PIVOT SOLAR NY 6

TOWN OF TICONDEROGA, ESSEX COUNTY, NEW YORK

DECEMBER 22, 2021

REVISION 1: FEBRUARY 18, 2022

REVISION 2: MARCH 15, 2022

EDR JOB #: 20204

SITE PLAN SUBMISSION & APA APPLICATION

NEW YORK STATE OF OPPORTUNITY. Adirondack Park Agency

FINAL

P2021-0296

NEW YORK STATE OF OPPORTUNITY. Adirondack Park Agency

RECEIVED

Date: April 1, 2022

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Environmental Design & Research,

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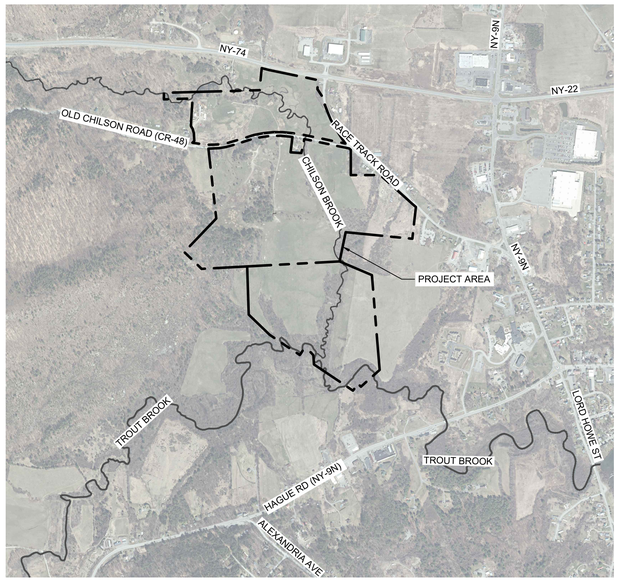
217 Montgomery Street, Suite 1100
Syracuse, New York 13202
P. 315.471.0688

PROJECT IMAGE / MAP:



SCALE: 1" = 1000'

DRAWING INDEX:

GENERAL NOTES

1. THE CONTRACTOR SHALL USE THE WRITTEN DIMENSIONS PROVIDED WITHIN THE CONTRACT DRAWINGS. SCALED DIMENSIONS SHALL NOT BE USED FOR CONSTRUCTION PURPOSES.
2. THE CONTRACTOR SHALL CONTACT OWNER'S REPRESENTATIVE IMMEDIATELY IF CLARIFICATIONS OR INTERPRETATIONS OF THE CONTRACT DOCUMENTS, OR ANY OTHER ASPECTS OF THE PROJECT, IS REQUIRED.
3. THE CONTRACTOR SHALL APPLY FOR ALL REQUIRED PERMITS AND PAY ALL FEES REQUIRED BY GOVERNING AGENCIES HAVING JURISDICTION OVER THE FACILITIES AND NATURAL FEATURES FOUND ON SITE.
4. SITE ACCESS IS RESTRICTED TO THE LOCATIONS SPECIFICALLY DESIGNATED ON PLAN.
5. THE CONTRACTOR SHALL ADHERE TO ALL OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA), STATE AND LOCAL SAFETY REGULATIONS.
6. PROMPTLY REPORT TO THE OWNER'S REPRESENTATIVE ANY DISCREPANCIES FOUND ON THE SITE OR IN THE CONTRACT DOCUMENTS FOR REVIEW AND RESOLUTION BEFORE PROCEEDING WITH THE WORK IN THE AREA IN QUESTION. PROVIDE FIELD INFORMATION SPECIFIC TO THE DISCREPANCY TO EXPEDITE RESOLUTION.
7. AVOID ANY DISTURBANCE OF EXISTING VEGETATION ON THE SITE EXCEPT THE VEGETATION SPECIFICALLY DESIGNATED TO BE REMOVED.
8. TAKE ALL PRECAUTIONS NECESSARY TO PREVENT EROSION AND CONTROL SEDIMENTATION AS REQUIRED BY THE AGENCIES OF GOVERNMENT HAVING JURISDICTION.
9. THIS PROJECT REQUIRES COVERAGE UNDER THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION (NYSDEC) STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM (SPDES) GENERAL PERMIT FOR STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITIES, PERMIT NO. GP-0-20-001 (GENERAL PERMIT). THE GENERAL PERMIT AUTHORIZES STORMWATER DISCHARGES TO SURFACE WATERS OF THE STATE FROM CONSTRUCTION RELATED ACTIVITIES. A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) HAS BEEN PREPARED IN ACCORDANCE WITH THIS PERMIT, AND IS PART OF THE CONTRACT AND CONSTRUCTION REQUIREMENTS FOR THIS PROJECT. THE CONTRACTOR SHALL OBTAIN A COPY OF THE APPROVED SWPPP FOR THIS PROJECT, PRIOR TO DEVELOPING A BID PRICE FOR THE OWNER. THE SWPPP INCLUDES THE REQUIREMENTS FOR PRECONSTRUCTION ACTIVITIES, INSPECTIONS DURING CONSTRUCTION, AND POST CONSTRUCTION CERTIFICATIONS THAT MUST BE FOLLOWED BY THE CONTRACTOR AND THE OWNER TO STAY IN COMPLIANCE WITH THIS PERMIT. THESE REQUIREMENTS ARE DESCRIBED IN THE SWPPP, AND SHALL BE INCLUDED INTO THE CONTRACTOR'S BID PRICING FOR THIS PROJECT, AS WELL AS THE CONDITIONS OF WORK BY BOTH THE CONTRACTOR AND OWNER.
10. THE BOUNDARY, TOPOGRAPHIC, AND UTILITY INFORMATION SHOWN ON THIS PLAN WAS PREPARED WITH PUBLICALY AVAILABLE DATA. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFYING THE EXISTING INFORMATION PRIOR TO CONSTRUCTION.
11. NO SUBSURFACE SOIL INFORMATION WAS OBTAINED ON THIS SITE FOR THIS PROJECT.
12. THE START OF ANY ON-SITE CONSTRUCTION INCLUDING STRIPPING TOPSOIL, REMOVING CUT OR PLACING FILL MATERIAL ESTABLISHES THAT THE CONTRACTOR ACCEPTS THE CONTRACT DOCUMENTS AS ACCURATELY REPRESENTING THE EXISTING SITE CONDITIONS.
13. ALL FACILITIES TO BE CONSTRUCTED OR INSTALLED SHALL COMPLY WITH ALL SECTIONS AND LATEST REVISIONS OF THE REQUIREMENTS OF ALL AGENCIES OF GOVERNMENT HAVING JURISDICTION.
14. LONG LEAD AND SCARCE MATERIALS SHALL BE ORDERED IN A TIMELY MANNER TO PREVENT AVOIDABLE CONSTRUCTION DELAYS.
15. THE CONTRACTOR IS RESPONSIBLE FOR ALL DAMAGE CAUSED BY CONSTRUCTION TO EXISTING UTILITIES AND FACILITIES WHICH ARE NOT INCLUDED AS PART OF THE INTENDED WORK. THE CONTRACTOR SHALL REPAIR, RESTORE AND/OR REPLACE ALL DAMAGE TO THE SATISFACTION OF OWNER'S REPRESENTATIVE AT NO ADDITIONAL COST TO THE OWNER.
16. THE CONTRACTOR SHALL RESTORE ALL DISTURBED SURFACES TO ORIGINAL OR BETTER CONDITION INCLUDING COMPLIANCE WITH LOCAL, COUNTY, AND FEDERAL REQUIREMENTS.
17. UNLESS NOTED OTHERWISE ON THE DRAWINGS, THE CONTRACTOR SHALL RESTORE ALL DISTURBED VEGETATED SURFACES WITH 6 INCHES OF TOPSOIL, SEED, FERTILIZER, AND MULCH. OTHER SURFACES SHALL BE RESTORED AS SHOWN ON THE DETAILS.
18. THE OWNER'S REPRESENTATIVE SHALL REVIEW THE LAYOUT OF ALL PAVEMENTS, UTILITIES, AND PLANTINGS IN THE FIELD BEFORE INSTALLATION. THE CONTRACTOR SHALL SCHEDULE ADVANCED NOTIFICATION TO THE OWNER'S REPRESENTATIVE TO FACILITATE TIMELY REVIEW.

EROSION & SEDIMENT CONTROL PLAN NOTES

1. REFER TO THE SWPPP.
2. DISTURBED AREAS SHALL BE AS SMALL AS PRACTICAL AND SHALL BE STABILIZED WITHIN THE TIME FRAME REQUIRED BY THE SWPPP.
3. MAINTAIN AN ADEQUATE SUPPLY OF EROSION AND SEDIMENT CONTROL MATERIALS AT THE CONSTRUCTION SITE AT ALL TIMES TO BE USED FOR URGENT SITUATIONS, SUCH AS UNEXPECTED HEAVY RAINFALL.
4. EROSION CONTROL MEASURES INCLUDING BUT NOT LIMITED TO A STABILIZED CONSTRUCTION ENTRANCE, STABILIZED CONSTRUCTION STAGING AREA AND SILT FENCE SHALL BE THE FIRST ITEMS CONSTRUCTED WHEN SITE WORK BEGINS, AND MUST BE COMPLETELY FUNCTIONAL BEFORE DOWN SLOPE LAND DISTURBANCE BEGINS.
5. ALL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE CONSTRUCTED AND OPERATED IN ACCORDANCE WITH THEIR DESIGN. ANY NEED FOR REPAIRS OR MAINTENANCE SHALL BE ADDRESSED IMMEDIATELY TO ASSURE THE CONTINUED PERFORMANCE OF THEIR INTENDED FUNCTION THROUGHOUT THE CONSTRUCTION PROCESS.
6. MAINTENANCE AND REPAIR OF ALL EQUIPMENT AND VEHICLES INVOLVING OIL CHANGES, HYDRAULIC SYSTEM AND FUEL TANK DRAIN DOWN, DEGREASING OPERATIONS AND OTHER ACTIVITIES THAT MAY RESULT IN THE ACCIDENTAL RELEASE OF CONTAMINANTS MUST BE CONDUCTED OFF-SITE. ACCIDENTAL SPILLS MUST BE CLEANED UP IMMEDIATELY AND CONTAMINANTS DISPOSED OF PROPERLY.
7. THE CONTRACTOR SHALL TAKE THE NECESSARY MEASURES, INCLUDING WATER SPRINKLING TO PROVIDE DUST CONTROL DURING CONSTRUCTION.
8. THE CONTRACTOR SHALL INSTALL ADDITIONAL EROSION AND SEDIMENT CONTROL PRACTICES AS SHOWN ON THE DETAIL SHEETS IF NEEDED, OR AS REQUIRED BY THE OWNER'S REPRESENTATIVE DURING THE COURSE OF CONSTRUCTION, AT NO COST TO THE OWNER.
9. THE CONTRACTOR SHALL INSTALL AND MAINTAIN THE STABILIZED CONSTRUCTION ENTRANCE TO PREVENT THE TRANSPORT OF SEDIMENT ONTO PUBLIC ROADS AND AS DIRECTED BY THE OWNER'S REPRESENTATIVE. IF SEDIMENT IS TRANSPORTED ONTO ROADS, IT MUST BE REMOVED FROM THE ROAD SURFACE ON A DAILY BASIS AND PRIOR TO RAIN EVENTS. SEDIMENT SHALL BE DISPOSED OF IN A MANNER THAT PREVENTS CONTAMINATION OF STORMWATER AND SURFACE WATER.
10. VEGETATION SHALL BE PROTECTED OUTSIDE OF THE LIMITS OF DISTURBANCE.
11. ALL EXISTING TOPSOIL SHALL BE STOCKPILED TO COMPLETE THE FINISH GRADING OF ALL EXPOSED AREAS FOR THE ESTABLISHMENT OF VEGETATION.
12. THE CONTRACTOR SHALL ULTIMATELY BE RESPONSIBLE FOR LOCATING SOIL AND EXCESS EXCAVATED EARTH STOCK PILES AT A STABLE LOCATION. STOCK PILES SHALL BE STABILIZED PER THE DETAIL.
13. CONSTRUCTION ROUTES SHALL BE STABILIZED PER THE NYS STANDARDS FOR EROSION AND SEDIMENT CONTROL, AS NECESSARY BASED ON SITE CONDITIONS.
14. THE CONTRACTOR IS RESPONSIBLE FOR THE PLACEMENT, DESIGN, APPROVAL, AND OPERATION OF THE CONCRETE WASHOUTS. THE CONCRETE WASHOUTS SHALL BE INSTALLED A MINIMUM OF 50' FROM STORM DRAINAGE OR SURFACE WATER. CONCRETE WASTE MATERIAL SHALL NOT BE ALLOWED TO ESCAPE FROM THE CONCRETE WASHOUT.
15. FOR INSTALLED SEDIMENT CONTROL PRACTICES, REMOVE ALL ACCUMULATED SEDIMENT AND DEBRIS WHEN THE ACCUMULATION HAS REACHED A DEPTH OF 25% OF THE HEIGHT AND/OR VOLUME OF THE PRACTICE'S CAPACITY, OR MORE FREQUENTLY AS REQUIRED BY THE DETAILS.
16. THE CONTRACTOR SHALL PROVIDE PORTABLE HANDWASHING AND SANITARY FACILITIES, THESE FACILITIES SHALL BE SERVICED REGULARLY BY AN APPROVED SERVICE PROVIDER.
17. SOLID WASTE SHALL BE STORED IN COVERED DUMPSTERS OR OTHER APPROPRIATE CONTAINERS. WASTE IS TO BE DISPOSED OF REGULARLY AND PROPERLY IN ACCORDANCE WITH LOCAL, STATE, AND/OR FEDERAL REGULATIONS.
18. DURING ROUGH GRADING, LEAVE SLOPE SURFACES SLIGHTLY ROUGHENED.
19. THE EROSION AND SEDIMENT CONTROLS ARE SHOWN FOR A CONDITION WHEN ALL WORK IS OCCURRING SIMULTANEOUSLY. ACTUAL INSTALLATIONS SHALL BE ADJUSTED BASED ON CURRENT CONSTRUCTION ACTIVITY AND SITE CONDITIONS.

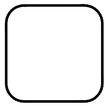
PLANTING PLAN NOTES

1. THE PLANTING OPERATION SHALL ONLY BE PERFORMED BY AN EXPERIENCED LANDSCAPE CONTRACTOR FAMILIAR WITH PLANTING PROCEDURES AND UNDER THE DIRECTION OF A QUALIFIED SUPERVISOR.
2. ALL PLANT MATERIALS SHALL COMPLY WITH AMERICAN STANDARDS FOR NURSERY STOCK ANSI Z60.1.
3. IN ACCORDANCE WITH THE AMERICAN STANDARD FOR NURSERY STOCK BY THE AMERICAN ASSOCIATION OF NURSERYMEN, EACH PLANT SIZE LISTED ON THE PLANT LIST IS THE MINIMUM SIZE ALLOWABLE FOR THAT GRADE AND SHALL INCLUDE PLANTS FROM THAT SIZE UP TO BUT NOT INCLUDING THE NEXT LARGER GRADE SIZE.
4. FURNISH PLANTS IN A GOOD AVERAGE OF THE SIZE RANGE. FOR EACH PLANT OF THE MINIMUM SIZE, FURNISH ONE (1) PLANT OF THE SAME SPECIES AT THE MAXIMUM SIZE.
5. THE CONTRACTOR SHALL LAYOUT ALL PLANT BEDS AND PLACE THE INDIVIDUAL PLANTS ON FINISHED GRADE IN THE LOCATIONS INDICATED ON PLAN FOR REVIEW BY THE OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION, AND PROVIDE ADEQUATE ADVANCED NOTIFICATION FOR TIMELY REVIEW.
6. UPON NOTIFICATION, THE OWNER'S REPRESENTATIVE WILL REVIEW IN THE FIELD THE LAYOUT OF ALL PLANT BED EDGES AND INDIVIDUAL PLANT LOCATIONS BEFORE INSTALLATION IS PERMITTED. THE OWNER'S REPRESENTATIVE RESERVES THE RIGHT TO INTERCHANGE THE PLANTS AND TO SHIFT THE PLANT LOCATIONS AND PLANT BED CONFIGURATION IF IT IS POSSIBLE IN THEIR JUDGMENT TO ACHIEVE A BETTER EFFECT BY THE CHANGES.
7. INSTALL PLANT MATERIALS AT THE CORRECT GRADE. CONFIRM THAT THE FINISHED GRADING IS COMPLETED IN THE AREAS WHERE PLANT MATERIALS ARE TO BE INSTALLED.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING AND MAINTAINING THE INSTALLED PLANT MATERIALS UNTIL SUBSTANTIAL COMPLETION OF THE CONSTRUCTION OR UNTIL FINAL ACCEPTANCE OF THE PLANT MATERIALS, WHICHEVER OCCURS LAST.

ABBREVIATIONS

AL	ALUMINUM	DMH	DROP MANHOLE	IN	INCH/INCHES	PC	POINT OF CURVATURE	TC	TOP OF CURB
ACT	ACTUAL	DWG	DRAWING	INL	INLET	PL	PROPERTY LINE	TOS	TOP OF SLOPE
APPR	APPROXIMATE/ APPROXIMATELY			INV	INVERT	PT	POINT OF TANGENT/ PERCOLATION TEST LOCATION	TS	TOP OF STAIR
		E	EAST	IP	IRON PIPE			TW	TOP OF WALL
		EA	EACH					TYP	TYPICAL
BC	BOTTOM OF CURB	EJ	EXPANSION JOINT	JB	JUNCTION BOX	PVC	POLYVINYL CHLORIDE	T&G	TONGUE AND GROOVE
BLDG	BUILDING	EL	ELEVATION						
BM	BENCHMARK	EQ	EQUAL	L	LENGTH/LONG	R	RADIUS		
BOS	BOTTOM OF SLOPE	ES	END SECTION	LA	LANDSCAPE ARCHITECT	RCP	REINFORCED CONCRETE PIPE	UD	UNDERDRAIN
BS	BOTTOM OF STAIR	EX	EXISTING	LAT	LATITUDE			USGS	UNITED STATES GEOLOGICAL SURVEY
BW	BOTTOM OF WALL	EXP	EXPANSION	LF	LINEAR FEET	REINF	REINFORCING		
B&B	BALLED AND BURLAPPED			LFT	LEFT	REQD	REQUIRED		
		FFE	FINISHED FLOOR ELEVATION	LIN	LINEAR	REV	REVISION	VAR	VARIES/VARIABLE
CAL	CALIPER	FG	FINISHED GRADE	LP	LOW POINT	ROW	RIGHT OF WAY	VCP	VITRIFIED CLAY PIPE
CB	CATCH BASIN	FIN	FINISH			RT	RIGHT	VERT	VERTICAL
CF	CUBIC FEET	FL	FLOOR	M	METER				
CI	CAST IRON	FTG	FOOTING	MAX	MAXIMUM	S	SOUTH	W	WEST
CIP	CAST IN PLACE	FT	FOOT/FEET	MH	MANHOLE	SAN	SANITARY	WE	WATER ELEVATION
CIR	CIRCLE/CIRCULAR			MIN	MINIMUM	SECT	SECTION	WL	WALK LIGHT
CJ	CONTROL JOINT	GA	GAUGE	MISC	MISCELLANEOUS	SF	SQUARE FOOT	WV	WATER VALVE
CLF	CHAIN-LINK FENCE	GAL	GALLON	MON	MONUMENT	SG	SUB GRADE	WWM	WOVEN WIRE MESH
CLL	CONTRACT LIMIT LINE	GALV	GALVANIZED			SH	SHEET	W/	WITH
CLR	CLEAR	GC	GENERAL CONTRACTOR	N	NORTH	SI	STORM INLET	W/O	WITHOUT
CMP	CORRUGATED METAL PIPE	GR	GUARDRAIL	NIC	NOT IN CONTRACT	SL	STREET LIGHT		
CO	CLEANOUT	GV	GAS VALVE	NOM	NOMINAL	SPEC	SPECIFICATIONS/ SPECIFIED	YD	YARD DRAIN
COL	COLUMN			NTS	NOT TO SCALE				
CONC	CONCRETE	HOR	HORIZONTAL	NUM	NUMBER	SQ	SQUARE	℄	CENTER LINE
CONT	CONTAINER	HP	HIGH POINT			SS	STAINLESS STEEL	±	PLUS OR MINUS
CONTR	CONTRACTOR	HT	HEIGHT	OC	ON CENTER	STA	STATION	Δ	CHANGE IN VALUE
CY	CUBIC YARDS	HW	HEAD WALL	OCEW	ON CENTER EACH WAY	STL	STEEL	<	LESS THAN
		HWY	HIGHWAY	OD	OUTSIDE DIAMETER	SY	SQUARE YARD	>	GREATER THAN
DET	DETAIL	HYD	HYDRANT	OP	OUTLET PROTECTION				
DIM	DIMENSION					T	TANGENT		
DIA	DIAMETER	ID	INSIDE DIAMETER	PA	PLANTING AREA	TB	TEST BORING		

ENLARGEMENT AREAS



ENLARGEMENT AREA

PROPOSED SITE DATA

		LOT R-1
1.	PARCEL AREA:	±180.5 ACRES OR 7,863,079 S.F.
1.1.	DISTURBANCE:	±27.7 ACRES OR 1,206,117 S.F.
1.2.	IMPERVIOUS:	±0.885 ACRES OR 38,535 S.F.
1.3.	COVERAGE:	±24.2 ACRES OR 1,056,057 S.F.
2.	ZONING:	RURAL RESIDENTIAL / AGRICULTURAL DISTRICT
3.	USE:	TIER 3 SOLAR ENERGY SYSTEM[1]

ZONING ANALYSIS

		LOT R-1	REQUIREMENT
4.	MINIMUM LOT SIZE:	±180.5 ACRES	2 ACRES
5.	MINIMUM LOT FRONTAGE:	7,187 FT	40 FT
6.	MINIMUM LOT WIDTH:	1,166 FT	200 FT
7.	MINIMUM LOT DEPTH:	464 FT	200 FT
8.	MAXIMUM LOT COVERAGE[2]:	13.4%	50%
9.	MINIMUM SETBACK:		
9.1.	FRONT YARD:	1,125 FT	N/A
9.2.	SIDE YARD:	202 FT	100 FT
9.3.	REAR YARD:	177 FT	100 FT

NOTES:
1. ALLOWABLE WITH A SPECIAL USE PERMIT.
2. COVERAGE INCLUDES MECHANICAL AND ELECTRICAL EQUIPMENT AND FENCED AREAS.

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PROJECT TITLE: **PIVOT SOLAR NY 6**

PROJECT LOCATION: **TOWN OF TICONDEROGA, ESSEX COUNTY, NEW YORK**

CLIENT: **PIVOT ENERGY**

DRAWING TITLE: **GENERAL NOTES, ABBREVIATIONS, AND ZONING COMPLIANCE TABLE**

DRAWINGS ISSUED FOR / REVISIONS

NO.	DATE	ISSUED FOR / REVISION	BY	CHK	APP
1	12/22/2021	ISSUED FOR APA APPLICATION	ZR	TD	
2	02/18/2022	REVISED PER APA COMMENTS	MC	TD	
3	3/15/2022	REVISED PER APA COMMENTS	ZR	TD	
4					
5					
6					

EDR JOB#: **20204**

DATE: **DECEMBER 22, 2021**

SCALE: **NTS**

DRAWN BY: **ZR, MC**

CHECKED BY: **TD**

DRAWING NUMBER: **G-001**

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GRAPHIC SCALE (IN FEET)

N

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PROJECT TITLE: **PIVOT SOLAR NY 6**

PROJECT LOCATION: **TOWN OF TICONDEROGA, ESSEX COUNTY, NEW YORK**

CLIENT: **PIVOT ENERGY**

DRAWING TITLE: **KEY PLAN**

DRAWINGS ISSUED FOR / REVISIONS

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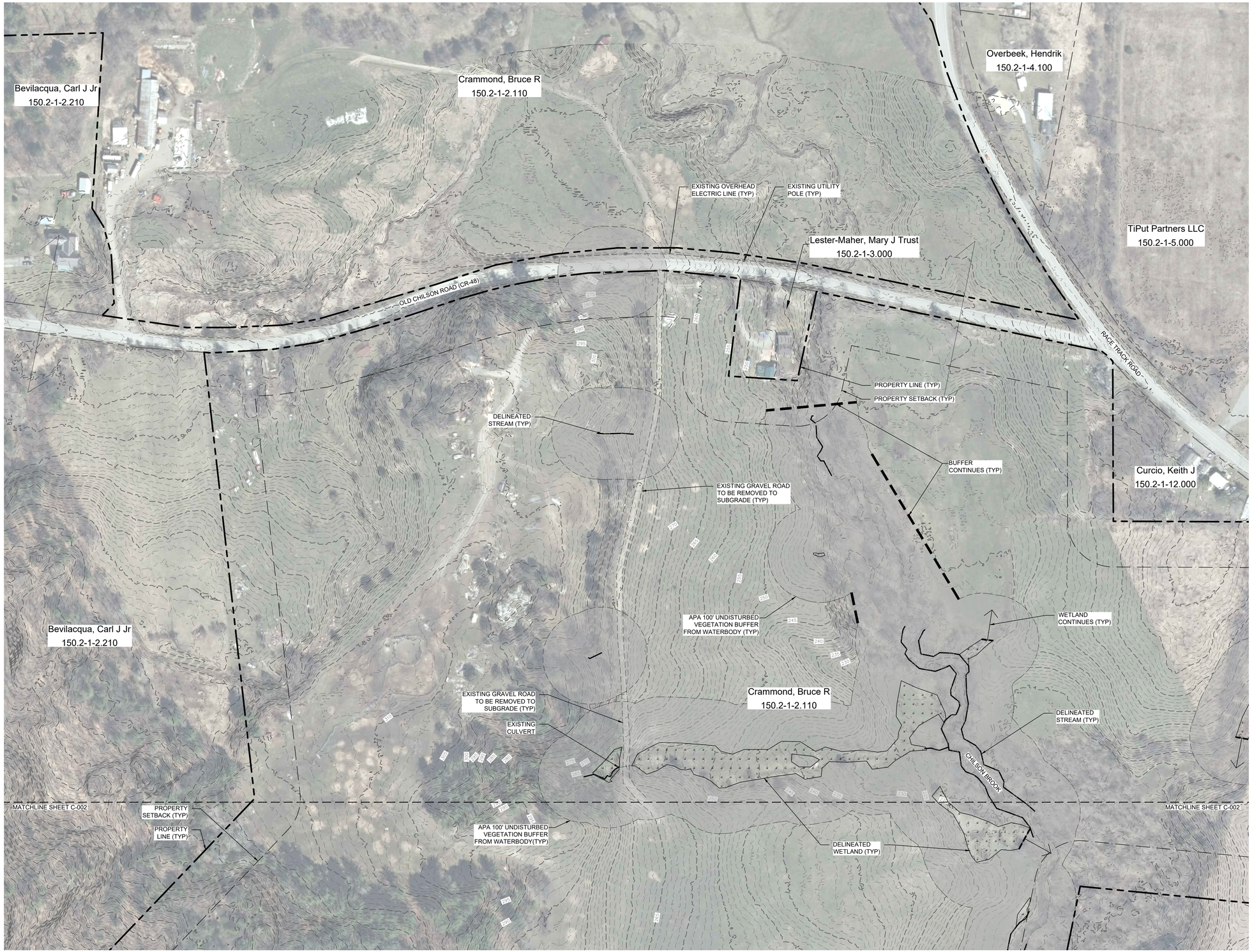
DATE: **DECEMBER 22, 2021**

SCALE: **1" = 200'**

DRAWN BY: **ZR, MC**

CHECKED BY: **TD**

DRAWING NUMBER: **C-000**



EXISTING CONDITONS LEGEND	
SYMBOL	ITEM
	PROPERTY BOUNDARY
	PROPERTY SETBACK
245	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	DELINEATED WETLAND
	DELINEATED STREAM
	EXISTING ACCESS ROAD
OHE	EXISTING OVERHEAD ELECTRIC LINE
	EXISTING UTILITY POLE

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100 0 50 100 200

GRAPHIC SCALE (IN FEET)

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PROJECT LOCATION: **TOWN OF TICONDEROGA, ESSEX COUNTY, NEW YORK**

CLIENT: **PIVOT ENERGY**

DRAWING TITLE: **EXISTING CONDITIONS PLAN**

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DRAWN BY: **ZR, MC**

CHECKED BY: **TD**

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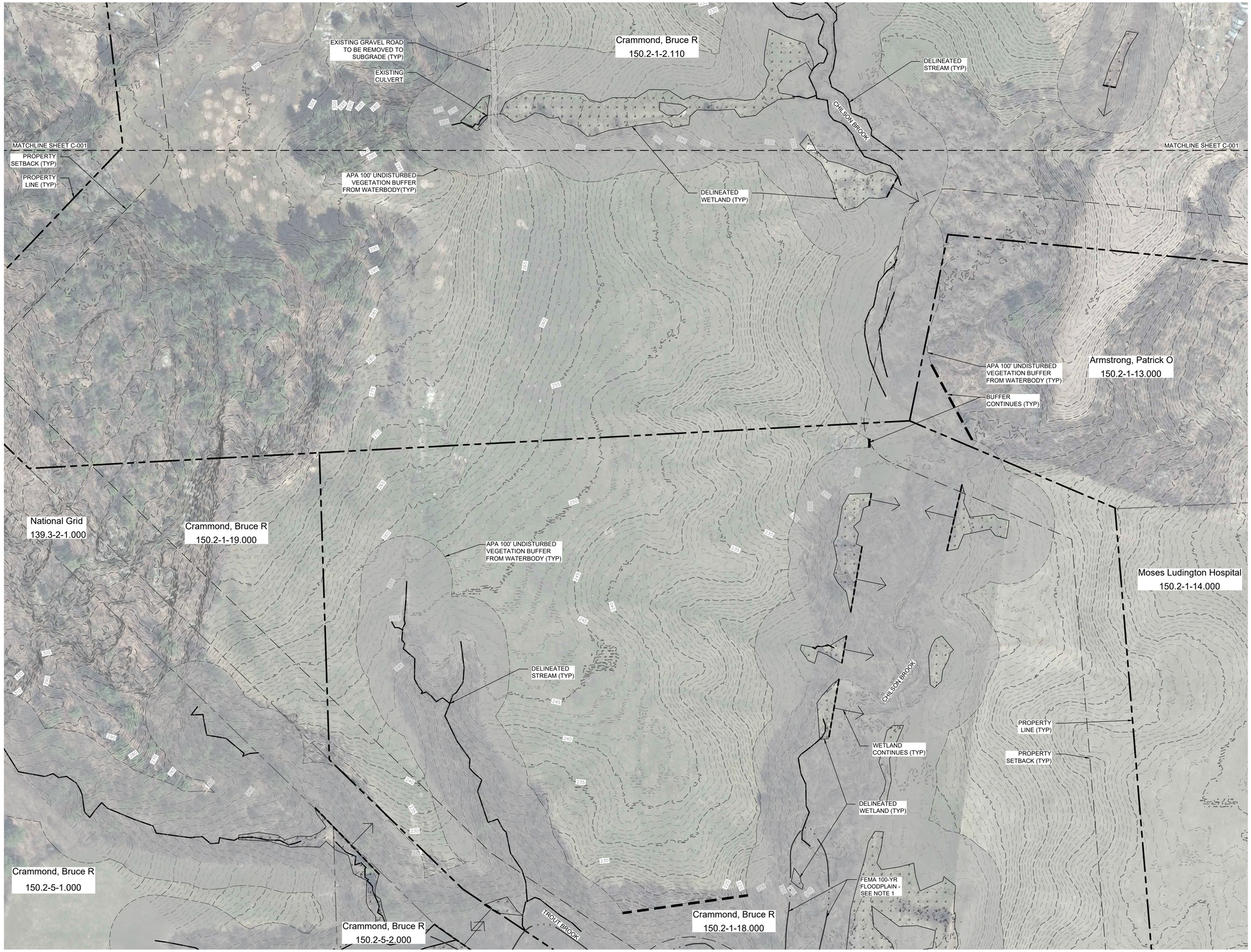

EXISTING CONDITONS LEGEND

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	EXISTING MINOR CONTOUR
	DELINEATED WETLAND
	DELINEATED STREAM
	EXISTING ACCESS ROAD
OHE	EXISTING OVERHEAD ELECTRIC LINE
ø	EXISTING UTILITY POLE

NOTES:
1. FLOODPLAIN LIMITS WERE CREATED USING FEMA HISTORICAL MAPPING DATED SEPTEMBER 6, 1996. THE FLOODPLAIN SHOWN SHOULD NOT BE USED FOR DESIGN PURPOSES.

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SCALE: **1" = 100'**
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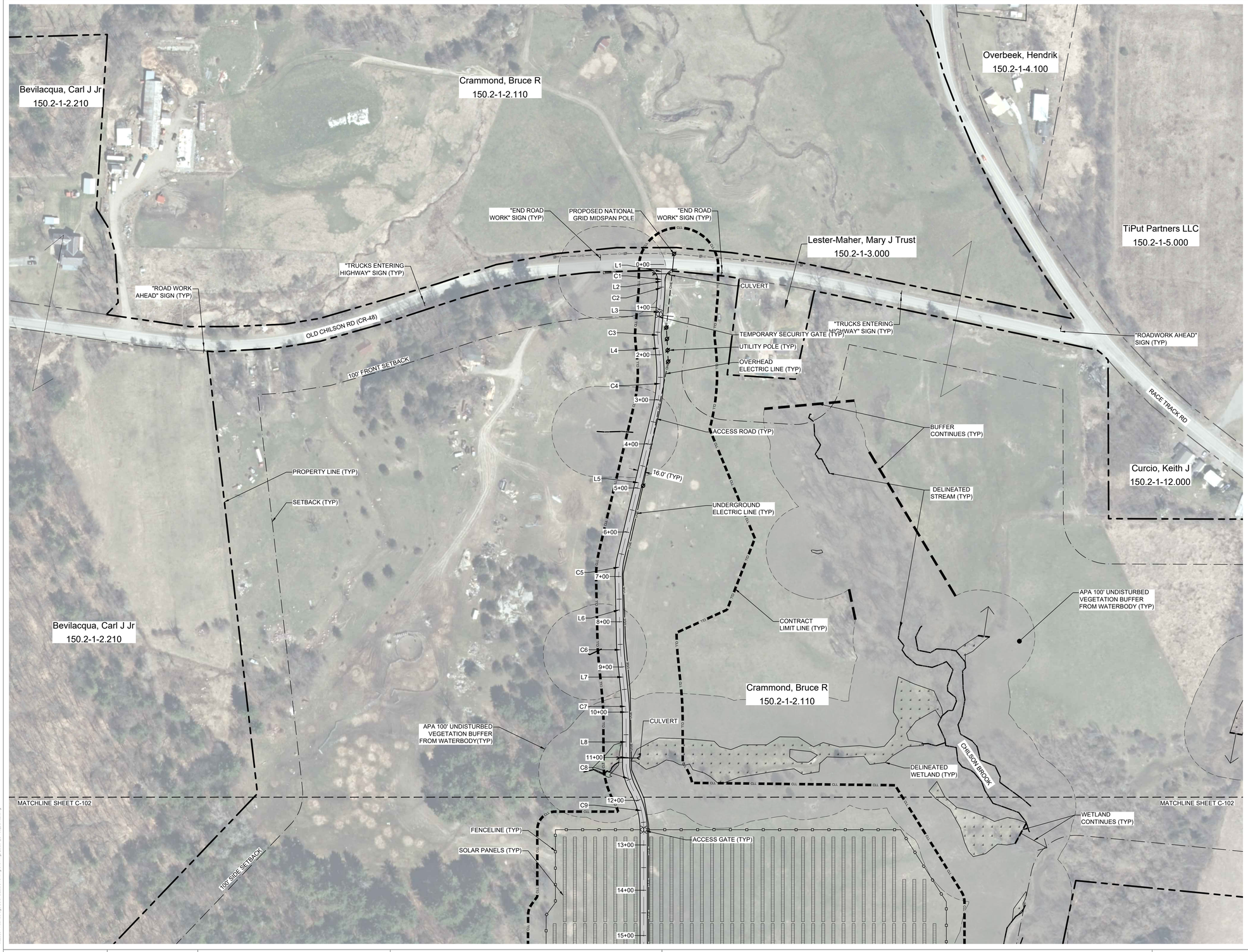
C-002



EXISTING CONDITONS LEGEND

SYMBOL	ITEM
	PROPERTY BOUNDARY
	PROPERTY SETBACK
	DELINEATED WETLAND
	DELINEATED STREAM

SITE PLAN LEGEND

SYMBOL	ITEM
	FENCELINE
	GRAVEL ACCESS ROAD
	UTILITY POLE
	OVERHEAD ELECTRIC LINE
	UNDERGROUND ELECTRIC LINE
	CONTRACT LIMIT LINE

Line Table: Access Road

Line #	Length	Direction
L1	31.940	S01° 22' 58.86"W
L2	5.370	S01° 52' 39.05"E
L3	83.593	S04° 56' 24.18"W
L4	39.630	S05° 40' 40.07"E
L5	331.410	S13° 27' 11.33"W
L6	137.317	S01° 13' 36.85"E
L7	81.738	S05° 44' 09.83"E
L8	108.398	S00° 10' 57.07"E
L9	909.792	S00° 00' 00.00"E

Curve Table: Access Road

Curve #	Radius	Length	Chord Direction
C1	46.012	2.618	S00° 14' 50.10"E
C2	199.269	23.711	S01° 31' 52.57"W
C3	100.000	18.532	S00° 22' 07.95"E
C4	350.000	116.864	S03° 53' 15.63"W
C5	200.000	51.243	S06° 06' 47.24"W
C6	500.000	39.350	S03° 28' 53.34"E
C7	500.000	48.464	S02° 57' 33.45"E
C8	136.343	55.043	S17° 02' 53.24"E
C9	182.910	96.838	S13° 43' 48.88"E

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Landscape Architecture, Engineering & Environmental Services, D.P.C.
217 Montgomery Street, Suite 1100
Syracuse, New York 13202
P. 315.471.0688

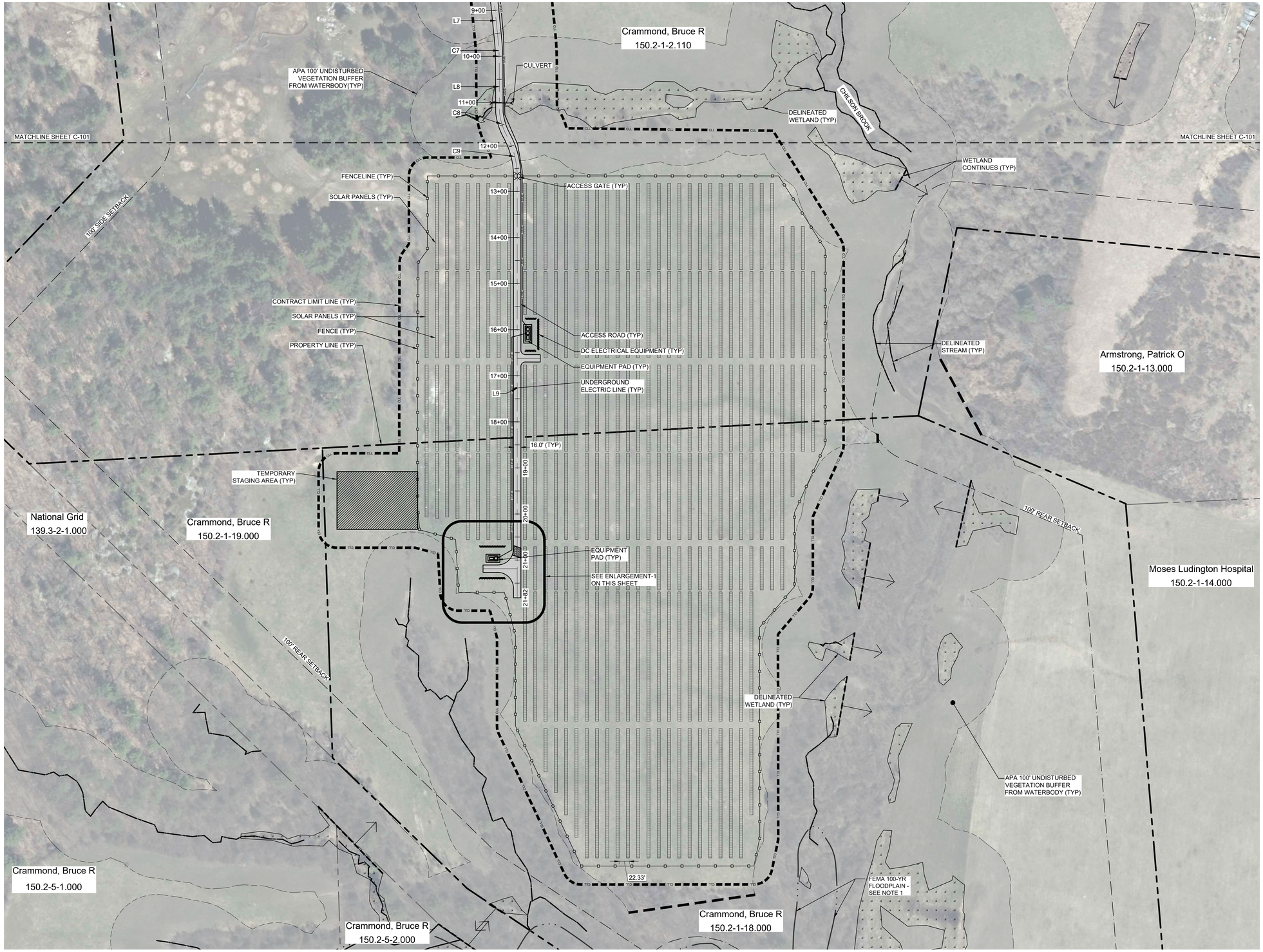
PROJECT TITLE: **PIVOT SOLAR NY 6**
PROJECT LOCATION: **TOWN OF TICONDEROGA, ESSEX COUNTY, NEW YORK**
CLIENT: **PIVOT ENERGY**
DRAWING TITLE: **SITE LAYOUT PLAN**

DRAWINGS ISSUED FOR / REVISIONS

NO.	DATE	ISSUED FOR / REVISION	BY	CHK	APP
1	12/22/2021	ISSUED FOR APA APPLICATION	ZR	TD	
2	02/18/2022	REVISED PER APA COMMENTS	MC	TD	
3	3/15/2022	REVISED PER APA COMMENTS	ZR	TD	
4					
5					
6					

EDR JOB#: **20204**
DATE: **DECEMBER 22, 2021**
SCALE: **1" = 100'**
DRAWN BY: **ZR, MC**
CHECKED BY: **TD**
DRAWING NUMBER: **C-101**

P:\20204 Ticonderoga Solar 2\Cad\Working Drawings\20204_C-100_SITE01.dwg

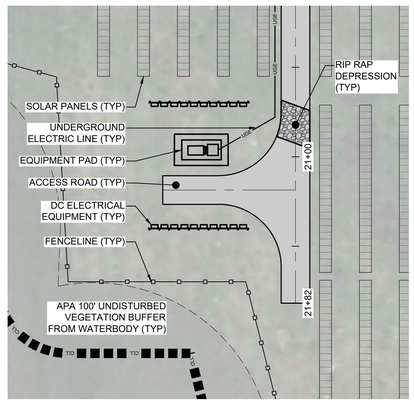


EXISTING CONDITONS LEGEND

SYMBOL	ITEM
	PROPERTY BOUNDARY
	PROPERTY SETBACK
	DELINEATED WETLAND
	DELINEATED STREAM

SITE PLAN LEGEND

SYMBOL	ITEM
	FENCELINE
	GRAVEL ACCESS ROAD
	UTILITY POLE
	OVERHEAD ELECTRIC LINE
	UNDERGROUND ELECTRIC LINE
	CONTRACT LIMIT LINE



ENLARGEMENT-1
Scale: 1" = 40'

40 20 0 20 40
GRAPHIC SCALE (IN FEET)

NOTES:
1. FLOODPLAIN LIMITS WERE CREATED USING FEMA HISTORICAL MAPPING DATED SEPTEMBER 6, 1996. THE FLOODPLAIN SHOWN SHOULD NOT BE USED FOR DESIGN PURPOSES.

NEW YORK STATE OF OPPORTUNITY. Adirondack Park Agency

FINAL
P2021-0296

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3/15/2022
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100 0 50 100 200
GRAPHIC SCALE (IN FEET)

N

CLIENT: Pivot Energy

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Syracuse, New York 13202
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PROJECT TITLE: **PIVOT SOLAR NY 6**
PROJECT LOCATION: **TOWN OF TICONDEROGA, ESSEX COUNTY, NEW YORK**
CLIENT: **PIVOT ENERGY**
DRAWING TITLE: **SITE LAYOUT PLAN**

DRAWINGS ISSUED FOR / REVISIONS

NO.	DATE	ISSUED FOR / REVISION	BY	CHK	APP
1	12/22/2021	ISSUED FOR APA APPLICATION	ZR	TD	
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4					
5					
6					

EDR JOB#: **20204**
DATE: **DECEMBER 22, 2021**
SCALE: **1" = 100'**
DRAWN BY: **ZR, MC**
CHECKED BY: **TD**
DRAWING NUMBER: **C-102**

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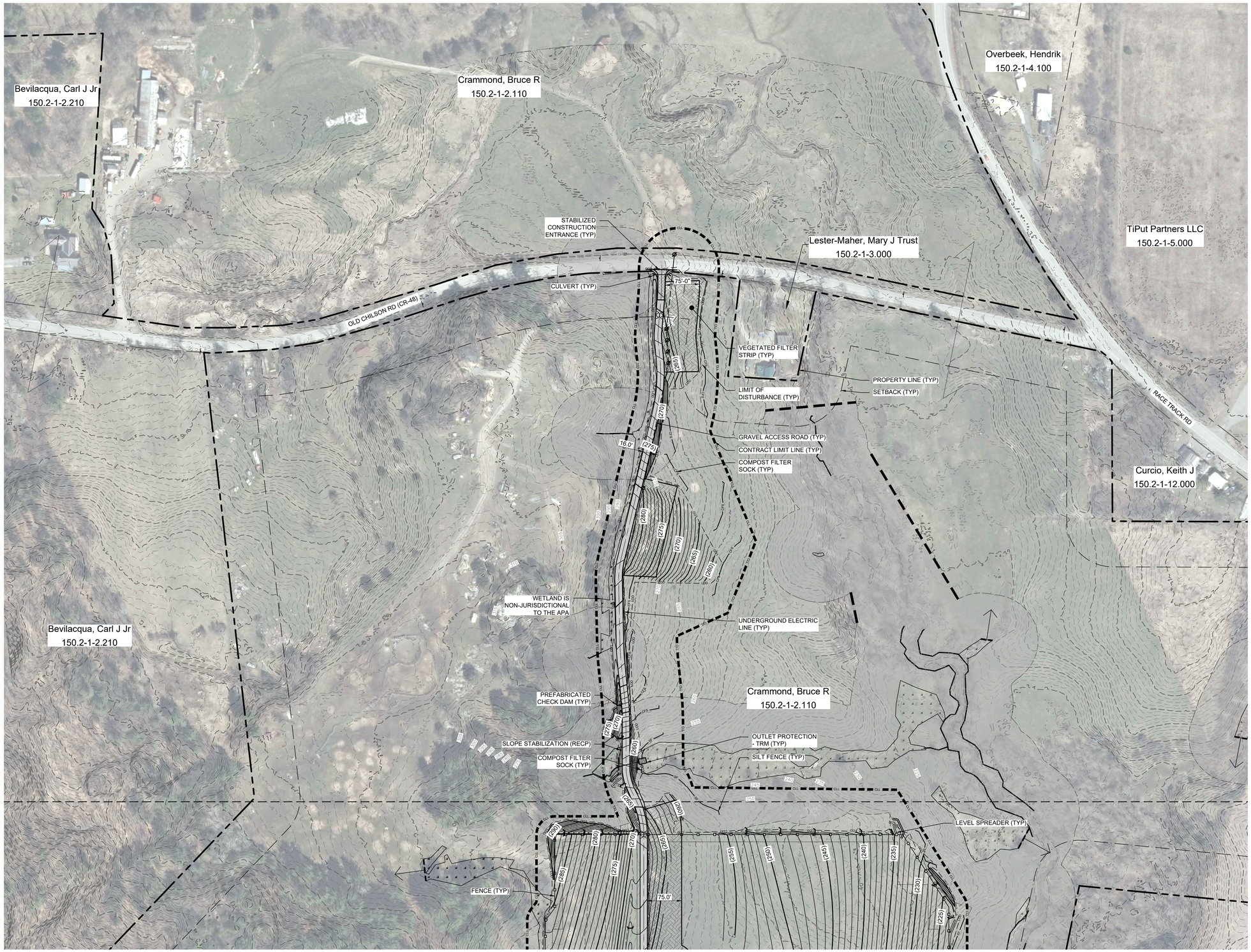

GRADING LEGEND

SYMBOL	ITEM
LOD	LIMIT OF DISTURBANCE
(285)	FINISHED MAJOR CONTOUR
	FINISHED MINOR CONTOUR

SITE PLAN LEGEND

SYMBOL	ITEM
	FENCELINE
	GRAVEL ACCESS ROAD
ø	UTILITY POLE
OHE	OVERHEAD ELECTRIC LINE
UGE	UNDERGROUND ELECTRIC LINE
CLL	CONTRACT LIMIT LINE

EROSION CONTROL SYMBOL LEGEND

SYMBOL	ITEM
	STABILIZED CONSTRUCTION ENTRANCE
SF	SILT FENCE
	SLOPE STABILIZATION (RECP)
	OUTLET PROTECTION - TURF REINFORCEMENT MAT (TRM)
CFS	COMPOST FILTER SOCK
	VEGETATED FILTER STRIP
	PREFABRICATED CHECK DAM

SOLAR ARRAY MAXIMUM SLOPES

SLOPE ASPECT	MAX. SLOPE
NORTH	5.0%
SOUTH	10.0%
EAST	10.0%
WEST	10.0%

NOTES:

1. ALL DISTURBED AREAS WITH SLOPES 1V:3H AND STEEPER SHALL BE STABILIZED WITH ROLLED EROSION CONTROL PRODUCT (RECP). SEE DETAIL 3 ON SHEET C-602.

NEW YORK STATE OF OPPORTUNITY. Adirondack Park Agency

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P2021-0296

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100 0 50 100 200
GRAPHIC SCALE (IN FEET)

N

CLIENT: Pivot Energy

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Landscape Architecture, Engineering & Environmental Services, D.P.C.
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Syracuse, New York 13202
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PROJECT TITLE: **PIVOT SOLAR NY 6**
PROJECT LOCATION: **TOWN OF TICONDEROGA, ESSEX COUNTY, NEW YORK**
CLIENT: **PIVOT ENERGY**
DRAWING TITLE: **GRADING AND EROSION & SEDIMENT CONTROL PLAN**

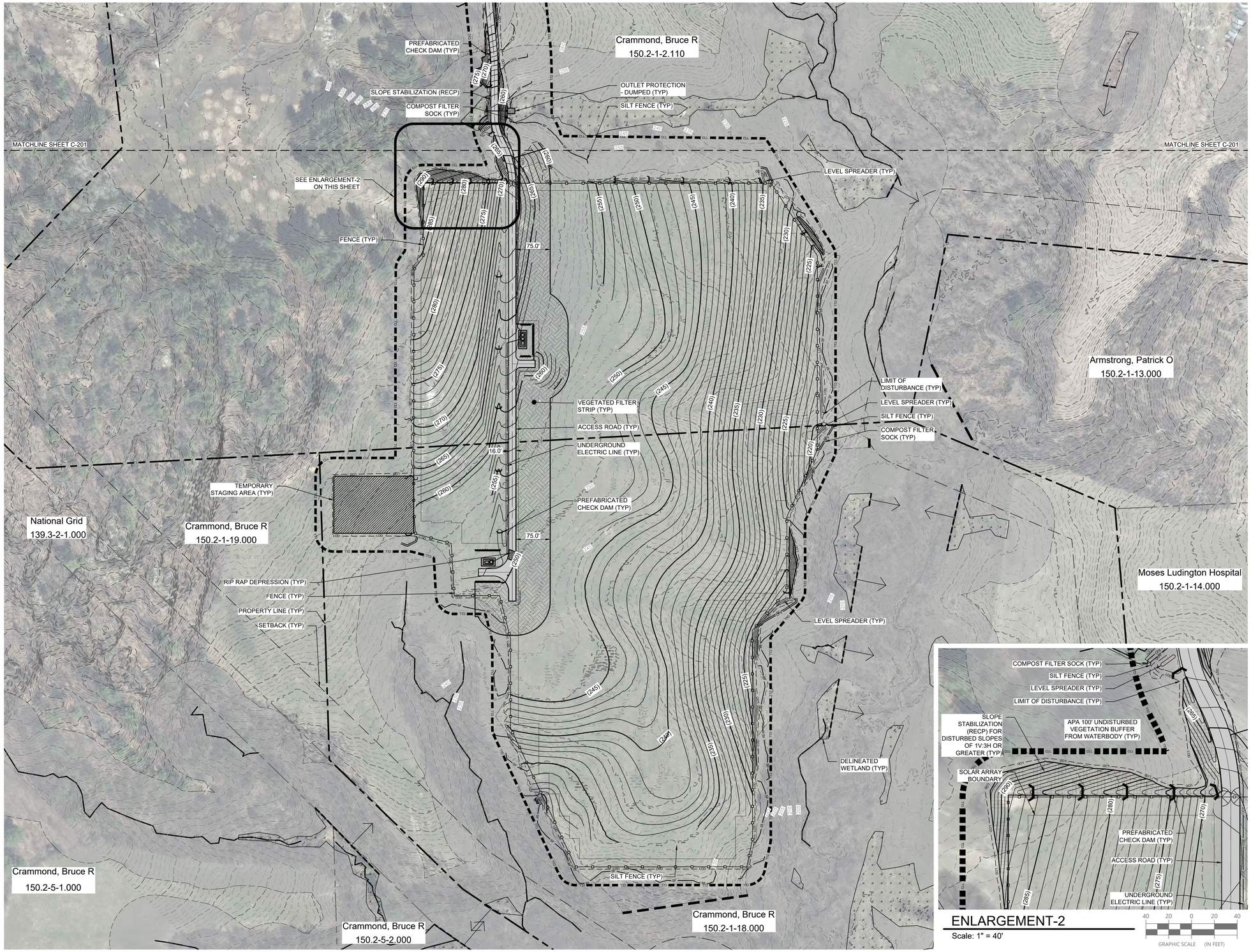
NEW YORK STATE OF OPPORTUNITY. Adirondack Park Agency
RECEIVED
Date: April 13, 2022

DRAWINGS ISSUED FOR / REVISIONS

NO.	DATE	ISSUED FOR / REVISION	BY	CHK	APP
1	12/22/2021	ISSUED FOR APA APPLICATION	ZR	TD	
2	02/18/2022	REVISED PER APA COMMENTS	MC	TD	
3	3/15/2022	REVISED PER APA COMMENTS	ZR	TD	
4	4/12/2022	REVISED CULVERT OUTLET PROTECTION	ZR		
5					
6					

EDR JOB#: **20204**
DATE: **DECEMBER 22, 2021**
SCALE: **1" = 100'**
DRAWN BY: **ZR, MC**
CHECKED BY: **TD**
DRAWING NUMBER:
C-201

J:\20204 Ticonderoga Solar 2\Cad\Working Drawings\20204_C-200_SHEET.dwg



GRADING LEGEND

SYMBOL	ITEM
LOD	LIMIT OF DISTURBANCE
(285)	FINISHED MAJOR CONTOUR
	FINISHED MINOR CONTOUR

SITE PLAN LEGEND

SYMBOL	ITEM
	FENCELINE
	GRAVEL ACCESS ROAD
ø	UTILITY POLE
OHE	OVERHEAD ELECTRIC LINE
UGE	UNDERGROUND ELECTRIC LINE
CLL	CONTRACT LIMIT LINE

EROSION CONTROL SYMBOL LEGEND

SYMBOL	ITEM
	STABILIZED CONSTRUCTION ENTRANCE
SF	SILT FENCE
	SLOPE STABILIZATION (RECP)
	OUTLET PROTECTION - DUMPED (DP)
CFS	COMPOST FILTER SOCK
	VEGETATED FILTER STRIP
	PREFABRICATED CHECK DAM

SOLAR ARRAY MAXIMUM SLOPES

SLOPE ASPECT	MAX. SLOPE
NORTH	5.0%
SOUTH	10.0%
EAST	10.0%
WEST	10.0%

NOTES:

1. ALL DISTURBED AREAS WITH SLOPES 1V:3H AND STEEPER SHALL BE STABILIZED WITH ROLLED EROSION CONTROL PRODUCT (RECP).

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Landscape Architecture, Engineering & Environmental Services, D.P.C.
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Syracuse, New York 13202
P. 315.471.0688

PROJECT TITLE: **PIVOT SOLAR NY 6**

PROJECT LOCATION: **TOWN OF TICONDEROGA, ESSEX COUNTY, NEW YORK**

CLIENT: **PIVOT ENERGY**

DRAWING TITLE: **GRADING AND EROSION & SEDIMENT CONTROL PLAN**

DRAWINGS ISSUED FOR / REVISIONS

NO.	DATE	ISSUED FOR / REVISION	BY	CHK	APP
1	12/22/2021	ISSUED FOR APA APPLICATION	ZR	TD	
2	02/18/2022	REVISED PER APA COMMENTS	MC	TD	
3	3/15/2022	REVISED PER APA COMMENTS	ZR	TD	
4					
5					
6					

EDR JOB#: **20204**
DATE: **DECEMBER 22, 2021**
SCALE: **1" = 100'**
DRAWN BY: **ZR, MC**
CHECKED BY: **TD**
DRAWING NUMBER: **C-202**

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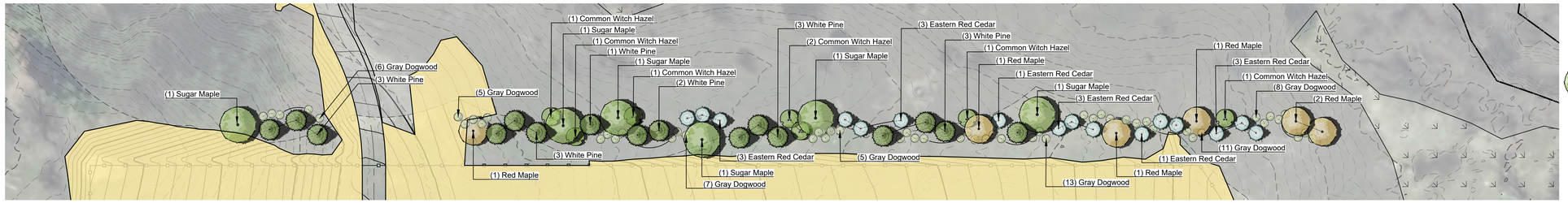
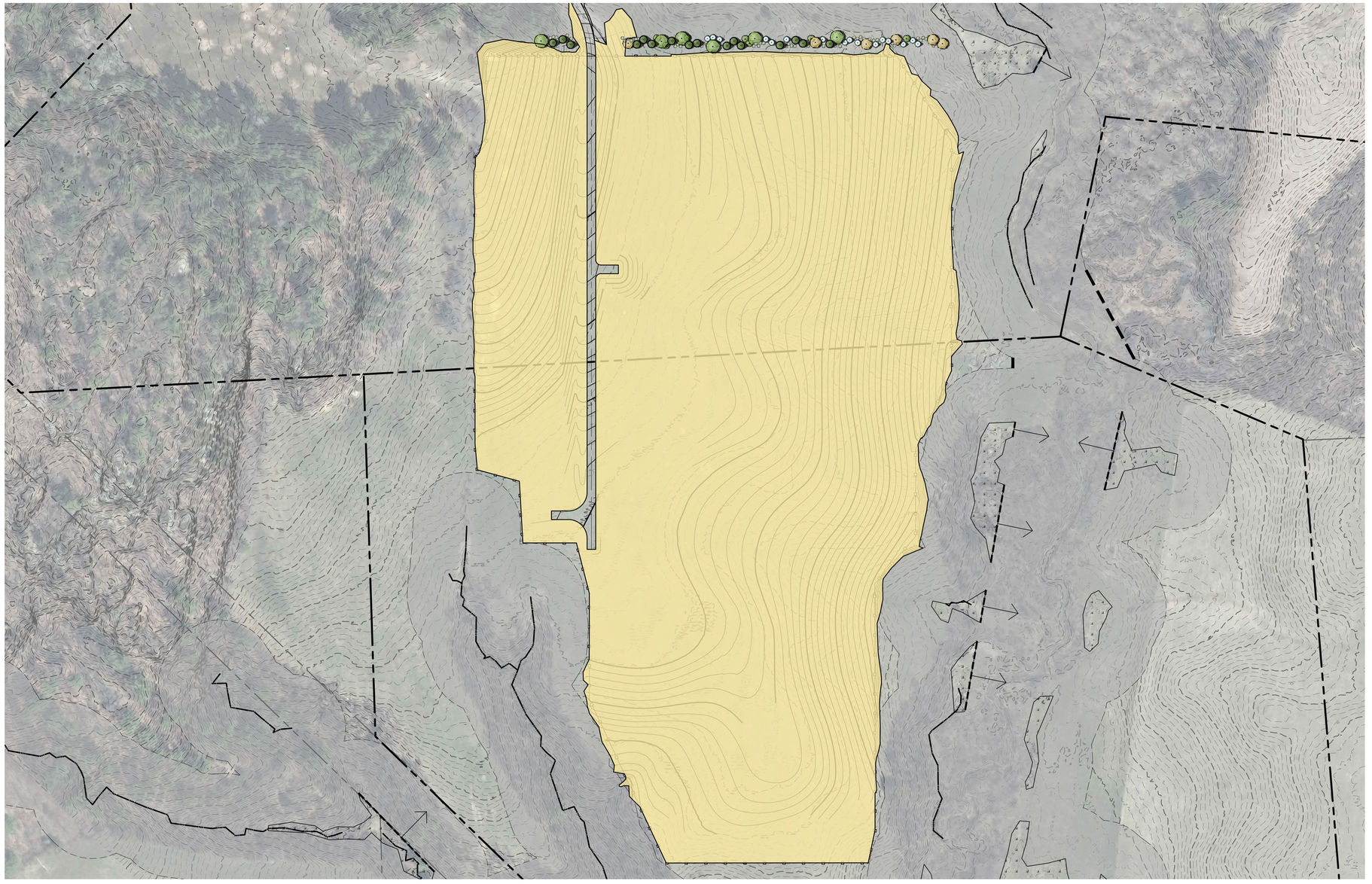


1 BUFFER PLANTING ENLARGEMENT

Scale: 1" = 40'-0"

40 20 0 20 40 80

GRAPHIC SCALE (IN FEET)



PLANT SCHEDULE

TREES	QTY	BOTANICAL NAME	COMMON NAME	SIZE	ROOT
	6	Acer rubrum	Red Maple	1" Cal.	B&B
	6	Acer saccharum	Sugar Maple	1" Cal.	B&B
	7	Hamamelis virginiana	Common Witch Hazel	6` Ht.	B&B
	16	Juniperus virginiana	Eastern Red Cedar	5` Ht.	B&B
	16	Pinus strobus	White Pine	6` Ht.	B&B
SHRUBS	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**SIZE**	**ROOT**
	56	Cornus racemosa	Gray Dogwood	3` Ht.	#5 Container

DISTURBED AREAS TO BE SEEDED WITH MIX SUITABLE FOR SHEEP GRAZING AND CONTAINING NATIVE SPECIES BENEFICIAL TO POLLINATORS

ERNST FUZZ & BUZZ - STANDARD SEED MIX:

26.4% LOLIUM PERENNE, 'CRAVE', TETRAPLOID (PERENNIAL RYEGRASS, 'CRAVE', TETRAPLOID)
20.8% DACTYLIS GLOMERATA, 'PENNLATE' (ORCHARDGRASS, 'PENNLATE')
18.9% POA PRATENSIS, 'GINGER' (KENTUCKY BLUEGRASS, 'GINGER' (PASTURE TYPE))
17.0% FESTUCA ELATIOR (MEADOW FESCUE)
5.7% TRIFOLIUM HYBRIDUM (ALSIKE CLOVER)
4.8% TRIFOLIUM PRATENSE, MEDIUM, VARIETY NOT STATED (RED CLOVER, MEDIUM)
2.0% LOTUS CORNICULATUS, 'LEO' (BIRD'S FOOT TREFOIL, 'LEO')
1.3% CICHORIUM INTYBUS (BLUE CHICORY)
1.0% CHRYSANTHEMUM LEUCANTHEMUM (OXEYE DAISY)
0.9% COREOPSIS LANCEOLATA (LANCELEAF COREOPSIS)
0.8% CHAMAECRISTA FASCICULATA, PA ECOTYPE (PARTRIDGE PEA, PA ECOTYPE)
0.4% SOLIDAGO NEMORALIS, PA ECOTYPE (GRAY GOLDENROD, PA ECOTYPE)

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3/15/2022

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100 0 50 100 200

GRAPHIC SCALE (IN FEET)

N

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217 Montgomery Street, Suite 1100
Syracuse, New York 13202
P. 315.471.0688

PROJECT TITLE: **PIVOT SOLAR NY 6**

PROJECT LOCATION: **TOWN OF TICONDEROGA, ESSEX COUNTY, NEW YORK**

CLIENT: **PIVOT ENERGY**

DRAWING TITLE: **PLANTING PLAN**

DRAWINGS ISSUED FOR / REVISIONS

NO.	DATE	ISSUED FOR / REVISION	BY	CHK	APP
1	12/22/2021	ISSUED FOR APA APPLICATION	ZR	TD	
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3	3/15/2022	REVISED PER APA COMMENTS	ZR	TD	
4					
5					
6					

EDR JOB#: **20204**

DATE: **DECEMBER 22, 2021**

SCALE: **1" = 100'**

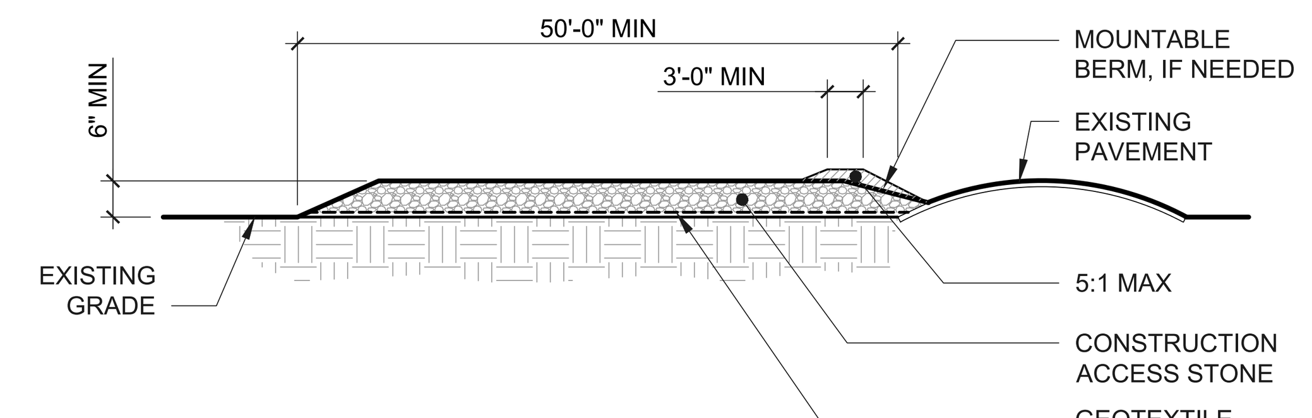
DRAWN BY: **ZR, MH**

CHECKED BY: **TD**

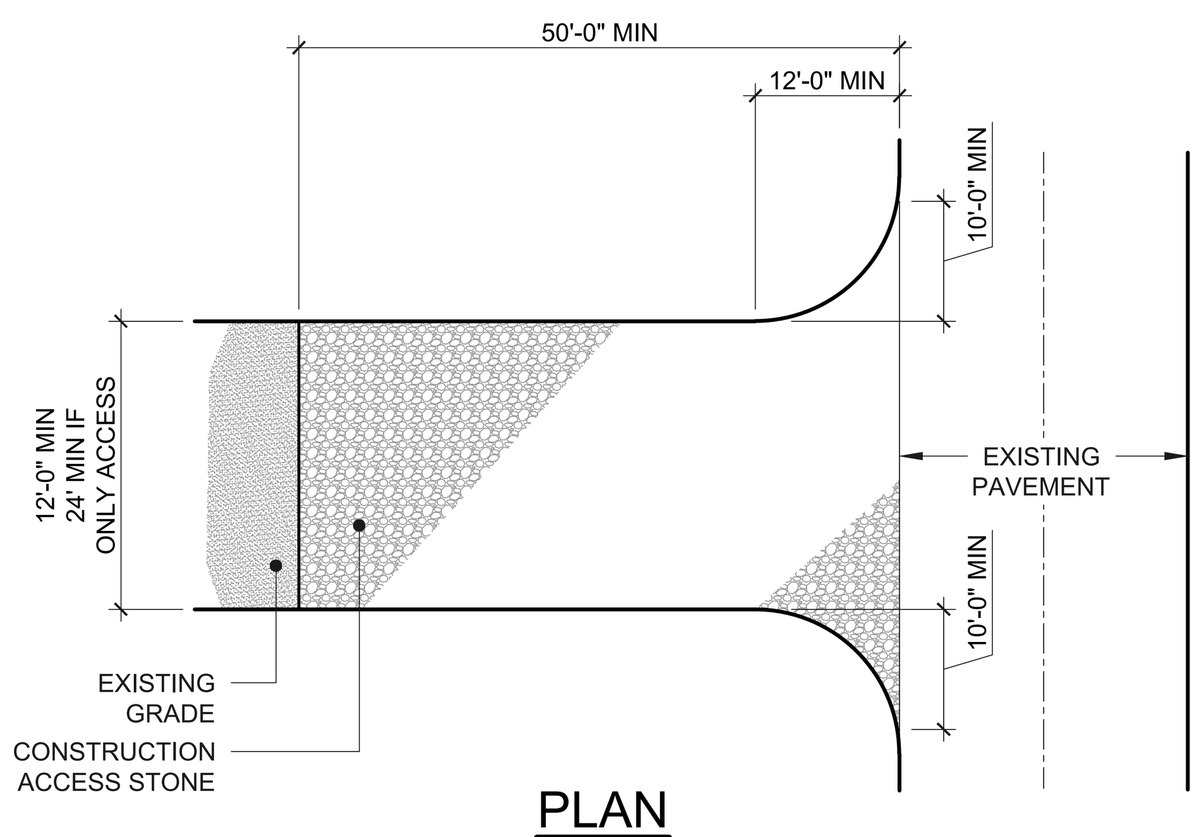
DRAWING NUMBER:

C-401

J:\20204 Ticonderoga Solar 2\Cad\Working Drawings\20204_C-400_SERIES .dwg



SECTION



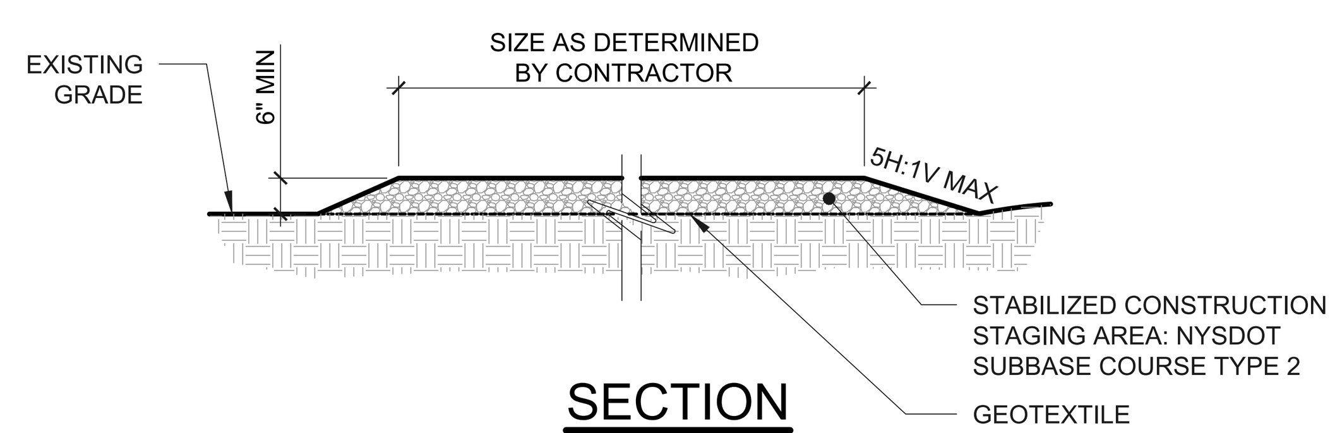
PLAN

NOTES:

1. CONSTRUCTION ACCESS STONE SIZE - USE A 50% TO 50% MIX OF NYSDOT #4 AND #5 STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. GEOTEXTILE:
   2.A. MIRAFI 500X OR APPROVED EQUAL.
   2.B. SHALL BE PLACED UNDER THE ENTIRE STABILIZED CONSTRUCTION ENTRANCE PRIOR TO PLACING OF STONE.
3. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ACCESS SHALL BE PIPED ACROSS THE STABILIZED CONSTRUCTION ACCESS. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM SHALL BE USED.
4. MAINTENANCE - THE CONSTRUCTION ACCESS SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO THE PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
5. WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ACCESS ONTO PUBLIC RIGHT-OF-WAYS. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO A NYSDEC APPROVED SEDIMENT TRAPPING DEVICE.
6. TRAINED CONTRACTOR SHALL PROVIDE DAILY INSPECTIONS.

STABILIZED CONSTRUCTION ACCESS

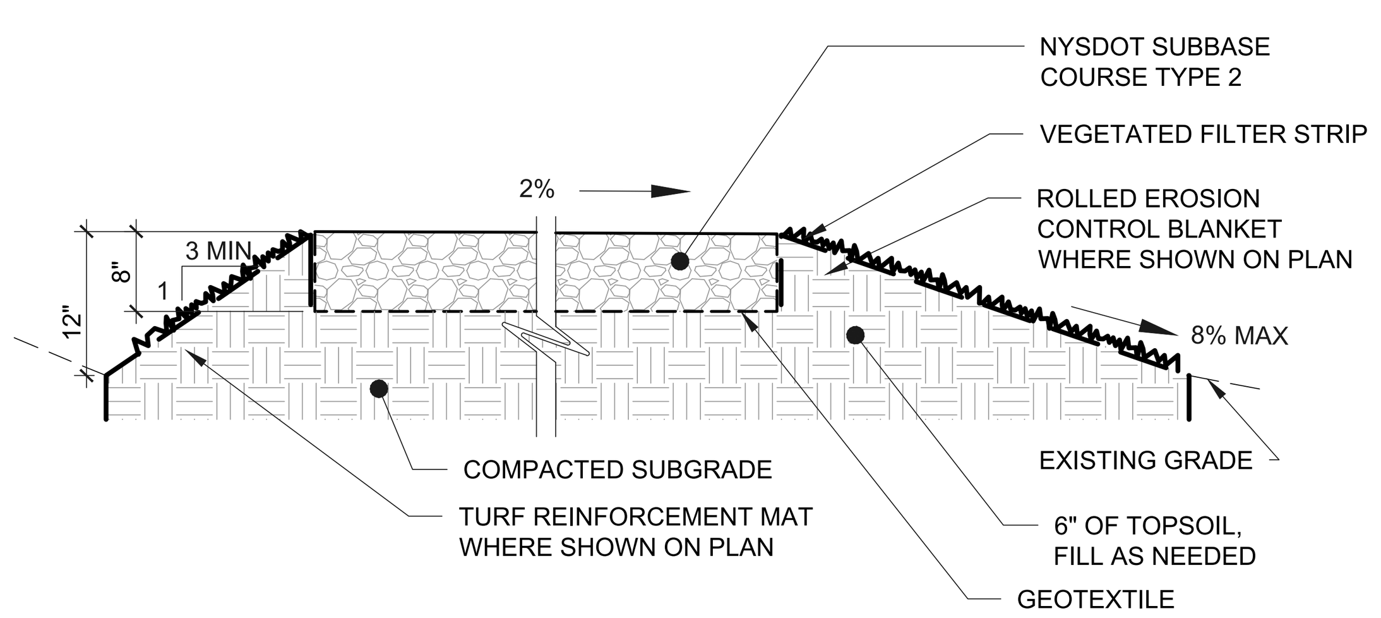
Scale: NTS — TEMPORARY



SECTION

STABILIZED CONST STAGING AREA

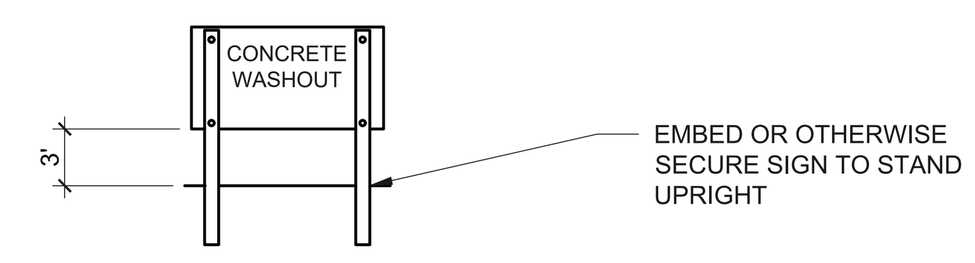
Scale: NTS — TEMPORARY



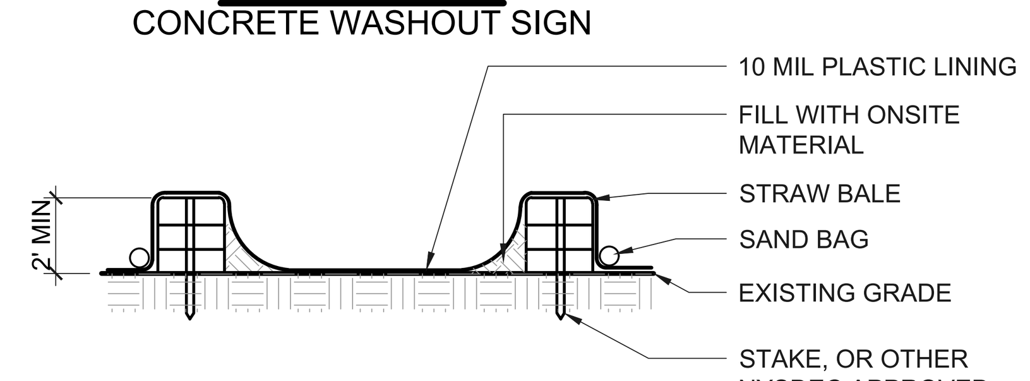
NOTE: TREATMENT OF THE SURFACE ADJACENT TO THE GRAVEL ROAD WILL VARY BASED ON ADJACENT GRADING. LOCATIONS OF THE OF TURF REINFORCEMENT MAT (TRM) AND EROSION CONTROL BLANKET (ECB) WILL BE IDENTIFIED ON THE GRADING PLAN.

GRAVEL ACCESS ROAD

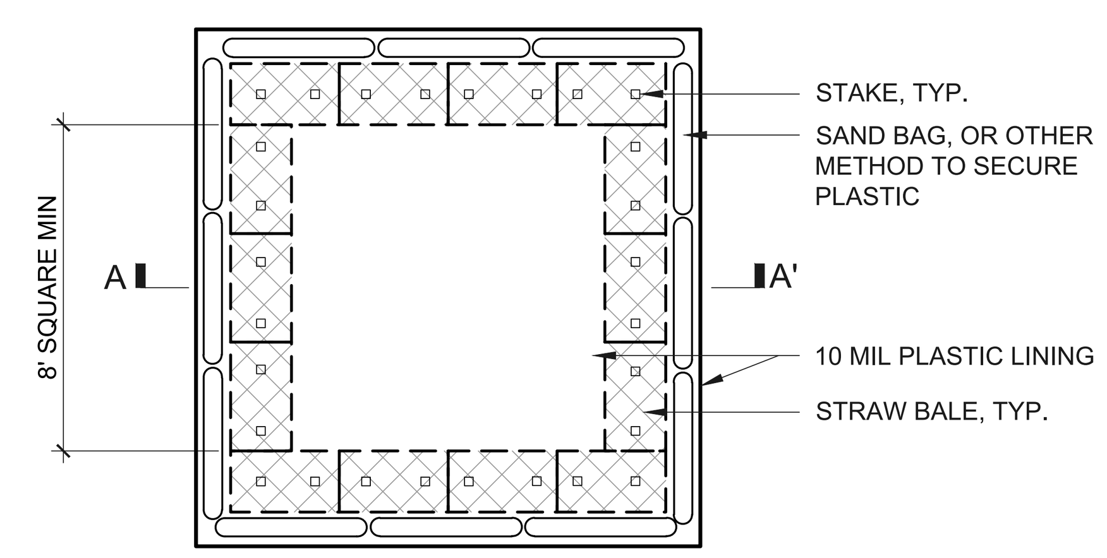
Scale: NTS



ELEVATION
CONCRETE WASHOUT SIGN



SECTION A-A'



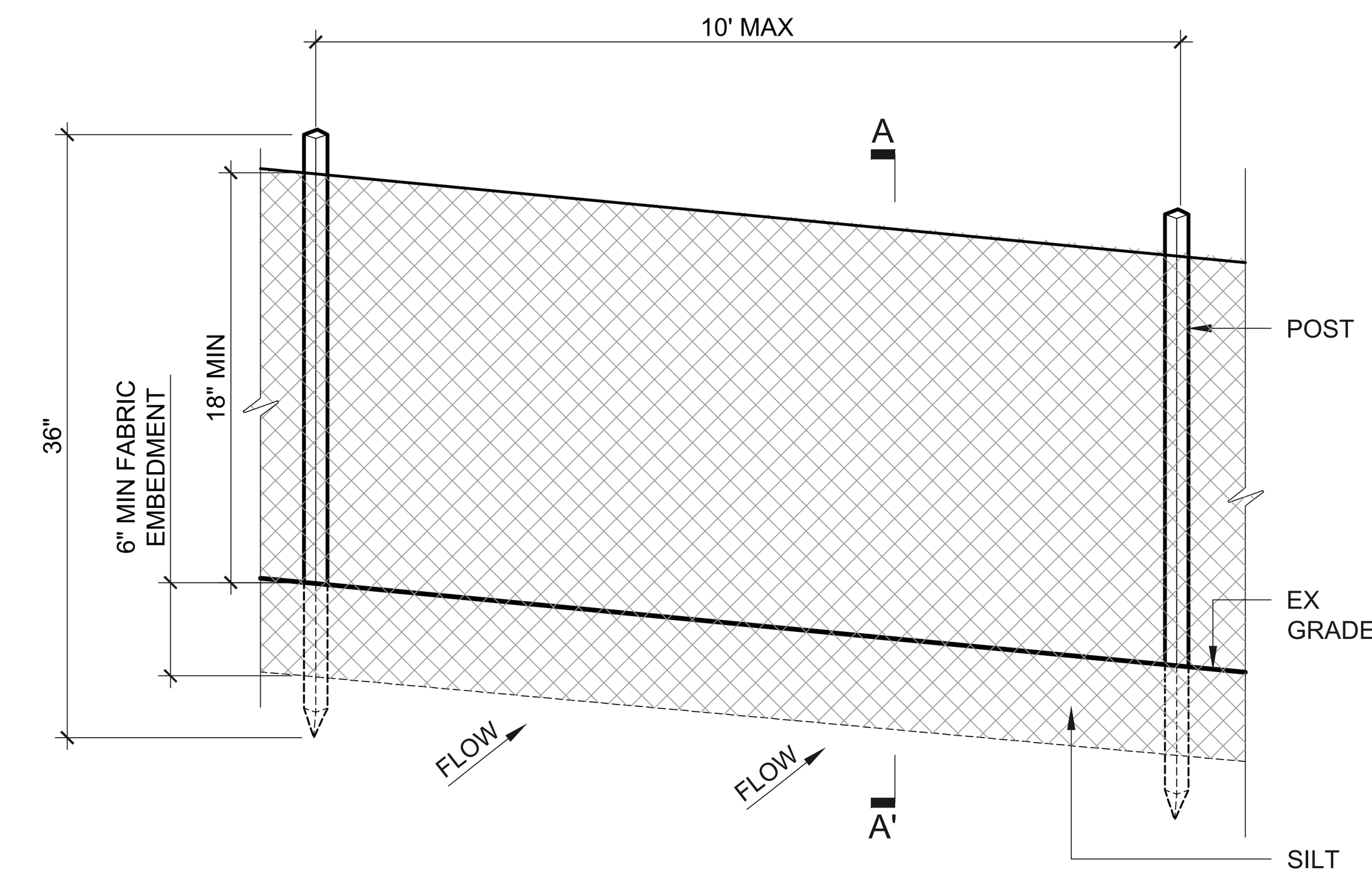
PLAN

NOTES:

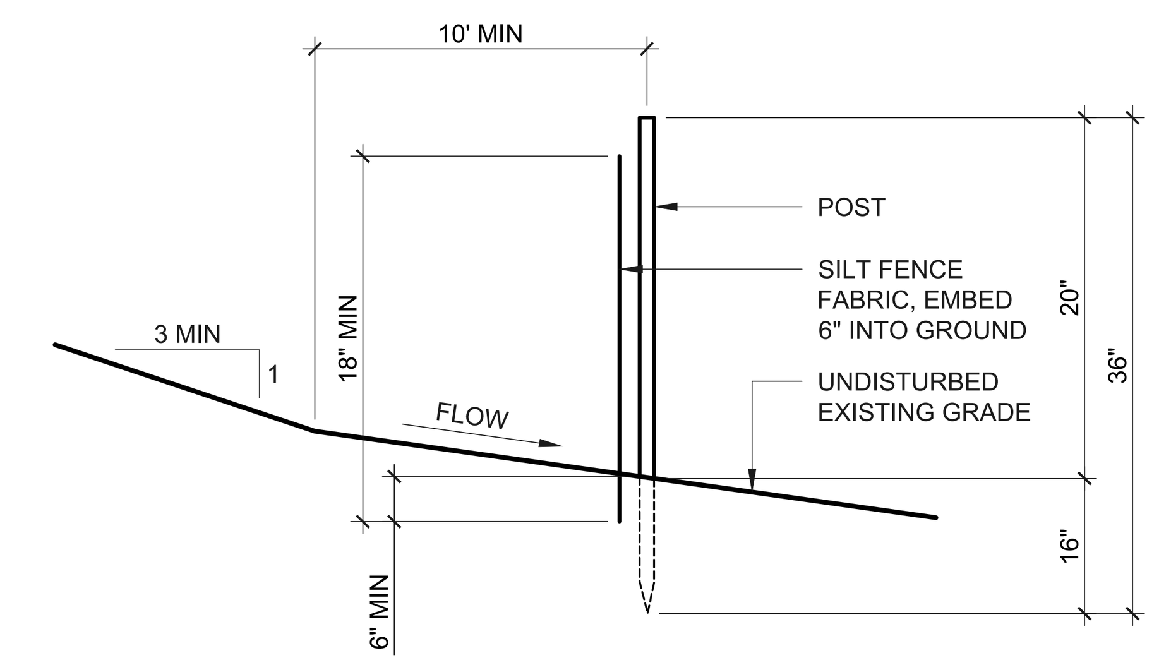
1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SIZING, CONSTRUCTION, AND INTEGRITY OF THE WASHOUT. THE CAPACITY OF THE WASHOUT SHALL BE 60 GALLONS PER TRUCK TO BE CLEANED WITHIN THE EXPECTED MAINTENANCE FREQUENCY. ADDITIONAL CAPACITY SHALL BE PROVIDED TO ACCOMMODATE RAINFALL.
2. OTHER METHODS OF CONCRETE WASHOUT CONTAINMENT MAY BE UTILIZED IF APPROVED BY THE OWNER'S REPRESENTATIVE.
3. LOCATE WASHOUT AREA AT LEAST 100' FROM STORM DRAINS, OPEN DITCHES, OR WATER BODIES.
4. THE PLASTIC LINING SHALL BE MAINTAINED IN A WATER TIGHT CONDITION AND SHALL BE REPLACED AT EVERY CLEANING.
5. DO NOT ALLOW RUNOFF TO ENTER THIS AREA.
6. THE CONCRETE WASHOUT SIGN SHALL BE PLACED WITHIN 30 FEET OF THE TEMPORARY CONCRETE WASHOUT FACILITY.

CONCRETE WASHOUT AREA

Scale: NTS — TEMPORARY



PERSPECTIVE VIEW



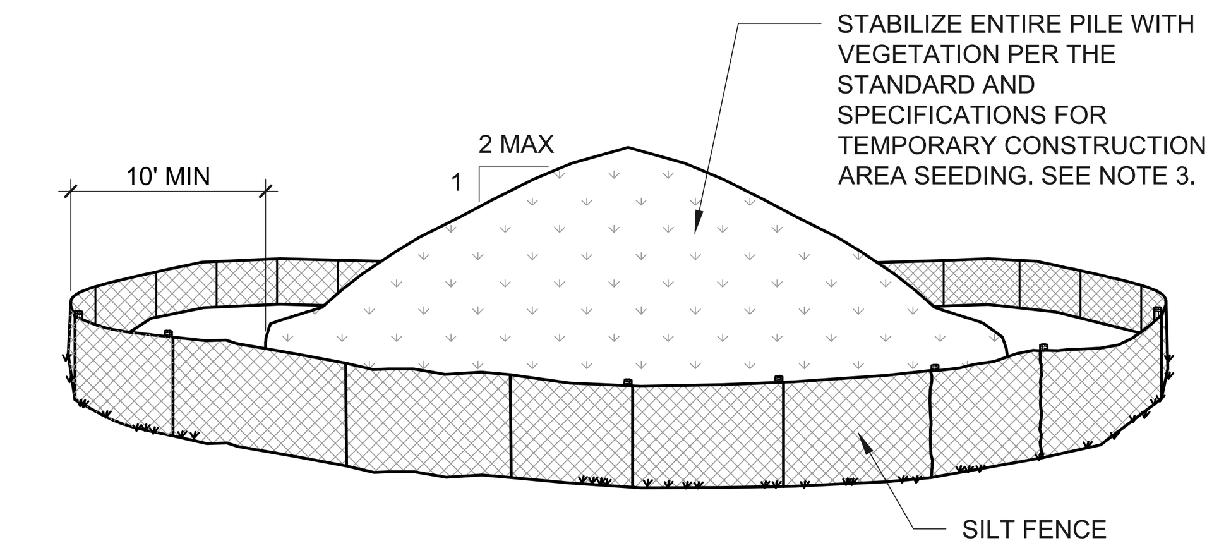
SECTION A-A'

NOTES:

1. WHEN TWO SECTIONS OF SILT FENCE FABRIC ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY 6" AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABLINKA T140N, OR APPROVED EQUAL.
2. PREFABRICATED UNITS SHALL MEET THE MINIMUM REQUIREMENTS SHOWN.
3. MAINTENANCE SHALL BE PERFORMED IMMEDIATELY AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

SILT FENCE - STANDARD

Scale: NTS — TEMPORARY

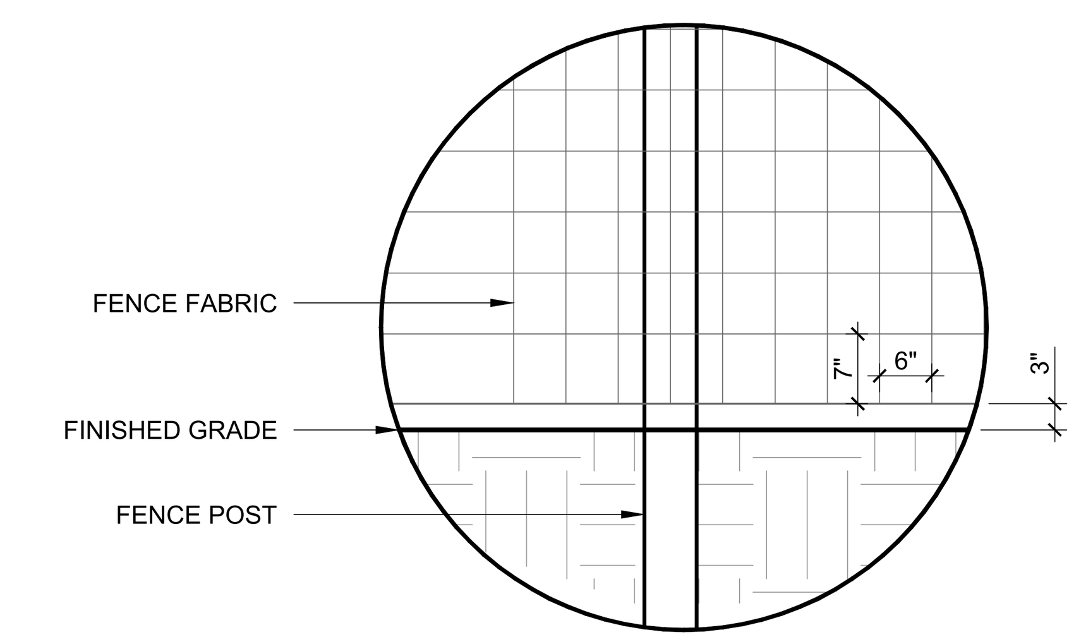


NOTES:

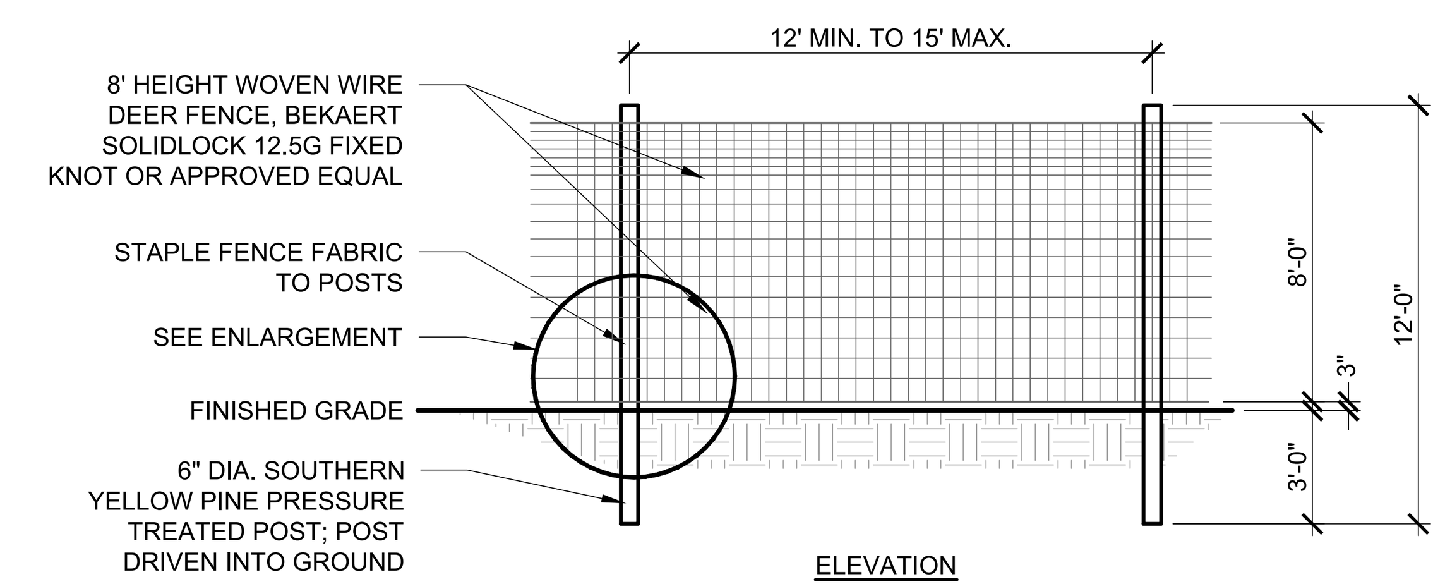
1. AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY, STABILIZED AND LOCATED AWAY FROM KNOWN WORK AREAS TO PREVENT RELOCATION.
2. MAXIMUM STOCKPILE HEIGHT SHALL BE 12 FEET.
3. EACH PILE SHALL BE SURROUNDED WITH SILT FENCING, INSTALLED PER SILT FENCE DETAIL, THEN STABILIZED IN ACCORDANCE WITH THE NYSDEC STANDARD AND SPECIFICATIONS FOR TEMPORARY CONSTRUCTION AREA SEEDING WITHIN 7 DAYS OF COMPLETION.
4. A PERIMETER DIKE/SWALE SHALL BE LOCATED UP-SLOPE OF THE TOPSOIL STOCKPILE TO DIVERT STORMWATER AROUND THE STOCKPILE.

STABILIZED SOIL STOCKPILE

Scale: NTS — TEMPORARY

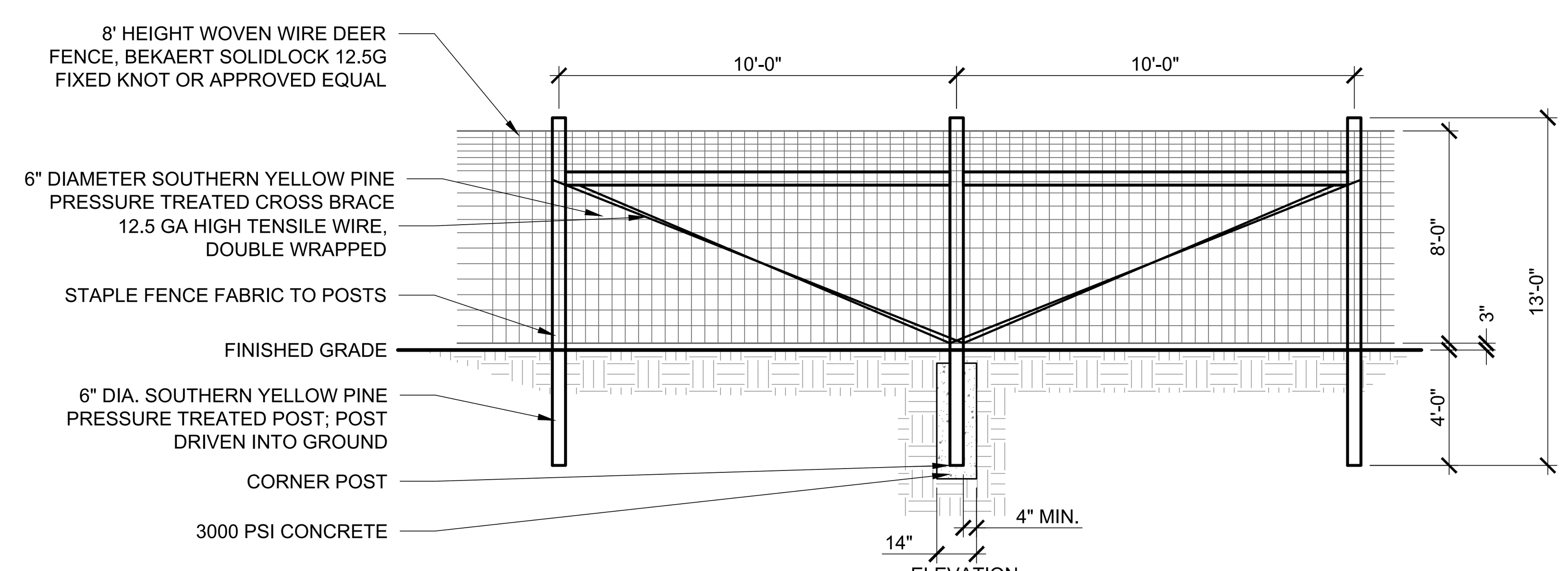


ENLARGEMENT
FENCE SPACING



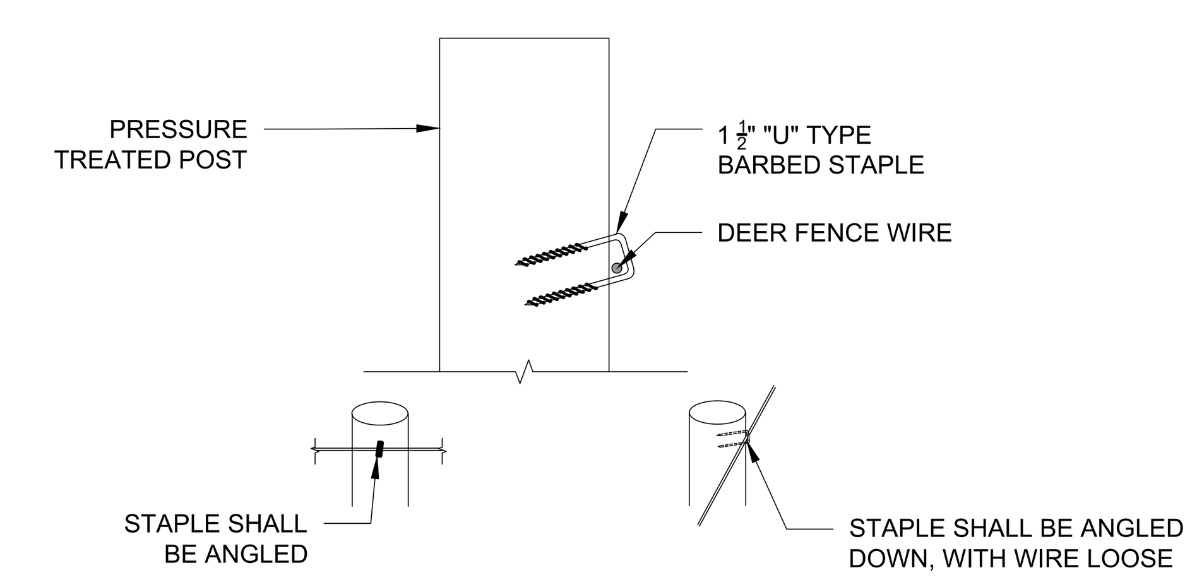
FENCE - LINE POST

Scale: N.T.S.



FENCE - CORNER POSTS

Scale: N.T.S.



TYPICAL STAPLING

Scale: N.T.S.

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3/15/2022

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CLIENT: Pivot Energy

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217 Montgomery Street, Suite 1100
Syracuse, New York 13202
P. 315.471.0688

PROJECT TITLE: **PIVOT SOLAR NY 6**

PROJECT LOCATION: TOWN OF TICONDEROGA, ESSEX COUNTY, NEW YORK

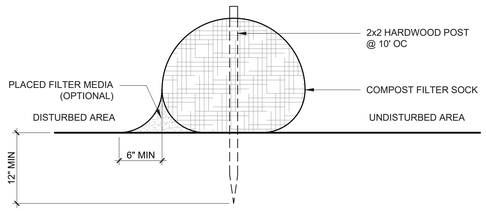
CLIENT: PIVOT ENERGY

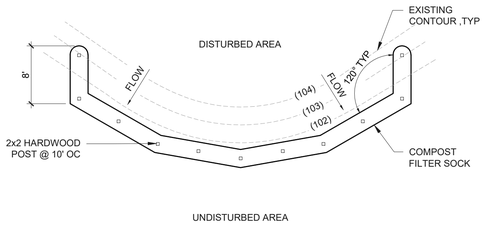
DRAWING TITLE: EROSION AND SEDIMENT CONTROL DETAILS

DRAWINGS ISSUED FOR / REVISIONS

NO.	DATE	ISSUED FOR / REVISION	BY	CHK	APP
1	12/22/2021	ISSUED FOR APA APPLICATION	ZR	TD	
2	02/18/2022	REVISED PER APA COMMENTS	MC	TD	
3	3/15/2022	REVISED PER APA COMMENTS	ZR	TD	
4					
5					
6					

EDR JOB#: 20204
DATE: DECEMBER 22, 2021
SCALE: NTS
DRAWN BY: ZR, MC
CHECKED BY: TD
DRAWING NUMBER: **C-601**





NOTE:

1. COMPOST FILTER SOCKS SHALL BE PLACED ON THE CONTOUR WITH BOTH TERMINAL ENDS OF THE SOCK EXTENDED 8 FEET UPSLOPE AT A 45° ANGLE TO PREVENT BYPASS FLOW.
2. DIAMETERS DESIGNED FOR USE SHALL BE 12"-32".
3. THE FLAT DIMENSION OF THE SOCK SHALL BE AT LEAST 1.5 TIMES THE NOMINAL DIAMETER.
4. THE MAXIMUM SLOPE LENGTH (IN FEET) ABOVE A COMPOST FILTER SOCK SHALL NOT EXCEED THE FOLLOWING LIMITS:

TABLE 1 - MAXIMUM SLOPE LENGTH ABOVE COMPOST FILTER SOCK (FEET)

DIA (IN)	SLOPE %						
	2	5	10	20	25	33	50
12	250	225	125	65	50	40	25
18	275	250	150	70	55	45	30
24	350	275	200	130	100	60	35
32	450	325	275	150	120	75	50

TABLE 2 - COMPOST FILTER MEDIA STANDARDS

ORGANIC MATTER CONTENT	25% - 100% DRY WEIGHT
ORGANIC PORTION	FIBROUS AND ELONGATED
pH	6.0 - 8.0
MOISTURE CONTENT	30% - 60%
PARTICLE SIZE	100% PASSING A 1" SCREEN AND 10-50% PASSING A 3/8" SCREEN
SOLUBLE SALT CONCENTRATION	5.0 dS/m (mmhos/cm) MAXIMUM

TABLE 3 - COMPOST SOCK FABRIC MINIMUM SPECIFICATIONS

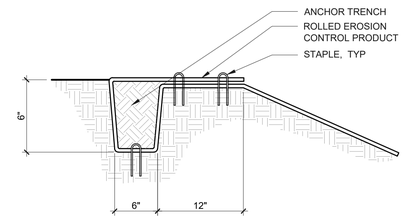
MATERIAL TYPE	3 MIL HDPE	5 MIL HDPE	5 MIL HDPE	MILTI-FILAMENT POLYPROPYLENE	HEAVY DUTY MILTI-FILAMENT POLYPROPYLENE
MATERIAL CHARACTERISTICS	PHOTODEGR AD-ABLE	PHOTODEGR AD-ABLE	BIODEGR AD-ABLE	PHOTODEGRAD-ABLE	PHOTODEGRAD-ABLE
SOCK DIAMETERS	12", 18"	12", 18", 24", 32"	12", 18", 24", 32"	12", 18", 24", 32"	12", 18", 24", 32"
MESH OPENING	3/8"	3/8"	3/8"	3/8"	1/8"
TENSILE STRENGTH		26 PSI	26 PSI	44 PSI	202 PSI
ULTRAVIOLET STABILITY % ORIGINAL STRENGTH (ASTM G-155)	23% AT 1000 HR.	23% AT 1000 HR.		100% AT 1000 HR.	100% AT 1000 HR.
MINIMUM FUNCTIONAL LONGEVITY	6 MONTHS	9 MONTHS	6 MONTHS	1 YEAR	2 YEARS

5. THE COMPOST INFILL SHALL BE WELL DECOMPOSED (MATURED AT LEAST 3 MONTHS), WEED-FREE, ORGANIC MATTER. IT SHALL BE AEROBICALLY COMPOSTED, POSSESS NO OBJECTIONABLE ODORS, AND CONTAIN LESS THAN 1%, BY DRY WEIGHT, OF MAN-MADE FOREIGN MATTER. THE PHYSICAL PARAMETERS OF THE COMPOST SHALL MEET THE STANDARDS LISTED IN TABLE 5.2-COMPOST FILTER MEDIA STANDARDS TABLE*. NOTE ALL BIOSOLIDS COMPOST PRODUCED IN NEW YORK STATE (OR APPROVED FOR IMPORTATION) MUST MEET NYS DEC'S 6 NYCRR PART 360 (SOLIDS WASTE MANAGEMENT FACILITIES) REQUIREMENTS. THE PART 360 REQUIREMENTS ARE EQUAL TO OR MORE STRINGENT THAN 40 CFR PART 503 WHICH ENSURE SAFE STANDARDS FOR PATHOGEN REDUCTION AND HEAVY METALS CONTENT. WHEN USING COMPOST FILTER SOCKS ADJACENT TO SURFACE WATER, THE COMPOST SHOULD HAVE A LOW NUTRIENT VALUE.
6. THE COMPOST FILTER SOCK FABRIC MATERIAL SHALL MEET THE MINIMUM SPECIFICATIONS GIVEN IN TABLE 5.3-COMPOST SOCK FABRIC MINIMUM SPECIFICATIONS TABLE*.
7. COMPOST FILTER SOCKS SHALL BE ANCHORED IN EARTH WITH 2x2 WOODEN STAKES DRIVEN 12" INTO THE SOIL ON 10 FOOT CENTER ON THE CENTERLINE OF THE SOCK. ON UNEVEN TERRAIN, EFFECTIVE GROUND CONTACT CAN BE ENHANCED BY THE PLACEMENT OF A FILLET OR FILTER MEDIA ON THE DISTURBED AREA SIDE OF THE COMPOST SOCK.
8. ALL SPECIFIC CONSTRUCTION DETAILS AND MATERIAL SPECIFICATIONS SHALL APPEAR ON THE EROSION AND SEDIMENT CONTROL CONSTRUCTIONS DRAWINGS WHEN COMPOST FILTER SOCKS ARE INCLUDED IN THE PLAN.

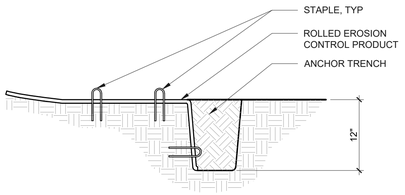
*TABLE FROM THE 2016 NYS STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL.

COMPOST FILTER SOCK

Scale: NTS TEMPORARY



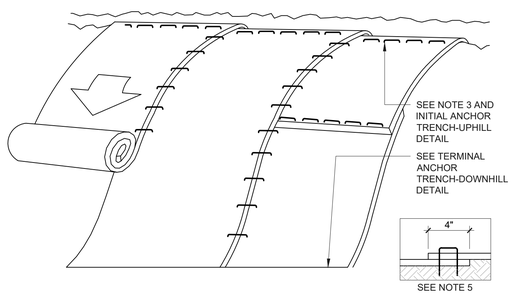
SECTION
INITIAL ANCHOR TRENCH-UPHILL



SECTION
TERMINAL ANCHOR TRENCH-DOWNHILL

ANCHOR TRENCH

Scale: NTS



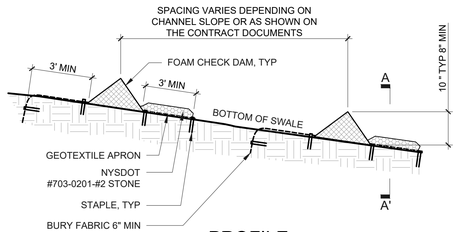
PERSPECTIVE VIEW

NOTES:

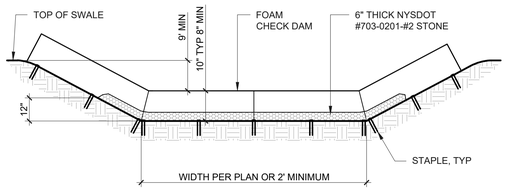
1. TURF REINFORCEMENT MAT (TRM) SHALL BE TENSAR NORTH AMERICAN GREEN P-300, OR APPROVED EQUAL.
2. ROLLED EROSION CONTROL PRODUCT (RECP) SHALL BE NORTH AMERICAN GREEN BIONET SC150BN OR APPROVED EQUAL.
3. PREPARE SOIL BEFORE INSTALLING TRM/RECP INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
4. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE TRM/RECP IN A TRENCH, AS SHOWN ON THE INITIAL ANCHOR TRENCH-UPHILL DETAIL. ANCHOR THE TRM/RECP WITH A ROW OF STAPLES APPROXIMATELY 12" APART IN THE BOTTOM OF TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF TRM/RECP BACK OVER THE SEED AND COMPACTED SOIL. SECURE TRM/RECP OVER COMPACTED SOIL WITH A ROW OF STAPLES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE ROLLED EROSION CONTROL PRODUCTS.
5. ROLL THE TRM/RECP DOWN THE SLOPE. TRM/RECP WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL TRM/RECP MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE PROVIDED BY MANUFACTURER.
6. THE EDGES OF PARALLEL TRM/RECP MUST BE STAPLED WITH 4" MINIMUM OVERLAP. OVERLAP PER MANUFACTURER'S INSTRUCTIONS.
7. CONSECUTIVE TRM/RECP SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH A 4" MINIMUM OVERLAP. STAPLE THROUGH OVERLAPPED AREA APPROXIMATELY 12" APART ACROSS ENTIRE TRM/RECP WIDTH. NOTE: IN LOOSE SOIL CONDITIONS THE USE OF STAPLE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE THE TRM/RECP.
8. REFER TO TERMINAL ANCHOR TRENCH-DOWNHILL DETAIL FOR TERMINAL ANCHOR TRENCH INSTALLATION.

SLOPE STABILIZATION

Scale: NTS TEMPORARY



PROFILE



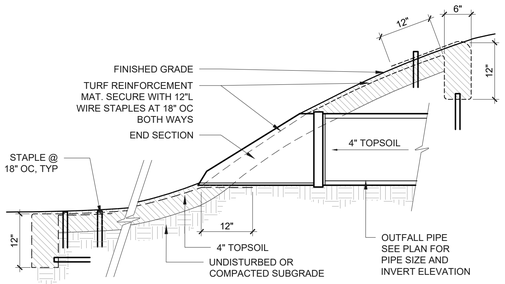
SECTION A-A'

NOTES:

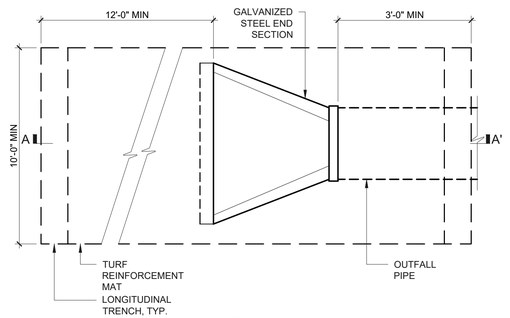
1. PREFABRICATED TEMPORARY CHECK DAMS SHALL BE EITHER URETHANE FOAM (CFC FREE) COVERED WITH GEOTEXITLE, TRIANGULAR SILT DIKE BY ACF, GEORDIGE BY NILEX OR EQUAL. INSTALL PER MANUFACTURER'S INSTRUCTIONS.
2. STAPLES SHALL BE PLACED WHERE UNITS OVERLAP AND A DIRECTED BY MANUFACTURERS INSTRUCTIONS.

PREFABRICATED CHECK DAM

Scale: NTS



SECTION A-A'



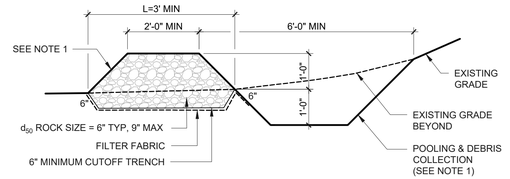
PLAN

NOTES:

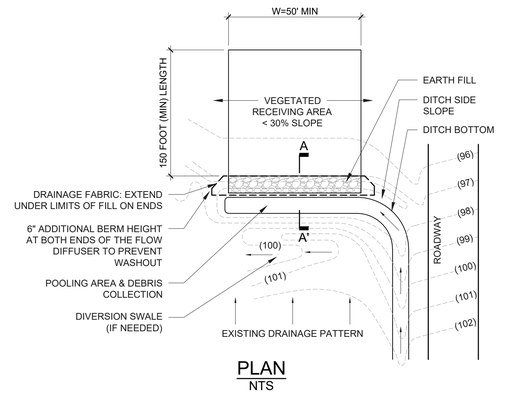
1. FINE GRADE SUBGRADE. SHALL BE UNIFORM AND SMOOTH. PLACE 4" OF TOPSOIL; INCORPORATE AMENDMENTS SUCH AS LIME AND FERTILIZER AND SEED.
2. TURF REINFORCEMENT MAT SHALL BE TENSAR NORTH AMERICAN GREEN P300 OR EQUAL.

TRM OUTLET PROTECTION

Scale: NTS



SECTION A-A'
NTS



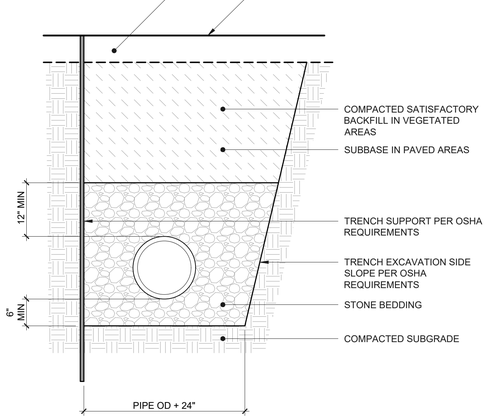
PLAN
NTS

NOTES:

1. ALL SIDE SLOPES SHALL BE 1H:1V OR FLATTER.

LEVEL SPREADER

Scale: NTS



PIPE TRENCH

Scale: NTS WITH STONE BEDDING

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4/12/2022

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CLIENT: Pivot Energy

EDR a better environment
Environmental Design & Research,
Landscape Architecture, Engineering & Environmental Services, D.P.C.
217 Montgomery Street, Suite 1100
Syracuse, New York 13202
P. 315.471.0688

PROJECT TITLE: **PIVOT SOLAR NY 6**

PROJECT LOCATION: **TOWN OF TICONDEROGA, ESSEX COUNTY, NEW YORK**

CLIENT: **PIVOT ENERGY**

DRAWING TITLE: **EROSION AND SEDIMENT CONTROL DETAILS**

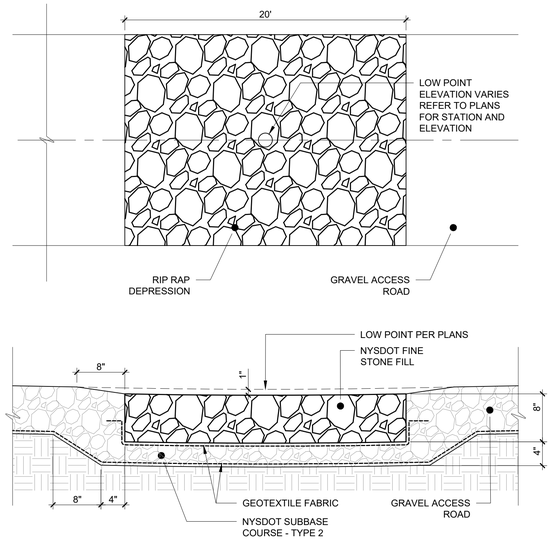
NEW YORK STATE OF OPPORTUNITY. Adirondack Park Agency
RECEIVED
Date: April 13, 2022

NEW YORK STATE OF OPPORTUNITY. Adirondack Park Agency
FINAL
P2021-0296

DRAWINGS ISSUED FOR / REVISIONS

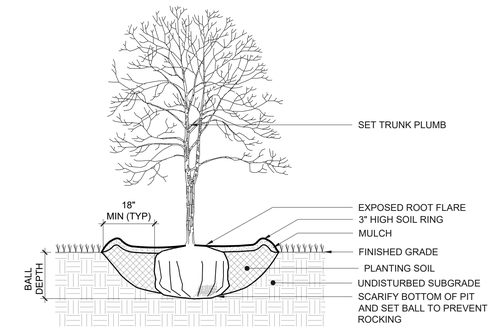
NO.	DATE	ISSUED FOR / REVISION	BY	CHK	APP
1	12/22/2021	ISSUED FOR APA APPLICATION	ZR	TD	
2	02/18/2022	REVISED PER APA COMMENTS	MC	TD	
3	3/15/2022	REVISED PER APA COMMENTS	ZR	TD	
4	4/12/2022	REVISED CULVERT OUTLET PROTECTION	ZR		
5					
6					

EDR JOB#: **20204**
DATE: **DECEMBER 22, 2021**
SCALE: **NTS**
DRAWN BY: **ZR, MC**
CHECKED BY: **TD**
DRAWING NUMBER: **C-602**



RIP RAP DEPRESSION

Scale: NTS

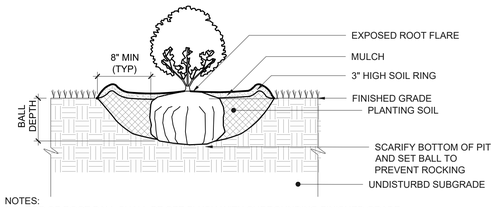


NOTES:

1. REMOVE BURLAP, ROPE, OR WIRE BASKET FROM TOP 1/3 OF BALL MINIMUM, CUT REMAINING PORTIONS OF ROPE OR WIRE BASKET ONCE PLANT IS IN THE FINAL POSITION IN PIT.
2. TOP OF ROOT BALL SHALL BE SET FLUSH WITH SURROUNDING FINISHED GRADE.

PLANTING - DECIDUOUS TREE

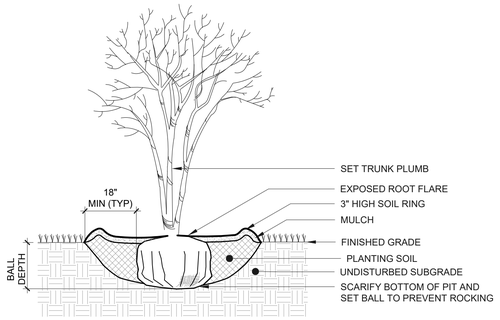
Scale: NTS



NOTES:
1. TOP OF ROOT BALL SHALL BE SET FLUSH WITH SURROUNDING FINISHED GRADE.
2. SET PLANTS PLUMB

PLANTING - SHRUB

Scale: NTS

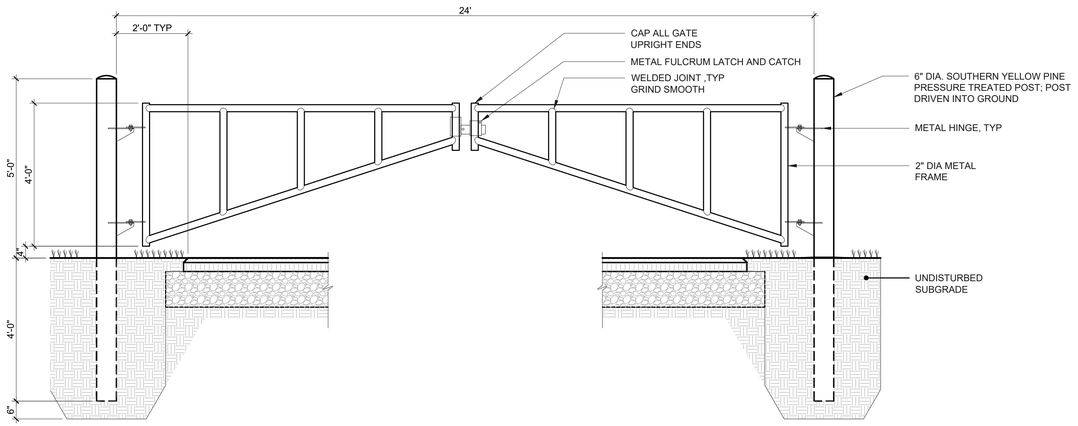


NOTES:

1. REMOVE BURLAP, ROPE, OR WIRE BASKET FROM TOP 1/3 OF BALL MINIMUM, CUT REMAINING PORTIONS OF ROPE OR WIRE BASKET ONCE PLANT IS IN THE FINAL POSITION IN PIT.
2. TOP OF ROOT BALL SHALL BE SET FLUSH WITH SURROUNDING FINISHED GRADE.

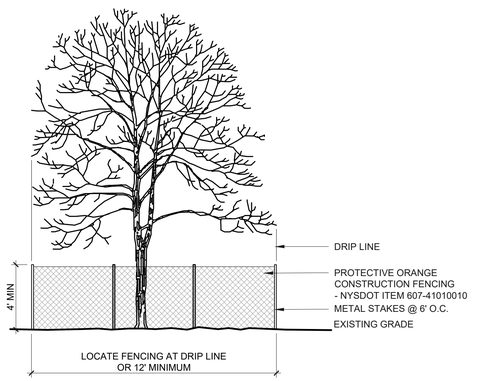
PLANTING - MULTI-STEM TREE

Scale: NTS



TEMPORARY SECURITY GATE

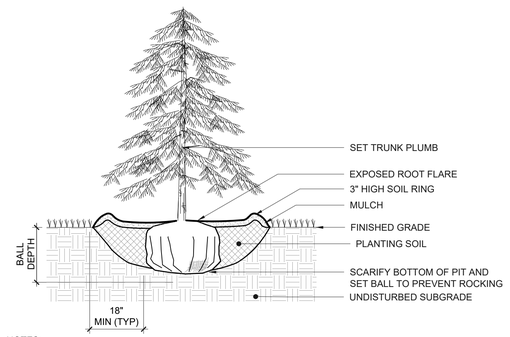
Scale: NTS



VEGETATION PROTECTION

Scale: NTS

TEMPORARY



NOTES:

1. REMOVE BURLAP, ROPE, OR WIRE BASKET FROM TOP 1/3 OF BALL MINIMUM, CUT REMAINING PORTIONS OF ROPE OR WIRE BASKET ONCE PLANT IS IN THE FINAL POSITION IN PIT.
2. TOP OF ROOT BALL SHALL BE SET FLUSH WITH SURROUNDING FINISHED GRADE.

PLANTING - EVERGREEN TREE

Scale: NTS

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3/15/2022

NOT FOR CONSTRUCTION

J:\20204 Ticonderoga Solar 2\Cad\Working Drawings\20204_C-600_SERIES.dwg

CLIENT: Pivot Energy

EDR a better environment
Environmental Design & Research,
Landscape Architecture, Engineering & Environmental Services, D.P.C.
217 Montgomery Street, Suite 1100
Syracuse, New York 13202
P. 315.471.0688

PROJECT TITLE: **PIVOT SOLAR NY 6**

PROJECT LOCATION: **TOWN OF TICONDEROGA, ESSEX COUNTY, NEW YORK**

CLIENT: **PIVOT ENERGY**

DRAWING TITLE: **EROSION AND SEDIMENT CONTROL DETAILS**

DRAWINGS ISSUED FOR / REVISIONS

NO.	DATE	ISSUED FOR / REVISION	BY	CHK	APP
1	12/22/2021	ISSUED FOR APA APPLICATION	ZR	TD	
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3	3/15/2022	REVISED PER APA COMMENTS	ZR	TD	
4					
5					
6					

EDR JOB#: **20204**

DATE: **DECEMBER 22, 2021**

SCALE: **NTS**

DRAWN BY: **ZR, MC**

CHECKED BY: **TD**

DRAWING NUMBER: **C-603**

Site maintenance is critical to ensure that an operational solar facility meets all conditions of operation. This document outlines the steps the operator will take to ensure the site is properly maintained during construction and throughout the operational life of the facility.

1) Weed and Vegetation Management

i) If construction occurs during growing season, Pivot will apply broadleaf herbicide prior to commencing construction as needed. Once construction is complete, Pivot will re-apply broadleaf herbicide if needed to allow planted native grass and pollinator seed mix to revegetate the site and establish the native plant community.

ii) Hydroseed or hydromulch a drought tolerant native grass and pollinator friendly seed mix in the early spring or early fall. Final seed mix will be determined by an approved professional knowledgeable with re-vegetation means and methods.

iii) Mow or graze project area a minimum of once per year, at a cut height of no less than six inches. It is likely that mowing or grazing may need to take place twice or more during the growing season to manage vegetation.

- Mowing will not be performed between May 1 and November 1 in any year
- Rotational grazing is typically employed with 3.5 to 4.0 mature ewes per acre (rounded up) to effectively manage vegetation for a full season which runs approximately May to November. Sheep may be on site for several days to two weeks depending on the fenced acreage and number of sheep. Sites will be grazed two to three times throughout the season with a targeted rest period of 42 days between grazes. The grazing manager will assess and tune site management variables such as number of sheep, duration of the grazing interval, and timing of grazing based on site specific conditions.

iv) Since weed seeds remain viable in the soil for number years, site and weed management is a long-term process. Treated areas will be monitored annually and re-treated if necessary, using typical weed management practices and procedures.

2) Planting Method

Preferred method will be hydroseed and hydromulching. If required, nutrient supplementation will take place to ensure the successful establishment of permanent ground cover. Permanent seeding shall occur as recommended by a vegetation specialist.

3) Temporary Seed Mix

Temporary seeding areas, which will be ready for stabilization after May 1 and before August 1, shall be seeded with Millet or Sorghum at the rate of 40 pounds per acre, with the amount of fertilizer as specified by a vegetation specialist. The requirement to plant temporary seeding does not eliminate the requirement to plant permanent seeding. Straw mulch is not required for temporary seeding.

4) Permanent Seed Mix

To consist of native, drought-tolerant, low growth grasses and flowering plants. The selected seed mix will support pollinators and grazing animals such as sheep. Final mix will be determined before planting by a qualified vegetation specialist. Ernst Fuzz & Buzz seed mix is anticipated to be utilized and offers the following species composition:

26.4% *Lolium perenn*e, 'Crave', Tetraploid (Perennial Ryegrass, 'Crave', Tetraploid)
20.8% *Dactylis glomerata*, 'Pennlate' (Orchardgrass, 'Pennlate')
18.9% *Poa pratensis*, 'Ginger' (Kentucky Bluegrass, 'Ginger' (Pasture Type))
17.0% *Festuca elatior,* (Meadow Fescue)
5.7% *Trifolium hybridum,* (Alsike Clover)
4.8% *Trifolium pratense*, Medium, Variety Not Stated (Red Clover, Medium)
2.0% *Lotus corniculatus*, 'Leo' (Bird's Foot Trefoil, 'Leo')
1.3% *Cichorium intybus,* (Blue Chicory)
1.0% *Chrysanthemum leucanthemum,* (Oxeye Daisy)
0.9% *Coreopsis lanceolata,* (Lanceleaf Coreopsis)
0.8% *Chamaecrista fasciculata*, Pa Ecotype (Partridge Pea, Pa Ecotype)
0.4% *Solidago nemoralis*, Pa Ecotype (Gray Goldenrod, Pa Ecotype)

5) Site Maintenance Checklist

i) Mow or graze project area once per year at a minimum to a cut height of approximately 6 inches.

ii) Walk the site and remove any accumulated debris on either side of the fence line and properly dispose. No burning of trash will be allowed.

iii) Apply herbicide as needed to control noxious weeds.

iv) Inspect and re-seed any bare ground with permanent seeding.

v) Inspect fence and repair as needed.

vi) Inspect all-weather access road and repair as needed.

vii) Inspect site for any visible erosion. Remove transported sediment and implementnecessary erosion control measures to minimize future maintenance issues.

viii) Inspect solar photovoltaic modules, racking, and balance of system; repair or replace as needed

ix) Inspect drainage and water management systems (e.g., culverts, ditches, etc.); repair as needed

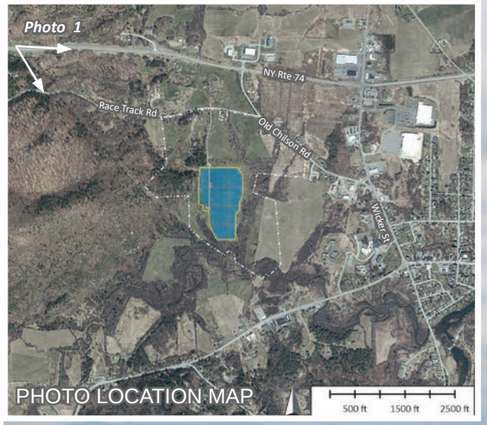

Photo 1
EXISTING CONDITION

SARATOGA ASSOCIATES

Photograph Information

Date:	September 17, 2021	Photo Location:	43° 51′ 39.6395″ N, 73° 27′ 51.2544″ W
Time:	12:45 am		
Focal Length:	35mm	Distance to Fence:	4,470 feet
Camera:	Canon EOS 6D Mark II		

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P2021-0296

NEW YORK STATE OF OPPORTUNITY. Adirondack Park Agency
RECEIVED
Date: April 1, 2022

Pivot Energy

Exhibit 1
PHOTO SIMULATIONS

Pivot Solar NY 6
Town of Ticonderoga, Essex County, NY 12883

Photo 1
SIMULATED CONDITION

SARATOGA ASSOCIATES

Photograph Information

Date:	September 17, 2021	Photo Location:	43° 51′ 39.6395″ N,
Time:	12:45 am		73° 27′ 51.2544″ W
Focal Length:	35mm	Distance to Fence:	4,470 feet
Camera:	Canon EOS 6D Mark II		

Pivot Energy

Exhibit 2
PHOTO SIMULATIONS

Pivot Solar NY 6
Town of Ticonderoga, Essex County, NY 12883

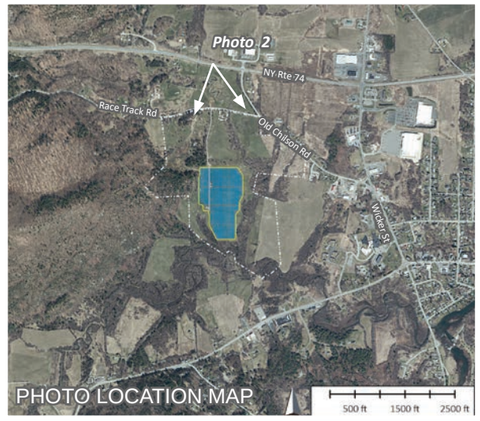

Photo 2
EXISTING CONDITION

SARATOGA ASSOCIATES

Photograph Information

Date:	September 17, 2021	Photo Location:	43° 51′ 35.7300″ N, 73° 26′ 57.1825″ W
Time:	12:54 pm		
Focal Length:	35mm	Distance to Fence:	2,170 feet
Camera:	Canon EOS 6D Mark II		

Pivot Energy

Exhibit 3
PHOTO SIMULATIONS

Pivot Solar NY 6
Town of Ticonderoga, Essex County, NY 12883

Photo 2
SIMULATED CONDITION

SARATOGA ASSOCIATES

Photograph Information

Date:	September 17, 2021	Photo Location:	43° 51′ 35.7300″ N, 73° 26′ 57.1825″ W
Time:	12:54 pm		
Focal Length:	35mm	Distance to Fence:	2,170 feet
Camera:	Canon EOS 6D Mark II		

Pivot Energy

Exhibit 4
PHOTO SIMULATIONS

Pivot Solar NY 6
Town of Ticonderoga, Essex County, NY 12883

Photo 3
EXISTING CONDITION

Photograph Information

Date:	September 17, 2021	Photo Location:	43° 51′ 26.6010″ N, 73° 26′ 57.8603″ W
Time:	1:03 pm		
Focal Length:	35mm	Distance to Fence:	1,230 feet
Camera:	Canon EOS 6D Mark II		

SARATOGA ASSOCIATES

Pivot Energy

Exhibit 5
PHOTO SIMULATIONS

Pivot Solar NY 6
Town of Ticonderoga, Essex County, NY 12883

Photo 3
SIMULATED CONDITION - LANDSCAPE MITIGATION 1 YEAR GROWTH

Photograph Information

Date:	September 17, 2021	Photo Location:	43° 51′ 26.6010″ N, 73° 26′ 57.8603″ W
Time:	1:03 pm		
Focal Length:	35mm	Distance to Fence:	1,230 feet
Camera:	Canon EOS 6D Mark II		

SARATOGA ASSOCIATES

Pivot Energy

Exhibit 6
PHOTO SIMULATIONS

Pivot Solar NY 6
Town of Ticonderoga, Essex County, NY 12883

Photo 3
SIMULATED CONDITION - LANDSCAPE MITIGATION 5 YEAR GROWTH

Photograph Information

Date:	September 17, 2021	Photo Location:	43° 51′ 26.6010″ N, 73° 26′ 57.8603″ W
Time:	1:03 pm		
Focal Length:	35mm	Distance to Fence:	1,230 feet
Camera:	Canon EOS 6D Mark II		

SARATOGA ASSOCIATES

Pivot Energy

Exhibit 7
PHOTO SIMULATIONS

Pivot Solar NY 6
Town of Ticonderoga, Essex County, NY 12883

Photo 3
SIMULATED CONDITION - LANDSCAPE MITIGATION 10 YEAR GROWTH

Photograph Information

Date:	September 17, 2021	Photo Location:	43° 51′ 26.6010″ N, 73° 26′ 57.8603″ W
Time:	1:03 pm		
Focal Length:	35mm	Distance to Fence:	1,230 feet
Camera:	Canon EOS 6D Mark II		

SARATOGA ASSOCIATES

Pivot Energy

Exhibit 8
PHOTO SIMULATIONS

Pivot Solar NY 6
Town of Ticonderoga, Essex County, NY 12883

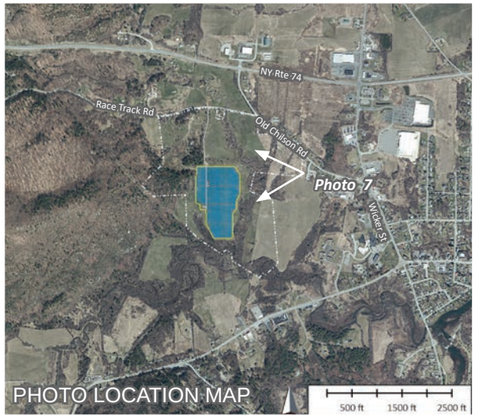

Photo 7
EXISTING CONDITION

SARATOGA ASSOCIATES

Photograph Information

Date:	September 17, 2021	Photo Location:	43° 51′ 12.4777″ N, 73° 26′ 31.3130″ W
Time:	1:19 pm		
Focal Length:	35mm	Distance to Fence:	1,300 feet
Camera:	Canon EOS 6D Mark II		

Pivot Energy

Exhibit 9
PHOTO SIMULATIONS

Pivot Solar NY 6
Town of Ticonderoga, Essex County, NY 12883

Photo 7
SIMULATED CONDITION - EARLY MORNING PANEL ORIENTATION

SARATOGA ASSOCIATES

Photograph Information

Date:	September 17, 2021	Photo Location:	43° 51′ 12.4777″ N, 73° 26′ 31.3130″ W
Time:	1:19 pm		
Focal Length:	35mm	Distance to Fence:	1,300 feet
Camera:	Canon EOS 6D Mark II		

Pivot Energy

Exhibit 10
PHOTO SIMULATIONS

Pivot Solar NY 6
Town of Ticonderoga, Essex County, NY 12883

Photo 7
SIMULATED CONDITION - LATE AFTERNOON PANEL ORIENTATION

SARATOGA ASSOCIATES

Photograph Information

Date:	September 17, 2021	Photo Location:	43° 51′ 12.4777″ N, 73° 26′ 31.3130″ W
Time:	1:19 pm		
Focal Length:	35mm	Distance to Fence:	1,300 feet
Camera:	Canon EOS 6D Mark II		

Pivot Energy

Exhibit 11
PHOTO SIMULATIONS

Pivot Solar NY 6
Town of Ticonderoga, Essex County, NY 12883

Photo 7
EXISTING CONDITION - LEAF OFF SEASON

Photograph Information

Date:	March 25, 2022	Photo Location:	43° 51′ 12.4777″ N, 73° 26′ 31.3130″ W
Time:	11:30 am		
Focal Length:	35mm	Distance to Fence:	1,300 feet
Camera:	Canon EOS 6D Mark II		

SARATOGA ASSOCIATES

Pivot Energy

Exhibit 12
PHOTO SIMULATIONS

Pivot Solar NY 6
Town of Ticonderoga, Essex County, NY 12883

Photo 7
SIMULATED CONDITION - LEAF OFF SEASON - EARLY MORNING PANEL ORIENTATION

Photograph Information

Date:	March 25, 2022	Photo Location:	43° 51′ 12.4777″ N,
Time:	11:30 am		73° 26′ 31.3130″ W
Focal Length:	35mm	Distance to Fence:	1,300 feet
Camera:	Canon EOS 6D Mark II		

SARATOGA ASSOCIATES

Pivot Energy

Exhibit 13
PHOTO SIMULATIONS

Pivot Solar NY 6
Town of Ticonderoga, Essex County, NY 12883

Photo 7
SIMULATED CONDITION - LEAF OFF SEASON - LATE AFTERNOON PANEL ORIENTATION

SARATOGA ASSOCIATES

Photograph Information

Date:	March 25, 2022	Photo Location:	43° 51′ 12.4777″ N,
Time:	11:30 am		73° 26′ 31.3130″ W
Focal Length:	35mm	Distance to Fence:	1,300 feet
Camera:	Canon EOS 6D Mark II		

Pivot Energy

Exhibit 14
PHOTO SIMULATIONS

Pivot Solar NY 6
Town of Ticonderoga, Essex County, NY 12883

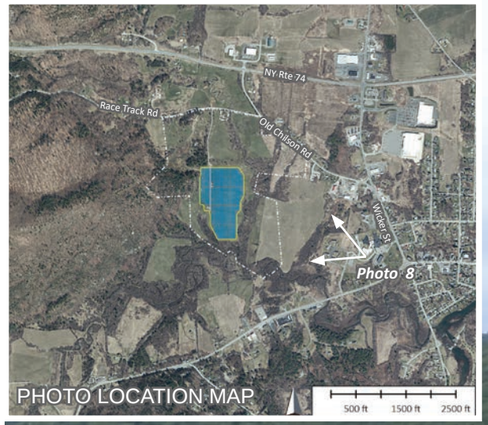

Photo 8
EXISTING CONDITION

SARATOGA ASSOCIATES

Photograph Information

Date:	September 17, 2021	Photo Location:	43° 50′ 54.8269″ N, 73° 26′ 15.5739″ W
Time:	1:45 pm		
Focal Length:	35mm	Distance to Fence:	1,800 feet
Camera:	Canon EOS 6D Mark II		

Pivot Energy

Exhibit 15
PHOTO SIMULATIONS

Pivot Solar NY 6
Town of Ticonderoga, Essex County, NY 12883

Photo 8
SIMULATED CONDITION - EARLY MORNING PANEL ORIENTATION

SARATOGA ASSOCIATES

Photograph Information

Date:	September 17, 2021	Photo Location:	43° 50’ 54.8269” N, 73° 26’ 15.5739” W
Time:	1:45 pm		
Focal Length:	35mm	Distance to Fence:	1,800 feet
Camera:	Canon EOS 6D Mark II		

Pivot Energy

Exhibit 16
PHOTO SIMULATIONS

Pivot Solar NY 6
Town of Ticonderoga, Essex County, NY 12883

Photo 8
SIMULATED CONDITION - LATE AFTERNOON PANEL ORIENTATION

SARATOGA ASSOCIATES

Photograph Information

Date:	September 17, 2021	Photo Location:	43° 50’ 54.8269” N, 73° 26’ 15.5739” W
Time:	1:45 pm		
Focal Length:	35mm	Distance to Fence:	1,800 feet
Camera:	Canon EOS 6D Mark II		

Pivot Energy

Exhibit 17
PHOTO SIMULATIONS

Pivot Solar NY 6
Town of Ticonderoga, Essex County, NY 12883

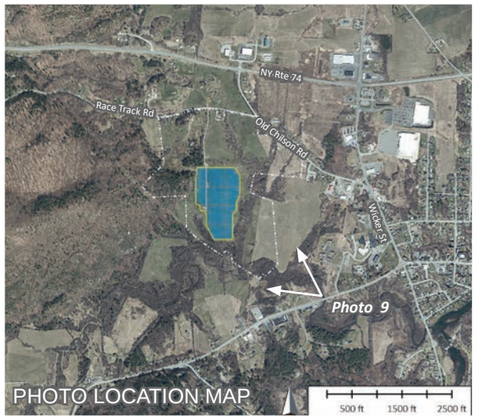

Photo 9
EXISTING CONDITION

SARATOGA ASSOCIATES

Photograph Information

Date:	September 17, 2021	Photo Location:	43° 50′ 46.5110″ N, 73° 26′ 26.8562″ W
Time:	1:53 pm		
Focal Length:	35mm	Distance to Fence:	1,360 feet
Camera:	Canon EOS 6D Mark II		

Pivot Energy

Exhibit 18
PHOTO SIMULATIONS

Pivot Solar NY 6
Town of Ticonderoga, Essex County, NY 12883

Photo 9
SIMULATED CONDITION

SARATOGA ASSOCIATES

Photograph Information

Date:	September 17, 2021	Photo Location:	43° 50’ 46.5110” N, 73° 26’ 26.8562” W
Time:	1:53 pm		
Focal Length:	35mm	Distance to Fence:	1,360 feet
Camera:	Canon EOS 6D Mark II		

Pivot Energy

Exhibit 19
PHOTO SIMULATIONS

Pivot Solar NY 6
Town of Ticonderoga, Essex County, NY 12883

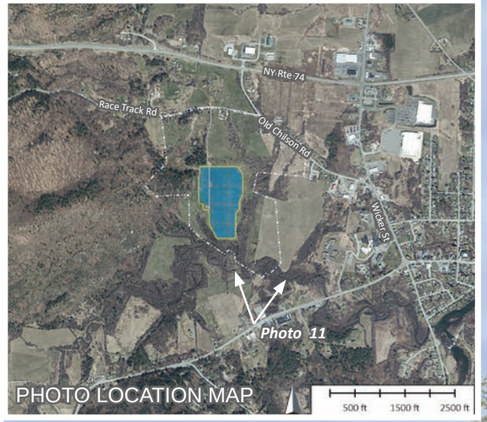

Photo 11
EXISTING CONDITION

SARATOGA ASSOCIATES

Photograph Information

Date:	September 29, 2021	Photo Location:	43° 50′ 40.7905″ N, 73° 26′ 47.2070″ W
Time:	10:27 am		
Focal Length:	35mm	Distance to Fence:	1,460 feet
Camera:	Canon EOS 6D Mark II		

Pivot Energy

Exhibit 20
PHOTO SIMULATIONS

Pivot Solar NY 6
Town of Ticonderoga, Essex County, NY 12883

Photo 11
SIMULATED CONDITION

SARATOGA ASSOCIATES

Photograph Information

Date:	September 29, 2021	Photo Location:	43° 50′ 40.7905″ N, 73° 26′ 47.2070″ W
Time:	10:27 am		
Focal Length:	35mm	Distance to Fence:	1,460 feet
Camera:	Canon EOS 6D Mark II		

Pivot Energy

Exhibit 21
PHOTO SIMULATIONS

Pivot Solar NY 6
Town of Ticonderoga, Essex County, NY 12883

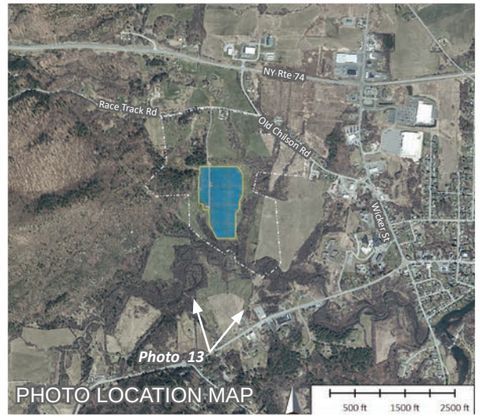

Photo 13
EXISTING CONDITION

SARATOGA ASSOCIATES

Photograph Information

Date:	September 17, 2021	Photo Location:	43° 50′ 35.2034″ N, 73° 26′ 59.2634″ W
Time:	2:16 pm		
Focal Length:	35mm	Distance to Fence:	2,320 feet
Camera:	Canon EOS 6D Mark II		

Pivot Energy

Exhibit 22
PHOTO SIMULATIONS

Pivot Solar NY 6
Town of Ticonderoga, Essex County, NY 12883

Photo 13
SIMULATED CONDITION

SARATOGA ASSOCIATES

Photograph Information

Date:	September 17, 2021	Photo Location:	43° 50′ 35.2034″ N, 73° 26′ 59.2634″ W
Time:	2:16 pm		
Focal Length:	35mm	Distance to Fence:	2,320 feet
Camera:	Canon EOS 6D Mark II		

Pivot Energy

Exhibit 23
PHOTO SIMULATIONS

Pivot Solar NY 6
Town of Ticonderoga, Essex County, NY 12883

Decommissioning Plan

Pivot Energy

Pivot Solar NY 6 – Decommissioning Plan

The Town of Ticonderoga Planning Board requires that Pivot Solar ("Pivot") submit a Decommissioning Plan as part of the Special Use Permit application for a Tier 3 Solar Energy System.

The useful life of the solar facility is anticipated to be at least 25-years. At the end of the project's useful life, Pivot will suspend operations and decommission the plant which will include any necessary demolition, removal of above and below ground equipment, and site reclamation efforts. Pivot's obligation under the Solar Lease Agreement is to return the site to the landowner in substantially the same condition that the property was in prior to the improvements being made.

This document establishes a detailed plan for decommissioning and reclamation activities once the project reaches the end of its useful life. The proposed activities will likely need to be refined periodically throughout the project's life to reflect future best practices of the solar industry.

The planning process will be initiated one to two years prior to the anticipated end of commercial operation. The final plans will be developed in consultation with the Ticonderoga Planning Board and code enforcement officer and any other applicable agencies that have jurisdiction of activities in the decommissioning process.

1. Decommissioning Project Elements and Milestones

The key tasks of project decommissioning are divided into related activities that represent milestones in the process. Each activity is described in further detail below. The decommissioning schedule reflects the conceptual timing of the milestones and overall process.

The individual project components to be decommissioned will either be 1) recycled or reused to the maximum extent practicable, or 2) removed from the site and disposed of at an appropriately licensed disposal facility. The general decommissioning approach will be the same whether a portion of or the entire Project is decommissioned.

The activities involved in the facility closure will depend on the expected future use of the site. Certain facility equipment and features may be left in place at the property owner's request, such as transmission facilities, roads, and drainage features. At the time of decommissioning, a plan will be submitted to the Planning Board proposing the equipment that will be removed and, if applicable, equipment that will remain, based on expected future use of the site.

Pre-closure activities include final closure and reclamation planning, which identifies measures to be taken to restore the site to near pre-construction conditions. This includes but is not limited to the following:

- Complete an analysis of the project materials and their composition to identify those specific components that may be recycled, re-used, scrapped, or sent to disposal sites; as well as identifying specific recycling facilities and disposal sites for materials.
- Coordinate with local officials to obtain permits and develop plans for the transportation of materials and equipment to and from the site.
- Develop final specifications for demolition and reclamation, which will serve as the basis for decommissioning the project and establish the scope of demolition and reclamation, including developing reclamation plans in compliance with local, state, and federal regulations.

Pivot Solar NY 6 – Decommissioning Plan

During the planning process Pivot will brief the Planning Board and other applicable agencies on the decommissioning process and plans. All necessary permits and approvals required for the decommissioning will be obtained prior to commencing operations.

The first step in the decommissioning process will be assessing existing site conditions and preparing the site for demolition. Site decommissioning and equipment removal is expected to take up to one year. Therefore, access roads, fencing, some electrical power, and other facilities will temporarily remain in place for use by the decommissioning workers until no longer needed. Demolition debris will be placed in temporary on-site storage areas pending final transportation and disposal and/or recycling according to the procedures listed below.

A plan will be implemented for de-energizing portions of the facility to allow safe decommissioning and formal lock out and tag out procedures. This will ensure all electrical components are placed and maintained in a safe condition for demolition activities prior to the start of work.

PV Module and Tracker Removal and Recycling

During decommissioning, project components that are no longer needed will be removed from the site and recycled, reused or disposed of at an appropriately licensed disposal facility. The first operation is to disconnect and remove modules from the tracker assemblies.

Next, the tracker and mounting structures, DC wiring materials, and combiner boxes will all be assembled and segregated for disposal or salvage. Steel piles that support the PV racking system will be removed and either reused or recycled to the maximum amount possible. Below ground portions of the supports will either be completely removed or cut off at least two feet below ground surface and left in place.

The demolition debris and removed equipment will be safely removed from the premises and transported to an appropriately licensed disposal facility or recycling center. Photovoltaic modules will either be reused, recycled or disposed of in accordance with applicable laws at the time of decommissioning.

Roads

On-site access roads will remain in place during the decommissioning process. The roads may remain intact after decommissioning if the property owner deems them beneficial for the future use of the site. Roads that will not be used after the solar project's decommissioning will be removed at the end of the process.

Fencing

Project site perimeter fencing will be removed at the end of the decommissioning project unless it may be utilized for future use of the site and the property owner requests the fence remain in place. This includes the removal of all posts, fencing material, gates, etc. to return the site to pre-project condition.

Transportation and Cleanup

During the disassembly and demolition process, materials will be segregated and temporarily placed in gathering areas for transportation. Various materials including, but not limited to, concrete, steel, aluminum, and copper will be temporarily stockpiled at or near a designated processing location pending transport to an appropriate offsite recycling facility. All such materials will then be transported from the site to approved designated facilities for recycling, scrapping or disposal. All metals will be recycled to the extent practical given the recycling options available at the time of decommissioning.

In general, the decommissioning will be undertaken using traditional heavy construction equipment including, but not limited to front end loaders, cranes, track mounted and rubber-tired excavators, bulldozers, and scrapers. Areas where excavation is required will be backfilled with natural material and compacted. Any voids left from the removal of foundations will be backfilled with surrounding subsoil and topsoil and fine graded to ensure suitable drainage and reclamation of natural grades.

Soil management and re-contouring operations will be conducted so as to minimize the surface area disturbance and implement the activities in the safest and most efficient manner and in accordance with applicable local requirements. Major earthwork is not anticipated as construction of the site will not alter the general grade across the site.

To account for post-decommissioning dust control, areas of exposed soils will be revegetated consistent with the expected future use of the site and State or County requirements. The native vegetation will be re-established to prevent the spread of weeds. Mulching or palliatives may be used for temporary dust control until vegetation is established.

Monitoring Site Restoration

Upon completion of the decommissioning process, a one-year restoration monitoring period will begin. Monitoring will ensure that grading and drainage implemented is successful in stabilizing water flow patterns and that the cover vegetation (native vegetation or other depending on land use) will be reestablished to prevent the spread of weeds. Corrective actions will be implemented if such monitoring determines adverse conditions are present as a result of an inadequate restoration.

STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

Pivot Solar NY 6

Pivot Energy

Essex County

Town of Ticonderoga, New York

Revised February 2022

EDR Project No. 20204

NEW YORK STATE OF OPPORTUNITY. Adirondack Park Agency

RECEIVED

Date: February 22, 2022

NEW YORK STATE OF OPPORTUNITY. Adirondack Park Agency

FINAL

P2021-0296

FOR MUNICIPAL REVIEW
NOT FOR CONSTRUCTION

Prepared by:

EDR

Environmental Design & Research,
Landscape Architecture, Engineering & Environmental Services, D.P.C.
217 Montgomery Street, Suite 1100
Syracuse, New York 13202
P: 315.471.0688
www.edrdpc.com

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C-000 Key Plan
C-001 Existing Conditions Plan
C-002 Existing Conditions Plan
C-101 Site Layout Plan
C-102 Site Layout Plan
C-201 Grading and ESC Plan
C-202 Grading and ESC Plan
C-401 Planting Plan
C-601 Details
C-602 Details
C-603 Details

1. DEFINITIONS & ACRONYMS

DEFINITIONS

Commencement of Construction: the initial disturbance of soils associated with clearing, grading, or excavation activities, or other construction activities that disturb or expose soils such as demolition or stockpiling of fill material.

Discharge(s): any addition of pollutant to waters of the State through an outlet or point source.

Final Stabilization: all soil disturbance activities at the site have ceased, and uniform perennial vegetative cover with a density of 80 percent over the entire pervious surface has been established or equivalent stabilization measures such as permanent landscape mulches, rock rip-rap or washed/crushed stone have been applied on all disturbed areas that are not covered by permanent structures, concrete, or pavement.

Qualified Inspector: a person that is knowledgeable in the principles and practices of erosion and sediment control. Qualified Inspectors include:

- A person with one of the following credentials: a Licensed Professional Engineer, Certified Professional in Erosion and Sediment Control (CPESC), or a Registered Landscape Architect
- A person working under the direct supervision of, and at the same company as, the Licensed Professional Engineer or Registered Landscape Architect, provided that person has training in the principles and practices of erosion and sediment control (i.e. the individual has received 4 hours of NYSDEC endorsed training in proper erosion and sediment control within the prior 3 years).

Trained Contractor: an employee from a contracting (construction) firm that has received 4 hours of NYSDEC endorsed training from a Soil and Water Conservation District (or other NYSDEC endorsed entity), in proper erosion and sediment control principles no later than 2 years from the date this general permit is issued. After receiving the initial training, the trained individual shall receive 4 hours of training every 3 years.

Temporarily Ceased: an existing disturbed area that will not be disturbed again within 14 calendar days of the previous soil disturbance.

Temporary Stabilization: when exposed soil has been covered with materials to prevent the exposed soil from eroding as set forth in the NYS Standards and Specifications for Erosion and Sediment Control. Examples of materials include mulch, seed and mulch, and rolled erosion control products.

ACRONYMS

DOW: Department of Water

NOI: Notice of Intent

NOT: Notice of Termination

NYSDEC: New York State Department of Environmental Conservation

SWPPP: Stormwater Pollution Prevention Plan

2. INTRODUCTION AND REGULATORY REQUIREMENTS

This Stormwater Pollution Prevention Plan (SWPPP) has been prepared by Environmental Design & Research, Landscape Architecture, Engineering & Environmental Services, D.P.C. (EDR), referred to as the Engineer, to provide instruction on appropriate construction management practices that will guide **Pivot Solar**, referred to as the Owner, in its field activities and operations to minimize the discharge of pollutants in stormwater runoff and protect water quality during and after construction activities.

ALL PERSONNEL ENGAGED IN **PIVOT SOLAR NY 6** CONSTRUCTION ACTIVITIES SHALL ABIDE BY THIS SWPPP.

This SWPPP is a requirement of New York State Department of Environmental Conservation (NYSDEC) State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activities, Permit No. GP-0-20-001 (General Permit), effective January 29, 2020 with an expiration date of January 28, 2025. The General Permit authorizes stormwater discharges to surface waters of the State from construction related activities. The contents of this SWPPP discuss and describe the requirements of this permit.

The SWPPP will be kept at the project site and made available for review by applicable regulatory agencies, the Engineer, and contractors. Regulatory agencies that have jurisdiction over the project site may elect to review this SWPPP and, if necessary, may notify the Owner that modifications to the SWPPP or site conditions are required.

The NOI, SWPPP, and inspection reports must be made available for public review by the Owner**.** The Owner shall produce copies of these documents for any person within 5 business days of the receipt of a written request. The requester is responsible for copying costs.

The General Permit requires that a review of the project be completed to determine whether stormwater discharge or construction activities affect a property that is an historic or archaeological resource listed or eligible for listing on the State or National Register of Historic Places. Further, the General Permit requires that a review of the project be completed to determine whether construction activities or discharges from construction activities may adversely affect an endangered or threatened species. Documentation of this review is included in Appendix D – State Historic Preservation Office (SHPO) and Endangered and Threatened Species (E & T) documentation.

The Owner shall retain the following documents for a period of at least 5 years from the date that the site achieves final stabilization:

- The SWPPP including:
  - NOI
  - NOI acknowledgement letter
  - Contractor Certification(s)
  - NOT
- Stormwater Construction Site Inspection Reports
- Contract Documents including Construction Drawings and Technical Specifications
- Correspondence (from NYSDEC, town, engineer, etc.) regarding stormwater management

3. PERMIT COVERAGE

The erosion and sedimentation control devices included in this SWPPP were selected to minimize the discharge of pollutants and to assist in the prevention of a violation of the water quality standards as discussed in the General Permit under Section 1.B for Effluent Limitations Applicable to Discharges from Construction Activities. Additionally, as required in Section C of the General Permit, the post-construction stormwater management practices included in this SWPPP were selected and designed to meet the performance criteria in the 2015 New York State Stormwater Management Design Manual. The SWPPP for the project has been prepared with no deviations from the 2016 New York State Standards and Specifications for Erosion and Sediment Control or the 2015 New York State Stormwater Management Design Manual. Construction related stormwater discharges from the project site will be authorized 5 business days from the date the complete electronic NOI is received by the NYSDEC, or 10 business days from the date the paper NOI is received by the NYSDEC (Appendix A).

4. SWPPP REVISION REQUIREMENTS

The Owner or the Contractors shall amend this SWPPP when modifications to the design, construction, operator, or maintenance of the project could affect the potential for discharge of pollutants in stormwater runoff. Scenarios where amendments are required include, but are not limited to, the following:

- The currently installed erosion and sediment control practices are ineffective in minimizing pollutants in stormwater discharges.
- An additional Contractor will be implementing the stormwater management and/or erosion and sediment control facilities and must complete the contractor certification.
- Issues are identified by qualified inspector, a NYSDEC representative, or other regulatory authority that require a modification.

The Contractor is responsible for the installation of all erosion and sediment control devices as specified in this SWPPP.

If changes in site conditions occur as a result of the workmanship or actions of the Contractor, time of year, and/or weather conditions, the Contractor will be responsible for revising the SWPPP Documents, implementing all SWPPP revisions, and installing all additional or revised stormwater management and erosion and sediment control devices at their own cost. All SWPPP revisions will be completed within 7 days of receiving notification that revisions are necessary. Revisions shall be reviewed and accepted by the Owner and the Engineer prior to implementation.

If existing site conditions observed by the Contractor are different than what is shown in the SWPPP documents, the Contractor shall report in writing all discrepancies to the Owner prior to any site disturbance. The Owner shall review the documented discrepancies and provide in writing acceptance or denial of discrepancies to the Contractor. When the Owner provides written acceptance of any agreed upon discrepancies prior to any site disturbance, the Owner shall revise the SWPPP Document and provide it to the Contractor within 3 days. The Contractor shall review the revised SWPPP within 3 days of receipt, and document in writing any changes to the negotiated contract. After acceptance by the Owner**,** the Contractor shall be responsible for full implementation of the revised SWPPP's stormwater management and erosion and sediment control practices. All SWPPP revisions will be completed within 7 days of receiving notification to proceed with the revisions.

All SWPPP revisions must be marked with the revision date and distributed by the Owner or the Contractors to the involved parties (i.e., subcontractors, Engineer, and municipality).

5. SITE INFORMATION

5.1 SITE & PROJECT DESCRIPTION

The Owner is constructing a 5 MW AC Photovoltaic Solar Panel Array on one parcel totaling 180.5 acres on Old Chilson Road in the Town of Ticonderoga. Proposed project features include the construction of:

- 2,300-lf of gravel road to facilitate access to the site from the South Side of Old Chilson Road.
- 4,450-lf of fence to enclose the approximately 21.2 acres of PV Solar Panel Array.
- An underground electrical collection system.
- 1,650 LF of underground electric transmission line from the transformer to the pole farm adjacent to Old Chilson Road.
- 525 LF of overhead transmission line from the pole farm to the connection with the public utility on the north side of Old Chilson Road.

The soils information for this site is given in Appendix C.

Stormwater from the site discharges into Chilson and Trout Brooks.

5.2 SITE LOCATION AND OWNER/OPERATOR CONTACT INFORMATION

Contact information for the site is as follows:

Owner/Operator:	**Pivot Energy**
Contact:	Gordon Woodcock
Address:	1750 15th St., Suite 400 Denver, CO 80202
Telephone:	607-793-8256
Email:	gwoodcock@pivotenergy.net

5.3 CONTRACT DOCUMENTS

The Contract Documents include Site Plan Drawings as listed in the Table of Contents and this SWPPP.

6. SWPPP CONSTRUCTION REQUIREMENTS

6.1 PRE-CONSTRUCTION REQUIREMENTS

Prior to construction, the Owner shall have the Contractors and subcontractors identify at least 1 person from their company who meets the requirements of a Trained Contractor. This person will be responsible for the implementation of the SWPPP and the inspection of the erosion and sediment controls in accordance with the New York Standards and Specifications for Erosion & Sediment Controls. The Owner's Representative shall ensure that at least 1 Trained Contractor is on-site daily when soil disturbance activities are being performed. The Trained Contractor shall inspect the site's erosion and sediment control practices daily to ensure these facilities are operational.

Pre-construction requirements to be followed by the Owner and Contractors prior to the commencement of any construction activities are described in Appendix E.

6.2 CONSTRUCTION REQUIREMENTS

Construction activity will not disturb greater than 5 acres of soil at any one time without prior written permission of the Owner's Representative and the DOW SPDES program contact at the regional NYDEC office.

6.2a Over 5 Acres of Disturbance

To obtain approval from the regional NYSDEC office, the Owner is required to submit a written request to DOW SPDES program contact at the regional NYSDEC office that contains the following information:

- A phasing plan that defines:
  - The maximum disturbed area per phase,
  - The required cuts and fills,
  - Any additional erosion and sediment control measures that will be implemented, and
  - Identification of additional water quality treatment practices to be installed.
- An explanation of why the 5-acre disturbance limit must be exceeded.
- Acknowledgement that a qualified inspector will conduct at least 2 site inspections every 7 days. The inspections must be separated by a minimum of 2 calendar days.
- Acknowledgement that where soil disturbance activity has been temporarily or permanently ceased, temporary and/or permanent soil stabilization measures, in conformance with the New York State Standards and Specifications for Erosion and Sediment Control, shall be installed within 7 days of the date the soil disturbance activity ceased.
- Acknowledgement that the Owner/Operator shall install any additional practices to protect water quality as necessary based on site conditions.

If the current site disturbance is reduced to less than 5 acres, then the inspection frequency can be reduced to the required frequency as identified in Section 6.2c. The Owner shall notify the DOW SPDES program contact at the regional NYSDEC office in writing prior to reducing the frequency of inspections.

6.2b Construction Sequence

The Contractors shall install erosion and sediment control practices downstream of the project area, prior to disturbance, to prevent sediment transport to offsite areas. General Construction Sequence includes:

- Install temporary stabilized construction entrance.
- Establish limits of site disturbance, including site clearing, stockpiled soil and access roads.
- Install silt fence, and all other necessary erosion and sediment control practices, prior to up-gradient soil disturbances.
- Clear and grub project limits.
- Strip topsoil and create stabilized stockpile onsite.
- Construct permanent and temporary access roads.
- Establish rough grade for site and stormwater management practices.
- Construct temporary staging areas.
- Construct equipment pads.
- Install solar panels and fence.
- Remove temporary work areas and staging areas.
- Complete Soil Restoration per Section 5.1.6 of the Design Manual on all disturbed areas that will be vegetated in their final states.
- Complete fine grading.
- Apply permanent seed and mulch.
- Install remainder of planting and seed any remaining disturbed areas.
- When site has reached final stabilization, remove temporary erosion and sediment control measures.

6.2c Construction Site Inspection

The Owner will be responsible for providing a Qualified Inspector to inspect erosion and sediment control practices, post-construction stormwater management practices that are under construction, disturbed areas, and all points of discharge from the construction site.

Specifically, the Qualified Inspector shall:

- Inspect all erosion and sediment control practices to ensure integrity and effectiveness.
- Verify that erosion and sediment control practices required by the SWPPP and the General Permit have been installed as appropriate for the phase of work and conditions at the site.
- Ensure that post-construction stormwater management practices are installed in accordance with the SWPPP.
- Inspect all areas of disturbance that have not achieved final stabilization.
- Observe all points of discharge from the site, including natural surface waterbodies located within or immediately adjacent to the construction site, conveyance systems, and overland flow.
- Provide the certifications required for the NOT.

The Qualified Inspector shall also take digital photographs, with date-stamp, that clearly show the conditions of erosion and sediment control practices and stormwater management practices that have been identified as needing corrective actions and of practices that have had corrective actions since the last inspection. These photographs shall be attached to the inspection from within 7 calendar days of the inspection.

If corrective actions are needed, the Qualified Inspector must notify the Owner and the appropriate Contractor within 1 business day of completing the inspection. The Contractor shall begin implementing the corrective action within 1 business day of receiving notification and complete it within 7 calendar days following the date of the inspection. Additional mitigation measures are to be implemented by the Contractors if necessary due to site conditions to minimize sediment transport or discharge of sediment laden runoff off-site.

The Qualified Inspector shall complete an inspection at least once every 7 calendar days. If authorization to disturb greater 5 acres of soil at one time is received, the qualified inspector shall conduct at least 2 site inspections every 7 calendar days. There shall be a minimum of 2 full calendar days between inspections. An Inspection Report form for conducting the inspections is included in Appendix F. Completed Inspection Reports are to remain on file at the site in Appendix F.

Temporary Construction Shutdown
If soil disturbing activities have been temporarily suspended, such as for winter shutdown, and temporary stabilization measures have been applied to all disturbed areas, the Owner may reduce inspections to a minimum of 1 inspection every 30 calendar days. The Owner shall notify the DOW SPDES program contact at the NYSDEC Regional Office in writing prior to reducing the frequency of inspections. The Owner shall resume inspections in accordance with this section as soon as soil disturbance activities resume.

Final Site Inspection
The Qualified Inspector shall perform a final inspection of the site to certify that:

- All disturbed areas have achieved final stabilization.
- Temporary erosion and sediment control practices have been removed.
- Post-construction stormwater management practices have been constructed in conformance with the SWPPP.

Prior to certification, at their own cost, the Contractors shall supply as-built topographic surveys of all post-construction stormwater management practices to document that the stage/storage relationship has been met. As-builts shall also show rims, inverts, orifices, pipe sizes and elevations, etc. Upon satisfactory completion of the final site inspection, the Qualified Inspector shall provide the certifications required to file the NOT form provided in Appendix I.

6.2d Authorized Non-Stormwater Discharges

Discharges from the following sources are authorized provided that they are directed to a sediment trapping device:

- Clean wash water (does not contain soaps, detergents or solvents) from cleaning construction vehicles and equipment
- Site dewatering (ground water) from pits, excavations, and trenches

Sediment trapping devices shall be designed and located by the Contractor and approved by the Owner and the Engineer prior to installation.

If clean, potable water is discharged from the site for any reason, it shall be directed over a grassed area prior to reaching off-site areas. Potable water shall not be discharged directly to a natural waterbody or watercourse.

Water used for dust control shall be applied using appropriate quantities and methods. No chemicals, soaps, detergents, etc., shall be used.

6.2e Prohibited Non-Stormwater Discharges

The following discharges are prohibited:

- Wastewater from washout and cleanout of concrete, stucco, paint, form release oils, curing compounds, and other construction materials*
- Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance
- Soaps or solvents used in vehicle and equipment washing
- Toxic or hazardous substances from a spill or other release

*It is a requirement of this SWPPP that these materials be washed out into a containment area or tank on site. All waste material must be disposed of off-site in accordance with Federal, State, and local requirements.

6.2f Maintaining Surface Water Quality

It is expected that compliance with this SWPPP and the General Permit will prevent discharges of pollutants which would cause or contribute to a violation of the surface water quality standards contained in Parts 700 through 705 of Title 6 of Official Compilation of Codes, Rules and Regulations of the State of New York. Potential violations include:

- An increase in turbidity that will cause substantial visible contrast to natural conditions
- An increase of suspended, colloidal or settleable solids that will cause deposition or impair surface waters for their best usages
- A residue from oil and floating substances, visible oil film, or globules of grease

If there is evidence indicating that the stormwater discharges authorized by the General Permit are causing, have reasonable potential to cause, or are contributing to a violation of surface water quality standards, the Owner or Operator must take appropriate corrective action within 1 business day. The corrective action must be documented in the next SWPPP inspection report. To address the surface water quality standard violation, the Owner or Operator may need to provide additional information, include and implement appropriate controls from this SWPPP to correct the problem, or obtain an individual SPDES Permit.

6.2g – Chemical and Oil Management

Secondary containment for oil containers shall be provided. If total oil storage on-site exceeds a cumulative total of 1,320-gallons, a spill prevention control and countermeasure (SPCC) plan is to be prepared by the Contractors and maintained on-site.

Spills of petroleum products, chemicals and other hazardous materials shall be reported in accordance with State, Federal, and local regulations. If a spill occurs at the site during construction, the Contractors shall contact the NYSDEC Spill Hotline (1-800-457-7362). The following material management practices are to be used by the Contractors to reduce the risk of spills or other accidental exposure of pollutants to stormwater runoff during construction:

- Products including, but not limited to, building materials, building products, construction waste, trash, landscaping materials, fertilizers, pesticides, herbicides, detergents, and sanitary waste shall be stored under a roof or other cover.
- Products shall be securely stored in their original containers, or as recommended by the manufacturer, and labeled appropriately.
- The amount of product stored on site will be appropriate for usage on the site. Do not bring excessive quantities to the site for storage.
- Whenever practical, products are to be used up or containers resealed before proper disposal of contents and containers off-site.
- Substances are not to be mixed with one another unless recommended by the manufacturer.
- Surplus product and empty containers are to be disposed of in accordance with manufacturers' recommendations and applicable regulations and/or permit conditions. Do not discharge any substances into the storm sewer.
- On-site vehicles are to be monitored for leaks and receive regular preventative maintenance to reduce the chance of the leakage of petroleum products. Petroleum products are to be stored in closed containers that are clearly labeled.
- Used oils are to be disposed of properly.

In addition to the material management practices discussed above, the following practices are to be followed by the Contractors for spill preparedness and cleanup.

- Spills are to be reported and cleaned up immediately after discovery.
- Manufacturers' recommended methods for spill cleanup are to be followed in the case of a spill, including the use of appropriate Personal Protective Equipment (PPE). Material Safety Data Sheets (MSDS) for materials at the site provide information on spill cleanup and should be stored in the project office or other accessible location.
- Materials and equipment necessary for spill cleanup are to be kept in designated material storage areas onsite. Spill response materials are to include items such as brooms, dust pans, mops, rags, gloves, goggles, spill control materials, sand, sawdust, disposal containers specifically for spill cleanup, and other response materials dependent on the materials stored at the site.
- If a spill does occur at the site, a spill report is to be completed by the Contractor in accordance with NYSDEC requirements and filed with this SWPPP.

6.3 POST-CONSTRUCTION MAINTENANCE REQUIREMENTS

An NOT shall be filed with the NYSDEC when the project is permanently stabilized. The NOT requires certification from the Qualified Inspector that the site has been stabilized and that all post-construction practices have been constructed in conformance with the SWPPP. The Owner will be the ultimate owner of the stormwater facilities and are required to have a maintenance plan in place. Post-construction maintenance and inspection checklists have been included in Appendix G for reference. Prior to submitting the NOT, the Owner must ensure that the post-construction stormwater management practices and any right-of-ways needed to maintain such practices have been deeded to the municipality.

7. STORMWATER MANAGEMENT DURING CONSTRUCTION

Anticipated locations for the erosion and sediment control practices are shown on the Construction Drawings. These practices, and any practices added due to conditions at the site, are to be installed and maintained in accordance with the New York State Standards and Specifications for Erosion and Sediment Control (NYSDEC 2016).

The Contractor is to provide a construction stabilization schedule (see Appendix E) to detail when construction activities are anticipated to start and when areas will be stabilized. This record is to become part of this SWPPP as Appendix E.

7.1 EROSION AND SEDIMENT CONTROLS

Proposed erosion and sediment control practices were designed in accordance with the following documents:

- New York State Standards and Specifications for Erosion and Sediment Control (NYSDEC 2016)
- New York State Stormwater Management Design Manual (the Design Manual) NYSDEC (June 2015)
- NYSDEC State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activity (Permit No. GP-0-20-001) (effective date January 29, 2020)

The erosion and sediment control practices are identified in the Contract Documents and must be installed and maintained to meet the requirements of the SWPPP.

Practices that must be directed to a temporary sediment trapping device that was not identified in the Contract Drawings shall be designed by the Contractor. Prior to installing these practices, the Contractor shall provide a detail and proposed location of the sediment trap to be approved by the Owner prior to installation.

Structural erosion and sediment control practices should generally be inspected weekly by a Qualified Inspector and after storms by the Trained Contractor.

7.2 STABILIZATION PRACTICES

7.2a Warm Weather Stabilization Practices

Stabilization practices must follow the guidelines specified in the 2016 New York State Standards and Specifications for Erosion and Sediment. For portions of the site where soil disturbance activities have temporarily or permanently ceased, stabilization measures must be initiated by the end of the next business day and completed within 14 days of the date the most recent soil disturbance activity ceased, or within 7 days if the current project disturbance is 5 acres or greater.

7.2b Winter Stabilization Practices

The following stabilization practices, per the 2016 New York State Standards and Specifications for Erosion and Sediment, will be employed by the contractor for any construction activities with ongoing land disturbance and exposure between November 15th to the following April 1st:

The Contractor shall:

- Prepare a snow management plan with adequate storage for snow and control of melt water, requiring cleared snow to be stored in a manner not affecting ongoing construction activities.
- Enlarge and stabilize access points to provide for snow management and stockpiling. Snow management activities must not destroy or degrade installed erosion and sediment control practices.
- A minimum 25-foot buffer shall be maintained from all perimeter controls such as silt fence. Mark silt fence with tall stakes that are visible above the snow pack.
- Edges of disturbed areas that drain to a waterbody within 100 feet will have 2 rows of silt fence, 5 feet apart, installed on the contour.
- Drainage structures must be kept open and free of snow and ice dams. All debris, ice dams, or debris from plowing operations, that restrict the flow of runoff and meltwater, shall be removed.
- Sediment barriers must be installed at all appropriate perimeter and sensitive locations. Silt fence and other practices requiring earth disturbance must be installed before the ground freezes.
- Soil stockpiles must be protected by the use of established vegetation, anchored straw mulch, rolled stabilization matting, or other durable covering. A barrier must be installed at least 15 feet from the toe of the stockpile to prevent soil migration and to capture loose soil.
- In areas where soil disturbance activity has temporarily or permanently ceased, the application of soil stabilization measures should be initiated by the end of the next business day and completed within 3 days. Rolled erosion control blankets must be used on all slopes 3 horizontal to 1 vertical or steeper.
- If straw mulch alone is used for temporary stabilization, it shall be applied at double the standard rate of 2 tons per acre. Other manufactured mulches should be applied at double the manufacturer's recommended rate.
- To ensure adequate stabilization of disturbed soil in advance of a melt event, areas of disturbed soil should be stabilized at the end of each work day unless:
  - work will resume within 24 hours in the same area and no precipitation is forecast or;
  - the work is in disturbed areas that collect and retain runoff, such as open utility trenches, foundation excavations, or water management areas.
- Use stone paths to stabilize access perimeters of buildings under construction and areas where construction vehicle traffic is anticipated. Stone paths should be a minimum of 10 feet in width but wider as necessary to accommodate equipment.

The site shall be inspected frequently to ensure that the erosion and sediment control plan is performing its winter stabilization function. If the site will not have earth disturbing activities ongoing during the winter season, all bare exposed soil must be stabilized by established vegetation, straw or other acceptable mulch, matting, rock, or other approved material such as rolled erosion control products. Seeding of areas with mulch cover is preferred but seeding alone is not acceptable for proper stabilization.
Compliance inspections must be performed and reports filed properly by the qualified inspector in accordance with the SWPPP for all sites under a winter shutdown.

7.3 ADDITIONAL STORMWATER CONTROLS

The following are additional Best Management Practices to be implemented at the site to minimize pollutant transport:

- Material transport – take proper precautions to prevent spilling materials during transport. Any spilled materials will be swept or removed as soon as practicable so that they do not enter surface and/or subsurface drainage systems.
- Dust control – provide dust control measures to prevent dust from leaving the site. Measures may include water application or mulching but shall not include the use of chemical additives. Any sediment that is tracked off the site shall be removed using a hand broom or other cleaning equipment.
- Solid waste management – store waste in covered dumpsters or other appropriate containers. Waste is to be disposed of regularly and properly in accordance with local, state, and/or federal regulations.
- Portable toilets – install and clean portable toilets regularly. Locate portable toilets where they will not be impacted by construction activities.
- Building materials storage – properly store and contain building materials on-site.

8. POST-CONSTRUCTION STORMWATER MANAGEMENT

8.1 STORMWATER QUALITY

The increased emphasis on a holistic approach to stormwater has resulted in a change in stormwater management practices and techniques. The Design Manual requires stormwater management designs to use the Green Infrastructure "Five Step" Process:

1) Site planning – Conserve natural areas and reduce impervious cover
2) Determine Water Quality volume (WQv)
3) Meet Runoff Reduction volume (RRv) requirements – Apply green infrastructure techniques and standard Stormwater Management Practices (SMPs) with RRv Capacity
4) Apply standard SMPs to address remaining WQv
5) Meet rate reduction requirements – Apply volume control practices as necessary to meet pre-construction discharge rates

Each green infrastructure planning and reduction technique and SMPs with RRv capacity were assessed for use at the site. Vegetated Filter Strip practices were selected to provide RRv for the site.

The total water quality volume required for the site is 2,401 cubic-feet. The implementation of the green infrastructure practices and standard SMPs with RRv capacity practices discussed above provide a reduction of 2,114 cubic-ft. of WQv, or RRv. The RRv provided is equal to the WQv for the site, therefore, no additional WQv treatment is required for the site and only water quantity control measures are required. A summary of the water quality treatment is shown in Table 1.

Detailed calculations and design information related to stormwater quality can be found in the Stormwater Management Engineering Memo included in Appendix H and the Contract Drawings bound separately from this report.

Table 1 - Water Quality Treatment Analysis

Project Feature	Total Area (acre)	Required WQv (cu-ft)	Minimum RRv Required (cu-ft)	RRv Provided[(1)] (cu-ft)	Total WQv Provided (cu-ft)	Stormwater Practice Providing RRv & WQv
POA 1	0.55	2,401	417	2,401	2,401	Vegetated Filter Strips

8.2 STORMWATER QUANTITY

Stormwater quantity requirements include the following:

- Channel Protection Volume (CPv) – extended detention of the 1-year storm to protect stream channels from erosion
- Overbank Flood Control (Qp) – attenuate the 10-year storm post-construction peak discharge rate to pre-construction rates
- Extreme Flood Control (Qf) – attenuate the 100-year storm post-construction peak discharge rate to pre-construction rates

A stormwater analysis of the site was conducted using HydroCAD version 10.10-3a. This software was used to perform a United States Department of Agriculture (USDA) Soil Conservation Service (SCS) Technical Release No. 55 (SCS TR-55) and TR-20 (SCS TR-20) hydrologic analysis of the site. The analysis shows that due to the minimal addition of impervious surfaces and grading of the site to flatten the slope, the peak runoff discharge rates are equal to or less than pre-construction rates. The results of the pre- and post-construction analysis for the site are shown in Table 2.

Table 2 - Point of Analysis - Comparison of Pre and Post Construction Conditions

Point of Analysis (POA)	Site Condition	1- Year		2-Year		10-Year		25-Year		50-Year		100-Year	
		Peak Flow (cfs)	Time to Peak (min.)	Peak Flow (cfs)	Time to Peak (min.)	Peak Flow (cfs)	Time to Peak (min.)	Peak Flow (cfs)	Time to Peak (min.)	Peak Flow (cfs)	Time to Peak (min.)	Peak Flow (cfs)	Time to Peak (min.)
POA 1	Post - Construction	12.57	766	19.20	765	43.75	763	64.66	761	84.46	761	109.00	761
	Pre-Construction	12.57	766	19.20	765	43.75	763	64.66	761	84.46	761	109.00	761
	Difference	0	0	0	0	0	0	0	0	0	0	0	0

Appendix A – NYSDEC Notice of Intent (NOI)

NOI for coverage under Stormwater General Permit for Construction Activity

version 1.32

(Submission #: HP9-TDZ3-0GK76, version 1)

Details

Submission Alias	NOI for Pivot Solar NY 6
Originally Started By	EDR Engineering
Submission ID	HP9-TDZ3-0GK76
Submission Reason	New
Status	Draft
Active Steps	Form Submitted

Form Input

Owner/Operator Information

Owner/Operator Name (Company/Private Owner/Municipality/Agency/Institution, etc.)
Pivot Energy

Owner/Operator Contact Person Last Name (NOT CONSULTANT)
Woodcock

Owner/Operator Contact Person First Name
Gordon

Owner/Operator Mailing Address
1750 15th St., Suite 400

City
Denver

State
CO

Zip
80202

Phone
6077938256

Email
gwoodcock@pivotenergy.net

Federal Tax ID
NONE PROVIDED

Project Location

Project/Site Name
Pivot Solar NY 6

Street Address (Not P.O. Box)
529 Old Chilson Rd

Side of Street
South

City/Town/Village (THAT ISSUES BUILDING PERMIT)
Town of Ticonderoga

State
NY

Zip
12883

DEC Region
5

County
ESSEX

Name of Nearest Cross Street
Race Track Rd

Distance to Nearest Cross Street (Feet)
850

Project In Relation to Cross Street
West

Tax Map Numbers Section-Block-Parcel
150.2-1-2.110

Tax Map Numbers
NONE PROVIDED

1. Coordinates

Provide the Geographic Coordinates for the project site. The two methods are:
- Navigate to the project location on the map (below) and click to place a marker and obtain the XY coordinates.
- The "Find Me" button will provide the lat/long for the person filling out this form. Then pan the map to the correct location and click the map to place a marker and obtain the XY coordinates.

Navigate to your location and click on the map to get the X,Y coordinates
43.854000480245496,-73.44965580220727

Project Details

2. What is the nature of this project?
Redevelopment with increase in impervious area

3. Select the predominant land use for both pre and post development conditions.

Pre-Development Existing Landuse
Pasture/Open Land

Post-Development Future Land Use
Other: Solar Farm

3a. If Single Family Subdivision was selected in question 3, enter the number of subdivision lots.
NONE PROVIDED

---

4. In accordance with the larger common plan of development or sale, enter the total project site acreage, the acreage to be disturbed and the future impervious area (acreage)within the disturbed area.

*** ROUND TO THE NEAREST TENTH OF AN ACRE. ***

Total Site Area (acres)
180.5

Total Area to be Disturbed (acres)
27.7

Existing Impervious Area to be Disturbed (acres)
.3

Future Impervious Area Within Disturbed Area (acres)
.6

5. Do you plan to disturb more than 5 acres of soil at any one time?
NONE PROVIDED

---

6. Indicate the percentage (%) of each Hydrologic Soil Group(HSG) at the site.

A (%)
6.5

B (%)
0

C (%)
0

D (%)
93.5

7. Is this a phased project?
No

8. Enter the planned start and end dates of the disturbance activities.

Start Date
5/1/2022

End Date
12/31/2022

9. Identify the nearest surface waterbody(ies) to which construction site runoff will discharge.
Chilson Brook, Trout Brook

9a. Type of waterbody identified in question 9?
Stream/Creek On Site

Other Waterbody Type Off Site Description
NONE PROVIDED

9b. If "wetland" was selected in 9A, how was the wetland identified?
NONE PROVIDED

10. Has the surface waterbody(ies in question 9 been identified as a 303(d) segment in Appendix E of GP-0-20-001?
No

11. Is this project located in one of the Watersheds identified in Appendix C of GP-0-20-001?
No

12. Is the project located in one of the watershed areas associated with AA and AA-S classified waters?
Yes

If No, skip question 13.

13. Does this construction activity disturb land with no existing impervious cover and where the Soil Slope Phase is identified as an E or F on the USDA Soil Survey?
No

If Yes, what is the acreage to be disturbed?
NONE PROVIDED

14. Will the project disturb soils within a State regulated wetland or the protected 100 foot adjacent area?
No

15. Does the site runoff enter a separate storm sewer system (including roadside drains, swales, ditches, culverts, etc)?
Yes

16. What is the name of the municipality/entity that owns the separate storm sewer system?
Town of Ticonderoga

17. Does any runoff from the site enter a sewer classified as a Combined Sewer?
No

18. Will future use of this site be an agricultural property as defined by the NYS Agriculture and Markets Law?
No

19. Is this property owned by a state authority, state agency, federal government or local government?
No

20. Is this a remediation project being done under a Department approved work plan? (i.e. CERCLA, RCRA, Voluntary Cleanup Agreement, etc.)
No

Required SWPPP Components

21. Has the required Erosion and Sediment Control component of the SWPPP been developed in conformance with the current NYS Standards and Specifications for Erosion and Sediment Control (aka Blue Book)?
Yes

22. Does this construction activity require the development of a SWPPP that includes the post-construction stormwater management practice component (i.e. Runoff Reduction, Water Quality and Quantity Control practices/techniques)?
Yes

If you answered No in question 22, skip question 23 and the Post-construction Criteria and Post-construction SMP Identification sections.

23. Has the post-construction stormwater management practice component of the SWPPP been developed in conformance with the current NYS Stormwater Management Design Manual?
Yes

24. The Stormwater Pollution Prevention Plan (SWPPP) was prepared by:
Professional Engineer (P.E.)

SWPPP Preparer
Environmental Design and Research

Contact Name (Last, Space, First)
Dussing, Thomas

Mailing Address
217 Montgomery St Suite 1100

City
Syracuse

State
NY

Zip
13202

Phone
3154710688

Email
tdussing@edrdpc.com

Download SWPPP Preparer Certification Form
Please take the following steps to prepare and upload your preparer certification form:

1) Click on the link below to download a blank certification form
2) The certified SWPPP preparer should sign this form

3) Scan the signed form
4) Upload the scanned document
Download SWPPP Preparer Certification Form

Please upload the SWPPP Preparer Certification

> NONE PROVIDED
> **Comment**
> NONE PROVIDED

Erosion & Sediment Control Criteria

25. Has a construction sequence schedule for the planned management practices been prepared?
Yes

26. Select all of the erosion and sediment control practices that will be employed on the project site:

Temporary Structural
Silt Fence
Stabilized Construction Entrance
Construction Road Stabilization
Check Dams

Biotechnical
None

Vegetative Measures
Seeding
Mulching
Protecting Vegetation

Permanent Structural
Land Grading

Other
NONE PROVIDED

Post-Construction Criteria

*** IMPORTANT: Completion of Questions 27-39 is not required if response to Question 22 is No.**

27. Identify all site planning practices that were used to prepare the final site plan/layout for the project.
Reduction of Clearing and Grading
Locating Development in Less Sensitive Areas
Roadway Reduction

27a. Indicate which of the following soil restoration criteria was used to address the requirements in Section 5.1.6("Soil Restoration") of the Design Manual (2010 version).
Compacted areas were considered as impervious cover when calculating the WQv Required, and the compacted areas were assigned a post-construction Hydrologic Soil Group (HSG) designation that is one level less permeable than existing conditions for the hydrology analysis.

28. Provide the total Water Quality Volume (WQv) required for this project (based on final site plan/layout). (Acre-feet)
.06

29. Post-construction SMP Identification
Use the Post-construction SMP Identification section to identify the RR techniques (Area Reduction), RR techniques(Volume Reduction) and Standard SMPs with RRv Capacity that were used to reduce the Total WQv Required (#28).

Identify the SMPs to be used by providing the total impervious area that contributes runoff to each technique/practice selected. For the Area Reduction Techniques, provide the total contributing area (includes pervious area) and, if applicable, the total impervious area that contributes runoff to the technique/practice.

Note: Redevelopment projects shall use the Post-Construction SMP Identification section to identify the SMPs used to treat and/or reduce the WQv required. If runoff reduction techniques will not be used to reduce the required WQv, skip to question 33a after identifying the SMPs.

30. Indicate the Total RRv provided by the RR techniques (Area/Volume Reduction) and Standard SMPs with RRv capacity identified in question 29. (acre-feet)
.06

31. Is the Total RRv provided (#30) greater than or equal to the total WQv required (#28)?
Yes

If Yes, go to question 36. If No, go to question 32.

32. Provide the Minimum RRv required based on HSG. [Minimum RRv Required = (P) (0.95) (Ai) / 12, Ai=(s) (Aic)] (acre-feet)
NONE PROVIDED

32a. Is the Total RRv provided (#30) greater than or equal to the Minimum RRv Required (#32)?
NONE PROVIDED

If Yes, go to question 33.
Note: Use the space provided in question #39 to summarize the specific site limitations and justification for not reducing 100% of WQv required (#28). A detailed evaluation of the specific site limitations and justification for not reducing 100% of the WQv required (#28) must also be included in the SWPPP.

If No, sizing criteria has not been met; therefore, NOI can not be processed. SWPPP preparer must modify design to meet sizing criteria.

33. SMPs
Use the Post-construction SMP Identification section to identify the Standard SMPs and, if applicable, the Alternative SMPs to be used to treat the remaining total WQv (=Total WQv Required in #28 - Total RRv Provided in #30).

Also, provide the total impervious area that contributes runoff to each practice selected.

NOTE: Use the Post-construction SMP Identification section to identify the SMPs used on Redevelopment projects.

33a. Indicate the Total WQv provided (i.e. WQv treated) by the SMPs identified in question #33 and Standard SMPs with RRv Capacity identified in question #29. (acre-feet)
NONE PROVIDED

Note: For the standard SMPs with RRv capacity, the WQv provided by each practice = the WQv calculated using the contributing drainage area to the practice - provided by the practice. (See Table 3.5 in Design Manual)

34. Provide the sum of the Total RRv provided (#30) and the WQv provided (#33a).
NONE PROVIDED

35. Is the sum of the RRv provided (#30) and the WQv provided (#33a) greater than or equal to the total WQv required (#28)?
NONE PROVIDED

If Yes, go to question 36.

If No, sizing criteria has not been met; therefore, NOI can not be processed. SWPPP preparer must modify design to meet sizing criteria.

36. Provide the total Channel Protection Storage Volume (CPv required and provided or select waiver (#36a), if applicable.

CPv Required (acre-feet)
1.6

CPv Provided (acre-feet)
1.6

36a. The need to provide channel protection has been waived because:
NONE PROVIDED

37. Provide the Overbank Flood (Qp) and Extreme Flood (Qf) control criteria or select waiver (#37a), if applicable.

Overbank Flood Control Criteria (Qp)

Pre-Development (CFS)
43.75

Post-Development (CFS)
43.75

Total Extreme Flood Control Criteria (Qf)

Pre-Development (CFS)
109

Post-Development (CFS)
109

37a. The need to meet the Qp and Qf criteria has been waived because:
Downstream analysis reveals that the Qp and Qf controls are not required.

38. Has a long term Operation and Maintenance Plan for the post-construction stormwater management practice(s) been developed?
Yes

If Yes, Identify the entity responsible for the long term Operation and Maintenance
Pivot Energy

39. Use this space to summarize the specific site limitations and justification for not reducing 100% of WQv required (#28). (See question #32a) This space can also be used for other pertinent project information.
NONE PROVIDED

Post-Construction SMP Identification

Runoff Reduction (RR) Techniques, Standard Stormwater Management Practices (SMPs) and Alternative SMPs
Identify the Post-construction SMPs to be used by providing the total impervious area that contributes runoff to each technique/practice selected. For the Area Reduction Techniques, provide the total contributing area (includes pervious area) and, if applicable, the total impervious area that contributes runoff to the technique/practice.

RR Techniques (Area Reduction)

Round to the nearest tenth

Total Contributing Acres for Conservation of Natural Area (RR-1)
NONE PROVIDED

Total Contributing Impervious Acres for Conservation of Natural Area (RR-1)
NONE PROVIDED

Total Contributing Acres for Sheetflow to Riparian Buffers/Filter Strips (RR-2)
.6

Total Contributing Impervious Acres for Sheetflow to Riparian Buffers/Filter Strips (RR-2)
NONE PROVIDED

Total Contributing Acres for Tree Planting/Tree Pit (RR-3)
NONE PROVIDED

Total Contributing Impervious Acres for Tree Planting/Tree Pit (RR-3)
NONE PROVIDED

Total Contributing Acres for Disconnection of Rooftop Runoff (RR-4)
NONE PROVIDED

RR Techniques (Volume Reduction)

Total Contributing Impervious Acres for Disconnection of Rooftop Runoff (RR-4)
NONE PROVIDED

Total Contributing Impervious Acres for Vegetated Swale (RR-5)
NONE PROVIDED

Total Contributing Impervious Acres for Rain Garden (RR-6)
NONE PROVIDED

Total Contributing Impervious Acres for Stormwater Planter (RR-7)
NONE PROVIDED

Total Contributing Impervious Acres for Rain Barrel/Cistern (RR-8)
NONE PROVIDED

Total Contributing Impervious Acres for Porous Pavement (RR-9)
NONE PROVIDED

Total Contributing Impervious Acres for Green Roof (RR-10)
NONE PROVIDED

Standard SMPs with RRv Capacity

Total Contributing Impervious Acres for Infiltration Trench (I-1)
NONE PROVIDED

Total Contributing Impervious Acres for Infiltration Basin (I-2)
NONE PROVIDED

Total Contributing Impervious Acres for Dry Well (I-3)
NONE PROVIDED

Total Contributing Impervious Acres for Underground Infiltration System (I-4)
NONE PROVIDED

Total Contributing Impervious Acres for Bioretention (F-5)
NONE PROVIDED

Total Contributing Impervious Acres for Dry Swale (O-1)
NONE PROVIDED

Standard SMPs

Total Contributing Impervious Acres for Micropool Extended Detention (P-1)
NONE PROVIDED

Total Contributing Impervious Acres for Wet Pond (P-2)
NONE PROVIDED

Total Contributing Impervious Acres for Wet Extended Detention (P-3)
NONE PROVIDED

Total Contributing Impervious Acres for Multiple Pond System (P-4)
NONE PROVIDED

Total Contributing Impervious Acres for Pocket Pond (P-5)
NONE PROVIDED

Total Contributing Impervious Acres for Surface Sand Filter (F-1)
NONE PROVIDED

Total Contributing Impervious Acres for Underground Sand Filter (F-2)
NONE PROVIDED

Total Contributing Impervious Acres for Perimeter Sand Filter (F-3)
NONE PROVIDED

Total Contributing Impervious Acres for Organic Filter (F-4)
NONE PROVIDED

Total Contributing Impervious Acres for Shallow Wetland (W-1)
NONE PROVIDED

Total Contributing Impervious Acres for Extended Detention Wetland (W-2)
NONE PROVIDED

Total Contributing Impervious Acres for Pond/Wetland System (W-3)
NONE PROVIDED

Total Contributing Impervious Acres for Pocket Wetland (W-4)
NONE PROVIDED

Total Contributing Impervious Acres for Wet Swale (O-2)
NONE PROVIDED

Alternative SMPs (DO NOT INCLUDE PRACTICES BEING USED FOR PRETREATMENT ONLY)

Total Contributing Impervious Area for Hydrodynamic
NONE PROVIDED

Total Contributing Impervious Area for Wet Vault
NONE PROVIDED

Total Contributing Impervious Area for Media Filter
NONE PROVIDED

"Other" Alternative SMP?
NONE PROVIDED

Total Contributing Impervious Area for "Other"
NONE PROVIDED

Provide the name and manufaturer of the alternative SMPs (i.e. proprietary practice(s)) being used for WQv treatment.

Note: Redevelopment projects which do not use RR techniques, shall use questions 28, 29, 33 and 33a to provide SMPs used, total WQv required and total WQv provided for the project.

Manufacturer of Alternative SMP
NONE PROVIDED

Name of Alternative SMP
NONE PROVIDED

Other Permits

40. Identify other DEC permits, existing and new, that are required for this project/facility.
None

If SPDES Multi-Sector GP, then give permit ID
NONE PROVIDED

If Other, then identify
NONE PROVIDED

41. Does this project require a US Army Corps of Engineers Wetland Permit?
No

If "Yes," then indicate Size of Impact, in acres, to the nearest tenth
NONE PROVIDED

42. If this NOI is being submitted for the purpose of continuing or transferring coverage under a general permit for stormwater runoff from construction activities, please indicate the former SPDES number assigned.
NONE PROVIDED

MS4 SWPPP Acceptance

43. Is this project subject to the requirements of a regulated, traditional land use control MS4?
No

If No, skip question 44

44. Has the "MS4 SWPPP Acceptance" form been signed by the principal executive officer or ranking elected official and submitted along with this NOI?
NONE PROVIDED

MS4 SWPPP Acceptance Form Download
Download form from the link below. Complete, sign, and upload.
MS4 SWPPP Acceptance Form

MS4 Acceptance Form Upload
> NONE PROVIDED
> **Comment**
> NONE PROVIDED

Owner/Operator Certification

Owner/Operator Certification Form Download
Download the certification form by clicking the link below. Complete, sign, scan, and upload the form.
Owner/Operator Certification Form (PDF, 45KB)

Upload Owner/Operator Certification Form
> NONE PROVIDED
> **Comment**
> NONE PROVIDED

Status History

	User	Processing Status
6/28/2021 4:03:19 PM	EDR Engineering	Draft

Processing Steps

Step Name	Assigned To/Completed By	Date Completed
Form Submitted		
Under Review	DAVID GASPER	

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

SWPPP Preparer Certification Form

SPDES General Permit for Stormwater Discharges From Construction Activity (GP-0-20-001)

Project Site Information

Project/Site Name

Owner/Operator Information

Owner/Operator (Company Name/Private Owner/Municipality Name)

Certification Statement – SWPPP Preparer

I hereby certify that the Stormwater Pollution Prevention Plan (SWPPP) for this project has been prepared in accordance with the terms and conditions of the GP-0-20-001. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of this permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings.

First name | MI | Last Name

Signature | Date

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

Owner/Operator Certification Form

SPDES General Permit For Stormwater Discharges From Construction Activity (GP-0-20-001)

Project/Site Name: _____

eNOI Submission Number: _____

eNOI Submitted by: ☐ **Owner/Operator** ☐ **SWPPP Preparer** ☐ **Other**

Certification Statement - Owner/Operator

I have read or been advised of the permit conditions and believe that I understand them. I also understand that, under the terms of the permit, there may be reporting requirements. I hereby certify that this document and the corresponding documents were prepared under my direction or supervision. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. I further understand that coverage under the general permit will be identified in the acknowledgment that I will receive as a result of submitting this NOI and can be as long as sixty (60) business days as provided for in the general permit. I also understand that, by submitting this NOI, I am acknowledging that the SWPPP has been developed and will be implemented as the first element of construction, and agreeing to comply with all the terms and conditions of the general permit for which this NOI is being submitted.

Owner/Operator First Name M.I. Last Name

_____

Signature

_____

Date

Appendix B – NYSDEC Acknowledgement of NOI Letter

Appendix C – Site Map and Soils Information

United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Essex County, New York

Pivot Solar NY 6

June 11, 2021

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

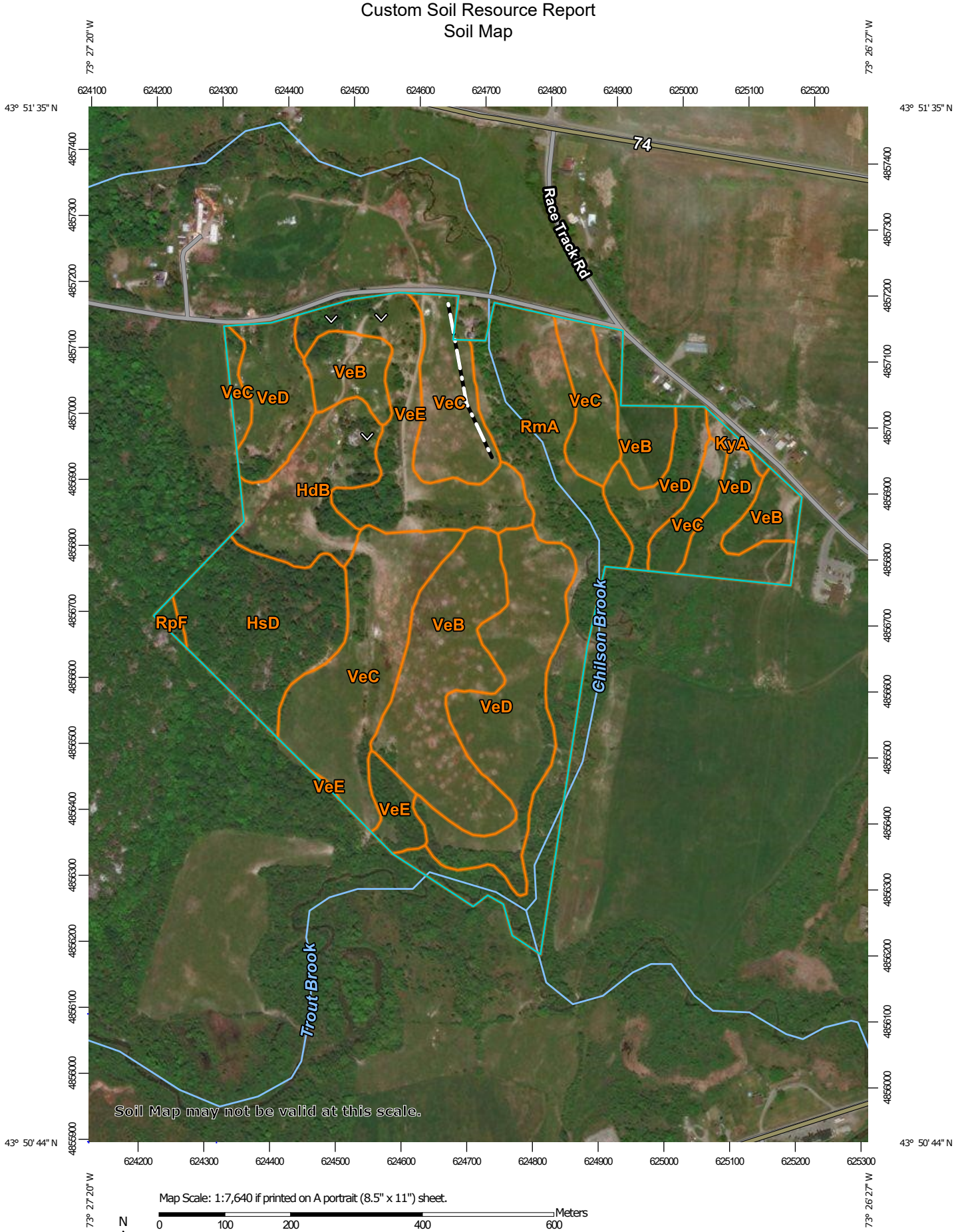
alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

Contents

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map



Map Scale: 1:7,640 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 100 200 400 600

Feet: 0 350 700 1400 2100

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

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 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

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: Essex County, New York
Survey Area Data: Version 20, Jun 11, 2020

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

Date(s) aerial images were photographed: Jun 28, 2012—Mar 29, 2017

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.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
HdB	Hartland very fine sandy loam, 2 to 8 percent slopes	8.4	6.5%
HsD	Hollis-Rock outcrop complex, 15 to 35 percent slopes, very stony	11.8	9.2%
KyA	Kingsbury silty clay loam, 0 to 3 percent slopes	0.6	0.4%
RmA	Rippowam fine sandy loam, 0 to 3 percent slopes	19.8	15.4%
RpF	Rock outcrop-Knob Lock-Lyman complex, 35 to 60 percent slopes, very bouldery	0.4	0.3%
VeB	Vergennes silty clay loam, 3 to 8 percent slopes	21.7	16.9%
VeC	Vergennes silty clay loam, 8 to 15 percent slopes	25.9	20.1%
VeD	Vergennes silty clay loam, 15 to 25 percent slopes	27.1	21.1%
VeE	Vergennes silty clay loam, 25 to 45 percent slopes	12.9	10.1%
Totals for Area of Interest		**128.5**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different

management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Essex County, New York

HdB—Hartland very fine sandy loam, 2 to 8 percent slopes

Map Unit Setting

National map unit symbol: bq4z
Elevation: 100 to 510 feet
Mean annual precipitation: 26 to 36 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 130 to 150 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Hartland and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Hartland

Setting

Landform: Lake plains
Landform position (two-dimensional): Summit, shoulder
Landform position (three-dimensional): Tread
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Silty glaciolacustrine deposits derived from igneous and sedimentary rock

Typical profile

Ap - 0 to 12 inches: very fine sandy loam
Bw1 - 12 to 19 inches: very fine sandy loam
Bw2 - 19 to 30 inches: very fine sandy loam
C1 - 30 to 45 inches: silt loam
C2 - 45 to 60 inches: very fine sandy loam
C3 - 60 to 72 inches: fine sandy loam

Properties and qualities

Slope: 2 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: High (about 9.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: A
Ecological site: F144AY017NH - Well Drained Lake Plain
Hydric soil rating: No

Minor Components

Dunkirk
Percent of map unit: 5 percent
Hydric soil rating: No

Collamer
Percent of map unit: 4 percent
Hydric soil rating: No

Factoryville
Percent of map unit: 3 percent
Hydric soil rating: No

Colonie
Percent of map unit: 2 percent
Hydric soil rating: No

Unnamed
Percent of map unit: 1 percent
Hydric soil rating: No

HsD—Hollis-Rock outcrop complex, 15 to 35 percent slopes, very stony

Map Unit Setting
National map unit symbol: 2xfdy
Elevation: 100 to 800 feet
Mean annual precipitation: 31 to 59 inches
Mean annual air temperature: 39 to 48 degrees F
Frost-free period: 100 to 160 days
Farmland classification: Not prime farmland

Map Unit Composition
Hollis, very stony, mlra 142, and similar soils: 50 percent
Rock outcrop: 30 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Hollis, Very Stony, Mlra 142

Setting
Landform: Ridges, hills
Landform position (two-dimensional): Shoulder, summit, backslope
Landform position (three-dimensional): Nose slope, crest, side slope
Down-slope shape: Convex
Across-slope shape: Convex, linear
Parent material: Coarse-loamy melt-out till derived from meta-anorthosite and/or meta-igneous rock

Typical profile
Oi - 0 to 2 inches: slightly decomposed plant material

A - 2 to 7 inches: gravelly fine sandy loam
Bw - 7 to 16 inches: gravelly fine sandy loam
2R - 16 to 26 inches: bedrock

Properties and qualities

Slope: 15 to 35 percent
Surface area covered with cobbles, stones or boulders: 1.6 percent
Depth to restrictive feature: 8 to 23 inches to lithic bedrock
Drainage class: Somewhat excessively drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water capacity: Very low (about 2.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: D
Hydric soil rating: No

Description of Rock Outcrop

Setting

Landform: Hills, ridges
Parent material: Igneous and metamorphic rock

Typical profile

R - 0 to 79 inches: bedrock

Properties and qualities

Slope: 15 to 35 percent
Depth to restrictive feature: 0 inches to lithic bedrock
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)
Available water capacity: Very low (about 0.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Hydric soil rating: No

Minor Components

Chatfield, very stony, mlra 142

Percent of map unit: 10 percent
Landform: Hills, ridges
Landform position (two-dimensional): Backslope, shoulder, summit
Landform position (three-dimensional): Crest, side slope, nose slope
Down-slope shape: Convex
Across-slope shape: Linear, convex
Hydric soil rating: No

Charlton, very stony, mlra 142

Percent of map unit: 5 percent
Landform: Ridges, hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex, linear
Across-slope shape: Convex
Hydric soil rating: No

Pittsfield, very stony

Percent of map unit: 3 percent
Landform: Hills, ground moraines
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Cayuga

Percent of map unit: 2 percent
Landform: Drainageways
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: No

KyA—Kingsbury silty clay loam, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: bq3k
Elevation: 100 to 510 feet
Mean annual precipitation: 26 to 36 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 130 to 150 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Kingsbury and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Kingsbury

Setting

Landform: Lake plains
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Linear

Parent material: Clayey glaciolacustrine deposits derived from igneous and sedimentary rock

Typical profile

Ap - 0 to 9 inches: silty clay loam
Bt1 - 9 to 14 inches: clay
Bt2 - 14 to 21 inches: clay
CB - 21 to 34 inches: silty clay
C1 - 34 to 65 inches: clay
C2 - 65 to 93 inches: silty clay

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: About 6 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Available water capacity: Moderate (about 8.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: D
Hydric soil rating: No

Minor Components

Covington

Percent of map unit: 4 percent
Landform: Lake plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: Yes

Churchville

Percent of map unit: 3 percent
Hydric soil rating: No

Cosad

Percent of map unit: 3 percent
Hydric soil rating: No

Vergennes

Percent of map unit: 2 percent
Hydric soil rating: No

Livingston

Percent of map unit: 1 percent
Landform: Lake plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread

Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: Yes

Unnamed
Percent of map unit: 1 percent
Hydric soil rating: No

Niagara
Percent of map unit: 1 percent
Hydric soil rating: No

RmA—Rippowam fine sandy loam, 0 to 3 percent slopes

Map Unit Setting
National map unit symbol: 1vk0f
Elevation: 100 to 510 feet
Mean annual precipitation: 26 to 36 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 130 to 150 days
Farmland classification: Farmland of statewide importance

Map Unit Composition
Rippowam and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Rippowam

Setting
Landform: Flood plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Dip
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Loamy alluvium derived from igneous and sedimentary rock

Typical profile
Oe - 0 to 2 inches: mucky peat
Ap - 2 to 11 inches: fine sandy loam
Cg1 - 11 to 21 inches: fine sandy loam
Cg2 - 21 to 29 inches: fine sandy loam
Cg3 - 29 to 36 inches: fine sandy loam
Cg4 - 36 to 43 inches: fine sandy loam
Cg5 - 43 to 72 inches: very gravelly loamy sand

Properties and qualities
Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Runoff class: Very high

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 5.95 in/hr)
Depth to water table: About 0 to 12 inches
Frequency of flooding: FrequentNone
Frequency of ponding: None
Available water capacity: Moderate (about 6.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: A/D
Hydric soil rating: Yes

Minor Components

Pootatuck

Percent of map unit: 5 percent
Hydric soil rating: No

Unnamed

Percent of map unit: 4 percent
Hydric soil rating: No

Fluvaquents-udifluvents

Percent of map unit: 3 percent
Landform: Flood plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Dip, rise
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: No

Gougeville

Percent of map unit: 3 percent
Landform: Deltas
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: Yes

RpF—Rock outcrop-Knob Lock-Lyman complex, 35 to 60 percent slopes, very bouldery

Map Unit Setting

National map unit symbol: 2xj2r
Elevation: 520 to 2,300 feet
Mean annual precipitation: 31 to 95 inches
Mean annual air temperature: 27 to 48 degrees F
Frost-free period: 100 to 130 days
Farmland classification: Not prime farmland

Map Unit Composition

Rock outcrop: 40 percent
Knob lock, very rocky, very bouldery, and similar soils: 30 percent
Lyman, very rocky, very bouldery, and similar soils: 20 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Rock Outcrop

Properties and qualities

Depth to restrictive feature: 0 inches to lithic bedrock

Description of Knob Lock, Very Rocky, Very Bouldery

Setting

Landform: Hillsides or mountainsides
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Lower third of mountainflank, side slope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Non-saturated organic material over till derived from gneiss

Typical profile

Oe - 0 to 3 inches: moderately decomposed plant material
Oa - 3 to 7 inches: highly decomposed plant material
Bs - 7 to 9 inches: very fine sandy loam
R - 9 to 79 inches: bedrock

Properties and qualities

Slope: 35 to 60 percent
Surface area covered with cobbles, stones or boulders: 2.4 percent
Depth to restrictive feature: 4 to 20 inches to lithic bedrock
Drainage class: Well drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low to very high (0.00 to 14.17 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Very low (about 2.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: D
Hydric soil rating: No

Description of Lyman, Very Rocky, Very Bouldery

Setting

Landform: Hillsides or mountainsides
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Lower third of mountainflank, side slope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Loamy till derived from gneiss

Typical profile

Oe - 0 to 1 inches: moderately decomposed plant material
Oa - 1 to 5 inches: highly decomposed plant material
E - 5 to 6 inches: fine sandy loam
Bhs - 6 to 11 inches: fine sandy loam
Bs - 11 to 19 inches: fine sandy loam
R - 19 to 79 inches: bedrock

Properties and qualities

Slope: 35 to 60 percent
Surface area covered with cobbles, stones or boulders: 2.4 percent
Depth to restrictive feature: 12 to 26 inches to lithic bedrock
Drainage class: Somewhat excessively drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low to very high (0.00 to 14.17 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Low (about 4.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: D
Hydric soil rating: No

Minor Components

Tunbridge, very rocky, very bouldery

Percent of map unit: 5 percent
Landform: Hillsides or mountainsides
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Lower third of mountainflank, side slope
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Monadnock, very rocky, very bouldery

Percent of map unit: 3 percent
Landform: Hillsides or mountainsides
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Becket, very rocky, very bouldery

Percent of map unit: 2 percent
Landform: Hillsides or mountainsides
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainbase, side slope
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

VeB—Vergennes silty clay loam, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 2rvsk
Elevation: 100 to 510 feet
Mean annual precipitation: 31 to 59 inches
Mean annual air temperature: 39 to 48 degrees F
Frost-free period: 120 to 175 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Vergennes and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Vergennes

Setting

Landform: Lake terraces
Landform position (two-dimensional): Summit, shoulder
Landform position (three-dimensional): Tread
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Calcareous clayey estuarine deposits derived from limestone and/or calcareous clayey glaciolacustrine deposits derived from limestone

Typical profile

Ap - 0 to 8 inches: silty clay loam
B/E - 8 to 10 inches: clay
Bt - 10 to 22 inches: clay
BC - 22 to 29 inches: silty clay
C1 - 29 to 37 inches: silty clay
C2 - 37 to 45 inches: silty clay
C3 - 45 to 79 inches: silty clay

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: About 18 to 30 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 20 percent
Available water capacity: Moderate (about 8.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: D
Hydric soil rating: No

Minor Components

Cayuga

Percent of map unit: 5 percent
Landform: Drumlinoid ridges
Landform position (two-dimensional): Shoulder, summit
Landform position (three-dimensional): Crest, side slope
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Kingsbury

Percent of map unit: 5 percent
Landform: Lake terraces
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Linear
Hydric soil rating: No

Wilpoint

Percent of map unit: 3 percent
Landform: Lake terraces
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Convex
Hydric soil rating: No

Farmington

Percent of map unit: 2 percent
Landform: Hills
Landform position (two-dimensional): Summit, shoulder
Landform position (three-dimensional): Crest
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

VeC—Vergennes silty clay loam, 8 to 15 percent slopes

Map Unit Setting

National map unit symbol: bq2d
Elevation: 100 to 510 feet
Mean annual precipitation: 26 to 36 inches

Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 130 to 150 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Vergennes and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Vergennes

Setting

Landform: Lake plains
Landform position (two-dimensional): Backslope, shoulder
Landform position (three-dimensional): Tread, riser
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Clayey glaciolacustrine deposits derived from igneous and sedimentary rock

Typical profile

Ap - 0 to 8 inches: silty clay loam
B/E - 8 to 10 inches: clay
Bt - 10 to 22 inches: clay
BC - 22 to 29 inches: silty clay
C1 - 29 to 37 inches: silty clay
C2 - 37 to 45 inches: silty clay
C3 - 45 to 72 inches: silty clay

Properties and qualities

Slope: 8 to 15 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: About 18 to 30 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Available water capacity: Moderate (about 7.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: D
Hydric soil rating: No

Minor Components

Cayuga

Percent of map unit: 4 percent
Hydric soil rating: No

Dunkirk

Percent of map unit: 4 percent
Hydric soil rating: No

Kingsbury

Percent of map unit: 4 percent
Hydric soil rating: No

Unnamed

Percent of map unit: 3 percent
Hydric soil rating: No

VeD—Vergennes silty clay loam, 15 to 25 percent slopes

Map Unit Setting

National map unit symbol: bq2f
Elevation: 100 to 510 feet
Mean annual precipitation: 26 to 36 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 130 to 150 days
Farmland classification: Not prime farmland

Map Unit Composition

Vergennes and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Vergennes

Setting

Landform: Lake plains
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Riser
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Clayey glaciolacustrine deposits derived from igneous and sedimentary rock

Typical profile

Ap - 0 to 8 inches: silty clay loam
B/E - 8 to 10 inches: clay
Bt - 10 to 22 inches: clay
BC - 22 to 29 inches: silty clay
C1 - 29 to 37 inches: silty clay
C2 - 37 to 45 inches: silty clay
C3 - 45 to 72 inches: silty clay

Properties and qualities

Slope: 15 to 25 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)

Depth to water table: About 18 to 30 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Available water capacity: Moderate (about 7.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: D
Hydric soil rating: No

Minor Components

Unnamed

Percent of map unit: 5 percent
Hydric soil rating: No

Dunkirk

Percent of map unit: 5 percent
Hydric soil rating: No

Cayuga

Percent of map unit: 4 percent
Hydric soil rating: No

Kingsbury

Percent of map unit: 1 percent
Hydric soil rating: No

VeE—Vergennes silty clay loam, 25 to 45 percent slopes

Map Unit Setting

National map unit symbol: bq2g
Elevation: 100 to 510 feet
Mean annual precipitation: 26 to 36 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 130 to 150 days
Farmland classification: Not prime farmland

Map Unit Composition

Vergennes and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Vergennes

Setting

Landform: Lake plains
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Riser
Down-slope shape: Convex

Across-slope shape: Convex
Parent material: Clayey glaciolacustrine deposits derived from igneous and sedimentary rock

Typical profile

Ap - 0 to 8 inches: silty clay loam
B/E - 8 to 10 inches: clay
Bt - 10 to 22 inches: clay
BC - 22 to 29 inches: silty clay
C1 - 29 to 37 inches: silty clay
C2 - 37 to 45 inches: silty clay
C3 - 45 to 72 inches: silty clay

Properties and qualities

Slope: 25 to 45 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: About 18 to 30 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Available water capacity: Moderate (about 7.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: D
Hydric soil rating: No

Minor Components

Unnamed

Percent of map unit: 7 percent
Hydric soil rating: No

Dunkirk

Percent of map unit: 6 percent
Hydric soil rating: No

Cayuga

Percent of map unit: 2 percent
Hydric soil rating: No

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Appendix D – SHPO and E&T Documentation

United States Department of the Interior

FISH AND WILDLIFE SERVICE
New York Ecological Services Field Office
3817 Luker Road
Cortland, NY 13045-9385
Phone: (607) 753-9334 Fax: (607) 753-9699
http://www.fws.gov/northeast/nyfo/es/section7.htm

In Reply Refer To: April 21, 2021
Consultation Code: 05E1NY00-2021-SLI-2331
Event Code: 05E1NY00-2021-E-07354
Project Name: Ticonderoga Solar 2

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531 *et seq.*). This list can also be used to determine whether listed species may be present for projects without federal agency involvement. New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list.

Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the ESA, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC site at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list. If listed, proposed, or candidate species were identified as potentially occurring in the project area, coordination with our office is encouraged. Information on the steps involved with assessing potential impacts from projects can be found at: http://www.fws.gov/northeast/nyfo/es/section7.htm

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the Services wind

energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the ESA. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

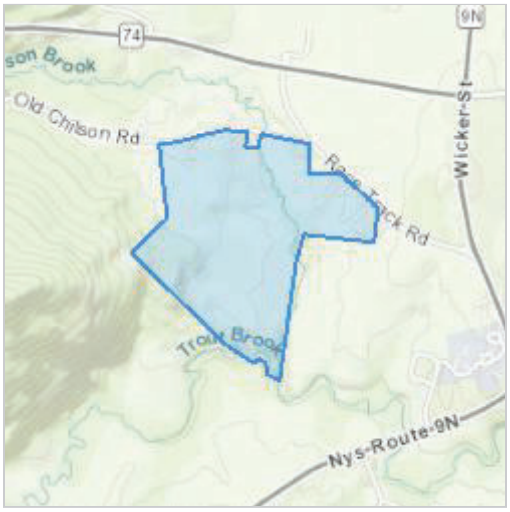
New York Ecological Services Field Office
3817 Luker Road
Cortland, NY 13045-9385
(607) 753-9334

Project Summary

Consultation Code: 05E1NY00-2021-SLI-2331
Event Code: 05E1NY00-2021-E-07354
Project Name: Ticonderoga Solar 2
Project Type: POWER GENERATION
Project Description: A proposed solar energy facility in the Town of Ticonderoga, Essex County, New York. The facility will be placed within an approximately 128-acre area leased by the applicant.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@43.8527817,-73.45034826933556,14z



Counties: Essex County, New York

Endangered Species Act Species

There is a total of 2 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Indiana Bat *Myotis sodalis* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/5949	Endangered
Northern Long-eared Bat *Myotis septentrionalis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Threatened

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Fish and Wildlife, New York Natural Heritage Program
625 Broadway, Fifth Floor, Albany, NY 12233-4757
P: (518) 402-8935 | F: (518) 402-8925
www.dec.ny.gov

June 4, 2021

Kyle Crawford
Environmental Design and Research
41 State Street, Suite 806
Albany, NY 12207

Re: Ticonderoga Solar 2
County: Essex Town/City: Ticonderoga

Dear Kyle Crawford:

In response to your recent request, we have reviewed the New York Natural Heritage Program database with respect to the above project.

Enclosed is a report of rare or state-listed animals and plants, and significant natural communities that our database indicates occur in the vicinity of the project site.

For most sites, comprehensive field surveys have not been conducted; the enclosed report only includes records from our database. We cannot provide a definitive statement as to the presence or absence of all rare or state-listed species or significant natural communities. Depending on the nature of the project and the conditions at the project site, further information from on-site surveys or other sources may be required to fully assess impacts on biological resources.

The presence of the plants and animals identified in the enclosed report may result in this project requiring additional review or permit conditions. For further guidance, and for information regarding other permits that may be required under state law for regulated areas or activities (e.g., regulated wetlands), please contact the NYS DEC Region 5 Office, Division of Environmental Permits, at dep.r5@dec.ny.gov.

Sincerely,

Heidi Krahling
Environmental Review Specialist
New York Natural Heritage Program

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The following state-listed animal has been documented in the vicinity of the project site.

The following list includes animals that are listed by NYS as Endangered, Threatened, or Special Concern; and/or that are federally listed.

For information about any permit considerations for your project, please contact the Permits staff at the NYSDEC Region 5 Office at dep.r5@dec.ny.gov, (518) 623-1286.

The following species has been documented within one mile of the project site. An additional location has been documented within 2.5 miles. Individual animals may travel 5 miles from documented locations. An impact of concern is the cutting or removal of potential roost trees.

COMMON NAME	*SCIENTIFIC NAME*	*NY STATE LISTING*	*FEDERAL LISTING*	
Mammals				
Northern Long-eared Bat *Hibernaculum*	*Myotis septentrionalis*	Threatened	Threatened	14143
Animal Assemblages				
Bat Colony *Hibernaculum*				4838

This report only includes records from the NY Natural Heritage database.

If any rare plants or animals are documented during site visits, we request that information on the observations be provided to the New York Natural Heritage Program so that we may update our database.

Information about many of the listed animals in New York, including habitat, biology, identification, conservation, and management, are available online in Natural Heritage's Conservation Guides at www.guides.nynhp.org, and from NYSDEC at www.dec.ny.gov/animals/7494.html.

NEW YORK STATE OF OPPORTUNITY. | Parks, Recreation, and Historic Preservation

KATHY HOCHUL
Governor

ERIK KULLESEID
Commissioner

February 16, 2022

Grant Johnson
Senior Project Manager - Historic Preservation
Environmental Design & Research, D.P.C. (EDR)
217 Montgomery Street
Suite 1100
Syracuse, NY 13202

Re: DEC
Pivot Solar NY 6/5 MW/30 Acres
Town of Ticonderoga Essex County, NY
21PR07196

Dear Grant Johnson:

Thank you for requesting the comments of the Division for Historic Preservation of the Office of Parks, Recreation and Historic Preservation (OPRHP). We have reviewed the submitted materials in accordance with the New York State Historic Preservation Act of 1980 (section 14.09 of the New York Parks, Recreation and Historic Preservation Law). These comments are those of the Division for Historic Preservation and relate only to Historic/Cultural resources. They do not include potential environmental impacts to New York State Parkland that may be involved in or near your project. Such impacts must be considered as part of the environmental review of the project pursuant to the State Environmental Quality Review Act (New York Environmental Conservation Law Article 8) and its implementing regulations (6NYCRR Part 617).

OPRHP has reviewed EDR's Memorandum submitted February 4, 2022. EDR's document demonstrates that the Pivot Solar NY 6 project will avoid impacts to the Old Chilson Road Precontact Site (03115.00027). No further archaeological work is necessary.

It is the opinion of the OPRHP that no properties, including archaeological and/or historic resources, listed in or eligible for the New York State and National Registers of Historic Places will be impacted by this project. If you have any questions, I can be reached at Jessica.Schreyer@parks.ny.gov.

Sincerely,

Jessica E. Schreyer

Jessica Schreyer
Scientist Archaeology

Appendix E – Pre-Construction Requirements

E-1: PRE-CONSTRUCTION MEETING DOCUMENTS AND INSPECTION REPORTS

General Project Information			
Project Name	**Pivot Solar NY 6**		
Project Location	Ticonderoga, NY	**County**	Essex
SPDES Permit ID No.		**NYSDEC Date of Authorization**	

PREAMBLE TO SITE ASSESSMENT AND INSPECTIONS – TO BE READ BY ALL PERSONS INVOLVED IN THE CONSTRUCTION OF STORMWATER RELATED ACTIVITIES

1. The Owner/Operator and Contractors shall read the NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activities GP-0-20-001. This SWPPP has been prepared for the project and represents the minimum standards for compliance. The Contractors must follow the requirements of the SWPPP.
2. A copy of the General Permit (GP-0-20-001), the SWPPP, NOI, NOI Acknowledgement Letter, MS4 Acceptance form (if applicable), inspection reports and any correspondence with the NYSDEC must be kept at the work site at all times. (e.g., in the job trailer.)
3. Prior to commencing soil disturbance, the Owner/Operator and/or Contractors must complete the forms and certifications in this Appendix. This information must be kept up to date.
4. All enclosed certifications shall be completed by the contractor. Subcontractors responsible for implementing erosion and sediment control measures or constructing stormwater management practices shall also complete the certifications. Each certification is to be completed and signed by a president, treasurer or vice president, or any person who performs similar policy or decision-making functions, and by the onsite individual having responsibility for the firm.
5. The Owner/Operator shall have a qualified inspector conduct an assessment of installed erosion and sediment controls and overall preparedness of the site prior to the commencement of construction. The inspection report in this section shall be used record the results of the inspection.
6. Site inspections shall be conducted by the qualified inspector at least once every seven calendar days when construction actives commence. For sites where the Owner/Operator has received authorization from the New York State Department of Environmental Conservation (NYSDEC) to disturb greater than five acres of soil at one time or where the project site discharges directly to a 303(d) impaired waterbody or is in a watershed listed in Appendix C of the General Permit, the qualified inspector shall conduct at least two site inspections every seven calendar days. There shall be a minimum of two full calendar days between inspections. The Owner/Operator shall maintain a record of all inspection reports onsite in Appendix F and have them available to the permitting authorities upon request.
7. The qualified inspector will notify the Owner/Operator and Contractor of any items to be addressed within one day business day of the inspection. The Contractors need to start corrective measures within one business day of notification and complete corrective actions in a reasonable time frame.
8. Prior to filing the Notice of Termination (NOT) or the end of permit term, the Owner/Operator shall have a qualified inspector perform a final site inspection. The qualified inspector shall certify that the site has undergone final stabilization using either vegetative or structural stabilization methods and that all temporary erosion and sediment controls (such as silt fencing, etc.) have been removed and that post-construction stormwater management practices have been installed in accordance with the SWPPP. The Owner/Operator must certify that, based upon their inquiry, all the information contained within the NOT is true.

9. Prior to submitting the NOT, the Owner/Operation is required to have one of the following in place (for permanent stormwater practices):
    a. Provide proof that the post-construction stormwater management practices, including any right-of-ways needed for maintenance of such practices, have been deeded to the municipality in which the practices are located, or
    b. Provide confirmation that the municipality has executed an agreement to maintain the post-construction stormwater management practices, or
    c. For privately-owned post-construction stormwater management practices, provide proof that the Owner/Operator has modified their deed of record to include a deed covenant that requires operation of the practices in accordance with the operations and maintenance plan.
    d. For institutional-owned or municipal-owned post-construction stormwater practices, provide proof that the Owner/Operator has policy and procedure in place to ensure operation of the practices in accordance with the operations and maintenance plan.
10. In the event of a transfer of ownership or responsibility for stormwater runoff, the original Owner/Operator (permittee) must notify the new Owner/Operator in writing of the requirement to obtain permit coverage by submitting a new Notice of Intent. Once the new Owner/Operator obtains permit coverage, the original Owner/Operator shall submit a completed NOT with the name and permit identification number of the new Owner/Operator. If the original Owner/Operator maintains ownership of a portion of the construction activity and will disturb soil, they must obtain their coverage under the general permit. Permit coverage for the new Owner/Operator will be effective when an acknowledgement letter is received from the NYSDEC confirming receipt of the completed Notice of Intent (NOI), provided the original Owner/Operator was not subject to a sixty business day authorization period that has not expired as of the date the Department receives the NOI from the new Owner/Operator.

E-1: PRE-CONSTRUCTION MEETING DOCUMENTS AND INSPECTION REPORTS

General Project Information			
Project Name	Pivot Solar NY 6		
Project Location	Ticonderoga, NY	**County**	Essex
SPDES Permit ID No.		**NYSDEC Date of Authorization**	

PRE-CONSTRUCTION SITE ASSESSMENT CHECKLIST

Construction (soil disturbance) shall not commence until all Erosion & Sediment Control Facilities have been installed, inspected, and found acceptable by the Owner/Operator. Add comments below as necessary.

Notice of Intent, SWPPP, and Contractor's Certification		
1.	Has Notice of Intent (NOI) been filed with NYSDEC, MS4 Certification (if applicable) and the NOI Acknowledgment form been received?	☐Yes ☐ No
2.	Is the SWPPP onsite? If yes, where? _____	☐Yes ☐ No
3.	Is the SWPPP current? What is the latest revision date? _____/_____/_____	☐Yes ☐ No
4.	Have all the Contractors involved with stormwater-related activities signed a Contractor's Certification Statement (Appendix E-3)?	☐Yes ☐ No
5.	Has the Contractor's Construction Stabilization Schedule (Appendix E-2) been received?	☐Yes ☐ No
Resource Protection		
6.	Are construction limits clearly flagged or fenced?	☐Yes ☐ No ☐ NA
7.	Have the important trees and associated root zones, onsite septic system absorption fields, existing vegetation areas suitable for filter strips been flagged for protection?	☐Yes ☐ No ☐ NA
8.	Were creek-crossings installed prior to land-disturbing activity?	☐Yes ☐ No ☐ NA
9.	Have wetlands been identified, flagged and protected?	☐Yes ☐ No ☐ NA
Surface Water Protection		
10.	Has runoff from undisturbed areas been diverted away from or around areas to be disturbed?	☐Yes ☐ No ☐ NA
11.	Have bodies of water either onsite or in the vicinity been identified and protected?	☐Yes ☐ No ☐ NA
12.	Have appropriate practices to protect onsite or downstream surface water been installed?	☐Yes ☐ No ☐ NA
13.	Has any grading operation occurred prior to this inspection, except for Erosion & Sediment Control Practices installation?	☐Yes ☐ No ☐ NA
Stabilized Construction Entrance		
14.	Has a temporary construction entrance been installed to prevent mud and debris from entering the public roadway?	☐Yes ☐ No ☐ NA
15.	Have construction routes and equipment parking areas needed to begin construction been stabilized immediately as work takes place, with gravel or other cover?	☐Yes ☐ No ☐ NA
16.	Is there a plan to remove or clean sediment tracked on to public roadways?	☐Yes ☐ No ☐ NA

Sediment Controls		
17.	Does the silt fence material and installation comply with the contract drawing, SWPPP, and specifications?	☐Yes ☐ No ☐ NA
18.	Are silt fences installed at appropriate spacing intervals?	☐Yes ☐ No ☐ NA
19.	Were sediment trapping devices installed as the first land disturbing activity?	☐Yes ☐ No ☐ NA
Waste and Hazardous Material Handling		
20.	Has the Owner and/or Operator or designated representative been assigned to implement the spill prevention avoidance and response approach?	☐Yes ☐ No ☐ NA
21.	Are there appropriate materials to control spills onsite? If yes, where? _____	☐Yes ☐ No ☐ NA

Items that need to be addressed prior to completion of Qualified Inspector's Certification

1.
2.
3.
4.
5.
6.

Qualified Inspector's Credentials and Certification

I hereby certify that I meet the Qualified Inspector criteria set forth in the General Permit and that the appropriate erosion and sediment controls described in the SWPPP and as described this checklist have been adequately installed or implemented, ensuring the overall preparedness of this site for the commencement of construction.

Signature: _____

Name (please print): _____

Title: _____ Date: _____

Company Name: _____

Address: _____

Phone: _____ Email: _____

Inspector Qualifications: ☐ PE ☐ RLA ☐ CPESC

4-hour Contractor Training Completed

Card Received: ☐ Yes ☐ No

Expiration Date: _____

E-2: CONSTRUCTION STABILIZATION SCHEDULE

General Project Information			
Project Name	**Pivot Solar NY 6**		
Project Location	Ticonderoga, NY	**County**	Essex
SPDES Permit ID No.		**NYSDEC Date of Authorization**	

For portions of the site where soil disturbance activities have temporarily or permanently ceased, stabilization measures must be initiated by the contractor by the end of the next business day and completed within 14 calendar days from the date the current soil disturbance activity ceased. Stabilization must be completed within 7 calendar days if the site current disturbance 5 acres or greater.

When construction activity is precluded by snow cover, stabilization measures shall be initiated as soon as practical.

Contractors are responsible to provide a construction schedule for review and approval by the Owner/Operator:

Soil Disturbing Activities	Location	Anticipated Start Date	Anticipated Stabilization Date
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			

E-3: CONTRACTOR CERTIFICATION STATEMENT

General Project Information			
Project Name	**Pivot Solar NY 6**		
Project Location	Ticonderoga, NY	**County**	Essex
SPDES Permit ID No.		**NYSDEC Date of Authorization**	

Each Contractor/Subcontractor is required to complete this form and sign this certification statement prior to working onsite.

Contractor Information

Contracting Firm: _____

Address: _____

Phone (Office): _____ Job Site (Trailer): _____

Contacts: 1) _____ Mobile: _____

2) _____ Mobile: _____

3) _____ Mobile: _____

Trained Contactor Responsibilities

A Trained Individual is an employee that has received 4 hours of training approved by the NYSDEC, from a Soil and Water Conservation District, from CPESC, Inc., or from another NYSDEC-endorsed entity providing training in proper erosion and sediment control principles. Training must be completed prior to the date that this project commences (prior to project mobilization). After receiving the initial training, the individual shall receive 4 hours of NYSDEC-approved training every 3 years.

Names of Trained Individuals from the Contractor's company that will be responsible for implementing the SWPPP:

Name: _____ Title: _____

Measures Responsible for: 1) _____

2) _____

3) _____

4) _____

Name: _____ Title: _____

Measures Responsible for: 1) _____
2) _____
3) _____
4) _____

Name: _____ Title: _____

Measures Responsible for: 1) _____
2) _____
3) _____
4) _____

Contractor's Certification

I hereby certify under penalty of law that I understand and agree to comply with the terms and conditions of the SWPPP and agree to implement any corrective actions identified by the Qualified Inspector during a site inspection. I also understand that the Owner and/or Operator must comply with the terms and conditions of the New York State Pollutant Discharge Elimination System (SPDES) general permit for stormwater discharges from construction activities, and it is unlawful for any person to cause, or contribute to, a violation of water quality standards.

Furthermore, I am aware that there are significant penalties for submitting false information, that I do not believe to be true, including the possibility of fine and imprisonment for knowing violations.

I also certify that I have received a copy of the SWPPP and will retain a copy of such SWPPP onsite during construction.

Signature of President, Vice President, or Treasurer DSF

Signature: _____ Date: _____

Print Name: _____ Title: _____

Signature of Responsible Onsite Individual (Must Meet Requirements of Trained Contractor)

Signature: _____ Date: _____

Print Name: _____ Title: _____

Appendix F – Stormwater Construction Site Inspection Reports

Stormwater Construction Site Inspection Report		Report #	
General Information			
Project Name	Pivot Solar NY 6		
SPDES Permit I.D. No.			
Date of Inspection		**Project Location**	Ticonderoga, NY
Qualified Inspector's Name(s)		**Qualified Inspector's Title(s)**	
Inspector's Contact Information			
Describe present phase of construction			

Type of Inspection
☐ **Weekly** ☐ **Monthly** ☐ **Twice Weekly**

Weather at time of this inspection?
☐ **Sunny** ☐ **Cloudy** ☐ **Raining** ☐ **Snow Cover**

Soil Conditions at time of this inspection?
☐ Dry ☐ Wet ☐ Saturated

Are there any discharges at the time of inspection? ☐Yes ☐No

Describe the condition of all points of discharge to natural surface waters and all point of discharge from the construction site located within, or immediately adjacent to the project's property boundaries, which receive runoff from disturbed areas (specifically note if sediment is present):

	SWPPP Documentation Compliance	
1.	Has Notice of Intent (NOI) been filed with NYSDEC and the NOI Acknowledgment form been received?	☐Yes ☐No
2.	Is the SWPPP on-site? SWPPP documentation onsite and current	☐Yes ☐No ☐Yes ☐No
3.	Is the Approved Phasing Plan for Disturbance > 5 Acres being followed?	☐Yes ☐No ☐N/A
4.	Is the Project Schedule being followed?	☐Yes ☐No
5.	Any SWPPP revisions? Latest revision date: (list all revisions and dates)	☐Yes ☐No

	BMP/Activity		Maintained? If no, list Corrective Action	List Required Completion Date, Company, and Responsible Person
Disturbance				
1.	Are construction limits and important resource areas clearly flagged or fenced?	☐Yes ☐No ☐N/A	☐Yes ☐No	
2.	Are areas outside the construction limits undergoing disturbance? **If yes, explain**	☐Yes ☐No		
3.	Has any single area > 5 Acres been disturbed?	☐Yes ☐No	☐Yes ☐No	
4.	Are clearing and grubbing operations minimized to the smallest practicable area?	☐Yes ☐No ☐N/A	☐Yes ☐No	
5.	Has clean stormwater runoff been diverted around areas to be disturbed?	☐Yes ☐No ☐N/A	☐Yes ☐No	
E&SC Practices				
6.	Were the sediment traps installed prior to any land-disturbing activity?	☐Yes ☐No ☐N/A	☐Yes ☐No	
7.	Are stabilized temporary construction entrances and construction staging area(s) in place?	☐Yes ☐No ☐N/A	☐Yes ☐No	
8.	Have construction access roads been properly stabilized?	☐Yes ☐No ☐N/A	☐Yes ☐No	
9.	Is there evidence of sediment being tracked onto the street?	☐Yes ☐No	☐Yes ☐No	
10.	Has silt fence been or other perimeter sediment control barriers been installed?	☐Yes ☐No ☐N/A	☐Yes ☐No	
11.	Are storm drain inlets properly protected?	☐Yes ☐No ☐N/A	☐Yes ☐No	
12.	Are washout facilities for concrete available and clearly marked?	☐Yes ☐No ☐N/A	☐Yes ☐No	
13.	Are temporary and/or permanent check dams in place?	☐Yes ☐No ☐N/A	☐Yes ☐No	
14.	Are top soil and excess excavated material stored in stabilized stock piles?	☐Yes ☐No ☐N/A	☐Yes ☐No	

	BMP/Activity		Maintained? If no, list Corrective Action	List Required Completion Date, Company, and Responsible Person
15.	Are dust control measures being properly implemented?	☐Yes ☐No ☐N/A	☐Yes ☐No	
16.	Were creek crossings installed prior to any land-disturbing activity?	☐Yes ☐No ☐N/A	☐Yes ☐No	
Stabilization				
17.	Are all slopes not being actively worked properly stabilized?	☐Yes ☐No ☐N/A	☐Yes ☐No	
18.	Are soil slopes steeper than 1V: 3H undergoing surface roughening/seed/mulch?	☐Yes ☐No ☐N/A	☐Yes ☐No	
19.	Are disturbed areas stabilized within 14 days?	☐Yes ☐No ☐N/A	☐Yes ☐No	
20.	Is the site adequately stabilized at this time?	☐Yes ☐No	☐Yes ☐No	
Other Best Management Practices				
21.	Are vehicle and equipment fueling, clean-out, and maintenance areas free of spills, leaks, or any other deleterious material?	☐Yes ☐No ☐N/A	☐Yes ☐No	
22.	Are materials that are potential stormwater contaminants stored inside or under cover?	☐Yes ☐No ☐N/A	☐Yes ☐No	
23.	Are appropriate materials to control spill located onsite?	☐Yes ☐No ☐N/A	☐Yes ☐No	
24.	Are non-stormwater discharges (e.g., wash water, dewatering) properly controlled?	☐Yes ☐No ☐N/A	☐Yes ☐No	
25.	Is trash/litter from work areas collected and placed in covered dumpsters?	☐Yes ☐No ☐N/A		
26.	Are any practices listed in the SWPPP missing?	☐Yes ☐No		

Inspector's Signature: _____

Date: _____

Appendix G – Post-Construction Maintenance Requirements

Post-Construction Operation and Maintenance – Vegetated Filter Strip/Riparian Forest Buffer			
Project Name	Pivot Solar NY 6		
Location	Ticonderoga, NY		
Site Status		**Inspector's Name**	
Date		**Time**	

	Maintenance Item	Satisfactory/ Unsatisfactory	Comments
Debris Removal			
1.	Channel clear of debris	☐ Satisfactory ☐ Unsatisfactory	
Level Spreader ((Spring, Fall and after Major Storm Events)			
2.	No evidence of bypass of level spreader	☐ Satisfactory ☐ Unsatisfactory	
3.	No erosion on level outlet	☐ Satisfactory ☐ Unsatisfactory	
Vegetation (Spring and Fall)			
4.	Mowed as necessary to encourage dense growth	☐ Satisfactory ☐ Unsatisfactory	
5.	All areas have suitable vegetative cover (minimum 85%)/No evidence of erosion or scour	☐ Satisfactory ☐ Unsatisfactory	
6.	Fertilized per specification	☐ Satisfactory ☐ Unsatisfactory	
7.	No unwanted vegetation (avoid use of pesticides)		
Ponding (Spring and Fall)			
8.	No evidence of excessive ponding/low spots	☐ Satisfactory ☐ Unsatisfactory	
Sediment Deposition (Spring and Fall)			
9.	Clear of sediment	☐ Satisfactory ☐ Unsatisfactory	

Note – The level spreader is depressed area with level earthen or concrete outlet to create uniform sheet flow over the vegetated filter strip or riparian forest buffer.

Actions to be Taken:

_____

_____

_____

_____

Inspector's Signature:

_____

Appendix H – Stormwater Management Memorandum

Stormwater Management Memorandum

To:	Pivot Solar	**EDR Project No:**	20204
From:	Environmental Design and Research		
Date:	Revised February 2022		
Reference:	Pivot Solar NY 6 SWPPP Appendix H - Stormwater Management Memorandum		

Memo Contents:

Project Introduction:

This memo describes the post-construction stormwater management for the Pivot Solar NY 6 project. The Pivot Solar NY 6 project is located on the south side of Old Chilson Road in the Town of Ticonderoga in Essex County.

Methodology:

Stormwater modeling was completed using HydroCAD. This software was used to perform a Natural Resource Conservation Service (NRCS) Technical Release No. 20 (TR-20) hydrologic analysis of each of the drainage areas. NRCS TR-20 is a computation methodology that develops a sequence of rainfall distributions to predict peak runoffs for a watershed that has been characterized by the Technical Release 55 (TR-55) procedures.

Pre-Construction Site Conditions:

The Pre-Construction condition of the 180.5 acre site is open land/pasture use. Chilson Brook runs north to south through the center of the property for approximately 3,400 feet. The soils for the site are mostly Vergennes silty clay loam, Hydrologic Soil Group (HSG) D (See Appendix C of the SWPPP for Web Soil Survey Reports). One Point of Analysis (POA) was selected for the site in the Pre-Construction Condition, including:

- POA 1 – Runoff from the site, Watershed E-1, flows northeast into a wetland, crosses the existing farm road via culvert, and then continues east to discharge into Chilson Brook on site. The runoff then flows south within Chilson Brook to Trout Brook, which is southeast of the site.

Post-Construction Site Conditions and Stormwater Management:

The Post-Construction condition of the site is industrial use. The site will be the location of a 5 MW AC Photovoltaic Solar panel array on the western side of Chilson Brook. An existing gravel road will be widened and extended to serve the solar array. The ground beneath the array will be vegetated in the post-construction condition. The post-construction condition of the POA is described below:

- POA 1 – Runoff from the site, Watershed P-1, flows northeast into a wetland where it is channelized under the new access road through an extended culvert. The runoff then flows east through the wetland into Chilson Brook, where it flows south into Trout Brook. The POAs for the pre and post conditions are the same.

Vegetated filter strips will be constructed to provide WQv and RRv for the site. Calculations for the vegetated filter strips are provided in Attachment 3. A summary of the stormwater management is shown in Table 1.

Table 1: Water Quality Treatment Analysis

Area Tributary to	Total Area	Required WQv	Minimum RRv Required	RRv Provided	Total WQv Provided	Stormwater Practice Providing RRv & WQv
	(ACRE)	(CU-FT)	(CU-FT)	(CU-FT)	(CU-FT)	
POA 1	0.55	2,401	417	2,401	2,401	Vegetated Filter Strips

Drainage Area Analysis:

Stormwater modeling shows no increase in post-construction discharges from the project site. The results of pre- and post-construction analysis for the site are shown in Table 2.

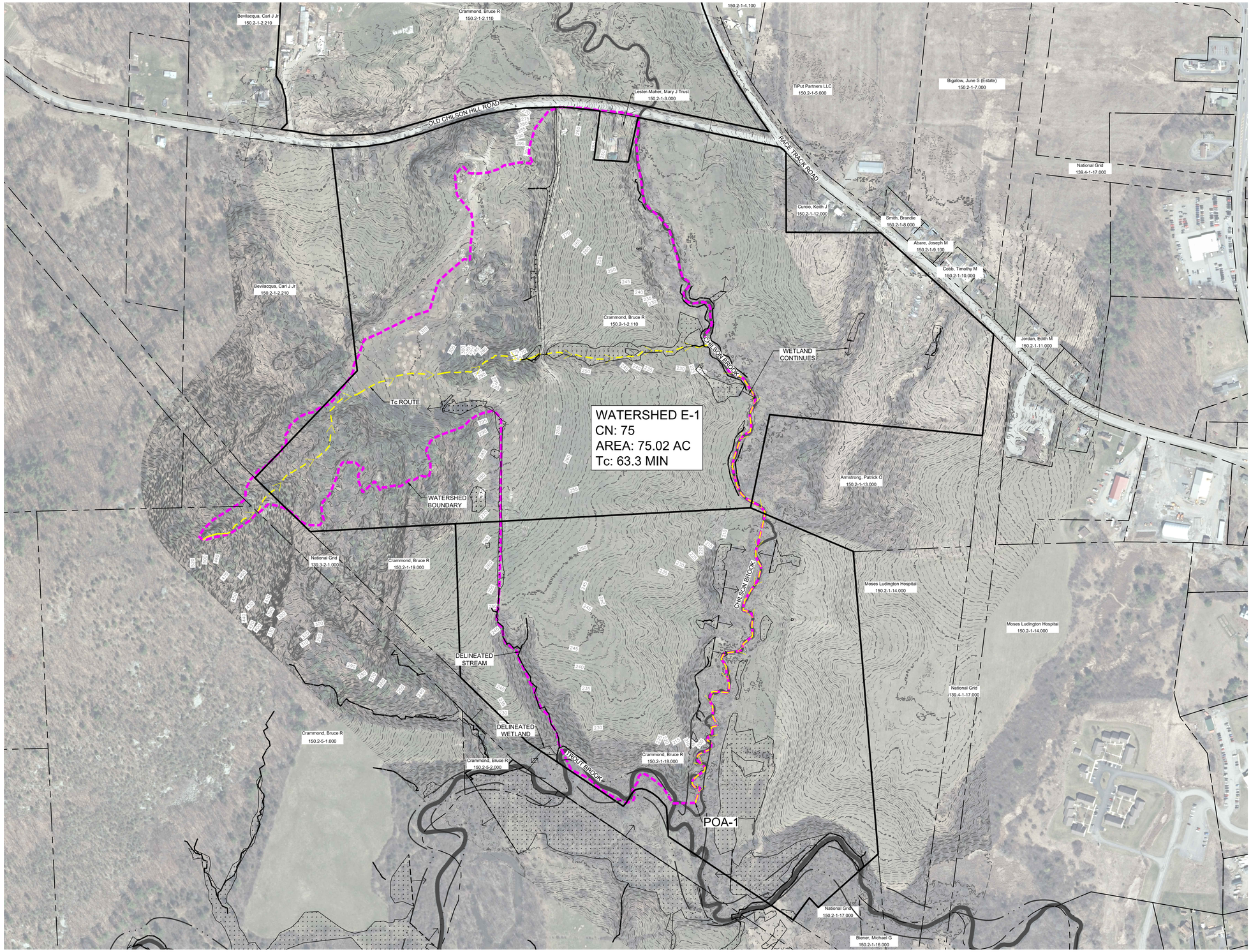
Table 2 - Point of Analysis - Comparison of Pre and Post Construction Conditions

Point of Analysis (POA)	Site Condition	1- Year		2-Year		10-Year		25-Year		50-Year		100-Year	
		Peak Flow (cfs)	Time to Peak (min.)	Peak Flow (cfs)	Time to Peak (min.)	Peak Flow (cfs)	Time to Peak (min.)	Peak Flow (cfs)	Time to Peak (min.)	Peak Flow (cfs)	Time to Peak (min.)	Peak Flow (cfs)	Time to Peak (min.)
POA 1	Post-Construction	12.57	766	19.20	765	43.75	763	64.66	761	84.46	761	109.00	761
	Pre-Construction	12.57	766	19.20	765	43.75	763	64.66	761	84.46	761	109.00	761
	Difference	0	0	0	0	0	0	0	0	0	0	0	0

Note: Difference = Post-Construction - Pre-Construction

Copies To: Adirondack Park Agency (APA), File

Attachment 1 – Watershed Maps



WATERSHED LEGEND

SYMBOL	ITEM
	WATERSHED BOUNDARY
	TC ROUTE
	DELINEATED WETLAND
	DELINEATED STREAM

FOR PERMITTING ONLY

2/18/2022

NOT FOR CONSTRUCTION

200 100 0 100 200 400

GRAPHIC SCALE (IN FEET)

N

J:\20204 Ticonderoga Solar 2\Cad\Working Drawings\20204_WATERSHED5.dwg

CLIENT: Pivot Energy

EDR a better environment

Environmental Design & Research,

Landscape Architecture, Engineering & Environmental Services, D.P.C.
217 Montgomery Street, Suite 1100
Syracuse, New York 13202
P. 315.471.0688

PROJECT TITLE: **PIVOT SOLAR NY 6**

PROJECT LOCATION: **TOWN OF TICONDEROGA, ESSEX COUNTY, NEW YORK**

CLIENT: **PIVOT ENERGY**

DRAWING TITLE: **EXISTING CONDITIONS DRAINAGE MAP**

DRAWINGS ISSUED FOR / REVISIONS

NO.	DATE	ISSUED FOR / REVISION	BY	CHK	APP
1	12/22/2021	ISSUED FOR APA APPLICATION	ZR	TD	
2	02/18/2022	REVISED PER APA COMMENTS	MC	TD	
3					
4					
5					
6					

EDR JOB#: **20204**

DATE: **DECEMBER 22, 2021**

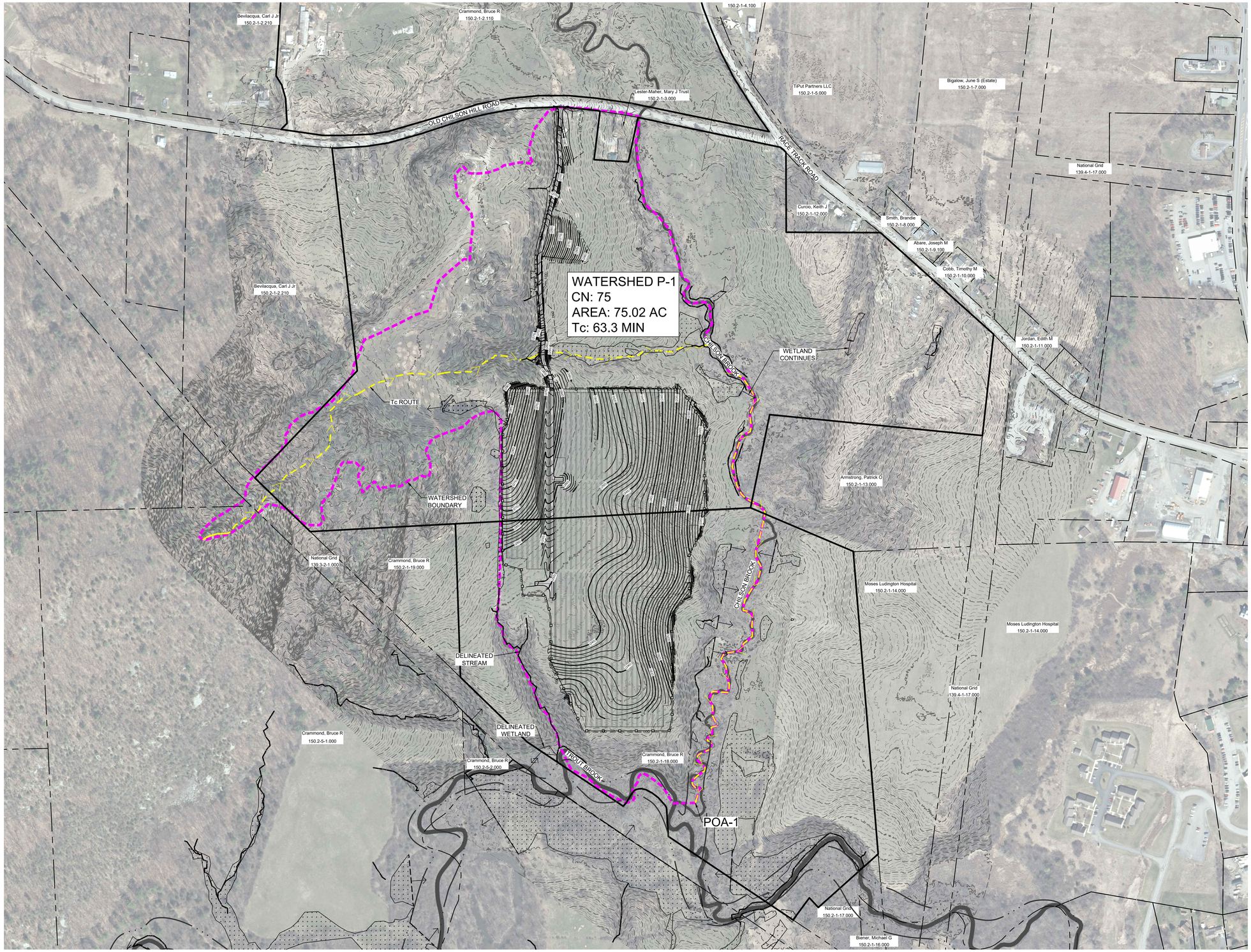
SCALE: **1"=200'**

DRAWN BY: **MC**

CHECKED BY:

DRAWING NUMBER:

DM-1



WATERSHED LEGEND

SYMBOL	ITEM
	WATERSHED BOUNDARY
	TC ROUTE
	DELINEATED WETLAND
	DELINEATED STREAM

FOR PERMITTING ONLY

2/18/2022

NOT FOR CONSTRUCTION

200 100 0 100 200 400

GRAPHIC SCALE (IN FEET)

N

CLIENT: Pivot Energy

EDR a better environment

Environmental Design & Research,

Landscape Architecture, Engineering & Environmental Services, D.P.C.
217 Montgomery Street, Suite 1100
Syracuse, New York 13202
P. 315.471.0688

PROJECT TITLE: **PIVOT SOLAR NY 6**

PROJECT LOCATION: **TOWN OF TICONDEROGA, ESSEX COUNTY, NEW YORK**

CLIENT: **PIVOT ENERGY**

DRAWING TITLE: **PROPOSED CONDITIONS DRAINAGE MAP**

DRAWINGS ISSUED FOR / REVISIONS

NO.	DATE	ISSUED FOR / REVISION	BY	CHK	APP
1	12/22/2021	ISSUED FOR APA APPLICATION	ZR	TD	
2	02/18/2022	REVISED PER APA COMMENTS	MC	TD	
3					
4					
5					
6					

EDR JOB#: **20204**

DATE: **DECEMBER 22, 2021**

SCALE: **1"=200'**

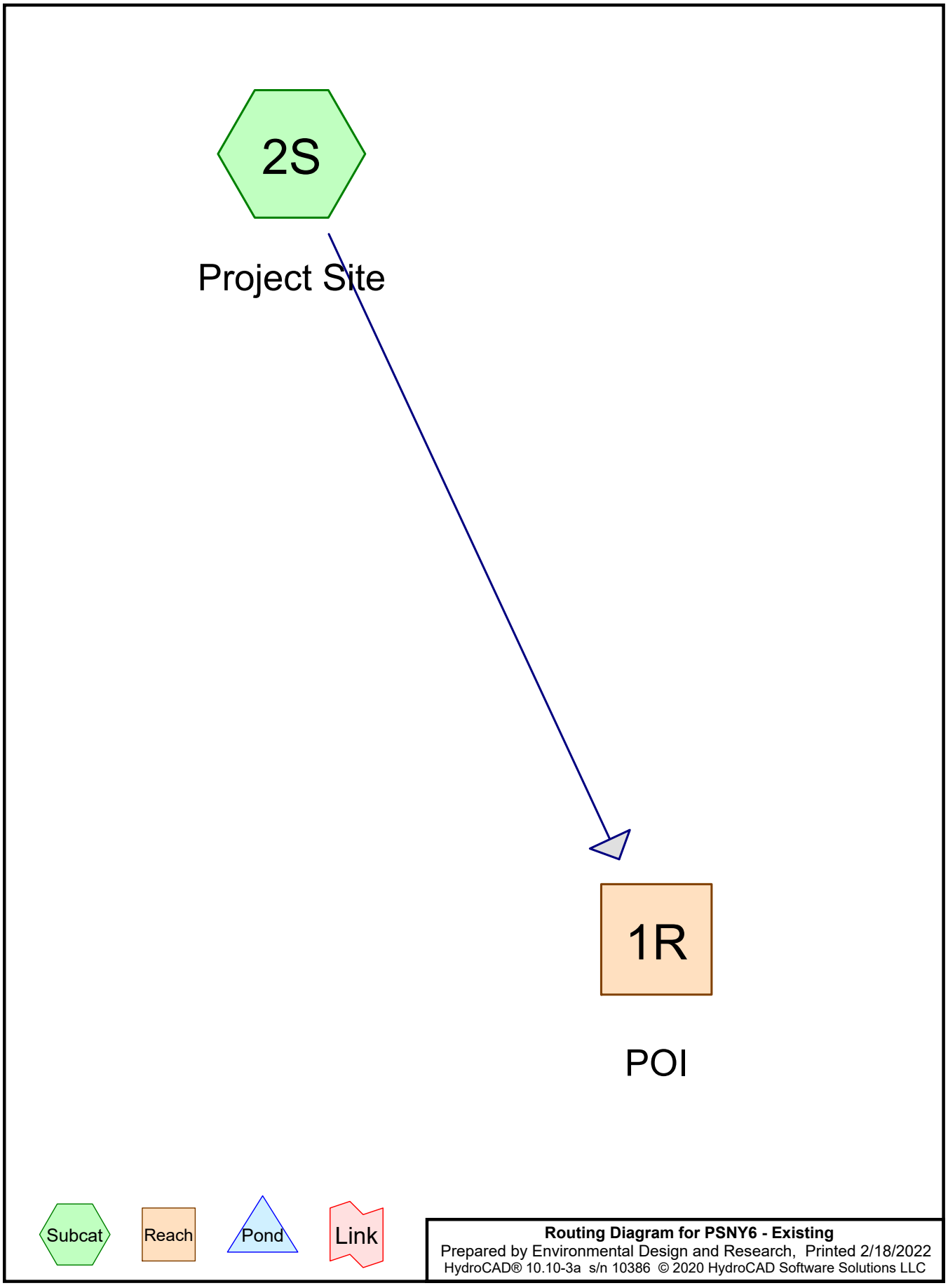
DRAWN BY: **MC**

CHECKED BY:

DRAWING NUMBER: **DM-2**

J:\20204 Ticonderoga Solar 2\Cad\Working Drawings\20204_WATERSHED5.dwg

Attachment 2 – Watershed Hydrologic Modeling Reports (Pre & Post Construction)



Routing Diagram for PSNY6 - Existing
Prepared by Environmental Design and Research, Printed 2/18/2022

Rainfall Events Listing

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	1yr	Type II 24-hr		Default	24.00	1	2.08	2
2	2yr	Type II 24-hr		Default	24.00	1	2.40	2
3	10yr	Type II 24-hr		Default	24.00	1	3.37	2
4	25yr	Type II 24-hr		Default	24.00	1	4.09	2
5	50yr	Type II 24-hr		Default	24.00	1	4.73	2
6	100yr	Type II 24-hr		Default	24.00	1	5.49	2

Area Listing (selected nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.785	85	1/2 acre lots, 25% imp, HSG D (2S)
0.864	35	Brush, Fair, HSG A (2S)
0.271	77	Brush, Fair, HSG D (2S)
0.699	89	Dirt roads, HSG D (2S)
4.804	30	Meadow, non-grazed, HSG A (2S)
44.945	78	Meadow, non-grazed, HSG D (2S)
2.191	98	Water Surface, HSG D (2S)
1.261	36	Woods, Fair, HSG A (2S)
19.199	79	Woods, Fair, HSG D (2S)
75.019	**75**	**TOTAL AREA**

Soil Listing (selected nodes)

Area (acres)	Soil Group	Subcatchment Numbers
6.929	HSG A	2S
0.000	HSG B	
0.000	HSG C	
68.090	HSG D	2S
0.000	Other	
75.019		**TOTAL AREA**

Ground Covers (selected nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	0.000	0.000	0.785	0.000	0.785	1/2 acre lots, 25% imp	2S
0.864	0.000	0.000	0.271	0.000	1.135	Brush, Fair	2S
0.000	0.000	0.000	0.699	0.000	0.699	Dirt roads	2S
4.804	0.000	0.000	44.945	0.000	49.749	Meadow, non-grazed	2S
0.000	0.000	0.000	2.191	0.000	2.191	Water Surface	2S
1.261	0.000	0.000	19.199	0.000	20.460	Woods, Fair	2S
6.929	**0.000**	**0.000**	**68.090**	**0.000**	**75.019**	**TOTAL AREA**	

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 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 2S: Project Site Runoff Area=3,267,827 sf 3.18% Impervious Runoff Depth>0.36"
Flow Length=5,225' Tc=63.3 min CN=75 Runoff=12.57 cfs 2.235 af

Reach 1R: POI Inflow=12.57 cfs 2.235 af
Outflow=12.57 cfs 2.235 af

Total Runoff Area = 75.019 ac Runoff Volume = 2.235 af Average Runoff Depth = 0.36"
96.82% Pervious = 72.632 ac 3.18% Impervious = 2.387 ac

Summary for Subcatchment 2S: Project Site

Project Site

[47] Hint: Peak is 179% of capacity of segment #6

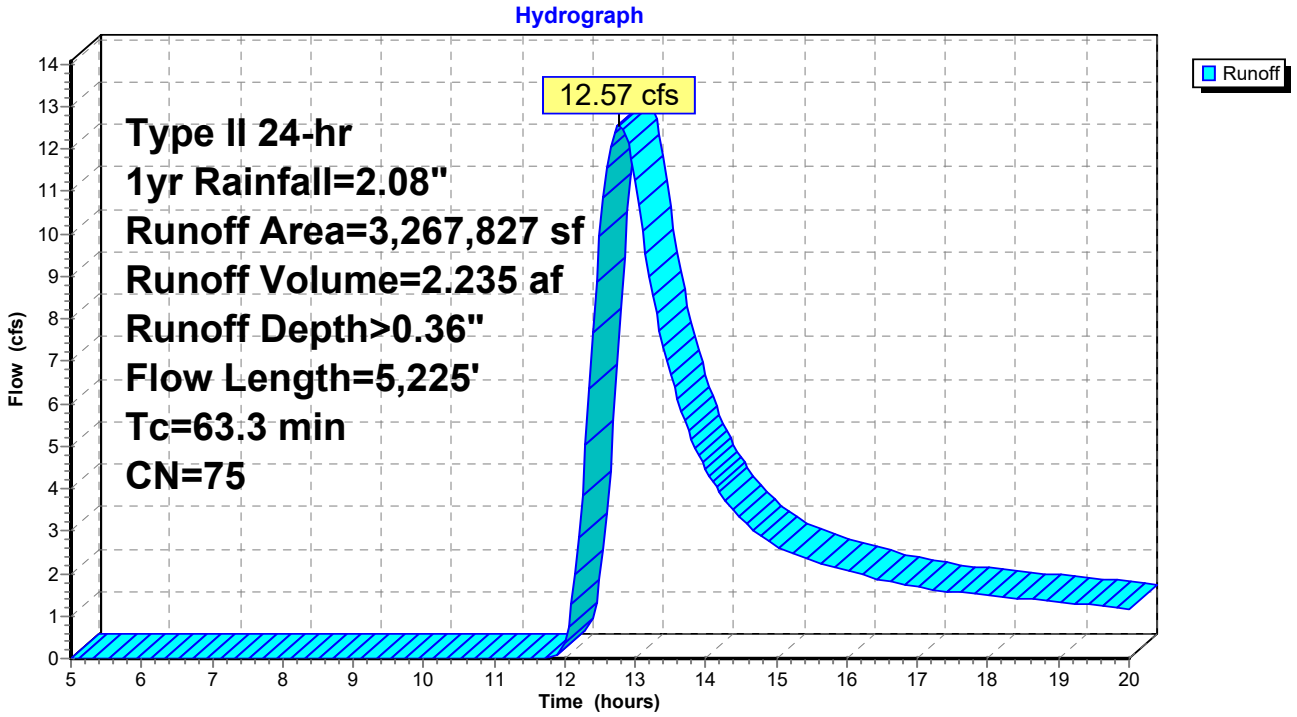
Runoff = 12.57 cfs @ 12.77 hrs, Volume= 2.235 af, Depth> 0.36"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 1yr Rainfall=2.08"

Area (sf)	CN	Description
1,957,804	78	Meadow, non-grazed, HSG D
209,262	30	Meadow, non-grazed, HSG A
30,448	89	Dirt roads, HSG D
37,636	35	Brush, Fair, HSG A
11,805	77	Brush, Fair, HSG D
836,308	79	Woods, Fair, HSG D
54,929	36	Woods, Fair, HSG A
95,440	98	Water Surface, HSG D
34,195	85	1/2 acre lots, 25% imp, HSG D
3,267,827	75	Weighted Average
3,163,838		96.82% Pervious Area
103,989		3.18% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.2	100	0.2400	0.18		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.40"
7.5	933	0.1710	2.07		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
4.1	384	0.0495	1.56		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
4.1	396	0.1023	1.60		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
4.1	828	0.0507	3.38		**Shallow Concentrated Flow,** Grassed Waterway Kv= 15.0 fps
34.3	2,584	0.0081	1.26	7.04	**Channel Flow,** Area= 5.6 sf Perim= 24.3' r= 0.23' n= 0.040 Mountain streams
63.3	5,225	Total			

Subcatchment 2S: Project Site



Summary for Reach 1R: POI

POI = Point of Interest, the convergence of Chilson and Trout Brooks.

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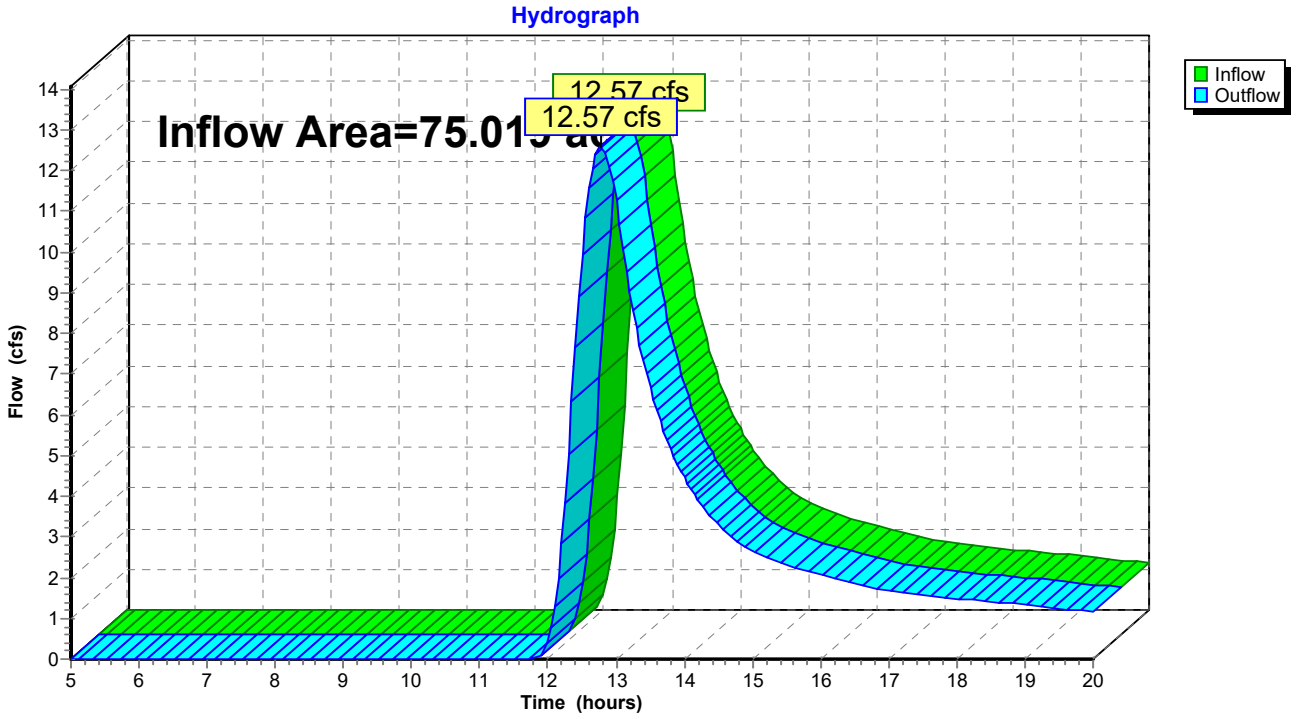
[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 75.019 ac, 3.18% Impervious, Inflow Depth > 0.36" for 1yr event
Inflow = 12.57 cfs @ 12.77 hrs, Volume= 2.235 af
Outflow = 12.57 cfs @ 12.77 hrs, Volume= 2.235 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Reach 1R: POI



Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 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 2S: Project Site Runoff Area=3,267,827 sf 3.18% Impervious Runoff Depth>0.51"
Flow Length=5,225' Tc=63.3 min CN=75 Runoff=19.20 cfs 3.193 af

Reach 1R: POI Inflow=19.20 cfs 3.193 af
Outflow=19.20 cfs 3.193 af

Total Runoff Area = 75.019 ac Runoff Volume = 3.193 af Average Runoff Depth = 0.51"
96.82% Pervious = 72.632 ac 3.18% Impervious = 2.387 ac

Summary for Subcatchment 2S: Project Site

Project Site

[47] Hint: Peak is 273% of capacity of segment #6

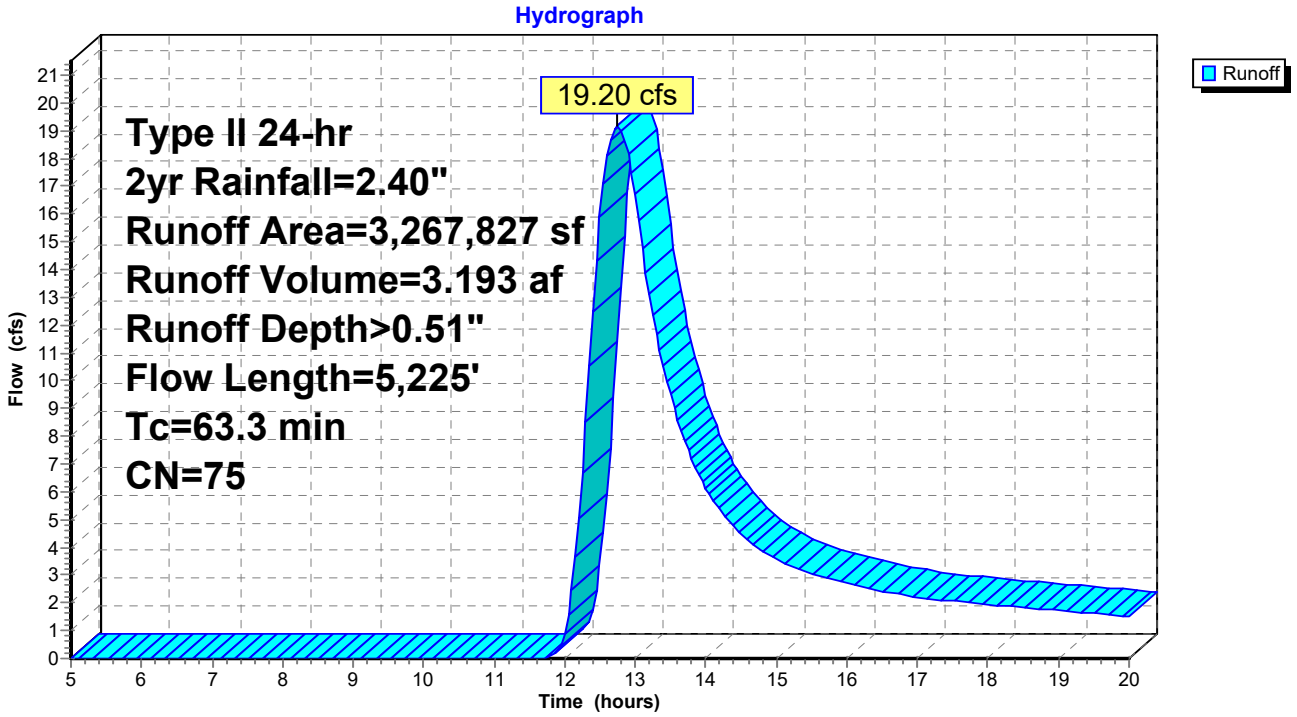
Runoff = 19.20 cfs @ 12.75 hrs, Volume= 3.193 af, Depth> 0.51"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 2yr Rainfall=2.40"

Area (sf)	CN	Description
1,957,804	78	Meadow, non-grazed, HSG D
209,262	30	Meadow, non-grazed, HSG A
30,448	89	Dirt roads, HSG D
37,636	35	Brush, Fair, HSG A
11,805	77	Brush, Fair, HSG D
836,308	79	Woods, Fair, HSG D
54,929	36	Woods, Fair, HSG A
95,440	98	Water Surface, HSG D
34,195	85	1/2 acre lots, 25% imp, HSG D
3,267,827	75	Weighted Average
3,163,838		96.82% Pervious Area
103,989		3.18% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.2	100	0.2400	0.18		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.40"
7.5	933	0.1710	2.07		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
4.1	384	0.0495	1.56		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
4.1	396	0.1023	1.60		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
4.1	828	0.0507	3.38		**Shallow Concentrated Flow,** Grassed Waterway Kv= 15.0 fps
34.3	2,584	0.0081	1.26	7.04	**Channel Flow,** Area= 5.6 sf Perim= 24.3' r= 0.23' n= 0.040 Mountain streams
63.3	5,225	Total			

Subcatchment 2S: Project Site



Summary for Reach 1R: POI

POI = Point of Interest, the convergence of Chilson and Trout Brooks.

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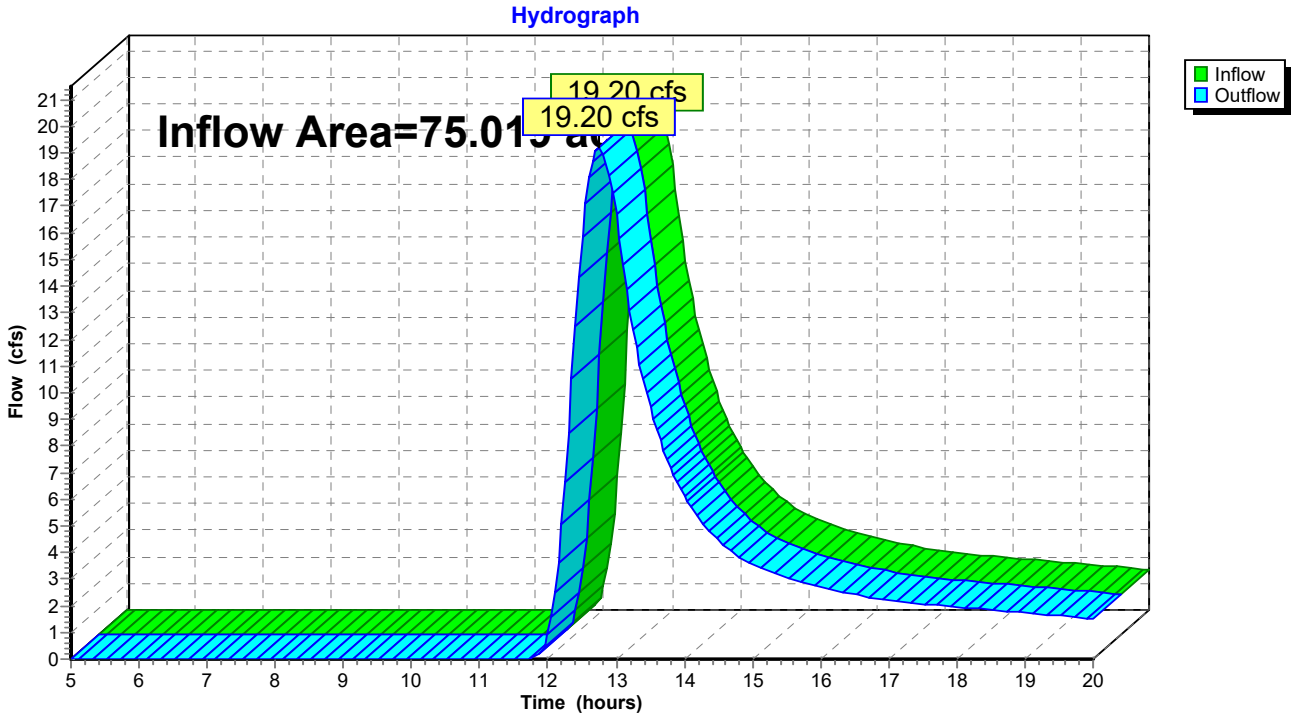
[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 75.019 ac, 3.18% Impervious, Inflow Depth > 0.51" for 2yr event
Inflow = 19.20 cfs @ 12.75 hrs, Volume= 3.193 af
Outflow = 19.20 cfs @ 12.75 hrs, Volume= 3.193 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Reach 1R: POI



Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 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 2S: Project Site Runoff Area=3,267,827 sf 3.18% Impervious Runoff Depth>1.07"
Flow Length=5,225' Tc=63.3 min CN=75 Runoff=43.75 cfs 6.678 af

Reach 1R: POI Inflow=43.75 cfs 6.678 af
Outflow=43.75 cfs 6.678 af

Total Runoff Area = 75.019 ac Runoff Volume = 6.678 af Average Runoff Depth = 1.07"
96.82% Pervious = 72.632 ac 3.18% Impervious = 2.387 ac

Summary for Subcatchment 2S: Project Site

Project Site

[47] Hint: Peak is 622% of capacity of segment #6

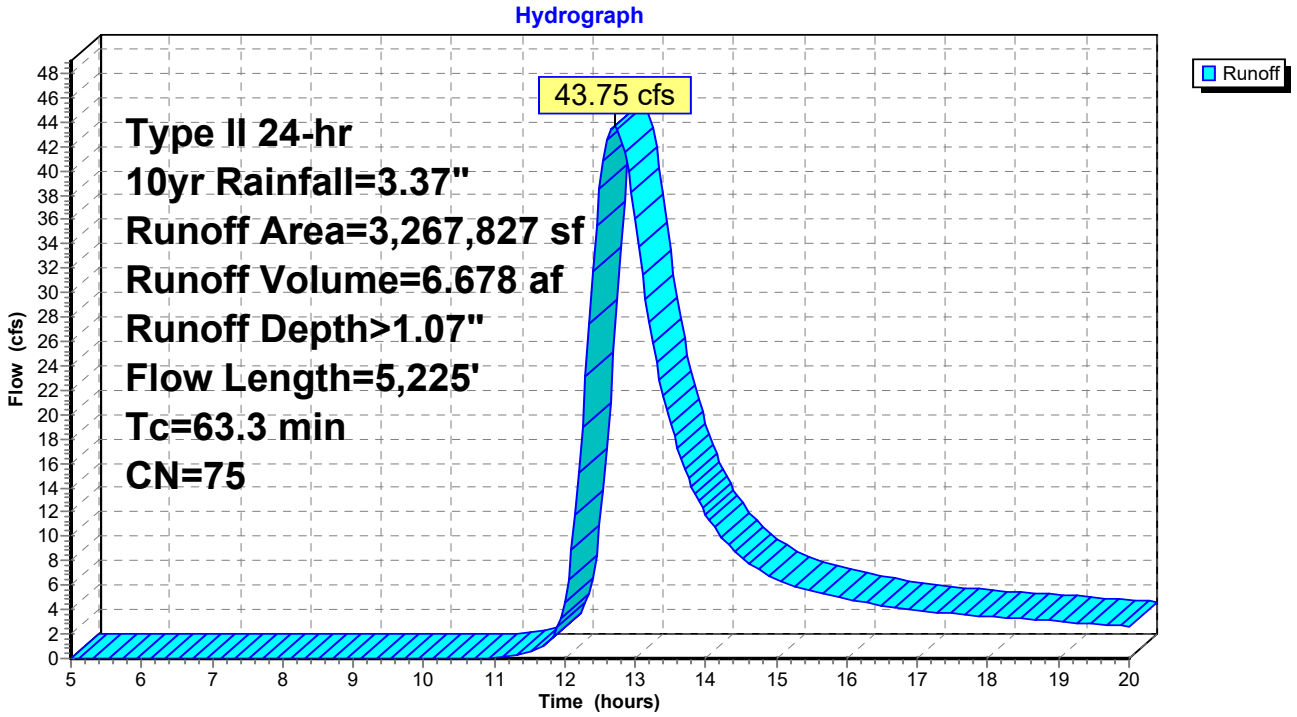
Runoff = 43.75 cfs @ 12.71 hrs, Volume= 6.678 af, Depth> 1.07"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 10yr Rainfall=3.37"

Area (sf)	CN	Description
1,957,804	78	Meadow, non-grazed, HSG D
209,262	30	Meadow, non-grazed, HSG A
30,448	89	Dirt roads, HSG D
37,636	35	Brush, Fair, HSG A
11,805	77	Brush, Fair, HSG D
836,308	79	Woods, Fair, HSG D
54,929	36	Woods, Fair, HSG A
95,440	98	Water Surface, HSG D
34,195	85	1/2 acre lots, 25% imp, HSG D
3,267,827	75	Weighted Average
3,163,838		96.82% Pervious Area
103,989		3.18% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.2	100	0.2400	0.18		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.40"
7.5	933	0.1710	2.07		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
4.1	384	0.0495	1.56		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
4.1	396	0.1023	1.60		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
4.1	828	0.0507	3.38		**Shallow Concentrated Flow,** Grassed Waterway Kv= 15.0 fps
34.3	2,584	0.0081	1.26	7.04	**Channel Flow,** Area= 5.6 sf Perim= 24.3' r= 0.23' n= 0.040 Mountain streams
63.3	5,225	Total			

Subcatchment 2S: Project Site



Summary for Reach 1R: POI

POI = Point of Interest, the convergence of Chilson and Trout Brooks.

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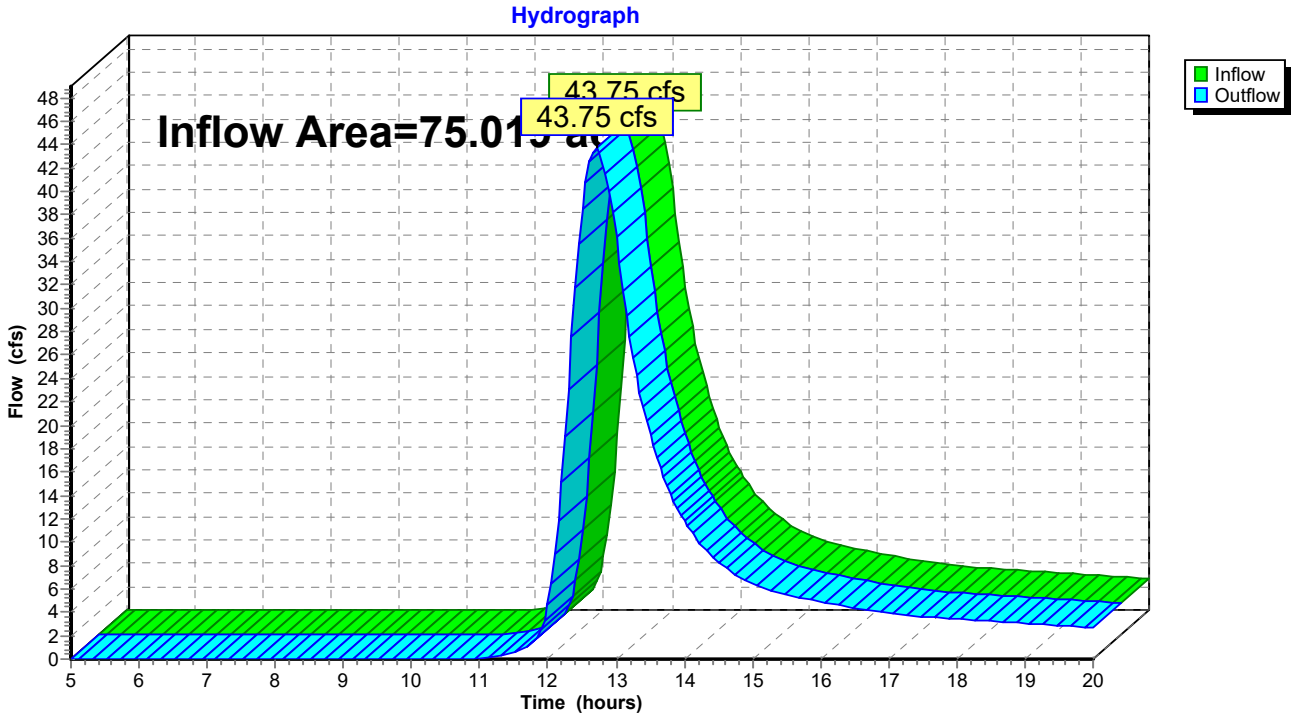
[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 75.019 ac, 3.18% Impervious, Inflow Depth > 1.07" for 10yr event
Inflow = 43.75 cfs @ 12.71 hrs, Volume= 6.678 af
Outflow = 43.75 cfs @ 12.71 hrs, Volume= 6.678 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Reach 1R: POI



Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 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 2S: Project Site Runoff Area=3,267,827 sf 3.18% Impervious Runoff Depth>1.55"
Flow Length=5,225' Tc=63.3 min CN=75 Runoff=64.66 cfs 9.663 af

Reach 1R: POI Inflow=64.66 cfs 9.663 af
Outflow=64.66 cfs 9.663 af

Total Runoff Area = 75.019 ac Runoff Volume = 9.663 af Average Runoff Depth = 1.55"
96.82% Pervious = 72.632 ac 3.18% Impervious = 2.387 ac

Summary for Subcatchment 2S: Project Site

Project Site

[47] Hint: Peak is 919% of capacity of segment #6

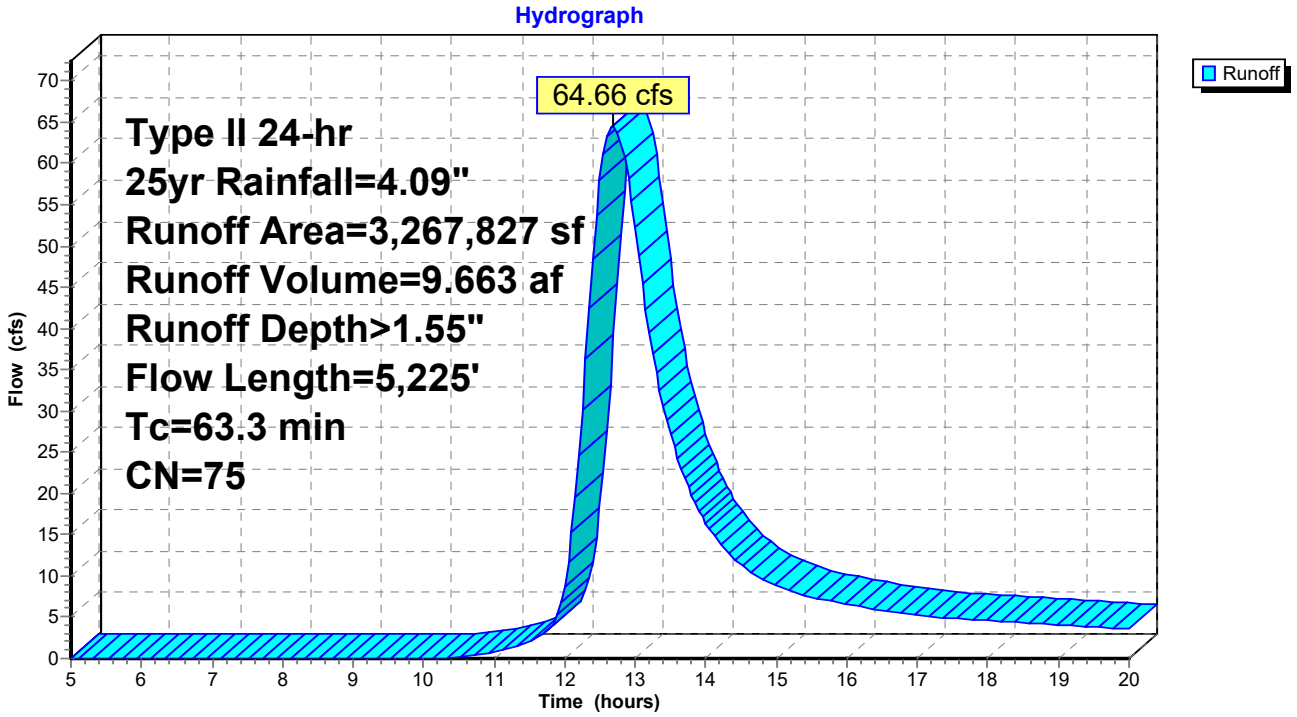
Runoff = 64.66 cfs @ 12.69 hrs, Volume= 9.663 af, Depth> 1.55"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 25yr Rainfall=4.09"

Area (sf)	CN	Description
1,957,804	78	Meadow, non-grazed, HSG D
209,262	30	Meadow, non-grazed, HSG A
30,448	89	Dirt roads, HSG D
37,636	35	Brush, Fair, HSG A
11,805	77	Brush, Fair, HSG D
836,308	79	Woods, Fair, HSG D
54,929	36	Woods, Fair, HSG A
95,440	98	Water Surface, HSG D
34,195	85	1/2 acre lots, 25% imp, HSG D
3,267,827	75	Weighted Average
3,163,838		96.82% Pervious Area
103,989		3.18% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.2	100	0.2400	0.18		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.40"
7.5	933	0.1710	2.07		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
4.1	384	0.0495	1.56		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
4.1	396	0.1023	1.60		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
4.1	828	0.0507	3.38		**Shallow Concentrated Flow,** Grassed Waterway Kv= 15.0 fps
34.3	2,584	0.0081	1.26	7.04	**Channel Flow,** Area= 5.6 sf Perim= 24.3' r= 0.23' n= 0.040 Mountain streams
63.3	5,225	Total			

Subcatchment 2S: Project Site



Summary for Reach 1R: POI

POI = Point of Interest, the convergence of Chilson and Trout Brooks.

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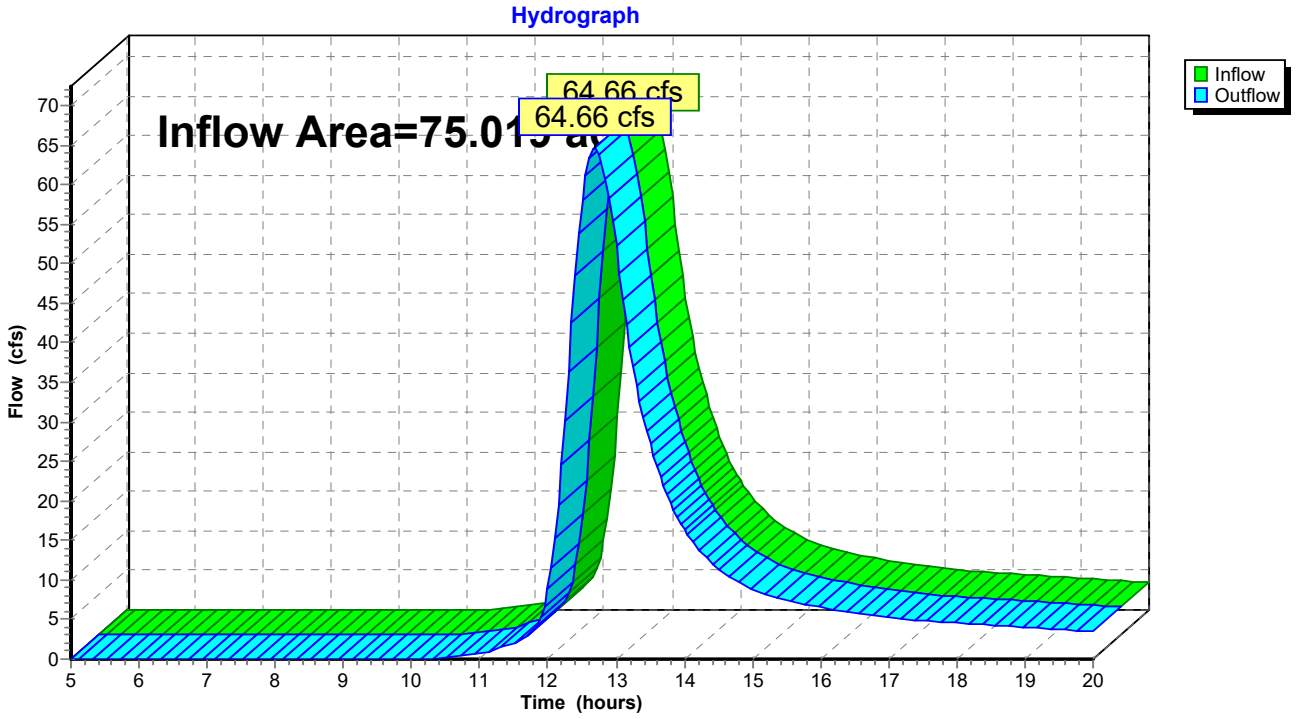
[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 75.019 ac, 3.18% Impervious, Inflow Depth > 1.55" for 25yr event
Inflow = 64.66 cfs @ 12.69 hrs, Volume= 9.663 af
Outflow = 64.66 cfs @ 12.69 hrs, Volume= 9.663 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Reach 1R: POI



Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 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 2S: Project Site Runoff Area=3,267,827 sf 3.18% Impervious Runoff Depth>2.00"
Flow Length=5,225' Tc=63.3 min CN=75 Runoff=84.46 cfs 12.514 af

Reach 1R: POI Inflow=84.46 cfs 12.514 af
Outflow=84.46 cfs 12.514 af

Total Runoff Area = 75.019 ac Runoff Volume = 12.514 af Average Runoff Depth = 2.00"
96.82% Pervious = 72.632 ac 3.18% Impervious = 2.387 ac

Summary for Subcatchment 2S: Project Site

Project Site

[47] Hint: Peak is 1200% of capacity of segment #6

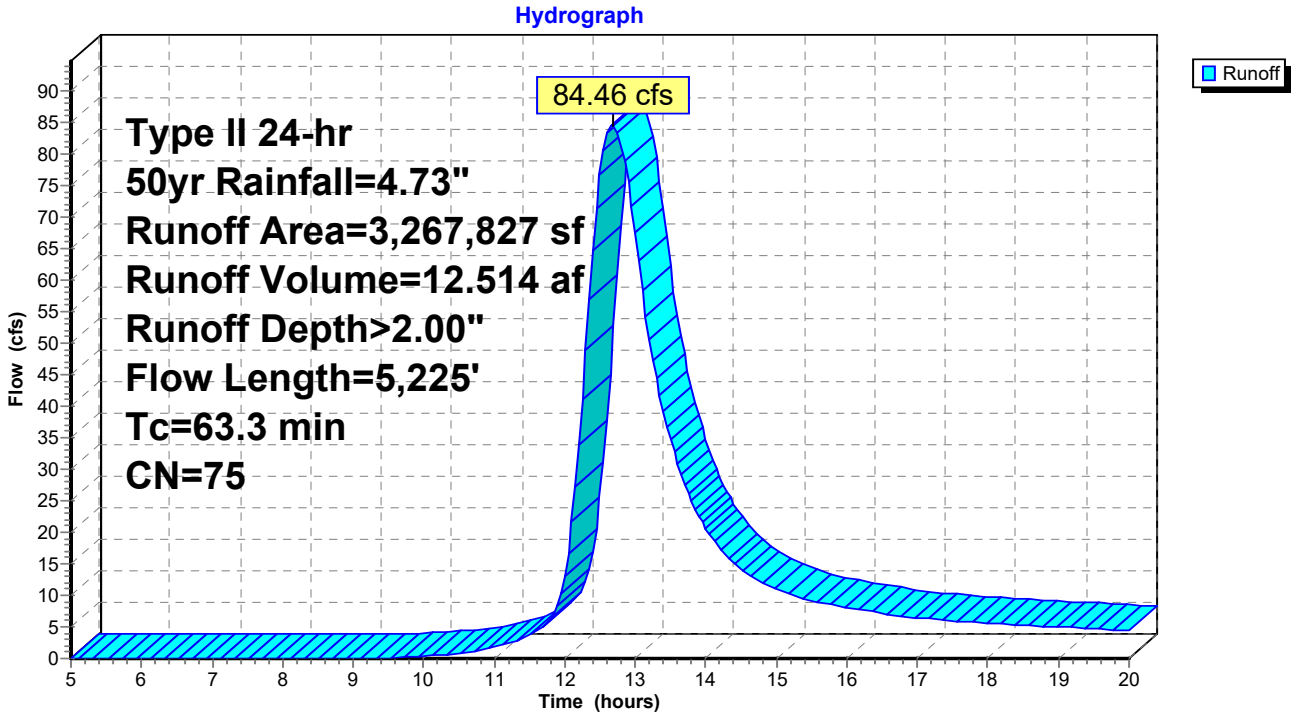
Runoff = 84.46 cfs @ 12.68 hrs, Volume= 12.514 af, Depth> 2.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 50yr Rainfall=4.73"

Area (sf)	CN	Description
1,957,804	78	Meadow, non-grazed, HSG D
209,262	30	Meadow, non-grazed, HSG A
30,448	89	Dirt roads, HSG D
37,636	35	Brush, Fair, HSG A
11,805	77	Brush, Fair, HSG D
836,308	79	Woods, Fair, HSG D
54,929	36	Woods, Fair, HSG A
95,440	98	Water Surface, HSG D
34,195	85	1/2 acre lots, 25% imp, HSG D
3,267,827	75	Weighted Average
3,163,838		96.82% Pervious Area
103,989		3.18% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.2	100	0.2400	0.18		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.40"
7.5	933	0.1710	2.07		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
4.1	384	0.0495	1.56		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
4.1	396	0.1023	1.60		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
4.1	828	0.0507	3.38		**Shallow Concentrated Flow,** Grassed Waterway Kv= 15.0 fps
34.3	2,584	0.0081	1.26	7.04	**Channel Flow,** Area= 5.6 sf Perim= 24.3' r= 0.23' n= 0.040 Mountain streams
63.3	5,225	Total			

Subcatchment 2S: Project Site



Summary for Reach 1R: POI

POI = Point of Interest, the convergence of Chilson and Trout Brooks.

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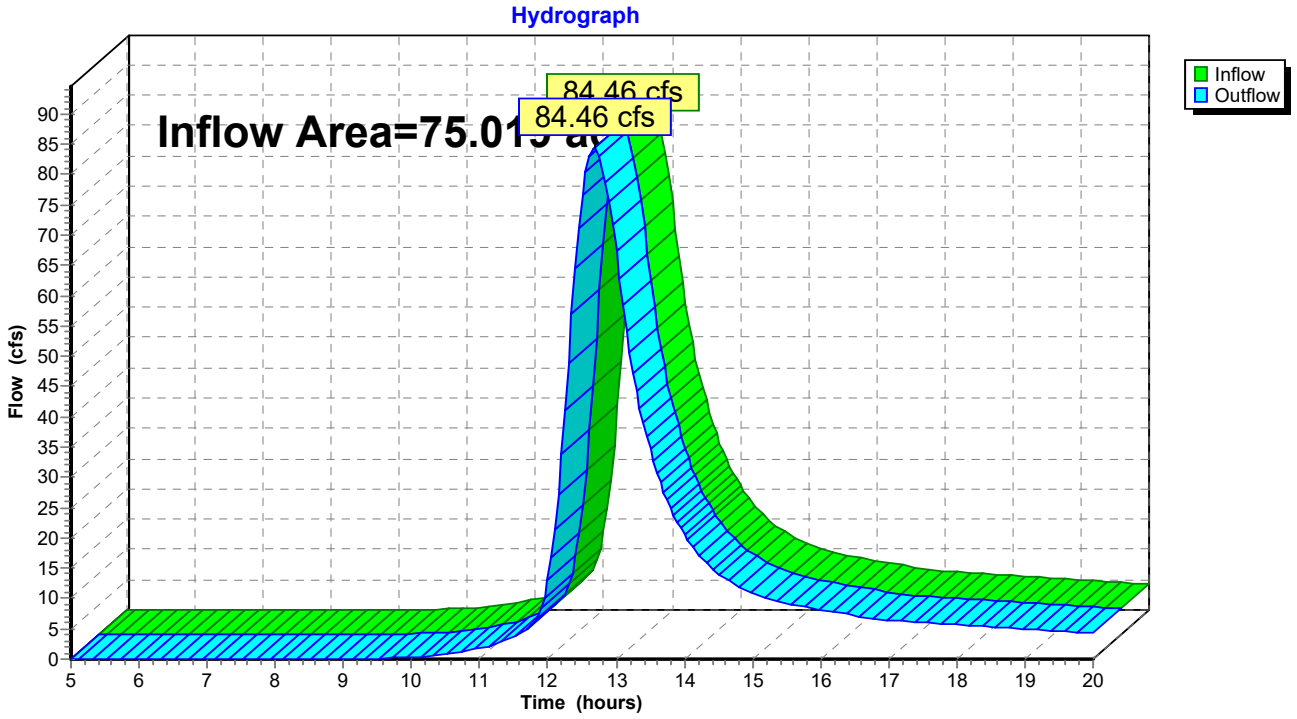
[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 75.019 ac, 3.18% Impervious, Inflow Depth > 2.00" for 50yr event
Inflow = 84.46 cfs @ 12.68 hrs, Volume= 12.514 af
Outflow = 84.46 cfs @ 12.68 hrs, Volume= 12.514 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Reach 1R: POI



Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 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 2S: Project Site Runoff Area=3,267,827 sf 3.18% Impervious Runoff Depth>2.57"
Flow Length=5,225' Tc=63.3 min CN=75 Runoff=109.00 cfs 16.080 af

Reach 1R: POI Inflow=109.00 cfs 16.080 af
Outflow=109.00 cfs 16.080 af

Total Runoff Area = 75.019 ac Runoff Volume = 16.080 af Average Runoff Depth = 2.57"
96.82% Pervious = 72.632 ac 3.18% Impervious = 2.387 ac

Summary for Subcatchment 2S: Project Site

Project Site

[47] Hint: Peak is 1549% of capacity of segment #6

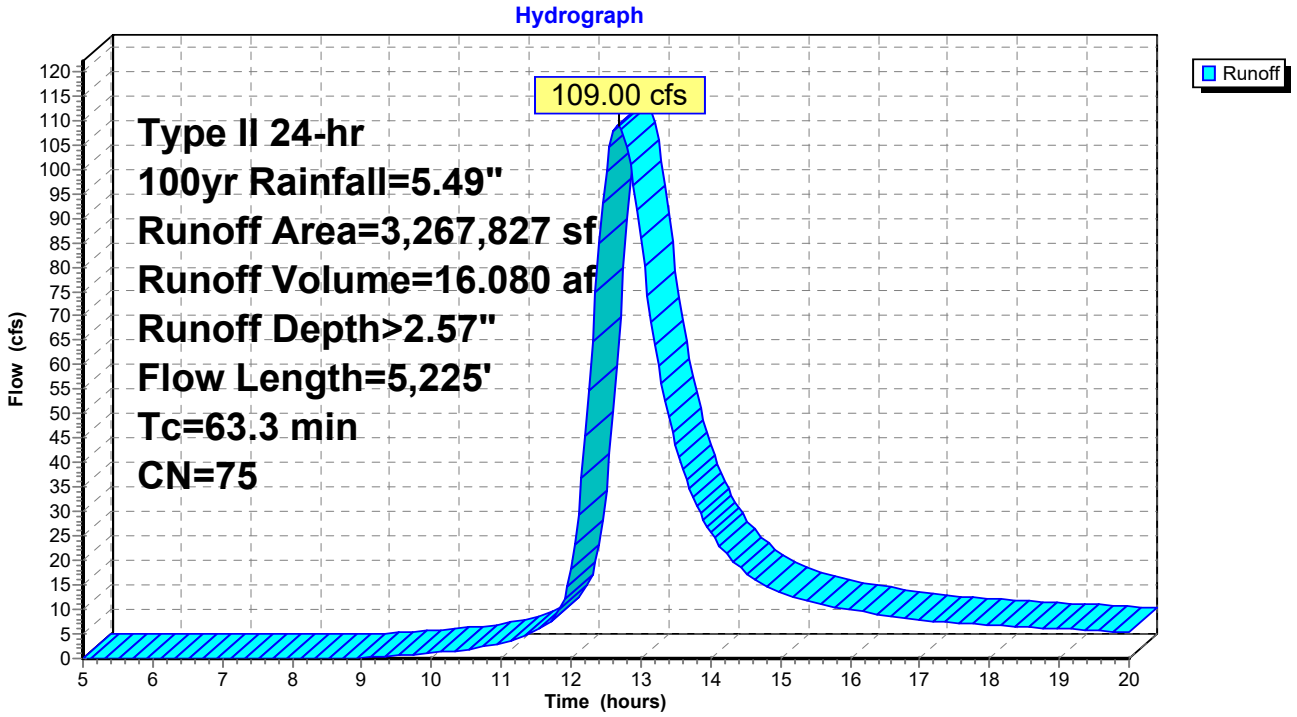
Runoff = 109.00 cfs @ 12.68 hrs, Volume= 16.080 af, Depth> 2.57"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 100yr Rainfall=5.49"

Area (sf)	CN	Description
1,957,804	78	Meadow, non-grazed, HSG D
209,262	30	Meadow, non-grazed, HSG A
30,448	89	Dirt roads, HSG D
37,636	35	Brush, Fair, HSG A
11,805	77	Brush, Fair, HSG D
836,308	79	Woods, Fair, HSG D
54,929	36	Woods, Fair, HSG A
95,440	98	Water Surface, HSG D
34,195	85	1/2 acre lots, 25% imp, HSG D
3,267,827	75	Weighted Average
3,163,838		96.82% Pervious Area
103,989		3.18% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.2	100	0.2400	0.18		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.40"
7.5	933	0.1710	2.07		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
4.1	384	0.0495	1.56		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
4.1	396	0.1023	1.60		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
4.1	828	0.0507	3.38		**Shallow Concentrated Flow,** Grassed Waterway Kv= 15.0 fps
34.3	2,584	0.0081	1.26	7.04	**Channel Flow,** Area= 5.6 sf Perim= 24.3' r= 0.23' n= 0.040 Mountain streams
63.3	5,225	Total			

Subcatchment 2S: Project Site



Summary for Reach 1R: POI

POI = Point of Interest, the convergence of Chilson and Trout Brooks.

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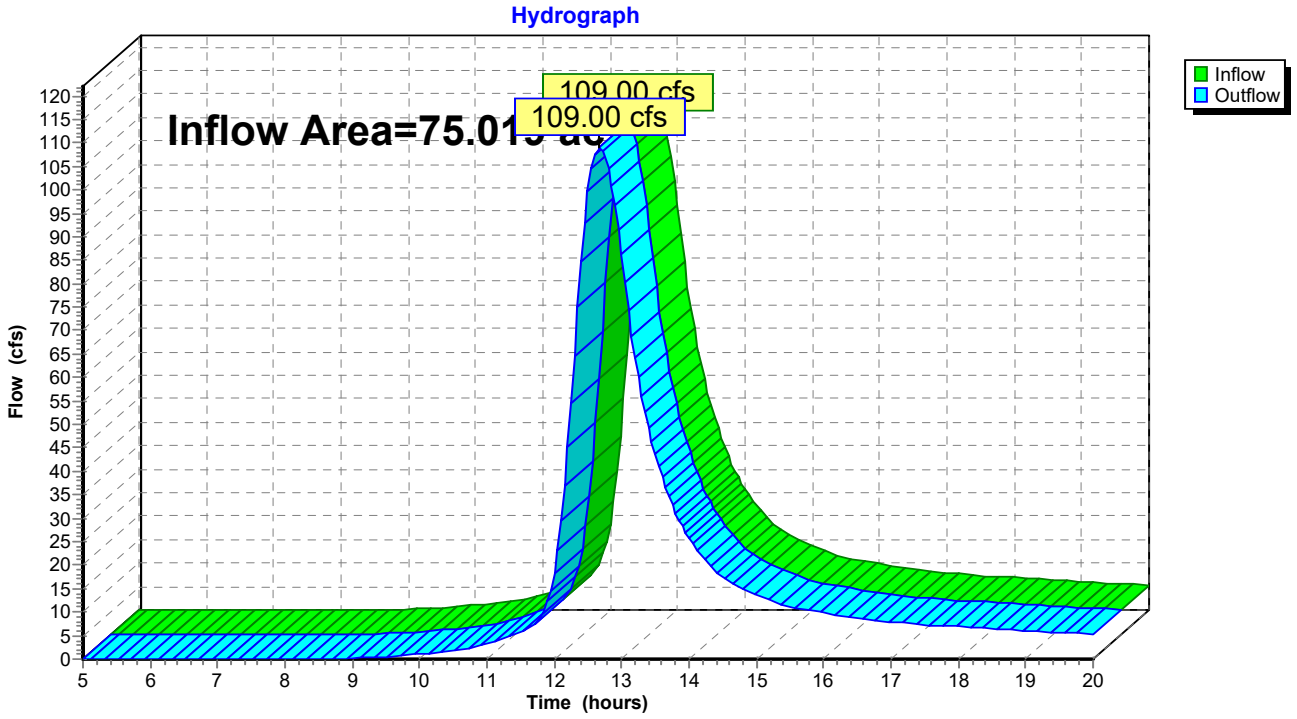
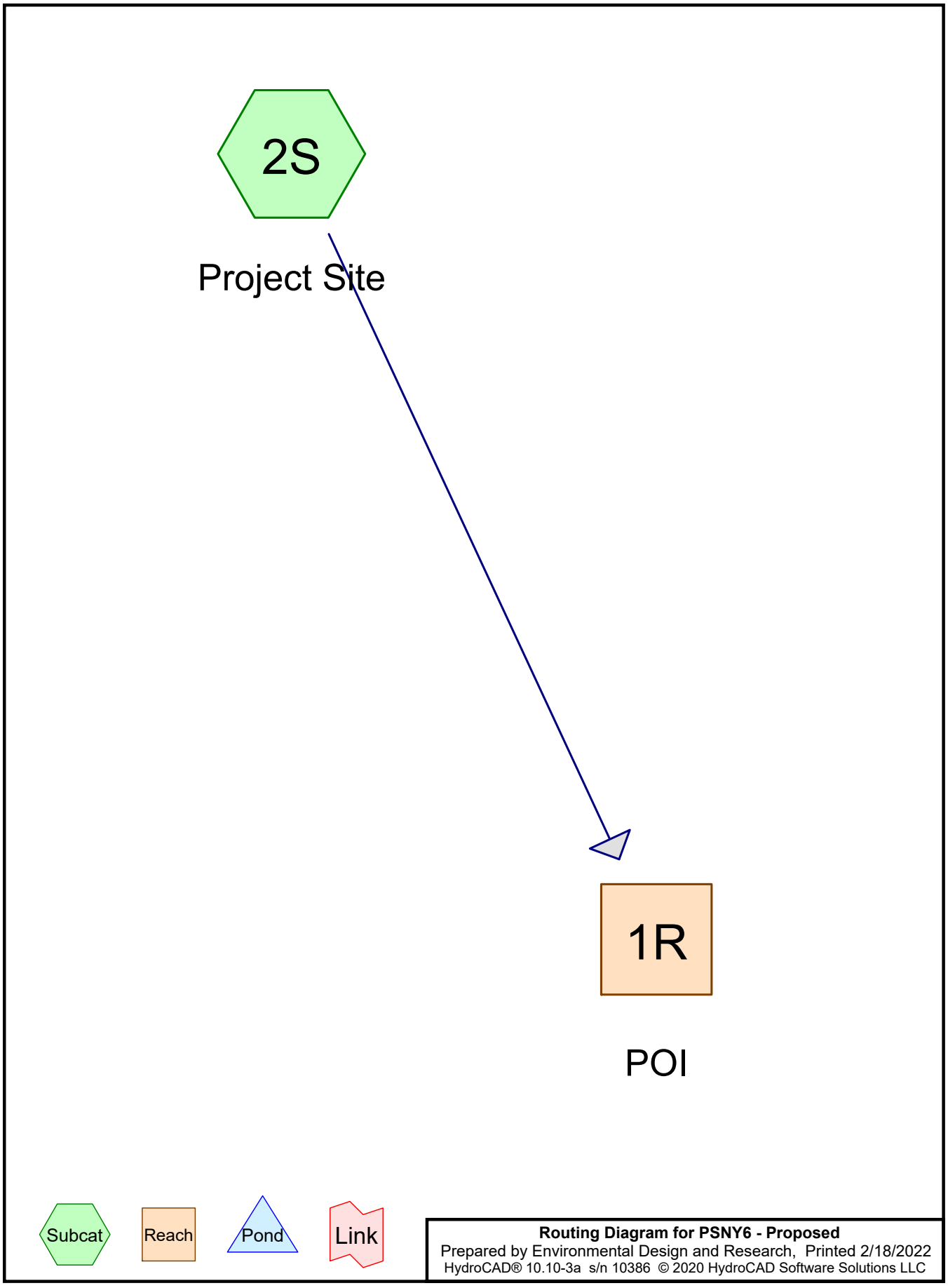
[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 75.019 ac, 3.18% Impervious, Inflow Depth > 2.57" for 100yr event
Inflow = 109.00 cfs @ 12.68 hrs, Volume= 16.080 af
Outflow = 109.00 cfs @ 12.68 hrs, Volume= 16.080 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Reach 1R: POI





Routing Diagram for PSNY6 - Proposed
Prepared by Environmental Design and Research, Printed 2/18/2022

Rainfall Events Listing

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	1yr	Type II 24-hr		Default	24.00	1	2.08	2
2	2yr	Type II 24-hr		Default	24.00	1	2.40	2
3	10yr	Type II 24-hr		Default	24.00	1	3.37	2
4	25yr	Type II 24-hr		Default	24.00	1	4.09	2
5	50yr	Type II 24-hr		Default	24.00	1	4.73	2
6	100yr	Type II 24-hr		Default	24.00	1	5.49	2

Area Listing (selected nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.785	85	1/2 acre lots, 25% imp, HSG D (2S)
0.864	35	Brush, Fair, HSG A (2S)
0.271	77	Brush, Fair, HSG D (2S)
0.251	89	Dirt roads, HSG D (2S)
0.856	96	Gravel surface, HSG D (2S)
4.804	30	Meadow, non-grazed, HSG A (2S)
44.537	78	Meadow, non-grazed, HSG D (2S)
2.191	98	Water Surface, HSG D (2S)
1.261	36	Woods, Fair, HSG A (2S)
19.199	79	Woods, Fair, HSG D (2S)
75.019	**75**	**TOTAL AREA**

Soil Listing (selected nodes)

Area (acres)	Soil Group	Subcatchment Numbers
6.929	HSG A	2S
0.000	HSG B	
0.000	HSG C	
68.090	HSG D	2S
0.000	Other	
75.019		**TOTAL AREA**

Ground Covers (selected nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	0.000	0.000	0.785	0.000	0.785	1/2 acre lots, 25% imp	2S
0.864	0.000	0.000	0.271	0.000	1.135	Brush, Fair	2S
0.000	0.000	0.000	0.251	0.000	0.251	Dirt roads	2S
0.000	0.000	0.000	0.856	0.000	0.856	Gravel surface	2S
4.804	0.000	0.000	44.537	0.000	49.341	Meadow, non-grazed	2S
0.000	0.000	0.000	2.191	0.000	2.191	Water Surface	2S
1.261	0.000	0.000	19.199	0.000	20.460	Woods, Fair	2S
6.929	**0.000**	**0.000**	**68.090**	**0.000**	**75.019**	**TOTAL AREA**	

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 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 2S: Project Site Runoff Area=3,267,828 sf 3.18% Impervious Runoff Depth>0.36"
Flow Length=5,225' Tc=63.3 min CN=75 Runoff=12.57 cfs 2.235 af

Reach 1R: POI Inflow=12.57 cfs 2.235 af
Outflow=12.57 cfs 2.235 af

Total Runoff Area = 75.019 ac Runoff Volume = 2.235 af Average Runoff Depth = 0.36"
96.82% Pervious = 72.632 ac 3.18% Impervious = 2.387 ac

Summary for Subcatchment 2S: Project Site

Project Site

[47] Hint: Peak is 179% of capacity of segment #6

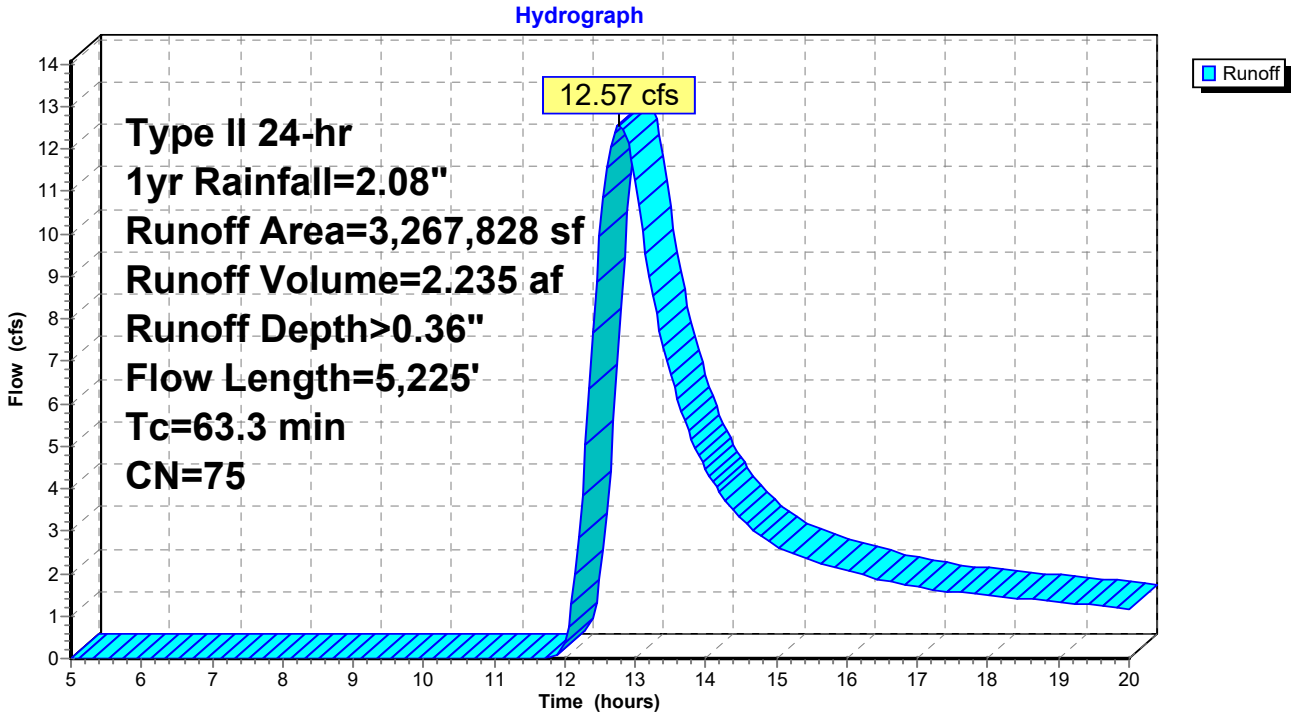
Runoff = 12.57 cfs @ 12.77 hrs, Volume= 2.235 af, Depth> 0.36"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 1yr Rainfall=2.08"

Area (sf)	CN	Description
1,940,013	78	Meadow, non-grazed, HSG D
209,262	30	Meadow, non-grazed, HSG A
10,934	89	Dirt roads, HSG D
37,636	35	Brush, Fair, HSG A
11,805	77	Brush, Fair, HSG D
836,308	79	Woods, Fair, HSG D
54,929	36	Woods, Fair, HSG A
95,440	98	Water Surface, HSG D
34,195	85	1/2 acre lots, 25% imp, HSG D
37,306	96	Gravel surface, HSG D
3,267,828	75	Weighted Average
3,163,839		96.82% Pervious Area
103,989		3.18% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.2	100	0.2400	0.18		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.40"
7.5	933	0.1710	2.07		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
4.1	384	0.0495	1.56		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
4.1	396	0.1023	1.60		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
4.1	828	0.0507	3.38		**Shallow Concentrated Flow,** Grassed Waterway Kv= 15.0 fps
34.3	2,584	0.0081	1.26	7.04	**Channel Flow,** Area= 5.6 sf Perim= 24.3' r= 0.23' n= 0.040 Mountain streams
63.3	5,225	Total			

Subcatchment 2S: Project Site



Summary for Reach 1R: POI

POI = Point of Interest, the convergence of Chilson and Trout Brooks.

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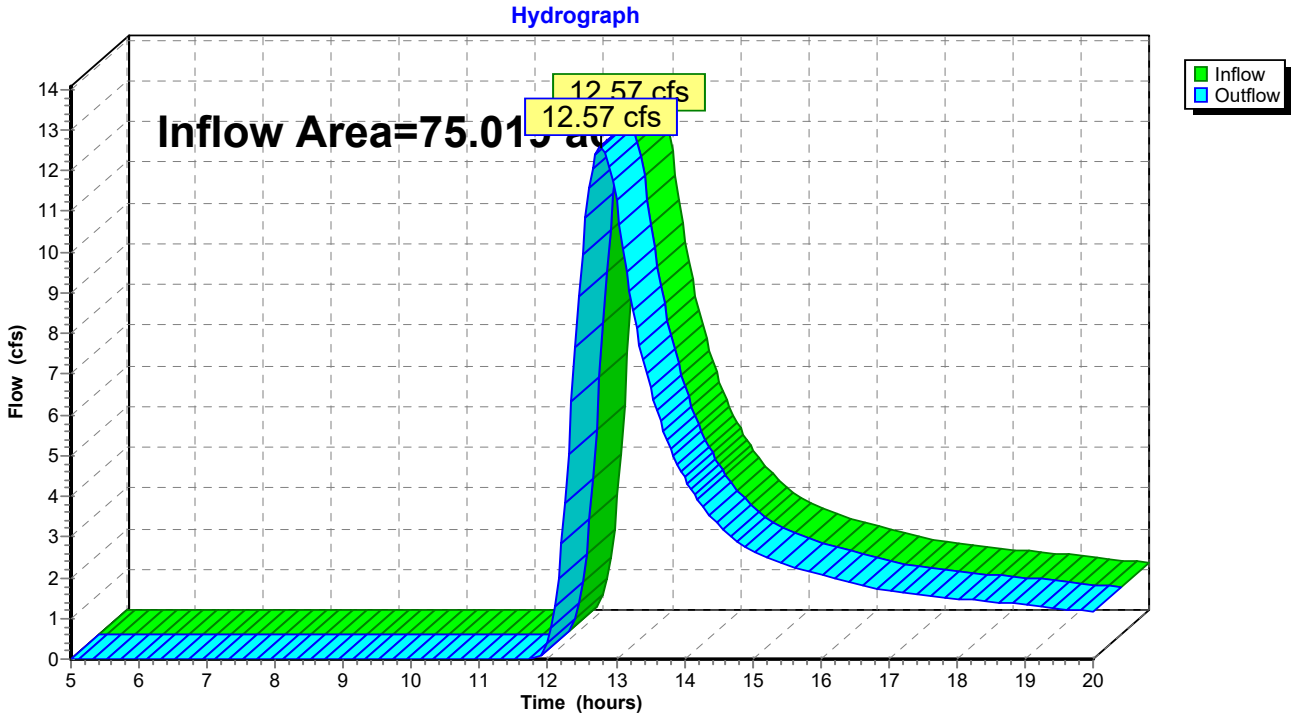
[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 75.019 ac, 3.18% Impervious, Inflow Depth > 0.36" for 1yr event
Inflow = 12.57 cfs @ 12.77 hrs, Volume= 2.235 af
Outflow = 12.57 cfs @ 12.77 hrs, Volume= 2.235 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Reach 1R: POI



Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 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 2S: Project Site Runoff Area=3,267,828 sf 3.18% Impervious Runoff Depth>0.51"
Flow Length=5,225' Tc=63.3 min CN=75 Runoff=19.20 cfs 3.193 af

Reach 1R: POI Inflow=19.20 cfs 3.193 af
Outflow=19.20 cfs 3.193 af

Total Runoff Area = 75.019 ac Runoff Volume = 3.193 af Average Runoff Depth = 0.51"
96.82% Pervious = 72.632 ac 3.18% Impervious = 2.387 ac

Summary for Subcatchment 2S: Project Site

Project Site

[47] Hint: Peak is 273% of capacity of segment #6

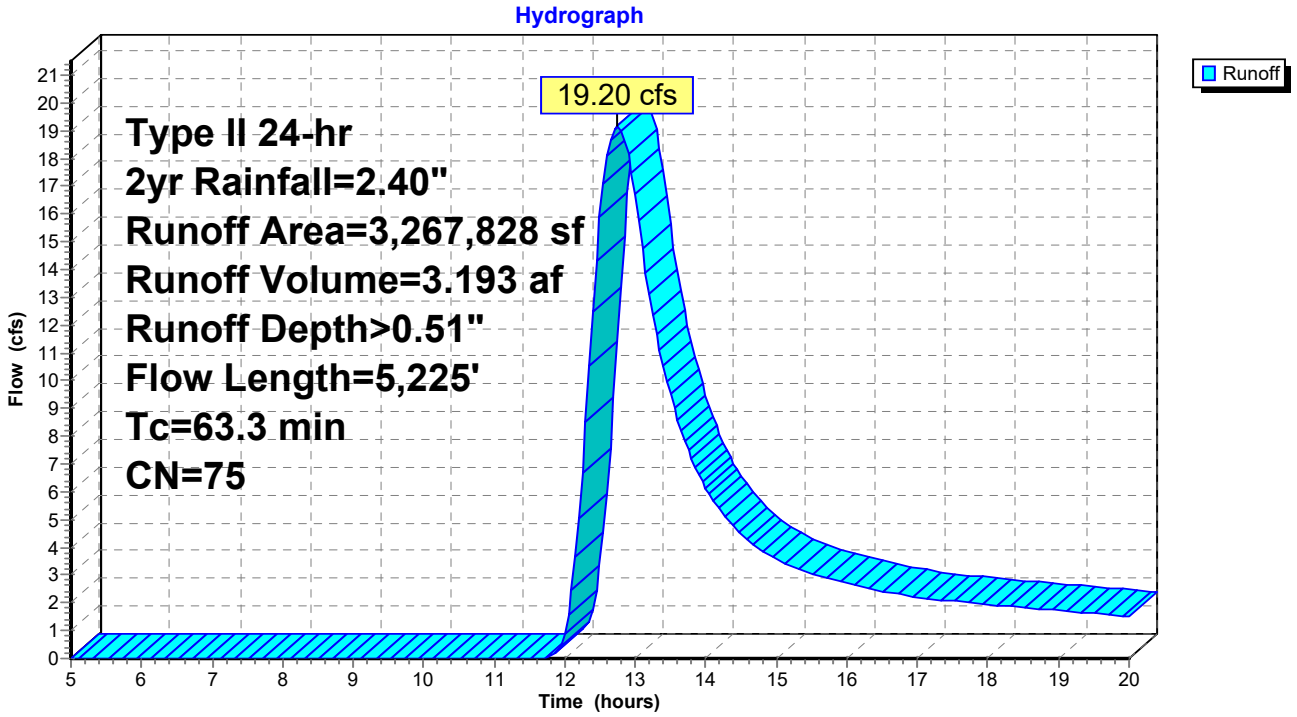
Runoff = 19.20 cfs @ 12.75 hrs, Volume= 3.193 af, Depth> 0.51"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 2yr Rainfall=2.40"

Area (sf)	CN	Description
1,940,013	78	Meadow, non-grazed, HSG D
209,262	30	Meadow, non-grazed, HSG A
10,934	89	Dirt roads, HSG D
37,636	35	Brush, Fair, HSG A
11,805	77	Brush, Fair, HSG D
836,308	79	Woods, Fair, HSG D
54,929	36	Woods, Fair, HSG A
95,440	98	Water Surface, HSG D
34,195	85	1/2 acre lots, 25% imp, HSG D
37,306	96	Gravel surface, HSG D
3,267,828	75	Weighted Average
3,163,839		96.82% Pervious Area
103,989		3.18% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.2	100	0.2400	0.18		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.40"
7.5	933	0.1710	2.07		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
4.1	384	0.0495	1.56		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
4.1	396	0.1023	1.60		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
4.1	828	0.0507	3.38		**Shallow Concentrated Flow,** Grassed Waterway Kv= 15.0 fps
34.3	2,584	0.0081	1.26	7.04	**Channel Flow,** Area= 5.6 sf Perim= 24.3' r= 0.23' n= 0.040 Mountain streams
63.3	5,225	Total			

Subcatchment 2S: Project Site



Summary for Reach 1R: POI

POI = Point of Interest, the convergence of Chilson and Trout Brooks.

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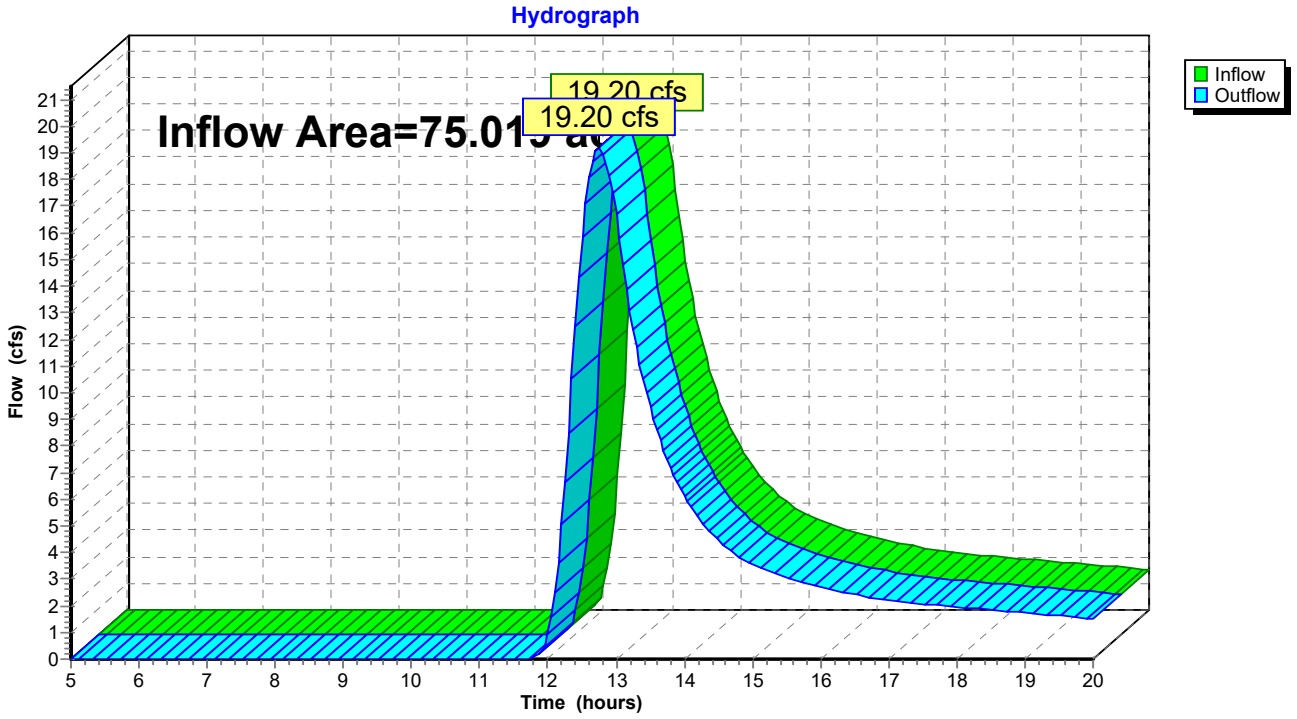
[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 75.019 ac, 3.18% Impervious, Inflow Depth > 0.51" for 2yr event
Inflow = 19.20 cfs @ 12.75 hrs, Volume= 3.193 af
Outflow = 19.20 cfs @ 12.75 hrs, Volume= 3.193 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Reach 1R: POI



Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 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 2S: Project Site Runoff Area=3,267,828 sf 3.18% Impervious Runoff Depth>1.07"
Flow Length=5,225' Tc=63.3 min CN=75 Runoff=43.75 cfs 6.678 af

Reach 1R: POI Inflow=43.75 cfs 6.678 af
Outflow=43.75 cfs 6.678 af

Total Runoff Area = 75.019 ac Runoff Volume = 6.678 af Average Runoff Depth = 1.07"
96.82% Pervious = 72.632 ac 3.18% Impervious = 2.387 ac

Summary for Subcatchment 2S: Project Site

Project Site

[47] Hint: Peak is 622% of capacity of segment #6

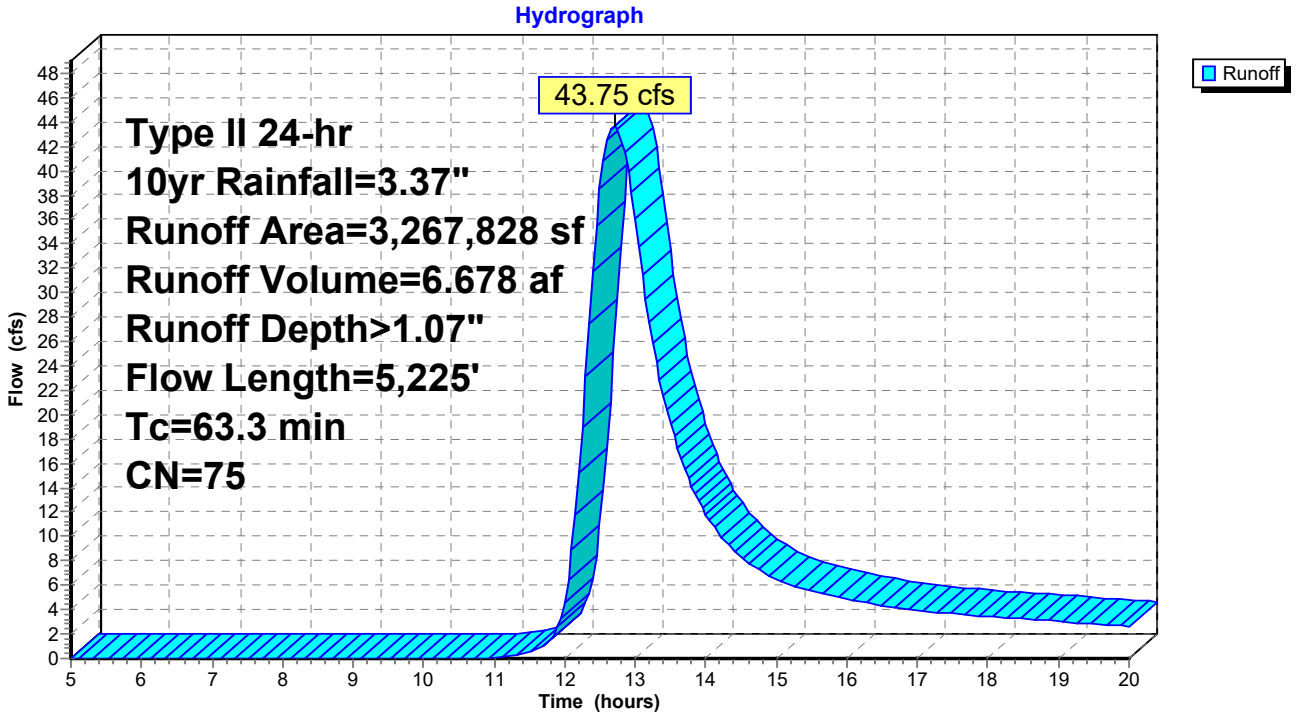
Runoff = 43.75 cfs @ 12.71 hrs, Volume= 6.678 af, Depth> 1.07"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 10yr Rainfall=3.37"

Area (sf)	CN	Description
1,940,013	78	Meadow, non-grazed, HSG D
209,262	30	Meadow, non-grazed, HSG A
10,934	89	Dirt roads, HSG D
37,636	35	Brush, Fair, HSG A
11,805	77	Brush, Fair, HSG D
836,308	79	Woods, Fair, HSG D
54,929	36	Woods, Fair, HSG A
95,440	98	Water Surface, HSG D
34,195	85	1/2 acre lots, 25% imp, HSG D
37,306	96	Gravel surface, HSG D
3,267,828	75	Weighted Average
3,163,839		96.82% Pervious Area
103,989		3.18% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.2	100	0.2400	0.18		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.40"
7.5	933	0.1710	2.07		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
4.1	384	0.0495	1.56		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
4.1	396	0.1023	1.60		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
4.1	828	0.0507	3.38		**Shallow Concentrated Flow,** Grassed Waterway Kv= 15.0 fps
34.3	2,584	0.0081	1.26	7.04	**Channel Flow,** Area= 5.6 sf Perim= 24.3' r= 0.23' n= 0.040 Mountain streams
63.3	5,225	Total			

Subcatchment 2S: Project Site



Summary for Reach 1R: POI

POI = Point of Interest, the convergence of Chilson and Trout Brooks.

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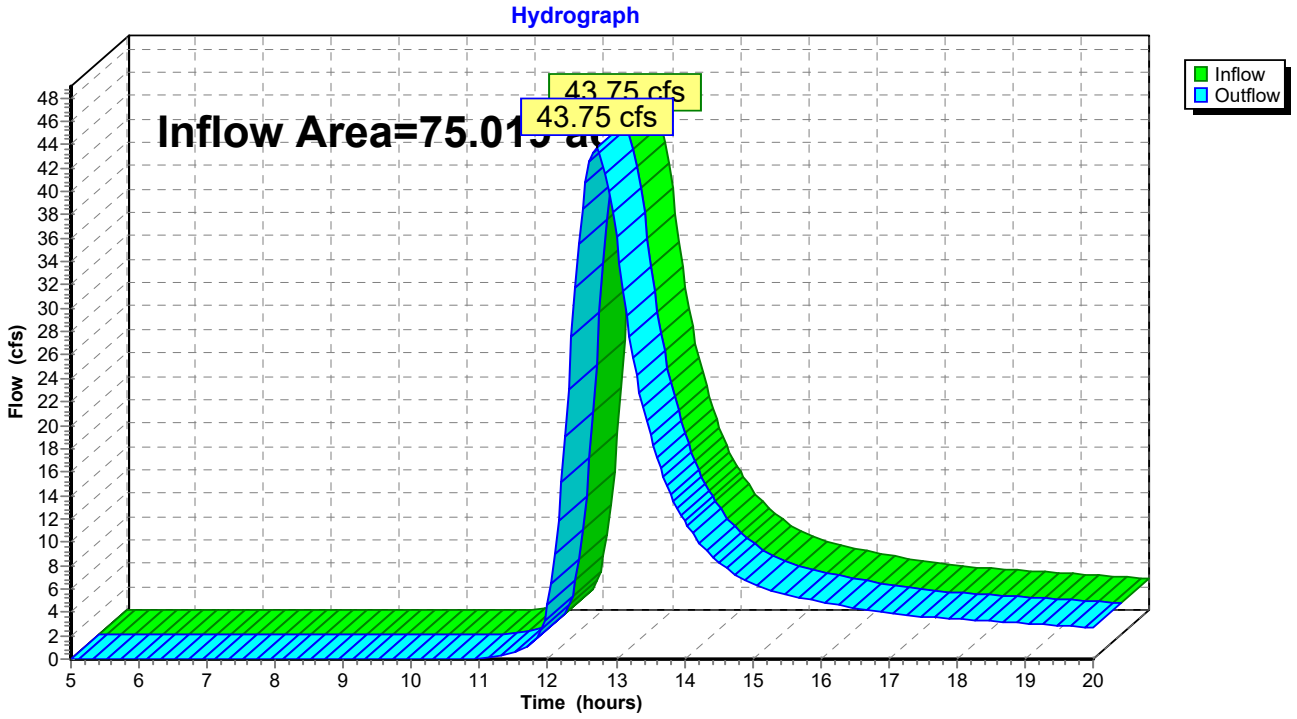
[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 75.019 ac, 3.18% Impervious, Inflow Depth > 1.07" for 10yr event
Inflow = 43.75 cfs @ 12.71 hrs, Volume= 6.678 af
Outflow = 43.75 cfs @ 12.71 hrs, Volume= 6.678 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Reach 1R: POI



Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 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 2S: Project Site Runoff Area=3,267,828 sf 3.18% Impervious Runoff Depth>1.55"
Flow Length=5,225' Tc=63.3 min CN=75 Runoff=64.66 cfs 9.663 af

Reach 1R: POI Inflow=64.66 cfs 9.663 af
Outflow=64.66 cfs 9.663 af

Total Runoff Area = 75.019 ac Runoff Volume = 9.663 af Average Runoff Depth = 1.55"
96.82% Pervious = 72.632 ac 3.18% Impervious = 2.387 ac

Summary for Subcatchment 2S: Project Site

Project Site

[47] Hint: Peak is 919% of capacity of segment #6

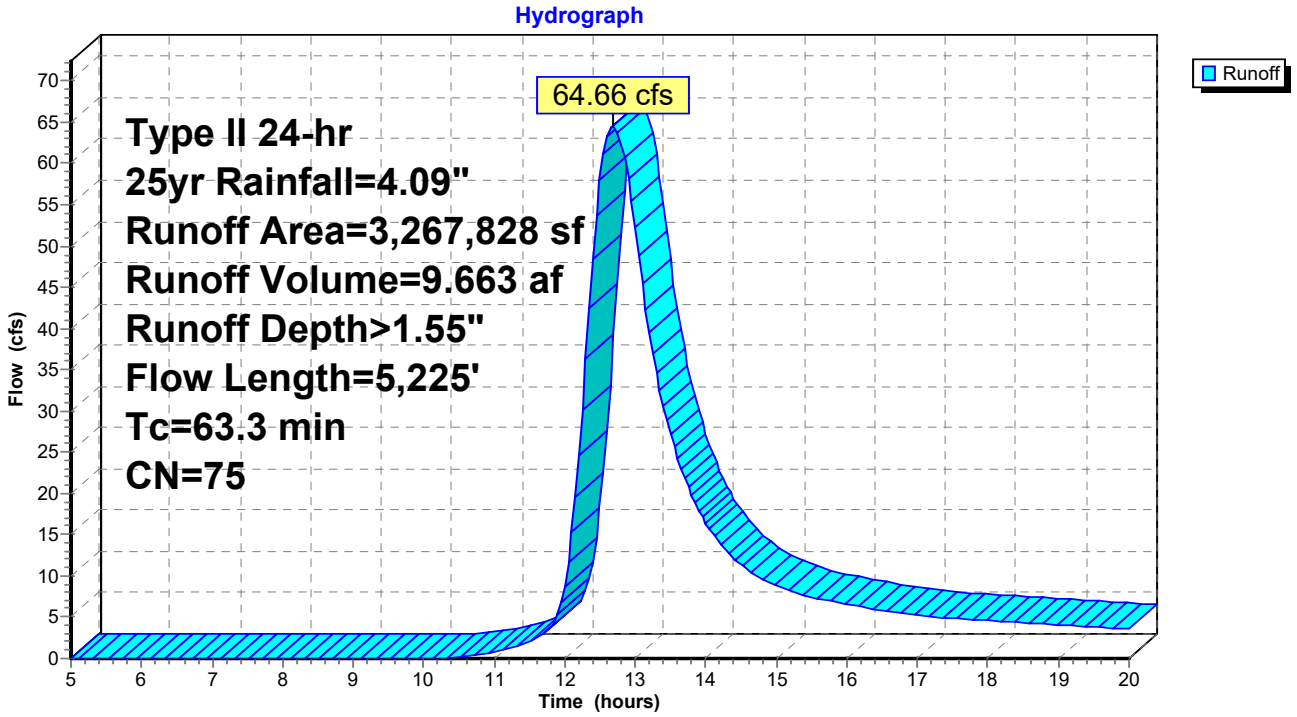
Runoff = 64.66 cfs @ 12.69 hrs, Volume= 9.663 af, Depth> 1.55"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 25yr Rainfall=4.09"

Area (sf)	CN	Description
1,940,013	78	Meadow, non-grazed, HSG D
209,262	30	Meadow, non-grazed, HSG A
10,934	89	Dirt roads, HSG D
37,636	35	Brush, Fair, HSG A
11,805	77	Brush, Fair, HSG D
836,308	79	Woods, Fair, HSG D
54,929	36	Woods, Fair, HSG A
95,440	98	Water Surface, HSG D
34,195	85	1/2 acre lots, 25% imp, HSG D
37,306	96	Gravel surface, HSG D
3,267,828	75	Weighted Average
3,163,839		96.82% Pervious Area
103,989		3.18% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.2	100	0.2400	0.18		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.40"
7.5	933	0.1710	2.07		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
4.1	384	0.0495	1.56		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
4.1	396	0.1023	1.60		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
4.1	828	0.0507	3.38		**Shallow Concentrated Flow,** Grassed Waterway Kv= 15.0 fps
34.3	2,584	0.0081	1.26	7.04	**Channel Flow,** Area= 5.6 sf Perim= 24.3' r= 0.23' n= 0.040 Mountain streams
63.3	5,225	Total			

Subcatchment 2S: Project Site



Summary for Reach 1R: POI

POI = Point of Interest, the convergence of Chilson and Trout Brooks.

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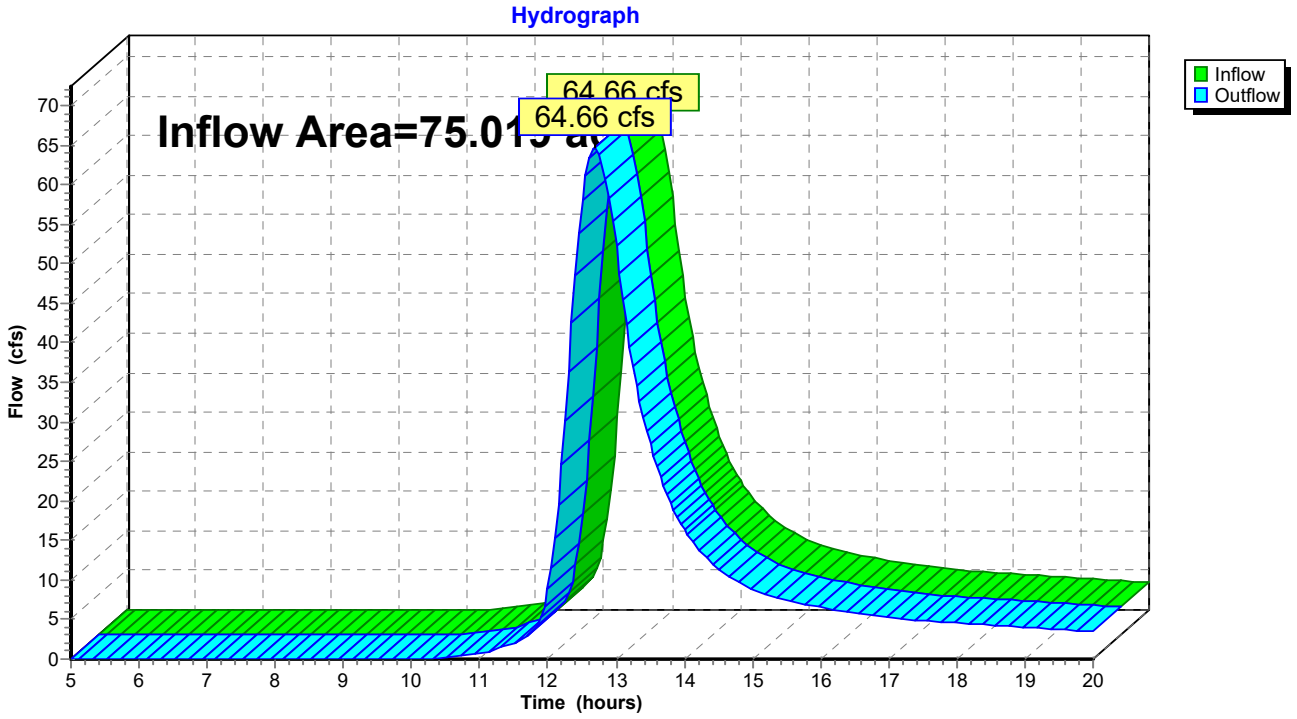
[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 75.019 ac, 3.18% Impervious, Inflow Depth > 1.55" for 25yr event
Inflow = 64.66 cfs @ 12.69 hrs, Volume= 9.663 af
Outflow = 64.66 cfs @ 12.69 hrs, Volume= 9.663 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Reach 1R: POI



Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 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 2S: Project Site Runoff Area=3,267,828 sf 3.18% Impervious Runoff Depth>2.00"
Flow Length=5,225' Tc=63.3 min CN=75 Runoff=84.46 cfs 12.514 af

Reach 1R: POI Inflow=84.46 cfs 12.514 af
Outflow=84.46 cfs 12.514 af

Total Runoff Area = 75.019 ac Runoff Volume = 12.514 af Average Runoff Depth = 2.00"
96.82% Pervious = 72.632 ac 3.18% Impervious = 2.387 ac

Summary for Subcatchment 2S: Project Site

Project Site

[47] Hint: Peak is 1200% of capacity of segment #6

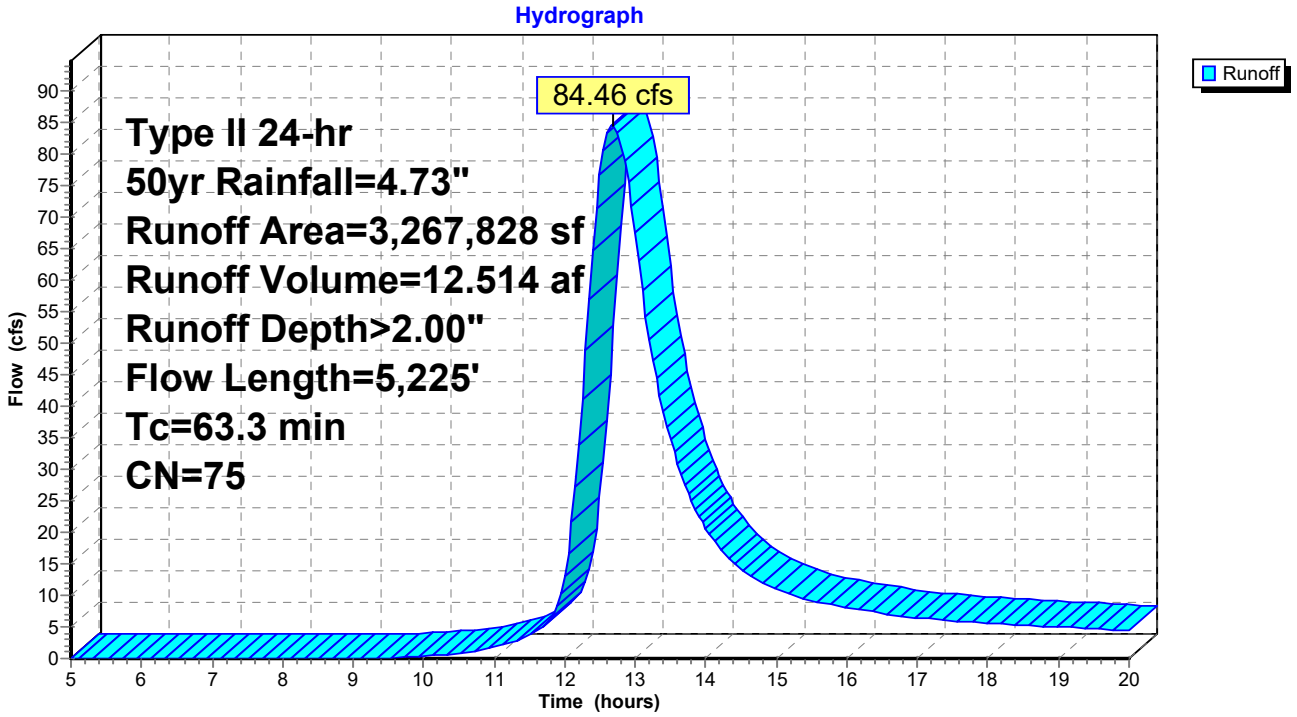
Runoff = 84.46 cfs @ 12.68 hrs, Volume= 12.514 af, Depth> 2.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 50yr Rainfall=4.73"

Area (sf)	CN	Description
1,940,013	78	Meadow, non-grazed, HSG D
209,262	30	Meadow, non-grazed, HSG A
10,934	89	Dirt roads, HSG D
37,636	35	Brush, Fair, HSG A
11,805	77	Brush, Fair, HSG D
836,308	79	Woods, Fair, HSG D
54,929	36	Woods, Fair, HSG A
95,440	98	Water Surface, HSG D
34,195	85	1/2 acre lots, 25% imp, HSG D
37,306	96	Gravel surface, HSG D
3,267,828	75	Weighted Average
3,163,839		96.82% Pervious Area
103,989		3.18% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.2	100	0.2400	0.18		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.40"
7.5	933	0.1710	2.07		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
4.1	384	0.0495	1.56		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
4.1	396	0.1023	1.60		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
4.1	828	0.0507	3.38		**Shallow Concentrated Flow,** Grassed Waterway Kv= 15.0 fps
34.3	2,584	0.0081	1.26	7.04	**Channel Flow,** Area= 5.6 sf Perim= 24.3' r= 0.23' n= 0.040 Mountain streams
63.3	5,225	Total			

Subcatchment 2S: Project Site



Summary for Reach 1R: POI

POI = Point of Interest, the convergence of Chilson and Trout Brooks.

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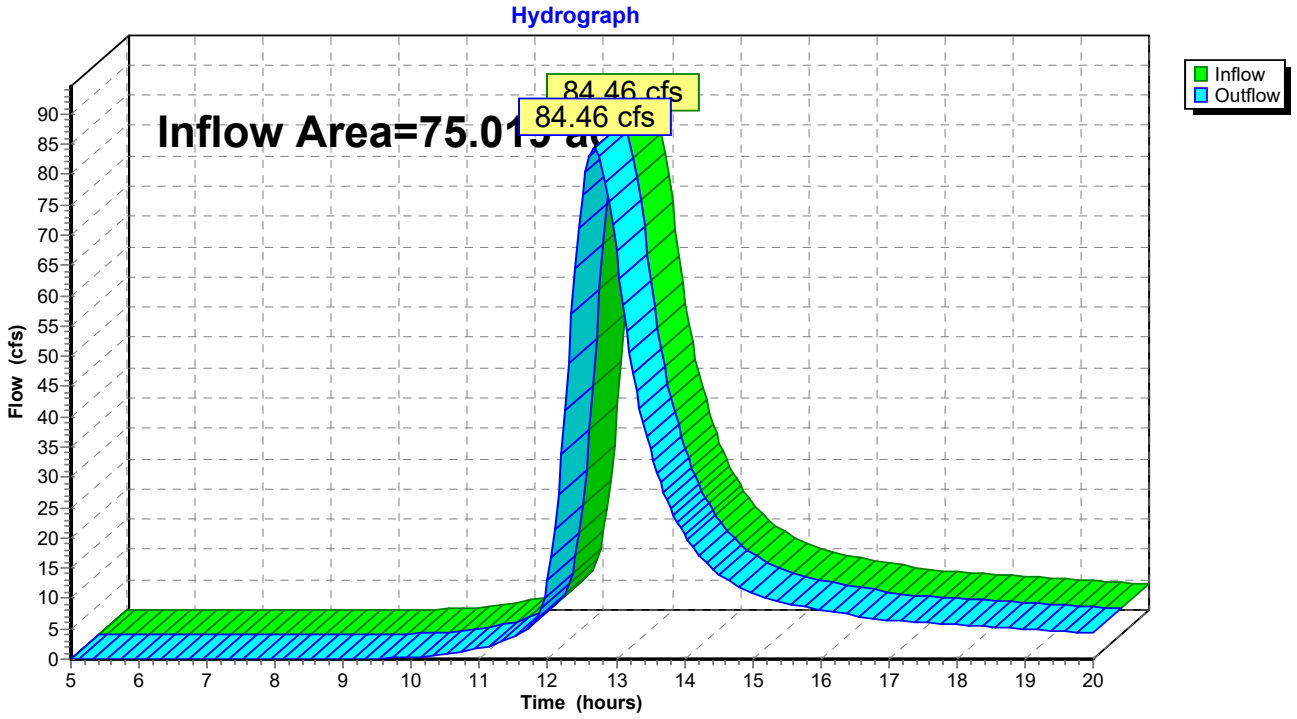
[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 75.019 ac, 3.18% Impervious, Inflow Depth > 2.00" for 50yr event
Inflow = 84.46 cfs @ 12.68 hrs, Volume= 12.514 af
Outflow = 84.46 cfs @ 12.68 hrs, Volume= 12.514 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Reach 1R: POI



Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 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 2S: Project Site Runoff Area=3,267,828 sf 3.18% Impervious Runoff Depth>2.57"
Flow Length=5,225' Tc=63.3 min CN=75 Runoff=109.00 cfs 16.080 af

Reach 1R: POI Inflow=109.00 cfs 16.080 af
Outflow=109.00 cfs 16.080 af

Total Runoff Area = 75.019 ac Runoff Volume = 16.080 af Average Runoff Depth = 2.57"
96.82% Pervious = 72.632 ac 3.18% Impervious = 2.387 ac

Summary for Subcatchment 2S: Project Site

Project Site

[47] Hint: Peak is 1549% of capacity of segment #6

Runoff = 109.00 cfs @ 12.68 hrs, Volume= 16.080 af, Depth> 2.57"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 100yr Rainfall=5.49"

Area (sf)	CN	Description
1,940,013	78	Meadow, non-grazed, HSG D
209,262	30	Meadow, non-grazed, HSG A
10,934	89	Dirt roads, HSG D
37,636	35	Brush, Fair, HSG A
11,805	77	Brush, Fair, HSG D
836,308	79	Woods, Fair, HSG D
54,929	36	Woods, Fair, HSG A
95,440	98	Water Surface, HSG D
34,195	85	1/2 acre lots, 25% imp, HSG D
37,306	96	Gravel surface, HSG D
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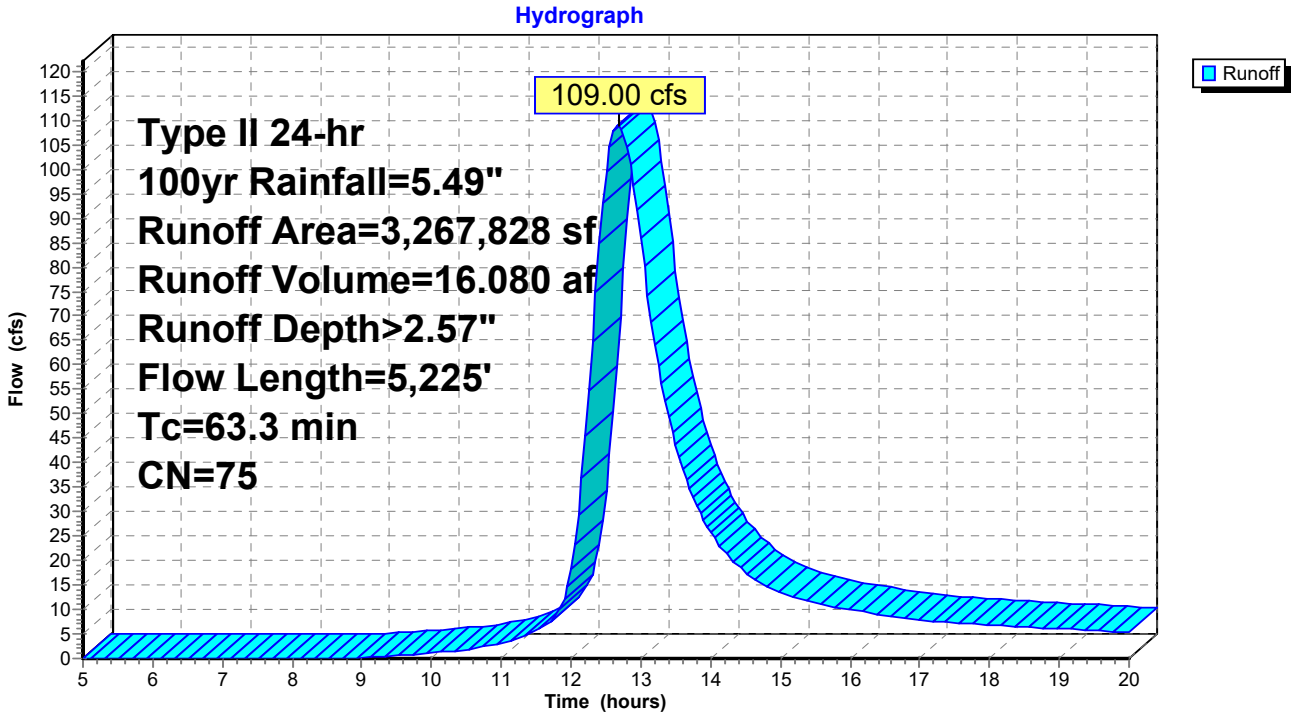
103,989		3.18% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.2	100	0.2400	0.18		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.40"
7.5	933	0.1710	2.07		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
4.1	384	0.0495	1.56		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
4.1	396	0.1023	1.60		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
4.1	828	0.0507	3.38		**Shallow Concentrated Flow,** Grassed Waterway Kv= 15.0 fps
34.3	2,584	0.0081	1.26	7.04	**Channel Flow,** Area= 5.6 sf Perim= 24.3' r= 0.23' n= 0.040 Mountain streams
63.3	5,225	Total			

Subcatchment 2S: Project Site



Summary for Reach 1R: POI

POI = Point of Interest, the convergence of Chilson and Trout Brooks.

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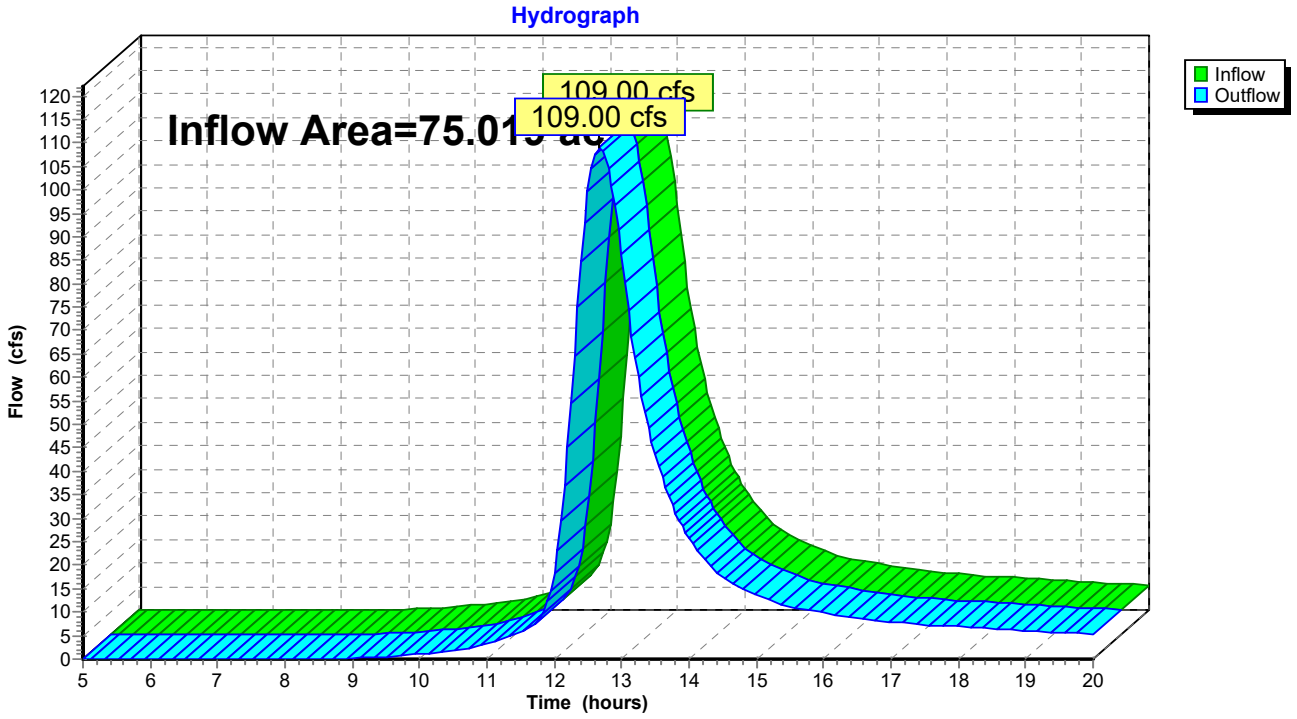
[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 75.019 ac, 3.18% Impervious, Inflow Depth > 2.57" for 100yr event
Inflow = 109.00 cfs @ 12.68 hrs, Volume= 16.080 af
Outflow = 109.00 cfs @ 12.68 hrs, Volume= 16.080 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Reach 1R: POI



Attachment 3 – Watersheds & Sizing Calculations

EDR Project No.: **Project Name:** **Date:** 2/18/2022

Water Quality Volume P (90% Rainfall) = 1.1 Inches

WQ_v *Capture & treat 100% of the 90% rainfall event stormwater runoff volume.*

WQv = [(P)(Rv)(A)]/12

Where:
P = 90% Rainfall Event Number
Rv = 0.05 + 0.009(I), where I is percent impervious cover
A = site area in acres

Post-Construction Watershed or Subwatershed	Area	Total Post-construction Impervious Area	I (%)	Rv	WQv	WQv	25% WQv (redevelopment)
	(acres)	(acres)			(ac-ft)	(cu-ft)	(cu-ft)
Access Rd North (Redevelopment)	0.34	0.34	**100%**	0.95	0.029	0	318
Access Rd North (New Impervious)	0.11	0.11	**100%**	0.95	0.010	424	0
Access Rd South (New Impervious)	0.44	0.44	**100%**	0.95	0.038	1,658	0
				Total	*0.08*	*2,083*	*318*

WQv Total (redevelopment and new impervious, cu-ft)	**2,401**

EDR Project No.: **Project Name:** **Date:** 2/18/2022

Runoff Reduction Volume P (90% Rainfall) = 1.1 Inches

RR_v *Goal - reduction of the total WQv by application of green infrastructure techniques and SMPs to replicate pre-construction hydrology.*

Minimum RRv *The minimum WQv that must be reduced.*

Minimum RRv = [(P)(Rv*)(Aic)(S)]/12

Where:

P = 90% Rainfall Event Number

Rv* = 0.05 + 0.009(I), where I is 100% impervious

Aic = Total area of new impervious cover

S = HSG Specific Reduction Factor, weighed to reflect watershed characteristics

HSG	S Factor
A	0.55
B	0.40
C	0.30
D	0.20

Post-Construction Watershed or Subwatershed	Hydrologic Soil Group				Specific Reduction Factor (S)	Post-Const. Change in Impervious Area (Aic)	Impervious Area Reduction Method	Impervious Area Reduction	Net Additional Imperious Area	Ai	RRv	RRv
	% of A	% of B	% of C	% of D		(acres)		(acres)			(ac-ft)	(cu-ft)
Access Rd North (Redevelopment)	0.0%	0.0%	0.0%	100.0%	0.20	0.0			0.0	- -	- -	- -
Access Rd North (New Impervious)	0.0%	0.0%	0.0%	100.0%	0.20	0.11			0.1	0.022	0.0019	85
Access Rd South (New Impervious)	0.0%	0.0%	0.0%	100.0%	0.20	0.44			0.4	0.087	0.0076	332
										Total	*0.01*	*417*

Vegetated Filter Strip

Per the 2015 NYSDEC Stormwater Management Design Manual, 75 linear feet of impervious is permitted to flow onto a vegetated filter strip. Contributing areas either sheet flow onto vegetated filter strips or are collected in swales and distributed with a level spreader. The lengths of level spreaders and the widths of corresonding vegetated filter strips are determined by dividing the contributing impervious areas by 75 feet. The length of vegetated filter strips is based on slop and soil goup (HSG).

Per the NYS 2015 Stormwater Design Manual, the area draining to the vegetated filter strip is removed from the watershed for WQv calculation and counted as RRv. Therefore RRv provided by the vegetated filter strip is equal to the WQv required for the watershed.

POA 1

WQv Required =	2,401	cu-ft
Impervious Area Tributary to Filter Strips =	23,919	sf
Min RRv Required =	417	cu-ft
RRv Provided =	2,401	cu-ft

Attachment 4 – Contract Drawings (Bound Separately)

Appendix I – SPDES General Permit

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SPDES GENERAL PERMIT
FOR STORMWATER DISCHARGES

From

CONSTRUCTION ACTIVITY

Permit No. GP- 0-20-001

Issued Pursuant to Article 17, Titles 7, 8 and Article 70

of the Environmental Conservation Law

Effective Date: January 29, 2020

Expiration Date: January 28, 2025

John J. Ferguson

Chief Permit Administrator

1-23-20

Authorized Signature

Date

Address: NYS DEC
Division of Environmental Permits
625 Broadway, 4th Floor
Albany, N.Y. 12233-1750

PREFACE

Pursuant to Section 402 of the Clean Water Act ("CWA"), stormwater *discharges* from certain *construction activities* are unlawful unless they are authorized by a *National Pollutant Discharge Elimination System ("NPDES")* permit or by a state permit program. New York administers the approved State Pollutant Discharge Elimination System (SPDES) program with permits issued in accordance with the New York State Environmental Conservation Law (ECL) Article 17, Titles 7, 8 and Article 70.

An *owner or operator* of a *construction activity* that is eligible for coverage under this permit must obtain coverage prior to the *commencement of construction activity*. Activities that fit the definition of "*construction activity*", as defined under 40 CFR 122.26(b)(14)(x), (15)(i), and (15)(ii), constitute construction of a *point source* and therefore, pursuant to ECL section 17-0505 and 17-0701, the *owner or operator* must have coverage under a SPDES permit prior to *commencing construction activity*. The *owner or operator* cannot wait until there is an actual *discharge* from the *construction site* to obtain permit coverage.

***Note: The italicized words/phrases within this permit are defined in Appendix A.**

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SPDES GENERAL PERMIT FOR STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITIES

Table of Contents

Part 1. PERMIT COVERAGE AND LIMITATIONS

A. Permit Application

This permit authorizes stormwater *discharges* to *surface waters of the State* from the following *construction activities* identified within 40 CFR Parts 122.26(b)(14)(x), 122.26(b)(15)(i) and 122.26(b)(15)(ii), provided all of the eligibility provisions of this permit are met:

1. *Construction activities* involving soil disturbances of one (1) or more acres; including disturbances of less than one acre that are part of a *larger common plan of development or sale* that will ultimately disturb one or more acres of land; excluding *routine maintenance activity* that is performed to maintain the original line and grade, hydraulic capacity or original purpose of a facility;

2. *Construction activities* involving soil disturbances of less than one (1) acre where the Department has determined that a *SPDES* permit is required for stormwater *discharges* based on the potential for contribution to a violation of a *water quality standard* or for significant contribution of *pollutants* to *surface waters of the State.*

3. *Construction activities* located in the watershed(s) identified in Appendix D that involve soil disturbances between five thousand (5,000) square feet and one (1) acre of land.

B. Effluent Limitations Applicable to Discharges from Construction Activities

*Discharge*s authorized by this permit must achieve, at a minimum, the effluent limitations in Part I.B.1. (a) – (f) of this permit. These limitations represent the degree of effluent reduction attainable by the application of best practicable technology currently available.

1. Erosion and Sediment Control Requirements - The *owner or operator* must select, design, install, implement and maintain control measures to *minimize* the *discharge* of *pollutants* and prevent a violation of the *water quality standards*. The selection, design, installation, implementation, and maintenance of these control measures must meet the non-numeric effluent limitations in Part I.B.1.(a) – (f) of this permit and be in accordance with the New York State Standards and Specifications for Erosion and Sediment Control, dated November 2016, using sound engineering judgment. Where control measures are not designed in conformance with the design criteria included in the technical standard, the *owner or operator* must include in the *Stormwater Pollution Prevention Plan* (“SWPPP”) the reason(s) for the

deviation or alternative design and provide information which demonstrates that the deviation or alternative design is *equivalent* to the technical standard.

a. **Erosion and Sediment Controls.** Design, install and maintain effective erosion and sediment controls to *minimize* the *discharge* of *pollutants* and prevent a violation of the *water quality standards*. At a minimum, such controls must be designed, installed and maintained to:

   (i) *Minimize* soil erosion through application of runoff control and soil stabilization control measure to *minimize pollutant discharge*s;

   (ii) Control stormwater *discharge*s, including both peak flowrates and total stormwater volume, to *minimize* channel and *streambank* erosion and scour in the immediate vicinity of the *discharge* points;

   (iii) *Minimize* the amount of soil exposed during *construction activity*;

   (iv) *Minimize* the disturbance of *steep slopes*;

   (v) *Minimize* sediment *discharge*s from the site;

   (vi) Provide and maintain *natural buffer*s around surface waters, direct stormwater to vegetated areas and maximize stormwater infiltration to reduce *pollutant discharge*s, unless *infeasible*;

   (vii) *Minimize* soil compaction. Minimizing soil compaction is not required where the intended function of a specific area of the site dictates that it be compacted;

   (viii) Unless *infeasible*, preserve a sufficient amount of topsoil to complete soil restoration and establish a uniform, dense vegetative cover; and

   (ix) *Minimize* dust. On areas of exposed soil, *minimize* dust through the appropriate application of water or other dust suppression techniques to control the generation of pollutants that could be discharged from the site.

b. **Soil Stabilization**. In areas where soil disturbance activity has temporarily or permanently ceased, the application of soil stabilization measures must be initiated by the end of the next business day and completed within fourteen (14) days from the date the current soil disturbance activity ceased. For construction sites that *directly discharge* to one of the 303(d) segments

listed in Appendix E or is located in one of the watersheds listed in Appendix C, the application of soil stabilization measures must be initiated by the end of the next business day and completed within seven (7) days from the date the current soil disturbance activity ceased. See Appendix A for definition of *Temporarily Ceased*.

c. **Dewatering**. *Discharge*s from *dewatering* activities, including *discharge*s from *dewatering* of trenches and excavations, must be managed by appropriate control measures.

d. **Pollution Prevention Measures**. Design, install, implement, and maintain effective pollution prevention measures to *minimize* the *discharge* of *pollutants* and prevent a violation of the *water quality standards*. At a minimum, such measures must be designed, installed, implemented and maintained to:

(i) *Minimize* the *discharge* of *pollutants* from equipment and vehicle washing, wheel wash water, and other wash waters. This applies to washing operations that use clean water only. Soaps, detergents and solvents cannot be used;

(ii) *Minimize* the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste, hazardous and toxic waste, and other materials present on the site to precipitation and to stormwater. Minimization of exposure is not required in cases where the exposure to precipitation and to stormwater will not result in a *discharge* of *pollutants*, or where exposure of a specific material or product poses little risk of stormwater contamination (such as final products and materials intended for outdoor use) ; and

(iii) Prevent the *discharge* of *pollutants* from spills and leaks and implement chemical spill and leak prevention and response procedures.

e. **Prohibited *Discharges*.** The following *discharge*s are prohibited:

(i) Wastewater from washout of concrete;

(ii) Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials;

(iii) Fuels, oils, or other *pollutants* used in vehicle and equipment operation and maintenance;

(iv) Soaps or solvents used in vehicle and equipment washing; and

(v) Toxic or hazardous substances from a spill or other release.

f. Surface Outlets. When discharging from basins and impoundments, the outlets shall be designed, constructed and maintained in such a manner that sediment does not leave the basin or impoundment and that erosion at or below the outlet does not occur.

C. Post-construction Stormwater Management Practice Requirements

1. The *owner or operator* of a *construction activity* that requires post-construction stormwater management practices pursuant to Part III.C. of this permit must select, design, install, and maintain the practices to meet the *performance criteria* in the New York State Stormwater Management Design Manual ("Design Manual"), dated January 2015, using sound engineering judgment. Where post-construction stormwater management practices ("SMPs") are not designed in conformance with the *performance criteria* in the Design Manual, the *owner or operator* must include in the SWPPP the reason(s) for the deviation or alternative design and provide information which demonstrates that the deviation or alternative design is *equivalent* to the technical standard.

2. The *owner or operator* of a *construction activity* that requires post-construction stormwater management practices pursuant to Part III.C. of this permit must design the practices to meet the applicable *sizing criteria* in Part I.C.2.a., b., c. or d. of this permit.

a. Sizing Criteria for New Development

(i) Runoff Reduction Volume ("RRv"): Reduce the total Water Quality Volume ("WQv") by application of RR techniques and standard SMPs with RRv capacity. The total WQv shall be calculated in accordance with the criteria in Section 4.2 of the Design Manual.

(ii) Minimum RRv and Treatment of Remaining Total WQv: Construction activities that cannot meet the criteria in Part I.C.2.a.(i) of this permit due to site limitations shall direct runoff from all newly constructed impervious areas to a RR technique or standard SMP with RRv capacity unless infeasible. The specific site limitations that prevent the reduction of 100% of the WQv shall be documented in the SWPPP.

For each impervious area that is not directed to a RR technique or standard SMP with RRv capacity, the SWPPP must include documentation which demonstrates that all options were considered and for each option explains why it is considered infeasible.

In no case shall the runoff reduction achieved from the newly constructed impervious areas be less than the Minimum RRv as calculated using the criteria in Section 4.3 of the Design Manual. The remaining portion of the total WQv that cannot be reduced shall be treated by application of standard SMPs.

(iii) Channel Protection Volume ("Cpv"): Provide 24 hour extended detention of the post-developed 1-year, 24-hour storm event; remaining after runoff reduction. The Cpv requirement does not apply when:
(1) Reduction of the entire Cpv is achieved by application of runoff reduction techniques or infiltration systems, or
(2) The site discharges directly to tidal waters, or fifth order or larger streams.

(iv) *Overbank* Flood Control Criteria ("Qp"): Requires storage to attenuate the post-development 10-year, 24-hour peak discharge rate (Qp) to predevelopment rates. The Qp requirement does not apply when:
(1) the site discharges directly to tidal waters or fifth order or larger streams, or
(2) A downstream analysis reveals that *overbank* control is not required.

(v) Extreme Flood Control Criteria ("Qf"): Requires storage to attenuate the post-development 100-year, 24-hour peak discharge rate (Qf) to predevelopment rates. The Qf requirement does not apply when:
(1) the site discharges directly to tidal waters or fifth order or larger streams, or
(2) A downstream analysis reveals that *overbank* control is not required.

b. *Sizing Criteria* for *New Development* in Enhanced Phosphorus Removal Watershed

(i) Runoff Reduction Volume (RRv): Reduce the total Water Quality Volume (WQv) by application of RR techniques and standard SMPs with RRv capacity. The total WQv is the runoff volume from the 1-year, 24 hour design storm over the post-developed watershed and shall be

calculated in accordance with the criteria in Section 10.3 of the Design Manual.

(ii) Minimum RRv and Treatment of Remaining Total WQv: *Construction activities* that cannot meet the criteria in Part I.C.2.b.(i) of this permit due to *site limitations* shall direct runoff from all newly constructed *impervious areas* to a RR technique or standard SMP with RRv capacity unless *infeasible*. The specific *site limitations* that prevent the reduction of 100% of the WQv shall be documented in the SWPPP. For each *impervious area* that is not directed to a RR technique or standard SMP with RRv capacity, the SWPPP must include documentation which demonstrates that all options were considered and for each option explains why it is considered *infeasible.*

In no case shall the runoff reduction achieved from the newly constructed *impervious areas* be less than the Minimum RRv as calculated using the criteria in Section 10.3 of the Design Manual. The remaining portion of the total WQv that cannot be reduced shall be treated by application of standard SMPs.

(iii) Channel Protection Volume (Cpv): Provide 24 hour extended detention of the post-developed 1-year, 24-hour storm event; remaining after runoff reduction. The Cpv requirement does not apply when:
(1) Reduction of the entire Cpv is achieved by application of runoff reduction techniques or infiltration systems, or
(2) The site *discharge*s directly to tidal waters, or fifth order or larger streams.

(iv) *Overbank* Flood Control Criteria (Qp): Requires storage to attenuate the post-development 10-year, 24-hour peak *discharge* rate (Qp) to predevelopment rates. The Qp requirement does not apply when:
(1) the site *discharge*s directly to tidal waters or fifth order or larger streams, or
(2) A downstream analysis reveals that *overbank* control is not required.

(v) Extreme Flood Control Criteria (Qf): Requires storage to attenuate the post-development 100-year, 24-hour peak *discharge* rate (Qf) to predevelopment rates. The Qf requirement does not apply when:
(1) the site *discharge*s directly to tidal waters or fifth order or larger streams, or
(2) A downstream analysis reveals that *overbank* control is not required.

c. Sizing Criteria for Redevelopment Activity

(i) Water Quality Volume (WQv): The WQv treatment objective for *redevelopment activity* shall be addressed by one of the following options. *Redevelopment activities* located in an Enhanced Phosphorus Removal Watershed (see Part III.B.3. and Appendix C of this permit) shall calculate the WQv in accordance with Section 10.3 of the Design Manual. All other *redevelopment activities* shall calculate the WQv in accordance with Section 4.2 of the Design Manual.

(1) Reduce the existing *impervious cover* by a minimum of 25% of the total disturbed, *impervious area*. The Soil Restoration criteria in Section 5.1.6 of the Design Manual must be applied to all newly created pervious areas, or

(2) Capture and treat a minimum of 25% of the WQv from the disturbed, *impervious area* by the application of standard SMPs; or reduce 25% of the WQv from the disturbed, *impervious area* by the application of RR techniques or standard SMPs with RRv capacity., or

(3) Capture and treat a minimum of 75% of the WQv from the disturbed, *impervious area* as well as any additional runoff from tributary areas by application of the alternative practices discussed in Sections 9.3 and 9.4 of the Design Manual., or

(4) Application of a combination of 1, 2 and 3 above that provide a weighted average of at least two of the above methods. Application of this method shall be in accordance with the criteria in Section 9.2.1(B) (IV) of the Design Manual.

If there is an existing post-construction stormwater management practice located on the site that captures and treats runoff from the *impervious area* that is being disturbed, the WQv treatment option selected must, at a minimum, provide treatment equal to the treatment that was being provided by the existing practice(s) if that treatment is greater than the treatment required by options 1 – 4 above.

(ii) Channel Protection Volume (Cpv): Not required if there are no changes to hydrology that increase the *discharge* rate from the project site.

(iii) *Overbank* Flood Control Criteria (Qp): Not required if there are no changes to hydrology that increase the *discharge* rate from the project site.

(iv) Extreme Flood Control Criteria (Qf): Not required if there are no changes to hydrology that increase the *discharge* rate from the project site

d. Sizing Criteria for Combination of Redevelopment Activity and New Development

Construction projects that include both New Development and Redevelopment Activity shall provide post-construction stormwater management controls that meet the sizing criteria calculated as an aggregate of the Sizing Criteria in Part I.C.2.a. or b. of this permit for the New Development portion of the project and Part I.C.2.c of this permit for Redevelopment Activity portion of the project.

D. Maintaining Water Quality

The Department expects that compliance with the conditions of this permit will control *discharge*s necessary to meet applicable *water quality standards*. It shall be a violation of the *ECL* for any discharge to either cause or contribute to a violation of *water quality standards* as contained in Parts 700 through 705 of Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York, such as:

1. There shall be no increase in turbidity that will cause a substantial visible contrast to natural conditions;

2. There shall be no increase in suspended, colloidal or settleable solids that will cause deposition or impair the waters for their best usages; and

3. There shall be no residue from oil and floating substances, nor visible oil film, nor globules of grease.

If there is evidence indicating that the stormwater *discharge*s authorized by this permit are causing, have the reasonable potential to cause, or are contributing to a violation of the *water quality standards*; the *owner or operator* must take appropriate corrective action in accordance with Part IV.C.5. of this general permit and document in accordance with Part IV.C.4. of this general permit. To address the *water quality standard* violation the *owner or operator* may need to provide additional information, include and implement appropriate controls in the SWPPP to correct the problem, or obtain an individual SPDES permit.

If there is evidence indicating that despite compliance with the terms and conditions of this general permit it is demonstrated that the stormwater *discharge*s authorized by this permit are causing or contributing to a violation of *water quality standards*, or if the Department determines that a modification of the permit is necessary to prevent a violation of *water quality standards*, the authorized *discharge*s will no longer be eligible for coverage under this permit. The Department may require the *owner or operator* to obtain an individual SPDES permit to continue discharging.

E. Eligibility Under This General Permit

1. This permit may authorize all *discharges* of stormwater from *construction activity* to *surface waters of the State* and *groundwaters* except for ineligible *discharges* identified under subparagraph F. of this Part.

2. Except for non-stormwater *discharges* explicitly listed in the next paragraph, this permit only authorizes stormwater *discharge*s; including stormwater runoff, snowmelt runoff, and surface runoff and drainage, from *construction activities*.

3. Notwithstanding paragraphs E.1 and E.2 above, the following non-stormwater discharges are authorized by this permit: those listed in 6 NYCRR 750-1.2(a)(29)(vi), with the following exception: "Discharges from firefighting activities are authorized only when the firefighting activities are emergencies/unplanned"; waters to which other components have not been added that are used to control dust in accordance with the SWPPP; and uncontaminated *discharge*s from *construction site* de-watering operations. All non-stormwater discharges must be identified in the SWPPP. Under all circumstances, the *owner or operator* must still comply with *water quality standards* in Part I.D of this permit.

4. The *owner or operator* must maintain permit eligibility to *discharge* under this permit. Any *discharges* that are not compliant with the eligibility conditions of this permit are not authorized by the permit and the *owner or operator* must either apply for a separate permit to cover those ineligible *discharges* or take steps necessary to make the *discharge* eligible for coverage.

F. Activities Which Are Ineligible for Coverage Under This General Permit

All of the following are **not** authorized by this permit:

1. *Discharge*s after *construction activities* have been completed and the site has undergone *final stabilization*;

2. *Discharge*s that are mixed with sources of non-stormwater other than those expressly authorized under subsection E.3. of this Part and identified in the SWPPP required by this permit;

3. *Discharges* that are required to obtain an individual SPDES permit or another SPDES general permit pursuant to Part VII.K. of this permit;

4. *Construction activities* or *discharges* from *construction activities* that may adversely affect an *endangered or threatened species* unless the *owner or*

operator has obtained a permit issued pursuant to 6 NYCRR Part 182 for the project or the Department has issued a letter of non-jurisdiction for the project. All documentation necessary to demonstrate eligibility shall be maintained on site in accordance with Part II.D.2 of this permit;

5. *Discharges* which either cause or contribute to a violation of *water quality standards* adopted pursuant to the *ECL* and its accompanying regulations;

6. *Construction activities* for residential, commercial and institutional projects:

   a. Where the *discharge*s from the *construction activities* are tributary to waters of the state classified as AA or AA-s; and

   b. Which are undertaken on land with no existing *impervious cover*; and

   c. Which disturb one (1) or more acres of land designated on the current United States Department of Agriculture ("USDA") Soil Survey as Soil Slope Phase "D", (provided the map unit name is inclusive of slopes greater than 25%), or Soil Slope Phase "E" or "F" (regardless of the map unit name), or a combination of the three designations.

7. *Construction activities* for linear transportation projects and linear utility projects:

   a. Where the *discharge*s from the *construction activities* are tributary to waters of the state classified as AA or AA-s; and

   b. Which are undertaken on land with no existing *impervious cover*; and

   c. Which disturb two (2) or more acres of land designated on the current USDA Soil Survey as Soil Slope Phase "D" (provided the map unit name is inclusive of slopes greater than 25%), or Soil Slope Phase "E" or "F" (regardless of the map unit name), or a combination of the three designations.

8. *Construction activities* that have the potential to affect an *historic property*, unless there is documentation that such impacts have been resolved. The following documentation necessary to demonstrate eligibility with this requirement shall be maintained on site in accordance with Part II.D.2 of this permit and made available to the Department in accordance with Part VII.F of this permit:

   a. Documentation that the *construction activity* is not within an archeologically sensitive area indicated on the sensitivity map, and that the *construction activity* is not located on or immediately adjacent to a property listed or determined to be eligible for listing on the National or State Registers of Historic Places, and that there is no new permanent building on the *construction site* within the following distances from a building, structure, or object that is more than 50 years old, or if there is such a new permanent building on the *construction site* within those parameters that NYS Office of Parks, Recreation and Historic Preservation (OPRHP), a Historic Preservation Commission of a Certified Local Government, or a qualified preservation professional has determined that the building, structure, or object more than 50 years old is not historically/archeologically significant.

      - 1-5 acres of disturbance - 20 feet
      - 5-20 acres of disturbance - 50 feet
      - 20+ acres of disturbance - 100 feet, or

   b. DEC consultation form sent to OPRHP, and copied to the NYS DEC Agency Historic Preservation Officer (APO), and
      (i) the State Environmental Quality Review (SEQR) Environmental Assessment Form (EAF) with a negative declaration or the Findings Statement, with documentation of OPRHP's agreement with the resolution; or
      (ii) documentation from OPRHP that the *construction activity* will result in No Impact; or
      (iii) documentation from OPRHP providing a determination of No Adverse Impact; or
      (iv) a Letter of Resolution signed by the owner/operator, OPRHP and the DEC APO which allows for this *construction activity* to be eligible for coverage under the general permit in terms of the State Historic Preservation Act (SHPA); or

   c. Documentation of satisfactory compliance with Section 106 of the National Historic Preservation Act for a coterminous project area:

(i) No Affect
(ii) No Adverse Affect
(iii) Executed Memorandum of Agreement, or

d. Documentation that:

(i) SHPA Section 14.09 has been completed by NYS DEC or another state agency.

9. *Discharge*s from *construction activities* that are subject to an existing SPDES individual or general permit where a SPDES permit for *construction activity* has been terminated or denied; or where the *owner or operator* has failed to renew an expired individual permit.

Part II. PERMIT COVERAGE

A. How to Obtain Coverage

1. An *owner or operator* of a *construction activity* that is not subject to the requirements of a regulated, traditional land use control MS4 must first prepare a SWPPP in accordance with all applicable requirements of this permit and then submit a completed Notice of Intent (NOI) to the Department to be authorized to discharge under this permit.

2. An *owner or operator* of a *construction activity* that is subject to the requirements of a *regulated, traditional land use control MS4* must first prepare a SWPPP in accordance with all applicable requirements of this permit and then have the SWPPP reviewed and accepted by the *regulated, traditional land use control MS4* prior to submitting the NOI to the Department. The *owner or operator* shall have the “MS4 SWPPP Acceptance” form signed in accordance with Part VII.H., and then submit that form along with a completed NOI to the Department.

3. The requirement for an *owner or operator* to have its SWPPP reviewed and accepted by the *regulated, traditional land use control MS4* prior to submitting the NOI to the Department does not apply to an *owner or operator* that is obtaining permit coverage in accordance with the requirements in Part II.F. (Change of *Owner or Operator*) or where the *owner or operator* of the *construction activity* is the *regulated, traditional land use control MS4* . This exemption does not apply to *construction activities* subject to the New York City Administrative Code.

B. Notice of Intent (NOI) Submittal

1. Prior to December 21, 2020, an owner or operator shall use either the electronic (eNOI) or paper version of the NOI that the Department prepared. Both versions of the NOI are located on the Department's website (http://www.dec.ny.gov/). The paper version of the NOI shall be signed in accordance with Part VII.H. of this permit and submitted to the following address:

   NOTICE OF INTENT
   NYS DEC, Bureau of Water Permits
   625 Broadway, 4th Floor
   Albany, New York 12233-3505

2. Beginning December 21, 2020 and in accordance with EPA's 2015 NPDES Electronic Reporting Rule (40 CFR Part 127), the *owner or operator* must submit the NOI electronically using the *Department's* online NOI.

3. The *owner or operator* shall have the SWPPP preparer sign the "SWPPP Preparer Certification" statement on the NOI prior to submitting the form to the Department.

4. As of the date the NOI is submitted to the Department, the *owner or operator* shall make the NOI and SWPPP available for review and copying in accordance with the requirements in Part VII.F. of this permit.

C. Permit Authorization

1. An *owner or operator* shall not *commence construction activity* until their authorization to *discharge* under this permit goes into effect.

2. Authorization to *discharge* under this permit will be effective when the *owner or operator* has satisfied all of the following criteria:

   a. project review pursuant to the State Environmental Quality Review Act ("SEQRA") have been satisfied, when SEQRA is applicable. See the Department's website (http://www.dec.ny.gov/) for more information,

   b. where required, all necessary Department permits subject to the *Uniform Procedures Act ("UPA")* (see 6 NYCRR Part 621), or the equivalent from another New York State agency, have been obtained, unless otherwise notified by the Department pursuant to 6 NYCRR 621.3(a)(4). *Owners or operators* of *construction activities* that are required to obtain *UPA* permits

must submit a preliminary SWPPP to the appropriate DEC Permit Administrator at the Regional Office listed in Appendix F at the time all other necessary *UPA* permit applications are submitted. The preliminary SWPPP must include sufficient information to demonstrate that the *construction activity* qualifies for authorization under this permit,

c. the final SWPPP has been prepared, and

d. a complete NOI has been submitted to the Department in accordance with the requirements of this permit.

3. An *owner or operator* that has satisfied the requirements of Part II.C.2 above will be authorized to *discharge* stormwater from their *construction activity* in accordance with the following schedule:

   a. For *construction activities* that are <u>not</u> subject to the requirements of a *regulated, traditional land use control MS4*:

      (i) Five (5) business days from the date the Department receives a complete electronic version of the NOI (eNOI) for *construction activities* with a SWPPP that has been prepared in conformance with the design criteria in the technical standard referenced in Part III.B.1 and the *performance criteria* in the technical standard referenced in Parts III.B., 2 or 3, for *construction activities* that require post-construction stormwater management practices pursuant to Part III.C.; or

      (ii) Sixty (60) business days from the date the Department receives a complete NOI (electronic or paper version) for *construction activities* with a SWPPP that has <u>not</u> been prepared in conformance with the design criteria in technical standard referenced in Part III.B.1. or, for *construction activities* that require post-construction stormwater management practices pursuant to Part III.C., the *performance criteria* in the technical standard referenced in Parts III.B., 2 or 3, or;

      (iii) Ten (10) business days from the date the Department receives a complete paper version of the NOI for *construction activities* with a SWPPP that has been prepared in conformance with the design criteria in the technical standard referenced in Part III.B.1 and the *performance criteria* in the technical standard referenced in Parts III.B., 2 or 3, for *construction activities* that require post-construction stormwater management practices pursuant to Part III.C.

b. For *construction activities* that are subject to the requirements of a *regulated, traditional land use control MS4*:

(i) Five (5) business days from the date the Department receives both a complete electronic version of the NOI (eNOI) and signed "*MS4* SWPPP Acceptance" form, or

(ii) Ten (10) business days from the date the Department receives both a complete paper version of the NOI and signed "MS4 SWPPP Acceptance" form.

4. Coverage under this permit authorizes stormwater *discharges* from only those areas of disturbance that are identified in the NOI. If an *owner or operator* wishes to have stormwater *discharges* from future or additional areas of disturbance authorized, they must submit a new NOI that addresses that phase of the development, unless otherwise notified by the Department. The *owner or operator* shall not *commence construction activity* on the future or additional areas until their authorization to *discharge* under this permit goes into effect in accordance with Part II.C. of this permit.

D. General Requirements For Owners or Operators With Permit Coverage

1. The *owner or operator* shall ensure that the provisions of the SWPPP are implemented from the *commencement of construction activity* until all areas of disturbance have achieved *final stabilization* and the Notice of Termination ("NOT") has been submitted to the Department in accordance with Part V. of this permit. This includes any changes made to the SWPPP pursuant to Part III.A.4. of this permit.

2. The *owner or operator* shall maintain a copy of the General Permit (GP-0-20-001), NOI, *NOI Acknowledgment Letter*, SWPPP, MS4 SWPPP Acceptance form, inspection reports, responsible contractor's or subcontractor's certification statement (see Part III.A.6.), and all documentation necessary to demonstrate eligibility with this permit at the *construction site* until all disturbed areas have achieved *final stabilization* and the NOT has been submitted to the Department. The documents must be maintained in a secure location, such as a job trailer, on-site construction office, or mailbox with lock. The secure location must be accessible during normal business hours to an individual performing a compliance inspection.

3. The *owner or operator* of a *construction activity* shall not disturb greater than five (5) acres of soil at any one time without prior written authorization from the Department or, in areas under the jurisdiction of a *regulated, traditional land*

use control MS4, the *regulated, traditional land use control MS4* (provided the *regulated, traditional land use control MS4* is not the *owner or operator* of the *construction activity*). At a minimum, the *owner or operator* must comply with the following requirements in order to be authorized to disturb greater than five (5) acres of soil at any one time:

a. The *owner or operator* shall have a *qualified inspector* conduct **at least** two (2) site inspections in accordance with Part IV.C. of this permit every seven (7) calendar days, for as long as greater than five (5) acres of soil remain disturbed. The two (2) inspections shall be separated by a minimum of two (2) full calendar days.

b. In areas where soil disturbance activity has temporarily or permanently ceased, the application of soil stabilization measures must be initiated by the end of the next business day and completed within seven (7) days from the date the current soil disturbance activity ceased. The soil stabilization measures selected shall be in conformance with the technical standard, New York State Standards and Specifications for Erosion and Sediment Control, dated November 2016.

c. The *owner or operator* shall prepare a phasing plan that defines maximum disturbed area per phase and shows required cuts and fills.

d. The *owner or operator* shall install any additional site-specific practices needed to protect water quality.

e. The *owner or operator* shall include the requirements above in their SWPPP.

4. In accordance with statute, regulations, and the terms and conditions of this permit, the Department may suspend or revoke an *owner's or operator's* coverage under this permit at any time if the Department determines that the SWPPP does not meet the permit requirements or consistent with Part VII.K..

5. Upon a finding of significant non-compliance with the practices described in the SWPPP or violation of this permit, the Department may order an immediate stop to all activity at the site until the non-compliance is remedied. The stop work order shall be in writing, describe the non-compliance in detail, and be sent to the *owner or operator*.

6. For *construction activities* that are subject to the requirements of a *regulated, traditional land use control MS4*, the *owner or operator* shall notify the

regulated, traditional land use control MS4 in writing of any planned amendments or modifications to the post-construction stormwater management practice component of the SWPPP required by Part III.A. 4. and 5. of this permit. Unless otherwise notified by the *regulated, traditional land use control MS4*, the *owner or operator* shall have the SWPPP amendments or modifications reviewed and accepted by the *regulated, traditional land use control MS4* prior to commencing construction of the post-construction stormwater management practice.

E. Permit Coverage for Discharges Authorized Under GP-0-15-002

1. Upon renewal of SPDES General Permit for Stormwater Discharges from *Construction Activity* (Permit No. GP-0-15-002), an *owner or operator* of *a construction activity* with coverage under GP-0-15-002, as of the effective date of GP- 0-20-001, shall be authorized to *discharge* in accordance with GP- 0-20-001, unless otherwise notified by the Department.

   An *owner or operator* may continue to implement the technical/design components of the post-construction stormwater management controls provided that such design was done in conformance with the technical standards in place at the time of initial project authorization. However, they must comply with the other, non-design provisions of GP-0-20-001.

F. Change of Owner or Operator

1. When property ownership changes or when there is a change in operational control over the construction plans and specifications, the original *owner or operator* must notify the new *owner or operator*, in writing, of the requirement to obtain permit coverage by submitting a NOI with the Department. For *construction activities* subject to the requirements of a *regulated, traditional land use control MS4,* the original *owner or operator* must also notify the MS4, in writing, of the change in ownership at least 30 calendar days prior to the change in ownership.

2. Once the new *owner or operator* obtains permit coverage, the original *owner or operator* shall then submit a completed NOT with the name and permit identification number of the new *owner or operator* to the Department at the address in Part II.B.1. of this permit. If the original *owner or operator* maintains ownership of a portion of the *construction activity* and will disturb soil, they must maintain their coverage under the permit.

3. Permit coverage for the new *owner or operator* will be effective as of the date the Department receives a complete NOI, provided the original *owner or*

operator was not subject to a sixty (60) business day authorization period that has not expired as of the date the Department receives the NOI from the new *owner or operator*.

Part III. STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

A. General SWPPP Requirements

1. A SWPPP shall be prepared and implemented by the *owner or operator* of each *construction activity* covered by this permit. The SWPPP must document the selection, design, installation, implementation and maintenance of the control measures and practices that will be used to meet the effluent limitations in Part I.B. of this permit and where applicable, the post-construction stormwater management practice requirements in Part I.C. of this permit. The SWPPP shall be prepared prior to the submittal of the NOI. The NOI shall be submitted to the Department prior to the *commencement of construction activity*. A copy of the completed, final NOI shall be included in the SWPPP.

2. The SWPPP shall describe the erosion and sediment control practices and where required, post-construction stormwater management practices that will be used and/or constructed to reduce the *pollutants* in stormwater *discharges* and to assure compliance with the terms and conditions of this permit. In addition, the SWPPP shall identify potential sources of pollution which may reasonably be expected to affect the quality of stormwater *discharges*.

3. All SWPPPs that require the post-construction stormwater management practice component shall be prepared by a *qualified professional* that is knowledgeable in the principles and practices of stormwater management and treatment.

4. The *owner or operator* must keep the SWPPP current so that it at all times accurately documents the erosion and sediment controls practices that are being used or will be used during construction, and all post-construction stormwater management practices that will be constructed on the site. At a minimum, the *owner or operator* shall amend the SWPPP, including construction drawings:

    a. whenever the current provisions prove to be ineffective in minimizing *pollutants* in stormwater *discharges* from the site;

b. whenever there is a change in design, construction, or operation at the *construction site* that has or could have an effect on the *discharge* of *pollutants*;

c. to address issues or deficiencies identified during an inspection by the *qualified inspector,* the Department or other regulatory authority; and

d. to document the final construction conditions.

5. The Department may notify the *owner or operator* at any time that the SWPPP does not meet one or more of the minimum requirements of this permit. The notification shall be in writing and identify the provisions of the SWPPP that require modification. Within fourteen (14) calendar days of such notification, or as otherwise indicated by the Department, the *owner or operator* shall make the required changes to the SWPPP and submit written notification to the Department that the changes have been made. If the *owner or operator* does not respond to the Department's comments in the specified time frame, the Department may suspend the *owner's or operator's* coverage under this permit or require the *owner or operator* to obtain coverage under an individual SPDES permit in accordance with Part II.D.4. of this permit.

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

   The *owner or operator* shall have each of the contractors and subcontractors identified above sign a copy of the following certification statement below before they commence any *construction activity*:

   "I hereby certify under penalty of law that I understand and agree to comply with the terms and conditions of the SWPPP and agree to implement any corrective actions identified by the *qualified inspector* during a site inspection. I also understand that the *owner or operator* must comply with

the terms and conditions of the most current version of the New York State Pollutant Discharge Elimination System ("SPDES") general permit for stormwater *discharge*s from *construction activities* and that it is unlawful for any person to cause or contribute to a violation of *water quality standards*. Furthermore, I am aware that there are significant penalties for submitting false information, that I do not believe to be true, including the possibility of fine and imprisonment for knowing violations"

In addition to providing the certification statement above, the certification page must also identify the specific elements of the SWPPP that each contractor and subcontractor will be responsible for and include the name and title of the person providing the signature; the name and title of the *trained contractor* responsible for SWPPP implementation; the name, address and telephone number of the contracting firm; the address (or other identifying description) of the site; and the date the certification statement is signed. The *owner or operator* shall attach the certification statement(s) to the copy of the SWPPP that is maintained at the *construction site*. If new or additional contractors are hired to implement measures identified in the SWPPP after construction has commenced, they must also sign the certification statement and provide the information listed above.

7. For projects where the Department requests a copy of the SWPPP or inspection reports, the *owner or operator* shall submit the documents in both electronic (PDF only) and paper format within five (5) business days, unless otherwise notified by the Department.

B. Required SWPPP Contents

1. Erosion and sediment control component - All SWPPPs prepared pursuant to this permit shall include erosion and sediment control practices designed in conformance with the technical standard, New York State Standards and Specifications for Erosion and Sediment Control, dated November 2016. Where erosion and sediment control practices are not designed in conformance with the design criteria included in the technical standard, the *owner or operator* must demonstrate *equivalence* to the technical standard. At a minimum, the erosion and sediment control component of the SWPPP shall include the following:

    a. Background information about the scope of the project, including the location, type and size of project

b. A site map/construction drawing(s) for the project, including a general location map. At a minimum, the site map shall show the total site area; all improvements; areas of disturbance; areas that will not be disturbed; existing vegetation; on-site and adjacent off-site surface water(s); floodplain/floodway boundaries; wetlands and drainage patterns that could be affected by the *construction activity*; existing and final contours ; locations of different soil types with boundaries; material, waste, borrow or equipment storage areas located on adjacent properties; and location(s) of the stormwater *discharge*(s);

c. A description of the soil(s) present at the site, including an identification of the Hydrologic Soil Group (HSG);

d. A construction phasing plan and sequence of operations describing the intended order of *construction activities*, including clearing and grubbing, excavation and grading, utility and infrastructure installation and any other activity at the site that results in soil disturbance;

e. A description of the minimum erosion and sediment control practices to be installed or implemented for each *construction activity* that will result in soil disturbance. Include a schedule that identifies the timing of initial placement or implementation of each erosion and sediment control practice and the minimum time frames that each practice should remain in place or be implemented;

f. A temporary and permanent soil stabilization plan that meets the requirements of this general permit and the technical standard, New York State Standards and Specifications for Erosion and Sediment Control, dated November 2016, for each stage of the project, including initial land clearing and grubbing to project completion and achievement of *final stabilization*;

g. A site map/construction drawing(s) showing the specific location(s), size(s), and length(s) of each erosion and sediment control practice;

h. The dimensions, material specifications, installation details, and operation and maintenance requirements for all erosion and sediment control practices. Include the location and sizing of any temporary sediment basins and structural practices that will be used to divert flows from exposed soils;

i. A maintenance inspection schedule for the contractor(s) identified in Part III.A.6. of this permit, to ensure continuous and effective operation of the erosion and sediment control practices. The maintenance inspection

schedule shall be in accordance with the requirements in the technical standard, New York State Standards and Specifications for Erosion and Sediment Control, dated November 2016;

j. A description of the pollution prevention measures that will be used to control litter, construction chemicals and construction debris from becoming a *pollutant* source in the stormwater *discharges*;

k. A description and location of any stormwater *discharges* associated with industrial activity other than construction at the site, including, but not limited to, stormwater *discharges* from asphalt plants and concrete plants located on the *construction site*; and

l. Identification of any elements of the design that are not in conformance with the design criteria in the technical standard, New York State Standards and Specifications for Erosion and Sediment Control, dated November 2016. Include the reason for the deviation or alternative design and provide information which demonstrates that the deviation or alternative design is *equivalent* to the technical standard.

2. Post-construction stormwater management practice component – The *owner or operator* of any construction project identified in Table 2 of Appendix B as needing post-construction stormwater management practices shall prepare a SWPPP that includes practices designed in conformance with the applicable *sizing criteria* in Part I.C.2.a., c. or d. of this permit and the *performance criteria* in the technical standard, New York State Stormwater Management Design Manual dated January 2015

   Where post-construction stormwater management practices are not designed in conformance with the *performance criteria* in the technical standard, the *owner or operator* must include in the SWPPP the reason(s) for the deviation or alternative design and provide information which demonstrates that the deviation or alternative design is *equivalent* to the technical standard.

   The post-construction stormwater management practice component of the SWPPP shall include the following:

   a. Identification of all post-construction stormwater management practices to be constructed as part of the project. Include the dimensions, material specifications and installation details for each post-construction stormwater management practice;

b. A site map/construction drawing(s) showing the specific location and size of each post-construction stormwater management practice;

c. A Stormwater Modeling and Analysis Report that includes:
   (i) Map(s) showing pre-development conditions, including watershed/subcatchments boundaries, flow paths/routing, and design points;

   (ii) Map(s) showing post-development conditions, including watershed/subcatchments boundaries, flow paths/routing, design points and post-construction stormwater management practices;

   (iii) Results of stormwater modeling (i.e. hydrology and hydraulic analysis) for the required storm events. Include supporting calculations (model runs), methodology, and a summary table that compares pre and post-development runoff rates and volumes for the different storm events;

   (iv) Summary table, with supporting calculations, which demonstrates that each post-construction stormwater management practice has been designed in conformance with the *sizing criteria* included in the Design Manual;

   (v) Identification of any *sizing criteria* that is not required based on the requirements included in Part I.C. of this permit; and

   (vi) Identification of any elements of the design that are not in conformance with the *performance criteria* in the Design Manual. Include the reason(s) for the deviation or alternative design and provide information which demonstrates that the deviation or alternative design is *equivalent* to the Design Manual;

d. Soil testing results and locations (test pits, borings);

e. Infiltration test results, when required; and

f. An operations and maintenance plan that includes inspection and maintenance schedules and actions to ensure continuous and effective operation of each post-construction stormwater management practice. The plan shall identify the entity that will be responsible for the long term operation and maintenance of each practice.

3. Enhanced Phosphorus Removal Standards - All construction projects identified in Table 2 of Appendix B that are located in the watersheds identified in Appendix C shall prepare a SWPPP that includes post-construction stormwater management practices designed in conformance with the applicable *sizing criteria* in Part I.C.2. b., c. or d. of this permit and the *performance criteria,* Enhanced Phosphorus Removal Standards included in the Design Manual. At a minimum, the post-construction stormwater management practice component of the SWPPP shall include items 2.a - 2.f. above.

C. Required SWPPP Components by Project Type

Unless otherwise notified by the Department, *owners or operators* of *construction activities* identified in Table 1 of Appendix B are required to prepare a SWPPP that only includes erosion and sediment control practices designed in conformance with Part III.B.1 of this permit. *Owners or operators* of the *construction activities* identified in Table 2 of Appendix B shall prepare a SWPPP that also includes post-construction stormwater management practices designed in conformance with Part III.B.2 or 3 of this permit.

Part IV. INSPECTION AND MAINTENANCE REQUIREMENTS

A. General Construction Site Inspection and Maintenance Requirements

1. The *owner or operator* must ensure that all erosion and sediment control practices (including pollution prevention measures) and all post-construction stormwater management practices identified in the SWPPP are inspected and maintained in accordance with Part IV.B. and C. of this permit.

2. The terms of this permit shall not be construed to prohibit the State of New York from exercising any authority pursuant to the ECL, common law or federal law, or prohibit New York State from taking any measures, whether civil or criminal, to prevent violations of the laws of the State of New York or protect the public health and safety and/or the environment.

B. Contractor Maintenance Inspection Requirements

1. The *owner or operator* of each *construction activity* identified in Tables 1 and 2 of Appendix B shall have a *trained contractor* inspect the erosion and sediment control practices and pollution prevention measures being implemented within the active work area daily to ensure that they are being maintained in effective operating condition at all times. If deficiencies are identified, the contractor shall

begin implementing corrective actions within one business day and shall complete the corrective actions in a reasonable time frame.

2. For construction sites where soil disturbance activities have been temporarily suspended (e.g. winter shutdown) and *temporary stabilization* measures have been applied to all disturbed areas, the *trained contractor* can stop conducting the maintenance inspections. The *trained contractor* shall begin conducting the maintenance inspections in accordance with Part IV.B.1. of this permit as soon as soil disturbance activities resume.

3. For construction sites where soil disturbance activities have been shut down with partial project completion, the *trained contractor* can stop conducting the maintenance inspections if all areas disturbed as of the project shutdown date have achieved *final stabilization* and all post-construction stormwater management practices required for the completed portion of the project have been constructed in conformance with the SWPPP and are operational.

C. Qualified Inspector Inspection Requirements

The *owner or operator* shall have a *qualified inspector* conduct site inspections in conformance with the following requirements:

[Note: The *trained contractor* identified in Part III.A.6. and IV.B. of this permit **cannot** conduct the *qualified inspector* site inspections unless they meet the *qualified inspector* qualifications included in Appendix A. In order to perform these inspections, the *trained contractor* would have to be a:

- licensed Professional Engineer,
- Certified Professional in Erosion and Sediment Control (CPESC),
- New York State Erosion and Sediment Control Certificate Program holder
- Registered Landscape Architect, or
- someone working under the direct supervision of, and at the same company as, the licensed Professional Engineer or Registered Landscape Architect, provided they have received four (4) hours of Department endorsed training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other Department endorsed entity].

1. A *qualified inspector* shall conduct site inspections for all *construction activities* identified in Tables 1 and 2 of Appendix B, with the exception of:

   a. the construction of a single family residential subdivision with 25% or less *impervious cover* at total site build-out that involves a soil disturbance of one (1) or more acres of land but less than five (5) acres and is not located

in one of the watersheds listed in Appendix C and not directly discharging to one of the 303(d) segments listed in Appendix E;

b. the construction of a single family home that involves a soil disturbance of one (1) or more acres of land but less than five (5) acres and is not located in one of the watersheds listed in Appendix C and not directly discharging to one of the 303(d) segments listed in Appendix E;

c. construction on agricultural property that involves a soil disturbance of one (1) or more acres of land but less than five (5) acres; and

d. *construction activities* located in the watersheds identified in Appendix D that involve soil disturbances between five thousand (5,000) square feet and one (1) acre of land.

2. Unless otherwise notified by the Department, the *qualified inspector* shall conduct site inspections in accordance with the following timetable:

a. For construction sites where soil disturbance activities are on-going, the *qualified inspector* shall conduct a site inspection at least once every seven (7) calendar days.

b. For construction sites where soil disturbance activities are on-going and the *owner or operator* has received authorization in accordance with Part II.D.3 to disturb greater than five (5) acres of soil at any one time, the *qualified inspector* shall conduct at least two (2) site inspections every seven (7) calendar days. The two (2) inspections shall be separated by a minimum of two (2) full calendar days.

c. For construction sites where soil disturbance activities have been temporarily suspended (e.g. winter shutdown) and *temporary stabilization* measures have been applied to all disturbed areas, the *qualified inspector* shall conduct a site inspection at least once every thirty (30) calendar days. The *owner or operator* shall notify the DOW Water (SPDES) Program contact at the Regional Office (see contact information in Appendix F) or, in areas under the jurisdiction of a *regulated, traditional land use control MS4,* the *regulated, traditional land use control MS4* (provided the *regulated, traditional land use control MS4* is not the *owner or operator* of the *construction activity*) in writing prior to reducing the frequency of inspections.

d. For construction sites where soil disturbance activities have been shut down with partial project completion, the *qualified inspector* can stop conducting inspections if all areas disturbed as of the project shutdown date have achieved *final stabilization* and all post-construction stormwater management practices required for the completed portion of the project have been constructed in conformance with the SWPPP and are operational. The *owner or operator* shall notify the DOW Water (SPDES) Program contact at the Regional Office (see contact information in Appendix F) or, in areas under the jurisdiction of a *regulated, traditional land use control MS4,* the *regulated, traditional land use control MS4* (provided the *regulated, traditional land use control MS4* is not the *owner or operator* of the *construction activity*) in writing prior to the shutdown. If soil disturbance activities are not resumed within 2 years from the date of shutdown, the *owner or operator* shall have the *qualified inspector* perform a final inspection and certify that all disturbed areas have achieved *final stabilization,* and all temporary, structural erosion and sediment control measures have been removed*;* and that all post-construction stormwater management practices have been constructed in conformance with the SWPPP by signing the "*Final Stabilization*" and "Post-Construction Stormwater Management Practice" certification statements on the NOT. The *owner or operator* shall then submit the completed NOT form to the address in Part II.B.1 of this permit.

e. For construction sites that directly *discharge* to one of the 303(d) segments listed in Appendix E or is located in one of the watersheds listed in Appendix C, the *qualified inspector* shall conduct at least two (2) site inspections every seven (7) calendar days. The two (2) inspections shall be separated by a minimum of two (2) full calendar days.

3. At a minimum, the *qualified inspector* shall inspect all erosion and sediment control practices and pollution prevention measures to ensure integrity and effectiveness, all post-construction stormwater management practices under construction to ensure that they are constructed in conformance with the SWPPP, all areas of disturbance that have not achieved *final stabilization,* all points of *discharge* to natural surface waterbodies located within, or immediately adjacent to, the property boundaries of the *construction site*, and all points of *discharge* from the *construction site*.

4. The *qualified inspector* shall prepare an inspection report subsequent to each and every inspection. At a minimum, the inspection report shall include and/or address the following:

a. Date and time of inspection;

b. Name and title of person(s) performing inspection;

c. A description of the weather and soil conditions (e.g. dry, wet, saturated) at the time of the inspection;

d. A description of the condition of the runoff at all points of *discharge* from the *construction site*. This shall include identification of any *discharges* of sediment from the *construction site*. Include *discharges* from conveyance systems (i.e. pipes, culverts, ditches, etc.) and overland flow;

e. A description of the condition of all natural surface waterbodies located within, or immediately adjacent to, the property boundaries of the *construction site* which receive runoff from disturbed areas. This shall include identification of any *discharges* of sediment to the surface waterbody;

f. Identification of all erosion and sediment control practices and pollution prevention measures that need repair or maintenance;

g. Identification of all erosion and sediment control practices and pollution prevention measures that were not installed properly or are not functioning as designed and need to be reinstalled or replaced;

h. Description and sketch of areas with active soil disturbance activity, areas that have been disturbed but are inactive at the time of the inspection, and areas that have been stabilized (temporary and/or final) since the last inspection;

i. Current phase of construction of all post-construction stormwater management practices and identification of all construction that is not in conformance with the SWPPP and technical standards;

j. Corrective action(s) that must be taken to install, repair, replace or maintain erosion and sediment control practices and pollution prevention measures; and to correct deficiencies identified with the construction of the post-construction stormwater management practice(s);

k. Identification and status of all corrective actions that were required by previous inspection; and

l. Digital photographs, with date stamp, that clearly show the condition of all practices that have been identified as needing corrective actions. The *qualified inspector* shall attach paper color copies of the digital photographs to the inspection report being maintained onsite within seven (7) calendar days of the date of the inspection. The *qualified inspector* shall also take digital photographs, with date stamp, that clearly show the condition of the practice(s) after the corrective action has been completed. The *qualified inspector* shall attach paper color copies of the digital photographs to the inspection report that documents the completion of the corrective action work within seven (7) calendar days of that inspection.

5. Within one business day of the completion of an inspection, the *qualified inspector* shall notify the *owner or operator* and appropriate contractor or subcontractor identified in Part III.A.6. of this permit of any corrective actions that need to be taken. The contractor or subcontractor shall begin implementing the corrective actions within one business day of this notification and shall complete the corrective actions in a reasonable time frame.

6. All inspection reports shall be signed by the *qualified inspector.* Pursuant to Part II.D.2. of this permit, the inspection reports shall be maintained on site with the SWPPP.

Part V. TERMINATION OF PERMIT COVERAGE

A. Termination of Permit Coverage

1. An *owner or operator* that is eligible to terminate coverage under this permit must submit a completed NOT form to the address in Part II.B.1 of this permit. The NOT form shall be one which is associated with this permit, signed in accordance with Part VII.H of this permit.

2. An *owner or operator* may terminate coverage when one or more the following conditions have been met:

   a. Total project completion - All *construction activity* identified in the SWPPP has been completed; and all areas of disturbance have achieved *final stabilization*; and all temporary, structural erosion and sediment control measures have been removed; and all post-construction stormwater management practices have been constructed in conformance with the SWPPP and are operational;

b. Planned shutdown with partial project completion - All soil disturbance activities have ceased; and all areas disturbed as of the project shutdown date have achieved *final stabilization*; and all temporary, structural erosion and sediment control measures have been removed; and all post-construction stormwater management practices required for the completed portion of the project have been constructed in conformance with the SWPPP and are operational;

c. A new *owner or operator* has obtained coverage under this permit in accordance with Part II.F. of this permit.

d. The *owner or operator* obtains coverage under an alternative SPDES general permit or an individual SPDES permit.

3. For *construction activities* meeting subdivision 2a. or 2b. of this Part, the *owner or operator* shall have the *qualified inspector* perform a final site inspection prior to submitting the NOT. The *qualified inspector* shall, by signing the "*Final Stabilization*" and "Post-Construction Stormwater Management Practice certification statements on the NOT, certify that all the requirements in Part V.A.2.a. or b. of this permit have been achieved.

4. For *construction activities* that are subject to the requirements of a *regulated, traditional land use control MS4* and meet subdivision 2a. or 2b. of this Part, the *owner or operator* shall have the *regulated, traditional land use control MS4* sign the "MS4 Acceptance" statement on the NOT in accordance with the requirements in Part VII.H. of this permit. The *regulated, traditional land use control MS4* official, by signing this statement, has determined that it is acceptable for the *owner or operator* to submit the NOT in accordance with the requirements of this Part. The *regulated, traditional land use control MS4* can make this determination by performing a final site inspection themselves or by accepting the *qualified inspector*'s final site inspection certification(s) required in Part V.A.3. of this permit.

5. For *construction activities* that require post-construction stormwater management practices and meet subdivision 2a. of this Part, the *owner or operator* must, prior to submitting the NOT, ensure one of the following:

   a. the post-construction stormwater management practice(s) and any right-of-way(s) needed to maintain such practice(s) have been deeded to the municipality in which the practice(s) is located,

b. an executed maintenance agreement is in place with the municipality that will maintain the post-construction stormwater management practice(s),

c. for post-construction stormwater management practices that are privately owned, the *owner or operator* has a mechanism in place that requires operation and maintenance of the practice(s) in accordance with the operation and maintenance plan, such as a deed covenant in the *owner or operator's* deed of record,

d. for post-construction stormwater management practices that are owned by a public or private institution (e.g. school, university, hospital), government agency or authority, or public utility; the *owner or operator* has policy and procedures in place that ensures operation and maintenance of the practices in accordance with the operation and maintenance plan.

Part VI. REPORTING AND RETENTION RECORDS

A. Record Retention

The *owner or operator* shall retain a copy of the NOI, NOI Acknowledgment Letter, SWPPP, MS4 SWPPP Acceptance form and any inspection reports that were prepared in conjunction with this permit for a period of at least five (5) years from the date that the Department receives a complete NOT submitted in accordance with Part V. of this general permit.

B. Addresses

With the exception of the NOI, NOT, and MS4 SWPPP Acceptance form (which must be submitted to the address referenced in Part II.B.1 of this permit), all written correspondence requested by the Department, including individual permit applications, shall be sent to the address of the appropriate DOW Water (SPDES) Program contact at the Regional Office listed in Appendix F.

Part VII. STANDARD PERMIT CONDITIONS

A. Duty to Comply

The *owner or operator* must comply with all conditions of this permit. All contractors and subcontractors associated with the project must comply with the terms of the SWPPP. Any non-compliance with this permit constitutes a violation of the Clean Water

Act (CWA) and the ECL and is grounds for an enforcement action against the *owner or operator* and/or the contractor/subcontractor; permit revocation, suspension or modification; or denial of a permit renewal application. Upon a finding of significant non-compliance with this permit or the applicable SWPPP, the Department may order an immediate stop to all *construction activity* at the site until the non-compliance is remedied. The stop work order shall be in writing, shall describe the non-compliance in detail, and shall be sent to the *owner or operator*.

If any human remains or archaeological remains are encountered during excavation, the *owner or operator* must immediately cease, or cause to cease, all *construction activity* in the area of the remains and notify the appropriate Regional Water Engineer (RWE). *Construction activity* shall not resume until written permission to do so has been received from the RWE.

B. Continuation of the Expired General Permit

This permit expires five (5) years from the effective date. If a new general permit is not issued prior to the expiration of this general permit, an *owner or operator* with coverage under this permit may continue to operate and *discharge* in accordance with the terms and conditions of this general permit, if it is extended pursuant to the State Administrative Procedure Act and 6 NYCRR Part 621, until a new general permit is issued.

C. Enforcement

Failure of the *owner or operator,* its contractors, subcontractors, agents and/or assigns to strictly adhere to any of the permit requirements contained herein shall constitute a violation of this permit. There are substantial criminal, civil, and administrative penalties associated with violating the provisions of this permit. Fines of up to $37,500 per day for each violation and imprisonment for up to fifteen (15) years may be assessed depending upon the nature and degree of the offense.

D. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for an *owner or operator* in an enforcement action that it would have been necessary to halt or reduce the *construction activity* in order to maintain compliance with the conditions of this permit.

E. Duty to Mitigate

The *owner or operator* and its contractors and subcontractors shall take all reasonable steps to *minimize* or prevent any *discharge* in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

F. Duty to Provide Information

The *owner or operator* shall furnish to the Department, within a reasonable specified time period of a written request, all documentation necessary to demonstrate eligibility and any information to determine compliance with this permit or to determine whether cause exists for modifying or revoking this permit, or suspending or denying coverage under this permit, in accordance with the terms and conditions of this permit. The NOI, SWPPP and inspection reports required by this permit are public documents that the *owner or operator* must make available for review and copying by any person within five (5) business days of the *owner or operator* receiving a written request by any such person to review these documents. Copying of documents will be done at the requester's expense.

G. Other Information

When the *owner or operator* becomes aware that they failed to submit any relevant facts, or submitted incorrect information in the NOI or in any of the documents required by this permit , or have made substantive revisions to the SWPPP (e.g. the scope of the project changes significantly, the type of post-construction stormwater management practice(s) changes, there is a reduction in the sizing of the post-construction stormwater management practice, or there is an increase in the disturbance area or *impervious area*), which were not reflected in the original NOI submitted to the Department, they shall promptly submit such facts or information to the Department using the contact information in Part II.A. of this permit. Failure of the *owner or operator* to correct or supplement any relevant facts within five (5) business days of becoming aware of the deficiency shall constitute a violation of this permit.

H. Signatory Requirements

1. All NOIs and NOTs shall be signed as follows:

    a. For a corporation these forms shall be signed by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:

(i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or

(ii) the manager of one or more manufacturing, production or operating facilities, provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

b. For a partnership or sole proprietorship these forms shall be signed by a general partner or the proprietor, respectively; or

c. For a municipality, State, Federal, or other public agency these forms shall be signed by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes:

(i) the chief executive officer of the agency, or

(ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).

2. The SWPPP and other information requested by the Department shall be signed by a person described in Part VII.H.1. of this permit or by a duly authorized representative of that person. A person is a duly authorized representative only if:

a. The authorization is made in writing by a person described in Part VII.H.1. of this permit;

b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field,

superintendent, position of *equivalent* responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position) and,

c. The written authorization shall include the name, title and signature of the authorized representative and be attached to the SWPPP.

3. All inspection reports shall be signed by the *qualified inspector* that performs the inspection.

4. The MS4 SWPPP Acceptance form shall be signed by the principal executive officer or ranking elected official from the *regulated, traditional land use control MS4,* or by a duly authorized representative of that person.

   It shall constitute a permit violation if an incorrect and/or improper signatory authorizes any required forms, SWPPP and/or inspection reports.

I. Property Rights

The issuance of this permit does not convey any property rights of any sort, nor any exclusive privileges, nor does it authorize any injury to private property nor any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations. *Owners or operators* must obtain any applicable conveyances, easements, licenses and/or access to real property prior to *commencing construction activity*.

J. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

K. Requirement to Obtain Coverage Under an Alternative Permit

1. The Department may require any owner or operator authorized by this permit to apply for and/or obtain either an individual SPDES permit or another SPDES general permit. When the Department requires any discharger authorized by a general permit to apply for an individual SPDES permit, it shall notify the discharger in writing that a permit application is required. This notice shall

include a brief statement of the reasons for this decision, an application form, a statement setting a time frame for the owner or operator to file the application for an individual SPDES permit, and a deadline, not sooner than 180 days from owner or operator receipt of the notification letter, whereby the authorization to discharge under this general permit shall be terminated. Applications must be submitted to the appropriate Permit Administrator at the Regional Office. The Department may grant additional time upon demonstration, to the satisfaction of the Department, that additional time to apply for an alternative authorization is necessary or where the Department has not provided a permit determination in accordance with Part 621 of this Title.

2. When an individual SPDES permit is issued to a discharger authorized to *discharge* under a general SPDES permit for the same *discharge*(s), the general permit authorization for outfalls authorized under the individual SPDES permit is automatically terminated on the effective date of the individual permit unless termination is earlier in accordance with 6 NYCRR Part 750.

L. Proper Operation and Maintenance

The *owner or operator* shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the *owner or operator* to achieve compliance with the conditions of this permit and with the requirements of the SWPPP.

M. Inspection and Entry

The *owner or operator* shall allow an authorized representative of the Department, EPA, applicable county health department, or, in the case of a *construction site* which *discharges* through an *MS4*, an authorized representative of the *MS4* receiving the discharge, upon the presentation of credentials and other documents as may be required by law, to:

1. Enter upon the owner’s or operator's premises where a regulated facility or activity is located or conducted or where records must be kept under the conditions of this permit;

2. Have access to and copy at reasonable times, any records that must be kept under the conditions of this permit; and

3. Inspect at reasonable times any facilities or equipment (including monitoring and control equipment), practices or operations regulated or required by this permit.

4. Sample or monitor at reasonable times, for purposes of assuring permit compliance or as otherwise authorized by the Act or ECL, any substances or parameters at any location.

N. Permit Actions

This permit may, at any time, be modified, suspended, revoked, or renewed by the Department in accordance with 6 NYCRR Part 621. The filing of a request by the *owner or operator* for a permit modification, revocation and reissuance, termination, a notification of planned changes or anticipated noncompliance does not limit, diminish and/or stay compliance with any terms of this permit.

O. Definitions

Definitions of key terms are included in Appendix A of this permit.

P. Re-Opener Clause

1. If there is evidence indicating potential or realized impacts on water quality due to any stormwater discharge associated with construction activity covered by this permit, the owner or operator of such discharge may be required to obtain an individual permit or alternative general permit in accordance with Part VII.K. of this permit or the permit may be modified to include different limitations and/or requirements.

2. Any Department initiated permit modification, suspension or revocation will be conducted in accordance with 6 NYCRR Part 621, 6 NYCRR 750-1.18, and 6 NYCRR 750-1.20.

Q. Penalties for Falsification of Forms and Reports

In accordance with 6NYCRR Part 750-2.4 and 750-2.5, any person who knowingly makes any false material statement, representation, or certification in any application, record, report or other document filed or required to be maintained under this permit, including reports of compliance or noncompliance shall, upon conviction, be punished in accordance with ECL §71-1933 and or Articles 175 and 210 of the New York State Penal Law.

R. Other Permits

Nothing in this permit relieves the *owner or operator* from a requirement to obtain any other permits required by law.

APPENDIX A – Acronyms and Definitions

Acronyms

APO – Agency Preservation Officer
BMP – Best Management Practice
CPESC – Certified Professional in Erosion and Sediment Control
Cpv – Channel Protection Volume
CWA – Clean Water Act (or the Federal Water Pollution Control Act, 33 U.S.C. §1251 et seq)
DOW – Division of Water
EAF – Environmental Assessment Form
ECL - Environmental Conservation Law
EPA – U. S. Environmental Protection Agency
HSG – Hydrologic Soil Group
MS4 – Municipal Separate Storm Sewer System
NOI – Notice of Intent
NOT – Notice of Termination
NPDES – National Pollutant Discharge Elimination System
OPRHP – Office of Parks, Recreation and Historic Places
Qf – Extreme Flood
Qp – Overbank Flood
RRv – Runoff Reduction Volume
RWE – Regional Water Engineer
SEQR – State Environmental Quality Review
SEQRA - State Environmental Quality Review Act
SHPA – State Historic Preservation Act
SPDES – State Pollutant Discharge Elimination System
SWPPP – Stormwater Pollution Prevention Plan
TMDL – Total Maximum Daily Load
UPA – Uniform Procedures Act
USDA – United States Department of Agriculture
WQv – Water Quality Volume

Definitions

All definitions in this section are solely for the purposes of this permit.

Agricultural Building – a structure designed and constructed to house farm implements, hay, grain, poultry, livestock or other horticultural products; excluding any structure designed, constructed or used, in whole or in part, for human habitation, as a place of employment where agricultural products are processed, treated or packaged, or as a place used by the public.

Agricultural Property –means the land for construction of a barn, *agricultural building*, silo, stockyard, pen or other structural practices identified in Table II in the "Agricultural Management Practices Catalog for Nonpoint Source Pollution in New York State" prepared by the Department in cooperation with agencies of New York Nonpoint Source Coordinating Committee (dated June 2007).

Alter Hydrology from Pre to Post-Development Conditions - means the post-development peak flow rate(s) has increased by more than 5% of the pre-developed condition for the design storm of interest (e.g. 10 yr and 100 yr).

Combined Sewer - means a sewer that is designed to collect and convey both "sewage" and "stormwater".

Commence (Commencement of) Construction Activities - means the initial disturbance of soils associated with clearing, grading or excavation activities; or other construction related activities that disturb or expose soils such as demolition, stockpiling of fill material, and the initial installation of erosion and sediment control practices required in the SWPPP. See definition for "*Construction Activity(ies)*" also.

Construction Activity(ies) - means any clearing, grading, excavation, filling, demolition or stockpiling activities that result in soil disturbance. Clearing activities can include, but are not limited to, logging equipment operation, the cutting and skidding of trees, stump removal and/or brush root removal. Construction activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of a facility.

Construction Site – means the land area where *construction activity(ies)* will occur. See definition for "*Commence (Commencement of) Construction Activities"* and "*Larger Common Plan of Development or Sale" also.*

Dewatering – means the act of draining rainwater and/or groundwater from building foundations, vaults or excavations/trenches.

Direct Discharge (to a specific surface waterbody) - means that runoff flows from a *construction site* by overland flow and the first point of discharge is the specific surface waterbody, or runoff flows from a *construction site* to a separate storm sewer system

and the first point of discharge from the separate storm sewer system is the specific surface waterbody.

Discharge(s) - means any addition of any pollutant to waters of the State through an outlet or *point source*.

Embankment –means an earthen or rock slope that supports a road/highway.

Endangered or Threatened Species – see 6 NYCRR Part 182 of the Department's rules and regulations for definition of terms and requirements.

Environmental Conservation Law (ECL) - means chapter 43-B of the Consolidated Laws of the State of New York, entitled the Environmental Conservation Law.

Equivalent (Equivalence) – means that the practice or measure meets all the performance, longevity, maintenance, and safety objectives of the technical standard and will provide an equal or greater degree of water quality protection.

Final Stabilization - means that all soil disturbance activities have ceased and a uniform, perennial vegetative cover with a density of eighty (80) percent over the entire pervious surface has been established; or other equivalent stabilization measures, such as permanent landscape mulches, rock rip-rap or washed/crushed stone have been applied on all disturbed areas that are not covered by permanent structures, concrete or pavement.

General SPDES permit - means a SPDES permit issued pursuant to 6 NYCRR Part 750-1.21 and Section 70-0117 of the ECL authorizing a category of discharges.

Groundwater(s) - means waters in the saturated zone. The saturated zone is a subsurface zone in which all the interstices are filled with water under pressure greater than that of the atmosphere. Although the zone may contain gas-filled interstices or interstices filled with fluids other than water, it is still considered saturated.

Historic Property – means any building, structure, site, object or district that is listed on the State or National Registers of Historic Places or is determined to be eligible for listing on the State or National Registers of Historic Places.

Impervious Area (Cover) - means all impermeable surfaces that cannot effectively infiltrate rainfall. This includes paved, concrete and gravel surfaces (i.e. parking lots, driveways, roads, runways and sidewalks); building rooftops and miscellaneous impermeable structures such as patios, pools, and sheds.

Infeasible – means not technologically possible, or not economically practicable and achievable in light of best industry practices.

Larger Common Plan of Development or Sale - means a contiguous area where multiple separate and distinct *construction activities* are occurring, or will occur, under one plan. The term “plan” in “larger common plan of development or sale” is broadly defined as any announcement or piece of documentation (including a sign, public notice or hearing, marketing plan, advertisement, drawing, permit application, State Environmental Quality Review Act (SEQRA) environmental assessment form or other documents, zoning request, computer design, etc.) or physical demarcation (including boundary signs, lot stakes, surveyor markings, etc.) indicating that *construction activities* may occur on a specific plot.

For discrete construction projects that are located within a larger common plan of development or sale that are at least 1/4 mile apart, each project can be treated as a separate plan of development or sale provided any interconnecting road, pipeline or utility project that is part of the same “common plan” is not concurrently being disturbed.

Minimize – means reduce and/or eliminate to the extent achievable using control measures (including best management practices) that are technologically available and economically practicable and achievable in light of best industry practices.

Municipal Separate Storm Sewer (MS4) - a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):

(i) Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to surface waters of the State*;*
(ii) Designed or used for collecting or conveying stormwater;
(iii) Which is not a *combined sewer*; and
(iv) Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.

National Pollutant Discharge Elimination System (NPDES) - means the national system for the issuance of wastewater and stormwater permits under the Federal Water Pollution Control Act (Clean Water Act).

Natural Buffer –means an undisturbed area with natural cover running along a surface water (e.g. wetland, stream, river, lake, etc.).

New Development – means any land disturbance that does not meet the definition of Redevelopment Activity included in this appendix.

New York State Erosion and Sediment Control Certificate Program – a certificate program that establishes and maintains a process to identify and recognize individuals who are capable of developing, designing, inspecting and maintaining erosion and sediment control plans on projects that disturb soils in New York State. The certificate program is administered by the New York State Conservation District Employees Association.

NOI Acknowledgment Letter - means the letter that the Department sends to an owner or operator to acknowledge the Department's receipt and acceptance of a complete Notice of Intent. This letter documents the owner's or operator's authorization to discharge in accordance with the general permit for stormwater discharges from *construction activity*.

Nonpoint Source - means any source of water pollution or pollutants which is not a discrete conveyance or *point source* permitted pursuant to Title 7 or 8 of Article 17 of the Environmental Conservation Law (see ECL Section 17-1403).

Overbank –means flow events that exceed the capacity of the stream channel and spill out into the adjacent floodplain.

Owner or Operator - means the person, persons or legal entity which owns or leases the property on which the *construction activity* is occurring; an entity that has operational control over the construction plans and specifications, including the ability to make modifications to the plans and specifications; and/or an entity that has day-to-day operational control of those activities at a project that are necessary to ensure compliance with the permit conditions.

Performance Criteria – means the design criteria listed under the "Required Elements" sections in Chapters 5, 6 and 10 of the technical standard, New York State Stormwater Management Design Manual, dated January 2015. It does not include the Sizing Criteria (i.e. WQv, RRv, Cpv, Qp and Qf) in Part I.C.2. of the permit.

Point Source - means any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, vessel or other floating craft, or landfill leachate collection system from which *pollutants* are or may be discharged.

Pollutant - means dredged spoil, filter backwash, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand and industrial, municipal, agricultural waste and ballast discharged into water; which may cause or might reasonably be expected to cause pollution of the waters of the state in contravention of the standards or guidance values adopted as provided in 6 NYCRR Parts 700 et seq .

Qualified Inspector - means a person that is knowledgeable in the principles and practices of erosion and sediment control, such as a licensed Professional Engineer, Certified Professional in Erosion and Sediment Control (CPESC), Registered Landscape Architect, New York State Erosion and Sediment Control Certificate Program holder or other Department endorsed individual(s).

It can also mean someone working under the direct supervision of, and at the same company as, the licensed Professional Engineer or Registered Landscape Architect, provided that person has training in the principles and practices of erosion and sediment control. Training in the principles and practices of erosion and sediment control means that the individual working under the direct supervision of the licensed Professional Engineer or Registered Landscape Architect has received four (4) hours of Department endorsed training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other Department endorsed entity. After receiving the initial training, the individual working under the direct supervision of the licensed Professional Engineer or Registered Landscape Architect shall receive four (4) hours of training every three (3) years.

It can also mean a person that meets the *Qualified Professional* qualifications in addition to the *Qualified Inspector* qualifications.

Note: Inspections of any post-construction stormwater management practices that include structural components, such as a dam for an impoundment, shall be performed by a licensed Professional Engineer.

Qualified Professional - means a person that is knowledgeable in the principles and practices of stormwater management and treatment, such as a licensed Professional Engineer, Registered Landscape Architect or other Department endorsed individual(s). Individuals preparing SWPPPs that require the post-construction stormwater management practice component must have an understanding of the principles of hydrology, water quality management practice design, water quantity control design, and, in many cases, the principles of hydraulics. All components of the SWPPP that involve the practice of engineering, as defined by the NYS Education Law (see Article 145), shall be prepared by, or under the direct supervision of, a professional engineer licensed to practice in the State of New York.

Redevelopment Activity(ies) – means the disturbance and reconstruction of existing impervious area, including impervious areas that were removed from a project site within five (5) years of preliminary project plan submission to the local government (i.e. site plan, subdivision, etc.).

Regulated, Traditional Land Use Control MS4 - means a city, town or village with land use control authority that is authorized to discharge under New York State DEC's

SPDES General Permit For Stormwater Discharges from Municipal Separate Stormwater Sewer Systems (MS4s) or the City of New York's Individual SPDES Permit for their Municipal Separate Storm Sewer Systems (NY-0287890).

Routine Maintenance Activity - means *construction activity* that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of a facility, including, but not limited to:

- Re-grading of gravel roads or parking lots,
- Cleaning and shaping of existing roadside ditches and culverts that maintains the approximate original line and grade, and hydraulic capacity of the ditch,
- Cleaning and shaping of existing roadside ditches that does not maintain the approximate original grade, hydraulic capacity and purpose of the ditch if the changes to the line and grade, hydraulic capacity or purpose of the ditch are installed to improve water quality and quantity controls (e.g. installing grass lined ditch),
- Placement of aggregate shoulder backing that stabilizes the transition between the road shoulder and the ditch or *embankment*,
- Full depth milling and filling of existing asphalt pavements, replacement of concrete pavement slabs, and similar work that does not expose soil or disturb the bottom six (6) inches of subbase material,
- Long-term use of equipment storage areas at or near highway maintenance facilities,
- Removal of sediment from the edge of the highway to restore a previously existing sheet-flow drainage connection from the highway surface to the highway ditch or *embankment*,
- Existing use of Canal Corp owned upland disposal sites for the canal, and
- Replacement of curbs, gutters, sidewalks and guide rail posts.

Site limitations – means site conditions that prevent the use of an infiltration technique and or infiltration of the total WQv. Typical site limitations include: seasonal high groundwater, shallow depth to bedrock, and soils with an infiltration rate less than 0.5 inches/hour. The existence of site limitations shall be confirmed and documented using actual field testing (i.e. test pits, soil borings, and infiltration test) or using information from the most current United States Department of Agriculture (USDA) Soil Survey for the County where the project is located.

Sizing Criteria – means the criteria included in Part I.C.2 of the permit that are used to size post-construction stormwater management control practices. The criteria include; Water Quality Volume (WQv), Runoff Reduction Volume (RRv), Channel Protection Volume (Cpv), *Overbank* Flood (Qp), and Extreme Flood (Qf).

State Pollutant Discharge Elimination System (SPDES) - means the system established pursuant to Article 17 of the ECL and 6 NYCRR Part 750 for issuance of permits authorizing discharges to the waters of the state.

Steep Slope – means land area designated on the current United States Department of Agriculture ("USDA") Soil Survey as Soil Slope Phase "D", (provided the map unit name is inclusive of slopes greater than 25%) , or Soil Slope Phase E or F, (regardless of the map unit name), or a combination of the three designations.

Streambank – as used in this permit, means the terrain alongside the bed of a creek or stream. The bank consists of the sides of the channel, between which the flow is confined.

Stormwater Pollution Prevention Plan (SWPPP) – means a project specific report, including construction drawings, that among other things: describes the construction activity(ies), identifies the potential sources of pollution at the *construction site*; describes and shows the stormwater controls that will be used to control the pollutants (i.e. erosion and sediment controls; for many projects, includes post-construction stormwater management controls); and identifies procedures the *owner or operator* will implement to comply with the terms and conditions of the permit. See Part III of the permit for a complete description of the information that must be included in the SWPPP.

Surface Waters of the State - shall be construed to include lakes, bays, sounds, ponds, impounding reservoirs, springs, rivers, streams, creeks, estuaries, marshes, inlets, canals, the Atlantic ocean within the territorial seas of the state of New York and all other bodies of surface water, natural or artificial, inland or coastal, fresh or salt, public or private (except those private waters that do not combine or effect a junction with natural surface waters), which are wholly or partially within or bordering the state or within its jurisdiction. Waters of the state are further defined in 6 NYCRR Parts 800 to 941.

Temporarily Ceased – means that an existing disturbed area will not be disturbed again within 14 calendar days of the previous soil disturbance.

Temporary Stabilization - means that exposed soil has been covered with material(s) as set forth in the technical standard, New York Standards and Specifications for Erosion and Sediment Control, to prevent the exposed soil from eroding. The materials can include, but are not limited to, mulch, seed and mulch, and erosion control mats (e.g. jute twisted yarn, excelsior wood fiber mats).

Total Maximum Daily Loads (TMDLs) - A TMDL is the sum of the allowable loads of a single pollutant from all contributing point and *nonpoint source*s. It is a calculation of the maximum amount of a pollutant that a waterbody can receive on a daily basis and still meet *water quality standards*, and an allocation of that amount to the pollutant's sources. A TMDL stipulates wasteload allocations (WLAs) for *point source* discharges, load allocations (LAs) for *nonpoint source*s, and a margin of safety (MOS).

Trained Contractor - means an employee from the contracting (construction) company, identified in Part III.A.6., that has received four (4) hours of Department endorsed

training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other Department endorsed entity. After receiving the initial training, the *trained contractor* shall receive four (4) hours of training every three (3) years.

It can also mean an employee from the contracting (construction) company, identified in Part III.A.6., that meets the *qualified inspector* qualifications (e.g. licensed Professional Engineer, Certified Professional in Erosion and Sediment Control (CPESC), Registered Landscape Architect, New York State Erosion and Sediment Control Certificate Program holder, or someone working under the direct supervision of, and at the same company as, the licensed Professional Engineer or Registered Landscape Architect, provided they have received four (4) hours of Department endorsed training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other Department endorsed entity).

The *trained contractor* is responsible for the day to day implementation of the SWPPP.

Uniform Procedures Act (UPA) Permit - means a permit required under 6 NYCRR Part 621 of the Environmental Conservation Law (ECL), Article 70.

Water Quality Standard - means such measures of purity or quality for any waters in relation to their reasonable and necessary use as promulgated in 6 NYCRR Part 700 et seq.

APPENDIX B – Required SWPPP Components by Project Type

Table 1
Construction Activities that Require the Preparation of a SWPPP That Only Includes Erosion and Sediment Controls

The following construction activities that involve soil disturbances of one (1) or more acres of land, but less than five (5) acres:

- Single family home not located in one of the watersheds listed in Appendix C or not *directly discharging* to one of the 303(d) segments listed in Appendix E
- Single family residential subdivisions with 25% or less impervious cover at total site build-out and not located in one of the watersheds listed in Appendix C and not directly discharging to one of the 303(d) segments listed in Appendix E
- Construction of a barn or other *agricultural building*, silo, stock yard or pen.

The following construction activities that involve soil disturbances between five thousand (5000) square feet and one (1) acre of land:

All construction activities located in the watersheds identified in Appendix D that involve soil disturbances between five thousand (5,000) square feet and one (1) acre of land.

The following construction activities that involve soil disturbances of one (1) or more acres of land:

- Installation of underground, linear utilities; such as gas lines, fiber-optic cable, cable TV, electric, telephone, sewer mains, and water mains
- Environmental enhancement projects, such as wetland mitigation projects, stormwater retrofits and stream restoration projects
- Pond construction
- Linear bike paths running through areas with vegetative cover, including bike paths surfaced with an impervious cover
- Cross-country ski trails and walking/hiking trails
- Sidewalk, bike path or walking path projects, surfaced with an impervious cover, that are not part of residential, commercial or institutional development;
- Sidewalk, bike path or walking path projects, surfaced with an impervious cover, that include incidental shoulder or curb work along an existing highway to support construction of the sidewalk, bike path or walking path.
- Slope stabilization projects
- Slope flattening that changes the grade of the site, but does not significantly change the runoff characteristics

Table 1 (Continued) CONSTRUCTION ACTIVITIES THAT REQUIRE THE PREPARATION OF A SWPPP THAT ONLY INCLUDES EROSION AND SEDIMENT CONTROLS

The following construction activities that involve soil disturbances of one (1) or more acres of land:

- Spoil areas that will be covered with vegetation
- Vegetated open space projects (i.e. recreational parks, lawns, meadows, fields, downhill ski trails) excluding projects that *alter hydrology from pre to post development* conditions,
- Athletic fields (natural grass) that do not include the construction or reconstruction of *impervious area* and do not *alter hydrology from pre to post development* conditions
- Demolition project where vegetation will be established, and no redevelopment is planned
- Overhead electric transmission line project that does not include the construction of permanent access roads or parking areas surfaced with *impervious cover*
- Structural practices as identified in Table II in the "Agricultural Management Practices Catalog for Nonpoint Source Pollution in New York State", excluding projects that involve soil disturbances of greater than five acres and construction activities that include the construction or reconstruction of impervious area
- Temporary access roads, median crossovers, detour roads, lanes, or other temporary impervious areas that will be restored to pre-construction conditions once the construction activity is complete

Table 2

CONSTRUCTION ACTIVITIES THAT REQUIRE THE PREPARATION OF A SWPPP THAT INCLUDES POST-CONSTRUCTION STORMWATER MANAGEMENT PRACTICES

The following construction activities that involve soil disturbances of one (1) or more acres of land:

- Single family home located in one of the watersheds listed in Appendix C or *directly discharging* to one of the 303(d) segments listed in Appendix E
- Single family home that disturbs five (5) or more acres of land
- Single family residential subdivisions located in one of the watersheds listed in Appendix C or *directly discharging* to one of the 303(d) segments listed in Appendix E
- Single family residential subdivisions that involve soil disturbances of between one (1) and five (5) acres of land with greater than 25% impervious cover at total site build-out
- Single family residential subdivisions that involve soil disturbances of five (5) or more acres of land, and single family residential subdivisions that involve soil disturbances of less than five (5) acres that are part of a larger common plan of development or sale that will ultimately disturb five or more acres of land
- Multi-family residential developments; includes duplexes, townhomes, condominiums, senior housing complexes, apartment complexes, and mobile home parks
- Airports
- Amusement parks
- Breweries, cideries, and wineries, including establishments constructed on agricultural land
- Campgrounds
- Cemeteries that include the construction or reconstruction of impervious area (>5% of disturbed area) or *alter the hydrology from pre to post development* conditions
- Commercial developments
- Churches and other places of worship
- Construction of a barn or other *agricultural building* (e.g. silo) and structural practices as identified in Table II in the "Agricultural Management Practices Catalog for Nonpoint Source Pollution in New York State" that include the construction or reconstruction of *impervious area*, excluding projects that involve soil disturbances of less than five acres.
- Golf courses
- Institutional development; includes hospitals, prisons, schools and colleges
- Industrial facilities; includes industrial parks
- Landfills
- Municipal facilities; includes highway garages, transfer stations, office buildings, POTW's, water treatment plants, and water storage tanks
- Office complexes
- Playgrounds that include the construction or reconstruction of impervious area
- Sports complexes
- Racetracks; includes racetracks with earthen (dirt) surface
- Road construction or reconstruction, including roads constructed as part of the construction activities listed in Table 1

Table 2 (Continued)

CONSTRUCTION ACTIVITIES THAT REQUIRE THE PREPARATION OF A SWPPP THAT INCLUDES POST-CONSTRUCTION STORMWATER MANAGEMENT PRACTICES

The following construction activities that involve soil disturbances of one (1) or more acres of land:

- Parking lot construction or reconstruction, including parking lots constructed as part of the construction activities listed in Table 1
- Athletic fields (natural grass) that include the construction or reconstruction of impervious area (>5% of disturbed area) or *alter the hydrology from pre to post development* conditions
- Athletic fields with artificial turf
- Permanent access roads, parking areas, substations, compressor stations and well drilling pads, surfaced with *impervious cover,* and constructed as part of an over-head electric transmission line project, wind-power project, cell tower project, oil or gas well drilling project, sewer or water main project or other linear utility project
- Sidewalk, bike path or walking path projects, surfaced with an impervious cover, that are part of a residential, commercial or institutional development
- Sidewalk, bike path or walking path projects, surfaced with an impervious cover, that are part of a highway construction or reconstruction project
- All other construction activities that include the construction or reconstruction of *impervious area* or *alter the hydrology from pre to post development* conditions, and are not listed in Table 1

APPENDIX C – Watersheds Requiring Enhanced Phosphorus Removal

Watersheds where *owners or operators* of construction activities identified in Table 2 of Appendix B must prepare a SWPPP that includes post-construction stormwater management practices designed in conformance with the Enhanced Phosphorus Removal Standards included in the technical standard, New York State Stormwater Management Design Manual ("Design Manual").

- Entire New York City Watershed located east of the Hudson River **-** Figure 1
- Onondaga Lake Watershed **-** Figure 2
- Greenwood Lake Watershed **-**Figure 3
- Oscawana Lake Watershed – Figure 4
- Kinderhook Lake Watershed – Figure 5

Figure 1 - New York City Watershed East of the Hudson

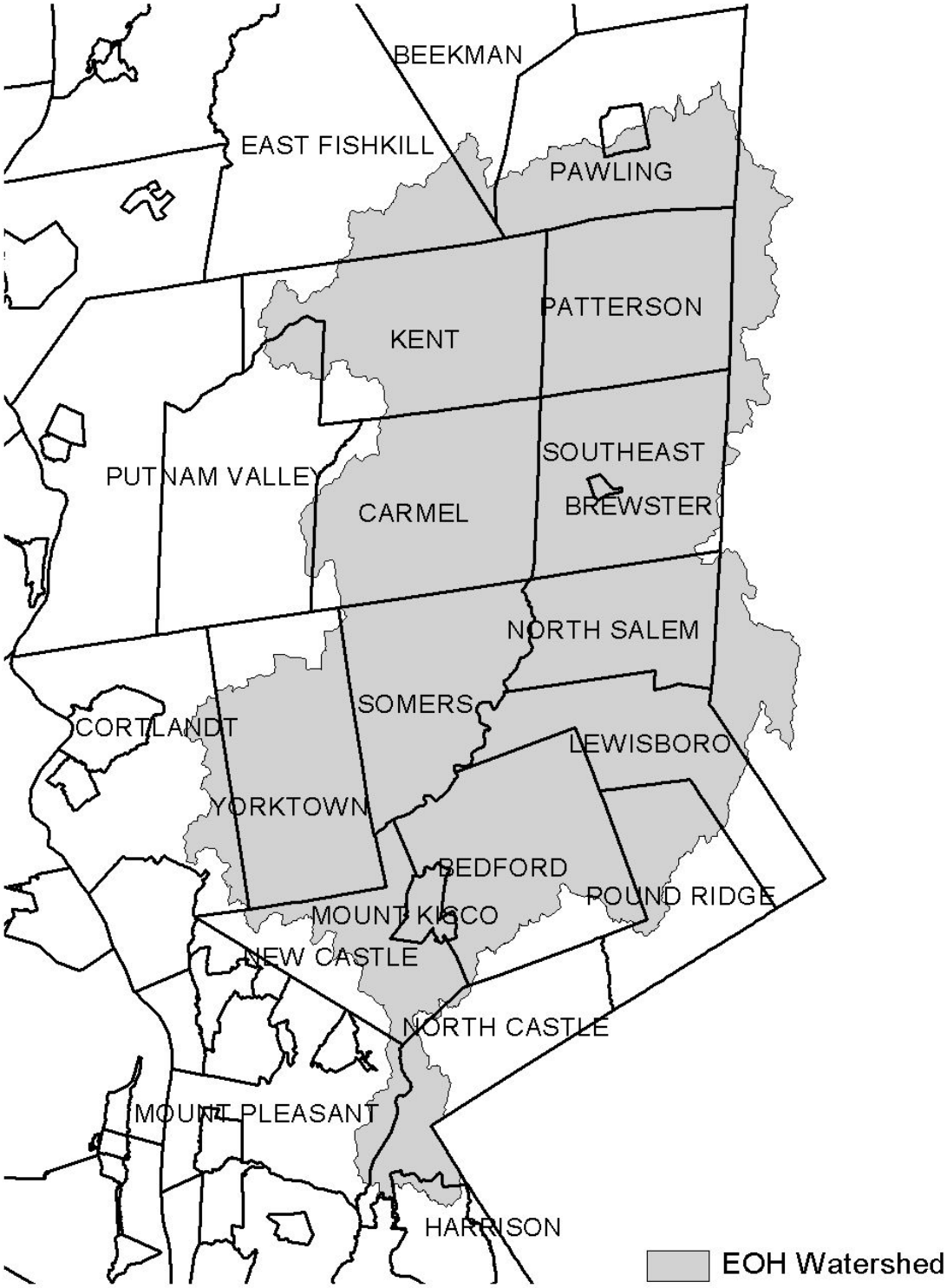


Figure 2 - Onondaga Lake Watershed

Figure 3 - Greenwood Lake Watershed

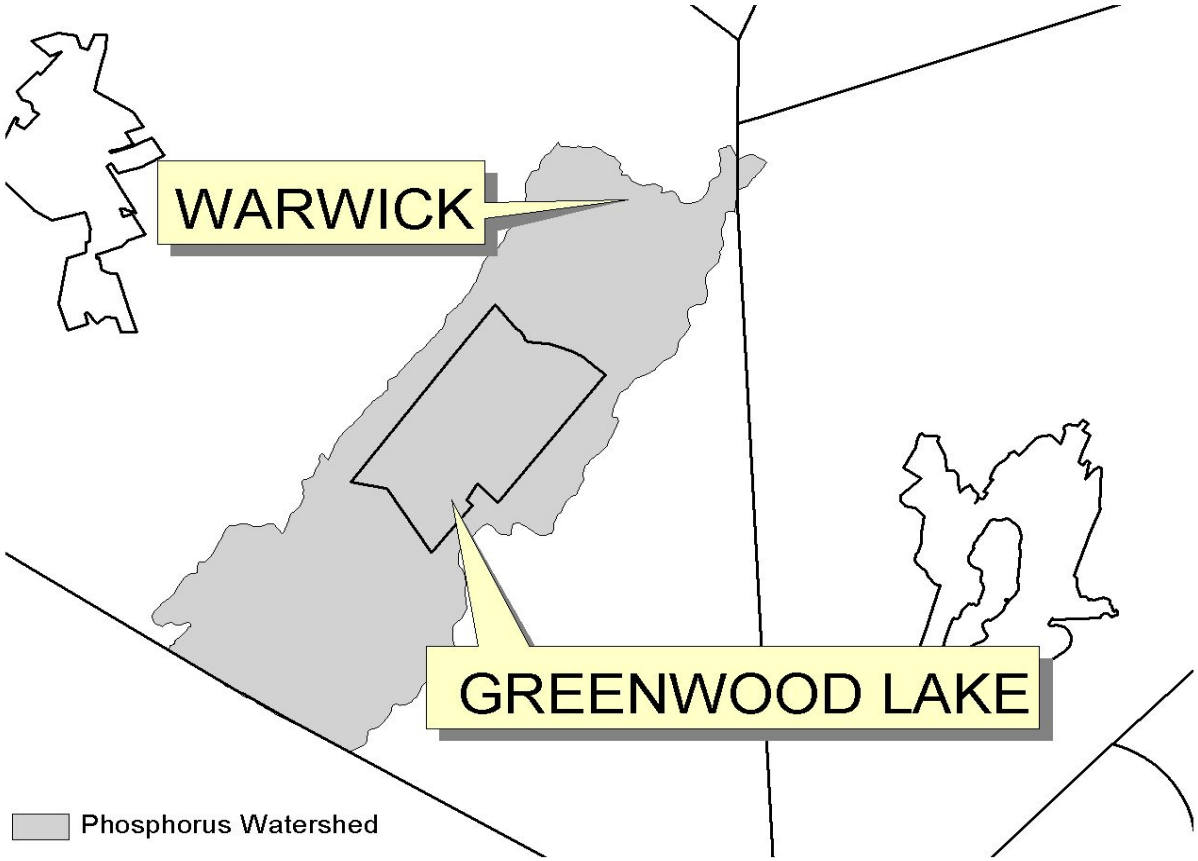


Figure 4 - Oscawana Lake Watershed

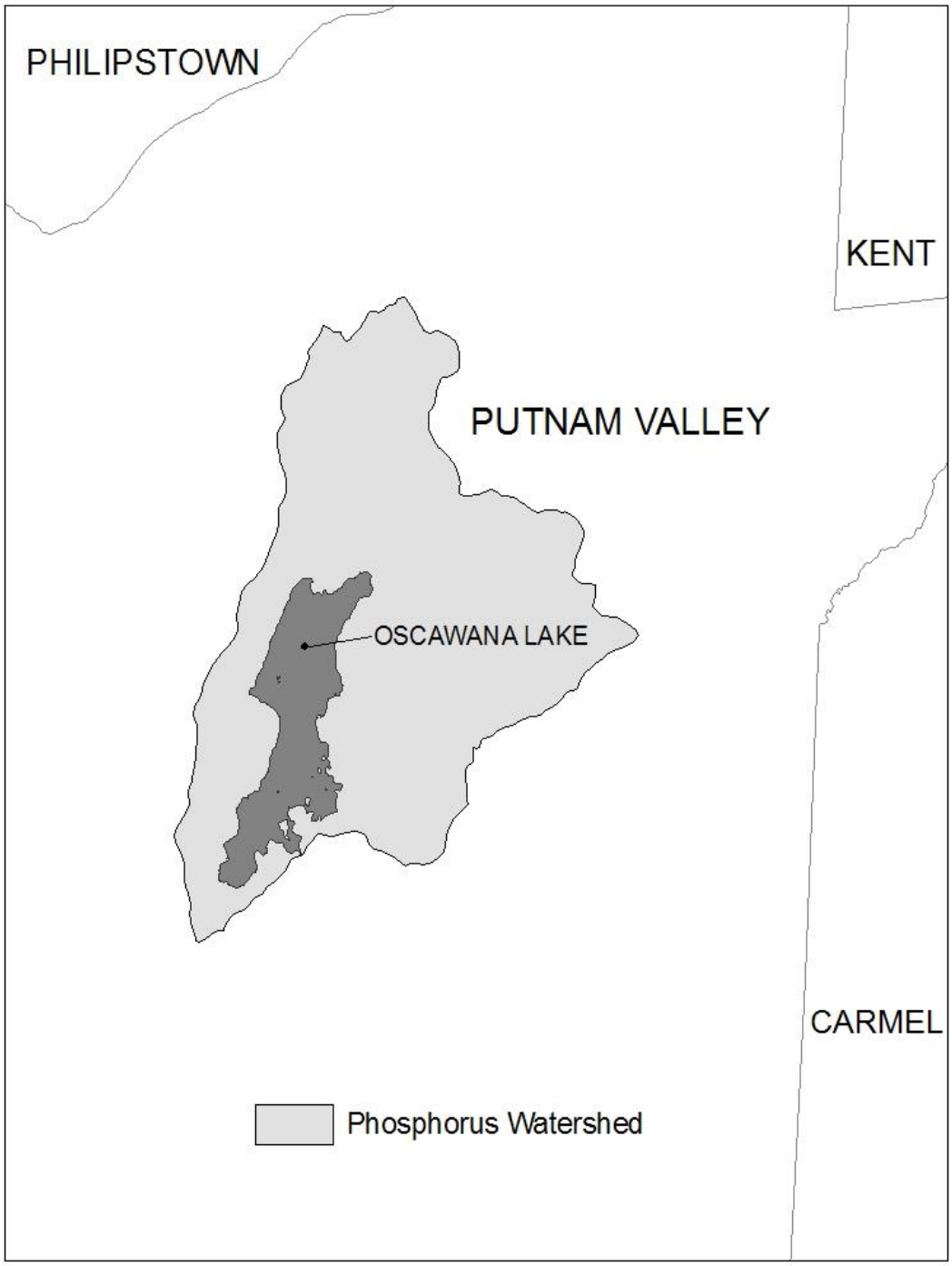
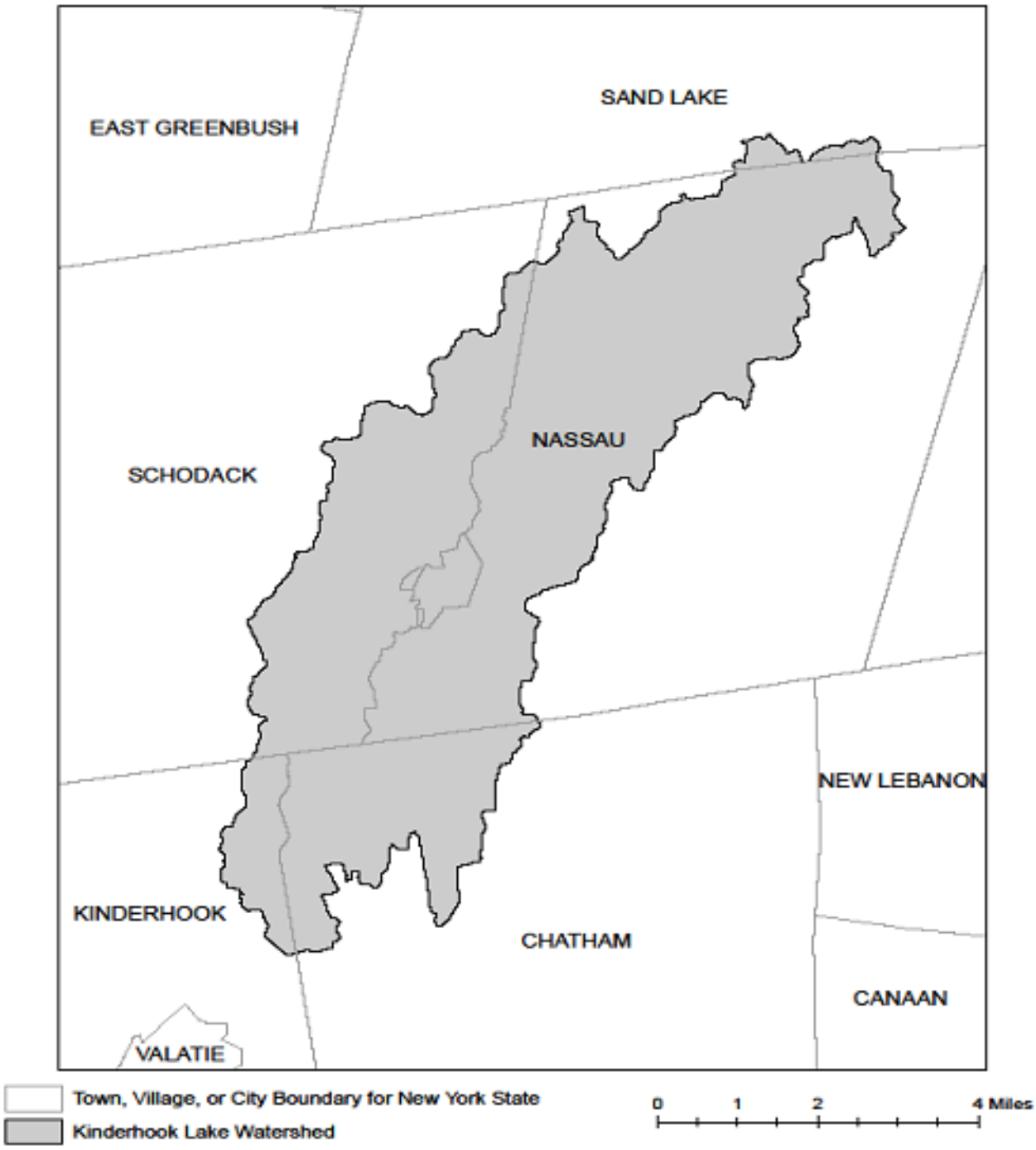


Figure 5 - Kinderhook Lake Watershed



APPENDIX D – Watersheds with Lower Disturbance Threshold

Watersheds where *owners or operators* of construction activities that involve soil disturbances between five thousand (5000) square feet and one (1) acre of land must obtain coverage under this permit.

Entire New York City Watershed that is located east of the Hudson River **-** See Figure 1 in Appendix C

APPENDIX E – 303(d) Segments Impaired by Construction Related Pollutant(s)

List of 303(d) segments impaired by pollutants related to *construction activity* (e.g. silt, sediment or nutrients). The list was developed using "The Final New York State 2016 Section 303(d) List of Impaired Waters Requiring a TMDL/Other Strategy" dated November 2016. *Owners or operators* of single family home and single family residential subdivisions with 25% or less total impervious cover at total site build-out that involve soil disturbances of one or more acres of land, but less than 5 acres, and *directly discharge* to one of the listed segments below shall prepare a SWPPP that includes post-construction stormwater management practices designed in conformance with the New York State Stormwater Management Design Manual ("Design Manual"), dated January 2015.

COUNTY	WATERBODY	POLLUTANT
Albany	Ann Lee (Shakers) Pond, Stump Pond	Nutrients
Albany	Basic Creek Reservoir	Nutrients
Allegany	Amity Lake, Saunders Pond	Nutrients
Bronx	Long Island Sound, Bronx	Nutrients
Bronx	Van Cortlandt Lake	Nutrients
Broome	Fly Pond, Deer Lake, Sky Lake	Nutrients
Broome	Minor Tribs to Lower Susquehanna (north)	Nutrients
Broome	Whitney Point Lake/Reservoir	Nutrients
Cattaraugus	Allegheny River/Reservoir	Nutrients
Cattaraugus	Beaver (Alma) Lake	Nutrients
Cattaraugus	Case Lake	Nutrients
Cattaraugus	Linlyco/Club Pond	Nutrients
Cayuga	Duck Lake	Nutrients
Cayuga	Little Sodus Bay	Nutrients
Chautauqua	Bear Lake	Nutrients
Chautauqua	Chadakoin River and tribs	Nutrients
Chautauqua	Chautauqua Lake, North	Nutrients
Chautauqua	Chautauqua Lake, South	Nutrients
Chautauqua	Findley Lake	Nutrients
Chautauqua	Hulburt/Clymer Pond	Nutrients
Clinton	Great Chazy River, Lower, Main Stem	Silt/Sediment
Clinton	Lake Champlain, Main Lake, Middle	Nutrients
Clinton	Lake Champlain, Main Lake, North	Nutrients
Columbia	Kinderhook Lake	Nutrients
Columbia	Robinson Pond	Nutrients
Cortland	Dean Pond	Nutrients

303(d) Segments Impaired by Construction Related Pollutant(s)

Dutchess	Fall Kill and tribs	Nutrients
Dutchess	Hillside Lake	Nutrients
Dutchess	Wappingers Lake	Nutrients
Dutchess	Wappingers Lake	Silt/Sediment
Erie	Beeman Creek and tribs	Nutrients
Erie	Ellicott Creek, Lower, and tribs	Silt/Sediment
Erie	Ellicott Creek, Lower, and tribs	Nutrients
Erie	Green Lake	Nutrients
Erie	Little Sister Creek, Lower, and tribs	Nutrients
Erie	Murder Creek, Lower, and tribs	Nutrients
Erie	Rush Creek and tribs	Nutrients
Erie	Scajaquada Creek, Lower, and tribs	Nutrients
Erie	Scajaquada Creek, Middle, and tribs	Nutrients
Erie	Scajaquada Creek, Upper, and tribs	Nutrients
Erie	South Branch Smoke Cr, Lower, and tribs	Silt/Sediment
Erie	South Branch Smoke Cr, Lower, and tribs	Nutrients
Essex	Lake Champlain, Main Lake, South	Nutrients
Essex	Lake Champlain, South Lake	Nutrients
Essex	Willsboro Bay	Nutrients
Genesee	Bigelow Creek and tribs	Nutrients
Genesee	Black Creek, Middle, and minor tribs	Nutrients
Genesee	Black Creek, Upper, and minor tribs	Nutrients
Genesee	Bowen Brook and tribs	Nutrients
Genesee	LeRoy Reservoir	Nutrients
Genesee	Oak Orchard Cr, Upper, and tribs	Nutrients
Genesee	Tonawanda Creek, Middle, Main Stem	Nutrients
Greene	Schoharie Reservoir	Silt/Sediment
Greene	Sleepy Hollow Lake	Silt/Sediment
Herkimer	Steele Creek tribs	Silt/Sediment
Herkimer	Steele Creek tribs	Nutrients
Jefferson	Moon Lake	Nutrients
Kings	Hendrix Creek	Nutrients
Kings	Prospect Park Lake	Nutrients
Lewis	Mill Creek/South Branch, and tribs	Nutrients
Livingston	Christie Creek and tribs	Nutrients
Livingston	Conesus Lake	Nutrients
Livingston	Mill Creek and minor tribs	Silt/Sediment
Monroe	Black Creek, Lower, and minor tribs	Nutrients
Monroe	Buck Pond	Nutrients
Monroe	Cranberry Pond	Nutrients

303(d) Segments Impaired by Construction Related Pollutant(s)

Monroe	Lake Ontario Shoreline, Western	Nutrients
Monroe	Long Pond	Nutrients
Monroe	Mill Creek and tribs	Nutrients
Monroe	Mill Creek/Blue Pond Outlet and tribs	Nutrients
Monroe	Minor Tribs to Irondequoit Bay	Nutrients
Monroe	Rochester Embayment - East	Nutrients
Monroe	Rochester Embayment - West	Nutrients
Monroe	Shipbuilders Creek and tribs	Nutrients
Monroe	Thomas Creek/White Brook and tribs	Nutrients
Nassau	Beaver Lake	Nutrients
Nassau	Camaans Pond	Nutrients
Nassau	East Meadow Brook, Upper, and tribs	Silt/Sediment
Nassau	East Rockaway Channel	Nutrients
Nassau	Grant Park Pond	Nutrients
Nassau	Hempstead Bay	Nutrients
Nassau	Hempstead Lake	Nutrients
Nassau	Hewlett Bay	Nutrients
Nassau	Hog Island Channel	Nutrients
Nassau	Long Island Sound, Nassau County Waters	Nutrients
Nassau	Massapequa Creek and tribs	Nutrients
Nassau	Milburn/Parsonage Creeks, Upp, and tribs	Nutrients
Nassau	Reynolds Channel, west	Nutrients
Nassau	Tidal Tribs to Hempstead Bay	Nutrients
Nassau	Tribs (fresh) to East Bay	Nutrients
Nassau	Tribs (fresh) to East Bay	Silt/Sediment
Nassau	Tribs to Smith/Halls Ponds	Nutrients
Nassau	Woodmere Channel	Nutrients
New York	Harlem Meer	Nutrients
New York	The Lake in Central Park	Nutrients
Niagara	Bergholtz Creek and tribs	Nutrients
Niagara	Hyde Park Lake	Nutrients
Niagara	Lake Ontario Shoreline, Western	Nutrients
Niagara	Lake Ontario Shoreline, Western	Nutrients
Oneida	Ballou, Nail Creeks and tribs	Nutrients
Onondaga	Harbor Brook, Lower, and tribs	Nutrients
Onondaga	Ley Creek and tribs	Nutrients
Onondaga	Minor Tribs to Onondaga Lake	Nutrients
Onondaga	Ninemile Creek, Lower, and tribs	Nutrients
Onondaga	Onondaga Creek, Lower, and tribs	Nutrients
Onondaga	Onondaga Creek, Middle, and tribs	Nutrients

303(d) Segments Impaired by Construction Related Pollutant(s)

Onondaga	Onondaga Lake, northern end	Nutrients
Onondaga	Onondaga Lake, southern end	Nutrients
Ontario	Great Brook and minor tribs	Silt/Sediment
Ontario	Great Brook and minor tribs	Nutrients
Ontario	Hemlock Lake Outlet and minor tribs	Nutrients
Ontario	Honeoye Lake	Nutrients
Orange	Greenwood Lake	Nutrients
Orange	Monhagen Brook and tribs	Nutrients
Orange	Orange Lake	Nutrients
Orleans	Lake Ontario Shoreline, Western	Nutrients
Orleans	Lake Ontario Shoreline, Western	Nutrients
Oswego	Lake Neatahwanta	Nutrients
Oswego	Pleasant Lake	Nutrients
Putnam	Bog Brook Reservoir	Nutrients
Putnam	Boyd Corners Reservoir	Nutrients
Putnam	Croton Falls Reservoir	Nutrients
Putnam	Diverting Reservoir	Nutrients
Putnam	East Branch Reservoir	Nutrients
Putnam	Lake Carmel	Nutrients
Putnam	Middle Branch Reservoir	Nutrients
Putnam	Oscawana Lake	Nutrients
Putnam	Palmer Lake	Nutrients
Putnam	West Branch Reservoir	Nutrients
Queens	Bergen Basin	Nutrients
Queens	Flushing Creek/Bay	Nutrients
Queens	Jamaica Bay, Eastern, and tribs (Queens)	Nutrients
Queens	Kissena Lake	Nutrients
Queens	Meadow Lake	Nutrients
Queens	Willow Lake	Nutrients
Rensselaer	Nassau Lake	Nutrients
Rensselaer	Snyders Lake	Nutrients
Richmond	Grasmere Lake/Bradys Pond	Nutrients
Rockland	Congers Lake, Swartout Lake	Nutrients
Rockland	Rockland Lake	Nutrients
Saratoga	Ballston Lake	Nutrients
Saratoga	Dwaas Kill and tribs	Silt/Sediment
Saratoga	Dwaas Kill and tribs	Nutrients
Saratoga	Lake Lonely	Nutrients
Saratoga	Round Lake	Nutrients
Saratoga	Tribs to Lake Lonely	Nutrients

303(d) Segments Impaired by Construction Related Pollutant(s)

Schenectady	Collins Lake	Nutrients
Schenectady	Duane Lake	Nutrients
Schenectady	Mariaville Lake	Nutrients
Schoharie	Engleville Pond	Nutrients
Schoharie	Summit Lake	Nutrients
Seneca	Reeder Creek and tribs	Nutrients
St.Lawrence	Black Lake Outlet/Black Lake	Nutrients
St.Lawrence	Fish Creek and minor tribs	Nutrients
Steuben	Smith Pond	Nutrients
Suffolk	Agawam Lake	Nutrients
Suffolk	Big/Little Fresh Ponds	Nutrients
Suffolk	Canaan Lake	Silt/Sediment
Suffolk	Canaan Lake	Nutrients
Suffolk	Flanders Bay, West/Lower Sawmill Creek	Nutrients
Suffolk	Fresh Pond	Nutrients
Suffolk	Great South Bay, East	Nutrients
Suffolk	Great South Bay, Middle	Nutrients
Suffolk	Great South Bay, West	Nutrients
Suffolk	Lake Ronkonkoma	Nutrients
Suffolk	Long Island Sound, Suffolk County, West	Nutrients
Suffolk	Mattituck (Marratooka) Pond	Nutrients
Suffolk	Meetinghouse/Terrys Creeks and tribs	Nutrients
Suffolk	Mill and Seven Ponds	Nutrients
Suffolk	Millers Pond	Nutrients
Suffolk	Moriches Bay, East	Nutrients
Suffolk	Moriches Bay, West	Nutrients
Suffolk	Peconic River, Lower, and tidal tribs	Nutrients
Suffolk	Quantuck Bay	Nutrients
Suffolk	Shinnecock Bay and Inlet	Nutrients
Suffolk	Tidal tribs to West Moriches Bay	Nutrients
Sullivan	Bodine, Montgomery Lakes	Nutrients
Sullivan	Davies Lake	Nutrients
Sullivan	Evens Lake	Nutrients
Sullivan	Pleasure Lake	Nutrients
Tompkins	Cayuga Lake, Southern End	Nutrients
Tompkins	Cayuga Lake, Southern End	Silt/Sediment
Tompkins	Owasco Inlet, Upper, and tribs	Nutrients
Ulster	Ashokan Reservoir	Silt/Sediment
Ulster	Esopus Creek, Upper, and minor tribs	Silt/Sediment
Warren	Hague Brook and tribs	Silt/Sediment

303(d) Segments Impaired by Construction Related Pollutant(s)

Warren	Huddle/Finkle Brooks and tribs	Silt/Sediment
Warren	Indian Brook and tribs	Silt/Sediment
Warren	Lake George	Silt/Sediment
Warren	Tribs to L.George, Village of L George	Silt/Sediment
Washington	Cossayuna Lake	Nutrients
Washington	Lake Champlain, South Bay	Nutrients
Washington	Tribs to L.George, East Shore	Silt/Sediment
Washington	Wood Cr/Champlain Canal and minor tribs	Nutrients
Wayne	Port Bay	Nutrients
Westchester	Amawalk Reservoir	Nutrients
Westchester	Blind Brook, Upper, and tribs	Silt/Sediment
Westchester	Cross River Reservoir	Nutrients
Westchester	Lake Katonah	Nutrients
Westchester	Lake Lincolndale	Nutrients
Westchester	Lake Meahagh	Nutrients
Westchester	Lake Mohegan	Nutrients
Westchester	Lake Shenorock	Nutrients
Westchester	Long Island Sound, Westchester (East)	Nutrients
Westchester	Mamaroneck River, Lower	Silt/Sediment
Westchester	Mamaroneck River, Upper, and minor tribs	Silt/Sediment
Westchester	Muscoot/Upper New Croton Reservoir	Nutrients
Westchester	New Croton Reservoir	Nutrients
Westchester	Peach Lake	Nutrients
Westchester	Reservoir No.1 (Lake Isle)	Nutrients
Westchester	Saw Mill River, Lower, and tribs	Nutrients
Westchester	Saw Mill River, Middle, and tribs	Nutrients
Westchester	Sheldrake River and tribs	Silt/Sediment
Westchester	Sheldrake River and tribs	Nutrients
Westchester	Silver Lake	Nutrients
Westchester	Teatown Lake	Nutrients
Westchester	Titicus Reservoir	Nutrients
Westchester	Truesdale Lake	Nutrients
Westchester	Wallace Pond	Nutrients
Wyoming	Java Lake	Nutrients
Wyoming	Silver Lake	Nutrients

APPENDIX F – List of NYS DEC Regional Offices

Region	Covering the following counties:	DIVISION OF ENVIRONMENTAL PERMITS (DEP) Permit Administrators	DIVISION OF WATER (DOW) Water (SPDES) Program
1	Nassau and Suffolk	50 Circle Road Stony Brook, NY 11790 Tel. (631) 444-0365	50 Circle Road Stony Brook, NY 11790-3409 Tel. (631) 444-0405
2	Bronx, Kings, New York, Queens and Richmond	1 Hunters Point Plaza, 47-40 21st St. Long Island City, NY 11101-5407 Tel. (718) 482-4997	1 Hunters Point Plaza, 47-40 21st St. Long Island City, NY 11101-5407 Tel. (718) 482-4933
3	Dutchess, Orange, Putnam, Rockland, Sullivan, Ulster and Westchester	21 South Putt Corners Road New Paltz, NY 12561-1696 Tel. (845) 256-3059	100 Hillside Avenue, Suite 1w White Plains, NY 10603 Tel. (914) 428 - 2505
4	Albany, Columbia, Delaware, Greene, Montgomery, Otsego, Rensselaer, Schenectady and Schoharie	1150 North Westcott Road Schenectady, NY 12306-2014 Tel. (518) 357-2069	1130 North Westcott Road Schenectady, NY 12306-2014 Tel. (518) 357-2045
5	Clinton, Essex, Franklin, Fulton, Hamilton, Saratoga, Warren and Washington	1115 State Route 86, Po Box 296 Ray Brook, NY 12977-0296 Tel. (518) 897-1234	232 Golf Course Road Warrensburg, NY 12885-1172 Tel. (518) 623-1200
6	HERKIMER, JEFFERSON, LEWIS, ONEIDA AND ST. LAWRENCE	STATE OFFICE BUILDING 317 WASHINGTON STREET WATERTOWN, NY 13601-3787 TEL. (315) 785-2245	STATE OFFICE BUILDING 207 GENESEE STREET UTICA, NY 13501-2885 TEL. (315) 793-2554
7	BROOME, CAYUGA, CHENANGO, CORTLAND, MADISON, ONONDAGA, OSWEGO, TIOGA AND TOMPKINS	615 ERIE BLVD. WEST SYRACUSE, NY 13204-2400 TEL. (315) 426-7438	615 ERIE BLVD. WEST SYRACUSE, NY 13204-2400 TEL. (315) 426-7500
8	CHEMUNG, GENESEE, LIVINGSTON, MONROE, ONTARIO, ORLEANS, SCHUYLER, SENECA, STEUBEN, WAYNE AND YATES	6274 EAST AVON-LIMA ROADAVON, NY 14414-9519 TEL. (585) 226-2466	6274 EAST AVON-LIMA RD. AVON, NY 14414-9519 TEL. (585) 226-2466
9	ALLEGANY, CATTARAUGUS, CHAUTAUQUA, ERIE, NIAGARA AND WYOMING	270 MICHIGAN AVENUE BUFFALO, NY 14203-2999 TEL. (716) 851-7165	270 MICHIGAN AVENUE BUFFALO, NY 14203-2999 TEL. (716) 851-7070

Appendix J – NYSDEC Notice of Termination (NOT)

New York State Department of Environmental Conservation
Division of Water
625 Broadway, 4th Floor
Albany, New York 12233-3505
(NOTE: Submit completed form to address above)

NOTICE OF TERMINATION for Storm Water Discharges Authorized under the SPDES General Permit for Construction Activity

Please indicate your permit identification number: NYR ___ ___ ___ ___ ___ ___

I. Owner or Operator Information

1. Owner/Operator Name:

2. Street Address:

3. City/State/Zip:

4. Contact Person: | 4a.Telephone:

4b. Contact Person E-Mail:

II. Project Site Information

5. Project/Site Name:

6. Street Address:

7. City/Zip:

8. County:

III. Reason for Termination

9a. □ All disturbed areas have achieved final stabilization in accordance with the general permit and SWPPP. ***Date final stabilization completed** (month/year): _____

9b. □ Permit coverage has been transferred to new owner/operator. Indicate new owner/operator's permit identification number: NYR ___ ___ ___ ___ ___ ___
(Note: Permit coverage can not be terminated by owner identified in I.1. above until new owner/operator obtains coverage under the general permit)

9c. □ Other (Explain on Page 2)

IV. Final Site Information:

10a. Did this construction activity require the development of a SWPPP that includes post-construction stormwater management practices? □ yes □ no (If no, go to question 10f.)

10b. Have all post-construction stormwater management practices included in the final SWPPP been constructed? □ yes □ no (If no, explain on Page 2)

10c. Identify the entity responsible for long-term operation and maintenance of practice(s)?

_____

NOTICE OF TERMINATION for Storm Water Discharges Authorized under the SPDES General Permit for Construction Activity - continued

10d. Has the entity responsible for long-term operation and maintenance been given a copy of the operation and maintenance plan required by the general permit? □ yes □ no

10e. Indicate the method used to ensure long-term operation and maintenance of the post-construction stormwater management practice(s):

□ Post-construction stormwater management practice(s) and any right-of-way(s) needed to maintain practice(s) have been deeded to the municipality.

□ Executed maintenance agreement is in place with the municipality that will maintain the post-construction stormwater management practice(s).

□ For post-construction stormwater management practices that are privately owned, a mechanism is in place that requires operation and maintenance of the practice(s) in accordance with the operation and maintenance plan, such as a deed covenant in the owner or operator's deed of record.

□ For post-construction stormwater management practices that are owned by a public or private institution (e.g. school, university or hospital), government agency or authority, or public utility; policy and procedures are in place that ensures operation and maintenance of the practice(s) in accordance with the operation and maintenance plan.

10f. Provide the total area of impervious surface (i.e. roof, pavement, concrete, gravel, etc.) constructed within the disturbance area? _____ (acres)

11. Is this project subject to the requirements of a regulated, traditional land use control MS4? □ yes □ no

(If Yes, complete section VI - "MS4 Acceptance" statement

V. Additional Information/Explanation:

(Use this section to answer questions 9c. and 10b., if applicable)

VI. MS4 Acceptance - MS4 Official (principal executive officer or ranking elected official) or Duly Authorized Representative (Note: Not required when 9b. is checked -transfer of coverage)

I have determined that it is acceptable for the owner or operator of the construction project identified in question 5 to submit the Notice of Termination at this time.

Printed Name:

Title/Position:

Signature:	Date:

NOTICE OF TERMINATION for Storm Water Discharges Authorized under the SPDES General Permit for Construction Activity - continued

VII. Qualified Inspector Certification - Final Stabilization:

I hereby certify that all disturbed areas have achieved final stabilization as defined in the current version of the general permit, and that all temporary, structural erosion and sediment control measures have been removed. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of the referenced permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings.

Printed Name:	
Title/Position:	
Signature:	Date:

VIII. Qualified Inspector Certification - Post-construction Stormwater Management Practice(s):

I hereby certify that all post-construction stormwater management practices have been constructed in conformance with the SWPPP. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of the referenced permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings.

Printed Name:	
Title/Position:	
Signature:	Date:

IX. Owner or Operator Certification

I hereby certify that this document was prepared by me or under my direction or supervision. My determination, based upon my inquiry of the person(s) who managed the construction activity, or those persons directly responsible for gathering the information, is that the information provided in this document is true, accurate and complete. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of the referenced permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings.

Printed Name:	
Title/Position:	
Signature:	Date:

(NYS DEC Notice of Termination - January 2015)

Appendix K – Amendments