------------------------------------------
 Tc Equations used...
 ----------------------------------------------------------------------


 ==== SCS TR-55 Sheet Flow ==============================================

      Tc = (.007 * ((n * Lf)**0.8)) / ((P**.5) * (Sf**.4))

      Where:  Tc = Time of concentration, hrs
              n  = Mannings n
              Lf = Flow length, ft
              P  = 2yr, 24hr Rain depth, inches
              Sf = Slope, %


 ==== SCS TR-55 Shallow Concentrated Flow ===============================

      Unpaved surface:
      V  = 16.1345 * (Sf**0.5)

      Paved surface:
      V  = 20.3282 * (Sf**0.5)

      Tc = (Lf / V) / (3600sec/hr)

      Where:  V  = Velocity, ft/sec
              Sf = Slope, ft/ft
              Tc = Time of concentration, hrs
              Lf = Flow length, ft
```

```
==== SCS Channel Flow ==================================================

     R  = Aq / Wp
     V  = (1.49 * (R**(2/3)) * (Sf**-0.5)) / n

     Tc = (Lf / V) / (3600sec/hr)

     Where:  R  = Hydraulic radius
             Aq = Flow area, sq.ft.
             Wp = Wetted perimeter, ft
             V  = Velocity, ft/sec
             Sf = Slope, ft/ft
             n  = Mannings n
             Tc = Time of concentration, hrs
             Lf = Flow length, ft
```

```
::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::
TIME OF CONCENTRATION CALCULATOR
::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::


-----------------------------------------------------------------------


Segment #1:  Tc: TR-55 Sheet

Mannings n          .2400
Hydraulic Length   100.00 ft
2yr, 24hr P        3.5000 in
Slope             .020000 ft/ft

Avg.Velocity          .12 ft/sec

                                         Segment #1 Time:     .2274 hrs
-----------------------------------------------------------------------

Segment #2:  Tc: TR-55 Shallow

Hydraulic Length   329.00 ft
Slope             .062300 ft/ft
Unpaved

Avg.Velocity         4.03 ft/sec

                                         Segment #2 Time:     .0227 hrs
-----------------------------------------------------------------------

Segment #3:  Tc: TR-55 Shallow

Hydraulic Length   647.00 ft
Slope             .017000 ft/ft
Unpaved

Avg.Velocity         2.10 ft/sec

                                         Segment #3 Time:     .0854 hrs
-----------------------------------------------------------------------
```

Segment #4: Tc: TR-55 Channel

Flow Area	7.0600	sq.ft
Wetted Perimeter	9.42	ft
Hydraulic Radius	.75	ft
Slope	.010000	ft/ft
Mannings n	.0120	
Hydraulic Length	800.00	ft

Avg.Velocity 10.24 ft/sec

Segment #4 Time: .0217 hrs

==========
Total Tc: .3572 hrs
==========

```
 ----------------------------------------------------------------------
 Tc Equations used...
 ----------------------------------------------------------------------


 ==== SCS TR-55 Sheet Flow ==============================================

      Tc = (.007 * ((n * Lf)**0.8)) / ((P**.5) * (Sf**.4))

      Where:  Tc = Time of concentration, hrs
              n  = Mannings n
              Lf = Flow length, ft
              P  = 2yr, 24hr Rain depth, inches
              Sf = Slope, %


 ==== SCS TR-55 Shallow Concentrated Flow ===============================

      Unpaved surface:
      V  = 16.1345 * (Sf**0.5)

      Paved surface:
      V  = 20.3282 * (Sf**0.5)

      Tc = (Lf / V) / (3600sec/hr)

      Where:  V  = Velocity, ft/sec
              Sf = Slope, ft/ft
              Tc = Time of concentration, hrs
              Lf = Flow length, ft
```

```
==== SCS Channel Flow ==================================================

     R  = Aq / Wp
     V  = (1.49 * (R**(2/3)) * (Sf**-0.5)) / n

     Tc = (Lf / V) / (3600sec/hr)

     Where:  R  = Hydraulic radius
             Aq = Flow area, sq.ft.
             Wp = Wetted perimeter, ft
             V  = Velocity, ft/sec
             Sf = Slope, ft/ft
             n  = Mannings n
             Tc = Time of concentration, hrs
             Lf = Flow length, ft
```

```
::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::
TIME OF CONCENTRATION CALCULATOR
::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::


-----------------------------------------------------------------------


Segment #1:  Tc: TR-55 Sheet

Mannings n          .0160
Hydraulic Length   100.00 ft
2yr, 24hr P        3.5000 in
Slope             .020000 ft/ft

Avg.Velocity         1.07 ft/sec

                                         Segment #1 Time:     .0261 hrs
-----------------------------------------------------------------------

Segment #2:  Tc: TR-55 Shallow

Hydraulic Length   669.00 ft
Slope             .032000 ft/ft
Paved

Avg.Velocity         3.64 ft/sec

                                         Segment #2 Time:     .0511 hrs
-----------------------------------------------------------------------

Segment #3:  Tc: TR-55 Channel

Flow Area          1.7700 sq.ft
Wetted Perimeter     4.71 ft
Hydraulic Radius      .38 ft
Slope             .005000 ft/ft
Mannings n          .0120
Hydraulic Length   110.00 ft

Avg.Velocity         4.57 ft/sec

                                         Segment #3 Time:     .0067 hrs
-----------------------------------------------------------------------
```

Segment #4: Tc: TR-55 Channel

Flow Area	3.1400	sq.ft
Wetted Perimeter	6.28	ft
Hydraulic Radius	.50	ft
Slope	.005000	ft/ft
Mannings n	.0120	
Hydraulic Length	386.00	ft

Avg.Velocity 5.53 ft/sec

Segment #4 Time: .0194 hrs

==========
Total Tc: .1032 hrs
==========

```
 ----------------------------------------------------------------------
 Tc Equations used...
 ----------------------------------------------------------------------


 ==== SCS TR-55 Sheet Flow ==============================================

      Tc = (.007 * ((n * Lf)**0.8)) / ((P**.5) * (Sf**.4))

      Where:  Tc = Time of concentration, hrs
              n  = Mannings n
              Lf = Flow length, ft
              P  = 2yr, 24hr Rain depth, inches
              Sf = Slope, %


 ==== SCS TR-55 Shallow Concentrated Flow ===============================

      Unpaved surface:
      V  = 16.1345 * (Sf**0.5)

      Paved surface:
      V  = 20.3282 * (Sf**0.5)

      Tc = (Lf / V) / (3600sec/hr)

      Where:  V  = Velocity, ft/sec
              Sf = Slope, ft/ft
              Tc = Time of concentration, hrs
              Lf = Flow length, ft
```

```
==== SCS Channel Flow ==================================================

     R  = Aq / Wp
     V  = (1.49 * (R**(2/3)) * (Sf**-0.5)) / n

     Tc = (Lf / V) / (3600sec/hr)

     Where:  R  = Hydraulic radius
             Aq = Flow area, sq.ft.
             Wp = Wetted perimeter, ft
             V  = Velocity, ft/sec
             Sf = Slope, ft/ft
             n  = Mannings n
             Tc = Time of concentration, hrs
             Lf = Flow length, ft
```

```
::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::
TIME OF CONCENTRATION CALCULATOR
::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::


-----------------------------------------------------------------------


Segment #1:  Tc: TR-55 Sheet

Mannings n          .2400
Hydraulic Length   150.00 ft
2yr, 24hr P        3.5000 in
Slope             .023300 ft/ft

Avg.Velocity          .14 ft/sec

                                         Segment #1 Time:     .2959 hrs
-----------------------------------------------------------------------

Segment #2:  Tc: TR-55 Shallow

Hydraulic Length  1191.00 ft
Slope             .017000 ft/ft
Unpaved

Avg.Velocity         2.10 ft/sec

                                         Segment #2 Time:     .1573 hrs
-----------------------------------------------------------------------

                                                 =========================
                                                  Total Tc:     .4532 hrs
                                                 =========================
```

```
 ----------------------------------------------------------------------
 Tc Equations used...
 ----------------------------------------------------------------------


 ==== SCS TR-55 Sheet Flow ==============================================

      Tc = (.007 * ((n * Lf)**0.8)) / ((P**.5) * (Sf**.4))

      Where:  Tc = Time of concentration, hrs
              n  = Mannings n
              Lf = Flow length, ft
              P  = 2yr, 24hr Rain depth, inches
              Sf = Slope, %


 ==== SCS TR-55 Shallow Concentrated Flow ===============================

      Unpaved surface:
      V  = 16.1345 * (Sf**0.5)

      Paved surface:
      V  = 20.3282 * (Sf**0.5)

      Tc = (Lf / V) / (3600sec/hr)

      Where:  V  = Velocity, ft/sec
              Sf = Slope, ft/ft
              Tc = Time of concentration, hrs
              Lf = Flow length, ft
```

RUNOFF CURVE NUMBER DATA
::

Soil/Surface Description	CN	Area acres	Impervious Adjustment %C	%UC	Adjusted CN
Impervious Areas	98	4.713			98.00
Gravel - HSG C	89	.066			89.00
Lawns, Good Condition, HSG C	74	7.532			74.00
COMPOSITE AREA & WEIGHTED CN --->		12.311			83.27 (83)

RUNOFF CURVE NUMBER DATA
::

Soil/Surface Description	CN	Area acres	Impervious Adjustment %C	%UC	Adjusted CN
Impervious Areas	98	1.769			98.00
Lawns, Good Condition, HSG C	74	13.984			74.00
Meadow - cont. grass (non grazed) -	71	1.527			71.00
COMPOSITE AREA & WEIGHTED CN --->		17.280			76.19 (76)

::

RUNOFF CURVE NUMBER DATA

::

Soil/Surface Description	CN	Area acres	Impervious Adjustment %C	Impervious Adjustment %UC	Adjusted CN
Impervious Areas	98	4.162			98.00
Lawns, Good Condition, HSG C	74	1.278			74.00

COMPOSITE AREA & WEIGHTED CN --->   5.440   92.36 (92)

::

RUNOFF CURVE NUMBER DATA

::

Soil/Surface Description	CN	Area acres	Impervious Adjustment %C	Impervious Adjustment %UC	Adjusted CN
Impervious Areas - Paved parking lo	98	2.740			98.00
Lawn/Landscaping/Shrubs, Good Condi	74	14.990			74.00
Woods, Good Condition, HSG C	70	1.070			70.00
COMPOSITE AREA & WEIGHTED CN --->		18.800			77.27 (77)

:::

SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 1 year storm
Duration = 24.0000 hrs Rain Depth = 2.8400 in
Rain Dir = S:\2010\10170\PondPack\2016-10-14_BD\
Rain File -ID = - TypeIII 24hr
Unit Hyd Type = Default Curvilinear
HYG Dir = S:\2010\10170\PondPack\2016-10-14_BD\
HYG File - ID = - PDA-1A 1
Tc = .1032 hrs
Drainage Area = 12.311 acres Runoff CN= 83
Calc.Increment= .01376 hrs Out.Incr.= .0500 hrs
HYG Volume = 58935 cu.ft

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
9.0000	.00	.00	.01	.02	.02
9.2500	.03	.04	.05	.05	.06
9.5000	.07	.08	.09	.10	.11
9.7500	.12	.13	.14	.15	.17
10.0000	.18	.19	.20	.22	.23
10.2500	.25	.27	.28	.30	.32
10.5000	.34	.36	.38	.40	.43
10.7500	.45	.47	.50	.52	.55
11.0000	.57	.61	.65	.70	.76
11.2500	.82	.90	.96	1.04	1.12
11.5000	1.21	1.40	1.73	2.17	2.83
11.7500	3.49	4.33	5.15	6.18	8.57
12.0000	12.72	15.08	16.49	15.27	11.59
12.2500	9.70	8.43	7.52	6.47	5.58
12.5000	4.49	3.79	3.12	2.82	2.64
12.7500	2.53	2.41	2.32	2.20	2.10
13.0000	1.99	1.91	1.83	1.79	1.75
13.2500	1.73	1.70	1.67	1.64	1.62
13.5000	1.59	1.56	1.53	1.51	1.48
13.7500	1.45	1.42	1.40	1.37	1.34
14.0000	1.31	1.28	1.26	1.24	1.23
14.2500	1.22	1.20	1.19	1.18	1.16
14.5000	1.15	1.14	1.12	1.11	1.09
14.7500	1.08	1.07	1.05	1.04	1.02
15.0000	1.01	1.00	.98	.97	.95
15.2500	.94	.92	.91	.89	.88
15.5000	.86	.85	.84	.82	.81
15.7500	.79	.78	.76	.75	.73
16.0000	.72	.71	.70	.69	.68
16.2500	.67	.67	.66	.65	.65

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
16.5000	.64	.64	.63	.62	.62
16.7500	.61	.60	.60	.59	.58
17.0000	.58	.57	.56	.56	.55
17.2500	.54	.54	.53	.52	.52
17.5000	.51	.51	.50	.49	.49
17.7500	.48	.47	.47	.46	.45
18.0000	.44	.44	.43	.43	.43
18.2500	.43	.43	.42	.42	.42
18.5000	.42	.42	.41	.41	.41
18.7500	.41	.41	.41	.40	.40
19.0000	.40	.40	.40	.39	.39
19.2500	.39	.39	.39	.38	.38
19.5000	.38	.38	.38	.37	.37
19.7500	.37	.37	.37	.36	.36
20.0000	.36	.36	.36	.35	.35
20.2500	.35	.35	.35	.35	.35
20.5000	.34	.34	.34	.34	.34
20.7500	.34	.34	.33	.33	.33
21.0000	.33	.33	.33	.33	.32
21.2500	.32	.32	.32	.32	.32
21.5000	.31	.31	.31	.31	.31
21.7500	.31	.31	.31	.30	.30
22.0000	.30	.30	.30	.30	.29
22.2500	.29	.29	.29	.29	.29
22.5000	.28	.28	.28	.28	.28
22.7500	.28	.28	.27	.27	.27
23.0000	.27	.27	.27	.26	.26
23.2500	.26	.26	.26	.26	.26
23.5000	.25	.25	.25	.25	.25
23.7500	.25	.25	.24	.24	.24
24.0000	.24	.18	.07	.02	.01
24.2500	.00	.00			

SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 10 year storm
Duration = 24.0000 hrs Rain Depth = 5.1100 in
Rain Dir = S:\2010\10170\PondPack\2016-10-14_BD\
Rain File -ID = - TypeIII 24hr
Unit Hyd Type = Default Curvilinear
HYG Dir = S:\2010\10170\PondPack\2016-10-14_BD\
HYG File - ID = - PDA-1A 10
Tc = .1032 hrs
Drainage Area = 12.311 acres Runoff CN= 83
Calc.Increment= .01376 hrs Out.Incr.= .0500 hrs
HYG Volume = 146296 cu.ft

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
6.5000	.00	.00	.01	.01	.02
6.7500	.02	.03	.03	.04	.05
7.0000	.05	.06	.07	.08	.08
7.2500	.09	.10	.11	.12	.12
7.5000	.13	.14	.15	.16	.17
7.7500	.18	.19	.20	.21	.22
8.0000	.23	.24	.25	.27	.28
8.2500	.30	.31	.33	.35	.36
8.5000	.38	.40	.42	.44	.46
8.7500	.48	.50	.52	.54	.56
9.0000	.58	.61	.63	.65	.68
9.2500	.70	.73	.76	.78	.81
9.5000	.84	.86	.89	.92	.95
9.7500	.98	1.01	1.04	1.07	1.10
10.0000	1.13	1.17	1.21	1.25	1.30
10.2500	1.35	1.41	1.46	1.51	1.56
10.5000	1.62	1.68	1.74	1.79	1.86
10.7500	1.92	1.98	2.04	2.11	2.17
11.0000	2.24	2.33	2.45	2.60	2.79
11.2500	2.97	3.18	3.37	3.59	3.79
11.5000	4.03	4.60	5.56	6.85	8.74
11.7500	10.51	12.72	14.74	17.23	23.14
12.0000	33.21	38.14	40.49	36.66	27.38
12.2500	22.60	19.43	17.18	14.67	12.59
12.5000	10.09	8.49	6.98	6.28	5.88
12.7500	5.62	5.35	5.12	4.86	4.64
13.0000	4.37	4.19	4.02	3.92	3.84
13.2500	3.78	3.71	3.65	3.59	3.53
13.5000	3.46	3.40	3.33	3.28	3.21
13.7500	3.15	3.08	3.02	2.95	2.89

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
14.0000	2.82	2.77	2.72	2.68	2.65
14.2500	2.62	2.58	2.56	2.52	2.50
14.5000	2.46	2.43	2.40	2.37	2.34
14.7500	2.31	2.28	2.25	2.21	2.19
15.0000	2.15	2.12	2.09	2.06	2.03
15.2500	2.00	1.96	1.93	1.90	1.87
15.5000	1.84	1.81	1.77	1.74	1.71
15.7500	1.68	1.65	1.62	1.58	1.55
16.0000	1.52	1.50	1.47	1.45	1.43
16.2500	1.42	1.41	1.40	1.38	1.37
16.5000	1.35	1.34	1.32	1.31	1.30
16.7500	1.28	1.27	1.25	1.24	1.23
17.0000	1.21	1.20	1.19	1.17	1.16
17.2500	1.14	1.13	1.12	1.10	1.09
17.5000	1.07	1.06	1.04	1.03	1.02
17.7500	1.01	.99	.98	.96	.95
18.0000	.93	.92	.91	.91	.90
18.2500	.90	.89	.89	.88	.88
18.5000	.87	.87	.87	.86	.86
18.7500	.85	.85	.85	.84	.84
19.0000	.83	.83	.82	.82	.82
19.2500	.81	.81	.80	.80	.80
19.5000	.79	.79	.78	.78	.77
19.7500	.77	.77	.76	.76	.75
20.0000	.75	.75	.74	.74	.74
20.2500	.74	.73	.73	.72	.72
20.5000	.72	.71	.71	.71	.70
20.7500	.70	.70	.70	.69	.69
21.0000	.69	.68	.68	.68	.67
21.2500	.67	.67	.66	.66	.66
21.5000	.65	.65	.65	.65	.64
21.7500	.64	.64	.63	.63	.63
22.0000	.62	.62	.62	.61	.61
22.2500	.61	.60	.60	.60	.59
22.5000	.59	.59	.59	.58	.58
22.7500	.57	.57	.57	.57	.56
23.0000	.56	.56	.55	.55	.55
23.2500	.54	.54	.54	.54	.53
23.5000	.53	.52	.52	.52	.51
23.7500	.51	.51	.50	.50	.50
24.0000	.49	.37	.14	.04	.01
24.2500	.00	.00			

SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 25 year storm
Duration = 24.0000 hrs Rain Depth = 6.4000 in
Rain Dir = S:\2010\10170\PondPack\2016-10-14_BD\
Rain File -ID = - TypeIII 24hr
Unit Hyd Type = Default Curvilinear
HYG Dir = S:\2010\10170\PondPack\2016-10-14_BD\
HYG File - ID = - PDA-1A 25
Tc = .1032 hrs
Drainage Area = 12.311 acres Runoff CN= 83
Calc.Increment= .01376 hrs Out.Incr.= .0500 hrs
HYG Volume = 199485 cu.ft

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
5.5500	.00	.00	.01	.02	.02
5.8000	.03	.03	.04	.05	.05
6.0500	.06	.06	.07	.08	.09
6.3000	.09	.10	.11	.12	.13
6.5500	.14	.14	.15	.16	.17
6.8000	.18	.19	.21	.22	.23
7.0500	.24	.25	.26	.27	.29
7.3000	.30	.31	.32	.34	.35
7.5500	.36	.38	.39	.41	.42
7.8000	.43	.45	.46	.48	.49
8.0500	.51	.53	.55	.58	.60
8.3000	.63	.65	.68	.70	.73
8.5500	.76	.79	.81	.84	.87
8.8000	.91	.94	.97	1.00	1.03
9.0500	1.07	1.10	1.14	1.17	1.21
9.3000	1.25	1.28	1.32	1.36	1.40
9.5500	1.43	1.47	1.51	1.56	1.60
9.8000	1.64	1.68	1.72	1.76	1.81
10.0500	1.86	1.91	1.97	2.05	2.11
10.3000	2.19	2.26	2.34	2.41	2.50
10.5500	2.57	2.66	2.73	2.82	2.90
10.8000	2.99	3.07	3.16	3.24	3.34
11.0500	3.46	3.64	3.84	4.11	4.36
11.3000	4.65	4.91	5.22	5.49	5.82
11.5500	6.62	7.98	9.79	12.43	14.87
11.8000	17.89	20.60	23.93	31.89	45.40
12.0500	51.72	54.51	49.09	36.51	30.03
12.3000	25.74	22.71	19.37	16.60	13.28
12.5500	11.17	9.17	8.25	7.72	7.37
12.8000	7.01	6.72	6.37	6.08	5.73

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
13.0500	5.49	5.26	5.13	5.02	4.94
13.3000	4.85	4.78	4.69	4.61	4.52
13.5500	4.44	4.35	4.28	4.18	4.11
13.8000	4.02	3.94	3.85	3.77	3.68
14.0500	3.61	3.54	3.49	3.45	3.41
14.3000	3.37	3.33	3.29	3.25	3.20
14.5500	3.17	3.12	3.09	3.04	3.00
14.8000	2.96	2.92	2.88	2.84	2.80
15.0500	2.76	2.71	2.68	2.63	2.60
15.3000	2.55	2.51	2.47	2.43	2.38
15.5500	2.35	2.30	2.27	2.22	2.18
15.8000	2.14	2.10	2.05	2.01	1.97
16.0500	1.94	1.91	1.88	1.86	1.84
16.3000	1.83	1.81	1.79	1.77	1.75
16.5500	1.74	1.71	1.70	1.68	1.66
16.8000	1.64	1.63	1.61	1.59	1.57
17.0500	1.55	1.54	1.52	1.50	1.48
17.3000	1.46	1.45	1.42	1.41	1.39
17.5500	1.37	1.35	1.34	1.32	1.30
17.8000	1.28	1.26	1.25	1.23	1.21
18.0500	1.19	1.18	1.17	1.17	1.16
18.3000	1.15	1.15	1.14	1.14	1.13
18.5500	1.13	1.12	1.12	1.11	1.11
18.8000	1.10	1.10	1.09	1.08	1.08
19.0500	1.07	1.07	1.06	1.06	1.05
19.3000	1.05	1.04	1.04	1.03	1.02
19.5500	1.02	1.01	1.01	1.00	1.00
19.8000	.99	.99	.98	.97	.97
20.0500	.97	.96	.95	.95	.95
20.3000	.94	.94	.93	.93	.93
20.5500	.92	.92	.91	.91	.90
20.8000	.90	.90	.89	.89	.89
21.0500	.88	.88	.87	.87	.87
21.3000	.86	.86	.85	.85	.84
21.5500	.84	.84	.83	.83	.82
21.8000	.82	.82	.81	.81	.80
22.0500	.80	.80	.79	.79	.78
22.3000	.78	.77	.77	.77	.76
22.5500	.76	.76	.75	.75	.74
22.8000	.74	.73	.73	.73	.72
23.0500	.72	.71	.71	.71	.70
23.3000	.69	.69	.69	.69	.68
23.5500	.68	.67	.67	.66	.66
23.8000	.66	.65	.64	.64	.64
24.0500	.48	.17	.05	.02	.00

```
                          HYDROGRAPH ORDINATES (cfs)
    Time  |               Output Time increment = .0500 hrs
    hrs   |    Time on left represents time for first value in each row.
 ---------|-------------------------------------------------------------
  24.3000 |         .00
```

SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 50 year storm
Duration = 24.0000 hrs Rain Depth = 7.5900 in
Rain Dir = S:\2010\10170\PondPack\2016-10-14_BD\
Rain File -ID = - TypeIII 24hr
Unit Hyd Type = Default Curvilinear
HYG Dir = S:\2010\10170\PondPack\2016-10-14_BD\
HYG File - ID = - PDA-1A 50
Tc = .1032 hrs
Drainage Area = 12.311 acres Runoff CN= 83
Calc.Increment= .01376 hrs Out.Incr.= .0500 hrs
HYG Volume = 249657 cu.ft

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
4.8500	.00	.00	.01	.02	.02
5.1000	.03	.04	.05	.05	.06
5.3500	.07	.07	.08	.09	.10
5.6000	.11	.11	.12	.13	.14
5.8500	.15	.15	.16	.17	.18
6.1000	.19	.20	.21	.22	.23
6.3500	.24	.25	.27	.28	.29
6.6000	.30	.32	.33	.35	.36
6.8500	.37	.39	.40	.42	.43
7.1000	.45	.47	.48	.50	.52
7.3500	.53	.55	.57	.59	.60
7.6000	.62	.64	.66	.68	.70
7.8500	.72	.74	.76	.78	.80
8.1000	.83	.85	.89	.92	.95
8.3500	.99	1.02	1.06	1.09	1.13
8.6000	1.17	1.21	1.25	1.28	1.33
8.8500	1.37	1.41	1.45	1.49	1.54
9.1000	1.58	1.63	1.67	1.72	1.77
9.3500	1.81	1.86	1.91	1.96	2.01
9.6000	2.06	2.11	2.16	2.21	2.26
9.8500	2.31	2.37	2.42	2.48	2.54
10.1000	2.61	2.69	2.78	2.87	2.97
10.3500	3.05	3.15	3.25	3.35	3.44
10.6000	3.55	3.64	3.75	3.85	3.96
10.8500	4.06	4.18	4.28	4.39	4.55
11.1000	4.77	5.03	5.37	5.69	6.06
11.3500	6.39	6.78	7.12	7.52	8.54
11.6000	10.27	12.57	15.91	18.97	22.74
11.8500	26.08	30.19	40.04	56.71	64.30
12.1000	67.46	60.54	44.91	36.86	31.54

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
12.3500	27.79	23.67	20.27	16.22	13.63
12.6000	11.18	10.06	9.41	8.98	8.54
12.8500	8.18	7.75	7.40	6.97	6.68
13.1000	6.40	6.24	6.11	6.01	5.90
13.3500	5.80	5.69	5.60	5.49	5.40
13.6000	5.29	5.19	5.08	4.99	4.88
13.8500	4.78	4.67	4.58	4.46	4.38
14.1000	4.29	4.24	4.18	4.14	4.08
14.3500	4.04	3.98	3.94	3.88	3.84
14.6000	3.79	3.74	3.69	3.64	3.59
14.8500	3.54	3.49	3.44	3.39	3.34
15.1000	3.29	3.24	3.19	3.14	3.09
15.3500	3.04	2.99	2.94	2.89	2.84
15.6000	2.79	2.74	2.69	2.64	2.59
15.8500	2.54	2.48	2.44	2.38	2.35
16.1000	2.31	2.28	2.25	2.23	2.21
16.3500	2.19	2.16	2.14	2.12	2.10
16.6000	2.07	2.05	2.03	2.01	1.99
16.8500	1.97	1.95	1.93	1.90	1.88
17.1000	1.86	1.84	1.81	1.79	1.77
17.3500	1.75	1.72	1.70	1.68	1.66
17.6000	1.63	1.61	1.59	1.57	1.54
17.8500	1.53	1.51	1.48	1.46	1.44
18.1000	1.42	1.42	1.41	1.40	1.39
18.3500	1.39	1.38	1.38	1.37	1.36
18.6000	1.36	1.35	1.34	1.34	1.33
18.8500	1.32	1.31	1.31	1.30	1.30
19.1000	1.29	1.28	1.28	1.27	1.26
19.3500	1.26	1.25	1.24	1.24	1.23
19.6000	1.22	1.22	1.21	1.20	1.20
19.8500	1.19	1.18	1.18	1.17	1.17
20.1000	1.16	1.15	1.15	1.15	1.14
20.3500	1.13	1.13	1.12	1.12	1.11
20.6000	1.11	1.10	1.09	1.09	1.09
20.8500	1.09	1.08	1.07	1.07	1.07
21.1000	1.06	1.05	1.05	1.04	1.04
21.3500	1.04	1.03	1.02	1.02	1.01
21.6000	1.01	1.01	1.00	.99	.99
21.8500	.99	.98	.97	.97	.96
22.1000	.96	.96	.95	.94	.94
22.3500	.93	.93	.93	.92	.91
22.6000	.91	.91	.90	.89	.89
22.8500	.88	.88	.88	.87	.86
23.1000	.86	.85	.85	.85	.84
23.3500	.83	.83	.83	.82	.81

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
23.6000	.81	.80	.80	.80	.79
23.8500	.78	.78	.77	.77	.58
24.1000	.21	.06	.02	.01	.00

SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 100 year storm
Duration = 24.0000 hrs Rain Depth = 9.0100 in
Rain Dir = S:\2010\10170\PondPack\2016-10-14_BD\
Rain File -ID = - TypeIII 24hr
Unit Hyd Type = Default Curvilinear
HYG Dir = S:\2010\10170\PondPack\2016-10-14_BD\
HYG File - ID = - PDA-1A 100
Tc = .1032 hrs
Drainage Area = 12.311 acres Runoff CN= 83
Calc.Increment= .01376 hrs Out.Incr.= .0500 hrs
HYG Volume = 310405 cu.ft

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
4.2000	.00	.00	.01	.01	.02
4.4500	.03	.04	.05	.06	.07
4.7000	.08	.09	.10	.11	.11
4.9500	.12	.13	.14	.15	.16
5.2000	.17	.18	.19	.20	.21
5.4500	.22	.23	.24	.25	.26
5.7000	.27	.28	.29	.31	.32
5.9500	.33	.34	.35	.36	.38
6.2000	.39	.41	.42	.44	.45
6.4500	.47	.49	.51	.52	.54
6.7000	.56	.58	.60	.62	.64
6.9500	.66	.68	.70	.72	.74
7.2000	.76	.78	.81	.83	.85
7.4500	.88	.90	.92	.95	.97
7.7000	1.00	1.02	1.05	1.07	1.10
7.9500	1.12	1.15	1.18	1.21	1.25
8.2000	1.29	1.33	1.38	1.42	1.47
8.4500	1.52	1.57	1.61	1.66	1.71
8.7000	1.77	1.81	1.87	1.92	1.98
8.9500	2.03	2.08	2.14	2.20	2.25
9.2000	2.31	2.37	2.43	2.49	2.55
9.4500	2.61	2.67	2.73	2.79	2.85
9.7000	2.92	2.98	3.05	3.11	3.18
9.9500	3.24	3.31	3.39	3.48	3.58
10.2000	3.69	3.80	3.92	4.03	4.16
10.4500	4.27	4.40	4.52	4.65	4.77
10.7000	4.90	5.02	5.16	5.28	5.42
10.9500	5.55	5.69	5.88	6.16	6.48
11.2000	6.92	7.31	7.77	8.18	8.66
11.4500	9.08	9.59	10.87	13.04	15.93

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
11.7000	20.11	23.90	28.57	32.66	37.69
11.9500	49.77	70.21	79.27	82.85	74.14
12.2000	54.89	44.96	38.42	33.82	28.79
12.4500	24.63	19.69	16.55	13.57	12.20
12.7000	11.41	10.89	10.35	9.92	9.40
12.9500	8.96	8.44	8.09	7.75	7.55
13.2000	7.39	7.27	7.14	7.02	6.89
13.4500	6.78	6.64	6.53	6.39	6.28
13.7000	6.14	6.03	5.89	5.78	5.64
13.9500	5.53	5.39	5.29	5.19	5.12
14.2000	5.05	5.00	4.93	4.87	4.81
14.4500	4.76	4.69	4.63	4.57	4.52
14.7000	4.45	4.39	4.33	4.28	4.21
14.9500	4.15	4.09	4.03	3.97	3.91
15.2000	3.85	3.79	3.72	3.67	3.61
15.4500	3.55	3.48	3.43	3.36	3.31
15.7000	3.24	3.18	3.12	3.06	2.99
15.9500	2.94	2.87	2.83	2.78	2.75
16.2000	2.71	2.69	2.66	2.64	2.60
16.4500	2.58	2.56	2.53	2.50	2.48
16.7000	2.45	2.43	2.39	2.37	2.34
16.9500	2.32	2.29	2.26	2.24	2.21
17.2000	2.18	2.16	2.13	2.11	2.07
17.4500	2.05	2.03	2.00	1.97	1.94
17.7000	1.92	1.89	1.86	1.84	1.81
17.9500	1.79	1.75	1.73	1.71	1.70
18.2000	1.70	1.69	1.68	1.67	1.66
18.4500	1.66	1.65	1.64	1.63	1.63
18.7000	1.61	1.61	1.60	1.59	1.58
18.9500	1.58	1.57	1.56	1.55	1.54
19.2000	1.54	1.53	1.52	1.51	1.51
19.4500	1.50	1.49	1.48	1.47	1.47
19.7000	1.46	1.45	1.44	1.43	1.42
19.9500	1.42	1.41	1.40	1.39	1.39
20.2000	1.39	1.38	1.37	1.36	1.36
20.4500	1.35	1.35	1.34	1.34	1.33
20.7000	1.32	1.31	1.31	1.31	1.30
20.9500	1.29	1.29	1.28	1.27	1.27
21.2000	1.26	1.26	1.25	1.25	1.24
21.4500	1.23	1.22	1.22	1.22	1.21
21.7000	1.20	1.20	1.19	1.19	1.18
21.9500	1.17	1.17	1.16	1.15	1.15
22.2000	1.14	1.14	1.13	1.12	1.12
22.4500	1.11	1.10	1.10	1.10	1.09
22.7000	1.08	1.08	1.07	1.06	1.06

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
22.9500	1.05	1.05	1.04	1.03	1.02
23.2000	1.02	1.02	1.01	1.00	1.00
23.4500	1.00	.99	.98	.97	.97
23.7000	.96	.96	.95	.94	.93
23.9500	.93	.92	.70	.25	.08
24.2000	.02	.01	.00	.00	

SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 1 year storm
Duration = 24.0000 hrs Rain Depth = 2.8400 in
Rain Dir = S:\2010\10170\PondPack\2016-10-14_BD\
Rain File -ID = - TypeIII 24hr
Unit Hyd Type = Default Curvilinear
HYG Dir = S:\2010\10170\PondPack\2016-10-14_BD\
HYG File - ID = - PDA-1A-1 1
Tc = .3572 hrs
Drainage Area = 17.280 acres Runoff CN= 76
Calc.Increment= .04763 hrs Out.Incr.= .0500 hrs
HYG Volume = 57004 cu.ft

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
10.6500	.00	.00	.00	.01	.02
10.9000	.03	.04	.06	.08	.10
11.1500	.12	.14	.17	.21	.24
11.4000	.28	.33	.38	.44	.52
11.6500	.63	.78	1.00	1.29	1.68
11.9000	2.17	2.85	3.83	5.23	7.01
12.1500	8.80	10.25	11.02	11.10	10.69
12.4000	9.99	9.18	8.34	7.49	6.64
12.6500	5.83	5.11	4.49	3.99	3.60
12.9000	3.29	3.04	2.83	2.65	2.49
13.1500	2.35	2.23	2.14	2.06	2.00
13.4000	1.95	1.90	1.86	1.83	1.80
13.6500	1.77	1.74	1.71	1.68	1.65
13.9000	1.62	1.59	1.56	1.53	1.50
14.1500	1.47	1.45	1.42	1.40	1.38
14.4000	1.37	1.35	1.33	1.32	1.30
14.6500	1.29	1.27	1.26	1.24	1.23
14.9000	1.22	1.20	1.19	1.17	1.16
15.1500	1.14	1.13	1.11	1.10	1.08
15.4000	1.06	1.05	1.03	1.02	1.00
15.6500	.99	.97	.96	.94	.92
15.9000	.91	.89	.87	.86	.84
16.1500	.83	.81	.80	.79	.78
16.4000	.77	.76	.75	.75	.74
16.6500	.73	.73	.72	.71	.70
16.9000	.70	.69	.68	.68	.67
17.1500	.66	.65	.65	.64	.63
17.4000	.63	.62	.61	.60	.60
17.6500	.59	.58	.57	.57	.56
17.9000	.55	.54	.54	.53	.52

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
18.1500	.52	.51	.50	.50	.50
18.4000	.49	.49	.49	.49	.48
18.6500	.48	.48	.48	.47	.47
18.9000	.47	.47	.47	.46	.46
19.1500	.46	.46	.45	.45	.45
19.4000	.45	.45	.44	.44	.44
19.6500	.44	.44	.43	.43	.43
19.9000	.43	.42	.42	.42	.42
20.1500	.42	.41	.41	.41	.41
20.4000	.41	.41	.40	.40	.40
20.6500	.40	.40	.39	.39	.39
20.9000	.39	.39	.39	.39	.38
21.1500	.38	.38	.38	.38	.38
21.4000	.37	.37	.37	.37	.37
21.6500	.36	.36	.36	.36	.36
21.9000	.36	.36	.35	.35	.35
22.1500	.35	.35	.35	.34	.34
22.4000	.34	.34	.34	.33	.33
22.6500	.33	.33	.33	.33	.32
22.9000	.32	.32	.32	.32	.32
23.1500	.31	.31	.31	.31	.31
23.4000	.31	.30	.30	.30	.30
23.6500	.30	.30	.29	.29	.29
23.9000	.29	.29	.28	.28	.26
24.1500	.23	.19	.14	.11	.07
24.4000	.05	.04	.03	.02	.01
24.6500	.01	.01	.00	.00	.00
24.9000	.00	.00			

SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 10 year storm
Duration = 24.0000 hrs Rain Depth = 5.1100 in
Rain Dir = S:\2010\10170\PondPack\2016-10-14_BD\
Rain File -ID = - TypeIII 24hr
Unit Hyd Type = Default Curvilinear
HYG Dir = S:\2010\10170\PondPack\2016-10-14_BD\
HYG File - ID = - PDA-1A-1 10
Tc = .3572 hrs
Drainage Area = 17.280 acres Runoff CN= 76
Calc.Increment= .04763 hrs Out.Incr.= .0500 hrs
HYG Volume = 164750 cu.ft

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
8.4500	.00	.00	.01	.01	.02
8.7000	.03	.04	.06	.07	.09
8.9500	.10	.12	.14	.16	.18
9.2000	.20	.22	.24	.26	.28
9.4500	.31	.33	.36	.38	.41
9.7000	.43	.46	.49	.52	.55
9.9500	.58	.61	.64	.68	.71
10.2000	.75	.79	.83	.87	.92
10.4500	.97	1.02	1.07	1.12	1.18
10.7000	1.24	1.30	1.36	1.42	1.48
10.9500	1.55	1.62	1.69	1.76	1.85
11.2000	1.95	2.07	2.20	2.36	2.53
11.4500	2.71	2.91	3.14	3.45	3.90
11.7000	4.54	5.42	6.58	8.01	9.74
11.9500	11.98	15.06	19.27	24.34	29.14
12.2000	32.68	34.08	33.43	31.48	28.85
12.4500	26.03	23.30	20.65	18.11	15.74
12.7000	13.66	11.92	10.52	9.41	8.54
12.9500	7.84	7.26	6.76	6.33	5.96
13.2000	5.65	5.39	5.18	5.01	4.87
13.4500	4.75	4.65	4.55	4.46	4.38
13.7000	4.30	4.22	4.14	4.06	3.98
13.9500	3.91	3.83	3.75	3.68	3.60
14.2000	3.54	3.48	3.42	3.37	3.32
14.4500	3.28	3.24	3.20	3.16	3.12
14.7000	3.08	3.04	3.01	2.97	2.93
14.9500	2.89	2.85	2.82	2.78	2.74
15.2000	2.70	2.66	2.62	2.59	2.55
15.4500	2.51	2.47	2.43	2.39	2.35
15.7000	2.31	2.27	2.23	2.20	2.16

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
15.9500	2.12	2.08	2.04	2.00	1.96
16.2000	1.93	1.90	1.87	1.85	1.82
16.4500	1.80	1.78	1.76	1.75	1.73
16.7000	1.71	1.69	1.68	1.66	1.64
16.9500	1.62	1.61	1.59	1.57	1.55
17.2000	1.54	1.52	1.50	1.48	1.47
17.4500	1.45	1.43	1.41	1.40	1.38
17.7000	1.36	1.34	1.33	1.31	1.29
17.9500	1.27	1.26	1.24	1.22	1.21
18.2000	1.19	1.18	1.17	1.16	1.15
18.4500	1.14	1.14	1.13	1.12	1.12
18.7000	1.11	1.11	1.10	1.10	1.09
18.9500	1.09	1.08	1.08	1.07	1.07
19.2000	1.06	1.06	1.05	1.05	1.04
19.4500	1.04	1.03	1.02	1.02	1.01
19.7000	1.01	1.00	1.00	.99	.99
19.9500	.98	.98	.97	.97	.96
20.2000	.96	.95	.95	.94	.94
20.4500	.94	.93	.93	.92	.92
20.7000	.92	.91	.91	.90	.90
20.9500	.89	.89	.89	.88	.88
21.2000	.88	.87	.87	.86	.86
21.4500	.86	.85	.85	.84	.84
21.7000	.84	.83	.83	.82	.82
21.9500	.82	.81	.81	.80	.80
22.2000	.80	.79	.79	.78	.78
22.4500	.78	.77	.77	.76	.76
22.7000	.76	.75	.75	.74	.74
22.9500	.74	.73	.73	.72	.72
23.2000	.71	.71	.71	.70	.70
23.4500	.70	.69	.69	.68	.68
23.7000	.68	.67	.67	.66	.66
23.9500	.65	.65	.63	.60	.53
24.2000	.43	.33	.24	.17	.12
24.4500	.09	.06	.04	.03	.02
24.7000	.01	.01	.01	.00	.00
24.9500	.00	.00	.00		

SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 25 year storm
Duration = 24.0000 hrs Rain Depth = 6.4000 in
Rain Dir = S:\2010\10170\PondPack\2016-10-14_BD\
Rain File -ID = - TypeIII 24hr
Unit Hyd Type = Default Curvilinear
HYG Dir = S:\2010\10170\PondPack\2016-10-14_BD\
HYG File - ID = - PDA-1A-1 25
Tc = .3572 hrs
Drainage Area = 17.280 acres Runoff CN= 76
Calc.Increment= .04763 hrs Out.Incr.= .0500 hrs
HYG Volume = 233837 cu.ft

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
7.4500	.00	.00	.00	.01	.01
7.7000	.02	.03	.04	.05	.07
7.9500	.08	.09	.10	.12	.13
8.2000	.15	.17	.18	.20	.22
8.4500	.24	.26	.28	.31	.33
8.7000	.35	.38	.40	.43	.46
8.9500	.49	.52	.55	.58	.61
9.2000	.64	.68	.71	.75	.78
9.4500	.82	.86	.90	.94	.98
9.7000	1.02	1.06	1.11	1.15	1.19
9.9500	1.24	1.29	1.33	1.38	1.43
10.2000	1.49	1.55	1.61	1.68	1.75
10.4500	1.82	1.90	1.98	2.06	2.15
10.7000	2.23	2.32	2.41	2.50	2.60
10.9500	2.69	2.79	2.89	3.00	3.13
11.2000	3.28	3.46	3.66	3.89	4.15
11.4500	4.42	4.72	5.07	5.53	6.20
11.7000	7.16	8.49	10.22	12.33	14.84
11.9500	18.08	22.46	28.42	35.48	42.08
12.2000	46.81	48.49	47.30	44.30	40.42
12.4500	36.32	32.39	28.62	25.02	21.70
12.7000	18.79	16.36	14.41	12.87	11.67
12.9500	10.69	9.89	9.20	8.60	8.09
13.2000	7.66	7.30	7.02	6.79	6.59
13.4500	6.43	6.28	6.15	6.03	5.91
13.7000	5.80	5.69	5.58	5.47	5.37
13.9500	5.26	5.15	5.05	4.95	4.85
14.2000	4.76	4.67	4.60	4.53	4.46
14.4500	4.40	4.35	4.29	4.24	4.19
14.7000	4.13	4.08	4.03	3.98	3.93

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
14.9500	3.87	3.82	3.77	3.72	3.67
15.2000	3.62	3.56	3.51	3.46	3.41
15.4500	3.35	3.30	3.25	3.20	3.14
15.7000	3.09	3.04	2.98	2.93	2.88
15.9500	2.83	2.77	2.72	2.67	2.62
16.2000	2.58	2.53	2.50	2.46	2.43
16.4500	2.40	2.38	2.35	2.33	2.30
16.7000	2.28	2.26	2.23	2.21	2.19
16.9500	2.16	2.14	2.12	2.09	2.07
17.2000	2.05	2.02	2.00	1.98	1.95
17.4500	1.93	1.90	1.88	1.86	1.83
17.7000	1.81	1.79	1.76	1.74	1.72
17.9500	1.69	1.67	1.65	1.62	1.60
18.2000	1.58	1.57	1.55	1.54	1.53
18.4500	1.52	1.51	1.50	1.49	1.49
18.7000	1.48	1.47	1.46	1.46	1.45
18.9500	1.44	1.44	1.43	1.42	1.42
19.2000	1.41	1.40	1.39	1.39	1.38
19.4500	1.37	1.37	1.36	1.35	1.35
19.7000	1.34	1.33	1.32	1.32	1.31
19.9500	1.30	1.30	1.29	1.28	1.28
20.2000	1.27	1.26	1.26	1.25	1.25
20.4500	1.24	1.23	1.23	1.22	1.22
20.7000	1.21	1.21	1.20	1.20	1.19
20.9500	1.19	1.18	1.18	1.17	1.17
21.2000	1.16	1.16	1.15	1.14	1.14
21.4500	1.13	1.13	1.12	1.12	1.11
21.7000	1.11	1.10	1.10	1.09	1.09
21.9500	1.08	1.08	1.07	1.06	1.06
22.2000	1.05	1.05	1.04	1.04	1.03
22.4500	1.03	1.02	1.02	1.01	1.01
22.7000	1.00	1.00	.99	.98	.98
22.9500	.97	.97	.96	.96	.95
23.2000	.95	.94	.93	.93	.92
23.4500	.92	.91	.91	.90	.90
23.7000	.89	.89	.88	.88	.87
23.9500	.86	.86	.84	.79	.69
24.2000	.57	.44	.32	.22	.16
24.4500	.11	.08	.06	.04	.03
24.7000	.02	.01	.01	.01	.00
24.9500	.00	.00	.00		

SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 50 year storm
Duration = 24.0000 hrs Rain Depth = 7.5900 in
Rain Dir = S:\2010\10170\PondPack\2016-10-14_BD\
Rain File -ID = - TypeIII 24hr
Unit Hyd Type = Default Curvilinear
HYG Dir = S:\2010\10170\PondPack\2016-10-14_BD\
HYG File - ID = - PDA-1A-1 50
Tc = .3572 hrs
Drainage Area = 17.280 acres Runoff CN= 76
Calc.Increment= .04763 hrs Out.Incr.= .0500 hrs
HYG Volume = 300245 cu.ft

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
6.7500	.00	.00	.01	.01	.02
7.0000	.03	.04	.05	.06	.07
7.2500	.09	.10	.12	.13	.15
7.5000	.16	.18	.20	.21	.23
7.7500	.25	.27	.28	.30	.32
8.0000	.34	.36	.38	.40	.43
8.2500	.45	.48	.50	.53	.56
8.5000	.59	.62	.66	.69	.73
8.7500	.76	.80	.84	.88	.92
9.0000	.96	1.00	1.05	1.09	1.14
9.2500	1.18	1.23	1.28	1.33	1.38
9.5000	1.43	1.49	1.54	1.59	1.65
9.7500	1.71	1.76	1.82	1.88	1.94
10.0000	2.00	2.06	2.13	2.20	2.27
10.2500	2.35	2.43	2.52	2.62	2.72
10.5000	2.82	2.93	3.03	3.14	3.26
10.7500	3.37	3.49	3.61	3.73	3.86
11.0000	3.99	4.12	4.26	4.43	4.62
11.2500	4.86	5.13	5.44	5.77	6.13
11.5000	6.52	6.98	7.59	8.48	9.75
11.7500	11.51	13.78	16.55	19.82	23.99
12.0000	29.61	37.19	46.13	54.38	60.19
12.2500	62.10	60.36	56.35	51.27	45.95
12.5000	40.88	36.06	31.47	27.26	23.57
12.7500	20.49	18.03	16.09	14.56	13.34
13.0000	12.32	11.45	10.70	10.06	9.52
13.2500	9.07	8.72	8.42	8.18	7.97
13.5000	7.79	7.62	7.47	7.32	7.18
13.7500	7.05	6.91	6.78	6.64	6.51
14.0000	6.38	6.25	6.12	5.99	5.88

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
14.2500	5.78	5.68	5.59	5.52	5.44
14.5000	5.37	5.30	5.23	5.17	5.10
14.7500	5.04	4.97	4.91	4.84	4.78
15.0000	4.72	4.65	4.59	4.52	4.46
15.2500	4.39	4.33	4.26	4.20	4.13
15.5000	4.07	4.00	3.94	3.87	3.81
15.7500	3.74	3.68	3.61	3.54	3.48
16.0000	3.41	3.35	3.28	3.22	3.17
16.2500	3.12	3.07	3.03	2.99	2.96
16.5000	2.92	2.89	2.86	2.83	2.80
16.7500	2.77	2.74	2.72	2.69	2.66
17.0000	2.63	2.60	2.57	2.54	2.51
17.2500	2.49	2.46	2.43	2.40	2.37
17.5000	2.34	2.31	2.28	2.25	2.22
17.7500	2.20	2.17	2.14	2.11	2.08
18.0000	2.05	2.02	1.99	1.97	1.94
18.2500	1.92	1.90	1.89	1.88	1.86
18.5000	1.85	1.84	1.83	1.82	1.82
18.7500	1.81	1.80	1.79	1.78	1.77
19.0000	1.76	1.75	1.75	1.74	1.73
19.2500	1.72	1.71	1.70	1.69	1.68
19.5000	1.68	1.67	1.66	1.65	1.64
19.7500	1.63	1.62	1.62	1.61	1.60
20.0000	1.59	1.58	1.57	1.56	1.56
20.2500	1.55	1.54	1.53	1.53	1.52
20.5000	1.51	1.51	1.50	1.49	1.49
20.7500	1.48	1.47	1.47	1.46	1.45
21.0000	1.45	1.44	1.43	1.43	1.42
21.2500	1.42	1.41	1.40	1.40	1.39
21.5000	1.38	1.37	1.37	1.36	1.35
21.7500	1.35	1.34	1.34	1.33	1.32
22.0000	1.32	1.31	1.30	1.30	1.29
22.2500	1.28	1.28	1.27	1.26	1.26
22.5000	1.25	1.24	1.24	1.23	1.22
22.7500	1.22	1.21	1.21	1.20	1.19
23.0000	1.18	1.18	1.17	1.16	1.16
23.2500	1.15	1.14	1.14	1.13	1.13
23.5000	1.12	1.11	1.11	1.10	1.09
23.7500	1.09	1.08	1.07	1.07	1.06
24.0000	1.05	1.03	.97	.85	.69
24.2500	.53	.39	.27	.19	.14
24.5000	.10	.07	.05	.03	.02
24.7500	.02	.01	.01	.01	.00
25.0000	.00	.00			

SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 100 year storm
Duration = 24.0000 hrs Rain Depth = 9.0100 in
Rain Dir = S:\2010\10170\PondPack\2016-10-14_BD\
Rain File -ID = - TypeIII 24hr
Unit Hyd Type = Default Curvilinear
HYG Dir = S:\2010\10170\PondPack\2016-10-14_BD\
HYG File - ID = - PDA-1A-1 100
Tc = .3572 hrs
Drainage Area = 17.280 acres Runoff CN= 76
Calc.Increment= .04763 hrs Out.Incr.= .0500 hrs
HYG Volume = 381715 cu.ft

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
6.0000	.00	.00	.01	.01	.02
6.2500	.03	.04	.05	.06	.07
6.5000	.09	.10	.11	.13	.14
6.7500	.16	.17	.19	.21	.23
7.0000	.24	.26	.28	.30	.32
7.2500	.34	.36	.38	.41	.43
7.5000	.45	.47	.50	.52	.54
7.7500	.57	.59	.62	.65	.67
8.0000	.70	.73	.76	.79	.82
8.2500	.85	.89	.93	.97	1.01
8.5000	1.05	1.10	1.14	1.19	1.24
8.7500	1.29	1.34	1.40	1.45	1.51
9.0000	1.57	1.62	1.68	1.74	1.80
9.2500	1.87	1.93	2.00	2.06	2.13
9.5000	2.20	2.27	2.34	2.41	2.48
9.7500	2.56	2.63	2.71	2.79	2.86
10.0000	2.94	3.02	3.11	3.19	3.29
10.2500	3.39	3.50	3.62	3.74	3.87
10.5000	4.01	4.14	4.28	4.43	4.57
10.7500	4.72	4.88	5.03	5.19	5.35
11.0000	5.51	5.68	5.86	6.07	6.33
11.2500	6.63	6.98	7.38	7.81	8.28
11.5000	8.79	9.38	10.17	11.32	12.97
11.7500	15.26	18.20	21.76	25.94	31.26
12.0000	38.36	47.90	59.07	69.30	76.38
12.2500	78.52	76.09	70.84	64.30	57.50
12.5000	51.07	44.96	39.18	33.90	29.28
12.7500	25.43	22.34	19.92	18.02	16.49
13.0000	15.22	14.14	13.21	12.40	11.73
13.2500	11.18	10.74	10.37	10.07	9.81

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
13.5000	9.58	9.38	9.19	9.01	8.83
13.7500	8.66	8.49	8.33	8.16	8.00
14.0000	7.83	7.67	7.51	7.36	7.22
14.2500	7.09	6.97	6.86	6.77	6.67
14.5000	6.58	6.50	6.42	6.33	6.25
14.7500	6.17	6.09	6.01	5.94	5.86
15.0000	5.78	5.70	5.62	5.54	5.46
15.2500	5.38	5.30	5.22	5.14	5.06
15.5000	4.98	4.90	4.82	4.74	4.66
15.7500	4.58	4.50	4.42	4.33	4.25
16.0000	4.17	4.09	4.02	3.94	3.87
16.2500	3.81	3.75	3.70	3.66	3.61
16.5000	3.57	3.54	3.50	3.46	3.42
16.7500	3.39	3.35	3.32	3.28	3.25
17.0000	3.21	3.18	3.14	3.11	3.07
17.2500	3.03	3.00	2.96	2.93	2.89
17.5000	2.86	2.82	2.79	2.75	2.72
17.7500	2.68	2.64	2.61	2.57	2.54
18.0000	2.50	2.47	2.43	2.40	2.37
18.2500	2.35	2.32	2.31	2.29	2.27
18.5000	2.26	2.25	2.24	2.23	2.21
18.7500	2.20	2.19	2.18	2.17	2.16
19.0000	2.15	2.14	2.13	2.12	2.11
19.2500	2.10	2.09	2.08	2.06	2.05
19.5000	2.04	2.03	2.02	2.01	2.00
19.7500	1.99	1.98	1.97	1.96	1.95
20.0000	1.94	1.93	1.92	1.91	1.90
20.2500	1.89	1.88	1.87	1.86	1.85
20.5000	1.84	1.84	1.83	1.82	1.81
20.7500	1.80	1.79	1.79	1.78	1.77
21.0000	1.76	1.76	1.75	1.74	1.73
21.2500	1.72	1.72	1.71	1.70	1.69
21.5000	1.68	1.67	1.67	1.66	1.65
21.7500	1.64	1.63	1.63	1.62	1.61
22.0000	1.60	1.60	1.59	1.58	1.57
22.2500	1.56	1.55	1.55	1.54	1.53
22.5000	1.52	1.51	1.51	1.50	1.49
22.7500	1.48	1.48	1.47	1.46	1.45
23.0000	1.44	1.43	1.43	1.42	1.41
23.2500	1.40	1.39	1.38	1.38	1.37
23.5000	1.36	1.35	1.35	1.34	1.33
23.7500	1.32	1.31	1.31	1.30	1.29
24.0000	1.28	1.25	1.17	1.03	.85
24.2500	.65	.47	.33	.24	.17
24.5000	.12	.08	.06	.04	.03

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
24.7500	.02	.01	.01	.01	.00
25.0000	.00	.00	.00		

1.83 acres of the field modeled as impervious area in
lieu of pervious lawn areas.
Conclusion: Water Quantity Standards met - Peak rates
of runoff in Proposed conditions < Existing conditions

Storm... TypeIII 24hr Tag: 1

SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 1 year storm
Duration = 24.0000 hrs Rain Depth = 2.8400 in
Rain Dir = S:\2010\10170\PondPack\2016-10-14_BD\
Rain File -ID = - TypeIII 24hr
Unit Hyd Type = Default Curvilinear
HYG Dir = S:\2010\10170\PondPack\2016-10-14_BD\
HYG File - ID = - PDA-1A-2 1
Tc = .1032 hrs
Drainage Area = 5.440 acres Runoff CN= 92
Calc.Increment= .01376 hrs Out.Incr.= .0500 hrs
HYG Volume = 39698 cu.ft

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
5.4000	.00	.00	.00	.00	.00
5.6500	.01	.01	.01	.01	.01
5.9000	.01	.01	.01	.02	.02
6.1500	.02	.02	.02	.02	.03
6.4000	.03	.03	.03	.03	.03
6.6500	.04	.04	.04	.04	.04
6.9000	.05	.05	.05	.05	.06
7.1500	.06	.06	.06	.07	.07
7.4000	.07	.07	.08	.08	.08
7.6500	.08	.09	.09	.09	.10
7.9000	.10	.10	.11	.11	.11
8.1500	.12	.12	.13	.13	.14
8.4000	.14	.15	.15	.16	.16
8.6500	.17	.18	.18	.19	.19
8.9000	.20	.21	.21	.22	.23
9.1500	.23	.24	.25	.26	.26
9.4000	.27	.28	.29	.29	.30
9.6500	.31	.32	.33	.34	.34
9.9000	.35	.36	.37	.38	.39
10.1500	.40	.42	.43	.45	.46
10.4000	.48	.49	.51	.52	.54
10.6500	.55	.57	.59	.60	.62
10.9000	.64	.65	.67	.70	.73
11.1500	.77	.83	.88	.94	.99

1.83 acres of the field modeled as impervious area in
lieu of pervious lawn areas.
Conclusion: Water Quantity Standards met - Peak rates
of runoff in Proposed conditions < Existing conditions
Storm... TypeIII 24hr Tag: 1

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
11.4000	1.05	1.10	1.17	1.33	1.60
11.6500	1.96	2.49	2.98	3.58	4.11
11.9000	4.77	6.35	9.03	10.28	10.82
12.1500	9.73	7.23	5.95	5.09	4.49
12.4000	3.83	3.28	2.63	2.21	1.81
12.6500	1.63	1.53	1.46	1.39	1.33
12.9000	1.26	1.20	1.13	1.08	1.04
13.1500	1.01	.99	.98	.96	.94
13.4000	.93	.91	.89	.88	.86
13.6500	.84	.83	.81	.79	.78
13.9000	.76	.74	.73	.71	.70
14.1500	.69	.68	.67	.66	.66
14.4000	.65	.64	.63	.62	.62
14.6500	.61	.60	.59	.58	.58
14.9000	.57	.56	.55	.54	.54
15.1500	.53	.52	.51	.50	.50
15.4000	.49	.48	.47	.46	.45
15.6500	.45	.44	.43	.42	.41
15.9000	.40	.40	.39	.38	.38
16.1500	.37	.37	.36	.36	.36
16.4000	.35	.35	.35	.34	.34
16.6500	.33	.33	.33	.32	.32
16.9000	.32	.31	.31	.31	.30
17.1500	.30	.30	.29	.29	.29
17.4000	.28	.28	.27	.27	.27
17.6500	.26	.26	.26	.25	.25
17.9000	.25	.24	.24	.23	.23
18.1500	.23	.23	.23	.23	.23
18.4000	.23	.22	.22	.22	.22
18.6500	.22	.22	.22	.22	.22
18.9000	.21	.21	.21	.21	.21
19.1500	.21	.21	.21	.21	.21
19.4000	.20	.20	.20	.20	.20
19.6500	.20	.20	.20	.20	.19
19.9000	.19	.19	.19	.19	.19
20.1500	.19	.19	.19	.19	.18
20.4000	.18	.18	.18	.18	.18
20.6500	.18	.18	.18	.18	.18
20.9000	.18	.18	.18	.17	.17

1.83 acres of the field modeled as impervious area in
lieu of pervious lawn areas.
Conclusion: Water Quantity Standards met - Peak rates
of runoff in Proposed conditions < Existing conditions

Storm... TypeIII 24hr Tag: 1

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
21.1500	.17	.17	.17	.17	.17
21.4000	.17	.17	.17	.17	.17
21.6500	.16	.16	.16	.16	.16
21.9000	.16	.16	.16	.16	.16
22.1500	.16	.16	.15	.15	.15
22.4000	.15	.15	.15	.15	.15
22.6500	.15	.15	.15	.15	.14
22.9000	.14	.14	.14	.14	.14
23.1500	.14	.14	.14	.14	.14
23.4000	.14	.14	.13	.13	.13
23.6500	.13	.13	.13	.13	.13
23.9000	.13	.13	.13	.09	.03
24.1500	.01	.00	.00		

SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 10 year storm
Duration = 24.0000 hrs Rain Depth = 5.1100 in
Rain Dir = S:\2010\10170\PondPack\2016-10-14_BD\
Rain File -ID = - TypeIII 24hr
Unit Hyd Type = Default Curvilinear
HYG Dir = S:\2010\10170\PondPack\2016-10-14_BD\
HYG File - ID = - PDA-1A-2 10
Tc = .1032 hrs
Drainage Area = 5.440 acres Runoff CN= 92
Calc.Increment= .01376 hrs Out.Incr.= .0500 hrs
HYG Volume = 82872 cu.ft

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
3.3500	.00	.00	.00	.01	.01
3.6000	.01	.01	.02	.02	.02
3.8500	.02	.03	.03	.03	.03
4.1000	.04	.04	.04	.04	.05
4.3500	.05	.05	.06	.06	.06
4.6000	.06	.07	.07	.07	.07
4.8500	.08	.08	.08	.09	.09
5.1000	.09	.09	.10	.10	.10
5.3500	.11	.11	.11	.11	.12
5.6000	.12	.12	.13	.13	.13
5.8500	.13	.14	.14	.14	.15
6.1000	.15	.16	.16	.16	.17
6.3500	.17	.18	.18	.19	.20
6.6000	.20	.21	.21	.22	.22
6.8500	.23	.24	.24	.25	.25
7.1000	.26	.27	.27	.28	.28
7.3500	.29	.30	.30	.31	.32
7.6000	.32	.33	.34	.34	.35
7.8500	.36	.37	.37	.38	.39
8.1000	.40	.41	.42	.43	.45
8.3500	.46	.47	.49	.50	.51
8.6000	.53	.54	.56	.57	.58
8.8500	.60	.61	.63	.64	.66
9.1000	.67	.69	.70	.72	.74
9.3500	.75	.77	.78	.80	.82
9.6000	.83	.85	.87	.88	.90
9.8500	.92	.94	.95	.97	.99
10.1000	1.01	1.04	1.07	1.10	1.13
10.3500	1.16	1.20	1.23	1.26	1.29
10.6000	1.32	1.36	1.39	1.42	1.46

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
10.8500	1.49	1.53	1.56	1.59	1.65
11.1000	1.72	1.81	1.92	2.03	2.15
11.3500	2.26	2.39	2.50	2.63	2.98
11.6000	3.56	4.34	5.46	6.46	7.69
11.8500	8.76	10.06	13.21	18.54	20.82
12.1000	21.65	19.30	14.25	11.65	9.94
12.3500	8.73	7.43	6.35	5.07	4.26
12.6000	3.49	3.14	2.93	2.80	2.66
12.8500	2.55	2.41	2.30	2.17	2.08
13.1000	1.99	1.94	1.90	1.87	1.83
13.3500	1.80	1.77	1.74	1.70	1.67
13.6000	1.64	1.61	1.57	1.54	1.51
13.8500	1.48	1.45	1.42	1.38	1.36
14.1000	1.33	1.31	1.29	1.28	1.26
14.3500	1.25	1.23	1.22	1.20	1.19
14.6000	1.17	1.15	1.14	1.12	1.11
14.8500	1.09	1.08	1.06	1.05	1.03
15.1000	1.01	1.00	.98	.97	.95
15.3500	.94	.92	.91	.89	.87
15.6000	.86	.84	.83	.81	.80
15.8500	.78	.76	.75	.73	.72
16.1000	.71	.70	.69	.69	.68
16.3500	.67	.66	.66	.65	.65
16.6000	.64	.63	.63	.62	.61
16.8500	.60	.60	.59	.58	.58
17.1000	.57	.56	.56	.55	.54
17.3500	.54	.53	.52	.52	.51
17.6000	.50	.50	.49	.48	.47
17.8500	.47	.46	.46	.45	.44
18.1000	.44	.43	.43	.43	.43
18.3500	.43	.42	.42	.42	.42
18.6000	.42	.41	.41	.41	.41
18.8500	.41	.40	.40	.40	.40
19.1000	.40	.39	.39	.39	.39
19.3500	.39	.38	.38	.38	.38
19.6000	.38	.37	.37	.37	.37
19.8500	.37	.36	.36	.36	.36
20.1000	.35	.35	.35	.35	.35
20.3500	.35	.35	.34	.34	.34
20.6000	.34	.34	.34	.33	.33
20.8500	.33	.33	.33	.33	.33
21.1000	.32	.32	.32	.32	.32
21.3500	.32	.32	.31	.31	.31
21.6000	.31	.31	.31	.30	.30
21.8500	.30	.30	.30	.30	.30

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
22.1000	.29	.29	.29	.29	.29
22.3500	.29	.28	.28	.28	.28
22.6000	.28	.28	.28	.27	.27
22.8500	.27	.27	.27	.27	.26
23.1000	.26	.26	.26	.26	.26
23.3500	.26	.25	.25	.25	.25
23.6000	.25	.25	.24	.24	.24
23.8500	.24	.24	.24	.24	.18
24.1000	.06	.02	.01	.00	.00

SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 25 year storm
Duration = 24.0000 hrs Rain Depth = 6.4000 in
Rain Dir = S:\2010\10170\PondPack\2016-10-14_BD\
Rain File -ID = - TypeIII 24hr
Unit Hyd Type = Default Curvilinear
HYG Dir = S:\2010\10170\PondPack\2016-10-14_BD\
HYG File - ID = - PDA-1A-2 25
Tc = .1032 hrs
Drainage Area = 5.440 acres Runoff CN= 92
Calc.Increment= .01376 hrs Out.Incr.= .0500 hrs
HYG Volume = 107878 cu.ft

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
2.7500	.00	.00	.01	.01	.01
3.0000	.02	.02	.02	.02	.03
3.2500	.03	.04	.04	.04	.05
3.5000	.05	.05	.06	.06	.06
3.7500	.07	.07	.07	.08	.08
4.0000	.08	.09	.09	.10	.10
4.2500	.10	.11	.11	.11	.12
4.5000	.12	.13	.13	.13	.14
4.7500	.14	.14	.15	.15	.16
5.0000	.16	.16	.17	.17	.17
5.2500	.18	.18	.19	.19	.19
5.5000	.20	.20	.21	.21	.21
5.7500	.22	.22	.23	.23	.23
6.0000	.24	.24	.25	.25	.26
6.2500	.27	.27	.28	.29	.29
6.5000	.30	.31	.32	.32	.33
6.7500	.34	.35	.36	.37	.37
7.0000	.38	.39	.40	.41	.41
7.2500	.42	.43	.44	.45	.46
7.5000	.47	.48	.48	.49	.50
7.7500	.51	.52	.53	.54	.55
8.0000	.56	.57	.58	.60	.61
8.2500	.63	.65	.66	.68	.70
8.5000	.72	.74	.76	.77	.79
8.7500	.81	.83	.85	.87	.89
9.0000	.91	.93	.95	.97	.99
9.2500	1.01	1.03	1.05	1.07	1.09
9.5000	1.11	1.13	1.15	1.17	1.20
9.7500	1.22	1.24	1.26	1.28	1.30
10.0000	1.33	1.35	1.38	1.42	1.46

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
10.2500	1.49	1.54	1.58	1.62	1.66
10.5000	1.70	1.74	1.78	1.82	1.87
10.7500	1.91	1.95	1.99	2.04	2.08
11.0000	2.13	2.19	2.29	2.40	2.55
11.2500	2.69	2.85	2.99	3.15	3.30
11.5000	3.47	3.91	4.68	5.68	7.14
11.7500	8.44	10.02	11.38	13.04	17.07
12.0000	23.87	26.73	27.72	24.66	18.18
12.2500	14.84	12.65	11.11	9.44	8.07
12.5000	6.44	5.41	4.43	3.98	3.72
12.7500	3.55	3.38	3.23	3.06	2.92
13.0000	2.75	2.63	2.52	2.46	2.40
13.2500	2.36	2.32	2.28	2.24	2.20
13.5000	2.16	2.12	2.08	2.04	1.99
13.7500	1.96	1.91	1.87	1.83	1.79
14.0000	1.75	1.72	1.68	1.66	1.64
14.2500	1.62	1.60	1.58	1.56	1.54
14.5000	1.52	1.50	1.48	1.46	1.44
14.7500	1.42	1.40	1.38	1.36	1.34
15.0000	1.32	1.30	1.28	1.26	1.24
15.2500	1.23	1.20	1.19	1.16	1.15
15.5000	1.12	1.11	1.09	1.07	1.05
15.7500	1.03	1.01	.99	.97	.95
16.0000	.93	.91	.90	.89	.87
16.2500	.87	.86	.85	.84	.83
16.5000	.82	.82	.81	.80	.79
16.7500	.78	.77	.76	.76	.75
17.0000	.74	.73	.72	.71	.70
17.2500	.69	.69	.68	.67	.66
17.5000	.65	.64	.63	.63	.62
17.7500	.61	.60	.59	.58	.58
18.0000	.56	.56	.55	.55	.55
18.2500	.54	.54	.54	.54	.53
18.5000	.53	.53	.53	.52	.52
18.7500	.52	.52	.51	.51	.51
19.0000	.51	.50	.50	.50	.49
19.2500	.49	.49	.49	.48	.48
19.5000	.48	.48	.47	.47	.47
19.7500	.47	.46	.46	.46	.46
20.0000	.45	.45	.45	.45	.45
20.2500	.44	.44	.44	.44	.43
20.5000	.43	.43	.43	.43	.42
20.7500	.42	.42	.42	.42	.42
21.0000	.41	.41	.41	.41	.41
21.2500	.40	.40	.40	.40	.40

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
21.5000	.39	.39	.39	.39	.39
21.7500	.38	.38	.38	.38	.38
22.0000	.37	.37	.37	.37	.37
22.2500	.36	.36	.36	.36	.36
22.5000	.35	.35	.35	.35	.35
22.7500	.35	.34	.34	.34	.34
23.0000	.34	.33	.33	.33	.33
23.2500	.33	.32	.32	.32	.32
23.5000	.32	.31	.31	.31	.31
23.7500	.31	.31	.30	.30	.30
24.0000	.30	.22	.08	.02	.01
24.2500	.00	.00			

SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 50 year storm
Duration = 24.0000 hrs Rain Depth = 7.5900 in
Rain Dir = S:\2010\10170\PondPack\2016-10-14_BD\
Rain File -ID = - TypeIII 24hr
Unit Hyd Type = Default Curvilinear
HYG Dir = S:\2010\10170\PondPack\2016-10-14_BD\
HYG File - ID = - PDA-1A-2 50
Tc = .1032 hrs
Drainage Area = 5.440 acres Runoff CN= 92
Calc.Increment= .01376 hrs Out.Incr.= .0500 hrs
HYG Volume = 131075 cu.ft

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
2.3500	.00	.00	.01	.01	.01
2.6000	.02	.02	.03	.03	.04
2.8500	.04	.04	.05	.05	.06
3.1000	.06	.07	.07	.07	.08
3.3500	.08	.09	.09	.10	.10
3.6000	.11	.11	.11	.12	.12
3.8500	.13	.13	.14	.14	.15
4.1000	.15	.16	.16	.16	.17
4.3500	.17	.18	.18	.19	.19
4.6000	.20	.20	.21	.21	.22
4.8500	.22	.23	.23	.24	.24
5.1000	.25	.25	.26	.26	.27
5.3500	.27	.27	.28	.28	.29
5.6000	.29	.30	.30	.31	.31
5.8500	.32	.32	.33	.33	.34
6.1000	.34	.35	.36	.37	.38
6.3500	.39	.40	.40	.42	.42
6.6000	.43	.44	.45	.46	.47
6.8500	.48	.49	.50	.51	.52
7.1000	.53	.54	.55	.56	.57
7.3500	.58	.59	.61	.62	.63
7.6000	.64	.65	.66	.67	.68
7.8500	.69	.71	.72	.73	.74
8.1000	.76	.78	.80	.82	.84
8.3500	.86	.88	.90	.93	.95
8.6000	.97	.99	1.02	1.04	1.06
8.8500	1.09	1.11	1.13	1.16	1.18
9.1000	1.21	1.23	1.26	1.28	1.31
9.3500	1.33	1.35	1.38	1.40	1.43
9.6000	1.45	1.48	1.51	1.53	1.56

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
9.8500	1.58	1.61	1.63	1.66	1.69
10.1000	1.73	1.77	1.82	1.86	1.91
10.3500	1.96	2.01	2.06	2.11	2.16
10.6000	2.21	2.26	2.31	2.36	2.41
10.8500	2.46	2.51	2.56	2.62	2.69
11.1000	2.81	2.95	3.13	3.29	3.49
11.3500	3.66	3.86	4.03	4.23	4.77
11.6000	5.70	6.92	8.68	10.24	12.15
11.8500	13.78	15.76	20.61	28.76	32.15
12.1000	33.29	29.58	21.79	17.77	15.13
12.3500	13.29	11.29	9.64	7.70	6.46
12.6000	5.30	4.76	4.45	4.24	4.03
12.8500	3.86	3.65	3.48	3.28	3.14
13.1000	3.01	2.93	2.87	2.82	2.77
13.3500	2.72	2.67	2.63	2.57	2.53
13.6000	2.48	2.43	2.38	2.33	2.28
13.8500	2.24	2.18	2.14	2.09	2.05
14.1000	2.01	1.98	1.95	1.93	1.90
14.3500	1.88	1.86	1.84	1.81	1.79
14.6000	1.76	1.74	1.72	1.69	1.67
14.8500	1.65	1.62	1.60	1.58	1.55
15.1000	1.53	1.51	1.48	1.46	1.43
15.3500	1.41	1.39	1.37	1.34	1.32
15.6000	1.29	1.27	1.25	1.22	1.20
15.8500	1.18	1.15	1.13	1.11	1.09
16.1000	1.07	1.06	1.04	1.03	1.02
16.3500	1.01	1.00	.99	.98	.97
16.6000	.96	.95	.94	.93	.92
16.8500	.91	.90	.89	.88	.87
17.1000	.86	.85	.84	.83	.82
17.3500	.81	.80	.79	.78	.77
17.6000	.76	.75	.74	.73	.71
17.8500	.71	.70	.69	.67	.67
18.1000	.66	.65	.65	.65	.64
18.3500	.64	.64	.64	.63	.63
18.6000	.63	.62	.62	.62	.61
18.8500	.61	.61	.60	.60	.60
19.1000	.59	.59	.59	.59	.58
19.3500	.58	.58	.57	.57	.57
19.6000	.56	.56	.56	.55	.55
19.8500	.55	.55	.54	.54	.54
20.1000	.53	.53	.53	.53	.52
20.3500	.52	.52	.52	.52	.51
20.6000	.51	.51	.50	.50	.50
20.8500	.50	.50	.49	.49	.49

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
21.1000	.49	.49	.48	.48	.48
21.3500	.48	.47	.47	.47	.47
21.6000	.47	.46	.46	.46	.46
21.8500	.45	.45	.45	.45	.44
22.1000	.44	.44	.44	.43	.43
22.3500	.43	.43	.43	.42	.42
22.6000	.42	.42	.41	.41	.41
22.8500	.41	.40	.40	.40	.40
23.1000	.39	.39	.39	.39	.39
23.3500	.38	.38	.38	.38	.37
23.6000	.37	.37	.37	.37	.36
23.8500	.36	.36	.35	.35	.27
24.1000	.10	.03	.01	.00	.00

SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 100 year storm
Duration = 24.0000 hrs Rain Depth = 9.0100 in
Rain Dir = S:\2010\10170\PondPack\2016-10-14_BD\
Rain File -ID = - TypeIII 24hr
Unit Hyd Type = Default Curvilinear
HYG Dir = S:\2010\10170\PondPack\2016-10-14_BD\
HYG File - ID = - PDA-1A-2 100
Tc = .1032 hrs
Drainage Area = 5.440 acres Runoff CN= 92
Calc.Increment= .01376 hrs Out.Incr.= .0500 hrs
HYG Volume = 158852 cu.ft

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
1.9500	.00	.00	.00	.01	.01
2.2000	.02	.02	.03	.03	.04
2.4500	.05	.05	.06	.06	.07
2.7000	.07	.08	.08	.09	.09
2.9500	.10	.10	.11	.12	.12
3.2000	.13	.13	.14	.14	.15
3.4500	.16	.16	.17	.17	.18
3.7000	.18	.19	.20	.20	.21
3.9500	.21	.22	.22	.23	.24
4.2000	.24	.25	.25	.26	.27
4.4500	.27	.28	.28	.29	.29
4.7000	.30	.31	.31	.32	.32
4.9500	.33	.33	.34	.35	.35
5.2000	.36	.36	.37	.38	.38
5.4500	.39	.39	.40	.40	.41
5.7000	.42	.42	.43	.43	.44
5.9500	.45	.45	.46	.47	.48
6.2000	.49	.50	.51	.52	.53
6.4500	.54	.55	.57	.58	.59
6.7000	.60	.61	.62	.64	.65
6.9500	.66	.67	.69	.70	.71
7.2000	.72	.74	.75	.76	.78
7.4500	.79	.80	.82	.83	.84
7.7000	.86	.87	.88	.89	.91
7.9500	.92	.93	.95	.97	.99
8.2000	1.02	1.04	1.07	1.10	1.13
8.4500	1.15	1.18	1.21	1.23	1.26
8.7000	1.29	1.32	1.35	1.37	1.40
8.9500	1.43	1.46	1.49	1.52	1.55
9.2000	1.58	1.60	1.63	1.66	1.69

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
9.4500	1.72	1.75	1.78	1.81	1.84
9.7000	1.87	1.90	1.93	1.96	1.99
9.9500	2.02	2.05	2.09	2.13	2.18
10.2000	2.24	2.30	2.36	2.41	2.48
10.4500	2.53	2.59	2.65	2.71	2.77
10.7000	2.83	2.89	2.95	3.01	3.07
10.9500	3.13	3.20	3.29	3.43	3.59
11.2000	3.82	4.01	4.25	4.45	4.69
11.4500	4.90	5.14	5.80	6.92	8.39
11.7000	10.51	12.39	14.68	16.62	19.00
11.9500	24.80	34.56	38.57	39.89	35.41
12.2000	26.06	21.25	18.09	15.87	13.48
12.4500	11.52	9.19	7.72	6.32	5.68
12.7000	5.31	5.06	4.81	4.61	4.36
12.9500	4.16	3.92	3.75	3.59	3.50
13.2000	3.42	3.37	3.30	3.25	3.19
13.4500	3.13	3.07	3.02	2.95	2.90
13.7000	2.84	2.78	2.72	2.67	2.60
13.9500	2.55	2.49	2.44	2.39	2.36
14.2000	2.33	2.30	2.27	2.24	2.21
14.4500	2.19	2.16	2.13	2.10	2.08
14.7000	2.05	2.02	1.99	1.96	1.93
14.9500	1.91	1.88	1.85	1.82	1.80
15.2000	1.77	1.74	1.71	1.68	1.65
15.4500	1.63	1.60	1.57	1.54	1.52
15.7000	1.48	1.46	1.43	1.40	1.37
15.9500	1.35	1.32	1.30	1.27	1.26
16.2000	1.24	1.23	1.22	1.21	1.19
16.4500	1.18	1.17	1.16	1.14	1.13
16.7000	1.12	1.11	1.10	1.08	1.07
16.9500	1.06	1.05	1.04	1.02	1.01
17.2000	1.00	.99	.98	.96	.95
17.4500	.94	.93	.91	.90	.89
17.7000	.88	.87	.85	.84	.83
17.9500	.82	.80	.79	.78	.78
18.2000	.78	.77	.77	.76	.76
18.4500	.76	.75	.75	.75	.74
18.7000	.74	.73	.73	.73	.72
18.9500	.72	.72	.71	.71	.70
19.2000	.70	.70	.69	.69	.69
19.4500	.68	.68	.68	.67	.67
19.7000	.66	.66	.66	.65	.65
19.9500	.65	.64	.64	.63	.63
20.2000	.63	.63	.62	.62	.62
20.4500	.62	.61	.61	.61	.61

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
20.7000	.60	.60	.60	.60	.59
20.9500	.59	.59	.59	.58	.58
21.2000	.57	.57	.57	.57	.57
21.4500	.56	.56	.55	.55	.55
21.7000	.55	.54	.54	.54	.54
21.9500	.53	.53	.53	.53	.52
22.2000	.52	.52	.51	.51	.51
22.4500	.51	.50	.50	.50	.50
22.7000	.49	.49	.49	.48	.48
22.9500	.48	.48	.47	.47	.47
23.2000	.47	.46	.46	.46	.46
23.4500	.45	.45	.45	.44	.44
23.7000	.44	.44	.43	.43	.42
23.9500	.42	.42	.32	.12	.04
24.2000	.01	.00	.00		

SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 1 year storm
Duration = 24.0000 hrs Rain Depth = 2.8400 in
Rain Dir = S:\2010\10170\PondPack\2016-10-14_BD\
Rain File -ID = - TypeIII 24hr
Unit Hyd Type = Default Curvilinear
HYG Dir = S:\2010\10170\PondPack\2016-10-14_BD\
HYG File - ID = - PDA-1B 1
Tc = .4532 hrs
Drainage Area = 18.800 acres Runoff CN= 77
Calc.Increment= .06042 hrs Out.Incr.= .0500 hrs
HYG Volume = 65630 cu.ft

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
10.5000	.00	.00	.01	.01	.02
10.7500	.03	.04	.06	.07	.09
11.0000	.11	.13	.15	.18	.21
11.2500	.24	.27	.31	.36	.40
11.5000	.46	.52	.59	.70	.84
11.7500	1.04	1.30	1.65	2.09	2.73
12.0000	3.60	4.78	6.25	7.91	9.51
12.2500	10.72	11.47	11.75	11.60	11.12
12.5000	10.39	9.57	8.71	7.86	7.03
12.7500	6.26	5.59	5.02	4.54	4.13
13.0000	3.80	3.51	3.27	3.06	2.88
13.2500	2.73	2.59	2.48	2.39	2.31
13.5000	2.24	2.18	2.13	2.08	2.04
13.7500	2.00	1.96	1.92	1.89	1.85
14.0000	1.82	1.78	1.75	1.72	1.68
14.2500	1.66	1.63	1.60	1.58	1.56
14.5000	1.54	1.52	1.50	1.48	1.47
14.7500	1.45	1.43	1.42	1.40	1.38
15.0000	1.36	1.35	1.33	1.31	1.30
15.2500	1.28	1.26	1.24	1.23	1.21
15.5000	1.19	1.17	1.16	1.14	1.12
15.7500	1.10	1.09	1.07	1.05	1.03
16.0000	1.01	1.00	.98	.96	.94
16.2500	.93	.91	.90	.89	.88
16.5000	.87	.86	.85	.84	.83
16.7500	.82	.81	.81	.80	.79
17.0000	.78	.77	.76	.76	.75
17.2500	.74	.73	.72	.72	.71
17.5000	.70	.69	.68	.68	.67
17.7500	.66	.65	.64	.63	.63

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
18.0000	.62	.61	.60	.59	.59
18.2500	.58	.57	.57	.56	.56
18.5000	.55	.55	.55	.55	.54
18.7500	.54	.54	.53	.53	.53
19.0000	.53	.52	.52	.52	.52
19.2500	.51	.51	.51	.51	.51
19.5000	.50	.50	.50	.50	.49
19.7500	.49	.49	.49	.48	.48
20.0000	.48	.48	.47	.47	.47
20.2500	.47	.46	.46	.46	.46
20.5000	.46	.45	.45	.45	.45
20.7500	.45	.44	.44	.44	.44
21.0000	.44	.44	.43	.43	.43
21.2500	.43	.43	.42	.42	.42
21.5000	.42	.42	.41	.41	.41
21.7500	.41	.41	.41	.40	.40
22.0000	.40	.40	.40	.39	.39
22.2500	.39	.39	.39	.38	.38
22.5000	.38	.38	.38	.37	.37
22.7500	.37	.37	.37	.37	.36
23.0000	.36	.36	.36	.36	.35
23.2500	.35	.35	.35	.35	.34
23.5000	.34	.34	.34	.34	.33
23.7500	.33	.33	.33	.33	.32
24.0000	.32	.32	.30	.28	.25
24.2500	.21	.18	.14	.11	.08
24.5000	.06	.05	.04	.03	.02
24.7500	.02	.01	.01	.01	.01
25.0000	.00	.00	.00	.00	.00
25.2500	.00				

SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 10 year storm
Duration = 24.0000 hrs Rain Depth = 5.1100 in
Rain Dir = S:\2010\10170\PondPack\2016-10-14_BD\
Rain File -ID = - TypeIII 24hr
Unit Hyd Type = Default Curvilinear
HYG Dir = S:\2010\10170\PondPack\2016-10-14_BD\
HYG File - ID = - PDA-1B 10
Tc = .4532 hrs
Drainage Area = 18.800 acres Runoff CN= 77
Calc.Increment= .06042 hrs Out.Incr.= .0500 hrs
HYG Volume = 185304 cu.ft

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
8.2000	.00	.00	.00	.01	.01
8.4500	.02	.03	.04	.05	.06
8.7000	.07	.09	.11	.12	.14
8.9500	.16	.18	.20	.22	.24
9.2000	.26	.29	.31	.33	.36
9.4500	.39	.41	.44	.47	.50
9.7000	.53	.56	.59	.62	.66
9.9500	.69	.72	.76	.79	.83
10.2000	.87	.91	.96	1.00	1.05
10.4500	1.11	1.16	1.22	1.27	1.34
10.7000	1.40	1.46	1.53	1.60	1.67
10.9500	1.74	1.81	1.89	1.97	2.06
11.2000	2.16	2.28	2.41	2.56	2.72
11.4500	2.91	3.11	3.34	3.62	4.01
11.7000	4.56	5.31	6.29	7.54	9.07
11.9500	11.14	13.85	17.35	21.56	26.10
12.2000	30.24	33.09	34.53	34.60	33.49
12.4500	31.54	29.02	26.38	23.75	21.20
12.7000	18.79	16.58	14.70	13.10	11.76
12.9500	10.64	9.71	8.93	8.28	7.71
13.2000	7.23	6.81	6.45	6.15	5.89
13.4500	5.68	5.49	5.33	5.19	5.07
13.7000	4.96	4.85	4.75	4.66	4.57
13.9500	4.47	4.39	4.30	4.21	4.13
14.2000	4.05	3.97	3.90	3.84	3.78
14.4500	3.72	3.67	3.62	3.58	3.53
14.7000	3.49	3.44	3.40	3.36	3.31
14.9500	3.27	3.23	3.19	3.14	3.10
15.2000	3.06	3.02	2.97	2.93	2.89
15.4500	2.84	2.80	2.76	2.71	2.67

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
15.7000	2.63	2.58	2.54	2.50	2.45
15.9500	2.41	2.37	2.32	2.28	2.24
16.2000	2.20	2.16	2.13	2.10	2.07
16.4500	2.04	2.01	1.99	1.97	1.95
16.7000	1.93	1.91	1.89	1.87	1.85
16.9500	1.83	1.81	1.79	1.77	1.75
17.2000	1.73	1.71	1.69	1.67	1.65
17.4500	1.63	1.61	1.59	1.57	1.56
17.7000	1.54	1.52	1.50	1.48	1.46
17.9500	1.44	1.42	1.40	1.38	1.36
18.2000	1.34	1.33	1.31	1.30	1.29
18.4500	1.28	1.27	1.26	1.26	1.25
18.7000	1.24	1.24	1.23	1.22	1.22
18.9500	1.21	1.21	1.20	1.19	1.19
19.2000	1.18	1.18	1.17	1.16	1.16
19.4500	1.15	1.15	1.14	1.14	1.13
19.7000	1.12	1.12	1.11	1.11	1.10
19.9500	1.10	1.09	1.08	1.08	1.07
20.2000	1.07	1.06	1.06	1.05	1.05
20.4500	1.04	1.04	1.03	1.03	1.02
20.7000	1.02	1.01	1.01	1.00	1.00
20.9500	1.00	.99	.99	.98	.98
21.2000	.97	.97	.97	.96	.96
21.4500	.95	.95	.94	.94	.93
21.7000	.93	.93	.92	.92	.91
21.9500	.91	.90	.90	.90	.89
22.2000	.89	.88	.88	.87	.87
22.4500	.86	.86	.85	.85	.85
22.7000	.84	.84	.83	.83	.82
22.9500	.82	.81	.81	.81	.80
23.2000	.80	.79	.79	.78	.78
23.4500	.77	.77	.77	.76	.76
23.7000	.75	.75	.74	.74	.73
23.9500	.73	.72	.71	.68	.63
24.2000	.56	.48	.40	.31	.24
24.4500	.18	.14	.11	.08	.06
24.7000	.05	.04	.03	.02	.02
24.9500	.01	.01	.01	.00	.00
25.2000	.00	.00	.00		

SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 25 year storm
Duration = 24.0000 hrs Rain Depth = 6.4000 in
Rain Dir = S:\2010\10170\PondPack\2016-10-14_BD\
Rain File -ID = - TypeIII 24hr
Unit Hyd Type = Default Curvilinear
HYG Dir = S:\2010\10170\PondPack\2016-10-14_BD\
HYG File - ID = - PDA-1B 25
Tc = .4532 hrs
Drainage Area = 18.800 acres Runoff CN= 77
Calc.Increment= .06042 hrs Out.Incr.= .0500 hrs
HYG Volume = 261424 cu.ft

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
7.2500	.00	.00	.00	.01	.01
7.5000	.02	.03	.04	.05	.06
7.7500	.07	.09	.10	.11	.13
8.0000	.14	.16	.18	.19	.21
8.2500	.23	.25	.27	.29	.31
8.5000	.33	.36	.38	.41	.44
8.7500	.46	.49	.52	.55	.58
9.0000	.62	.65	.69	.72	.76
9.2500	.79	.83	.87	.91	.95
9.5000	1.00	1.04	1.08	1.13	1.17
9.7500	1.22	1.27	1.32	1.36	1.41
10.0000	1.47	1.52	1.57	1.63	1.69
10.2500	1.75	1.81	1.88	1.96	2.04
10.5000	2.12	2.20	2.29	2.38	2.47
10.7500	2.57	2.67	2.77	2.87	2.97
11.0000	3.08	3.19	3.31	3.44	3.59
11.2500	3.76	3.95	4.17	4.42	4.69
11.5000	4.99	5.33	5.74	6.33	7.14
11.7500	8.25	9.70	11.52	13.75	16.74
12.0000	20.59	25.52	31.39	37.66	43.30
12.2500	47.06	48.84	48.69	46.93	44.00
12.5000	40.34	36.56	32.82	29.23	25.85
12.7500	22.75	20.13	17.91	16.05	14.50
13.0000	13.21	12.13	11.23	10.45	9.78
13.2500	9.20	8.71	8.29	7.94	7.65
13.5000	7.39	7.17	6.98	6.82	6.66
13.7500	6.52	6.38	6.25	6.12	6.00
14.0000	5.88	5.76	5.64	5.53	5.42
14.2500	5.32	5.22	5.14	5.06	4.98
14.5000	4.91	4.84	4.78	4.72	4.66

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
14.7500	4.60	4.54	4.48	4.42	4.36
15.0000	4.31	4.25	4.19	4.13	4.08
15.2500	4.02	3.96	3.90	3.84	3.79
15.5000	3.73	3.67	3.61	3.55	3.50
15.7500	3.44	3.38	3.32	3.26	3.20
16.0000	3.15	3.09	3.03	2.97	2.92
16.2500	2.87	2.82	2.78	2.74	2.71
16.5000	2.67	2.64	2.61	2.58	2.56
16.7500	2.53	2.50	2.48	2.45	2.42
17.0000	2.40	2.37	2.34	2.32	2.29
17.2500	2.27	2.24	2.22	2.19	2.16
17.5000	2.14	2.11	2.09	2.06	2.03
17.7500	2.01	1.98	1.96	1.93	1.90
18.0000	1.88	1.85	1.83	1.80	1.78
18.2500	1.76	1.74	1.72	1.71	1.69
18.5000	1.68	1.67	1.66	1.65	1.64
18.7500	1.63	1.63	1.62	1.61	1.60
19.0000	1.59	1.59	1.58	1.57	1.56
19.2500	1.56	1.55	1.54	1.53	1.52
19.5000	1.52	1.51	1.50	1.49	1.49
19.7500	1.48	1.47	1.46	1.45	1.45
20.0000	1.44	1.43	1.42	1.42	1.41
20.2500	1.40	1.39	1.39	1.38	1.38
20.5000	1.37	1.36	1.36	1.35	1.34
20.7500	1.34	1.33	1.33	1.32	1.31
21.0000	1.31	1.30	1.30	1.29	1.29
21.2500	1.28	1.27	1.27	1.26	1.26
21.5000	1.25	1.24	1.24	1.23	1.23
21.7500	1.22	1.21	1.21	1.20	1.20
22.0000	1.19	1.19	1.18	1.17	1.17
22.2500	1.16	1.16	1.15	1.14	1.14
22.5000	1.13	1.13	1.12	1.11	1.11
22.7500	1.10	1.10	1.09	1.09	1.08
23.0000	1.07	1.07	1.06	1.06	1.05
23.2500	1.04	1.04	1.03	1.03	1.02
23.5000	1.01	1.01	1.00	1.00	.99
23.7500	.99	.98	.97	.97	.96
24.0000	.95	.94	.90	.84	.74
24.2500	.64	.52	.41	.32	.24
24.5000	.18	.14	.11	.08	.06
24.7500	.05	.04	.03	.02	.01
25.0000	.01	.01	.01	.00	.00
25.2500	.00	.00	.00		

SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 50 year storm
Duration = 24.0000 hrs Rain Depth = 7.5900 in
Rain Dir = S:\2010\10170\PondPack\2016-10-14_BD\
Rain File -ID = - TypeIII 24hr
Unit Hyd Type = Default Curvilinear
HYG Dir = S:\2010\10170\PondPack\2016-10-14_BD\
HYG File - ID = - PDA-1B 50
Tc = .4532 hrs
Drainage Area = 18.800 acres Runoff CN= 77
Calc.Increment= .06042 hrs Out.Incr.= .0500 hrs
HYG Volume = 334375 cu.ft

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
6.5000	.00	.00	.00	.01	.01
6.7500	.02	.03	.04	.05	.06
7.0000	.07	.08	.10	.11	.13
7.2500	.14	.16	.17	.19	.21
7.5000	.23	.24	.26	.28	.30
7.7500	.32	.34	.36	.38	.40
8.0000	.43	.45	.47	.49	.52
8.2500	.54	.57	.60	.63	.66
8.5000	.70	.73	.77	.81	.85
8.7500	.89	.93	.97	1.01	1.06
9.0000	1.10	1.15	1.20	1.25	1.30
9.2500	1.35	1.40	1.45	1.51	1.57
9.5000	1.62	1.68	1.74	1.80	1.86
9.7500	1.92	1.99	2.05	2.11	2.18
10.0000	2.25	2.32	2.39	2.46	2.54
10.2500	2.62	2.70	2.80	2.89	3.00
10.5000	3.11	3.22	3.33	3.45	3.58
10.7500	3.70	3.83	3.96	4.09	4.23
11.0000	4.36	4.51	4.66	4.83	5.02
11.2500	5.24	5.49	5.78	6.11	6.46
11.5000	6.86	7.31	7.84	8.61	9.67
11.7500	11.13	13.03	15.41	18.30	22.15
12.0000	27.08	33.35	40.77	48.66	55.67
12.2500	60.26	62.32	61.95	59.53	55.67
12.5000	50.94	46.07	41.29	36.70	32.42
12.7500	28.50	25.19	22.38	20.03	18.08
13.0000	16.46	15.09	13.97	12.98	12.14
13.2500	11.41	10.79	10.27	9.84	9.47
13.5000	9.15	8.87	8.64	8.42	8.23
13.7500	8.05	7.88	7.72	7.56	7.41

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
14.0000	7.26	7.11	6.96	6.82	6.68
14.2500	6.56	6.44	6.33	6.23	6.14
14.5000	6.05	5.97	5.89	5.81	5.73
14.7500	5.66	5.59	5.51	5.44	5.37
15.0000	5.30	5.23	5.15	5.08	5.01
15.2500	4.94	4.87	4.80	4.73	4.65
15.5000	4.58	4.51	4.44	4.37	4.30
15.7500	4.22	4.15	4.08	4.01	3.93
16.0000	3.86	3.79	3.72	3.65	3.59
16.2500	3.52	3.47	3.41	3.37	3.32
16.5000	3.28	3.24	3.21	3.17	3.14
16.7500	3.10	3.07	3.04	3.00	2.97
17.0000	2.94	2.91	2.87	2.84	2.81
17.2500	2.78	2.75	2.72	2.68	2.65
17.5000	2.62	2.59	2.56	2.52	2.49
17.7500	2.46	2.43	2.40	2.37	2.33
18.0000	2.30	2.27	2.24	2.21	2.18
18.2500	2.15	2.13	2.11	2.09	2.08
18.5000	2.06	2.05	2.03	2.02	2.01
18.7500	2.00	1.99	1.98	1.97	1.96
19.0000	1.95	1.94	1.93	1.92	1.91
19.2500	1.90	1.89	1.88	1.87	1.86
19.5000	1.86	1.85	1.84	1.83	1.82
19.7500	1.81	1.80	1.79	1.78	1.77
20.0000	1.76	1.75	1.74	1.73	1.72
20.2500	1.71	1.71	1.70	1.69	1.68
20.5000	1.67	1.67	1.66	1.65	1.64
20.7500	1.64	1.63	1.62	1.61	1.61
21.0000	1.60	1.59	1.59	1.58	1.57
21.2500	1.56	1.56	1.55	1.54	1.54
21.5000	1.53	1.52	1.51	1.51	1.50
21.7500	1.49	1.48	1.48	1.47	1.46
22.0000	1.46	1.45	1.44	1.43	1.43
22.2500	1.42	1.41	1.41	1.40	1.39
22.5000	1.38	1.38	1.37	1.36	1.36
22.7500	1.35	1.34	1.33	1.33	1.32
23.0000	1.31	1.30	1.30	1.29	1.28
23.2500	1.27	1.27	1.26	1.25	1.25
23.5000	1.24	1.23	1.22	1.22	1.21
23.7500	1.20	1.20	1.19	1.18	1.17
24.0000	1.16	1.14	1.10	1.02	.91
24.2500	.78	.64	.50	.39	.30
24.5000	.22	.17	.13	.10	.07
24.7500	.06	.04	.03	.02	.02
25.0000	.01	.01	.01	.01	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs			
25.2500	.00	.00	.00

SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 100 year storm
Duration = 24.0000 hrs Rain Depth = 9.0100 in
Rain Dir = S:\2010\10170\PondPack\2016-10-14_BD\
Rain File -ID = - TypeIII 24hr
Unit Hyd Type = Default Curvilinear
HYG Dir = S:\2010\10170\PondPack\2016-10-14_BD\
HYG File - ID = - PDA-1B 100
Tc = .4532 hrs
Drainage Area = 18.800 acres Runoff CN= 77
Calc.Increment= .06042 hrs Out.Incr.= .0500 hrs
HYG Volume = 423683 cu.ft

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
5.7500	.00	.00	.00	.01	.01
6.0000	.02	.03	.04	.05	.06
6.2500	.07	.08	.09	.11	.12
6.5000	.14	.15	.17	.19	.20
6.7500	.22	.24	.26	.28	.30
7.0000	.32	.34	.36	.38	.40
7.2500	.42	.45	.47	.50	.52
7.5000	.54	.57	.60	.62	.65
7.7500	.68	.71	.73	.76	.79
8.0000	.82	.85	.88	.92	.95
8.2500	.99	1.02	1.07	1.11	1.15
8.5000	1.20	1.25	1.30	1.35	1.41
8.7500	1.46	1.52	1.58	1.64	1.70
9.0000	1.76	1.82	1.89	1.96	2.02
9.2500	2.09	2.16	2.23	2.31	2.38
9.5000	2.45	2.53	2.61	2.69	2.77
9.7500	2.85	2.93	3.01	3.10	3.18
10.0000	3.27	3.36	3.45	3.54	3.64
10.2500	3.75	3.86	3.98	4.10	4.24
10.5000	4.38	4.52	4.67	4.83	4.98
10.7500	5.15	5.31	5.48	5.65	5.82
11.0000	5.99	6.18	6.37	6.58	6.83
11.2500	7.11	7.43	7.81	8.23	8.69
11.5000	9.19	9.77	10.45	11.45	12.82
11.7500	14.70	17.15	20.21	23.91	28.79
12.0000	35.02	42.90	52.17	61.99	70.63
12.2500	76.20	78.57	77.89	74.68	69.68
12.5000	63.63	57.46	51.42	45.65	40.27
12.7500	35.36	31.22	27.72	24.79	22.35
13.0000	20.32	18.63	17.22	16.00	14.95

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
13.2500	14.05	13.28	12.63	12.09	11.63
13.5000	11.23	10.89	10.60	10.34	10.10
13.7500	9.88	9.66	9.46	9.27	9.08
14.0000	8.89	8.71	8.53	8.35	8.18
14.2500	8.03	7.88	7.75	7.63	7.51
14.5000	7.40	7.30	7.20	7.11	7.01
14.7500	6.92	6.83	6.74	6.65	6.56
15.0000	6.47	6.39	6.30	6.21	6.12
15.2500	6.03	5.95	5.86	5.77	5.68
15.5000	5.60	5.51	5.42	5.33	5.24
15.7500	5.16	5.07	4.98	4.89	4.80
16.0000	4.71	4.62	4.54	4.45	4.37
16.2500	4.30	4.23	4.17	4.11	4.05
16.5000	4.00	3.95	3.91	3.87	3.82
16.7500	3.78	3.74	3.70	3.66	3.62
17.0000	3.58	3.54	3.50	3.46	3.43
17.2500	3.39	3.35	3.31	3.27	3.23
17.5000	3.19	3.15	3.11	3.08	3.04
17.7500	3.00	2.96	2.92	2.88	2.84
18.0000	2.80	2.76	2.73	2.69	2.65
18.2500	2.62	2.59	2.57	2.55	2.53
18.5000	2.51	2.49	2.48	2.46	2.45
18.7500	2.44	2.42	2.41	2.40	2.39
19.0000	2.37	2.36	2.35	2.34	2.33
19.2500	2.32	2.30	2.29	2.28	2.27
19.5000	2.26	2.25	2.23	2.22	2.21
19.7500	2.20	2.19	2.18	2.16	2.15
20.0000	2.14	2.13	2.12	2.11	2.10
20.2500	2.08	2.07	2.06	2.05	2.04
20.5000	2.04	2.03	2.02	2.01	2.00
20.7500	1.99	1.98	1.97	1.96	1.95
21.0000	1.94	1.94	1.93	1.92	1.91
21.2500	1.90	1.89	1.88	1.88	1.87
21.5000	1.86	1.85	1.84	1.83	1.82
21.7500	1.81	1.80	1.80	1.79	1.78
22.0000	1.77	1.76	1.75	1.74	1.73
22.2500	1.73	1.72	1.71	1.70	1.69
22.5000	1.68	1.67	1.66	1.65	1.65
22.7500	1.64	1.63	1.62	1.61	1.60
23.0000	1.59	1.58	1.58	1.57	1.56
23.2500	1.55	1.54	1.53	1.52	1.51
23.5000	1.50	1.50	1.49	1.48	1.47
23.7500	1.46	1.45	1.44	1.43	1.42
24.0000	1.41	1.39	1.34	1.24	1.10
24.2500	.94	.77	.61	.47	.36

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
24.5000	.27	.21	.16	.12	.09
24.7500	.07	.05	.04	.03	.02
25.0000	.02	.01	.01	.01	.00
25.2500	.00	.00	.00		

MODIFIED PULS REACH DATA

```
HYG Dir          = S:\2010\10170\PondPack\2016-10-14_BD\
Inflow  HYG file = NONE STORED - JUNC 1B          1
Outflow HYG file = NONE STORED - REACH 1B         1

Reach Link Data  = REACH 1B
Reach Length     = 1456.00 ft
Approx. Total Tt = .0689 hrs  (based on Wtd.Q = 4.56 cfs)
Reach Channel    = Pipes  (Chn-Circular)
Overflow Elev.   = 277.38 ft
Overflow Channel = NONE

No Infiltration

INITIAL CONDITIONS
----------------------------------
Starting WS Elev   =   274.62 ft
Starting Volume    =        0 cu.ft
Starting Outflow   =      .00 cfs
Starting Infiltr.  =      .00 cfs
Starting Total Qout=      .00 cfs
Time Increment     =    .0500 hrs
```

Elevation ft	Outflow cfs	Storage cu.ft	Area sq.ft	Infilt. cfs	Q Total cfs	2S/t + O cfs
274.62	.00	0	0	.00	.00	.00
274.68	.05	49	1217	.00	.05	.59
274.74	.22	137	1703	.00	.22	1.75
274.80	.53	251	2064	.00	.53	3.31
274.86	.97	384	2357	.00	.97	5.23
274.92	1.55	533	2606	.00	1.55	7.47
274.98	2.28	696	2823	.00	2.28	10.01
275.04	3.14	871	3014	.00	3.14	12.81
275.10	4.13	1057	3184	.00	4.13	15.88
275.16	5.26	1253	3336	.00	5.26	19.18
275.22	6.51	1457	3473	.00	6.51	22.70
275.28	7.89	1669	3596	.00	7.89	26.44
275.34	9.39	1888	3706	.00	9.39	30.37
275.40	11.01	2114	3806	.00	11.01	34.49
275.46	12.73	2345	3895	.00	12.73	38.78
275.52	14.55	2581	3975	.00	14.55	43.23
275.58	16.48	2821	4045	.00	16.48	47.83
275.64	18.49	3066	4107	.00	18.49	52.56
275.70	20.59	3314	4160	.00	20.59	57.41
275.76	22.77	3565	4206	.00	22.77	62.38

MODIFIED PULS REACH DATA

```
HYG Dir          = S:\2010\10170\PondPack\2016-10-14_BD\
Inflow  HYG file = NONE STORED - JUNC 1B          1
Outflow HYG file = NONE STORED - REACH 1B         1

Reach Link Data  = REACH 1B
Reach Length     = 1456.00 ft
Approx. Total Tt = .0689 hrs  (based on Wtd.Q = 4.56 cfs)
Reach Channel    = Pipes  (Chn-Circular)
Overflow Elev.   = 277.38 ft
Overflow Channel = NONE

No Infiltration

INITIAL CONDITIONS
----------------------------------
Starting WS Elev   =   274.62 ft
Starting Volume    =        0 cu.ft
Starting Outflow   =      .00 cfs
Starting Infiltr.  =      .00 cfs
Starting Total Qout=      .00 cfs
Time Increment     =    .0500 hrs
```

Elevation ft	Outflow cfs	Storage cu.ft	Area sq.ft	Infilt. cfs	Q Total cfs	2S/t + O cfs
275.82	25.02	3819	4244	.00	25.02	67.45
275.88	27.33	4074	4274	.00	27.33	72.60
275.94	29.70	4332	4298	.00	29.70	77.83
276.00	32.12	4590	4313	.00	32.12	83.12
276.06	34.58	4849	4322	.00	34.58	88.45
276.12	37.07	5108	4324	.00	37.07	93.83
276.18	39.59	5368	4324	.00	39.59	99.23
276.24	42.12	5626	4324	.00	42.12	104.63
276.30	44.66	5884	4324	.00	44.66	110.04
276.36	47.20	6141	4324	.00	47.20	115.43
276.42	49.72	6395	4324	.00	49.72	120.78
276.48	52.23	6648	4324	.00	52.23	126.09
276.54	54.70	6897	4324	.00	54.70	131.34
276.60	57.13	7144	4324	.00	57.13	136.51
276.66	59.51	7386	4324	.00	59.51	141.58
276.72	61.82	7625	4324	.00	61.82	146.54
276.78	64.06	7859	4324	.00	64.06	151.38
276.84	66.20	8087	4324	.00	66.20	156.06
276.90	68.24	8309	4324	.00	68.24	160.56
276.96	70.16	8525	4324	.00	70.16	164.88

MODIFIED PULS REACH DATA

```
HYG Dir          = S:\2010\10170\PondPack\2016-10-14_BD\
Inflow  HYG file = NONE STORED - JUNC 1B          1
Outflow HYG file = NONE STORED - REACH 1B         1

Reach Link Data  = REACH 1B
Reach Length     = 1456.00 ft
Approx. Total Tt = .0689 hrs  (based on Wtd.Q = 4.56 cfs)
Reach Channel    = Pipes  (Chn-Circular)
Overflow Elev.   = 277.38 ft
Overflow Channel = NONE

No Infiltration

INITIAL CONDITIONS
----------------------------------
Starting WS Elev   =   274.62 ft
Starting Volume    =        0 cu.ft
Starting Outflow   =      .00 cfs
Starting Infiltr.  =      .00 cfs
Starting Total Qout=      .00 cfs
Time Increment     =    .0500 hrs
```

Elevation ft	Outflow cfs	Storage cu.ft	Area sq.ft	Infilt. cfs	Q Total cfs	2S/t + O cfs
277.02	71.94	8733	4324	.00	71.94	168.97
277.08	73.56	8933	4324	.00	73.56	172.82
277.14	75.00	9124	4324	.00	75.00	176.38
277.20	76.24	9305	4324	.00	76.24	179.63
277.26	77.24	9474	4324	.00	77.24	182.52
277.32	77.97	9631	4324	.00	77.97	184.98
277.38	78.36	9772	4324	.00	78.36	186.94

POND ROUTED TOTAL OUTFLOW HYG...
HYG file =
HYG ID = REACH 1B
HYG Tag = 1

Peak Discharge = 11.63 cfs
Time to Peak = 12.4000 hrs
HYG Volume = 65630 cu.ft

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
10.5000	.00	.00	.00	.00	.00
10.7500	.01	.01	.02	.03	.03
11.0000	.05	.06	.09	.11	.14
11.2500	.16	.19	.22	.26	.31
11.5000	.36	.41	.47	.54	.65
11.7500	.78	.96	1.23	1.56	2.05
12.0000	2.71	3.65	4.90	6.44	8.12
12.2500	9.65	10.78	11.44	11.63	11.41
12.5000	10.88	10.17	9.36	8.54	7.71
12.7500	6.92	6.20	5.56	5.01	4.55
13.0000	4.15	3.83	3.54	3.30	3.09
13.2500	2.92	2.76	2.62	2.51	2.41
13.5000	2.33	2.25	2.20	2.14	2.09
13.7500	2.05	2.01	1.97	1.93	1.90
14.0000	1.86	1.83	1.79	1.76	1.73
14.2500	1.69	1.66	1.64	1.61	1.59
14.5000	1.57	1.55	1.53	1.51	1.49
14.7500	1.47	1.46	1.44	1.42	1.41
15.0000	1.39	1.37	1.35	1.34	1.32
15.2500	1.30	1.29	1.27	1.25	1.23
15.5000	1.22	1.20	1.18	1.16	1.15
15.7500	1.13	1.11	1.09	1.08	1.06
16.0000	1.04	1.02	1.00	.99	.97
16.2500	.95	.94	.92	.91	.90
16.5000	.89	.87	.86	.85	.85
16.7500	.84	.83	.82	.81	.80
17.0000	.79	.79	.78	.77	.76
17.2500	.75	.75	.74	.73	.72
17.5000	.71	.71	.70	.69	.68
17.7500	.67	.66	.66	.65	.64
18.0000	.63	.62	.61	.61	.60

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
18.2500	.59	.58	.58	.57	.57
18.5000	.56	.56	.55	.55	.55
18.7500	.54	.54	.54	.54	.53
19.0000	.53	.53	.53	.52	.52
19.2500	.52	.52	.51	.51	.51
19.5000	.51	.51	.50	.50	.50
19.7500	.50	.49	.49	.49	.49
20.0000	.48	.48	.48	.48	.47
20.2500	.47	.47	.47	.46	.46
20.5000	.46	.46	.46	.45	.45
20.7500	.45	.45	.45	.44	.44
21.0000	.44	.44	.44	.44	.43
21.2500	.43	.43	.43	.43	.42
21.5000	.42	.42	.42	.42	.41
21.7500	.41	.41	.41	.41	.41
22.0000	.40	.40	.40	.40	.40
22.2500	.39	.39	.39	.39	.39
22.5000	.38	.38	.38	.38	.38
22.7500	.37	.37	.37	.37	.37
23.0000	.37	.36	.36	.36	.36
23.2500	.36	.35	.35	.35	.35
23.5000	.35	.34	.34	.34	.34
23.7500	.34	.33	.33	.33	.33
24.0000	.33	.32	.32	.31	.29
24.2500	.27	.24	.21	.19	.16
24.5000	.13	.11	.09	.07	.06
24.7500	.05	.04	.04	.03	.03
25.0000	.02	.02	.02	.01	.01
25.2500	.01	.01	.01	.01	.00
25.5000	.00	.00	.00	.00	.00
25.7500	.00	.00	.00	.00	.00
26.0000	.00	.00	.00	.00	.00
26.2500	.00	.00	.00	.00	.00
26.5000	.00	.00	.00	.00	.00
26.7500	.00	.00	.00	.00	.00
27.0000	.00	.00	.00	.00	.00
27.2500	.00	.00	.00	.00	.00
27.5000	.00	.00	.00	.00	.00
27.7500	.00	.00	.00	.00	.00
28.0000	.00	.00	.00	.00	.00
28.2500	.00	.00	.00	.00	.00
28.5000	.00	.00	.00	.00	.00
28.7500	.00	.00	.00	.00	.00
29.0000	.00	.00	.00	.00	.00
29.2500	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
29.5000	.00	.00	.00	.00	.00
29.7500	.00	.00	.00	.00	.00
30.0000	.00	.00	.00	.00	.00
30.2500	.00	.00	.00	.00	.00
30.5000	.00	.00	.00	.00	.00
30.7500	.00	.00	.00	.00	.00
31.0000	.00	.00	.00	.00	.00
31.2500	.00	.00	.00	.00	.00
31.5000	.00	.00	.00	.00	.00
31.7500	.00	.00	.00	.00	.00
32.0000	.00	.00	.00	.00	.00
32.2500	.00	.00	.00	.00	.00
32.5000	.00	.00	.00	.00	.00
32.7500	.00	.00	.00	.00	.00
33.0000	.00	.00	.00	.00	.00
33.2500	.00	.00	.00	.00	.00
33.5000	.00	.00	.00	.00	.00
33.7500	.00	.00	.00	.00	.00
34.0000	.00	.00	.00	.00	.00
34.2500	.00	.00	.00	.00	.00
34.5000	.00	.00	.00	.00	.00
34.7500	.00	.00	.00	.00	.00
35.0000	.00	.00	.00	.00	.00
35.2500	.00	.00	.00	.00	.00
35.5000	.00	.00	.00	.00	.00
35.7500	.00	.00	.00	.00	.00
36.0000	.00	.00	.00	.00	.00
36.2500	.00	.00	.00	.00	.00
36.5000	.00	.00	.00	.00	.00
36.7500	.00	.00	.00	.00	.00
37.0000	.00	.00	.00	.00	.00
37.2500	.00	.00	.00	.00	.00
37.5000	.00	.00	.00	.00	.00
37.7500	.00	.00	.00	.00	.00
38.0000	.00	.00	.00	.00	.00
38.2500	.00	.00	.00	.00	.00
38.5000	.00	.00	.00	.00	.00
38.7500	.00	.00	.00	.00	.00
39.0000	.00	.00	.00	.00	.00
39.2500	.00	.00	.00	.00	.00
39.5000	.00	.00	.00	.00	.00
39.7500	.00	.00	.00	.00	.00
40.0000	.00	.00	.00	.00	.00
40.2500	.00	.00	.00	.00	.00
40.5000	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
40.7500	.00	.00	.00	.00	.00
41.0000	.00	.00	.00	.00	.00
41.2500	.00	.00	.00	.00	.00
41.5000	.00	.00	.00	.00	.00
41.7500	.00	.00	.00	.00	.00
42.0000	.00	.00	.00	.00	.00
42.2500	.00	.00	.00	.00	.00
42.5000	.00	.00	.00	.00	.00
42.7500	.00	.00	.00	.00	.00
43.0000	.00	.00	.00	.00	.00
43.2500	.00	.00	.00	.00	.00
43.5000	.00	.00	.00	.00	.00
43.7500	.00	.00	.00	.00	.00
44.0000	.00	.00	.00	.00	.00
44.2500	.00	.00	.00	.00	.00
44.5000	.00	.00	.00	.00	.00
44.7500	.00	.00	.00	.00	.00
45.0000	.00	.00	.00	.00	.00
45.2500	.00	.00	.00	.00	.00
45.5000	.00	.00	.00	.00	.00
45.7500	.00	.00	.00	.00	.00
46.0000	.00	.00	.00	.00	.00
46.2500	.00	.00	.00	.00	.00
46.5000	.00	.00	.00	.00	.00
46.7500	.00	.00	.00	.00	.00
47.0000	.00	.00	.00	.00	.00
47.2500	.00	.00	.00	.00	.00
47.5000	.00	.00	.00	.00	.00
47.7500	.00	.00	.00	.00	.00
48.0000	.00	.00	.00	.00	.00
48.2500	.00	.00	.00	.00	.00
48.5000	.00	.00	.00	.00	.00
48.7500	.00	.00	.00	.00	.00
49.0000	.00	.00	.00	.00	.00
49.2500	.00	.00	.00	.00	.00
49.5000	.00	.00	.00	.00	.00
49.7500	.00	.00	.00	.00	.00
50.0000	.00	.00	.00	.00	.00
50.2500	.00	.00	.00	.00	.00
50.5000	.00	.00	.00	.00	.00
50.7500	.00	.00	.00	.00	.00
51.0000	.00	.00	.00	.00	.00
51.2500	.00	.00	.00	.00	.00
51.5000	.00	.00	.00	.00	.00
51.7500	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
52.0000	.00	.00	.00	.00	.00
52.2500	.00	.00	.00	.00	.00
52.5000	.00	.00	.00	.00	.00
52.7500	.00	.00	.00	.00	.00
53.0000	.00	.00	.00	.00	.00
53.2500	.00	.00	.00	.00	.00
53.5000	.00	.00	.00	.00	.00
53.7500	.00	.00	.00	.00	.00
54.0000	.00	.00	.00	.00	.00
54.2500	.00	.00	.00	.00	.00
54.5000	.00	.00	.00	.00	.00
54.7500	.00	.00	.00	.00	.00
55.0000	.00	.00	.00	.00	.00
55.2500	.00	.00	.00	.00	.00
55.5000	.00	.00	.00	.00	.00
55.7500	.00	.00	.00	.00	.00
56.0000	.00	.00	.00	.00	.00
56.2500	.00	.00	.00	.00	.00
56.5000	.00	.00	.00	.00	.00
56.7500	.00	.00	.00	.00	.00
57.0000	.00	.00	.00	.00	.00
57.2500	.00	.00	.00	.00	.00
57.5000	.00	.00	.00	.00	.00
57.7500	.00	.00	.00	.00	.00
58.0000	.00	.00	.00	.00	.00
58.2500	.00	.00	.00	.00	.00
58.5000	.00	.00	.00	.00	.00
58.7500	.00	.00	.00	.00	.00
59.0000	.00	.00	.00	.00	.00
59.2500	.00	.00	.00	.00	.00
59.5000	.00	.00	.00	.00	.00
59.7500	.00	.00	.00	.00	.00
60.0000	.00	.00	.00	.00	.00
60.2500	.00	.00	.00	.00	.00
60.5000	.00	.00	.00	.00	.00
60.7500	.00	.00	.00	.00	.00
61.0000	.00	.00	.00	.00	.00
61.2500	.00	.00	.00	.00	.00
61.5000	.00	.00	.00	.00	.00
61.7500	.00	.00	.00	.00	.00
62.0000	.00	.00	.00	.00	.00
62.2500	.00	.00	.00	.00	.00
62.5000	.00	.00	.00	.00	.00
62.7500	.00	.00	.00	.00	.00
63.0000	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
63.2500	.00	.00	.00	.00	.00
63.5000	.00	.00	.00	.00	.00
63.7500	.00	.00	.00	.00	.00
64.0000	.00	.00	.00	.00	.00
64.2500	.00	.00	.00	.00	.00
64.5000	.00	.00	.00	.00	.00
64.7500	.00	.00	.00	.00	.00
65.0000	.00	.00	.00	.00	.00
65.2500	.00	.00	.00	.00	.00
65.5000	.00	.00	.00	.00	.00
65.7500	.00	.00	.00	.00	.00
66.0000	.00	.00	.00	.00	.00
66.2500	.00	.00	.00	.00	.00
66.5000	.00	.00	.00	.00	.00
66.7500	.00	.00	.00	.00	.00
67.0000	.00	.00	.00	.00	.00
67.2500	.00	.00	.00	.00	.00
67.5000	.00	.00	.00	.00	.00
67.7500	.00	.00	.00	.00	.00
68.0000	.00	.00	.00	.00	.00
68.2500	.00	.00	.00	.00	.00
68.5000	.00	.00	.00	.00	.00
68.7500	.00	.00	.00	.00	.00
69.0000	.00	.00	.00	.00	.00
69.2500	.00	.00	.00	.00	.00
69.5000	.00	.00	.00	.00	.00
69.7500	.00	.00	.00	.00	.00
70.0000	.00	.00	.00	.00	.00
70.2500	.00	.00	.00	.00	.00
70.5000	.00	.00	.00	.00	.00
70.7500	.00	.00	.00	.00	.00
71.0000	.00	.00	.00	.00	.00
71.2500	.00	.00	.00	.00	.00
71.5000	.00	.00	.00	.00	.00
71.7500	.00	.00	.00	.00	.00
72.0000	.00	.00	.00	.00	.00
72.2500	.00	.00	.00	.00	.00
72.5000	.00	.00	.00	.00	.00
72.7500	.00	.00	.00	.00	.00
73.0000	.00	.00	.00	.00	.00
73.2500	.00	.00	.00	.00	.00
73.5000	.00	.00	.00	.00	.00
73.7500	.00	.00	.00	.00	.00
74.0000	.00	.00	.00	.00	.00
74.2500	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
74.5000	.00	.00	.00	.00	.00
74.7500	.00	.00	.00	.00	.00
75.0000	.00	.00	.00	.00	.00
75.2500	.00	.00	.00	.00	.00
75.5000	.00	.00	.00	.00	.00
75.7500	.00	.00	.00	.00	.00
76.0000	.00	.00	.00	.00	.00
76.2500	.00	.00	.00	.00	.00
76.5000	.00	.00	.00	.00	.00
76.7500	.00	.00	.00	.00	.00
77.0000	.00	.00	.00	.00	.00
77.2500	.00	.00	.00	.00	.00
77.5000	.00	.00	.00	.00	.00
77.7500	.00	.00	.00	.00	.00
78.0000	.00	.00	.00	.00	.00
78.2500	.00	.00	.00	.00	.00
78.5000	.00	.00	.00	.00	.00
78.7500	.00	.00	.00	.00	.00
79.0000	.00	.00	.00	.00	.00
79.2500	.00	.00	.00	.00	.00
79.5000	.00	.00	.00	.00	.00
79.7500	.00	.00	.00	.00	.00
80.0000	.00	.00	.00	.00	.00
80.2500	.00	.00	.00	.00	.00
80.5000	.00	.00	.00	.00	.00
80.7500	.00	.00	.00	.00	.00
81.0000	.00	.00	.00	.00	.00
81.2500	.00	.00	.00	.00	.00
81.5000	.00	.00	.00	.00	.00
81.7500	.00	.00	.00	.00	.00
82.0000	.00	.00	.00	.00	.00
82.2500	.00	.00	.00	.00	.00
82.5000	.00	.00	.00	.00	.00
82.7500	.00	.00	.00	.00	.00
83.0000	.00	.00	.00	.00	.00
83.2500	.00	.00	.00	.00	.00
83.5000	.00	.00	.00	.00	.00
83.7500	.00	.00	.00	.00	.00
84.0000	.00	.00	.00	.00	.00
84.2500	.00	.00	.00	.00	.00
84.5000	.00	.00	.00	.00	.00
84.7500	.00	.00	.00	.00	.00
85.0000	.00	.00	.00	.00	.00
85.2500	.00	.00	.00	.00	.00
85.5000	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
85.7500	.00	.00	.00	.00	.00
86.0000	.00	.00	.00	.00	.00
86.2500	.00	.00	.00	.00	.00
86.5000	.00	.00	.00	.00	.00
86.7500	.00	.00	.00	.00	.00
87.0000	.00	.00	.00	.00	.00
87.2500	.00	.00	.00	.00	.00
87.5000	.00	.00	.00	.00	.00
87.7500	.00	.00	.00	.00	.00
88.0000	.00	.00	.00	.00	.00
88.2500	.00	.00	.00	.00	.00
88.5000	.00	.00	.00	.00	.00
88.7500	.00	.00	.00	.00	.00
89.0000	.00	.00	.00	.00	.00
89.2500	.00	.00	.00	.00	.00
89.5000	.00	.00	.00	.00	.00
89.7500	.00	.00	.00	.00	.00
90.0000	.00	.00	.00	.00	.00
90.2500	.00	.00	.00	.00	.00
90.5000	.00	.00	.00	.00	.00
90.7500	.00	.00	.00	.00	.00
91.0000	.00	.00	.00	.00	.00
91.2500	.00	.00	.00	.00	.00
91.5000	.00	.00	.00	.00	.00
91.7500	.00	.00	.00	.00	.00
92.0000	.00	.00	.00	.00	.00
92.2500	.00	.00	.00	.00	.00
92.5000	.00	.00	.00	.00	.00
92.7500	.00	.00	.00	.00	.00
93.0000	.00	.00	.00	.00	.00
93.2500	.00	.00	.00	.00	.00
93.5000	.00	.00	.00	.00	.00
93.7500	.00	.00	.00	.00	.00
94.0000	.00	.00	.00	.00	.00
94.2500	.00	.00	.00	.00	.00
94.5000	.00	.00	.00	.00	.00
94.7500	.00	.00	.00	.00	.00
95.0000	.00	.00	.00	.00	.00
95.2500	.00	.00	.00	.00	.00
95.5000	.00	.00	.00	.00	.00
95.7500	.00	.00	.00	.00	.00
96.0000	.00	.00	.00	.00	.00
96.2500	.00	.00	.00	.00	.00
96.5000	.00	.00	.00	.00	.00
96.7500	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
97.0000	.00	.00	.00	.00	.00
97.2500	.00	.00	.00	.00	.00
97.5000	.00	.00	.00	.00	.00
97.7500	.00	.00	.00	.00	.00
98.0000	.00	.00	.00	.00	.00
98.2500	.00	.00	.00	.00	.00
98.5000	.00	.00	.00	.00	.00
98.7500	.00	.00	.00	.00	.00
99.0000	.00	.00	.00	.00	.00
99.2500	.00	.00	.00	.00	.00
99.5000	.00	.00	.00	.00	.00
99.7500	.00	.00	.00	.00	.00
100.0000	.00	.00	.00	.00	.00
100.2500	.00	.00	.00	.00	.00
100.5000	.00	.00	.00	.00	.00
100.7500	.00	.00	.00	.00	.00
101.0000	.00	.00	.00	.00	.00
101.2500	.00	.00	.00	.00	.00
101.5000	.00	.00	.00	.00	.00
101.7500	.00	.00	.00	.00	.00
102.0000	.00	.00	.00	.00	.00
102.2500	.00	.00	.00	.00	.00
102.5000	.00	.00	.00	.00	.00
102.7500	.00	.00	.00	.00	.00
103.0000	.00	.00	.00	.00	.00
103.2500	.00	.00	.00	.00	.00
103.5000	.00	.00	.00	.00	.00
103.7500	.00	.00	.00	.00	.00
104.0000	.00	.00	.00	.00	.00
104.2500	.00	.00	.00	.00	.00
104.5000	.00	.00	.00	.00	.00
104.7500	.00	.00	.00	.00	.00
105.0000	.00	.00	.00	.00	.00
105.2500	.00	.00	.00	.00	.00
105.5000	.00	.00	.00	.00	.00
105.7500	.00	.00	.00	.00	.00
106.0000	.00	.00	.00	.00	.00
106.2500	.00	.00	.00	.00	.00
106.5000	.00	.00	.00	.00	.00
106.7500	.00	.00	.00	.00	.00
107.0000	.00	.00	.00	.00	.00
107.2500	.00	.00	.00	.00	.00
107.5000	.00	.00	.00	.00	.00
107.7500	.00	.00	.00	.00	.00
108.0000	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
108.2500	.00	.00	.00	.00	.00
108.5000	.00	.00	.00	.00	.00
108.7500	.00	.00	.00	.00	.00
109.0000	.00	.00	.00	.00	.00
109.2500	.00	.00	.00	.00	.00
109.5000	.00	.00	.00	.00	.00
109.7500	.00	.00	.00	.00	.00
110.0000	.00	.00	.00	.00	.00
110.2500	.00	.00	.00	.00	.00
110.5000	.00	.00	.00	.00	.00
110.7500	.00	.00	.00	.00	.00
111.0000	.00	.00	.00	.00	.00
111.2500	.00	.00	.00	.00	.00
111.5000	.00	.00	.00	.00	.00
111.7500	.00	.00	.00	.00	.00
112.0000	.00	.00	.00	.00	.00
112.2500	.00	.00	.00	.00	.00
112.5000	.00	.00	.00	.00	.00
112.7500	.00	.00	.00	.00	.00
113.0000	.00	.00	.00	.00	.00
113.2500	.00	.00	.00	.00	.00
113.5000	.00	.00	.00	.00	.00
113.7500	.00	.00	.00	.00	.00
114.0000	.00	.00	.00	.00	.00
114.2500	.00	.00	.00	.00	.00
114.5000	.00	.00	.00	.00	.00
114.7500	.00	.00	.00	.00	.00
115.0000	.00	.00	.00	.00	.00
115.2500	.00	.00	.00	.00	.00
115.5000	.00	.00	.00	.00	.00
115.7500	.00	.00	.00	.00	.00
116.0000	.00	.00	.00	.00	.00
116.2500	.00	.00	.00	.00	.00
116.5000	.00	.00	.00	.00	.00
116.7500	.00	.00	.00	.00	.00
117.0000	.00	.00	.00	.00	.00
117.2500	.00	.00	.00	.00	.00
117.5000	.00	.00	.00	.00	.00
117.7500	.00	.00	.00	.00	.00
118.0000	.00	.00	.00	.00	.00
118.2500	.00	.00	.00	.00	.00
118.5000	.00	.00	.00	.00	.00
118.7500	.00	.00	.00	.00	.00
119.0000	.00	.00	.00	.00	.00
119.2500	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
119.5000	.00	.00	.00	.00	.00
119.7500	.00	.00	.00	.00	.00
120.0000	.00	.00	.00	.00	.00
120.2500	.00	.00	.00	.00	.00
120.5000	.00	.00	.00	.00	.00
120.7500	.00	.00	.00	.00	.00
121.0000	.00	.00	.00	.00	.00
121.2500	.00	.00	.00	.00	.00
121.5000	.00	.00	.00	.00	.00
121.7500	.00	.00	.00	.00	.00
122.0000	.00	.00	.00	.00	.00
122.2500	.00	.00	.00	.00	.00
122.5000	.00	.00	.00	.00	.00
122.7500	.00	.00	.00	.00	.00
123.0000	.00	.00	.00	.00	.00
123.2500	.00	.00	.00	.00	.00
123.5000	.00	.00	.00	.00	.00
123.7500	.00	.00	.00	.00	.00
124.0000	.00	.00	.00	.00	.00
124.2500	.00	.00	.00	.00	.00
124.5000	.00	.00	.00	.00	.00
124.7500	.00	.00	.00	.00	.00
125.0000	.00	.00	.00	.00	.00
125.2500	.00	.00	.00	.00	.00
125.5000	.00	.00	.00	.00	.00
125.7500	.00	.00	.00	.00	.00
126.0000	.00	.00	.00	.00	.00
126.2500	.00	.00	.00	.00	.00
126.5000	.00	.00	.00	.00	.00
126.7500	.00	.00	.00	.00	.00
127.0000	.00	.00	.00	.00	.00
127.2500	.00	.00	.00	.00	.00
127.5000	.00	.00	.00	.00	.00
127.7500	.00	.00	.00	.00	.00
128.0000	.00	.00	.00	.00	.00
128.2500	.00	.00	.00	.00	.00
128.5000	.00	.00	.00	.00	.00
128.7500	.00	.00	.00	.00	.00
129.0000	.00	.00	.00	.00	.00
129.2500	.00	.00	.00	.00	.00
129.5000	.00	.00	.00	.00	.00
129.7500	.00	.00	.00	.00	.00
130.0000	.00	.00	.00	.00	.00
130.2500	.00	.00	.00	.00	.00
130.5000	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
130.7500	.00	.00	.00	.00	.00
131.0000	.00	.00	.00	.00	.00
131.2500	.00	.00	.00	.00	.00
131.5000	.00	.00	.00	.00	.00
131.7500	.00	.00	.00	.00	.00
132.0000	.00	.00	.00	.00	.00
132.2500	.00	.00	.00	.00	.00
132.5000	.00	.00	.00	.00	.00
132.7500	.00	.00	.00	.00	.00
133.0000	.00	.00	.00	.00	.00
133.2500	.00	.00	.00	.00	.00
133.5000	.00	.00	.00	.00	.00
133.7500	.00	.00	.00	.00	.00
134.0000	.00	.00	.00	.00	.00
134.2500	.00	.00	.00	.00	.00
134.5000	.00	.00	.00	.00	.00
134.7500	.00	.00	.00	.00	.00
135.0000	.00	.00	.00	.00	.00
135.2500	.00	.00	.00	.00	.00
135.5000	.00	.00	.00	.00	.00
135.7500	.00	.00	.00	.00	.00
136.0000	.00	.00	.00	.00	.00
136.2500	.00	.00	.00	.00	.00
136.5000	.00	.00	.00	.00	.00
136.7500	.00	.00	.00	.00	.00
137.0000	.00	.00	.00	.00	.00
137.2500	.00	.00	.00	.00	.00
137.5000	.00	.00	.00	.00	.00
137.7500	.00	.00	.00	.00	.00
138.0000	.00	.00	.00	.00	.00
138.2500	.00	.00	.00	.00	.00
138.5000	.00	.00	.00	.00	.00
138.7500	.00	.00	.00	.00	.00
139.0000	.00	.00	.00	.00	.00
139.2500	.00	.00	.00	.00	.00
139.5000	.00	.00	.00	.00	.00
139.7500	.00	.00	.00	.00	.00
140.0000	.00	.00	.00	.00	.00
140.2500	.00	.00	.00	.00	.00
140.5000	.00	.00	.00	.00	.00
140.7500	.00	.00	.00	.00	.00
141.0000	.00	.00	.00	.00	.00
141.2500	.00	.00	.00	.00	.00
141.5000	.00	.00	.00	.00	.00
141.7500	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
142.0000	.00	.00	.00	.00	.00
142.2500	.00	.00	.00	.00	.00
142.5000	.00	.00	.00	.00	.00
142.7500	.00	.00	.00	.00	.00
143.0000	.00	.00	.00	.00	.00
143.2500	.00	.00	.00	.00	.00
143.5000	.00	.00	.00	.00	.00
143.7500	.00	.00	.00	.00	.00
144.0000	.00	.00	.00	.00	.00
144.2500	.00	.00	.00	.00	.00
144.5000	.00	.00	.00	.00	.00
144.7500	.00	.00	.00	.00	.00
145.0000	.00	.00	.00	.00	.00
145.2500	.00	.00	.00	.00	.00
145.5000	.00	.00	.00	.00	.00
145.7500	.00	.00	.00	.00	.00
146.0000	.00	.00	.00	.00	.00
146.2500	.00	.00	.00	.00	.00
146.5000	.00	.00	.00	.00	.00
146.7500	.00	.00	.00	.00	.00
147.0000	.00	.00	.00	.00	.00
147.2500	.00	.00	.00	.00	.00
147.5000	.00	.00	.00	.00	.00
147.7500	.00	.00	.00	.00	.00
148.0000	.00	.00	.00	.00	.00
148.2500	.00	.00	.00	.00	.00
148.5000	.00	.00	.00	.00	.00
148.7500	.00	.00	.00	.00	.00
149.0000	.00	.00	.00	.00	.00
149.2500	.00	.00	.00	.00	.00
149.5000	.00	.00	.00	.00	.00
149.7500	.00	.00	.00	.00	.00
150.0000	.00	.00	.00	.00	.00
150.2500	.00	.00	.00	.00	.00
150.5000	.00	.00	.00	.00	.00
150.7500	.00	.00	.00	.00	.00
151.0000	.00	.00	.00	.00	.00
151.2500	.00	.00	.00	.00	.00
151.5000	.00	.00	.00	.00	.00
151.7500	.00	.00	.00	.00	.00
152.0000	.00	.00	.00	.00	.00
152.2500	.00	.00	.00	.00	.00
152.5000	.00	.00	.00	.00	.00
152.7500	.00	.00	.00	.00	.00
153.0000	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
153.2500	.00	.00	.00	.00	.00
153.5000	.00	.00	.00	.00	.00
153.7500	.00	.00	.00	.00	.00
154.0000	.00	.00	.00	.00	.00
154.2500	.00	.00	.00	.00	.00
154.5000	.00	.00	.00	.00	.00
154.7500	.00	.00	.00	.00	.00
155.0000	.00	.00	.00	.00	.00
155.2500	.00	.00	.00	.00	.00
155.5000	.00	.00	.00	.00	.00
155.7500	.00	.00	.00	.00	.00
156.0000	.00	.00	.00	.00	.00
156.2500	.00	.00	.00	.00	.00
156.5000	.00	.00	.00	.00	.00
156.7500	.00	.00	.00	.00	.00
157.0000	.00	.00	.00	.00	.00
157.2500	.00	.00	.00	.00	.00
157.5000	.00	.00	.00	.00	.00
157.7500	.00	.00	.00	.00	.00
158.0000	.00	.00	.00	.00	.00
158.2500	.00	.00	.00	.00	.00
158.5000	.00	.00	.00	.00	.00
158.7500	.00	.00	.00	.00	.00
159.0000	.00	.00	.00	.00	.00
159.2500	.00	.00	.00	.00	.00
159.5000	.00	.00	.00	.00	.00
159.7500	.00	.00	.00	.00	.00
160.0000	.00	.00	.00	.00	.00
160.2500	.00	.00	.00	.00	.00
160.5000	.00	.00	.00	.00	.00
160.7500	.00	.00	.00	.00	.00
161.0000	.00	.00	.00	.00	.00
161.2500	.00	.00	.00	.00	.00
161.5000	.00	.00	.00	.00	.00
161.7500	.00	.00	.00	.00	.00
162.0000	.00	.00	.00	.00	.00
162.2500	.00	.00	.00	.00	.00
162.5000	.00	.00	.00	.00	.00
162.7500	.00	.00	.00	.00	.00
163.0000	.00	.00	.00	.00	.00
163.2500	.00	.00	.00	.00	.00
163.5000	.00	.00	.00	.00	.00
163.7500	.00	.00	.00	.00	.00
164.0000	.00	.00	.00	.00	.00
164.2500	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
164.5000	.00	.00	.00	.00	.00
164.7500	.00	.00	.00	.00	.00
165.0000	.00	.00	.00	.00	.00
165.2500	.00	.00	.00	.00	.00
165.5000	.00	.00	.00	.00	.00
165.7500	.00	.00	.00	.00	.00
166.0000	.00	.00	.00	.00	.00
166.2500	.00	.00	.00	.00	.00
166.5000	.00	.00	.00	.00	.00
166.7500	.00	.00	.00	.00	.00
167.0000	.00	.00	.00	.00	.00
167.2500	.00	.00	.00	.00	.00
167.5000	.00	.00	.00	.00	.00
167.7500	.00	.00	.00	.00	.00
168.0000	.00	.00	.00	.00	.00
168.2500	.00	.00	.00	.00	.00
168.5000	.00	.00	.00	.00	.00
168.7500	.00	.00	.00	.00	.00
169.0000	.00	.00	.00	.00	.00
169.2500	.00	.00	.00	.00	.00
169.5000	.00	.00	.00	.00	.00
169.7500	.00	.00	.00	.00	.00
170.0000	.00	.00	.00	.00	.00
170.2500	.00	.00	.00	.00	.00
170.5000	.00	.00	.00	.00	.00
170.7500	.00	.00	.00	.00	.00
171.0000	.00	.00	.00	.00	.00
171.2500	.00	.00	.00	.00	.00
171.5000	.00	.00	.00	.00	.00
171.7500	.00	.00	.00	.00	.00
172.0000	.00	.00	.00	.00	.00
172.2500	.00	.00	.00	.00	.00
172.5000	.00	.00	.00	.00	.00
172.7500	.00	.00	.00	.00	.00
173.0000	.00	.00	.00	.00	.00
173.2500	.00	.00	.00	.00	.00
173.5000	.00	.00	.00	.00	.00
173.7500	.00	.00	.00	.00	.00
174.0000	.00	.00	.00	.00	.00
174.2500	.00	.00	.00	.00	.00
174.5000	.00	.00	.00	.00	.00
174.7500	.00	.00	.00	.00	.00
175.0000	.00	.00	.00	.00	.00
175.2500	.00	.00	.00	.00	.00
175.5000	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
175.7500	.00	.00	.00	.00	.00
176.0000	.00	.00	.00	.00	.00
176.2500	.00	.00	.00	.00	.00
176.5000	.00	.00	.00	.00	.00
176.7500	.00	.00	.00	.00	.00
177.0000	.00	.00	.00	.00	.00
177.2500	.00	.00	.00	.00	.00
177.5000	.00	.00	.00	.00	.00
177.7500	.00	.00	.00	.00	.00
178.0000	.00	.00	.00	.00	.00
178.2500	.00	.00	.00	.00	.00
178.5000	.00	.00	.00	.00	.00
178.7500	.00	.00	.00	.00	.00
179.0000	.00	.00	.00	.00	.00
179.2500	.00	.00	.00	.00	.00
179.5000	.00	.00	.00	.00	.00
179.7500	.00	.00	.00	.00	.00
180.0000	.00				

POND ROUTED TOTAL OUTFLOW HYG...
HYG file =
HYG ID = REACH 1B
HYG Tag = 10

Peak Discharge = 34.49 cfs
Time to Peak = 12.3500 hrs
HYG Volume = 185304 cu.ft

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
8.2000	.00	.00	.00	.00	.00
8.4500	.00	.01	.01	.02	.02
8.7000	.03	.04	.05	.07	.09
8.9500	.11	.12	.14	.16	.18
9.2000	.20	.23	.25	.28	.31
9.4500	.33	.36	.39	.41	.44
9.7000	.47	.50	.53	.56	.60
9.9500	.63	.67	.70	.74	.77
10.2000	.81	.85	.89	.93	.98
10.4500	1.03	1.08	1.14	1.19	1.25
10.7000	1.31	1.37	1.44	1.50	1.57
10.9500	1.65	1.72	1.79	1.87	1.95
11.2000	2.04	2.14	2.26	2.39	2.54
11.4500	2.71	2.89	3.10	3.34	3.65
11.7000	4.06	4.66	5.45	6.49	7.83
11.9500	9.57	11.88	14.93	18.76	23.18
12.2000	27.64	31.30	33.61	34.49	34.08
12.4500	32.64	30.48	27.95	25.35	22.79
12.7000	20.34	18.05	16.00	14.25	12.76
12.9500	11.51	10.45	9.57	8.83	8.20
13.2000	7.65	7.18	6.77	6.42	6.14
13.4500	5.89	5.67	5.49	5.33	5.19
13.7000	5.07	4.96	4.85	4.75	4.66
13.9500	4.56	4.47	4.38	4.30	4.21
14.2000	4.13	4.05	3.98	3.91	3.84
14.4500	3.78	3.73	3.68	3.63	3.58
14.7000	3.53	3.49	3.44	3.40	3.36
14.9500	3.32	3.27	3.23	3.19	3.14
15.2000	3.10	3.06	3.02	2.98	2.94
15.4500	2.89	2.85	2.81	2.76	2.72
15.7000	2.68	2.63	2.59	2.55	2.50

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
15.9500	2.46	2.42	2.37	2.33	2.29
16.2000	2.25	2.21	2.17	2.14	2.10
16.4500	2.08	2.05	2.02	2.00	1.98
16.7000	1.95	1.93	1.91	1.89	1.87
16.9500	1.85	1.83	1.81	1.79	1.77
17.2000	1.75	1.73	1.71	1.70	1.68
17.4500	1.66	1.64	1.62	1.60	1.58
17.7000	1.56	1.54	1.52	1.50	1.49
17.9500	1.47	1.45	1.43	1.41	1.39
18.2000	1.37	1.35	1.34	1.32	1.31
18.4500	1.30	1.29	1.28	1.27	1.26
18.7000	1.25	1.25	1.24	1.23	1.23
18.9500	1.22	1.21	1.21	1.20	1.20
19.2000	1.19	1.18	1.18	1.17	1.17
19.4500	1.16	1.16	1.15	1.14	1.14
19.7000	1.13	1.13	1.12	1.11	1.11
19.9500	1.10	1.10	1.09	1.09	1.08
20.2000	1.07	1.07	1.06	1.06	1.05
20.4500	1.05	1.04	1.04	1.03	1.03
20.7000	1.02	1.02	1.02	1.01	1.01
20.9500	1.00	1.00	.99	.99	.98
21.2000	.98	.98	.97	.97	.96
21.4500	.96	.96	.95	.95	.94
21.7000	.94	.93	.93	.92	.92
21.9500	.92	.91	.91	.90	.90
22.2000	.89	.89	.88	.88	.88
22.4500	.87	.87	.86	.86	.85
22.7000	.85	.84	.84	.84	.83
22.9500	.83	.82	.82	.81	.81
23.2000	.80	.80	.80	.79	.79
23.4500	.78	.78	.77	.77	.76
23.7000	.76	.76	.75	.75	.74
23.9500	.74	.73	.73	.71	.69
24.2000	.65	.59	.52	.46	.39
24.4500	.32	.26	.21	.17	.14
24.7000	.12	.09	.08	.06	.05
24.9500	.04	.04	.03	.03	.02
25.2000	.02	.02	.01	.01	.01
25.4500	.01	.01	.01	.00	.00
25.7000	.00	.00	.00	.00	.00
25.9500	.00	.00	.00	.00	.00
26.2000	.00	.00	.00	.00	.00
26.4500	.00	.00	.00	.00	.00
26.7000	.00	.00	.00	.00	.00
26.9500	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
27.2000	.00	.00	.00	.00	.00
27.4500	.00	.00	.00	.00	.00
27.7000	.00	.00	.00	.00	.00
27.9500	.00	.00	.00	.00	.00
28.2000	.00	.00	.00	.00	.00
28.4500	.00	.00	.00	.00	.00
28.7000	.00	.00	.00	.00	.00
28.9500	.00	.00	.00	.00	.00
29.2000	.00	.00	.00	.00	.00
29.4500	.00	.00	.00	.00	.00
29.7000	.00	.00	.00	.00	.00
29.9500	.00	.00	.00	.00	.00
30.2000	.00	.00	.00	.00	.00
30.4500	.00	.00	.00	.00	.00
30.7000	.00	.00	.00	.00	.00
30.9500	.00	.00	.00	.00	.00
31.2000	.00	.00	.00	.00	.00
31.4500	.00	.00	.00	.00	.00
31.7000	.00	.00	.00	.00	.00
31.9500	.00	.00	.00	.00	.00
32.2000	.00	.00	.00	.00	.00
32.4500	.00	.00	.00	.00	.00
32.7000	.00	.00	.00	.00	.00
32.9500	.00	.00	.00	.00	.00
33.2000	.00	.00	.00	.00	.00
33.4500	.00	.00	.00	.00	.00
33.7000	.00	.00	.00	.00	.00
33.9500	.00	.00	.00	.00	.00
34.2000	.00	.00	.00	.00	.00
34.4500	.00	.00	.00	.00	.00
34.7000	.00	.00	.00	.00	.00
34.9500	.00	.00	.00	.00	.00
35.2000	.00	.00	.00	.00	.00
35.4500	.00	.00	.00	.00	.00
35.7000	.00	.00	.00	.00	.00
35.9500	.00	.00	.00	.00	.00
36.2000	.00	.00	.00	.00	.00
36.4500	.00	.00	.00	.00	.00
36.7000	.00	.00	.00	.00	.00
36.9500	.00	.00	.00	.00	.00
37.2000	.00	.00	.00	.00	.00
37.4500	.00	.00	.00	.00	.00
37.7000	.00	.00	.00	.00	.00
37.9500	.00	.00	.00	.00	.00
38.2000	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
38.4500	.00	.00	.00	.00	.00
38.7000	.00	.00	.00	.00	.00
38.9500	.00	.00	.00	.00	.00
39.2000	.00	.00	.00	.00	.00
39.4500	.00	.00	.00	.00	.00
39.7000	.00	.00	.00	.00	.00
39.9500	.00	.00	.00	.00	.00
40.2000	.00	.00	.00	.00	.00
40.4500	.00	.00	.00	.00	.00
40.7000	.00	.00	.00	.00	.00
40.9500	.00	.00	.00	.00	.00
41.2000	.00	.00	.00	.00	.00
41.4500	.00	.00	.00	.00	.00
41.7000	.00	.00	.00	.00	.00
41.9500	.00	.00	.00	.00	.00
42.2000	.00	.00	.00	.00	.00
42.4500	.00	.00	.00	.00	.00
42.7000	.00	.00	.00	.00	.00
42.9500	.00	.00	.00	.00	.00
43.2000	.00	.00	.00	.00	.00
43.4500	.00	.00	.00	.00	.00
43.7000	.00	.00	.00	.00	.00
43.9500	.00	.00	.00	.00	.00
44.2000	.00	.00	.00	.00	.00
44.4500	.00	.00	.00	.00	.00
44.7000	.00	.00	.00	.00	.00
44.9500	.00	.00	.00	.00	.00
45.2000	.00	.00	.00	.00	.00
45.4500	.00	.00	.00	.00	.00
45.7000	.00	.00	.00	.00	.00
45.9500	.00	.00	.00	.00	.00
46.2000	.00	.00	.00	.00	.00
46.4500	.00	.00	.00	.00	.00
46.7000	.00	.00	.00	.00	.00
46.9500	.00	.00	.00	.00	.00
47.2000	.00	.00	.00	.00	.00
47.4500	.00	.00	.00	.00	.00
47.7000	.00	.00	.00	.00	.00
47.9500	.00	.00	.00	.00	.00
48.2000	.00	.00	.00	.00	.00
48.4500	.00	.00	.00	.00	.00
48.7000	.00	.00	.00	.00	.00
48.9500	.00	.00	.00	.00	.00
49.2000	.00	.00	.00	.00	.00
49.4500	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
49.7000	.00	.00	.00	.00	.00
49.9500	.00	.00	.00	.00	.00
50.2000	.00	.00	.00	.00	.00
50.4500	.00	.00	.00	.00	.00
50.7000	.00	.00	.00	.00	.00
50.9500	.00	.00	.00	.00	.00
51.2000	.00	.00	.00	.00	.00
51.4500	.00	.00	.00	.00	.00
51.7000	.00	.00	.00	.00	.00
51.9500	.00	.00	.00	.00	.00
52.2000	.00	.00	.00	.00	.00
52.4500	.00	.00	.00	.00	.00
52.7000	.00	.00	.00	.00	.00
52.9500	.00	.00	.00	.00	.00
53.2000	.00	.00	.00	.00	.00
53.4500	.00	.00	.00	.00	.00
53.7000	.00	.00	.00	.00	.00
53.9500	.00	.00	.00	.00	.00
54.2000	.00	.00	.00	.00	.00
54.4500	.00	.00	.00	.00	.00
54.7000	.00	.00	.00	.00	.00
54.9500	.00	.00	.00	.00	.00
55.2000	.00	.00	.00	.00	.00
55.4500	.00	.00	.00	.00	.00
55.7000	.00	.00	.00	.00	.00
55.9500	.00	.00	.00	.00	.00
56.2000	.00	.00	.00	.00	.00
56.4500	.00	.00	.00	.00	.00
56.7000	.00	.00	.00	.00	.00
56.9500	.00	.00	.00	.00	.00
57.2000	.00	.00	.00	.00	.00
57.4500	.00	.00	.00	.00	.00
57.7000	.00	.00	.00	.00	.00
57.9500	.00	.00	.00	.00	.00
58.2000	.00	.00	.00	.00	.00
58.4500	.00	.00	.00	.00	.00
58.7000	.00	.00	.00	.00	.00
58.9500	.00	.00	.00	.00	.00
59.2000	.00	.00	.00	.00	.00
59.4500	.00	.00	.00	.00	.00
59.7000	.00	.00	.00	.00	.00
59.9500	.00	.00	.00	.00	.00
60.2000	.00	.00	.00	.00	.00
60.4500	.00	.00	.00	.00	.00
60.7000	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
60.9500	.00	.00	.00	.00	.00
61.2000	.00	.00	.00	.00	.00
61.4500	.00	.00	.00	.00	.00
61.7000	.00	.00	.00	.00	.00
61.9500	.00	.00	.00	.00	.00
62.2000	.00	.00	.00	.00	.00
62.4500	.00	.00	.00	.00	.00
62.7000	.00	.00	.00	.00	.00
62.9500	.00	.00	.00	.00	.00
63.2000	.00	.00	.00	.00	.00
63.4500	.00	.00	.00	.00	.00
63.7000	.00	.00	.00	.00	.00
63.9500	.00	.00	.00	.00	.00
64.2000	.00	.00	.00	.00	.00
64.4500	.00	.00	.00	.00	.00
64.7000	.00	.00	.00	.00	.00
64.9500	.00	.00	.00	.00	.00
65.2000	.00	.00	.00	.00	.00
65.4500	.00	.00	.00	.00	.00
65.7000	.00	.00	.00	.00	.00
65.9500	.00	.00	.00	.00	.00
66.2000	.00	.00	.00	.00	.00
66.4500	.00	.00	.00	.00	.00
66.7000	.00	.00	.00	.00	.00
66.9500	.00	.00	.00	.00	.00
67.2000	.00	.00	.00	.00	.00
67.4500	.00	.00	.00	.00	.00
67.7000	.00	.00	.00	.00	.00
67.9500	.00	.00	.00	.00	.00
68.2000	.00	.00	.00	.00	.00
68.4500	.00	.00	.00	.00	.00
68.7000	.00	.00	.00	.00	.00
68.9500	.00	.00	.00	.00	.00
69.2000	.00	.00	.00	.00	.00
69.4500	.00	.00	.00	.00	.00
69.7000	.00	.00	.00	.00	.00
69.9500	.00	.00	.00	.00	.00
70.2000	.00	.00	.00	.00	.00
70.4500	.00	.00	.00	.00	.00
70.7000	.00	.00	.00	.00	.00
70.9500	.00	.00	.00	.00	.00
71.2000	.00	.00	.00	.00	.00
71.4500	.00	.00	.00	.00	.00
71.7000	.00	.00	.00	.00	.00
71.9500	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
72.2000	.00	.00	.00	.00	.00
72.4500	.00	.00	.00	.00	.00
72.7000	.00	.00	.00	.00	.00
72.9500	.00	.00	.00	.00	.00
73.2000	.00	.00	.00	.00	.00
73.4500	.00	.00	.00	.00	.00
73.7000	.00	.00	.00	.00	.00
73.9500	.00	.00	.00	.00	.00
74.2000	.00	.00	.00	.00	.00
74.4500	.00	.00	.00	.00	.00
74.7000	.00	.00	.00	.00	.00
74.9500	.00	.00	.00	.00	.00
75.2000	.00	.00	.00	.00	.00
75.4500	.00	.00	.00	.00	.00
75.7000	.00	.00	.00	.00	.00
75.9500	.00	.00	.00	.00	.00
76.2000	.00	.00	.00	.00	.00
76.4500	.00	.00	.00	.00	.00
76.7000	.00	.00	.00	.00	.00
76.9500	.00	.00	.00	.00	.00
77.2000	.00	.00	.00	.00	.00
77.4500	.00	.00	.00	.00	.00
77.7000	.00	.00	.00	.00	.00
77.9500	.00	.00	.00	.00	.00
78.2000	.00	.00	.00	.00	.00
78.4500	.00	.00	.00	.00	.00
78.7000	.00	.00	.00	.00	.00
78.9500	.00	.00	.00	.00	.00
79.2000	.00	.00	.00	.00	.00
79.4500	.00	.00	.00	.00	.00
79.7000	.00	.00	.00	.00	.00
79.9500	.00	.00	.00	.00	.00
80.2000	.00	.00	.00	.00	.00
80.4500	.00	.00	.00	.00	.00
80.7000	.00	.00	.00	.00	.00
80.9500	.00	.00	.00	.00	.00
81.2000	.00	.00	.00	.00	.00
81.4500	.00	.00	.00	.00	.00
81.7000	.00	.00	.00	.00	.00
81.9500	.00	.00	.00	.00	.00
82.2000	.00	.00	.00	.00	.00
82.4500	.00	.00	.00	.00	.00
82.7000	.00	.00	.00	.00	.00
82.9500	.00	.00	.00	.00	.00
83.2000	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
83.4500	.00	.00	.00	.00	.00
83.7000	.00	.00	.00	.00	.00
83.9500	.00	.00	.00	.00	.00
84.2000	.00	.00	.00	.00	.00
84.4500	.00	.00	.00	.00	.00
84.7000	.00	.00	.00	.00	.00
84.9500	.00	.00	.00	.00	.00
85.2000	.00	.00	.00	.00	.00
85.4500	.00	.00	.00	.00	.00
85.7000	.00	.00	.00	.00	.00
85.9500	.00	.00	.00	.00	.00
86.2000	.00	.00	.00	.00	.00
86.4500	.00	.00	.00	.00	.00
86.7000	.00	.00	.00	.00	.00
86.9500	.00	.00	.00	.00	.00
87.2000	.00	.00	.00	.00	.00
87.4500	.00	.00	.00	.00	.00
87.7000	.00	.00	.00	.00	.00
87.9500	.00	.00	.00	.00	.00
88.2000	.00	.00	.00	.00	.00
88.4500	.00	.00	.00	.00	.00
88.7000	.00	.00	.00	.00	.00
88.9500	.00	.00	.00	.00	.00
89.2000	.00	.00	.00	.00	.00
89.4500	.00	.00	.00	.00	.00
89.7000	.00	.00	.00	.00	.00
89.9500	.00	.00	.00	.00	.00
90.2000	.00	.00	.00	.00	.00
90.4500	.00	.00	.00	.00	.00
90.7000	.00	.00	.00	.00	.00
90.9500	.00	.00	.00	.00	.00
91.2000	.00	.00	.00	.00	.00
91.4500	.00	.00	.00	.00	.00
91.7000	.00	.00	.00	.00	.00
91.9500	.00	.00	.00	.00	.00
92.2000	.00	.00	.00	.00	.00
92.4500	.00	.00	.00	.00	.00
92.7000	.00	.00	.00	.00	.00
92.9500	.00	.00	.00	.00	.00
93.2000	.00	.00	.00	.00	.00
93.4500	.00	.00	.00	.00	.00
93.7000	.00	.00	.00	.00	.00
93.9500	.00	.00	.00	.00	.00
94.2000	.00	.00	.00	.00	.00
94.4500	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
94.7000	.00	.00	.00	.00	.00
94.9500	.00	.00	.00	.00	.00
95.2000	.00	.00	.00	.00	.00
95.4500	.00	.00	.00	.00	.00
95.7000	.00	.00	.00	.00	.00
95.9500	.00	.00	.00	.00	.00
96.2000	.00	.00	.00	.00	.00
96.4500	.00	.00	.00	.00	.00
96.7000	.00	.00	.00	.00	.00
96.9500	.00	.00	.00	.00	.00
97.2000	.00	.00	.00	.00	.00
97.4500	.00	.00	.00	.00	.00
97.7000	.00	.00	.00	.00	.00
97.9500	.00	.00	.00	.00	.00
98.2000	.00	.00	.00	.00	.00
98.4500	.00	.00	.00	.00	.00
98.7000	.00	.00	.00	.00	.00
98.9500	.00	.00	.00	.00	.00
99.2000	.00	.00	.00	.00	.00
99.4500	.00	.00	.00	.00	.00
99.7000	.00	.00	.00	.00	.00
99.9500	.00	.00	.00	.00	.00
100.2000	.00	.00	.00	.00	.00
100.4500	.00	.00	.00	.00	.00
100.7000	.00	.00	.00	.00	.00
100.9500	.00	.00	.00	.00	.00
101.2000	.00	.00	.00	.00	.00
101.4500	.00	.00	.00	.00	.00
101.7000	.00	.00	.00	.00	.00
101.9500	.00	.00	.00	.00	.00
102.2000	.00	.00	.00	.00	.00
102.4500	.00	.00	.00	.00	.00
102.7000	.00	.00	.00	.00	.00
102.9500	.00	.00	.00	.00	.00
103.2000	.00	.00	.00	.00	.00
103.4500	.00	.00	.00	.00	.00
103.7000	.00	.00	.00	.00	.00
103.9500	.00	.00	.00	.00	.00
104.2000	.00	.00	.00	.00	.00
104.4500	.00	.00	.00	.00	.00
104.7000	.00	.00	.00	.00	.00
104.9500	.00	.00	.00	.00	.00
105.2000	.00	.00	.00	.00	.00
105.4500	.00	.00	.00	.00	.00
105.7000	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
105.9500	.00	.00	.00	.00	.00
106.2000	.00	.00	.00	.00	.00
106.4500	.00	.00	.00	.00	.00
106.7000	.00	.00	.00	.00	.00
106.9500	.00	.00	.00	.00	.00
107.2000	.00	.00	.00	.00	.00
107.4500	.00	.00	.00	.00	.00
107.7000	.00	.00	.00	.00	.00
107.9500	.00	.00	.00	.00	.00
108.2000	.00	.00	.00	.00	.00
108.4500	.00	.00	.00	.00	.00
108.7000	.00	.00	.00	.00	.00
108.9500	.00	.00	.00	.00	.00
109.2000	.00	.00	.00	.00	.00
109.4500	.00	.00	.00	.00	.00
109.7000	.00	.00	.00	.00	.00
109.9500	.00	.00	.00	.00	.00
110.2000	.00	.00	.00	.00	.00
110.4500	.00	.00	.00	.00	.00
110.7000	.00	.00	.00	.00	.00
110.9500	.00	.00	.00	.00	.00
111.2000	.00	.00	.00	.00	.00
111.4500	.00	.00	.00	.00	.00
111.7000	.00	.00	.00	.00	.00
111.9500	.00	.00	.00	.00	.00
112.2000	.00	.00	.00	.00	.00
112.4500	.00	.00	.00	.00	.00
112.7000	.00	.00	.00	.00	.00
112.9500	.00	.00	.00	.00	.00
113.2000	.00	.00	.00	.00	.00
113.4500	.00	.00	.00	.00	.00
113.7000	.00	.00	.00	.00	.00
113.9500	.00	.00	.00	.00	.00
114.2000	.00	.00	.00	.00	.00
114.4500	.00	.00	.00	.00	.00
114.7000	.00	.00	.00	.00	.00
114.9500	.00	.00	.00	.00	.00
115.2000	.00	.00	.00	.00	.00
115.4500	.00	.00	.00	.00	.00
115.7000	.00	.00	.00	.00	.00
115.9500	.00	.00	.00	.00	.00
116.2000	.00	.00	.00	.00	.00
116.4500	.00	.00	.00	.00	.00
116.7000	.00	.00	.00	.00	.00
116.9500	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
117.2000	.00	.00	.00	.00	.00
117.4500	.00	.00	.00	.00	.00
117.7000	.00	.00	.00	.00	.00
117.9500	.00	.00	.00	.00	.00
118.2000	.00	.00	.00	.00	.00
118.4500	.00	.00	.00	.00	.00
118.7000	.00	.00	.00	.00	.00
118.9500	.00	.00	.00	.00	.00
119.2000	.00	.00	.00	.00	.00
119.4500	.00	.00	.00	.00	.00
119.7000	.00	.00	.00	.00	.00
119.9500	.00	.00	.00	.00	.00
120.2000	.00	.00	.00	.00	.00
120.4500	.00	.00	.00	.00	.00
120.7000	.00	.00	.00	.00	.00
120.9500	.00	.00	.00	.00	.00
121.2000	.00	.00	.00	.00	.00
121.4500	.00	.00	.00	.00	.00
121.7000	.00	.00	.00	.00	.00
121.9500	.00	.00	.00	.00	.00
122.2000	.00	.00	.00	.00	.00
122.4500	.00	.00	.00	.00	.00
122.7000	.00	.00	.00	.00	.00
122.9500	.00	.00	.00	.00	.00
123.2000	.00	.00	.00	.00	.00
123.4500	.00	.00	.00	.00	.00
123.7000	.00	.00	.00	.00	.00
123.9500	.00	.00	.00	.00	.00
124.2000	.00	.00	.00	.00	.00
124.4500	.00	.00	.00	.00	.00
124.7000	.00	.00	.00	.00	.00
124.9500	.00	.00	.00	.00	.00
125.2000	.00	.00	.00	.00	.00
125.4500	.00	.00	.00	.00	.00
125.7000	.00	.00	.00	.00	.00
125.9500	.00	.00	.00	.00	.00
126.2000	.00	.00	.00	.00	.00
126.4500	.00	.00	.00	.00	.00
126.7000	.00	.00	.00	.00	.00
126.9500	.00	.00	.00	.00	.00
127.2000	.00	.00	.00	.00	.00
127.4500	.00	.00	.00	.00	.00
127.7000	.00	.00	.00	.00	.00
127.9500	.00	.00	.00	.00	.00
128.2000	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
128.4500	.00	.00	.00	.00	.00
128.7000	.00	.00	.00	.00	.00
128.9500	.00	.00	.00	.00	.00
129.2000	.00	.00	.00	.00	.00
129.4500	.00	.00	.00	.00	.00
129.7000	.00	.00	.00	.00	.00
129.9500	.00	.00	.00	.00	.00
130.2000	.00	.00	.00	.00	.00
130.4500	.00	.00	.00	.00	.00
130.7000	.00	.00	.00	.00	.00
130.9500	.00	.00	.00	.00	.00
131.2000	.00	.00	.00	.00	.00
131.4500	.00	.00	.00	.00	.00
131.7000	.00	.00	.00	.00	.00
131.9500	.00	.00	.00	.00	.00
132.2000	.00	.00	.00	.00	.00
132.4500	.00	.00	.00	.00	.00
132.7000	.00	.00	.00	.00	.00
132.9500	.00	.00	.00	.00	.00
133.2000	.00	.00	.00	.00	.00
133.4500	.00	.00	.00	.00	.00
133.7000	.00	.00	.00	.00	.00
133.9500	.00	.00	.00	.00	.00
134.2000	.00	.00	.00	.00	.00
134.4500	.00	.00	.00	.00	.00
134.7000	.00	.00	.00	.00	.00
134.9500	.00	.00	.00	.00	.00
135.2000	.00	.00	.00	.00	.00
135.4500	.00	.00	.00	.00	.00
135.7000	.00	.00	.00	.00	.00
135.9500	.00	.00	.00	.00	.00
136.2000	.00	.00	.00	.00	.00
136.4500	.00	.00	.00	.00	.00
136.7000	.00	.00	.00	.00	.00
136.9500	.00	.00	.00	.00	.00
137.2000	.00	.00	.00	.00	.00
137.4500	.00	.00	.00	.00	.00
137.7000	.00	.00	.00	.00	.00
137.9500	.00	.00	.00	.00	.00
138.2000	.00	.00	.00	.00	.00
138.4500	.00	.00	.00	.00	.00
138.7000	.00	.00	.00	.00	.00
138.9500	.00	.00	.00	.00	.00
139.2000	.00	.00	.00	.00	.00
139.4500	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
139.7000	.00	.00	.00	.00	.00
139.9500	.00	.00	.00	.00	.00
140.2000	.00	.00	.00	.00	.00
140.4500	.00	.00	.00	.00	.00
140.7000	.00	.00	.00	.00	.00
140.9500	.00	.00	.00	.00	.00
141.2000	.00	.00	.00	.00	.00
141.4500	.00	.00	.00	.00	.00
141.7000	.00	.00	.00	.00	.00
141.9500	.00	.00	.00	.00	.00
142.2000	.00	.00	.00	.00	.00
142.4500	.00	.00	.00	.00	.00
142.7000	.00	.00	.00	.00	.00
142.9500	.00	.00	.00	.00	.00
143.2000	.00	.00	.00	.00	.00
143.4500	.00	.00	.00	.00	.00
143.7000	.00	.00	.00	.00	.00
143.9500	.00	.00	.00	.00	.00
144.2000	.00	.00	.00	.00	.00
144.4500	.00	.00	.00	.00	.00
144.7000	.00	.00	.00	.00	.00
144.9500	.00	.00	.00	.00	.00
145.2000	.00	.00	.00	.00	.00
145.4500	.00	.00	.00	.00	.00
145.7000	.00	.00	.00	.00	.00
145.9500	.00	.00	.00	.00	.00
146.2000	.00	.00	.00	.00	.00
146.4500	.00	.00	.00	.00	.00
146.7000	.00	.00	.00	.00	.00
146.9500	.00	.00	.00	.00	.00
147.2000	.00	.00	.00	.00	.00
147.4500	.00	.00	.00	.00	.00
147.7000	.00	.00	.00	.00	.00
147.9500	.00	.00	.00	.00	.00
148.2000	.00	.00	.00	.00	.00
148.4500	.00	.00	.00	.00	.00
148.7000	.00	.00	.00	.00	.00
148.9500	.00	.00	.00	.00	.00
149.2000	.00	.00	.00	.00	.00
149.4500	.00	.00	.00	.00	.00
149.7000	.00	.00	.00	.00	.00
149.9500	.00	.00	.00	.00	.00
150.2000	.00	.00	.00	.00	.00
150.4500	.00	.00	.00	.00	.00
150.7000	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
150.9500	.00	.00	.00	.00	.00
151.2000	.00	.00	.00	.00	.00
151.4500	.00	.00	.00	.00	.00
151.7000	.00	.00	.00	.00	.00
151.9500	.00	.00	.00	.00	.00
152.2000	.00	.00	.00	.00	.00
152.4500	.00	.00	.00	.00	.00
152.7000	.00	.00	.00	.00	.00
152.9500	.00	.00	.00	.00	.00
153.2000	.00	.00	.00	.00	.00
153.4500	.00	.00	.00	.00	.00
153.7000	.00	.00	.00	.00	.00
153.9500	.00	.00	.00	.00	.00
154.2000	.00	.00	.00	.00	.00
154.4500	.00	.00	.00	.00	.00
154.7000	.00	.00	.00	.00	.00
154.9500	.00	.00	.00	.00	.00
155.2000	.00	.00	.00	.00	.00
155.4500	.00	.00	.00	.00	.00
155.7000	.00	.00	.00	.00	.00
155.9500	.00	.00	.00	.00	.00
156.2000	.00	.00	.00	.00	.00
156.4500	.00	.00	.00	.00	.00
156.7000	.00	.00	.00	.00	.00
156.9500	.00	.00	.00	.00	.00
157.2000	.00	.00	.00	.00	.00
157.4500	.00	.00	.00	.00	.00
157.7000	.00	.00	.00	.00	.00
157.9500	.00	.00	.00	.00	.00
158.2000	.00	.00	.00	.00	.00
158.4500	.00	.00	.00	.00	.00
158.7000	.00	.00	.00	.00	.00
158.9500	.00	.00	.00	.00	.00
159.2000	.00	.00	.00	.00	.00
159.4500	.00	.00	.00	.00	.00
159.7000	.00	.00	.00	.00	.00
159.9500	.00	.00	.00	.00	.00
160.2000	.00	.00	.00	.00	.00
160.4500	.00	.00	.00	.00	.00
160.7000	.00	.00	.00	.00	.00
160.9500	.00	.00	.00	.00	.00
161.2000	.00	.00	.00	.00	.00
161.4500	.00	.00	.00	.00	.00
161.7000	.00	.00	.00	.00	.00
161.9500	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
162.2000	.00	.00	.00	.00	.00
162.4500	.00	.00	.00	.00	.00
162.7000	.00	.00	.00	.00	.00
162.9500	.00	.00	.00	.00	.00
163.2000	.00	.00	.00	.00	.00
163.4500	.00	.00	.00	.00	.00
163.7000	.00	.00	.00	.00	.00
163.9500	.00	.00	.00	.00	.00
164.2000	.00	.00	.00	.00	.00
164.4500	.00	.00	.00	.00	.00
164.7000	.00	.00	.00	.00	.00
164.9500	.00	.00	.00	.00	.00
165.2000	.00	.00	.00	.00	.00
165.4500	.00	.00	.00	.00	.00
165.7000	.00	.00	.00	.00	.00
165.9500	.00	.00	.00	.00	.00
166.2000	.00	.00	.00	.00	.00
166.4500	.00	.00	.00	.00	.00
166.7000	.00	.00	.00	.00	.00
166.9500	.00	.00	.00	.00	.00
167.2000	.00	.00	.00	.00	.00
167.4500	.00	.00	.00	.00	.00
167.7000	.00	.00	.00	.00	.00
167.9500	.00	.00	.00	.00	.00
168.2000	.00	.00	.00	.00	.00
168.4500	.00	.00	.00	.00	.00
168.7000	.00	.00	.00	.00	.00
168.9500	.00	.00	.00	.00	.00
169.2000	.00	.00	.00	.00	.00
169.4500	.00	.00	.00	.00	.00
169.7000	.00	.00	.00	.00	.00
169.9500	.00	.00	.00	.00	.00
170.2000	.00	.00	.00	.00	.00
170.4500	.00	.00	.00	.00	.00
170.7000	.00	.00	.00	.00	.00
170.9500	.00	.00	.00	.00	.00
171.2000	.00	.00	.00	.00	.00
171.4500	.00	.00	.00	.00	.00
171.7000	.00	.00	.00	.00	.00
171.9500	.00	.00	.00	.00	.00
172.2000	.00	.00	.00	.00	.00
172.4500	.00	.00	.00	.00	.00
172.7000	.00	.00	.00	.00	.00
172.9500	.00	.00	.00	.00	.00
173.2000	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
173.4500	.00	.00	.00	.00	.00
173.7000	.00	.00	.00	.00	.00
173.9500	.00	.00	.00	.00	.00
174.2000	.00	.00	.00	.00	.00
174.4500	.00	.00	.00	.00	.00
174.7000	.00	.00	.00	.00	.00
174.9500	.00	.00	.00	.00	.00
175.2000	.00	.00	.00	.00	.00
175.4500	.00	.00	.00	.00	.00
175.7000	.00	.00	.00	.00	.00
175.9500	.00	.00	.00	.00	.00
176.2000	.00	.00	.00	.00	.00
176.4500	.00	.00	.00	.00	.00
176.7000	.00	.00	.00	.00	.00
176.9500	.00	.00	.00	.00	.00
177.2000	.00	.00	.00	.00	.00
177.4500	.00	.00	.00	.00	.00
177.7000	.00	.00	.00	.00	.00
177.9500	.00	.00	.00	.00	.00
178.2000	.00	.00	.00	.00	.00
178.4500	.00	.00	.00	.00	.00
178.7000	.00	.00	.00	.00	.00
178.9500	.00	.00	.00	.00	.00
179.2000	.00	.00	.00	.00	.00
179.4500	.00	.00	.00	.00	.00
179.7000	.00	.00	.00	.00	.00
179.9500	.00	.00			

POND ROUTED TOTAL OUTFLOW HYG...
HYG file =
HYG ID = REACH 1B
HYG Tag = 25

Peak Discharge = 48.71 cfs
Time to Peak = 12.3500 hrs
HYG Volume = 261424 cu.ft

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
7.2500	.00	.00	.00	.00	.00
7.5000	.01	.01	.01	.02	.02
7.7500	.03	.04	.05	.07	.08
8.0000	.10	.11	.13	.15	.16
8.2500	.18	.20	.21	.24	.26
8.5000	.29	.31	.33	.36	.38
8.7500	.41	.44	.46	.49	.52
9.0000	.56	.59	.63	.66	.70
9.2500	.73	.77	.81	.85	.89
9.5000	.93	.97	1.02	1.06	1.11
9.7500	1.15	1.20	1.25	1.30	1.34
10.0000	1.39	1.45	1.50	1.55	1.61
10.2500	1.67	1.73	1.80	1.87	1.94
10.5000	2.02	2.10	2.18	2.27	2.37
10.7500	2.46	2.56	2.66	2.76	2.86
11.0000	2.96	3.07	3.18	3.31	3.44
11.2500	3.59	3.76	3.95	4.18	4.43
11.5000	4.71	5.02	5.38	5.84	6.48
11.7500	7.37	8.58	10.15	12.13	14.67
12.0000	18.04	22.39	27.80	33.95	40.02
12.2500	44.87	47.77	48.71	47.86	45.60
12.5000	42.38	38.70	34.97	31.34	27.88
12.7500	24.67	21.82	19.38	17.33	15.60
13.0000	14.15	12.94	11.92	11.06	10.32
13.2500	9.67	9.12	8.65	8.24	7.90
13.5000	7.62	7.37	7.16	6.97	6.80
13.7500	6.64	6.50	6.37	6.24	6.11
14.0000	5.99	5.87	5.75	5.63	5.52
14.2500	5.41	5.31	5.22	5.13	5.06
14.5000	4.98	4.91	4.84	4.78	4.72
14.7500	4.65	4.59	4.54	4.48	4.42

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
15.0000	4.36	4.30	4.25	4.19	4.13
15.2500	4.08	4.02	3.96	3.90	3.85
15.5000	3.79	3.73	3.67	3.62	3.56
15.7500	3.50	3.44	3.38	3.32	3.26
16.0000	3.21	3.15	3.09	3.04	2.98
16.2500	2.93	2.88	2.83	2.79	2.75
16.5000	2.71	2.68	2.65	2.62	2.59
16.7500	2.56	2.53	2.51	2.48	2.45
17.0000	2.43	2.40	2.37	2.35	2.32
17.2500	2.30	2.27	2.25	2.22	2.20
17.5000	2.17	2.14	2.12	2.09	2.07
17.7500	2.04	2.02	1.99	1.96	1.94
18.0000	1.91	1.89	1.86	1.83	1.81
18.2500	1.79	1.76	1.75	1.73	1.71
18.5000	1.70	1.69	1.68	1.67	1.66
18.7500	1.65	1.64	1.63	1.62	1.61
19.0000	1.60	1.60	1.59	1.58	1.57
19.2500	1.56	1.56	1.55	1.54	1.53
19.5000	1.53	1.52	1.51	1.50	1.50
19.7500	1.49	1.48	1.47	1.47	1.46
20.0000	1.45	1.44	1.43	1.43	1.42
20.2500	1.41	1.40	1.40	1.39	1.38
20.5000	1.38	1.37	1.37	1.36	1.35
20.7500	1.35	1.34	1.33	1.33	1.32
21.0000	1.32	1.31	1.30	1.30	1.29
21.2500	1.29	1.28	1.28	1.27	1.26
21.5000	1.26	1.25	1.25	1.24	1.23
21.7500	1.23	1.22	1.22	1.21	1.21
22.0000	1.20	1.19	1.19	1.18	1.18
22.2500	1.17	1.16	1.16	1.15	1.15
22.5000	1.14	1.13	1.13	1.12	1.12
22.7500	1.11	1.11	1.10	1.09	1.09
23.0000	1.08	1.08	1.07	1.06	1.06
23.2500	1.05	1.05	1.04	1.03	1.03
23.5000	1.02	1.02	1.01	1.01	1.00
23.7500	.99	.99	.98	.98	.97
24.0000	.96	.95	.94	.91	.85
24.2500	.78	.69	.58	.49	.41
24.5000	.33	.27	.21	.18	.15
24.7500	.12	.10	.08	.06	.05
25.0000	.04	.04	.03	.03	.02
25.2500	.02	.02	.01	.01	.01
25.5000	.01	.01	.01	.00	.00
25.7500	.00	.00	.00	.00	.00
26.0000	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
26.2500	.00	.00	.00	.00	.00
26.5000	.00	.00	.00	.00	.00
26.7500	.00	.00	.00	.00	.00
27.0000	.00	.00	.00	.00	.00
27.2500	.00	.00	.00	.00	.00
27.5000	.00	.00	.00	.00	.00
27.7500	.00	.00	.00	.00	.00
28.0000	.00	.00	.00	.00	.00
28.2500	.00	.00	.00	.00	.00
28.5000	.00	.00	.00	.00	.00
28.7500	.00	.00	.00	.00	.00
29.0000	.00	.00	.00	.00	.00
29.2500	.00	.00	.00	.00	.00
29.5000	.00	.00	.00	.00	.00
29.7500	.00	.00	.00	.00	.00
30.0000	.00	.00	.00	.00	.00
30.2500	.00	.00	.00	.00	.00
30.5000	.00	.00	.00	.00	.00
30.7500	.00	.00	.00	.00	.00
31.0000	.00	.00	.00	.00	.00
31.2500	.00	.00	.00	.00	.00
31.5000	.00	.00	.00	.00	.00
31.7500	.00	.00	.00	.00	.00
32.0000	.00	.00	.00	.00	.00
32.2500	.00	.00	.00	.00	.00
32.5000	.00	.00	.00	.00	.00
32.7500	.00	.00	.00	.00	.00
33.0000	.00	.00	.00	.00	.00
33.2500	.00	.00	.00	.00	.00
33.5000	.00	.00	.00	.00	.00
33.7500	.00	.00	.00	.00	.00
34.0000	.00	.00	.00	.00	.00
34.2500	.00	.00	.00	.00	.00
34.5000	.00	.00	.00	.00	.00
34.7500	.00	.00	.00	.00	.00
35.0000	.00	.00	.00	.00	.00
35.2500	.00	.00	.00	.00	.00
35.5000	.00	.00	.00	.00	.00
35.7500	.00	.00	.00	.00	.00
36.0000	.00	.00	.00	.00	.00
36.2500	.00	.00	.00	.00	.00
36.5000	.00	.00	.00	.00	.00
36.7500	.00	.00	.00	.00	.00
37.0000	.00	.00	.00	.00	.00
37.2500	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
37.5000	.00	.00	.00	.00	.00
37.7500	.00	.00	.00	.00	.00
38.0000	.00	.00	.00	.00	.00
38.2500	.00	.00	.00	.00	.00
38.5000	.00	.00	.00	.00	.00
38.7500	.00	.00	.00	.00	.00
39.0000	.00	.00	.00	.00	.00
39.2500	.00	.00	.00	.00	.00
39.5000	.00	.00	.00	.00	.00
39.7500	.00	.00	.00	.00	.00
40.0000	.00	.00	.00	.00	.00
40.2500	.00	.00	.00	.00	.00
40.5000	.00	.00	.00	.00	.00
40.7500	.00	.00	.00	.00	.00
41.0000	.00	.00	.00	.00	.00
41.2500	.00	.00	.00	.00	.00
41.5000	.00	.00	.00	.00	.00
41.7500	.00	.00	.00	.00	.00
42.0000	.00	.00	.00	.00	.00
42.2500	.00	.00	.00	.00	.00
42.5000	.00	.00	.00	.00	.00
42.7500	.00	.00	.00	.00	.00
43.0000	.00	.00	.00	.00	.00
43.2500	.00	.00	.00	.00	.00
43.5000	.00	.00	.00	.00	.00
43.7500	.00	.00	.00	.00	.00
44.0000	.00	.00	.00	.00	.00
44.2500	.00	.00	.00	.00	.00
44.5000	.00	.00	.00	.00	.00
44.7500	.00	.00	.00	.00	.00
45.0000	.00	.00	.00	.00	.00
45.2500	.00	.00	.00	.00	.00
45.5000	.00	.00	.00	.00	.00
45.7500	.00	.00	.00	.00	.00
46.0000	.00	.00	.00	.00	.00
46.2500	.00	.00	.00	.00	.00
46.5000	.00	.00	.00	.00	.00
46.7500	.00	.00	.00	.00	.00
47.0000	.00	.00	.00	.00	.00
47.2500	.00	.00	.00	.00	.00
47.5000	.00	.00	.00	.00	.00
47.7500	.00	.00	.00	.00	.00
48.0000	.00	.00	.00	.00	.00
48.2500	.00	.00	.00	.00	.00
48.5000	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
48.7500	.00	.00	.00	.00	.00
49.0000	.00	.00	.00	.00	.00
49.2500	.00	.00	.00	.00	.00
49.5000	.00	.00	.00	.00	.00
49.7500	.00	.00	.00	.00	.00
50.0000	.00	.00	.00	.00	.00
50.2500	.00	.00	.00	.00	.00
50.5000	.00	.00	.00	.00	.00
50.7500	.00	.00	.00	.00	.00
51.0000	.00	.00	.00	.00	.00
51.2500	.00	.00	.00	.00	.00
51.5000	.00	.00	.00	.00	.00
51.7500	.00	.00	.00	.00	.00
52.0000	.00	.00	.00	.00	.00
52.2500	.00	.00	.00	.00	.00
52.5000	.00	.00	.00	.00	.00
52.7500	.00	.00	.00	.00	.00
53.0000	.00	.00	.00	.00	.00
53.2500	.00	.00	.00	.00	.00
53.5000	.00	.00	.00	.00	.00
53.7500	.00	.00	.00	.00	.00
54.0000	.00	.00	.00	.00	.00
54.2500	.00	.00	.00	.00	.00
54.5000	.00	.00	.00	.00	.00
54.7500	.00	.00	.00	.00	.00
55.0000	.00	.00	.00	.00	.00
55.2500	.00	.00	.00	.00	.00
55.5000	.00	.00	.00	.00	.00
55.7500	.00	.00	.00	.00	.00
56.0000	.00	.00	.00	.00	.00
56.2500	.00	.00	.00	.00	.00
56.5000	.00	.00	.00	.00	.00
56.7500	.00	.00	.00	.00	.00
57.0000	.00	.00	.00	.00	.00
57.2500	.00	.00	.00	.00	.00
57.5000	.00	.00	.00	.00	.00
57.7500	.00	.00	.00	.00	.00
58.0000	.00	.00	.00	.00	.00
58.2500	.00	.00	.00	.00	.00
58.5000	.00	.00	.00	.00	.00
58.7500	.00	.00	.00	.00	.00
59.0000	.00	.00	.00	.00	.00
59.2500	.00	.00	.00	.00	.00
59.5000	.00	.00	.00	.00	.00
59.7500	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
60.0000	.00	.00	.00	.00	.00
60.2500	.00	.00	.00	.00	.00
60.5000	.00	.00	.00	.00	.00
60.7500	.00	.00	.00	.00	.00
61.0000	.00	.00	.00	.00	.00
61.2500	.00	.00	.00	.00	.00
61.5000	.00	.00	.00	.00	.00
61.7500	.00	.00	.00	.00	.00
62.0000	.00	.00	.00	.00	.00
62.2500	.00	.00	.00	.00	.00
62.5000	.00	.00	.00	.00	.00
62.7500	.00	.00	.00	.00	.00
63.0000	.00	.00	.00	.00	.00
63.2500	.00	.00	.00	.00	.00
63.5000	.00	.00	.00	.00	.00
63.7500	.00	.00	.00	.00	.00
64.0000	.00	.00	.00	.00	.00
64.2500	.00	.00	.00	.00	.00
64.5000	.00	.00	.00	.00	.00
64.7500	.00	.00	.00	.00	.00
65.0000	.00	.00	.00	.00	.00
65.2500	.00	.00	.00	.00	.00
65.5000	.00	.00	.00	.00	.00
65.7500	.00	.00	.00	.00	.00
66.0000	.00	.00	.00	.00	.00
66.2500	.00	.00	.00	.00	.00
66.5000	.00	.00	.00	.00	.00
66.7500	.00	.00	.00	.00	.00
67.0000	.00	.00	.00	.00	.00
67.2500	.00	.00	.00	.00	.00
67.5000	.00	.00	.00	.00	.00
67.7500	.00	.00	.00	.00	.00
68.0000	.00	.00	.00	.00	.00
68.2500	.00	.00	.00	.00	.00
68.5000	.00	.00	.00	.00	.00
68.7500	.00	.00	.00	.00	.00
69.0000	.00	.00	.00	.00	.00
69.2500	.00	.00	.00	.00	.00
69.5000	.00	.00	.00	.00	.00
69.7500	.00	.00	.00	.00	.00
70.0000	.00	.00	.00	.00	.00
70.2500	.00	.00	.00	.00	.00
70.5000	.00	.00	.00	.00	.00
70.7500	.00	.00	.00	.00	.00
71.0000	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
71.2500	.00	.00	.00	.00	.00
71.5000	.00	.00	.00	.00	.00
71.7500	.00	.00	.00	.00	.00
72.0000	.00	.00	.00	.00	.00
72.2500	.00	.00	.00	.00	.00
72.5000	.00	.00	.00	.00	.00
72.7500	.00	.00	.00	.00	.00
73.0000	.00	.00	.00	.00	.00
73.2500	.00	.00	.00	.00	.00
73.5000	.00	.00	.00	.00	.00
73.7500	.00	.00	.00	.00	.00
74.0000	.00	.00	.00	.00	.00
74.2500	.00	.00	.00	.00	.00
74.5000	.00	.00	.00	.00	.00
74.7500	.00	.00	.00	.00	.00
75.0000	.00	.00	.00	.00	.00
75.2500	.00	.00	.00	.00	.00
75.5000	.00	.00	.00	.00	.00
75.7500	.00	.00	.00	.00	.00
76.0000	.00	.00	.00	.00	.00
76.2500	.00	.00	.00	.00	.00
76.5000	.00	.00	.00	.00	.00
76.7500	.00	.00	.00	.00	.00
77.0000	.00	.00	.00	.00	.00
77.2500	.00	.00	.00	.00	.00
77.5000	.00	.00	.00	.00	.00
77.7500	.00	.00	.00	.00	.00
78.0000	.00	.00	.00	.00	.00
78.2500	.00	.00	.00	.00	.00
78.5000	.00	.00	.00	.00	.00
78.7500	.00	.00	.00	.00	.00
79.0000	.00	.00	.00	.00	.00
79.2500	.00	.00	.00	.00	.00
79.5000	.00	.00	.00	.00	.00
79.7500	.00	.00	.00	.00	.00
80.0000	.00	.00	.00	.00	.00
80.2500	.00	.00	.00	.00	.00
80.5000	.00	.00	.00	.00	.00
80.7500	.00	.00	.00	.00	.00
81.0000	.00	.00	.00	.00	.00
81.2500	.00	.00	.00	.00	.00
81.5000	.00	.00	.00	.00	.00
81.7500	.00	.00	.00	.00	.00
82.0000	.00	.00	.00	.00	.00
82.2500	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
82.5000	.00	.00	.00	.00	.00
82.7500	.00	.00	.00	.00	.00
83.0000	.00	.00	.00	.00	.00
83.2500	.00	.00	.00	.00	.00
83.5000	.00	.00	.00	.00	.00
83.7500	.00	.00	.00	.00	.00
84.0000	.00	.00	.00	.00	.00
84.2500	.00	.00	.00	.00	.00
84.5000	.00	.00	.00	.00	.00
84.7500	.00	.00	.00	.00	.00
85.0000	.00	.00	.00	.00	.00
85.2500	.00	.00	.00	.00	.00
85.5000	.00	.00	.00	.00	.00
85.7500	.00	.00	.00	.00	.00
86.0000	.00	.00	.00	.00	.00
86.2500	.00	.00	.00	.00	.00
86.5000	.00	.00	.00	.00	.00
86.7500	.00	.00	.00	.00	.00
87.0000	.00	.00	.00	.00	.00
87.2500	.00	.00	.00	.00	.00
87.5000	.00	.00	.00	.00	.00
87.7500	.00	.00	.00	.00	.00
88.0000	.00	.00	.00	.00	.00
88.2500	.00	.00	.00	.00	.00
88.5000	.00	.00	.00	.00	.00
88.7500	.00	.00	.00	.00	.00
89.0000	.00	.00	.00	.00	.00
89.2500	.00	.00	.00	.00	.00
89.5000	.00	.00	.00	.00	.00
89.7500	.00	.00	.00	.00	.00
90.0000	.00	.00	.00	.00	.00
90.2500	.00	.00	.00	.00	.00
90.5000	.00	.00	.00	.00	.00
90.7500	.00	.00	.00	.00	.00
91.0000	.00	.00	.00	.00	.00
91.2500	.00	.00	.00	.00	.00
91.5000	.00	.00	.00	.00	.00
91.7500	.00	.00	.00	.00	.00
92.0000	.00	.00	.00	.00	.00
92.2500	.00	.00	.00	.00	.00
92.5000	.00	.00	.00	.00	.00
92.7500	.00	.00	.00	.00	.00
93.0000	.00	.00	.00	.00	.00
93.2500	.00	.00	.00	.00	.00
93.5000	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
93.7500	.00	.00	.00	.00	.00
94.0000	.00	.00	.00	.00	.00
94.2500	.00	.00	.00	.00	.00
94.5000	.00	.00	.00	.00	.00
94.7500	.00	.00	.00	.00	.00
95.0000	.00	.00	.00	.00	.00
95.2500	.00	.00	.00	.00	.00
95.5000	.00	.00	.00	.00	.00
95.7500	.00	.00	.00	.00	.00
96.0000	.00	.00	.00	.00	.00
96.2500	.00	.00	.00	.00	.00
96.5000	.00	.00	.00	.00	.00
96.7500	.00	.00	.00	.00	.00
97.0000	.00	.00	.00	.00	.00
97.2500	.00	.00	.00	.00	.00
97.5000	.00	.00	.00	.00	.00
97.7500	.00	.00	.00	.00	.00
98.0000	.00	.00	.00	.00	.00
98.2500	.00	.00	.00	.00	.00
98.5000	.00	.00	.00	.00	.00
98.7500	.00	.00	.00	.00	.00
99.0000	.00	.00	.00	.00	.00
99.2500	.00	.00	.00	.00	.00
99.5000	.00	.00	.00	.00	.00
99.7500	.00	.00	.00	.00	.00
100.0000	.00	.00	.00	.00	.00
100.2500	.00	.00	.00	.00	.00
100.5000	.00	.00	.00	.00	.00
100.7500	.00	.00	.00	.00	.00
101.0000	.00	.00	.00	.00	.00
101.2500	.00	.00	.00	.00	.00
101.5000	.00	.00	.00	.00	.00
101.7500	.00	.00	.00	.00	.00
102.0000	.00	.00	.00	.00	.00
102.2500	.00	.00	.00	.00	.00
102.5000	.00	.00	.00	.00	.00
102.7500	.00	.00	.00	.00	.00
103.0000	.00	.00	.00	.00	.00
103.2500	.00	.00	.00	.00	.00
103.5000	.00	.00	.00	.00	.00
103.7500	.00	.00	.00	.00	.00
104.0000	.00	.00	.00	.00	.00
104.2500	.00	.00	.00	.00	.00
104.5000	.00	.00	.00	.00	.00
104.7500	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
105.0000	.00	.00	.00	.00	.00
105.2500	.00	.00	.00	.00	.00
105.5000	.00	.00	.00	.00	.00
105.7500	.00	.00	.00	.00	.00
106.0000	.00	.00	.00	.00	.00
106.2500	.00	.00	.00	.00	.00
106.5000	.00	.00	.00	.00	.00
106.7500	.00	.00	.00	.00	.00
107.0000	.00	.00	.00	.00	.00
107.2500	.00	.00	.00	.00	.00
107.5000	.00	.00	.00	.00	.00
107.7500	.00	.00	.00	.00	.00
108.0000	.00	.00	.00	.00	.00
108.2500	.00	.00	.00	.00	.00
108.5000	.00	.00	.00	.00	.00
108.7500	.00	.00	.00	.00	.00
109.0000	.00	.00	.00	.00	.00
109.2500	.00	.00	.00	.00	.00
109.5000	.00	.00	.00	.00	.00
109.7500	.00	.00	.00	.00	.00
110.0000	.00	.00	.00	.00	.00
110.2500	.00	.00	.00	.00	.00
110.5000	.00	.00	.00	.00	.00
110.7500	.00	.00	.00	.00	.00
111.0000	.00	.00	.00	.00	.00
111.2500	.00	.00	.00	.00	.00
111.5000	.00	.00	.00	.00	.00
111.7500	.00	.00	.00	.00	.00
112.0000	.00	.00	.00	.00	.00
112.2500	.00	.00	.00	.00	.00
112.5000	.00	.00	.00	.00	.00
112.7500	.00	.00	.00	.00	.00
113.0000	.00	.00	.00	.00	.00
113.2500	.00	.00	.00	.00	.00
113.5000	.00	.00	.00	.00	.00
113.7500	.00	.00	.00	.00	.00
114.0000	.00	.00	.00	.00	.00
114.2500	.00	.00	.00	.00	.00
114.5000	.00	.00	.00	.00	.00
114.7500	.00	.00	.00	.00	.00
115.0000	.00	.00	.00	.00	.00
115.2500	.00	.00	.00	.00	.00
115.5000	.00	.00	.00	.00	.00
115.7500	.00	.00	.00	.00	.00
116.0000	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
116.2500	.00	.00	.00	.00	.00
116.5000	.00	.00	.00	.00	.00
116.7500	.00	.00	.00	.00	.00
117.0000	.00	.00	.00	.00	.00
117.2500	.00	.00	.00	.00	.00
117.5000	.00	.00	.00	.00	.00
117.7500	.00	.00	.00	.00	.00
118.0000	.00	.00	.00	.00	.00
118.2500	.00	.00	.00	.00	.00
118.5000	.00	.00	.00	.00	.00
118.7500	.00	.00	.00	.00	.00
119.0000	.00	.00	.00	.00	.00
119.2500	.00	.00	.00	.00	.00
119.5000	.00	.00	.00	.00	.00
119.7500	.00	.00	.00	.00	.00
120.0000	.00	.00	.00	.00	.00
120.2500	.00	.00	.00	.00	.00
120.5000	.00	.00	.00	.00	.00
120.7500	.00	.00	.00	.00	.00
121.0000	.00	.00	.00	.00	.00
121.2500	.00	.00	.00	.00	.00
121.5000	.00	.00	.00	.00	.00
121.7500	.00	.00	.00	.00	.00
122.0000	.00	.00	.00	.00	.00
122.2500	.00	.00	.00	.00	.00
122.5000	.00	.00	.00	.00	.00
122.7500	.00	.00	.00	.00	.00
123.0000	.00	.00	.00	.00	.00
123.2500	.00	.00	.00	.00	.00
123.5000	.00	.00	.00	.00	.00
123.7500	.00	.00	.00	.00	.00
124.0000	.00	.00	.00	.00	.00
124.2500	.00	.00	.00	.00	.00
124.5000	.00	.00	.00	.00	.00
124.7500	.00	.00	.00	.00	.00
125.0000	.00	.00	.00	.00	.00
125.2500	.00	.00	.00	.00	.00
125.5000	.00	.00	.00	.00	.00
125.7500	.00	.00	.00	.00	.00
126.0000	.00	.00	.00	.00	.00
126.2500	.00	.00	.00	.00	.00
126.5000	.00	.00	.00	.00	.00
126.7500	.00	.00	.00	.00	.00
127.0000	.00	.00	.00	.00	.00
127.2500	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
127.5000	.00	.00	.00	.00	.00
127.7500	.00	.00	.00	.00	.00
128.0000	.00	.00	.00	.00	.00
128.2500	.00	.00	.00	.00	.00
128.5000	.00	.00	.00	.00	.00
128.7500	.00	.00	.00	.00	.00
129.0000	.00	.00	.00	.00	.00
129.2500	.00	.00	.00	.00	.00
129.5000	.00	.00	.00	.00	.00
129.7500	.00	.00	.00	.00	.00
130.0000	.00	.00	.00	.00	.00
130.2500	.00	.00	.00	.00	.00
130.5000	.00	.00	.00	.00	.00
130.7500	.00	.00	.00	.00	.00
131.0000	.00	.00	.00	.00	.00
131.2500	.00	.00	.00	.00	.00
131.5000	.00	.00	.00	.00	.00
131.7500	.00	.00	.00	.00	.00
132.0000	.00	.00	.00	.00	.00
132.2500	.00	.00	.00	.00	.00
132.5000	.00	.00	.00	.00	.00
132.7500	.00	.00	.00	.00	.00
133.0000	.00	.00	.00	.00	.00
133.2500	.00	.00	.00	.00	.00
133.5000	.00	.00	.00	.00	.00
133.7500	.00	.00	.00	.00	.00
134.0000	.00	.00	.00	.00	.00
134.2500	.00	.00	.00	.00	.00
134.5000	.00	.00	.00	.00	.00
134.7500	.00	.00	.00	.00	.00
135.0000	.00	.00	.00	.00	.00
135.2500	.00	.00	.00	.00	.00
135.5000	.00	.00	.00	.00	.00
135.7500	.00	.00	.00	.00	.00
136.0000	.00	.00	.00	.00	.00
136.2500	.00	.00	.00	.00	.00
136.5000	.00	.00	.00	.00	.00
136.7500	.00	.00	.00	.00	.00
137.0000	.00	.00	.00	.00	.00
137.2500	.00	.00	.00	.00	.00
137.5000	.00	.00	.00	.00	.00
137.7500	.00	.00	.00	.00	.00
138.0000	.00	.00	.00	.00	.00
138.2500	.00	.00	.00	.00	.00
138.5000	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
138.7500	.00	.00	.00	.00	.00
139.0000	.00	.00	.00	.00	.00
139.2500	.00	.00	.00	.00	.00
139.5000	.00	.00	.00	.00	.00
139.7500	.00	.00	.00	.00	.00
140.0000	.00	.00	.00	.00	.00
140.2500	.00	.00	.00	.00	.00
140.5000	.00	.00	.00	.00	.00
140.7500	.00	.00	.00	.00	.00
141.0000	.00	.00	.00	.00	.00
141.2500	.00	.00	.00	.00	.00
141.5000	.00	.00	.00	.00	.00
141.7500	.00	.00	.00	.00	.00
142.0000	.00	.00	.00	.00	.00
142.2500	.00	.00	.00	.00	.00
142.5000	.00	.00	.00	.00	.00
142.7500	.00	.00	.00	.00	.00
143.0000	.00	.00	.00	.00	.00
143.2500	.00	.00	.00	.00	.00
143.5000	.00	.00	.00	.00	.00
143.7500	.00	.00	.00	.00	.00
144.0000	.00	.00	.00	.00	.00
144.2500	.00	.00	.00	.00	.00
144.5000	.00	.00	.00	.00	.00
144.7500	.00	.00	.00	.00	.00
145.0000	.00	.00	.00	.00	.00
145.2500	.00	.00	.00	.00	.00
145.5000	.00	.00	.00	.00	.00
145.7500	.00	.00	.00	.00	.00
146.0000	.00	.00	.00	.00	.00
146.2500	.00	.00	.00	.00	.00
146.5000	.00	.00	.00	.00	.00
146.7500	.00	.00	.00	.00	.00
147.0000	.00	.00	.00	.00	.00
147.2500	.00	.00	.00	.00	.00
147.5000	.00	.00	.00	.00	.00
147.7500	.00	.00	.00	.00	.00
148.0000	.00	.00	.00	.00	.00
148.2500	.00	.00	.00	.00	.00
148.5000	.00	.00	.00	.00	.00
148.7500	.00	.00	.00	.00	.00
149.0000	.00	.00	.00	.00	.00
149.2500	.00	.00	.00	.00	.00
149.5000	.00	.00	.00	.00	.00
149.7500	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
150.0000	.00	.00	.00	.00	.00
150.2500	.00	.00	.00	.00	.00
150.5000	.00	.00	.00	.00	.00
150.7500	.00	.00	.00	.00	.00
151.0000	.00	.00	.00	.00	.00
151.2500	.00	.00	.00	.00	.00
151.5000	.00	.00	.00	.00	.00
151.7500	.00	.00	.00	.00	.00
152.0000	.00	.00	.00	.00	.00
152.2500	.00	.00	.00	.00	.00
152.5000	.00	.00	.00	.00	.00
152.7500	.00	.00	.00	.00	.00
153.0000	.00	.00	.00	.00	.00
153.2500	.00	.00	.00	.00	.00
153.5000	.00	.00	.00	.00	.00
153.7500	.00	.00	.00	.00	.00
154.0000	.00	.00	.00	.00	.00
154.2500	.00	.00	.00	.00	.00
154.5000	.00	.00	.00	.00	.00
154.7500	.00	.00	.00	.00	.00
155.0000	.00	.00	.00	.00	.00
155.2500	.00	.00	.00	.00	.00
155.5000	.00	.00	.00	.00	.00
155.7500	.00	.00	.00	.00	.00
156.0000	.00	.00	.00	.00	.00
156.2500	.00	.00	.00	.00	.00
156.5000	.00	.00	.00	.00	.00
156.7500	.00	.00	.00	.00	.00
157.0000	.00	.00	.00	.00	.00
157.2500	.00	.00	.00	.00	.00
157.5000	.00	.00	.00	.00	.00
157.7500	.00	.00	.00	.00	.00
158.0000	.00	.00	.00	.00	.00
158.2500	.00	.00	.00	.00	.00
158.5000	.00	.00	.00	.00	.00
158.7500	.00	.00	.00	.00	.00
159.0000	.00	.00	.00	.00	.00
159.2500	.00	.00	.00	.00	.00
159.5000	.00	.00	.00	.00	.00
159.7500	.00	.00	.00	.00	.00
160.0000	.00	.00	.00	.00	.00
160.2500	.00	.00	.00	.00	.00
160.5000	.00	.00	.00	.00	.00
160.7500	.00	.00	.00	.00	.00
161.0000	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
161.2500	.00	.00	.00	.00	.00
161.5000	.00	.00	.00	.00	.00
161.7500	.00	.00	.00	.00	.00
162.0000	.00	.00	.00	.00	.00
162.2500	.00	.00	.00	.00	.00
162.5000	.00	.00	.00	.00	.00
162.7500	.00	.00	.00	.00	.00
163.0000	.00	.00	.00	.00	.00
163.2500	.00	.00	.00	.00	.00
163.5000	.00	.00	.00	.00	.00
163.7500	.00	.00	.00	.00	.00
164.0000	.00	.00	.00	.00	.00
164.2500	.00	.00	.00	.00	.00
164.5000	.00	.00	.00	.00	.00
164.7500	.00	.00	.00	.00	.00
165.0000	.00	.00	.00	.00	.00
165.2500	.00	.00	.00	.00	.00
165.5000	.00	.00	.00	.00	.00
165.7500	.00	.00	.00	.00	.00
166.0000	.00	.00	.00	.00	.00
166.2500	.00	.00	.00	.00	.00
166.5000	.00	.00	.00	.00	.00
166.7500	.00	.00	.00	.00	.00
167.0000	.00	.00	.00	.00	.00
167.2500	.00	.00	.00	.00	.00
167.5000	.00	.00	.00	.00	.00
167.7500	.00	.00	.00	.00	.00
168.0000	.00	.00	.00	.00	.00
168.2500	.00	.00	.00	.00	.00
168.5000	.00	.00	.00	.00	.00
168.7500	.00	.00	.00	.00	.00
169.0000	.00	.00	.00	.00	.00
169.2500	.00	.00	.00	.00	.00
169.5000	.00	.00	.00	.00	.00
169.7500	.00	.00	.00	.00	.00
170.0000	.00	.00	.00	.00	.00
170.2500	.00	.00	.00	.00	.00
170.5000	.00	.00	.00	.00	.00
170.7500	.00	.00	.00	.00	.00
171.0000	.00	.00	.00	.00	.00
171.2500	.00	.00	.00	.00	.00
171.5000	.00	.00	.00	.00	.00
171.7500	.00	.00	.00	.00	.00
172.0000	.00	.00	.00	.00	.00
172.2500	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
172.5000	.00	.00	.00	.00	.00
172.7500	.00	.00	.00	.00	.00
173.0000	.00	.00	.00	.00	.00
173.2500	.00	.00	.00	.00	.00
173.5000	.00	.00	.00	.00	.00
173.7500	.00	.00	.00	.00	.00
174.0000	.00	.00	.00	.00	.00
174.2500	.00	.00	.00	.00	.00
174.5000	.00	.00	.00	.00	.00
174.7500	.00	.00	.00	.00	.00
175.0000	.00	.00	.00	.00	.00
175.2500	.00	.00	.00	.00	.00
175.5000	.00	.00	.00	.00	.00
175.7500	.00	.00	.00	.00	.00
176.0000	.00	.00	.00	.00	.00
176.2500	.00	.00	.00	.00	.00
176.5000	.00	.00	.00	.00	.00
176.7500	.00	.00	.00	.00	.00
177.0000	.00	.00	.00	.00	.00
177.2500	.00	.00	.00	.00	.00
177.5000	.00	.00	.00	.00	.00
177.7500	.00	.00	.00	.00	.00
178.0000	.00	.00	.00	.00	.00
178.2500	.00	.00	.00	.00	.00
178.5000	.00	.00	.00	.00	.00
178.7500	.00	.00	.00	.00	.00
179.0000	.00	.00	.00	.00	.00
179.2500	.00	.00	.00	.00	.00
179.5000	.00	.00	.00	.00	.00
179.7500	.00	.00	.00	.00	.00
180.0000	.00				

POND ROUTED TOTAL OUTFLOW HYG...
HYG file =
HYG ID = REACH 1B
HYG Tag = 50

Peak Discharge = 62.06 cfs
Time to Peak = 12.3500 hrs
HYG Volume = 334375 cu.ft

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
6.5000	.00	.00	.00	.00	.00
6.7500	.00	.01	.01	.02	.02
7.0000	.03	.04	.05	.06	.08
7.2500	.09	.11	.13	.14	.16
7.5000	.18	.19	.21	.23	.26
7.7500	.28	.30	.32	.34	.36
8.0000	.38	.40	.42	.45	.47
8.2500	.49	.52	.55	.58	.61
8.5000	.64	.68	.71	.75	.78
8.7500	.82	.86	.90	.94	.99
9.0000	1.04	1.08	1.13	1.18	1.23
9.2500	1.28	1.33	1.38	1.43	1.49
9.5000	1.54	1.60	1.66	1.72	1.78
9.7500	1.85	1.91	1.97	2.03	2.10
10.0000	2.16	2.23	2.30	2.38	2.45
10.2500	2.53	2.61	2.70	2.79	2.89
10.5000	2.99	3.09	3.21	3.33	3.45
10.7500	3.57	3.70	3.82	3.95	4.09
11.0000	4.23	4.37	4.52	4.67	4.84
11.2500	5.04	5.26	5.53	5.82	6.15
11.5000	6.51	6.93	7.41	8.01	8.87
11.7500	10.06	11.66	13.74	16.33	19.66
12.0000	24.01	29.59	36.47	44.18	51.71
12.2500	57.60	61.05	62.06	60.83	57.81
12.5000	53.57	48.79	43.97	39.31	34.89
12.7500	30.81	27.21	24.14	21.55	19.38
13.0000	17.57	16.05	14.78	13.70	12.77
13.2500	11.97	11.27	10.69	10.19	9.77
13.5000	9.41	9.10	8.84	8.60	8.39
13.7500	8.20	8.02	7.85	7.69	7.54
14.0000	7.39	7.23	7.09	6.94	6.80

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
14.2500	6.67	6.54	6.43	6.32	6.22
14.5000	6.13	6.04	5.96	5.88	5.80
14.7500	5.73	5.65	5.58	5.51	5.43
15.0000	5.36	5.29	5.22	5.15	5.08
15.2500	5.01	4.94	4.87	4.79	4.72
15.5000	4.65	4.58	4.51	4.44	4.36
15.7500	4.29	4.22	4.15	4.08	4.01
16.0000	3.94	3.86	3.79	3.72	3.65
16.2500	3.59	3.53	3.47	3.42	3.37
16.5000	3.33	3.28	3.25	3.21	3.17
16.7500	3.14	3.11	3.07	3.04	3.01
17.0000	2.97	2.94	2.91	2.88	2.85
17.2500	2.82	2.78	2.75	2.72	2.69
17.5000	2.66	2.62	2.59	2.56	2.53
17.7500	2.50	2.47	2.43	2.40	2.37
18.0000	2.34	2.31	2.27	2.25	2.22
18.2500	2.19	2.16	2.14	2.12	2.10
18.5000	2.08	2.07	2.05	2.04	2.03
18.7500	2.02	2.00	1.99	1.98	1.97
19.0000	1.96	1.95	1.94	1.93	1.92
19.2500	1.91	1.91	1.90	1.89	1.88
19.5000	1.87	1.86	1.85	1.84	1.83
19.7500	1.82	1.81	1.80	1.79	1.78
20.0000	1.77	1.76	1.75	1.74	1.73
20.2500	1.73	1.72	1.71	1.70	1.69
20.5000	1.68	1.68	1.67	1.66	1.65
20.7500	1.65	1.64	1.63	1.62	1.62
21.0000	1.61	1.60	1.59	1.59	1.58
21.2500	1.57	1.57	1.56	1.55	1.55
21.5000	1.54	1.53	1.52	1.52	1.51
21.7500	1.50	1.49	1.49	1.48	1.47
22.0000	1.47	1.46	1.45	1.45	1.44
22.2500	1.43	1.42	1.42	1.41	1.40
22.5000	1.39	1.39	1.38	1.37	1.36
22.7500	1.36	1.35	1.34	1.34	1.33
23.0000	1.32	1.31	1.31	1.30	1.29
23.2500	1.28	1.28	1.27	1.26	1.26
23.5000	1.25	1.24	1.23	1.23	1.22
23.7500	1.21	1.21	1.20	1.19	1.18
24.0000	1.18	1.16	1.14	1.10	1.03
24.2500	.94	.83	.71	.59	.48
24.5000	.40	.32	.25	.20	.17
24.7500	.14	.11	.09	.07	.06
25.0000	.05	.04	.04	.03	.03
25.2500	.02	.02	.02	.01	.01

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
25.5000	.01	.01	.01	.01	.00
25.7500	.00	.00	.00	.00	.00
26.0000	.00	.00	.00	.00	.00
26.2500	.00	.00	.00	.00	.00
26.5000	.00	.00	.00	.00	.00
26.7500	.00	.00	.00	.00	.00
27.0000	.00	.00	.00	.00	.00
27.2500	.00	.00	.00	.00	.00
27.5000	.00	.00	.00	.00	.00
27.7500	.00	.00	.00	.00	.00
28.0000	.00	.00	.00	.00	.00
28.2500	.00	.00	.00	.00	.00
28.5000	.00	.00	.00	.00	.00
28.7500	.00	.00	.00	.00	.00
29.0000	.00	.00	.00	.00	.00
29.2500	.00	.00	.00	.00	.00
29.5000	.00	.00	.00	.00	.00
29.7500	.00	.00	.00	.00	.00
30.0000	.00	.00	.00	.00	.00
30.2500	.00	.00	.00	.00	.00
30.5000	.00	.00	.00	.00	.00
30.7500	.00	.00	.00	.00	.00
31.0000	.00	.00	.00	.00	.00
31.2500	.00	.00	.00	.00	.00
31.5000	.00	.00	.00	.00	.00
31.7500	.00	.00	.00	.00	.00
32.0000	.00	.00	.00	.00	.00
32.2500	.00	.00	.00	.00	.00
32.5000	.00	.00	.00	.00	.00
32.7500	.00	.00	.00	.00	.00
33.0000	.00	.00	.00	.00	.00
33.2500	.00	.00	.00	.00	.00
33.5000	.00	.00	.00	.00	.00
33.7500	.00	.00	.00	.00	.00
34.0000	.00	.00	.00	.00	.00
34.2500	.00	.00	.00	.00	.00
34.5000	.00	.00	.00	.00	.00
34.7500	.00	.00	.00	.00	.00
35.0000	.00	.00	.00	.00	.00
35.2500	.00	.00	.00	.00	.00
35.5000	.00	.00	.00	.00	.00
35.7500	.00	.00	.00	.00	.00
36.0000	.00	.00	.00	.00	.00
36.2500	.00	.00	.00	.00	.00
36.5000	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
36.7500	.00	.00	.00	.00	.00
37.0000	.00	.00	.00	.00	.00
37.2500	.00	.00	.00	.00	.00
37.5000	.00	.00	.00	.00	.00
37.7500	.00	.00	.00	.00	.00
38.0000	.00	.00	.00	.00	.00
38.2500	.00	.00	.00	.00	.00
38.5000	.00	.00	.00	.00	.00
38.7500	.00	.00	.00	.00	.00
39.0000	.00	.00	.00	.00	.00
39.2500	.00	.00	.00	.00	.00
39.5000	.00	.00	.00	.00	.00
39.7500	.00	.00	.00	.00	.00
40.0000	.00	.00	.00	.00	.00
40.2500	.00	.00	.00	.00	.00
40.5000	.00	.00	.00	.00	.00
40.7500	.00	.00	.00	.00	.00
41.0000	.00	.00	.00	.00	.00
41.2500	.00	.00	.00	.00	.00
41.5000	.00	.00	.00	.00	.00
41.7500	.00	.00	.00	.00	.00
42.0000	.00	.00	.00	.00	.00
42.2500	.00	.00	.00	.00	.00
42.5000	.00	.00	.00	.00	.00
42.7500	.00	.00	.00	.00	.00
43.0000	.00	.00	.00	.00	.00
43.2500	.00	.00	.00	.00	.00
43.5000	.00	.00	.00	.00	.00
43.7500	.00	.00	.00	.00	.00
44.0000	.00	.00	.00	.00	.00
44.2500	.00	.00	.00	.00	.00
44.5000	.00	.00	.00	.00	.00
44.7500	.00	.00	.00	.00	.00
45.0000	.00	.00	.00	.00	.00
45.2500	.00	.00	.00	.00	.00
45.5000	.00	.00	.00	.00	.00
45.7500	.00	.00	.00	.00	.00
46.0000	.00	.00	.00	.00	.00
46.2500	.00	.00	.00	.00	.00
46.5000	.00	.00	.00	.00	.00
46.7500	.00	.00	.00	.00	.00
47.0000	.00	.00	.00	.00	.00
47.2500	.00	.00	.00	.00	.00
47.5000	.00	.00	.00	.00	.00
47.7500	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
48.0000	.00	.00	.00	.00	.00
48.2500	.00	.00	.00	.00	.00
48.5000	.00	.00	.00	.00	.00
48.7500	.00	.00	.00	.00	.00
49.0000	.00	.00	.00	.00	.00
49.2500	.00	.00	.00	.00	.00
49.5000	.00	.00	.00	.00	.00
49.7500	.00	.00	.00	.00	.00
50.0000	.00	.00	.00	.00	.00
50.2500	.00	.00	.00	.00	.00
50.5000	.00	.00	.00	.00	.00
50.7500	.00	.00	.00	.00	.00
51.0000	.00	.00	.00	.00	.00
51.2500	.00	.00	.00	.00	.00
51.5000	.00	.00	.00	.00	.00
51.7500	.00	.00	.00	.00	.00
52.0000	.00	.00	.00	.00	.00
52.2500	.00	.00	.00	.00	.00
52.5000	.00	.00	.00	.00	.00
52.7500	.00	.00	.00	.00	.00
53.0000	.00	.00	.00	.00	.00
53.2500	.00	.00	.00	.00	.00
53.5000	.00	.00	.00	.00	.00
53.7500	.00	.00	.00	.00	.00
54.0000	.00	.00	.00	.00	.00
54.2500	.00	.00	.00	.00	.00
54.5000	.00	.00	.00	.00	.00
54.7500	.00	.00	.00	.00	.00
55.0000	.00	.00	.00	.00	.00
55.2500	.00	.00	.00	.00	.00
55.5000	.00	.00	.00	.00	.00
55.7500	.00	.00	.00	.00	.00
56.0000	.00	.00	.00	.00	.00
56.2500	.00	.00	.00	.00	.00
56.5000	.00	.00	.00	.00	.00
56.7500	.00	.00	.00	.00	.00
57.0000	.00	.00	.00	.00	.00
57.2500	.00	.00	.00	.00	.00
57.5000	.00	.00	.00	.00	.00
57.7500	.00	.00	.00	.00	.00
58.0000	.00	.00	.00	.00	.00
58.2500	.00	.00	.00	.00	.00
58.5000	.00	.00	.00	.00	.00
58.7500	.00	.00	.00	.00	.00
59.0000	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
59.2500	.00	.00	.00	.00	.00
59.5000	.00	.00	.00	.00	.00
59.7500	.00	.00	.00	.00	.00
60.0000	.00	.00	.00	.00	.00
60.2500	.00	.00	.00	.00	.00
60.5000	.00	.00	.00	.00	.00
60.7500	.00	.00	.00	.00	.00
61.0000	.00	.00	.00	.00	.00
61.2500	.00	.00	.00	.00	.00
61.5000	.00	.00	.00	.00	.00
61.7500	.00	.00	.00	.00	.00
62.0000	.00	.00	.00	.00	.00
62.2500	.00	.00	.00	.00	.00
62.5000	.00	.00	.00	.00	.00
62.7500	.00	.00	.00	.00	.00
63.0000	.00	.00	.00	.00	.00
63.2500	.00	.00	.00	.00	.00
63.5000	.00	.00	.00	.00	.00
63.7500	.00	.00	.00	.00	.00
64.0000	.00	.00	.00	.00	.00
64.2500	.00	.00	.00	.00	.00
64.5000	.00	.00	.00	.00	.00
64.7500	.00	.00	.00	.00	.00
65.0000	.00	.00	.00	.00	.00
65.2500	.00	.00	.00	.00	.00
65.5000	.00	.00	.00	.00	.00
65.7500	.00	.00	.00	.00	.00
66.0000	.00	.00	.00	.00	.00
66.2500	.00	.00	.00	.00	.00
66.5000	.00	.00	.00	.00	.00
66.7500	.00	.00	.00	.00	.00
67.0000	.00	.00	.00	.00	.00
67.2500	.00	.00	.00	.00	.00
67.5000	.00	.00	.00	.00	.00
67.7500	.00	.00	.00	.00	.00
68.0000	.00	.00	.00	.00	.00
68.2500	.00	.00	.00	.00	.00
68.5000	.00	.00	.00	.00	.00
68.7500	.00	.00	.00	.00	.00
69.0000	.00	.00	.00	.00	.00
69.2500	.00	.00	.00	.00	.00
69.5000	.00	.00	.00	.00	.00
69.7500	.00	.00	.00	.00	.00
70.0000	.00	.00	.00	.00	.00
70.2500	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
70.5000	.00	.00	.00	.00	.00
70.7500	.00	.00	.00	.00	.00
71.0000	.00	.00	.00	.00	.00
71.2500	.00	.00	.00	.00	.00
71.5000	.00	.00	.00	.00	.00
71.7500	.00	.00	.00	.00	.00
72.0000	.00	.00	.00	.00	.00
72.2500	.00	.00	.00	.00	.00
72.5000	.00	.00	.00	.00	.00
72.7500	.00	.00	.00	.00	.00
73.0000	.00	.00	.00	.00	.00
73.2500	.00	.00	.00	.00	.00
73.5000	.00	.00	.00	.00	.00
73.7500	.00	.00	.00	.00	.00
74.0000	.00	.00	.00	.00	.00
74.2500	.00	.00	.00	.00	.00
74.5000	.00	.00	.00	.00	.00
74.7500	.00	.00	.00	.00	.00
75.0000	.00	.00	.00	.00	.00
75.2500	.00	.00	.00	.00	.00
75.5000	.00	.00	.00	.00	.00
75.7500	.00	.00	.00	.00	.00
76.0000	.00	.00	.00	.00	.00
76.2500	.00	.00	.00	.00	.00
76.5000	.00	.00	.00	.00	.00
76.7500	.00	.00	.00	.00	.00
77.0000	.00	.00	.00	.00	.00
77.2500	.00	.00	.00	.00	.00
77.5000	.00	.00	.00	.00	.00
77.7500	.00	.00	.00	.00	.00
78.0000	.00	.00	.00	.00	.00
78.2500	.00	.00	.00	.00	.00
78.5000	.00	.00	.00	.00	.00
78.7500	.00	.00	.00	.00	.00
79.0000	.00	.00	.00	.00	.00
79.2500	.00	.00	.00	.00	.00
79.5000	.00	.00	.00	.00	.00
79.7500	.00	.00	.00	.00	.00
80.0000	.00	.00	.00	.00	.00
80.2500	.00	.00	.00	.00	.00
80.5000	.00	.00	.00	.00	.00
80.7500	.00	.00	.00	.00	.00
81.0000	.00	.00	.00	.00	.00
81.2500	.00	.00	.00	.00	.00
81.5000	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
81.7500	.00	.00	.00	.00	.00
82.0000	.00	.00	.00	.00	.00
82.2500	.00	.00	.00	.00	.00
82.5000	.00	.00	.00	.00	.00
82.7500	.00	.00	.00	.00	.00
83.0000	.00	.00	.00	.00	.00
83.2500	.00	.00	.00	.00	.00
83.5000	.00	.00	.00	.00	.00
83.7500	.00	.00	.00	.00	.00
84.0000	.00	.00	.00	.00	.00
84.2500	.00	.00	.00	.00	.00
84.5000	.00	.00	.00	.00	.00
84.7500	.00	.00	.00	.00	.00
85.0000	.00	.00	.00	.00	.00
85.2500	.00	.00	.00	.00	.00
85.5000	.00	.00	.00	.00	.00
85.7500	.00	.00	.00	.00	.00
86.0000	.00	.00	.00	.00	.00
86.2500	.00	.00	.00	.00	.00
86.5000	.00	.00	.00	.00	.00
86.7500	.00	.00	.00	.00	.00
87.0000	.00	.00	.00	.00	.00
87.2500	.00	.00	.00	.00	.00
87.5000	.00	.00	.00	.00	.00
87.7500	.00	.00	.00	.00	.00
88.0000	.00	.00	.00	.00	.00
88.2500	.00	.00	.00	.00	.00
88.5000	.00	.00	.00	.00	.00
88.7500	.00	.00	.00	.00	.00
89.0000	.00	.00	.00	.00	.00
89.2500	.00	.00	.00	.00	.00
89.5000	.00	.00	.00	.00	.00
89.7500	.00	.00	.00	.00	.00
90.0000	.00	.00	.00	.00	.00
90.2500	.00	.00	.00	.00	.00
90.5000	.00	.00	.00	.00	.00
90.7500	.00	.00	.00	.00	.00
91.0000	.00	.00	.00	.00	.00
91.2500	.00	.00	.00	.00	.00
91.5000	.00	.00	.00	.00	.00
91.7500	.00	.00	.00	.00	.00
92.0000	.00	.00	.00	.00	.00
92.2500	.00	.00	.00	.00	.00
92.5000	.00	.00	.00	.00	.00
92.7500	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
93.0000	.00	.00	.00	.00	.00
93.2500	.00	.00	.00	.00	.00
93.5000	.00	.00	.00	.00	.00
93.7500	.00	.00	.00	.00	.00
94.0000	.00	.00	.00	.00	.00
94.2500	.00	.00	.00	.00	.00
94.5000	.00	.00	.00	.00	.00
94.7500	.00	.00	.00	.00	.00
95.0000	.00	.00	.00	.00	.00
95.2500	.00	.00	.00	.00	.00
95.5000	.00	.00	.00	.00	.00
95.7500	.00	.00	.00	.00	.00
96.0000	.00	.00	.00	.00	.00
96.2500	.00	.00	.00	.00	.00
96.5000	.00	.00	.00	.00	.00
96.7500	.00	.00	.00	.00	.00
97.0000	.00	.00	.00	.00	.00
97.2500	.00	.00	.00	.00	.00
97.5000	.00	.00	.00	.00	.00
97.7500	.00	.00	.00	.00	.00
98.0000	.00	.00	.00	.00	.00
98.2500	.00	.00	.00	.00	.00
98.5000	.00	.00	.00	.00	.00
98.7500	.00	.00	.00	.00	.00
99.0000	.00	.00	.00	.00	.00
99.2500	.00	.00	.00	.00	.00
99.5000	.00	.00	.00	.00	.00
99.7500	.00	.00	.00	.00	.00
100.0000	.00	.00	.00	.00	.00
100.2500	.00	.00	.00	.00	.00
100.5000	.00	.00	.00	.00	.00
100.7500	.00	.00	.00	.00	.00
101.0000	.00	.00	.00	.00	.00
101.2500	.00	.00	.00	.00	.00
101.5000	.00	.00	.00	.00	.00
101.7500	.00	.00	.00	.00	.00
102.0000	.00	.00	.00	.00	.00
102.2500	.00	.00	.00	.00	.00
102.5000	.00	.00	.00	.00	.00
102.7500	.00	.00	.00	.00	.00
103.0000	.00	.00	.00	.00	.00
103.2500	.00	.00	.00	.00	.00
103.5000	.00	.00	.00	.00	.00
103.7500	.00	.00	.00	.00	.00
104.0000	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
104.2500	.00	.00	.00	.00	.00
104.5000	.00	.00	.00	.00	.00
104.7500	.00	.00	.00	.00	.00
105.0000	.00	.00	.00	.00	.00
105.2500	.00	.00	.00	.00	.00
105.5000	.00	.00	.00	.00	.00
105.7500	.00	.00	.00	.00	.00
106.0000	.00	.00	.00	.00	.00
106.2500	.00	.00	.00	.00	.00
106.5000	.00	.00	.00	.00	.00
106.7500	.00	.00	.00	.00	.00
107.0000	.00	.00	.00	.00	.00
107.2500	.00	.00	.00	.00	.00
107.5000	.00	.00	.00	.00	.00
107.7500	.00	.00	.00	.00	.00
108.0000	.00	.00	.00	.00	.00
108.2500	.00	.00	.00	.00	.00
108.5000	.00	.00	.00	.00	.00
108.7500	.00	.00	.00	.00	.00
109.0000	.00	.00	.00	.00	.00
109.2500	.00	.00	.00	.00	.00
109.5000	.00	.00	.00	.00	.00
109.7500	.00	.00	.00	.00	.00
110.0000	.00	.00	.00	.00	.00
110.2500	.00	.00	.00	.00	.00
110.5000	.00	.00	.00	.00	.00
110.7500	.00	.00	.00	.00	.00
111.0000	.00	.00	.00	.00	.00
111.2500	.00	.00	.00	.00	.00
111.5000	.00	.00	.00	.00	.00
111.7500	.00	.00	.00	.00	.00
112.0000	.00	.00	.00	.00	.00
112.2500	.00	.00	.00	.00	.00
112.5000	.00	.00	.00	.00	.00
112.7500	.00	.00	.00	.00	.00
113.0000	.00	.00	.00	.00	.00
113.2500	.00	.00	.00	.00	.00
113.5000	.00	.00	.00	.00	.00
113.7500	.00	.00	.00	.00	.00
114.0000	.00	.00	.00	.00	.00
114.2500	.00	.00	.00	.00	.00
114.5000	.00	.00	.00	.00	.00
114.7500	.00	.00	.00	.00	.00
115.0000	.00	.00	.00	.00	.00
115.2500	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
115.5000	.00	.00	.00	.00	.00
115.7500	.00	.00	.00	.00	.00
116.0000	.00	.00	.00	.00	.00
116.2500	.00	.00	.00	.00	.00
116.5000	.00	.00	.00	.00	.00
116.7500	.00	.00	.00	.00	.00
117.0000	.00	.00	.00	.00	.00
117.2500	.00	.00	.00	.00	.00
117.5000	.00	.00	.00	.00	.00
117.7500	.00	.00	.00	.00	.00
118.0000	.00	.00	.00	.00	.00
118.2500	.00	.00	.00	.00	.00
118.5000	.00	.00	.00	.00	.00
118.7500	.00	.00	.00	.00	.00
119.0000	.00	.00	.00	.00	.00
119.2500	.00	.00	.00	.00	.00
119.5000	.00	.00	.00	.00	.00
119.7500	.00	.00	.00	.00	.00
120.0000	.00	.00	.00	.00	.00
120.2500	.00	.00	.00	.00	.00
120.5000	.00	.00	.00	.00	.00
120.7500	.00	.00	.00	.00	.00
121.0000	.00	.00	.00	.00	.00
121.2500	.00	.00	.00	.00	.00
121.5000	.00	.00	.00	.00	.00
121.7500	.00	.00	.00	.00	.00
122.0000	.00	.00	.00	.00	.00
122.2500	.00	.00	.00	.00	.00
122.5000	.00	.00	.00	.00	.00
122.7500	.00	.00	.00	.00	.00
123.0000	.00	.00	.00	.00	.00
123.2500	.00	.00	.00	.00	.00
123.5000	.00	.00	.00	.00	.00
123.7500	.00	.00	.00	.00	.00
124.0000	.00	.00	.00	.00	.00
124.2500	.00	.00	.00	.00	.00
124.5000	.00	.00	.00	.00	.00
124.7500	.00	.00	.00	.00	.00
125.0000	.00	.00	.00	.00	.00
125.2500	.00	.00	.00	.00	.00
125.5000	.00	.00	.00	.00	.00
125.7500	.00	.00	.00	.00	.00
126.0000	.00	.00	.00	.00	.00
126.2500	.00	.00	.00	.00	.00
126.5000	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
126.7500	.00	.00	.00	.00	.00
127.0000	.00	.00	.00	.00	.00
127.2500	.00	.00	.00	.00	.00
127.5000	.00	.00	.00	.00	.00
127.7500	.00	.00	.00	.00	.00
128.0000	.00	.00	.00	.00	.00
128.2500	.00	.00	.00	.00	.00
128.5000	.00	.00	.00	.00	.00
128.7500	.00	.00	.00	.00	.00
129.0000	.00	.00	.00	.00	.00
129.2500	.00	.00	.00	.00	.00
129.5000	.00	.00	.00	.00	.00
129.7500	.00	.00	.00	.00	.00
130.0000	.00	.00	.00	.00	.00
130.2500	.00	.00	.00	.00	.00
130.5000	.00	.00	.00	.00	.00
130.7500	.00	.00	.00	.00	.00
131.0000	.00	.00	.00	.00	.00
131.2500	.00	.00	.00	.00	.00
131.5000	.00	.00	.00	.00	.00
131.7500	.00	.00	.00	.00	.00
132.0000	.00	.00	.00	.00	.00
132.2500	.00	.00	.00	.00	.00
132.5000	.00	.00	.00	.00	.00
132.7500	.00	.00	.00	.00	.00
133.0000	.00	.00	.00	.00	.00
133.2500	.00	.00	.00	.00	.00
133.5000	.00	.00	.00	.00	.00
133.7500	.00	.00	.00	.00	.00
134.0000	.00	.00	.00	.00	.00
134.2500	.00	.00	.00	.00	.00
134.5000	.00	.00	.00	.00	.00
134.7500	.00	.00	.00	.00	.00
135.0000	.00	.00	.00	.00	.00
135.2500	.00	.00	.00	.00	.00
135.5000	.00	.00	.00	.00	.00
135.7500	.00	.00	.00	.00	.00
136.0000	.00	.00	.00	.00	.00
136.2500	.00	.00	.00	.00	.00
136.5000	.00	.00	.00	.00	.00
136.7500	.00	.00	.00	.00	.00
137.0000	.00	.00	.00	.00	.00
137.2500	.00	.00	.00	.00	.00
137.5000	.00	.00	.00	.00	.00
137.7500	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
138.0000	.00	.00	.00	.00	.00
138.2500	.00	.00	.00	.00	.00
138.5000	.00	.00	.00	.00	.00
138.7500	.00	.00	.00	.00	.00
139.0000	.00	.00	.00	.00	.00
139.2500	.00	.00	.00	.00	.00
139.5000	.00	.00	.00	.00	.00
139.7500	.00	.00	.00	.00	.00
140.0000	.00	.00	.00	.00	.00
140.2500	.00	.00	.00	.00	.00
140.5000	.00	.00	.00	.00	.00
140.7500	.00	.00	.00	.00	.00
141.0000	.00	.00	.00	.00	.00
141.2500	.00	.00	.00	.00	.00
141.5000	.00	.00	.00	.00	.00
141.7500	.00	.00	.00	.00	.00
142.0000	.00	.00	.00	.00	.00
142.2500	.00	.00	.00	.00	.00
142.5000	.00	.00	.00	.00	.00
142.7500	.00	.00	.00	.00	.00
143.0000	.00	.00	.00	.00	.00
143.2500	.00	.00	.00	.00	.00
143.5000	.00	.00	.00	.00	.00
143.7500	.00	.00	.00	.00	.00
144.0000	.00	.00	.00	.00	.00
144.2500	.00	.00	.00	.00	.00
144.5000	.00	.00	.00	.00	.00
144.7500	.00	.00	.00	.00	.00
145.0000	.00	.00	.00	.00	.00
145.2500	.00	.00	.00	.00	.00
145.5000	.00	.00	.00	.00	.00
145.7500	.00	.00	.00	.00	.00
146.0000	.00	.00	.00	.00	.00
146.2500	.00	.00	.00	.00	.00
146.5000	.00	.00	.00	.00	.00
146.7500	.00	.00	.00	.00	.00
147.0000	.00	.00	.00	.00	.00
147.2500	.00	.00	.00	.00	.00
147.5000	.00	.00	.00	.00	.00
147.7500	.00	.00	.00	.00	.00
148.0000	.00	.00	.00	.00	.00
148.2500	.00	.00	.00	.00	.00
148.5000	.00	.00	.00	.00	.00
148.7500	.00	.00	.00	.00	.00
149.0000	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
149.2500	.00	.00	.00	.00	.00
149.5000	.00	.00	.00	.00	.00
149.7500	.00	.00	.00	.00	.00
150.0000	.00	.00	.00	.00	.00
150.2500	.00	.00	.00	.00	.00
150.5000	.00	.00	.00	.00	.00
150.7500	.00	.00	.00	.00	.00
151.0000	.00	.00	.00	.00	.00
151.2500	.00	.00	.00	.00	.00
151.5000	.00	.00	.00	.00	.00
151.7500	.00	.00	.00	.00	.00
152.0000	.00	.00	.00	.00	.00
152.2500	.00	.00	.00	.00	.00
152.5000	.00	.00	.00	.00	.00
152.7500	.00	.00	.00	.00	.00
153.0000	.00	.00	.00	.00	.00
153.2500	.00	.00	.00	.00	.00
153.5000	.00	.00	.00	.00	.00
153.7500	.00	.00	.00	.00	.00
154.0000	.00	.00	.00	.00	.00
154.2500	.00	.00	.00	.00	.00
154.5000	.00	.00	.00	.00	.00
154.7500	.00	.00	.00	.00	.00
155.0000	.00	.00	.00	.00	.00
155.2500	.00	.00	.00	.00	.00
155.5000	.00	.00	.00	.00	.00
155.7500	.00	.00	.00	.00	.00
156.0000	.00	.00	.00	.00	.00
156.2500	.00	.00	.00	.00	.00
156.5000	.00	.00	.00	.00	.00
156.7500	.00	.00	.00	.00	.00
157.0000	.00	.00	.00	.00	.00
157.2500	.00	.00	.00	.00	.00
157.5000	.00	.00	.00	.00	.00
157.7500	.00	.00	.00	.00	.00
158.0000	.00	.00	.00	.00	.00
158.2500	.00	.00	.00	.00	.00
158.5000	.00	.00	.00	.00	.00
158.7500	.00	.00	.00	.00	.00
159.0000	.00	.00	.00	.00	.00
159.2500	.00	.00	.00	.00	.00
159.5000	.00	.00	.00	.00	.00
159.7500	.00	.00	.00	.00	.00
160.0000	.00	.00	.00	.00	.00
160.2500	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
160.5000	.00	.00	.00	.00	.00
160.7500	.00	.00	.00	.00	.00
161.0000	.00	.00	.00	.00	.00
161.2500	.00	.00	.00	.00	.00
161.5000	.00	.00	.00	.00	.00
161.7500	.00	.00	.00	.00	.00
162.0000	.00	.00	.00	.00	.00
162.2500	.00	.00	.00	.00	.00
162.5000	.00	.00	.00	.00	.00
162.7500	.00	.00	.00	.00	.00
163.0000	.00	.00	.00	.00	.00
163.2500	.00	.00	.00	.00	.00
163.5000	.00	.00	.00	.00	.00
163.7500	.00	.00	.00	.00	.00
164.0000	.00	.00	.00	.00	.00
164.2500	.00	.00	.00	.00	.00
164.5000	.00	.00	.00	.00	.00
164.7500	.00	.00	.00	.00	.00
165.0000	.00	.00	.00	.00	.00
165.2500	.00	.00	.00	.00	.00
165.5000	.00	.00	.00	.00	.00
165.7500	.00	.00	.00	.00	.00
166.0000	.00	.00	.00	.00	.00
166.2500	.00	.00	.00	.00	.00
166.5000	.00	.00	.00	.00	.00
166.7500	.00	.00	.00	.00	.00
167.0000	.00	.00	.00	.00	.00
167.2500	.00	.00	.00	.00	.00
167.5000	.00	.00	.00	.00	.00
167.7500	.00	.00	.00	.00	.00
168.0000	.00	.00	.00	.00	.00
168.2500	.00	.00	.00	.00	.00
168.5000	.00	.00	.00	.00	.00
168.7500	.00	.00	.00	.00	.00
169.0000	.00	.00	.00	.00	.00
169.2500	.00	.00	.00	.00	.00
169.5000	.00	.00	.00	.00	.00
169.7500	.00	.00	.00	.00	.00
170.0000	.00	.00	.00	.00	.00
170.2500	.00	.00	.00	.00	.00
170.5000	.00	.00	.00	.00	.00
170.7500	.00	.00	.00	.00	.00
171.0000	.00	.00	.00	.00	.00
171.2500	.00	.00	.00	.00	.00
171.5000	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
171.7500	.00	.00	.00	.00	.00
172.0000	.00	.00	.00	.00	.00
172.2500	.00	.00	.00	.00	.00
172.5000	.00	.00	.00	.00	.00
172.7500	.00	.00	.00	.00	.00
173.0000	.00	.00	.00	.00	.00
173.2500	.00	.00	.00	.00	.00
173.5000	.00	.00	.00	.00	.00
173.7500	.00	.00	.00	.00	.00
174.0000	.00	.00	.00	.00	.00
174.2500	.00	.00	.00	.00	.00
174.5000	.00	.00	.00	.00	.00
174.7500	.00	.00	.00	.00	.00
175.0000	.00	.00	.00	.00	.00
175.2500	.00	.00	.00	.00	.00
175.5000	.00	.00	.00	.00	.00
175.7500	.00	.00	.00	.00	.00
176.0000	.00	.00	.00	.00	.00
176.2500	.00	.00	.00	.00	.00
176.5000	.00	.00	.00	.00	.00
176.7500	.00	.00	.00	.00	.00
177.0000	.00	.00	.00	.00	.00
177.2500	.00	.00	.00	.00	.00
177.5000	.00	.00	.00	.00	.00
177.7500	.00	.00	.00	.00	.00
178.0000	.00	.00	.00	.00	.00
178.2500	.00	.00	.00	.00	.00
178.5000	.00	.00	.00	.00	.00
178.7500	.00	.00	.00	.00	.00
179.0000	.00	.00	.00	.00	.00
179.2500	.00	.00	.00	.00	.00
179.5000	.00	.00	.00	.00	.00
179.7500	.00	.00	.00	.00	.00
180.0000	.00				

POND ROUTED TOTAL OUTFLOW HYG...
HYG file =
HYG ID = REACH 1B
HYG Tag = 100

Peak Discharge = 77.61 cfs
Time to Peak = 12.3500 hrs
HYG Volume = 423683 cu.ft

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
5.7500	.00	.00	.00	.00	.00
6.0000	.01	.01	.01	.02	.02
6.2500	.03	.04	.05	.06	.08
6.5000	.09	.11	.12	.14	.16
6.7500	.17	.19	.21	.23	.25
7.0000	.27	.29	.31	.34	.36
7.2500	.38	.40	.42	.45	.47
7.5000	.49	.52	.55	.58	.60
7.7500	.63	.66	.69	.72	.74
8.0000	.77	.80	.83	.86	.90
8.2500	.93	.96	1.01	1.05	1.09
8.5000	1.14	1.18	1.23	1.28	1.33
8.7500	1.39	1.44	1.50	1.55	1.62
9.0000	1.68	1.74	1.81	1.87	1.94
9.2500	2.01	2.08	2.15	2.22	2.29
9.5000	2.37	2.44	2.52	2.60	2.68
9.7500	2.76	2.84	2.92	3.00	3.09
10.0000	3.17	3.26	3.35	3.44	3.54
10.2500	3.64	3.74	3.86	3.98	4.10
10.5000	4.24	4.39	4.53	4.68	4.84
10.7500	4.99	5.15	5.32	5.49	5.66
11.0000	5.84	6.01	6.20	6.40	6.62
11.2500	6.88	7.17	7.50	7.88	8.32
11.5000	8.79	9.32	9.94	10.73	11.85
11.7500	13.40	15.49	18.19	21.54	25.80
12.0000	31.33	38.39	46.97	56.50	65.62
12.2500	72.53	76.40	77.61	76.75	73.19
12.5000	67.48	61.11	54.86	48.89	43.30
12.7500	38.17	33.64	29.82	26.59	23.89
13.0000	21.64	19.75	18.18	16.84	15.69
13.2500	14.69	13.84	13.11	12.50	11.99

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
13.5000	11.54	11.16	10.83	10.55	10.29
13.7500	10.05	9.83	9.62	9.42	9.23
14.0000	9.04	8.86	8.67	8.49	8.32
14.2500	8.16	8.00	7.86	7.73	7.61
14.5000	7.50	7.39	7.29	7.19	7.09
14.7500	7.00	6.91	6.82	6.73	6.64
15.0000	6.55	6.46	6.38	6.29	6.20
15.2500	6.11	6.03	5.94	5.85	5.76
15.5000	5.68	5.59	5.50	5.41	5.32
15.7500	5.24	5.15	5.06	4.97	4.89
16.0000	4.80	4.71	4.62	4.54	4.45
16.2500	4.37	4.30	4.23	4.17	4.11
16.5000	4.06	4.01	3.96	3.91	3.87
16.7500	3.83	3.78	3.74	3.70	3.66
17.0000	3.62	3.58	3.54	3.50	3.47
17.2500	3.43	3.39	3.35	3.31	3.27
17.5000	3.23	3.19	3.15	3.12	3.08
17.7500	3.04	3.00	2.96	2.92	2.89
18.0000	2.85	2.81	2.77	2.73	2.69
18.2500	2.66	2.63	2.60	2.57	2.55
18.5000	2.53	2.51	2.50	2.48	2.47
18.7500	2.45	2.44	2.43	2.41	2.40
19.0000	2.39	2.38	2.36	2.35	2.34
19.2500	2.33	2.32	2.31	2.29	2.28
19.5000	2.27	2.26	2.25	2.24	2.23
19.7500	2.21	2.20	2.19	2.18	2.17
20.0000	2.16	2.14	2.13	2.12	2.11
20.2500	2.10	2.09	2.08	2.07	2.06
20.5000	2.05	2.04	2.03	2.02	2.01
20.7500	2.00	1.99	1.98	1.97	1.96
21.0000	1.96	1.95	1.94	1.93	1.92
21.2500	1.91	1.90	1.90	1.89	1.88
21.5000	1.87	1.86	1.85	1.84	1.83
21.7500	1.82	1.81	1.81	1.80	1.79
22.0000	1.78	1.77	1.76	1.75	1.75
22.2500	1.74	1.73	1.72	1.71	1.70
22.5000	1.69	1.68	1.67	1.67	1.66
22.7500	1.65	1.64	1.63	1.62	1.61
23.0000	1.60	1.60	1.59	1.58	1.57
23.2500	1.56	1.55	1.54	1.53	1.53
23.5000	1.52	1.51	1.50	1.49	1.48
23.7500	1.47	1.46	1.46	1.45	1.44
24.0000	1.43	1.41	1.39	1.33	1.25
24.2500	1.13	.99	.85	.71	.57
24.5000	.46	.38	.30	.24	.19

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
24.7500	.16	.13	.11	.08	.07
25.0000	.05	.05	.04	.03	.03
25.2500	.02	.02	.02	.01	.01
25.5000	.01	.01	.01	.01	.00
25.7500	.00	.00	.00	.00	.00
26.0000	.00	.00	.00	.00	.00
26.2500	.00	.00	.00	.00	.00
26.5000	.00	.00	.00	.00	.00
26.7500	.00	.00	.00	.00	.00
27.0000	.00	.00	.00	.00	.00
27.2500	.00	.00	.00	.00	.00
27.5000	.00	.00	.00	.00	.00
27.7500	.00	.00	.00	.00	.00
28.0000	.00	.00	.00	.00	.00
28.2500	.00	.00	.00	.00	.00
28.5000	.00	.00	.00	.00	.00
28.7500	.00	.00	.00	.00	.00
29.0000	.00	.00	.00	.00	.00
29.2500	.00	.00	.00	.00	.00
29.5000	.00	.00	.00	.00	.00
29.7500	.00	.00	.00	.00	.00
30.0000	.00	.00	.00	.00	.00
30.2500	.00	.00	.00	.00	.00
30.5000	.00	.00	.00	.00	.00
30.7500	.00	.00	.00	.00	.00
31.0000	.00	.00	.00	.00	.00
31.2500	.00	.00	.00	.00	.00
31.5000	.00	.00	.00	.00	.00
31.7500	.00	.00	.00	.00	.00
32.0000	.00	.00	.00	.00	.00
32.2500	.00	.00	.00	.00	.00
32.5000	.00	.00	.00	.00	.00
32.7500	.00	.00	.00	.00	.00
33.0000	.00	.00	.00	.00	.00
33.2500	.00	.00	.00	.00	.00
33.5000	.00	.00	.00	.00	.00
33.7500	.00	.00	.00	.00	.00
34.0000	.00	.00	.00	.00	.00
34.2500	.00	.00	.00	.00	.00
34.5000	.00	.00	.00	.00	.00
34.7500	.00	.00	.00	.00	.00
35.0000	.00	.00	.00	.00	.00
35.2500	.00	.00	.00	.00	.00
35.5000	.00	.00	.00	.00	.00
35.7500	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
36.0000	.00	.00	.00	.00	.00
36.2500	.00	.00	.00	.00	.00
36.5000	.00	.00	.00	.00	.00
36.7500	.00	.00	.00	.00	.00
37.0000	.00	.00	.00	.00	.00
37.2500	.00	.00	.00	.00	.00
37.5000	.00	.00	.00	.00	.00
37.7500	.00	.00	.00	.00	.00
38.0000	.00	.00	.00	.00	.00
38.2500	.00	.00	.00	.00	.00
38.5000	.00	.00	.00	.00	.00
38.7500	.00	.00	.00	.00	.00
39.0000	.00	.00	.00	.00	.00
39.2500	.00	.00	.00	.00	.00
39.5000	.00	.00	.00	.00	.00
39.7500	.00	.00	.00	.00	.00
40.0000	.00	.00	.00	.00	.00
40.2500	.00	.00	.00	.00	.00
40.5000	.00	.00	.00	.00	.00
40.7500	.00	.00	.00	.00	.00
41.0000	.00	.00	.00	.00	.00
41.2500	.00	.00	.00	.00	.00
41.5000	.00	.00	.00	.00	.00
41.7500	.00	.00	.00	.00	.00
42.0000	.00	.00	.00	.00	.00
42.2500	.00	.00	.00	.00	.00
42.5000	.00	.00	.00	.00	.00
42.7500	.00	.00	.00	.00	.00
43.0000	.00	.00	.00	.00	.00
43.2500	.00	.00	.00	.00	.00
43.5000	.00	.00	.00	.00	.00
43.7500	.00	.00	.00	.00	.00
44.0000	.00	.00	.00	.00	.00
44.2500	.00	.00	.00	.00	.00
44.5000	.00	.00	.00	.00	.00
44.7500	.00	.00	.00	.00	.00
45.0000	.00	.00	.00	.00	.00
45.2500	.00	.00	.00	.00	.00
45.5000	.00	.00	.00	.00	.00
45.7500	.00	.00	.00	.00	.00
46.0000	.00	.00	.00	.00	.00
46.2500	.00	.00	.00	.00	.00
46.5000	.00	.00	.00	.00	.00
46.7500	.00	.00	.00	.00	.00
47.0000	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
47.2500	.00	.00	.00	.00	.00
47.5000	.00	.00	.00	.00	.00
47.7500	.00	.00	.00	.00	.00
48.0000	.00	.00	.00	.00	.00
48.2500	.00	.00	.00	.00	.00
48.5000	.00	.00	.00	.00	.00
48.7500	.00	.00	.00	.00	.00
49.0000	.00	.00	.00	.00	.00
49.2500	.00	.00	.00	.00	.00
49.5000	.00	.00	.00	.00	.00
49.7500	.00	.00	.00	.00	.00
50.0000	.00	.00	.00	.00	.00
50.2500	.00	.00	.00	.00	.00
50.5000	.00	.00	.00	.00	.00
50.7500	.00	.00	.00	.00	.00
51.0000	.00	.00	.00	.00	.00
51.2500	.00	.00	.00	.00	.00
51.5000	.00	.00	.00	.00	.00
51.7500	.00	.00	.00	.00	.00
52.0000	.00	.00	.00	.00	.00
52.2500	.00	.00	.00	.00	.00
52.5000	.00	.00	.00	.00	.00
52.7500	.00	.00	.00	.00	.00
53.0000	.00	.00	.00	.00	.00
53.2500	.00	.00	.00	.00	.00
53.5000	.00	.00	.00	.00	.00
53.7500	.00	.00	.00	.00	.00
54.0000	.00	.00	.00	.00	.00
54.2500	.00	.00	.00	.00	.00
54.5000	.00	.00	.00	.00	.00
54.7500	.00	.00	.00	.00	.00
55.0000	.00	.00	.00	.00	.00
55.2500	.00	.00	.00	.00	.00
55.5000	.00	.00	.00	.00	.00
55.7500	.00	.00	.00	.00	.00
56.0000	.00	.00	.00	.00	.00
56.2500	.00	.00	.00	.00	.00
56.5000	.00	.00	.00	.00	.00
56.7500	.00	.00	.00	.00	.00
57.0000	.00	.00	.00	.00	.00
57.2500	.00	.00	.00	.00	.00
57.5000	.00	.00	.00	.00	.00
57.7500	.00	.00	.00	.00	.00
58.0000	.00	.00	.00	.00	.00
58.2500	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
58.5000	.00	.00	.00	.00	.00
58.7500	.00	.00	.00	.00	.00
59.0000	.00	.00	.00	.00	.00
59.2500	.00	.00	.00	.00	.00
59.5000	.00	.00	.00	.00	.00
59.7500	.00	.00	.00	.00	.00
60.0000	.00	.00	.00	.00	.00
60.2500	.00	.00	.00	.00	.00
60.5000	.00	.00	.00	.00	.00
60.7500	.00	.00	.00	.00	.00
61.0000	.00	.00	.00	.00	.00
61.2500	.00	.00	.00	.00	.00
61.5000	.00	.00	.00	.00	.00
61.7500	.00	.00	.00	.00	.00
62.0000	.00	.00	.00	.00	.00
62.2500	.00	.00	.00	.00	.00
62.5000	.00	.00	.00	.00	.00
62.7500	.00	.00	.00	.00	.00
63.0000	.00	.00	.00	.00	.00
63.2500	.00	.00	.00	.00	.00
63.5000	.00	.00	.00	.00	.00
63.7500	.00	.00	.00	.00	.00
64.0000	.00	.00	.00	.00	.00
64.2500	.00	.00	.00	.00	.00
64.5000	.00	.00	.00	.00	.00
64.7500	.00	.00	.00	.00	.00
65.0000	.00	.00	.00	.00	.00
65.2500	.00	.00	.00	.00	.00
65.5000	.00	.00	.00	.00	.00
65.7500	.00	.00	.00	.00	.00
66.0000	.00	.00	.00	.00	.00
66.2500	.00	.00	.00	.00	.00
66.5000	.00	.00	.00	.00	.00
66.7500	.00	.00	.00	.00	.00
67.0000	.00	.00	.00	.00	.00
67.2500	.00	.00	.00	.00	.00
67.5000	.00	.00	.00	.00	.00
67.7500	.00	.00	.00	.00	.00
68.0000	.00	.00	.00	.00	.00
68.2500	.00	.00	.00	.00	.00
68.5000	.00	.00	.00	.00	.00
68.7500	.00	.00	.00	.00	.00
69.0000	.00	.00	.00	.00	.00
69.2500	.00	.00	.00	.00	.00
69.5000	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
69.7500	.00	.00	.00	.00	.00
70.0000	.00	.00	.00	.00	.00
70.2500	.00	.00	.00	.00	.00
70.5000	.00	.00	.00	.00	.00
70.7500	.00	.00	.00	.00	.00
71.0000	.00	.00	.00	.00	.00
71.2500	.00	.00	.00	.00	.00
71.5000	.00	.00	.00	.00	.00
71.7500	.00	.00	.00	.00	.00
72.0000	.00	.00	.00	.00	.00
72.2500	.00	.00	.00	.00	.00
72.5000	.00	.00	.00	.00	.00
72.7500	.00	.00	.00	.00	.00
73.0000	.00	.00	.00	.00	.00
73.2500	.00	.00	.00	.00	.00
73.5000	.00	.00	.00	.00	.00
73.7500	.00	.00	.00	.00	.00
74.0000	.00	.00	.00	.00	.00
74.2500	.00	.00	.00	.00	.00
74.5000	.00	.00	.00	.00	.00
74.7500	.00	.00	.00	.00	.00
75.0000	.00	.00	.00	.00	.00
75.2500	.00	.00	.00	.00	.00
75.5000	.00	.00	.00	.00	.00
75.7500	.00	.00	.00	.00	.00
76.0000	.00	.00	.00	.00	.00
76.2500	.00	.00	.00	.00	.00
76.5000	.00	.00	.00	.00	.00
76.7500	.00	.00	.00	.00	.00
77.0000	.00	.00	.00	.00	.00
77.2500	.00	.00	.00	.00	.00
77.5000	.00	.00	.00	.00	.00
77.7500	.00	.00	.00	.00	.00
78.0000	.00	.00	.00	.00	.00
78.2500	.00	.00	.00	.00	.00
78.5000	.00	.00	.00	.00	.00
78.7500	.00	.00	.00	.00	.00
79.0000	.00	.00	.00	.00	.00
79.2500	.00	.00	.00	.00	.00
79.5000	.00	.00	.00	.00	.00
79.7500	.00	.00	.00	.00	.00
80.0000	.00	.00	.00	.00	.00
80.2500	.00	.00	.00	.00	.00
80.5000	.00	.00	.00	.00	.00
80.7500	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
81.0000	.00	.00	.00	.00	.00
81.2500	.00	.00	.00	.00	.00
81.5000	.00	.00	.00	.00	.00
81.7500	.00	.00	.00	.00	.00
82.0000	.00	.00	.00	.00	.00
82.2500	.00	.00	.00	.00	.00
82.5000	.00	.00	.00	.00	.00
82.7500	.00	.00	.00	.00	.00
83.0000	.00	.00	.00	.00	.00
83.2500	.00	.00	.00	.00	.00
83.5000	.00	.00	.00	.00	.00
83.7500	.00	.00	.00	.00	.00
84.0000	.00	.00	.00	.00	.00
84.2500	.00	.00	.00	.00	.00
84.5000	.00	.00	.00	.00	.00
84.7500	.00	.00	.00	.00	.00
85.0000	.00	.00	.00	.00	.00
85.2500	.00	.00	.00	.00	.00
85.5000	.00	.00	.00	.00	.00
85.7500	.00	.00	.00	.00	.00
86.0000	.00	.00	.00	.00	.00
86.2500	.00	.00	.00	.00	.00
86.5000	.00	.00	.00	.00	.00
86.7500	.00	.00	.00	.00	.00
87.0000	.00	.00	.00	.00	.00
87.2500	.00	.00	.00	.00	.00
87.5000	.00	.00	.00	.00	.00
87.7500	.00	.00	.00	.00	.00
88.0000	.00	.00	.00	.00	.00
88.2500	.00	.00	.00	.00	.00
88.5000	.00	.00	.00	.00	.00
88.7500	.00	.00	.00	.00	.00
89.0000	.00	.00	.00	.00	.00
89.2500	.00	.00	.00	.00	.00
89.5000	.00	.00	.00	.00	.00
89.7500	.00	.00	.00	.00	.00
90.0000	.00	.00	.00	.00	.00
90.2500	.00	.00	.00	.00	.00
90.5000	.00	.00	.00	.00	.00
90.7500	.00	.00	.00	.00	.00
91.0000	.00	.00	.00	.00	.00
91.2500	.00	.00	.00	.00	.00
91.5000	.00	.00	.00	.00	.00
91.7500	.00	.00	.00	.00	.00
92.0000	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
92.2500	.00	.00	.00	.00	.00
92.5000	.00	.00	.00	.00	.00
92.7500	.00	.00	.00	.00	.00
93.0000	.00	.00	.00	.00	.00
93.2500	.00	.00	.00	.00	.00
93.5000	.00	.00	.00	.00	.00
93.7500	.00	.00	.00	.00	.00
94.0000	.00	.00	.00	.00	.00
94.2500	.00	.00	.00	.00	.00
94.5000	.00	.00	.00	.00	.00
94.7500	.00	.00	.00	.00	.00
95.0000	.00	.00	.00	.00	.00
95.2500	.00	.00	.00	.00	.00
95.5000	.00	.00	.00	.00	.00
95.7500	.00	.00	.00	.00	.00
96.0000	.00	.00	.00	.00	.00
96.2500	.00	.00	.00	.00	.00
96.5000	.00	.00	.00	.00	.00
96.7500	.00	.00	.00	.00	.00
97.0000	.00	.00	.00	.00	.00
97.2500	.00	.00	.00	.00	.00
97.5000	.00	.00	.00	.00	.00
97.7500	.00	.00	.00	.00	.00
98.0000	.00	.00	.00	.00	.00
98.2500	.00	.00	.00	.00	.00
98.5000	.00	.00	.00	.00	.00
98.7500	.00	.00	.00	.00	.00
99.0000	.00	.00	.00	.00	.00
99.2500	.00	.00	.00	.00	.00
99.5000	.00	.00	.00	.00	.00
99.7500	.00	.00	.00	.00	.00
100.0000	.00	.00	.00	.00	.00
100.2500	.00	.00	.00	.00	.00
100.5000	.00	.00	.00	.00	.00
100.7500	.00	.00	.00	.00	.00
101.0000	.00	.00	.00	.00	.00
101.2500	.00	.00	.00	.00	.00
101.5000	.00	.00	.00	.00	.00
101.7500	.00	.00	.00	.00	.00
102.0000	.00	.00	.00	.00	.00
102.2500	.00	.00	.00	.00	.00
102.5000	.00	.00	.00	.00	.00
102.7500	.00	.00	.00	.00	.00
103.0000	.00	.00	.00	.00	.00
103.2500	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
103.5000	.00	.00	.00	.00	.00
103.7500	.00	.00	.00	.00	.00
104.0000	.00	.00	.00	.00	.00
104.2500	.00	.00	.00	.00	.00
104.5000	.00	.00	.00	.00	.00
104.7500	.00	.00	.00	.00	.00
105.0000	.00	.00	.00	.00	.00
105.2500	.00	.00	.00	.00	.00
105.5000	.00	.00	.00	.00	.00
105.7500	.00	.00	.00	.00	.00
106.0000	.00	.00	.00	.00	.00
106.2500	.00	.00	.00	.00	.00
106.5000	.00	.00	.00	.00	.00
106.7500	.00	.00	.00	.00	.00
107.0000	.00	.00	.00	.00	.00
107.2500	.00	.00	.00	.00	.00
107.5000	.00	.00	.00	.00	.00
107.7500	.00	.00	.00	.00	.00
108.0000	.00	.00	.00	.00	.00
108.2500	.00	.00	.00	.00	.00
108.5000	.00	.00	.00	.00	.00
108.7500	.00	.00	.00	.00	.00
109.0000	.00	.00	.00	.00	.00
109.2500	.00	.00	.00	.00	.00
109.5000	.00	.00	.00	.00	.00
109.7500	.00	.00	.00	.00	.00
110.0000	.00	.00	.00	.00	.00
110.2500	.00	.00	.00	.00	.00
110.5000	.00	.00	.00	.00	.00
110.7500	.00	.00	.00	.00	.00
111.0000	.00	.00	.00	.00	.00
111.2500	.00	.00	.00	.00	.00
111.5000	.00	.00	.00	.00	.00
111.7500	.00	.00	.00	.00	.00
112.0000	.00	.00	.00	.00	.00
112.2500	.00	.00	.00	.00	.00
112.5000	.00	.00	.00	.00	.00
112.7500	.00	.00	.00	.00	.00
113.0000	.00	.00	.00	.00	.00
113.2500	.00	.00	.00	.00	.00
113.5000	.00	.00	.00	.00	.00
113.7500	.00	.00	.00	.00	.00
114.0000	.00	.00	.00	.00	.00
114.2500	.00	.00	.00	.00	.00
114.5000	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
114.7500	.00	.00	.00	.00	.00
115.0000	.00	.00	.00	.00	.00
115.2500	.00	.00	.00	.00	.00
115.5000	.00	.00	.00	.00	.00
115.7500	.00	.00	.00	.00	.00
116.0000	.00	.00	.00	.00	.00
116.2500	.00	.00	.00	.00	.00
116.5000	.00	.00	.00	.00	.00
116.7500	.00	.00	.00	.00	.00
117.0000	.00	.00	.00	.00	.00
117.2500	.00	.00	.00	.00	.00
117.5000	.00	.00	.00	.00	.00
117.7500	.00	.00	.00	.00	.00
118.0000	.00	.00	.00	.00	.00
118.2500	.00	.00	.00	.00	.00
118.5000	.00	.00	.00	.00	.00
118.7500	.00	.00	.00	.00	.00
119.0000	.00	.00	.00	.00	.00
119.2500	.00	.00	.00	.00	.00
119.5000	.00	.00	.00	.00	.00
119.7500	.00	.00	.00	.00	.00
120.0000	.00	.00	.00	.00	.00
120.2500	.00	.00	.00	.00	.00
120.5000	.00	.00	.00	.00	.00
120.7500	.00	.00	.00	.00	.00
121.0000	.00	.00	.00	.00	.00
121.2500	.00	.00	.00	.00	.00
121.5000	.00	.00	.00	.00	.00
121.7500	.00	.00	.00	.00	.00
122.0000	.00	.00	.00	.00	.00
122.2500	.00	.00	.00	.00	.00
122.5000	.00	.00	.00	.00	.00
122.7500	.00	.00	.00	.00	.00
123.0000	.00	.00	.00	.00	.00
123.2500	.00	.00	.00	.00	.00
123.5000	.00	.00	.00	.00	.00
123.7500	.00	.00	.00	.00	.00
124.0000	.00	.00	.00	.00	.00
124.2500	.00	.00	.00	.00	.00
124.5000	.00	.00	.00	.00	.00
124.7500	.00	.00	.00	.00	.00
125.0000	.00	.00	.00	.00	.00
125.2500	.00	.00	.00	.00	.00
125.5000	.00	.00	.00	.00	.00
125.7500	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
126.0000	.00	.00	.00	.00	.00
126.2500	.00	.00	.00	.00	.00
126.5000	.00	.00	.00	.00	.00
126.7500	.00	.00	.00	.00	.00
127.0000	.00	.00	.00	.00	.00
127.2500	.00	.00	.00	.00	.00
127.5000	.00	.00	.00	.00	.00
127.7500	.00	.00	.00	.00	.00
128.0000	.00	.00	.00	.00	.00
128.2500	.00	.00	.00	.00	.00
128.5000	.00	.00	.00	.00	.00
128.7500	.00	.00	.00	.00	.00
129.0000	.00	.00	.00	.00	.00
129.2500	.00	.00	.00	.00	.00
129.5000	.00	.00	.00	.00	.00
129.7500	.00	.00	.00	.00	.00
130.0000	.00	.00	.00	.00	.00
130.2500	.00	.00	.00	.00	.00
130.5000	.00	.00	.00	.00	.00
130.7500	.00	.00	.00	.00	.00
131.0000	.00	.00	.00	.00	.00
131.2500	.00	.00	.00	.00	.00
131.5000	.00	.00	.00	.00	.00
131.7500	.00	.00	.00	.00	.00
132.0000	.00	.00	.00	.00	.00
132.2500	.00	.00	.00	.00	.00
132.5000	.00	.00	.00	.00	.00
132.7500	.00	.00	.00	.00	.00
133.0000	.00	.00	.00	.00	.00
133.2500	.00	.00	.00	.00	.00
133.5000	.00	.00	.00	.00	.00
133.7500	.00	.00	.00	.00	.00
134.0000	.00	.00	.00	.00	.00
134.2500	.00	.00	.00	.00	.00
134.5000	.00	.00	.00	.00	.00
134.7500	.00	.00	.00	.00	.00
135.0000	.00	.00	.00	.00	.00
135.2500	.00	.00	.00	.00	.00
135.5000	.00	.00	.00	.00	.00
135.7500	.00	.00	.00	.00	.00
136.0000	.00	.00	.00	.00	.00
136.2500	.00	.00	.00	.00	.00
136.5000	.00	.00	.00	.00	.00
136.7500	.00	.00	.00	.00	.00
137.0000	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
137.2500	.00	.00	.00	.00	.00
137.5000	.00	.00	.00	.00	.00
137.7500	.00	.00	.00	.00	.00
138.0000	.00	.00	.00	.00	.00
138.2500	.00	.00	.00	.00	.00
138.5000	.00	.00	.00	.00	.00
138.7500	.00	.00	.00	.00	.00
139.0000	.00	.00	.00	.00	.00
139.2500	.00	.00	.00	.00	.00
139.5000	.00	.00	.00	.00	.00
139.7500	.00	.00	.00	.00	.00
140.0000	.00	.00	.00	.00	.00
140.2500	.00	.00	.00	.00	.00
140.5000	.00	.00	.00	.00	.00
140.7500	.00	.00	.00	.00	.00
141.0000	.00	.00	.00	.00	.00
141.2500	.00	.00	.00	.00	.00
141.5000	.00	.00	.00	.00	.00
141.7500	.00	.00	.00	.00	.00
142.0000	.00	.00	.00	.00	.00
142.2500	.00	.00	.00	.00	.00
142.5000	.00	.00	.00	.00	.00
142.7500	.00	.00	.00	.00	.00
143.0000	.00	.00	.00	.00	.00
143.2500	.00	.00	.00	.00	.00
143.5000	.00	.00	.00	.00	.00
143.7500	.00	.00	.00	.00	.00
144.0000	.00	.00	.00	.00	.00
144.2500	.00	.00	.00	.00	.00
144.5000	.00	.00	.00	.00	.00
144.7500	.00	.00	.00	.00	.00
145.0000	.00	.00	.00	.00	.00
145.2500	.00	.00	.00	.00	.00
145.5000	.00	.00	.00	.00	.00
145.7500	.00	.00	.00	.00	.00
146.0000	.00	.00	.00	.00	.00
146.2500	.00	.00	.00	.00	.00
146.5000	.00	.00	.00	.00	.00
146.7500	.00	.00	.00	.00	.00
147.0000	.00	.00	.00	.00	.00
147.2500	.00	.00	.00	.00	.00
147.5000	.00	.00	.00	.00	.00
147.7500	.00	.00	.00	.00	.00
148.0000	.00	.00	.00	.00	.00
148.2500	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
148.5000	.00	.00	.00	.00	.00
148.7500	.00	.00	.00	.00	.00
149.0000	.00	.00	.00	.00	.00
149.2500	.00	.00	.00	.00	.00
149.5000	.00	.00	.00	.00	.00
149.7500	.00	.00	.00	.00	.00
150.0000	.00	.00	.00	.00	.00
150.2500	.00	.00	.00	.00	.00
150.5000	.00	.00	.00	.00	.00
150.7500	.00	.00	.00	.00	.00
151.0000	.00	.00	.00	.00	.00
151.2500	.00	.00	.00	.00	.00
151.5000	.00	.00	.00	.00	.00
151.7500	.00	.00	.00	.00	.00
152.0000	.00	.00	.00	.00	.00
152.2500	.00	.00	.00	.00	.00
152.5000	.00	.00	.00	.00	.00
152.7500	.00	.00	.00	.00	.00
153.0000	.00	.00	.00	.00	.00
153.2500	.00	.00	.00	.00	.00
153.5000	.00	.00	.00	.00	.00
153.7500	.00	.00	.00	.00	.00
154.0000	.00	.00	.00	.00	.00
154.2500	.00	.00	.00	.00	.00
154.5000	.00	.00	.00	.00	.00
154.7500	.00	.00	.00	.00	.00
155.0000	.00	.00	.00	.00	.00
155.2500	.00	.00	.00	.00	.00
155.5000	.00	.00	.00	.00	.00
155.7500	.00	.00	.00	.00	.00
156.0000	.00	.00	.00	.00	.00
156.2500	.00	.00	.00	.00	.00
156.5000	.00	.00	.00	.00	.00
156.7500	.00	.00	.00	.00	.00
157.0000	.00	.00	.00	.00	.00
157.2500	.00	.00	.00	.00	.00
157.5000	.00	.00	.00	.00	.00
157.7500	.00	.00	.00	.00	.00
158.0000	.00	.00	.00	.00	.00
158.2500	.00	.00	.00	.00	.00
158.5000	.00	.00	.00	.00	.00
158.7500	.00	.00	.00	.00	.00
159.0000	.00	.00	.00	.00	.00
159.2500	.00	.00	.00	.00	.00
159.5000	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
159.7500	.00	.00	.00	.00	.00
160.0000	.00	.00	.00	.00	.00
160.2500	.00	.00	.00	.00	.00
160.5000	.00	.00	.00	.00	.00
160.7500	.00	.00	.00	.00	.00
161.0000	.00	.00	.00	.00	.00
161.2500	.00	.00	.00	.00	.00
161.5000	.00	.00	.00	.00	.00
161.7500	.00	.00	.00	.00	.00
162.0000	.00	.00	.00	.00	.00
162.2500	.00	.00	.00	.00	.00
162.5000	.00	.00	.00	.00	.00
162.7500	.00	.00	.00	.00	.00
163.0000	.00	.00	.00	.00	.00
163.2500	.00	.00	.00	.00	.00
163.5000	.00	.00	.00	.00	.00
163.7500	.00	.00	.00	.00	.00
164.0000	.00	.00	.00	.00	.00
164.2500	.00	.00	.00	.00	.00
164.5000	.00	.00	.00	.00	.00
164.7500	.00	.00	.00	.00	.00
165.0000	.00	.00	.00	.00	.00
165.2500	.00	.00	.00	.00	.00
165.5000	.00	.00	.00	.00	.00
165.7500	.00	.00	.00	.00	.00
166.0000	.00	.00	.00	.00	.00
166.2500	.00	.00	.00	.00	.00
166.5000	.00	.00	.00	.00	.00
166.7500	.00	.00	.00	.00	.00
167.0000	.00	.00	.00	.00	.00
167.2500	.00	.00	.00	.00	.00
167.5000	.00	.00	.00	.00	.00
167.7500	.00	.00	.00	.00	.00
168.0000	.00	.00	.00	.00	.00
168.2500	.00	.00	.00	.00	.00
168.5000	.00	.00	.00	.00	.00
168.7500	.00	.00	.00	.00	.00
169.0000	.00	.00	.00	.00	.00
169.2500	.00	.00	.00	.00	.00
169.5000	.00	.00	.00	.00	.00
169.7500	.00	.00	.00	.00	.00
170.0000	.00	.00	.00	.00	.00
170.2500	.00	.00	.00	.00	.00
170.5000	.00	.00	.00	.00	.00
170.7500	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
171.0000	.00	.00	.00	.00	.00
171.2500	.00	.00	.00	.00	.00
171.5000	.00	.00	.00	.00	.00
171.7500	.00	.00	.00	.00	.00
172.0000	.00	.00	.00	.00	.00
172.2500	.00	.00	.00	.00	.00
172.5000	.00	.00	.00	.00	.00
172.7500	.00	.00	.00	.00	.00
173.0000	.00	.00	.00	.00	.00
173.2500	.00	.00	.00	.00	.00
173.5000	.00	.00	.00	.00	.00
173.7500	.00	.00	.00	.00	.00
174.0000	.00	.00	.00	.00	.00
174.2500	.00	.00	.00	.00	.00
174.5000	.00	.00	.00	.00	.00
174.7500	.00	.00	.00	.00	.00
175.0000	.00	.00	.00	.00	.00
175.2500	.00	.00	.00	.00	.00
175.5000	.00	.00	.00	.00	.00
175.7500	.00	.00	.00	.00	.00
176.0000	.00	.00	.00	.00	.00
176.2500	.00	.00	.00	.00	.00
176.5000	.00	.00	.00	.00	.00
176.7500	.00	.00	.00	.00	.00
177.0000	.00	.00	.00	.00	.00
177.2500	.00	.00	.00	.00	.00
177.5000	.00	.00	.00	.00	.00
177.7500	.00	.00	.00	.00	.00
178.0000	.00	.00	.00	.00	.00
178.2500	.00	.00	.00	.00	.00
178.5000	.00	.00	.00	.00	.00
178.7500	.00	.00	.00	.00	.00
179.0000	.00	.00	.00	.00	.00
179.2500	.00	.00	.00	.00	.00
179.5000	.00	.00	.00	.00	.00
179.7500	.00	.00	.00	.00	.00
180.0000	.00				

SUMMARY FOR HYDROGRAPH ADDITION
at Node: DESIGN POINT 1

HYG Directory: S:\2010\10170\PondPack\2016-10-14_BD\

Upstream Link ID	Upstream Node ID	HYG file	HYG ID	HYG tag
OCS 1A	BASIN 1A		OCS 1A	1
REACH 1B	JUNC 1B		REACH 1B	1

INFLOWS TO: DESIGN POINT 1

HYG file	HYG ID	HYG tag	Volume cu.ft	Peak Time hrs	Peak Flow cfs
	OCS 1A	1	115638	16.1500	1.49
	REACH 1B	1	65630	12.4000	11.63

TOTAL FLOW INTO: DESIGN POINT 1

HYG file	HYG ID	HYG tag	Volume cu.ft	Peak Time hrs	Peak Flow cfs
	DESIGN POINT 1	1	181271	12.4000	12.42

TOTAL NODE INFLOW...
HYG file =
HYG ID = DESIGN POINT 1
HYG Tag = 1

Peak Discharge = 12.42 cfs
Time to Peak = 12.4000 hrs
HYG Volume = 181271 cu.ft

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
9.7500	.00	.00	.00	.00	.00
10.0000	.00	.00	.00	.00	.00
10.2500	.00	.00	.00	.00	.00
10.5000	.00	.01	.01	.01	.01
10.7500	.01	.02	.03	.03	.04
11.0000	.06	.08	.10	.12	.15
11.2500	.18	.21	.24	.28	.33
11.5000	.38	.44	.50	.58	.70
11.7500	.85	1.04	1.34	1.71	2.24
12.0000	3.00	4.04	5.38	6.99	8.74
12.2500	10.32	11.50	12.20	12.42	12.24
12.5000	11.73	11.04	10.25	9.45	8.63
12.7500	7.85	7.14	6.51	5.97	5.51
13.0000	5.12	4.81	4.53	4.29	4.09
13.2500	3.91	3.76	3.63	3.52	3.42
13.5000	3.34	3.27	3.22	3.17	3.12
13.7500	3.08	3.04	3.00	2.97	2.93
14.0000	2.90	2.87	2.84	2.80	2.77
14.2500	2.74	2.72	2.69	2.67	2.64
14.5000	2.62	2.61	2.59	2.57	2.56
14.7500	2.54	2.52	2.51	2.49	2.48
15.0000	2.46	2.45	2.43	2.41	2.40
15.2500	2.38	2.37	2.35	2.33	2.32
15.5000	2.30	2.28	2.34	2.39	2.43
15.7500	2.46	2.48	2.49	2.50	2.51
16.0000	2.50	2.50	2.49	2.47	2.46
16.2500	2.44	2.42	2.41	2.39	2.37
16.5000	2.35	2.33	2.31	2.29	2.28
16.7500	2.26	2.24	2.22	2.20	2.18
17.0000	2.16	2.14	2.12	2.10	2.08
17.2500	2.06	2.04	2.02	2.00	1.98

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
17.5000	1.96	1.94	1.92	1.89	1.87
17.7500	1.85	1.83	1.81	1.78	1.76
18.0000	1.74	1.72	1.70	1.68	1.66
18.2500	1.67	1.67	1.66	1.66	1.65
18.5000	1.65	1.64	1.64	1.63	1.63
18.7500	1.63	1.62	1.62	1.62	1.61
19.0000	1.61	1.61	1.61	1.60	1.60
19.2500	1.60	1.60	1.59	1.59	1.59
19.5000	1.59	1.58	1.58	1.58	1.58
19.7500	1.57	1.57	1.57	1.56	1.56
20.0000	1.56	1.56	1.55	1.55	1.55
20.2500	1.54	1.54	1.54	1.54	1.53
20.5000	1.53	1.53	1.53	1.52	1.52
20.7500	1.52	1.52	1.52	1.51	1.51
21.0000	1.51	1.51	1.50	1.50	1.50
21.2500	1.50	1.50	1.49	1.49	1.49
21.5000	1.49	1.48	1.48	1.48	1.48
21.7500	1.47	1.47	1.47	1.47	1.46
22.0000	1.46	1.46	1.46	1.46	1.45
22.2500	1.45	1.45	1.45	1.44	1.44
22.5000	1.44	1.44	1.43	1.43	1.43
22.7500	1.43	1.42	1.42	1.42	1.42
23.0000	1.41	1.41	1.41	1.41	1.40
23.2500	1.40	1.40	1.40	1.39	1.39
23.5000	1.39	1.39	1.38	1.38	1.38
23.7500	1.38	1.37	1.37	1.37	1.37
24.0000	1.36	1.36	1.35	1.34	1.33
24.2500	1.30	1.27	1.24	1.22	1.19
24.5000	1.16	1.14	1.11	1.10	1.08
24.7500	1.07	1.06	1.06	1.05	1.04
25.0000	1.04	1.03	1.03	1.03	1.02
25.2500	1.02	1.02	1.01	1.01	1.01
25.5000	1.01	1.01	1.00	1.00	1.00
25.7500	1.00	1.00	1.00	.99	.99
26.0000	.99	.99	.99	.99	.98
26.2500	.98	.98	.98	.98	.98
26.5000	.97	.97	.97	.97	.97
26.7500	.97	.96	.96	.96	.96
27.0000	.96	.96	.95	.95	.95
27.2500	.95	.95	.95	.94	.94
27.5000	.94	.94	.94	.94	.93
27.7500	.93	.93	.93	.93	.93
28.0000	.92	.92	.92	.92	.92
28.2500	.92	.91	.91	.91	.91
28.5000	.91	.91	.90	.90	.90

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
28.7500	.90	.90	.90	.89	.89
29.0000	.89	.89	.89	.89	.88
29.2500	.88	.88	.88	.88	.88
29.5000	.87	.87	.87	.87	.87
29.7500	.87	.86	.86	.86	.86
30.0000	.86	.86	.85	.85	.85
30.2500	.85	.85	.85	.84	.84
30.5000	.84	.84	.84	.84	.83
30.7500	.83	.83	.83	.83	.83
31.0000	.82	.82	.82	.82	.82
31.2500	.82	.81	.81	.81	.81
31.5000	.81	.81	.80	.80	.80
31.7500	.80	.80	.80	.79	.79
32.0000	.79	.79	.79	.79	.78
32.2500	.78	.78	.78	.78	.78
32.5000	.77	.77	.77	.77	.77
32.7500	.77	.76	.76	.76	.76
33.0000	.76	.76	.75	.75	.75
33.2500	.75	.75	.75	.75	.74
33.5000	.74	.74	.74	.74	.74
33.7500	.73	.73	.73	.73	.73
34.0000	.73	.72	.72	.72	.72
34.2500	.72	.72	.71	.71	.71
34.5000	.71	.71	.71	.70	.70
34.7500	.70	.70	.70	.70	.69
35.0000	.69	.69	.69	.69	.69
35.2500	.68	.68	.68	.68	.68
35.5000	.68	.67	.67	.67	.67
35.7500	.67	.67	.66	.66	.66
36.0000	.66	.66	.66	.65	.65
36.2500	.65	.65	.65	.65	.64
36.5000	.64	.64	.64	.64	.64
36.7500	.63	.63	.63	.63	.63
37.0000	.63	.62	.62	.62	.62
37.2500	.62	.62	.61	.61	.61
37.5000	.61	.61	.61	.60	.60
37.7500	.60	.60	.60	.60	.59
38.0000	.59	.59	.59	.59	.59
38.2500	.58	.58	.58	.58	.58
38.5000	.58	.57	.57	.57	.57
38.7500	.57	.57	.56	.56	.56
39.0000	.56	.56	.56	.55	.55
39.2500	.55	.55	.55	.55	.54
39.5000	.54	.54	.54	.54	.54
39.7500	.53	.53	.53	.53	.53

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
40.0000	.53	.52	.52	.52	.52
40.2500	.52	.52	.51	.51	.51
40.5000	.51	.51	.51	.50	.50
40.7500	.50	.50	.50	.50	.49
41.0000	.49	.49	.49	.49	.49
41.2500	.49	.48	.48	.48	.48
41.5000	.48	.47	.47	.47	.47
41.7500	.47	.47	.46	.46	.46
42.0000	.46	.46	.46	.45	.45
42.2500	.45	.45	.45	.45	.44
42.5000	.44	.44	.44	.44	.44
42.7500	.43	.43	.43	.43	.43
43.0000	.43	.42	.42	.42	.42
43.2500	.42	.42	.42	.41	.41
43.5000	.41	.41	.40	.40	.40
43.7500	.40	.39	.39	.39	.39
44.0000	.38	.38	.38	.38	.38
44.2500	.37	.37	.37	.37	.36
44.5000	.36	.36	.36	.35	.35
44.7500	.35	.35	.35	.34	.34
45.0000	.34	.34	.34	.33	.33
45.2500	.33	.33	.32	.32	.32
45.5000	.32	.32	.31	.31	.31
45.7500	.31	.31	.31	.30	.30
46.0000	.30	.30	.30	.29	.29
46.2500	.29	.29	.29	.29	.28
46.5000	.28	.28	.28	.28	.27
46.7500	.27	.27	.27	.27	.27
47.0000	.26	.26	.26	.26	.26
47.2500	.26	.26	.25	.25	.25
47.5000	.25	.25	.25	.24	.24
47.7500	.24	.24	.24	.24	.24
48.0000	.23	.23	.23	.23	.23
48.2500	.23	.23	.22	.22	.22
48.5000	.22	.22	.22	.22	.22
48.7500	.21	.21	.21	.21	.21
49.0000	.21	.21	.21	.20	.20
49.2500	.20	.20	.20	.20	.20
49.5000	.20	.19	.19	.19	.19
49.7500	.19	.19	.19	.19	.19
50.0000	.18	.18	.18	.18	.18
50.2500	.18	.18	.18	.18	.17
50.5000	.17	.17	.17	.17	.17
50.7500	.17	.17	.17	.17	.17
51.0000	.17	.16	.16	.16	.16

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
51.2500	.16	.16	.16	.16	.16
51.5000	.16	.16	.16	.16	.15
51.7500	.15	.15	.15	.15	.15
52.0000	.15	.15	.15	.15	.15
52.2500	.15	.15	.15	.14	.14
52.5000	.14	.14	.14	.14	.14
52.7500	.14	.14	.14	.14	.14
53.0000	.14	.14	.13	.13	.13
53.2500	.13	.13	.13	.13	.13
53.5000	.13	.13	.13	.13	.13
53.7500	.13	.13	.13	.12	.12
54.0000	.12	.12	.12	.12	.12
54.2500	.12	.12	.12	.12	.12
54.5000	.12	.12	.12	.12	.12
54.7500	.11	.11	.11	.11	.11
55.0000	.11	.11	.11	.11	.11
55.2500	.11	.11	.11	.11	.11
55.5000	.11	.11	.11	.10	.10
55.7500	.10	.10	.10	.10	.10
56.0000	.10	.10	.10	.10	.10
56.2500	.10	.10	.10	.10	.10
56.5000	.10	.10	.10	.10	.09
56.7500	.09	.09	.09	.09	.09
57.0000	.09	.09	.09	.09	.09
57.2500	.09	.09	.09	.09	.09
57.5000	.09	.09	.09	.09	.09
57.7500	.09	.08	.08	.08	.08
58.0000	.08	.08	.08	.08	.08
58.2500	.08	.08	.08	.08	.08
58.5000	.08	.08	.08	.08	.08
58.7500	.08	.08	.08	.08	.08
59.0000	.08	.08	.08	.08	.08
59.2500	.08	.08	.08	.08	.08
59.5000	.08	.08	.08	.08	.07
59.7500	.07	.07	.07	.07	.07
60.0000	.07	.07	.07	.07	.07
60.2500	.07	.07	.07	.07	.07
60.5000	.07	.07	.07	.07	.07
60.7500	.07	.07	.07	.07	.07
61.0000	.07	.07	.07	.07	.07
61.2500	.07	.07	.07	.07	.07
61.5000	.07	.07	.07	.07	.07
61.7500	.07	.07	.07	.06	.06
62.0000	.06	.06	.06	.06	.06
62.2500	.06	.06	.06	.06	.06

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
62.5000	.06	.06	.06	.06	.06
62.7500	.06	.06	.06	.06	.06
63.0000	.06	.06	.06	.06	.06
63.2500	.06	.06	.06	.06	.06
63.5000	.06	.06	.06	.06	.06
63.7500	.06	.06	.06	.06	.06
64.0000	.06	.06	.06	.06	.06
64.2500	.06	.06	.06	.05	.05
64.5000	.05	.05	.05	.05	.05
64.7500	.05	.05	.05	.05	.05
65.0000	.05	.05	.05	.05	.05
65.2500	.05	.05	.05	.05	.05
65.5000	.05	.05	.05	.05	.05
65.7500	.05	.05	.05	.05	.05
66.0000	.05	.05	.05	.05	.05
66.2500	.05	.05	.05	.05	.05
66.5000	.05	.05	.05	.05	.05
66.7500	.05	.05	.05	.05	.05
67.0000	.05	.05	.05	.05	.05
67.2500	.05	.05	.05	.05	.05
67.5000	.04	.04	.04	.04	.04
67.7500	.04	.04	.04	.04	.04
68.0000	.04	.04	.04	.04	.04
68.2500	.04	.04	.04	.04	.04
68.5000	.04	.04	.04	.04	.04
68.7500	.04	.04	.04	.04	.04
69.0000	.04	.04	.04	.04	.04
69.2500	.04	.04	.04	.04	.04
69.5000	.04	.04	.04	.04	.04
69.7500	.04	.04	.04	.04	.04
70.0000	.04	.04	.04	.04	.04
70.2500	.04	.04	.04	.04	.04
70.5000	.04	.04	.04	.04	.04
70.7500	.04	.04	.04	.04	.04
71.0000	.04	.04	.04	.04	.04
71.2500	.04	.04	.03	.03	.03
71.5000	.03	.03	.03	.03	.03
71.7500	.03	.03	.03	.03	.03
72.0000	.03	.03	.03	.03	.03
72.2500	.03	.03	.03	.03	.03
72.5000	.03	.03	.03	.03	.03
72.7500	.03	.03	.03	.03	.03
73.0000	.03	.03	.03	.03	.03
73.2500	.03	.03	.03	.03	.03
73.5000	.03	.03	.03	.03	.03

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
73.7500	.03	.03	.03	.03	.03
74.0000	.03	.03	.03	.03	.03
74.2500	.03	.03	.03	.03	.03
74.5000	.03	.03	.03	.03	.03
74.7500	.03	.03	.03	.03	.03
75.0000	.03	.03	.03	.03	.03
75.2500	.03	.03	.03	.03	.03
75.5000	.03	.03	.03	.03	.03
75.7500	.03	.03	.03	.03	.03
76.0000	.03	.03	.03	.03	.03
76.2500	.03	.03	.03	.03	.02
76.5000	.02	.02	.02	.02	.02
76.7500	.02	.02	.02	.02	.02
77.0000	.02	.02	.02	.02	.02
77.2500	.02	.02	.02	.02	.02
77.5000	.02	.02	.02	.02	.02
77.7500	.02	.02	.02	.02	.02
78.0000	.02	.02	.02	.02	.02
78.2500	.02	.02	.02	.02	.02
78.5000	.02	.02	.02	.02	.02
78.7500	.02	.02	.02	.02	.02
79.0000	.02	.02	.02	.02	.02
79.2500	.02	.02	.02	.02	.02
79.5000	.02	.02	.02	.02	.02
79.7500	.02	.02	.02	.02	.02
80.0000	.02	.02	.02	.02	.02
80.2500	.02	.02	.02	.02	.02
80.5000	.02	.02	.02	.02	.02
80.7500	.02	.02	.02	.02	.02
81.0000	.02	.02	.02	.02	.02
81.2500	.02	.02	.02	.02	.02
81.5000	.02	.02	.02	.02	.02
81.7500	.02	.02	.02	.02	.02
82.0000	.02	.02	.02	.02	.02
82.2500	.02	.02	.02	.02	.02
82.5000	.02	.02	.02	.02	.02
82.7500	.02	.02	.02	.02	.02
83.0000	.02	.02	.02	.02	.02
83.2500	.02	.02	.02	.02	.02
83.5000	.02	.02	.02	.02	.02
83.7500	.02	.02	.02	.02	.02
84.0000	.02	.02	.02	.02	.02
84.2500	.02	.02	.02	.02	.02
84.5000	.02	.02	.02	.02	.02
84.7500	.02	.02	.02	.02	.02

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
85.0000	.02	.02	.02	.02	.02
85.2500	.02	.02	.02	.02	.02
85.5000	.02	.02	.02	.02	.02
85.7500	.02	.02	.02	.02	.02
86.0000	.02	.02	.02	.02	.02
86.2500	.02	.02	.02	.02	.02
86.5000	.02	.02	.02	.02	.02
86.7500	.02	.02	.02	.02	.02
87.0000	.02	.02	.02	.02	.02
87.2500	.02	.02	.02	.02	.02
87.5000	.02	.02	.02	.02	.02
87.7500	.02	.02	.02	.02	.02
88.0000	.02	.02	.02	.02	.02
88.2500	.02	.02	.02	.02	.02
88.5000	.02	.02	.02	.02	.02
88.7500	.02	.02	.02	.02	.02
89.0000	.02	.02	.02	.02	.02
89.2500	.02	.02	.02	.02	.02
89.5000	.02	.02	.02	.02	.02
89.7500	.02	.02	.02	.02	.02
90.0000	.02	.02	.02	.02	.02
90.2500	.02	.02	.02	.02	.02
90.5000	.02	.02	.02	.02	.02
90.7500	.02	.02	.02	.02	.02
91.0000	.02	.02	.02	.02	.02
91.2500	.02	.02	.02	.02	.02
91.5000	.02	.02	.02	.02	.02
91.7500	.02	.02	.02	.02	.02
92.0000	.02	.02	.02	.02	.02
92.2500	.02	.02	.02	.02	.02
92.5000	.02	.02	.02	.02	.02
92.7500	.02	.02	.02	.02	.02
93.0000	.02	.02	.02	.02	.02
93.2500	.02	.02	.02	.02	.02
93.5000	.02	.02	.02	.02	.02
93.7500	.02	.02	.02	.02	.02
94.0000	.02	.02	.02	.02	.02
94.2500	.02	.02	.02	.02	.02
94.5000	.02	.02	.02	.02	.02
94.7500	.02	.01	.01	.01	.01
95.0000	.01	.01	.01	.01	.01
95.2500	.01	.01	.01	.01	.01
95.5000	.01	.01	.01	.01	.01
95.7500	.01	.01	.01	.01	.01
96.0000	.01	.01	.01	.01	.01

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
96.2500	.01	.01	.01	.01	.01
96.5000	.01	.01	.01	.01	.01
96.7500	.01	.01	.01	.01	.01
97.0000	.01	.01	.01	.01	.01
97.2500	.01	.01	.01	.01	.01
97.5000	.01	.01	.01	.01	.01
97.7500	.01	.01	.01	.01	.01
98.0000	.01	.01	.01	.01	.01
98.2500	.01	.01	.01	.01	.01
98.5000	.01	.01	.01	.01	.01
98.7500	.01	.01	.01	.01	.01
99.0000	.01	.01	.01	.01	.01
99.2500	.01	.01	.01	.01	.01
99.5000	.01	.01	.01	.01	.01
99.7500	.01	.01	.01	.01	.01
100.0000	.01	.01	.01	.01	.01
100.2500	.01	.01	.01	.01	.01
100.5000	.01	.01	.01	.01	.01
100.7500	.01	.01	.01	.01	.01
101.0000	.01	.01	.01	.01	.01
101.2500	.01	.01	.01	.01	.01
101.5000	.01	.01	.01	.01	.01
101.7500	.01	.01	.01	.01	.01
102.0000	.01	.01	.01	.01	.01
102.2500	.01	.01	.01	.01	.01
102.5000	.01	.01	.01	.01	.01
102.7500	.01	.01	.01	.01	.01
103.0000	.01	.01	.01	.01	.01
103.2500	.01	.01	.01	.01	.01
103.5000	.01	.01	.01	.01	.01
103.7500	.01	.01	.01	.01	.01
104.0000	.01	.01	.01	.01	.01
104.2500	.01	.01	.01	.01	.01
104.5000	.01	.01	.01	.01	.01
104.7500	.01	.01	.01	.01	.01
105.0000	.01	.01	.01	.01	.01
105.2500	.01	.01	.01	.01	.01
105.5000	.01	.01	.01	.01	.01
105.7500	.01	.01	.01	.01	.01
106.0000	.01	.01	.01	.01	.01
106.2500	.01	.01	.01	.01	.01
106.5000	.01	.01	.01	.01	.01
106.7500	.01	.01	.01	.01	.01
107.0000	.01	.01	.01	.01	.01
107.2500	.01	.01	.01	.01	.01

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
107.5000	.01	.01	.01	.01	.01
107.7500	.01	.01	.01	.01	.01
108.0000	.01	.01	.01	.01	.01
108.2500	.01	.01	.01	.01	.01
108.5000	.01	.01	.01	.01	.01
108.7500	.01	.01	.01	.01	.01
109.0000	.01	.01	.01	.01	.01
109.2500	.01	.01	.01	.01	.01
109.5000	.01	.01	.01	.01	.01
109.7500	.01	.01	.01	.01	.01
110.0000	.01	.01	.01	.01	.01
110.2500	.01	.01	.01	.01	.01
110.5000	.01	.01	.01	.01	.01
110.7500	.01	.01	.01	.01	.01
111.0000	.01	.01	.01	.01	.01
111.2500	.01	.01	.01	.01	.01
111.5000	.01	.01	.01	.01	.01
111.7500	.01	.01	.01	.01	.01
112.0000	.01	.01	.01	.01	.01
112.2500	.01	.01	.01	.01	.01
112.5000	.01	.01	.01	.01	.01
112.7500	.01	.01	.01	.01	.01
113.0000	.01	.01	.01	.01	.01
113.2500	.01	.01	.01	.01	.01
113.5000	.01	.01	.01	.01	.01
113.7500	.01	.01	.01	.01	.01
114.0000	.01	.01	.01	.01	.01
114.2500	.01	.01	.01	.01	.01
114.5000	.01	.01	.01	.01	.01
114.7500	.01	.01	.01	.01	.01
115.0000	.01	.01	.01	.01	.01
115.2500	.01	.01	.01	.01	.01
115.5000	.01	.01	.01	.01	.01
115.7500	.01	.01	.01	.01	.01
116.0000	.01	.01	.01	.01	.01
116.2500	.01	.01	.01	.01	.01
116.5000	.01	.01	.01	.01	.01
116.7500	.01	.01	.01	.01	.01
117.0000	.01	.01	.01	.01	.01
117.2500	.01	.01	.01	.01	.01
117.5000	.01	.01	.01	.01	.01
117.7500	.01	.01	.01	.01	.01
118.0000	.01	.01	.01	.01	.01
118.2500	.01	.01	.01	.01	.01
118.5000	.01	.01	.01	.01	.01

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
118.7500	.01	.01	.01	.01	.01
119.0000	.01	.01	.01	.01	.01
119.2500	.01	.01	.01	.01	.01
119.5000	.01	.01	.01	.01	.01
119.7500	.01	.01	.01	.01	.01
120.0000	.01	.01	.01	.01	.01
120.2500	.01	.01	.01	.01	.01
120.5000	.01	.01	.01	.01	.01
120.7500	.01	.01	.01	.01	.01
121.0000	.01	.01	.01	.01	.01
121.2500	.01	.01	.01	.01	.01
121.5000	.01	.01	.01	.01	.01
121.7500	.01	.01	.01	.01	.01
122.0000	.01	.01	.01	.01	.01
122.2500	.01	.01	.01	.01	.01
122.5000	.01	.01	.01	.01	.01
122.7500	.01	.01	.01	.01	.01
123.0000	.01	.01	.01	.01	.01
123.2500	.01	.01	.01	.01	.01
123.5000	.01	.01	.01	.01	.01
123.7500	.01	.01	.01	.01	.01
124.0000	.01	.01	.01	.01	.01
124.2500	.01	.01	.01	.01	.01
124.5000	.01	.01	.01	.01	.01
124.7500	.01	.01	.01	.01	.01
125.0000	.01	.01	.01	.01	.01
125.2500	.01	.01	.01	.01	.01
125.5000	.01	.01	.01	.01	.01
125.7500	.01	.01	.01	.01	.01
126.0000	.01	.01	.01	.01	.01
126.2500	.01	.01	.01	.01	.01
126.5000	.01	.01	.01	.01	.01
126.7500	.01	.01	.01	.01	.01
127.0000	.01	.01	.01	.01	.01
127.2500	.01	.01	.01	.01	.01
127.5000	.01	.01	.01	.01	.01
127.7500	.01	.01	.01	.01	.01
128.0000	.01	.01	.01	.01	.01
128.2500	.01	.01	.01	.01	.01
128.5000	.01	.01	.01	.01	.01
128.7500	.01	.01	.01	.01	.01
129.0000	.01	.01	.01	.01	.01
129.2500	.01	.01	.01	.01	.01
129.5000	.01	.01	.01	.01	.01
129.7500	.01	.01	.01	.01	.01

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
130.0000	.01	.01	.01	.01	.01
130.2500	.01	.01	.01	.01	.01
130.5000	.01	.01	.01	.01	.01
130.7500	.01	.01	.01	.01	.01
131.0000	.01	.01	.01	.01	.01
131.2500	.01	.01	.01	.01	.01
131.5000	.01	.01	.01	.01	.01
131.7500	.01	.01	.01	.01	.01
132.0000	.01	.01	.01	.01	.01
132.2500	.01	.01	.01	.01	.01
132.5000	.01	.01	.01	.01	.01
132.7500	.01	.01	.01	.01	.01
133.0000	.01	.01	.01	.01	.01
133.2500	.01	.01	.01	.01	.01
133.5000	.01	.01	.01	.01	.01
133.7500	.01	.01	.01	.01	.01
134.0000	.01	.01	.01	.01	.01
134.2500	.01	.01	.01	.01	.01
134.5000	.01	.01	.01	.01	.01
134.7500	.01	.01	.01	.01	.01
135.0000	.01	.01	.01	.01	.01
135.2500	.01	.01	.01	.01	.01
135.5000	.01	.01	.01	.01	.01
135.7500	.01	.01	.01	.01	.01
136.0000	.01	.01	.01	.01	.01
136.2500	.01	.01	.01	.01	.01
136.5000	.01	.01	.01	.01	.01
136.7500	.01	.01	.01	.01	.01
137.0000	.01	.01	.01	.01	.01
137.2500	.01	.01	.01	.01	.01
137.5000	.01	.01	.01	.01	.01
137.7500	.01	.01	.01	.01	.01
138.0000	.01	.01	.01	.01	.01
138.2500	.01	.01	.01	.01	.01
138.5000	.01	.01	.01	.01	.01
138.7500	.01	.01	.01	.01	.01
139.0000	.01	.01	.01	.01	.01
139.2500	.01	.01	.01	.01	.01
139.5000	.01	.01	.01	.01	.01
139.7500	.01	.01	.01	.01	.01
140.0000	.01	.01	.01	.01	.01
140.2500	.01	.01	.01	.01	.01
140.5000	.01	.01	.01	.01	.01
140.7500	.01	.01	.01	.01	.01
141.0000	.01	.01	.01	.01	.01

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
141.2500	.01	.01	.01	.01	.01
141.5000	.01	.01	.01	.01	.01
141.7500	.01	.01	.01	.01	.01
142.0000	.01	.01	.01	.01	.01
142.2500	.01	.01	.01	.01	.01
142.5000	.01	.01	.01	.01	.01
142.7500	.01	.01	.01	.01	.01
143.0000	.01	.01	.01	.01	.01
143.2500	.01	.01	.01	.01	.01
143.5000	.01	.01	.01	.01	.01
143.7500	.01	.01	.01	.01	.01
144.0000	.01	.01	.01	.01	.01
144.2500	.01	.01	.01	.01	.01
144.5000	.00	.00	.00	.00	.00
144.7500	.00	.00	.00	.00	.00
145.0000	.00	.00	.00	.00	.00
145.2500	.00	.00	.00	.00	.00
145.5000	.00	.00	.00	.00	.00
145.7500	.00	.00	.00	.00	.00
146.0000	.00	.00	.00	.00	.00
146.2500	.00	.00	.00	.00	.00
146.5000	.00	.00	.00	.00	.00
146.7500	.00	.00	.00	.00	.00
147.0000	.00	.00	.00	.00	.00
147.2500	.00	.00	.00	.00	.00
147.5000	.00	.00	.00	.00	.00
147.7500	.00	.00	.00	.00	.00
148.0000	.00	.00	.00	.00	.00
148.2500	.00	.00	.00	.00	.00
148.5000	.00	.00	.00	.00	.00
148.7500	.00	.00	.00	.00	.00
149.0000	.00	.00	.00	.00	.00
149.2500	.00	.00	.00	.00	.00
149.5000	.00	.00	.00	.00	.00
149.7500	.00	.00	.00	.00	.00
150.0000	.00	.00	.00	.00	.00
150.2500	.00	.00	.00	.00	.00
150.5000	.00	.00	.00	.00	.00
150.7500	.00	.00	.00	.00	.00
151.0000	.00	.00	.00	.00	.00
151.2500	.00	.00	.00	.00	.00
151.5000	.00	.00	.00	.00	.00
151.7500	.00	.00	.00	.00	.00
152.0000	.00	.00	.00	.00	.00
152.2500	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
152.5000	.00	.00	.00	.00	.00
152.7500	.00	.00	.00	.00	.00
153.0000	.00	.00	.00	.00	.00
153.2500	.00	.00	.00	.00	.00
153.5000	.00	.00	.00	.00	.00
153.7500	.00	.00	.00	.00	.00
154.0000	.00	.00	.00	.00	.00
154.2500	.00	.00	.00	.00	.00
154.5000	.00	.00	.00	.00	.00
154.7500	.00	.00	.00	.00	.00
155.0000	.00	.00	.00	.00	.00
155.2500	.00	.00	.00	.00	.00
155.5000	.00	.00	.00	.00	.00
155.7500	.00	.00	.00	.00	.00
156.0000	.00	.00	.00	.00	.00
156.2500	.00	.00	.00	.00	.00
156.5000	.00	.00	.00	.00	.00
156.7500	.00	.00	.00	.00	.00
157.0000	.00	.00	.00	.00	.00
157.2500	.00	.00	.00	.00	.00
157.5000	.00	.00	.00	.00	.00
157.7500	.00	.00	.00	.00	.00
158.0000	.00	.00	.00	.00	.00
158.2500	.00	.00	.00	.00	.00
158.5000	.00	.00	.00	.00	.00
158.7500	.00	.00	.00	.00	.00
159.0000	.00	.00	.00	.00	.00
159.2500	.00	.00	.00	.00	.00
159.5000	.00	.00	.00	.00	.00
159.7500	.00	.00	.00	.00	.00
160.0000	.00	.00	.00	.00	.00
160.2500	.00	.00	.00	.00	.00
160.5000	.00	.00	.00	.00	.00
160.7500	.00	.00	.00	.00	.00
161.0000	.00	.00	.00	.00	.00
161.2500	.00	.00	.00	.00	.00
161.5000	.00	.00	.00	.00	.00
161.7500	.00	.00	.00	.00	.00
162.0000	.00	.00	.00	.00	.00
162.2500	.00	.00	.00	.00	.00
162.5000	.00	.00	.00	.00	.00
162.7500	.00	.00	.00	.00	.00
163.0000	.00	.00	.00	.00	.00
163.2500	.00	.00	.00	.00	.00
163.5000	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
163.7500	.00	.00	.00	.00	.00
164.0000	.00	.00	.00	.00	.00
164.2500	.00	.00	.00	.00	.00
164.5000	.00	.00	.00	.00	.00
164.7500	.00	.00	.00	.00	.00
165.0000	.00	.00	.00	.00	.00
165.2500	.00	.00	.00	.00	.00
165.5000	.00	.00	.00	.00	.00
165.7500	.00	.00	.00	.00	.00
166.0000	.00	.00	.00	.00	.00
166.2500	.00	.00	.00	.00	.00
166.5000	.00	.00	.00	.00	.00
166.7500	.00	.00	.00	.00	.00
167.0000	.00	.00	.00	.00	.00
167.2500	.00	.00	.00	.00	.00
167.5000	.00	.00	.00	.00	.00
167.7500	.00	.00	.00	.00	.00
168.0000	.00	.00	.00	.00	.00
168.2500	.00	.00	.00	.00	.00
168.5000	.00	.00	.00	.00	.00
168.7500	.00	.00	.00	.00	.00
169.0000	.00	.00	.00	.00	.00
169.2500	.00	.00	.00	.00	.00
169.5000	.00	.00	.00	.00	.00
169.7500	.00	.00	.00	.00	.00
170.0000	.00	.00	.00	.00	.00
170.2500	.00	.00	.00	.00	.00
170.5000	.00	.00	.00	.00	.00
170.7500	.00	.00	.00	.00	.00
171.0000	.00	.00	.00	.00	.00
171.2500	.00	.00	.00	.00	.00
171.5000	.00	.00	.00	.00	.00
171.7500	.00	.00	.00	.00	.00
172.0000	.00	.00	.00	.00	.00
172.2500	.00	.00	.00	.00	.00
172.5000	.00	.00	.00	.00	.00
172.7500	.00	.00	.00	.00	.00
173.0000	.00	.00	.00	.00	.00
173.2500	.00	.00	.00	.00	.00
173.5000	.00	.00	.00	.00	.00
173.7500	.00	.00	.00	.00	.00
174.0000	.00	.00	.00	.00	.00
174.2500	.00	.00	.00	.00	.00
174.5000	.00	.00	.00	.00	.00
174.7500	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
175.0000	.00	.00	.00	.00	.00
175.2500	.00	.00	.00	.00	.00
175.5000	.00	.00	.00	.00	.00
175.7500	.00	.00	.00	.00	.00
176.0000	.00	.00	.00	.00	.00
176.2500	.00	.00	.00	.00	.00
176.5000	.00	.00	.00	.00	.00
176.7500	.00	.00	.00	.00	.00
177.0000	.00	.00	.00	.00	.00
177.2500	.00	.00	.00	.00	.00
177.5000	.00	.00	.00	.00	.00
177.7500	.00	.00	.00	.00	.00
178.0000	.00	.00	.00	.00	.00
178.2500	.00	.00	.00	.00	.00
178.5000	.00	.00	.00	.00	.00
178.7500	.00	.00	.00	.00	.00
179.0000	.00	.00	.00	.00	.00
179.2500	.00	.00	.00	.00	.00
179.5000	.00	.00	.00	.00	.00
179.7500	.00	.00	.00	.00	.00
180.0000	.00				

SUMMARY FOR HYDROGRAPH ADDITION
at Node: DESIGN POINT 1

HYG Directory: S:\2010\10170\PondPack\2016-10-14_BD\

Upstream Link ID	Upstream Node ID	HYG file	HYG ID	HYG tag
OCS 1A	BASIN 1A		OCS 1A	10
REACH 1B	JUNC 1B		REACH 1B	10

INFLOWS TO: DESIGN POINT 1

HYG file	HYG ID	HYG tag	Volume cu.ft	Peak Time hrs	Peak Flow cfs
	OCS 1A	10	310740	12.4000	41.09
	REACH 1B	10	185304	12.3500	34.49

TOTAL FLOW INTO: DESIGN POINT 1

HYG file	HYG ID	HYG tag	Volume cu.ft	Peak Time hrs	Peak Flow cfs
	DESIGN POINT 1	10	496044	12.4000	75.17

TOTAL NODE INFLOW...
HYG file =
HYG ID = DESIGN POINT 1
HYG Tag = 10

Peak Discharge = 75.17 cfs
Time to Peak = 12.4000 hrs
HYG Volume = 496044 cu.ft

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
7.3500	.00	.00	.00	.00	.00
7.6000	.00	.00	.00	.00	.00
7.8500	.00	.00	.00	.00	.00
8.1000	.00	.00	.00	.01	.01
8.3500	.01	.01	.01	.01	.02
8.6000	.02	.03	.04	.05	.06
8.8500	.08	.10	.12	.14	.16
9.1000	.18	.20	.22	.24	.27
9.3500	.30	.33	.36	.39	.42
9.6000	.45	.48	.51	.55	.58
9.8500	.62	.66	.70	.74	.78
10.1000	.82	.86	.91	.96	1.01
10.3500	1.06	1.12	1.18	1.25	1.32
10.6000	1.39	1.46	1.54	1.62	1.70
10.8500	1.79	1.87	1.97	2.07	2.16
11.1000	2.26	2.37	2.47	2.59	2.72
11.3500	2.88	3.04	3.23	3.43	3.66
11.6000	3.93	4.26	4.70	5.33	6.16
11.8500	7.25	8.64	10.44	12.83	15.95
12.1000	20.41	33.68	48.77	60.89	69.21
12.3500	73.90	75.17	73.73	70.29	65.62
12.6000	60.37	55.05	49.90	45.02	40.57
12.8500	36.78	33.43	30.50	27.95	25.75
13.1000	23.95	22.35	20.94	19.70	18.62
13.3500	17.68	16.87	16.17	15.55	15.01
13.6000	14.58	14.20	13.85	13.53	13.22
13.8500	12.92	12.64	12.37	12.11	11.85
14.1000	11.60	11.36	11.13	10.92	10.71
14.3500	10.52	10.34	10.17	10.01	9.86
14.6000	9.72	9.58	9.45	9.32	9.19
14.8500	9.07	8.95	8.83	8.71	8.59

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
15.1000	8.48	8.36	8.25	8.14	8.02
15.3500	7.91	7.80	7.68	7.57	7.46
15.6000	7.34	7.23	7.11	7.00	6.88
15.8500	6.77	6.65	6.54	6.42	6.35
16.1000	6.26	6.17	6.08	6.00	5.91
16.3500	5.83	5.75	5.68	5.61	5.54
16.6000	5.47	5.41	5.35	5.29	5.23
16.8500	5.17	5.11	5.05	5.00	4.94
17.1000	4.89	4.83	4.78	4.73	4.67
17.3500	4.62	4.57	4.52	4.46	4.41
17.6000	4.36	4.31	4.26	4.20	4.15
17.8500	4.10	4.05	4.00	3.95	3.90
18.1000	3.85	3.80	3.75	3.70	3.66
18.3500	3.61	3.58	3.54	3.51	3.48
18.6000	3.45	3.42	3.40	3.37	3.35
18.8500	3.32	3.30	3.28	3.26	3.24
19.1000	3.22	3.20	3.19	3.17	3.15
19.3500	3.13	3.11	3.10	3.08	3.06
19.6000	3.05	3.03	3.01	3.00	2.98
19.8500	2.97	2.95	2.94	2.92	2.90
20.1000	2.89	2.87	2.86	2.84	2.83
20.3500	2.81	2.80	2.79	2.77	2.76
20.6000	2.75	2.73	2.72	2.71	2.70
20.8500	2.68	2.67	2.66	2.65	2.63
21.1000	2.62	2.61	2.60	2.59	2.58
21.3500	2.57	2.55	2.54	2.53	2.52
21.6000	2.51	2.50	2.48	2.47	2.46
21.8500	2.45	2.44	2.43	2.42	2.40
22.1000	2.39	2.38	2.37	2.36	2.35
22.3500	2.33	2.32	2.31	2.30	2.29
22.6000	2.27	2.26	2.25	2.24	2.23
22.8500	2.22	2.20	2.19	2.18	2.17
23.1000	2.16	2.15	2.13	2.12	2.11
23.3500	2.10	2.09	2.08	2.06	2.05
23.6000	2.04	2.03	2.02	2.01	1.99
23.8500	1.98	1.97	1.96	1.95	1.93
24.1000	1.88	1.80	1.73	1.67	1.60
24.3500	1.54	1.47	1.40	1.34	1.29
24.6000	1.25	1.22	1.19	1.17	1.15
24.8500	1.13	1.12	1.11	1.10	1.10
25.1000	1.09	1.09	1.08	1.08	1.07
25.3500	1.07	1.07	1.06	1.06	1.06
25.6000	1.06	1.05	1.05	1.05	1.05
25.8500	1.05	1.05	1.04	1.04	1.04
26.1000	1.04	1.04	1.04	1.04	1.03

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
26.3500	1.03	1.03	1.03	1.03	1.03
26.6000	1.03	1.03	1.03	1.02	1.02
26.8500	1.02	1.02	1.02	1.02	1.02
27.1000	1.02	1.01	1.01	1.01	1.01
27.3500	1.01	1.01	1.01	1.01	1.00
27.6000	1.00	1.00	1.00	1.00	1.00
27.8500	1.00	1.00	.99	.99	.99
28.1000	.99	.99	.99	.98	.98
28.3500	.98	.98	.98	.98	.97
28.6000	.97	.97	.97	.97	.97
28.8500	.96	.96	.96	.96	.96
29.1000	.96	.95	.95	.95	.95
29.3500	.95	.95	.94	.94	.94
29.6000	.94	.94	.94	.93	.93
29.8500	.93	.93	.93	.93	.92
30.1000	.92	.92	.92	.92	.92
30.3500	.91	.91	.91	.91	.91
30.6000	.91	.91	.90	.90	.90
30.8500	.90	.90	.90	.89	.89
31.1000	.89	.89	.89	.89	.88
31.3500	.88	.88	.88	.88	.88
31.6000	.87	.87	.87	.87	.87
31.8500	.87	.86	.86	.86	.86
32.1000	.86	.86	.85	.85	.85
32.3500	.85	.85	.85	.84	.84
32.6000	.84	.84	.84	.84	.83
32.8500	.83	.83	.83	.83	.83
33.1000	.82	.82	.82	.82	.82
33.3500	.82	.81	.81	.81	.81
33.6000	.81	.81	.80	.80	.80
33.8500	.80	.80	.80	.79	.79
34.1000	.79	.79	.79	.79	.78
34.3500	.78	.78	.78	.78	.78
34.6000	.77	.77	.77	.77	.77
34.8500	.77	.76	.76	.76	.76
35.1000	.76	.76	.75	.75	.75
35.3500	.75	.75	.75	.74	.74
35.6000	.74	.74	.74	.74	.73
35.8500	.73	.73	.73	.73	.73
36.1000	.72	.72	.72	.72	.72
36.3500	.72	.71	.71	.71	.71
36.6000	.71	.71	.70	.70	.70
36.8500	.70	.70	.70	.69	.69
37.1000	.69	.69	.69	.69	.68
37.3500	.68	.68	.68	.68	.68

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
37.6000	.67	.67	.67	.67	.67
37.8500	.67	.66	.66	.66	.66
38.1000	.66	.66	.65	.65	.65
38.3500	.65	.65	.65	.64	.64
38.6000	.64	.64	.64	.64	.63
38.8500	.63	.63	.63	.63	.63
39.1000	.62	.62	.62	.62	.62
39.3500	.62	.61	.61	.61	.61
39.6000	.61	.61	.60	.60	.60
39.8500	.60	.60	.60	.59	.59
40.1000	.59	.59	.59	.59	.58
40.3500	.58	.58	.58	.58	.58
40.6000	.57	.57	.57	.57	.57
40.8500	.57	.56	.56	.56	.56
41.1000	.56	.56	.55	.55	.55
41.3500	.55	.55	.55	.55	.54
41.6000	.54	.54	.54	.54	.54
41.8500	.53	.53	.53	.53	.53
42.1000	.52	.52	.52	.52	.52
42.3500	.52	.51	.51	.51	.51
42.6000	.51	.51	.50	.50	.50
42.8500	.50	.50	.50	.50	.49
43.1000	.49	.49	.49	.49	.49
43.3500	.48	.48	.48	.48	.48
43.6000	.48	.47	.47	.47	.47
43.8500	.47	.47	.46	.46	.46
44.1000	.46	.46	.45	.45	.45
44.3500	.45	.45	.45	.44	.44
44.6000	.44	.44	.44	.44	.44
44.8500	.43	.43	.43	.43	.43
45.1000	.43	.42	.42	.42	.42
45.3500	.42	.42	.41	.41	.41
45.6000	.41	.41	.40	.40	.40
45.8500	.40	.39	.39	.39	.39
46.1000	.38	.38	.38	.38	.37
46.3500	.37	.37	.37	.36	.36
46.6000	.36	.36	.36	.35	.35
46.8500	.35	.35	.34	.34	.34
47.1000	.34	.34	.33	.33	.33
47.3500	.33	.33	.32	.32	.32
47.6000	.32	.32	.31	.31	.31
47.8500	.31	.31	.30	.30	.30
48.1000	.30	.30	.29	.29	.29
48.3500	.29	.29	.29	.28	.28
48.6000	.28	.28	.28	.28	.27

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
48.8500	.27	.27	.27	.27	.27
49.1000	.26	.26	.26	.26	.26
49.3500	.26	.25	.25	.25	.25
49.6000	.25	.25	.25	.24	.24
49.8500	.24	.24	.24	.24	.24
50.1000	.23	.23	.23	.23	.23
50.3500	.23	.23	.22	.22	.22
50.6000	.22	.22	.22	.22	.21
50.8500	.21	.21	.21	.21	.21
51.1000	.21	.21	.20	.20	.20
51.3500	.20	.20	.20	.20	.20
51.6000	.19	.19	.19	.19	.19
51.8500	.19	.19	.19	.19	.18
52.1000	.18	.18	.18	.18	.18
52.3500	.18	.18	.18	.18	.17
52.6000	.17	.17	.17	.17	.17
52.8500	.17	.17	.17	.17	.17
53.1000	.17	.16	.16	.16	.16
53.3500	.16	.16	.16	.16	.16
53.6000	.16	.16	.16	.15	.15
53.8500	.15	.15	.15	.15	.15
54.1000	.15	.15	.15	.15	.15
54.3500	.15	.15	.14	.14	.14
54.6000	.14	.14	.14	.14	.14
54.8500	.14	.14	.14	.14	.14
55.1000	.14	.14	.13	.13	.13
55.3500	.13	.13	.13	.13	.13
55.6000	.13	.13	.13	.13	.13
55.8500	.13	.13	.12	.12	.12
56.1000	.12	.12	.12	.12	.12
56.3500	.12	.12	.12	.12	.12
56.6000	.12	.12	.12	.12	.11
56.8500	.11	.11	.11	.11	.11
57.1000	.11	.11	.11	.11	.11
57.3500	.11	.11	.11	.11	.11
57.6000	.11	.11	.11	.10	.10
57.8500	.10	.10	.10	.10	.10
58.1000	.10	.10	.10	.10	.10
58.3500	.10	.10	.10	.10	.10
58.6000	.10	.10	.10	.09	.09
58.8500	.09	.09	.09	.09	.09
59.1000	.09	.09	.09	.09	.09
59.3500	.09	.09	.09	.09	.09
59.6000	.09	.09	.09	.09	.09
59.8500	.09	.08	.08	.08	.08

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
60.1000	.08	.08	.08	.08	.08
60.3500	.08	.08	.08	.08	.08
60.6000	.08	.08	.08	.08	.08
60.8500	.08	.08	.08	.08	.08
61.1000	.08	.08	.08	.08	.08
61.3500	.08	.08	.08	.08	.08
61.6000	.08	.08	.08	.07	.07
61.8500	.07	.07	.07	.07	.07
62.1000	.07	.07	.07	.07	.07
62.3500	.07	.07	.07	.07	.07
62.6000	.07	.07	.07	.07	.07
62.8500	.07	.07	.07	.07	.07
63.1000	.07	.07	.07	.07	.07
63.3500	.07	.07	.07	.07	.07
63.6000	.07	.07	.07	.07	.07
63.8500	.07	.07	.06	.06	.06
64.1000	.06	.06	.06	.06	.06
64.3500	.06	.06	.06	.06	.06
64.6000	.06	.06	.06	.06	.06
64.8500	.06	.06	.06	.06	.06
65.1000	.06	.06	.06	.06	.06
65.3500	.06	.06	.06	.06	.06
65.6000	.06	.06	.06	.06	.06
65.8500	.06	.06	.06	.06	.06
66.1000	.06	.06	.06	.06	.06
66.3500	.06	.06	.06	.05	.05
66.6000	.05	.05	.05	.05	.05
66.8500	.05	.05	.05	.05	.05
67.1000	.05	.05	.05	.05	.05
67.3500	.05	.05	.05	.05	.05
67.6000	.05	.05	.05	.05	.05
67.8500	.05	.05	.05	.05	.05
68.1000	.05	.05	.05	.05	.05
68.3500	.05	.05	.05	.05	.05
68.6000	.05	.05	.05	.05	.05
68.8500	.05	.05	.05	.05	.05
69.1000	.05	.05	.05	.05	.05
69.3500	.05	.05	.05	.05	.04
69.6000	.04	.04	.04	.04	.04
69.8500	.04	.04	.04	.04	.04
70.1000	.04	.04	.04	.04	.04
70.3500	.04	.04	.04	.04	.04
70.6000	.04	.04	.04	.04	.04
70.8500	.04	.04	.04	.04	.04
71.1000	.04	.04	.04	.04	.04

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
71.3500	.04	.04	.04	.04	.04
71.6000	.04	.04	.04	.04	.04
71.8500	.04	.04	.04	.04	.04
72.1000	.04	.04	.04	.04	.04
72.3500	.04	.04	.04	.04	.04
72.6000	.04	.04	.04	.04	.04
72.8500	.04	.04	.04	.04	.04
73.1000	.04	.04	.04	.04	.04
73.3500	.04	.03	.03	.03	.03
73.6000	.03	.03	.03	.03	.03
73.8500	.03	.03	.03	.03	.03
74.1000	.03	.03	.03	.03	.03
74.3500	.03	.03	.03	.03	.03
74.6000	.03	.03	.03	.03	.03
74.8500	.03	.03	.03	.03	.03
75.1000	.03	.03	.03	.03	.03
75.3500	.03	.03	.03	.03	.03
75.6000	.03	.03	.03	.03	.03
75.8500	.03	.03	.03	.03	.03
76.1000	.03	.03	.03	.03	.03
76.3500	.03	.03	.03	.03	.03
76.6000	.03	.03	.03	.03	.03
76.8500	.03	.03	.03	.03	.03
77.1000	.03	.03	.03	.03	.03
77.3500	.03	.03	.03	.03	.03
77.6000	.03	.03	.03	.03	.03
77.8500	.03	.03	.03	.03	.03
78.1000	.03	.03	.03	.03	.03
78.3500	.03	.03	.03	.03	.02
78.6000	.02	.02	.02	.02	.02
78.8500	.02	.02	.02	.02	.02
79.1000	.02	.02	.02	.02	.02
79.3500	.02	.02	.02	.02	.02
79.6000	.02	.02	.02	.02	.02
79.8500	.02	.02	.02	.02	.02
80.1000	.02	.02	.02	.02	.02
80.3500	.02	.02	.02	.02	.02
80.6000	.02	.02	.02	.02	.02
80.8500	.02	.02	.02	.02	.02
81.1000	.02	.02	.02	.02	.02
81.3500	.02	.02	.02	.02	.02
81.6000	.02	.02	.02	.02	.02
81.8500	.02	.02	.02	.02	.02
82.1000	.02	.02	.02	.02	.02
82.3500	.02	.02	.02	.02	.02

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
82.6000	.02	.02	.02	.02	.02
82.8500	.02	.02	.02	.02	.02
83.1000	.02	.02	.02	.02	.02
83.3500	.02	.02	.02	.02	.02
83.6000	.02	.02	.02	.02	.02
83.8500	.02	.02	.02	.02	.02
84.1000	.02	.02	.02	.02	.02
84.3500	.02	.02	.02	.02	.02
84.6000	.02	.02	.02	.02	.02
84.8500	.02	.02	.02	.02	.02
85.1000	.02	.02	.02	.02	.02
85.3500	.02	.02	.02	.02	.02
85.6000	.02	.02	.02	.02	.02
85.8500	.02	.02	.02	.02	.02
86.1000	.02	.02	.02	.02	.02
86.3500	.02	.02	.02	.02	.02
86.6000	.02	.02	.02	.02	.02
86.8500	.02	.02	.02	.02	.02
87.1000	.02	.02	.02	.02	.02
87.3500	.02	.02	.02	.02	.02
87.6000	.02	.02	.02	.02	.02
87.8500	.02	.02	.02	.02	.02
88.1000	.02	.02	.02	.02	.02
88.3500	.02	.02	.02	.02	.02
88.6000	.02	.02	.02	.02	.02
88.8500	.02	.02	.02	.02	.02
89.1000	.02	.02	.02	.02	.02
89.3500	.02	.02	.02	.02	.02
89.6000	.02	.02	.02	.02	.02
89.8500	.02	.02	.02	.02	.02
90.1000	.02	.02	.02	.02	.02
90.3500	.02	.02	.02	.02	.02
90.6000	.02	.02	.02	.02	.02
90.8500	.02	.02	.02	.02	.02
91.1000	.02	.02	.02	.02	.02
91.3500	.02	.02	.02	.02	.02
91.6000	.02	.02	.02	.02	.02
91.8500	.02	.02	.02	.02	.02
92.1000	.02	.02	.02	.02	.02
92.3500	.02	.02	.02	.02	.02
92.6000	.02	.02	.02	.02	.02
92.8500	.02	.02	.02	.02	.02
93.1000	.02	.02	.02	.02	.02
93.3500	.02	.02	.02	.02	.02
93.6000	.02	.02	.02	.02	.02

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
93.8500	.02	.02	.02	.02	.02
94.1000	.02	.02	.02	.02	.02
94.3500	.02	.02	.02	.02	.02
94.6000	.02	.02	.02	.02	.02
94.8500	.02	.02	.02	.02	.02
95.1000	.02	.02	.02	.02	.02
95.3500	.02	.02	.02	.02	.02
95.6000	.02	.02	.02	.02	.02
95.8500	.02	.02	.02	.02	.02
96.1000	.02	.02	.02	.02	.02
96.3500	.02	.02	.02	.02	.02
96.6000	.02	.02	.02	.02	.02
96.8500	.02	.01	.01	.01	.01
97.1000	.01	.01	.01	.01	.01
97.3500	.01	.01	.01	.01	.01
97.6000	.01	.01	.01	.01	.01
97.8500	.01	.01	.01	.01	.01
98.1000	.01	.01	.01	.01	.01
98.3500	.01	.01	.01	.01	.01
98.6000	.01	.01	.01	.01	.01
98.8500	.01	.01	.01	.01	.01
99.1000	.01	.01	.01	.01	.01
99.3500	.01	.01	.01	.01	.01
99.6000	.01	.01	.01	.01	.01
99.8500	.01	.01	.01	.01	.01
100.1000	.01	.01	.01	.01	.01
100.3500	.01	.01	.01	.01	.01
100.6000	.01	.01	.01	.01	.01
100.8500	.01	.01	.01	.01	.01
101.1000	.01	.01	.01	.01	.01
101.3500	.01	.01	.01	.01	.01
101.6000	.01	.01	.01	.01	.01
101.8500	.01	.01	.01	.01	.01
102.1000	.01	.01	.01	.01	.01
102.3500	.01	.01	.01	.01	.01
102.6000	.01	.01	.01	.01	.01
102.8500	.01	.01	.01	.01	.01
103.1000	.01	.01	.01	.01	.01
103.3500	.01	.01	.01	.01	.01
103.6000	.01	.01	.01	.01	.01
103.8500	.01	.01	.01	.01	.01
104.1000	.01	.01	.01	.01	.01
104.3500	.01	.01	.01	.01	.01
104.6000	.01	.01	.01	.01	.01
104.8500	.01	.01	.01	.01	.01

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
105.1000	.01	.01	.01	.01	.01
105.3500	.01	.01	.01	.01	.01
105.6000	.01	.01	.01	.01	.01
105.8500	.01	.01	.01	.01	.01
106.1000	.01	.01	.01	.01	.01
106.3500	.01	.01	.01	.01	.01
106.6000	.01	.01	.01	.01	.01
106.8500	.01	.01	.01	.01	.01
107.1000	.01	.01	.01	.01	.01
107.3500	.01	.01	.01	.01	.01
107.6000	.01	.01	.01	.01	.01
107.8500	.01	.01	.01	.01	.01
108.1000	.01	.01	.01	.01	.01
108.3500	.01	.01	.01	.01	.01
108.6000	.01	.01	.01	.01	.01
108.8500	.01	.01	.01	.01	.01
109.1000	.01	.01	.01	.01	.01
109.3500	.01	.01	.01	.01	.01
109.6000	.01	.01	.01	.01	.01
109.8500	.01	.01	.01	.01	.01
110.1000	.01	.01	.01	.01	.01
110.3500	.01	.01	.01	.01	.01
110.6000	.01	.01	.01	.01	.01
110.8500	.01	.01	.01	.01	.01
111.1000	.01	.01	.01	.01	.01
111.3500	.01	.01	.01	.01	.01
111.6000	.01	.01	.01	.01	.01
111.8500	.01	.01	.01	.01	.01
112.1000	.01	.01	.01	.01	.01
112.3500	.01	.01	.01	.01	.01
112.6000	.01	.01	.01	.01	.01
112.8500	.01	.01	.01	.01	.01
113.1000	.01	.01	.01	.01	.01
113.3500	.01	.01	.01	.01	.01
113.6000	.01	.01	.01	.01	.01
113.8500	.01	.01	.01	.01	.01
114.1000	.01	.01	.01	.01	.01
114.3500	.01	.01	.01	.01	.01
114.6000	.01	.01	.01	.01	.01
114.8500	.01	.01	.01	.01	.01
115.1000	.01	.01	.01	.01	.01
115.3500	.01	.01	.01	.01	.01
115.6000	.01	.01	.01	.01	.01
115.8500	.01	.01	.01	.01	.01
116.1000	.01	.01	.01	.01	.01

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
116.3500	.01	.01	.01	.01	.01
116.6000	.01	.01	.01	.01	.01
116.8500	.01	.01	.01	.01	.01
117.1000	.01	.01	.01	.01	.01
117.3500	.01	.01	.01	.01	.01
117.6000	.01	.01	.01	.01	.01
117.8500	.01	.01	.01	.01	.01
118.1000	.01	.01	.01	.01	.01
118.3500	.01	.01	.01	.01	.01
118.6000	.01	.01	.01	.01	.01
118.8500	.01	.01	.01	.01	.01
119.1000	.01	.01	.01	.01	.01
119.3500	.01	.01	.01	.01	.01
119.6000	.01	.01	.01	.01	.01
119.8500	.01	.01	.01	.01	.01
120.1000	.01	.01	.01	.01	.01
120.3500	.01	.01	.01	.01	.01
120.6000	.01	.01	.01	.01	.01
120.8500	.01	.01	.01	.01	.01
121.1000	.01	.01	.01	.01	.01
121.3500	.01	.01	.01	.01	.01
121.6000	.01	.01	.01	.01	.01
121.8500	.01	.01	.01	.01	.01
122.1000	.01	.01	.01	.01	.01
122.3500	.01	.01	.01	.01	.01
122.6000	.01	.01	.01	.01	.01
122.8500	.01	.01	.01	.01	.01
123.1000	.01	.01	.01	.01	.01
123.3500	.01	.01	.01	.01	.01
123.6000	.01	.01	.01	.01	.01
123.8500	.01	.01	.01	.01	.01
124.1000	.01	.01	.01	.01	.01
124.3500	.01	.01	.01	.01	.01
124.6000	.01	.01	.01	.01	.01
124.8500	.01	.01	.01	.01	.01
125.1000	.01	.01	.01	.01	.01
125.3500	.01	.01	.01	.01	.01
125.6000	.01	.01	.01	.01	.01
125.8500	.01	.01	.01	.01	.01
126.1000	.01	.01	.01	.01	.01
126.3500	.01	.01	.01	.01	.01
126.6000	.01	.01	.01	.01	.01
126.8500	.01	.01	.01	.01	.01
127.1000	.01	.01	.01	.01	.01
127.3500	.01	.01	.01	.01	.01

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
127.6000	.01	.01	.01	.01	.01
127.8500	.01	.01	.01	.01	.01
128.1000	.01	.01	.01	.01	.01
128.3500	.01	.01	.01	.01	.01
128.6000	.01	.01	.01	.01	.01
128.8500	.01	.01	.01	.01	.01
129.1000	.01	.01	.01	.01	.01
129.3500	.01	.01	.01	.01	.01
129.6000	.01	.01	.01	.01	.01
129.8500	.01	.01	.01	.01	.01
130.1000	.01	.01	.01	.01	.01
130.3500	.01	.01	.01	.01	.01
130.6000	.01	.01	.01	.01	.01
130.8500	.01	.01	.01	.01	.01
131.1000	.01	.01	.01	.01	.01
131.3500	.01	.01	.01	.01	.01
131.6000	.01	.01	.01	.01	.01
131.8500	.01	.01	.01	.01	.01
132.1000	.01	.01	.01	.01	.01
132.3500	.01	.01	.01	.01	.01
132.6000	.01	.01	.01	.01	.01
132.8500	.01	.01	.01	.01	.01
133.1000	.01	.01	.01	.01	.01
133.3500	.01	.01	.01	.01	.01
133.6000	.01	.01	.01	.01	.01
133.8500	.01	.01	.01	.01	.01
134.1000	.01	.01	.01	.01	.01
134.3500	.01	.01	.01	.01	.01
134.6000	.01	.01	.01	.01	.01
134.8500	.01	.01	.01	.01	.01
135.1000	.01	.01	.01	.01	.01
135.3500	.01	.01	.01	.01	.01
135.6000	.01	.01	.01	.01	.01
135.8500	.01	.01	.01	.01	.01
136.1000	.01	.01	.01	.01	.01
136.3500	.01	.01	.01	.01	.01
136.6000	.01	.01	.01	.01	.01
136.8500	.01	.01	.01	.01	.01
137.1000	.01	.01	.01	.01	.01
137.3500	.01	.01	.01	.01	.01
137.6000	.01	.01	.01	.01	.01
137.8500	.01	.01	.01	.01	.01
138.1000	.01	.01	.01	.01	.01
138.3500	.01	.01	.01	.01	.01
138.6000	.01	.01	.01	.01	.01

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
138.8500	.01	.01	.01	.01	.01
139.1000	.01	.01	.01	.01	.01
139.3500	.01	.01	.01	.01	.01
139.6000	.01	.01	.01	.01	.01
139.8500	.01	.01	.01	.01	.01
140.1000	.01	.01	.01	.01	.01
140.3500	.01	.01	.01	.01	.01
140.6000	.01	.01	.01	.01	.01
140.8500	.01	.01	.01	.01	.01
141.1000	.01	.01	.01	.01	.01
141.3500	.01	.01	.01	.01	.01
141.6000	.01	.01	.01	.01	.01
141.8500	.01	.01	.01	.01	.01
142.1000	.01	.01	.01	.01	.01
142.3500	.01	.01	.01	.01	.01
142.6000	.01	.01	.01	.01	.01
142.8500	.01	.01	.01	.01	.01
143.1000	.01	.01	.01	.01	.01
143.3500	.01	.01	.01	.01	.01
143.6000	.01	.01	.01	.01	.01
143.8500	.01	.01	.01	.01	.01
144.1000	.01	.01	.01	.01	.01
144.3500	.01	.01	.01	.01	.01
144.6000	.01	.01	.01	.01	.01
144.8500	.01	.01	.01	.01	.01
145.1000	.01	.01	.01	.01	.01
145.3500	.01	.01	.01	.01	.01
145.6000	.01	.01	.01	.01	.01
145.8500	.01	.01	.01	.01	.01
146.1000	.01	.01	.01	.01	.01
146.3500	.01	.01	.01	.01	.00
146.6000	.00	.00	.00	.00	.00
146.8500	.00	.00	.00	.00	.00
147.1000	.00	.00	.00	.00	.00
147.3500	.00	.00	.00	.00	.00
147.6000	.00	.00	.00	.00	.00
147.8500	.00	.00	.00	.00	.00
148.1000	.00	.00	.00	.00	.00
148.3500	.00	.00	.00	.00	.00
148.6000	.00	.00	.00	.00	.00
148.8500	.00	.00	.00	.00	.00
149.1000	.00	.00	.00	.00	.00
149.3500	.00	.00	.00	.00	.00
149.6000	.00	.00	.00	.00	.00
149.8500	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
150.1000	.00	.00	.00	.00	.00
150.3500	.00	.00	.00	.00	.00
150.6000	.00	.00	.00	.00	.00
150.8500	.00	.00	.00	.00	.00
151.1000	.00	.00	.00	.00	.00
151.3500	.00	.00	.00	.00	.00
151.6000	.00	.00	.00	.00	.00
151.8500	.00	.00	.00	.00	.00
152.1000	.00	.00	.00	.00	.00
152.3500	.00	.00	.00	.00	.00
152.6000	.00	.00	.00	.00	.00
152.8500	.00	.00	.00	.00	.00
153.1000	.00	.00	.00	.00	.00
153.3500	.00	.00	.00	.00	.00
153.6000	.00	.00	.00	.00	.00
153.8500	.00	.00	.00	.00	.00
154.1000	.00	.00	.00	.00	.00
154.3500	.00	.00	.00	.00	.00
154.6000	.00	.00	.00	.00	.00
154.8500	.00	.00	.00	.00	.00
155.1000	.00	.00	.00	.00	.00
155.3500	.00	.00	.00	.00	.00
155.6000	.00	.00	.00	.00	.00
155.8500	.00	.00	.00	.00	.00
156.1000	.00	.00	.00	.00	.00
156.3500	.00	.00	.00	.00	.00
156.6000	.00	.00	.00	.00	.00
156.8500	.00	.00	.00	.00	.00
157.1000	.00	.00	.00	.00	.00
157.3500	.00	.00	.00	.00	.00
157.6000	.00	.00	.00	.00	.00
157.8500	.00	.00	.00	.00	.00
158.1000	.00	.00	.00	.00	.00
158.3500	.00	.00	.00	.00	.00
158.6000	.00	.00	.00	.00	.00
158.8500	.00	.00	.00	.00	.00
159.1000	.00	.00	.00	.00	.00
159.3500	.00	.00	.00	.00	.00
159.6000	.00	.00	.00	.00	.00
159.8500	.00	.00	.00	.00	.00
160.1000	.00	.00	.00	.00	.00
160.3500	.00	.00	.00	.00	.00
160.6000	.00	.00	.00	.00	.00
160.8500	.00	.00	.00	.00	.00
161.1000	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
161.3500	.00	.00	.00	.00	.00
161.6000	.00	.00	.00	.00	.00
161.8500	.00	.00	.00	.00	.00
162.1000	.00	.00	.00	.00	.00
162.3500	.00	.00	.00	.00	.00
162.6000	.00	.00	.00	.00	.00
162.8500	.00	.00	.00	.00	.00
163.1000	.00	.00	.00	.00	.00
163.3500	.00	.00	.00	.00	.00
163.6000	.00	.00	.00	.00	.00
163.8500	.00	.00	.00	.00	.00
164.1000	.00	.00	.00	.00	.00
164.3500	.00	.00	.00	.00	.00
164.6000	.00	.00	.00	.00	.00
164.8500	.00	.00	.00	.00	.00
165.1000	.00	.00	.00	.00	.00
165.3500	.00	.00	.00	.00	.00
165.6000	.00	.00	.00	.00	.00
165.8500	.00	.00	.00	.00	.00
166.1000	.00	.00	.00	.00	.00
166.3500	.00	.00	.00	.00	.00
166.6000	.00	.00	.00	.00	.00
166.8500	.00	.00	.00	.00	.00
167.1000	.00	.00	.00	.00	.00
167.3500	.00	.00	.00	.00	.00
167.6000	.00	.00	.00	.00	.00
167.8500	.00	.00	.00	.00	.00
168.1000	.00	.00	.00	.00	.00
168.3500	.00	.00	.00	.00	.00
168.6000	.00	.00	.00	.00	.00
168.8500	.00	.00	.00	.00	.00
169.1000	.00	.00	.00	.00	.00
169.3500	.00	.00	.00	.00	.00
169.6000	.00	.00	.00	.00	.00
169.8500	.00	.00	.00	.00	.00
170.1000	.00	.00	.00	.00	.00
170.3500	.00	.00	.00	.00	.00
170.6000	.00	.00	.00	.00	.00
170.8500	.00	.00	.00	.00	.00
171.1000	.00	.00	.00	.00	.00
171.3500	.00	.00	.00	.00	.00
171.6000	.00	.00	.00	.00	.00
171.8500	.00	.00	.00	.00	.00
172.1000	.00	.00	.00	.00	.00
172.3500	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
172.6000	.00	.00	.00	.00	.00
172.8500	.00	.00	.00	.00	.00
173.1000	.00	.00	.00	.00	.00
173.3500	.00	.00	.00	.00	.00
173.6000	.00	.00	.00	.00	.00
173.8500	.00	.00	.00	.00	.00
174.1000	.00	.00	.00	.00	.00
174.3500	.00	.00	.00	.00	.00
174.6000	.00	.00	.00	.00	.00
174.8500	.00	.00	.00	.00	.00
175.1000	.00	.00	.00	.00	.00
175.3500	.00	.00	.00	.00	.00
175.6000	.00	.00	.00	.00	.00
175.8500	.00	.00	.00	.00	.00
176.1000	.00	.00	.00	.00	.00
176.3500	.00	.00	.00	.00	.00
176.6000	.00	.00	.00	.00	.00
176.8500	.00	.00	.00	.00	.00
177.1000	.00	.00	.00	.00	.00
177.3500	.00	.00	.00	.00	.00
177.6000	.00	.00	.00	.00	.00
177.8500	.00	.00	.00	.00	.00
178.1000	.00	.00	.00	.00	.00
178.3500	.00	.00	.00	.00	.00
178.6000	.00	.00	.00	.00	.00
178.8500	.00	.00	.00	.00	.00
179.1000	.00	.00	.00	.00	.00
179.3500	.00	.00	.00	.00	.00
179.6000	.00	.00	.00	.00	.00
179.8500	.00	.00	.00	.00	

SUMMARY FOR HYDROGRAPH ADDITION
at Node: DESIGN POINT 1

HYG Directory: S:\2010\10170\PondPack\2016-10-14_BD\

Upstream Link ID	Upstream Node ID	HYG file	HYG ID	HYG tag
OCS 1A	BASIN 1A		OCS 1A	25
REACH 1B	JUNC 1B		REACH 1B	25

INFLOWS TO: DESIGN POINT 1

HYG file	HYG ID	HYG tag	Volume cu.ft	Peak Time hrs	Peak Flow cfs
	OCS 1A	25	440208	12.3500	69.48
	REACH 1B	25	261424	12.3500	48.71

TOTAL FLOW INTO: DESIGN POINT 1

HYG file	HYG ID	HYG tag	Volume cu.ft	Peak Time hrs	Peak Flow cfs
	DESIGN POINT 1	25	701622	12.3500	118.19

```
TOTAL NODE INFLOW...
HYG file =
HYG ID   = DESIGN POINT 1
HYG Tag  =     25
-----------------------------------
Peak Discharge =       118.19 cfs
Time to Peak   =      12.3500 hrs
HYG Volume     =       701622 cu.ft
-----------------------------------
```

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
6.4000	.00	.00	.00	.00	.00
6.6500	.00	.00	.00	.00	.00
6.9000	.00	.00	.00	.00	.00
7.1500	.00	.00	.00	.01	.01
7.4000	.01	.01	.01	.02	.02
7.6500	.03	.03	.04	.05	.06
7.9000	.08	.09	.11	.13	.14
8.1500	.16	.18	.20	.21	.23
8.4000	.26	.28	.31	.33	.36
8.6500	.39	.41	.44	.48	.51
8.9000	.54	.58	.62	.66	.70
9.1500	.74	.78	.82	.87	.91
9.4000	.96	1.01	1.06	1.11	1.17
9.6500	1.23	1.29	1.35	1.41	1.47
9.9000	1.54	1.60	1.67	1.74	1.81
10.1500	1.88	1.96	2.04	2.12	2.21
10.4000	2.29	2.38	2.47	2.57	2.67
10.6500	2.77	2.88	2.99	3.10	3.21
10.9000	3.33	3.44	3.56	3.69	3.82
11.1500	3.96	4.11	4.27	4.46	4.67
11.4000	4.91	5.19	5.49	5.82	6.20
11.6500	6.69	7.36	8.29	9.54	11.16
11.9000	13.18	17.04	28.55	45.94	65.98
12.1500	85.65	101.35	111.60	117.04	118.19
12.4000	115.61	110.20	102.76	94.23	85.62
12.6500	77.12	69.24	62.02	55.57	50.11
12.9000	45.36	41.25	37.81	34.89	32.36
13.1500	30.14	28.23	26.56	25.18	24.02
13.4000	23.01	22.13	21.37	20.69	20.08
13.6500	19.54	19.06	18.61	18.19	17.79
13.9000	17.41	17.05	16.69	16.34	16.01

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
14.1500	15.68	15.37	15.07	14.79	14.56
14.4000	14.34	14.13	13.92	13.72	13.53
14.6500	13.34	13.16	12.98	12.80	12.63
14.9000	12.45	12.28	12.11	11.94	11.77
15.1500	11.60	11.43	11.26	11.10	10.93
15.4000	10.77	10.60	10.44	10.27	10.11
15.6500	9.94	9.78	9.61	9.45	9.28
15.9000	9.12	8.95	8.78	8.62	8.46
16.1500	8.30	8.15	8.00	7.86	7.72
16.4000	7.59	7.47	7.36	7.25	7.15
16.6500	7.05	6.96	6.86	6.77	6.68
16.9000	6.60	6.52	6.44	6.40	6.34
17.1500	6.28	6.21	6.15	6.09	6.03
17.4000	5.97	5.90	5.84	5.78	5.71
17.6500	5.65	5.58	5.51	5.45	5.38
17.9000	5.32	5.25	5.18	5.12	5.05
18.1500	4.99	4.92	4.86	4.81	4.75
18.4000	4.70	4.66	4.62	4.58	4.54
18.6500	4.50	4.47	4.44	4.41	4.38
18.9000	4.35	4.32	4.29	4.27	4.24
19.1500	4.22	4.19	4.17	4.15	4.12
19.4000	4.10	4.08	4.06	4.03	4.01
19.6500	3.99	3.97	3.95	3.93	3.90
19.9000	3.88	3.86	3.84	3.82	3.80
20.1500	3.78	3.76	3.74	3.72	3.70
20.4000	3.68	3.66	3.65	3.63	3.61
20.6500	3.59	3.58	3.56	3.54	3.53
20.9000	3.51	3.49	3.48	3.46	3.45
21.1500	3.43	3.42	3.40	3.39	3.37
21.4000	3.35	3.34	3.32	3.31	3.29
21.6500	3.27	3.26	3.24	3.23	3.21
21.9000	3.20	3.18	3.17	3.15	3.14
22.1500	3.12	3.11	3.09	3.08	3.06
22.4000	3.04	3.03	3.01	3.00	2.98
22.6500	2.97	2.95	2.94	2.92	2.91
22.9000	2.89	2.88	2.86	2.85	2.83
23.1500	2.81	2.80	2.78	2.77	2.75
23.4000	2.74	2.72	2.71	2.69	2.68
23.6500	2.66	2.64	2.63	2.61	2.60
23.9000	2.58	2.57	2.55	2.52	2.47
24.1500	2.37	2.24	2.08	1.89	1.70
24.4000	1.57	1.49	1.41	1.35	1.29
24.6500	1.26	1.22	1.19	1.17	1.15
24.9000	1.13	1.12	1.11	1.11	1.10
25.1500	1.09	1.09	1.08	1.08	1.08

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
25.4000	1.07	1.07	1.07	1.06	1.06
25.6500	1.06	1.06	1.05	1.05	1.05
25.9000	1.05	1.05	1.05	1.05	1.04
26.1500	1.04	1.04	1.04	1.04	1.04
26.4000	1.04	1.03	1.03	1.03	1.03
26.6500	1.03	1.03	1.03	1.03	1.02
26.9000	1.02	1.02	1.02	1.02	1.02
27.1500	1.02	1.02	1.01	1.01	1.01
27.4000	1.01	1.01	1.01	1.01	1.01
27.6500	1.01	1.00	1.00	1.00	1.00
27.9000	1.00	1.00	1.00	1.00	.99
28.1500	.99	.99	.99	.99	.99
28.4000	.98	.98	.98	.98	.98
28.6500	.98	.97	.97	.97	.97
28.9000	.97	.97	.96	.96	.96
29.1500	.96	.96	.96	.95	.95
29.4000	.95	.95	.95	.95	.94
29.6500	.94	.94	.94	.94	.94
29.9000	.93	.93	.93	.93	.93
30.1500	.93	.92	.92	.92	.92
30.4000	.92	.92	.91	.91	.91
30.6500	.91	.91	.91	.90	.90
30.9000	.90	.90	.90	.90	.89
31.1500	.89	.89	.89	.89	.89
31.4000	.88	.88	.88	.88	.88
31.6500	.88	.87	.87	.87	.87
31.9000	.87	.87	.87	.86	.86
32.1500	.86	.86	.86	.86	.85
32.4000	.85	.85	.85	.85	.85
32.6500	.84	.84	.84	.84	.84
32.9000	.84	.83	.83	.83	.83
33.1500	.83	.83	.82	.82	.82
33.4000	.82	.82	.82	.81	.81
33.6500	.81	.81	.81	.81	.80
33.9000	.80	.80	.80	.80	.80
34.1500	.79	.79	.79	.79	.79
34.4000	.79	.78	.78	.78	.78
34.6500	.78	.78	.77	.77	.77
34.9000	.77	.77	.77	.76	.76
35.1500	.76	.76	.76	.76	.75
35.4000	.75	.75	.75	.75	.75
35.6500	.74	.74	.74	.74	.74
35.9000	.74	.73	.73	.73	.73
36.1500	.73	.73	.72	.72	.72
36.4000	.72	.72	.72	.71	.71

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
36.6500	.71	.71	.71	.71	.70
36.9000	.70	.70	.70	.70	.70
37.1500	.69	.69	.69	.69	.69
37.4000	.69	.68	.68	.68	.68
37.6500	.68	.68	.67	.67	.67
37.9000	.67	.67	.67	.66	.66
38.1500	.66	.66	.66	.66	.65
38.4000	.65	.65	.65	.65	.65
38.6500	.64	.64	.64	.64	.64
38.9000	.64	.63	.63	.63	.63
39.1500	.63	.63	.62	.62	.62
39.4000	.62	.62	.62	.61	.61
39.6500	.61	.61	.61	.61	.60
39.9000	.60	.60	.60	.60	.60
40.1500	.59	.59	.59	.59	.59
40.4000	.59	.58	.58	.58	.58
40.6500	.58	.58	.57	.57	.57
40.9000	.57	.57	.57	.56	.56
41.1500	.56	.56	.56	.56	.55
41.4000	.55	.55	.55	.55	.55
41.6500	.55	.54	.54	.54	.54
41.9000	.54	.53	.53	.53	.53
42.1500	.53	.53	.52	.52	.52
42.4000	.52	.52	.52	.51	.51
42.6500	.51	.51	.51	.51	.50
42.9000	.50	.50	.50	.50	.50
43.1500	.50	.49	.49	.49	.49
43.4000	.49	.49	.48	.48	.48
43.6500	.48	.48	.48	.47	.47
43.9000	.47	.47	.47	.46	.46
44.1500	.46	.46	.46	.46	.45
44.4000	.45	.45	.45	.45	.45
44.6500	.44	.44	.44	.44	.44
44.9000	.44	.43	.43	.43	.43
45.1500	.43	.43	.43	.42	.42
45.4000	.42	.42	.42	.42	.41
45.6500	.41	.41	.41	.41	.40
45.9000	.40	.40	.40	.39	.39
46.1500	.39	.39	.38	.38	.38
46.4000	.38	.37	.37	.37	.37
46.6500	.36	.36	.36	.36	.36
46.9000	.35	.35	.35	.35	.34
47.1500	.34	.34	.34	.34	.33
47.4000	.33	.33	.33	.33	.32
47.6500	.32	.32	.32	.32	.31

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
47.9000	.31	.31	.31	.31	.30
48.1500	.30	.30	.30	.30	.29
48.4000	.29	.29	.29	.29	.29
48.6500	.28	.28	.28	.28	.28
48.9000	.28	.27	.27	.27	.27
49.1500	.27	.27	.26	.26	.26
49.4000	.26	.26	.26	.25	.25
49.6500	.25	.25	.25	.25	.25
49.9000	.24	.24	.24	.24	.24
50.1500	.24	.23	.23	.23	.23
50.4000	.23	.23	.23	.23	.22
50.6500	.22	.22	.22	.22	.22
50.9000	.22	.21	.21	.21	.21
51.1500	.21	.21	.21	.21	.20
51.4000	.20	.20	.20	.20	.20
51.6500	.20	.20	.19	.19	.19
51.9000	.19	.19	.19	.19	.19
52.1500	.19	.18	.18	.18	.18
52.4000	.18	.18	.18	.18	.18
52.6500	.18	.17	.17	.17	.17
52.9000	.17	.17	.17	.17	.17
53.1500	.17	.17	.17	.16	.16
53.4000	.16	.16	.16	.16	.16
53.6500	.16	.16	.16	.16	.16
53.9000	.15	.15	.15	.15	.15
54.1500	.15	.15	.15	.15	.15
54.4000	.15	.15	.15	.15	.14
54.6500	.14	.14	.14	.14	.14
54.9000	.14	.14	.14	.14	.14
55.1500	.14	.14	.14	.13	.13
55.4000	.13	.13	.13	.13	.13
55.6500	.13	.13	.13	.13	.13
55.9000	.13	.13	.13	.13	.12
56.1500	.12	.12	.12	.12	.12
56.4000	.12	.12	.12	.12	.12
56.6500	.12	.12	.12	.12	.12
56.9000	.12	.11	.11	.11	.11
57.1500	.11	.11	.11	.11	.11
57.4000	.11	.11	.11	.11	.11
57.6500	.11	.11	.11	.11	.11
57.9000	.10	.10	.10	.10	.10
58.1500	.10	.10	.10	.10	.10
58.4000	.10	.10	.10	.10	.10
58.6500	.10	.10	.10	.10	.10
58.9000	.09	.09	.09	.09	.09

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
59.1500	.09	.09	.09	.09	.09
59.4000	.09	.09	.09	.09	.09
59.6500	.09	.09	.09	.09	.09
59.9000	.09	.09	.09	.08	.08
60.1500	.08	.08	.08	.08	.08
60.4000	.08	.08	.08	.08	.08
60.6500	.08	.08	.08	.08	.08
60.9000	.08	.08	.08	.08	.08
61.1500	.08	.08	.08	.08	.08
61.4000	.08	.08	.08	.08	.08
61.6500	.08	.08	.08	.08	.08
61.9000	.07	.07	.07	.07	.07
62.1500	.07	.07	.07	.07	.07
62.4000	.07	.07	.07	.07	.07
62.6500	.07	.07	.07	.07	.07
62.9000	.07	.07	.07	.07	.07
63.1500	.07	.07	.07	.07	.07
63.4000	.07	.07	.07	.07	.07
63.6500	.07	.07	.07	.07	.07
63.9000	.07	.07	.07	.07	.06
64.1500	.06	.06	.06	.06	.06
64.4000	.06	.06	.06	.06	.06
64.6500	.06	.06	.06	.06	.06
64.9000	.06	.06	.06	.06	.06
65.1500	.06	.06	.06	.06	.06
65.4000	.06	.06	.06	.06	.06
65.6500	.06	.06	.06	.06	.06
65.9000	.06	.06	.06	.06	.06
66.1500	.06	.06	.06	.06	.06
66.4000	.06	.06	.06	.06	.06
66.6500	.05	.05	.05	.05	.05
66.9000	.05	.05	.05	.05	.05
67.1500	.05	.05	.05	.05	.05
67.4000	.05	.05	.05	.05	.05
67.6500	.05	.05	.05	.05	.05
67.9000	.05	.05	.05	.05	.05
68.1500	.05	.05	.05	.05	.05
68.4000	.05	.05	.05	.05	.05
68.6500	.05	.05	.05	.05	.05
68.9000	.05	.05	.05	.05	.05
69.1500	.05	.05	.05	.05	.05
69.4000	.05	.05	.05	.05	.05
69.6500	.05	.04	.04	.04	.04
69.9000	.04	.04	.04	.04	.04
70.1500	.04	.04	.04	.04	.04

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
70.4000	.04	.04	.04	.04	.04
70.6500	.04	.04	.04	.04	.04
70.9000	.04	.04	.04	.04	.04
71.1500	.04	.04	.04	.04	.04
71.4000	.04	.04	.04	.04	.04
71.6500	.04	.04	.04	.04	.04
71.9000	.04	.04	.04	.04	.04
72.1500	.04	.04	.04	.04	.04
72.4000	.04	.04	.04	.04	.04
72.6500	.04	.04	.04	.04	.04
72.9000	.04	.04	.04	.04	.04
73.1500	.04	.04	.04	.04	.04
73.4000	.04	.04	.04	.03	.03
73.6500	.03	.03	.03	.03	.03
73.9000	.03	.03	.03	.03	.03
74.1500	.03	.03	.03	.03	.03
74.4000	.03	.03	.03	.03	.03
74.6500	.03	.03	.03	.03	.03
74.9000	.03	.03	.03	.03	.03
75.1500	.03	.03	.03	.03	.03
75.4000	.03	.03	.03	.03	.03
75.6500	.03	.03	.03	.03	.03
75.9000	.03	.03	.03	.03	.03
76.1500	.03	.03	.03	.03	.03
76.4000	.03	.03	.03	.03	.03
76.6500	.03	.03	.03	.03	.03
76.9000	.03	.03	.03	.03	.03
77.1500	.03	.03	.03	.03	.03
77.4000	.03	.03	.03	.03	.03
77.6500	.03	.03	.03	.03	.03
77.9000	.03	.03	.03	.03	.03
78.1500	.03	.03	.03	.03	.03
78.4000	.03	.03	.03	.03	.03
78.6500	.03	.02	.02	.02	.02
78.9000	.02	.02	.02	.02	.02
79.1500	.02	.02	.02	.02	.02
79.4000	.02	.02	.02	.02	.02
79.6500	.02	.02	.02	.02	.02
79.9000	.02	.02	.02	.02	.02
80.1500	.02	.02	.02	.02	.02
80.4000	.02	.02	.02	.02	.02
80.6500	.02	.02	.02	.02	.02
80.9000	.02	.02	.02	.02	.02
81.1500	.02	.02	.02	.02	.02
81.4000	.02	.02	.02	.02	.02

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
81.6500	.02	.02	.02	.02	.02
81.9000	.02	.02	.02	.02	.02
82.1500	.02	.02	.02	.02	.02
82.4000	.02	.02	.02	.02	.02
82.6500	.02	.02	.02	.02	.02
82.9000	.02	.02	.02	.02	.02
83.1500	.02	.02	.02	.02	.02
83.4000	.02	.02	.02	.02	.02
83.6500	.02	.02	.02	.02	.02
83.9000	.02	.02	.02	.02	.02
84.1500	.02	.02	.02	.02	.02
84.4000	.02	.02	.02	.02	.02
84.6500	.02	.02	.02	.02	.02
84.9000	.02	.02	.02	.02	.02
85.1500	.02	.02	.02	.02	.02
85.4000	.02	.02	.02	.02	.02
85.6500	.02	.02	.02	.02	.02
85.9000	.02	.02	.02	.02	.02
86.1500	.02	.02	.02	.02	.02
86.4000	.02	.02	.02	.02	.02
86.6500	.02	.02	.02	.02	.02
86.9000	.02	.02	.02	.02	.02
87.1500	.02	.02	.02	.02	.02
87.4000	.02	.02	.02	.02	.02
87.6500	.02	.02	.02	.02	.02
87.9000	.02	.02	.02	.02	.02
88.1500	.02	.02	.02	.02	.02
88.4000	.02	.02	.02	.02	.02
88.6500	.02	.02	.02	.02	.02
88.9000	.02	.02	.02	.02	.02
89.1500	.02	.02	.02	.02	.02
89.4000	.02	.02	.02	.02	.02
89.6500	.02	.02	.02	.02	.02
89.9000	.02	.02	.02	.02	.02
90.1500	.02	.02	.02	.02	.02
90.4000	.02	.02	.02	.02	.02
90.6500	.02	.02	.02	.02	.02
90.9000	.02	.02	.02	.02	.02
91.1500	.02	.02	.02	.02	.02
91.4000	.02	.02	.02	.02	.02
91.6500	.02	.02	.02	.02	.02
91.9000	.02	.02	.02	.02	.02
92.1500	.02	.02	.02	.02	.02
92.4000	.02	.02	.02	.02	.02
92.6500	.02	.02	.02	.02	.02

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
92.9000	.02	.02	.02	.02	.02
93.1500	.02	.02	.02	.02	.02
93.4000	.02	.02	.02	.02	.02
93.6500	.02	.02	.02	.02	.02
93.9000	.02	.02	.02	.02	.02
94.1500	.02	.02	.02	.02	.02
94.4000	.02	.02	.02	.02	.02
94.6500	.02	.02	.02	.02	.02
94.9000	.02	.02	.02	.02	.02
95.1500	.02	.02	.02	.02	.02
95.4000	.02	.02	.02	.02	.02
95.6500	.02	.02	.02	.02	.02
95.9000	.02	.02	.02	.02	.02
96.1500	.02	.02	.02	.02	.02
96.4000	.02	.02	.02	.02	.02
96.6500	.02	.02	.02	.02	.02
96.9000	.02	.02	.02	.01	.01
97.1500	.01	.01	.01	.01	.01
97.4000	.01	.01	.01	.01	.01
97.6500	.01	.01	.01	.01	.01
97.9000	.01	.01	.01	.01	.01
98.1500	.01	.01	.01	.01	.01
98.4000	.01	.01	.01	.01	.01
98.6500	.01	.01	.01	.01	.01
98.9000	.01	.01	.01	.01	.01
99.1500	.01	.01	.01	.01	.01
99.4000	.01	.01	.01	.01	.01
99.6500	.01	.01	.01	.01	.01
99.9000	.01	.01	.01	.01	.01
100.1500	.01	.01	.01	.01	.01
100.4000	.01	.01	.01	.01	.01
100.6500	.01	.01	.01	.01	.01
100.9000	.01	.01	.01	.01	.01
101.1500	.01	.01	.01	.01	.01
101.4000	.01	.01	.01	.01	.01
101.6500	.01	.01	.01	.01	.01
101.9000	.01	.01	.01	.01	.01
102.1500	.01	.01	.01	.01	.01
102.4000	.01	.01	.01	.01	.01
102.6500	.01	.01	.01	.01	.01
102.9000	.01	.01	.01	.01	.01
103.1500	.01	.01	.01	.01	.01
103.4000	.01	.01	.01	.01	.01
103.6500	.01	.01	.01	.01	.01
103.9000	.01	.01	.01	.01	.01

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
104.1500	.01	.01	.01	.01	.01
104.4000	.01	.01	.01	.01	.01
104.6500	.01	.01	.01	.01	.01
104.9000	.01	.01	.01	.01	.01
105.1500	.01	.01	.01	.01	.01
105.4000	.01	.01	.01	.01	.01
105.6500	.01	.01	.01	.01	.01
105.9000	.01	.01	.01	.01	.01
106.1500	.01	.01	.01	.01	.01
106.4000	.01	.01	.01	.01	.01
106.6500	.01	.01	.01	.01	.01
106.9000	.01	.01	.01	.01	.01
107.1500	.01	.01	.01	.01	.01
107.4000	.01	.01	.01	.01	.01
107.6500	.01	.01	.01	.01	.01
107.9000	.01	.01	.01	.01	.01
108.1500	.01	.01	.01	.01	.01
108.4000	.01	.01	.01	.01	.01
108.6500	.01	.01	.01	.01	.01
108.9000	.01	.01	.01	.01	.01
109.1500	.01	.01	.01	.01	.01
109.4000	.01	.01	.01	.01	.01
109.6500	.01	.01	.01	.01	.01
109.9000	.01	.01	.01	.01	.01
110.1500	.01	.01	.01	.01	.01
110.4000	.01	.01	.01	.01	.01
110.6500	.01	.01	.01	.01	.01
110.9000	.01	.01	.01	.01	.01
111.1500	.01	.01	.01	.01	.01
111.4000	.01	.01	.01	.01	.01
111.6500	.01	.01	.01	.01	.01
111.9000	.01	.01	.01	.01	.01
112.1500	.01	.01	.01	.01	.01
112.4000	.01	.01	.01	.01	.01
112.6500	.01	.01	.01	.01	.01
112.9000	.01	.01	.01	.01	.01
113.1500	.01	.01	.01	.01	.01
113.4000	.01	.01	.01	.01	.01
113.6500	.01	.01	.01	.01	.01
113.9000	.01	.01	.01	.01	.01
114.1500	.01	.01	.01	.01	.01
114.4000	.01	.01	.01	.01	.01
114.6500	.01	.01	.01	.01	.01
114.9000	.01	.01	.01	.01	.01
115.1500	.01	.01	.01	.01	.01

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
115.4000	.01	.01	.01	.01	.01
115.6500	.01	.01	.01	.01	.01
115.9000	.01	.01	.01	.01	.01
116.1500	.01	.01	.01	.01	.01
116.4000	.01	.01	.01	.01	.01
116.6500	.01	.01	.01	.01	.01
116.9000	.01	.01	.01	.01	.01
117.1500	.01	.01	.01	.01	.01
117.4000	.01	.01	.01	.01	.01
117.6500	.01	.01	.01	.01	.01
117.9000	.01	.01	.01	.01	.01
118.1500	.01	.01	.01	.01	.01
118.4000	.01	.01	.01	.01	.01
118.6500	.01	.01	.01	.01	.01
118.9000	.01	.01	.01	.01	.01
119.1500	.01	.01	.01	.01	.01
119.4000	.01	.01	.01	.01	.01
119.6500	.01	.01	.01	.01	.01
119.9000	.01	.01	.01	.01	.01
120.1500	.01	.01	.01	.01	.01
120.4000	.01	.01	.01	.01	.01
120.6500	.01	.01	.01	.01	.01
120.9000	.01	.01	.01	.01	.01
121.1500	.01	.01	.01	.01	.01
121.4000	.01	.01	.01	.01	.01
121.6500	.01	.01	.01	.01	.01
121.9000	.01	.01	.01	.01	.01
122.1500	.01	.01	.01	.01	.01
122.4000	.01	.01	.01	.01	.01
122.6500	.01	.01	.01	.01	.01
122.9000	.01	.01	.01	.01	.01
123.1500	.01	.01	.01	.01	.01
123.4000	.01	.01	.01	.01	.01
123.6500	.01	.01	.01	.01	.01
123.9000	.01	.01	.01	.01	.01
124.1500	.01	.01	.01	.01	.01
124.4000	.01	.01	.01	.01	.01
124.6500	.01	.01	.01	.01	.01
124.9000	.01	.01	.01	.01	.01
125.1500	.01	.01	.01	.01	.01
125.4000	.01	.01	.01	.01	.01
125.6500	.01	.01	.01	.01	.01
125.9000	.01	.01	.01	.01	.01
126.1500	.01	.01	.01	.01	.01
126.4000	.01	.01	.01	.01	.01

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
126.6500	.01	.01	.01	.01	.01
126.9000	.01	.01	.01	.01	.01
127.1500	.01	.01	.01	.01	.01
127.4000	.01	.01	.01	.01	.01
127.6500	.01	.01	.01	.01	.01
127.9000	.01	.01	.01	.01	.01
128.1500	.01	.01	.01	.01	.01
128.4000	.01	.01	.01	.01	.01
128.6500	.01	.01	.01	.01	.01
128.9000	.01	.01	.01	.01	.01
129.1500	.01	.01	.01	.01	.01
129.4000	.01	.01	.01	.01	.01
129.6500	.01	.01	.01	.01	.01
129.9000	.01	.01	.01	.01	.01
130.1500	.01	.01	.01	.01	.01
130.4000	.01	.01	.01	.01	.01
130.6500	.01	.01	.01	.01	.01
130.9000	.01	.01	.01	.01	.01
131.1500	.01	.01	.01	.01	.01
131.4000	.01	.01	.01	.01	.01
131.6500	.01	.01	.01	.01	.01
131.9000	.01	.01	.01	.01	.01
132.1500	.01	.01	.01	.01	.01
132.4000	.01	.01	.01	.01	.01
132.6500	.01	.01	.01	.01	.01
132.9000	.01	.01	.01	.01	.01
133.1500	.01	.01	.01	.01	.01
133.4000	.01	.01	.01	.01	.01
133.6500	.01	.01	.01	.01	.01
133.9000	.01	.01	.01	.01	.01
134.1500	.01	.01	.01	.01	.01
134.4000	.01	.01	.01	.01	.01
134.6500	.01	.01	.01	.01	.01
134.9000	.01	.01	.01	.01	.01
135.1500	.01	.01	.01	.01	.01
135.4000	.01	.01	.01	.01	.01
135.6500	.01	.01	.01	.01	.01
135.9000	.01	.01	.01	.01	.01
136.1500	.01	.01	.01	.01	.01
136.4000	.01	.01	.01	.01	.01
136.6500	.01	.01	.01	.01	.01
136.9000	.01	.01	.01	.01	.01
137.1500	.01	.01	.01	.01	.01
137.4000	.01	.01	.01	.01	.01
137.6500	.01	.01	.01	.01	.01

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
137.9000	.01	.01	.01	.01	.01
138.1500	.01	.01	.01	.01	.01
138.4000	.01	.01	.01	.01	.01
138.6500	.01	.01	.01	.01	.01
138.9000	.01	.01	.01	.01	.01
139.1500	.01	.01	.01	.01	.01
139.4000	.01	.01	.01	.01	.01
139.6500	.01	.01	.01	.01	.01
139.9000	.01	.01	.01	.01	.01
140.1500	.01	.01	.01	.01	.01
140.4000	.01	.01	.01	.01	.01
140.6500	.01	.01	.01	.01	.01
140.9000	.01	.01	.01	.01	.01
141.1500	.01	.01	.01	.01	.01
141.4000	.01	.01	.01	.01	.01
141.6500	.01	.01	.01	.01	.01
141.9000	.01	.01	.01	.01	.01
142.1500	.01	.01	.01	.01	.01
142.4000	.01	.01	.01	.01	.01
142.6500	.01	.01	.01	.01	.01
142.9000	.01	.01	.01	.01	.01
143.1500	.01	.01	.01	.01	.01
143.4000	.01	.01	.01	.01	.01
143.6500	.01	.01	.01	.01	.01
143.9000	.01	.01	.01	.01	.01
144.1500	.01	.01	.01	.01	.01
144.4000	.01	.01	.01	.01	.01
144.6500	.01	.01	.01	.01	.01
144.9000	.01	.01	.01	.01	.01
145.1500	.01	.01	.01	.01	.01
145.4000	.01	.01	.01	.01	.01
145.6500	.01	.01	.01	.01	.01
145.9000	.01	.01	.01	.01	.01
146.1500	.01	.01	.01	.01	.01
146.4000	.01	.01	.01	.01	.01
146.6500	.01	.00	.00	.00	.00
146.9000	.00	.00	.00	.00	.00
147.1500	.00	.00	.00	.00	.00
147.4000	.00	.00	.00	.00	.00
147.6500	.00	.00	.00	.00	.00
147.9000	.00	.00	.00	.00	.00
148.1500	.00	.00	.00	.00	.00
148.4000	.00	.00	.00	.00	.00
148.6500	.00	.00	.00	.00	.00
148.9000	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
149.1500	.00	.00	.00	.00	.00
149.4000	.00	.00	.00	.00	.00
149.6500	.00	.00	.00	.00	.00
149.9000	.00	.00	.00	.00	.00
150.1500	.00	.00	.00	.00	.00
150.4000	.00	.00	.00	.00	.00
150.6500	.00	.00	.00	.00	.00
150.9000	.00	.00	.00	.00	.00
151.1500	.00	.00	.00	.00	.00
151.4000	.00	.00	.00	.00	.00
151.6500	.00	.00	.00	.00	.00
151.9000	.00	.00	.00	.00	.00
152.1500	.00	.00	.00	.00	.00
152.4000	.00	.00	.00	.00	.00
152.6500	.00	.00	.00	.00	.00
152.9000	.00	.00	.00	.00	.00
153.1500	.00	.00	.00	.00	.00
153.4000	.00	.00	.00	.00	.00
153.6500	.00	.00	.00	.00	.00
153.9000	.00	.00	.00	.00	.00
154.1500	.00	.00	.00	.00	.00
154.4000	.00	.00	.00	.00	.00
154.6500	.00	.00	.00	.00	.00
154.9000	.00	.00	.00	.00	.00
155.1500	.00	.00	.00	.00	.00
155.4000	.00	.00	.00	.00	.00
155.6500	.00	.00	.00	.00	.00
155.9000	.00	.00	.00	.00	.00
156.1500	.00	.00	.00	.00	.00
156.4000	.00	.00	.00	.00	.00
156.6500	.00	.00	.00	.00	.00
156.9000	.00	.00	.00	.00	.00
157.1500	.00	.00	.00	.00	.00
157.4000	.00	.00	.00	.00	.00
157.6500	.00	.00	.00	.00	.00
157.9000	.00	.00	.00	.00	.00
158.1500	.00	.00	.00	.00	.00
158.4000	.00	.00	.00	.00	.00
158.6500	.00	.00	.00	.00	.00
158.9000	.00	.00	.00	.00	.00
159.1500	.00	.00	.00	.00	.00
159.4000	.00	.00	.00	.00	.00
159.6500	.00	.00	.00	.00	.00
159.9000	.00	.00	.00	.00	.00
160.1500	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
160.4000	.00	.00	.00	.00	.00
160.6500	.00	.00	.00	.00	.00
160.9000	.00	.00	.00	.00	.00
161.1500	.00	.00	.00	.00	.00
161.4000	.00	.00	.00	.00	.00
161.6500	.00	.00	.00	.00	.00
161.9000	.00	.00	.00	.00	.00
162.1500	.00	.00	.00	.00	.00
162.4000	.00	.00	.00	.00	.00
162.6500	.00	.00	.00	.00	.00
162.9000	.00	.00	.00	.00	.00
163.1500	.00	.00	.00	.00	.00
163.4000	.00	.00	.00	.00	.00
163.6500	.00	.00	.00	.00	.00
163.9000	.00	.00	.00	.00	.00
164.1500	.00	.00	.00	.00	.00
164.4000	.00	.00	.00	.00	.00
164.6500	.00	.00	.00	.00	.00
164.9000	.00	.00	.00	.00	.00
165.1500	.00	.00	.00	.00	.00
165.4000	.00	.00	.00	.00	.00
165.6500	.00	.00	.00	.00	.00
165.9000	.00	.00	.00	.00	.00
166.1500	.00	.00	.00	.00	.00
166.4000	.00	.00	.00	.00	.00
166.6500	.00	.00	.00	.00	.00
166.9000	.00	.00	.00	.00	.00
167.1500	.00	.00	.00	.00	.00
167.4000	.00	.00	.00	.00	.00
167.6500	.00	.00	.00	.00	.00
167.9000	.00	.00	.00	.00	.00
168.1500	.00	.00	.00	.00	.00
168.4000	.00	.00	.00	.00	.00
168.6500	.00	.00	.00	.00	.00
168.9000	.00	.00	.00	.00	.00
169.1500	.00	.00	.00	.00	.00
169.4000	.00	.00	.00	.00	.00
169.6500	.00	.00	.00	.00	.00
169.9000	.00	.00	.00	.00	.00
170.1500	.00	.00	.00	.00	.00
170.4000	.00	.00	.00	.00	.00
170.6500	.00	.00	.00	.00	.00
170.9000	.00	.00	.00	.00	.00
171.1500	.00	.00	.00	.00	.00
171.4000	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
171.6500	.00	.00	.00	.00	.00
171.9000	.00	.00	.00	.00	.00
172.1500	.00	.00	.00	.00	.00
172.4000	.00	.00	.00	.00	.00
172.6500	.00	.00	.00	.00	.00
172.9000	.00	.00	.00	.00	.00
173.1500	.00	.00	.00	.00	.00
173.4000	.00	.00	.00	.00	.00
173.6500	.00	.00	.00	.00	.00
173.9000	.00	.00	.00	.00	.00
174.1500	.00	.00	.00	.00	.00
174.4000	.00	.00	.00	.00	.00
174.6500	.00	.00	.00	.00	.00
174.9000	.00	.00	.00	.00	.00
175.1500	.00	.00	.00	.00	.00
175.4000	.00	.00	.00	.00	.00
175.6500	.00	.00	.00	.00	.00
175.9000	.00	.00	.00	.00	.00
176.1500	.00	.00	.00	.00	.00
176.4000	.00	.00	.00	.00	.00
176.6500	.00	.00	.00	.00	.00
176.9000	.00	.00	.00	.00	.00
177.1500	.00	.00	.00	.00	.00
177.4000	.00	.00	.00	.00	.00
177.6500	.00	.00	.00	.00	.00
177.9000	.00	.00	.00	.00	.00
178.1500	.00	.00	.00	.00	.00
178.4000	.00	.00	.00	.00	.00
178.6500	.00	.00	.00	.00	.00
178.9000	.00	.00	.00	.00	.00
179.1500	.00	.00	.00	.00	.00
179.4000	.00	.00	.00	.00	.00
179.6500	.00	.00	.00	.00	.00
179.9000	.00	.00	.00		

SUMMARY FOR HYDROGRAPH ADDITION
at Node: DESIGN POINT 1

HYG Directory: S:\2010\10170\PondPack\2016-10-14_BD\

Upstream Link ID	Upstream Node ID	HYG file	HYG ID	HYG tag
OCS 1A	BASIN 1A		OCS 1A	50
REACH 1B	JUNC 1B		REACH 1B	50

INFLOWS TO: DESIGN POINT 1

HYG file	HYG ID	HYG tag	Volume cu.ft	Peak Time hrs	Peak Flow cfs
	OCS 1A	50	573871	12.3000	94.06
	REACH 1B	50	334375	12.3500	62.06

TOTAL FLOW INTO: DESIGN POINT 1

HYG file	HYG ID	HYG tag	Volume cu.ft	Peak Time hrs	Peak Flow cfs
	DESIGN POINT 1	50	908246	12.3000	155.11

```
TOTAL NODE INFLOW...
HYG file =
HYG ID   = DESIGN POINT 1
HYG Tag  =     50
-----------------------------------
Peak Discharge =       155.11 cfs
Time to Peak   =      12.3000 hrs
HYG Volume     =       908246 cu.ft
-----------------------------------
```

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
5.6500	.00	.00	.00	.00	.00
5.9000	.00	.00	.00	.00	.00
6.1500	.00	.00	.00	.00	.00
6.4000	.00	.00	.00	.01	.01
6.6500	.01	.01	.01	.01	.02
6.9000	.02	.03	.04	.05	.06
7.1500	.07	.09	.11	.12	.14
7.4000	.16	.18	.19	.21	.23
7.6500	.25	.27	.30	.32	.34
7.9000	.37	.39	.41	.44	.47
8.1500	.49	.52	.55	.58	.61
8.4000	.65	.68	.72	.76	.80
8.6500	.84	.89	.94	.99	1.04
8.9000	1.09	1.14	1.20	1.26	1.32
9.1500	1.39	1.45	1.52	1.59	1.65
9.4000	1.73	1.80	1.87	1.95	2.03
9.6500	2.11	2.19	2.27	2.34	2.42
9.9000	2.50	2.58	2.66	2.74	2.82
10.1500	2.91	3.00	3.09	3.18	3.28
10.4000	3.39	3.50	3.62	3.74	3.87
10.6500	4.00	4.14	4.28	4.42	4.56
10.9000	4.71	4.86	5.01	5.17	5.33
11.1500	5.51	5.70	5.91	6.15	6.44
11.4000	6.75	7.10	7.49	7.93	8.42
11.6500	9.05	9.93	11.75	16.96	24.79
11.9000	34.37	46.29	62.33	82.29	104.15
12.1500	125.17	141.22	150.83	155.11	154.72
12.4000	150.20	142.37	132.29	121.14	109.83
12.6500	98.91	88.74	79.54	71.34	64.38
12.9000	58.34	53.15	48.82	45.06	41.80
13.1500	38.98	36.59	34.55	32.75	31.20

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
13.4000	29.85	28.67	27.64	26.74	25.93
13.6500	25.21	24.59	24.02	23.48	22.96
13.9000	22.46	21.97	21.50	21.03	20.58
14.1500	20.14	19.72	19.31	18.93	18.58
14.4000	18.25	17.93	17.63	17.34	17.07
14.6500	16.80	16.55	16.30	16.06	15.82
14.9000	15.59	15.36	15.14	14.92	14.70
15.1500	14.51	14.31	14.11	13.91	13.70
15.4000	13.50	13.29	13.08	12.87	12.66
15.6500	12.45	12.24	12.03	11.82	11.61
15.9000	11.39	11.18	10.97	10.76	10.55
16.1500	10.35	10.15	9.97	9.79	9.63
16.4000	9.47	9.32	9.18	9.05	8.92
16.6500	8.80	8.69	8.57	8.47	8.36
16.9000	8.25	8.15	8.05	7.95	7.85
17.1500	7.75	7.65	7.55	7.45	7.36
17.4000	7.26	7.16	7.07	6.97	6.88
17.6500	6.78	6.69	6.60	6.51	6.45
17.9000	6.38	6.31	6.24	6.16	6.09
18.1500	6.02	5.95	5.89	5.82	5.76
18.4000	5.71	5.65	5.60	5.56	5.52
18.6500	5.48	5.44	5.40	5.37	5.33
18.9000	5.30	5.27	5.23	5.20	5.17
19.1500	5.14	5.11	5.09	5.06	5.03
19.4000	5.00	4.97	4.95	4.92	4.89
19.6500	4.87	4.84	4.81	4.79	4.76
19.9000	4.74	4.71	4.68	4.66	4.63
20.1500	4.61	4.58	4.56	4.54	4.51
20.4000	4.49	4.47	4.45	4.43	4.40
20.6500	4.38	4.36	4.34	4.32	4.30
20.9000	4.28	4.26	4.24	4.22	4.20
21.1500	4.18	4.16	4.15	4.13	4.11
21.4000	4.09	4.07	4.05	4.03	4.01
21.6500	3.99	3.97	3.96	3.94	3.92
21.9000	3.90	3.88	3.86	3.84	3.82
22.1500	3.81	3.79	3.77	3.75	3.73
22.4000	3.71	3.69	3.67	3.65	3.63
22.6500	3.62	3.60	3.58	3.56	3.54
22.9000	3.52	3.50	3.48	3.47	3.45
23.1500	3.43	3.41	3.39	3.37	3.35
23.4000	3.33	3.31	3.30	3.28	3.26
23.6500	3.24	3.22	3.20	3.18	3.16
23.9000	3.14	3.13	3.11	3.07	3.00
24.1500	2.88	2.71	2.52	2.30	2.07
24.4000	1.84	1.62	1.48	1.40	1.33

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
24.6500	1.28	1.25	1.22	1.19	1.17
24.9000	1.15	1.13	1.12	1.11	1.11
25.1500	1.10	1.09	1.09	1.08	1.08
25.4000	1.08	1.07	1.07	1.07	1.06
25.6500	1.06	1.06	1.06	1.06	1.05
25.9000	1.05	1.05	1.05	1.05	1.05
26.1500	1.04	1.04	1.04	1.04	1.04
26.4000	1.04	1.04	1.04	1.03	1.03
26.6500	1.03	1.03	1.03	1.03	1.03
26.9000	1.03	1.02	1.02	1.02	1.02
27.1500	1.02	1.02	1.02	1.02	1.01
27.4000	1.01	1.01	1.01	1.01	1.01
27.6500	1.01	1.01	1.01	1.00	1.00
27.9000	1.00	1.00	1.00	1.00	1.00
28.1500	1.00	.99	.99	.99	.99
28.4000	.99	.99	.98	.98	.98
28.6500	.98	.98	.98	.97	.97
28.9000	.97	.97	.97	.97	.96
29.1500	.96	.96	.96	.96	.96
29.4000	.95	.95	.95	.95	.95
29.6500	.95	.94	.94	.94	.94
29.9000	.94	.94	.93	.93	.93
30.1500	.93	.93	.93	.92	.92
30.4000	.92	.92	.92	.92	.91
30.6500	.91	.91	.91	.91	.91
30.9000	.90	.90	.90	.90	.90
31.1500	.90	.89	.89	.89	.89
31.4000	.89	.89	.88	.88	.88
31.6500	.88	.88	.88	.87	.87
31.9000	.87	.87	.87	.87	.86
32.1500	.86	.86	.86	.86	.86
32.4000	.86	.85	.85	.85	.85
32.6500	.85	.85	.84	.84	.84
32.9000	.84	.84	.84	.83	.83
33.1500	.83	.83	.83	.83	.82
33.4000	.82	.82	.82	.82	.82
33.6500	.81	.81	.81	.81	.81
33.9000	.81	.80	.80	.80	.80
34.1500	.80	.80	.79	.79	.79
34.4000	.79	.79	.79	.78	.78
34.6500	.78	.78	.78	.78	.77
34.9000	.77	.77	.77	.77	.77
35.1500	.76	.76	.76	.76	.76
35.4000	.76	.75	.75	.75	.75
35.6500	.75	.75	.74	.74	.74

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
35.9000	.74	.74	.74	.73	.73
36.1500	.73	.73	.73	.73	.72
36.4000	.72	.72	.72	.72	.72
36.6500	.71	.71	.71	.71	.71
36.9000	.71	.70	.70	.70	.70
37.1500	.70	.70	.69	.69	.69
37.4000	.69	.69	.69	.68	.68
37.6500	.68	.68	.68	.68	.67
37.9000	.67	.67	.67	.67	.67
38.1500	.66	.66	.66	.66	.66
38.4000	.66	.65	.65	.65	.65
38.6500	.65	.65	.64	.64	.64
38.9000	.64	.64	.64	.63	.63
39.1500	.63	.63	.63	.63	.62
39.4000	.62	.62	.62	.62	.62
39.6500	.61	.61	.61	.61	.61
39.9000	.61	.60	.60	.60	.60
40.1500	.60	.60	.59	.59	.59
40.4000	.59	.59	.59	.58	.58
40.6500	.58	.58	.58	.58	.57
40.9000	.57	.57	.57	.57	.57
41.1500	.56	.56	.56	.56	.56
41.4000	.56	.55	.55	.55	.55
41.6500	.55	.55	.55	.54	.54
41.9000	.54	.54	.54	.53	.53
42.1500	.53	.53	.53	.53	.52
42.4000	.52	.52	.52	.52	.52
42.6500	.51	.51	.51	.51	.51
42.9000	.51	.50	.50	.50	.50
43.1500	.50	.50	.49	.49	.49
43.4000	.49	.49	.49	.49	.48
43.6500	.48	.48	.48	.48	.48
43.9000	.47	.47	.47	.47	.47
44.1500	.46	.46	.46	.46	.46
44.4000	.46	.45	.45	.45	.45
44.6500	.45	.45	.44	.44	.44
44.9000	.44	.44	.44	.43	.43
45.1500	.43	.43	.43	.43	.43
45.4000	.42	.42	.42	.42	.42
45.6500	.42	.41	.41	.41	.41
45.9000	.41	.40	.40	.40	.40
46.1500	.39	.39	.39	.39	.38
46.4000	.38	.38	.38	.37	.37
46.6500	.37	.37	.36	.36	.36
46.9000	.36	.36	.35	.35	.35

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
47.1500	.35	.34	.34	.34	.34
47.4000	.34	.33	.33	.33	.33
47.6500	.33	.32	.32	.32	.32
47.9000	.32	.31	.31	.31	.31
48.1500	.31	.30	.30	.30	.30
48.4000	.30	.29	.29	.29	.29
48.6500	.29	.29	.28	.28	.28
48.9000	.28	.28	.28	.27	.27
49.1500	.27	.27	.27	.27	.26
49.4000	.26	.26	.26	.26	.26
49.6500	.25	.25	.25	.25	.25
49.9000	.25	.25	.24	.24	.24
50.1500	.24	.24	.24	.23	.23
50.4000	.23	.23	.23	.23	.23
50.6500	.23	.22	.22	.22	.22
50.9000	.22	.22	.22	.21	.21
51.1500	.21	.21	.21	.21	.21
51.4000	.21	.20	.20	.20	.20
51.6500	.20	.20	.20	.20	.19
51.9000	.19	.19	.19	.19	.19
52.1500	.19	.19	.19	.18	.18
52.4000	.18	.18	.18	.18	.18
52.6500	.18	.18	.18	.17	.17
52.9000	.17	.17	.17	.17	.17
53.1500	.17	.17	.17	.17	.17
53.4000	.16	.16	.16	.16	.16
53.6500	.16	.16	.16	.16	.16
53.9000	.16	.16	.15	.15	.15
54.1500	.15	.15	.15	.15	.15
54.4000	.15	.15	.15	.15	.15
54.6500	.15	.14	.14	.14	.14
54.9000	.14	.14	.14	.14	.14
55.1500	.14	.14	.14	.14	.14
55.4000	.13	.13	.13	.13	.13
55.6500	.13	.13	.13	.13	.13
55.9000	.13	.13	.13	.13	.13
56.1500	.13	.12	.12	.12	.12
56.4000	.12	.12	.12	.12	.12
56.6500	.12	.12	.12	.12	.12
56.9000	.12	.12	.12	.11	.11
57.1500	.11	.11	.11	.11	.11
57.4000	.11	.11	.11	.11	.11
57.6500	.11	.11	.11	.11	.11
57.9000	.11	.11	.10	.10	.10
58.1500	.10	.10	.10	.10	.10

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
58.4000	.10	.10	.10	.10	.10
58.6500	.10	.10	.10	.10	.10
58.9000	.10	.10	.09	.09	.09
59.1500	.09	.09	.09	.09	.09
59.4000	.09	.09	.09	.09	.09
59.6500	.09	.09	.09	.09	.09
59.9000	.09	.09	.09	.09	.09
60.1500	.08	.08	.08	.08	.08
60.4000	.08	.08	.08	.08	.08
60.6500	.08	.08	.08	.08	.08
60.9000	.08	.08	.08	.08	.08
61.1500	.08	.08	.08	.08	.08
61.4000	.08	.08	.08	.08	.08
61.6500	.08	.08	.08	.08	.08
61.9000	.08	.08	.07	.07	.07
62.1500	.07	.07	.07	.07	.07
62.4000	.07	.07	.07	.07	.07
62.6500	.07	.07	.07	.07	.07
62.9000	.07	.07	.07	.07	.07
63.1500	.07	.07	.07	.07	.07
63.4000	.07	.07	.07	.07	.07
63.6500	.07	.07	.07	.07	.07
63.9000	.07	.07	.07	.07	.07
64.1500	.07	.06	.06	.06	.06
64.4000	.06	.06	.06	.06	.06
64.6500	.06	.06	.06	.06	.06
64.9000	.06	.06	.06	.06	.06
65.1500	.06	.06	.06	.06	.06
65.4000	.06	.06	.06	.06	.06
65.6500	.06	.06	.06	.06	.06
65.9000	.06	.06	.06	.06	.06
66.1500	.06	.06	.06	.06	.06
66.4000	.06	.06	.06	.06	.06
66.6500	.06	.06	.05	.05	.05
66.9000	.05	.05	.05	.05	.05
67.1500	.05	.05	.05	.05	.05
67.4000	.05	.05	.05	.05	.05
67.6500	.05	.05	.05	.05	.05
67.9000	.05	.05	.05	.05	.05
68.1500	.05	.05	.05	.05	.05
68.4000	.05	.05	.05	.05	.05
68.6500	.05	.05	.05	.05	.05
68.9000	.05	.05	.05	.05	.05
69.1500	.05	.05	.05	.05	.05
69.4000	.05	.05	.05	.05	.05

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
69.6500	.05	.05	.05	.04	.04
69.9000	.04	.04	.04	.04	.04
70.1500	.04	.04	.04	.04	.04
70.4000	.04	.04	.04	.04	.04
70.6500	.04	.04	.04	.04	.04
70.9000	.04	.04	.04	.04	.04
71.1500	.04	.04	.04	.04	.04
71.4000	.04	.04	.04	.04	.04
71.6500	.04	.04	.04	.04	.04
71.9000	.04	.04	.04	.04	.04
72.1500	.04	.04	.04	.04	.04
72.4000	.04	.04	.04	.04	.04
72.6500	.04	.04	.04	.04	.04
72.9000	.04	.04	.04	.04	.04
73.1500	.04	.04	.04	.04	.04
73.4000	.04	.04	.04	.04	.04
73.6500	.03	.03	.03	.03	.03
73.9000	.03	.03	.03	.03	.03
74.1500	.03	.03	.03	.03	.03
74.4000	.03	.03	.03	.03	.03
74.6500	.03	.03	.03	.03	.03
74.9000	.03	.03	.03	.03	.03
75.1500	.03	.03	.03	.03	.03
75.4000	.03	.03	.03	.03	.03
75.6500	.03	.03	.03	.03	.03
75.9000	.03	.03	.03	.03	.03
76.1500	.03	.03	.03	.03	.03
76.4000	.03	.03	.03	.03	.03
76.6500	.03	.03	.03	.03	.03
76.9000	.03	.03	.03	.03	.03
77.1500	.03	.03	.03	.03	.03
77.4000	.03	.03	.03	.03	.03
77.6500	.03	.03	.03	.03	.03
77.9000	.03	.03	.03	.03	.03
78.1500	.03	.03	.03	.03	.03
78.4000	.03	.03	.03	.03	.03
78.6500	.03	.03	.03	.02	.02
78.9000	.02	.02	.02	.02	.02
79.1500	.02	.02	.02	.02	.02
79.4000	.02	.02	.02	.02	.02
79.6500	.02	.02	.02	.02	.02
79.9000	.02	.02	.02	.02	.02
80.1500	.02	.02	.02	.02	.02
80.4000	.02	.02	.02	.02	.02
80.6500	.02	.02	.02	.02	.02

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
80.9000	.02	.02	.02	.02	.02
81.1500	.02	.02	.02	.02	.02
81.4000	.02	.02	.02	.02	.02
81.6500	.02	.02	.02	.02	.02
81.9000	.02	.02	.02	.02	.02
82.1500	.02	.02	.02	.02	.02
82.4000	.02	.02	.02	.02	.02
82.6500	.02	.02	.02	.02	.02
82.9000	.02	.02	.02	.02	.02
83.1500	.02	.02	.02	.02	.02
83.4000	.02	.02	.02	.02	.02
83.6500	.02	.02	.02	.02	.02
83.9000	.02	.02	.02	.02	.02
84.1500	.02	.02	.02	.02	.02
84.4000	.02	.02	.02	.02	.02
84.6500	.02	.02	.02	.02	.02
84.9000	.02	.02	.02	.02	.02
85.1500	.02	.02	.02	.02	.02
85.4000	.02	.02	.02	.02	.02
85.6500	.02	.02	.02	.02	.02
85.9000	.02	.02	.02	.02	.02
86.1500	.02	.02	.02	.02	.02
86.4000	.02	.02	.02	.02	.02
86.6500	.02	.02	.02	.02	.02
86.9000	.02	.02	.02	.02	.02
87.1500	.02	.02	.02	.02	.02
87.4000	.02	.02	.02	.02	.02
87.6500	.02	.02	.02	.02	.02
87.9000	.02	.02	.02	.02	.02
88.1500	.02	.02	.02	.02	.02
88.4000	.02	.02	.02	.02	.02
88.6500	.02	.02	.02	.02	.02
88.9000	.02	.02	.02	.02	.02
89.1500	.02	.02	.02	.02	.02
89.4000	.02	.02	.02	.02	.02
89.6500	.02	.02	.02	.02	.02
89.9000	.02	.02	.02	.02	.02
90.1500	.02	.02	.02	.02	.02
90.4000	.02	.02	.02	.02	.02
90.6500	.02	.02	.02	.02	.02
90.9000	.02	.02	.02	.02	.02
91.1500	.02	.02	.02	.02	.02
91.4000	.02	.02	.02	.02	.02
91.6500	.02	.02	.02	.02	.02
91.9000	.02	.02	.02	.02	.02

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
92.1500	.02	.02	.02	.02	.02
92.4000	.02	.02	.02	.02	.02
92.6500	.02	.02	.02	.02	.02
92.9000	.02	.02	.02	.02	.02
93.1500	.02	.02	.02	.02	.02
93.4000	.02	.02	.02	.02	.02
93.6500	.02	.02	.02	.02	.02
93.9000	.02	.02	.02	.02	.02
94.1500	.02	.02	.02	.02	.02
94.4000	.02	.02	.02	.02	.02
94.6500	.02	.02	.02	.02	.02
94.9000	.02	.02	.02	.02	.02
95.1500	.02	.02	.02	.02	.02
95.4000	.02	.02	.02	.02	.02
95.6500	.02	.02	.02	.02	.02
95.9000	.02	.02	.02	.02	.02
96.1500	.02	.02	.02	.02	.02
96.4000	.02	.02	.02	.02	.02
96.6500	.02	.02	.02	.02	.02
96.9000	.02	.02	.02	.02	.02
97.1500	.01	.01	.01	.01	.01
97.4000	.01	.01	.01	.01	.01
97.6500	.01	.01	.01	.01	.01
97.9000	.01	.01	.01	.01	.01
98.1500	.01	.01	.01	.01	.01
98.4000	.01	.01	.01	.01	.01
98.6500	.01	.01	.01	.01	.01
98.9000	.01	.01	.01	.01	.01
99.1500	.01	.01	.01	.01	.01
99.4000	.01	.01	.01	.01	.01
99.6500	.01	.01	.01	.01	.01
99.9000	.01	.01	.01	.01	.01
100.1500	.01	.01	.01	.01	.01
100.4000	.01	.01	.01	.01	.01
100.6500	.01	.01	.01	.01	.01
100.9000	.01	.01	.01	.01	.01
101.1500	.01	.01	.01	.01	.01
101.4000	.01	.01	.01	.01	.01
101.6500	.01	.01	.01	.01	.01
101.9000	.01	.01	.01	.01	.01
102.1500	.01	.01	.01	.01	.01
102.4000	.01	.01	.01	.01	.01
102.6500	.01	.01	.01	.01	.01
102.9000	.01	.01	.01	.01	.01
103.1500	.01	.01	.01	.01	.01

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
103.4000	.01	.01	.01	.01	.01
103.6500	.01	.01	.01	.01	.01
103.9000	.01	.01	.01	.01	.01
104.1500	.01	.01	.01	.01	.01
104.4000	.01	.01	.01	.01	.01
104.6500	.01	.01	.01	.01	.01
104.9000	.01	.01	.01	.01	.01
105.1500	.01	.01	.01	.01	.01
105.4000	.01	.01	.01	.01	.01
105.6500	.01	.01	.01	.01	.01
105.9000	.01	.01	.01	.01	.01
106.1500	.01	.01	.01	.01	.01
106.4000	.01	.01	.01	.01	.01
106.6500	.01	.01	.01	.01	.01
106.9000	.01	.01	.01	.01	.01
107.1500	.01	.01	.01	.01	.01
107.4000	.01	.01	.01	.01	.01
107.6500	.01	.01	.01	.01	.01
107.9000	.01	.01	.01	.01	.01
108.1500	.01	.01	.01	.01	.01
108.4000	.01	.01	.01	.01	.01
108.6500	.01	.01	.01	.01	.01
108.9000	.01	.01	.01	.01	.01
109.1500	.01	.01	.01	.01	.01
109.4000	.01	.01	.01	.01	.01
109.6500	.01	.01	.01	.01	.01
109.9000	.01	.01	.01	.01	.01
110.1500	.01	.01	.01	.01	.01
110.4000	.01	.01	.01	.01	.01
110.6500	.01	.01	.01	.01	.01
110.9000	.01	.01	.01	.01	.01
111.1500	.01	.01	.01	.01	.01
111.4000	.01	.01	.01	.01	.01
111.6500	.01	.01	.01	.01	.01
111.9000	.01	.01	.01	.01	.01
112.1500	.01	.01	.01	.01	.01
112.4000	.01	.01	.01	.01	.01
112.6500	.01	.01	.01	.01	.01
112.9000	.01	.01	.01	.01	.01
113.1500	.01	.01	.01	.01	.01
113.4000	.01	.01	.01	.01	.01
113.6500	.01	.01	.01	.01	.01
113.9000	.01	.01	.01	.01	.01
114.1500	.01	.01	.01	.01	.01
114.4000	.01	.01	.01	.01	.01

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
114.6500	.01	.01	.01	.01	.01
114.9000	.01	.01	.01	.01	.01
115.1500	.01	.01	.01	.01	.01
115.4000	.01	.01	.01	.01	.01
115.6500	.01	.01	.01	.01	.01
115.9000	.01	.01	.01	.01	.01
116.1500	.01	.01	.01	.01	.01
116.4000	.01	.01	.01	.01	.01
116.6500	.01	.01	.01	.01	.01
116.9000	.01	.01	.01	.01	.01
117.1500	.01	.01	.01	.01	.01
117.4000	.01	.01	.01	.01	.01
117.6500	.01	.01	.01	.01	.01
117.9000	.01	.01	.01	.01	.01
118.1500	.01	.01	.01	.01	.01
118.4000	.01	.01	.01	.01	.01
118.6500	.01	.01	.01	.01	.01
118.9000	.01	.01	.01	.01	.01
119.1500	.01	.01	.01	.01	.01
119.4000	.01	.01	.01	.01	.01
119.6500	.01	.01	.01	.01	.01
119.9000	.01	.01	.01	.01	.01
120.1500	.01	.01	.01	.01	.01
120.4000	.01	.01	.01	.01	.01
120.6500	.01	.01	.01	.01	.01
120.9000	.01	.01	.01	.01	.01
121.1500	.01	.01	.01	.01	.01
121.4000	.01	.01	.01	.01	.01
121.6500	.01	.01	.01	.01	.01
121.9000	.01	.01	.01	.01	.01
122.1500	.01	.01	.01	.01	.01
122.4000	.01	.01	.01	.01	.01
122.6500	.01	.01	.01	.01	.01
122.9000	.01	.01	.01	.01	.01
123.1500	.01	.01	.01	.01	.01
123.4000	.01	.01	.01	.01	.01
123.6500	.01	.01	.01	.01	.01
123.9000	.01	.01	.01	.01	.01
124.1500	.01	.01	.01	.01	.01
124.4000	.01	.01	.01	.01	.01
124.6500	.01	.01	.01	.01	.01
124.9000	.01	.01	.01	.01	.01
125.1500	.01	.01	.01	.01	.01
125.4000	.01	.01	.01	.01	.01
125.6500	.01	.01	.01	.01	.01

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
125.9000	.01	.01	.01	.01	.01
126.1500	.01	.01	.01	.01	.01
126.4000	.01	.01	.01	.01	.01
126.6500	.01	.01	.01	.01	.01
126.9000	.01	.01	.01	.01	.01
127.1500	.01	.01	.01	.01	.01
127.4000	.01	.01	.01	.01	.01
127.6500	.01	.01	.01	.01	.01
127.9000	.01	.01	.01	.01	.01
128.1500	.01	.01	.01	.01	.01
128.4000	.01	.01	.01	.01	.01
128.6500	.01	.01	.01	.01	.01
128.9000	.01	.01	.01	.01	.01
129.1500	.01	.01	.01	.01	.01
129.4000	.01	.01	.01	.01	.01
129.6500	.01	.01	.01	.01	.01
129.9000	.01	.01	.01	.01	.01
130.1500	.01	.01	.01	.01	.01
130.4000	.01	.01	.01	.01	.01
130.6500	.01	.01	.01	.01	.01
130.9000	.01	.01	.01	.01	.01
131.1500	.01	.01	.01	.01	.01
131.4000	.01	.01	.01	.01	.01
131.6500	.01	.01	.01	.01	.01
131.9000	.01	.01	.01	.01	.01
132.1500	.01	.01	.01	.01	.01
132.4000	.01	.01	.01	.01	.01
132.6500	.01	.01	.01	.01	.01
132.9000	.01	.01	.01	.01	.01
133.1500	.01	.01	.01	.01	.01
133.4000	.01	.01	.01	.01	.01
133.6500	.01	.01	.01	.01	.01
133.9000	.01	.01	.01	.01	.01
134.1500	.01	.01	.01	.01	.01
134.4000	.01	.01	.01	.01	.01
134.6500	.01	.01	.01	.01	.01
134.9000	.01	.01	.01	.01	.01
135.1500	.01	.01	.01	.01	.01
135.4000	.01	.01	.01	.01	.01
135.6500	.01	.01	.01	.01	.01
135.9000	.01	.01	.01	.01	.01
136.1500	.01	.01	.01	.01	.01
136.4000	.01	.01	.01	.01	.01
136.6500	.01	.01	.01	.01	.01
136.9000	.01	.01	.01	.01	.01

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
137.1500	.01	.01	.01	.01	.01
137.4000	.01	.01	.01	.01	.01
137.6500	.01	.01	.01	.01	.01
137.9000	.01	.01	.01	.01	.01
138.1500	.01	.01	.01	.01	.01
138.4000	.01	.01	.01	.01	.01
138.6500	.01	.01	.01	.01	.01
138.9000	.01	.01	.01	.01	.01
139.1500	.01	.01	.01	.01	.01
139.4000	.01	.01	.01	.01	.01
139.6500	.01	.01	.01	.01	.01
139.9000	.01	.01	.01	.01	.01
140.1500	.01	.01	.01	.01	.01
140.4000	.01	.01	.01	.01	.01
140.6500	.01	.01	.01	.01	.01
140.9000	.01	.01	.01	.01	.01
141.1500	.01	.01	.01	.01	.01
141.4000	.01	.01	.01	.01	.01
141.6500	.01	.01	.01	.01	.01
141.9000	.01	.01	.01	.01	.01
142.1500	.01	.01	.01	.01	.01
142.4000	.01	.01	.01	.01	.01
142.6500	.01	.01	.01	.01	.01
142.9000	.01	.01	.01	.01	.01
143.1500	.01	.01	.01	.01	.01
143.4000	.01	.01	.01	.01	.01
143.6500	.01	.01	.01	.01	.01
143.9000	.01	.01	.01	.01	.01
144.1500	.01	.01	.01	.01	.01
144.4000	.01	.01	.01	.01	.01
144.6500	.01	.01	.01	.01	.01
144.9000	.01	.01	.01	.01	.01
145.1500	.01	.01	.01	.01	.01
145.4000	.01	.01	.01	.01	.01
145.6500	.01	.01	.01	.01	.01
145.9000	.01	.01	.01	.01	.01
146.1500	.01	.01	.01	.01	.01
146.4000	.01	.01	.01	.01	.01
146.6500	.01	.01	.01	.00	.00
146.9000	.00	.00	.00	.00	.00
147.1500	.00	.00	.00	.00	.00
147.4000	.00	.00	.00	.00	.00
147.6500	.00	.00	.00	.00	.00
147.9000	.00	.00	.00	.00	.00
148.1500	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
148.4000	.00	.00	.00	.00	.00
148.6500	.00	.00	.00	.00	.00
148.9000	.00	.00	.00	.00	.00
149.1500	.00	.00	.00	.00	.00
149.4000	.00	.00	.00	.00	.00
149.6500	.00	.00	.00	.00	.00
149.9000	.00	.00	.00	.00	.00
150.1500	.00	.00	.00	.00	.00
150.4000	.00	.00	.00	.00	.00
150.6500	.00	.00	.00	.00	.00
150.9000	.00	.00	.00	.00	.00
151.1500	.00	.00	.00	.00	.00
151.4000	.00	.00	.00	.00	.00
151.6500	.00	.00	.00	.00	.00
151.9000	.00	.00	.00	.00	.00
152.1500	.00	.00	.00	.00	.00
152.4000	.00	.00	.00	.00	.00
152.6500	.00	.00	.00	.00	.00
152.9000	.00	.00	.00	.00	.00
153.1500	.00	.00	.00	.00	.00
153.4000	.00	.00	.00	.00	.00
153.6500	.00	.00	.00	.00	.00
153.9000	.00	.00	.00	.00	.00
154.1500	.00	.00	.00	.00	.00
154.4000	.00	.00	.00	.00	.00
154.6500	.00	.00	.00	.00	.00
154.9000	.00	.00	.00	.00	.00
155.1500	.00	.00	.00	.00	.00
155.4000	.00	.00	.00	.00	.00
155.6500	.00	.00	.00	.00	.00
155.9000	.00	.00	.00	.00	.00
156.1500	.00	.00	.00	.00	.00
156.4000	.00	.00	.00	.00	.00
156.6500	.00	.00	.00	.00	.00
156.9000	.00	.00	.00	.00	.00
157.1500	.00	.00	.00	.00	.00
157.4000	.00	.00	.00	.00	.00
157.6500	.00	.00	.00	.00	.00
157.9000	.00	.00	.00	.00	.00
158.1500	.00	.00	.00	.00	.00
158.4000	.00	.00	.00	.00	.00
158.6500	.00	.00	.00	.00	.00
158.9000	.00	.00	.00	.00	.00
159.1500	.00	.00	.00	.00	.00
159.4000	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
159.6500	.00	.00	.00	.00	.00
159.9000	.00	.00	.00	.00	.00
160.1500	.00	.00	.00	.00	.00
160.4000	.00	.00	.00	.00	.00
160.6500	.00	.00	.00	.00	.00
160.9000	.00	.00	.00	.00	.00
161.1500	.00	.00	.00	.00	.00
161.4000	.00	.00	.00	.00	.00
161.6500	.00	.00	.00	.00	.00
161.9000	.00	.00	.00	.00	.00
162.1500	.00	.00	.00	.00	.00
162.4000	.00	.00	.00	.00	.00
162.6500	.00	.00	.00	.00	.00
162.9000	.00	.00	.00	.00	.00
163.1500	.00	.00	.00	.00	.00
163.4000	.00	.00	.00	.00	.00
163.6500	.00	.00	.00	.00	.00
163.9000	.00	.00	.00	.00	.00
164.1500	.00	.00	.00	.00	.00
164.4000	.00	.00	.00	.00	.00
164.6500	.00	.00	.00	.00	.00
164.9000	.00	.00	.00	.00	.00
165.1500	.00	.00	.00	.00	.00
165.4000	.00	.00	.00	.00	.00
165.6500	.00	.00	.00	.00	.00
165.9000	.00	.00	.00	.00	.00
166.1500	.00	.00	.00	.00	.00
166.4000	.00	.00	.00	.00	.00
166.6500	.00	.00	.00	.00	.00
166.9000	.00	.00	.00	.00	.00
167.1500	.00	.00	.00	.00	.00
167.4000	.00	.00	.00	.00	.00
167.6500	.00	.00	.00	.00	.00
167.9000	.00	.00	.00	.00	.00
168.1500	.00	.00	.00	.00	.00
168.4000	.00	.00	.00	.00	.00
168.6500	.00	.00	.00	.00	.00
168.9000	.00	.00	.00	.00	.00
169.1500	.00	.00	.00	.00	.00
169.4000	.00	.00	.00	.00	.00
169.6500	.00	.00	.00	.00	.00
169.9000	.00	.00	.00	.00	.00
170.1500	.00	.00	.00	.00	.00
170.4000	.00	.00	.00	.00	.00
170.6500	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
170.9000	.00	.00	.00	.00	.00
171.1500	.00	.00	.00	.00	.00
171.4000	.00	.00	.00	.00	.00
171.6500	.00	.00	.00	.00	.00
171.9000	.00	.00	.00	.00	.00
172.1500	.00	.00	.00	.00	.00
172.4000	.00	.00	.00	.00	.00
172.6500	.00	.00	.00	.00	.00
172.9000	.00	.00	.00	.00	.00
173.1500	.00	.00	.00	.00	.00
173.4000	.00	.00	.00	.00	.00
173.6500	.00	.00	.00	.00	.00
173.9000	.00	.00	.00	.00	.00
174.1500	.00	.00	.00	.00	.00
174.4000	.00	.00	.00	.00	.00
174.6500	.00	.00	.00	.00	.00
174.9000	.00	.00	.00	.00	.00
175.1500	.00	.00	.00	.00	.00
175.4000	.00	.00	.00	.00	.00
175.6500	.00	.00	.00	.00	.00
175.9000	.00	.00	.00	.00	.00
176.1500	.00	.00	.00	.00	.00
176.4000	.00	.00	.00	.00	.00
176.6500	.00	.00	.00	.00	.00
176.9000	.00	.00	.00	.00	.00
177.1500	.00	.00	.00	.00	.00
177.4000	.00	.00	.00	.00	.00
177.6500	.00	.00	.00	.00	.00
177.9000	.00	.00	.00	.00	.00
178.1500	.00	.00	.00	.00	.00
178.4000	.00	.00	.00	.00	.00
178.6500	.00	.00	.00	.00	.00
178.9000	.00	.00	.00	.00	.00
179.1500	.00	.00	.00	.00	.00
179.4000	.00	.00	.00	.00	.00
179.6500	.00	.00	.00	.00	.00
179.9000	.00	.00	.00		

SUMMARY FOR HYDROGRAPH ADDITION
at Node: DESIGN POINT 1

HYG Directory: S:\2010\10170\PondPack\2016-10-14_BD\

Upstream Link ID	Upstream Node ID	HYG file	HYG ID	HYG tag
OCS 1A	BASIN 1A		OCS 1A	100
REACH 1B	JUNC 1B		REACH 1B	100

INFLOWS TO: DESIGN POINT 1

HYG file	HYG ID	HYG tag	Volume cu.ft	Peak Time hrs	Peak Flow cfs
	OCS 1A	100	736792	12.3000	115.62
	REACH 1B	100	423683	12.3500	77.61

TOTAL FLOW INTO: DESIGN POINT 1

HYG file	HYG ID	HYG tag	Volume cu.ft	Peak Time hrs	Peak Flow cfs
	DESIGN POINT 1	100	1160475	12.3500	193.13

TOTAL NODE INFLOW...
HYG file =
HYG ID = DESIGN POINT 1
HYG Tag = 100

Peak Discharge = 193.13 cfs
Time to Peak = 12.3500 hrs
HYG Volume = 1160475 cu.ft

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
4.9500	.00	.00	.00	.00	.00
5.2000	.00	.00	.00	.00	.00
5.4500	.00	.00	.00	.00	.00
5.7000	.00	.00	.01	.01	.01
5.9500	.01	.01	.02	.02	.03
6.2000	.03	.04	.05	.06	.07
6.4500	.09	.10	.12	.14	.15
6.7000	.17	.19	.21	.22	.24
6.9500	.27	.29	.31	.34	.36
7.2000	.39	.41	.44	.46	.49
7.4500	.52	.55	.58	.61	.64
7.7000	.67	.71	.74	.77	.81
7.9500	.85	.88	.92	.96	1.00
8.2000	1.04	1.09	1.13	1.18	1.24
8.4500	1.30	1.35	1.42	1.48	1.55
8.7000	1.61	1.68	1.76	1.83	1.91
8.9500	1.99	2.07	2.16	2.23	2.31
9.2000	2.39	2.47	2.56	2.64	2.72
9.4500	2.81	2.90	2.99	3.08	3.17
9.7000	3.27	3.36	3.45	3.55	3.64
9.9500	3.74	3.84	3.95	4.05	4.16
10.2000	4.26	4.38	4.50	4.63	4.76
10.4500	4.90	5.06	5.22	5.38	5.54
10.7000	5.71	5.89	6.06	6.25	6.44
10.9500	6.63	6.82	7.01	7.21	7.42
11.2000	7.66	7.93	8.23	8.58	10.25
11.4500	12.12	14.68	17.35	20.32	23.98
11.7000	28.37	34.17	41.14	49.71	59.80
11.9500	72.74	91.09	114.46	140.08	163.67
12.2000	177.36	186.90	192.02	193.13	190.82
12.4500	184.52	174.80	158.96	142.78	127.44

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
12.7000	113.58	101.28	90.50	81.39	73.59
12.9500	66.97	61.39	56.57	52.40	48.95
13.2000	45.92	43.29	41.01	39.04	37.35
13.4500	35.96	34.73	33.63	32.66	31.78
13.7000	30.97	30.21	29.50	28.82	28.17
13.9500	27.54	26.92	26.31	25.72	25.14
14.2000	24.62	24.13	23.66	23.22	22.80
14.4500	22.40	22.02	21.66	21.31	20.97
14.7000	20.64	20.33	20.01	19.71	19.41
14.9500	19.11	18.82	18.54	18.25	17.97
15.2000	17.69	17.41	17.13	16.86	16.58
15.4500	16.31	16.04	15.77	15.51	15.24
15.7000	14.98	14.71	14.48	14.25	14.00
15.9500	13.76	13.51	13.26	13.02	12.77
16.2000	12.53	12.31	12.09	11.88	11.69
16.4500	11.50	11.33	11.17	11.01	10.85
16.7000	10.71	10.57	10.43	10.30	10.17
16.9500	10.04	9.92	9.80	9.68	9.56
17.2000	9.44	9.32	9.20	9.09	8.97
17.4500	8.85	8.74	8.62	8.51	8.40
17.7000	8.28	8.17	8.05	7.94	7.82
17.9500	7.71	7.60	7.48	7.37	7.26
18.2000	7.15	7.05	6.96	6.88	6.80
18.4500	6.74	6.67	6.62	6.56	6.51
18.7000	6.47	6.46	6.42	6.39	6.36
18.9500	6.32	6.29	6.26	6.23	6.20
19.2000	6.17	6.14	6.11	6.07	6.04
19.4500	6.01	5.98	5.95	5.92	5.89
19.7000	5.86	5.83	5.80	5.77	5.74
19.9500	5.71	5.68	5.65	5.62	5.59
20.2000	5.56	5.53	5.50	5.47	5.45
20.4500	5.42	5.39	5.37	5.34	5.32
20.7000	5.29	5.27	5.24	5.22	5.19
20.9500	5.17	5.14	5.12	5.10	5.07
21.2000	5.05	5.03	5.01	4.98	4.96
21.4500	4.94	4.91	4.89	4.87	4.84
21.7000	4.82	4.79	4.77	4.75	4.73
21.9500	4.71	4.68	4.66	4.64	4.62
22.2000	4.59	4.57	4.55	4.52	4.50
22.4500	4.48	4.45	4.43	4.41	4.38
22.7000	4.36	4.34	4.32	4.29	4.27
22.9500	4.25	4.23	4.20	4.18	4.16
23.2000	4.13	4.11	4.09	4.06	4.04
23.4500	4.02	4.00	3.97	3.95	3.93
23.7000	3.91	3.88	3.86	3.84	3.81

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
23.9500	3.79	3.77	3.72	3.64	3.49
24.2000	3.29	3.05	2.77	2.50	2.22
24.4500	1.96	1.73	1.53	1.38	1.32
24.7000	1.28	1.24	1.21	1.18	1.16
24.9500	1.14	1.13	1.12	1.11	1.10
25.2000	1.10	1.09	1.09	1.08	1.08
25.4500	1.08	1.07	1.07	1.07	1.06
25.7000	1.06	1.06	1.06	1.06	1.05
25.9500	1.05	1.05	1.05	1.05	1.05
26.2000	1.05	1.04	1.04	1.04	1.04
26.4500	1.04	1.04	1.04	1.04	1.03
26.7000	1.03	1.03	1.03	1.03	1.03
26.9500	1.03	1.03	1.02	1.02	1.02
27.2000	1.02	1.02	1.02	1.02	1.02
27.4500	1.01	1.01	1.01	1.01	1.01
27.7000	1.01	1.01	1.01	1.01	1.00
27.9500	1.00	1.00	1.00	1.00	1.00
28.2000	1.00	1.00	.99	.99	.99
28.4500	.99	.99	.99	.98	.98
28.7000	.98	.98	.98	.98	.97
28.9500	.97	.97	.97	.97	.97
29.2000	.96	.96	.96	.96	.96
29.4500	.96	.95	.95	.95	.95
29.7000	.95	.95	.94	.94	.94
29.9500	.94	.94	.94	.93	.93
30.2000	.93	.93	.93	.93	.92
30.4500	.92	.92	.92	.92	.92
30.7000	.91	.91	.91	.91	.91
30.9500	.91	.90	.90	.90	.90
31.2000	.90	.90	.89	.89	.89
31.4500	.89	.89	.89	.88	.88
31.7000	.88	.88	.88	.88	.87
31.9500	.87	.87	.87	.87	.87
32.2000	.86	.86	.86	.86	.86
32.4500	.86	.85	.85	.85	.85
32.7000	.85	.85	.84	.84	.84
32.9500	.84	.84	.84	.83	.83
33.2000	.83	.83	.83	.83	.83
33.4500	.82	.82	.82	.82	.82
33.7000	.82	.81	.81	.81	.81
33.9500	.81	.81	.80	.80	.80
34.2000	.80	.80	.80	.79	.79
34.4500	.79	.79	.79	.79	.78
34.7000	.78	.78	.78	.78	.78
34.9500	.77	.77	.77	.77	.77

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
35.2000	.77	.76	.76	.76	.76
35.4500	.76	.76	.75	.75	.75
35.7000	.75	.75	.75	.74	.74
35.9500	.74	.74	.74	.74	.73
36.2000	.73	.73	.73	.73	.73
36.4500	.72	.72	.72	.72	.72
36.7000	.72	.71	.71	.71	.71
36.9500	.71	.71	.70	.70	.70
37.2000	.70	.70	.70	.69	.69
37.4500	.69	.69	.69	.69	.68
37.7000	.68	.68	.68	.68	.68
37.9500	.67	.67	.67	.67	.67
38.2000	.67	.66	.66	.66	.66
38.4500	.66	.66	.65	.65	.65
38.7000	.65	.65	.65	.64	.64
38.9500	.64	.64	.64	.64	.63
39.2000	.63	.63	.63	.63	.63
39.4500	.62	.62	.62	.62	.62
39.7000	.62	.61	.61	.61	.61
39.9500	.61	.61	.60	.60	.60
40.2000	.60	.60	.60	.59	.59
40.4500	.59	.59	.59	.59	.58
40.7000	.58	.58	.58	.58	.58
40.9500	.57	.57	.57	.57	.57
41.2000	.57	.56	.56	.56	.56
41.4500	.56	.56	.55	.55	.55
41.7000	.55	.55	.55	.55	.54
41.9500	.54	.54	.54	.54	.53
42.2000	.53	.53	.53	.53	.53
42.4500	.52	.52	.52	.52	.52
42.7000	.52	.51	.51	.51	.51
42.9500	.51	.51	.50	.50	.50
43.2000	.50	.50	.50	.49	.49
43.4500	.49	.49	.49	.49	.49
43.7000	.48	.48	.48	.48	.48
43.9500	.48	.47	.47	.47	.47
44.2000	.47	.46	.46	.46	.46
44.4500	.46	.46	.45	.45	.45
44.7000	.45	.45	.45	.44	.44
44.9500	.44	.44	.44	.44	.43
45.2000	.43	.43	.43	.43	.43
45.4500	.43	.42	.42	.42	.42
45.7000	.42	.42	.41	.41	.41
45.9500	.41	.41	.40	.40	.40
46.2000	.40	.39	.39	.39	.39

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
46.4500	.38	.38	.38	.38	.37
46.7000	.37	.37	.37	.36	.36
46.9500	.36	.36	.36	.35	.35
47.2000	.35	.35	.34	.34	.34
47.4500	.34	.34	.33	.33	.33
47.7000	.33	.33	.32	.32	.32
47.9500	.32	.32	.31	.31	.31
48.2000	.31	.31	.30	.30	.30
48.4500	.30	.30	.29	.29	.29
48.7000	.29	.29	.29	.28	.28
48.9500	.28	.28	.28	.28	.27
49.2000	.27	.27	.27	.27	.27
49.4500	.26	.26	.26	.26	.26
49.7000	.26	.25	.25	.25	.25
49.9500	.25	.25	.25	.24	.24
50.2000	.24	.24	.24	.24	.23
50.4500	.23	.23	.23	.23	.23
50.7000	.23	.23	.22	.22	.22
50.9500	.22	.22	.22	.22	.21
51.2000	.21	.21	.21	.21	.21
51.4500	.21	.21	.20	.20	.20
51.7000	.20	.20	.20	.20	.20
51.9500	.19	.19	.19	.19	.19
52.2000	.19	.19	.19	.19	.18
52.4500	.18	.18	.18	.18	.18
52.7000	.18	.18	.18	.18	.17
52.9500	.17	.17	.17	.17	.17
53.2000	.17	.17	.17	.17	.17
53.4500	.16	.16	.16	.16	.16
53.7000	.16	.16	.16	.16	.16
53.9500	.16	.16	.16	.15	.15
54.2000	.15	.15	.15	.15	.15
54.4500	.15	.15	.15	.15	.15
54.7000	.15	.15	.14	.14	.14
54.9500	.14	.14	.14	.14	.14
55.2000	.14	.14	.14	.14	.14
55.4500	.14	.13	.13	.13	.13
55.7000	.13	.13	.13	.13	.13
55.9500	.13	.13	.13	.13	.13
56.2000	.13	.13	.12	.12	.12
56.4500	.12	.12	.12	.12	.12
56.7000	.12	.12	.12	.12	.12
56.9500	.12	.12	.12	.12	.11
57.2000	.11	.11	.11	.11	.11
57.4500	.11	.11	.11	.11	.11

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
57.7000	.11	.11	.11	.11	.11
57.9500	.11	.11	.10	.10	.10
58.2000	.10	.10	.10	.10	.10
58.4500	.10	.10	.10	.10	.10
58.7000	.10	.10	.10	.10	.10
58.9500	.10	.10	.10	.09	.09
59.2000	.09	.09	.09	.09	.09
59.4500	.09	.09	.09	.09	.09
59.7000	.09	.09	.09	.09	.09
59.9500	.09	.09	.09	.09	.09
60.2000	.08	.08	.08	.08	.08
60.4500	.08	.08	.08	.08	.08
60.7000	.08	.08	.08	.08	.08
60.9500	.08	.08	.08	.08	.08
61.2000	.08	.08	.08	.08	.08
61.4500	.08	.08	.08	.08	.08
61.7000	.08	.08	.08	.08	.08
61.9500	.08	.08	.08	.07	.07
62.2000	.07	.07	.07	.07	.07
62.4500	.07	.07	.07	.07	.07
62.7000	.07	.07	.07	.07	.07
62.9500	.07	.07	.07	.07	.07
63.2000	.07	.07	.07	.07	.07
63.4500	.07	.07	.07	.07	.07
63.7000	.07	.07	.07	.07	.07
63.9500	.07	.07	.07	.07	.07
64.2000	.07	.07	.06	.06	.06
64.4500	.06	.06	.06	.06	.06
64.7000	.06	.06	.06	.06	.06
64.9500	.06	.06	.06	.06	.06
65.2000	.06	.06	.06	.06	.06
65.4500	.06	.06	.06	.06	.06
65.7000	.06	.06	.06	.06	.06
65.9500	.06	.06	.06	.06	.06
66.2000	.06	.06	.06	.06	.06
66.4500	.06	.06	.06	.06	.06
66.7000	.06	.06	.05	.05	.05
66.9500	.05	.05	.05	.05	.05
67.2000	.05	.05	.05	.05	.05
67.4500	.05	.05	.05	.05	.05
67.7000	.05	.05	.05	.05	.05
67.9500	.05	.05	.05	.05	.05
68.2000	.05	.05	.05	.05	.05
68.4500	.05	.05	.05	.05	.05
68.7000	.05	.05	.05	.05	.05

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
68.9500	.05	.05	.05	.05	.05
69.2000	.05	.05	.05	.05	.05
69.4500	.05	.05	.05	.05	.05
69.7000	.05	.05	.05	.05	.04
69.9500	.04	.04	.04	.04	.04
70.2000	.04	.04	.04	.04	.04
70.4500	.04	.04	.04	.04	.04
70.7000	.04	.04	.04	.04	.04
70.9500	.04	.04	.04	.04	.04
71.2000	.04	.04	.04	.04	.04
71.4500	.04	.04	.04	.04	.04
71.7000	.04	.04	.04	.04	.04
71.9500	.04	.04	.04	.04	.04
72.2000	.04	.04	.04	.04	.04
72.4500	.04	.04	.04	.04	.04
72.7000	.04	.04	.04	.04	.04
72.9500	.04	.04	.04	.04	.04
73.2000	.04	.04	.04	.04	.04
73.4500	.04	.04	.04	.04	.04
73.7000	.04	.03	.03	.03	.03
73.9500	.03	.03	.03	.03	.03
74.2000	.03	.03	.03	.03	.03
74.4500	.03	.03	.03	.03	.03
74.7000	.03	.03	.03	.03	.03
74.9500	.03	.03	.03	.03	.03
75.2000	.03	.03	.03	.03	.03
75.4500	.03	.03	.03	.03	.03
75.7000	.03	.03	.03	.03	.03
75.9500	.03	.03	.03	.03	.03
76.2000	.03	.03	.03	.03	.03
76.4500	.03	.03	.03	.03	.03
76.7000	.03	.03	.03	.03	.03
76.9500	.03	.03	.03	.03	.03
77.2000	.03	.03	.03	.03	.03
77.4500	.03	.03	.03	.03	.03
77.7000	.03	.03	.03	.03	.03
77.9500	.03	.03	.03	.03	.03
78.2000	.03	.03	.03	.03	.03
78.4500	.03	.03	.03	.03	.03
78.7000	.03	.03	.03	.02	.02
78.9500	.02	.02	.02	.02	.02
79.2000	.02	.02	.02	.02	.02
79.4500	.02	.02	.02	.02	.02
79.7000	.02	.02	.02	.02	.02
79.9500	.02	.02	.02	.02	.02

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
80.2000	.02	.02	.02	.02	.02
80.4500	.02	.02	.02	.02	.02
80.7000	.02	.02	.02	.02	.02
80.9500	.02	.02	.02	.02	.02
81.2000	.02	.02	.02	.02	.02
81.4500	.02	.02	.02	.02	.02
81.7000	.02	.02	.02	.02	.02
81.9500	.02	.02	.02	.02	.02
82.2000	.02	.02	.02	.02	.02
82.4500	.02	.02	.02	.02	.02
82.7000	.02	.02	.02	.02	.02
82.9500	.02	.02	.02	.02	.02
83.2000	.02	.02	.02	.02	.02
83.4500	.02	.02	.02	.02	.02
83.7000	.02	.02	.02	.02	.02
83.9500	.02	.02	.02	.02	.02
84.2000	.02	.02	.02	.02	.02
84.4500	.02	.02	.02	.02	.02
84.7000	.02	.02	.02	.02	.02
84.9500	.02	.02	.02	.02	.02
85.2000	.02	.02	.02	.02	.02
85.4500	.02	.02	.02	.02	.02
85.7000	.02	.02	.02	.02	.02
85.9500	.02	.02	.02	.02	.02
86.2000	.02	.02	.02	.02	.02
86.4500	.02	.02	.02	.02	.02
86.7000	.02	.02	.02	.02	.02
86.9500	.02	.02	.02	.02	.02
87.2000	.02	.02	.02	.02	.02
87.4500	.02	.02	.02	.02	.02
87.7000	.02	.02	.02	.02	.02
87.9500	.02	.02	.02	.02	.02
88.2000	.02	.02	.02	.02	.02
88.4500	.02	.02	.02	.02	.02
88.7000	.02	.02	.02	.02	.02
88.9500	.02	.02	.02	.02	.02
89.2000	.02	.02	.02	.02	.02
89.4500	.02	.02	.02	.02	.02
89.7000	.02	.02	.02	.02	.02
89.9500	.02	.02	.02	.02	.02
90.2000	.02	.02	.02	.02	.02
90.4500	.02	.02	.02	.02	.02
90.7000	.02	.02	.02	.02	.02
90.9500	.02	.02	.02	.02	.02
91.2000	.02	.02	.02	.02	.02

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
91.4500	.02	.02	.02	.02	.02
91.7000	.02	.02	.02	.02	.02
91.9500	.02	.02	.02	.02	.02
92.2000	.02	.02	.02	.02	.02
92.4500	.02	.02	.02	.02	.02
92.7000	.02	.02	.02	.02	.02
92.9500	.02	.02	.02	.02	.02
93.2000	.02	.02	.02	.02	.02
93.4500	.02	.02	.02	.02	.02
93.7000	.02	.02	.02	.02	.02
93.9500	.02	.02	.02	.02	.02
94.2000	.02	.02	.02	.02	.02
94.4500	.02	.02	.02	.02	.02
94.7000	.02	.02	.02	.02	.02
94.9500	.02	.02	.02	.02	.02
95.2000	.02	.02	.02	.02	.02
95.4500	.02	.02	.02	.02	.02
95.7000	.02	.02	.02	.02	.02
95.9500	.02	.02	.02	.02	.02
96.2000	.02	.02	.02	.02	.02
96.4500	.02	.02	.02	.02	.02
96.7000	.02	.02	.02	.02	.02
96.9500	.02	.02	.02	.02	.02
97.2000	.01	.01	.01	.01	.01
97.4500	.01	.01	.01	.01	.01
97.7000	.01	.01	.01	.01	.01
97.9500	.01	.01	.01	.01	.01
98.2000	.01	.01	.01	.01	.01
98.4500	.01	.01	.01	.01	.01
98.7000	.01	.01	.01	.01	.01
98.9500	.01	.01	.01	.01	.01
99.2000	.01	.01	.01	.01	.01
99.4500	.01	.01	.01	.01	.01
99.7000	.01	.01	.01	.01	.01
99.9500	.01	.01	.01	.01	.01
100.2000	.01	.01	.01	.01	.01
100.4500	.01	.01	.01	.01	.01
100.7000	.01	.01	.01	.01	.01
100.9500	.01	.01	.01	.01	.01
101.2000	.01	.01	.01	.01	.01
101.4500	.01	.01	.01	.01	.01
101.7000	.01	.01	.01	.01	.01
101.9500	.01	.01	.01	.01	.01
102.2000	.01	.01	.01	.01	.01
102.4500	.01	.01	.01	.01	.01

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
102.7000	.01	.01	.01	.01	.01
102.9500	.01	.01	.01	.01	.01
103.2000	.01	.01	.01	.01	.01
103.4500	.01	.01	.01	.01	.01
103.7000	.01	.01	.01	.01	.01
103.9500	.01	.01	.01	.01	.01
104.2000	.01	.01	.01	.01	.01
104.4500	.01	.01	.01	.01	.01
104.7000	.01	.01	.01	.01	.01
104.9500	.01	.01	.01	.01	.01
105.2000	.01	.01	.01	.01	.01
105.4500	.01	.01	.01	.01	.01
105.7000	.01	.01	.01	.01	.01
105.9500	.01	.01	.01	.01	.01
106.2000	.01	.01	.01	.01	.01
106.4500	.01	.01	.01	.01	.01
106.7000	.01	.01	.01	.01	.01
106.9500	.01	.01	.01	.01	.01
107.2000	.01	.01	.01	.01	.01
107.4500	.01	.01	.01	.01	.01
107.7000	.01	.01	.01	.01	.01
107.9500	.01	.01	.01	.01	.01
108.2000	.01	.01	.01	.01	.01
108.4500	.01	.01	.01	.01	.01
108.7000	.01	.01	.01	.01	.01
108.9500	.01	.01	.01	.01	.01
109.2000	.01	.01	.01	.01	.01
109.4500	.01	.01	.01	.01	.01
109.7000	.01	.01	.01	.01	.01
109.9500	.01	.01	.01	.01	.01
110.2000	.01	.01	.01	.01	.01
110.4500	.01	.01	.01	.01	.01
110.7000	.01	.01	.01	.01	.01
110.9500	.01	.01	.01	.01	.01
111.2000	.01	.01	.01	.01	.01
111.4500	.01	.01	.01	.01	.01
111.7000	.01	.01	.01	.01	.01
111.9500	.01	.01	.01	.01	.01
112.2000	.01	.01	.01	.01	.01
112.4500	.01	.01	.01	.01	.01
112.7000	.01	.01	.01	.01	.01
112.9500	.01	.01	.01	.01	.01
113.2000	.01	.01	.01	.01	.01
113.4500	.01	.01	.01	.01	.01
113.7000	.01	.01	.01	.01	.01

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
113.9500	.01	.01	.01	.01	.01
114.2000	.01	.01	.01	.01	.01
114.4500	.01	.01	.01	.01	.01
114.7000	.01	.01	.01	.01	.01
114.9500	.01	.01	.01	.01	.01
115.2000	.01	.01	.01	.01	.01
115.4500	.01	.01	.01	.01	.01
115.7000	.01	.01	.01	.01	.01
115.9500	.01	.01	.01	.01	.01
116.2000	.01	.01	.01	.01	.01
116.4500	.01	.01	.01	.01	.01
116.7000	.01	.01	.01	.01	.01
116.9500	.01	.01	.01	.01	.01
117.2000	.01	.01	.01	.01	.01
117.4500	.01	.01	.01	.01	.01
117.7000	.01	.01	.01	.01	.01
117.9500	.01	.01	.01	.01	.01
118.2000	.01	.01	.01	.01	.01
118.4500	.01	.01	.01	.01	.01
118.7000	.01	.01	.01	.01	.01
118.9500	.01	.01	.01	.01	.01
119.2000	.01	.01	.01	.01	.01
119.4500	.01	.01	.01	.01	.01
119.7000	.01	.01	.01	.01	.01
119.9500	.01	.01	.01	.01	.01
120.2000	.01	.01	.01	.01	.01
120.4500	.01	.01	.01	.01	.01
120.7000	.01	.01	.01	.01	.01
120.9500	.01	.01	.01	.01	.01
121.2000	.01	.01	.01	.01	.01
121.4500	.01	.01	.01	.01	.01
121.7000	.01	.01	.01	.01	.01
121.9500	.01	.01	.01	.01	.01
122.2000	.01	.01	.01	.01	.01
122.4500	.01	.01	.01	.01	.01
122.7000	.01	.01	.01	.01	.01
122.9500	.01	.01	.01	.01	.01
123.2000	.01	.01	.01	.01	.01
123.4500	.01	.01	.01	.01	.01
123.7000	.01	.01	.01	.01	.01
123.9500	.01	.01	.01	.01	.01
124.2000	.01	.01	.01	.01	.01
124.4500	.01	.01	.01	.01	.01
124.7000	.01	.01	.01	.01	.01
124.9500	.01	.01	.01	.01	.01

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
125.2000	.01	.01	.01	.01	.01
125.4500	.01	.01	.01	.01	.01
125.7000	.01	.01	.01	.01	.01
125.9500	.01	.01	.01	.01	.01
126.2000	.01	.01	.01	.01	.01
126.4500	.01	.01	.01	.01	.01
126.7000	.01	.01	.01	.01	.01
126.9500	.01	.01	.01	.01	.01
127.2000	.01	.01	.01	.01	.01
127.4500	.01	.01	.01	.01	.01
127.7000	.01	.01	.01	.01	.01
127.9500	.01	.01	.01	.01	.01
128.2000	.01	.01	.01	.01	.01
128.4500	.01	.01	.01	.01	.01
128.7000	.01	.01	.01	.01	.01
128.9500	.01	.01	.01	.01	.01
129.2000	.01	.01	.01	.01	.01
129.4500	.01	.01	.01	.01	.01
129.7000	.01	.01	.01	.01	.01
129.9500	.01	.01	.01	.01	.01
130.2000	.01	.01	.01	.01	.01
130.4500	.01	.01	.01	.01	.01
130.7000	.01	.01	.01	.01	.01
130.9500	.01	.01	.01	.01	.01
131.2000	.01	.01	.01	.01	.01
131.4500	.01	.01	.01	.01	.01
131.7000	.01	.01	.01	.01	.01
131.9500	.01	.01	.01	.01	.01
132.2000	.01	.01	.01	.01	.01
132.4500	.01	.01	.01	.01	.01
132.7000	.01	.01	.01	.01	.01
132.9500	.01	.01	.01	.01	.01
133.2000	.01	.01	.01	.01	.01
133.4500	.01	.01	.01	.01	.01
133.7000	.01	.01	.01	.01	.01
133.9500	.01	.01	.01	.01	.01
134.2000	.01	.01	.01	.01	.01
134.4500	.01	.01	.01	.01	.01
134.7000	.01	.01	.01	.01	.01
134.9500	.01	.01	.01	.01	.01
135.2000	.01	.01	.01	.01	.01
135.4500	.01	.01	.01	.01	.01
135.7000	.01	.01	.01	.01	.01
135.9500	.01	.01	.01	.01	.01
136.2000	.01	.01	.01	.01	.01

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
136.4500	.01	.01	.01	.01	.01
136.7000	.01	.01	.01	.01	.01
136.9500	.01	.01	.01	.01	.01
137.2000	.01	.01	.01	.01	.01
137.4500	.01	.01	.01	.01	.01
137.7000	.01	.01	.01	.01	.01
137.9500	.01	.01	.01	.01	.01
138.2000	.01	.01	.01	.01	.01
138.4500	.01	.01	.01	.01	.01
138.7000	.01	.01	.01	.01	.01
138.9500	.01	.01	.01	.01	.01
139.2000	.01	.01	.01	.01	.01
139.4500	.01	.01	.01	.01	.01
139.7000	.01	.01	.01	.01	.01
139.9500	.01	.01	.01	.01	.01
140.2000	.01	.01	.01	.01	.01
140.4500	.01	.01	.01	.01	.01
140.7000	.01	.01	.01	.01	.01
140.9500	.01	.01	.01	.01	.01
141.2000	.01	.01	.01	.01	.01
141.4500	.01	.01	.01	.01	.01
141.7000	.01	.01	.01	.01	.01
141.9500	.01	.01	.01	.01	.01
142.2000	.01	.01	.01	.01	.01
142.4500	.01	.01	.01	.01	.01
142.7000	.01	.01	.01	.01	.01
142.9500	.01	.01	.01	.01	.01
143.2000	.01	.01	.01	.01	.01
143.4500	.01	.01	.01	.01	.01
143.7000	.01	.01	.01	.01	.01
143.9500	.01	.01	.01	.01	.01
144.2000	.01	.01	.01	.01	.01
144.4500	.01	.01	.01	.01	.01
144.7000	.01	.01	.01	.01	.01
144.9500	.01	.01	.01	.01	.01
145.2000	.01	.01	.01	.01	.01
145.4500	.01	.01	.01	.01	.01
145.7000	.01	.01	.01	.01	.01
145.9500	.01	.01	.01	.01	.01
146.2000	.01	.01	.01	.01	.01
146.4500	.01	.01	.01	.01	.01
146.7000	.01	.01	.01	.01	.00
146.9500	.00	.00	.00	.00	.00
147.2000	.00	.00	.00	.00	.00
147.4500	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
147.7000	.00	.00	.00	.00	.00
147.9500	.00	.00	.00	.00	.00
148.2000	.00	.00	.00	.00	.00
148.4500	.00	.00	.00	.00	.00
148.7000	.00	.00	.00	.00	.00
148.9500	.00	.00	.00	.00	.00
149.2000	.00	.00	.00	.00	.00
149.4500	.00	.00	.00	.00	.00
149.7000	.00	.00	.00	.00	.00
149.9500	.00	.00	.00	.00	.00
150.2000	.00	.00	.00	.00	.00
150.4500	.00	.00	.00	.00	.00
150.7000	.00	.00	.00	.00	.00
150.9500	.00	.00	.00	.00	.00
151.2000	.00	.00	.00	.00	.00
151.4500	.00	.00	.00	.00	.00
151.7000	.00	.00	.00	.00	.00
151.9500	.00	.00	.00	.00	.00
152.2000	.00	.00	.00	.00	.00
152.4500	.00	.00	.00	.00	.00
152.7000	.00	.00	.00	.00	.00
152.9500	.00	.00	.00	.00	.00
153.2000	.00	.00	.00	.00	.00
153.4500	.00	.00	.00	.00	.00
153.7000	.00	.00	.00	.00	.00
153.9500	.00	.00	.00	.00	.00
154.2000	.00	.00	.00	.00	.00
154.4500	.00	.00	.00	.00	.00
154.7000	.00	.00	.00	.00	.00
154.9500	.00	.00	.00	.00	.00
155.2000	.00	.00	.00	.00	.00
155.4500	.00	.00	.00	.00	.00
155.7000	.00	.00	.00	.00	.00
155.9500	.00	.00	.00	.00	.00
156.2000	.00	.00	.00	.00	.00
156.4500	.00	.00	.00	.00	.00
156.7000	.00	.00	.00	.00	.00
156.9500	.00	.00	.00	.00	.00
157.2000	.00	.00	.00	.00	.00
157.4500	.00	.00	.00	.00	.00
157.7000	.00	.00	.00	.00	.00
157.9500	.00	.00	.00	.00	.00
158.2000	.00	.00	.00	.00	.00
158.4500	.00	.00	.00	.00	.00
158.7000	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
158.9500	.00	.00	.00	.00	.00
159.2000	.00	.00	.00	.00	.00
159.4500	.00	.00	.00	.00	.00
159.7000	.00	.00	.00	.00	.00
159.9500	.00	.00	.00	.00	.00
160.2000	.00	.00	.00	.00	.00
160.4500	.00	.00	.00	.00	.00
160.7000	.00	.00	.00	.00	.00
160.9500	.00	.00	.00	.00	.00
161.2000	.00	.00	.00	.00	.00
161.4500	.00	.00	.00	.00	.00
161.7000	.00	.00	.00	.00	.00
161.9500	.00	.00	.00	.00	.00
162.2000	.00	.00	.00	.00	.00
162.4500	.00	.00	.00	.00	.00
162.7000	.00	.00	.00	.00	.00
162.9500	.00	.00	.00	.00	.00
163.2000	.00	.00	.00	.00	.00
163.4500	.00	.00	.00	.00	.00
163.7000	.00	.00	.00	.00	.00
163.9500	.00	.00	.00	.00	.00
164.2000	.00	.00	.00	.00	.00
164.4500	.00	.00	.00	.00	.00
164.7000	.00	.00	.00	.00	.00
164.9500	.00	.00	.00	.00	.00
165.2000	.00	.00	.00	.00	.00
165.4500	.00	.00	.00	.00	.00
165.7000	.00	.00	.00	.00	.00
165.9500	.00	.00	.00	.00	.00
166.2000	.00	.00	.00	.00	.00
166.4500	.00	.00	.00	.00	.00
166.7000	.00	.00	.00	.00	.00
166.9500	.00	.00	.00	.00	.00
167.2000	.00	.00	.00	.00	.00
167.4500	.00	.00	.00	.00	.00
167.7000	.00	.00	.00	.00	.00
167.9500	.00	.00	.00	.00	.00
168.2000	.00	.00	.00	.00	.00
168.4500	.00	.00	.00	.00	.00
168.7000	.00	.00	.00	.00	.00
168.9500	.00	.00	.00	.00	.00
169.2000	.00	.00	.00	.00	.00
169.4500	.00	.00	.00	.00	.00
169.7000	.00	.00	.00	.00	.00
169.9500	.00	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
170.2000	.00	.00	.00	.00	.00
170.4500	.00	.00	.00	.00	.00
170.7000	.00	.00	.00	.00	.00
170.9500	.00	.00	.00	.00	.00
171.2000	.00	.00	.00	.00	.00
171.4500	.00	.00	.00	.00	.00
171.7000	.00	.00	.00	.00	.00
171.9500	.00	.00	.00	.00	.00
172.2000	.00	.00	.00	.00	.00
172.4500	.00	.00	.00	.00	.00
172.7000	.00	.00	.00	.00	.00
172.9500	.00	.00	.00	.00	.00
173.2000	.00	.00	.00	.00	.00
173.4500	.00	.00	.00	.00	.00
173.7000	.00	.00	.00	.00	.00
173.9500	.00	.00	.00	.00	.00
174.2000	.00	.00	.00	.00	.00
174.4500	.00	.00	.00	.00	.00
174.7000	.00	.00	.00	.00	.00
174.9500	.00	.00	.00	.00	.00
175.2000	.00	.00	.00	.00	.00
175.4500	.00	.00	.00	.00	.00
175.7000	.00	.00	.00	.00	.00
175.9500	.00	.00	.00	.00	.00
176.2000	.00	.00	.00	.00	.00
176.4500	.00	.00	.00	.00	.00
176.7000	.00	.00	.00	.00	.00
176.9500	.00	.00	.00	.00	.00
177.2000	.00	.00	.00	.00	.00
177.4500	.00	.00	.00	.00	.00
177.7000	.00	.00	.00	.00	.00
177.9500	.00	.00	.00	.00	.00
178.2000	.00	.00	.00	.00	.00
178.4500	.00	.00	.00	.00	.00
178.7000	.00	.00	.00	.00	.00
178.9500	.00	.00	.00	.00	.00
179.2000	.00	.00	.00	.00	.00
179.4500	.00	.00	.00	.00	.00
179.7000	.00	.00	.00	.00	.00
179.9500	.00	.00			

SUMMARY FOR HYDROGRAPH ADDITION
at Node: JUNC 1B

HYG Directory: S:\2010\10170\PondPack\2016-10-14_BD\

Upstream Link ID	Upstream Node ID	HYG file	HYG ID	HYG tag
ADDLINK 1B	PDA-1B		PDA-1B	1

INFLOWS TO: JUNC 1B

HYG file	HYG ID	HYG tag	Volume cu.ft	Peak Time hrs	Peak Flow cfs
	PDA-1B	1	65630	12.3500	11.75

TOTAL FLOW INTO: JUNC 1B

HYG file	HYG ID	HYG tag	Volume cu.ft	Peak Time hrs	Peak Flow cfs
	JUNC 1B	1	65630	12.3500	11.75

```
TOTAL NODE INFLOW...
HYG file =
HYG ID   = JUNC 1B
HYG Tag  =      1
-----------------------------------
Peak Discharge =        11.75 cfs
Time to Peak   =      12.3500 hrs
HYG Volume     =        65630 cu.ft
-----------------------------------
```

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
10.5000	.00	.00	.01	.01	.02
10.7500	.03	.04	.06	.07	.09
11.0000	.11	.13	.15	.18	.21
11.2500	.24	.27	.31	.36	.40
11.5000	.46	.52	.59	.70	.84
11.7500	1.04	1.30	1.65	2.09	2.73
12.0000	3.60	4.78	6.25	7.91	9.51
12.2500	10.72	11.47	11.75	11.60	11.12
12.5000	10.39	9.57	8.71	7.86	7.03
12.7500	6.26	5.59	5.02	4.54	4.13
13.0000	3.80	3.51	3.27	3.06	2.88
13.2500	2.73	2.59	2.48	2.39	2.31
13.5000	2.24	2.18	2.13	2.08	2.04
13.7500	2.00	1.96	1.92	1.89	1.85
14.0000	1.82	1.78	1.75	1.72	1.68
14.2500	1.66	1.63	1.60	1.58	1.56
14.5000	1.54	1.52	1.50	1.48	1.47
14.7500	1.45	1.43	1.42	1.40	1.38
15.0000	1.36	1.35	1.33	1.31	1.30
15.2500	1.28	1.26	1.24	1.23	1.21
15.5000	1.19	1.17	1.16	1.14	1.12
15.7500	1.10	1.09	1.07	1.05	1.03
16.0000	1.01	1.00	.98	.96	.94
16.2500	.93	.91	.90	.89	.88
16.5000	.87	.86	.85	.84	.83
16.7500	.82	.81	.81	.80	.79
17.0000	.78	.77	.76	.76	.75
17.2500	.74	.73	.72	.72	.71
17.5000	.70	.69	.68	.68	.67
17.7500	.66	.65	.64	.63	.63
18.0000	.62	.61	.60	.59	.59

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
18.2500	.58	.57	.57	.56	.56
18.5000	.55	.55	.55	.55	.54
18.7500	.54	.54	.53	.53	.53
19.0000	.53	.52	.52	.52	.52
19.2500	.51	.51	.51	.51	.51
19.5000	.50	.50	.50	.50	.49
19.7500	.49	.49	.49	.48	.48
20.0000	.48	.48	.47	.47	.47
20.2500	.47	.46	.46	.46	.46
20.5000	.46	.45	.45	.45	.45
20.7500	.45	.44	.44	.44	.44
21.0000	.44	.44	.43	.43	.43
21.2500	.43	.43	.42	.42	.42
21.5000	.42	.42	.41	.41	.41
21.7500	.41	.41	.41	.40	.40
22.0000	.40	.40	.40	.39	.39
22.2500	.39	.39	.39	.38	.38
22.5000	.38	.38	.38	.37	.37
22.7500	.37	.37	.37	.37	.36
23.0000	.36	.36	.36	.36	.35
23.2500	.35	.35	.35	.35	.34
23.5000	.34	.34	.34	.34	.33
23.7500	.33	.33	.33	.33	.32
24.0000	.32	.32	.30	.28	.25
24.2500	.21	.18	.14	.11	.08
24.5000	.06	.05	.04	.03	.02
24.7500	.02	.01	.01	.01	.01
25.0000	.00	.00	.00	.00	.00
25.2500	.00				

SUMMARY FOR HYDROGRAPH ADDITION
at Node: JUNC 1B

HYG Directory: S:\2010\10170\PondPack\2016-10-14_BD\

Upstream Link ID	Upstream Node ID	HYG file	HYG ID	HYG tag
ADDLINK 1B	PDA-1B		PDA-1B	10

INFLOWS TO: JUNC 1B

HYG file	HYG ID	HYG tag	Volume cu.ft	Peak Time hrs	Peak Flow cfs
	PDA-1B	10	185304	12.3500	34.60

TOTAL FLOW INTO: JUNC 1B

HYG file	HYG ID	HYG tag	Volume cu.ft	Peak Time hrs	Peak Flow cfs
	JUNC 1B	10	185304	12.3500	34.60

```
TOTAL NODE INFLOW...
HYG file =
HYG ID   = JUNC 1B
HYG Tag  =     10
-----------------------------------
Peak Discharge =        34.60 cfs
Time to Peak   =      12.3500 hrs
HYG Volume     =       185304 cu.ft
-----------------------------------
```

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
8.2000	.00	.00	.00	.01	.01
8.4500	.02	.03	.04	.05	.06
8.7000	.07	.09	.11	.12	.14
8.9500	.16	.18	.20	.22	.24
9.2000	.26	.29	.31	.33	.36
9.4500	.39	.41	.44	.47	.50
9.7000	.53	.56	.59	.62	.66
9.9500	.69	.72	.76	.79	.83
10.2000	.87	.91	.96	1.00	1.05
10.4500	1.11	1.16	1.22	1.27	1.34
10.7000	1.40	1.46	1.53	1.60	1.67
10.9500	1.74	1.81	1.89	1.97	2.06
11.2000	2.16	2.28	2.41	2.56	2.72
11.4500	2.91	3.11	3.34	3.62	4.01
11.7000	4.56	5.31	6.29	7.54	9.07
11.9500	11.14	13.85	17.35	21.56	26.10
12.2000	30.24	33.09	34.53	34.60	33.49
12.4500	31.54	29.02	26.38	23.75	21.20
12.7000	18.79	16.58	14.70	13.10	11.76
12.9500	10.64	9.71	8.93	8.28	7.71
13.2000	7.23	6.81	6.45	6.15	5.89
13.4500	5.68	5.49	5.33	5.19	5.07
13.7000	4.96	4.85	4.75	4.66	4.57
13.9500	4.47	4.39	4.30	4.21	4.13
14.2000	4.05	3.97	3.90	3.84	3.78
14.4500	3.72	3.67	3.62	3.58	3.53
14.7000	3.49	3.44	3.40	3.36	3.31
14.9500	3.27	3.23	3.19	3.14	3.10
15.2000	3.06	3.02	2.97	2.93	2.89
15.4500	2.84	2.80	2.76	2.71	2.67
15.7000	2.63	2.58	2.54	2.50	2.45

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
15.9500	2.41	2.37	2.32	2.28	2.24
16.2000	2.20	2.16	2.13	2.10	2.07
16.4500	2.04	2.01	1.99	1.97	1.95
16.7000	1.93	1.91	1.89	1.87	1.85
16.9500	1.83	1.81	1.79	1.77	1.75
17.2000	1.73	1.71	1.69	1.67	1.65
17.4500	1.63	1.61	1.59	1.57	1.56
17.7000	1.54	1.52	1.50	1.48	1.46
17.9500	1.44	1.42	1.40	1.38	1.36
18.2000	1.34	1.33	1.31	1.30	1.29
18.4500	1.28	1.27	1.26	1.26	1.25
18.7000	1.24	1.24	1.23	1.22	1.22
18.9500	1.21	1.21	1.20	1.19	1.19
19.2000	1.18	1.18	1.17	1.16	1.16
19.4500	1.15	1.15	1.14	1.14	1.13
19.7000	1.12	1.12	1.11	1.11	1.10
19.9500	1.10	1.09	1.08	1.08	1.07
20.2000	1.07	1.06	1.06	1.05	1.05
20.4500	1.04	1.04	1.03	1.03	1.02
20.7000	1.02	1.01	1.01	1.00	1.00
20.9500	1.00	.99	.99	.98	.98
21.2000	.97	.97	.97	.96	.96
21.4500	.95	.95	.94	.94	.93
21.7000	.93	.93	.92	.92	.91
21.9500	.91	.90	.90	.90	.89
22.2000	.89	.88	.88	.87	.87
22.4500	.86	.86	.85	.85	.85
22.7000	.84	.84	.83	.83	.82
22.9500	.82	.81	.81	.81	.80
23.2000	.80	.79	.79	.78	.78
23.4500	.77	.77	.77	.76	.76
23.7000	.75	.75	.74	.74	.73
23.9500	.73	.72	.71	.68	.63
24.2000	.56	.48	.40	.31	.24
24.4500	.18	.14	.11	.08	.06
24.7000	.05	.04	.03	.02	.02
24.9500	.01	.01	.01	.00	.00
25.2000	.00	.00	.00		

SUMMARY FOR HYDROGRAPH ADDITION
at Node: JUNC 1B

HYG Directory: S:\2010\10170\PondPack\2016-10-14_BD\

Upstream Link ID	Upstream Node ID	HYG file	HYG ID	HYG tag
ADDLINK 1B	PDA-1B		PDA-1B	25

INFLOWS TO: JUNC 1B

HYG file	HYG ID	HYG tag	Volume cu.ft	Peak Time hrs	Peak Flow cfs
	PDA-1B	25	261424	12.3000	48.84

TOTAL FLOW INTO: JUNC 1B

HYG file	HYG ID	HYG tag	Volume cu.ft	Peak Time hrs	Peak Flow cfs
	JUNC 1B	25	261424	12.3000	48.84

TOTAL NODE INFLOW...
HYG file =
HYG ID = JUNC 1B
HYG Tag = 25

Peak Discharge = 48.84 cfs
Time to Peak = 12.3000 hrs
HYG Volume = 261424 cu.ft

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
7.2500	.00	.00	.00	.01	.01
7.5000	.02	.03	.04	.05	.06
7.7500	.07	.09	.10	.11	.13
8.0000	.14	.16	.18	.19	.21
8.2500	.23	.25	.27	.29	.31
8.5000	.33	.36	.38	.41	.44
8.7500	.46	.49	.52	.55	.58
9.0000	.62	.65	.69	.72	.76
9.2500	.79	.83	.87	.91	.95
9.5000	1.00	1.04	1.08	1.13	1.17
9.7500	1.22	1.27	1.32	1.36	1.41
10.0000	1.47	1.52	1.57	1.63	1.69
10.2500	1.75	1.81	1.88	1.96	2.04
10.5000	2.12	2.20	2.29	2.38	2.47
10.7500	2.57	2.67	2.77	2.87	2.97
11.0000	3.08	3.19	3.31	3.44	3.59
11.2500	3.76	3.95	4.17	4.42	4.69
11.5000	4.99	5.33	5.74	6.33	7.14
11.7500	8.25	9.70	11.52	13.75	16.74
12.0000	20.59	25.52	31.39	37.66	43.30
12.2500	47.06	48.84	48.69	46.93	44.00
12.5000	40.34	36.56	32.82	29.23	25.85
12.7500	22.75	20.13	17.91	16.05	14.50
13.0000	13.21	12.13	11.23	10.45	9.78
13.2500	9.20	8.71	8.29	7.94	7.65
13.5000	7.39	7.17	6.98	6.82	6.66
13.7500	6.52	6.38	6.25	6.12	6.00
14.0000	5.88	5.76	5.64	5.53	5.42
14.2500	5.32	5.22	5.14	5.06	4.98
14.5000	4.91	4.84	4.78	4.72	4.66
14.7500	4.60	4.54	4.48	4.42	4.36

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
15.0000	4.31	4.25	4.19	4.13	4.08
15.2500	4.02	3.96	3.90	3.84	3.79
15.5000	3.73	3.67	3.61	3.55	3.50
15.7500	3.44	3.38	3.32	3.26	3.20
16.0000	3.15	3.09	3.03	2.97	2.92
16.2500	2.87	2.82	2.78	2.74	2.71
16.5000	2.67	2.64	2.61	2.58	2.56
16.7500	2.53	2.50	2.48	2.45	2.42
17.0000	2.40	2.37	2.34	2.32	2.29
17.2500	2.27	2.24	2.22	2.19	2.16
17.5000	2.14	2.11	2.09	2.06	2.03
17.7500	2.01	1.98	1.96	1.93	1.90
18.0000	1.88	1.85	1.83	1.80	1.78
18.2500	1.76	1.74	1.72	1.71	1.69
18.5000	1.68	1.67	1.66	1.65	1.64
18.7500	1.63	1.63	1.62	1.61	1.60
19.0000	1.59	1.59	1.58	1.57	1.56
19.2500	1.56	1.55	1.54	1.53	1.52
19.5000	1.52	1.51	1.50	1.49	1.49
19.7500	1.48	1.47	1.46	1.45	1.45
20.0000	1.44	1.43	1.42	1.42	1.41
20.2500	1.40	1.39	1.39	1.38	1.38
20.5000	1.37	1.36	1.36	1.35	1.34
20.7500	1.34	1.33	1.33	1.32	1.31
21.0000	1.31	1.30	1.30	1.29	1.29
21.2500	1.28	1.27	1.27	1.26	1.26
21.5000	1.25	1.24	1.24	1.23	1.23
21.7500	1.22	1.21	1.21	1.20	1.20
22.0000	1.19	1.19	1.18	1.17	1.17
22.2500	1.16	1.16	1.15	1.14	1.14
22.5000	1.13	1.13	1.12	1.11	1.11
22.7500	1.10	1.10	1.09	1.09	1.08
23.0000	1.07	1.07	1.06	1.06	1.05
23.2500	1.04	1.04	1.03	1.03	1.02
23.5000	1.01	1.01	1.00	1.00	.99
23.7500	.99	.98	.97	.97	.96
24.0000	.95	.94	.90	.84	.74
24.2500	.64	.52	.41	.32	.24
24.5000	.18	.14	.11	.08	.06
24.7500	.05	.04	.03	.02	.01
25.0000	.01	.01	.01	.00	.00
25.2500	.00	.00	.00		

SUMMARY FOR HYDROGRAPH ADDITION
at Node: JUNC 1B

HYG Directory: S:\2010\10170\PondPack\2016-10-14_BD\

Upstream Link ID	Upstream Node ID	HYG file	HYG ID	HYG tag
ADDLINK 1B	PDA-1B		PDA-1B	50

INFLOWS TO: JUNC 1B

HYG file	HYG ID	HYG tag	Volume cu.ft	Peak Time hrs	Peak Flow cfs
	PDA-1B	50	334375	12.3000	62.32

TOTAL FLOW INTO: JUNC 1B

HYG file	HYG ID	HYG tag	Volume cu.ft	Peak Time hrs	Peak Flow cfs
	JUNC 1B	50	334375	12.3000	62.32

TOTAL NODE INFLOW...
HYG file =
HYG ID = JUNC 1B
HYG Tag = 50

Peak Discharge = 62.32 cfs
Time to Peak = 12.3000 hrs
HYG Volume = 334375 cu.ft

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
6.5000	.00	.00	.00	.01	.01
6.7500	.02	.03	.04	.05	.06
7.0000	.07	.08	.10	.11	.13
7.2500	.14	.16	.17	.19	.21
7.5000	.23	.24	.26	.28	.30
7.7500	.32	.34	.36	.38	.40
8.0000	.43	.45	.47	.49	.52
8.2500	.54	.57	.60	.63	.66
8.5000	.70	.73	.77	.81	.85
8.7500	.89	.93	.97	1.01	1.06
9.0000	1.10	1.15	1.20	1.25	1.30
9.2500	1.35	1.40	1.45	1.51	1.57
9.5000	1.62	1.68	1.74	1.80	1.86
9.7500	1.92	1.99	2.05	2.11	2.18
10.0000	2.25	2.32	2.39	2.46	2.54
10.2500	2.62	2.70	2.80	2.89	3.00
10.5000	3.11	3.22	3.33	3.45	3.58
10.7500	3.70	3.83	3.96	4.09	4.23
11.0000	4.36	4.51	4.66	4.83	5.02
11.2500	5.24	5.49	5.78	6.11	6.46
11.5000	6.86	7.31	7.84	8.61	9.67
11.7500	11.13	13.03	15.41	18.30	22.15
12.0000	27.08	33.35	40.77	48.66	55.67
12.2500	60.26	62.32	61.95	59.53	55.67
12.5000	50.94	46.07	41.29	36.70	32.42
12.7500	28.50	25.19	22.38	20.03	18.08
13.0000	16.46	15.09	13.97	12.98	12.14
13.2500	11.41	10.79	10.27	9.84	9.47
13.5000	9.15	8.87	8.64	8.42	8.23
13.7500	8.05	7.88	7.72	7.56	7.41
14.0000	7.26	7.11	6.96	6.82	6.68

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
14.2500	6.56	6.44	6.33	6.23	6.14
14.5000	6.05	5.97	5.89	5.81	5.73
14.7500	5.66	5.59	5.51	5.44	5.37
15.0000	5.30	5.23	5.15	5.08	5.01
15.2500	4.94	4.87	4.80	4.73	4.65
15.5000	4.58	4.51	4.44	4.37	4.30
15.7500	4.22	4.15	4.08	4.01	3.93
16.0000	3.86	3.79	3.72	3.65	3.59
16.2500	3.52	3.47	3.41	3.37	3.32
16.5000	3.28	3.24	3.21	3.17	3.14
16.7500	3.10	3.07	3.04	3.00	2.97
17.0000	2.94	2.91	2.87	2.84	2.81
17.2500	2.78	2.75	2.72	2.68	2.65
17.5000	2.62	2.59	2.56	2.52	2.49
17.7500	2.46	2.43	2.40	2.37	2.33
18.0000	2.30	2.27	2.24	2.21	2.18
18.2500	2.15	2.13	2.11	2.09	2.08
18.5000	2.06	2.05	2.03	2.02	2.01
18.7500	2.00	1.99	1.98	1.97	1.96
19.0000	1.95	1.94	1.93	1.92	1.91
19.2500	1.90	1.89	1.88	1.87	1.86
19.5000	1.86	1.85	1.84	1.83	1.82
19.7500	1.81	1.80	1.79	1.78	1.77
20.0000	1.76	1.75	1.74	1.73	1.72
20.2500	1.71	1.71	1.70	1.69	1.68
20.5000	1.67	1.67	1.66	1.65	1.64
20.7500	1.64	1.63	1.62	1.61	1.61
21.0000	1.60	1.59	1.59	1.58	1.57
21.2500	1.56	1.56	1.55	1.54	1.54
21.5000	1.53	1.52	1.51	1.51	1.50
21.7500	1.49	1.48	1.48	1.47	1.46
22.0000	1.46	1.45	1.44	1.43	1.43
22.2500	1.42	1.41	1.41	1.40	1.39
22.5000	1.38	1.38	1.37	1.36	1.36
22.7500	1.35	1.34	1.33	1.33	1.32
23.0000	1.31	1.30	1.30	1.29	1.28
23.2500	1.27	1.27	1.26	1.25	1.25
23.5000	1.24	1.23	1.22	1.22	1.21
23.7500	1.20	1.20	1.19	1.18	1.17
24.0000	1.16	1.14	1.10	1.02	.91
24.2500	.78	.64	.50	.39	.30
24.5000	.22	.17	.13	.10	.07
24.7500	.06	.04	.03	.02	.02
25.0000	.01	.01	.01	.01	.00
25.2500	.00	.00	.00		

SUMMARY FOR HYDROGRAPH ADDITION
at Node: JUNC 1B

HYG Directory: S:\2010\10170\PondPack\2016-10-14_BD\

Upstream Link ID	Upstream Node ID	HYG file	HYG ID	HYG tag
ADDLINK 1B	PDA-1B		PDA-1B	100

INFLOWS TO: JUNC 1B

HYG file	HYG ID	HYG tag	Volume cu.ft	Peak Time hrs	Peak Flow cfs
	PDA-1B	100	423683	12.3000	78.57

TOTAL FLOW INTO: JUNC 1B

HYG file	HYG ID	HYG tag	Volume cu.ft	Peak Time hrs	Peak Flow cfs
	JUNC 1B	100	423683	12.3000	78.57

```
TOTAL NODE INFLOW...
HYG file =
HYG ID   = JUNC 1B
HYG Tag  =    100
-----------------------------------
Peak Discharge =        78.57 cfs
Time to Peak   =      12.3000 hrs
HYG Volume     =       423683 cu.ft
-----------------------------------
```

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
5.7500	.00	.00	.00	.01	.01
6.0000	.02	.03	.04	.05	.06
6.2500	.07	.08	.09	.11	.12
6.5000	.14	.15	.17	.19	.20
6.7500	.22	.24	.26	.28	.30
7.0000	.32	.34	.36	.38	.40
7.2500	.42	.45	.47	.50	.52
7.5000	.54	.57	.60	.62	.65
7.7500	.68	.71	.73	.76	.79
8.0000	.82	.85	.88	.92	.95
8.2500	.99	1.02	1.07	1.11	1.15
8.5000	1.20	1.25	1.30	1.35	1.41
8.7500	1.46	1.52	1.58	1.64	1.70
9.0000	1.76	1.82	1.89	1.96	2.02
9.2500	2.09	2.16	2.23	2.31	2.38
9.5000	2.45	2.53	2.61	2.69	2.77
9.7500	2.85	2.93	3.01	3.10	3.18
10.0000	3.27	3.36	3.45	3.54	3.64
10.2500	3.75	3.86	3.98	4.10	4.24
10.5000	4.38	4.52	4.67	4.83	4.98
10.7500	5.15	5.31	5.48	5.65	5.82
11.0000	5.99	6.18	6.37	6.58	6.83
11.2500	7.11	7.43	7.81	8.23	8.69
11.5000	9.19	9.77	10.45	11.45	12.82
11.7500	14.70	17.15	20.21	23.91	28.79
12.0000	35.02	42.90	52.17	61.99	70.63
12.2500	76.20	78.57	77.89	74.68	69.68
12.5000	63.63	57.46	51.42	45.65	40.27
12.7500	35.36	31.22	27.72	24.79	22.35
13.0000	20.32	18.63	17.22	16.00	14.95
13.2500	14.05	13.28	12.63	12.09	11.63

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
13.5000	11.23	10.89	10.60	10.34	10.10
13.7500	9.88	9.66	9.46	9.27	9.08
14.0000	8.89	8.71	8.53	8.35	8.18
14.2500	8.03	7.88	7.75	7.63	7.51
14.5000	7.40	7.30	7.20	7.11	7.01
14.7500	6.92	6.83	6.74	6.65	6.56
15.0000	6.47	6.39	6.30	6.21	6.12
15.2500	6.03	5.95	5.86	5.77	5.68
15.5000	5.60	5.51	5.42	5.33	5.24
15.7500	5.16	5.07	4.98	4.89	4.80
16.0000	4.71	4.62	4.54	4.45	4.37
16.2500	4.30	4.23	4.17	4.11	4.05
16.5000	4.00	3.95	3.91	3.87	3.82
16.7500	3.78	3.74	3.70	3.66	3.62
17.0000	3.58	3.54	3.50	3.46	3.43
17.2500	3.39	3.35	3.31	3.27	3.23
17.5000	3.19	3.15	3.11	3.08	3.04
17.7500	3.00	2.96	2.92	2.88	2.84
18.0000	2.80	2.76	2.73	2.69	2.65
18.2500	2.62	2.59	2.57	2.55	2.53
18.5000	2.51	2.49	2.48	2.46	2.45
18.7500	2.44	2.42	2.41	2.40	2.39
19.0000	2.37	2.36	2.35	2.34	2.33
19.2500	2.32	2.30	2.29	2.28	2.27
19.5000	2.26	2.25	2.23	2.22	2.21
19.7500	2.20	2.19	2.18	2.16	2.15
20.0000	2.14	2.13	2.12	2.11	2.10
20.2500	2.08	2.07	2.06	2.05	2.04
20.5000	2.04	2.03	2.02	2.01	2.00
20.7500	1.99	1.98	1.97	1.96	1.95
21.0000	1.94	1.94	1.93	1.92	1.91
21.2500	1.90	1.89	1.88	1.88	1.87
21.5000	1.86	1.85	1.84	1.83	1.82
21.7500	1.81	1.80	1.80	1.79	1.78
22.0000	1.77	1.76	1.75	1.74	1.73
22.2500	1.73	1.72	1.71	1.70	1.69
22.5000	1.68	1.67	1.66	1.65	1.65
22.7500	1.64	1.63	1.62	1.61	1.60
23.0000	1.59	1.58	1.58	1.57	1.56
23.2500	1.55	1.54	1.53	1.52	1.51
23.5000	1.50	1.50	1.49	1.48	1.47
23.7500	1.46	1.45	1.44	1.43	1.42
24.0000	1.41	1.39	1.34	1.24	1.10
24.2500	.94	.77	.61	.47	.36
24.5000	.27	.21	.16	.12	.09

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
24.7500	.07	.05	.04	.03	.02
25.0000	.02	.01	.01	.01	.00
25.2500	.00	.00	.00		

Elevation (ft)	Planimeter (sq.in)	Area (sq.ft)	A1+A2+sqr(A1*A2) (sq.ft)	Volume (cu.ft)	Volume Sum (cu.ft)
256.00	-----	1628	0	0	0
258.00	-----	4070	8272	5515	5515
258.50	-----	4780	13261	2210	7725
260.00	-----	11285	23410	11705	19430
261.00	-----	17180	42389	14130	33559
262.00	-----	27734	66742	22247	55807
264.00	-----	40821	102202	68135	123941
266.00	-----	52276	139292	92861	216803

POND VOLUME EQUATIONS

* Incremental volume computed by the Conic Method for Reservoir Volumes.

Volume = (1/3) * (EL2-EL1) * (Area1 + Area2 + sq.rt.(Area1*Area2))

where: EL1, EL2 = Lower and upper elevations of the increment
Area1,Area2 = Areas computed for EL1, EL2, respectively
Volume = Incremental volume between EL1 and EL2

USER DEFINED VOLUME RATING TABLE

Elevation (ft)	Volume (cu.ft)
264.50	0
265.00	11000
265.25	22000
265.50	30800
265.75	41800
266.00	48400
266.33	57200
266.58	63800
266.83	68200

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	256.00	256.10	256.20	256.30	256.40
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	256.50	256.60	256.70	256.80	256.90
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	257.00	257.10	257.20	257.30	257.40
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft 257.50	TW,ft 257.60	TW,ft 257.70	TW,ft 257.80	TW,ft 257.90
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	258.00	258.10	258.20	258.30	258.40
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	258.50	258.60	258.70	258.80	258.90
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	259.00	259.10	259.20	259.30	259.40
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	259.50	259.60	259.70	259.80	259.90
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	260.00	260.10	260.20	260.30	260.40
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	260.50	260.60	260.70	260.80	260.90
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	261.00	261.10	261.20	261.30	261.40
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	261.50	261.60	261.70	261.80	261.90
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	262.00	262.10	262.20	262.30	262.40
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	262.50	262.60	262.70	262.80	262.90
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	263.00	263.10	263.20	263.30	263.40
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	263.50	263.60	263.70	263.80	263.90
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	264.00	264.10	264.20	264.30	264.40
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	264.50	264.60	264.70	264.80	264.90
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	265.00	265.10	265.20	265.30	265.40
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	265.50	265.60	265.70	265.80	265.90
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.41	.42	.42
266.20	1.18	1.18	1.18	1.17	1.17
266.30	2.16	2.16	2.15	2.15	2.16
266.40	3.20	3.20	3.20	3.23	3.15
266.50	4.01	4.01	4.01	4.01	4.04
266.60	4.77	4.77	4.77	4.77	4.84
266.70	5.51	5.51	5.51	5.51	5.57
266.80	6.22	6.22	6.22	6.22	6.30
266.83	6.43	6.43	6.43	6.43	6.53

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft 266.00	TW,ft	TW,ft	TW,ft	TW,ft
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00				
264.60	.00				
264.70	.00				
264.80	.00				
264.90	.00				
265.00	.00				
265.10	.00				
265.20	.00				
265.30	.00				
265.40	.00				
265.50	.00				
265.60	.00				
265.70	.00				
265.80	.00				
265.90	.00				
266.00	.00				
266.10	.42				
266.20	1.16				
266.30	2.05				
266.40	2.97				
266.50	3.86				
266.60	4.68				
266.70	5.45				
266.80	6.16				
266.83	6.36				

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	256.00	256.10	256.20	256.30	256.40
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	256.50	256.60	256.70	256.80	256.90
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	257.00	257.10	257.20	257.30	257.40
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	257.50	257.60	257.70	257.80	257.90
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	258.00	258.10	258.20	258.30	258.40
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	258.50	258.60	258.70	258.80	258.90
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	259.00	259.10	259.20	259.30	259.40
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	259.50	259.60	259.70	259.80	259.90
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	260.00	260.10	260.20	260.30	260.40
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	260.50	260.60	260.70	260.80	260.90
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	261.00	261.10	261.20	261.30	261.40
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	261.50	261.60	261.70	261.80	261.90
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	262.00	262.10	262.20	262.30	262.40
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	262.50	262.60	262.70	262.80	262.90
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	263.00	263.10	263.20	263.30	263.40
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	263.50	263.60	263.70	263.80	263.90
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	264.00	264.10	264.20	264.30	264.40
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	264.50	264.60	264.70	264.80	264.90
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	265.00	265.10	265.20	265.30	265.40
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	265.50	265.60	265.70	265.80	265.90
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.41	.42	.42
266.20	1.18	1.18	1.18	1.17	1.17
266.30	2.16	2.16	2.15	2.15	2.16
266.40	3.20	3.20	3.20	3.23	3.15
266.50	4.01	4.01	4.01	4.01	4.04
266.60	4.77	4.77	4.77	4.77	4.84
266.70	5.51	5.51	5.51	5.51	5.57
266.80	6.22	6.22	6.22	6.22	6.30
266.83	6.43	6.43	6.43	6.43	6.53

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	266.00				
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00				
264.60	.00				
264.70	.00				
264.80	.00				
264.90	.00				
265.00	.00				
265.10	.00				
265.20	.00				
265.30	.00				
265.40	.00				
265.50	.00				
265.60	.00				
265.70	.00				
265.80	.00				
265.90	.00				
266.00	.00				
266.10	.42				
266.20	1.16				
266.30	2.05				
266.40	2.97				
266.50	3.86				
266.60	4.68				
266.70	5.45				
266.80	6.16				
266.83	6.36				

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	256.00	256.10	256.20	256.30	256.40
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	256.50	256.60	256.70	256.80	256.90
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	257.00	257.10	257.20	257.30	257.40
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	257.50	257.60	257.70	257.80	257.90
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	258.00	258.10	258.20	258.30	258.40
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	258.50	258.60	258.70	258.80	258.90
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	259.00	259.10	259.20	259.30	259.40
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	259.50	259.60	259.70	259.80	259.90
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	260.00	260.10	260.20	260.30	260.40
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	260.50	260.60	260.70	260.80	260.90
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	261.00	261.10	261.20	261.30	261.40
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	261.50	261.60	261.70	261.80	261.90
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	262.00	262.10	262.20	262.30	262.40
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	262.50	262.60	262.70	262.80	262.90
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	263.00	263.10	263.20	263.30	263.40
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	263.50	263.60	263.70	263.80	263.90
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	264.00	264.10	264.20	264.30	264.40
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft 264.50	TW,ft 264.60	TW,ft 264.70	TW,ft 264.80	TW,ft 264.90
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	265.00	265.10	265.20	265.30	265.40
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	265.50	265.60	265.70	265.80	265.90
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.41	.42	.42
266.20	1.18	1.18	1.18	1.17	1.17
266.30	2.16	2.16	2.15	2.15	2.16
266.40	3.20	3.20	3.20	3.23	3.15
266.50	4.01	4.01	4.01	4.01	4.04
266.60	4.77	4.77	4.77	4.77	4.84
266.70	5.51	5.51	5.51	5.51	5.57
266.80	6.22	6.22	6.22	6.22	6.30
266.83	6.43	6.43	6.43	6.43	6.53

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	266.00				
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00				
264.60	.00				
264.70	.00				
264.80	.00				
264.90	.00				
265.00	.00				
265.10	.00				
265.20	.00				
265.30	.00				
265.40	.00				
265.50	.00				
265.60	.00				
265.70	.00				
265.80	.00				
265.90	.00				
266.00	.00				
266.10	.42				
266.20	1.16				
266.30	2.05				
266.40	2.97				
266.50	3.86				
266.60	4.68				
266.70	5.45				
266.80	6.16				
266.83	6.36				

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	256.00	256.10	256.20	256.30	256.40
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	256.50	256.60	256.70	256.80	256.90
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	257.00	257.10	257.20	257.30	257.40
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	257.50	257.60	257.70	257.80	257.90
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	258.00	258.10	258.20	258.30	258.40
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	258.50	258.60	258.70	258.80	258.90
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	259.00	259.10	259.20	259.30	259.40
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	259.50	259.60	259.70	259.80	259.90
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	260.00	260.10	260.20	260.30	260.40
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	260.50	260.60	260.70	260.80	260.90
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	261.00	261.10	261.20	261.30	261.40
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	261.50	261.60	261.70	261.80	261.90
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	262.00	262.10	262.20	262.30	262.40
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	262.50	262.60	262.70	262.80	262.90
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	263.00	263.10	263.20	263.30	263.40
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	263.50	263.60	263.70	263.80	263.90
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	264.00	264.10	264.20	264.30	264.40
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	264.50	264.60	264.70	264.80	264.90
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	265.00	265.10	265.20	265.30	265.40
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	265.50	265.60	265.70	265.80	265.90
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.41	.42	.42
266.20	1.18	1.18	1.18	1.17	1.17
266.30	2.16	2.16	2.15	2.15	2.16
266.40	3.20	3.20	3.20	3.23	3.15
266.50	4.01	4.01	4.01	4.01	4.04
266.60	4.77	4.77	4.77	4.77	4.84
266.70	5.51	5.51	5.51	5.51	5.57
266.80	6.22	6.22	6.22	6.22	6.30
266.83	6.43	6.43	6.43	6.43	6.53

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	266.00				
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00				
264.60	.00				
264.70	.00				
264.80	.00				
264.90	.00				
265.00	.00				
265.10	.00				
265.20	.00				
265.30	.00				
265.40	.00				
265.50	.00				
265.60	.00				
265.70	.00				
265.80	.00				
265.90	.00				
266.00	.00				
266.10	.42				
266.20	1.16				
266.30	2.05				
266.40	2.97				
266.50	3.86				
266.60	4.68				
266.70	5.45				
266.80	6.16				
266.83	6.36				

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	256.00	256.10	256.20	256.30	256.40
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	256.50	256.60	256.70	256.80	256.90
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	257.00	257.10	257.20	257.30	257.40
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	257.50	257.60	257.70	257.80	257.90
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	258.00	258.10	258.20	258.30	258.40
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	258.50	258.60	258.70	258.80	258.90
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	259.00	259.10	259.20	259.30	259.40
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	259.50	259.60	259.70	259.80	259.90
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	260.00	260.10	260.20	260.30	260.40
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	260.50	260.60	260.70	260.80	260.90
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	261.00	261.10	261.20	261.30	261.40
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	261.50	261.60	261.70	261.80	261.90
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	262.00	262.10	262.20	262.30	262.40
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	262.50	262.60	262.70	262.80	262.90
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	263.00	263.10	263.20	263.30	263.40
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	263.50	263.60	263.70	263.80	263.90
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	264.00	264.10	264.20	264.30	264.40
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	264.50	264.60	264.70	264.80	264.90
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	265.00	265.10	265.20	265.30	265.40
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.42	.42	.42
266.20	1.18	1.18	1.18	1.18	1.18
266.30	2.16	2.16	2.16	2.16	2.16
266.40	3.20	3.20	3.20	3.20	3.20
266.50	4.01	4.01	4.01	4.01	4.01
266.60	4.77	4.77	4.77	4.77	4.77
266.70	5.51	5.51	5.51	5.51	5.51
266.80	6.22	6.22	6.22	6.22	6.22
266.83	6.43	6.43	6.43	6.43	6.43

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft	TW,ft	TW,ft	TW,ft	TW,ft
	265.50	265.60	265.70	265.80	265.90
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00	.00	.00	.00	.00
264.60	.00	.00	.00	.00	.00
264.70	.00	.00	.00	.00	.00
264.80	.00	.00	.00	.00	.00
264.90	.00	.00	.00	.00	.00
265.00	.00	.00	.00	.00	.00
265.10	.00	.00	.00	.00	.00
265.20	.00	.00	.00	.00	.00
265.30	.00	.00	.00	.00	.00
265.40	.00	.00	.00	.00	.00
265.50	.00	.00	.00	.00	.00
265.60	.00	.00	.00	.00	.00
265.70	.00	.00	.00	.00	.00
265.80	.00	.00	.00	.00	.00
265.90	.00	.00	.00	.00	.00
266.00	.00	.00	.00	.00	.00
266.10	.42	.42	.41	.42	.42
266.20	1.18	1.18	1.18	1.17	1.17
266.30	2.16	2.16	2.15	2.15	2.16
266.40	3.20	3.20	3.20	3.23	3.15
266.50	4.01	4.01	4.01	4.01	4.04
266.60	4.77	4.77	4.77	4.77	4.84
266.70	5.51	5.51	5.51	5.51	5.57
266.80	6.22	6.22	6.22	6.22	6.30
266.83	6.43	6.43	6.43	6.43	6.53

Elevation - Outflow - Tailwater (ICPR Rating Table)

TW Elevs. --->	TW,ft 266.00	TW,ft	TW,ft	TW,ft	TW,ft
HW Elev,ft	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs	Flow, cfs
264.50	.00				
264.60	.00				
264.70	.00				
264.80	.00				
264.90	.00				
265.00	.00				
265.10	.00				
265.20	.00				
265.30	.00				
265.40	.00				
265.50	.00				
265.60	.00				
265.70	.00				
265.80	.00				
265.90	.00				
266.00	.00				
266.10	.42				
266.20	1.16				
266.30	2.05				
266.40	2.97				
266.50	3.86				
266.60	4.68				
266.70	5.45				
266.80	6.16				
266.83	6.36				

REQUESTED POND WS ELEVATIONS:

Min. Elev.= 256.00 ft
Increment = .10 ft
Max. Elev.= 266.00 ft

```
*********************************************
                OUTLET CONNECTIVITY
*********************************************

 ---> Forward Flow Only (UpStream to DnStream)
<---  Reverse Flow Only (DnStream to UpStream)
<---> Forward and Reverse Both Allowed
```

Structure	No.		Outfall	E1, ft	E2, ft
Inlet Box	R1	--->	C1	264.300	266.000
Orifice-Circular	O1	--->	C1	262.200	266.000
Culvert-Circular	C1	--->	TW	256.500	266.000
TW SETUP, DS Channel					

OUTLET STRUCTURE INPUT DATA

```
Structure ID      = R1
Structure Type    = Inlet Box
------------------------------------
# of Openings     =         1
Invert Elev.      =    264.30 ft
Orifice Area      =   21.0000 sq.ft
Orifice Coeff.    =      .600
Weir Length       =     28.00 ft
Weir Coeff.       =     3.330
K, Reverse        =     1.000
Mannings n        =     .0000
Kev,Charged Riser =      .000
Weir Submergence  = No
```

```
Structure ID      = O1
Structure Type    = Orifice-Circular
------------------------------------
# of Openings     =         1
Invert Elev.      =    262.20 ft
Diameter          =     .4580 ft
Orifice Coeff.    =      .600
```

OUTLET STRUCTURE INPUT DATA

```
Structure ID      = C1
Structure Type    = Culvert-Circular
------------------------------------
No. Barrels       =         1
Barrel Diameter   =    3.5000 ft
Upstream Invert   =    256.50 ft
Dnstream Invert   =    256.31 ft
Horiz. Length     =    105.00 ft
Barrel Length     =    105.00 ft
Barrel Slope      =    .00181 ft/ft

OUTLET CONTROL DATA...
Mannings n        =     .0120
Ke                =     .5000  (forward entrance loss)
Kb                =   .005015  (per ft of full flow)
Kr                =     .5000  (reverse entrance loss)
HW Convergence    =      .001  +/- ft

INLET CONTROL DATA...
Equation form     =         1
Inlet Control K   =     .0098
Inlet Control M   =    2.0000
Inlet Control c   =    .03980
Inlet Control Y   =     .6700
T1 ratio (HW/D)   =     1.159
T2 ratio (HW/D)   =     1.306
Slope Factor      =     -.500

Use unsubmerged inlet control Form 1 equ. below T1 elev.
Use   submerged inlet control Form 1 equ. above T2 elev.

In transition zone between unsubmerged and submerged inlet control,
interpolate between flows at T1 & T2...
At T1 Elev =    260.56 ft  --->  Flow =     63.00 cfs
At T2 Elev =    261.07 ft  --->  Flow =     72.00 cfs
```

RATING TABLE FOR ONE OUTLET TYPE

Structure ID = R1 (Inlet Box)

Upstream ID = (Pond Water Surface)
DNstream ID = C1 (Culvert-Circular)

Pond WS. Elev. ft	Device Q cfs	(into) HW HGL ft	Converge DS HGL ft	Next DS HGL ft	DS HGL Error +/-ft	Q SUM Error +/-cfs	DS Chan. TW ft	TW Error +/-ft
256.00	.00	REVERSE: Flow is closed off						
256.10	.00	REVERSE: Flow is closed off						
256.20	.00	REVERSE: Flow is closed off						
256.30	.00	REVERSE: Flow is closed off						
256.40	.00	REVERSE: Flow is closed off						
256.50	.00	REVERSE: Flow is closed off						
256.60	.00	REVERSE: Flow is closed off						
256.70	.00	REVERSE: Flow is closed off						
256.80	.00	REVERSE: Flow is closed off						
256.90	.00	REVERSE: Flow is closed off						
257.00	.00	REVERSE: Flow is closed off						
257.10	.00	REVERSE: Flow is closed off						
257.20	.00	REVERSE: Flow is closed off						
257.30	.00	REVERSE: Flow is closed off						
257.40	.00	REVERSE: Flow is closed off						
257.50	.00	REVERSE: Flow is closed off						
257.60	.00	REVERSE: Flow is closed off						
257.70	.00	REVERSE: Flow is closed off						
257.80	.00	REVERSE: Flow is closed off						
257.90	.00	REVERSE: Flow is closed off						
258.00	.00	REVERSE: Flow is closed off						
258.10	.00	REVERSE: Flow is closed off						
258.20	.00	REVERSE: Flow is closed off						
258.30	.00	REVERSE: Flow is closed off						
258.40	.00	REVERSE: Flow is closed off						
258.50	.00	REVERSE: Flow is closed off						
258.60	.00	REVERSE: Flow is closed off						
258.70	.00	REVERSE: Flow is closed off						
258.80	.00	REVERSE: Flow is closed off						
258.90	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
259.00	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
259.10	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
259.20	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						

RATING TABLE FOR ONE OUTLET TYPE

Structure ID = R1 (Inlet Box)

Upstream ID = (Pond Water Surface)
DNstream ID = C1 (Culvert-Circular)

Pond WS. Elev. ft	Device Q cfs	(into) HW HGL ft	Converge DS HGL ft	Next DS HGL ft	DS HGL Error +/-ft	Q SUM Error +/-cfs	DS Chan. TW ft	TW Error +/-ft
259.30	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
259.40	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
259.50	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
259.60	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
259.70	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
259.80	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
259.90	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
260.00	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
260.10	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
260.20	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
260.30	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
260.40	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
260.50	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
260.60	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
260.70	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
260.80	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
260.90	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
261.00	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						

RATING TABLE FOR ONE OUTLET TYPE

Structure ID = R1 (Inlet Box)

Upstream ID = (Pond Water Surface)
DNstream ID = C1 (Culvert-Circular)

Pond WS. Elev. ft	Device Q cfs	(into) HW HGL ft	Converge DS HGL ft	Next DS HGL ft	DS HGL Error +/-ft	Q SUM Error +/-cfs	DS Chan. TW ft	TW Error +/-ft
261.10	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
261.20	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
261.30	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
261.40	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
261.50	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
261.60	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
261.70	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
261.80	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
261.90	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
262.00	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
262.10	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
262.20	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
262.30	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
262.40	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
262.50	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
262.60	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
262.70	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
262.80	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						

RATING TABLE FOR ONE OUTLET TYPE

Structure ID = R1 (Inlet Box)

Upstream ID = (Pond Water Surface)
DNstream ID = C1 (Culvert-Circular)

Pond WS. Elev. ft	Device Q cfs	(into) HW HGL ft	Converge DS HGL ft	Next DS HGL ft	DS HGL Error +/-ft	Q SUM Error +/-cfs	DS Chan. TW ft	TW Error +/-ft
262.90	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
263.00	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
263.10	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
263.20	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
263.30	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
263.40	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
263.50	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
263.60	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
263.70	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
263.80	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
263.90	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
264.00	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
264.10	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
264.20	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
264.30	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
264.40	2.95	264.40	Free	258.88	.000	.000	258.87	.000
		Weir: H =.10ft						
264.50	8.34	264.50	Free	258.92	.000	.000	258.87	.000
		Weir: H =.20ft						
264.60	15.32	264.60	Free	259.02	.000	.000	258.87	.000
		Weir: H =.30ft						

RATING TABLE FOR ONE OUTLET TYPE

Structure ID = R1 (Inlet Box)

Upstream ID = (Pond Water Surface)
DNstream ID = C1 (Culvert-Circular)

Pond WS. Elev. ft	Device Q cfs	(into) HW HGL ft	Converge DS HGL ft	Next DS HGL ft	DS HGL Error +/-ft	Q SUM Error +/-cfs	DS Chan. TW ft	TW Error +/-ft
264.70	23.59	264.70	Free	259.21	.000	.000	258.87	.000
		Weir: H =.40ft						
264.80	32.97	264.80	Free	259.50	.000	.000	258.87	.000
		Weir: H =.50ft						
264.90	43.33	264.90	Free	259.89	.000	.000	258.87	.000
		Weir: H =.60ft						
265.00	54.61	265.00	Free	260.38	.000	.000	258.87	.000
		Weir: H =.70ft						
265.10	66.72	265.10	Free	260.95	.000	.000	258.87	.000
		Weir: H =.80ft						
265.20	79.61	265.20	Free	261.68	.000	.000	258.87	.000
		Weir: H =.90ft						
265.30	93.24	265.30	Free	262.68	.000	.000	258.87	.000
		Weir: H =1.00ft						
265.40	106.01	265.40	Free	263.77	.000	.000	258.87	.000
		Orifice: H =1.10; Riser orifice equation controlling.						
265.50	110.72	265.50	Free	264.20	.000	.000	258.87	.000
		Orifice: H =1.20; Riser orifice equation controlling.						
265.60	115.24	265.60	264.64	264.64	.000	.000	258.87	.000
		FULLY CHARGED RISER: Orifice Equation Control to Crest; H=1.30						
265.70	119.59	265.70	265.06	265.06	.000	.000	258.87	.000
		FULLY CHARGED RISER: Orifice Equation Control to Crest; H=1.40						
265.80	123.79	265.80	265.48	265.48	.000	.000	258.87	.000
		FULLY CHARGED RISER: Orifice Equation Control to Crest; H=1.50						
265.90	127.85	265.90	265.89	265.89	.000	.000	258.87	.000
		FULLY CHARGED RISER: Orifice Equation Control to Crest; H=1.60						
266.00	*	266.00	266.00	266.00	.000	.000	258.87	.000
		FULLY CHARGED RISER, DOWNSTREAM CONTROL: Kev=0. Hev=0.000						

RATING TABLE FOR ONE OUTLET TYPE

Structure ID = O1 (Orifice-Circular)

Upstream ID = (Pond Water Surface)
DNstream ID = C1 (Culvert-Circular)

Pond WS. Elev. ft	Device Q cfs	(into) HW HGL ft	Converge DS HGL ft	Next DS HGL ft	DS HGL Error +/-ft	Q SUM Error +/-cfs	DS Chan. TW ft	TW Error +/-ft
256.00	.00	REVERSE: Flow is closed off						
256.10	.00	REVERSE: Flow is closed off						
256.20	.00	REVERSE: Flow is closed off						
256.30	.00	REVERSE: Flow is closed off						
256.40	.00	REVERSE: Flow is closed off						
256.50	.00	REVERSE: Flow is closed off						
256.60	.00	REVERSE: Flow is closed off						
256.70	.00	REVERSE: Flow is closed off						
256.80	.00	REVERSE: Flow is closed off						
256.90	.00	REVERSE: Flow is closed off						
257.00	.00	REVERSE: Flow is closed off						
257.10	.00	REVERSE: Flow is closed off						
257.20	.00	REVERSE: Flow is closed off						
257.30	.00	REVERSE: Flow is closed off						
257.40	.00	REVERSE: Flow is closed off						
257.50	.00	REVERSE: Flow is closed off						
257.60	.00	REVERSE: Flow is closed off						
257.70	.00	REVERSE: Flow is closed off						
257.80	.00	REVERSE: Flow is closed off						
257.90	.00	REVERSE: Flow is closed off						
258.00	.00	REVERSE: Flow is closed off						
258.10	.00	REVERSE: Flow is closed off						
258.20	.00	REVERSE: Flow is closed off						
258.30	.00	REVERSE: Flow is closed off						
258.40	.00	REVERSE: Flow is closed off						
258.50	.00	REVERSE: Flow is closed off						
258.60	.00	REVERSE: Flow is closed off						
258.70	.00	REVERSE: Flow is closed off						
258.80	.00	REVERSE: Flow is closed off						
258.90	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
259.00	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
259.10	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
259.20	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						

RATING TABLE FOR ONE OUTLET TYPE

Structure ID = O1 (Orifice-Circular)

Upstream ID = (Pond Water Surface)
DNstream ID = C1 (Culvert-Circular)

Pond WS. Elev. ft	Device Q cfs	(into) HW HGL ft	Converge DS HGL ft	Next DS HGL ft	DS HGL Error +/-ft	Q SUM Error +/-cfs	DS Chan. TW ft	TW Error +/-ft
259.30	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
259.40	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
259.50	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
259.60	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
259.70	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
259.80	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
259.90	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
260.00	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
260.10	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
260.20	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
260.30	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
260.40	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
260.50	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
260.60	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
260.70	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
260.80	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
260.90	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
261.00	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						

RATING TABLE FOR ONE OUTLET TYPE

Structure ID = O1 (Orifice-Circular)

Upstream ID = (Pond Water Surface)
DNstream ID = C1 (Culvert-Circular)

Pond WS. Elev. ft	Device Q cfs	(into) HW HGL ft	Converge DS HGL ft	Next DS HGL ft	DS HGL Error +/-ft	Q SUM Error +/-cfs	DS Chan. TW ft	TW Error +/-ft
261.10	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
261.20	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
261.30	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
261.40	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
261.50	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
261.60	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
261.70	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
261.80	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
261.90	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
262.00	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
262.10	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
262.20	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
262.30	.02	262.30	Free	258.87	.000	.000	258.87	.000
		CRIT.DEPTH CONTROL Vh= .025ft Dcr= .075ft CRIT.DEPTH Hev= .00ft						
262.40	.08	262.40	Free	258.87	.000	.000	258.87	.000
		CRIT.DEPTH CONTROL Vh= .054ft Dcr= .147ft CRIT.DEPTH Hev= .00ft						
262.50	.18	262.50	Free	258.87	.000	.000	258.87	.000
		CRIT.DEPTH CONTROL Vh= .084ft Dcr= .216ft CRIT.DEPTH Hev= .00ft						
262.60	.29	262.60	Free	258.87	.000	.000	258.87	.000
		CRIT.DEPTH CONTROL Vh= .119ft Dcr= .281ft CRIT.DEPTH Hev= .00ft						
262.70	.41	262.70	Free	258.87	.000	.000	258.87	.000
		H =.27						
262.80	.48	262.80	Free	258.87	.000	.000	258.87	.000
		H =.37						

RATING TABLE FOR ONE OUTLET TYPE

Structure ID = O1 (Orifice-Circular)

Upstream ID = (Pond Water Surface)
DNstream ID = C1 (Culvert-Circular)

Pond WS. Elev. ft	Device Q cfs	(into) HW HGL ft	Converge DS HGL ft	Next DS HGL ft	DS HGL Error +/-ft	Q SUM Error +/-cfs	DS Chan. TW ft	TW Error +/-ft
262.90	.54	262.90	Free	258.87	.000	.000	258.87	.000
		H =.47						
263.00	.60	263.00	Free	258.87	.000	.000	258.87	.000
		H =.57						
263.10	.65	263.10	Free	258.87	.000	.000	258.87	.000
		H =.67						
263.20	.70	263.20	Free	258.87	.000	.000	258.87	.000
		H =.77						
263.30	.74	263.30	Free	258.87	.000	.000	258.87	.000
		H =.87						
263.40	.78	263.40	Free	258.87	.000	.000	258.87	.000
		H =.97						
263.50	.82	263.50	Free	258.87	.000	.000	258.87	.000
		H =1.07						
263.60	.86	263.60	Free	258.87	.000	.000	258.87	.000
		H =1.17						
263.70	.89	263.70	Free	258.87	.000	.000	258.87	.000
		H =1.27						
263.80	.93	263.80	Free	258.87	.000	.000	258.87	.000
		H =1.37						
263.90	.96	263.90	Free	258.87	.000	.000	258.87	.000
		H =1.47						
264.00	.99	264.00	Free	258.87	.000	.000	258.87	.000
		H =1.57						
264.10	1.03	264.10	Free	258.87	.000	.000	258.87	.000
		H =1.67						
264.20	1.06	264.20	Free	258.87	.000	.000	258.87	.000
		H =1.77						
264.30	1.08	264.30	Free	258.87	.000	.000	258.87	.000
		H =1.87						
264.40	1.11	264.40	Free	258.88	.000	.000	258.87	.000
		H =1.97						
264.50	1.14	264.50	Free	258.92	.000	.000	258.87	.000
		H =2.07						
264.60	1.17	264.60	Free	259.02	.000	.000	258.87	.000
		H =2.17						

RATING TABLE FOR ONE OUTLET TYPE

Structure ID = O1 (Orifice-Circular)

Upstream ID = (Pond Water Surface)
DNstream ID = C1 (Culvert-Circular)

Pond WS. Elev. ft	Device Q cfs	(into) HW HGL ft	Converge DS HGL ft	Next DS HGL ft	DS HGL Error +/-ft	Q SUM Error +/-cfs	DS Chan. TW ft	TW Error +/-ft
264.70	1.19	264.70	Free	259.21	.000	.000	258.87	.000
		H =2.27						
264.80	1.22	264.80	Free	259.50	.000	.000	258.87	.000
		H =2.37						
264.90	1.25	264.90	Free	259.89	.000	.000	258.87	.000
		H =2.47						
265.00	1.27	265.00	Free	260.38	.000	.000	258.87	.000
		H =2.57						
265.10	1.30	265.10	Free	260.95	.000	.000	258.87	.000
		H =2.67						
265.20	1.32	265.20	Free	261.68	.000	.000	258.87	.000
		H =2.77						
265.30	1.28	265.30	262.68	262.68	.000	.000	258.87	.000
		H =2.62						
265.40	1.01	265.40	263.77	263.77	.000	.000	258.87	.000
		H =1.63						
265.50	.90	265.50	264.20	264.20	.000	.000	258.87	.000
		H =1.30						
265.60	.78	265.60	264.64	264.64	.000	.000	258.87	.000
		H =.96						
265.70	.63	265.70	265.06	265.06	.000	.000	258.87	.000
		H =.64						
265.80	.45	265.80	265.48	265.48	.000	.000	258.87	.000
		H =.32						
265.90	.09	265.90	265.89	265.89	.000	.000	258.87	.000
		H =.01						
266.00	*	266.00	266.00	266.00	.000	.000	258.87	.000

FLOW PRECEDENCE SET TO DOWNSTREAM CONTROLLING STRUCTURE

RATING TABLE FOR ONE OUTLET TYPE

Structure ID = C1 (Culvert-Circular)

Mannings open channel maximum capacity: 49.87 cfs
UPstream ID's= R1, O1
DNstream ID = TW (Pond Outfall)

Pond WS. Elev. ft	Device Q cfs	(into) HW HGL ft	Converge DS HGL ft	Next DS HGL ft	DS HGL Error +/-ft	Q SUM Error +/-cfs	DS Chan. TW ft	TW Error +/-ft
256.00	.00	REVERSE: Flow is closed off						
256.10	.00	REVERSE: Flow is closed off						
256.20	.00	REVERSE: Flow is closed off						
256.30	.00	REVERSE: Flow is closed off						
256.40	.00	REVERSE: Flow is closed off						
256.50	.00	REVERSE: Flow is closed off						
256.60	.00	REVERSE: Flow is closed off						
256.70	.00	REVERSE: Flow is closed off						
256.80	.00	REVERSE: Flow is closed off						
256.90	.00	REVERSE: Flow is closed off						
257.00	.00	REVERSE: Flow is closed off						
257.10	.00	REVERSE: Flow is closed off						
257.20	.00	REVERSE: Flow is closed off						
257.30	.00	REVERSE: Flow is closed off						
257.40	.00	REVERSE: Flow is closed off						
257.50	.00	REVERSE: Flow is closed off						
257.60	.00	REVERSE: Flow is closed off						
257.70	.00	REVERSE: Flow is closed off						
257.80	.00	REVERSE: Flow is closed off						
257.90	.00	REVERSE: Flow is closed off						
258.00	.00	REVERSE: Flow is closed off						
258.10	.00	REVERSE: Flow is closed off						
258.20	.00	REVERSE: Flow is closed off						
258.30	.00	REVERSE: Flow is closed off						
258.40	.00	REVERSE: Flow is closed off						
258.50	.00	REVERSE: Flow is closed off						
258.60	.00	REVERSE: Flow is closed off						
258.70	.00	REVERSE: Flow is closed off						
258.80	.00	REVERSE: Flow is closed off						
258.90	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
259.00	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
259.10	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						

RATING TABLE FOR ONE OUTLET TYPE

Structure ID = C1 (Culvert-Circular)

Mannings open channel maximum capacity: 49.87 cfs
UPstream ID's= R1, O1
DNstream ID = TW (Pond Outfall)

Pond WS. Elev. ft	Device Q cfs	(into) HW HGL ft	Converge DS HGL ft	Next DS HGL ft	DS HGL Error +/-ft	Q SUM Error +/-cfs	DS Chan. TW ft	TW Error +/-ft
259.20	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
259.30	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
259.40	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
259.50	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
259.60	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
259.70	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
259.80	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
259.90	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
260.00	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
260.10	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
260.20	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
260.30	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
260.40	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
260.50	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
260.60	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
260.70	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
260.80	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
260.90	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						

RATING TABLE FOR ONE OUTLET TYPE

Structure ID = C1 (Culvert-Circular)

Mannings open channel maximum capacity: 49.87 cfs
UPstream ID's= R1, O1
DNstream ID = TW (Pond Outfall)

Pond WS. Elev. ft	Device Q cfs	(into) HW HGL ft	Converge DS HGL ft	Next DS HGL ft	DS HGL Error +/-ft	Q SUM Error +/-cfs	DS Chan. TW ft	TW Error +/-ft
261.00	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
261.10	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
261.20	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
261.30	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
261.40	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
261.50	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
261.60	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
261.70	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
261.80	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
261.90	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
262.00	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
262.10	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
262.20	.00	...	...	...	...	...	258.87	.000
		WS below an invert; no flow.						
262.30	*	258.87	258.87	258.87	.000	.000	258.87	.000
		FLOW PRECEDENCE SET TO UPSTREAM CONTROLLING STRUCTURE						
262.40	*	258.87	258.87	258.87	.000	.000	258.87	.000
		FLOW PRECEDENCE SET TO UPSTREAM CONTROLLING STRUCTURE						
262.50	*	258.87	258.87	258.87	.000	.000	258.87	.000
		FLOW PRECEDENCE SET TO UPSTREAM CONTROLLING STRUCTURE						
262.60	*	258.87	258.87	258.87	.000	.000	258.87	.000
		FLOW PRECEDENCE SET TO UPSTREAM CONTROLLING STRUCTURE						
262.70	*	258.87	258.87	258.87	.000	.000	258.87	.000
		FLOW PRECEDENCE SET TO UPSTREAM CONTROLLING STRUCTURE						

RATING TABLE FOR ONE OUTLET TYPE

Structure ID = C1 (Culvert-Circular)

Mannings open channel maximum capacity: 49.87 cfs
UPstream ID's= R1, O1
DNstream ID = TW (Pond Outfall)

Pond WS. Elev. ft	Device Q cfs	(into) HW HGL ft	Converge DS HGL ft	Next DS HGL ft	DS HGL Error +/-ft	Q SUM Error +/-cfs	DS Chan. TW ft	TW Error +/-ft
262.80	*	258.87	258.87	258.87	.000	.000	258.87	.000
		FLOW PRECEDENCE SET TO UPSTREAM CONTROLLING STRUCTURE						
262.90	*	258.87	258.87	258.87	.000	.000	258.87	.000
		FLOW PRECEDENCE SET TO UPSTREAM CONTROLLING STRUCTURE						
263.00	*	258.87	258.87	258.87	.000	.000	258.87	.000
		FLOW PRECEDENCE SET TO UPSTREAM CONTROLLING STRUCTURE						
263.10	*	258.87	258.87	258.87	.000	.000	258.87	.000
		FLOW PRECEDENCE SET TO UPSTREAM CONTROLLING STRUCTURE						
263.20	*	258.87	258.87	258.87	.000	.000	258.87	.000
		FLOW PRECEDENCE SET TO UPSTREAM CONTROLLING STRUCTURE						
263.30	*	258.87	258.87	258.87	.000	.000	258.87	.000
		FLOW PRECEDENCE SET TO UPSTREAM CONTROLLING STRUCTURE						
263.40	*	258.87	258.87	258.87	.000	.000	258.87	.000
		FLOW PRECEDENCE SET TO UPSTREAM CONTROLLING STRUCTURE						
263.50	*	258.87	258.87	258.87	.000	.000	258.87	.000
		FLOW PRECEDENCE SET TO UPSTREAM CONTROLLING STRUCTURE						
263.60	*	258.87	258.87	258.87	.000	.000	258.87	.000
		FLOW PRECEDENCE SET TO UPSTREAM CONTROLLING STRUCTURE						
263.70	*	258.87	258.87	258.87	.000	.000	258.87	.000
		FLOW PRECEDENCE SET TO UPSTREAM CONTROLLING STRUCTURE						
263.80	*	258.87	258.87	258.87	.000	.000	258.87	.000
		FLOW PRECEDENCE SET TO UPSTREAM CONTROLLING STRUCTURE						
263.90	*	258.87	258.87	258.87	.000	.000	258.87	.000
		FLOW PRECEDENCE SET TO UPSTREAM CONTROLLING STRUCTURE						
264.00	*	258.87	258.87	258.87	.000	.000	258.87	.000
		FLOW PRECEDENCE SET TO UPSTREAM CONTROLLING STRUCTURE						
264.10	*	258.87	258.87	258.87	.000	.000	258.87	.000
		FLOW PRECEDENCE SET TO UPSTREAM CONTROLLING STRUCTURE						
264.20	*	258.87	258.87	258.87	.000	.000	258.87	.000
		FLOW PRECEDENCE SET TO UPSTREAM CONTROLLING STRUCTURE						
264.30	*	258.87	258.87	258.87	.000	.000	258.87	.000
		FLOW PRECEDENCE SET TO UPSTREAM CONTROLLING STRUCTURE						
264.40	4.04	258.88	258.87	258.87	.000	.009	258.87	.000
		BACKWATER CONTROL.. Vh= .005ft hwDi= 2.371ft Lbw= 105.0ft Hev= .00ft						
264.50	9.47	258.92	258.87	258.87	.000	.006	258.87	.000
		BACKWATER CONTROL.. Vh= .029ft hwDi= 2.377ft Lbw= 105.0ft Hev= .00ft						

RATING TABLE FOR ONE OUTLET TYPE

Structure ID = C1 (Culvert-Circular)

Mannings open channel maximum capacity: 49.87 cfs
UPstream ID's= R1, O1
DNstream ID = TW (Pond Outfall)

Pond WS. Elev. ft	Device Q cfs	(into) HW HGL ft	Converge DS HGL ft	Next DS HGL ft	DS HGL Error +/-ft	Q SUM Error +/-cfs	DS Chan. TW ft	TW Error +/-ft
264.60	16.52	259.02	258.87	258.87	.000	.000	258.87	.000
		BACKWATER CONTROL.. Vh= .086ft hwDi= 2.392ft Lbw= 105.0ft Hev= .00ft						
264.70	24.77	259.21	258.87	258.87	.000	.010	258.87	.000
		BACKWATER CONTROL.. Vh= .189ft hwDi= 2.423ft Lbw= 105.0ft Hev= .00ft						
264.80	34.16	259.50	258.87	258.87	.000	.029	258.87	.000
		BACKWATER CONTROL.. Vh= .339ft hwDi= 2.486ft Lbw= 105.0ft Hev= .00ft						
264.90	44.57	259.89	258.87	258.87	.000	.010	258.87	.000
		BACKWATER CONTROL.. Vh= .522ft hwDi= 2.610ft Lbw= 105.0ft Hev= .00ft						
265.00	55.87	260.38	258.87	258.87	.000	.005	258.87	.000
		BACKWATER CONTROL.. Vh= .697ft hwDi= 2.834ft Lbw= 105.0ft Hev= .00ft						
265.10	68.03	260.95	258.87	258.87	.000	.011	258.87	.000
		BACKWATER CONTROL.. Vh= .858ft hwDi= 3.167ft Lbw= 105.0ft Hev= .00ft						
265.20	80.93	261.68	258.87	258.87	.000	.001	258.87	.000
		FULL FLOW...Lfull=7.90ft Vh=1.100ft HL=1.693ft Hev= .00ft						
265.30	94.46	262.68	258.87	258.87	.000	.062	258.87	.000
		INLET CONTROL... Submerged: HW =6.18						
265.40	107.03	263.77	258.87	258.87	.000	.000	258.87	.000
		INLET CONTROL... Submerged: HW =7.27						
265.50	111.63	264.20	258.87	258.87	.000	.000	258.87	.000
		INLET CONTROL... Submerged: HW =7.70						
265.60	116.09	264.64	258.87	258.87	.000	.000	258.87	.000
		INLET CONTROL... Submerged: HW =8.14						
265.70	120.28	265.06	258.87	258.87	.000	.000	258.87	.000
		INLET CONTROL... Submerged: HW =8.56						
265.80	124.29	265.48	258.87	258.87	.000	.000	258.87	.000
		INLET CONTROL... Submerged: HW =8.98						
265.90	128.01	265.89	258.87	258.87	.000	.000	258.87	.000
		INLET CONTROL... Submerged: HW =9.39						
266.00	129.03	266.00	258.87	258.87	.000	2.752	258.87	.000
		INLET CONTROL... Submerged: HW =9.50						

***** COMPOSITE OUTFLOW SUMMARY ****

CUMULATIVE HGL CONVERGENCE ERROR .000 (+/- ft)

* Max. convergence errors shown may also occur for flow paths other than the ones listed above.

WS Elev, Total Q			Notes	
			Converge	
Elev. ft	Q cfs	TW Elev ft	Error +/-ft	Contributing Structures
256.00	.00	258.87	.000	(no Q: R1,O1,C1)
256.10	.00	258.87	.000	(no Q: R1,O1,C1)
256.20	.00	258.87	.000	(no Q: R1,O1,C1)
256.30	.00	258.87	.000	(no Q: R1,O1,C1)
256.40	.00	258.87	.000	(no Q: R1,O1,C1)
256.50	.00	258.87	.000	(no Q: R1,O1,C1)
256.60	.00	258.87	.000	(no Q: R1,O1,C1)
256.70	.00	258.87	.000	(no Q: R1,O1,C1)
256.80	.00	258.87	.000	(no Q: R1,O1,C1)
256.90	.00	258.87	.000	(no Q: R1,O1,C1)
257.00	.00	258.87	.000	(no Q: R1,O1,C1)
257.10	.00	258.87	.000	(no Q: R1,O1,C1)
257.20	.00	258.87	.000	(no Q: R1,O1,C1)
257.30	.00	258.87	.000	(no Q: R1,O1,C1)
257.40	.00	258.87	.000	(no Q: R1,O1,C1)
257.50	.00	258.87	.000	(no Q: R1,O1,C1)
257.60	.00	258.87	.000	(no Q: R1,O1,C1)
257.70	.00	258.87	.000	(no Q: R1,O1,C1)
257.80	.00	258.87	.000	(no Q: R1,O1,C1)
257.90	.00	258.87	.000	(no Q: R1,O1,C1)
258.00	.00	258.87	.000	(no Q: R1,O1,C1)
258.10	.00	258.87	.000	(no Q: R1,O1,C1)
258.20	.00	258.87	.000	(no Q: R1,O1,C1)
258.30	.00	258.87	.000	(no Q: R1,O1,C1)
258.40	.00	258.87	.000	(no Q: R1,O1,C1)
258.50	.00	258.87	.000	(no Q: R1,O1,C1)
258.60	.00	258.87	.000	(no Q: R1,O1,C1)
258.70	.00	258.87	.000	(no Q: R1,O1,C1)
258.80	.00	258.87	.000	(no Q: R1,O1,C1)
258.90	.00	258.87	.000	(no Q: R1,O1,C1)
259.00	.00	258.87	.000	(no Q: R1,O1,C1)
259.10	.00	258.87	.000	(no Q: R1,O1,C1)
259.20	.00	258.87	.000	(no Q: R1,O1,C1)

***** COMPOSITE OUTFLOW SUMMARY ****

CUMULATIVE HGL CONVERGENCE ERROR .000 (+/- ft)

* Max. convergence errors shown may also occur for flow paths other than the ones listed above.

WS Elev, Total Q			Notes	
Elev. ft	Q cfs	TW Elev ft	Converge Error +/-ft	Contributing Structures
259.30	.00	258.87	.000	(no Q: R1,O1,C1)
259.40	.00	258.87	.000	(no Q: R1,O1,C1)
259.50	.00	258.87	.000	(no Q: R1,O1,C1)
259.60	.00	258.87	.000	(no Q: R1,O1,C1)
259.70	.00	258.87	.000	(no Q: R1,O1,C1)
259.80	.00	258.87	.000	(no Q: R1,O1,C1)
259.90	.00	258.87	.000	(no Q: R1,O1,C1)
260.00	.00	258.87	.000	(no Q: R1,O1,C1)
260.10	.00	258.87	.000	(no Q: R1,O1,C1)
260.20	.00	258.87	.000	(no Q: R1,O1,C1)
260.30	.00	258.87	.000	(no Q: R1,O1,C1)
260.40	.00	258.87	.000	(no Q: R1,O1,C1)
260.50	.00	258.87	.000	(no Q: R1,O1,C1)
260.60	.00	258.87	.000	(no Q: R1,O1,C1)
260.70	.00	258.87	.000	(no Q: R1,O1,C1)
260.80	.00	258.87	.000	(no Q: R1,O1,C1)
260.90	.00	258.87	.000	(no Q: R1,O1,C1)
261.00	.00	258.87	.000	(no Q: R1,O1,C1)
261.10	.00	258.87	.000	(no Q: R1,O1,C1)
261.20	.00	258.87	.000	(no Q: R1,O1,C1)
261.30	.00	258.87	.000	(no Q: R1,O1,C1)
261.40	.00	258.87	.000	(no Q: R1,O1,C1)
261.50	.00	258.87	.000	(no Q: R1,O1,C1)
261.60	.00	258.87	.000	(no Q: R1,O1,C1)
261.70	.00	258.87	.000	(no Q: R1,O1,C1)
261.80	.00	258.87	.000	(no Q: R1,O1,C1)
261.90	.00	258.87	.000	(no Q: R1,O1,C1)
262.00	.00	258.87	.000	(no Q: R1,O1,C1)
262.10	.00	258.87	.000	(no Q: R1,O1,C1)
262.20	.00	258.87	.000	(no Q: R1,O1,C1)
262.30	.02	258.87	.000	O1,C1 (no Q: R1)
262.40	.08	258.87	.000	O1,C1 (no Q: R1)
262.50	.18	258.87	.000	O1,C1 (no Q: R1)

***** COMPOSITE OUTFLOW SUMMARY ****

CUMULATIVE HGL CONVERGENCE ERROR .000 (+/- ft)

* Max. convergence errors shown may also occur for flow paths other than the ones listed above.

WS Elev, Total Q			Notes	
Elev. ft	Q cfs	TW Elev ft	Converge Error +/-ft	Contributing Structures
262.60	.29	258.87	.000	O1,C1 (no Q: R1)
262.70	.41	258.87	.000	O1,C1 (no Q: R1)
262.80	.48	258.87	.000	O1,C1 (no Q: R1)
262.90	.54	258.87	.000	O1,C1 (no Q: R1)
263.00	.60	258.87	.000	O1,C1 (no Q: R1)
263.10	.65	258.87	.000	O1,C1 (no Q: R1)
263.20	.70	258.87	.000	O1,C1 (no Q: R1)
263.30	.74	258.87	.000	O1,C1 (no Q: R1)
263.40	.78	258.87	.000	O1,C1 (no Q: R1)
263.50	.82	258.87	.000	O1,C1 (no Q: R1)
263.60	.86	258.87	.000	O1,C1 (no Q: R1)
263.70	.89	258.87	.000	O1,C1 (no Q: R1)
263.80	.93	258.87	.000	O1,C1 (no Q: R1)
263.90	.96	258.87	.000	O1,C1 (no Q: R1)
264.00	.99	258.87	.000	O1,C1 (no Q: R1)
264.10	1.03	258.87	.000	O1,C1 (no Q: R1)
264.20	1.06	258.87	.000	O1,C1 (no Q: R1)
264.30	1.08	258.87	.000	O1,C1 (no Q: R1)
264.40	4.05	258.87	.000	R1,O1,C1
264.50	9.48	258.87	.000	R1,O1,C1
264.60	16.49	258.87	.000	R1,O1,C1
264.70	24.77	258.87	.000	R1,O1,C1
264.80	34.16	258.87	.000	R1,O1,C1
264.90	44.57	258.87	.000	R1,O1,C1
265.00	55.87	258.87	.000	R1,O1,C1
265.10	68.03	258.87	.000	R1,O1,C1
265.20	80.93	258.87	.000	R1,O1,C1
265.30	94.46	258.87	.000	R1,O1,C1
265.40	107.02	258.87	.000	R1,O1,C1
265.50	111.63	258.87	.000	R1,O1,C1
265.60	116.02	258.87	.000	R1,O1,C1
265.70	120.23	258.87	.000	R1,O1,C1
265.80	124.23	258.87	.000	R1,O1,C1

***** COMPOSITE OUTFLOW SUMMARY ****

CUMULATIVE HGL CONVERGENCE ERROR .000 (+/- ft)

* Max. convergence errors shown may also occur for
flow paths other than the ones listed above.

WS Elev, Total Q				Notes
			Converge	
Elev. ft	Q cfs	TW Elev ft	Error +/-ft	Contributing Structures
265.90	127.94	258.87	.000	R1,O1,C1
266.00	129.03	258.87	.000	R1,C1 (no Q: O1)

ICPM POND ROUTING SUMMARY

```
HYG Dir          = S:\2010\10170\PondPack\2016-10-14_BD\
Inflow  HYG file = BASIN 1A      IN 1
Outflow HYG file = BASIN 1A     OUT 1

Pond Node   Data = BASIN 1A
Pond Volume Data = BASIN 1A
Pond Outlet Data = OCS 1A

No Infiltration

INITIAL CONDITIONS                     CALCULATION TOLERANCES
----------------------------------     -------------------------------
Starting WS Elev =   262.20 ft         Target Convergence=     .000 cfs +/-
Starting Volume  =    62621 cu.ft      Max. Iterations   =       35 loops
Starting Outflow =      .00 cfs        ICPM   Time Step  =    .0500 hrs
                                       Output Time Step  =    .0500 hrs
----------------------------------     ICPM Ending Time  = 180.0000 hrs
                                       -------------------------------
```

MAXIMUM STORAGE

Tp, hrs	Elev, ft	Vol, cu.ft
16.2000	264.31	138503

	FORWARD FLOW PEAKS		REVERSE FLOW PEAKS	
	Tp, hrs	Qp, cfs	Tp, hrs	Qp, cfs
Pond Inflow.....	12.1500	24.07	.0000	.00
Pond Outflow....	16.1500	1.49	.0000	.00

	TOTAL VOLUME IN		TOTAL VOLUME OUT	
	Vol, cu.ft	Direction	Vol, cu.ft	Direction
Pond Inflow.....	115938	Forward	0	Reverse
Pond Outflow....	0	Reverse	115639	Forward

```
MASS BALANCE (cu.ft)
----------------------------
+ Initial Vol.....       62621
+ Total Vol IN....      115938
- Total Vol OUT...      115639
- Ending Pond Vol.       63067  <-- (At 180.0000 hrs  Elev.= 262.21 ft)
                    ------------
Difference......        -147 cu.ft  (.126% of Inflow Volume)
```

ICPM POND ROUTING SUMMARY

```
HYG Dir          = S:\2010\10170\PondPack\2016-10-14_BD\
Inflow  HYG file = BASIN 1A      IN 10
Outflow HYG file = BASIN 1A     OUT 10

Pond Node   Data = BASIN 1A
Pond Volume Data = BASIN 1A
Pond Outlet Data = OCS 1A

No Infiltration

INITIAL CONDITIONS                     CALCULATION TOLERANCES
----------------------------------     -------------------------------
Starting WS Elev =   262.20 ft         Target Convergence=     .000 cfs +/-
Starting Volume  =    62621 cu.ft      Max. Iterations   =       35 loops
Starting Outflow =      .00 cfs        ICPM   Time Step  =    .0500 hrs
                                       Output Time Step  =    .0500 hrs
----------------------------------     ICPM Ending Time  = 180.0000 hrs
                                       -------------------------------
```

MAXIMUM STORAGE

Tp, hrs	Elev, ft	Vol, cu.ft
12.4000	264.87	164179

	FORWARD FLOW PEAKS		REVERSE FLOW PEAKS	
	Tp, hrs	Qp, cfs	Tp, hrs	Qp, cfs
Pond Inflow.....	12.1500	65.81	.0000	.00
Pond Outflow....	12.4000	41.09	.0000	.00

	TOTAL VOLUME IN		TOTAL VOLUME OUT	
	Vol, cu.ft	Direction	Vol, cu.ft	Direction
Pond Inflow.....	311046	Forward	0	Reverse
Pond Outflow....	0	Reverse	310740	Forward

```
MASS BALANCE (cu.ft)
----------------------------
+ Initial Vol.....       62621
+ Total Vol IN....      311046
- Total Vol OUT...      310740
- Ending Pond Vol.       63067  <-- (At 180.0000 hrs  Elev.= 262.21 ft)
                    ------------
Difference......        -141 cu.ft  (.045% of Inflow Volume)
```

ICPM POND ROUTING SUMMARY

```
HYG Dir          = S:\2010\10170\PondPack\2016-10-14_BD\
Inflow  HYG file = BASIN 1A      IN 25
Outflow HYG file = BASIN 1A     OUT 25

Pond Node   Data = BASIN 1A
Pond Volume Data = BASIN 1A
Pond Outlet Data = OCS 1A

No Infiltration

INITIAL CONDITIONS                     CALCULATION TOLERANCES
----------------------------------     -------------------------------
Starting WS Elev =   262.20 ft         Target Convergence=     .000 cfs +/-
Starting Volume  =    62621 cu.ft      Max. Iterations   =       35 loops
Starting Outflow =      .00 cfs        ICPM   Time Step  =    .0500 hrs
                                       Output Time Step  =    .0500 hrs
----------------------------------     ICPM Ending Time  = 180.0000 hrs
                                       -------------------------------
```

MAXIMUM STORAGE

Tp, hrs	Elev, ft	Vol, cu.ft
12.3500	265.11	175540

	FORWARD FLOW PEAKS		REVERSE FLOW PEAKS	
	Tp, hrs	Qp, cfs	Tp, hrs	Qp, cfs
Pond Inflow.....	12.1500	91.17	.0000	.00
Pond Outflow....	12.3500	69.48	.0000	.00

	TOTAL VOLUME IN		TOTAL VOLUME OUT	
	Vol, cu.ft	Direction	Vol, cu.ft	Direction
Pond Inflow.....	440521	Forward	0	Reverse
Pond Outflow....	0	Reverse	440209	Forward

```
MASS BALANCE (cu.ft)
----------------------------
+ Initial Vol.....       62621
+ Total Vol IN....      440521
- Total Vol OUT...      440209
- Ending Pond Vol.       63067  <-- (At 180.0000 hrs  Elev.= 262.21 ft)
                    ------------
Difference......        -134 cu.ft  (.030% of Inflow Volume)
```

ICPM POND ROUTING SUMMARY

```
HYG Dir          = S:\2010\10170\PondPack\2016-10-14_BD\
Inflow  HYG file = BASIN 1A      IN 50
Outflow HYG file = BASIN 1A     OUT 50

Pond Node   Data = BASIN 1A
Pond Volume Data = BASIN 1A
Pond Outlet Data = OCS 1A

No Infiltration

INITIAL CONDITIONS                     CALCULATION TOLERANCES
----------------------------------     -------------------------------
Starting WS Elev =   262.20 ft         Target Convergence=     .000 cfs +/-
Starting Volume  =    62621 cu.ft      Max. Iterations   =       35 loops
Starting Outflow =      .00 cfs        ICPM   Time Step  =    .0500 hrs
                                       Output Time Step  =    .0500 hrs
----------------------------------     ICPM Ending Time  = 180.0000 hrs
                                       -------------------------------
```

MAXIMUM STORAGE

Tp, hrs	Elev, ft	Vol, cu.ft
12.3000	265.30	184163

	FORWARD FLOW PEAKS		REVERSE FLOW PEAKS	
	Tp, hrs	Qp, cfs	Tp, hrs	Qp, cfs
Pond Inflow.....	12.1500	114.92	.0000	.00
Pond Outflow....	12.3000	94.06	.0000	.00

	TOTAL VOLUME IN		TOTAL VOLUME OUT	
	Vol, cu.ft	Direction	Vol, cu.ft	Direction
Pond Inflow.....	574189	Forward	0	Reverse
Pond Outflow....	0	Reverse	573872	Forward

```
MASS BALANCE (cu.ft)
-----------------------------
+ Initial Vol.....       62621
+ Total Vol IN....      574189
- Total Vol OUT...      573872
- Ending Pond Vol.       63067  <-- (At 180.0000 hrs  Elev.= 262.21 ft)
                    ------------
Difference......        -129 cu.ft  (.022% of Inflow Volume)
```

ICPM POND ROUTING SUMMARY

```
HYG Dir          = S:\2010\10170\PondPack\2016-10-14_BD\
Inflow  HYG file = BASIN 1A      IN 100
Outflow HYG file = BASIN 1A     OUT 100

Pond Node   Data = BASIN 1A
Pond Volume Data = BASIN 1A
Pond Outlet Data = OCS 1A

No Infiltration

INITIAL CONDITIONS                     CALCULATION TOLERANCES
----------------------------------     -------------------------------
Starting WS Elev =   262.20 ft         Target Convergence=     .000 cfs +/-
Starting Volume  =    62621 cu.ft      Max. Iterations   =       35 loops
Starting Outflow =      .00 cfs        ICPM   Time Step  =    .0500 hrs
                                       Output Time Step  =    .0500 hrs
----------------------------------     ICPM Ending Time  = 180.0000 hrs
                                       -------------------------------
```

MAXIMUM STORAGE

Tp, hrs	Elev, ft	Vol, cu.ft
12.3000	265.59	197804

	FORWARD FLOW PEAKS		REVERSE FLOW PEAKS	
	Tp, hrs	Qp, cfs	Tp, hrs	Qp, cfs
Pond Inflow.....	12.1500	144.90	.0000	.00
Pond Outflow....	12.3000	115.62	.0000	.00

	TOTAL VOLUME IN		TOTAL VOLUME OUT	
	Vol, cu.ft	Direction	Vol, cu.ft	Direction
Pond Inflow.....	737112	Forward	0	Reverse
Pond Outflow....	0	Reverse	736793	Forward

```
MASS BALANCE (cu.ft)
----------------------------
+ Initial Vol.....       62621
+ Total Vol IN....      737112
- Total Vol OUT...      736793
- Ending Pond Vol.       63067  <-- (At 180.0000 hrs  Elev.= 262.21 ft)
                    ------------
Difference......        -127 cu.ft  (.017% of Inflow Volume)
```

ICPM POND ROUTING SUMMARY

```
HYG Dir          = S:\2010\10170\PondPack\2016-10-14_BD\
Inflow  HYG file = CHAMBERS      IN 1
Outflow HYG file = CHAMBERS     OUT 1

Pond Node   Data = CHAMBERS
Pond Volume Data = CHAMBERS
Pond Outlet Data = NEW CHMBERS

Infiltration =     1.21 cfs

INITIAL CONDITIONS                      CALCULATION TOLERANCES
----------------------------------      ------------------------------
Starting WS Elev =   264.50 ft          Target Convergence=     .000 cfs +/-
Starting Volume  =        0 cu.ft       Max. Iterations   =       35 loops
Starting Outflow =      .00 cfs         ICPM   Time Step  =    .0500 hrs
Starting Infilt. =     1.21 cfs         Output Time Step  =    .0500 hrs
----------------------------------      ICPM Ending Time  = 180.0000 hrs
                                        ------------------------------
```

MAXIMUM STORAGE

Tp, hrs	Elev, ft	Vol, cu.ft
12.9500	265.08	14460

	FORWARD FLOW PEAKS		REVERSE FLOW PEAKS	
	Tp, hrs	Qp, cfs	Tp, hrs	Qp, cfs
Pond Inflow.....	12.1000	10.82	.0000	.00
Infiltration....	5.4000	1.21	.0000	.00
Pond Outflow....	.0500	.00	.0000	.00

	TOTAL VOLUME IN		TOTAL VOLUME OUT	
	Vol, cu.ft	Direction	Vol, cu.ft	Direction
Pond Inflow.....	39698	Forward	0	Reverse
Infiltration....	0	Reverse	82450	Forward
Pond Outflow....	0	Reverse	0	Forward

```
MASS BALANCE (cu.ft)
----------------------------
+ Initial Vol.....          0
+ Total Vol IN....      39698
- Total Vol OUT...      82450
- Ending Pond Vol.          0  <-- (At 18.7000 hrs  Elev.= 264.50 ft)
                   ------------
Difference......     -42752 cu.ft  (51.852% of Outflow Volume)

WARNING: Mass balance for routing volumes vary by more than .5%
```

ICPM POND DETENTION TIMES SUMMARY

```
HYG Dir          = S:\2010\10170\PondPack\2016-10-14_BD\
Inflow  HYG file = CHAMBERS      IN 1
Outflow HYG file = CHAMBERS     OUT 1

Pond Node   Data = CHAMBERS
Pond Volume Data = CHAMBERS
Pond Outlet Data = NEW CHMBERS

Infiltration =     1.21 cfs

INITIAL CONDITIONS                     CALCULATION TOLERANCES
----------------------------------     -------------------------------
Starting WS Elev =   264.50 ft         Target Convergence=     .000 cfs +/-
Starting Volume  =        0 cu.ft      Max. Iterations   =       35 loops
Starting Outflow =      .00 cfs        ICPM   Time Step  =    .0500 hrs
Starting Infilt. =     1.21 cfs        Output Time Step  =    .0500 hrs
----------------------------------     ICPM Ending Time  = 180.0000 hrs
                                       -------------------------------


APPROXIMATE DETENTION TIME
---------------------------------------

Qout+Infilt. Centroid   =   14.8305 hrs
Inflow Centroid         =   13.3581 hrs
Centroid to Centroid    =    1.4724 hrs
---------------------------------------
```

ICPM POND ROUTING SUMMARY

```
HYG Dir          = S:\2010\10170\PondPack\2016-10-14_BD\
Inflow  HYG file = CHAMBERS      IN 10
Outflow HYG file = CHAMBERS     OUT 10

Pond Node   Data = CHAMBERS
Pond Volume Data = CHAMBERS
Pond Outlet Data = NEW CHMBERS

Infiltration =     1.21 cfs

INITIAL CONDITIONS                     CALCULATION TOLERANCES
----------------------------------     -------------------------------
Starting WS Elev =   264.50 ft         Target Convergence=     .000 cfs +/-
Starting Volume  =        0 cu.ft      Max. Iterations   =       35 loops
Starting Outflow =      .00 cfs        ICPM   Time Step  =    .0500 hrs
Starting Infilt. =     1.21 cfs        Output Time Step  =    .0500 hrs
----------------------------------     ICPM Ending Time  = 180.0000 hrs
                                       -------------------------------
```

MAXIMUM STORAGE

Tp, hrs	Elev, ft	Vol, cu.ft
14.4500	265.70	39692

	FORWARD FLOW PEAKS		REVERSE FLOW PEAKS	
	Tp, hrs	Qp, cfs	Tp, hrs	Qp, cfs
Pond Inflow.....	12.1000	21.65	.0000	.00
Infiltration....	3.3500	1.21	.0000	.00
Pond Outflow....	.0500	.00	.0000	.00

	TOTAL VOLUME IN		TOTAL VOLUME OUT	
	Vol, cu.ft	Direction	Vol, cu.ft	Direction
Pond Inflow.....	82872	Forward	0	Reverse
Infiltration....	0	Reverse	105262	Forward
Pond Outflow....	0	Reverse	0	Forward

```
MASS BALANCE (cu.ft)
----------------------------
+ Initial Vol.....          0
+ Total Vol IN....      82872
- Total Vol OUT...     105262
- Ending Pond Vol.          0  <-- (At 27.5500 hrs  Elev.= 264.50 ft)
                   ------------
Difference......     -22390 cu.ft  (21.271% of Outflow Volume)

WARNING: Mass balance for routing volumes vary by more than .5%
```

ICPM POND DETENTION TIMES SUMMARY

```
HYG Dir          = S:\2010\10170\PondPack\2016-10-14_BD\
Inflow  HYG file = CHAMBERS      IN 10
Outflow HYG file = CHAMBERS     OUT 10

Pond Node   Data = CHAMBERS
Pond Volume Data = CHAMBERS
Pond Outlet Data = NEW CHMBERS

Infiltration =     1.21 cfs

INITIAL CONDITIONS                     CALCULATION TOLERANCES
----------------------------------     -------------------------------
Starting WS Elev =   264.50 ft         Target Convergence=     .000 cfs +/-
Starting Volume  =        0 cu.ft      Max. Iterations   =       35 loops
Starting Outflow =      .00 cfs        ICPM   Time Step  =    .0500 hrs
Starting Infilt. =     1.21 cfs        Output Time Step  =    .0500 hrs
----------------------------------     ICPM Ending Time  = 180.0000 hrs
                                       -------------------------------


APPROXIMATE DETENTION TIME
---------------------------------------

Qout+Infilt. Centroid   =   15.4091 hrs
Inflow Centroid         =   13.0230 hrs
Centroid to Centroid    =    2.3861 hrs
---------------------------------------
```

ICPM POND ROUTING SUMMARY

```
HYG Dir          = S:\2010\10170\PondPack\2016-10-14_BD\
Inflow  HYG file = CHAMBERS      IN 25
Outflow HYG file = CHAMBERS     OUT 25

Pond Node   Data = CHAMBERS
Pond Volume Data = CHAMBERS
Pond Outlet Data = NEW CHMBERS

Infiltration =     1.21 cfs

INITIAL CONDITIONS                     CALCULATION TOLERANCES
----------------------------------     -------------------------------
Starting WS Elev =   264.50 ft         Target Convergence=     .000 cfs +/-
Starting Volume  =        0 cu.ft      Max. Iterations   =       35 loops
Starting Outflow =      .00 cfs        ICPM   Time Step  =    .0500 hrs
Starting Infilt. =     1.21 cfs        Output Time Step  =    .0500 hrs
----------------------------------     ICPM Ending Time  = 180.0000 hrs
                                       -------------------------------
```

MAXIMUM STORAGE

Tp, hrs	Elev, ft	Vol, cu.ft
13.6500	266.15	52511

	FORWARD FLOW PEAKS		REVERSE FLOW PEAKS	
	Tp, hrs	Qp, cfs	Tp, hrs	Qp, cfs
Pond Inflow.....	12.1000	27.72	.0000	.00
Infiltration....	2.7500	1.21	.0000	.00
Pond Outflow....	13.6000	.83	.0000	.00

	TOTAL VOLUME IN		TOTAL VOLUME OUT	
	Vol, cu.ft	Direction	Vol, cu.ft	Direction
Pond Inflow.....	107878	Forward	0	Reverse
Infiltration....	0	Reverse	121991	Forward
Pond Outflow....	0	Reverse	7199	Forward

```
MASS BALANCE (cu.ft)
-----------------------------
+ Initial Vol.....          0
+ Total Vol IN....     107878
- Total Vol OUT...     129191
- Ending Pond Vol.          0  <-- (At 30.8000 hrs  Elev.= 264.50 ft)
                   ------------
Difference......     -21312 cu.ft  (16.497% of Outflow Volume)

WARNING: Mass balance for routing volumes vary by more than .5%
```

ICPM POND DETENTION TIMES SUMMARY

```
HYG Dir          = S:\2010\10170\PondPack\2016-10-14_BD\
Inflow  HYG file = CHAMBERS      IN 25
Outflow HYG file = CHAMBERS     OUT 25

Pond Node   Data = CHAMBERS
Pond Volume Data = CHAMBERS
Pond Outlet Data = NEW CHMBERS

Infiltration =     1.21 cfs

INITIAL CONDITIONS                     CALCULATION TOLERANCES
----------------------------------     -------------------------------
Starting WS Elev =   264.50 ft         Target Convergence=     .000 cfs +/-
Starting Volume  =        0 cu.ft      Max. Iterations   =       35 loops
Starting Outflow =      .00 cfs        ICPM   Time Step  =    .0500 hrs
Starting Infilt. =     1.21 cfs        Output Time Step  =    .0500 hrs
----------------------------------     ICPM Ending Time  = 180.0000 hrs
                                       -------------------------------


APPROXIMATE DETENTION TIME
---------------------------------------

Qout+Infilt. Centroid   =   16.5945 hrs
Inflow Centroid         =   12.9103 hrs
Centroid to Centroid    =    3.6842 hrs
---------------------------------------
```

ICPM POND ROUTING SUMMARY

```
HYG Dir          = S:\2010\10170\PondPack\2016-10-14_BD\
Inflow  HYG file = CHAMBERS      IN 50
Outflow HYG file = CHAMBERS     OUT 50

Pond Node   Data = CHAMBERS
Pond Volume Data = CHAMBERS
Pond Outlet Data = NEW CHMBERS

Infiltration =     1.21 cfs

INITIAL CONDITIONS                     CALCULATION TOLERANCES
----------------------------------     -------------------------------
Starting WS Elev =   264.50 ft         Target Convergence=     .000 cfs +/-
Starting Volume  =        0 cu.ft      Max. Iterations   =       35 loops
Starting Outflow =      .00 cfs        ICPM   Time Step  =    .0500 hrs
Starting Infilt. =     1.21 cfs        Output Time Step  =    .0500 hrs
----------------------------------     ICPM Ending Time  = 180.0000 hrs
                                       -------------------------------
```

MAXIMUM STORAGE

Tp, hrs	Elev, ft	Vol, cu.ft
12.7000	266.41	59250

	FORWARD FLOW PEAKS		REVERSE FLOW PEAKS	
	Tp, hrs	Qp, cfs	Tp, hrs	Qp, cfs
Pond Inflow.....	12.1000	33.29	.0000	.00
Infiltration....	2.3500	1.21	.0000	.00
Pond Outflow....	12.7000	3.26	.0000	.00

	TOTAL VOLUME IN		TOTAL VOLUME OUT	
	Vol, cu.ft	Direction	Vol, cu.ft	Direction
Pond Inflow.....	131075	Forward	0	Reverse
Infiltration....	0	Reverse	126988	Forward
Pond Outflow....	0	Reverse	24287	Forward

```
MASS BALANCE (cu.ft)
----------------------------
+ Initial Vol.....          0
+ Total Vol IN....     131075
- Total Vol OUT...     151275
- Ending Pond Vol.          0  <-- (At 31.5500 hrs  Elev.= 264.50 ft)
                   ------------
Difference......      -20200 cu.ft  (13.353% of Outflow Volume)

WARNING: Mass balance for routing volumes vary by more than .5%
```

ICPM POND DETENTION TIMES SUMMARY

```
HYG Dir          = S:\2010\10170\PondPack\2016-10-14_BD\
Inflow  HYG file = CHAMBERS      IN 50
Outflow HYG file = CHAMBERS     OUT 50

Pond Node   Data = CHAMBERS
Pond Volume Data = CHAMBERS
Pond Outlet Data = NEW CHMBERS

Infiltration =     1.21 cfs

INITIAL CONDITIONS                     CALCULATION TOLERANCES
----------------------------------     -------------------------------
Starting WS Elev =   264.50 ft         Target Convergence=     .000 cfs +/-
Starting Volume  =        0 cu.ft      Max. Iterations   =       35 loops
Starting Outflow =      .00 cfs        ICPM   Time Step  =    .0500 hrs
Starting Infilt. =     1.21 cfs        Output Time Step  =    .0500 hrs
----------------------------------     ICPM Ending Time  = 180.0000 hrs
                                       -------------------------------


APPROXIMATE DETENTION TIME
---------------------------------------

Qout+Infilt. Centroid   =   16.4041 hrs
Inflow Centroid         =   12.8307 hrs
Centroid to Centroid    =    3.5734 hrs
---------------------------------------
```

ICPM POND ROUTING SUMMARY

```
HYG Dir          = S:\2010\10170\PondPack\2016-10-14_BD\
Inflow  HYG file = CHAMBERS      IN 100
Outflow HYG file = CHAMBERS     OUT 100

Pond Node   Data = CHAMBERS
Pond Volume Data = CHAMBERS
Pond Outlet Data = NEW CHMBERS

Infiltration =     1.21 cfs

INITIAL CONDITIONS                     CALCULATION TOLERANCES
----------------------------------     -------------------------------
Starting WS Elev =   264.50 ft         Target Convergence=     .000 cfs +/-
Starting Volume  =        0 cu.ft      Max. Iterations   =       35 loops
Starting Outflow =      .00 cfs        ICPM   Time Step  =    .0500 hrs
Starting Infilt. =     1.21 cfs        Output Time Step  =    .0500 hrs
----------------------------------     ICPM Ending Time  = 180.0000 hrs
                                       -------------------------------
```

MAXIMUM STORAGE

Tp, hrs	Elev, ft	Vol, cu.ft
12.4500	266.83	68199

	FORWARD FLOW PEAKS		REVERSE FLOW PEAKS	
	Tp, hrs	Qp, cfs	Tp, hrs	Qp, cfs
Pond Inflow.....	12.1000	39.89	.0000	.00
Infiltration....	1.9500	1.21	.0000	.00
Pond Outflow....	12.4500	6.43	.0000	.00

	TOTAL VOLUME IN		TOTAL VOLUME OUT	
	Vol, cu.ft	Direction	Vol, cu.ft	Direction
Pond Inflow.....	158852	Forward	0	Reverse
Infiltration....	0	Reverse	131768	Forward
Pond Outflow....	0	Reverse	44991	Forward

```
MASS BALANCE (cu.ft)
----------------------------
+ Initial Vol.....          0
+ Total Vol IN....     158852
- Total Vol OUT...     176759
- Ending Pond Vol.          0  <-- (At 32.2500 hrs  Elev.= 264.50 ft)
                   ------------
Difference......      -17907 cu.ft  (10.131% of Outflow Volume)

WARNING: Mass balance for routing volumes vary by more than .5%
```

ICPM POND DETENTION TIMES SUMMARY

```
HYG Dir          = S:\2010\10170\PondPack\2016-10-14_BD\
Inflow  HYG file = CHAMBERS      IN 100
Outflow HYG file = CHAMBERS     OUT 100

Pond Node   Data = CHAMBERS
Pond Volume Data = CHAMBERS
Pond Outlet Data = NEW CHMBERS

Infiltration =     1.21 cfs

INITIAL CONDITIONS                     CALCULATION TOLERANCES
----------------------------------     -------------------------------
Starting WS Elev =   264.50 ft         Target Convergence=     .000 cfs +/-
Starting Volume  =        0 cu.ft      Max. Iterations   =       35 loops
Starting Outflow =      .00 cfs        ICPM   Time Step  =    .0500 hrs
Starting Infilt. =     1.21 cfs        Output Time Step  =    .0500 hrs
----------------------------------     ICPM Ending Time  = 180.0000 hrs
                                       -------------------------------


APPROXIMATE DETENTION TIME
---------------------------------------

Qout+Infilt. Centroid   =   16.1893 hrs
Inflow Centroid         =   12.7557 hrs
Centroid to Centroid    =    3.4335 hrs
---------------------------------------
```

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----- W -----
Watershed... 1.01
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APPENDIX C

NYSDEC STORMWATER SIZING CALCULATIONS

RUNOFF REDUCTION VOLUME, WATER QUALITY VOLUME AND STREAM CHANNEL PROTECTION SIZING CALCULATIONS

French-American School New York

400 Ridgeway
White Plains, NY

JMC Project: **10170**

Drawing Reference: **DA-1, DA-2**

Computed by: **BD/SS**
Checked by: **DV**

Date Printed: 10/19/2016

TOTAL WATER QUALITY VOLUME WORKSHEET

JMC Project:	**10170**
Design Point:	**1**

French-American School New York	Drainage Area:	**PDA-1A, 1A-1, 1A-2**

Initial Water Quality Treatment Volume

DESCRIPTION	Design Storm	Area	Impervious Area	Percent Impervious	Runoff Coefficient	Total Required WQ Volume
SYMBOL	P	A	I	%I	R_V	WQ_V
VALUE	1.5	17.19	10.17	59.15	0.582388033	**54,498**
UNITS	In	Ac	Ac	%	CF	CF
VALUE	Enhanced Phosphorus Removal (WQ_V = 1-yr Storm Runoff)					

Runoff Reduction Techniques (Area)

DESCRIPTION	Total Area	Impervious Area
SYMBOL	A	I
Conservation of Natural Areas		
Sheetflow to Riparian Buffers or Filter Strips		
Vegetated Swale		
Tree Planting / Tree Pit		
Disconnection of Rooftop Runoff		
Stream Daylighting		
TOTAL		
UNITS	Ac	Ac

Adjusted Water Quality Treatment Volume

DESCRIPTION	Design Storm	Area	Impervious Area	Percent Impervious	Runoff Coefficient	Total Required WQ Volume
SYMBOL	P	A	I	%I	R_V	WQ_V
VALUE	1.5	17.19	10.17	59.15	0.582388033	**54,498**
UNITS	In	Ac	Ac	%	CF	CF
VALUE	Enhanced Phosphorus Removal (WQ_V = 1-yr Storm Runoff)					

Net Water Quality Treatment Volume = Adjusted WQv - Provided RRv

Initial Water Quality Treatment Volume	54,498	CF
Adjusted Water Quality Treatment Volume	54,498	CF
Provided Runoff Reduction Volume	24,471	CF
Net Water Quality Treatment Volume	30,027	CF

Date Printed: 10/21/2016

TOTAL RUNOFF REDUCTION VOLUME WORKSHEET

JMC Project:	**10170**
Design Point:	**1**

French-American School New York	Drainage Area:	**PDA -1A, 1A-1, 1A-2**

Total Water Quality Treatment Volume

DESCRIPTION	*SYMBOL*	*VALUE*	*UNITS*
Initial Water Quality Volume	WQ_V	**54,498**	CF
Adjusted Water Quality Volume	WQ_V	**54,498**	CF

Minimum Runoff Reduction Volume

DESCRIPTION	*SYMBOL*	*VALUE*	*UNITS*
Design Storm [90% Rainfall Event Number] **or** [1-yr Storm Depth]	P	1.5	In
Total Area of *new* Impervious Cover	Aic	4.73	Ac
Hydrologic Soil Group (HSG) Specific Reduction Factor	S	0.30	
Runoff Coefficient [0.05 + 0.009 x %I]	R_V	0.95	CF
Impervious Cover targeted for Runoff Reduction [S x Aic]	Ai	1.42	Ac
TOTAL VOLUME Required [RR_V = (P x R_V x Ai) / 12]	RR_V	**7,339**	CF

Runoff Reduction Techniques (Volume)

GREEN INFRASTRUCTURE PRACTICE / SMP	*SYMBOL*	*VALUE*	*UNITS*
Vegetated Swale #1A-1	RR_V	93	CF
Vegetated Swale #1A-2	RR_V	121	CF
Vegetated Swale #1A-3	RR_V	113	CF
Vegetated Swale #1A-4	RR_V	380	CF
Green Roof #1C	RR_V	1,841	CF
Infiltration Chambers	RR_V	21,924	CF
TOTAL	RR_V	**24,471**	CF

Runoff Reduction

Is Total RR_V > Adjusted WQ_V?	**NO**
Is Total RR_V > Minimum RR_V?	**YES**

Date Printed: 10/21/2016

VEGETATED SWALE WORKSHEET

JMC Project:	**10170**
Design Point:	**1**

Vegetated Swale #1A-1

Within Drainage Area: **PDA-1A**

Site Data for Drainage Area to be Treated by Practice			
DESCRIPTION	*SYMBOL*	*VALUE*	*UNITS*
Design Storm [90% Rainfall Event Number]	P	1.5	In
Impervious Area	I	0.12	Ac
Area	A	0.19	Ac
Percent Impervious	%I	61.05	%
Runoff Coefficient [0.05 + 0.009 x %I]	R_V	0.60	CF
TOTAL VOLUME Required [WQ_V = (P x R_V x A) / 12]	WQ_V	**620**	CF

Design Parameters			
DESCRIPTION	*SYMBOL*	*VALUE*	*UNITS*
Water Quality Volume	WQ_V	620	CF
Water Quality Flow Rate	Q_{WQ}	0.18	CFS
10 Year Storm Flow Rate	Q_{10}	0.69	CFS

Channel Design			
DESCRIPTION	*SYMBOL*	*VALUE*	*UNITS*
Given/Assumed Information			
Channel Longitudinal Slope	S	2.00	%
Channel Bottom Width	W	2.00	Ft
Channel Depth	D	1.00	Ft
Channel Side Slope (Hori./Verti.)	z	3	
Determine WQv Flow Depth & Velocity			
WQv Flow Depth	$Q_{WQ}h$	0.18	Ft
Manning's Coefficeint (varying with flow depth see fig L.1)	n	0.15	
Water Quality Flow Rate in Channel	Q	0.16	CFS
Velocity of Q V=Q/(D*(z*D+W)	V	0.03	FPS
Determine Channel Length			
WQv Minimum Detention Time	t	10	min.
Length of Swale Required L=v*t*60	l	19	Ft
Length of Swale Provided	L	105	Ft
Determine Q_{10} Flow Depth & Velocity			
Peak Discharge Q_{10} (TR-55 10 year storm)	Q_{10}	0.69	CFS
Peak Discharge Q_{10} Depth	$Q_{10}h$	0.38	Ft
Q_{10} Free Board Provided	f	0.62	Ft
Minimum Depth of Swale Required	h	0.88	Ft
Total Depth of Swale Provided	H	1.00	Ft
Velocity of Q_{10} $V_{10}=Q_{10}/(Q_{10}h*(z*Q_{10}h+W)$	V_{10}	0.58	FPS

Runoff Reduction			
DESCRIPTION	*SYMBOL*	*VALUE*	*UNITS*
15% Runoff Reduction of Required WQv in HSG C Modified*	RR_V	**93**	CF
*Modifications must be in accordance with Soil Restoration Standards			

Date Printed: 10/19/2016

PROPRIETARY PRACTICE WORKSHEET

JMC Project:	**10170**
Design Point:	**DP-1**
Within Drainage Area:	**PDA-1A**

Vegetated Swale 1A-1 Water Quality Flow

Rainfall Distribution Type: **III**

		A	B	C
Coefficients for the equation unit peak [$R = I_a / P$] [$C_i = A \times R^2 + B \times R + C$]	C_0	-1.774	0.3301	2.4577
	C_1	1.8622	-0.7397	-0.4627
	C_2	-0.0648	0.2276	-0.1932

Site Data for Drainage Area to be Treated by Practice

DESCRIPTION	*SYMBOL*	*VALUE*	*UNITS*
Design Storm [90% Rainfall Event Number]	P	1.5	In
Impervious Area	I	0.12	Ac
Area	A	0.19	Ac
Percent Impervious	%I	61.05	%
Runoff Coefficient [$0.05 + 0.009 \times \%I$]	R_V	0.60	CF
TOTAL VOLUME Required [$WQ_V = (P \times R_V \times A) / 12$]	WQ_V	**620**	CF

Water Quality Peak Flow Calculation

DESCRIPTION	*SYMBOL*	*VALUE*	*UNITS*
Water Quality Volume	WQ_V	620	CF
Design Storm [90% Rainfall Event Number] **or** [1-yr Storm Depth]	P	1.5	In
Time of Concentration	t_c	0.0833	Hr
Runoff Volume [$Q = WQ_V / (A \times 3630)$]	Q	0.90	In
Curve Number [$CN = 1000 / (10 + 5P + 10Q - 10 \times (Q^2 + 1.25\ QP)^{½}$]	CN	93.48	
Curve Number	CN	93	
Initial Abstraction [$I_a = 200 / CN - 2$]	I_a	0.14	In
Ratio [$R = I_a / P$]	R	0.09	
$C_0 = A \times R^2 + B \times R + C$	C_0	2.47	
$C_1 = A \times R2 + B \times R + C$	C_1	-0.52	
$C_2 = A \times R2 + B \times R + C$	C_2	-0.17	
Unit Peak Discharge	q_u	673.40	$cfs/mi^2/in$
Peak Discharge [$Q_p = q_u \times A \times Q / 640$]	Q_p	**0.18**	cfs

Date Printed: 10/19/2016

VEGETATED SWALE WORKSHEET

JMC Project:	**10170**
Design Point:	**1**
Within Drainage Area:	**PDA-1A**

Vegetated Swale #1A-2

Site Data for Drainage Area to be Treated by Practice			
DESCRIPTION	*SYMBOL*	*VALUE*	*UNITS*
Design Storm [90% Rainfall Event Number]	P	1.5	In
Impervious Area	I	0.15	Ac
Area	A	0.20	Ac
Percent Impervious	%I	76.12	%
Runoff Coefficient [0.05 + 0.009 x %I]	R_V	0.74	CF
TOTAL VOLUME Required [WQ_V = (P x R_V x A) / 12]	WQ_V	**804**	CF

Design Parameters			
DESCRIPTION	*SYMBOL*	*VALUE*	*UNITS*
Water Quality Volume	WQ_V	804	CF
Water Quality Flow Rate	Q_{WQ}	0.22	CFS
10 Year Storm Flow Rate	Q_{10}	0.77	CFS

Channel Design			
DESCRIPTION	*SYMBOL*	*VALUE*	*UNITS*
Given/Assumed Information			
Channel Longitudinal Slope	S	2.00	%
Channel Bottom Width	W	2.00	Ft
Channel Depth	D	1.00	Ft
Channel Side Slope (Hori./Verti.)	z	3	
Determine WQv Flow Depth & Velocity			
WQv Flow Depth	$Q_{WQ}h$	0.19	Ft
Manning's Coefficeint (varying with flow depth see fig L.1)	n	0.15	
Water Quality Flow Rate in Channel	Q	0.19	CFS
Velocity of Q V=Q/(D*(z*D+W)	V	0.04	FPS
Determine Channel Length			
WQv Minimum Detention Time	t	10	min.
Length of Swale Required L=v*t*60	l	23	Ft
Length of Swale Provided	L	124	Ft
Determine Q_{10} Flow Depth & Velocity			
Peak Discharge Q_{10} (TR-55 10 year storm)	Q_{10}	0.77	CFS
Peak Discharge Q_{10} Depth	$Q_{10}h$	0.40	Ft
Q_{10} Free Board Provided	f	0.60	Ft
Minimum Depth of Swale Required	h	0.90	Ft
Total Depth of Swale Provided	H	1.00	Ft
Velocity of Q_{10} $V_{10}=Q_{10}/(Q_{10}h*(z*Q_{10}h+W)$	V_{10}	0.60	FPS

Runoff Reduction			
DESCRIPTION	*SYMBOL*	*VALUE*	*UNITS*
15% Runoff Reduction of Required WQv in HSG C Modified*	RR_V	**121**	CF
*Modifications must be in accordance with Soil Restoration Standards			

Date Printed: 10/19/2016

PROPRIETARY PRACTICE WORKSHEET

JMC Project:	**10170**
Design Point:	**1**
Within Drainage Area:	**PDA -1A**

Vegetated Swale 1A-2 Water Quality Flow

Rainfall Distribution Type: **III**

		A	B	C
Coefficients for the equation unit peak [$R = I_a / P$] [$C_i = A \times R^2 + B \times R + C$]	C_0	-1.774	0.3301	2.4577
	C_1	1.8622	-0.7397	-0.4627
	C_2	-0.0648	0.2276	-0.1932

Site Data for Drainage Area to be Treated by Practice

DESCRIPTION	*SYMBOL*	*VALUE*	*UNITS*
Design Storm [90% Rainfall Event Number]	P	1.5	In
Impervious Area	I	0.15	Ac
Area	A	0.20	Ac
Percent Impervious	%I	76.12	%
Runoff Coefficient [$0.05 + 0.009 \times \%I$]	R_V	0.74	CF
TOTAL VOLUME Required [$WQ_V = (P \times R_V \times A) / 12$]	WQ_V	**804**	CF

Water Quality Peak Flow Calculation

DESCRIPTION	*SYMBOL*	*VALUE*	*UNITS*
Water Quality Volume	WQ_V	804	CF
Design Storm [90% Rainfall Event Number] **or** [1-yr Storm Depth]	P	1.5	In
Time of Concentration	t_c	0.0833	Hr
Runoff Volume [$Q = WQ_V / (A \times 3630)$]	Q	1.10	In
Curve Number [$CN = 1000 / (10 + 5P + 10Q - 10 \times (Q^2 + 1.25\ QP)^{½}$]	CN	96.09	
Curve Number	CN	96	
Initial Abstraction [$I_a = 200 / CN - 2$]	I_a	0.08	In
Ratio [$R = I_a / P$]	R	0.05	
$C_0 = A \times R^2 + B \times R + C$	C_0	2.47	
$C_1 = A \times R2 + B \times R + C$	C_1	-0.50	
$C_2 = A \times R2 + B \times R + C$	C_2	-0.18	
Unit Peak Discharge	q_u	625.52	$cfs/mi^2/in$
Peak Discharge [$Q_p = q_u \times A \times Q / 640$]	Q_p	**0.22**	cfs

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VEGETATED SWALE WORKSHEET

JMC Project:	**10170**
Design Point:	**DP-1**
Within Drainage Area:	**PDA-1A**

Vegetated Swale #1A-3

Site Data for Drainage Area to be Treated by Practice			
DESCRIPTION	*SYMBOL*	*VALUE*	*UNITS*
Design Storm [90% Rainfall Event Number]	P	1.5	In
Impervious Area	I	0.14	Ac
Area	A	0.19	Ac
Percent Impervious	%I	74.91	%
Runoff Coefficient [0.05 + 0.009 x %I]	R_V	0.72	CF
TOTAL VOLUME Required [WQ_V = (P x R_V x A) / 12]	WQ_V	**754**	CF

Design Parameters			
DESCRIPTION	*SYMBOL*	*VALUE*	*UNITS*
Water Quality Volume	WQ_V	754	CF
Water Quality Flow Rate	Q_{WQ}	0.20	CFS
10 Year Storm Flow Rate	Q_{10}	0.73	CFS

Channel Design			
DESCRIPTION	*SYMBOL*	*VALUE*	*UNITS*
Given/Assumed Information			
Channel Longitudinal Slope	S	2.00	%
Channel Bottom Width	W	2.00	Ft
Channel Depth	D	1.00	Ft
Channel Side Slope (Hori./Verti.)	z	3	
Determine WQv Flow Depth & Velocity			
WQv Flow Depth	$Q_{WQ}h$	0.18	Ft
Manning's Coefficeint (varying with flow depth see fig L.1)	n	0.15	
Water Quality Flow Rate in Channel	Q	0.18	CFS
Velocity of Q V=Q/(D*(z*D+W)	V	0.04	FPS
Determine Channel Length			
WQv Minimum Detention Time	t	10	min.
Length of Swale Required L=v*t*60	l	22	Ft
Length of Swale Provided	L	125	Ft
Determine Q_{10} Flow Depth & Velocity			
Peak Discharge Q_{10} (TR-55 10 year storm)	Q_{10}	0.73	CFS
Peak Discharge Q_{10} Depth	$Q_{10}h$	0.16	Ft
Q_{10} Free Board Provided	f	0.84	Ft
Minimum Depth of Swale Required	h		Ft
Total Depth of Swale Provided	H	1.00	Ft
Velocity of Q_{10} $V_{10}=Q_{10}/(Q_{10}h*(z*Q_{10}h+W)$	V_{10}	1.82	FPS

Runoff Reduction			
DESCRIPTION	*SYMBOL*	*VALUE*	*UNITS*
15% Runoff Reduction of Required WQv in HSG C Modified*	RR_V	**113**	CF
*Modifications must be in accordance with Soil Restoration Standards			

Date Printed: 10/19/2016

PROPRIETARY PRACTICE WORKSHEET

JMC Project:	**10170**
Design Point:	**1**
Within Drainage Area:	**PDA-1A**

Vegetated Swale 1A-3 Water Quality Flow

Rainfall Distribution Type: **III**

		A	B	C
Coefficients for the equation unit peak [$R = I_a / P$] [$C_i = A \times R^2 + B \times R + C$]	C_0	-1.774	0.3301	2.4577
	C_1	1.8622	-0.7397	-0.4627
	C_2	-0.0648	0.2276	-0.1932

Site Data for Drainage Area to be Treated by Practice

DESCRIPTION	*SYMBOL*	*VALUE*	*UNITS*
Design Storm [90% Rainfall Event Number]	P	1.5	In
Impervious Area	I	0.14	Ac
Area	A	0.19	Ac
Percent Impervious	%I	74.91	%
Runoff Coefficient [$0.05 + 0.009 \times \%I$]	R_V	0.72	CF
TOTAL VOLUME Required [$WQ_V = (P \times R_V \times A) / 12$]	WQ_V	**754**	CF

Water Quality Peak Flow Calculation

DESCRIPTION	*SYMBOL*	*VALUE*	*UNITS*
Water Quality Volume	WQ_V	754	CF
Design Storm [90% Rainfall Event Number] **or** [1-yr Storm Depth]	P	1.5	In
Time of Concentration	t_c	0.0833	Hr
Runoff Volume [$Q = WQ_V / (A \times 3630)$]	Q	1.09	In
Curve Number [$CN = 1000 / (10 + 5P + 10Q - 10 \times (Q^2 + 1.25\ QP)^{½}$]	CN	95.90	
Curve Number	CN	96	
Initial Abstraction [$I_a = 200 / CN - 2$]	I_a	0.09	In
Ratio [$R = I_a / P$]	R	0.06	
$C_0 = A \times R^2 + B \times R + C$	C_0	2.47	
$C_1 = A \times R2 + B \times R + C$	C_1	-0.50	
$C_2 = A \times R2 + B \times R + C$	C_2	-0.18	
Unit Peak Discharge	q_u	629.37	$cfs/mi^2/in$
Peak Discharge [$Q_p = q_u \times A \times Q / 640$]	Q_p	**0.20**	cfs

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VEGETATED SWALE WORKSHEET

JMC Project:	**10170**
Design Point:	**DP-1**

Vegetated Swale #1A-4

Within Drainage Area: **PDA-1A**

Site Data for Drainage Area to be Treated by Practice			
DESCRIPTION	*SYMBOL*	*VALUE*	*UNITS*
Design Storm [90% Rainfall Event Number]	P	1.5	In
Impervious Area	I	0.48	Ac
Area	A	0.60	Ac
Percent Impervious	%I	80.50	%
Runoff Coefficient [0.05 + 0.009 x %I]	R_V	0.77	CF
TOTAL VOLUME Required [WQ_V = (P x R_V x A) / 12]	WQ_V	**2,530**	CF

Design Parameters			
DESCRIPTION	*SYMBOL*	*VALUE*	*UNITS*
Water Quality Volume	WQ_V	2,530	CF
Water Quality Flow Rate	Q_{WQ}	0.67	CFS
10 Year Storm Flow Rate	Q_{10}	2.32	CFS

Channel Design			
DESCRIPTION	*SYMBOL*	*VALUE*	*UNITS*
Given/Assumed Information			
Channel Longitudinal Slope	S	2.00	%
Channel Bottom Width	W	2.00	Ft
Channel Depth	D	1.00	Ft
Channel Side Slope (Hori./Verti.)	z	3	
Determine WQv Flow Depth & Velocity			
WQv Flow Depth	$Q_{WQ}h$	0.36	Ft
Manning's Coefficeint (varying with flow depth see fig L.1)	n	0.15	
Water Quality Flow Rate in Channel	Q	0.37	CFS
Velocity of Q V=Q/(D*(z*D+W)	V	0.07	FPS
Determine Channel Length			
WQv Minimum Detention Time	t	10	min.
Length of Swale Required L=v*t*60	l	44	Ft
Length of Swale Provided	L	170	Ft
Determine Q_{10} Flow Depth & Velocity			
Peak Discharge Q_{10} (TR-55 10 year storm)	Q_{10}	2.32	CFS
Peak Discharge Q_{10} Depth	$Q_{10}h$	0.39	Ft
Q_{10} Free Board Provided	f	0.61	Ft
Minimum Depth of Swale Required	h	0.89	Ft
Total Depth of Swale Provided	H	1.00	Ft
Velocity of Q_{10} $V_{10}=Q_{10}/(Q_{10}h*(z*Q_{10}h+W)$	V_{10}	1.89	FPS

Runoff Reduction			
DESCRIPTION	*SYMBOL*	*VALUE*	*UNITS*
15% Runoff Reduction of Required WQv in HSG C Modified*	RR_V	**380**	CF
*Modifications must be in accordance with Soil Restoration Standards			

Date Printed: 10/19/2016

PROPRIETARY PRACTICE WORKSHEET

JMC Project:	**10170**
Design Point:	**DP-1**
Within Drainage Area:	**PDA-1A**

Vegetated Swale 1A-4 Water Quality Flow

Rainfall Distribution Type: **III**

		A	B	C
Coefficients for the equation unit peak [$R = I_a / P$] [$C_i = A \times R^2 + B \times R + C$]	C_0	-1.774	0.3301	2.4577
	C_1	1.8622	-0.7397	-0.4627
	C_2	-0.0648	0.2276	-0.1932

Site Data for Drainage Area to be Treated by Practice

DESCRIPTION	*SYMBOL*	*VALUE*	*UNITS*
Design Storm [90% Rainfall Event Number]	P	1.5	In
Impervious Area	I	0.48	Ac
Area	A	0.60	Ac
Percent Impervious	%I	80.50	%
Runoff Coefficient [$0.05 + 0.009 \times \%I$]	R_V	0.77	CF
TOTAL VOLUME Required [$WQ_V = (P \times R_V \times A) / 12$]	WQ_V	**2,530**	CF

Water Quality Peak Flow Calculation

DESCRIPTION	*SYMBOL*	*VALUE*	*UNITS*
Water Quality Volume	WQ_V	2,530	CF
Design Storm [90% Rainfall Event Number] **or** [1-yr Storm Depth]	P	1.5	In
Time of Concentration	t_c	0.0833	Hr
Runoff Volume [$Q = WQ_V / (A \times 3630)$]	Q	1.16	In
Curve Number [$CN = 1000 / (10 + 5P + 10Q - 10 \times (Q^2 + 1.25\ QP)^{½}$]	CN	96.76	
Curve Number	CN	97	
Initial Abstraction [$I_a = 200 / CN - 2$]	I_a	0.07	In
Ratio [$R = I_a / P$]	R	0.04	
$C_0 = A \times R^2 + B \times R + C$	C_0	2.47	
$C_1 = A \times R2 + B \times R + C$	C_1	-0.49	
$C_2 = A \times R2 + B \times R + C$	C_2	-0.18	
Unit Peak Discharge	q_u	611.68	$cfs/mi^2/in$
Peak Discharge [$Q_p = q_u \times A \times Q / 640$]	Q_p	**0.67**	cfs

Date Printed: 10/19/2016

GREEN ROOF WORKSHEET

JMC Project:	**10170**
Design Point:	**1**
Green Roof #1C Within Drainage Area:	**ROOFTOP**

Site Data for Drainage Area to be Treated by Practice			
DESCRIPTION	*SYMBOL*	*VALUE*	*UNITS*
Design Storm [90% Rainfall Event Number]	P	1.5	In
Impervious Area	I	0.36	Ac
Area	A	0.36	Ac
Percent Impervious	%I	100.00	%
Runoff Volume [0.05 + 0.009 x %I]	R_V	0.95	CF
TOTAL VOLUME Required [$WQ_V = (P \times R_V \times A) / 12$]	WQ_V	**1,841**	CF

Proposed Green Roof			
DESCRIPTION	*SYMBOL*	*VALUE*	*UNITS*
Green Roof surface AREA	A_{RG}	15,503.00	SF
DEPTH of the Soil Media	D_{SM}	0.25	Ft
DEPTH of the Drainage Layer	D_{DL}	0.17	Ft
DEPTH of Ponding above surface	D_P	0.04	Ft
Porosity of the Soil Media	n_{SM}	20%	%
Porosity of the Drainage Layer	n_{DL}	25%	%
VOLUME provided in Soil Media [$V_{SM} = A_{RG} \times D_{SM} \times n_{SM}$]	V_{SM}	775.15	CF
VOLUME provided in Drainage Layer [$V_{DL} = A_{RG} \times D_{SM} \times n_{SM}$]	V_{DL}	645.96	CF
VOLUME provided in Ponding Area [$D_P \times A_{RG}$]		645.96	CF
TOTAL VOLUME Provided [$WQv \leq V_{SM} + V_{DL} + (D_P \times A_{RG})$]	WQ_V	**2,067**	CF

Runoff Reduction			
DESCRIPTION	*SYMBOL*	*VALUE*	*UNITS*
Runoff Reduction volume provided	RR_V	**1,841**	CF

STREAM CHANNEL PROTECTION VOLUME Cp_v

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Unified Stormwater Sizing Criteria (See Section 4.4 & Appendix B.2)

RAINFALL DISTRIBUTION TYPE		III		
$(R=I_a/P)$ $C_i=A*R^2+B*R+C$		A	B	C
Coefficients for the equation unit peak	C_0	-1.774	0.3301	2.4577
Coefficients for the equation unit peak	C_1	1.8622	-0.7397	-0.4627
Coefficients for the equation unit peak	C_2	-0.0648	0.2276	-0.1932

D E S I G N P A R A M E T E R S	SYMBOL	UNITS	PDA-1A-2	PDA 1A	PDA-1A-1
TOTAL DEVELOPED AREA	A	acres	5.44	12.31	17.28
RAINFALL EVENT (1-year recurrence, 24-hr. duration)	P_1	inches	2.84	2.84	2.84
RUNOFF CURVE NUMBER (proposed)	CN		92.00	83.00	76.00
TIME OF CONCENTRATION (Use TR-55 equations)	T_c	hours	0.10	0.10	0.36

D E S I G N C A L C U L A T I O N S					
CHANNEL PROTECTION VOLUME, (Cp_v) ((see Section 4.4 and Appendix B)					
INITIAL ABSTRACTION I_a=(200/CN)-2	I_a	inches	0.174	0.410	0.632
RATIO $R=I_a/P_1$	R		0.06	0.14	0.22
$C_0 = A*R^2 +B*R +C$	C_0		2.47	2.47	2.44
$C_1 = A*R^2 +B*R +C$	C_1		-0.50	-0.53	-0.54
$C_2 = A*R^2 +B*R +C$	C_2		-0.18	-0.16	-0.15
UNIT PEAK DIS. $q_u=10^{(C_0+C_1*Log(T_c)+C_2*(log(T_c))^2)}$	q_u	$cfs/mi^2/in$	617.72	687.60	450.27
RUNOFF (TR-55) $Q=((P_1-I_a)^2)/(P_1+4*I_a)$	Q	inches	2.01	1.32	0.91
PEAK DISCHARGE $Q_{p1}=q_u*A*Q$ (TR-5 1 year storm)	Q_{p1}	cfs	*10.56*	*17.44*	*11.05*
RATIO of out/in flow $(q_o/q_i)=14.121*q_u^{(-0.9703)}$	(q_o/q_i)		0.03	0.02	0.04
$(V_s/V_r)=0.682-1.43*(q_o/q_i)+1.64*(qo/qi)^2-0.804*(qo/qi)^3$	(V_s/V_r)		0.64	0.65	0.63
HYG RUNOFF VOLUME $V_r=Q*A*3630$ (TR-55 1year)	V_r	cu. ft.	*39,699*	*58,934*	*57,008*
		acres-ft	0.91	1.35	1.31
REQUIRED STORAGE VOLUME Vs=(Vs/Vr)*V_r (Cpv)	**Vs**	**cu. ft.**	**25,554**	**38,151**	**35,944**
		acres-ft	0.59	0.88	0.83
Provided Runoff Reduction Volume	**RRv**	**CF**	24,471		
Net Channel Protection Volume Required			75,178		(Total for DP-1)
Net Channel Protection Volume Provided	EXDT.tab	**(Cp_v)**	**cu. ft.**	**75,250**	
AVERAGE RELEASE $Q_{avg}=V_s/(24hr*3600sec)$	Q_{avg}	cfs	0.30		
MAXIMUM RELEASE $Q_{max}=2*Q_{avg}$	Q_{max}	cfs	0.59		
Channel Protection Volume Required for Entire Site		**cu. ft.**	**75,177.83**		
Channel Protection Volume Provided for Entire Site		**cu. ft.**	**75,250.00**	Cpv Requirement Met	

DESIGN OF OUTLET CONTROL STRUCTURE ORIFII FOR EXTENDED DETENTION OF WATER QUALITY & STREAM CHANNEL PROTECTION VOLUMES

JMC Project No: **10170**
Computed By: ND
Checked BY: DV
Dwg, Ref: DA-1, DA-2

Project: French-American School New York
Location: White Plains, NY

DESIGN PARAMETERS			SYMBOL	UNITS	
SUB AREA NAME					PDA-1A
DRAINAGE AREA			A	acres	
PRACTICE DESIGNATION					P-3
PRACTICE NAME					Wet Ext. Det.
PERCENTAGE PERMANENT POOL REQUIRED			PPR	%	50%
PERCENTAGE PERMANENT POOL PROVIDED			PPP		50%
PERCENTAGE FOREBAY PRETREATMENT POOL			PFR	%	10%
PERCENTAGE FOREBAY PRETREATMENT POOL PROVIDED			PFP		10%
TOTAL WATER QUALITY VOLUME REQUIRED			**WQvr**	cu. ft.	30,027
PERMANENT POOL REQUIRED Vpool=WQv*PPP			VR_{pool}	cu. ft.	15,014
PERMANENT POOL VOLUME PROVIDED			*VP_{pool}*	*cu. ft.*	*33,559*
FOREBAY PRETREATMENT REQUIRED Vpret=WQv*PFP			VR_{pret}	cu. ft.	3,003
FOREBAY PRETREATMENT PROVIDED			*VP_{pret}*	*cu. ft.*	*3,869*
ELEVATION PERMANENT POOL (orifice inv. above permanent pool)			E_1	(ft.)	262.20
Elev. Ext. Det. for rest of WQv (Use E-Q-V from PondPack at Volume WQVR)			E_2	(ft.)	262.16
EXTENDED DETENTION ELEV. PROVIDED (rounded UP)			E_{2P}	(ft.)	262.20

DESIGN WATER QUALITY ORIFICE		*(See Section 8.2 Step 6.)*			
VERIFY IF IS ENOUGH PERMANENT POOL PROVIDED					OKAY
VERIFY IF IS ENOUGH FOREBAY POOL PROVIDED					OKAY
EXTENDED DETENTION VOLUME REQUIRED		EDvr=WQvr-VRpool-VRpret	ED_{VR}	(cfs)	
EXTENDED DETENTION VOLUME PROVIDED (to be)		EDvp=WQvp-VPpool	EDvp	cu. ft.	
AVERAGE DISCHARGE (to be release in 24 hr)		$Q_0=ED_{VR}/(24hr*3600sec)$	Q_0	(cfs)	
AVERAGE HEAD WATER QUALITY		$H_0=(E_2-E_1)/2$	H_0	(ft.)	
ORIFICE DIAMETER CALCULATION		$D_0=6.166*Q_0^{0.5}/H_0^{0.25}$	D_0	(in.)	
ORIFICE DIAMETER ROUNDDOWN @ 1/8)			D_W	(in.)	
ORIFICE DIAMETER PROVIDED		(suggested less than calculated)	D_W	(in.)	
AVERAGE HEAD PROVIDED	$H_W=(Q_0/(C*\pi*D_W^2/4))^2=(Q_0/(0.02626*D_W^2))^2$		H_W	(ft.)	
EXTENDED DETENTION ELEV. PROVIDED		$E_{2P}=E_1+Dw/(2*12)+2*Hw$	**E_{2P}**	(ft.)	262.20
EXTENDED DETENTION VOLUME PROVIDED		Use E-Q-V from PondPack at **E_{2P}**	**E_2vp**	(cf)	**62,620**
WATER QUALITY VOLUME PROVIDED WQ_{VP}		**E_2vp** - WQvr	WQvp	(cf)	**29,061**
VERIFY IF ENOUGH WATER QUALITY IS PROVIDED					OKAY

DESIGN CHANNEL PROTECTION ORIFICE		*(See Section 8.2 Step 7.)*			
CHANNEL PROTECTION VOLUME REQUIRED			CP_{VR}	(cu. ft.)	**75,178**
PERMANENT POOL VOLUME PROVIDED			VP_{pool}	(cu. ft.)	62,620
TOTAL CHANNEL PROTECTION VOLUME REQUIRED		$TCP_{VR}=CP_{VR}+VP_{pool}$	**TCP_{VR}**	(cu. ft.)	137,798
ELEVATION PERMANENT POOL (orifice invert above permanent pool		see above	E_1	(ft.)	262.20
EXTENDED DETENTION ELEV. PROVIDED (rounded,1)		see above	E_{2P}	(ft.)	262.20
REQUIRED C_{PV} ELEVATION		Use E-Q-V from PondPack at Volume CPv	E_3	(ft.)	264.27
AVERAGE HEAD WATER QUALITY		$H_0=(E_3-E_1)/2$	H_0	(ft.)	1.04
AVERAGE HEAD CHANNEL PROTECTION		$H_1=(E_3-E_{2P})/2$	H_1	(ft.)	1.04
AVERAGE DISCHARGE (release rate in 24 hr)		$Q_{0C}=CP_{VR}/(24hr*3600sec)$	Q_{0C}	(cfs)	0.8701
AVERAGE DISCHARGE (calculated at WQ orifice)		$Q_W=0.02626*D_W^2*Hw^{0.5}$	Q_W	(cfs)	0.00
DISCHARGE CHANNEL PROTECTION		$Q_{1C}=Q_{0C}-Q_W$	Q_{1C}	(cfs)	0.8701
ORIFICE DIAMETER CALCULATION		$D_{1C}=6.166*Q_{1C}^{0.5}/H_1^{0.25}$	D_{1C}	(in.)	5.557
ORIFICE DIAMETER ROUNDDOWN @ 1/8)			D_{1C}	(in.)	5.50
ORIFICE DIAMETER PROVIDED			D_{CP}	(in.)	5.50
MINIMUM HEAD REQUIRED	$E_3-(E_{2P}+((D_{CP}/2))$	E_3-E_{2P}	H_{CP}	(ft)	2.07
CHANNEL PROTECTION ELEV. PROVIDED		$E_{2CP}=E_{2P}+Hcp$	**E_{2CP}**	(ft.)	264.30
TOTAL CHANNEL PROTECTION VOLUME PROVIDED		Use E-Q-V from PondPack at **E_{2CP}**	CPvp	(cu. ft.)	137,870
NET CHANNEL PROTECTION VOLUME PROVIDED		$CP_V=CP_{VP}$-VPpool		(cu. ft.)	**75,250**
VERIFY IF ENOUGH CHANNEL PROTECTION VOLUME IS PROVIDED					OKAY

STORM_TECH RECHARGER SC 310

THE VOLUMES ACCOUNT VOID IN THE 6" STONE BASE AND STONE SURROUNDING

ADDITIONAL STONE IS CALCULATED AT 40% VOID SPACE

	HEIGHT f.t.	STAGE f.t.	STORAGE PLAIN cf/ft	STORAGE W/STONE cf/unit
STONE COVER	1.83	2.33		31.00
STONE COVER	1.58	2.08		29.00
CROWN STORMTECH	1.33	1.83		26.00
StormTech	1.00	1.50		22.00
StormTech	0.75	1.25		19.00
StormTech	0.50	1.00		14.00
StormTech	0.25	0.75		10.00
BOTTOM STORMTECH	0.00	0.50		5.00
BOTTOM BROKEN STONE	GRAVAL	0		0.00

		DIM. f.t.	LAY-UP f.t.
AREA/UNIT	s.f.		23.71
HEIGHT		1.33	2.33

INFILTRATION		1.00	in/hr	0.0005488	cfs/unit			LENGTH		7.56	7.12
ELEVATION BOTTOM STONE		264.50			ACUMULATIVE			WIDE		2.83	3.33

VOLUMEN OF ESTORAGE IN EACH STAGE cf.

50	GRAVEL		STORM-TECH RECHARGER SC310			GUIDANCE WQ volume		GRAVEL					GUIDANCE W-quantity Volume
5	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	CONSTANT		infiltrate	Storage +
No UNIT	0.00	0.50	0.75	1.00	1.25	1.50	1.83	2.08	2.33	FLOW RATE	AREA*UNIT	in 12 hrs	Infiltration
ELEV.	264.50	265.00	265.25	265.50	265.75	266.00	266.33	266.58	266.83	cfs		cfs	cfs
1	0.00	5.00	10.00	14.00	19.00	22.00	26.00	29.00	31.00	*0.001*	23.71		
2000	0.00	10,000	20,000	28,000	38,000	44,000	52,000	58,000	62,000	*1.098*	47,419.20	47,419	109,419
2050	0.00	10,250	20,500	28,700	38,950	45,100	53,300	59,450	63,550	*1.125*	48,604.68	48,605	112,155
2100	0.00	10,500	21,000	29,400	39,900	46,200	54,600	60,900	65,100	*1.153*	49,790.16	49,790	114,890
2150	0.00	10,750	21,500	30,100	40,850	47,300	55,900	62,350	66,650	*1.180*	50,975.64	50,976	117,626
2200	0.00	11,000	22,000	30,800	41,800	48,400	57,200	63,800	68,200	*1.207*	52,161.12	52,161	120,361
2250	0.00	11,250	22,500	31,500	42,750	49,500	58,500	65,250	69,750	*1.235*	53,346.60	53,347	123,097
2300	0.00	11,500	23,000	32,200	43,700	50,600	59,800	66,700	71,300	*1.262*	54,532.08	54,532	125,832
2350	0.00	11,750	23,500	32,900	44,650	51,700	61,100	68,150	72,850	*1.290*	55,717.56	55,718	128,568
2400	0.00	12,000	24,000	33,600	45,600	52,800	62,400	69,600	74,400	*1.317*	56,903.04	56,903	131,303
2450	0.00	12,250	24,500	34,300	46,550	53,900	63,700	71,050	75,950	*1.345*	58,088.52	58,089	134,039
2500	0.00	12,500	25,000	35,000	47,500	55,000	65,000	72,500	77,500	*1.372*	59,274.00	59,274	136,774
2550	0.00	12,750	25,500	35,700	48,450	56,100	66,300	73,950	79,050	*1.400*	60,459.48	60,459	139,509
2600	0.00	13,000	26,000	36,400	49,400	57,200	67,600	75,400	80,600	*1.427*	61,644.96	61,645	142,245
2650	0.00	13,250	26,500	37,100	50,350	58,300	68,900	76,850	82,150	*1.454*	62,830.44	62,830	144,980
2700	0.00	13,500	27,000	37,800	51,300	59,400	70,200	78,300	83,700	*1.482*	64,015.92	64,016	147,716
2750	0.00	13,750	27,500	38,500	52,250	60,500	71,500	79,750	85,250	*1.509*	65,201.40	65,201	150,451

INFILTRATION WORKSHEET

JMC Project:	**10170**
Design Point:	**1**
Drainage Area:	**PDA-1A-1**

Infiltration System #1A-1

Net Water Quality Treatment Volume			
	SYMBOL	*VALUE*	*UNITS*
Design Storm [90% Rainfall Event Number]	WQ_V	21,924	CF

Water Quality Volume Provided			
DESCRIPTION	*SYMBOL*	*VALUE*	*UNITS*
TOTAL VOLUME Provided (WQ_V Storage Below WQ_V Outflow)	WQ_V	48,000	CF

Runoff Reduction			
DESCRIPTION	*SYMBOL*	*VALUE*	*UNITS*
100% Runoff Reduction capacity	RR_V	**21,924**	CF

APPENDIX D

CONTRACTOR'S CERTIFICATION

JMC Project 10170
FASNY
336 RIDGEWAY
WHITE PLAINS, NY

CONTRACTOR'S CERTIFICATION

"I hereby certify that I understand and agree to comply with the terms and conditions of the SWPPP and agree to implement any corrective actions identified by the qualified inspector during a site inspection. I also understand that the owner or operator must comply with the terms and conditions of the most current version of the New York State Pollutant Discharge Elimination System ("SPDES") general permit for stormwater discharges from construction activities and that it is unlawful for any person to cause or contribute to a violation of water quality standards. Furthermore, I am aware there are significant penalties for submitting false information that I do not believe to be true, including the possibility of time and imprisonment for knowing violations."

Company Name: _____

Address: _____

Telephone Number: _____

Name and Title: _____

Signature: _____Date: _____

Permit Identification No.:_____

Name and Title of Trained Contractor:_____

Elements of the SWPPP Contractor is responsible for:_____

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APPENDIX E

OWNER'S CERTIFICATION

JMC Project 10170
FASNY
336 RIDGEWAY
WHITE PLAINS, NY

OWNER'S CERTIFICATION

"I have read or been advised of the permit conditions and believe that I understand them. I also understand that, under the terms of the permit, there may be reporting requirements. I hereby certify that the Notice of Intent (NOI) and corresponding documents were prepared under my direction or supervision. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. I further understand that coverage under the general permit will be identified in the acknowledgment that I will receive as a result of submitting the NOI and can be as long as sixty (60) business days as provided for in the general permit. I also understand that, by submitting the NOI, I am acknowledging that the SWPPP has been developed and will be implemented as the first element of construction, and agreeing to comply with all the terms and conditions of the general permit for which the NOI is being submitted."

Company Name: _____

Address: _____

Telephone Number: _____

Name and Title: _____

Signature: _____Date: _____

Permit Identification No.:_____

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APPENDIX F

STORMWATER PRACTICE CONSTRUCTION INSPECTION CHECKLISTS

Stormwater/Wetland Pond Construction Inspection Checklist

Project:
Location:
Site Status:

Date:

Time:

Inspector:

CONSTRUCTION SEQUENCE	SATISFACTORY/ UNSATISFACTORY	COMMENTS
Pre-Construction/Materials and Equipment		
Pre-construction meeting		
Pipe and appurtenances on-site prior to construction and dimensions checked		
1. Material (including protective coating, if specified)		
2. Diameter		
3. Dimensions of metal riser or pre-cast concrete outlet structure		
4. Required dimensions between water control structures (orifices, weirs, etc.) are in accordance with approved plans		
5. Barrel stub for prefabricated pipe structures at proper angle for design barrel slope		
6. Number and dimensions of prefabricated anti-seep collars		
7. Watertight connectors and gaskets		
8. Outlet drain valve		
Project benchmark near pond site		
Equipment for temporary de-watering		

CONSTRUCTION SEQUENCE	SATISFACTORY/ UNSATISFACTORY	COMMENTS
2. Subgrade Preparation		
Area beneath embankment stripped of all vegetation, topsoil, and organic matter		
3. Pipe Spillway Installation		
Method of installation detailed on plans		
A. Bed preparation		
Installation trench excavated with specified side slopes		
Stable, uniform, dry subgrade of relatively impervious material (If subgrade is wet, contractor shall have defined steps before proceeding with installation)		
Invert at proper elevation and grade		
B. Pipe placement		
Metal / plastic pipe		
1. Watertight connectors and gaskets properly installed		
2. Anti-seep collars properly spaced and having watertight connections to pipe		
3. Backfill placed and tamped by hand under “haunches” of pipe		
4. Remaining backfill placed in max. 8 inch lifts using small power tamping equipment until 2 feet cover over pipe is reached		

CONSTRUCTION SEQUENCE	SATISFACTORY/ UNSATISFACTORY	COMMENTS
3. Pipe Spillway Installation		
Concrete pipe		
1. Pipe set on blocks or concrete slab for pouring of low cradle		
2. Pipe installed with rubber gasket joints with no spalling in gasket interface area		
3. Excavation for lower half of anti-seep collar(s) with reinforcing steel set		
4. Entire area where anti-seep collar(s) will come in contact with pipe coated with mastic or other approved waterproof sealant		
5. Low cradle and bottom half of anti-seep collar installed as monolithic pour and of an approved mix		
6. Upper half of anti-seep collar(s) formed with reinforcing steel set		
7. Concrete for collar of an approved mix and vibrated into place (protected from freezing while curing, if necessary)		
8. Forms stripped and collar inspected for honeycomb prior to backfilling. Parge if necessary.		
C. Backfilling		
Fill placed in maximum 8 inch lifts		
Backfill taken minimum 2 feet above top of anti-seep collar elevation before traversing with heavy equipment		

CONSTRUCTION SEQUENCE	SATISFACTORY/ UNSATISFACTORY	COMMENTS
4. Riser / Outlet Structure Installation		
Riser located within embankment		
A. Metal riser		
Riser base excavated or formed on stable subgrade to design dimensions		
Set on blocks to design elevations and plumbed		
Reinforcing bars placed at right angles and projecting into sides of riser		
Concrete poured so as to fill inside of riser to invert of barrel		
B. Pre-cast concrete structure		
Dry and stable subgrade		
Riser base set to design elevation		
If more than one section, no spalling in gasket interface area; gasket or approved caulking material placed securely		
Watertight and structurally sound collar or gasket joint where structure connects to pipe spillway		
C. Poured concrete structure		
Footing excavated or formed on stable subgrade, to design dimensions with reinforcing steel set		
Structure formed to design dimensions, with reinforcing steel set as per plan		
Concrete of an approved mix and vibrated into place (protected from freezing while curing, if necessary)		
Forms stripped & inspected for “honeycomb” prior to backfilling; parge if necessary		

CONSTRUCTION SEQUENCE	SATISFACTORY/ UNSATISFACTORY	COMMENTS
5. Embankment Construction		
Fill material		
Compaction		
Embankment		
1. Fill placed in specified lifts and compacted with appropriate equipment		
2. Constructed to design cross-section, side slopes and top width		
3. Constructed to design elevation plus allowance for settlement		
6. Impounded Area Construction		
Excavated / graded to design contours and side slopes		
Inlet pipes have adequate outfall protection		
Forebay(s)		
Pond benches		
7. Earth Emergency Spillway Construction		
Spillway located in cut or structurally stabilized with riprap, gabions, concrete, etc.		
Excavated to proper cross-section, side slopes and bottom width		
Entrance channel, crest, and exit channel constructed to design grades and elevations		

CONSTRUCTION SEQUENCE	SATISFACTORY / UNSATISFACTORY	COMMENTS
8. Outlet Protection		
A. End section		
Securely in place and properly backfilled		
B. Endwall		
Footing excavated or formed on stable subgrade, to design dimensions and reinforcing steel set, if specified		
Endwall formed to design dimensions with reinforcing steel set as per plan		
Concrete of an approved mix and vibrated into place (protected from freezing, if necessary)		
Forms stripped and structure inspected for “honeycomb” prior to backfilling; parge if necessary		
C. Riprap apron / channel		
Apron / channel excavated to design cross-section with proper transition to existing ground		
Filter fabric in place		
Stone sized as per plan and uniformly place at the thickness specified		
9. Vegetative Stabilization		
Approved seed mixture or sod		
Proper surface preparation and required soil amendments		
Excelsior mat or other stabilization, as per plan		

CONSTRUCTION SEQUENCE	SATISFACTORY/ UNSATISFACTORY	COMMENTS
10. Miscellaneous		
Drain for ponds having a permanent pool		
Trash rack / anti-vortex device secured to outlet structure		
Trash protection for low flow pipes, orifices, etc.		
Fencing (when required)		
Access road		
Set aside for clean-out maintenance		
11. Stormwater Wetlands		
Adequate water balance		
Variety of depth zones present		
Approved pondscaping plan in place Reinforcement budget for additional plantings		
Plants and materials ordered 6 months prior to construction		
Construction planned to allow for adequate planting and establishment of plant community (April-June planting window)		
Wetland buffer area preserved to maximum extent possible		

Comments:

Actions to be Taken:

Open Channel System Construction Inspection Checklist

Project:
Location:
Site Status:

Date:

Time:

Inspector:

CONSTRUCTION SEQUENCE	SATISFACTORY / UNSATISFACTORY	COMMENTS
1. Pre-Construction		
Pre-construction meeting		
Runoff diverted		
Facility location staked out		
2. Excavation		
Size and location		
Side slope stable		
Soil permeability		
Groundwater / bedrock		
Lateral slopes completely level		
Longitudinal slopes within design range		
Excavation does not compact subsoils		
3. Check dams		
Dimensions		
Spacing		
Materials		

CONSTRUCTION SEQUENCE	SATISFACTORY / UNSATISFACTORY	COMMENTS
4. Structural Components		
Underdrain installed correctly		
Inflow installed correctly		
Pretreatment devices installed		
5. Vegetation		
Complies with planting specifications		
Topsoil adequate in composition and placement		
Adequate erosion control measures in place		
6. Final inspection		
Dimensions		
Check dams		
Proper outlet		
Effective stand of vegetation and stabilization		
Contributing watershed stabilized before flow is routed to the factility		

Comments:

Actions to be Taken:

APPENDIX G

OPERATION AND MAINTENANCE

JMC Project **10170**
French-American School of New York
336 Ridgeway
City of White Plains, New York

Temporary Erosion and Sediment Control Inspection and Maintenance Checklist

Erosion and Sediment Control Measure	Inspection/Maintenance Intervals	Inspection/Maintenance Requirements
Stabilized Construction Entrance	Daily	• Periodic top dressing with additional aggregate as required • Clean sediment in public right-of-ways immediately
Silt Fence	Weekly + After Each Rain	• Remove & redistribute sediment when bulges develop in the silt fence.
Inlet Protection	Weekly + After Each Rain	• Refer to Figures A5.11, A5.12, A5.13 & A5.14 within the NYSDEC New York State Standard and Specifications for Erosion and Sediment Control
Stone Check Dam	Weekly + After Each Rain	• Correct all damage immediately. • Notify design engineer if significant erosion has occurred between structures as a liner of stone or other suitable material maybe required in this section of the channel. • Remove sediment accumulated behind the dam as needed to allow the channel to drain through the stone check dam and prevent large flows from carrying sediment over the dam. • Replace stones as needed to maintain the design cross section of the structures.

Temporary Erosion and Sediment Control Inspection and Maintenance Checklist (Cont'd)

Erosion and Sediment Control Measure	Inspection/Maintenance Intervals	Inspection/Maintenance Requirements
Temporary Swale	Weekly + After Each Rain	• Immediately remove any sediment and reestablish vegetative cover as required. • Inspect entire swale and surrounding area for rilling and repair as required with the placement of additional topsoil, then seeding and mulching, as outlined in Figure No. 5A.2 of the NYSDEC New York State Standards and Specifications for Erosion and Sediment Control.
Temporary Sediment Basin/Trap	Weekly + After Each Rain	• Remove and redistribute sediment when it reaches an elevation indicated on the construction documents. • Check for rilling within and around the sediment basin and repair as required. • Remove all sediment and debris from the outlet control structure as maybe required.

JMC Project **10170**
French-American School of New York
400 Ridgeway
City of White Plains, New York

Permanent Erosion and Sediment Control Inspection and Maintenance Checklist

Erosion and Sediment Control Measure	Inspection/Maintenance Intervals	Inspection/Maintenance Requirements
Vegetated Swale	Monthly	• Check that contributing area is clean of debris. • Confirm vegetation is adequately maintained (mowing, fertilizer, etc.) • Check for rilling/erosion and repair as needed. • Confirm dewatering occurs between storms.
Rip-Rap Apron/Energy Dissipator and Check Dams	Annually + After Major Storms	• Check for evidence of flows going around the structure. • Check for evidence at downstream toe and repair as needed. • Clean sediment and install additional aggregate as necessary.
Stormwater Management Basin	Monthly	• Check Permanent Pool for undesirable vegetative growth and floatings or floatable debris. Remove as needed. • Check Forebays for sediment and cleanout when it depth <50% design depth. • Check Cry Pond areas for adequate vegetation, undesirable vegetative growth, low flow channels are clear of obstructions, standing water or wet spots and sediment and/or trash accumulation. Repair/remove as necessary.

Permanent Erosion and Sediment Control Inspection and Maintenance Checklist (Cont'd)

Erosion and Sediment Control Measure	Inspection/Maintenance Intervals	Inspection/Maintenance Requirements
Stormwater Management Basin	Annually + After Major Storms	• Check adequacy of vegetation and ground cover; for evidence of embankment erosion, animal burrows, unauthorized plantings and cracking, bulging or sliding of dam, clear/properly functioning drains, seeps/leaks on downstream face, failure of slope protection or riprap. Repair/remove as necessary. • Confirm emergency spillway is clear of obstructions and debris. • Confirm all inlets and outlet structures/pipes are operating properly.
Drain Inlets	Monthly	• Check for blockage and/or erosion at top of each inlet. Repair/remove as necessary. • Check for sediment and debris collected within sumps and clean out as necessary.
Vegetated Swale/Level Spreader	Annually + After Major Storms	• Clean sediment and re-vegetate as necessary. • Check condition of outlet and repair as necessary

Permanent Erosion and Sediment Control Inspection and Maintenance Checklist (Cont'd)

Erosion and Sediment Control Measure	Inspection/Maintenance Intervals	Inspection/Maintenance Requirements
Stormwater Management Basin	Annually + After Major Storms	• Check adequacy of vegetation and ground cover; for evidence of embankment erosion, animal burrows, unauthorized plantings and cracking, bulging or sliding of dam, clear/properly functioning drains, seeps/leaks on downstream face, failure of slope protection or riprap. Repair/remove as necessary. • Confirm emergency spillway is clear of obstructions and debris. • Confirm all inlets and outlet structures/pipes are operating properly.
StormTech Subsurface Retention Facility	Semi-Annually + After Major Storms (See Maintenance Guidelines in Appendix G)	• Check level of sediment accumulated within the isolator row through the access manhole. If 3 inches of sediment or greater, clean out utilizing a high pressure water nozzle to scour and suspend sediments. • Flush all sediment to access manhole and remove using a vacuum truck.

Permanent Erosion and Sediment Control Inspection and Maintenance Checklist (Cont'd)

Erosion and Sediment Control Measure	Inspection/Maintenance Intervals	Inspection/Maintenance Requirements
Green Roof	Spring	• Annual Soil Test by removing small soil quantities and sending to a testing laboratory for nutrient content, etc. • Begin biweekly weed inspection and removal. • Judiciously apply phosphorus free fertilizer if needed based on the annual soil test results. • Biweekly check for displaced soil, inspect roof drains, remove debris and check for pests.
	Summer	• Continue biweekly weed inspection and removal. • Continue biweekly inspection for soil displacement, roof drains, debris, pest control, etc. • Irrigation may be required every 2 or 3 weeks during prolonged hot, dry weather.
	Fall	• Continue biweekly weed inspection and removal. • Continue biweekly inspection for soil displacement, roof drains, debris, pest control, etc.
	Winter	• Remove snow as needed from access walkways.

The owner/operator responsible for inspection and maintenance as outlined above:

French-American School of New York
Mr. Pascale Tooth, Director of Finance & Operations
525 Fenimore Road
Mamaroneck, NY 10543
Phone: (914) 250-0505

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NYSDEC Standard and Green Practice Maintenance Requirements

Maintain the long-term performance of the stormwater practices through regular maintenance activities, and through design elements that ease the maintenance burden.

I. Green Practice - Tree Planting Areas

- During the first three years, mulching, watering and protection of young trees may be necessary and should be included in the inspection list.
- Inspections should be performed every three months and within one week of ice storms, within one week of high wind events that reach speeds of 20 mph until trees have reached maturity, and according to established tree inspection requirements as identified within this document.
- As a minimum, the following items should be included in the regular inspection list:
  - ✓ Assess tree health.
    - Inspect tree for evidence of insect and disease damage; treat as necessary
    - Inspect tree for damages or dead limbs; prune as necessary
  - ✓ Determine survival rate; replace any dead trees.

II. Stormwater Ponds

- Maintenance responsibility for a pond and its buffer shall be vested with a responsible authority by means of a legally binding and enforceable maintenance agreement that is executed as a condition of plan approval.
- The principal spillway's removable trash rack shall be kept clean of debris, and access shall be maintained from dry land.
- Sediment removal in the forebay shall occur every five to six years or after 50% of total forebay capacity has been lost.
- Sediments excavated from stormwater ponds that do not receive runoff from designated hotspots are generally not considered toxic or hazardous material, and can be safely disposed by either land application or land filling. Sediment testing may be required prior to sediment disposal when a hotspot land use is present (see Section 4.8 for a list of potential hotspots).
- Sediment removed from stormwater ponds should be disposed of according to an approved comprehensive operation and maintenance plan. Warning signs prohibiting swimming and skating shall be posted and maintained. A Legally binding maintenance agreement shall run with the land.

III. Infiltration Practices

- Direct access shall be maintained to infiltration practices for maintenance and rehabilitation. If a stone reservoir or perforated pipe is used to temporarily store runoff prior to infiltration, the practice shall not be covered by an impermeable surface.

- Never serves as a sediment control device. Pretreatment areas shall be cleaned of trash, debris and sediment, at least yearly.

StormTech®

Detention • Retention • Water Quality

A division of ADS

Save Valuable Land and Protect Water Resources

Isolator® Row O&M Manual

StormTech® Chamber System for Stormwater Management

1.0 The Isolator® Row

1.1 INTRODUCTION

An important component of any Stormwater Pollution Prevention Plan is inspection and maintenance. The StormTech Isolator Row is a patented technique to inexpensively enhance Total Suspended Solids (TSS) removal and provide easy access for inspection and maintenance.

Looking down the Isolator Row from the manhole opening, woven geotextile is shown between the chamber and stone base.

1.2 THE ISOLATOR ROW

The Isolator Row is a row of StormTech chambers, either SC-310, SC-310-3, SC-740, DC-780, MC-3500 or MC-4500 models, that is surrounded with filter fabric and connected to a closely located manhole for easy access. The fabric-wrapped chambers provide for settling and filtration of sediment as storm water rises in the Isolator Row and ultimately passes through the filter fabric. The open bottom chambers and perforated sidewalls (SC-310, SC-310-3 and SC-740 models) allow storm water to flow both vertically and horizontally out of the chambers. Sediments are captured in the Isolator Row protecting the storage areas of the adjacent stone and chambers from sediment accumulation.

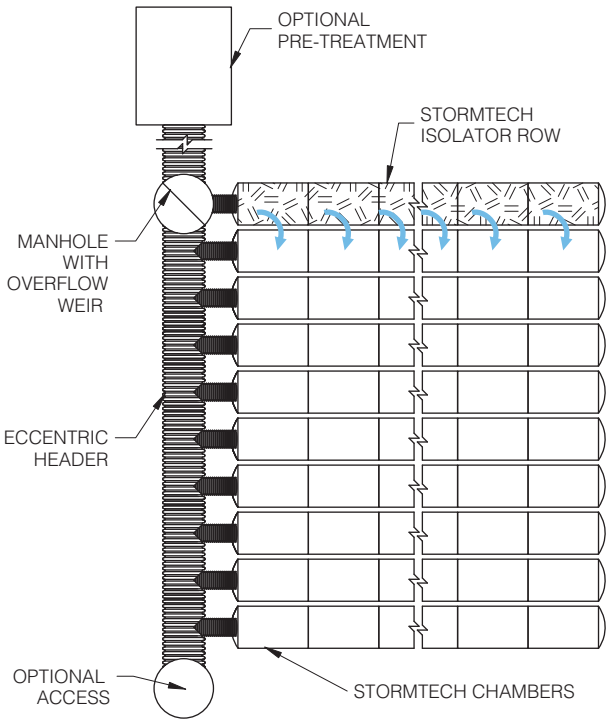
Two different fabrics are used for the Isolator Row. A woven geotextile fabric is placed between the stone and the Isolator Row chambers. The tough geotextile provides a media for storm water filtration and provides a durable surface for maintenance operations. It is also designed to prevent scour of the underlying stone and remain intact during high pressure jetting. A non-woven fabric is placed over the chambers to provide a filter media for flows passing through the perforations in the sidewall of the chamber. The non-woven fabric is not required over the DC-780, MC-3500 or MC-4500 models as these chambers do not have perforated side walls.

The Isolator Row is typically designed to capture the "first flush" and offers the versatility to be sized on a volume basis or flow rate basis. An upstream manhole not only provides access to the Isolator Row but typically includes a high flow weir such that storm water flowrates or volumes that exceed the capacity of the Isolator Row overtop the over flow weir and discharge through a manifold to the other chambers.

The Isolator Row may also be part of a treatment train. By treating storm water prior to entry into the chamber system, the service life can be extended and pollutants such as hydrocarbons can be captured. Pre-treatment best management practices can be as simple as deep sump catch basins, oil-water separators or can be innovative storm water treatment devices. The design of the treatment train and selection of pretreatment devices by the design engineer is often driven by regulatory requirements. Whether pretreatment is used or not, the Isolator Row is recommended by StormTech as an effective means to minimize maintenance requirements and maintenance costs.

Note: See the StormTech Design Manual for detailed information on designing inlets for a StormTech system, including the Isolator Row.

StormTech Isolator Row with Overflow Spillway
(not to scale)



2.0 Isolator Row Inspection/Maintenance

StormTech

2.1 INSPECTION

The frequency of Inspection and Maintenance varies by location. A routine inspection schedule needs to be established for each individual location based upon site specific variables. The type of land use (i.e. industrial, commercial, residential), anticipated pollutant load, percent imperviousness, climate, etc. all play a critical role in determining the actual frequency of inspection and maintenance practices.

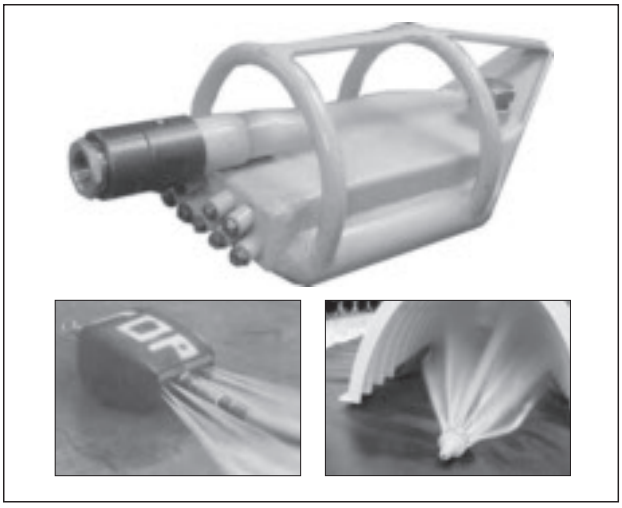
At a minimum, StormTech recommends annual inspections. Initially, the Isolator Row should be inspected every 6 months for the first year of operation. For subsequent years, the inspection should be adjusted based upon previous observation of sediment deposition.

The Isolator Row incorporates a combination of standard manhole(s) and strategically located inspection ports (as needed). The inspection ports allow for easy access to the system from the surface, eliminating the need to perform a confined space entry for inspection purposes.

If upon visual inspection it is found that sediment has accumulated, a stadia rod should be inserted to determine the depth of sediment. When the average depth of sediment exceeds 3 inches throughout the length of the Isolator Row, clean-out should be performed.

2.2 MAINTENANCE

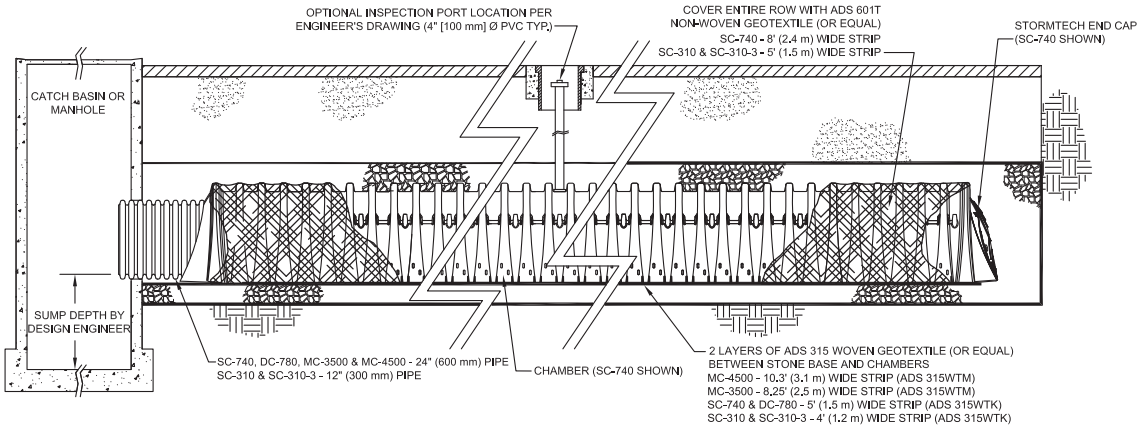
The Isolator Row was designed to reduce the cost of periodic maintenance. By "isolating" sediments to just one row, costs are dramatically reduced by eliminating the need to clean out each row of the entire storage bed. If inspection indicates the potential need for maintenance, access is provided via a manhole(s) located on the end(s) of the row for cleanout. If entry into the manhole is required, please follow local and OSHA rules for a confined space entries.



Examples of culvert cleaning nozzles appropriate for Isolator Row maintenance. (These are not StormTech products.)

Maintenance is accomplished with the JetVac process. The JetVac process utilizes a high pressure water nozzle to propel itself down the Isolator Row while scouring and suspending sediments. As the nozzle is retrieved, the captured pollutants are flushed back into the manhole for vacuuming. Most sewer and pipe maintenance companies have vacuum/JetVac combination vehicles. Selection of an appropriate JetVac nozzle will improve maintenance efficiency. Fixed nozzles designed for culverts or large diameter pipe cleaning are preferable. Rear facing jets with an effective spread of at least 45" are best. Most JetVac reels have 400 feet of hose allowing maintenance of an Isolator Row up to 50 chambers long. **The JetVac process shall only be performed on StormTech Isolator Rows that have AASHTO class 1 woven geotextile (as specified by StormTech) over their angular base stone.**

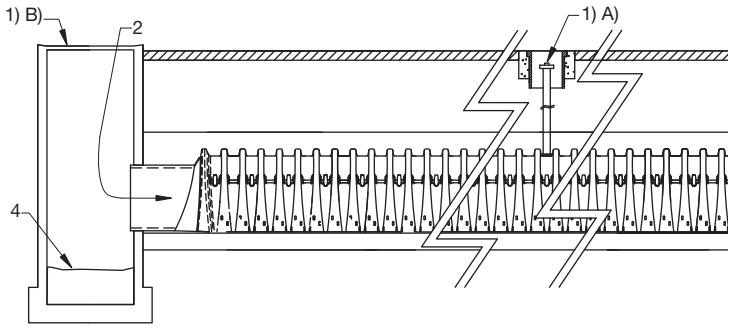
StormTech Isolator Row (not to scale)



NOTE: NON-WOVEN FABRIC IS ONLY REQUIRED OVER THE INLET PIPE CONNECTION INTO THE END CAP FOR DC-780, MC-3500 AND MC-4500 CHAMBER MODELS AND IS NOT REQUIRED OVER THE ENTIRE ISOLATOR ROW.

3.0 Isolator Row Step By Step Maintenance Procedures

StormTech Isolator Row (not to scale)



Step 1) Inspect Isolator Row for sediment

A) Inspection ports (if present)

i. Remove lid from floor box frame

ii. Remove cap from inspection riser

iii. Using a flashlight and stadia rod, measure depth of sediment and record results on maintenance log.

iv. If sediment is at, or above, 3 inch depth proceed to Step 2. If not proceed to step 3.

B) All Isolator Rows

i. Remove cover from manhole at upstream end of Isolator Row

ii. Using a flashlight, inspect down Isolator Row through outlet pipe

1. Mirrors on poles or cameras may be used to avoid a confined space entry
2. Follow OSHA regulations for confined space entry if entering manhole

iii. If sediment is at or above the lower row of sidewall holes (approximately 3 inches) proceed to Step 2. If not proceed to Step 3.

Step 2) Clean out Isolator Row using the JetVac process

A) A fixed culvert cleaning nozzle with rear facing nozzle spread of 45 inches or more is preferable

B) Apply multiple passes of JetVac until backflush water is clean

C) Vacuum manhole sump as required

Step 3) Replace all caps, lids and covers, record observations and actions

Step 4) Inspect & clean catch basins and manholes upstream of the StormTech system

Sample Maintenance Log

Date	Stadia Rod Readings		Sediment Depth (1) - (2)	Observations/Actions	Inspector
	Fixed point to chamber bottom (1)	Fixed point to top of sediment (2)			
3/15/01	6.3 ft.	none		New installation. Fixed point is CI frame at grade	djm
9/24/01		6.2	0.1 ft.	Some grit felt	sm
6/20/03		5.8	0.5 ft.	Mucky feel, debris visible in manhole and in Isolator row, maintenance due	rv
7/7/03	6.3 ft.		0	System jetted and vacuumed	djm

StormTech®

Detention • Retention • Water Quality

A division of ADS

70 Inwood Road, Suite 3 | Rocky Hill | Connecticut | 06067

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#11011 03/16

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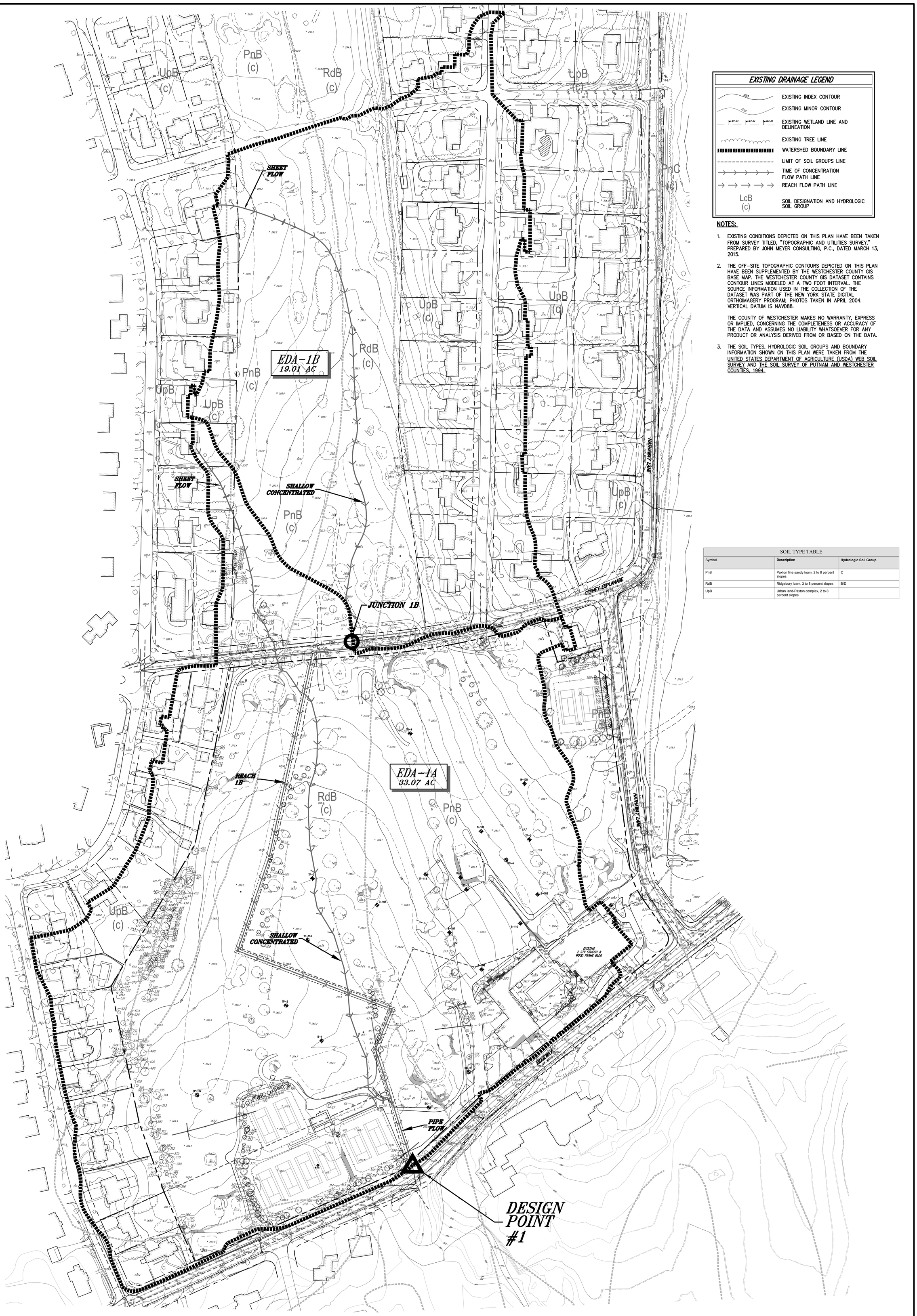
APPENDIX H

JMC DRAINAGE AREA DRAWINGS



EXISTING DRAINAGE LEGEND

- EXISTING INDEX CONTOUR
- EXISTING MINOR CONTOUR
- EXISTING WETLAND LINE AND DELINEATION
- EXISTING TREE LINE
- WATERSHED BOUNDARY LINE
- LIMIT OF SOIL GROUPS LINE
- TIME OF CONCENTRATION FLOW PATH LINE
- REACH FLOW PATH LINE
- LcB (c) — SOIL DESIGNATION AND HYDROLOGIC SOIL GROUP

NOTES:

1. EXISTING CONDITIONS DEPICTED ON THIS PLAN HAVE BEEN TAKEN FROM SURVEY TITLED, "TOPOGRAPHIC AND UTILITIES SURVEY," PREPARED BY JOHN MEYER CONSULTING, P.C., DATED MARCH 13, 2015.
2. THE OFF-SITE TOPOGRAPHIC CONTOURS DEPICTED ON THIS PLAN HAVE BEEN SUPPLEMENTED BY THE WESTCHESTER COUNTY GIS BASE MAP. THE WESTCHESTER COUNTY GIS DATASET CONTAINS CONTOUR LINES MODELED AT A TWO FOOT INTERVAL. THE SOURCE INFORMATION USED IN THE COLLECTION OF THE DATASET WAS PART OF THE NEW YORK STATE DIGITAL ORTHOIMAGERY PROGRAM; PHOTOS TAKEN IN APRIL 2004. VERTICAL DATUM IS NAVD88.

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3. THE SOIL TYPES, HYDROLOGIC SOIL GROUPS AND BOUNDARY INFORMATION SHOWN ON THIS PLAN WERE TAKEN FROM THE UNITED STATES DEPARTMENT OF AGRICULTURE (USDA) WEB SOIL SURVEY AND THE SOIL SURVEY OF PUTNAM AND WESTCHESTER COUNTIES, 1994.

SOIL TYPE TABLE

Symbol	Description	Hydrologic Soil Group
PnB	Paxton fine sandy loam, 2 to 8 percent slopes	C
RdB	Ridgebury loam, 3 to 8 percent slopes	B/D
UpB	Urban land-Paxton complex, 2 to 8 percent slopes	

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DRAWN: CS APPROVED: RR
SCALE: 1"=150'
DATE: 05/05/2014
PROJECT No: 10170
DWG NUM-DRAWING: EDA
FILE: EDA-SCR
DRAWING No: DA-1

EXISTING DRAINAGE AREA MAP

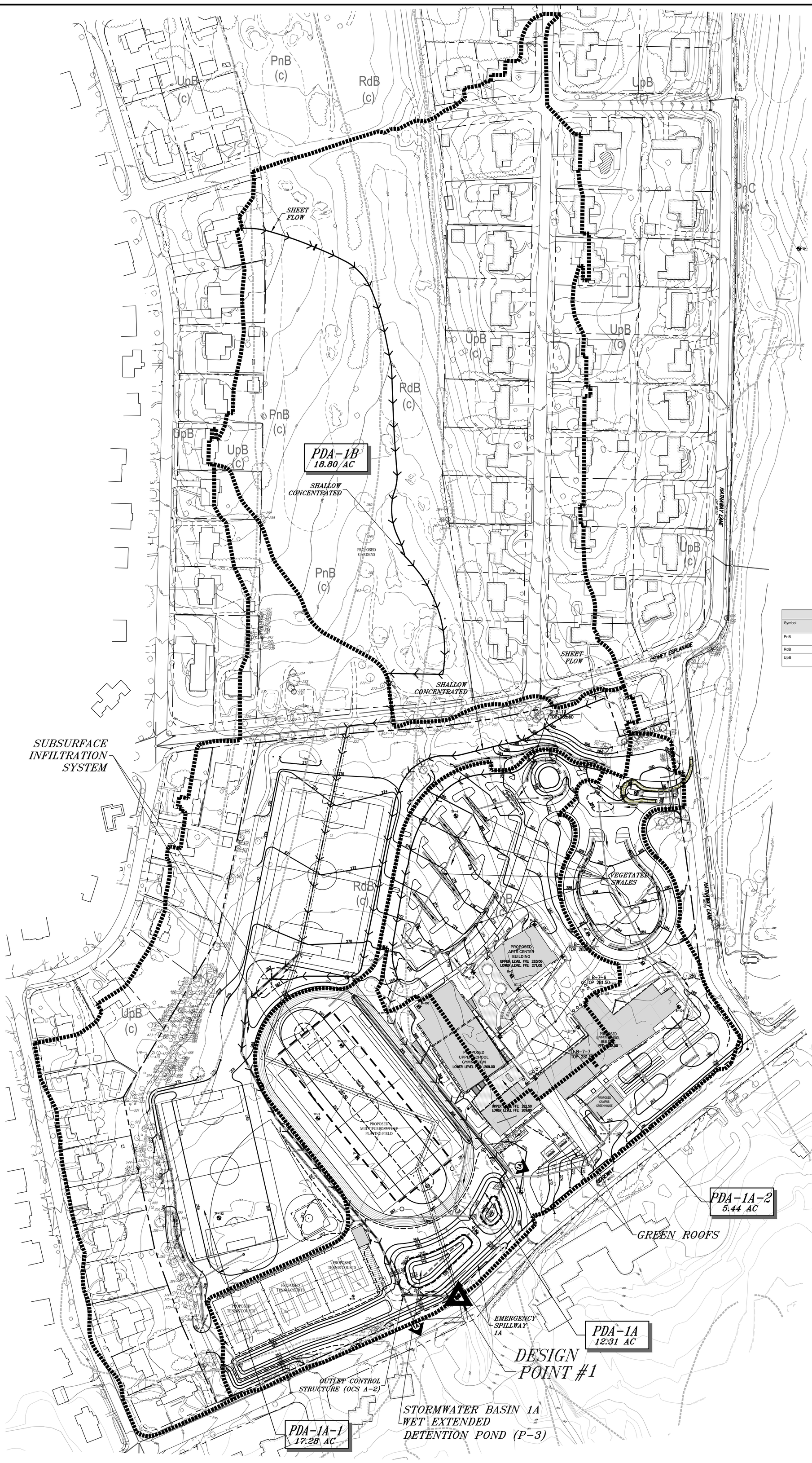
FRENCH-AMERICAN SCHOOL OF NEW YORK
336 RIDGEWAY
CITY OF WHITE PLAINS, NEW YORK

JMC Planning, Engineering, Landscape Architecture & Land Surveying, PLLC
JMC Site Development Consultants, LLC
John Meyer Consulting, Inc.
120 BEDFORD ROAD • ARMONK, NY 10504
voice 914.273.5225 • fax 914.273.2102
www.jmcpllc.com

APPLICANT/OWNER:
FRENCH-AMERICAN SCHOOL OF NEW YORK
525 FENIMORE ROAD
MAMARONECK, NY 10543

ARCHITECT:
STANTEC
400 MORGAN CENTER
101 EAST DIAMOND STREET
BUTLER, PA 16001-5923

NO.	REVISION	DATE	BY
1.	SITE PLAN SUBMISSION	05/19/2014	CS
2.	REVISED PER CITY COMMENTS	10/20/2014	CS
3.	REVISED PER CITY COMMENTS	12/10/2014	CS
4.	REVISED PER CITY COMMENTS	03/17/2015	CS
5.	REVISED PER CITY COMMENTS	05/01/2015	CS
6.	REVISED PER CITY COMMENTS	05/15/2015	CS
7.	SITE PLAN SUBMISSION	10/25/2016	CS
	Previous Editions Obsolete		



PROPOSED DRAINAGE LEGEND

- EXISTING INDEX CONTOUR
- EXISTING MINOR CONTOUR
- EXISTING WETLAND LINE AND DELINEATION
- PROPOSED FINISHED GRADE
- EXISTING STONE WALL
- WATERSHED BOUNDARY LINE
- LIMIT OF SOIL GROUPS LINE
- TIME OF CONCENTRATION FLOW PATH LINE
- REACH FLOW PATH LINE
- PROPOSED VEGETATED SWALE
- PROPOSED BUILDING LINE
- PROPOSED CONCRETE CURB
- PROPOSED STORM DRAINAGE PIPE
- PnB (c) — SOIL DESIGNATION AND HYDROLOGIC SOIL GROUP

NOTES:

1. EXISTING CONDITIONS DEPICTED ON THIS PLAN HAVE BEEN TAKEN FROM SURVEY TITLED, "TOPOGRAPHIC AND UTILITIES SURVEY," PREPARED BY JOHN MEYER CONSULTING, P.C., DATED MARCH 13, 2015.
2. THE OFF-SITE TOPOGRAPHIC CONTOURS DEPICTED ON THIS PLAN HAVE BEEN SUPPLEMENTED BY THE WESTCHESTER COUNTY GIS BASE MAP. THE WESTCHESTER COUNTY GIS DATASET CONTAINS CONTOUR LINES MODELED AT A TWO FOOT INTERVAL. THE SOURCE INFORMATION USED IN THE COLLECTION OF THE DATASET WAS PART OF THE NEW YORK STATE DIGITAL ORTHOIMAGERY PROGRAM; PHOTOS TAKEN IN APRIL 2004. VERTICAL DATUM IS NAVD88.

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3. THE SOIL TYPES, HYDROLOGIC SOIL GROUPS AND BOUNDARY INFORMATION SHOWN ON THIS PLAN WERE TAKEN FROM THE UNITED STATES DEPARTMENT OF AGRICULTURE (USDA) WEB SOIL SURVEY.
4. GEOTECHNICAL BORING/TEST PIT LOCATIONS DEPICTED ON THIS PLAN WERE TAKEN FROM THE GEOTECHNICAL REPORT ENTITLED, "SUBSURFACE SOIL AND FOUNDATION INVESTIGATION", DATED 10/02/2014, PREPARED BY CARLIN-SIMPSON AND ASSOCIATES.

SOIL TYPE TABLE

Symbol	Description	Hydrologic Soil Group
PnB	Paxton fine sandy loam, 2 to 8 percent slopes	C
RdB	Ridgebury loam, 3 to 8 percent slopes	B/D
UpB	Urban land-Paxton complex, 2 to 8 percent slopes	

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DA-2

DRAWN: CS APPROVED: RR
SCALE: 1"=150'
DATE: 05/05/2014
PROJECT No: 10170
DWG: 10170-NONAME TAB: PDA SCR: PDA_SCR

PROPOSED DRAINAGE AREA MAP

FRENCH-AMERICAN SCHOOL OF NEW YORK
336 RIDGEWAY
CITY OF WHITE PLAINS, NEW YORK

JMC Planning, Engineering, Landscape Architecture & Land Surveying, PLLC
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NO.	REVISION	DATE	BY
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6.	REVISED PER CITY COMMENTS	05/15/2015	CS
7.	SITE PLAN SUBMISSION	10/25/2016	CS
	Previous Editions Obsolete		

APPENDIX I

CARLIN-SIMPSON & ASSOCIATES REPORT ON SUBSURFACE SOIL AND FOUNDATION INVESTIGATION, LAST REVISED 10/02/2014

CARLIN • SIMPSON & ASSOCIATES

Consulting Geotechnical and Environmental Engineers

61 Main Street, Sayreville, New Jersey 08872
Tel. (732) 432-5757
Fax. (732) 432-5717

Principal:
Robert B. Simpson, P.E.

Associates:
Robert H. Barnes, P.E.
Meredith R. Anke, P.E.
Kurt W. Anke
Eric J. Shaw

17 June 2014
Modified 2 October 2014

French American School New York
15 New Street
Mamaroneck, New York 10543

Attn: Ms. Mischa Zabotin

Re: Report on Subsurface Soil and Foundation Investigation
French American School New York
Ridgeway Country Club Property
400 Ridgeway
White Plains, New York (10-146)

Dear Ms. Zabotin:

In accordance with our revised proposal dated 18 February 2014 and your subsequent authorization, we have completed a Subsurface Soil and Foundation Investigation for the referenced site. The purpose of this study was to determine the nature and engineering properties of the subsurface soil and the groundwater conditions for the proposed new construction, to recommend a practical foundation scheme, to determine the allowable bearing capacity of the site soils, and to determine the soil permeability in the new stormwater management areas.

We understand that the planned construction will consist of a new lower school building, middle school building, high school building, gymnasium, and performing arts center building. The proposed development will also include a greenhouse structure, athletic fields, site retaining walls, stormwater management areas, underground utilities, and asphalt paved driveways and parking areas. To guide us in tour study, you have provided us with a site plan for the project.

Our scope of work for this project included the following:

1. Reviewed the proposed layout, the existing site conditions, the expected soil conditions, and planned this study.

2. Retained General Borings, Inc. to advance four (4) test borings at the site in January 2011 and 14 test borings at the site in April 2014.

3. Retained a test pit subcontractor to excavate 13 test pits at the site in December 2010, six (6) test pits in April 2013, and 19 test pits in April 2014.

4. Performed field permeability tests at two (2) locations for the proposed stormwater management system.

5. Laid out the boring and test pit locations in the field, provided full time inspection of the explorations, obtained soil samples, and prepared detailed logs and a Boring and Test Pit Location Plan.

6. Performed soil identification tests on selected soil samples in our laboratory.

7. Analyzed the field and laboratory test data and prepared this report containing the results of this study.

SITE DESCRIPTION

The project site is located on the 130-acre site of the former Ridgeway Country Club, which is located on Ridgeway Road in White Plains, New York. The proposed construction will encompass the southern and eastern portions of the former country club property. These areas are currently occupied by a large clubhouse building, parking areas, tennis courts, and a golf course with grass lawn areas, paved cart paths, and wooded areas. There is also an existing pond in the northeast portion of the property. The existing surface grades vary across the site between approximately elevation +260.0 and elevation +298.0.

SUBSURFACE CONDITIONS

To determine the subsurface soil and groundwater conditions at the site, we advanced 18 test borings and 38 test pits at the locations shown on the enclosed Boring and Test Pit Location Plan. Detailed logs have been prepared and are included in this report. Our field representative visually identified all soil samples and selected soil samples were tested in our laboratory. The results of these tests are included in this report.

Soil

The soil descriptions shown on the boring and test pit logs are based on the Burmister Classification System. In this system, the soil is divided into three components: Sand (S), Silt ($) and Gravel (G). The major component is indicated in all capital letters, the lesser in lower case letters. The following modifiers indicate the quantity of each lesser component:

Modifier	Quantity
trace (t)	0 -10%
little (l)	10% - 20%

Modifier	**Quantity**
some (s)	20% - 35%
and (a)	35% - 50%

The subsurface soil conditions observed in the borings and test pits can be summarized as follows:

Stratum 1A
Topsoil

The surface layer in borings B-1 through B-4, B-101 to B-103, and B-105 as well as test pits TP-2 through TP-14, BC-2 through BC-7, TP-101 through TP-110, and TP-112 through TP-119 is topsoil that ranges from approximately 0’2” to 0’8” in thickness.

Stratum 1B
Asphalt

The surface layer in borings B-104, B-106, and B-110 is asphalt pavement that ranges from approximately 0’2” to 0’8” in thickness.

Stratum 2
Existing Fill

Beneath the surface layers or at the surface in select borings and test pits is existing fill that generally consists of loose to medium dense brown coarse to fine SAND, little (to and) Silt, trace (to some) coarse to fine Gravel, with varying amounts of cobbles. The existing fill was encountered to depths ranging from 1’0” to 7’6” beneath the existing ground surface.

Stratum 3
Silty Sand, Sandy Silt, Sand, or Silty Sand with Gravel

Underlying the surface layers and existing fill is medium dense to dense brown, gray brown, or mottled coarse to fine SAND, trace (to and) Silt, trace (to and) coarse to fine Gravel, with varying amounts of cobbles and boulders. At select locations, the virgin soil consists of a layer or medium stiff gray brown or mottled SILT some (to and), coarse to fine Sand, trace (to little) coarse to fine Gravel. Most of the test pits were terminated in this stratum at final depths ranging from 4’0” to 10’0” below the existing ground surface. In the borings, this soil stratum continued to depths ranging from 8’0” to 20’6” beneath the existing ground surface.

Stratum 4
Schist Bedrock

Below the virgin soil is weathered Schist bedrock, which was encountered at select borings and test pits at depths ranging from 7’6” to 18’0” below the existing ground surface.

At boring B-114, the upper 5’0” of the bedrock was cored. The core recovery was 93% and the rock quality designation (RQD) of the recovered core was 80%. Based on the RQD value, the upper few feet of the bedrock can be classified as good quality in a massive, moderately jointed condition.

Groundwater

Observations for groundwater were made during sampling and upon completion of the drilling operations at each boring location. In auger drilling operations, water is not introduced into the boreholes, and the groundwater position can often be determined by observing water flowing into or out of the boreholes. Furthermore, visual observation of the soil samples retrieved during the auger drilling and in the test pits can often be used in evaluating the groundwater conditions.

Groundwater was encountered in most of the borings and test pit explorations performed during this study at depths ranging from 0’6” to 10’0” below the existing ground surface. The groundwater observations are summarized in Table 1 below. During construction, trapped water also could be present in the existing fill, in the dense virgin soils, and/or along the soil/rock interface. Proper groundwater control measures (i.e. sumps and pumps) will be required in the event that water is encountered in the site excavations. In addition, footings drains and a sub-slab drainage system will be required for proposed buildings with lower level floors. Recommendation are discussed in the following sections of this report.

The highest groundwater observations are normally encountered in late winter and early spring, and our current groundwater observations are expected to be reflective of or slightly lower than the seasonal maximum water table. Variations in the location of the long-term water table may occur as a result of changes in precipitation, evaporation, surface water runoff, and other factors not immediately apparent at the time of this exploration.

EVALUATION

The proposed project will consist of a new lower school building, middle school building, high school building, gymnasium, and performing arts center building. The proposed development will also include a greenhouse structure, athletic fields, site retaining walls, stormwater management areas, underground utilities, and asphalt paved driveways and parking areas.

The groundwater, existing fill, and bedrock observations for the borings and test pits performed at the site are summarized in Table 1 below. Each proposed building area is discussed separately following the table.

Table 1 – Summary of Boring and Test Pit Data

Boring or Test Pit No.	Approximate Ground Surface Elevation (Feet)	Proposed Building Area	Observed Depth to Groundwater (Elevation)	Depth to Bottom of Existing Fill (Elevation)	Depth to Probable Bedrock (Elevation)
B-1	+264.0	Athletic Fields	6’0” (+258.0)	2’6” (+261.5)	8’0” (+256.0)
B-2	+277.0	Performing Arts	7’0” (+270.0)	2’0” (+275.0)	NE to 20’6”

Boring or Test Pit No.	Approximate Ground Surface Elevation (Feet)	Proposed Building Area	Observed Depth to Groundwater (Elevation)	Depth to Bottom of Existing Fill (Elevation)	Depth to Probable Bedrock (Elevation)
B-3	+305.0	--	5’6” (+301.5)	NE	NE to 20’6”
B-4	+288.0	--	10’0” (+278.0)	3’0” (+285.0)	17’0” (+271.0)
B-101	+281.0	Performing Arts	2’2” (+278.8)	2’6” (+278.5)	17’6” (+263.5)
B-102	+283.0	High School	3’6” (+279.5)	NE	16’0” (+267.0)
B-103	+288.0	Middle School	4’0” (+284.0)	NE	16’6” (+271.5)
B-104	+286.0	High School	3’0” (+283.0)	1’0” (+285.0)	14’0” (+272.0)
B-105	+289.0	Middle School	6’0” (+283.0)	NE	17’6” (+271.5)
B-106	+274.0	High School	6’0” (+268.0)	7’6” (+266.5)	NE to 20’3”
B-107	+272.0	Gymnasium	5’0” (+267.0)	1’0” (+271.0)	18’0” (+254.0)
B-108	+267.0	Gymnasium	3’0” (+264.0)	1’6” (+265.5)	17’0” (+250.0)
B-109	+268.0	High School	6’0” (+262.0)	1’6” (+266.5)	18’0” (+250.0)
B-110	+279.0	High School	6’0” (+273.0)	NE	17’6” (+261.5)
B-111	+285.0	Lower School	7’0” (+278.0)	2’0” (+283.0)	NE to 20’3”
B-112	+280.0	Lower School	6’0” (+274.0)	NE	NE to 16’3”
B-113	+276.0	Lower School	6’0” (+270.0)	2’0” (+274.0)	16’0” (+260.0)
B-114	+278.5	Lower School	6’0” (+272.5)	2’0” (+276.5)	11’0” (+267.5)
BC-1	+263.5	Stormwater	3’7” (+259.9)	3’0” (+260.5)	NE to 4’0”
BC-2	+269.0	Stormwater	4’6” (+264.5)	NE	NE to 5’0”
BC-3	+276.0	Performing Arts	5’10” (+270.2)	NE	NE to 6’3”
BC-4	+282.0	Performing Arts	NE to 6’6”	NE	NE to 6’6”
BC-5	--	--	--	--	--
BC-6	+280.0	Stormwater	NE to 7’0”	NE	NE to 7’0”
BC-7	+279.0	Stormwater	NE to 7’0”	NE	NE to 7’0”
TP-1	--	--	--	--	--
TP-2	+266.5	Athletic Fields	6’4” (+260.2)	NE	10’0” (+256.5)
TP-3	+266.0	Athletic Fields	5’0” (+261.0)	5’0” (+261.0)	NE to 8’6”
TP-4	+278.0	Parking Lot	3’0” (+275.0)	NE	NE to 8’6”
TP-5	+286.0	Middle School	7’0” (+279.0)	NE	NE to 10’0”
TP-6	+280.0	Parking Lot	3’0” (+277.0)	NE	NE to 7’0”
TP-7	+280.0	Lower School	3’6” (+276.5)	NE	NE to 7’6”
TP-8	+292.0	--	0’6” (+191.5)	NE	NE to 5’0”
TP-9	+282.0	--	2’6” (+279.5)	NE	NE to 6’6”
TP-10	+301.0	--	3’6” (+297.5)	NE	NE to 8’0”
TP-11	+278.0	--	4’6” (+273.5)	NE	NE to 9’0”
TP-12	+288.0	--	5’6” (+282.5)	NE	NE to 10’0”
TP-13	+304.0	--	NE to 7’6”	NE	NE to 7’6”
TP-14	+290.0	--	NE to 8’0”	NE	NE to 8’0”
TP-101	+280.0	Stormwater	4’4” (+275.7)	NE	NE to 8’6”
TP-102	+277.0	Stormwater	5’0” (+272.0)	NE	NE to 8‘6”
TP-103	+276.0	Stormwater	5’3” (+270.7)	NE	NE to 7’6”
TP-104	+272.0	Stormwater	4’6” (+267.5)	NE	NE to 6’3”
TP-105	+280.0	Stormwater	6’0” (+274.0)	NE	7’6” (+272.5)
TP-106	+278.5	Stormwater	7’0” (+271.5)	NE	NE to 8’10”
TP-107	+266.5	Stormwater	4’4” (+262.2)	NE	NE to 6’0”

Boring or Test Pit No.	Approximate Ground Surface Elevation (Feet)	Proposed Building Area	Observed Depth to Groundwater (Elevation)	Depth to Bottom of Existing Fill (Elevation)	Depth to Probable Bedrock (Elevation)
TP-108	+267.0	Stormwater	3’8” (+263.3)	NE	NE to 5’0”
TP-109	+261.0	Driveway	2’8” (+258.3)	NE	NE to 4’0”
TP-110	+264.5	Stormwater	4’0” (+260.5)	NE	NE to 5’0”
TP-111	+266.0	Athletic Fields	4’3” (+261.7)	0’3” (+265.7)	NE to 7’6”
TP-112	+264.0	Athletic Fields	3’8” (+260.3)	NE	NE to 6’6”
TP-113	+266.0	Athletic Fields	4’6” (+261.5)	1’6” (+264.5)	NE to 7’0”
TP-114	+273.0	Performing Arts	3’10” (+269.2)	NE	NE to 5’6”
TP-115	+278.0	Driveway	4’6” (+273.5)	NE	NE to 6’6”
TP-116	+277.0	Driveway	3’6” (+273.5)	NE	NE to 7’6”
TP-117	+267.0	Driveway	5’0” (+262.0)	NE	NE to 6’6”
TP-118	+280.0	Driveway	4’3” (+275.7)	1’2” (+278.8)	NE to 7’0”
TP-119	+280.0	Stormwater	6’6” (+273.5)	NE	NE to 7’6”

NE – Not Encountered

Proposed Building Areas

The proposed development will include five (5) primary structures, which include a lower school building, a middle school and black box theater building, a high school building, a gymnasium building, and a performing arts center building. Each of these proposed building areas is summarized below. General construction recommendations are discussed in the following sections of this report.

Lower School Building

Based on the grading plan provided to this office, the proposed lower school building will have a finished floor elevation of +281.0. Existing grades in this building area range from approximately elevation +277.0 to elevation +286.0. Therefore, cuts ranging up to 5’0” and fills ranging up to 4’0” are expected to achieve the planned finished floor elevation for the proposed lower school building.

Borings B-111, B-112, B-113 and B-114 and test pit TP-7 were performed in the area of the proposed lower school building. The boring data indicates that existing fill (Stratum 2) is present within portions of the planned building area. Where encountered in borings B-111, B-113, and B-114, the fill extended to a depth of 2’0” below the existing ground surface. Virgin soils were observed at the surface in boring B-112 and below the surface layers of topsoil or fill at the other test locations. The virgin soils are comprised of medium dense to dense Silty Sand with Gravel (Stratum 3). Test pit TP-7 was terminated in this stratum at a final depth of 7’6”. Within the borings, the Silty Sand with Gravel transitions into completely weathered to highly weathered Schist in a very dense soil-like state (Gravelly Sand or Silty Sand with Gravel) at depths ranging from 7’0” to 14’0” below the ground surface. Borings B-111 and B-112 were terminated at final depths of 20’3” and 16’3”, respectively in the very dense soil or weathered rock material.

Boring B-113 was terminated upon “auger refusal” at a final depth of 16’0” below the ground surface. The auger refusal may indicate the top of the bedrock surface. At boring B-114, the bedrock was cored between the depths of 11’0” and 16’0” below the ground surface. Based on the core data, the upper 5’0” of the Schist bedrock is in a massive and moderately jointed condition.

Groundwater was encountered in the borings at depths varying between 6’0” and 7’0” below the ground surface. Groundwater seepage was observed within test pit TP-7 at a depth of 6’2” below the ground surface. These depths correlate to groundwater levels ranging between elevation +270.0 and elevation +278.0. Based on the boring observations and the proposed finished floor elevation of +281.0, groundwater may be encountered in the foundation excavations in portions of the proposed lower school building. Sumps and pumps should be used to control groundwater encountered in the site excavations.

Middle School and Black Box Theater Building

The grading plan indicates that the proposed middle school and black box theater building will have a finished floor elevation of +285.0. Existing grades in this building area range from approximately elevation +285.0 to elevation +290.0. Therefore, cuts ranging up to 5’0” and very minor fills are expected to achieve the planned finished floor elevation for the proposed middle school and black box theater building.

Borings B-103 and B-105 and test pit TP-5 were performed for the proposed middle school and black box theater building. The boring and test pit data indicates that the surface layer is topsoil ranging from 0’5” to 0’6” in thickness. Beneath the surface topsoil layer are virgin soils comprised of medium dense Silty Sand or Silty Sand with Gravel and very stiff Sandy Clayey Silt. Test pit TP-5 was terminated in the medium dense Silty Sand with Gravel at a final depth of 10’0”. In borings B-103 and B-105, the soils become very dense beginning at depths of 15’0” and 10’0”, respectively. Borings B-103 and B-105 were terminated upon “auger refusal” at final depths of 16’6” and 17’6” below the ground surface, respectively. The auger refusal likely indicates the top of the bedrock surface.

Groundwater was encountered in borings B-103 and B-105 at depths of 4’0” and 6’0” below the ground surface, respectively. Groundwater seepage was observed in test pit TP-5 at a depth of 8’3” below the ground surface. These depths correlate to groundwater levels ranging between elevation +279.0 and elevation +284.0. Based on the boring observations and the proposed finished floor elevation of +285.0, groundwater may be encountered in the foundation excavations in portions of the proposed middle school and black box theater building. Sump pits and pumps should be used to remove the water from these excavations.

High School Building

The grading plan indicates that the proposed high school building will have a finished floor elevation of +283.0 with a partial lower level at elevation +269.0. Existing grades in this building area range from approximately elevation +268.0 to elevation

+287.0. Therefore, cuts ranging up to 4’0” and fills ranging up to 7’0” are expected to achieve the planned finished floor elevation for the proposed high school building.

Borings B-102, B-104, B-106, B-109 and B-110 were performed in the area of the proposed high school building. The surface material in boring B-102 is topsoil, approximately 0’5” in thickness. The surface material in borings B-104, B-106, and B-110 is asphalt pavement, which is approximately 0’2” to 0’3” in thickness. A 0’5” thick gravel subbase layer was present below the asphalt in boring B-106. Existing fill was present at the surface in boring B-109 and below the asphalt in borings B-104 and B-106. The fill consists of Silty Sand or Silty Sand with Gravel in a loose to medium dense state. The fill continues to depths of 1’0”, 7’6”, and 1’6” below the ground surface in borings B-104, B-106, and B-109, respectively.

Beneath the fill in borings B-104, B-106 and B-109, the surface topsoil in boring B-102, and the asphalt in boring B-110 is virgin soil comprised of medium dense to very dense Silty Sand or Silty Sand with Gravel. The soils become a very dense beginning at depths ranging from about 7’0” to 10’0” below the ground surface. Very dense completely weathered Schist was observed in boring B-102, beginning at a depth of 13’0”. Boring B-106 was terminated in the very dense Silty Sand at a final depth of 20’3” below the ground surface. Borings B-102, B-104, B-109 and B-110 were terminated upon “auger refusal” at final depths of 16’0”, 14’0”, 18’0” and 17’6” below the ground surface, respectively. The auger refusal likely indicates the top of the Schist bedrock surface.

Groundwater was encountered in the borings at depths varying between 3’0” and 6’0” below the ground surface. At these locations, the water appears to be perched in the existing fill or silty soils above the very dense soil layer. In the event that groundwater or trapped water is encountered within the building excavations during construction, sump pits and pumps will be required to remove the water from the excavations.

Middle School/High School Gymnasium

The grading plan indicates that the proposed gymnasium building will have a finished floor elevation of +269.0. Existing grades within this building area range from approximately elevation +267.0 to elevation +272.0. Therefore, cuts ranging up to 3’0” and fills ranging up to 2’0” are expected to achieve the planned finished floor elevation for the proposed gymnasium building.

Borings B-107 and B-108 were performed in the area of the proposed middle school/high school gymnasium. Existing fill was present at the surface in borings B-107 and B-108, extending to depths of 1’0” and 1’6” below the existing ground surface, respectively. The fill generally consists of Silty Sand or Silty Sand with Gravel in a loose state. Beneath the fill in borings B-107 and B-108, are virgin soils comprised of medium dense Silty Sand with Gravel that continue to depths of 8’0” and 5’0”, respectively. Below the Silty Sand with Gravel in boring B-107 is medium dense Gravelly Sand that continues to a depth of 8’0” below the surface. The Gravelly Sand is underlain by very dense Silty Sand and Gravel, extending to a depth of 18’0”. Underlying the Silty Sand with Gravel in boring B-108 is loose to medium dense Sand that continues to a depth of 11’0” below the

ground surface. Below the Sand layer is dense to very dense Gravelly Sand, extending to a depth of 17’0” below the surface. The soils become very dense beginning at depths of 10’0” and 13’6” below the ground surface in borings B-107 and B-108, respectively. The very dense material may be completely weathered Schist. Borings B-107 and B-108 were terminated upon “auger refusal” on the probable bedrock surface at final depths of 18’0” and 17’0” below the ground surface, respectively.

Groundwater was encountered in borings B-107 and B-108 at depths of 5’0” and 3’0” below the ground surface, respectively. These depths correlate to groundwater levels ranging between elevation +264.0 and elevation +267.0. Based on the boring observations and the proposed finished floor elevation of +269.0, groundwater may be encountered in the foundation excavations in portions of the proposed gymnasium building. Sump pits and pumps should be used to remove the water from the excavations.

Performing Arts Center Building

Based on the grading plan, the proposed performing arts center building will have a finished floor elevation of +271.0. Existing grades within this building area range from approximately elevation +276.0 to elevation +282.0. Therefore, cuts ranging up to 11’0” are expected to achieve the planned finished floor elevation for the proposed performing arts center building.

Borings B-2 and B-101 were performed for the proposed performing arts center building. Test pits BC-3, BC-4 and TP-114 were also performed in this area. The surface layer at each location consists of topsoil, ranging from 0’3” to 0’6” in thickness. Existing fill was present below the topsoil in boring B-2, extending to a depth of 2’0” below the existing ground surface. The fill generally consists of Silty Sand with Gravel in a medium dense state.

Beneath the surface topsoil and fill are virgin soils comprised of medium dense to dense Silty Sand with Gravel with cobbles or Silty Sand. Test pits BC-3, BC-4 and TP-114 were terminated in this stratum at final depths of 5’10”, 6’6” and 5’6”, respectively. In boring B-2, very dense Silty Sand with Gravel was encountered beginning at a depth of 12’0” and in boring B-101, very dense Silty Sand was encountered beginning at a depth of 11’6” below the surface. Borings B-2 and B-101 were terminated upon “auger refusal” on the probable bedrock surface at final depths of 20’6” and 17’6” below the ground surface, respectively.

Groundwater was encountered in borings B-2 and B-101 at depths of 7’0” and 2’2”, respectively. At boring B-101, the water appeared to be trapped in the fill layer. Water was observed in test pits BC-3 and TP-114 at depths of 5’10” and 3’10”, respectively. Water was not observed in test pit BC-4, which was terminated at a depth of 6’6” below the ground surface. Based on the boring observations and the proposed finished floor elevation of +271.0, groundwater may be encountered in the foundation excavations in portions of the proposed gymnasium building. In the event that groundwater is encountered within the building excavations during construction, sump pits and pumps will be required to remove the water from the excavations.

Removal of Existing Structures from New Building and Pavement Areas

Building Area

The site plan indicates that portions of the proposed building areas are occupied by existing structures, an existing parking lot, and underground utilities. These items must be removed as part of the proposed development. All debris resulting from the demolition of these items must be completely removed from the new building areas, extending at least ten (10) feet beyond the new building limits, where practical. This shall include the complete removal of all foundations, walls, slabs, utilities, sidewalks, pavement, and miscellaneous debris. Where the removal of the above items and associated materials extends below the planned building subgrade elevation, the resulting excavations shall be backfilled with new compacted fill as described below.

Existing utilities, where they are encountered within the planned building area, should be either abandoned or rerouted around the new structure. Once the utility has been rerouted or abandoned, the section of pipe and any associated structure within the building area must be completely removed. The removal of the pipe and structure must also include any loose fill around the pipe or structure. After the pipe, associated structure, and associated loose backfill have been removed, the resulting excavation shall be backfilled with new controlled fill as described below.

New compacted fill shall consist of either suitable on-site soil or imported sand and gravel. Imported sand and gravel fill shall contain less than 20% by weight passing a No. 200 sieve. The fill shall be placed in layers not exceeding one (1) foot in loose thickness. In the proposed building area, new fill shall be compacted to at least 95% of its Maximum Modified Dry Density (ASTM D1557). Each layer shall be compacted, tested, and approved prior to placing subsequent layers.

Pavement Areas

In the proposed pavement areas, any existing structures and debris resulting from the demolition of the structures must be completely removed from the new pavement area, extending at least five (5) feet beyond the new paving limits, where practical. The excavations resulting from the removal of existing items shall be backfilled using controlled compacted fill. New fill shall consist of either suitable on-site soil or imported sand and gravel placed in one (1) foot loose layers and compacted to at least 92% of its Maximum Modified Dry Density (ASTM D1557).

Implications of Existing Fill

The boring data indicates that existing fill is present in portions of the site. Where encountered in the test borings, the fill extended to depths ranging from 1’0” to 7’6” beneath the existing ground surface. The depth of the existing fill is expected to be variable and may be deeper near the existing site structures and/or in unexplored areas of the site.

The existing fill, where present, is not an acceptable bearing material for the new building foundations and floor slabs. The consistency and density of the fill material are not predictable. Certain areas may contain clean dense soils while other areas may contain loose material, organic material, and/or debris. The existing fill creates the possibility of intolerable differential settlements under loading.

To eliminate the potential for damaging differential settlements, we recommend that the existing fill be completely removed from the new building areas. Based on the proposed grades and the available boring data, we expect that some of the existing fill will be removed during the initial excavation to the required subgrade elevation. Existing fill is expected to be encountered below the planned subgrade elevation in portions of the proposed building areas. Undercutting of the subgrade will be required in these areas to remove the existing fill from the building areas. The over-excavated areas shall then be replaced with new structural fill, as necessary, to achieve the planned subgrade elevations

We recommend that a series of supplemental test pits be performed at the time of construction to further evaluate the existing fill conditions in and around the planned building areas where the fill extends below the planned subgrade elevation. The test pits should be conducted under the full time observation of a Carlin-Simpson & Associates representative. These test pits will allow us to confirm the consistency and thickness of the existing fill as well as the horizontal limits of the existing fill material.

Provided that the existing fill and any other unsuitable materials encountered during construction are removed, it is our opinion that the new structural fill and virgin soils can adequately support the new building foundations and floor slabs.

Preparation of New Building Areas and Removal of Existing Fill

As discussed above, the proposed construction will consist of five (5) primary structures, which include a lower school building, a middle school and black box theater building, a high school building, a gymnasium building, and a performing arts center building. Site development will also include the construction of a campus greenhouse building and other various smaller structures for maintenance and operation of the athletic fields.

In order to prepare all of the building areas for construction, all surface materials such as asphalt, topsoil, concrete, and surface vegetation shall be removed from the planned building areas, extending at least ten (10) feet beyond the new construction limits, where feasible.

The boring data indicates that existing fill is present within portions the proposed building areas. Where encountered in the test borings, the existing fill extended to depths ranging from 1’0” to 7’6” below the existing ground surface. The existing fill observations are summarized in Table 1 above. The existing fill is expected to vary in thickness and may extend deeper in unexplored areas of the site.

After the surface materials are removed, the existing fill, where present, shall be excavated from the new building areas. The removal of the existing fill from the new building areas shall extend through the existing fill, down to the virgin soil. At the bottom of the excavation, the removal of the unsuitable material shall extend horizontally beyond the building lines a minimum distance of three (3) feet plus a distance equal to the depth of the excavation below the planned foundation bearing elevation. For example, if the removal of the existing fill extends vertically four (4) feet below the planned foundation bearing elevation, the excavation must extend horizontally a minimum of seven (7) feet (3 feet plus 4 feet) beyond the new building line at that location.

The removal of the existing fill from the planned building areas shall be performed under the full time observation of Carlin-Simpson & Associates. The on-site representative from Carlin-Simpson & Associates shall direct the Contractor during this operation to ensure that all of the unsuitable material has been removed from the proposed building areas.

During the removal of the unsuitable material from the building areas, the contractor should segregate the potentially re-usable existing fill material from the non-reusable fill (i.e. debris and topsoil). The on-site representative from Carlin-Simpson & Associates shall evaluate the suitability of the excavated materials for use as structural fill during the excavation and prior to its re-use. Potentially usable fill should be stockpiled and covered with tarps or plastic sheeting for protection from excess moisture. Any fill material that is wet must be dried prior to its re-use.

After the surface materials and existing fill have been removed and prior to the placement of new structural fill, the exposed subgrade must be graded level and proofrolled by several passes of a vibratory drum roller. The proofrolling operation is necessary to densify the underlying soils. Carlin-Simpson & Associates shall be retained to observe the proofrolling of the subgrade. If any soft or otherwise unsuitable soils are noted, the unsuitable material shall be removed and replaced with new structural fill. Carlin-Simpson & Associates shall be responsible for determining what material, if any, is to be removed and will direct the contractor during this operation.

New structural fill required to achieve final grades shall consist of either suitable on-site soil or imported sand and gravel. Imported fill shall contain less than 20% material by weight passing a No. 200 sieve. The structural fill shall be placed in layers not exceeding one (1) foot in loose thickness and each layer shall be compacted to at least 95% of its Maximum Modified Dry Density (ASTM D1557). Each layer must be compacted, tested, and approved prior to placing subsequent layers. The suitability of the excavated soil for reuse as structural fill is discussed in a following section of this report.

After the installation of structural fill has been completed to the required subgrade elevation, the virgin soil and new structural fill may be used to support the proposed building foundations and floor slabs.

Handling Groundwater and Wet Subgrades during Construction

Groundwater was observed in most of the borings and test pits that were performed at the site during our subsurface investigations. The depth to groundwater ranged between 0'6" and 7'0" below the existing ground surface. The groundwater observations are summarized in Table 1 above. Based on the boring and test pit observations and the proposed construction, groundwater may be encountered in areas during the removal of existing fill and/or in the site excavations.

If required, temporary groundwater control measures shall consist of one (1) or more sumps and pumps. The sump shall consist of a perforated pipe at least eight (8) inches in diameter, surrounded by crushed stone and filter fabric. The sump pits must be installed just outside the planned excavation area and at least two (2) feet below the lowest anticipated subgrade elevation. These sumps and pumps must be set and in operation prior to excavation. The pumps shall be used to temporarily lower the surrounding groundwater level and keep the building excavation relatively dry until crushed stone is placed. Electric pumps equipped with an automatic shut off and capable of operating 24 hours a day are recommended. Swales and ditches should be constructed to collect and direct the water seepage to the sump pits.

In the event that water has softened the subgrade soil, some type of remediation may be required. This determination will be made by Carlin-Simpson & Associates during the excavation process. The soft soil should be over-excavated a minimum of 12 inches and replaced with 3/4-inch clean crushed stone for stabilization. Carlin-Simpson & Associates will determine what material is to be removed and will direct the contractor during this operation. A layer of geotextile fabric (Mirafi 500X or equivalent) shall be placed between the soil subgrade and the crushed stone.

The excavation shall then be filled with 3/4-inch clean crushed stone until the crushed stone is above the water table. The crushed stone shall be placed in 12 inch layers and compacted by several passes of a small vibratory drum roller. After the crushed stone has been installed above the water table, soil fill may be used. A second layer of geotextile fabric (Mirafi 500X or equivalent) shall be placed between the crushed stone and soil fill to prevent the downward migration of soil into the stone.

New Building Foundations

According to the boring data, the foundation bearing materials will likely consist of medium dense to dense virgin soil and new structural fill. Foundations for the proposed structures may be designed as a shallow spread footing bearing on the virgin soil or new structural fill utilizing a net allowable bearing pressure of 4,000 psf (2.0 TSF).

Exterior footings shall bear at a depth of at least 42 inches below finished outside grade for protection from frost. Interior column footings may bear on the virgin soil or new structural fill just below the floor slab provided the building is heated during winter. Column footings shall have a minimum dimension of 30 inches. The wall footings shall have a minimum width of 18 inches.

Prior to the placement of formwork, reinforcement steel, and concrete, the bearing subgrade shall be cleaned of all loose soil and compacted with several passes of a small vibratory drum trench compactor (i.e. Wacker Model RT560), a heavy vibratory plate tamper (i.e. Wacker BPU 3545A or equivalent), or "jumping jack" style tamper (i.e. Wacker Model BS 600). This must be performed under the inspection of a representative from Carlin-Simpson & Associates. If instability is observed during the compaction of the bearing subgrade, the soft soil shall be removed and replaced with new compacted fill.

New Foundation Adjacent to Existing Footings

We understand that a portion of the existing building will remain as part of the new development. Where the new building will be constructed immediately adjacent to the existing structure, the new footing shall bear at the same elevation as the existing footings. This is required to ensure that the new construction does not undermine the existing foundations and to ensure that the new footings do not bear on fill placed around the existing foundation.

During this investigation, two (2) test pits were excavated at the existing structure to determine the existing foundation conditions. The test pit locations and sketches showing the test pit observations are attached as Figure 2.

Floor Slabs and Underdrains

After the footings and foundation walls are installed, fill will be required to backfill the excavations and to raise grades in the building area to the slab subgrade elevation. New fill for the floor slab shall consist of either suitable on-site soil or imported sand and gravel containing less than 20% material by weight passing a No. 200 sieve. The fill shall be placed in layers not exceeding one (1) foot in loose thickness and each layer shall be compacted to at least 92% of its Maximum Modified Dry Density (ASTM D1557). Fill layers shall be compacted, tested, and approved before placing subsequent layers.

The floor may be designed as a slab on grade, bearing on new structural fill or virgin soil. We recommend a Modulus of Subgrade Reaction (k) of 200 pounds per cubic inch (pci) be used for design. For lower level floor slabs, an eight (8) inch layer of dense graded aggregate (DGA) is recommended beneath the concrete slab for additional support and drainage. For first floor slabs, a four (4) inch layer of DGA is recommended beneath the concrete slab for additional support. A vapor barrier shall also be installed below the floor slabs.

A sub-slab drainage system is recommended beneath the lower level floor slab for the high school building and the gymnasium building. The system must be designed to collect the water from beneath the floor slab and transfer it into the stormwater collection system or daylight it outside of the building.

The drainpipes for the underdrain system shall consist of four (4) inch diameter rigid wall perforated PVC or HDPE pipes placed directly on the subgrade surface and

backfilled with clean ¾-inch crushed stone gravel. The drainpipe and crushed stone shall be wrapped in a geotextile filter fabric (Mirafi 140N or equivalent) to prevent soil from clogging the pipes and stone. The edges of the filter fabric shall be folded on top of the stone fill. The subgrade should be graded ("pitched") towards the underdrain pipes.

The basement walls shall also be waterproofed and a perimeter foundation drain, as described in a following section of this report, must be provided around the outside perimeter of the basement walls. Water stops shall also be provided.

It is our understanding that the water collected in the underdrain system shall be piped outside the building into the stormwater collection system. Therefore, sump pits and pumps are not required in this case. Provisions for sump pits and pumps are recommended for any below grade (basement) levels where an underdrain system is not installed and/or the water from an underdrain system cannot be directly connected to the stormwater collection system.

Settlement

Settlement of individual footings, designed in accordance with recommendations presented in this report, is expected to be within tolerable limits for the proposed structure. For footings placed on natural soils or new compacted fill approved by Carlin-Simpson & Associates and constructed in accordance with the requirements outlined in this report, maximum total settlement is expected to be on the order of one-half (1/2) inch or less. Maximum differential settlement between adjacent columns or load bearing walls is expected to be half the total settlement.

The above settlement values are based on our engineering experience with similar soil conditions and the anticipated structural loading, and are to guide the Structural Engineer with his design. To minimize difficulties during the foundation installation phase, it is critical that Carlin-Simpson & Associates be retained to observe the foundation bearing surfaces and to confirm the recommended bearing pressures and that the existing fill, topsoil, and unsuitable materials have been removed from beneath the new foundations.

Foundation Walls

Where foundation walls are required, the soil adjacent to the building walls will exert a horizontal pressure against the wall. This pressure is based on the soil density and Coefficient of Earth Pressure at Rest (k_o), which is applicable to non-yielding building walls. We estimate that the backfill material will have an in-place (moist) density of about 130 pcf and a k_o of 0.5. Based on these properties, the soil will produce an Equivalent Fluid Pressure of 65 psf/ft against the building walls.

For sliding, the coefficient of friction between concrete and the virgin site soils or new structural fill is 0.45. Where passive lateral earth pressure is to be included in the design of the wall, a design value of 195 psf/ft may be used. This is based on a Coefficient

of Passive Earth Pressure (k_p) of 3.0, an in-place soil backfill density of 130 pcf, and a factor of safety of 2.0.

Where foundation walls are required, we recommend that a footing drain be placed around the exterior of the new structure to prevent water from accumulating against the foundation wall. The footing drain may be installed on top of the new footing or immediately adjacent to the new footing. This drain may consist of a minimum four (4) inch diameter, rigid wall perforated PVC pipe surrounded by at least 12 inches of 3/4-inch clean crushed stone. The stone shall be wrapped in a geotextile fabric, Mirafi 140N or equivalent. The foundation drainpipe should be extended to daylight or to the stormwater collection system. The outside face of the foundation wall, where it extends below grade, must be damp proofed or waterproofed.

Outside the structure, the backfill placed adjacent to the foundation walls and above the footing drain shall consist of either clean crushed stone or an imported sand and gravel mixture containing less than 10% by weight passing a No. 200 sieve and placed in layers not exceeding one (1) foot in thickness. This clean sand and gravel or crushed stone backfill shall extend a minimum of one (1) foot horizontally from the back face of the foundation walls, and shall extend vertically up the wall face to two (2) feet below the finished ground surface elevation. Where retained soils are not covered by concrete or pavement and are exposed to weather, the top two (2) feet of backfill should consist of low permeable soil. This will help to minimize water infiltration behind the wall. Surface grades should be sloped away from the building to prevent water from accumulating adjacent to the wall.

Beyond this point, the foundation walls should be backfilled with suitable soil placed in layers up to one (1) foot in thickness. The new fill should be compacted with a vibratory drum trench compactor (i.e. Wacker Model RT560), a heavy vibratory plate tamper (i.e. Wacker BPU 3545A or equivalent), or “jumping jack” style tamper (i.e. Wacker Model BS 600) to at least 92% of its Maximum Modified Dry Density (ASTM D1557). Heavy equipment should not be operated near the wall as damage to the wall could occur.

Seismic Design Considerations

From site-specific test boring data, the Site Class was determined from Table 1613.5.2 of the New York State Building Code. The site-specific data used to determine the Site Class typically includes soil test borings to determine Standard Penetration resistances (N-values). Based on estimated average N-values in the upper 100 feet of soil profile, the site can be classified as Site Class D – Stiff Soil Profile.

New structures should be designed to resist stress produced by lateral forces computed in accordance with Section 1613 of the New York State Building Code. The values in Table 2 shall be used for this project.

Table 2 – Seismic Design Values

Mapped Spectral Response Acceleration for Short Periods, [Fig 1613.5 (1)]	S_S=0.28g
Mapped Spectral Response Acceleration at 1-Second Period, [Fig 1613.5 (2)]	S_1=0.06g
Site Coefficient [Table 1613.5.3 (1)]	F_a=1.576
Site Coefficient [Table 1613.5.3 (2)]	F_v=2.40
Max Considered Earthquake Spectral Response for Short Periods [Eq 16-37]	S_{MS}=0.441g
Max Considered Earthquake Spectral Response at 1-Second Period [Eq 16-38]	S_{M1}=0.144g
Design Spectral Response Acceleration for Short Periods [Eq 16-39]	S_{DS}=0.294g
Design Spectral Response Acceleration for 1-Second Period [Eq 16-40]	S_{D1}=0.096g

Site Retaining Walls

We understand that a few site retaining walls will be required as part of the proposed development. The top of wall and bottom of wall elevations were not known at the time of this report but based on the provided grading plan, the walls will vary from approximately 4’0” to 12’0” in height. The site retaining walls may be designed as either cast-in-place steel reinforced concrete walls or geogrid reinforced modular block (MSE) walls. The following recommendations are preliminary in nature based on the boring and test pit data from other areas of the project site during this investigation.

In the event that existing fill materials are present within the proposed wall areas, these materials must be completely removed from the limits of new wall construction. The removal of the topsoil or other unsuitable fill materials shall extend horizontally a minimum distance of five (5) feet beyond the front face of the new wall or extend horizontally a minimum distance equivalent to the vertical depth of the required excavation below the proposed wall base or foundation bearing elevation, whichever is greater. This is required to ensure that all unsuitable material has been removed from beneath the wall base or foundation zone of influence, which shall be defined by an imaginary plane projecting downward and away from the front edge of the wall base or foundation on a one horizontal to one vertical (1H:1V) projection.

The foundations for the new retaining wall may be placed on the virgin soil, weathered bedrock, or on new compacted fill approved by Carlin-Simpson & Associates. New compacted fill shall consist of either suitable on-site soil or imported sand and gravel. Imported fill shall contain less than 20% by weight passing the No. 200 sieve. The fill shall be placed in one (1) foot thick loose layers and compacted to at least 95% of its Maximum Modified Dry Density. The footings or base of the wall can be designed using a net design bearing pressure of 4,000 psf (2.0 TSF).

For MSE walls, the wall base or foundation must be adequately embedded for internal and global stability. The embedment depth will be determined by the Wall Design Engineer. For reinforced concrete walls, the footing or base of the wall shall bear at least 42 inches below finished grade of the outside face of the wall for protection from frost.

Drains must be provided behind the retaining walls to prevent the buildup of hydrostatic pressure against the walls. The drain should consist of a 4-inch diameter

perforated PVC pipe, surrounded with 3/4-inch clean crushed stone and wrapped in a geotextile fabric, Mirafi 140N or equivalent. The drain should be installed behind the base or foundation of the retaining wall to collect the water behind the wall and be connected into the site stormwater collection system or extended to daylight beyond the wall area.

Backfill placed directly behind the retaining walls shall consist of either suitable on-site soil or imported sand and gravel containing less than 20% by weight passing a No. 200 sieve. Each layer shall be compacted using a hand guided mechanical tamper to 92% of its Maximum Modified Dry Density (ASTM D1557). Excessive compaction adjacent to the retaining walls must be avoided. Layers shall be tested and approved before placing subsequent layers. Large compaction equipment must not be used within ten (10) feet of the new walls to prevent potential damage to the walls.

The soil adjacent to the site retaining walls will exert a horizontal pressure against the walls. This pressure is based on the soil density and the Coefficient of Active Earth Pressure (k_a). We estimate that the backfill material will have an in-place (moist) density of about 130 pcf and an angle of internal friction (ϕ) of 30°. For design, soil cohesion is assumed to be zero for the foundation soil, retained soil, and reinforced backfill. The active earth pressure coefficient (k_a) is 0.33 provided the grade behind the wall is level. Based on these properties, the retained soil will produce an Equivalent Fluid Pressure of 42.9 pcf against the retaining walls. If a sloping grade exists behind the new walls, the k_a and the Equivalent Fluid Pressure must be adjusted accordingly. In addition, any surcharge loads from structures, vehicles, and/or construction equipment must be considered in the wall design.

For sliding, the friction coefficient between mass concrete and the virgin site soils or new compacted fill is 0.45. Where passive lateral earth pressure is to be included in the design of the wall, a maximum design value of 195 psf/ft may be used. This is based on a Coefficient of Passive Earth Pressure (k_p) of 3.0, an in-place soil backfill density of 130 pcf, and a factor of safety of 2.0.

The Wall Design Engineer shall prepare a complete wall design (i.e. drawings, specifications, and calculations), which shall be designed and sealed by a Professional Engineer registered in the State of New York and submitted to Carlin-Simpson & Associates for review and approval. MSE retaining walls shall be designed in accordance with the recommendations of the NCMA Design Manual for Segmental Retaining Walls (Current Edition).

The MSE wall design shall consider the internal stability of the reinforced soil mass and shall be in completed accordance with acceptable engineering practice. In addition, external stability, including sliding, overturning, and bearing, as well as global slope stability shall be evaluated in accordance with acceptable engineering practice.

The MSE Wall Designer Engineer shall be responsible for determining the required geogrid reinforcement lengths and elevations based on his stability analysis (including global stability) and the properties of the geogrid reinforcement used in the design. We

anticipate that in the critical areas of the wall, global stability will be the controlling design criteria for the design of the geogrid reinforcement.

Stormwater Management System

We understand that the planned development will include multiple stormwater management areas, which include four (4) stormwater basins and one (1) subsurface infiltration system. The locations of the proposed systems are shown on the attached Boring and Test Pit Location Plan.

According to the grading plan, the southern stormwater management basin has an invert elevation of +256.0 and the central stormwater management basin has an invert elevation of +269.0. The planned invert elevation for the subsurface infiltration system is elevation +277.5. The two northern stormwater management basins both have a planned bottom at approximately elevation +262.0. We understand that the stormwater basins are not designed for water infiltration but that the subsurface infiltration system will be designed to allow for water infiltration.

During this study, borings and/or test pits were performed within each of the anticipated stormwater management areas at the locations shown on the attached Boring and Test Pit Location Plan. The test locations were provided by the project Site Engineer. The boring and test pit data for the planned stormwater management areas is summarized in Table 3 below.

Table 3 – Summary of Field Data – Stormwater Areas

Boring or Test Pit No.	Approximate Ground Surface Elevation (Feet)	Proposed Stormwater Area	Observed Depth to Groundwater (Elevation)	Depth to Probable Bedrock (Elevation)
BC-1	+263.5	South Basin	3’7” (+259.9)	NE to 4’0”
BC-2	+269.0	South Basin	4’6” (+264.5)	NE to 5’0”
BC-6	+280.0	Subsurface	NE to 7’0”	NE to 7’0”
BC-7	+279.0	Subsurface	NE to 7’0”	NE to 7’0”
TP-101	+280.0	Unknown	4’4” (+275.7)	NE to 8’6”
TP-102	+277.0	Unknown	5’0” (+272.0)	NE to 8‘6”
TP-103	+276.0	Central Basin	5’3” (+270.7)	NE to 7’6”
TP-104	+272.0	Central Basin	4’6” (+267.5)	NE to 6’3”
TP-105	+280.0	Subsurface	6’0” (+274.0)	7’6” (+272.5)
TP-106	+278.5	Subsurface	7’0” (+271.5)	NE to 8’10”
TP-107	+266.5	Northeast Basin	4’4” (+262.2)	NE to 6’0”
TP-108	+267.0	Northeast Basin	3’8” (+263.3)	NE to 5’0”
TP-110	+264.5	Northwest Basin	4’0” (+260.5)	NE to 5’0”
TP-119	+280.0	Subsurface	6’6” (+273.5)	NE to 7’6”

NE – Not Encountered

In April 2014, permeability tests were performed within the area of the proposed subsurface infiltration system. Two (2) percolation tests were performed at test pits TP-105 and TP-106. The infiltration rates at the test locations are summarized in Table 4 below.

Table 4 – Field Permeability Test Results

Test Location	Permeability Test Depth (Elevation)	Permeability Rate	Soil Description
TP-105	3'10" (+276.2)	20 in/hour	Brown coarse to fine Sand, little Silt, some coarse to fine Gravel, w/cobbles
TP-106	3'5" (+275.1)	16 in/hour	Gray brown coarse to fine SAND, some (-) Silt, trace (-) coarse to fine Gravel, with cobbles

Based on the field tests, the virgin Silty Sand or Silty Sand with Gravel in the area of the proposed infiltration system has a permeability rate that ranges from 16 to 20 inches per hour. For design, a permeability rate of 8 inches per hour should be used for this system, which includes a factor of safety of 2.0.

Should stormwater management areas be planned in other portions of the site, they should be evaluated on a case-by-case basis. The stormwater management systems must be designed in accordance with the applicable New York State Department of Environmental Conservation (NYSDEC) regulations and the New York State Stormwater Management Design Manual (August 2010). The testing requirements are outlined in Appendix D of the manual.

Pavement

We understand that the proposed construction will also include new asphalt paved driveways and parking areas. To prepare the new pavement areas, the existing surface materials (i.e. topsoil, vegetation, debris, etc.) must be removed from the planned pavement areas.

After all surface materials have been removed; the exposed subgrade that is either at or below the planned subgrade elevation shall be proofrolled with a large vibratory drum roller (i.e. Dynapac 250 or equivalent) to densify the underlying soils. The on-site representative from Carlin-Simpson & Associates shall witness the proofrolling operation. If any excessive movement is noted during the proofrolling, the soft or unsuitable soil shall be removed and replaced with new compacted fill.

Areas where existing fill is encountered shall be compacted in place. Carlin-Simpson & Associates must evaluate these areas for the presence of soft or unsuitable material within the existing fill matrix. Portions of this fill may have to be removed and replaced with new compacted fill. Carlin-Simpson & Associates will determine this during construction.

Where new fill is required to achieve final grades, it shall consist of either suitable on-site soil or imported sand and gravel. Imported sand and gravel shall contain less than 20% by weight passing a No. 200 sieve. New fill shall be placed in layers not exceeding one (1) foot in loose thickness and each layer shall be compacted to at least 92% of its Maximum Modified Dry Density (ASTM D1557). After the planned subgrade has been proofrolled and new compacted fill has been placed as required, the new pavement subbase may be placed on the existing site soils and new compacted fill.

The new pavement subbase may be placed on engineer-approved densified existing fill, virgin soil, or new compacted fill. A minimum of six (6) inches of dense graded aggregate (DGA) is recommended for the subbase layer for drainage and additional pavement support. We recommend that the following pavement sections be used for the parking lots and driveways. These pavement sections are subject to local government approval.

Light Duty Pavement Section

2	Asphalt Wearing Surface Course	NYSDOT, Type 6F
2”	Asphalt Base Course	NYSDOT, Type 3
6”	Stone Subbase (DGA)	NYSDOT, Type 4
	Approved Compacted Subgrade (Minimum CBR = 10)	

Medium Duty Pavement Section

2	Asphalt Wearing Surface Course	NYSDOT, Type 6F
4	Asphalt Base Course	NYSDOT, Type 3
8”	Stone Subbase (DGA)	NYSDOT, Type 4
	Approved Compacted Subgrade (Minimum CBR = 10)	

Based on the boring and test pit data, we anticipate that the existing site soils and new compacted fill will provide a CBR value that is equal to or greater than 10, which can adequately support the above pavement sections.

Utilities

New utilities may bear in the existing site soils or new compacted fill. The bottom of all trenches should be excavated clean so a hard bottom is provided for the pipe support. If any soft areas or unsuitable existing fill conditions are encountered during construction, these materials must be removed and replaced with new compacted fill. The excavated material may be used as backfill provided that it meets the requirements outlined below. The new compacted fill should be placed in layers not exceeding one (1) foot in loose thickness and each layer shall be compacted to at least 92% of its Maximum Modified Dry Density (ASTM D1557). The backfill must be free of all topsoil and debris.

In the event that water seepage is encountered in the utility trench excavations, the excavation should be extended six (6) inches below the bottom of the pipe and a six (6)

inch layer of 3/4-inch crushed stone shall be placed on the bearing soil to provide a firm base for support of the pipe. Sump pits and pumps should be used to remove the water from the excavation.

Temporary construction excavations shall be conducted in accordance with the most recent OSHA guidelines or applicable federal, state, or local codes. In our opinion, the on-site soils would be considered either a Type "B" or Type "C" soil as defined by OSHA regulations. A qualified person should evaluate the excavations at the time of construction to determine the appropriate soil type and allowable slope configuration. Temporary support (i.e. sheeting and shoring) should be used for any excavations that encounter groundwater seepage or cannot be sloped in accordance with the applicable regulations.

Suitability of the In-Situ Soils for Use as Compacted Fill

The suitability of each soil stratum for use as compacted fill is discussed below.

Stratum 1A Topsoil	Topsoil is not suitable for use as compacted fill. During construction, it may be stockpiled on site for later use in the landscaped areas or removed from the site.
Stratum 1B Asphalt	Asphalt is not suitable for use as compacted fill. During construction, it should be removed from the site.
Stratum 2 Existing Fill	The existing fill that was encountered at the site generally consists of brown Sand with varying amounts of Silt and Gravel. The existing fill may be suitable for use as compacted fill at the site provided that it remains relatively dry for optimum compaction and that any debris and organic material (i.e. topsoil, roots, etc.) have been removed prior to its reuse.
Stratum 3 Silty Sand or Silty Sand with Gravel	The virgin site soils that will be excavated from the cut areas generally consist of Silty Sand or Silty Sand with Gravel and cobbles and boulders. This material is generally suitable for use as compacted fill, provided that it remains relatively dry for optimum compaction.

Proper moisture conditioning of the soil will be required. In the event that the on-site material is too wet at the time of placement and cannot be adequately compacted, the soil should be aerated and allowed to dry or the material removed and a drier cleaner fill material used. In the event that the on-site material is too dry at the time of placement and cannot be adequately compacted, water may be needed to increase the soil moisture content for proper compaction.

The in-situ soils which exist throughout the site may become soft and weave if exposed to excessive moisture and construction traffic. The instability will occur quickly when exposed to these elements and it will be difficult to stabilize the subgrade. We recommend that adequate site drainage be implemented early in the construction schedule

and if the subgrade becomes wet, the Contractor should limit construction activity until the soil has dried.

GENERAL

The findings, conclusions and recommendations presented in this report represent our professional opinions concerning subsurface conditions at the site. The opinions presented are relative to the dates of our site work and should not be relied on to represent conditions at later dates or at locations not explored. The opinions included herein are based on information provided to us, the data obtained at specific locations during the study and our past experience. If additional information becomes available that might impact our geotechnical opinions, it will be necessary for Carlin-Simpson & Associates to review the information, reassess the potential concerns, and re-evaluate our conclusions and recommendations.

Regardless of the thoroughness of a geotechnical exploration, there is the possibility that conditions between borings and test pits will differ from those encountered at specific boring or test pit locations, that conditions are not as anticipated by the designers and/or the contractors, or that either natural events or the construction process have altered the subsurface conditions. These variations are an inherent risk associated with subsurface conditions in this region and the approximate methods used to obtain the data. These variations may not be apparent until construction. Additional subsurface exploration may be required at the time of construction to further evaluate the subsurface conditions at specific locations.

The professional opinions presented in this geotechnical report are not final. Field observations and foundation installation monitoring by the geotechnical engineer, as well as soil density testing and other quality assurance functions associated with site earthwork and foundation construction, are an extension of this report. Therefore, Carlin-Simpson & Associates should be retained by the owner to observe all earthwork and foundation construction, to document that the conditions anticipated in this study actually exist, and to finalize or amend our conclusions and recommendations Carlin-Simpson & Associates is not responsible or liable for the conclusions and recommendations presented in this report if Carlin-Simpson & Associates does not perform these observation and testing services.

Therefore, in order to preserve continuity in this project, the owner must retain the services of Carlin-Simpson & Associates to provide full time geotechnical related monitoring and testing during construction. At a minimum, this shall include the observation and testing of the following: 1) the removal of existing fill and unsuitable soil, where required; 2) the proofrolling of the subgrade soil prior to the placement of new compacted fill; 3) the placement and compaction of controlled fill; 4) the excavation for the building and retaining wall foundations; and 5) the preparation of the subgrade for the floor slabs and pavement areas.

This report has been prepared in accordance with generally accepted geotechnical engineering practice. No other warranty is expressed or implied. The evaluations and recommendations presented in this report are based on the available project information, as

well as on the results of the exploration. Carlin-Simpson & Associates should be given the opportunity to review the final drawings and site plans for this project to determine if changes to the recommendations outlined in this report are needed. Should the nature of the project change, these recommendations should be reevaluated.

This report is provided for the exclusive use of French American School New York and the project specific design team and may not be used or relied upon in connection with other projects or by other third parties. Carlin-Simpson & Associates disclaims liability for any such third party use or reliance without express written permission. Use of this report or the findings, conclusions or recommendations by others will be at the sole risk of the user. Carlin-Simpson & Associates is not responsible or liable for the interpretation by others of the data in this report, nor their conclusions, recommendations or opinions.

If the conditions encountered during construction vary significantly from those stated in this report, this office should be notified immediately so that additional recommendations can be made.

Thank you for allowing us to assist you with this project. Should you have any questions or comments, please contact this office.

Very truly yours,

CARLIN-SIMPSON & ASSOCIATES

M. Anke

MEREDITH R. ANKE, P.E.
Project Engineer

Robert Simpson

ROBERT B. SIMPSON, P.E.

File No. 10-146

CARLIN - SIMPSON & ASSOCIATES Sayreville, NJ	TEST BORING LOG	BORING NUMBER B-1

Project:	**French American School of New York, White Plains, NY**	**SHEET NO.:**	1 of 1
Client:	**French American School of New York**	**JOB NUMBER:**	10-146
Drilling Contractor:	**General Borings, Inc.**	**ELEVATION:**	+264.0
GROUNDWATER		**DATUM:**	

DATE	TIME	DEPTH	CASING	TYPE	CASING	SAMPLE	CORE	TUBE		
					HSA	SS			**START DATE:**	3 Jan 11
3 Jan 11	**1155**	**6'0"**	**Auger**	**DIA.**	**3 1/4"**	**1 3/8"**			**FINISH DATE:**	3 Jan 11
				WGHT		**140#**			**DRILLER:**	JIM
				FALL		**30"**			**INSPECTOR:**	EJS

Depth (ft.)	Casing Blows per Foot	Sample Number	Blows on Sample Spoon per 6"	Sym	IDENTIFICATION		REMARKS
			3		**Brown Sandy Topsoil**	0'6"	
1		**S-1**	5		FILL (Br cf S, s $, s cf G)		
			14		**FILL (Brown coarse to fine SAND,**		Rec = 15"
2			15		**some Silt, some coarse to fine Gravel)**		moist
			16		same	2'6"	
3		**S-2**	28		Br gr cf S, l (+) $, s (+) cf G		
			35				Rec = 15"
4			25				moist
					Brown gray coarse to fine SAND,		
5					**little (+) Silt, some (+) coarse to fine**		
			10		**Gravel**		
6		**S-3**	26				Rec = 12"
			29				moist - wet
7			50		same		
8						8'0"	Very dense material at
							8'-10', moved 10'
9					**Highly Weathered Schist**		south, redrilled to 10'
10						10'0"	
					End of Boring @ 10'0"		Auger Refusal at
11							10' on probable bedrock
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

CARLIN - SIMPSON & ASSOCIATES Sayreville, NJ	TEST BORING LOG	BORING NUMBER B-2

Project:	**French American School of New York, White Plains, NY**	**SHEET NO.:**	1 of 1
Client:	**French American School of New York**	**JOB NUMBER:**	10-146
Drilling Contractor:	**General Borings, Inc.**	**ELEVATION:**	+277.0
DATUM:			
START DATE:	3 Jan 11		
FINISH DATE:	3 Jan 11		
DRILLER:	JIM		
INSPECTOR:	EJS		

GROUNDWATER					CASING	SAMPLE	CORE	TUBE
DATE	**TIME**	**DEPTH**	**CASING**	**TYPE**	**HSA**	**SS**		
3 Jan 11	**1030**	**7'0"**	**Auger**	**DIA.**	**3 1/4"**	**2"**		
				WGHT		**140#**		
				FALL		**30"**		

Depth (ft.)	Casing Blows per Foot	Sample Number	Blows on Sample Spoon per 6"	Sym	IDENTIFICATION	REMARKS
			6		**Brown Sandy Topsoil** 0'6"	
1		**S-1**	6		FILL (Br cf S, s $, l cf G)	Rec = 12"
			8		**FILL (Brown coarse to fine SAND,**	moist
2			29		**some Silt, little coarse to fine Gravel)** 2'0"	
			28		Br gr cf S, s (-) $, l cf G	
3		**S-2**	38			Rec = 15"
			48			moist
4			46			
5						
			9			
6		**S-3**	7		same, l mf G	Rec = 19"
			10		**Brown gray coarse to fine SAND,**	moist - wet
7			11		**some (-) Silt, little coarse to fine**	
			8		**Gravel**	
8		**S-4**	7		same	Rec = 17"
			13			wet
9			10			
10						
			24			
11		**S-5**	57		same	Rec = 12"
						wet
12					12'0"	
13						
14						
15						
			60		Gr br cf S, l $, a (-) mf G	
16		**S-6**	61			Rec = 10"
			63			wet
17						
					Gray brown coarse to fine SAND,	
18					**little Silt, and (-) coarse to fine**	
					Gravel	
19						
20						
		S-7	60/6"		same, a (-) cf G 20'6"	Rec = 3"
21					**End of Boring @ 20'6"**	wet
22						

CARLIN - SIMPSON & ASSOCIATES Sayreville, NJ	TEST BORING LOG	BORING NUMBER B-3

Project:	**French American School of New York, White Plains, NY**	**SHEET NO.:**	1 of 1
Client:	**French American School of New York**	**JOB NUMBER:**	10-146
Drilling Contractor:	**General Borings, Inc.**	**ELEVATION:**	+305.0
GROUNDWATER		**DATUM:**	

DATE	TIME	DEPTH	CASING	TYPE	CASING	SAMPLE	CORE	TUBE		
					HSA	SS			START DATE:	3 Jan 11
3 Jan 11	1415	5'6"	Auger	DIA.	3 1/4"	2"			FINISH DATE:	3 Jan 11
				WGHT		140#			DRILLER:	JIM
				FALL		30"			INSPECTOR:	EJS

Depth (ft.)	Casing Blows per Foot	Sample Number	Blows on Sample Spoon per 6"	Sym	IDENTIFICATION	REMARKS
			5		**Brown Sandy Topsoil** 0'5"	
1		S-1	4		Br gr cf S, a (-) $, l cf G	Rec = 17"
			6		**Brown gray coarse to fine SAND,**	moist
2			10		**and (-) Silt, little coarse to fine Gravel** 2'0"	
			20		Br $ a (+), cf S, t mf G	
3		S-2	25		**Brown SILT and (+), coarse to fine**	Rec = 19"
			27		**Sand, trace medium to fine Gravel**	moist
4			30		4'0"	
5						
			13		Br gr cf S, s (+) $, l (+) cf G	
6		S-3	14			Rec = 19"
			19		**Brown gray coarse to fine SAND,**	moist
7			20		**some (+) Silt, little (+) coarse to fine**	
			7		**Gravel**	
8		S-4	5		same, s (-) cf G	Rec = 12"
			6			moist - wet
9			5			perched water @ 8'6"
					9'6"	
10						
			19			
11		S-5	34		Br gr cf S, s $, l (+) cf G, w/cobbles	Rec = 10"
			40			very moist
12			35			
13					**Brown gray coarse to fine SAND,**	
					some Silt, little (+) coarse to fine	
14					**Gravel, with cobbles**	
15						
			54			
16		S-6	50/6"		same	Rec = 12"
						moist
17						hard till
						15'-20'
18						
19						
20						
		S-7	50/6"		same 20'6"	Rec = 3"
21					**End of Boring @ 20'6"**	moist
22						

CARLIN - SIMPSON & ASSOCIATES Sayreville, NJ	TEST BORING LOG	BORING NUMBER B-4

Project:	**French American School of New York, White Plains, NY**	**SHEET NO.:**	1 of 1
Client:	**French American School of New York**	**JOB NUMBER:**	10-146
Drilling Contractor:	**General Borings, Inc.**	**ELEVATION:**	+288.0

GROUNDWATER					CASING	SAMPLE	CORE	TUBE	DATUM:	
DATE	TIME	DEPTH	CASING	TYPE	HSA	SS			START DATE:	3 Jan 11
3 Jan 11	1530	10'0"	Auger	DIA.	3 1/4"	1 3/8"			FINISH DATE:	3 Jan 11
				WGHT		140#			DRILLER:	JIM
				FALL		30"			INSPECTOR:	EJS

Depth (ft.)	Casing Blows per Foot	Sample Number	Blows on Sample Spoon per 6"	Sym	IDENTIFICATION	REMARKS
			3		**Brown Silty Topsoil** 0'7"	
1		S-1	4		FILL (Br gr cf S, a (+) $, l (+) cf G)	Rec = 18"
			6			moist
2			9		**FILL (Brown gray coarse to fine SAND, and (+) Silt, little (+) coarse to fine Gravel)**	
			13			
3		S-2	9		same 3'0"	Rec = 19"
			7		Br cf S, s $, s cf G	very moist - wet
4			4			perched water @ 3'0"
5						
			5			
6		S-3	14		same	Rec = 17"
			12		**Brown coarse to fine SAND, some Silt, some coarse to fine Gravel**	moist
7			13			
			8			
8		S-4	19		same	Rec = 18"
			22			very moist
9			25			
10					10'0"	
			11			
11		S-5	19		Br gr cf S, a (-) $, l f G	Rec = 17"
			31			moist - wet
12			50/3"		same, w/cobbles	
13						
14					**Brown gray coarse to fine SAND, and (-) Silt, little coarse to fine Gravel, with cobbles**	
15						
			45			
16		S-6	75/4"		same, l cf G	Rec = 8"
						moist
17					17'0"	
18					**End of Boring @ 17'0"**	Auger Refusal 17'
19						
20						
21						
22						

CARLIN - SIMPSON & ASSOCIATES Sayreville, NJ	TEST BORING LOG	BORING NUMBER B-101

Project:	**Proposed French American School New York, White Plains, NY**	**SHEET NO.:**	1 of 1
Client:	**French American School New York**	**JOB NUMBER:**	10-146
Drilling Contractor:	**General Borings, Inc.**	**ELEVATION:**	+281.0
GROUNDWATER		**DATUM:**	

DATE	TIME	DEPTH	CASING	TYPE	CASING	SAMPLE	CORE	TUBE	START DATE:	11 Apr 14
11 Apr 14	1000	2'2"	HSA	DIA.	3 1/4"	1 3/8"			FINISH DATE:	11 Apr 14
				WGHT		140#			DRILLER:	J. Wyant
				FALL		30"			INSPECTOR:	KWA

Depth (ft.)	Casing Blows per Foot	Sample No.	Blows on Sample Spoon per 6"	Sym	IDENTIFICATION	REMARKS
			2		**Topsoil** 0'3"	
1		S-1	2		FILL (Br cf S, a (-) $, l (+) cf G)	Rec = 18"
			2		**FILL (Brown coarse to fine SAND,**	moist
2			9		**and (-) Silt, little (+) medium to fine**	
			8		**Gravel)** 2'6"	
3		S-2	10		Br cf S, s (+) $, t (+) mf G	Rec = 17"
			9			moist
4			11			
5						
			6		same	
6		S-3	7		**Brown coarse to fine SAND, some (+)**	Rec = 15"
			9		**Silt, trace (+) medium to fine Gravel**	moist
7			13			
			15		same	
8		S-4	14			Rec = 14"
			12			moist
9			9			
10						
			9		same	
11		S-5	14			Rec =4"
			12		11'6"	wet
12			31			
13						
					Gray brown coarse to fine SAND,	
14					**some Silt**	
15						
			21		Gr br cf S, s $	
16		S-6	62			Rec = 12"
			70/3"			wet
17					17'6"	
					End of Boring @ 17'6"	Auger refusal @ 17'6"
18						
19						
20						
21						
22						

CARLIN - SIMPSON & ASSOCIATES Sayreville, NJ	TEST BORING LOG	BORING NUMBER B-102

Project:	**Proposed French American School New York, White Plains, NY**	**SHEET NO.:**	1 of 1
Client:	**French American School New York**	**JOB NUMBER:**	10-146
Drilling Contractor:	**General Borings, Inc.**	**ELEVATION:**	+283.0
GROUNDWATER		**DATUM:**	

DATE	TIME	DEPTH	CASING	TYPE	CASING	SAMPLE	CORE	TUBE		
									START DATE:	11 Apr 14
11 Apr 14	**1130**	**3'6"**		**DIA.**	**3 1/4"**	**1 3/8"**			**FINISH DATE:**	11 Apr 14
				WGHT		**140#**			**DRILLER:**	J. Wyant
				FALL		**30"**			**INSPECTOR:**	KWA

Depth (ft.)	Casing Blows per Foot	Sample No.	Blows on Sample Spoon per 6"	Sym	IDENTIFICATION	REMARKS
			1		**Topsoil** 0'5"	
1		**S-1**	2		Br cf S, s (+) $, t f G	Rec = 17"
			3			moist
2			5			
			3		same	
3		**S-2**	3			Rec = 18"
			3			moist-wet
4			4			
5						
			3		same, a (-) $, t (+) mf G	
6		**S-3**	5			Rec = 20"
			7		**Brown coarse to fine SAND, some (+)**	wet
7			8		**Silt, trace medium to fine Gravel**	
			5		same	
8		**S-4**	7			Rec = 18"
			6			wet
9			7			
10						
			6		same, s $	
11		**S-5**	8			Rec = 17"
			14			wet
12			22			
13					13'0	
14					**Gray Schist, completely weathered**	
15						
			50/4"		Gr Schist (completely weathered)	
16		**S-6**			16'0"	Rec = 4"
					End of Boring @ 16'0"	wet
17						Auger refusal @ 16'0"
18						
19						
20						
21						
22						

CARLIN - SIMPSON & ASSOCIATES Sayreville, NJ	TEST BORING LOG	BORING NUMBER B-103

Project:	Proposed French American School New York, White Plains, NY	**SHEET NO.:**	1 of 1
Client:	French American School New York	**JOB NUMBER:**	10-146
Drilling Contractor:	General Borings, Inc.	**ELEVATION:**	+288.0
GROUNDWATER		**DATUM:**	
START DATE:	11 Apr 14		
FINISH DATE:	11 Apr 14		
DRILLER:	J. Wyant		
INSPECTOR:	KWA		

DATE	TIME	DEPTH	CASING	TYPE	CASING	SAMPLE	CORE	TUBE
11 Apr 14		4'0"		DIA.	3 1/4"	1 3/8"		
				WGHT		140#		
				FALL		30"		

Depth (ft.)	Casing Blows per Foot	Sample No.	Blows on Sample Spoon per 6"	Sym	IDENTIFICATION	REMARKS
			2		**Brown Topsoil** 0'6"	
1		S-1	2		Br cf S, a $, t (+) mf G	Rec = 20"
			2			moist
2			3			
			4		same	
3		S-2	7			Rec = 19"
			7		**Brown coarse to fine SAND, and**	moist-wet
4			7		**Silt, trace (+) medium to fine Gravel**	
5						
			3		same	
6		S-3	7			Rec = 17"
			10			wet
7			8			
			6		same 7'3"	
8		S-4	16		Br cf S, l $, l cf G	Rec = 15"
			19			moist
9			11		**Brown coarse to fine SAND, little**	
					Silt, little coarse to fine Gravel	
10					10'0"	
			5		Gr br cf S, a (-) $, t f G	
11		S-5	6			Rec = 17"
			7			moist
12			11		**Gray brown coarse to fine SAND,**	
					and (-) Silt, little fine Gravel	
13						
14						
15						
			22		same	
16		S-6	50/2"			Rec = 6"
					16'6"	wet
17					**End of Boring @ 16'6"**	Auger refusal @ 16'6"
18						
19						
20						
21						
22						

CARLIN - SIMPSON & ASSOCIATES Sayreville, NJ	TEST BORING LOG	BORING NUMBER B-104

Project:	**Proposed French American School New York, White Plains, NY**	**SHEET NO.:**	1 of 1
Client:	**French American School New York**	**JOB NUMBER:**	10-146
Drilling Contractor:	**General Borings, Inc.**	**ELEVATION:**	+286.0
GROUNDWATER		**DATUM:**	

DATE	TIME	DEPTH	CASING	TYPE	CASING	SAMPLE	CORE	TUBE	START DATE:	11 Apr 14
11 Apr 14	1400	3'0"	HSA	DIA.	3 1/4"	1 3/8"			FINISH DATE:	11 Apr 14
				WGHT		140#			DRILLER:	J. Wyant
				FALL		30"			INSPECTOR:	KWA

Depth (ft.)	Casing Blows per Foot	Sample No.	Blows on Sample Spoon per 6"	Sym	IDENTIFICATION		REMARKS
			7		**Asphalt**	0'2"	
1		S-1	5		FILL (Br cf S, a $, l cf G)	1'0"	Rec = 20"
			5		**FILL (Brown coarse to fine SAND, and Silt, little coarse to fine Gravel)**		moist
2			5				
			5		Br cf S, s (+) $, t mf G		
3		S-2	7				Rec = 17"
			11		same		moist-wet
4			11		**Brown coarse to fine SAND, some (+) Silt, trace medium to fine Gravel**		
5							
			9		same	5'6"	
6		S-3	12		Br cf S, l $		Rec = 11"
			12		**Brown coarse to fine SAND, little Silt**	6'6"	wet
7			7				
			3		Br cf S, a (-) $, l (-) mf G		
8		S-4	3				No recovery
			5				
9			6				
10					**Brown coarse to fine SAND, and (-) Silt, little (-) medium to fine Gravel**		
		S-5	50/2"				Rec = 2"
11							wet
12							
13							
14						14'0"	Auger refusal @ 14'0"
15					**End of Boring @ 14'0"**		
16							
17							
18							
19							
20							
21							
22							

CARLIN - SIMPSON & ASSOCIATES Sayreville, NJ	TEST BORING LOG	BORING NUMBER B-105

Project:	Proposed French American School New York, White Plains, NY	**SHEET NO.:**	1 of 1
Client:	French American School New York	**JOB NUMBER:**	10-146
Drilling Contractor:	General Borings, Inc.	**ELEVATION:**	+289.0
		DATUM:	
		START DATE:	11 Apr 14
		FINISH DATE:	11 Apr 14
		DRILLER:	J. Wyant
		INSPECTOR:	KWA

GROUNDWATER					CASING	SAMPLE	CORE	TUBE
DATE	TIME	DEPTH	CASING	TYPE	HSA	SS		
11 Apr 14		6'0"		DIA.	3 1/4"	1 3/8"		
				WGHT		140#		
				FALL		30"		

Depth (ft.)	Casing Blows per Foot	Sample No.	Blows on Sample Spoon per 6"	Sym	IDENTIFICATION	REMARKS
			2		**Brown Topsoil** 0'5"	
1		S-1	3		Br cf S, a $, t mf G	Rec = 7"
			4		**Brown, gray brown coarse to fine**	moist
2			3		**SAND, and (-) Silt, trace (+) medium**	
			3		**to fine Gravel**	
3		S-2	7		Gr br cf S, a (-) $, t (+) mf G	Rec = 18"
			9			moist
4			8		4'0"	
5						
			4		Br Cy $ s, cf S	
6		S-3	11		**Brown Clayey SILT some, coarse**	Rec = 17"
			8		**to fine Sand**	wet
7			8		7'0"	
			4		Br cf S, a (-) $, t (-) f G	
8		S-4	4			Rec = 16"
			6		**Brown coarse to fine SAND, and (-)**	wet
9			10		**Silt, trace (-) fine Gravel**	
10					10'0"	
			8		Br cf S, a (-) $, l (-) cf G	
11		S-5	31			Rec = 15"
			17			wet
12			22			
13					**Brown coarse to fine SAND, and (-)**	
					Silt, little (-) coarse to fine Gravel	
14						
15						
			17		same	
16		S-6	34			Rec = 20"
			34			moist
17			41			
					17'6"	Auger refusal @ 17'6"
18					**End of Boring @ 17'6"**	
19						
20						
21						
22						

CARLIN - SIMPSON & ASSOCIATES Sayreville, NJ	TEST BORING LOG	BORING NUMBER B-106

Project:	Proposed French American School New York, White Plains, NY	**SHEET NO.:**	1 of 1
Client:	French American School New York	**JOB NUMBER:**	10-146
Drilling Contractor:	General Borings, Inc.	**ELEVATION:**	+274.0
		DATUM:	
		START DATE:	14 Apr 14
		FINISH DATE:	14 Apr 14
		DRILLER:	J. Wyant
		INSPECTOR:	KWA

GROUNDWATER					CASING	SAMPLE	CORE	TUBE
DATE	TIME	DEPTH	CASING	TYPE	HSA	SS		
14 Apr 14	1550	6'0"		DIA.	3 1/4"	1 3/8"		
				WGHT		140#		
				FALL		30"		

Depth (ft.)	Casing Blows per Foot	Sample No.	Blows on Sample Spoon per 6"	Sym	IDENTIFICATION	REMARKS
					Asphalt/Stone 0'8"	3" Asphalt
1						5" Stone
			3		FILL (Br cf S, a $, t (-) mf G)	
2		S-1	4			Rec = 8"
			5			moist
3			4			
			2		FILL (same, t cf G)	
4		S-2	3		**FILL (Brown coarse to fine SAND, and Silt, trace coarse to fine Gravel)**	Rec = 13"
			2			moist
5			2			
			2		FILL (same)	
6		S-3	3			Rec = 8"
			4			moist-wet
7			7			
			5		7'6"	
8		S-4	8		Gr cf S, s $, t mf G	Rec = 10"
			14			moist-wet
9			19			
10						
			10		Dk gr cf S, s (-) $, t cf G	
11		S-5	35			Rec = 15"
			25			moist-wet
12			41			
13					**Gray, dark gray coarse to fine SAND, some (-) Silt, trace coarse to fine Gravel**	
14						
15						
			33		same	
16		S-6	33			Rec = 20"
			34			moist-wet
17			37			
18						very dense 16'-20'
19						
20						
		S-7	50/3"		same 20'3"	Rec = 2"
21					**End of Boring @ 20'3"**	wet
22						

CARLIN - SIMPSON & ASSOCIATES Sayreville, NJ	TEST BORING LOG	BORING NUMBER B-107

Project:	**Proposed French American School New York, White Plains, NY**	**SHEET NO.:**	1 of 1
Client:	**French American School New York**	**JOB NUMBER:**	10-146
Drilling Contractor:	**General Borings, Inc.**	**ELEVATION:**	+272.0
GROUNDWATER		**DATUM:**	

DATE	TIME	DEPTH	CASING	TYPE	CASING	SAMPLE	CORE	TUBE	START DATE:	14 Apr 14
14 Apr 14	1045	5'0"		DIA.	3 1/4"	1 3/8"			FINISH DATE:	14 Apr 14
				WGHT		140#			DRILLER:	J. Wyant
				FALL		30"			INSPECTOR:	CKS

Depth (ft.)	Casing Blows per Foot	Sample No.	Blows on Sample Spoon per 6"	Sym	IDENTIFICATION	REMARKS
			1		FILL (Br cf S, l $, l cf G)	
1		S-1	2		**FILL (Brown coarse to fine SAND, little Silt, little coarse to fine Gravel)** 1'0"	Rec = 17"
			3			moist
2			3		Br cf S, s $, t (+) cf G	
			6			
3		S-2	5		same	Rec = 16"
			8			moist
4			10		**Brown coarse to fine SAND, some Silt, trace (+) coarse to fine Gravel**	
5						
			10		same	
6		S-3	7			Rec = 18"
			6			wet
7			6			
			8		same	
8		S-4	8		8'0"	Rec = 18"
			10		Br cf S, t $, s cf G	wet
9			11		**Brown coarse to fine SAND, trace Silt, some coarse to fine Gravel**	
10					10'0"	
			12		Gr cf S, t $, s cf G	
11		S-5	27			Rec = 14"
			36			wet
12			57		**Gray coarse to fine SAND, little Silt, some coarse to fine Gravel, with weathered rock fragments**	
13						
14						
						dense drilling 13'6"-15'0"
15						
			18		Gr cf S, l $, s cf G, w/weathered rock fragments	
16		S-6	52			Rec = 8"
			30/1"			wet
17						
18					18'0"	Auger refusal @ 18'0"
					End of Boring @ 18'0"	
19						
20						
21						
22						

CARLIN - SIMPSON & ASSOCIATES Sayreville, NJ	TEST BORING LOG	BORING NUMBER B-108

Project:	**Proposed French American School New York, White Plains, NY**	**SHEET NO.:**	1 of 1
Client:	**French American School New York**	**JOB NUMBER:**	10-146
Drilling Contractor:	**General Borings, Inc.**	**ELEVATION:**	+267.0
GROUNDWATER		**DATUM:**	

DATE	TIME	DEPTH	CASING	TYPE	CASING	SAMPLE	CORE	TUBE	START DATE:	14 Apr 14
14 Apr 14	0945	3'0"		DIA.	3 1/4"	1 3/8"			FINISH DATE:	14 Apr 14
				WGHT		140#			DRILLER:	J. Wyant
				FALL		30"			INSPECTOR:	CKS

Depth (ft.)	Casing Blows per Foot	Sample No.	Blows on Sample Spoon per 6"	Sym	IDENTIFICATION	REMARKS
			1		FILL (Br cf S, s $, l cf G, w/t grass)	
1		S-1	3		**FILL (Brown coarse to fine SAND, some Silt, little coarse to fine Gravel, with trace grass)** 1'6"	Rec = 16"
			3			moist
2			5			
			8		Br cf S, l $, l cf G	
3		S-2	12			Rec = 18"
			10		**Brown coarse to fine SAND, little Silt, little coarse to fine Gravel**	moist-wet
4			7			
5					5'0"	
			1		Br cf S, t $, t cf G	
6		S-3	1			Rec = 14"
			3			wet
7			5			
			5		same, l cf G	
8		S-4	9		**Brown coarse to fine SAND, trace Silt, trace coarse to fine Gravel**	Rec = 17"
			8			wet
9			10			
10						
			4		same	
11		S-5	9		11'0"	Rec = 15"
			16		Br cf S, t $, s cf G	wet
12			12			
13						
					Brown coarse to fine SAND, trace Silt, some coarse to fine Gravel	
14						dense drilling 13'6"-15'
15						
			38		same	
16		S-6	50/3"			Rec = 6"
						wet
17					17'0"	weathered rock
18						Auger refusal @ 17'0"
19						
20						
21						
22						

CARLIN - SIMPSON & ASSOCIATES Sayreville, NJ	TEST BORING LOG	BORING NUMBER B-109

Project:	**Proposed French American School New York, White Plains, NY**	**SHEET NO.:**	1 of 1
Client:	**French American School New York**	**JOB NUMBER:**	10-146
Drilling Contractor:	**General Borings, Inc.**	**ELEVATION:**	+268.0
GROUNDWATER		**DATUM:**	

DATE	TIME	DEPTH	CASING	TYPE	CASING	SAMPLE	CORE	TUBE	START DATE:	14 Apr 14
14 Apr 14		6'0"		DIA.	3 1/4"	1 3/8"			FINISH DATE:	14 Apr 14
				WGHT		140#			DRILLER:	J. Wyant
				FALL		30"			INSPECTOR:	CKS/KWA

Depth (ft.)	Casing Blows per Foot	Sample No.	Blows on Sample Spoon per 6"	Sym	IDENTIFICATION	REMARKS
			2		FILL (Br cf S, s $, l cf G)	
1		S-1	3		**FILL (Brown coarse to fine SAND, some**	Rec = 18"
			5		**Silt, little coarse to fine Gravel)** 1'6"	moist
2			7			
			15		Br cf S, s (-) $, t (-) mf G	
3		S-2	18			Rec = 1"
			11			moist
4			7		**Brown coarse to fine SAND, some (-)**	
					Silt, trace (-) medium to fine Gravel	
5						
			2		same	
6		S-3	2			Rec = 17"
			4			wet
7			7		7'0"	
			23		Gr cf S, t $, s cf G, w/cobbles	
8		S-4	17			Rec = 18"
			22			wet
9			21			
10						
			29		Gr cf S, l $, t cf G	
11		S-5	42			Rec = 16"
			25			wet
12			25		**Gray coarse to fine SAND, little**	
					Silt, little coarse to fine Gravel,	
13					**with cobbles**	
14						
15						
			16		same	
16		S-6	40			Rec = 15"
			50/3"			wet
17						
18					18'0"	Auger refusal @ 18'0"
					End of Boring @ 18'0"	
19						
20						
21						
22						

CARLIN - SIMPSON & ASSOCIATES Sayreville, NJ	TEST BORING LOG	BORING NUMBER B-110

Project:	Proposed French American School New York, White Plains, NY	**SHEET NO.:**	1 of 1
Client:	French American School New York	**JOB NUMBER:**	10-146
Drilling Contractor:	General Borings, Inc.	**ELEVATION:**	+279.0
		DATUM:	
		START DATE:	14 Apr 14
		FINISH DATE:	14 Apr 14
		DRILLER:	J. Wyant
		INSPECTOR:	KWA

GROUNDWATER					CASING	SAMPLE	CORE	TUBE
DATE	TIME	DEPTH	CASING	TYPE	HSA	SS		
14 Apr 14		6'0"		DIA.	3 1/4"	1 3/8"		
				WGHT		140#		
				FALL		30"		

Depth (ft.)	Casing Blows per Foot	Sample No.	Blows on Sample Spoon per 6"	Sym	IDENTIFICATION	REMARKS
					Asphalt 0'3"	
1						
			4		Br cf S, s $, t (+) mf G	
2		S-1	5			Rec = 20"
			5			moist
3			7		**Brown coarse to fine SAND, some**	
			5		same **Silt, little (-) coarse to fine Gravel**	
4		S-2	6			Rec = 2"
			19			moist
5			10			
			4		Br cf S, s $, l (-) cf G	
6		S-3	5			Rec = 18"
			6			wet
7			7			
			11		same	
8		S-4	10		8'0"	Rec = 16"
			11		Gr cf S, l $, t f G	wet-moist
9			17			
10						
			7		same	
11		S-5	22			Rec = 19"
			24			wet
12			22		**Gray coarse to fine SAND, little**	
					Silt, trace fine Gravel	
13						
14						
15						
			48		same	
16		S-6	36			Rec = 16"
			50/3"			wet
17						
					17'6"	Auger refusal @ 17'6"
18					**End of Boring @ 17'6"**	
19						
20						
21						
22						

CARLIN - SIMPSON & ASSOCIATES Sayreville, NJ	TEST BORING LOG	BORING NUMBER B-111

Project:	**Proposed French American School New York, White Plains, NY**	**SHEET NO.:**	1 of 1
Client:	**French American School New York**	**JOB NUMBER:**	10-146
Drilling Contractor:	**General Borings, Inc.**	**ELEVATION:**	+285.0
GROUNDWATER		**DATUM:**	

DATE	TIME	DEPTH	CASING	TYPE	CASING	SAMPLE	CORE	TUBE	START DATE:	15 Apr 14
15 Apr 14		7'0"		DIA.	3 1/4"	1 3/8"			FINISH DATE:	15 Apr 14
				WGHT		140#			DRILLER:	J. Wyant
				FALL		30"			INSPECTOR:	CKS

Depth (ft.)	Casing Blows per Foot	Sample No.	Blows on Sample Spoon per 6"	Sym	IDENTIFICATION	REMARKS
			2		FILL (Br cf S, l (+) $, t cf G)	
1		S-1	5		**FILL (Brown coarse to fine SAND, little (+) Silt, trace coarse to fine Gravel)**	Rec = 15"
			8			moist
2			4		2'0"	
			7		Br cf S, l (-) $, l cf G	
3		S-2	9			Rec = 16"
			9			moist
4			11			with cobbles
5						
			12		same, s cf G	
6		S-3	10			Rec = 17"
			10			wet
7			16			
			28		same, s cf G, w/rock fragments	
8		S-4	50/5"			Rec = 8"
9					**Brown coarse to fine SAND, little (-) Silt, little coarse to fine Gravel, with cobbles and rock fragments**	wet cobbles @ 8'0" dense drilling 8'-10'
10						
			11		same	
11		S-5	20			Rec = 10"
			22			wet
12			28			
13						
14					14'0"	
15						
			11		Gr cf S, t $, s cf G	
16		S-6	24			Rec = 14"
			29			wet
17			29		**Gray coarse to fine SAND, trace Silt, some coarse to fine Gravel**	
18						dense drilling 17'-20'
19						
20						
		S-7	50/3"		same 20'3"	Rec = 2"
21					**End of Boring @ 20'3"**	wet
22						

CARLIN - SIMPSON & ASSOCIATES Sayreville, NJ	TEST BORING LOG	BORING NUMBER B-112

Project:	**Proposed French American School New York, White Plains, NY**	**SHEET NO.:**	1 of 1
Client:	**French American School New York**	**JOB NUMBER:**	10-146
Drilling Contractor:	**General Borings, Inc.**	**ELEVATION:**	+280.0
GROUNDWATER		**DATUM:**	

DATE	TIME	DEPTH	CASING	TYPE	CASING	SAMPLE	CORE	TUBE	START DATE:	15 Apr 14
15 Apr 14		6'0"		DIA.	3 1/4"	1 3/8"			FINISH DATE:	15 Apr 14
				WGHT		140#			DRILLER:	J. Wyant
				FALL		30"			INSPECTOR:	CKS

Depth (ft.)	Casing Blows per Foot	Sample No.	Blows on Sample Spoon per 6"	Sym	IDENTIFICATION	REMARKS
			1		Br cf S, s (-) $, t cf G	
1		S-1	2			No recovery
			3			
2			2			
			6		same	
3		S-2	7		**Brown coarse to fine SAND, some (-)**	Rec = 2"
			15		**Silt, trace coarse to fine Gravel**	moist
4			11			
5						
			6		same, t mf G	
6		S-3	6			Rec = 13"
			9			wet
7			10		7'0"	
			16		Br cf S, l $, a cf G	
8		S-4	18			Rec = 20"
			19			wet
9			13			
10						
			22		same, w/completely weathered rock fragments	
11		S-5	24			Rec = 14"
			24		**Brown coarse to fine SAND, little**	wet
12			29		**Silt, and coarse to fine Gravel, with**	
					completely weathered rock fragments	
13						boulder @ 13'0"
14						
15						
			29		same, w/completely weathered rock fragments	
16		S-6	56			Rec = 10"
			50/4"		16'3"	wet
17					**End of Boring @ 16'3'**	
18						
19						
20						
21						
22						

CARLIN - SIMPSON & ASSOCIATES Sayreville, NJ	TEST BORING LOG	BORING NUMBER B-113

Project:	**Proposed French American School New York, White Plains, NY**	**SHEET NO.:**	1 of 1
Client:	**French American School New York**	**JOB NUMBER:**	10-146
Drilling Contractor:	**General Borings, Inc.**	**ELEVATION:**	+276.0
GROUNDWATER		**DATUM:**	

DATE	TIME	DEPTH	CASING	TYPE	CASING	SAMPLE	CORE	TUBE	START DATE:	15 Apr 14
15 Apr 14		6'0"		DIA.	3 1/4"	1 3/8"			FINISH DATE:	15 Apr 14
				WGHT		140#			DRILLER:	J. Wyant
				FALL		30"			INSPECTOR:	CKS

Depth (ft.)	Casing Blows per Foot	Sample No.	Blows on Sample Spoon per 6"	Sym	IDENTIFICATION	REMARKS
			4		FILL (Br cf S, a $, l cf G)	
1		S-1	3		**FILL (Brown coarse to fine SAND,**	Rec = 11"
			2		**and Silt, little coarse to fine Gravel)**	moist
2			2		2'0"	
			11		Br cf S, l (+) $, s cf G	
3		S-2	16			Rec = 17"
			14			moist
4			14		**Brown coarse to fine SAND, little (+)**	
					Silt, some coarse to fine Gravel	
5						
			7		same, s (+) mf G	
6		S-3	9			Rec = 13"
			15			moist-wet
7			23			
			20		same, s cf G	
8		S-4	14			Rec = 8"
			14			wet
9			11			
10						
			6		same 10'6"	
11		S-5	48		Gr cf G a, cf S, t $, w/weathered rock fragments	Rec = 13"
			50/5"			wet
12						
					Gray coarse to fine GRAVEL and,	
13					**coarse to fine Sand, trace Silt,**	dense drilling 11'-15'
					with weathered rock fragments	
14						
15						
		S-6	50/2"		same	Rec = 1"
16					16'0"	wet
					End of Boring @ 16'0"	Auger refusal @ 16'0"
17						
18						
19						
20						
21						
22						

CARLIN - SIMPSON & ASSOCIATES Sayreville, NJ	TEST BORING LOG	BORING NUMBER B-114

Project:	**Proposed French American School New York, White Plains, NY**	**SHEET NO.:**	1 of 1
Client:	**French American School New York**	**JOB NUMBER:**	10-146
Drilling Contractor:	**General Borings, Inc.**	**ELEVATION:**	+278.5
GROUNDWATER		**DATUM:**	

DATE	TIME	DEPTH	CASING	TYPE	CASING	SAMPLE	CORE	TUBE	START DATE:	15 Apr 14
15 Apr 14		6'0"		DIA.	3 1/4"	1 3/8"			FINISH DATE:	15 Apr 14
				WGHT		140#			DRILLER:	J. Wyant
				FALL		30"			INSPECTOR:	CKS

Depth (ft.)	Casing Blows per Foot	Sample No.	Blows on Sample Spoon per 6"	Sym	IDENTIFICATION	REMARKS
			1		FILL (Br cf S, s $, l cf G, w/roots)	
1		S-1	7		**FILL (Brown coarse to fine SAND, some Silt, little coarse to fine Gravel, with roots)** 2'0"	Rec = 8" moist
			12			
2			5			
			2		Gr cf S, s $, l cf G	
3		S-2	8		**Gray coarse to fine SAND, some Silt, little coarse to fine Gravel** 3'6"	Rec = 8" moist
			11			
4			24			
5						
			15		Gr cf S, l $, s cf G	
6		S-3	13			Rec = 18" moist-wet
			24			
7			25			
			14		same, w/weathered rock	
8		S-4	50/5"			Rec = 11" wet
9					**Gray coarse to fine SAND, little Silt, some coarse to fine Gravel, with weathered rock**	
10						
		S-5	50/2"		same	Rec = 1" wet
11					11'0"	
12						
		Run #1				Run #1 11'0"-16'0" Run = 60" Rec = 56", 93% RQD = 80%
13					**Gray Schist, massive, moderately jointed, slightly weathered to fresh**	
14						
15						
16					16'0"	
17					**End of Boring @ 16'0"**	
18						
19						
20						
21						
22						

French American School of New York
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White Plains, NY
(10-146)

22 December 2010

TEST PIT LOGS

TP-1	Eliminated due to utility conflict		
TP-2	Elevation +266.5		
0-0'3"	Brown Topsoil		
0'3"-4'10"	Brown coarse to fine SAND, some (+) Silt, some (-) coarse to fine Gravel, with cobbles and boulders	med. dense	moist
4'10"-10'0"	Dark brown coarse to fine SAND, some (+) Silt, some coarse to fine Gravel, (weathered schist)	dense	moist - wet
10'0"	Possible Bedrock (schist) or boulder		
	Groundwater seepage at 8'4" – Moderate inflow Estimated seasonal high groundwater at 6'4"		
TP-3	Elevation +266		
0-0'3"	Brown Topsoil		
0'3"-5'0"	FILL (Brown coarse to fine SAND, some Silt, some (-) coarse to fine Gravel)	med. dense	moist
5'0"-8'6"	Brown, gray coarse to fine SAND, some Silt, some coarse to fine Gravel, with occasional cobbles	dense	moist - wet
	Groundwater seepage at 6'6" – Slow inflow Estimated seasonal high groundwater at 5'0"		

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TP-4	Elevation +278		
0-0'8"	Brown Topsoil		
0'8"-3'7"	Mottled gray, brown SILT and, coarse to fine Sand, little coarse to fine Gravel	med. stiff	moist
3'7"-8'6"	Brown, gray coarse to fine SAND, some Silt, trace (+) medium to fine Gravel	med. dense	moist-wet
	Groundwater seepage at 5'2" – Slow inflow Groundwater seepage at 7'0" – Moderate inflow Estimated seasonal high groundwater at 3'0"		

TP-5	Elevation +286		
0-0'6"	Brown Topsoil		
0'6"-10'0"	Brown coarse to fine SAND, some (-) Silt, little coarse to fine Gravel, with occasional cobbles	med. dense	moist-wet
	Groundwater seepage at 8'3" – Slow inflow Estimated seasonal high groundwater at 7'0"		

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TP-6	Elevation +280		
0-0'4"	Brown Topsoil		
0'4"-2'0"	Brown coarse to fine SAND, some Silt, some coarse to fine Gravel	med. dense	moist
2'0"-5'0"	Mottled gray, brown SILT and, coarse to fine Sand, little coarse to fine Gravel	med. stiff	moist
5'0"-7'0"	Gray brown coarse to fine SAND, some (+) Silt, some (+) coarse to fine Gravel, with occasional cobbles and boulders	med. dense	wet
	Groundwater seepage at 5'0" – Moderate inflow Estimated seasonal high groundwater at 3'0"		

TP-7	Elevation +280		
0-0'3"	Brown Topsoil		
0'3"-3'0"	Brown coarse to fine SAND, some (+) Silt, little (+) coarse to fine Gravel with occasional cobbles and boulders	med. dense	moist
3'0"-4'4"	Mottled light gray, brown, orange brown SILT little (+), coarse to fine Sand, trace (-) fine Gravel	med. stiff	moist
4'4"-6'6"	Brown coarse to fine SAND, some Silt, some (-) coarse to fine Gravel	med. dense	moist-wet
6'6"-7'6"	Gray brown coarse to fine SAND, little Silt, some coarse to fine Gravel	med. dense	moist-wet
	Groundwater seepage at 6'2" – Slow inflow Estimated seasonal high groundwater at 3'6"		

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TP-8	Elevation +292		
0-0'2"	Brown Topsoil		
0'2"-1'3"	Mottled gray brown Clayey SILT some (-), coarse to fine Sand	med. stiff	moist
1'3"-5'0"	Gray brown coarse to fine SAND, and Silt, trace coarse to fine Gravel	med. dense	moist-wet
	Groundwater seepage at 3'10" – Rapid inflow Groundwater level at 1'0" after 1.5 hours Estimated seasonal high groundwater at 0'6"		

TP-9	Elevation +282		
0-0'9"	Brown Topsoil		
0'9"-2'9"	Mottled light gray, brown, orange brown SILT some coarse to fine Sand, trace (-) fine Gravel	med. stiff	moist
2'9"-6'6"	Brown, gray coarse to fine SAND, some (+) Silt, some coarse to fine Gravel	med. dense	moist-wet
	Groundwater seepage at 4'0" – Very slow inflow Estimated seasonal high groundwater at 2'6"		

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TP-10	Elevation +301		
0-0'4"	Brown Topsoil		
0'4"-2'2"	Brown coarse to fine SAND, and (-) Silt, little coarse to fine Gravel	med. dense	moist
2'2"-8'0"	Gray brown coarse to fine SAND, and (-) Silt, trace fine Gravel	med. dense	moist-wet
	Groundwater seepage at 3'6" – Perched water Excavation dry at 8'0"		

TP-11	Elevation +278		
0-0'6"	Brown Topsoil		
0'6"-3'3"	Brown coarse to fine SAND, some (+) Silt, little (-) coarse to fine Gravel	med. dense	moist
3'3"-9'0"	Brown, dark brown coarse to fine SAND, some (-) Silt, some coarse to fine Gravel, with occasional cobbles and boulders	dense	moist-wet
	Groundwater seepage at 6'6" – Slow to moderate inflow Estimated seasonal high groundwater at 4'6"		

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TP-12	Elevation +288		
0-0'5"	Brown Topsoil		
0'5"-2'3"	Brown coarse to fine SAND, some (+) Silt, little coarse to fine Gravel	med. dense	moist
2'3"-8'6"	Mottled light gray, brown, orange brown SILT little, (+), coarse to fine Sand, trace (-) fine Gravel	med. stiff	moist-wet
8'6"-10'0"	Brown coarse to fine SAND, little Silt, some (+) coarse to fine Gravel	med. dense	wet
	Groundwater seepage at 8'0" – Slow to moderate inflow Estimated seasonal high groundwater at 5'6"		

TP-13	Elevation +304		
0-0'6"	Brown Topsoil		
0'6"-3'3"	Brown coarse to fine SAND, some (+) Silt, little (-) coarse to fine Gravel	med. dense	moist
3'3"-7'6"	Brown coarse to fine SAND, some Silt, some (-) coarse to fine Gravel, with occasional cobbles and boulders	dense	moist
	No water encountered		

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TP-14	Elevation +290		
0-0'4"	Brown Topsoil		
0'4"-2'1"	Light brown coarse to fine SAND, some (+) Silt, little (-) coarse to fine Gravel	med. dense	moist
2'1"-8'0"	Brown coarse to fine SAND, some Silt, little coarse to fine Gravel, with occasional cobbles and boulders	dense	moist
	No water encountered		

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TEST PIT LOGS

BC-1	Elevation +263.5		
0-3'0"	FILL (Brown coarse to fine SAND, some (-) Silt, some (+) coarse to fine Gravel, with cobbles, topsoil and roots)	medium dense	moist
3'0"-3'7"	Gray Clayey SILT, some coarse to fine Sand	medium stiff	moist
3'7"-4'0"	Gray coarse to fine SAND, little Silt, some coarse to fine Gravel	loose	wet
	Groundwater encountered @ 3'7"	slow inflow	
BC-2	Elevation +269.0		
0-0'3"	Topsoil		
0'3"-1'10"	Brown coarse to fine SAND, and (-) Silt, trace fine Gravel	medium dense	moist
1'10"-3'6"	Light brown, gray Clayey SILT little (+) coarse to fine Sand	medium stiff	moist
3'6"-5'0"	Light brown coarse to fine SAND, some (+) Silt, little medium to fine Gravel	medium dense	moist-wet
	Groundwater encountered @ 4'6"	very slow inflow	

BC-3	Elevation +276.0		
0'0'5"	Brown Topsoil		
0'5"-6'3"	Brown coarse to fine SAND, some Silt, little (+) coarse to fine Gravel, with cobbles	medium dense	moist-wet
	Groundwater encountered @ 5'10"	slow inflow	
BC-4	Elevation +282.0		
0'0'4"	Brown Topsoil		
0'4"-6'6"	Brown coarse to fine SAND, some Silt, little coarse to fine Gravel, with cobbles	medium dense	moist
	No water encountered		
BC-5	Not Performed		
BC-6	Elevation +280.0		
0'0'8"	Dark brown Topsoil		
0'8"-1'10"	Orange brown coarse to fine SAND, some (-) Silt, trace coarse to fine Gravel	medium dense	moist
1'10"-7'0"	Brown coarse to fine SAND, little Silt, trace coarse to fine Gravel	medium dense	moist
	No water encountered		

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BC-7	Elevation +279.0		
0-0’6”	Brown Topsoil		
0’6”-1’7”	Brown coarse to fine SAND, and (-) Silt	medium dense	moist
1’7”-3’0”	Brown coarse to fine SAND, some (+) Silt, little coarse to fine Gravel	medium dense	moist
3’0”-4’0”	Brown coarse to fine SAND, some Silt	medium dense	moist
4’0”-7’0”	Brown, gray, orange brown coarse to fine Silt, little coarse to fine Gravel	medium dense	moist
	No water encountered		

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TEST PIT LOGS

TP-101	Elevation +280.0		
0'-0'07"	Brown Topsoil		
0'7"-3'8"	Brown coarse to fine SAND, some (-) Silt, trace to fine Gravel	medium dense	moist
3'8"-8'6"	Brown coarse to fine SAND, little Silt, some (+) coarse to fine Gravel, with cobbles	dense	moist
	Groundwater encountered @ 4'4", slow inflow		

TP-102	Elevation +277.0		
0'0"-0'10	Dark Brown Topsoil		
0'10"-5'6"	Mottled gray, brown, orange brown coarse to fine SAND, some (+) SILT, trace (-) fine Gravel	medium dense	moist-wet
5'6"-8'6"	Brown coarse to fine SAND, some SILT, some coarse to fine Gravel (probable weathered bedrock)	medium dense	moist-wet
	Groundwater encountered @ 5'0" slow inflow		

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TP-103	Elevation +276.0		
0-0'8"	Dark brown Topsoil		
0'8"-1'6"	Brown coarse to fine SAND, some Silt, trace fine Gravel	medium dense	moist
1'6"-2'6"	Brown coarse to fine SAND, some (+) Silt, some coarse to fine Gravel	dense	moist
2'6"-7'6"	Brown coarse to fine SAND, little Silt, some coarse to fine Gravel, with Cobbles	medium dense	wet
	Groundwater encountered @ 5'3" slow inflow		

TP-104	Elevation +272.0		
0'0"-1'0"	Dark brown Topsoil		
1'0"-5'0"	Mottled gray, brown, orange brown coarse fine SAND, some Silt, trace medium to fine Gravel	medium dense-dense	moist-wet
5'0"-6'3"	Dark gray coarse to fine SAND, little Silt, some medium to fine Gravel, with cobbles	medium dense	wet
	Groundwater encountered @ 4'6" Perched water @ 2'6"		

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TP-105	Elevation +280.0		
0-1'0"	Dark brown Topsoil		
1'0"-2'0"	Brown coarse to fine SAND, some (+) Silt, trace medium to fine Gravel	medium dense	moist
2'0"-3'7"	Brown coarse to fine SAND, little Silt, trace medium to fine Gravel	medium dense	moist
3'7"-5'6"	Brown coarse to fine SAND, little Silt, some coarse to fine Gravel, with cobbles and boulders	medium dense	moist
5'6"-7'6"	Dark brown coarse to fine SAND, little Silt, some medium to fine Gravel, with weathered rock	dense	moist-wet
7'6"	Probable bedrock		
	Groundwater encountered @ 6'0" slow inflow		

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TP-106	Elevation +278.5		
0-0'8"	Brown Topsoil		
0'8"-2'6"	Brown coarse to fine SAND, some (+) Silt, trace fine Gravel	medium dense	moist
2'6"-3'6"	Gray brown coarse to fine SAND, little Silt, trace fine Gravel	medium dense	moist
3'6"-8'0"	Gray brown coarse to fine SAND, some (-) Silt, trace (-) fine Gravel, with cobbles	medium dense	moist-wet
8'0"-8'10"	Dark gray, black coarse to fine SAND, little Silt, some (+) medium to fine Gravel, with weathered rock and cobbles	dense	moist
	Groundwater encountered @ 7'0" slow inflow		

TP-107	Elevation +266.5		
0-1'5"	Dark brown Topsoil with cobbles		
1'5"-2'6"	Mottled brown, orange brown, gray coarse to fine SAND, and Silt, little coarse to fine Gravel	medium dense	moist
2'6"-6'0"	Brown coarse to fine SAND, some Silt, some (-) coarse to fine Gravel	medium dense	moist-wet
	Groundwater encountered @ 4'4" slow inflow		

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TP-108	Elevation +267.0		
0-1'2"	Dark brown Topsoil		
1'2"-5'0"	Mottled brown, orange brown, gray coarse to fine SAND, and Silt, little coarse to fine Gravel	medium dense	moist
	Groundwater encountered @ 3'8"		

TP-109	Elevation +261.0		
0-1'1"	Dark brown Topsoil		
1'1"-3'0"	Mottled gray, orange brown coarse to fine SAND, and Silt, little coarse to fine Gravel	medium dense	moist-wet
3'0"-4'0"	Gray brown coarse to fine SAND, little Silt, little (+) coarse to fine Gravel, with cobbles	medium dense	moist-wet
	Groundwater encountered @ 2'8" slow inflow		

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TP-110	Elevation +264.5		
0-0'3"	Topsoil		
0'3"-2'0"	Orange brown coarse to fine SAND, and (-) Silt	medium dense	moist
2'0"-4'0"	Mottled orange brown, gray coarse to fine SAND, some (+) Silt, some coarse to fine Gravel	medium dense	moist
4'0"-5'0"	Brown coarse to fine SAND, some (-) Silt, and (-) coarse to fine Gravel, with cobbles	medium dense	moist-wet
	Groundwater encountered @ 4'0" slow inflow		

TP-111	Elevation +266.0		
0-0'3"	FILL (Gray Clayey SILT, some coarse to fine Sand)	loose	moist
0'3"-4'6"	Light gray, brown coarse to fine SAND, and (-) Silt, trace (+) medium to fine Gravel	medium dense	moist
4'6"-7'6"	Gray coarse to fine SAND, some (-) Silt, some medium to fine Gravel, with cobbles	dense	wet
	Groundwater encountered @ 4'3"		

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TP-112	Elevation +264.0		
0-0'1'0"	Dark brown Topsoil		
1'0"-2'0"	Mottled gray, brown Clayey SILT little (-) coarse to fine SAND	medium stiff	moist
2'0"-5'2"	Mottled light brown, gray Clayey SILT, and (-) coarse to fine Sand, trace (-) fine Gravel	medium stiff	moist-wet
5'2"-6'6"	Gray coarse to fine SAND, little Silt, some coarse to fine Gravel, with cobbles, completely weathered rock	dense	wet
	Groundwater encountered @ 3'8"		

TP-113	Elevation +266.0		
0-0'6"	Dark brown Topsoil		
0'6"-1'6"	FILL (Brown coarse to fine SAND, some Silt, little medium to fine Gravel)	medium dense	moist
1'6"-3'0"	Mottled gray, brown SILT some, coarse to fine Sand, trace (-) fine Gravel	medium stiff	moist
3'0"-5'6"	Gray, brown coarse to fine SAND, little (+) Silt, some (-) coarse to fine Gravel, with cobbles	dense	moist-wet
5'6"-7'0"	Gray coarse to fine SAND, some Silt, some (-) coarse to fine Gravel, with cobbles	dense	wet
	Groundwater encountered @ 4'6"		

TP-114	Elevation +273.0		
0-0'6"	Dark brown Topsoil with roots		
0'6"-2'6"	Brown coarse to fine SAND, some Silt, little medium to fine Gravel, with occasional cobbles	medium dense	moist
2'6"-5'6"	Mottled gray, brown coarse to fine SAND, some Silt, trace (-) fine Gravel	medium dense	moist-wet
	Groundwater encountered @ 3'10"		

TP-115	Elevation +278.0		
0-0'6"	Topsoil with roots		
0'6"-2'0"	Brown coarse to fine SAND, some (-) Silt, little (+) medium to fine Gravel	medium dense	moist
2'0"-6'6"	Brown coarse to fine SAND, little (+) Silt, some coarse to fine Gravel, with cobbles	dense	moist-wet
	Groundwater encountered @ 4'6"		

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TP-116	Elevation +277.0		
0-0'10"	Dark brown Topsoil, with roots		
0'10"-3'8"	Mottled light gray, brown coarse to fine SAND, and (-) Silt, trace coarse to fine Gravel, with occasional cobbles	dense	moist-wet
3'8"-7'6"	Gray, brown coarse to fine SAND, little Silt, some (-) coarse to fine Gravel, with cobbles	dense	wet
	Groundwater encountered @ 3'6'		

TP-117	Elevation +267.0		
0-0'10"	Topsoil		
0'10"-2'10"	Mottled gray, brown coarse to fine SAND, and (-) Silt, trace (-) fine Gravel	medium dense	moist
2'10"-6'6"	Gray coarse to fine SAND, little Silt, some (-) coarse to fine Gravel, with cobbles, and completely weathered rock	dense	moist-wet
	Groundwater encountered @ 5'0"		

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TP-118	Elevation +280.0		
0-0’2”	Dark brown Topsoil		
0’2”-1’2”	FILL (Dark brown coarse to fine SAND, some (+) Silt, trace medium to fine Gravel)	medium dense	moist
1’2”-2’6”	Brown coarse to fine SAND, some Silt, little medium to fine Gravel	medium dense	moist
2’6”-7’0”	Brown coarse to fine SAND, little Silt, some coarse to fine Gravel, with cobbles	dense	moist
	Groundwater encountered @ 4’3”		

TP-119	Elevation +280.0		
0-0’8”	Black Topsoil		
0’8”-3’8”	Mottled brown, gray coarse to fine SAND, some (+) Silt, trace (+) medium to fine Gravel	medium dense	moist
3’8”-7’6”	Gray, brown coarse to fine SAND, little Silt, some (-) coarse to fine Gravel, with cobbles	dense	moist
	Groundwater encountered @ 6’6”		

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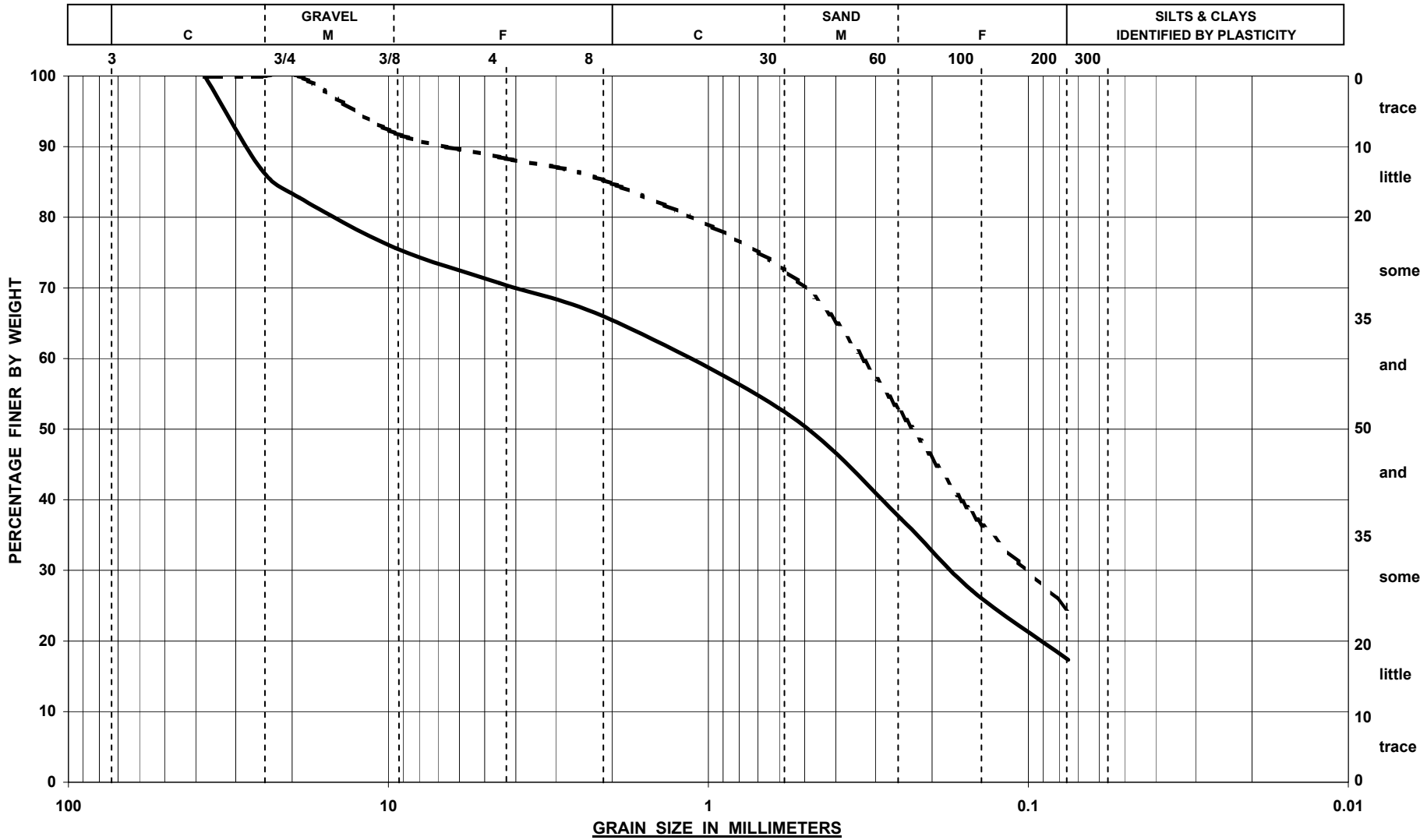
SIEVE ANALYSIS



SYMBOL	TEST PIT	SAMPLE	DEPTH	DESCRIPTION	NAT MC
———	B-1	S-2	2'-4'	Brown, coarse to fine SAND, little (+) Silt, some (+) medium to fine Gravel	10.0%
— -	B-2	S-3	5'-7'	Brown coarse to fine SAND, some (-) Silt, little medium to fine Gravel	12.1%

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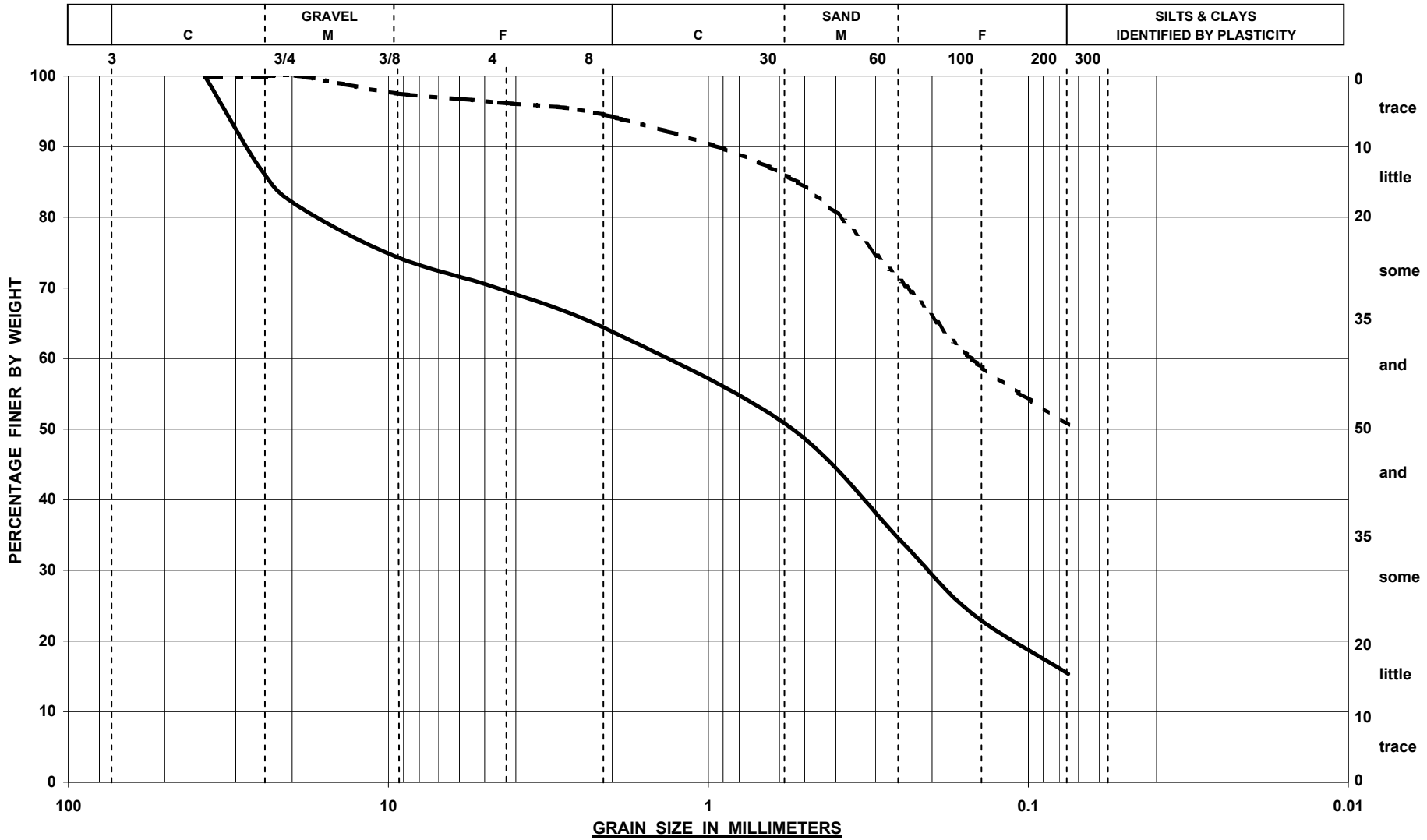
SIEVE ANALYSIS



SYMBOL	TEST PIT	SAMPLE	DEPTH	DESCRIPTION	NAT MC
———	B-2	S-6	15'-16'8"	Brown coarse to fine SAND, little Silt, and (-) medium to fine Gravel	8.5%
— -	B-3	S-2	2'-4'	Brown SILT and (+), coarse to fine Sand, trace medium to fine Gravel	10.5%

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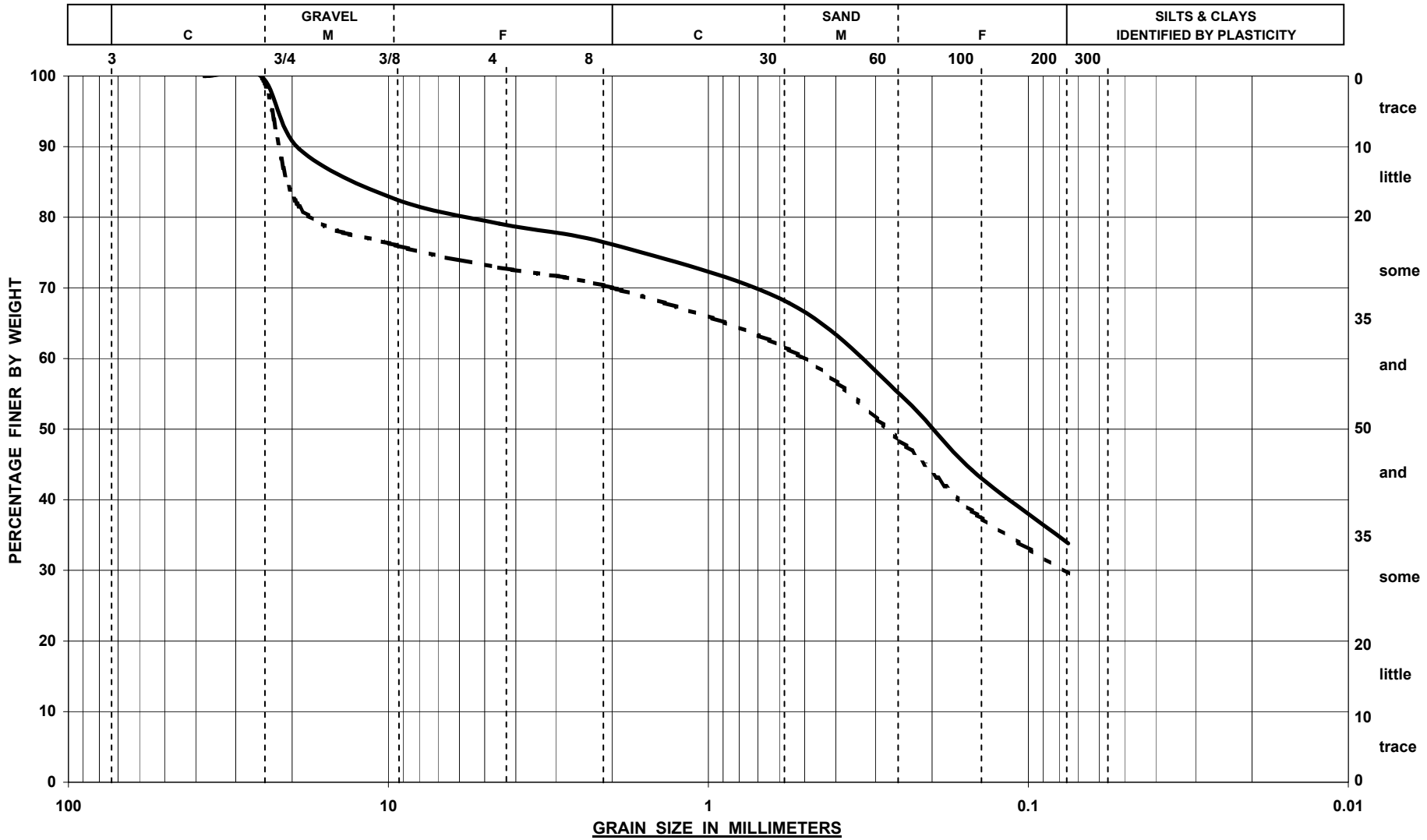
SIEVE ANALYSIS



SYMBOL	TEST PIT	SAMPLE	DEPTH	DESCRIPTION	NAT MC
———	B-3	S-4	7'-9'	Brown coarse to fine Sand, some (+) Silt, some (-) medium to fine Gravel	11.1%
— -	B-4	S-3	5'-7'	Brown coarse to fine Sand, some Silt, some medium to fine Gravel	7.2%

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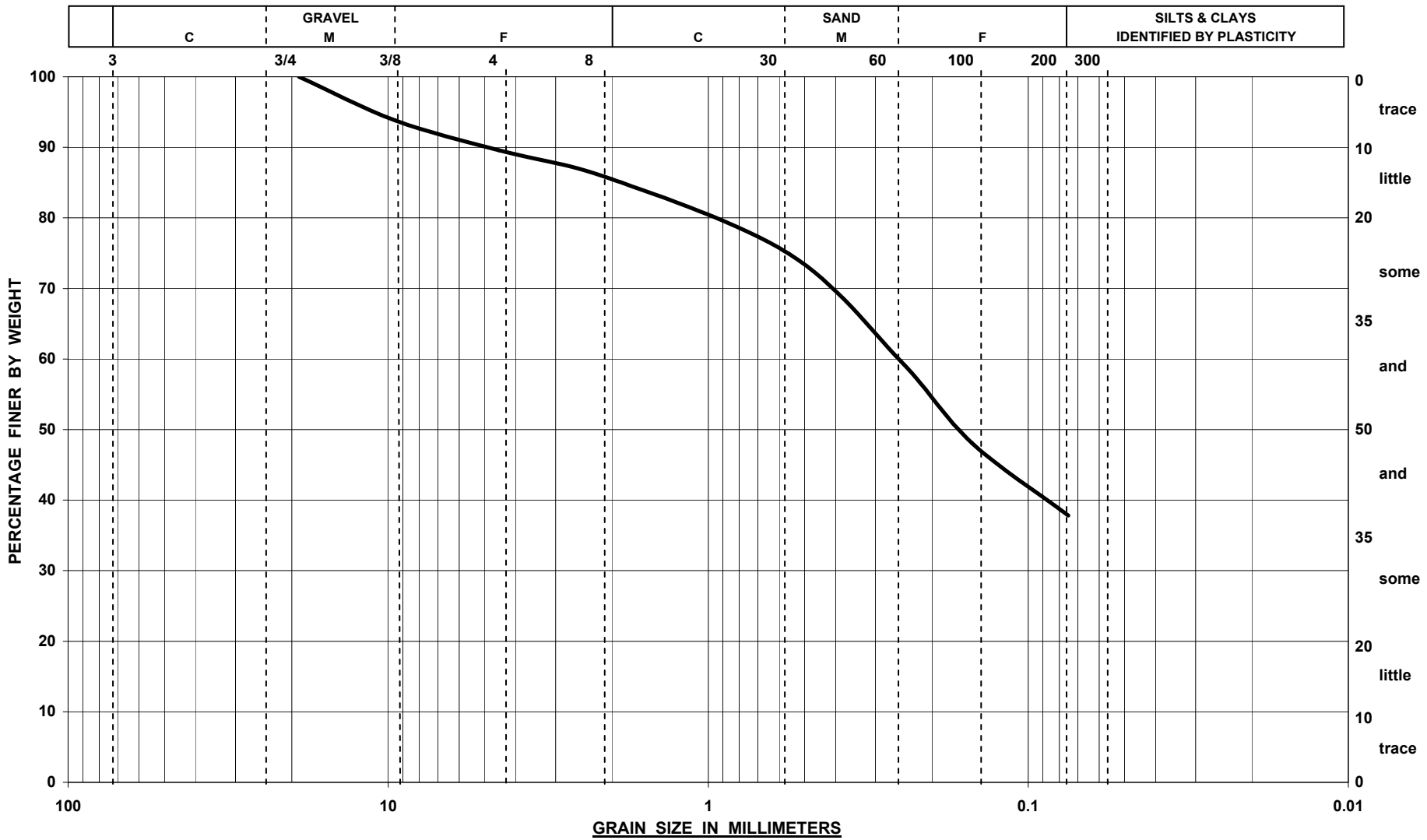
SAYREVILLE, NJ 08872

SIEVE ANALYSIS



SYMBOL	TEST PIT	SAMPLE	DEPTH	DESCRIPTION	NAT MC
▬	B-4	S-5	10'-12'	Brown coarse to fine SAND, and (-) Silt, little fine Gravel	9.0%

PROJECT French American School of NY, White Plains, NY **BY** GFL **DATE** 7-Jan-11 **JOB NO** 10-146

CARLIN-SIMPSON & ASSOCIATES
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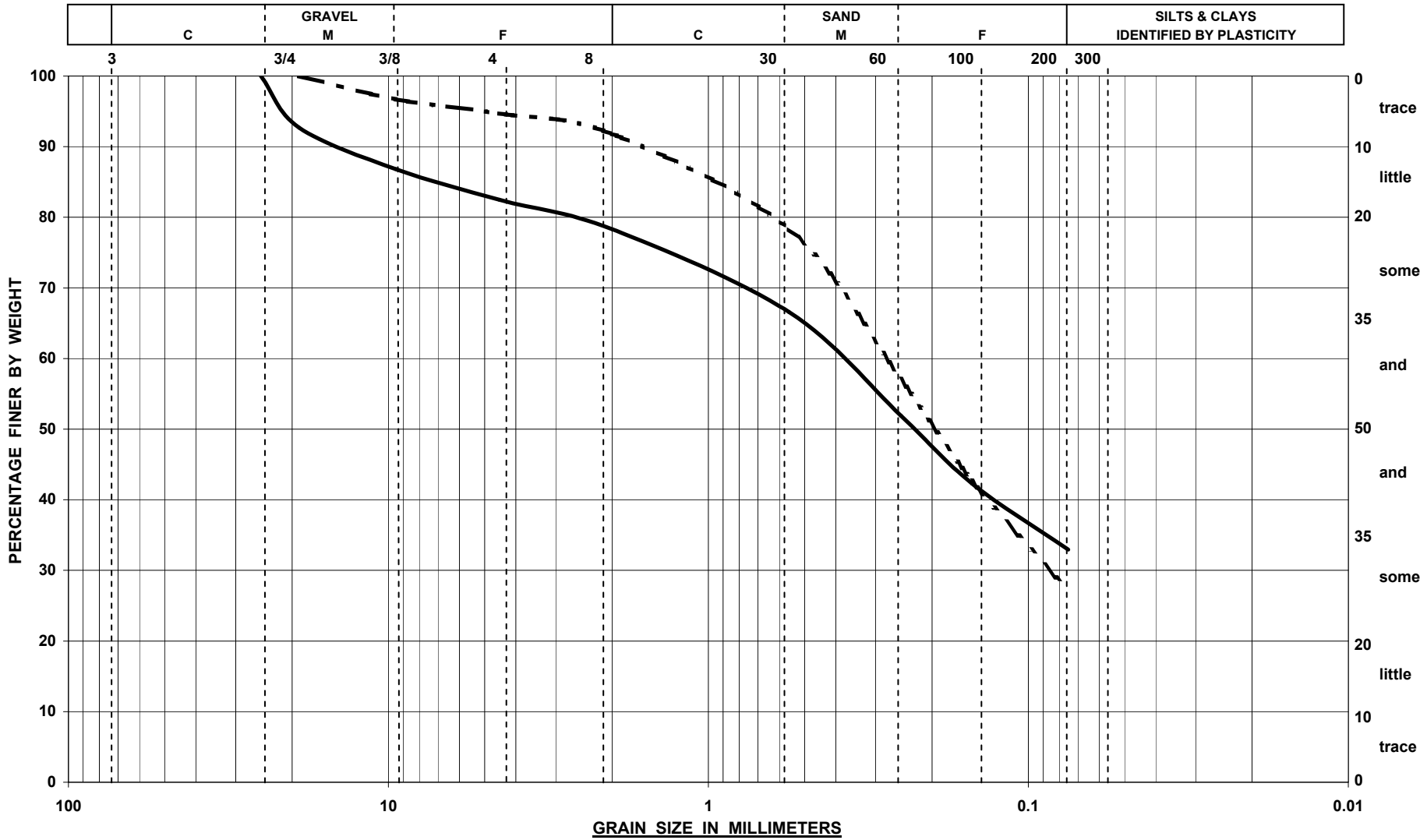
SIEVE ANALYSIS

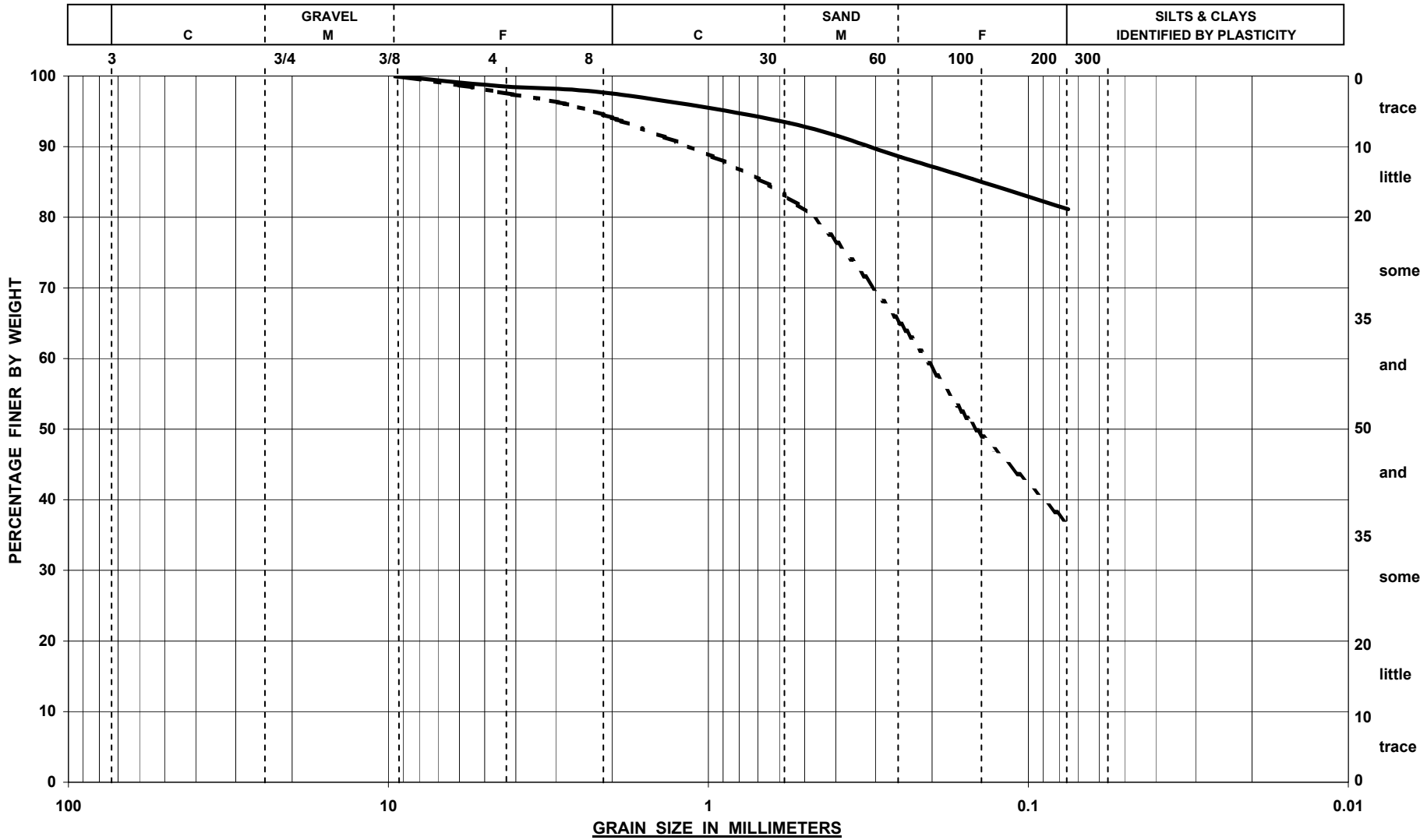


SYMBOL	TEST PIT	SAMPLE	DEPTH	DESCRIPTION	NAT MC
———	TP-2		0' 3" - 4' 10"	Brown coarse to fine Sand, some (+) Silt, some (-) coarse to fine Gravel	16.4%
— -	TP-4		3' '7" - 8' 6"	Brown, gray coarse to fine SAND, some Silt, trace (+) medium to fine Gravel	12.2%

PROJECT French American School of NY, White Plains, NY **BY** GJ **DATE** 30-Dec-10 **JOB NO** 10-146

CARLIN-SIMPSON & ASSOCIATES
SAYREVILLE, NJ 08872

SIEVE ANALYSIS

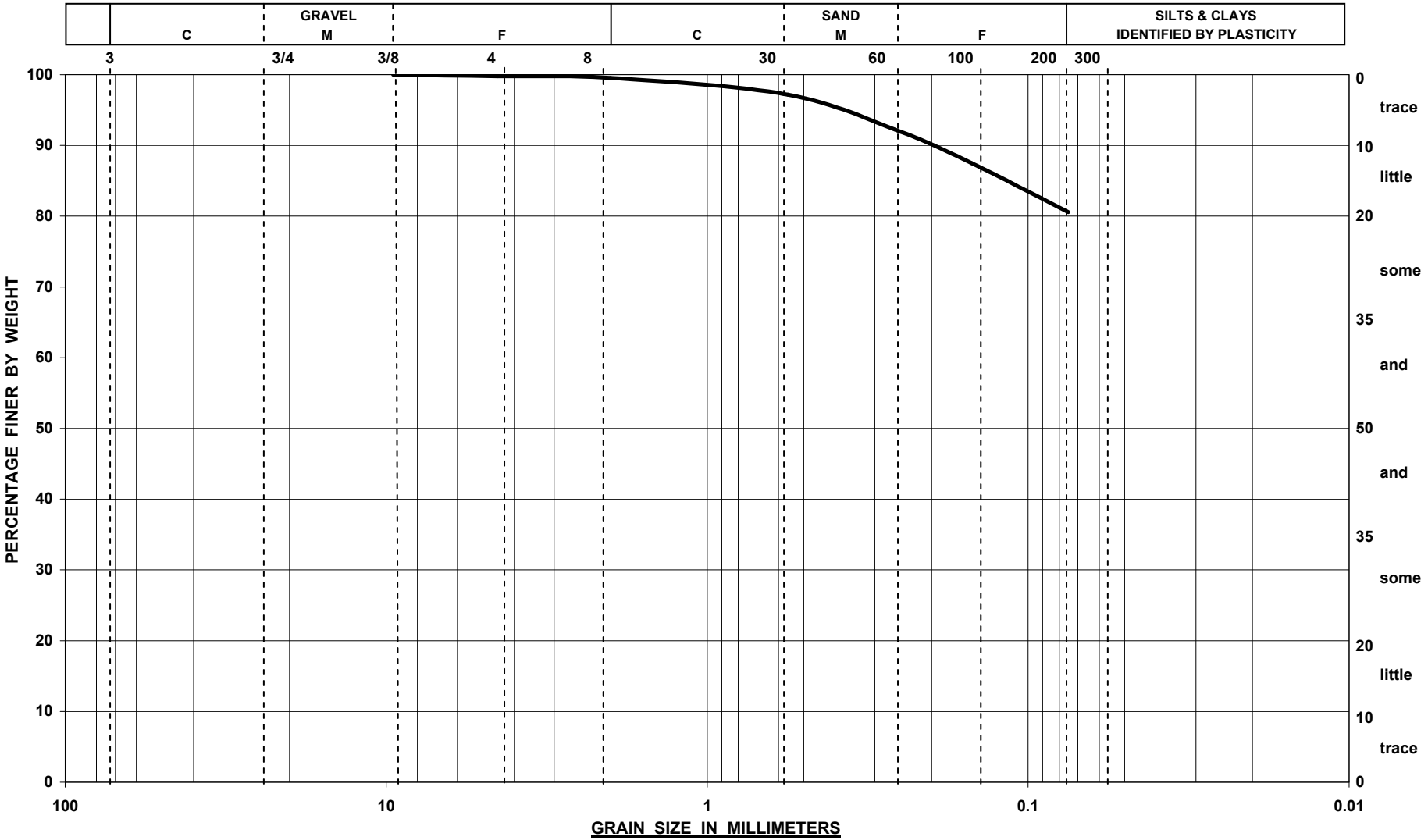


SYMBOL	TEST PIT	SAMPLE	DEPTH	DESCRIPTION	NAT MC
———	TP-7		0' 3" - 4' 4"	Mottled light gray, brown, orange brown SILT little (+), coarse to fine Sand, trace (-) fine Gravel	18.4%
— -	TP-10		2' 2" - 8' 0"	Gray brown coarse to fine SAND, and (-) Silt, trace fine Gravel	12.8%

PROJECT French American School of NY, White Plains, NY **BY** GJ **DATE** 30-Dec-10 **JOB NO** 10-146

CARLIN-SIMPSON & ASSOCIATES
SAYREVILLE, NJ 08872

SIEVE ANALYSIS

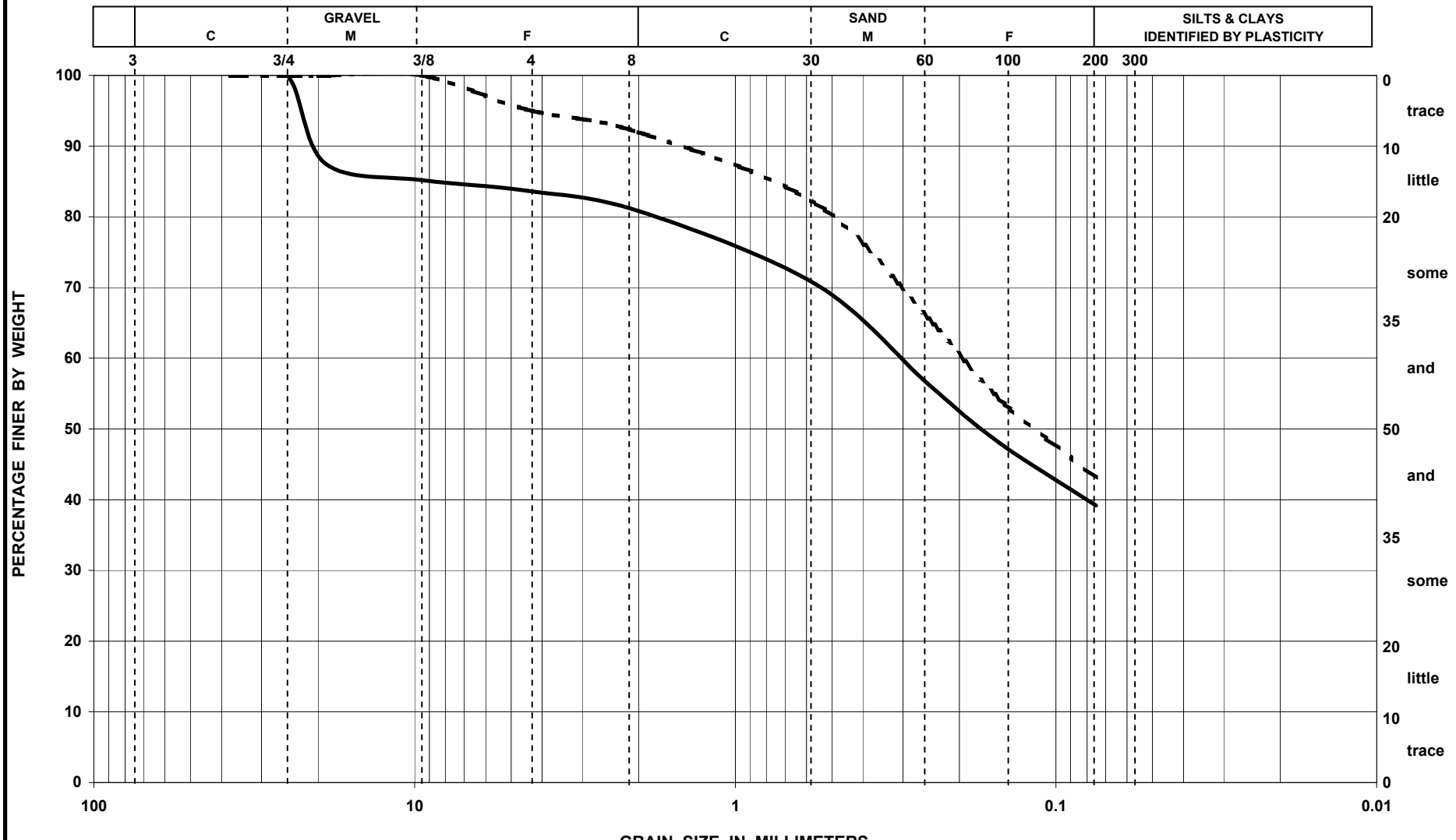


SYMBOL	TEST PIT	SAMPLE	DEPTH	DESCRIPTION	NAT MC
▬	TP-12		2' 3" - 8' 6"	Mottled light gray, brown, orange brown SILT little (+), coarse to fine Sand, trace (-) fine Gravel	23.9%

PROJECT French American School of NY, White Plains, NY **BY** GJ **DATE** 30-Dec-10 **JOB NO** 10-146

CARLIN-SIMPSON & ASSOCIATES
SAYREVILLE, NJ 08872

SIEVE ANALYSIS



SYMBOL	BORING	SAMPLE	DEPTH	DESCRIPTION	NAT MC
———	B-101	S-1	0'3"-2'0"	Brown coarse to fine SAND, and (-) Silt, little (+) medium to fine Gravel	16.9%
— -	B-103	S-2	2'0"-4'0"	Brown coarse to fine SAND, and Silt, trace (+) medium to fine Gravel	18.9%

PROJECT French American School of NY, White Plains, NY **BY** MW **DATE** 25-Apr-14 **JOB NO** 10-146

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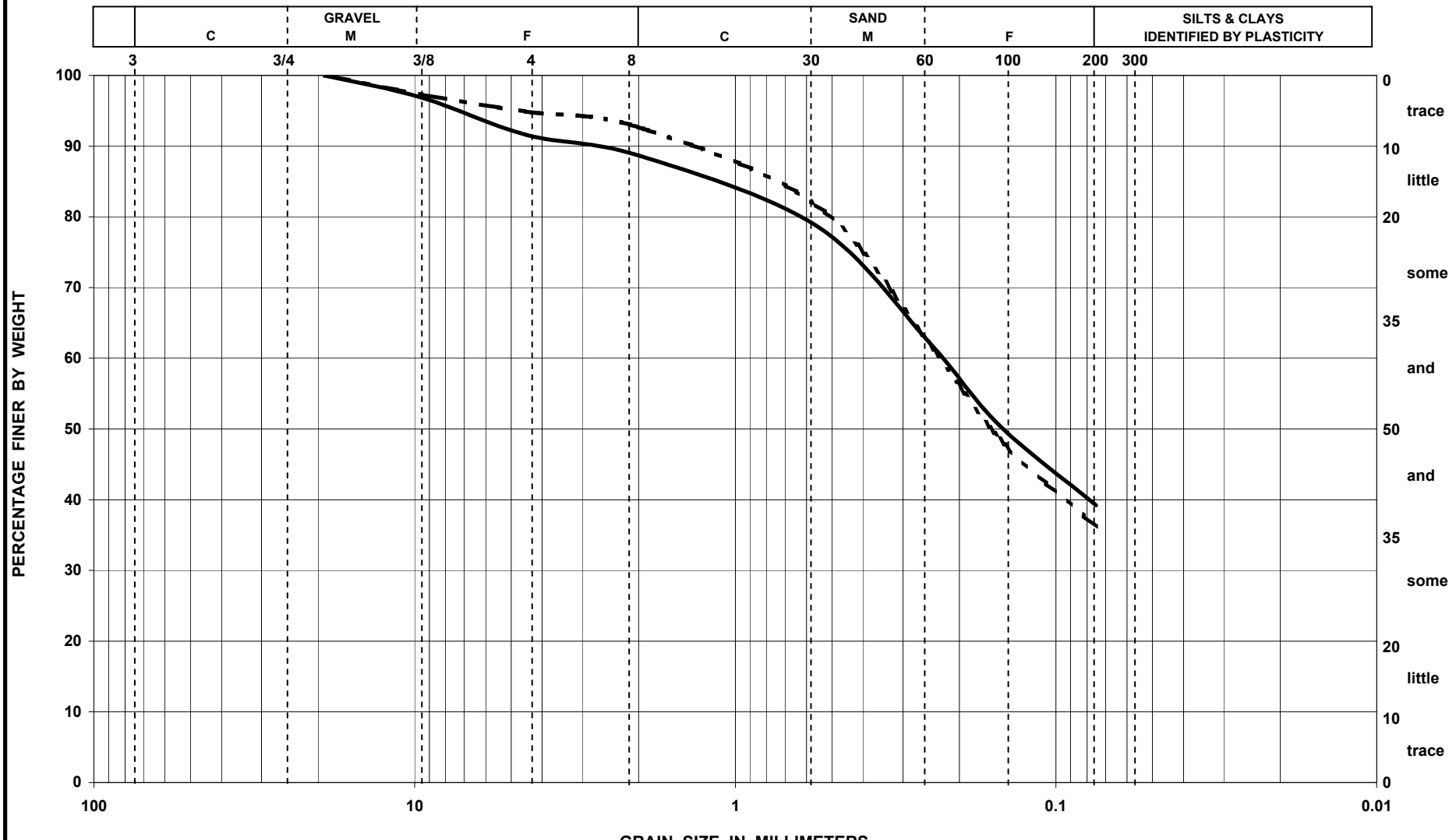
SIEVE ANALYSIS



SYMBOL	BORING	SAMPLE	DEPTH	DESCRIPTION	NAT MC
———	B-104	S-4	7'0"-9'0"	Brown coarse to fine SAND, and (-) Silt, little (-) medium to fine Gravel	11.9%
— -	B-105	S-2	2'0"-4'0"	Gray brown coarse to fine SAND, and (-) Silt, trace (+) medium to fine Gravel	12.0%

PROJECT French American School of NY, White Plains, NY **BY** MW **DATE** 25-Apr-14 **JOB NO** 10-146

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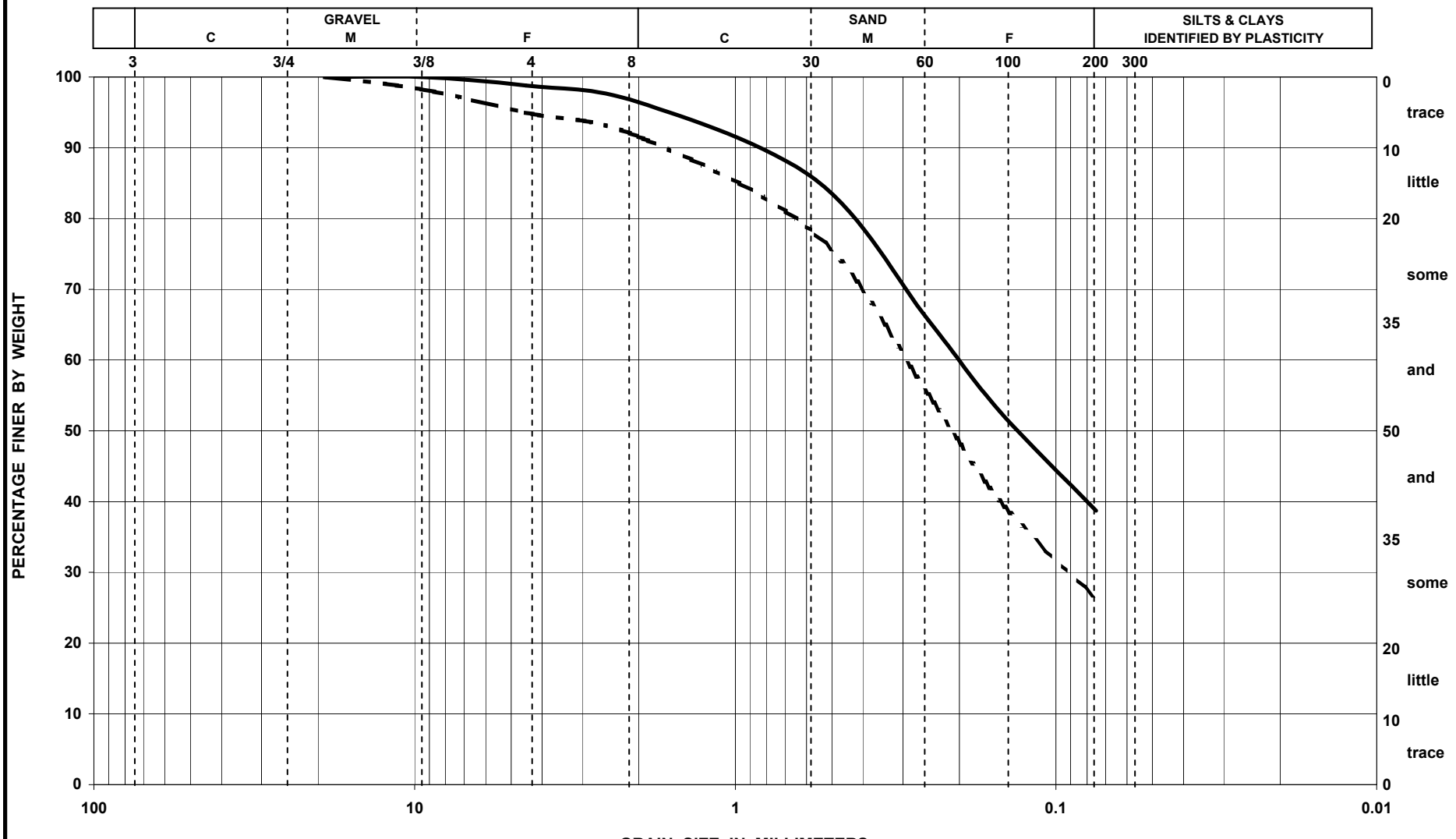
SAYREVILLE, NJ 08872

SIEVE ANALYSIS



SYMBOL	BORING	SAMPLE	DEPTH	DESCRIPTION	NAT MC
———	B-106	S-3	5'0"-7'0"	FILL (Brown coarse to fine SAND, and Silt, trace (-) medium to fine Gravel)	17.1%
— -	B-107	S-3	5'0"-7'0"	Brown, coarse to fine SAND, some Silt, trace (+) medium to fine Gravel	14.4%

PROJECT French American School of NY, White Plains, NY **BY** MW **DATE** 25-Apr-14 **JOB NO** 10-146

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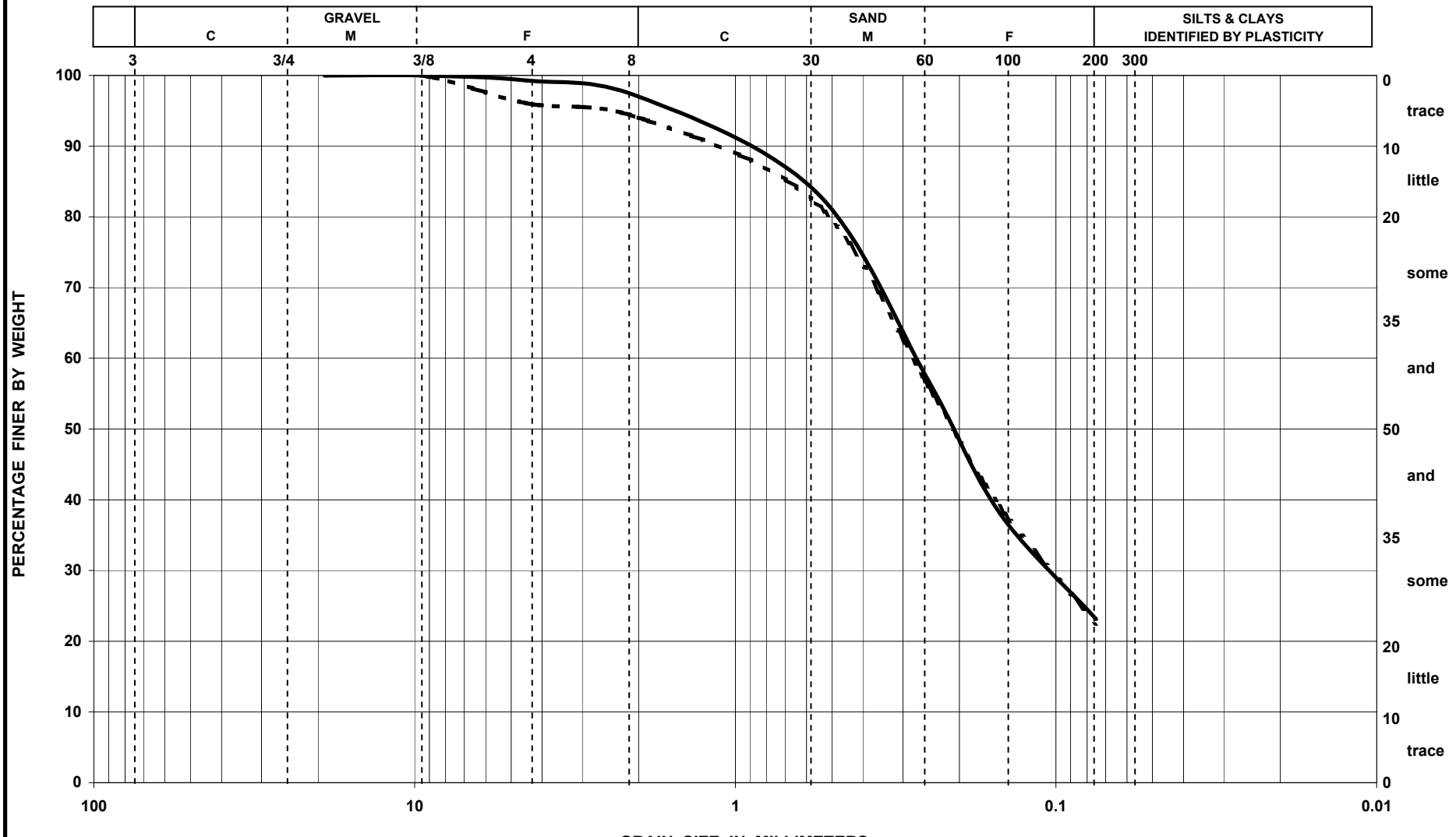
SIEVE ANALYSIS



SYMBOL	BORING	SAMPLE	DEPTH	DESCRIPTION	NAT MC
———	B-109	S-2	2'0"-4'0"	Brown coarse to fine SAND, some (-) Silt, trace (-) fine Gravel	15.9%
— -	B-112	S-3	5'0"-7'0"	Brown coarse to fine SAND, some (-) Silt, trace medium to fine Gravel	13.1%

PROJECT French American School of NY, White Plains, NY **BY** MW **DATE** 25-Apr-14 **JOB NO** 10-146

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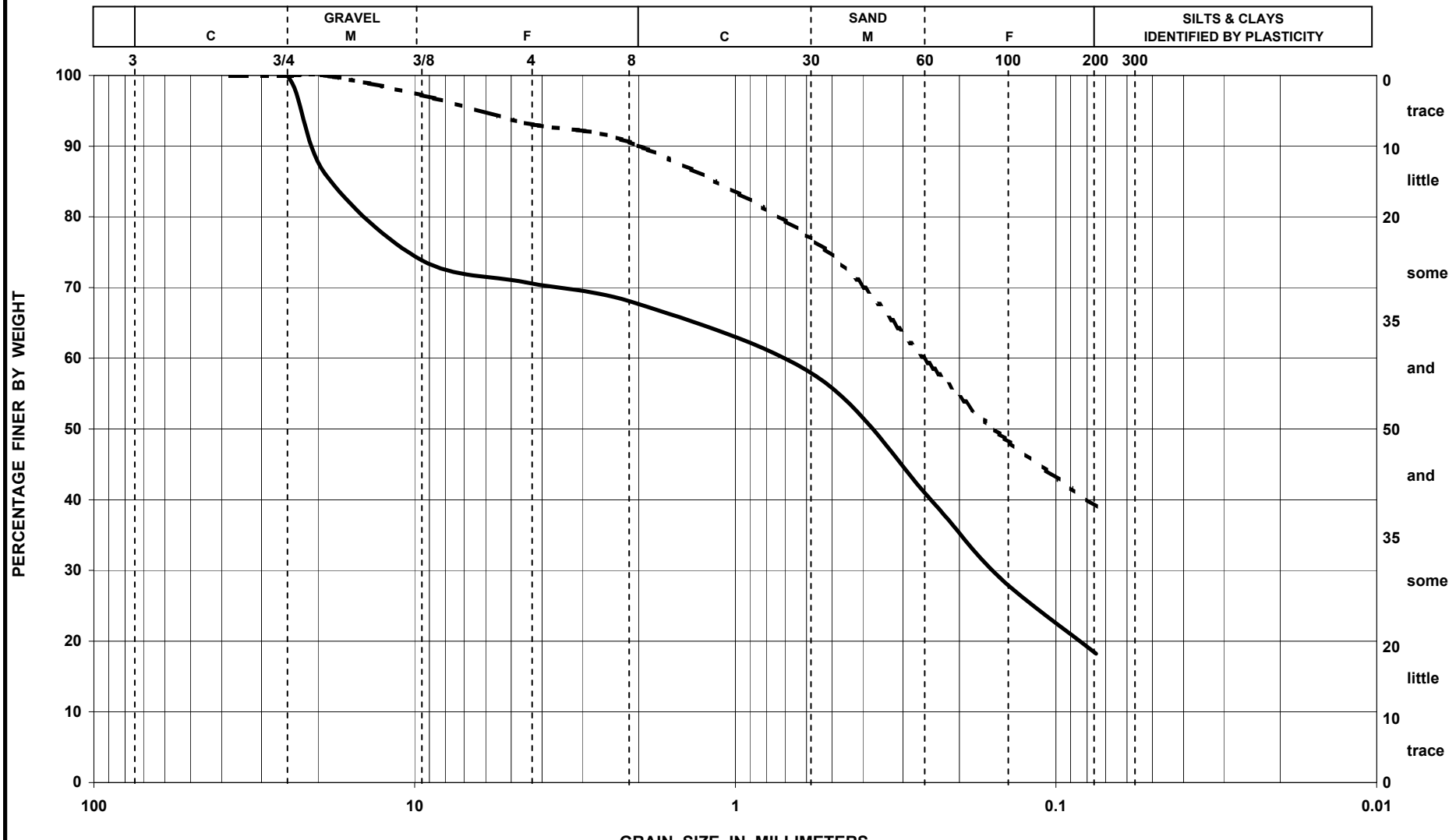
SIEVE ANALYSIS



SYMBOL	BORING	SAMPLE	DEPTH	DESCRIPTION	NAT MC
———	B-113	S-3	5'0"-7'0"	Brown coarse to fine SAND, little (+) Silt, some (+) medium to fine Gravel	10.7%
— -	TP-111	S-2	0'3"-4'6"	Light gray, brown coarse to fine SAND, and (-) Silt, trace (+) medium to fine Gravel	14.4%

PROJECT French American School of NY, White Plains, NY **BY** MW **DATE** 25-Apr-14 **JOB NO** 10-146

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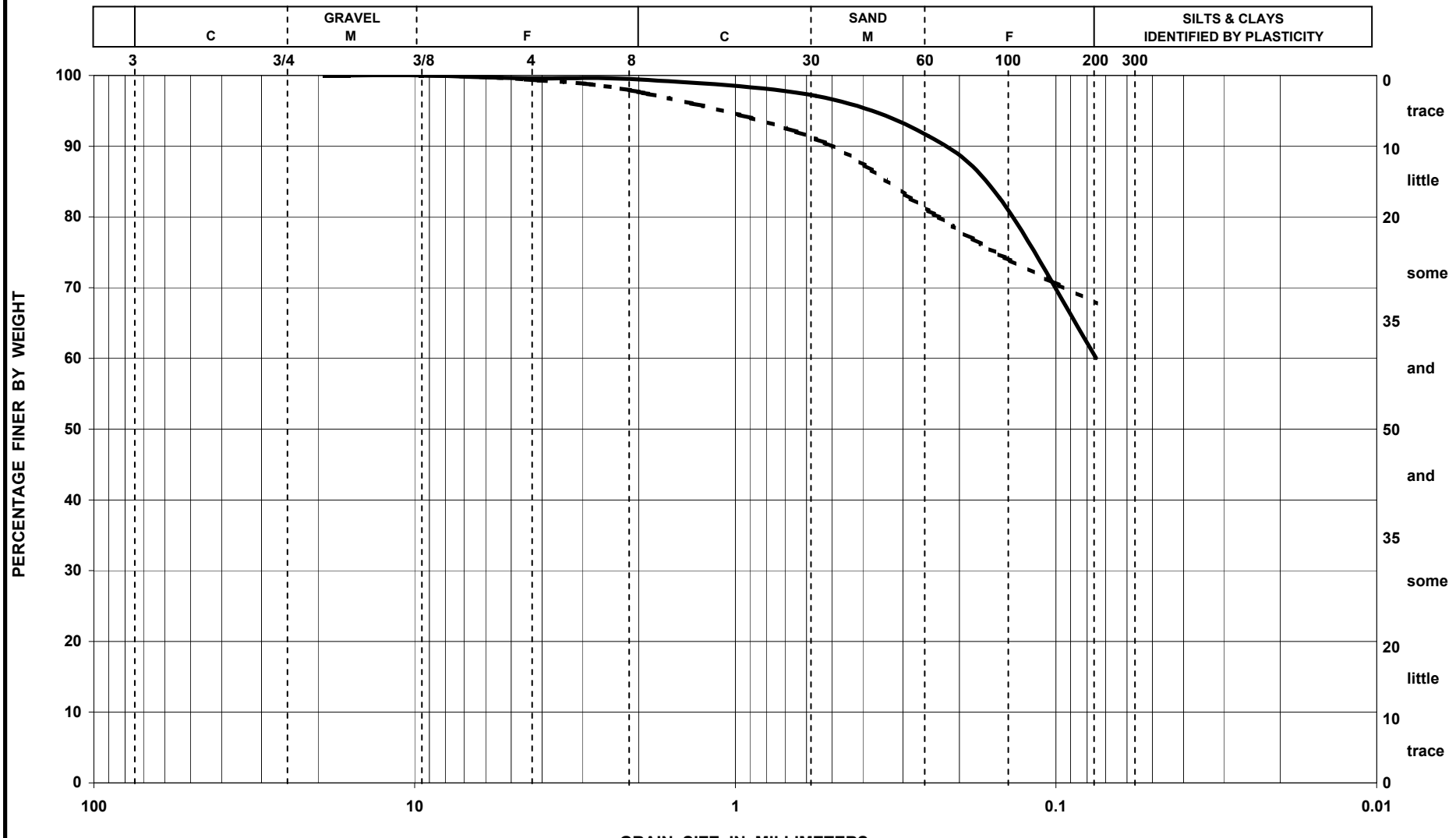
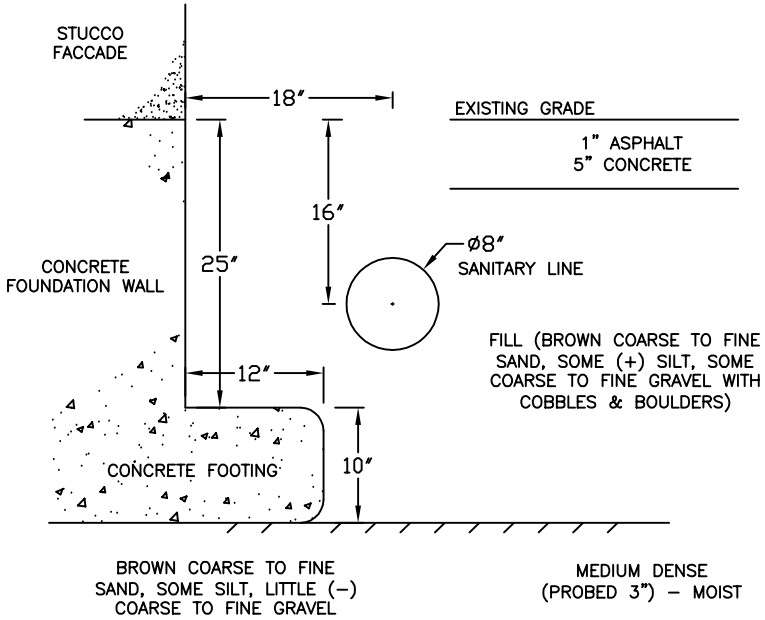
SIEVE ANALYSIS



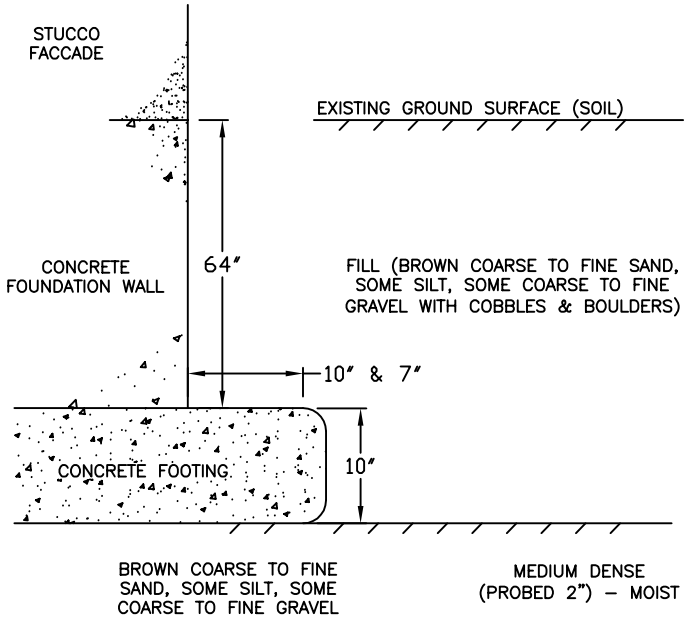
SYMBOL	BORING	SAMPLE	DEPTH	DESCRIPTION	NAT MC
———	TP-112	S-2	2'0"-5'2"	Mottled light brown, gray, brown SILT, trace (-) fine Gravel, and (-) coarse to fine Sand	18.7%
— -	TP-113	S-2	1'0"-3'0"	Mottled gray, brown, light brown SILT, trace (-) fine Gravel, some coarse to fine Sand	19.1%

PROJECT French American School of NY, White Plains, NY **BY** MW **DATE** 25-Apr-14 **JOB NO** 10-146

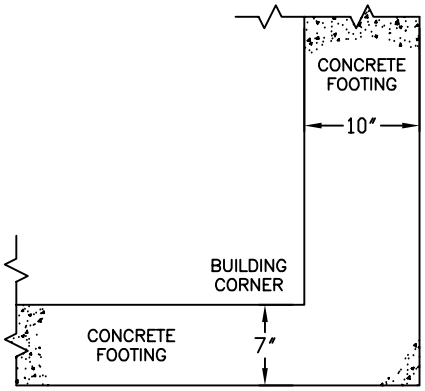
TEST PIT WEST SECTION

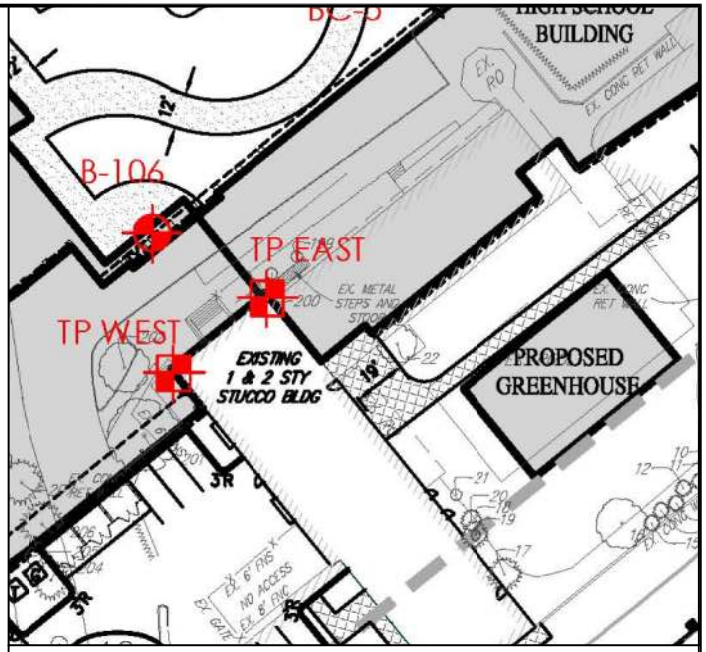


TEST PIT EAST SECTION



TEST PIT EAST PLAN





GENERAL NOTES:

1. GENERAL LAYOUT WAS OBTAINED FROM A DRAWING PREPARED BY JOHN MEYER CONSULTING, ENTITLED "SCHEMATIC SITE LAYOUT", DATED 4/4/2014.
2. TEST PITS WERE LAID OUT IN THE FIELD BY CARLIN-SIMPSON & ASSOCIATES (CSA).
3. TEST PITS WERE PERFORMED BY TRAFICANTE CONTRACTING INC. ON 5 MAY 2014 UNDER THE FULL TIME INSPECTION OF CSA.
4. TEST PIT OBSERVATIONS, DIMENSIONS, AND LOCATIONS ARE APPROXIMATE.

LEGEND:

- BORING LOCATION
- TEST PIT LOCATION

ROBERT B. SIMPSON, P.E.
PROFESSIONAL ENGINEER

LICENSE NO. | SIGNATURE | DATE

TEST PIT SKETCHES AND PLAN

PROPOSED FRENCH AMERICAN SCHOOL OF NEW YORK
400 RIDGEWAY ROAD
WHITE PLAINS, NEW YORK

DRAWN: SR	SCALE: NO SCALE
CHECKED: RBS	DATE: 27 MAY 2014
PROJECT NO.: 10-146	DWG NO.: FIG -2
APPROVED:	

CARLIN-SIMPSON AND ASSOCIATES
61 Main Street
Sayreville, NJ 08872

Consulting Geotechnical and Environmental Engineers

APPENDIX J

PIPE CAPACITY CALCULATIONS

Link Summary

Element ID	Element Type	From (Inlet) Node	To (Outlet) Node	Length (ft)	Inlet Invert Elevation (ft)	Outlet Invert Elevation (ft)	Average Slope (%)	Diameter or Height (in)	Manning's Roughness	Peak Flow (cfs)	Design Flow Capacity (cfs)	Peak Flow/ Design Flow Ratio	Peak Flow Velocity (ft/sec)	Peak Flow Depth (ft)	Peak Flow Depth/ Total Depth Ratio
Link-05	Pipe	B-7-8	LI-B-7-7	53.00	278.65	278.35	0.5700	15.000	0.0120	1.84	5.27	0.35	2.13	1.25	1.00
Link-06	Pipe	LI-B-7-7	LI-B-7-6	58.00	278.35	278.05	0.5200	15.000	0.0120	3.38	5.03	0.67	2.75	1.25	1.00
Link-07	Pipe	LI-B-7-6	LI-B-7-5	71.00	278.05	277.70	0.4900	15.000	0.0120	4.28	4.91	0.87	3.49	1.25	1.00
Link-08	Pipe	LI-B-7-5	MH-B-7-4	81.00	277.70	277.30	0.4900	15.000	0.0120	7.57	4.92	1.54	6.17	1.25	1.00
Link-09	Pipe	MH-B-7-4	MH-B-7-3	123.00	277.30	276.65	0.5300	15.000	0.0120	7.56	5.09	1.49	7.87	0.92	0.74
Link-10	Pipe	MH-B-7-3	DI-B-7-2	191.00	276.65	266.74	5.1900	15.000	0.0120	7.33	15.94	0.46	7.55	0.92	0.74
Link-11	Pipe	DI-B-7-2	DI-B-7-1	54.00	266.74	266.48	0.4800	18.000	0.0120	7.92	7.90	1.00	4.48	1.50	1.00
Link-12	Pipe	DI-B-7-1	DI B-7	80.00	266.48	266.08	0.5000	18.000	0.0150	10.75	6.44	1.67	6.09	1.50	1.00
Link-13	Pipe	DI B-6	Jun-01	167.00	265.85	265.00	0.5100	24.000	0.0120	19.56	17.48	1.12	6.58	1.79	0.90
Link-14	Pipe	DI-D-8	DI D-6	84.23	264.85	262.94	2.2700	24.000	0.0150	3.90	29.52	0.13	1.82	1.58	0.79
Pipe - (166)	Pipe	EX-DMH A-8	DI A-7	75.32	262.30	261.32	1.3000	36.000	0.0120	45.06	82.37	0.55	9.06	2.09	0.70
Pipe - (166) (1)	Pipe	DI A-7	MH A-6	67.05	261.32	260.45	1.3000	36.000	0.0120	41.87	82.37	0.51	8.80	2.34	0.78
Pipe - (167)	Pipe	MH A-6	MH A-5	108.53	260.45	259.90	0.5100	36.000	0.0120	41.73	51.44	0.81	8.47	2.41	0.81
Pipe - (168)	Pipe	OCS A-2	Out-1Pipe - (168)	113.60	256.50	256.30	0.1800	42.000	0.0120	32.40	45.73	0.71	5.48	2.07	0.59
Pipe - (171)	Pipe	DI D-13	DI D-12	83.66	277.00	274.85	2.5700	15.000	0.0120	2.84	11.22	0.25	5.52	0.55	0.44
Pipe - (172)	Pipe	DI D-12	DI D-11	78.37	274.85	272.75	2.6800	15.000	0.0120	4.65	11.46	0.41	7.04	0.66	0.53
Pipe - (173)	Pipe	DI D-11	DI D-10	71.50	272.75	270.20	3.5700	15.000	0.0120	6.06	13.22	0.46	7.49	0.78	0.63
Pipe - (174)	Pipe	DI D-10	DI B-7	73.94	270.20	267.85	3.1800	15.000	0.0120	7.46	12.48	0.60	9.18	0.79	0.63
Pipe - (175)	Pipe	DI B-7	DI B-6	43.00	266.08	265.85	0.5300	24.000	0.0120	18.34	17.92	1.02	6.23	2.00	1.00
Pipe - (180)	Pipe	DI D-5	DI D-4	110.24	262.78	262.50	0.2500	30.000	0.0120	17.75	22.39	0.79	4.54	2.50	1.00
Pipe - (181)	Pipe	DI D-4	DI D-3	79.54	262.50	262.30	0.2500	36.000	0.0120	25.46	36.23	0.70	4.81	2.98	1.00
Pipe - (183)	Pipe	DI D-2-5	DI D-2-4	113.38	276.50	275.90	0.5300	18.000	0.0120	7.92	8.28	0.96	4.95	1.50	1.00
Pipe - (184)	Pipe	DI D-2-4	DI D-2-3	132.07	275.90	275.20	0.5300	18.000	0.0120	9.09	8.28	1.10	5.14	1.50	1.00
Pipe - (186)	Pipe	DI D-2-3	MH D-2-2	78.51	275.20	274.80	0.5100	18.000	0.0120	10.97	8.12	1.35	6.42	1.37	0.93
Pipe - (187)	Pipe	MH D-2-2	DI D-2-1	106.02	268.86	264.55	4.0700	24.000	0.0120	10.64	49.41	0.22	9.77	0.80	0.40
Pipe - (189)	Pipe	DI D-2-1	CI D-2	50.26	264.50	262.61	3.7600	24.000	0.0120	10.89	47.52	0.23	4.38	1.48	0.74
Pipe - (214)	Pipe	MH A-5	MH A-4	153.35	259.90	259.15	0.4900	36.000	0.0120	39.39	50.53	0.78	8.98	2.17	0.72
Pipe - (215)	Pipe	MH A-4	MH A-3	329.26	259.15	257.50	0.5000	36.000	0.0120	33.83	51.15	0.66	7.67	2.08	0.69
Pipe - (217)	Pipe	MH B-4	MH B-3	44.06	264.60	264.19	0.9300	18.000	0.0120	11.19	10.98	1.02	6.33	1.50	1.00
Pipe - (218)	Pipe	MH B-3	MH B-2	35.44	264.19	263.88	0.8700	18.000	0.0120	11.19	10.64	1.05	6.33	1.50	1.00
Pipe - (220)	Pipe	DI D-6	DI D-5	63.50	262.94	262.78	0.2500	30.000	0.0120	14.63	22.31	0.66	4.08	2.50	1.00
Pipe - (233)	Pipe	LI C-3	LI C-2	88.44	262.50	262.25	0.2800	18.000	0.0120	7.53	6.05	1.24	5.28	1.50	1.00
Pipe - (234)	Pipe	MH B-2	Out-1Pipe - (234)	36.98	262.53	262.00	1.4300	18.000	0.0120	11.19	13.62	0.82	6.33	1.50	1.00
Pipe - (235)	Pipe	DI D-3	CI D-2	114.70	262.30	262.05	0.2200	36.000	0.0120	26.94	33.73	0.80	4.96	3.00	1.00
Pipe - (236)	Pipe	CI D-2	Out-1Pipe - (236)	28.51	262.05	262.00	0.1800	36.000	0.0120	44.04	30.26	1.46	7.45	3.00	1.00
Pipe - (237)	Pipe	MH A-3	OCS A-2	125.16	257.50	256.50	0.8000	36.000	0.0120	32.40	64.59	0.50	6.55	2.25	0.75
Pipe - (238)	Pipe	DI D-14	DI D-13	72.42	279.15	277.00	2.9700	15.000	0.0120	2.30	12.06	0.19	6.19	0.43	0.34
Pipe - (240)	Pipe	DI D-2-3-1	DI D-2-3	77.92	279.50	275.20	5.5200	15.000	0.0120	1.32	16.44	0.08	4.51	0.74	0.60
Pipe - (241)	Pipe	LI D-2-6	DI D-2-5	66.11	276.85	276.50	0.5300	15.000	0.0120	7.72	5.09	1.52	6.29	1.25	1.00
Pipe - (340)	Pipe	LI C-4	LI C-3	93.91	263.00	262.50	0.5300	18.000	0.0120	5.61	8.30	0.68	3.66	1.50	1.00
Pipe - (342)	Pipe	LI C-2	Out-1Pipe - (342)	111.56	262.25	262.00	0.2200	18.000	0.0120	10.68	5.39	1.98	6.07	1.50	1.00
Pipe - (346)	Pipe	LI D-2-2-1	MH D-2-2	67.83	268.00	267.35	0.9600	12.000	0.0120	2.04	3.78	0.54	2.70	1.00	1.00
Pipe - (347)	Pipe	LI D-2-4-1	DI D-2-4	60.08	279.00	275.90	5.1600	15.000	0.0120	1.10	15.90	0.07	3.80	0.74	0.59
Pipe - (348)	Pipe	MH C-3-1	LI C-3	106.19	265.00	262.75	2.1200	12.000	0.0120	0.58	5.62	0.10	1.13	0.76	0.76
Pipe - (350)	Pipe	LI D-2-8-2	LI D-2-8-1	101.21	278.50	277.95	0.5400	15.000	0.0120	3.56	5.16	0.69	3.22	1.25	1.00
Pipe - (351)	Pipe	LI D-2-8-1	LI D-2-8	37.19	277.95	277.50	1.2100	15.000	0.0120	4.18	7.70	0.54	3.45	1.25	1.00
Pipe - (352)	Pipe	LI D-2-7	LI D-2-6	71.17	277.25	276.85	0.5600	15.000	0.0120	7.69	5.25	1.47	6.27	1.25	1.00
Pipe - (363)	Pipe	DI D-2-16	CI D-2-15	34.19	284.25	284.05	0.5800	15.000	0.0120	0.29	5.35	0.05	2.06	0.22	0.17
Pipe - (365)	Pipe	DI D-2-13	DI D-2-12	162.74	283.05	280.85	1.3500	15.000	0.0120	0.72	8.14	0.09	1.08	0.74	0.59
Pipe - (366)	Pipe	DI D-2-12	DI D-2-11	82.94	280.85	278.40	2.9500	15.000	0.0120	5.14	12.03	0.43	4.49	1.25	1.00
Pipe - (367)	Pipe	DI D-2-11	DI D-2-10	65.63	278.40	278.05	0.5300	15.000	0.0120	5.80	5.11	1.14	4.73	1.25	1.00
Pipe - (368)	Pipe	LI D-2-8	LI D-2-7	47.07	277.50	277.25	0.5300	15.000	0.0120	8.31	5.10	1.63	6.77	1.25	1.00
Pipe - (386)	Pipe	DI D-14-1	DI D-14	53.34	282.25	279.15	5.8100	15.000	0.0120	1.05	16.87	0.06	4.50	0.31	0.24
Pipe - (387)	Pipe	DI D-15	DI D-14	52.48	280.00	279.15	1.6200	15.000	0.0120	1.05	8.91	0.12	3.61	0.36	0.29
Pipe - (388)	Pipe	CI D-2-11-2	DI D-2-11-1	28.82	279.25	279.10	0.5200	15.000	0.0120	6.48	5.05	1.28	5.35	1.25	1.00
Pipe - (390)	Pipe	DI D-2-10	CI D-2-9	28.56	278.05	277.90	0.5300	15.000	0.0120	9.90	5.07	1.95	8.07	1.25	1.00
Pipe - (391)	Pipe	CI D-2-9	LI D-2-8	70.21	277.90	277.50	0.5700	15.000	0.0120	9.33	5.28	1.77	7.60	1.25	1.00
Pipe - (392)	Pipe	DI D-2-11-1	DI D-2-11	71.50	279.10	278.40	0.9800	15.000	0.0120	5.67	6.92	0.82	4.68	1.25	1.00

Link Summary

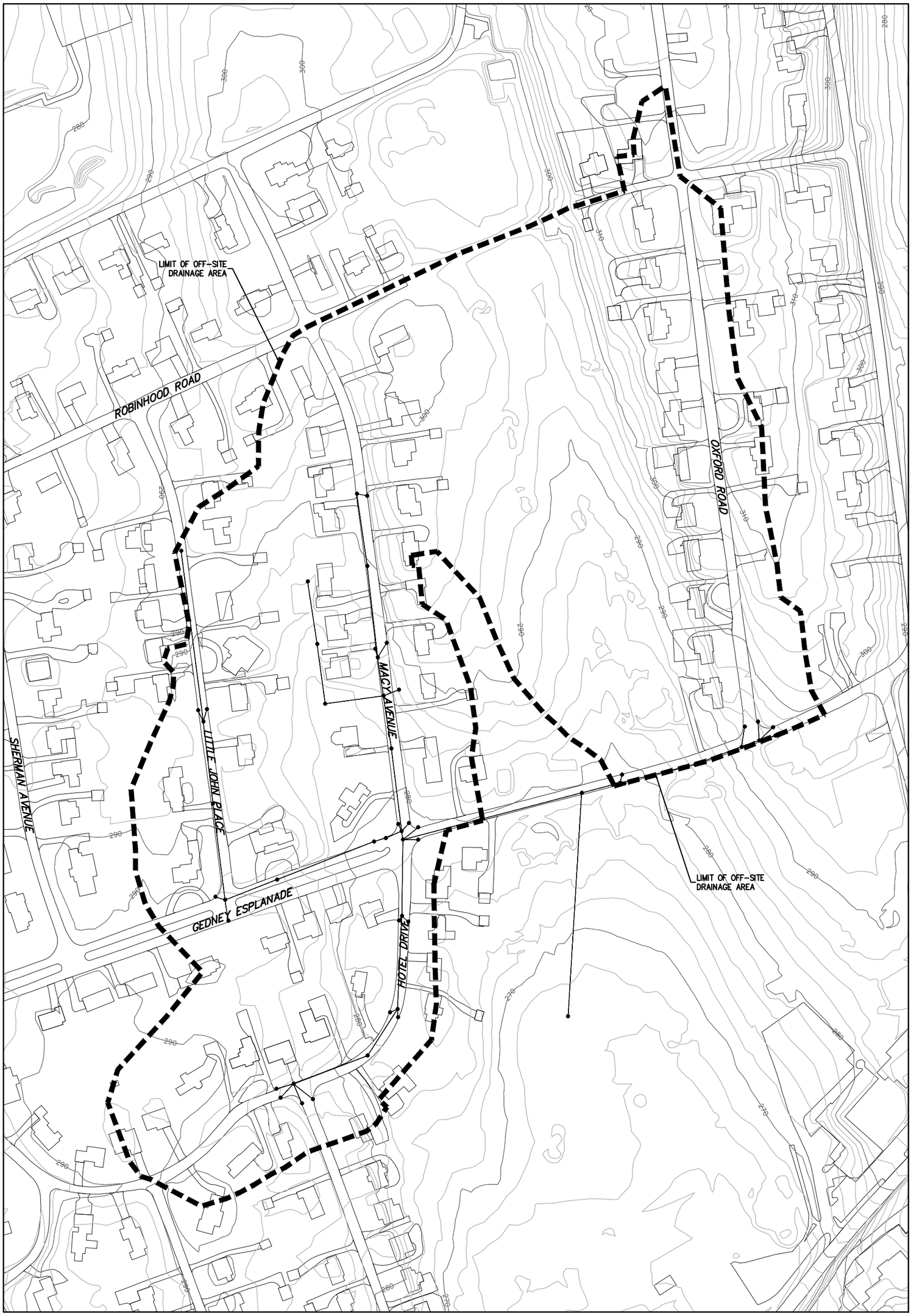
Element ID	Element Type	From (Inlet) Node	To (Outlet) Node	Length (ft)	Inlet Invert Elevation (ft)	Outlet Invert Elevation (ft)	Average Slope (%)	Diameter or Height (in)	Manning's Roughness	Peak Flow (cfs)	Design Flow Capacity (cfs)	Peak Flow/ Design Flow Ratio	Peak Flow Velocity (ft/sec)	Peak Flow Depth (ft)	Peak Flow Depth/ Total Depth Ratio
Pipe - (393)	Pipe	CI D-2-15	CI D-2-14	44.61	284.05	283.80	0.5600	15.000	0.0120	0.29	5.24	0.05	2.14	0.21	0.17
Pipe - (394)	Pipe	CI D-2-14	DI D-2-13	149.41	283.80	283.05	0.5000	15.000	0.0120	0.29	4.96	0.06	2.12	0.22	0.18
Pipe - (395)	Pipe	DI D-2-12-1	DI D-2-12	58.25	282.00	280.85	1.9700	15.000	0.0120	3.29	9.83	0.33	3.60	1.25	1.00
Pipe - (396)	Pipe	DI D-2-11-3	DI D-2-11	87.38	282.55	278.40	4.7500	15.000	0.0120	1.90	15.25	0.12	2.16	0.91	0.73

Link Summary

Element ID	Element Type	From (Inlet) Node	To (Outlet) Node	Length (ft)	Inlet Invert Elevation (ft)	Outlet Invert Elevation (ft)	Average Slope (%)	Diameter or Height (in)	Manning's Roughness	Peak Flow (cfs)	Design Flow Capacity (cfs)	Peak Flow/ Design Flow Ratio	Peak Flow Velocity (ft/sec)	Peak Flow Depth (ft)	Peak Flow Depth/ Total Depth Ratio
Link-05	Pipe	B-7-8	LI-B-7-7	53.00	278.65	278.35	0.5700	15.000	0.0120	2.18	5.27	0.41	2.15	1.25	1.00
Link-06	Pipe	LI-B-7-7	LI-B-7-6	58.00	278.35	278.05	0.5200	15.000	0.0120	3.30	5.03	0.66	2.69	1.25	1.00
Link-07	Pipe	LI-B-7-6	LI-B-7-5	71.00	278.05	277.70	0.4900	15.000	0.0120	4.29	4.91	0.87	3.50	1.25	1.00
Link-08	Pipe	LI-B-7-5	MH-B-7-4	81.00	277.70	277.30	0.4900	15.000	0.0120	8.24	4.92	1.67	6.71	1.25	1.00
Link-09	Pipe	MH-B-7-4	MH-B-7-3	123.00	277.30	276.65	0.5300	15.000	0.0120	8.23	5.09	1.62	8.29	0.94	0.75
Link-10	Pipe	MH-B-7-3	DI-B-7-2	191.00	276.65	266.74	5.1900	15.000	0.0120	8.22	15.94	0.52	8.27	0.94	0.75
Link-11	Pipe	DI-B-7-2	DI-B-7-1	54.00	266.74	266.48	0.4800	18.000	0.0120	7.91	7.90	1.00	4.47	1.50	1.00
Link-12	Pipe	DI-B-7-1	DI B-7	80.00	266.48	266.08	0.5000	18.000	0.0150	10.53	6.44	1.64	5.96	1.50	1.00
Link-13	Pipe	DI B-6	Jun-01	167.00	265.85	265.00	0.5100	24.000	0.0120	21.50	17.48	1.23	7.14	1.83	0.91
Link-14	Pipe	DI-D-8	DI D-6	84.23	264.85	262.94	2.2700	24.000	0.0150	6.88	29.52	0.23	2.79	1.95	1.00
Pipe - (166)	Pipe	EX-DMH A-8	DI A-7	75.32	262.30	261.32	1.3000	36.000	0.0120	45.08	82.37	0.55	9.06	2.09	0.70
Pipe - (166) (1)	Pipe	DI A-7	MH A-6	67.05	261.32	260.45	1.3000	36.000	0.0120	41.84	82.37	0.51	8.79	2.34	0.78
Pipe - (167)	Pipe	MH A-6	MH A-5	108.53	260.45	259.90	0.5100	36.000	0.0120	41.74	51.44	0.81	8.49	2.41	0.81
Pipe - (168)	Pipe	OCS A-2	Out-1Pipe - (168)	113.60	256.50	256.30	0.1800	42.000	0.0120	32.40	45.73	0.71	5.48	2.07	0.59
Pipe - (171)	Pipe	DI D-13	DI D-12	83.66	277.00	274.85	2.5700	15.000	0.0120	3.77	11.22	0.34	5.75	0.66	0.53
Pipe - (172)	Pipe	DI D-12	DI D-11	78.37	274.85	272.75	2.6800	15.000	0.0120	6.18	11.46	0.54	7.24	0.82	0.66
Pipe - (173)	Pipe	DI D-11	DI D-10	71.50	272.75	270.20	3.5700	15.000	0.0120	8.05	13.22	0.61	7.61	1.01	0.81
Pipe - (174)	Pipe	DI D-10	DI B-7	73.94	270.20	267.85	3.1800	15.000	0.0120	9.89	12.48	0.79	9.42	1.06	0.85
Pipe - (175)	Pipe	DI B-7	DI B-6	43.00	266.08	265.85	0.5300	24.000	0.0120	19.91	17.92	1.11	6.34	2.00	1.00
Pipe - (180)	Pipe	DI D-5	DI D-4	110.24	262.78	262.50	0.2500	30.000	0.0120	23.52	22.39	1.05	5.32	2.50	1.00
Pipe - (181)	Pipe	DI D-4	DI D-3	79.54	262.50	262.30	0.2500	36.000	0.0120	31.72	36.23	0.88	5.36	3.00	1.00
Pipe - (183)	Pipe	DI D-2-5	DI D-2-4	113.38	276.50	275.90	0.5300	18.000	0.0120	8.22	8.28	0.99	5.15	1.50	1.00
Pipe - (184)	Pipe	DI D-2-4	DI D-2-3	132.07	275.90	275.20	0.5300	18.000	0.0120	9.79	8.28	1.18	5.54	1.50	1.00
Pipe - (186)	Pipe	DI D-2-3	MH D-2-2	78.51	275.20	274.80	0.5100	18.000	0.0120	11.95	8.12	1.47	6.91	1.40	0.95
Pipe - (187)	Pipe	MH D-2-2	DI D-2-1	106.02	268.86	264.55	4.0700	24.000	0.0120	11.51	49.41	0.23	6.88	1.06	0.53
Pipe - (189)	Pipe	DI D-2-1	CI D-2	50.26	264.50	262.61	3.7600	24.000	0.0120	11.76	47.52	0.25	4.06	1.75	0.87
Pipe - (214)	Pipe	MH A-5	MH A-4	153.35	259.90	259.15	0.4900	36.000	0.0120	39.40	50.53	0.78	8.98	2.17	0.72
Pipe - (215)	Pipe	MH A-4	MH A-3	329.26	259.15	257.50	0.5000	36.000	0.0120	33.84	51.15	0.66	7.67	2.08	0.69
Pipe - (217)	Pipe	MH B-4	MH B-3	44.06	264.60	264.19	0.9300	18.000	0.0120	10.26	10.98	0.93	5.80	1.50	1.00
Pipe - (218)	Pipe	MH B-3	MH B-2	35.44	264.19	263.88	0.8700	18.000	0.0120	10.25	10.64	0.96	5.80	1.50	1.00
Pipe - (220)	Pipe	DI D-6	DI D-5	63.50	262.94	262.78	0.2500	30.000	0.0120	19.65	22.31	0.88	4.72	2.50	1.00
Pipe - (233)	Pipe	LI C-3	LI C-2	88.44	262.50	262.25	0.2800	18.000	0.0120	8.60	6.05	1.42	5.75	1.50	1.00
Pipe - (234)	Pipe	MH B-2	Out-1Pipe - (234)	36.98	262.53	262.00	1.4300	18.000	0.0120	12.30	13.62	0.90	6.96	1.50	1.00
Pipe - (235)	Pipe	DI D-3	CI D-2	114.70	262.30	262.05	0.2200	36.000	0.0120	33.24	33.73	0.99	5.34	3.00	1.00
Pipe - (236)	Pipe	CI D-2	Out-1Pipe - (236)	28.51	262.05	262.00	0.1800	36.000	0.0120	54.37	30.26	1.80	8.77	3.00	1.00
Pipe - (237)	Pipe	MH A-3	OCS A-2	125.16	257.50	256.50	0.8000	36.000	0.0120	32.40	64.59	0.50	6.65	2.25	0.75
Pipe - (238)	Pipe	DI D-14	DI D-13	72.42	279.15	277.00	2.9700	15.000	0.0120	3.06	12.06	0.25	6.51	0.51	0.41
Pipe - (240)	Pipe	DI D-2-3-1	DI D-2-3	77.92	279.50	275.20	5.5200	15.000	0.0120	1.76	16.44	0.11	4.81	0.76	0.61
Pipe - (241)	Pipe	LI D-2-6	DI D-2-5	66.11	276.85	276.50	0.5300	15.000	0.0120	7.91	5.09	1.55	6.47	1.25	1.00
Pipe - (340)	Pipe	LI C-4	LI C-3	93.91	263.00	262.50	0.5300	18.000	0.0120	6.22	8.30	0.75	3.83	1.50	1.00
Pipe - (342)	Pipe	LI C-2	Out-1Pipe - (342)	111.56	262.25	262.00	0.2200	18.000	0.0120	12.01	5.39	2.23	6.81	1.50	1.00
Pipe - (346)	Pipe	LI D-2-2-1	MH D-2-2	67.83	268.00	267.35	0.9600	12.000	0.0120	2.01	3.78	0.53	2.66	1.00	1.00
Pipe - (347)	Pipe	LI D-2-4-1	DI D-2-4	60.08	279.00	275.90	5.1600	15.000	0.0120	1.63	15.90	0.10	4.08	0.75	0.61
Pipe - (348)	Pipe	MH C-3-1	LI C-3	106.19	265.00	262.75	2.1200	12.000	0.0120	0.77	5.62	0.14	1.40	0.84	0.84
Pipe - (350)	Pipe	LI D-2-8-2	LI D-2-8-1	101.21	278.50	277.95	0.5400	15.000	0.0120	3.40	5.16	0.66	3.13	1.25	1.00
Pipe - (351)	Pipe	LI D-2-8-1	LI D-2-8	37.19	277.95	277.50	1.2100	15.000	0.0120	4.03	7.70	0.52	3.57	1.25	1.00
Pipe - (352)	Pipe	LI D-2-7	LI D-2-6	71.17	277.25	276.85	0.5600	15.000	0.0120	7.61	5.25	1.45	6.20	1.25	1.00
Pipe - (363)	Pipe	DI D-2-16	CI D-2-15	34.19	284.25	284.05	0.5800	15.000	0.0120	0.39	5.35	0.07	2.20	0.25	0.20
Pipe - (365)	Pipe	DI D-2-13	DI D-2-12	162.74	283.05	280.85	1.3500	15.000	0.0120	0.85	8.14	0.10	1.11	0.76	0.61
Pipe - (366)	Pipe	DI D-2-12	DI D-2-11	82.94	280.85	278.40	2.9500	15.000	0.0120	5.35	12.03	0.44	4.67	1.25	1.00
Pipe - (367)	Pipe	DI D-2-11	DI D-2-10	65.63	278.40	278.05	0.5300	15.000	0.0120	7.40	5.11	1.45	6.03	1.25	1.00
Pipe - (368)	Pipe	LI D-2-8	LI D-2-7	47.07	277.50	277.25	0.5300	15.000	0.0120	8.35	5.10	1.64	6.80	1.25	1.00
Pipe - (386)	Pipe	DI D-14-1	DI D-14	53.34	282.25	279.15	5.8100	15.000	0.0120	1.39	16.87	0.08	4.79	0.36	0.29
Pipe - (387)	Pipe	DI D-15	DI D-14	52.48	280.00	279.15	1.6200	15.000	0.0120	1.39	8.91	0.16	3.80	0.42	0.34
Pipe - (388)	Pipe	CI D-2-11-2	DI D-2-11-1	28.82	279.25	279.10	0.5200	15.000	0.0120	5.64	5.05	1.12	4.84	1.25	1.00
Pipe - (390)	Pipe	DI D-2-10	CI D-2-9	28.56	278.05	277.90	0.5300	15.000	0.0120	10.08	5.07	1.99	8.21	1.25	1.00
Pipe - (391)	Pipe	CI D-2-9	LI D-2-8	70.21	277.90	277.50	0.5700	15.000	0.0120	9.24	5.28	1.75	7.53	1.25	1.00
Pipe - (392)	Pipe	DI D-2-11-1	DI D-2-11	71.50	279.10	278.40	0.9800	15.000	0.0120	6.05	6.92	0.87	5.16	1.25	1.00

Link Summary

Element ID	Element Type	From (Inlet) Node	To (Outlet) Node	Length (ft)	Inlet Invert Elevation (ft)	Outlet Invert Elevation (ft)	Average Slope (%)	Diameter or Height (in)	Manning's Roughness	Peak Flow (cfs)	Design Flow Capacity (cfs)	Peak Flow/ Design Flow Ratio	Peak Flow Velocity (ft/sec)	Peak Flow Depth (ft)	Peak Flow Depth/ Total Depth Ratio
Pipe - (393)	Pipe	CI D-2-15	CI D-2-14	44.61	284.05	283.80	0.5600	15.000	0.0120	0.38	5.24	0.07	2.33	0.24	0.19
Pipe - (394)	Pipe	CI D-2-14	DI D-2-13	149.41	283.80	283.05	0.5000	15.000	0.0120	0.37	4.96	0.07	2.22	0.25	0.20
Pipe - (395)	Pipe	DI D-2-12-1	DI D-2-12	58.25	282.00	280.85	1.9700	15.000	0.0120	3.37	9.83	0.34	3.78	1.25	1.00
Pipe - (396)	Pipe	DI D-2-11-3	DI D-2-11	87.38	282.55	278.40	4.7500	15.000	0.0120	2.26	15.25	0.15	2.47	0.94	0.75



FRENCH-AMERICAN SCHOOL OF NEW YORK

400 RIDGEWAY

CITY OF WHITE PLAINS, NEW YORK

CONTRIBUTING DRAINAGE AREA

DATE: 3/17/2015

JMC PROJECT: 10170

FIGURE: 01

SCALE: 1" = 200'

JMC
SITE DEVELOPMENT CONSULTANTS
120 BEDFORD ROAD • ARMONK, NY 10504
voice 914.273.5225 • fax 914.273.2102
www.jmcpllc.com

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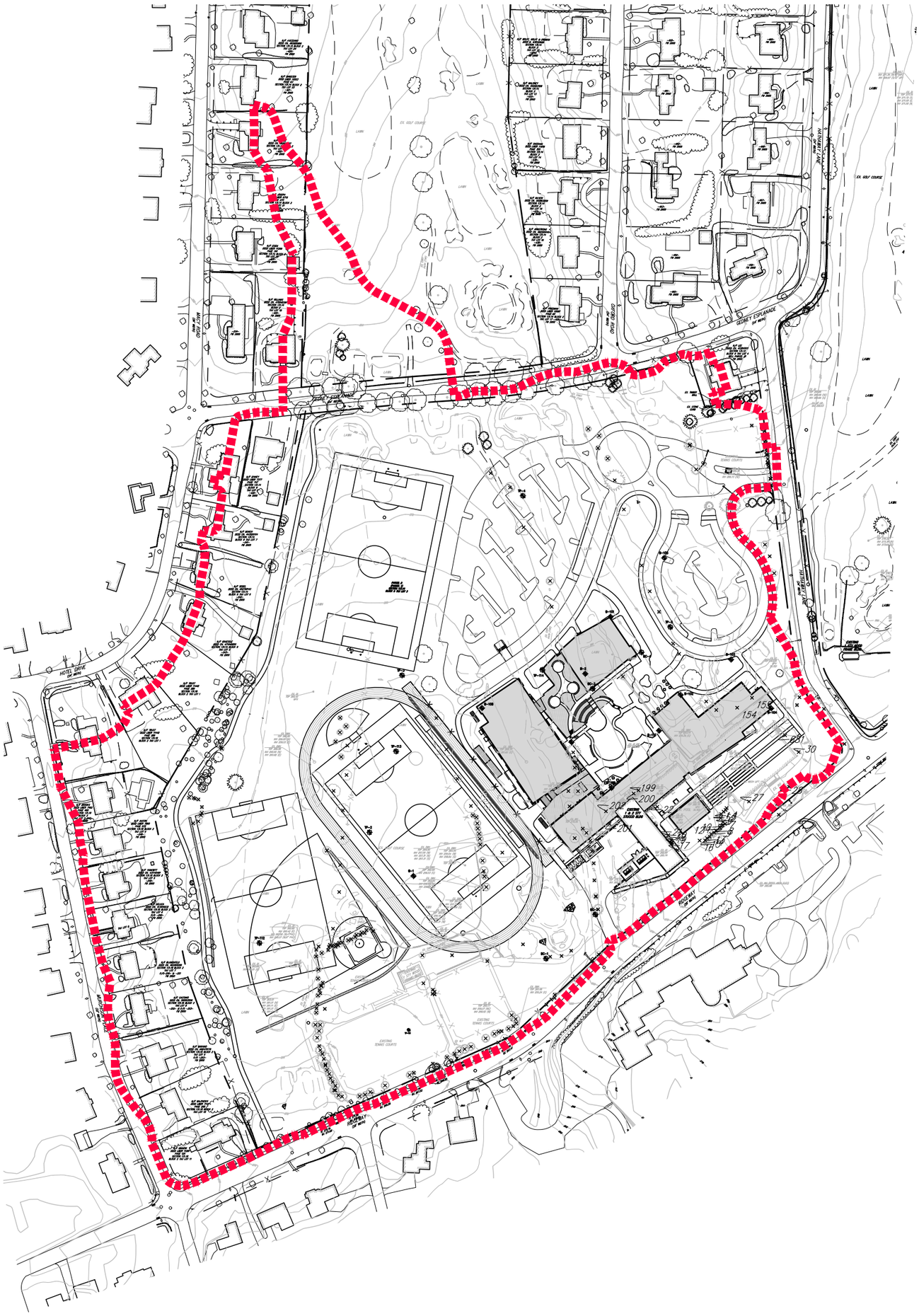
10170-GIS-BASE_BD.dwg; Layout1.tab



FRENCH-AMERICAN SCHOOL OF NEW YORK

400 RIDGEWAY

CITY OF WHITE PLAINS, NEW YORK

CONTRIBUTING DRAINAGE AREA

DATE: 03/17/2015

JMC PROJECT: 10170

FIGURE: 02

SCALE: 1" = 200'

JMC
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10170-GRADING.dwg; CATCHMENT AREAS.tab

APPENDIX K

NYSDEC SPDES GENERAL PERMIT INFORMATION

0644089821

NOTICE OF INTENT

New York State Department of Environmental Conservation
Division of Water
625 Broadway, 4th Floor
Albany, New York 12233-3505

NYR _____
(for DEC use only)

Stormwater Discharges Associated with Construction Activity Under State Pollutant Discharge Elimination System (SPDES) General Permit # GP-0-15-002

All sections must be completed unless otherwise noted. Failure to complete all items may result in this form being returned to you, thereby delaying your coverage under this General Permit. Applicants must read and understand the conditions of the permit and prepare a Stormwater Pollution Prevention Plan prior to submitting this NOI. Applicants are responsible for identifying and obtaining other DEC permits that may be required.

-IMPORTANT-
RETURN THIS FORM TO THE ADDRESS ABOVE
OWNER/OPERATOR MUST SIGN FORM

Owner/Operator Information

Owner/Operator (Company Name/Private Owner Name/Municipality Name)
FRENCH AMRICAN SCHOOL NEW YORK

Owner/Operator Contact Person Last Name (NOT CONSULTANT)
TOOTH

Owner/Operator Contact Person First Name
PASCALE

Owner/Operator Mailing Address
525 FENIMORE ROAD

City
MAMARONECK

State: NY
Zip: 10543 -

Phone (Owner/Operator): 914 250 5055
Fax (Owner/Operator): 914 698 6996

Email (Owner/Operator)
PTOOTH@FASNY.ORG

FED TAX ID
- (not required for individuals)

Project Site Information

Project/Site Name
FASNY

Street Address (NOT P.O. BOX)
400 RIDGEWAY

Side of Street
● **North** ○ **South** ○ **East** ○ **West**

City/Town/Village (THAT ISSUES BUILDING PERMIT)
WHITE PLAINS

State: NY
Zip: 10605 -
County: WESTCHESTER
DEC Region: 3

Name of Nearest Cross Street
MURCHISON

Distance to Nearest Cross Street (Feet)
930

Project In Relation to Cross Street
○ **North** ○ **South** ● **East** ○ **West**

Tax Map Numbers
Section-Block-Parcel
131.10-1-6

Tax Map Numbers
131.10-3-43

131.14-2-3, 131.14-9-3, 131.11-12-1

1. Provide the Geographic Coordinates for the project site in NYTM Units. To do this you **must** go to the NYSDEC Stormwater Interactive Map on the DEC website at:

www.dec.ny.gov/imsmaps/stormwater/viewer.htm

Zoom into your Project Location such that you can accurately click on the centroid of your site. Once you have located your project site, go to the tool boxes on the top and choose "i"(identify). Then click on the center of your site and a new window containing the X, Y coordinates in UTM will pop up. Transcribe these coordinates into the boxes below. For problems with the interactive map use the help function.

X Coordinates (Easting)
605858

Y Coordinates (Northing)
4541118800

2. What is the nature of this construction project?

○ **New Construction**

● **Redevelopment with increase in impervious area**

○ **Redevelopment with no increase in impervious area**

3. Select the predominant land use for both pre and post development conditions.
SELECT ONLY ONE CHOICE FOR EACH

Pre-Development Existing Land Use

- ○ FOREST
- ○ PASTURE/OPEN LAND
- ○ CULTIVATED LAND
- ○ SINGLE FAMILY HOME
- ○ SINGLE FAMILY SUBDIVISION
- ○ TOWN HOME RESIDENTIAL
- ○ MULTIFAMILY RESIDENTIAL
- ○ INSTITUTIONAL/SCHOOL
- ○ INDUSTRIAL
- ○ COMMERCIAL
- ○ ROAD/HIGHWAY
- ● RECREATIONAL/SPORTS FIELD
- ○ BIKE PATH/TRAIL
- ○ LINEAR UTILITY
- ○ PARKING LOT
- ○ OTHER

Post-Development Future Land Use

- ○ SINGLE FAMILY HOME
- ○ SINGLE FAMILY SUBDIVISION — Number of Lots
- ○ TOWN HOME RESIDENTIAL
- ○ MULTIFAMILY RESIDENTIAL
- ● INSTITUTIONAL/SCHOOL
- ○ INDUSTRIAL
- ○ COMMERCIAL
- ○ MUNICIPAL
- ○ ROAD/HIGHWAY
- ○ RECREATIONAL/SPORTS FIELD
- ○ BIKE PATH/TRAIL
- ○ LINEAR UTILITY (water, sewer, gas, etc.)
- ○ PARKING LOT
- ○ CLEARING/GRADING ONLY
- ○ DEMOLITION, NO REDEVELOPMENT
- ○ WELL DRILLING ACTIVITY *(Oil, Gas, etc.)
- ○ OTHER

***Note**: for gas well drilling, non-high volume hydraulic fractured wells only

4. In accordance with the larger common plan of development or sale, enter the total project site area; the total area to be disturbed; existing impervious area to be disturbed (for redevelopment activities); and the future impervious area constructed within the disturbed area. (Round to the nearest tenth of an acre.)

Total Site Area	Total Area To Be Disturbed	Existing Impervious Area To Be Disturbed	Future Impervious Area Within Disturbed Area
27.287.8	26.226.2	5.65.6	12.172.7

5. Do you plan to disturb more than 5 acres of soil at any one time? ○ **Yes** ○ **No**

6. Indicate the percentage of each Hydrologic Soil Group(HSG) at the site.

A	B	C	D
0%	0%	100%	0%

7. Is this a phased project? ● **Yes** ○ **No**

8. Enter the planned start and end dates of the disturbance activities.

Start Date 06/01/2017 - **End Date** 06/01/2019

9. Identify the nearest surface waterbody(ies) to which construction site runoff will discharge.

Name

MAMARONECK RIVER

9a. Type of waterbody identified in Question 9?

- ○ Wetland / State Jurisdiction On Site (Answer 9b)
- ○ Wetland / State Jurisdiction Off Site
- ○ Wetland / Federal Jurisdiction On Site (Answer 9b)
- ○ Wetland / Federal Jurisdiction Off Site
- ○ Stream / Creek On Site
- ● Stream / Creek Off Site
- ○ River On Site
- ○ River Off Site
- ○ Lake On Site
- ○ Lake Off Site
- ○ Other Type On Site
- ○ Other Type Off Site

9b. How was the wetland identified?

- ○ Regulatory Map
- ○ Delineated by Consultant
- ○ Delineated by Army Corps of Engineers
- ● Other (identify)

10. Has the surface waterbody(ies) in question 9 been identified as a 303(d) segment in Appendix E of GP-0-15-002? ○ **Yes** ● **No**

11. Is this project located in one of the Watersheds identified in Appendix C of GP-0-15-002? ○ **Yes** ● **No**

12. Is the project located in one of the watershed areas associated with AA and AA-S classified waters? ○ **Yes** ● **No**
If no, skip question 13.

13. Does this construction activity disturb land with no existing impervious cover and where the Soil Slope Phase is identified as an E or F on the USDA Soil Survey? ○ **Yes** ● **No**
If Yes, what is the acreage to be disturbed?

.

14. Will the project disturb soils within a State regulated wetland or the protected 100 foot adjacent area? ○ **Yes** ● **No**

15. Does the site runoff enter a separate storm sewer system (including roadside drains, swales, ditches, culverts, etc)? ● Yes ○ No ○ Unknown

16. What is the name of the municipality/entity that owns the separate storm sewer system?

CITY OF WHITE PLAINS DPW

17. Does any runoff from the site enter a sewer classified as a Combined Sewer? ○ Yes ● No ○ Unknown

18. Will future use of this site be an agricultural property as defined by the NYS Agriculture and Markets Law? ○ Yes ● No

19. Is this property owned by a state authority, state agency, federal government or local government? ○ Yes ● No

20. Is this a remediation project being done under a Department approved work plan? (i.e. CERCLA, RCRA, Voluntary Cleanup Agreement, etc.) ○ Yes ● No

21. Has the required Erosion and Sediment Control component of the SWPPP been developed in conformance with the current NYS Standards and Specifications for Erosion and Sediment Control (aka Blue Book)? ● Yes ○ No

22. Does this construction activity require the development of a SWPPP that includes the post-construction stormwater management practice component (i.e. Runoff Reduction, Water Quality and Quantity Control practices/techniques)? ● Yes ○ No
If No, skip questions 23 and 27-39.

23. Has the post-construction stormwater management practice component of the SWPPP been developed in conformance with the current NYS Stormwater Management Design Manual? ● Yes ○ No

24. The Stormwater Pollution Prevention Plan (SWPPP) was prepared by:

- ● **Professional Engineer (P.E.)**
- ○ **Soil and Water Conservation District (SWCD)**
- ○ **Registered Landscape Architect (R.L.A)**
- ○ **Certified Professional in Erosion and Sediment Control (CPESC)**
- ○ **Owner/Operator**
- ○ **Other**

SWPPP Preparer
JMC PLANNING, ENGINEERING, LANDSCAPE

Contact Name (Last, Space, First) ARCHITECTURE & LAND SURVEYING, PLLC
VILLAREALE, DIEGO

Mailing Address
120 BEDFORD ROAD

City
ARMONK

State Zip
NY 10504-

Phone
914-273-5225

Fax
914 273 1021

Email
DVILLAREALE@JMCPLLC.COM

SWPPP Preparer Certification

I hereby certify that the Stormwater Pollution Prevention Plan (SWPPP) for this project has been prepared in accordance with the terms and conditions of the GP-0-15-002. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of this permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings.

First Name
DIEGO

MI

Last Name
VILLAREALE

Signature

Date
/ /

25. Has a construction sequence schedule for the planned management practices been prepared? ● Yes ○ No

26. Select **all** of the erosion and sediment control practices that will be employed on the project site:

Temporary Structural

- ● Check Dams
- ○ Construction Road Stabilization
- ○ Dust Control
- ○ Earth Dike
- ○ Level Spreader
- ○ Perimeter Dike/Swale
- ○ Pipe Slope Drain
- ○ Portable Sediment Tank
- ○ Rock Dam
- ● Sediment Basin
- ● Sediment Traps
- ● Silt Fence
- ● Stabilized Construction Entrance
- ● Storm Drain Inlet Protection
- ○ Straw/Hay Bale Dike
- ○ Temporary Access Waterway Crossing
- ○ Temporary Stormdrain Diversion
- ● Temporary Swale
- ○ Turbidity Curtain
- ○ Water bars

Biotechnical

- ○ Brush Matting
- ○ Wattling

Vegetative Measures

- ○ Brush Matting
- ○ Dune Stabilization
- ○ Grassed Waterway
- ○ Mulching
- ○ Protecting Vegetation
- ○ Recreation Area Improvement
- ● Seeding
- ○ Sodding
- ○ Straw/Hay Bale Dike
- ○ Streambank Protection
- ○ Temporary Swale
- ● Topsoiling
- ○ Vegetating Waterways

Permanent Structural

- ○ Debris Basin
- ○ Diversion
- ○ Grade Stabilization Structure
- ○ Land Grading
- ○ Lined Waterway (Rock)
- ○ Paved Channel (Concrete)
- ○ Paved Flume
- ○ Retaining Wall
- ● Riprap Slope Protection
- ● Rock Outlet Protection
- ○ Streambank Protection

Other

Post-construction Stormwater Management Practice (SMP) Requirements

Important: Completion of Questions 27-39 is not required if response to Question 22 is No.

27. Identify all site planning practices that were used to prepare the final site plan/layout for the project.

- ● **Preservation of Undisturbed Areas**
- ○ **Preservation of Buffers**
- ● **Reduction of Clearing and Grading**
- ○ **Locating Development in Less Sensitive Areas**
- ○ **Roadway Reduction**
- ○ **Sidewalk Reduction**
- ● **Driveway Reduction**
- ○ **Cul-de-sac Reduction**
- ○ **Building Footprint Reduction**
- ○ **Parking Reduction**

27a. Indicate which of the following soil restoration criteria was used to address the requirements in Section 5.1.6("Soil Restoration") of the Design Manual (2010 version).

- ● All disturbed areas will be restored in accordance with the Soil Restoration requirements in Table 5.3 of the Design Manual (see page 5-22).
- ○ Compacted areas were considered as impervious cover when calculating the **WQv Required**, and the compacted areas were assigned a post-construction Hydrologic Soil Group (HSG) designation that is one level less permeable than existing conditions for the hydrology analysis.

28. Provide the total Water Quality Volume (WQv) required for this project (based on final site plan/layout).

Total WQv Required

1 . 2 1 5 1 **acre-feet**

29. Identify the RR techniques (Area Reduction), RR techniques(Volume Reduction) and Standard SMPs with RRv Capacity in Table 1 (See Page 9) that were used to reduce the Total WQv Required(#28).

Also, provide in Table 1 the total impervious area that contributes runoff to each technique/practice selected. For the Area Reduction Techniques, provide the total contributing area (includes pervious area) and, if applicable, the total impervious area that contributes runoff to the technique/practice.

Note: Redevelopment projects shall use Tables 1 and 2 to identify the SMPs used to treat and/or reduce the WQv required. If runoff reduction techniques will not be used to reduce the required WQv, skip to question 33a after identifying the SMPs.

Table 1 - Runoff Reduction (RR) Techniques and Standard Stormwater Management Practices (SMPs)

	Total Contributing Area (acres)		Total Contributing Impervious Area(acres)
RR Techniques (Area Reduction)			
○ Conservation of Natural Areas (RR-1)		and/or	
○ Sheetflow to Riparian Buffers/Filters Strips (RR-2)		and/or	
○ Tree Planting/Tree Pit (RR-3)		and/or	
○ Disconnection of Rooftop Runoff (RR-4)		and/or	
RR Techniques (Volume Reduction)			
● Vegetated Swale (RR-5)			0.8989
○ Rain Garden (RR-6)			
○ Stormwater Planter (RR-7)			
○ Rain Barrel/Cistern (RR-8)			
○ Porous Pavement (RR-9)			
● Green Roof (RR-10)			0.2027
Standard SMPs with RRv Capacity			
○ Infiltration Trench (I-1)			
○ Infiltration Basin (I-2)			
○ Dry Well (I-3)			
● Underground Infiltration System (I-4)			4.1462
○ Bioretention (F-5)			
○ Dry Swale (O-1)			
Standard SMPs			
○ Micropool Extended Detention (P-1)			
○ Wet Pond (P-2)			
● Wet Extended Detention (P-3)			11.0644
○ Multiple Pond System (P-4)			
○ Pocket Pond (P-5)			
○ Surface Sand Filter (F-1)			
○ Underground Sand Filter (F-2)			
○ Perimeter Sand Filter (F-3)			
○ Organic Filter (F-4)			
○ Shallow Wetland (W-1)			
○ Extended Detention Wetland (W-2)			
○ Pond/Wetland System (W-3)			
○ Pocket Wetland (W-4)			
○ Wet Swale (O-2)			

Table 2 - Alternative SMPs (DO NOT INCLUDE PRACTICES BEING USED FOR PRETREATMENT ONLY)

Alternative SMP	Total Contributing Impervious Area(acres)
○ **Hydrodynamic**	___ . ___
○ **Wet Vault**	___ . ___
○ **Media Filter**	___ . ___
○ **Other** _____	___ . ___

Provide the name and manufacturer of the Alternative SMPs (i.e. proprietary practice(s)) being used for WQv treatment.

Name _____

Manufacturer _____

Note: Redevelopment projects which do not use RR techniques, shall use questions 28, 29, 33 and 33a to provide SMPs used, total WQv required and total WQv provided for the project.

30. Indicate the Total RRv provided by the RR techniques (Area/Volume Reduction) and Standard SMPs with RRv capacity identified in question 29.

Total RRv provided

0.0623 **acre-feet**

31. Is the Total RRv provided (#30) greater than or equal to the total WQv required (#28).

○ **Yes** ● **No**

If Yes, go to question 36.
If No, go to question 32.

32. Provide the Minimum RRv required based on HSG.
[Minimum RRv Required = (P)(0.95)(Ai)/12, Ai=(S)(Aic)]

Minimum RRv Required

0.1068 **acre-feet**

32a. Is the Total RRv provided (#30) greater than or equal to the Minimum RRv Required (#32)?

● **Yes** ○ **No**

If Yes, go to question 33.
Note: Use the space provided in question #39 to summarize the specific site limitations and justification for not reducing 100% of WQv required (#28). A detailed evaluation of the specific site limitations and justification for not reducing 100% of the WQv required (#28) must also be included in the SWPPP.
If No, sizing criteria has not been met, so NOI can not be processed. SWPPP preparer must modify design to meet sizing criteria.

33. Identify the Standard SMPs in Table 1 and, if applicable, the Alternative SMPs in Table 2 that were used to treat the remaining total WQv(=Total WQv Required in 28 - Total RRv Provided in 30).

Also, provide in Table 1 and 2 the total impervious area that contributes runoff to each practice selected.

Note: Use Tables 1 and 2 to identify the SMPs used on Redevelopment projects.

33a. Indicate the Total WQv provided (i.e. WQv treated) by the SMPs identified in question #33 and Standard SMPs with RRv Capacity identified in question 29.

WQv Provided

1.219090 **acre-feet**

Note: For the standard SMPs with RRv capacity, the WQv provided by each practice = the WQv calculated using the contributing drainage area to the practice - RRv provided by the practice. (See Table 3.5 in Design Manual)

34. Provide the sum of the Total RRv provided (#30) and the WQv provided (#33a). 1.219090

35. Is the sum of the RRv provided (#30) and the WQv provided (#33a) greater than or equal to the total WQv required (#28)? ● **Yes** ○ **No**

If Yes, go to question 36.
If No, sizing criteria has not been met, so NOI can not be processed. SWPPP preparer must modify design to meet sizing criteria.

36. Provide the total Channel Protection Storage Volume (CPv) required and provided or select waiver (36a), if applicable.

CPv Required

1.616464 **acre-feet**

CPv Provided

1.727727 **acre-feet**

36a. The need to provide channel protection has been waived because:

○ Site discharges directly to tidal waters or a fifth order or larger stream.

○ Reduction of the total CPv is achieved on site through runoff reduction techniques or infiltration systems.

37. Provide the Overbank Flood (Qp) and Extreme Flood (Qf) control criteria or select waiver (37a), if applicable.

Total Overbank Flood Control Criteria (Qp)

Pre-Development

98.550 **CFS**

Post-development

75.117 **CFS**

Total Extreme Flood Control Criteria (Qf)

Pre-Development

211.210 **CFS**

Post-development

193.13 **CFS**

37a. The need to meet the Qp and Qf criteria has been waived because:

- ○ Site discharges directly to tidal waters or a fifth order or larger stream.
- ○ Downstream analysis reveals that the Qp and Qf controls are not required

38. Has a long term Operation and Maintenance Plan for the post-construction stormwater management practice(s) been developed? ● Yes ○ No

If Yes, Identify the entity responsible for the long term Operation and Maintenance

FRENCH-AMERICAN SCHOOL NEW YORK

39. Use this space to summarize the specific site limitations and justification for not reducing 100% of WQv required(#28). (See question 32a) This space can also be used for other pertinent project information.

Infiltration Systems -These practices are provided on site, however these practice were limited due to physical constraints such as soil, depth to groundwater and head. Vegetated Swales and Greenroofs - these practices were utilized on site, however not enough of these practices can be used to meet the WQv.

40. Identify other DEC permits, existing and new, that are required for this project/facility.

- ○ Air Pollution Control
- ○ Coastal Erosion
- ○ Hazardous Waste
- ○ Long Island Wells
- ○ Mined Land Reclamation
- ○ Solid Waste
- ○ Navigable Waters Protection / Article 15
- ○ Water Quality Certificate
- ○ Dam Safety
- ○ Water Supply
- ○ Freshwater Wetlands/Article 24
- ○ Tidal Wetlands
- ○ Wild, Scenic and Recreational Rivers
- ○ Stream Bed or Bank Protection / Article 15
- ○ Endangered or Threatened Species(Incidental Take Permit)
- ○ Individual SPDES
- ○ SPDES Multi-Sector GP N Y R
- ○ Other
- ○ None

41. Does this project require a US Army Corps of Engineers Wetland Permit? ○ **Yes** ● **No**
If Yes, Indicate Size of Impact. .

42. Is this project subject to the requirements of a regulated, traditional land use control MS4? ● **Yes** ○ **No**
(If No, skip question 43)

43. Has the "MS4 SWPPP Acceptance" form been signed by the principal executive officer or ranking elected official and submitted along with this NOI? ● **Yes** ○ **No**

44. If this NOI is being submitted for the purpose of continuing or transferring coverage under a general permit for stormwater runoff from construction activities, please indicate the former SPDES number assigned. N Y R

Owner/Operator Certification

I have read or been advised of the permit conditions and believe that I understand them. I also understand that, under the terms of the permit, there may be reporting requirements. I hereby certify that this document and the corresponding documents were prepared under my direction or supervision. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. I further understand that coverage under the general permit will be identified in the acknowledgment that I will receive as a result of submitting this NOI and can be as long as sixty (60) business days as provided for in the general permit. I also understand that, by submitting this NOI, I am acknowledging that the SWPPP has been developed and will be implemented as the first element of construction, and agreeing to comply with all the terms and conditions of the general permit for which this NOI is being submitted.

Print First Name: PASCALE

MI:

Print Last Name: TOOTH

Owner/Operator Signature:

Date: / /

NYS Department of Environmental Conservation
Division of Water
625 Broadway, 4th Floor
Albany, New York 12233-3505

MS4 Stormwater Pollution Prevention Plan (SWPPP) Acceptance Form

for

Construction Activities Seeking Authorization Under SPDES General Permit

*(NOTE: Attach Completed Form to Notice Of Intent and Submit to Address Above)

I. Project Owner/Operator Information	
1. Owner/Operator Name:	French American School New York
2. Contact Person:	Ms. Pasquale Tooth
3. Street Address:	525 Fenimore Road
4. City/State/Zip:	Mamaroneck, NY 10543
II. Project Site Information	
5. Project/Site Name:	FASNY
6. Street Address:	400 Ridgeway
7. City/State/Zip:	White Plains, NY 10605
III. Stormwater Pollution Prevention Plan (SWPPP) Review and Acceptance Information	
8. SWPPP Reviewed by:	
9. Title/Position:	
10. Date Final SWPPP Reviewed and Accepted:	
IV. Regulated MS4 Information	
11. Name of MS4:	City of White Plains
12. MS4 SPDES Permit Identification Number: NYR20A	
13. Contact Person:	
14. Street Address:	255 Main Street
15. City/State/Zip:	White Plains, NY 10601
16. Telephone Number:	914-422-1220

MS4 SWPPP Acceptance Form - continued

V. Certification Statement - MS4 Official (principal executive officer or ranking elected official) or Duly Authorized Representative

I hereby certify that the final Stormwater Pollution Prevention Plan (SWPPP) for the construction project identified in question 5 has been reviewed and meets the substantive requirements in the SPDES General Permit For Stormwater Discharges from Municipal Separate Storm Sewer Systems (MS4s). Note: The MS4, through the acceptance of the SWPPP, assumes no responsibility for the accuracy and adequacy of the design included in the SWPPP. In addition, review and acceptance of the SWPPP by the MS4 does not relieve the owner/operator or their SWPPP preparer of responsibility or liability for errors or omissions in the plan.

Printed Name:

Title/Position: Commissioner of Public Works/City Engineer

Signature:

Date:

VI. Additional Information

(NYS DEC - MS4 SWPPP Acceptance Form - January 2015)

New York State Department of Environmental Conservation
Division of Water
625 Broadway, 4th Floor
Albany, New York 12233-3505
(NOTE: Submit completed form to address above)

NOTICE OF TERMINATION for Storm Water Discharges Authorized under the SPDES General Permit for Construction Activity

Please indicate your permit identification number: NYR ___ ___ ___ ___ ___ ___

I. Owner or Operator Information

1. Owner/Operator Name:

2. Street Address:

3. City/State/Zip:

4. Contact Person:	4a.Telephone:

4b. Contact Person E-Mail:

II. Project Site Information

5. Project/Site Name:

6. Street Address:

7. City/Zip:

8. County:

III. Reason for Termination

9a. □ All disturbed areas have achieved final stabilization in accordance with the general permit and SWPPP. ***Date final stabilization completed** (month/year): _____

9b. □ Permit coverage has been transferred to new owner/operator. Indicate new owner/operator's permit identification number: NYR ___ ___ ___ ___ ___ ___
(Note: Permit coverage can not be terminated by owner identified in I.1. above until new owner/operator obtains coverage under the general permit)

9c. □ Other (Explain on Page 2)

IV. Final Site Information:

10a. Did this construction activity require the development of a SWPPP that includes post-construction stormwater management practices? □ yes □ no (If no, go to question 10f.)

10b. Have all post-construction stormwater management practices included in the final SWPPP been constructed? □ yes □ no (If no, explain on Page 2)

10c. Identify the entity responsible for long-term operation and maintenance of practice(s)?

_____

NOTICE OF TERMINATION for Storm Water Discharges Authorized under the SPDES General Permit for Construction Activity - continued

10d. Has the entity responsible for long-term operation and maintenance been given a copy of the operation and maintenance plan required by the general permit? □ yes □ no

10e. Indicate the method used to ensure long-term operation and maintenance of the post-construction stormwater management practice(s):

□ Post-construction stormwater management practice(s) and any right-of-way(s) needed to maintain practice(s) have been deeded to the municipality.

□ Executed maintenance agreement is in place with the municipality that will maintain the post-construction stormwater management practice(s).

□ For post-construction stormwater management practices that are privately owned, a mechanism is in place that requires operation and maintenance of the practice(s) in accordance with the operation and maintenance plan, such as a deed covenant in the owner or operator's deed of record.

□ For post-construction stormwater management practices that are owned by a public or private institution (e.g. school, university or hospital), government agency or authority, or public utility; policy and procedures are in place that ensures operation and maintenance of the practice(s) in accordance with the operation and maintenance plan.

10f. Provide the total area of impervious surface (i.e. roof, pavement, concrete, gravel, etc.) constructed within the disturbance area? _____ (acres)

11. Is this project subject to the requirements of a regulated, traditional land use control MS4? □ yes □ no

(If Yes, complete section VI - "MS4 Acceptance" statement

V. Additional Information/Explanation:

(Use this section to answer questions 9c. and 10b., if applicable)

VI. MS4 Acceptance - MS4 Official (principal executive officer or ranking elected official) or Duly Authorized Representative (Note: Not required when 9b. is checked -transfer of coverage)

I have determined that it is acceptable for the owner or operator of the construction project identified in question 5 to submit the Notice of Termination at this time.

Printed Name:

Title/Position:

Signature:	Date:

NOTICE OF TERMINATION for Storm Water Discharges Authorized under the SPDES General Permit for Construction Activity - continued	
VII. Qualified Inspector Certification - Final Stabilization:	
I hereby certify that all disturbed areas have achieved final stabilization as defined in the current version of the general permit, and that all temporary, structural erosion and sediment control measures have been removed. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of the referenced permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings.	
Printed Name:	
Title/Position:	
Signature:	Date:
VIII. Qualified Inspector Certification - Post-construction Stormwater Management Practice(s):	
I hereby certify that all post-construction stormwater management practices have been constructed in conformance with the SWPPP. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of the referenced permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings.	
Printed Name:	
Title/Position:	
Signature:	Date:
IX. Owner or Operator Certification	
I hereby certify that this document was prepared by me or under my direction or supervision. My determination, based upon my inquiry of the person(s) who managed the construction activity, or those persons directly responsible for gathering the information, is that the information provided in this document is true, accurate and complete. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of the referenced permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings.	
Printed Name:	
Title/Position:	
Signature:	Date:

(NYS DEC Notice of Termination - January 2015)

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SPDES GENERAL PERMIT
FOR STORMWATER DISCHARGES

From

CONSTRUCTION ACTIVITY

Permit No. GP-0-15-002

Issued Pursuant to Article 17, Titles 7, 8 and Article 70
of the Environmental Conservation Law

Effective Date: January 29, 2015 Expiration Date: January 28, 2020

John J. Ferguson
Chief Permit Administrator

1 / 12 / 15

Authorized Signature Date

Address: NYS DEC
Division of Environmental Permits
625 Broadway, 4th Floor
Albany, N.Y. 12233-1750

PREFACE

Pursuant to Section 402 of the Clean Water Act ("CWA"), stormwater *discharges* from certain *construction activities* are unlawful unless they are authorized by a *National Pollutant Discharge Elimination System ("NPDES")* permit or by a state permit program. New York's *State Pollutant Discharge Elimination System ("SPDES")* is a NPDES-approved program with permits issued in accordance with the *Environmental Conservation Law ("ECL").*

This general permit ("permit") is issued pursuant to Article 17, Titles 7, 8 and Article 70 of the ECL. An *owner or operator* may obtain coverage under this permit by submitting a Notice of Intent ("NOI") to the Department. Copies of this permit and the NOI for New York are available by calling (518) 402-8109 or at any New York State Department of Environmental Conservation ("the Department") regional office (see Appendix G).They are also available on the Department's website at:

http://www.dec.ny.gov/

An *owner or operator* of a *construction activity* that is eligible for coverage under this permit must obtain coverage prior to the *commencement of construction activity*. Activities that fit the definition of "*construction activity*", as defined under 40 CFR 122.26(b)(14)(x), (15)(i), and (15)(ii), constitute construction of a point source and therefore, pursuant to Article 17-0505 of the ECL, the *owner or operator* must have coverage under a SPDES permit prior to *commencing construction activity*. They cannot wait until there is an actual *discharge* from the construction site to obtain permit coverage.

***Note: The italicized words/phrases within this permit are defined in Appendix A.**

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SPDES GENERAL PERMIT FOR STORMWATER DISCHARGES
FROM CONSTRUCTION ACTIVITIES

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(Part I)

Part I. PERMIT COVERAGE AND LIMITATIONS

A. Permit Application

This permit authorizes stormwater *discharges* to *surface waters of the State* from the following *construction activities* identified within 40 CFR Parts 122.26(b)(14)(x), 122.26(b)(15)(i) and 122.26(b)(15)(ii), provided all of the eligibility provisions of this permit are met:

1. *Construction activities* involving soil disturbances of one (1) or more acres; including disturbances of less than one acre that are part of a *larger common plan of development or sale* that will ultimately disturb one or more acres of land; excluding *routine maintenance activity* that is performed to maintain the original line and grade, hydraulic capacity or original purpose of a facility;

2. *Construction activities* involving soil disturbances of less than one (1) acre where the Department has determined that a *SPDES* permit is required for stormwater *discharges* based on the potential for contribution to a violation of a *water quality standard* or for significant contribution of *pollutants* to *surface waters of the State.*

3. *Construction activities* located in the watershed(s) identified in Appendix D that involve soil disturbances between five thousand (5,000) square feet and one (1) acre of land.

B. Effluent Limitations Applicable to Discharges from Construction Activities

*Discharge*s authorized by this permit must achieve, at a minimum, the effluent limitations in Part I.B.1. (a) – (f) of this permit. These limitations represent the degree of effluent reduction attainable by the application of best practicable technology currently available.

1. Erosion and Sediment Control Requirements - The *owner or operator* must select, design, install, implement and maintain control measures to *minimize* the *discharge* of *pollutants* and prevent a violation of the *water quality standards*. The selection, design, installation, implementation, and maintenance of these control measures must meet the non-numeric effluent limitations in Part I.B.1.(a) – (f) of this permit and be in accordance with the New York State Standards and Specifications for Erosion and Sediment Control, dated August 2005, using sound engineering judgment. Where control measures are not designed in conformance with the design criteria included in the technical standard, the *owner or operator* must include in the Stormwater Pollution Prevention Plan ("SWPPP") the reason(s) for the deviation or alternative design and provide information

which demonstrates that the deviation or alternative design is *equivalent* to the technical standard.

a. **Erosion and Sediment Controls.** Design, install and maintain effective erosion and sediment controls to *minimize* the *discharge* of *pollutants* and prevent a violation of the *water quality standards*. At a minimum, such controls must be designed, installed and maintained to:

   (i) *Minimize* soil erosion through application of runoff control and soil stabilization control measure to *minimize pollutant discharge*s;

   (ii) Control stormwater *discharge*s to *minimize* channel and streambank erosion and scour in the immediate vicinity of the *discharge* points;

   (iii) *Minimize* the amount of soil exposed during *construction activity*;

   (iv) *Minimize* the disturbance of *steep slopes*;

   (v) *Minimize* sediment *discharge*s from the site;

   (vi) Provide and maintain natural buffers around surface waters, direct stormwater to vegetated areas and maximize stormwater infiltration to reduce *pollutant discharge*s, unless *infeasible*;

   (vii) *Minimize* soil compaction. Minimizing soil compaction is not required where the intended function of a specific area of the site dictates that it be compacted; and

   (viii) Unless *infeasible*, preserve a sufficient amount of topsoil to complete soil restoration and establish a uniform, dense vegetative cover.

b. **Soil Stabilization**. In areas where soil disturbance activity has temporarily or permanently ceased, the application of soil stabilization measures must be initiated by the end of the next business day and completed within fourteen (14) days from the date the current soil disturbance activity ceased. For construction sites that *directly discharge* to one of the 303(d) segments listed in Appendix E or is located in one of the watersheds listed in Appendix C, the application of soil stabilization measures must be initiated by the end of the next business day and completed within seven (7) days from the date the current soil disturbance activity ceased. See Appendix A for definition of *Temporarily Ceased*.

c. **Dewatering**. *Discharge*s from dewatering activities, including *discharge*s

from dewatering of trenches and excavations, must be managed by appropriate control measures.

d. **Pollution Prevention Measures**. Design, install, implement, and maintain effective pollution prevention measures to *minimize* the *discharge* of *pollutants* and prevent a violation of the *water quality standards*. At a minimum, such measures must be designed, installed, implemented and maintained to:

(i) *Minimize* the *discharge* of *pollutants* from equipment and vehicle washing, wheel wash water, and other wash waters. This applies to washing operations that use clean water only. Soaps, detergents and solvents cannot be used;

(ii) *Minimize* the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste and other materials present on the site to precipitation and to stormwater. Minimization of exposure is not required in cases where the exposure to precipitation and to stormwater will not result in a *discharge* of *pollutants*, or where exposure of a specific material or product poses little risk of stormwater contamination (such as final products and materials intended for outdoor use) ; and

(iii) Prevent the *discharge* of *pollutants* from spills and leaks and implement chemical spill and leak prevention and response procedures.

e. **Prohibited *Discharge*s.** The following *discharge*s are prohibited:

(i) Wastewater from washout of concrete;

(ii) Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials;

(iii) Fuels, oils, or other *pollutants* used in vehicle and equipment operation and maintenance;

(iv) Soaps or solvents used in vehicle and equipment washing; and

(v) Toxic or hazardous substances from a spill or other release.

f. Surface Outlets. When discharging from basins and impoundments, the outlets shall be designed, constructed and maintained in such a manner that sediment does not leave the basin or impoundment and that erosion

at or below the outlet does not occur.

C. Post-construction Stormwater Management Practice Requirements

1. The *owner or operator* of a *construction activity* that requires post-construction stormwater management practices pursuant to Part III.C. of this permit must select, design, install, and maintain the practices to meet the *performance criteria* in the New York State Stormwater Management Design Manual ("Design Manual"), dated January 2015, using sound engineering judgment. Where post-construction stormwater management practices ("SMPs") are not designed in conformance with the *performance criteria* in the Design Manual, the *owner or operator* must include in the SWPPP the reason(s) for the deviation or alternative design and provide information which demonstrates that the deviation or alternative design is *equivalent* to the technical standard.

2. The *owner or operator* of a *construction activity* that requires post-construction stormwater management practices pursuant to Part III.C. of this permit must design the practices to meet the applicable *sizing criteria* in Part I.C.2.a., b., c. or d. of this permit.

a. ***Sizing Criteria* for *New Development***

(i) Runoff Reduction Volume ("RRv"): Reduce the total Water Quality Volume ("WQv") by application of RR techniques and standard SMPs with RRv capacity. The total WQv shall be calculated in accordance with the criteria in Section 4.2 of the Design Manual.

(ii) Minimum RRv and Treatment of Remaining Total WQv: *Construction activities* that cannot meet the criteria in Part I.C.2.a.(i) of this permit due to *site limitations* shall direct runoff from all newly constructed *impervious areas* to a RR technique or standard SMP with RRv capacity unless *infeasible*. The specific *site limitations* that prevent the reduction of 100% of the WQv shall be documented in the SWPPP. For each *impervious area* that is not directed to a RR technique or standard SMP with RRv capacity, the SWPPP must include documentation which demonstrates that all options were considered and for each option explains why it is considered *infeasible.*

In no case shall the runoff reduction achieved from the newly constructed *impervious areas* be less than the Minimum RRv as calculated using the criteria in Section 4.3 of the Design Manual. The remaining portion of the total WQv

that cannot be reduced shall be treated by application of standard SMPs.

(iii) Channel Protection Volume ("Cpv"): Provide 24 hour extended detention of the post-developed 1-year, 24-hour storm event; remaining after runoff reduction. The Cpv requirement does not apply when:

(1) Reduction of the entire Cpv is achieved by application of runoff reduction techniques or infiltration systems, or

(2) The site *discharge*s directly to tidal waters, or fifth order or larger streams.

(iv) Overbank Flood Control Criteria ("Qp"): Requires storage to attenuate the post-development 10-year, 24-hour peak *discharge* rate (Qp) to predevelopment rates. The Qp requirement does not apply when:

(1) the site *discharge*s directly to tidal waters or fifth order or larger streams, or

(2) A downstream analysis reveals that overbank control is not required.

(v) Extreme Flood Control Criteria ("Qf"): Requires storage to attenuate the post-development 100-year, 24-hour peak *discharge* rate (Qf) to predevelopment rates. The Qf requirement does not apply when:

(1) the site *discharge*s directly to tidal waters or fifth order or larger streams, or

(2) A downstream analysis reveals that overbank control is not required.

b. ***Sizing Criteria* for *New Development* in Enhanced Phosphorus Removal Watershed**

(i) Runoff Reduction Volume (RRv): Reduce the total Water Quality Volume (WQv) by application of RR techniques and standard SMPs with RRv capacity. The total WQv is the runoff volume from the 1-year, 24 hour design storm over the post-developed watershed and shall be calculated in accordance with the criteria in Section 10.3 of the Design Manual.

(ii) Minimum RRv and Treatment of Remaining Total WQv: *Construction activities* that cannot meet the criteria in Part I.C.2.b.(i) of this permit due to *site limitations* shall direct runoff from all newly constructed *impervious areas* to a RR technique or

standard SMP with RRv capacity unless *infeasible*. The specific *site limitations* that prevent the reduction of 100% of the WQv shall be documented in the SWPPP. For each *impervious area* that is not directed to a RR technique or standard SMP with RRv capacity, the SWPPP must include documentation which demonstrates that all options were considered and for each option explains why it is considered *infeasible.*

In no case shall the runoff reduction achieved from the newly constructed *impervious areas* be less than the Minimum RRv as calculated using the criteria in Section 10.3 of the Design Manual. The remaining portion of the total WQv that cannot be reduced shall be treated by application of standard SMPs.

(iii) Channel Protection Volume (Cpv): Provide 24 hour extended detention of the post-developed 1-year, 24-hour storm event; remaining after runoff reduction. The Cpv requirement does not apply when:

(1) Reduction of the entire Cpv is achieved by application of runoff reduction techniques or infiltration systems, or

(2) The site *discharge*s directly to tidal waters, or fifth order or larger streams.

(iv) Overbank Flood Control Criteria (Qp): Requires storage to attenuate the post-development 10-year, 24-hour peak *discharge* rate (Qp) to predevelopment rates. The Qp requirement does not apply when:

(1) the site *discharge*s directly to tidal waters or fifth order or larger streams, or
(2) A downstream analysis reveals that overbank control is not required.

(v) Extreme Flood Control Criteria (Qf): Requires storage to attenuate the post-development 100-year, 24-hour peak *discharge* rate (Qf) to predevelopment rates. The Qf requirement does not apply when:

(1) the site *discharge*s directly to tidal waters or fifth order or larger streams, or
(2) A downstream analysis reveals that overbank control is not required.

c. ***Sizing Criteria* for *Redevelopment Activity***

(Part I.C.2.c.i)

(i) Water Quality Volume (WQv): The WQv treatment objective for *redevelopment activity* shall be addressed by one of the following options. *Redevelopment activities* located in an Enhanced Phosphorus Removal Watershed (see Part III.B.3. and Appendix C of this permit) shall calculate the WQv in accordance with Section 10.3 of the Design Manual. All other *redevelopment activities* shall calculate the WQv in accordance with Section 4.2 of the Design Manual.

(1) Reduce the existing *impervious cover* by a minimum of 25% of the total disturbed, *impervious area*. The Soil Restoration criteria in Section 5.1.6 of the Design Manual must be applied to all newly created pervious areas, or
(2) Capture and treat a minimum of 25% of the WQv from the disturbed, *impervious area* by the application of standard SMPs; or reduce 25% of the WQv from the disturbed, *impervious area* by the application of RR techniques or standard SMPs with RRv capacity., or
(3) Capture and treat a minimum of 75% of the WQv from the disturbed, *impervious area* as well as any additional runoff from tributary areas by application of the alternative practices discussed in Sections 9.3 and 9.4 of the Design Manual., or
(4) Application of a combination of 1, 2 and 3 above that provide a weighted average of at least two of the above methods. Application of this method shall be in accordance with the criteria in Section 9.2.1(B) (IV) of the Design Manual.

If there is an existing post-construction stormwater management practice located on the site that captures and treats runoff from the *impervious area* that is being disturbed, the WQv treatment option selected must, at a minimum, provide treatment equal to the treatment that was being provided by the existing practice(s) if that treatment is greater than the treatment required by options 1 – 4 above.

(ii) Channel Protection Volume (Cpv): Not required if there are no changes to hydrology that increase the *discharge* rate from the project site.

(iii) Overbank Flood Control Criteria (Qp): Not required if there are no changes to hydrology that increase the *discharge* rate from the project site.

(Part I.C.2.c.iv)

(iv) Extreme Flood Control Criteria (Qf): Not required if there are no changes to hydrology that increase the *discharge* rate from the project site.

d. ***Sizing Criteria*** **for Combination of** ***Redevelopment Activity*** **and** ***New Development***

Construction projects that include both *New Development* and *Redevelopment Activity* shall provide post-construction stormwater management controls that meet the *sizing criteria* calculated as an aggregate of the *Sizing Criteria* in Part I.C.2.a. or b. of this permit for the *New Development* portion of the project and Part I.C.2.c of this permit for *Redevelopment Activity* portion of the project.

D. Maintaining Water Quality

The Department expects that compliance with the conditions of this permit will control *discharge*s necessary to meet applicable *water quality standards*. It shall be a violation of the *ECL* for any discharge to either cause or contribute to a violation of *water quality standards* as contained in Parts 700 through 705 of Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York, such as:

1. There shall be no increase in turbidity that will cause a substantial visible contrast to natural conditions;

2. There shall be no increase in suspended, colloidal or settleable solids that will cause deposition or impair the waters for their best usages; and

3. There shall be no residue from oil and floating substances, nor visible oil film, nor globules of grease.

If there is evidence indicating that the stormwater *discharge*s authorized by this permit are causing, have the reasonable potential to cause, or are contributing to a violation of the *water quality standards*; the *owner or operator* must take appropriate corrective action in accordance with Part IV.C.5. of this general permit and document in accordance with Part IV.C.4. of this general permit. To address the *water quality standard* violation the *owner or operator* may need to provide additional information, include and implement appropriate controls in the SWPPP to correct the problem, or obtain an individual SPDES permit.

If there is evidence indicating that despite compliance with the terms and conditions of this general permit it is demonstrated that the stormwater *discharge*s authorized by this permit are causing or contributing to a violation of *water quality standards*, or

if the Department determines that a modification of the permit is necessary to prevent a violation of *water quality standards*, the authorized *discharge*s will no longer be eligible for coverage under this permit. The Department may require the *owner or operator* to obtain an individual SPDES permit to continue discharging.

E. Eligibility Under This General Permit

1. This permit may authorize all *discharges* of stormwater from *construction activity* to *surface waters of the State* and *groundwaters* except for ineligible *discharges* identified under subparagraph F. of this Part.

2. Except for non-stormwater *discharges* explicitly listed in the next paragraph, this permit only authorizes stormwater *discharge*s from *construction activities*.

3. Notwithstanding paragraphs E.1 and E.2 above, the following non-stormwater *discharges* may be authorized by this permit: *discharge*s from firefighting activities; fire hydrant flushings; waters to which cleansers or other components have not been added that are used to wash vehicles or control dust in accordance with the SWPPP, routine external building washdown which does not use detergents; pavement washwaters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and where detergents are not used; air conditioning condensate; uncontaminated *groundwater* or spring water; uncontaminated *discharge*s from construction site de-watering operations; and foundation or footing drains where flows are not contaminated with process materials such as solvents. For those entities required to obtain coverage under this permit, and who *discharge* as noted in this paragraph, and with the exception of flows from firefighting activities, these *discharge*s must be identified in the SWPPP. Under all circumstances, the *owner or operator* must still comply with *water quality standards* in Part I.D of this permit.

4. The *owner or operator* must maintain permit eligibility to *discharge* under this permit. Any *discharges* that are not compliant with the eligibility conditions of this permit are not authorized by the permit and the *owner or operator* must either apply for a separate permit to cover those ineligible *discharges* or take steps necessary to make the *discharge* eligible for coverage.

F. Activities Which Are Ineligible for Coverage Under This General Permit

All of the following are **<u>not</u>** authorized by this permit:

(Part I.F)

1. *Discharge*s after *construction activities* have been completed and the site has undergone *final stabilization*;

2. *Discharge*s that are mixed with sources of non-stormwater other than those expressly authorized under subsection E.3. of this Part and identified in the SWPPP required by this permit;

3. *Discharges* that are required to obtain an individual SPDES permit or another SPDES general permit pursuant to Part VII.K. of this permit;

4. *Construction activities* or *discharges* from *construction activities* that may adversely affect an endangered or threatened species unless the *owner or operator* has obtained a permit issued pursuant to 6 NYCRR Part 182 for the project or the Department has issued a letter of non-jurisdiction for the project. All documentation necessary to demonstrate eligibility shall be maintained on site in accordance with Part II.C.2 of this permit.

5. *Discharges* which either cause or contribute to a violation of *water quality standards* adopted pursuant to the *ECL* and its accompanying regulations;

6. *Construction activities* for residential, commercial and institutional projects:

   a. Where the *discharge*s from the *construction activities* are tributary to waters of the state classified as AA or AA-s; and

   b. Which disturb one or more acres of land with no existing *impervious cover*; and

   c. Which are undertaken on land with a Soil Slope Phase that is identified as an E or F, or the map unit name is inclusive of 25% or greater slope, on the United States Department of Agriculture ("USDA") Soil Survey for the County where the disturbance will occur.

7. *Construction activities* for linear transportation projects and linear utility projects:

   a. Where the *discharge*s from the *construction activities* are tributary to waters of the state classified as AA or AA-s; and

   b. Which disturb two or more acres of land with no existing *impervious cover*; and

   c. Which are undertaken on land with a Soil Slope Phase that is identified as an E or F, or the map unit name is inclusive of 25% or greater slope, on the USDA Soil Survey for the County where the disturbance will occur.

(Part I.F.8)

8. *Construction activities* that have the potential to affect an *historic property*, unless there is documentation that such impacts have been resolved. The following documentation necessary to demonstrate eligibility with this requirement shall be maintained on site in accordance with Part II.C.2 of this permit and made available to the Department in accordance with Part VII.F of this permit:

   a. Documentation that the *construction activity* is not within an archeologically sensitive area indicated on the sensitivity map, and that the *construction activity* is not located on or immediately adjacent to a property listed or determined to be eligible for listing on the National or State Registers of Historic Places, and that there is no new permanent building on the construction site within the following distances from a building, structure, or object that is more than 50 years old, or if there is such a new permanent building on the construction site within those parameters that NYS Office of Parks, Recreation and Historic Preservation (OPRHP), a Historic Preservation Commission of a Certified Local Government, or a qualified preservation professional has determined that the building, structure, or object more than 50 years old is not historically/archeologically significant.

      - 1-5 acres of disturbance - 20 feet
      - 5-20 acres of disturbance - 50 feet
      - 20+ acres of disturbance - 100 feet, or

   b. DEC consultation form sent to OPRHP, and copied to the NYS DEC Agency Historic Preservation Officer (APO), and
      (i) the State Environmental Quality Review (SEQR) Environmental Assessment Form (EAF) with a negative declaration or the Findings Statement, with documentation of OPRHP's agreement with the resolution; or
      (ii) documentation from OPRHP that the *construction activity* will result in No Impact; or
      (iii) documentation from OPRHP providing a determination of No Adverse Impact; or
      (iv) a Letter of Resolution signed by the owner/operator, OPRHP and the DEC APO which allows for this *construction activity* to be eligible for coverage under the general permit in terms of the State Historic Preservation Act (SHPA); or

   c. Documentation of satisfactory compliance with Section 106 of the National Historic Preservation Act for a coterminous project area:
      (i) No Affect
      (ii) No Adverse Affect

(Part I.F.8.c.iii)

(iii) Executed Memorandum of Agreement, or

d. Documentation that:

(i) SHPA Section 14.09 has been completed by NYS DEC or another state agency.

9. *Discharges* from *construction activities* that are subject to an existing SPDES individual or general permit where a SPDES permit for *construction activity* has been terminated or denied; or where the *owner or operator* has failed to renew an expired individual permit.

II. Part II. OBTAINING PERMIT COVERAGE

A. Notice of Intent (NOI) Submittal

1. An *owner or operator* of a *construction activity* that is not subject to the requirements of a *regulated, traditional land use control MS4* must first prepare a SWPPP in accordance with all applicable requirements of this permit and then submit a completed NOI form to the Department in order to be authorized to *discharge* under this permit. An *owner or operator* shall use either the electronic (eNOI) or paper version of the NOI that the Department prepared. Both versions of the NOI are located on the Department's website (http://www.dec.ny.gov/). The paper version of the NOI shall be signed in accordance with Part VII.H. of this permit and submitted to the following address.

NOTICE OF INTENT
NYS DEC, Bureau of Water Permits
625 Broadway, 4th Floor
Albany, New York 12233-3505

2. An *owner or operator* of a *construction activity* that is subject to the requirements of a *regulated, traditional land use control MS4* must first prepare a SWPPP in accordance with all applicable requirements of this permit and then have its SWPPP reviewed and accepted by the *regulated, traditional land use control MS4* prior to submitting the NOI to the Department. The *owner or operator* shall have the "MS4 SWPPP Acceptance" form signed in accordance with Part VII.H., and then submit that form along with a completed NOI to the Department. An *owner or operator* shall use either the electronic (eNOI) or paper version of the NOI.

   The paper version of the NOI shall be signed in accordance with Part VII.H. of this permit and submitted to the address in Part II.A.1.

(Part II.A.2)

The requirement for an *owner or operator* to have its SWPPP reviewed and accepted by the *MS4* prior to submitting the NOI to the Department does not apply to an *owner or operator* that is obtaining permit coverage in accordance with the requirements in Part II.E. (Change of *Owner or Operator*) or where the *owner or operator* of the *construction activity* is the *regulated, traditional land use control MS4*.

3. The *owner or operator* shall have the SWPPP preparer sign the "SWPPP Preparer Certification" statement on the NOI prior to submitting the form to the Department.

4. As of the date the NOI is submitted to the Department, the *owner or operator* shall make the NOI and SWPPP available for review and copying in accordance with the requirements in Part VII.F. of this permit.

B. Permit Authorization

1. An *owner or operator* shall not *commence construction activity* until their authorization to *discharge* under this permit goes into effect.

2. Authorization to *discharge* under this permit will be effective when the *owner or operator* has satisfied <u>all</u> of the following criteria:

   a. project review pursuant to the State Environmental Quality Review Act ("SEQRA") have been satisfied, when SEQRA is applicable. See the Department's website (http://www.dec.ny.gov/) for more information,

   b. where required, all necessary Department permits subject to the *Uniform Procedures Act ("UPA")* (see 6 NYCRR Part 621) have been obtained, unless otherwise notified by the Department pursuant to 6 NYCRR 621.3(a)(4). *Owners or operators* of *construction activities* that are required to obtain *UPA* permits must submit a preliminary SWPPP to the appropriate DEC Permit Administrator at the Regional Office listed in Appendix F at the time all other necessary *UPA* permit applications are submitted. The preliminary SWPPP must include sufficient information to demonstrate that the *construction activity* qualifies for authorization under this permit,

   c. the final SWPPP has been prepared, and

   d. a complete NOI has been submitted to the Department in accordance with the requirements of this permit.

3. An *owner or operator* that has satisfied the requirements of Part II.B.2 above

(Part II.B.3)

will be authorized to *discharge* stormwater from their *construction activity* in accordance with the following schedule:

a. For *construction activities* that are not subject to the requirements of a *regulated, traditional land use control MS4*:

(i) Five (5) business days from the date the Department receives a complete electronic version of the NOI (eNOI) for *construction activities* with a SWPPP that has been prepared in conformance with the design criteria in the technical standard referenced in Part III.B.1 and the *performance criteria* in the technical standard referenced in Parts III.B., 2 or 3, for *construction activities* that require post-construction stormwater management practices pursuant to Part III.C.; or

(ii) Sixty (60) business days from the date the Department receives a complete NOI (electronic or paper version) for *construction activities* with a SWPPP that has not been prepared in conformance with the design criteria in technical standard referenced in Part III.B.1. or, for *construction activities* that require post-construction stormwater management practices pursuant to Part III.C., the *performance criteria* in the technical standard referenced in Parts III.B., 2 or 3, or;

(iii) Ten (10) business days from the date the Department receives a complete paper version of the NOI for *construction activities* with a SWPPP that has been prepared in conformance with the design criteria in the technical standard referenced in Part III.B.1 and the *performance criteria* in the technical standard referenced in Parts III.B., 2 or 3, for *construction activities* that require post-construction stormwater management practices pursuant to Part III.C.

b. For *construction activities* that are subject to the requirements of a *regulated, traditional land use control MS4*:

(i) Five (5) business days from the date the Department receives both a complete electronic version of the NOI (eNOI) and signed "*MS4* SWPPP Acceptance" form, or

(ii) Ten (10) business days from the date the Department receives both a complete paper version of the NOI and signed "MS4 SWPPP Acceptance" form.

4. The Department may suspend or deny an *owner's or operator's* coverage

under this permit if the Department determines that the SWPPP does not meet the permit requirements. In accordance with statute, regulation, and the terms and conditions of this permit, the Department may deny coverage under this permit and require submittal of an application for an individual SPDES permit based on a review of the NOI or other information pursuant to Part II.

5. Coverage under this permit authorizes stormwater *discharges* from only those areas of disturbance that are identified in the NOI. If an *owner or operator* wishes to have stormwater *discharges* from future or additional areas of disturbance authorized, they must submit a new NOI that addresses that phase of the development, unless otherwise notified by the Department. The *owner or operator* shall not *commence construction activity* on the future or additional areas until their authorization to *discharge* under this permit goes into effect in accordance with Part II.B. of this permit.

C. General Requirements For Owners or Operators With Permit Coverage

1. The *owner or operator* shall ensure that the provisions of the SWPPP are implemented from the *commencement of construction activity* until all areas of disturbance have achieved *final stabilization* and the Notice of Termination ("NOT") has been submitted to the Department in accordance with Part V. of this permit. This includes any changes made to the SWPPP pursuant to Part III.A.4. of this permit.

2. The *owner or operator* shall maintain a copy of the General Permit (GP-0-15-002), NOI, *NOI Acknowledgment Letter*, SWPPP, MS4 SWPPP Acceptance form, inspection reports, and all documentation necessary to demonstrate eligibility with this permit at the construction site until all disturbed areas have achieved *final stabilization* and the NOT has been submitted to the Department. The documents must be maintained in a secure location, such as a job trailer, on-site construction office, or mailbox with lock. The secure location must be accessible during normal business hours to an individual performing a compliance inspection.

3. The *owner or operator* of a *construction activity* shall not disturb greater than five (5) acres of soil at any one time without prior written authorization from the Department or, in areas under the jurisdiction of a *regulated, traditional land use control MS4,* the *regulated, traditional land use control MS4* (provided the *regulated, traditional land use control MS4* is not the *owner or operator* of the *construction activity*). At a minimum, the *owner or operator* must comply with the following requirements in order to be authorized to disturb greater than five (5) acres of soil at any one time:
   a. The *owner or operator* shall

have a *qualified inspector* conduct **at least** two (2) site inspections in accordance with Part IV.C. of this permit every seven (7) calendar days, for as long as greater than five (5) acres of soil remain disturbed. The two (2) inspections shall be separated by a minimum of two (2) full calendar days.

b. In areas where soil disturbance activity has temporarily or permanently ceased, the application of soil stabilization measures must be initiated by the end of the next business day and completed within seven (7) days from the date the current soil disturbance activity ceased. The soil stabilization measures selected shall be in conformance with the technical standard, New York State Standards and Specifications for Erosion and Sediment Control, dated August 2005.

c. The *owner or operator* shall prepare a phasing plan that defines maximum disturbed area per phase and shows required cuts and fills.

d. The *owner or operator* shall install any additional site specific practices needed to protect water quality.

e. The *owner or operator* shall include the requirements above in their SWPPP.

4. In accordance with statute, regulations, and the terms and conditions of this permit, the Department may suspend or revoke an *owner's or operator's* coverage under this permit at any time if the Department determines that the SWPPP does not meet the permit requirements. Upon a finding of significant non-compliance with the practices described in the SWPPP or violation of this permit, the Department may order an immediate stop to all activity at the site until the non-compliance is remedied. The stop work order shall be in writing, describe the non-compliance in detail, and be sent to the *owner or operator*.

5. For *construction activities* that are subject to the requirements of a *regulated, traditional land use control MS4*, the *owner or operator* shall notify the *regulated, traditional land use control MS4* in writing of any planned amendments or modifications to the post-construction stormwater management practice component of the SWPPP required by Part III.A. 4. and 5. of this permit. Unless otherwise notified by the *regulated, traditional land use control MS4*, the *owner or operator* shall have the SWPPP amendments or modifications reviewed and accepted by the *regulated, traditional land use control MS4* prior to commencing construction of the post-construction stormwater management practice

(Part II.D)

D. Permit Coverage for Discharges Authorized Under GP-0-10-001

1. Upon renewal of SPDES General Permit for Stormwater Discharges from *Construction Activity* (Permit No. GP-0-10-001), an *owner or operator* of *a construction activity* with coverage under GP-0-10-001, as of the effective date of GP-0-15-002, shall be authorized to *discharge* in accordance with GP-0-15-002, unless otherwise notified by the Department.

   An *owner or operator* may continue to implement the technical/design components of the post-construction stormwater management controls provided that such design was done in conformance with the technical standards in place at the time of initial project authorization. However, they must comply with the other, non-design provisions of GP-0-15-002.

E. Change of *Owner or Operator*

2. When property ownership changes or when there is a change in operational control over the construction plans and specifications, the original *owner or operator* must notify the new *owner or operator*, <u>in writing,</u> of the requirement to obtain permit coverage by submitting a NOI with the Department. Once the new *owner or operator* obtains permit coverage, the original *owner or operator* shall then submit a completed NOT with the name and permit identification number of the new *owner or operator* to the Department at the address in Part II.A.1. of this permit. If the original *owner or operator* maintains ownership of a portion of the *construction activity* and will disturb soil, they must maintain their coverage under the permit.

Permit coverage for the new *owner or operator* will be effective as of the date the Department receives a complete NOI, provided the original *owner or operator* was not subject to a sixty (60) business day authorization period that has not expired as of the date the Department receives the NOI from the new *owner or operator*.

(Part III)

III. Part III. STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

A. General SWPPP Requirements

1. A SWPPP shall be prepared and implemented by the *owner or operator* of each *construction activity* covered by this permit. The SWPPP must document the selection, design, installation, implementation and maintenance of the control measures and practices that will be used to meet the effluent limitations in Part I.B. of this permit and where applicable, the post-construction stormwater management practice requirements in Part I.C. of this permit. The SWPPP shall be prepared prior to the submittal of the NOI. The NOI shall be submitted to the Department prior to the *commencement of construction activity*. A copy of the completed, final NOI shall be included in the SWPPP.

2. The SWPPP shall describe the erosion and sediment control practices and where required, post-construction stormwater management practices that will be used and/or constructed to reduce the *pollutants* in stormwater *discharges* and to assure compliance with the terms and conditions of this permit. In addition, the SWPPP shall identify potential sources of pollution which may reasonably be expected to affect the quality of stormwater *discharges*.

3. All SWPPPs that require the post-construction stormwater management practice component shall be prepared by a *qualified professional* that is knowledgeable in the principles and practices of stormwater management and treatment.

4. The *owner or operator* must keep the SWPPP current so that it at all times accurately documents the erosion and sediment controls practices that are being used or will be used during construction, and all post-construction stormwater management practices that will be constructed on the site. At a minimum, the *owner or operator* shall amend the SWPPP:

   a. whenever the current provisions prove to be ineffective in minimizing *pollutants* in stormwater *discharges* from the site;

   b. whenever there is a change in design, construction, or operation at the construction site that has or could have an effect on the *discharge* of *pollutants*; and

   c. to address issues or deficiencies identified during an inspection by the *qualified inspector,* the Department or other regulatory authority.

5. The Department may notify the *owner or operator* at any time that the

(Part III.A.5)

SWPPP does not meet one or more of the minimum requirements of this permit. The notification shall be in writing and identify the provisions of the SWPPP that require modification. Within fourteen (14) calendar days of such notification, or as otherwise indicated by the Department, the *owner or operator* shall make the required changes to the SWPPP and submit written notification to the Department that the changes have been made. If the *owner or operator* does not respond to the Department's comments in the specified time frame, the Department may suspend the *owner's or operator's* coverage under this permit or require the *owner or operator* to obtain coverage under an individual SPDES permit in accordance with Part II.C.4. of this permit.

6. Prior to the *commencement of construction activity*, the *owner or operator* must identify the contractor(s) and subcontractor(s) that will be responsible for installing, constructing, repairing, replacing, inspecting and maintaining the erosion and sediment control practices included in the SWPPP; and the contractor(s) and subcontractor(s) that will be responsible for constructing the post-construction stormwater management practices included in the SWPPP. The *owner or operator* shall have each of the contractors and subcontractors identify at least one person from their company that will be responsible for implementation of the SWPPP. This person shall be known as the *trained contractor.* The *owner or operator* shall ensure that at least one *trained contractor* is on site on a daily basis when soil disturbance activities are being performed.

   The *owner or operator* shall have each of the contractors and subcontractors identified above sign a copy of the following certification statement below before they commence any *construction activity*:

   > "I hereby certify under penalty of law that I understand and agree to comply with the terms and conditions of the SWPPP and agree to implement any corrective actions identified by the *qualified inspector* during a site inspection. I also understand that the *owner or operator* must comply with the terms and conditions of the most current version of the New York State Pollutant Discharge Elimination System ("SPDES") general permit for stormwater *discharge*s from *construction activities* and that it is unlawful for any person to cause or contribute to a violation of *water quality standards*. Furthermore, I am aware that there are significant penalties for submitting false information, that I do not believe to be true, including the possibility of fine and imprisonment for knowing violations"

   In addition to providing the certification statement above, the certification page must also identify the specific elements of the SWPPP that each contractor and subcontractor will be responsible for and include the name and title of the person providing the signature; the name and title of the

trained contractor responsible for SWPPP implementation; the name, address and telephone number of the contracting firm; the address (or other identifying description) of the site; and the date the certification statement is signed. The *owner or operator* shall attach the certification statement(s) to the copy of the SWPPP that is maintained at the construction site. If new or additional contractors are hired to implement measures identified in the SWPPP after construction has commenced, they must also sign the certification statement and provide the information listed above.

7. For projects where the Department requests a copy of the SWPPP or inspection reports, the *owner or operator* shall submit the documents in both electronic (PDF only) and paper format within five (5) business days, unless otherwise notified by the Department.

B. Required SWPPP Contents

1. Erosion and sediment control component - All SWPPPs prepared pursuant to this permit shall include erosion and sediment control practices designed in conformance with the technical standard, New York State Standards and Specifications for Erosion and Sediment Control, dated August 2005. Where erosion and sediment control practices are not designed in conformance with the design criteria included in the technical standard, the *owner or operator* must demonstrate *equivalence* to the technical standard. At a minimum, the erosion and sediment control component of the SWPPP shall include the following:

   a. Background information about the scope of the project, including the location, type and size of project;

   b. A site map/construction drawing(s) for the project, including a general location map. At a minimum, the site map shall show the total site area; all improvements; areas of disturbance; areas that will not be disturbed; existing vegetation; on-site and adjacent off-site surface water(s); floodplain/floodway boundaries; wetlands and drainage patterns that could be affected by the *construction activity*; existing and final contours ; locations of different soil types with boundaries; material, waste, borrow or equipment storage areas located on adjacent properties; and location(s) of the stormwater *discharge*(s);

   c. A description of the soil(s) present at the site, including an identification of the Hydrologic Soil Group (HSG);

   d. A construction phasing plan and sequence of operations describing the intended order of *construction activities*, including clearing and grubbing, excavation and grading, utility and infrastructure installation and any other

activity at the site that results in soil disturbance;

e. A description of the minimum erosion and sediment control practices to be installed or implemented for each *construction activity* that will result in soil disturbance. Include a schedule that identifies the timing of initial placement or implementation of each erosion and sediment control practice and the minimum time frames that each practice should remain in place or be implemented;

f. A temporary and permanent soil stabilization plan that meets the requirements of this general permit and the technical standard, New York State Standards and Specifications for Erosion and Sediment Control, dated August 2005, for each stage of the project, including initial land clearing and grubbing to project completion and achievement of *final stabilization*;

g. A site map/construction drawing(s) showing the specific location(s), size(s), and length(s) of each erosion and sediment control practice;

h. The dimensions, material specifications, installation details, and operation and maintenance requirements for all erosion and sediment control practices. Include the location and sizing of any temporary sediment basins and structural practices that will be used to divert flows from exposed soils;

i. A maintenance inspection schedule for the contractor(s) identified in Part III.A.6. of this permit, to ensure continuous and effective operation of the erosion and sediment control practices. The maintenance inspection schedule shall be in accordance with the requirements in the technical standard, New York State Standards and Specifications for Erosion and Sediment Control, dated August 2005;

j. A description of the pollution prevention measures that will be used to control litter, construction chemicals and construction debris from becoming a *pollutant* source in the stormwater *discharges*;

k. A description and location of any stormwater *discharges* associated with industrial activity other than construction at the site, including, but not limited to, stormwater *discharges* from asphalt plants and concrete plants located on the construction site; and

l. Identification of any elements of the design that are not in conformance with the design criteria in the technical standard, New York State Standards and Specifications for Erosion and Sediment Control, dated August 2005. Include the reason for the deviation or alternative design

and provide information which demonstrates that the deviation or alternative design is *equivalent* to the technical standard.

2. Post-construction stormwater management practice component – The *owner or operator* of any construction project identified in Table 2 of Appendix B as needing post-construction stormwater management practices shall prepare a SWPPP that includes practices designed in conformance with the applicable *sizing criteria* in Part I.C.2.a., c. or d. of this permit and the *performance criteria* in the technical standard, New York State Stormwater Management Design Manual dated January 2015

   Where post-construction stormwater management practices are not designed in conformance with the *performance criteria* in the technical standard, the *owner or operator* must include in the SWPPP the reason(s) for the deviation or alternative design and provide information which demonstrates that the deviation or alternative design is *equivalent* to the technical standard.

   The post-construction stormwater management practice component of the SWPPP shall include the following:

   a. Identification of all post-construction stormwater management practices to be constructed as part of the project. Include the dimensions, material specifications and installation details for each post-construction stormwater management practice;

   b. A site map/construction drawing(s) showing the specific location and size of each post-construction stormwater management practice;

   c. A Stormwater Modeling and Analysis Report that includes:

      (i) Map(s) showing pre-development conditions, including watershed/subcatchments boundaries, flow paths/routing, and design points;

      (ii) Map(s) showing post-development conditions, including watershed/subcatchments boundaries, flow paths/routing, design points and post-construction stormwater management practices;

      (iii) Results of stormwater modeling (i.e. hydrology and hydraulic analysis) for the required storm events. Include supporting calculations (model runs), methodology, and a summary table that compares pre and post-development runoff rates and volumes for the different storm events;

      (iv) Summary table, with supporting calculations, which demonstrates

that each post-construction stormwater management practice has been designed in conformance with the *sizing criteria* included in the Design Manual;

(v) Identification of any *sizing criteria* that is not required based on the requirements included in Part I.C. of this permit; and

(vi) Identification of any elements of the design that are not in conformance with the *performance criteria* in the Design Manual. Include the reason(s) for the deviation or alternative design and provide information which demonstrates that the deviation or alternative design is *equivalent* to the Design Manual;

d. Soil testing results and locations (test pits, borings);

e. Infiltration test results, when required; and

f. An operations and maintenance plan that includes inspection and maintenance schedules and actions to ensure continuous and effective operation of each post-construction stormwater management practice. The plan shall identify the entity that will be responsible for the long term operation and maintenance of each practice.

3. Enhanced Phosphorus Removal Standards - All construction projects identified in Table 2 of Appendix B that are located in the watersheds identified in Appendix C shall prepare a SWPPP that includes post-construction stormwater management practices designed in conformance with the applicable *sizing criteria* in Part I.C.2. b., c. or d. of this permit and the *performance criteria,* Enhanced Phosphorus Removal Standards included in the Design Manual. At a minimum, the post-construction stormwater management practice component of the SWPPP shall include items 2.a - 2.f. above.

C. Required SWPPP Components by Project Type

Unless otherwise notified by the Department, *owners or operators* of *construction activities* identified in Table 1 of Appendix B are required to prepare a SWPPP that only includes erosion and sediment control practices designed in conformance with Part III.B.1 of this permit. *Owners or operators* of the *construction activities* identified in Table 2 of Appendix B shall prepare a SWPPP that also includes post-construction stormwater management practices designed in conformance with Part III.B.2 or 3 of this permit.

IV. Part IV. INSPECTION AND MAINTENANCE REQUIREMENTS

A. General Construction Site Inspection and Maintenance Requirements

1. The *owner or operator* must ensure that all erosion and sediment control practices (including pollution prevention measures) and all post-construction stormwater management practices identified in the SWPPP are inspected and maintained in accordance with Part IV.B. and C. of this permit.

2. The terms of this permit shall not be construed to prohibit the State of New York from exercising any authority pursuant to the ECL, common law or federal law, or prohibit New York State from taking any measures, whether civil or criminal, to prevent violations of the laws of the State of New York, or protect the public health and safety and/or the environment.

B. Contractor Maintenance Inspection Requirements

1. The *owner or operator* of each *construction activity* identified in Tables 1 and 2 of Appendix B shall have a *trained contractor* inspect the erosion and sediment control practices and pollution prevention measures being implemented within the active work area daily to ensure that they are being maintained in effective operating condition at all times. If deficiencies are identified, the contractor shall begin implementing corrective actions within one business day and shall complete the corrective actions in a reasonable time frame.

2. For construction sites where soil disturbance activities have been temporarily suspended (e.g. winter shutdown) and *temporary stabilization* measures have been applied to all disturbed areas, the *trained contractor* can stop conducting the maintenance inspections. The *trained contractor* shall begin conducting the maintenance inspections in accordance with Part IV.B.1. of this permit as soon as soil disturbance activities resume.

3. For construction sites where soil disturbance activities have been shut down with partial project completion, the *trained contractor* can stop conducting the maintenance inspections if all areas disturbed as of the project shutdown date have achieved *final stabilization* <u>and</u> all post-construction stormwater management practices required for the completed portion of the project have been constructed in conformance with the SWPPP and are operational.

C. Qualified Inspector Inspection Requirements

(Part IV.C)

The *owner or operator* shall have a *qualified inspector* conduct site inspections in conformance with the following requirements:

[Note: The *trained contractor* identified in Part III.A.6. and IV.B. of this permit **cannot** conduct the *qualified inspector* site inspections unless they meet the *qualified inspector* qualifications included in Appendix A. In order to perform these inspections, the *trained contractor* would have to be a:

- licensed Professional Engineer,
- Certified Professional in Erosion and Sediment Control (CPESC),
- Registered Landscape Architect, or
- someone working under the direct supervision of, and at the same company as, the licensed Professional Engineer or Registered Landscape Architect, provided they have received four (4) hours of Department endorsed training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other Department endorsed entity].

1. A *qualified inspector* shall conduct site inspections for all *construction activities* identified in Tables 1 and 2 of Appendix B, <u>with the exception of</u>:

   a. the construction of a single family residential subdivision with 25% or less *impervious cover* at total site build-out that involves a soil disturbance of one (1) or more acres of land but less than five (5) acres and is <u>not</u> located in one of the watersheds listed in Appendix C and <u>not</u> directly discharging to one of the 303(d) segments listed in Appendix E;

   b. the construction of a single family home that involves a soil disturbance of one (1) or more acres of land but less than five (5) acres and is <u>not</u> located in one of the watersheds listed in Appendix C and <u>not</u> directly discharging to one of the 303(d) segments listed in Appendix E;

   c. construction on agricultural property that involves a soil disturbance of one (1) or more acres of land but less than five (5) acres; and

   d. *construction activities* located in the watersheds identified in Appendix D that involve soil disturbances between five thousand (5,000) square feet and one (1) acre of land.

2. Unless otherwise notified by the Department, the *qualified inspector* shall conduct site inspections in accordance with the following timetable:

   a. For construction sites where soil disturbance activities are on-going, the *qualified inspector* shall conduct a site inspection at least once every seven (7) calendar days.

   b. For construction sites where soil disturbance activities are on-going and

the *owner or operator* has received authorization in accordance with Part II.C.3 to disturb greater than five (5) acres of soil at any one time, the *qualified inspector* shall conduct at least two (2) site inspections every seven (7) calendar days. The two (2) inspections shall be separated by a minimum of two (2) full calendar days.

c. For construction sites where soil disturbance activities have been temporarily suspended (e.g. winter shutdown) and *temporary stabilization* measures have been applied to all disturbed areas, the *qualified inspector* shall conduct a site inspection at least once every thirty (30) calendar days. The *owner or operator* shall notify the DOW Water (SPDES) Program contact at the Regional Office (see contact information in Appendix F) or, in areas under the jurisdiction of a *regulated, traditional land use control MS4,* the *regulated, traditional land use control MS4* (provided the *regulated, traditional land use control MS4* is not the *owner or operator* of the *construction activity*) in writing prior to reducing the frequency of inspections.

d. For construction sites where soil disturbance activities have been shut down with partial project completion, the *qualified inspector* can stop conducting inspections if all areas disturbed as of the project shutdown date have achieved *final stabilization* <u>and</u> all post-construction stormwater management practices required for the completed portion of the project have been constructed in conformance with the SWPPP and are operational. The *owner or operator* shall notify the DOW Water (SPDES) Program contact at the Regional Office (see contact information in Appendix F) or, in areas under the jurisdiction of a *regulated, traditional land use control MS4,* the *regulated, traditional land use control MS4* (provided the *regulated, traditional land use control MS4* is not the *owner or operator* of the *construction activity*) in writing prior to the shutdown. If soil disturbance activities are not resumed within 2 years from the date of shutdown, the *owner or operator* shall have the *qualified inspector* perform a final inspection and certify that all disturbed areas have achieved *final stabilization,* <u>and</u> all temporary, structural erosion and sediment control measures have been removed*;* and that all post-construction stormwater management practices have been constructed in conformance with the SWPPP by signing the "*Final Stabilization*" and "Post-Construction Stormwater Management Practice" certification statements on the NOT. The *owner or operator* shall then submit the completed NOT form to the address in Part II.A.1 of this permit.

e. For construction sites that directly *discharge* to one of the 303(d) segments listed in Appendix E or is located in one of the watersheds listed in Appendix C, the *qualified inspector* shall conduct at least two (2) site inspections every seven (7) calendar days. The two (2) inspections shall

be separated by a minimum of two (2) full calendar days.

3. At a minimum, the *qualified inspector* shall inspect all erosion and sediment control practices and pollution prevention measures to ensure integrity and effectiveness, all post-construction stormwater management practices under construction to ensure that they are constructed in conformance with the SWPPP, all areas of disturbance that have not achieved *final stabilization,* all points of *discharge* to natural surface waterbodies located within, or immediately adjacent to, the property boundaries of the construction site, and all points of *discharge* from the construction site.

4. The *qualified inspector* shall prepare an inspection report subsequent to each and every inspection. At a minimum, the inspection report shall include and/or address the following:

a. Date and time of inspection;

b. Name and title of person(s) performing inspection;

c. A description of the weather and soil conditions (e.g. dry, wet, saturated) at the time of the inspection;

d. A description of the condition of the runoff at all points of *discharge* from the construction site. This shall include identification of any *discharges* of sediment from the construction site. Include *discharges* from conveyance systems (i.e. pipes, culverts, ditches, etc.) and overland flow;

e. A description of the condition of all natural surface waterbodies located within, or immediately adjacent to, the property boundaries of the construction site which receive runoff from disturbed areas. This shall include identification of any *discharges* of sediment to the surface waterbody;

f. Identification of all erosion and sediment control practices and pollution prevention measures that need repair or maintenance;

g. Identification of all erosion and sediment control practices and pollution prevention measures that were not installed properly or are not functioning as designed and need to be reinstalled or replaced;

h. Description and sketch of areas with active soil disturbance activity, areas that have been disturbed but are inactive at the time of the inspection, and areas that have been stabilized (temporary and/or final) since the last inspection;

(Part IV.C.4.i)

i. Current phase of construction of all post-construction stormwater management practices and identification of all construction that is not in conformance with the SWPPP and technical standards;

j. Corrective action(s) that must be taken to install, repair, replace or maintain erosion and sediment control practices and pollution prevention measures; and to correct deficiencies identified with the construction of the post-construction stormwater management practice(s);

k. Identification and status of all corrective actions that were required by previous inspection; and

l. Digital photographs, with date stamp, that clearly show the condition of all practices that have been identified as needing corrective actions. The *qualified inspector* shall attach paper color copies of the digital photographs to the inspection report being maintained onsite within seven (7) calendar days of the date of the inspection. The *qualified inspector* shall also take digital photographs, with date stamp, that clearly show the condition of the practice(s) after the corrective action has been completed. The *qualified inspector* shall attach paper color copies of the digital photographs to the inspection report that documents the completion of the corrective action work within seven (7) calendar days of that inspection.

5. Within one business day of the completion of an inspection, the *qualified inspector* shall notify the *owner or operator* and appropriate contractor or subcontractor identified in Part III.A.6. of this permit of any corrective actions that need to be taken. The contractor or subcontractor shall begin implementing the corrective actions within one business day of this notification and shall complete the corrective actions in a reasonable time frame.

6. All inspection reports shall be signed by the *qualified inspector.* Pursuant to Part II.C.2. of this permit, the inspection reports shall be maintained on site with the SWPPP.

V. Part V. TERMINATION OF PERMIT COVERAGE

A. Termination of Permit Coverage

1. An *owner or operator* that is eligible to terminate coverage under this permit must submit a completed NOT form to the address in Part II.A.1 of this permit. The NOT form shall be one which is associated with this permit, signed in accordance with Part VII.H of this permit.

(Part V.A.2)

2. An *owner or operator* may terminate coverage when one or more the following conditions have been met:

   a. Total project completion - All *construction activity* identified in the SWPPP has been completed; and all areas of disturbance have achieved *final stabilization*; and all temporary, structural erosion and sediment control measures have been removed; and all post-construction stormwater management practices have been constructed in conformance with the SWPPP and are operational;

   b. Planned shutdown with partial project completion - All soil disturbance activities have ceased; and all areas disturbed as of the project shutdown date have achieved *final stabilization*; and all temporary, structural erosion and sediment control measures have been removed; and all post-construction stormwater management practices required for the completed portion of the project have been constructed in conformance with the SWPPP and are operational;

   c. A new *owner or operator* has obtained coverage under this permit in accordance with Part II.E. of this permit.

   d. The *owner or operator* obtains coverage under an alternative SPDES general permit or an individual SPDES permit.

3. For *construction activities* meeting subdivision 2a. or 2b. of this Part, the *owner or operator* shall have the *qualified inspector* perform a final site inspection prior to submitting the NOT. The *qualified inspector* shall, by signing the "*Final Stabilization*" and "Post-Construction Stormwater Management Practice certification statements on the NOT, certify that all the requirements in Part V.A.2.a. or b. of this permit have been achieved.

4. For *construction activities* that are subject to the requirements of a *regulated, traditional land use control MS4* and meet subdivision 2a. or 2b. of this Part, the *owner or operator* shall have the *regulated, traditional land use control MS4* sign the "MS4 Acceptance" statement on the NOT in accordance with the requirements in Part VII.H. of this permit. The *regulated, traditional land use control MS4* official, by signing this statement, has determined that it is acceptable for the *owner or operator* to submit the NOT in accordance with the requirements of this Part. The *regulated, traditional land use control MS4* can make this determination by performing a final site inspection themselves or by accepting the *qualified inspector*'s final site inspection certification(s) required in Part V.A.3. of this permit.

(Part V.A.5)

5. For *construction activities* that require post-construction stormwater management practices and meet subdivision 2a. of this Part, the *owner or operator* must, prior to submitting the NOT, ensure one of the following:

   a. the post-construction stormwater management practice(s) and any right-of-way(s) needed to maintain such practice(s) have been deeded to the municipality in which the practice(s) is located,

   b. an executed maintenance agreement is in place with the municipality that will maintain the post-construction stormwater management practice(s),

   c. for post-construction stormwater management practices that are privately owned, the *owner or operator* has a mechanism in place that requires operation and maintenance of the practice(s) in accordance with the operation and maintenance plan, such as a deed covenant in the *owner or operator's* deed of record,

   d. for post-construction stormwater management practices that are owned by a public or private institution (e.g. school, university, hospital), government agency or authority, or public utility; the *owner or operator* has policy and procedures in place that ensures operation and maintenance of the practices in accordance with the operation and maintenance plan.

VI. Part VI. REPORTING AND RETENTION OF RECORDS

A. Record Retention

The *owner or operator* shall retain a copy of the NOI, NOI Acknowledgment Letter, SWPPP, MS4 SWPPP Acceptance form and any inspection reports that were prepared in conjunction with this permit for a period of at least five (5) years from the date that the Department receives a complete NOT submitted in accordance with Part V. of this general permit.

B. Addresses

With the exception of the NOI, NOT, and MS4 SWPPP Acceptance form (which must be submitted to the address referenced in Part II.A.1 of this permit), all written correspondence requested by the Department, including individual permit applications, shall be sent to the address of the appropriate DOW Water (SPDES) Program contact at the Regional Office listed in Appendix F.

VII. Part VII. STANDARD PERMIT CONDITIONS

A. Duty to Comply

The *owner or operator* must comply with all conditions of this permit. All contractors and subcontractors associated with the project must comply with the terms of the SWPPP. Any non-compliance with this permit constitutes a violation of the Clean Water Act (CWA) and the ECL and is grounds for an enforcement action against the *owner or operator* and/or the contractor/subcontractor; permit revocation, suspension or modification; or denial of a permit renewal application. Upon a finding of significant non-compliance with this permit or the applicable SWPPP, the Department may order an immediate stop to all *construction activity* at the site until the non-compliance is remedied. The stop work order shall be in writing, shall describe the non-compliance in detail, and shall be sent to the *owner or operator*.

If any human remains or archaeological remains are encountered during excavation, the *owner or operator* must immediately cease, or cause to cease, all *construction activity* in the area of the remains and notify the appropriate Regional Water Engineer (RWE). *Construction activity* shall not resume until written permission to do so has been received from the RWE.

B. Continuation of the Expired General Permit

This permit expires five (5) years from the effective date. If a new general permit is not issued prior to the expiration of this general permit, an *owner or operator* with coverage under this permit may continue to operate and *discharge* in accordance with the terms and conditions of this general permit, if it is extended pursuant to the State Administrative Procedure Act and 6 NYCRR Part 621, until a new general permit is issued.

C. Enforcement

Failure of the *owner or operator,* its contractors, subcontractors, agents and/or assigns to strictly adhere to any of the permit requirements contained herein shall constitute a violation of this permit. There are substantial criminal, civil, and administrative penalties associated with violating the provisions of this permit. Fines of up to $37,500 per day for each violation and imprisonment for up to fifteen (15) years may be assessed depending upon the nature and degree of the offense.

D. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for an *owner or operator* in an enforcement action that it would have been necessary to halt or reduce the *construction activity* in order to maintain compliance with the conditions of this permit.

E. Duty to Mitigate

The *owner or operator* and its contractors and subcontractors shall take all reasonable steps to *minimize* or prevent any *discharge* in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

F. Duty to Provide Information

The *owner or operator* shall furnish to the Department, within a reasonable specified time period of a written request, all documentation necessary to demonstrate eligibility and any information to determine compliance with this permit or to determine whether cause exists for modifying or revoking this permit, or suspending or denying coverage under this permit, in accordance with the terms and conditions of this permit. The NOI, SWPPP and inspection reports required by this permit are public documents that the *owner or operator* must make available for review and copying by any person within five (5) business days of the *owner or operator* receiving a written request by any such person to review these documents. Copying of documents will be done at the requester's expense.

G. Other Information

When the *owner or operator* becomes aware that they failed to submit any relevant facts, or submitted incorrect information in the NOI or in any of the documents required by this permit , or have made substantive revisions to the SWPPP (e.g. the scope of the project changes significantly, the type of post-construction stormwater management practice(s) changes, there is a reduction in the sizing of the post-construction stormwater management practice, or there is an increase in the disturbance area or *impervious area*), which were not reflected in the original NOI submitted to the Department, they shall promptly submit such facts or information to the Department using the contact information in Part II.A. of this permit. Failure of the *owner or operator* to correct or supplement any relevant facts within five (5) business days of becoming aware of the deficiency shall constitute a violation of this permit.

H. Signatory Requirements

1. All NOIs and NOTs shall be signed as follows:

   a. For a corporation these forms shall be signed by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:

      (i) a president, secretary, treasurer, or vice-president of the

corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or

(ii) the manager of one or more manufacturing, production or operating facilities, provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

b. For a partnership or sole proprietorship these forms shall be signed by a general partner or the proprietor, respectively; or

c. For a municipality, State, Federal, or other public agency these forms shall be signed by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes:

(i) the chief executive officer of the agency, or

(ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).

2. The SWPPP and other information requested by the Department shall be signed by a person described in Part VII.H.1. of this permit or by a duly authorized representative of that person. A person is a duly authorized representative only if:

a. The authorization is made in writing by a person described in Part VII.H.1. of this permit;

b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, position of *equivalent* responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named

individual or any individual occupying a named position) and,

c. The written authorization shall include the name, title and signature of the authorized representative and be attached to the SWPPP.

3. All inspection reports shall be signed by the *qualified inspector* that performs the inspection.

4. The MS4 SWPPP Acceptance form shall be signed by the principal executive officer or ranking elected official from the *regulated, traditional land use control MS4,* or by a duly authorized representative of that person.

   It shall constitute a permit violation if an incorrect and/or improper signatory authorizes any required forms, SWPPP and/or inspection reports.

I. Property Rights

The issuance of this permit does not convey any property rights of any sort, nor any exclusive privileges, nor does it authorize any injury to private property nor any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations. *Owners or operators* must obtain any applicable conveyances, easements, licenses and/or access to real property prior to *commencing construction activity*.

J. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

K. Requirement to Obtain Coverage Under an Alternative Permit

1. The Department may require any *owner or operator* authorized by this permit to apply for and/or obtain either an individual SPDES permit or another SPDES general permit. When the Department requires any *discharge*r authorized by a general permit to apply for an individual SPDES permit, it shall notify the *discharge*r in writing that a permit application is required. This notice shall include a brief statement of the reasons for this decision, an application form, a statement setting a time frame for the *owner or operator* to file the application for an individual SPDES permit, and a deadline, not sooner than 180 days from *owner or operator* receipt of the notification letter, whereby the authorization to

discharge under this general permit shall be terminated. Applications must be submitted to the appropriate Permit Administrator at the Regional Office. The Department may grant additional time upon demonstration, to the satisfaction of the Department, that additional time to apply for an alternative authorization is necessary or where the Department has not provided a permit determination in accordance with Part 621 of this Title.

2. When an individual SPDES permit is issued to a discharger authorized to *discharge* under a general SPDES permit for the same *discharge*(s), the general permit authorization for outfalls authorized under the individual SPDES permit is automatically terminated on the effective date of the individual permit unless termination is earlier in accordance with 6 NYCRR Part 750.

L. Proper Operation and Maintenance

The *owner or operator* shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the *owner or operator* to achieve compliance with the conditions of this permit and with the requirements of the SWPPP.

M. Inspection and Entry

The *owner or operator* shall allow an authorized representative of the Department, EPA, applicable county health department, or, in the case of a construction site which *discharges* through an *MS4*, an authorized representative of the *MS4* receiving the discharge, upon the presentation of credentials and other documents as may be required by law, to:

1. Enter upon the *owner's or operator's* premises where a regulated facility or activity is located or conducted or where records must be kept under the conditions of this permit;

2. Have access to and copy at reasonable times, any records that must be kept under the conditions of this permit; and

3. Inspect at reasonable times any facilities or equipment (including monitoring and control equipment), practices or operations regulated or required by this permit.

4. Sample or monitor at reasonable times, for purposes of assuring permit compliance or as otherwise authorized by the Act or ECL, any substances or parameters at any location.

N. Permit Actions

This permit may, at any time, be modified, suspended, revoked, or renewed by the Department in accordance with 6 NYCRR Part 621. The filing of a request by the *owner or operator* for a permit modification, revocation and reissuance, termination, a notification of planned changes or anticipated noncompliance does not limit, diminish and/or stay compliance with any terms of this permit.

O. Definitions

Definitions of key terms are included in Appendix A of this permit.

P. Re-Opener Clause

1. If there is evidence indicating potential or realized impacts on water quality due to any stormwater discharge associated with *construction activity* covered by this permit, the *owner or operator* of such discharge may be required to obtain an individual permit or alternative general permit in accordance with Part VII.K. of this permit or the permit may be modified to include different limitations and/or requirements.

2. Any Department initiated permit modification, suspension or revocation will be conducted in accordance with 6 NYCRR Part 621, 6 NYCRR 750-1.18, and 6 NYCRR 750-1.20.

Q. Penalties for Falsification of Forms and Reports

In accordance with 6NYCRR Part 750-2.4 and 750-2.5, any person who knowingly makes any false material statement, representation, or certification in any application, record, report or other document filed or required to be maintained under this permit, including reports of compliance or noncompliance shall, upon conviction, be punished in accordance with ECL §71-1933 and or Articles 175 and 210 of the New York State Penal Law.

R. Other Permits

Nothing in this permit relieves the *owner or operator* from a requirement to obtain any other permits required by law.

VIII. **APPENDIX A**

Definitions

Alter Hydrology from Pre to Post-Development Conditions - means the post-development peak flow rate(s) has increased by more than 5% of the pre-developed condition for the design storm of interest (e.g. 10 yr and 100 yr).

Combined Sewer - means a sewer that is designed to collect and convey both “sewage” and “stormwater”.

Commence (Commencement of) Construction Activities - means the initial disturbance of soils associated with clearing, grading or excavation activities; or other construction related activities that disturb or expose soils such as demolition, stockpiling of fill material, and the initial installation of erosion and sediment control practices required in the SWPPP. See definition for “*Construction Activity(ies)*” also.

***Construction Activity*(ies) -** means any clearing, grading, excavation, filling, demolition or stockpiling activities that result in soil disturbance. Clearing activities can include, but are not limited to, logging equipment operation, the cutting and skidding of trees, stump removal and/or brush root removal. Construction activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of a facility.

Direct Discharge (to a specific surface waterbody) - means that runoff flows from a construction site by overland flow and the first point of discharge is the specific surface waterbody, or runoff flows from a construction site to a separate storm sewer system and the first point of discharge from the separate storm sewer system is the specific surface waterbody.

Discharge(s) - means any addition of any pollutant to waters of the State through an outlet or point source.

Environmental Conservation Law (ECL) - means chapter 43-B of the Consolidated Laws of the State of New York, entitled the Environmental Conservation Law.

Equivalent (Equivalence) – means that the practice or measure meets all the performance, longevity, maintenance, and safety objectives of the technical standard and will provide an equal or greater degree of water quality protection.

Final Stabilization - means that all soil disturbance activities have ceased and a uniform, perennial vegetative cover with a density of eighty (80) percent over the entire pervious surface has been established; or other equivalent stabilization measures, such as permanent landscape mulches, rock rip-rap or washed/crushed stone have been applied

on all disturbed areas that are not covered by permanent structures, concrete or pavement.

General SPDES permit - means a SPDES permit issued pursuant to 6 NYCRR Part 750-1.21 and Section 70-0117 of the ECL authorizing a category of discharges.

Groundwater(s) - means waters in the saturated zone. The saturated zone is a subsurface zone in which all the interstices are filled with water under pressure greater than that of the atmosphere. Although the zone may contain gas-filled interstices or interstices filled with fluids other than water, it is still considered saturated.

Historic Property – means any building, structure, site, object or district that is listed on the State or National Registers of Historic Places or is determined to be eligible for listing on the State
or National Registers of Historic Places.

Impervious Area (Cover) - means all impermeable surfaces that cannot effectively infiltrate rainfall. This includes paved, concrete and gravel surfaces (i.e. parking lots, driveways, roads, runways and sidewalks); building rooftops and miscellaneous impermeable structures such as patios, pools, and sheds.

Infeasible – means not technologically possible, or not economically practicable and achievable in light of best industry practices.

Larger Common Plan of Development or Sale - means a contiguous area where multiple separate and distinct *construction activities* are occurring, or will occur, under one plan. The term “plan” in “larger common plan of development or sale” is broadly defined as any announcement or piece of documentation (including a sign, public notice or hearing, marketing plan, advertisement, drawing, permit application, State Environmental Quality Review Act (SEQRA) environmental assessment form or other documents, zoning request, computer design, etc.) or physical demarcation (including boundary signs, lot stakes, surveyor markings, etc.) indicating that *construction activities* may occur on a specific plot.

For discrete construction projects that are located within a larger common plan of development or sale that are at least 1/4 mile apart, each project can be treated as a separate plan of development or sale provided any interconnecting road, pipeline or utility project that is part of the same “common plan” is not concurrently being disturbed.

Minimize – means reduce and/or eliminate to the extent achievable using control measures (including best management practices) that are technologically available and economically practicable and achievable in light of best industry practices.

Municipal Separate Storm Sewer (MS4) - a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters,

ditches, man-made
channels, or storm drains):

(i) Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to surface waters of the State*;*

(ii) Designed or used for collecting or conveying stormwater;

(iii) Which is not a *combined sewer*; and

(iv) Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.

National Pollutant Discharge Elimination System (NPDES) - means the national system for the issuance of wastewater and stormwater permits under the Federal Water Pollution Control Act (Clean Water Act).

New Development – means any land disturbance that does meet the definition of Redevelopment Activity included in this appendix.

NOI Acknowledgment Letter - means the letter that the Department sends to an owner or operator to acknowledge the Department's receipt and acceptance of a complete Notice of Intent. This letter documents the owner's or operator's authorization to discharge in accordance with the general permit for stormwater discharges from *construction activity*.

Owner or Operator - means the person, persons or legal entity which owns or leases the property on which the *construction activity* is occurring; and/or an entity that has operational control over the construction plans and specifications, including the ability to make modifications to the plans and specifications.

Performance Criteria – means the design criteria listed under the "Required Elements" sections in Chapters 5, 6 and 10 of the technical standard, New York State Stormwater Management Design Manual, dated January 2015. It does not include the Sizing Criteria (i.e. WQv, RRv, Cpv, Qp and Qf) in Part I.C.2. of the permit.

Pollutant - means dredged spoil, filter backwash, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand and industrial, municipal, agricultural waste and ballast discharged into water; which may cause or might reasonably be expected to cause pollution of the waters of the state in contravention of the standards or guidance values adopted as provided in 6 NYCRR Parts 700 et seq .

Qualified Inspector - means a person that is knowledgeable in the principles and practices of erosion and sediment control, such as a licensed Professional Engineer, Certified Professional in Erosion and Sediment Control (CPESC), Registered Landscape Architect, or other Department endorsed individual(s).

It can also mean someone working under the direct supervision of, and at the same company as, the licensed Professional Engineer or Registered Landscape Architect, provided that person has training in the principles and practices of erosion and sediment control. Training in the principles and practices of erosion and sediment control means that the individual working under the direct supervision of the licensed Professional Engineer or Registered Landscape Architect has received four (4) hours of Department endorsed training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other Department endorsed entity. After receiving the initial training, the individual working under the direct supervision of the licensed Professional Engineer or Registered Landscape Architect shall receive four (4) hours of training every three (3) years.

It can also mean a person that meets the *Qualified Professional* qualifications in addition to the *Qualified Inspector* qualifications.

Note: Inspections of any post-construction stormwater management practices that include structural components, such as a dam for an impoundment, shall be performed by a licensed Professional Engineer.

Qualified Professional - means a person that is knowledgeable in the principles and practices of stormwater management and treatment, such as a licensed Professional Engineer, Registered Landscape Architect or other Department endorsed individual(s). Individuals preparing SWPPPs that require the post-construction stormwater management practice component must have an understanding of the principles of hydrology, water quality management practice design, water quantity control design, and, in many cases, the principles of hydraulics. All components of the SWPPP that involve the practice of engineering, as defined by the NYS Education Law (see Article 145), shall be prepared by, or under the direct supervision of, a professional engineer licensed to practice in the State of New York..

Redevelopment Activity(ies) – means the disturbance and reconstruction of existing impervious area, including impervious areas that were removed from a project site within five (5) years of preliminary project plan submission to the local government (i.e. site plan, subdivision, etc.).

Regulated, Traditional Land Use Control MS4 - means a city, town or village with land use control authority that is required to gain coverage under New York State DEC's SPDES General Permit For Stormwater Discharges from Municipal Separate Stormwater Sewer Systems (MS4s).

Routine Maintenance Activity - means *construction activity* that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of a facility, including, but not limited to:

- Re-grading of gravel roads or parking lots,
- Stream bank restoration projects (does not include the placement of spoil material),
- Cleaning and shaping of existing roadside ditches and culverts that maintains the approximate original line and grade, and hydraulic capacity of the ditch,
- Cleaning and shaping of existing roadside ditches that does not maintain the approximate original grade, hydraulic capacity and purpose of the ditch if the changes to the line and grade, hydraulic capacity or purpose of the ditch are installed to improve water quality and quantity controls (e.g. installing grass lined ditch),
- Placement of aggregate shoulder backing that makes the transition between the road shoulder and the ditch or embankment,
- Full depth milling and filling of existing asphalt pavements, replacement of concrete pavement slabs, and similar work that does not expose soil or disturb the bottom six (6) inches of subbase material,
- Long-term use of equipment storage areas at or near highway maintenance facilities,
- Removal of sediment from the edge of the highway to restore a previously existing sheet-flow drainage connection from the highway surface to the highway ditch or embankment,
- Existing use of Canal Corp owned upland disposal sites for the canal, and
- Replacement of curbs, gutters, sidewalks and guide rail posts.

Site limitations – means site conditions that prevent the use of an infiltration technique and or infiltration of the total WQv. Typical site limitations include: seasonal high groundwater, shallow depth to bedrock, and soils with an infiltration rate less than 0.5 inches/hour. The existence of site limitations shall be confirmed and documented using actual field testing (i.e. test pits, soil borings, and infiltration test) or using information from the most current United States Department of Agriculture (USDA) Soil Survey for the County where the project is located.

Sizing Criteria – means the criteria included in Part I.C.2 of the permit that are used to size post-construction stormwater management control practices. The criteria include; Water Quality Volume (WQv), Runoff Reduction Volume (RRv), Channel Protection Volume (Cpv), Overbank Flood (Qp), and Extreme Flood (Qf).

State Pollutant Discharge Elimination System (SPDES) - means the system established pursuant to Article 17 of the ECL and 6 NYCRR Part 750 for issuance of permits authorizing discharges to the waters of the state.

Steep Slope – means land area with a Soil Slope Phase that is identified as an E or F, or

the map unit name is inclusive of 25% or greater slope, on the United States Department of Agriculture ("USDA") Soil Survey for the County where the disturbance will occur.

Surface Waters of the State - shall be construed to include lakes, bays, sounds, ponds, impounding reservoirs, springs, rivers, streams, creeks, estuaries, marshes, inlets, canals, the Atlantic ocean within the territorial seas of the state of New York and all other bodies of surface water, natural or artificial, inland or coastal, fresh or salt, public or private (except those private waters that do not combine or effect a junction with natural surface waters), which are wholly or partially within or bordering the state or within its jurisdiction. Waters of the state are further defined in 6 NYCRR Parts 800 to 941.

Temporarily Ceased – means that an existing disturbed area will not be disturbed again within 14 calendar days of the previous soil disturbance.

Temporary Stabilization - means that exposed soil has been covered with material(s) as set forth in the technical standard, New York Standards and Specifications for Erosion and Sediment Control, to prevent the exposed soil from eroding. The materials can include, but are not limited to, mulch, seed and mulch, and erosion control mats (e.g. jute twisted yarn, excelsior wood fiber mats).

Total Maximum Daily Loads (TMDLs) - A TMDL is the sum of the allowable loads of a single pollutant from all contributing point and nonpoint sources. It is a calculation of the maximum amount of a pollutant that a waterbody can receive on a daily basis and still meet *water quality standards*, and an allocation of that amount to the pollutant's sources. A TMDL stipulates wasteload allocations (WLAs) for point source discharges, load allocations (LAs) for nonpoint sources, and a margin of safety (MOS).

Trained Contractor - means an employee from the contracting (construction) company, identified in Part III.A.6., that has received four (4) hours of Department endorsed training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other Department endorsed entity. After receiving the initial training, the *trained contractor* shall receive four (4) hours of training every three (3) years.

It can also mean an employee from the contracting (construction) company, identified in Part III.A.6., that meets the *qualified inspector* qualifications (e.g. licensed Professional Engineer, Certified Professional in Erosion and Sediment Control (CPESC), Registered Landscape Architect, or someone working under the direct supervision of, and at the same company as, the licensed Professional Engineer or Registered Landscape Architect, provided they have received four (4) hours of Department endorsed training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other Department endorsed entity).

The *trained contractor* is responsible for the day to day implementation of the SWPPP.

Uniform Procedures Act (UPA) Permit - means a permit required under 6 NYCRR Part

621 of the Environmental Conservation Law (ECL), Article 70.

Water Quality Standard - means such measures of purity or quality for any waters in relation to their reasonable and necessary use as promulgated in 6 NYCRR Part 700 et seq.

IX. APPENDIX B

Required SWPPP Components by Project Type

Table 1
CONSTRUCTION ACTIVITIES THAT REQUIRE THE PREPARATION OF A SWPPP THAT ONLY INCLUDES EROSION AND SEDIMENT CONTROLS

The following construction activities that involve soil disturbances of one (1) or more acres of land, but less than five (5) acres: • Single family home not located in one of the watersheds listed in Appendix C or not *directly discharging* to one of the 303(d) segments listed in Appendix E • Single family residential subdivisions with 25% or less impervious cover at total site build-out and not located in one of the watersheds listed in Appendix C and not directly discharging to one of the 303(d) segments listed in Appendix E • Construction of a barn or other agricultural building, silo, stock yard or pen.
The following construction activities that involve soil disturbances of one (1) or more acres of land: • Installation of underground, linear utilities; such as gas lines, fiber-optic cable, cable TV, electric, telephone, sewer mains, and water mains • Environmental enhancement projects, such as wetland mitigation projects, stormwater retrofits and stream restoration projects • Bike paths and trails • Sidewalk construction projects that are not part of a road/ highway construction or reconstruction project • Slope stabilization projects • Slope flattening that changes the grade of the site, but does not significantly change the runoff characteristics • Spoil areas that will be covered with vegetation • Land clearing and grading for the purposes of creating vegetated open space (i.e. recreational parks, lawns, meadows, fields), excluding projects that *alter hydrology from pre to post development* conditions • Athletic fields (natural grass) that do not include the construction or reconstruction of *impervious area* and do not *alter hydrology from pre to post development* conditions • Demolition project where vegetation will be established and no redevelopment is planned • Overhead electric transmission line project that does not include the construction of permanent access roads or parking areas surfaced with *impervious cover* • Structural practices as identified in Table II in the "Agricultural Management Practices Catalog for Nonpoint Source Pollution in New York State", excluding projects that involve soil disturbances of less than five acres and construction activities that include the construction or reconstruction of impervious area
The following construction activities that involve soil disturbances between five thousand (5000) square feet and one (1) acre of land: • All construction activities located in the watersheds identified in Appendix D that involve soil disturbances between five thousand (5,000) square feet and one (1) acre of land.

Table 2

CONSTRUCTION ACTIVITIES THAT REQUIRE THE PREPARATION OF A SWPPP THAT INCLUDES POST-CONSTRUCTION STORMWATER MANAGEMENT PRACTICES

The following construction activities that involve soil disturbances of one (1) or more acres of land:

- Single family home located in one of the watersheds listed in Appendix C or *directly discharging* to one of the 303(d) segments listed in Appendix E
- Single family residential subdivisions located in one of the watersheds listed in Appendix C or *directly discharging* to one of the 303(d) segments listed in Appendix E
- Single family residential subdivisions that involve soil disturbances of between one (1) and five (5) acres of land with greater than 25% impervious cover at total site build-out
- Single family residential subdivisions that involve soil disturbances of five (5) or more acres of land, and single family residential subdivisions that involve soil disturbances of less than five (5) acres that are part of a larger common plan of development or sale that will ultimately disturb five or more acres of land
- Multi-family residential developments; includes townhomes, condominiums, senior housing complexes, apartment complexes, and mobile home parks
- Airports
- Amusement parks
- Campgrounds
- Cemeteries that include the construction or reconstruction of impervious area (>5% of disturbed area) or *alter the hydrology from pre to post development* conditions
- Commercial developments
- Churches and other places of worship
- Construction of a barn or other agricultural building(e.g. silo) and structural practices as identified in Table II in the "Agricultural Management Practices Catalog for Nonpoint Source Pollution in New York State" that include the construction or reconstruction of *impervious area*, excluding projects that involve soil disturbances of less than five acres.
- Golf courses
- Institutional, includes hospitals, prisons, schools and colleges
- Industrial facilities, includes industrial parks
- Landfills
- Municipal facilities; includes highway garages, transfer stations, office buildings, POTW's and water treatment plants
- Office complexes
- Sports complexes
- Racetracks, includes racetracks with earthen (dirt) surface
- Road construction or reconstruction
- Parking lot construction or reconstruction
- Athletic fields (natural grass) that include the construction or reconstruction of impervious area (>5% of disturbed area) or *alter the hydrology from pre to post development* conditions
- Athletic fields with artificial turf
- Permanent access roads, parking areas, substations, compressor stations and well drilling pads, surfaced with *impervious cover,* and constructed as part of an over-head electric transmission line project , wind-power project, cell tower project, oil or gas well drilling project, sewer or water main project or other linear utility project
- All other construction activities that include the construction or reconstruction of *impervious area* <u>or</u> *alter the hydrology from pre to post development* conditions, <u>and</u> are not listed in Table 1

X. APPENDIX C

Watersheds Where Enhanced Phosphorus Removal Standards Are Required

Watersheds where *owners or operators* of construction activities identified in Table 2 of Appendix B must prepare a SWPPP that includes post-construction stormwater management practices designed in conformance with the Enhanced Phosphorus Removal Standards included in the technical standard, New York State Stormwater Management Design Manual ("Design Manual").

- Entire New York City Watershed located east of the Hudson River **-** Figure 1
- Onondaga Lake Watershed **-** Figure 2
- Greenwood Lake Watershed **-**Figure 3
- Oscawana Lake Watershed – Figure 4
- Kinderhook Lake Watershed – Figure 5

Figure 1 - New York City Watershed East of the Hudson

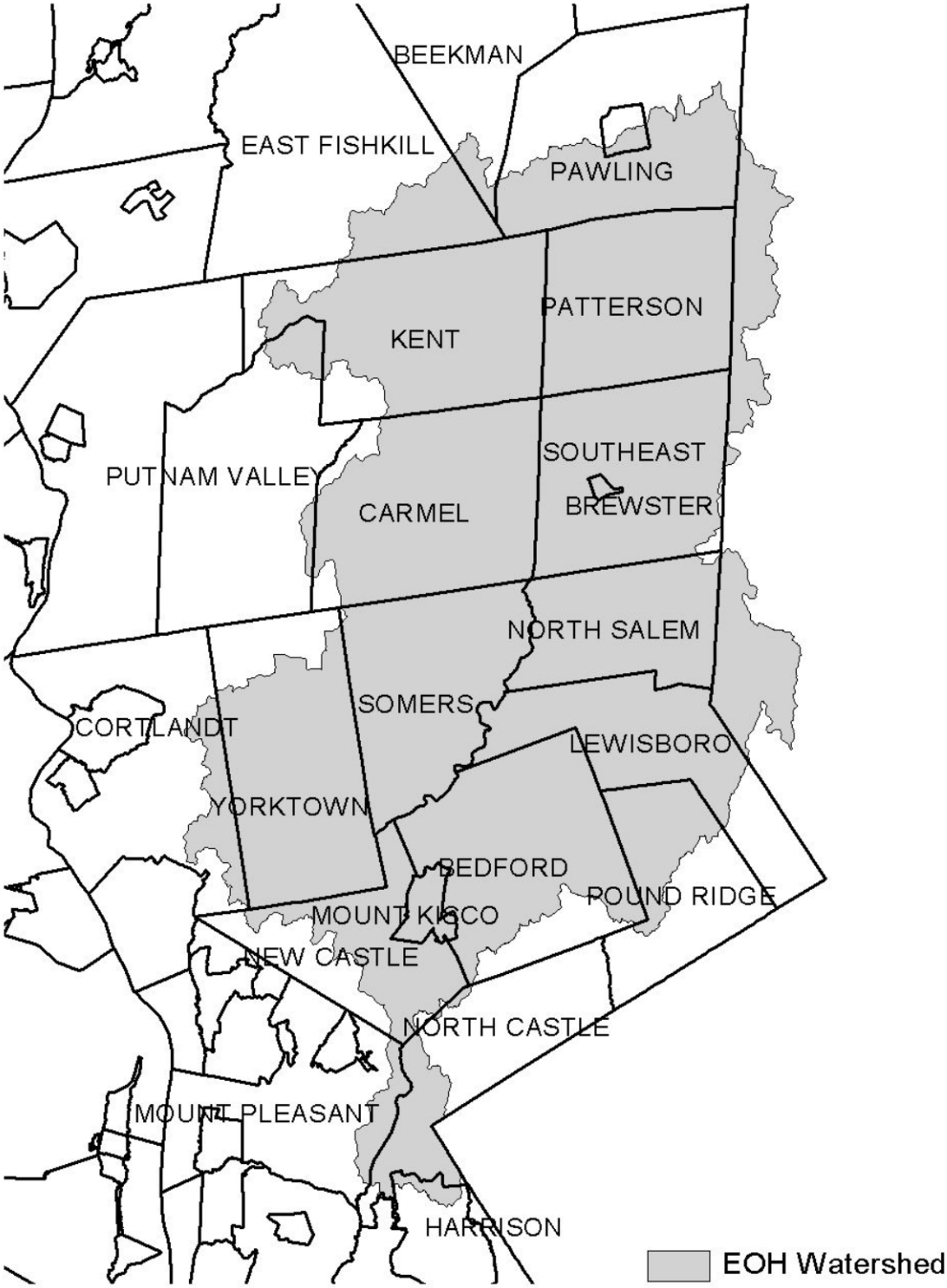


Figure 2 - Onondaga Lake Watershed

Figure 3 - Greenwood Lake Watershed

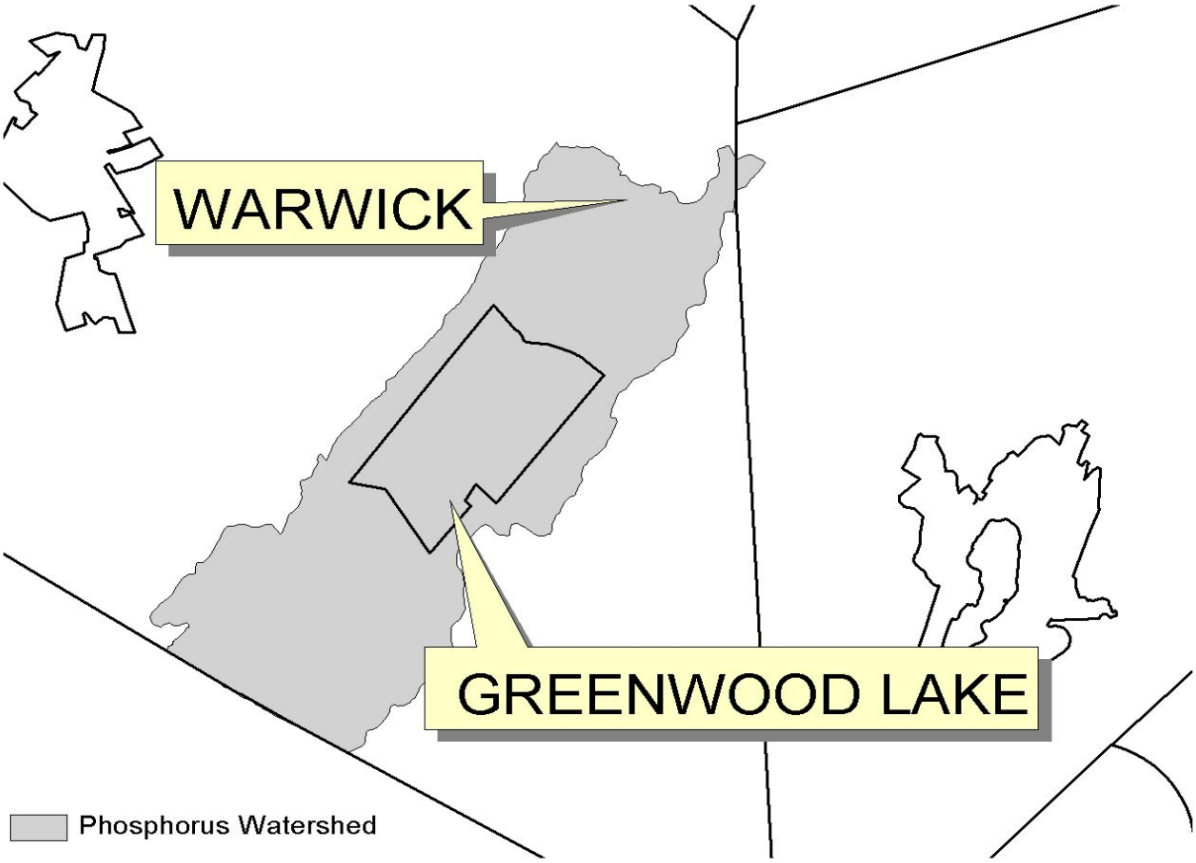


Figure 4 - Oscawana Lake Watershed

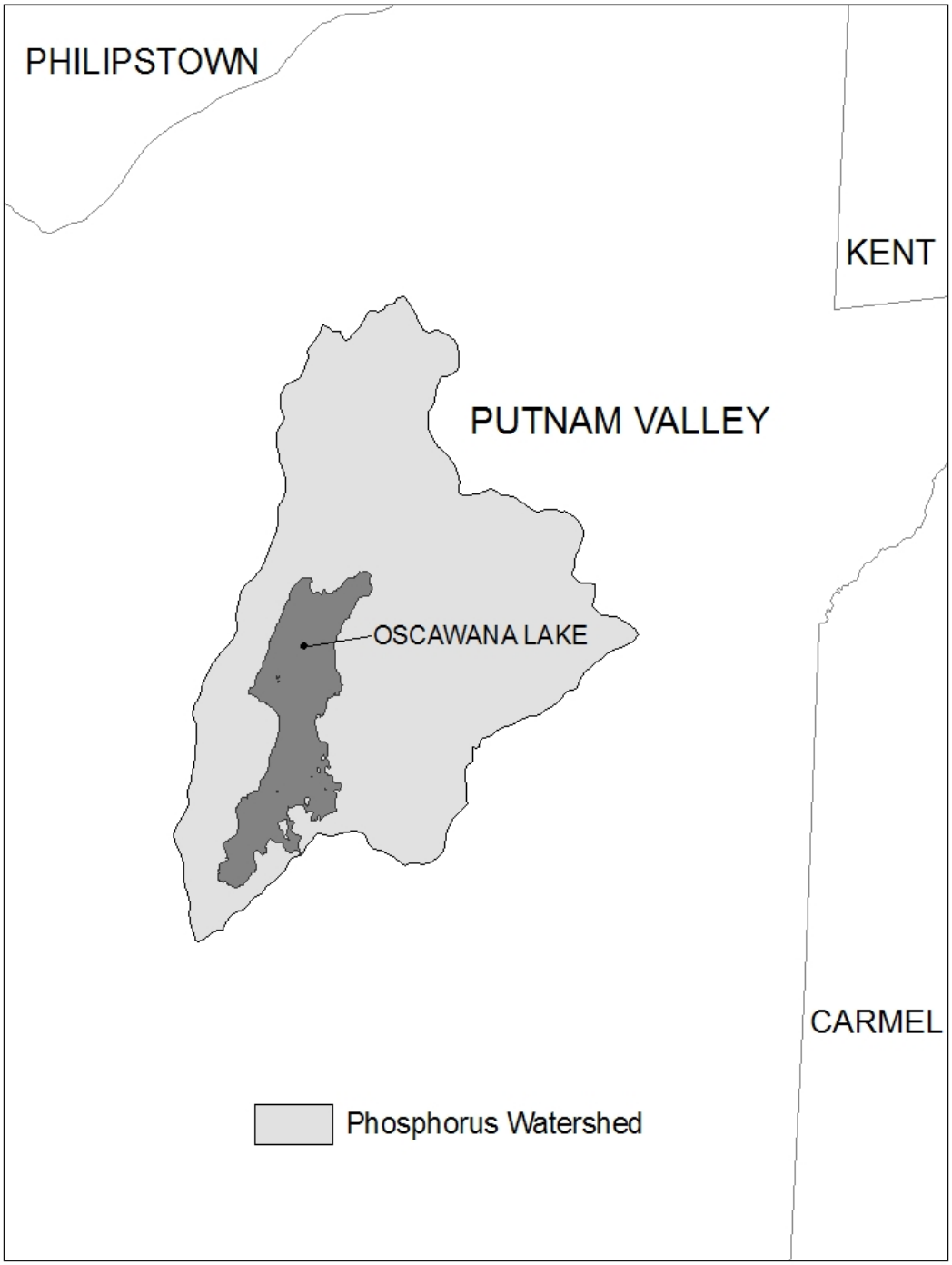
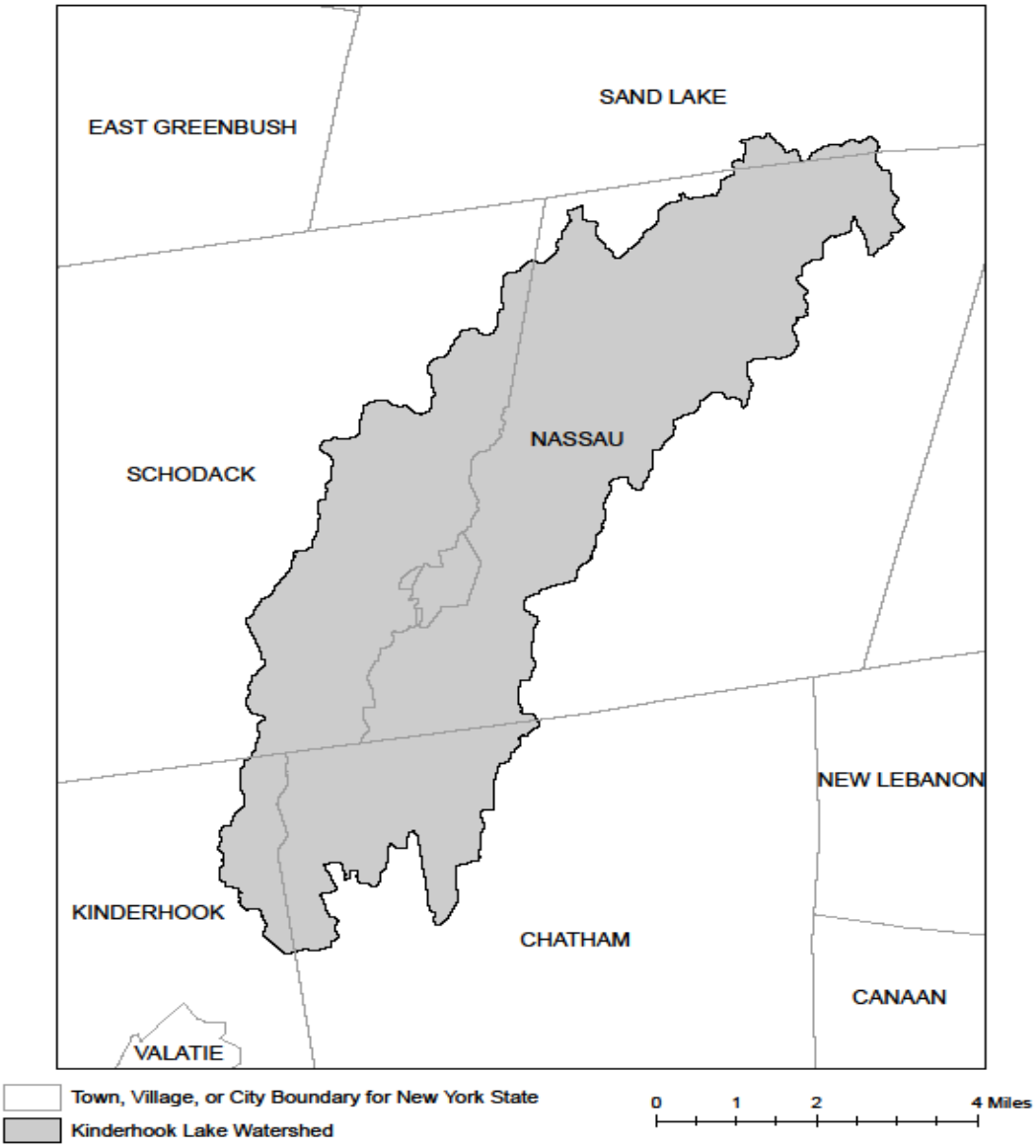


Figure 5: Kinderhook Lake Watershed



XI. APPENDIX D

Watersheds where *owners or operators* of construction activities that involve soil disturbances between five thousand (5000) square feet and one (1) acre of land must obtain coverage under this permit.

Entire New York City Watershed that is located east of the Hudson River **-** See Figure 1 in Appendix C

XII. APPENDIX E

List of 303(d) segments impaired by pollutants related to *construction activity* (e.g. silt, sediment or nutrients). *Owners or operators* of single family home and single family residential subdivisions with 25% or less total impervious cover at total site build-out that involve soil disturbances of one or more acres of land, but less than 5 acres, and *directly discharge* to one of the listed segments below shall prepare a SWPPP that includes post-construction stormwater management practices designed in conformance with the New York State Stormwater Management Design Manual ("Design Manual"), dated January 2015.

COUNTY	WATERBODY	COUNTY	WATERBODY
Albany	Ann Lee (Shakers) Pond, Stump Pond	Greene	Sleepy Hollow Lake
Albany	Basic Creek Reservoir	Herkimer	Steele Creek tribs
Allegheny	Amity Lake, Saunders Pond	Kings	Hendrix Creek
Bronx	Van Cortlandt Lake	Lewis	Mill Creek/South Branch and tribs
Broome	Whitney Point Lake/Reservoir	Livingston	Conesus Lake
Broome	Fly Pond, Deer Lake	Livingston	Jaycox Creek and tribs
Broome	Minor Tribs to Lower Susquehanna (north)	Livingston	Mill Creek and minor tribs
		Livingston	Bradner Creek and tribs
Cattaraugus	Allegheny River/Reservoir	Livingston	Christie Creek and tribs
Cattaraugus	Case Lake	Monroe	Lake Ontario Shoreline, Western
Cattaraugus	Linlyco/Club Pond	Monroe	Mill Creek/Blue Pond Outlet and tribs
Cayuga	Duck Lake	Monroe	Rochester Embayment - East
Chautauqua	Chautauqua Lake, North	Monroe	Rochester Embayment - West
Chautauqua	Chautauqua Lake, South	Monroe	Unnamed Trib to Honeoye Creek
Chautauqua	Bear Lake	Monroe	Genesee River, Lower, Main Stem
Chautauqua	Chadakoin River and tribs	Monroe	Genesee River, Middle, Main Stem
Chautauqua	Lower Cassadaga Lake	Monroe	Black Creek, Lower, and minor tribs
Chautauqua	Middle Cassadaga Lake	Monroe	Buck Pond
Chautauqua	Findley Lake	Monroe	Long Pond
Clinton	Great Chazy River, Lower, Main Stem	Monroe	Cranberry Pond
Columbia	Kinderhook Lake	Monroe	Mill Creek and tribs
Columbia	Robinson Pond	Monroe	Shipbuilders Creek and tribs
Dutchess	Hillside Lake	Monroe	Minor tribs to Irondequoit Bay
Dutchess	Wappinger Lakes	Monroe	Thomas Creek/White Brook and tribs
Dutchess	Fall Kill and tribs	Nassau	Glen Cove Creek, Lower, and tribs
Erie	Green Lake	Nassau	LI Tribs (fresh) to East Bay
Erie	Scajaquada Creek, Lower, and tribs	Nassau	East Meadow Brook, Upper, and tribs
Erie	Scajaquada Creek, Middle, and tribs	Nassau	Hempstead Bay
Erie	Scajaquada Creek, Upper, and tribs	Nassau	Hempstead Lake
Erie	Rush Creek and tribs	Nassau	Grant Park Pond
Erie	Ellicott Creek, Lower, and tribs	Nassau	Beaver Lake
Erie	Beeman Creek and tribs	Nassau	Camaans Pond
Erie	Murder Creek, Lower, and tribs	Nassau	Halls Pond
Erie	South Branch Smoke Cr, Lower, and tribs	Nassau	LI Tidal Tribs to Hempstead Bay
		Nassau	Massapequa Creek and tribs
Erie	Little Sister Creek, Lower, and tribs	Nassau	Reynolds Channel, east
Essex	Lake George (primary county: Warren)	Nassau	Reynolds Channel, west
Genesee	Black Creek, Upper, and minor tribs	Nassau	Silver Lake, Lofts Pond
Genesee	Tonawanda Creek, Middle, Main Stem	Nassau	Woodmere Channel
Genesee	Oak Orchard Creek, Upper, and tribs	Niagara	Hyde Park Lake
Genesee	Bowen Brook and tribs	Niagara	Lake Ontario Shoreline, Western
Genesee	Bigelow Creek and tribs	Niagara	Bergholtz Creek and tribs
Genesee	Black Creek, Middle, and minor tribs	Oneida	Ballou, Nail Creeks
Genesee	LeRoy Reservoir	Onondaga	Ley Creek and tribs
Greene	Schoharie Reservoir	Onondaga	Onondaga Creek, Lower and tribs

APPENDIX E

List of 303(d) segments impaired by pollutants related to construction activity, cont'd.

COUNTY	WATERBODY	COUNTY	WATERBODY
Onondaga	Onondaga Creek, Middle and tribs	Suffolk	Great South Bay, West
Onondaga	Onondaga Creek, Upp, and minor tribs	Suffolk	Mill and Seven Ponds
Onondaga	Harbor Brook, Lower, and tribs	Suffolk	Moriches Bay, East
Onondaga	Ninemile Creek, Lower, and tribs	Suffolk	Moriches Bay, West
Onondaga	Minor tribs to Onondaga Lake	Suffolk	Quantuck Bay
Onondaga	Onondaga Creek, Lower, and tribs	Suffolk	Shinnecock Bay (and Inlet)
Ontario	Honeoye Lake	Sullivan	Bodine, Montgomery Lakes
Ontario	Hemlock Lake Outlet and minor tribs	Sullivan	Davies Lake
Ontario	Great Brook and minor tribs	Sullivan	Pleasure Lake
Orange	Monhagen Brook and tribs	Sullivan	Swan Lake
Orange	Orange Lake	Tompkins	Cayuga Lake, Southern End
Orleans	Lake Ontario Shoreline, Western	Tompkins	Owasco Inlet, Upper, and tribs
Oswego	Pleasant Lake	Ulster	Ashokan Reservoir
Oswego	Lake Neatahwanta	Ulster	Esopus Creek, Upper, and minor tribs
Putnam	Oscawana Lake		
Putnam	Palmer Lake	Ulster	Esopus Creek, Lower, Main Stem
Putnam	Lake Carmel	Ulster	Esopus Creek, Middle, and minor tribs
Queens	Jamaica Bay, Eastern, and tribs (Queens)		
Queens	Bergen Basin	Warren	Lake George
Queens	Shellbank Basin	Warren	Tribs to L.George, Village of L George
Rensselaer	Nassau Lake		
Rensselaer	Snyders Lake	Warren	Huddle/Finkle Brooks and tribs
Richmond	Grasmere, Arbutus and Wolfes Lakes	Warren	Indian Brook and tribs
Rockland	Congers Lake, Swartout Lake	Warren	Hague Brook and tribs
Rockland	Rockland Lake	Washington	Tribs to L.George, East Shr Lk George
Saratoga	Ballston Lake		
Saratoga	Round Lake	Washington	Cossayuna Lake
Saratoga	Dwaas Kill and tribs	Washington	Wood Cr/Champlain Canal, minor tribs
Saratoga	Tribs to Lake Lonely		
Saratoga	Lake Lonely	Wayne	Port Bay
Schenectady	Collins Lake	Wayne	Marbletown Creek and tribs
Schenectady	Duane Lake	Westchester	Lake Katonah
Schenectady	Mariaville Lake	Westchester	Lake Mohegan
Schoharie	Engleville Pond	Westchester	Lake Shenorock
Schoharie	Summit Lake	Westchester	Reservoir No.1 (Lake Isle)
Schuyler	Cayuta Lake	Westchester	Saw Mill River, Middle, and tribs
St. Lawrence	Fish Creek and minor tribs	Westchester	Silver Lake
St. Lawrence	Black Lake Outlet/Black Lake	Westchester	Teatown Lake
Steuben	Lake Salubria	Westchester	Truesdale Lake
Steuben	Smith Pond	Westchester	Wallace Pond
Suffolk	Millers Pond	Westchester	Peach Lake
Suffolk	Mattituck (Marratooka) Pond	Westchester	Mamaroneck River, Lower
Suffolk	Tidal tribs to West Moriches Bay	Westchester	Mamaroneck River, Upp, and tribs
Suffolk	Canaan Lake	Westchester	Sheldrake River and tribs
Suffolk	Lake Ronkonkoma	Westchester	Blind Brook, Lower
Suffolk	Beaverdam Creek and tribs	Westchester	Blind Brook, Upper, and tribs
Suffolk	Big/Little Fresh Ponds	Westchester	Lake Lincolndale
Suffolk	Fresh Pond	Westchester	Lake Meahaugh
Suffolk	Great South Bay, East	Wyoming	Java Lake
Suffolk	Great South Bay, Middle	Wyoming	Silver Lake

Note: The list above identifies those waters from the final New York State "2014 Section 303(d) List of Impaired Waters Requiring a TMDL/Other Strategy", dated January 2015, that are impaired by silt, sediment or nutrients.

XIII. APPENDIX F

LIST OF NYS DEC REGIONAL OFFICES

Region	COVERING THE FOLLOWING COUNTIES:	DIVISION OF ENVIRONMENTAL PERMITS (DEP) PERMIT ADMINISTRATORS	DIVISION OF WATER (DOW) WATER (SPDES) PROGRAM
1	NASSAU AND SUFFOLK	50 CIRCLE ROAD STONY BROOK, NY 11790 TEL. (631) 444-0365	50 CIRCLE ROAD STONY BROOK, NY 11790-3409 TEL. (631) 444-0405
2	BRONX, KINGS, NEW YORK, QUEENS AND RICHMOND	1 HUNTERS POINT PLAZA, 47-40 21ST ST. LONG ISLAND CITY, NY 11101-5407 TEL. (718) 482-4997	1 HUNTERS POINT PLAZA, 47-40 21ST ST. LONG ISLAND CITY, NY 11101-5407 TEL. (718) 482-4933
3	DUTCHESS, ORANGE, PUTNAM, ROCKLAND, SULLIVAN, ULSTER AND WESTCHESTER	21 SOUTH PUTT CORNERS ROAD NEW PALTZ, NY 12561-1696 TEL. (845) 256-3059	100 HILLSIDE AVENUE, SUITE 1W WHITE PLAINS, NY 10603 TEL. (914) 428 - 2505
4	ALBANY, COLUMBIA, DELAWARE, GREENE, MONTGOMERY, OTSEGO, RENSSELAER, SCHENECTADY AND SCHOHARIE	1150 NORTH WESTCOTT ROAD SCHENECTADY, NY 12306-2014 TEL. (518) 357-2069	1130 NORTH WESTCOTT ROAD SCHENECTADY, NY 12306-2014 TEL. (518) 357-2045
5	CLINTON, ESSEX, FRANKLIN, FULTON, HAMILTON, SARATOGA, WARREN AND WASHINGTON	1115 STATE ROUTE 86, PO BOX 296 RAY BROOK, NY 12977-0296 TEL. (518) 897-1234	232 GOLF COURSE ROAD WARRENSBURG, NY 12885-1172 TEL. (518) 623-1200
6	HERKIMER, JEFFERSON, LEWIS, ONEIDA AND ST. LAWRENCE	STATE OFFICE BUILDING 317 WASHINGTON STREET WATERTOWN, NY 13601-3787 TEL. (315) 785-2245	STATE OFFICE BUILDING 207 GENESEE STREET UTICA, NY 13501-2885 TEL. (315) 793-2554
7	BROOME, CAYUGA, CHENANGO, CORTLAND, MADISON, ONONDAGA, OSWEGO, TIOGA AND TOMPKINS	615 ERIE BLVD. WEST SYRACUSE, NY 13204-2400 TEL. (315) 426-7438	615 ERIE BLVD. WEST SYRACUSE, NY 13204-2400 TEL. (315) 426-7500
8	CHEMUNG, GENESEE, LIVINGSTON, MONROE, ONTARIO, ORLEANS, SCHUYLER, SENECA, STEUBEN, WAYNE AND YATES	6274 EAST AVON-LIMA ROAD AVON, NY 14414-9519 TEL. (585) 226-2466	6274 EAST AVON-LIMA RD. AVON, NY 14414-9519 TEL. (585) 226-2466
9	ALLEGANY, CATTARAUGUS, CHAUTAUQUA, ERIE, NIAGARA AND WYOMING	270 MICHIGAN AVENUE BUFFALO, NY 14203-2999 TEL. (716) 851-7165	270 MICHIGAN AVE. BUFFALO, NY 14203-2999 TEL. (716) 851-7070

APPENDIX L

TEMPORARY SEDIMENT BASIN CALCULATIONS

TEMPORARY SEDIMENT BASIN DESIGN DATA SHEET

Computed by SS/JMC Date 12/10/2014 Checked by DV/JMC Date 12/10/2014

Project FASNY Basin # 1A

Location Ridgeway Total Area draining to basin EDA-1A 33.07 Acres

BASIN SIZE DESIGN

1. Minimum sediment storage volume = 134 cu. yds. (3600 cf) x 33.07 acres of drainage area = 4432 cu.yds. (119,052 cf) → Corresponds to elev. 262.30 (Top of Riser)
2. a. Cleanout at 50 percent of minimum required volume = 2216 cu. yds. (59,526 cf)
   b. Elevation corresponding to scheduled time to clean out 260.03
   c. Distance below top of riser 2.27 feet (262.30 - 260.03)
3. Minimum surface area is larger of 0.01 $Q_{(1)}$ 0.2144 or, 0.015 DA = 0.4961 use 0.50 acres ok

Q_1 = 21.44 cfs (from EDA-1A in pondpack)

DESIGN OF SPILLWAYS & ELEVATIONS

Runoff

4. $Q_{p(10)}$ = 61.01 cfs (EDA-1A in pondpack)
   (EFH, Ch. 2, TR-55, or Section 4; Attach runoff computation sheet)

- Since Riser Elev. = 262.30 Set Spillway Elev = 263.30 for Minimum 1 foot

RISER

Pipe Spillway (Q_{ps})

5. Min. pipe spillway cap., Q_{ps} = 0.2 x 33.07 ac. Drainage = 6.61 cfs
   Note: If there is no emergency spillway, then req'd $Q_{ps} = Q_{p(10)}$ = — cfs.
6. H = 5.12 ft. Barrel length = 90 ft
7. (5A.26) Barrel: Diam. 15 inches; Q_{ps} = (Q) 7.78 x (cor.fac.) 0.91 = 7.08 cfs.
8. (5A.25) Riser: Diam. 18 inches; Length 4.74 ft.; h = 0.70 ft. Crest Elev. 262.30
9. Trash Rack: Diam. 27 inches; H = 15 inches (262.30 - 257.56 = 4.74)

- Lowest drainable outlet is 256.31 for 30" RCP in DI in Ridgeway. Connect with 15" outlet, match tops of pipes, 15" outlet = 257.56

H = 263.30 - 257.56 (+ 1.25/2)

H = 5.12

Emergency Spillway Design

10. Emergency Spillway Flow, $Q_{es} = Q_p - Q_{ps}$ = 61.01 - 7.08 = 54.02 cfs.
11. Width 20 ft.; H_p 0.25 ft ← Crest elevation 263.30; Design High Water Elev. 263.55
    Entrance channel slope 0 % ; Top of Dam Elev. 265.00
    Exit channel slope 0 %

H_p = 263.55 - 263.30 = 0.25

ANTI-SEEP COLLAR/ SEEPAGE DIAPHRAGM DESIGN

N/A Since pipe does not drain through a berm. (Refer to detail)

Collars:

12. y = _____ ft.; z = _____ :1; pipe slope = _____ %, L_s = _____ ft.
    Use _____ collars, _____ - _____ inches square; projection = _____ ft.

Diaphragms:

\# _____ width _____ ft. height _____ ft.

DEWATERING ORIFICE SIZING

(RESULTS IN LARGE ORIFICE SIZE)

A_o = 0.87 sf = $\frac{\pi d^2}{4}$

d = 1.05 ft = 12.63"

13. $Ao = \frac{A_s \times (2h)^{0.5}}{122{,}568}$ = 0.87 sq. ft.; h = 4.74 ft.; therefore use, 12.63" → use 12"

262.30 - 257.56

A_s = surface area of basin @ Riser Elev. 262.30 → 34,455 sf

Elevation (ft)	Planimeter (sq.in)	Area (sq.ft)	A1+A2+sqr(A1*A2) (sq.ft)	Volume (cu.ft)	Volume Sum (cu.ft)
256.00	-----	10800	0	0	0
258.00	-----	14600	37957	25305	25305
260.00	-----	19000	50255	33504	58808
262.00	-----	26700	68223	45482	104291
264.00	-----	78400	150852	100568	204859
265.00	-----	85000	245033	81678	286537

POND VOLUME EQUATIONS

* Incremental volume computed by the Conic Method for Reservoir Volumes.

Volume = (1/3) * (EL2-EL1) * (Area1 + Area2 + sq.rt.(Area1*Area2))

where: EL1, EL2 = Lower and upper elevations of the increment
Area1,Area2 = Areas computed for EL1, EL2, respectively
Volume = Incremental volume between EL1 and EL2

MASTER DESIGN STORM SUMMARY

Network Storm Collection: Westchester

Return Event	Total Depth in	Rainfall Type	RNF ID
10	5.0000	Synthetic Curve	TypeIII 24hr

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

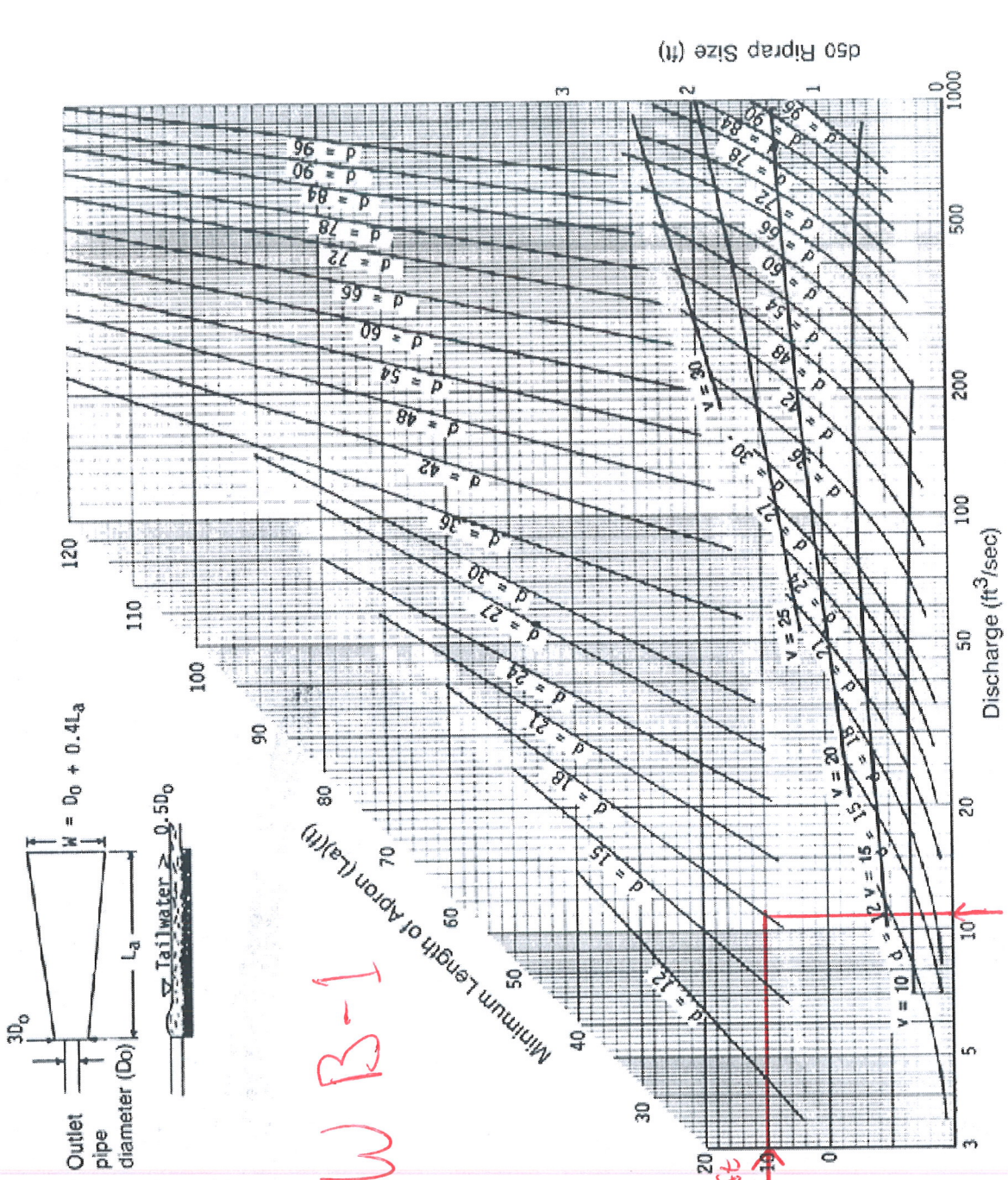
Node ID	Type	Return Event	HYG Vol cu.ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage cu.ft
*DESIGN POINT 1	JCT	10	393353		12.3500	34.35		
EDA 1A	AREA	10	325535		12.3000	61.01		
EDA 1B	AREA	10	181030		12.3000	34.67		
JUNC 1B	JCT	10	181030		12.3000	34.67		
SED BASIN 1A IN	POND	10	325535		12.3000	61.01		
SED BASIN 1A OUT	POND	10	212326		13.2500	11.52	263.55	173056

APPENDIX M

RIP-RAP APRON CALCULATIONS

10170
10/19/16

Figure 5B.13
Outlet Protection Design—Maximum Tailwater Condition (Design of Outlet Protection from a Round Pipe Flowing Full, Maximum Tailwater Condition: $T_w \geq 0.5D_o$) (USDA - NRCS)



HW B-1

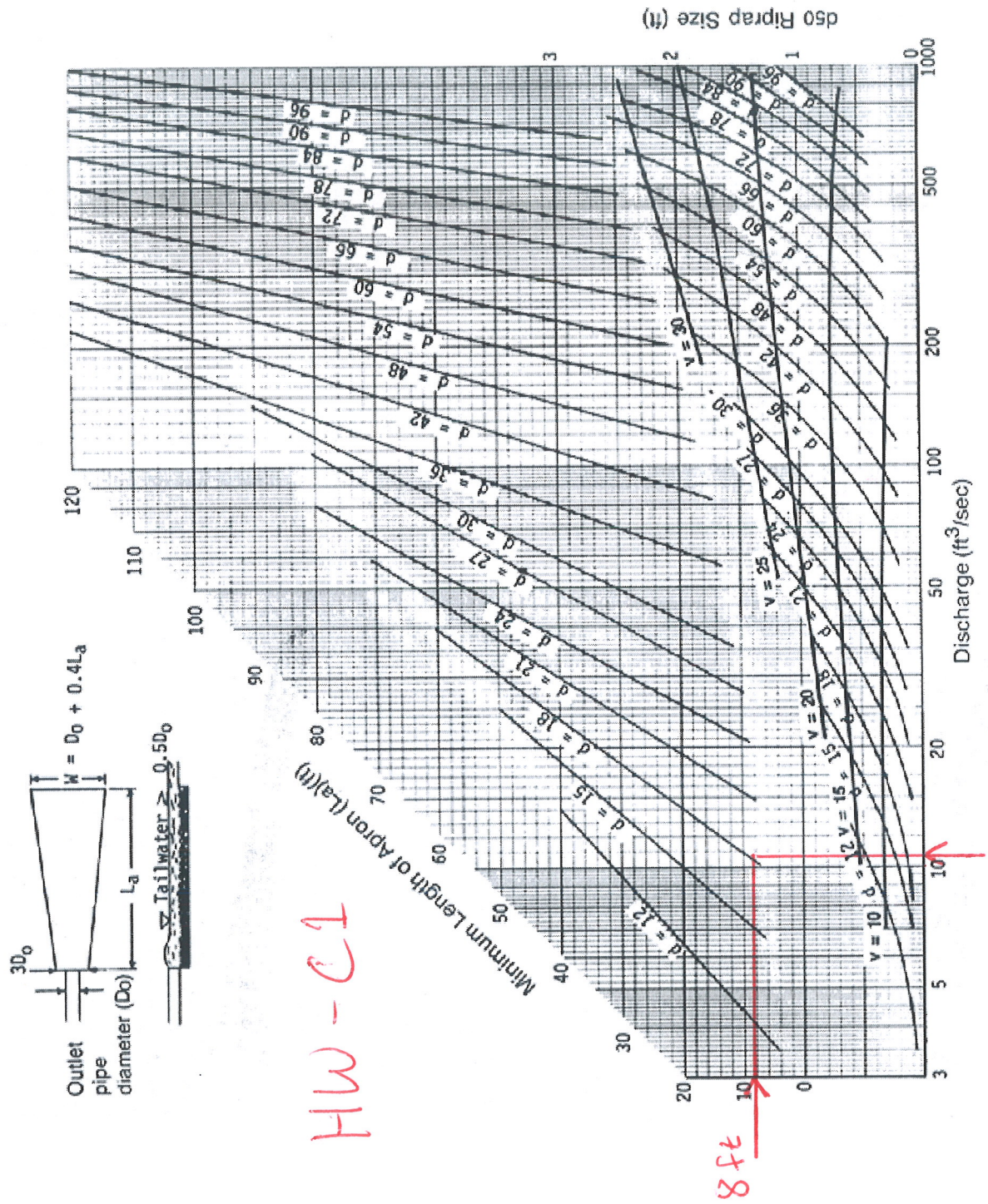
La = 10 ft

Refer to Detail 34 on Drawing SP-14

Qp = 11.19 CFS

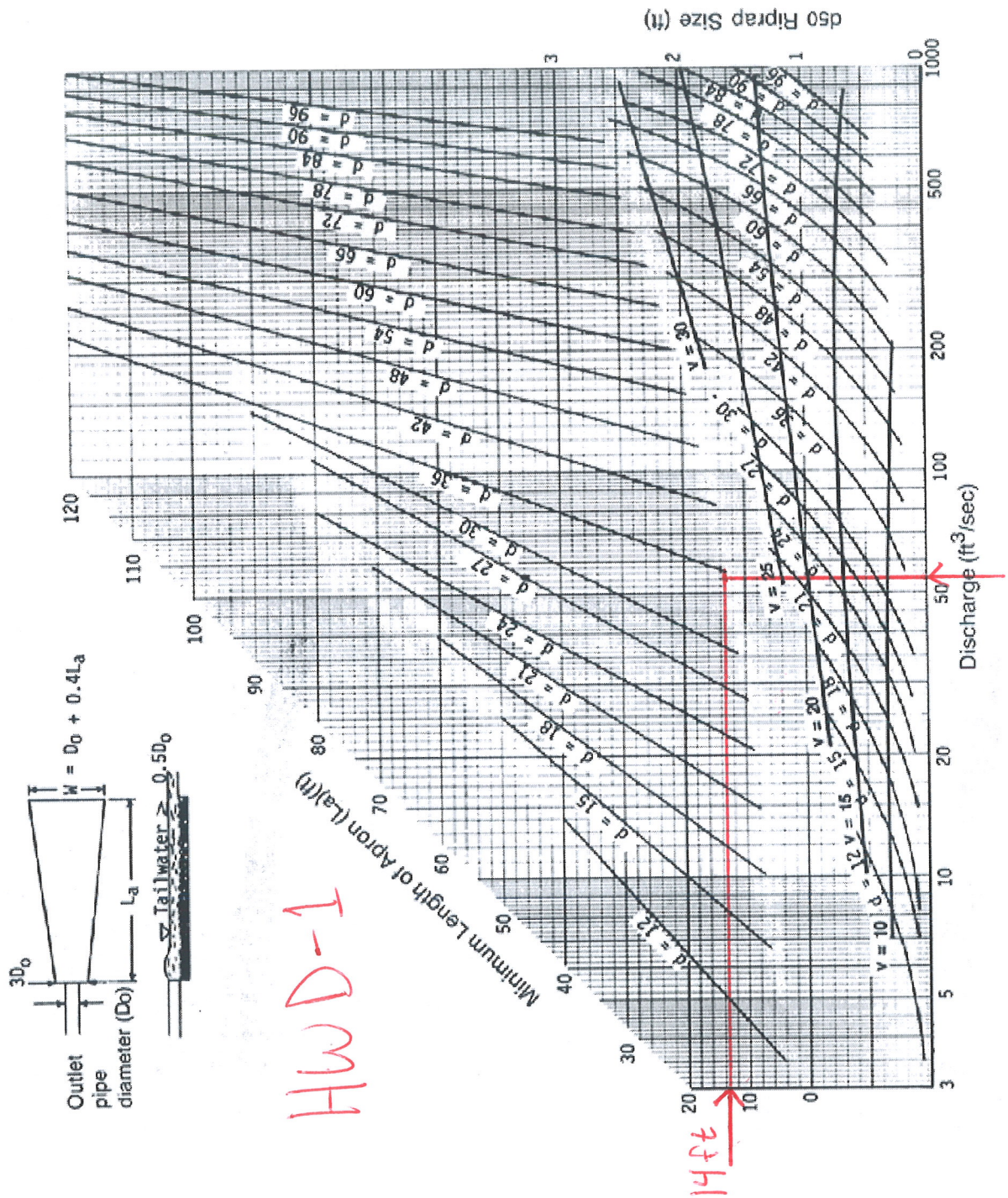
10170
10/19/16

Figure 5B.13
Outlet Protection Design—Maximum Tailwater Condition (Design of Outlet Protection from a Round Pipe Flowing Full, Maximum Tailwater Condition: $T_w \geq 0.5D_o$) (USDA - NRCS)



10170
10/19/16

Figure 5B.13
Outlet Protection Design—Maximum Tailwater Condition (Design of Outlet Protection from a Round Pipe Flowing Full, Maximum Tailwater Condition: $T_w \geq 0.5D_o$) (USDA - NRCS)



APPENDIX N

EMERGENCY SPILLWAY CALCULATIONS

Table of Contents

********** MASTER SUMMARY **********

Watershed..... Master Network Summary 1.01

********** OUTLET STRUCTURES **********

OCS 1A..... Outlet Input Data 2.01
Composite Rating Curve 2.03

MASTER DESIGN STORM SUMMARY

Network Storm Collection: Westchester

Return Event	Total Depth in	Rainfall Type	RNF ID
1	2.8400	Synthetic Curve	TypeIII 24hr
10	5.1100	Synthetic Curve	TypeIII 24hr
25	6.4000	Synthetic Curve	TypeIII 24hr
50	7.5900	Synthetic Curve	TypeIII 24hr
100	9.0100	Synthetic Curve	TypeIII 24hr

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID	Type	Return Event	HYG Vol cu.ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage cu.ft
BASIN 1A	IN POND	1	116309	--	12.1500	24.07		
BASIN 1A	IN POND	10	327767		12.1500	66.24		
BASIN 1A	IN POND	25	466331		12.1500	92.38		
BASIN 1A	IN POND	50	600278		12.1500	117.20		
BASIN 1A	IN POND	100	764592		12.1500	149.59		
BASIN 1A	OUT POND	1	0		9.0500	.00	265.22	177778
BASIN 1A	OUT POND	10	167258		12.7000	21.55	266.21	228018
BASIN 1A	OUT POND	25	305774		12.3500	70.84	266.36	235382
BASIN 1A	OUT POND	50	439720		12.2000	110.28	266.44	240005
BASIN 1A	OUT POND	100	604034		12.1500	146.94	266.52	243831
CHAMBERS	IN POND	1	39698		12.1000	10.82		
CHAMBERS	IN POND	10	82872		12.1000	21.65		
CHAMBERS	IN POND	25	107878		12.1000	27.72		
CHAMBERS	IN POND	50	131075		12.1000	33.29		
CHAMBERS	IN POND	100	158852		12.1000	39.89		

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID	Type	Return Event	HYG Vol cu.ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage cu.ft
CHAMBERS OUT	POND	1	371		12.7000	.05	265.11	16006
CHAMBERS OUT	POND	10	16721		12.8000	1.34	265.62	36115
CHAMBERS OUT	POND	25	33009		12.6000	2.94	265.95	47062
CHAMBERS OUT	POND	50	50376		12.5000	6.62	266.26	55358
CHAMBERS OUT	POND	100	72471		12.4000	12.32	266.56	63276
*DESIGN POINT 1	JCT	1	65629		12.4000	11.63		
*DESIGN POINT 1	JCT	10	352512		12.6500	43.03		
*DESIGN POINT 1	JCT	25	567197		12.3500	119.55		
*DESIGN POINT 1	JCT	50	774095		12.2500	163.59		
*DESIGN POINT 1	JCT	100	1027716		12.2000	210.47		
JUNC 1B	JCT	1	65630		12.3500	11.75		
JUNC 1B	JCT	10	185304		12.3500	34.60		
JUNC 1B	JCT	25	261424		12.3000	48.84		
JUNC 1B	JCT	50	334375		12.3000	62.32		
JUNC 1B	JCT	100	423683		12.3000	78.57		
PDA-1A	AREA	1	58935		12.1000	16.49		
PDA-1A	AREA	10	146296		12.1000	40.49		
PDA-1A	AREA	25	199485		12.1000	54.51		
PDA-1A	AREA	50	249657		12.1000	67.46		
PDA-1A	AREA	100	310405		12.1000	82.85		
PDA-1A-1	AREA	1	57004		12.3000	11.10		
PDA-1A-1	AREA	10	164750		12.2500	34.08		
PDA-1A-1	AREA	25	233837		12.2500	48.49		
PDA-1A-1	AREA	50	300245		12.2500	62.10		
PDA-1A-1	AREA	100	381715		12.2500	78.52		
PDA-1A-2	AREA	1	39698		12.1000	10.82		
PDA-1A-2	AREA	10	82872		12.1000	21.65		
PDA-1A-2	AREA	25	107878		12.1000	27.72		
PDA-1A-2	AREA	50	131075		12.1000	33.29		
PDA-1A-2	AREA	100	158852		12.1000	39.89		

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID	Type	Return Event	HYG Vol cu.ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage cu.ft
PDA-1B	AREA	1	65630		12.3500	11.75		
PDA-1B	AREA	10	185304		12.3500	34.60		
PDA-1B	AREA	25	261424		12.3000	48.84		
PDA-1B	AREA	50	334375		12.3000	62.32		
PDA-1B	AREA	100	423683		12.3000	78.57		

REQUESTED POND WS ELEVATIONS:

Min. Elev.= 256.00 ft
Increment = .10 ft
Max. Elev.= 266.60 ft

```
*********************************************
                OUTLET CONNECTIVITY
*********************************************

 ---> Forward Flow Only (UpStream to DnStream)
<---  Reverse Flow Only (DnStream to UpStream)
<---> Forward and Reverse Both Allowed
```

Structure	No.		Outfall	E1, ft	E2, ft
Weir-XY Points	W0	--->	TW	266.100	266.600
TW SETUP, DS Channel					

OUTLET STRUCTURE INPUT DATA

Structure ID = W0
Structure Type = Weir-XY Points

# of Openings = 1
WEIR X-Y GROUND POINTS

X, ft	Elev, ft
.00	266.60
5.00	266.10
205.00	266.10
210.00	266.60

Lowest Elev. = 266.10 ft

Weir Coeff. = 2.680000

Weir TW effects (Use adjustment equation)

***** COMPOSITE OUTFLOW SUMMARY ****

CUMULATIVE HGL CONVERGENCE ERROR .000 (+/- ft)

WS Elev, Total Q			Notes	
			Converge	
Elev. ft	Q cfs	TW Elev ft	Error +/-ft	Contributing Structures
256.00	.00	258.87	.000	W0
256.10	.00	258.87	.000	W0
256.20	.00	258.87	.000	W0
256.30	.00	258.87	.000	W0
256.40	.00	258.87	.000	W0
256.50	.00	258.87	.000	W0
256.60	.00	258.87	.000	W0
256.70	.00	258.87	.000	W0
256.80	.00	258.87	.000	W0
256.90	.00	258.87	.000	W0
257.00	.00	258.87	.000	W0
257.10	.00	258.87	.000	W0
257.20	.00	258.87	.000	W0
257.30	.00	258.87	.000	W0
257.40	.00	258.87	.000	W0
257.50	.00	258.87	.000	W0
257.60	.00	258.87	.000	W0
257.70	.00	258.87	.000	W0
257.80	.00	258.87	.000	W0
257.90	.00	258.87	.000	W0
258.00	.00	258.87	.000	W0
258.10	.00	258.87	.000	W0
258.20	.00	258.87	.000	W0
258.30	.00	258.87	.000	W0
258.40	.00	258.87	.000	W0
258.50	.00	258.87	.000	W0
258.60	.00	258.87	.000	W0
258.70	.00	258.87	.000	W0
258.80	.00	258.87	.000	W0
258.90	.00	258.87	.000	None contributing
259.00	.00	258.87	.000	None contributing
259.10	.00	258.87	.000	None contributing
259.20	.00	258.87	.000	None contributing
259.30	.00	258.87	.000	None contributing
259.40	.00	258.87	.000	None contributing
259.50	.00	258.87	.000	None contributing

***** COMPOSITE OUTFLOW SUMMARY ****

CUMULATIVE HGL CONVERGENCE ERROR .000 (+/- ft)

WS Elev, Total Q			Notes	
			Converge	
Elev. ft	Q cfs	TW Elev ft	Error +/-ft	Contributing Structures
259.60	.00	258.87	.000	None contributing
259.70	.00	258.87	.000	None contributing
259.80	.00	258.87	.000	None contributing
259.90	.00	258.87	.000	None contributing
260.00	.00	258.87	.000	None contributing
260.10	.00	258.87	.000	None contributing
260.20	.00	258.87	.000	None contributing
260.30	.00	258.87	.000	None contributing
260.40	.00	258.87	.000	None contributing
260.50	.00	258.87	.000	None contributing
260.60	.00	258.87	.000	None contributing
260.70	.00	258.87	.000	None contributing
260.80	.00	258.87	.000	None contributing
260.90	.00	258.87	.000	None contributing
261.00	.00	258.87	.000	None contributing
261.10	.00	258.87	.000	None contributing
261.20	.00	258.87	.000	None contributing
261.30	.00	258.87	.000	None contributing
261.40	.00	258.87	.000	None contributing
261.50	.00	258.87	.000	None contributing
261.60	.00	258.87	.000	None contributing
261.70	.00	258.87	.000	None contributing
261.80	.00	258.87	.000	None contributing
261.90	.00	258.87	.000	None contributing
262.00	.00	258.87	.000	None contributing
262.10	.00	258.87	.000	None contributing
262.20	.00	258.87	.000	None contributing
262.30	.00	258.87	.000	None contributing
262.40	.00	258.87	.000	None contributing
262.50	.00	258.87	.000	None contributing
262.60	.00	258.87	.000	None contributing
262.70	.00	258.87	.000	None contributing
262.80	.00	258.87	.000	None contributing
262.90	.00	258.87	.000	None contributing
263.00	.00	258.87	.000	None contributing
263.10	.00	258.87	.000	None contributing

***** COMPOSITE OUTFLOW SUMMARY ****

CUMULATIVE HGL CONVERGENCE ERROR .000 (+/- ft)

WS Elev, Total Q			Notes	
			Converge	
Elev. ft	Q cfs	TW Elev ft	Error +/-ft	Contributing Structures
263.20	.00	258.87	.000	None contributing
263.30	.00	258.87	.000	None contributing
263.40	.00	258.87	.000	None contributing
263.50	.00	258.87	.000	None contributing
263.60	.00	258.87	.000	None contributing
263.70	.00	258.87	.000	None contributing
263.80	.00	258.87	.000	None contributing
263.90	.00	258.87	.000	None contributing
264.00	.00	258.87	.000	None contributing
264.10	.00	258.87	.000	None contributing
264.20	.00	258.87	.000	None contributing
264.30	.00	258.87	.000	None contributing
264.40	.00	258.87	.000	None contributing
264.50	.00	258.87	.000	None contributing
264.60	.00	258.87	.000	None contributing
264.70	.00	258.87	.000	None contributing
264.80	.00	258.87	.000	None contributing
264.90	.00	258.87	.000	None contributing
265.00	.00	258.87	.000	None contributing
265.10	.00	258.87	.000	None contributing
265.20	.00	258.87	.000	None contributing
265.30	.00	258.87	.000	None contributing
265.40	.00	258.87	.000	None contributing
265.50	.00	258.87	.000	None contributing
265.60	.00	258.87	.000	None contributing
265.70	.00	258.87	.000	None contributing
265.80	.00	258.87	.000	None contributing
265.90	.00	258.87	.000	None contributing
266.00	.00	258.87	.000	None contributing
266.10	.00	258.87	.000	W0
266.20	17.01	258.87	.000	W0
266.30	48.27	258.87	.000	W0
266.40	89.00	258.87	.000	W0
266.50	137.51	258.87	.000	W0
266.60	192.85	258.87	.000	W0

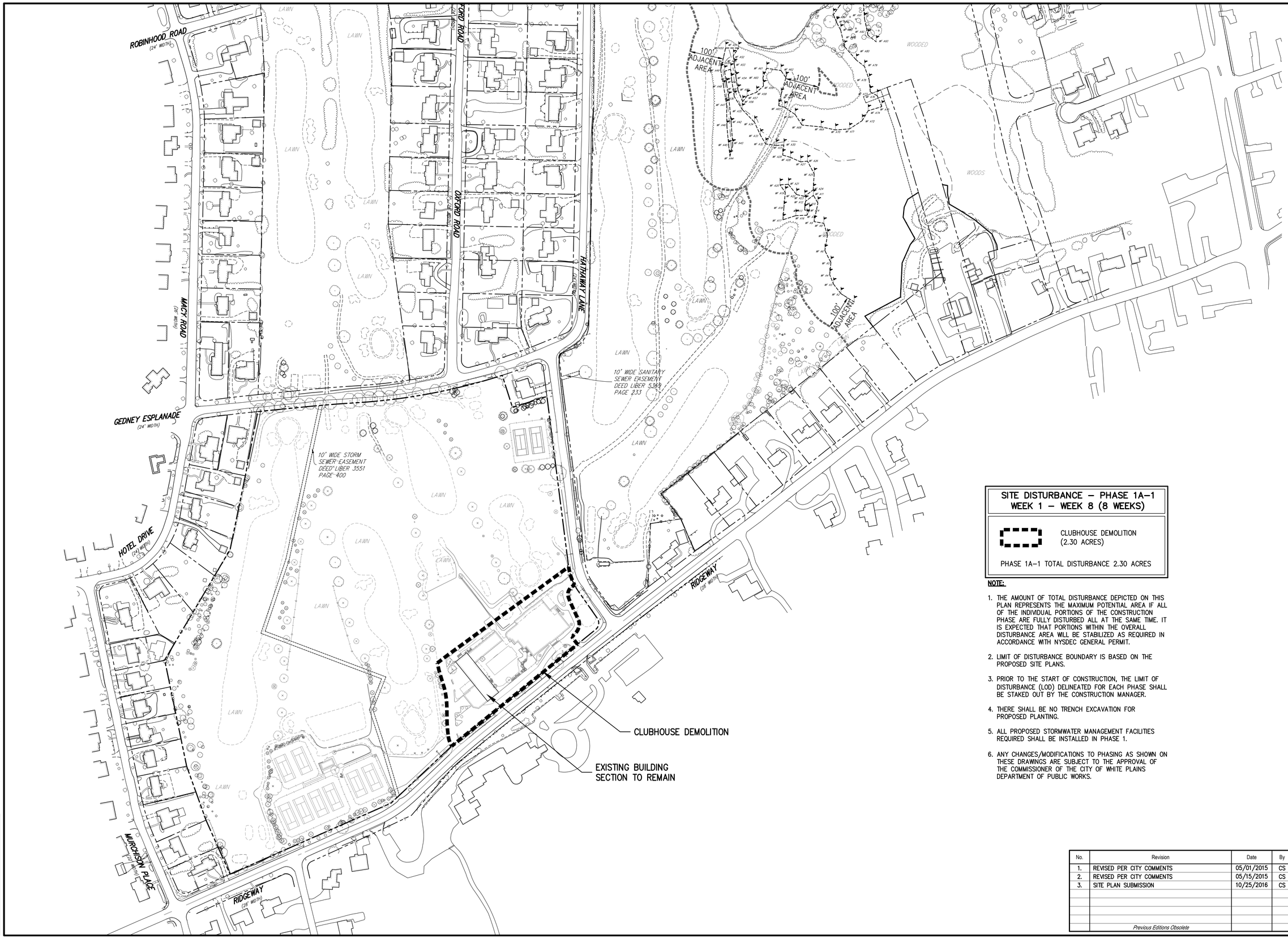
Index of Starting Page Numbers for ID Names

----- O -----
OCS 1A... 2.01, 2.03

----- W -----
Watershed... 1.01

APPENDIX O

FASNY 5 ACRE DISTURBANCE PHASING PLANS



SITE DISTURBANCE – PHASE 1A–1
WEEK 1 – WEEK 8 (8 WEEKS)

CLUBHOUSE DEMOLITION (2.30 ACRES)

PHASE 1A–1 TOTAL DISTURBANCE 2.30 ACRES

NOTE:

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CONSTRUCTION PHASING PLAN PHASE 1A–1

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Project No:	10170
10170–PHASES	1A–1	--
Drawing No:	PH–1A–1

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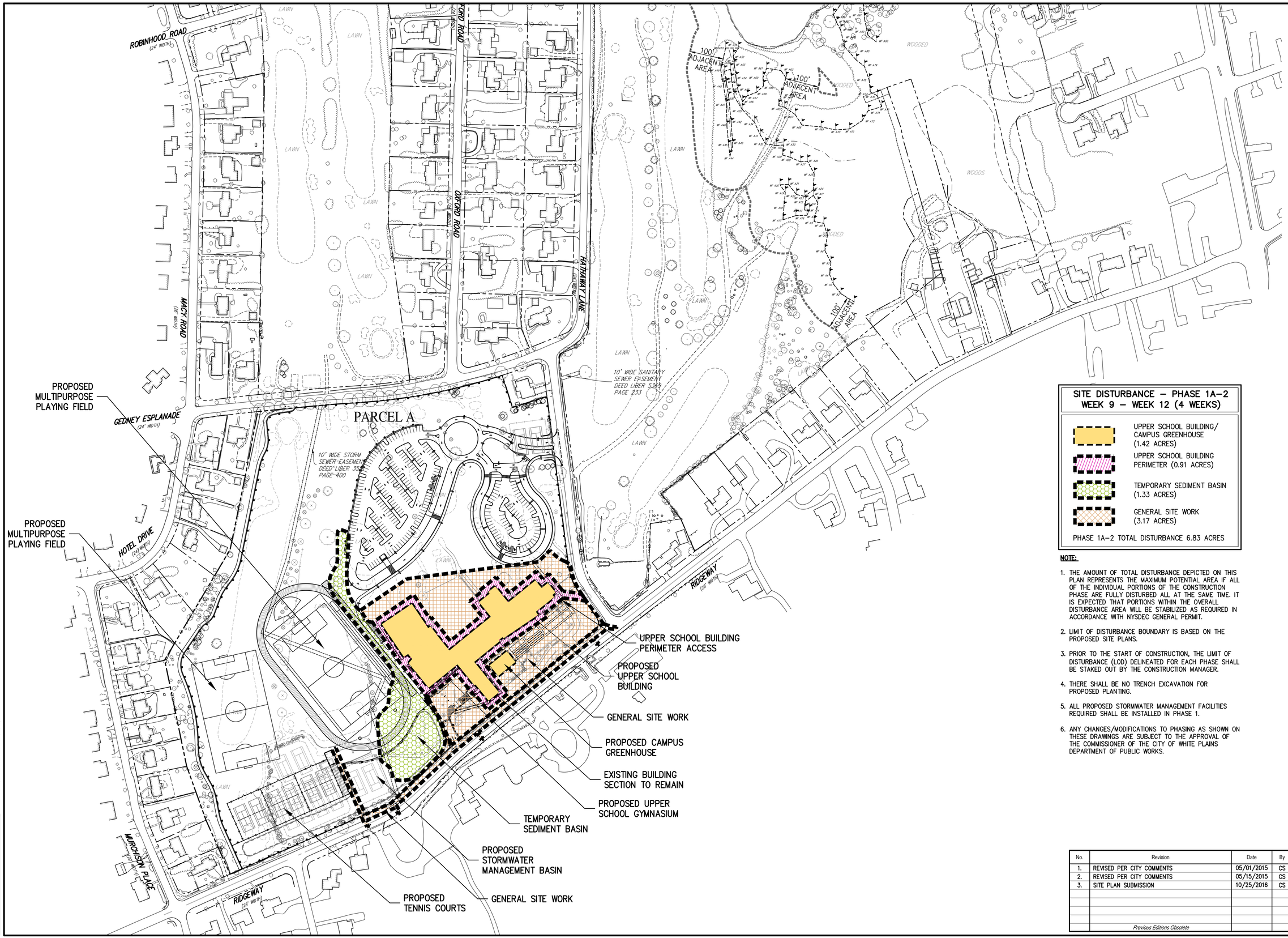

SITE DISTURBANCE – PHASE 1A–2
WEEK 9 – WEEK 12 (4 WEEKS)

- UPPER SCHOOL BUILDING/ CAMPUS GREENHOUSE (1.42 ACRES)
- UPPER SCHOOL BUILDING PERIMETER (0.91 ACRES)
- TEMPORARY SEDIMENT BASIN (1.33 ACRES)
- GENERAL SITE WORK (3.17 ACRES)

PHASE 1A–2 TOTAL DISTURBANCE 6.83 ACRES

NOTE:

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CONSTRUCTION PHASING PLAN PHASE 1A–2

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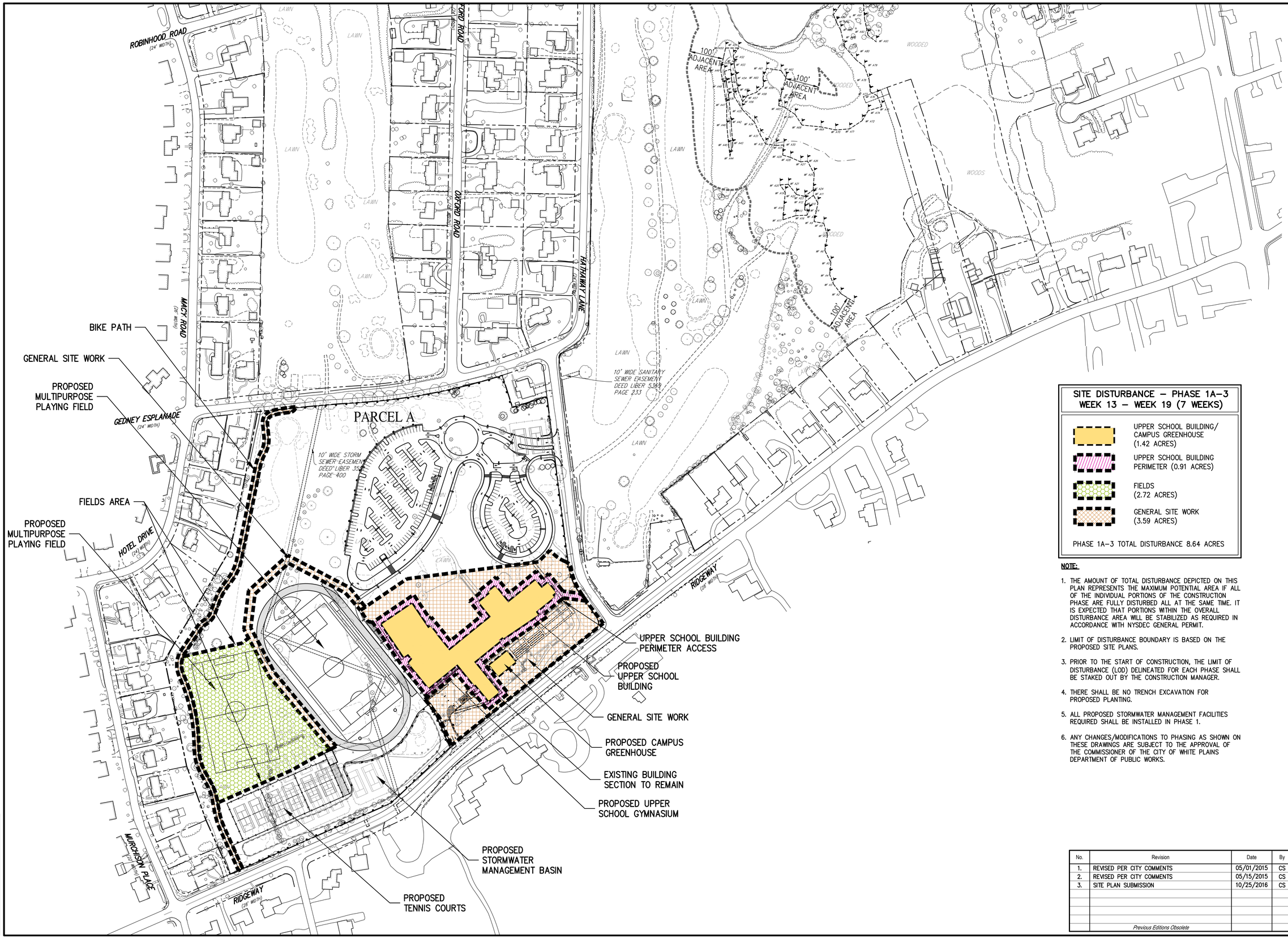

SITE DISTURBANCE – PHASE 1A–3
WEEK 13 – WEEK 19 (7 WEEKS)

- UPPER SCHOOL BUILDING/ CAMPUS GREENHOUSE (1.42 ACRES)
- UPPER SCHOOL BUILDING PERIMETER (0.91 ACRES)
- FIELDS (2.72 ACRES)
- GENERAL SITE WORK (3.59 ACRES)

PHASE 1A–3 TOTAL DISTURBANCE 8.64 ACRES

NOTE:

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CONSTRUCTION PHASING PLAN PHASE 1A–3

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Project No:	10170		
10170–PHASES	1A–3		––
Drawing No:	PH–1A–3		

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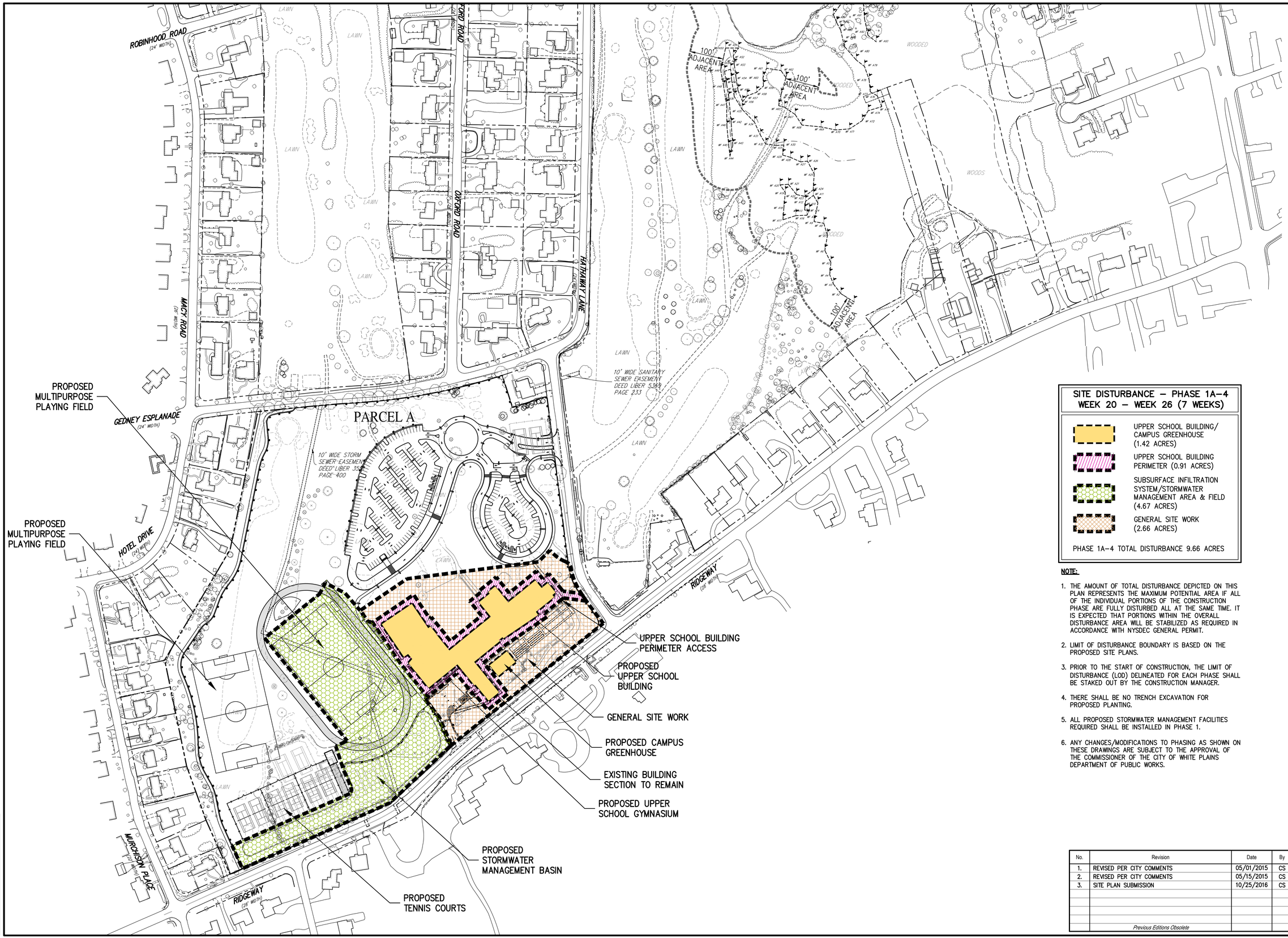

SITE DISTURBANCE – PHASE 1A–4
WEEK 20 – WEEK 26 (7 WEEKS)

- UPPER SCHOOL BUILDING/ CAMPUS GREENHOUSE (1.42 ACRES)
- UPPER SCHOOL BUILDING PERIMETER (0.91 ACRES)
- SUBSURFACE INFILTRATION SYSTEM/STORMWATER MANAGEMENT AREA & FIELD (4.67 ACRES)
- GENERAL SITE WORK (2.66 ACRES)

PHASE 1A–4 TOTAL DISTURBANCE 9.66 ACRES

NOTE:

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Drawing No: PH-1A-4

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CONSTRUCTION PHASING PLAN PHASE 1A–4

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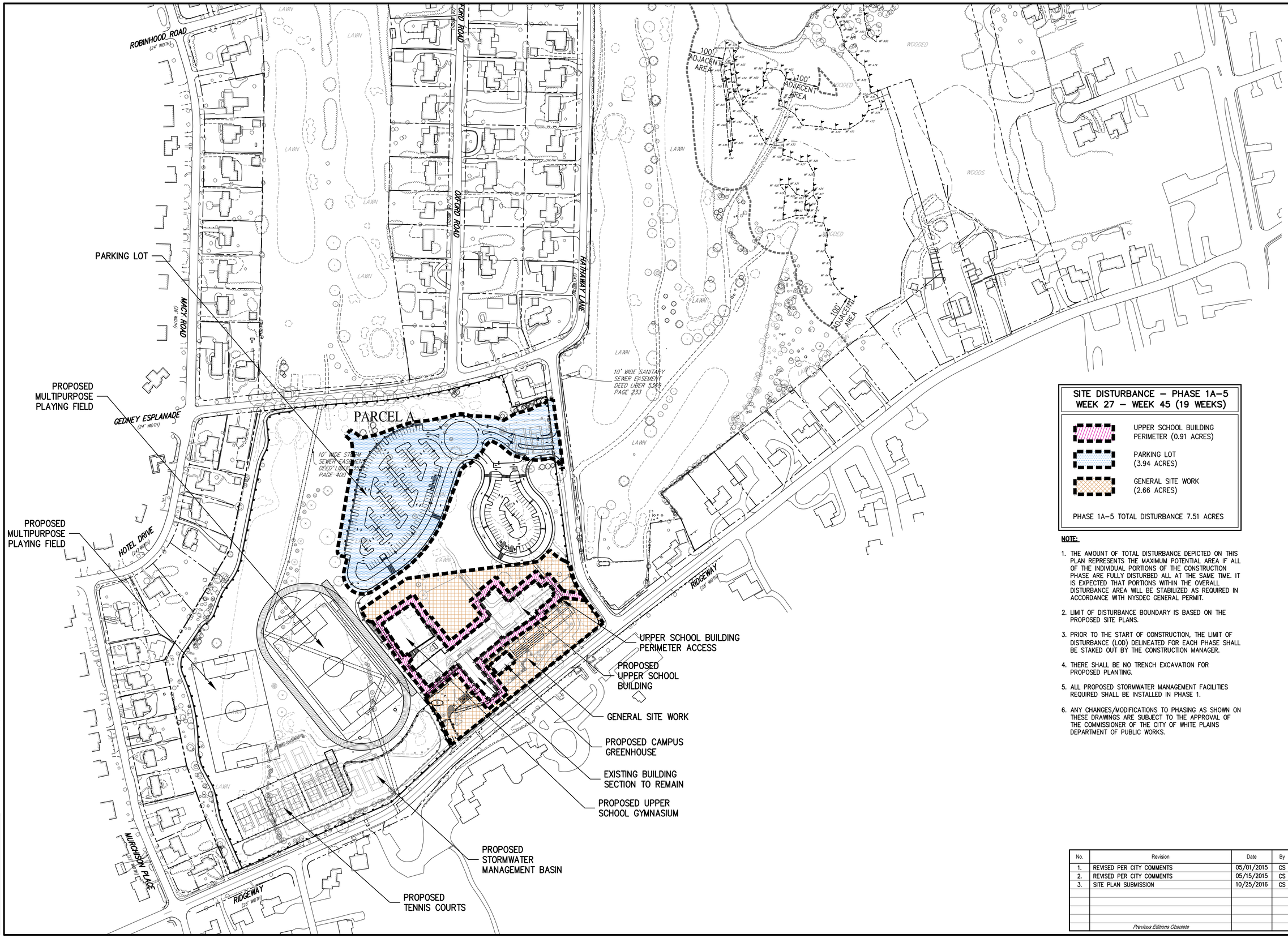

SITE DISTURBANCE – PHASE 1A–5 WEEK 27 – WEEK 45 (19 WEEKS)
UPPER SCHOOL BUILDING PERIMETER (0.91 ACRES)
PARKING LOT (3.94 ACRES)
GENERAL SITE WORK (2.66 ACRES)
PHASE 1A–5 TOTAL DISTURBANCE 7.51 ACRES

NOTE:

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CONSTRUCTION PHASING PLAN PHASE 1A–5

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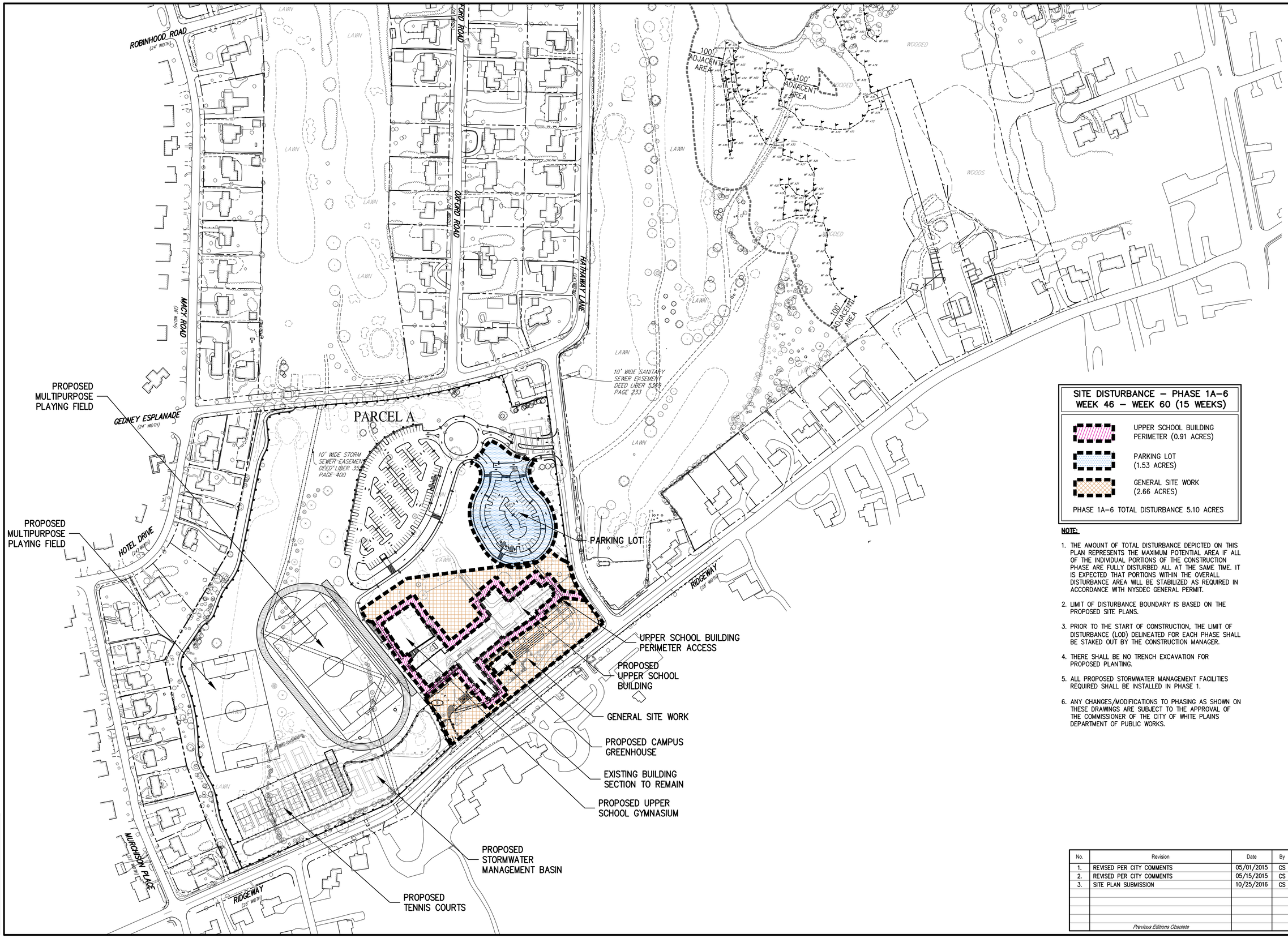

SITE DISTURBANCE – PHASE 1A–6 WEEK 46 – WEEK 60 (15 WEEKS)
UPPER SCHOOL BUILDING PERIMETER (0.91 ACRES)
PARKING LOT (1.53 ACRES)
GENERAL SITE WORK (2.66 ACRES)
PHASE 1A–6 TOTAL DISTURBANCE 5.10 ACRES

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CONSTRUCTION PHASING PLAN PHASE 1A–6

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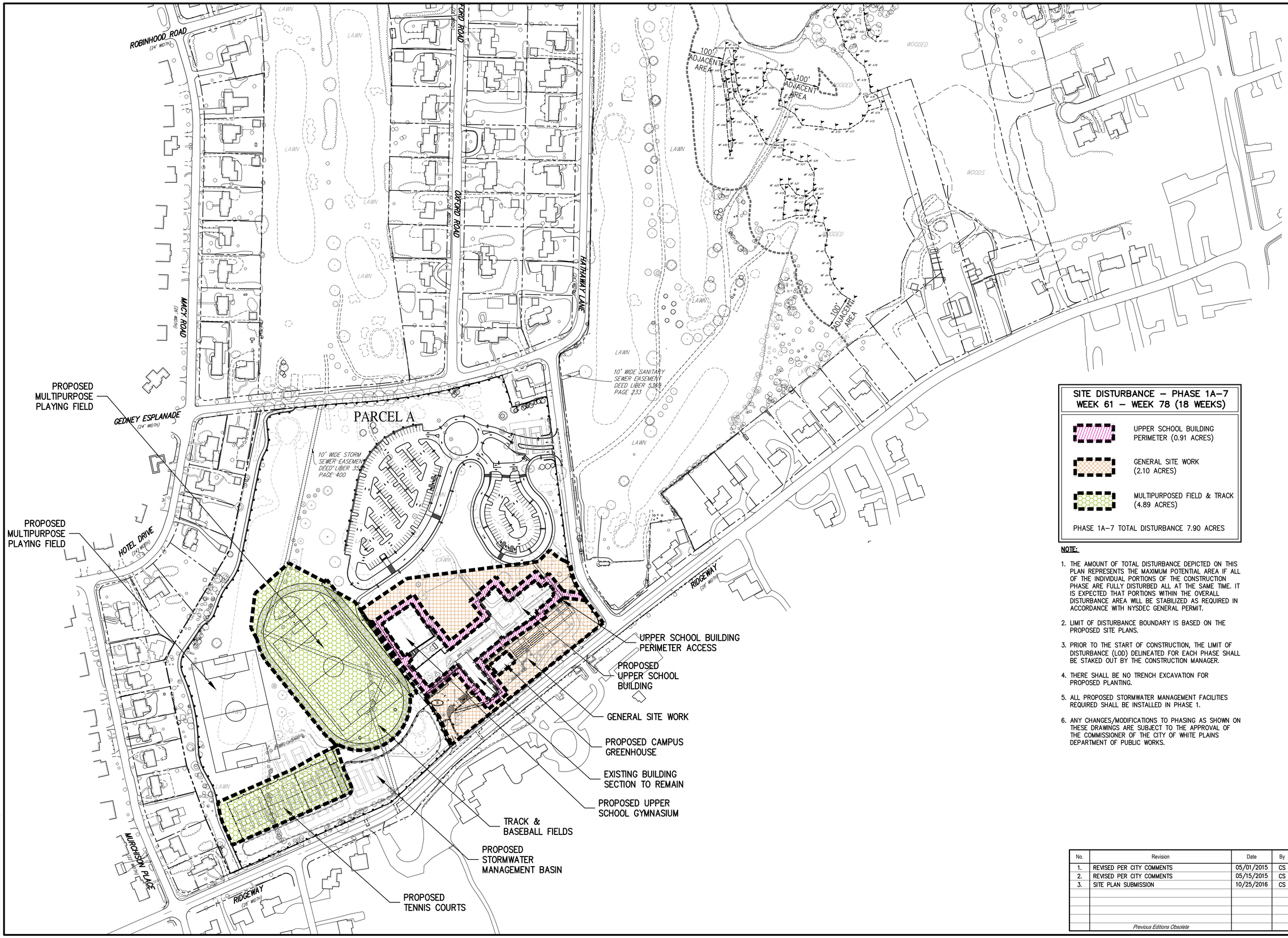

SITE DISTURBANCE – PHASE 1A–7
WEEK 61 – WEEK 78 (18 WEEKS)

- UPPER SCHOOL BUILDING PERIMETER (0.91 ACRES)
- GENERAL SITE WORK (2.10 ACRES)
- MULTIPURPOSED FIELD & TRACK (4.89 ACRES)

PHASE 1A–7 TOTAL DISTURBANCE 7.90 ACRES

NOTE:

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CONSTRUCTION PHASING PLAN
PHASE 1A–7

FRENCH–AMERICAN SCHOOL OF NEW YORK
336 RIDGEWAY
CITY OF WHITE PLAINS, NEW YORK

Drawn:	CS	Approved:	RR
Scale:	1" = 120'		
Date:	03/17/2015		
Project No:	10170		
10170–PHASES	1A–7	––	
Drawing No:	PH–1A–7		

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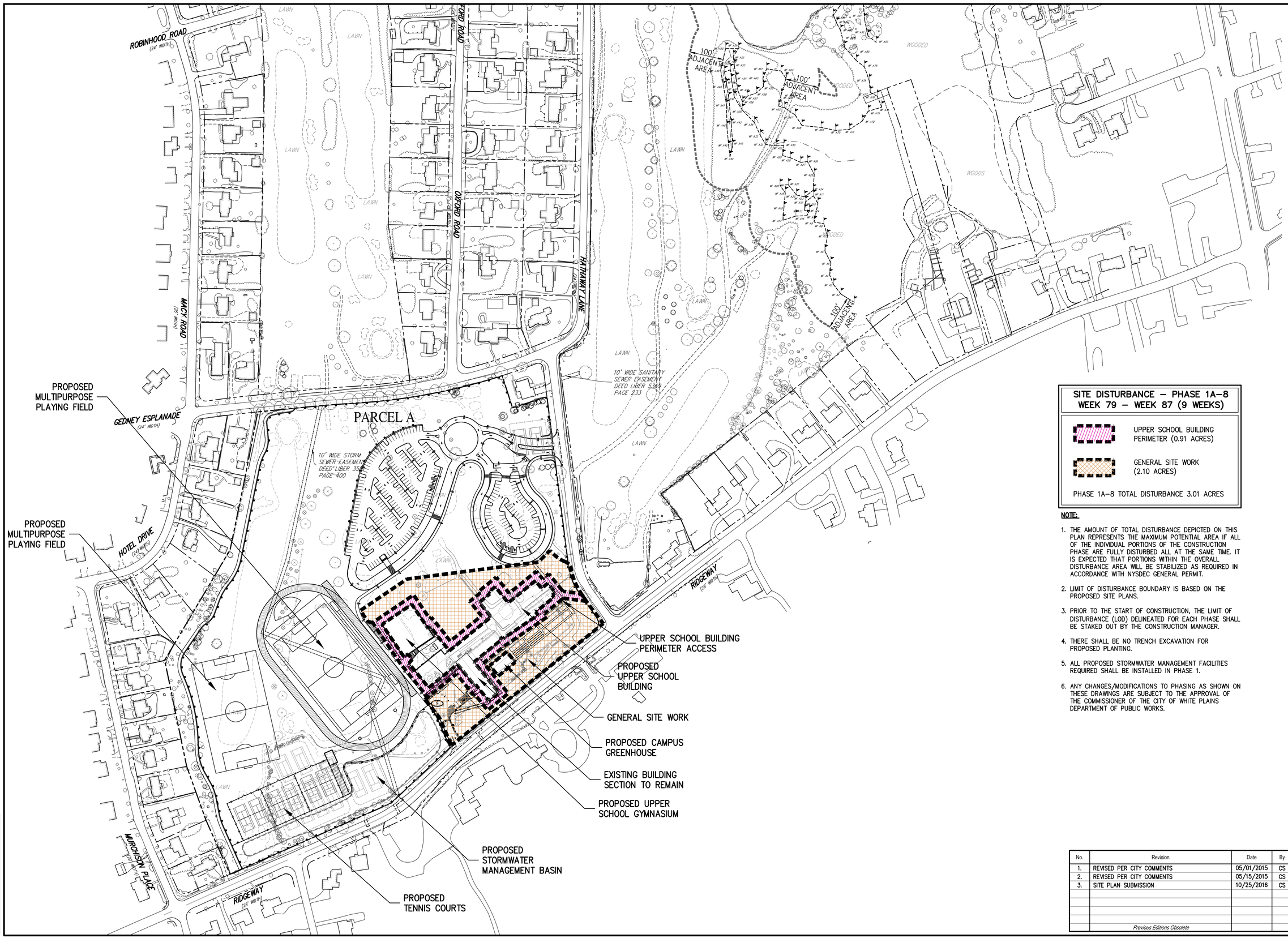

SITE DISTURBANCE – PHASE 1A–8
WEEK 79 – WEEK 87 (9 WEEKS)

UPPER SCHOOL BUILDING PERIMETER (0.91 ACRES)

GENERAL SITE WORK (2.10 ACRES)

PHASE 1A–8 TOTAL DISTURBANCE 3.01 ACRES

NOTE:

1. THE AMOUNT OF TOTAL DISTURBANCE DEPICTED ON THIS PLAN REPRESENTS THE MAXIMUM POTENTIAL AREA IF ALL OF THE INDIVIDUAL PORTIONS OF THE CONSTRUCTION PHASE ARE FULLY DISTURBED ALL AT THE SAME TIME. IT IS EXPECTED THAT PORTIONS WITHIN THE OVERALL DISTURBANCE AREA WILL BE STABILIZED AS REQUIRED IN ACCORDANCE WITH NYSDEC GENERAL PERMIT.
2. LIMIT OF DISTURBANCE BOUNDARY IS BASED ON THE PROPOSED SITE PLANS.
3. PRIOR TO THE START OF CONSTRUCTION, THE LIMIT OF DISTURBANCE (LOD) DELINEATED FOR EACH PHASE SHALL BE STAKED OUT BY THE CONSTRUCTION MANAGER.
4. THERE SHALL BE NO TRENCH EXCAVATION FOR PROPOSED PLANTING.
5. ALL PROPOSED STORMWATER MANAGEMENT FACILITIES REQUIRED SHALL BE INSTALLED IN PHASE 1.
6. ANY CHANGES/MODIFICATIONS TO PHASING AS SHOWN ON THESE DRAWINGS ARE SUBJECT TO THE APPROVAL OF THE COMMISSIONER OF THE CITY OF WHITE PLAINS DEPARTMENT OF PUBLIC WORKS.

No.	Revision	Date	By
1.	REVISED PER CITY COMMENTS	05/01/2015	CS
2.	REVISED PER CITY COMMENTS	05/15/2015	CS
3.	SITE PLAN SUBMISSION	10/25/2016	CS

Previous Editions Obsolete

Drawn: CS Approved: RR
Scale: 1" = 120'
Date: 03/17/2015
Project No: 10170
10170-PHASES 1A–8 --
Drawing No: PH–1A–8

APPLICANT/OWNER:
FRENCH–AMERICAN SCHOOL OF NEW YORK
525 FENIMORE ROAD
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ARCHITECT:
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CONSTRUCTION PHASING PLAN PHASE 1A–8

FRENCH–AMERICAN SCHOOL OF NEW YORK
336 RIDGEWAY
CITY OF WHITE PLAINS, NEW YORK

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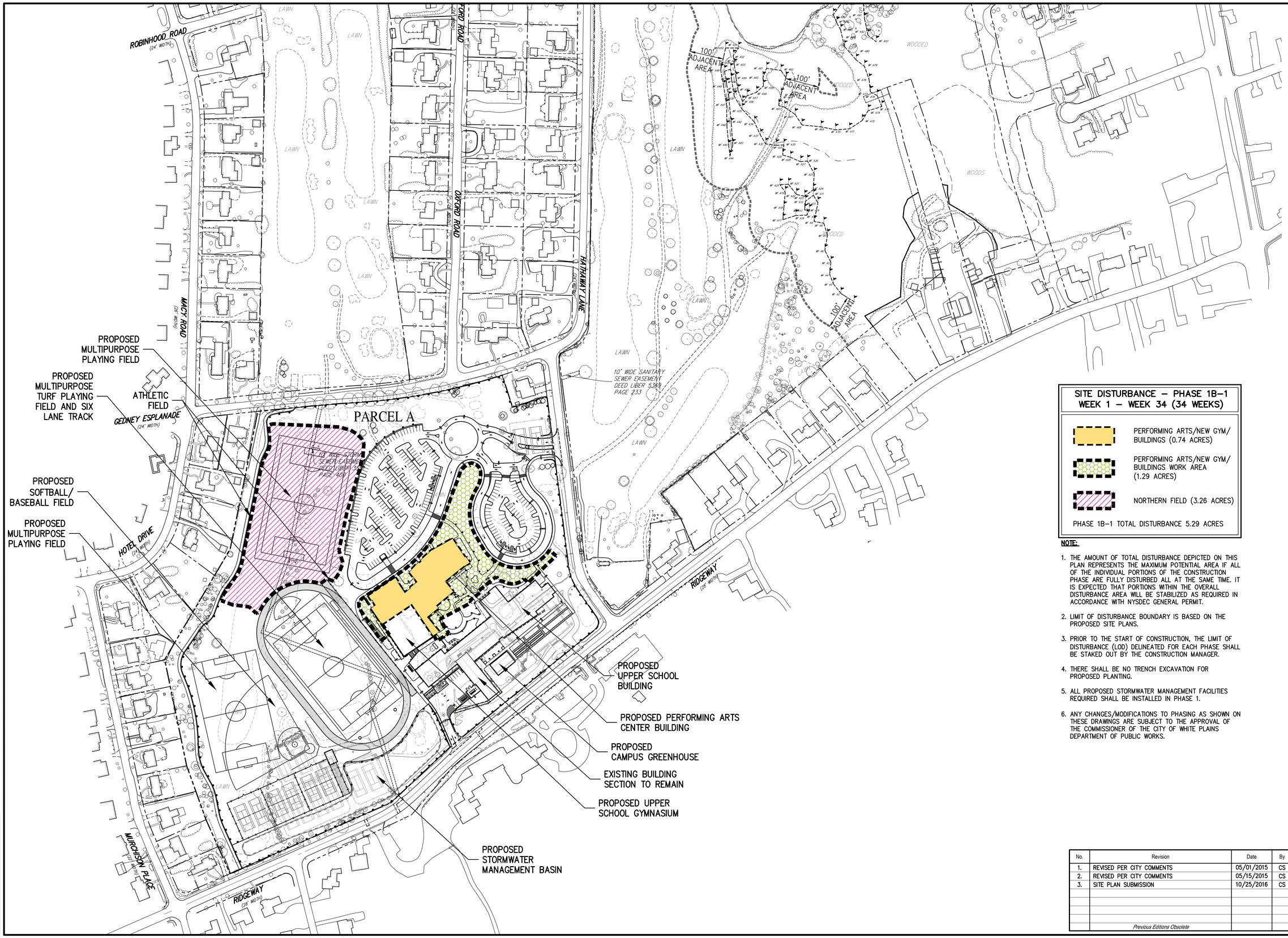

SITE DISTURBANCE – PHASE 1B–1 WEEK 1 – WEEK 34 (34 WEEKS)	
	PERFORMING ARTS/NEW GYM/ BUILDINGS (0.74 ACRES)
	PERFORMING ARTS/NEW GYM/ BUILDINGS WORK AREA (1.29 ACRES)
	NORTHERN FIELD (3.26 ACRES)
PHASE 1B–1 TOTAL DISTURBANCE 5.29 ACRES	

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3.	SITE PLAN SUBMISSION	10/25/2016	CS
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Drawn: CS Approved: RR
Scale: 1" = 120'
Date: 03/17/2015
Project No: 10170
10170-PHASES 1B-1 --
Drawing No:
PH–1B–1

APPLICANT/OWNER:
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CONSTRUCTION PHASING PLAN PHASE 1B–1

FRENCH–AMERICAN SCHOOL OF NEW YORK
336 RIDGEWAY
CITY OF WHITE PLAINS, NEW YORK

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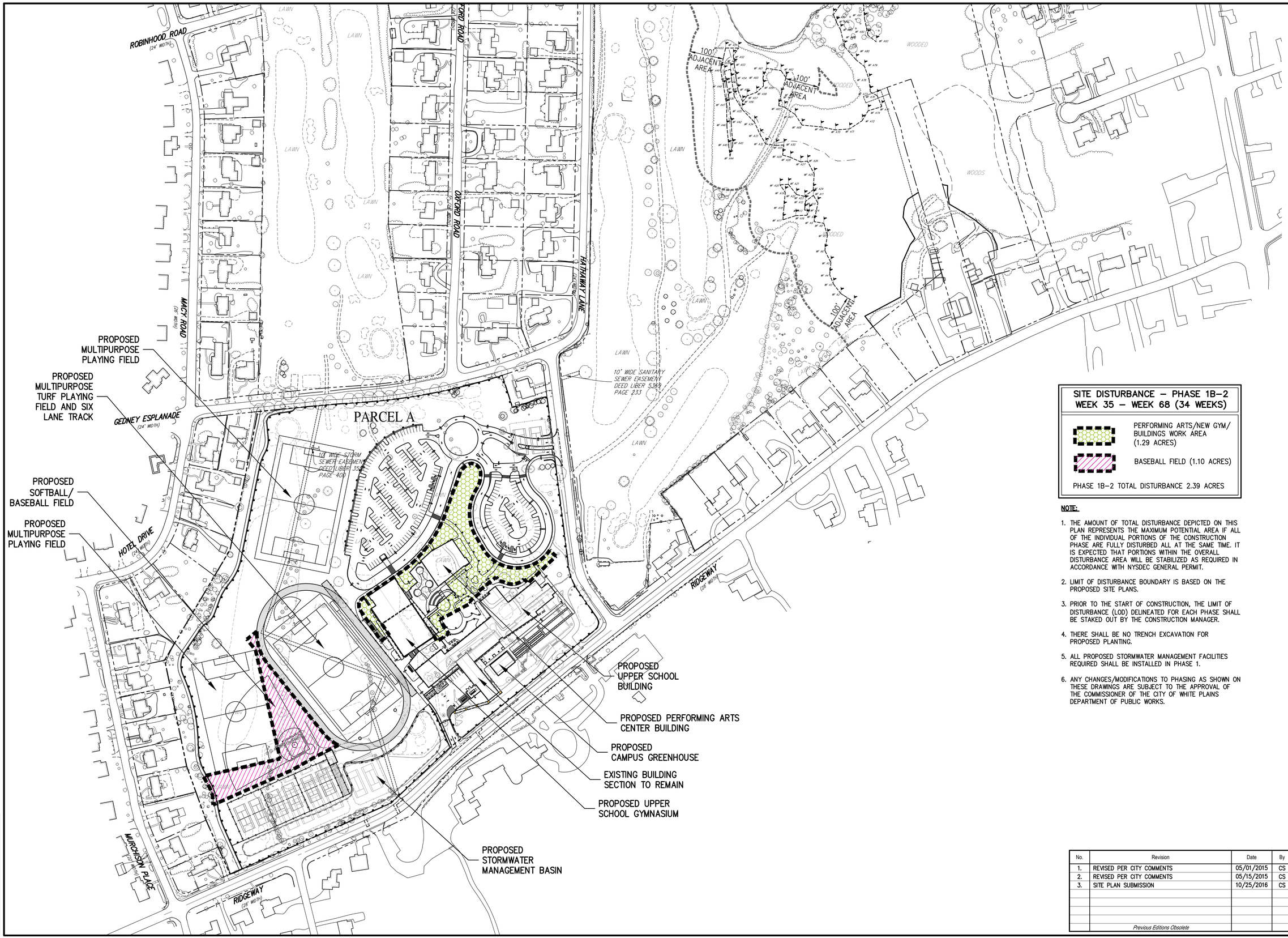

SITE DISTURBANCE – PHASE 1B–2 WEEK 35 – WEEK 68 (34 WEEKS)
PERFORMING ARTS/NEW GYM/ BUILDINGS WORK AREA (1.29 ACRES)
BASEBALL FIELD (1.10 ACRES)
PHASE 1B–2 TOTAL DISTURBANCE 2.39 ACRES

NOTE:

1. THE AMOUNT OF TOTAL DISTURBANCE DEPICTED ON THIS PLAN REPRESENTS THE MAXIMUM POTENTIAL AREA IF ALL OF THE INDIVIDUAL PORTIONS OF THE CONSTRUCTION PHASE ARE FULLY DISTURBED ALL AT THE SAME TIME. IT IS EXPECTED THAT PORTIONS WITHIN THE OVERALL DISTURBANCE AREA WILL BE STABILIZED AS REQUIRED IN ACCORDANCE WITH NYSDEC GENERAL PERMIT.
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1.	REVISED PER CITY COMMENTS	05/01/2015	CS
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3.	SITE PLAN SUBMISSION	10/25/2016	CS
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CONSTRUCTION PHASING PLAN PHASE 1B–2

FRENCH–AMERICAN SCHOOL OF NEW YORK
336 RIDGEWAY
CITY OF WHITE PLAINS, NEW YORK

Drawn:	CS	Approved:	RR
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Date:	03/17/2015		
Project No:	10170		
10170–PHASES	1B–2		––
Drawing No:	PH–1B–2		

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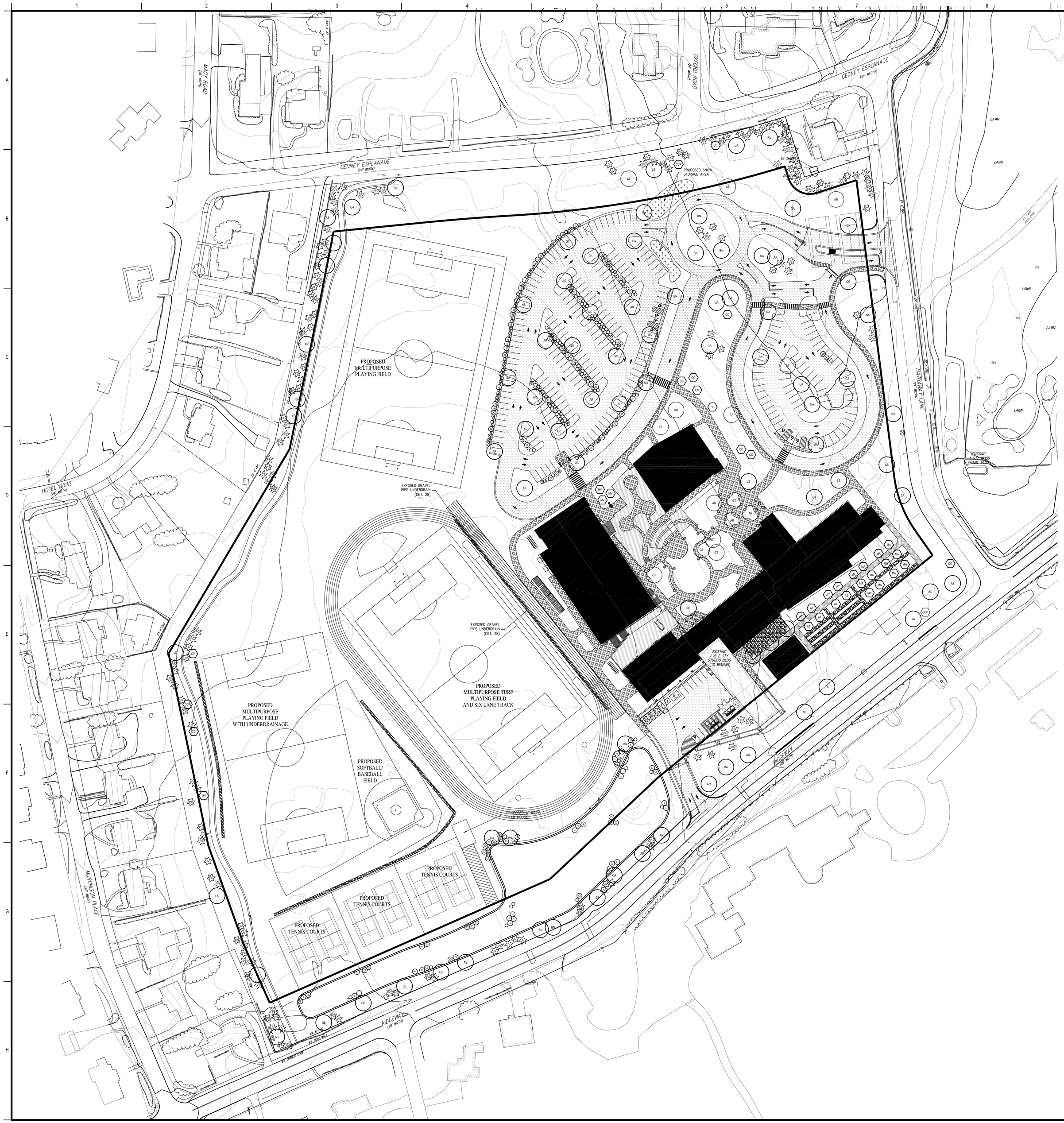
APPENDIX P

LANDSCAPE PLAN, TREES AND SHRUBS SPECIFICATIONS PREPARED BY STANTEC ARCHITECTURE AND ENGINEER, LLC



Plant Schedule

Key	Quantity	Plant: Botanical Name	Plant: Common Name	Size	Container
Deciduous Shade Trees					
AR	21	Acer rubrum 'October Glory'	October Glory Red Maple	3" - 3 1/2" cal.	B&B
AS	11	Acer saccharum 'Legacy'	Sugar Maple	3" - 3 1/2" cal.	B&B
BN	14	Betula nigra 'Cully'	Heritage River Birch	3" - 3 1/2" cal.	B&B
CK	1	Cladrastis kentukea	Yellowwood	3" - 3 1/2" cal.	B&B
GT	11	Gleditsia triacanthos inermis 'Spectazm'	Speczam Thornless Honeylocust	3" - 3 1/2" cal.	B&B
LS	9	Liquidambar styraciflua 'Rotundiloba'	Rotundiloba Sweet Gum	3" - 3 1/2" cal.	B&B
NS	7	Nyssa sylvatica	Black Tupelo	3" - 3 1/2" cal.	B&B
TA	5	Tilia americana 'Redmond'	Redmond Linden	3" - 3 1/2" cal.	B&B
QA	3	Quercus alba	White Oak	3" - 3 1/2" cal.	B&B
QB	4	Quercus bicolor	Swamp White Oak	3" - 3 1/2" cal.	B&B
UA	18	Ulmus americana 'Valley Forge'	Valley Forge American Elm	3" - 3 1/2" cal.	B&B
Evergreen Trees					
AF	5	Abies fraserii	Fraser Fir	8' - 10' ht.	B&B
CT	9	Chamaecyparis thyoides	Atlantic White Cedar	8' - 10' ht.	B&B
JV	76	Juniperus virginiana	Eastern Red Cedar	8' - 10' ht.	B&B
PG	52	Picea glauca	White Spruce	8' - 10' ht.	B&B
PS	28	Pinus strobus	White Pine	8' - 10' ht.	B&B
Ornamental Trees					
MA	12	Malus, species and variety TBD	Apple Tree	8' - 10' ht.	B&B
AT	9	Asimina triloba	Common Pawpaw	8' - 10' ht.	B&B
CC	10	Cercis canadensis	Eastern Redbud	2 1/2 - 3" cal.	B&B
CV	1	Crataegus viridis 'Winter King'	Winter King Hawthorn	2 1/2 - 3" cal.	B&B
CCP	2	Carpinus caroliniana 'Palisade'	Palisade American Hornbeam	2 1/2 - 3" cal.	B&B
MV	4	Magnolia virginiana 'Henry Hicks'	Henry Hicks Magnolia	2 1/2 - 3" cal.	B&B
Shrubs					
CO	52	Aronia melanocarpa	Black Chokeberry	4' ht.	#5 cont.
IG	18	Hydrangea quercifolia 'Snow Queen'	Snow Queen Hydrangea	4' ht	#5 cont.
IO	73	Ilex glabra	Inkberry	5' ht.	#7 cont.
IV	42	Ilex verticillata 'Winter Red'	Winter Red Winterberry	3' ht.	#5 cont.
IVG	7	Ilex verticillata 'Southern Gentleman'	Southern Gentleman Winterberry	3' ht.	#5 cont.
MP	105	Myrica pensylvanica	Bayberry	6' ht.	#10 cont.
RC	27	Rhododendron atlanticum	Coastal Azalea	3' ht.	#5 cont.

Planting Notes

1. Specific plant species and cultivars are subject to change pending final design document for DOB submission.Location, quantity, size, and type of plant (deciduous tree, evergreen tree, shrub, etc.) will not change.

Stantec

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Butler, PA 16001
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Consultants

Site Development and Civil Engineering

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Key Plan

Revision	YYYY.MM.DD
Rev 2 - Draft for White Plains Review	2015.10.25
Rev 1 - Draft for White Plains Review	2015.06.01
Rev 0 - Not for Construction	2014.09.29
Issued	YYYY.MM.DD

Permit-Seal

NOT FOR CONSTRUCTION

Client/Project

French - American School of New York
Ridgeway Campus

100% Construction Documents

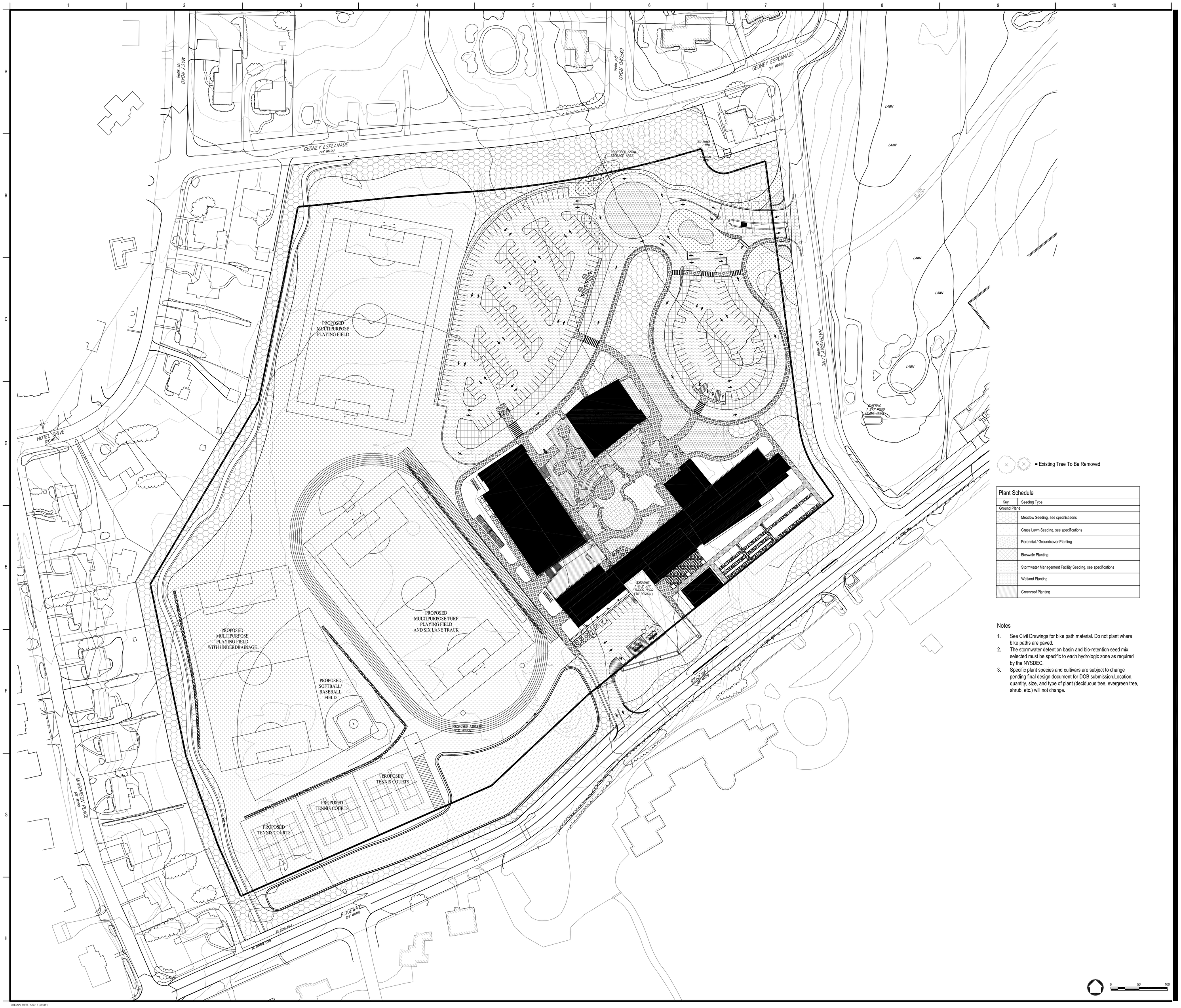
336 Ridgeway
White Plains, NY 10605

Title

Landscape Plan, Trees and Shrubs

Project No.	Scale
218010579	1" = 50'
Revision	Drawing No.
2016.10.25	L101

ORIGINAL SHEET - ARCH E (36"x48")



= Existing Tree To Be Removed

Plant Schedule

Key	Seeding Type
Ground Plane	
	Meadow Seeding, see specifications
	Grass Lawn Seeding, see specifications
	Perennial / Groundcover Planting
	Bioswale Planting
	Stormwater Management Facility Seeding, see specifications
	Wetland Planting
	Greenroof Planting

Notes

1. See Civil Drawings for bike path material. Do not plant where bike paths are paved.
2. The stormwater detention basin and bio-retention seed mix selected must be specific to each hydrologic zone as required by the NYSDEC.
3. Specific plant species and cultivars are subject to change pending final design document for DOB submission.Location, quantity, size, and type of plant (deciduous tree, evergreen tree, shrub, etc.) will not change.

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Rev 1 - Draft for White Plains Review	2015.06.01
Rev 0 - Not for Construction	2014.09.29
Issued	YYYY.MM.DD

Permit-Seal

NOT FOR CONSTRUCTION

Client/Project

French - American School of New York
Ridgeway Campus

100% Construction Documents

336 Ridgeway
White Plains, NY 10605

Title

Landscape Plan, Ground Plane

Project No.	Scale
218010579	1" = 50'
Revision	Drawing No.
2016.10.25	L102

ORIGINAL SHEET - ARCH E (36"x48")

APPENDICES

The appendices listed below have been provided in a digital format

A. Existing Hydrologic Calculations

B. Proposed Hydrologic Calculations

C. NYSDEC Stormwater Sizing Calculations

D. Contractor's Certification

E. Owner's Certification

F. Stormwater Practice Construction Inspection Checklists

G. Operation and Maintenance

H. Drainage Area Drawings

I. Carlin-Simpson & Associates Report On Subsurface Soil And Foundation Investigation, Last Revised 10/02/2014

J. 25 Year and 100 Year Pipe Capacity Calculations

K. NYSDEC SPDES General Permit Information

L. Temporary Sediment Basin Calculations

M. Rip-Rap Apron Calculations

N. Emergency Spillway Calculations

O. FASNY 5 Acre Disturbance Narrative

P. Landscape Plan, Trees and Shrubs and Specifications prepared by Stantec Architecture and Engineer, LLC