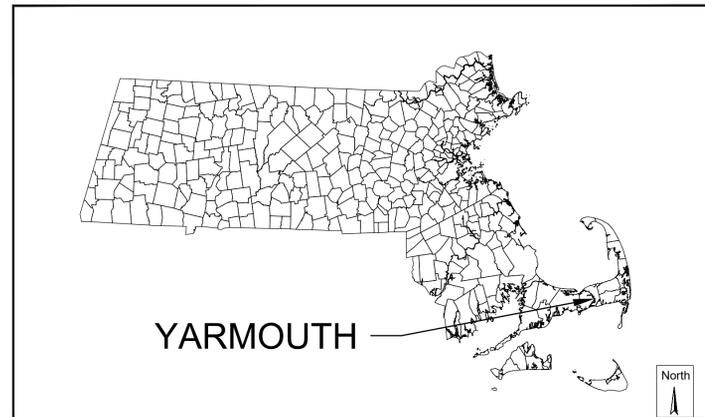


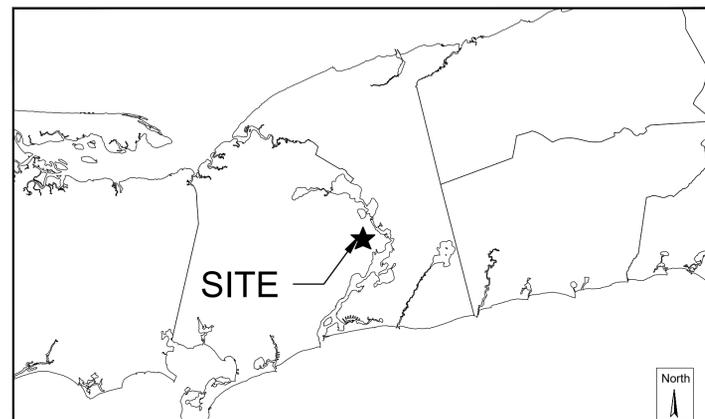
GREAT WESTERN ROAD DRAINAGE IMPROVEMENTS SOUTH YARMOUTH, MASSACHUSETTS

AUGUST 18, 2025



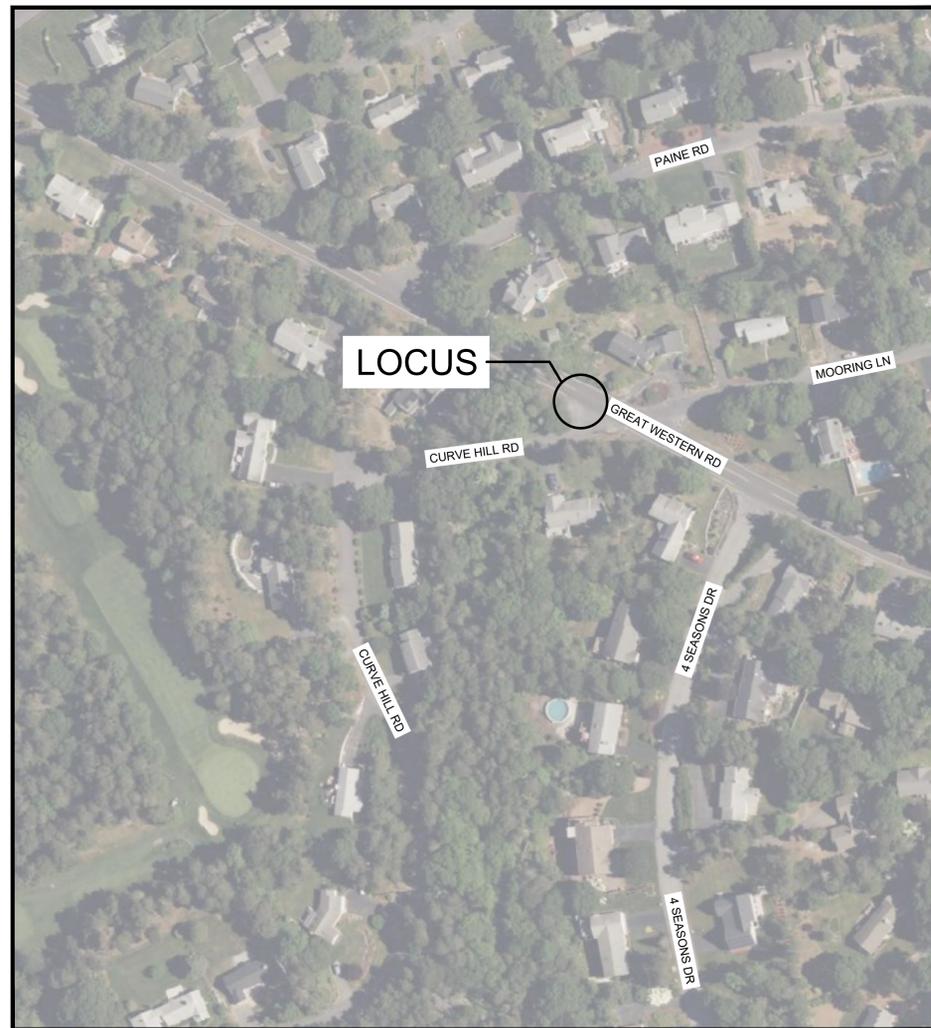
MASSACHUSETTS

Graphic Scale
0 150000
SCALE IN FEET
1:150000



YARMOUTH

Graphic Scale
0 12000
SCALE IN FEET
1:12000



VICINITY MAP

Graphic Scale
1-inch = 100-feet

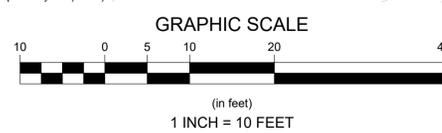
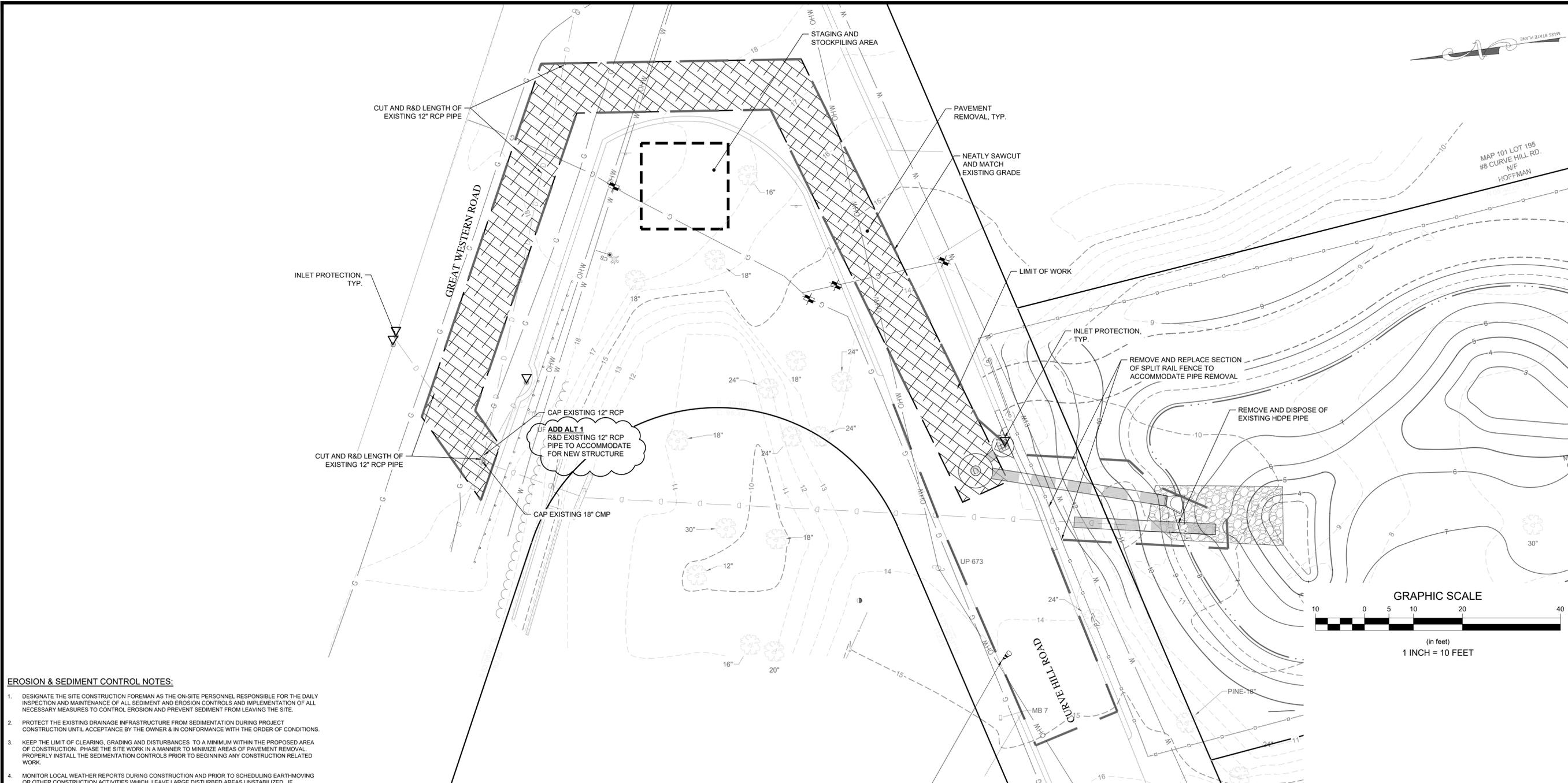
Sheet List Table	
Sheet Number	Sheet Title
1	COVER SHEET
2	EXISTING CONDITIONS
3	SITE PREPARATION PLAN, DETAILS & LEGEND
4	SITE AND GRADING PLAN
5	DETAILS AND CONSTRUCTION NOTES

- GENERAL NOTES:**
1. SURVEY CONDUCTED BY HORSLEY WITTEN GROUP (HW) IN FEBRUARY, 2024. ELEVATION DATUM IS NAVD 88.
 2. ABUTTER INFORMATION FROM ASSESSOR'S MAP.
 3. SITE INFORMATION:

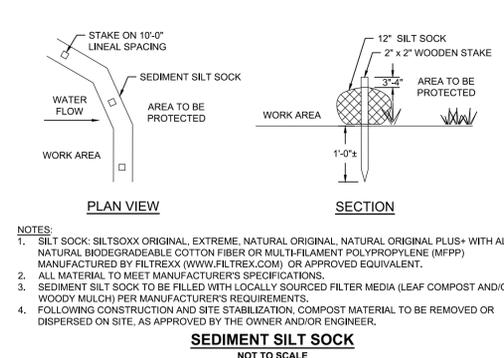
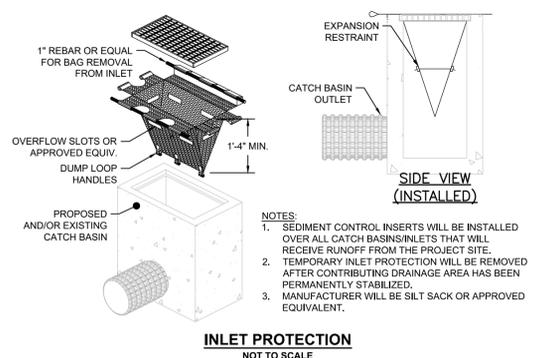
MAP	101
LOT	196
ADDRESS	CURVE HILL ROAD
ZONING DISTRICT	RESIDENTIAL
 4. THE WETLAND DELINEATION SHOWN HEREON WAS CONDUCTED BY HORSLEY WITTN GROUP, INC. IN NOVEMBER 2023.

Plan Set: <h3 style="margin: 0;">GREAT WESTERN ROAD DRAINAGE IMPROVEMENTS SOUTH YARMOUTH, MASSACHUSETTS</h3>																											
Prepared For:		Town of Yarmouth DPW 74 Town Brook Road West Yarmouth, MA 02673 (508) 398-2231 ext. 1250																									
Prepared By:		Horsley Witten Group, Inc. Sustainable Environmental Solutions www.horsleywitten.com																									
Headquarters 90 Route 6A, Unit 1 Sandwich, MA 02563 Phone: (508) 833-6600 Fax: (508) 833-3150	112 Water Street, 6th Floor Boston, MA 02109 Phone: (857) 263-8193	1 Turks Head Place, Suite 300 Providence, RI 02903 Phone: (401) 272-1717 Fax: (401) 437-8368	113 R2 Water Street Exeter, NH 03833 Phone: (603) 658-1660																								
Date Issued: AUGUST 18, 2025		<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="4" style="text-align: left;">Revisions</th> </tr> <tr> <th style="width: 5%;">Rev.</th> <th style="width: 10%;">Date</th> <th style="width: 10%;">By</th> <th style="width: 75%;">Appr. Description</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>	Revisions				Rev.	Date	By	Appr. Description																	Project Number: 22108 Sheet Number: 1 of 5 Drawing Number: C - 1
Revisions																											
Rev.	Date	By	Appr. Description																								

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- EROSION & SEDIMENT CONTROL NOTES:**
- DESIGNATE THE SITE CONSTRUCTION FOREMAN AS THE ON-SITE PERSONNEL RESPONSIBLE FOR THE DAILY INSPECTION AND MAINTENANCE OF ALL SEDIMENT AND EROSION CONTROLS AND IMPLEMENTATION OF ALL NECESSARY MEASURES TO CONTROL EROSION AND PREVENT SEDIMENT FROM LEAVING THE SITE.
 - PROTECT THE EXISTING DRAINAGE INFRASTRUCTURE FROM SEDIMENTATION DURING PROJECT CONSTRUCTION UNTIL ACCEPTANCE BY THE OWNER & IN CONFORMANCE WITH THE ORDER OF CONDITIONS.
 - KEEP THE LIMIT OF CLEARING, GRADING AND DISTURBANCES TO A MINIMUM WITHIN THE PROPOSED AREA OF CONSTRUCTION. PHASE THE SITE WORK IN A MANNER TO MINIMIZE AREAS OF PAVEMENT REMOVAL. PROPERLY INSTALL THE SEDIMENTATION CONTROLS PRIOR TO BEGINNING ANY CONSTRUCTION RELATED WORK.
 - MONITOR LOCAL WEATHER REPORTS DURING CONSTRUCTION AND PRIOR TO SCHEDULING EARTHMOVING OR OTHER CONSTRUCTION ACTIVITIES WHICH LEAVE LARGE DISTURBED AREAS UNSTABILIZED. IF INCLEMENT WEATHER IS PREDICTED, USE BEST PROFESSIONAL JUDGEMENT AND GOOD CONSTRUCTION PRACTICES WHEN SCHEDULING CONSTRUCTION ACTIVITIES AND ENSURE THE NECESSARY EROSION CONTROL DEVICES ARE INSTALLED AND FUNCTIONING PROPERLY TO MINIMIZE EROSION FROM ANY IMPENDING WEATHER EVENTS.
 - INSPECT EROSION AND SEDIMENT CONTROL DEVICES AFTER EACH RAINFALL EVENT OF .25 INCH OR GREATER. REPAIR IDENTIFIED PROBLEMS WITHIN 24 HOURS TO ENSURE EROSION AND SEDIMENT CONTROLS ARE IN GOOD WORKING ORDER. RESET OR REPLACE MATERIALS AS REQUIRED.
 - SURROUND THE PERIMETER OF STOCKPILES WITH SILT SOCK, AS DETERMINED NECESSARY.
 - DISTURBED AREAS AND SLOPES MUST NOT BE LEFT UNATTENDED OR EXPOSED FOR EXCESSIVE PERIODS OF TIME SUCH AS THE INACTIVE WINTER SEASON. PROVIDE APPROPRIATE STABILIZATION PRACTICES ON ALL DISTURBED AREAS AS SOON AS POSSIBLE BUT NOT MORE THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT AREA HAS TEMPORARILY OR PERMANENTLY CEASED. REINFORCE TEMPORARY AREAS HAVING A SLOPE GREATER THAN 4:1 WITH EROSION BLANKETS OR APPROVED EQUAL UNTIL THE SITE IS PROPERLY STABILIZED. TEMPORARY SWALES MAY ALSO BE REQUIRED IF DETERMINED NECESSARY IN THE FIELD BY THE ENGINEER.
 - INSTALL A SILT SOCK OR APPROVED EQUIVALENT IN EACH EXISTING DRAIN BASIN RECEIVING RUNOFF FROM THE SITE. UPON THE INSTALLATION OF EACH NEW DRAIN BASIN, INSTALL A SILT SOCK OR APPROVED EQUIVALENT. INSPECT SILT SOCKS AFTER EACH SIGNIFICANT STORM EVENT AND REMOVE AND EMPTY AS NEEDED FOR THE DURATION OF THE CONSTRUCTION PERIOD.
 - CONTAIN ALL SEDIMENT ONSITE. SWEEP ALL EXITS FROM THE SITE. AS NECESSARY INCLUDING ANY SEDIMENT TRACKING. SWEEP PAVED AREAS AS NEEDED TO REMOVE SEDIMENT AND POTENTIAL POLLUTANTS ACCUMULATED DURING SITE CONSTRUCTION.
 - REGULARLY REMOVE ACCUMULATED SEDIMENT FROM ALL TEMPORARY AND/OR PERMANENT PRACTICES AND AFTER RAIN EVENTS TO MAINTAIN PROPER DRAINAGE. DISPOSE OF IN A PRE-APPROVED LOCATION.
 - PROVIDE ON SITE OR MAKE READILY AVAILABLE THE NECESSARY EQUIPMENT AND SITE PERSONNEL DURING CONSTRUCTION HOURS FOR THE DURATION OF THE PROJECT TO ENSURE ALL EROSION AND SEDIMENTATION CONTROL DEVICES ARE PROPERLY MAINTAINED AND REPAIRED IN A TIMELY AND RESPONSIBLE MANNER. IF SITE WORK IS SUSPENDED DURING THE WINTER MONTHS THE CONTRACTOR MUST CONTINUE TO PROVIDE PERSONNEL AND EQUIPMENT EITHER ON SITE OR READILY AVAILABLE TO PROPERLY MAINTAIN AND REPAIR ALL EROSION AND SEDIMENTATION CONTROL DEVICES IN A TIMELY AND RESPONSIBLE MANNER.
 - CONTROL DUST BY WATERING OR OTHER APPROVED METHODS AS NECESSARY, OR AS DIRECTED BY THE ENGINEER.
 - THE CONTRACTOR IS RESPONSIBLE FOR THE INSPECTION AND MAINTENANCE DURING CONSTRUCTION OF ALL STORMWATER FACILITIES INSTALLED OR AFFECTED BY THE PROJECT. REMOVE SEDIMENT OR DEBRIS COLLECTED WITHIN THESE FACILITIES AS REQUIRED FOR PROPER FUNCTION AND CONTROL OF SITE RUNOFF DURING CONSTRUCTION AND PRIOR TO THE OWNER'S ACCEPTANCE.

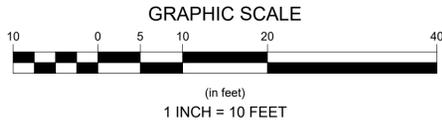


LEGEND:

GENERAL	SYMBOLS
PROPOSED	BENCHMARK
LIMIT OF WORK	BOUNDARY
CENTERLINE	EXISTING TREE
44	EXISTING SPOT GRADE
50	DRAIN MANHOLE
PAVEMENT	CATCHBASIN
PAVEMENT REMOVAL	GAS VALVE
SAWCUT	FIRE HYDRANT
DRAIN PIPE	UTILITY POLE
INLET PROTECTION	GUY
	LIGHT POST
	MAIL BOX
	WATER VALVE

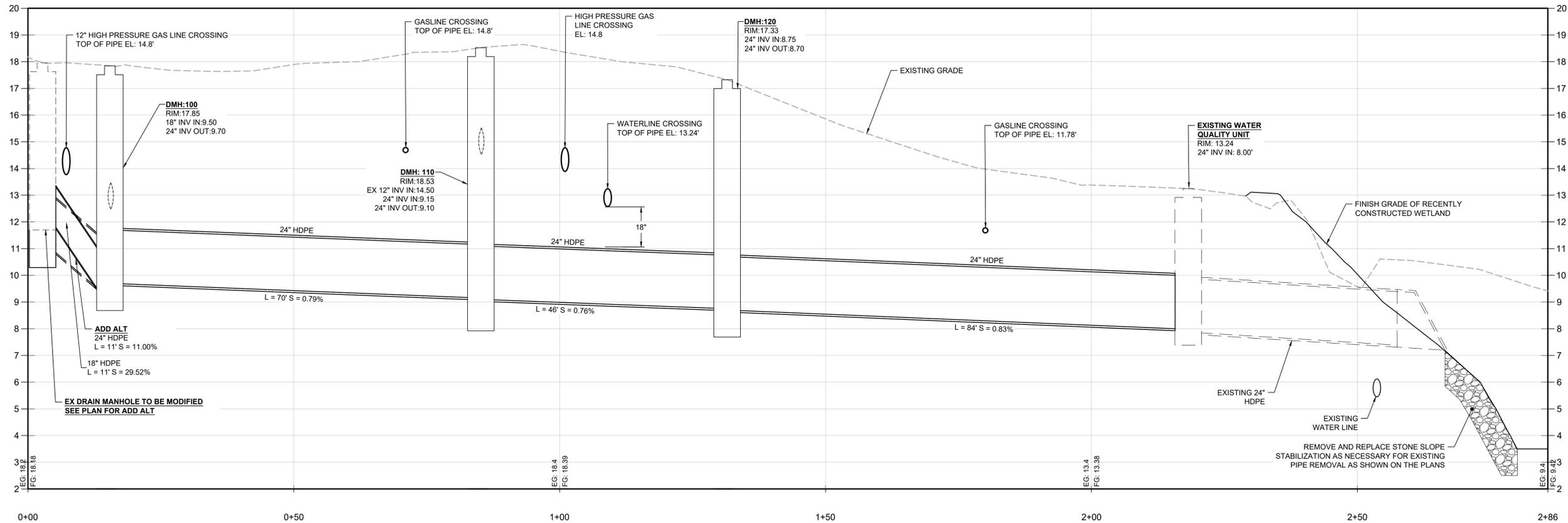
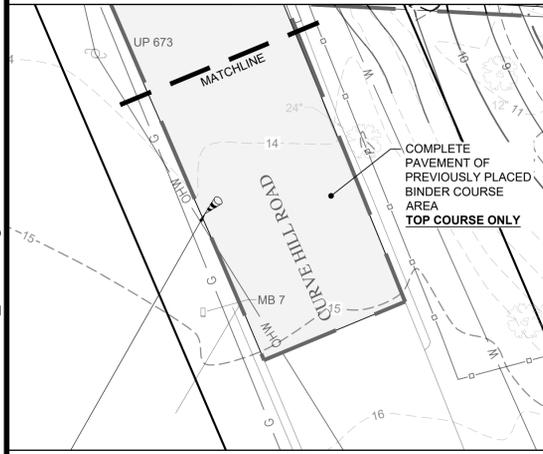
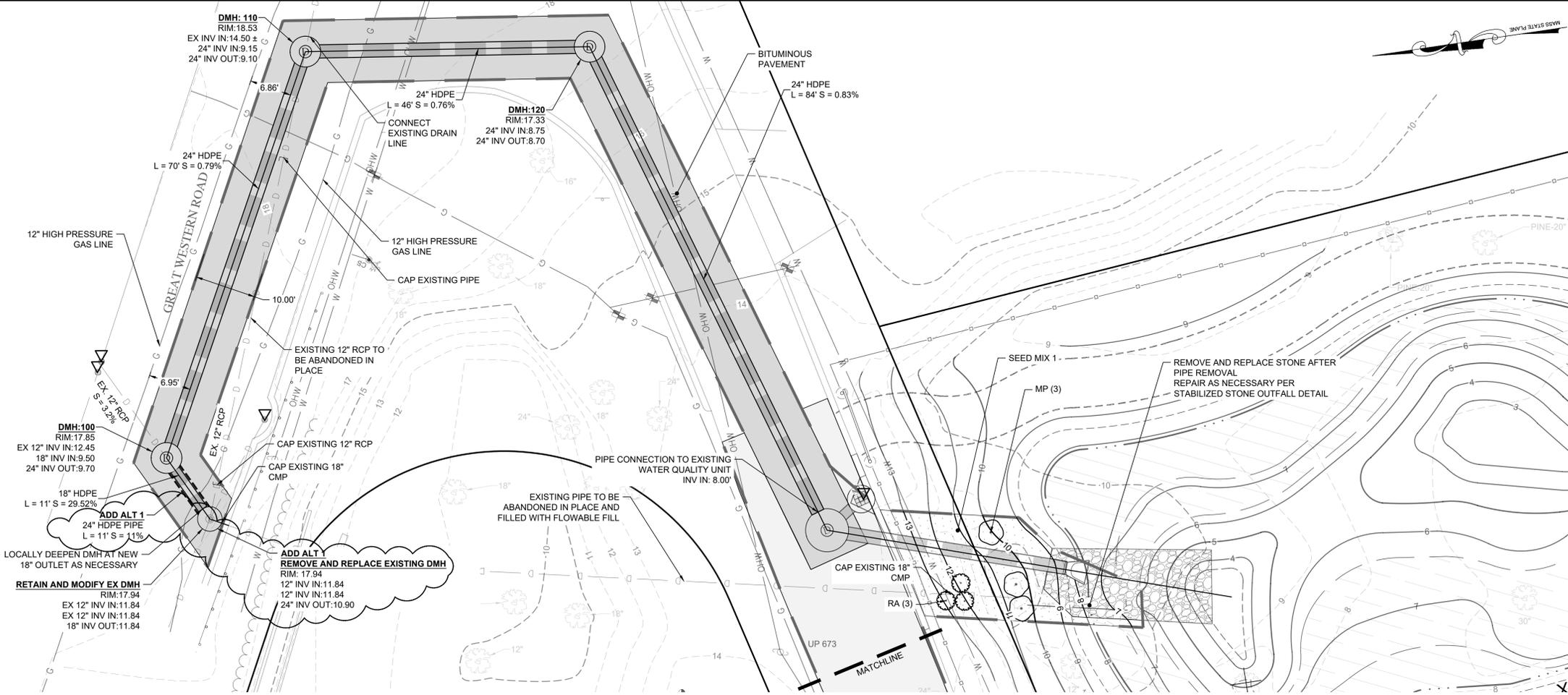
<p>Revisions</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Rev.</th> <th>Date</th> <th>By</th> <th>Appr.</th> <th>Description</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>	Rev.	Date	By	Appr.	Description																										<p>Horsley Witten Group, Inc. Sustainable Environmental Solutions 90 Route 6A, Unit 1 Sandwich, MA 02563 Phone: (508) 833-6600 Fax: (508) 833-3150</p>	<p>Town of Yarmouth DPW 74 Town Brook Road West Yarmouth, MA 02673 Phone: (508) 398-2231 ext. 1250</p>	<p>Project Number: 22108 Sheet: 3 of 5</p>
Rev.	Date	By	Appr.	Description																													
<p>GREAT WESTERN ROAD DRAINAGE IMPROVEMENTS SOUTH YARMOUTH, MASSACHUSETTS</p>		<p>SITE PREPARATION PLAN, DETAILS & LEGEND</p>																															
<p>Plan Set: GREAT WESTERN ROAD DRAINAGE IMPROVEMENTS SOUTH YARMOUTH, MASSACHUSETTS</p>		<p>Survey Provided By: Horsley Witten Group, Inc. 90 Route 6A Sandwich, MA 02566 Phone: 508-833-6600 Fax: 508-833-3150 Dated: January 1, 2024</p>																															
<p>DATE: AUGUST 18, 2025 DESIGNED BY: GELK DRAWN BY: CSG CHECKED BY: RAC</p>		<p>REGISTRATION: </p>																															
<p>C - 3</p>																																	

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NOTES

- 1. MAINTAIN 12 INCHES OF SEPARATION BETWEEN ALL NATURAL GAS LINES AND STORM DRAIN PIPES.



PIPE NETWORK PROFILE
HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 2'

Revisions table with columns for Rev, Date, By, Descr, and RAC.

Horsley Witten Group, Inc. logo and contact information: Sustainable Environmental Solutions, 90 Route 6A, Sandwich, MA 02563.

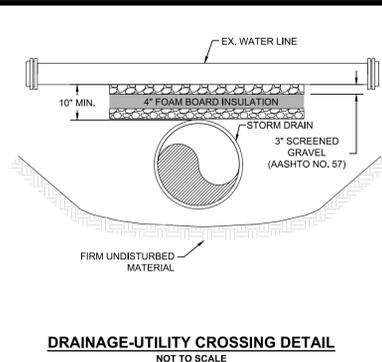
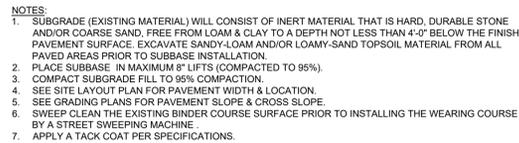
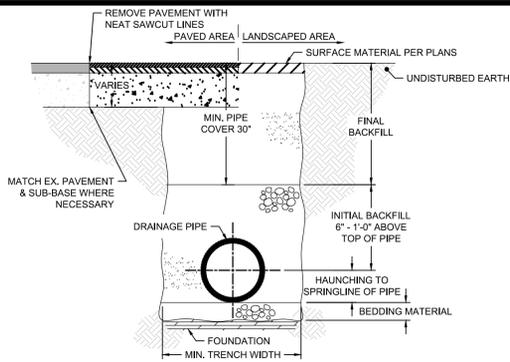
GREAT WESTERN ROAD
DRAINAGE IMPROVEMENTS
SOUTH YARMOUTH, MASSACHUSETTS
SITE AND GRADING PLAN

Prepared For: Town of Yarmouth DPW, 74 Town Brook Road, West Yarmouth, MA 02673.

Survey Provided By: Horsley Witten Group, Inc., 90 Route 6A, Sandwich, MA 02566.



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- NOTES:**
- INSTALL DRAIN PIPE & FITTINGS IN STRICT ACCORDANCE WITH THE INSTALLATION RECOMMENDATIONS OF THE PIPE FITTING MANUFACTURER. SUCH INSTRUCTIONS INCLUDE BUT ARE NOT LIMITED TO CUTTING, SOLVENT CEMENTING & PRIMING, JOINTS, CONNECTIONS, TRANSITIONS & ALLOWANCE FOR THERMAL EXPANSION.
 - FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR WILL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER & REPLACE WITH A SUITABLE COMPACTED GRAVEL MATERIAL OR AS AN ALTERNATIVE AT THE DISCRETION OF THE ENGINEER. THE TRENCH BOTTOM MAY BE STABILIZED USING A WOVEN GEOTEXTILE FABRIC.
 - BEDDING, HAUNCHING & INITIAL BACKFILL: SUITABLE MATERIAL WILL CONSIST OF CLEAN, HARD, PARTICLES OF GRAVEL MEETING THE FOLLOWING:

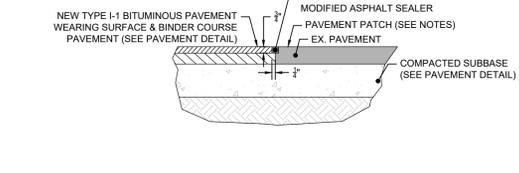
SIEVE SIZE	PERCENT PASSING	NOMINAL Ø	MIN. RECOMMENDED TRENCH WIDTH
3/4"	85-95	1'-0"	3'-0"
# 4	5-15	1'-3"	3'-0"
# 8	0-3	>1'-0"	3'-0"

DRAINAGE PIPE TRENCH
NOT TO SCALE

- NOTES:**
- SUBGRADE (EXISTING MATERIAL) WILL CONSIST OF INERT MATERIAL THAT IS HARD, DURABLE STONE AND/OR COARSE SAND, FREE FROM LOAM & CLAY TO A DEPTH NOT LESS THAN 4'-0" BELOW THE FINISH PAVEMENT SURFACE. EXCAVATE SANDY-LOAM AND/OR LOAMY-SAND TOPSOIL MATERIAL FROM ALL PAVED AREAS PRIOR TO SUBBASE INSTALLATION.
 - PLACE SUBBASE IN MAXIMUM 8" LIFTS (COMPACTED TO 95%).
 - COMPACT SUBGRADE FILL TO 95% COMPACTION.
 - SEE SITE LAYOUT PLAN FOR PAVEMENT WIDTH & LOCATION.
 - SEE GRADING PLANS FOR PAVEMENT SLOPE & CROSS SLOPE.
 - SWEEP CLEAN THE EXISTING BINDER COURSE SURFACE PRIOR TO INSTALLING THE WEARING COURSE BY A STREET SWEEPING MACHINE.
 - APPLY A TACK COAT PER SPECIFICATIONS.

BITUMINOUS PAVEMENT
NOT TO SCALE

DRAINAGE-UTILITY CROSSING DETAIL
NOT TO SCALE



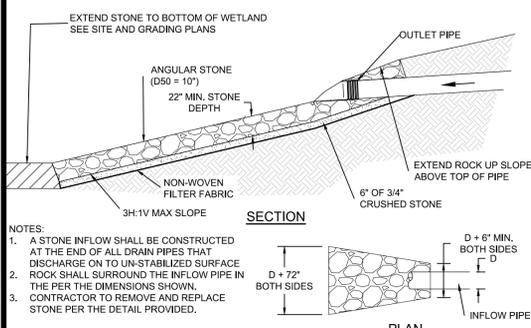
- NOTES:**
- EXISTING BITUMINOUS PAVEMENT WILL BE REMOVED TO A CLEAN STRAIGHT EDGE VIA SAW CUTTING. THE SAW CUT WILL BE COMPLETED PERPENDICULAR TO THE ROADWAY/SIDEWALK.
 - PRIOR TO INSTALLING THE WEARING COURSE, THE EXISTING VERTICAL PAVEMENT SURFACE WILL BE SWEEPED COMPLETELY CLEAN.
 - AFTER PROPER COMPACTION (SEE PAVEMENT DETAIL), SAW CUT NEW PAVEMENT ABUTMENT 2" DEEP & FILL WITH FIBER MODIFIED ASPHALT SEALER AS SHOWN.

SAW CUT PAVEMENT PATCH
NOT TO SCALE

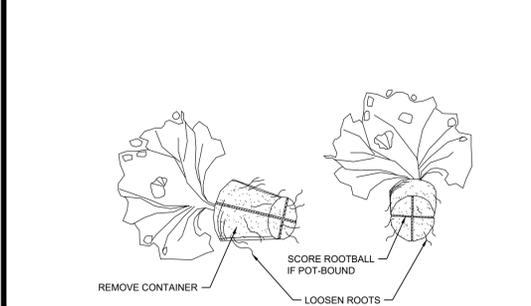


- NOTES:**
- FRAME & COVER WILL CONFORM TO MASSACHUSETTS STANDARDS HEAVY DUTY (EAST JORDAN, NEEHAH, OR APPROVED EQUIVALENT).
 - ALL H2O LOADING.
 - MIN. FRAME WEIGHT: 4" FLANGE 285 LBS. 3" FLANGE 285 LBS.
 - MATERIAL: CAST IRON.
 - MINIMUM GRATE WEIGHT: 200LBS.
 - SEE MANHOLE DETAILS FOR INSTALLATION.

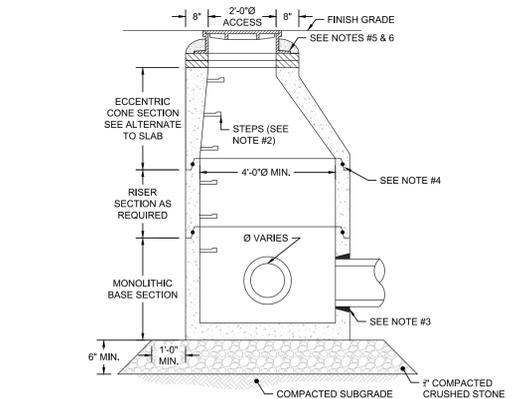
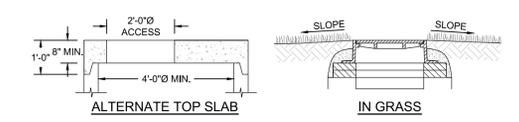
DRAINAGE STRUCTURE FRAME & COVER
NOT TO SCALE



STABILIZED STONE OUTLET
NOT TO SCALE

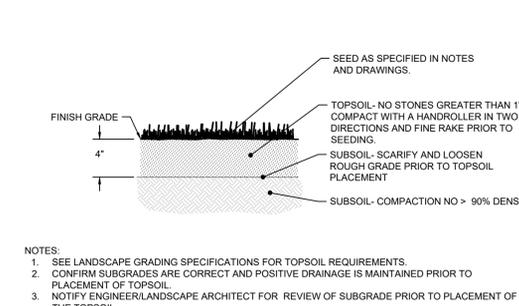


CONTAINER PLANT ROOTBALL TREATMENT
NOT TO SCALE

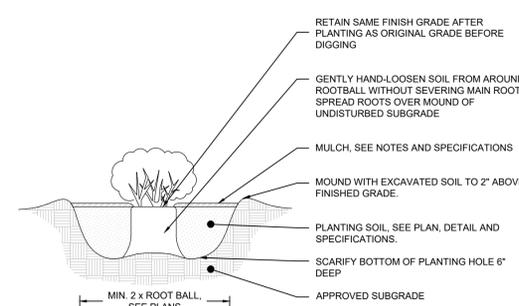


- NOTES:**
- ALL SECTIONS WILL BE DESIGNED FOR H-20 LOADING.
 - COPOLYMER MANHOLE STEPS WILL BE INSTALLED AT 1'-0" O.C. FOR THE FULL DEPTH OF THE STRUCTURE.
 - PROVIDE "V" KNOCKOUTS FOR PIPES WITH 2" MAXIMUM CLEARANCE TO OUTSIDE OF PIPE. MORTAR ALL PIPE CONNECTIONS.
 - JOINT SEALANT BETWEEN PRECAST SECTIONS WILL BE PERFORMED BUTYL RUBBER.
 - DRAIN MANHOLE FRAME & COVER WILL BE SET IN FULL 1'-0" MORTAR BED, ADJUST TO GRADE WITH PRECAST CONCRETE RISER OR BRICK.
 - DO NOT PLACE MORTAR BED AROUND STRUCTURE UNTIL IT IS AT THE REQUIRED FINISH ELEVATION & ALIGNMENT.
 - FRAME & COVER TO CONFORM TO MASSACHUSETTS STANDARDS HEAVY DUTY (EAST JORDAN, NEEHAH, OR APPROVED EQUIVALENT).

DRAIN MANHOLE (DMH)
NOT TO SCALE



LOAM AND SEED
NOT TO SCALE



SHRUB CONTAINER PLANTING
NOT TO SCALE

GENERAL CONSTRUCTION NOTES:

- ALL SITE WORK TO COMPLETE THIS PROJECT, AS INDICATED ON THE DRAWINGS, IN THE SPECIFICATIONS AND AS DESCRIBED BELOW IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- IMMEDIATELY CONTACT AND COORDINATE WITH THE ENGINEER AND OWNER IF ANY DEVIATION OR ALTERATION OF THE WORK PROPOSED ON THESE DRAWINGS IS REQUIRED.
- UTILIZE ALL PRECAUTIONS AND MEASURES TO ENSURE THE SAFETY OF THE PUBLIC, ALL PERSONNEL AND PROPERTY DURING CONSTRUCTION IN ACCORDANCE WITH OSHA STANDARDS, INCLUDING THE INSTALLATION OF TEMPORARY FENCING BARRICADES, CONES, POLICE DETAIL, AND/OR FLAGMEN AS DETERMINED NECESSARY BY THE TOWN OF YARMOUTH. THE CONTRACTOR SHALL PROVIDE FLAGGERS IF LOCAL POLICE CANNOT FILL DETAIL REQUEST. THE TOWN WILL PAY FOR POLICE DETAILS DIRECTLY, AND WILL REIMBURSE THE CONTRACTOR FOR THE COST OF FLAGGERS.
- MAKE ALL NECESSARY CONSTRUCTION NOTIFICATIONS AND APPLY FOR AND OBTAIN ALL NECESSARY CONSTRUCTION PERMITS, PAY ALL FEES AND POST ALL BONDS, IF NECESSARY, ASSOCIATED WITH THE SAME, AND COORDINATE WITH THE OWNER AND THE ENGINEER.
- ALL EXISTING CONDITIONS SHOWN ARE APPROXIMATE AND ARE BASED ON THE BEST INFORMATION AVAILABLE. PRIOR TO THE START OF CONSTRUCTION VERIFY THAT THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS DO NOT CONFLICT WITH ANY KNOWN EXISTING OR OTHER PROPOSED IMPROVEMENTS. IF ANY CONFLICTS ARE DISCOVERED, NOTIFY THE OWNER AND THE ENGINEER PRIOR TO INSTALLING ANY PORTION OF THE SITE WORK WHICH WOULD BE AFFECTED.
- THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AND STRUCTURES AS INDICATED ON THE DRAWINGS ARE BASED ON RECORDS OF VARIOUS UTILITY COMPANIES, AND WHEREVER POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THIS INFORMATION IS NOT TO BE RELIED UPON AS BEING EXACT OR COMPLETE. VERIFY THE LOCATION OF ALL UNDERGROUND UTILITIES AND STRUCTURES IN THE FIELD PRIOR TO THE START OF CONSTRUCTION. CONTACT THE APPROPRIATE UTILITY COMPANY, ANY GOVERNING PERMITTING AUTHORITY IN THE TOWN OF YARMOUTH, AND "DISSAFE" (1-888-344-7233) AT LEAST THREE BUSINESS DAYS PRIOR TO ANY EXCAVATION WORK TO REQUEST EXACT FIELD LOCATION OF UTILITIES. THE CONTRACTOR MUST RESOLVE CONFLICTS BETWEEN THE PROPOSED UTILITIES AND FIELD-LOCATED UTILITIES AND REPORT ANY DISCREPANCIES TO THE ENGINEER IMMEDIATELY. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR DAMAGES INCURRED AS A RESULT OF UTILITIES OMITTED, INCOMPLETELY SHOWN, OR INACCURATELY SHOWN. THE CONTRACTOR MUST MAINTAIN ACCURATE RECORDS OF THE LOCATION AND ELEVATION OF ALL WORK INSTALLED AND EXISTING UTILITIES FOUND DURING CONSTRUCTION FOR THE PREPARATION OF THE AS-BUILT PLAN.
- CONTRACTOR SHALL NOTIFY NATIONAL GRID AND YARMOUTH WATER DEPARTMENT WHEN EXCAVATING AND/OR WORKING IN THE PROXIMITY OF UTILITIES AT LEAST 72 HOURS IN ADVANCE OF THE WORK.
- MAINTAIN ALL EXISTING UTILITIES IN WORKING ORDER AND FREE FROM DAMAGE DURING THE ENTIRE DURATION OF THE PROJECT. REPAIR ANY DAMAGE TO EXISTING UTILITY LINES OR STRUCTURES INCURRED DURING CONSTRUCTION OPERATIONS AT NO COST TO THE OWNER. THE CONTRACTOR IS RESPONSIBLE FOR ALL COST RELATED TO THE REPAIR OF UTILITIES. EXCAVATION REQUIRED WITHIN THE PROXIMITY OF EXISTING UTILITY LINES MUST BE DONE BY HAND.
- COORDINATE ALL TRENCHING WORK WITHIN ROADWAYS WITH THE PROPER LOCAL & STATE AGENCY. THE CONTRACTOR IS RESPONSIBLE FOR ALL TRENCH SAFETY INCLUDING ANY LOCAL AND/OR STATE PERMITS REQUIRED FOR THE TRENCH WORK. IF THIS WORK IS REQUIRED TO OCCUR OUTSIDE THE AGREED UPON HOURS OF OPERATION FOR THE FACILITY, THE CONTRACTOR MUST PLAN ACCORDINGLY.
- ALL TRENCH WORK SHALL BE PERFORMED PURSUANT TO THE REQUIREMENTS OF M.G.L.C. 82A AND 520 CMR. NO UNATTENDED TRENCHES ARE ALLOWED WITHOUT THE APPROVAL OF THE TOWN.
- SAWCUT ALL TRENCH WORK WITHIN EXISTING PAVEMENT AS INDICATED ON THE DRAWINGS. BACKFILL AND COMPACT TRENCH WORK AS INDICATED ON THE DRAWING AND IN THE SPECIFICATIONS. IF SETTLEMENT OCCURS DUE TO INADEQUATE COMPACTION, AS DETERMINED BY THE ENGINEER, WITHIN THE WARRANTY PERIOD, CONTRACTOR IS REQUIRED TO REMOVE, PATCH AND REPAVE AFTER ONE COMPLETE 12-MONTH CYCLE.
- ESTABLISH AND MAINTAIN ALL CONTROL POINTS AND BENCHMARKS DURING CONSTRUCTION INCLUDING BENCHMARK LOCATIONS AND ELEVATIONS AT CRITICAL AREAS. COORDINATE WITH THE ENGINEER THE LOCATION OF ALL CONTROL POINTS AND BENCHMARKS.
- SITE LAYOUT SURVEY REQUIRED FOR CONSTRUCTION MUST BE PROVIDED BY THE CONTRACTOR AND PERFORMED BY A MASSACHUSETTS REGISTERED PROFESSIONAL LAND SURVEYOR. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE SURVEYOR FOR ALL SITE SURVEY WORK.
- MAINTAIN ALL GRADE STAKES SET BY THE SURVEYOR. GRADE STAKES ARE TO REMAIN UNTIL A FINAL INSPECTION OF THE ITEM HAS BEEN COMPLETED BY THE ENGINEER. RE-STAKING OF PREVIOUSLY SURVEYED SITE FEATURES IS THE RESPONSIBILITY (INCLUDING COST) OF THE CONTRACTOR.
- UNLESS OTHERWISE INDICATED ON THE DRAWINGS AND/OR IN THE SPECIFICATIONS, ALL SITE CONSTRUCTION MATERIALS AND METHODOLOGIES ARE TO CONFORM TO THE MOST RECENT VERSION OF THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS.
- PROVIDE ALL CONSTRUCTION SERVICE IN ACCORDANCE WITH APPLICABLE LAWS AND REGULATIONS REGARDING NOISE, VIBRATION, DUST, SEDIMENTATION CONTAINMENT, AND TRENCH WORK.
- COLLECT SOLID WASTES AND STORE IN A SECURED DUMPSTER. THE DUMPSTER MUST MEET ALL LOCAL AND STATE SOLID WASTE MANAGEMENT REGULATIONS.
- RESTORE ALL SURFACES EQUAL TO THEIR ORIGINAL CONDITION AFTER CONSTRUCTION IS COMPLETE PER SPECIFICATIONS. LEAVE ALL AREAS NOT DISTURBED BY CONSTRUCTION IN THEIR NATURAL STATE. TAKE CARE TO PREVENT DAMAGE TO SHRUBS, TREES, OTHER LANDSCAPING AND/OR NATURAL FEATURES. WHEREAS THE PLANS DO NOT SHOW ALL LANDSCAPE FEATURES, EXISTING CONDITIONS MUST BE VERIFIED BY THE CONTRACTOR IN ADVANCE OF THE WORK.
- REGULARLY INSPECT THE PERIMETER OF THE PROPERTY TO CLEAN UP AND REMOVE LOOSE CONSTRUCTION DEBRIS BEFORE IT LEAVES THE SITE. PROMPTLY REMOVE ALL DEMOLITION DEBRIS FROM THE SITE TO AN APPROVED DUMP SITE.
- ALL TRUCKS LEAVING THE SITE MUST BE COVERED.
- DO NOT WASH ANY CONCRETE TRUCKS ONSITE. REMOVE BY HAND ANY CEMENT OR CONCRETE DEBRIS LEFT IN THE DISTURBED AREA.
- BURIAL OF ANY STUMPS, SOLID DEBRIS, AND/OR STONES/BOULDERS ONSITE IS PROHIBITED. DO NOT USE ROAD SALT OR OTHER DE-ICING CHEMICALS ON THE ACCESS ROADWAY.
- AT THE END OF CONSTRUCTION, REMOVE ALL CONSTRUCTION DEBRIS AND SURPLUS MATERIALS FROM THE SITE. PERFORM A THOROUGH INSPECTION OF THE WORK PERIMETER. COLLECT AND REMOVE ALL MATERIALS AND BLOWN OR WATER CARRIED DEBRIS FROM THE SITE.

BASIC CONSTRUCTION SEQUENCE:

- THE FOLLOWING CONSTRUCTION SEQUENCE IS TO BE USED AS A GENERAL GUIDELINE. COORDINATE WITH THE OWNER, ENGINEER AND LANDSCAPE ARCHITECT AND SUBMIT A PROPOSED CONSTRUCTION SEQUENCE FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION.
- PLACE SEDIMENTATION CONTROL DEVICES AS INDICATED ON DRAWINGS. UNDER NO CIRCUMSTANCES IS THE LIMIT OF WORK TO EXTEND BEYOND THE LIMIT OF DISTURBANCE AS INDICATED ON DRAWINGS.
 - BEGIN SITE PREPARATION, CLEARING AND DEMOLITION AS REQUIRED.
 - SURVEY AND MARK THE CENTERLINE OF DRAINAGE LINES.
 - INSTALL DRAINAGE PIPES, DRAINAGE MANHOLES, AND CATCH BASINS. BEGIN WORK AT THE STORMWATER MANAGEMENT AREAS AND PROGRESS UP-GRADE. MAINTAIN EXISTING DISCHARGE OUTLETS AND RIP-RAP APRONS. THE STORMWATER MANAGEMENT AREA(S) AND DRAINAGE NETWORK ARE TO BE PROTECTED FROM SEDIMENTATION UNTIL ALL UN-STABILIZED AREAS ARE STABILIZED WITH STONE SUB-BASE OR VEGETATION. INSTALL SEDIMENT BARRIERS/SHIELD PROTECTION AT ALL POINTS OF ENTRY INTO THE DRAINAGE NETWORK. TAKE PARTICULAR CARE TO PROTECT THE DRAINAGE STRUCTURES FROM SEDIMENT.
 - FINAL PAVING IS NOT TO OCCUR UNTIL THE ENTIRE PERMANENT DRAINAGE SYSTEM HAS BEEN INSTALLED AND ALL PIPE CONNECTIONS COMPLETE.
 - FINISH PERMANENT STABILIZATION. COMPLETE PERMANENT STORMWATER MANAGEMENT AREA SEEDING AND PLANTING AFTER THE CONTRIBUTING AREA TO THE BASIN HAS REACHED A MINIMUM OF 80% STABILIZATION AND IS NO LONGER REQUIRED AS A CONSTRUCTION SEDIMENTATION BASIN.
 - COMPLETE ALL REMAINING PLANTING AND SEEDING.
 - SWEEP THE ROADWAY TO REMOVE ALL SEDIMENTS. REPAIR DRAINAGE OUTLETS AND BASINS AS REQUIRED. CLEAN AND FLUSH THE DRAINAGE STRUCTURES AND PIPES AT THE END OF CONSTRUCTION AND REMOVE ALL ACCUMULATED SEDIMENTS IN THE STORMWATER MANAGEMENT AREAS. CONTRACTOR MUST INSPECT THE DRAINAGE NETWORK AND REPAIR ANY DAMAGE IMMEDIATELY.
 - ENGINEER TO APPROVE THE REMOVAL OF ALL TEMPORARY SOIL EROSION AND SEDIMENTATION CONTROL MEASURES FOLLOWING VEGETATIVE ESTABLISHMENT OF ALL DISTURBED AREAS AND DETERMINE WHEN THE CONTRIBUTING AREA HAS REACHED A MINIMUM OF 80% STABILIZATION.

GENERAL GRADING AND DRAINAGE NOTES:

- EXISTING GRADE CONTOUR INTERVALS SHOWN AT 1 FOOT.
- PROPOSED PAVEMENT PATCHING TO MATCH EXISTING ROAD GRADES.
- ADJUST AND/OR CUT EXISTING PAVEMENT AS NECESSARY TO ASSURE A SMOOTH FIT AND CONTINUOUS GRADE.
- ALL DRAINAGE STRUCTURES AND PIPES MUST BE CONNECTED TO THE DRAINAGE SYSTEM PRIOR TO THE INSTALLATION OF ANY PAVEMENT. PAVING WILL NOT BE ALLOWED IF THE DRAINAGE SYSTEM FOR THE PROPOSED PAVED AREA IS NOT COMPLETELY AND PROPERLY INSTALLED. THIS INCLUDES THE STABILIZATION OF ALL DISTURBED AREAS CONTRIBUTING TO THE DRAINAGE SYSTEMS AND ANY STORMWATER BASIN FLOORS AND SIDE SLOPES.

STORMWATER FACILITY OPERATION & MAINTENANCE:

- THE CONTRACTOR IS RESPONSIBLE FOR THE PROPER INSPECTION AND MAINTENANCE OF ALL STORMWATER MANAGEMENT FACILITIES AS OUTLINED BELOW DURING CONSTRUCTION AND UNTIL SUCH TIME THAT THE ROADWAYS AND ASSOCIATED UTILITIES ARE ACCEPTED BY THE OWNER AND THE ENGINEER.
- INSPECT AND RESTORE/CLEAN ALL FACILITIES (INLETS, MANHOLES, STORMWATER MANAGEMENT AREAS AS DESCRIBED BELOW) OF SEDIMENT AND DEBRIS PRIOR TO THE OWNER'S ACCEPTANCE.
 - REMOVE AND DISPOSE ALL SEDIMENT AND DEBRIS TO A PRE-APPROVED LOCATION.
 - AT A MINIMUM INSPECT MONTHLY AND AFTER STORM EVENTS GREATER THAN OR EQUAL TO 1" OF RAINFALL AS NECESSARY FOR THE ENTIRE DURATION OF THE CONSTRUCTION PROJECT AND THE FIRST 3 MONTHS AFTER CONSTRUCTION TO ENSURE PROPER STABILIZATION.
 - SPECIFIC MAINTENANCE REQUIRED DURING CONSTRUCTION:
 - DRAINAGE STRUCTURES (INLETS, MANHOLES, CATCHBASINS, DIVERSION STRUCTURE, WATER QUALITY UNITS): MONITOR AND REGULARLY INSPECT ALL EXISTING AND PROPOSED DRAINAGE STRUCTURES FOR PROPER OPERATION, COLLECTION OF LITTER OR TRASH, AND STRUCTURAL DETERIORATION. CLEAN AND REMOVE SEDIMENT FROM THE STRUCTURES (INCLUDING SUMP) AS NECESSARY, AND REPAIR WHEN REQUIRED.
 - RIP-RAP SLOPE PROTECTION: MONITOR, REGULARLY INSPECT AND REPAIR AS NECESSARY.
 - ROUTINE MAINTENANCE: OTHER ROUTINE MAINTENANCE INCLUDES THE REMOVAL OF TRASH AND LITTER FROM PAVED AND PERIMETER AREAS, AND STREET AND PARKING LOT SWEEPING UPON COMPLETION OF CONSTRUCTION TO AVOID EXCESSIVE ACCUMULATION OF SEDIMENT IN THE DRAINAGE SYSTEM. INSPECT THE PIPES AND STRUCTURES FOR SEDIMENT ACCUMULATION AND PROPER FLOW.

PLANT SCHEDULE

CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	SPACING
SHRUBS					
MP	3	Myrica pensylvanica	Northern Bayberry	#5	48" o.c.
RA	3	Rhus aromatica	Fragrant Sumac	#3	36" o.c.

NOTES:

- PLANT SPACING PER SCHEDULE OR AS SHOWN ON PLANS.

SYMBOL	BOTANICAL NAME	COMMON NAME
	SEED MIX #1: STABILIZER ROADSIDE & EROSION CONTROL MIX	
	Agrostis perennans	Autumn Bentgrass
	Andropogon gerardii	Big Bluestem
	Asclepias tuberosa	Butterfly Milkweed
	Carex swanii	Swan's Sedge
	Chamaecrista fasciculata	Partridge Pea
	Coreopsis lanceolata	Lanceleaf Tickseed
	Deschampsia flexuosa	Crinkled Hair Grass
	Desmodium canadense	Showy Tick Trefoil
	Elymus canadensis	Canada Wild Rye
	Festuca x	Rough Bent Grass/Blue Hard Fescue
	Schizachyrium scoparium	Little Bluestem
	Solidago sempervirens	Seaside Goldenrod
	Trifolium repens	White Clover

Revisions

Rev.	Date	By	Description
1			
2			
3			
4			
5			

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Checked By: PAC
Designed By: GSK
Drawn By: GSK
Date: AUGUST 18, 2025

**GREAT WESTERN ROAD
DRAINAGE IMPROVEMENTS
SOUTH YARMOUTH, MASSACHUSETTS**

Plan Set
Plan Title
DETAILS AND CONSTRUCTION NOTES

Prepared For:
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Dated: January 1, 2024

Registration:
RICHARD A. CLAYTON
CIVIL
NO. 45116
REGISTERED PROFESSIONAL ENGINEER
EXPIRES 12/31/2025