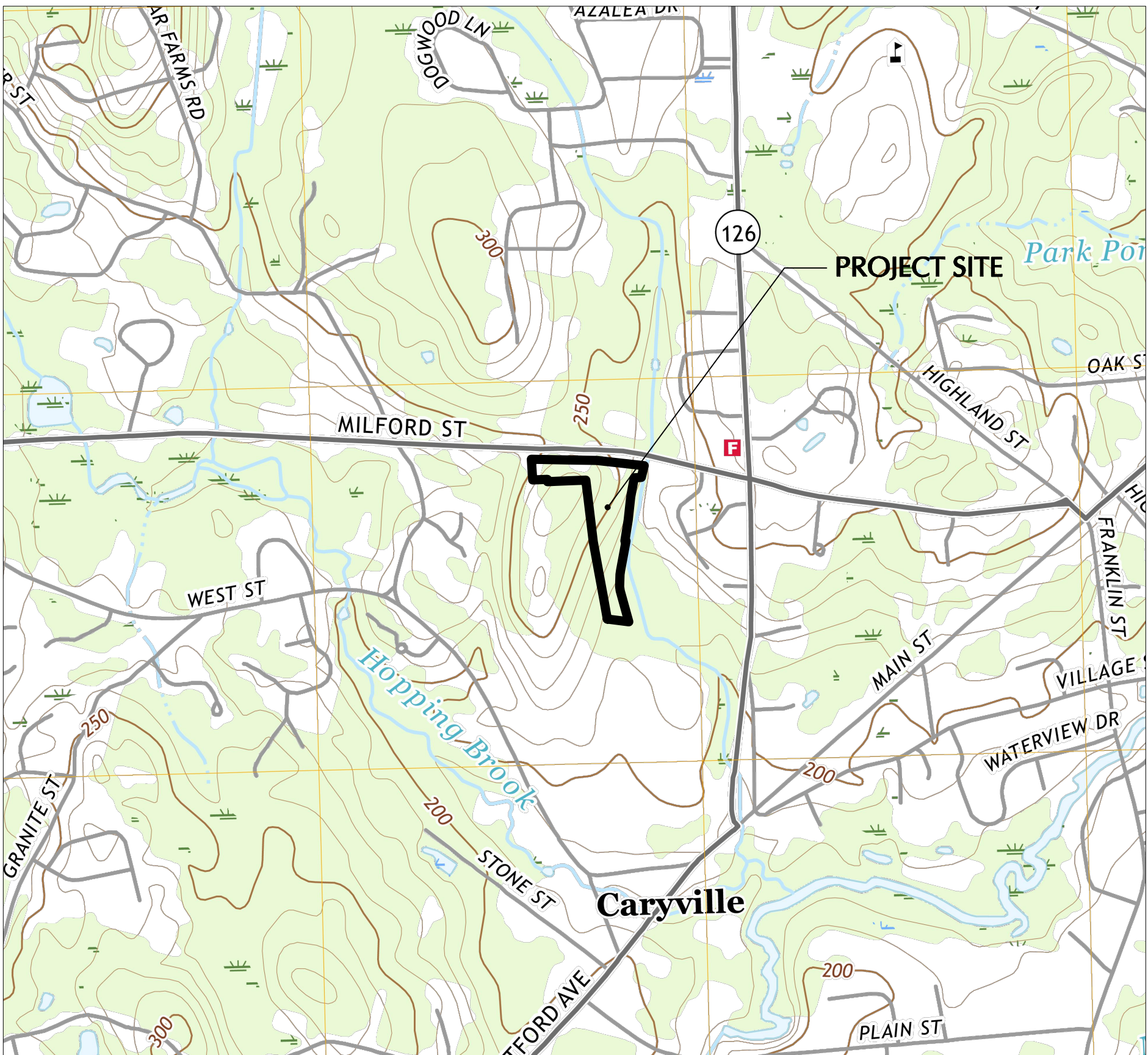


MEDWAY BATTERY ENERGY STORAGE SYSTEM
NOI PLAN SET
PARCELS: 046-005, 046-0056, 046-0057, 0056-0006
TOWN OF MEDWAY, NORFOLK COUNTY, MASSACHUSETTS

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
CG503	GRADING & DRAINAGE DETAILS III	06/08/2023	08/01/2024
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
CU501	UTILITY DETAILS	06/08/2023	
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



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

LOCATION MAP

SCALE: 1" = 1000'

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

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

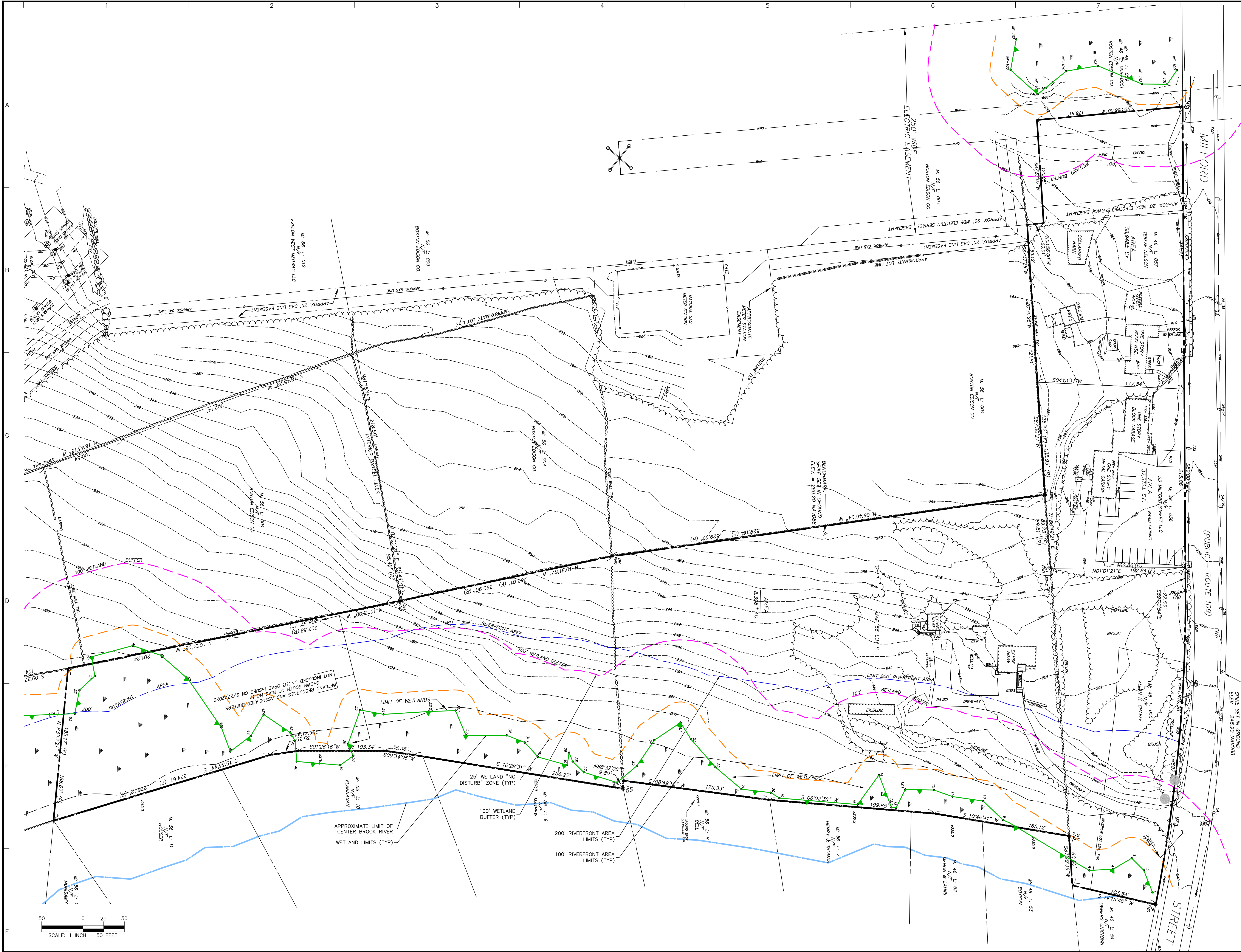
WETLANDS & NATURAL RESOURCES
EPSILON ASSOCIATES, INC.
C/O: MARC BERGERON
3 MILL & MAIN PLACE, SUITE 250
MAYNARD, MA 01754
PHONE: 978-461-6253
EMAIL:
MBERGERON@EPSILONASSOCIATES.COM

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

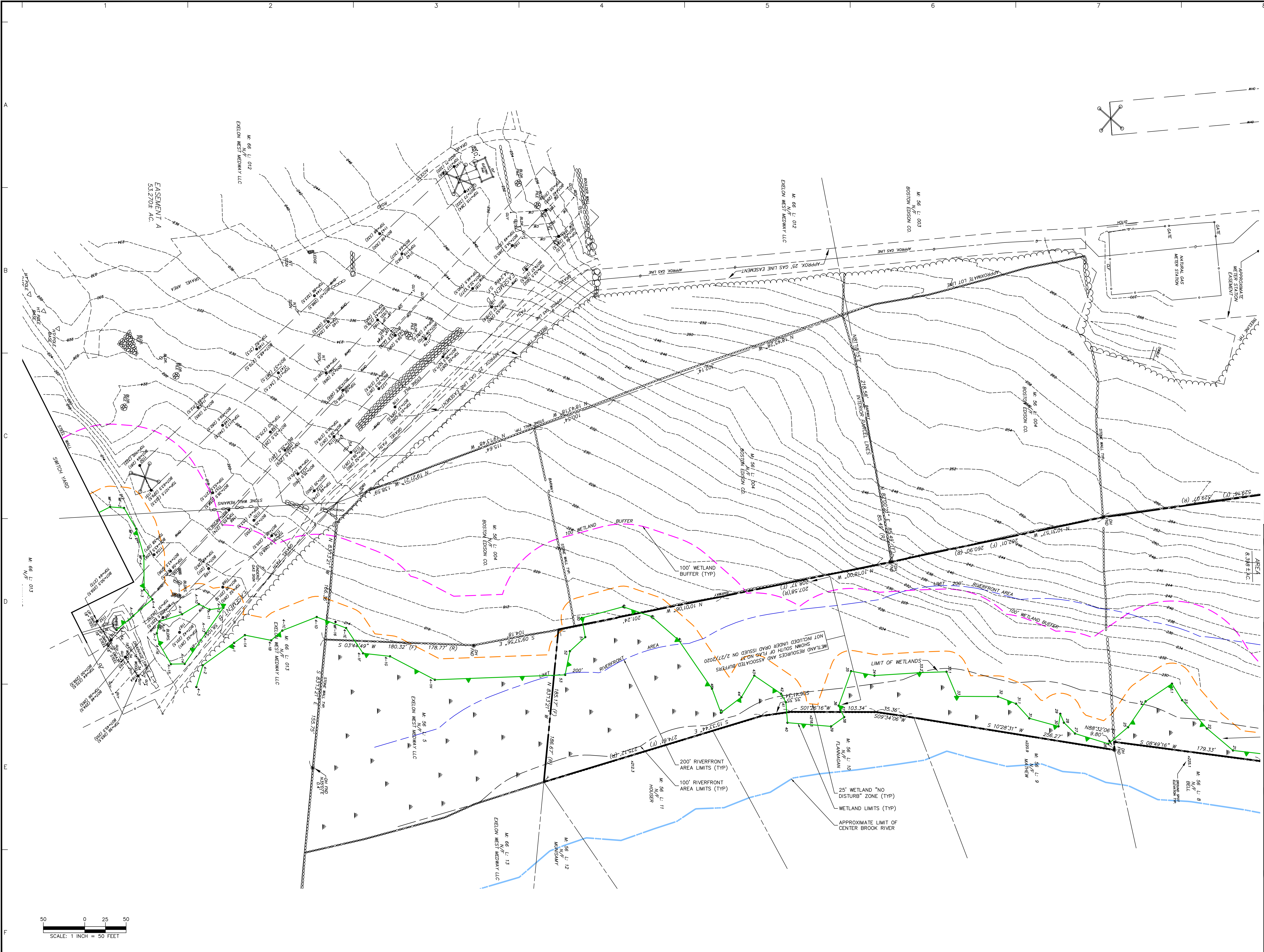
GEOTECHNICAL ENGINEER
GZA GEOENVIRONMENTAL, INC.
C/O: BRUCE FAIRLESS
249 VANDERBILT AVENUE
NORWOOD, MA 02062
PHONE: 781-248-3700
EMAIL: BRUCE.FAIRLESS@GZA.COM

LAND SURVEYOR
LAND PLANNING, INC.
C/O: NORMAN G. HILL
1115 MAIN STREET
HANSON, MA 02341
PHONE: 781-294-4144

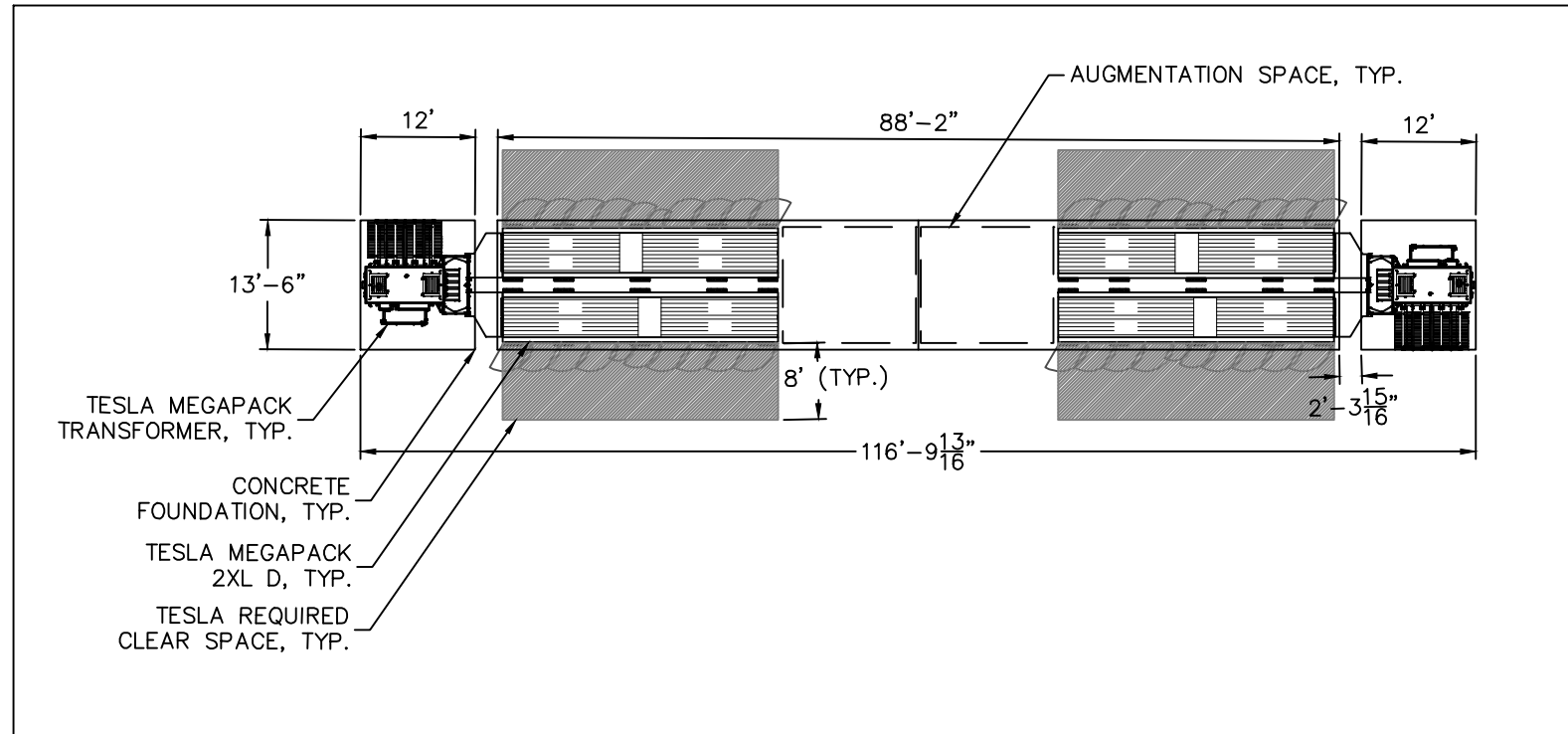
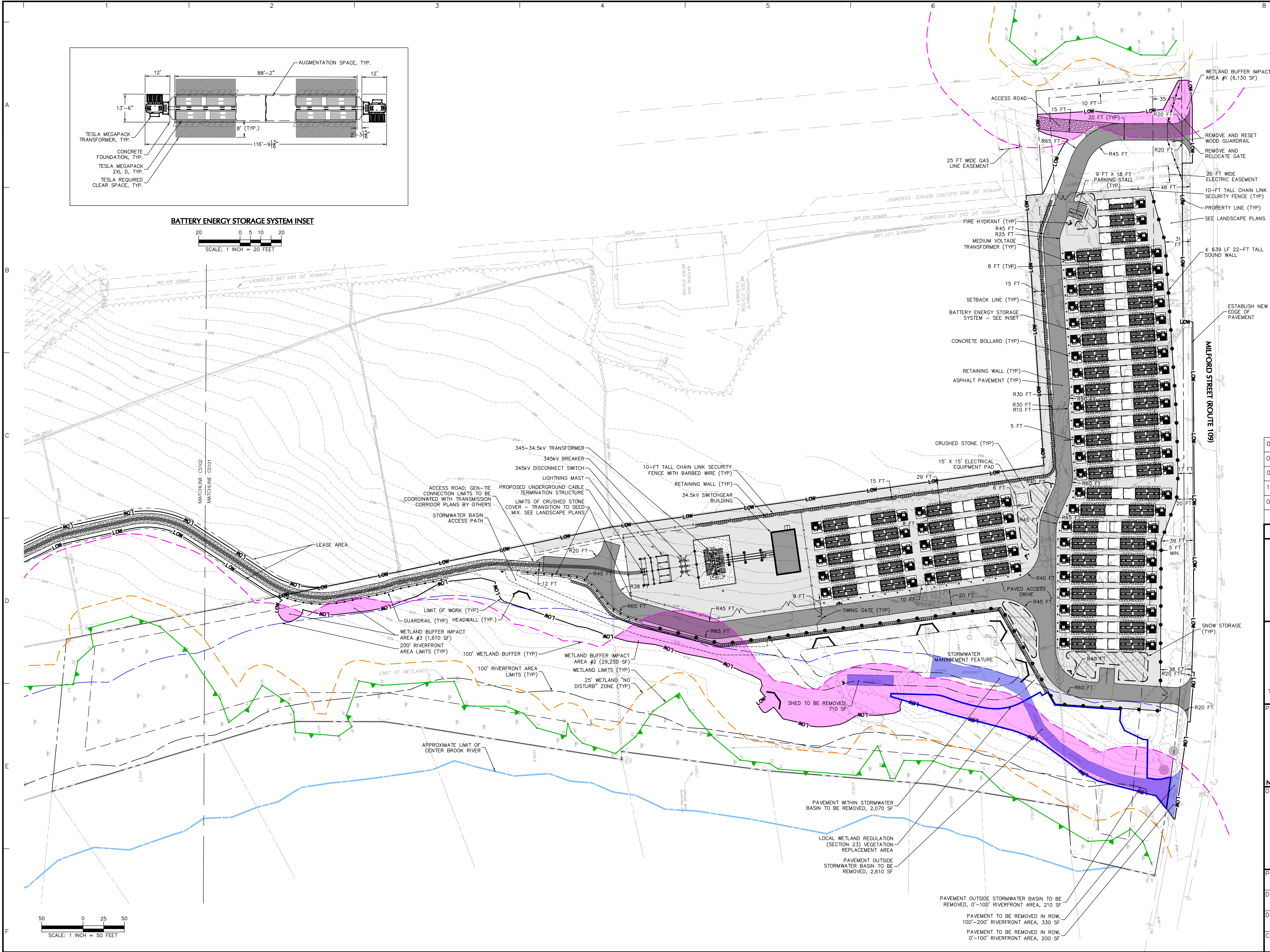
EPC CONTRACTOR
MCPHEE ELECTRIC, LTD.
C/O: MAX MCPHEE
505 MAIN STREET
FARMINGTON, CT 06032
PHONE: 860-677-9797



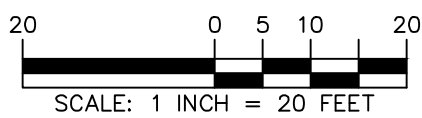
Date	Description	No.
Revisions		
<div><div><div><div><div><div></div><div>FRANK HOLMES</div></div></div><div><div><div></div><div>REGISTERED PROFESSIONAL ENGINEER</div></div><div><div></div><div>MASSACHUSETTS</div></div></div><div><div><div></div><div>NO. 40203</div></div></div></div></div><div>FRANK HOLMES</div></div>		
<div><div><div><div><div><div></div><div>LANGAN</div></div></div><div><div><div></div><div>LANGAN ENGINEERING AND ENVIRONMENTAL SERVICES, INC.</div></div></div><div><div><div></div><div>100 Cambridge Street, Suite 1310</div></div></div><div><div><div></div><div>Boston, MA 02114</div></div></div><div><div><div></div><div>T: 617.824.9100</div></div></div><div><div><div></div><div>F: 617.824.9101</div></div></div><div><div><div></div><div>www.langan.com</div></div></div></div></div></div>		
Project		
MEDWAY BATTERY ENERGY STORAGE SYSTEM		
MEDWAY		
NORFOLK COUNTY MASSACHUSETTS		
Drawing Title		
RESOURCE DELINEATION PLAN I		
Project No.		Drawing No.
151033401		EX101
Date	10/04/2023	
Drawn By	JSP	
Checked By	FH	



Date	Description	No.
Revisions		
LANGAN 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		
Project		
MEDWAY BATTERY ENERGY STORAGE SYSTEM MEDWAY MASSACHUSETTS		
Drawing Title		
RESOURCE DELINEATION PLAN II		
Project No.		Drawing No.
151033401		EX102
Date		
10/04/2023		
Drawn By		
JSP		
Checked By		
FH		

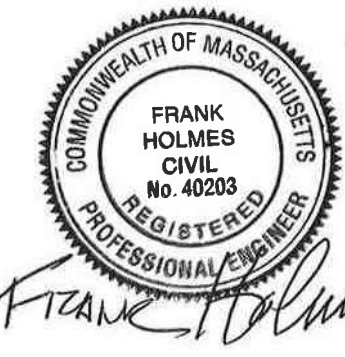


BATTERY ENERGY STORAGE SYSTEM INSET



08/01/24	NOI REVISIONS	5
07/05/24	EPC REVISIONS	4
01/25/24	CLIENT REVISIONS	3
10/04/23	NOI COMMENT REVISIONS	2
08/24/23	NOI COMMENT REVISIONS	1
Date	Description	No.

Revisions



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Project

**MEDWAY BATTERY
ENERGY STORAGE
SYSTEM**

NORFOLK COUNTY MEDWAY MASSACHUSETTS
Drawing Title

SITE PLAN

Project No.	Drawing No.
151033401	CS101
Date	
06/08/2023	
Drawn By	
JNW	
Checked By	
FH	

NOTE: PLEASE REFER TO POWER ENGINEER'S PROPOSED 345kV UNDERGROUND TRANSMISSION LINE PLANS FOR ADDITIONAL INFORMATION.

Date	Description	No.
08/01/24	NOI REVISIONS	3
10/04/23	NOI COMMENT REVISIONS	2
08/24/23	NOI COMMENT REVISIONS	1

Revisions

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Boston, MA 02114

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Project

**MEDWAY BATTERY
ENERGY STORAGE
SYSTEM**

MEDWAY

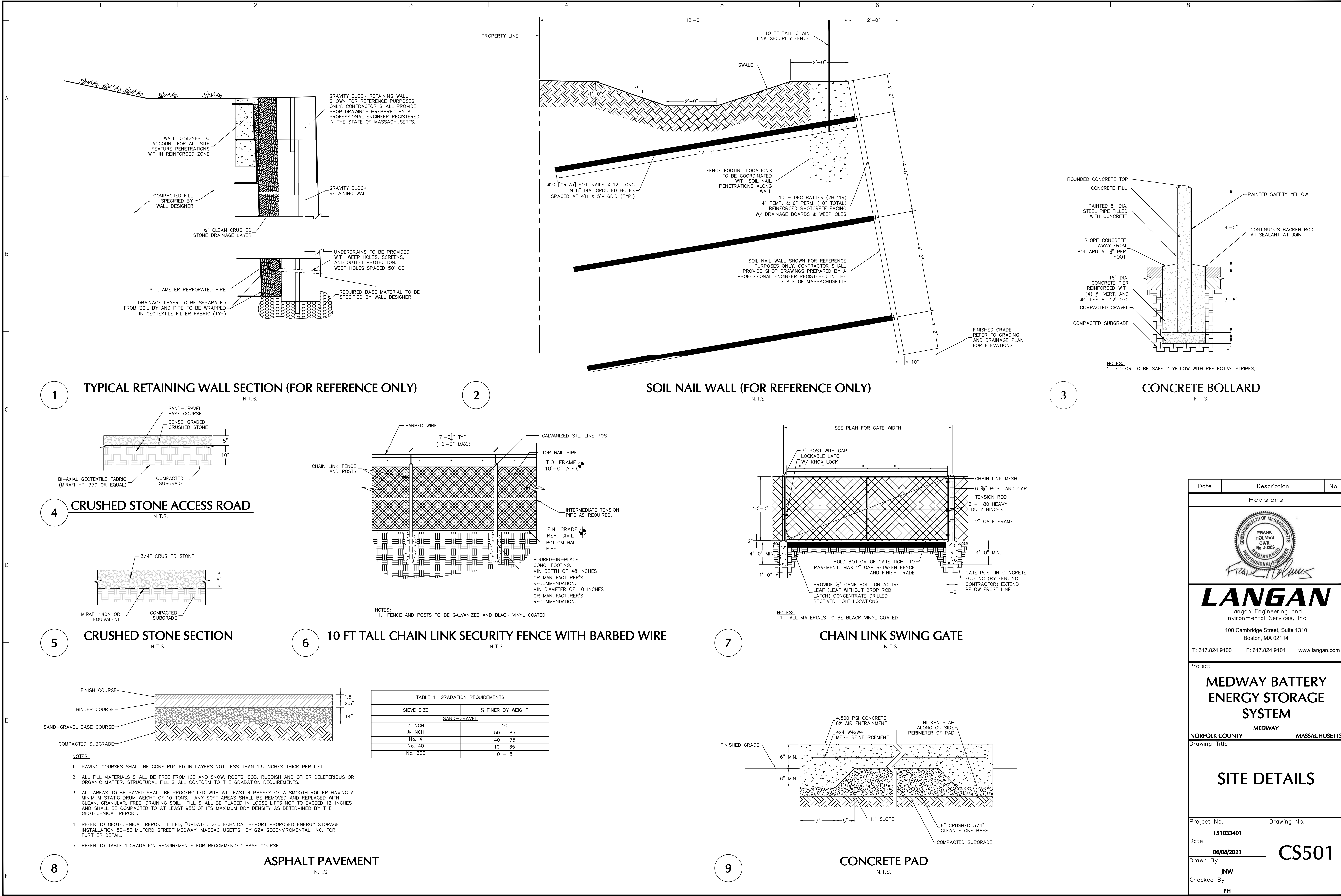
NORFOLK COUNTY MASSACHUSETTS

Drawing Title

**UNDERGROUND
TRANSMISSION
LINE SITE PLAN**

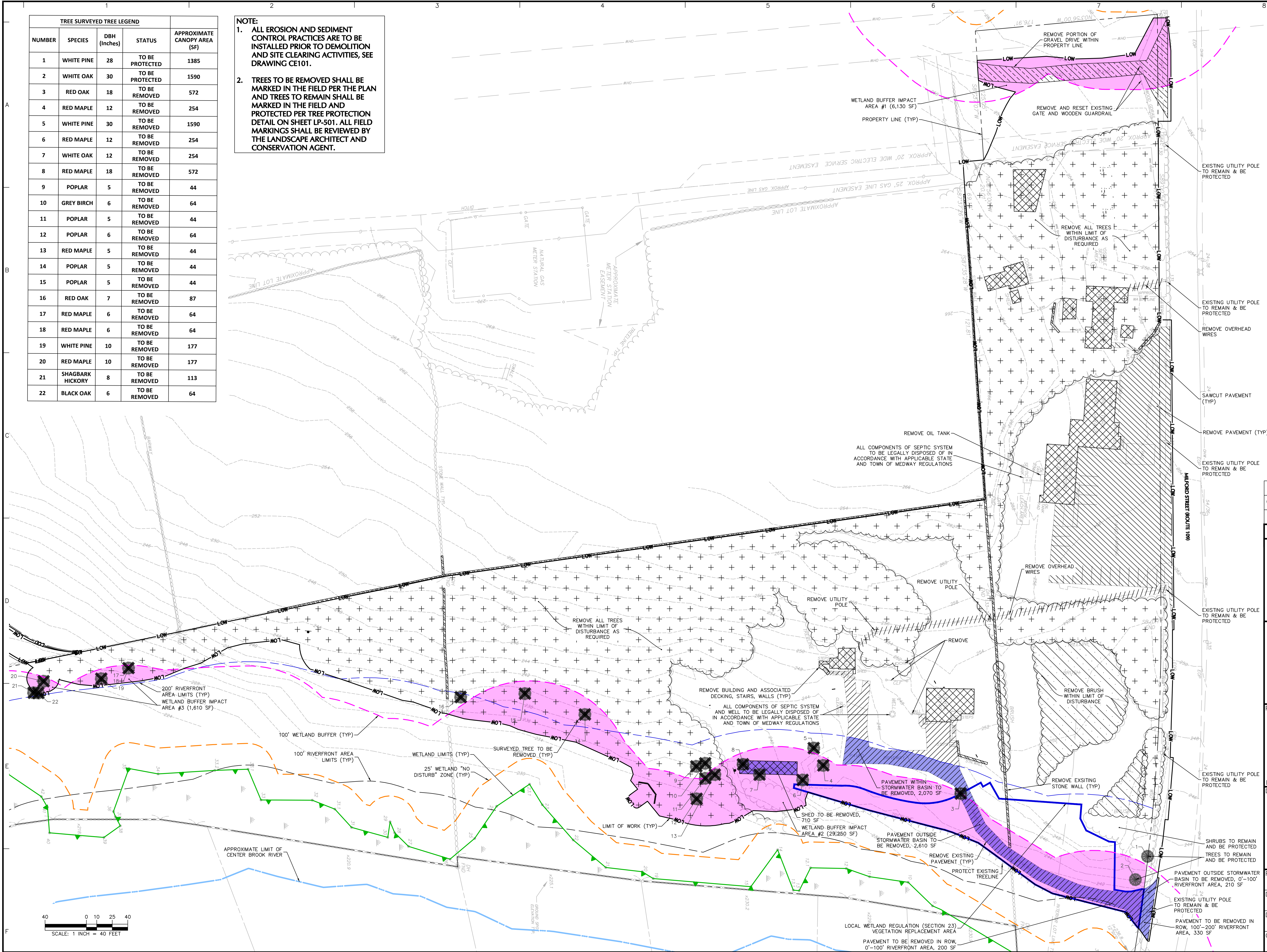
Project No.	Drawing No.
151033401	CS102
Date	
06/08/2023	
Drawn By	
JSP	FH
Checked By	

50 0 25 50
SCALE: 1 INCH = 50 FEET



TREE SURVEYED TREE LEGEND				
NUMBER	SPECIES	DBH (Inches)	STATUS	APPROXIMATE CANOPY AREA (SF)
1	WHITE PINE	28	TO BE PROTECTED	1385
2	WHITE OAK	30	TO BE PROTECTED	1590
3	RED OAK	18	TO BE REMOVED	572
4	RED MAPLE	12	TO BE REMOVED	254
5	WHITE PINE	30	TO BE REMOVED	1590
6	RED MAPLE	12	TO BE REMOVED	254
7	WHITE OAK	12	TO BE REMOVED	254
8	RED MAPLE	18	TO BE REMOVED	572
9	POPLAR	5	TO BE REMOVED	44
10	GREY BIRCH	6	TO BE REMOVED	64
11	POPLAR	5	TO BE REMOVED	44
12	POPLAR	6	TO BE REMOVED	64
13	RED MAPLE	5	TO BE REMOVED	44
14	POPLAR	5	TO BE REMOVED	44
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17	RED MAPLE	6	TO BE REMOVED	64
18	RED MAPLE	6	TO BE REMOVED	64
19	WHITE PINE	10	TO BE REMOVED	177
20	RED MAPLE	10	TO BE REMOVED	177
21	SHAGBARK HICKORY	8	TO BE REMOVED	113
22	BLACK OAK	6	TO BE REMOVED	64

NOTE:
1. ALL EROSION AND SEDIMENT CONTROL PRACTICES ARE TO BE INSTALLED PRIOR TO DEMOLITION AND SITE CLEARING ACTIVITIES, SEE DRAWING CE101.
2. 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	2
08/24/23	NOI COMMENT REVISIONS	1
Date	Description	No.

Revisions



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Project

MEDWAY BATTERY ENERGY STORAGE SYSTEM

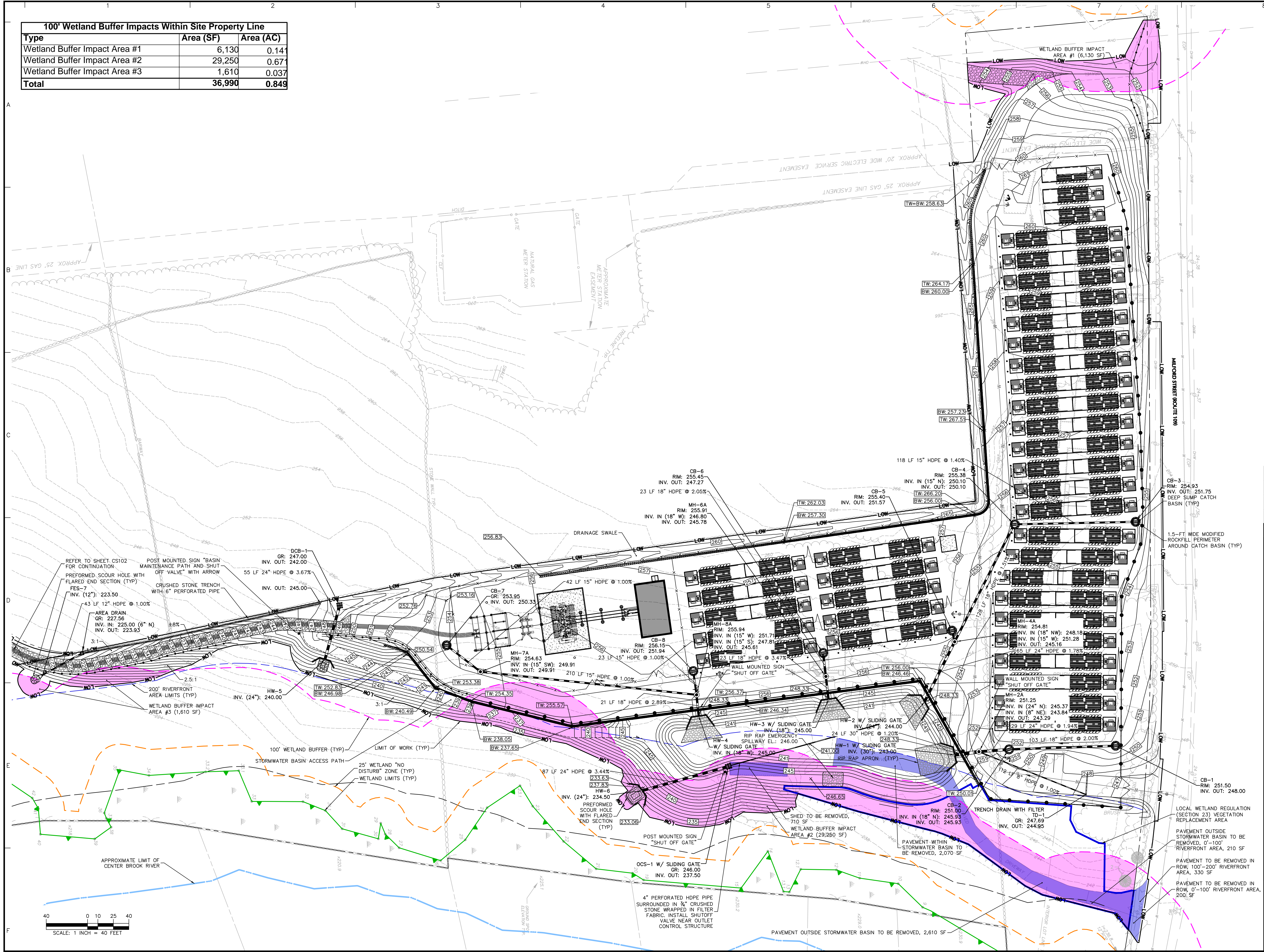
NORFOLK COUNTY MEDWAY MASSACHUSETTS

Drawing Title

SITE PREPARATION PLAN

Project No.	Drawing No.
151033401	CD101
Date	
06/08/2023	
Drawn By	
JNW	
Checked By	
FH	

100' Wetland Buffer Impacts Within Site Property Line		
Type	Area (SF)	Area (AC)
Wetland Buffer Impact Area #1	6,130	0.14
Wetland Buffer Impact Area #2	29,250	0.67
Wetland Buffer Impact Area #3	1,610	0.037
Total	36,990	0.849



08/01/24	NOI REVISIONS	3
10/04/23	NOI COMMENT REVISIONS	2
08/24/23	NOI COMMENT REVISIONS	1
Date	Description	No.

Revisions

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Project

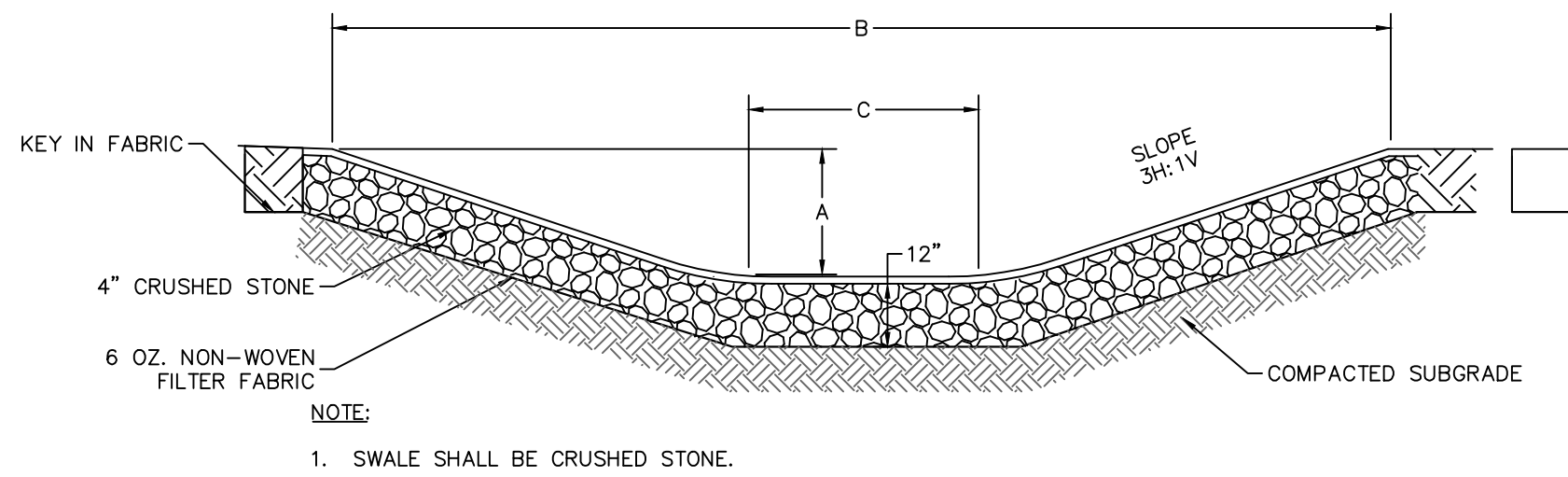
**MEDWAY BATTERY
ENERGY STORAGE
SYSTEM**

MEDWAY
NORFOLK COUNTY MASSACHUSETTS

Drawing Title

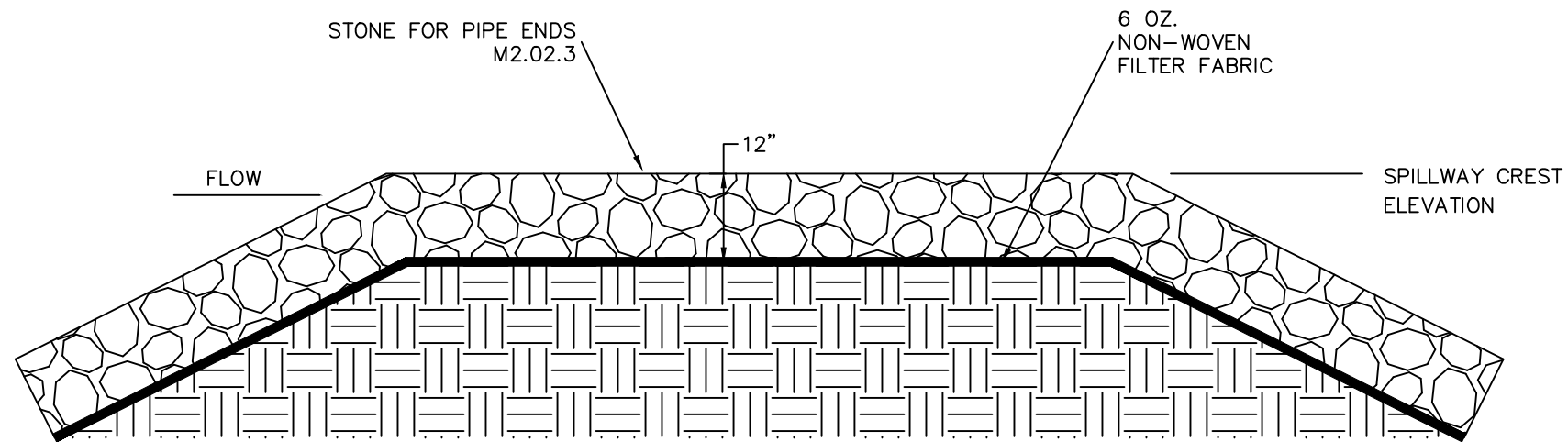
**GRADING &
DRAINAGE PLAN**

Project No.	Drawing No.
151033401	CG101
Date	
06/08/2023	
Drawn By	
JNW	
Checked By	
FH	



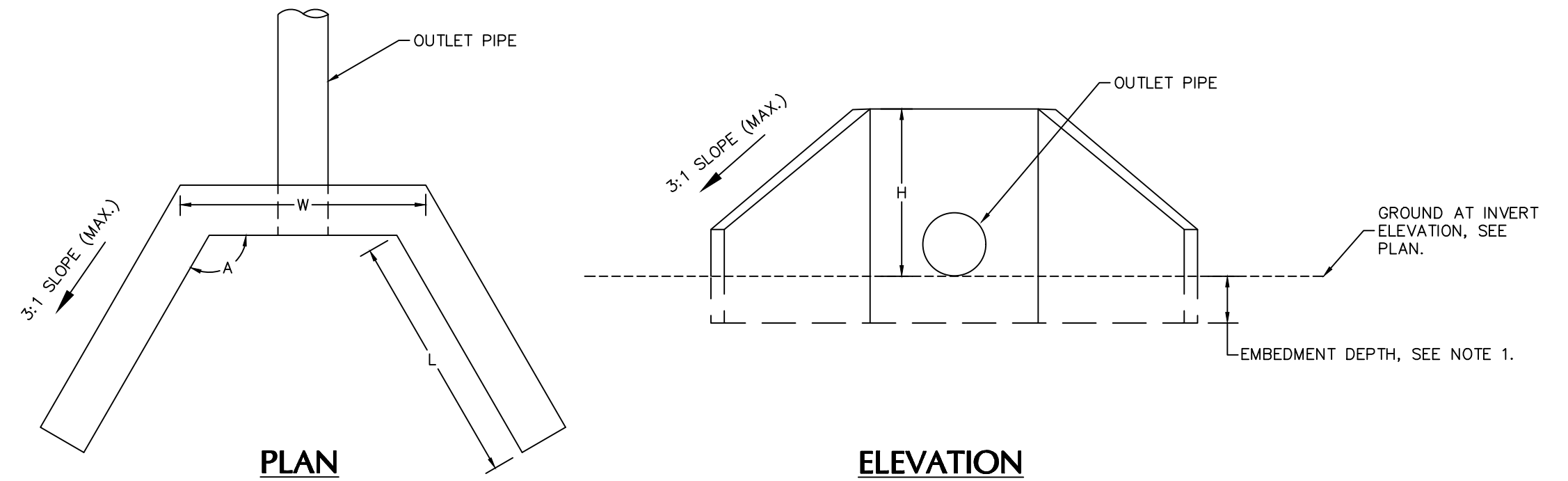
SWALE DESIGN SCHEDULE				
SWALE LOCATION	LENGTH (FT)	A MIN. DEPTH (FT)	B MIN. TOP WIDTH (FT)	C BOTTOM WIDTH (FT)
WESTERN PROPERTY LINE	PER PLAN	1.0	8.0	2.0

SWALE
N.T.S.



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

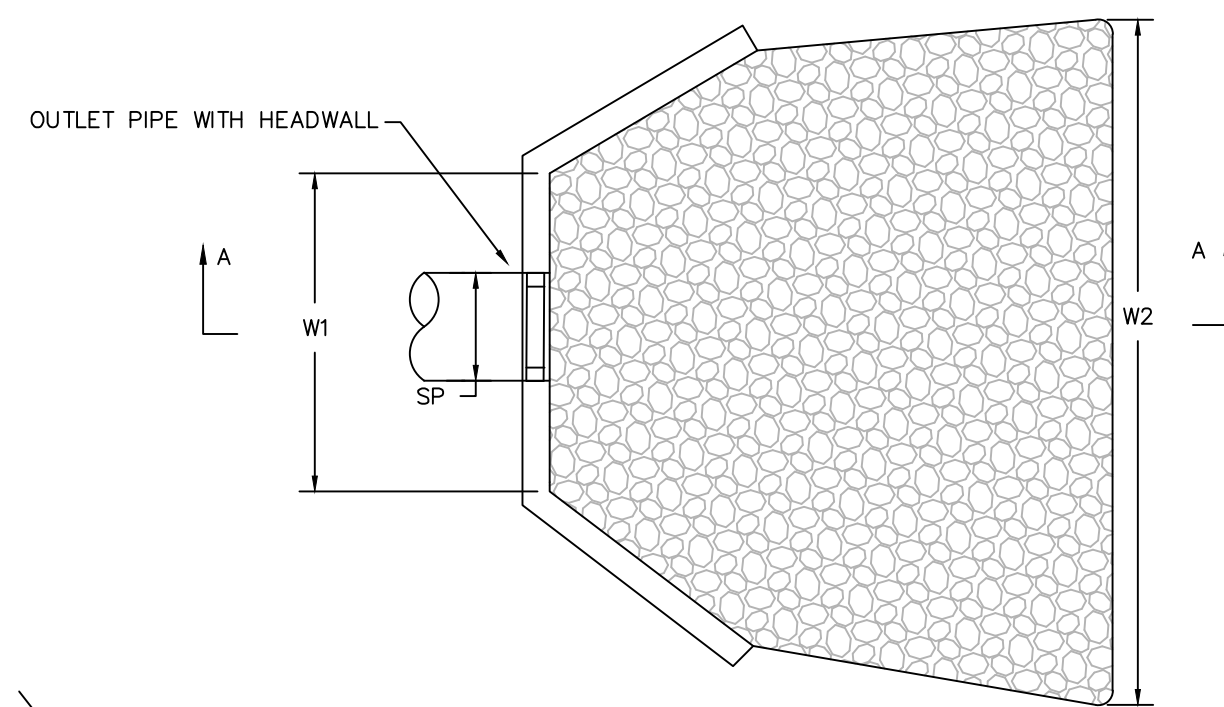
RIP RAP EMERGENCY SPILLWAY
N.T.S.



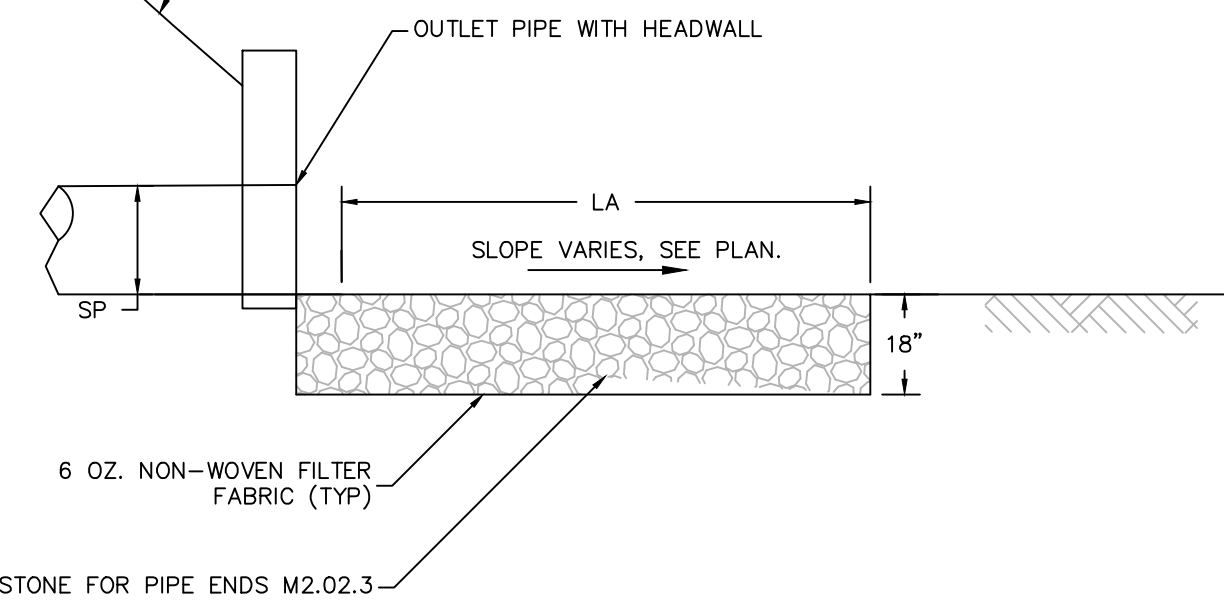
- NOTES:
- CONTRACTOR TO PROVIDE SHOP DRAWINGS FOR HEADWALL STAMPED BY A STRUCTURAL ENGINEER LICENSED IN THE COMMONWEALTH OF MASSACHUSETTS FOR THE HEADWALLS INDICATING CONCRETE THICKNESS, REINFORCEMENT, AND EMBEDMENT DEPTH.
 - ALL HEADWALLS SHALL HAVE A GUARDRAIL AT THE TOP OF THE WALL. THE GUARDRAIL 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]	H	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

HEADWALL
N.T.S.



PLAN

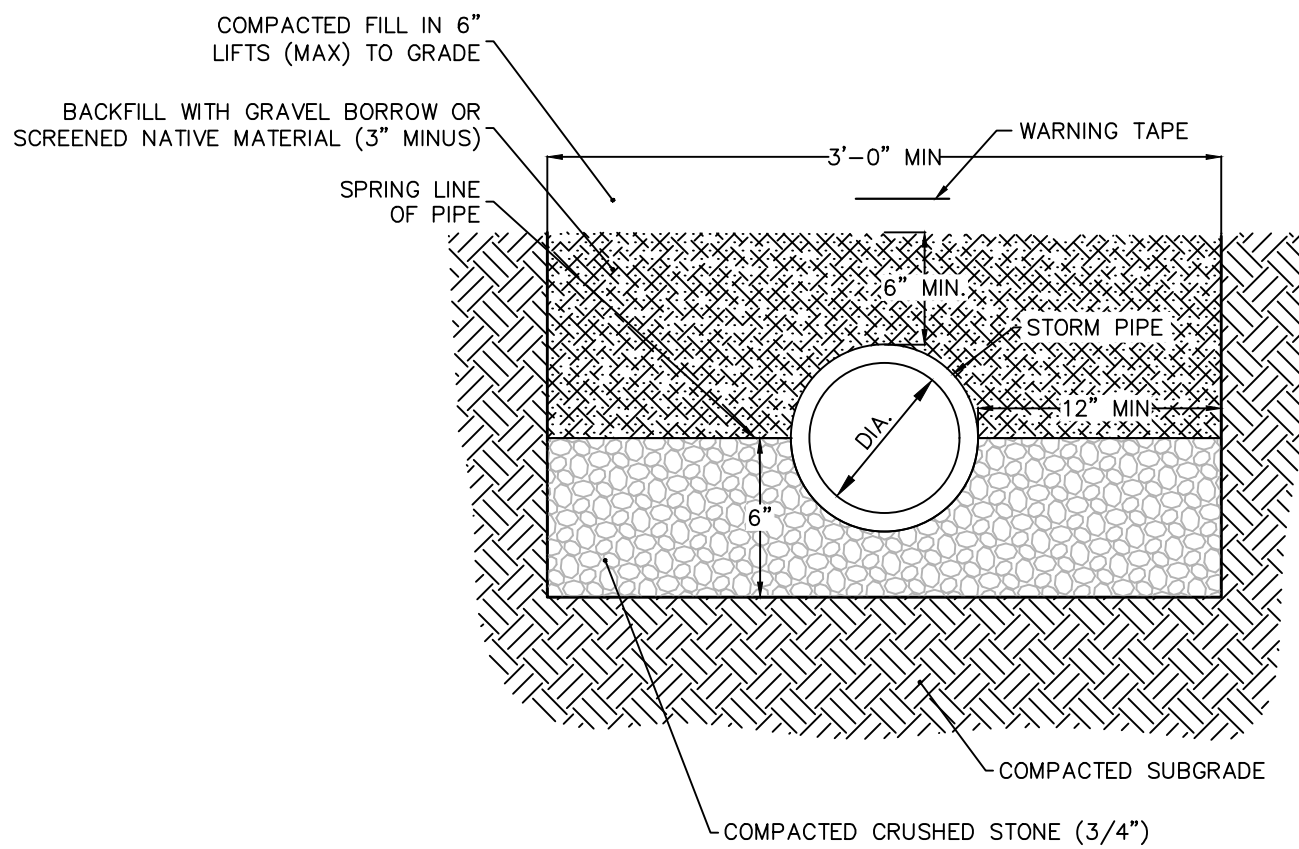


SECTION A-A

- NOTES:
- SEE GRADING AND DRAINAGE PLAN FOR SIZES/DIMENSIONS

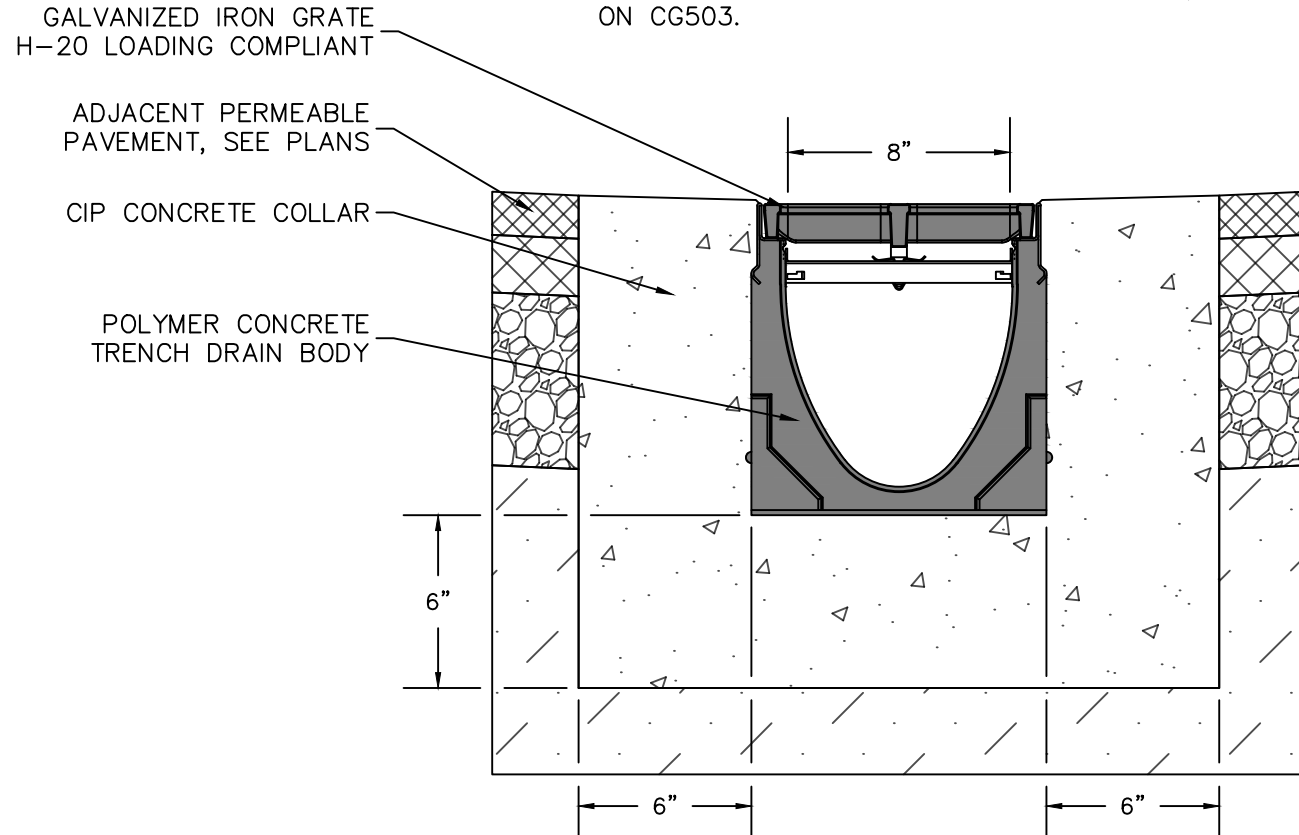
STRUCTURE	LA [FT]	W1 [FT]	W2 [FT]	SP [FT]
HW-1	36	14.5	27	2.5
HW-2	21	14	31	2
HW-3	20	13.5	37	1.5
HW-4	23	13.5	40	1.5

RIPRAP APRON
N.T.S.

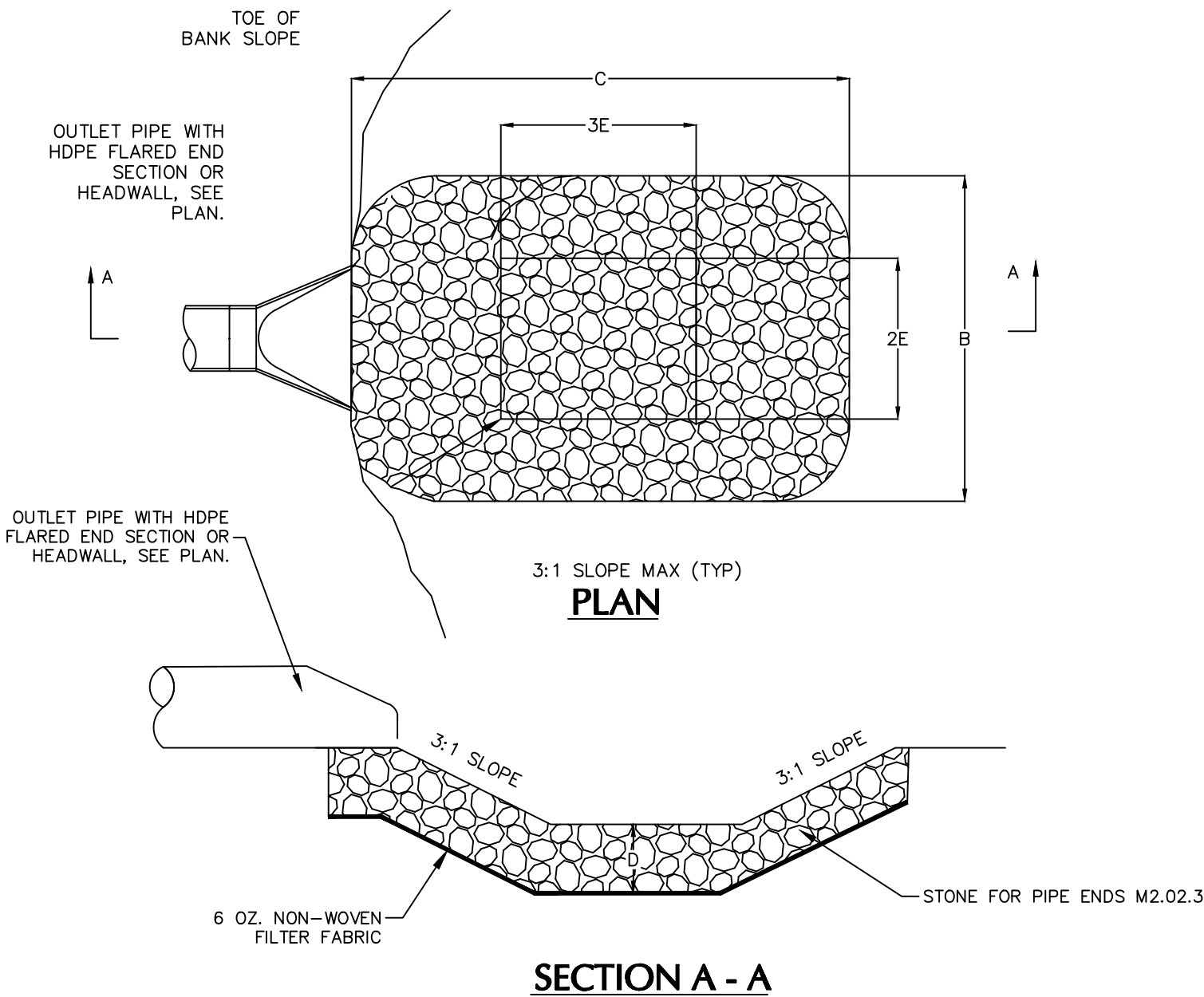


STORM PIPE BEDDING
N.T.S.

- NOTES:
- MINIMUM CONCRETE STRENGTH OF 4,000 PSI. VIBRATE TO ELIMINATE AIR POCKETS.
 - THE FINISHED LEVEL OF THE CONCRETE SURROUND MUST BE APPROX. 1/8" [3mm] ABOVE THE TOP OF THE CHANNEL EDGE.
 - INSTALL PER MANUFACTURER INSTRUCTIONS.
 - MINIMUM TRENCH DRAIN DEPTH SHALL BE 6.5" FROM THE BOTTOM OF THE GRATE.
 - TRENCH DRAIN FILTER SHALL BE INSTALLED, SEE DETAIL 8 ON CG503.



TRENCH DRAIN
N.T.S.



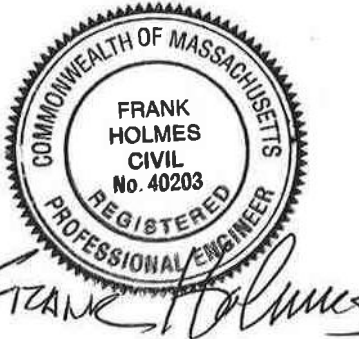
- NOTE:
- SIDE SLOPES SHALL BE 3:1 OR FLATTER.

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
N.T.S.

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

Revisions



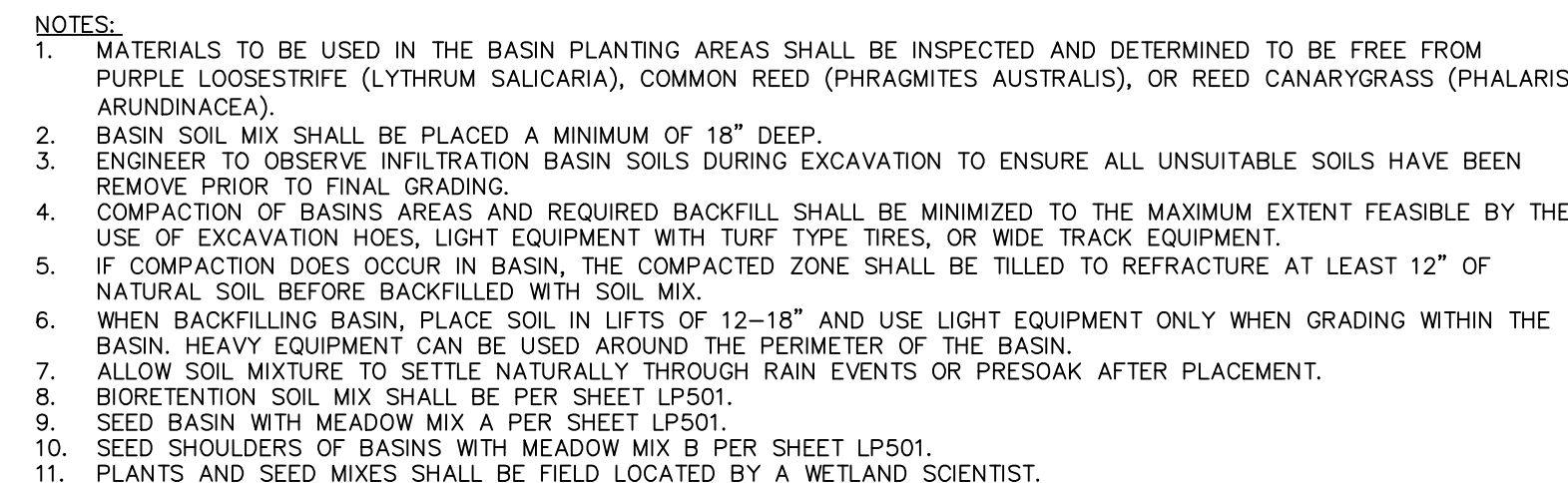
LANGAN

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

Project
**MEDWAY BATTERY
ENERGY STORAGE
SYSTEM**
NORFOLK COUNTY MEDWAY MASSACHUSETTS
Drawing Title

**GRADING &
DRAINAGE DETAILS**

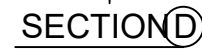
Project No. 151033401	Drawing No. CG501
Date 06/08/2023	
Drawn By JNW	
Checked By FH	



N.T.S.



N.T.S.



1. GRATE SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05.2
2. DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS. RISERS ARE NEEDED FOR BASINS OVER 84" DUE TO SHIPPING RESTRICTIONS.
3. DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE (ADS N-12/HANCOR DUAL WALL), N-12 HP, & PVC SEWER.
5. ADAPTERS CAN BE MOUNTED ON ANY ANGLE 0° TO 360°.

N.T.S.



NOTES: UNLESS OTHERWISE SPECIFIED.

1. (GATE CATING) DESIGN SEATING HEAD = _____ FT. (S.P. = _____ LB./IN.)
 QUITTING GATE FROM LINE: MAXIMUM SEATING HEAD = _____ FT.; MAXIMUM UNSEATING HEAD = _____ FT. [8]
2. LIFT CAPACITY = _____ LBS. @ _____ IN./MIN. (_____ FT./LBS.; _____ RPM)
3. TURN HANDWHEEL CROW TO OPEN (RAISE) GATE.
4. 29° STUB ACME THROADS. (_____ PITCH, _____ LEAD, _____ I.)
5. CONTRACTOR TO VERIFY OR SUPPLY _____
6. DIMENSION INCLUDES GASKET THICKNESS.
7. CONTRACTOR TO PROVIDE HILTI HIT-RE 500-V3 (WET OR DRY CONDITIONS), HILTI HY-200 (DRY CONDITIONS ONLY); OR EQUAL EPOXY FOR ANCHORS

Revisions

SEAL OF THE COMMONWEALTH OF MASSACHUSETTS



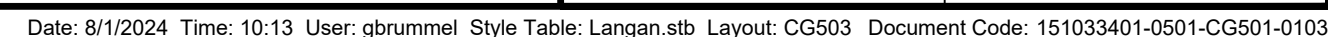
Project

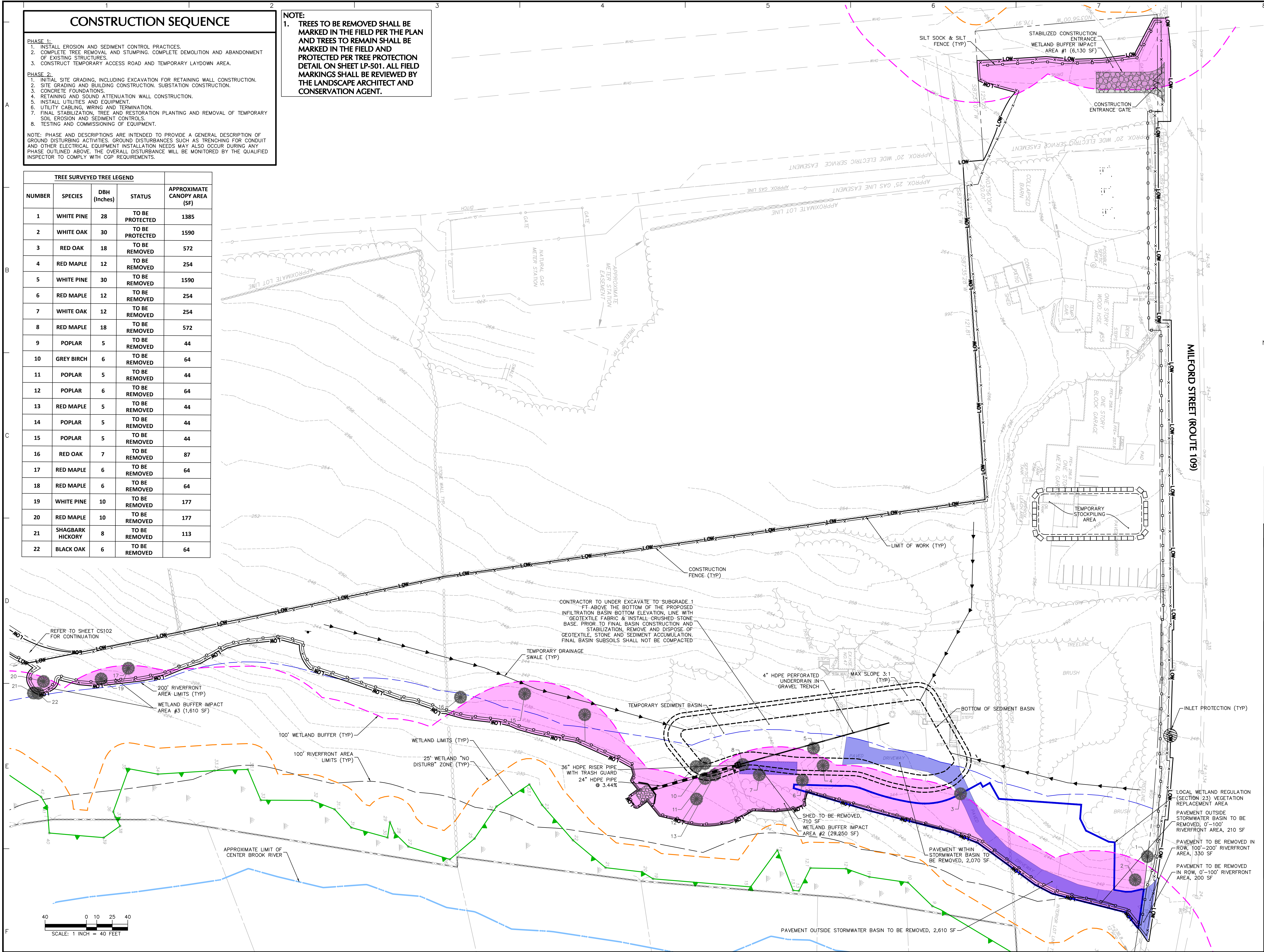
MEDWAY

NORFOLK COUNTY MASSACHUSETTS

11

CG502





CONSTRUCTION SEQUENCE

PHASE 1:

1. INSTALL EROSION AND SEDIMENT CONTROL PRACTICES.
2. COMPLETE TREE REMOVAL AND STUMPING, COMPLETE DEMOLITION AND ABANDONMENT OF EXISTING STRUCTURES.
3. CONSTRUCT TEMPORARY ACCESS ROAD AND TEMPORARY LAYDOWN AREA.

PHASE 2:

1. INITIAL SITE GRADING, INCLUDING EXCAVATION FOR RETAINING WALL CONSTRUCTION.
2. SITE GRADING AND BUILDING CONSTRUCTION, SUBSTATION CONSTRUCTION.
3. CONCRETE FOUNDATIONS.
4. RETAINING AND SOUND ATTENUATION WALL CONSTRUCTION.
5. INSTALL UTILITIES AND EQUIPMENT.
6. UTILITY CABLING, WIRING AND TERMINATION.
7. FINAL STABILIZATION, TREE AND RESTORATION PLANTING AND REMOVAL OF TEMPORARY SOIL EROSION AND SEDIMENT CONTROLS.
8. TESTING AND COMMISSIONING OF EQUIPMENT.

NOTE: PHASE AND DESCRIPTIONS ARE INTENDED TO PROVIDE A GENERAL DESCRIPTION OF GROUND DISTURBING ACTIVITIES. GROUND DISTURBANCES SUCH AS TRENCHING FOR CONDUIT AND OTHER ELECTRICAL EQUIPMENT INSTALLATION NEEDS MAY ALSO OCCUR DURING ANY PHASE OUTLINED ABOVE. THE OVERALL DISTURBANCE WILL BE MONITORED BY THE QUALIFIED INSPECTOR TO COMPLY WITH CGP REQUIREMENTS.

TREE SURVEYED TREE LEGEND				
NUMBER	SPECIES	DBH (Inches)	STATUS	APPROXIMATE CANOPY AREA (SF)
1	WHITE PINE	28	TO BE PROTECTED	1385
2	WHITE OAK	30	TO BE PROTECTED	1590
3	RED OAK	18	TO BE REMOVED	572
4	RED MAPLE	12	TO BE REMOVED	254
5	WHITE PINE	30	TO BE REMOVED	1590
6	RED MAPLE	12	TO BE REMOVED	254
7	WHITE OAK	12	TO BE REMOVED	254
8	RED MAPLE	18	TO BE REMOVED	572
9	POPLAR	5	TO BE REMOVED	44
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17	RED MAPLE	6	TO BE REMOVED	64
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19	WHITE PINE	10	TO BE REMOVED	177
20	RED MAPLE	10	TO BE REMOVED	177
21	SHAGBARK HICKORY	8	TO BE REMOVED	113
22	BLACK OAK	6	TO BE REMOVED	64

NOTE:

1. 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.

- NOTE:
1. THE TOTAL AREA WITHIN THE PROPOSED LIMIT OF WORK WITHIN THE PROPERTY BOUNDARY IS APPROXIMATELY 295,500 SF.
 2. SEE SOIL EROSION AND SEDIMENT CONTROL NOTES ON CS002. SEE SOIL EROSION AND SEDIMENT CONTROL NOTE 12 FOR INSPECTION SCHEDULE.
 3. REFER TO STORMWATER POLLUTION PREVENTION PLAN (SWPPP) FOR DETAILED INSPECTION AND MAINTENANCE SCHEDULES.

08/01/24	NOI REVISIONS	3
10/04/23	NOI COMMENT REVISIONS	2
08/24/23	NOI COMMENT REVISIONS	1
Date	Description	No.

Revisions

FRANK HOLMES
CIVIL
No. 40293
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Project

MEDWAY BATTERY ENERGY STORAGE SYSTEM

NORFOLK COUNTY MASSACHUSETTS

Drawing Title

SOIL EROSION & SEDIMENT CONTROL PLAN PHASE I

Project No.	151033401	Drawing No.	CE101
Date	06/08/2023		
Drawn By	JNW		
Checked By	FH		

CONSTRUCTION SEQUENCE

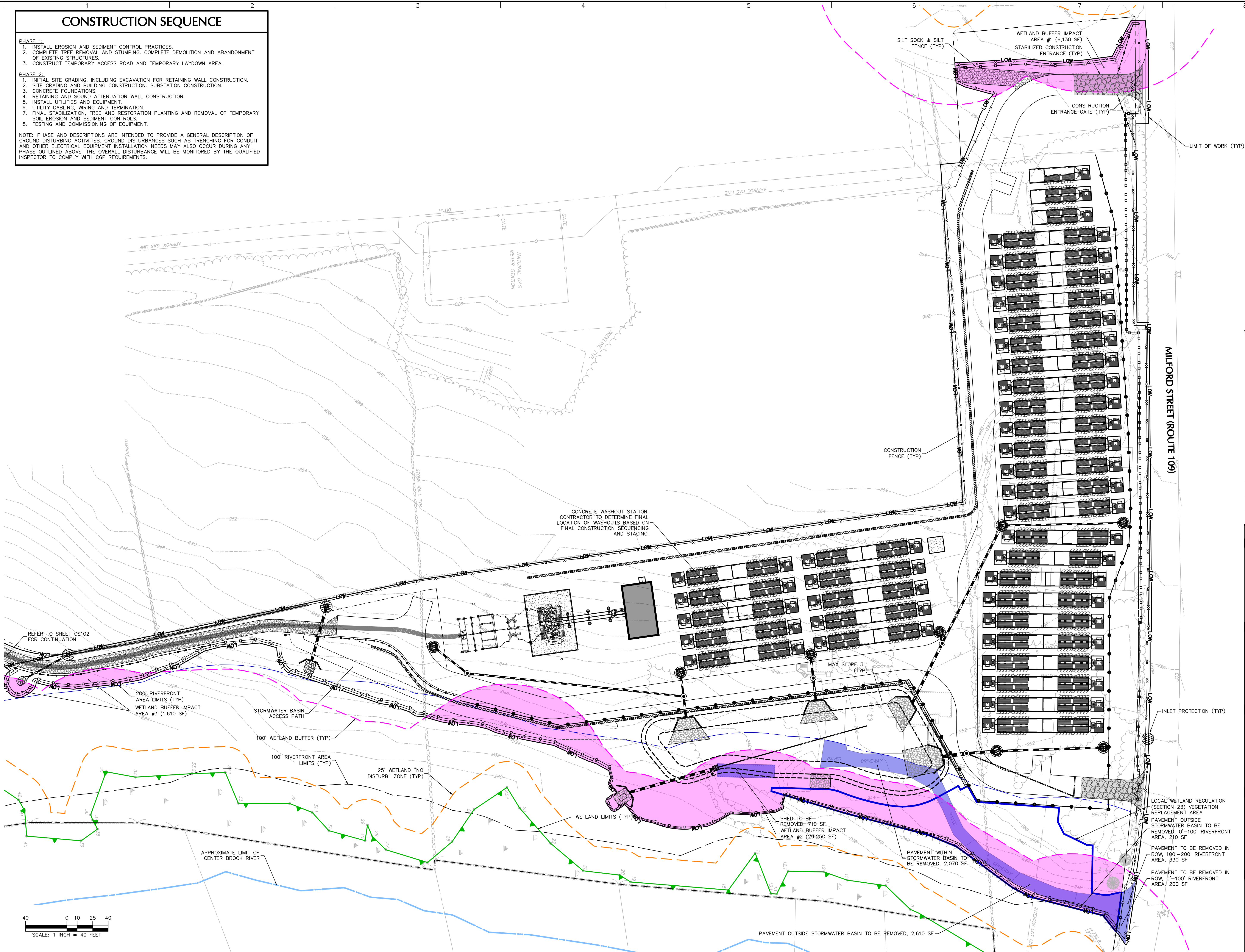
PHASE 1:

1. INSTALL EROSION AND SEDIMENT CONTROL PRACTICES.
2. COMPLETE TREE REMOVAL AND STUMPING. COMPLETE DEMOLITION AND ABANDONMENT OF EXISTING STRUCTURES.
3. CONSTRUCT TEMPORARY ACCESS ROAD AND TEMPORARY LAYDOWN AREA.

PHASE 2:

1. INITIAL SITE GRADING, INCLUDING EXCAVATION FOR RETAINING WALL CONSTRUCTION.
2. SITE GRADING AND BUILDING CONSTRUCTION. SUBSTATION CONSTRUCTION.
3. CONCRETE FOUNDATIONS.
4. RETAINING AND SOUND ATTENUATION WALL CONSTRUCTION.
5. INSTALL UTILITIES AND EQUIPMENT.
6. UTILITY CABLING, WIRING AND TERMINATION.
7. FINAL STABILIZATION, TREE AND RESTORATION PLANTING AND REMOVAL OF TEMPORARY SOIL EROSION AND SEDIMENT CONTROLS.
8. TESTING AND COMMISSIONING OF EQUIPMENT.

NOTE: PHASE AND DESCRIPTIONS ARE INTENDED TO PROVIDE A GENERAL DESCRIPTION OF GROUND DISTURBING ACTIVITIES. GROUND DISTURBANCES SUCH AS TRENCHING FOR CONDUIT AND OTHER ELECTRICAL EQUIPMENT INSTALLATION NEEDS MAY ALSO OCCUR DURING ANY PHASE OUTLINED ABOVE. THE OVERALL DISTURBANCE WILL BE MONITORED BY THE QUALIFIED INSPECTOR TO COMPLY WITH CGP REQUIREMENTS.



NOTE:

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.

08/01/24	NOI REVISIONS	3
10/04/23	NOI COMMENT REVISIONS	2
08/24/23	NOI COMMENT REVISIONS	1
Date	Description	No.

Revisions



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Project

**MEDWAY BATTERY
ENERGY STORAGE
SYSTEM**

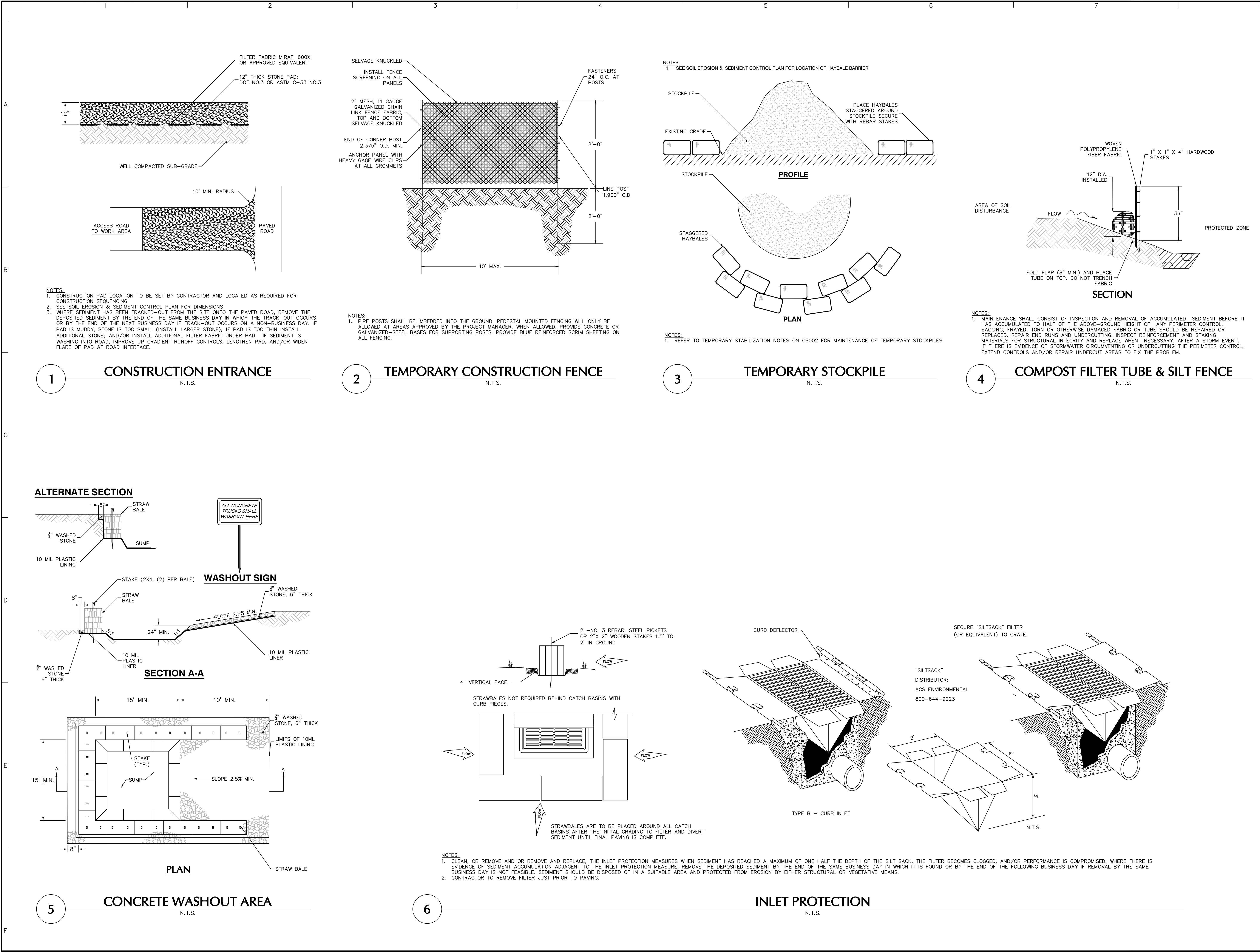
MEDWAY

NORFOLK COUNTY MASSACHUSETTS

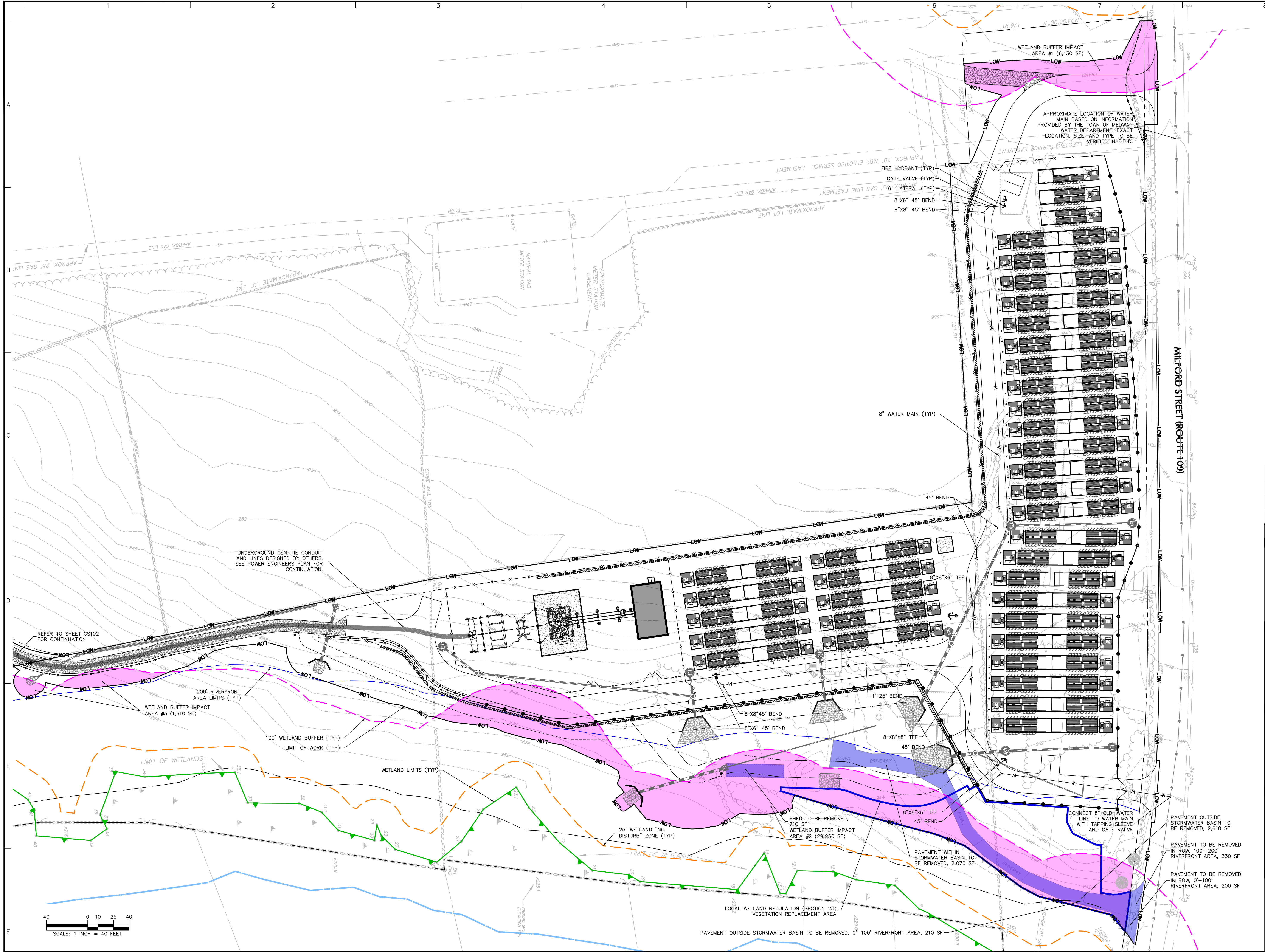
Drawing Title

**SOIL EROSION &
SEDIMENT
CONTROL PLAN
PHASE II**

Project No.	Drawing No.
151033401	CE102
Date	06/08/2023
Drawn By	JNW
Checked By	FH



08/24/23	NOI COMMENT REVISIONS	1
Date	Description	No.
Revisions		
<div><div><div><div><div><div></div><div>FRANK HOLMES</div></div></div><div><div></div><div>REGISTERED PROFESSIONAL ENGINEER</div></div></div><div>COMMONWEALTH OF MASSACHUSETTS CIVIL No. 40203</div></div></div>		
<div><div><div><div><div><div>LANGAN</div><div>Langan Engineering and Environmental Services, Inc.</div><div>100 Cambridge Street, Suite 1310 Boston, MA 02114</div><div>T: 617.824.9100 F: 617.824.9101 www.langan.com</div></div></div></div></div></div>		
Project		
MEDWAY BATTERY ENERGY STORAGE SYSTEM		
NORFOLK COUNTY MEDWAY MASSACHUSETTS		
Drawing Title		
SOIL EROSION & SEDIMENT CONTROL DETAILS		
I		
Project No.	Drawing No.	
151033401	CE501	
Date		
06/08/2023		
Drawn By		
JNW		
Checked By		
FH		



08/01/24	NOI REVISIONS	3
10/04/23	NOI COMMENT REVISIONS	2
08/24/23	NOI COMMENT REVISIONS	1
Date	Description	No.

Revisions

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Project

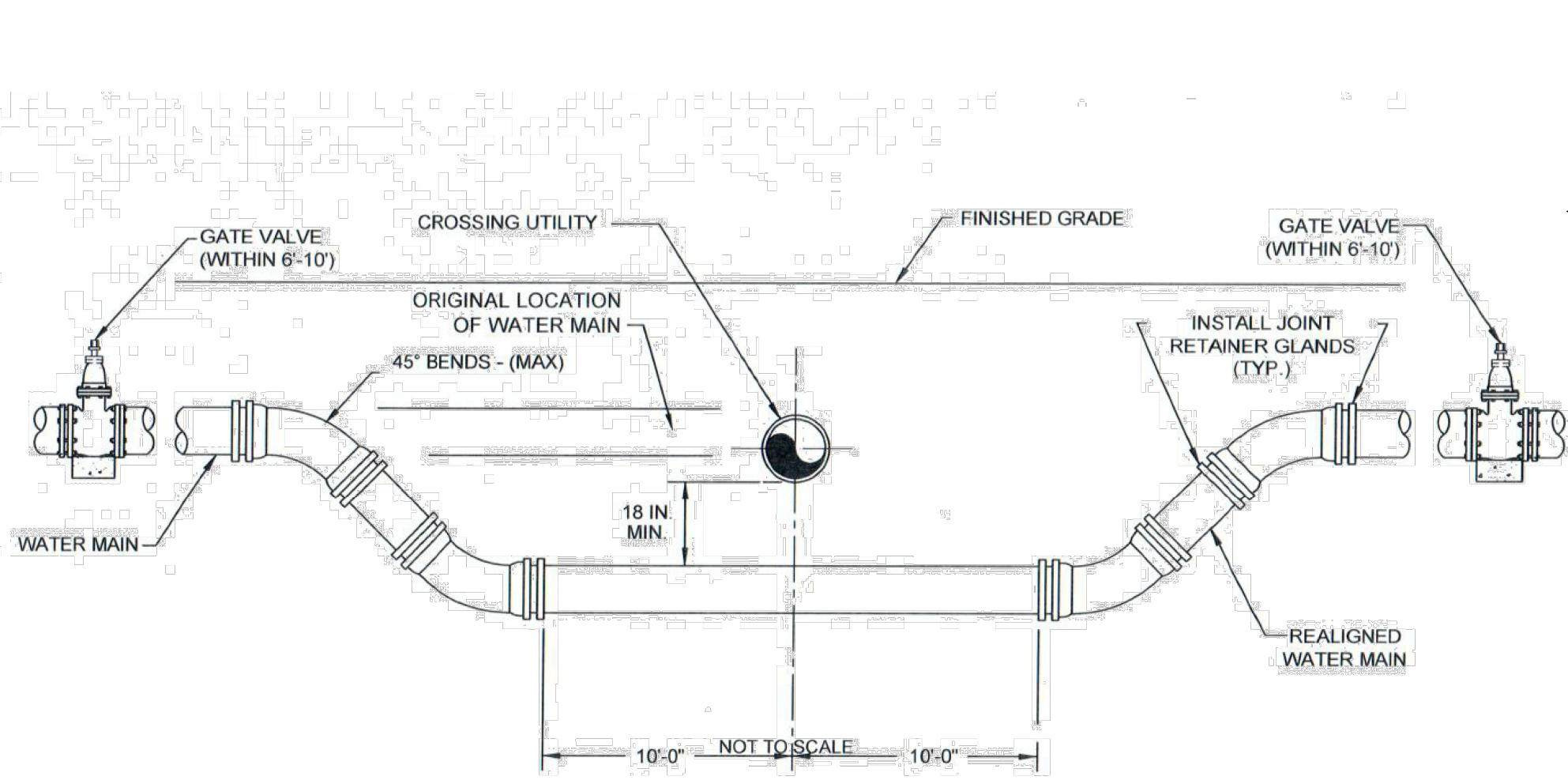
**MEDWAY BATTERY
ENERGY STORAGE
SYSTEM**

MEDWAY
NORFOLK COUNTY MASSACHUSETTS

Drawing Title

UTILITY PLAN

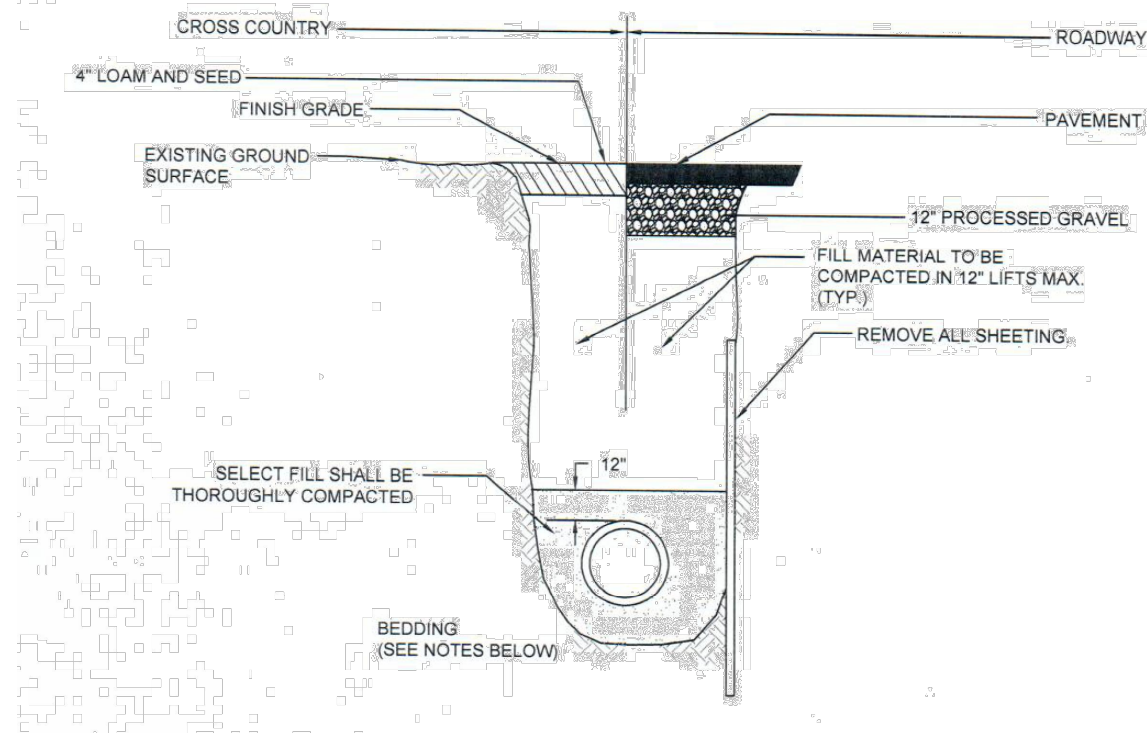
Project No.	Drawing No.
151033401	CU101
Date	
06/08/2023	
Drawn By	
JNW	
Checked By	
FH	



- NOTES:
1. ALL FITTINGS AND JOINTS IN LOWERING AREA TO BE RESTRAINED. TOWN MAY REQUIRE THREADED ROD RESTRAINS IN CERTAIN SITUATIONS.
 2. 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.

1 WATER MAIN LOWERING DETAIL

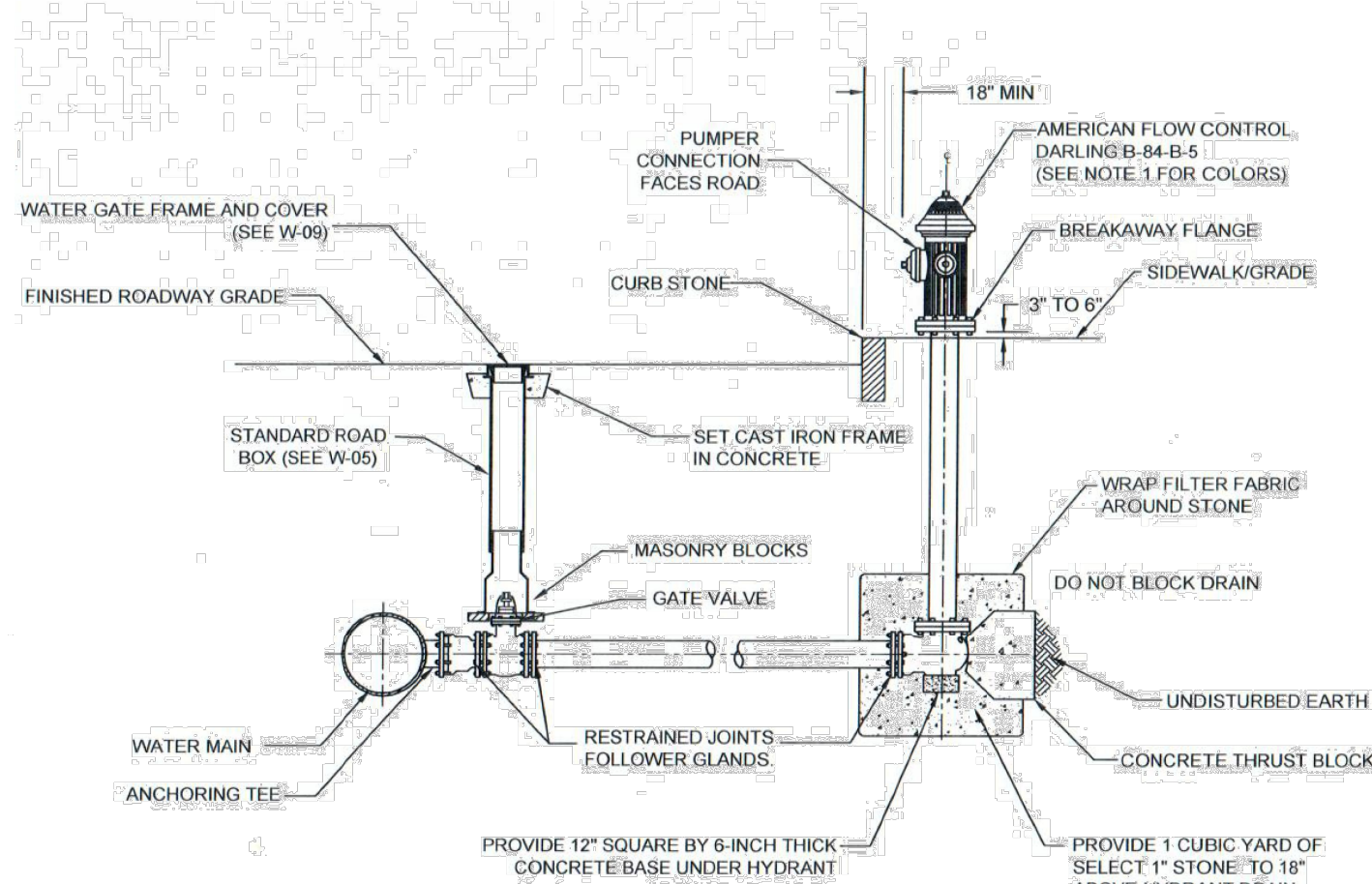
N.T.S. — SOURCE: TOWN OF MEDWAY DEPARTMENT OF PUBLIC SERVICES



- 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 2'-0" MINIMUM COVER. LESS THAN 5'-0" OF COVER SHALL BE INSULATED.
 6. LEDGE SHALL BE REMOVED 12 INCHES AROUND PIPE.

3 WATER MAIN TRENCH

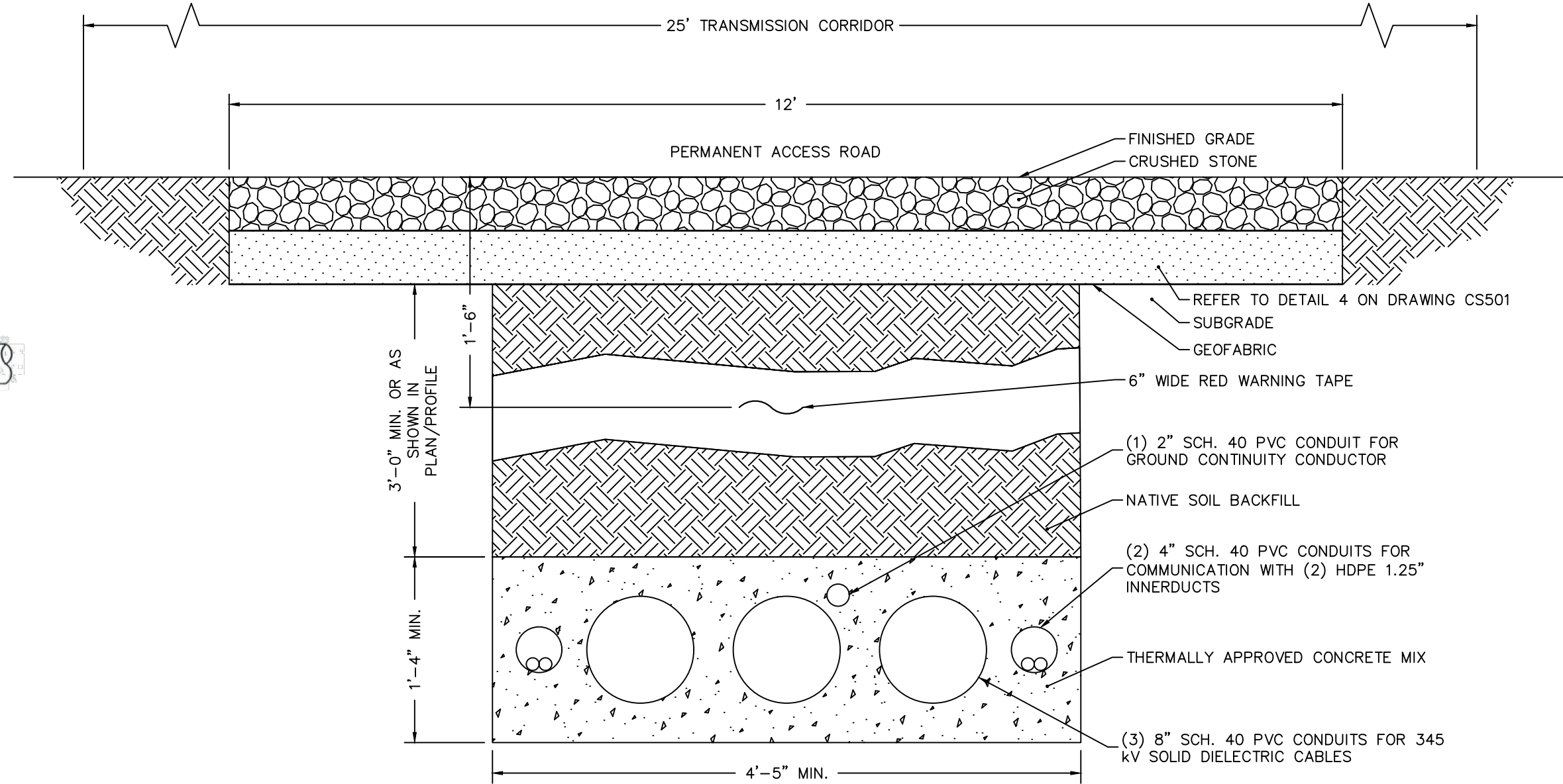
N.T.S. — SOURCE: TOWN OF MEDWAY DEPARTMENT OF PUBLIC SERVICES



- 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.

6 FIRE HYDRANT INSTALLATION

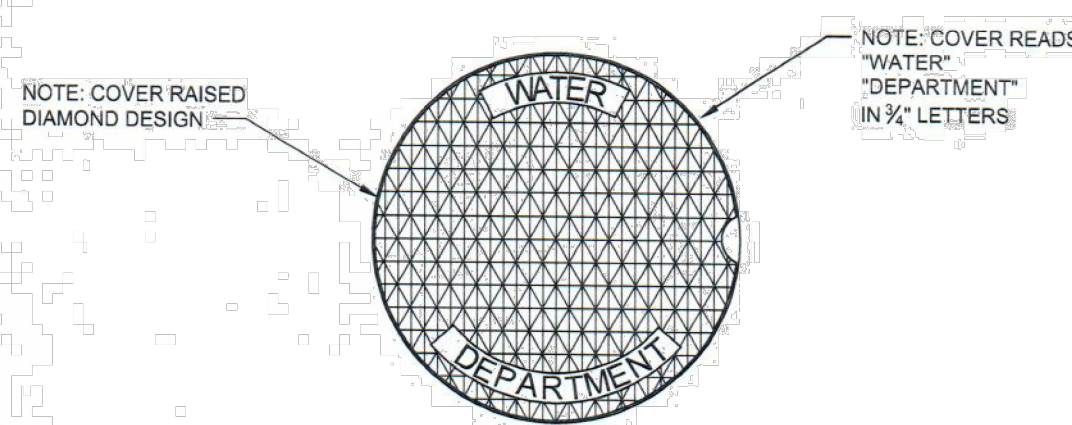
N.T.S. — SOURCE: TOWN OF MEDWAY DEPARTMENT OF PUBLIC SERVICES



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

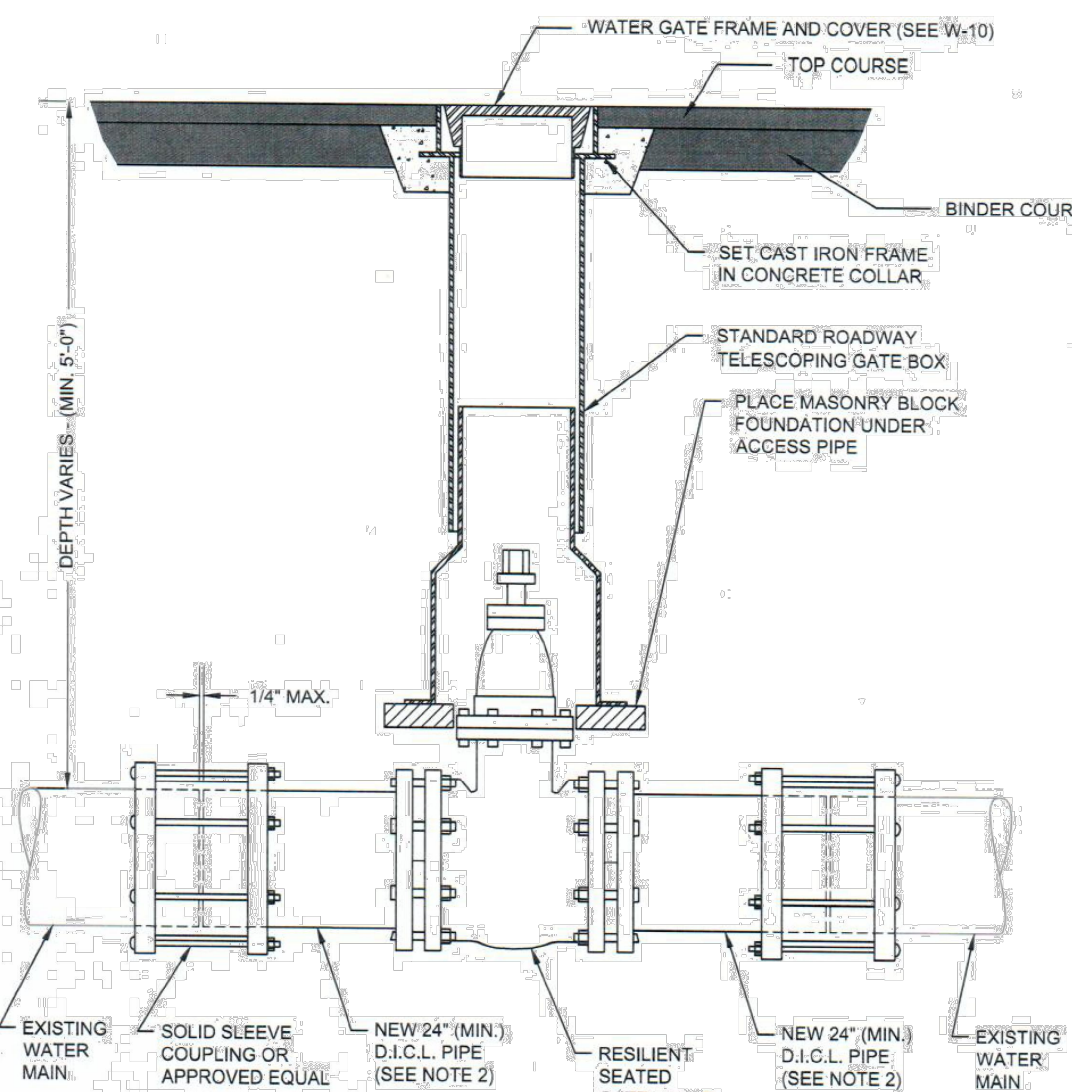
2 TYPICAL CONDUIT TRENCH SECTION

N.T.S. SOURCE: POWER ENGINEERS



4 WATER GATE COVER

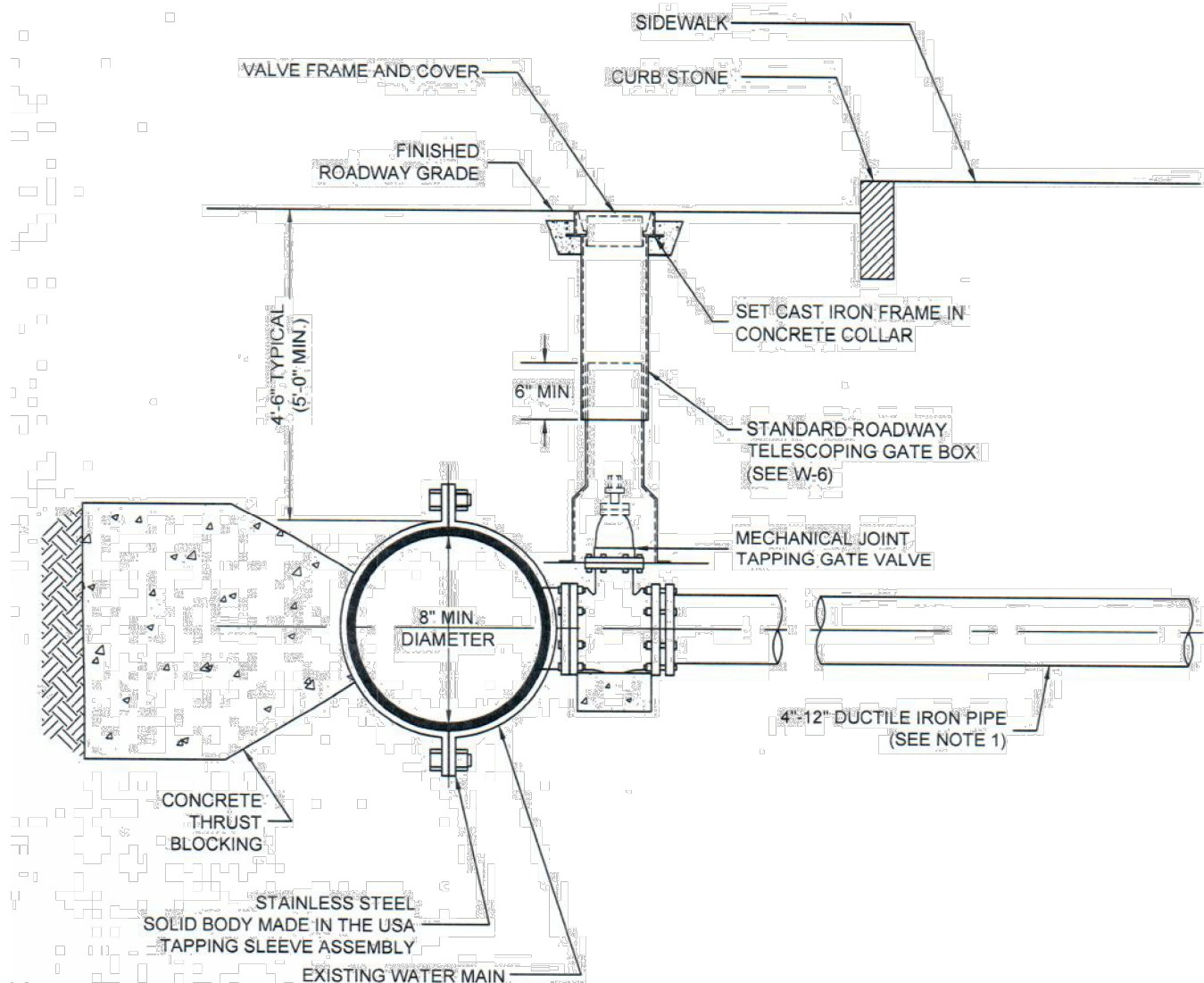
N.T.S.



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

7 GATE VALVE

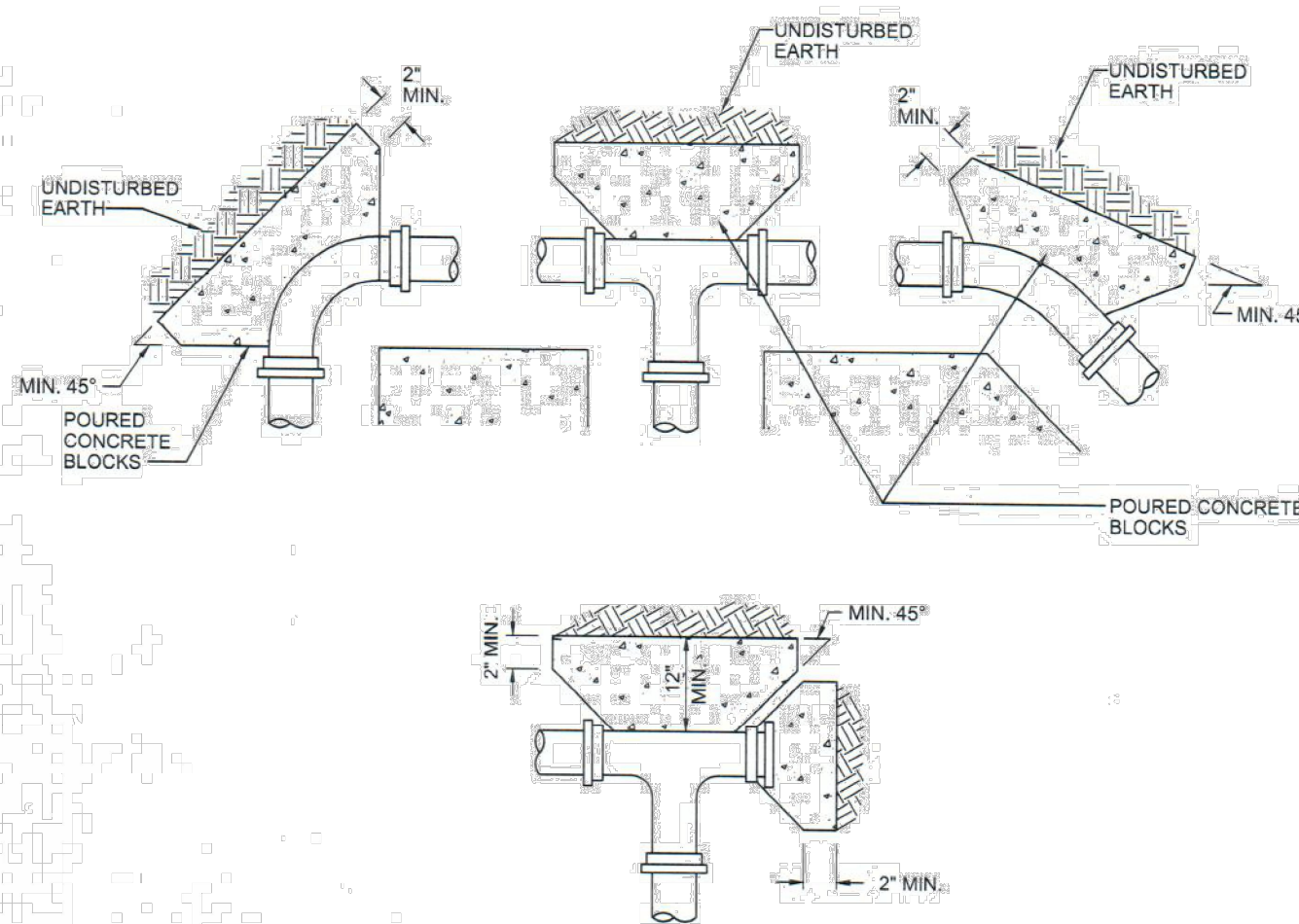
N.T.S. — SOURCE: TOWN OF MEDWAY DEPARTMENT OF PUBLIC SERVICES



- NOTES:
1. MAXIMUM TAPPING SLEEVE SHALL NOT BE GREATER THAN 1/2 DIAMETER OF CONNECTING MAIN.
 2. MECHANICAL JOINT RESTRAINTS AND GASKETS ON ALL MECHANICAL JOINTS.
 3. TOWN MAY REQUIRE THREADED ROD AS RESTRAINT.

5 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.
 2. PLACE 4 MIL. POLYETHYLENE BETWEEN CONCRETE AND FITTING (CONCRETE SHALL NOT INTERFERE WITH JOINT).
 3. MINIMUM 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.

8 TYPICAL THRUST BLOCK

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

Date	Description	No.
------	-------------	-----

Revisions

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Project

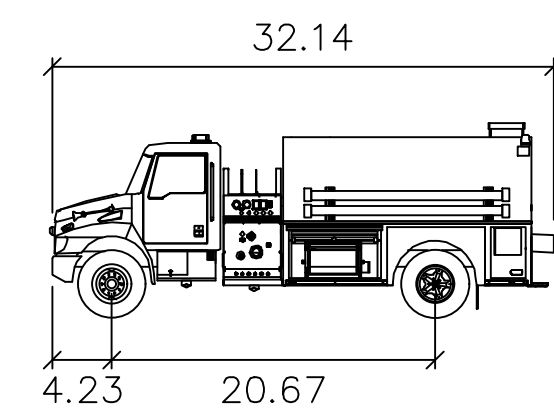
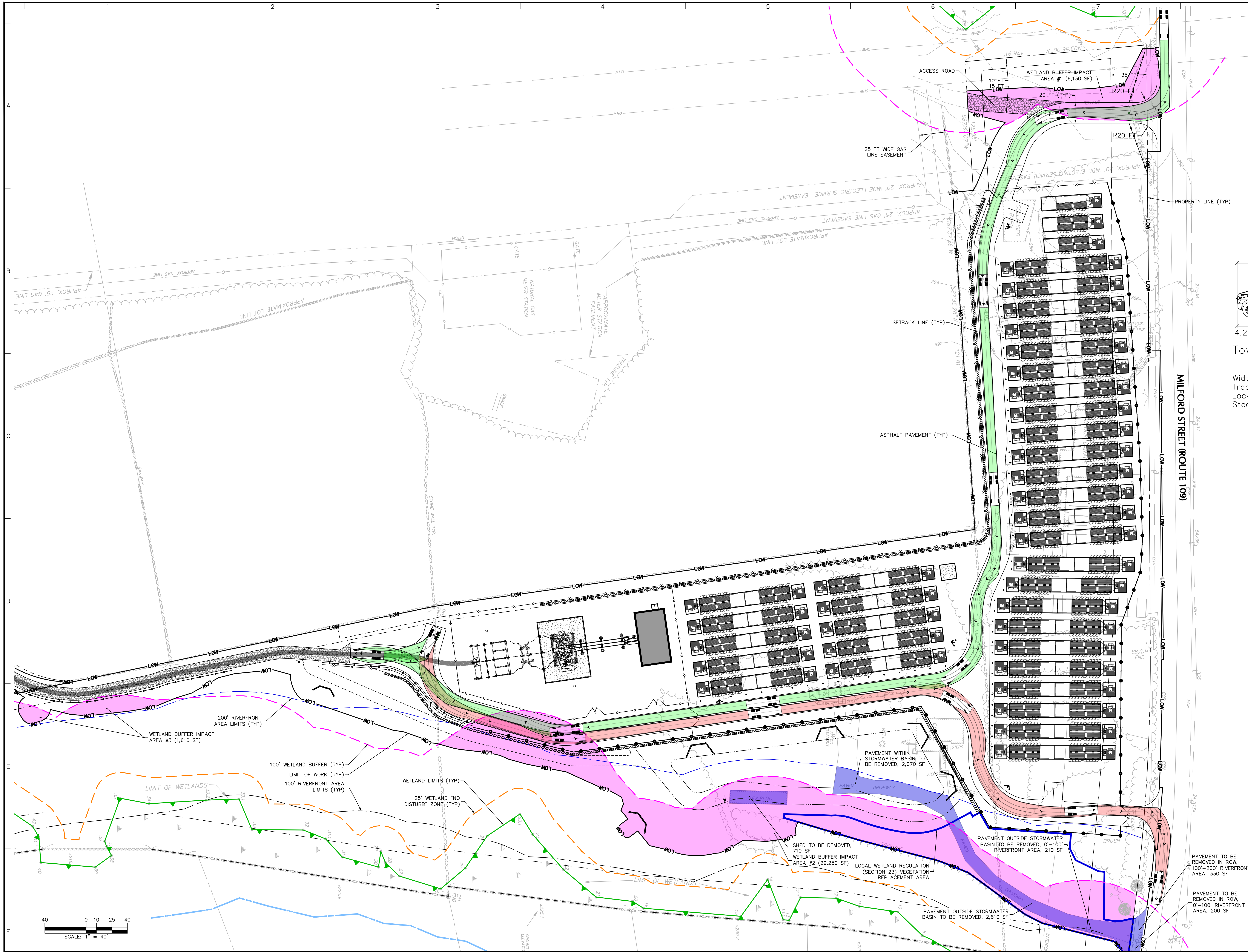
MEDWAY BATTERY ENERGY STORAGE SYSTEM

NORFOLK COUNTY MASSACHUSETTS

Drawing Title

UTILITY DETAILS I

Project No.	Drawing No.
151033401	CU501
Date	
06/08/2023	
Drawn By	
JNW	
Checked By	
FH	



Town of Medway — Tanker 1

feet

Width : 8.58

Track : 8.00

Lock to Lock Time : 6.0

Steering Angle : 40.1

08/01/24	NOI REVISIONS	2
10/04/23	NOI COMMENT REVISIONS	1
Date	Description	No.

Revisions

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Project

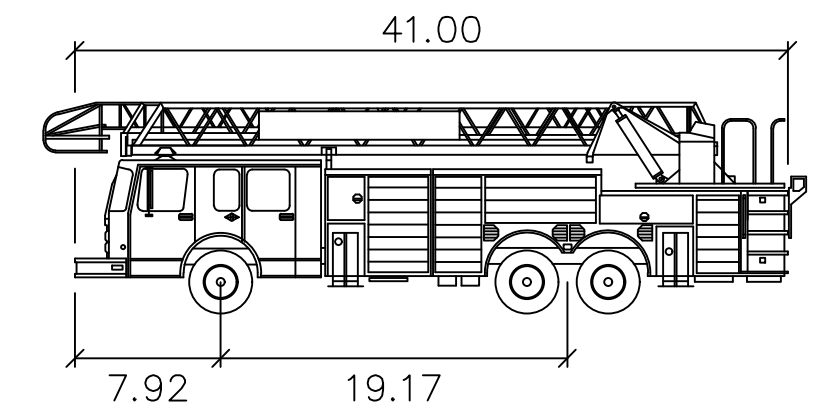
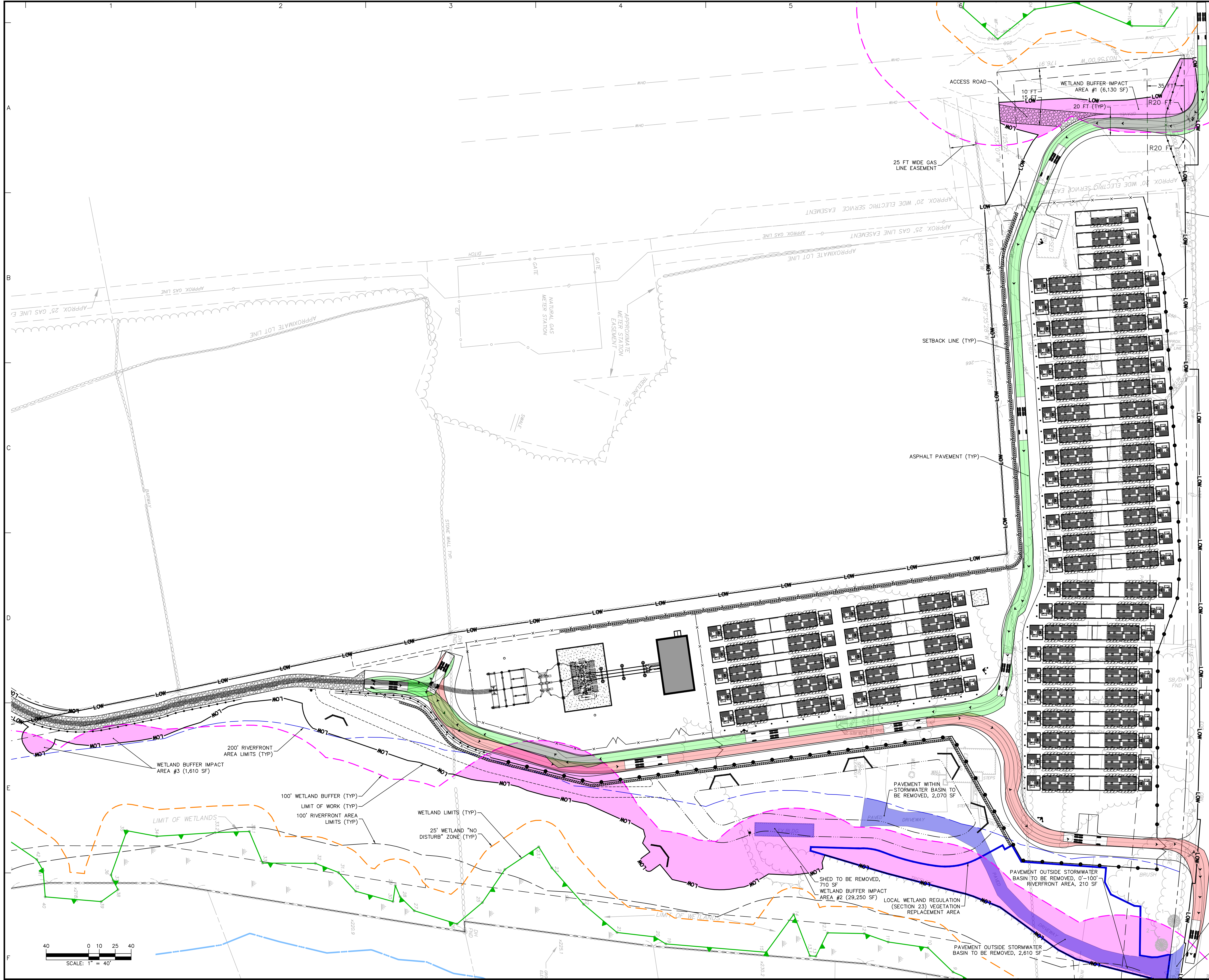
**MEDWAY BATTERY
ENERGY STORAGE
SYSTEM**

NORFOLK COUNTY MEDWAY MASSACHUSETTS

Drawing Title

**TANKER TRUCK
TURNING
MOVEMENT PLAN**

Project No.	Drawing No.
151033401	TM101
Date	
08/24/2023	
Drawn By	
JSP	
Checked By	
FH	



Town of Medway – Ladder

Width	: 8.33
Track	: 8.15
Lock to Lock Time	: 6.0
Steering Angle	: 39.5

08/01/24	NOI REVISIONS	2
10/04/23	NOI COMMENT REVISIONS	1
Date	Description	No.

Revisions

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Project

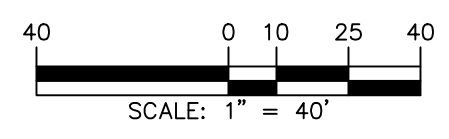
**MEDWAY BATTERY
ENERGY STORAGE
SYSTEM**

NORFOLK COUNTY MEDWAY MASSACHUSETTS

Drawing Title

**LADDER TRUCK
TURNING
MOVEMENT PLAN**

Project No.	Drawing No.
151033401	TM102
Date	
08/24/2023	
Drawn By	
JSP	
Checked By	
FH	



SITE LIGHTING SCHEDULE

SYMBOL	KEY	QTY.	FIXTURE MANUFACTURER	FIXTURE MODEL	FIXTURE DESCRIPTION	FIXTURE MOUNTING HEIGHT	LAMP	OPTICS	LUMENS PER LAMP	LLF	COLOR TEMPERATURE	IES FILE	FIXTURE CATALOGUE NO.	POLE MANUFACTURER	POLE DESCRIPTION	POLE LENGTH	POLE CATALOGUE NO.	REMARKS
	A	2	GARDCO	PUREFORM LED	POLE MOUNTED POST TOP LIGHT; COLOR - BLACK	20'-0" (ABOVE FFE)	LED	BACK LIGHT CONTROL	3,000	0.90	3000K	P15-P-A02-730-BLC	P15-P-A02-730-BLC	GARDCO	TAPERED ROUND STEEL; COLOR - BLACK	20'-0"	06TRS-20-11-D1-BLP-VDA	POLE TO BE FACTORY CUT TO A LENGTH OF 17'; MOUNTED ON 3" HEIGHT EXPOSED CONCRETE BASE
	B	21	GARDCO	PUREFORM LED	POLE MOUNTED POST TOP LIGHT; COLOR - BLACK	20'-0" (ABOVE FFE)	LED	T4S	3800	0.90	3000K	P15-P-A02-730-T4S	P15-P-A02-730-T4S	GARDCO	TAPERED ROUND STEEL; COLOR - BLACK	20'-0"	06TRS-20-11-D1-BLP-VDA	POLE TO BE FACTORY CUT TO A LENGTH OF 17'; MOUNTED ON 3" HEIGHT EXPOSED CONCRETE BASE
	B1	18	GARDCO	PUREFORM LED	FENCE POST MOUNTED; COLOR - BLACK	20'-0" (ABOVE FFE)	LED	T4S	3800	0.90	3000K	P15-P-A02-730-T4S	P15-P-A02-730-T4S	-	-	-	-	-

NOTES:

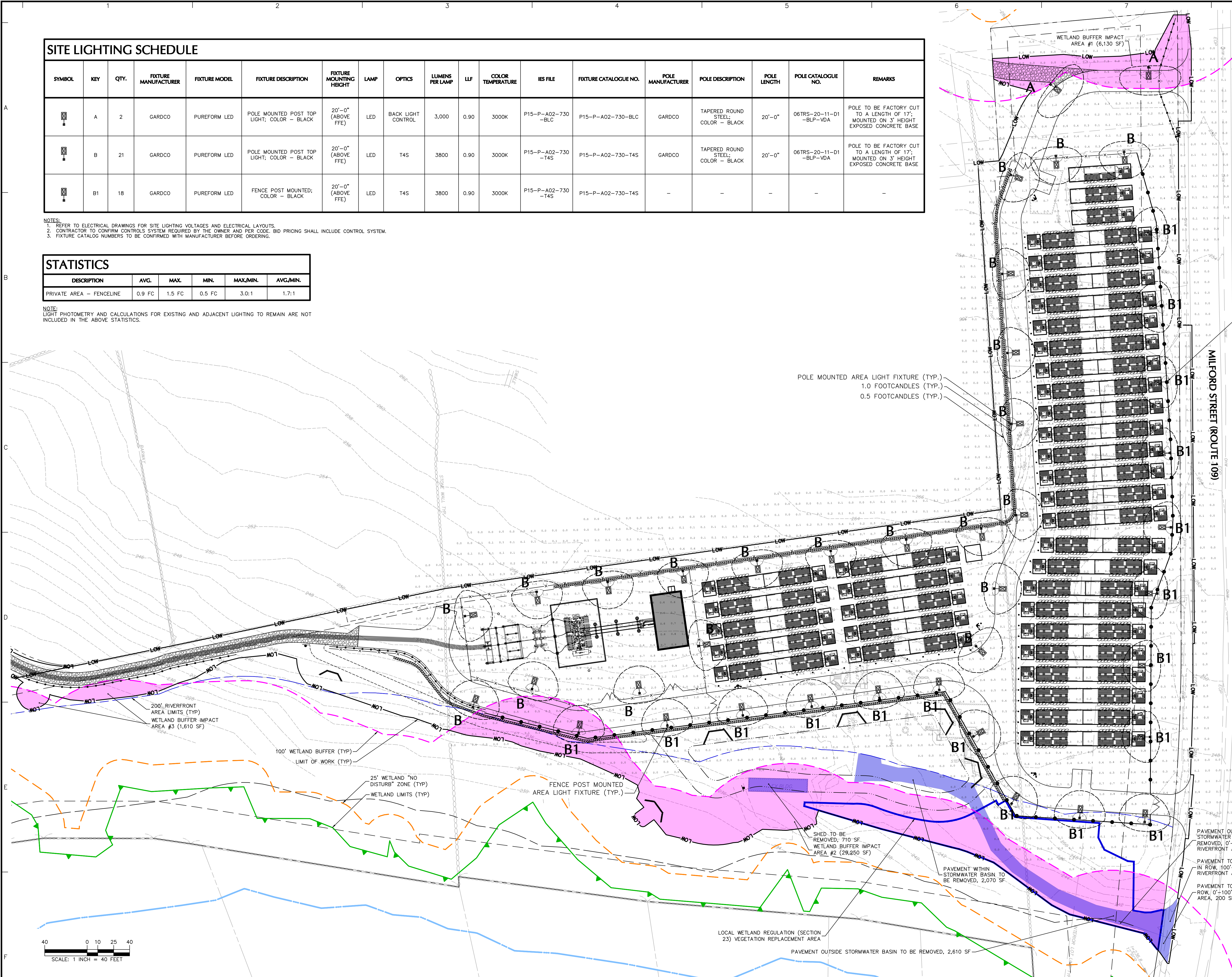
1. REFER TO ELECTRICAL DRAWINGS FOR SITE LIGHTING VOLTAGES AND ELECTRICAL LAYOUTS.
2. CONTRACTOR TO CONFIRM CONTROLS SYSTEM REQUIRED BY THE OWNER AND PER CODE. BID PRICING SHALL INCLUDE CONTROL SYSTEM.
3. FIXTURE CATALOG NUMBERS TO BE CONFIRMED WITH MANUFACTURER BEFORE ORDERING.

STATISTICS

DESCRIPTION	AVG.	MAX.	MIN.	MAX/MIN.	AVG/MIN.
PRIVATE AREA - FENCELINE	0.9 FC	1.5 FC	0.5 FC	3.0:1	1.7:1

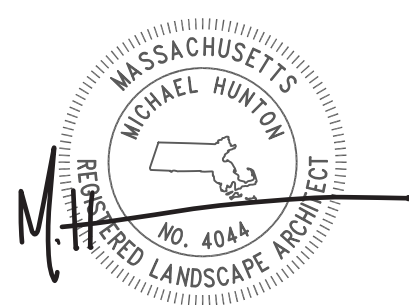
NOTE:

LIGHT PHOTOMETRY AND CALCULATIONS FOR EXISTING AND ADJACENT LIGHTING TO REMAIN ARE NOT INCLUDED IN THE ABOVE STATISTICS.



08/01/24	NOI REVISIONS	3
10/04/23	NOI COMMENT REVISIONS	2
08/24/23	NOI COMMENT REVISIONS	1
Date	Description	No.

Revisions

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Project

**MEDWAY BATTERY
ENERGY STORAGE
SYSTEM**NORFOLK COUNTY
Drawing Title
MEDWAY MASSACHUSETTS**LIGHTING PLAN**

Project No.	Drawing No.
151033401	LL101
Date	06/08/2023
Drawn By	LL/SH
Checked By	MH

LIGHTING NOTES:

GENERAL

- 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 LUX IN ACCORDANCE WITH GUIDANCE AS PROVIDED BY IESNA. MAJOR 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. GUARANTEE OF LIGHT LEVELS IS EXPRESSED OR IMPLIED BY THE POINT BY POINT CALCULATIONS SHOWN ON THESE PLANS.
- 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.
- 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.
- LIGHTING LAYOUT COMPLIES WITH THE ILLUMINATING ENGINEERING SOCIETY OF NORTH AMERICA (IESNA) SAFETY STANDARDS FOR LIGHT LEVELS.

COORDINATION

- CONTRACTOR TO COORDINATE POWER SOURCE WITH LIGHT FIXTURES TO ENSURE ALL SITE LIGHTING IS OPERATING EFFECTIVELY, EFFICIENTLY AND SAFELY.
- REFER TO ELECTRIFICATION PLAN FOR PROVIDING ADEQUATE POWER FOR SITE LIGHTING.
- CONTRACTOR TO COORDINATE LOCATION OF EASEMENTS, UNDERGROUND UTILITIES AND DRAINAGE BEFORE DRILLING POLE BASES.
- 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 DURING EXCAVATIONS.

POLES AND FOOTINGS

- 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.
- 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.
- POLE FOUNDATIONS SHALL NOT BE POURED IF FREE STANDING WATER IS PRESENT IN EXCAVATED AREA.
- ALL POLES HIGHER THAN 25 FT. SHALL BE EQUIPPED WITH FACTORY INSTALLED VIBRATION DAMPERS.

WALL MOUNTED FIXTURES

- CONTRACTOR TO COORDINATE INSTALLATION OF ALL THE WALL MOUNTED FIXTURES AND ELECTRICAL CONNECTIONS TO SITE STRUCTURE(S) WITH BUILDING MEP, ARCHITECT, AND/OR OWNER.
- 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.

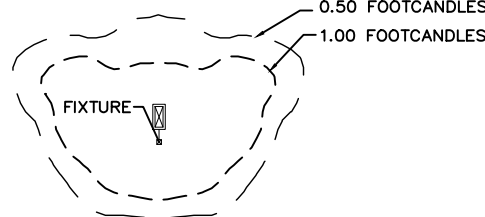
ADJUSTMENT AND INSPECTION

- CONTRACTOR TO OPERATE EACH LUMINAIRE AFTER INSTALLATION AND CONNECTION. INSPECT FOR IMPROPER CONNECTIONS AND OPERATION.
- CONTRACTOR TO ADJUST 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 OWNER.
- CONTRACTOR TO CONFIRM THAT LIGHT FIXTURES, TILT ANGLE AND AIMING MATCH SPECIFICATIONS ON THE PLANS.

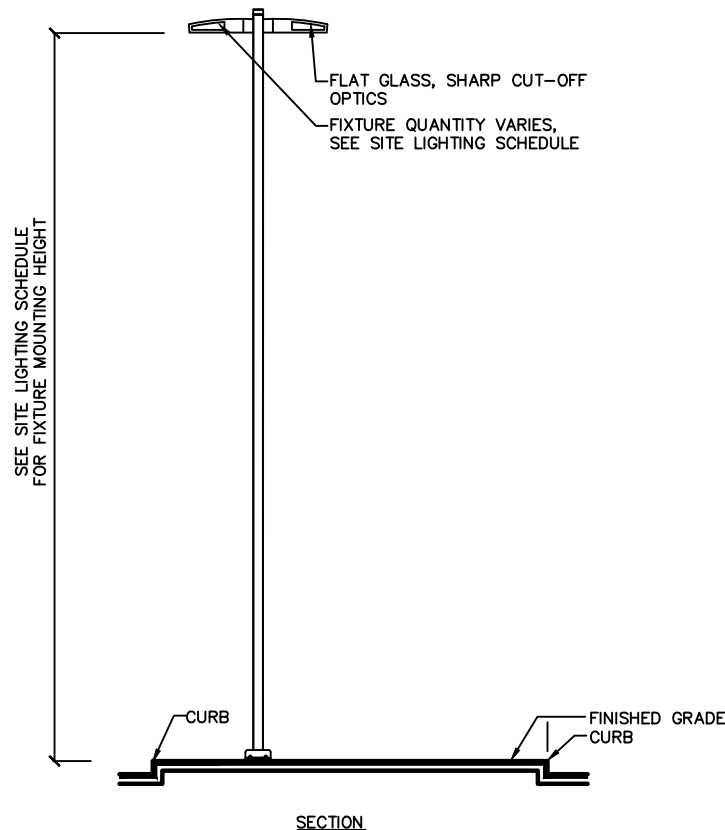
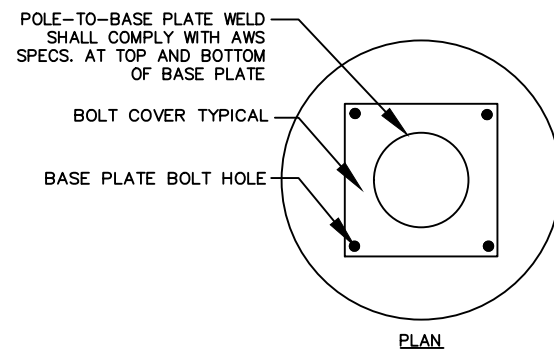
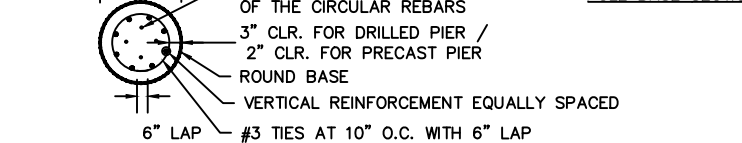
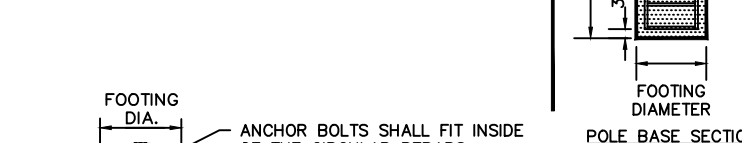
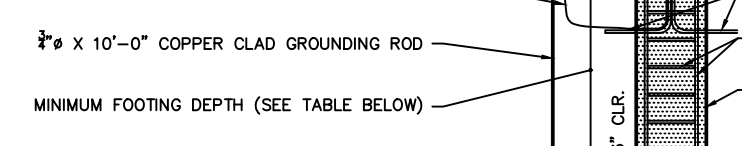
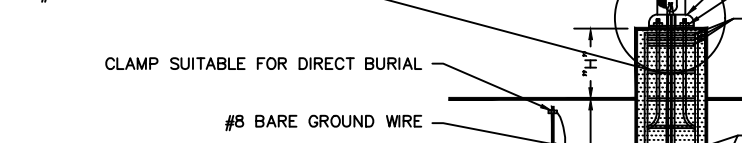
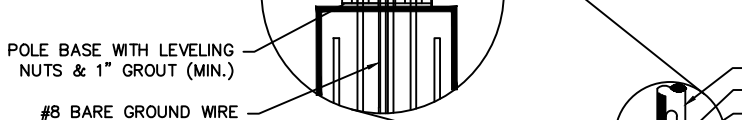
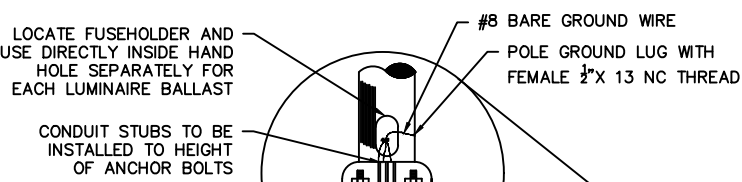
REQUIREMENTS FOR ALTERNATES

- ALL LIGHTING SUBSTITUTIONS MUST BE MADE WITHIN 14 DAYS PRIOR TO THE BID DATE TO PROVIDE ADEQUATE TIME FOR REVIEW AND TO ISSUE AN ADDENDUM INCORPORATING THE SUBSTITUTION WITH THE FOLLOWING REQUIREMENTS:
 - 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.
 - COMPUTER PREPARED PHOTOMETRIC LAYOUT OF THE PROPOSED LIGHTED AREA WHICH INDICATES, BY ISO/CANDLE, THE SYSTEM'S PERFORMANCE.
 - A PHOTOMETRIC REPORT FROM A NATIONAL INDEPENDENT TESTING LABORATORY WITH REPORT NUMBER, DATE, FIXTURE CATALOG NUMBERS, LUMINAIRE AND LAMP SPECIFICATIONS, IES CALCULATIONS, POINT BY POINT FOOT CANDLE PLAN, STATISTIC ZONES SHOWING AVERAGE, MAXIMUM, MINIMUM AND UNIFORMITY RATIOS, SUMMARY SOLID 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.
 - POLE MANUFACTURER ASISTO 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.
 - THE UNDERWRITERS LABORATORY LISTING AND FILE NUMBER FOR THE SPECIFIC FIXTURE(S) TO BE UTILIZED.
 - A COLOR PHOTOGRAPH THAT CLEARLY SHOWS THE REPLACEMENT FIXTURE POLE MOUNTED, THE FIXTURE'S COLOR, FINISH, AND PHYSICAL CHARACTERISTICS.

PHOTOMETRIC LIGHTING LEGEND:



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



NOTE: 1. ALL LIGHTS WITH 25' MOUNTING HEIGHT OR GREATER TO RECEIVE FACTORY INSTALLED VIBRATION DAMPERS.

LIGHT FIXTURE AND POLE

- Product types standard with 120V.
- Extended lead times apply. Contact factory for details.
- Mounts to a 4-8" OD round pole with adapter included for square poles.
- Not available with other dimming control options (mutually exclusive).
- Not available with motion sensor.
- BL50 must be specified with a motion sensor lens (L2 or L3).
- Not available with photocontrols.
- Not available in 347 or 480V.
- Available only in 120 or 277V.
- Must specify input voltage.
- All 7 pins in NEMA receptacle are connected to SR driver.
- Not available in 480V. Order photocell separately with TR7.
- Not available with DLEA and FAMS dimming control options.
- When ordering SRDR with L2 or L3, controller to be used on socket must be SR compatible (See specifications for more details).

P15_PureForm_area_small_square_precision 04/21 page 1 of 6



2 FIXTURE TYPE A & B

NTS

3 POLE TYPE A & B

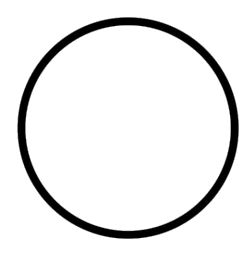
NTS



Pole/Bracket

Site and Area Poles

Tapered Round Steel



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.

Project:
Location:
Cat.No:
Type:
Lumens:
Notes:

Ordering guide

P15	P	Configuration (lumens)	Color Temperature	Distribution	Mounting	Voltage
P15	P	AD1 2,000 lumens AD2 4,000 lumens AD3 6,000 lumens AD4 8,000 lumens AD6 10,000 lumens AD7 14,000 lumens AD8 16,000 lumens	750 70CR 3000K 760 70CR 4000K 780 70CR 5000K 845 80CR 3000K 827 80CR 2700K	T2M Type 2 Medium T3M Type 3 Medium T4S Type 4 Short T5S Type 5 Short BLC Back Light Control	ARM Arm mount (Standard) The following mounting kits must be ordered separately (See accessories) RAM Retrofit arm mount kit WAL Wall mount	120 120V 208 208V 240 240V 277 277V 347 347V 480 480V UNV 120-277V (50/60Hz) HWU 347-480V (50/60Hz)

example: P15-P-A06-740-T5S-ARM-UNV-BL50-L3-BZ

Options	Motion sensor lens	Electrical/Shielding	Finish
Dimming controls DLEA* Dimming Leads Externally Accessible (controls by others) FAMS* Field Adjustable Wattage Selector BL50** Blaw set at 50% dimming SRDR** SR driver connected to Zhaga socket DynaDimmer: Automatic Profile Dimming CS50** Security 50% Dimming, 7 hours CM50** Median 50% Dimming, 8 hours CS30** Security 30% Dimming, 7 hours CM30** Median 30% Dimming, 8 hours	L2** PIR Sensor #2 lens L3** PIR Sensor #3 lens	PCB** Photocell Button TR7** 7-pin Twist Lock Receptacle TL7** 7-pin Twist Lock Receptacle w/ 3-pin Photocell SP2* Increased 20A PS2* Single Fuse (20, 277, 347VAC) FS2** Double Fuse (208, 240, 480VAC) HS Internal house side shield	Textured BK Black WH White BZ Bronze DG Dark Gray MG Medium Gray RAL Specify optional color or RAL (ex: RAL7034) CD Custom color (Must supply color chip for required factory quote)

Ordering Guide

Pole	Height	Gauge	Drilling	Finish	Options
05TRS	20	11	D1 1 Way D2 2 Way at 180° D2@90 2 Way at 90° D3 3 Way at 90° D3@120 3 Way at 120° D4 4 Way T2 24" OD Tenon X 4" long T3 3" OD Tenon X 5" long T4 4" OD Tenon X 6" long P Plain Top (No Drilling/No Tenon)	BRP Bronze Paint BLP Black Paint WP White Paint MGY Medium Grey DGY Dark Grey GV Galvanized (No Paint) FPGV Finished Paint over Galvanized (specify color) OC Optional Color Paint (Specify RAL designation ex: RAL7034) SC Special Color Paint (Specify. Must supply color chip.)	FES Festoon Outlet VDA Vibration Damper AHH Additional Hand Hole For Festoon Outlets and Additional Hand Holes, indicate height above base and orientation to original hand hole. See Pole Orientation Information on Page 4. Nipples and Couplings CL1/2 Coupling - Internal Thread 1/2" CL3/4 Coupling - Internal Thread 3/4" CL1 Coupling - Internal Thread 1" CL1-1/4 Coupling - Internal Thread 1-1/4" CL1-1/2 Coupling - Internal Thread 1-1/2" NL1/2 Nipple - External Thread 1/2" NL3/4 Nipple - External Thread 3/4" NL1 Nipple - External Thread 1" NL1-1/4 Nipple - External Thread 1-1/4" NL1-1/2 Nipple - External Thread 1-1/2" Indicate height above base and orientation to hand hole. See Pole Orientation Information on Page 4. Single Side Mount Bulbhorn Brackets GM-080-19 Single - 19" OD (For Gardco DFL/DFC only) GM-080-24 Single - 24" OD Indicate height above base and orientation to hand hole. See Pole Orientation Information on Page 4. Additional and alternative brackets and accessories available. Refer to the Signify product catalog (eCat) website for more information.

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.

- Standard poles are drilled in factory for compatibility with Signify luminaires only (D* options). For non-Signify-brand luminaires, select the P drilling option.
- Poles with a 2.4" top OD cannot be side drilled. The 2.4" top has the same OD as the T2 tenon.

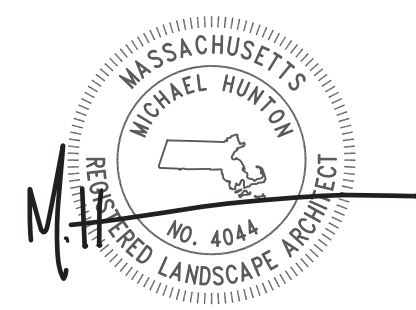
Anchor Bolts for Gardco OxTRS Poles, ordered separately:

	T2NC for ordering	Description (in inches)
For Pre-ship service (Order 4 per pole)	912400205784	1 x 36 x 4.5
For shipment with the pole (Order 1 per pole)	912400202028	1 x 36 x 4.5

TRS_Spec_Sheet 02/21 page 1 of 4

Date Description No.

Revisions



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Project

MEDWAY BATTERY ENERGY STORAGE SYSTEM

NORFOLK COUNTY MASSACHUSETTS

Drawing Title

LIGHTING DETAILS

Project No. Drawing No.

151033401

Date

06/08/2023

Drawn By

LL/AS

Checked By

MH

LL501

NON-JURISDICTIONAL ROUTE 109 SCREENING PLANTING SCHEDULE

KEY	QTY.	BOTANICAL NAME	COMMON NAME	SIZE	ROOT	REMARKS
SHADE TREE(S)						
AR	3	ACER RUBRUM	RED MAPLE	2 1/2-3" CAL.	B+B	-
CCA	8	CARPINUS CAROLINIANA	AMERICAN HORNBEEAM	2 1/2-3" CAL.	B+B	-
TA	1	TILIA AMERICANA	BASSWOOD	2 1/2-3" CAL.	B+B	-
EVERGREEN TREE(S)						
JV	9	JUNIPERUS VIRGINIANA	EASTERN RED CEDAR	8-10'	B+B	-
DECIDUOUS SHRUB(S)						
AAL	24	ARONIA ARBUTIFOLIA	RED CHOKEBERRY	24-30"	CONTAINER	-
HVCW	23	HAMAMELIS VIRGINIANA	COMMON WITCHHAZEL	3-4'	CONTAINER	-
IVE	35	ILEX VERTICILLATA	WINTERBERRY	24-30"	CONTAINER	-
VD	30	VIBURNUM DENTATUM	ARROWWOOD VIBURNUM	3-4'	B+B	-
VINE(S)						
PQ	+413	PARTHENOCISSUS QUINQUEFOLIA	VIRGINIA CREEPER	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	SIZE	ROOT	REMARKS
SHADE TREE(S)						
AR	12	ACER RUBRUM	RED MAPLE	3-3 1/2" CAL	B+B	(12' MINIMUM HEIGHT)
BTP	1	BETULA POPULIFOLIA	GREY BIRCH	12-14' HT	B+B	-
CYO	2	CARYA OVATA	SHAGBARK HICKORY	3-3 1/2" CAL	B+B	(12' MINIMUM HEIGHT)
QA	2	QUERCUS ALBA	WHITE OAK	3-3 1/2" CAL	B+B	(12' MINIMUM HEIGHT)
QR	3	QUERCUS RUBRA	RED OAK	3-3 1/2" CAL	B+B	(12' MINIMUM HEIGHT)
QV	1	QUERCUS VELUTINA	BLACK OAK	3-3 1/2" CAL	B+B	(12' MINIMUM HEIGHT)
ORNAMENTAL TREE(S)						
POP	5	POPULUS TREMULODES	QUAKING ASPEN	12-14'	B+B	-
EVERGREEN TREE(S)						
PS	5	PINUS STROBUS	EASTERN WHITE PINE	12-14'	B+B	-
DECIDUOUS SHRUB(S)						
AAL	23	ARONIA ARBUTIFOLIA	RED CHOKEBERRY	24-30" HT	CONTAINER	-
FG	14	FOTHERGILLA GARDENII	DWARF FOTHERGILLA	24-30" HT	CONTAINER	-
IVE	12	ILEX VERTICILLATA	WINTERBERRY	24-30" HT	CONTAINER	-
VD	15	VIBURNUM DENTATUM	ARROWWOOD VIBURNUM	24-30" HT	CONTAINER	-

NOTE:

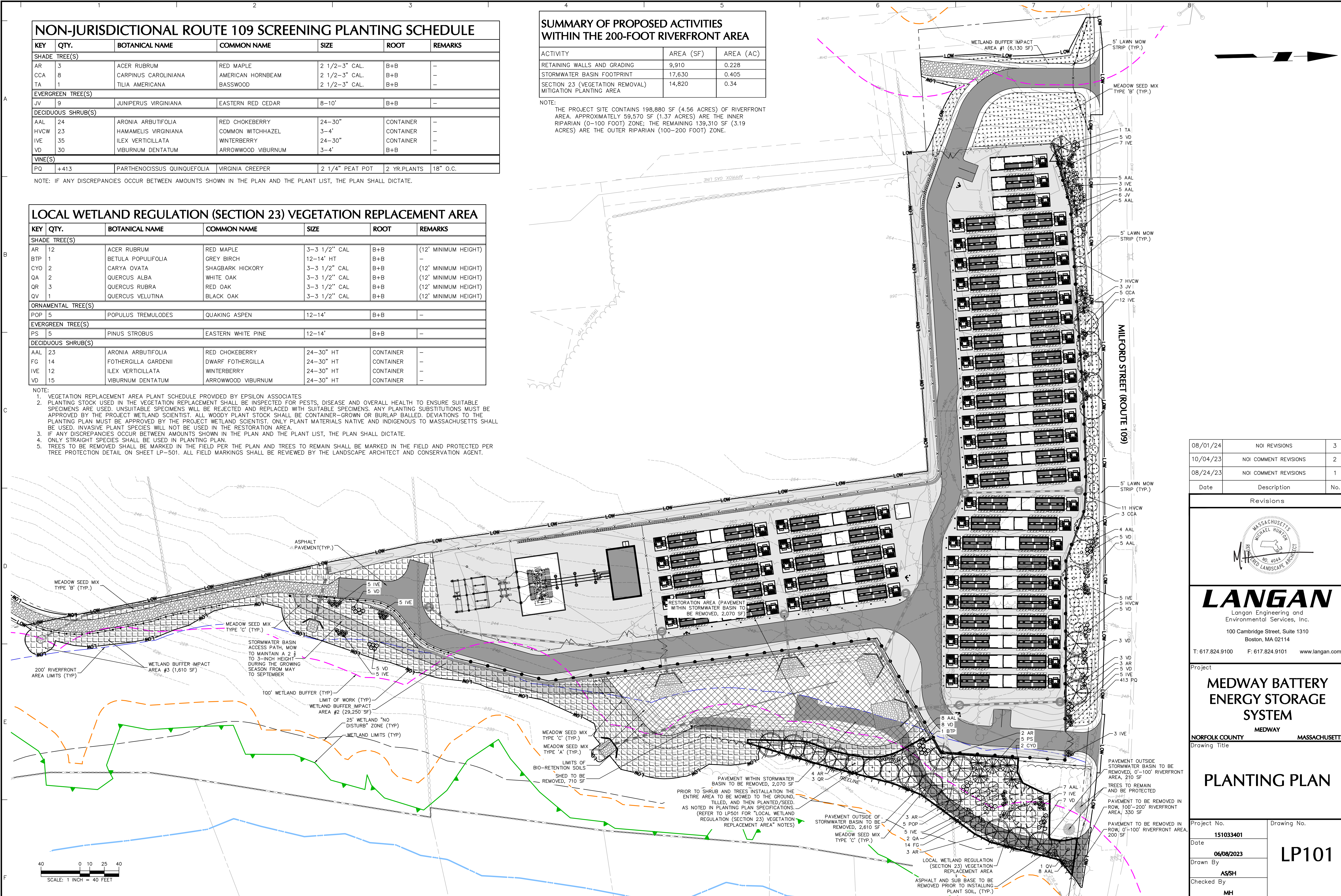
1. VEGETATION REPLACEMENT AREA PLANT SCHEDULE PROVIDED BY EPSILON ASSOCIATES
2. PLANTING STOCK USED IN THE VEGETATION REPLACEMENT SHALL BE INSPECTED FOR PESTS, DISEASE AND OVERALL HEALTH TO ENSURE SUITABLE SPECIMENS ARE USED. UNSUITABLE SPECIMENS WILL BE REJECTED AND REPLACED WITH SUITABLE SPECIMENS. 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.
4. ONLY STRAIGHT SPECIES SHALL BE USED IN PLANTING PLAN.
5. 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.

SUMMARY OF PROPOSED ACTIVITIES WITHIN THE 200-FOOT RIVERFRONT AREA

ACTIVITY	AREA (SF)	AREA (AC)
RETAINING WALLS AND GRADING	9,910	0.228
STORMWATER BASIN FOOTPRINT	17,630	0.405
SECTION 23 (VEGETATION REMOVAL) MITIGATION PLANTING AREA	14,820	0.34

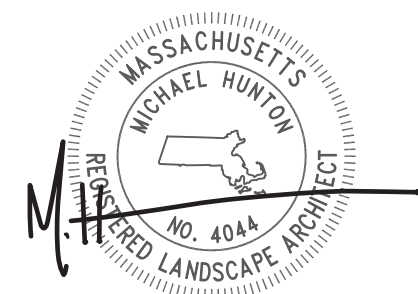
NOTE:

THE PROJECT SITE CONTAINS 198,880 SF (4.56 ACRES) OF RIVERFRONT AREA. APPROXIMATELY 59,570 SF (1.37 ACRES) ARE THE INNER RIPARIAN (0-100 FOOT) ZONE; THE REMAINING 139,310 SF (3.19 ACRES) ARE THE OUTER RIPARIAN (100-200 FOOT) ZONE.



08/01/24	NOI REVISIONS	3
10/04/23	NOI COMMENT REVISIONS	2
08/24/23	NOI COMMENT REVISIONS	1
Date	Description	No.

Revisions



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Project

**MEDWAY BATTERY
ENERGY STORAGE
SYSTEM**

NORFOLK COUNTY MEDWAY MASSACHUSETTS

Drawing Title

PLANTING PLAN

Project No.	Drawing No.
151033401	LP101
Date	06/08/2023
Drawn By	AS/SH
Checked By	MH

1. 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.
2. 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.
3. NO PLANT SHALL BE PUT INTO THE GROUND BEFORE GRADING HAS BEEN COMPLETED AND APPROVED BY THE PROJECT LANDSCAPE ARCHITECT OR PROJECT ENGINEER.

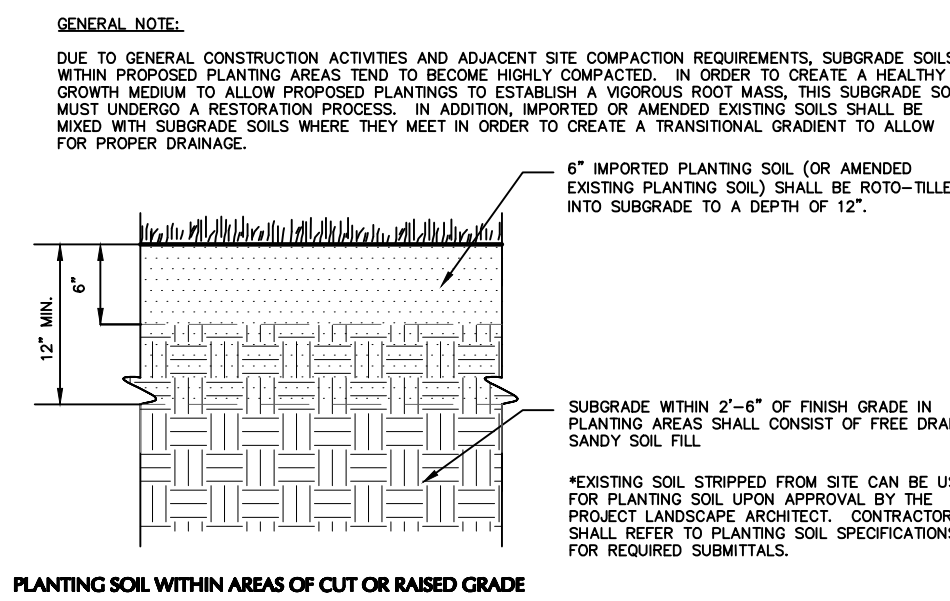
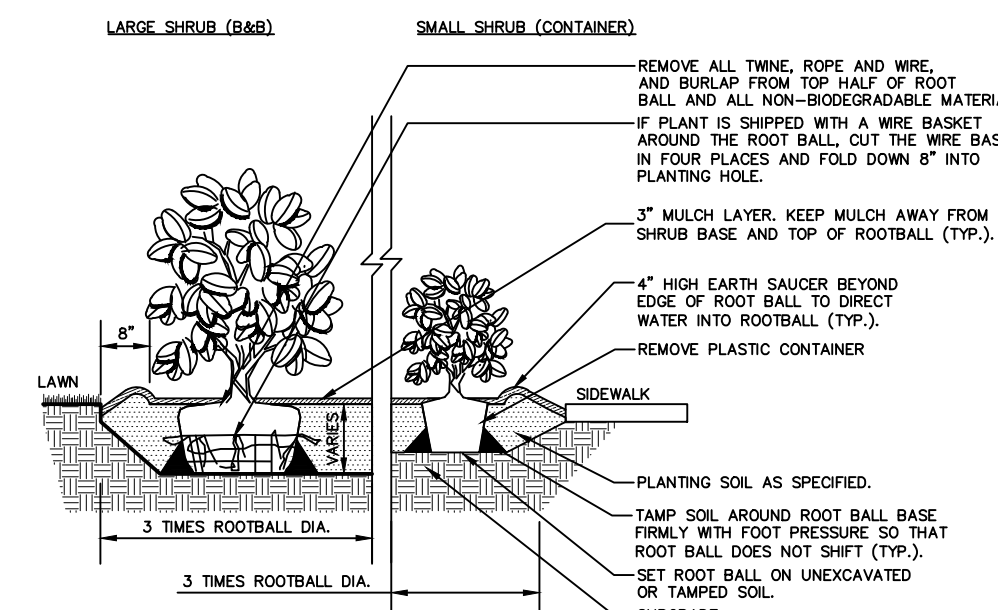
1. PLANTING SOIL, ALTERNATELY MAY BE REFERRED TO AS TOPSOIL, SHOULD BE FRABLE, FERTILE, WELL DRAINED, FREE OF DEBRIS, TOXINS, TRASH AND STONES OVER 1/2" DIA. IT SHOULD HAVE A HIGH ORGANIC CONTENT SUITABLE TO SUSTAIN HEALTHY PLANT GROWTH AND SHOULD LOOK AESTHETICALLY PLEASING HAVING NO NOXIOUS ODDORS.

2. PLANTING SOIL:

REUSE SURFACE SOILS STOCKPILED ON SITE, VERIFYING COMPLIANCE WITH PLANTING SOIL AND TOPSOIL CRITERIA 1. 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

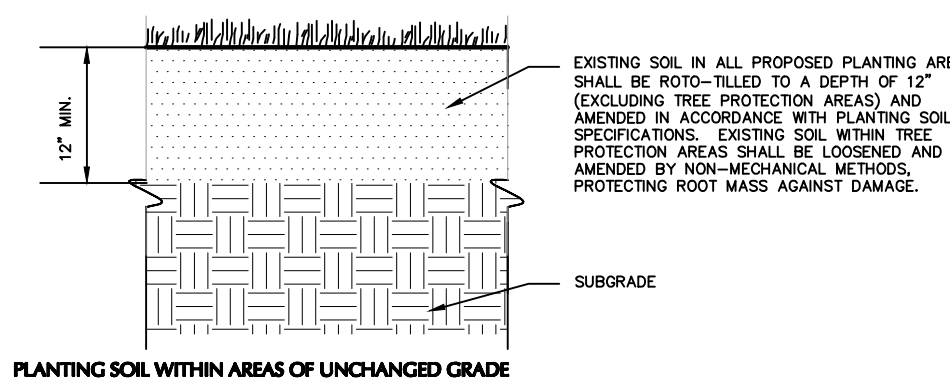
<u>MEADOW SEED MIX A</u> - ERNST SEED MIX ERNMX-183 (NATIVE DETENTION AREA MIX)	
32% PAREUX CLANDESTINUM, "TIGOA"	DEERTONGUE, "TIGOA"
20% CARENIX VULPINOIDES, "VIRGA"	FOX SEDGE
20% ELIMUS VIRGINICUS, "WILLOW WILDRYE"	WILLOW WILDRYE
20% PAREUX VIRGATUM, "SHAMINE"	SWITCHGRASS, "SHAMINE"
4% AGROSTIS PERENNANS, ALBANY PINE BUSH	ALBANY BENTGRASS, ALBANY PINE
2% JUNCUS TENUIS	PATH RUSH
1% JUNCUS EFFUSUS	SOFT RUSH
1% PAREUX RIGIDULUM	REDTOP PANCRASS
NOTES:	
SEED AT A RATE OF 20 LBS/ACRE OF 100% PURE LIVE SEED.	

1. ALL EXISTING TREES WITHIN THE LIMITS OF TREE PROTECTION FENCING SHALL BE PROTECTED THROUGHOUT THE DURATION OF WORK. TREE PROTECTION FENCING SHALL BE INSTALLED AT THE DIS- 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 INSTALLATION.
2. TREE PROTECTION PLANKING SHALL BE INSTALLED ALONG ALL EXISTING TREES AS NOTED ON THIS DRAWING. REFER TO DETAIL ON THIS SHEET.
3. TREE PROTECTION FENCING SHALL BE MAINTAINED TO PROTECT TREES AT ALL TIMES. ANY DAMAGED FENCING SHALL BE IMMEDIATELY REPAIR OR WHEN DAMAGED.
4. IF TREE PROTECTION FENCING NEEDS TO BE MOVED OR ORIGINATED DUE TO TEMPORARY CONSTRUCTION ACTIVITY WITHIN THE TREE PROTECTION ZONE, THE FENCING WILL BE RESET TO ITS ORIGINAL LOCATION IMMEDIATELY AFTER CONSTRUCTION ACTIVITY WITHIN THE TREE PROTECTION ZONE IS COMPLETE.



1. MAINTENANCE OPERATIONS BEFORE APPROVAL:

A. PLANT CARE SHALL BEGIN IMMEDIATELY AFTER EACH PLANT IS SATISFACTORILY INSTALLED AND



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 MAINTENANCE/BOND PERIOD. ANY BARE OR DEAD AREAS IN THE LAWN SHALL BE PREPARED, RESEEDED AND REESTABLISHED PRIOR TO THE END OF THE MAINTENANCE/BOND PERIOD AND TO THE SATISFACTION OF THE PROJECT LANDSCAPE ARCHITECT AND THE OWNER.

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 COMMISSION FOR APPROVAL PRIOR TO IMPLEMENTATION.

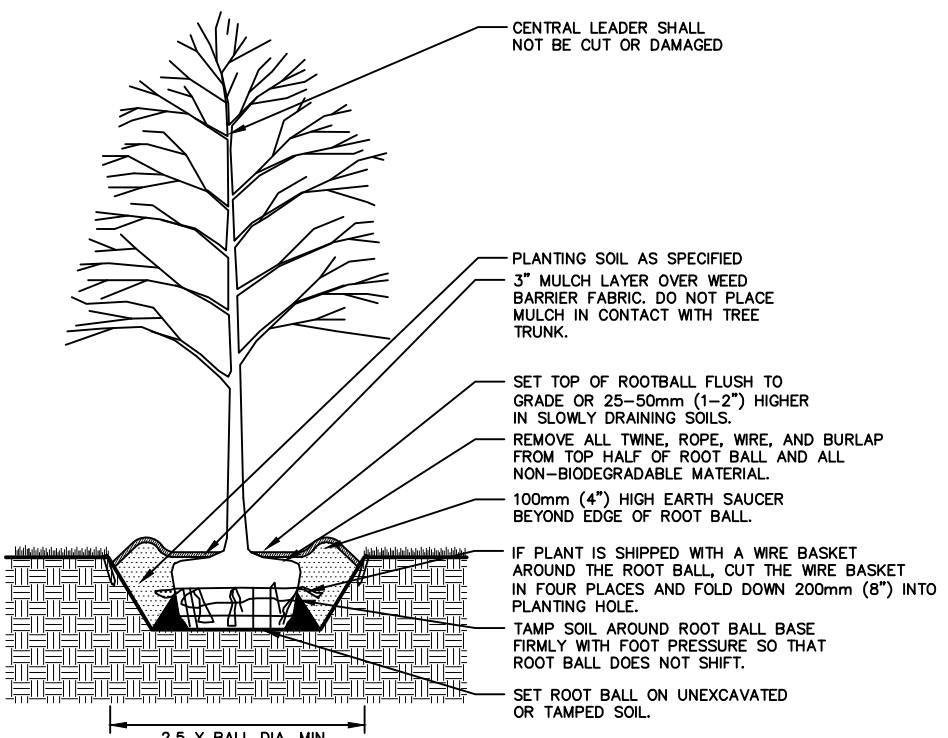
1. LAWN SEED MIX: LESCO GRASS SEED - ALL PRO TRANSITION MIX (3 TURF-TYPE TALL-FESCUE GRASSES)

NOTES:

A) SEED RATE:

1) NEW ESTABLISHMENT: SEED AT A RATE OF 6-8 LBS./1000 SQ FT

2) RENOVATION: 20-50% EXISTING COVER: 5-7 LBS./1000 SQ FT
50-75% EXISTING COVER: 6-8 LBS./1000 SQ FT

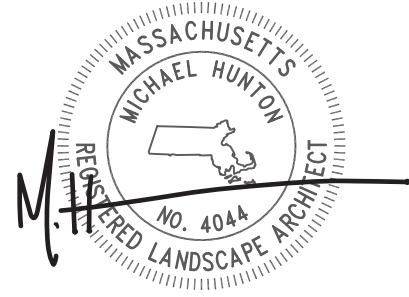


SECTION	REQUIRED/ PERMITTED	PROVIDED/ PROPOSED	COMPLIANCE								
23. F. 1	<p>THE REPLACEMENT OF VEGETATION SHALL BE ACCORDING TO THE FOLLOWING TABLE:</p> <table border="0"> <thead> <tr> <th>FOR EVERY EXISTING TRUNK (DBH)</th><th>REPLACEMENT QUANTITY</th></tr> </thead> <tbody> <tr> <td>3 TO 8 INCHES</td><td>1</td></tr> <tr> <td>8 TO 20 INCHES</td><td>2</td></tr> <tr> <td>> 20 INCHES</td><td>3</td></tr> </tbody> </table>	FOR EVERY EXISTING TRUNK (DBH)	REPLACEMENT QUANTITY	3 TO 8 INCHES	1	8 TO 20 INCHES	2	> 20 INCHES	3	<p>TOTAL TREES REQUIRED: 30 TREES TOTAL TREES PLANTED: 31 TREES</p>	COMPLIES
FOR EVERY EXISTING TRUNK (DBH)	REPLACEMENT QUANTITY										
3 TO 8 INCHES	1										
8 TO 20 INCHES	2										
> 20 INCHES	3										

10/04/23	NOI COMMENT REVISIONS	2
08/24/23	NOI COMMENT REVISIONS	1
Date	Description	No.

Revisions

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Boston, MA 02114

Project

MEDWAY BATTERY ENERGY STORAGE SYSTEM

NORFOLK COUNTY MEDWAY MASSACHUSETTS

Drawing Title

Project No. 151033401	Drawing No. <div style="font-size: 2em; font-weight: bold; text-align: center;">LP501</div>
Date 06/08/2023	
Drawn By LL/AS	
Checked By MH	