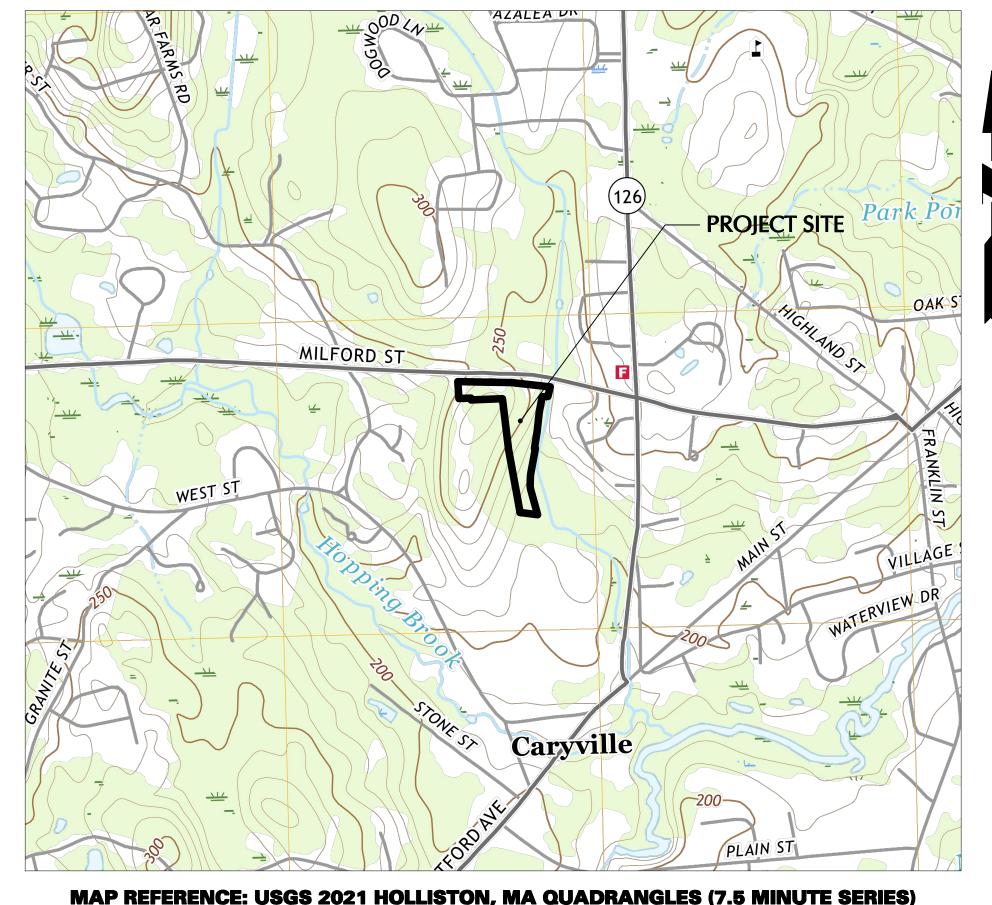
MEDWAY BATTERY ENERGY STORAGE SYSTEM NOI PLAN SET

PARCELS: 046-005, 046-0056, 046-0057, 0056-0006 TOWN OF MEDWAY, NORFOLK COUNTY, MASSACHUSETTS

CIVIL DRAWING INDEX							
SHEET NUMBER	DRAWING TITLE	DATE	LAST REVISED				
CS001	SITE COVER SHEET	06/08/2023	08/01/2024				
CS002	MASTER LEGEND & NOTES	06/08/2023	10/04/2023				
EX101	RESOURCE DELINEATION PLAN I	10/04/2023					
EX102	RESOURCE DELINEATION PLAN II	10/04/2023					
CS101	OVERALL SITE PLAN	06/08/2023	08/01/2024				
CS102	UNDERGROUND TRANSMISSION LINE SITE PLAN	06/08/2023	08/01/2024				
CS501	SITE DETAILS	06/08/2023					
CD101	SITE PREPARATION PLAN	06/08/2023	10/04/2023				
CG101	GRADING & DRAINAGE PLAN	06/08/2023	08/01/2024				
CG501	GRADING & DRAINAGE DETAILS I	06/08/2023	08/01/2024				
CG502	GRADING & DRAINAGE DETAILS II	06/08/2023	08/01/2024				
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CE101	SOIL & EROSION CONTROL PLAN - PHASE I	06/08/2023	08/01/2024				
CE102	SOIL & EROSION CONTROL PLAN - PHASE II	06/08/2023	08/01/2024				
CE501	SOIL & EROSION CONTROL DETAILS I	06/08/2023	08/24/2023				
CE502	SOIL & EROSION CONTROL DETAILS II	06/08/2023	10/04/2023				
CU101	UTILITY PLAN	06/08/2023	08/01/2024				
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TM101	TANKER TRUCK TURNING MOVEMENT PLAN	08/24/2023	08/01/2024				
TM102	LADDER TRUCK TURNING MOVEMENT PLAN	08/24/2023	08/01/2024				
LL101	SITE LIGHTING PLAN	06/08/2023	08/01/2024				
LL501	SITE LIGHTING DETAILS	06/08/2023					
LP101	PLANTING PLAN	06/08/2023	08/01/2024				
LP501	PLANTING DETAILS	06/08/2023	10/04/2023				



	RELEASE DATES
DATE	ISSUED FOR
06/08/2023	NOTICE OF INTENT
08/24/2023	NOI COMMENT REVISIONS
10/04/2023	NOI COMMENT REVISIONS
08/01/2024	NOI REVISIONS

MAP REFERENCE: USGS 2021 HOLLISTON, MA QUADRANGLES (7.5 MINUTE SERIES)

LOCATION MAP

SCALE: 1" = 1000'

OWNER/APPLICANT MEDWAY GRID, LLC C/O: ANDREW CATANIA 110 EDISON PLACE, SUITE 312 **NEWARK, NJ 07102 EMAIL:** AFC@VCRENEWABLES.COM

WETLANDS & NATURAL RESOURCES EPSILON ASSOCIATES, INC. C/O: MARC BERGERON 3 MILL & MAIN PLACE, SUITE 250 MAYNARD, MA 01754 PHONE: 978-461-6253 **EMAIL:**

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CIVIL ENGINEER & LANDSCAPE ARCHITECT LANGAN ENGINEERING & ENVIRONMENTAL SERVICES, LLC C/O: FRANK HOLMES **100 CAMBRIDGE STREET BOSTON, MA 02116** PHONE: 617-824-9100 EMAIL: FHOLMES@LANGAN.COM

GEOTECHNICAL ENGINEER GZA GEOENVIRONMENTAL, INC. C/O: BRUCE FAIRLESS 249 VANDERBILT AVENUE NORWOOD, MA 02062 PHONE: 781-248-3700 EMAIL: BRUCE.FAIRLESS@GZA.COM LAND SURVEYOR LAND PLANNING, INC. C/O: NORMAN G. HILL 1115 MAIN STREET HANSON, MA 02341 PHONE: 781-294-4144

EPC CONTRACTOR MCPHEE ELECTRIC, LTD. C/O: MAX MCPHEE **505 MAIN STREET** FARMINGTON, CT 06032 PHONE: 860-677-9797



GENERAL NOTES

- 1. PLANIMETRIC AND TOPOGRAPHIC INFORMATION SHOWN HEREON HAS BEEN OBTAINED FROM GROUND SURVEYS BY "LAND PLANNING, INC." CONDUCTED ON NOVEMBER 12, 2021.
- 2. THE SITE LIES IN FLOOD ZONE X AS SHOWN ON THE FLOOD INSURANCE RATE MAP NORFOLK COUNTY, FEMA MAP NUMBER 25021CO139E, EFFECTIVE 7/17/2012.
- 3. THE BOUNDARIES OF THE WETLAND RESOURCE AREAS ON THE PROJECT SITE AND ON ADJACENT PARCELS INCLUDING; 55 AND 61 MILFORD STREET (EVERSOURCE PARCELS TO THE WEST OF PROJECT SITE) AND 9 SUMMER STREET (CONSTELLATION PARCELS TO THE SOUTH OF THE PROJECT SITE) HAVE BEEN REVIEWED AND VERIFIED THROUGH EITHER AN ORDER OF RESOURCE AREA DELINEATION ("ORAD"), ISSUED ON FEBRUARY 27, 2020 OR BY REVIEW OF A THIRD-PARTY 13. THE LOCATION OF EXISTING UNDERGROUND UTILITIES SHOWN HEREON IS TAKEN FROM DESIGN WETLAND CONSULTANT (ECOTEC, INC) ON AUGUST 3, 2023.
- 4. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING DIG SAFE (WWW.DIGSAFE.COM), EXCAVATION TEST HOLES, PERFORMING TEST BORINGS, AND PERFORMING WHATEVER ADDITIONAL INVESTIGATION NECESSARY TO PROTECT AND MAINTAIN ALL EXISTING UTILITIES TO REMAIN THROUGHOUT THE CONSTRUCTION PERIOD. ANY CONFLICTS BETWEEN EXISTING UTILITIES AND PROPOSED UTILITIES DISCOVERED DURING CONSTRUCTION SHALL BE PROMPTLY REPORTED TO THE PROJECT ENGINEER.
- 5. CONTRACTOR SHALL PREVENT DUST, SEDIMENT AND DEBRIS FROM EXITING THE SITE AND SHALL BE RESPONSIBLE FOR CLEANUP, REPAIRS AND CORRECTIVE ACTION IF SUCH OCCURS. ADJOINING STREETS AND PROPERTIES TO BE KEPT FREE OF DEBRIS RESULTING FROM DEMOLITION AND SHALL BE CLEANED ON A DAILY BASIS OR AS NEEDED.
- 6. DUST CONTROL TREATMENTS SHALL BE APPLIED AS NECESSARY TO CONTROL AND REDUCE THE 16. RESET ALL EXISTING SANITARY AND DRAINAGE STRUCTURES TO MASSACHUSETTS STATE AMOUNT OF DUST WHICH MAY CAUSE OFF-SITE DAMAGE, BE A HEALTH HAZARD TO HUMANS, WILDLIFE AND PLANT LIFE, OR POSE A HAZARD TO TRAFFIC SAFETY.
- . PROPOSED SITE WORK IMPROVEMENTS SHALL CONFORM TO THE STANDARD DETAILS AND SPECIFICATIONS OF THE TOWN OF MEDWAY. IN THE ABSENCE OF LOCAL STANDARDS, SITE WORK SHALL CONFORM TO THE REQUIREMENTS OF MASSACHUSETTS DOT STANDARD DETAILS.
- 8. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY 19. BOTTOM AND TOP OF RETAINING WALL ELEVATION SPOT SHOTS REPRESENT THE BASE OF THE COMPANIES, AND WHERE POSSIBLE MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED LIPON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS. ANY DISCREPANCIES DISCOVERED DURING THE COURSE OF CONSTRUCTION SHALL BE PROMPTLY REPORTED TO THE PROJECT ENGINEER.
- 9. ANY UTILITY EASEMENTS REQUIRED BY ANY OF THE VARIOUS UTILITY COMPANIES, THE CONTRACTOR SHALL OBTAIN, EXECUTE, AND RECORD PRIOR TO ANY OF THE AFFECTED UTILITY WORK BFING PERFORMED.
- 10. ALL IMPROVEMENTS CONSTRUCTED IN THE TOWN PUBLIC RIGHT-OF-WAY SHALL CONFORM TO TOWN OF MEDWAY STANDARD DETAILS. IN THE ABSENCE OF LOCAL DETAILS & REQUIREMENTS AND WORK IN THE STATE RIGHT-OF-WAY SHALL COMPLY WITH THE STATE OF MASSACHUSETTS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES. THE COMMONWEALTH OF MASSACHUSETTS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS

- (2021 EDITION) AND THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION OF TRANSPORTATION SUPPLEMENTAL SPECIFICATIONS (DATED SEPTEMBER 30, 2021).
- 11. FOR AREAS OUTSIDE THE PROPERTY LINES, REPAIR AND/OR REPLACE ALL DAMAGE DONE TO EXISTING ELEMENTS (SIDEWALKS, PAVING, LANDSCAPING, ETC) AS REQUIRED BY OWNER AND/OR
- 12. ALL SIGNS AND PAVEMENT MARKINGS SHALL CONFORM TO THE LATEST EDITION OF THE MUTCD AND MASSACHUSETTS DEPARTMENT OF TRANSPORTATION REGULATIONS.
- PLANS, AS-BUILT SKETCHES, EXISTING UTILITY COMPANY RECORDS, AND OTHER SOURCES OF INFORMATION AND IS NOT TO BE CONSTRUED AS AN ACCURATE "AS-BUILT" SURVEY AND IS SUBJECT TO SUCH CORRECTIONS THAT A MORE ACCURATE SURVEY MAY DISCLOSE IN ADDITION. OTHER UTILITIES NOT SHOWN HEREON MAY BE PRESENT. ANY DISCREPANCIES DISCOVERED DURING THE COURSE OF CONSTRUCTION SHALL BE PROMPTLY REPORTED TO THE PROJECT ENGINEER.
- 14. ALL UTILITY WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS AND SPECIFICATIONS/DETAILS OF THE UTILITY COMPANY HAVING AUTHORITY OVER THE PROPOSED WORK. ALL PROPOSED UTILITY WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL ORDINANCES/REQUIREMENTS GOVERNING THE PROPOSED WORK.
- 15. ALL PROPOSED UTILITIES WILL BE LOCATED UNDERGROUND UNLESS OTHERWISE NOTED.
- STANDARDS AND AS REQUIRED BY REPAIRING, MILLING OR OVERLAYING.
- 17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PAVEMENT REPAIRS REQUIRED AS A RESULT OF ANY UTILITY WORK.
- 18. CONCRETE JOINTS ON SITE ARE TO BE FILLED WITH HOT-APPLIED JOINT FILLER, TO INCLUDE CONCRETE PAVEMENTS, MONOLITHIC CURBING AND MONOLITHIC SIDEWALKS.
- WALL AT FINISHED GROUND LEVEL AND THE TOP OF THE FACE OF THE WALL RESPECTIVELY.
- 20. ALL ON-SITE CONCRETE TO BE 4,500 PSI WITH 5% TO 7% AIR ENTRAPMENT UNLESS OTHERWISE

DEMOLITION NOTES

- DEMOLITION CONTRACTOR SHALL COORDINATE ALL DEMOLITION SEQUENCING WITH THE GENERAL CONTRACTOR FOR TEMPORARY CONDITIONS AND PHASING.
- 2. THE CONTRACTOR IS TO REFER TO THE REMAINING CONSTRUCTION DRAWING SET FOR REMOVAL LIMIT COORDINATION WITH OTHER DESIGN ELEMENTS.
- 3. THE CONTRACTOR IS TO REMOVE AND DISPOSE OR RECYCLE ALL SITE FEATURES WITHIN THE LIMITS OF CLEARING, UNLESS OTHERWISE DIRECTED IN THE PLANS, SPECIFICATIONS AND THE
- 4. THE CONTRACTOR SHALL NOTIFY AND OBTAIN ALL SHUTOFFS FOR ALL APPLICABLE UTILITIES PRIOR TO THE COMMENCEMENT OF DEMOLITION.
- THE CONTRACTOR SHALL LOCATE/CONFIRM ALL DRAINAGE INFRASTRUCTURE AND MAINTAIN ADEQUATE STORM DRAINAGE THROUGHOUT CONSTRUCTION.
- 6. THE CONTRACTOR SHALL COORDINATE ANY PARTIAL DEMOLITION OF DRAINAGE OR UTILITY INFRASTRUCTURE WITH THE FINAL CONDITION. SEE CONSTRUCTION DRAWINGS.
- THE CONTRACTOR SHALL FIELD LOCATE AND PROPERLY DISCONNECT APPROPRIATE LATERALS TO LIVE MAINS PRIOR TO DEMOLITION AND IN ACCORDANCE WITH UTILITY COMPANY
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY DEMOLITION ASSOCIATED PERMITS.
- 9. THE CONTRACTOR SHALL REMOVE AND LEGALLY DISPOSE OF ALL STRUCTURES WITHIN THE PROJECT LIMITS UNLESS INDICATED TO REMAIN.
- NECESSARY TO SATISFY FEDERAL, STATE & LOCAL REQUIREMENTS INCLUDING BUT NOT NECESSARILY LIMITED TO BRACING, SHORING, PAVEMENT REPAIR, FENCING, PEDESTRIAN AND VEHICLE ACCESS, CONCRETE PADS, ETC.

10. THE CONTRACTOR SHALL INCLUDE IN HIS BID ALL TEMPORARY FACILITIES AND SERVICES

- 11. THE CONTRACTOR SHALL REFER TO THE SOIL EROSION & SEDIMENT CONTROL PLANS PROVIDED BY LANGAN INCLUDED AS PART OF THIS PLAN SET.
- 12. ALL SIGNS WITHIN LIMIT OF CLEARING TO BE REMOVED UNLESS OTHERWISE NOTED.
- 13. EXISTING FOUNDATIONS/BUILDING SLABS TO BE LEFT IN PLACE IF DEEPER THAN 3 VERTICAL FEET BELOW PROPOSED BUILDING SLAB, FOOTINGS, HARDSCAPE FEATURES, OR UTILITIES. ANY SLABS LEFT IN PLACE SHALL BE BROKEN UP TO THE SATISFACTION OF THE GEOTECHNICAL
- 14. BASEMENTS AND BELOW GRADE STRUCTURES EXIST IN VARIOUS LOCATIONS ON SITE, INCLUDING BELOW EXISTING SLABS AND PAVED AREAS.
- 15. IF GROUNDWATER IS ENCOUNTERED ACROSS THE EXISTING SITE. DEWATERING OF EXCAVATIONS MAY BE REQUIRED. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ANY NECESSARY

GRADING & DRAINAGE NOTES

- ALL PROPOSED STORM DRAINAGE PIPING TO UTILIZE WATER-TIGHT JOINTS.
- CLEANOUTS SHALL BE PROVIDED FLUSH TO GRADE AT ALL LOCATIONS OF ROOF DRAIN INTERSECTIONS, BENDS AND UPSTREAM ENDS.
- CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE APPROPRIATE SIZES OF THE DRAINAGE STRUCTURES (CATCH BASINS, MANHOLES, YARD DRAINS, ETC.) TO ACCOMMODATE THE PIPING
- STORM DRAINAGE PIPING INSTALLATION SHALL COMMENCE AT THE FURTHEST DOWNSTREAM POINT AND PROCEED UPSTREAM "IN THE DRY".
- THE CONTRACTOR WILL BE REQUIRED TO CLEAN THE ENTIRE DRAINAGE SYSTEM OF ALL DEBRIS AND OBSTRUCTIONS BOTH DURING CONSTRUCTION AND AT THE END OF CONSTRUCTION PRIOR TO ACCEPTANCE. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO, REMOVAL OF ALL FORMWORK FROM STRUCTURES, CONCRETE AND MORTAR DROPPINGS, CONSTRUCTION DEBRIS, AND DIRT THE SYSTEM SHALL BE THOROUGHLY FLUSHED CLEAN AND THE CONTRACTOR SHALL FURNISH ALL NECESSARY HOSE, PUMPS, PIPE, AND OTHER EQUIPMENT THAT MAY BE REQUIRED FOR THIS PURPOSE. NO DEBRIS SHALL BE FLUSHED INTO EXISTING STORM DRAINS, WETLANDS, OR WATERCOURSES; ALL DEBRIS SHALL BE REMOVED FROM THE SYSTEM AND DISPOSED OF IN ACCORDANCE WITH ALL GOVERNING AGENCIES.
- ALL MANHOLE COVERS, GRATES, INLETS, AND RIMS TO REMAIN SHALL BE ADJUSTED TO PROPOSED GRADE.
- CONTRACTOR TO PROVIDE ALL FITTINGS AND BENDS NECESSARY TO ACCOMPLISH WORK.
- REFER TO THE "STORMWATER OPERATION AND MAINTENANCE PLAN MEDWAY BATTERY ENERGY STORAGE SYSTEM" FOR OPERATION OF THE STORMWATER MANAGEMENT SYSTEM.

UTILITY NOTES

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION OF THE FIRE SERVICE LINE CONNECTIONS TO
- TEST PITS ARE TO BE PERFORMED PRIOR TO INSTALLATION OF FIRE SERVICE LINE CONNECTIONS TO CONFIRM THE SIZE AND MATERIAL OF THE MAIN.
- TAPPING SLEEVES AND GATE VALVE ASSEMBLIES SHALL BE INSTALLED AT EACH FIRE SERVICE LINE
- CONNECTION AND SHALL BE MANUFACTURED BY CLOW VALVE CO., MUELLER CO., OR AMERICAN VALVE AND SCHEDULING OF ALL FIRE SERVICE LINE CONNECTION WORK SHALL BE COORDINATED WITH THE TOWN OF
- MEDWAY TO ALLOW FOR A REPRESENTATIVE FROM THE AGENCY TO BE ONSITE TO OVERSEE THE CONNECTIONS AND PERFORM A WATER SHUTDOWN AS NEEDED. THE DEPARTMENT SHALL APPROVE ALL MATERIALS USED IN MAKING A SERVICE CONNECTION AND SHALL
- INSPECT ALL WORK UPON COMPLETION AND PRIOR TO BACKFILL OF TRENCH. ALL PIPE FITTINGS, AND APPURTENANCES SHALL MEET AWWA AND DEPARTMENT STANDARDS. ALL MAINS SHALL BE AT LEAST EIGHT (8) INCHES IN DIAMETER AT A DEPTH OF FIVE (5) FEET AND SHALL
- CLOSER THAN THREE (3) FEET VERTICALLY OR TEN (10) FEET HORIZONTALLY FROM SEWER LINE OR ENCASED IN CONCRETE OR SLEEVÉ SEGMENTS NOT MEETING THESE CRITERIA. VALVE BOXES SHALL BE MANUFACTURED IN THE UNITED STATES AND BE CAST IRON, TAR COATED, SLIDING, HEAVY PATTERN TYPE, CONSISTING OF THREE (3) PIECES: A FLANGED BOTTOM PIECE, A FLANGED TOP PIECE, AND A COVER WITH TOW (2) LIFTING HOLES AND THE WORD "WATER" CAST ON THE TOP. A MINIMUM

LEAST 5-1/4 INCHES AND LENGTHS SHALL BE AS NECESSARY TO SUIT GROUND ELEVATION.

BE CEMENT LINED DUCTILE IRON THICKNESS CLASS 52. ALL MAINS OR SERVICES SHALL BE INSTALLED NO

6 INCH OVERLAP IS REQUIRED BETWEEN SLIDING SECTIONS. THE INSIDE DIAMETER OF BOXES SHALL BE AT

- WATER SHUT-OFF BOX AND CURB STOP BOX SHALL BE ERIE STYLE.
- ALL HYDRANTS SHALL BE STANDARDIZED TYPE AND SPECIFICATIONS OF OF THE MEDWAY WATER DIVISION. HYDRANTS SHALL BE LOCATED AT PROPERTY LINES WHEN POSSIBLE AND SHALL NOT BE SPACED MORE THAN FIVE HUNDRED (500) FEET APART. THERE SHALL ALSO BE A GATE VALVE FOR EVERY HYDRANT. ALL HYDRANTS SHALL BE BACKED WITH 0.25 CUBIC YARDS OF CONCRETE OR APPROVED THRUST BLOCK AGAINST TRENCH WALL. HYDRANTS SHALL ALSO BE SURROUNDED WITH 1 CUBIC YARD OF 3/4-INCH STONE FOR DRAINAGE. SEE CONSTRUCTION DETAIL.
- . ALL FIRE HYDRANTS SHALL RECEIVE AN ISOLATION VALVE ALONG THE HYDRANT LATERAL AND A MINIMUM OF TWO PROTECTIVE BOLLARDS.
- HYDRANTS AMERICAN, DARLING MODEL B-84B, OPEN LEFT. FACTORY PAINTED IN TOWN OF MEDWAY STANDARD COLOR WITH NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) STANDARD THREADS AND TWO 2-1/2 INCH NOZZLES AND ONE 4-1/2 INCH NOZZLE.
- 2. THE DEVELOPER SHALL PROVIDE AS-BUILT RECORD DRAWINGS OF ALL NEW AND EXISTING WATER INFRASTRUCTURE TO THE TOWN OF MEDWAY AT THE COMPLETION OF CONSTRUCTION.
- . WATER MAINS SHALL BE PRESSURE AND LEAK TESTED AS PER AMERICAN WATER WORKS ASSOCIATION (AWWA) SPECIFICATIONS AT 50 PSI OVER STATIC PRESSURE OR 150 PSI, WHICHEVER IS GREATER, FOR A PERIOD OF TWO (2) HOURS.
- H. THE DEVELOPER SHALL SUBMIT AN AS—BUILT PLAN, GATE TIE CARDS, AND WATER SERVICE CARDS, PREPARED BY A REGISTERED CIVIL ENGINEER IN THE STATE OF MASSACHUSETTS TO THE MEDWAY ENGINEERING DIVISION AT THE CONCLUSION OF THE PROJECT.
- 5. ALL NEW CONSTRUCTION OR ALL CEMENT LINED DUCTILE IRON JOINTS AT FITTINGS (CLASS 52), VALVES AND HYDRANT LATERALS SHALL BE MECHANICAL WITH NEOPRENE GASKETS. JOINTS AT OTHER LOCATIONS SHALL BE PUSH-ON TYPE WITH NEOPRENE OR SYNTHETIC RUBBER GASKETS. ALL WATER GATES SHALL OPEN PER MUNICIPAL REQUIREMENTS. ALL WATER LINES SHALL HAVE A MINIMUM OF 5' OF GROUND COVER AND A MINIMUM HORIZONTAL SEPARATION OF 10' FROM THE SEWER SYSTEM. AT WATER AND SEWER CROSSINGS, THE SEWER LINE SHALL BE ENCASED IN 6" OF CONCRETE FOR A DISTANCE OF 10' ON EITHER SIDE OF THE CROSSING IF A MINIMUM VERTICAL SEPARATION OF 18" IS NOT MAINTAINED.
- 6. ENSURE ALL EXISTING (TO REMAIN) AND PROPOSED MANHOLES PROPERLY IDENTIFY UTILITIES SERVICED.
- . WHERE AN EXISTING UTILITY IS FOUND TO BE IN CONFLICT WITH THE PROPOSED WORK, THE CONTRACTOR SHALL ACCURATELY DETERMINE THE LOCATION, ELEVATION, AND SIZE OF THE UTILITY AND TRANSMIT THIS INFORMATION TO THE ENGINEER WITHOUT DELAY.
- . THE LOCATIONS OF EXISTING ELECTRICAL LINES AND GAS MAINS ARE APPROXIMATE. THE CONTRACTOR MUST CONSULT THE LOCAL UTILITY COMPANIES FOR ADDITIONAL INFORMATION. ALL PROPOSED GAS AND ELECTRICAL WORK SHALL BE IN CONFORMANCE WITH LOCAL COUNTY, STATE AND FEDERAL GUIDELINES AND

	LEGEND	
	EXISTING	PROPOSED
PROPERTY LINE		
LEASE AREA		l
SETBACK LINE		l
WETLAND LIMITS		
25' WETLAND NO DISTURB ZONE		l
100' WETLAND BUFFER ZONE		
100' RIVERFRONT AREA LIMITS		
200' RIVERFRONT AREA LIMITS		
LIMIT OF RIVER WETLAND BUFFER IMPACTS		
EXISTING IMPERVIOUS AREA TO BE REMOVED		
LOCAL WETLAND REGULATION (SECTION 23) VEGETATION REPLACEMENT AREA		
BUILDING LINE	'//////////////////////////////////////	
PEDESTRIAN DOOR LOCATION		_
SIGN	-	· ·
BOLLARD		•
CONCRETE		
ASPHALT		
GRAVEL		
STORMWATER MANAGEMENT		
FEATURE		
WATER LINE		
FIRE SERVICE LOOP	UFW* UFW*	
OVERHEAD ELECTRIC	——————————————————————————————————————	
UNDERGROUND ELECTRIC	E*E*	UE
STORM PIPE		
STORM CURBLESS CATCH BASIN		(
STORM MANHOLE		
CONTOUR	137	135
SPOT ELEVATION	X192.54	× <u>135.19</u>
CHAIN LINK FENCE		* * * *
RETAINING WALL		
SOUND WALL		
LIMIT OF WORK		LOW
SILT FENCE & SILT SOCK		
SILT FENCE	77774	-0-0-0-
INLET PROTECTION		
SEDIMENT BASIN/TRAP		
STABILIZED DIVERSION CHANNEL		
WITH STONE CHECK DAMS		
GUARDRAIL		
TREELINE		
TREE	〇 ※	
PARKING ROW COUNT		58
MANHOLES	ODEFMGSTOUW	
STORM FLARED END SECTION		>
CLEANOUT	0	c.o. ₀
FIRE HYDRANT	♦	₩
GATE VALVE		8
TRANSFORMER		Т
POWER POLE	Ώ.	Δ
GUY WIRE	←	o—
GOT WITCE		8 —⊠
LIGHT POLE	☆	
	☆ 	G
LIGHT POLE	☆ ——— G ———	G
LIGHT POLE GAS LINE	* G — — — G	

I FGFND

ABBREVIATIONS BOTTOM OF CURF BITUMINOUS BOTTOM OF WALL CATCHBASIN CONCRETE CURB CIFAN OUT CONCRETE CONCRETE PAD CANOPY DRAIN DUCTILE IRON PIPE DETECTABLE WARNING DOUBLE YELLOW LINE ELEVATION EDGE OF PAVEMENT FLARED END SECTION GRADE HIGH DENSITY POLYETHYLENE PIPE LANDSCAPED AREA LINEAR FEET MANHOLE NOT TO SCALE OUTLET CONTROL STRUCTURE PROPOSED POLYVINYL CHLORIDE PIPE REINFORCED CONCRETE PIPE RETAINING RIGHT OF WAY R.O.W REMOVE & DISPOSE REMOVE & REPLACE STORM DRAIN TOP OF CURB TRENCH DRAIN TOP OF FRAME TOP OF WALL TYPICAL WATER QUALITY UNIT YARD DRAIN NOI COMMENT REVISIONS NOI COMMENT REVISIONS

Date Description Revisions



Environmental Services, Inc.

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MEDWAY BATTERY ENERGY STORAGE

MASSACHUSETT

NORFOLK COUNTY

MASTER LEGEND **AND NOTES**

Drawing No. 151033401 06/08/2023 Orawn Bv Checked By

SOIL EROSION-SEDIMENT CONTROL NOTES

PROPOSED DEVELOPMENT

- 1. CONSTRUCTION WILL INCLUDE EARTHWORK, CURBING, PAVING, UTILITY INSTALLATION, LANDSCAPING AND BUILDING CONSTRUCTION. ALL DEMOLITION DEBRIS AND SOIL REMOVAL RELATED TO CONSTRUCTION SHALL BE REMOVED AND DISPOSED OF IN ACCORDANCE WITH APPLICABLE STATE AND LOCAL LAWS GOVERNING
- 2. THE DETAILED EROSION AND SEDIMENT CONTROL MEASURES ARE SHOWN ON DRAWINGS CE101 AND CE102. THE PROPOSED MEASURES HAVE BEEN DESIGNED TO LIMIT THE MIGRATION OF SOIL SEDIMENT FROM THE SITE. HOWEVER, THE SITE CONTRACTOR IS RESPONSIBLE FOR ALL EROSION AND SEDIMENT CONTROLS AND SHALL SUPPLEMENT AND ADJUST THE PLAN AS NEEDED TO PREVENT SOIL EROSION TO THE MAXIMUM EXTENT FEASIBLE. TEMPORARY SEDIMENT BASINS ARE NOT SHOWN ON THE PLANS AS THE EXACT LOCATIONS ARE TO BE DETERMINED IN THE FIELD. THE CONTRACTOR SHALL CONSTRUCT AND IMPLEMENT TEMPORARY SEDIMENT BASINS THROUGHOUT THE SITE AS NEEDED TO CONTROL SITE RUNOFF AND PREVENT SEDIMENT MIGRATION.
- SOIL EROSION AND SEDIMENT CONTROL NOTES
- THE SOIL AND SEDIMENT CONTROL PRACTICES MUST BE INSTALLED IN ACCORDANCE WITH THE LOCAL GOVERNING AUTHORITY, THE MASSACHUSETTS EROSION AND SEDIMENT CONTROL GUIDELINES AND THE MASSACHUSETTS STORMWATER STANDARDS.
- EROSION AND SEDIMENT CONTROL DEVICES MUST BE INSTALLED PRIOR TO START OF DEMOLITION AND CONSTRUCTION AND DISTURBANCE OF SITE CONTRIBUTORY DRAINAGE AREAS. THE OWNER OR ITS CONTRACTOR SHALL INSPECT. REPAIR AND REMOVE ALL SEDIMENT AND EROSION CONTROL DEVICES. AS INDICATED HEREIN. ALL EARTH CHANGES SHALL BE DESIGNED, CONSTRUCTED, AND COMPLETED IN SUCH A MANNER SO THAT THE EXPOSED AREA OF ANY DISTURBED LAND SHALL BE LIMITED TO THE SHORTEST POSSIBLE PERIOD OF TIME. CLEARING SHALL BE PHASED TO THE EXTENT FEASIBLE TO LIMIT POTENTIAL FOR SOIL EROSION.
- DISPOSAL OF COLLECTED SEDIMENT SHALL BE MADE TO AREA DESIGNATED BY THE OWNER'S SOIL ENGINEER.
- 4. FILTER FABRIC/SILT FENCE WILL BE INSTALLED ALONG THE TOE OF ALL CRITICAL CUT AND FILL SLOPES. EROSION CONTROL BLANKET BIONET SC150BN OR APPROVED EQUAL AND SEEDING AS SPECIFIED ON THE PLANTING PLAN MUST BE PROVIDED ON ALL SLOPES 4H:1V TO 3:1V. FOR SLOPES 2.5H:1V TO 3H:1V, SLOPES SHALL BE STABILIZED WITH A 12-INCH THICK LAYER OF MODIFIED ROCK FILL (MASSDOT M2.02.4) PLACED ON A 6-INCH THICK BEDDING LAYER OF 3/4-INCH CRUSHED STONE OVER MIRAFI FW700 WOVEN
- GEOTEXTILE. ALL SITE SLOPES SHALL BE LESS THAN 2.5H:1V. 6. ALL TOPSOIL NOT TO BE USED FOR FINAL GRADING/LANDSCAPED AREAS SHALL BE REMOVED FROM THE SITE IMMEDIATELY, IN ACCORDANCE WITH APPLICABLE STATE AND LOCAL LAW. ALL TOPSOIL TO BE USED IN LANDSCAPED AREAS SHALL BE STORED/STOCKPILED IN ACCORDANCE WITH APPLICABLE STATE AND LOCAL LAW STANDARDS

- 7. THE SITE SHALL BE WETTED AS NECESSARY TO PROVIDE DUST CONTROL.
- 8. PAVEMENT BASE COURSE MUST BE PLACED IN ALL NEW ROADWAY AREAS UPON COMPLETION OF FINE 9. THE CONTRACTOR IS RESPONSIBLE FOR ALL PAVED ROADWAYS, ON AND OFF-SITE, WHICH MUST BE KEPT
- FREE OF SITE GENERATED SEDIMENT AT ALL TIMES. DUST SHALL BE CONTROLLED BY SPRINKLING OR OTHER APPROVED METHOD. 10. ALL STORM DRAINAGE OUTLETS MUST BE STABILIZED, AS REQUIRED, BEFORE THE DISCHARGE POINTS
- BECOME OPERATIONAL 11. SILT FENCES AND BARRIERS MUST BE CLEANED OR REPLACED PERIODICALLY TO REMOVE BUILT-UP SILT.
- 12. ALL EROSION AND SEDIMENT CONTROL DEVICES MUST BE INSPECTED EVERY 14 CALENDAR DAYS AND WITHIN 24 OF EITHER A STORM EVENT THAT PRODUCES 0.25 INCHES OR MORE OF RAIN WITHIN A 24 HOUR PERIOD. OR A STORM EVENT THAT PRODUCES 0.25 INCHES OR MORE OF RAIN WITHIN A 24-HOUR PERIOD ON THE FIRST DAY OF A STORM AND CONTINUES TO PRODUCE 0.25 INCHES OR MORE OF RAIN ON

SUBSEQUENT DAYS, OR A DISCHARGE CAUSED BY SNOWMELT FROM A STORM EVENT THAT PRODUCES 3.25

- 13. ANY TEMPORARY OR PERMANENT FACILITY DESIGNED FOR THE CONVEYANCE OF WATER AROUND, THROUGH, OR FROM DISTURBED AREAS SHALL BE DESIGNED TO LIMIT THE WATER FLOW TO A NON-EROSIVE VELOCITY.
- 14. THE CONTRACTOR SHALL CORRECT ANY OMISSIONS, ERRORS, OR FIELD OPERATIONS IMMEDIATELY AND IN ACCORDANCE WITH THE GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL.
- 15. THE PROPERTY OWNER AND/OR HIS/HER AGENTS MUST MAINTAIN (REPAIR/REPLACE), WHEN NECESSARY, THE SILTATION CONTROL UNTIL ALL DEVELOPMENT ACTIVITY IS COMPLETED AND ALL DISTURBED AREAS ARE PERMANENTLY STABILIZED.

TEMPORARY STABILIZATION

- SEDIMENT DISPOSAL AREAS AND TOPSOIL STOCKPILES NOT SCHEDULED FOR CONSTRUCTION ACTIVITIES WITHIN FOURTEEN (14) DAYS OF DISTURBANCE SHALL BE STABILIZED AS FOLLOWS:
 - A. SOIL AMENDMENTS AS NECESSARY.

SEEDED PER ITEM C ABOVE.

INCHES OR MORE OF SNOW WITHIN A 24-HOUR PERIOD ..

- B. ANNUAL RYE GRASS SEEDING APPLIED AT A RATE OF NOT LESS THAN 1 LB. PER 1,000 SF. C. MULCH ALL NEWLY SEEDED AREAS WITHIN 80 LBS. OF SALT HAY OR SMALL GRAIN STRAW PER 1,000
- D. WHEN DISTURBED AREAS ARE SCHEDULED FOR IMMEDIATE LANDSCAPING THEY MAY BE MULCHED AND

DISTRICT FOR REVIEW.

PERMANENT STABILIZATION

- REFER TO PLANS FOR PERMANENT STABILIZATION METHODS + PROPOSED SEED MIXES.
- A. PERMANENT VEGETATION IS TO BE SEEDED OR SODDED ON ALL DISTURBED LAND AREAS WITHIN SEVEN (7) DAYS AFTER FINAL GRADING. MULCH AS NECESSARY FOR SEED PROTECTION AND ESTABLISHMENT. AMEND SOIL AS NEEDED PRIOR TO PERMANENT SEEDING. WHEN IT IS NOT POSSIBLE TO PERMANENTLY STABILIZE A DISTURBED AREA AFTER COMPLETION OF AN EARTH CHANGE OR WHEN SIGNIFICANT EARTH CHANGE ACTIVITY CEASES, TEMPORARY SOIL EROSION CONTROL MEASURES SHALL BE IMPLEMENTED. ALL TEMPORARY SOIL EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL PERMANENT SOIL EROSION CONTROL MEASURES SHALL BE IMPLEMENTED. ALL DISTURBED AREAS, STOCKPILES OF FILL OR EXCAVATED MATERIAL SHALL BE STABILIZED IN SUCH A MANNER AS NOT TO CAUSE UNREASONABLE HAZARD TO PERSONS OR PROPERTY.
- B. MATERIALS SPECIFICATION: LAWN + MEADOW AREAS
- (i) ANY SOIL HAVING A pH OF FOUR OR LESS CONTAINING IRON SULFIDES SHALL BE COVERED WITH A MINIMUM OF TWELVE INCHES OF SOIL HAVING A pH OF FIVE OR MORE PRIOR TO SEED BED
- C. MULCHING SHALL BE DONE AT THE RATE OF SEVENTY TO NINETY POUNDS (70-90 LBS) PER 1,000 SQUARE FEET WITH UNROTTED SALT HAY.
- D. LIQUID MULCH BINDERS MUST BE USED TO ANCHOR SALT HAY, HAY OR STRAY MULCHES. (i) APPLICATIONS SHOULD BE HEAVIER AT EDGES WHERE WIND CATCHES THE MULCH IN VALLEYS AND AT CREATED BANKS. REMAINDER OF AREA SHOULD BE UNIFORM IN APPEARANCE.
- (ii) USE ONE OF THE FOLLOWING: SYNTHETIC OR ORGANIC BINDERS, BINDERS SUCH AS CURASOL DCA-70, PETRO SET, TERRA TACH, HYDRO MULCH AND AEROSPRAY MAY BE USED AT RATES RECOMMENDED BY THE MANUFACTURER OF ANCHOR MULCH MATERIALS. BINDERS CONTAINING PETROLEUM PRODUCTS SHALL NOT BE USED.
- NOTE: ALL NAMES GIVEN ABOVE ARE REGISTERED TRADE NAMES. THIS DOES NOT CONSTITUTE A RECOMMENDATION OF THESE TO THE EXCLUSION OF OTHER PRODUCTS.
- D. FILL MATERIAL SHALL BE FREE FROM DEBRIS, PERISHABLE OR COMBUSTIBLE MATERIAL AND FROZEN OR WET EARTH OR STONES LARGER THAN THREE INCHES IN MAXIMUM DIMENSION.

F. ALL REVISIONS AFTER APPROVAL HAS BEEN GRANTED SHALL BE FORWARDED TO THE APPROPRIATE

- E. CONSTRUCTION AREAS SHALL BE PERIODICALLY SPRAYED WITH WATER UNTIL THE SURFACE IS WET TO CONTROL THE GENERATION OF DUST.
- A. 25% OF THE INSTALLED LENGTH OF SILT FENCE B. EQUIVALENT TONNAGE OF STONE FOR STABILIZATION OF 2 STABILIZATION ENTRANCES. STONE COULD BE

EVENT OF SEVERE WEATHER AND INCREASED POTENTIAL FOR SEVERE EROSION.

MUST BE RETILLED AND FIRMED AS ABOVE.

THE START OF ANY CONSTRUCTION.

OTHER UNSUITABLE MATERIAL.

CONTINGENCY SOIL EROSION AND SEDIMENT CONTROL NARRATIVE

(ii) TOPSOIL SHALL BE TESTED PRIOR TO SEEDING.

H. SEEDBED PREPARATION:

USED FOR SLOPE REPAIRS, ENERGY DISSIPATER ENHANCEMENTS, ETC. C. HEAVY EQUIPMENT CAPABLE OF TRENCHING/EXCAVATING LARGE AREAS TO DIVERT AND CONTROL RUNOFF IN A CONTROLLED MANNER.

2. THE GENERAL CONTRACTOR IS REQUIRED TO MAINTAIN ON SITE OR HAVE THE ABILITY TO RETRIEVE WITHIN

G. THE LOCAL GOVERNING AUTHORITY SHALL RECEIVE WRITTEN NOTIFICATION SEVENTY TWO HOURS BEFORE

(i) TOPSOIL SHOULD BE A MINIMUM OF SIX INCHES DEEP (LIGHTLY COMPACTED) BEFORE SEEDING.

(iii) WORK SOIL AMENDMENTS INTO SOIL AS NECESSARY AS NEARLY AS PRACTICAL TO A DEPTH OF

OR SILTY SOIL AND COARSE SANDS SHOULD BE ROLLED TO FIRM THE SEED BED WHEREVER

(iv) REMOVE FROM THE SURFACE ALL STONES ONE INCH OR LARGER IN ANY DIMENSION. REMOVE ALL

(v) INSPECT SEED BED JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT SOIL COMPACT, THE AREA

1. THE GENERAL CONTRACTOR WILL DESIGNATE PERSONNEL FOR 24 HOUR EMERGENCY RESPONSE IN THE

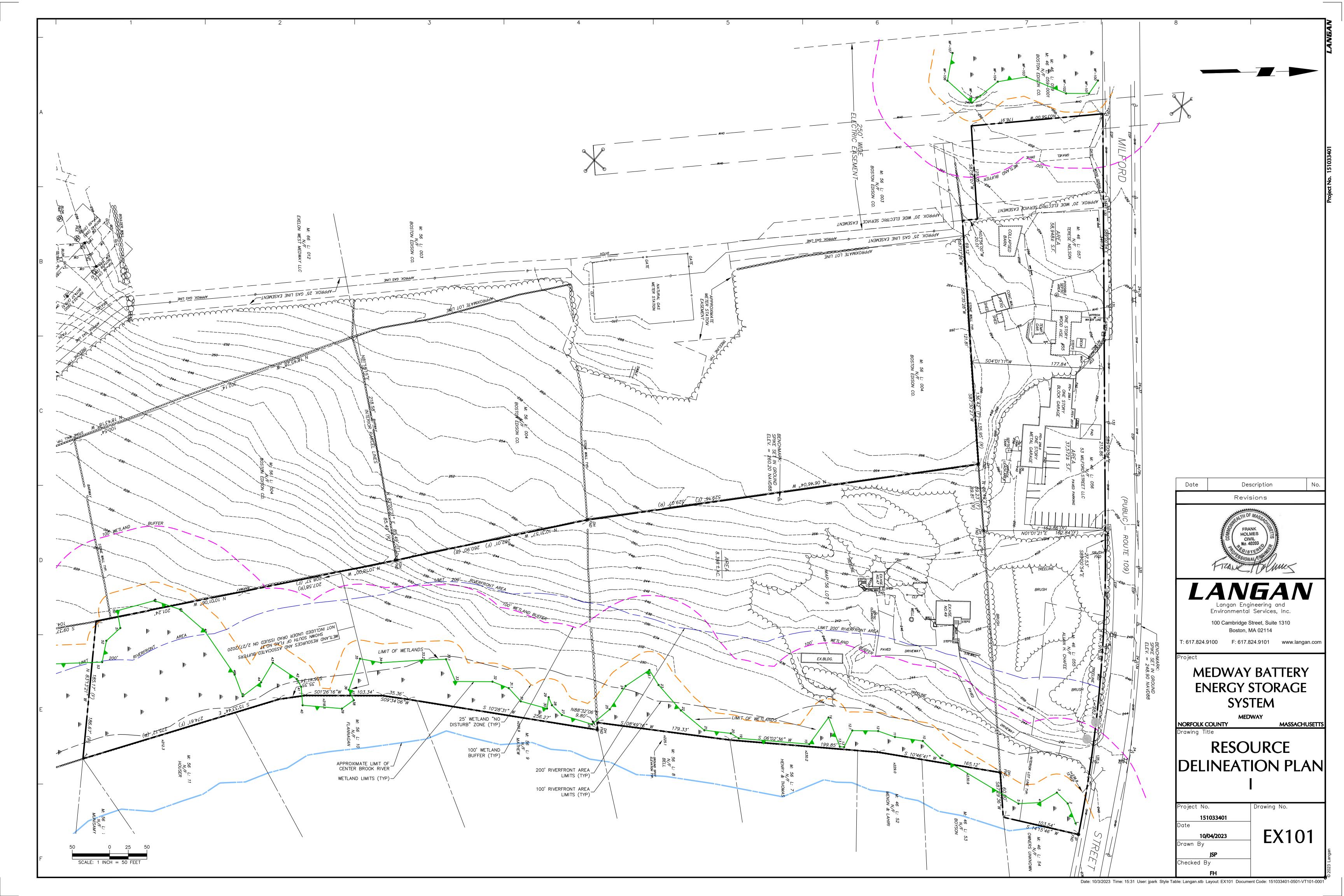
12 HOURS THE FOLLOWING MATERIALS IN THE EVENT THAT THERE ARE DEFICIENCIES IN THE SESC

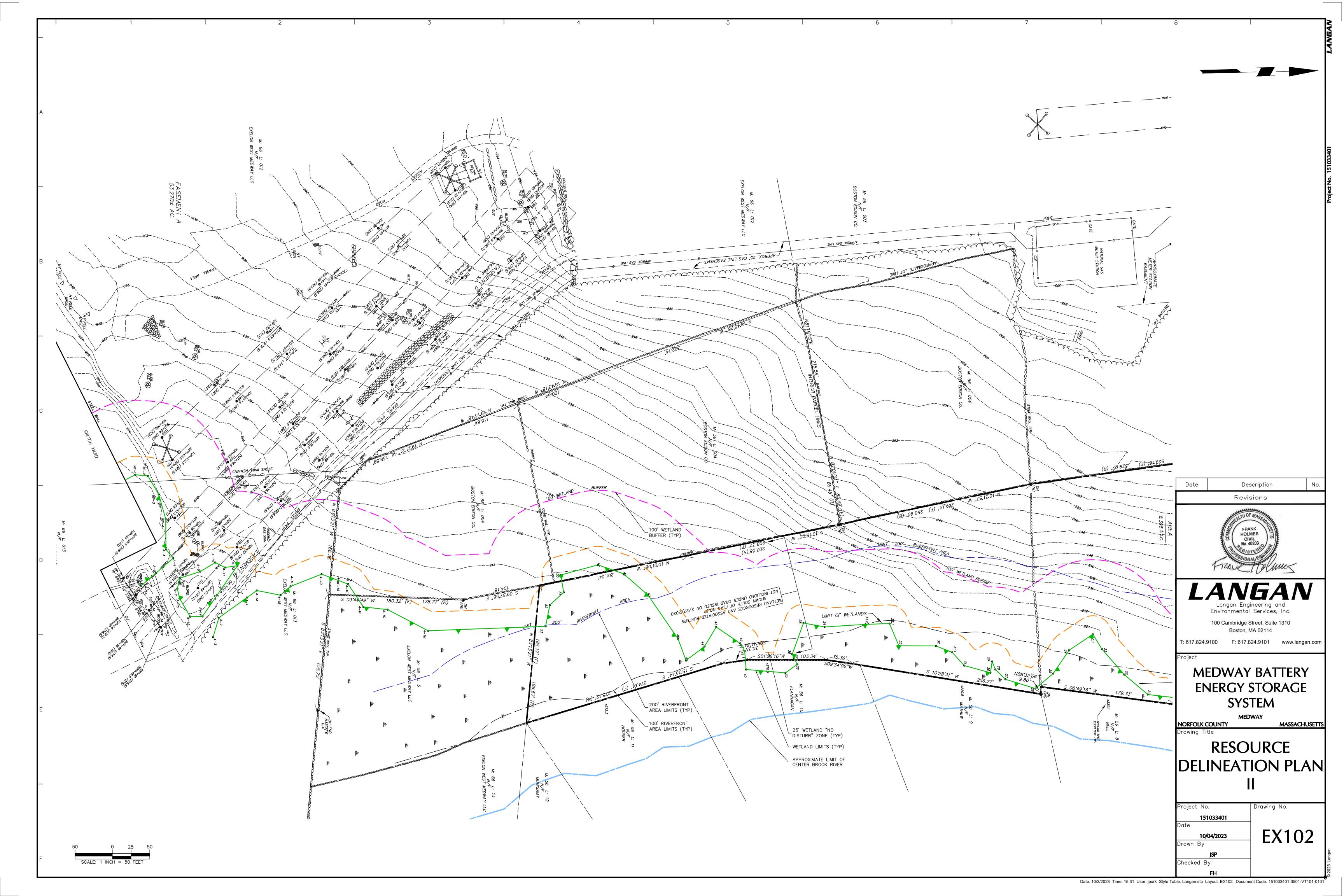
OTHER DEBRIS, SUCH AS WIRE, CABLE, TREE ROOTS, PIECES OF CONCRETE, CLODS, LUMPS, OR

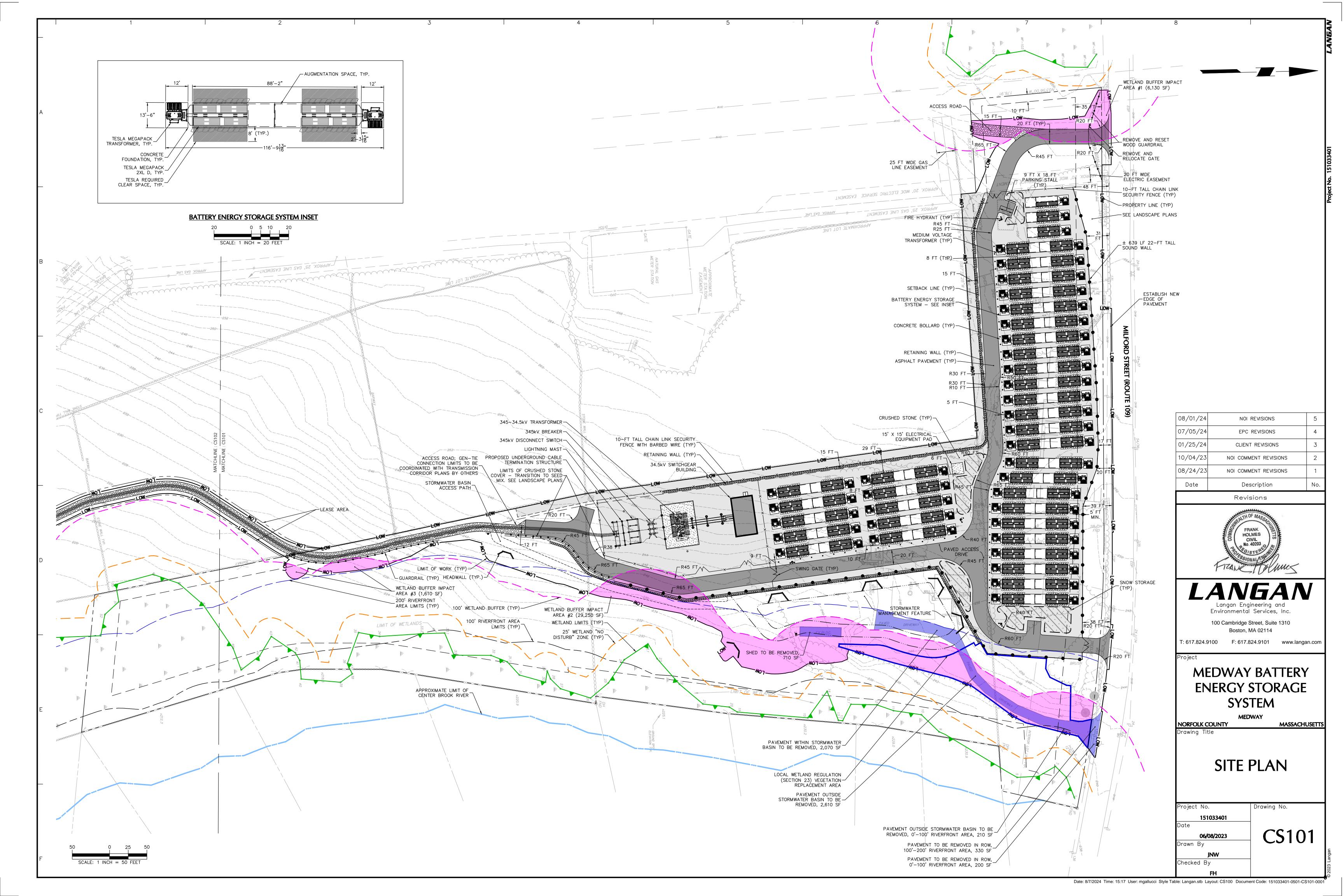
FOUR INCHES WITH A DISC, SPRINGTOOTH HARROW OR OTHER SUITABLE EQUIPMENT. THE FINAL

HARROWING OR DISCING OPERATION SHOULD BE ON THE GENERAL CONTOUR. CONTINUE ALL CLAY

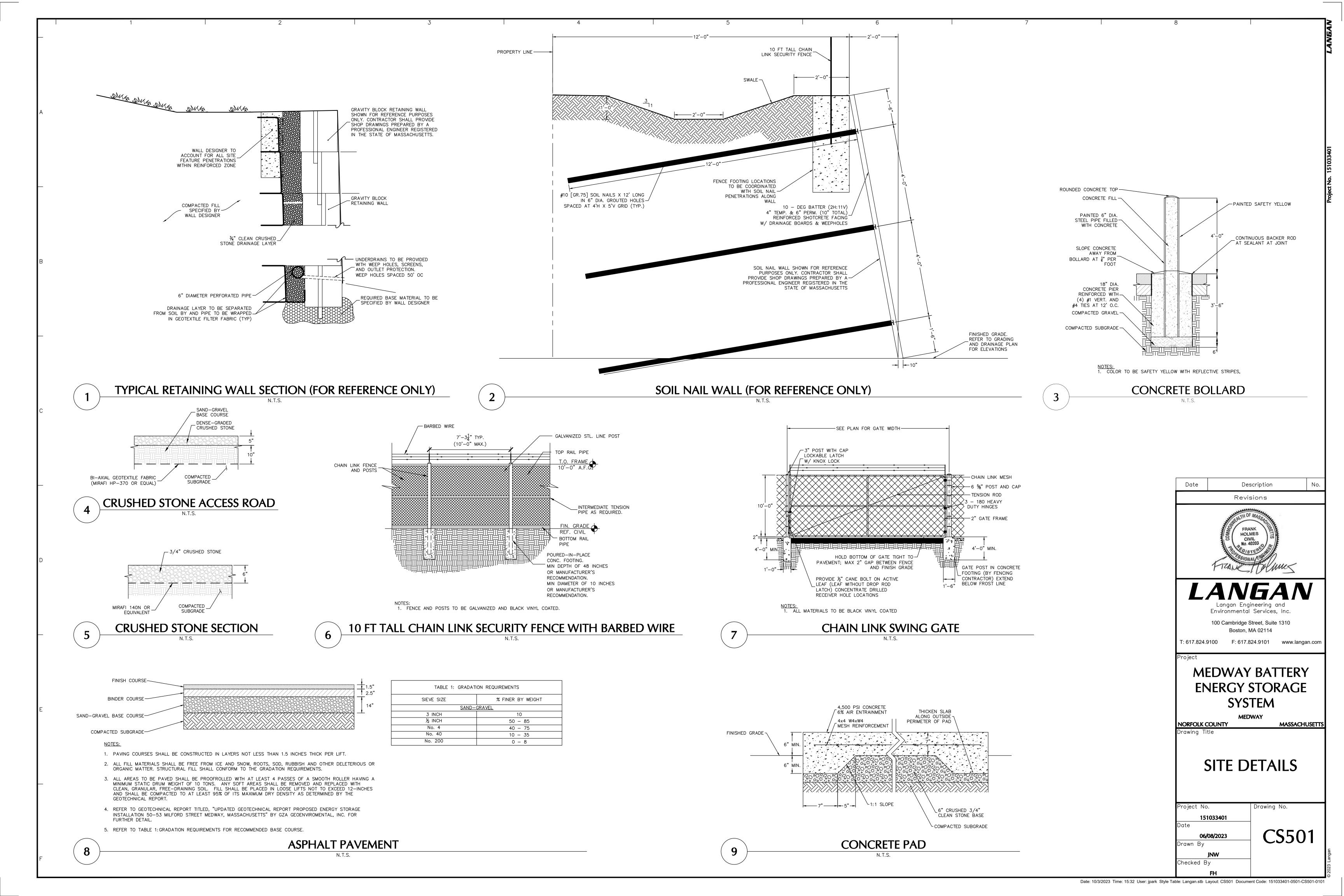
D. HAVE DESIGNATED A HYDRO-SEED CONTRACTOR CAPABLE OF RESPONDING TO THE SITE WITHIN 12 3. ANY STUMP GRINDINGS OR WOOD CHIPS GENERATED ON-SITE SHOULD BE RETAINED FOR USE TO BACK UP SILT FENCES

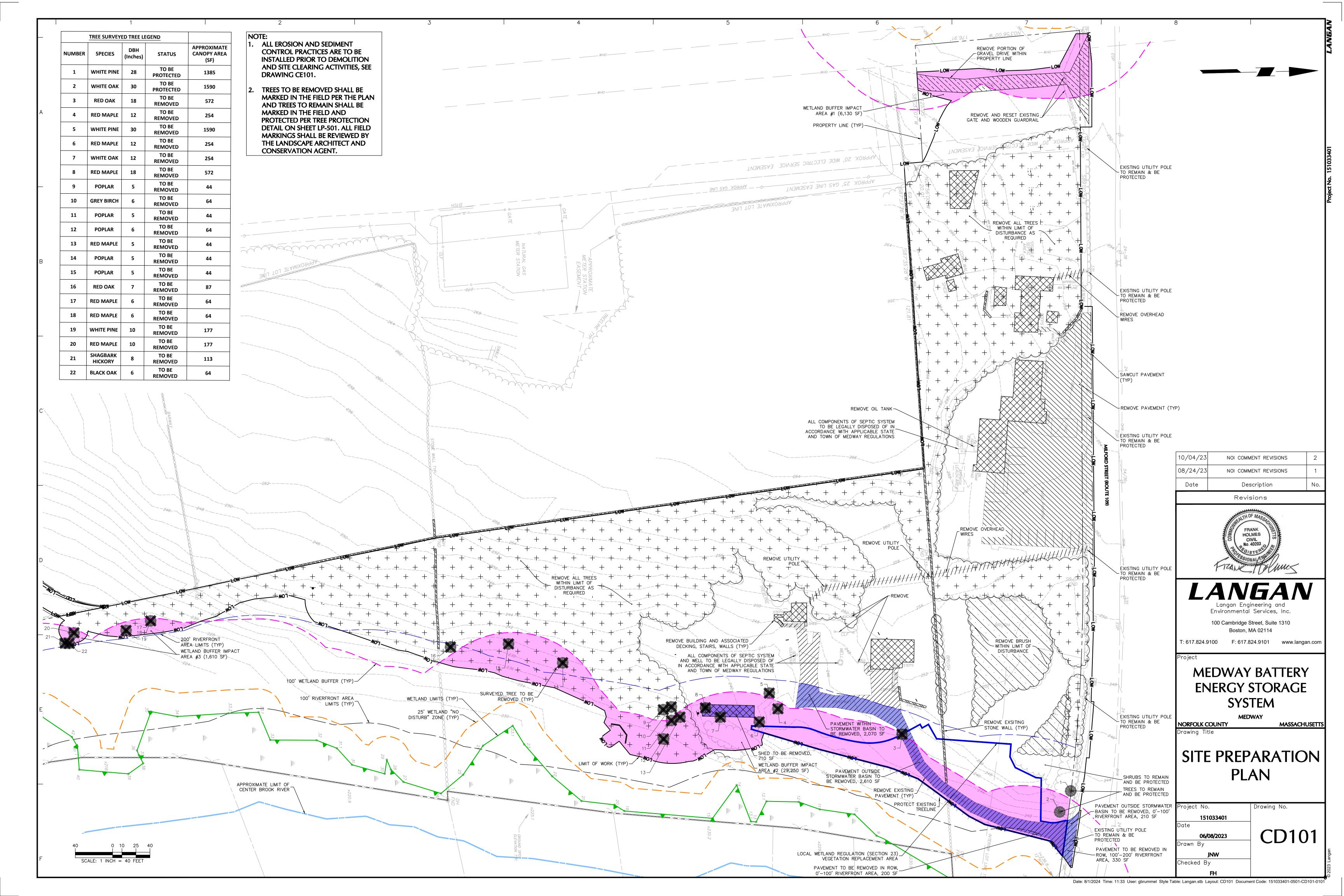


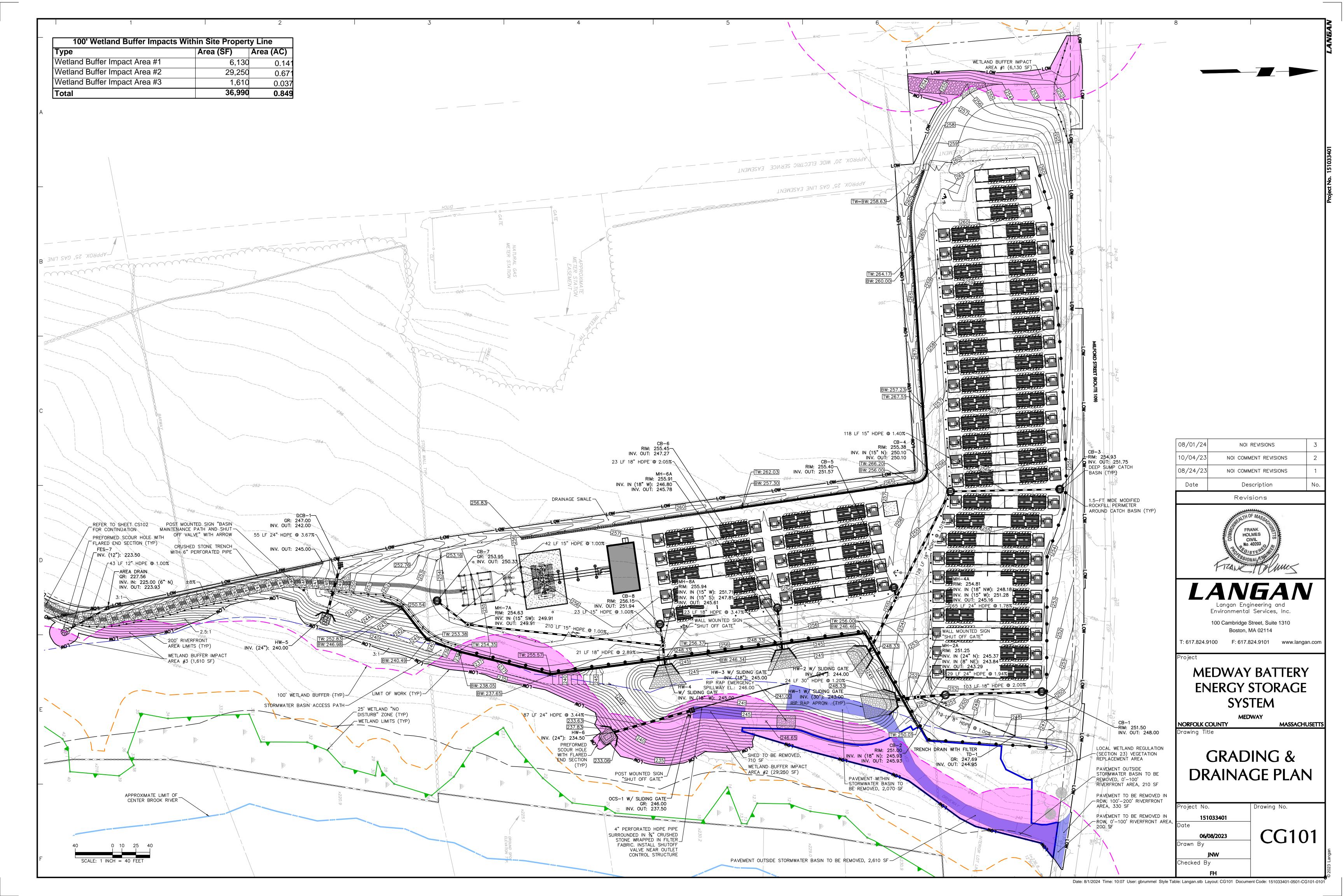


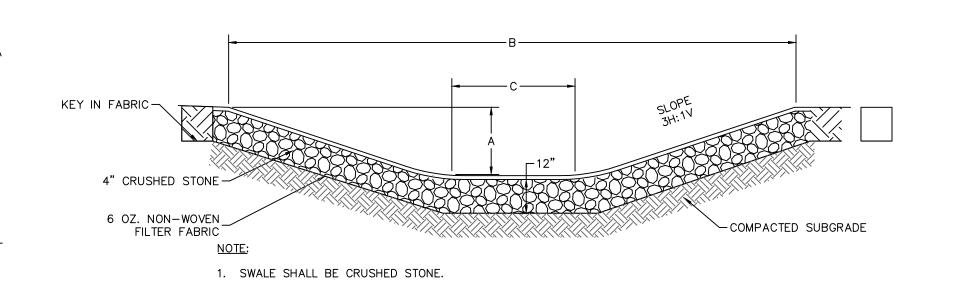




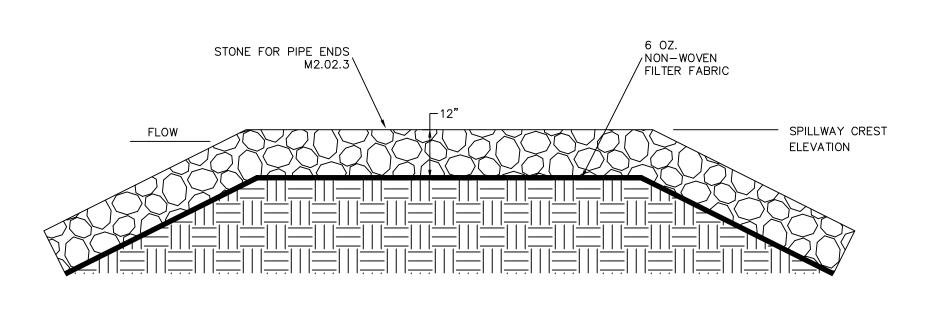




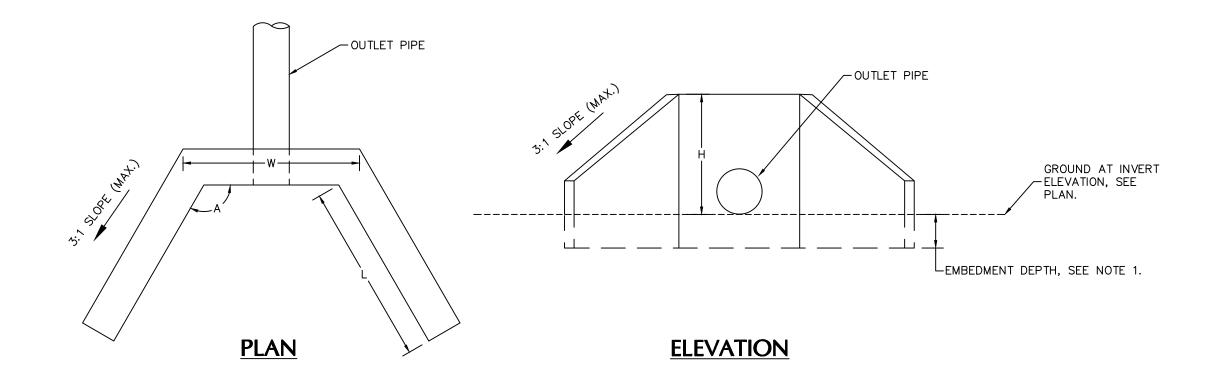




	SWALE DES	SIGN SCHEDULE		
SWALE LOCATION	LENGTH (FT)	A MIN. DEPTH (FT)	B MIN. TOP WIDTH (FT)	C BOTTOM WIDTH (FT)
WESTERN PROPERTY LINE	PER PLAN	1.0	8.0	2.0



RIP-RAP SPILLWAY SCHEDULE								
LOCATION	SPILLWAY CREST ELEVATION (FT)	SPILLWAY CREST ELEVATION WIDTH (FT)	SPILLWAY TOP WIDTH (FT)	SPILLWAY SIDE SLOPES	SPILLWAY LENGTH (FT)			
INFILTRATION BASIN	246	20	23	3:1	36			



HEADWALL

CONTRACTOR TO PROVIDE SHOP DRAWINGS FOR HEADWALL STAMPED BY A STRUCTURAL ENGINEER LICENSED IN THE COMMONWEALTH OF

MASSACHUSETTS FOR THE HEADWALLS INDICATING CONCRETE THICKNESS, REINFORCEMENT, AND EMBEDMENT DEPTH. 2. ALL HEADWALLS SHALL HAVE A GUARDRAIL AT THE TOP OF THE WALL. THE GUARDRAIL SHALL BE 42" IN HEIGHT WITH A MIDRAIL INSTALLED AT A HEIGHT MIDWAY BETWEEN THE TOP EDGE OF THE GUARD RAIL AND HEADWALL SURFACE, GUARDRAIL POST AND MIDRAIL TO BE 1-1/2" GALVANIZED STEEL PIPE. POST SPACING TO BE EQUIDISTANT AND NO MORE THAN 5 FEET.

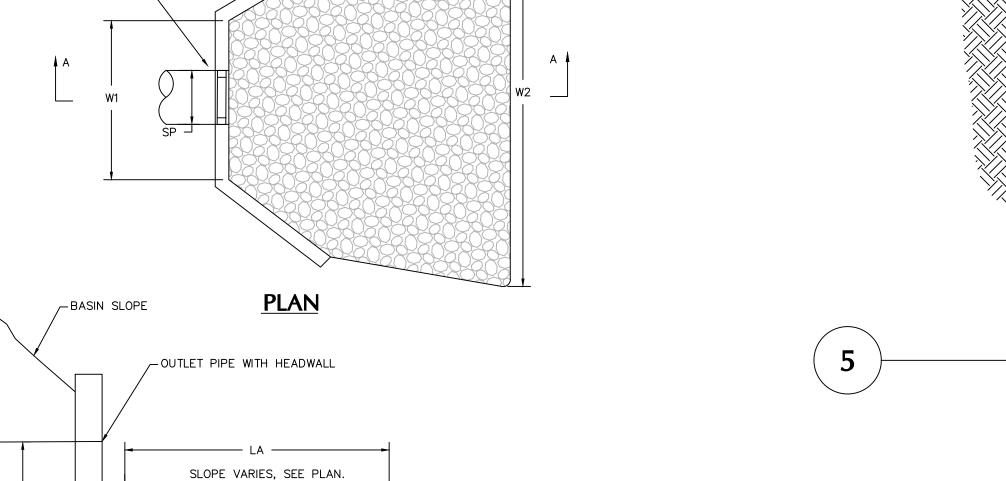
STRUCTURE	W [FT]	L [FT]	Н	A [DEG]
HW-1	16.0	13.5	6'-4"	120
HW-2	15.5	13.5	5'-4"	120
HW-3	15.0	13.5	4'-4"	120
HW-4	15.0	13.5	4'-4"	120
HW-5	11.0	8.0	4'-2"	135
HW-6	13.33	9.0	5'-4"	135

SWALE N.T.S.

OUTLET PIPE WITH HEADWALL -

RIP RAP EMERGENCY SPILLWAY

COMPACTED FILL IN 6" LIFTS (MAX) TO GRADE ✓ BACKFILL WITH GRAVEL BORROW OR SCREENED NATIVE MATERIAL (3" MINUS) COMPACTED SUBGRADE COMPACTED CRUSHED STONE (3/4")



STONE FOR PIPE ENDS M2.02.3-**SECTION A-A**

NOTES:

1. SEE GRADING AND DRAINAGE PLAN FOR SIZES/DIMENSIONS

6 OZ. NON-WOVEN FILTER_

STRUCTURE	LA [FT]	W1 [FT]	W2 [FT]	SP [FT]
HW-1	36	14.5	27	2.5
HW-2	21	14	31	2
HW-3	20	13.5	37	1.5
HW-4	23	13.5	40	1.5

RIPRAP APRON

STORM PIPE BEDDING

NOTES:

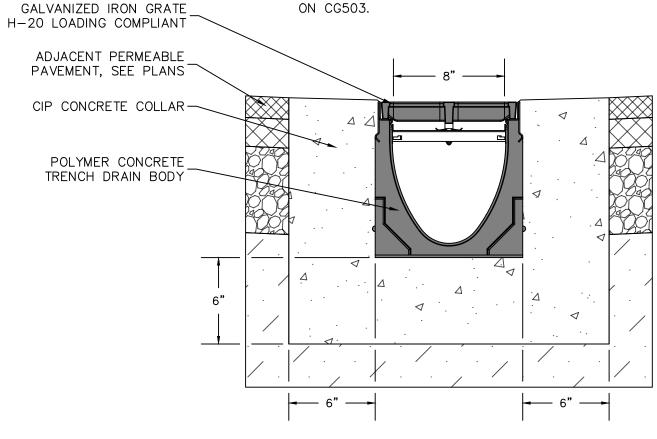
1. MINIMUM CONCRETE STRENGTH OF 4,000 PSI. VIBRATE TO ELIMINATE AIR POCKETS.

2. THE FINISHED LEVEL OF THE CONCRETE SURROUND MUST BE APPROX. 1/8" [3mm] ABOVE THE TOP OF THE CHANNEL EDGE.

3. INSTALL PER MANUFACTURER INSTRUCTIONS.

4. MINIMUM TRENCH DRAIN DEPTH SHALL BE 6.5" FROM THE BOTTOM OF THE GRATE.

5. TRENCH DRAIN FILTER SHALL BE INSTALLED, SEE DETAIL 8 ON CG503.



TRENCH DRAIN

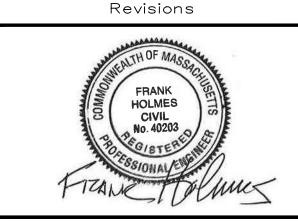
BANK SLOPE OUTLET PIPE WITH HDPE FLARED END SECTION OR HEADWALL, SAN OUTLET PIPE WITH HDPE FLARED END SECTION OR — HEADWALL, SEE PLAN. 3:1 SLOPE MAX (TYP) <u>PLAN</u> -STONE FOR PIPE ENDS M2.02.3 6 OZ. NON-WOVEN—/ FILTER FABRIC SECTION A - A

NOTE: 1. SIDE SLOPES SHALL BE 3:1 OR FLATTER.

STRUCTURE	E [FT]	2E [FT]	3E [FT]	DEPTH [FT]	B [FT]	C [FT]	D [FT]
HW-5	2	4	6	1	10	12	1
HW-6	2.5	5	7.5	1.25	12.5	15	1
FES-7	1.5	3	4.5	0.75	7.5	9	1

PREFORMED SCOUR HOLE

08/01/24	NOI REVISIONS	2
08/24/23	NOI COMMENT REVISIONS	1
Date	Description	No.



Langan Engineering and Environmental Services, Inc.

100 Cambridge Street, Suite 1310 Boston, MA 02114

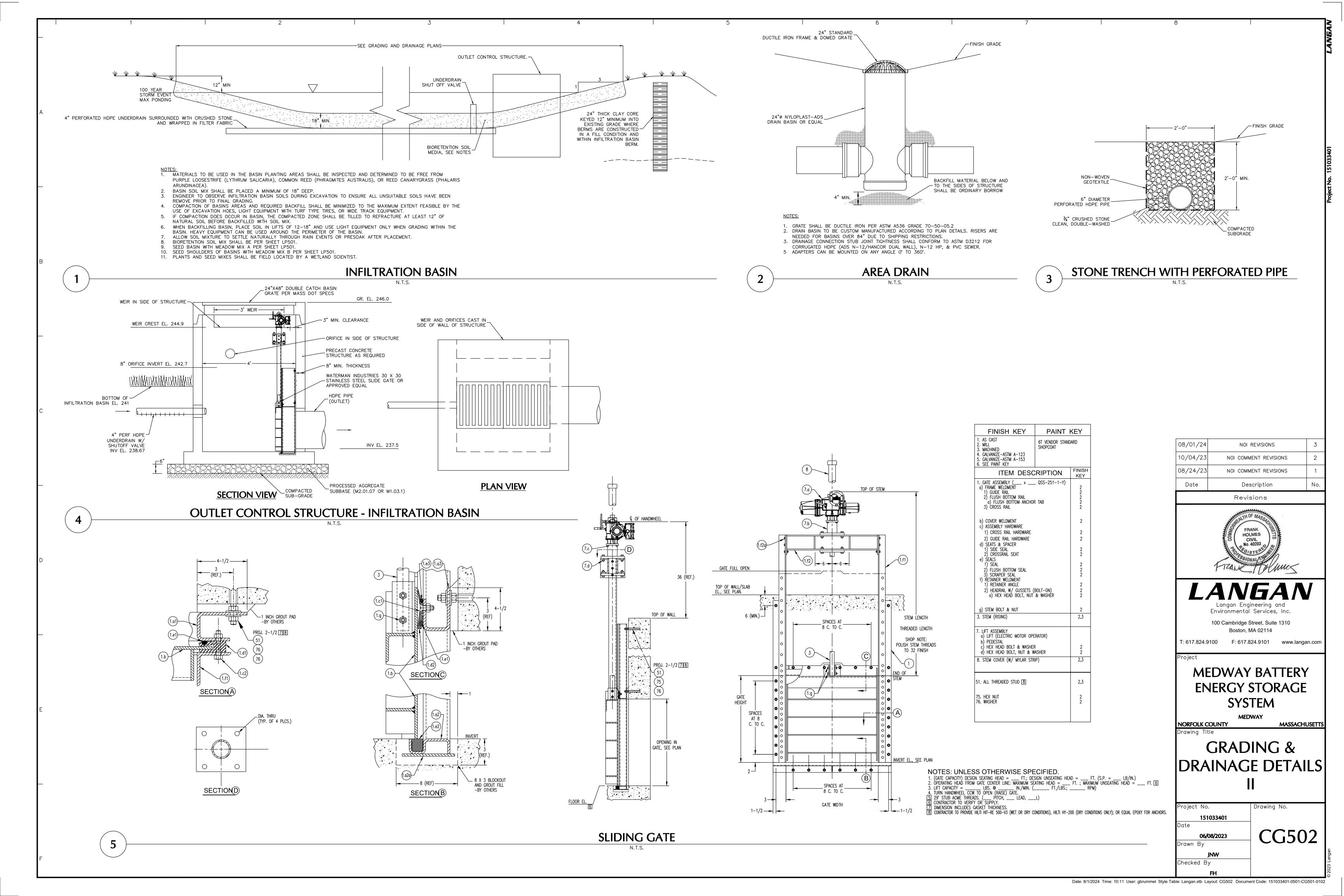
T: 617.824.9100 F: 617.824.9101 www.langan.com

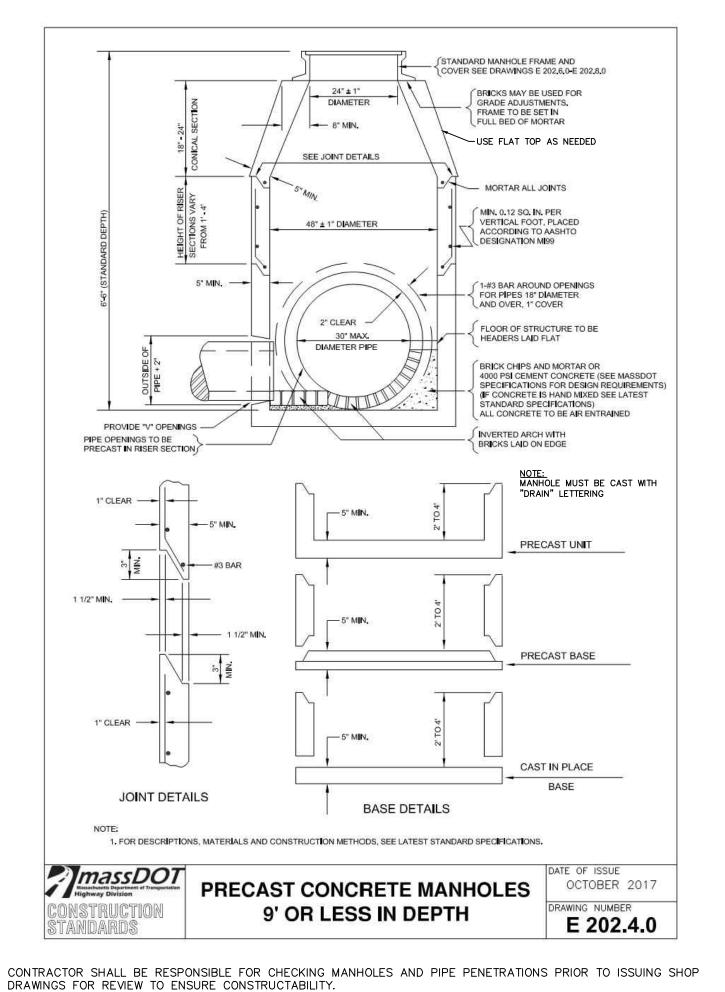
MEDWAY BATTERY **ENERGY STORAGE SYSTEM**

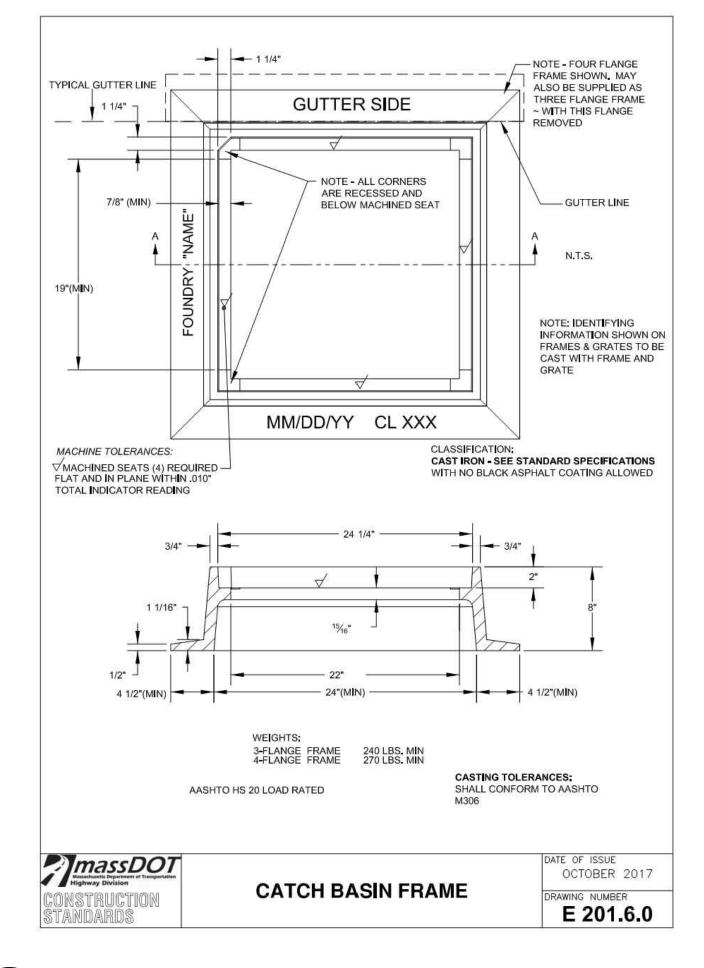
NORFOLK COUNTY **MASSACHUSETTS** Drawing Title

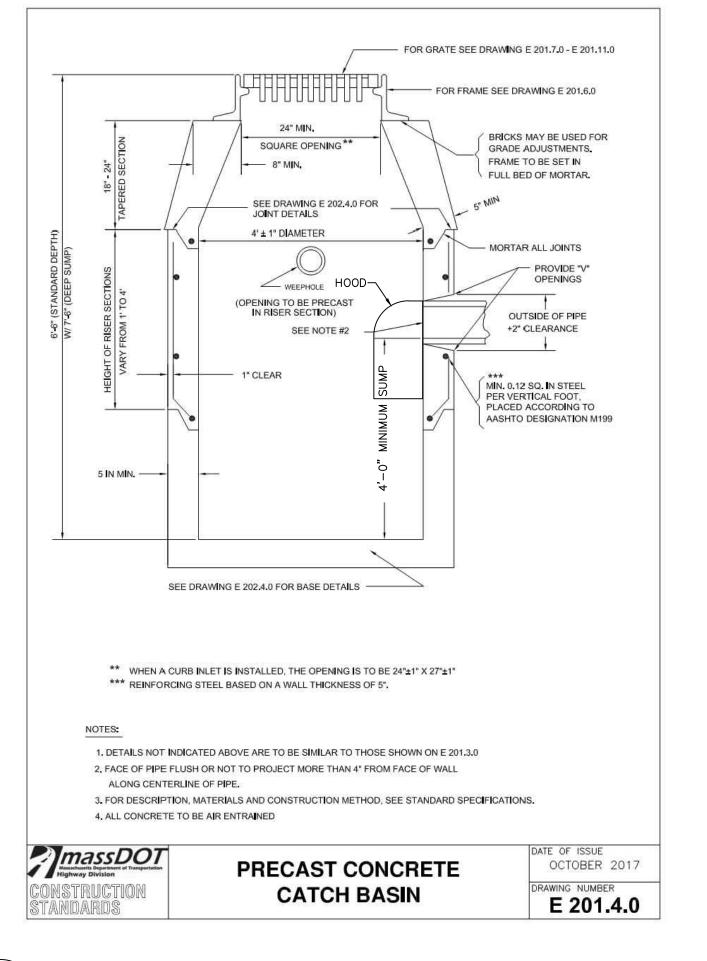
GRADING & DRAINAGE DETAILS

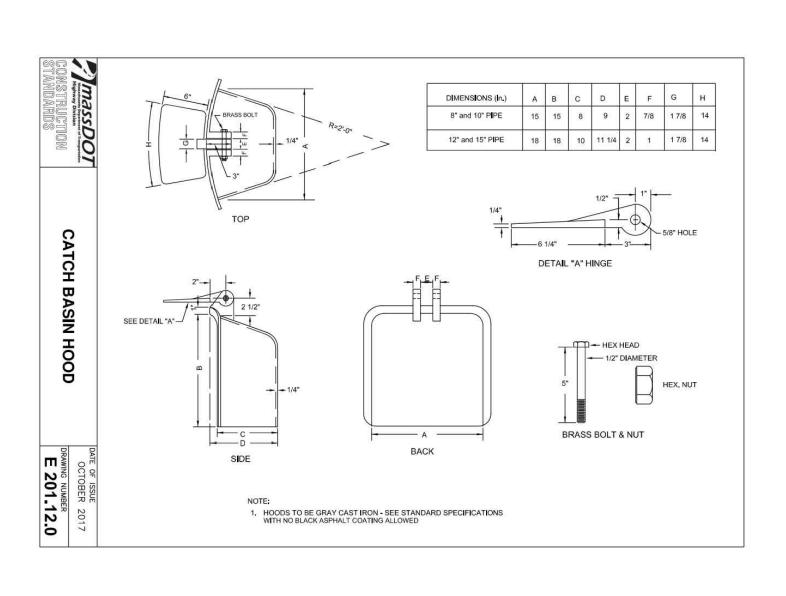
Project No. Drawing No. 151033401 CG501 06/08/2023 Drawn By Checked By









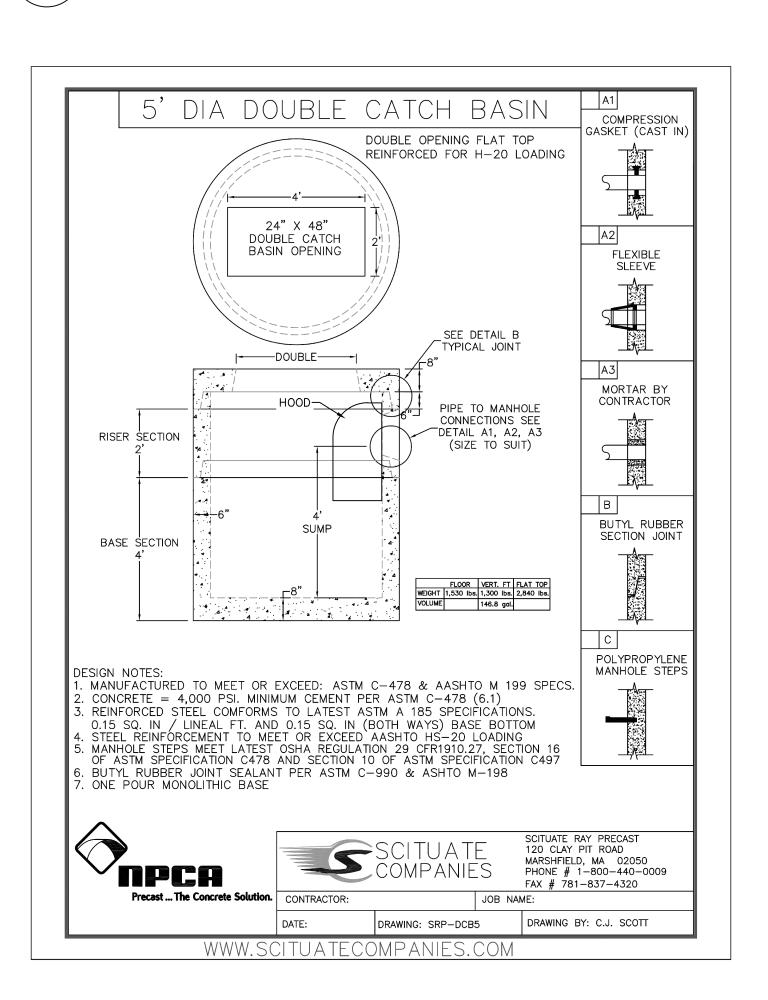


PRECAST CONCRETE MANHOLES 9' OR LESS IN DEPTH

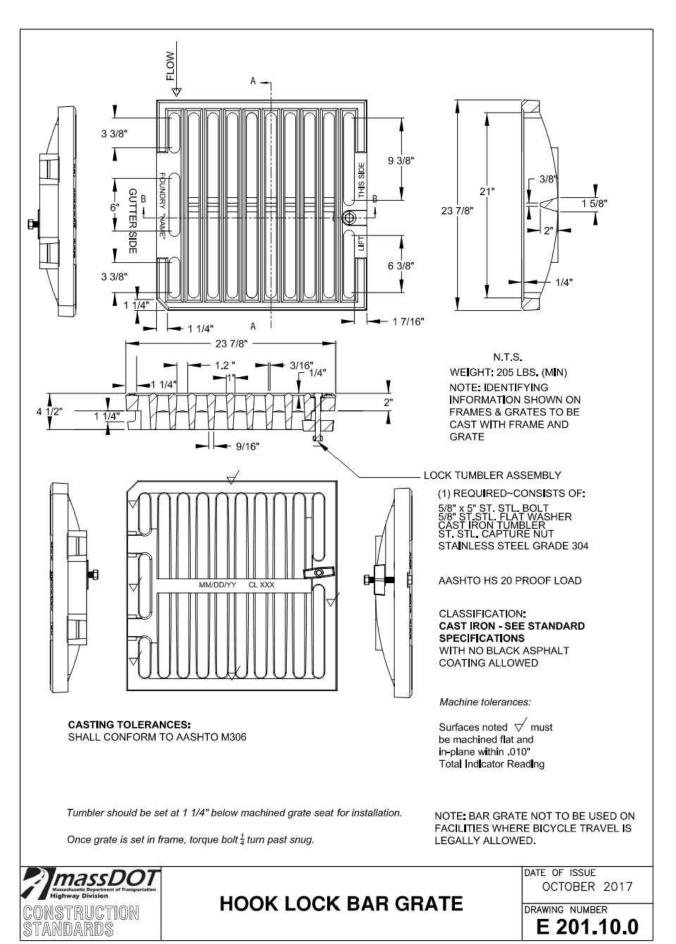
CATCH BASIN FRAME

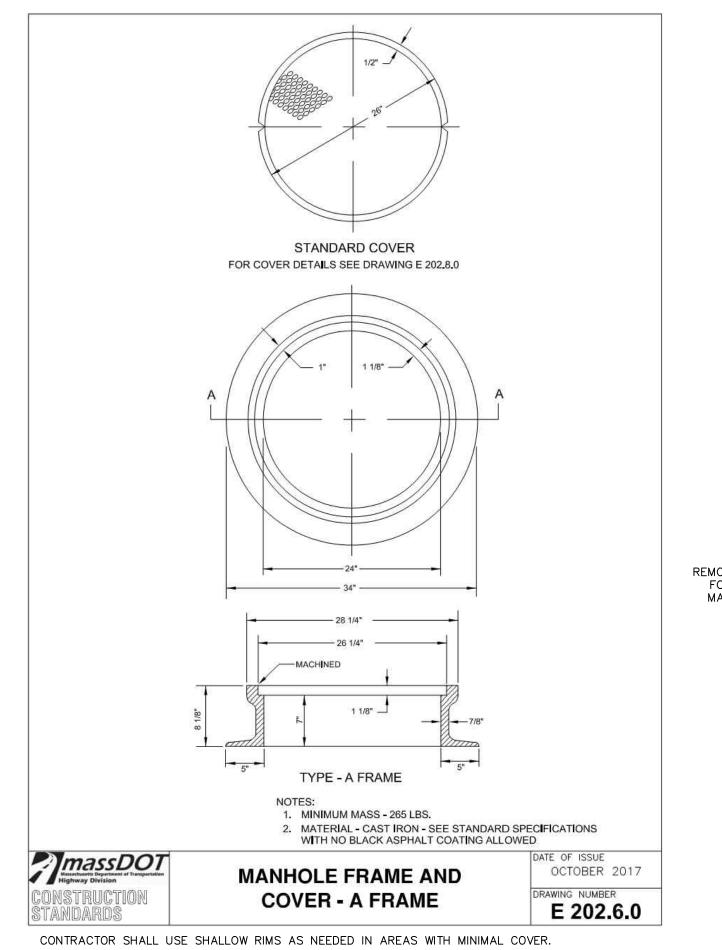
PRECAST CONCRETE CATCH BASIN

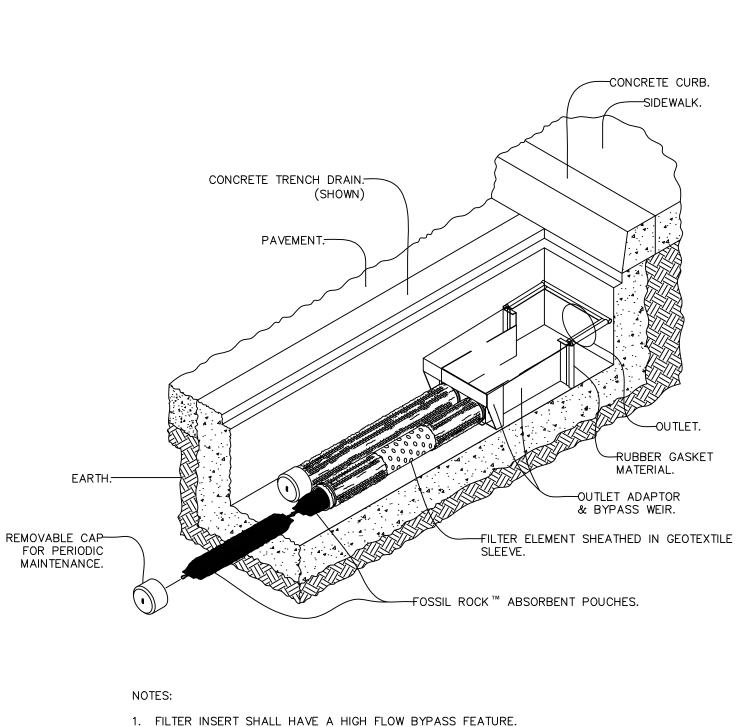
CATCH BASIN HOOD



5' DIA DOUBLE CATCH BASIN







100 Cambridge Street, Suite 1310 Boston, MA 02114 F: 617.824.9101 www.langan.com **MEDWAY BATTERY ENERGY STORAGE SYSTEM** NORFOLK COUNTY MASSACHUSETT **GRADING &**

NOI REVISIONS

NOI COMMENT REVISIONS

NOI COMMENT REVISIONS

Description

Revisions

Environmental Services, Inc.

10/04/23

Date

DRAINAGE DETAILS

⊃roject No. Drawing No. 151033401 CG503 06/08/2023

CATCH BASIN LOCK BAR GRATE 6

MANHOLE FRAME AND COVER

TRENCH DRAIN FILTER (MODEL FG-TDOF8)

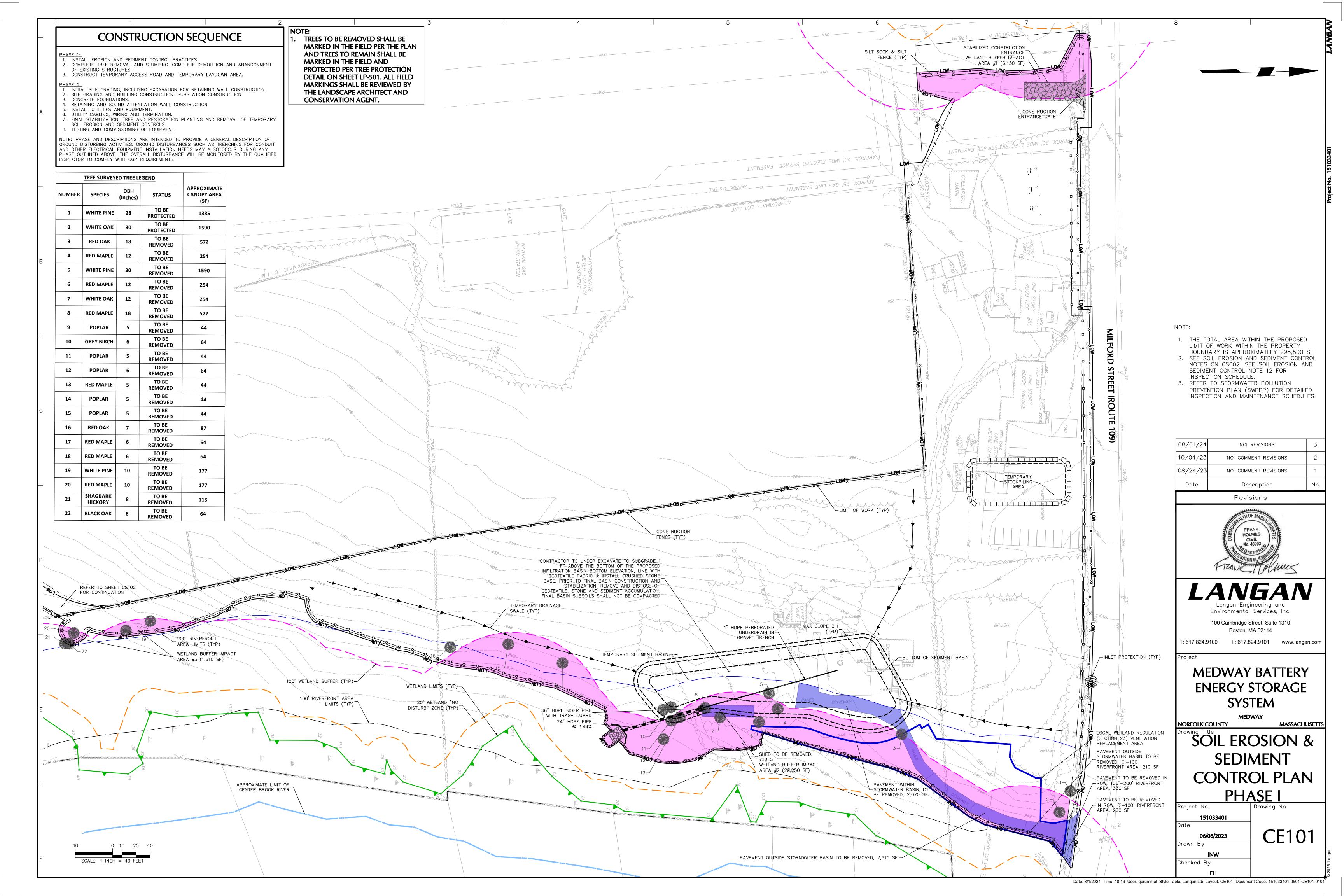
2. FILTER OUTLET ADAPTER SHALL BE CONSTRUCTED FROM STAINLESS STEEL TYPE 304. ALTERNATE OUTLET ADAPTOR FOR SHALLOW

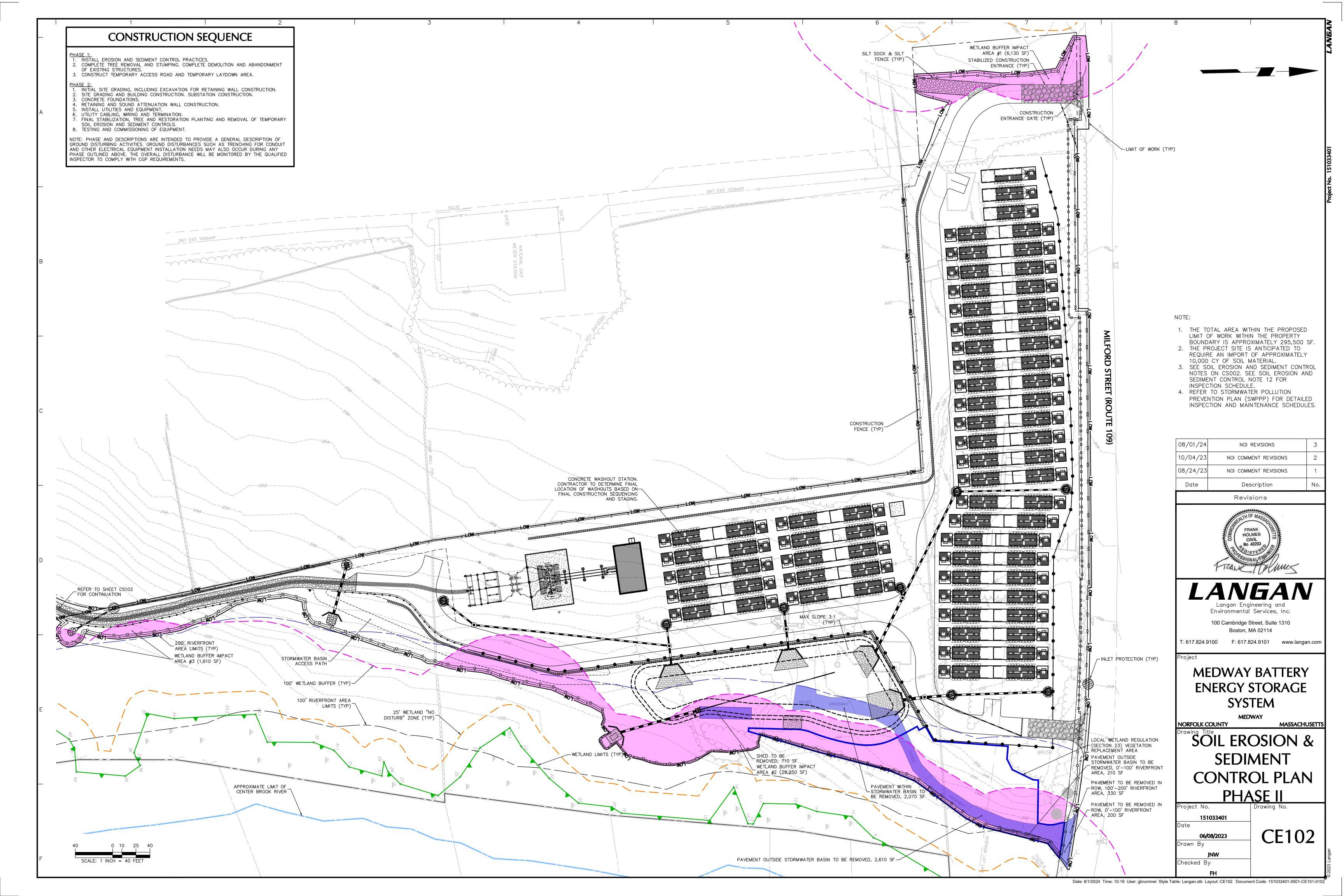
MAINTAINED IN ACCORDANCE WITH MANUFACTURER SPECIFICATIONS.

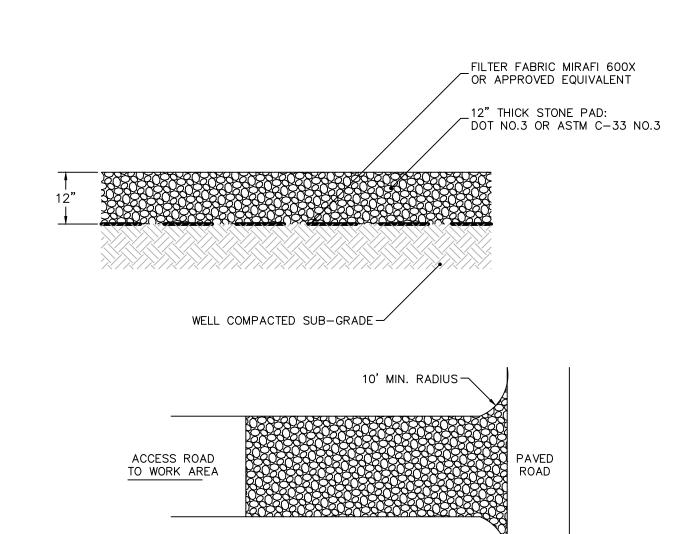
3. FILTER MEDIUM SHALL BE FOSSIL ROCK™, INSTALLED AND

INSTALLATIONS SHALL BE PVC SCH-40.

Checked By







- NOTES:

 1. CONSTRUCTION PAD LOCATION TO BE SET BY CONTRACTOR AND LOCATED AS REQUIRED FOR CONSTRUCTION SEQUENCING
- SEE SOIL EROSION & SEDIMENT CONTROL PLAN FOR DIMENSIONS WHERE SEDIMENT HAS BEEN TRACKED-OUT FROM THE SITE ONTO THE PAVED ROAD, REMOVE THE DEPOSITED SEDIMENT BY THE END OF THE SAME BUSINESS DAY IN WHICH THE TRACK-OUT OCCURS OR BY THE END OF THE NEXT BUSINESS DAY IF TRACK-OUT OCCURS ON A NON-BUSINESS DAY. IF PAD IS MUDDY, STONE IS TOO SMALL (INSTALL LARGER STONE); IF PAD IS TOO THIN INSTALL ADDITIONAL STONE; AND/OR INSTALL ADDITIONAL FILTER FABRIC UNDER PAD. IF SEDIMENT IS WASHING INTO ROAD, IMPROVE UP GRADIENT RUNOFF CONTROLS, LENGTHEN PAD, AND/OR WIDEN FLARE OF PAD AT ROAD INTERFACE.

ALL CONCRETE TRUCKS SHALL WASHOUT HERE

_3" WASHED STONE, 6" THICK

10 MIL PLASTIC

3" WASHED STONE, 6" THICK

LIMITS OF 10ML PLASTIC LINING

∽STRAW BALE

-STAKE (2X4, (2) PER BALE) WASHOUT SIGN

SECTION A-A

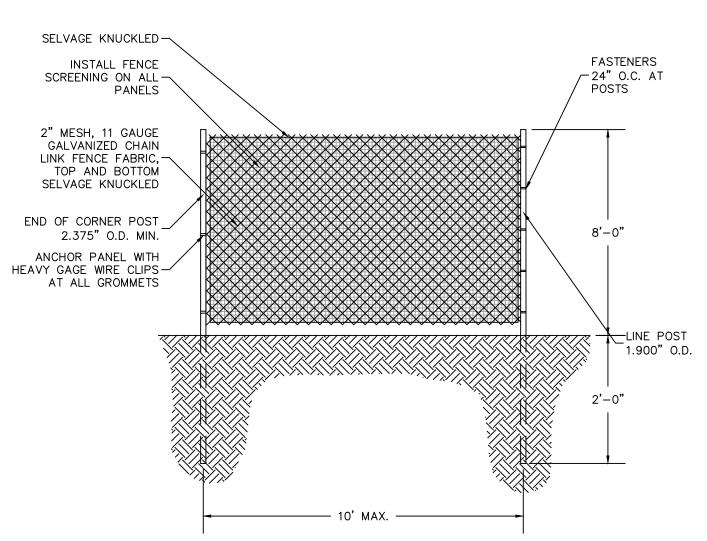


ALTERNATE SECTION

₹" WASHED_ STONE

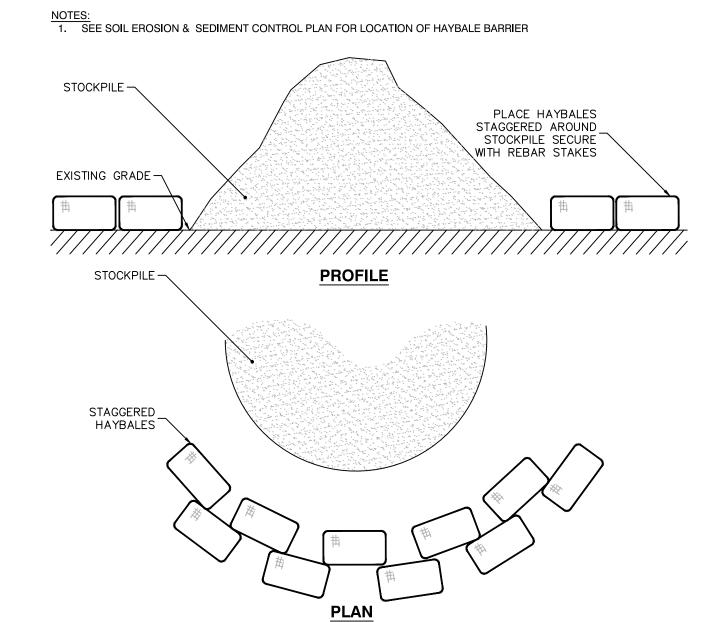
10 MIL PLASTIC

WASHED STONE 6" THICK



NOTES:
1. PIPE POSTS SHALL BE IMBEDDED INTO THE GROUND. PEDESTAL MOUNTED FENCING WILL ONLY BE ALLOWED AT AREAS APPROVED BY THE PROJECT MANAGER. WHEN ALLOWED, PROVIDE CONCRETE OR GALVANIZED-STEEL BASES FOR SUPPORTING POSTS. PROVIDE BLUE REINFORCED SCRIM SHEETING ON

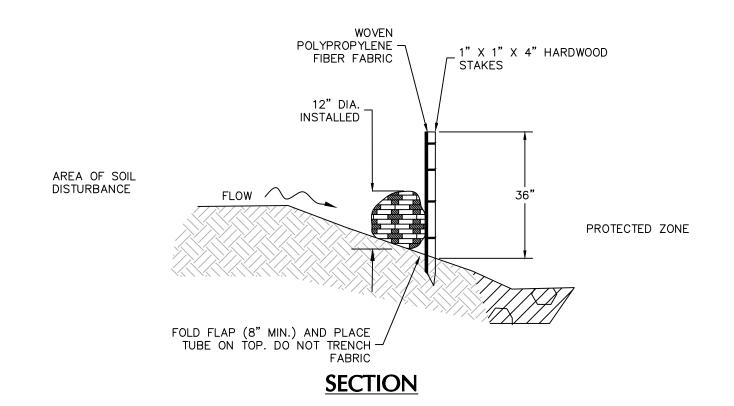
TEMPORARY CONSTRUCTION FENCE



NOTES:

1. REFER TO TEMPORARY STABILIZATION NOTES ON CS002 FOR MAINTENANCE OF TEMPORARY STOCKPILES.

TEMPORARY STOCKPILE



NOTES:

1. MAINTENANCE SHALL CONSIST OF INSPECTION AND REMOVAL OF ACCUMULATED SEDIMENT BEFORE IT HAS ACCUMULATED TO HALF OF THE ABOVE—GROUND HEIGHT OF ANY PERIMETER CONTROL. SAGGING, FRAYED, TORN OR OTHERWISE DAMAGED FABRIC OR TUBE SHOULD BE REPAIRED OR REPLACED. REPAIR END RUNS AND UNDERCUTTING. INSPECT REINFORCEMENT AND STAKING MATERIALS FOR STRUCTURAL INTEGRITY AND REPLACE WHEN NECESSARY. AFTER A STORM EVENT, IF THERE IS EVIDENCE OF STORMWATER CIRCUMVENTING OR UNDERCUTTING THE PERIMETER CONTROL, EXTEND CONTROLS AND/OR REPAIR UNDERCUT AREAS TO FIX THE PROBLEM.

COMPOST FILTER TUBE & SILT FENCE

08/24/23

Date

- 1. THE TOTAL AREA WITHIN THE PROPOSED LIMIT OF WORK WITHIN THE PROPERTY
- BOUNDARY IS APPROXIMATELY 295,500 SF. 2. THE PROJECT SITE IS ANTICIPATED TO REQUIRE AN IMPORT OF APPROXIMATELY
- 10,000 CY OF SOIL MATERIAL. 3. SEE SOIL EROSION AND SEDIMENT CONTROL NOTES ON CS002. SEE SOIL EROSION AND SEDIMENT CONTROL NOTE 12 FOR
- INSPECTION SCHEDULE. 4. REFER TO STORMWATER POLLUTION PREVENTION PLAN (SWPPP) FOR DETAILED INSPECTION AND MAINTENANCE SCHEDULES

NOI COMMENT REVISIONS

Description

Revisions Environmental Services, Inc. 100 Cambridge Street, Suite 1310 Boston, MA 02114 T: 617.824.9100 F: 617.824.9101 www.langan.com MEDWAY BATTERY **ENERGY STORAGE SYSTEM** NORFOLK COUNTY

MASSACHUSETT: SÖİL EROSION & SEDIMENT **CONTROL DETAILS**

Project No. Drawing No. 151033401 **CE501** 06/08/2023 Drawn By

SECURE "SILTSACK" FILTER 2 -NO. 3 REBAR, STEEL PICKETS CURB DEFLECTOR-(OR EQUIVALENT) TO GRATE. OR 2"X 2" WOODEN STAKES 1.5' TO 2' IN GROUND "SILTSACK" DISTRIBUTOR: 4" VERTICAL FACE ACS ENVIRONMENTAL STRAWBALES NOT REQUIRED BEHIND CATCH BASINS WITH 800-644-9223 FLOW FLOW TYPE B - CURB INLET STRAWBALES ARE TO BE PLACED AROUND ALL CATCH BASINS AFTER THE INITIAL GRADING TO FILTER AND DIVERT SEDIMENT UNTIL FINAL PAVING IS COMPLETE.

NOTES:

1. CLEAN, OR REMOVE AND OR REMOVE AND REPLACE, THE INLET PROTECTION MEASURES WHEN SEDIMENT HAS REACHED A MAXIMUM OF ONE HALF THE DEPTH OF THE SILT SACK, THE FILTER BECOMES CLOGGED, AND/OR PERFORMANCE IS COMPROMISED. WHERE THERE IS EVIDENCE OF SEDIMENT ACCUMULATION ADJACENT TO THE INLET PROTECTION MEASURE, REMOVE THE DEPOSITED SEDIMENT BY THE END OF THE SAME BUSINESS DAY IN WHICH IT IS FOUND OR BY THE END OF THE FOLLOWING BUSINESS DAY IF REMOVAL BY THE SAME PROSECULAR OR VEGETATIVE MEANS. BUSINESS DAY IS NOT FEASIBLE. SEDIMENT SHOULD BE DISPOSED OF IN A SUITABLE AREA AND PROTECTED FROM EROSION BY EITHER STRUCTURAL OR VEGETATIVE MEANS. 2. CONTRACTOR TO REMOVE FILTER JUST PRIOR TO PAVING.

CONCRETE WASHOUT AREA

<u>PLAN</u>

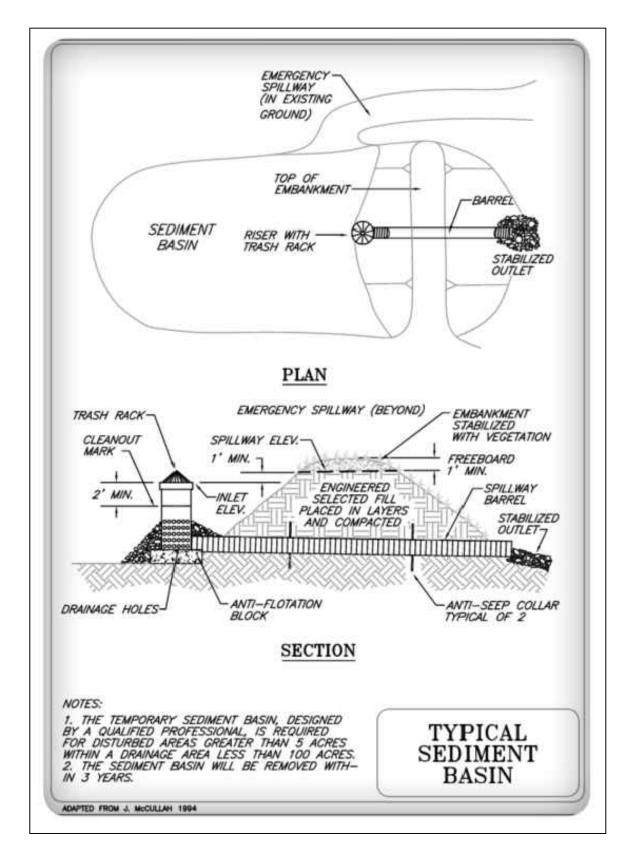
SLOPE 2.5% MIN.

6

INLET PROTECTION

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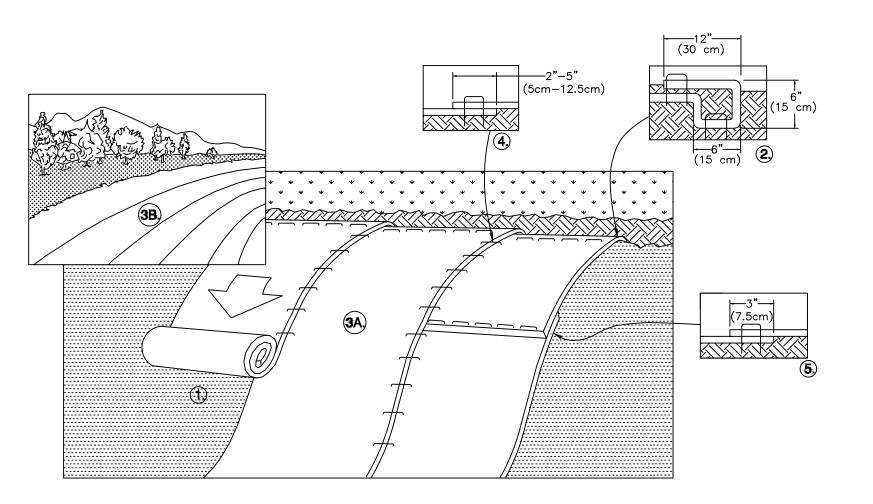
Checked By



NOTES:

1. CHECK THE OUTLET TO ENSURE THAT IT IS STRUCTURALLY SOUND AND HAS NOT BEEN DAMAGED BY EROSION OR CONSTRUCTION EQUIPMENT. THE HEIGHT OF THE OUTLET SHOULD MAINTAIN AT LEAST 1 FOOT BELOW THE CREST OF THE EMBANKMENT. ALSO CHECK FOR SEDIMENT ACCUMULATION AND FILTRATION PERFORMANCE. WHEN SEDIMENTS HAVE ACCUMULATED TO ONE HALF THE MINIMUM REQUIRED VOLUME OF THE WET STORAGE, DEWATER AS NEEDED, REMOVE SEDIMENTS AND RESTORE THE BASIN TO ITS ORIGINAL DIMENSIONS. DISPOSE OF REMOVED SEDIMENT IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOTE ERODE AND SEDIMENTATION PROBLEMS. THE TEMPORARY SEDIMENT BASIN MAY BE REMOVED UPON THE STABILIZATION OF THE CONTRIBUTING DRAINAGE AREA. IF REMOVED, REFER TO GRADING AND DRAINAGE PLANS TO HOW THE AREA IS TO BE GRADED AND STABILIZED UPON REMOVAL. HEAVY EQUIPMENT IS RESTRICTED FROM USE WITHIN TEMPORARY SEDIMENT BASINS.

SEDIMENT BASIN N.T.S.



NOTES:

1. EROSION CONTROL BLANKETS SHALL BE BIONET SC150BN OR APPROVED EQUAL.

1. EROSION CONTROL BLANKETS SHALL BE BIONET SC150BN OR APPROVED EQUAL.

2. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, SLOW-RELEASE FERTILIZER, AND SEED. NOTE: WHEN USING

CELL-O-SEED. DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN. 3. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" (15cm) WIDE TRENCH WITH APPROXIMATELY 12" (30cm) OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIAMATELY 12" (30cm) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30cm) PORTION OF THE BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30cm) APART ACROSS THE WIDTH OF THE BLANKET.

4. ROLL THE BLANKETS (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH THE APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING OPTIONAL DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN. 5. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2"-5" (5cm-12.5cm) OVERLAP DEPENDING ON BLANKET TYPE. TO ENSURE

PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE COLORED SEAM STITCH ON THE PREVIOUSLY INSTALLED BLANKET. 6. CONSECUTIVE BLANKETS SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" (7.5cm) OVERLAP. STAPLE

THROUGH OVERLAPPED AREA, APPROXIMATELY 12" (30cm) APART ACROSS ENTIRE BLANKET WIDTH. 7. IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15cm) MAT BE NECESSARY TO PROPERLY ANCHOR THE BLANKETS.

8. PROVIDE EROSION CONTROL BLANKET ON ALL SLOPES 4H:1V TO 3H:1V. 9. PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECP'S), INCLUDING ANY NECESSARY APPLICATION OF LIME, SLOW-RELEASE FERTILIZER, AND SEED.

10. FOLLOW MANUFACTURER'S INSTALLATION INSTRUCTIONS. 11. SEE EROSION AND SEDIMENT CONTROL NOTE 5 ON DRAWING CS002 FOR SLOPE STABILIZATION ON SLOPES STEEPER THAN 3H:1V.

> **EROSION CONTROL BLANKETS** (SLOPE STABILIZATION SLOPES 4H:1V TO 3H:1V)

N.T.S.

NOTE:

1. SEE SOIL EROSION AND SEDIMENT CONTROL NOTES ON CS002. SEE SOIL EROSION AND SEDIMENT CONTROL NOTE 12 FOR INSPECTION SCHEDULE.

2. REFER TO STORMWATER POLLUTION PREVENTION PLAN (SWPPP) FOR DETAILED INSPECTION AND MAINTENANCE SCHEDULES.

NOI COMMENT REVISIONS 08/24/23 NOI COMMENT REVISIONS Date Description Revisions

LANGAN

Environmental Services, Inc. 100 Cambridge Street, Suite 1310 Boston, MA 02114

MEDWAY BATTERY ENERGY STORAGE SYSTEM

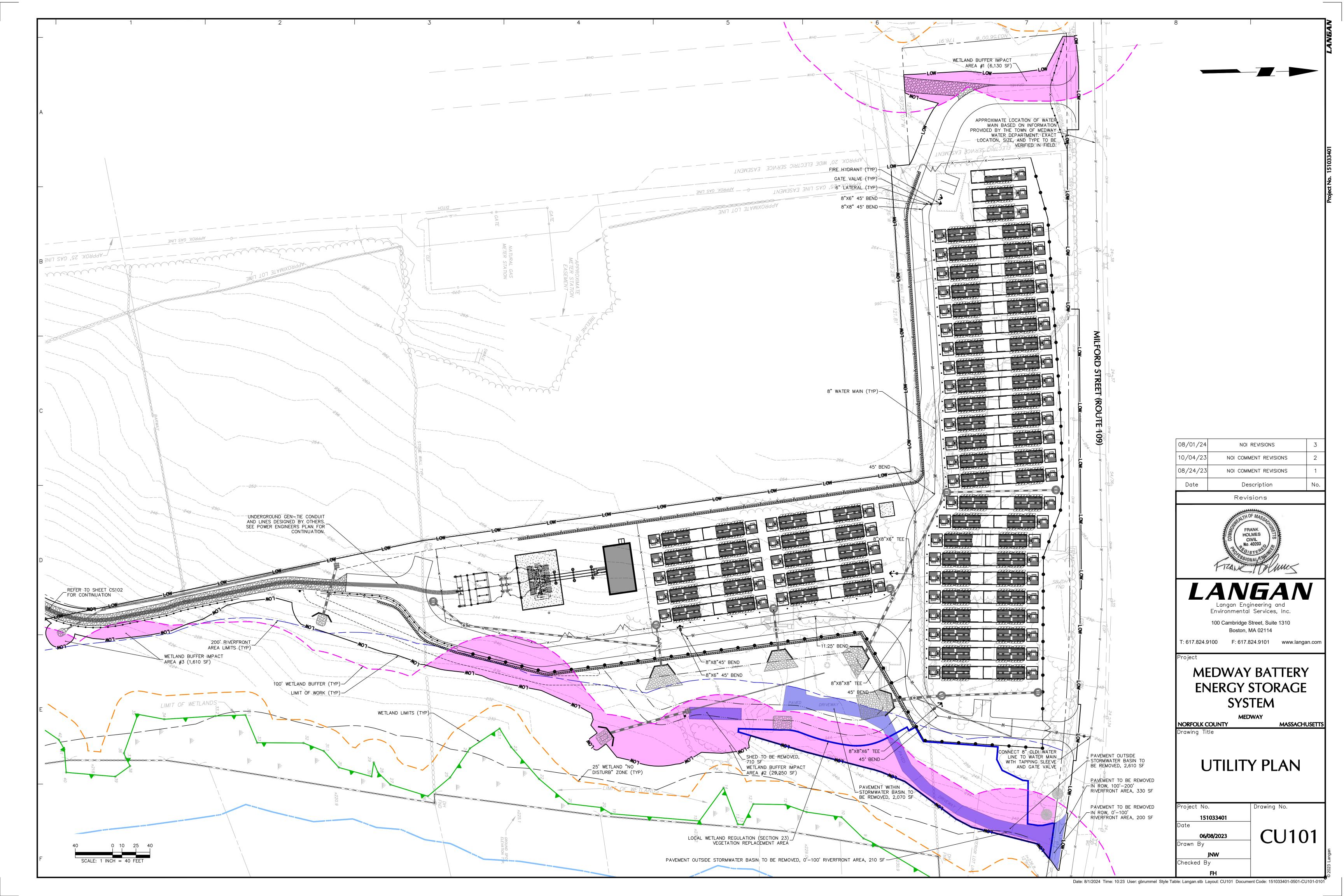
NORFOLK COUNTY MASSACHUSETT: SOIL EROSION & **SEDIMENT CONTROL DETAILS**

Drawing No.

Project No. 151033401 **CE502** 06/08/2023 Drawn By

Date: 10/3/2023 Time: 15:35 User: jpark Style Table: Langan.stb Layout: CE502 Document Code: 151033401-0501-CE501-0102

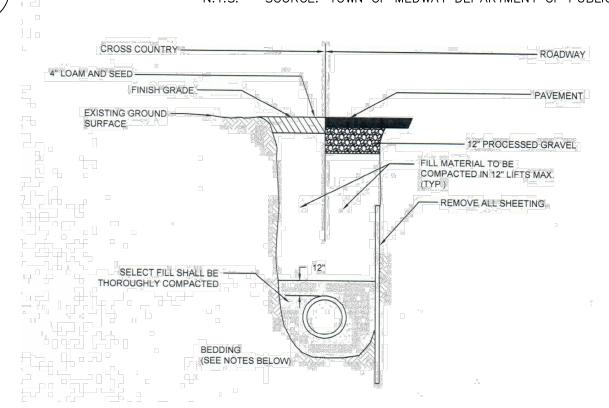
Checked By



NOTES:

1. ALL FITTINGS AND JOINTS IN LOWERING AREA TO BE RESTRAINED. TOWN MAY REQUIRE THREADED ROD RESTRAINS IN CERTAIN SITUATIONS. . WHEN IT IS IMPOSSIBLE TO OBTAIN HORIZONTAL OR VERTICAL SEPARATION AS INDICATED IN THE DETAIL ABOVE, BOTH THE WATER AND THE SEWER SHOULD BE ENCASED IN CONTROL DENSITY FILL FOR A DISTANCE OF 10 FEET ON EITHER SIDE OF THE CROSSING. 3. ALL DUCTILE IRON PIPE AND FITTINGS SHALL BE WRAPPED WITH POLYETHYLENE ENCASEMENT WHEN CONTACTING CONTROL DENSITY FILL.

WATER MAIN LOWERING DETAIL N.T.S. - SOURCE: TOWN OF MEDWAY DEPARTMENT OF PUBLIC SERVICES

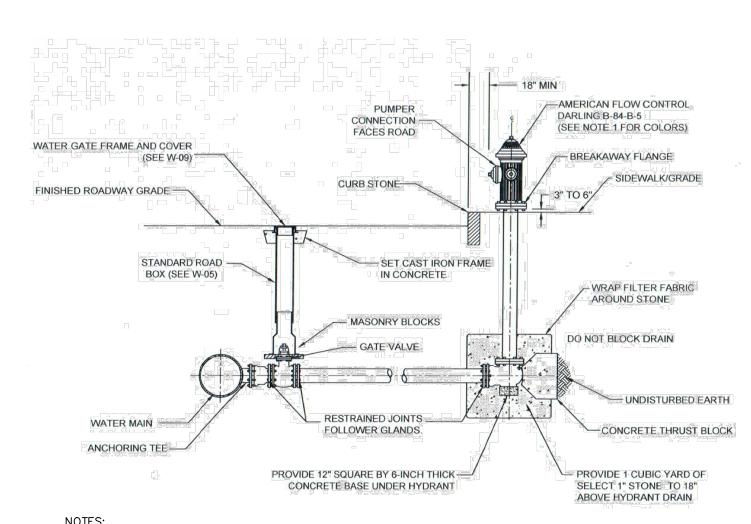


NOTES:

1. TOWN OF MEDWAY MAY REQUIRE FLOWABLE FILL AT ITS DISCRETION. 2. FOR LOCATIONS WHERE LEDGE IS NOT ENCOUNTERED IN TRENCH, PIPE CAN LAY ON UNDISTURBED EARTH, OR

- ON SAND BEDDING CONSISTENT WITH AWWA GUIDELINES. 3. FOR LOCATIONS WHERE LEDGE IS ENCOUNTERED, SAND BEDDING SHALL BE MINIMUM 12" THICK UNDER PIPE.
- 4. FILL MATERIAL SHALL BE COMPACTED TO 95% PROCTOR DENSITY. 5. WATER MAIN SHALL HAVE 5'-0" MINIMUM COVER. LESS THAN 5'-0" OF COVER SHALL BE INSULATED.
- 6. LEDGE SHALL BE REMOVED 12 INCHES AROUND PIPE.

WATER MAIN TRENCH N.T.S. - SOURCE: TOWN OF MEDWAY DEPARTMENT OF PUBLIC SERVICES



NOTES:

1. HYDRANT SHALL BE PAINTED THE FOLLOWING COLORS: BARREL: BLUE SAFETY (COLOR CODE: 822913) COVER & CAPS: SILVER (COLOR CODE: 822903) 2. HYDRANT SHALL OPEN LEFT PER TOWN STANDARDS. 3. HYDRANT LATERAL SHALL BE FULLY RESTRAINED. 4. 3'-0" CLEAR AND FLAT ALL AROUND HYDRANT PER NFPA STANDARD.

FIRE HYDRANT INSTALLATION N.T.S. - SOURCE: TOWN OF MEDWAY DEPARTMENT OF PUBLIC SERVICES PERMANENT ACCESS ROAD CRUSHED STONE `—SUBGRADE

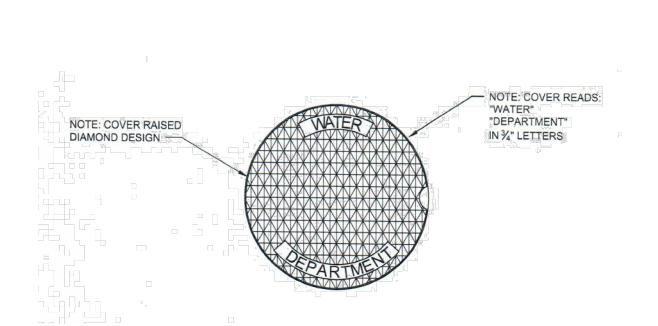
- 25' TRANSMISSION CORRIDOR -

REFER TO DETAIL 4 ON DRAWING CS501 GEOFABRIC -6" WIDE RED WARNING TAPE _(1) 2" SCH. 40 PVC CONDUIT FOR GROUND CONTINUITY CONDUCTOR -NATIVE SOIL BACKFILL (2) 4" SCH. 40 PVC CONDUITS FOR COMMUNICATION WITH (2) HDPE 1.25" INNERDUCTS - THERMALLY APPROVED CONCRETE MIX _(3) 8" SCH. 40 PVC CONDUITS FOR 345 kV SOLID DIELECTRIC CABLES

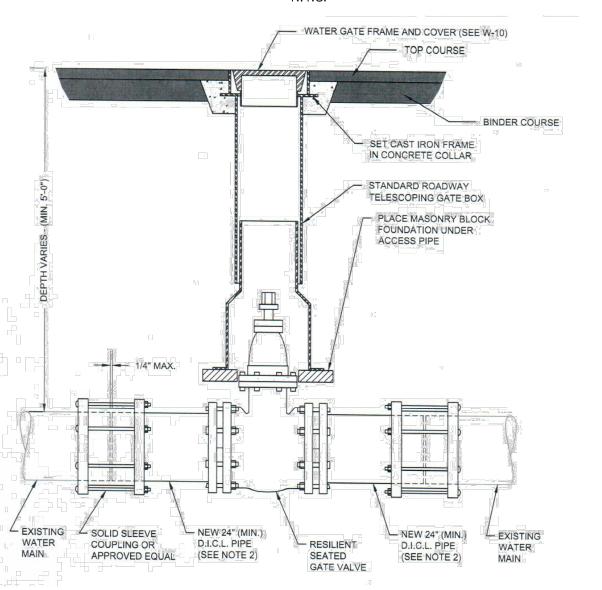
-FINISHED GRADE

1. DETAIL FOR REFERENCE ONLY. REFER TO PLANS PREPARED BY POWER ENGINEERS FOR TRENCH SECTION AND CONDUIT LAYOUT SPECIFICATIONS.

TYPICAL CONDUIT TRENCH SECTION N.T.S. SOURCE: POWER ENGINEERS

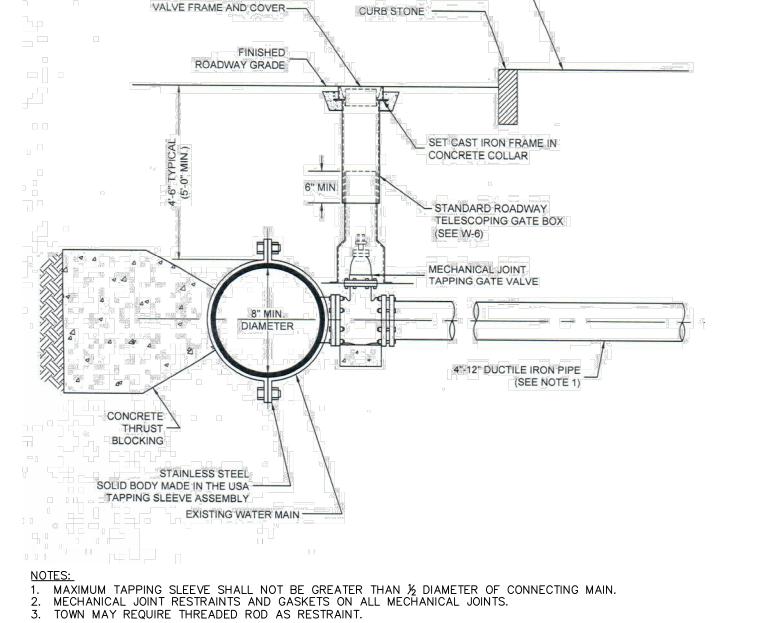


WATER GATE COVER



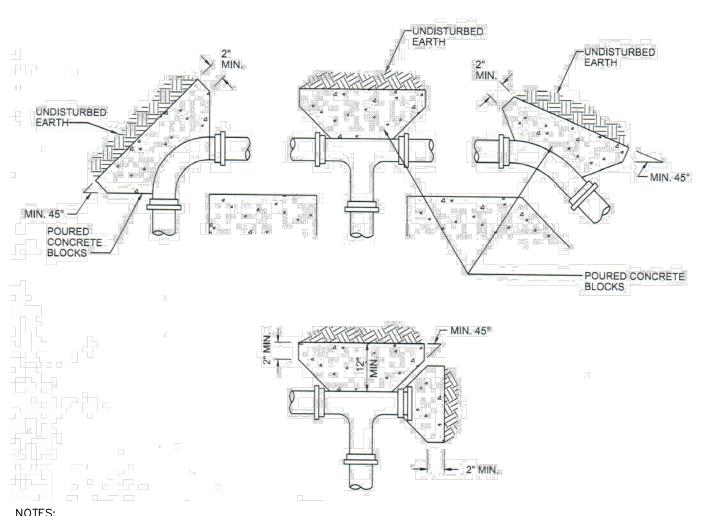
1. ALL EXCAVATION, BACKFILLING AND PAVING SHALL BE IN ACCORDANCE WITH THE TOWN OF MEDWAY 2. TO THE EXTENT PRACTICAL, VALVE TO BE INSTALLED DIRECTLY TO EXISTING MAIN TO MINIMIZE NUMBER OF MECHANICAL JOINTS.

GATE VALVE N.T.S. - SOURCE: TOWN OF MEDWAY DEPARTMENT OF PUBLIC SERVICES



SIDEWALK ----

TYPICAL CONNECTION (TAPPING SLEEVE) N.T.S. - SOURCE: TOWN OF MEDWAY DEPARTMENT OF PUBLIC SERVICES



NOTES:

1. SPECIFIC THRUST BLOCK DESIGN SHALL CONFORM TO AWWA GUIDELINES.

1. SPECIFIC THRUST BLOCK DESIGN SHALL CONFORM TO AWWA GUIDELINES. 2. PLACE 4 MIL. POLYETHYLENE BETWEEN CONCRETE AND FITTING (CONCRETE SHALL NOT INTERFERE WITH

- 3. MINIMÚM CONCRETE THICKNESS SHALL BE 12 INCHES.
- 4. THRUST BLOCK ORIENTATION SHALL BE SUCH THAT THE CENTER OF THE FITTING CORRESPONDS WITH THE CENTER OF THE THRUST BLOCK.
- 5. THE MINIMUM ALLOWABLE ANGLE (EITHER VERTICAL OR HORIZONTAL) SHALL BE 45 DEGREES.

TYPICAL THRUST BLOCK

N.T.S. - SOURCE: TOWN OF MEDWAY DEPARTMENT OF PUBLIC SERVICES

Date Description Revisions

LANGAN Langan Engineering and Environmental Services, Inc.

> 100 Cambridge Street, Suite 1310 Boston, MA 02114

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MEDWAY BATTERY **ENERGY STORAGE SYSTEM**

NORFOLK COUNTY **MASSACHUSETTS**

UTILITY DETAILS I

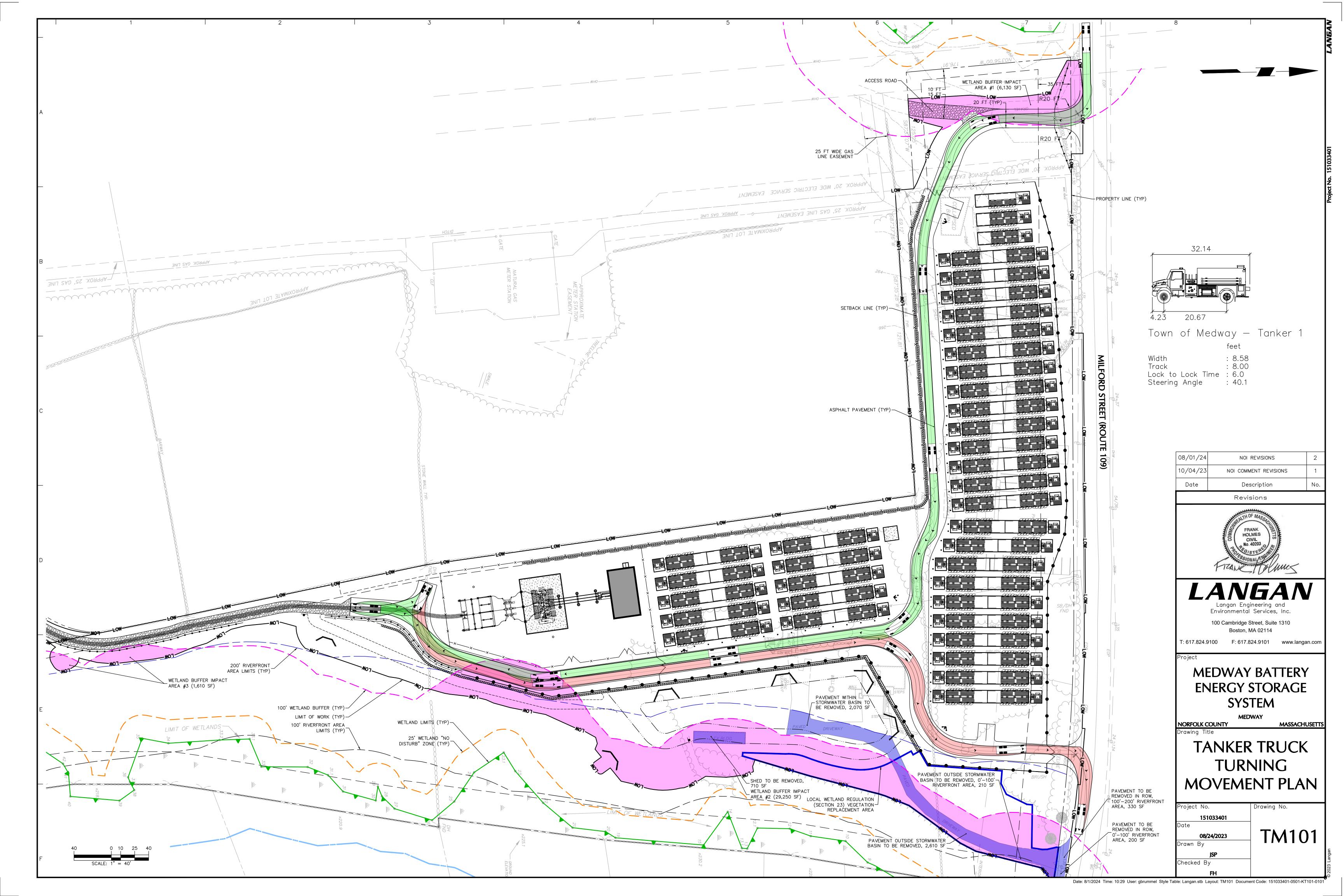
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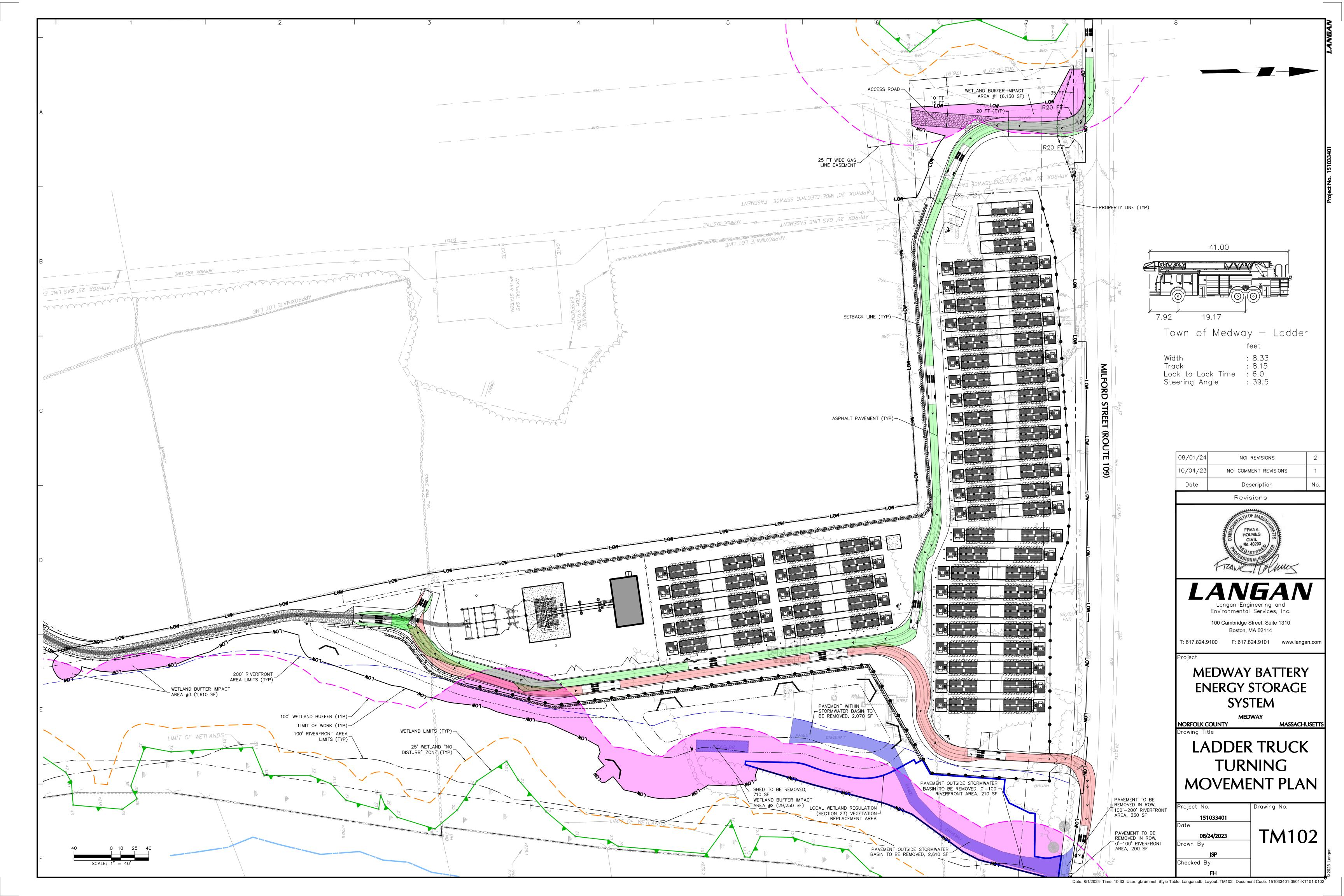
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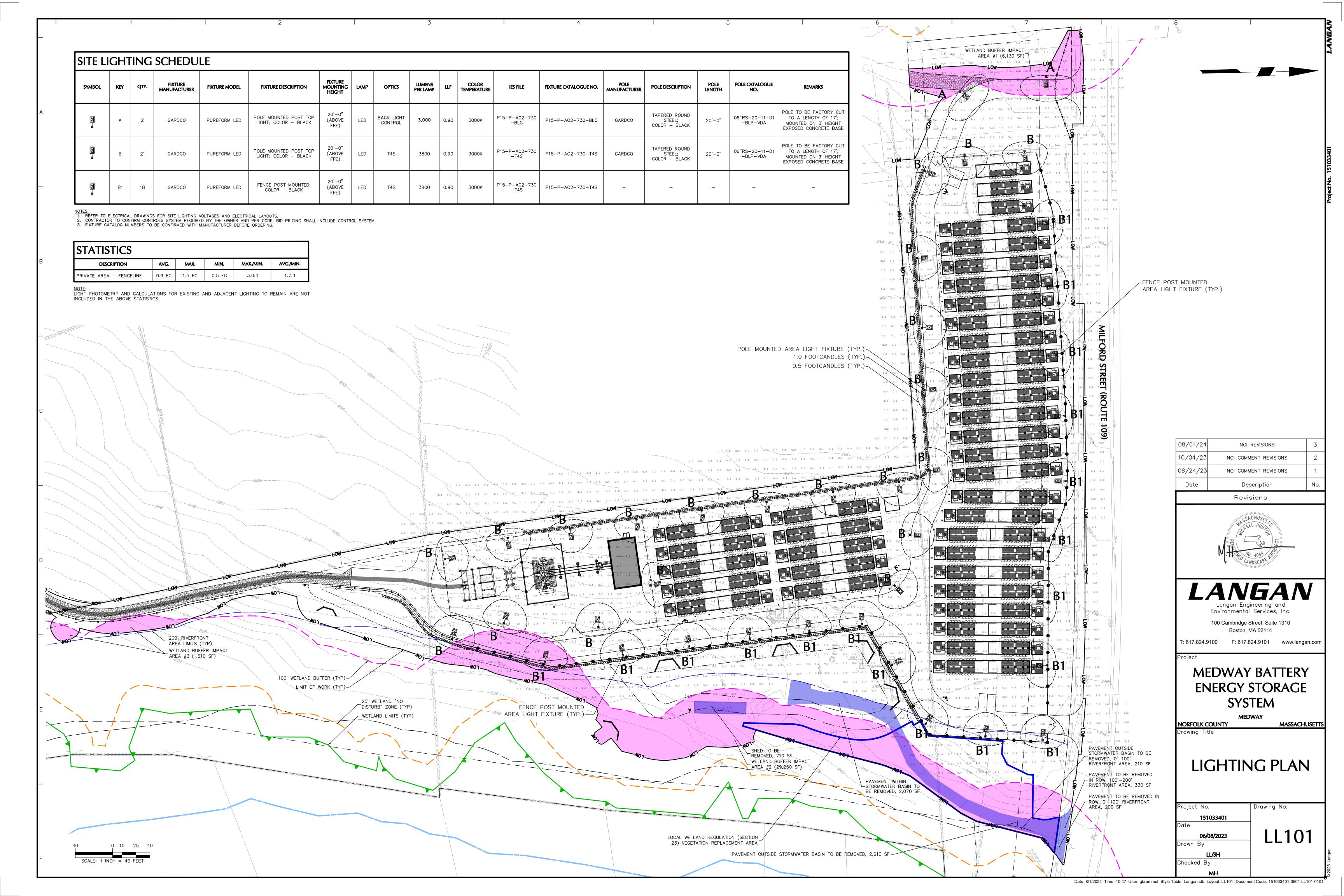
Date: 10/3/2023 Time: 15:36 User: jpark Style Table: Langan.stb Layout: CU501 Document Code: 151033401-0501-CU501-0101

Drawing Title

⊃roject No.







LIGHTING NOTES:

- 1. POINT—BY—POINT CALCULATIONS PROVIDED WITHIN HAVE BEEN PREPARED IN ACCORDANCE TO IESNA STANDARDS AND IN CONSIDERATION OF THE VARIABLES WITHIN THESE NOTES AND SITE LIGHTING SCHEDULE. THE VALUES SHOWN ON THE PLANS ARE NOT AN INDICATION OF THE INITIAL LIGHT INTENSITIES OF THE LAMPS. THESE VALUES ARE AN APPROXIMATION OF THE MAINTAINED INTENSITIES DELIVERED TO THE GROUND PLANE USING INDUSTRY STANDARD LIGHT LOSS FACTORS (LLF) WHICH COVER LAMP DEGRADATION AND NATURAL BUILDUP/ DIRT DEGRADATION ON THE FIXTURE LENS. THE LIGHTING PLAN IS DESIGNED WITH AN INDUSTRY STANDARD LLF IN ACCORDANCE WITH GUIDANCE AS PROVIDED BY IESNA. MINOR VARIATIONS IN TOPOGRAPHY, PHYSICAL OBSTRUCTIONS, AMBIENT OR ADJACENT LIGHT SOURCES AND/OR OTHER POTENTIAL IMPACTS HAVE NOT BEEN INCLUDED IN THESE CALCULATIONS. THEREFORE, AS—BUILT LIGHT INTENSITIES MAY VARY, IN EITHER DIRECTION, FROM WHAT IS EXPLICITLY PORTRAYED WITHIN THESE DRAWINGS.NO GUARANTEE OF LIGHT LEVELS IS EXPRESSED OR IMPLIED BY THE POINT BY POINT CALCULATIONS SHOWN ON THESE DEADS.
- LIGHT LEVEL POINT SPACING IS 10 FT. LEFT TO RIGHT AND 10 FT. TOP TO BOTTOM. POINT BY POINT CALCULATIONS ARE BASED ON THE LIGHT LOSS FACTOR AS STATED IN THE LIGHTING SCHEDULE. 3. ALL LIGHTING IS TO BE FULL CUT-OFF.

COMPLIANCE

- ALL SITE LIGHTING RELATED WORK AND MATERIALS SHALL COMPLY WITH CITY, COUNTY, AND OTHER APPLICABLE GOVERNING AUTHORITY REQUIREMENTS. 4. LIGHTING LAYOUT COMPLIES WITH THE ILLUMINATING ENGINEERING SOCIETY OF NORTH AMERICA (IESNA) SAFETY STANDARDS FOR LIGHT LEVELS.
- CONTRACTOR TO COORDINATE POWER SOURCE WITH LIGHT FIXTURES TO ENSURE ALL SITE LIGHTING IS OPERATING EFFECTIVELY, EFFICIENTLY AND SAFELY.
- 6. REFER TO ELECTRIFICATION PLAN FOR PROVIDING ADEQUATE POWER FOR SITE LIGHTING.
- 7. CONTRACTOR TO COORDINATE LOCATION OF EASEMENTS, UNDERGROUND UTILITIES AND DRAINAGE BEFORE
- 8. INSTALLATION OF ALL LIGHTING FIXTURES, POLES, FOOTINGS, AND FEEDER CABLE TO BE COORDINATED WITH ALL SITE WORK TRADES TO AVOID CONFLICT WITH FINISHED AND PROPOSED WORK.
- CONTRACTOR TO COORDINATE INSTALLATION OF UNDERGROUND FEEDER CABLE FOR EXTERIOR LIGHTING WITH EXISTING AND PROPOSED UTILITIES, SITE DRAINAGE SYSTEMS, AND PAVING. CONTRACTOR SHALL PROMPTLY NOTIFY THE OWNER'S REPRESENTATIVE SHOULD ANY UTILITIES, NOT SHOWN ON THE PLANS, BE FOUND

POLES AND FOOTINGS

- 10. PROVIDE A CONCRETE BASE FOR EACH LIGHT POLE AT THE LOCATIONS INDICATED ON THE CONSTRUCTION DRAWINGS AND/OR IN ACCORDANCE WITH PROJECT PLANS AND SPECIFICATIONS RELATING DIRECTLY TO CAST—IN-PLACE CONCRETE. THE USE OF ALTERNATE LIGHTING FOUNDATIONS, SUCH AS PRECAST, MAY CHANGE THE SIZING AND REINFORCEMENT REQUIREMENTS FROM THOSE SHOWN ON THESE PLANS. CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR REVIEW PRIOR TO ORDERING ANY SUBSTITUTED PRODUCTS.
- 11. CONTRACTOR SHALL EXAMINE AND VERIFY THAT SOIL CONDITIONS ARE SUITABLE TO SUPPORT LOADS EXERTED UPON THE FOUNDATIONS DURING EXCAVATION. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY UNSATISFACTORY CONDITIONS.
- 12. POLE FOUNDATIONS SHALL NOT BE POURED IF FREE STANDING WATER IS PRESENT IN EXCAVATED AREA. 13. ALL POLES HIGHER THAN 25 FT. SHALL BE EQUIPPED WITH FACTORY INSTALLED VIBRATION DAMPENERS.

WALL MOUNTED FIXTURES

14. CONTRACTOR TO COORDINATE INSTALLATION OF ALL THE WALL MOUNTED FIXTURES AND ELECTRICAL CONNECTIONS TO SITE STRUCTURE(S) WITH BUILDING MEP, ARCHITECT, AND/OR OWNER. 15. INSTALLATION AND ELECTRICAL CONNECTIONS FOR WALL MOUNTED FIXTURES TO BE COORDINATED WITH ARCHITECTURAL, STRUCTURAL, UTILITY AND SITE PLANS AND TO BE IN ACCORDANCE WITH ALL APPLICABLE CODES.

ADJUSTMENT AND INSPECTION

- 16. CONTRACTOR TO OPERATE EACH LUMINAIRE AFTER INSTALLATION AND CONNECTION. INSPECT FOR IMPROPER 17. CONTRACTOR TO AIM AND ADJUST ALL LUMINAIRES TO PROVIDE ILLUMINATION LEVELS AND DISTRIBUTION AS
- INDICATED ON THE CONSTRUCTION DRAWINGS OR AS DIRECTED BY THE LANDSCAPE ARCHITECT AND/OR 18. CONTRACTOR TO CONFIRM THAT LIGHT FIXTURES, TILT ANGLE AND AIMING MATCH SPECIFICATIONS ON THE PLANS.

REQUIREMENTS FOR ALTERNATES

- 19. ALL LIGHTING SUBSTITUTIONS MUST BE MADE WITHIN 14 DAYS PRIOR TO THE BID DATE TO PROVIDE AMPLE TIME FOR REVIEW AND TO ISSUE AN ADDENDUM INCORPORATING THE SUBSTITUTION WITH THE FOLLOWING REQUIREMENTS:

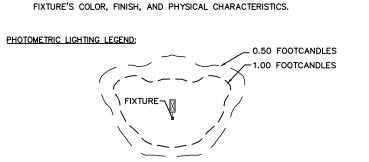
 A. ANY SUBSTITUTION TO LIGHTING FIXTURES, POLES, ETC. MUST BE APPROVED BY THE OWNER, ENGINEER
- AND TENANTS. ANY COST ASSOCIATED WITH REVIEW AND/OR APPROVAL OF THE SUBSTITUTIONS SHALL BE ENTIRELY BORNE BY THE CONTRACTOR

 B. COMPUTER PREPARED PHOTOMETRIC LAYOUT OF THE PROPOSED LIGHTED AREA WHICH INDICATES, BY B. COMPUTER PREPARED PHOTOMETRIC LAYOUT OF THE PROPOSED LIGHTED AREA WHICH INDICATES, BY ISOFOOTCANDLE, THE SYSTEM'S PERFORMANCE.

 C. A PHOTOMETRIC REPORT FROM A NATIONAL INDEPENDENT TESTING LABORATORY WITH REPORT NUMBER, DATE, FIXTURE CATALOG NUMBER, LUMINAIRE AND LAMP SPECIFICATIONS; IES CALCULATIONS, POINT BY POINT FOOT CANDLE PLAN, STATISTIC ZONES SHOWING AVERAGE, MAXIMUM, MINIMUM AND UNIFORMITY RATIOS, SUMMARY, ISOLUX PLOT, AND CATALOGUE CUTS. CATALOGUE CUTS MUST IDENTIFY OPTICS, LAMP TYPE, DISTRIBUTION TYPE, REFLECTOR, LENS, BALLASTS, WATTAGE, VOLTAGE, FINISH HOUSING DESCRIPTION AND ALL OTHER PERTINENT INFORMATION.

 D. POLE MANUFACTURER AASHTO CALCULATIONS INDICATING THE POLE AND ANCHOR BOLTS BEING SUBMITTED ARE CAPABLE OF SUPPORTING THE POLE AND FIXTURE SYSTEMS BEING UTILIZED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

 E THE LINDERWRITERS LABORATORY LISTING AND FILE NUMBER FOR THE SPECIFIC FIXTURE(S) TO BE
- THE UNDERWRITERS LABORATORY LISTING AND FILE NUMBER FOR THE SPECIFIC FIXTURE(S) TO BE F. A COLOR PHOTOGRAPH THAT CLEARLY SHOWS THE REPLACEMENT FIXTURE POLE MOUNTED, THE

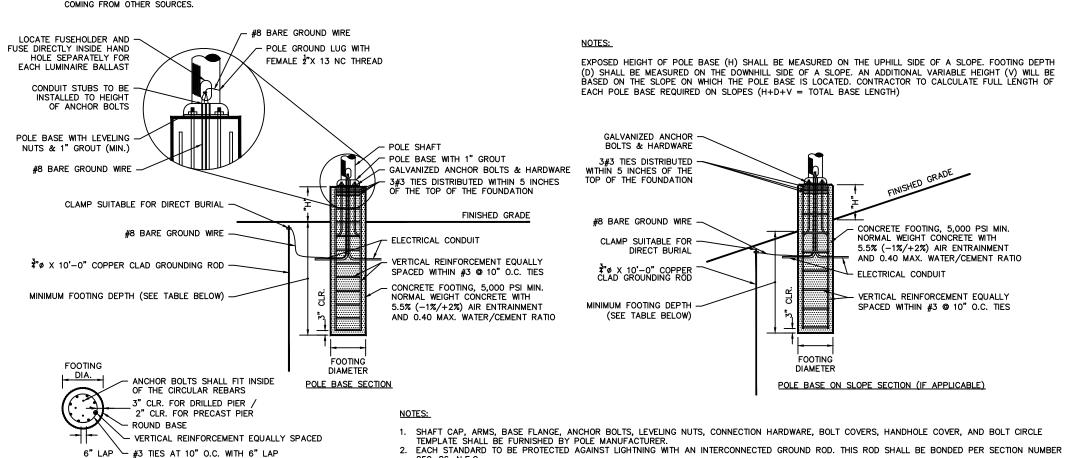


NOTE: THE PHOTOMETRIC TEMPLATE REPRESENTS LIGHT THROW FOR EACH INDIVIDUAL FIXTURE AND DOES NOT REPRESENT LIGHT COMING FROM OTHER SOURCES.

VERTICAL REINFORCEMENT EQUALLY SPACED

6" LAP #3 TIES AT 10" O.C. WITH 6" LAP

POLE FOOTING



2. EACH STANDARD TO BE PROTECTED AGAINST LIGHTNING WITH AN INTERCONNECTED GROUND ROD. THIS ROD SHALL BE BONDED PER SECTION NUMBE 250—86, N.E.C.
3. CONCRETE WORK SHALL COMPLY WITH THE REQUIREMENT OF ACT 318. CAST—IN—PLACE SHALL HAVE UNCONFINED COMPRESSIVE STRENGTH OF AT LEAST 5,000 PSI AT 28—DAYS. DEFORMED REINFORCEMENT BARS SHALL CONFORM TO ASTM A615, GRADE 60.
4. CONTRACTOR TO ENSURE CONCRETE POLE BASES ARE POURED / PLACED ABSOLUTELY VERTICAL & LEVEL.
5. IF POLE BASE IS CAST—IN—PLACE, POLE BASE SHALL BE ONE CONTINUOUS POUR. EXPOSED PORTION OF BASE SHALL BE HAND—RUBBED SMOOTH. 6. CONTRACTOR TO COMPACT SUBGRADE AROUND POLE BASE PER EARTHWORK SPECIFICATIONS / GEOTECH REPORT.

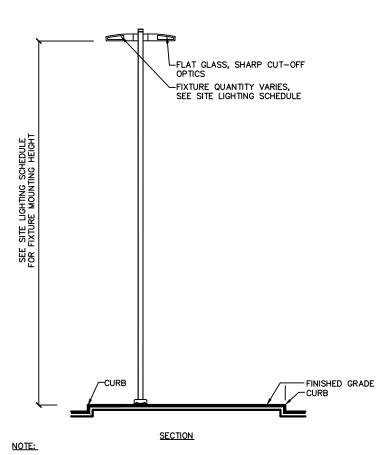
7. THE INFORMATION ILLUSTRATED IN THE LIGHT POLE FOUNDATION DETAIL HAS BEEN PROVIDED FOR GENERAL REFERENCE AND PRELIMINARY COST ESTIMATE PURPOSES. LIGHT POLE FOUNDATIONS SHOULD BE DESIGNED AND DETAILED BY A LICENSED STRUCTURAL ENGINEER BASED ON EXISTING SOIL CONDITIONS, LOCAL DESIGN STANDARDS AND MANUFACTURERS RECOMMENDATIONS.

8. CONTRACTOR TO CONFIRM GROUNDING DESIGN WITH MEP.

MOUNTING HEIGHT	FOOTING DEPTH	FOOTING DIAMETER	VERTICAL REINFORCEMENT	Ή
20'-0"	7'-0"	2'-0"	6 #5 BARS	3'-0"

NTS

POLE-TO-BASE PLATE WELD — SHALL COMPLY WITH AWS SPECS. AT TOP AND BOTTOM OF BASE PLATE BOLT COVER TYPICAL -BASE PLATE BOLT HOLE



1. ALL LIGHTS WITH 25' MOUNTING HEIGHT OR GREATER TO RECEIVE FACTORY

LIGHT FIXTURE AND POLE

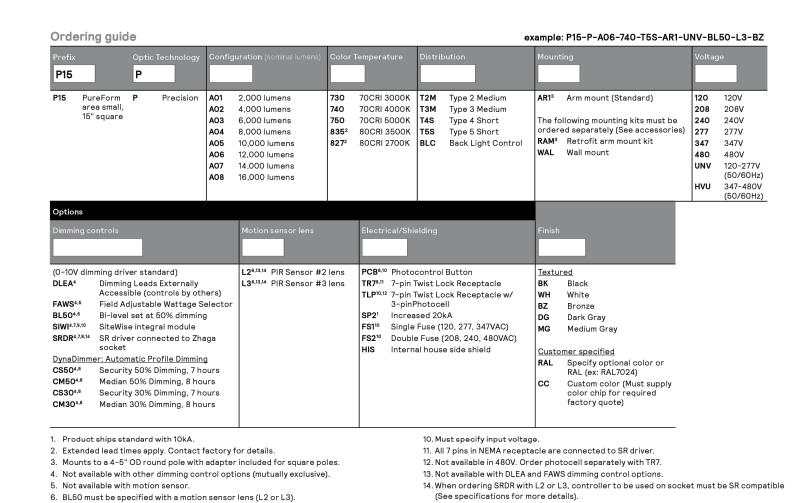


customize your selection.



Gardco PureForm LED area small square precision P15 features a sleek, low profile design. Precision optics are optimized for maximum efficiency and uniformity. Multiple optical distributions and color temperatures are available to allow you to Cat.No:













FIXTURE TYPE A & B

P15 PureForm area small square precision 04/21 page 1 of 6

7. Not available with photocontrols

8. Not available in 347 or 480V. 9. Available only in 120 or 277V.

NTS



The Gardco TRS Tapered Round Steel pole consists of a one-piece design fabricated steel tubing circumferentially welded to a structural quality hot rolled carbon steel plate. The poles are finished with an electrostatically applied, thermally cured TGIC polyester powdercoat.



Prefix	Height	Gauge	Drilling ¹		Finish		Options			
05TRS	20	11	D1	1 Way	BRP	Bronze Paint	FES	Fest	oon Outlet	
06TRS	20 25 ²		D2 D2@90	2 Way at 180° 2 Way at 90°	BLP WP	Black Paint White Paint	VDA AHH		ation Dampener tional Hand Hole	
07TRS	25 30 ² 35 ²		D3 D3@120	D3	3 Way at 90° 3 Way at 120° 4 Way	MGY DGY GV	Medium Grey Dark Grey Galvanized (No Paint)		base an	ets and Additional Hand Holes, indicate height d orientation to original hand hole. See Pole ientation Information on Page 4.
08TRS	30 35 39 ²		T2 T3 T4	2.4" OD Tenon X 4" long 3" OD Tenon X 5" long 4" OD Tenon X 6" long	FPGV OC	Finished Paint over Galvanized (specify color) Optional Color Paint	CL1/2 CL3/4	Coup	Nipples and Couplings bling - Internal Thread 1/2" bling - Internal Thread 3/4"	
O9TRS	39		P	Plain Top (No Drilling/No Tenon)	SC	(Specify RAL designation ex: RAL7024) Special Color Paint (Specify. Must supply color chip.)	CL1 C. CL1-1/4 C. CL1-1/2 C. NL1/2 N. NL3/4 N. NL1 N. NL1-1/4 N. NL1-1/2 N.	Coup Coup Coup Nipp Nipp Nipp Nipp Nipp	oling – Internal Thread 1" oling – Internal Thread 1-1/4" oling – Internal Thread 1-1/2" ole – External Thread 1/2" ole – External Thread 3/4" ole – External Thread 1" ole – External Thread 1-1/4" ole – External Thread 1-1/2" ole – External Thread 1-1/2" ole of the base and orientation to hand hole. le Orientation Information on Page 4.	
							GM-080 GM-080 Indica	1-19 1-24 ate heigh See Po	Side Mount Bullhorn Brackets Single - 1.9" OD (For Gardco DFL7/DFC7 only) Single - 2.4" OD at above base and orientation to hand hole. le Orientation Information on Page 4 salternative brackets and accessories available. anify product catalog (eCat) website for more	

Enter the order code into the appropriate box above. Note: Gardco reserves the right to refuse a configuration. Not all combinations and configurations are valid. Refer to notes below for exclusions and limitations. For questions or concerns, please consult the factory. 1. Standard poles are drilled in factory for compatibility with Signify luminaires only (D* options). For non-Signify-brand luminaires, select the P drilling option. 2. Poles with a 2.4" top OD cannot be side drilled. The 2.4" top has the same OD as the T2 tenon

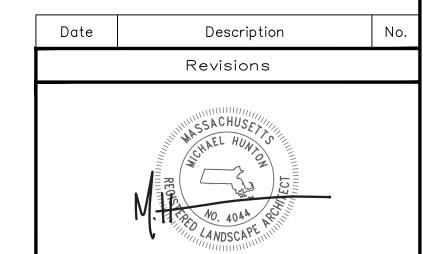
Anchor Bolts for Gardco 0xTRS Poles, ordered separately:

	12NC for ordering	Description (in inche
For Pre-ship service (Order 4 per pole)	912400215784	1 x 36 x 4.5
For shipment with the pole (Order 1 per pole)	912400200208	1 x 36 x 4.5

TRS_Spec_Sheet 02/21 page 1 of 4



NTS



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Drawing Title

MEDWAY BATTERY ENERGY STORAGE SYSTEM

NORFOLK COUNTY **MASSACHUSETT**

LIGHTING DETAILS

Project No. Drawing No. 151033401 LL501 06/08/2023 rawn Bv Checked By

Date: 10/3/2023 Time: 15:37 User: jpark Style Table: Langan.stb Layout: LL501 Document Code: 151033401-0501-LL501-0101

SUMMARY OF PROPOSED ACTIVITIES NON-JURISDICTIONAL ROUTE 109 SCREENING PLANTING SCHEDULE WITHIN THE 200-FOOT RIVERFRONT AREA WETLAND BUFFER IMPACT 5' LAWN MOW KEY QTY. BOTANICAL NAME COMMON NAME AREA #1 (6,130 SF) STRIP (TYP.) ACTIVITY AREA (SF) AREA (AC) SHADE TREE(S) ACER RUBRUM 2 1/2-3° CAL. RETAINING WALLS AND GRADING 9.910 0.228 RED MAPLE STORMWATER BASIN FOOTPRINT 17,630 0.405 CCA CARPINUS CAROLINIANA AMERICAN HORNBEAM 2 1/2-3" CAL. B+B 14,820 0.34 TILIA AMERICANA BASSWOOD 2 1/2-3" CAL. B+B SECTION 23 (VEGETATION REMOVAL) MEADOW SEED MIX MITIGATION PLANTING AREA EVERGREEN TREE(S) EASTERN RED CEDAR JUNIPERUS VIRGINIANA 8-10' B+B THE PROJECT SITE CONTAINS 198,880 SF (4.56 ACRES) OF RIVERFRONT DECIDUOUS SHRUB(S) AREA. APPROXIMATELY 59,570 SF (1.37 ACRES) ARE THE INNER ARONIA ARBUTIFOLIA RED CHOKEBERRY 24-30" CONTAINER RIPARIAN (0-100 FOOT) ZONE; THE REMAINING 139,310 SF (3.19)ACRES) ARE THE OUTER RIPARIAN (100-200 FOOT) ZONE. HVCW 23 CONTAINER HAMAMELIS VIRGINIANA COMMON WITCHHAZEL ILEX VERTICILLATA WINTERBERRY 24-30" CONTAINER VIBURNUM DENTATUM ARROWWOOD VIBURNUM B+B VINE(S) PARTHENOCISSUS QUINQUEFOLIA VIRGINIA CREEPER PQ +413 2 1/4" PEAT POT | 2 YR.PLANTS | 18" O.C. NOTE: IF ANY DISCREPANCIES OCCUR BETWEEN AMOUNTS SHOWN IN THE PLAN AND THE PLANT LIST, THE PLAN SHALL DICTATE. LOCAL WETLAND REGULATION (SECTION 23) VEGETATION REPLACEMENT AREA KEY QTY. **BOTANICAL NAME** COMMON NAME ROOT REMARKS 5' LAWN MOW SHADE TREE(S) ACER RUBRUM (12' MINIMUM HEIGHT) RED MAPLE 3-3 1/2" CAL GREY BIRCH BETULA POPULIFOLIA 12-14' HT B+B 3-3 1/2" CAL B+B (12' MINIMUM HEIGHT) CARYA OVATA SHAGBARK HICKORY QUERCUS ALBA B+B WHITE OAK 3-3 1/2" CAL (12' MINIMUM HEIGHT) QUERCUS RUBRA RED OAK 3-3 1/2" CAL B+B (12' MINIMUM HEIGHT) BLACK OAK QUERCUS VELUTINA 3-3 1/2" CAL (12' MINIMUM HEIGHT) ORNAMENTAL TREE(S) POPULUS TREMULODES QUAKING ASPEN 12-14 B+B EVERGREEN TREE(S) PINUS STROBUS EASTERN WHITE PINE B+B 12-14 DECIDUOUS SHRUB(S) ARONIA ARBUTIFOLIA RED CHOKEBERRY 24-30" HT CONTAINER 24-30" HT FOTHERGILLA GARDENII DWARF FOTHERGILLA CONTAINER CONTAINER ILEX VERTICILLATA WINTERBERRY 24-30" HT VIBURNUM DENTATUM ARROWWOOD VIBURNUM 24-30" HT CONTAINER VEGETATION REPLACEMENT AREA PLANT SCHEDULE PROVIDED BY EPSILON ASSOCIATES PLANTING STOCK USED IN THE VEGETATION REPLACEMENT SHALL BE INSPECTED FOR PESTS, DISEASE AND OVERALL HEALTH TO ENSURE SUITABLE SPECIMENS ARE USED. UNSUITABLE SPECIMENS WILL BE REJECTED AND REPLACED WITH SUITABLE SPECIMENS. ANY PLANTING SUBSTITUTIONS MUST BE APPROVED BY THE PROJECT WETLAND SCIENTIST. ALL WOODY PLANT STOCK SHALL BE CONTAINER-GROWN OR BURLAP BALLED. DEVIATIONS TO THE PLANTING PLAN MUST BE APPROVED BY THE PROJECT WETLAND SCIENTIST. ONLY PLANT MATERIALS NATIVE AND INDIGENOUS TO MASSACHUSETTS SHALL BE USED. INVASIVE PLANT SPECIES WILL NOT BE USED IN THE RESTORATION AREA. 3. IF ANY DISCREPANCIES OCCUR BETWEEN AMOUNTS SHOWN IN THE PLAN AND THE PLANT LIST, THE PLAN SHALL DICTATE. ONLY STRAIGHT SPECIES SHALL BE USED IN PLANTING PLAN. 08/01/24 NOI REVISIONS TREES TO BE REMOVED SHALL BE MARKED IN THE FIELD PER THE PLAN AND TREES TO REMAIN SHALL BE MARKED IN THE FIELD AND PROTECTED PER TREE PROTECTION DETAIL ON SHEET LP-501. ALL FIELD MARKINGS SHALL BE REVIEWED BY THE LANDSCAPE ARCHITECT AND CONSERVATION AGENT. 10/04/23 NOI COMMENT REVISIONS 08/24/23 NOI COMMENT REVISIONS 5' LAWN MOW Date Description STRIP (TYP.) Revisions PAVEMENT(TYP. MEADOW SEED MIX TYPE 'B' (TYP.) Environmental Services, Inc. 100 Cambridge Street, Suite 1310 Boston, MA 02114 STORMWATER BASIN ACCESS PATH, MOW F: 617.824.9101 TO MAINTAIN A 2 1 TO 3-INCH HEIGHT WETLAND BUFFER IMPACT DURING THE GROWING SEASON FROM MAY 200' RIVERFRONT AREA #3 (1,610 SF) O SEPTEMBER AREA LIMITS (TYP) MEDWAY BATTERY 100' WETLAND BUFFER (TYP) **ENERGY STORAGE** LIMIT OF WORK (TYP) WETLAND BUFFER IMPACT **SYSTEM** AREA #2 (29,250 SF) 25' WETLAND "NO DISTURB" ZONE (TYP) MEADOW SEED MIX TLAND LIMITS (TYP) NORFOLK COUNTY MASSACHUSETTS TYPE 'C' (TYP.) Drawing Title MEADOW SEED M TYPE 'A' (TYP.) PAVEMENT OUTSIDE LIMITS OF STORMWATER BASIN TO BE BIO-RETENTION SOILS REMOVED, 0'-100' RIVERFRONT PLANTING PLAN SHED TO E AREA, 210 SF PAVEMENT WITHIN STORMWATER REMOVED, 710 SF BASIN TO BE REMOVED, 2,070 SF TREES TO REMAIN PRIOR TO SHRUB AND TREES INSTALLATION THE AND BE PROTECTED ENTIRE AREA TO BE MOWED TO THE GROUND, PAVEMENT TO BE REMOVED IN TILLED, AND THEN PLANTED/SEED. ROW, 100'-200' RIVERFRONT AREA, 330 SF NOTED IN PLANTING PLAN SPECIFICATIONS. -(REFER TO LP501 FOR "LOCAL WETLAND PAVEMENT OUTSIDE OF . STORMWATER BASIN TO BE REGULATION (SECTION 23) VEGETATION PAVEMENT TO BE REMOVED IN Drawing No. REPLACEMENT AREA" NOTES) REMOVED, 2,610 SF -ROW, O'-100' RIVERFRONT AREA. MEADOW SEED MIX 151033401 LP101 06/08/2023 LOCAL WETLAND REGULATION rawn By (SECTION 23) VEGETATION REPLACEMENT AREA ASPHALT AND SUB BASE TO BE hecked By REMOVED PRIOR TO INSTALLING PLANT SOIL, (TYP.) Date: 8/1/2024 Time: 10:52 User: gbrummel Style Table: Langan.stb Layout: LP101 Document Code: 151033401-0501-LP101-01

GENERAL LANDSCAPE PLANTING NOTES

- NAMES OF PLANTS AS DESCRIBED ON THIS PLAN CONFORM TO THOSE GIVEN IN "STANDARDIZED PLANT NAMES", 1942 EDITION, PREPARED BY THE AMERICAN JOINT COMMITTEE ON HORTICULTURAL NOMENCLATURE. NAMES OF PLANT VARIETIES NOT INCLUDED THEREIN CONFORM TO NAMES GENERALLY ACCEPTED IN NURSERY TRADE. ALL EXPOSED GROUND SURFACES THAT ARE NOT PAVED WITHIN THE CONTRACT LIMIT LINE, AND THAT ARE NOT COVERED BY LANDSCAPE PLANTING OR SEEDING AS SPECIFIED, SHALL BE COVERED BY A NATURAL MULCH THAT WILL PREVENT SOIL EROSION AND THE EMANATION OF DUST.
- NO PLANT SHALL BE PUT INTO THE GROUND BEFORE ROUGH GRADING HAS BEEN COMPLETED AND APPROVED BY THE PROJECT LANDSCAPE ARCHITECT OR PROJECT ENGINEER.
- 4. STANDARDS FOR TYPE, SPREAD, HEIGHT, ROOT BALL AND QUALITY OF NEW PLANT MATERIAL SHALL BE IN ACCORDANCE WITH GUIDELINES AS SET FORTH IN THE "AMERICAN STANDARD FOR NURSERY STOCK", PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN. PLANT MATERIAL SHALL HAVE NORMAL HABIT OF GROWTH AND BE HEALTHY, VIGOROUS, AND FREE FROM DISEASES AND INSECT INFESTATION. 5. NEW PLANT MATERIAL SHALL BE NURSERY GROWN UNLESS SPECIFIED OTHERWISE. ALL PLANTS SHALL BE SET
- PLUMB AND SHALL BEAR THE SAME RELATIONSHIP TO FINISHED GRADE AS THE PLANT'S ORIGINAL GRADE BEFORE DIGGING, PLANT MATERIAL OF THE SAME SPECIES AND SPECIFED AS THE SAME SIZE SHOULD BE SIMILAR IN SHAPE, COLOR AND HABIT. THE LANDSCAPE ARCHITECT HAS THE RIGHT TO REJECT PLANT MATERIAL THAT DOES NOT CONFORM TO THE TYPICAL OR SPECIFIED HABIT OF THAT SPECIES.
- 6. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UNDERGROUND UTILITY AND SEWER LINES PRIOR TO THE START OF EXCAVATION ACTIVITIES. NOTIFY THE PROJECT ENGINEER AND OWNER IMMEDIATELY OF ANY CONFLICTS WITH PROPOSED PLANTING LOCATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE. 7. THE CONTRACTOR SHALL NOT MAKE SUBSTITUTIONS. IF THE SPECIFIED LANDSCAPE MATERIAL IS NOT OBTAINABLE, THE CONTRACTOR SHALL SUBMIT PROOF OF NON-AVAILABILITY TO THE LANDSCAPE ARCHITECT AND OWNER, TOGETHER WITH A WRITTEN PROPOSAL FOR USE OF AN EQUIVALENT MATERIAL.
- 8. LANDSCAPE CONTRACTOR TO STAKE OUT PLANTING LOCATIONS, FOR REVIEW AND APPROVAL BY THE LANDSCAPE ARCHITECT AND/OR OWNER BEFORE PLANTING WORK BEGINS. THE LANDSCAPE ARCHITECT AND/OR OWNER SHALL DIRECT THE CONTRACTOR IN THE FINAL PLACEMENT OF ALL PLANT MATERIAL AND LOCATION OF PLANTING BEDS TO ENSURE COMPLIANCE WITH DESIGN INTENT UNLESS OTHERWISE INSTRUCTED.
- 9. THE LANDSCAPE ARCHITECT MAY REVIEW PLANT MATERIALS AT THE SITE, BEFORE PLANTING, FOR COMPLIANCE THE LANDSCAPE ARCHITECT MAY REVIEW PLANT MATERIALS AT THE SITE, BEFORE PLANTING, FOR COMPLIANCE WITH REQUIREMENTS FOR GENUS, SPECIES, VARIETY, SIZE, AND QUALITY. THE LANDSCAPE ARCHITECT RETAINS THE RIGHT TO FURTHER REVIEW PLANT MATERIALS FOR SIZE AND CONDITION OF BALLS AND ROOT SYSTEM, INSECTS, INJURIES, AND LATENT DEFECTS, AND TO REJECT UNSATISFACTORY OR DEFECTIVE MATERIAL AT ANY TIME DURING PROOFESS OF WORK. THE CONTRACTOR SHALL REMOVE REJECTED PLANT MATERIALS IMMEDIATELY FROM PROJECT SITE AS DIRECTED BY THE LANDSCAPE ARCHITECT OR OWNER.
- 10. DELIVERY, STORAGE, AND HANDLING
 A. PACKAGED MATERIALS: PACKAGED MATERIALS SHALL BE DELIVERED IN CONTAINERS SHOWING WEIGHT,
 ANALYSIS, AND NAME OF MANUFACTURER. MATERIALS SHALL BE PROTECTED FROM DETERIORATION DURING
 DELIVERY, AND WHILE STORED AT SITE.
 B. TREES AND SHRUBS: THE CONTRACTOR SHALL PROVIDE TREES AND SHRUBS DUG FOR THE GROWING SEASON
 FOR WHICH THEY WILL BE PLANTED. DO NOT PRUNE PRIOR TO DELIVERY UNLESS OTHERWISE DIRECTED BY
 THE LANDSCAPE ARCHITECT. DO NOT BEND OR BIND—THE TREES OR SHRUBS IN SUCH A MANNER AS TO
 DAMAGE BARK, BREAK BRANCHES, OR DESTROY NATURAL SHAPE. PROVIDE PROTECTIVE COVERING DURING
 TRANSIT. DO NOT DROP BALLED AND BURLAPPED STOCK DURING DELIVERY OR HANDLING.
 C. ALL PLANTS SHALL BE BALLED AND BURLAPPED OR CONTAINER GROWN AS SPECIFIED. NO CONTAINER
 GROWN STOCK WILL BE ACCEPTED IF IT IS ROOT BOUND. ALL ROOTBALL WRAPPING AND BINDING MATERIAL
 MADE OF SYNTHETICS OR PLASTICS SHALL BE REMOVED FROM THE TOP OF THE BALL AT THE TIME OF
 PLANTING. IF THE PLANT IS SHIPPED WITH A WIRE BASKET AROUND THE ROOT BALL, THE WIRE BASKET
 SHALL BE CUT AND FOLDED DOWN 8 INCHES INTO THE PLANTING HOLE. WITH CONTAINER GROWN STOCK,
 THE CONTAINER SHALL BE REMOVED AND THE ROOT BALL SHALL BE CUT THROUGH THE SURFACE IN TWO HE CONTAINER SHALL BE REMOVED AND THE ROOT BALL SHALL BE CUT THROUGH THE SURFACE IN TWO
- D. THE CONTRACTOR SHALL HAVE TREES AND SHRUBS DELIVERED TO SITE AFTER PREPARATIONS FOR PLANTING HAVE BEEN COMPLETED AND PLANT IMMEDIATELY. IF PLANTING IS DELAYED MORE THAN 6 HOURS AFTER DELIVERY, THE CONTRACTOR SHALL SET TREES AND SHRUBS IN SHADE, PROTECT FROM WEATHER AND MECHANICAL DAMAGE AND KEEP ROOTS MOIST BY COVERING WITH MULCH, BURLAP OR OTHER ACCEPTABLE MEANS OF RETAINING MOISTURE.
- 11. ALL LANDSCAPED AREAS TO BE CLEARED OF ROCKS, STUMPS, TRASH AND OTHER UNSIGHTLY DEBRIS. ALL FINE GRADED AREAS SHOULD BE HAND RAKED SMOOTH ELIMINATING ANY CLUMPS AND AND UNEVEN SURFACES PRIOR 13. NEW PLANT MATERIAL SHALL BE GUARANTEED TO BE ALIVE AND IN VIGOROUS GROWING CONDITION FOR A PERIOD OF ONE YEAR FOLLOWING ACCEPTANCE BY THE OWNER. PLANT MATERIAL FOUND TO BE UNHEALTHY, DYING OR DEAD DURING THIS PERIOD, SHALL BE REMOVED AND REPLACED IN KIND BY THE CONTRACTOR AT NO EXPENSE TO THE OWNER.
- 14. THE CONTRACTOR SHALL KEEP AREA CLEAN DURING DELIVERY AND INSTALLATION OF PLANT MATERIALS. REMOVE AND DISPOSE OF OFF-SITE ANY ACCUMULATED DEBRIS OR UNUSED MATERIALS. REPAIR DAMAGE TO ADJACENT AREAS CAUSED BY LANDSCAPE INSTALLATION OPERATIONS.
- PLANTS SHALL THEN BE WATERED WEEKLY OR AS REQUIRED BY SITE AND WEATHER CONDITIONS TO MAINTAIN VIGOROUS AND HEALTHY PLANT GROWTH.
- 16. THE BACKFILL MIXTURE AND SOIL MIXES TO BE INSTALLED PER THE SPECIFICATIONS.
- 17. AFTER PLANT IS PLACED IN TREE PIT LOCATION, ALL TWINE HOLDING ROOT BALL TOGETHER SHOULD BE
- 18. MULCH SHOULD NOT BE PILED UP AROUND THE TRUNK OF ANY PLANT MATERIAL. NO MULCH OR TOPSOIL SHOULD BE TOUCHING THE BASE OF THE TRUNK ABOVE THE ROOT COLLAR.
- ALL FENCE INSTALLATION SHALL BE COMPLETED PRIOR TO COMMENCEMENT OF ANY LANDSCAPE PLANTING, LAWN AND GRASSES, OR IRRIGATION WORK. 20. FOR ANY DISCREPANCIES BETWEEN THE PLANT SCHEDULE AND PLANTING PLAN THE GRAPHIC QUANTITY SHOWN
- 21. PLANT MATERIALS SHALL NOT BE PLANTED UNTIL THE FINISHED GRADING HAS BEEN COMPLETED.
- 22. ALL PLANT INSTALLATIONS SHALL BE COMPLETED EITHER BETWEEN APRIL 1 JUNE 15 OR AUGUST 15 NOVEMBER 1, UNLESS OTHERWISE DIRECTED BY THE PROJECT LANDSCAPE ARCHITECT. SEE LAWN SEEDING DATES IN SEEDING NOTES.

LAWN WATERING SCHEDULE

THE FOLLOWING WATERING SCHEDULE COVERS ROUGHLY 8 WEEKS TO ESTABLISH A HEALTHY STAND OF GRASS FROM SEED. THE CONTRACTOR SHALL BE OBLIGATED TO ENSURE A HEALTHY STAND OF GRASS AT THE END OF THE REESTABLISHED PRIOR TO THE END OF THE MAINTENANCE/BOND PERIOD AND TO THE SATISFACTION OF THE PROJECT LANDSCAPE ARCHITECT AND THE OWNER. IMPORTANT ASPECTS TO ATTAINING AND SUSTAINING A HEALTHY STAND OF GRASS ARE THE INSTALLATION OF TOPSOIL, SEED BED PREPARATION, ATTAINING OPTIMAL pH FOR THE INTENDED PLANT SPECIES, FERTILIZING, MULCH COVERING, AND SUFFICIENT WATERING PER THESE NOTES AND/OR PROJECT SPECIFICATIONS.

- SEEDING SHALL BE DONE DURING THE SEASONS SPECIFIED IN THE LAWN SEED MIX NOTES AND/OR PROJECT SPECIFICATIONS.
- AFTER THE SEEDBED IS PREPARED, SEED IS INSTALLED, AND MULCH IS APPLIED, WATER LIGHTLY TO KEEP THE TOP 2 INCHES OF SOIL CONSISTENTLY MOIST, NOT SATURATED. AT NO TIME SHOULD WATER BE APPLIED TO THE POINT OF RUNOFF OR THE DISPLACEMENT OF SEED.
- 3. DEPENDING ON SOIL TEMPERATURES, IT MAY TAKE SEVERAL WEEKS FOR GERMINATION TO OCCUR. DIFFERENT SPECIES WITHIN THE MIX GERMINATE AT DIFFERENT TIMES AND THEREFORE CONTRACTOR SHOULD CONTINUE THE LIGHT WATERING, AS DESCRIBED ABOVE, UNTIL THERE IS AT LEAST 2 INCHES OF GROWTH THROUGHOUT.
- 4. AT THIS POINT, WATERING FREQUENCY MAY BE REDUCED TO EVERY 3 TO 5 DAYS. WATER SHALL BE APPLIED TO WET A 6 INCH MINIMUM SOIL DEPTH TO PROMOTE HEALTHY DEEP ROOTS.

LAWN SEED MIX

- . LAWN SEED MIX: LESCO GRASS SEED ALL PRO TRANSITION MIX (3 TURF-TYPE TALL-FESCUE
-) NEW ESTABLISHMENT: SEED AT A RATE OF 6-8 LBS/1000 SQ FT

- 1. SEEDING SHALL TAKE PLACE IN THE SPRING (APRIL 1 TO JUNE 15) OR THE FALL (SEPTEMBER 1 TO
- OCTOBER 15).

 2. PROTECT ALL EXISTING TREES AND SHRUBS TO REMAIN PER TREE PROTECTION DETAILS. NO DRILL SEEDING OR HERBICIDE USE WITHIN DRIPLINE OF EXISTING TREES TO REMAIN.

 3. ELIMINATE UNWANTED SHRUB AND BRUSH AND MOW ALL LAWN TO GRADE IN AREAS TO BE SEEDED PRIOR TO INSTALLATION.

 4. ELIMINATE REMAINING VEGETATION PRIOR TO SEEDING USING A NON-SELECTIVE HERBICIDE PER MANUFACTURED SECRETATION PRIOR TO SEEDING USING A NON-SELECTIVE HERBICIDE PER
- MANUFACTURER'S SPECIFICATIONS.

 5. ALL AREAS NOT DISTURBED DUE TO SITE GRADING SHALL NOT BE TILLED. A TRUAX—TYPE DRILL SEEDER SHALL BE USED IN THOSE LOCATIONS. IN ALL REMAINING AREAS TO BE SEEDED, CONTRACTOR IS TO SUBMIT SEEDING METHODOLOGY TO PROJECT LANDSCAPE ARCHITECT FOR REVIEW AND APPROVAL BY CONSERVATION COMMISSION PRIOR TO SEEDING.

 6. THERE MUST BE CONTINUOUS SOIL MOISTURE FOR 4—6 WEEKS TO ALLOW PROPER GERMINATION.

SECTION

- BEGIN MAINTENANCE IMMEDIATELY AFTER EACH PORTION OF LAWN IS PLANTED AND CONTINUE FOR 8
 WEEKS AFTER ALL LAWN PLANTING IS COMPLETED.
- WATER TO KEEP SURFACE SOIL MOIST, REPAIR WASHED OUT AREAS BY FILLING WITH TOPSOIL, LIMING, FERTILIZING AND RE-SEEDING; MOW TO 2 1/2-3 INCHES AFTER GRASS REACHES 3 1/2 INCHES IN HEIGHT, AND MOW FREQUENTLY ENOUGH TO KEEP GRASS FROM EXCEEDING 3 1/2 INCHÉS. WEED BY LOCAL SPOT APPLICATION OF SELECTIVE HERBICIDE ONLY AFTER GRASS IS WELL-ESTABLISHED.

REQUIRED / PERMITTED

PLANTING SOIL SPECIFICATIONS

PLANTING SOIL, ALTERNATELY MAY BE REFERRED TO AS TOPSOIL, SHOULD BE FRIABLE, FERTILE, WELL DRAINED, FREE OF DEBRIS, TOXINS, TRASH AND STONES OVER 1/2" DIA., IT SHOULD HAVE A HIGH ORGANIC CONTENT SUITABLE TO SUSTAIN HEALTHY PLANT GROWTH AND SHOULD LOOK AESTHETICALLY PLEASING HAVING NO NOXIOUS

REUSE SURFACE SOILS STOCKPILED ON SITE, VERIFYING COMPLIANCE WITH PLANTING SOIL AND TOPSOIL CRITERIA IN THIS SPECIFICATION THROUGH TESTING. CLEAN SURFACE SOIL OF ALL ROOTS, PLANTS, SOD, AND GRAVEL OVER 1" IN DIAMETER AND DELETERIOUS MATERIALS. IF ON-SITE SOILS ARE TO BE USED FOR PROPOSED PLANTING, THE CONTRACTOR SHALL DEMONSTRATE, THROUGH SOIL TESTING, THAT ON-SITE SOILS MEET THE SAME CRITERIA AS INDICATED IN NOTES PLANS AND SPECIFICATIONS. SUPPLEMENT WITH IMPORTED OR MANUFACTURED TOPSOIL FROM OFF SITE SOURCES WHEN TOPSOIL AND PLANTING SOIL QUANTITIES ARE INSUFFICIENT. OBTAIN SOIL DISPLACED FROM NATURALLY WELL-DRAINED SITES WHERE OPSOIL OCCURS AT LEAST 4" DEEP. DO NOT OBTAIN FROM AGRICULTURAL LAND, BOGS, MARSHES OR

CONTRACTOR SHALL TEST SOILS AND FURNISH SAMPLES UPON REQUEST. PACKAGED MATERIALS SHALL BE UNOPENED BAGS OR CONTAINERS, EACH BEARING A NAME, GUARANTEE, AND TRADEMARK OF THE PRODUCER MATERIAL COMPOSITION, MANUFACTURER'S CERTIFIED ANALYSIS, AND THE WEIGHT OF THE MATERIALS. SOIL OR AMENDMENT MATERIALS SHALL BE STORED ON SITE TEMPORARILY IN STOCKPILES PRIOR TO PLACEMENT AND SHALL BE PROTECTED FROM INTRUSION OF CONTAMINANTS AND EROSION. AFTER MIXING, SOIL MATERIALS SHALL BE COVERED WITH A TARPAULIN UNTIL TIME OF ACTUAL USE.

ALL PLANTING SOILS SHALL BE SUBMITTED FOR TESTING TO THE STATE COOPERATIVE EXTENSION SERVICE, OR APPROVED EQUAL, PRIOR TO DELIVERY TO THE SITE. CONTRACTOR SHALL FURNISH SOIL SAMPLES AND SOIL TEST RESULTS TO LANDSCAPE ARCHITECT OR OWNER AT A RATE OF ONE SAMPLE PER 500 CUBIC YARDS TO ENSURE CONSISTENCY ACROSS THE TOTAL VOLUME OF PLANTING SOIL REQUIRED. TEST RESULTS SHALL EVALUATE FOR ALL CRITERIA LISTED IN THIS SPECIFICATION. IF TESTING AGENCY DETERMINES THAT THE SOILS ARE DEFICIENT IN ANY MANNER AND MAY BE CORRECTED BY ADDING AMENDMENTS, THE CONTRACTOR SHALL FOLLOW STATED RECOMMENDATIONS FOR SOIL IMPROVEMENT AND FURNISH SUBMITTALS FOR ALL AMENDMENTS PRIOR TO DELIVERY OF SOIL TO THE PROJECT SUF

. THE FOLLOWING TESTING SHOULD BE PERFORMED AND RESULTS GIVEN TO THE LANDSCAPE ARCHITECT FOR a. PARTICLE SIZE ANALYSIS - LOAMY SAND: 60-75% SAND, 25-40% SILT, AND 5-15% CLAY.

b. FERTILITY ANALYSIS: ph (5.5-6.5), SOLUBLE SALTS (LESS THAN 2 MMHO/CM), NITRATE, PHOSPHATE, POTASSIUM, CALCIUM AND MAGNESIUM c. ORGANIC MATTER CONTENT: 2.5-5% IN NATIVE SOILS; UP TO 10% IN AMENDED SOILS d. TOXIC SUBSTANCE ANALYSIS

e. MATERIAL DRAINAGE RATE: 60% PASSING IN 2 MINUTES, 40% RETAINED

f. NOT MORE THAN 1% OF MATERIAL SHALL BE RETAINED BY A #4 SIEVE

SOIL AMENDMENT FOR PLANT MATERIAL:

IF SOIL ORGANIC CONTENT IS INADEQUATE, SOIL SHALL BE AMENDED WITH COMPOST OR ACCEPTABLE, WEED FREE,
ORGANIC MATTER. ORGANIC AMENDMENT SHALL BE WELL COMPOSTED, PH RANGE OF 6-8; MOISTURE CONTENT 35-55% BY WEIGHT 100% PASSING THROUGH 1" SIEVE; SOLUBLE SALT CONTENT LESS THAN 0.5 MM HOS/CM; A ORGANIC MATTER AS A SOIL AMENDMENT: LEAF MOLD WITH 60-90% ORGANIC CONTENT BY WEIGHT, SHREDDER

LEAF LITTER, COMPOSTED FOR A MINIMUM OF 1 YR. SHOULD BE FREE OF DEBRIS, STONES OVER 1/2", WOOD B. SOIL IN BEDS AND PLANTING ISLANDS OTHER THAN BACKFILL MATERIAL AND TOPSOIL, SHOULD BE FRIABLE, WELL DRAINED, AND FREE OF DEBRIS, INCLUDING STONES AND TRASH.

a. GROUND LIMESTONE (WITH A MIN. OF 88% OF CALCIUM AND MAGNESIUM CARBONATES) USED PENDING RESULTS OF SOIL ANALYSIS. BRING pH LEVELS TO 5.5 MIN. TO 6.5 FOR NON-ERICACEOUS PLANTS - BRING PH LEVELS TO 4.5 MIN. TO 5.5 FOR ERICACEOUS PLANTS

: AMENDMENTS FOR BACK FILL IN TREE AND SHRUB PITS:

b. TERRA-SORB BY 'PLANT HEALTH CARE' 800-421-9051 (SEE MANUFACTURER RECOMMENDATIONS) USED IN PLANTER BACKFILL MIXTURE WITH TREES AND SHRUBS. c. MYCOR-ROOT SAVER BY 'PLANT HEALTH CARE' 800-421-9051 (SEE MANUFACTURER RECOMMENDATIONS) USED IN BACKFILL MIXTURE WITH TREES.

. WHERE PLANTING AREAS ARE PROPOSED FOR FORMER PAVED OR GRAVEL AREAS, BEDS SHALL BE EXCAVATED TO A MINIMUM 30" DEPTH AND, AT A MINIMUM, BE BACKFILLED WITH BOTTOM LAYER OF SANDY LOAM (ORGANIC

LANDSCAPE FILL MATERIAL, BELOW PLANTING SOILS, SHALL HAVE THE PHYSICAL PROPERTIES OF A SANDY LOAM WITH AN ORGANIC CONTENT OF LESS THAN 2% AND A PH BETWEEN 5-7. A. CONTRACTOR TO PROVIDE SIX INCHES (6") MINIMUM DEPTH PLANTING SOIL LAYER IN LAWN AREAS, TWELVE INCHES (12") MINIMUM DEPTH PLANTING SOIL LAYER IN GROUNDCOVER AND PERENNIAL AREAS, EIGHTEEN

B. SCARIFY AND/OR TILL COMPACTED SUBSOILS TO A MINIMUM DEPTH OF 6 INCHES. THOROUGHLY MIX A 6 INCH DEPTH LAYER OF PLANTING SOIL INTO THE SUBSOIL PRIOR TO PLACING PLANTING SOIL AT THE DEPTHS INDICATED ABOVE. PLANTING SOIL SHALL BE PLACED IN 12-18* LIFTS AND WATER THOROUGHLY BEFORE INSTALLING NEXT LIFT. REPEAT UNTIL DEPTHS AND FINISH GRADES HAVE BEEN ACHIEVED. NO SOILS SHALL BE PLACED IN A FROZEN OR MUDDY CONDITION.

C. PLANTING SOIL PRESENT AT THE SITE, IF ANY, MAY BE USED TO SUPPLEMENT TOTAL AMOUNT REQUIRED. CONTRACTOR TO FURNISH AN ANALYSIS OF ON-SITE PLANTING SOIL UTILIZED IN ALL PLANTING AREAS.

i. SOIL CONDITIONING:

A. ADJUST PH AND NUTRIENT LEVELS AS REQUIRED TO ENSURE AN ACCEPTABLE GROWING MEDIUM. LOWER PH USING ELEMENTAL SULFUR ONLY. PEAT MOSS OR COPPER SULFATE MAY NOT BE USED. GROUND LIMESTONE AS A SOIL AMENDMENT MATERIAL WILL ONLY BE USED PENDING RESULTS OF SOIL ANALYSIS. PROVIDE WITH MINIMUM 88% CALCIUM AND MAGNESIUM CARBONATES AND SHALL HAVE TOTAL 100% PASSING THE 10 MESH SIEVE, MINIMUM 90% PASSING 20 MESH SIEVE, AND MINIMUM 60% PASSING 100 MESH SIEVE. B. ALL DEBRIS EXPOSED FROM EXCAVATION AND CULTIVATION SHALL BE DISPOSED OF AT THE CONTRACTOR'S

. SOIL MODIFICATIONS (PENDING RESULTS OF SOIL ANALYSIS): a. THOROUGHLY TILL ORGANIC MATTER (LEAF COMPOST) INTO THE TOP 6 TO 12 IN. OF MOST PLANTING SOILS TO IMPROVE THE SOIL'S ABILITY TO RETAIN WATER AND NUTRIENTS. ALL PRODUCTS SHOULD BE COMPOSTED TO A DARK COLOR AND BE FREE OF PIECES WITH IDENTIFIABLE LEAF OR WOOD STRUCTURE AVOID MATERIAL WITH A PH HIGHER THAN 7.0. PEAT MOSS MAY NOT BE USED AS ORGANIC MATTER AMEDIDENT

b MODIFY HEAVY CLAY OR SILT (MORE THAN 40% CLAY OR SILT) BY ADDING COMPOSTED PINE BARK (LIE TO 30% BY VOLUME) AND/OR GYPSUM. COARSE SAND MAY BE USED IF ENOUGH IS ADDED TO BRING THE SAND CONTENT TO MORE THAN 60% OF THE TOTAL MIX. IMPROVE DRAINAGE IN HEAVY SOILS BY PLANTIN ON RAISED MOUNDS OR BEDS AND INCLUDING SUBSURFACE DRAINAGE LINES.

c. MODIFY EXTREMELY SANDY SOILS (MORE THAN 85% SAND) BY ADDING ORGANIC MATTER AND/OR DRY, SHREDDED CLAY LOAM UP TO 30% OF THE TOTAL MIX.

LOCAL WETLAND REGULATION (SECTION 23) **VEGETATION REPLACEMENT NOTES**

PRIOR TO SHRUB AND TREE INSTALLATION THE ENTIRE AREA IS TO BE MOWED TO THE GROUND, TILLED, AND THEN PLANTED/SEEDED. AREA TO BE MONITORED AND IF HERBICIDE USE IS NECESSARY, A PLAN WILL BE DEVELOPED AND SUBMITTED TO THE CONSERVATION COMMISSION FOR APPROVAL PRIOR TO IMPLEMENTATION.

MEADOW SEED NOTES

MEADOW SEED MIX A - ERNST SEED MIX ERNMX-183 (NATIVE DETENTION AREA MIX) VIRGINIA WILDRYE % ELYMUS VIRGINICUS 20% PANICUM VIRGATUM, 'SHAWNEE'
4% AGROSTIS PERENNANS, ALBANY I
2% JUNCUS TENUIS
% JANCUS FFUSUS
% PANICUM RIGIDULUM SWITCHGRASS, 'SHAWNEE' SWITCHGRASS, SHAWNEE
AUTUMN BENTGRASS, ALBANY PINE BUSH
PATH RUSH
SOFT RUSH
REDTOP PANICGRASS

SEED AT A RATE OF 20 LBS/ACRE OF 100% PURE LIVE SEED.

MEADOW SEED MIX B - NEW ENGLAND WETLAND PLANTS - NEW ENGLAND ROADSIDE MATRIX UPLAND SEED MI PANICULATUM PANICLEDLEAF TICK TREFOIL LITTLE BLUESTEM SCHIZACHYRIUM SCOPARIUM ANDROPOGON GERARDII BIG BLUESTEM SORGHASTRUM NUTANS INDIAN GRASS STAGHORN SUMAC CORNUS AMOMUM SILKY DOGWOOD EVENING PRIMROSE BUTTERFLY MILKWEED ASCLEPIAS TUBEROSA RUDBECKIA HIRTA BLACK EYED SUSAN EUPATORIUM FISTULOSUM HOLLOW-STEM JOE PYE WEED

SEED AT A RATE OF 35 LB/ACRE OF 100% PURE LIVE SEED

 ${\color{red} \underline{\textbf{MEADOW SEED MIX C}}} - {\color{red} \textbf{ERNST NATIVE UPLAND WILDLIFE FORAGE \& COVER MEADOW MIX)}}$ 34.9% ANDROPOGON GERARDII, 'NIAGARA' BIG BLUESTEM, 'NIAGARA' 27.0% PANICUM VIRGATUM, 'CAVE-IN-ROCK' SWITCHGRASS, 'CAVE-IN-ROCK' 21.0% ELYMUS VIRGINICUS, 'MADISON' VIRGINIA WILDRYE, 'MADISON' 3.0% RUDBECKIA HIRTA PA ECOTYPE BLACKEYED SUSAN, PA ECOTYPI

OXEYE SUNFLOWER, PA ECOTYPI

SHOWY TICKTREFOIL, PA ECOTYPE

0.1% MONARDA FISTULOSA, PA ECOTYPE WILD BERGAMOT, PA ECOTYPE SEED AT A RATE OF 20 LB/ACRE OF 100% PURE LIVE SEED

5% HELIOPSIS HELIANTHOIDES, PA ECOTYPE

0.4% DESMODIUM CANADENSE, PA ECOTYPE

- ALL SEEDING LOCATIONS SHALL BE STAKED IN FIELD REVIEWED AND APPROVED PRIOR TO THE APPLICATION.
 FINAL SEED MIXTURES, RATES & SPECIES TO BE DETERMINED BASED ON CONSERVATION COMMISSION REVIEW IN MASSACHUSETTS. 3. SEEDING SHALL TAKE PLACE IN THE SPRING (APRIL 1 TO JUNE 15) OR THE FALL (SEPTEMBER 1 TO
- MANUFACTURER'S SPECIFICATIONS. CONTRACTOR TO ENSURE HERBICIDE IS INDICATED FOR USE AROUND WATER BODIES.

 IT IS RECOMMENDED THAT CONTRACTOR INSTALL SEED MIXTURE USING A NO-TILL TRUAX-TYPE DRILL WHERE APPLICABLE.

 THERE MUST BE CONTINUOUS SOIL MOISTURE FOR 4-6 WEEKS TO ALLOW PROPER GERMINATION.
- 1. DURING THE ESTABLISHMENT YEAR, CONTRACTOR SHALL MOW SEEDING IF WEED HEIGHT EXCEEDS MEADON MIX HEIGHT. MOW AT A HEIGHT OF 8"-10". DO NOT MOW CLOSE, AS SOME OF THE MEADOW MIX MAY BE DAMAGED.

 AFTER THE FIRST GROWING SEASON, AND IF MEADOW MIX IS WELL ESTABLISHED, THE MEADOW MIX SHALL

 AFTER THE FIRST GROWING SEASON, AND IF MEADOW MIX IS WELL ESTABLISHED, THE MEADOW MIX SHALL

 AND ADDRESS OF THE PROPERTY OF THE MEADOW MIX SHALL BE DONE IN OCTOBER.
- BE MOWED ONLY ONCE ANNUALLY. ANNUAL MAINTENANCE MOWING SHALL BE DONE IN OCTOBER.

 3. MOW IN DETENTION BASIN AND WETLAND TRANSITION AREAS DURING DRIER SITE CONDITIONS WHEN SOIL DISTURBANCE WILL NOT OCCUR. MAINTENANCE FOR DETENTION BASIN AND WETLAND TRANSITION AREAS SHALL OCCUR DURING LATE SUMMER (JULY 15 AUGUST 15) WHEN THE WATER TABLE IS USUALLY AT ITS LOWEST POINT OF THE YEAR. DO NOT MOW IN DETENTION BASIN, WETLAND OR WETLAND TRANSITION AND A CONTRACT OF THE YEAR. AREAS AFTER ESTABLISHMENT OF MEADOW MIX.

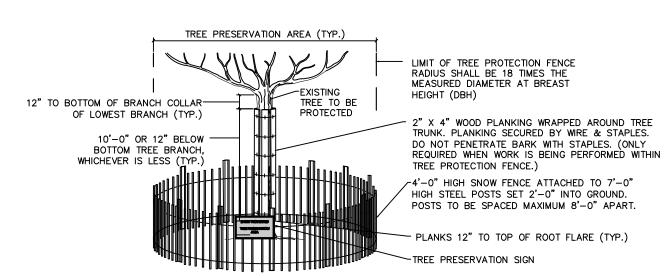
LANDSCAPE MAINTENANCE NOTES

- MAINTENANCE OPERATIONS BEFORE APPROVAL:
- A. PLANT CARE SHALL BEGIN IMMEDIATELY AFTER EACH PLANT IS SATISFACTORILY INSTALLED AND SHALL CONTINUE THROUGHOUT THE LIFE OF THE CONTRACT UNTIL FINAL ACCEPTANCE OF THE PROJECT.
- C. CONTRACTOR SHALL REMOVE AND REPLACE ALL DEAD, DEFECTIVE AND/OR REJECTED PLANTS AS 2. MAINTENANCE DURING CONSTRUCTION:
- A. MAINTENANCE SHALL BEGIN IMMEDIATELY AFTER PLANTING. PLANTS SHALL BE WATERED, MULCHED WEEDED, PRUNED, SPRAYED, FERTILIZED, CULTIVATED, AND OTHERWISE MAINTAINED AND PROTECTED UNTIL PROVISIONAL ACCEPTANCE. SETTLED PLANTS SHALL BE RESET TO PROPER GRADE AND POSITION, PLANTING SAUCER RESTORED AND DEAD MATERIAL REMOVED. STAKES AND WIRES SHALL BE GORRECTED AS SOON AS POSSIBLE AFTER IT BECOMES APPARENT AND WEATHER AND SEASON PERMIT.
- B. IF A SUBSTANTIAL NUMBER OF PLANTS ARE SICKLY OR DEAD AT THE TIME OF INSPECTION. ACCEPTANCE SHALL NOT BE GRANTED AND THE CONTRACTOR'S RESPONSIBILITY FOR MAINTENANCE OF ALL PLANTS SHALL BE EXTENDED FROM THE TIME REPLACEMENTS ARE MADE OR EXISTING PLANTS ARE DEEMED ACCEPTABLE BY THE LANDSCAPE ARCHITECT.
- C. ALL REPLACEMENTS SHALL BE PLANTS OF THE SAME KIND AND SIZE SPECIFIED ON THE PLANT LIST OR THAT WHICH WAS TO REMAIN OR BE RELOCATED. THEY SHALL BE FURNISHED AND PLANTED AS SPECIFIED. THE COST SHALL BE BORNE BY THE CONTRACTOR. REPLACEMENTS RESULTING FROM REMOVAL, LOSS, OR DAMAGE DUE TO OCCUPANCY OF THE PROJECT IN ANY PART, VANDALISM, PHYSICAL DAMAGE BY ANIMALS, VEHICLES, ETC., AND LOSSES DUE TO CURTAILMENT OF WATER BY LOCAL AUTHORITIES SHALL BE APPROVED AND PAID FOR BY THE OWNER.
- D. PLANTS SHALL BE GUARANTEED FOR A PERIOD OF TWO YEARS AFTER INSPECTION AND PROVISIONAL
- E. AT THE END OF THE ESTABLISHMENT PERIOD, INSPECTION SHALL BE MADE AGAIN. ANY PLANT REQUIRED UNDER THIS CONTRACT THAT IS DEAD OR UNSATISFACTORY TO THE LANDSCAPE ARCHITECT OR OWNER SHALL BE REMOVED FROM THE SITE AND REPLACED DURING THE NORMAL PLANTING SEASON.
- 3. MOWING MAINTENANCE(LAWN): A. BEGIN MOWING ONCE PER WEEK AFTER THE GRASS HAS REACHED 3 INCHES HEIGHT. MOW TO A HEIGHT OF NO LESS THAN 2-½ INCHES. AFTER 2 TO 3 WEEKS OF MOWING, CONTINUE TO WATER TO A 6 INCH MINIMUM SOIL DEPTH AS NECESSARY PER WEATHER CONDITIONS, AND SOIL MOISTURE SENSORS IF APPLICABLE.

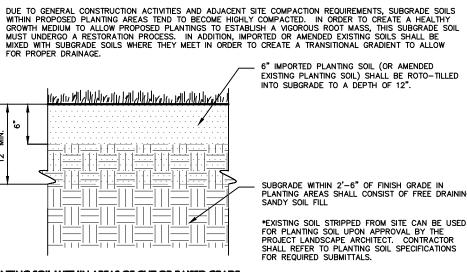
COMPLIANCE

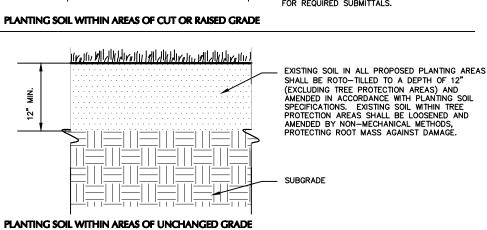
TREE PROTECTION NOTES:

- ALL EXISTING TREES WITHIN THE LIMITS OF TREE PROTECTION FENCING, SHALL BE PROTECTED THOUGHOUT THE DURATION OF WORK. TREE
 PROTECTION FENCING SHALL BE INSTALLED AT THE DRIP—LINE OF THE PROTECTED TREE UNLESS CONDITIONS WARRANT THE FENCE TO BE
 LOCATED WITHIN THE LIMIT OF BRANCHING. THE PROJECT LANDSCAPE ARCHITECT TO APPROVE THE LOCATION OF ALL FENCING PRIOR TO
 PROJECT AND THE PROJECT PROJECT LANDSCAPE ARCHITECT TO APPROVE THE LOCATION OF ALL FENCING PRIOR TO
- 2. TREE_PROTECTION PLANKING SHALL BE INSTALLED AROUND ALL EXISTING TREES AS NOTED ON THIS DRAWING. REFER TO DETAIL ON THIS
- 3. TREE PROTECTION FENCING SHALL BE MAINTAINED TO PROTECT TREES AT ALL TIMES. ANY DAMAGED FENCING SHALL BE IMMEDIATELY
- 4. IF TREE PROTECTION FENCING NEEDS TO BE MOVED OR BREACHED DUE TO TEMPORARY CONSTRUCTION ACTIVITY WITHIN THE TREE PROTECTION ZONE, THE FENCING WILL BE RESET TO ITS ORIGINAL LOCATION IMMEDIATELY AFTER CONSTRUCTION WITHIN THE TREE PROTECTION ZONE IS COMPLETE.
- DEMOLITION WORK ADJACENT TO PROTECTED TREES SHALL BE PERFORMED BY NON-MECHANICAL METHODS. CONTRACTOR TO PROTECT ROOT MASS AGAINST DAMAGE DURING EXCAVATION. ANY TREE ROOTS THAT ARE DISTURBED, BROKEN, OR CUT SHALL BE PRUNED BACK WITH CLEAN SHARP TOOLS.
- 6. ALL EXPOSED TREE ROOTS SHALL BE THOROUGHLY IRRIGATED ON A DAILY BASIS AS DIRECTED BY THE PROJECT LANDSCAPE ARCHITECT.
- 7. ALL WORK TO BE PERFORMED UNDER THE DIRECT SUPERVISION OF EITHER THE OWNER'S REPRESENTATIVE OR THE PROJECT LANDSCAPE ARCHITECT 8. TREES TO BE REMOVED SHALL BE MARKED IN THE FIELD PER THE PLAN AND TREES TO REMAIN SHALL BE MARKED IN THE FIELD AND



TREE PROTECTION FENCE AND PLANKING





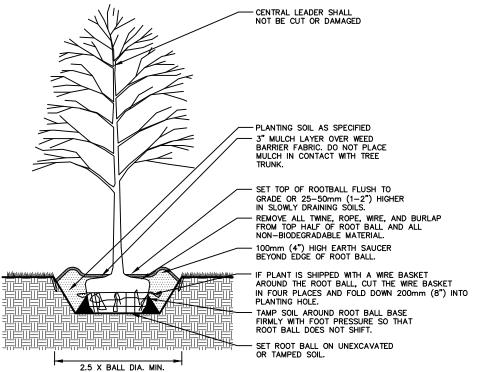
CONTRACTOR IS RESPONSIBLE TO SEND SAMPLES OF EXISTING SOILS INTENDED FOR USE IN PLANTING AREAS (1 PER 500 CY.) TO TESTING LABORATORY OR UNIVERSITY COOPERATIVE EXTENSION FOR TESTING. ALL TESTING COSTS ARE AT THE

2. RECYCLED CRUSHED CONCRETE AND ASPHALT MILLINGS SHALL NOT BE PLACED WITHIN 2'-6" OF FINISH GRADE IN PROPOSED LANDSCAPE AREAS. 3. IMPORTED FILL SHALL CONTAIN NO CONTAMINATION IN EXCEEDENCE OF THE APPLICABLE STATE ENVIRONMENTAL STANDARDS AND MEET THE ENVIRONMENTAL REQUIREMENTS FOR THE PROJECT. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION OF COMPLIANCE PRIOR TO DELIVERY OF ANY FILL TO THE SITE.

4. CONTRACTOR TO LIGHTLY COMPACT ALL PLACED PLANTING SOILS AND RAISE GRADES ACCORDINGLY TO ALLOW FOR FUTURE SETTLEMENT OF PLANTING SOILS (TYP.) 5. NO STONES, WOOD CHIPS, OR DEBRIS LARGER THAN 1/2" SHALL BE ACCEPTABLE WITHIN PLANTING AREAS.

PLANTING SOII

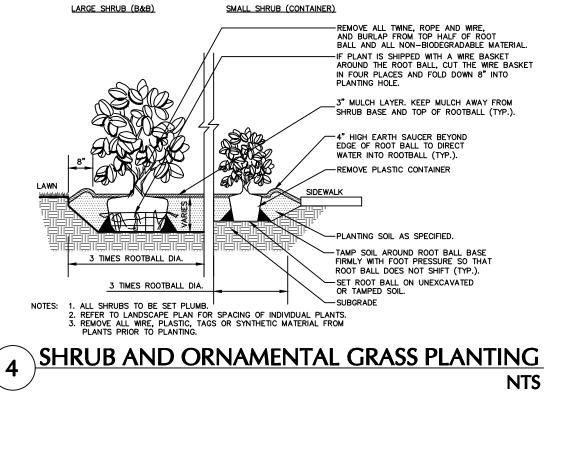
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TREE PLANTING

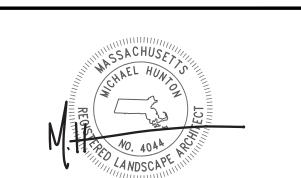
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NOI COMMENT REVISIONS 08/24/23 NOI COMMENT REVISIONS Date Description

Revisions



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MEDWAY BATTERY **ENERGY STORAGE SYSTEM**

NORFOLK COUNTY

Drawing Title

| PLANTING DETAILS

MASSACHUSETT

Project No. Drawing No. 151033401 _P501 06/08/2023

rawn By hecked By

Date: 10/3/2023 Time: 18:08 User: vcizik Style Table: Langan.stb Layout: LP501 Document Code: 151033401-0501-LP501-0101

THE REPLACEMENT OF VEGETATION SHALL BE ACCORDING TO THE FOLLOWING TABLE: TOTAL TREES REQUIRED: 30 TREES FOR EVERY EXISTING TRUNK (DBH) REPLACEMENT QUANTITY 23. F. 1 COMPLIES TOTAL TREES PLANTED: 31 TREES 3 TO 8 INCHES 8 TO 20 INCHES > 20 INCHES

PROVIDED / PROPOSED

TOWN OF MEDWAY - WETLAND BYLAW COMPLIANCE CHART