



PAUL R. MICHAUD
Managing Attorney / Principal
515 Centerpoint Drive, Suite 503
Middletown, CT 06457
Direct Telephone: (860) 338-3728
Email: pmichaud@michaud.law
Web: www.michaudlaw.com

May 10, 2023

FILED BY ELECTRONIC MAIL AND US MAIL

Melanie Bachman, Esq.
Executive Director
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

Re: **PETITION NO. 1487** – TRITEC Americas, LLC petition for a declaratory ruling, pursuant to Connecticut General Statutes §4-176 and §16-50k, for the proposed construction, maintenance and operation of a 1.97-megawatt AC solar photovoltaic electric generating facility located at 254 Putnam Road, Pomfret, Connecticut, and associated electrical interconnection.

Dear Attorney Bachman:

On behalf of TRITEC Americas, LLC (“Petitioner”), this letter to the Connecticut Siting Council (“Council”) is in response to Council’s Petition No. 1487 Decision dated June 10, 2022 (“Decision”), specifically Condition #2.

Enclosed – and in response to Condition #2 of the Decision – please find a copy of the DEEP Stormwater Permit and the Stormwater Pollution Control Plan. Petitioner believes they have satisfied all pre-construction requirements; however, Petitioner will refrain from moving forward until they receive Council’s acknowledgement.

Consistent with Council requirements, Petitioner submits one electronic version, an original, and fifteen hard copies of all necessary documents.

Please feel free to contact me if you have any questions.

Very truly yours,

Paul R. Michaud



79 Elm Street • Hartford, CT 06106-5127

www.ct.gov/deep

Affirmative Action/Equal Opportunity Employer

NOTICE OF PERMIT AUTHORIZATION

Date: 5/10/23

ATTN: David Trepeck, CEO

Mailing Address:
TRITEC Americas LLC
888 Prospect Street
La Jolla, CA 92037

Site Information:
Amaral Solar
254 Putnam Road
Pomfret Center, CT 06259

RE: General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities
Permit No. GSN003863, issued to TRITEC Americas LLC
Application No. 202208711

Dear Mr. Trepeck:

The Department of Energy and Environmental Protection, Water Permitting and Enforcement Division of the Bureau of Materials Management and Compliance Assurance, has completed the review of the Amaral Solar (located at 254 Putnam Road) registration for the **General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities, effective 12/31/2020 (general permit)**. The project is compliant with the requirements of the general permit and the discharge(s) associated with this project is (are) authorized to commence as of the date of this letter. Permit No. GSN003863 has been assigned to authorize the stormwater discharge(s) from this project.

Should you have any questions about this letter or any other question concerning the general permit, please feel free to contact Christopher Stone, P.E. at 860-424-3850 or chris.stone@ct.gov.

Sincerely,

A handwritten signature in black ink that reads "Karen L. Allen". The signature is written in a cursive style.

Karen L. Allen, PE

Supervising Sanitary Engineer

Water Permitting and Enforcement Division

Bureau of Materials Management and Compliance Assurance



STORMWATER POLLUTION CONTROL PLAN

PROPOSED
AMARAL
SOLAR PROJECT

254 PUTNAM ROAD
POMFRET CENTER, CONNECTICUT
WINDHAM COUNTY

Prepared for:

**TRITEC Americas
888 Prospect Street
La Jolla, CA 92037**

Prepared by:

**All-Points Technology Corporation, P.C.
567 Vauxhall Street Extension – Suite 311
Waterford, CT 06385**

August 2022

This Stormwater Pollution Control Plan (SWPCP) is prepared to comply with the requirements for the General Permit for the Discharge and Dewatering Wastewaters from Construction Activities. Also to be considered part of the SWPCP are the proposed construction plans, special provisions, and the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control (Guidelines).

Table of Contents

INTRODUCTION	1
SITE DESCRIPTION AND PROPOSED WORK.....	1
APPENDIX I – STORMWATER MANAGEMENT AT SOLAR ARRAY CONSTRUCTION PROJECTS.....	2
RECEIVING WATERS	2
WETLANDS, WATERCOURSES, AND WATERBODIES ON SITE.....	3
VERNAL POOLS.....	4
FLOOD ZONES.....	4
CONSTRUCTION SEQUENCE.....	5
CONTROL MEASURES	6
EROSION AND SEDIMENTATION CONTROLS GENERAL NOTES	6
SOIL STABILIZATION AND PROTECTION	7
TEMPORARY STABILIZATION PRACTICES	7
PERMANENT STABILIZATION PRACTICES	8
STRUCTURAL MEASURES	8
MAINTENANCE	8
DEWATERING WASTEWATERS.....	9
POST-CONSTRUCTION STORMWATER MANAGEMENT	10
POST-CONSTRUCTION GUIDELINES.....	10
OTHER CONTROLS.....	10
SPILL PREVENTION CONTROL PLAN	10
WASTE DISPOSAL	11
WASHOUT AREAS.....	11
ANTI-TRACKING PADS AND DUST CONTROL	12
POST-CONSTRUCTION	12
INSPECTIONS.....	12
INSPECTION GUIDELINES.....	12
CORRECTIVE ACTIONS.....	14
CONTRACTORS	14
GENERAL	14
CERTIFICATION STATEMENT.....	14
KEEPING PLANS CURRENT.....	15
TERMINATION.....	15

Appendix	Title
APPENDIX A	SITE LOCATION MAP
APPENDIX B	IDENTIFICATION OF CONTRACTORS AND CERTIFICATION STATEMENTS
APPENDIX C	STORMWATER MANANGEMENT REPORT
APPENDIX D	DESIGN PLANS
APPENDIX E	STORMWATER MONITORING REPORT FORM
APPENDIX F	NOTICE OF TERMINATION FORM

WETLAND DELINEATION REPORT PROVIDED UPON REQUEST

Introduction

All-Points Technology Corporation, P.C. ("APT") prepared this Storm Water Pollution Control Plan ("SWPCP") on behalf of TRITEC Americas ("Permittee" or "Applicant") for the Amaral Solar Project ("Project") located at 254 Putnam Road, in Pomfret Center, Connecticut. See site location map, Appendix A.

This SWPCP has been completed to support the Permittee's application for the Connecticut Department of Energy and Environmental Protection's ("CTDEEP") General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities ("General Permit"), effective date: December 31, 2020, expiration date: December 30, 2025.

During construction, the contractor(s) shall be responsible for implementing all elements of the erosion and sedimentation control measures as defined on the drawings, in this plan, and as directed. Erosion and sedimentation controls will be implemented and adjusted as needed throughout construction to minimize soil erosion. Construction activities will be phased to minimize areas of disturbance.

Throughout the construction process, the Permittee or Permittee's agent shall periodically inspect all erosion and sedimentation control measures. A monitoring program will be established to observe the effectiveness of these measures and identify corrective actions, where necessary. After construction, the Permittee shall be responsible for maintaining these erosion and sedimentation control measures until the Project is complete. The Project will not be considered complete until all disturbed areas have been satisfactorily stabilized for at least two growing seasons (as defined by CTDEEP), all erosion has been repaired, and all temporary erosion and sedimentation control measures have been removed as called for on the design plans ("Plans") in Appendix D.

All contractors and subcontractors who will perform actions on-site that may reasonably be expected to cause or have the potential to cause pollution of waters of the State will be identified prior to construction and must sign the certification included in Appendix B. Any new contractors and subcontractors brought on to the project during construction must sign the certification as well. The certification will be available for inspection prior to and during construction.

The Permittee or Permittee's agent is responsible for keeping the Plan in compliance with the General permit at all times. Should the Plan fail to prevent pollution or fail to otherwise comply with the General Permit at any time, the Permittee or Permittee's agent shall amend the SWPCP and/or Plan as necessary. The plan shall also be amended if there is a change in contractors and/or subcontractors or a change in design, construction, operation or maintenance at the site.

Site Description and Proposed Work

The Site is a privately owned, 215.6-acre parcel south of Route 44/Putnam Road and north of Wrights Crossing Road. The Site is mostly undeveloped active agricultural land; the southeastern extent of the Site is wooded. Bark Meadow Brook flows generally north to south in the western portion of the Site. A residence and multiple farm buildings are located on the northern portion

of the Site along Putnam Road; a residence is also located off of Wrights Crossing Road in the southwestern portion of the Site. The Site is zoned Rural Residential.

The Project will be constructed in an existing agricultural field with established ground cover, no tree clearing is proposed for installation of the array or access. Access to the Project area will be provided from Wrights Crossing Road south of the project area. The Project includes the installation of (4,970) 540W solar panel modules, and associated fencing, access road, utilities, and stormwater management features, within approximately 14.2± acres of the Site.

The proposed solar panels will be installed on a post driven ground mounted racking system, with minimal changes to the existing grades. As a result, the post-development site conditions will mimic the pre-developed site conditions. Areas of existing ground cover that is disturbed during construction will be reseeded with a low growth seed mix. To address water quality requirements two grass lined swales are proposed along the upper and lower sections of access road with rock check dams.

Appendix I – Stormwater Management at Solar Array Construction Projects

The Permittee and the Contractor should be aware that construction of large-scale solar arrays such as this Project are unlike typical development projects due to significant amounts of disturbed area that are at times un-stabilized soils. As such, it is imperative that the Contractor follow the sequence of construction within this SWPCP and on the design plans. Any deviations from the proposed sequence of construction will require approval in writing.

Receiving Waters

Based upon DEEP mapping, the Site is located in Major Drainage Basin 3 (Thames River), Regional Drainage Basin 37 (Quinebaug), Subregional Drainage Basin 3700 (Quinebaug River), and Local Drainage Basins 3700-18 and 3700-20 (unnamed).

Wetlands, Watercourses, and Waterbodies on Site

APT Registered Soil Scientists identified portions of six (6) wetlands on or proximate to the Site during field inspections and wetland delineations completed on March 24 and 25, 2021. The results of the field delineation are summarized below. The locations of these resources are depicted on Figures 2 and 3.

Wetlands 1 and 5 consist of two hillside seep systems that both drain southwest into Bark Meadow Brook. These headwater seep areas occur in the northern extents of the Site, consist of seasonally saturated surfaces, and are dominated by wet meadow grasses. Bark Meadow Brook, a perennial watercourse interior to Wetland 1, is a well incised perennial watercourse historically channelized by farming activities. Its banks are steeply sloping with narrow bordering vegetated wetlands consisting of scrub shrub and narrow mature forest adjacent to agricultural hayfields. As these areas drain into the interior perennial watercourse, the dominant vegetation transitions to edge forest and scrub/shrub. These areas consist of intermittently flooded margins. This system drains south into a culvert inlet under Wrights Crossing Road.

Wetland 2 consists of a broad forested wetland system with an interior intermittent watercourse located on the eastern edge of the Site. This 3- to 5-foot-wide watercourse is characterized by a braided channel with areas of riffle/pool structure, sandy/organic bottom, and numerous low and high flow channels. This system generally drains south into a culvert under Wrights Crossing Road. Interior depressional pockets within this wetland contain seasonal flooding; a deeper depression contained obligate vernal pool breeding activity at the time of the inspection (see Section 3.3.2 for additional details). Dominant vegetation within this wetland consists of mature hardwood forest with a closed canopy. The western boundaries of Wetland 2 are characterized by historically altered and filled edges. The southern portion of Wetland 2 extends westward. This area is characterized as a hillside seep system formed within the adjacent Hayfield which drains east into the forested portions of the resource.

Wetlands 3 and 4 consist of isolated wetland depressions located at a topographic high point of the Site within the routinely mowed Hayfields. Generally, these features are characterized by seasonally saturated perched hydrology, and occur within localized shallow topographic depressions that experience seasonal surface saturation. Due to routine and historic disturbances, soil profiles within these wetlands generally consist of deep plow horizons with depleted matrix subsoil and high amounts of redoximorphic features typical of wetlands located within farm fields. Dominant vegetation within Wetlands 3 and 4 consists of cool season grasses/reed canary grass associated with routinely mowed agricultural hayfields.

Wetland 6 consists of a historically constructed farm pond with permanent flooding and depths exceeding 3 feet. This feature generally drains west/southwest, eventually discharging into Wetland 1. Eastern boundaries of this feature have some supporting bordering seep wetlands. These seep areas have been historically altered by farming activities resulting in disturbed soil profiles and surface hydrology. Vegetation along the banks of Wetland 6 consists of well-maintained grasses/emergents.

Vernal Pools

A single vernal pool is present on the Site, embedded within the southern portion of Wetland 2. A limited vernal pool survey was conducted on March 24 and 25, 2021. Survey methods included aural surveys to record chorusing frogs, visual surveys to search for adults, egg masses and larvae, and dip-netting to identify species within the water column and benthic material. Egg mass searches were conducted by slowly and methodically wading through the open water in a parallel transect-like pattern using polarized sunglasses under bright sunny skies.

The vernal pool supports a single indicator species, the wood frog (*Lithobates sylvaticus*). The wood frog occurs statewide across all ecoregions and is one of the most common vernal pool indicator species. A total of eight (8) wood frog egg masses were identified. The egg masses were located on coarse woody debris attachment sites and the bottom of the pool. The maximum observed water depth was approximately 6 to 8 inches.

The limits of the vernal pool were field located using a Trimble GPS unit and plotted using ESRI ArcMap software.

No direct physical impact to the vernal pool will occur as a result of construction and operation of the Facility. Vernal pool dependent amphibians are not solely reliant upon the actual vernal pool habitat for breeding (i.e., egg and larval development); they also require surrounding upland forest habitat for most of their adult lives. Accepted studies recommend protection of adjacent habitat up to 750 feet from the vernal pool edge for obligate pool-breeding amphibians. The Project will not have any impacts in areas within 100 feet of the vernal pool. The closest point of the Facility to this vernal pool is 435 feet to the west. In addition, the entirety of the Facility is to be located in sub-optimal upland habitat consisting of cool season grass hayfields that are routinely managed through seasonal cuttings. These types of open habitats that experience regular disturbances are not commonly utilized by obligate vernal pool breeding species. Due to the significant distance separating the Facility from the vernal pool, and the entirety of the Facility being located within suboptimal upland hayfield habitat, the Project will not have a significant negative impact on this vernal pool resource.

Flood Zones

The Facility will not be located within a 100- or 500-year flood zone. APT reviewed the United States Federal Emergency Management Agency ("FEMA") Flood Insurance Rate Map ("FIRM") covering the Site. A FIRM is the official map of a community on which FEMA has delineated both the special hazard areas and risk premium zones applicable to the community. The area inclusive of the Site is mapped on FIRM PANEL #0901630010B, dated April 17, 1985. Based upon the reviewed FIRM Map, the majority of the Project Area is located in an area designated as unshaded Zone C, which is defined as areas of minimal flooding, typically above the 100- and 500-year flood levels. Bark Meadow Brook, the farm pond and its drainage area are located within Zone A (100-year flood zone).

No special design considerations or precautions relative to flooding are required for the Facility. A portion of the electrical interconnection line (in proximity to the farm pond) does encroach into the 100-year flood zone. However, with the electrical interconnection line being underground,

there will be no adverse effect to this flood hazard zone as no changes to the existing ground elevation or placement of fill or above-ground structures would occur.

Construction Sequence

The following suggested sequence of construction activities is projected based upon engineering judgment and best management practices. The contractor may elect to alter the sequencing to best meet the construction schedule, the existing site activities, and weather conditions. Should the contractor alter the construction sequence or any erosion and sedimentation control measure, they shall modify the SWPCP as required by the General Permit. Major changes in sequencing and/or methods may require regulatory approval prior to implementation.

Pre-Construction

1. The contractor shall schedule a pre-construction meeting. Physically flag the limits of disturbance in the field as necessary to facilitate the pre-construction meeting.
2. Conduct a pre-construction meeting to discuss the proposed work and erosion and sedimentation control measures. The meeting should be attended by the owner, the owner's representative(s), representative of the conservation district, the general contractor, designated sub-contractors, and the person, or persons, responsible for the implementation, operation, monitoring and maintenance of the erosion and sedimentation measures. The construction procedures for the entire project shall be reviewed at this meeting.
3. Notify Call Before You Dig at 811 (or 1-800-922-4455), as required, prior to the start of construction.
4. Remove existing impediments as necessary and provide minimal clearing and grubbing to install the required construction entrance.
5. Clear only as needed to install the perimeter erosion and sedimentation control measures and, if applicable, tree protection. All wetland areas shall be protected before major construction begins.
6. Clear treeline along Wrights Crossing Road.
7. Complete grading of access road base and accompanying ditching.
8. Place access road gravel and rock check dam aggregate.
9. Temporarily seed disturbed areas not under construction for thirty (30) days or more.
10. Install racking posts for ground mounted solar panels.
11. Install ground mounted solar panels and complete electrical installation.
12. After substantial completion of the installation of the solar panels, complete remaining site work, including any required landscape screening, and stabilize all disturbed areas.
13. Fine grade, rake, seed, and mulch all remaining disturbed areas.
14. After the site is stabilized and with the approval of the permittee, remove perimeter erosion and sedimentation controls, clean and convert temporary sediment traps. Any areas disturbed during cleanup shall be permanently seeded.
15. The site shall be monitored once a month for two full growing seasons (April – October).
16. Issue notice of termination upon completion of monitoring required per Appendix I.

Control Measures

The Contractor shall install and maintain silt fence around the Site as perimeter control throughout the duration of construction. Construction entrances shall be installed at the locations where the contractor will be leaving disturbed areas of the site. Material stockpile areas with appropriate controls shall be placed as needed throughout the limits of the site.

Erosion and Sedimentation Controls General Notes

- All erosion and sediment control measures shall be constructed in accordance with the standards and specifications of the "2002 Connecticut Guidelines for Soil Erosion and Sediment Control" (CTDEEP Bulletin No. 34), and all amendments and addenda thereto as published by the Connecticut Department of Energy and Environmental Protection.
- Land disturbance shall be kept to the minimum necessary for construction operations.
- Install all control measures as shown on the Plans and elsewhere as necessary to prevent soil erosion and sediment transport to resource areas. Additional controls not depicted on the Plans may be necessary. It is the responsibility of the contractor to assess the need for and to install additional controls that are warranted by site conditions.
- Inspect and maintain control measures throughout the construction period. Inspections shall be conducted after each rainstorm and during major storm events to determine if all control measures are adequately in place and effective.
- Sediment removed shall be properly disposed of in an appropriate upland area within the defined limits of disturbance
- Stockpile topsoil in level upland areas and contain using straw bales and/or silt fence around the perimeter.
- In accordance with the Project specification, stabilization of open soil surfaces will be implemented within 7 days after grading or construction activities have temporarily or permanently ceased, unless weather prohibits seed germination.
- Where necessary, in accordance with the Project specifications, suitable topsoil, seedbed preparation, and water shall be provided for effective establishment of vegetative cover.
- The construction contractor shall keep all paved roadways clean.
- Inspect and maintain temporary erosion and sedimentation controls until restoration has been determined to be effective as defined by conformance to the General Permit.

- If construction activities are complete or have been temporarily halted for more than seven (7) days, stabilization activities will be implemented within three (3) days.
- Areas that remain disturbed but inactive for at least 30 days shall receive temporary seeding or soil protection within seven (7) days.
- Disturbed areas that do not establish a vegetative cover within 30 days of seeding shall have erosion control blankets installed. Prior to the erosion control blanket installation, the soil would be prepared with the application of lime, fertilizer, and seed.
- Areas that will be disturbed past the planting season will be covered with a long-term, non-vegetative stabilization method that will provide protection through the winter.
- Stabilization practices will be implemented as quickly as possible in accordance with the Guidelines.
- The contractor shall stabilize disturbed areas with temporary or permanent measures as quickly as possible after the land is disturbed.

Soil Stabilization and Protection

Temporary and permanent stabilization measures are proposed to provide protection against erosion both during and after construction. Land disturbance shall be kept to the minimum necessary for construction operations and existing vegetation shall be preserved to the maximum extent practicable.

The contractor shall maintain temporary erosion and sediment control measures until final stabilization has been achieved. Areas that will remain disturbed but inactive for at least 30 days shall receive temporary seeding or soil protection in accordance with the 2002 Guidelines. Areas that will remain disturbed beyond the seeding season shall receive long term non-vegetative stabilization and protection measures sufficient to protect disturbed areas through the winter. In all cases, stabilization and protection measures shall be implemented as soon as possible in accordance with the 2002 Guidelines.

The stabilization practices to be implemented during the construction of the proposed project are as follows:

Temporary Stabilization Practices

Temporary Soil Protection: Temporary soil protection shall only be used when a disturbed area will be inactive for a period of 30 or more consecutive days, but less than 5 months. If surfaces will not be reworked within 5 months, temporary vegetative cover shall be used. This temporary soil protection shall consist of mulches, tackifiers, and erosion control blankets which shall be biodegradable or photo-degradable within 2 years but without substantial degradation for 5 months. Additionally, they shall be capable of being applied evenly such that it provides 100% initial soil coverage, still adheres to the soil surface, and are free of contaminants and foreign material.

Silt Fence: Silt fence is constructed of a permeable geotextile fabric secured by wooden stakes driven into the ground. It is installed as a temporary barrier to prevent sediment from flowing into an unprotected and/or sensitive area from a disturbed site. Staked silt fence and hay bales or wood chip bags can be used separately or in conjunction as erosion control barriers. A silt fence should be installed downgradient of the work area and placed on contour or as directed by the engineer. Once the Project is complete and soils are stabilized, silt fence materials (i.e., geotextile fabric and wooden stakes) must be removed and properly disposed of off-site. It is important that this measure be installed on contour to reduce erosion along the system.

Construction Entrances: To prevent soil or sediment from being carried off-site by construction equipment, a construction entrance will be installed before construction traffic into and out of the Project area. The width of the anti-tracking pad shall not be less than the width of the ingress or egress. Adjacent roadways shall be swept daily to remove material that may be tracked onto pavement.

Permanent Stabilization Practices

All areas disturbed by construction and unpaved areas that are graded or disturbed by construction will receive topsoil from the site and/or turf establishment. The contractor may use other permanent stabilization practices approved by the Engineer and conforming to the Guidelines.

Structural Measures

The existing slopes will be maintained to capture runoff from the Project Site. The Project Area has been divided into areas of less than five (5) acres that will be controlled by temporary sediment traps.

Maintenance

All construction and related activities shall conform to the requirements of the plans or as directed by the Engineer. In general, all construction activities shall proceed in such a manner so as not to pollute any wetlands, watercourses, water bodies, and conduits carrying stormwater. The Contractor shall limit, in so far as possible, the surface area of earthen materials exposed by construction activity and immediately provide temporary and permanent stabilization practices to prevent soil erosion and contamination on the site. Water pollution control provisions and best management practices shall be administered during construction in accordance with the Guidelines and as directed by the Engineer.

The following maintenance practices will be completed as part of this project:

Silt Fence: Inspect silt fence at least once per week and within 24 hours of the end of a storm with a rainfall amount of 0.25 inch or greater. For dewatering operations, inspect frequently before, during, and after pumping operations. Remove the sediment deposits or install a secondary barrier upslope from the existing barrier when sediment deposits reach one half the height of the barrier.

Compost Filter Sock: Inspect compost filter sock at least once per week and within 24 hours of the end of a storm with a rainfall amount of 0.25 inch or greater. For dewatering operations,

inspect frequently before, during, and after pumping operations. Repair/replace when failure or deterioration is observed.

Temporary Soil Protection: Inspect the temporary soil protection at least once a week and within 24 hours of the end of a storm with a rainfall amount of 0.5 inch or greater for failures. If eroded or bare areas are found repair them immediately. When repetitive failures are observed at the same location, review conditions and limitations for use and determine if other measures are needed to reduce failure rate.

Temporary Sediment Basin/Trap (w/baffles): Inspect temporary sediment basins with baffles for failures at least once a week and within 24 hours of the end of a storm with a rainfall amount of 0.5 inch or greater. Remove sediment once it has accumulated to one half of minimum required volume of the wet storage, dewatering as needed. Restore basin to original dimensions. Repair/replace baffles when failure or deterioration is observed.

Construction Entrances: Maintain the entrance in a condition which will prevent tracking and washing sediment onto paved surfaces. Provide periodic top dressing with additional stone of additional length as conditions demand. Repair any measures used to trap sediment as needed. Remove all sediment spilled, dropped, washed or tracked onto paved surfaces. Adjacent roadways shall be left clean at the end of each day. If the construction is properly maintained and the action of a vehicle traveling over the stone pad is not sufficient to remove the majority of the sediment then either (1) increase the length of the construction entrance, (2) modify the construction access road surface, or (3) install washing racks and associated settling area or similar devices before the vehicle enters a paved surface.

Topsoil/Borrow Stockpiles: Inspect topsoil/borrow stockpiles daily. Repair/replace sediment barriers as necessary and stabilize stockpiles as needed.

Dewatering Wastewaters

The need for dewatering is not anticipated. However, if encountered, dewatering wastewaters will be infiltrated into the ground unless otherwise directed by the Engineer. When dewatering is necessary, pumps used shall not be allowed to discharge directly into a wetland or watercourse.

Prior to any dewatering, the Contractor shall prepare a written proposal for specific methods and devices to be used including, but not limited to, the pumping of water into a temporary sedimentation basin, providing surge protection at the inlet or outlet of pumps, floating the intake of a pump, or any other method for minimizing and retaining the suspended solids. If the Contractor witnesses a pumping operation causing turbidity problems, the Contractor shall halt said operation until a means of controlling the turbidity is established by the Contractor. No discharge of dewatering wastewater shall contain or cause a visible oil sheen, floating solids or foaming in the receiving water

Post-Construction Stormwater Management

Post-construction Guidelines

After the Project is complete the developer will perform the following maintenance and restoration measures:

- Mowing and maintenance of the turf and vegetated areas will occur as needed.

Other Controls

Spill Prevention Control Plan

Certain precautions are necessary to store petroleum materials, refuel and contain and properly clean up any inadvertent fuel or petroleum (i.e., oil, hydraulic fluid, etc.) spill to avoid possible impact to nearby habitats.

A spill containment kit consisting of a sufficient supply of absorbent pads and absorbent material will be maintained by the Contractor at the construction site throughout the duration of the project. In addition, a waste drum will be kept on site to contain any used absorbent pads/material for proper and timely disposal off site in accordance with applicable local, state and federal laws.

The following petroleum and hazardous materials storage and refueling restrictions and spill response procedures will be adhered to by the Contractor.

1. Petroleum and Hazardous Materials Storage and Refueling
 - a. Refueling of vehicles or machinery shall occur within the Construction Laydown Area ONLY and shall take place on an impervious pad with secondary containment designed to contain fuels. This area must be a minimum of 100 feet from wetlands or watercourses.
 - b. Any fuel or hazardous materials that must be kept on site shall be stored on an impervious surface utilizing secondary containment a minimum of 100 feet from wetlands or watercourses.
2. Initial Spill Response Procedures
 - a. Stop operations and shut off equipment.
 - b. Remove any sources of spark or flame.
 - c. Contain the source of the spill.
 - d. Determine the approximate volume of the spill.
 - e. Identify the location of natural flow paths to prevent the release of the spill to sensitive nearby waterways or wetlands.
 - f. Ensure that fellow workers are notified of the spill.
3. Spill Clean Up & Containment
 - a. Obtain spill response materials from the on-site spill response kit. Place absorbent materials directly on the release area.
 - b. Limit the spread of the spill by placing absorbent materials around the perimeter of the spill.

- c. Isolate and eliminate the spill source.
 - d. Contact a licensed cleanup and disposal company to properly dispose of contaminated materials in accordance with all local, state and federal regulations.
4. Reporting
- a. Complete an incident report.
 - b. Notify CT Department of Environmental Protection at 860-424-3338 or 1-866-337-7745 (1-866-DEP-SPIL).
 - c. Contact general contractor Horton Electric at (860) 693-6388.
 - d. Contact site owner - TRITEC Americas (David Trepeck at (858) 353-8070).
 - e. Contact local police department.
 - f. Contact municipal official (Town Manager).
 - g. Submit a completed incident report to the appropriate Connecticut Department of Environmental Protection, Municipal Official, Connecticut Siting Council and other applicable local, state and federal officials.

Waste Disposal

Construction site waste shall be properly managed and disposed of during the entire construction period. Additionally;

- A waste collection area will be designated. The selected area will minimize truck travel through the site and will not drain directly to the adjacent wetlands.
- Waste collection shall be scheduled regularly to prevent the containers from overflowing.
- Spills shall be cleaned up immediately.
- Defective containers that may cause leaks or spills will be identified through regular inspection. Any found to be defective will be repaired or replaced immediately.
- Any stockpiling of materials should be confined to the designated area as defined by the engineer.

Washout Areas

Washout of applicators, containers, vehicles and equipment for concrete shall be conducted in a designated washout area. No surface discharge of washout wastewaters from the area will be allowed. All concrete wash water will be directed into a container or pit such that no overflows can occur. Washout shall be conducted in an entirely self-contained system and will be clearly designed and flagged or signed where necessary. The washout area shall be located outside of any buffers and at least 50 feet from any stream, wetland or other sensitive water or natural resources as shown on the plans.

The designated area shall be designed and maintained such that no overflows can occur during rainfall or after snowmelt. Containers or pits shall be inspected at least once a week to ensure structural integrity, adequate holding capacity and will be repaired prior to future use if leaks are present. The contractor shall remove hardened concrete waste when it accumulates to a height of 1/2 of the container or pit or as necessary to avoid overflows. All concrete waste shall be disposed of in a manner consistent with all applicable laws, regulations, and guidelines.

Anti-tracking Pads and Dust Control

Off-site vehicle tracking of sediments and the generation of dust shall be minimized. Temporary anti-tracking pads from the active work site to the existing pavement will be installed and maintained at the locations shown on the plans. The contractor shall:

- Maintain the entrance in a condition which will prevent tracking and washing of sediment onto paved surfaces.
- Provide periodic top dressing with additional stone or additional length as conditions demand.
- Repair any measures used to trap sediment as needed.
- Immediately remove all sediment spilled, dropped, washed or tracked onto paved surfaces.
- Ensure roads adjacent to a construction site are left clean at the end of each day.

If the construction entrance is being properly maintained and the action of a vehicle traveling over the stone pad is not sufficient to remove the majority of the sediment, then the contractor shall either:

- Increase the length of the construction entrance,
- Modify the construction access road surface, or
- Install washing racks and associated settling area or similar devices before the vehicle enters a paved surface.

For construction activities which cause airborne particulates, wet dust suppression shall be utilized. Construction site dust will be controlled by sprinkling the ground surface with water until it is moist on an as-needed basis. The volume of water sprayed shall be such that it suppresses dust yet also prevents the runoff of water.

Post-Construction

Upon completion of construction activities and stabilization of the site, the site shall be cleaned of construction sediment or debris and any remaining silt fence shall be removed prior to acceptance of the Project. Sediment shall be properly disposed of in accordance with all applicable laws, regulations and guidelines.

Inspections

Inspection Guidelines

The Permittee shall retain the designing qualified professional and a qualified inspector (as those terms are defined in Section (2) of the General Permit) to conduct the Plan Implementation and Routine inspections pursuant to Section 5(b)(4) of the General Permit, provided that any qualified inspector shall be chosen by the designing qualified professional. Unless otherwise approved in writing by the Commissioner, such designing qualified professional and qualified inspector shall be retained for the duration of the construction project until the Notice of Termination has been submitted to the Commissioner and determined to be acceptable.

Plan Implementation Inspections: Notwithstanding the schedule of inspections set forth in Section 5(b)(4) of the General Permit, the Permittee shall ensure that the designing qualified professional and the qualified inspector chosen by such designing qualified professional conduct Plan Implementation Inspections beginning with the commencement of construction activities and through each phase of construction until all perimeter controls, initial erosion and sediment control measures, and construction stormwater traps, basins, swales, and other control measures associated with each phase have been installed and stabilized. In addition, once all of these measures have been installed and stabilized, the Permittee shall ensure that the designing qualified professional certifies in writing to their completion in the applicable inspection report in accordance with the Plan. The Permittee shall ensure that the designing qualified professional conducts a Plan Implementation Inspection of the site at least once a month and the qualified inspector chosen by such designing qualified professional conducts such inspection at least once a week. (The qualified inspector does not need to conduct a weekly inspection during the week the qualified designing professional conducts a monthly inspection).

Routine inspections shall occur at least once every seven calendar days and within 24 hours of the end of a storm that generates a discharge. These inspections shall be conducted by a qualified inspector (provided by the Permittee), as defined in the General Permit, and at a minimum, will include inspection of all areas disturbed by the construction activity that have not been stabilized, all erosion and sedimentation control measures, all structural control measures, soil stockpile areas, washout areas and locations where vehicles enter or exit the site for evidence of, or the potential for, pollutants entering the drainage system and impacts to receiving waters.

For storms that end on a weekend, holiday or other time in which working hours will not commence within 24 hours, an inspection is required within 24 hours only for storms that equal or exceed 0.5 inches. For lesser storms, inspection shall occur immediately upon the start of subsequent normal working hours.

The Permittee shall ensure, after completion of a construction project, that a Notice of Termination is filed in compliance with Section 6 of the General Permit, including the requirement that such Notice of Termination be signed by a District representative certifying that such District representative has personally conducted a Post-Construction Inspection and Final Stabilization Inspection in accordance with Section 6(a) of the General Permit and verified compliance with the requirements of that section. The Notice of Termination shall not be submitted until two (2) full growing seasons (April-October) have passed following final stabilization. Monthly post-construction inspections shall be conducted by the qualified inspector following final stabilization until the Notice of Termination is submitted.

Qualified personnel provided by the Permittee shall conduct Inspections.

Items to be inspected: the following items shall be inspected as described below:

<u>Item</u>	<u>Procedure</u>
Silt Fence/Haybales	Inspected weekly and within 24 hours of rainfall to ensure that the fence line is intact with no breaks or tears. Repair/replace when failure, or observed deterioration, is observed. Remove silt when it reaches 1/2 the height of the fence or bale.

Topsoil/Borrow Stockpiles	Inspect daily. Repair sediment barriers as necessary.
Temporary Soil Protection	Inspected weekly and within 24 hours of rainfall to ensure that the fence line is intact with no breaks or tears. Repair eroded/bare areas immediately. Reseed and mulch.
Construction Entrance	Inspect daily. Place additional stone, extend the length or remove and replace the stone. Clean paved surfaces of tracked sediment.
Compost Filter Sock	Inspect weekly and within 24 hours of rainfall greater than 0.25". Repair/replace when failure or deterioration is observed.
Temporary Sediment Basin/Trap (with Baffles) minimum	Inspect weekly and within 24 hours of rainfall greater than 0.5". Remove sediment once it has accumulated to one half of required volume of the wet storage, dewatering as needed. Restore basin to original dimensions. Repair/replace baffles when failure or deterioration is observed.

Corrective Actions

If at any time an inspection determines that the Site is out of compliance with the terms and conditions of this SWPCP and the General Permit, corrective actions shall be taken. Non-engineered corrective actions (as identified in the 2002 Guidelines and 2004 Connecticut Stormwater Quality Manual) shall be implemented on Site within 24 hours and incorporated into a revised SWPCP within three calendar days of the date of inspection. Engineered corrective actions shall be implemented on Site within seven days and incorporated into a revised SWPCP within ten calendar days of the date of inspection unless another schedule is specified.

Contractors

General

This section shall identify all contractors and subcontractors who will perform on-Site actions which may reasonably be expected to cause or have potential to cause pollution of the waters of the State.

Certification Statement

All contractors and subcontractors must sign the attached statement. All certification will be included in the SWPCP.

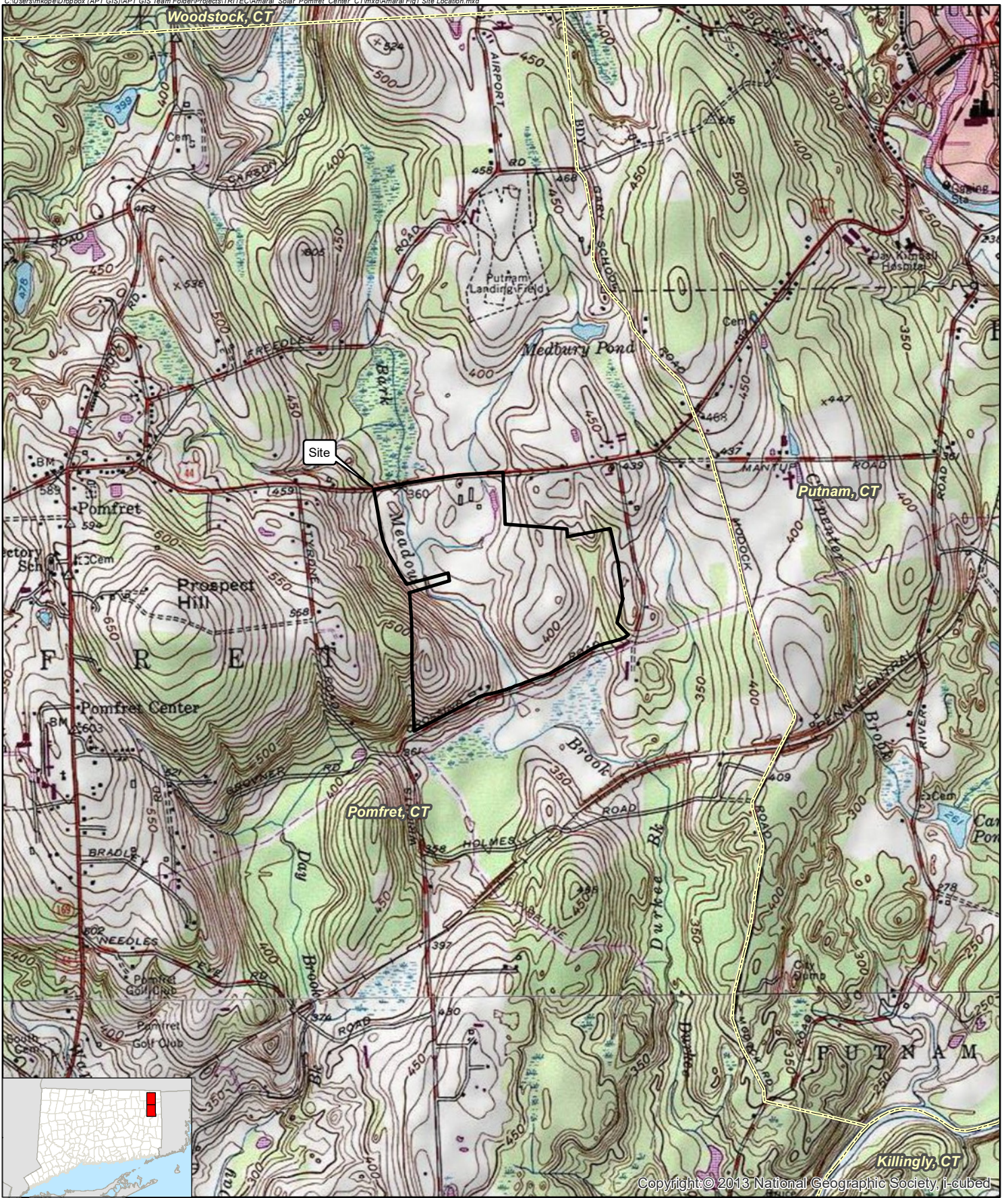
Keeping Plans Current

The Permittee shall amend the Plan whenever there is a change in contractors or subcontractors at the site, or a change in design, construction, operation, or maintenance at the Site which has the potential for the discharge of pollutants to the waters of the state and which has not otherwise been addressed in the Plan or if the actions required by the Plan fail to prevent pollution.

Termination

Once the site has been stabilized and all final inspections have occurred, the Permittee shall file a termination notice. Prior to filing for termination, all temporary erosion and sediment control measure shall be removed. A blank copy of the Notice of Termination Form is provided in Appendix F.

APPENDIX A
Site Location Map





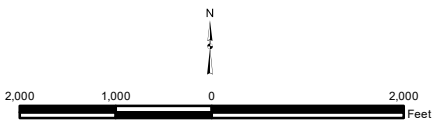
- Legend**
-  Site
 -  Municipal Boundary

Figure 1
Site Location Map
 Amaral Solar Facility
 254 Putnam Road
 Pomfret Center, Connecticut

Map Notes:
 Base Map Source: USGS 7.5 Minute Topographic
 Quadrangle Maps, Danielson, CT (1970) and Putnam, CT (1970)
 Map Scale: 1 inch = 2,000 feet
 Map Date: May 2021



APPENDIX B
Identification of Contractors and
Certification Statements



ATTACHMENT 1

**GENERAL PERMIT FOR THE DISCHARGE OF STORMWATER AND DEWATERING
WASTEWATERS ASSOCIATED WITH CONSTRUCTION ACTIVITIES**

**STORM WATER POLLUTION PREVENTION PLAN
CONTRACTOR CERTIFICATION STATEMENT**

Project Number:	
Project Title:	
Project Location:	

CONTRACTOR CERTIFICATION STATEMENT:

"I certify under penalty of the law that I have read and understand the terms and conditions of the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities. I understand that as a contractor or subcontractor at the site, I am authorized by this general permit, and must comply with the terms and conditions of this permit, including but not limited to the requirements of the Stormwater Pollution Control Plan prepared for this site."

Name:	
Signature:	
Title:	
Company Name:	
Address:	
Telephone Number:	
Date:	
Scope of Services:	

APPENDIX C
Stormwater Management Report



STORMWATER MANAGEMENT REPORT

PROPOSED
AMARAL
SOLAR PROJECT

254 PUTNAM ROAD
POMFRET CENTER, CONNECTICUT
WINDHAM COUNTY

Prepared for:

**TRITEC Americas
888 Prospect Street
La Jolla, CA 92037**

Prepared by:

**All-Points Technology Corporation, P.C.
567 Vauxhall Street Extension, Suite 311
Waterford, CT 06385**

November 2021



Table of Contents

INTRODUCTION	1
EXISTING SITE CONDITIONS.....	1
DEVELOPED SITE CONDITIONS	1
STORMWATER MANAGEMENT	2
CONCLUSION	4

Tables

TABLE 1 PRE-DEVELOPED PEAK STORM RUNOFF (Q)	2
TABLE 2 POST-DEVELOPED PEAK STORM RUNOFF (Q).....	3
TABLE 3 PEAK STORM RUNOFF (Q) COMPARISON PRE- & POST-	3

Appendices

APPENDIX A: NRCS SOIL SURVEY

APPENDIX B: EXISTING DRAINAGE AREA MAP (EDA-1) & HYDROLOGIC COMPUTATION (HYDROCAD)

APPENDIX C: PROPOSED DRAINAGE AREA MAP (PDA-1) & HYDROLOGIC COMPUTATION (HYDROCAD)

APPENDIX D: NOAA ATLAS 14 PRECIPITATION FREQUENCY TABLE

APPENDIX E: WATER QUALITY CALCULATIONS

Introduction

At the request of TRITEC Americas, All-Points Technology Corporation, P.C. ("APT") has prepared the following analysis of and design to address stormwater impacts resulting from the development of a proposed 2.70 MW direct current ("DC") (1.97 MW alternating current ("AC")) solar electric generating facility herein referred to as Amaral Solar (the "Project") located at 254 Putnam Road, Pomfret Center, Connecticut (the "Site").

The purpose of this report is to provide a description and analysis of the potential stormwater drainage impacts associated with the Project, as well as a description of the design to mitigate such potential stormwater drainage impacts. The design is intended to be in full compliance with the State and Town regulations while taking prevailing site conditions and practical factors into account.

Existing Site Conditions

The Site is a privately owned, 215.6-acre parcel south of Route 44/Putnam Road and north of Wrights Crossing Road. The Site is mostly undeveloped active agricultural land; the southeastern extent of the Site is wooded. Bark Meadow Brook flows generally north to south in the western portion of the Site. A residence and multiple farm buildings are located on the northern portion of the Site along Putnam Road; a residence is also located off of Wrights Crossing Road in the southwestern portion of the Site. The Site is zoned Rural Residential.

The Site's existing topography varies, ranging from approximately 338 feet above mean sea level ("AMSL") to 504 feet AMSL. In general, elevations decrease from the western Site boundary to Bark Meadow Brook, and rise again to the east. Grades within the Project Area supporting the Facility slope gently from north to south/southeast, with ground elevations ranging from approximately 405 feet AMSL in the northwest to approximately 355 feet AMSL in the southeast.

Developed Site Conditions

The Project will be constructed in an existing agricultural field with established ground cover, no tree clearing is proposed for installation of the array or access. Access to the Project area will be provided from Wrights Crossing Road south of the project area. The Project includes the installation of (2,592) 400W solar panel modules, (3,060) 545W solar panel modules, and associated fencing, access road, utilities, and stormwater management features, within approximately 14.2± acres of the Site.

The proposed solar panels will be installed on a post driven ground mounted racking system, with minimal changes to the existing grades. As a result, the post-development site conditions will mimic the pre-developed site conditions. Areas of existing ground cover that is disturbed during construction will be reseeded with a low growth seed mix. To address water quality requirements two grass lined swales are proposed along the upper and lower sections of access road with rock check dams.

Stormwater Management

Analysis Methodology

The hydrologic analysis was performed using the HydroCAD stormwater modeling system computer program developed by HydroCAD Software Solutions, LLC.

Hydrographs for each watershed were developed using the SCS Synthetic Unit Hydrograph Method with a Type III rainfall distribution. Hydrographs were developed for the NOAA Atlas 14, Volume 10, Version 3 Precipitation 2-, 25-, 50-, and 100-year storm event with rainfall depths of 3.4, 6.2, 7.0, and 7.9 inches respectively.

The existing and proposed drainage areas used in the calculations are illustrated on the Existing and Proposed Drainage Area Plans (EDA-1 & PDA-1). These maps and the corresponding HydroCAD output are attached.

The Water Quality Volume ("WQV") for the site will be calculated assuming that the roadways, gravel surfaces, and transformer pads are effective impervious cover. The panels are not considered impervious cover for purposes of the WQV calculations.

The Project area soils identified by the United States Department of Agriculture (USDA) Natural Resources Conservation Service consist primarily of a HSG rating of "D", and limited portions with a HSG rating of "B" and "C". The specific Map Unit Symbol soils include 23, 45, and 84.

Specific details for each soil Map Unit Symbol are provided in Appendix A with their extent shown on the Drainage Area Plans.

Existing Drainage Patterns

The Project area generally drains from north to south then divides with outflows leaving at the southwest and southeast portions of the property. The Site is modeled at two (2) Analysis Points ("AP-1" & "AP-2"). AP-1 discharges to an existing wetland to the southwest of the site. AP-2 discharges to an existing wetland to the southeast of the site. Peak discharges have been computed at the points of study for the 2-, 25-, 50-, and 100-year storm events.

The pre-developed peak discharges at each analysis point are tabulated in Table 1.

Table 1

<i>Analysis Point</i>	Pre-developed Peak Storm Runoff (Q), cubic feet per second (cfs)			
	2-year	25-year	50-year	100-year
AP-1	10.2	28.1	33.5	39.6
AP-2	28.3	74.2	87.9	103.4

Proposed Drainage Patterns

The Project will maintain existing hydrological conditions to the extent practicable, as only limited grading is required for the installation of the access drive, equipment pads and water quality swales. Upon completion of construction, the Site will be stabilized using a mix of native flowering grasses and plants selected specifically for solar installations (Ernst Solar Farm Seed Mix), which will create a meadow condition.

Appendix I requires that the hydrologic soil group be reduced by a half-drop in those areas subject to heavy machinery traffic (i.e., the solar field and access), which typically results in a higher curve number. However, the Project’s change from the existing condition of Hayfield ground cover to proposed meadow ground cover results in an equal value for the site, even accounting for the half-drop in hydrologic soil group (for 52,720 sq-ft of HSG C soils within the array footprint).

To appropriately manage Site drainage and provide requisite water quality treatment volumes, two (2) swales are proposed along the access road to capture and treat the runoff from the access drive and tributary project area. Based on the site area and portion of proposed impervious cover the project requires approximately 3,555 cu-ft of water quality treatment volume. The calculations provided in Appendix E show that the volume retained behind the rock check dams and dead storage areas in the swales is approximately 5,008 cu-ft, which is greater than the required volume and therefore in compliance with this requirement.

The post-development conditions were modeled using the same two Analysis Points. Peak discharges have been computed at the points of study for the 2-year, 25-year, 50-year, and 100-year storm events and tabulated in Table 2 below.

Table 2

<i>Analysis Point</i>	Post-developed Peak Storm Runoff (Q), cubic feet per second (cfs)			
	2-year	25-year	50-year	100-year
AP-1	7.9	22.2	26.6	31.5
AP-2	26.4	70.6	84.2	99.2

The reduction in runoff achieved by the post-development discharges in comparison with the pre-development discharges are tabulated in Table 3.

Table 3

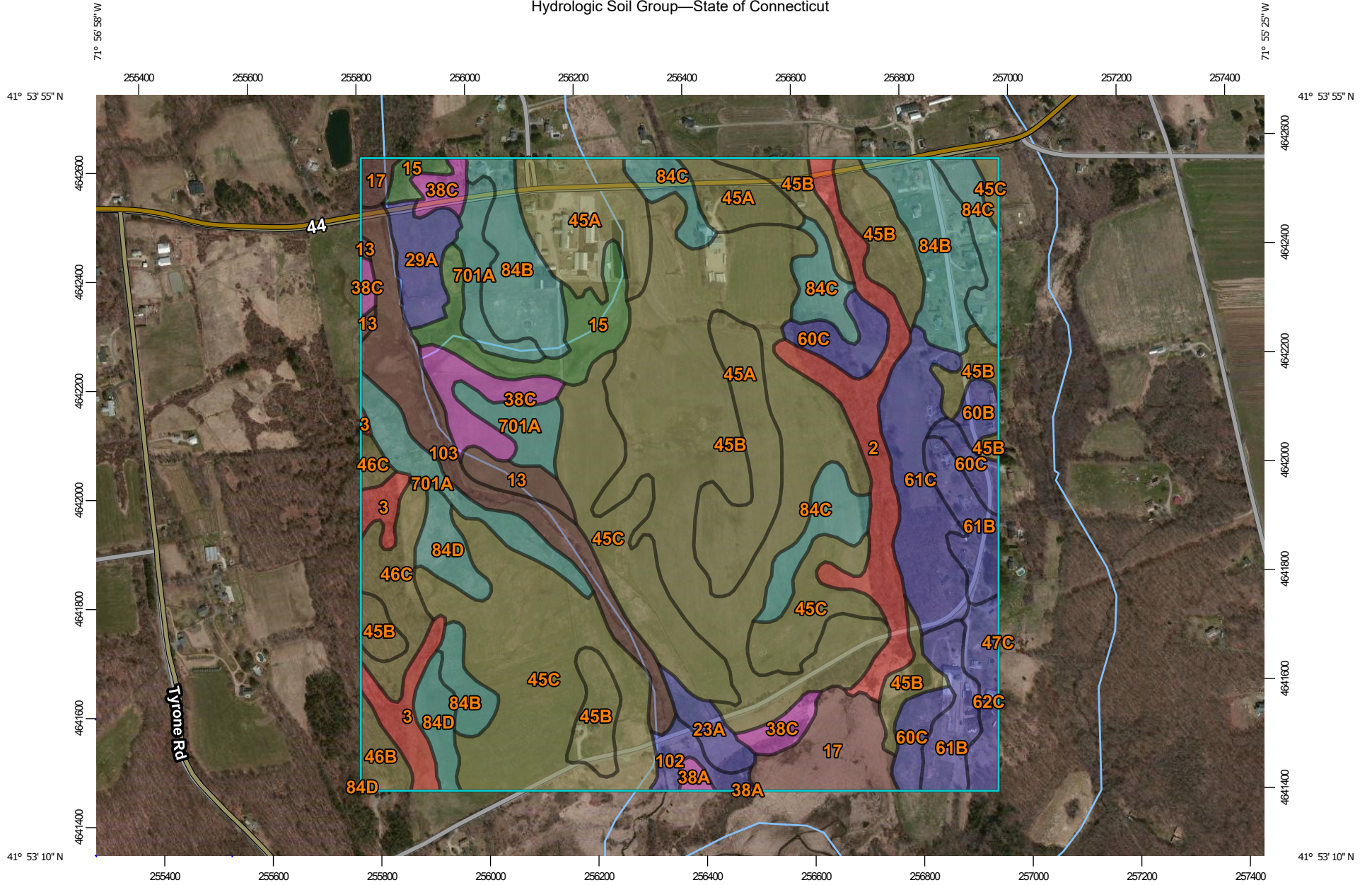
<i>Analysis Point</i>	Peak Storm Runoff (Q) Comparison Pre- and Post-, Percent (%) Change			
	2-year	25-year	50-year	100-year
AP-1	-23%	-21%	-21%	-20%
AP-2	-7%	-5%	-4%	-4%

Conclusion

The stormwater management for the proposed Project has been designed such that the post-development peak discharges to the waters of the State of Connecticut for the 2-, 25-, 50-, and 100- year storm events are less than the pre-development peak discharges. As a result, the proposed solar array is not predicted to result in any adverse conditions to the surrounding areas and properties.

APPENDIX A: NRCS SOIL SURVEY

Hydrologic Soil Group—State of Connecticut



Map Scale: 1:9,840 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 19N WGS84



MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

Soil Rating Polygons

 A
 A/D
 B
 B/D
 C
 C/D
 D
 Not rated or not available

Soil Rating Lines

 A
 A/D
 B
 B/D
 C
 C/D
 D
 Not rated or not available

Soil Rating Points

 A
 A/D
 B
 B/D

 C
 C/D
 D
 Not rated or not available

Water Features

 Streams and Canals

Transportation

 Rails
 Interstate Highways
 US Routes
 Major Roads
 Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: State of Connecticut
 Survey Area Data: Version 20, Jun 9, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Apr 8, 2011—Apr 9, 2011

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
2	Ridgebury fine sandy loam, 0 to 3 percent slopes	D	14.1	4.2%
3	Ridgebury, Leicester, and Whitman soils, 0 to 8 percent slopes, extremely stony	D	6.0	1.8%
13	Walpole sandy loam, 0 to 3 percent slopes	B/D	3.2	1.0%
15	Scarboro muck, 0 to 3 percent slopes	A/D	9.9	2.9%
17	Timakwa and Natchaug soils, 0 to 2 percent slopes	B/D	9.5	2.8%
23A	Sudbury sandy loam, 0 to 5 percent slopes	B	2.9	0.9%
29A	Agawam fine sandy loam, 0 to 3 percent slopes	B	5.1	1.5%
38A	Hinckley loamy sand, 0 to 3 percent slopes	A	0.7	0.2%
38C	Hinckley loamy sand, 3 to 15 percent slopes	A	9.7	2.9%
45A	Woodbridge fine sandy loam, 0 to 3 percent slopes	C/D	27.3	8.1%
45B	Woodbridge fine sandy loam, 3 to 8 percent slopes	C/D	74.3	22.0%
45C	Woodbridge fine sandy loam, 8 to 15 percent slopes	C/D	53.0	15.7%
46B	Woodbridge fine sandy loam, 0 to 8 percent slopes, very stony	C/D	2.5	0.8%
46C	Woodbridge fine sandy loam, 8 to 15 percent slopes, very stony	C/D	7.7	2.3%
47C	Woodbridge fine sandy loam, 3 to 15 percent slopes, extremely stony	C/D	0.0	0.0%
60B	Canton and Charlton fine sandy loams, 3 to 8 percent slopes	B	1.8	0.5%

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
60C	Canton and Charlton fine sandy loams, 8 to 15 percent slopes	B	8.6	2.5%
61B	Canton and Charlton fine sandy loams, 0 to 8 percent slopes, very stony	B	10.4	3.1%
61C	Canton and Charlton fine sandy loams, 8 to 15 percent slopes, very stony	B	12.6	3.7%
62C	Canton and Charlton fine sandy loams, 3 to 15 percent slopes, extremely stony	B	4.5	1.3%
84B	Paxton and Montauk fine sandy loams, 3 to 8 percent slopes	C	21.1	6.2%
84C	Paxton and Montauk fine sandy loams, 8 to 15 percent slopes	C	15.1	4.5%
84D	Paxton and Montauk fine sandy loams, 15 to 25 percent slopes	C	6.6	1.9%
102	Pootatuck fine sandy loam	B	2.6	0.8%
103	Rippowam fine sandy loam	B/D	14.6	4.3%
701A	Ninigret fine sandy loam, 0 to 3 percent slopes	C	14.4	4.3%
Totals for Area of Interest			338.3	100.0%

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

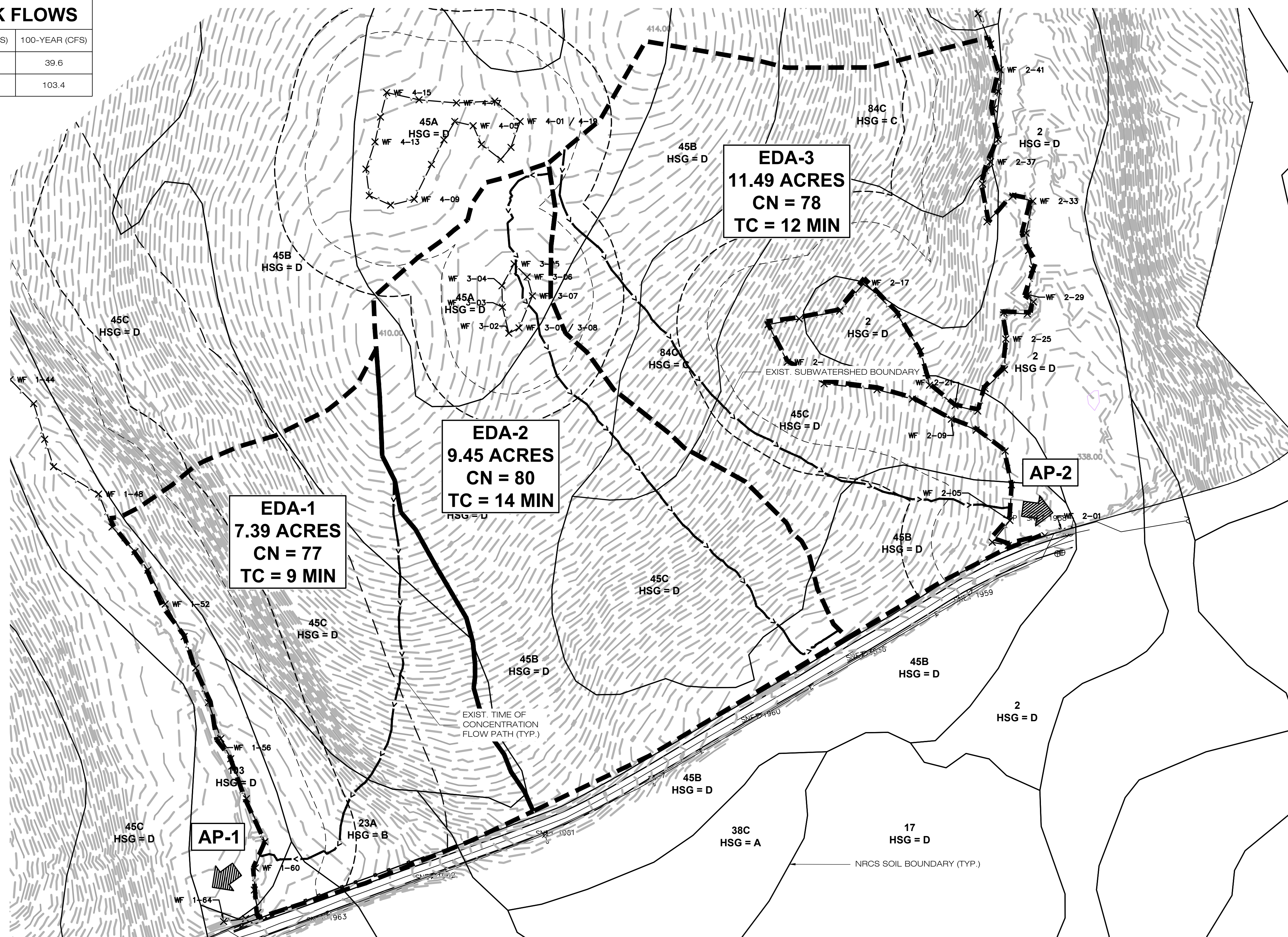
**APPENDIX B: EXISTING DRAINAGE AREA MAP (EDA-1) &
HYDROLOGIC COMPUTATION (HYDROCAD)**

EXISTING DRAINAGE AREAS

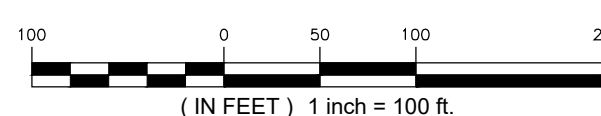
	TOTAL AREA (ACRES)	COMPOSITE CN	TC (MINS.)
EDA-1	7.39	77	9
EDA-2	9.45	80	14
EDA-3	11.49	78	12

EXISTING CONDITIONS PEAK FLOWS

ANALYSIS POINT	2-YEAR (CFS)	25-YEAR (CFS)	50-YEAR (CFS)	100-YEAR (CFS)
AP-1	10.2	28.1	33.5	39.6
AP-2	28.3	74.2	87.9	103.4



EXISTING DRAINAGE AREA MAP
SCALE: 1" = 100'-0"



888 PROSPECT STREET
LA JOLLA, CA 92037
OFFICE: (619) 363-3080



567 VAUXHAUL STREET EXTENSION - SUITE 311
WATERFORD, CT 06385 PHONE: (860)-663-1697
WWW.ALLPOINTSTECH.COM FAX: (860)-663-0935

PERMIT SET

NO	DATE	REVISION
0	11/05/21	IFP
1		
2		
3		
4		
5		
6		

DESIGN PROFESSIONAL OF RECORD

PROF: KEVIN A. MCCAFFERY, PE
COMP: ALL-POINTS TECHNOLOGY CORPORATION
ADD: 567 VAUXHAUL STREET EXTENSION - SUITE 311 WATERFORD, CT 06385

OWNER: ANTONIO & MARY AMARAL
ADDRESS: 254 POMFRET ROAD POMFRET CENTER, CT 06259

AMARAL SOLAR

SITE: 254 PUTNAM ROAD
ADDRESS: POMFRET CENTER, CT 06259

APT FILING NUMBER: CT657100

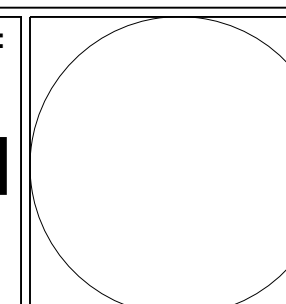
DRAWN BY: MT
DATE: 11/05/21 CHECKED BY: KAM

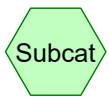
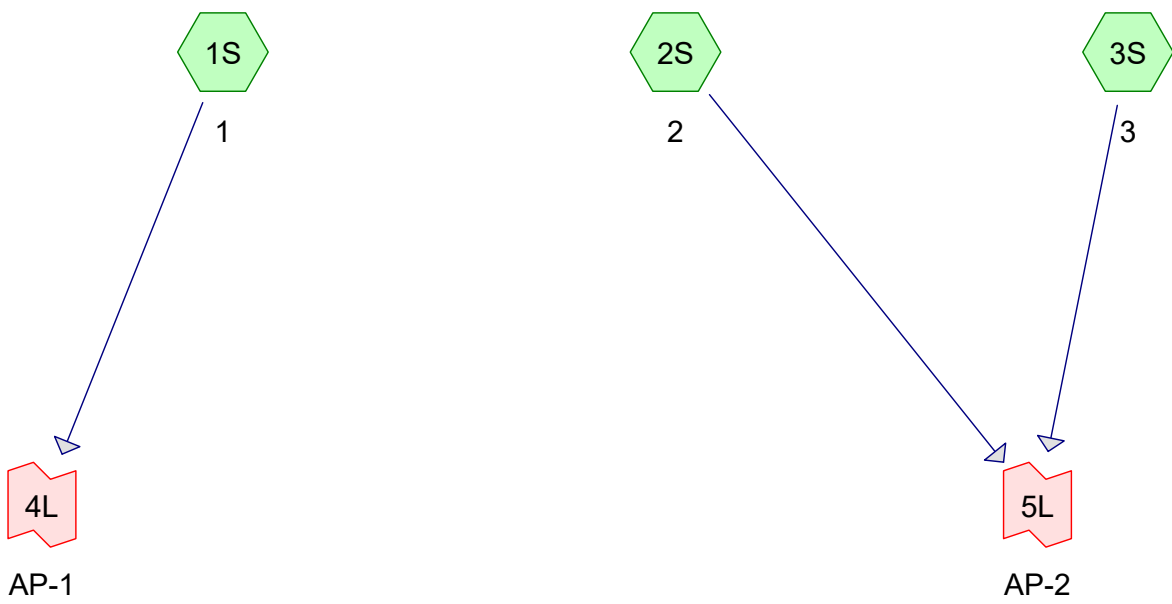
SHEET TITLE:

EXISTING DRAINAGE AREA MAP

SHEET NUMBER:

EDA-1

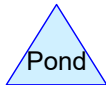




Subcat



Reach



Pond



Link

CT657100-AMARAL-EX

Prepared by All Points Technology Corp.

HydroCAD® 10.00-24 s/n 07402 © 2018 HydroCAD Software Solutions LLC

Printed 11/4/2021

Page 2

Area Listing (all nodes)

Area (sq-ft)	CN	Description (subcatchment-numbers)
52,629	61	Pasture/grassland/range, Good, HSG B (1S)
142,065	74	Pasture/grassland/range, Good, HSG C (2S, 3S)
1,010,198	80	Pasture/grassland/range, Good, HSG D (1S, 2S, 3S)
11,538	70	Woods, Good, HSG C (3S)
17,675	77	Woods, Good, HSG D (3S)
1,234,105	78	TOTAL AREA

CT657100-AMARAL-EX

Prepared by All Points Technology Corp.

HydroCAD® 10.00-24 s/n 07402 © 2018 HydroCAD Software Solutions LLC

Printed 11/4/2021

Page 3

Soil Listing (all nodes)

Area (sq-ft)	Soil Group	Subcatchment Numbers
0	HSG A	
52,629	HSG B	1S
153,603	HSG C	2S, 3S
1,027,873	HSG D	1S, 2S, 3S
0	Other	
1,234,105		TOTAL AREA

CT657100-AMARAL-EX

Prepared by All Points Technology Corp.

HydroCAD® 10.00-24 s/n 07402 © 2018 HydroCAD Software Solutions LLC

Printed 11/4/2021

Page 4

Ground Covers (all nodes)

HSG-A (sq-ft)	HSG-B (sq-ft)	HSG-C (sq-ft)	HSG-D (sq-ft)	Other (sq-ft)	Total (sq-ft)	Ground Cover
0	52,629	142,065	1,010,198	0	1,204,892	Pasture/grassland /range, Good
0	0	11,538	17,675	0	29,213	Woods, Good
0	52,629	153,603	1,027,873	0	1,234,105	TOTAL AREA

CT657100-AMARAL-EX

Type III 24-hr 2-YEAR Rainfall=3.40"

Prepared by All Points Technology Corp.

Printed 11/4/2021

HydroCAD® 10.00-24 s/n 07402 © 2018 HydroCAD Software Solutions LLC

Page 5

Time span=0.00-48.00 hrs, dt=0.05 hrs, 961 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: 1 Runoff Area=322,100 sf 0.00% Impervious Runoff Depth=1.36"
Flow Length=780' Slope=0.0800 '/' Tc=8.9 min CN=77 Runoff=10.22 cfs 36,415 cf

Subcatchment 2S: 2 Runoff Area=411,671 sf 0.00% Impervious Runoff Depth=1.56"
Flow Length=1,110' Slope=0.0550 '/' Tc=14.0 min CN=80 Runoff=13.20 cfs 53,428 cf

Subcatchment 3S: 3 Runoff Area=500,334 sf 0.00% Impervious Runoff Depth=1.42"
Flow Length=1,035' Slope=0.0670 '/' Tc=12.1 min CN=78 Runoff=15.30 cfs 59,281 cf

Link 4L: AP-1 Inflow=10.22 cfs 36,415 cf
Primary=10.22 cfs 36,415 cf

Link 5L: AP-2 Inflow=28.27 cfs 112,710 cf
Primary=28.27 cfs 112,710 cf

Total Runoff Area = 1,234,105 sf Runoff Volume = 149,125 cf Average Runoff Depth = 1.45"
100.00% Pervious = 1,234,105 sf 0.00% Impervious = 0 sf

Summary for Subcatchment 1S: 1

Runoff = 10.22 cfs @ 12.14 hrs, Volume= 36,415 cf, Depth= 1.36"

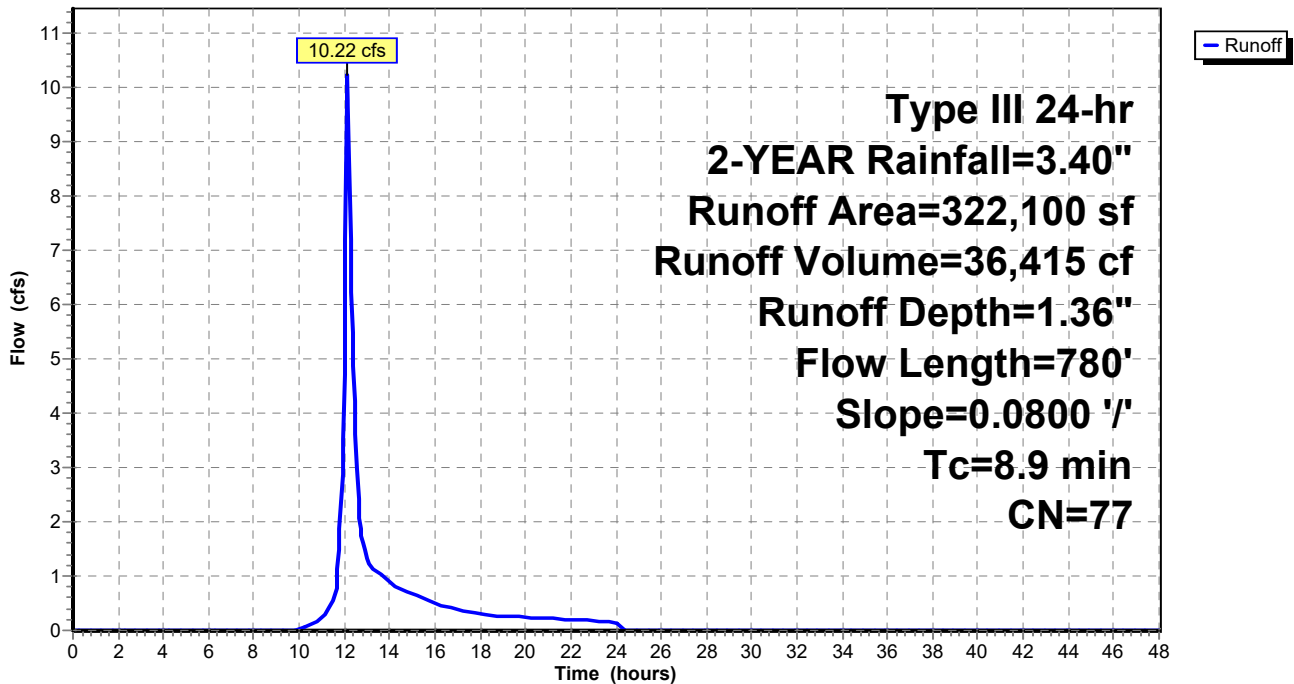
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
 Type III 24-hr 2-YEAR Rainfall=3.40"

Area (sf)	CN	Description
269,471	80	Pasture/grassland/range, Good, HSG D
52,629	61	Pasture/grassland/range, Good, HSG B
322,100	77	Weighted Average
322,100		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.8	50	0.0800	0.30		Sheet Flow, Range n= 0.130 P2= 3.40"
6.1	730	0.0800	1.98		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
8.9	780	Total			

Subcatchment 1S: 1

Hydrograph



Summary for Subcatchment 2S: 2

Runoff = 13.20 cfs @ 12.20 hrs, Volume= 53,428 cf, Depth= 1.56"

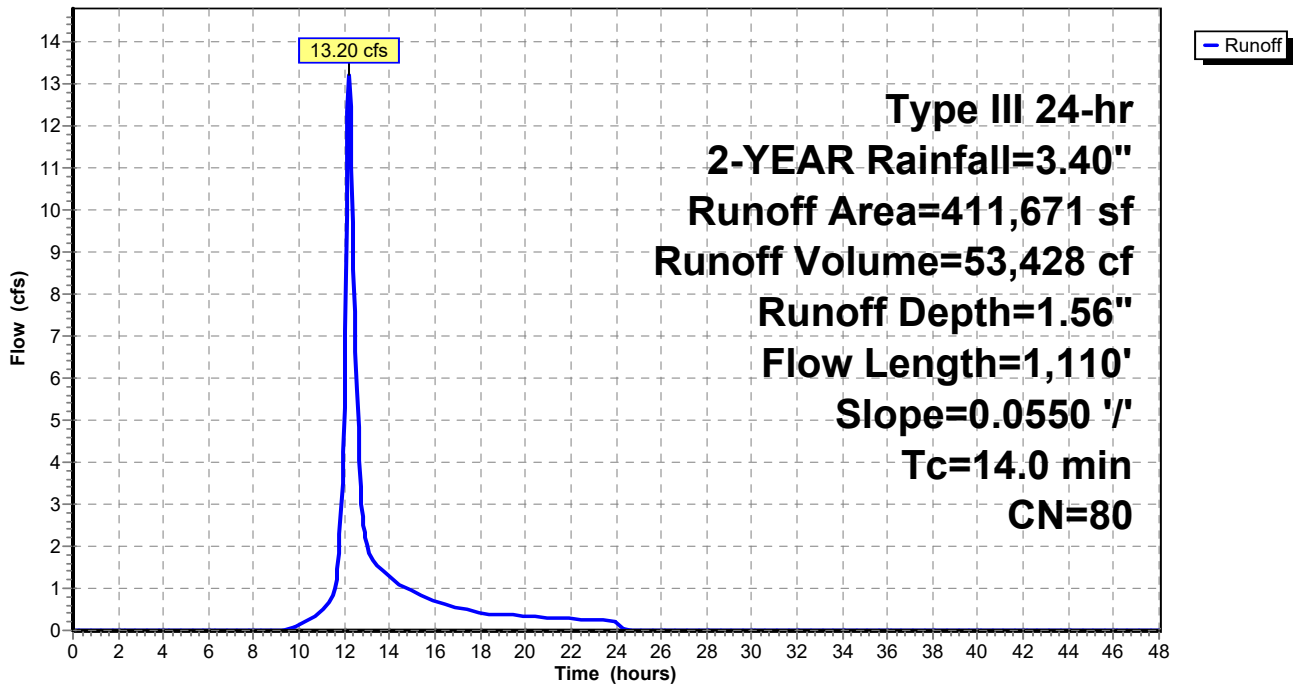
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-YEAR Rainfall=3.40"

Area (sf)	CN	Description
394,902	80	Pasture/grassland/range, Good, HSG D
16,769	74	Pasture/grassland/range, Good, HSG C
411,671	80	Weighted Average
411,671		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.2	50	0.0550	0.26		Sheet Flow, Range n= 0.130 P2= 3.40"
10.8	1,060	0.0550	1.64		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
14.0	1,110	Total			

Subcatchment 2S: 2

Hydrograph



Summary for Subcatchment 3S: 3

Runoff = 15.30 cfs @ 12.17 hrs, Volume= 59,281 cf, Depth= 1.42"

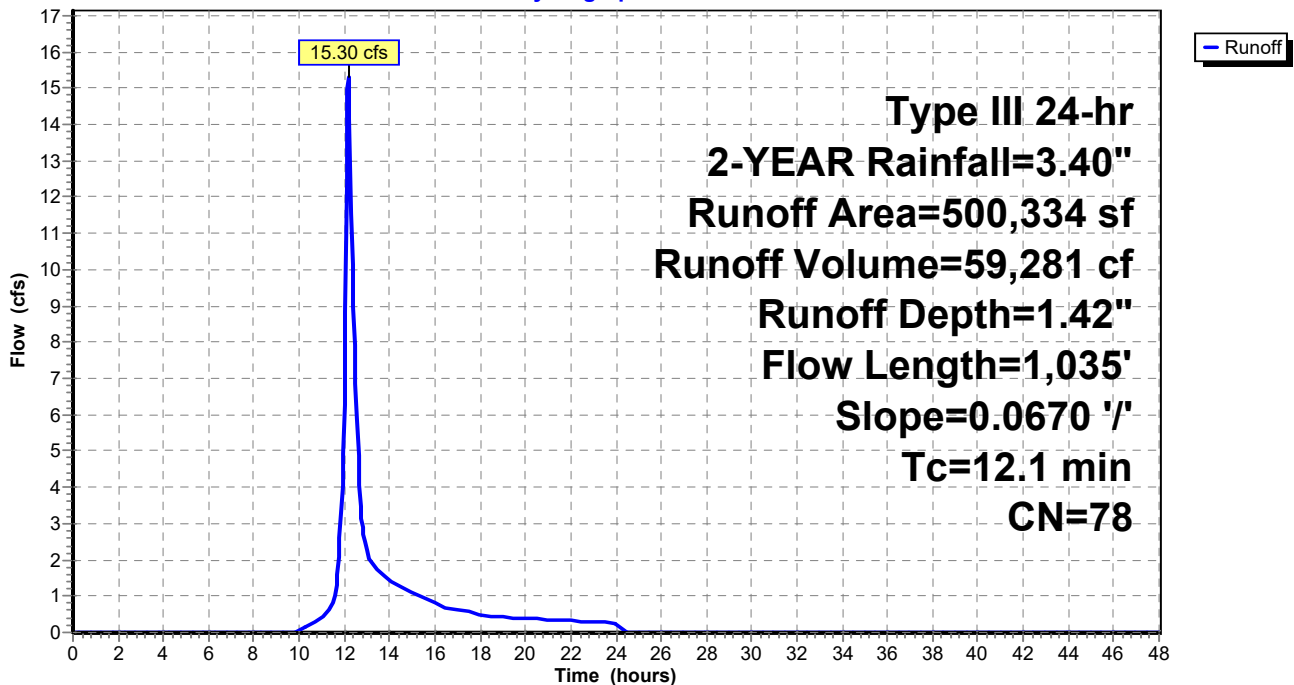
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-YEAR Rainfall=3.40"

Area (sf)	CN	Description
345,825	80	Pasture/grassland/range, Good, HSG D
125,296	74	Pasture/grassland/range, Good, HSG C
17,675	77	Woods, Good, HSG D
11,538	70	Woods, Good, HSG C
500,334	78	Weighted Average
500,334		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.0	50	0.0670	0.28		Sheet Flow, Range n= 0.130 P2= 3.40"
9.1	985	0.0670	1.81		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
12.1	1,035	Total			

Subcatchment 3S: 3

Hydrograph



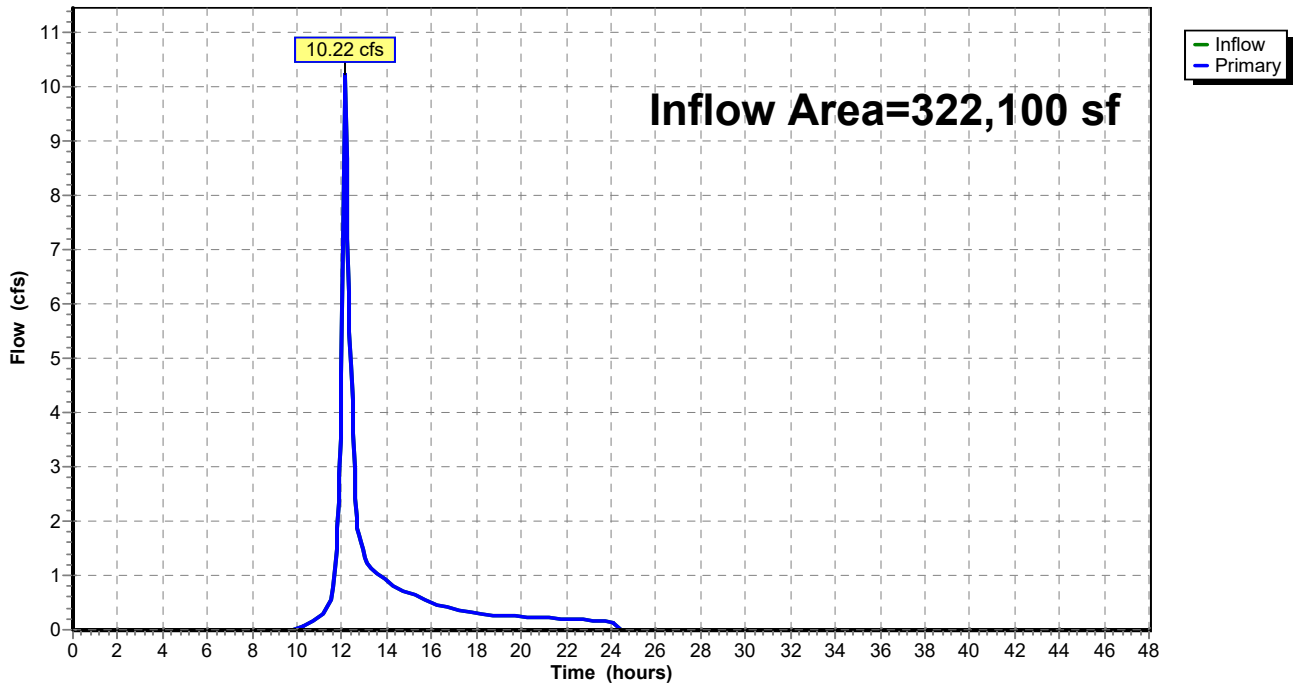
Summary for Link 4L: AP-1

Inflow Area = 322,100 sf, 0.00% Impervious, Inflow Depth = 1.36" for 2-YEAR event
Inflow = 10.22 cfs @ 12.14 hrs, Volume= 36,415 cf
Primary = 10.22 cfs @ 12.14 hrs, Volume= 36,415 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

Link 4L: AP-1

Hydrograph



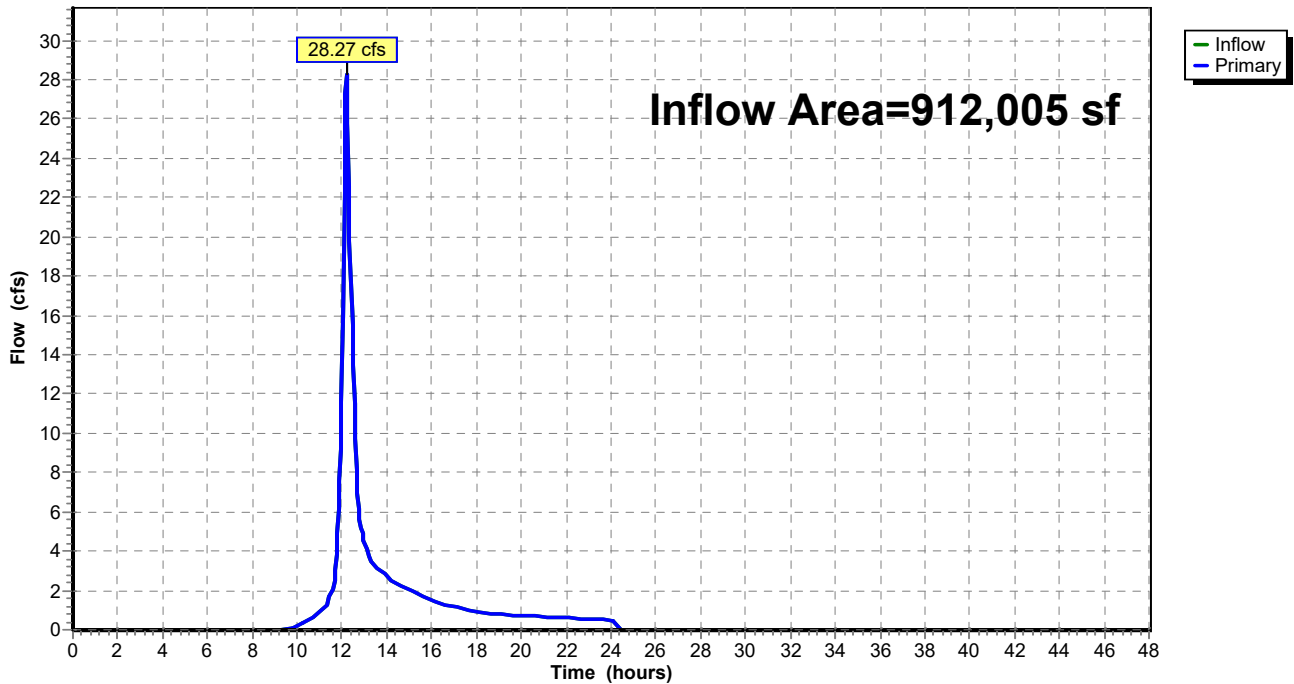
Summary for Link 5L: AP-2

Inflow Area = 912,005 sf, 0.00% Impervious, Inflow Depth = 1.48" for 2-YEAR event
Inflow = 28.27 cfs @ 12.19 hrs, Volume= 112,710 cf
Primary = 28.27 cfs @ 12.19 hrs, Volume= 112,710 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

Link 5L: AP-2

Hydrograph



CT657100-AMARAL-EX

Type III 24-hr 25-YEAR Rainfall=6.20"

Prepared by All Points Technology Corp.

Printed 11/4/2021

HydroCAD® 10.00-24 s/n 07402 © 2018 HydroCAD Software Solutions LLC

Page 11

Time span=0.00-48.00 hrs, dt=0.05 hrs, 961 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: 1 Runoff Area=322,100 sf 0.00% Impervious Runoff Depth=3.65"
Flow Length=780' Slope=0.0800 '/' Tc=8.9 min CN=77 Runoff=28.08 cfs 98,088 cf

Subcatchment 2S: 2 Runoff Area=411,671 sf 0.00% Impervious Runoff Depth=3.96"
Flow Length=1,110' Slope=0.0550 '/' Tc=14.0 min CN=80 Runoff=33.76 cfs 135,927 cf

Subcatchment 3S: 3 Runoff Area=500,334 sf 0.00% Impervious Runoff Depth=3.76"
Flow Length=1,035' Slope=0.0670 '/' Tc=12.1 min CN=78 Runoff=41.15 cfs 156,610 cf

Link 4L: AP-1 Inflow=28.08 cfs 98,088 cf
Primary=28.08 cfs 98,088 cf

Link 5L: AP-2 Inflow=74.23 cfs 292,537 cf
Primary=74.23 cfs 292,537 cf

Total Runoff Area = 1,234,105 sf Runoff Volume = 390,624 cf Average Runoff Depth = 3.80"
100.00% Pervious = 1,234,105 sf 0.00% Impervious = 0 sf

Summary for Subcatchment 1S: 1

Runoff = 28.08 cfs @ 12.13 hrs, Volume= 98,088 cf, Depth= 3.65"

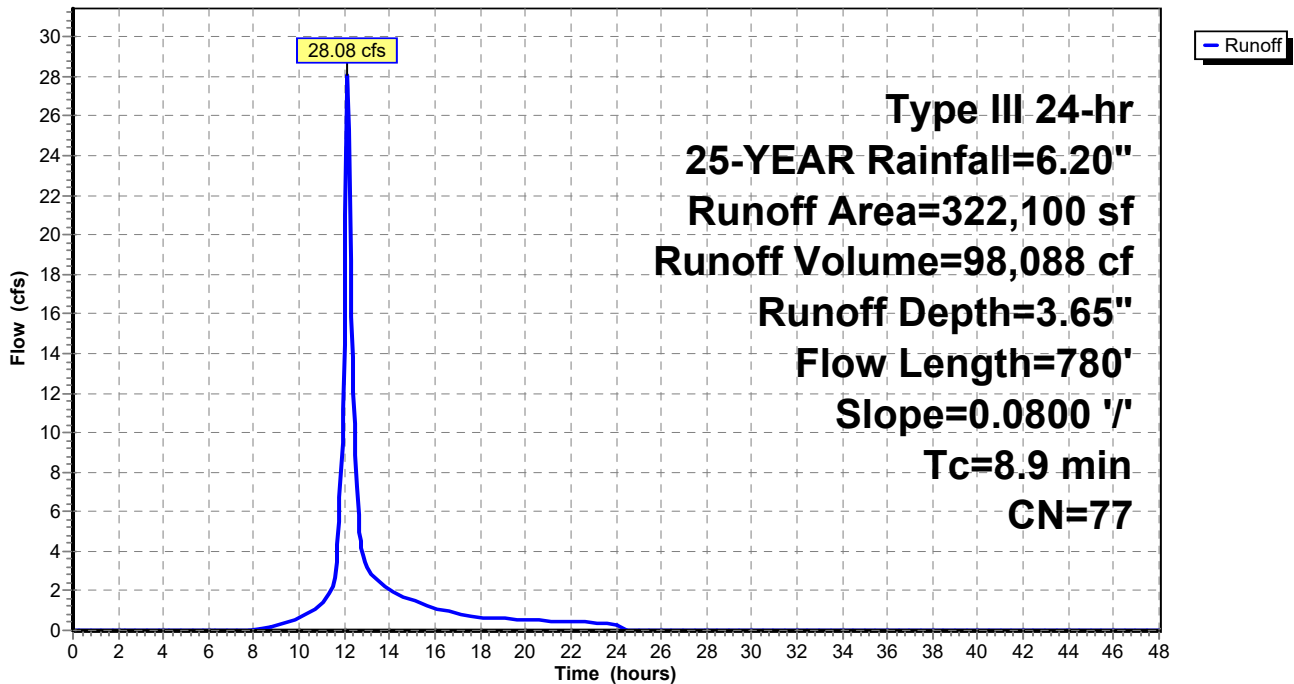
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-YEAR Rainfall=6.20"

Area (sf)	CN	Description
269,471	80	Pasture/grassland/range, Good, HSG D
52,629	61	Pasture/grassland/range, Good, HSG B
322,100	77	Weighted Average
322,100		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.8	50	0.0800	0.30		Sheet Flow, Range n= 0.130 P2= 3.40"
6.1	730	0.0800	1.98		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
8.9	780	Total			

Subcatchment 1S: 1

Hydrograph



Summary for Subcatchment 2S: 2

Runoff = 33.76 cfs @ 12.19 hrs, Volume= 135,927 cf, Depth= 3.96"

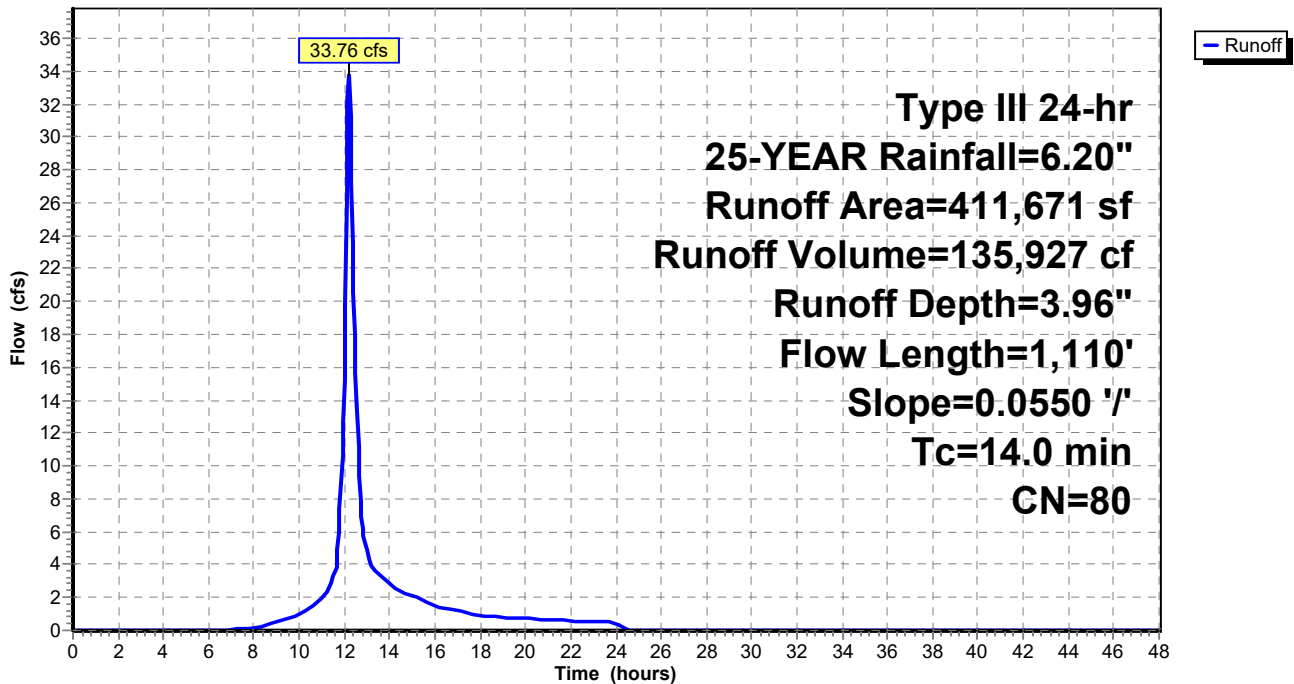
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-YEAR Rainfall=6.20"

Area (sf)	CN	Description
394,902	80	Pasture/grassland/range, Good, HSG D
16,769	74	Pasture/grassland/range, Good, HSG C
411,671	80	Weighted Average
411,671		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.2	50	0.0550	0.26		Sheet Flow, Range n= 0.130 P2= 3.40"
10.8	1,060	0.0550	1.64		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
14.0	1,110	Total			

Subcatchment 2S: 2

Hydrograph



Summary for Subcatchment 3S: 3

Runoff = 41.15 cfs @ 12.17 hrs, Volume= 156,610 cf, Depth= 3.76"

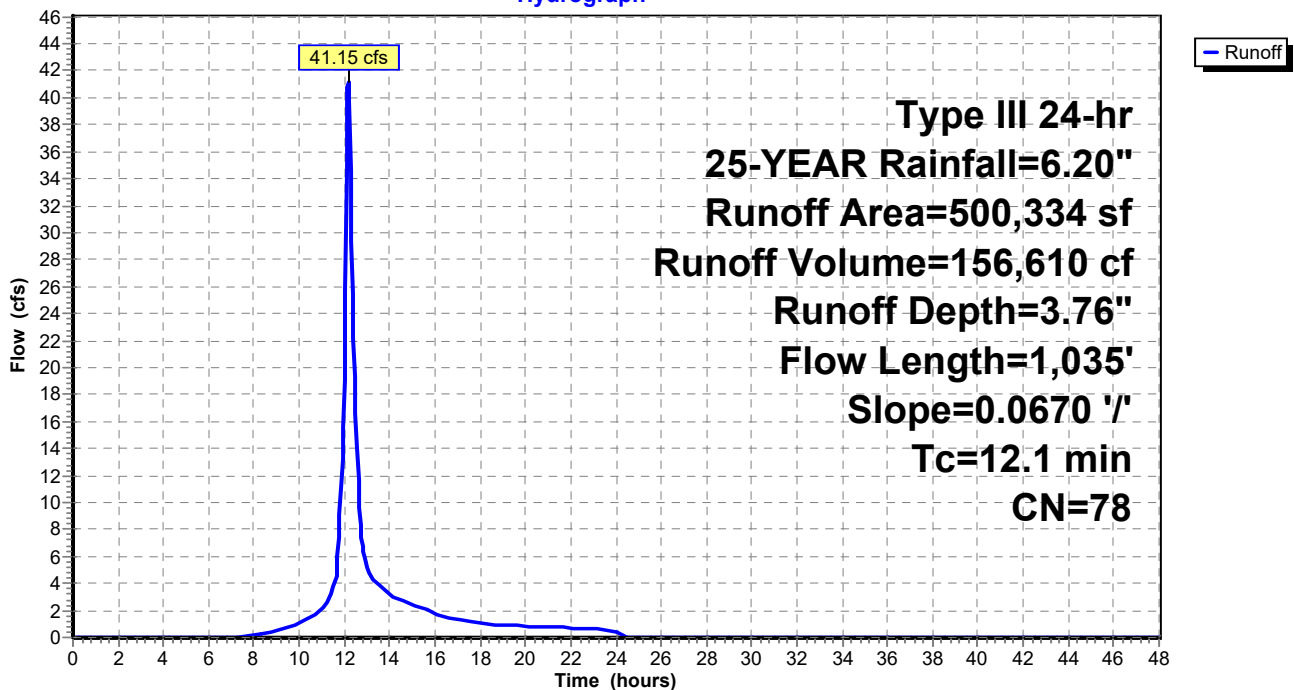
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
 Type III 24-hr 25-YEAR Rainfall=6.20"

Area (sf)	CN	Description
345,825	80	Pasture/grassland/range, Good, HSG D
125,296	74	Pasture/grassland/range, Good, HSG C
17,675	77	Woods, Good, HSG D
11,538	70	Woods, Good, HSG C
500,334	78	Weighted Average
500,334		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.0	50	0.0670	0.28		Sheet Flow, Range n= 0.130 P2= 3.40"
9.1	985	0.0670	1.81		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
12.1	1,035	Total			

Subcatchment 3S: 3

Hydrograph



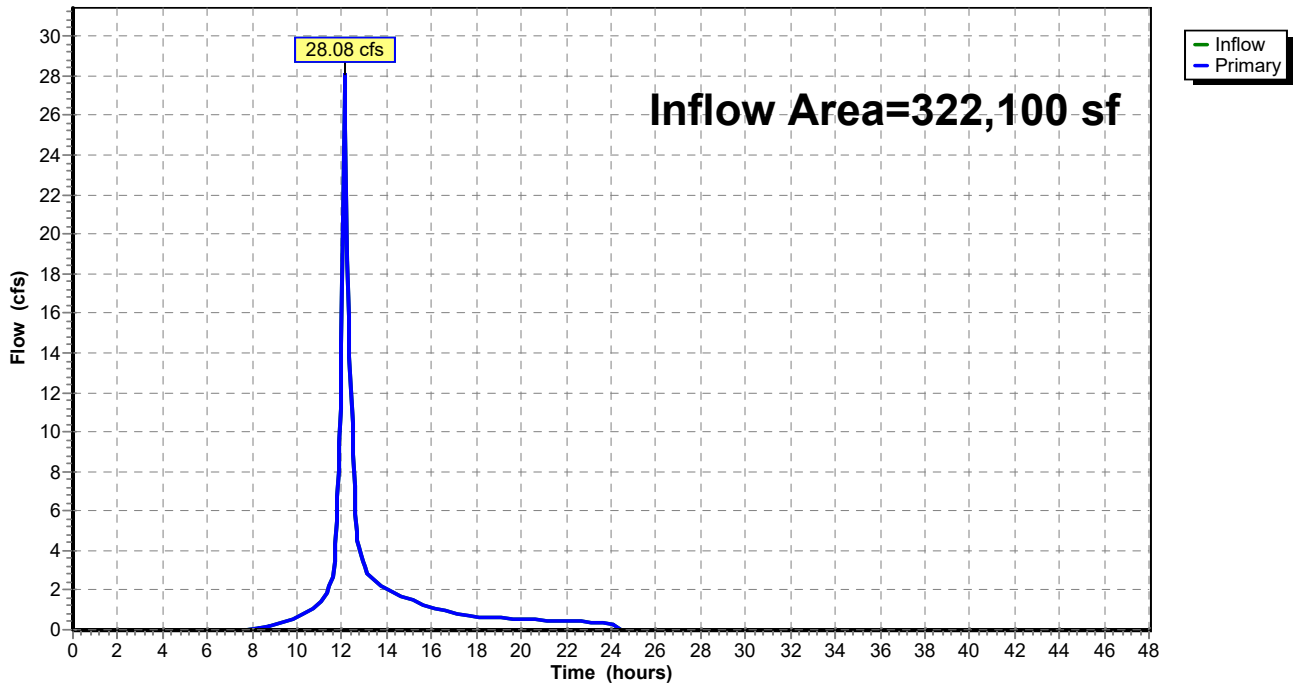
Summary for Link 4L: AP-1

Inflow Area = 322,100 sf, 0.00% Impervious, Inflow Depth = 3.65" for 25-YEAR event
Inflow = 28.08 cfs @ 12.13 hrs, Volume= 98,088 cf
Primary = 28.08 cfs @ 12.13 hrs, Volume= 98,088 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

Link 4L: AP-1

Hydrograph



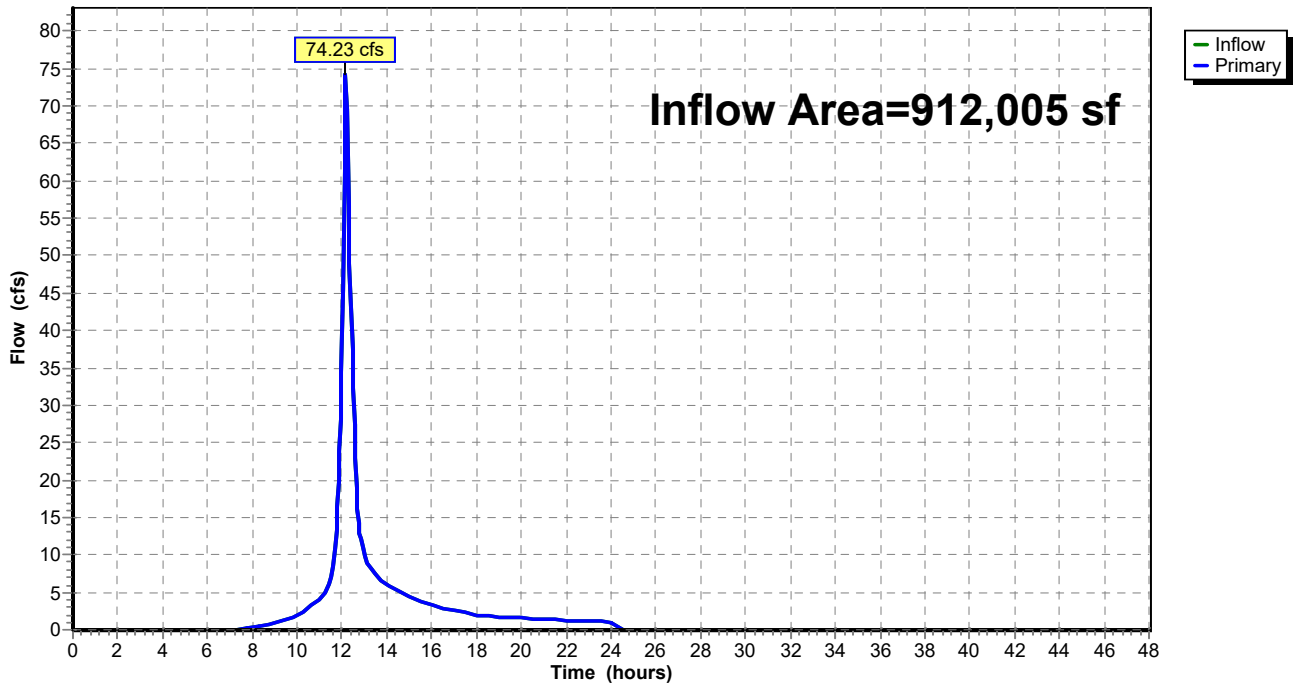
Summary for Link 5L: AP-2

Inflow Area = 912,005 sf, 0.00% Impervious, Inflow Depth = 3.85" for 25-YEAR event
Inflow = 74.23 cfs @ 12.18 hrs, Volume= 292,537 cf
Primary = 74.23 cfs @ 12.18 hrs, Volume= 292,537 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

Link 5L: AP-2

Hydrograph



CT657100-AMARAL-EX

Type III 24-hr 50-YEAR Rainfall=7.00"

Prepared by All Points Technology Corp.

Printed 11/4/2021

HydroCAD® 10.00-24 s/n 07402 © 2018 HydroCAD Software Solutions LLC

Page 17

Time span=0.00-48.00 hrs, dt=0.05 hrs, 961 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: 1 Runoff Area=322,100 sf 0.00% Impervious Runoff Depth=4.37"
Flow Length=780' Slope=0.0800 '/' Tc=8.9 min CN=77 Runoff=33.46 cfs 117,186 cf

Subcatchment 2S: 2 Runoff Area=411,671 sf 0.00% Impervious Runoff Depth=4.69"
Flow Length=1,110' Slope=0.0550 '/' Tc=14.0 min CN=80 Runoff=39.84 cfs 161,047 cf

Subcatchment 3S: 3 Runoff Area=500,334 sf 0.00% Impervious Runoff Depth=4.47"
Flow Length=1,035' Slope=0.0670 '/' Tc=12.1 min CN=78 Runoff=48.89 cfs 186,575 cf

Link 4L: AP-1 Inflow=33.46 cfs 117,186 cf
Primary=33.46 cfs 117,186 cf

Link 5L: AP-2 Inflow=87.92 cfs 347,623 cf
Primary=87.92 cfs 347,623 cf

Total Runoff Area = 1,234,105 sf Runoff Volume = 464,808 cf Average Runoff Depth = 4.52"
100.00% Pervious = 1,234,105 sf 0.00% Impervious = 0 sf

Summary for Subcatchment 1S: 1

Runoff = 33.46 cfs @ 12.13 hrs, Volume= 117,186 cf, Depth= 4.37"

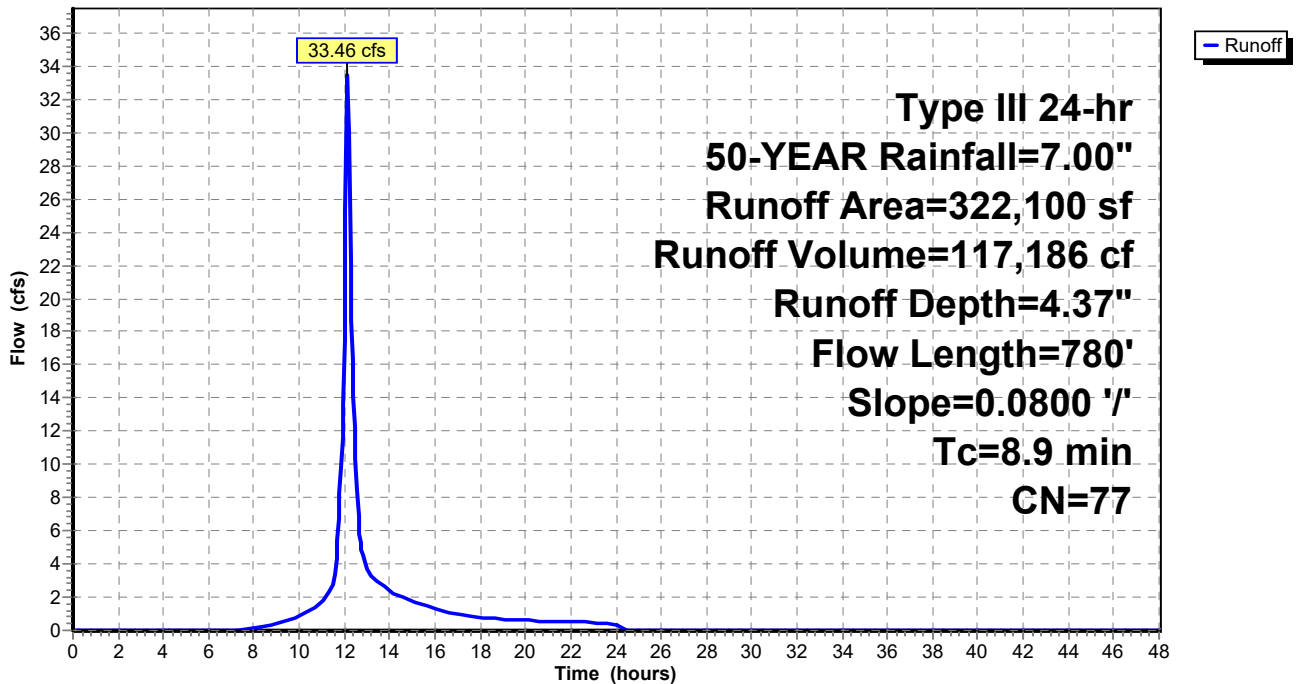
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 50-YEAR Rainfall=7.00"

Area (sf)	CN	Description
269,471	80	Pasture/grassland/range, Good, HSG D
52,629	61	Pasture/grassland/range, Good, HSG B
322,100	77	Weighted Average
322,100		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.8	50	0.0800	0.30		Sheet Flow, Range n= 0.130 P2= 3.40"
6.1	730	0.0800	1.98		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
8.9	780	Total			

Subcatchment 1S: 1

Hydrograph



Summary for Subcatchment 2S: 2

Runoff = 39.84 cfs @ 12.19 hrs, Volume= 161,047 cf, Depth= 4.69"

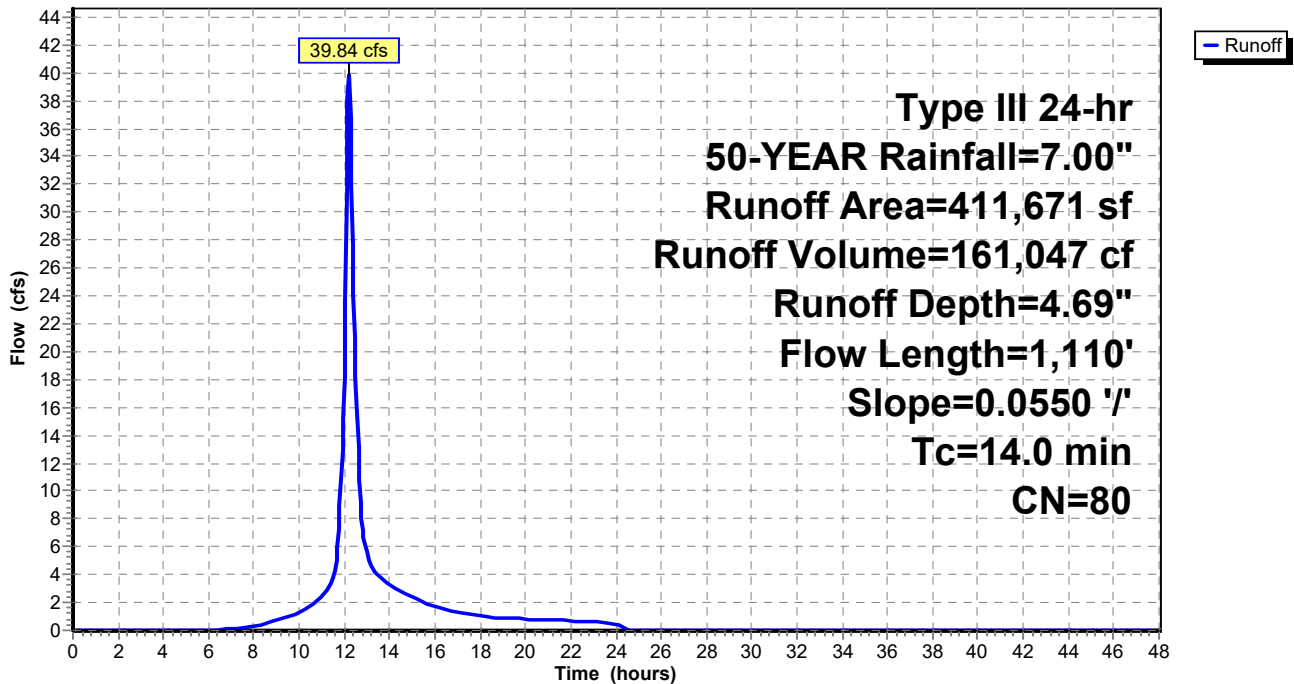
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 50-YEAR Rainfall=7.00"

Area (sf)	CN	Description
394,902	80	Pasture/grassland/range, Good, HSG D
16,769	74	Pasture/grassland/range, Good, HSG C
411,671	80	Weighted Average
411,671		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.2	50	0.0550	0.26		Sheet Flow, Range n= 0.130 P2= 3.40"
10.8	1,060	0.0550	1.64		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
14.0	1,110	Total			

Subcatchment 2S: 2

Hydrograph



Summary for Subcatchment 3S: 3

Runoff = 48.89 cfs @ 12.17 hrs, Volume= 186,575 cf, Depth= 4.47"

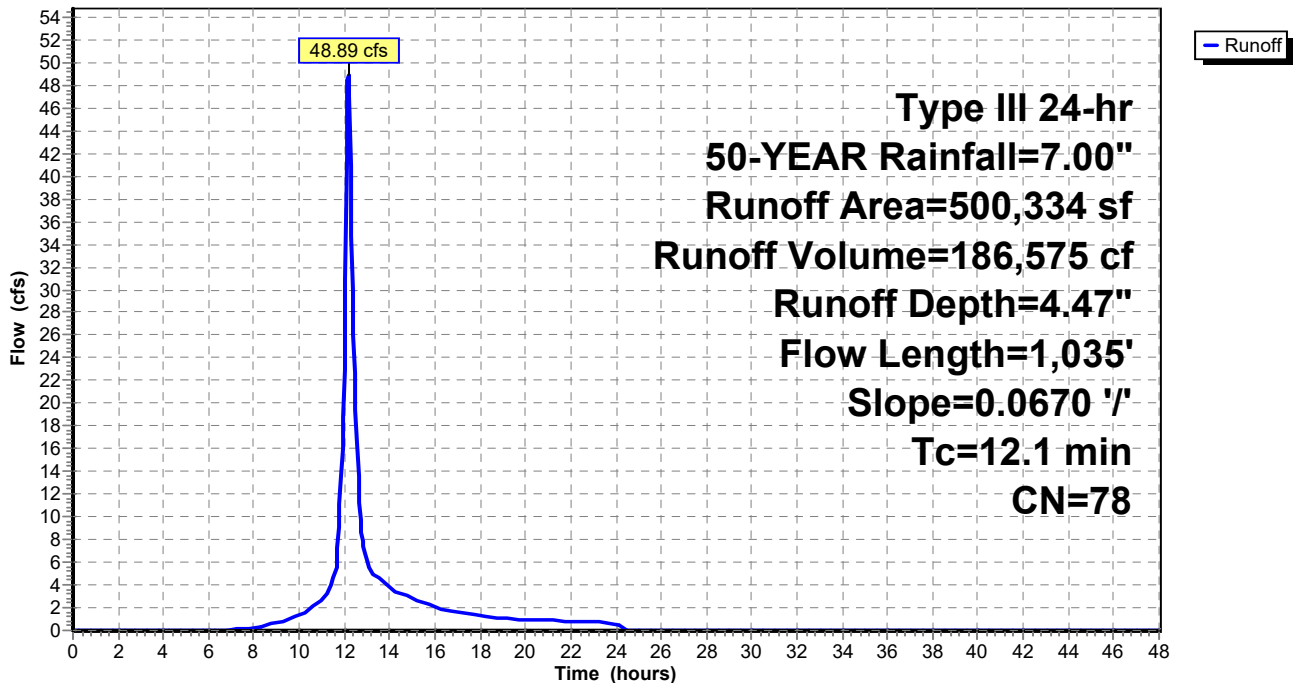
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 50-YEAR Rainfall=7.00"

Area (sf)	CN	Description
345,825	80	Pasture/grassland/range, Good, HSG D
125,296	74	Pasture/grassland/range, Good, HSG C
17,675	77	Woods, Good, HSG D
11,538	70	Woods, Good, HSG C
500,334	78	Weighted Average
500,334		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.0	50	0.0670	0.28		Sheet Flow, Range n= 0.130 P2= 3.40"
9.1	985	0.0670	1.81		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
12.1	1,035	Total			

Subcatchment 3S: 3

Hydrograph



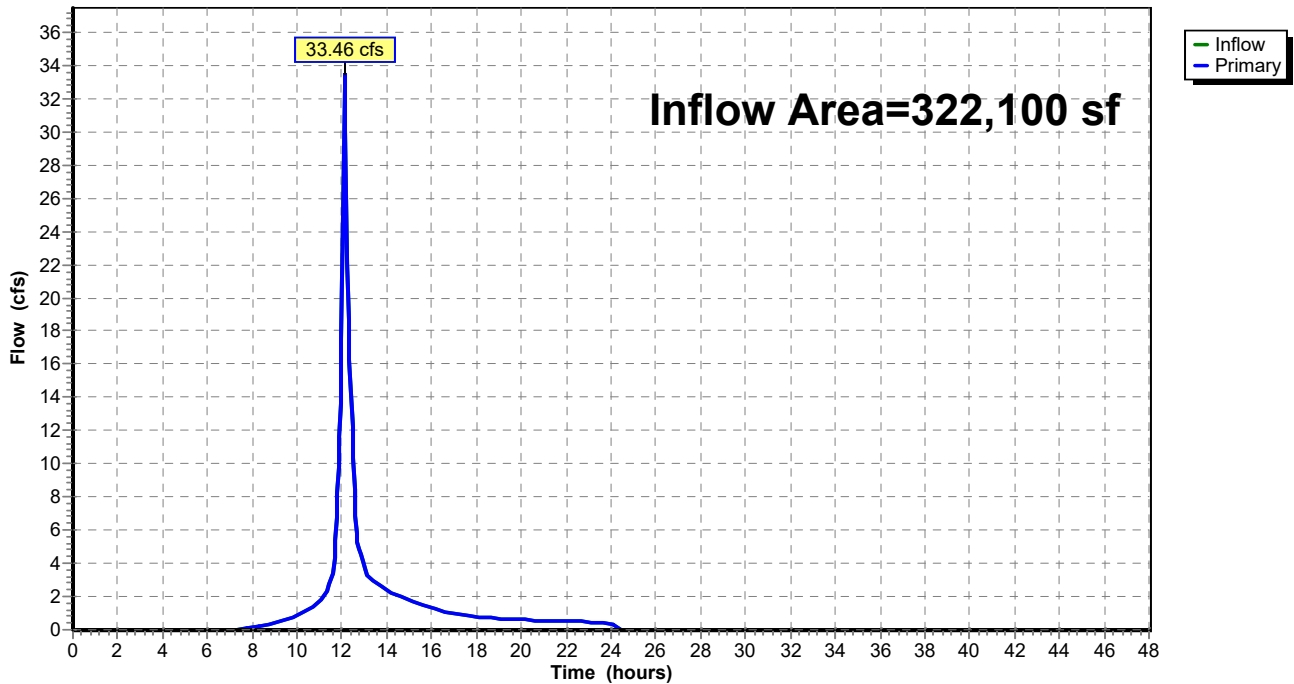
Summary for Link 4L: AP-1

Inflow Area = 322,100 sf, 0.00% Impervious, Inflow Depth = 4.37" for 50-YEAR event
Inflow = 33.46 cfs @ 12.13 hrs, Volume= 117,186 cf
Primary = 33.46 cfs @ 12.13 hrs, Volume= 117,186 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

Link 4L: AP-1

Hydrograph



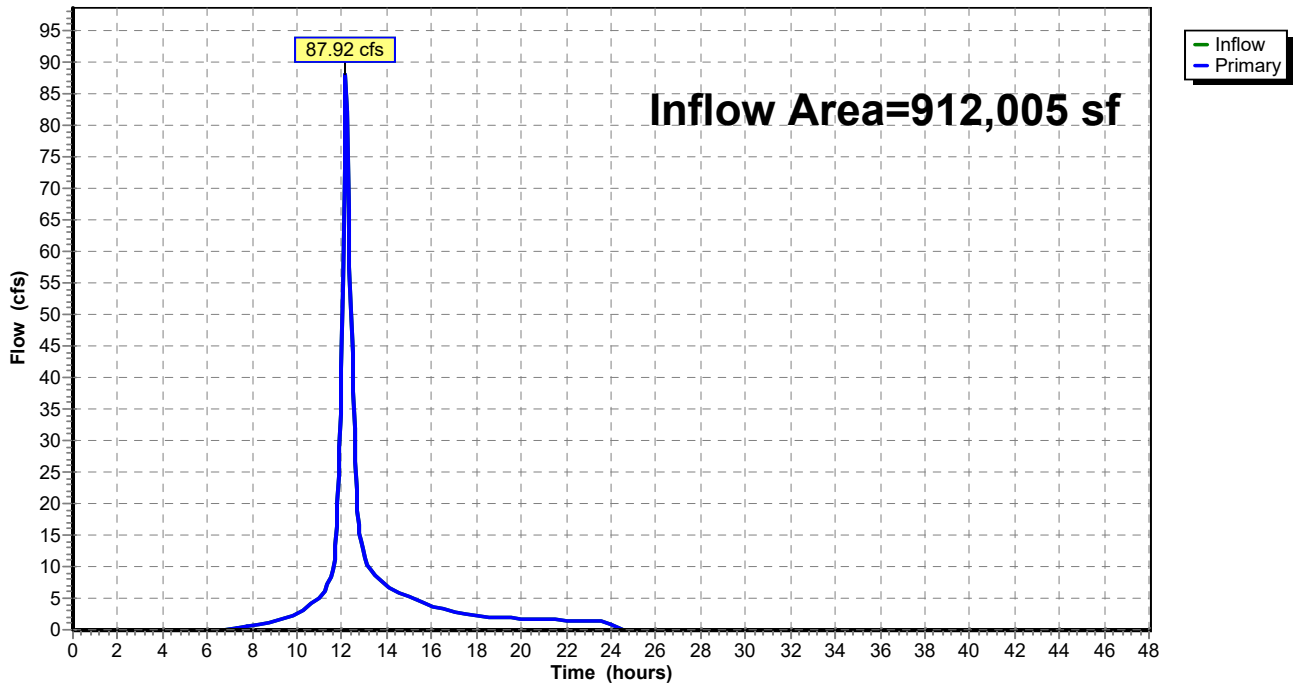
Summary for Link 5L: AP-2

Inflow Area = 912,005 sf, 0.00% Impervious, Inflow Depth = 4.57" for 50-YEAR event
Inflow = 87.92 cfs @ 12.18 hrs, Volume= 347,623 cf
Primary = 87.92 cfs @ 12.18 hrs, Volume= 347,623 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

Link 5L: AP-2

Hydrograph



CT657100-AMARAL-EX

Type III 24-hr 100-YEAR Rainfall=7.90"

Prepared by All Points Technology Corp.

Printed 11/4/2021

HydroCAD® 10.00-24 s/n 07402 © 2018 HydroCAD Software Solutions LLC

Page 23

Time span=0.00-48.00 hrs, dt=0.05 hrs, 961 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: 1 Runoff Area=322,100 sf 0.00% Impervious Runoff Depth=5.18"
Flow Length=780' Slope=0.0800 '/' Tc=8.9 min CN=77 Runoff=39.57 cfs 139,112 cf

Subcatchment 2S: 2 Runoff Area=411,671 sf 0.00% Impervious Runoff Depth=5.53"
Flow Length=1,110' Slope=0.0550 '/' Tc=14.0 min CN=80 Runoff=46.70 cfs 189,757 cf

Subcatchment 3S: 3 Runoff Area=500,334 sf 0.00% Impervious Runoff Depth=5.30"
Flow Length=1,035' Slope=0.0670 '/' Tc=12.1 min CN=78 Runoff=57.67 cfs 220,925 cf

Link 4L: AP-1 Inflow=39.57 cfs 139,112 cf
Primary=39.57 cfs 139,112 cf

Link 5L: AP-2 Inflow=103.41 cfs 410,682 cf
Primary=103.41 cfs 410,682 cf

Total Runoff Area = 1,234,105 sf Runoff Volume = 549,794 cf Average Runoff Depth = 5.35"
100.00% Pervious = 1,234,105 sf 0.00% Impervious = 0 sf

Summary for Subcatchment 1S: 1

Runoff = 39.57 cfs @ 12.13 hrs, Volume= 139,112 cf, Depth= 5.18"

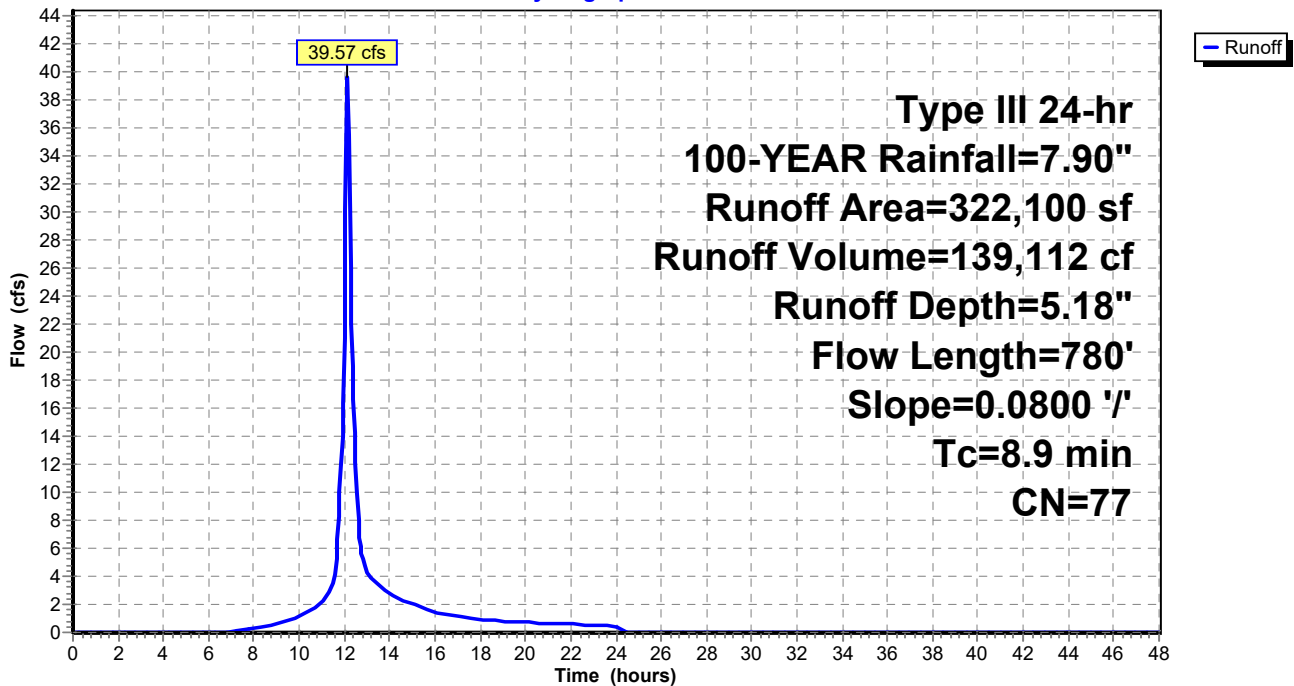
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-YEAR Rainfall=7.90"

Area (sf)	CN	Description
269,471	80	Pasture/grassland/range, Good, HSG D
52,629	61	Pasture/grassland/range, Good, HSG B
322,100	77	Weighted Average
322,100		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.8	50	0.0800	0.30		Sheet Flow, Range n= 0.130 P2= 3.40"
6.1	730	0.0800	1.98		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
8.9	780	Total			

Subcatchment 1S: 1

Hydrograph



Summary for Subcatchment 2S: 2

Runoff = 46.70 cfs @ 12.19 hrs, Volume= 189,757 cf, Depth= 5.53"

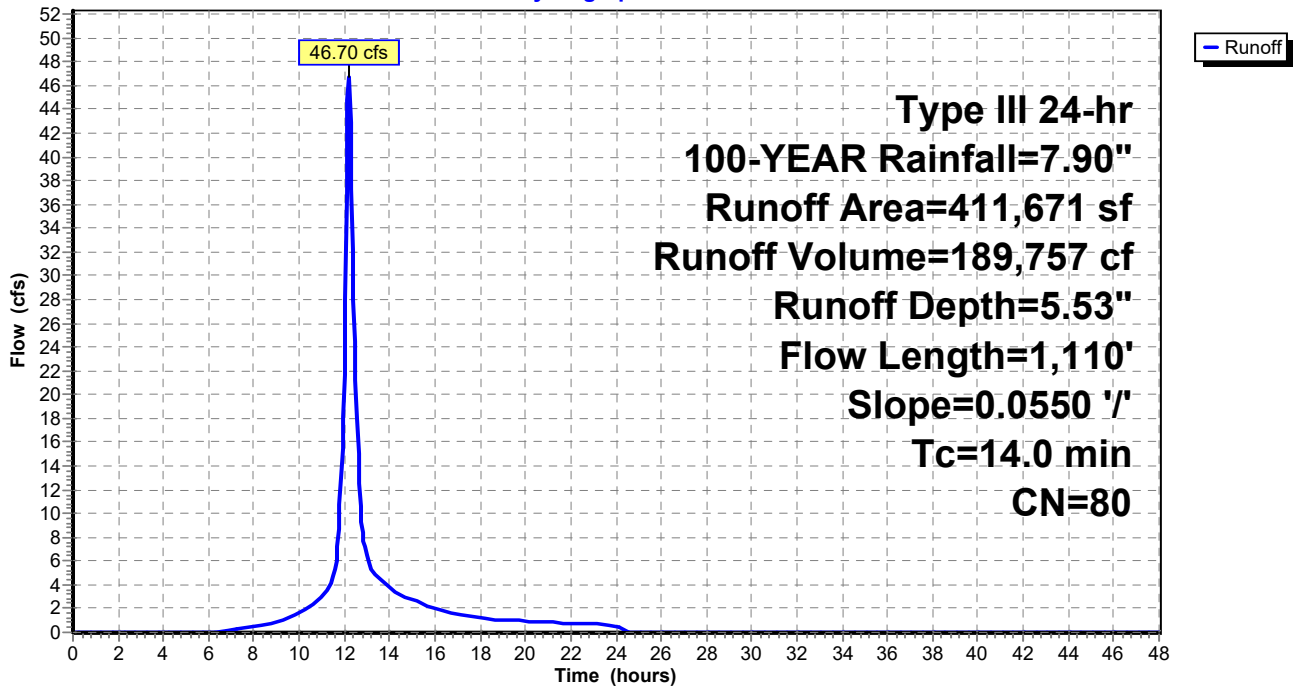
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
 Type III 24-hr 100-YEAR Rainfall=7.90"

Area (sf)	CN	Description
394,902	80	Pasture/grassland/range, Good, HSG D
16,769	74	Pasture/grassland/range, Good, HSG C
411,671	80	Weighted Average
411,671		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.2	50	0.0550	0.26		Sheet Flow, Range n= 0.130 P2= 3.40"
10.8	1,060	0.0550	1.64		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
14.0	1,110	Total			

Subcatchment 2S: 2

Hydrograph



Summary for Subcatchment 3S: 3

Runoff = 57.67 cfs @ 12.17 hrs, Volume= 220,925 cf, Depth= 5.30"

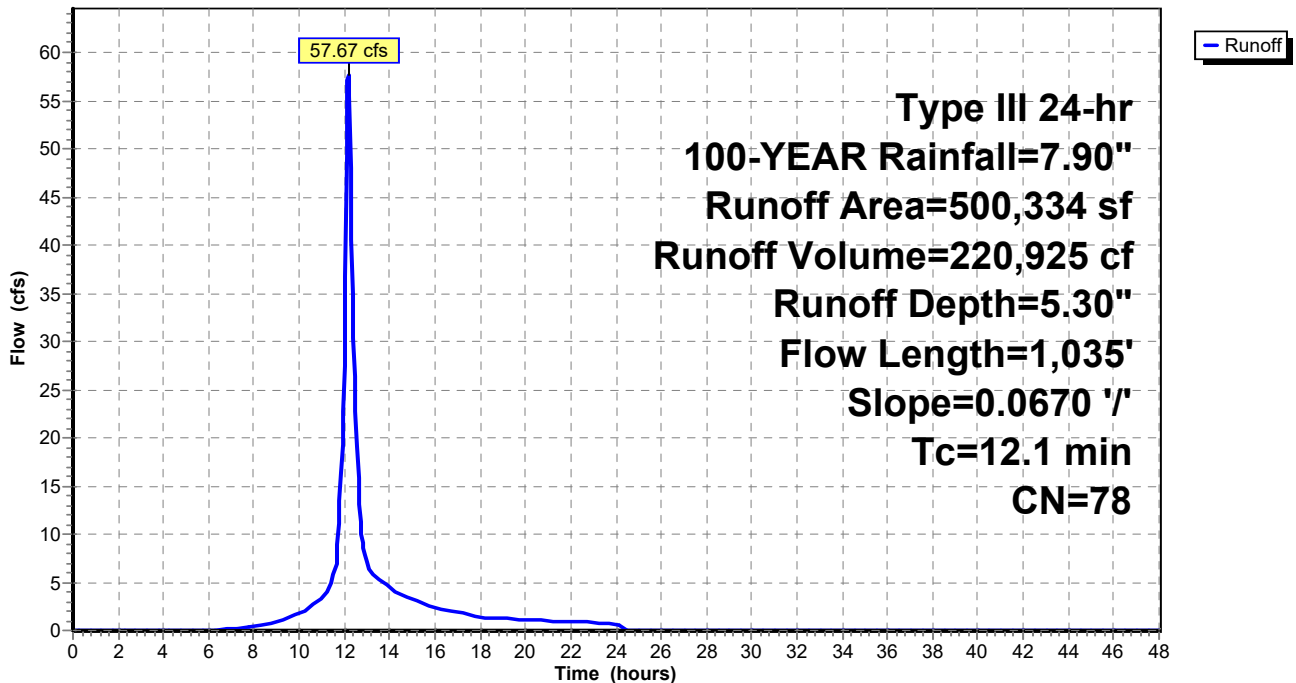
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-YEAR Rainfall=7.90"

Area (sf)	CN	Description
345,825	80	Pasture/grassland/range, Good, HSG D
125,296	74	Pasture/grassland/range, Good, HSG C
17,675	77	Woods, Good, HSG D
11,538	70	Woods, Good, HSG C
500,334	78	Weighted Average
500,334		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.0	50	0.0670	0.28		Sheet Flow, Range n= 0.130 P2= 3.40"
9.1	985	0.0670	1.81		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
12.1	1,035	Total			

Subcatchment 3S: 3

Hydrograph



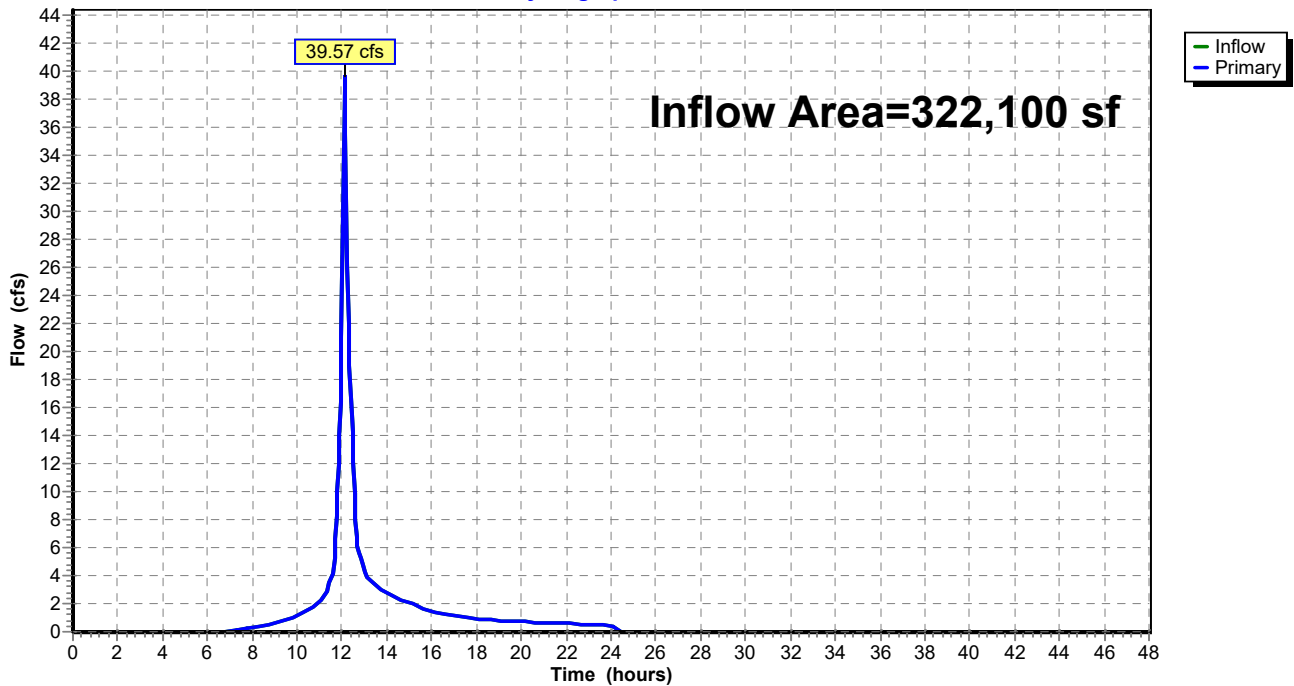
Summary for Link 4L: AP-1

Inflow Area = 322,100 sf, 0.00% Impervious, Inflow Depth = 5.18" for 100-YEAR event
Inflow = 39.57 cfs @ 12.13 hrs, Volume= 139,112 cf
Primary = 39.57 cfs @ 12.13 hrs, Volume= 139,112 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

Link 4L: AP-1

Hydrograph



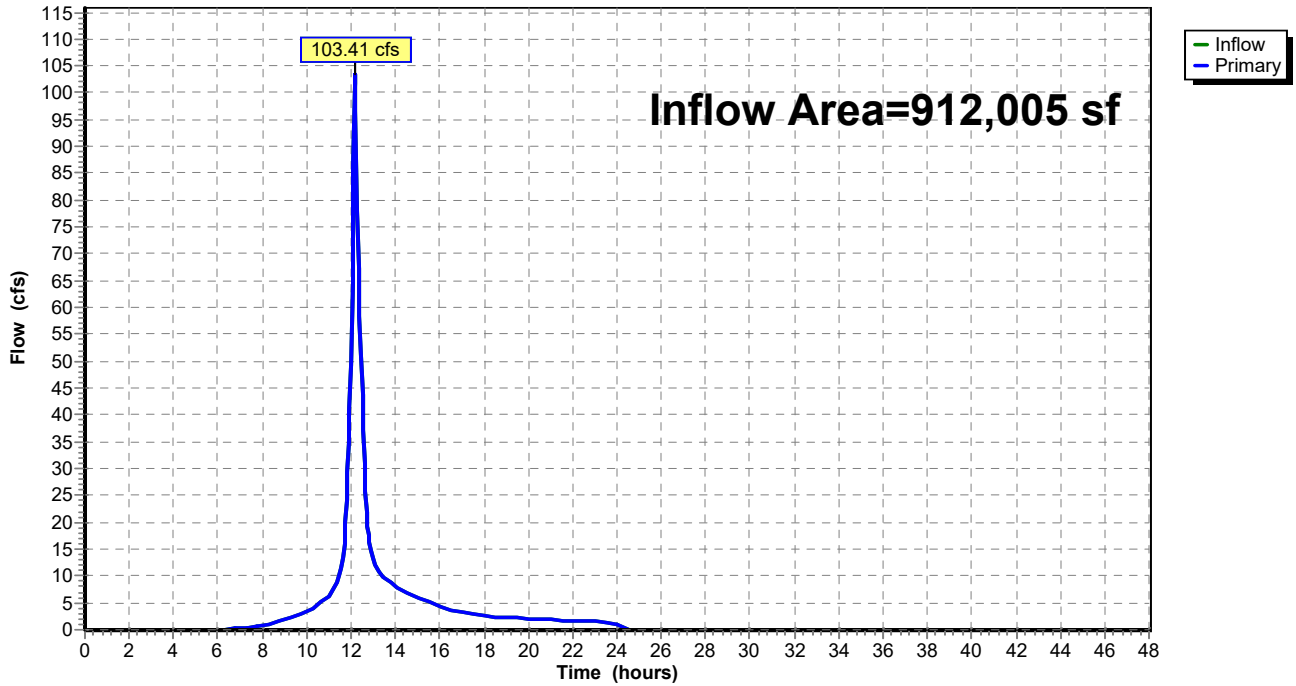
Summary for Link 5L: AP-2

Inflow Area = 912,005 sf, 0.00% Impervious, Inflow Depth = 5.40" for 100-YEAR event
Inflow = 103.41 cfs @ 12.18 hrs, Volume= 410,682 cf
Primary = 103.41 cfs @ 12.18 hrs, Volume= 410,682 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

Link 5L: AP-2

Hydrograph



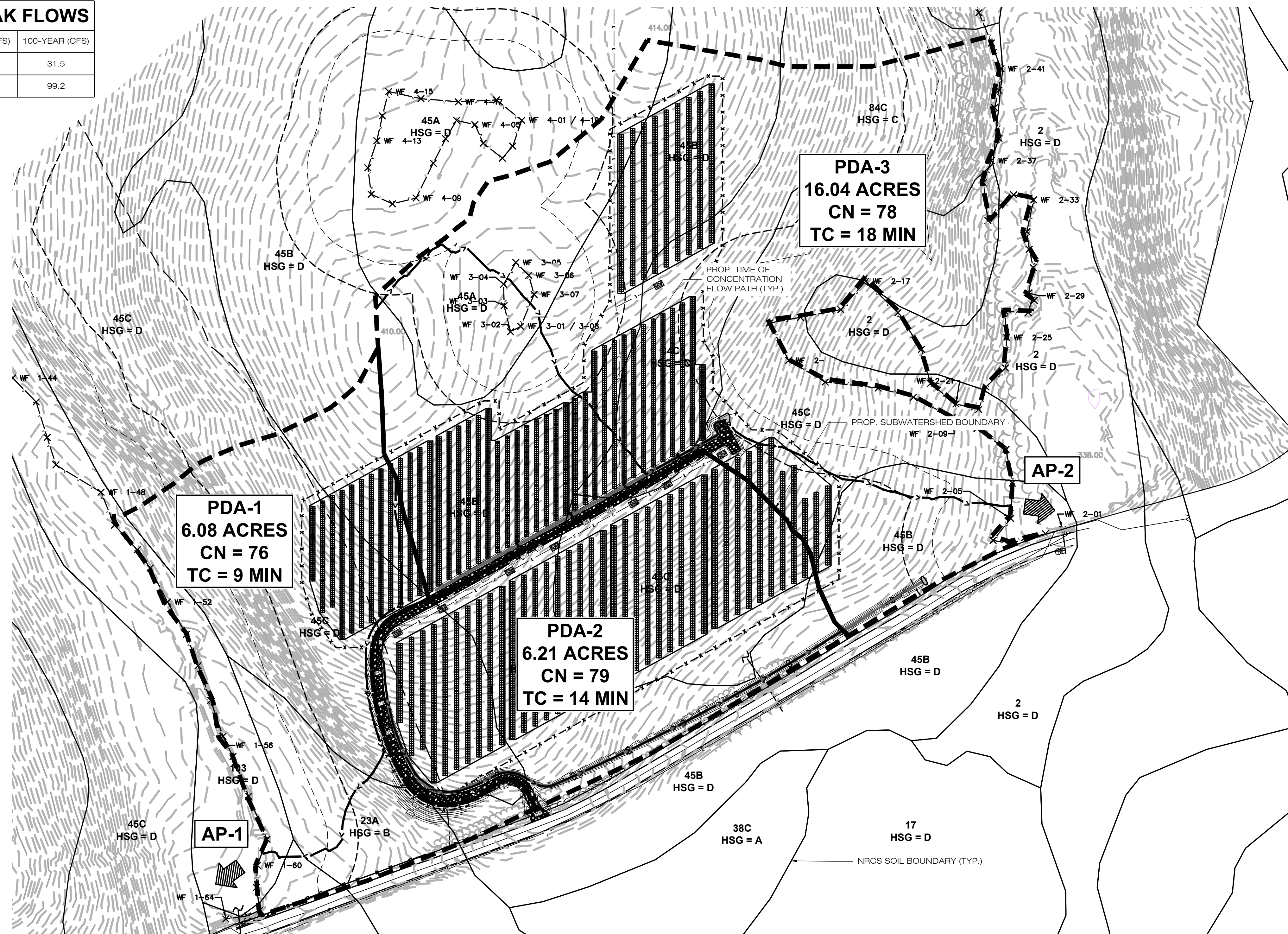
**APPENDIX C: PROPOSED DRAINAGE AREA MAP (PDA-1) &
HYDROLOGIC COMPUTATION (HYDROCAD)**

PROPOSED DRAINAGE AREAS

	TOTAL AREA (ACRES)	COMPOSITE CN	TC (MINS.)
PDA-1	6.08	76	9
PDA-2	6.21	79	14
PDA-3	16.04	78	18

PROPOSED CONDITIONS PEAK FLOWS

ANALYSIS POINT	2-YEAR (CFS)	25-YEAR (CFS)	50-YEAR (CFS)	100-YEAR (CFS)
AP-1	7.9	22.2	26.6	31.5
AP-2	26.4	70.6	84.2	99.2



1 PROPOSED DRAINAGE AREA MAP
 SCALE: 1" = 100'-0"
 (IN FEET) 1 inch = 100 ft.



888 PROSPECT STREET
 LA JOLLA, CA 92037
 OFFICE: (619) 363-3080



567 VAUXHAUL STREET EXTENSION - SUITE 311
 WATERFORD, CT 06385 PHONE: (860)-663-1697
 WWW.ALLPOINTSTECH.COM FAX: (860)-663-0935

PERMIT SET

NO	DATE	REVISION
0	11/05/21	IFP
1		
2		
3		
4		
5		
6		

DESIGN PROFESSIONAL OF RECORD
 PROF: KEVIN A. MCCAFFERY, PE
 COMP: ALL-POINTS TECHNOLOGY CORPORATION
 ADD: 567 VAUXHAUL STREET EXTENSION - SUITE 311 WATERFORD, CT 06385

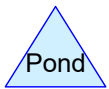
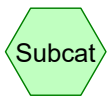
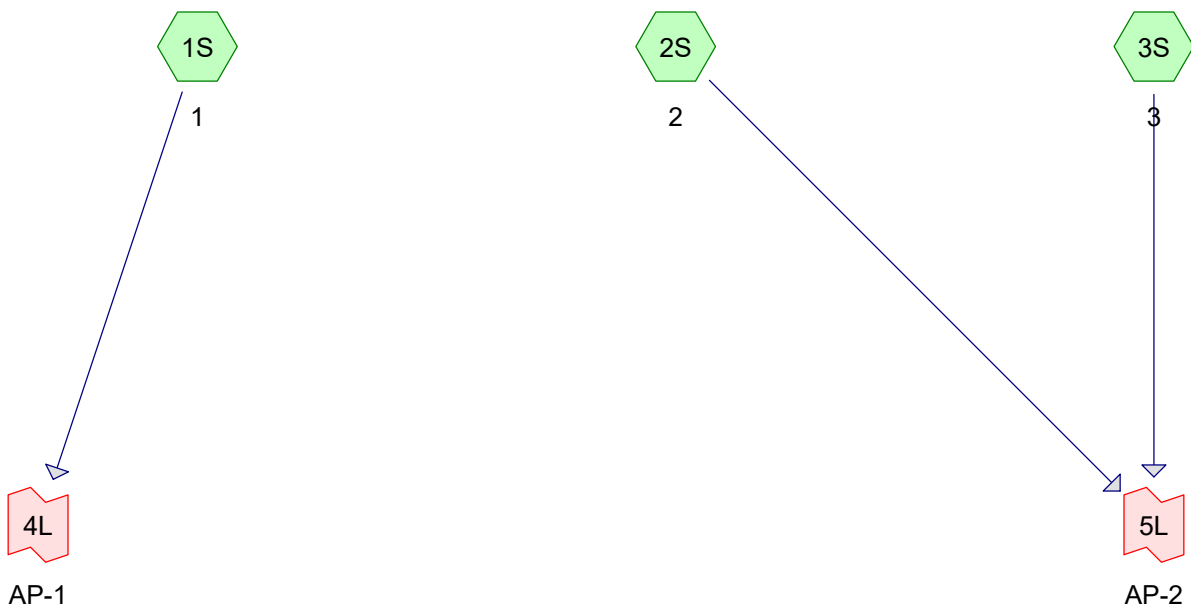
OWNER: ANTONIO & MARY AMARAL
 ADDRESS: 254 POMFRET ROAD POMFRET CENTER, CT 06259

AMARAL SOLAR
 SITE: 254 PUTNAM ROAD
 ADDRESS: POMFRET CENTER, CT 06259
 APT FILING NUMBER: CT657100

DRAWN BY: MT
 DATE: 11/05/21 CHECKED BY: KAM

SHEET TITLE:
 PROPOSED DRAINAGE AREA MAP

SHEET NUMBER:
 PDA-1



Routing Diagram for CT657100-AMARAL-PR
 Prepared by All Points Technology Corp., Printed 11/4/2021
 HydroCAD® 10.00-24 s/n 07402 © 2018 HydroCAD Software Solutions LLC

CT657100-AMARAL-PR

Prepared by All Points Technology Corp.

HydroCAD® 10.00-24 s/n 07402 © 2018 HydroCAD Software Solutions LLC

Printed 11/4/2021

Page 2

Area Listing (all nodes)

Area (sq-ft)	CN	Description (subcatchment-numbers)
19,278	96	Gravel surface, HSG D (1S, 2S, 3S)
53,296	75	Meadow, non-grazed, HSG C/D (2S, 3S)
411,022	78	Meadow, non-grazed, HSG D (1S, 2S, 3S)
52,629	61	Pasture/grassland/range, Good, HSG B (1S)
86,604	74	Pasture/grassland/range, Good, HSG C (3S)
580,863	80	Pasture/grassland/range, Good, HSG D (1S, 2S, 3S)
1,200	98	Unconnected pavement, HSG D (2S, 3S)
11,538	70	Woods, Good, HSG C (3S)
17,675	77	Woods, Good, HSG D (3S)
1,234,105	78	TOTAL AREA

CT657100-AMARAL-PR

Prepared by All Points Technology Corp.

HydroCAD® 10.00-24 s/n 07402 © 2018 HydroCAD Software Solutions LLC

Printed 11/4/2021

Page 3

Soil Listing (all nodes)

Area (sq-ft)	Soil Group	Subcatchment Numbers
0	HSG A	
52,629	HSG B	1S
151,438	HSG C	2S, 3S
1,030,038	HSG D	1S, 2S, 3S
0	Other	
1,234,105		TOTAL AREA

CT657100-AMARAL-PR

Prepared by All Points Technology Corp.

HydroCAD® 10.00-24 s/n 07402 © 2018 HydroCAD Software Solutions LLC

Printed 11/4/2021

Page 4

Ground Covers (all nodes)

HSG-A (sq-ft)	HSG-B (sq-ft)	HSG-C (sq-ft)	HSG-D (sq-ft)	Other (sq-ft)	Total (sq-ft)	Ground Cover
0	0	0	19,278	0	19,278	Gravel surface
0	0	53,296	411,022	0	464,318	Meadow, non-grazed
0	52,629	86,604	580,863	0	720,096	Pasture/grassland /range, Good
0	0	0	1,200	0	1,200	Unconnected pavement
0	0	11,538	17,675	0	29,213	Woods, Good
0	52,629	151,438	1,030,038	0	1,234,105	TOTAL AREA

CT657100-AMARAL-PR

Type III 24-hr 2-YEAR Rainfall=3.40"

Prepared by All Points Technology Corp.

Printed 11/4/2021

HydroCAD® 10.00-24 s/n 07402 © 2018 HydroCAD Software Solutions LLC

Page 5

Time span=0.00-48.00 hrs, dt=0.05 hrs, 961 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: 1 Runoff Area=264,701 sf 0.00% Impervious Runoff Depth=1.29"
Flow Length=805' Slope=0.0770 '/' Tc=9.3 min CN=76 Runoff=7.88 cfs 28,527 cf

Subcatchment 2S: 2 Runoff Area=270,517 sf 0.33% Impervious Runoff Depth=1.49"
Flow Length=945' Slope=0.0400 '/' Tc=14.4 min CN=79 Runoff=8.18 cfs 33,560 cf

Subcatchment 3S: 3 Runoff Area=698,887 sf 0.04% Impervious Runoff Depth=1.42"
Flow Length=1,385' Slope=0.0500 '/' Tc=17.6 min CN=78 Runoff=18.57 cfs 82,807 cf

Link 4L: AP-1 Inflow=7.88 cfs 28,527 cf
Primary=7.88 cfs 28,527 cf

Link 5L: AP-2 Inflow=26.42 cfs 116,367 cf
Primary=26.42 cfs 116,367 cf

Total Runoff Area = 1,234,105 sf Runoff Volume = 144,894 cf Average Runoff Depth = 1.41"
99.90% Pervious = 1,232,905 sf 0.10% Impervious = 1,200 sf

Summary for Subcatchment 1S: 1

Runoff = 7.88 cfs @ 12.14 hrs, Volume= 28,527 cf, Depth= 1.29"

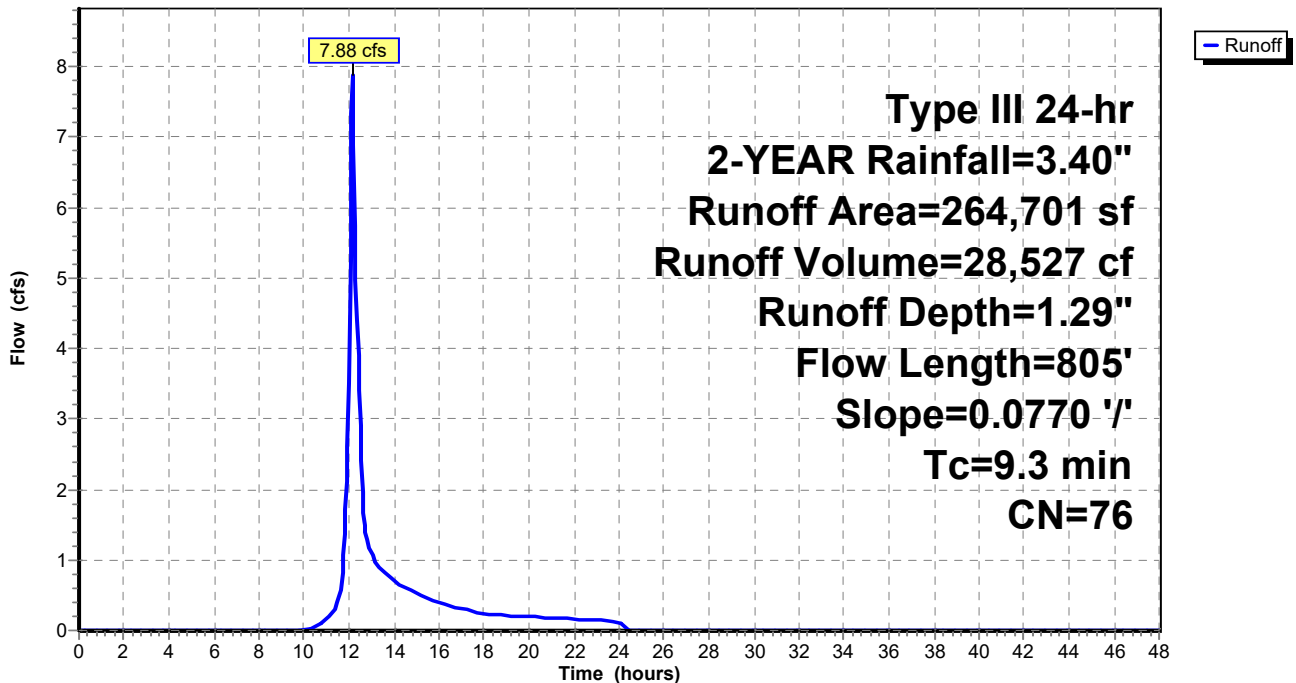
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-YEAR Rainfall=3.40"

Area (sf)	CN	Description
163,180	80	Pasture/grassland/range, Good, HSG D
48,017	78	Meadow, non-grazed, HSG D
875	96	Gravel surface, HSG D
52,629	61	Pasture/grassland/range, Good, HSG B
264,701	76	Weighted Average
264,701		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.8	50	0.0770	0.29		Sheet Flow, Range n= 0.130 P2= 3.40"
6.5	755	0.0770	1.94		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
9.3	805	Total			

Subcatchment 1S: 1

Hydrograph



Summary for Subcatchment 2S: 2

Runoff = 8.18 cfs @ 12.21 hrs, Volume= 33,560 cf, Depth= 1.49"

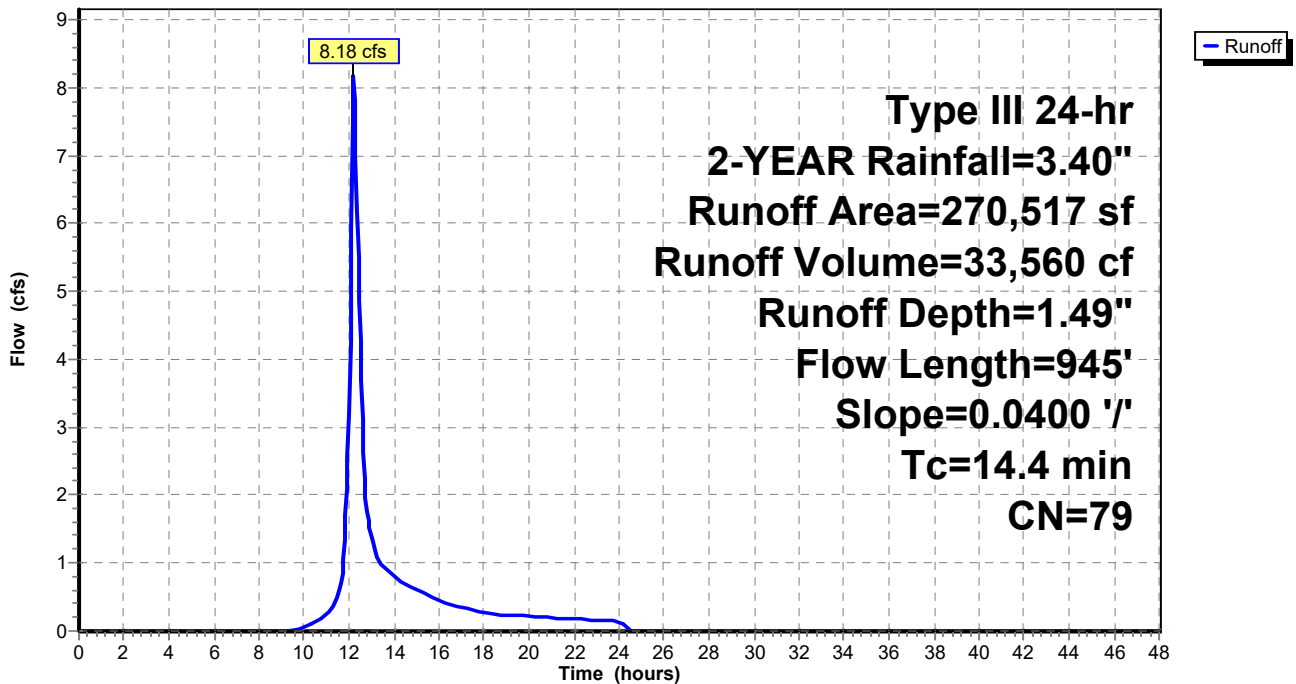
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-YEAR Rainfall=3.40"

Area (sf)	CN	Description
900	98	Unconnected pavement, HSG D
200,066	78	Meadow, non-grazed, HSG D
* 576	75	Meadow, non-grazed, HSG C/D
56,141	80	Pasture/grassland/range, Good, HSG D
12,834	96	Gravel surface, HSG D
270,517	79	Weighted Average
269,617		99.67% Pervious Area
900		0.33% Impervious Area
900		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.7	50	0.0400	0.23		Sheet Flow, Range n= 0.130 P2= 3.40"
10.7	895	0.0400	1.40		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
14.4	945	Total			

Subcatchment 2S: 2

Hydrograph



Summary for Subcatchment 3S: 3

Runoff = 18.57 cfs @ 12.25 hrs, Volume= 82,807 cf, Depth= 1.42"

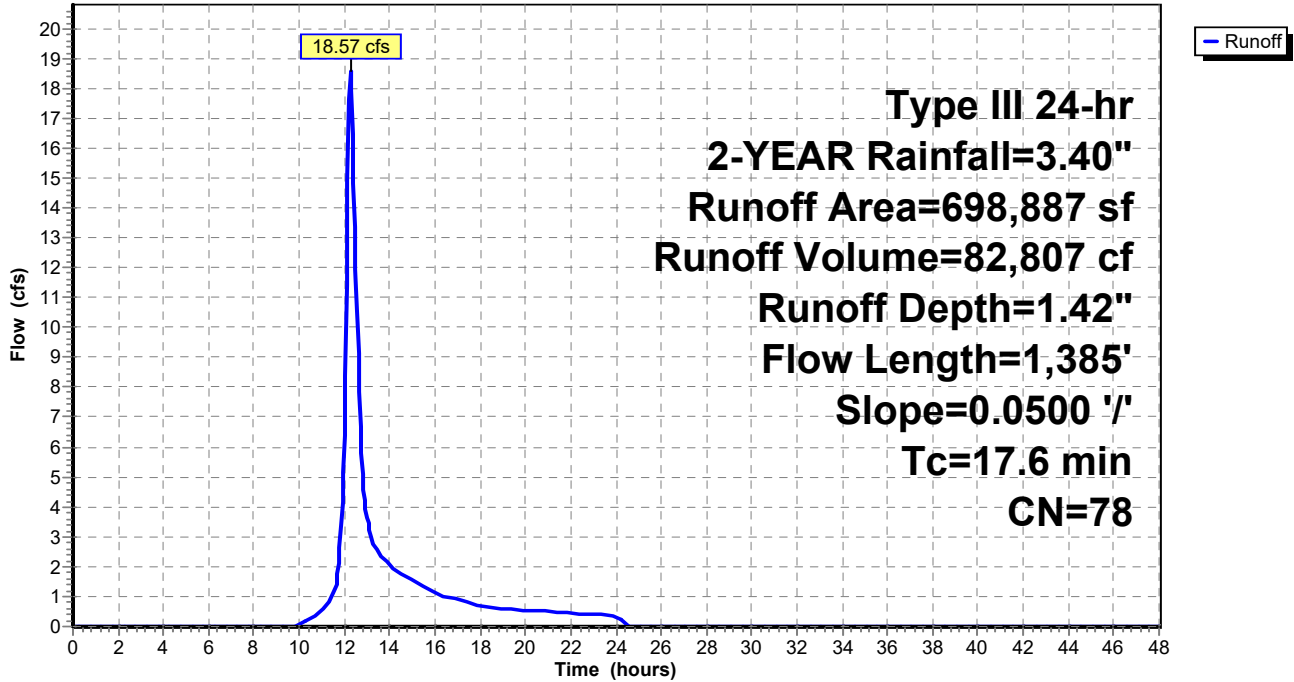
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
 Type III 24-hr 2-YEAR Rainfall=3.40"

Area (sf)	CN	Description
17,675	77	Woods, Good, HSG D
11,538	70	Woods, Good, HSG C
162,939	78	Meadow, non-grazed, HSG D
* 52,720	75	Meadow, non-grazed, HSG C/D
300	98	Unconnected pavement, HSG D
5,569	96	Gravel surface, HSG D
361,542	80	Pasture/grassland/range, Good, HSG D
86,604	74	Pasture/grassland/range, Good, HSG C
698,887	78	Weighted Average
698,587		99.96% Pervious Area
300		0.04% Impervious Area
300		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.4	50	0.0500	0.25		Sheet Flow, Range n= 0.130 P2= 3.40"
14.2	1,335	0.0500	1.57		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
17.6	1,385	Total			

Subcatchment 3S: 3

Hydrograph



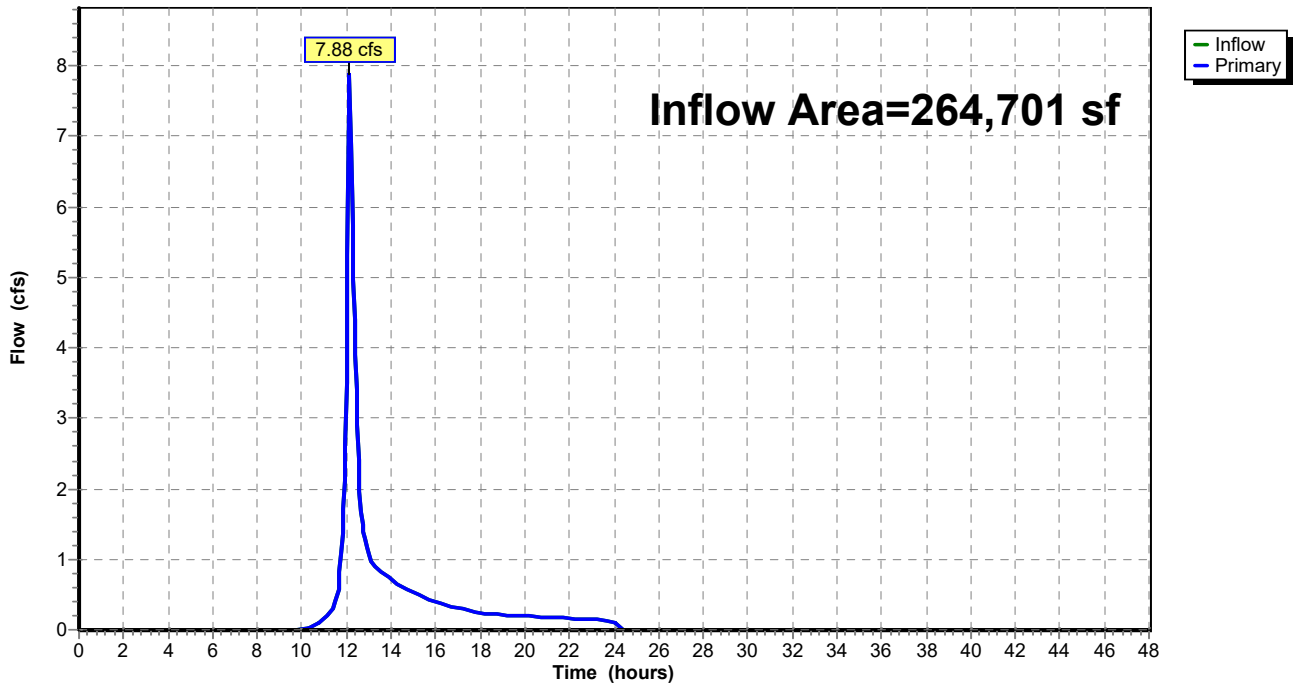
Summary for Link 4L: AP-1

Inflow Area = 264,701 sf, 0.00% Impervious, Inflow Depth = 1.29" for 2-YEAR event
Inflow = 7.88 cfs @ 12.14 hrs, Volume= 28,527 cf
Primary = 7.88 cfs @ 12.14 hrs, Volume= 28,527 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

Link 4L: AP-1

Hydrograph



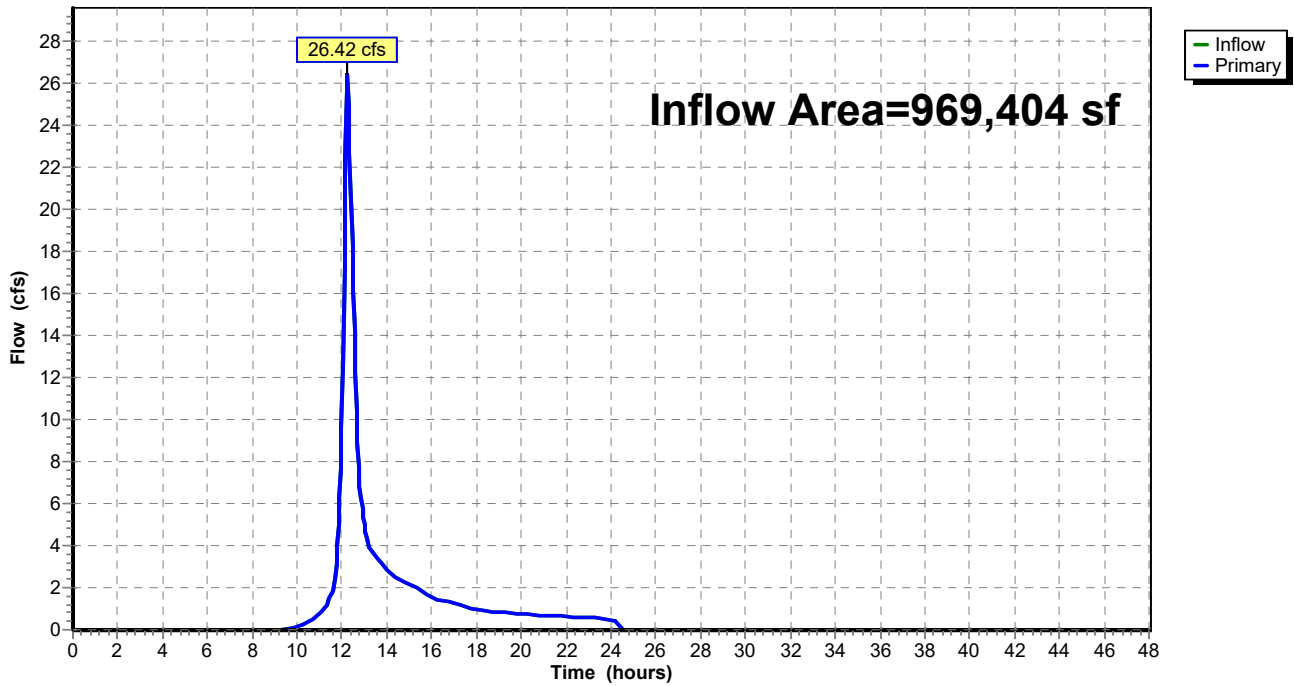
Summary for Link 5L: AP-2

Inflow Area = 969,404 sf, 0.12% Impervious, Inflow Depth = 1.44" for 2-YEAR event
Inflow = 26.42 cfs @ 12.24 hrs, Volume= 116,367 cf
Primary = 26.42 cfs @ 12.24 hrs, Volume= 116,367 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

Link 5L: AP-2

Hydrograph



CT657100-AMARAL-PR

Type III 24-hr 25-YEAR Rainfall=6.20"

Prepared by All Points Technology Corp.

Printed 11/4/2021

HydroCAD® 10.00-24 s/n 07402 © 2018 HydroCAD Software Solutions LLC

Page 12

Time span=0.00-48.00 hrs, dt=0.05 hrs, 961 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: 1 Runoff Area=264,701 sf 0.00% Impervious Runoff Depth=3.55"
Flow Length=805' Slope=0.0770 '/' Tc=9.3 min CN=76 Runoff=22.23 cfs 78,380 cf

Subcatchment 2S: 2 Runoff Area=270,517 sf 0.33% Impervious Runoff Depth=3.86"
Flow Length=945' Slope=0.0400 '/' Tc=14.4 min CN=79 Runoff=21.44 cfs 86,988 cf

Subcatchment 3S: 3 Runoff Area=698,887 sf 0.04% Impervious Runoff Depth=3.76"
Flow Length=1,385' Slope=0.0500 '/' Tc=17.6 min CN=78 Runoff=49.94 cfs 218,759 cf

Link 4L: AP-1 Inflow=22.23 cfs 78,380 cf
Primary=22.23 cfs 78,380 cf

Link 5L: AP-2 Inflow=70.60 cfs 305,747 cf
Primary=70.60 cfs 305,747 cf

Total Runoff Area = 1,234,105 sf Runoff Volume = 384,128 cf Average Runoff Depth = 3.74"
99.90% Pervious = 1,232,905 sf 0.10% Impervious = 1,200 sf

Summary for Subcatchment 1S: 1

Runoff = 22.23 cfs @ 12.13 hrs, Volume= 78,380 cf, Depth= 3.55"

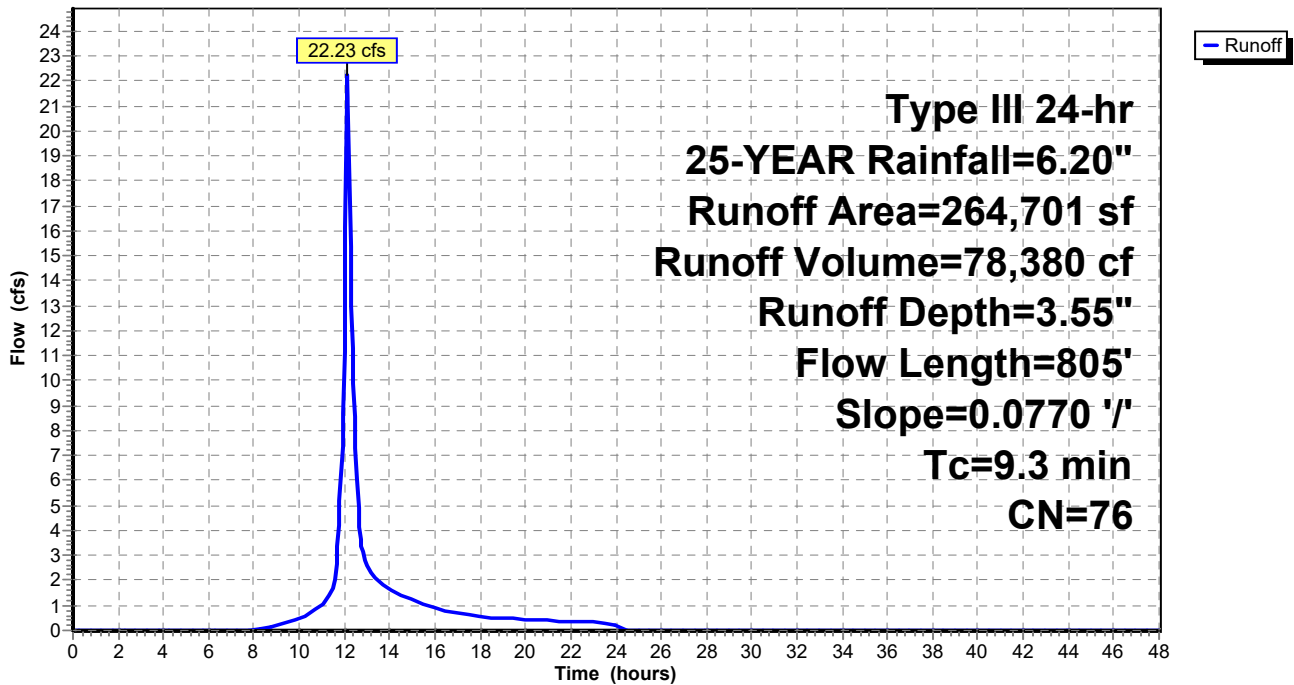
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-YEAR Rainfall=6.20"

Area (sf)	CN	Description
163,180	80	Pasture/grassland/range, Good, HSG D
48,017	78	Meadow, non-grazed, HSG D
875	96	Gravel surface, HSG D
52,629	61	Pasture/grassland/range, Good, HSG B
264,701	76	Weighted Average
264,701		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.8	50	0.0770	0.29		Sheet Flow, Range n= 0.130 P2= 3.40"
6.5	755	0.0770	1.94		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
9.3	805	Total			

Subcatchment 1S: 1

Hydrograph



Summary for Subcatchment 2S: 2

Runoff = 21.44 cfs @ 12.20 hrs, Volume= 86,988 cf, Depth= 3.86"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-YEAR Rainfall=6.20"

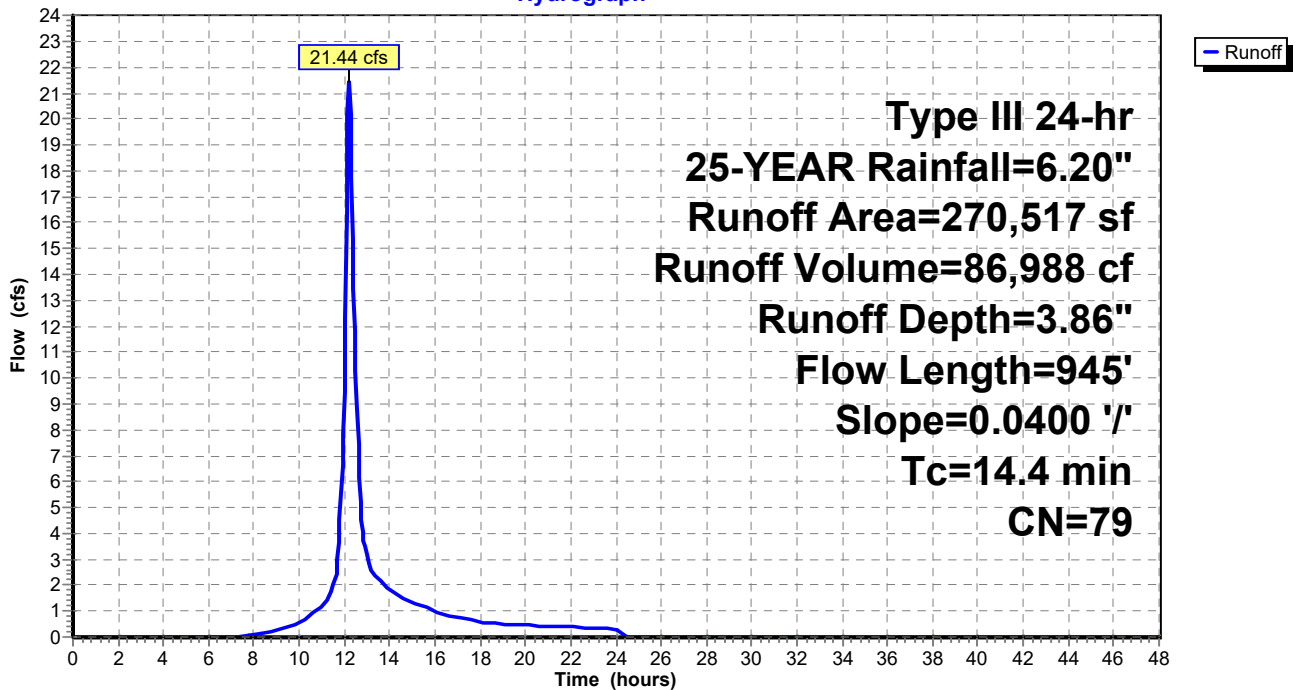
Area (sf)	CN	Description
900	98	Unconnected pavement, HSG D
200,066	78	Meadow, non-grazed, HSG D
* 576	75	Meadow, non-grazed, HSG C/D
56,141	80	Pasture/grassland/range, Good, HSG D
12,834	96	Gravel surface, HSG D

270,517	79	Weighted Average
269,617		99.67% Pervious Area
900		0.33% Impervious Area
900		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.7	50	0.0400	0.23		Sheet Flow, Range n= 0.130 P2= 3.40"
10.7	895	0.0400	1.40		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
14.4	945	Total			

Subcatchment 2S: 2

Hydrograph



Summary for Subcatchment 3S: 3

Runoff = 49.94 cfs @ 12.24 hrs, Volume= 218,759 cf, Depth= 3.76"

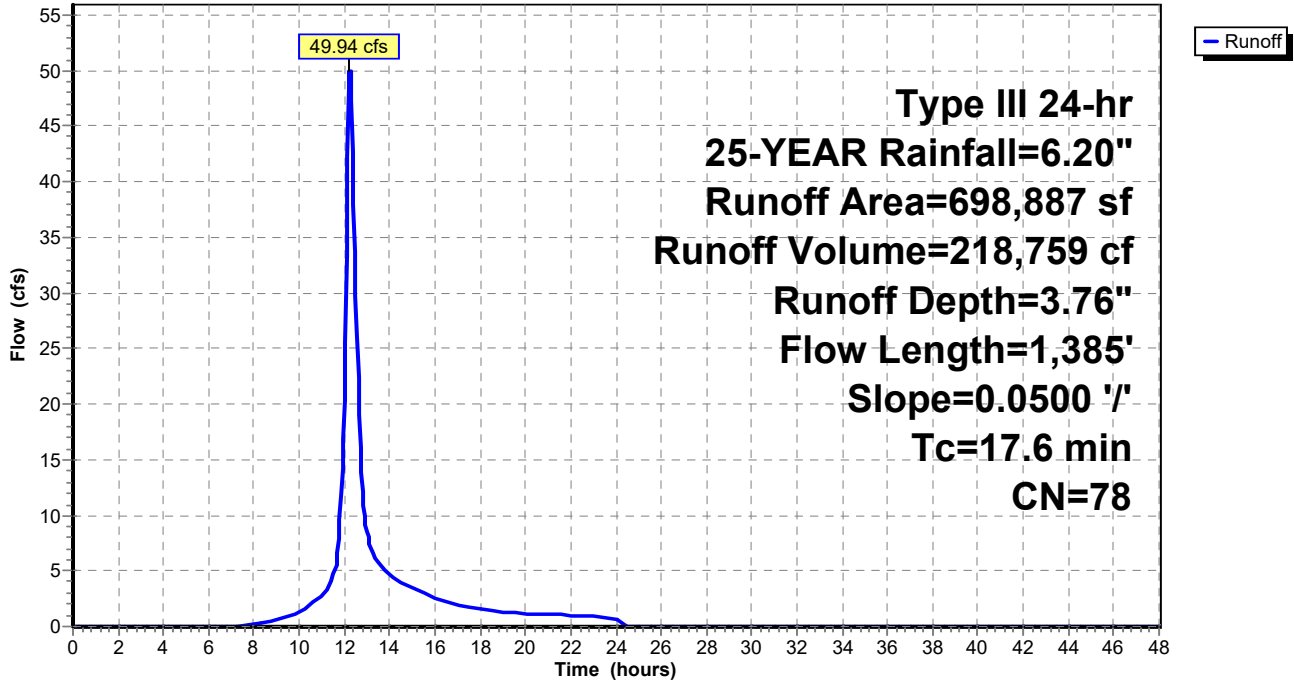
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
 Type III 24-hr 25-YEAR Rainfall=6.20"

Area (sf)	CN	Description
17,675	77	Woods, Good, HSG D
11,538	70	Woods, Good, HSG C
162,939	78	Meadow, non-grazed, HSG D
* 52,720	75	Meadow, non-grazed, HSG C/D
300	98	Unconnected pavement, HSG D
5,569	96	Gravel surface, HSG D
361,542	80	Pasture/grassland/range, Good, HSG D
86,604	74	Pasture/grassland/range, Good, HSG C
698,887	78	Weighted Average
698,587		99.96% Pervious Area
300		0.04% Impervious Area
300		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.4	50	0.0500	0.25		Sheet Flow, Range n= 0.130 P2= 3.40"
14.2	1,335	0.0500	1.57		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
17.6	1,385	Total			

Subcatchment 3S: 3

Hydrograph



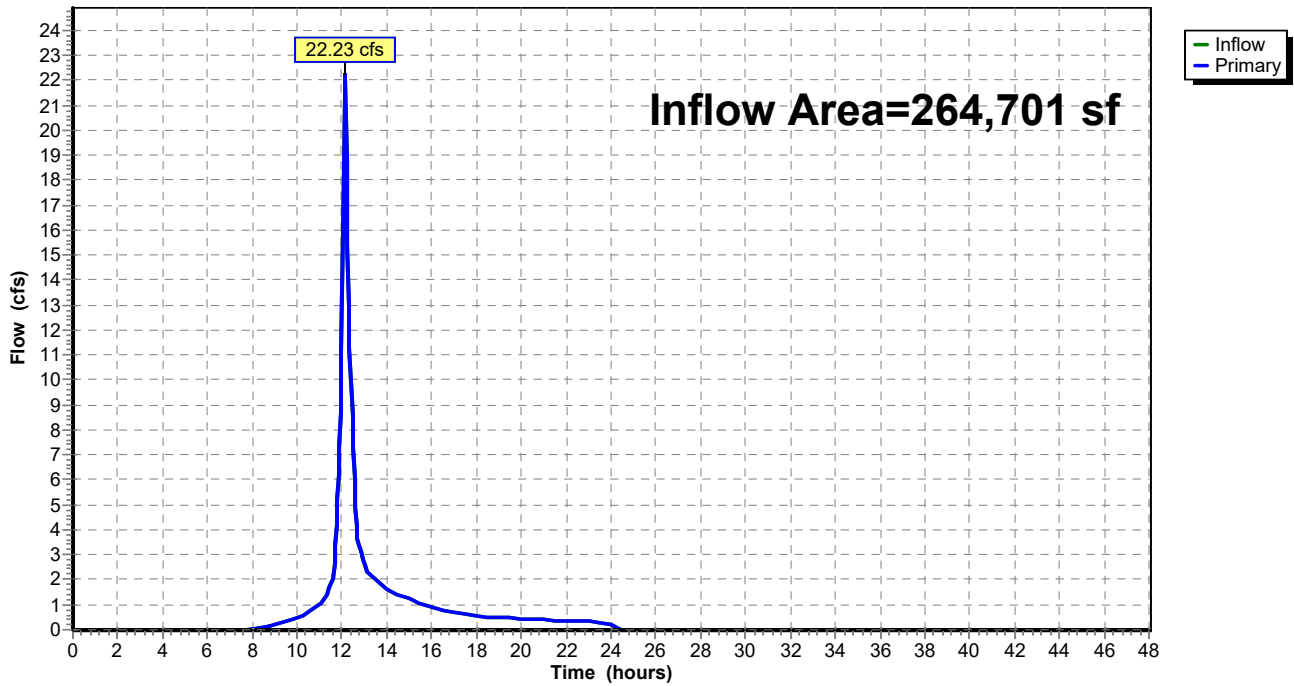
Summary for Link 4L: AP-1

Inflow Area = 264,701 sf, 0.00% Impervious, Inflow Depth = 3.55" for 25-YEAR event
Inflow = 22.23 cfs @ 12.13 hrs, Volume= 78,380 cf
Primary = 22.23 cfs @ 12.13 hrs, Volume= 78,380 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

Link 4L: AP-1

Hydrograph



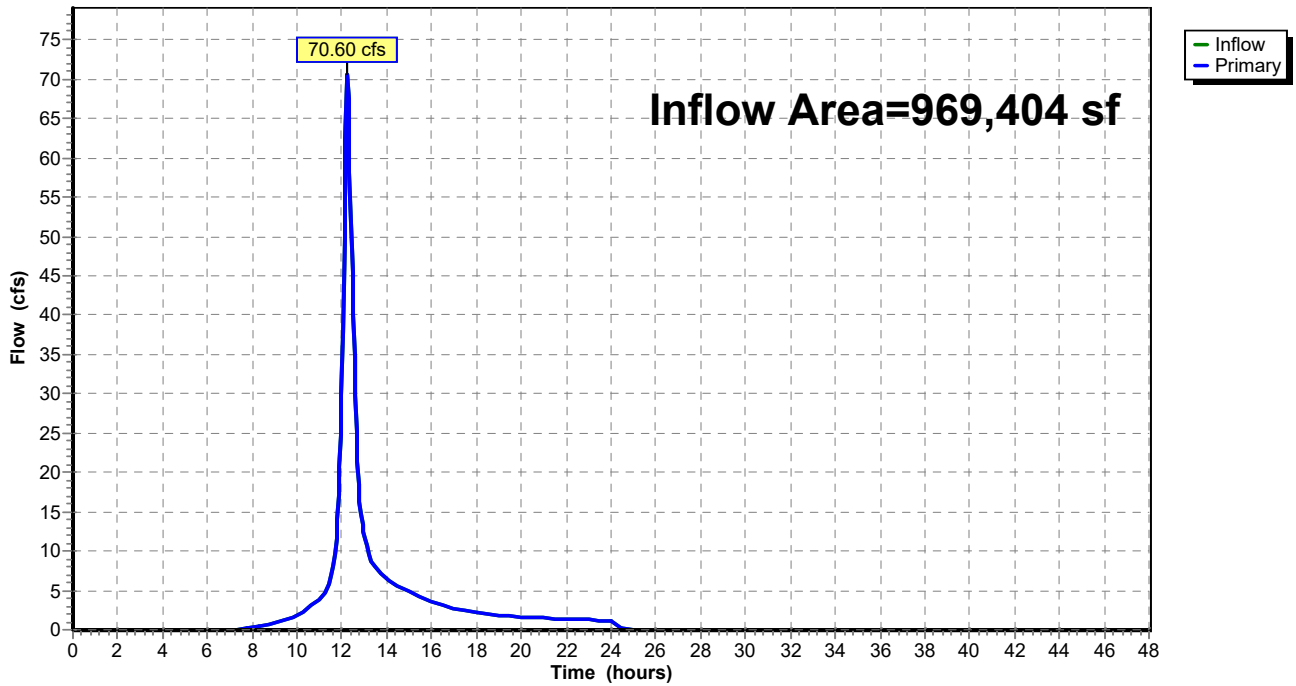
Summary for Link 5L: AP-2

Inflow Area = 969,404 sf, 0.12% Impervious, Inflow Depth = 3.78" for 25-YEAR event
Inflow = 70.60 cfs @ 12.23 hrs, Volume= 305,747 cf
Primary = 70.60 cfs @ 12.23 hrs, Volume= 305,747 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

Link 5L: AP-2

Hydrograph



CT657100-AMARAL-PR

Type III 24-hr 50-YEAR Rainfall=7.00"

Prepared by All Points Technology Corp.

Printed 11/4/2021

HydroCAD® 10.00-24 s/n 07402 © 2018 HydroCAD Software Solutions LLC

Page 19

Time span=0.00-48.00 hrs, dt=0.05 hrs, 961 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: 1 Runoff Area=264,701 sf 0.00% Impervious Runoff Depth=4.26"
Flow Length=805' Slope=0.0770 '/' Tc=9.3 min CN=76 Runoff=26.59 cfs 93,910 cf

Subcatchment 2S: 2 Runoff Area=270,517 sf 0.33% Impervious Runoff Depth=4.58"
Flow Length=945' Slope=0.0400 '/' Tc=14.4 min CN=79 Runoff=25.39 cfs 103,346 cf

Subcatchment 3S: 3 Runoff Area=698,887 sf 0.04% Impervious Runoff Depth=4.47"
Flow Length=1,385' Slope=0.0500 '/' Tc=17.6 min CN=78 Runoff=59.35 cfs 260,616 cf

Link 4L: AP-1 Inflow=26.59 cfs 93,910 cf
Primary=26.59 cfs 93,910 cf

Link 5L: AP-2 Inflow=84.16 cfs 363,962 cf
Primary=84.16 cfs 363,962 cf

Total Runoff Area = 1,234,105 sf Runoff Volume = 457,872 cf Average Runoff Depth = 4.45"
99.90% Pervious = 1,232,905 sf 0.10% Impervious = 1,200 sf

Summary for Subcatchment 1S: 1

Runoff = 26.59 cfs @ 12.13 hrs, Volume= 93,910 cf, Depth= 4.26"

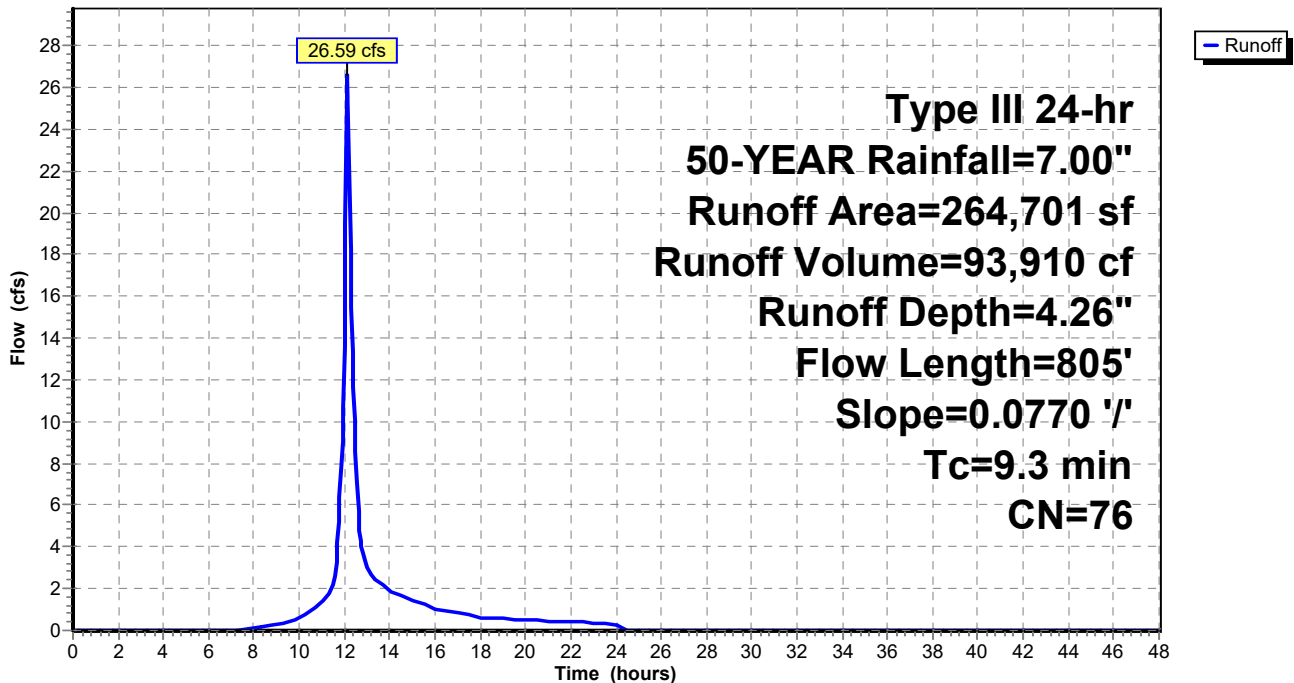
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 50-YEAR Rainfall=7.00"

Area (sf)	CN	Description
163,180	80	Pasture/grassland/range, Good, HSG D
48,017	78	Meadow, non-grazed, HSG D
875	96	Gravel surface, HSG D
52,629	61	Pasture/grassland/range, Good, HSG B
264,701	76	Weighted Average
264,701		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.8	50	0.0770	0.29		Sheet Flow, Range n= 0.130 P2= 3.40"
6.5	755	0.0770	1.94		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
9.3	805	Total			

Subcatchment 1S: 1

Hydrograph



CT657100-AMARAL-PR

Prepared by All Points Technology Corp.

HydroCAD® 10.00-24 s/n 07402 © 2018 HydroCAD Software Solutions LLC

Type III 24-hr 50-YEAR Rainfall=7.00"

Printed 11/4/2021

Page 21

Summary for Subcatchment 2S: 2

Runoff = 25.39 cfs @ 12.20 hrs, Volume= 103,346 cf, Depth= 4.58"

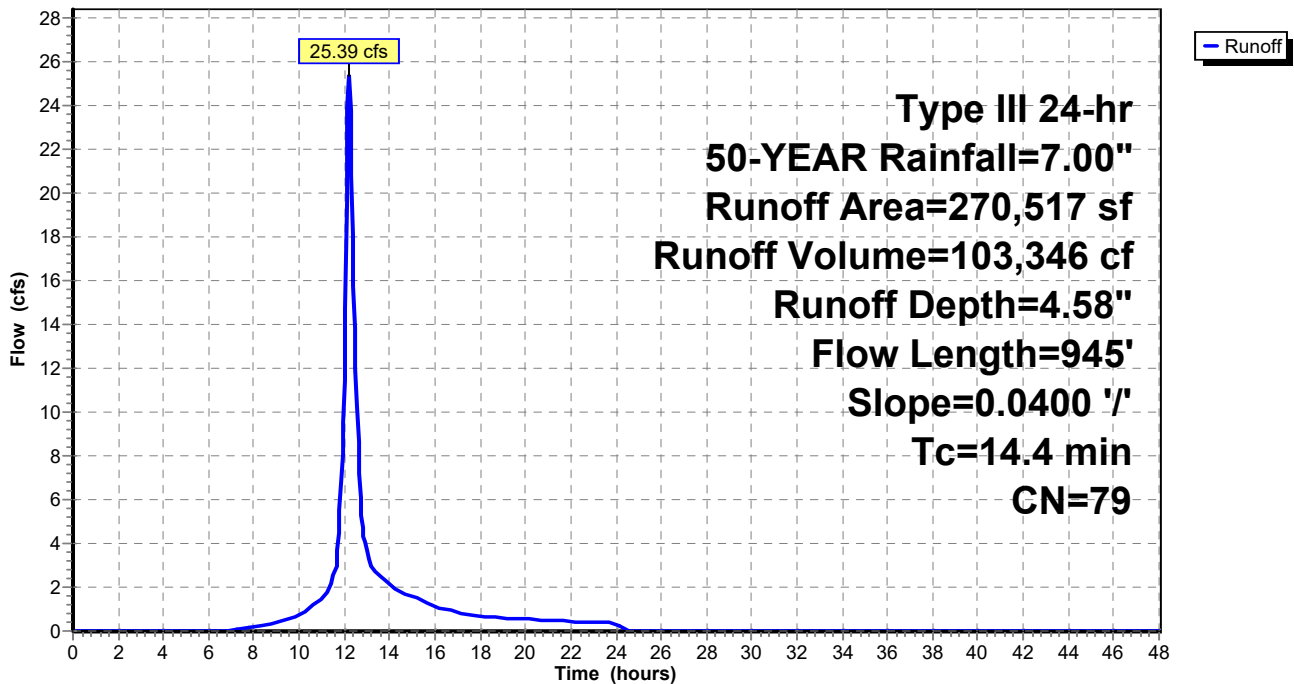
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 50-YEAR Rainfall=7.00"

Area (sf)	CN	Description
900	98	Unconnected pavement, HSG D
200,066	78	Meadow, non-grazed, HSG D
* 576	75	Meadow, non-grazed, HSG C/D
56,141	80	Pasture/grassland/range, Good, HSG D
12,834	96	Gravel surface, HSG D
270,517	79	Weighted Average
269,617		99.67% Pervious Area
900		0.33% Impervious Area
900		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.7	50	0.0400	0.23		Sheet Flow, Range n= 0.130 P2= 3.40"
10.7	895	0.0400	1.40		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
14.4	945	Total			

Subcatchment 2S: 2

Hydrograph



Summary for Subcatchment 3S: 3

Runoff = 59.35 cfs @ 12.24 hrs, Volume= 260,616 cf, Depth= 4.47"

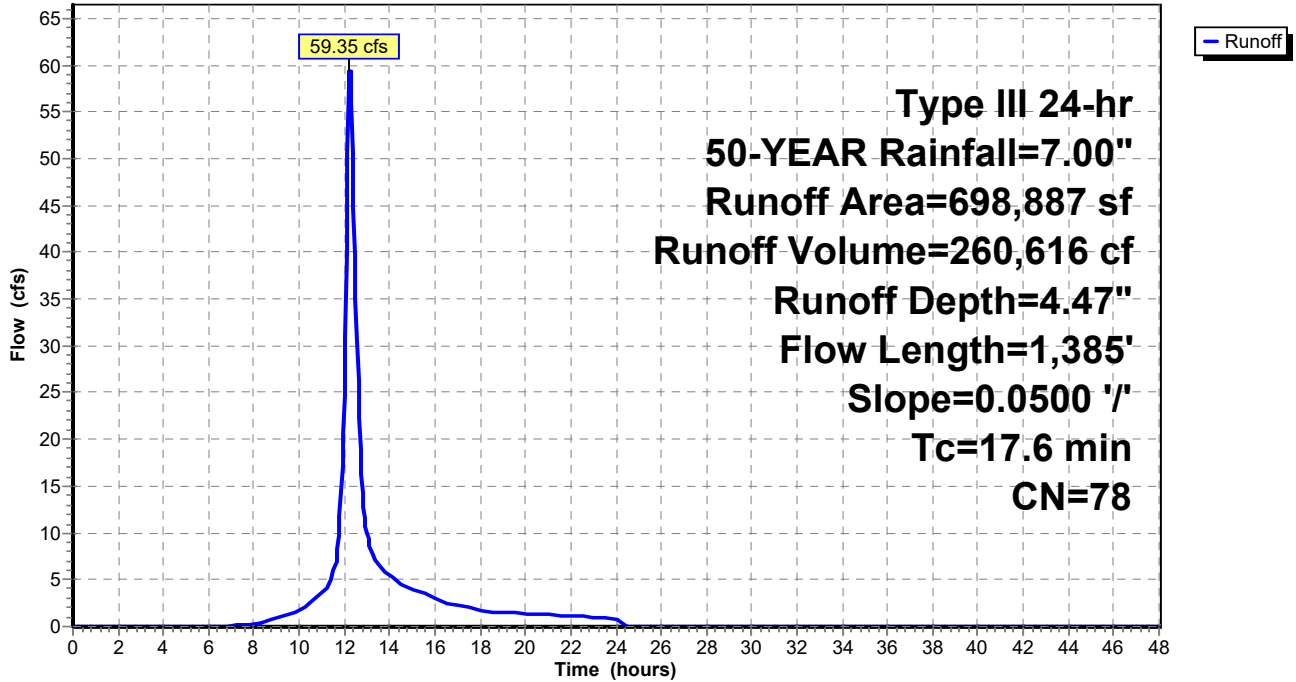
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
 Type III 24-hr 50-YEAR Rainfall=7.00"

Area (sf)	CN	Description
17,675	77	Woods, Good, HSG D
11,538	70	Woods, Good, HSG C
162,939	78	Meadow, non-grazed, HSG D
* 52,720	75	Meadow, non-grazed, HSG C/D
300	98	Unconnected pavement, HSG D
5,569	96	Gravel surface, HSG D
361,542	80	Pasture/grassland/range, Good, HSG D
86,604	74	Pasture/grassland/range, Good, HSG C
698,887	78	Weighted Average
698,587		99.96% Pervious Area
300		0.04% Impervious Area
300		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.4	50	0.0500	0.25		Sheet Flow, Range n= 0.130 P2= 3.40"
14.2	1,335	0.0500	1.57		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
17.6	1,385	Total			

Subcatchment 3S: 3

Hydrograph



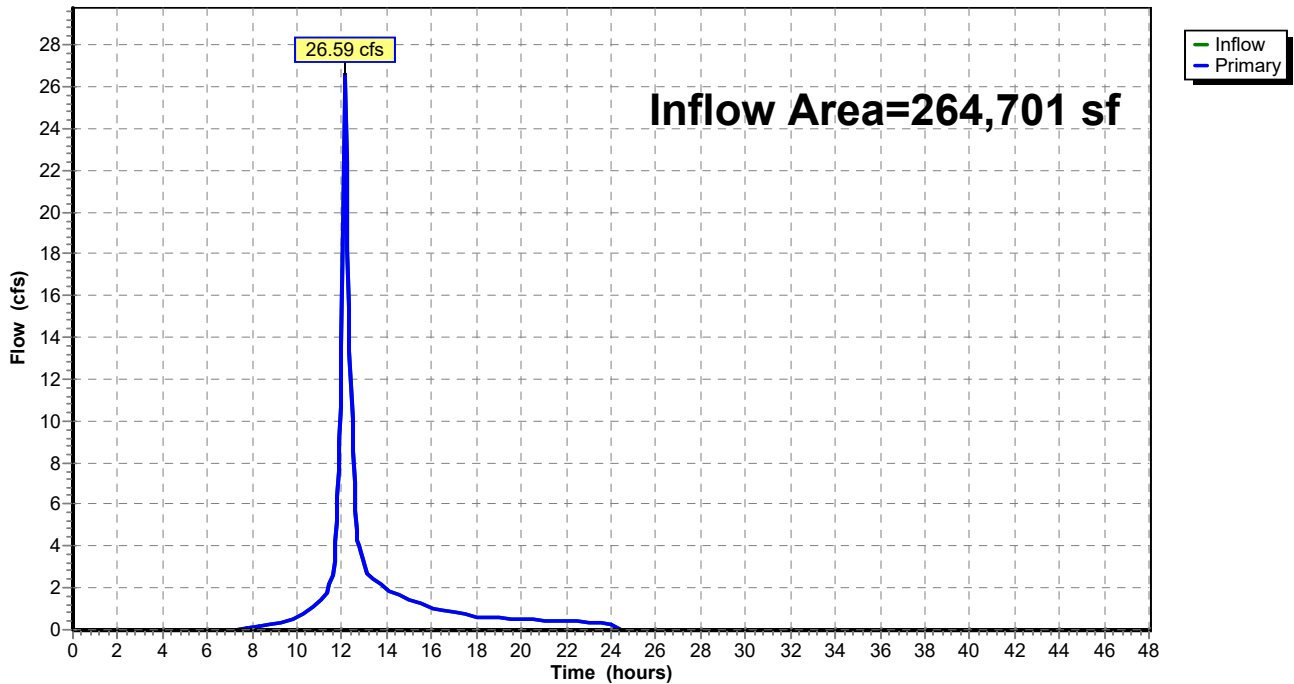
Summary for Link 4L: AP-1

Inflow Area = 264,701 sf, 0.00% Impervious, Inflow Depth = 4.26" for 50-YEAR event
Inflow = 26.59 cfs @ 12.13 hrs, Volume= 93,910 cf
Primary = 26.59 cfs @ 12.13 hrs, Volume= 93,910 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

Link 4L: AP-1

Hydrograph



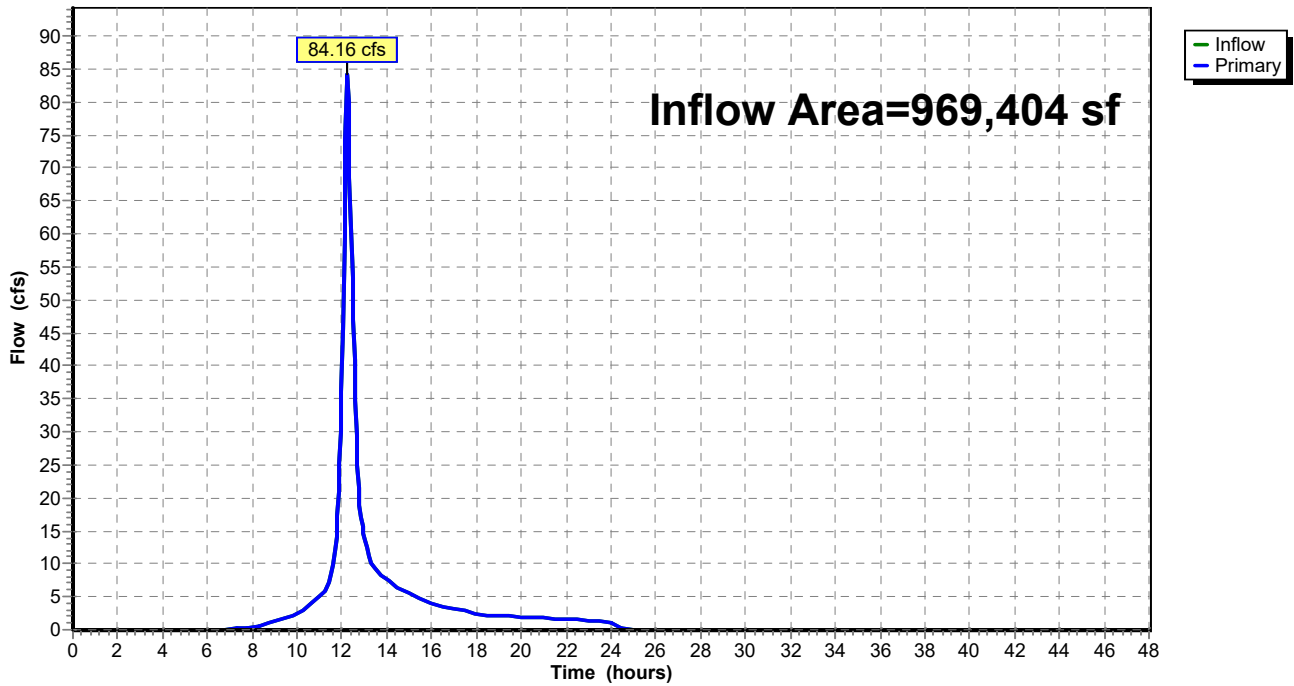
Summary for Link 5L: AP-2

Inflow Area = 969,404 sf, 0.12% Impervious, Inflow Depth = 4.51" for 50-YEAR event
Inflow = 84.16 cfs @ 12.22 hrs, Volume= 363,962 cf
Primary = 84.16 cfs @ 12.22 hrs, Volume= 363,962 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

Link 5L: AP-2

Hydrograph



CT657100-AMARAL-PR

Type III 24-hr 100-YEAR Rainfall=7.90"

Prepared by All Points Technology Corp.

Printed 11/4/2021

HydroCAD® 10.00-24 s/n 07402 © 2018 HydroCAD Software Solutions LLC

Page 26

Time span=0.00-48.00 hrs, dt=0.05 hrs, 961 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: 1 Runoff Area=264,701 sf 0.00% Impervious Runoff Depth=5.07"
Flow Length=805' Slope=0.0770 '/' Tc=9.3 min CN=76 Runoff=31.54 cfs 111,770 cf

Subcatchment 2S: 2 Runoff Area=270,517 sf 0.33% Impervious Runoff Depth=5.41"
Flow Length=945' Slope=0.0400 '/' Tc=14.4 min CN=79 Runoff=29.85 cfs 122,068 cf

Subcatchment 3S: 3 Runoff Area=698,887 sf 0.04% Impervious Runoff Depth=5.30"
Flow Length=1,385' Slope=0.0500 '/' Tc=17.6 min CN=78 Runoff=70.01 cfs 308,597 cf

Link 4L: AP-1 Inflow=31.54 cfs 111,770 cf
Primary=31.54 cfs 111,770 cf

Link 5L: AP-2 Inflow=99.21 cfs 430,665 cf
Primary=99.21 cfs 430,665 cf

Total Runoff Area = 1,234,105 sf Runoff Volume = 542,435 cf Average Runoff Depth = 5.27"
99.90% Pervious = 1,232,905 sf 0.10% Impervious = 1,200 sf

Summary for Subcatchment 1S: 1

Runoff = 31.54 cfs @ 12.13 hrs, Volume= 111,770 cf, Depth= 5.07"

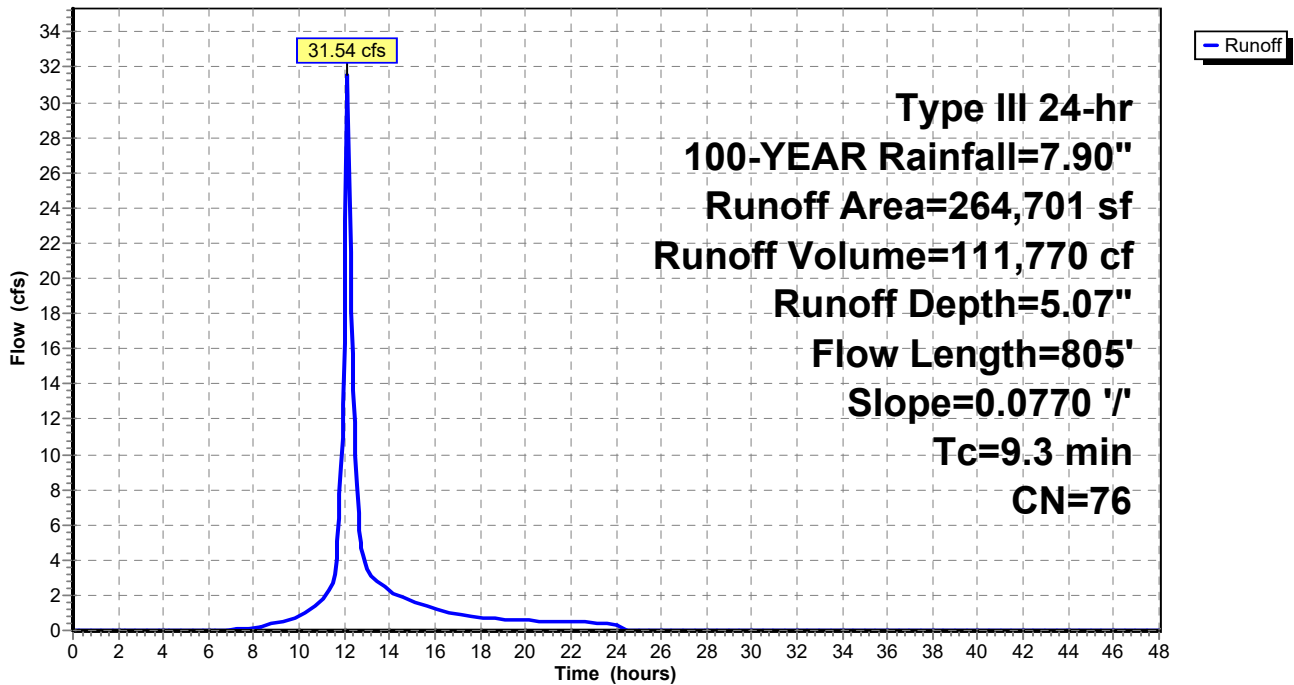
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
 Type III 24-hr 100-YEAR Rainfall=7.90"

Area (sf)	CN	Description
163,180	80	Pasture/grassland/range, Good, HSG D
48,017	78	Meadow, non-grazed, HSG D
875	96	Gravel surface, HSG D
52,629	61	Pasture/grassland/range, Good, HSG B
264,701	76	Weighted Average
264,701		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.8	50	0.0770	0.29		Sheet Flow, Range n= 0.130 P2= 3.40"
6.5	755	0.0770	1.94		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
9.3	805	Total			

Subcatchment 1S: 1

Hydrograph



Summary for Subcatchment 2S: 2

Runoff = 29.85 cfs @ 12.20 hrs, Volume= 122,068 cf, Depth= 5.41"

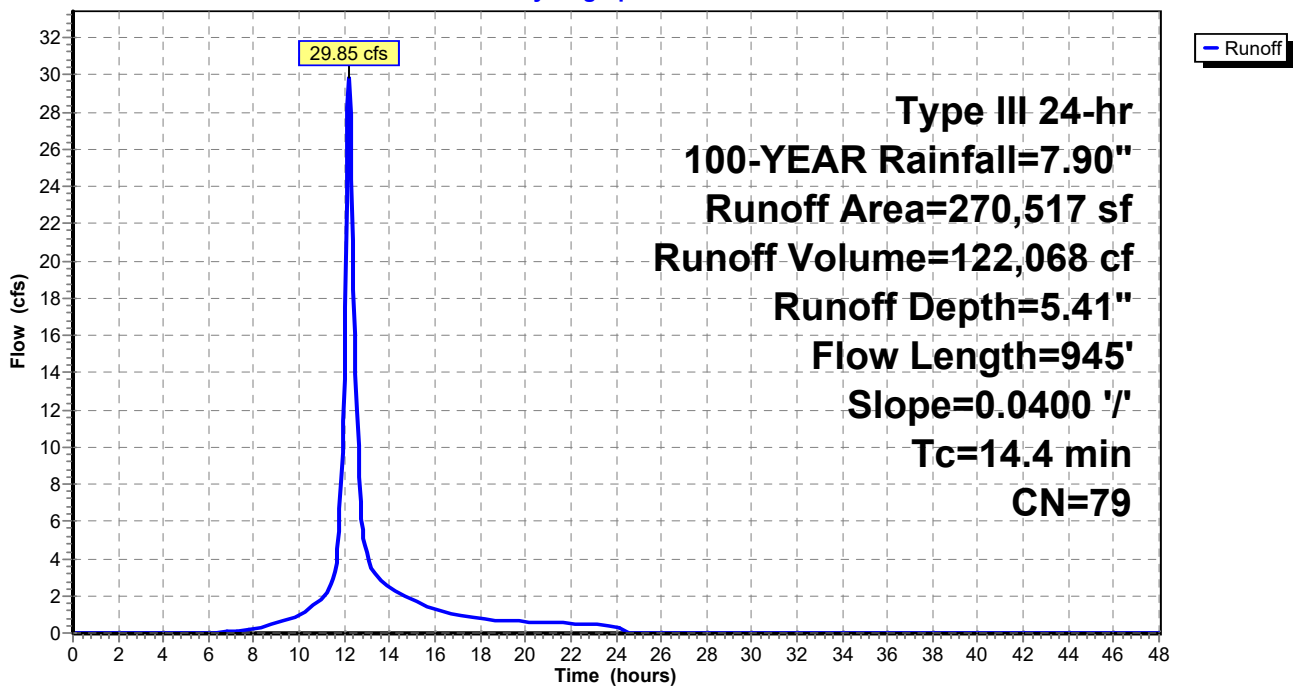
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-YEAR Rainfall=7.90"

Area (sf)	CN	Description
900	98	Unconnected pavement, HSG D
200,066	78	Meadow, non-grazed, HSG D
* 576	75	Meadow, non-grazed, HSG C/D
56,141	80	Pasture/grassland/range, Good, HSG D
12,834	96	Gravel surface, HSG D
270,517	79	Weighted Average
269,617		99.67% Pervious Area
900		0.33% Impervious Area
900		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.7	50	0.0400	0.23		Sheet Flow, Range n= 0.130 P2= 3.40"
10.7	895	0.0400	1.40		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
14.4	945	Total			

Subcatchment 2S: 2

Hydrograph



Summary for Subcatchment 3S: 3

Runoff = 70.01 cfs @ 12.24 hrs, Volume= 308,597 cf, Depth= 5.30"

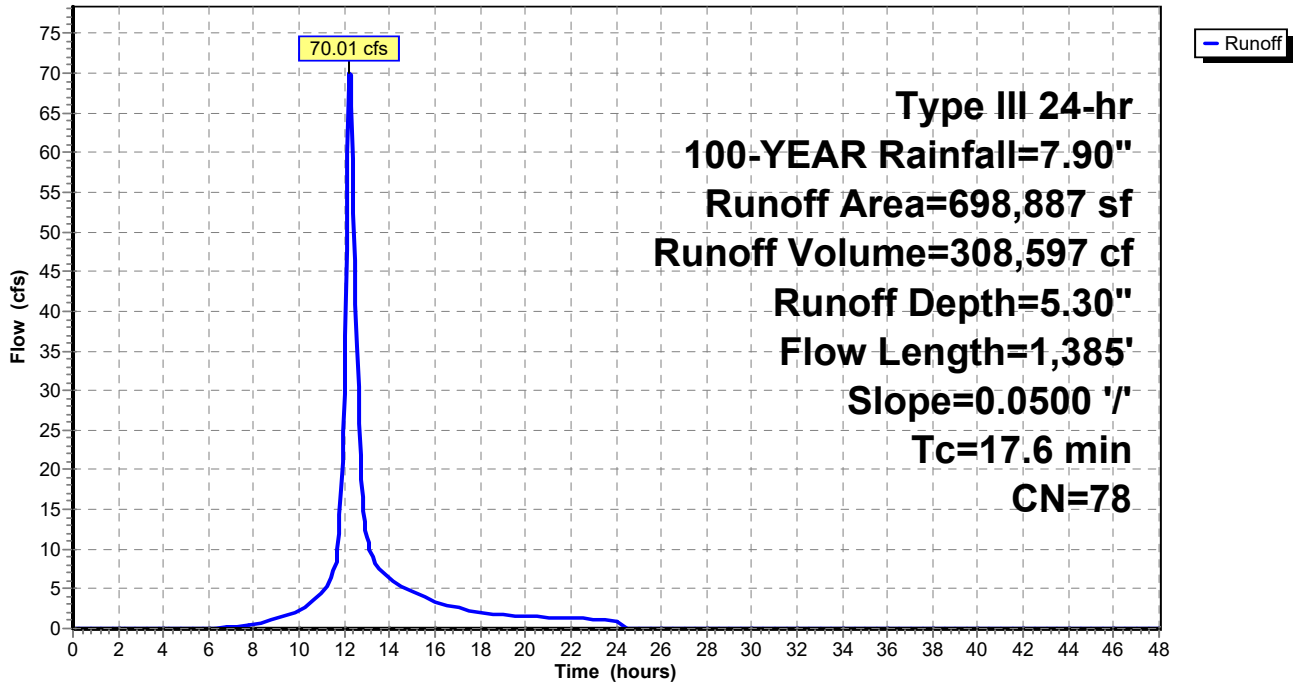
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
 Type III 24-hr 100-YEAR Rainfall=7.90"

Area (sf)	CN	Description
17,675	77	Woods, Good, HSG D
11,538	70	Woods, Good, HSG C
162,939	78	Meadow, non-grazed, HSG D
* 52,720	75	Meadow, non-grazed, HSG C/D
300	98	Unconnected pavement, HSG D
5,569	96	Gravel surface, HSG D
361,542	80	Pasture/grassland/range, Good, HSG D
86,604	74	Pasture/grassland/range, Good, HSG C
698,887	78	Weighted Average
698,587		99.96% Pervious Area
300		0.04% Impervious Area
300		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.4	50	0.0500	0.25		Sheet Flow, Range n= 0.130 P2= 3.40"
14.2	1,335	0.0500	1.57		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
17.6	1,385	Total			

Subcatchment 3S: 3

Hydrograph



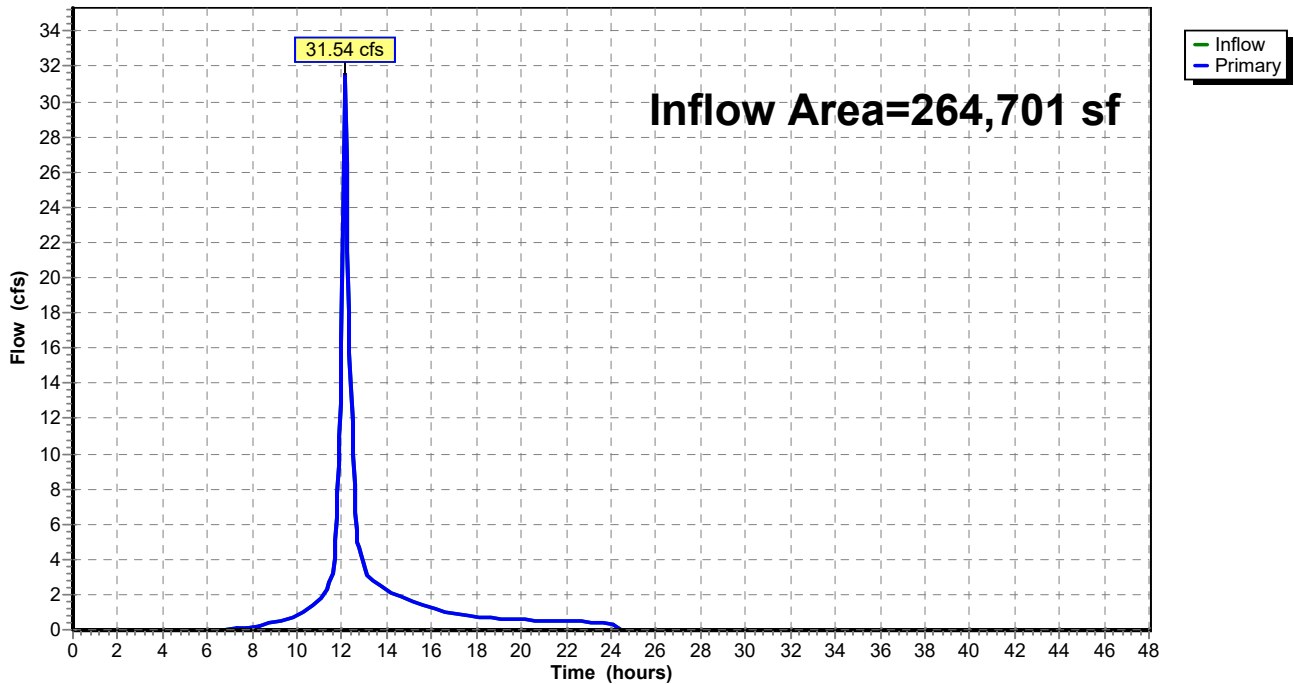
Summary for Link 4L: AP-1

Inflow Area = 264,701 sf, 0.00% Impervious, Inflow Depth = 5.07" for 100-YEAR event
Inflow = 31.54 cfs @ 12.13 hrs, Volume= 111,770 cf
Primary = 31.54 cfs @ 12.13 hrs, Volume= 111,770 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

Link 4L: AP-1

Hydrograph



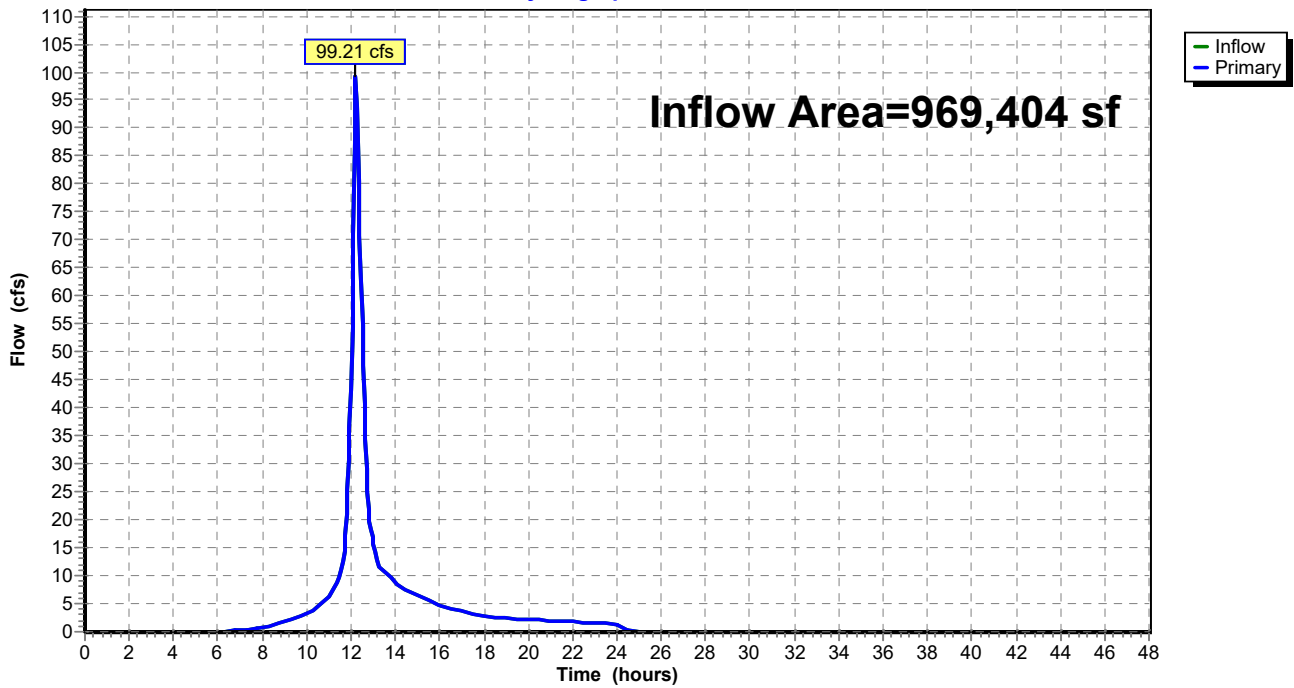
Summary for Link 5L: AP-2

Inflow Area = 969,404 sf, 0.12% Impervious, Inflow Depth = 5.33" for 100-YEAR event
Inflow = 99.21 cfs @ 12.22 hrs, Volume= 430,665 cf
Primary = 99.21 cfs @ 12.22 hrs, Volume= 430,665 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

Link 5L: AP-2

Hydrograph



APPENDIX D: NOAA ATLAS 14 PRECIPITATION FREQUENCY TABLE



NOAA Atlas 14, Volume 10, Version 3
Location name: Town of Pomfret, Connecticut,
USA*
Latitude: 41.8907°, Longitude: -71.9358°
Elevation: 410.42 ft**
 * source: ESRI Maps
 ** source: USGS



POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Sandra Pavlovic, Michael St. Laurent, Carl Trypaluk, Dale Unruh, Orlan Wilhite

NOAA, National Weather Service, Silver Spring, Maryland

[PF_tabular](#) | [PF_graphical](#) | [Maps_&_aerials](#)

PF tabular

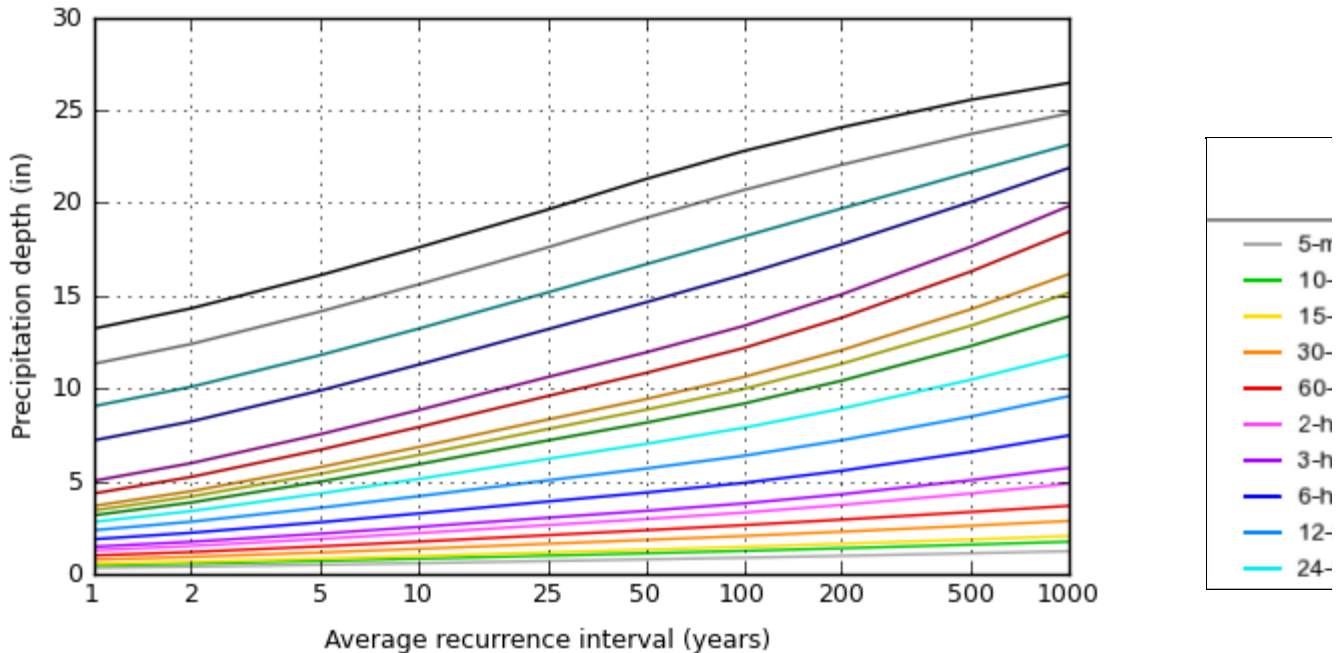
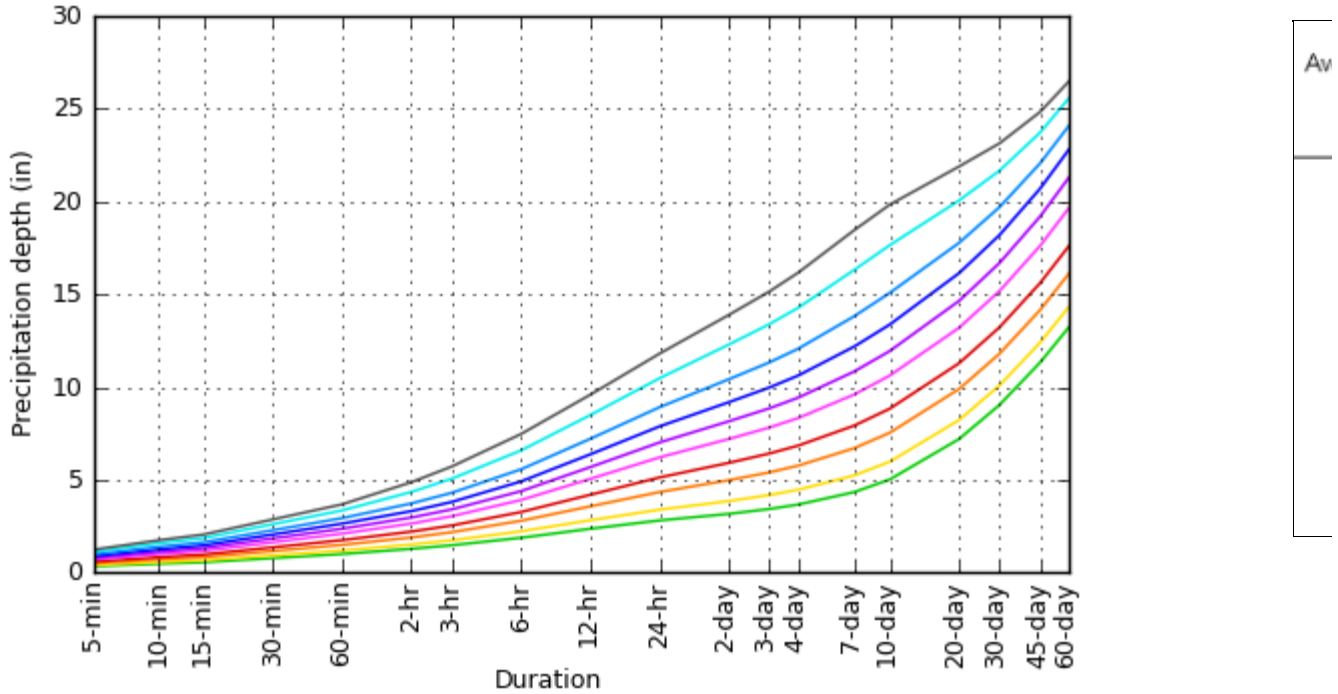
PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches)										
Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	0.332 (0.258-0.424)	0.395 (0.307-0.504)	0.498 (0.385-0.638)	0.582 (0.449-0.750)	0.699 (0.521-0.937)	0.788 (0.575-1.08)	0.879 (0.622-1.24)	0.978 (0.659-1.42)	1.12 (0.724-1.67)	1.23 (0.777-1.77)
10-min	0.470 (0.366-0.601)	0.559 (0.435-0.715)	0.704 (0.546-0.903)	0.824 (0.636-1.06)	0.990 (0.738-1.33)	1.12 (0.815-1.53)	1.25 (0.882-1.76)	1.39 (0.935-2.01)	1.58 (1.03-2.37)	1.74 (1.10-2.50)
15-min	0.553 (0.431-0.707)	0.658 (0.512-0.841)	0.829 (0.643-1.06)	0.970 (0.748-1.25)	1.17 (0.869-1.56)	1.31 (0.958-1.80)	1.47 (1.04-2.07)	1.63 (1.10-2.36)	1.86 (1.21-2.79)	2.05 (1.30-3.00)
30-min	0.775 (0.604-0.990)	0.921 (0.716-1.18)	1.16 (0.899-1.49)	1.36 (1.05-1.75)	1.63 (1.22-2.19)	1.84 (1.34-2.51)	2.05 (1.45-2.90)	2.28 (1.54-3.30)	2.60 (1.69-3.90)	2.86 (1.81-4.40)
60-min	0.997 (0.777-1.27)	1.18 (0.921-1.51)	1.49 (1.16-1.91)	1.74 (1.35-2.25)	2.09 (1.56-2.81)	2.36 (1.72-3.23)	2.63 (1.86-3.72)	2.93 (1.97-4.24)	3.34 (2.17-5.00)	3.67 (2.33-5.50)
2-hr	1.27 (0.999-1.62)	1.51 (1.18-1.92)	1.89 (1.47-2.41)	2.20 (1.71-2.83)	2.64 (1.99-3.53)	2.96 (2.19-4.05)	3.31 (2.38-4.70)	3.72 (2.51-5.36)	4.34 (2.82-6.46)	4.87 (3.09-7.40)
3-hr	1.47 (1.16-1.86)	1.74 (1.36-2.20)	2.17 (1.70-2.76)	2.54 (1.97-3.24)	3.03 (2.29-4.06)	3.40 (2.52-4.65)	3.80 (2.75-5.41)	4.30 (2.91-6.17)	5.06 (3.29-7.50)	5.71 (3.63-8.40)
6-hr	1.87 (1.48-2.36)	2.22 (1.75-2.80)	2.79 (2.19-3.52)	3.26 (2.55-4.14)	3.91 (2.97-5.20)	4.39 (3.27-5.97)	4.91 (3.57-6.96)	5.56 (3.78-7.94)	6.58 (4.30-9.70)	7.47 (4.76-11.40)
12-hr	2.36 (1.87-2.95)	2.82 (2.24-3.53)	3.57 (2.82-4.48)	4.19 (3.30-5.29)	5.05 (3.85-6.67)	5.68 (4.25-7.67)	6.37 (4.64-8.95)	7.21 (4.92-10.2)	8.49 (5.56-12.4)	9.55 (6.13-14.40)
24-hr	2.81 (2.25-3.49)	3.39 (2.71-4.22)	4.34 (3.45-5.41)	5.13 (4.05-6.43)	6.21 (4.76-8.14)	7.01 (5.27-9.40)	7.88 (5.76-11.0)	8.91 (6.10-12.6)	10.5 (6.89-15.2)	11.8 (7.57-17.40)
2-day	3.16 (2.54-3.91)	3.85 (3.09-4.76)	4.98 (3.98-6.17)	5.91 (4.70-7.37)	7.20 (5.54-9.39)	8.15 (6.15-10.9)	9.18 (6.74-12.7)	10.4 (7.16-14.6)	12.3 (8.11-17.8)	13.9 (8.94-20.0)
3-day	3.43 (2.76-4.22)	4.17 (3.36-5.14)	5.40 (4.33-6.67)	6.42 (5.12-7.97)	7.82 (6.04-10.2)	8.85 (6.70-11.8)	9.97 (7.35-13.8)	11.3 (7.80-15.8)	13.4 (8.85-19.3)	15.2 (9.77-22.0)
4-day	3.66 (2.96-4.50)	4.46 (3.60-5.48)	5.76 (4.64-7.10)	6.84 (5.47-8.48)	8.33 (6.45-10.8)	9.43 (7.16-12.5)	10.6 (7.84-14.6)	12.1 (8.32-16.8)	14.3 (9.44-20.5)	16.2 (10.4-23.0)
7-day	4.33 (3.52-5.29)	5.23 (4.24-6.40)	6.70 (5.42-8.22)	7.92 (6.36-9.76)	9.59 (7.46-12.4)	10.8 (8.26-14.3)	12.2 (9.03-16.7)	13.8 (9.55-19.1)	16.3 (10.8-23.3)	18.5 (11.9-25.0)
10-day	5.02 (4.09-6.11)	5.97 (4.86-7.28)	7.54 (6.11-9.21)	8.83 (7.12-10.9)	10.6 (8.27-13.6)	11.9 (9.11-15.7)	13.4 (9.91-18.2)	15.1 (10.5-20.8)	17.6 (11.7-25.1)	19.8 (12.9-27.0)
20-day	7.20 (5.90-8.71)	8.22 (6.73-9.96)	9.89 (8.07-12.0)	11.3 (9.14-13.8)	13.2 (10.3-16.7)	14.6 (11.2-18.9)	16.1 (11.9-21.5)	17.8 (12.4-24.3)	20.1 (13.4-28.3)	21.9 (14.2-30.0)
30-day	9.04 (7.43-10.9)	10.1 (8.28-12.2)	11.8 (9.65-14.3)	13.2 (10.7-16.1)	15.2 (11.9-19.1)	16.7 (12.7-21.3)	18.2 (13.3-23.9)	19.7 (13.8-26.8)	21.7 (14.5-30.4)	23.1 (15.1-33.0)
45-day	11.3 (9.34-13.6)	12.4 (10.2-14.9)	14.2 (11.6-17.1)	15.6 (12.7-18.9)	17.6 (13.8-22.0)	19.2 (14.6-24.3)	20.7 (15.1-26.9)	22.1 (15.5-29.8)	23.7 (16.0-33.1)	24.8 (16.2-34.0)
60-day	13.2 (10.9-15.8)	14.3 (11.8-17.2)	16.1 (13.3-19.4)	17.6 (14.4-21.3)	19.6 (15.4-24.4)	21.3 (16.3-26.9)	22.8 (16.7-29.4)	24.1 (17.0-32.4)	25.6 (17.2-35.6)	26.5 (17.3-37.0)

¹ Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS). Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimate upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values. Please refer to NOAA Atlas 14 document for more information.

[Back to Top](#)

PF graphical

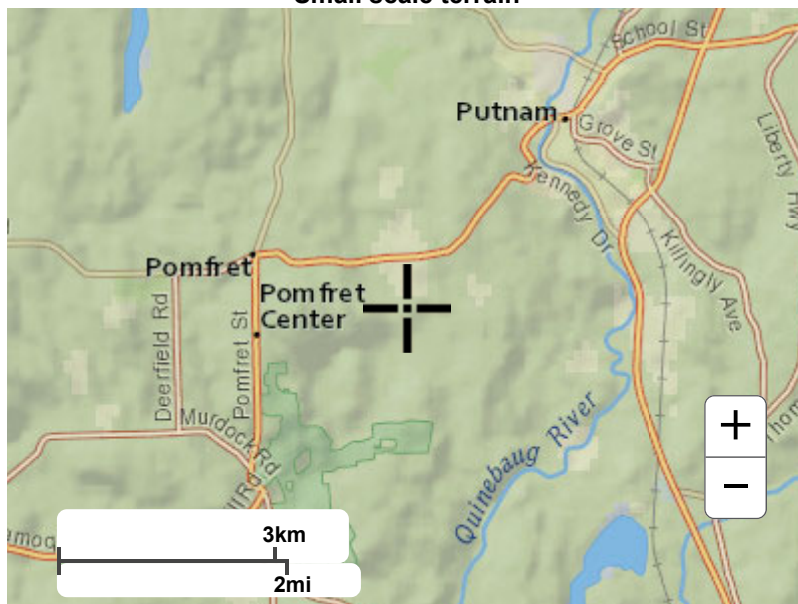
PDS-based depth-duration-frequency (DDF) curves
 Latitude: 41.8907°, Longitude: -71.9358°



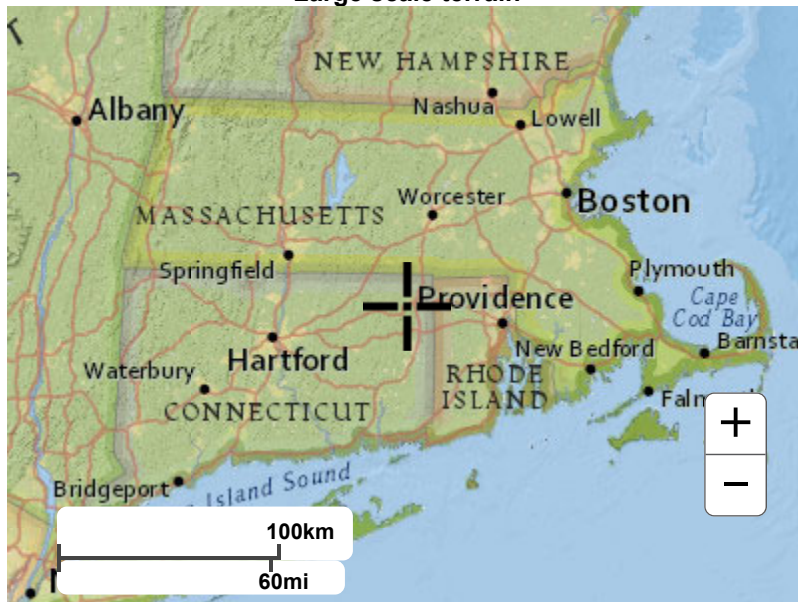
[Back to Top](#)

Maps & aerials

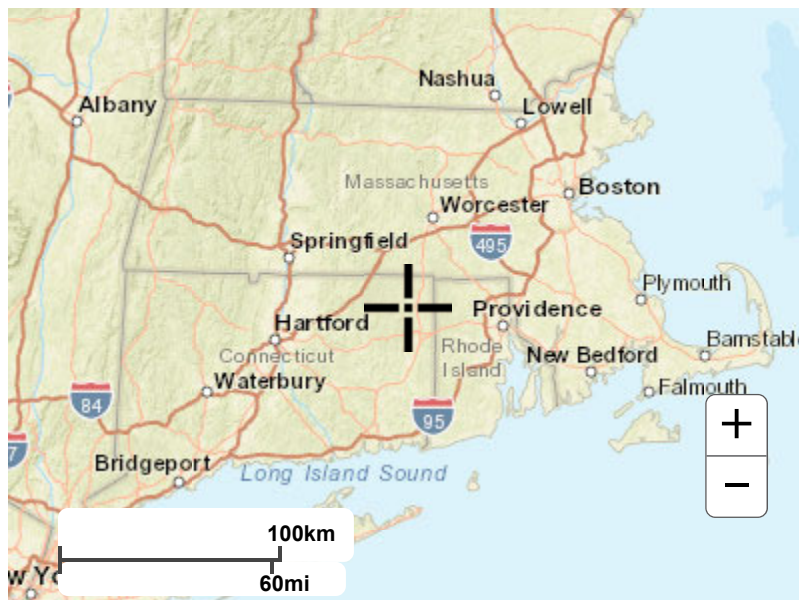
Small scale terrain



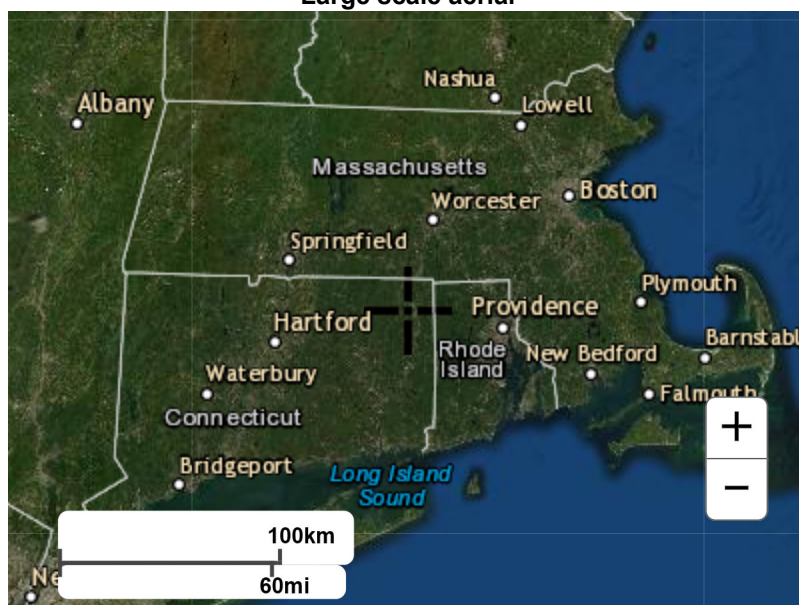
Large scale terrain



Large scale map



Large scale aerial



[Back to Top](#)

[US Department of Commerce](#)
[National Oceanic and Atmospheric Administration](#)
[National Weather Service](#)
[National Water Center](#)
1325 East West Highway
Silver Spring, MD 20910
Questions?: HDSC.Questions@noaa.gov

[Disclaimer](#)

APPENDIX E: WATER QUALITY CALCULATIONS

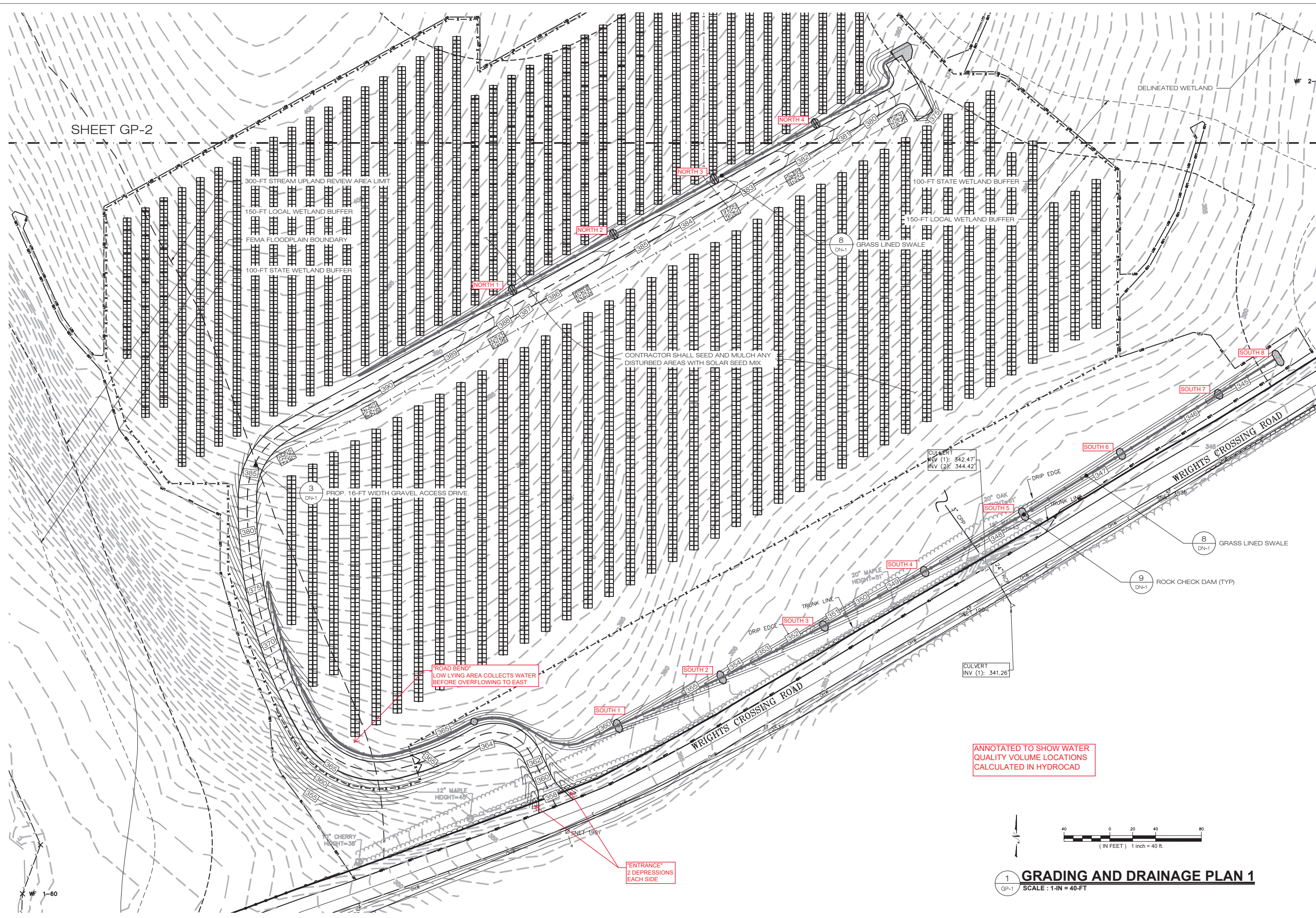
WATER QUALITY VOLUME CALCULATIONS
FOR
AMARAL SOLAR
WRIGHTS CROSSING ROAD, POMFRET CENTER, CT

$$WQV = \frac{(1)(R)(A)}{12}$$

where: WQV = water quality volume (ac-ft)
 R = volumetric runoff coefficient
= $0.05 + 0.009(I)$
 I = percent impervious cover
 A = site area in acres

Subwatershed	Project Area (ac)	Pervious (ac)	Imperv. (ac)	I	R	WQV (ac-ft)	Total V Req. (cu-ft)	V Provided (cu-ft)
1	1.12	1.10	0.02	2%	0.07	0.006	269	130
2	4.92	4.61	0.32	6%	0.11	0.044	1,923	3,299
3	5.08	4.94	0.13	3%	0.07	0.031	1,362	1,579
Overall Project	11.12	10.65	0.47	4%	0.09	0.082	3,555	5,008

SHEET GP-2



TRITEC AMERICAS
 888 PROSPECT STREET
 LA JOLLA, CA 92037
 OFFICE: (619) 363-3080

ALL-POINTS TECHNOLOGY CORPORATION
 567 VAUXHAUL STREET EXTENSION - SUITE 311
 WATERFORD, CT 06385 PHONE: (860)-963-1697
 WWW.ALLPOINTSTECH.COM FAX: (860)-963-0935

CSC PERMIT SET

NO	DATE	REVISION
0	07/09/21	PERMIT SUBMISSION DRAFT
1		
2		
3		
4		
5		
6		

NOT FOR CONSTRUCTION

DESIGN PROFESSIONAL OF RECORD
 PROF: KEVIN A. MCCAFFERY, PE
 COMP: ALL-POINTS TECHNOLOGY CORPORATION
 ADD: 567 VAUXHAUL STREET EXTENSION - SUITE 311 WATERFORD, CT 06385

OWNER: ANTONIO & MARY AMARAL
 ADDRESS: 254 PUTNAM ROAD POMFRET CENTER, CT 06259

AMARAL SOLAR

SITE: 254 PUTNAM ROAD
 ADDRESS: POMFRET CENTER, CT 06259

APT FILING NUMBER: CT657100

DATE: 07/09/21

DRAWN BY: KAM
 CHECKED BY: BG

SHEET TITLE:
GRADING AND DRAINAGE PLAN (1 OF 3)

SHEET NUMBER:
GP-1

ANNOTATED TO SHOW WATER QUALITY VOLUME LOCATIONS CALCULATED IN HYDROCAD



1 GRADING AND DRAINAGE PLAN 1
 GP-1 SCALE: 1-IN = 40-FT

WF 1-60



ROAD BEND



NORTH-1



NORTH-2



NORTH-3



NORTH-4



SOUTH-1



SOUTH-2



SOUTH-3



SOUTH-4



SOUTH-5



SOUTH-6



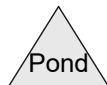
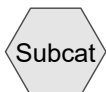
SOUTH-7



SOUTH-8



ENTRANCE



Routing Diagram for CT657100-AMARAL-PR-WQ
Prepared by All Points Technology Corp., Printed 11/5/2021
HydroCAD® 10.00-24 s/n 07402 © 2018 HydroCAD Software Solutions LLC

Stage-Area-Storage for Pond 1P: ENTRANCE

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
357.00	53	0
358.00	206	130

Stage-Area-Storage for Pond 2P: ROAD BEND

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
363.00	579	0
364.00	1,609	1,094

Stage-Area-Storage for Pond 3P: SOUTH-1

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
359.00	101	0
360.00	345	223

Stage-Area-Storage for Pond 4P: SOUTH-2

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
354.00	66	0
355.00	262	164

Stage-Area-Storage for Pond 5P: SOUTH-3

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
350.00	33	0
351.00	265	149

Stage-Area-Storage for Pond 6P: SOUTH-4

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
348.00	178	0
349.00	573	376

Stage-Area-Storage for Pond 7P: SOUTH-5

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
347.00	445	0
348.00	895	670

Stage-Area-Storage for Pond 8P: SOUTH-6

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
346.00	419	0
347.00	826	623

Stage-Area-Storage for Pond 9P: SOUTH-7

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
345.00	41	0
346.00	693	367

Stage-Area-Storage for Pond 10P: SOUTH-8

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
345.00	400	0
346.00	679	540

Stage-Area-Storage for Pond 11P: NORTH-1

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
387.00	34	0
388.00	180	107

Stage-Area-Storage for Pond 12P: NORTH-2

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
385.00	67	0
386.00	583	325

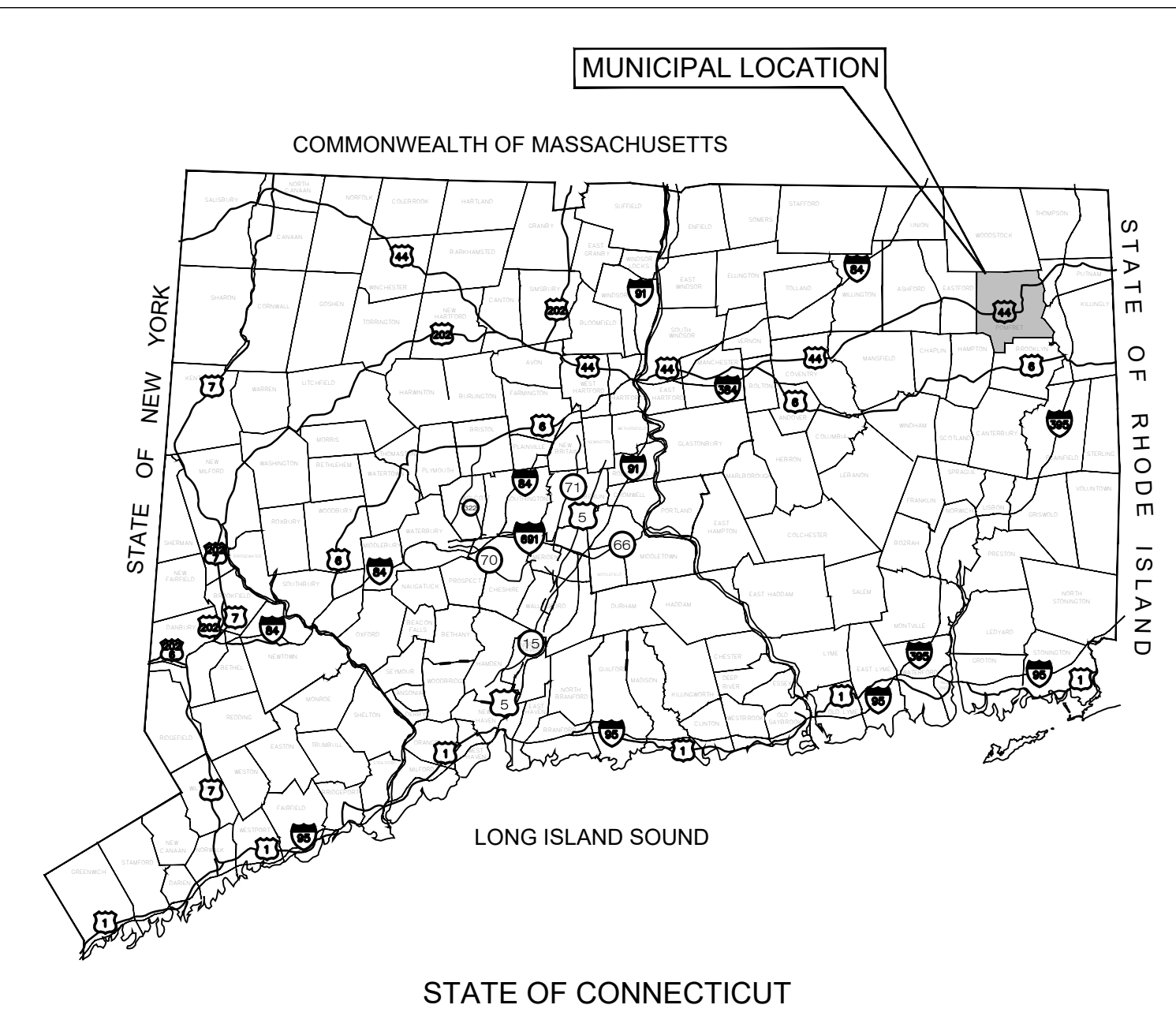
Stage-Area-Storage for Pond 13P: NORTH-3

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
383.00	29	0
384.00	294	162

Stage-Area-Storage for Pond 14P: NORTH-4

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
381.00	8	0
382.00	147	78

APPENDIX D
Design Plans



AMARAL SOLAR

TRITEC AMERICAS, LLC

254 PUTNAM ROAD POMFRET CENTER, CT

PERMIT APPLICATION DRAWINGS DECEMBER 9, 2021

LIST OF DRAWINGS

- T-1 TITLE SHEET & INDEX
- 1 OF 1 SURVEY PROVIDED BY WSP USA
- GN-1 GENERAL NOTES
- EN-1 ENVIRONMENTAL NOTES
- OP-1 OVERALL SITE PLAN
- OP-2 OVERALL LOCUS PLAN
- EC-1 SEDIMENTATION AND EROSION CONTROL NOTES
- EC-2 SEDIMENTATION AND EROSION CONTROL DETAILS
- EC-3 SEDIMENTATION AND EROSION CONTROL PLAN, 1 OF 3
- EC-4 SEDIMENTATION AND EROSION CONTROL PLAN, 2 OF 3
- EC-5 SEDIMENTATION AND EROSION CONTROL PLAN, 3 OF 3
- GP-1 GRADING & DRAINAGE PLAN, 1 OF 3
- GP-2 GRADING & DRAINAGE PLAN, 2 OF 3
- GP-3 GRADING & DRAINAGE PLAN, 2 OF 3
- SP-1 SITE & UTILITY PLAN, 1 OF 3
- SP-2 SITE & UTILITY PLAN, 2 OF 3
- SP-3 SITE & UTILITY PLAN, 3 OF 3
- DN-1 SITE DETAILS
- EX-1 SLOPE ANALYSIS

SITE INFORMATION

SITE NAME: AMARAL SOLAR
 LOCATION: 254 PUTNAM ROAD
 POMFRET CENTER, CT

SITE TYPE/DESCRIPTION: ADD (1) GROUND MOUNTED
 SOLAR PANEL ARRAY
 W/ ASSOCIATED EQUIPMENT.

PROPERTY OWNER: ANTONIO & MARY AMARAL
 254 PUTNAM ROAD
 POMFRET CENTER, CT 06259

APPLICANT: TRITEC AMERICAS, LLC
 888 PROSPECT STREET
 LA JOLLA, CA 92037

ENGINEER CONTACT: KEVIN A. MCCAFFERY, PE
 (860) 663-1697 x228

LATITUDE: 41° 53' 20" N
 LONGITUDE: 71° 56' 11" W
 ELEVATION: 345-415± AMSL

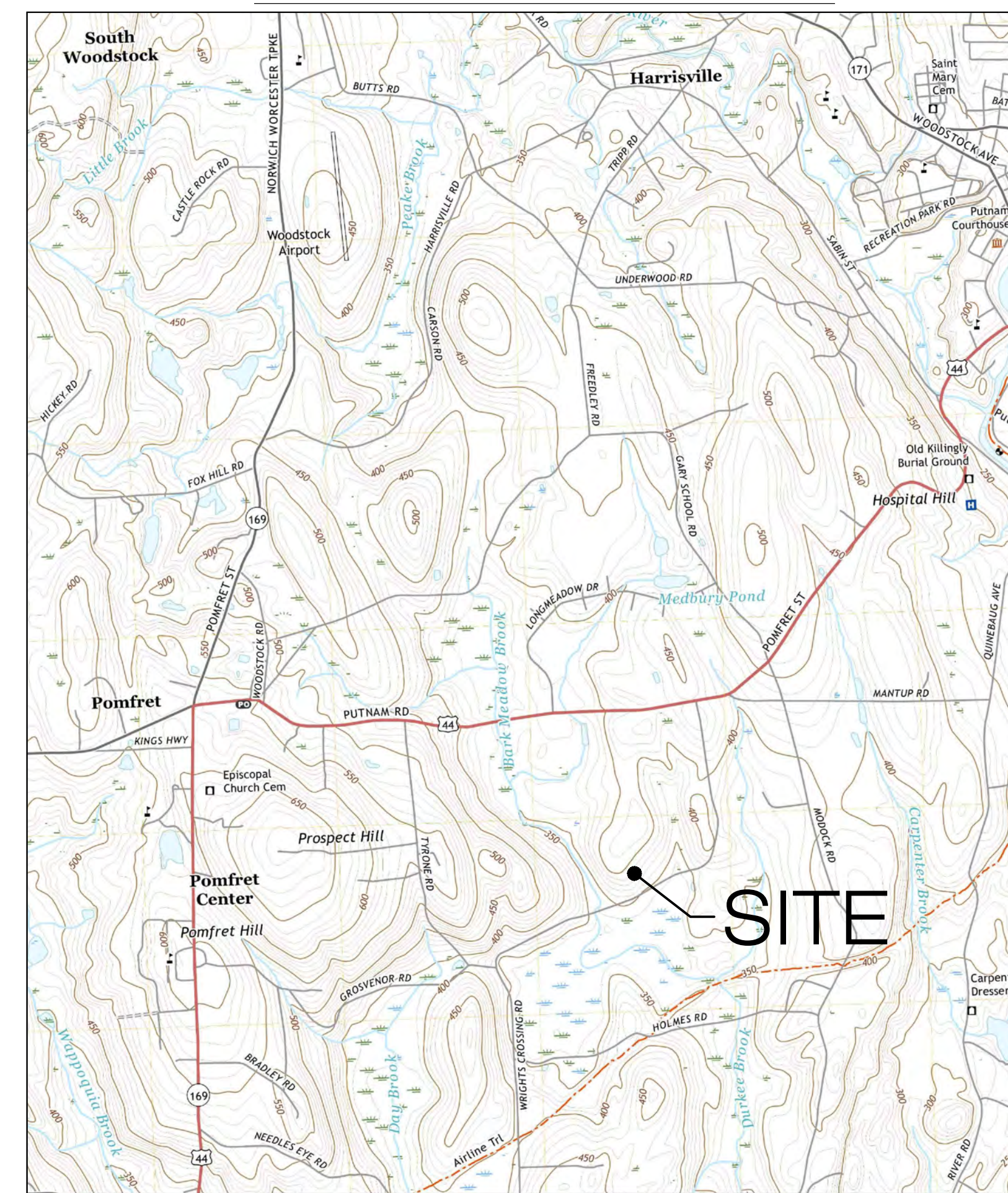
MAP-LOT: 10-1
 ZONE: RR
 EXISTING LAND USE: AGRICULTURAL
 PROPOSED LAND USE: ENERGY PRODUCTION

TOTAL SITE ACREAGE: 215.60± AC.
 TOTAL DISTURBED AREA: 14.27± AC.

APPROX. VOLUME OF CUT: 930± CY
 APPROX. VOLUME OF FILL: 745 ± CY
 APPROX. NET VOLUME: 185 ± CY OF CUT
 (ASSUMES 615 CY ACCESS ROAD GRAVEL)

PROP. GRAVEL ACCESS ROAD: 1,185± LINEAR FEET
 PROP. SILT FENCE: 4,590± LINEAR FEET
 TREE CLEARING AREA: LIMITED TO SELECTIVE TREELINE REMOVAL
 FOR ACCESS AND INTERCONNECTION
 EFFECTIVE IMPERVIOUS AREA: 20,480± SQUARE FEET

USGS TOPOGRAPHIC MAP



SCALE : 1-IN = 2000-FT SOURCE: NRCS GEOSPATIAL GATEWAY



888 PROSPECT STREET
 LA JOLLA, CA 92037
 OFFICE: (619) 363-3080



567 VAUXHAUL STREET EXTENSION - SUITE 311
 WATERFORD, CT 06385 PHONE: (860)-663-1697
 WWW.ALLPOINTSTECH.COM FAX: (860)-663-0935

CSC PERMIT SET

NO	DATE	REVISION
0	12/09/21	SITING COUNCIL SUBMISSION
1	04/09/22	COUNCIL INTERROGATORIES
2	05/11/22	PANEL LAYOUT, UTIL. POLES
3		
4		
5		
6		

NOT FOR CONSTRUCTION

DESIGN PROFESSIONAL OF RECORD

PROF: KEVIN A. MCCAFFERY, PE
 COMP: ALL-POINTS TECHNOLOGY
 CORPORATION
 ADD: 567 VAUXHAUL STREET
 EXTENSION - SUITE 311
 WATERFORD, CT 06385

OWNER: ANTONIO & MARY AMARAL

ADDRESS: 254 PUTNAM ROAD
 POMFRET CENTER, CT 06259

AMARAL SOLAR

SITE ADDRESS: 254 PUTNAM ROAD
 POMFRET CENTER, CT 06259

APT FILING NUMBER: CT657100

DATE: 12/09/21
 DRAWN BY: KAM
 CHECKED BY: BG

SHEET TITLE:

TITLE SHEET & INDEX

SHEET NUMBER:

T-1



GENERAL NOTES

- ALL CONSTRUCTION SHALL COMPLY WITH PROJECT DEVELOPER STANDARDS, TOWN OF POMFRET STANDARDS, CONNECTICUT DEPARTMENT OF TRANSPORTATION STANDARDS AND SPECIFICATIONS IN THE ABOVE REFERENCED INCREASING HIERARCHY. IF SPECIFICATIONS ARE IN CONFLICT, THE MORE STRINGENT SPECIFICATION SHALL APPLY.
- IF NO PROJECT CONSTRUCTION SPECIFICATION PACKAGE IS PROVIDED BY THE PROJECT DEVELOPER OR THEIR REPRESENTATIVE, THE CONTRACTOR SHALL COMPLY WITH THE MANUFACTURE, TOWN OF POMFRET, OR CONNECTICUT DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, AND BE IN ACCORDANCE WITH ALL APPLICABLE OSHA, FEDERAL, STATE AND LOCAL REGULATIONS.
- THE PROJECT DEVELOPER IS RESPONSIBLE FOR OBTAINING ALL NECESSARY ZONING AND STORMWATER PERMITS REQUIRED BY GOVERNMENT AGENCIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL OBTAIN ALL TOWN OF POMFRET CONSTRUCTION PERMITS. THE CONTRACTOR SHALL POST ALL BONDS, PAY ALL FEES, PROVIDE PROOF OF INSURANCE AND PROVIDE TRAFFIC CONTROL NECESSARY FOR THIS WORK.
- REFER TO PLANS, DETAILS AND REPORTS PREPARED BY ALL-POINTS TECHNOLOGY CORPORATION FOR ADDITIONAL INFORMATION. THE CONTRACTOR SHALL VERIFY ALL SITE CONDITIONS IN THE FIELD AND CONTACT THE PROJECT DEVELOPER IF THERE ARE ANY QUESTIONS OR CONFLICTS REGARDING THE CONSTRUCTION DOCUMENTS AND/OR FIELD CONDITIONS SO THAT APPROPRIATE REVISIONS CAN BE MADE PRIOR TO BIDDING/CONSTRUCTION. ANY CONFLICT BETWEEN THE DRAWINGS AND SPECIFICATIONS SHALL BE CONFIRMED WITH THE PROJECT DEVELOPERS CONSTRUCTION MANAGER PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF ALL PRODUCTS, MATERIALS PER PLANS AND SPECIFICATIONS TO THE PROJECT DEVELOPER FOR REVIEW AND APPROVAL PRIOR TO FABRICATION OR DELIVERY TO THE SITE. ALLOW A MINIMUM OF 14 WORKING DAYS FOR REVIEW.
- SHOULD ANY UNKNOWN OR INCORRECTLY LOCATED EXISTING PIPING OR OTHER UTILITY BE UNCOVERED DURING EXCAVATION, CONSULT THE PROJECT DEVELOPER IMMEDIATELY FOR DIRECTIONS BEFORE PROCEEDING FURTHER WITH WORK IN THIS AREA.
- DO NOT INTERRUPT EXISTING UTILITIES SERVICING FACILITIES OCCUPIED AND USED BY THE PROJECT DEVELOPER OR OTHERS DURING OCCUPIED HOURS, EXCEPT WHEN SUCH INTERRUPTIONS HAVE BEEN AUTHORIZED IN WRITING BY THE PROJECT DEVELOPER AND THE LOCAL MUNICIPALITY. INTERRUPTIONS SHALL ONLY OCCUR AFTER ACCEPTABLE TEMPORARY SERVICE HAS BEEN PROVIDED.
- THE CONTRACT LIMIT IS THE PROPERTY LINE UNLESS OTHERWISE SPECIFIED OR SHOWN ON THE CONTRACT DRAWINGS.
- THE CONTRACTOR SHALL ABIDE BY ALL OSHA, FEDERAL, STATE AND LOCAL REGULATIONS WHEN OPERATING CRANES, BOOMS, HOISTS, ETC. IN CLOSE PROXIMITY TO OVERHEAD ELECTRIC LINES. IF CONTRACTOR MUST OPERATE EQUIPMENT CLOSE TO ELECTRIC LINES, CONTACT POWER COMPANY TO MAKE ARRANGEMENTS FOR PROPER SAFEGUARDS. ANY UTILITY COMPANY FEES SHALL BE PAID FOR BY THE CONTRACTOR.
- THE CONTRACTOR SHALL COMPLY WITH OSHA CFR 29 PART 1926 FOR EXCAVATION TRENCHING AND TRENCH PROTECTION REQUIREMENTS.
- THE ENGINEER IS NOT RESPONSIBLE FOR SITE SAFETY MEASURES TO BE EMPLOYED DURING CONSTRUCTION. THE ENGINEER HAS NO CONTRACTUAL DUTY TO CONTROL THE SAFEST METHODS OR MEANS OF THE WORK, JOB SITE RESPONSIBILITIES, SUPERVISION OF PERSONNEL OR TO SUPERVISE SAFETY AND DO NOT VOLUNTARILY ASSUME ANY SUCH DUTY OR RESPONSIBILITY.
- THE CONTRACTOR SHALL RESTORE ANY DRAINAGE STRUCTURE, PIPE, CONDUIT, PAVEMENT, CURBING, SIDEWALKS, LANDSCAPED AREAS OR SIGNAGE DISTURBED DURING CONSTRUCTION TO THEIR ORIGINAL CONDITION OR BETTER, AS APPROVED BY THE PROJECT DEVELOPER OR TOWN OF POMFRET.
- THE CONTRACTOR SHALL PROVIDE AS-BUILT RECORDS OF ALL CONSTRUCTION (INCLUDING UNDERGROUND UTILITIES) TO THE PROJECT DEVELOPER AT THE END OF CONSTRUCTION.
- ALTERNATIVE METHODS AND PRODUCTS, OTHER THAN THOSE SPECIFIED, MAY BE USED IF REVIEWED AND APPROVED BY THE PROJECT DEVELOPER, ENGINEER, AND APPROPRIATE REGULATORY AGENCY PRIOR TO INSTALLATION DURING THE BIDDING/CONSTRUCTION PROCESS.
- INFORMATION ON EXISTING UTILITIES AND STORM DRAINAGE SYSTEMS HAS BEEN COMPILED FROM AVAILABLE INFORMATION INCLUDING UTILITY PROVIDER AND MUNICIPAL RECORD MAPS AND/OR FIELD SURVEY AND IS NOT GUARANTEED CORRECT OR COMPLETE. UTILITIES AND STORM DRAINAGE SYSTEMS ARE SHOWN TO ALERT THE CONTRACTOR TO THEIR PRESENCE AND THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DETERMINING ACTUAL LOCATIONS AND ELEVATIONS OF ALL UTILITIES AND STORM DRAINAGE SYSTEMS INCLUDING SERVICES. PRIOR TO DEMOLITION OR CONSTRUCTION, THE CONTRACTOR SHALL CONTACT "DIG SAFE" 72 HOURS BEFORE COMMENCEMENT OF WORK AT "811" AND VERIFY ALL UTILITY AND STORM DRAINAGE SYSTEM LOCATIONS.
- NO CONSTRUCTION OR DEMOLITION SHALL BEGIN UNTIL APPROVAL OF THE FINAL PLANS IS GRANTED BY ALL GOVERNING AND REGULATORY AGENCIES.

SITE PLAN NOTES

- THE SURVEY WAS PROVIDED BY WSP USA DATED MAY 17, 2021.
- THERE ARE WETLANDS AND WATERWAYS LOCATED ON THE SITE AS INDICATED ON THE PLANS. BOUNDARIES WERE FLAGGED BY APT IN MARCH 2021 AND FIELD SURVEYED BY WSP.
- THE CONTRACTOR SHALL FOLLOW THE RECOMMENDED SEQUENCE OF CONSTRUCTION NOTES PROVIDED ON THE EROSION CONTROL PLAN OR SUBMIT AN ALTERNATE PLAN FOR APPROVAL BY THE ENGINEER AND/OR PERMITTING AGENCIES PRIOR TO THE START CONSTRUCTION. ALLOW A MINIMUM OF 14 WORKING DAYS FOR REVIEW.
- PROPER CONSTRUCTION PROCEDURES SHALL BE FOLLOWED ON ALL IMPROVEMENTS WITHIN THIS PARCEL SO AS TO PREVENT THE SILTING OF ANY WATERCOURSE OR WETLAND IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS. IN ADDITION, THE CONTRACTOR SHALL ADHERE TO "EROSION CONTROL PLAN" CONTAINED HEREIN. THE CONTRACTOR SHALL BE RESPONSIBLE TO POST ALL BONDS AS REQUIRED BY GOVERNMENT AGENCIES WHICH WOULD GUARANTEE THE PROPER IMPLEMENTATION OF THE PLAN.
- ALL SITE WORK, MATERIALS OF CONSTRUCTION, AND CONSTRUCTION METHODS FOR EARTHWORK AND STORM DRAINAGE WORK, SHALL CONFORM TO THE SPECIFICATIONS AND DETAILS AND APPLICABLE SECTIONS OF THE PROJECT SPECIFICATIONS MANUAL. OTHERWISE THIS WORK SHALL CONFORM TO THE STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION AND PROJECT GEOTECHNICAL REPORT IF THERE IS NO PROJECT SPECIFICATIONS MANUAL. ALL FILL MATERIAL UNDER STRUCTURES AND PAVED AREAS SHALL BE PER THE ABOVE STATED APPLICABLE SPECIFICATIONS, AND/OR PROJECT GEOTECHNICAL REPORT, AND SHALL BE PLACED IN ACCORDANCE WITH THE APPLICABLE SPECIFICATIONS UNDER THE SUPERVISION OF A QUALIFIED PROFESSIONAL ENGINEER. MATERIAL SHALL BE COMPACTED IN 8" LIFTS TO 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D 1557 AT 95% PERCENT OF OPTIMUM MOISTURE CONTENT.
- ALL DISTURBANCE INCURRED TO PUBLIC, MUNICIPAL, COUNTY, STATE PROPERTY DUE TO CONSTRUCTION SHALL BE RESTORED TO ITS PREVIOUS CONDITION OR BETTER, TO THE SATISFACTION OF THE TOWN OF POMFRET AND STATE OF CONNECTICUT.
- IF IMPACTED OR CONTAMINATED SOIL IS ENCOUNTERED BY THE CONTRACTOR, THE CONTRACTOR SHALL SUSPEND EXCAVATION WORK OF IMPACTED SOIL AND NOTIFY THE PROJECT DEVELOPER AND/OR PROJECT DEVELOPERS ENVIRONMENTAL CONSULTANT PRIOR TO PROCEEDING WITH FURTHER WORK IN THE IMPACTED SOIL LOCATION UNTIL FURTHER INSTRUCTED BY THE PROJECT DEVELOPER AND/OR PROJECT DEVELOPERS ENVIRONMENTAL CONSULTANT.

UTILITY NOTES

- CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE TOWN OF POMFRET TO SECURE CONSTRUCTION PERMITS AND FOR PAYMENT OF FEES FOR STREET CUTS AND CONNECTIONS TO EXISTING UTILITIES.
- REFER TO DRAWINGS BY PROJECT DEVELOPER FOR THE ONSITE ELECTRICAL DRAWINGS AND INTERCONNECTION TO EXISTING ELECTRICAL GRID. SITE CONTRACTOR SHALL SUPPLY AND INSTALL PIPE ADAPTERS AS NECESSARY AT BUILDING CONNECTION POINT OR AT EXISTING UTILITY OR PIPE CONNECTION POINT. THESE DETAILS ARE NOT INCLUDED IN THESE PLANS.
- UTILITY LOCATIONS AND PENETRATIONS ARE SHOWN FOR THE CONTRACTOR'S INFORMATION AND SHALL BE VERIFIED WITH THE ELECTRICAL ENGINEER AND THE PROJECT DEVELOPERS CONSTRUCTION MANAGER PRIOR TO THE START OF CONSTRUCTION.
- THE CONTRACTOR SHALL VISIT THE SITE AND VERIFY THE ELEVATION AND LOCATION OF ALL UTILITIES BY VARIOUS MEANS PRIOR TO BEGINNING ANY EXCAVATION. TEST PITS SHALL BE DUG AT ALL LOCATIONS WHERE PROP. SANITARY SEWERS AND WHERE PROP. STORM PIPING WILL CROSS EXISTING UTILITIES, AND THE HORIZONTAL AND VERTICAL LOCATIONS OF THE UTILITIES SHALL BE DETERMINED. THE CONTRACTOR SHALL CONTACT THE PROJECT DEVELOPER IN THE EVENT OF ANY DISCOVERED OR UNFORESEEN CONFLICTS BETWEEN EXISTING AND PROPOSED SANITARY SEWERS, STORM PIPING AND UTILITIES SO THAT AN APPROPRIATE MODIFICATION MAY BE MADE.
- UTILITY CONNECTION DESIGN AS REFLECTED ON THE PLAN MAY CHANGE SUBJECT TO UTILITY PROVIDER AND GOVERNING AUTHORITY STAFF REVIEW.
- THE CONTRACTOR SHALL ENSURE THAT ALL UTILITY PROVIDERS AND GOVERNING AUTHORITY STANDARDS FOR MATERIALS AND CONSTRUCTION METHODS ARE MET. THE CONTRACTOR SHALL PERFORM PROPER COORDINATION WITH THE RESPECTIVE UTILITY PROVIDER.
- THE CONTRACTOR SHALL ARRANGE FOR AND COORDINATE WITH THE RESPECTIVE UTILITY PROVIDERS FOR SERVICE INSTALLATIONS AND CONNECTIONS. THE CONTRACTOR SHALL COORDINATE WORK TO BE PERFORMED BY THE VARIOUS UTILITY PROVIDERS AND SHALL PAY ALL FEES FOR CONNECTIONS, DISCONNECTIONS, RELOCATIONS, INSPECTIONS, AND DEMOLITION UNLESS OTHERWISE STATED IN THE PROJECT SPECIFICATIONS MANUAL AND/OR GENERAL CONDITIONS OF THE CONTRACT.
- ALL EXISTING PAVEMENT WHERE UTILITY PIPING IS TO BE INSTALLED SHALL BE SAW CUT. AFTER UTILITY INSTALLATION IS COMPLETED, THE CONTRACTOR SHALL INSTALL TEMPORARY AND/OR PERMANENT PAVEMENT REPAIR AS DETAILED ON THE DRAWINGS OR AS REQUIRED BY THE TOWN OF POMFRET.
- ALL PIPES SHALL BE LAID ON STRAIGHT ALIGNMENTS AND EVEN GRADES USING A PIPE LASER OR OTHER ACCURATE METHOD.
- RELOCATION OF UTILITY PROVIDER FACILITIES, SUCH AS POLES, SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE UTILITY PROVIDER.
- THE CONTRACTOR SHALL COMPACT PIPE BACKFILL IN 8" LIFTS ACCORDING TO THE PIPE BEDDING DETAILS. TRENCH BOTTOM SHALL BE STABLE IN HIGH GROUNDWATER AREAS. A PIPE FOUNDATION SHALL BE USED PER THE TRENCH DETAILS AND IN AREAS OF ROCK EXCAVATION.
- CONTRACTOR TO PROVIDE STEEL SLEEVES AND ANNULAR SPACE SAND FILL FOR UTILITY PIPE AND CONDUIT CONNECTIONS UNDER FOOTINGS.
- ALL UTILITY CONSTRUCTION IS SUBJECT TO INSPECTION FOR APPROVAL PRIOR TO BACKFILLING, IN ACCORDANCE WITH THE APPROPRIATE UTILITY PROVIDER REQUIREMENTS.
- A ONE-FOOT MINIMUM VERTICAL CLEARANCE BETWEEN WATER, GAS, ELECTRICAL, AND TELEPHONE LINES AND STORM PIPING SHALL BE PROVIDED. A SIX-INCH MINIMUM CLEARANCE SHALL BE MAINTAINED BETWEEN STORM PIPING AND SANITARY SEWER. A 6-INCH TO 18-INCH VERTICAL CLEARANCE BETWEEN SANITARY SEWER PIPING AND STORM PIPING SHALL REQUIRE CONCRETE ENCASEMENT OF THE PROP. SANITARY PIPING.
- THE CONTRACTOR SHALL RESTORE ANY UTILITY STRUCTURE, PIPE, CONDUIT, PAVEMENT, CURBING, SIDEWALKS, DRAINAGE STRUCTURE, SWALE OR LANDSCAPED AREAS DISTURBED DURING CONSTRUCTION, TO THEIR ORIGINAL CONDITION OR BETTER TO THE SATISFACTION OF THE PROJECT DEVELOPER AND TOWN OF POMFRET.
- INFORMATION ON EXISTING UTILITIES AND STORM DRAINAGE HAS BEEN COMPILED FROM AVAILABLE INFORMATION INCLUDING UTILITY PROVIDER AND MUNICIPAL RECORD MAPS AND/OR FIELD SURVEY, AND IS NOT GUARANTEED CORRECT OR COMPLETE. UTILITIES AND STORM DRAINAGE ARE SHOWN TO ALERT THE CONTRACTOR TO THEIR PRESENCE. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DETERMINING ACTUAL LOCATIONS AND ELEVATIONS OF ALL UTILITIES AND STORM DRAINAGE INCLUDING SERVICES. CONTACT "DIG SAFE" AT 811 72 HOURS PRIOR TO CONSTRUCTION AND VERIFY ALL UNDERGROUND AND OVERHEAD UTILITY AND STORM DRAINAGE LOCATIONS. THE CONTRACTOR SHALL EMPLOY THE USE OF A UTILITY LOCATING COMPANY TO PROVIDE SUBSURFACE UTILITY ENGINEERING CONSISTING OF DESIGNATING UTILITIES AND STORM PIPING ON PRIVATE PROPERTY WITHIN THE CONTRACT LIMIT AND CONSISTING OF DESIGNATING AND LOCATING WHERE PROP. UTILITIES AND STORM PIPING CROSS EXISTING UTILITIES AND STORM PIPING WITHIN THE CONTRACT LIMITS.
- THE CONTRACTOR SHALL ARRANGE AND COORDINATE WITH UTILITY PROVIDERS FOR WORK TO BE PERFORMED BY UTILITY PROVIDERS. THE CONTRACTOR SHALL PAY ALL UTILITY FEES UNLESS OTHERWISE STATED IN THE PROJECT SPECIFICATION MANUAL AND GENERAL CONDITIONS, AND REPAIR PAVEMENTS AS NECESSARY.
- ELECTRIC DRAWINGS AND REQUIREMENTS ARE NOT INCLUDED AS PART OF THIS DRAWING SET AND SHOULD BE OBTAINED FROM THE PROJECT DEVELOPER.
- ALTERNATIVE METHODS AND PRODUCTS OTHER THAN THOSE SPECIFIED MAY BE USED IF REVIEWED AND APPROVED BY THE PROJECT DEVELOPER, ENGINEER, AND APPROPRIATE REGULATORY AGENCIES PRIOR TO INSTALLATION.
- THE CONTRACTOR SHALL MAINTAIN ALL FLOWS AND UTILITY CONNECTIONS TO EXISTING BUILDINGS WITHOUT INTERRUPTION UNLESS/UNTIL AUTHORIZED TO DISCONNECT BY THE PROJECT DEVELOPER, TOWN OF POMFRET, UTILITY PROVIDERS AND GOVERNING AUTHORITIES.

GENERAL LEGEND

	EXISTING	PROPOSED
PROPERTY LINE	=====	
BUILDING SETBACK		
SOLAR SETBACK	--- . . . --- . . . ---	
EASEMENT	=====	
TREE LINE	~ ~ ~ ~ ~	
WETLAND	=====	
WETLAND BUFFER	-----	
VERNAL POOL	=====	
VERNAL POOL BUFFER	--- . . . --- . . . ---	
WATERCOURSE	=====	
WATERCOURSE BUFFER	--- --- --- --- ---	
MAJOR CONTOUR	--- --- --- --- ---	=====
MINOR CONTOUR	--- --- --- --- ---	=====
UNDERGROUND ELECTRIC	=====	--- E --- E ---
OVERHEAD ELECTRIC	--- OH --- OH ---	--- OH --- OH ---
GAS LINE	=====	
WATER LINE	--- W --- W ---	--- W --- W ---
WATER QUALITY SWALE		--- . . . --- . . . ---
FENCE		--- X --- X --- X ---
LIMIT OF DISTURBANCE		===== LOD =====
SILT FENCE		--- SF --- SF ---



888 PROSPECT STREET
LA JOLLA, CA 92037
OFFICE: (619) 363-3080



567 VAUXHAUL STREET EXTENSION - SUITE 311
WATERFORD, CT 06385 PHONE: (860)-663-1697
WWW.ALLPOINTSTECH.COM FAX: (860)-663-0935

CSC PERMIT SET

NO	DATE	REVISION
0	12/09/21	SITING COUNCIL SUBMISSION
1	04/09/22	COUNCIL INTERROGATORIES
2	05/11/22	PANEL LAYOUT, UTIL. POLES
3		
4		
5		
6		

NOT FOR CONSTRUCTION

DESIGN PROFESSIONAL OF RECORD

PROF: KEVIN A. MCCAFFERY, PE
COMP: ALL-POINTS TECHNOLOGY CORPORATION
ADD: 567 VAUXHAUL STREET
EXTENSION - SUITE 311
WATERFORD, CT 06385

OWNER: ANTONIO & MARY AMARAL

ADDRESS: 254 PUTNAM ROAD
POMFRET CENTER, CT 06259

AMARAL SOLAR

SITE 254 PUTNAM ROAD
ADDRESS: POMFRET CENTER, CT 06259

APT FILING NUMBER: CT657100

	DRAWN BY: KAM
DATE: 12/09/21	CHECKED BY: BG

SHEET TITLE:

GENERAL NOTES

SHEET NUMBER:

GN-1



ENVIRONMENTAL NOTES - RESOURCE PROTECTION MEASURES

WETLAND, VERNAL POOL, AND RARE SPECIES PROTECTION PROGRAM

THE PROPOSED SOLAR FACILITY IS LOCATED PROXIMATE TO SENSITIVE HABITATS INCLUDING WETLAND RESOURCE AREAS, VERNAL POOLS, AND RARE SPECIES HABITAT. IN ADDITION, A PORTION OF THE PROPOSED UNDERGROUND UTILITY ROUTE IS LOCATED WITHIN WETLANDS THAT WERE PREVIOUSLY DISTURBED BY AGRICULTURAL ACTIVITIES AND CONSTRUCTION OF THE FARM POND. AS A RESULT, TEMPORARY DISTURBANCES TO WETLANDS WILL RESULT FROM INSTALLATION OF THE PROPOSED UNDERGROUND UTILITIES VIA TRENCHING. THE FOLLOWING PROTECTIVE MEASURES AND RESTORATION ACTIVITIES SHALL BE FOLLOWED TO HELP AVOID DEGRADATION, AND PROPER RESTORATION OF THESE WETLANDS AS WELL AS HELP AVOID DEGRADATION OF NEARBY WETLAND/WATERCOURSES, AVOID INCIDENTAL IMPACT TO VERNAL POOL INDICATOR SPECIES, AND RARE SPECIES.

WOOD TURTLE (*GLYPTEMYS INSCULPTA*), SPOTTED TURTLE (*CLEMMY'S GUTTATA*), BOBOLINK (*DOLICHONYX ORYZIVORUS*) AND SAVANNAH SPARROW (*PASSERCOLLUS SANDWICHENSIS*), ALL STATE SPECIAL CONCERN SPECIES AFFORDED PROTECTION UNDER THE CONNECTICUT ENDANGERED SPECIES ACT, ARE KNOWN TO OCCUR ON THE SUBJECT PROPERTY IN PROXIMITY TO THE PROPOSED FACILITY. THE RARE SPECIES PROTECTION MEASURES THAT FOLLOW ARE SIMILAR TO PROTECTION MEASURES PREVIOUSLY APPROVED BY THE CONNECTICUT DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION ("DEEP") WILDLIFE DIVISION ON OTHER SIMILAR PROJECTS.

TWO STATE-LISTED BIRDS OCCUR AND POTENTIALLY BREED ON THE PROJECT SITE. BOBOLINK (*DOLICHONYX ORYZIVORUS*) AND SAVANNAH SPARROW (*PASSERCOLLUS SANDWICHENSIS*), THESE SPECIES ARE SMALL (APPROXIMATELY 6" IN HEIGHT) MIGRATORY SONGBIRDS THAT INHABIT GRASSLANDS, HAYFIELDS OR OTHER OPEN TREELESS HABITATS WITH LITTLE TO NO WOODY SHRUB COVER. THEY ARRIVE ON THE BREEDING GROUNDS IN EARLY TO MID-MAY AND ESTABLISH WELL-CONCEALED NESTS ON OR CLOSE TO THE GROUND AMONGST TALL GRASSY COVER. IDEALLY, CONSTRUCTION SHOULD BE PERFORMED OUTSIDE OF THE GRASSLAND BIRD BREEDING SEASON (APRIL 1 THROUGH AUGUST 30). HOWEVER, IF CONSTRUCTION ACTIVITIES ARE PLANNED DURING THE ACTIVE PEAK BREEDING SEASON FOR GRASSLAND BIRD SPECIES (MAY 20 THROUGH AUGUST 20), THE RARE GRASSLAND BIRDS PROTECTIVE MEASURES DURING CONSTRUCTION SHOULD BE FOLLOWED TO HAVE THE LEAST IMPACT ON STATE-LISTED GRASSLAND BIRD SPECIES.

IT IS OF THE UTMOST IMPORTANCE THAT THE CONTRACTOR COMPLIES WITH THE REQUIREMENT FOR IMPLEMENTATION OF THESE PROTECTIVE MEASURES AND THE EDUCATION OF ITS EMPLOYEES AND SUBCONTRACTORS PERFORMING WORK ON THE PROJECT SITE. THE WETLAND PROTECTION MEASURES SHALL BE IMPLEMENTED AND MAINTAINED THROUGHOUT THE DURATION OF CONSTRUCTION ACTIVITIES UNTIL PERMANENT STABILIZATION OF SITE SOILS HAS OCCURRED. VERNAL POOL PROTECTION MEASURES SHOULD BE IMPLEMENTED DURING PEAK AMPHIBIAN MOVEMENT PERIODS (EARLY SPRING BREEDING (MARCH 1ST TO MAY 15TH) AND LATE SUMMER DISPERSAL (JULY 15TH TO SEPTEMBER 15TH)) IF CONSTRUCTION CANNOT BE AVOIDED DURING THESE PERIODS. THE TURTLE PROTECTION MEASURES WITHIN THIS PLAN SHALL BE IMPLEMENTED IF WORK WILL OCCUR DURING EITHER THE TURTLES ACTIVE PERIOD (MARCH 15TH TO NOVEMBER 1ST) OR DORMANT PERIOD (NOVEMBER 1ST TO MARCH 15TH).

ALL-POINTS TECHNOLOGY CORPORATION, P.C. ("APT") WILL SERVE AS THE ENVIRONMENTAL MONITOR FOR THIS PROJECT TO ENSURE THAT THESE PROTECTION MEASURES ARE IMPLEMENTED PROPERLY. APT WILL PROVIDE AN EDUCATION SESSION FOR THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION ACTIVITIES ON PROJECTS LOCATION WITHIN SENSITIVE HABITATS (E.G., RARE SPECIES, WETLANDS, VERNAL POOLS). THE CONTRACTOR SHALL CONTACT DEAN GUSTAFSON, SENIOR BIOLOGIST AT APT, AT LEAST 5 BUSINESS DAYS PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITIES TO SCHEDULE A PRE-CONSTRUCTION MEETING. MR. GUSTAFSON CAN BE REACHED BY PHONE AT (860) 552-2033 OR VIA EMAIL AT DGUSTAFSON@ALLPOINTSTECH.COM.

THIS PROTECTION PROGRAM CONSISTS OF SEVERAL COMPONENTS: EDUCATION OF ALL CONTRACTORS AND SUB-CONTRACTORS PRIOR TO INITIATION OF WORK ON THE SITE; PROTECTIVE MEASURES; WETLAND RESTORATION MEASURES; PETROLEUM STORAGE AND SPILL PREVENTION; VERNAL POOL/WETLAND PROTECTION MEASURES; TURTLE PROTECTION MEASURES; GRASSLAND BIRD PROTECTION MEASURES AND MOWING RESTRICTIONS, AND, REPORTING.

1. CONTRACTOR EDUCATION

a. PRIOR TO WORK ON SITE, THE CONTRACTOR SHALL ATTEND AN EDUCATIONAL SESSION AT THE PRE-CONSTRUCTION MEETING WITH APT. THIS ORIENTATION AND EDUCATIONAL SESSION WILL CONSIST OF AN INTRODUCTORY MEETING WITH APT TO EMPHASIZE THE ENVIRONMENTALLY SENSITIVE NATURE OF THE PROJECT, THE VARIOUS WETLAND, VERNAL POOL AND RARE SPECIES RESOURCES, AND THE REQUIREMENT TO DILIGENTLY FOLLOW THE PROTECTIVE MEASURES AS DESCRIBED IN SECTIONS BELOW. WORKERS WILL ALSO BE PROVIDED INFORMATION REGARDING THE IDENTIFICATION OF OTHER TURTLES, SNAKES, COMMON HERPETOFAUNA, AND RARE GRASSLAND BIRD SPECIES THAT COULD BE ENCOUNTERED, TYPICAL SPECIES BEHAVIOR, AND PROPER PROCEDURES IF SPECIES ARE ENCOUNTERED. THE IMPORTANCE OF PROTECTING NEARBY WETLAND AND VERNAL POOL RESOURCES WILL ALSO BE STRESSED AS PART OF THIS EDUCATIONAL SESSION.

b. THE EDUCATION SESSION WILL ALSO FOCUS ON MEANS TO DISCRIMINATE BETWEEN THE SPECIES OF CONCERN AND OTHER NATIVE SPECIES TO AVOID UNNECESSARY "FALSE ALARMS". ENCOUNTERS WITH ANY SPECIES OF TURTLES, SNAKES AND AMPHIBIANS WILL BE DOCUMENTED.

c. THE CONTRACTOR WILL DESIGNATE ONE OF ITS WORKERS AS THE "PROJECT MONITOR" TO BE RESPONSIBLE FOR THE PERIODIC "SWEEPS" FOR RARE SPECIES AND HERPETOFAUNA WITHIN THE CONSTRUCTION ZONE EACH MORNING AND FOR ANY AREAS OF GROUND DISTURBANCE WORK. THIS INDIVIDUAL WILL RECEIVE MORE INTENSE TRAINING FROM APT ON THE IDENTIFICATION AND PROTECTION OF RARE SPECIES AND HERPETOFAUNA IN ORDER TO PERFORM SWEEPS. ANY HERPETOFAUNA DISCOVERED WOULD BE TRANSLOCATED OUTSIDE THE WORK ZONE IN THE GENERAL DIRECTION THE ANIMAL WAS ORIENTED.

d. APT WILL ALSO POST CAUTION SIGNS THROUGHOUT THE PROJECT SITE FOR THE DURATION OF THE CONSTRUCTION PROJECT TO MAINTAIN WORKER AWARENESS AS THE PROJECT PROGRESSES PROVIDING NOTICE OF THE ENVIRONMENTALLY SENSITIVE NATURE OF THE WORK AREA, THE POTENTIAL FOR ENCOUNTERING VARIOUS RARE SPECIES, AMPHIBIANS AND REPTILES AND PRECAUTIONS TO BE TAKEN TO AVOID INJURY TO OR MORTALITY OF THESE ANIMALS.

e. THE CONTRACTOR WILL BE PROVIDED WITH CELL PHONE AND EMAIL CONTACTS FOR APT PERSONNEL TO IMMEDIATELY REPORT ANY ENCOUNTERS WITH ANY RARE SPECIES. IF ANY RARE SPECIES ARE ENCOUNTERED, THE CONTRACTOR SHALL IMMEDIATELY CEASE ALL WORK, AVOID ANY DISTURBANCE TO THE SPECIES, AND CONTACT APT.

2. ISOLATION MEASURES & SEDIMENTATION AND EROSION CONTROLS

a. ALL EROSION AND SEDIMENTATION CONTROLS SHALL CONFORM TO THE 2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL, DEP BULLETIN 34.

b. PLASTIC NETTING USED IN A VARIETY OF EROSION CONTROL PRODUCTS (I.E., EROSION CONTROL BLANKETS, FIBER ROLLS [WATTLES], REINFORCED SILT FENCE) HAS BEEN FOUND TO ENTANGLE WILDLIFE, INCLUDING REPTILES, AMPHIBIANS, BIRDS, AND SMALL MAMMALS, BUT PARTICULARLY SNAKES. NO PERMANENT EROSION CONTROL PRODUCTS OR REINFORCED SILT FENCE WILL BE USED ON THE PROJECT. TEMPORARY EROSION CONTROL PRODUCTS WILL USE EITHER EROSION CONTROL BLANKETS AND FIBER ROLLS COMPOSED OF PROCESSED FIBERS MECHANICALLY BOUND TOGETHER TO FORM A CONTINUOUS MATRIX (NETLESS) OR NETTING COMPOSED OF PLANAR VERNAL NATURAL BIODEGRADABLE FIBER TO AVOID/MINIMIZE WILDLIFE ENTANGLEMENT.

c. INSTALLATION OF SEDIMENTATION AND EROSION CONTROLS, REQUIRED FOR EROSION CONTROL COMPLIANCE AND CREATION OF A BARRIER TO POSSIBLE MIGRATING/DISPERSING TURTLES, SHALL BE PERFORMED BY THE CONTRACTOR FOLLOWING CLEARING ACTIVITIES AND PRIOR TO ANY EARTHWORK. THE ENVIRONMENTAL MONITOR WILL INSPECT THE WORK ZONE AREA PRIOR TO AND FOLLOWING EROSION CONTROL BARRIER INSTALLATION TO ENSURE THE AREA IS FREE OF TURTLES AND OTHER HERPETOFAUNA AND DOCUMENT BARRIERS HAVE BEEN SATISFACTORILY INSTALLED. THE INTENT OF THE BARRIER IS TO SEGREGATE THE MAJORITY OF THE WORK ZONE AND ISOLATE IT FROM NESTING/FORAGING/MIGRATING/DISPERSING TURTLES, SNAKES AND OTHER HERPETOFAUNA. OFTENTIMES COMPLETE ISOLATION OF A WORK ZONE IS NOT FEASIBLE DUE TO ACCESSIBILITY NEEDS AND LOCATIONS OF STAGING/MATERIAL STORAGE AREAS, ETC. ALTHOUGH THE BARRIERS MAY NOT COMPLETELY ISOLATE THE WORK ZONE, THEY WILL BE POSITIONED TO DEFLECT MIGRATING/DISPERSAL ROUTES AWAY FROM THE WORK ZONE TO MINIMIZE POTENTIAL ENCOUNTERS WITH TURTLES, SNAKES AND OTHER HERPETOFAUNA.

d. EXCLUSIONARY FENCING FOR TURTLES SHALL BE AT LEAST 20 INCHES TALL AND MUST BE SECURED TO AND REMAIN IN CONTACT WITH THE GROUND AND BE REGULARLY MAINTAINED BY THE CONTRACTOR (AT LEAST BI-WEEKLY AND AFTER MAJOR WEATHER EVENTS) TO SECURE ANY GAPS OR OPENINGS AT GROUND LEVEL THAT MAY LET ANIMAL PASS THROUGH.

e. SILT FENCING SHALL CONSIST OF NON-REINFORCED CONVENTIONAL EROSION CONTROL WOVEN

FABRIC, INSTALLED APPROXIMATELY SIX INCHES BELOW SURFACE GRADE AND STAKED AT SEVEN TO TEN-FOOT INTERVALS USING FOUR-FOOT OAK STAKES OR APPROVED EQUIVALENT.

f. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAILY INSPECTIONS OF THE SEDIMENTATION AND EROSION CONTROLS, INCLUDING BUT NOT LIMITED TO FOR TEARS OR BREECHEES AND ACCUMULATION LEVELS OF SEDIMENT, PARTICULARLY FOLLOWING STORM EVENTS THAT GENERATE A DISCHARGE AS DEFINED BY AND IN ACCORDANCE WITH APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS.

g. THE CONTRACTOR SHALL NOTIFY THE ENVIRONMENTAL MONITOR WITHIN 24 HOURS OF ANY BREECHEES OF THE SEDIMENTATION AND EROSION CONTROLS AND ANY SEDIMENT RELEASES BEYOND THE PERIMETER CONTROLS THAT IMPACT WETLANDS, WATERCOURSES OR WITHIN 100 FEET OF WETLANDS AND WATERCOURSES.

h. APT WILL PROVIDE PERIODIC INSPECTIONS OF THE SEDIMENTATION AND EROSION CONTROLS THROUGHOUT THE DURATION OF CONSTRUCTION ACTIVITIES ONLY AS IT PERTAINS TO THEIR FUNCTION AS ISOLATION MEASURES FOR THE PURPOSES OF THIS PROTECTION PLAN. THIRD PARTY MONITORING OF SEDIMENTATION AND EROSION CONTROLS WILL BE PERFORMED BY OTHER PARTIES, AS NECESSARY, UNDER APPLICABLE LOCAL, STATE AND/OR FEDERAL REGULATIONS AND OTHER PROJECT AUTHORIZATIONS (I.E., DEEP STORMWATER PERMIT, ETC.).

i. THE APT ENVIRONMENTAL MONITOR WILL PROVIDE PERIODIC INSPECTIONS OF THE SEDIMENTATION AND EROSION CONTROLS THROUGHOUT THE DURATION OF CONSTRUCTION ACTIVITIES ONLY AS IT PERTAINS TO THIS RESOURCE PROTECTION PLAN, WHICH WILL GENERALLY OCCUR ON A MONTHLY BASIS. IF APT IS NOTIFIED BY THE CONTRACTOR OF A BREACH IN SEDIMENT AND EROSION CONTROLS RESULTING IN A SEDIMENT RELEASE, AN INSPECTION WILL BE SCHEDULED SPECIFICALLY TO INVESTIGATE AND EVALUATE POSSIBLE IMPACTS TO RESOURCE AREAS, WITH A FOCUS ON NEARBY WETLAND RESOURCES.

j. THE EXTENT OF THE SEDIMENTATION AND EROSION CONTROLS WILL BE AS SHOWN ON THE SITE PLANS. THE CONTRACTOR SHALL HAVE ADDITIONAL SEDIMENTATION AND EROSION CONTROLS STOCKPILED ON SITE SHOULD FIELD OR CONSTRUCTION CONDITIONS WARRANT EXTENDING THE CONTROLS AS DIRECTED BY APT OR OTHER REGULATORY AGENCIES.

k. NO EQUIPMENT, VEHICLES OR CONSTRUCTION MATERIALS SHALL BE STORED OUTSIDE OF THE SEDIMENTATION AND EROSION CONTROLS WITHIN 100 FEET OF WETLANDS OR WATERCOURSES.

l. ALL SEDIMENTATION AND EROSION CONTROLS SHALL BE REMOVED WITHIN 30 DAYS OF COMPLETION OF WORK AND PERMANENT STABILIZATION OF SITE SOILS SO THAT REPTILE AND AMPHIBIAN MOVEMENT BETWEEN UPLANDS AND WETLANDS IS NOT RESTRICTED. IF FIBER ROLLS/WATTLES, STRAW BALES, OR OTHER NATURAL MATERIAL EROSION CONTROL PRODUCTS ARE USED, SUCH DEVICES WILL NOT BE LEFT IN PLACE TO BIODEGRADE AND SHALL BE PROMPTLY REMOVED AFTER SOILS ARE STABLE SO AS NOT TO CREATE A BARRIER TO MIGRATING WILDLIFE. SEED FROM SEEDING OF SOILS SHOULD NOT SPREAD OVER FIBER ROLLS/WATTLES AS IT MAKES THEM HARDER TO REMOVE ONCE SOILS ARE STABILIZED BY VEGETATION.

3. WETLAND RESTORATION MEASURES

a. FLAG OR FENCE PROJECT LIMITS OF DISTURBANCE WITHIN ALL WETLAND AREAS AND AREAS WITHIN 100 FEET OF WETLANDS PRIOR TO ANY WORK IN WETLAND AREAS.

b. LOCATE STAGING AREAS AND ACCESS POINTS. STAGING AREAS SHOULD BE LOCATED AT LEAST 50 FEET FROM THE EDGE OF THE WETLAND. INSTALL SEDIMENT BARRIERS DOWN SLOPE OF ANY STAGING AREAS OR ACCESS POINTS.

c. SWAMP MATS, TIMBER MATS, TRUCK MATS OR SIMILAR DEVICES SHALL BE USED DURING THE CROSSINGS OF WETLANDS. SUCH DEVICES SHALL BE INSTALLED PRIOR TO CLEARING, GRUBBING OR EXCAVATION ACTIVITIES.

d. CLEARING, GRUBBING AND UTILITY TRENCHING ACTIVITIES MAY NOT COMMENCE IN ANY STAGE OR PHASE OF THE PROJECT UNTIL THE EROSION AND SEDIMENTATION CONTROLS SPECIFIED BY THIS PROTECTION PLAN AND AS DETAILED ON THE PROJECT SITE PLANS HAVE BEEN INSTALLED AND HAVE BEEN REVIEWED AND APPROVED BY THE ENVIRONMENTAL MONITOR TO ENSURE EROSION CONTROLS ARE PROPERLY INSTALLED.

e. SOIL EXCAVATED FROM WETLAND AREAS SHALL BE CAREFULLY REMOVED WITH THE ROOTS INTACT. THIS SOIL SHOULD BE PLACED IN A SEPARATE STOCKPILE TO BE REUSED DURING THE WETLAND RESTORATION WORK. BOTH WETLAND TOPSOIL AND SUBSOIL SHALL BE SEGREGATED INTO SEPARATE STOCKPILES.

f. SOIL EXCAVATED FROM THE UTILITIES TRENCH LOCATED WITHIN OR ADJACENT TO WETLANDS SHALL BE TEMPORARILY PLACED ON GEOTEXTILE FABRIC.

g. DEWATERING OF THE UTILITY TRENCH EXCAVATION SHALL BE PUMPED TO A SEDIMENT FILTER BAG OR TEMPORARY SEDIMENT BASIN, FOLLOWING REQUIREMENTS AS NOTED IN SECTION 2.

h. INSTALL PIPE AND TRENCH PLUGS IN WETLAND AREAS, AS NECESSARY, TO PREVENT THE TRENCH FROM DRAINING THE WETLAND OR CHANGING ITS HYDROLOGY, AS DETERMINED BY THE ENVIRONMENTAL MONITOR.

i. BACKFILL PIPE TRENCH. BACKFILL FIRST WITH STOCKPILED WETLAND SUBSOIL, WITH THE TOP 2-INCHES OF THE EXCAVATED TRENCH FILLED WITH THE STOCKPILED WETLAND TOPSOIL TO MATCH ORIGINAL SURFACE GRADES.

j. NO SOIL AMENDMENTS SUCH AS AGRICULTURAL LIME, FERTILIZER, ETC. WILL BE USED WITHIN WETLAND AREAS.

k. COMPACT BACKFILL AND GRADE THE SURFACE OF THE TRENCH AREA TO ALLOW FOR POSITIVE DRAINAGE TO SOIL EROSION AND SEDIMENT CONTROLS AND TO PREPARE DISTURBED AREAS FOR PERMANENT TRENCH RESTORATION.

l. ORIGINAL GRADES THROUGH WETLANDS MUST BE RESTORED AFTER TRENCHING AND BACKFILLING. ANY EXCESS FILL MATERIALS MUST BE REMOVED FROM THE WETLAND AND NOT SPREAD ON-SITE.

m. SEED DISTURBED WETLAND AREAS WITH A NEW ENGLAND WET SEED MIX (NEW ENGLAND WETLAND PLANTS, INC., OR APPROVED EQUIVALENT) AT THE MANUFACTURERS RECOMMENDED SEED RATE. MULCH-DISTURBED WETLAND AREAS WITH NON-WOVEN NATURAL FIBER EROSION CONTROL BLANKET OR 1" TO 2" INCHES OF CLEAN STRAW MULCH.

New England Wetmix (Wetland Seed Mix)

Botanical Name	Common Name	Indicator
<i>Carex vulpinoidea</i>	Fox Sedge	OBL
<i>Carex scoparia</i>	Blunt Broom Sedge	FACW
<i>Carex lurida</i>	Lurid Sedge	OBL
<i>Carex lupulina</i>	Hop Sedge	OBL
<i>Poa palustris</i>	Fowl Bluegrass	FACW
<i>Bidens frondosa</i>	Beggar Ticks	FACW
<i>Scirpus atrovirens</i>	Green Bulrush	OBL
<i>Asclepias incarnata</i>	Swamp Milkweed	OBL
<i>Carex crinita</i>	Fringed Sedge	OBL
<i>Vernonia noveboracensis</i>	New York Ironweed	FACW+
<i>Juncus effusus</i>	Soft Rush	FACW+
<i>Aster lateriflorus (Symphyotrichum lateriflorum)</i>	Starved/Calico Aster	FACW
<i>Iris versicolor</i>	Blue Flag	OBL
<i>Glyceria grandis</i>	American Mannagrass	OBL
<i>Mimulus ringens</i>	Square Stemmed Monkey Flower	OBL
<i>Eupatorium maculatum (Eutrochium maculatum)</i>	Spotted Joe Pye Weed	OBL
PRICE PER LB. \$135.00 MIN. QUANTITY 1 LBS. TOTAL: \$135.00		APPLY: 18 LBS/ACRE @2500 sq ft/lb

n. SEED DISTURBED UPLAND AREAS WITH ERNMX-610, SEE SEED LIST ON SHEET DN-1, AT THE MANUFACTURERS RECOMMENDED SEED RATE. MULCH DISTURBED AREAS WITH NON-WOVEN NATURAL FIBER EROSION CONTROL BLANKET OR 1" TO 2" INCHES OF CLEAN STRAW MULCH.

o. MAINTAIN ALL EROSION AND SEDIMENTATION CONTROL DEVICES UNTIL SITE WORK IS COMPLETE AND A UNIFORM 70% PERENNIAL VEGETATIVE COVER IS ESTABLISHED AS CONFIRMED BY THE ENVIRONMENTAL MONITOR.

p. REMOVE ALL SOIL AND EROSION SEDIMENT CONTROL MEASURES WITHIN 30 DAYS UPON ESTABLISHMENT OF A UNIFORM 70% VEGETATIVE COVER OVER THE DISTURBED AREA. RE-GRADE AND REVEGETATE AREAS DISTURBED DURING THE REMOVAL OF THE SOIL EROSION AND SEDIMENT CONTROLS.

4. PETROLEUM MATERIALS STORAGE AND SPILL PREVENTION

a. CERTAIN PRECAUTIONS ARE NECESSARY TO STORE PETROLEUM MATERIALS, REFUEL AND CONTAIN AND PROPERLY CLEAN UP ANY INADVERTENT FUEL OR PETROLEUM (I.E., OIL, HYDRAULIC FLUID, ETC.) SPILL TO AVOID POSSIBLE IMPACT TO RESOURCES.

b. A SPILL CONTAINMENT KIT CONSISTING OF A SUFFICIENT SUPPLY OF ABSORBENT PADS AND ABSORBENT MATERIAL WILL BE MAINTAINED BY THE CONTRACTOR AT THE CONSTRUCTION SITE THROUGHOUT THE DURATION OF THE PROJECT. IN ADDITION, A WASTE DRUM WILL BE KEPT ON SITE TO CONTAIN ANY USED ABSORBENT PADS/MATERIAL FOR PROPER AND TIMELY DISPOSAL OFF SITE IN ACCORDANCE WITH APPLICABLE LOCAL, STATE, AND FEDERAL LAWS.

c. THE FOLLOWING PETROLEUM AND HAZARDOUS MATERIALS STORAGE AND REFUELING RESTRICTIONS AND SPILL RESPONSE PROCEDURES WILL BE ADHERED TO BY THE CONTRACTOR.

i. PETROLEUM AND HAZARDOUS MATERIALS STORAGE AND REFUELING

1. REFUELING OF VEHICLES OR MACHINERY SHALL OCCUR A MINIMUM OF 100 FEET FROM WETLANDS OR WATERCOURSES AND SHALL TAKE PLACE ON AN IMPERVIOUS PAD WITH SECONDARY CONTAINMENT DESIGNED TO CONTAIN FUELS.

2. ANY FUEL OR HAZARDOUS MATERIALS THAT MUST BE KEPT ON SITE SHALL BE STORED ON AN IMPERVIOUS SURFACE UTILIZING SECONDARY CONTAINMENT A MINIMUM OF 100 FEET FROM WETLANDS OR WATERCOURSES.

3. THE CONTRACTOR SHALL INSPECT ALL EQUIPMENT AT THE BEGINNING AND END OF EACH DAY FOR ANY FUEL OR HYDRAULIC LEAKS AND IF DISCOVERED SHALL TAKE IMMEDIATE STEPS TO MAKE REPAIRS AND CLEAN UP ANY DISCHARGES AS DETAILED IN THE FOLLOWING SECTIONS.

ii. INITIAL SPILL RESPONSE PROCEDURES

1. STOP OPERATIONS AND SHUT OFF EQUIPMENT.

2. REMOVE ANY SOURCES OF SPARK OR FLAME.

3. CONTAIN THE SOURCE OF THE SPILL.

4. DETERMINE THE APPROXIMATE VOLUME OF THE SPILL.

5. IDENTIFY THE LOCATION OF NATURAL FLOW PATHS TO PREVENT THE RELEASE OF THE SPILL TO SENSITIVE NEARBY WATERWAYS OR WETLANDS.

6. ENSURE THAT FELLOW WORKERS ARE NOTIFIED OF THE SPILL.

iii. SPILL CLEAN UP & CONTAINMENT

1. OBTAIN SPILL RESPONSE MATERIALS FROM THE ON-SITE SPILL RESPONSE KIT. PLACE ABSORBENT MATERIALS DIRECTLY ON THE RELEASE AREA.

2. LIMIT THE SPREAD OF THE SPILL BY PLACING ABSORBENT MATERIALS AROUND THE PERIMETER OF THE SPILL.

3. ISOLATE AND ELIMINATE THE SPILL SOURCE.

4. CONTACT THE APPROPRIATE LOCAL, STATE AND/OR FEDERAL AGENCIES, AS NECESSARY.

5. CONTACT A DISPOSAL COMPANY TO PROPERLY DISPOSE OF CONTAMINATED MATERIALS IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS.

iv. REPORTING

1. COMPLETE AN INCIDENT REPORT.

2. SUBMIT A COMPLETED INCIDENT REPORT TO THE CONNECTICUT SITING COUNCIL, AND OTHER APPLICABLE LOCAL, STATE, AND FEDERAL OFFICIALS.

6. HERBICIDE, PESTICIDE AND SALT RESTRICTIONS

a. THE USE OF HERBICIDES AND PESTICIDES AT THE FACILITY SHALL BE RESTRICTED. IN THE EVENT HERBICIDES AND/OR PESTICIDES ARE REQUIRED AT THE FACILITY (I.E., TO ASSIST IN MANAGEMENT OF INVASIVE SPECIES WITHIN HABITAT ENHANCEMENT AREAS), THEIR USE WILL BE USED IN ACCORDANCE WITH INTEGRATED PEST MANAGEMENT ("IPM") PRINCIPLES WITH PARTICULAR ATTENTION TO MINIMIZE APPLICATIONS WITHIN 100 FEET OF WETLAND OR WATERCOURSE RESOURCES. NO APPLICATIONS OF HERBICIDES OR PESTICIDES ARE ALLOWED WITHIN ACTUAL WETLAND OR WATERCOURSE RESOURCES.

b. MAINTENANCE OF THE FACILITY DURING THE WINTER MONTHS SHALL NOT INCLUDE THE APPLICATION OF SALT OR SIMILAR PRODUCTS FOR MELTING SNOW OR ICE.

6. VERNAL POOL PROTECTIVE MEASURES

a. A THOROUGH COVER SEARCH OF THE CONSTRUCTION AREA WILL BE PERFORMED BY APT'S ENVIRONMENTAL MONITOR FOR HERPETOFAUNA (AMPHIBIANS AND REPTILES) PRIOR TO AND FOLLOWING INSTALLATION OF THE SILT FENCING BARRIER TO REMOVE ANY SPECIES FROM THE WORK ZONE PRIOR TO THE INITIATION OF CONSTRUCTION ACTIVITIES. ANY HERPETOFAUNA DISCOVERED WOULD BE CAREFULLY TRANSLOCATED OUTSIDE THE WORK ZONE IN THE GENERAL DIRECTION THE ANIMAL WAS ORIENTED. PERIODIC INSPECTIONS WILL BE PERFORMED BY APT'S ENVIRONMENTAL MONITOR THROUGHOUT THE DURATION OF THE CONSTRUCTION.

b. ANY STORMWATER MANAGEMENT FEATURES, RUTS OR ARTIFICIAL DEPRESSIONS THAT COULD HOLD WATER CREATED INTENTIONALLY OR UNINTENTIONALLY BY SITE CLEARING/CONSTRUCTION ACTIVITIES WILL BE PROPERLY FILLED IN AND PERMANENTLY STABILIZED WITH VEGETATION TO AVOID THE CREATION OF VERNAL POOL "DECOY POOLS" THAT COULD INTERCEPT AMPHIBIANS MOVING TOWARD THE VERNAL POOLS. STORMWATER MANAGEMENT FEATURES SUCH AS LEVEL SPREADERS WILL BE CAREFULLY REVIEWED IN THE FIELD TO ENSURE THAT STANDING WATER DOES NOT ENDURE FOR MORE THAN A 24-HOUR PERIOD TO AVOID CREATION OF DECOY POOLS AND MAY BE SUBJECT TO FIELD DESIGN CHANGES. ANY SUCH PROPOSED DESIGN CHANGES WILL BE REVIEWED BY THE DESIGN ENGINEER TO ENSURE STORMWATER MANAGEMENT FUNCTIONS ARE MAINTAINED.

7. TURTLE PROTECTIVE MEASURES - ACTIVE PERIOD (MARCH 15TH TO NOVEMBER 1ST)

a. PRIOR TO CONSTRUCTION AND FOLLOWING INSTALLATION OF ISOLATION BARRIERS, THE CONSTRUCTION AREA WILL BE SWEEP BY APT AND ANY TURTLES OCCURRING WITHIN THE WORK AREA WILL BE RELOCATED TO SUITABLE HABITAT OUTSIDE OF THE ISOLATION BARRIERS.

a. PRIOR TO THE START OF CONSTRUCTION EACH DAY, THE CONTRACTOR SHALL SEARCH THE ENTIRE WORK AREA FOR TURTLES.

b. IF A TURTLE IS FOUND DURING THE ACTIVE PERIOD, IT SHALL BE IMMEDIATELY MOVED, UNHARMED, BY CAREFULLY GRASPED IN BOTH HANDS, ONE ON EACH SIDE OF THE SHELL, BETWEEN THE TURTLES FORELIMBS AND THE HIND LIMBS, AND PLACED JUST OUTSIDE OF THE ISOLATION BARRIER IN THE SAME APPROXIMATE DIRECTION IT WAS HEADING. THESE ANIMALS ARE PROTECTED BY LAW AND NO TURTLES SHOULD BE RELOCATED FROM THE PROPERTY.

c. SPECIAL CARE SHALL BE TAKEN BY THE CONTRACTOR DURING EARLY MORNING AND EVENING HOURS SO THAT POSSIBLE BASKING OR FORAGING TURTLES ARE NOT HARMED BY CONSTRUCTION ACTIVITIES.

d. THE CONTRACTOR SHALL BE PARTICULARLY DILIGENT DURING THE MONTHS OF MAY AND JUNE WHEN TURTLES ARE ACTIVELY SELECTING NESTING SITES WHICH RESULTS IN AN INCREASE IN TURTLE MOVEMENT ACTIVITY.

e. NO HEAVY MACHINERY OR VEHICLES MAY BE PARKED IN ANY TURTLE HABITAT.

f. SPECIAL PRECAUTIONS MUST BE TAKEN TO AVOID DEGRADATION OF WETLAND HABITATS INCLUDING ANY WET MEADOW HABITAT AND VERNAL POOLS.

8. TURTLE PROTECTIVE MEASURES - DORMANT PERIOD (NOVEMBER 1ST TO MARCH 15TH)

a. DO NOT CONDUCT LAND CLEARING ACTIVITIES WITHIN 100 FEET OF WETLANDS DURING THE TURTLES DORMANT PERIOD.

b. AVOID AND LIMIT ANY EQUIPMENT USE WITHIN 100 FEET OF WETLANDS AND NO HEAVY MACHINERY OR VEHICLES MAY BE PARKED IN ANY TURTLE HABITAT OR WITHIN 100 FEET OF WETLANDS.

9. RARE GRASSLAND BIRDS PROTECTIVE MEASURES DURING CONSTRUCTION

a. IF CONSTRUCTION ACTIVITIES ARE TO OCCUR DURING THE ACTIVE PEAK BREEDING SEASON FOR RARE GRASSLAND BIRD SPECIES (MAY 20 TO AUGUST 20), THESE BIRDS SHOULD BE DETERFERED FROM NESTING WITHIN THE PROJECT LIMITS BY IMPLEMENTING THE FOLLOWING MEASURES.

b. THE PROJECT AREA SHOULD BE MOWED CONTINUOUSLY TWICE PER WEEK STARTING ON MAY 1ST AND CONTINUING UNTIL CONSTRUCTION BEGINS.

c. VEGETATION SHOULD NOT BE ALLOWED TO EXCEED THREE INCHES IN HEIGHT DURING THIS PERIOD.

d. THE TWICE PER WEEK MOWING SCHEDULE SHOULD BE MAINTAINED REGARDLESS OF VEGETATION HEIGHT (I.E., EVEN IF VEGETATION HEIGHT REMAINS BELOW THREE INCHES), TO SERVE AS AN ADDITIONAL DETERRENT TO NEST ESTABLISHMENT.

e. FIELD SURVEYS BY QUALIFIED BIOLOGISTS SHOULD OCCUR DURING THIS MOWING PERIOD AND THROUGH THE MONTH OF MAY UNTIL CONSTRUCTION BEGINS TO ENSURE THAT THE MEASURES ARE EFFECTIVELY DETERREING NEST ESTABLISHMENT. IF THIS PROVES UNSUCCESSFUL, REMEDIAL MEASURES WILL BE RECOMMENDED.

f. FOR MAINTENANCE OF THE FACILITY ONCE CONSTRUCTION HAS BEEN COMPLETED, MOWING ACTIVITIES SHOULD BE RESTRICTED AS OUTLINED IN SECTION 8. SITE MANAGEMENT PROTECTION MEASURES (MOWING).

10. RARE GRASSLAND BIRDS SITE MANAGEMENT MEASURES (MOWING)

a. THE FOLLOWING MEASURES ARE INTENDED FOR IMPLEMENTATION WITHIN THE FENCED SOLAR-POWERED GENERATION FACILITY. THE LIKELIHOOD OF NESTING OCCURRING WITHIN THE FENCED COMPOUND, AND AMONGST THE ARRAYS THEMSELVES, IS LOW. HOWEVER, THESE BIRDS MAY BREED IN THE CONTIGUOUS GRASSLAND HABITAT ADJACENT TO THE FACILITY AND THEREFORE WOULD BE SUBJECT TO SECONDARY IMPACTS SUCH AS NOISE OR VISUAL DISTURBANCE THAT MAY AFFECT NESTING. ADDITIONALLY, THERE IS THE POTENTIAL FOR ADULTS AND FLEDGLINGS TO FEED WITHIN THE FENCED COMPOUND.

b. TIMING OF MOWING/VEGETATION MAINTENANCE. IF POSSIBLE, MOWING SHOULD BE AVOIDED FROM MAY 15TH THROUGH AUGUST 15TH TO MINIMIZE IMPACTS TO NESTING BIRDS. FOR THE BENEFIT OF BIRDS AS WELL AS TERRESTRIAL WILDLIFE, MOWING CONDUCTED ONCE PER SEASON IS OPTIMAL. AFTER OCTOBER 15TH WHEN MOST SPECIES HAVE ENTERED FALL/WINTER DORMANCY.

c. MOWING TYPE/METHOD:

1. MOWER SPEED: MOWING AT SLOW SPEEDS WILL ALLOW ANIMALS TO REACT AND MOVE OUT OF THE FIELD.

2. MOWING STYLE: AVOID FLAIL MOWER HEADS WITH GUIDE BARS THAT RIDE ALONG THE GROUND. SICKLE BAR MOWERS WILL HAVE THE LEAST IMPACT IF MOWING EVERY 1-5 YEARS.

3. MOWING HEIGHT: IF MOWING DURING THE BREEDING SEASON, RETENTION OF MOWING STUBBLE AT A MINIMUM HEIGHT OF 7 INCHES WILL REDUCE MORTALITY AND WILL LEAVE IMPORTANT COVER FOR WILDLIFE.

4. DIRECTIONALITY: IF MOWING DURING THE BREEDING SEASON IS NECESSARY, START MOWING CLOSEST TO THE ARRAYS AND MOVE OUTWARD TOWARD THE EDGE OF THE ARRAY FIELD.

d. PRE-MOWING NEST SURVEYS: IF MOWING OUTSIDE OF THE NESTING SEASON IS NOT POSSIBLE, A PRE-MOWING INSPECTION BY AN ORNITHOLOGIST IS RECOMMENDED TO CONFIRM THAT NO NESTS ARE PRESENT WITHIN THE MOWING LIMITS. THAT SURVEY SHOULD OCCUR NO MORE THAN ONE WEEK PRIOR TO THE START OF MOWING. ANY ACTIVITY BY TARGET SPECIES SHOULD BE FIELD FLAGGED AND/OR CONVEYED TO THE CONTRACTOR. IF A NEST SITE IS OBSERVED WITHIN THE MOWING LIMITS, NO MOWING SHOULD OCCUR WITHIN 100 FEET OF THE NEST SITE UNTIL IT IS INACTIVE AND THE FLEDGLINGS ARE FULLY MOBILE.

11. REPORTING

a. COMPLIANCE MONITORING REPORTS (BRIEF NARRATIVE AND APPLICABLE PHOTOS) DOCUMENTING EACH APT INSPECTION WILL BE SUBMITTED BY APT TO THE PERMITTEE/FACILITY OWNER AND ITS CONTRACTOR FOR COMPLIANCE VERIFICATION OF THESE PROTECTION MEASURES. THESE REPORTS ARE NOT TO BE USED TO DOCUMENT COMPLIANCE WITH ANY OTHER PERMIT AGENCY APPROVAL CONDITIONS (I.E., DEEP STORMWATER PERMIT MONITORING, ETC.). ANY NON-COMPLIANCE OBSERVATIONS OF EROSION CONTROL MEASURES OR EVIDENCE OF EROSION OR SEDIMENT RELEASE BY APT'S ENVIRONMENTAL MONITOR WILL BE REPORTED WITHIN 24 HOURS TO THE PERMITTEE/FACILITY OWNER AND ITS CONTRACTOR AND INCLUDED IN THE REPORTS ALONG WITH ANY OBSERVATIONS OF RARE SPECIES OR HERPETOFAUNA.

b. FOLLOWING COMPLETION OF THE CONSTRUCTION PROJECT, APT WILL PROVIDE A COMPLIANCE MONITORING SUMMARY REPORT TO THE PERMITTEE/FACILITY OWNER DOCUMENTING IMPLEMENTATION OF THIS RESOURCE PROTECTION PROGRAM, MONITORING AND ANY SPECIES OBSERVATIONS. THE PERMITTEE/FACILITY OWNER SHALL PROVIDE A COPY OF THE COMPLIANCE MONITORING SUMMARY REPORT TO THE CONNECTICUT SITING COUNCIL FOR COMPLIANCE VERIFICATION.

c. ANY OBSERVATIONS OF RARE SPECIES WILL BE REPORTED TO DEEP BY APT ON THE APPROPRIATE SPECIAL ANIMAL REPORTING FORM, WITH PHOTO-DOCUMENTATION (IF POSSIBLE) AND SPECIFIC INFORMATION ON THE LOCATION



888 PROSPECT STREET
LA JOLLA, CA 92037
OFFICE: (619) 363-3080



567 VAUXHAUL STREET EXTENSION - SUITE 311
WATERFORD, CT 06385 PHONE: (860)-663-1697
WWW.ALLPOINTSTECH.COM FAX: (860)-663-0935

CSC PERMIT SET		
NO	DATE	REVISION
0	12/09/21	SITING COUNCIL SUBMISSION
1	04/09/22	COUNCIL INTERROGATORIES
2	05/11/22	PANEL LAYOUT, UTIL. POLES
3		
4		
5		
6		

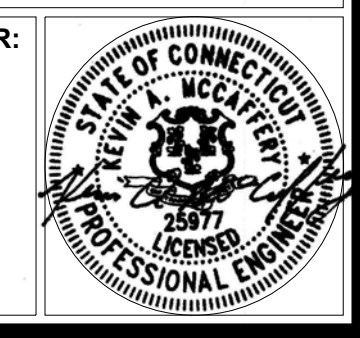
NOT FOR CONSTRUCTION

DESIGN PROFESSIONAL OF RECORD
 PROF: KEVIN A. MCCAFFERY, PE
 COMP: ALL-POINTS TECHNOLOGY CORPORATION
 ADD: 567 VAUXHAUL STREET EXTENSION - SUITE 311 WATERFORD, CT 06385
 OWNER: ANTONIO & MARY AMARAL
 ADDRESS: 254 PUTNAM ROAD POMFRET CENTER, CT 06259

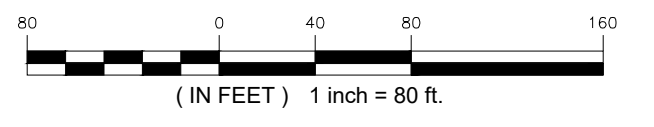
AMARAL SOLAR
 SITE: 254 PUTNAM ROAD
 ADDRESS: POMFRET CENTER, CT 06259
 APT FILING NUMBER: CT657100
 DATE: 12/09/21
 DRAWN BY: KAM
 CHECKED BY: BG

SHEET TITLE:
OVERALL SITE PLAN

SHEET NUMBER:
OP-1



1 OVERALL SITE PLAN
 CP-1 SCALE: 1" = 80'-0"





N/F
THOMAS PAHL
147 TYRONE ROAD
BK: 127 PG: 140

N/F
LARRY & MAUREN LANE
161 PUTNAM ROAD
BK: 293 PG: 206

N/F
TYRONE FARM MGT INC
9 TYRONE ROAD
BK: 175 PG: 313

N/F
WILLIAM MACLAREN
89 TYRONE ROAD
BK: 178 PG: 334

N/F
WILLIAM MACLAREN
107 TYRONE ROAD
BK: 130 PG: 343

N/F
DOREEN SYLVESTER
ET ALS
579 TYRONE ROAD
BK: 373 PG: 37

N/F
ROGER DAIGLE
193A PUTNAM ROAD
BK: 235 PG: 224

N/F
ROBERT HIRT
4 LONGMEADOW DRIVE
BK: 371 PG: 113

PROP. UTILITY POLES (18)
FOR INTERCONNECTION

FEMA FLOODPLAIN BOUNDARY

BARK MEADOW BROOK AND
300-FT STREAM UPLAND
REVIEW AREA LIMIT

PROP. SOLAR ARRAY

150-FT LOCAL WETLAND BUFFER

100-FT STATE WETLAND BUFFER

DELINEATED WETLAND

PROP. ACCESS ROAD WITH ENTRANCE
FROM WRIGHTS CROSSING ROAD

N/F
ANTONIO & WILLOW THERRIEN III
590 WRIGHTS CROSSING ROAD
BK: 335 PG: 165

N/F
SHANE COURNOYER
591 WRIGHTS CROSSING ROAD
BK: 340 PG: 186

N/F
OWNER UNKNOWN
7 LONGMEADOW DRIVE
BK: 188 PG: 62

N/F
BABAK MARDANI
271 PUTNAM ROAD
BK: 356 PG: 322

N/F
CYNTHIA TARR MORRILL
296 PUTNAM ROAD
BK: 282 PG: 295

N/F
ANTONIO & MARY AMARAL
254 PUTNAM ROAD
BK: 48 PG: 352

N/F
WYNDHAM LAND TRUST INC
611 WRIGHTS CROSSING ROAD
BK: 118 PG: 294

PROP. UNDERGROUND
ELECTRIC LINE TO
INTERCONNECTION
ON PUTNAM ROAD

N/F
JOSEPH & MARILYN MANCINI JR
735 WRIGHTS CROSSING ROAD
BK: 307 PG: 13

N/F
PAMELA TARR BILLINGS
300 PUTNAM ROAD
BK: 282 PG: 297

N/F
DAVID & ASHLEY AMARAL
310 PUTNAM ROAD
BK: 370 PG: 62

N/F
ANGELA MCCANN
822 WRIGHTS CROSSING ROAD
BK: 362 PG: 144

N/F
HENRY & KRISTINE FOLSOM
810 WRIGHTS CROSSING ROAD
BK: 146 PG: 347

N/F
RICHARD & JEANETTE BANULSKI
800 WRIGHTS CROSSING ROAD
BK: 59 PG: 90

N/F
JOSHUA & JILL OLSEN
792 WRIGHTS CROSSING ROAD
BK: 352 PG: 82

N/F
NICHOLAS & JULIE HEMEON
784 WRIGHTS CROSSING ROAD
BK: 318 PG: 176

N/F
ALICE & CURTIS WISE
778 WRIGHTS CROSSING ROAD
BK: 97 PG: 262

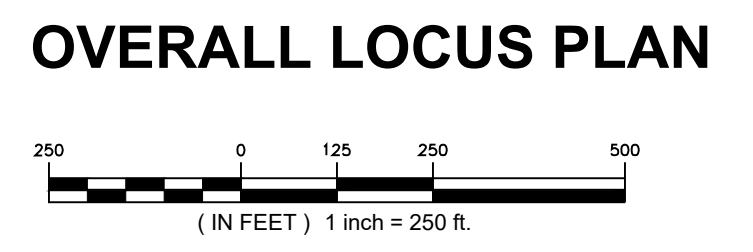
N/F
CHRISTOPHER & STACY MAYO
764 WRIGHTS CROSSING ROAD
BK: 353 PG: 212

N/F
GREGORY & ANN TYIMOK
756 WRIGHTS CROSSING ROAD
BK: 195 PG: 203

N/F
CNG HOLDINGS LLC
748 WRIGHTS CROSSING ROAD
BK: 374 PG: 119

N/F
JUSTIN & JILLIAN MANCINI
743 WRIGHTS CROSSING ROAD
BK: 366 PG: 265

N/F
ALYSSA CRAWFORD
740 WRIGHTS CROSSING ROAD
BK: 348 PG: 74



TRITEC
AMERICAS
888 PROSPECT STREET
LA JOLLA, CA 92037
OFFICE: (619) 363-3080

ALL-POINTS
TECHNOLOGY CORPORATION
567 VAUXHAUL STREET EXTENSION - SUITE 311
WATERFORD, CT 06385 PHONE: (860)-663-1697
WWW.ALLPOINTSTECH.COM FAX: (860)-663-0936

CSC PERMIT SET

NO	DATE	REVISION
0	12/09/21	SITING COUNCIL SUBMISSION
1	04/09/22	COUNCIL INTERROGATORIES
2	05/11/22	PANEL LAYOUT, UTIL. POLES
3		
4		
5		
6		

NOT FOR CONSTRUCTION

DESIGN PROFESSIONAL OF RECORD
PROF: KEVIN A. MCCAFFERY, PE
COMP: ALL-POINTS TECHNOLOGY CORPORATION
ADD: 567 VAUXHAUL STREET EXTENSION - SUITE 311 WATERFORD, CT 06385

OWNER: ANTONIO & MARY AMARAL
ADDRESS: 254 PUTNAM ROAD POMFRET CENTER, CT 06259

AMARAL SOLAR
SITE: 254 PUTNAM ROAD
ADDRESS: POMFRET CENTER, CT 06259
APT FILING NUMBER: CT657100
DRAWN BY: KAM
DATE: 12/09/21
CHECKED BY: BG

SHEET TITLE:
OVERALL LOCUS PLAN

SHEET NUMBER:
OP-2

EROSION CONTROL NOTES

EROSION AND SEDIMENT CONTROL PLAN NOTES

- THE CONTRACTOR SHALL CONSTRUCT ALL SEDIMENT AND EROSION CONTROLS IN ACCORDANCE WITH THE 2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL, LATEST EDITION, IN ACCORDANCE WITH THE CONTRACT DOCUMENTS, AND AS DIRECTED BY THE TOWN OF POMFRET, PERMITTEE, AND/OR SWPCP MONITOR. ALL PERIMETER SEDIMENTATION AND EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO THE START OF CLEARING AND GRUBBING AND DEMOLITION OPERATIONS.
- THESE DRAWINGS ARE ONLY INTENDED TO DESCRIBE THE SEDIMENT AND EROSION CONTROL MEASURES FOR THIS SITE. SEE CONSTRUCTION SEQUENCE FOR ADDITIONAL INFORMATION. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHOWN ON THE EROSION & SEDIMENT CONTROL PLAN ARE SHOWN AS REQUIRED BY THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT ALL EROSION CONTROL MEASURES ARE CONFIGURED AND CONSTRUCTED IN A MANNER THAT WILL MINIMIZE EROSION OF SOILS AND PREVENT THE TRANSPORT OF SEDIMENTS AND OTHER POLLUTANTS TO STORM DRAINAGE SYSTEMS AND/OR WATERCOURSES. ACTUAL SITE CONDITIONS OR SEASONAL AND CLIMATIC CONDITIONS MAY WARRANT ADDITIONAL CONTROLS OR CONFIGURATIONS, AS REQUIRED, AND AS DIRECTED BY THE PERMITTEE AND/OR SWPCP MONITOR. REFER TO SITE PLAN FOR GENERAL INFORMATION AND OTHER CONTRACT PLANS FOR APPROPRIATE INFORMATION.
- A BOND OR LETTER OF CREDIT MAY BE REQUIRED TO BE POSTED WITH THE GOVERNING AUTHORITY FOR THE EROSION CONTROL INSTALLATION AND MAINTENANCE.
- THE CONTRACTOR SHALL APPLY THE MINIMUM EROSION & SEDIMENT CONTROL MEASURES SHOWN ON THE PLAN IN CONJUNCTION WITH CONSTRUCTION SEQUENCING, SUCH THAT ALL ACTIVE WORK ZONES ARE PROTECTED. ADDITIONAL AND/OR ALTERNATIVE SEDIMENT AND EROSION CONTROL MEASURES MAY BE INSTALLED DURING THE CONSTRUCTION PERIOD IF FOUND NECESSARY BY THE CONTRACTOR, OWNER, SITE ENGINEER, MUNICIPAL OFFICIALS, OR ANY GOVERNING AGENCY. THE CONTRACTOR SHALL CONTACT THE OWNER AND APPROPRIATE GOVERNING AGENCIES FOR APPROVAL IF ALTERNATIVE CONTROLS OTHER THAN THOSE SHOWN ON THE PLANS ARE PROPOSED BY THE CONTRACTOR.
- THE CONTRACTOR SHALL TAKE EXTREME CARE DURING CONSTRUCTION SO AS NOT TO DISTURB UNPROTECTED WETLAND AREAS OR INSTALLED SEDIMENTATION AND EROSION CONTROL MEASURES. THE CONTRACTOR SHALL INSPECT ALL SEDIMENT AND EROSION CONTROLS WEEKLY AND WITHIN 24 HOURS OF A STORM WITH A RAINFALL AMOUNT OF 0.25 INCHES OR GREATER TO VERIFY THAT THE CONTROLS ARE OPERATING PROPERLY AND MAKE REPAIRS AS NECESSARY IN A TIMELY MANNER.
- THE CONTRACTOR SHALL KEEP A SUPPLY OF EROSION CONTROL MATERIAL (SILT FENCE, COMPOST FILTER SOCK, EROSION CONTROL BLANKET, ETC.) ON-SITE FOR PERIODIC MAINTENANCE AND EMERGENCY REPAIRS.
- ALL FILL MATERIAL PLACED ADJACENT TO ANY WETLAND AREA SHALL BE GOOD QUALITY, WITH LESS THAN 5% FINES PASSING THROUGH A #200 SIEVE (BANK RUN), SHALL BE PLACED IN MAXIMUM ONE FOOT LIFTS, AND SHALL BE COMPACTED TO 95% MAX. DRY DENSITY MODIFIED PROCTOR OR AS SPECIFIED IN THE CONTRACT SPECIFICATIONS.
- PROTECT EXISTING TREES THAT ARE TO BE SAVED BY FENCING, ORANGE SAFETY FENCE, CONSTRUCTION TAPE, OR EQUIVALENT FENCING/TAPE. ANY LIMB TRIMMING SHOULD BE DONE AFTER CONSULTATION WITH AN ARBORIST AND BEFORE CONSTRUCTION BEGINS IN THAT AREA; FENCING SHALL BE MAINTAINED AND REPAIRED DURING CONSTRUCTION.
- CONSTRUCTION ENTRANCES (ANTI-TRACKING PADS) SHALL BE INSTALLED PRIOR TO ANY SITE EXCAVATION OR CONSTRUCTION ACTIVITY AND SHALL BE MAINTAINED THROUGHOUT THE DURATION OF ALL CONSTRUCTION IF REQUIRED. THE LOCATION OF THE TRACKING PADS MAY CHANGE AS VARIOUS PHASES OF CONSTRUCTION ARE COMPLETED. CONTRACTOR SHALL ENSURE THAT ALL VEHICLES EXITING THE SITE ARE PASSING OVER THE ANTI-TRACKING PADS PRIOR TO EXISTING.
- ALL CONSTRUCTION SHALL BE CONTAINED WITHIN THE LIMIT OF DISTURBANCE, WHICH SHALL BE MARKED WITH SILT FENCE, SAFETY FENCE, HAY BALES, RIBBONS, OR OTHER MEANS PRIOR TO CLEARING. CONSTRUCTION ACTIVITY SHALL REMAIN ON THE UPHILL SIDE OF THE SEDIMENT BARRIER UNLESS WORK IS SPECIFICALLY CALLED FOR ON THE DOWNHILL SIDE OF THE BARRIER.
- NO CUT OR FILL SLOPES SHALL EXCEED 2:1 EXCEPT WHERE STABILIZED BY ROCK FACED EMBANKMENTS OR EROSION CONTROL BLANKETS. ALL SLOPES SHALL BE SEEDED AND BANKS WILL BE STABILIZED IMMEDIATELY UPON COMPLETION OF FINAL GRADING UNTIL TURF IS ESTABLISHED.
- DIRECT ALL DEWATERING PUMP DISCHARGE TO A SEDIMENT CONTROL DEVICE CONFORMING TO THE GUIDELINES WITHIN THE APPROVED LIMIT OF DISTURBANCE IF REQUIRED. DISCHARGE TO STORM DRAINS OR SURFACE WATERS FROM SEDIMENT CONTROLS SHALL BE CLEAR AND APPROVED BY THE PERMITTEE OR MUNICIPALITY.
- THE CONTRACTOR SHALL MAINTAIN A CLEAN CONSTRUCTION SITE AND SHALL NOT ALLOW THE ACCUMULATION OF RUBBISH OR CONSTRUCTION DEBRIS ON THE SITE. PROPER SANITARY DEVICES SHALL BE MAINTAINED ON-SITE AT ALL TIMES AND SECURED APPROPRIATELY. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO AVOID THE SPILLAGE OF FUEL OR OTHER POLLUTANTS ON THE CONSTRUCTION SITE AND SHALL ADHERE TO ALL APPLICABLE POLICIES AND REGULATIONS RELATED TO SPILL PREVENTION AND RESPONSE/CONTAINMENT.
- MINIMIZE LAND DISTURBANCES. SEED AND MULCH DISTURBED AREAS WITH TEMPORARY MIX AS SOON AS PRACTICABLE (2 WEEK MAXIMUM UNSTABILIZED PERIOD) USING PERENNIAL RYEGRASS AT 40 LBS PER ACRE. MULCH ALL CUT AND FILL SLOPES AND SWALES WITH LOOSE HAY AT A RATE OF 2 TONS PER ACRE. IF NECESSARY, REPLACE LOOSE HAY ON SLOPES WITH EROSION CONTROL BLANKETS OR JUTE CLOTH. MODERATELY GRADED AREAS, ISLANDS, AND TEMPORARY CONSTRUCTION STAGING AREAS MAY BE HYDROSEEDED WITH TACKIFIER.
- SWEEP AFFECTED PORTIONS OF OFF SITE ROADS ONE OR MORE TIMES A DAY (OR LESS FREQUENTLY IF TRACKING IS NOT A PROBLEM) DURING CONSTRUCTION. FOR DUST CONTROL, PERIODICALLY MOISTEN EXPOSED SOIL SURFACES WITH WATER ON UNPAVED TRAVELWAYS TO KEEP THE TRAVELWAYS DAMP. CALCIUM CHLORIDE MAY ALSO BE APPLIED TO ACCESS ROADS. DUMP TRUCK LOADS EXITING THE SITE SHALL BE COVERED.
- VEGETATIVE ESTABLISHMENT SHALL OCCUR ON ALL DISTURBED SOIL, UNLESS THE AREA IS UNDER ACTIVE CONSTRUCTION, IT IS COVERED IN STONE OR SCHEDULED FOR PAVING WITHIN 30 DAYS. TEMPORARY SEEDING OR NON-LIVING SOIL PROTECTION OF ALL EXPOSED SOILS AND SLOPES SHALL BE INITIATED WITHIN THE FIRST 7 DAYS OF SUSPENDING WORK IN AREAS TO BE LEFT LONGER THAN 30 DAYS.
- MAINTAIN ALL PERMANENT AND TEMPORARY SEDIMENT CONTROL DEVICES IN EFFECTIVE CONDITION THROUGHOUT THE CONSTRUCTION PERIOD. UPON COMPLETION OF WORK SWEEP CONCRETE PADS, CLEAN THE STORMWATER MANAGEMENT SYSTEMS AND REMOVE ALL TEMPORARY SEDIMENT CONTROLS ONCE THE SITE IS FULLY STABILIZED AND APPROVAL HAS BEEN RECEIVED FROM PERMITTEE OR THE MUNICIPALITY.
- SEEDING MIXTURES SHALL BE NEW ENGLAND SEMI-SHADE GRASS AND FORBS MIX (SEE SITE DETAILS SHEET DN-1), OR APPROVED EQUAL BY OWNER.

CONSTRUCTION OPERATION AND MAINTENANCE PLAN - BY CONTRACTOR		
E&S MEASURE	INSPECTION SCHEDULE	MAINTENANCE REQUIRED
CONSTRUCTION ENTRANCE	DAILY	PLACE ADDITIONAL STONE, EXTEND THE LENGTH OR REMOVE AND REPLACE THE STONE. CLEAN PAVED SURFACES OF TRACKED SEDIMENT.
COMPOST FILTER SOCK	WEEKLY & WITHIN 24 HOURS OF RAINFALL > 0.25"	REPAIR/REPLACE WHEN FAILURE OR DETERIORATION IS OBSERVED.
SILT FENCE	WEEKLY & WITHIN 24 HOURS OF RAINFALL > 0.25"	REPAIR/REPLACE WHEN FAILURE OR DETERIORATION IS OBSERVED. REMOVE SILT WHEN IT REACHES 1/2 THE HEIGHT OF THE FENCE.
TOPSOIL/BORROW STOCKPILES	DAILY	REPAIR/REPLACE SEDIMENT BARRIERS AS NECESSARY.
TEMPORARY SEDIMENT BASIN (W/ BAFFLES)	WEEKLY & WITHIN 24 HOURS OF RAINFALL > 0.5"	REMOVE SEDIMENT ONCE IT HAS ACCUMULATED TO ONE HALF OF MINIMUM REQUIRED VOLUME OF THE WET STORAGE, DEWATERING AS NEEDED. RESTORE TRAP TO ORIGINAL DIMENSIONS. REPAIR/REPLACE BAFFLES WHEN FAILURE OR DETERIORATION IS OBSERVED.
TEMPORARY SEDIMENT TRAP (W/ BAFFLES)	WEEKLY & WITHIN 24 HOURS OF RAINFALL > 0.5"	REMOVE SEDIMENT ONCE IT HAS ACCUMULATED TO ONE HALF OF MINIMUM REQUIRED VOLUME OF THE WET STORAGE, DEWATERING AS NEEDED. RESTORE TRAP TO ORIGINAL DIMENSIONS. REPAIR/REPLACE BAFFLES WHEN FAILURE OR DETERIORATION IS OBSERVED.
TEMPORARY SOIL PROTECTION	WEEKLY & WITHIN 24 HOURS OF RAINFALL > 0.25"	REPAIR ERODED OR BARE AREAS IMMEDIATELY. RESEED AND MULCH.

SEDIMENT & EROSION CONTROL NARRATIVE

- THE PROJECT INVOLVES THE CONSTRUCTION OF A GROUND MOUNTED SOLAR PANEL FACILITY WITH ASSOCIATED EQUIPMENT.

THE PROPOSED PROJECT INVOLVES THE FOLLOWING CONSTRUCTION:

- GRADING FOR ACCESS ROAD AND DRAINAGE INSTALLATION PLUS TREELINE CLEARING ALONG WRIGHTS CROSSING ROAD.
 - CONSTRUCTION OF GROUND MOUNTED SOLAR PANELS AND ASSOCIATED EQUIPMENT.
 - THE STABILIZATION OF DISTURBED AREAS WITH PERMANENT VEGETATIVE TREATMENTS.
- FOR THIS PROJECT, THERE ARE APPROXIMATELY 14.27± ACRE OF THE SITE BEING DISTURBED WITH NEGLIGIBLE INCREASE IN THE IMPERVIOUS AREA OF THE SITE, AS ALL ACCESS THOUGH THE SITE WILL BE GRAVEL. IMPERVIOUS AREAS ARE LIMITED TO THE CONCRETE PADS FOR ELECTRICAL EQUIPMENT.
 - THE PROJECT SITE, AS MAPPED IN THE SOIL SURVEY OF STATE OF CONNECTICUT (NRCS, VERSION 19, SEP 13, 2019), CONTAINS MAP UNITS 45 (HYDROLOGIC SOIL GROUP D) AND 84 (HYDROLOGIC SOIL GROUP C) SOILS. A GEOTECHNICAL ENGINEERING REPORT HAS NOT BEEN COMPLETED.
 - IT IS ANTICIPATED THAT CONSTRUCTION WILL BE COMPLETED IN APPROXIMATELY 3-4 MONTHS.
 - REFER TO THE CONSTRUCTION SEQUENCING AND EROSION AND SEDIMENTATION NOTES FOR INFORMATION REGARDING SEQUENCING OF MAJOR OPERATIONS IN THE ON-SITE CONSTRUCTION PHASES.
 - STORMWATER MANAGEMENT DESIGN CRITERIA UTILIZES THE APPLICABLE SECTIONS OF THE 2004 CONNECTICUT STORMWATER QUALITY MANUAL AND THE TOWN OF POMFRET STANDARDS, TO THE EXTENT POSSIBLE AND PRACTICABLE FOR THIS PROJECT ON THIS SITE. EROSION AND SEDIMENTATION MEASURES ARE BASED UPON ENGINEERING PRACTICE, JUDGEMENT AND THE APPLICABLE SECTIONS OF THE CONNECTICUT EROSION AND SEDIMENT CONTROL GUIDELINES FOR URBAN AND SUBURBAN AREAS, LATEST EDITION.
 - DETAILS FOR THE TYPICAL STORMWATER MANAGEMENT AND EROSION AND SEDIMENTATION MEASURES ARE SHOWN ON THE PLAN SHEETS OR PROVIDED AS SEPARATE SUPPORT DOCUMENTATION FOR REVIEW IN THIS PLAN.
 - CONSERVATION PRACTICES TO BE USED DURING CONSTRUCTION:
 - STAGED CONSTRUCTION;
 - MINIMIZE THE DISTURBED AREAS TO THE EXTENT PRACTICABLE DURING CONSTRUCTION;
 - STABILIZE DISTURBED AREAS WITH TEMPORARY OR PERMANENT MEASURES AS SOON AS POSSIBLE, BUT NO LATER THAN 7-DAYS FOLLOWING DISTURBANCE;
 - MINIMIZE IMPERVIOUS AREAS;
 - UTILIZE APPROPRIATE CONSTRUCTION EROSION AND SEDIMENTATION MEASURES.
 - THE FOLLOWING SEPARATE DOCUMENTS ARE TO BE CONSIDERED A PART OF THE EROSION AND SEDIMENTATION PLAN:
 - STORMWATER MANAGEMENT REPORT DATED NOVEMBER 2021.
 - SWPCP (TO BE ISSUED PRIOR TO CONSTRUCTION).

SUGGESTED CONSTRUCTION SEQUENCE:

THE FOLLOWING SUGGESTED SEQUENCE OF CONSTRUCTION ACTIVITIES IS PROJECTED BASED UPON ENGINEERING JUDGEMENT AND BEST MANAGEMENT PRACTICES. THE CONTRACTOR MAY ELECT TO ALTER THE SEQUENCING TO BEST MEET THE CONSTRUCTION SCHEDULE, THE EXISTING SITE ACTIVITIES AND WEATHER CONDITIONS. SHOULD THE CONTRACTOR ALTER THE CONSTRUCTION SEQUENCE OR ANY EROSION AND SEDIMENTATION CONTROL MEASURES THEY SHALL MODIFY THE STORMWATER POLLUTION CONTROL PLAN ("SWPCP") AS REQUIRED BY THE GENERAL PERMIT. MAJOR CHANGES IN SEQUENCING AND/OR METHODS MAY REQUIRE REGULATORY APPROVAL PRIOR TO IMPLEMENTATION.

- THE CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING. PHYSICALLY FLAG THE LIMITS OF DISTURBANCE IN THE FIELD AS NECESSARY TO FACILITATE THE PRE-CONSTRUCTION MEETING.
- CONDUCT A PRE-CONSTRUCTION MEETING TO DISCUSS THE PROPOSED WORK AND EROSION AND SEDIMENTATION CONTROL MEASURES. THE MEETING SHOULD BE ATTENDED BY THE OWNER, THE OWNER'S REPRESENTATIVE(S), THE GENERAL CONTRACTOR, DESIGNATED SUB-CONTRACTORS AND THE PERSON, OR PERSONS, RESPONSIBLE FOR THE IMPLEMENTATION, OPERATION, MONITORING AND MAINTENANCE OF THE EROSION AND SEDIMENTATION MEASURES. THE CONSTRUCTION PROCEDURES FOR THE ENTIRE PROJECT SHALL BE REVIEWED AT THIS MEETING.
- NOTIFY CALL BEFORE YOU DIG AT 1-800-922-4455, AS REQUIRED, PRIOR TO THE START OF CONSTRUCTION.
- REMOVE EXISTING IMPEDIMENTS AS NECESSARY AND PROVIDE MINIMAL CLEARING AND GRUBBING TO INSTALL THE REQUIRED CONSTRUCTION ENTRANCE.
- INSTALL THE PERIMETER EROSION AND SEDIMENTATION CONTROL MEASURES. ALL WETLAND AREAS SHALL BE PROTECTED BEFORE MAJOR CONSTRUCTION BEGINS.
- CLEAR TREELINE ALONG WRIGHTS CROSSING ROAD.
- COMPLETE GRADING OF ACCESS ROAD BASE AND ACCOMPANYING DITCHING.
- PLACE ACCESS ROAD GRAVEL AND ROCK CHECK DAM AGGREGATE.
- TEMPORARILY SEED DISTURBED AREAS NOT UNDER CONSTRUCTION FOR THIRTY (30) DAYS OR MORE.
- INSTALL RACKING POSTS FOR GROUND MOUNTED SOLAR PANELS.
- INSTALL GROUND MOUNTED SOLAR PANELS AND COMPLETE ELECTRICAL INSTALLATION.
- AFTER SUBSTANTIAL COMPLETION OF THE INSTALLATION OF THE SOLAR PANELS, COMPLETE REMAINING SITE WORK, INCLUDING THE FENCING, EQUIPMENT PADS, AND INTERCONNECTION RUN. STABILIZE ALL DISTURBED AREAS.
- FINE GRADE, RAKE, SEED, AND MULCH ALL REMAINING DISTURBED AREAS.
- AFTER THE SITE IS STABILIZED AND WITH THE APPROVAL OF THE PERMITTEE AND TOWN OF POMFRET AGENT, REMOVE PERIMETER EROSION AND SEDIMENTATION CONTROLS.



**888 PROSPECT STREET
LA JOLLA, CA 92037
OFFICE: (619) 363-3080**



567 VAUXHAUL STREET EXTENSION - SUITE 311
WATERFORD, CT 06385 PHONE: (860)-663-1697
WWW.ALLPOINTSTECH.COM FAX: (860)-663-0935

CSC PERMIT SET

NO	DATE	REVISION
0	12/09/21	SITING COUNCIL SUBMISSION
1	04/09/22	COUNCIL INTERROGATORIES
2	05/11/22	PANEL LAYOUT, UTIL. POLES
3		
4		
5		
6		

NOT FOR CONSTRUCTION

DESIGN PROFESSIONAL OF RECORD

**PROF: KEVIN A. MCCAFFERY, PE
COMP: ALL-POINTS TECHNOLOGY CORPORATION
ADD: 567 VAUXHAUL STREET
EXTENSION - SUITE 311
WATERFORD, CT 06385**

OWNER: ANTONIO & MARY AMARAL

**ADDRESS: 254 PUTNAM ROAD
POMFRET CENTER, CT 06259**

AMARAL SOLAR

**SITE 254 PUTNAM ROAD
ADDRESS: POMFRET CENTER, CT 06259**

APT FILING NUMBER: CT657100

	DRAWN BY: KAM
DATE: 12/09/21	CHECKED BY: BG

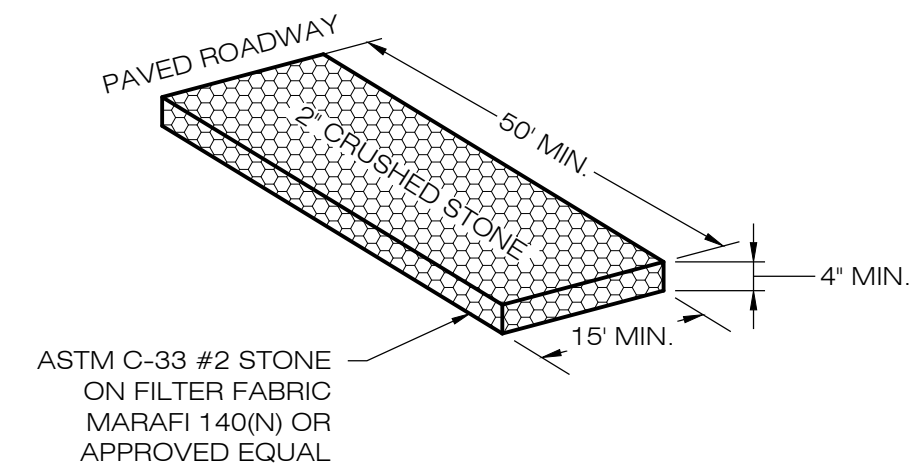
SHEET TITLE:

**SEDIMENTATION &
EROSION CONTROL
NOTES**

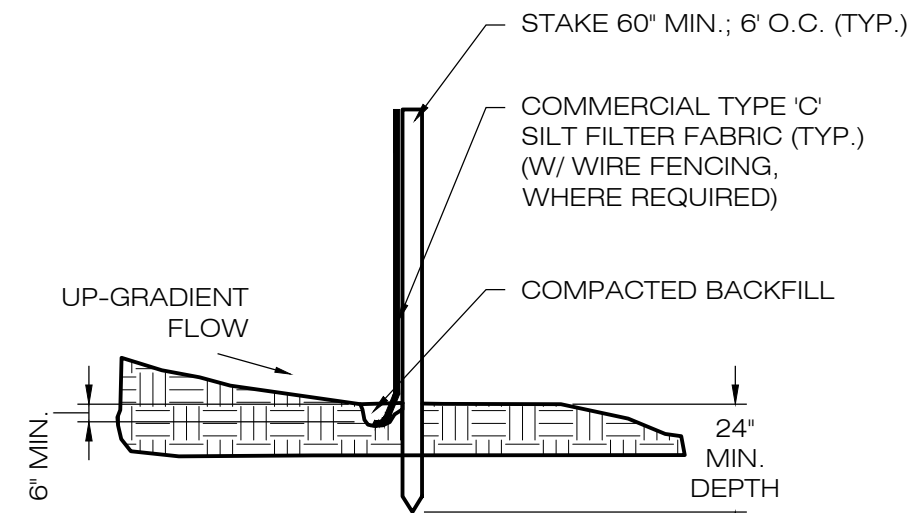
SHEET NUMBER:

EC-1

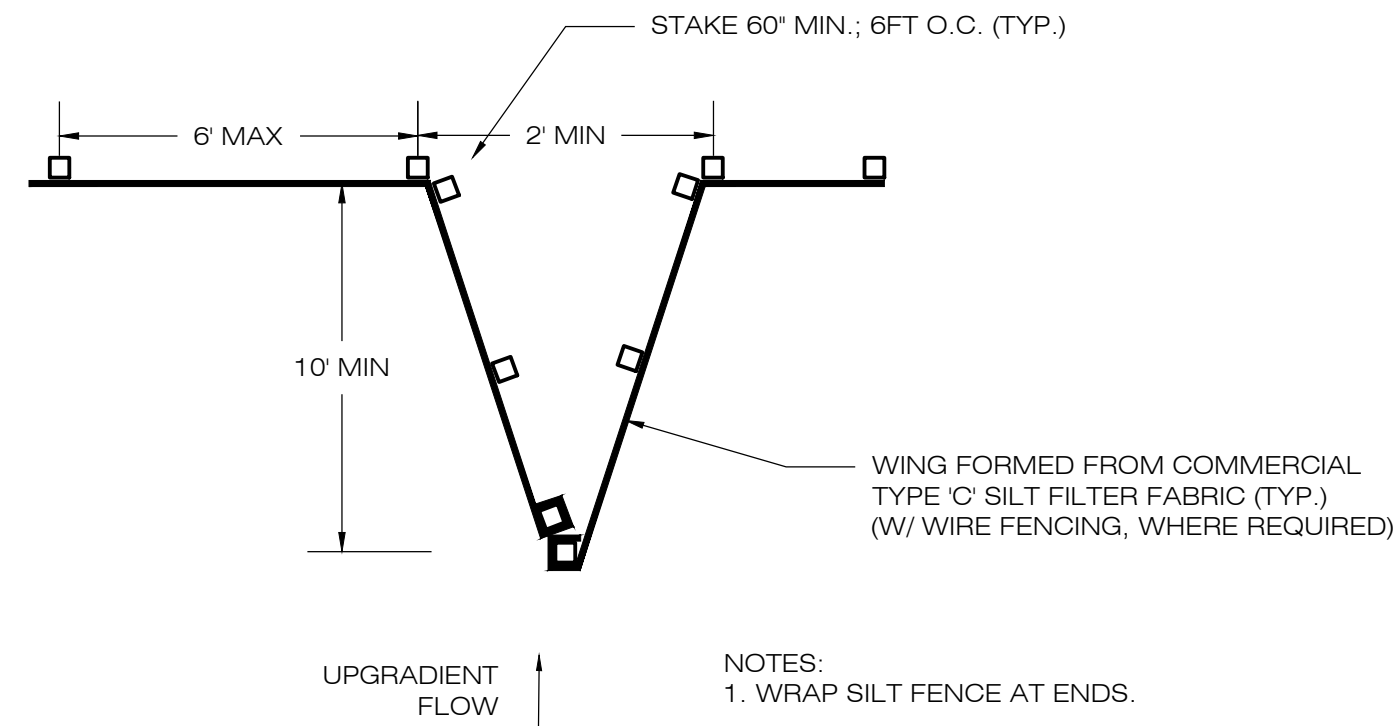




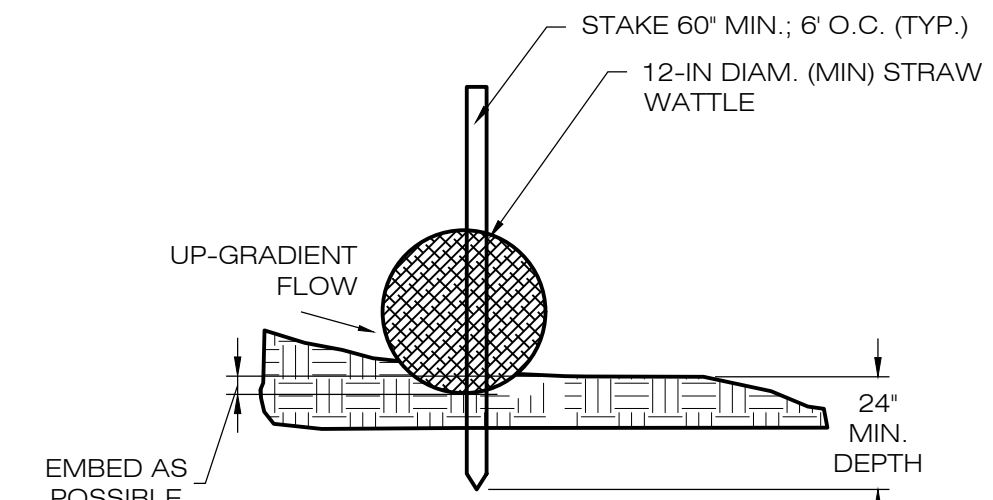
1 CONSTRUCTION ENTRANCE DETAIL
SCALE : N.T.S.



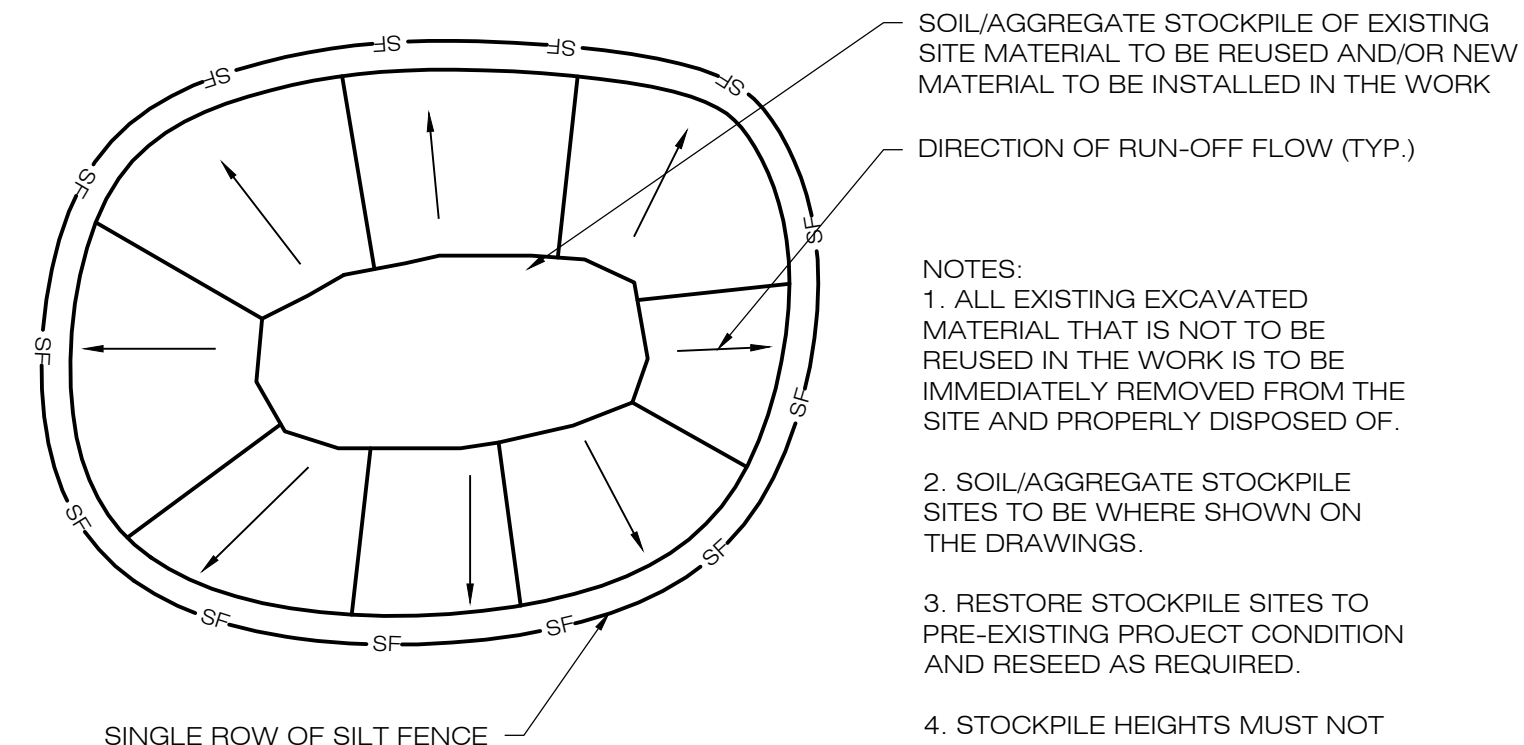
2 SILT FENCE DETAIL
SCALE : N.T.S.



3 SILT FENCE WING DETAIL
SCALE : N.T.S.

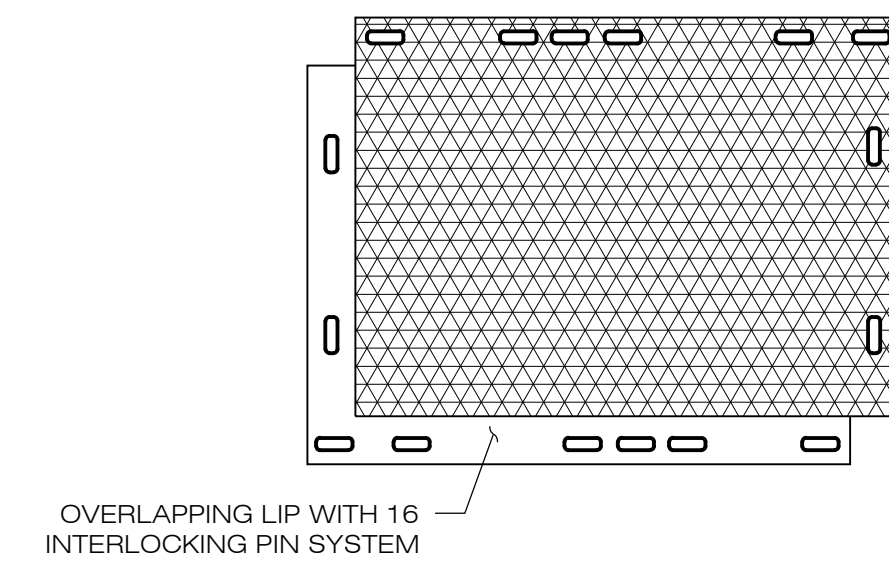


4 STRAW WATTLE DETAIL
SCALE : N.T.S.



- NOTES:
1. ALL EXISTING EXCAVATED MATERIAL THAT IS NOT TO BE REUSED IN THE WORK IS TO BE IMMEDIATELY REMOVED FROM THE SITE AND PROPERLY DISPOSED OF.
 2. SOIL/AGGREGATE STOCKPILE SITES TO BE WHERE SHOWN ON THE DRAWINGS.
 3. RESTORE STOCKPILE SITES TO PRE-EXISTING PROJECT CONDITION AND RESEED AS REQUIRED.
 4. STOCKPILE HEIGHTS MUST NOT EXCEED 35'. STOCKPILE SLOPES MUST BE 2:1 OR FLATTER.

5 MATERIALS STOCKPILE DETAIL
SCALE : N.T.S.



- NOTES:
1. DURA-BASE COMPOSITE MAT SYSTEM (OR EQUAL). SEE SPECIFICATIONS AND INSTALLATION INSTRUCTIONS FROM MANUFACTURER.
 2. OVERALL DIMENSIONS: 8'X14'X4'
 3. SURFACE DIMENSIONS: 7'X13'

6 TEMPORARY CONSTRUCTION MATTING
SCALE : N.T.S.

TRITEC AMERICAS
888 PROSPECT STREET
LA JOLLA, CA 92037
OFFICE: (619) 363-3080

ALL-POINTS TECHNOLOGY CORPORATION
567 VAUXHAUL STREET EXTENSION - SUITE 311
WATERFORD, CT 06385 PHONE: (860)-663-1697
WWW.ALLPOINTSTECH.COM FAX: (860)-663-0935

CSC PERMIT SET

NO	DATE	REVISION
0	12/09/21	SITING COUNCIL SUBMISSION
1	04/09/22	COUNCIL INTERROGATORIES
2	05/11/22	PANEL LAYOUT, UTIL. POLES
3		
4		
5		
6		

NOT FOR CONSTRUCTION

DESIGN PROFESSIONAL OF RECORD
PROF: KEVIN A. MCCAFFERY, PE
COMP: ALL-POINTS TECHNOLOGY CORPORATION
ADD: 567 VAUXHAUL STREET EXTENSION - SUITE 311 WATERFORD, CT 06385

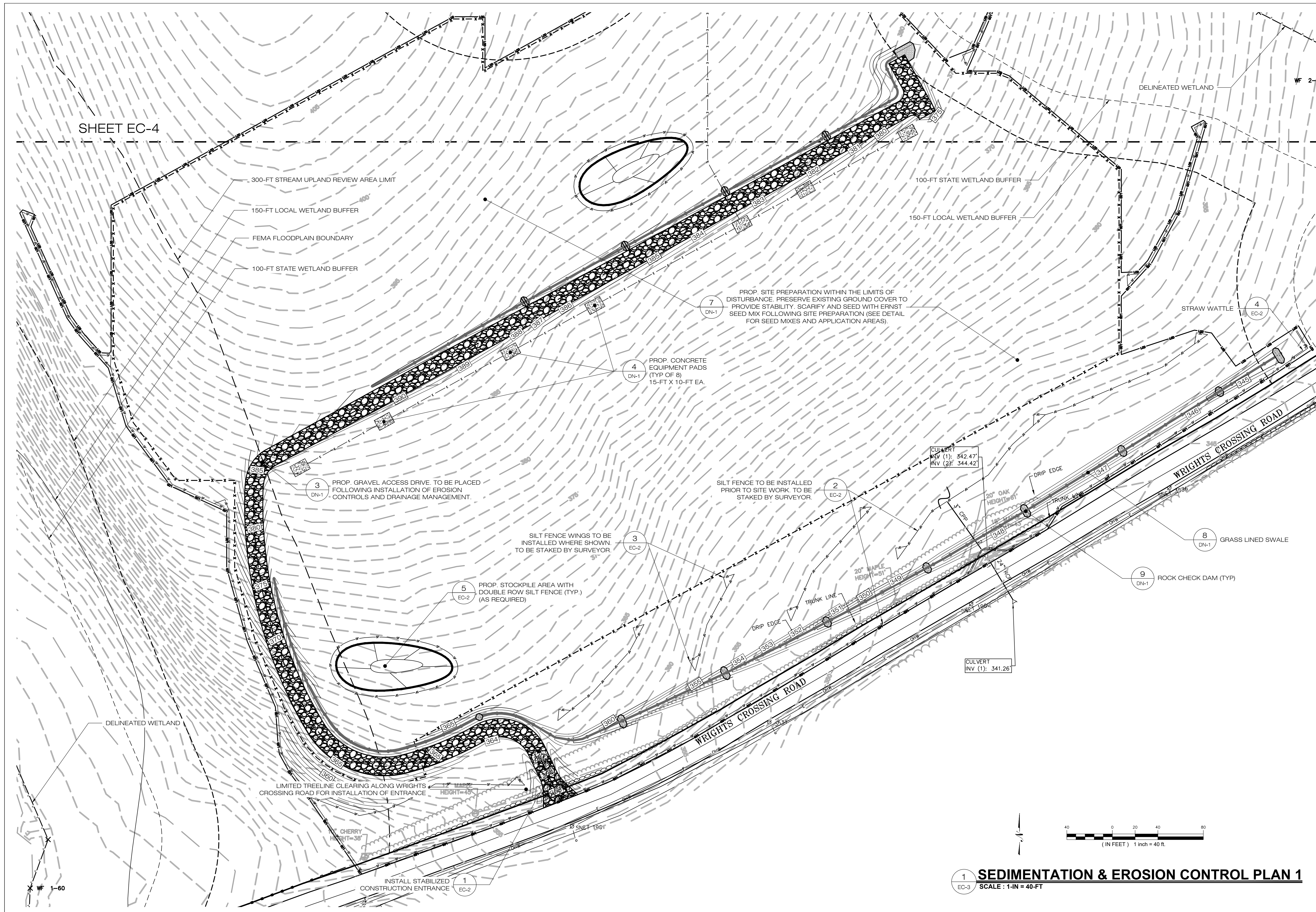
OWNER: ANTONIO & MARY AMARAL
ADDRESS: 254 PUTNAM ROAD POMFRET CENTER, CT 06259

AMARAL SOLAR
SITE: 254 PUTNAM ROAD
ADDRESS: POMFRET CENTER, CT 06259
APT FILING NUMBER: CT657100
DRAWN BY: KAM
DATE: 12/09/21 CHECKED BY: BG

SHEET TITLE:
SEDIMENTATION & EROSION CONTROL DETAILS

SHEET NUMBER:
EC-2





SHEET EC-4

TRITEC AMERICAS
 888 PROSPECT STREET
 LA JOLLA, CA 92037
 OFFICE: (619) 363-3080

ALL-POINTS TECHNOLOGY CORPORATION
 567 VAUXHAUL STREET EXTENSION - SUITE 311
 WATERFORD, CT 06385 PHONE: (860)-663-1697
 WWW.ALLPOINTSTECH.COM FAX: (860)-663-0935

CSC PERMIT SET

NO	DATE	REVISION
0	12/09/21	SITING COUNCIL SUBMISSION
1	04/09/22	COUNCIL INTERROGATORIES
2	05/11/22	PANEL LAYOUT, UTIL. POLES
3		
4		
5		
6		

NOT FOR CONSTRUCTION

DESIGN PROFESSIONAL OF RECORD
 PROF: KEVIN A. MCCAFFERY, PE
 COMP: ALL-POINTS TECHNOLOGY CORPORATION
 ADD: 567 VAUXHAUL STREET EXTENSION - SUITE 311 WATERFORD, CT 06385

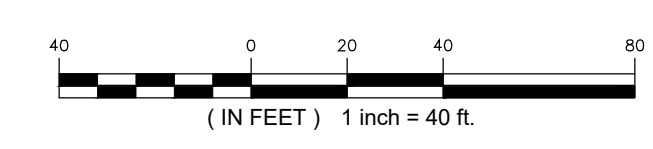
OWNER: ANTONIO & MARY AMARAL
 ADDRESS: 254 PUTNAM ROAD POMFRET CENTER, CT 06259

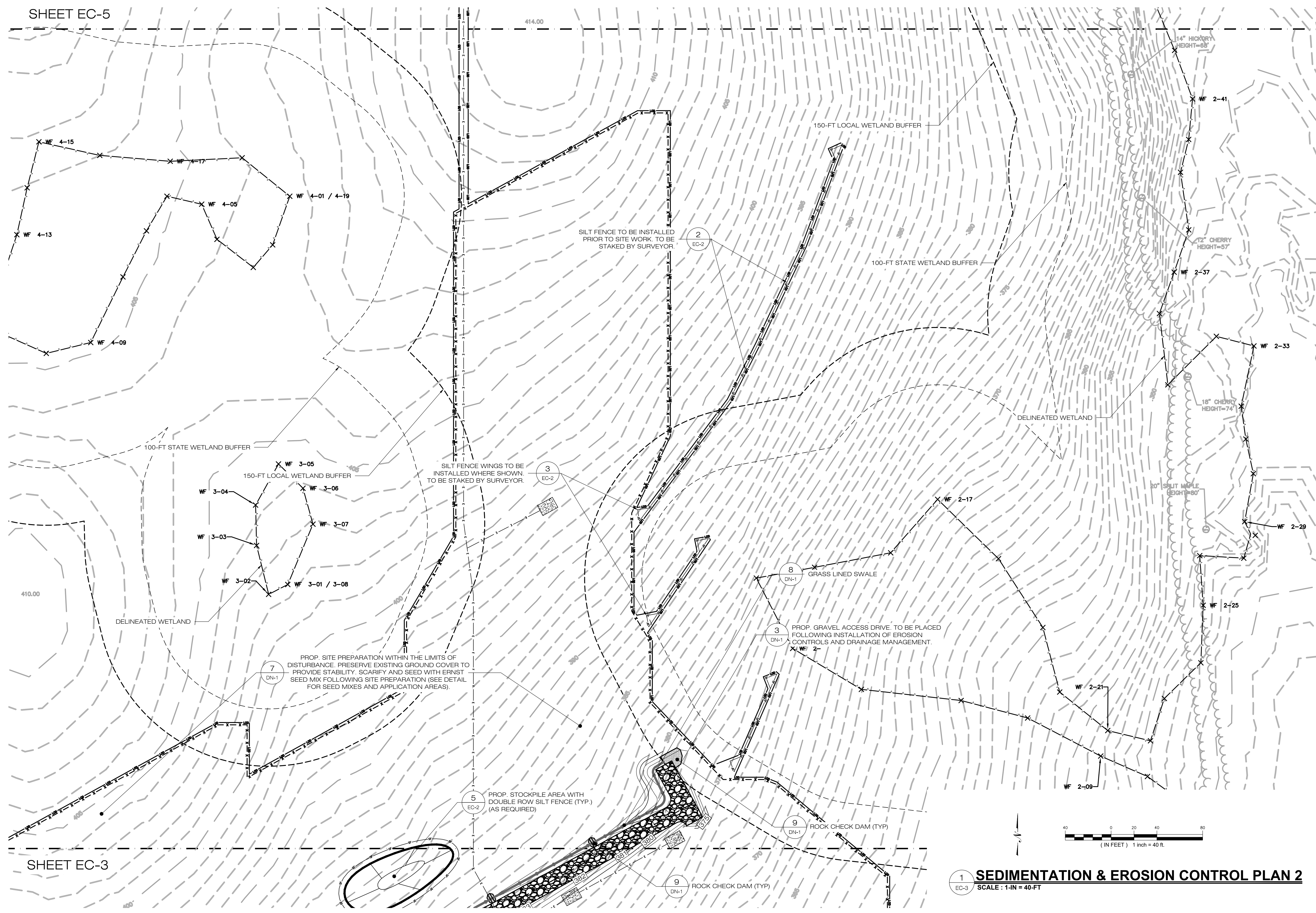
AMARAL SOLAR
 SITE: 254 PUTNAM ROAD
 ADDRESS: POMFRET CENTER, CT 06259
 APT FILING NUMBER: CT657100
 DRAWN BY: KAM
 DATE: 12/09/21 CHECKED BY: BG

SHEET TITLE:
 SEDIMENTATION & EROSION CONTROL PLAN
 (1 OF 3)

SHEET NUMBER:
 EC-3

1 SEDIMENTATION & EROSION CONTROL PLAN 1
 EC-3 SCALE: 1-IN = 40-FT





1
EC-3 **SEDIMENTATION & EROSION CONTROL PLAN 2**
SCALE: 1-IN = 40-FT

TRITEC
AMERICAS
888 PROSPECT STREET
LA JOLLA, CA 92037
OFFICE: (619) 363-3080

ALL-POINTS
TECHNOLOGY CORPORATION
567 VAUXHAUL STREET EXTENSION - SUITE 311
WATERFORD, CT 06385 PHONE: (860)-663-1697
WWW.ALLPOINTSTECH.COM FAX: (860)-663-0935

CSC PERMIT SET

NO	DATE	REVISION
0	12/09/21	SITING COUNCIL SUBMISSION
1	04/09/22	COUNCIL INTERROGATORIES
2	05/11/22	PANEL LAYOUT, UTIL. POLES
3		
4		
5		
6		

NOT FOR CONSTRUCTION

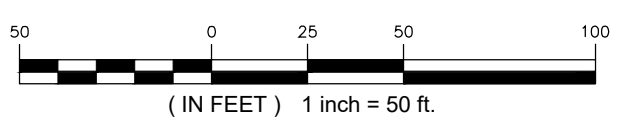
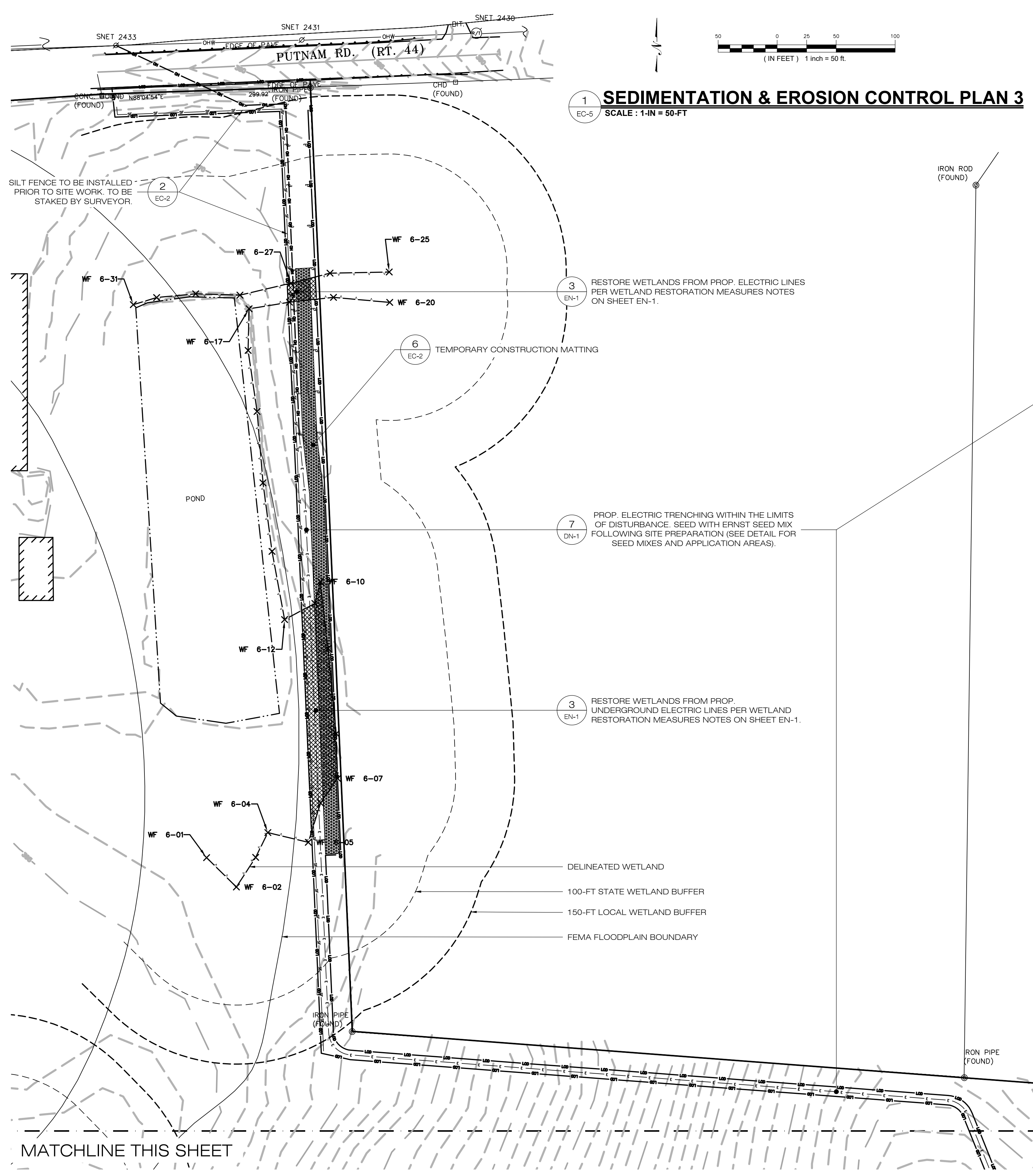
DESIGN PROFESSIONAL OF RECORD
PROF: KEVIN A. MCCAFFERY, PE
COMP: ALL-POINTS TECHNOLOGY CORPORATION
ADD: 567 VAUXHAUL STREET EXTENSION - SUITE 311 WATERFORD, CT 06385

OWNER: ANTONIO & MARY AMARAL
ADDRESS: 254 PUTNAM ROAD POMFRET CENTER, CT 06259

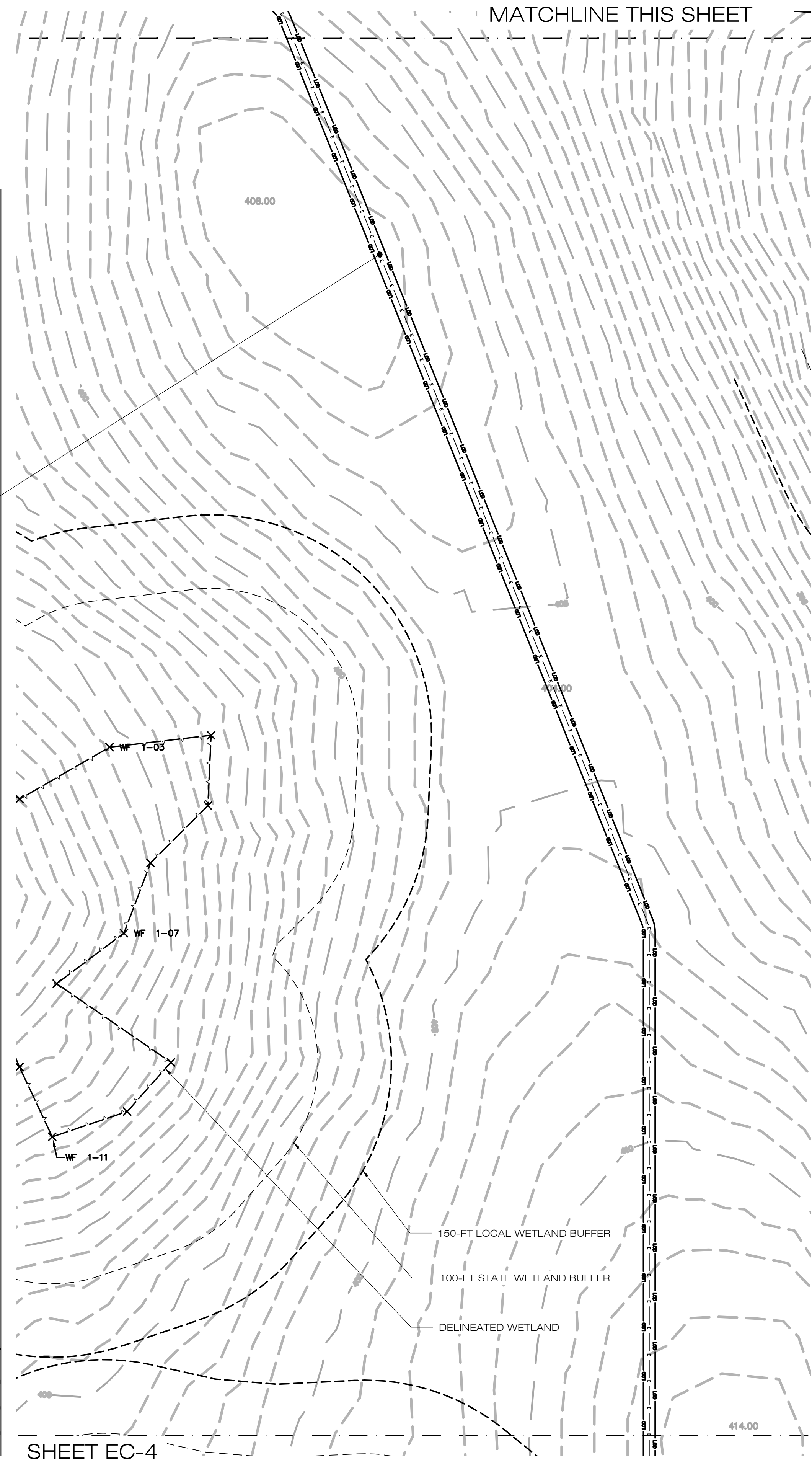
AMARAL SOLAR
SITE: 254 PUTNAM ROAD
ADDRESS: POMFRET CENTER, CT 06259
APT FILING NUMBER: CT657100
DRAWN BY: KAM
DATE: 12/09/21 CHECKED BY: BG

SHEET TITLE:
SEDIMENTATION & EROSION CONTROL PLAN (2 OF 3)

SHEET NUMBER:
EC-4



MATCHLINE THIS SHEET



SHEET EC-4

MATCHLINE THIS SHEET



888 PROSPECT STREET
 LA JOLLA, CA 92037
 OFFICE: (619) 363-3080



567 VAUXHAUL STREET EXTENSION - SUITE 311
 WATERFORD, CT 06385 PHONE: (860)-663-1697
 WWW.ALLPOINTSTECH.COM FAX: (860)-663-0935

CSC PERMIT SET		
NO	DATE	REVISION
0	12/09/21	SITING COUNCIL SUBMISSION
1	04/09/22	COUNCIL INTERROGATORIES
2	05/11/22	PANEL LAYOUT, UTIL. POLES
3		
4		
5		
6		

NOT FOR CONSTRUCTION

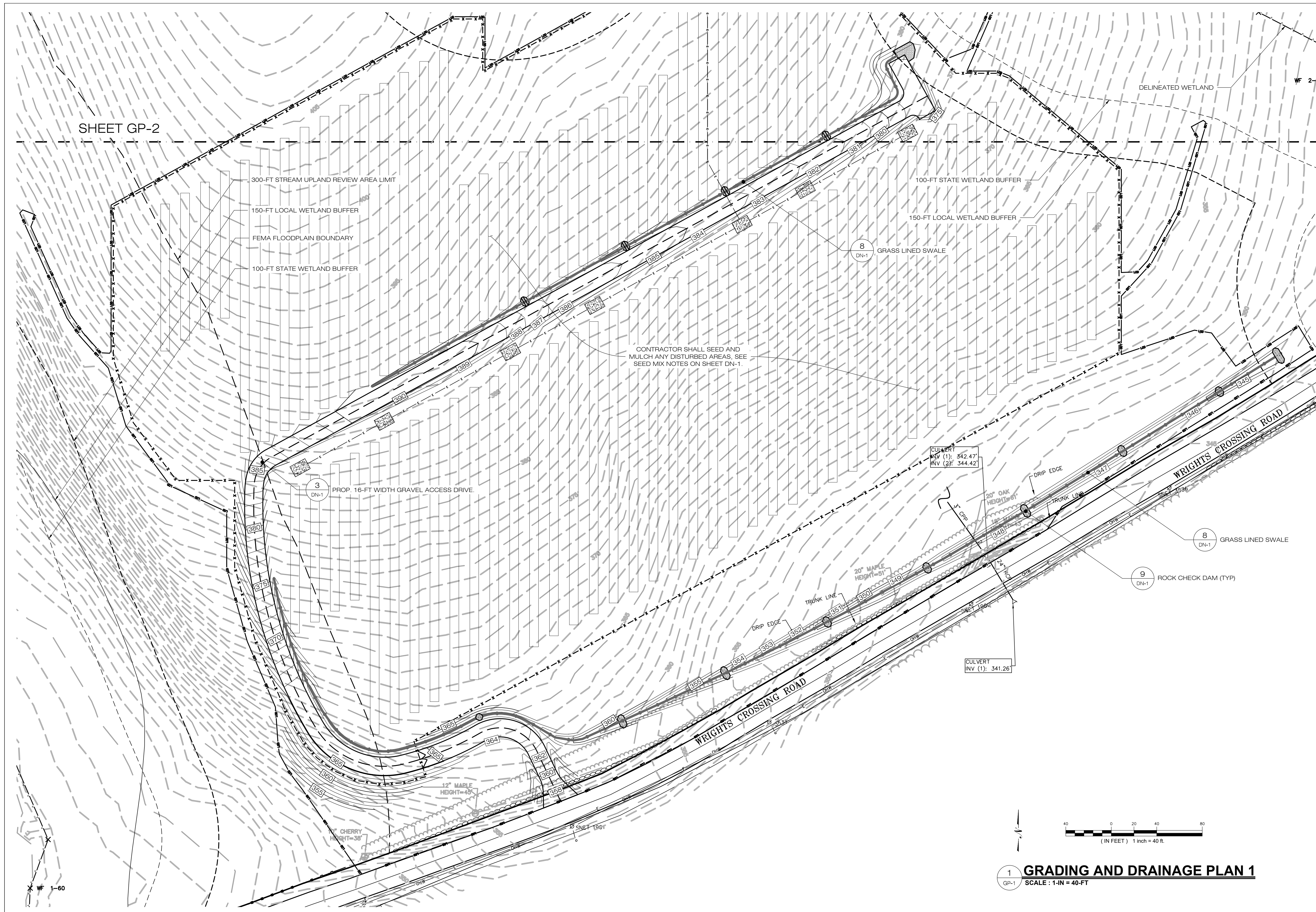
DESIGN PROFESSIONAL OF RECORD
 PROF: KEVIN A. MCCAFFERY, PE
 COMP: ALL-POINTS TECHNOLOGY CORPORATION
 ADD: 567 VAUXHAUL STREET EXTENSION - SUITE 311 WATERFORD, CT 06385

OWNER: ANTONIO & MARY AMARAL
 ADDRESS: 254 PUTNAM ROAD POMFRET CENTER, CT 06259

AMARAL SOLAR
 SITE: 254 PUTNAM ROAD
 ADDRESS: POMFRET CENTER, CT 06259
 APT FILING NUMBER: CT657100
 DRAWN BY: KAM
 DATE: 12/09/21 CHECKED BY: BG

SHEET TITLE:
 SEDIMENTATION & EROSION CONTROL PLAN
 (3 OF 3)

SHEET NUMBER:
 EC-5



SHEET GP-2

300-FT STREAM UPLAND REVIEW AREA LIMIT
 150-FT LOCAL WETLAND BUFFER
 FEMA FLOODPLAIN BOUNDARY
 100-FT STATE WETLAND BUFFER

CONTRACTOR SHALL SEED AND MULCH ANY DISTURBED AREAS, SEE SEED MIX NOTES ON SHEET DN-1.

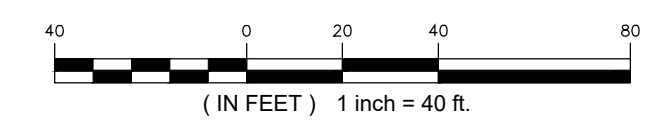
3 DN-1 PROP. 16-FT WIDTH GRAVEL ACCESS DRIVE.

CULVERT
 INV (1): 342.47
 INV (2): 344.42

CULVERT
 INV (1): 341.26

9 DN-1 ROCK CHECK DAM (TYP)

8 DN-1 GRASS LINED SWALE



1 GP-1 GRADING AND DRAINAGE PLAN 1
 SCALE: 1-IN = 40-FT

TRITEC
 AMERICAS
 888 PROSPECT STREET
 LA JOLLA, CA 92037
 OFFICE: (619) 363-3080

ALL-POINTS
 TECHNOLOGY CORPORATION
 567 VAUXHAUL STREET EXTENSION - SUITE 311
 WATERFORD, CT 06385 PHONE: (860)-663-1697
 WWW.ALLPOINTSTECH.COM FAX: (860)-663-0935

CSC PERMIT SET

NO	DATE	REVISION
0	12/09/21	SITING COUNCIL SUBMISSION
1	04/09/22	COUNCIL INTERROGATORIES
2	05/11/22	PANEL LAYOUT, UTIL. POLES
3		
4		
5		
6		

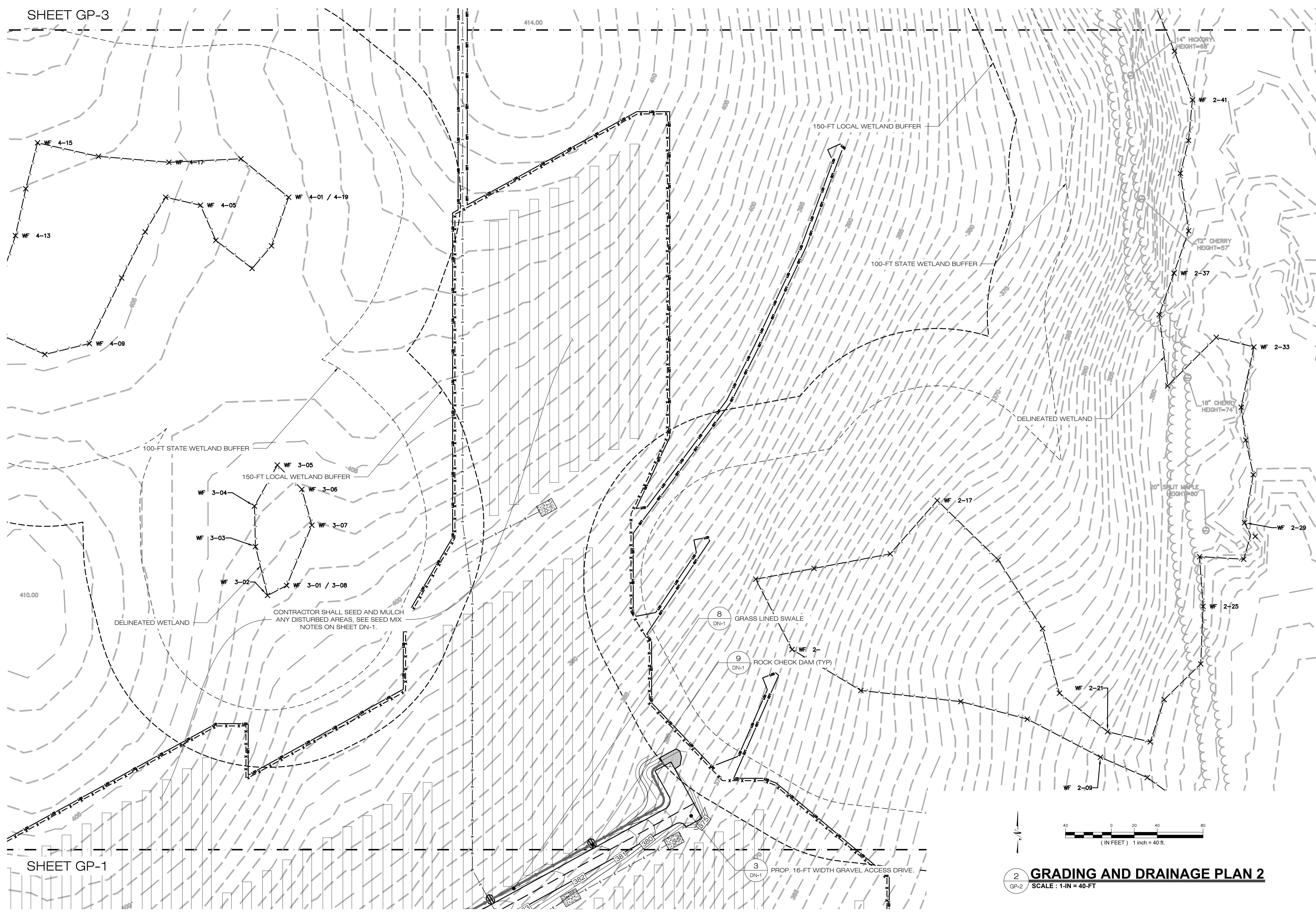
NOT FOR CONSTRUCTION

DESIGN PROFESSIONAL OF RECORD
 PROF: KEVIN A. MCCAFFERY, PE
 COMP: ALL-POINTS TECHNOLOGY CORPORATION
 ADD: 567 VAUXHAUL STREET EXTENSION - SUITE 311 WATERFORD, CT 06385
 OWNER: ANTONIO & MARY AMARAL
 ADDRESS: 254 PUTNAM ROAD POMFRET CENTER, CT 06259

AMARAL SOLAR
 SITE 254 PUTNAM ROAD
 ADDRESS: POMFRET CENTER, CT 06259
 APT FILING NUMBER: CT657100
 DRAWN BY: KAM
 DATE: 12/09/21 CHECKED BY: BG

SHEET TITLE:
GRADING AND DRAINAGE PLAN
 (1 OF 3)

SHEET NUMBER:
GP-1



2 GRADING AND DRAINAGE PLAN 2
 GP-2 SCALE: 1-IN = 40-FT

(IN FEET) 1 inch = 40 ft.

TRITEC
 AMERICAS
 888 PROSPECT STREET
 LA JOLLA, CA 92037
 OFFICE: (619) 363-3080

ALL-POINTS
 TECHNOLOGY CORPORATION
 567 VAUXHAUL STREET EXTENSION - SUITE 311
 WATERFORD, CT 06385 PHONE: (860)-663-1697
 WWW.ALLPOINTSTECH.COM FAX: (860)-663-0936

CSC PERMIT SET

NO	DATE	REVISION
0	12/09/21	SITING COUNCIL SUBMISSION
1	04/09/22	COUNCIL INTERROGATORIES
2	05/11/22	PANEL LAYOUT, UTIL. POLES
3		
4		
5		
6		

NOT FOR CONSTRUCTION

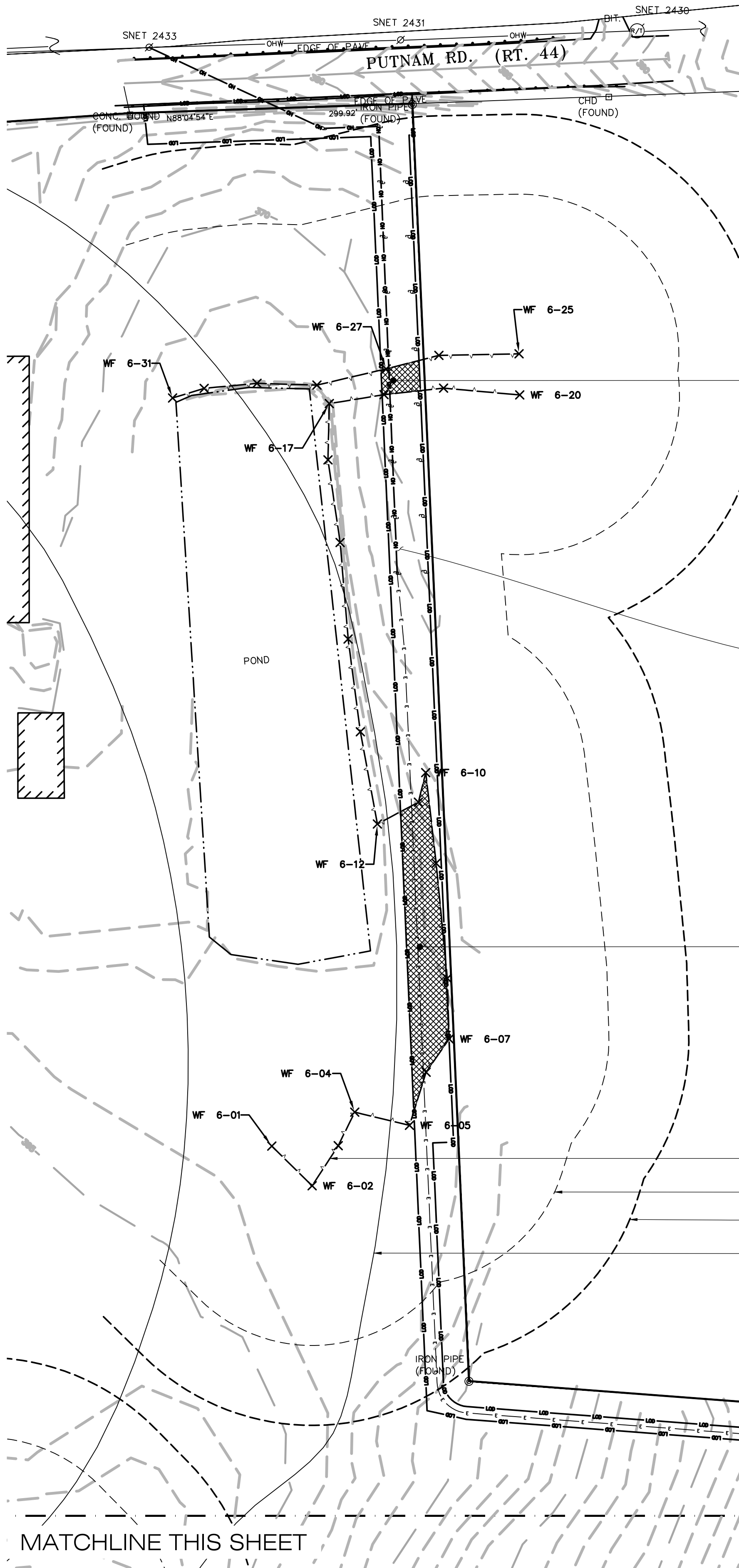
DESIGN PROFESSIONAL OF RECORD
 PROF: KEVIN A. MCCAFFERY, PE
 COMP: ALL-POINTS TECHNOLOGY CORPORATION
 ADD: 567 VAUXHAUL STREET EXTENSION - SUITE 311 WATERFORD, CT 06385

OWNER: ANTONIO & MARY AMARAL
 ADDRESS: 254 PUTNAM ROAD POMFRET CENTER, CT 06259

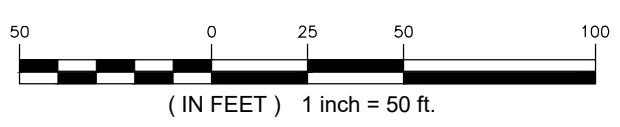
AMARAL SOLAR
 SITE 254 PUTNAM ROAD
 ADDRESS: POMFRET CENTER, CT 06259
 APT FILING NUMBER: CT657100
 DRAWN BY: KAM
 DATE: 12/09/21 CHECKED BY: BG

SHEET TITLE:
GRADING AND DRAINAGE PLAN (2 OF 3)

SHEET NUMBER:
GP-2



1 GRADING AND DRAINAGE PLAN 3
GP-3 SCALE: 1-IN = 50-FT



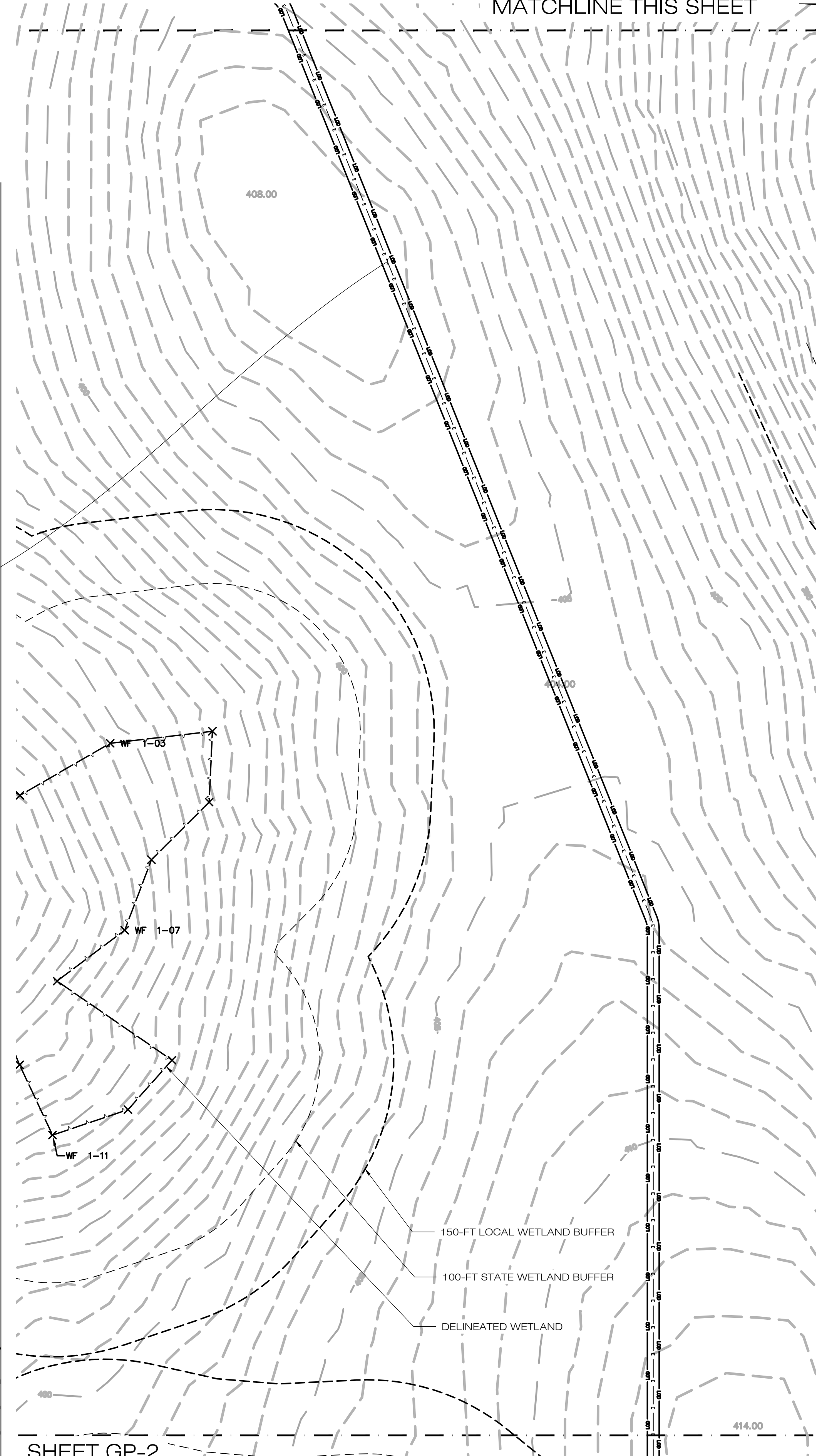
3 EN-1 RESTORE WETLANDS FROM PROP. ELECTRIC LINES PER WETLAND RESTORATION MEASURES NOTES ON SHEET EN-1.

3 EN-1 RESTORE WETLANDS FROM PROP. UNDERGROUND ELECTRIC LINES PER WETLAND RESTORATION MEASURES NOTES ON SHEET EN-1.

CONTRACTOR SHALL SEED AND MULCH ANY DISTURBED AREAS. SEE SEED MIX NOTES ON SHEET DN-1.

- DELINEATED WETLAND
- 100-FT STATE WETLAND BUFFER
- 150-FT LOCAL WETLAND BUFFER
- FEMA FLOODPLAIN BOUNDARY

MATCHLINE THIS SHEET



SHEET GP-2

MATCHLINE THIS SHEET

TRITEC
AMERICAS
888 PROSPECT STREET
LA JOLLA, CA 92037
OFFICE: (619) 363-3080

ALL-POINTS
TECHNOLOGY CORPORATION
567 VAUXHAUL STREET EXTENSION - SUITE 311
WATERFORD, CT 06385 PHONE: (860)-663-1697
WWW.ALLPOINTSTECH.COM FAX: (860)-663-0935

CSC PERMIT SET

NO	DATE	REVISION
0	12/09/21	SITING COUNCIL SUBMISSION
1	04/09/22	COUNCIL INTERROGATORIES
2	05/11/22	PANEL LAYOUT, UTIL. POLES
3		
4		
5		
6		

NOT FOR CONSTRUCTION

DESIGN PROFESSIONAL OF RECORD
PROF: KEVIN A. MCCAFFERY, PE
COMP: ALL-POINTS TECHNOLOGY CORPORATION
ADD: 567 VAUXHAUL STREET EXTENSION - SUITE 311 WATERFORD, CT 06385

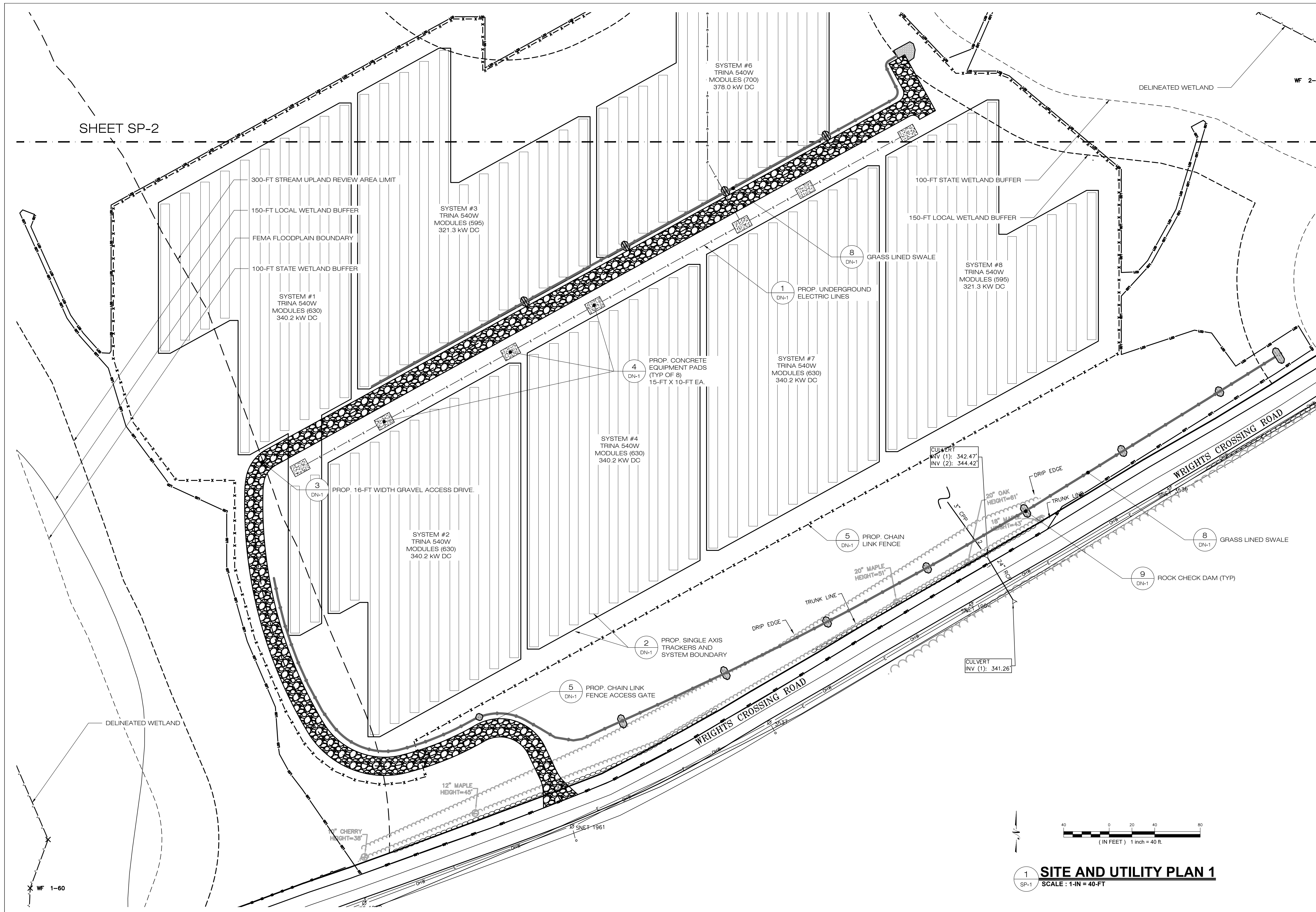
OWNER: ANTONIO & MARY AMARAL
ADDRESS: 254 PUTNAM ROAD POMFRET CENTER, CT 06259

AMARAL SOLAR
SITE: 254 PUTNAM ROAD
ADDRESS: POMFRET CENTER, CT 06259

APT FILING NUMBER: CT657100
DRAWN BY: KAM
DATE: 12/09/21
CHECKED BY: BG

SHEET TITLE:
GRADING AND DRAINAGE PLAN (3 OF 3)

SHEET NUMBER:
GP-3



SHEET SP-2

DELINEATED WETLAND

WF 1-60

TRITEC
AMERICAS
888 PROSPECT STREET
LA JOLLA, CA 92037
OFFICE: (619) 363-3080

ALL-POINTS
TECHNOLOGY CORPORATION
567 VAUXHAUL STREET EXTENSION - SUITE 311
WATERFORD, CT 06385 PHONE: (860)-663-1697
WWW.ALLPOINTSTECH.COM FAX: (860)-663-0935

CSC PERMIT SET

NO	DATE	REVISION
0	12/09/21	SITING COUNCIL SUBMISSION
1	04/09/22	COUNCIL INTERROGATORIES
2	05/11/22	PANEL LAYOUT, UTIL. POLES
3		
4		
5		
6		

NOT FOR CONSTRUCTION

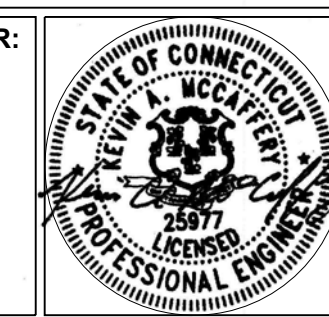
DESIGN PROFESSIONAL OF RECORD
PROF: KEVIN A. MCCAFFERY, PE
COMP: ALL-POINTS TECHNOLOGY CORPORATION
ADD: 567 VAUXHAUL STREET EXTENSION - SUITE 311 WATERFORD, CT 06385

OWNER: ANTONIO & MARY AMARAL
ADDRESS: 254 PUTNAM ROAD POMFRET CENTER, CT 06259

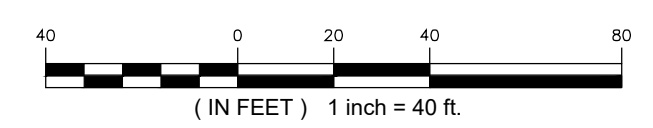
AMARAL SOLAR
SITE: 254 PUTNAM ROAD
ADDRESS: POMFRET CENTER, CT 06259
APT FILING NUMBER: CT657100
DRAWN BY: KAM
DATE: 12/09/21 CHECKED BY: BG

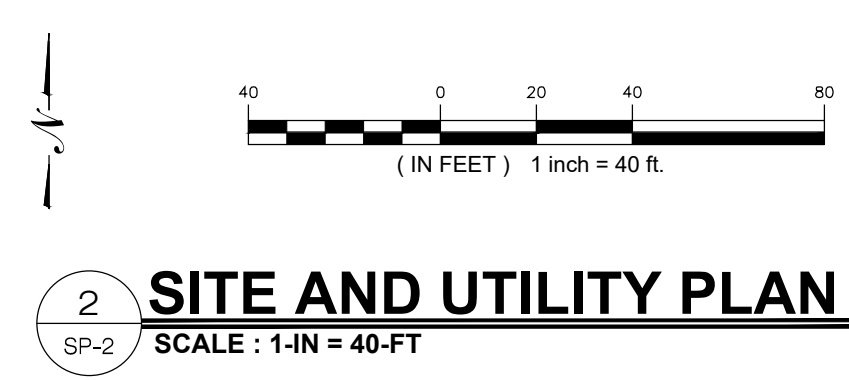
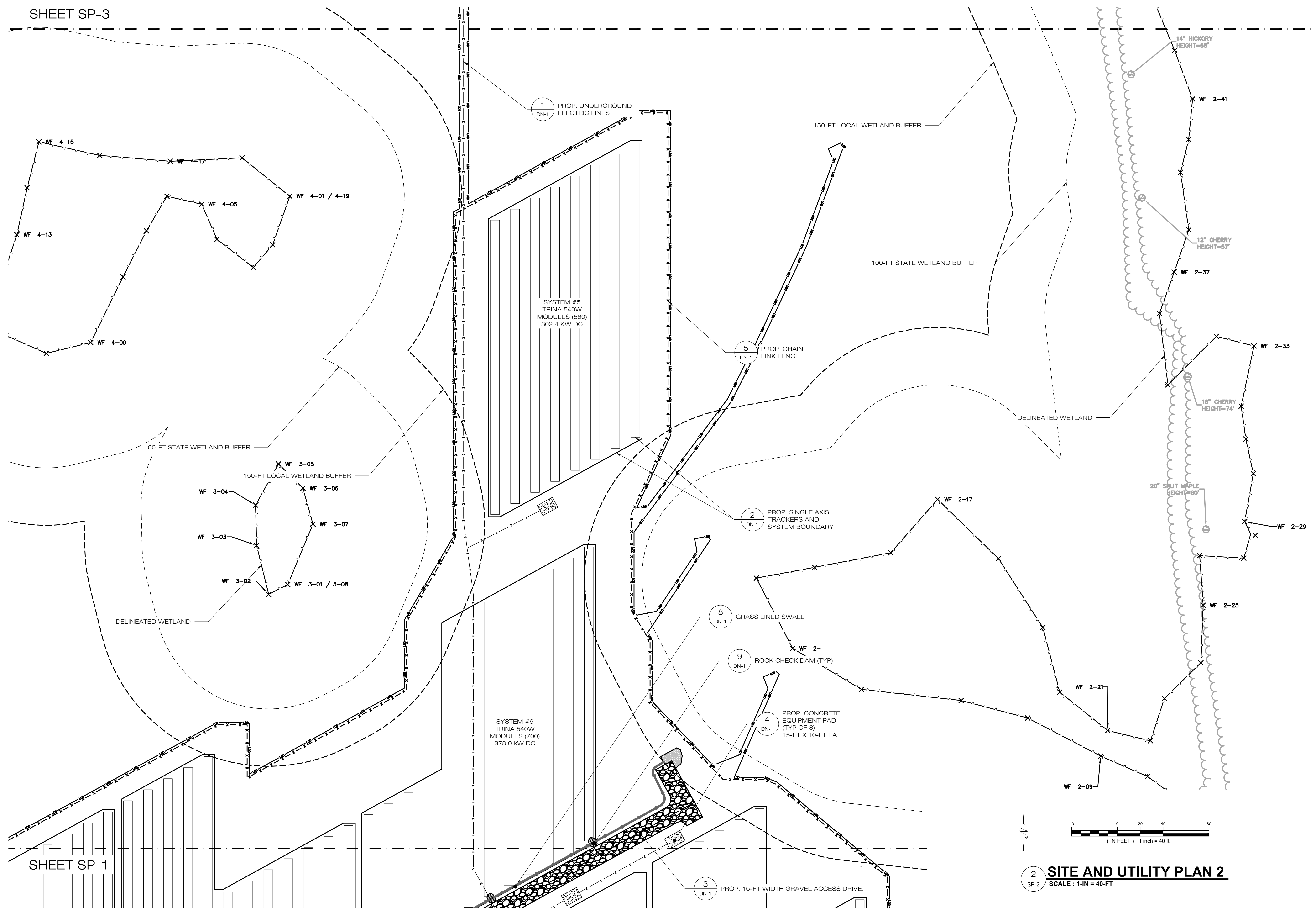
SHEET TITLE:
SITE AND UTILITY PLAN (1 OF 3)

SHEET NUMBER:
SP-1



1 **SITE AND UTILITY PLAN 1**
SCALE: 1-IN = 40-FT





TRITEC AMERICAS
888 PROSPECT STREET
LA JOLLA, CA 92037
OFFICE: (619) 363-3080

ALL-POINTS TECHNOLOGY CORPORATION
567 VAUXHAUL STREET EXTENSION - SUITE 311
WATERFORD, CT 06385 PHONE: (860)-663-1697
WWW.ALLPOINTSTECH.COM FAX: (860)-663-0935

CSC PERMIT SET

NO	DATE	REVISION
0	12/09/21	SITING COUNCIL SUBMISSION
1	04/09/22	COUNCIL INTERROGATORIES
2	05/11/22	PANEL LAYOUT, UTIL. POLES
3		
4		
5		
6		

NOT FOR CONSTRUCTION

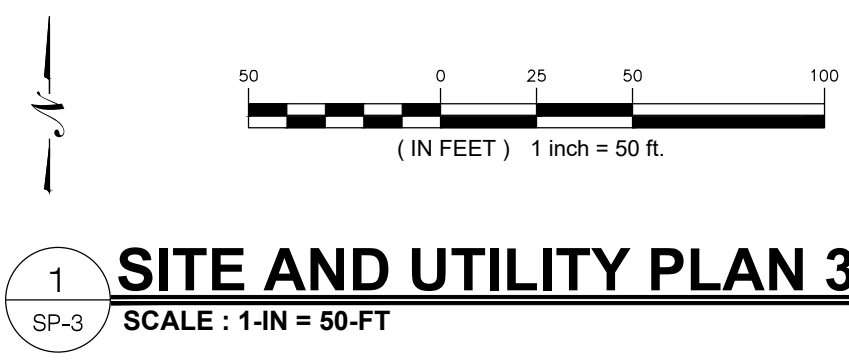
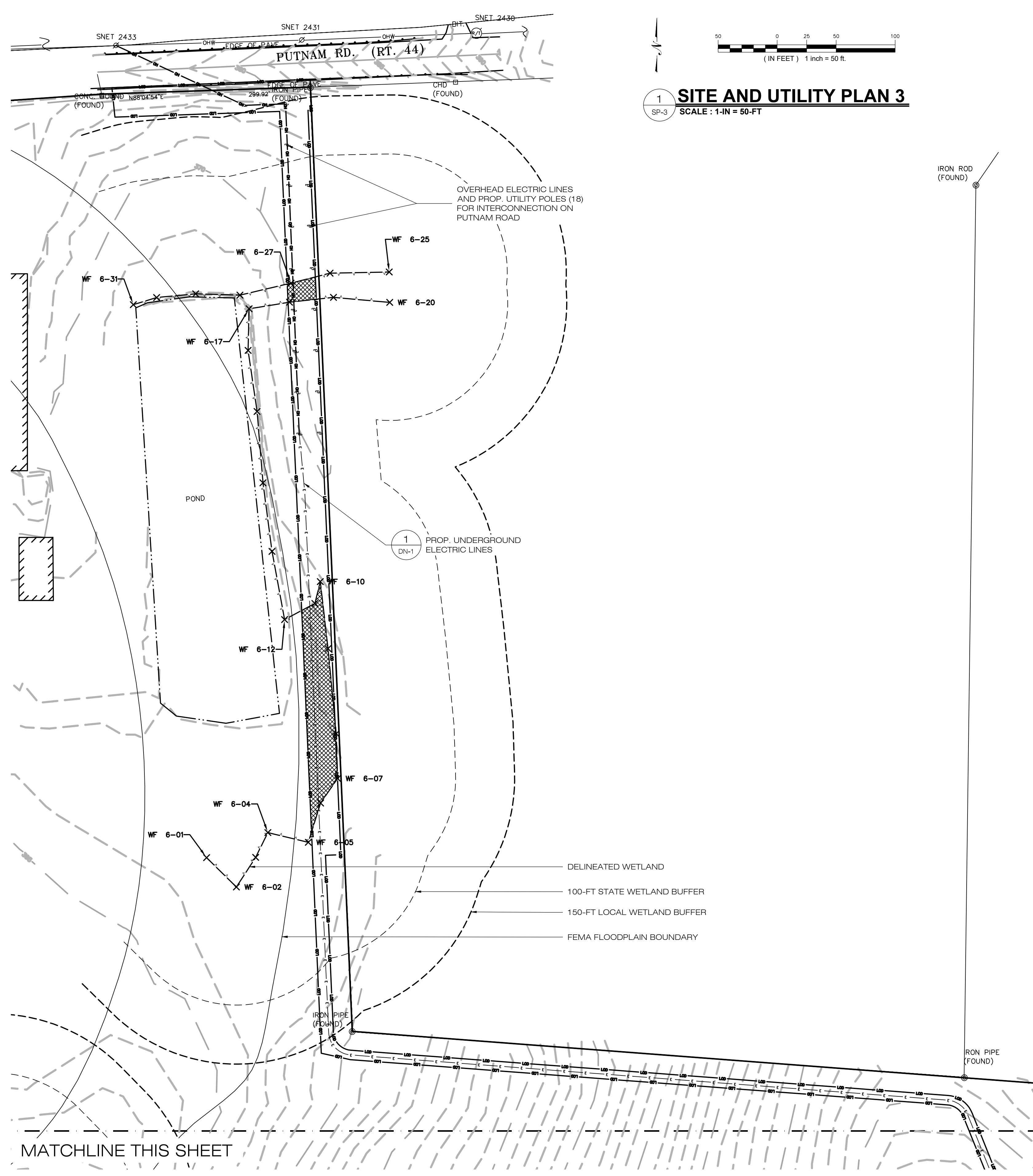
DESIGN PROFESSIONAL OF RECORD
PROF: KEVIN A. MCCAFFERY, PE
COMP: ALL-POINTS TECHNOLOGY CORPORATION
ADD: 567 VAUXHAUL STREET EXTENSION - SUITE 311
WATERFORD, CT 06385

OWNER: ANTONIO & MARY AMARAL
ADDRESS: 254 PUTNAM ROAD
POMFRET CENTER, CT 06259

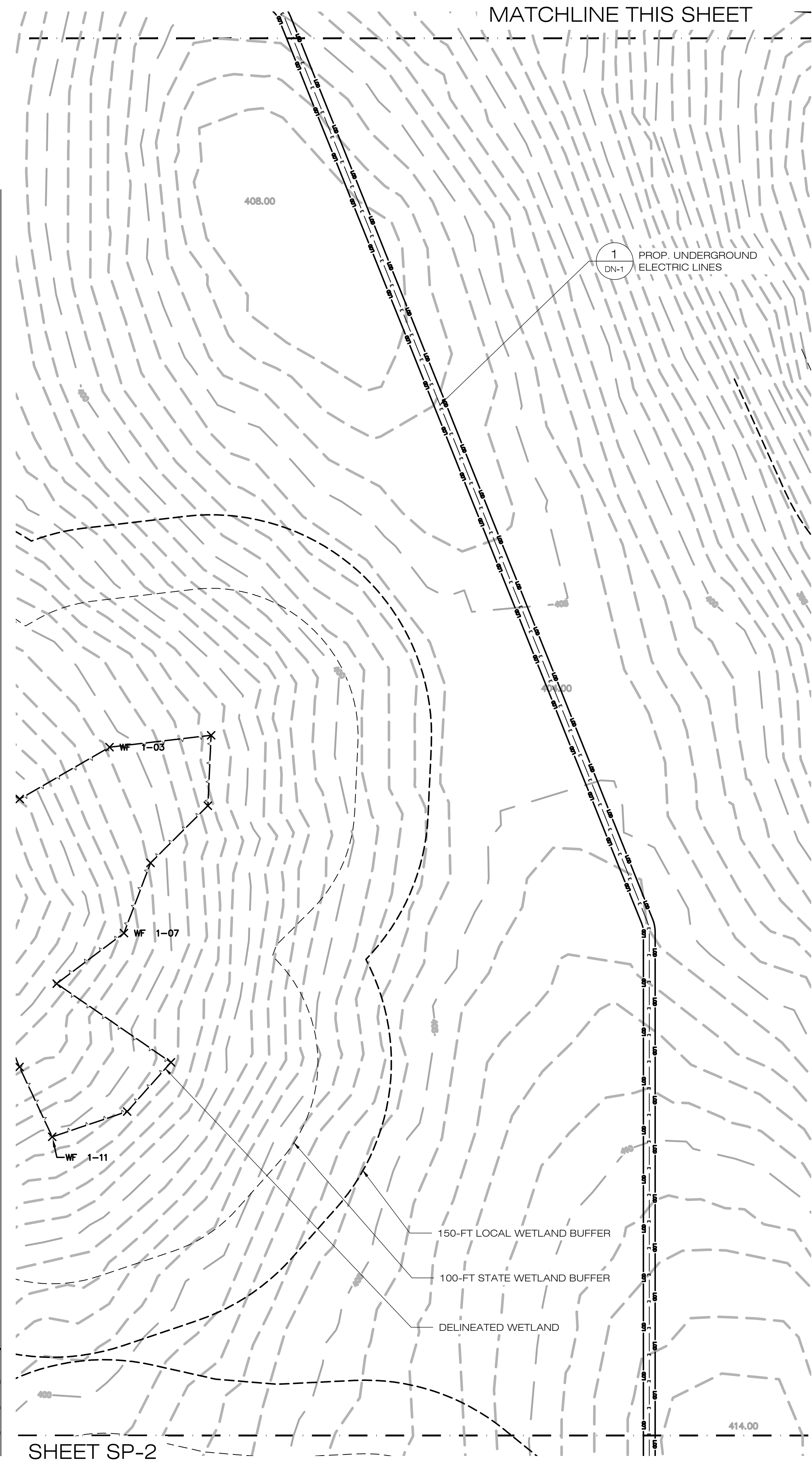
AMARAL SOLAR
SITE: 254 PUTNAM ROAD
ADDRESS: POMFRET CENTER, CT 06259
APT FILING NUMBER: CT657100
DRAWN BY: KAM
DATE: 12/09/21 CHECKED BY: BG

SHEET TITLE:
SITE AND UTILITY PLAN (2 OF 3)

SHEET NUMBER:
SP-2




1 SITE AND UTILITY PLAN 3
SP-3 SCALE: 1-IN = 50-FT




SHEET SP-2

MATCHLINE THIS SHEET

MATCHLINE THIS SHEET



**888 PROSPECT STREET
LA JOLLA, CA 92037
OFFICE: (619) 363-3080**



567 VAUXHAUL STREET EXTENSION - SUITE 311
WATERFORD, CT 06385 PHONE: (860)-663-1697
WWW.ALLPOINTSTECH.COM FAX: (860)-663-0935

CSC PERMIT SET		
NO	DATE	REVISION
0	12/09/21	SITING COUNCIL SUBMISSION
1	04/09/22	COUNCIL INTERROGATORIES
2	05/11/22	PANEL LAYOUT, UTIL. POLES
3		
4		
5		
6		

NOT FOR CONSTRUCTION

DESIGN PROFESSIONAL OF RECORD
 PROF: KEVIN A. MCCAFFERY, PE
 COMP: ALL-POINTS TECHNOLOGY CORPORATION
 ADD: 567 VAUXHAUL STREET EXTENSION - SUITE 311 WATERFORD, CT 06385

OWNER: ANTONIO & MARY AMARAL
 ADDRESS: 254 PUTNAM ROAD POMFRET CENTER, CT 06259


AMARAL SOLAR

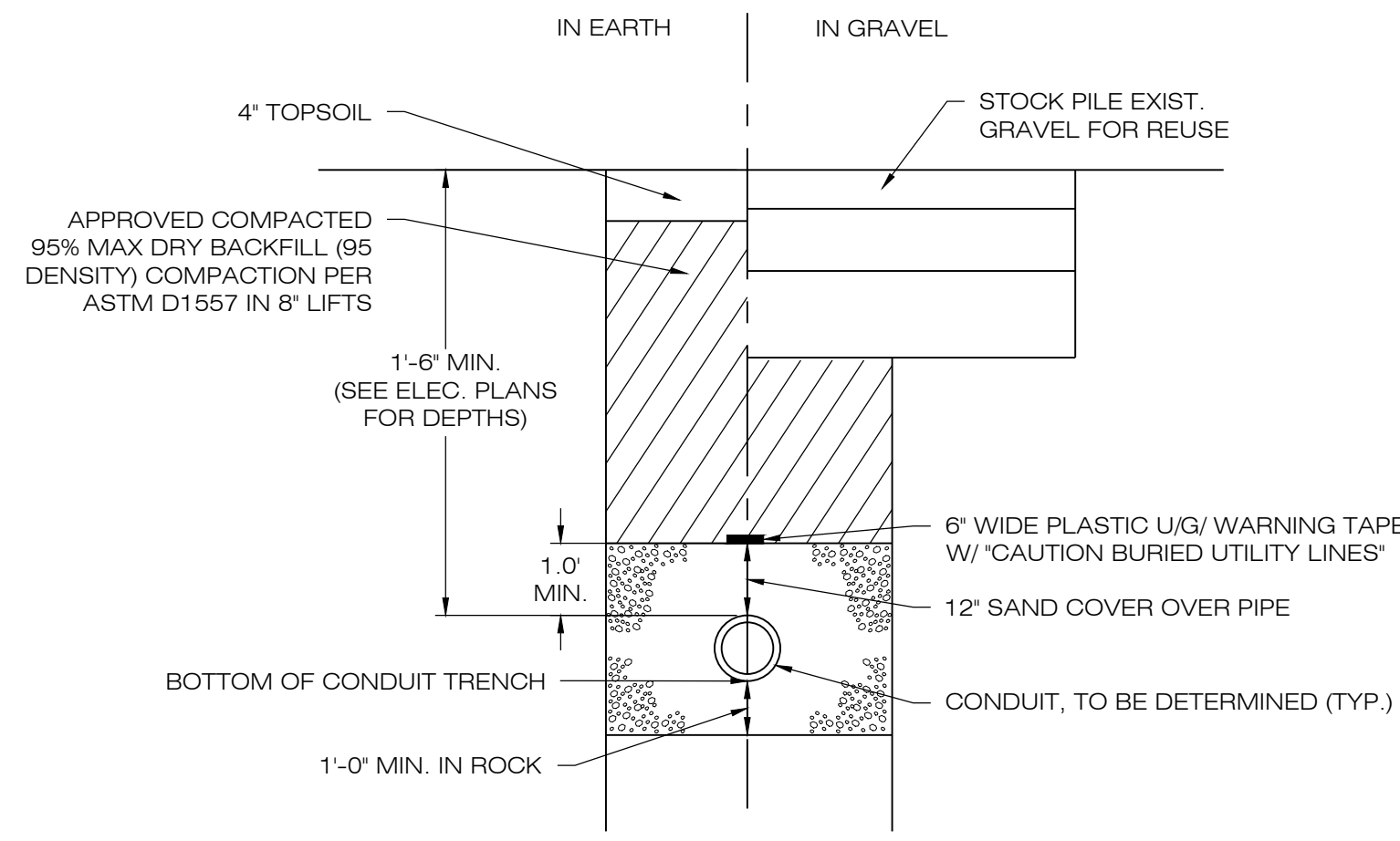
SITE 254 PUTNAM ROAD
ADDRESS: POMFRET CENTER, CT 06259
APT FILING NUMBER: CT657100

DATE: 12/09/21 **DRAWN BY:** KAM
CHECKED BY: BG

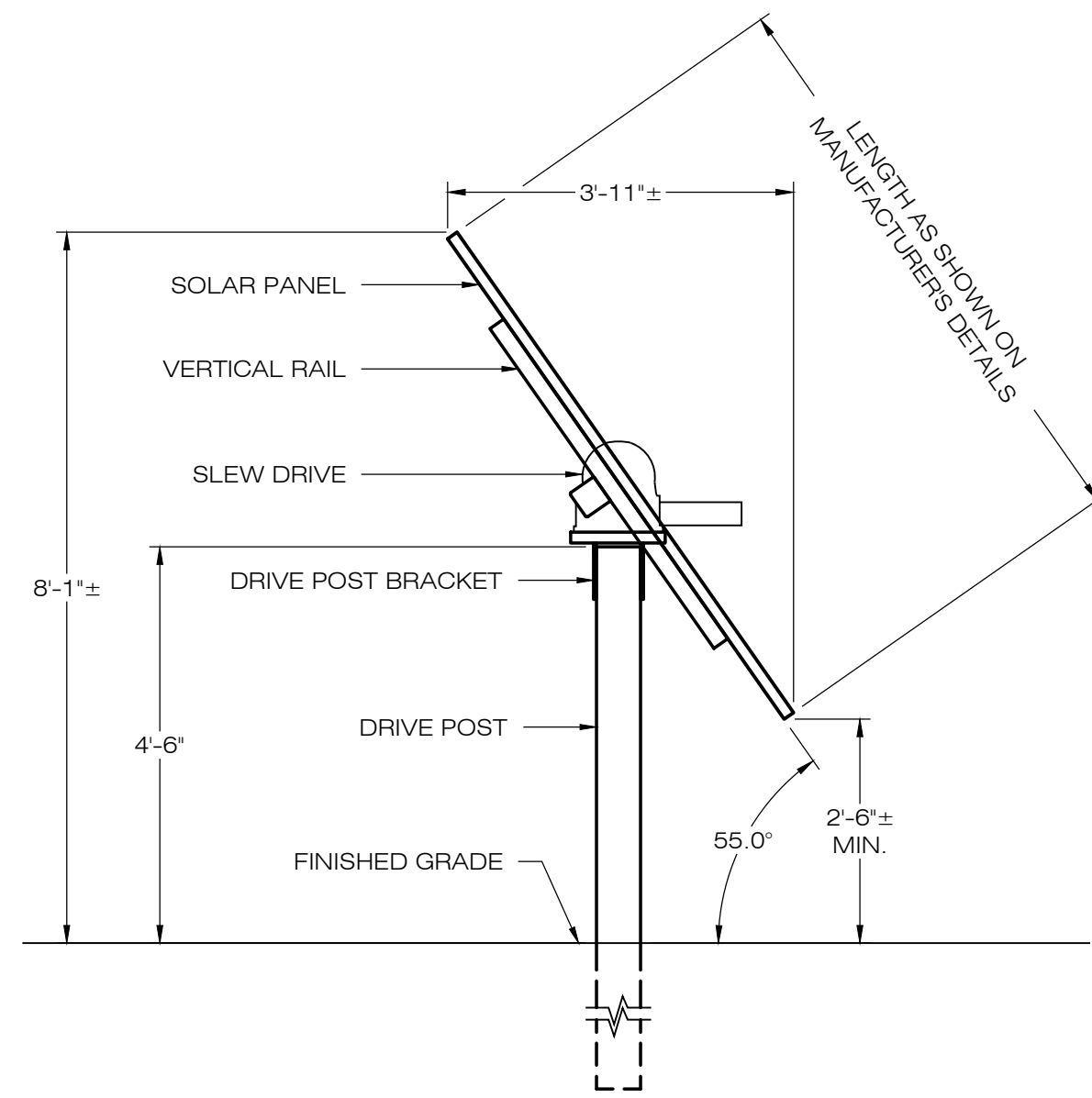
SHEET TITLE:
**SITE AND UTILITY PLAN
 (3 OF 3)**

SHEET NUMBER:
SP-3



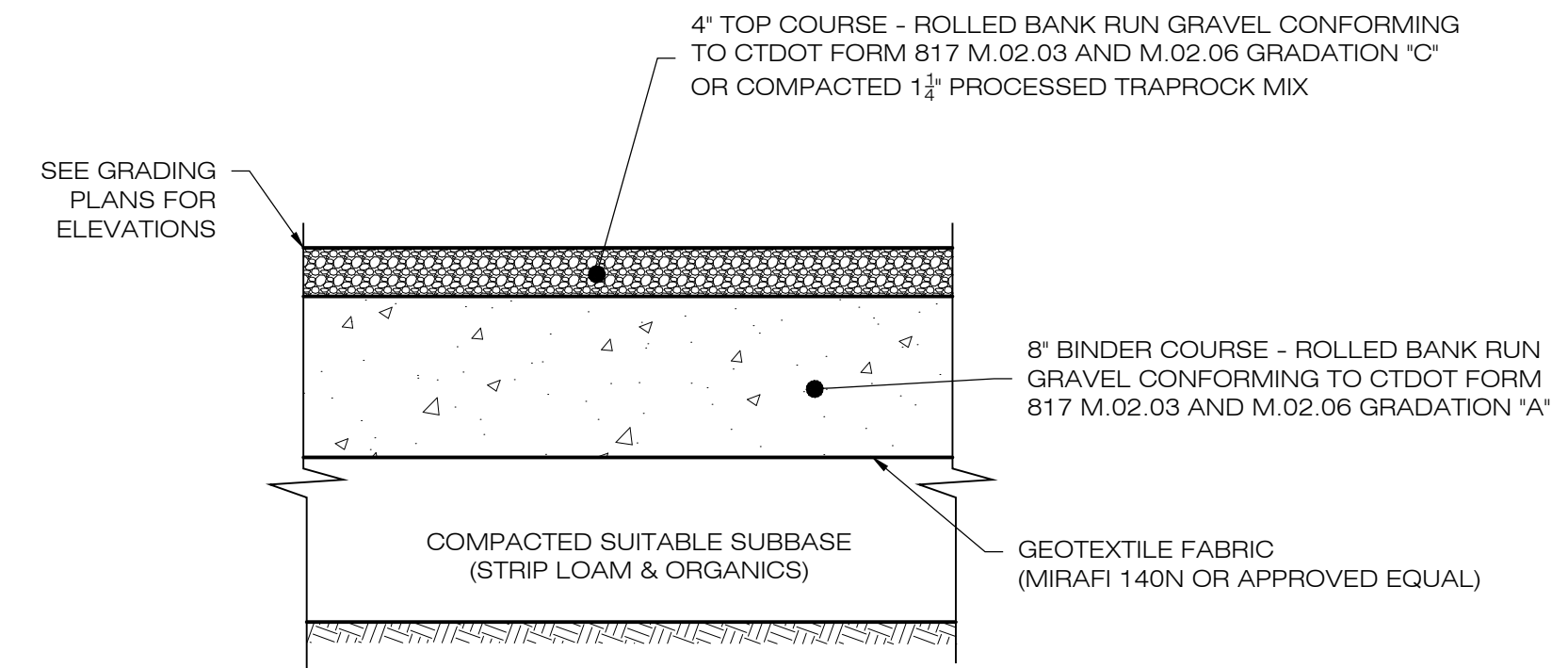


1 ELECTRICAL TRENCH DETAIL
DN-1 SCALE : N.T.S.



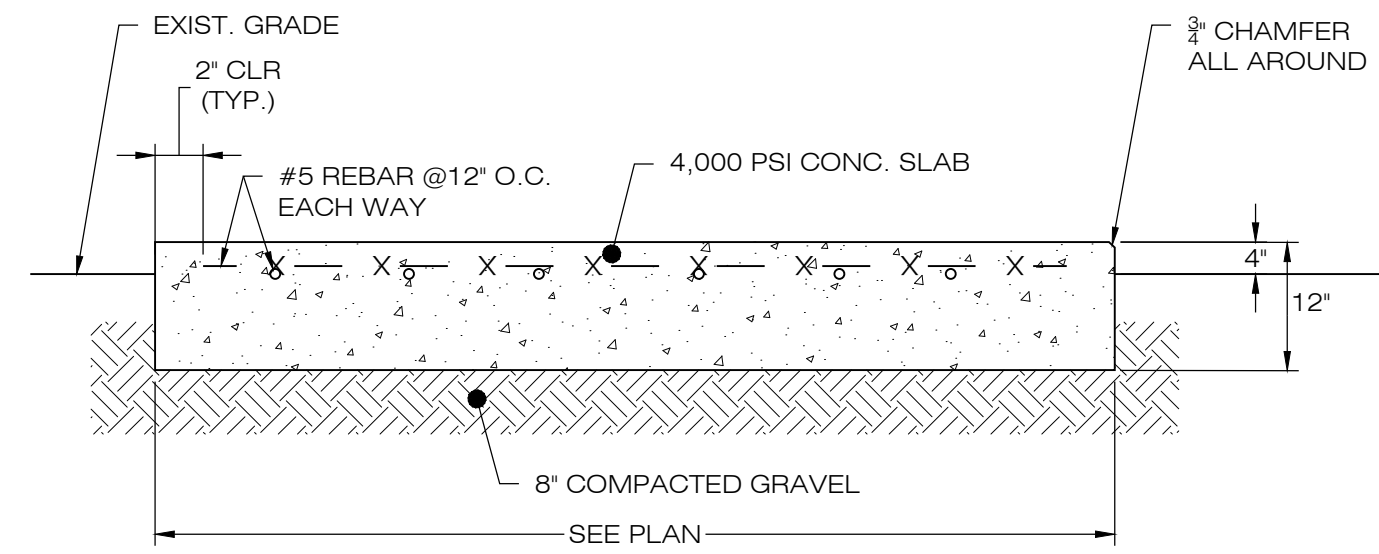
NOTES:
SEE MANUFACTURERS DETAIL SHEETS FOR ADDITIONAL INFORMATION REGARDING RACKING SYSTEM REQUIREMENTS AND INSTALLATION PROCEDURES. RACKING SYSTEM TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS REQUIREMENTS.

2 TYPICAL TRACKER POST MOUNTED RACKING SYSTEM
DN-1 SCALE : N.T.S.

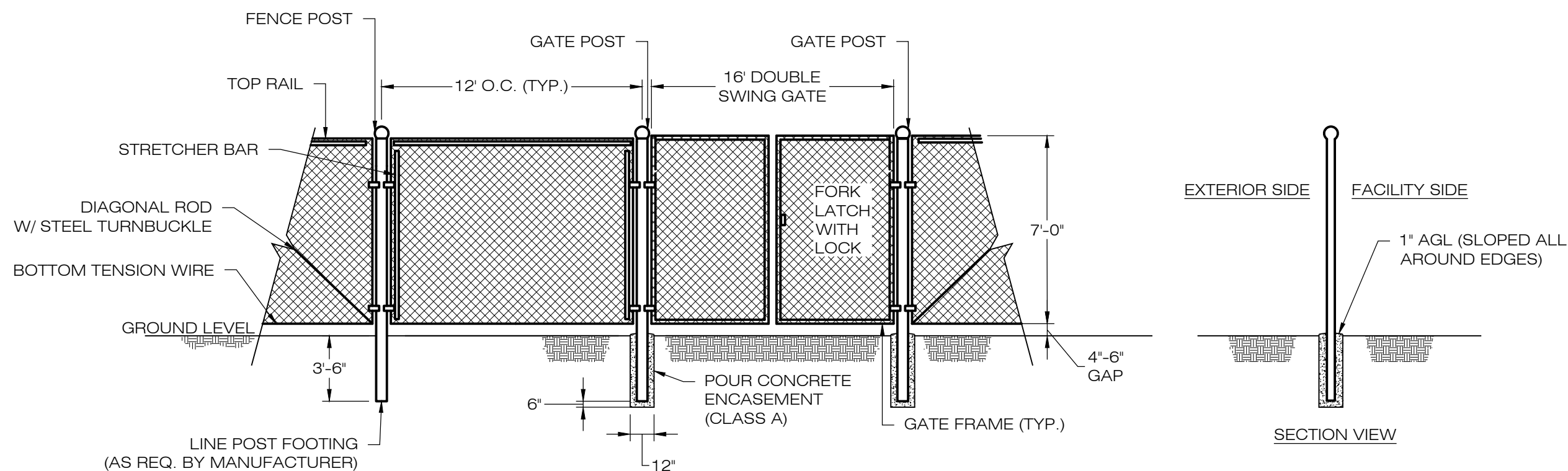


NOTES:
1. SUBBASE MAY CONSIST OF NATIVE MATERIALS IF FOUND ACCEPTABLE BY THE ENGINEER. SUBBASE TO BE COMPACTED TO 95% MAX DRY DENSITY.
2. SUBBASE IS TO BE FREE FROM DEBRIS AND UNSUITABLE MATERIALS.
3. CONTRACTOR SHALL INSTALL ACCESS ROAD FLUSH WITH EXISTING GRADE TO ENSURE DRAINAGE FLOW PATHS ARE MAINTAINED.
4. SEE PLAN VIEW SHEETS FOR ROAD WIDTH AND ELEVATIONS.

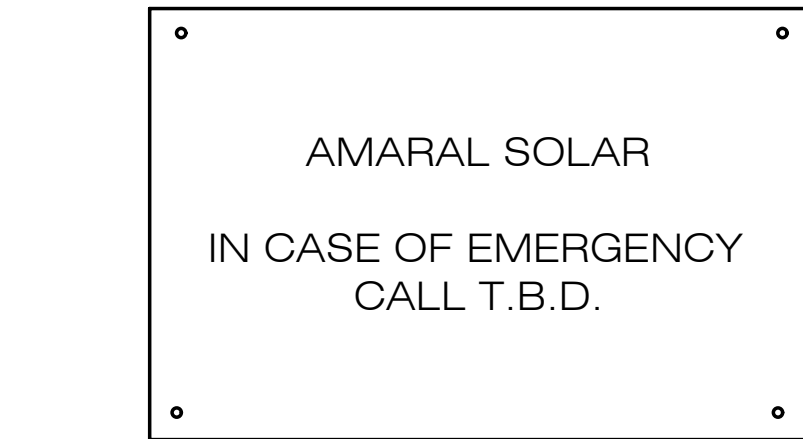
3 GRAVEL ACCESS DRIVE SECTION
DN-1 SCALE : N.T.S.



4 CONCRETE EQUIPMENT PAD
DN-1 SCALE : N.T.S.

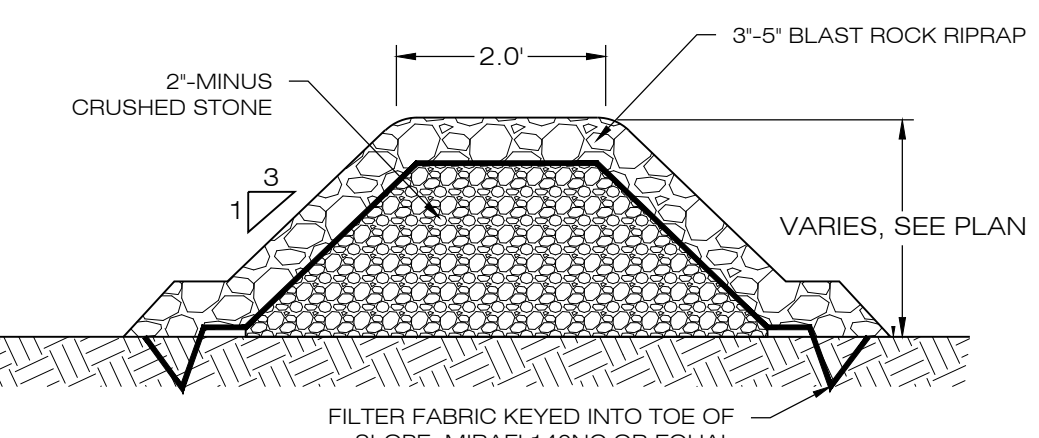


5 CHAIN-LINK FENCE & GATE DETAIL
DN-1 SCALE : N.T.S.



NOTES:
EMERGENCY CALL NUMBER TO BE PROVIDED ONCE DETERMINED.

6 NOTIFICATION SIGN DETAIL
DN-1 SCALE : N.T.S.



NOTES:
1. STONE SHALL BE PLACED MECHANICALLY OR BY HAND. STONE SHALL NOT BE DUMPED DIRECTLY INTO SWALE.
2. SEE GRADING AND DRAINAGE PLAN.

9 ROCK CHECK DAM
DN-1 SCALE : N.T.S.

Fuzz & Buzz Mix - Premium - ERNM-147

Botanical Name	Common Name	Price/lb
24.20 % <i>Lolium perenne</i> , 'Crave', Tetraploid	Perennial Ryegrass, 'Crave', Tetraploid	3.48
17.70 % <i>Oxycthis glomerata</i> , 'Pinnacle'	Oxycthis glomerata, 'Pinnacle'	3.00
17.70 % <i>Festuca elatior</i>	Meadow Fescue	4.80
17.70 % <i>Poa pratensis</i> , 'Ginger'	Kentucky Bluegrass, 'Ginger' (pasture type)	3.36
5.40 % <i>Trifolium hybridum</i>	Alsike Clover	3.90
4.90 % <i>Trifolium incarnatum</i> , Variety Not Stated	Crimson Clover, Variety Not Stated	1.92
4.50 % <i>Trifolium pratense</i> , Medium, Variety Not Stated	Red Clover, Medium, Variety Not Stated	3.00
2.00 % <i>Lotus corniculatus</i> , 'Lee'	Beet's Foot, 'Trelli', 'Lee'	7.50
1.30 % <i>Chrysanthemum leucanthemum</i>	Owey Daisy	33.60
1.30 % <i>Cichorium intybus</i>	Blue Chicory	19.20
0.80 % <i>Chamaecrista fasciculata</i> , PA Ecotype	Partridge Pea, PA Ecotype	7.20
0.40 % <i>Aster oblongifolius</i> , PA Ecotype	Aromatic Aster, PA Ecotype	336.00
0.40 % <i>Aster prenanthoides</i> , PA Ecotype	Zigzag Aster, PA Ecotype	432.00
0.40 % <i>Cirsopsis lanceolata</i>	Lanceleaf Coreopsis	28.80
0.40 % <i>Tradescantia ohioensis</i> , PA Ecotype	Ohio Spiderwort, PA Ecotype	192.00
0.40 % <i>Zizia aurea</i>	Golden Alexanders	288.00
0.30 % <i>Solidago nemoralis</i> , PA Ecotype	Gray Goldenrod, PA Ecotype	336.00
0.10 % <i>Achillea millefolium</i>	Common Milkweed	163.20
0.10 % <i>Penstemon hirsutus</i>	Hairy Beardtongue	480.00

100.00 % Mix Price/lb Bulk: \$10.91

Seeding Rate: Expect to apply about 42 lbs per acre with a cover crop of annual ryegrass at 12 lbs/acre.

Northeast Solar Pollinator Buffer Mix - ERNM-610

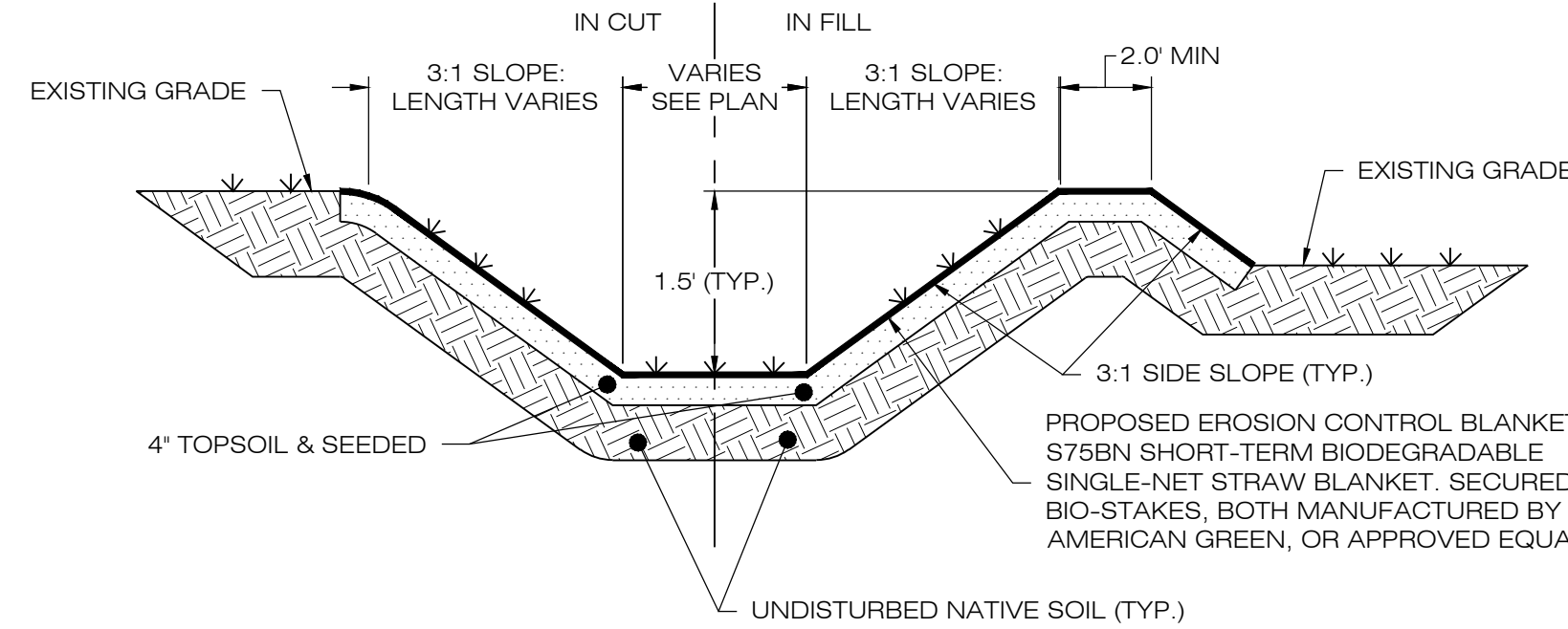
Botanical Name	Common Name	Price/lb
37.00 % <i>Schizanthus scarpianus</i> , 'Camper'	Little Bluestem, 'Camper'	15.90
36.30 % <i>Bouteloua curtipendula</i> , 'Butte'	Sideoats Grama, 'Butte'	14.11
4.00 % <i>Chamaecrista fasciculata</i> , PA Ecotype	Partridge Pea, PA Ecotype	7.20
4.00 % <i>Cirsopsis lanceolata</i>	Lanceleaf Coreopsis	28.80
4.00 % <i>Cirsopsis discolor</i>	Purple Coreopsis	43.20
3.30 % <i>Rudbeckia hirta</i>	Blackeyed Susan	24.00
2.30 % <i>Helianthus helianthoides</i> , PA Ecotype	Owey Sunflower, PA Ecotype	33.60
1.60 % <i>Penstemon digitalis</i> , PA Ecotype	Tall White Beardtongue, PA Ecotype	192.00
1.50 % <i>Achillea tuberosa</i>	Butterfly Milkweed	432.00
0.80 % <i>Liatris spicata</i>	Marsh Blazing Star	252.00
0.70 % <i>Senna hebecarpa</i> , VA & WV Ecotype	Wild Senna, VA & WV Ecotype	28.80
0.50 % <i>Achillea incarnata</i> , PA Ecotype	Swamp Milkweed, PA Ecotype	192.00
0.50 % <i>Goum canadensis</i> , PA Ecotype	White Asters, PA Ecotype	192.00
0.50 % <i>Monarda fistulosa</i> , Fort Indiantown Gap-PA Ecotype	Wild Bergamot, Fort Indiantown Gap-PA Ecotype	120.00
0.50 % <i>Pycnanthemum tenuifolium</i>	Narrowleaf Mountainmint	168.00
0.50 % <i>Zizia aurea</i>	Golden Alexanders	288.00
0.40 % <i>Aster laevis</i> , NY Ecotype	Smooth Blue Aster, NY Ecotype	336.00
0.40 % <i>Aster novae-angliae</i> , PA Ecotype	New England Aster, PA Ecotype	336.00
0.30 % <i>Baptisia australis</i> , Southern WV Ecotype	Blue False Indigo, Southern WV Ecotype	96.00
0.30 % <i>Tradescantia ohioensis</i> , PA Ecotype	Ohio Spiderwort, PA Ecotype	192.00
0.20 % <i>Onocletha fruticosa</i> var. <i>fruticosa</i>	Sundrops	360.00
0.20 % <i>Solidago nemoralis</i> , PA Ecotype	Gray Goldenrod, PA Ecotype	336.00
0.10 % <i>Aster prenanthoides</i> , PA Ecotype	Zigzag Aster, PA Ecotype	432.00
0.10 % <i>Veronicastrum virginicum</i> , PA Ecotype	Culver's Root, PA Ecotype	768.00

100.00 % Mix Price/lb Bulk: \$38.45

Seeding Rate: Seed with 30 lbs/acre of a cover crop. For a cover crop use either grain oats (1 Jan to 31 Jul) or grain rye (1 Aug to 31 Dec).

7 ERNST SEED MIXES
DN-1 SCALE : N.T.S.

NOTE:
ERNM-147 TO BE USED WITHIN ARRAY.
ERNM-610 TO BE USED OUTSIDE FENCELINE AND IN NON-ARRAY AREAS (ROAD SHOULDERS, PERIMETER ALLEYS, ELECTRICAL TRENCHES, ETC.)



SEED MIX TO BE NEWP NEW ENGLAND EROSION CONTROL/ RESTORATION MIX FOR DETENTION BASINS AND MOIST SITES.

8 GRASS LINED SWALE
DN-1 SCALE : N.T.S.

New England Erosion Control/Restoration Mix For Detention Basins and Moist Sites

Botanical Name	Common Name	Indicator
<i>Elymus riparius</i>	Riverbank Wild Rye	FACW
<i>Schizachyrium scoparium</i>	Little Bluestem	FACU
<i>Festuca rubra</i>	Red Fescue	FACU
<i>Andropogon gerardii</i>	Big Bluestem	FAC
<i>Panicum virgatum</i>	Switch Grass	FAC
<i>Vernonia noveboracensis</i>	New York Ironweed	FACW+
<i>Agrostis perennans</i>	Upland Bentgrass	FACU
<i>Bidens frondosa</i>	Beggar Ticks	FACW
<i>Eupatorium maculatum</i> (<i>Eutrochium maculatum</i>)	Spotted Joe Pye Weed	OBL
<i>Eupatorium perfoliatum</i>	Boneset	FACW
<i>Aster novae-angliae</i> (<i>Symphoricarum novae-angliae</i>)	New England Aster	FACW-
<i>Scirpus cyperinus</i>	Wool Grass	FACW
<i>Juncus effusus</i>	Soft Rush	FACW+

PRICE PER LB. \$37.00 MIN. QUANTITY 3 LBS. TOTAL: \$111.00 APPLY: 35 LBS/ACRE :1250 sq ft/lb

TRITEC AMERICAS
888 PROSPECT STREET
LA JOLLA, CA 92037
OFFICE: (619) 363-3080

ALL-POINTS TECHNOLOGY CORPORATION
567 VAUXHAUL STREET EXTENSION - SUITE 311
WATERFORD, CT 06385 PHONE: (860)-663-1697
WWW.ALLPOINTSTECH.COM FAX: (860)-663-0935

CSC PERMIT SET

NO	DATE	REVISION
0	12/09/21	SITING COUNCIL SUBMISSION
1	04/09/22	COUNCIL INTERROGATORIES
2	05/11/22	PANEL LAYOUT, UTIL. POLES
3		
4		
5		
6		

NOT FOR CONSTRUCTION

DESIGN PROFESSIONAL OF RECORD
PROF: KEVIN A. MCCAFFERY, PE
COMP: ALL-POINTS TECHNOLOGY CORPORATION
ADD: 567 VAUXHAUL STREET
EXTENSION - SUITE 311
WATERFORD, CT 06385

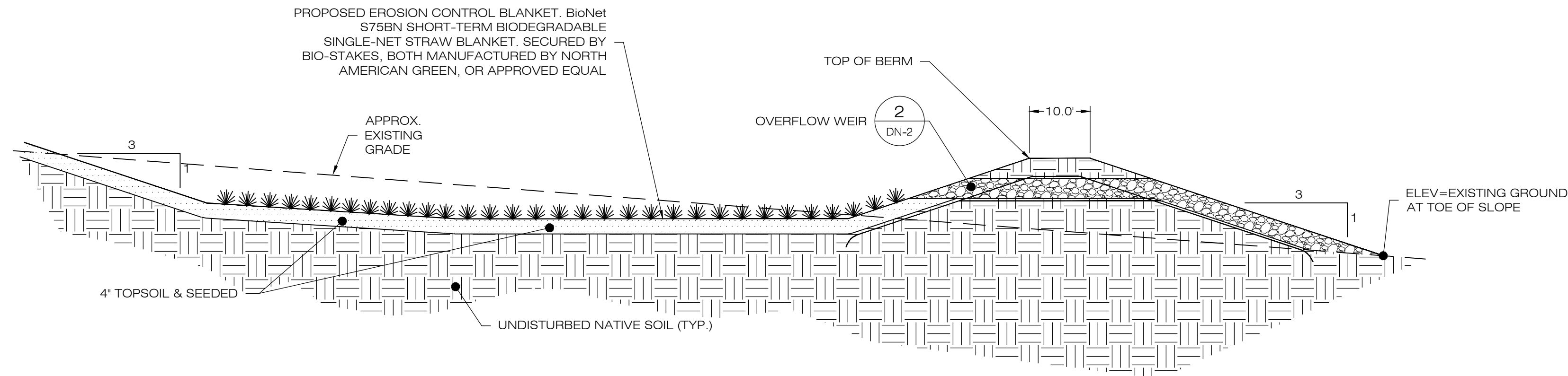
OWNER: ANTONIO & MARY AMARAL
ADDRESS: 254 PUTNAM ROAD
POMFRET CENTER, CT 06259

AMARAL SOLAR
SITE ADDRESS: 254 PUTNAM ROAD
ADDRESS: POMFRET CENTER, CT 06259
APT FILING NUMBER: CT657100
DRAWN BY: KAM
DATE: 12/09/21 CHECKED BY: BG

AMARAL SOLAR
SITE ADDRESS: 254 PUTNAM ROAD
ADDRESS: POMFRET CENTER, CT 06259
APT FILING NUMBER: CT657100
DRAWN BY: KAM
DATE: 12/09/21 CHECKED BY: BG

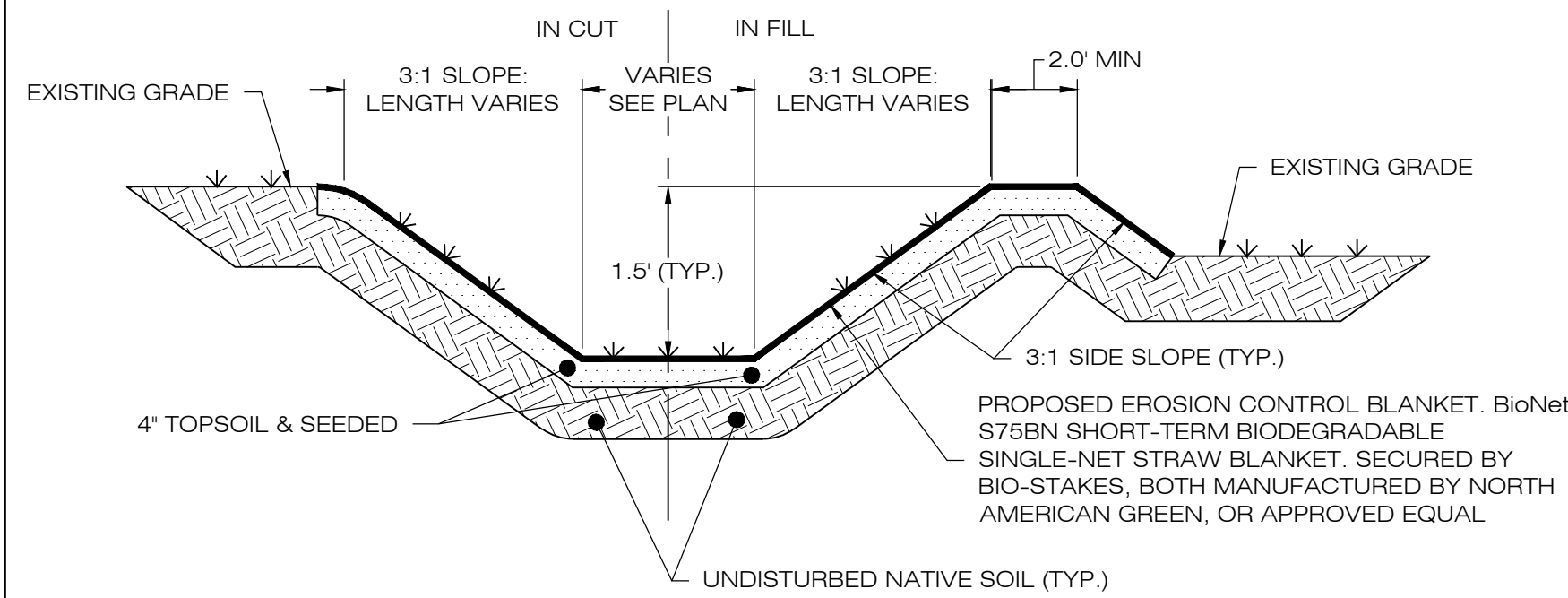
SHEET TITLE: SITE DETAILS

SHEET NUMBER: DN-1



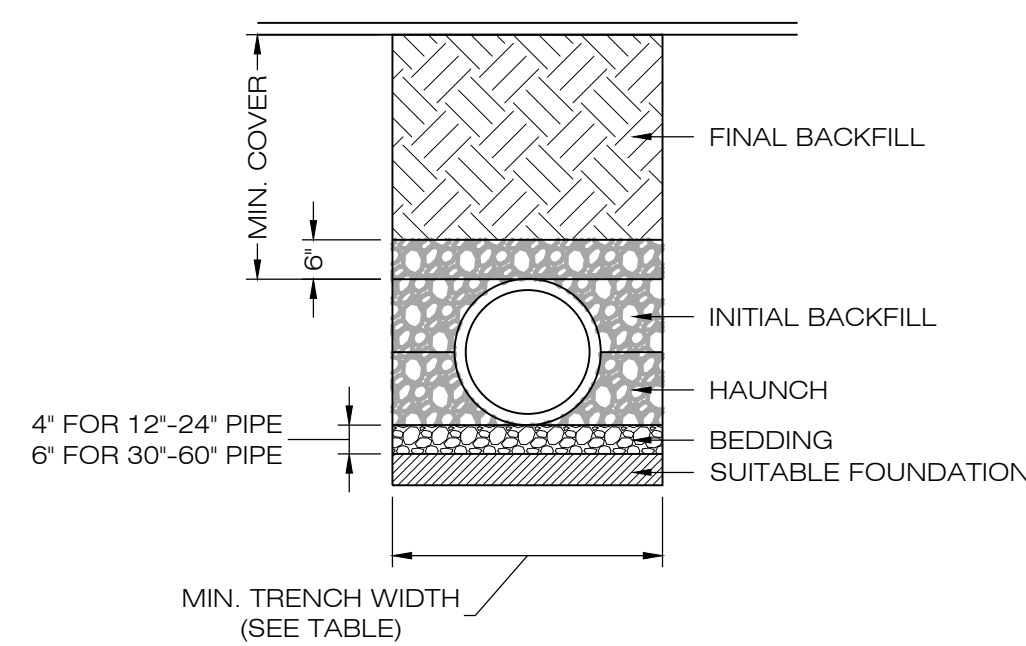
- NOTES:**
- SEED MIX TO BE NEW ENGLAND EROSION CONTROL/ RESTORATION MIX FOR MOIST SITES ON THE BOTTOM OF THE BASIN AND NEW ENGLAND EROSION/RESTORATION MIX FOR DRY SITES ON THE SIDE SLOPES.
 - FOR CONVERTING TEMPORARY SEDIMENT BASIN TO INFILTRATION BASIN, REMOVE BAFFLES, CLEAN OUT SEDIMENT, RESHAPE AS REQUIRED. SEE PLANS FOR BASIN DEPTHS AND ELEVATIONS.
 - INSPECT AND CLEAN PIPES.

1 GRASS LINED BASIN
SCALE: N.T.S.



- NOTES:**
- SEED MIX TO BE NEW ENGLAND EROSION CONTROL/ RESTORATION MIX FOR MOIST SITES ON THE BOTTOM OF THE BASIN AND NEW ENGLAND EROSION/RESTORATION MIX FOR DRY SITES ON THE SIDE SLOPES.
 - IF DEPTH VARIES FROM 1.5', SEE PLAN CALLOUTS.

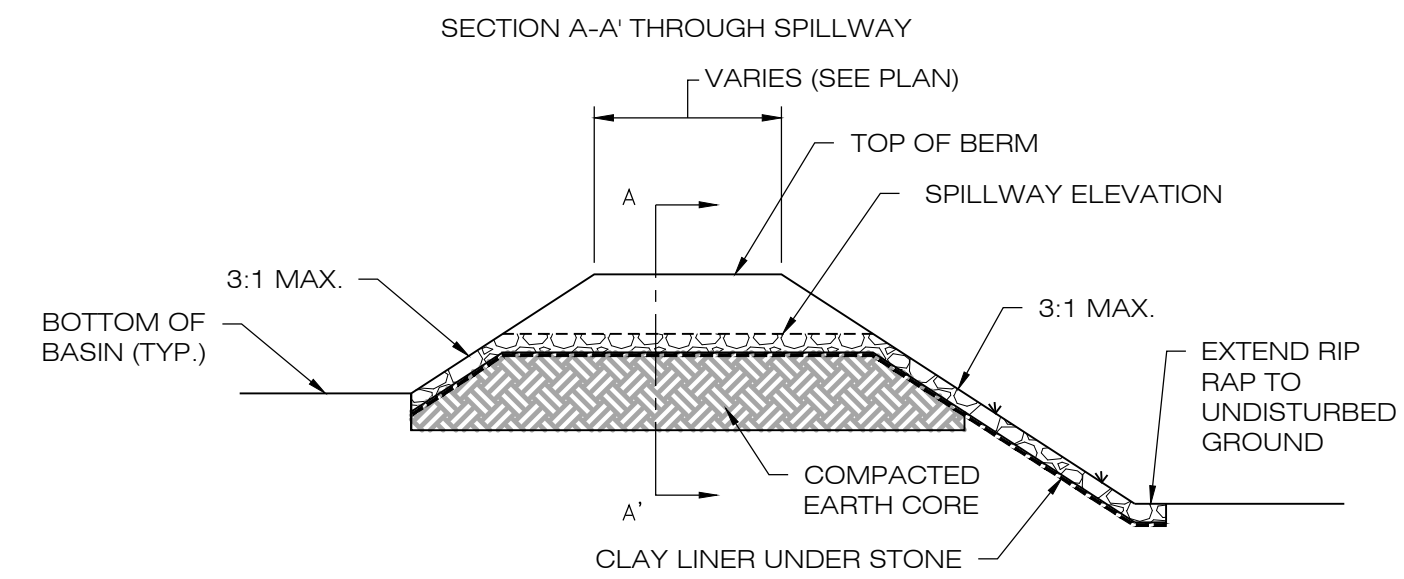
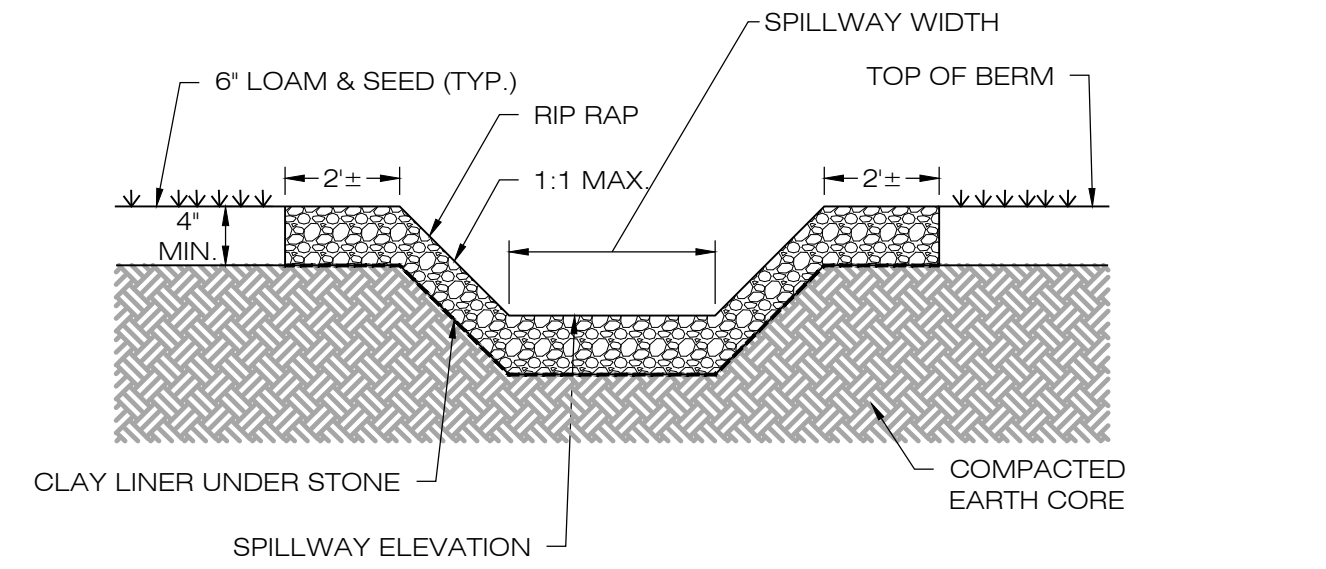
3 GRASS LINED SWALE
SCALE: N.T.S.



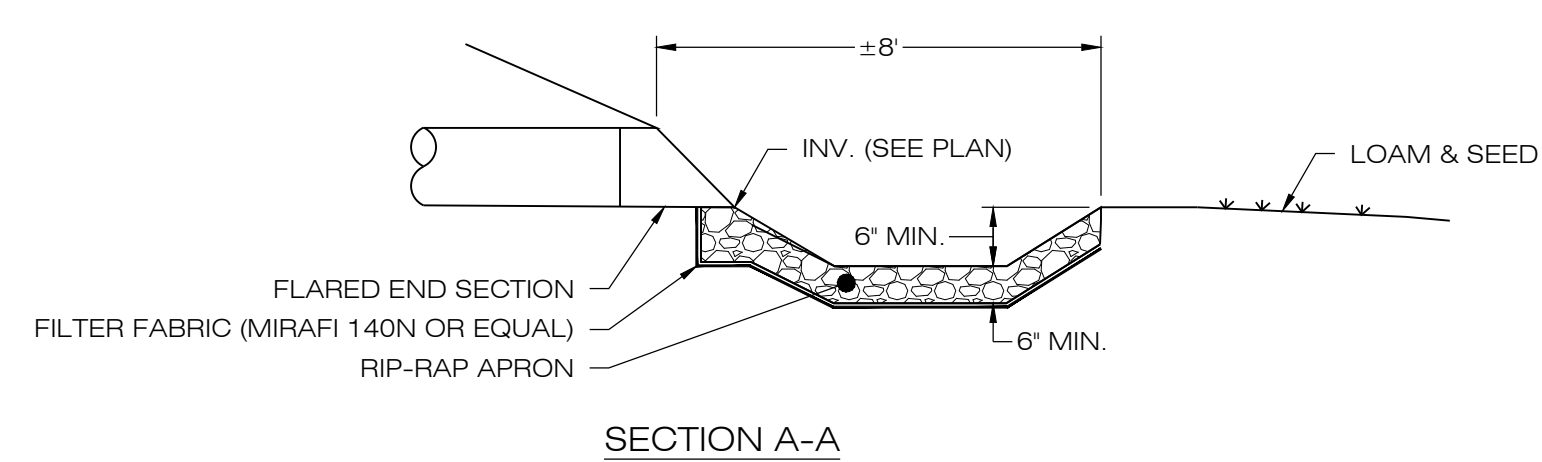
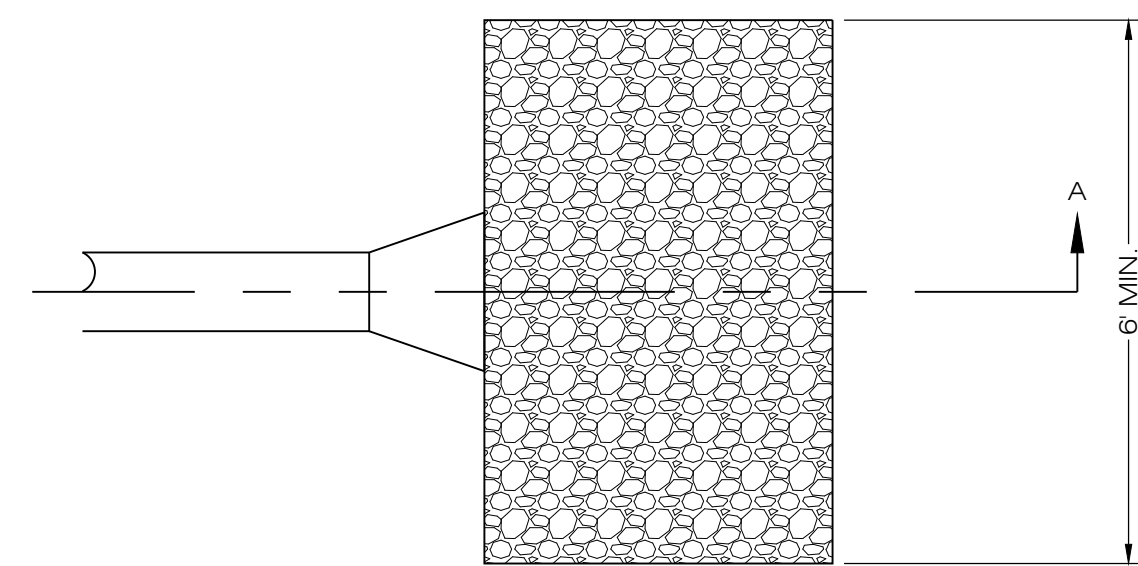
PIPE DIA.	MIN. TRENCH WIDTH
6"	23"
8"	26"
10"	28"
12"	30"
15"	34"
18"	39"
24"	48"
30"	56"
36"	64"
48"	80"
60"	96"

- NOTES:**
- ALL PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS", LATEST EDITION.
 - MEASURES SHOULD BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES INTO BACKFILL MATERIAL, WHEN REQUIRED.
 - FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER. AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL.
 - BEDDING: SUITABLE MATERIAL SHALL BE CLASS I, II OR III. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. UNLESS OTHERWISE NOTED BY THE ENGINEER, MINIMUM BEDDING THICKNESS SHALL BE 4" (100mm) FOR 4'-24" (100mm-600mm), 6" (150mm) FOR 30'-60" (750mm-900mm).
 - INITIAL BACKFILL: SUITABLE MATERIAL SHALL BE CLASS I, II OR III IN THE PIPE ZONE EXTENDING NOT LESS THAN 6" ABOVE CROWN OF PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.
 - MINIMUM COVER: MINIMUM COVER, H, IN NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) IS 12" FROM THE TOP OF PIPE TO GROUND SURFACE. ADDITIONAL COVER MAY BE REQUIRED TO PREVENT FLOTATION. FOR TRAFFIC APPLICATIONS, MINIMUM COVER, H, IS 12" UP TO 48" DIAMETER PIPE AND 24" OF COVER FOR 54"-60" DIAMETER PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT.

4 HDPE STORM DRAINAGE TRENCH DETAIL
SCALE: N.T.S.



2 OVERFLOW WEIR DETAIL
SCALE: N.T.S.



5 FLARED END SECTION/PLUNGE POOL
SCALE: N.T.S.

SOUTHINGTON SOLAR ONE, LLC
150 TRUMBULL STREET
4TH FLOOR
HARTFORD, CT, 06103



567 VAUXHAUL STREET EXTENSION - SUITE 311
WATERFORD, CT 06385 PHONE: (860)-663-1697
WWW.ALLPOINTSTECH.COM FAX: (860)-663-0935

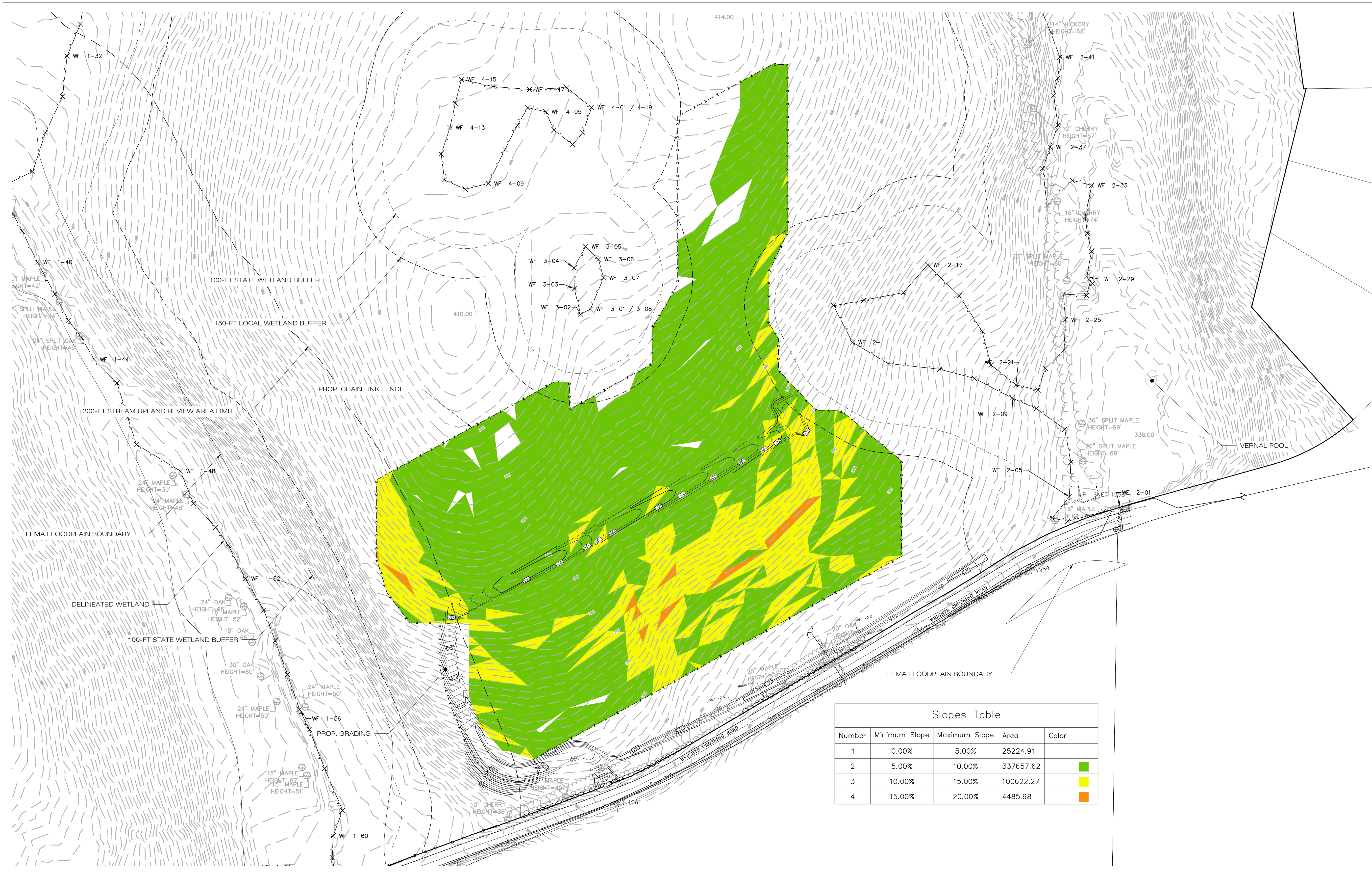
CSC PERMIT SET		
NO	DATE	REVISION
0	07/23/20	INTERCONNECTION TRENCH
1	08/03/20	EMBED FENCE
2	09/11/20	90% PERMIT SET
3		
4		
5		
6		

DESIGN PROFESSIONAL OF RECORD
PROF: BRADLEY J. PARSONS, P.E.
COMP: ALL-POINTS TECHNOLOGY CORPORATION
ADD: 567 VAUXHALL ST EXT - STE 311
WATERFORD, CT 06385
OWNER: CATHOLIC CEMETERIES OF ARCHDIOCESE OF HARTFORD
ADDRESS: 700 MIDDLETOWN AVENUE
NORTH HAVEN, CT 06473

SOUTHINGTON SOLAR ONE, LLC
SITE ADDRESS: 1012 EAST STREET
SOUTHINGTON, CT
APT FILING NUMBER: CT590170
DRAWN BY: KAM
DATE: 07/07/2020 CHECKED BY: BJP

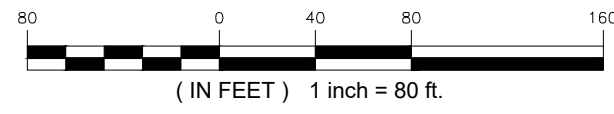
SHEET TITLE:
SITE DETAILS

SHEET NUMBER:
DN-2



Number	Minimum Slope	Maximum Slope	Area	Color
1	0.00%	5.00%	25224.91	
2	5.00%	10.00%	337657.62	Green
3	10.00%	15.00%	100622.27	Yellow
4	15.00%	20.00%	4485.98	Orange

1 EXISTING SITE SLOPES
EX-1 SCALE: 1" = 80'-0"



888 PROSPECT STREET
LA JOLLA, CA 92037
OFFICE: (619) 363-3080



567 VAUXHAUL STREET EXTENSION - SUITE 311
WATERFORD, CT 06385 PHONE: (860)-663-1697
WWW.ALLPOINTSTECH.COM FAX: (860)-663-0935

CSC PERMIT SET

NO	DATE	REVISION
0	12/09/21	SITING COUNCIL SUBMISSION
1	04/09/22	COUNCIL INTERROGATORIES
2	05/11/22	PANEL LAYOUT, UTIL. POLES
3		
4		
5		
6		

NOT FOR CONSTRUCTION

DESIGN PROFESSIONAL OF RECORD

PROF: KEVIN A. MCCAFFERY, PE
COMP: ALL-POINTS TECHNOLOGY CORPORATION
ADD: 567 VAUXHAUL STREET EXTENSION - SUITE 311 WATERFORD, CT 06385

OWNER: ANTONIO & MARY AMARAL

ADDRESS: 254 PUTNAM ROAD POMFRET CENTER, CT 06259

AMARAL SOLAR


SITE: 254 PUTNAM ROAD
ADDRESS: POMFRET CENTER, CT 06259

APT FILING NUMBER: CT657100

DATE: 12/09/21
DRAWN BY: KAM
CHECKED BY: BG

SHEET TITLE:
SLOPE ANALYSIS

SHEET NUMBER:
EX-1



APPENDIX E
Stormwater Monitoring Report Form

General Information				
Name of Project				Inspection Date
Inspector Name, Title & Contact Information				
Inspector Qualifications				
Present Phase of Construction				
Inspection Location (if multiple inspections are required, specify location where this inspection is being conducted)				
<p>Inspection Frequency (Note: you may be subject to different inspection frequencies in different areas of the site. Check all that apply.)</p> <p>Standard Frequency: <input type="checkbox"/> Weekly <input type="checkbox"/> Within 24 hours of the end of a storm that generates a discharge</p> <p>Reduced Frequency:</p> <p>- <input type="checkbox"/> Once per month (for stabilized areas)</p>				
<p>Date of last rainfall:</p> <p>Total rainfall amount:</p>				
<p>Current Weather Conditions:</p>				

Condition and Effectiveness of Erosion and Sediment (E&S) Controls

(see reverse for instructions)

Type/Location of E&S Control [Add an additional sheet if necessary]	Repairs or Other Maintenance Needed?*	Corrective Action Required?*	Notes
1. Sediment Traps	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
2. Sediment Basins	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
3. Diversion Ditches	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
4. Perimeter Control	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
5. Surface Stabilization	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
6. Construction Entrance	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
7. Soil Stockpile Areas	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
8. Natural Depression	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	

* **Note:** The permit differentiates between conditions requiring repairs and maintenance, and those requiring corrective action. The permit requires maintenance in order to keep controls in effective operating condition and requires repairs if controls are not operating as intended. Corrective actions are triggered only for specific, more serious conditions, which include: 1) A required stormwater control was never installed, was installed incorrectly, or not in accordance with the requirements in the Guidelines; 2) You become aware that the stormwater controls you have installed and are maintaining are not effective enough for the discharge to meet applicable water quality standards or applicable requirements; 3) A prohibited discharge is occurring or has occurred; or 4) Corrective actions are required as a result of a permit violation found during an inspection. If a condition on your site requires a corrective action, engineered corrective actions shall be implemented within 7 days of the inspection.

Condition and Effectiveness of Pollution Prevention (Good Housekeeping) Practices (see reverse for instructions)			
Type/Location of PP Practices [Add an additional sheet if necessary]	Repairs or Other Maintenance Needed?*	Corrective Action Required?*	Notes
1. Storage of Construction Materials	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
2. Oil/Gas/Chemicals	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
3. Haz/Toxic Waste	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
4. Construction Waste	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
5. Sanitary Waste	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
6. Offsite Vehicle Tracking	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
7.	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
8.	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	

*** Note:** The permit differentiates between conditions requiring repairs and maintenance, and those requiring corrective action. The permit requires maintenance in order to keep controls in effective operating condition and requires repairs if controls are not operating as intended. Corrective actions are triggered only for specific, more serious conditions, which include: 1) A required stormwater control was never installed, was installed incorrectly, or not in accordance with the requirements in the Guidelines; 2) You become aware that the stormwater controls you have installed and are maintaining are not effective enough for the discharge to meet applicable water quality standards or applicable requirements; 3) A prohibited discharge is occurring or has occurred; or 4) Corrective actions are required as a result of a permit violation found during an inspection. If a condition on your site requires a corrective action, engineered corrective actions shall be implemented within 7 days of the inspection.

Stabilization of Exposed Soil			
Stabilization Area [Add an additional sheet if necessary]	Stabilization Method	Have Stabilization Been Initiated?	Notes
1. Interior (Solar Array)		<input type="checkbox"/> YES <input type="checkbox"/> NO If yes, provide date: 04/2019	
2. Soil Stockpile		<input type="checkbox"/> YES <input type="checkbox"/> NO If yes, provide date: 05/29/2019	
3.		<input type="checkbox"/> YES <input type="checkbox"/> NO If yes, provide date: 5	
4.		<input type="checkbox"/> YES <input type="checkbox"/> NO If yes, provide date:	
5.		<input type="checkbox"/> YES <input type="checkbox"/> NO If yes, provide date:	

Instructions for Filling Out the “Stabilization of Exposed Soil” Table

Stabilization Area

List all areas where soil stabilization is required to begin because construction work in that area has permanently stopped or temporarily stopped, and all areas where stabilization has been implemented.

Stabilization Method

For each area, specify the method of stabilization (e.g., hydroseed, sod, planted vegetation, erosion control blanket, mulch, rock).

Have You Initiated Stabilization

For each area, indicate whether stabilization has been initiated.

Notes

For each area where stabilization has been initiated, describe the progress that has been made, and what additional actions are necessary to complete stabilization. Note the effectiveness of stabilization in preventing erosion. If stabilization has been initiated but not completed, make a note of the date it is to be completed. If stabilization has been completed, make a note of the date it was completed. If stabilization has not yet been initiated, make a note of the date it is to be initiated, and the date it is to be completed.

Description of Discharges	
Was a stormwater discharge or other discharge occurring from any part of your site at the time of the inspection? <input type="checkbox"/> Yes <input type="checkbox"/> No If "yes", provide the following information for each point of discharge:	
Discharge Location [Add an additional sheet if necessary]	Observations
1.	Describe the discharge:
	At points of discharge and the channels and banks of surface waters in the immediate vicinity, are there any visible signs of erosion and/or sediment accumulation that can be attributed to your discharge? <input type="checkbox"/> Yes <input type="checkbox"/> No
	If yes, describe what you see, specify the location(s) where these conditions were found, and indicate whether modification, maintenance, or corrective action is needed to resolve the issue:
2.	Describe the discharge:
	At points of discharge and the channels and banks of surface waters in the immediate vicinity, are there any visible signs of erosion and/or sediment accumulation that can be attributed to your discharge? <input type="checkbox"/> Yes <input type="checkbox"/> No
	If yes, describe what you see, specify the location(s) where these conditions were found, and indicate whether modification, maintenance, or corrective action is needed to resolve the issue:
3.	Describe the discharge:
	At points of discharge and the channels and banks of surface waters in the immediate vicinity, are there any visible signs of erosion and/or sediment accumulation that can be attributed to your discharge? <input type="checkbox"/> Yes <input type="checkbox"/> No
	If yes, describe what you see, specify the location(s) where these conditions were found, and indicate whether modification, maintenance, or corrective action is needed to resolve the issue:
4.	Describe the discharge:
	At points of discharge and the channels and banks of surface waters in the immediate vicinity, are there any visible signs of erosion and/or sediment accumulation that can be attributed to your discharge? <input type="checkbox"/> Yes <input type="checkbox"/> No
	If yes, describe what you see, specify the location(s) where these conditions were found, and indicate whether modification, maintenance, or corrective action is needed to resolve the issue:

Summary

The Site is: In Compliance Out of Compliance

with the terms and conditions of the SWPCP and General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities.

Describe remedial actions required to bring the Site back into compliance (Refer to Corrective Action Log Form):

Describe interim measures required to minimize the potential for the discharge of pollutants from the Site:

Notes:

Non-engineered corrective actions (as identified in the Guidelines) shall be implemented on site within 24 hours and incorporated into a revised SWPCP within three (3) calendar days of the date of inspection unless another schedule is specified in the Guidelines.

Engineered corrective actions (as identified in the Guidelines) shall be implemented on site within seven (7) days and incorporated into a revised SWPCP within ten (10) days of the date of inspection unless another schedule is specified in the Guidelines or is approved by DEEP.

Section B – Corrective Action Progress			
(Complete this section no later than 7 calendar days after discovering the condition that triggered corrective action)			
Stormwater Control Modifications to be Implemented to Correct the Problem			
List of Stormwater Control Modification(s) Needed to Correct Problem (Add an additional sheet if necessary)	Date of Completion	SWPCP Update Necessary?	Notes
1.		<input type="checkbox"/> Yes <input type="checkbox"/> No If yes, provide date SWPCP modified:	
2.		<input type="checkbox"/> Yes <input type="checkbox"/> No If yes, provide date SWPCP modified:	
3.		<input type="checkbox"/> Yes <input type="checkbox"/> No If yes, provide date SWPCP modified:	
4.		<input type="checkbox"/> Yes <input type="checkbox"/> No If yes, provide date SWPCP modified:	
5.		<input type="checkbox"/> Yes <input type="checkbox"/> No If yes, provide date SWPCP modified:	
6.		<input type="checkbox"/> Yes <input type="checkbox"/> No If yes, provide date SWPCP modified:	
7.			

Stormwater Construction Site Inspection Report

CERTIFICATION STATEMENT

“I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that a false statement made in this document or its attachments may be punishable as a criminal offense, in accordance with Section 22a-6 of the General Statutes, pursuant to Section 53a-157b of the General Statutes, and in accordance with any other applicable statute.”

Inspector:

SIGNATURE: _____

PRINTED NAME: _____

TITLE: _____

AFFILIATION: _____

ADDRESS: _____

PHONE: _____

DATE: _____

Permittee or his/her authorized representative:

SIGNATURE: _____

PRINTED NAME: _____

TITLE: _____

AFFILIATION: _____

ADDRESS: _____

PHONE: _____

DATE: _____

APPENDIX F
Notice of Termination Form



Connecticut Department of Energy & Environmental Protection
 Bureau of Materials Management & Compliance Assurance
 Water Permitting & Enforcement Division

General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities

Notice of Termination Form: Solar Projects (Appendix I)

This Notice serves as a request to terminate the below listed permit as well as any applicable Letter(s) of Credit.

Part I: Permittee Information

The below information is required in accordance with Section 6(b) of the General Permit.

1. Permit Number: GSN _____

2. Registrant: _____

3. Site Address: _____

City/Town: _____ State: _____ Zip Code: _____

4. Date of completion of construction: _____

Date all storm drainage structures were cleared of construction sediment and debris: _____

Beginning and Ending Dates of post-construction inspections: _____

Date of final stabilization inspection(s)*: _____

Qualified Inspector who conducted the Final Stabilization Inspection: (This person must sign Part III) _____

5. Check the post-construction activity(ies)** at the site (check all that apply):

Industrial Residential Capped Landfill

Commercial Solar Array Other: _____

* The Final Stabilization Inspection must occur at least two full growing seasons after final stabilization has been achieved. A full growing season is defined as the timeframe encompassed by two consecutive full seeding seasons: April 1 through June 15, and August 15 through October 1. If final stabilization is achieved during a seeding season, the following seeding season will be considered the first full seeding season after final stabilization has been achieved.

** Any questions regarding this form can be sent via email to DEEP.StormwaterStaff@ct.gov.

Locally Approvable and Locally Exempt Projects Must Complete the following Part II - (Attach additional sheets as needed)

Part II: Locally Approvable and Locally Exempt Post-Construction Inspection Certification

The below information is required in accordance with Section 5(b)(4)(C)(i)/(ii) and Appendix I(l)(7) of the General Permit.

Certification by a Qualified Professional Engineer / Qualified Soil Erosion and Sediment Control Professional and a District Representative

“I hereby certify that I am a qualified professional engineer / a qualified soil erosion and sediment control professional and a representative of the District in which the site is located as defined in Section 2 of the General Permit for Discharge of Stormwater and Dewatering Wastewaters from Construction Activities (general permit). I am familiar with the site described in this Notice of Termination and the requirements of the general permit. I certify, based on my personal inspection of the site pursuant to Section 6(a) of the general permit that all post-construction measures have been installed as specified in the permittee’s Stormwater Pollution Control Plan and in accordance with Section 5(b)(2)(C) of the general permit and that all such measures have been cleaned of construction sediment and debris. I understand that this certification is part of a registration submitted in accordance with section 22a-430b of Connecticut General Statutes and is subject to the requirements and responsibilities for a qualified professional in such statute. I also understand that knowingly making any false statement in this certification may be punishable as a criminal offense, including the possibility of fine and imprisonment, under section 53a-157b of the Connecticut General Statutes and any other applicable law.”

Signature of Qualified Professional Engineer / Qualified Soil Erosion and Sediment Control Professional

Date

Printed Name of Qualified Professional Engineer / Qualified Soil Erosion and Sediment Control Professional

Title

Signature of District Representative

Date

Printed Name of District Representative

Title





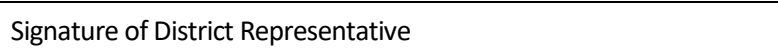

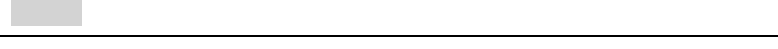

State Agency Projects Must Complete the following Part II - (Attach additional sheets as needed)

Part II: State Agency Post-Construction Inspection Certification

The below information is required in accordance with Section 5(b)(4)(C)(iii) and Appendix I(1)(7) of the General Permit.

Certification by a DOT District Engineer or his/her designee / a DOT District Environmental Coordinator / a designated employee of another state agency and a District Representative

“I hereby certify that I am a DOT District Engineer or his/her designee / a DOT District Environmental Coordinator / a designated employee of another state agency and a representative of the District in which the site is located as defined in Section 2 of the General Permit for Discharge of Stormwater and Dewatering Wastewaters from Construction Activities (general permit). I am familiar with the site described in this Notice of Termination and the requirements of the general permit. I certify, based on my personal inspection of the site pursuant to Section 6(a) of the general permit that all post-construction measures have been installed as specified in the permittee’s Stormwater Pollution Control Plan and in accordance with Section 5(b)(2)(C) of the general permit and that all such measures have been cleaned of construction sediment and debris. I understand that this certification is part of a registration submitted in accordance with Section 22a-430b of Connecticut General Statutes and is subject to the requirements and responsibilities for a qualified professional in such statute. I also understand that knowingly making any false statement in this certification may be punishable as a criminal offense, including the possibility of fine and imprisonment, under section 53a-157b of the Connecticut General Statutes and any other applicable law.”

	
Signature	Date
	
Printed Name	Title
	
Signature of District Representative	Date
	
Printed Name of District Representative	Title





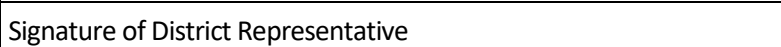



All Projects Must Complete the following Part III - (Attach additional sheets as needed)

Part III: Final Stabilization Inspection Certification

The below information is required in accordance with Section 5(b)(4)(D) and Appendix I(I)(7) of the General Permit.

Certification by a Qualified Inspector and a District Representative

“I hereby certify that I am a qualified inspector and a representative of the District in which the site is located as defined in Section 2 of the General Permit for Discharge of Stormwater and Dewatering Wastewaters from Construction Activities (general permit). I am familiar with the site described in this Notice of Termination and the requirements of the general permit. I certify, based on my personal inspection of the site pursuant to Section 6(a) of the general permit that the site has been stabilized, as defined in Section 2 of the general permit, for a period of no less than two full growing seasons following the cessation of construction activities. I further certify that there is no active erosion or sedimentation present on site and no disturbed areas remain exposed. I also understand that knowingly making any false statement in this certification may be punishable as a criminal offense, including the possibility of fine and imprisonment, under section 53a-157b of the Connecticut General Statutes and any other applicable law.”

	
Signature of Qualified Inspector	Date
	
Printed Name of Qualified Inspector	Title
	
Signature of District Representative	Date
	
Printed Name of District Representative	Title

All Projects Must Complete the following Part IV - (Attach additional sheets as needed)

Part IV: Permittee Certification

The below information is required in accordance with Section 5(b)(4)(D) of the General Permit.

Certification by the Permittee

“I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that a false statement made in this document or its attachments may be punishable as a criminal offense, in accordance with section 22a-6 of the Connecticut General Statutes, pursuant to section 53a-157b of the Connecticut General Statutes, and in accordance with any other applicable statute.”

Signature of Permittee	Date
Printed Name of Permittee	Title

All Projects Must Complete the following Part V - (Attach additional documentation as needed)

Part V: Additional Submittals

The following attachments are required to be submitted along with the Notice of Termination Form:

- Post-Construction Inspection Report (must contain photos with time stamps)
- Final Stabilization Inspection Report (must contain photos with time stamps)

Complete and submit this form in accordance with the general permit (DEEP-WPED-GP-015) to ensure the proper handling of the termination. Print or type unless otherwise noted.

Submit this Notice of Termination Form to the address below, as well as via email to DEEP.StormwaterStaff@ct.gov:

WATER PERMITTING AND ENFORCEMENT DIVISION/STORMWATER GROUP
DEPARTMENT OF ENERGY & ENVIRONMENTAL PROTECTION
79 ELM STREET
HARTFORD, CT 06106-5127