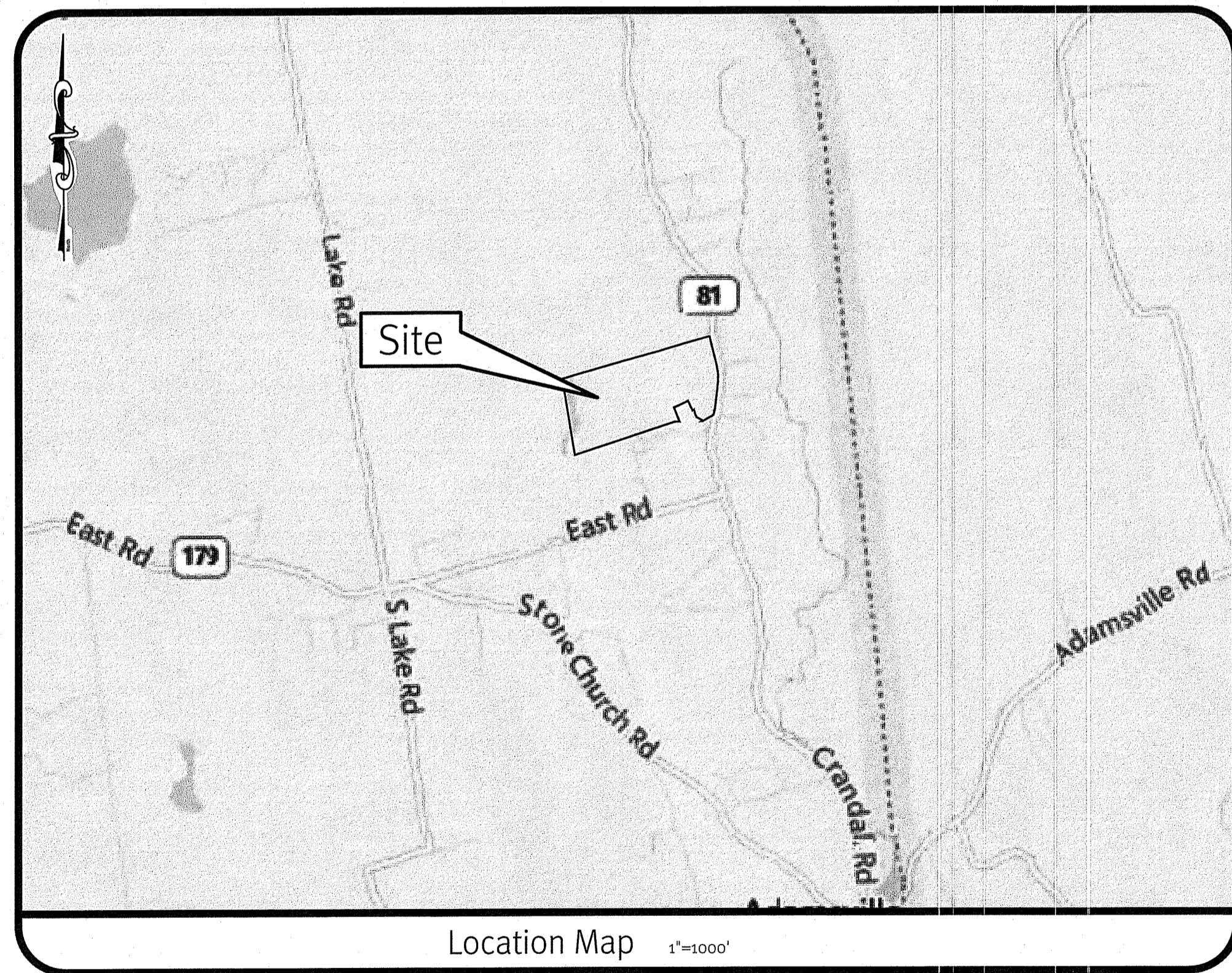


Design Development Plans

Wingover Solar Farm

1519 Crandall Road
Tiverton, Rhode Island

Assessor's Plat 611 Lot 101, 103, 104 & 105



Sheet Index

1. Cover Sheet
2. Half Mile Aerial & USGS Map
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5. Soil Erosion & Sediment Control Plan
6. Site, Grading & Drainage Plan
7. BMP Details
8. Detail Sheet
9. Buffer Planting Plan by John C. Carter & Co., Inc.
(Sheet 1 of 1)
10. Pole Locations - Exhibit 1
11. Pole Locations - Exhibit 2

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED SEP 5 2019 FILE # 19-0011
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE
Nancy L. Freeman

Environmental Management
AUG 19 2019
Office of Water Resources

SESC / O&M
The Soil Erosion and Sediment Control Plan (SESC) and Operations and Maintenance Plan (O&M) are required documents with this plan set and must be maintained by the contractor and owner onsite.

RIDOT
The Proposed Improvements Will Not Increase the Rate of Stormwater Runoff Onto the State Highway. All Work Within the State Right of Way Must Conform to the RI Standard Specifications, Details, and Addendums.

DiPrete Engineering
Two Stafford Court Cranston, RI 02920
tel 401-943-1000 fax 401-464-6006 www.diprete-eng.com
BOSTON • PROVIDENCE • NEWPORT

KEVIN DEMERS
[Signature]
REGISTERED PROFESSIONAL ENGINEER CIVIL

This regulatory submission set shall not be used for construction purposes unless stamped 'issued for construction' and signed by a DiPrete Engineering representative.
The contractor is responsible for all of the means, methods, safety precautions and requirements, and OSHA conformance in the implementation of this plan and design.

No.	Date	Description	Drawn By: M.A.H.	Design By: K.L.D.
2	08-22-2019	RIPEN Wetlands PE Revisions		
1	08-22-2019	RIPEN Wetlands PE Revisions		
0	10-30-2018	RIPEN Wetlands PE Submission		

Cover Sheet
Wingover Solar Farm
Tiverton, Rhode Island
Prepared for
1519 Crandall Road LLC c/o AMERESCO & Douglas Enterprises, Ltd.
c/o Kéo Talladourous, Director of Development
111 Speen Street, Suite 410 / Framingham, MA 01701 / tel 508-661-2263

z:\demain\projects\0681-008 crandall road wing-over farms\autocad drawing\0681-008-ovr.dwg Plotted: 8/19/2019

z:\demain\projects\0681-058 crandall road wing-over farms\autocad drawings\0681-058-over.dwg plotted: 7/3/2019

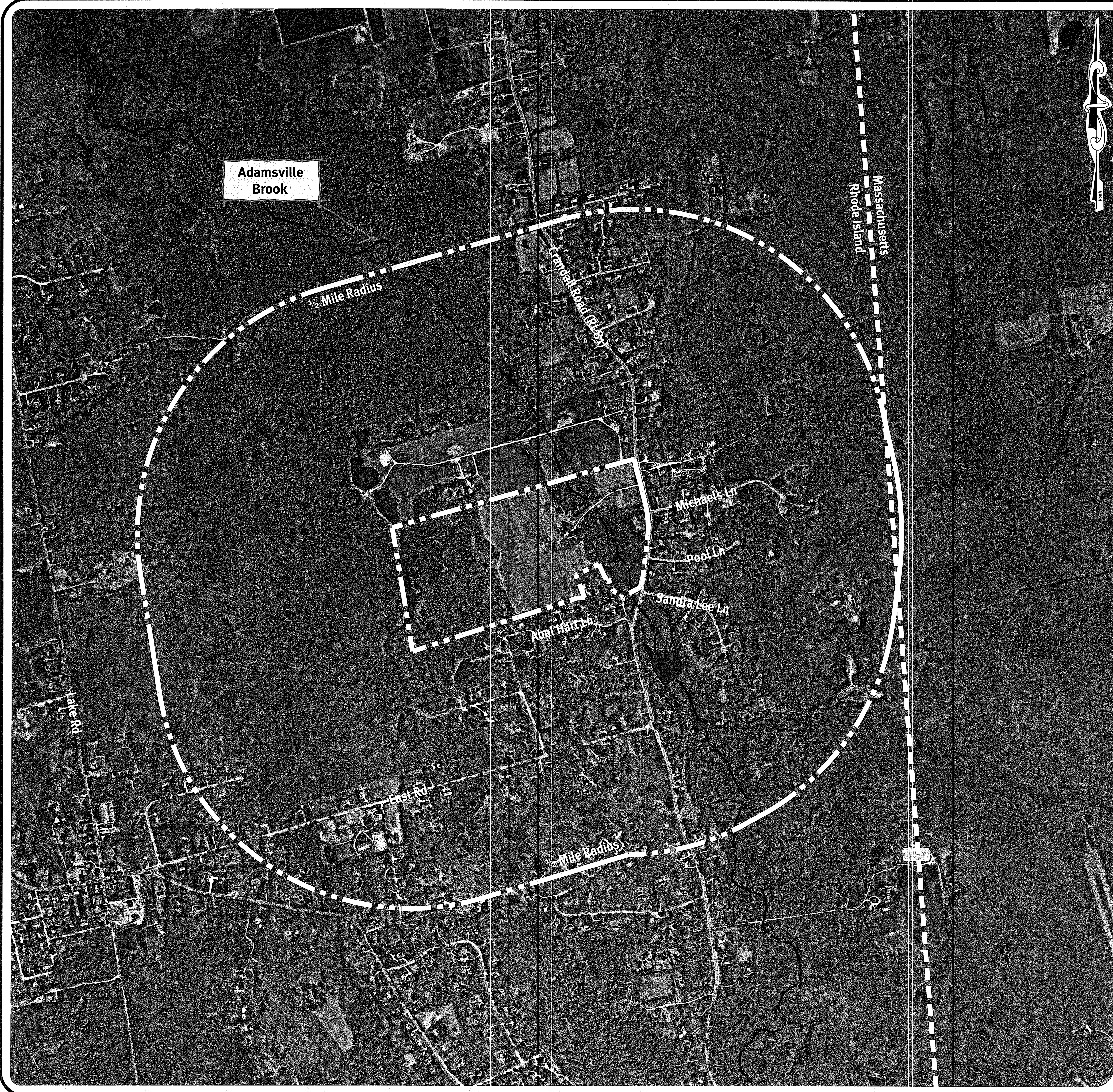
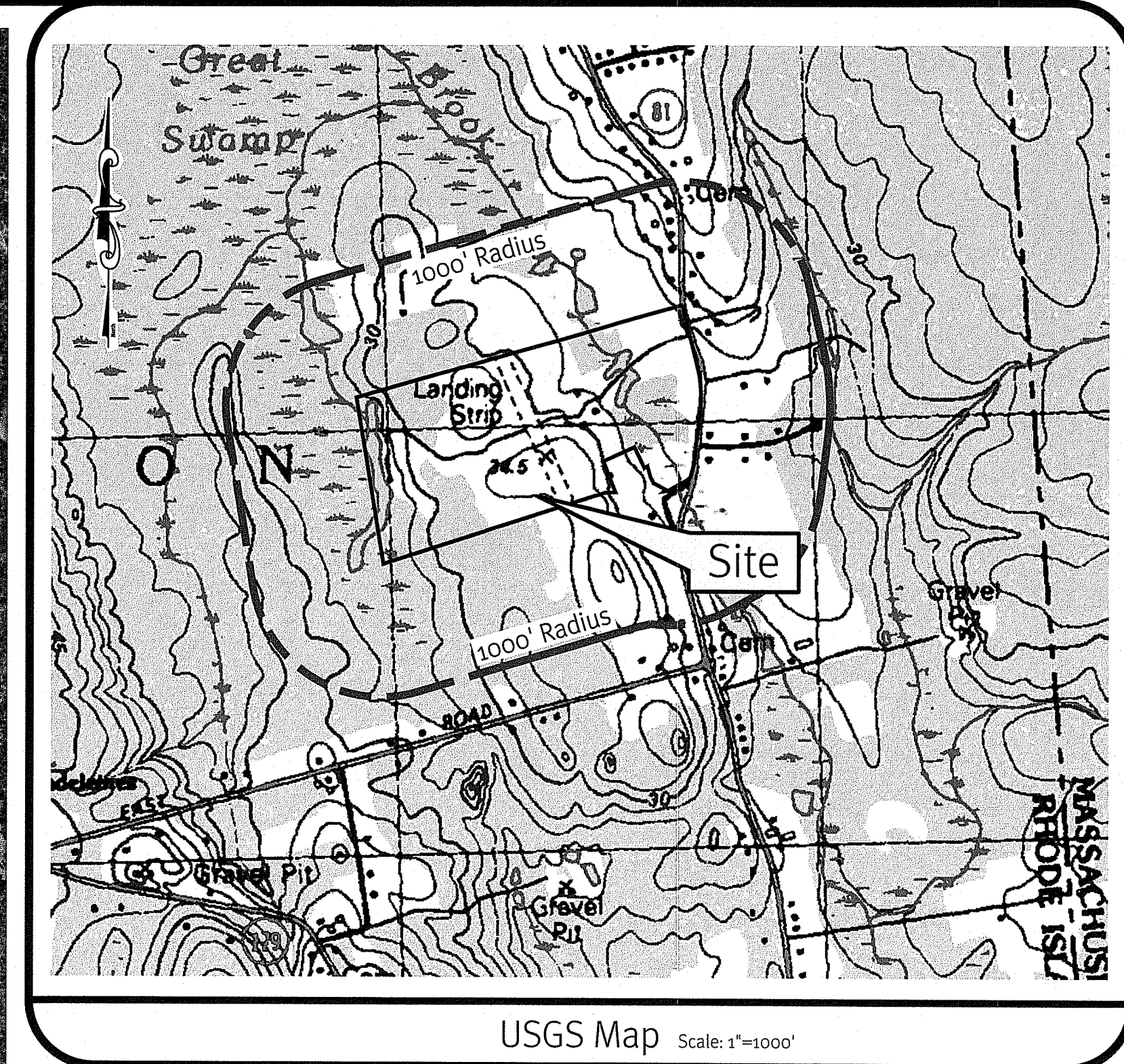
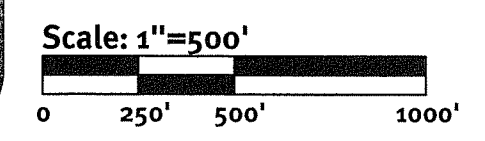


Photo Obtained from RIGIS.



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DiPrete Engineering
Two Stafford Court Cranston, RI 02920
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Boston • Providence • Newport

KEVIN DEMERS
[Signature]
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CIVIL

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No.	Date	Drawn By	Description	MAH	ACT	BY
1	06-25-2019	M.A.H.	Wetlands 10 Submission			
2	07-03-2019	M.A.H.	Wetlands 10 Submission			

Drawn By: M.A.H. Design By: K.D.

Half Mile Aerial & USGS Map
Wingover Solar Farm
Prepared for
3519 Crandall Road LLC c/o AMERESCO & Douglas Enterprises, Ltd.
c/o Kleo Talladouris, Director of Development
311 Spenc Street, Suite 410/ Framingham, MA 01701 / tel 508-665-2265
DE Job No: 0881-058 Copyright 2019 by DiPrete Engineering Associates, Inc.

General Notes:

- THE SITE IS LOCATED IN THE TOWN OF TIVERTON, RI. ASSESSOR'S PLAT 611, LOTS 101 & 103-105.
- THE SITE IS APPROXIMATELY 73.8± ACRES AND IS ZONED R-80.
- THE OWNER OF AP 611, LOTS 101 & 103-105 IS: MAJORIE E. JENSEN TRUSTEE
1724 R CRANDALL ROAD
TIVERTON, RI 02878
- THIS SITE IS LOCATED IN FEMA FLOOD ZONE X (AREA OF MINIMAL FLOOD HAZARD). REFERENCE FEMA FLOOD INSURANCE RATE MAP 25005C0434F, MAP REVISED JULY 7, 2009.
- THIS PLAN IS SUBSTANTIALLY CORRECT IN ACCORDANCE WITH A CLASS IV STANDARD AS ADOPTED BY THE RHODE ISLAND BOARD OF REGISTRATION FOR PROFESSIONAL LAND SURVEYORS. THIS COMPILATION PLAN HAS BEEN PREPARED FROM SOURCES OF INFORMATION AND DATA WHOSE POSITIONAL ACCURACY AND RELIABILITY HAS NOT BEEN VERIFIED. THE PROPERTY LINES DEPICTED HEREIN DO NOT REPRESENT A BOUNDARY OPINION, AND OTHER INFORMATION DEPICTED IS SUBJECT TO SUCH CHANGES AS AN AUTHORITY FIELD SURVEY MAY DISCLOSE. THE PROPERTY LINE SHOWN WAS DRAWN FROM THE "ADMINISTRATIVE SUBDIVISION PLAN" FOR PLAT 611 LOTS 101, 103, 104 & 105, SHEETS 1-4, DATED MARCH 31, 2016.
- ALL WORK PERFORMED HEREIN IS TO BE GOVERNED BY CURRENT EDITIONS OF THE RHODE ISLAND STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION, TOWN OF TIVERTON, RI STANDARD SPECIFICATIONS AND DETAILS AND SPECIFICATIONS INCLUDED AS PART OF THE DRAWINGS. IN AREAS OF CONFLICT BETWEEN THE DIFFERENT SPECIFICATIONS, THE DESIGN PLANS AND PROJECT SPECIFICATIONS WILL TAKE PRECEDENCE OVER THE GENERAL SPECIFICATIONS AND THE DESIGN ENGINEER WILL INTERPRET THE CONSTRUCTION REQUIREMENT. THE CONTRACTOR IS ADVISED TO SUBMIT A REQUEST FOR INFORMATION (RFI) FOR ANY AREAS OF CONFLICT BEFORE COMMITTING TO CONSTRUCTION.
- THE SITE IS NOT WITHIN A:
GROUNDWATER PROTECTION AREA (RIDEM)
NARROW RIVER SPECIAL AREA MANAGEMENT PLAN (CRMC)
SALT PONDS SPECIAL AREA MANAGEMENT PLAN (CRMC)
GROUNDWATER PROTECTION OVERLAY DISTRICT (TOWN)
- THE SITE IS WITHIN A:
NATURAL HERITAGE AREA (RIDEM)
- THE FOLLOWING DOCUMENTS ARE CONSIDERED PART OF THE PROJECT PLANS AND THE CONTRACTOR/ OWNER MUST MAINTAIN THESE DOCUMENTS AS PART OF A FULL PLAN SET:
• SOIL EROSION AND SEDIMENT CONTROL PLAN (SESC). THE SESC CONTAINS THE FOLLOWING:
o EROSION CONTROL MEASURES
o SHORT TERM MAINTENANCE
o ESTABLISHMENT OF VEGETATIVE COVER
o CONSTRUCTION POLLUTION PREVENTION
o SEQUENCE OF CONSTRUCTION
• OPERATION AND MAINTENANCE PLAN (O&M). THE O&M CONTAINS:
o LONG TERM MAINTENANCE
o LONG TERM POLLUTION PREVENTION
- THIS PLAN SET REFERENCES RIDOT STANDARD DETAILS (DESIGNATED AS RIDOT STD X.X.X.), RIDOT STANDARD DETAILS ARE AVAILABLE FROM RIDOT AND ONLINE AT: [HTTP://WWW.DOT.RI.GOV/BUSINESS/CONTRACTORSANDCONSULTANTS.PHP](http://www.dot.ri.gov/business/contractorsandconsultants.php).
- THE PROPOSED DEVELOPMENT DOES NOT REQUIRE WATER OR SEWER SERVICE.
- THE DRAINAGE SYSTEM IS DESIGNED TO MEET THE TIVERTON SUBDIVISION AND LAND DEVELOPMENT REGULATIONS WITH THE USE OF AND INFILTRATING DRAINAGE BASINS. THE STORMWATER MANAGEMENT SYSTEM MEETS THE RIDEM BEST MANAGEMENT PRACTICES.
- THE SITE IS PROPOSED TO BE BUILT IN ONE PHASE.
- SOIL EVALUATIONS WERE COMPLETED BY DIPRETE ENGINEERING ON MAY 16, 2018.
- ANY PROPRIETARY PRODUCTS REFERENCED IN THIS PLAN SET ARE REPRESENTATIVE OF THE MINIMUM DESIGN REQUIREMENTS FOR THE PURPOSE IT PROPOSES TO SERVE. ALTERNATIVES TO ANY PROPRIETARY PRODUCT MAY BE SUBMITTED TO THE ENGINEER OF RECORD FOR CONSIDERATION, WHICH MUST BE ACCOMPANIED BY APPROPRIATE SPECIFICATION SHEETS / DESIGN CALCULATIONS THAT DEMONSTRATE THE ALTERNATIVE(S) MEET THE MINIMUM DESIGN PARAMETERS OF THE PRODUCT SHOWN ON THE PLANS. NO ALTERNATIVES MAY BE USED WITHOUT THE WRITTEN APPROVAL OF THE ENGINEER OF RECORD.

Soil Information:

(REFERENCE: USDA NATURAL RESOURCES CONSERVATION SERVICE)
SOIL NAME DESCRIPTION

B+B	BROADBROOK SILT LOAM, 3 TO 8 PERCENT SLOPES
ChB	CANTON AND CHARLTON VERY STONY FINE SANDY LOAMS, 3 TO 8 PERCENT SLOPES
FaA	FREETOWN MUCKY, 0 TO 1 PERCENT SLOPES
Ma	MANSFIELD MUCKY SILT LOAM
Mc	MANSFIELD VERY STONY MUCKY SILT LOAM
RaA	RAINBOW SILT LOAM, 0 TO 3 PERCENT SLOPES
RoB	RAINBOW SILT LOAM, 3 TO 8 PERCENT SLOPES
RbB	RAINBOW VERY STONY SILT LOAM, 0 TO 8 PERCENT SLOPES
UD	UDORTHTENS-URBAN LAND COMPLEX

Soil Erosion and Sedimentation Control Notes:

- THE CONTRACTOR IS RESPONSIBLE FOR ALL SOIL EROSION AND SEDIMENT CONTROL ON SITE WHICH MUST BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE APPLICABLE REGULATIONS AND AUTHORITY HAVING JURISDICTION. THE CONTRACTOR IS TO NOTIFY THE DESIGN ENGINEER, THE DIRECTOR OF PUBLIC WORKS, THE TOWN ENGINEER, AND RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT AT LEAST 48 HOURS PRIOR TO THE START OF CONSTRUCTION.
- ALL EROSION CONTROL, TEMPORARY SWALES, TEMPORARY SEDIMENT TRAPS, TEMPORARY SEDIMENTATION PONDS, ETC. TO BE INSTALLED PER THE RHODE ISLAND SOIL EROSION AND SEDIMENTATION CONTROL LATEST EDITION AND THE SOIL EROSION SEDIMENTATION CONTROL PLAN (SESC).
- TEMPORARY SWALES ARE TO BE USED TO CONTROL RUNOFF DURING CONSTRUCTION OF THE PROPOSED ROADWAY. TEMPORARY SWALES TO BE VEGETATED AFTER CONSTRUCTION. EROSION CONTROL MATS ARE TO BE INSTALLED, IF NECESSARY, TO PREVENT EROSION AND SUPPORT VEGETATION. AFTER CONSTRUCTION IS COMPLETE AND TRIBUTARY AREAS TO THE SWALES HAVE BEEN STABILIZED, THE TEMPORARY SWALES ARE TO BE CLEARED AND FINAL DESIGN, INCLUDING INSTALLATION OF THE GRASS SWALE TO BE PER THE DESIGN PLANS.
- ONCE THE SEDIMENT TRAPS / SEDIMENT BASIN IS NO LONGER REQUIRED AND ALL TRIBUTARY AREAS HAVE BEEN STABILIZED, THE TEMPORARY SEDIMENTATION BASIN TO BE CLEARED AND BROUGHT TO FINAL DESIGN GRADES.
- INLET PROTECTION IS TO BE INSTALLED ON ALL CATCH BASINS ONCE CONSTRUCTED.
- FOR SEQUENCE OF CONSTRUCTION, PROJECT PHASING AND CONSTRUCTION PHASING SEE SESC PLAN.
- CONTRACTOR MAY MODIFY SEQUENCE OF CONSTRUCTION WITH APPROVAL FROM DESIGN ENGINEER AND OWNER.
- TEMPORARY SEDIMENT BASINS MUST BE DEWATERED USING A DEVICE THAT DISCHARGES WATER FROM THE TOP OF THE DEWATERING ZONE. A SKIMMER MUST BE PROVIDED FOR EACH TEMPORARY SEDIMENTATION BASIN SEE SEDIMENTATION BASIN DETAIL.
- IF CONCRETE TRUCKS ARE WASHED OUT ON SITE, ALL WASHOUT MUST BE COMPLETED IN THE DESIGNATED CONCRETE WASHOUT AREA.

Demolition Notes:

- ALL EXISTING UTILITIES SHOWN ARE FROM VISIBLE INFORMATION, PLANS OF RECORD, DRAWINGS FROM OTHERS, OR INFORMATION PROVIDED TO DIPRETE ENGINEERING AND ARE SUBJECT TO CHANGE. THE LOCATIONS OF UNDERGROUND PIPES AND CONDUITS HAVE BEEN DETERMINED FROM AFOREMENTIONED SOURCES AND ARE APPROXIMATE ONLY. PRIOR TO CONSTRUCTION, THE PROPER UTILITY ENGINEERING DEPARTMENTS MUST BE CONTACTED AND THE ACTUAL LOCATION OF SUBSURFACE STRUCTURES MUST BE DETERMINED IN THE FIELD BY THE CONTRACTOR. CALL THE DIG SAFE CENTER TOLL FREE AT 1-888-344-7233 IN MA, ME, NH, RI & VT, CALL 1-800-922-4455 IN CT 72 HOURS (48 HOURS IN VT AND CT) PRIOR TO EXCAVATION. NOTIFY DESIGN ENGINEER OF ANY DISCREPANCIES PRIOR TO EXCAVATION. ANY DAMAGE TO UTILITIES WHICH ARE SHOWN ON THE PLANS OR DETAILED BY DIG SAFE ARE THE SITE CONTRACTORS RESPONSIBILITY.
- CONTRACTOR TO OBTAIN ALL FEDERAL, STATE, AND MUNICIPAL APPROVALS PRIOR TO THE START OF CONSTRUCTION.
- CONTRACTOR TO PERFORM DAILY SWEEPING AT CONSTRUCTION ENTRANCE DURING DEMOLITION AND CONSTRUCTION TO MINIMIZE SEDIMENTS ON EXTERNAL STREETS.
- ANY EXISTING BUILDING(S) AND PROPERTY PROPOSED TO REMAIN WHICH ARE DAMAGED BY THE CONTRACTOR MUST BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
- CONTRACTOR IS RESPONSIBLE FOR REMOVING AND LEGALLY DISPOSING (R&D) ALL MATERIALS INDICATED ON THE PLANS UNLESS SPECIFIED OTHERWISE HERE IN. R&D MATERIALS MUST INCLUDE BUT ARE NOT LIMITED TO PAVEMENT, GRAVEL, CATCH BASINS, MANHOLES, GRATES/FRAMES/COVERS, AND ANY EXCESS SOIL THAT IS NOT INCORPORATED INTO THE WORK.
- IN ADDITION TO THOSE AREAS SPECIFICALLY DESIGNATED ON THE PLANS, ALL DISTURBED AREAS INCLUDING THE CONTRACTOR'S STOCKPILE AND STAGING AREAS WITHIN THE LIMIT OF WORK MUST BE RESTORED TO MATCH THE DESIGN PLANS.

Traffic Notes:

- ALL TRAFFIC CONTROL MUST CONFORM TO THE MUTCD CONTROL DEVICES CURRENT EDITION.
- DURING CONSTRUCTION, TRAFFIC CONES ARE TO BE USED FOR SEPARATION OF ACTIVE TRAFFIC FROM WORK ZONE PER MUTCD REQUIREMENTS.
- DURING CONSTRUCTION FLAGGERS MUST BE EMPLOYED TO ENSURE SAFETY FOR INTERACTION OF CONSTRUCTION VEHICLES AND ACTIVE TRAFFIC.
- ALL SIGNS, FLAGGERS, TRAFFIC CONTROL DEVICES, AND TEMPORARY TRAFFIC ZONE ACTIVITIES MUST MEET THE REQUIREMENTS OF THE MANUAL ON UNIFORM TRAFFIC (MUTCD) LATEST EDITION AND SUBSEQUENT ADDENDA.
- TEMPORARY CONSTRUCTION SIGNS MUST BE MOUNTED ON RIDOT APPROVED SUPPORTS AND MUST BE REMOVED OR COVERED WHEN NOT APPLICABLE.

As-Built Notes:

ALL COMPONENTS OF THE DRAINAGE SYSTEM MUST BE ASBUILT PRIOR TO COVERING. ENGINEER TO BE NOTIFIED PRIOR TO COVERING TO SURVEY ASBUILT LOCATIONS. ENGINEER WILL NOT ACCEPT FIELD MEASUREMENTS FROM THE SITE CONTRACTOR.

Grading and Utility Notes:

- CONSTRUCTION TO COMMENCE SPRING 2019 OR UPON RECEIPT OF ALL NECESSARY APPROVALS.
- THE CONTRACTOR MUST COORDINATE WITH ALL OF THE APPROPRIATE UTILITY COMPANIES FOR AGREEMENTS TO SERVICE THE PROPOSED DEVELOPMENT. THIS MUST BE DONE PRIOR TO CONSTRUCTION. NO REPRESENTATIONS ARE MADE BY DIPRETE ENGINEERING THAT UTILITY SERVICE IS AVAILABLE.
- THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING FINISH GRADING AND DRAINAGE AROUND THE DEVELOPMENT TO ENSURE SURFACE WATER AND/OR GROUNDWATER ARE DIRECTED TO THE APPROPRIATE BMPs OR WETLANDS AS APPLICABLE.
- PRIOR TO START OF CONSTRUCTION, CONTRACTOR MUST VERIFY EXISTING GROUND ELEVATIONS ADJACENT TO DRAINAGE OUTLETS TO ASSURE PROPER TRANSITIONS BETWEEN EXISTING AND PROPOSED FACILITIES. CONTRACTOR MUST NOTIFY DESIGN ENGINEER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.
- ALL PROPOSED UNDERGROUND UTILITIES SERVING THE SITE TO BE COORDINATED WITH OWNER, DEVELOPER AND ENGINEER PRIOR TO INSTALLATION.
- ALL RETAINING WALLS AND STEEP SLOPES ARE SUBJECT TO FINAL STRUCTURAL DESIGN. DIPRETE ENGINEERING IS NOT PROVIDING THE STRUCTURAL DESIGN OF THESE ITEMS. ALL WALLS AND STEEP SLOPES ARE TO BE DESIGNED AND BUILT UNDER THE DIRECTION OF A PROFESSIONAL GEOTECHNICAL ENGINEER AND CERTIFIED TO THE OWNER PRIOR TO THE COMPLETION OF THE PROJECT. SHOP DRAWINGS TO BE SUBMITTED PRIOR TO CONSTRUCTION. FINAL STRUCTURAL DESIGN MUST INCORPORATE THE INTENT OF THE GRADING SHOWN ON THESE PLANS AND ALL WORK MUST BE WITHIN THE LIMIT OF DISTURBANCE SHOWN ON THE PLANS.
- ALL CUT AND FILL AREAS ARE TO BE DONE UNDER THE DIRECTION OF A PROFESSIONAL GEOTECHNICAL ENGINEER WITH TESTING AND CERTIFICATION TO BE PROVIDED TO THE APPLICANT AT THE COMPLETION OF THE PROJECT. DIPRETE ENGINEERING IS NOT PROVIDING THE FILL SPECIFICATION, GEOTECHNICAL ENGINEERING, STRUCTURAL ENGINEERING SERVICES, OR SUPERVISION AS PART OF THESE DRAWINGS.
- NO STOCKPILING OF MATERIAL TO BE LOCATED IN THE RIGHT OF WAY AND NO OPEN TRENCHES ARE TO BE LEFT OVERNIGHT.
- ALL LOAM IN DISTURBED AREAS TO BE STOCKPILED FOR FUTURE USE.
- ALL EXCESS SOIL, TREES, ROCKS, BOULDERS, AND OTHER REFUSE, MUST BE DISCARDED OFF SITE IN AN ACCEPTABLE MANNER AT AN APPROVED LOCATION. STUMPS MUST BE GROUND ON SITE OR REMOVED.
- NO STUMP DUMPS ARE PROPOSED ON SITE.

DRAINAGE

ALL DRAINAGE PIPING TO BE HIGH-DENSITY POLYETHYLENE (HDPE) WITH WATERTIGHT JOINTS WHERE INSTALLED WITHIN THE SEASONAL HIGH GROUNDWATER, UNLESS NOTED OTHERWISE ON THE PLANS OR IN THE SPECIFICATIONS.

ALL DRAINAGE STRUCTURES MUST BE WATERTIGHT.

ELECTRIC/TELECOM/GAS

PROPOSED GAS, ELECTRIC, CABLE AND DATA UTILITIES ARE SHOWN SCHEMATICALLY AND ARE PROPOSED TO BE UNDERGROUND WITHIN THE SOLAR DEVELOPMENT AREA. THE UTILITY CONNECTION SHALL BE AS PER THE DEVELOPER AND NATIONAL GRID. ELECTRIC DEVELOPER & CONTRACTOR TO COORDINATE FINAL DESIGN WITH APPROPRIATE UTILITY COMPANIES. ALL WORK TO BE IN ACCORDANCE WITH EACH UTILITY COMPANY'S STANDARDS AND DETAILS AS WELL AS LOCAL AND FEDERAL REGULATIONS. THIS INCLUDES BUT IS NOT LIMITED TO, POLES, TRANSFORMERS, PULL BOXES, CONCRETE PADS, CONCRETE ENCASUREMENTS AND CONDUITS. CONNECTION POINTS FOR ELECTRIC AND TELECOM UTILITIES, AT THE EXISTING INFRASTRUCTURE, ARE CURRENTLY SHOWN AS UNDERGROUND UTILITIES. THESE UTILITIES MAY BE UNDERGROUND OR OVERHEAD AND WILL BE COORDINATED WITH NATIONAL GRID PRIOR TO CONSTRUCTION.

SITE LIGHTING

NO SITE LIGHTING IS PROPOSED FOR THIS DEVELOPMENT.

Site Layout Notes:

- THE SITE DOES NOT REQUIRE WATER OR SEWER SERVICE.
- ELECTRICAL EQUIPMENT BETWEEN THE FACILITY AND THE UTILITY CONNECTION MAY BE ABOVE GROUND IF REQUIRED BY THE UTILITY.
- NO NEW LIGHTING INSTALLATIONS ARE PROPOSED.
- PROPOSED SIGNAGE IS LIMITED TO SECURITY SIGNS (OR SIMILAR) INSTALLED ON THE FACILITY PERIMETER FENCING.
- PROJECT WORK WILL BE UNDERTAKEN IN MULTIPLE PHASES AND IS ANTICIPATED TO BEGIN SPRING 2019 AND CONCLUDE FALL 2019, INCLUDING ALL ASSOCIATED WORKS.
- LOW GROWTH, SHADE TOLERANT, DROUGHT TOLERANT NATIVE GRASSES WHERE NO FERTILIZER IS REQUIRED TO MAINTAIN GROWTH SHALL BE USED.

Abbreviations:

ASSESSOR'S PLAT AP
NOW OR FORMERLY N/F

Abbreviations Legend

ADA	AMERICANS WITH DISABILITY ACT	OHW	OVERHEAD WIRE
AP	ASSESSOR'S PLAT	PE	POLYETHYLENE
BC	BOTTOM OF CURB	PL	PROPERTY LINE
BT	BOTTOM OF TESTHOLE	PR	PROPOSED
BIT	BITUMINOUS (BERM)	PVC	POLYVINYL CHLORIDE
BIO	BIORETENTION	R	RADIUS
BS	BASEMENT SLAB ELEVATION	R&D	REMOVE AND DISPOSE
BW	FINISHED GRADE AT BOTTOM OF WALL	RCP	REINFORCED CONCRETE PIPE
CB	CATCH BASIN	RIBB	RHODE ISLAND HIGHWAY BOUND
C	CALCULATED	RL	ROOF LEADER
CL	CENTERLINE	ROW	RIGHT OF WAY
(CA)	CHORD ANGLE	S	SLOPE
CLDIP	CONCRETE LINED DUCTILE IRON PIPE	SD	SUBDRAIN
CO	CLEAN OUT	SED	SEDIMENT FOREBAY
CONC	CONCRETE	SF	SQUARE FOOT
(D)	DEED	SFL	STATE FREEWAY LINE
DCB	DOUBLE CATCH BASIN	SFM	SEWER FORCE MAIN
DI	DROP INLET	SG	SLAB ON GRADE ELEVATION
DMH	DRAINAGE MANHOLE	SHL	STATE HIGHWAY LINE
DP	DETENTION POND	SMH	SEWER MANHOLE
ELEV	ELEVATION	SNDF	SAND FILTER
EOP	EDGE OF PAVEMENT	SS	SIDE SLOPE
ESC	EROSION AND SEDIMENT CONTROL	EX	EXISTING
FES	FLARED END SECTION	TC	TOP OF CURB
FFE	FINISH FLOOR ELEVATION	TD	TRENCH DRAIN
GS	GARAGE SLAB ELEVATION	TF	TOP OF FOUNDATION
GWT	GROUND WATER TABLE	TRANS	TRANSITION
HW	HEADWALL	TW	TOP OF WALL (FINISHED GRADE AT TOP OF WALL)
HC	HIGH CAPACITY CATCH BASIN GRATE	TYP	TYPICAL
HDPE	HIGH DENSITY POLYETHYLENE	UDS	UNDERGROUND DETENTION SYSTEM
ID	INLINE DRAIN	UIS	UNDERGROUND INFILTRATION SYSTEM
INV	INVERT	UP	UTILITY POLE
IP	INFILTRATION POND	WO	WALKOUT ELEVATION
LF	LINEAR FEET	WQ	WATER QUALITY
LOD	LIMIT OF DISTURBANCE	(M)	MEASURED
LP	LIGHT POLE	N/F	NOW OR FORMERLY

Existing Legend

(AS SHOWN ON PROPOSED PLANS)
NOT ALL ITEMS SHOWN WILL APPEAR ON PLANS

	PROPERTY LINE		NAIL FOUND/SET
	ASSESSORS LINE		DRILL HOLE FOUND/SET
	BUILDING		BOUND FOUND/SET
	BRUSHLINE		SIGN
	TRELLINE		BOLLARD
	GUARDRAIL		SOIL EVALUATION
	FENCE		CATCH BASIN
	RETAINING WALL		DOUBLE CATCH BASIN
	STONE WALL		DRAINAGE MANHOLE
	MINOR CONTOUR LINE		FLARED END SECTION
	MAJOR CONTOUR LINE		GUY POLE
	WATER LINE		ELECTRIC MANHOLE
	SEWER LINE		UTILITY/POWER POLE
	SEWER FORCE MAIN		LIGHTPOST
	GAS LINE		SEWER/SEPTIC MANHOLE
	ELECTRIC LINE		SEWER VALVE
	OVERHEAD WIRES		CLEANOUT
	DRAINAGE LINE		HYDRANT
	STATION		IRRIGATION VALVE
	SOILS LINES		WATER VALVE
	50' PERIMETER WETLAND		WELL
	100' RIVERBANK WETLAND		MONITORING WELL
	200' RIVERBANK WETLAND		UNKNOWN MANHOLE
	FEMA BOUNDARY		GAS VALVE
	STREAM		BENCH MARK
	WETLAND LINE & FLAG		STREAM FLOW DIRECTION
	STATE HIGHWAY LINE		
	STATE FREEWAY LINE		

Proposed Legend

NOT ALL ITEMS SHOWN WILL APPEAR ON PLANS

	PROPERTY LINE		DRAINAGE LINE
	BUILDING SETBACKS		PERFORATED SUBDRAIN
	CHAINLINK FENCE		SWALE
	GUARDRAIL (RIDOT STD 34.2.0, 34.4.0 OR APPROVED EQUAL)		SEWER FORCE MAIN
	RETAINING WALL		GAS LINE
	MINOR CONTOUR LINE		WATER LINE
	MAJOR CONTOUR LINE		HYDRANT ASSEMBLY
	SPOT ELEVATION		WATER SHUT OFF
	EDGE OF PAVEMENT		WATER VALVE
	BITUMINOUS BERM (RIDOT STD 7.5.1)		THRUST BLOCK
	CONCRETE CURB (RIDOT STD 7.1.0)		SEWER LINE
	BUILDING FOOTPRINT		OVERHEAD WIRE
	BUILDING OVERHANG		ELECTRIC, TELEPHONE, CABLE LINE
	ASPHALT PAVEMENT		LIMIT OF DISTURBANCE/ LIMIT OF CLEARING
	HEAVY DUTY ASPHALT PAVEMENT		SEDIMENTATION BARRIER, SILT FENCE (RIDOT STD 9.2.0), COMPOST SOCK OR APPROVED EQUAL
	HEAVY DUTY CONCRETE		2:1 OR 1:1 SLOPES
	CONCRETE SIDEWALK		UNDERGROUND INFILTRATION OUTLINE
	ASPHALT SIDEWALK		POND ACCESS
	SAWCUT LINE		RIP RAP
	SIGN (RIDOT STD 24.6.2 AS APPLICABLE)		SAND FILTER
	SINGLE LIGHT		BIO RETENTION
	DOUBLE LIGHT		CATCH BASIN
	OVERHANGING LIGHT		DOUBLE CATCH BASIN
	ACCESSIBLE PARKING SPACE SYMBOLS		MANHOLE
	BUILDING INGRESS/EGRESS		FLARED END SECTION
			HEAD WALL

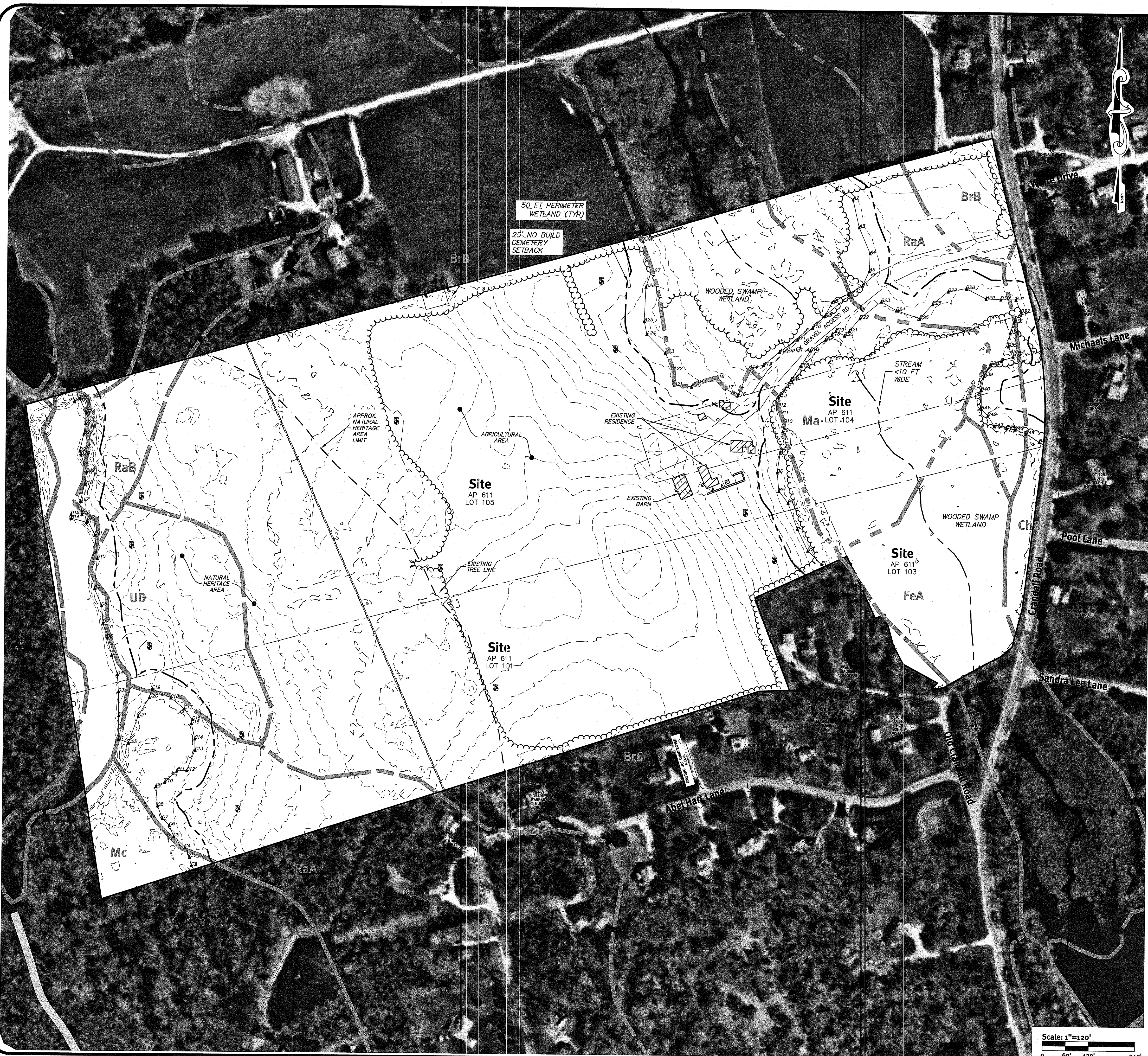
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Environmental Management
Aug 19 2019
Director of Water Resources

General Notes & Legend
Wingover Solar Farm
Tiverton, Rhode Island

Prepared for
1519 Crandall Road LLC c/o AMERESCO & Douglas Enterprises, Ltd.
c/o Kico Taliadourous, Director of Development
111 Speeth Street, Suite 4307, Farmington, MA 01757 / tel: 938-666-2263

NO.	DATE	DESCRIPTION	BY:
1	08-12-2019	ISSUED FOR CONSTRUCTION	KEVIN DEMERS
2	09-05-2019	ISSUED FOR CONSTRUCTION	KEVIN DEMERS
3	09-05-2019	ISSUED FOR CONSTRUCTION	KEVIN DEMERS



Master Plan Notes:

1. THE SITE IS LOCATED ON THE TOWN OF TIVERTON, RHODE ISLAND ASSESSOR'S PLAT 611 LOT 101, & 103-105.
2. THE SITE IS APPROXIMATELY 72.3± ACRES AND IS ZONED R-80.
3. THE OWNER OF AP 611 LOT 101 & 103-105 IS:
MARJORIE E JENSEN TRUSTEE
1724 R CRANDALL RD
TIVERTON, RI 02878
4. THIS SITE IS LOCATED IN FEMA FLOOD ZONES X. REFERENCE FEMA FLOOD INSURANCE RATE MAP 2500500434F, MAP REVISED JULY 7, 2009.
5. TOPOGRAPHY WAS OBTAINED FROM LIDAR MAPS. ELEVATIONS ARE APPROXIMATE AND REFERENCED TO THE NAVD '88 US FEET DATUM. PRIOR TO ANY DEVELOPMENT ON THE SITE, THE OWNER SHALL VERIFY ELEVATIONS USING FIELD SURVEY.
6. SOIL MAPPING OBTAINED FROM SOIL SURVEY OF RHODE ISLAND, PREPARED BY U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE.
7. WETLANDS DELINEATION BY NRS, INC. (S. RABIDEAU - NOV 2017) #17-375.
8. PARCEL AND PROPERTY SURVEY PLAN BY ABLE ENGINEERING, (9/3/2018) #14-009 PLAN ENTITLED "ADMINISTRATIVE SUBDIVISION PLAN PREPARED FOR MARJORIE JENSEN PLAT 611 LOTS 101, 103, 104 & 105, 1513 & 1519 CRANDALL ROAD, TIVERTON, RHODE ISLAND" DATED MARCH 31, 2016 SHEETS 1-4. THE ABLE PLAN IS CERTIFIED TO A BOUNDARY SURVEY TYPE, COMPREHENSIVE BOUNDARY SURVEY, MEASUREMENT SPECIFICATION I. THIS PLAN IS DRAWN TO A CLASS IV STANDARD.
9. THE SITE IS NOT WITHIN A:
GROUNDWATER PROTECTION AREA (RIDEM)
GROUNDWATER PROTECTION OVERLAY DISTRICT (TOWN)
10. THE SITE IS WITHIN A NATURAL HERITAGE AREA- POKE MILKWEED. NATURAL RESOURCE SERVICES, INC. CONDUCTED A VEGETATION SURVEY IN AUGUST 2018 AND FOUND NO EVIDENCE OF MILKWEED SPECIES ON THE SUBJECT PROPERTIES.
11. AREA SERVICED BY PRIVATE WELLS, QWTS, ELECTRIC, TELEPHONE, AND CABLE TV. EXISTING SEPTIC AND WELLS TO BE ABANDONED.

Soil Information:

(REFERENCE: SOIL SURVEY OF RHODE ISLAND, U.S.D.A. SOIL CONSERVATION SERVICE)

SOIL NAME	DESCRIPTION
BrB	BROADBROOK SILT LOAM, 3 TO 8 PERCENT SLOPES
CHB	CANTON AND CHARLTON VERY STONY FINE SANDY LOAMS, 3 TO 8 PERCENT SLOPES
FeA	FREETOWN MUCK, 0 TO 1 PERCENT SLOPES
Mo	MANSFIELD MUCKY SILT LOAM
Mc	MANSFIELD VERY STONY MUCKY SILT LOAM
RaA	RAINBOW SILT LOAM, 0 TO 3 PERCENT SLOPES
RoB	RAINBOW SILT LOAM, 3 TO 8 PERCENT SLOPES
UD	UDORTHENTS-URBAN LAND COMPLEX

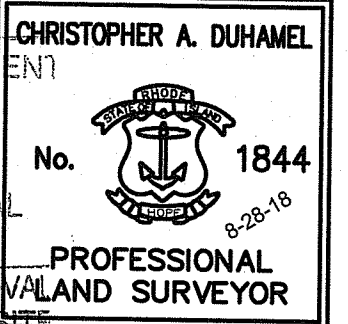
Certification

THIS SURVEY HAS BEEN CONDUCTED AND THE PLAN HAS BEEN PREPARED PURSUANT TO SECTION 9 OF THE RULES AND REGULATIONS ADOPTED BY THE RHODE ISLAND STATE BOARD OF REGISTRATION FOR PROFESSIONAL LAND SURVEYORS ON JANUARY 1, 2016, AS FOLLOWS:
 TYPE OF SURVEY: MEASUREMENT SPECIFICATION
 COMPILED PLAN: CLASS IV
 NOT A BOUNDARY SURVEY

THIS COMPILATION PLAN HAS BEEN PREPARED FROM SOURCES OF INFORMATION AND DATA WHOSE POSITIONAL ACCURACY AND RELIABILITY HAS NOT BEEN VERIFIED. THE PROPERTY LINES DEPICTED HEREON DO NOT REPRESENT A BOUNDARY OPINION, AND OTHER INFORMATION DEPICTED IS SUBJECT TO SUCH CHANGES AS AN AUTHORITY FIELD SURVEY MAY DISCLOSE

THE PURPOSE FOR THE CONDUCT OF THE SURVEY AND FOR THE PREPARATION OF THE PLAN IS AS FOLLOWS: COMPILATION PLAN

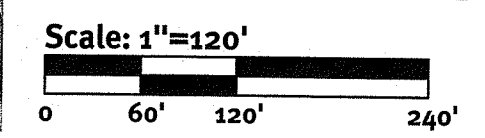
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER RESOURCES
 FRESHWATER WETLANDS PROGRAM
 APPROVED WITH CONDITIONS
 AS SPECIFIED IN THE LETTER OF APPROVAL
 DATED SEP 5 2019 FILE # 14-0011
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE



BY *Christopher A. Duhamel*
 CHRISTOPHER A. DUHAMEL, RPLS #1844
 C.O.A. NO. LS-A160

Existing Conditions Legend:

SITE PROPERTY LINE	—————
ASSESSOR LINE	-----
EX MAJOR FOOT CONTOUR	-----160-----
EX MINOR FOOT CONTOUR	-----158-----
SOIL LINE AND DESIGNATION	-----HkC----- -----CkC-----
STREAM CENTERLINE	—————
WETLAND EDGE	—————
50' PERIMETER WETLAND	—————
EDGE OF PAVEMENT	—————
STONE WALL	—————
BUILDING	—————
TREELINE	—————



Diprete Engineering
 Two Stafford Court, Cranston, RI 02920
 Tel: 401-943-1000 Fax: 401-641-6006 www.diprete-eng.com
 Boston • Providence • Newport

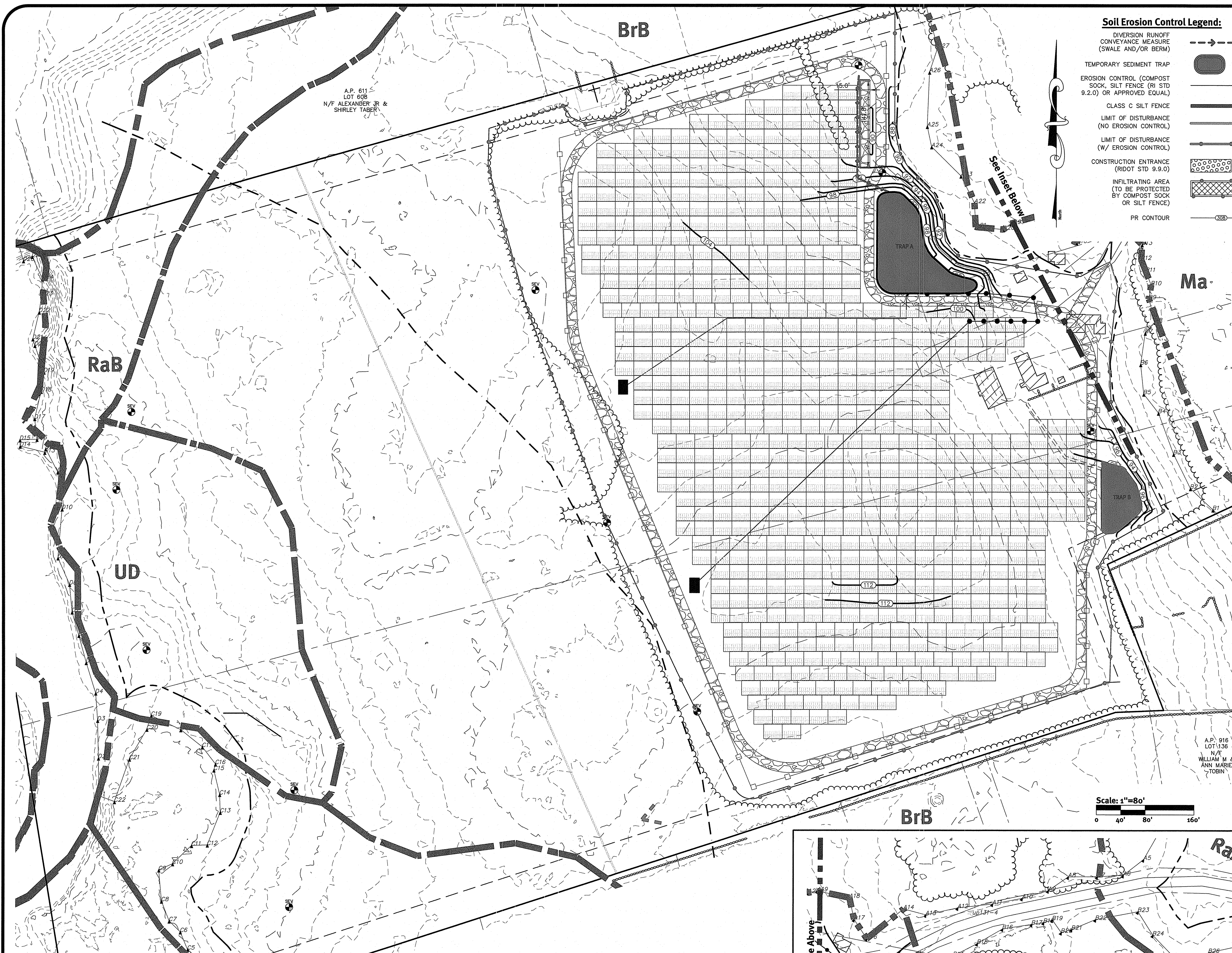
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The contractor is responsible for all of the means, methods, safety precautions and requirements, and OSHA compliance in the implementation of this plan and design.

No.	Date	Description	Drawn By: M.A.H.	Design By: K.L.D.
1	10-31-2018	EDGE WETLANDS SUBMISSION		

Existing Analysis Plan
Wingover Solar Farm
 Tiverton, Rhode Island

Prepared for
1519 Crandall Road LLC c/o AMERESCO
 Kiko Tahaourou, Director of Development
 111 Speen Street, Suite 410, Framingham, MA 01701 / Tel: 508-661-2963
 DC Job No: 0681-028 Copyright 2018 by Diprete Engineering Associates, Inc.



- Soil Erosion Control Legend:**
- DIVERSION RUNOFF CONVEYANCE MEASURE (SWALE AND/OR BERM)
 - TEMPORARY SEDIMENT TRAP
 - EROSION CONTROL (COMPOST SOCK, SILT FENCE (RI STD 9.2.0) OR APPROVED EQUAL)
 - CLASS C SILT FENCE
 - LIMIT OF DISTURBANCE (NO EROSION CONTROL)
 - LIMIT OF DISTURBANCE (W/ EROSION CONTROL)
 - CONSTRUCTION ENTRANCE (RIDOT STD 9.9.0)
 - INFILTRATING AREA (TO BE PROTECTED BY COMPOST SOCK OR SILT FENCE)
 - PR CONTOUR

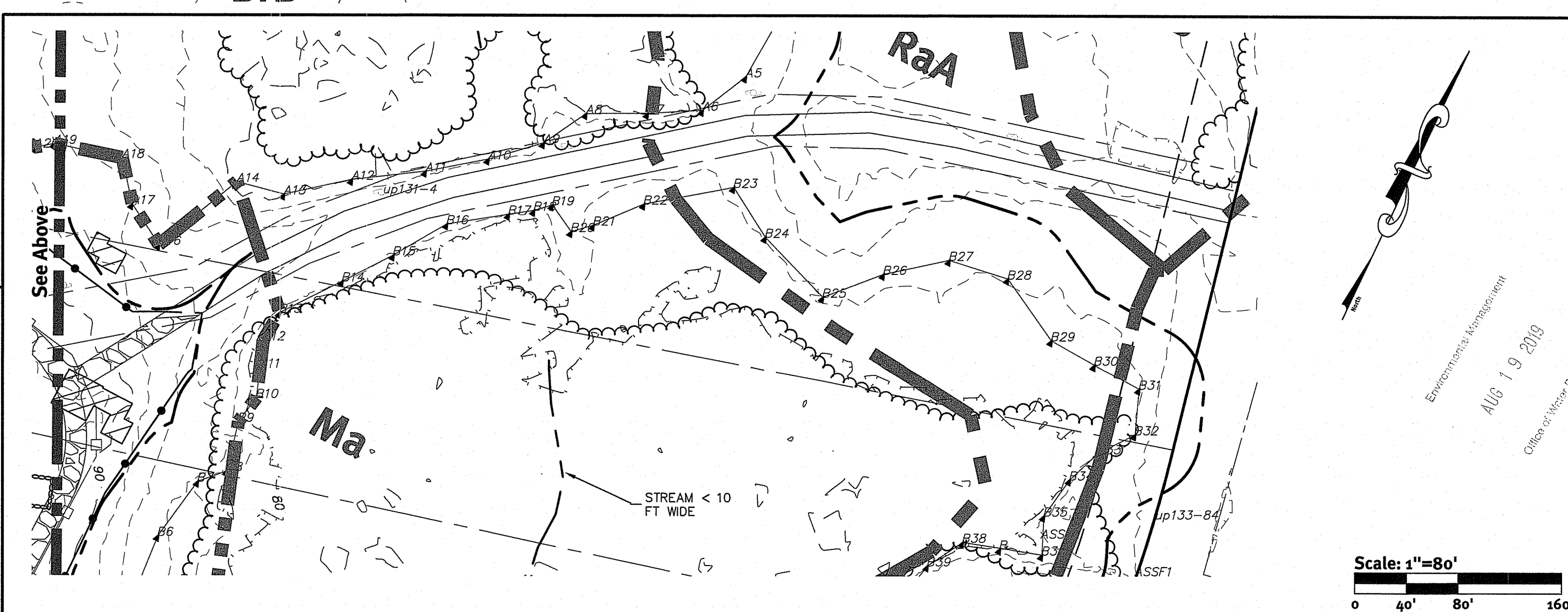
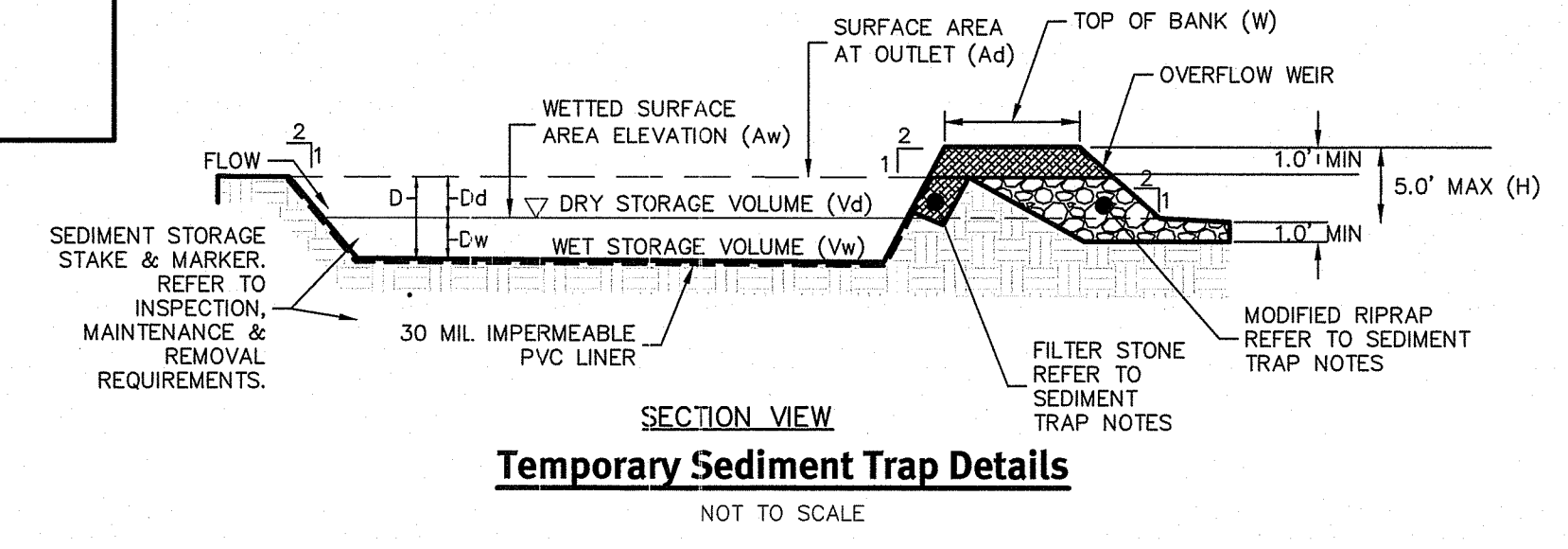
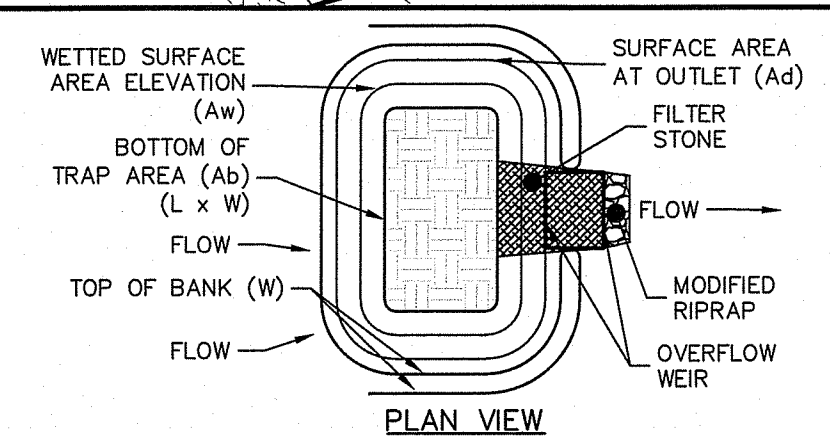
- Soil Erosion Control Implementation Phasing**
- Phase IA** - INSTALL EROSION CONTROL SILT FENCE & STONE CONSTRUCTION ENTRANCE.
 - Phase IB** - INSTALL TEMPORARY SEDIMENTATION TRAP.
 - Phase IC** - CONSTRUCT PROPOSED DIVERSIONS.
 - Phase IIA** - CLEAR AND GRUB IMPERVIOUS AREAS, CONSTRUCT PROPOSED BUILDING & INSTALL UTILITIES WITH ROADWAYS, INSTALL DRAINAGE NETWORK WORKING FROM THE DOWN GRADIENT BASINS UP TO THE START OF NETWORK, INSTALL ASPHALT PAVING.
 - Phase IIB** - STABILIZE ALL DISTURBED AREAS, DE-CONSTRUCT DIVERSIONS AND TEMPORARY SEDIMENTATION TRAPS.
- Note** - SOIL EROSION CONTROL IMPLEMENTATION PHASING SHOULD NOT BE MISCONSTRUED WITH CONSTRUCTION PHASING/ SEQUENCING. ALL MEASURES DEPICTED ON THIS PLAN ARE TO BE INSTALLED WITH THE FIRST PHASE OF CONSTRUCTION.

- Sediment Trap Notes:**
- THE TEMPORARY SEDIMENT TRAPS SHALL MEET ALL REQUIREMENTS FOR TEMPORARY SEDIMENT TRAPS OUTLINED IN THE RHODE ISLAND SOIL EROSION AND SEDIMENT CONTROL HANDBOOK (LATEST REVISION) SECTION SIX: SEDIMENT CONTROL MEASURES.
 - THE TEMPORARY SEDIMENT TRAP SHALL HAVE AN INITIAL STORAGE VOLUME OF 134 CUBIC YARDS PER ACRE OF DRAINAGE AREA.
 - ALL CUT AND FILL SLOPES SHALL BE 2:1 OR FLATTER EXCEPT FOR THE EXCAVATED WET STORAGE AREA WHERE SLOPES SHALL NOT EXCEED 1.5:1.
 - THE OUTLET SHALL BE LOCATED AT THE MOST DISTANT HYDRAULIC POINT FROM THE INLET.
 - THE OUTLET CONSISTS OF A PERVIOUS STONE DIKE WITH A CORE OF MODIFIED RIPRAP AND FACED ON THE UPSTREAM SIDE WITH STONE.
 - TEMPORARY SEDIMENT TRAPS MUST OUTLET ONTO STABILIZED GROUND.
 - MAXIMUM HEIGHT OF A TEMPORARY SEDIMENT TRAP EMBANKMENT IS LIMITED TO 5 FEET.
 - SIDE SLOPES OF THE EMBANKMENT SHALL BE 2:1 OR FLATTER.
 - MODIFIED RIPRAP: SHALL MEET THE REQUIREMENTS OF RIDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION SUBSECTION M.10.03.2.
 - FILTER STONE: SHALL MEET THE REQUIREMENTS OF RIDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION SUBSECTION M.01.03 TABLE I, COLUMN V FILTER STONE.

- Inspection, Maintenance, and Removal Requirements:**
- INSTALL "SEDIMENT STORAGE" STAKE WITH A MARKER AT ONE HALF OF THE WET STORAGE VOLUME.
 - INSPECT THE TEMPORARY SEDIMENT TRAP AT LEAST ONCE A WEEK AND WITHIN 24 HOURS OF THE END OF A STORM WITH A RAINFALL AMOUNT OF 0.25 INCH OR GREATER.
 - CHECK THE OUTLET TO ENSURE THAT IT IS STRUCTURALLY SOUND AND HAS NOT BEEN DAMAGED BY EROSION OR CONSTRUCTION EQUIPMENT.
 - CHECK FOR SEDIMENT ACCUMULATION AND FILTRATION PERFORMANCE.
 - WHEN SEDIMENTS HAVE ACCUMULATED TO ONE HALF THE MINIMUM REQUIRED VOLUME OF THE WET STORAGE, DEWATER THE TRAP AS NEEDED, REMOVE SEDIMENTS AND RESTORE THE TRAP TO ITS ORIGINAL DIMENSIONS.
 - DISPOSE OF THE SEDIMENT REMOVED FROM THE BASIN IN A SUITABLE AREA.
 - THE TEMPORARY SEDIMENT TRAP MAY BE REMOVED AFTER THE CONTRIBUTING DRAINAGE AREA IS STABILIZED.

- Installation Notes:**
- CLEAR, GRUB AND STRIP ANY VEGETATION AND ROOT MAT FROM ANY PROPOSED EMBANKMENT AND OUTLET AREA.
 - REMOVE STONES AND ROCKS WHOSE DIAMETER IS GREATER THAN THREE (3) INCHES AND OTHER DEBRIS.
 - EXCAVATE WET STORAGE AND CONSTRUCT THE EMBANKMENT AND/OR OUTLET AS NEEDED TO ATTAIN THE NECESSARY STORAGE REQUIREMENTS.
 - USE ONLY FILL MATERIAL FOR THE EMBANKMENT THAT IS FREE FROM EXCESSIVE ORGANICS, DEBRIS, LARGE ROCKS (OVER SIX (6) INCHES) OR OTHER UNSUITABLE MATERIALS. COMPACT THE EMBANKMENT IN 8-INCH LAYERS BY TRAVERSING WITH EQUIPMENT WHILE IT IS BEING CONSTRUCTED.
 - STABILIZE THE EARTHEN EMBANKMENT, USING ANY OF THE FOLLOWING MEASURES: SEEDING FOR TEMPORARY VEGETATION COVER; SEEDING FOR PERMANENT VEGETATIVE COVER; OR SLOPE PROTECTION, IMMEDIATELY AFTER INSTALLATION.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED SEP 5 2019 FILE # 19-0011
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APPROVED PLANS MUST BE AT CONSTRUCTION SITE
Nancy L. Freeman



Diprete Engineering
Two Stafford Court, Cranston, RI 02920
tel: 403-943-1000 fax: 403-64-6006 www.diprete-eng.com

KEVIN DEMERS
REGISTERED PROFESSIONAL ENGINEER
CIVIL

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The contractor is responsible for all of the means, methods, safety, precautions and requirements, and OSHA compliance in the implementation of this plan and design.

No.	Date	Description	By:
1	06-29-2019	RIBA Wetlands PD Revisions	M.A.H.
2	11-28-2018	RIBA Wetlands PD Submission	M.A.H.

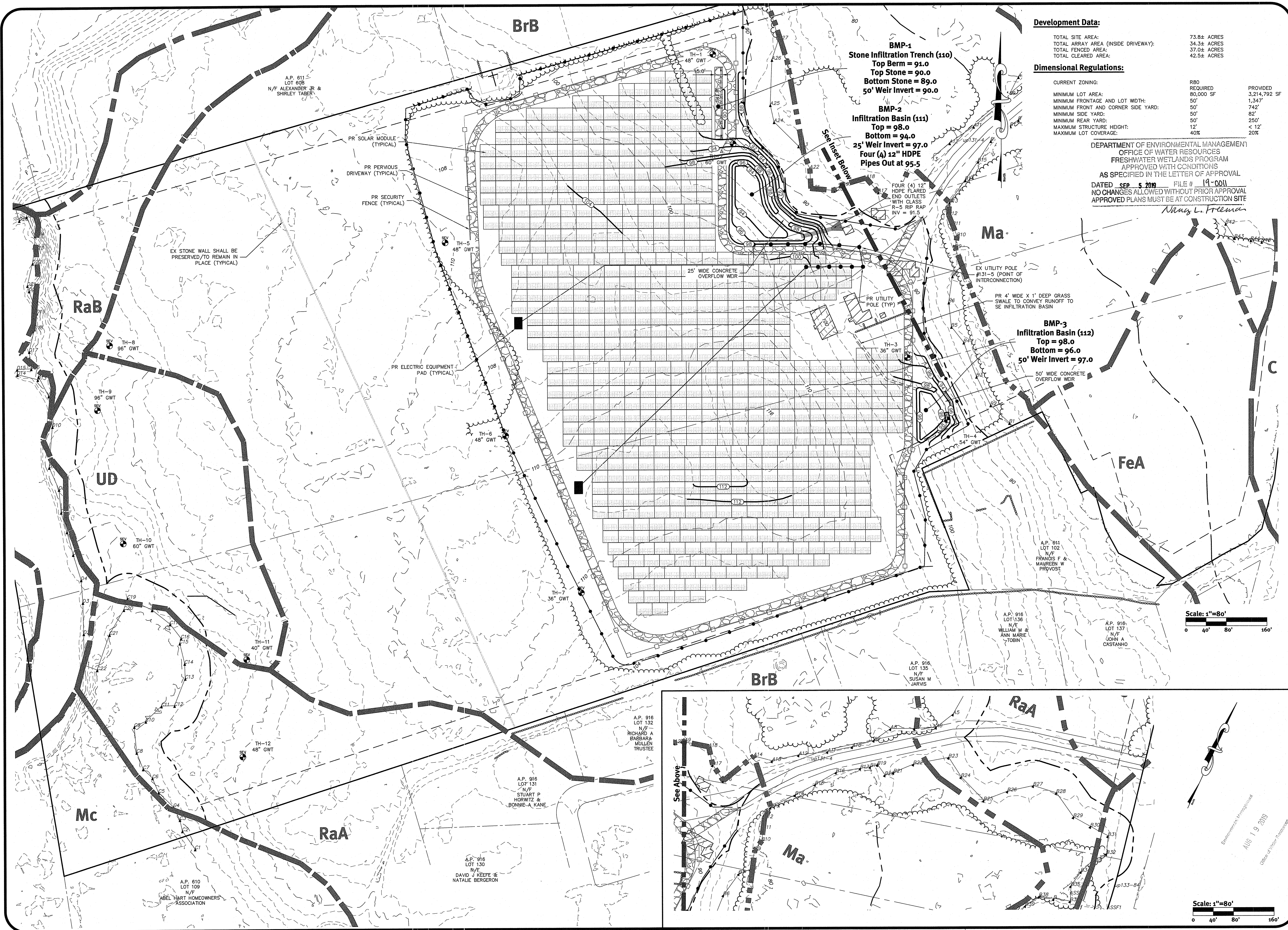
Drawn By: M.A.H. Design By: K.L.D.

Soil Erosion & Sediment Control Plan
Wingover Solar Farm
Iverson, Rhode Island

Prepared for:
1519 Crandall Road LLC c/o AMERESCO & Douglas Enterprises, Ltd.
c/o Kibb Salazar, Director of Development
111 Speen Street, Suite 410 Framingham, MA 01701 / tel: 508-661-2263
DE Job No: 0884-088 Copyright 2019 by Diprete Engineering Associates, Inc.

Prepared by:
Environmental Management
AUG 19 2019
Office of Water Resources

z:\demain\projects\0681-058 crandall road wing-over farm\outcrop drawings\0681-058-plan-4wg-plotter.dwg Plotter: 7/17/2019



Development Data:

TOTAL SITE AREA: 73.8± ACRES
 TOTAL ARRAY AREA (INSIDE DRIVEWAY): 34.3± ACRES
 TOTAL FENCED AREA: 37.0± ACRES
 TOTAL CLEARED AREA: 42.5± ACRES

Dimensional Regulations:

CURRENT ZONING:	R80	PROVIDED
REQUIRED:	80,000 SF	3,214,792 SF
MINIMUM LOT AREA:	50'	1,347'
MINIMUM FRONTAGE AND LOT WIDTH:	50'	742'
MINIMUM FRONT AND CORNER SIDE YARD:	50'	82'
MINIMUM SIDE YARD:	50'	250'
MINIMUM REAR YARD:	12'	< 12'
MAXIMUM STRUCTURE HEIGHT:	40%	20%
MAXIMUM LOT COVERAGE:		

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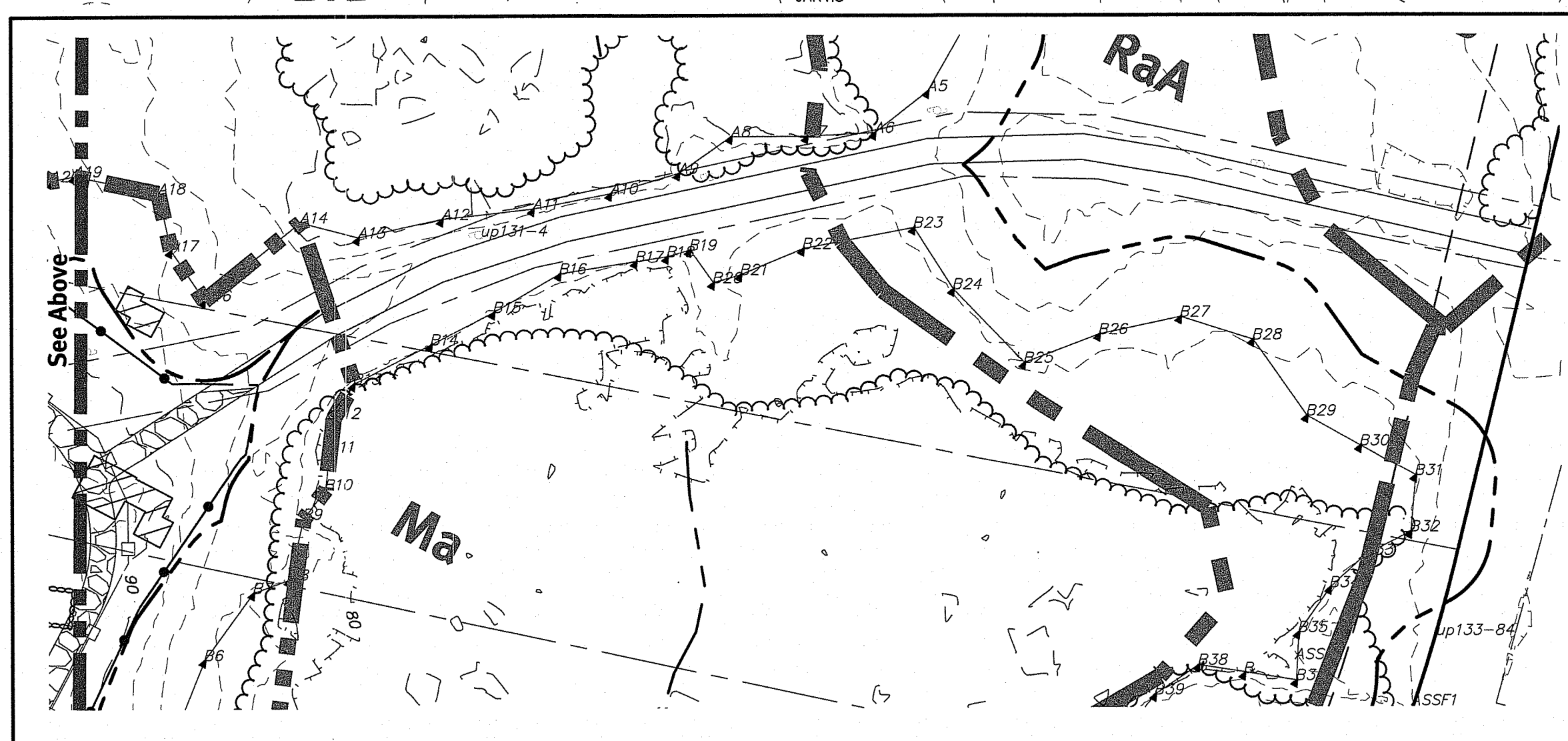
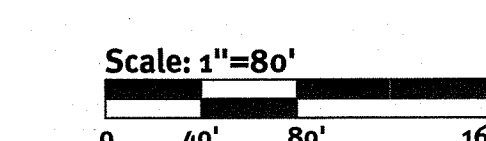
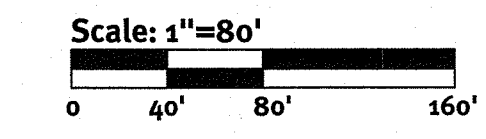
DiPrete Engineering
 Two Stafford Court Cranston, RI 02920
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KEVIN DEMERS
 REGISTERED PROFESSIONAL ENGINEER
 CIVIL

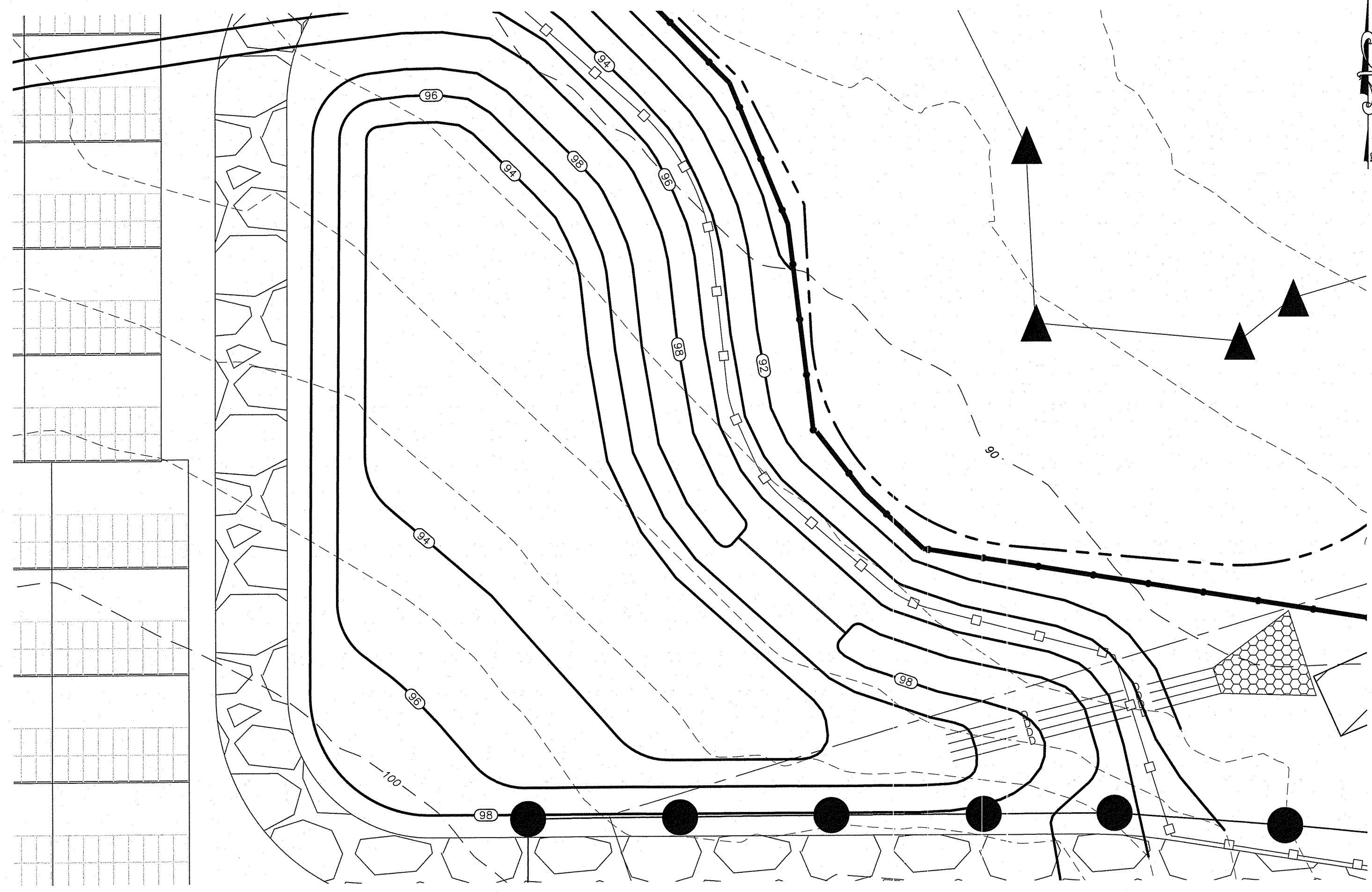
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No.	Date	Description	Drawn By: M.A.H.	Design By: K.J.D.
1	06-25-2019	RIEMA Wetland PS Submission		
2	08-22-2018	RIEMA Wetland PS Submission		

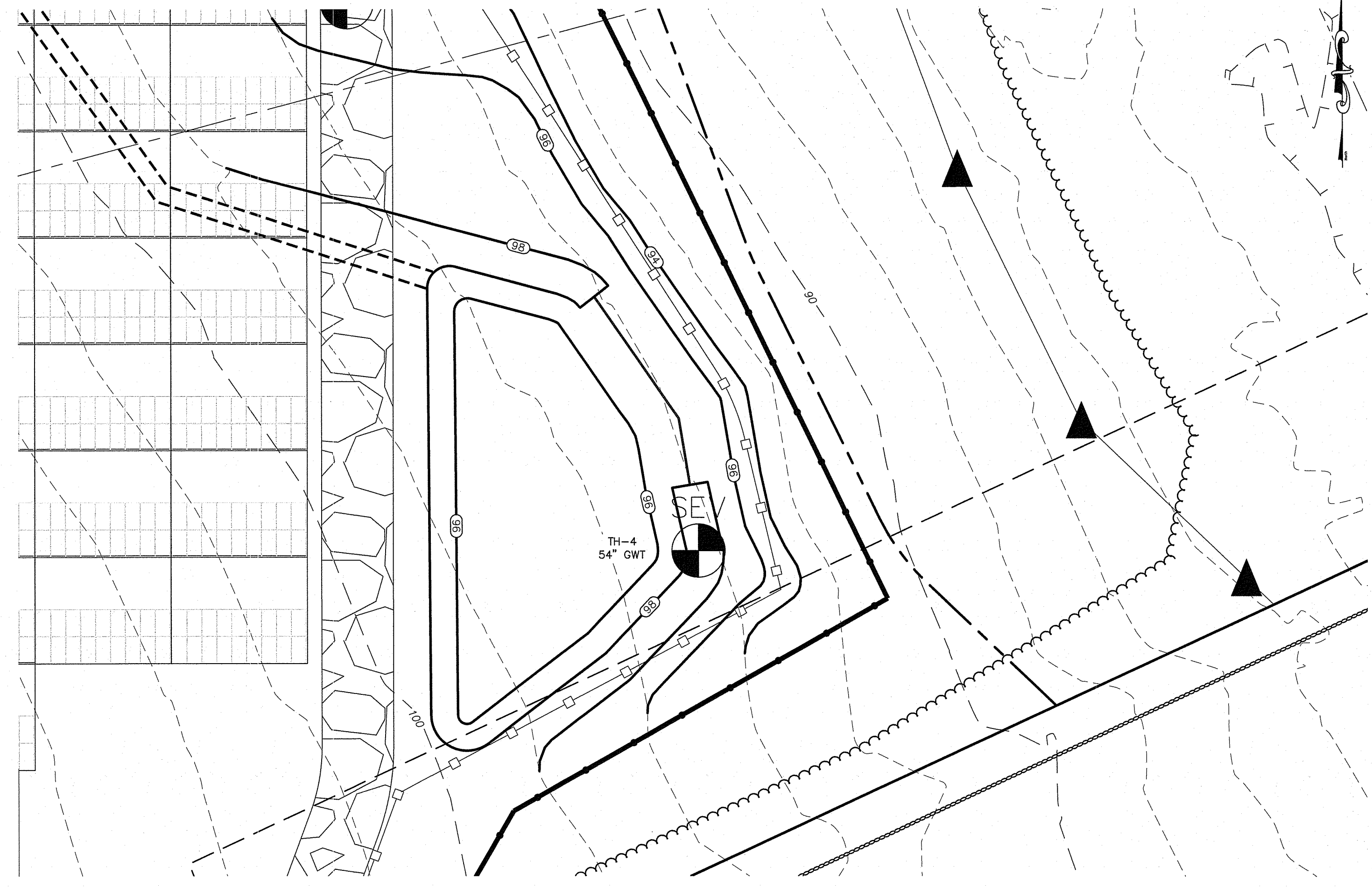
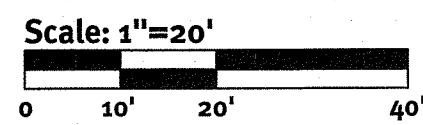
Site, Grading & Drainage Plan
Wingover Solar Farm
 Prepared by
1519 Crandall Road LLC c/o AMERESCO & Douglas Enterprises, Ltd.
 c/o Kileo Iliadouris, Director of Development
 111 Speen Street, Suite #201 Farmington, MA 01707 | Tel: 508-663-2253
 DE Job No: 0681-058 Copyright 2019 by DiPrete Engineering Associates, Inc.



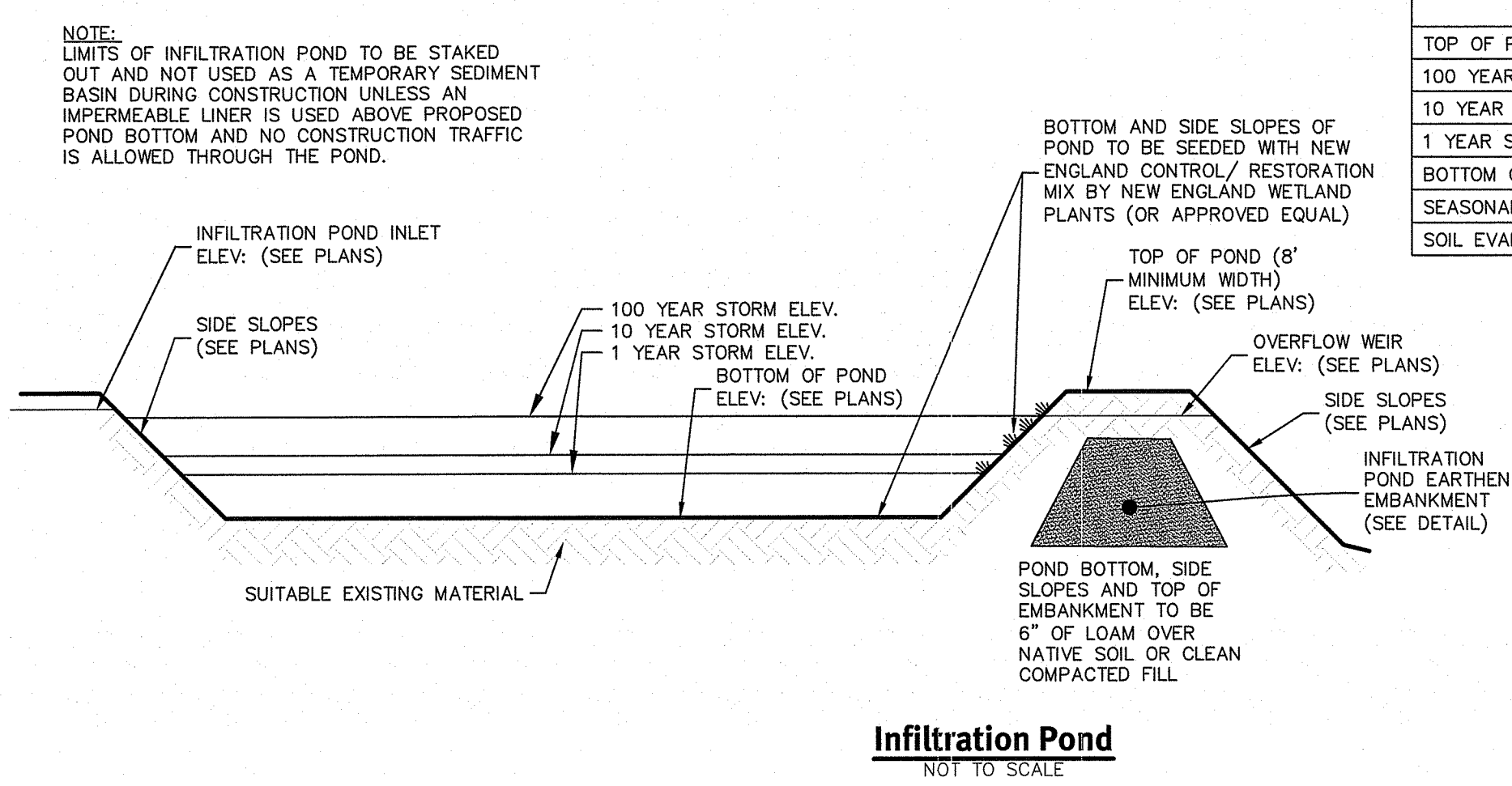
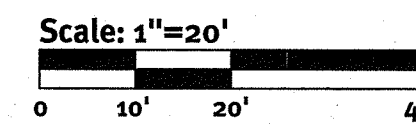
Environment & Management
 August 19, 2019
 Office of Water Resources



BMP-2 Infiltration Basin

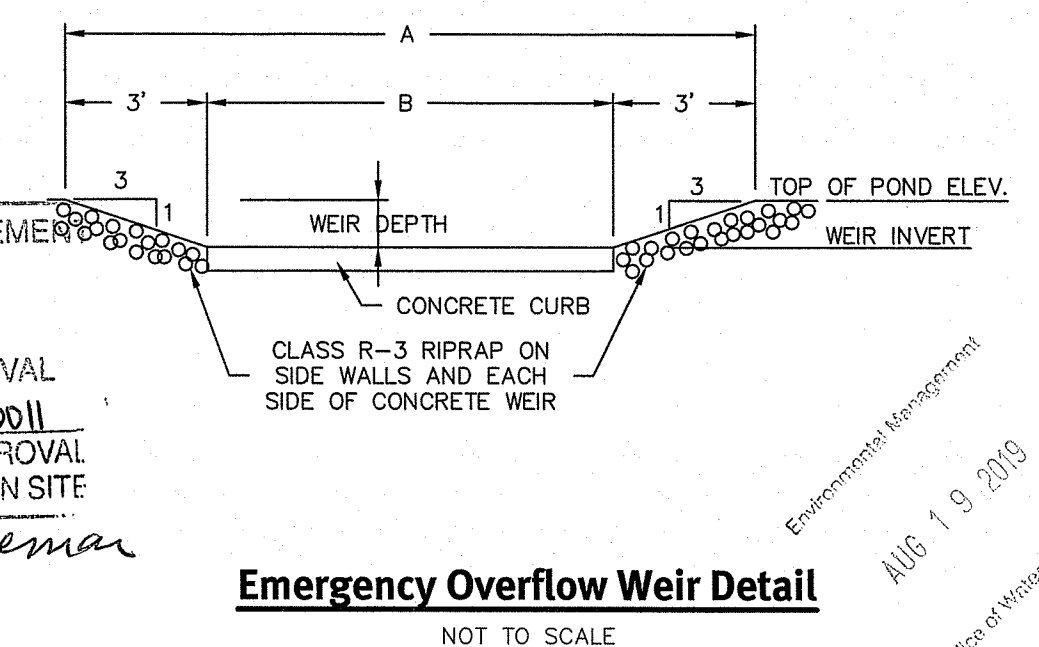


BMP-3 Infiltration Basin



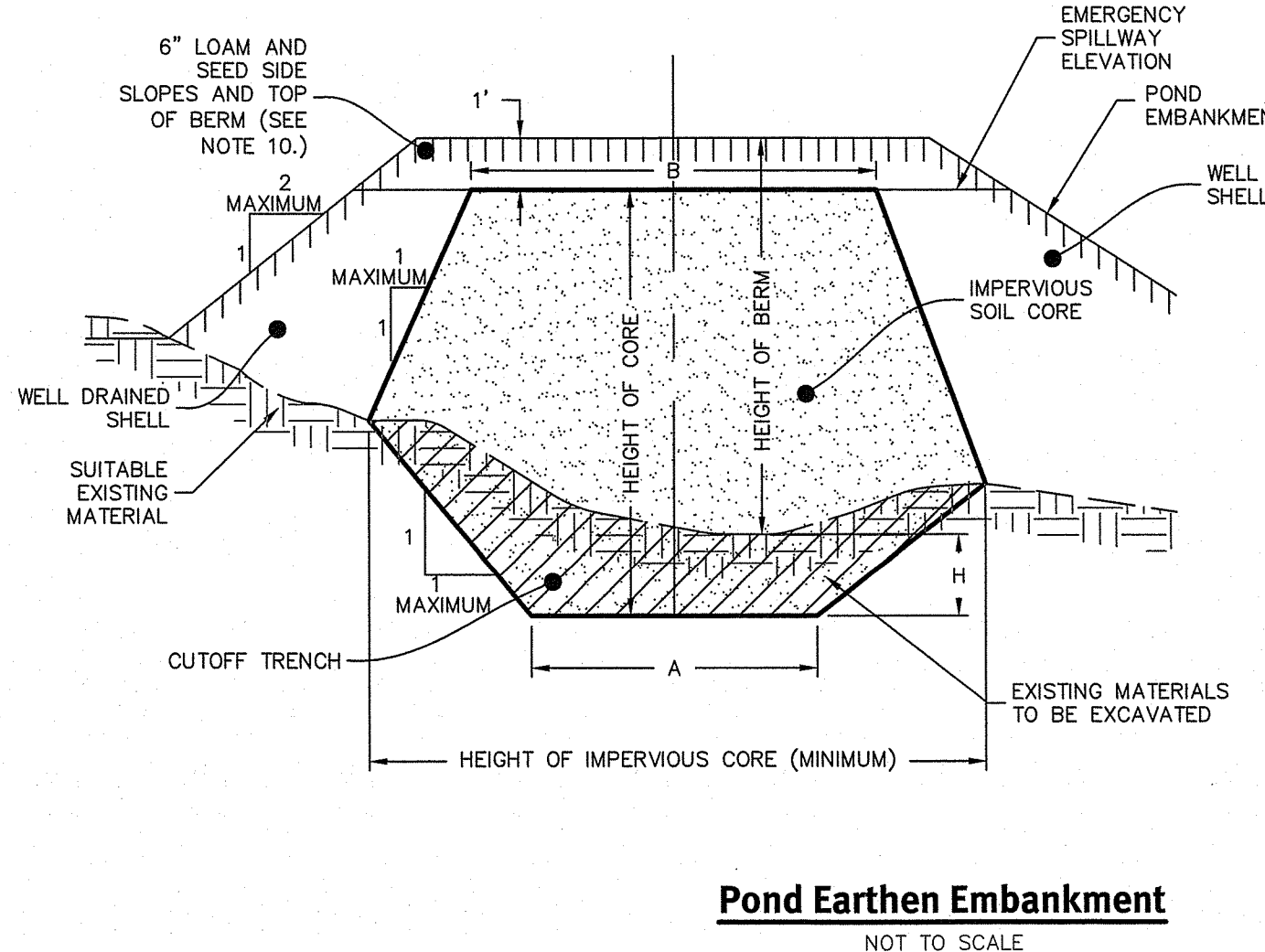
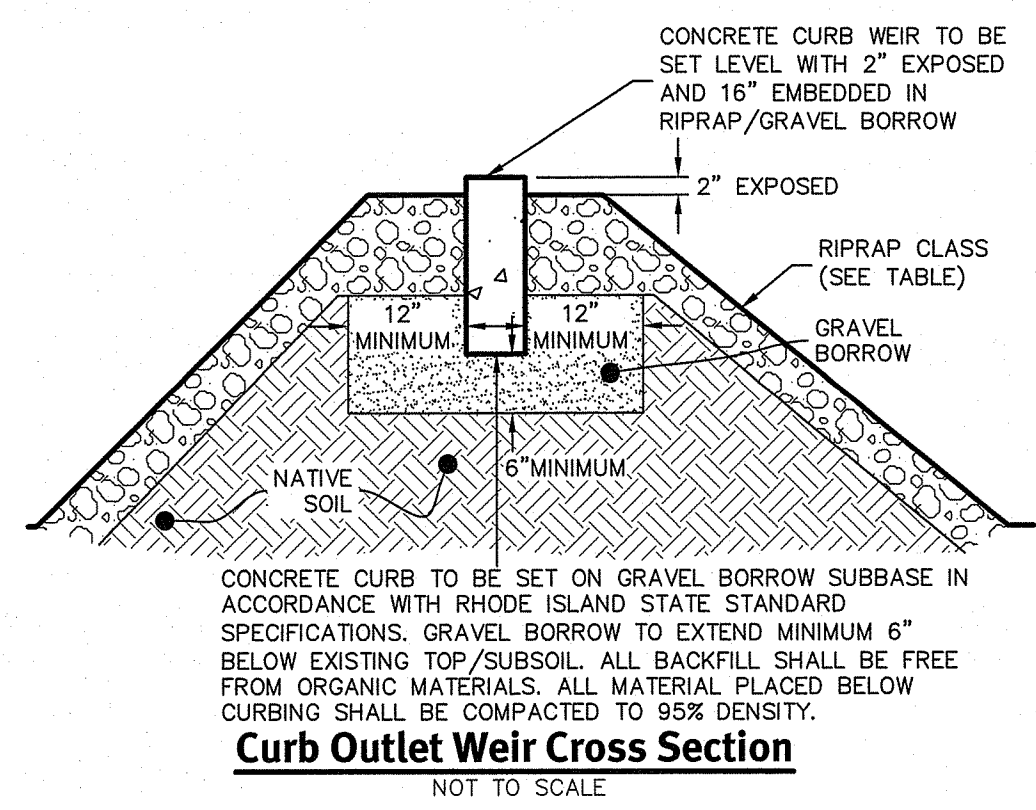
DESCRIPTION	BMP-2 (111)	BMP-3 (112)
TOP OF POND ELEVATION	98.00	98.00
100 YEAR STORM ELEVATION	97.36	97.15
10 YEAR STORM ELEVATION	96.27	96.84
1 YEAR STORM ELEVATION	95.10	96.01
BOTTOM OF POND ELEVATION	94.00	96.00
SEASONAL HIGH GWT ELEVATION	90.0	92.5
SOIL EVALUATION	TH-2	TH-4

LOCATION	TOP OF POND ELEV.	WEIR INVERT	WEIR DEPTH	A	B
BMP-2 (111)	98.00	97.00	1.0	25'	31'
BMP-3 (112)	98.00	97.00	1.0	50'	56'



DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
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Nancy L. Freeman

LOCATION	TOP OF POND ELEV.	WEIR INVERT	WEIR DEPTH	RIPRAP CLASS
BMP-1	98.00	97.00	1.0	R-3
BMP-2	98.00	97.00	1.0	R-3



BERM HEIGHT (FT)	TOP WIDTH OF CORE - B (FT)
0-6.5	8.2
6.6-9.8	9.2
9.9-13.1	9.8
13.2-16.4	10.8
16.5-19.7	11.5

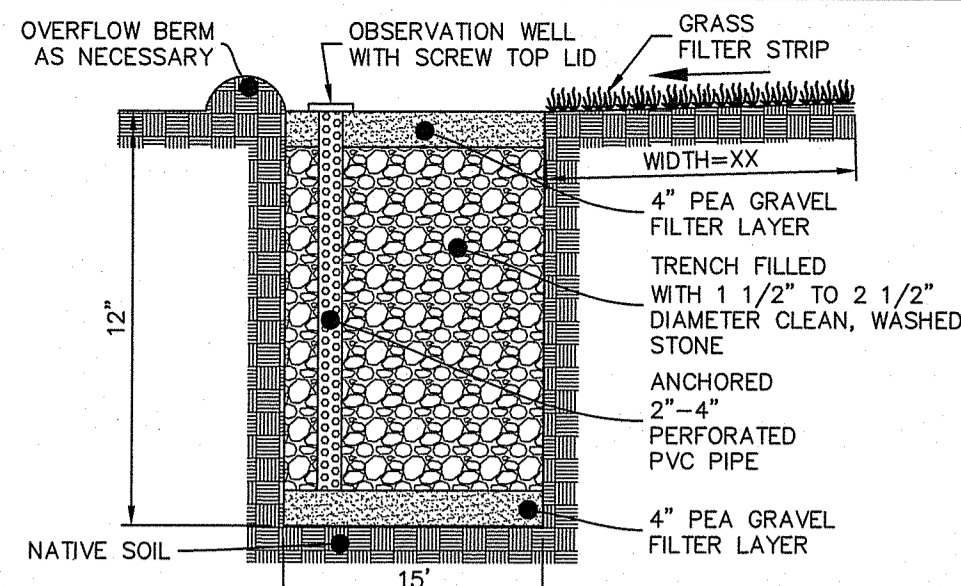
- NOTES:**
- IMPERVIOUS SOIL CORE TO BE PROVIDED FOR ALL POND EMBANKMENTS.
 - IMPERVIOUS SOIL CORE TO BE CONSTRUCTED OF A MATERIAL WITH A MINIMUM OF 5% PASSING THE #200 SIEVE AND A MAXIMUM PERMEABILITY OF 0.00005 CM/S.
 - WELL DRAINED SHELL TO BE CONSTRUCTED OF GRAVEL AND/OR SAND WITH LESS THAN 5% PASSING THE #200 SIEVE.
 - MINIMUM DEPTH OF CUTOFF TRENCH (H) SHALL BE 3/4 OF THE TOTAL BERM HEIGHT.
 - THE IMPERVIOUS CORE AT A MINIMUM SHALL EXTEND UP BOTH ABUTMENTS TO THE EMERGENCY SPILLWAY ELEVATION.
 - THE MINIMUM BOTTOM WIDTH (A) SHALL BE 5'-8", AND WIDE ENOUGH TO PERMIT OPERATION OF COMPACTION EQUIPMENT.
 - SIDE SLOPES OF THE TRENCH SHALL BE NO STEEPER THAN 1:1.
 - IF BEDROCK IS ENCOUNTERED BELOW THE DAM THE CUT OFF TRENCH CAN BE REDUCED TO 1'x1' (A)xH.
 - COMPACTION REQUIREMENTS FOR THE SHELL AND IMPERVIOUS CORE TO BE 95% OF THE MODIFIED PROCTOR PER ASTM D1557. ALL FILL TO BE PLACED IN LIFTS NOT EXCEEDING 12".
 - SIDE SLOPE OF POND EMBANKMENT TO BE 2:1 MAXIMUM. IF SIDE SLOPES ARE STEEPER THAN 3:1, SLOPE PROTECTION MUST BE UTILIZED ON POND EMBANKMENT. THIS INCLUDES, BUT NOT LIMITED TO, RIPRAP AND EROSION CONTROL MATS.
 - THE IMPERVIOUS CORE SHALL BE KEPT FREE FROM STANDING WATER DURING THE BACKFILL OPERATION.
 - ALL EMBANKMENTS TO BE DESIGNED BY A GEOTECHNICAL ENGINEER PRIOR TO CONSTRUCTION. ALL EMBANKMENT INSTALLATIONS TO BE SUPERVISED BY A GEOTECHNICAL ENGINEER.

KEVIN DEMERS
REGISTERED PROFESSIONAL ENGINEER
CIVIL

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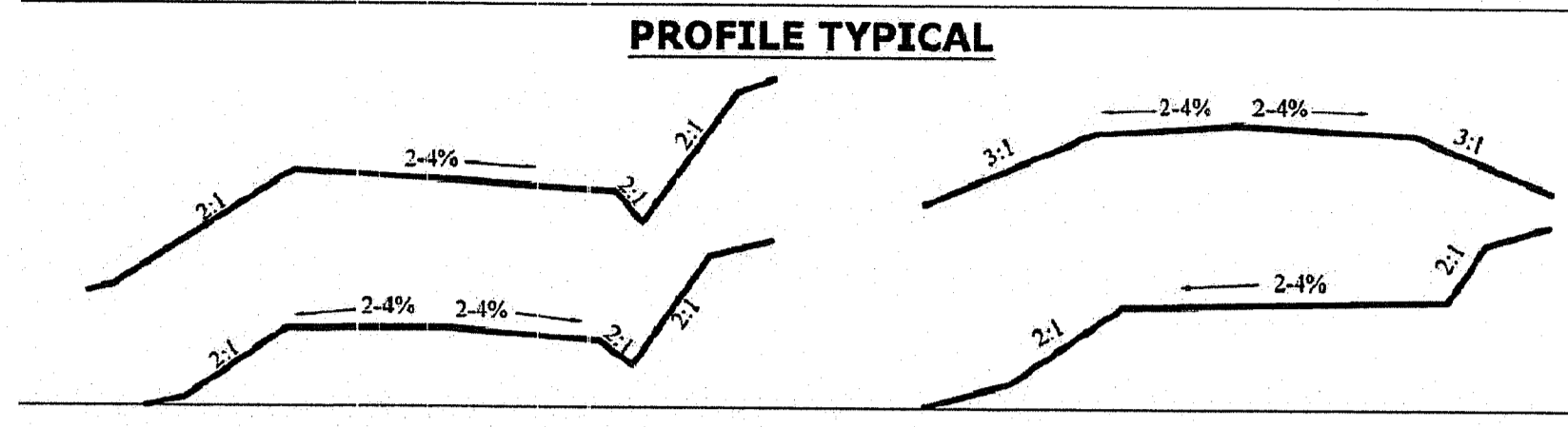
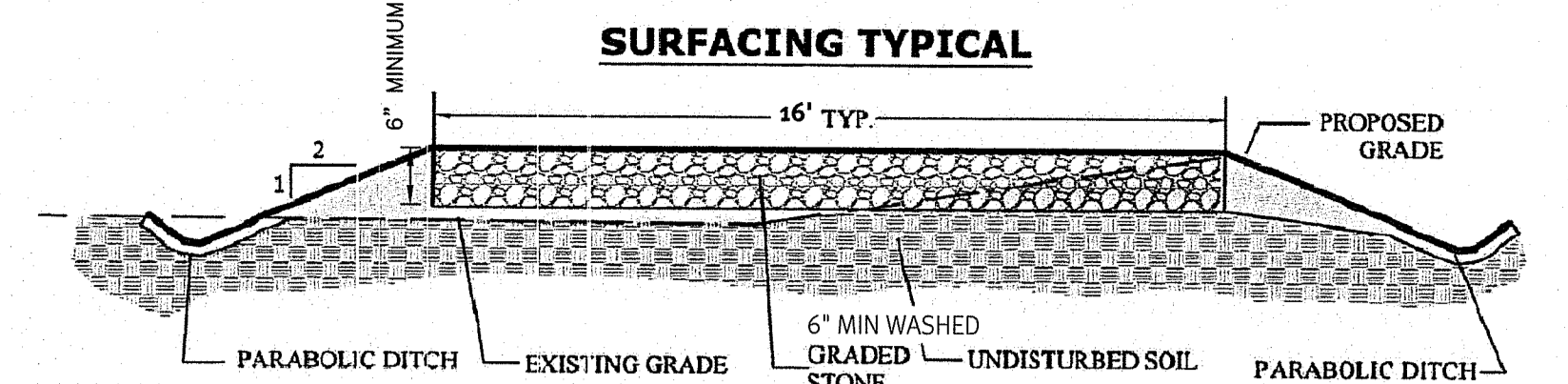
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BMP Detail Sheet
Wingover Solar Farm
Thetford, Rhode Island
Prepared for:
5119 Crandall Road LLC c/o AMERESCO & Douglas Enterprises, Ltd.
c/o Kiso Taitadourous, Director of Development
111 Speen Street, Suite 410 Frammingham, MA 01907 / tel: 608-666-2265
DE Job No: 0681-068 Copyright 2019 by DiPrete Engineering Associates, Inc.



DESCRIPTION	BMP-1
TOP OF STORAGE	91.00
TOP OF BERM ELEVATION	90.00
100 YEAR STORM ELEVATION	90.46
10 YEAR STORM ELEVATION	90.24
1 YEAR STORM ELEVATION	89.40
BOTTOM OF TRENCH ELEVATION	89.00
SEASONAL HIGH GWT ELEVATION	85.3
SOIL EVALUATION	TH-2

Stone Infiltration Trench
NOT TO SCALE



SURFACING SPECIFICATIONS

Conditions:	Road Thickness	Stone Size	Fines
Base Layer with Geotextile Fabric (not excessively wet)	4" Min.	3-3 1/2	0-6%
Base Layer with Geotextile Fabric (wet conditions)	6" Min.	3-3 1/2	0-6%

CONSTRUCTION NOTES:
 A. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER AS TO MINIMIZE POTENTIAL EROSION AND WATER QUALITY DEGRADATION.
 B. FIXED EROSION CONTROLS AND SITE STABILIZATION SHALL BE CONDUCTED IN ACCORDANCE WITH APPROVED BMP'S, OR PURSUANT TO PROJECT SPECIFIC PERMITS.
 C. TREES, STUMPS, ROOTS, BRUSH AND WEEDS SHALL BE REMOVED FROM THE WORK AREA IF DETERMINED NECESSARY TO SAFELY CONSTRUCT ROADWAY.
 D. ON WEAK BEARING SOIL SUCH AS LOOSE ALLUVIAL, OR WETLANDS SOILS, SURFACE TREATMENTS SHOULD BE UNDERLAIN WITH WOVEN GEOTEXTILES.
 E. AT MINIMUM, ROADSIDE DITCHES SHALL BE 1-FT BELOW ROAD SURFACE.
 F. DISCHARGE PITS FOR DITCHES SHALL NOT BE NEAR WETLANDS OR STREAMS, AND OR BE LOCATED IN THE DIRECTION OF THE ESCAPE.

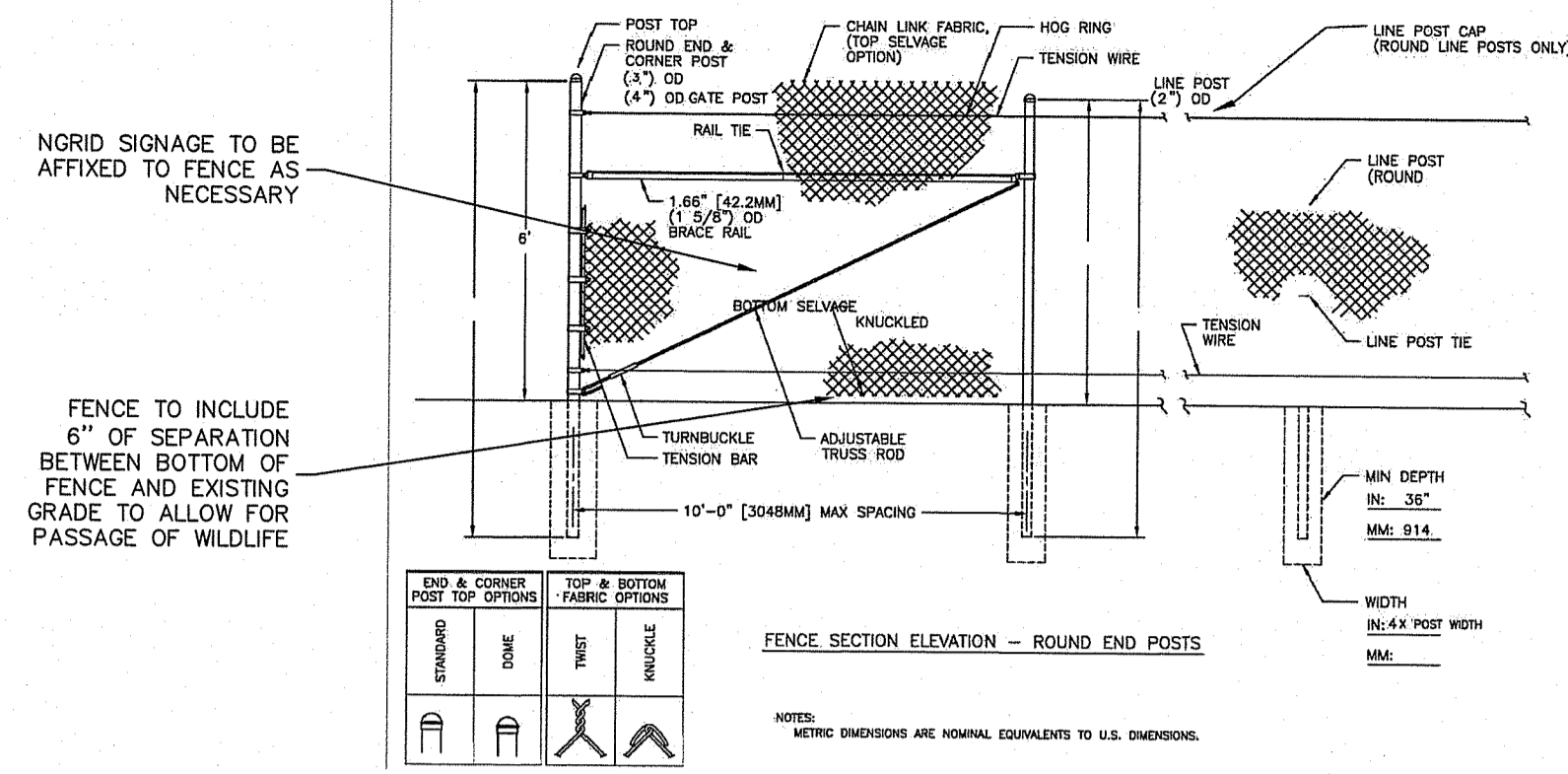
MATERIAL SPECIFICATIONS

Sieve Designation	Percentage by Mass (Weight) Passing Square Mesh Sieves
90mm (3.5 inch)	100
75mm (3 inch)	90-100
50mm (2 inch)	75-100
25mm (1 inch)	50-80
12.5mm (1/2 inch)	30-60
4.75mm (No. 4)	15-40
75um (No. 200)	0-6

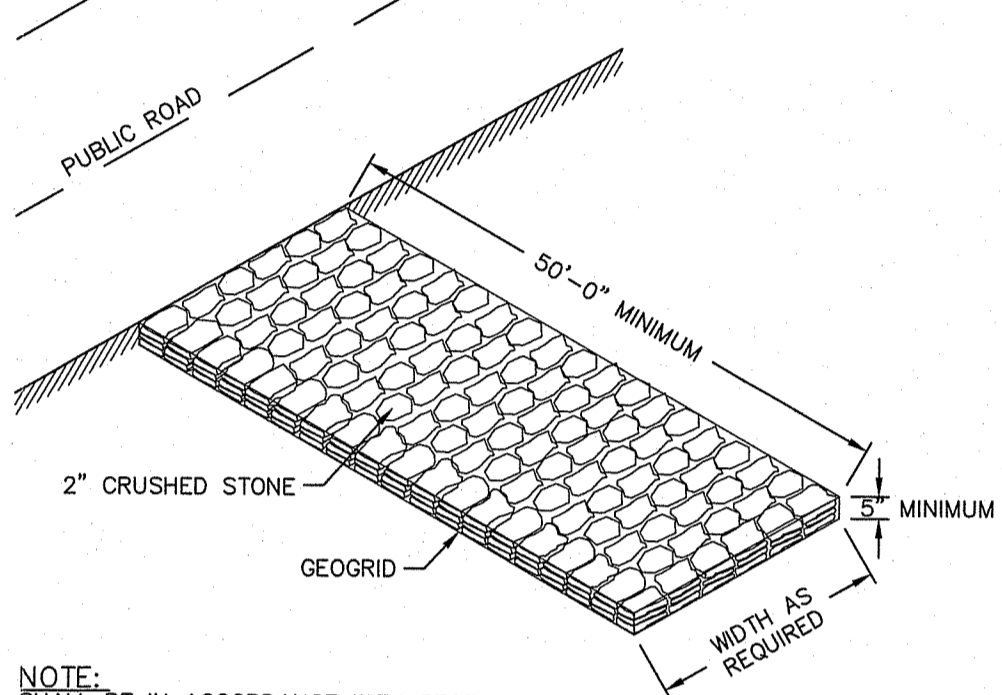
DENSE GRADED CAULKED STONE FOR SUBBASE:
 A. Dense graded caulked stone for subbase shall consist of clean, hard, uniformly graded, rounded stone. It shall be sufficiently free from dirt, deleterious material, and pieces that are structurally weak and shall meet the following requirements:
 B. Source of material shall be shall obtained from areas stripped and cleaned of soil and debris before blinding.
 C. Material coarser than the 4.75 mm (No. 4) sieve shall not be more than 35 percent, by mass (weight), of this and/or elongated pieces.

- SOURCES:**
 • Surfacing Typical and Surfacing Specs.: Derived from USDA NRCS drawing "Access Road; ME-ENG-AR1"
 • Profile Typical: Derived from USDA Forest Service Publication "Forest Road Construction and Maintenance"
 • Material Specs.: Derived from VTrans 704.06 Subbase

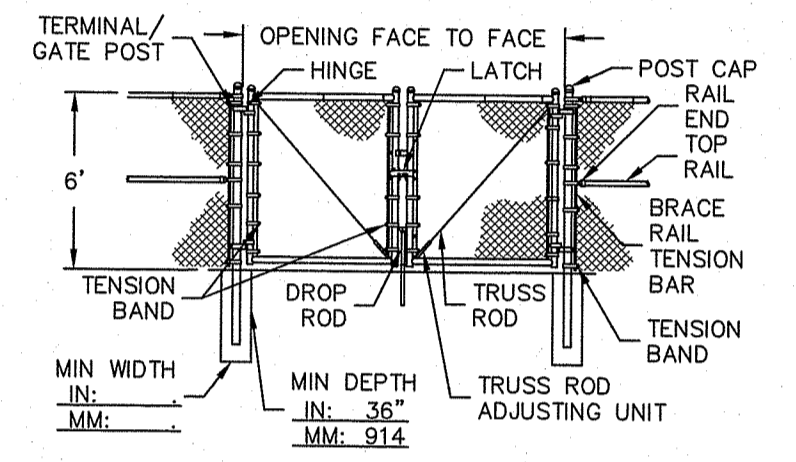
Permeable Access Detail
NOT TO SCALE



Fence Detail
NOT TO SCALE

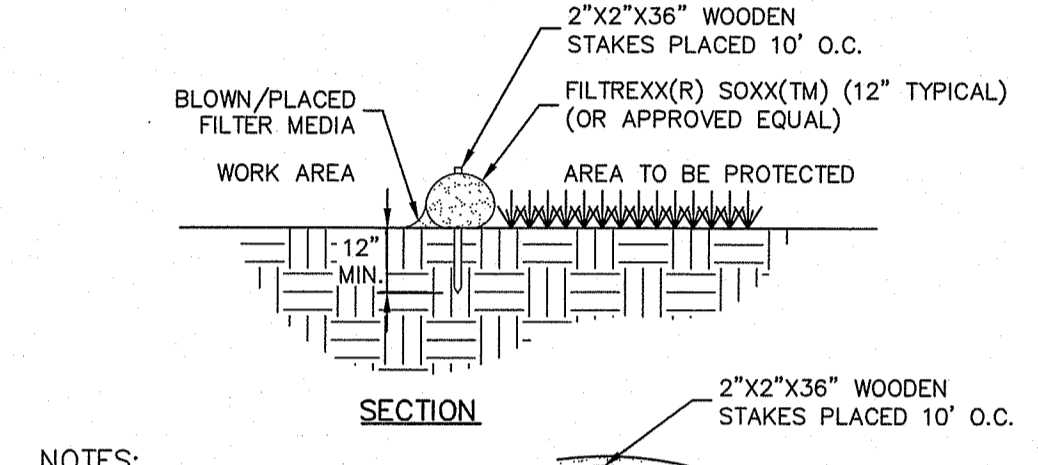


Construction Access
NOT TO SCALE



NOTE:
 1. METRIC DIMENSIONS ARE NOMINAL EQUIVALENTS TO U.S. DIMENSIONS.
 2. SPECIFICATIONS SHOWN CAN BE CHANGED BY THE MANUFACTURER ONLY.
 3. FOOTING WIDTH TO BE (4)X POST WIDTH.

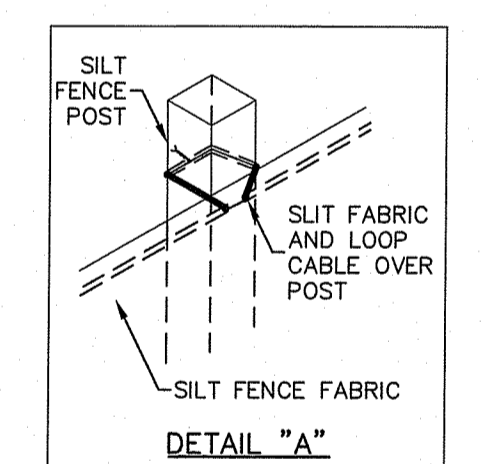
Double Swing Gate 6-16' Opening
NOT TO SCALE



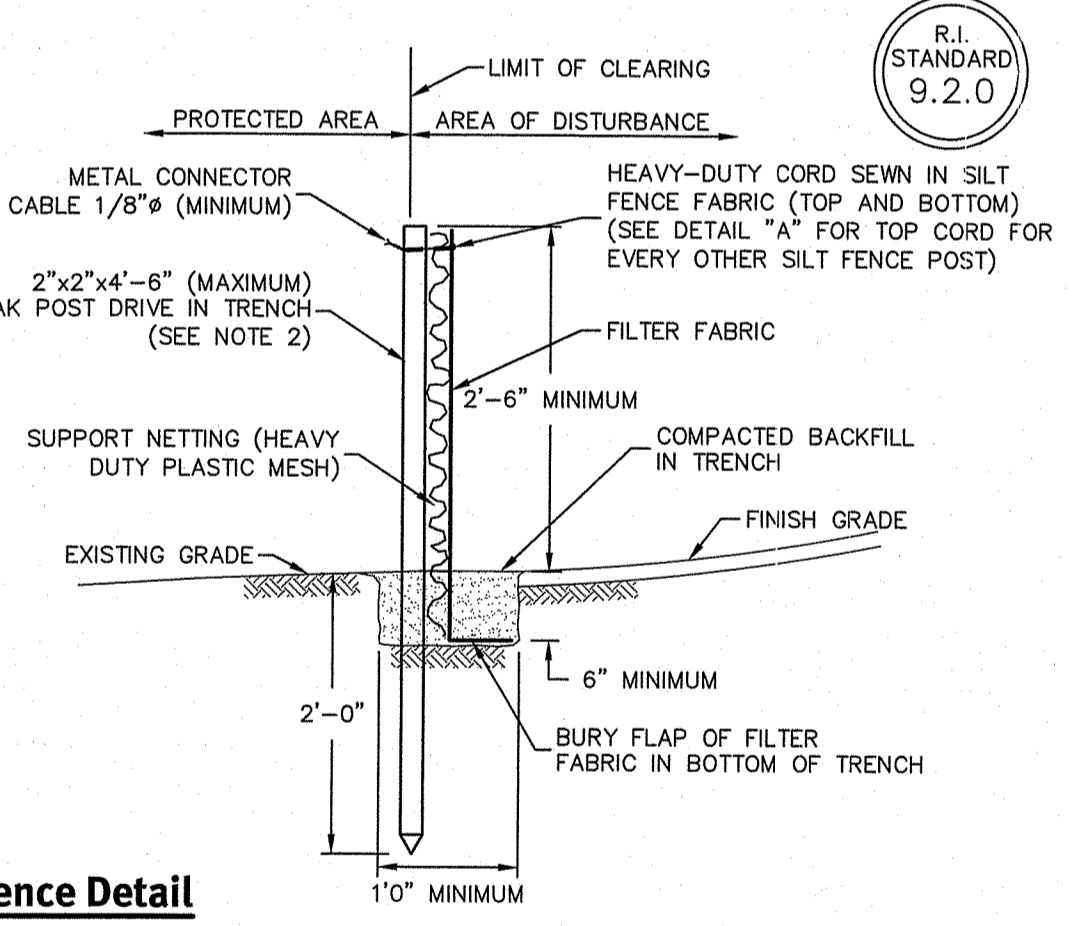
NOTES:
 1. ALL MATERIAL TO MEET FILTREXX(R) SPECIFICATIONS.
 2. FILTER MEDIA(TM) FILL TO MEET APPLICATION REQUIREMENTS.
 3. COMPOST MATERIAL TO BE DISPERSED ON SITE, AS DETERMINED BY ENGINEER. STAKES ARE NOT TO BE USED IN PAVEMENT AREAS.
 4. SELF WEIGHT OF FILTREXX SYSTEM IS ADEQUATE TO PREVENT SYSTEM MOVEMENT ONCE POSITIONED ALONG AREA SHOWN ON THE PLANS.
 5. CONTRACTOR TO PLACE FILTREXX SEDIMENT CONTROL OR APPROVED EQUAL AROUND ALL CURB INLET LOCATIONS AS SPECIFIED ON PLANS.

Filtrexx Sediment Control (or Approved Equal)
NOT TO SCALE

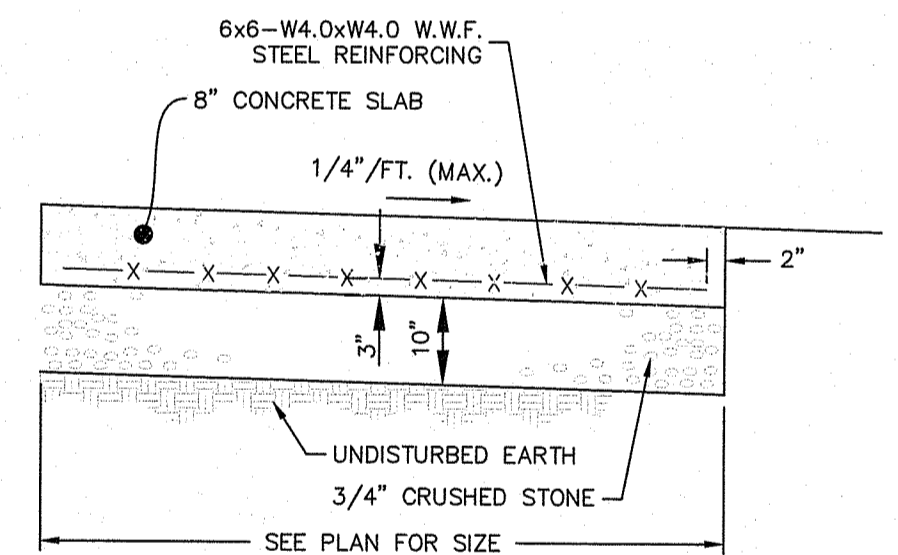
- NOTES:**
 1. SHALL BE IN ACCORDANCE WITH SECTION 206 OF THE R.I. STANDARD SPECIFICATIONS.
 2. 2"x2"x4"-6" (MAXIMUM) OAK POSTS FOR SILT FENCE SHALL BE LOCATED 8'-0" (MAXIMUM) O.C. IN WETLAND AREAS AND 4'-0" (MAXIMUM) O.C. IN WETLAND RAVINE, GULLY OR DROP-OFF AREAS AS SHOWN ON PLANS.
 3. 1"x1"x4"-6" (MINIMUM) POSTS PERMITTED FOR PRE-FABRICATED SILT FENCE.
 4. SILT FENCE SHALL BE INSTALLED BEFORE ANY GRUBBING OR EARTH EXCAVATION TAKES PLACE.



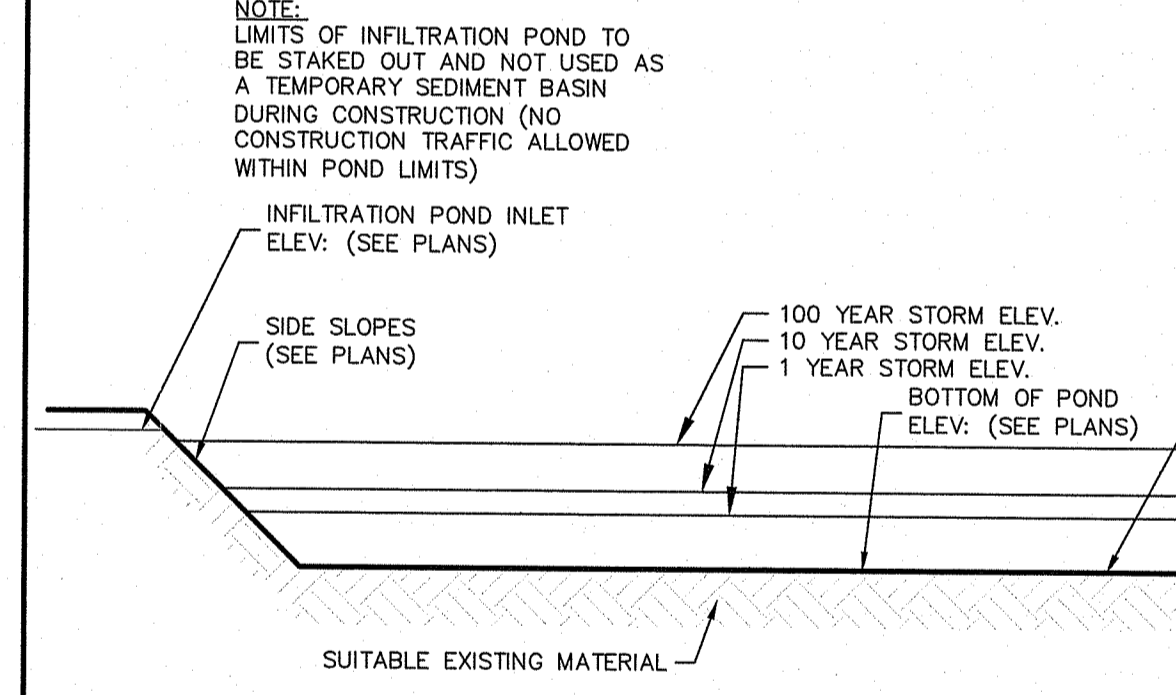
Silt Fence Detail
NOT TO SCALE



R.I. STANDARD 9.2.0



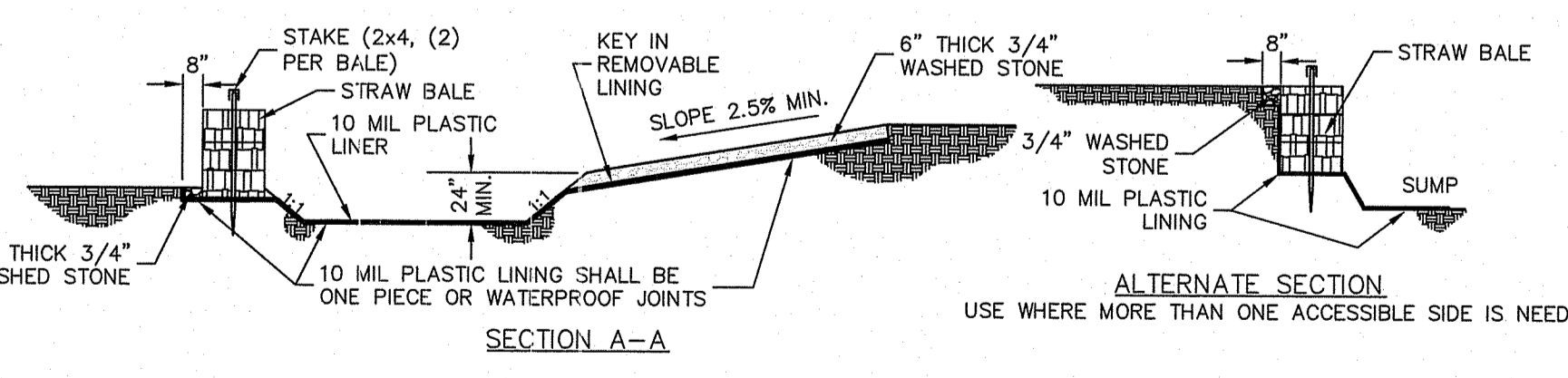
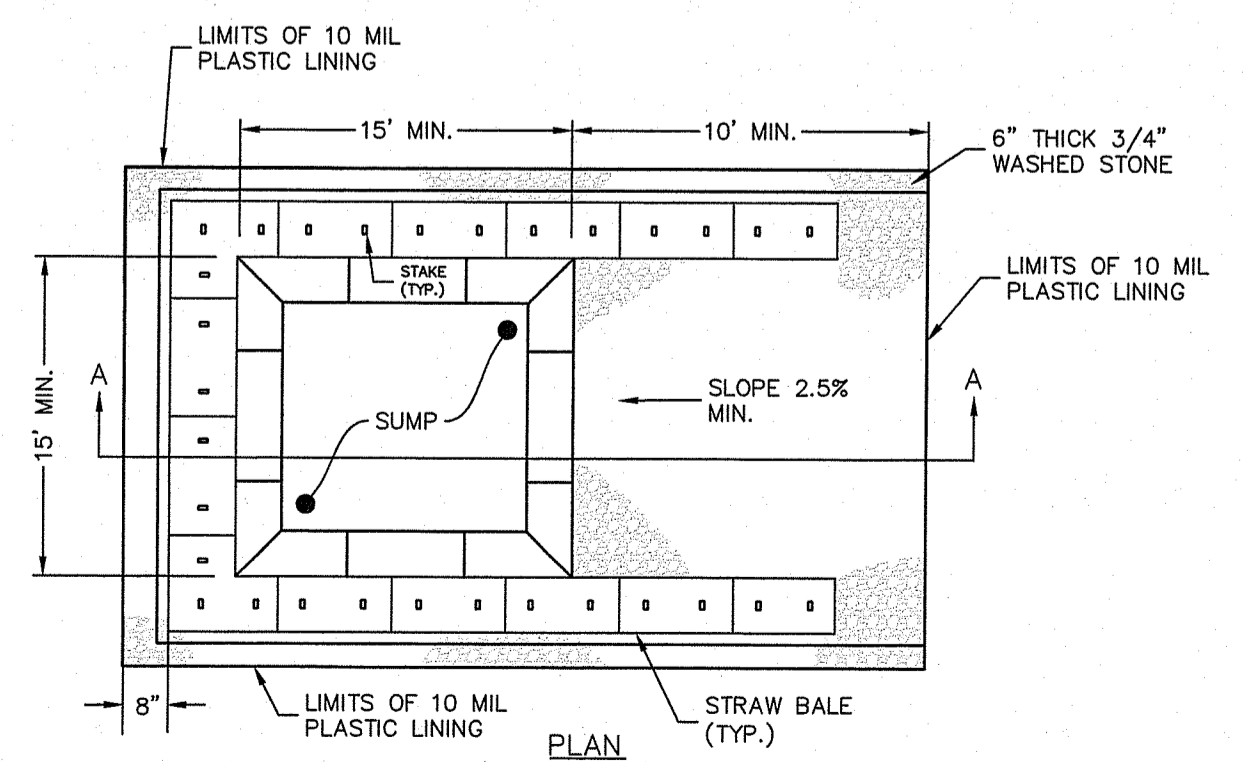
Typical Concrete Equipment Pad
NOT TO SCALE



Infiltration Pond
NOT TO SCALE

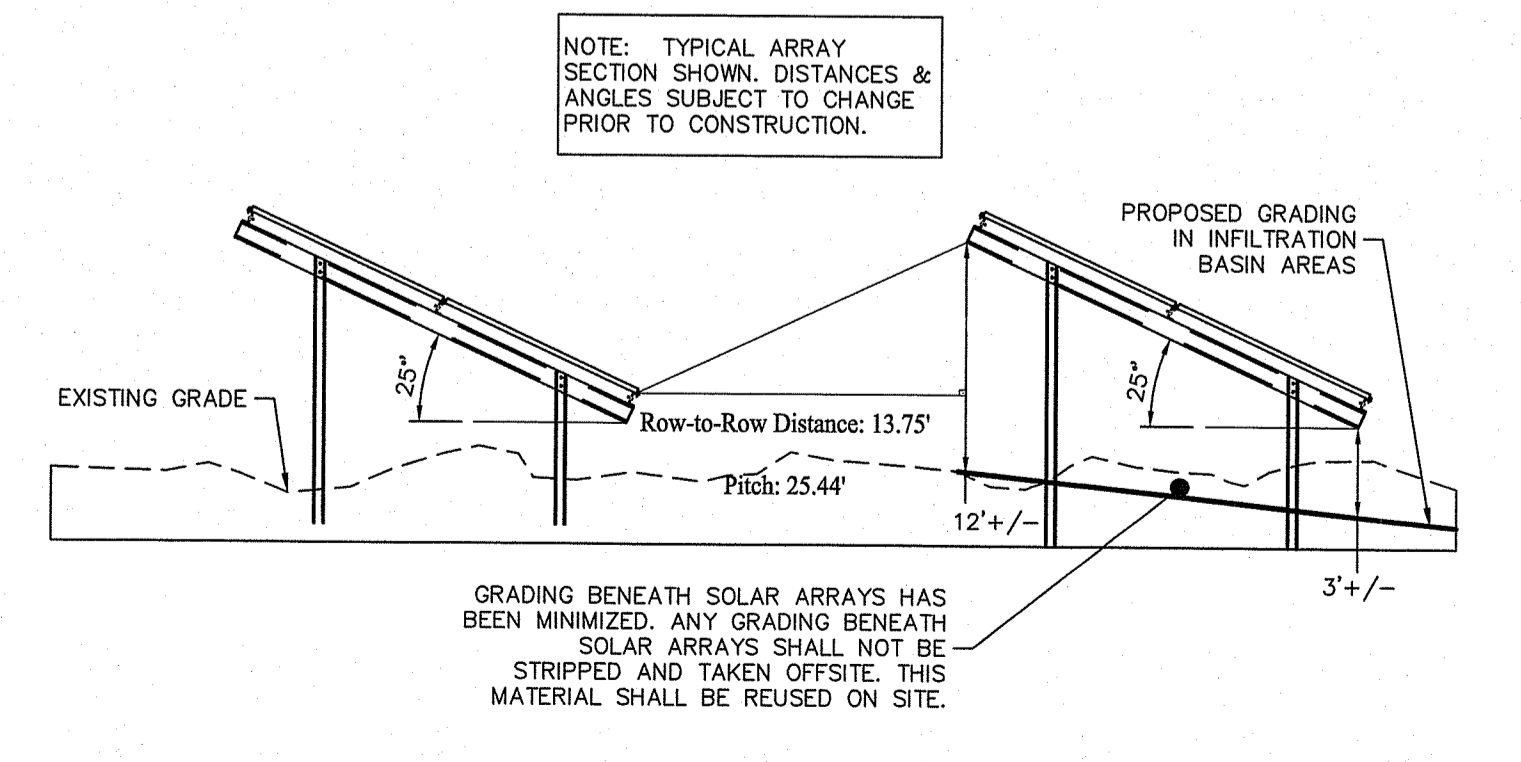
DESCRIPTION	BMP-2	BMP-3
TOP OF POND ELEVATION	96	98
100 YEAR STORM ELEVATION	95.31	97.15
10 YEAR STORM ELEVATION	94.14	96.84
1 YEAR STORM ELEVATION	93.10	96.01
BOTTOM OF POND ELEVATION	92	96
SEASONAL HIGH GWT ELEVATION	85.3	89.9
SOIL EVALUATION	TH-2	TH-4

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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 APPROVED PLANS MUST BE AT CONSTRUCTION SITE



CONCRETE WASHOUT AREA
NOT TO SCALE

- NOTES:**
 1. PIT IS SPECIFICALLY DESIGNATED, DIKED AND IMPERVIOUS CONTAINMENT TO PREVENT CONTACT BETWEEN CONCRETE WASH AND STORMWATER.
 2. WASH WATER SHALL NOT BE ALLOWED TO FLOW TO SURFACE WATER.
 3. FACILITY MUST HOLD SUFFICIENT VOLUME TO CONTAIN CONCRETE WASTE WITH A MINIMUM FREEBOARD OF 12".
 4. FACILITY SHALL NOT BE FILLED BEYOND 95% CAPACITY UNLESS A NEW FACILITY IS CONSTRUCTED.
 5. SAW CUT PORTLAND CEMENT CONCRETE, RESIDUE FROM SAWCUT & GRINDING TO BE DISPOSED OF IN THE PIT.
 6. CONCRETE WASHOUTS SHALL BE LOCATED A MINIMUM OF 100' FROM DRAINAGE WAYS, INLETS, & SURFACE WATERS.
 7. MANUFACTURED CONCRETE WASHOUT DEVICES MAY BE USED IF REMOVED FROM THE SITE WHEN 95% FULL CAPACITY.



Onsite Grading Material and PV Array Distance Scheme - Tilt, Angle, and Shading Detail
NOT TO SCALE

DiPrete Engineering
 Two Stafford Court Cranston, RI 02920
 Tel: 401-943-1000 Fax: 401-464-6606 www.diprete-eng.com
 BOSTON • PROVIDENCE • NEWPORT

KEVIN DEMERS
 REGISTERED PROFESSIONAL ENGINEER
 CIVIL

This regulatory submission set shall not be used for construction purposes unless stamped "Issued for Construction" and signed by a DiPrete Engineering representative.
 The contractor is responsible for all of the means, methods, safety precautions and requirements, and OSHA compliance in the implementation of this plan and design.
 Design By: K.J.D.

Detail Sheet
Wingover Solar Farm
 Prepared for: 1519 Crandall Road LLC c/o AMERESCO & Douglas Enterprises, Ltd.
 c/o Kileo Talladous, Director of Development, 111 Sheep Street, Suite 401, Framingham, MA 01701 / tel: 508-665-2263
 DE Job No: 0881-058 Copyright 2019 by DiPrete Engineering Associates, Inc.
 SHEET 8 OF 11

- NOTES:**
- GENERAL:**
1. THE EXISTING SITE INFORMATION WAS TAKEN FROM A PLAN PREPARED BY AMERESCO, TITLED 'TIVERTON RI GROUND MOUNT - OVERALL ARRAY LAYOUT', AT A SCALE OF 1" = 100', DATED JUNE 25, 2018, AND FROM OBSERVATIONS PERFORMED BY JOHN C. CARTER & CO.
 2. ANY PROPERTY LINES DEPICTED ON THIS PLAN ARE PICTORIAL ONLY. THIS PLAN IS TO BE USED FOR THE SELECTION, LOCATION AND INSTALLATION OF LANDSCAPE MATERIALS ONLY AND IS NOT TO BE USED FOR ANY OTHER PURPOSE.
 3. WRITTEN DIMENSIONS AND SPECIFICATIONS SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS.
 4. THE LOCATION OF UTILITIES IF SHOWN ON THIS PLAN ARE APPROXIMATE ONLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY THE LOCATION OF ALL UTILITIES BEFORE ANY EXCAVATION. DIG-SAFE SHALL BE CONTACTED AT LEAST 72 HOURS BEFORE EXCAVATION. DIG-SAFE CAN BE REACHED AT 1-888-344-7233.



- PLANTING:**
1. PROVIDE QUALITY PLANTS IN THE GENUS, SPECIES AND VARIETY INDICATED IN THE PLANT SCHEDULE, COMPLYING WITH APPLICABLE REQUIREMENTS OF 'ANSI Z601 AMERICAN STANDARD FOR NURSERY STOCK.'
 2. PROVIDE PLANTS IN THE SIZE AND NUMBER INDICATED IN THE PLANT SCHEDULE. PLANTS SHALL BE GROWN IN NURSERIES LOCATED IN THE NORTHEASTERN U.S.
 3. DELIVER FRESH DUG TREES & SHRUBS WHICH ARE BALLED AND BURLAPPED. ALL PLANTS ARE TO BE HEALTHY, VIGOROUS AND FREE OF INSECTS AND DISEASE.
 4. PLANTS ARE TO BE INSTALLED AS SPECIFIED IN THE PLANTING DETAILS WITH ADEQUATE WATER PROVIDED DURING PLANTING TO ALLOW COMPACTION OF THE PLANTING SOIL TO PREVENT ANY AIR POCKETS OR SETTLEMENT AFTER PLANTING.
 5. ALL PLANTING BEDS ARE TO BE COVERED WITH 2" SHREDDED BARK MULCH.
 6. AFTER THE TREES ARE PLANTED, ANY DISTURBED SURFACE NOT COVERED BY PLANTS OR MULCH SHALL BE LOAMED AND SEEDED WITH A CONSERVATION SEED MIX.
 7. ALL TREES ARE TO BE STAKED AS SHOWN IN THE PLANTING DETAILS. TREES ARE TO REMAIN PLUMB AND SHALL BE ADJUSTED AS NEEDED. ALL STAKES AND ARBOR TIES ARE TO BE MAINTAINED AND ADJUSTED TO PREVENT GIRDLING OF THE TRUNK AND REMOVED WHEN NO LONGER NEEDED.
 8. RECOMMENDED PLANTING DATES ARE APRIL 15 TO JUNE 15 AND SEPTEMBER 15 TO NOVEMBER 15.
 9. PLANT SUBSTITUTIONS SHALL BE ALLOWED BASED ON AVAILABILITY. SUBSTITUTIONS MAY BE MADE ONLY WITH DIRECT APPROVAL FROM THE LANDSCAPE ARCHITECT OR OWNER.

POLLINATOR PLANTS

A SELECTION OF SHRUBS AND HERBACEOUS PERENNIALS, NOTED BY THE NE WILD FLOWER SOCIETY AS POLLINATOR PLANTS, ARE PROPOSED TO PROVIDE FOOD AND SHELTER FOR POLLINATORS SUCH AS BEES AND BUTTERFLIES.

- MAINTENANCE & WARRANTY:**
1. THE CONTRACTOR SHALL WARRANTY ALL PLANTS FOR A PERIOD OF ONE YEAR AFTER THE DATE OF SUBSTANTIAL COMPLETION AGAINST DEFECTS INCLUDING DEATH AND UNSATISFACTORY GROWTH.
 2. AFTER PLANTING IS COMPLETED, THE OWNER SHALL BE RESPONSIBLE TO PROVIDE ADEQUATE WATER TO ENSURE HEALTHY AND VIGOROUS GROWTH.
 3. ANY PLANT WHICH IS NOT HEALTHY AND GROWING VIGOROUSLY AFTER ONE YEAR SHALL BE REPLACED BY THE CONTRACTOR IN CONFORMANCE WITH THE PLANTING SPECIFICATIONS.
 4. IF NECESSARY, THE CONTRACTOR SHALL OVERSEED OR SOD ANY AREAS WHICH ARE NOT SUBSTANTIALLY COVERED BY ADEQUATE GRASS GROWTH FOR ONE YEAR AFTER THE INITIAL SEED APPLICATION.

PLANT SCHEDULE *

BOTANICAL NAME	COMMON NAME	SIZE	SPACING	NOTES
EVERGREEN TREES				
PICEA ABIES	NORWAY SPRUCE	9' HT.	11-21' O.C.	B4B
JANIFERUS VIRGINIANA	EASTERN RED CEDAR	9' HT.	11-21' O.C.	B4B
DECIDUOUS TREES				
ACER RUBRUM	RED MAPLE	1-1/2 - 2" GAL.	11-21' O.C.	B4B
SHRUBS				
VIBURNUM DENTATUM	ARROWOOD VIBURNUM	24-30" HT.	10' O.C.	B4B
MORELLA PENNSYLVANICA	BAYBERRY	24-30" HT.	10' O.C.	B4B
CLETHRA ALNIFOLIA	SWEET PEPPERBUSH	24-30" HT.	8' O.C.	B4B

* PLANTS HAVE BEEN SELECTED FROM THE URI RHODE ISLAND NATIVE PLANT GUIDE DATABASE.

WILDFLOWER SEED MIX

AREAS ON THE PLAN LABELED 'WILDFLOWER SEED MIX' SHALL BE SEEDED WITH 'NE SHOWY WILDFLOWER MIX' (OR APPROVED EQUAL) AVAILABLE AT NEW ENGLAND WETLAND PLANTS, (WWW.NEWP.COM, PHONE: 418-548-8000)

TOWN OF TIVERTON, RHODE ISLAND

ARTICLE XXIV. - SOLAR PHOTOVOLTAIC SYSTEM DEVELOPMENTS

SECTION 1. - DESIGN AND OPERATION STANDARDS: GROUND ARRAY SOLAR ENERGY SYSTEMS

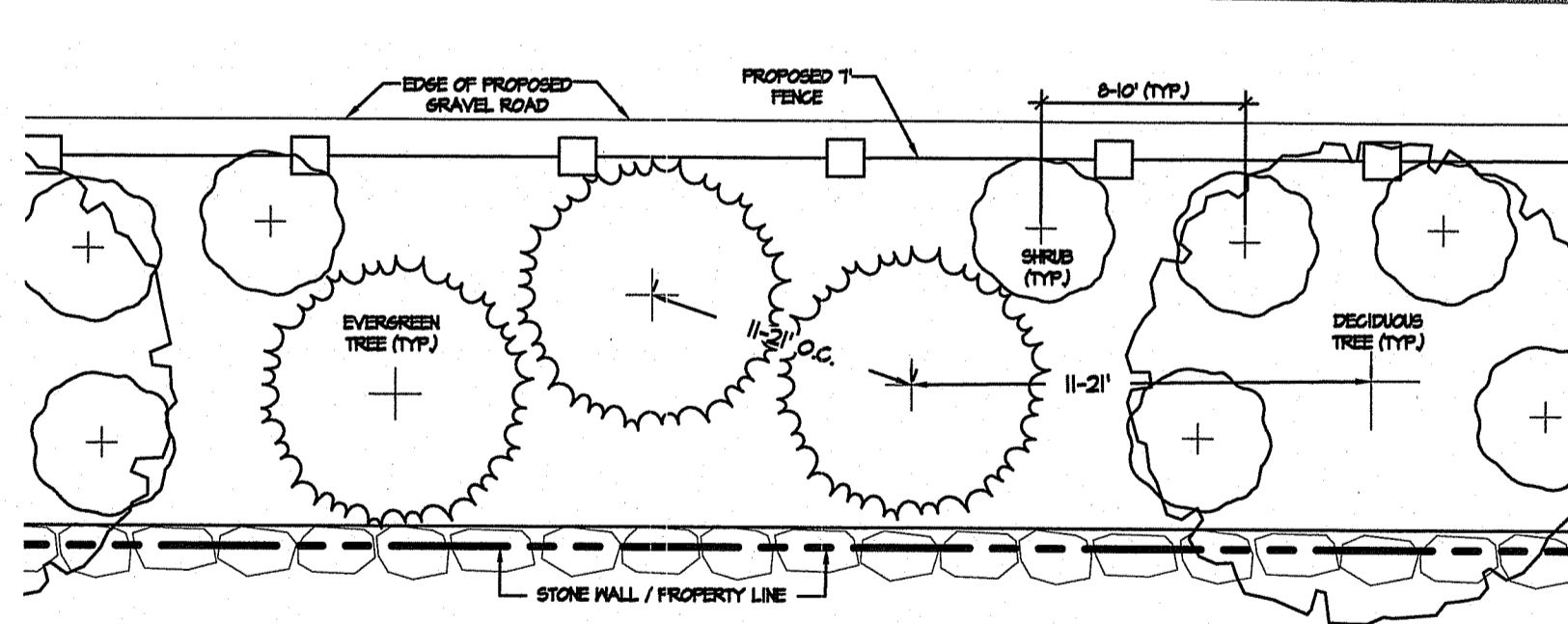
6. SCREENING: CONSISTS OF NATURAL PLANTINGS OR LANDSCAPING DESIGNED TO SCREEN THE INSTALLATION BUT NOT IMPEDE ITS SOLAR ENERGY CAPTURE EFFICIENCY. A NEWLY LANDSCAPED VEGETATIVE BUFFER SHALL CONSIST OF PLANTS FROM THE RHODE ISLAND NATIVE PLANT DATA BASE AND THE LANDSCAPE PLAN SHALL BE PREPARED BY A REGISTERED LANDSCAPE ARCHITECT. A VEGETATIVE BUFFER SHALL BE A MINIMUM OF SIX (6) FEET IN HEIGHT.

(2) MEDIUM AND LARGE SOLAR ENERGY SYSTEMS SHALL MAINTAIN ANY EXISTING VEGETATIVE BUFFER OF TWENTY (20) FEET WITHIN THE REQUIRED SETBACK. IF NEW PLANTINGS ARE REQUIRED TO SCREEN THE INSTALLATION, THE APPLICANT SHALL PLANT NEW PLANTINGS OF SUFFICIENT DEPTH TO SCREEN THE INSTALLATION FROM THE ROADWAY AND SHALL BE APPROVED BY THE PLANNING BOARD.

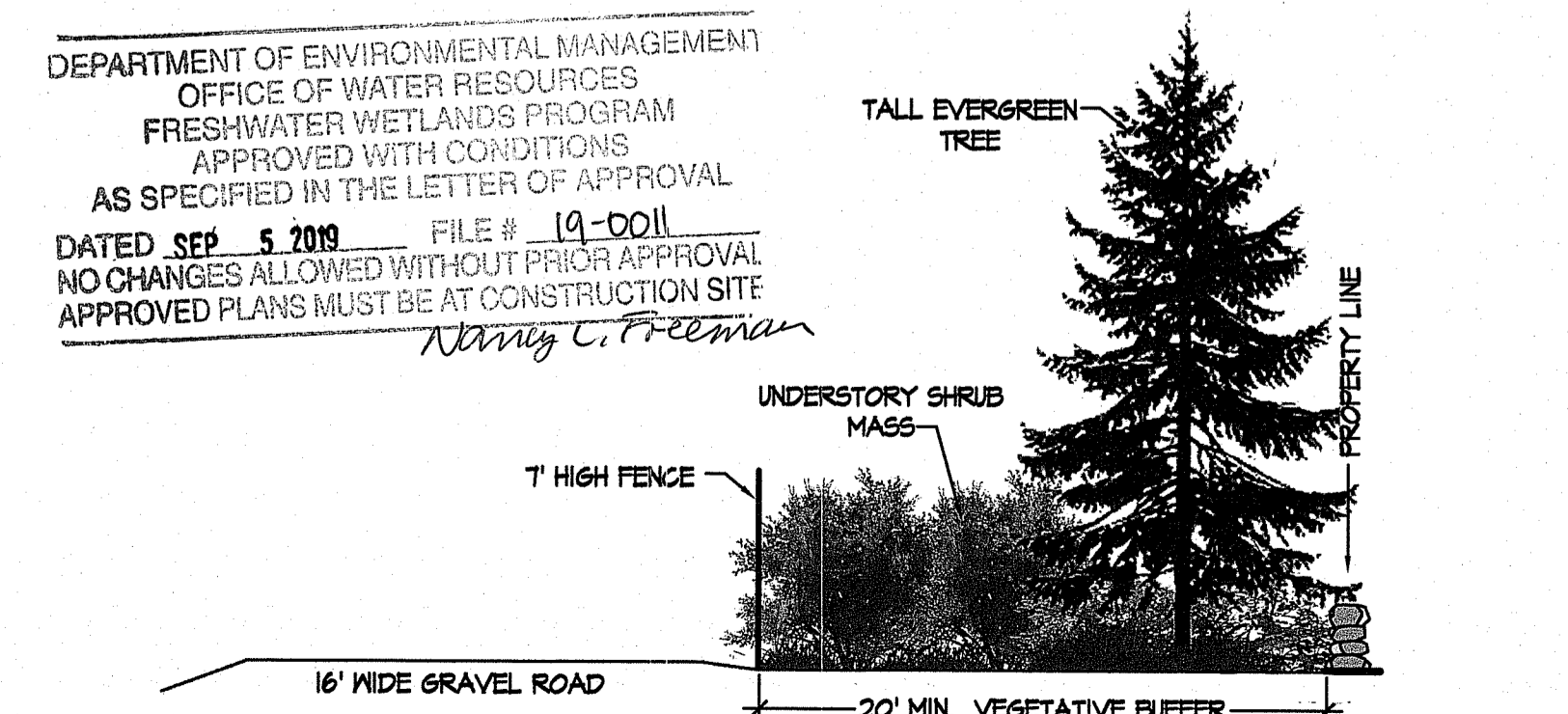
A NATURAL VEGETATED BUFFER AT LEAST 20 FEET WIDE IS PROVIDED WITHIN THE REQUIRED SETBACK AS A LANDSCAPE SCREEN. THE EXISTING VEGETATION WITHIN THIS 20 FOOT BUFFER AREA WILL REMAIN AND NEW PLANTINGS, A MINIMUM OF SIX (6) FEET IN HEIGHT WITH A SHRUB UNDERSTORY, ARE PROPOSED WHERE NEEDED TO PROVIDE ADDITIONAL SCREENING. ALL NEW PLANTINGS HAVE BEEN CHOSEN FROM THE URI RHODE ISLAND NATIVE PLANT DATABASE.

f. SECURITY: MEDIUM AND LARGE SOLAR ENERGY SYSTEMS SHALL SURROUND THE PERIMETER OF THE INSTALLATION WITH NO LESS THAN SEVEN (7) AND NO MORE THAN TEN (10) FEET IN HEIGHT OF FENCING.

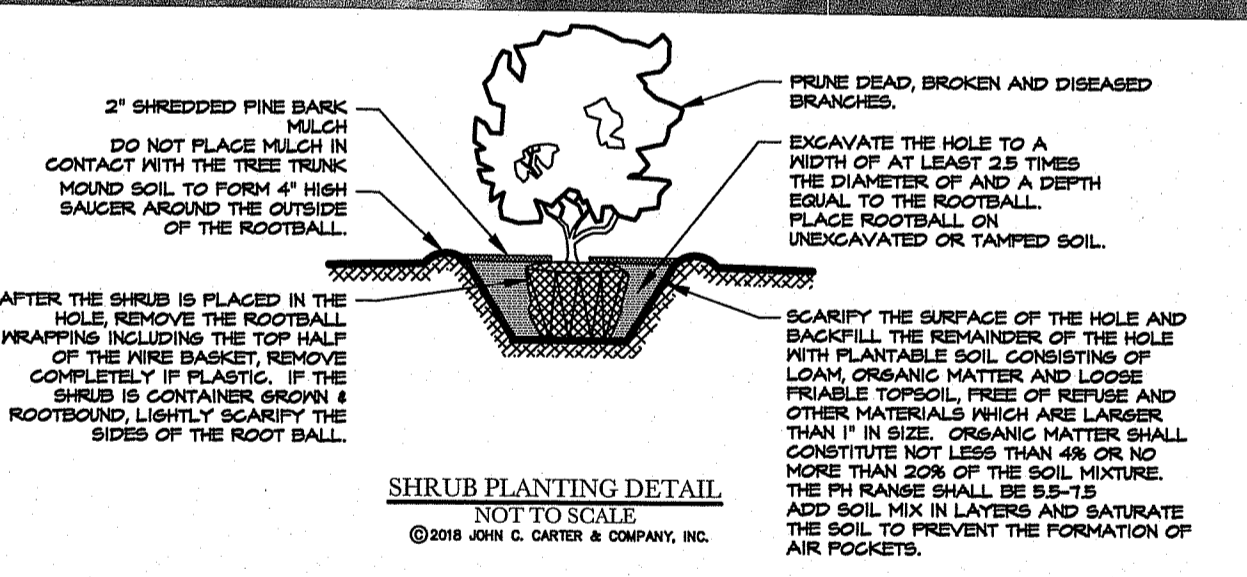
A SEVEN (7) FOOT HIGH FENCE SURROUNDING THE PERIMETER OF THE INSTALLATION IS PROPOSED.



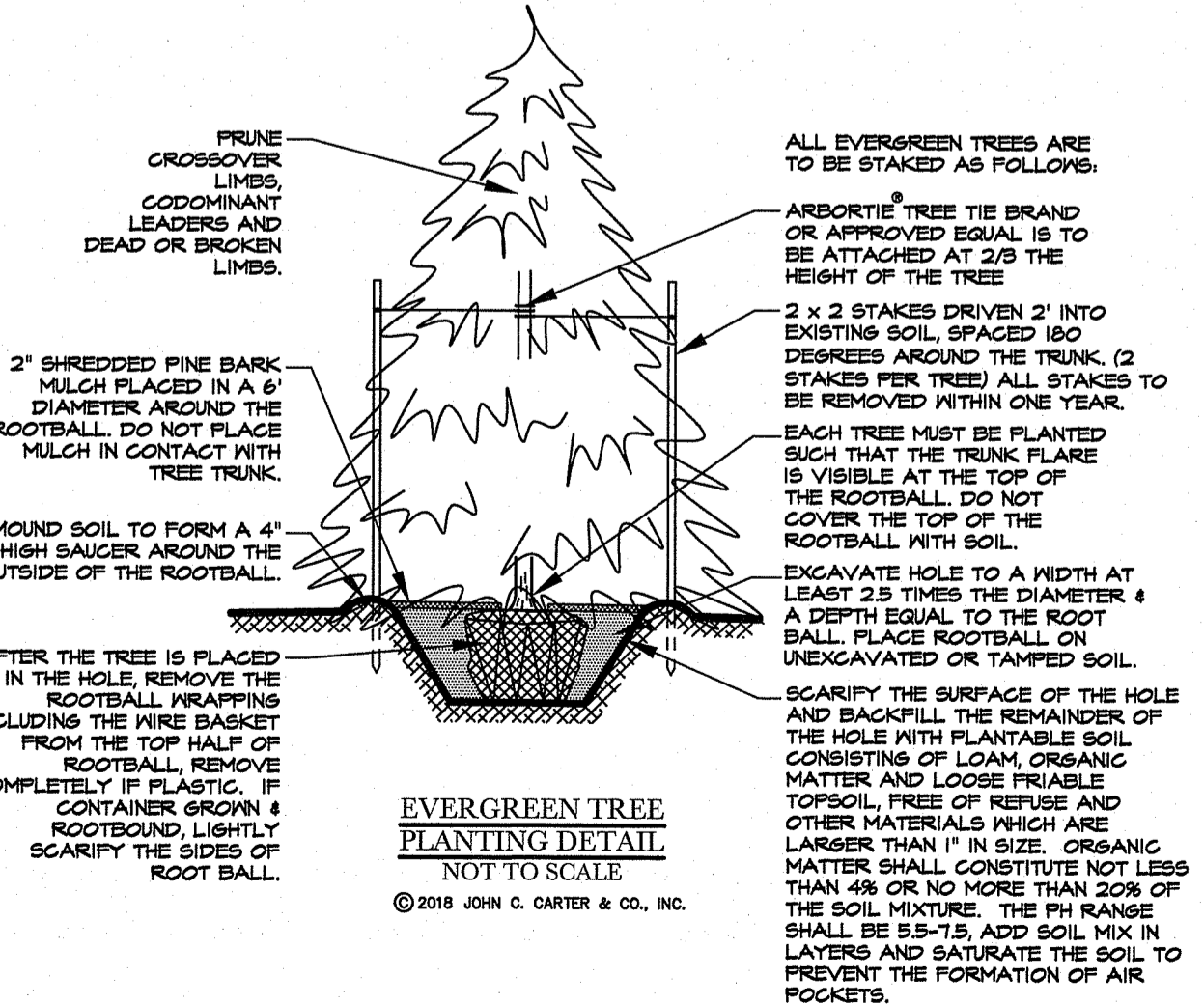
1 TYPICAL PLANTING LAYOUT
SCALE: 1" = 10'



2 TYPICAL CROSS SECTION
SCALE: NOT TO SCALE



SHRUB PLANTING DETAIL
NOT TO SCALE
© 2018 JOHN C. CARTER & COMPANY, INC.



EVERGREEN TREE PLANTING DETAIL
NOT TO SCALE
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BUFFER PLANTING PLAN

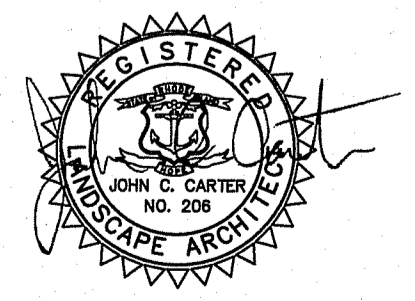
JOHN C. CARTER & CO., INC.
960 BOSTON NECK RD. NARRAGANSETT, RI
(401) 783-3500
LANDSCAPE ARCHITECTURE
DESIGN & BUILD

PREPARED FOR:
WINGOVER SOLAR FARM, TIVERTON, RI
APPLICANT:
15 RANDALL ROAD, LLC C/O AMERESCO
111 Speen Street, Suite 410, Framingham, MA 01701

ISSUED FOR PERMITTING

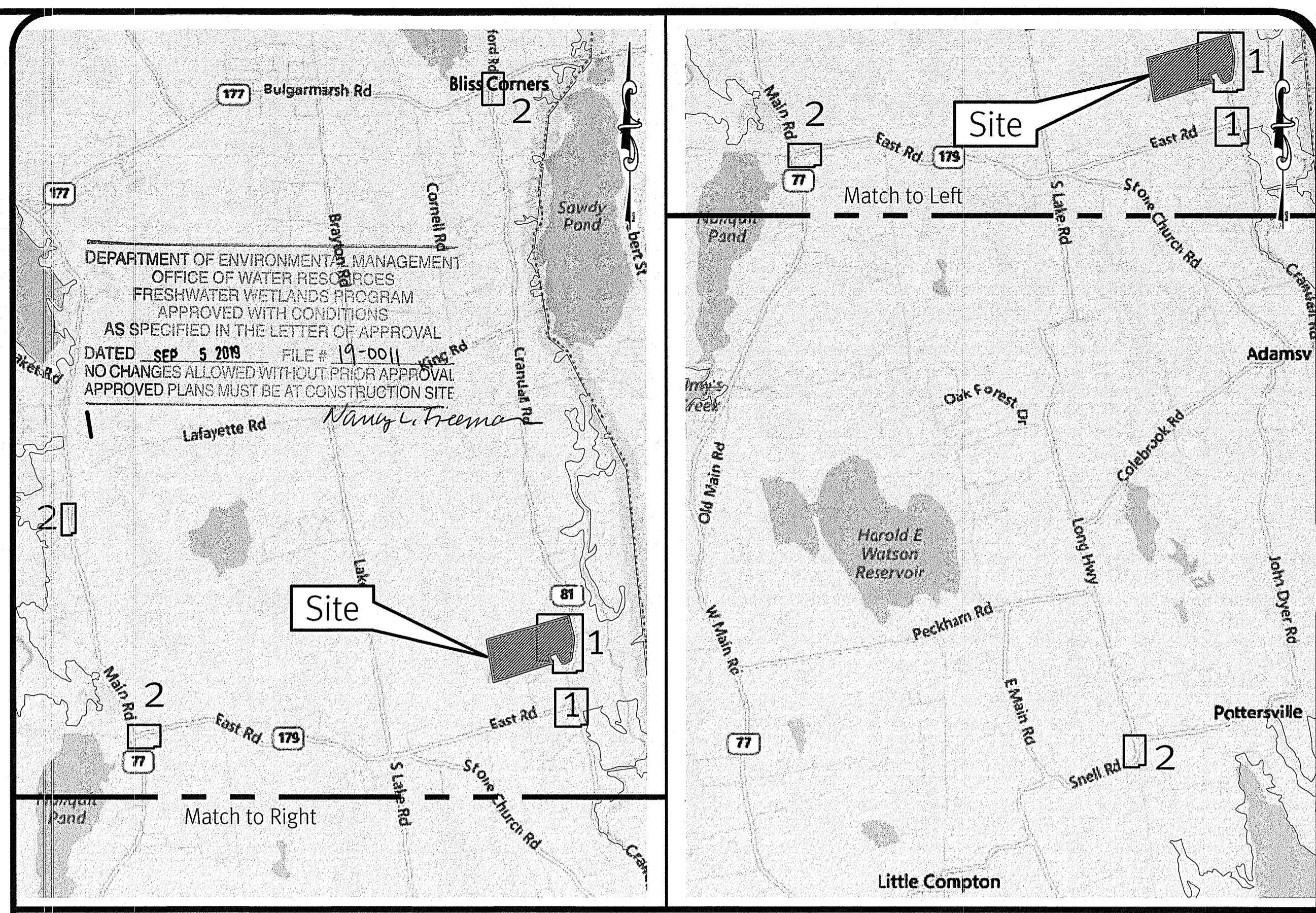
REVISIONS
8-14-18 Updated per engineer's plan.
8-29-18 Per Town comments.

SCALE: 1" = 100'
DATE: July 23, 2018



SHEET NUMBER
1 OF 1

z:\demain\projects\0681-058 crandall road wing-over farms\autocad drawings\0681-058-extr-pole locations.dwg Plotted: 8/19/2019



Legend

- APPROXIMATE STREAM OR RIVER LOCATION
- 200' RIVERBANK WETLAND
- 100' RIVERBANK WETLAND
- 50' PERIMETER WETLAND
- APPROXIMATE WETLAND LINE WETLAND AREA
- EXISTING UTILITY POLE TO BE REPLACED OR NEW POLE (SEE CALL OUT)
- ASSESSORS LINE

DiPrete Engineering
 Two Stafford Court Cranston, RI 02920
 tel: 401-943-1000 fax: 401-664-6066 www.diprete-eng.com

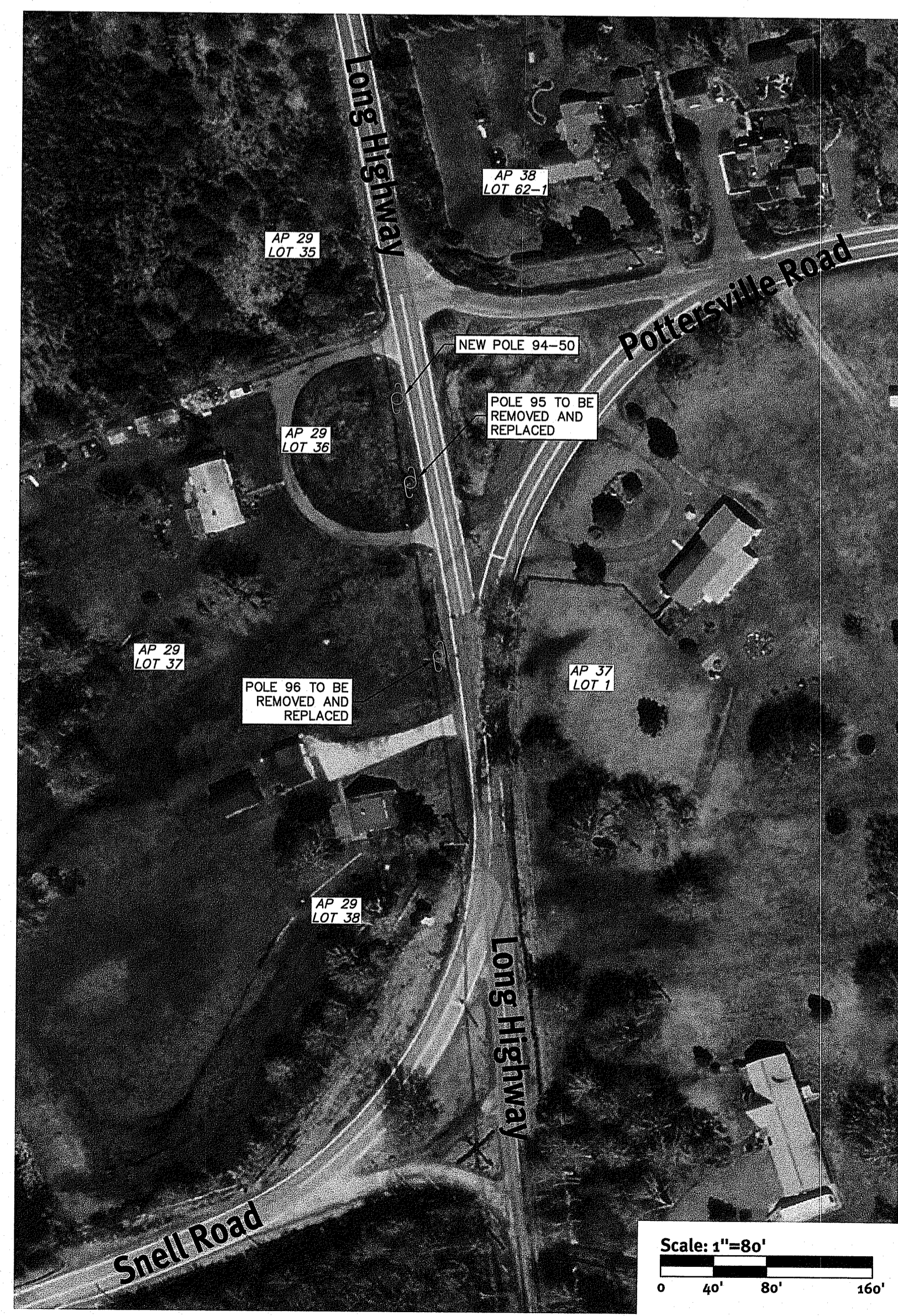
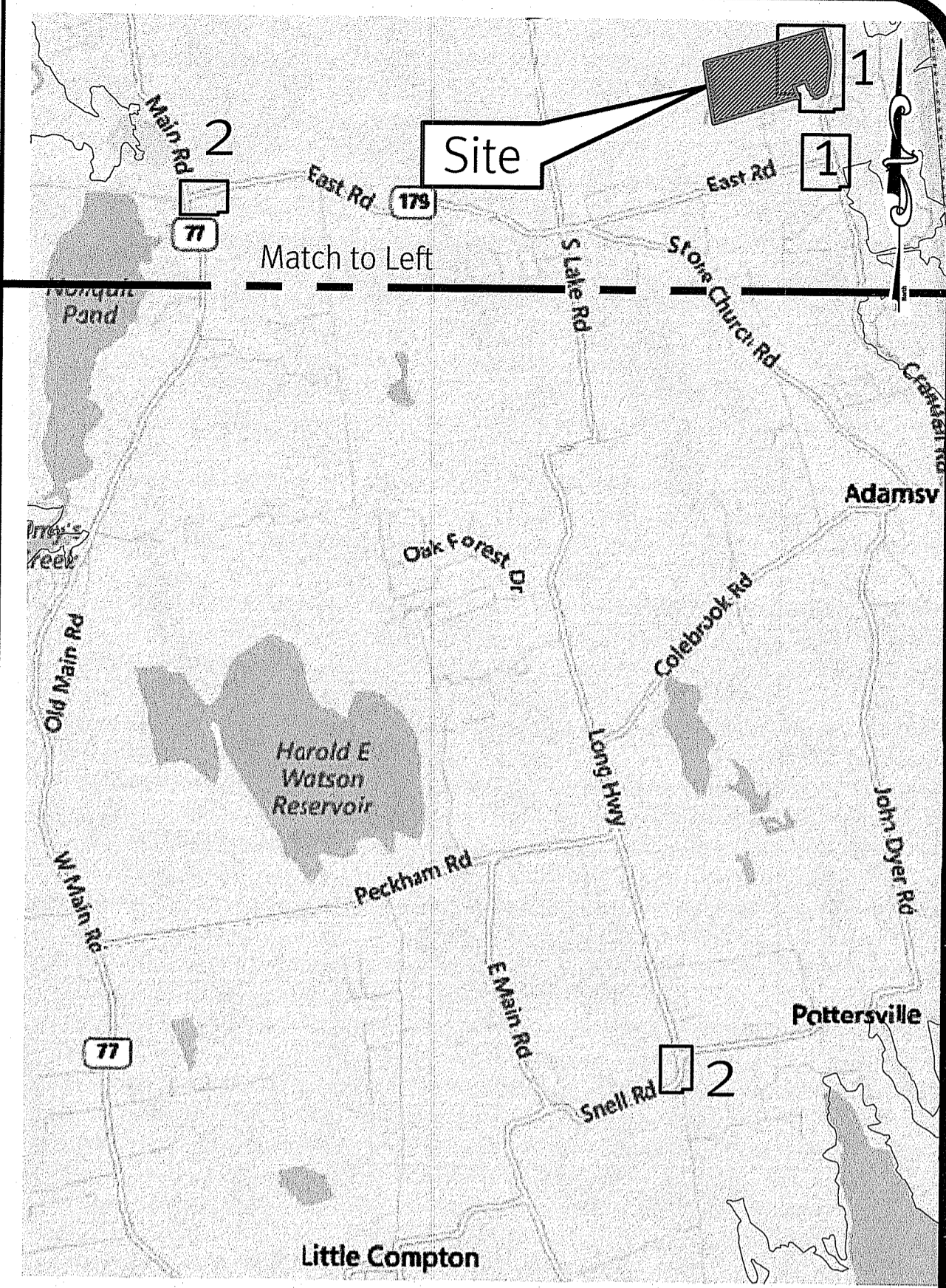
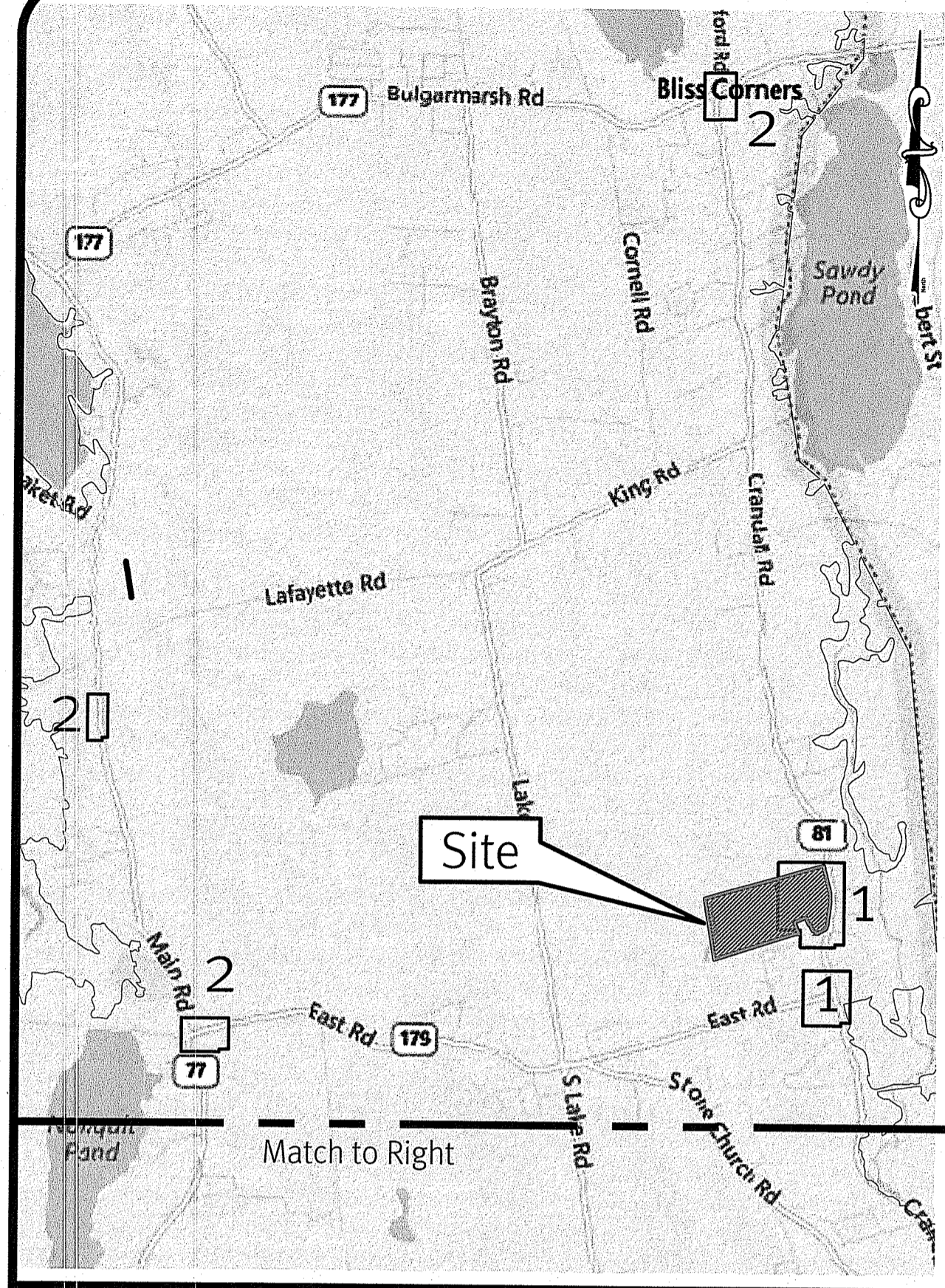
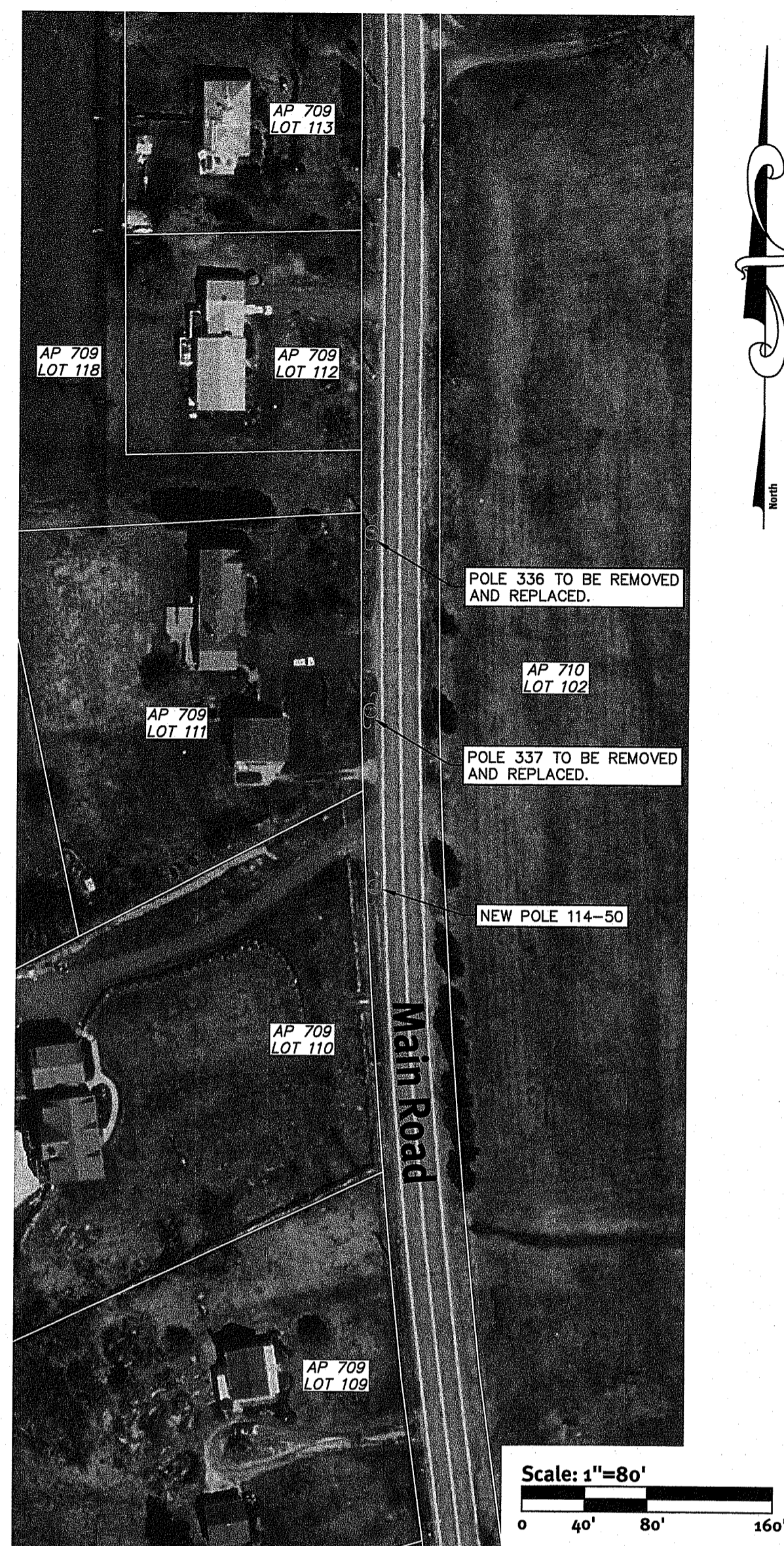
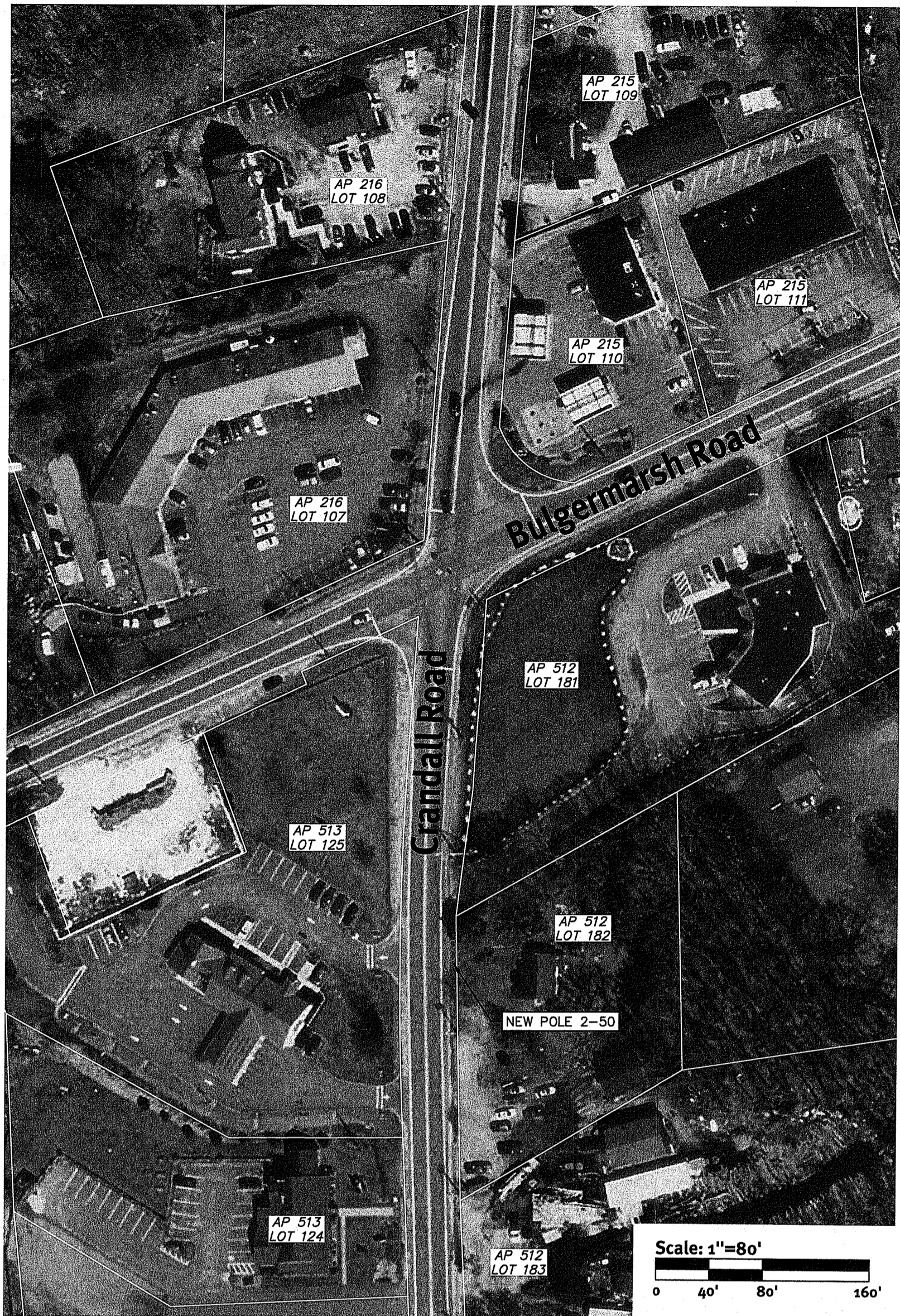
KEVIN DEMERS
 REGISTERED PROFESSIONAL ENGINEER CIVIL

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 The contractor is responsible for all of the means, methods, safety precautions and requirements, and OSHA compliance in the implementation of this plan and design.

Approved: 10/9/2019
 Office of Water Resources
 No. 1818
 Design By: MA-H

Pole Locations - Exhibit 1
Wingover Solar Farm
 Prepared for:
1519 Crandall Road LLC c/o AMERESCO & Douglas Enterprises, Ltd.
 c/o KEO Talladourous, Director of Development
 111 Speen Street, Suite 100 Framingham, MA 01701 / tel: 508-665-2263

SHEET 10 OF 11



- Legend**
- APPROXIMATE STREAM OR RIVER LOCATION
 - 200' RIVERBANK WETLAND
 - 100' RIVERBANK WETLAND
 - 50' PERIMETER WETLAND
 - APPROXIMATE WETLAND LINE WETLAND AREA
 - EXISTING UTILITY POLE TO BE REPLACED OR NEW POLE (SEE CALL OUT)
 - ASSESSORS LINE

DiPrete Engineering
 Two Stafford Court Cranston, RI 02920
 Tel: 401-943-1000 Fax: 401-464-6066 www.diprete-eng.com

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DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER RESOURCES PROGRAM
 FRESHWATER WETLANDS PROGRAM
 APPROVED WITH CONDITIONS
 AS SPECIFIED IN THE LETTER OF APPROVAL
 DATED SEP 5 2019 FILE # 19-001
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE

No.	Date	Description	Drawn By: M.A.H.	Design By: K.I.D.
0	08-22-2019			

Pole Locations - Exhibit 2
Wingover Solar Farm
 Prepared for:
1519 Crandall Road LLC c/o AMERESCO & Douglas Enterprises, Ltd.
 c/o Alex Talladreas, Director of Development
 111 Speen Street, Suite 1101 Framingham, MA 01701 / Tel: 508-661-2263

Prepared by: *Kevin Demers*
 AUG 19 2019
 Checked by: *Kevin Demers*