

GENERAL NOTES

- THE CONTRACTOR SHALL FURNISH, INSTALL, TEST, AND COMPLETE ALL WORK AS SPECIFIED IN THE CONTRACT DOCUMENTS TO THE SATISFACTION OF THE OWNER AND ENGINEER.
- THE TERM "INSTALL" INCLUDES FURNISHING, INSTALLING, AND PLACING COMPONENTS INTO OPERATION.
- THE CONTRACTOR IS SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, AND JOB SITE SAFETY, INCLUDING COMPLIANCE WITH ALL APPLICABLE SAFETY REGULATIONS AND LAWS IN EFFECT AT THE TIME OF CONSTRUCTION. THESE PLANS DO NOT PROVIDE DETAILED CONSTRUCTION INSTRUCTIONS.
- THE CONTRACTOR SHALL ACCEPT THE SITE "AS IS" AND VERIFY ALL SITE CONDITIONS BEFORE COMMENCING WORK. THE CONTRACTOR SHALL INSPECT THE SITE, CORRELATE EXISTING CONDITIONS WITH THE DRAWINGS, AND RESOLVE ANY POTENTIAL CONFLICTS WITH THE OWNER AND ENGINEER BEFORE PROCEEDING. NOTIFY THE ENGINEER IMMEDIATELY OF ANY UNFORESEEN CONDITIONS OR DISCREPANCIES BETWEEN THE PLANS AND FIELD CONDITIONS.
- COORDINATE WITH THE ENGINEER AND ARCHITECT AS NECESSARY, NOTIFY THE ENGINEER AT THE START OF CONSTRUCTION TO SCHEDULE REQUIRED INSPECTIONS.
- CONSTRUCTION LAYOUT OF BUILDINGS AND SITE IMPROVEMENTS SHALL BE PERFORMED BY A LICENSED PROFESSIONAL LAND SURVEYOR.
- THE CONTRACTOR SHALL PROTECT ALL STRUCTURES, UTILITIES, PAVEMENT, AND OTHER SITE FEATURES THAT ARE TO REMAIN. ANY DAMAGE SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE, RESTORING THE AFFECTED ELEMENTS TO ORIGINAL OR BETTER CONDITION, IN COMPLIANCE WITH APPLICABLE CODES AND STANDARDS.
- THE LIMIT OF WORK IS SHOWN ON THE PLANS BY SAWCUT LINES, EROSION CONTROL BARRIERS, LIMIT OF CLEARING AND/OR LIMIT OF WORK LINES. ANY AREAS DISTURBED OUTSIDE THE LIMIT OF WORK SHALL BE RESTORED TO THEIR ORIGINAL CONDITION AT NO ADDITIONAL COST TO THE OWNER.
- NO DEBRIS, HAZARDOUS MATERIALS, NON-BIO降DEGRADABLE FILL, OR STUMPS SHALL BE BURIED ON-SITE OR LEFT WITHIN THE PUBLIC RIGHT-OF-WAY. THE CONTRACTOR SHALL MAINTAIN A CLEAN WORK AREA AND RESTORE DISTURBED AREAS AS REQUIRED.
- MAINTAIN RECORD DRAWINGS THROUGHOUT CONSTRUCTION, SUBMIT FINAL AS-BUILT DRAWINGS, INCLUDING UNDERGROUND UTILITIES, TO THE OWNER UPON PROJECT COMPLETION. THE OWNER AND CONTRACTOR ARE RESPONSIBLE FOR PROVING ALL CERTIFICATIONS REQUIRED FOR THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.
- ALL WORK SHALL MEET OR EXCEED THE PROJECT SPECIFICATIONS. ALTERNATIVE METHODS OR MATERIALS MUST BE APPROVED IN ADVANCE BY THE OWNER, ENGINEER, AND APPLICABLE REGULATORY AGENCIES. ALL MATERIALS SHALL BE NEW AND IN GOOD CONDITION UNLESS OTHERWISE SPECIFIED.
- THE CONTRACTOR IS LIABLE FOR ALL COSTS, FINES, PENALTIES, AND DAMAGES RESULTING FROM DEVIATIONS FROM THE PLANS WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE ENGINEER.
- FOR CLARITY, SOME EXISTING FEATURES SUCH AS UTILITIES, PROPERTY BOUNDARIES, AND EASEMENTS MAY NOT BE SHOWN ON ALL DRAWINGS. REFER TO THE FULL SET OF REFERENCED DRAWINGS AND DOCUMENTS FOR ADDITIONAL INFORMATION.

PLAN REFERENCES

- "PLAN OF LAND IN LITTLETON MASSACHUSETTS" PREPARED FOR GLAVEY FAMILY IRREVOCABLE TRUST BY DILLIS & ROY CIVIL DESIGN GROUP, DATED JULY 24, 2024, RECORDED AT THE MIDDLESEX REGISTRY OF DEEDS SOUTHERN DISTRICT ON OCTOBER 30, 2024, BOOK 2024, PAGE 621.
- EXISTING CONDITION INFORMATION BASED ON AN-ON-THE-GROUND TOPOGRAPHIC PERFORMED BY GOLDSMITH, PREST & RINGWALL, INC., DATED JULY 2018 TO APRIL 2019
- EXISTING BASE INFORMATION INCLUDING PROPERTY LINES, STRUCTURES, UTILITIES, AND TOPOGRAPHY, IS TAKEN FROM "PLAN OF LAND IN LITTLETON, MASSACHUSETTS" PREPARED FOR GLAVEY FAMILY IRREVOCABLE TRUST BY DILLIS & ROY CIVIL DESIGN GROUP, DATED JULY 25, 2024, RECORDED AT MIDDLESEX REGISTRY OF DEEDS SOUTHERN DISTRICT ON OCTOBER 30, 2024, BOOK 2024, PAGE 621.
- ELEVATIONS SHOWN ARE BASED ON THE NAVG 1988 DATUM.

REGULATORY NOTES

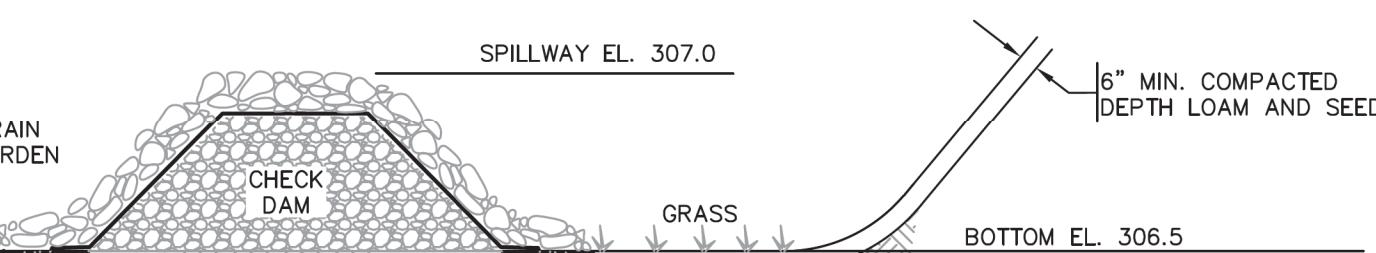
- LOCATIONS OF UNDERGROUND UTILITIES, OBSTRUCTIONS, AND SYSTEMS SHOWN ARE APPROXIMATE AND MAY NOT REPRESENT ALL FIELD CONDITIONS. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND PROTECTING ALL UNDERGROUND UTILITIES, WHETHER DEPICTED OR NOT, CONTACT 1-888-DEG-SAFE AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION.
- THE CONTRACTOR SHALL MAKE ALL NECESSARY NOTIFICATIONS, OBTAIN ALL REQUIRED PERMITS (INCLUDING TRENCH PERMITS IN ACCORDANCE WITH 520 CMR 14.00), PAY ALL ASSOCIATED FEES, AND POST BONDS AS REQUIRED.
- THE CONTRACTOR SHALL BE AWARE OF AND COMPLY WITH ALL CONSTRUCTION REQUIREMENTS, CONDITIONS, AND LIMITATIONS IMPOSED BY PERMITS AND APPROVALS ISSUED BY REGULATORY AUTHORITIES PRIOR TO THE COMMENCEMENT OF ANY WORK.
- ALL WORK OUTSIDE OF THE BUILDING IS WITHIN 10 FEET OF THE INSIDE FACE OF THE BUILDING FOUNDATION SHALL CONFORM TO THE UNIFORM STATE PLUMBING CODE OF MASSACHUSETTS (248 CMR 2.00).
- WETLANDS SHALL REMAIN UNDISTURBED; NO ENCROACHMENT PERMITTED.

EROSION AND SEDIMENTATION NOTES

- THE CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTING THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP), AND EPA CONSTRUCTION GENERAL PERMIT (CGP) REQUIREMENTS.
- THE SWPPP SHALL BE AVAILABLE ON-SITE AT ALL TIMES AND UPDATED AS NEEDED TO REFLECT CHANGES IN SITE CONDITIONS OR OPERATIONS.
- PREVENT SOIL AND MATERIALS FROM ENTERING WETLANDS, STREAMS, AND OTHER PROTECTED RESOURCE AREAS.
- PROTECT ABUTTING PROPERTIES FROM CONSTRUCTION-RELATED EROSION AND SEDIMENTATION AT ALL TIMES. WORK ON ABUTTING PROPERTIES REQUIRES WRITTEN AUTHORIZATION FROM THE OWNER PRIOR TO ANY LAND DISTURBANCE.
- INSTALL SEDIMENT CONTROL BARRIERS AT THE EDGE OF PROPOSED WORK, AS SHOWN ON THE DRAWINGS, PRIOR TO ANY EARTH-DISTURBING ACTIVITIES.
- DEVISE A WORK SEQUENCE TO LIMIT THE DRAINAGE AREA TRIBUTARY TO DISTURBED ZONES TO MINIMIZE RUNOFF AND EROSION POTENTIAL.
- MAINTAIN ALL SEDIMENT AND EROSION CONTROL MEASURES THROUGHOUT CONSTRUCTION TO ENSURE CONTINUED FUNCTIONALITY.
- THE EROSION CONTROL MEASURES SHOWN ON THESE PLANS ARE MINIMUM REQUIREMENTS. IMPLEMENT ADDITIONAL MEASURES AS NEEDED OR AS DIRECTED BY THE OWNER OR OWNER'S REPRESENTATIVE. MAINTAIN SPARE MATERIALS ON-SITE FOR IMMEDIATE DEPLOYMENT, REPAIR, OR EXPANSION OF CONTROLS.
- INSPECT AND MAINTAIN EROSION AND SEDIMENT CONTROLS AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS AFTER ANY RAINFALL EVENT OF 0.25 INCHES OR GREATER. ENSURE THAT CHANNELS, DITCHES, AND PIPES REMAIN CLEAR AND MEASURES REMAIN INTACT. REPAIR OR REPLACE DAMAGED CONTROLS IMMEDIATELY.
- MAINTAIN CONSTRUCTION ACCESS POINTS TO PREVENT SEDIMENT TRACKING ONTO PUBLIC WAYS. SWEEP ANY TRACKED SEDIMENT FROM PUBLIC WAYS DAILY.
- LOCATE ALL STOCKPILES WITHIN THE LIMIT OF WORK. STABILIZE OR PROTECT STOCKPILES WITH SEDIMENT BARRIERS AND COVER IF LEFT INACTIVE FOR MORE THAN 14 DAYS.
- DISPOSE OF DEBRIS GENERATED DURING SITE PREPARATION OFF-SITE IN ACCORDANCE WITH LEGAL REQUIREMENTS.
- PROVIDE CRIBBING AS NECESSARY TO PROTECT EXISTING UTILITY LINES DURING CONSTRUCTION.
- PROTECT ALL SITE ELEMENTS DESIGNATED TO REMAIN FOR THE DURATION OF CONSTRUCTION.
- STRIP TOPSOIL WITHIN THE LIMIT OF WORK TO ITS FULL DEPTH. STOCKPILE SEPARATELY FOR REUSE, AND DISPOSE OF EXCESS TOPSOIL ON-SITE AS DIRECTED BY THE OWNER.
- MULCH CRITICAL VEGETATION AREAS—INCLUDING TEMPORARY/PERMANENT DITCHES, CHANNELS, EMBANKMENTS, AND ANY DENUDED SURFACES EXPOSED FOR MORE THAN ONE MONTH—with STRAW APPLIED UNIFORMLY AND THICK ENOUGH TO FULLY COVER THE SOIL.
- STABILIZE CRITICAL VEGETATION AREAS BY SEEDING WITH ANNUAL RYEGRASS AT A RATE OF 40 LBS/ACRE.
- CONTROL DUST BY SPRINKLING OR OTHER APPROVED METHODS, AS NECESSARY OR AS DIRECTED BY THE OWNER OR OWNER'S REPRESENTATIVE.
- INSTALL FILTER BAGS IN EXISTING CATCH BASINS BEFORE CONSTRUCTION BEGINS, AND IN NEW CATCH BASINS PRIOR TO PERMANENT PAVEMENT PLACEMENT.
- INSTALL STRAW BALE CHECK DAMS EVERY 200 FEET WITHIN DRAINAGE SWALES AND DITCHES, AND AT THE UPSTREAM ENDS OF DRAINAGE INLETS.
- NO EQUIPMENT, FUELS, LUBRICANTS, OR OTHER MATERIALS SHALL BE STORED WITHIN 100 FEET OF BORDERING VEGETATED WETLANDS (BVW), BANKS, OR SURFACE WATERS UNLESS OTHERWISE APPROVED. EQUIPMENT SHALL BE INSPECTED DAILY FOR LEAKS; ANY LEAKS MUST BE REPAIRED IMMEDIATELY.
- SEDIMENTATION BASINS SHALL BE USED THROUGHOUT THE SITE TO TREAT RUNOFF. DIVERSION BERM SHALL BE USED TO DIRECT UNTREATED STORMWATER TO SEDIMENTATION BASINS. SEDIMENTATION BASINS AND DIVERSION BERM SHALL BE ADDED, REMOVED, AND ADJUSTED AS THE SITE EVOLVES THROUGHOUT CONSTRUCTION.
- EROSION AND SEDIMENT CONTROLS SHALL REMAIN IN PLACE UNTIL DISTURBED AREAS ARE STABILIZED.

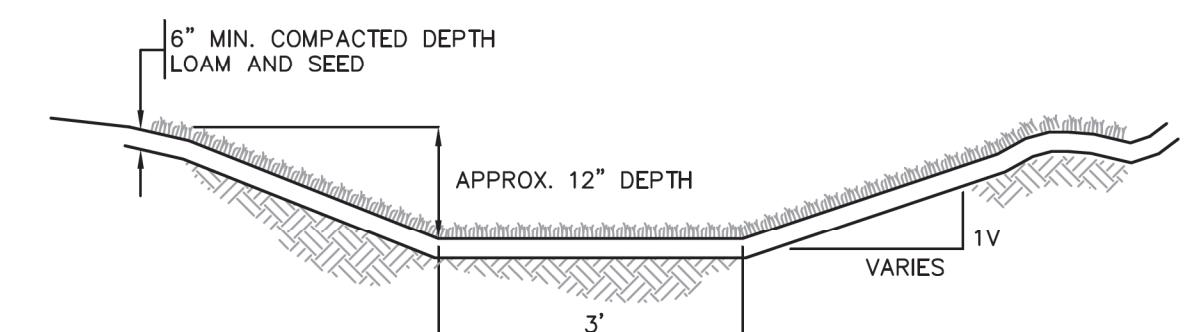
GRADING, DRAINAGE AND UTILITY NOTES

- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS, GRADES, AND SITE CONDITIONS PRIOR TO BEGINNING CONSTRUCTION. ANY CONFLICTS, DISCREPANCIES, OR AMBIGUITIES SHALL BE REPORTED IN WRITING TO THE ENGINEER BEFORE BEGINNING WORK. NO ADDITIONAL COMPENSATION WILL BE PAID FOR REWORK REQUIRED DUE TO UNREPORTED DISCREPANCIES.
- REFER TO ARCHITECTURAL DRAWINGS FOR LOCATIONS, DIMENSIONS, AND DETAILS OF ALL DOORS, RAMPS, SIDEWALKS, AND BUILDING-RELATED WALLS.
- WHERE NEW WORK ABUTS EXISTING CURB OR PAVEMENT, SAWCUT THE EXISTING SURFACES TO PROVIDE A CLEAN EDGE. BLEND NEW WORK SMOOTHLY INTO EXISTING LINES AND GRADES AND ENSURE POSITIVE DRAINAGE IS MAINTAINED.
- SCHEDULE WORK TO ENSURE FINISHED SUBGRADES DRAIN PROPERLY WITHOUT PONDING. PROVIDE TEMPORARY DRAINAGE AS NEEDED UNTIL FINAL GRADING AND PAVING ARE COMPLETED.
- SPOT GRADES ARE PROVIDED IN CRITICAL AREAS FOR GUIDANCE. CONTRACTOR SHALL VERIFY EXISTING GRADES IN THE FIELD AND NOTIFY THE ENGINEER IMMEDIATELY IF DISCREPANCIES ARE FOUND. MAINTAIN A MINIMUM PITCH OF 1/8" PER FOOT ON PAVED SURFACES UNLESS OTHERWISE NOTED.
- GRADING ADJACENT TO BUILDING FOUNDATIONS SHALL PROVIDE POSITIVE DRAINAGE AWAY FROM THE STRUCTURE. LOW POINTS AND AREAS OF POTENTIAL PONDING SHALL NOT BE LOCATED ADJACENT TO FOUNDATIONS OR BASEMENT WALLS.
- ALL IMPORTED FILL SHALL BE ENVIRONMENTALLY CLEAN AND GEOTECHNICALLY SUITABLE FOR ITS INTENDED USE. FILL SHOULD BE FREE OF HAZARDOUS MATERIALS, LEAD, BUT NOT LIMITED TO, ASBESTOS, LEAD, UNTREATED WOOD, ASH, DUST, AND OTHER RELATED CONTAMINANTS AS DEFINED IN LOCAL, STATE, OR FEDERAL ENVIRONMENTAL STANDARDS. IT SHALL NOT CONTAIN CONSTRUCTION OR DEMOLITION DEBRIS, ORGANIC MATTER, FROZEN MATERIAL, OR OTHER UNSUITABLE SOILS. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION VERIFYING THE SOURCE, COMPOSITION, AND SUITABILITY OF ALL IMPORTED MATERIAL. THE OWNER AND ENGINEER RESERVE THE RIGHT TO REJECT ANY MATERIAL DEEMED UNSUITABLE.
- ALL SLOPES WITH A GRADE OF 2:1 (HORIZONTAL TO VERTICAL) OR STEEPER SHALL INCLUDE APPROPRIATE STABILIZATION MEASURES TO PREVENT EROSION AND SLOP STABILIZATION METHODS MAY INCLUDE, BUT ARE NOT LIMITED TO, GEOTEXTILE FABRIC, EROSION CONTROL BLANKETS, REINFORCED TURF MATS, OR ENGINEERED GEOROADS, AS SPECIFIED IN THE PROJECT DOCUMENTS OR APPROVED BY THE ENGINEER. THE CONTRACTOR SHALL INSTALL ALL STABILIZATION MATERIALS IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND PROJECT SPECIFICATIONS. THE CONTRACTOR SHALL SUBMIT MATERIAL SPECIFICATIONS AND INSTALLATION DETAILS FOR REVIEW AND APPROVAL PRIOR TO PLACEMENT.
- UNLESS OTHERWISE NOTED ALL UTILITIES SHALL BE INSTALLED UNDERGROUND.
- CONTRACTOR SHALL COORDINATE WITH UTILITY PROVIDERS FOR ALL WORK TO GAS, ELECTRIC, TELEPHONE, AND OTHER PRIVATE UTILITIES.
- ALL DRAINAGE PIPE SHALL BE SMOOTH-WALLED CORRUGATED POLYETHYLENE PIPE (ADS N-12 OR APPROVED EQUAL) RATED FOR H-20 LOADING AND SHALL HAVE SILT-TIGHT JOINTS UNLESS OTHERWISE NOTED.
- PRIOR TO OWNER ACCEPTANCE CONTRACTOR SHALL CLEAN THE STORMWATER MANAGEMENT SYSTEM. THIS INCLUDES: REMOVAL OF ALL SEDIMENT, CONSTRUCTION DEBRIS, CONCRETE/MORTAR DROPPINGS, AND FORMWORK FLUSHING OF ALL PIPES COMPLETION OF OPERATION AND MAINTENANCE ACTIVITIES IN THE PROJECT'S SWPPP. NO DEBRIS SHALL BE FLUSHED INTO WETLANDS, WATERCOURSES, OR EXISTING STORM DRAINS.
- FOR SEWAGE DISPOSAL SYSTEM DETAILS SEE "SUBSURFACE SEWAGE DISPOSAL SYSTEM - NEW CONSTRUCTION, LOT 1 (MAP 1, PARCEL 107) AND LOT 2 (MAP 1, PARCEL 14), HARWOOD AVENUE, LITTLETON, MA" PREPARED FOR DECA CORP BY THIS OFFICE, DATED MARCH 2025 AND "SUBSURFACE SEWAGE DISPOSAL SYSTEM - NEW CONSTRUCTION, LOT 2 (MAP 1, PARCEL 14), HARWOOD AVENUE, LITTLETON, MA" PREPARED FOR DECA CORP BY THIS OFFICE, DATED APRIL 2025.
- WATER SERVICES SHALL BE TYPE K COPPER OR PE PIPING AS REQUIRED BY THE LOCAL WATER DEPARTMENT. MAINTAIN A MINIMUM COVER OF FIVE (5) FEET FOR WATER LINES UNLESS OTHERWISE APPROVED BY THE ENGINEER AND WATER AUTHORITY.
- ALL ON-SITE CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF 4,500 PSI WITH 5%-7% AIR ENTRAINMENT UNLESS OTHERWISE NOTED.



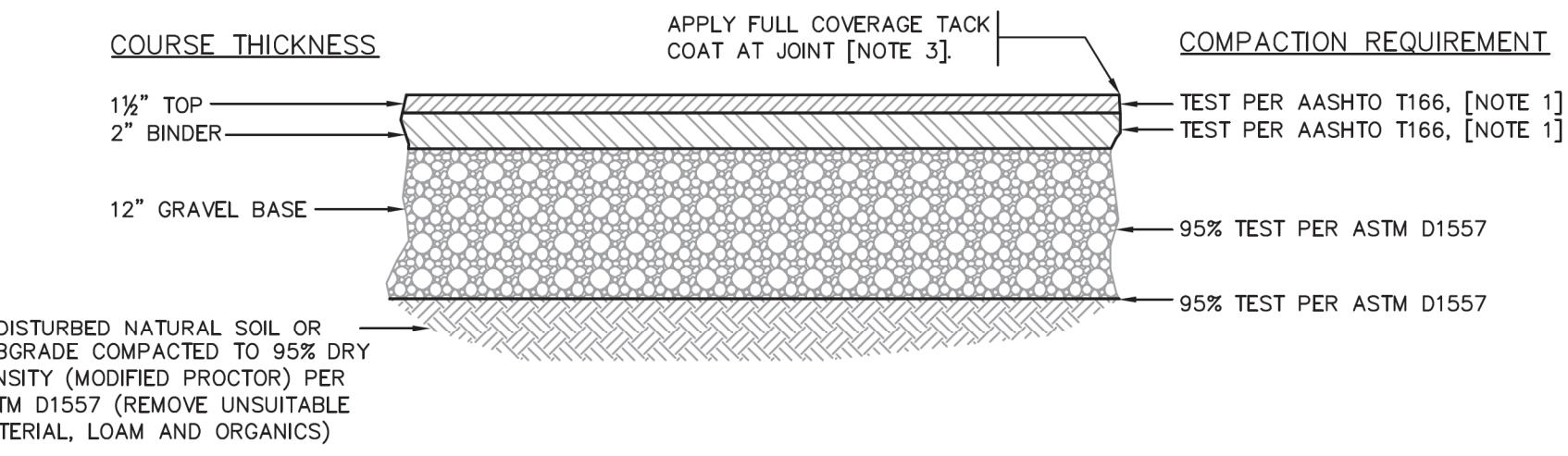
SEDIMENT FOREBAY

TYPICAL CROSS SECTION
NOT TO SCALE



GRASS SWALE

TYPICAL CROSS SECTION
NOT TO SCALE



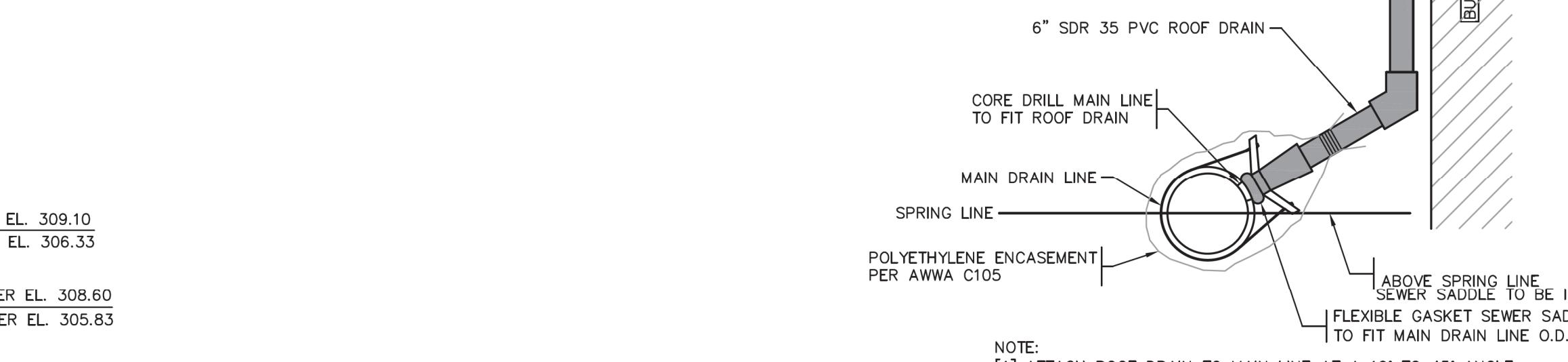
COURSE	MATERIAL	SPECIFICATION PER MASS HIGHWAY DEPARTMENT (MHD)	MAX AGG. SIZE (INCH)
TOP	BITUMINOUS CONCRETE	M3.11.03 CLASS I, TYPE I-1	1/2
BINDER	BITUMINOUS CONCRETE	M3.11.03 CLASS I, TYPE I-1	3/4
BASE	GRAVEL BORROW [2]	M1.03.0 TYPE B	3
UNFITTED SUBGRADE	ORDINARY BORROW	ON-SITE EXCAVATED MATERIAL	12

NOTES:

- COMPACT TO TEST AVERAGE OF 95% NO TEST LOWER THAN 93%.
- ACCEPTABLE SUBSTITUTE MATERIAL 3/4" MINUS DENSE GRADED CRUSHED STONE.
- EXISTING PAVEMENT SHALL BE CUT VERTICALLY AT FINAL JOINT LOCATIONS.

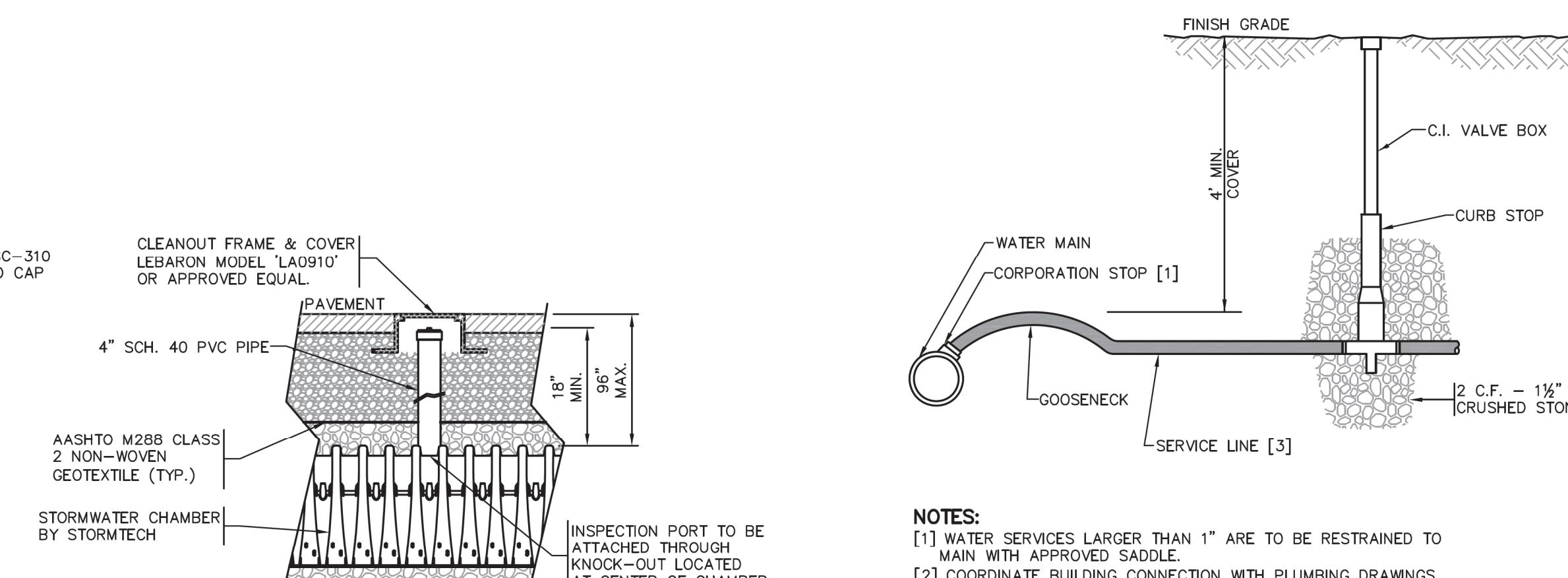
BITUMINOUS CONCRETE PAVEMENT

TYPICAL CROSS SECTION
NOT TO SCALE



ROOF DRAIN DRY WELL

NOT TO SCALE



INVESTIGATION PORT

TYPICAL CROSS SECTION
NOT TO SCALE

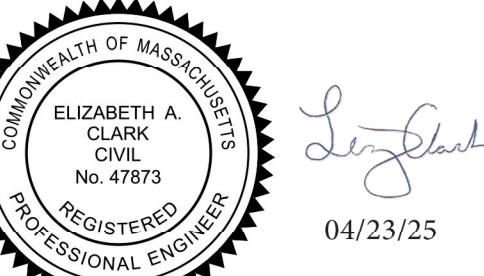


ABBREVIATIONS

EL	ELEVATION
INV	INVERT
SF	SQUARE FEET
AC	ACRES
FT	FEET
R	RADIIUS
DIA	DIAMETER
BIT	BITUMINOUS
CONC	CONCRETE
L	LENGTH
S	SEED
HDPE	HIGH DENSITY POLYETHYLENE
PVC	POLYVINYL CHLORIDE
RCP	REINFORCED CONCRETE PIPE
N/F	NOW OR FORMERLY
VP	VERNAL POOL
WT	WEIGHT
TW	TOP OF WALL
BW	BOTTOM OF WALL
FG	FINISH GRADE
BSMT	BASEMENT
FF	FINISH FLOOR

LEGEND

EXISTING	PROPOSED
100	100
X100.0	FO
SPOT GRADE	WETLAND DELINEATION
PROPERTY LINE	WETLAND BUFFER ZONE
EDGE OF PAVEMENT	TREE LINE / EDGE OF VEGETATION
CAPE COD BERM CURBING	WETLAND
GRANITE CURBING	DIRT ROAD
REINFORCED CONCRETE PIPE	STOCKADE FENCE
NOW OR FORMERLY	STONE WALL
VERNAL POOL	WATER MAIN
WEIGHT	WATER SERVICE
WATER GATE VALVE	WATER SERVICE
WATER GATE VALVE	WATER GATE VALVE
W	W
WS	WS
FM	FM
SS	SS
CS	CS
FM	FM
SS	SS
SMH	SMH
FM	FM
SD	SD
UD	UD
FD	FD
CB	CATCH BASIN
DMH	DRAIN MANHOLE
SWAT	STRAW WATERS
SDH	DEE SOIL OBSERVATION HOLE
SL	SITE LUMINAIRE(S)
SDR	SIGN
SDR	SURFACE RUNOFF DIRECTION
SDR	STONE BOUND
DRILL	DRILL HOLE
IRON	IRON ROD



04/23/25