

SITE USE PLAN

0 DIVISION ROAD, WESTPORT, MA 02790
2125 kW AC SOLAR ELECTRIC SYSTEM

THIS DOCUMENT IS PROVIDED BY BORRERO SOLAR SYSTEMS, INC. TO FACILITATE THE SALE AND INSTALLATION OF A SOLAR POWER SYSTEM FROM BORRERO SOLAR SYSTEMS, INC. REPRODUCTION, RELEASE OR UTILIZATION FOR ANY OTHER PURPOSE, WITHOUT PRIOR WRITTEN CONSENT IS STRICTLY PROHIBITED.



BORREGO SOLAR

55 TECHNOLOGY DRIVE, SUITE 101
LOWELL, MA 01851
PHONE: (888) 898-6273
FAX: (888) 843-6778
WWW.BORREGOSOLAR.COM

GENERAL NOTES

1. AS CONTAINED HEREIN, "CONTRACTOR" IS ASSUMED TO BE BORREGO SOLAR SYSTEMS, INC. AND "SUBCONTRACTOR" IS BORREGO'S INSTALLATION SUBCONTRACTOR.
2. THESE NOTES SET MINIMUM STANDARDS FOR CONSTRUCTION. THE DRAWINGS GOVERN OVER THESE NOTES TO THE EXTENT SHOWN.
3. ALL WORK SHALL CONFORM TO THE MINIMUM STANDARDS OF THE FOLLOWING: LOCAL BUILDING CODE, LOCAL ELECTRICAL CODE, ANY OTHER REGULATING AGENCIES WHICH HAVE AUTHORITY OVER ANY PORTION OF THE WORK AND THOSE CODES AND STANDARDS LISTED IN THESE DRAWINGS AND IN THE SUBCONTRACTOR AGREEMENT.
4. EXCEPTIONS TO THE CONTRACT DOCUMENTS ARE PERMITTED ONLY WITH THE APPROVAL OF BORREGO.
5. COORDINATE THESE DRAWINGS WITH SPECIFICATIONS AND MANUFACTURER INSTALLATION AND OPERATION MANUALS AND NOTIFY BORREGO OF ANY DISCREPANCIES PRIOR TO BEGINNING WORK.
6. DRAWINGS HAVE BEEN DETAILED IN COMPLIANCE WITH U.L. LISTING REQUIREMENTS AND THE BUILDING CODE FOR THE MATERIALS SPECIFIED. IF AN ALTERNATE OR SUBSTITUTED MATERIAL IS ACCEPTED AS AN EQUAL BY BORREGO, THE SUBCONTRACTOR WILL ASSUME THE RESPONSIBILITY FOR WHATEVER CONSTRUCTION MODIFICATION AND/OR ADDITIONAL COST THAT IS REQUIRED BY REASON OF THIS ACCEPTANCE.
7. PRIOR TO THE COMMENCEMENT OF ANY WORK, EACH TRADE SHALL VERIFY EXISTING CONDITIONS AND NOTIFY BORREGO OF ANY DISCREPANCIES TO THAT WHICH IS SHOWN IN THESE DRAWINGS, INCLUDING BUT NOT LIMITED TO DIMENSIONS OF THE WORK AREA, STRUCTURE, EXISTING ELECTRICAL SERVICE, CONDUIT PATHS, OBSTRUCTIONS, ACCESSIBILITY ISSUES, AND WORKING CLEARANCES. ANY WORK PERFORMED IN CONFLICT WITH THE CONTRACT DOCUMENTS OR ANY CODE REQUIREMENTS SHALL BE CORRECTED BY THE SUBCONTRACTOR AT HIS OWN EXPENSE.
8. SUBCONTRACTOR INITIATED CHANGES SHALL BE SUBMITTED IN WRITING TO BORREGO FOR APPROVAL PRIOR TO MAKING ANY CHANGES. APPROVED CHANGES REQUIRE A DRAWING REVISION TO MAINTAIN CONTROL OVER THE APPROVED DESIGN. DEVIATION FROM THESE PLANS PRIOR TO BORREGO APPROVAL PLACES ALL LIABILITY ON THE SUBCONTRACTOR.
9. UNLESS INDICATED AS EXISTING (E), ALL PROPOSED MATERIALS AND EQUIPMENT ARE NEW.
10. ALL ITEMS TO BE REMOVED AND RELOCATED OR REPLACED SHALL BE HANDLED WITH PROPER CARE AND STORED IN A SAFE PLACE TO PREVENT DAMAGE; OR BE REPLACED AT THE SUBCONTRACTOR'S EXPENSE.
11. ALL EQUIPMENT SHALL BE MOUNTED AS SHOWN. WHERE DETAILS ARE NOT PROVIDED, THE SUBCONTRACTOR SHALL USE DILIGENT EFFORTS TO MOUNT EQUIPMENT SUCH THAT IT WILL BE CLEAN, LEVEL AND SOLID.
12. ALL SURFACES SHALL BE PATCHED AND PAINTED AROUND NEW DEVICES AND EQUIPMENT TO MATCH EXISTING FINISHES.
13. ANY METAL SHAVINGS RESULTING FROM SITE WORK SHALL BE CLEANED FROM ROOF SURFACES, ENCLOSURES AND ANY ADDITIONAL AREAS WHERE OXIDIZED OR CONDUCTIVE METAL SHAVINGS MAY CAUSE RUST, ELECTRICAL SHORT CIRCUITS OR OTHER DAMAGE.
14. NO STRUCTURAL MEMBER SHALL BE DRILLED UNLESS SPECIFICALLY AUTHORIZED BY BORREGO.
15. SUBCONTRACTOR ACKNOWLEDGES THAT THE SYSTEM AS INDICATED ON THE PLANS REQUIRES ALL COMPONENTS TO BE INSTALLED TO PROPERLY RESIST WIND LOADS, SUCH AS BALLAST, WIND DEFLECTORS, ETC. IT IS THE RESPONSIBILITY OF THE SUBCONTRACTOR TO PROVIDE TEMPORARY MEANS TO RESIST WIND LOADS FOR ALL COMPONENTS NOT YET INSTALLED DURING AND AFTER REGULAR WORKING HOURS. THIS MAY INCLUDE TEMPORARY TIE DOWNS, COVERING, BALLAST OR ANY OTHER MEANS. DAMAGE TO ANY INSTALLED SYSTEM COMPONENT OR THE EXISTING FACILITY AS A RESULT OF THE UNFINISHED CONDITION NOT ADEQUATELY RESISTING WIND SHALL BE THE RESPONSIBILITY OF THE SUBCONTRACTOR TO REPAIR OR REPLACE AT THE SUBCONTRACTOR'S COST.
16. TREES MAY GROW DURING THE LIFE OF THE SYSTEM AND IMPACT THE PRODUCTION.

V.7

PROJECT SCOPE

THIS PROJECT CONSISTS OF THE INSTALLATION OF SOLAR MODULES PER THE SYSTEM DESCRIPTION, BELOW. THE MODULES WILL BE INSTALLED ON A GROUND MOUNTED RACKING SYSTEM. THE MODULES WILL BE WIRED IN SERIES STRINGS AND CONNECTED IN PARALLEL TO THE INVERTERS, WHICH CONVERT THE PHOTOVOLTAIC OUTPUT POWER FROM DC TO AC. THE SOLAR ELECTRIC SYSTEM WILL BE INTERCONNECTED WITH THE EXISTING SITE ELECTRICAL SYSTEM IN ACCORDANCE WITH THE APPLICABLE ELECTRIC CODE AND NSTAR REQUIREMENTS.



SYSTEM DESCRIPTION

SYSTEM SIZE (DC STC)	2,951.200 KW	SYSTEM SIZE (AC)	2,125 KW
MODULES	(4960) RISEN RSM120-8-595BMDG	CEC RATING	---- W
MODULES PER STRING	32	# OF STRINGS	155
RACKING	TERRASmart TGP 2X12	TILT ANGLE	25°
INVERTER(S)	(1) POWER ELECTRONICS HEMK FS2125K	CEC EFFICIENCY	98.8 %
AZIMUTH	180° (SOUTH = 180°)		

ENERGY STORAGE SYSTEM DESCRIPTION

SYSTEM AC POWER	2125 KW
SYSTEM ENERGY CAPACITY	8,500 KWH
INVERTER INFORMATION	SAME INVERTER AS SOLAR SYSTEM
TRANSFORMER CAPACITY	3000 KW

TOTAL SYSTEM DESCRIPTION

TOTAL PV + STORAGE SYSTEM SIZE	2125 KW
MAXIMUM EXPORT TO UTILITY	2125 KW

APPLICABLE CODES AND STANDARDS

2017 MASSACHUSETTS ELECTRICAL CODE 527 CMR12.00
MASSACHUSETTS BUILDING CODE 9TH EDITION
UL-1703 – SOLAR MODULES
UL-1741 – INVERTERS, COMBINER BOXES
UL-2703 – RACKING MOUNTING SYSTEMS AND CLAMPING DEVICES FOR PV MODULES

PROJECT DIRECTORY

OWNER
DIVISION ROAD SOLAR 1, LLC
C/O BORREGO SOLAR SYSTEMS, INC
55 TECHNOLOGY DRIVE, SUITE 102
LOWELL, MA 01851
(888)-898-6273

HOST
MARIE T. & JOHN L. CICCOTELLI
794 GIFFORD ROAD
WESTPORT, MA 02790
JAMES G. DUPLISEA

AUTHORITY HAVING JURISDICTION
RALPH SOUZA, BUILDING COMMISSIONER
TOWN OF WESTPORT
856 MAIN ROAD
WESTPORT, MA 02790

UTILITY
EVERSOURCE

PROJECT MANAGER
FIRM: BORREGO SOLAR SYSTEMS, INC.
CONTACT: NED CHANEY
PHONE: (617)-877-2040

CIVIL ENGINEER
FIRM: BORREGO SOLAR SYSTEMS, INC.
CONTACT: DAVID ALBRECHT, P.E.
PHONE: (978)-513-2621

STRUCTURAL ENGINEER
FIRM: BORREGO SOLAR SYSTEMS, INC.
CONTACT: DAVID DUTIL, P.E., LEED AP
PHONE: (978)-513-2623

ELECTRICAL ENGINEER
FIRM: BORREGO SOLAR SYSTEMS, INC.
CONTACT: MICHAEL WALL
PHONE: (781)-656-3119

DESIGN ENGINEER
FIRM: BORREGO SOLAR
CONTACT: TIM LEE
PHONE: (978)-513-2625

LOCATION MAP



AERIAL VIEW



GENERAL ABBREVIATIONS

(E)	EXISTING	NS	NORTH—SOUTH
AHJ	AUTHORITY HAVING JURISDICTION	NTS	NOT TO SCALE
AL	ALUMINUM	OAE	OR APPROVED EQUAL
APPROX	APPROXIMATE	OC	ON CENTER
ARY	ARRAY	OD	OUTSIDE DIAMETER
BLDG	BUILDING	OFCl	OWNER FURNISHED CONTRACTOR
BSS	BORREGO SOLAR SYSTEM		INSTALLED
CL	CENTERLINE	PV	PHOTOVOLTAIC
DAS	DATA ACQUISITION SYSTEM	PVC	POLY VINYL CHLORIDE
DIA	DIAMETER	SCH	SCHEDULE
DO	DITTO	SS	STAINLESS STEEL
EW	EAST—WEST	SSC	SOLAR SUPPORT STRUCTURE
FBO	FURNISHED BY OTHERS	STS	STANDARD TEST CONDITIONS
FF	FORWARD FACING	TBD	TO BE DETERMINED
GALV	GALVANIZED	TP	TAMPER PROOF
HDG	HOT DIP GALVANIZED	TYP	TYPICAL
HVAC	HEATING VENTILATION AND AIR CONDITIONING	UON	UNLESS OTHERWISE NOTED
ID	INSIDE DIAMETER	VIF	VERIFY IN FIELD
MFR	MANUFACTURER	WP	WEATHER PROOF
MOD	SOLAR MODULE		

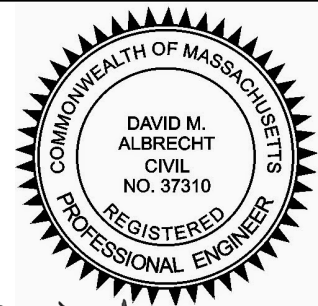
REV 1.0

REV 1.0

DRAWING LIST

SHEET NUMBER	SHEET TITLE
T-1	TITLE PAGE
CIVIL	
C-0.0	CIVIL NOTES
C-1.0	EXISTING CONDITIONS PLAN
C-2.0	TREE CLEARING PLAN
C-3.0	LAYOUT AND MATERIALS PLAN
C-3.1	WETLANDS IMPACT PLAN
C-4.0	GRADING AND EROSION CONTROL PLAN
C-4.1	GRADING AND EROSION CONTROL PLAN- ACCESS ROAD
C-4.2	BASIN DETAILS
C-5.0	CIVIL DETAILS
C-5.1	CIVIL DETAILS
C-5.2	CIVIL DETAILS
C-5.3	WETLAND CROSSING DETAILS
C-5.4	TEMPORARY WETLAND CROSSING DETAIL
C-6.0	WETLAND REPLICATION PLAN
C-7.0	OPEN SPACE PARCEL PLAN
C-8.0	TREE CLEARING & STORMWATER PHASING PLAN
FIG 3	SUBCATCHMENT PLAN - PRE-DEVELOPMENT
FIG 4	SUBCATCHMENT PLAN - POST-DEVELOPMENT
ELECTRICAL	
E-2.1	AC SINGLE LINE DIAGRAM

NOT FOR
CONSTRUCTION



Dave Red 10/07/2021

SITE USE PLAN
0 DIVISION ROAD
WESTPORT, MA 02790

PROJECT NUMBER:
905-2046

[illegible]

SCALES STATED ON DRAWING
ARE VALID ONLY WHEN PLOTTED
ARCH D 24" X 36"

T-1

TITLE PAGE

C:\Users\wefandish\Box\Scaleforce\Projects\0_Division Rd - Westport_SUP_06-15-21 - Westport_2\Design\02_Working Set\0_Division Rd - Westport_SUP_06-15-21

GENERAL CIVIL NOTES

APPROVALS (LARGE SCALE SOLAR SYSTEM)

- SPECIAL PERMIT – DATE TBD
- LOW IMPACT DEVELOPMENT PERMIT – DATE TBD
- MA DEP SUPERCEDING ORDER OF CONDITIONS (#SE80–2515) – 09/08/2021.
- MA DEP WATER QUALITY CERTIFICATE – 09/08/2021.
- ARMY CORPS SECTION 404 FILL PERMIT – DATE TBD.

GENERAL NOTES

- AS CONTAINED HEREIN, "CONTRACTOR" IS ASSUMED TO BE BORREGO SOLAR SYSTEMS, INC., "SUBCONTRACTOR" IS BORREGO'S INSTALLATION SUBCONTRACTORS (INCLUDING SITE WORK SUBCONTRACTOR) AND CIVIL ENGINEER OF RECORD (CEOR) IS BORREGO SOLAR SYSTEMS IN-HOUSE CIVIL ENGINEER.
- EXISTING CONDITIONS SURVEY INFORMATION WAS PREPARED BY NORTHEAST SURVEY CONSULTANTS AND PERFORMED ON MARCH 4, 2019. AN ADDITIONAL WAS SURVEY COMPLETED ON JANUARY 10, 2020. HORIZONTAL DATUM IS REFERENCED TO THE NAD83, MASSACHUSETTS MAINLAND COORDINATE SYSTEM. VERTICAL DATUM IS REFERENCED TO NAVD88.
- THERE IS NO GUARANTEE THAT ALL THE EXISTING UTILITIES, WHETHER FUNCTIONAL OR ABANDONED WITHIN THE PROJECT LIMITS ARE ON THIS DRAWING. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL UNDERGOUND UTILITIES BEFORE STARTING WORK AND SHALL BE RESPONSIBLE FOR ALL DAMAGE RESULTING FROM THIS WORK. BEFORE COMMENCING WORK "DIG SAFE SYSTEM, INC." AT 1-888-344-7233 AND PROVIDE 72 HOURS NOTICE.
- THE TOWN OF WESTPORT APPROVALS SHALL BE KEPT ON SITE AT ALL TIMES.
- PRIOR TO CONSTRUCTING THE SITE ENTRANCES ONTO DIVISION ROAD THE CONTRACTOR SHALL OBTAIN A HIGHWAY/DRIVEWAY PERMIT FROM THE TOWN OF WESTPORT HIGHWAY DEPARTMENT.
- THE CONTRACTOR SHALL ALLOW TOWN OFFICIALS ON SITE DURING CONSTRUCTION HOURS ONLY AND AS LONG AS ALL SAFETY MEASURES ARE IN PLACE.
- THE CONTRACTOR SHALL CONTACT TOWN AND THE PROPER LOCAL AUTHORITIES OR RESPECTIVE UTILITY COMPANIES TO CONFIRM THE LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. ANY DAMAGE DUE TO FAILURE OF THE CONTRACTOR TO CONTACT THE PROPER AUTHORITIES SHALL BE BORNE BY THE CONTRACTOR.
- SUBCONTRACTOR(S) SHALL THOROUGHLY FAMILIARIZE THEMSELVES WITH ALL CONSTRUCTION DOCUMENTS, SPECIFICATIONS, AND SITE CONDITIONS PRIOR TO BIDDING AND PRIOR TO CONSTRUCTION.
- ANY DISCREPANCIES BETWEEN DRAWINGS, SPECIFICATIONS, AND SITE CONDITIONS SHALL BE REPORTED IMMEDIATELY TO THE CONTRACTOR/CEOR FOR CLARIFICATION AND RESOLUTION PRIOR TO BIDDING OR CONSTRUCTION.
- CONTRACTOR PARKING AREA(S) SHALL BE AS DESIGNATED ON THESE PLANS UNLESS OTHER AREAS APPROVED BY BORREGO SOLAR SITE SUPERINTENDENT. PARKING AREAS SHALL BE CONSTRUCTED USING A MINIMUM OF 6-INCHES OF GRAVEL 6-INCH MINUS) AND SURROUNDED BY AN ORANGE SNOW FENCE. POST-CONSTRUCTION THE PARKING AREA(S) SHALL BE RESTORED TO PRE-CONSTRUCTION CONDITIONS, INCLUDING, BUT NOT LIMITED TO REGRADING, LOAMING AND SEEDING. IN NO CASE SHALL PARKING AREAS, LAYDOWN AREAS, CONSTRUCTION TRAILERS, AND PORTABLE TOILETS BE LOCATED WITHIN A WETLAND RESOURCE AREA AND/OR ANY BUFFER ZONES.

SITE PREPARATION NOTES

- PRIOR TO THE COMMENCEMENT OF TREE CLEARING ON THE SITE, THE LIMITS OF ALL TREE CLEARING WILL BE FIELD SURVEYED AND IDENTIFIED TO ENSURE NO TREES ARE CLEARED FURTHER INTO BUFFER ZONE/PROPERTY LINE SETBACKS THAN APPROVED BY THESE PLANS.
- AREAS DESIGNATED FOR CLEARING SHALL BE CLEARED ONLY. NO GRUBBING OR STRIPPING OF TOPSOIL IS NECESSARY, UNLESS SPECIFICALLY SHOWN OTHERWISE AND APPROVAL HAS BEEN GIVEN BY THE CONTRACTOR.
- TREE REMOVAL SHALL BE IN ACCORDANCE WITH APPROVED LOCAL, STATE, AND FEDERAL PERMITS. TREES TO BE REMOVED SHALL BE MARKED BY BORREGO PROJECT MANAGER OR SITE SUPERINTENDENT PRIOR TO COMMENCEMENT OF WORK ON-SITE.
- THE SUBCONTRACTOR(S) IS/ARE RESPONSIBLE FOR ANY DAMAGE TO EXISTING CONDITIONS TO REMAIN THAT ARE DUE TO SUBCONTRACTOR(S) OPERATIONS.
- ITEMS TO BE REMOVED THAT ARE NOT STOCKPILED FOR LATER REUSE ON THE PROJECT OR DELIVERED TO THE OWNER SHALL BE LEGALLY DISPOSED OF OFF SITE BY THE SUBCONTRACTOR(S).
- THE SUBCONTRACTOR(S) SHALL BE RESPONSIBLE FOR COORDINATING THEIR EFFORTS WITH ALL TRADES.
- THE SUBCONTRACTOR(S) SHALL COORDINATE ALL ADJUSTMENT OR ABANDONMENT OF UTILITIES WITH THE RESPECTIVE UTILITY COMPANY.
- THE SUBCONTRACTOR(S) SHALL MAINTAIN OR ADJUST TO NEW FINISH GRADE AS NECESSARY ALL UTILITY AND SITE STRUCTURES SUCH AS LIGHT POLES, SIGN POLES, MAN HOLES, CATCH BASINS HAND HOLES, WATER AND GAS GATES, HYDRANTS, ETC., FROM MAINTAINED UTILITY AND SITE SYSTEMS UNLESS OTHERWISE NOTED OR DIRECTED BY THE CONTRACTOR/CEOR.
- TEMPORARY CONSTRUCTION ROADS (IF REQUIRED) SHALL BE EXCAVATED AND THE SUB-BASE COMPACTED TO 95% SPMD. THE USE OF SEPARATION FABRICS MAY BE USED TO FACILITATE FUTURE REMOVAL AND RECOVERY OF GRANULAR MATERIALS. ROAD(S) SHALL HAVE AT LEAST 9" OF 6-INCH MINUS STONE AND SHALL BE MAINTAINED DURING CONSTRUCTION. THESE TEMPORARY ROADS SHALL BE REMOVED POST-CONSTRUCTION AND THE GROUND DE-COMPACTED USING A YORK RAKE AND THEN RE-SEED.ED.
- TEMPORARY STOCKPILE AND/OR LAYDOWN AREAS SHALL BE ONLY AS SHOWN ON THE PLANS. NO AREA SHALL BE WITHIN THE 100-FOOT BUFFER ZONE OR OTHER WETLAND RESOURCE AREAS. OTHER LOCATIONS MUST BE APPROVED IN WRITING BY THE TOWN OF WESTPORT CONSERVATION COMMISSION OFFICE. ONCE THESE AREAS ARE NO LONGER NEEDED, THEY SHALL BE DECOMPACTED AND RESEED.ED WITH A POLLINATOR SEED MIX. EROSION CONTROLS SHALL REMAIN IN PLACE UNTIL TOWN HAS APPROVED A CERTIFICATE OF COMPLIANCE.

EROSION AND SEDIMENT CONTROL MEASURES

- A CONSTRUCTION GENERAL PERMIT SHALL BE IN PLACE PRIOR TO COMMENCING ANY EARTH DISTURBANCE. THE CGP PERMIT # IS TBD.
- EROSION CONTROLS SHALL BE PROVIDED IN ACCORDANCE WITH THE SEQUENCE OF STAGED CONSTRUCTION. THE CONTRACTOR SHALL SUBMIT A DETAILED EROSION CONTROL PLAN INCLUDING SCHEDULE FOR APPROVAL BY THE TOWN OF WESPOT. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE.
- EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY SITE EXCAVATION OR DISTURBANCE AND SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PROCESS. THE SMALLEST PRACTICAL AREA OF LAND SHALL BE EXPOSED AT ANY ONE TIME.
- SEDIMENT BARRIERS SHALL BE INSPECTED AND APPROVED BY THE TOWN OF WESTPORT OR THEIR REPRESENTATIVE AND THE CONTRACTOR/CEOR BEFORE CONSTRUCTION CAN START.

- STRAW BALES AND MULCH SHALL BE MOWINGS OF ACCEPTABLE HERBACEOUS GROWTH, FREE OF NOXIOUS WEEDS OR WOODY STEMS, AND SHALL BE DRY WHEN INSTALLED.
- THE UNDERSIDE OF STRAW BALES SHOULD BE KEPT IN CLOSE CONTACT (TRENCHED IN 3-INCHES MINIMUM) WITH THE EARTH AND RESET AS NECESSARY.
- DISTURBED AREAS SHALL BE BLANKETED OR SEEDED AND MULCHED AS SOON AS PRACTICAL AFTER CONSTRUCTION ACTIVITIES IN THAT AREA HAVE CONCLUDED. ALL ERODABLE/BARE AREAS SHALL BE BLANKETED OR SEEDED AND MULCHED WITHIN 7 DAYS WITH TEMPORARY EROSION CONTROL SEEDING.
- STABILIZE SLOPES GREATER THAN 3:1 (HORIZONTAL: VERTICAL) WITH SEED, SECURED GEOTEXTILE FABRIC, SPRAYED COMPOST BLANKET, OR RIP-RAP AS REQUIRED TO PREVENT EROSION DURING CONSTRUCTION. REFER TO PLANS FOR LOCATIONS.
- WITHIN SEVEN (7) DAYS SEDIMENT BARRIERS SHALL BE CONSTRUCTED AROUND ALL SOIL STOCKPILE AREAS.
- CLEAN OUT PROJECT DRAINAGE FEATURES AND STRUCTURES (I.E. CULVERTS, BASINS, SWALES, ETC.) AFTER COMPLETION OF CONSTRUCTION. IF CLOGGED THESE FEATURES/STRUCUTRE SHALL BE REMOVED AND REPLACED WITH CLEAN MATERIALS.
- SEDIMENT COLLECTED DURING CONSTRUCTION BY THE VARIOUS EROSION CONTROL SYSTEMS SHALL BE DISPOSED OF ON THE SITE ON A REGULAR BASIS. SEDIMENT SHALL BE REMOVED FROM EROSION CONTROL SYSTEMS WHEN THE HEIGHT OF THE SEDIMENT EXCEEDS ONE-HALF OF THE HEIGHT OF THE SEDIMENT CONTROL MEASURE.
- AFTER ALL DISTURBED AREAS HAVE BEEN STABILIZED, THE SUBCONTRACTOR(S) SHALL REMOVE ALL TEMPORARY EROSION CONTROL MEASURES AT THE CONTRACTOR/CEOR DIRECTION.
- AFTER THE REMOVAL OF TEMPORARY EROSION CONTROL MEASURES, THE SUBCONTRACTOR(S) SHALL GRADE AND SEED AREA OF TEMPORARY EROSION CONTROL MEASURE.
- DAMAGED OR DETERIORATED ITEMS WILL BE REPAIRED IMMEDIATELY AFTER IDENTIFICATION OR AS DIRECTED BY THE CONTRACTOR/CEOR.
- THE CONTRACTOR'S SITE SUPERINTENDENT IS RESPONSIBLE FOR DAILY INSPECTIONS, MAINTENANCE, AND DIRECTING REPAIR ACTIVITIES. IN ACCORDANCE WITH THE NPDES REQUIREMENTS. THE CONTRACTOR SHALL INSPECT EROSION CONTROL MEASURES ONCE EVERY SEVEN (7) CALENDAR DAYS AND ONCE EVERY FOURTEEN (14) DAYS AND WITHIN 24 HOURS OF ANY STORM EXCEEDING 1/4 INCH PRECIPITATION. DAMAGED AND INEFFECTIVE EROSION CONTROL MEASURES SHALL BE REPAIRED OR REPLACED WITHIN 48 HOURS.
- PIPE OUTLETS (IF ANY) SHALL BE STABILIZED WITH STONE. REFER TO DETAILS.
- TEMPORARY SEEDING SHALL BE AT A RATE OF 45 LBS PER ACRE UNLESS OTHERWISE RECOMMENDED BY SEED SUPPLIER. ERODABLE AREAS OUTSIDE AND DOWN SLOPE FROM THE CONSTRUCTION LIMITS SHALL BE SIMILARLY SEEDED. REFER TO REVEGETATION PLAN FOR SEEDING SPECIFICATIONS.
- WATER PUMPED OR OTHERWISE DISCHARGED FROM THE SITE DURING CONSTRUCTION DEWATERING SHALL BE FILTERED. DEWATERING PLAN SHALL BE SUBMITTED FOR APPROVAL BY THE CEOR AND ADDED TO THE SWPPP.
- WHEN TEMPORARY DRAINAGE IS ESTABLISHED, EROSION/SEDIMENTATION CONTROL MEASURES MAY BE REQUIRED BY CONTRACTOR/CEOR.
- GRAVEL ROADS AND ACCESS DRIVES OF SUFFICIENT WIDTH AND LENGTH, AND VEHICLE WASH DOWN FACILITIES, SHALL BE PROVIDED TO PREVENT SOIL FROM BEING TRACKED ONTO PUBLIC OR PRIVATE ROADWAYS. ANY SOIL REACHING A PUBLIC OR PRIVATE ROADWAY SHALL BE REMOVED BEFORE THE END OF EACH WORKDAY.
- NECESSARY MEASURES SHALL BE TAKEN TO CONTAIN ANY FUEL OR POLLUTION RUNOFF. NO RE-FUELING SHALL OCCUR WITHIN 100 FEET OF ANY WETLAND RESOURCE AREA AND 200 FEET FROM RIVERFRONT. LEAKING EQUIPMENT OR SUPPLIES SHALL BE IMMEDIATELY REPAIRED OR REMOVED FROM THE SITE.
- THE COST OF REPAIRING EROSION CONTROL MEASURES OR REMOVING SEDIMENT FROM EROSION CONTROL SYSTEMS SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR THE APPLICABLE EROSION CONTROL ITEM.
- EROSION CONTROL MEASURES SHALL BE KEPT OPERATIONAL AND MAINTAINED CONTINUOUSLY THROUGHOUT THE PERIOD OF LAND DISTURBANCE UNTIL PERMANENT SEDIMENT AND EROSION CONTROL MEASURES ARE OPERATIONAL. CONTRACTOR SHALL PROVIDE TO THE CONSERVATION COMMISSION MEASURES (EROSION AND SEDIMENTATION CONTROL) FOR WORK DURING WINTER CONDITIONS.
- CONTRACTOR SHALL SPRAY WATER FROM A WATER TRUCK ON DRY AND WINDY DAYS TO PREVENT DUST FROM FORMING.
- EROSION CONTROL MEASURES AS SHOWN ON THESE DRAWINGS IS INTENDED TO CONVEY MINIMUM REQUIREMENTS. THE CONTRACTOR SHALL IMPLEMENT ADDITIONAL MEASURES AS NECESSARY TO PREVENT SOIL EROSION AND TO COMPLY WITH THE PROJECT'S CONSTRUCTION GENERAL PERMIT STORMWATER POLLUTION PREVENTION PLAN.
- SOILS ON SLOPES THAT ARE STEEPER THAN 3:1 SHALL BE ROUGHENED PER THE EPA'S NPDES SOIL ROUGHENING FACT SHEET IF THEY ARE TO BE SEEDED WITHIN 2 WEEKS OF DISTURBANCE. IF NOT, EROSION CONTROL BLANKETS SHOULD BE INSTALLED ON THESE SLOPES.

LAYOUT AND MATERIAL NOTES

- BENCHMARKS TO BE USED FOR CONSTRUCTION LAYOUT ARE:

BENCHMARK #1: TBD

BENCHMARK #2: TBD

THE FOLLOWING LAYOUT CRITERIA SHALL CONTROL UNLESS OTHERWISE NOTED ON THE PLAN:

- TIES TO PROPERTY LINES ARE PERPENDICULAR TO THE PROPERTY LINE UNLESS OTHERWISE NOTED.
- DIMENSIONS TO RACKING SHALL BE TO TOP OF SOLAR PANEL OR LEADING EDGE.
- DISTANCES AND DIMENSIONS ARE IN DECIMAL FEET.

- SCREENED IMAGES SHOW EXISTING CONDITIONS. WHERE EXISTING CONDITIONS LIE UNDER OR ARE IMPINGED UPON BY PROPOSED BUILDINGS AND/OR SITE ELEMENTS, THE EXISTING CONDITION WILL BE REMOVED, ABANDONED AND/OR CAPPED OR DEMOLISHED AS REQUIRED. AMBIGUITIES IN THE PLANS SHALL BE CLARIFIED BY THE CEOR OR SITE SUPERINTENDENT.
- THE CONTRACTOR SHALL HAVE ELECTRICAL TRENCHES AND RACKING STAKED OUT BY A LICENSED LAND SURVEYOR PRIOR TO ANY INSTALLATION OF RACKING OR TRENCHES.
- EXCESS TRENCH MATERIAL SHALL BE PLACED ON THE SIDES OF THE TRENCH AND PLACED AT OR NEAR THE SAME LOCATION AS WHERE EXCAVATED. TOPSOIL REMOVED SHALL BE PLACED ON TOP AND LIGHTLY COMPACTED.

GRADING AND UTILITY NOTES

- PRIOR TO THE START OF ANY EXCAVATION FOR THE PROJECT, BOTH ON AND OFF THE SITE, THE CONTRACTOR SHALL NOTIFY DIG-SAFE AND BE PROVIDED WITH A TICKET NUMBER INDICATING THAT ALL EXISTING UTILITIES HAVE BEEN LOCATED AND MARKED.
- THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE CONTRACTOR. THE

SUBCONTRACTOR(S) SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MAY BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ALL UNDERGROUND UTILITIES.

- WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATION, ELEVATION, AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE SUBCONTRACTOR(S), AND THE INFORMATION FURNISHED TO THE CONTRACTOR/CEOR FOR RESOLUTION OF THE CONFLICT.
- UTILITY-OWNED EQUIPMENT ON ELECTRICAL POLES TO BE INSTALLED WILL CONSIST OF METERING EQUIPMENT. THE UTILITY SHALL OVERSEE THE PERMITTING OF THE EQUIPMENT. SEE PLANS FOR DETAILS OF INSTALLATION AND LAYOUT OF POLES.
- AREAS OUTSIDE THE LIMITS OF PROPOSED WORK DISTURBED BY THE SUBCONTRACTOR(S) OPERATIONS SHALL BE RESTORED BY THE SUBCONTRACTOR(S) TO THEIR ORIGINAL CONDITION, AT THE SUBCONTRACTOR(S) EXPENSE.
- THE LOCATION, SIZE, DEPTH, AND SPECIFICATIONS FOR CONSTRUCTION OF PRIVATE UTILITY SERVICES SHALL BE INSTALLED ACCORDING TO THE REQUIREMENTS PROVIDED BY, AND APPROVED BY, THE RESPECTIVE ELECTRIC UTILITY COMPANY. THE CONTRACTOR SHALL COORDINATE THE INSTALLATION OF THE UTILITY CONNECTIONS WITH THE RESPECTIVE COMPANIES PRIOR TO ANY UTILITY CONSTRUCTION.
- GRADES MEET EXISTING GRADES, SUBCONTRACTOR(S) SHALL BLEND GRADES TO PROVIDE A SMOOTH TRANSITION BETWEEN EXISTING AND NEW WORK. PONDING AT TRANSITION AREAS WILL NOT BE ALLOWED.
- SUBCONTRACTOR(S) SHALL MAINTAIN POSITIVE DRAINAGE AWAY FROM ALL STRUCTURES.
- MAXIMUM LONGITUDINAL SLOPES SHALL NOT EXCEED 10:1 ALONG GRAVEL ROADS (UNLESS SHOWN OTHERWISE) AND WITHIN FENCED SOLAR ARRAY AREAS, AND 3:1 IN ALL OTHER DISTURBED AREAS, UNLESS OTHERWISE NOTED.
- SUBCONTRACTOR(S) SHALL VERIFY EXISTING GRADES AND NOTIFY THE CONTRACTOR/CEOR OF ANY DISCREPANCIES.

INVASIVE SPECIES PLAN

- STEM CUTTING IS THE PREFERED METHOD OF TREATMENT OF INVASIVE SPECIES. IT SHOULD OCCUR PRIOR TO LEAF OUT IN EARLY SPRING OR FALL.
- FOR TREATMENT OF ORIENTAL BITTERSWEET REFER TO NRCS FACT SHEETS FOR RECOMMENDED TREATMENTS/SCHEDULES.
- ALL HERBICIDES SHALL BE SUBMITTED TO THE TOWN OF WESTPORT CONSERVATION COMMISSION PRIOR TO WORK COMMENCING. ALL HERBICIDES USED SHALL BE AQUATIC SAFE AND TREATMENT SHALL BE APPLIED BY A CERTIFIED APPLICATOR.

PHASE I

- HOLD A PRE-CONSTRUCTION MEETING WITH THE TOWN OFFICIALS PRIOR TO ANY SITE DISTURBANCE.
- INSTALL CONSTRUCTION EXIT ONTO DIVISION ROAD.
- INSTALL SEDIMENTATION CONTROL ALONG OUTSIDE OF PROPOSED FENCE AT THE LIMIT OF CLEARING.
- APPLICANT TO CONTACT THE TOWN OF WESTPORT CONSERVATION COMMISSION A MINIMUM OF TWO (2) DAYS PRIOR TO FINAL SEDIMENTATION CONTROL COMPLETION.
- SURVEY TREE CLEARING LIMITS AND IDENTIFY APPROPRIATELY
- CUT AND CLEAR TREES
- TUB GRIND STUMPS AND STOCKPILE WOOD GRINDINGS ON SITE. USE FOR WOOD STRAND BERM WHERE SHOWN.
- LAYOUT GRAVEL ACCESS ROAD.

PHASE II

- EXCAVATE ELECTRICAL TRENCHES.
- INSTALL SOLAR MODULE RACKING WORKING.
- CONSTRUCT CONCRETE WASHOUTS.
- EXCAVATE AND POUR ELECTRICAL EQUIPMENT PADS.
- INSTALL PERIMETER SECURITY FENCE.

PHASE III

- HYDROSEED DISTURBED AREAS ONCE WORK IN THESE AREAS ARE COMPLETED. [COMPLETED MEANS THAT VEHICULAR TRAFFIC IS NO LONGER NECESSARY].
- REMOVE EROSION/SEDIMENT CONTROL MEASURES ONCE PROPER STABILIZATION IS ACHIEVED.
- APPLICANT TO CONTACT TOWN OF WESTPORT PLANNING DEPARTMENT AND CONSERVATION COMMISSION A MINIMUM OF TWO (2) DAYS PRIOR TO PROJECT COMPLETION.
- CONTRACTOR TO COMPLETE AN AS-BUILT (RECORD) SURVEY OF THE PROJECT AREA.

INVASIVE SPECIES TREATMENT TO OCCUR IN SPRING OR FALL DEPENDING ON PROJECT COMMENCEMENT.

ABBREVIATIONS

BC	BOTTOM OF CURB
BWV	BORDERING VEGETATED WETLANDS
CB	CATCH BASIN
CLF	CHAIN LINK FENCE
DIP	DUCTILE IRON PIPE
DMH	DRAIN MANHOLE
ECB	EROSION CONTROL BARRIER
FES	FLARED END SECTION
FH	FIRE HYDRANT
FOC	FACE OF CURB
GG	GAS GATE
HW	HEADWALL
ILSF	ISOLATED LANDS SUBJECT TO FLOODING
ISW	ISOLATED WETLANDS (FEDERAL JURISDICTION)
LA	LANDSCAPED AREA
LOW	LIMIT OF WORK
NTS	NOT TO SCALE
OCS	OUTLET CONTROL STRUCTURE
PCC	PRECAST CONCRETE CURB
RCP	REINFORCED CONCRETE PIPE
SLC	STREET LIGHT CIRCUIT
SMH	SEWER MANHOLE
TC	TOP OF CURB
TEL	TELEPHONE CABLE
VGC	VERTICAL GRANITE CURB
WG	WATER GATE

REV 1.0

LEGEND

	SOLAR MODULES
	ROAD (GRAVEL)
	FENCE LINE
	PROPERTY LINE
	FLOW DIRECTION
	BANK LINE/FLAG
	WETLAND LINE/FLAG
	(E) MAJOR CONTOUR
	(E) MINOR CONTOUR
	PROPOSED MAJOR CONTOUR
	PROPOSED MINOR CONTOUR
	100' WETLAND BUFFER ZONE
	200' RIVERFRONT AREA
	100-YEAR FLOOD LINE
	WATER RESOURCE OVERLAY DISTRICT
	EDGE OF WATER
	TREELINE
	STONE WALL
	SILT FENCE
	LIMIT OF WORK
	DRAIN PIPE
	ELECTRICAL TRENCH
	OVERHEAD ELECTRIC
	SEWER LINE
	WATER LINE
	GAS MAIN

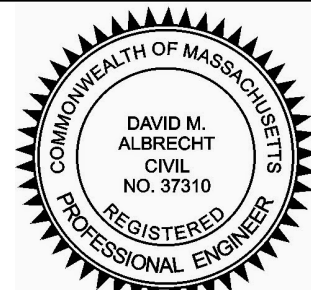
	OMITTED MODULE		ASSESSORS MAP-LOT
	SPARE MODULE	CB/DH	CONCRETE BOUND/DRILL/HOLE
	NON-ACTIVE MODULE	DH	DRILLHOLE
SB/DH	STONE BOUND DRILL/HOLE	FND	FOUND
N/F	NOW OR FORMERLY	CMP	CORRUGATED METAL PIPE
IP	IRON PIPE	BIT CONC	BITUMINOUS CONCRETE
		RET WALL	RETAINING WALL

THIS DOCUMENT IS PROVIDED BY BORREGO SOLAR SYSTEMS, INC. TO FACILITATE THE SALE AND INSTALLATION OF A SOLAR POWER SYSTEM FROM BORREGO SOLAR SYSTEMS, INC. REPRODUCTION, RELEASE, OR UTILIZATION FOR ANY OTHER PURPOSE, WITHOUT PRIOR WRITTEN CONSENT IS STRICTLY PROHIBITED.



BORREGO SOLAR
55 TECHNOLOGY DRIVE, SUITE 102
LOWELL, MA 01801
PHONE: (888) 898-6213
FAX: (888) 843-6778
WWW.BORREGOSOLAR.COM

NOT FOR CONSTRUCTION



David M. Albrecht 10/07/2021

SITE USE PLAN
0 DIVISION ROAD
WESTPORT, MA 02790

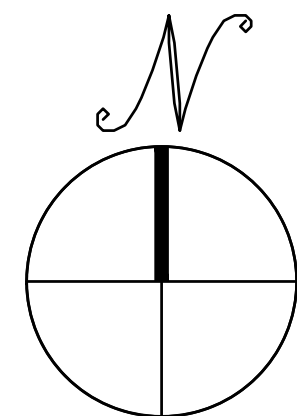
PROJECT NUMBER:
905-2046

DRAWN	CHECKED	RELEASE LEVEL	SUBMISSION TO WESTPORT PB	DATE	REV
				10/07/21	

SCALES STATED ON DRAWINGS
ARE VALID ONLY WHEN PLOTTED
ARCH: D 24" X 36"

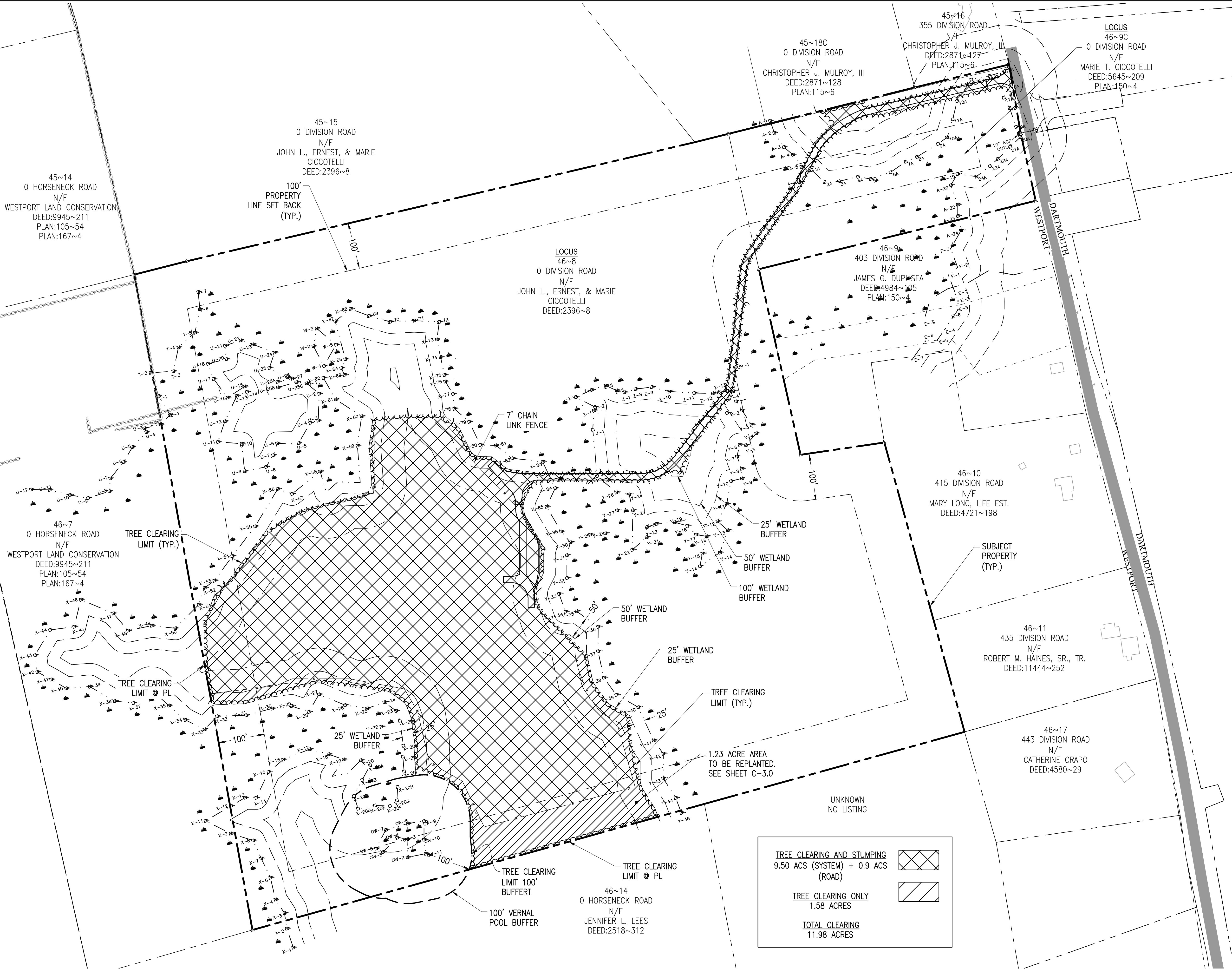
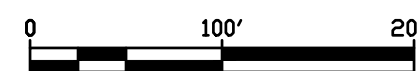
C-0.0
CIVIL NOTES

C:\Users\westandish\Box\Salesforce\Projects\0 Division Rd - Westport\2 Design\02 Working Set\0 Division Rd - Westport_SIP_06-15-21



TREE CLEARING PLAN

SCALE: 1" = 100'



TREE CLEARING AND STUMPING	
9.50 ACS (SYSTEM) + 0.9 ACS (ROAD)	
TREE CLEARING ONLY	
1.58 ACRES	
TOTAL CLEARING	
11.98 ACRES	

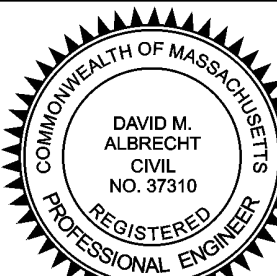
THIS DOCUMENT IS PROVIDED BY BORREGO SOLAR SYSTEMS, INC. TO FACILITATE THE SALE AND INSTALLATION OF A SOLAR POWER SYSTEM FROM BORREGO SOLAR SYSTEMS, INC. REPRODUCTION, RELEASE, OR UTILIZATION FOR ANY OTHER PURPOSE, WITHOUT PRIOR WRITTEN CONSENT, IS STRICTLY PROHIBITED.



BORREGO SOLAR

55 TECHNOLOGY DRIVE, SUITE 102
DORCHESTER, MA 01951
PHONE: (888) 888-6273
FAX: (888) 843-6778
WWW.BORREGOSOLAR.COM

NOT FOR
CONSTRUCTION



David M. Albright 10/07/2021

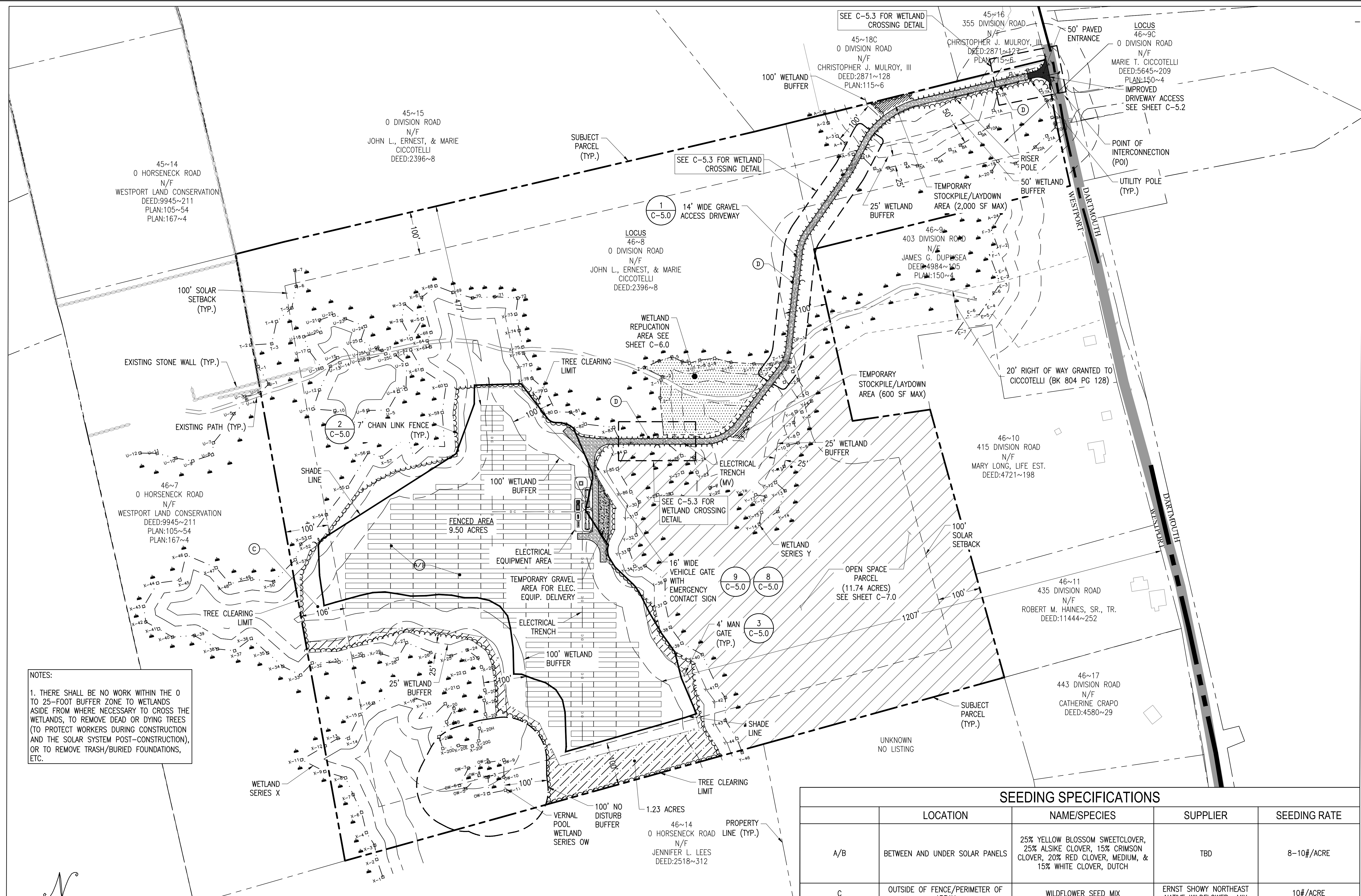
SITE USE PLAN
0 DIVISION ROAD
WESTPORT, MA 02790

PROJECT NUMBER:
905-2046

REV	DATE	DRAWN	CHECKED	RELEASE LEVEL	
	10/07/21	WS	HG	SUBMISSION TO WESTPORT PB	

SCALES STATED ON DRAWINGS
ARE VALID ONLY WHEN PLOTTED
ARCH D 24" X 36"

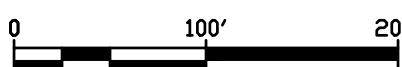
C-2.0
TREE CLEARING PLAN



NOTES:
1. THERE SHALL BE NO WORK WITHIN THE 0 TO 25-FOOT BUFFER ZONE TO WETLANDS ASIDE FROM WHERE NECESSARY TO CROSS THE WETLANDS, TO REMOVE DEAD OR DYING TREES (TO PROTECT WORKERS DURING CONSTRUCTION AND THE SOLAR SYSTEM POST-CONSTRUCTION), OR TO REMOVE TRASH/BURIED FOUNDATIONS, ETC.

LAYOUT AND MATERIALS PLAN

SCALE: 1" = 100'



SEEDING SPECIFICATIONS				
	LOCATION	NAME/SPECIES	SUPPLIER	SEEDING RATE
A/B	BETWEEN AND UNDER SOLAR PANELS	25% YELLOW BLOSSOM SWEETCLOVER, 25% ALSIKE CLOVER, 15% CRIMSON CLOVER, 20% RED CLOVER, MEDIUM, & 15% WHITE CLOVER, DUTCH	TBD	8-10#/ACRE
C	OUTSIDE OF FENCE/PERIMETER OF ARRAY	WILDFLOWER SEED MIX	ERNST SHOWY NORTHEAST NATIVE WILDFLOWER MIX	10#/ACRE
D	DISTURBED AREAS BETWEEN TOE OF SLOPE AND TREE LINE WITHIN WETLAND	WETMIX OR APPROVED EQUAL (MIX TO MATCH WETLAND REPLICATION AREA, REFER TO C-6.0)	NEW ENGLAND WETLAND PLANTS, INC.	1#/2,500SF

- BETWEEN DECEMBER 1ST AND APRIL 1ST, EACH TYPE OF SEED SHALL HAVE AN ADDITIONAL 1#/1,000 SF OF WINTER RYEGRASS OR GRAIN RYE GRASS SEED.
- IT SHALL BE THE SUB-CONTRACTORS RESPONSIBILITY TO ENSURE THAT THE PROJECT LIMIT OF WORK IS STABILIZED (IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS/REQUIREMENTS/PERMIT APPROVALS) DURING THE LENGTH OF THE PROJECT.
- ALL DISTURBED AREAS SHALL BE RESTORED WITH 4" MINIMUM TOPSOIL & SEED PER SEEDING SPECIFICATIONS LISTED IN THIS TABLE.

THIS DOCUMENT IS PROVIDED BY BORREGO SOLAR SYSTEMS, INC. TO FACILITATE THE SALE AND INSTALLATION OF A SOLAR POWER SYSTEM FROM BORREGO SOLAR SYSTEMS, INC. REPRODUCTION, RELEASE, OR UTILIZATION FOR ANY OTHER PURPOSE, WITHOUT PRIOR WRITTEN CONSENT, IS STRICTLY PROHIBITED.



BORREGO SOLAR

55 TECHNOLOGY DRIVE, SUITE 102
LOWELL, MA 01851
PHONE: (800) 898-6273
FAX: (800) 843-6778
WWW.BORREGOSOLAR.COM

NOT FOR
CONSTRUCTION



David M. Albrecht 10/07/2021

SITE USE PLAN
0 DIVISION ROAD
WESTPORT, MA 02790

PROJECT NUMBER:
905-2046

REV	DATE	DRAWN	CHECKED	RELEASE LEVEL	
				SUBMISSION TO WESTPORT PB	
				WG	
				WS	
	10/07/21				

SCALES STATED ON DRAWINGS
ARE VALID ONLY WHEN PLOTTED
ARCH D 24" X 36"

C-3.0
LAYOUT AND MATERIALS
PLAN

C:\Users\wetlandsh\Box\Salesforce\Projects\0 Division Rd - Westport_SIP_06-15-21

BUFFER ZONE IMPACTS - ARRAY

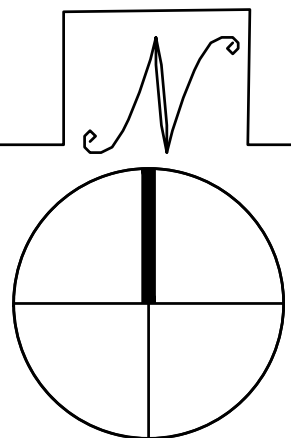
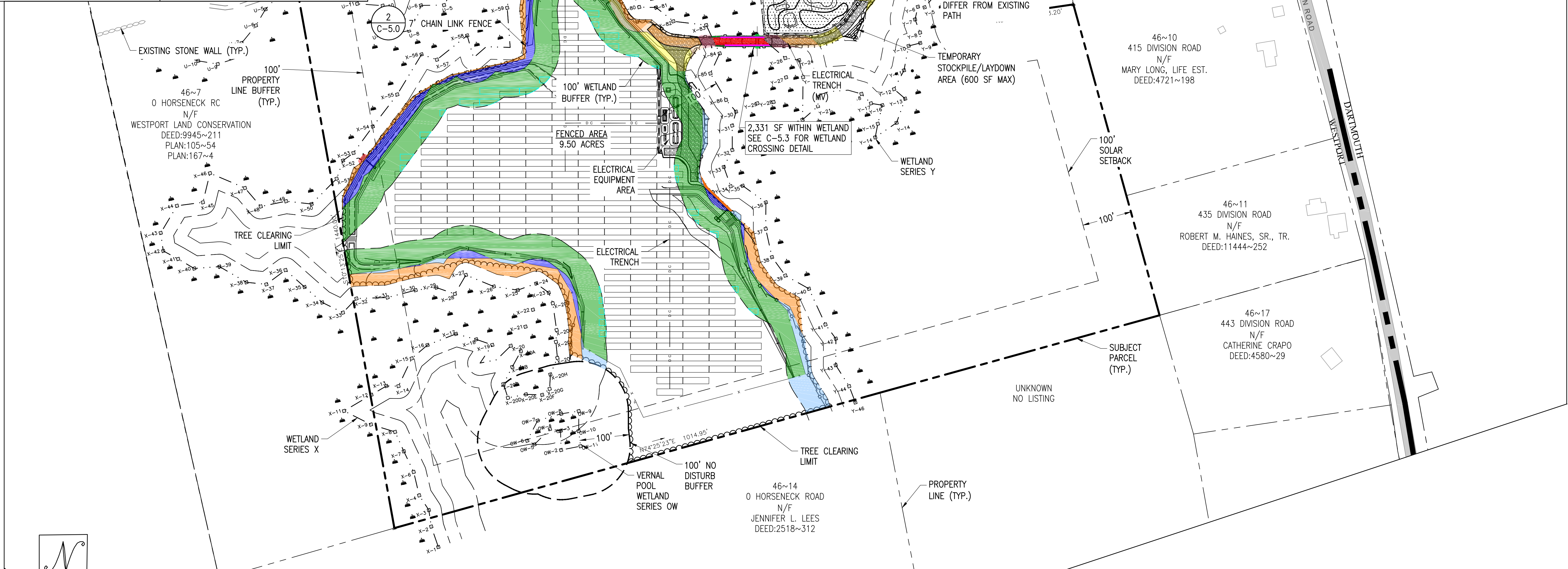
	0' - 25'	25' - 50'	50' - 100'
STORMWATER OUTLET	160	0	0
TREE CLEARING (OUTSIDE FENCE)	0	23,539	10,123
TREE CLEARING (INSIDE FENCE)	0	15,881	113,554
SOLAR PANEL	0	0	5,565
TOTAL (SQUARE FEET)	160	39,420	131,942
TOTAL (ACRES)	0.00	0.91	3.03
TOTAL AREA OF 100' BUFFER ZONE ON SITE: 12.06 ACRES			

BUFFER ZONE IMPACTS - ROAD

	0' - 25'	25' - 50'	50' - 100'
TREE CLEARING	2,422	2,806	4,924
GRAVEL ROAD	2,877	4,241	4,548
TOTAL (SQUARE FEET)	5,299	7,047	9,472
TOTAL (ACRES)	0.12	0.16	0.22

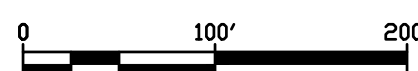
DIRECT WETLAND IMPACT

LOCATION	WEST	CENTER	EAST
TREE CLEARING (TEMPORARY)	328	1,302	1,223
RIPRAP SLOPE RETURN TO GRADE	45	168	339
LARGE BLOCK RETAINING WALL/CULVERT	487	2,257	0
GRAVEL ROAD	1,471	7,021	1,497
TOTAL TEMPORARY IMPACT (TREE CLEARING)	2,853 S.F.		
TOTAL PERMANENT IMPACT	13,285 S.F.		
TOTAL IMPACT	16,138 S.F. or 0.37 ACRES		



WETLANDS IMPACT PLAN

SCALE: 1" = 100'

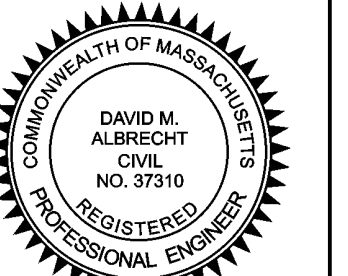


THIS DOCUMENT IS PROVIDED BY BORREGO SOLAR SYSTEMS, INC. TO FACILITATE THE SALE AND INSTALLATION OF A SOLAR POWER SYSTEM FROM BORREGO SOLAR SYSTEMS, INC. REPRODUCTION, RELEASE, OR UTILIZATION FOR ANY OTHER PURPOSE, WITHOUT PRIOR WRITTEN CONSENT IS STRICTLY PROHIBITED.



BORREGO SOLAR
55 TECHNOLOGY DRIVE, SUITE 102
LOWELL, MA 01851
PHONE: (978) 858-6213
FAX: (978) 843-6778
WWW.BORREGOSOLAR.COM

NOT FOR
CONSTRUCTION



David M. Albrecht 10/07/2021

SITE USE PLAN
0 DIVISION ROAD
WESTPORT, MA 02790

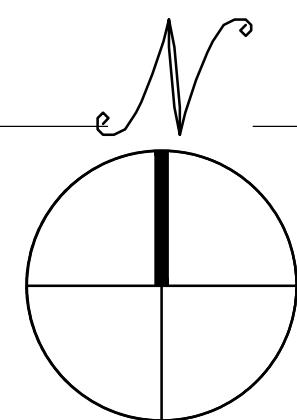
PROJECT NUMBER:
905-2046

REV	DATE	DRAWN	CHECKED	RELEASE LEVEL
	10/07/21	WS	HG	SUBMISSION TO WESTPORT PB

SCALES STATED ON DRAWINGS
ARE VALID ONLY WHEN PLOTTED
ARCH D 24" X 36"

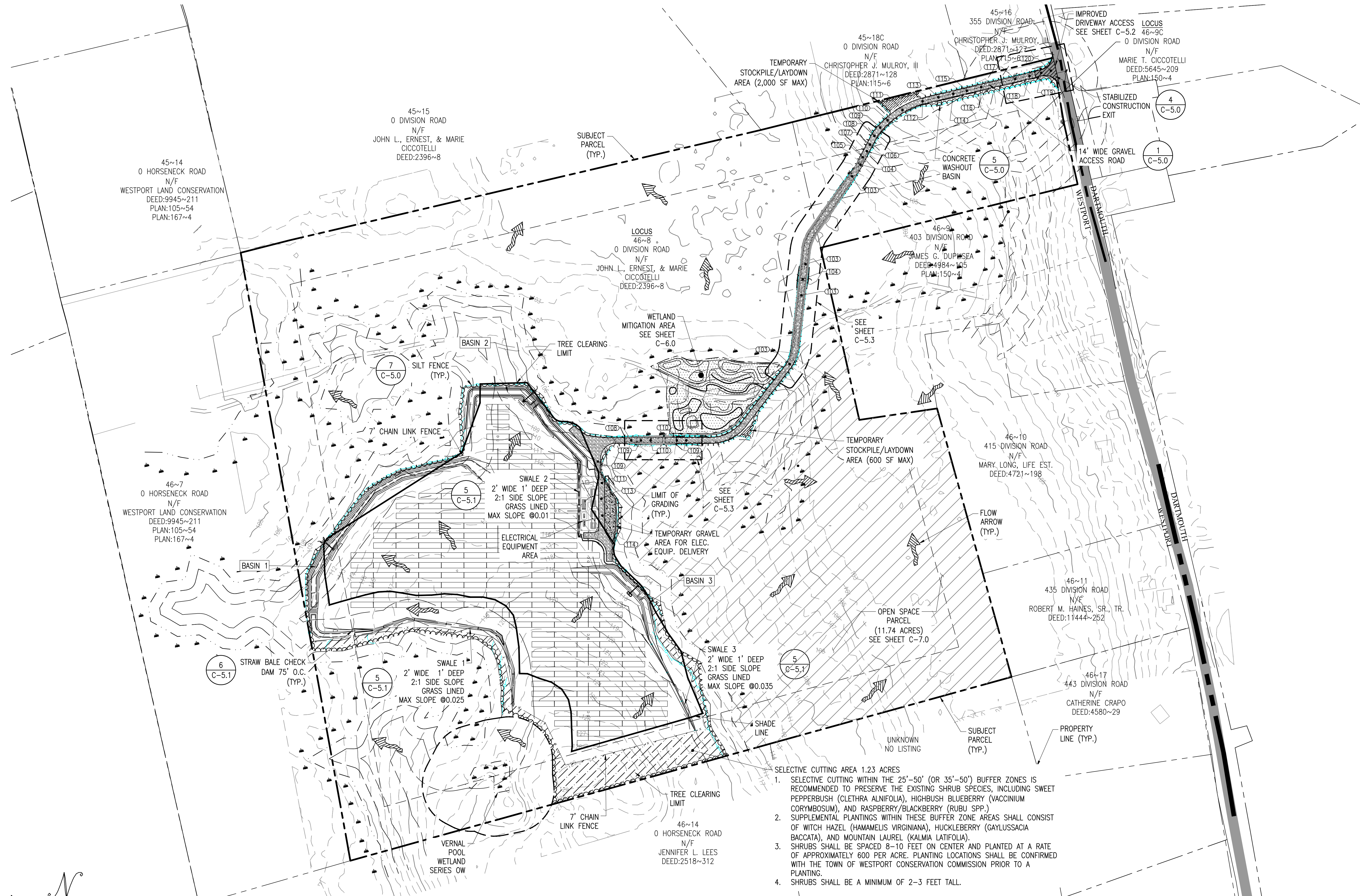
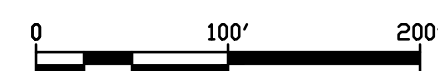
C-3.1
WETLANDS IMPACT PLAN

C:\Users\westland\Box\Salesforce\Projects\0 Division Rd - Westport_2\Design\02. Working Set\0 Division Rd - Westport_SJP_06-15-21



GRADING AND EROSION CONTROL PLAN

SCALE: 1" = 100'



- SELECTIVE CUTTING AREA 1.23 ACRES
1. SELECTIVE CUTTING WITHIN THE 25'-50' (OR 35'-50') BUFFER ZONES IS RECOMMENDED TO PRESERVE THE EXISTING SHRUB SPECIES, INCLUDING SWEET PEPPERBUSH (CLETHRA ALNIFOLIA), HIGHBUSH BLUEBERRY (VACCINIUM CORYMBOSUM), AND RASPBERRY/BLACKBERRY (RUBUS SPP.).
 2. SUPPLEMENTAL PLANTINGS WITHIN THESE BUFFER ZONE AREAS SHALL CONSIST OF WITCH HAZEL (HAMAMELIS VIRGINIANA), HUCKLEBERRY (GAYLUSSACIA BACCATA), AND MOUNTAIN LAUREL (KALMIA LATIFOLIA).
 3. SHRUBS SHALL BE SPACED 8-10 FEET ON CENTER AND PLANTED AT A RATE OF APPROXIMATELY 600 PER ACRE. PLANTING LOCATIONS SHALL BE CONFIRMED WITH THE TOWN OF WESTPORT CONSERVATION COMMISSION PRIOR TO A PLANTING.
 4. SHRUBS SHALL BE A MINIMUM OF 2-3 FEET TALL.

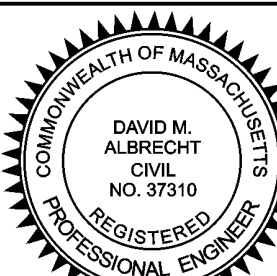
THIS DOCUMENT IS PROVIDED BY BORREGO SOLAR SYSTEMS, INC. TO FACILITATE THE SALE AND INSTALLATION OF A SOLAR POWER SYSTEM FROM BORREGO SOLAR SYSTEMS, INC. REPRODUCTION, RELEASE, OR UTILIZATION FOR ANY OTHER PURPOSE, WITHOUT PRIOR WRITTEN CONSENT IS STRICTLY PROHIBITED.



BORREGO SOLAR

55 TECHNOLOGY DRIVE, SUITE 102
LOWELL, MA 01851
PHONE: (978) 858-6273
FAX: (978) 843-6778
WWW.BORREGOSOLAR.COM

NOT FOR
CONSTRUCTION



David M. Albrecht 10/07/2021

SITE USE PLAN
0 DIVISION ROAD
WESTPORT, MA 02790

PROJECT NUMBER:
905-2046

REV	DATE	DRAWN	CHECKED	RELEASE LEVEL	
	10/07/21	WS	HG	SUBMISSION TO WESTPORT PB	

SCALES STATED ON DRAWINGS
ARE VALID ONLY WHEN PLOTTED
ARCH D 24" X 36"

C-4.0

GRADING AND EROSION
CONTROL PLAN

NOT FOR
CONSTRUCTION



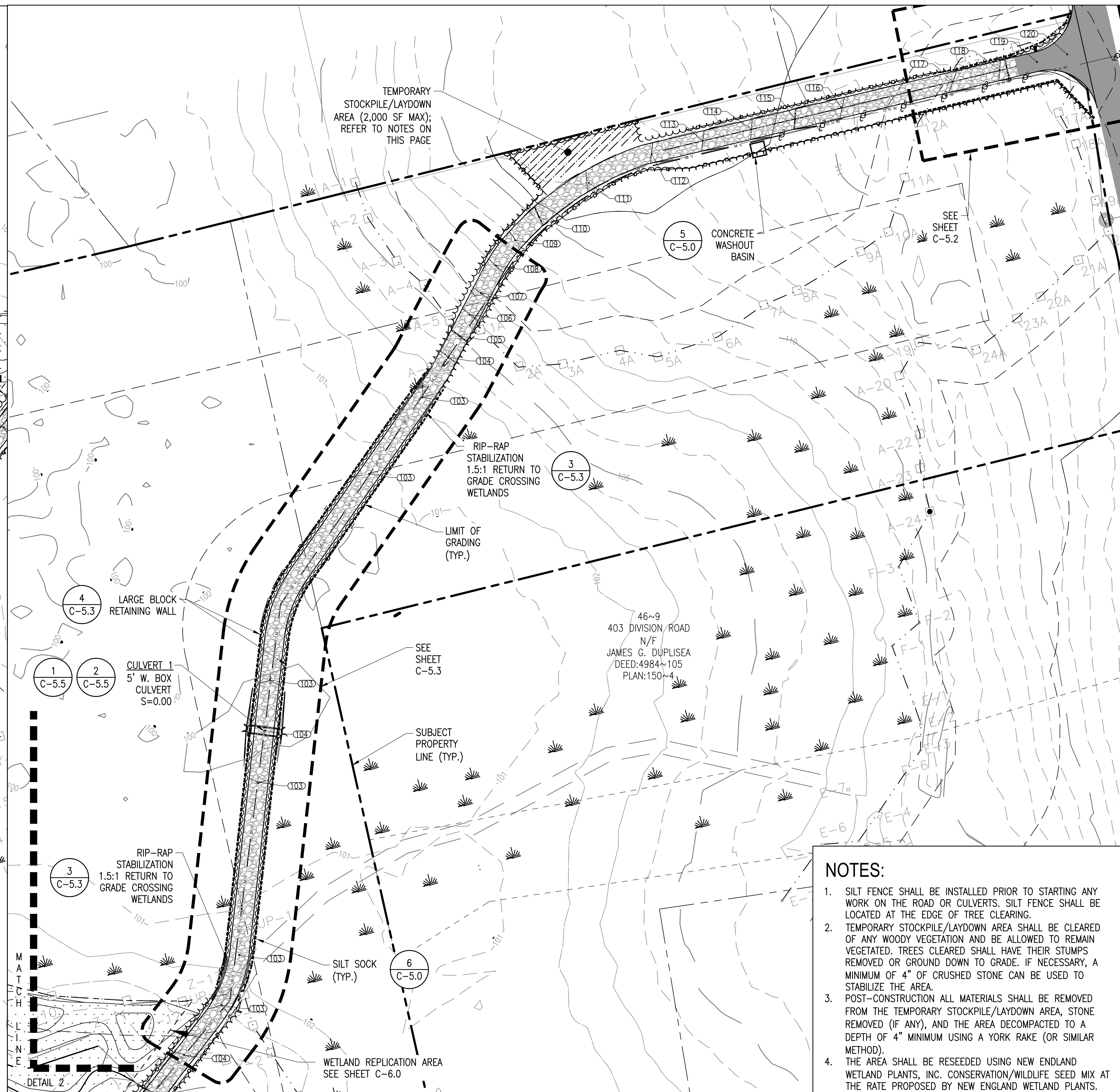
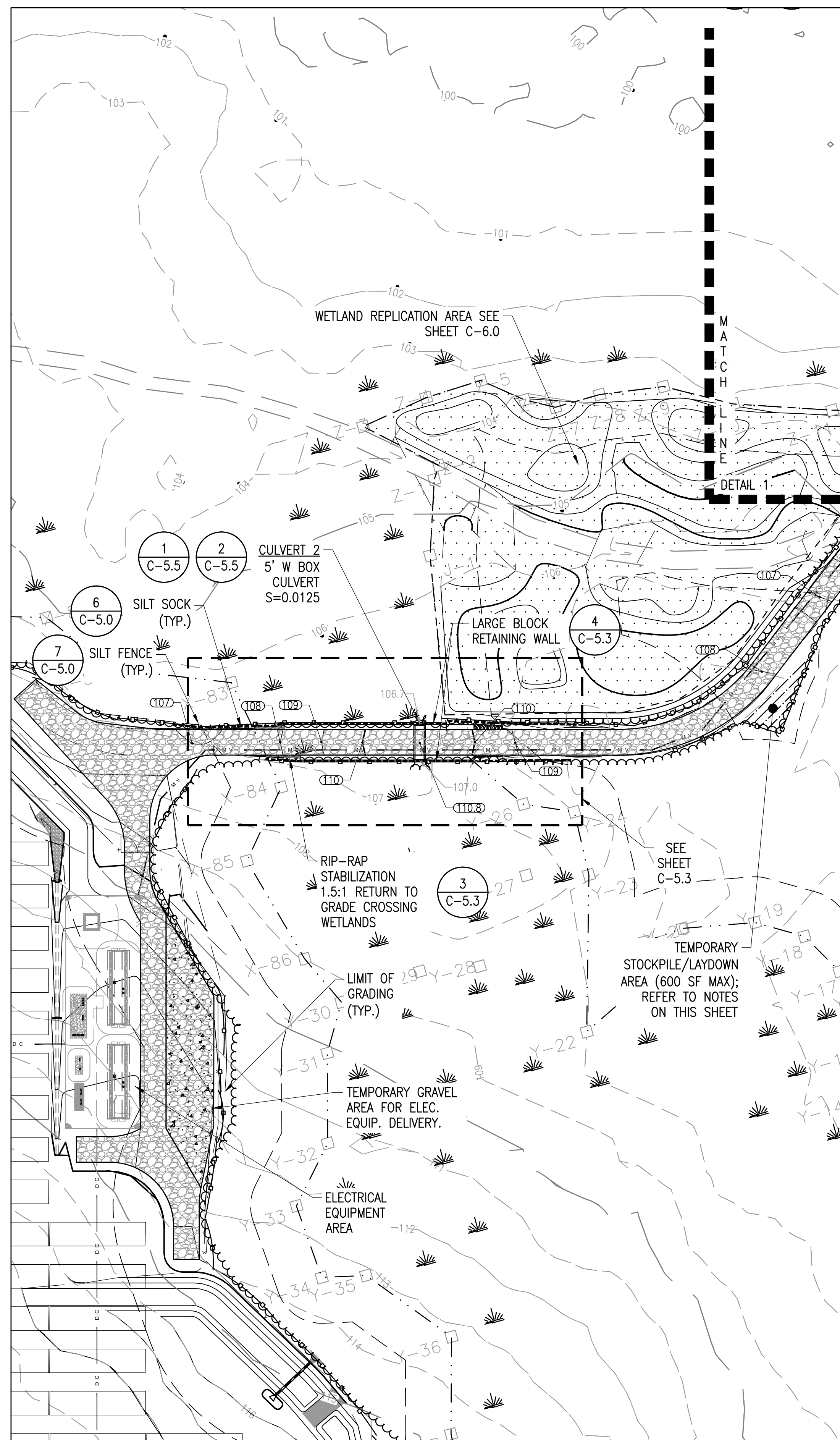
David M. Albrecht 10/07/2021

SITE USE PLAN
0 DIVISION ROAD
WESTPORT, MA 02790

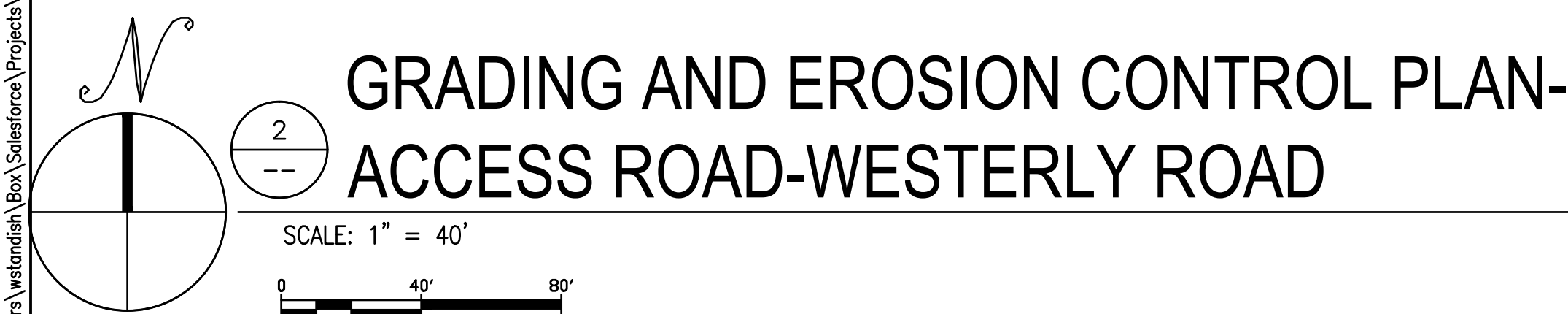
PROJECT NUMBER:
905-2046

REV	DATE	DRAWN	CHECKED	RELEASE LEVEL	
	10/07/21	WS	HG	SUBMISSION TO WESTPORT PB	

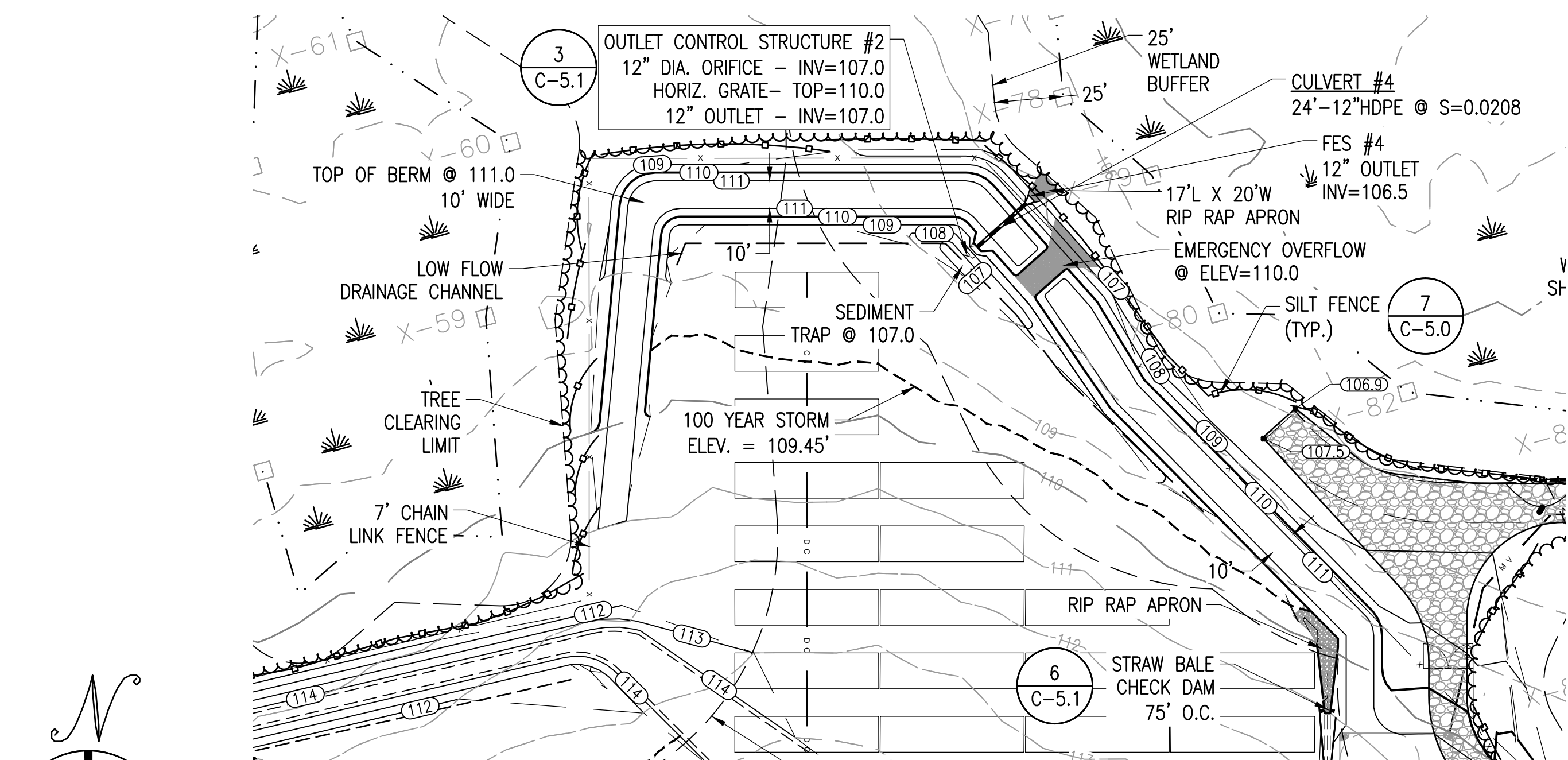
SCALES STATED ON DRAWINGS
ARE VALID ONLY WHEN PLOTTED
ARCH D 24" X 36"
C-4.1
GRADING AND EROSION
CONTROL PLAN-ACCESS
ROAD



- NOTES:**
- SILT FENCE SHALL BE INSTALLED PRIOR TO STARTING ANY WORK ON THE ROAD OR CULVERTS. SILT FENCE SHALL BE LOCATED AT THE EDGE OF TREE CLEARING.
 - TEMPORARY STOCKPILE/LAYDOWN AREA SHALL BE CLEARED OF ANY WOODY VEGETATION AND BE ALLOWED TO REMAIN VEGETATED. TREES CLEARED SHALL HAVE THEIR STUMPS REMOVED OR GROUND DOWN TO GRADE. IF NECESSARY, A MINIMUM OF 4" OF CRUSHED STONE CAN BE USED TO STABILIZE THE AREA.
 - POST-CONSTRUCTION ALL MATERIALS SHALL BE REMOVED FROM THE TEMPORARY STOCKPILE/LAYDOWN AREA, STONE REMOVED (IF ANY), AND THE AREA DECOMPACTED TO A DEPTH OF 4" MINIMUM USING A YORK RAKE (OR SIMILAR METHOD).
 - THE AREA SHALL BE RESEEDING USING NEW ENGLAND WETLAND PLANTS, INC. CONSERVATION/WILDLIFE SEED MIX AT THE RATE PROPOSED BY NEW ENGLAND WETLAND PLANTS.

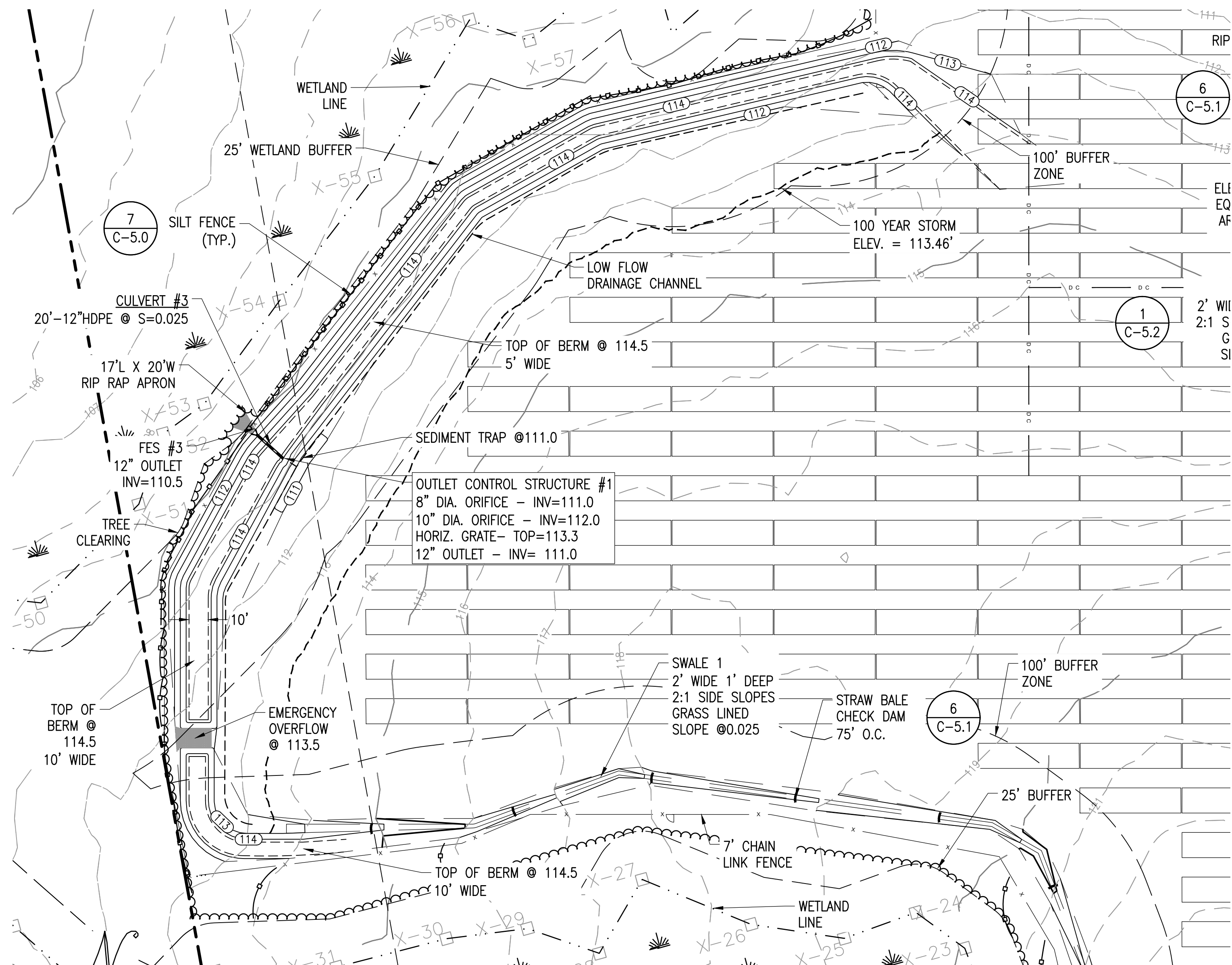


C:\Users\wetandish\Box\Salesforce\Projects\0 Division Rd - Westport_2\Design\02. Working Set\0 Division Rd - Westport_SIP_06-15-21



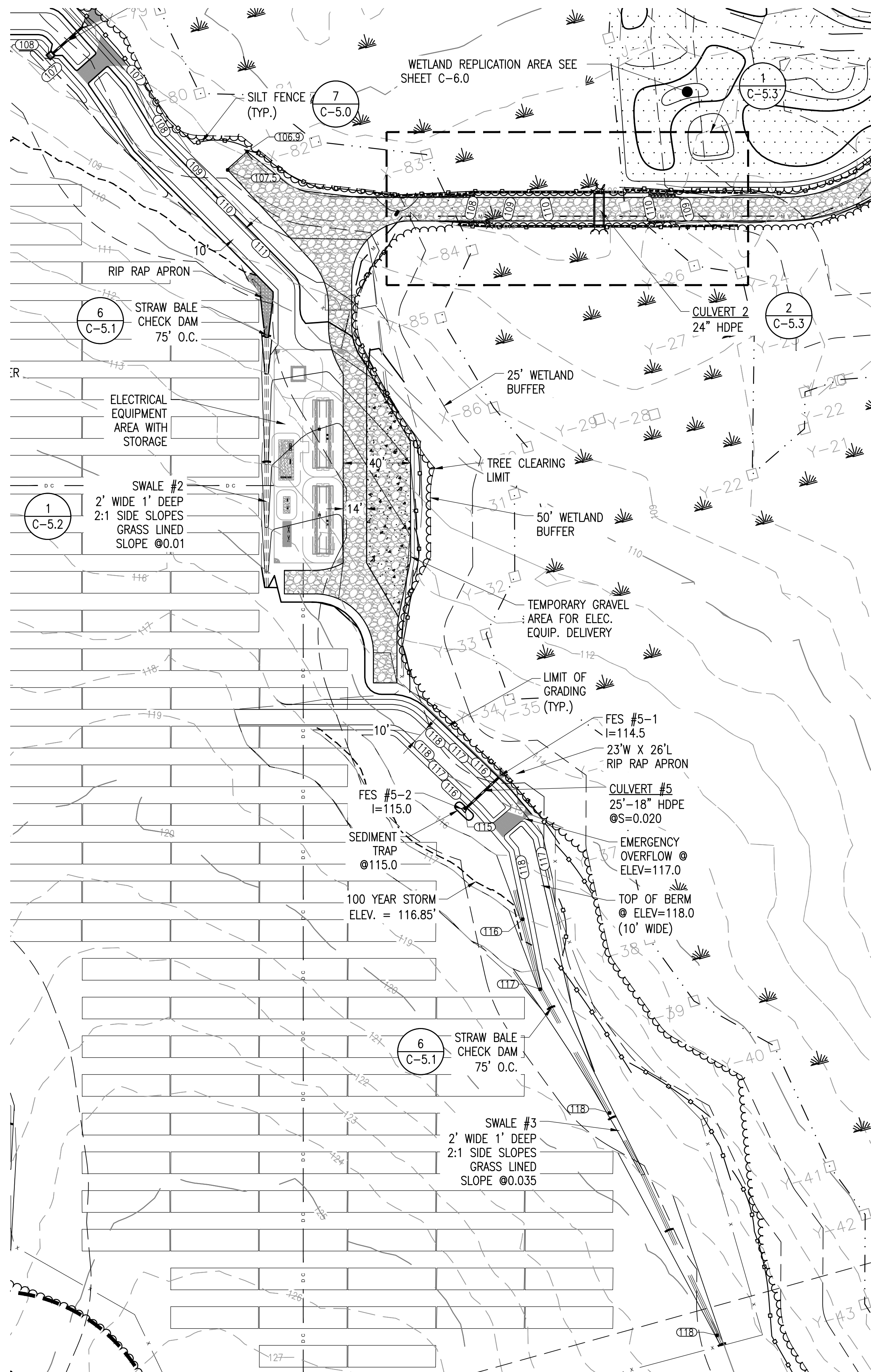
BASIN 2 DETAIL

SCALE: 1" = 40'



BASIN 1 DETAIL

SCALE: 1" = 40'



BASIN 3 DETAIL

SCALE: 1" = 40'

SCALE: 1" = 40'

THIS DOCUMENT IS PROVIDED BY BORREGO SOLAR SYSTEMS, INC. TO FACILITATE THE SALE AND INSTALLATION OF A SOLAR POWER SYSTEM FROM BORREGO SOLAR SYSTEMS, INC. REPRODUCTION, RELEASE, OR UTILIZATION FOR ANY OTHER PURPOSE, WITHOUT PRIOR WRITTEN CONSENT, IS STRICTLY PROHIBITED.

BORREGO SOLAR
55 TECHNOLOGY DRIVE, SUITE 102
LOWELL, MA 01851
PHONE: (978) 898-6273
FAX: (978) 843-6778
WWW.BORREGOSOLAR.COM

NOT FOR
CONSTRUCTION

DAVID M. ALBRECHT
CIVIL
NO. 37310
PROFESSIONAL ENGINEER

David M. Albrecht 10/07/2021

SITE USE PLAN
0 DIVISION ROAD
WESTPORT, MA 02790

PROJECT NUMBER:
905-2046

REV	DATE	DRAWN	CHECKED	RELEASE LEVEL
	10/07/21	WS	HG	SUBMISSION TO WESTPORT PB

SCALES STATED ON DRAWINGS
ARE VALID ONLY WHEN PLOTTED
ARCH D 24" X 36"

C-4.2
BASIN DETAILS

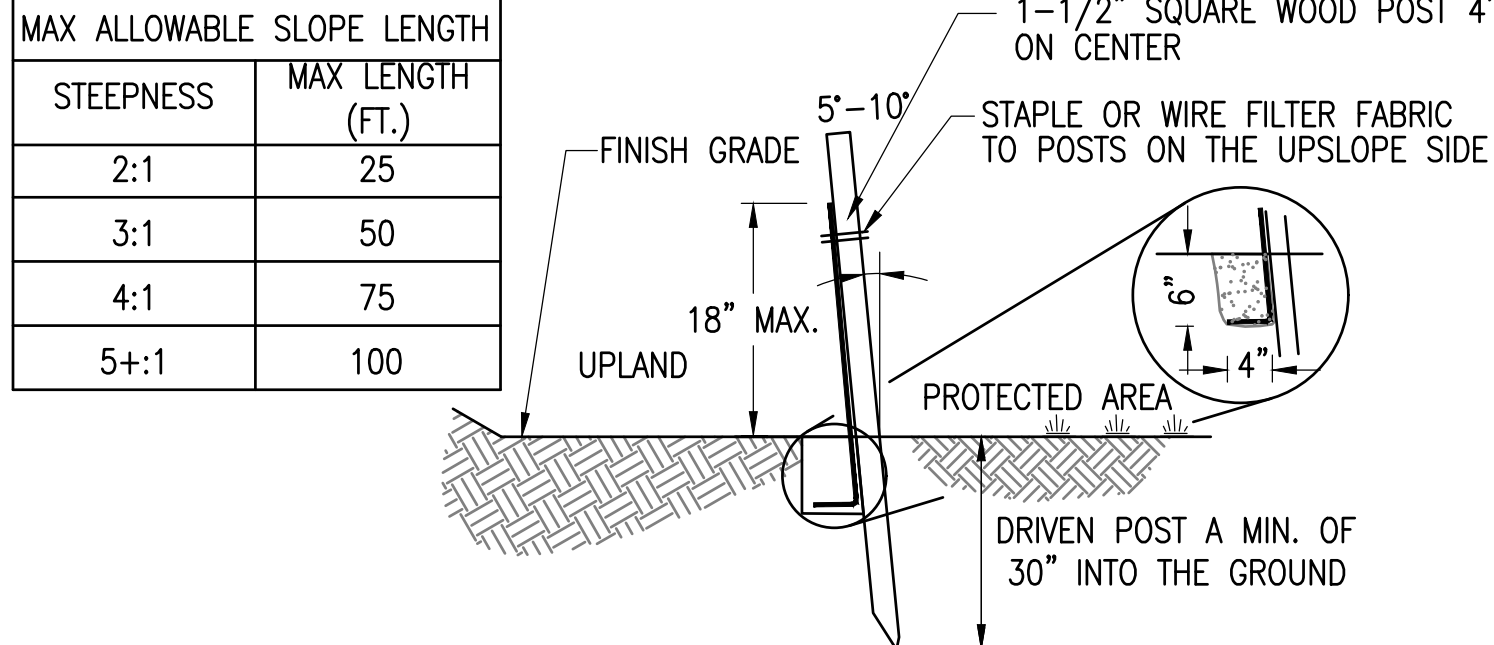
C:\Users\welandish\Box\Salesforce\Projects\0 Division Rd - Westport_SIP_06-15-21



8 EMERGENCY CONTACT SIGN

LOCATED AT VEHICLE GATES

SCALE: NTS
XD_CIVIL_A04_SIGNAGE_EMERGENCY 2016-2-22

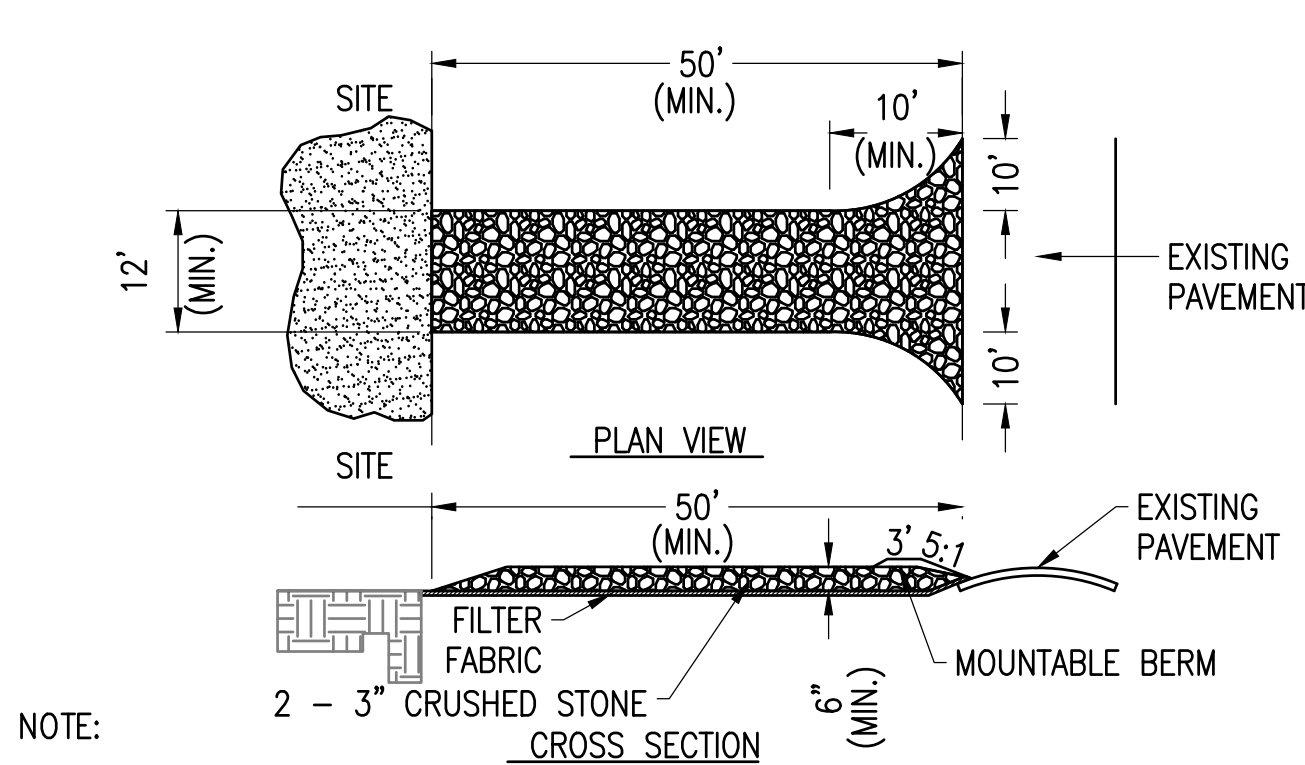


NOTES:

- MAX DRAINAGE AREA FOR OVERLAND FLOW SHALL NOT EXCEED 1/4 ACRE-FOOT PER 100 FEET OF FENCE.
- FILTER FABRIC TO BE FASTENED SECURELY TO FENCE POST WITH WIRE TIES OR STAPLES. POST SHALL BE STEEL EITHER "I" OR "U" SHAPED OR HARDWOOD.
- FILTER CLOTH SHALL BE FASTENED SECURELY WITH TIES SPACED EVERY 24" AT TOP AND MID-SECTION.
- WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY 6 INCHES AND FOLDED. FILTER CLOTH SHALL BE FILTER X, MIRAFI 100X, STABILENKA T140N, OR APPROVED EQUAL.
- PREFABRICATED UNITS SHALL BE GEOFAB, ENVIROFENCE, OR APPROVED EQUAL.
- MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SEDIMENT FENCE.

7 SILT FENCE

SCALE: NTS
XD_CIVIL_EROSION_SILT_FENCE_P 2014-10-17

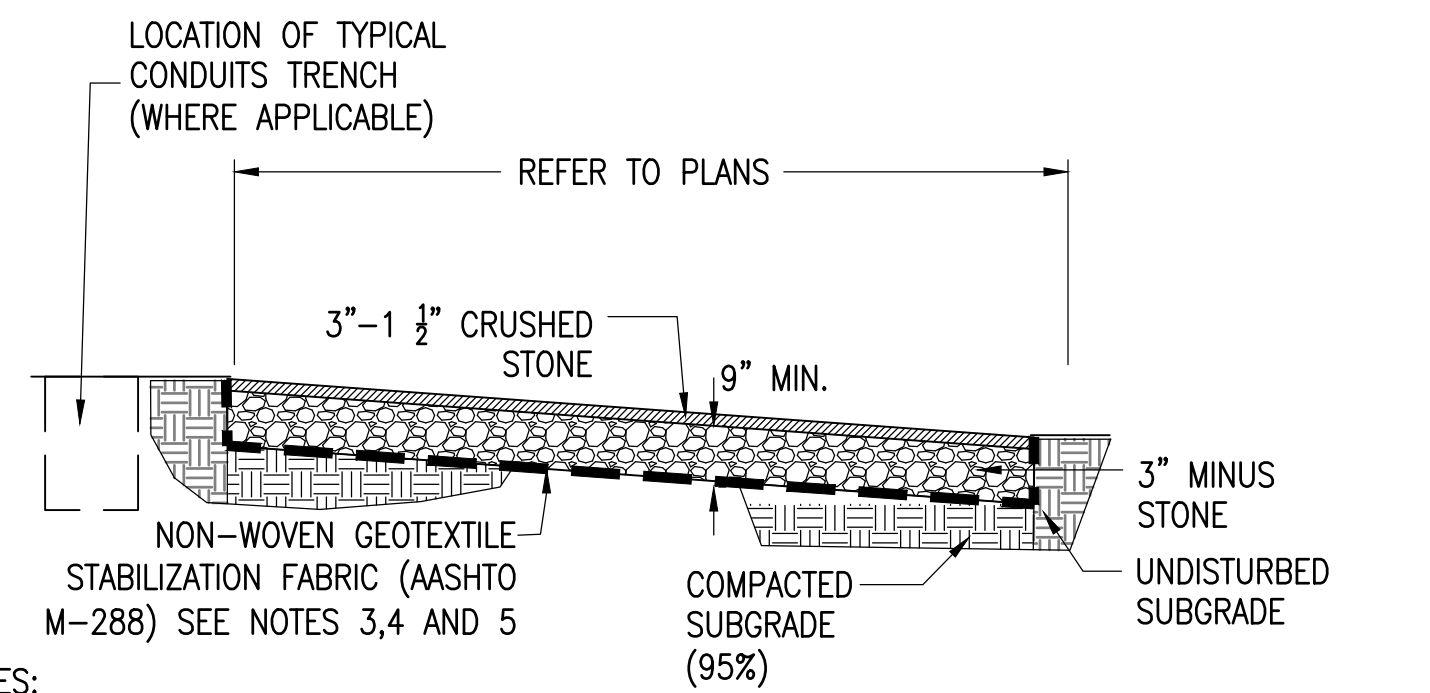


NOTE:

- ENTRANCE WIDTH SHALL BE A TWENTY-FOUR (24) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
- THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH SHALL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR 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. BERM SHALL BE PERMITTED. PERIODIC INSPECTION AND MAINTENANCE SHALL BE PROVIDED AS NEEDED.

4 STABILIZED CONSTRUCTION EXIT

SCALE: NTS
XD_CIVIL_TEMPORARY_CONSTRUCTION_STABILIZED_CONSTRUCTION_EXIT 06-10-2016

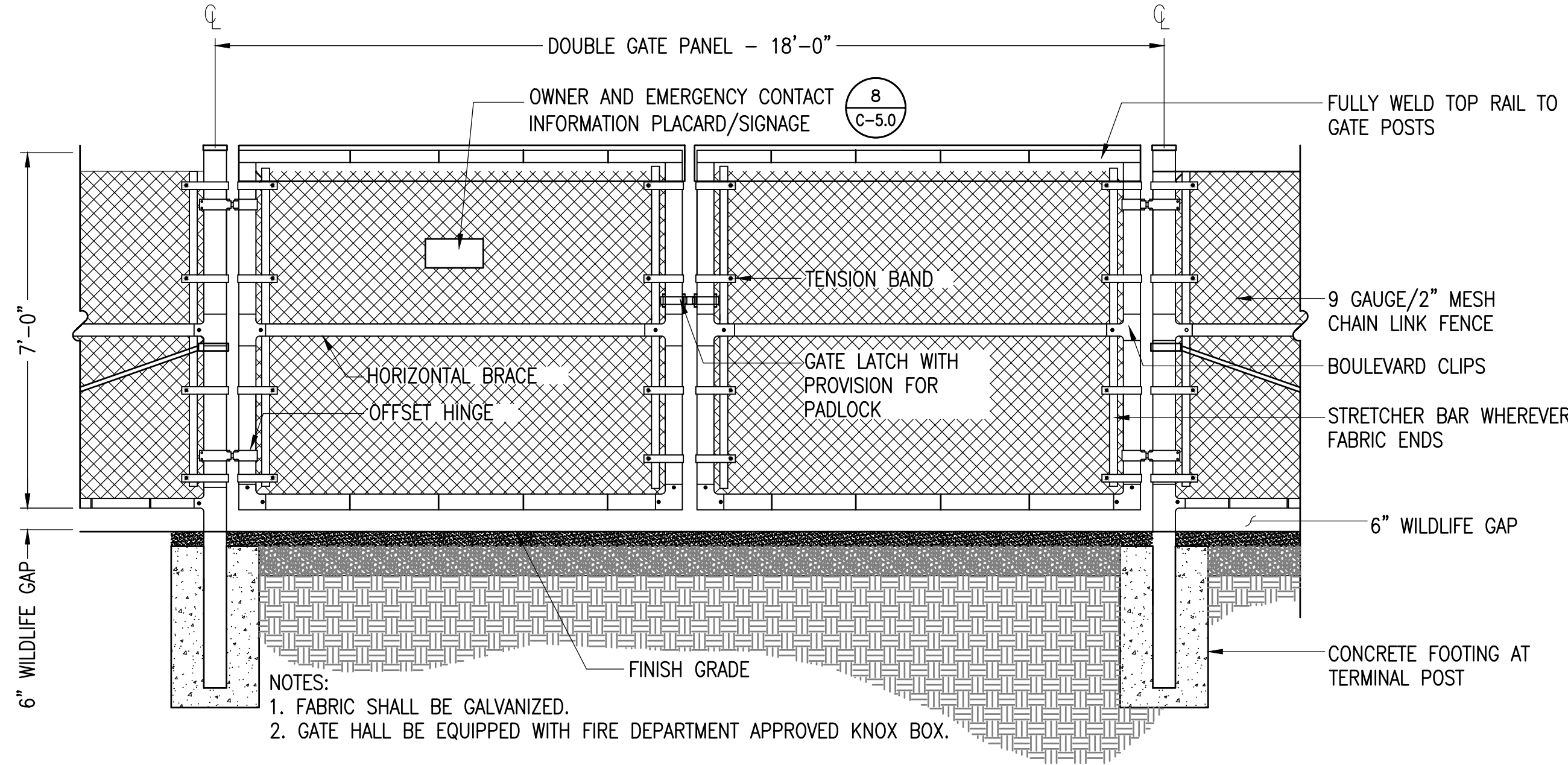


NOTES:

- SUBCONTRACTOR SHALL EXCAVATE TO SUITABLE MATERIAL FOR SUBGRADE.
- SUBCONTRACTOR SHALL COMPACT SUBGRADE TO PROVIDE SUITABLE SURFACE TO PLACE ROAD.
- GEOTEXTILE FABRIC SHALL MEET THE FOLLOWING REQUIREMENTS:
 - TENSILE STRENGTH: 150 LB MIN.
 - ELONGATION: 50%
 - CBR PUNCTURE: 400 LB MIN.
 - MINIMUM WATER FLOW RATE: 120 GPM / FT²
- SUBCONTRACTOR SHALL FOLLOW GEOTEXTILE FABRIC MANUFACTURER INSTALLATION PROCEDURES.
- WHERE OVERLAPPING OF GEOTEXTILE FABRIC IS REQUIRED, SUBCONTRACTOR SHALL OVERLAP A MINIMUM OF 24".
- SUBCONTRACTOR SHALL REMOVE TEMPORARY CONSTRUCTION ACCESS ROADS, AND RESTORE TO PRE-CONSTRUCTION CONDITIONS TO THE SATISFACTION OF THE CEOR AND THE GOVERNING AGENCIES.

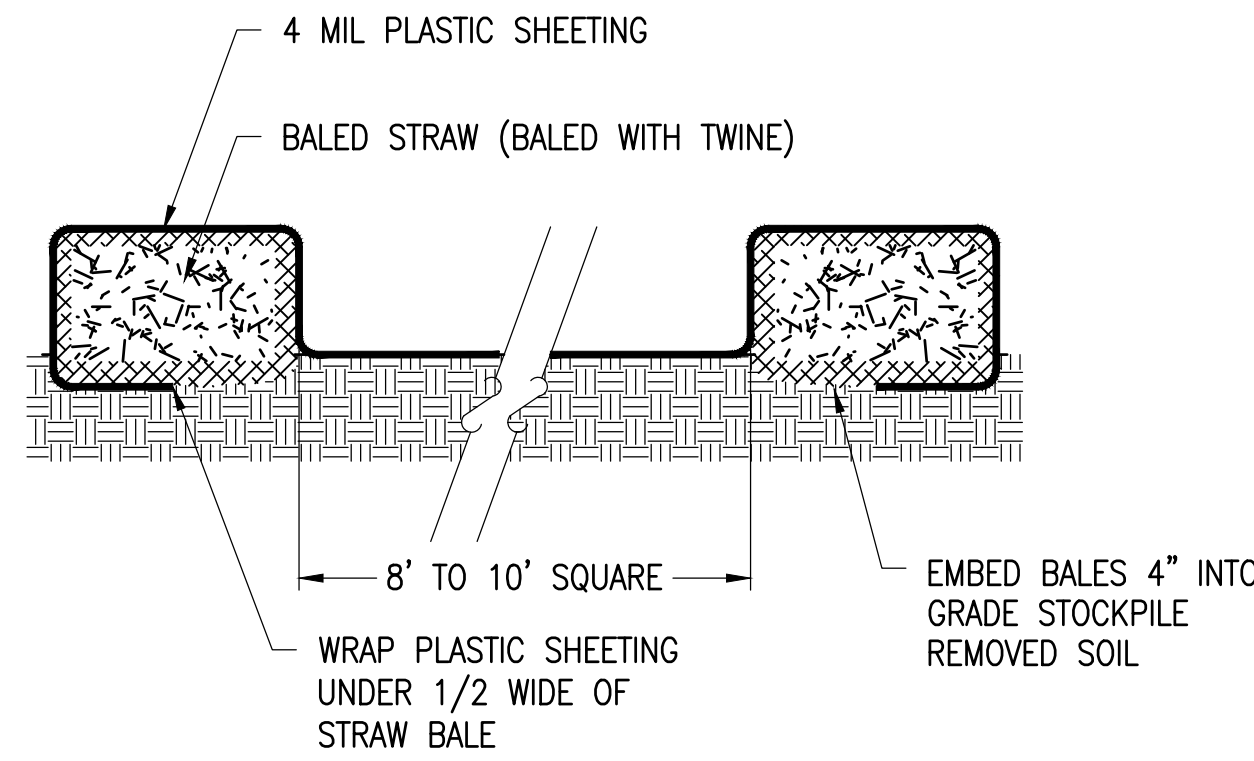
1 GRAVEL ACCESS ROAD

SCALE: NTS
XD_CIVIL_GRAVEL_ROAD 07-24-2017



9 VEHICLE GATE - WILDLIFE GAP

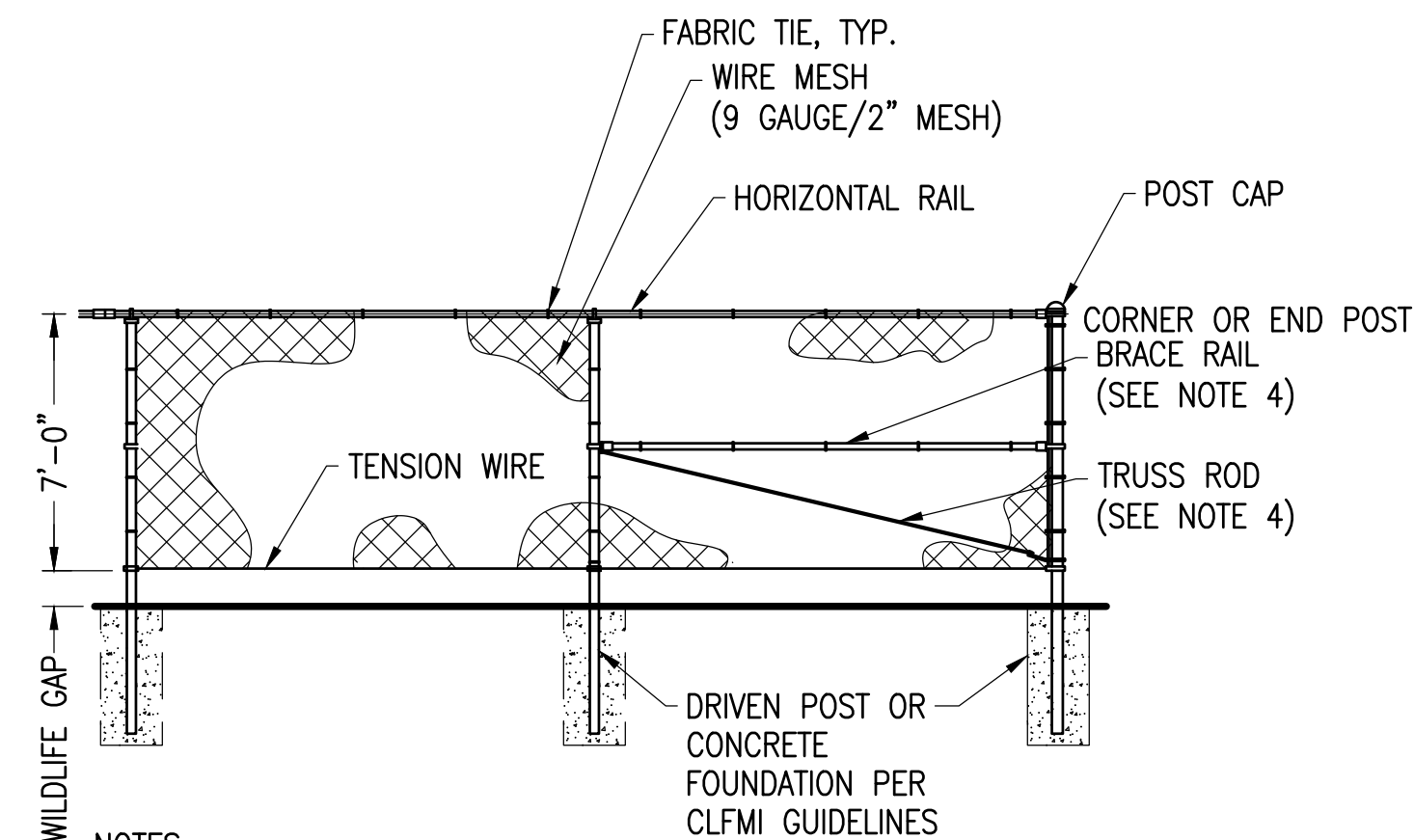
SCALE: NTS
XD_CIVIL_FENCE_VEHICLE_GATE_Y 10-23-2018



NOTE: PLASTIC SHEETING SHALL BE FREE OF TEARS OR HOLES. AFTER BASIN IS USED, WASHWATER FROM WASHOUT BASIN SHALL EVAPORATE OR BE VACUUMED OUT. REMOVE REMAINING HARDENED SOLIDS. REPLACE PLASTIC SHEETING AND STRAWBALES AS REQUIRED.

5 CONCRETE WASHOUT BASINS

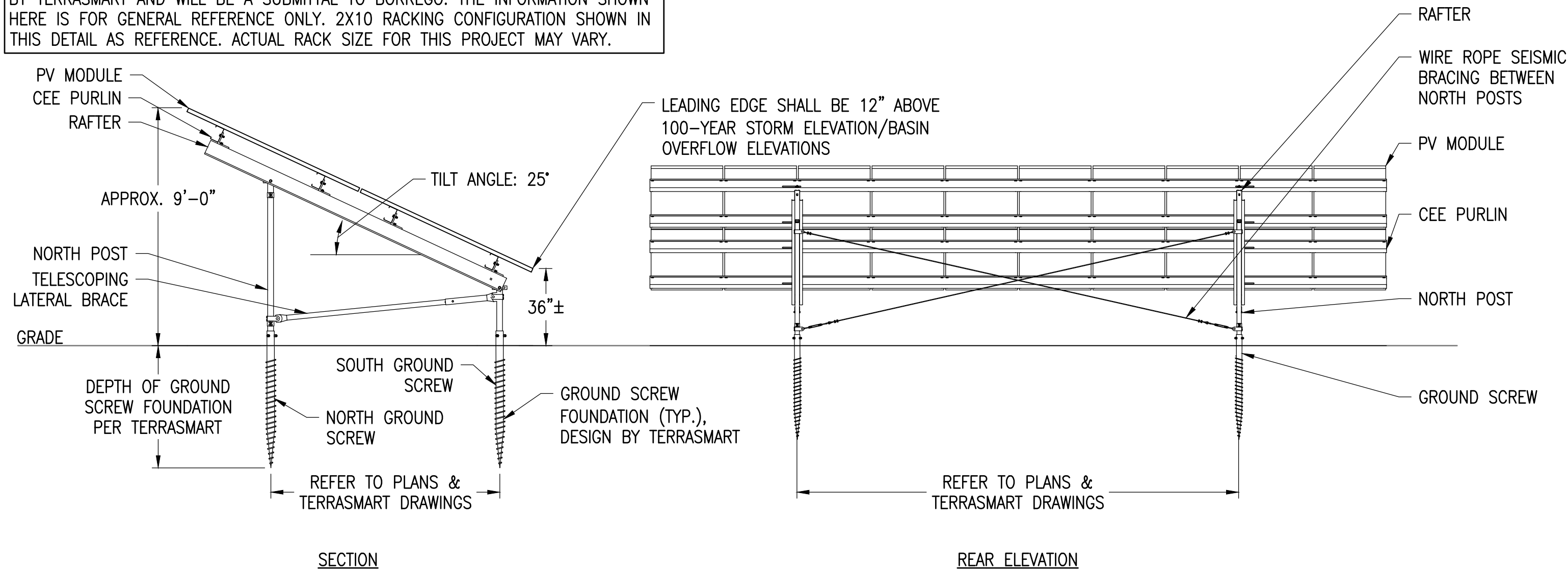
SCALE: NTS
XD_CIVIL_CONCRETE_WASHOUT_BASINS 07-24-2017



2 CHAIN LINK FENCE - WILDLIFE GAP

SCALE: NTS
XD_CIVIL_FENCE_Y_CHAIN_LINK_WILDLIFE_GAP 06-27-2016

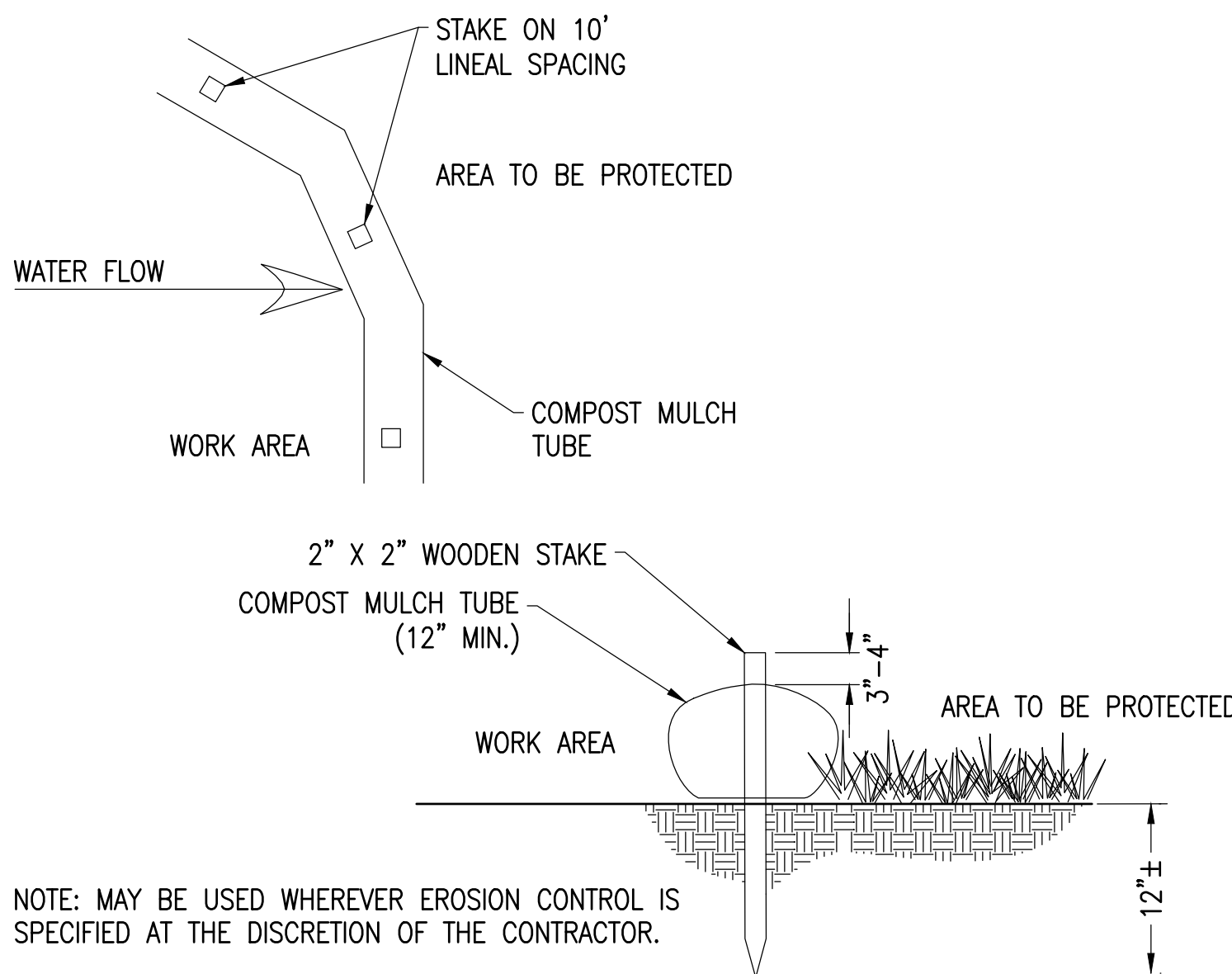
NOTE: THE "TERRAFARM" RACKING AND GROUND SCREW FOUNDATIONS ARE DESIGNED BY TERRASmart AND WILL BE A SUBMITTAL TO BORREGO. THE INFORMATION SHOWN HERE IS FOR GENERAL REFERENCE ONLY. 2X10 RACKING CONFIGURATION SHOWN IN THIS DETAIL AS REFERENCE. ACTUAL RACK SIZE FOR THIS PROJECT MAY VARY.



10 TYPICAL RACK SECTION & REAR ELEVATION

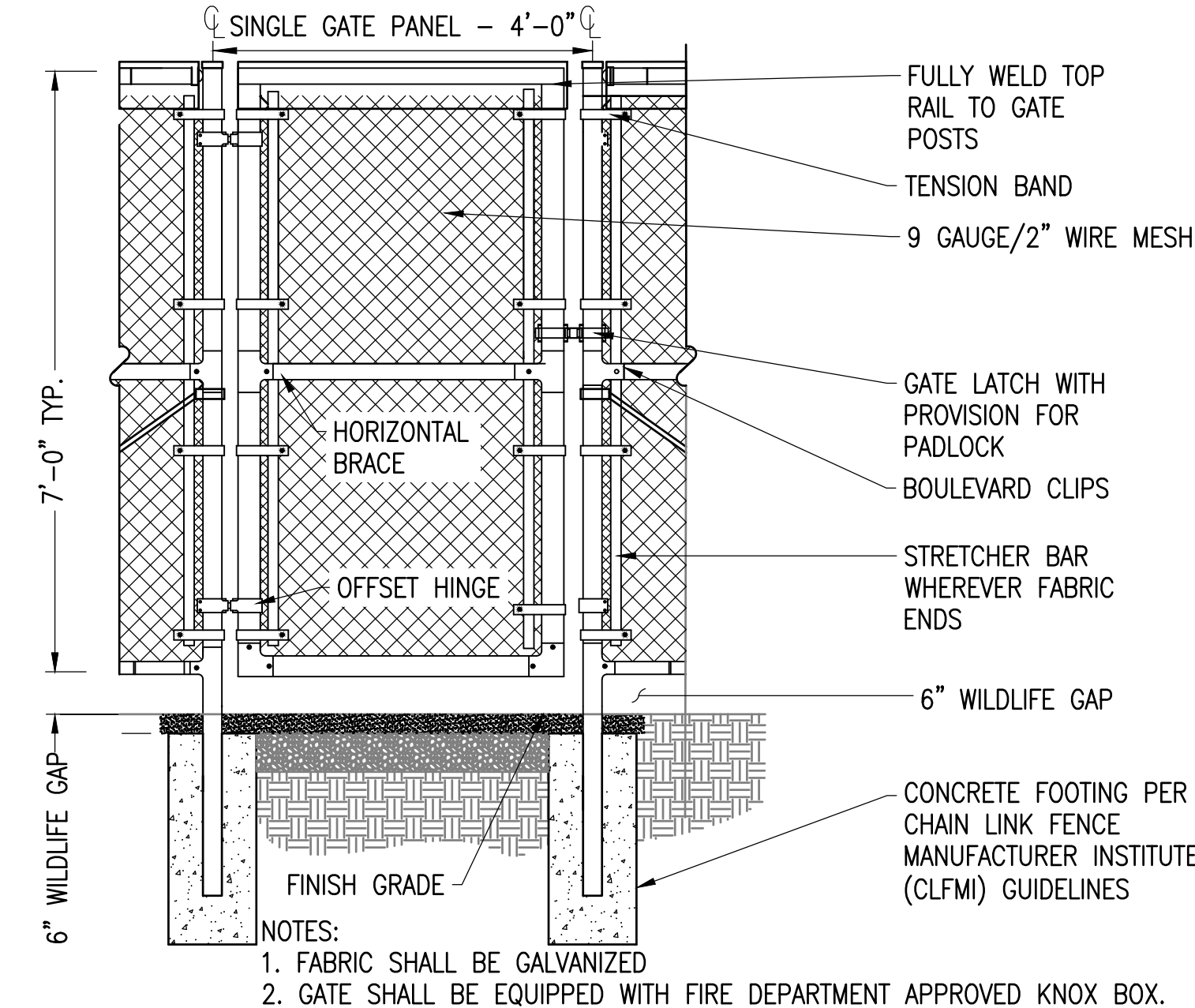
TERRASmart TERRAFARM 2 - 2X PORTRAIT

SCALE: NTS
XD_STRUCT_TERRASmart_TF2_RACK_SECT & REAR_ELEV 2016-06-27



6 MULCH TUBE

SCALE: NTS
XD_CIVIL_FILTEREX_FILTER_SOCK 03-29-2016



3 4' MAN GATE - WILDLIFE GAP

SCALE: NTS
XD_CIVIL_SITE_CONSTRUCTION_4' WALK THROUGH GATE 07-25-2017

THIS DOCUMENT IS PROVIDED BY BORREGO SOLAR SYSTEMS, INC. TO FACILITATE THE SALE AND INSTALLATION OF A SOLAR POWER SYSTEM FROM BORREGO SOLAR SYSTEMS, INC. REPRODUCTION, RELEASE OR UTILIZATION FOR ANY OTHER PURPOSE, WITHOUT PRIOR WRITTEN CONSENT IS STRICTLY PROHIBITED.



BORREGO SOLAR
55 TECHNOLOGY DRIVE, SUITE 102
LOWELL, MA 01851
PHONE: (978) 858-6273
FAX: (978) 843-6778
WWW.BORREGOSOLAR.COM

NOT FOR CONSTRUCTION



David M. Albrecht 10/07/2021

SITE USE PLAN
0 DIVISION ROAD
WESTPORT, MA 02790

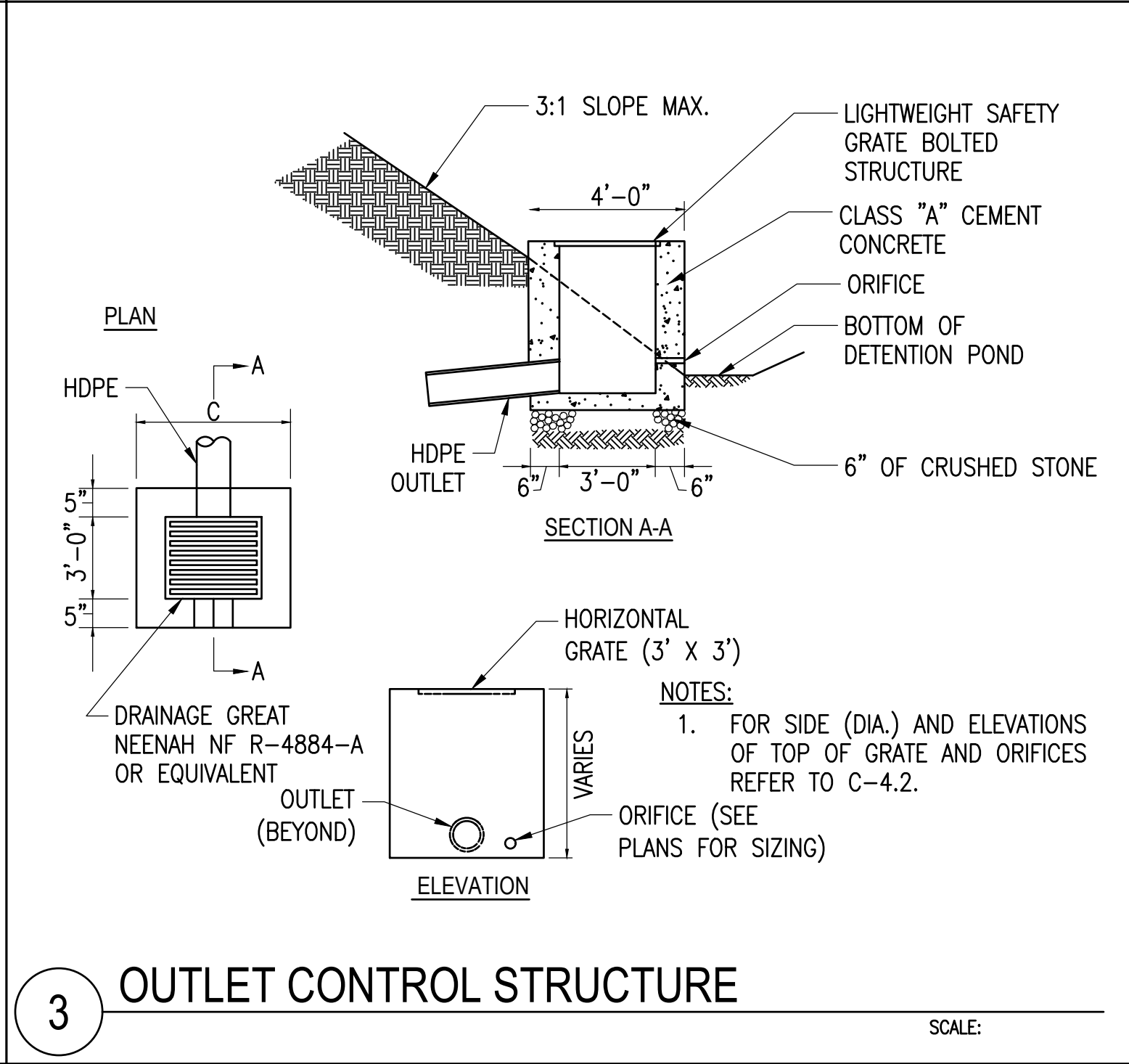
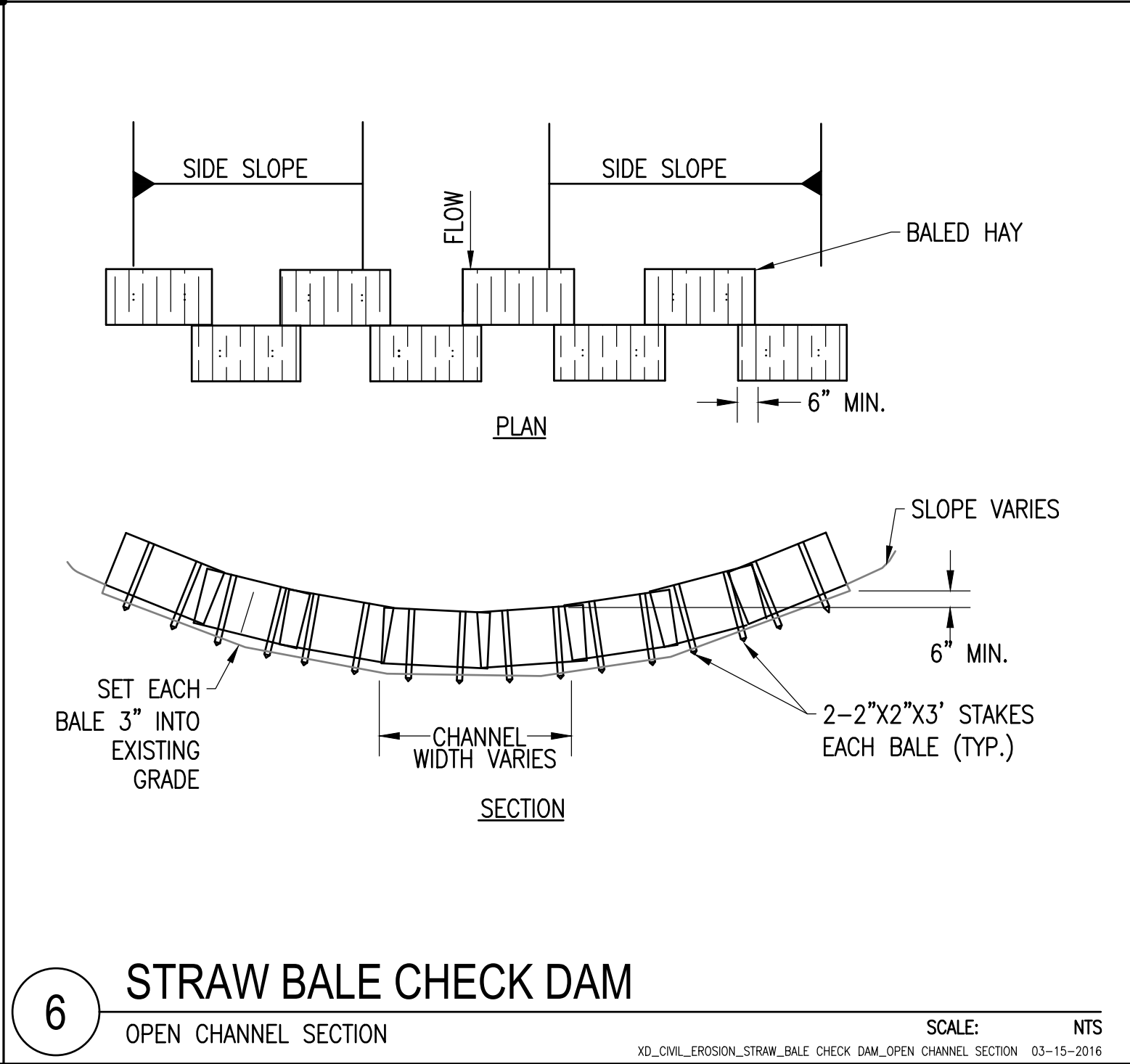
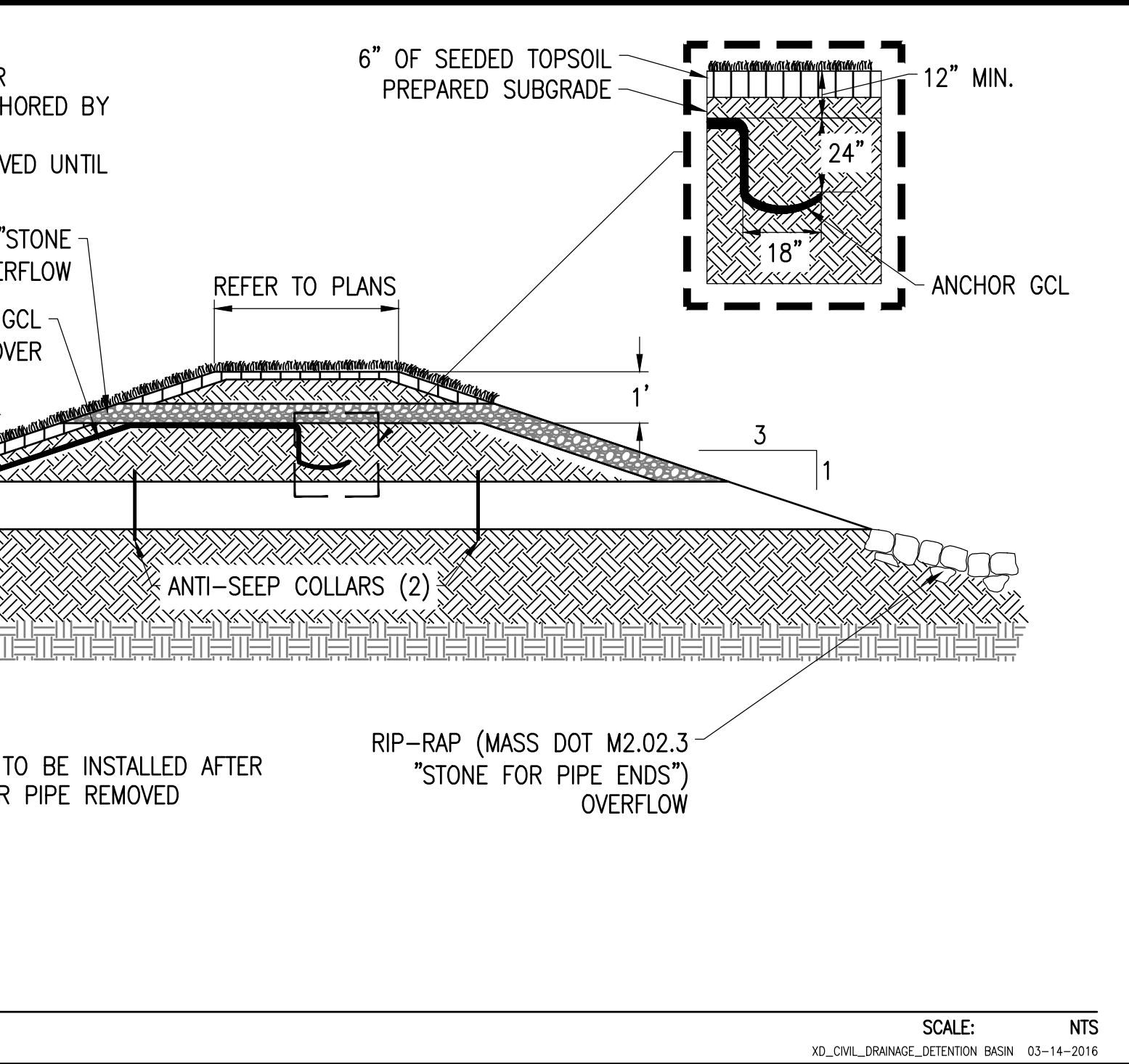
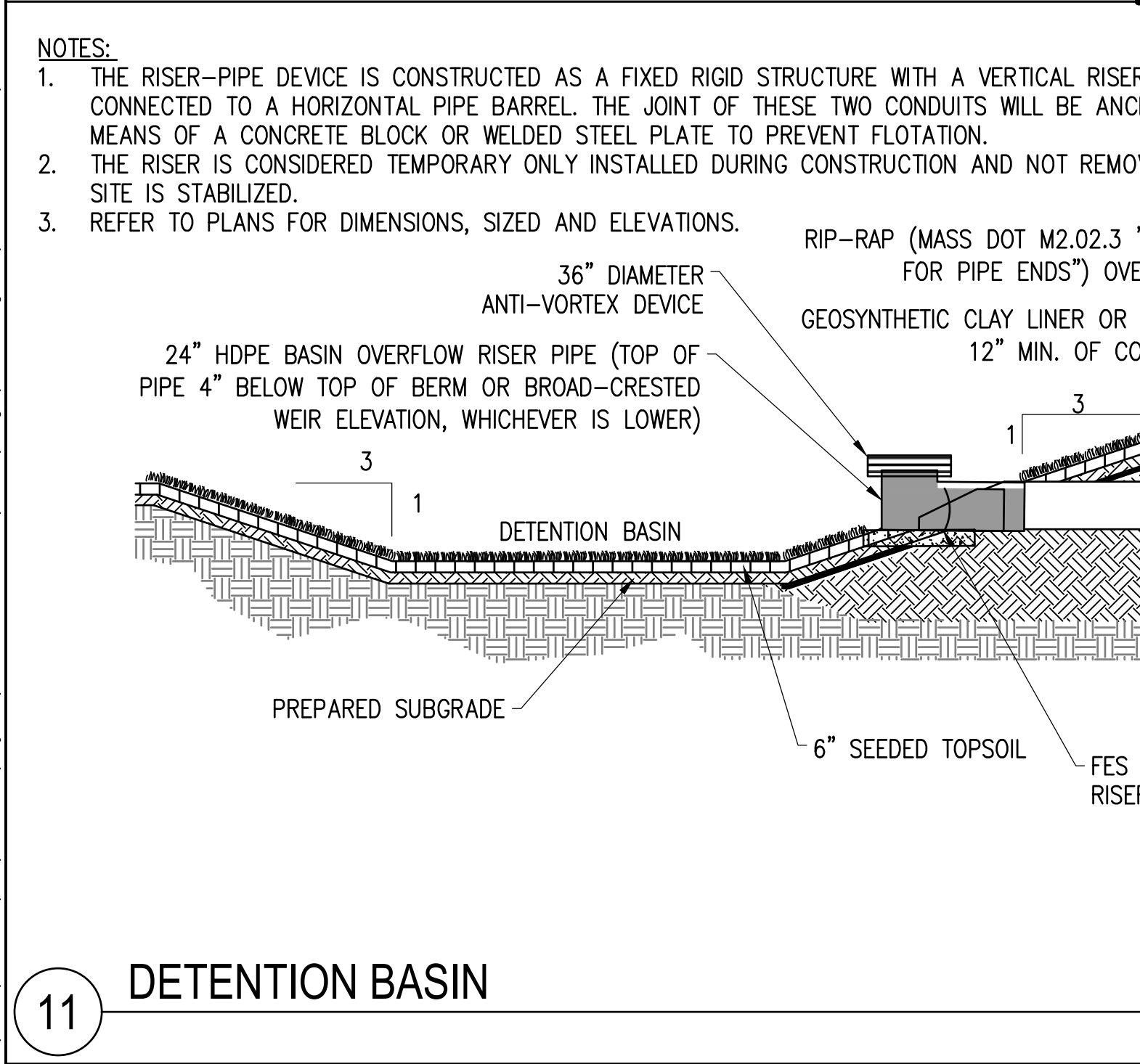
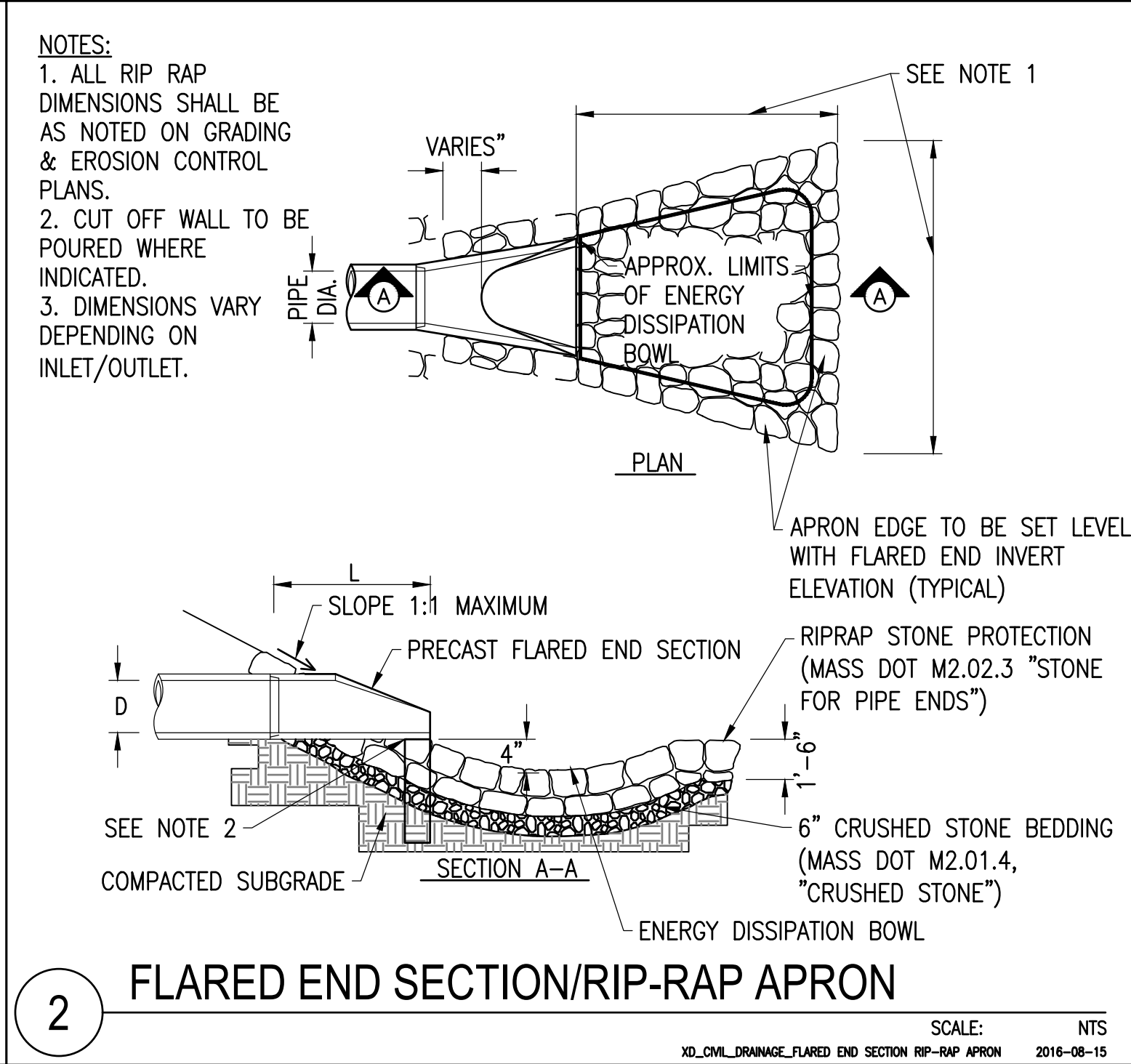
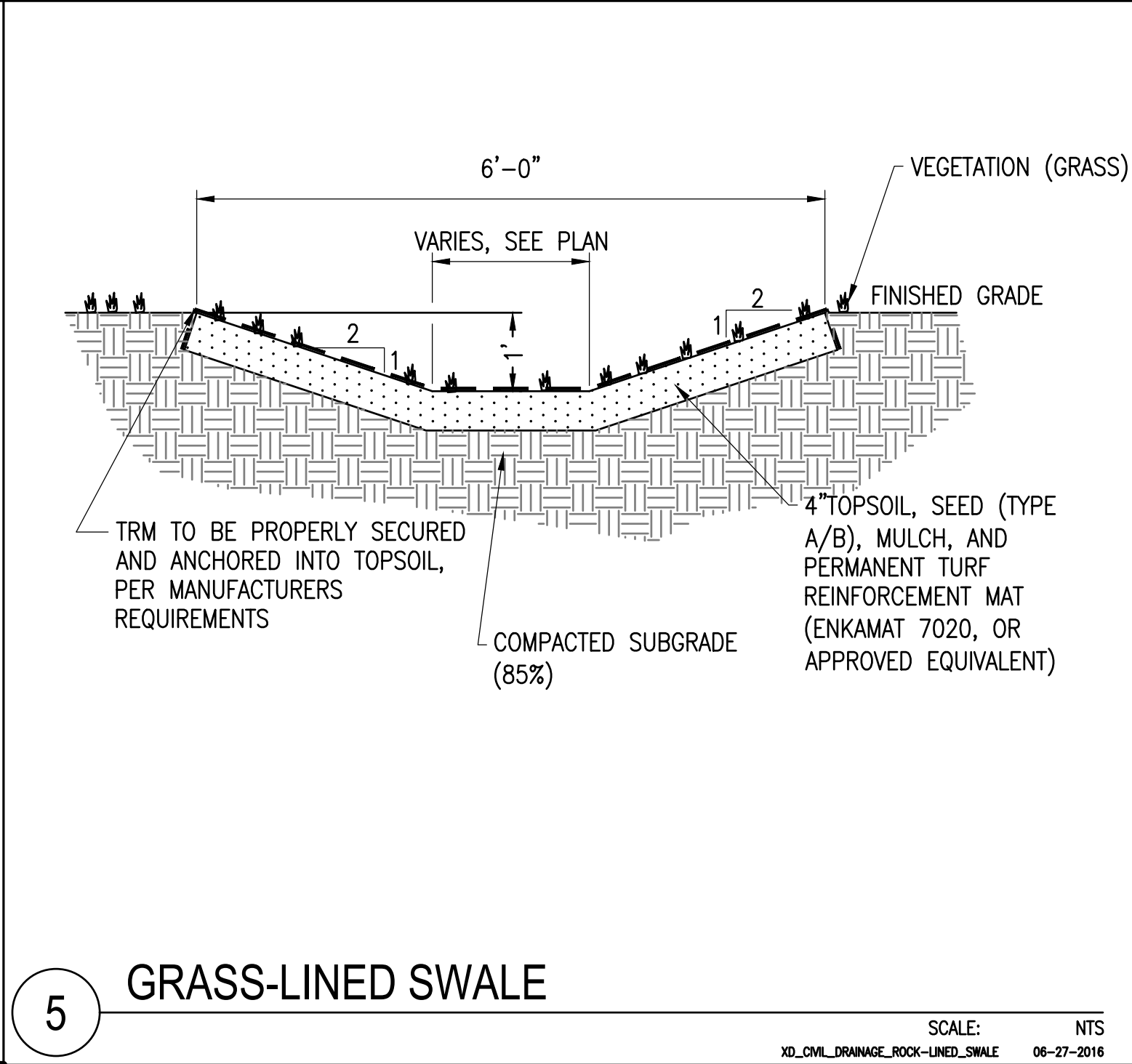
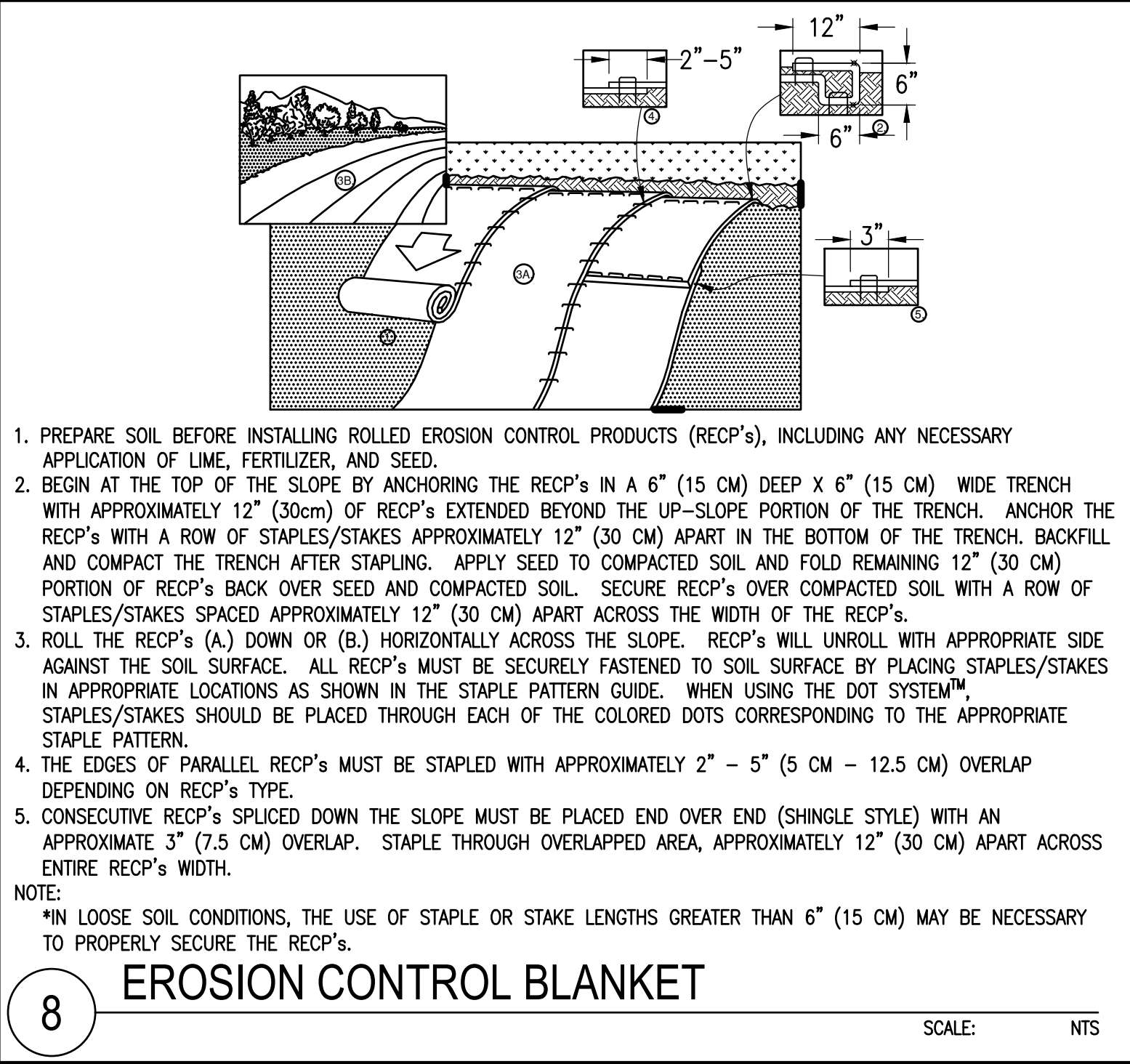
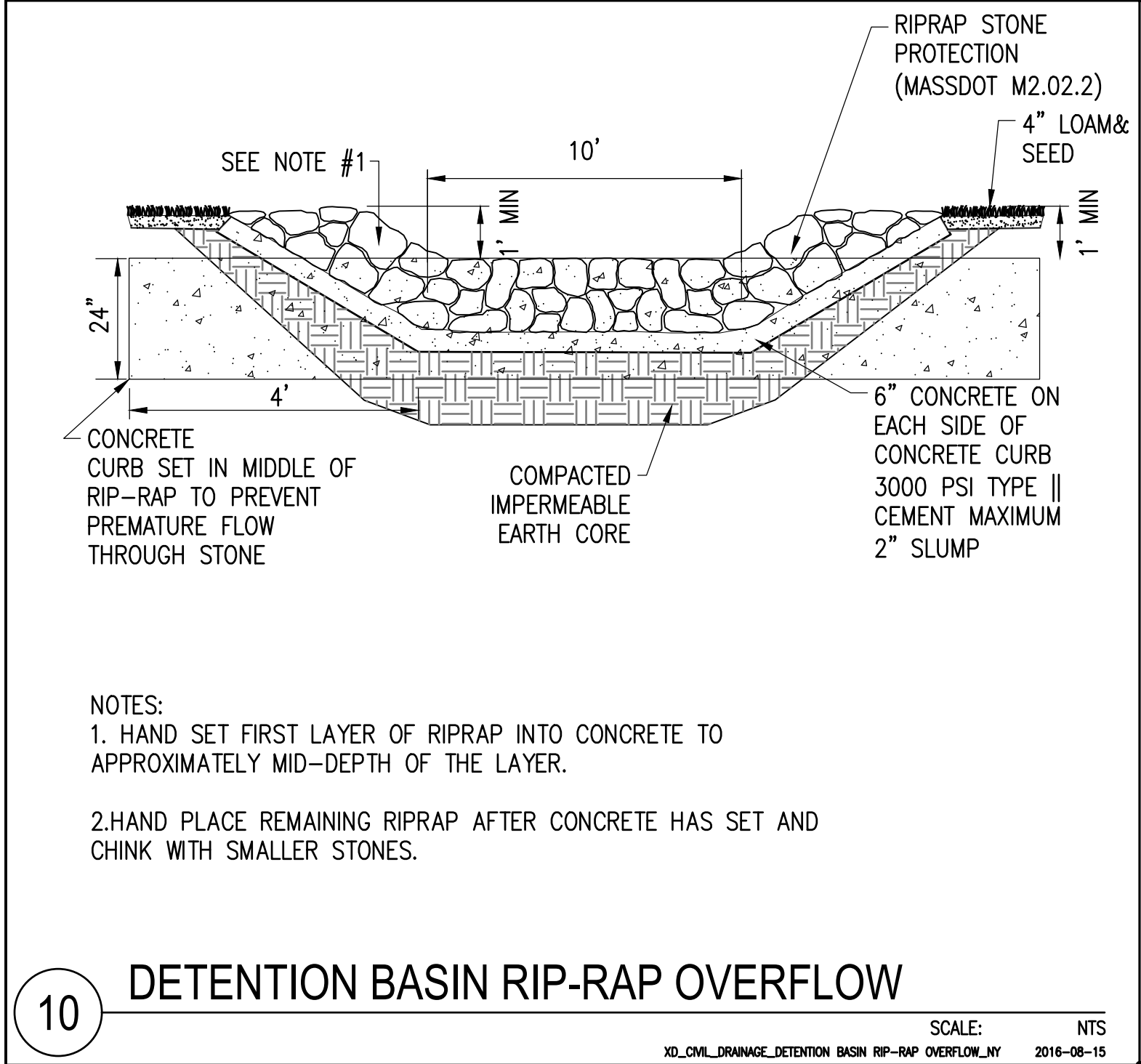
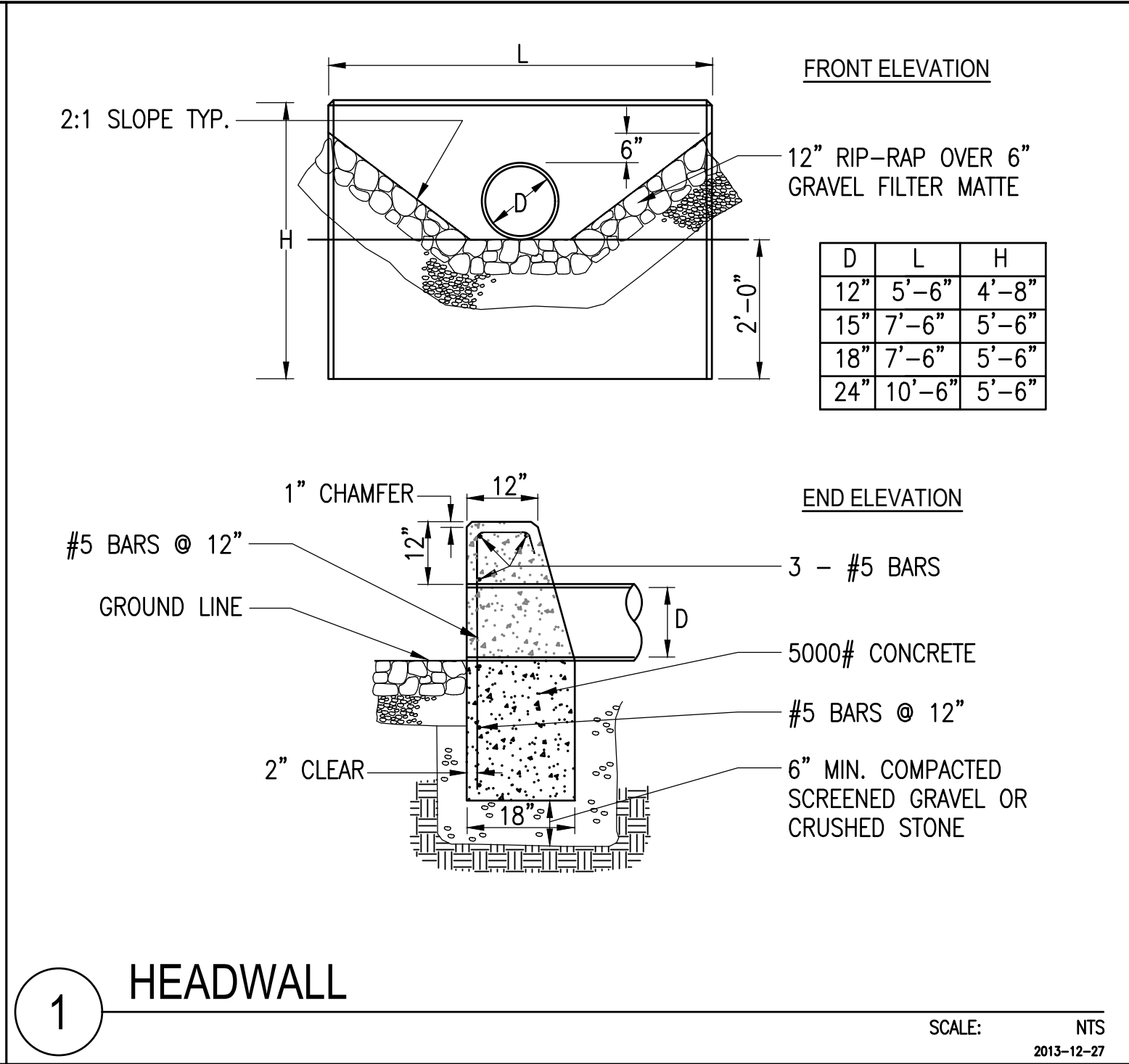
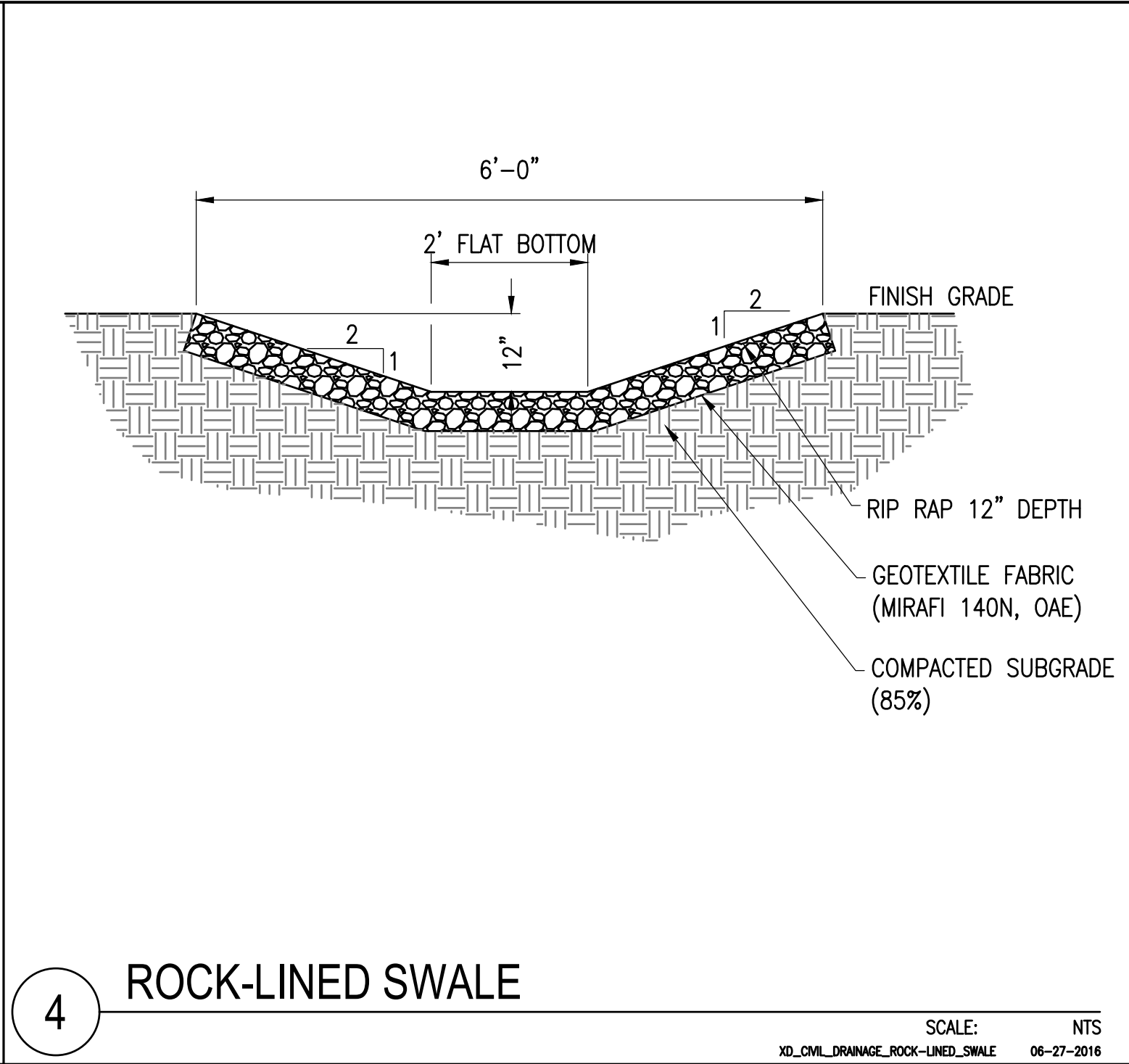
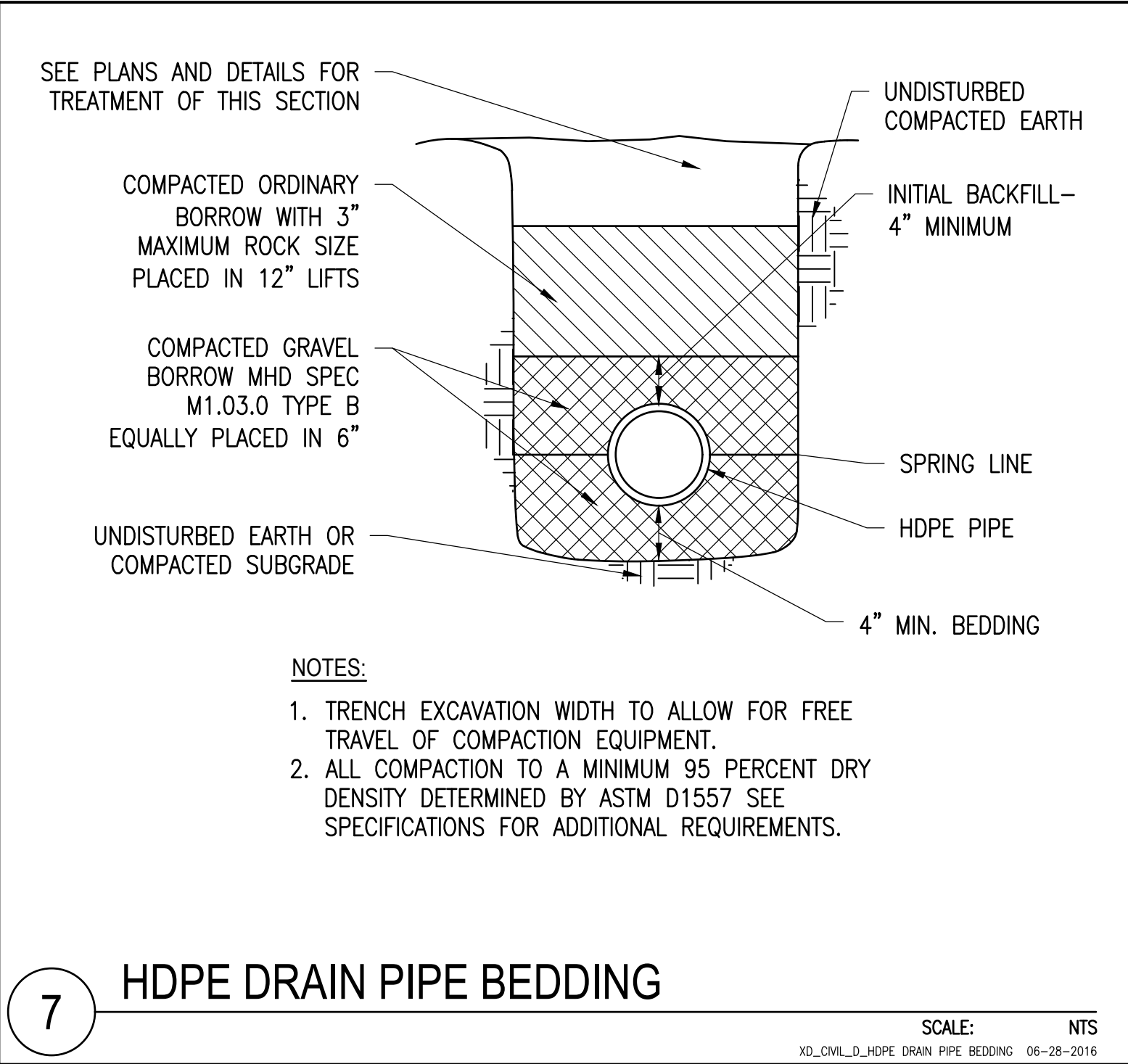
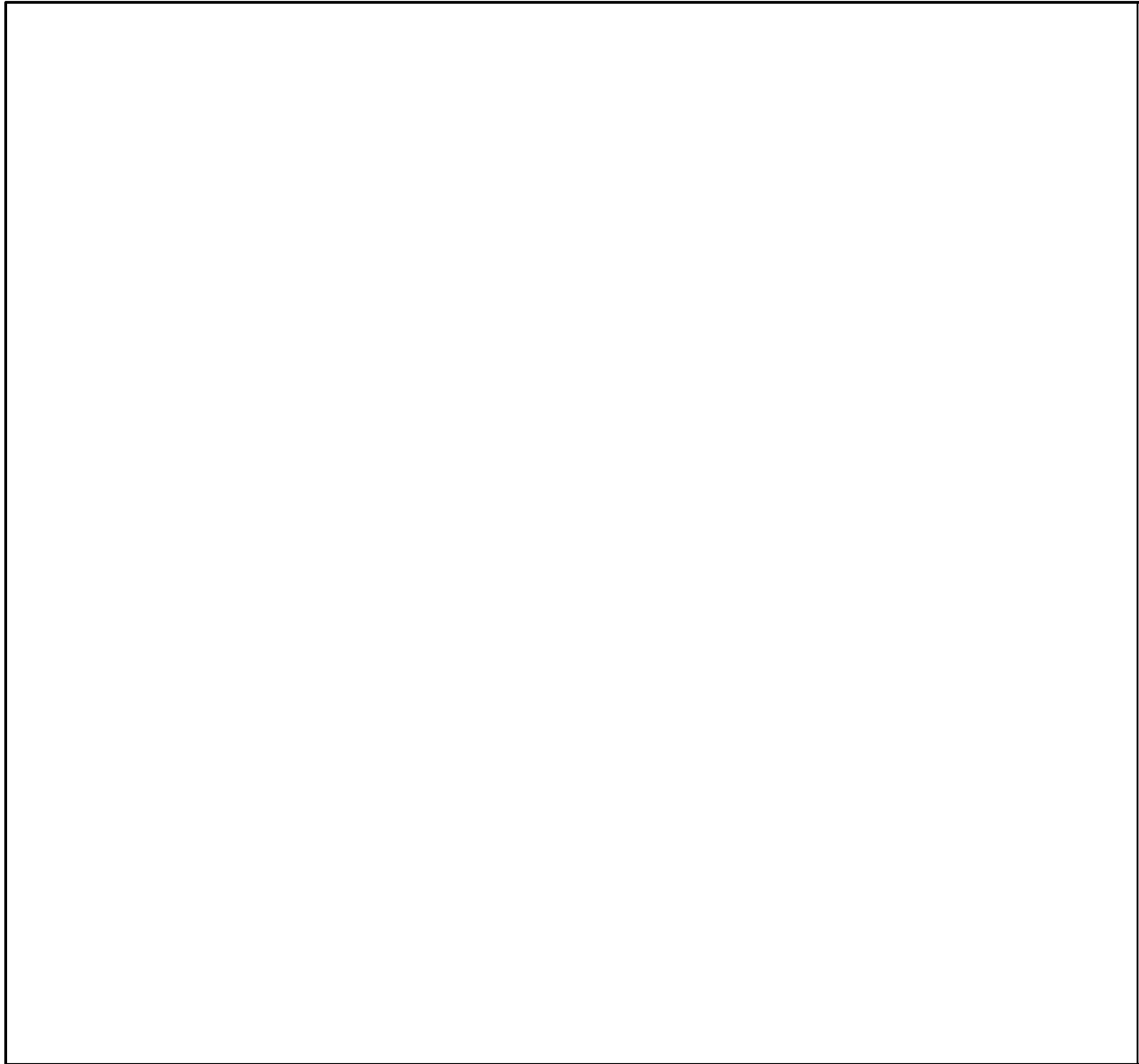
PROJECT NUMBER:
905-2046

REV	DATE	DRAWN	CHECKED	RELEASE LEVEL	SUBMISSION TO WESTPORT PB
				HS	
				WS	
	10/07/21				

SCALES STATED ON DRAWINGS ARE VALID ONLY WHEN PLOTTED ARCH D 24" X 36"

C-5.0

CIVIL DETAILS



THIS DOCUMENT IS PROVIDED BY BORREGO SOLAR SYSTEMS, INC. TO FACILITATE THE SALE AND INSTALLATION OF A SOLAR POWER SYSTEM FROM BORREGO SOLAR SYSTEMS, INC. REPRODUCTION, RELEASE, OR UTILIZATION FOR ANY OTHER PURPOSE, WITHOUT PRIOR WRITTEN CONSENT, IS STRICTLY PROHIBITED.

BORREGO SOLAR
55 TECHNOLOGY DRIVE, SUITE 102
LOWELL, MA 01851
PHONE: (888) 838-6273
FAX: (888) 843-6778
WWW.BORREGOSOLAR.COM

NOT FOR CONSTRUCTION

DAVID M. ALBRECHT
CIVIL
NO. 37310
PROFESSIONAL ENGINEER
10/07/2021

SITE USE PLAN
0 DIVISION ROAD
WESTPORT, MA 02790

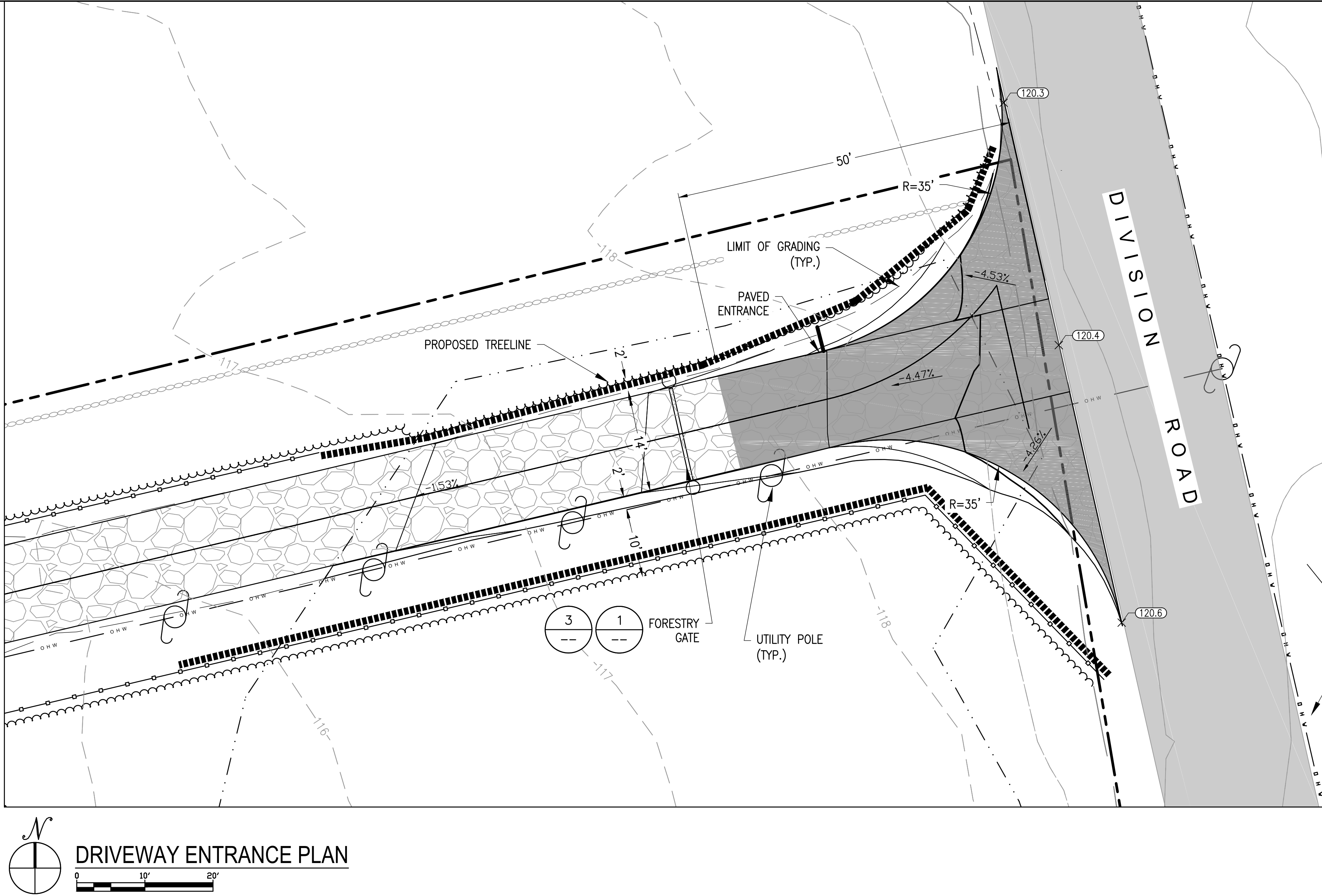
PROJECT NUMBER:
905-2046

REV	DATE	DRAWN	CHECKED	RELEASE LEVEL	SUBMISSION TO WESTPORT PB
10/07/21	WS	HG			

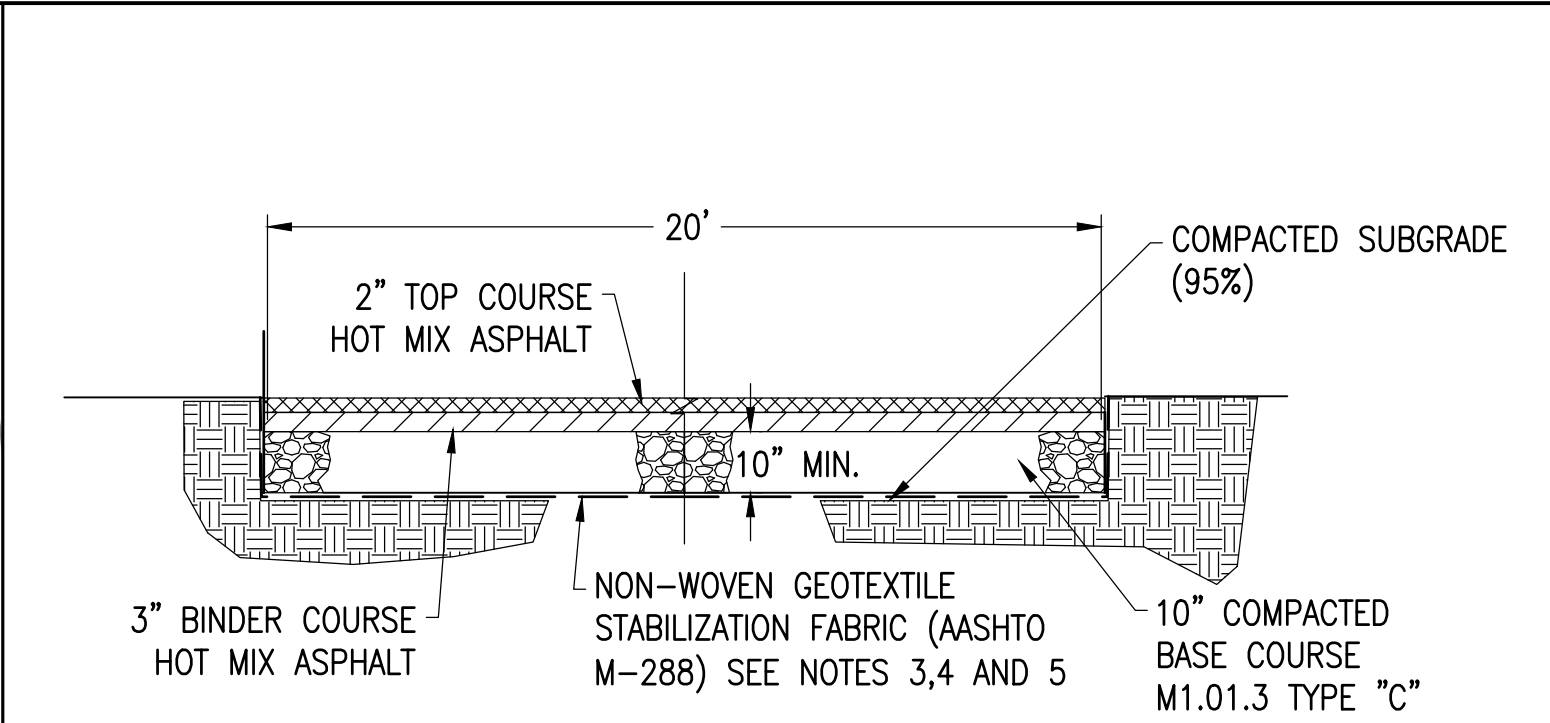
SCALES STATED ON DRAWINGS ARE VALID ONLY WHEN PLOTTED ARCH D 24" X 36"

C-5.1
CIVIL DETAILS

C:\Users\westonlsh\Box\Salesforce\Projects\0 Division Rd - Westport Set\0 Design\02 Working Set\0 Division Rd - Westport_SJP_06-15-21



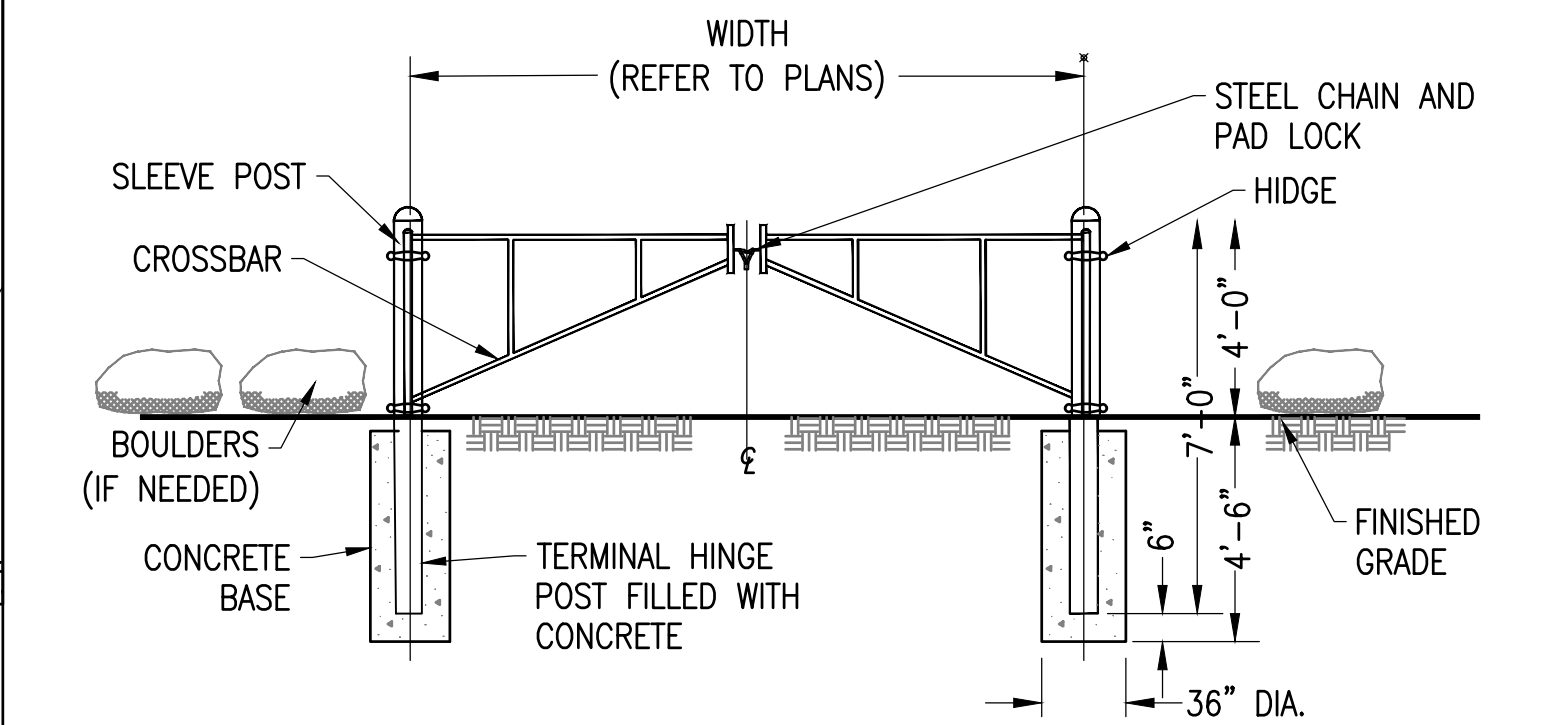
DRIVEWAY ENTRANCE PLAN



- NOTES:
- SUBCONTRACTOR SHALL EXCAVATE TO SUITABLE MATERIAL FOR SUBGRADE.
 - SUBCONTRACTOR SHALL COMPACT SUBGRADE TO PROVIDE SUITABLE SURFACE TO PLACE ROAD.
 - GEOTEXTILE FABRIC SHALL MEET THE FOLLOWING REQUIREMENTS:
 - TENSILE STRENGTH: 150 LB MIN.
 - ELONGATION: 50%
 - CBR PUNCTURE: 400 LB MIN.
 - MINIMUM WATER FLOW RATE: 120 GPM / FT²
 - SUBCONTRACTOR SHALL FOLLOW GEOTEXTILE FABRIC MANUFACTURER INSTALLATION PROCEDURES.
 - WHERE OVERLAPPING OF GEOTEXTILE FABRIC IS REQUIRED, SUBCONTRACTOR SHALL OVERLAP A MINIMUM OF 24".

1 PAVED DRIVEWAY ENTRANCE

SCALE: NTS
XD_CIVIL_PAVED_DRIVEWAY_ENTRANCE_NY 09-20-2018



2 FORESTRY GATE

SCALE: NTS
XD_CIVIL_ACCESS_BARRIER_GATE 10-24-2018

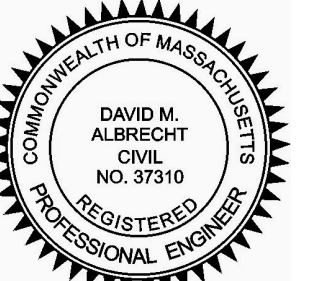
THIS DOCUMENT IS PROVIDED BY BORREGO SOLAR SYSTEMS, INC. TO FACILITATE THE SALE AND INSTALLATION OF A SOLAR POWER SYSTEM FROM BORREGO SOLAR SYSTEMS, INC. REPRODUCTION, RELEASE, OR UTILIZATION FOR ANY OTHER PURPOSE, WITHOUT PRIOR WRITTEN CONSENT IS STRICTLY PROHIBITED.



BORREGO SOLAR

55 TECHNOLOGY DRIVE, SUITE 102
LOWELL, MA 01851
PHONE: (888) 898-6273
FAX: (888) 843-6778
WWW.BORREGOSOLAR.COM

NOT FOR CONSTRUCTION



David M. Albrecht 10/07/2021

SITE USE PLAN
0 DIVISION ROAD
WESTPORT, MA 02790

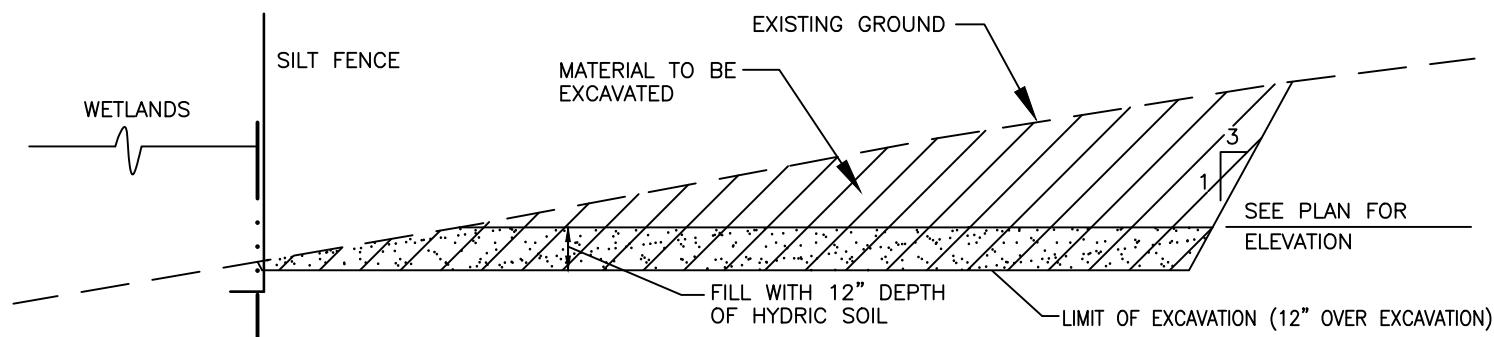
PROJECT NUMBER:
905-2046

REV	DATE	DRAWN	CHECKED	RELEASE LEVEL
	10/07/21	WS	HG	SUBMISSION TO WESTPORT PB

SCALES STATED ON DRAWINGS
ARE VALID ONLY WHEN PLOTTED
ARCH D 24" X 36"

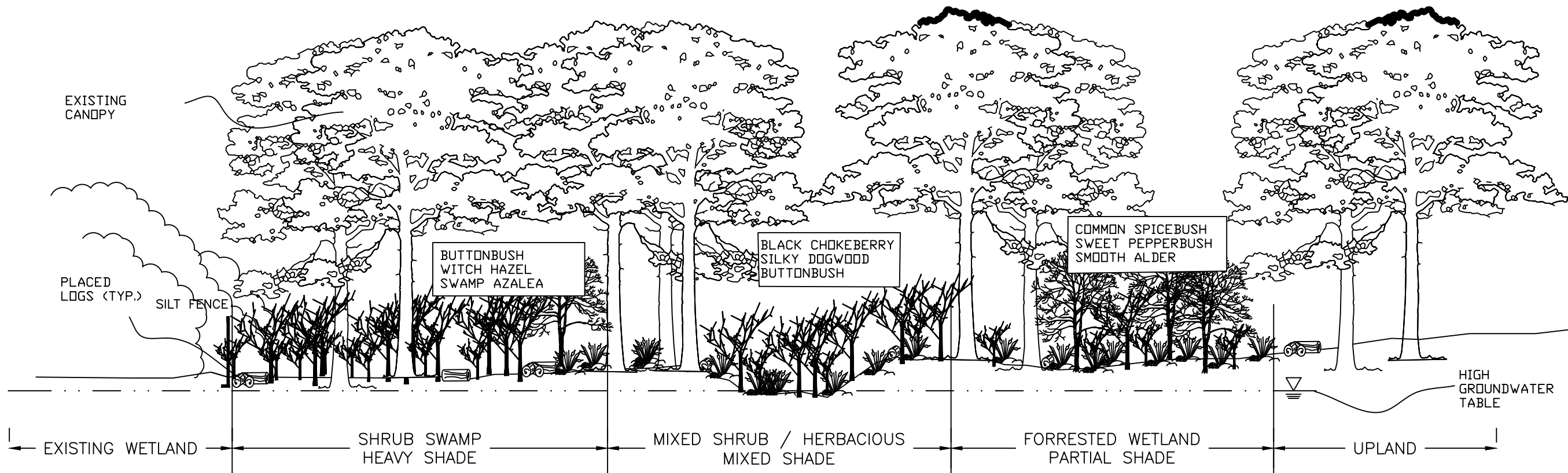
C-5.2
CIVIL DETAILS

C:\Users\wetlandsh\Box\Salesforce\Projects\0 Division Rd - Westport_SIP_06-15-21



SCHEMATIC CROSS SECTION OF REPLICATION AREA EARTHWORK
NOT TO SCALE

TOTAL WETLAND IMPACT AREA: 16,138 S.F.
TOTAL WETLAND REPLICATION: 26,530 S.F.
REPLICATION RATIO = 1.6 : 1



SCHEMATIC CROSS SECTION OF REPLICATION AREA VEGETATION
NOT TO SCALE

WETLAND REPLICATION NOTES:

- THE EXISTING WETLANDS WITHIN THE IMPACT AREAS CONSIST OF DECIDUOUS FORESTED WETLAND SUCH AS WHITE OAK AND RED MAPLE TREES, SWEET PEPPERBUSH AND SMOOTH ALDER SHRUBS, AND HERBACEOUS PLANTS INCLUDING CINNAMON FERN.
- IN NO CASE SHALL LIVING TREES LARGER THAN 12" CALIPER BE REMOVED FROM THE WETLAND REPLICATION AREA. THE WETLAND REPLICATION AREA SHALL BE GRADED IN A MANNER TO ACCOMMODATE SUCH TREES. ANY SHRUBS OR HERBACEOUS UNDERSTORY VEGETATION BENEATH EXISTING TREES TO BE REMOVED.
- IT IS INTENDED THE EXISTING TREES TO REMAIN IN THE WETLAND REPLICATION AREA AND THE UNDERSTORY PLANTED WITH TREES, SHRUBS AND A WETLAND SEED MIX AND DEVELOP INTO A DECIDUOUS FORESTED WETLAND
- THE REPLICATION AND IMPACT AREAS SHOULD BE EXCAVATED WHEN THE WATER TABLE IS LOW AND THE SOIL CAN BE EXCAVATED IN A PREDOMINANTLY DRY CONDITION.
- THE REPLICATION AND IMPACT AREAS SHALL BE STAKED BY A SURVEY CREW.
- EXISTING TREES TO REMAIN TO BE MARKED BY A SURVEY CREW.
- THE SILT FENCE SHALL BE PLACED AND TOED IN AT THE DOWNGRADIENT LIMIT OF REPLICATION AREA AND IN THE WETLAND IMPACT AREA AS SHOWN ON THIS PLAN.
- FINAL ELEVATIONS SHALL MIMIC EXISTING GRADES WITHIN THE ADJACENT WETLAND.
- EXCAVATION TO A SUB-GRADE ELEVATION SHALL BE APPROXIMATELY 12 INCHES BELOW THE PROPOSED FINAL ELEVATIONS. DO NOT EXCAVATE UNDER EXISTING TREES TO REMAIN.
- A WETLAND SCIENTIST MONITOR SHALL BE ON-SITE DURING EXCAVATION TO ENSURE ADEQUATE SUBGRADES ARE ACHIEVED TO INTERCEPT WETLAND HYDROLOGY.
- THE WETLAND SCIENTIST MAY RECOMMEND MODIFICATIONS TO SUBGRADE AND FINAL GRADE TO ENSURE ADEQUATE INTERCEPTION OF HYDROLOGY.
- APPROXIMATELY 12 INCHES OF ORGANIC RICH TOPSOIL SHALL BE ESTABLISHED IN THE WETLAND REPLICATION AREA. DO NOT BACKFILL AGAINST EXISTING TREES.
- ORGANIC MATERIAL FROM THE IMPACT AREA SHALL BE PLACED ON THE BASE OF THE OVER EXCAVATED REPLICATION AREA. STOCKPILED SOILS SHALL BE COVERED OR KEPT MOIST. SHOULD ADDITIONAL SOILS BE NEEDED, IMPORTED SOILS ARE TO BE FREE OF INVASIVE SPECIES AND HAVE A HIGH ORGANIC CONTENT. THIS MAY BE ACCOMPLISHED BY MIXING 1/3 COMPOST WITH 2/3 TOPSOIL. THE SURFACE OF THIS SOIL SHALL BE GENTLY DISTURBED WITH THE FORKS OF AN EXCAVATOR IN A NORTH-SOUTH DIRECTION TO CREATE A MICROTOPOGRAPHY. THE AREA SHALL NOT BE ROLLED SMOOTHED OR COMPACTED.
- THE WETLAND SCIENTIST SHALL BE ON-SITE DURING ESTABLISHMENT OF FINAL GRADING OF THE WETLAND REPLICATION AREA.
- THE WETLAND SCIENTIST SHALL OVERSEE CREATION OF MICRO-TOPOGRAPHY.
- SURVEY EQUIPMENT SHALL BE USED DURING GRADING ACTIVITIES TO COMPARE TO ADJACENT WETLAND AREAS.
- PLANTING WILL OCCUR DURING THE GROWING SEASON FOR BRISTOL COUNTY (SOUTHERN) ACCORDING TO THE MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION INLAND WETLAND REPLICATION GUIDELINES IS APRIL 24TH TO OCTOBER 11TH.
- ALL PLANTINGS SHALL COME FROM A REPUTABLE PLANT NURSERY OR GARDEN CENTER WITH RECEIPT OF RECEIVING ALL PLANT MATERIAL SPECIFIED IN THIS RESTORATION PLAN AND FOR THE RECEIPT TO BE SUBMITTED TO THE CONSERVATION COMMISSION.
- SEE PLANTING SCHEDULE FOR NUMBER OF SPECIES. THE LOCATIONS SHOWN ON THE PLAN ARE APPROXIMATE AND SHOULD BE ADJUSTED ON SITE, AS WELL AS THE LOCATION AND SHAPE OF THE HUMMOCKS, TO MATCH THE EXISTING CHARACTER OF THE ADJACENT WETLAND AND INCREASE THE SUCCESSFUL ESTABLISHMENT OF PLANTINGS.
- PRIOR TO SHRUB PLANTING, PLANTS SHALL BE "LAYED OUT" IN GROUPS OF THE SAME SPECIES (5-10) PLANTS PER GROUP).
- ALL BURLAP SHALL BE REMOVED FROM PLANT SPECIMENS AND ROOTS SHALL BE TEASED APART GENTLY. PLANTS CAN THEN BE PLACED IN THEIR HOLES AND COVERED WITH LOAM UP TO THE BASE OF THE PLANT.
- ONCE HOLES ARE DUG FOR EACH INDIVIDUAL TREE PLANTING, 1 PART ORGANIC COW MANURE AND 2 PARTS ORGANIC PEAT SHALL BE PLACED IN THE HOLE TO PROVIDE NUTRIENTS TO THE NEW PLANTS.
- THE WETLAND SCIENTIST SHALL OVERSEE PLANT INSTALLATION AND MAY RELOCATE PROPOSED PLANTS BASED ON THEIR WETLAND INDICATOR STATUS AND FINAL GRADING AND MICROTOPOGRAPHY. SUBSTITUTIONS SHALL BE APPROVED BY THE OVERSEEING WETLAND SCIENTIST. NO CULTIVARS ARE ALLOWED.
- THROUGHOUT THE REPLICATION PROCESS THE NUMBER AND PLACEMENT OF PLANTINGS AT THE REPLICATION LOCATION MAY BE MODIFIED DEPENDING ON UNANTICIPATED CONDITIONS, IF SO RECOMMENDED BY THE CONSERVATION AGENT.
- THE BASE AREA SHALL BE SEEDED WITH WETMIX BY NEW ENGLAND WETLAND PLANTS OR APPROVED EQUAL.
- REPLICATION AREA MUST HAVE 75% COVER OF NATIVE WETLAND PLANTS WITHIN TWO GROWING SEASONS.
- ONCE ALL PLANTING IS DONE, A REPORT WITH PICTURES OF THE OUTCOME SHALL BE SUBMITTED TO THE CONSERVATION COMMISSION.
- THE REPLICATION PROCESS SHALL BE MONITORED BY A WETLAND SCIENTIST RETAINED BY THE OWNER AND BY THE WESTPORT CONSERVATION AGENT. THE REPLICATED AREA SHALL BE INSPECTED BY A WETLAND SCIENTIST IN THE SPRING OF 2021 AND THE SPRING OF 2022 AND THE CONDITION OF THE REPLICATED AREA SHALL BE REPORTED TO THE WESTPORT CONSERVATION COMMISSION. IF INVASIVE SPECIES, SUCH PHRAGMITES ARE OBSERVED IN THE REPLICATED AREA, THEY SHALL BE REMOVED BY HAND AND DISPOSED OFF-SITE.
- AN AS-BUILT PLAN SHALL BE PREPARED FOLLOWING THE COMPLETION OF THE REPLICATION AREA TO CONFIRM PROPOSED SQUARE FOOTAGE AND ELEVATION HAS BEEN ACHIEVED.

SHRUB PLANTING SCHEDULE:

BOTANICAL NAME	COMMON NAME	QUANTITY	SYMBOL	STATUS	SUN/SHADE	MIN. HEIGHT
CEPHALANTHUS OCCIDENTALIS	BUTTONBUSH	70	CO	OBL	☐	18"-24"
CORNUS AMOMUM	SILKY DOGWOOD	70	CA	FACW	☐	18"-24"
LINDERA BENZOIN	COMMON SPICEBUSH	70	LB	FACW-	○	18"-24"
RHODODENDRON VISCOSUM	SWAMP AZALEA	70	RV	FACW	●	18"-24"
CLETHRA ALNIFOLIA	SWEET PEPPERBUSH	70	CL	FACW	○	18"-24"
ALNUS SERRULATA	SMOOTH ALDER	70	AS	OBL	○	18"-24"
HAMAMELIS VIRGINIANA	WITCH HAZEL	70	HV	FAC-	●	18"-24"
ARONIA MELANOCARPA	BLACK CHOKEBERRY	70	AM	FACW	☐	18"-24"

TREE PLANTING SCHEDULE:

ACER RUBRUM	RED MAPLE	15	⊗	FAC	☐	4'-6'
BETULA ALLEGHANIENSIS	YELLOW BIRCH	15	⊗	FAC	☐	4'-6'
NYSSA SYLVATICA	BLACK TUPELO	15	⊗	FAC	☐	4'-6'

SEED MIX NOTES:

THE ENTIRE WETLAND REPLICATION AREA IS TO BE SEEDED WITH ONE POUND PER 2,500 SQUARE FEET OF WETMIX SUPPLIED BY NEW ENGLAND WETLAND PLANTS, INC., OR APPROVED EQUAL WHICH CONTAINS THE FOLLOWING SPECIMENS:

Botanical Name	Common Name	Indicator
<i>Carex vulpinoidea</i>	Fox Sedge	OBL
<i>Carex scoparia</i>	Blunt Broom Sedge	FACW
<i>Carex lurida</i>	Lurid Sedge	OBL
<i>Carex lupulina</i>	Hop Sedge	OBL
<i>Poa palustris</i>	Fowl Bluegrass	FACW
<i>Bidens frondosa</i>	Beggar Ticks	FACW
<i>Scirpus atrovirens</i>	Green Bulrush	OBL
<i>Asclepias incarnata</i>	Swamp Milkweed	OBL
<i>Carex crinita</i>	Fringed Sedge	OBL
<i>Vernonia noveboracensis</i>	New York Ironweed	FACW+
<i>Juncus effusus</i>	Soft Rush	FACW+
<i>Aster lateriflorus (Symphyotrichum lateriflorum)</i>	Starved/Calico Aster	FACW
<i>Iris versicolor</i>	Blue Flag	OBL
<i>Glyceria grandis</i>	American Mannagrass	OBL
<i>Mimulus ringens</i>	Square Stemmed Monkey Flower	OBL
<i>Eupatorium maculatum (Eutrochium maculatum)</i>	Spotted Joe Pye Weed	OBL

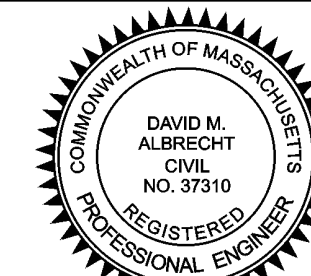
THIS DOCUMENT IS PROVIDED BY BORREGO SOLAR SYSTEMS, INC. TO FACILITATE THE SALE AND INSTALLATION OF A SOLAR POWER SYSTEM FROM BORREGO SOLAR SYSTEMS, INC. REPRODUCTION, RELEASE, OR UTILIZATION FOR ANY OTHER PURPOSE, WITHOUT PRIOR WRITTEN CONSENT IS STRICTLY PROHIBITED.



BORREGO SOLAR

55 TECHNOLOGY DRIVE, SUITE 102
LOWELL, MA 01851
PHONE: (800) 898-6273
FAX: (888) 843-6778
WWW.BORREGOSOLAR.COM

NOT FOR
CONSTRUCTION



David M. Albrecht 10/07/2021

SITE USE PLAN
0 DIVISION ROAD
WESTPORT, MA 02790

PROJECT NUMBER:
905-2046

REV	DATE	DRAWN	CHECKED	RELEASE LEVEL
	10/07/21	WS	HG	SUBMISSION TO WESTPORT PB

SCALES STATED ON DRAWINGS
ARE VALID ONLY WHEN PLOTTED
ARCH D 24" X 36"

C-6.0
WETLAND REPLICATION
PLAN

55 TECHNOLOGY DRIVE, SUITE 10
LOWELL, MA 01851
PHONE: (888) 898-6273
FAX: (888) 843-6778
WWW.BORREGOSOLAR.COM

NOT FOR
CONSTRUCTION



David A. Lee 10/07/2021

SITE USE PLAN
0 DIVISION ROAD
WESTPORT, MA 02790

PROJECT NUMBER
905-2046

[illegible]

SCALES STATED ON DRAWINGS
ARE VALID ONLY WHEN PLOTTED
ARCH D 24" X 36"

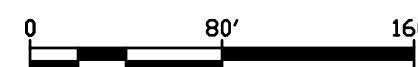
C-7.0

OPEN SPACE PARCEL PLAN



OPEN SPACE PARCEL PLAN

SCALE: 1" = 80



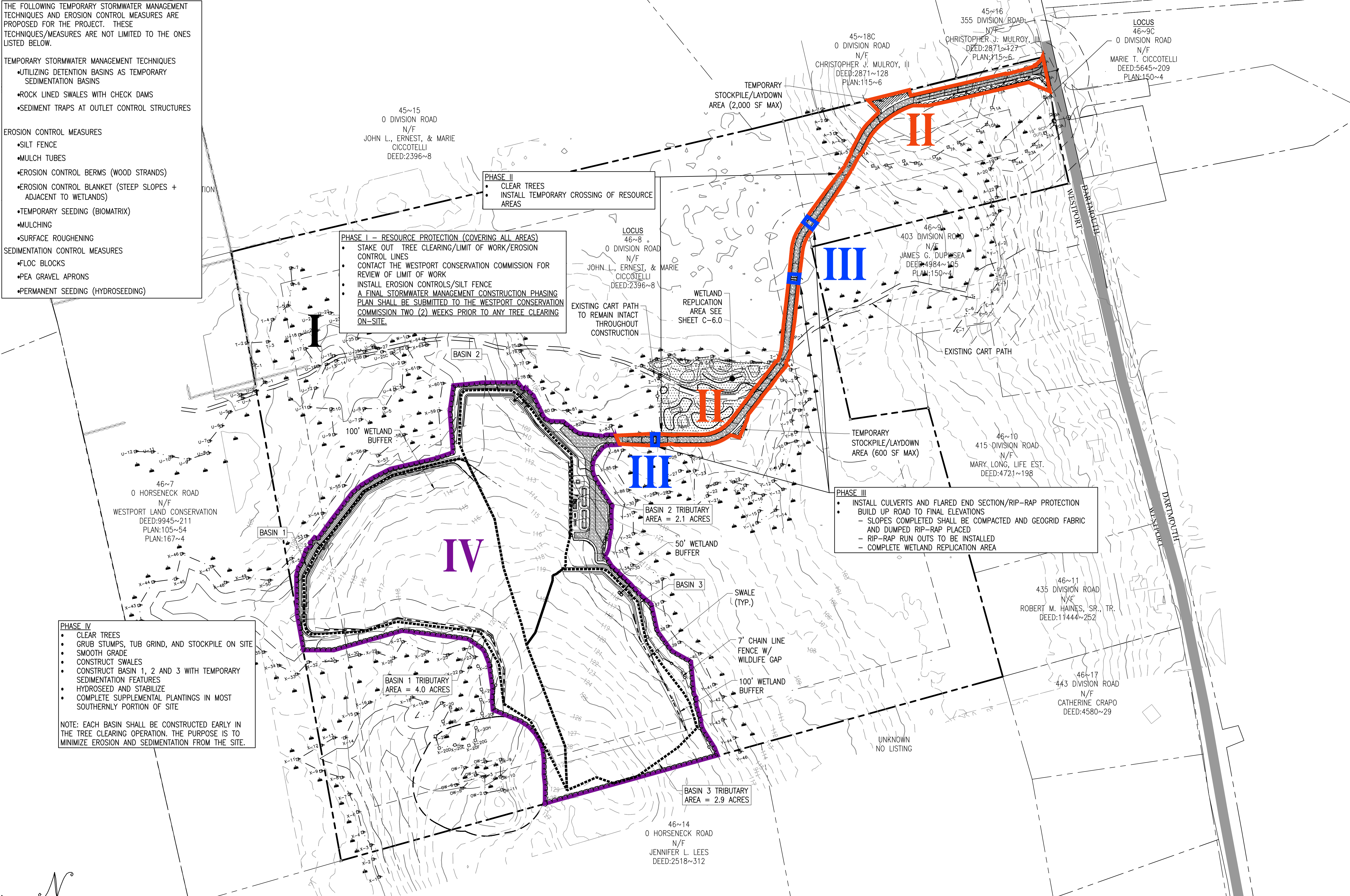
c:\Users\wstandish\Box\Salesforce\Projects\0 Division Rd - Westport 2\Design\02. Working Set\0 Division Rd-Westport SUP 06-15-21

THE FOLLOWING TEMPORARY STORMWATER MANAGEMENT TECHNIQUES AND EROSION CONTROL MEASURES ARE PROPOSED FOR THE PROJECT. THESE TECHNIQUES/MEASURES ARE NOT LIMITED TO THE ONES LISTED BELOW.

- TEMPORARY STORMWATER MANAGEMENT TECHNIQUES
- UTILIZING DETENTION BASINS AS TEMPORARY SEDIMENTATION BASINS
 - ROCK LINED SWALES WITH CHECK DAMS
 - SEDIMENT TRAPS AT OUTLET CONTROL STRUCTURES

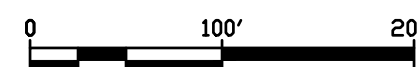
- EROSION CONTROL MEASURES
- SILT FENCE
 - MULCH TUBES
 - EROSION CONTROL BERMS (WOOD STRANDS)
 - EROSION CONTROL BLANKET (STEEP SLOPES + ADJACENT TO WETLANDS)
 - TEMPORARY SEEDING (BIOMATRIX)
 - MULCHING
 - SURFACE ROUGHENING

- SEDIMENTATION CONTROL MEASURES
- FLOC BLOCKS
 - PEA GRAVEL APRONS
 - PERMANENT SEEDING (HYDROSEEDING)



TREE CLEARING & STORMWATER PHASING PLAN

SCALE: 1" = 100'



THIS DOCUMENT IS PROVIDED BY BORREGO SOLAR SYSTEMS, INC. TO FACILITATE THE SALE AND INSTALLATION OF A SOLAR POWER SYSTEM FROM BORREGO SOLAR SYSTEMS, INC. REPRODUCTION, RELEASE, OR UTILIZATION FOR ANY OTHER PURPOSE, WITHOUT PRIOR WRITTEN CONSENT IS STRICTLY PROHIBITED.

BORREGO SOLAR
55 TECHNOLOGY DRIVE, SUITE 102
LOWELL, MA 01851
PHONE: (888) 838-6273
FAX: (888) 843-6778
WWW.BORREGOSOLAR.COM

NOT FOR CONSTRUCTION



David M. Albrecht 10/07/2021

SITE USE PLAN
0 DIVISION ROAD
WESTPORT, MA 02790

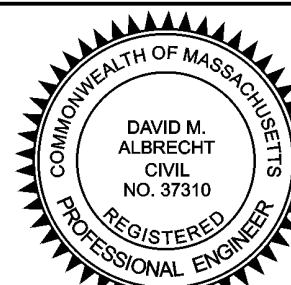
PROJECT NUMBER:
905-2046

REV	DATE	DRAWN	CHECKED	RELEASE LEVEL	DESCRIPTION
	10/07/21	WS	HG	SUBMISSION TO WESTPORT PB	

SCALES STATED ON DRAWINGS ARE VALID ONLY WHEN PLOTTED ARCH D 24" X 36"

C-8.1
TREE CLEARING & STORMWATER PHASING PLAN

NOT FOR
CONSTRUCTION



David A. Lee 10/07/2021

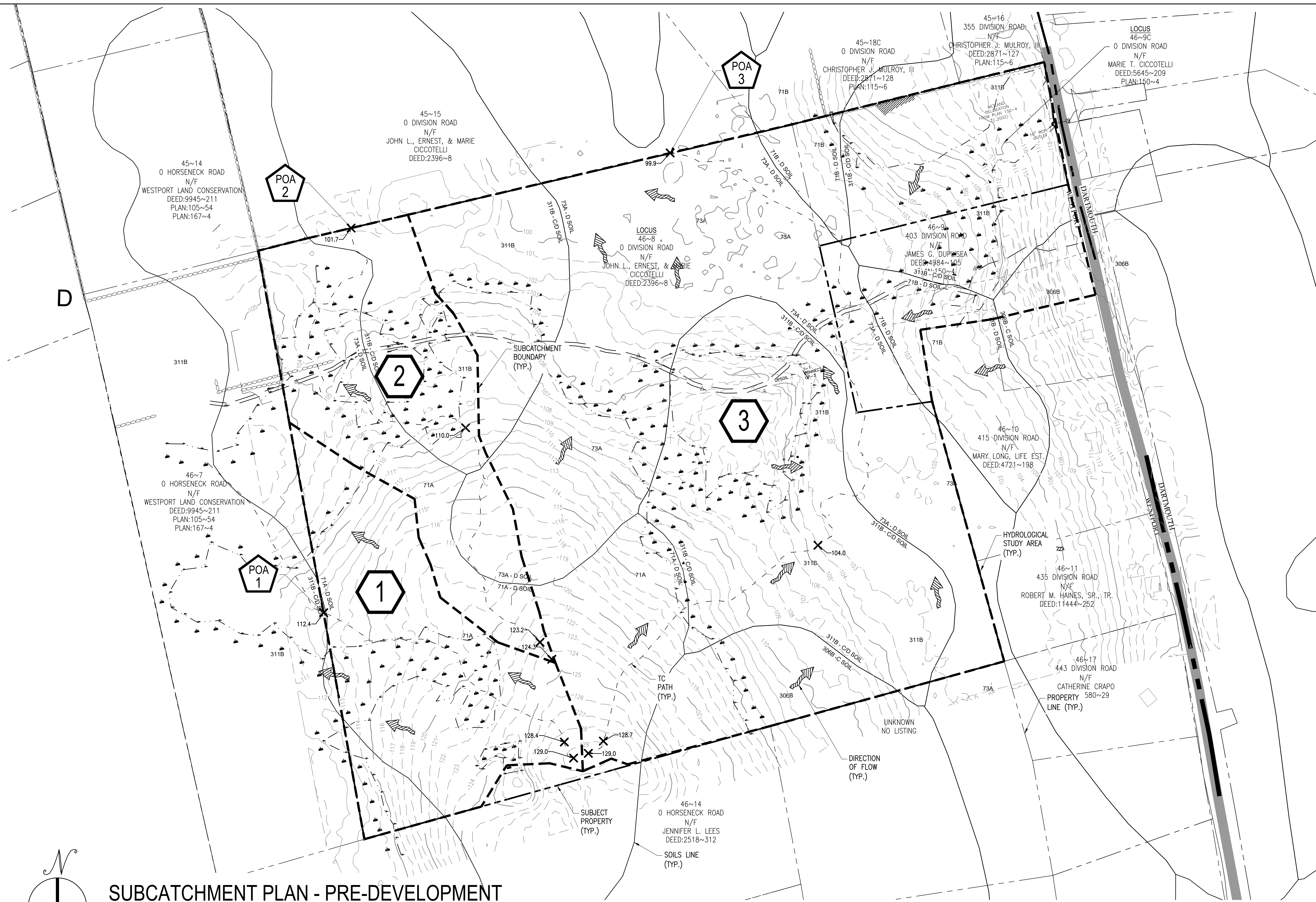
SITE USE PLAN
0 DIVISION ROAD
WESTPORT, MA 02790

PROJECT NUMBER
905-2046

[illegible]

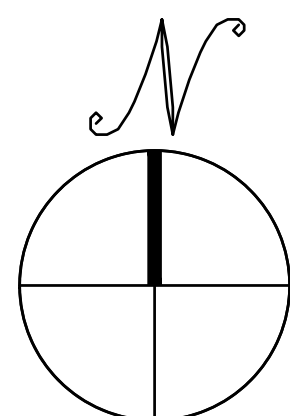
SCALES STATED ON DRAWING
ARE VALID ONLY WHEN PLO
ARCH D 24" X 36"

FIG 3
SUBCATCHMENT PLANNING
PRE-DEVELOPMENT

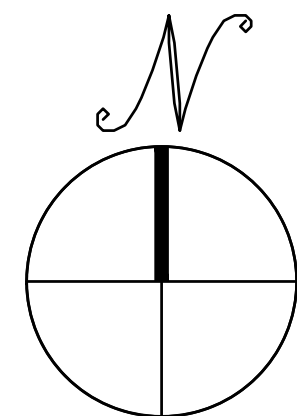


SUBCATCHMENT PLAN - PRE-DEVELOPMENT

SCALE: 1" = 100'

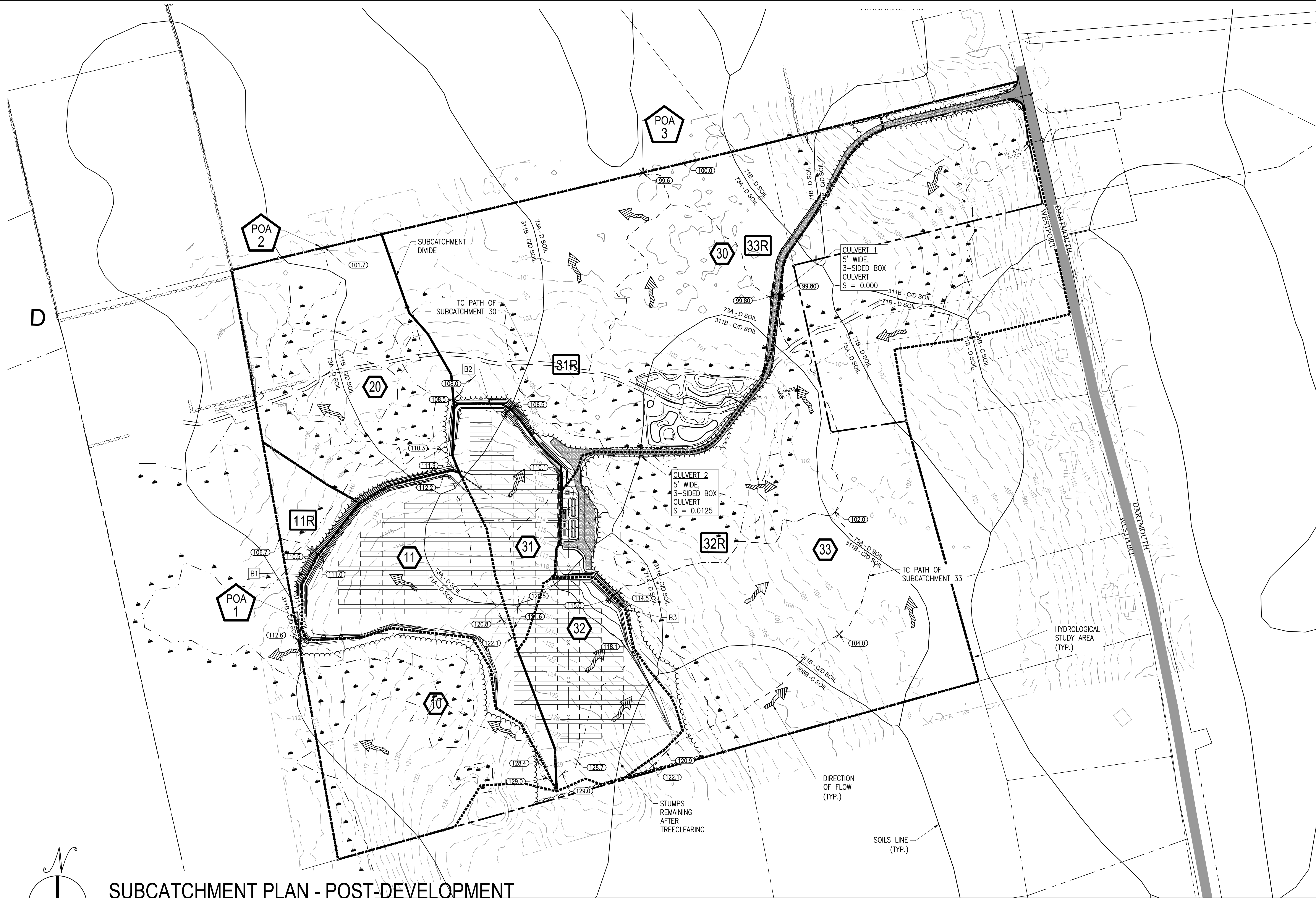
A horizontal graphic scale bar with alternating black and white segments. It is marked with '0' at the left end, '100'' in the middle, and '200'' at the right end.

C:\Users\westandish\Box\Salesforce\Projects\0 Division Rd - Westport_2\Design\02. Working Set\0 Division Rd - Westport_SJP_06-15-21



SUBCATCHMENT PLAN - POST-DEVELOPMENT

SCALE: 1" = 100'



THIS DOCUMENT IS PROVIDED BY BORREGO SOLAR SYSTEMS, INC. TO FACILITATE THE SALE AND INSTALLATION OF A SOLAR POWER SYSTEM FROM BORREGO SOLAR SYSTEMS, INC. REPRODUCTION, RELEASE, OR UTILIZATION FOR ANY OTHER PURPOSE, WITHOUT PRIOR WRITTEN CONSENT, IS STRICTLY PROHIBITED.



BORREGO SOLAR

55 TECHNOLOGY DRIVE, SUITE 102
LOWELL, MA 01851
PHONE: (888) 898-6273
FAX: (888) 843-6778
WWW.BORREGOSOLAR.COM

NOT FOR
CONSTRUCTION



David M. Albrecht 10/07/2021

SITE USE PLAN
0 DIVISION ROAD
WESTPORT, MA 02790

PROJECT NUMBER:
905-2046

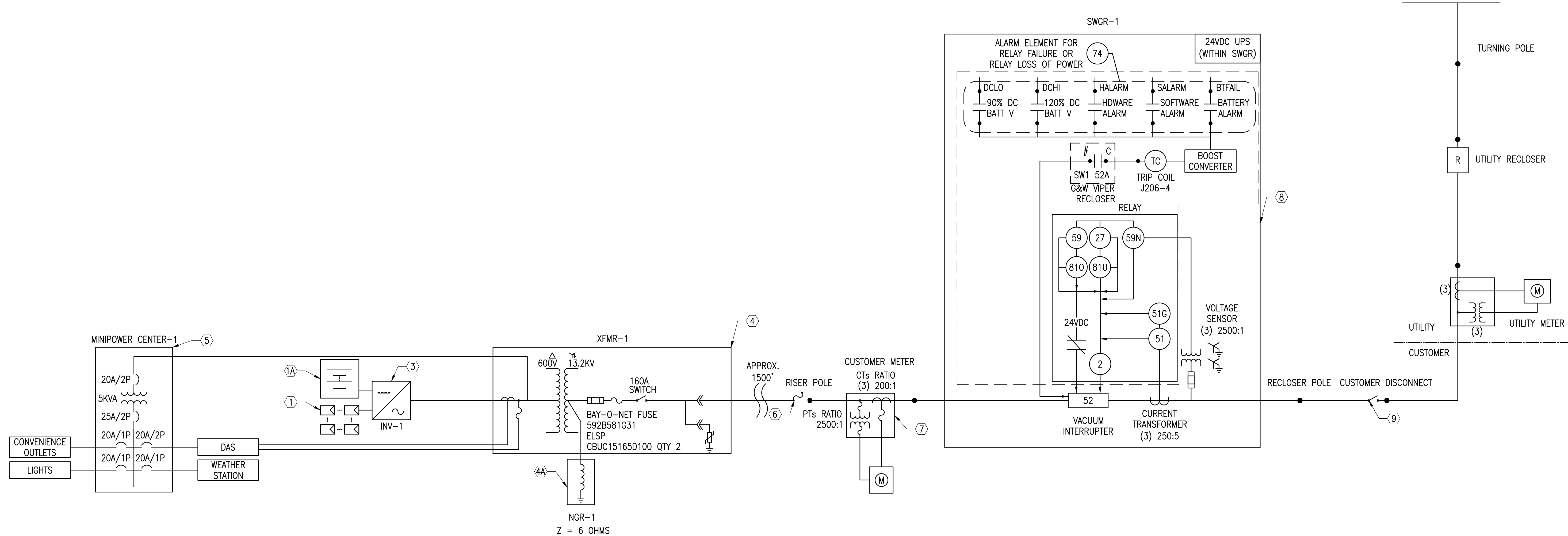
REV	DATE	DRAWN	CHECKED	RELEASE LEVEL
	10/07/21	WS	HG	SUBMISSION TO WESTPORT PB

SCALES STATED ON DRAWINGS
ARE VALID ONLY WHEN PLOTTED
ARCH D 24" X 36"

FIG 4

SUBCATCHMENT PLAN -
POST-DEVELOPMENT

C:\Users\westonfish\Box\Salesforce\Projects\0 - Westport_SLP_06-15-21



ELECTRICAL EQUIPMENT SCHEDULE		
REF. #	QTY.	DESCRIPTION
1	4960	RISEN RSM120-8-595BMDG MODULE (STRINGS OF 32)
1A	1	ENERGY STORAGE SYSTEM, FLUENCE SUNSTACK, 2125kW, 8500kWh
2	15	COMBINER, SOLARBOS, 400A, 1500V, NEMA-4
3	1	INVERTER, POWER ELECTRONICS HEMK FS2125K, 2125kWAC
4	1	XFMR-1, EATON, 2500KVA, 13.2KV GWYE PRIMARY, 600V DELTA SECONDARY, ELBOW ARRESTERS
4A	1	NEUTRAL GROUNDING REACTOR, 6 OHMS
5	1	EATON MINIPOWER CENTER
6	1	15KV POLE MOUNTED, 900A, 65KAIC, CUSTOMER-OWNED RISER POLE WITH FUSED CUTOUPS
7	1	CUSTOMER METER
8	1	G&W POLE MOUNTED RECLOSER, VACUUM INTERRUPTER, WITH INTEGRATED SEL651R
9	1	HORIZONTAL GANG OPERATED LOCKABLE LOAD-BREAK DISCONNECT SWITCH, VISIBLE OPEN-AIR GAP, 24/7 UTILITY ACCESSIBLE. PERMANENT LABELING SHALL BE INSTALLED

INVERTER PROTECTION SETTINGS				
DEVICE	PICKUP	UNIT	TIME DELAY (SEC)	DESCRIPTION
27-1	300	VOLTS	1.1	UNDER VOLTAGE
27-2	528	VOLTS	2	
59-1	660	VOLTS	2	OVER VOLTAGE
59-2	720	VOLTS	0.16	
81U-1	56.5	HZ	0.16	UNDER FREQUENCY
81U-2	58.5	HZ	300	
810-1	61.2	HZ	300	OVER FREQUENCY
810-2	62.0	HZ	0.16	

RELAY SETTING					
DEVICE	PRIMARY PICKUP	UNIT	TIME DELAY (SEC)	DESCRIPTION	NOTE
27-1	3811	VOLTS	1.1	UNDervOLTAGE RELAY	SETTING INCLUDES 3 CYCLE ESTIMATED TRIP DEVICE OPENING TIME
27-2	6706	VOLTS	2.0		
59-1	8383	VOLTS	2.0	OVERVOLTAGE RELAY	
59-2	9145	VOLTS	0.16		
81U-1	56.5	HZ	0.16	UNDERFREQUENCY	
81U-2	58.5	HZ	300		
810-1	61.2	HZ	300	OVERFREQUENCY	
810-2	62.0	HZ	0.16		
32	<2125	kW	2	DIRECTIONAL POWER	
59N	100	VOLTS	2	GROUND OVER VOLTAGE	
51	197	Amps	TD:2.0 CURVE: U4	INVERSE CURVE OVER CURRENT	
51G	98	Amps	TD:1.5 CURVE: U4	INVERSE CURVE GROUND OVER CURRENT	

AC SINGLE LINE DIAGRAM

SCALE: NTS

THIS DOCUMENT IS PROVIDED BY BORREGO SOLAR SYSTEMS, INC. TO FACILITATE THE SALE AND INSTALLATION OF A SOLAR POWER SYSTEM FROM BORREGO SOLAR SYSTEMS, INC. REPRODUCTION, RELEASE OR UTILIZATION FOR ANY OTHER PURPOSE, WITHOUT PRIOR WRITTEN CONSENT IS STRICTLY PROHIBITED.



BORREGO SOLAR

55 TECHNOLOGY DRIVE, SUITE 102
LOWELL, MA 01851
PHONE: (888) 898-6273
FAX: (888) 843-6778
WWW.BORREGOSOLAR.COM

NOT FOR
CONSTRUCTION

SITE USE PLAN
0 DIVISION ROAD
WESTPORT, MA 02790

PROJECT NUMBER:
905-2046

REV
DATE
10/07/21

DRAWN
WS

CHECKED
HG

RELEASE LEVEL
SUBMISSION TO WESTPORT PB

SCALES STATED ON DRAWINGS
ARE VALID ONLY WHEN PLOTTED
ARCH D 24" X 36"

E-2.1

AC SINGLE LINE DIAGRAM