

CONSTRUCTION NOTES:

- At least two full business days prior to starting any site activity or demolition, the contractor shall contact the applicable state utility location service by dialing 811 or submitting an online ticket request. The utilities shall be marked in all areas of proposed disturbance.
- It is the contractor's responsibility to review all construction contract documents associated with the project scope of work, including, but not limited to, all drawings and specifications, architectural plans, boundary and topographic survey, wetlands assessment and reports, geotechnical reports, environmental reports, and approval conditions, prior to the commencement of construction. Should the contractor find conflict and/or discrepancy between the documents relative to the plans, specifications, reports, or the relative or applicable codes, regulations, laws, rules, statutes and/or ordinances, it is the contractor's sole responsibility to notify the Engineer, in writing, of said conflict and/or discrepancy prior to the start of construction.
- The contractor shall be responsible for adhering to any conditions of approval placed on the project by the authorities having jurisdiction.
- The contractor must comply, to the fullest extent, with the latest Occupational Safety and Health (OSHA) standards and regulations, and/or any other agency with jurisdiction for construction activities. The contractor is solely responsible for construction means, methods, techniques, sequences, or procedures, or for safety precautions and programs in connection with work on the Project. The Engineer will not be responsible for the contractor's safety, schedules, or failure to carry out its work in accordance with the contract documents. The Engineer will not have control over or charge of acts or omissions of the contractor, subcontractors, or their agents or employees, or of any persons performing portions of work on the Project.
- Contractor must notify the Engineer in writing if there are any questions concerning the accuracy or intent of these plans or related specifications. If such notification is given, no demolition or site activity may begin until such time that the Engineer provides a written response to same.
- Contractor shall adhere to and is responsible for compliance with all details, notes, plans and specifications contained herein. It is the responsibility of the contractor to ensure that all work performed by their subcontractors is in full compliance with these requirements.
- The contractor shall confirm that they are in receipt of the current version of the referenced documents prior to the commencement of any work.
- Prior to commencing work, the contractor shall review and correlate all consultants plans and specifications including the entire site plan and the latest architectural plans (including, but not limited to, structural, mechanical, electrical, plumbing, and fire suppression plans, where applicable), in particular for building utility connection locations, grease trap requirements/ details, door access, and exterior grading. Contractor must immediately notify the Architect and the Engineer, in writing, of any conflicts, discrepancies or ambiguities which exist, and receive a written resolution prior to commencing construction.
- Prior to commencing work, contractor is required to secure all necessary and/or required permits and approvals for the construction of the project, including, but not limited to, demolition work, and all off site material sources and disposal facilities. Copies of all permits and approvals shall be maintained on site throughout the duration of the project. The contractor shall thoroughly review all permits and approvals and permit conditions prior to fabrication of any materials or products to be used as part of the project.
- The contractor is responsible for independently verifying all existing onsite utilities within and adjacent to the limits of the project activities. Underground utility, structure and facility locations depicted and noted on the plans have been compiled, in part, from record mapping supplied by the respective utility companies or governmental agencies, from parol testimony, and from other sources. These locations must be considered as approximate in nature. Additionally, other such features may exist on the site, the existence of which are unknown to the Engineer.
- The contractor is responsible for ensuring the installation of all improvements comply with all requirements of utility companies with jurisdiction and/or control of the site.
- Locations of all existing and proposed services are approximate. Final utility service sizes and locations, including, but not limited to, the relocation and/or installation of utility poles, or the relocation and/or installation of transformers, are at the sole discretion of the respective utility companies.
- Prior to commencement of any work, the contractor shall independently coordinate and confirm with the appropriate utility companies to finalize all utility services and/or relocations to ensure no conflict with the design plans and that proper depths can be achieved. All discrepancies must immediately be reported to the Engineer in writing. Should a conflict arise due to the final designs of the utility company, the contractor shall notify the Engineer in writing and await a written resolution prior to proceeding with further utility installations.
- Prior to commencing construction, the contractor shall field verify all existing conditions, topographic information, utility invert elevations, and proposed layout dimensions, and must immediately notify the Engineer in writing if actual site conditions differ or are in conflict with the proposed work. No extra compensation will be paid to the contractor for work which has to be redone or repaired due to dimensions or grades shown incorrectly on these plans unless the contractor receives written permission from Owner/developer giving authorization to proceed with such additional work.
- Where utilities are proposed to cross/traverse existing underground utilities, the elevations of the existing utilities shall be verified in the field prior to construction by excavating a test pit at the proposed utility crossing point. Should the field verified existing utility be in conflict with the proposed site designs, the contractor shall notify the Engineer in writing and shall not proceed with said utility construction until further direction is given from the Engineer.
- At least 72 hours prior to starting any site activity or demolition, the contractor shall notify, at a minimum, the building official, municipal engineer, department of public works, planning and zoning commission, the Engineer, and local inland wetland commission, as applicable. The contractor shall also attend a pre-construction meeting with the local municipality, if required, prior to commencing any site activity or demolition.
- Prior to starting any site activity or demolition, the contractor shall implement the soil erosion and sediment control measures as noted on the plans. Refer to the Erosion and Sedimentation Control Notes.
- The demolition plan or existing features designated to be removed are intended to provide only general information regarding items to be demolished and/or removed. The contractor shall review all site plans (and architectural drawings as applicable) to assure that all demolition activities and incidental work necessary for the construction of the new site improvements are completed.
- The contractor shall protect and maintain the operation and service of all active utilities and systems that are not being removed and are not to be construction activities. Should a temporary interruption of utility services be required as part of the proposed construction activities, the contractor shall coordinate with appropriate utility companies and the affected end users to minimize impact and service interruption.

- The contractor shall arrange for and coordinate with the appropriate utility companies for all services that require temporary or permanent termination for the project, whether shown on the site plans or not. Termination of utilities shall be performed in compliance with all local, state and/or federal regulations.
- Contractor must prepare record drawings depicting the location of existing utilities that are capped, abandoned in place, or relocated and provide to the Owner and the Engineer of record.
- Should hazardous material be discovered/encountered, which was not anticipated/addressed in the project plans and specifications, cease all work immediately and notify Owner and Engineer regarding the discovery of same. Do not continue work in the area until written instructions are received from an environmental professional.
- The contractor is responsible for preventing movement, settlement, damage, or collapse of existing structures, and any other improvements that are to remain. If any existing structures that are to remain are damaged during construction, repairs shall be made using new product/materials resulting in a pre-damage condition, or better. Contractor is responsible for all repair costs. Contractor shall document all existing damage and to notify the Owner prior to the start of construction.
- The use of explosives, if required, must comply with all local, state and federal regulations. The contractor shall obtain all permits that are required by the federal, state and local governments, and shall also be responsible for all notification, inspection, monitoring or testing as may be required.
- All debris from removal operations must be removed from the site at the time of excavation. Stockpiling of demolition debris will not be permitted. Debris shall not be burned or buried on site. All demolition materials to be disposed of, including, but not limited to, stumps, limbs, and brush, shall be done in accordance with all municipal, county, state, and federal laws and applicable codes. The contractor must maintain records of all disposal activities.
- The contractor is responsible for repairing all damage to any existing utilities during construction, at its own expense.
- All new utilities/services, including electric, telephone, cable tv, etc. are to be installed underground unless noted otherwise on the plans. The Contractor shall be responsible for installing all new utilities/services in accordance with the utility/service provider's written installation specifications and standards.
- All earthwork activities must be performed in accordance with these plans and specifications and the recommendations set forth in the geotechnical report completed for this project. In the absence of a geotechnical report, all earthwork activities must comply with the standard state Department of Transportation (DOT) specifications (latest edition) and any amendments or revisions thereto. All earthwork activities must comply all applicable requirements, rules, statutes, laws, ordinances and codes for the jurisdictions where the work is being performed.
- The contractor is responsible for removing and replacing unsuitable materials with suitable materials. All excavated or filled areas must be properly compacted. Moisture content at time of placement must be submitted in a compaction report prepared by a qualified geotechnical engineer, licensed in the state where the work is performed, verifying that all filled areas and subgrade areas within the building pad area and areas to be paved have been compacted in accordance with these plans, specifications and the recommendations. Subbase material for building pads, sidewalks, curb, or asphalt must be free of organics and other unsuitable materials. Should subbase be deemed unsuitable by Owner/developer or Owner/developer's representative, subbase is to be removed and filled with suitable material and properly compacted at the contractor's expense. All fill, compaction, and backfill materials required for utility installation must be coordinated with the applicable utility company specifications. The Engineer shall have no liability or responsibility for or as related to fill, compaction, backfill, or the balancing of earthwork.
- Pavement must be saw cut into straight lines and must extend to the full depth of the existing pavement, except for edge of butt joints.
- The tops of existing manholes, inlet structures, and sanitary cleanout taps must be adjusted as necessary, to match proposed grades.
- Where retaining walls (whether or not they meet the jurisdictional definition) are identified on plans, elevations identified herein are for the exposed portion of the wall. Wall footing/foundation elevations are not identified herein and are to be set/determined by the contractor based on final structural design shop drawings prepared by an appropriate professional licensed in the state where the construction occurs.
- Unless indicated otherwise or required by the authority having jurisdiction, all pipes shall be as follows:

Reinforced Concrete pipe (RCP) shall meet the requirements of AASHTO M 170 Class IV with silt tight joints.

High-Density Polyethylene pipe (HDPE) shall conform to AASHTO M 294, Type S (smooth interior with angular corrugations) with gaskets for silt tight joints.

Polyvinyl chloride (PVC) pipe for roof drain connections shall be SDR 35 gasket pipe. Polyvinyl Chloride (PVC) pipe for sanitary sewer pipe shall be SDR 35 gasket pipe.
- Storm sewer pipe lengths indicated are approximate and measured to the inside of inlet and/or manhole structure. Sanitary sewer pipe lengths indicated are approximate and measured to center of inlet and/or manhole structure to center of structure.
- Stormwater roof drain locations are approximate and are based on preliminary architectural plans. Contractor is responsible for reviewing and coordinating the final architectural plans to verify final locations and sizes of all roof drains.
- Sewers crossing streams and/or location within 10 feet of the stream embankment, or where site conditions so indicate, must be constructed of steel, reinforced concrete, ductile iron or other suitable material. Sewers conveying sanitary flow, combined sanitary and stormwater flow or industrial flow must be separated from water mains by a distance of at least 10 feet horizontally. If such lateral separations are not possible, the pipes must be in separate trenches with the sewer at least 18 inches below the bottom of the water main, or such other separation as approved by the agency with jurisdiction over same. Where appropriate separation from a water main is not possible, the sewer must be encased in concrete, or constructed of ductile iron pipe using mechanical slip-on joints for a distance of at least 10 feet on either side of the crossing. In addition, one full length of sewer pipe should be located so both joints will be as far from the water line as possible. Where a water main crosses under a sewer, adequate structural support for the sewer must be provided.
- Contractor's price for water service must include all fees, costs and appurtenances required by the utility to provide full and complete working service.
- Contractor must contact the applicable water company to confirm the proper water meter and vault, prior to commencing construction. Water main and water service piping shall be installed in accordance with the requirements and specifications of the water authority having jurisdiction. In the absence of such specifications, water main piping must ductile iron (DIP) minimum Class 54. All work and materials must comply with the applicable American

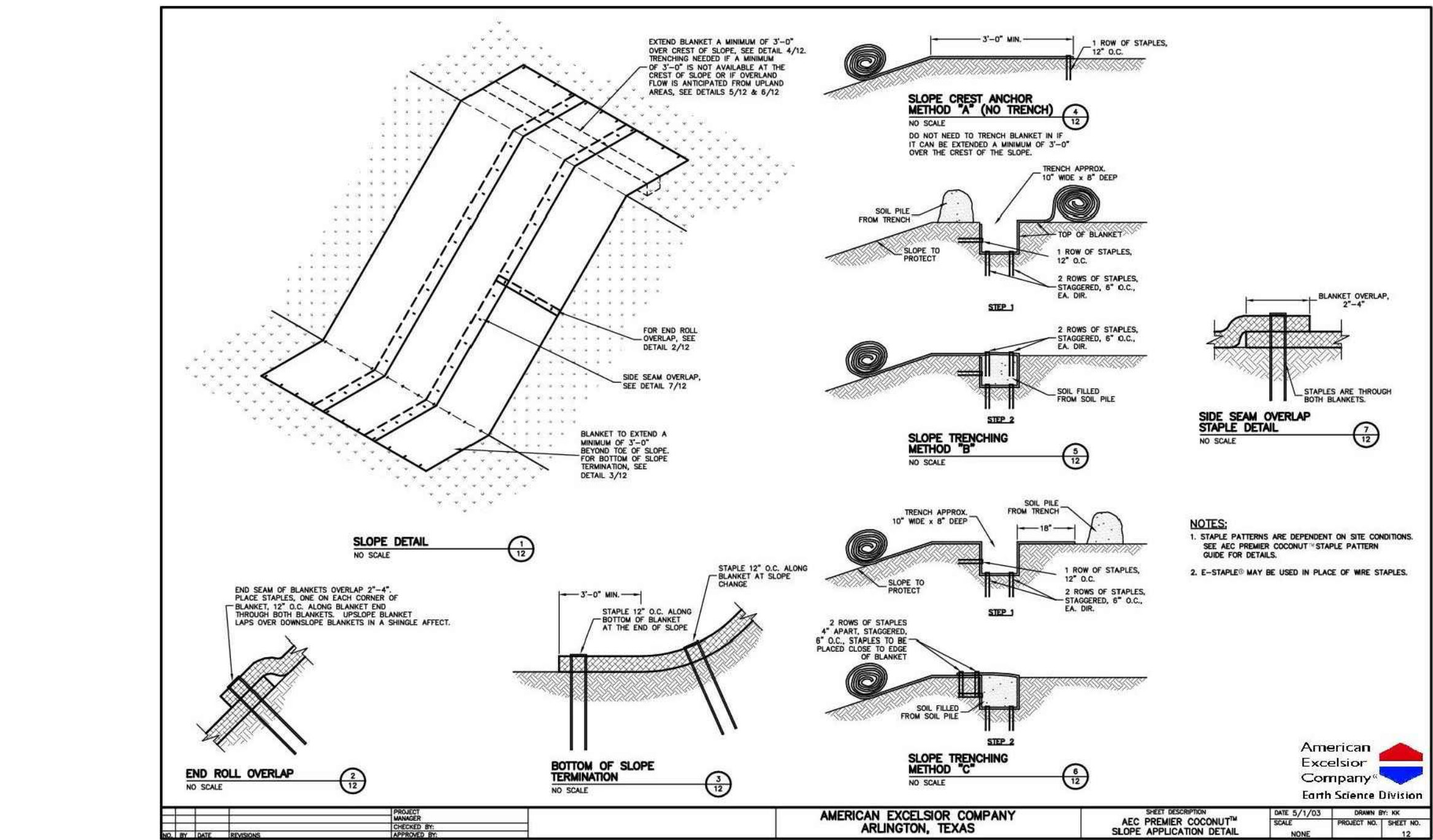
- Water Works Association (AWWA) standards in effect at the time of the service application.
- The contractor shall ensure that all work located in existing pavement be repaired in accordance with municipal, county and/or DOT details as applicable. Contractor is responsible to coordinate the permitting, inspection and approval of completed work with the agency having jurisdiction over the proposed work.
 - Where sump pumps are installed, all discharges must be connected to the storm sewer or discharged to an approved location.
 - For single and multi-family residential projects, spot elevation(s) adjacent to the buildings are schematic for non-specific building footprints. Grades must be adjusted based on final architectural plans and shall provide a minimum of six (6) inches below top of foundation/concrete and/or six (6) inches below the facade treatment, whichever is lower, and must provide positive drainage away from the structure (minimum of 2%). All areas shall be graded to preclude ponding adjacent to buildings, and on or adjacent to walks/driveways leading to the buildings. All construction, including grading, must comply with all applicable building codes, local, state and federal requirements, regulations and ordinances.
 - Contractor shall maintain and control traffic on and offsite in conformance with the current Federal Highway Administration (FHWA) "Manual on Uniform Traffic Control Devices" (MUTCD), and the federal, state, and local regulations for all aspects of demolition and site work. If a Maintenance of Traffic Plan is required for work that affects public travel either on or offsite, the contractor shall be responsible for the cost and implementation of said plan.
 - All temporary and permanent onsite and offsite signage and pavement markings shall conform to MUTCD, ADA, state DOT, and/or local approval requirements.
 - Contractor shall prevent the emission of dust, sediment, and debris from the site, and shall be responsible for corrective measures such as street sweeping, and clean-up work as deemed necessary by the Engineer or the authority having jurisdiction.
 - All concrete must be air entrained with a minimum compressive strength of 4,000 psi at 28 days unless otherwise specified on the plans, details and/or geotechnical report.
 - The Engineer will review contractor submittals which the contractor is required to submit, but only for the sole purpose of checking for general conformance with the intent of the design and contract documents. The Engineer is not responsible for any deviations from the construction documents unless contractor received explicit direction to do so, in writing, from the Engineer. The contractor remains responsible for details and accuracy, for confirming and correlating all quantities and dimensions, and for techniques of assembly and/or fabrication processes.

AMERICANS WITH DISABILITY ACT NOTES TO CONTRACTOR:

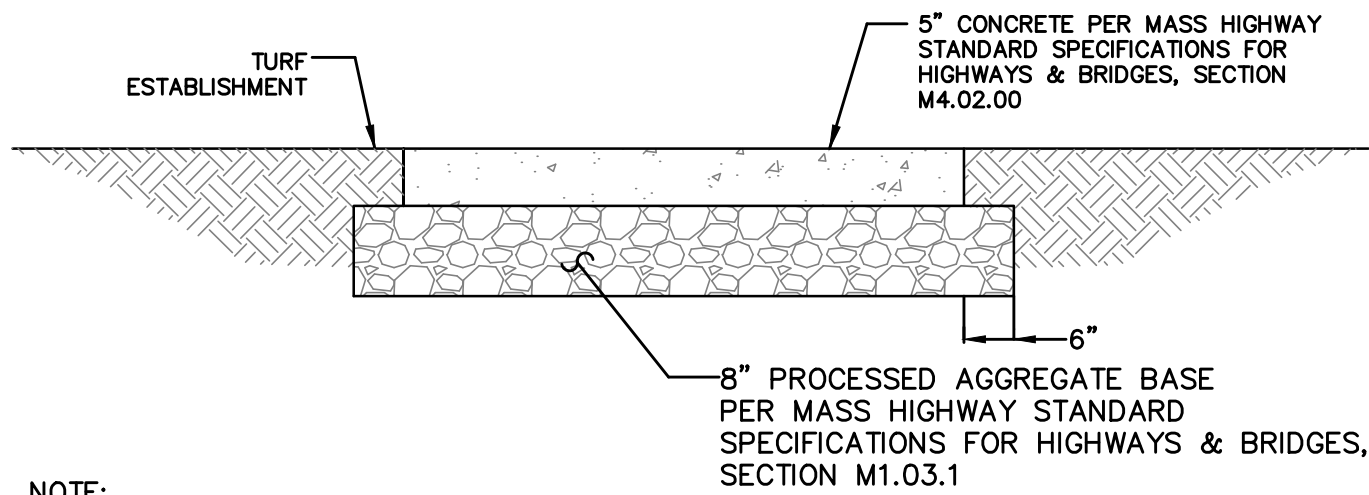
The contractor shall review the proposed construction with the local building department to ensure compliance with the Americans with Disabilities Act (ADA) accessible parking components, and accessible routes for the project. These components shall comply with all applicable state and local accessibility laws and regulations and the current ADA regulations and construction standards. These components include, but are not limited to the following:

- Parking spaces and parking aisles shall not exceed a 1:50 (nominally 2.0%) slope in any direction.
- Accessible routes shall be a minimum of 36" wide (unobstructed). Handrails and car overhangs may not obstruct these areas. Longitudinal slopes (direction of travel) shall not exceed 1:20 (5.0%) and shall have a cross slope no greater than 1:50 (2.0%).
- Accessible routes exceeding 1:20 (5.0%) shall be considered a "ramp". Maximum slopes of a ramp shall be 1:12 (8.3%) in the direction of travel, and a cross slope of 1:50 (2.0%). Ramps shall have maximum rise of thirty (30) inches, shall be equipped with hand rails on both sides, and landings at the top and bottom of the ramp. Landings shall not exceed 1:50 (2.0%) in any direction and have positive drainage away from the landing.
- A landing shall be provided at the exterior of all doors and at each end of ramps. Landings shall not exceed 1:50 (2.0%) in any direction and have positive drainage away from the landing and/or building. The landing shall be no less than 60 inches long unless permitted otherwise per the ADA regulations.
- Curb ramps-- shall not exceed a 1:12 (8.3%) slope for a maximum length of six (6) feet or a maximum rise of six (6) inches.
- The contractor shall verify all existing elevations shown on the plan in areas of existing doorways, accessible routes or other areas where re-construction is proposed. The contractor shall immediately notify the Owner and Engineer in writing if any of the proposed work intended to meet ADA requirements is incapable of doing so, or if there is any ambiguity regarding which design components are intended to meet ADA requirements. The contractor shall not commence the work in the affected area until receiving written resolution from Engineer.

LEGEND		
EXISTING	DESCRIPTION	PROPOSED
PROPERTY	PROPERTY LINE	---
---	EASEMENT LINE	---
○	IRON PIPE	●
○	IRON ROD	●
■	MONUMENT	■
EROSION CONTROL		
	SILT FENCE	— SF —
TOPOGRAPHY		
---	95	95
×	67.95	SPOT ELEVATION
		● 95

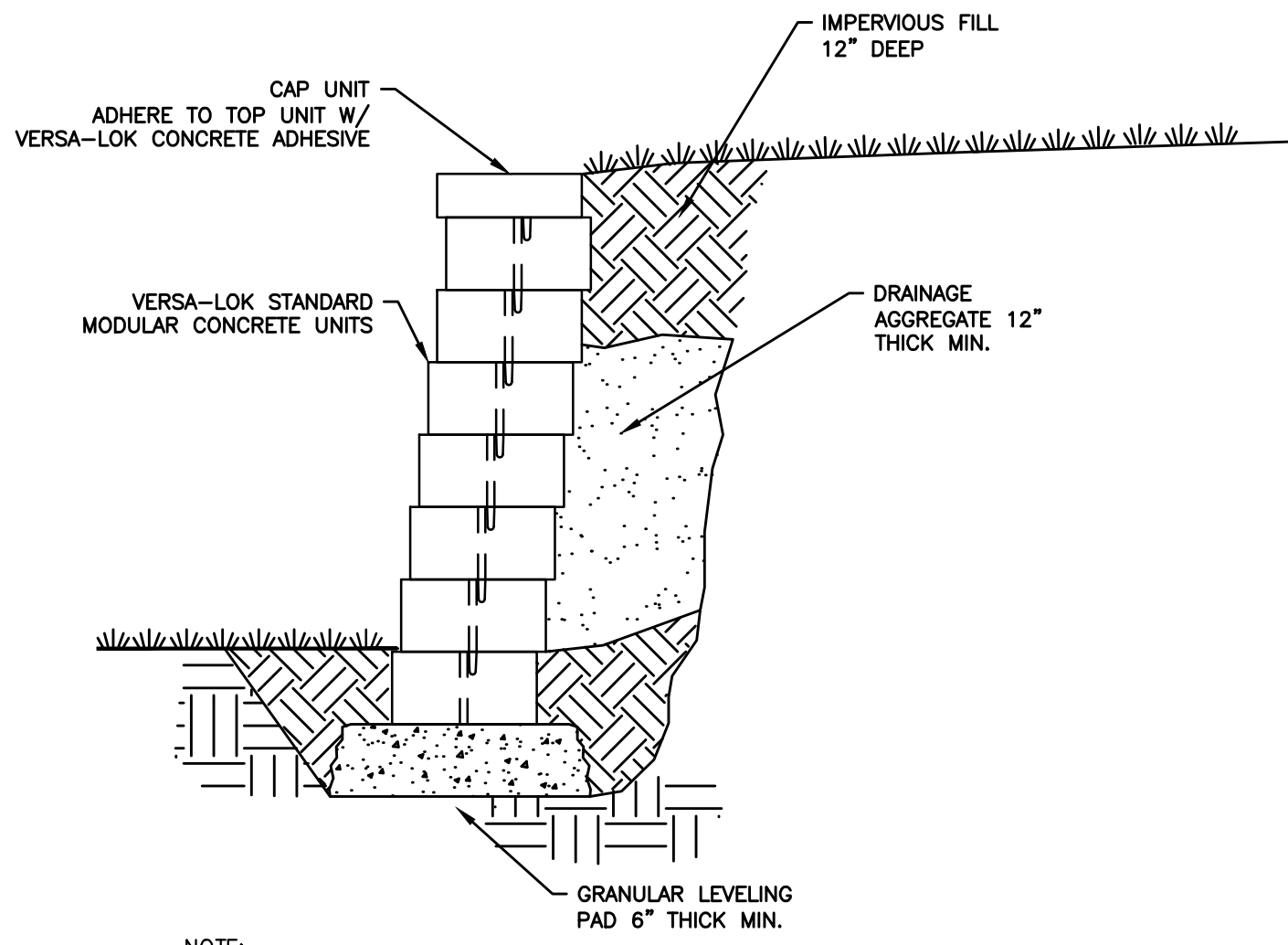


EROSION CONTROL
BLANKET DETAIL
N.T.S.



NOTE:

SEE SHEET SITE PLANS FOR LAYOUT AND DIMENSIONS.

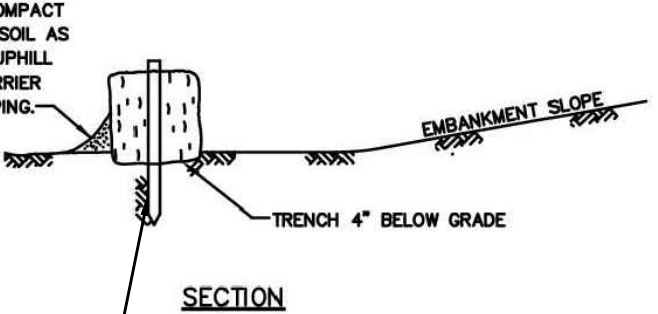
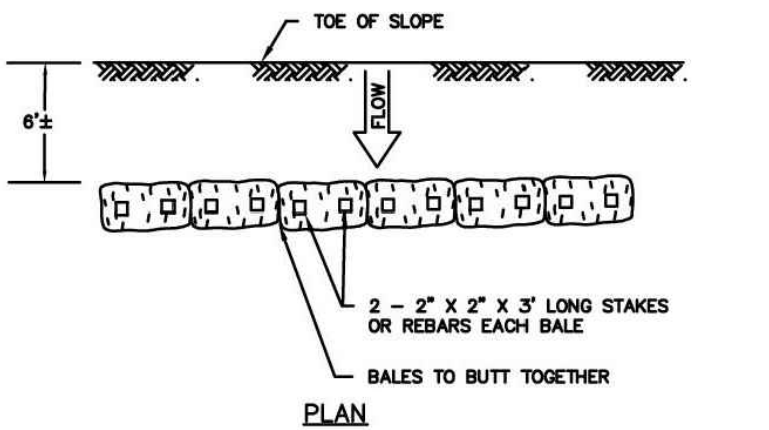
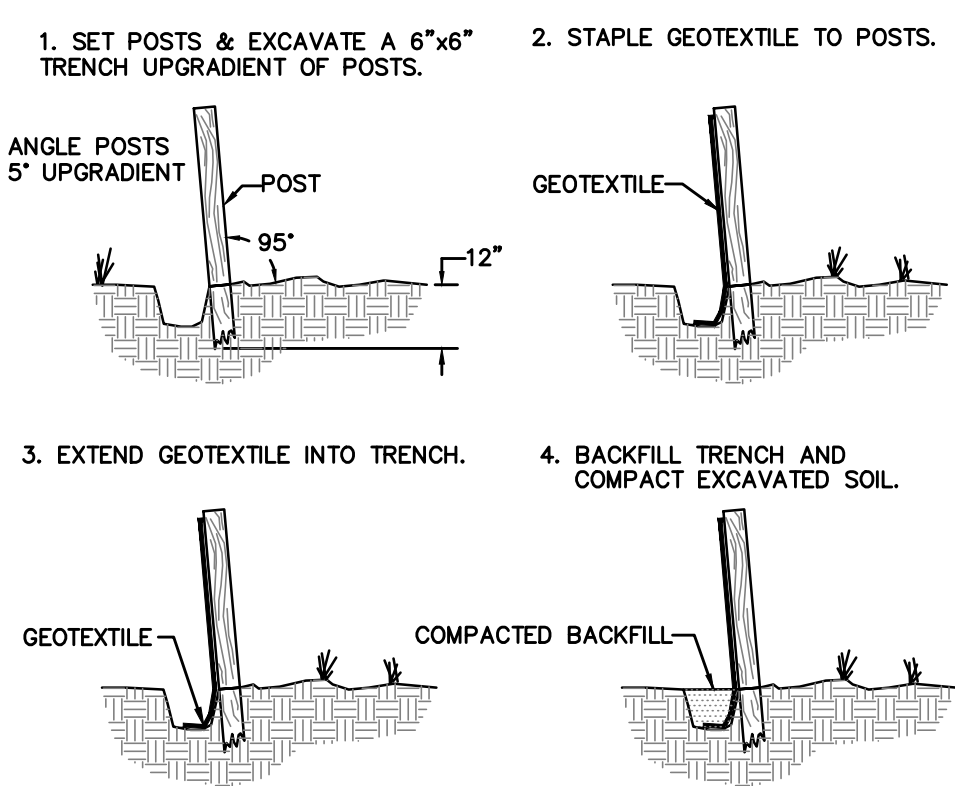


NOTE:

- SHOWN FOR ILLUSTRATIVE PURPOSES ONLY. CONTRACTOR TO PROVIDE SHOP DRAWINGS TO OWNER. COLOR TO BE SELECTED BY OWNER.
- PROVIDE WEEP HOLES ALONG BASE WALL AS DIRECTED BY MANUFACTURER.
- MANUFACTURER TO BE VERSA-LOK OR APPROVED EQUIVALENT.

TYPICAL SECTION - SEGMENTAL CONCRETE RETAINING WALL

N.T.S.



NOTES:

- HAYBALES SHALL BE MAINTAINED AND/OR REPLACED AS REQUIRED OR AS DIRECTED BY THE ENGINEER.
- PLACE HAYBALES SUCH THAT TWINE OR BINDING WIRE IS PARALLEL TO THE EXISTING GROUND.

STRAW BALES FOR EROSION
CONTROL
N.T.S.

Prepared for:
Town of Longmeadow,
Massachusetts

PROJECT NO.	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
1432	10/02/19	BPW	BPW	BPW

RUSSELL FIELD EROSION PROJECT
BLISS ROAD
LONGMEADOW, MASSACHUSETTS

REVISIONS		BY	REASON
NO.	DATE	ADD	ADDITIONAL EROSION CONTROL MEASURES
1	10/17/19		

NOTES, LEGEND, &
DETAILS

SHEET

C-D1
SHEET 2 OF 2