

ADDENDUM NO. 02
to the construction documents

Project: City of San Antonio Existing Police Headquarters
Building Abatement and Demolition
214 W. Nueva Street
San Antonio, Texas 78207

Architect: Madeline Anz Slay Architecture, PLLC
123 Altgelt Avenue
San Antonio, Texas 78201



This addendum is hereby made a part of the construction documents to the same extent as though it were originally included therein. This addendum shall take precedence over the original construction documents where its provisions apply.

ITEM NO. DESCRIPTION

PROJECT MANUAL

- SECTION 01 1000 SUMMARY**
- 2.1 Delete Section 01 1000 **SUMMARY** and replace with enclosed Section 01 1000 **SUMMARY** dated May 14, 2012.
- SECTION 01 2200 UNIT PRICES**
- 2.2 Delete Section 01 2200 **UNIT PRICES** and replace with enclosed Section 01 2200 **UNIT PRICES** dated May 14, 2012.
- SECTION 01 5713 TEMPORARY EROSION AND SEDIMENT**
- 2.3 Delete Section 01 5713 **TEMPORARY EROSION AND SEDIMENT** and replace with enclosed Section 01 5713 **TEMPORARY EROSION AND SEDIMENT** dated May 14, 2012.
- ATTACHMENT A- Abatement Specification**
- 2.4 Delete **ATTACHMENT A - Abatement Specifications** and replace with enclosed **ATTACHEMENT A – Abatement Specifications** dated May 9, 2012 from ATC Associates, Inc.
- ATTACHMENT B- Special Environmental Specification**
- 2.5 Delete **ATTACHMENT B – Special Environmental Specifications** and replace with enclosed **ATTACHEMENT B – Special Environmental Specifications** dated May 2012 from Geo Strata Environmental Consultants, Inc.

END OF ADDENDUM NO. 02

**SECTION 01 1000
SUMMARY**

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Work Included
- B. Work Sequence.
- C. Use of Premises.
- D. Owner Occupancy.
- E. Work Excluded.

1.02 RELATED REQUIREMENTS

- A. General Conditions - Section 00 7000
- B. Attachment A - Hazardous Abatement Material Specifications.
- C. Attachment B - Special Environmental Specifications.
- D. Section 01 5000 - Temporary Facilities and Controls

1.03 PROJECT

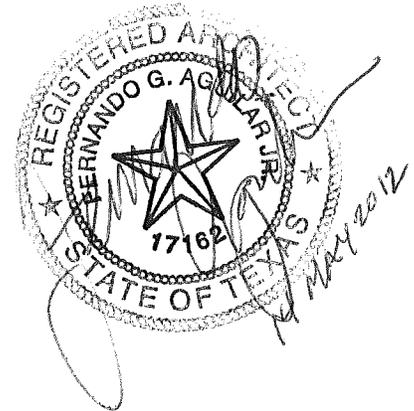
- A. Project Name: City of San Antonio Existing Police Headquarters Building Demolition.
- B. Owner's Name: City of San Antonio.
- C. Architect's Name: Madeline Anz Slay Architecture, PLLC.
- D. The Project consists of the abatement & demolition of existing Police Headquarters building, approximately 45,000 square feet and site related items to prepare for new building construction in future.

1.04 WORK COVERED BY CONTRACT DOCUMENTS

- A. Work of this Contract comprises:
 - 1. The abatement of asbestos and hazardous materials within the building.
 - a. Refer to **Attachment A** for abatement requirements per the City of San Antonio Specifications prepared by **ATC Associates, Inc.**
 - 2. Special Environment Specifications:
 - a. Refer to **Attachment B** for special waste handling and disposal, removal of storage tanks (underground and above ground), removal of oil and water separator associated with car wash station requirements per the City of San Antonio Specifications prepared by **Geo Strata Environmental Consultants, Inc.**
 - 3. Remove the buildings and improvements above, on, or underground, including but not limited to, concrete structure, foundations and piers, stairs, steps, and walks, all trees, tracks, poles, wires and storage tanks (overhead and/or underground), all gas, water, and heating, ducts, conduits, and sewers crossing the site, unless otherwise indicated, and to plug at the lot line any such pipes, ducts, conduit, or sewers.
 - 4. Radio Communications Tower and auxiliary building foundation and piers.
 - 5. Provide fill at excavated areas and prepare site to receive topsoil and hydroseed.
- B. Contractor to hire a professional surveyor to locate and document portions of existing concrete piers and all other items that will remain and to submit survey plan, signed and sealed by a registered engineer, including an electronic AutoCADD file to Architect of Record as early as possible prior to submitting close out documents. The existing leftover piers will be removed in the future under a separate contract.

1.05 CONTRACT DESCRIPTION

- A. Contract Type: A single prime contract based on a Stipulated Price as described in Document 00 5200 - Agreement Form.



1.06 DESCRIPTION OF ALTERATIONS WORK

- A. Scope of demolition and removal work is shown on drawings and specified in Section 02 4100 and 02 4113.
- B. This Work is generally described as asbestos and hazardous material abatement, management of impacted soils, removal of UST /AST, and entire site & building demolition of the City of San Antonio existing Police Headquarters. The hazardous material abatement Scope is more particularly described in the Hazardous Material Abatement Specifications (Attachment A) prepared by ATC Associates, Inc. ("ENVIRONMENTAL ENGINEER"), and drawings, specifications, proposal documents and other Contract Documents prepared by Madeline Anz Slay Architecture, PLLC ("ARCHITECT").
 - 1. ***The Abatement Specifications and Scope of Work provided by ATC Associates, Inc., dated May 9, 2012, consisting of 357 pages, has been included in this Project Manual and listed in the Table of Contents for the convenience to the Owner. Madeline Anz Slay Architecture, PLLC has not participated in the development of the hazardous abatement documents and accepts no liability or responsibility for its contents.***
- C. This Work is generally described as asbestos and hazardous material abatement, management of impacted soils, removal of UST /AST, and entire site & building demolition of the City of San Antonio existing Police Headquarters. The special handling, management and disposal of impacted soils, removal of UST /AST, oil separators Scope is more particularly described in the Special Environmental Specifications (Attachment B) prepared by Geo Strata Environmental Consultants, Inc. ("ENVIRONMENTAL CONSULTANT"), and drawings, specifications, proposal documents and other Contract Documents prepared by Madeline Anz Slay Architecture, PLLC ("ARCHITECT").
 - 1. ***The Special Environmental Specifications provided by Geo Strata Environmental Consultants, Inc., dated May 2012, consisting of 23 pages, has been included in this Project Manual and listed in the Table of Contents for the convenience to the Owner. Madeline Anz Slay Architecture, PLLC has not participated in the development of the environmental specifications and accepts no liability or responsibility for its contents.***
- D. Scope of alterations work is shown on drawings.
- E. Contractor to provide and monitor vibration throughout entire project demolition duration at **Casa Navarro State Historic Site**, Texas Historical Commission property, located at 228 S. Laredo Street, San Antonio, Texas 78207. Coordinate with the City of San Antonio and Texas Historical Commission.
- F. Plumbing: Cap all existing service to the existing buildings/site at property line per SAWS requirements.
- G. Electrical Power and Lighting: alter existing service in operation that may be servicing the existing site lighting outside of the perimeter existing fence/property line. .
 - 1. Maintain site lighting outside demolition site area.
 - 2. Remove all utilities, including wires & conduits, within the demolition area.
- H. Telephone: Disconnect at manhole/vault as required. Vault to remain. Coordinate with AT&T.
- I. Sanitary and Storm: Cap all existing service to the existing buildings/site. Cap at property line or as indicated on Civil drawings. Underground storm lines to remain and located on new survey. Coordinate with SAWS and Public Works.
- J. Telecommunications: Disconnect at manhole/vault as required. Coordinate with Time Warner.
- K. Contractor shall remove and deliver the following to City of San Antonio prior to start of work:
 - 1. Wall of Honor marble plaque located in Building Lobby.
 - 2. Mail Box in located in Building Main Lobby.
 - 3. City of San Antonio Plaque on Building street side, right of building.
 - 4. San Antonio Police Department letters on front of Building.

5. Existing generators.

1.07 WORK BY OWNER

- A. Items noted NIC (Not In Contract) will be removed by the City of San Antonio under a separate contract.
 1. Radio Communications Tower
 2. Underground monitoring wells
 3. Security Access Control Panels and associated hardware.
- B. Coordinate use of the site under the direction of the Architect to allow access and work of separate contractors.

1.08 OWNER OCCUPANCY

- A. City of San Antonio intends to continue to occupy adjacent portions of the existing building during Phase 1 and 2.
- B. City of San Antonio will **not** occupy the building or any portions of the existing site during Phase 3 and the final demolition period.

1.09 CONTRACTOR USE OF SITE AND PREMISES

- A. Coordinate use of premises under direction of Owner's representative.
- B. Assume full responsibility for protection and safekeeping of products under this Contract.
- C. Obtain and pay for use of additional storage or work areas needed for operations under this Contract.
- D. Construction Operations: Limited to areas noted on Drawings.
- E. Arrange use of site and premises to allow:
 1. Work by Others.
 2. Work by City of San Antonio.
- F. Provide access to and from site as required by law and by City of San Antonio:
- G. Do not obstruct roadways, sidewalks, or other public ways without permit.
- H. Time Restrictions:
 1. Limit conduct of especially noisy exterior work to the hours of 7:30 am to 5:30 pm.
- I. Utility Outages and Shutdown:
 1. Coordinate with Utility company and Owner.
 2. Prevent accidental disruption of utility services to other facilities.
 3. Notify surrounding facilities prior to utility outages and/or shutdowns.

1.10 WORK SEQUENCE

- A. Construct Work in phases during the construction period:
 1. Phase 1: SE Corner- Abatement and demolition of the wash/fuel station and associated paving, foundations and piers. Tower to remain. Expected start date July 2012.
 2. Phase 2: SW Corner-paving areas.
 3. Phase 3: North- Abatement and demolition of building and paving areas. Expected start date October 2012.
 4. Phase 4: Radio Communications Tower and associated auxiliary building, including but not limited to, foundations, piers, walks, stairs, paving, etc. Radio Communications Tower shall be dismantled by Owner under a separate contract. Expected start date of Radio Communications Tower removal October 2012.
- B. Coordinate construction schedule and operations with City of San Antonio.
- C. Project to be completed in 240 calendar days.
- D. Demolition expected to commence no later than July 1, 2012.
- E. Substantial Completion is expected no later than March 1, 2013.

1.11 INSPECTIONS

- A. Inspect existing construction before beginning work and as additional portions of existing construction are exposed by demolition activities. Specifically inspect construction for signs or deterioration, unknown utilities and/or other materials.
- B. Inspect existing utilities to ensure locations. If any existing locations interfere with proposed demolition, notify utility company and do not proceed until clear directions are received.

1.12 WORK EXCLUDED

- A. Work under this Contract includes the removal of specific lead and asbestos containing materials under the provision of specifications developed by **ATC Associates, Inc.** Complete work in strict accordance with **ATC Associates, Inc.** requirements and applicable OSHA and EPA requirements.
- B. Work under this Contract includes environmental construction worker monitoring and waste management procedures during removal of underground utilities, removal of the USTs and ASTs, and cleanup under the provision of specifications developed by **Geo Strata Environmental Consultants, Inc.** Complete work in strict accordance with **Geo Strata Environmental Consultants, Inc.** requirements and applicable OSHA and EPA requirements.
- C. Should the Contractor discover or have reason to believe as a result of his operations, that additional hazardous materials are present, not identified in the Hazardous Materials Survey and not addressed in the Hazardous Abatement Specification, immediately cease operations and notify Environmental Engineer and Owner.
- D. No claims for additional compensation will be allowed for suspicion or finding of hazardous materials.

1.13 DRAWINGS AND PROJECT MANUAL:

- A. The Drawings and Project Manual are intended to be explanatory each to the other. Should any discrepancy arise, or any misunderstanding appears as to the importance of anything contained, the explanation by the Architect shall be final and binding on the Subcontractors.
- B. All work or materials shown on the Drawings and not specified herein or any work specified and not shown on the Drawings, including anything not shown, but normally required to complete the work, shall be furnished and performed as if the same were both shown on the Drawings and mentioned herein. Where conflicts occur between Drawings and/or Specifications/Project Manual, the most stringent requirement shall govern. Failure to call to the Architect and/or Owner's attention these conflicts prior to ordering, fabrication, obtaining permits, or any installation shall result in re-ordering, re-fabricating, removing existing items and reinstalling the desired material, and General Contractor/Subcontractor bearing all costs.
- C. Dimensions on large scale Drawings take precedence over scale or small Drawings. Do not scale the drawings. All explanatory notes, etc., on the Drawings are hereby made and declared a part of this Project Manual. Failure to show or mention details shall not be warranted for omission of anything necessary for the proper completion of the work to the entire satisfaction of the Architect. All Addenda, corrections or letters issued during the time of bidding shall take precedence over the Drawings and Project Manual as originally issued.
- D. Supplementary Drawings will be issued if necessary. These drawings will be for clarification only and shall not affect Contract price, except when issued in conjunction with letters requesting prices for design layout or other changes. When Supplementary Drawings are issued, immediately notify Architect in writing if the Drawings affect Contract price. In case of any particular conditions, the particular specification shall govern.

1.14 PERMITS

- A. The Contractor shall, at his own non-reimbursable expense, submit applications, letters, and documentation required to secure trade permits required to complete the work, including street closures, street pavement, sidewalks, removing water taps, demolition permits, etc.

- B. The Owner, City of San Antonio, will pay all permit fees directly to Development Services and other jurisdictions as required.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

**SECTION 01 2200
UNIT PRICES**



PART 1 GENERAL

1.01 SECTION INCLUDES

- A. List of unit prices, for use in preparing Bids.
- B. Measurement and payment criteria applicable to Work performed under a unit price payment method.
- C. Defect assessment and non-payment for rejected work.

1.02 COSTS INCLUDED

- A. Unit Prices included on the Bid Form shall include full compensation for all required labor, products, tools, equipment, plant, transportation, services and incidentals; erection, application or installation of an item of the Work; overhead and profit.

1.03 UNIT QUANTITIES SPECIFIED

- A. Quantities indicated in the Bid Form are for bidding and contract purposes only. Quantities and measurements of actual Work will determine the payment amount.

1.04 MEASUREMENT OF QUANTITIES

- A. Measurement methods delineated in the individual specification sections complement the criteria of this section. In the event of conflict, the requirements of the individual specification section govern.
- B. Take all measurements and compute quantities. Measurements and quantities will be verified by Architect.
- C. Assist by providing necessary equipment, workers, and survey personnel as required.
- D. Measurement Devices:
 - 1. Weigh Scales: Inspected, tested and certified by the applicable state Weights and Measures department within the past year.
 - 2. Platform Scales: Of sufficient size and capacity to accommodate the conveying vehicle.
 - 3. Metering Devices: Inspected, tested and certified by the applicable State department within the past year.
- E. Measurement by Weight: Concrete reinforcing steel, rolled or formed steel or other metal shapes will be measured by handbook weights. Welded assemblies will be measured by handbook or scale weight.
- F. Measurement by Volume: Measured by cubic dimension using mean length, width and height or thickness.
- G. Measurement by Area: Measured by square dimension using mean length and width or radius.
- H. Linear Measurement: Measured by linear dimension, at the item centerline or mean chord.
- I. Stipulated Sum/Price Measurement: Items measured by weight, volume, area, or linear means or combination, as appropriate, as a completed item or unit of the Work.
- J. Perform surveys required to determine quantities, including control surveys to establish measurement reference lines. Notify Architect prior to starting work.
- K. Contractor's Engineer Responsibilities: Sign surveyor's field notes or keep duplicate field notes, calculate and certify quantities for payment purposes.

1.05 PAYMENT

- A. Payment for Work governed by unit prices will be made on the basis of the actual measurements and quantities of Work which is incorporated in or made necessary by the Work and accepted by the Architect, multiplied by the unit sum/price.
- B. Payment will not be made for any of the following:

1. Products wasted or disposed of in a manner that is not acceptable.
2. Products determined as unacceptable before or after placement.
3. Products not completely unloaded from the transporting vehicle.
4. Products placed beyond the lines and levels of the required Work.
5. Products remaining on hand after completion of the Work.
6. Loading, hauling, and disposing of rejected Products.

1.06 SCHEDULE OF UNIT PRICES

- A. Item 1: Remove existing 24 inch to 47 inch diameter concrete pier; Section 02 4100 & plans.
 1. Description: provide materials and labor to remove existing concrete pier beyond the depth as indicated in the contract documents. Unit price to include backfilling and compaction.
 2. Unit of measurement per Linear Foot
- B. Item 2: Remove existing 48 inch to 59 inch diameter concrete pier; Section 02 4100 & plans.
 1. Description: provide materials and labor to remove existing concrete pier beyond the depth as indicated in the contract documents. Unit price to include backfilling and compaction.
 2. Unit of measurement per Linear Foot
- C. Item 3: Remove existing 60 inch to 71 inch diameter concrete pier; Section 02 4100 & plans.
 1. Description: provide materials and labor to remove existing concrete pier beyond the depth as indicated in the contract documents. Unit price to include backfilling and compaction.
 2. Unit of measurement per Linear Foot
- D. Item 4: Remove existing 72 inch to 83 inch diameter concrete pier; Section 02 4100 & plans.
 1. Description: provide materials and labor to remove existing concrete pier beyond the depth as indicated in the contract documents. Unit price to include backfilling and compaction.
 2. Unit of measurement per Linear Foot
- E. Item 5: Remove existing 84 inch to 95 inch diameter concrete pier; Section 02 4100 & plans.
 1. Description: provide materials and labor to remove existing concrete pier beyond the depth as indicated in the contract documents. Unit price to include backfilling and compaction.
 2. Unit of measurement per Linear Foot
- F. Item 6: Remove existing 96 inch to 108 inch diameter concrete pier; Section 02 4100 & plans.
 1. Description: provide materials and labor to remove existing concrete pier beyond the depth as indicated in the contract documents. Unit price to include backfilling and compaction.
 2. Unit of measurement per Linear Foot
- G. Refer to **Attachment A** and **Attachment B** for other required unit prices.
- H. Refer to City of San Antonio 025 Unit Price Form for all unit prices to be included.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

SECTION 01 5713
TEMPORARY EROSION AND SEDIMENT CONTROL



PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Prevention of erosion due to demolition activities.
- B. Prevention of sedimentation of waterways, open drainage ways, and storm and sanitary sewers due to demolition activities.
- C. Restoration of areas eroded due to insufficient preventive measures.
- D. Compensation of City of San Antonio for fines levied by authorities having jurisdiction due to non-compliance by Contractor.

1.02 PERFORMANCE REQUIREMENTS

- A. Comply with all requirements of the Texas Commission on Environmental Quality (TCEQ) for erosion and sedimentation controls as specified by the Texas Pollution Discharge Elimination System (TPDES) General Permit No. TXR150000, issued March 5, 2008.
- B. Develop and follow a Storm Water Pollution Prevention Plan (SW3P) and prepare periodic inspections reports.
- C. Complete the TCEQ Notice of Intent (NOI) for storm water discharges associated with construction activities under TPDES General Permit (TXR150000) Form and submit to the TCEQ for approval.
- D. Complete the TCEQ Notice of Termination (NOT) for authorizations under TPDES General Permit (TXR150000) Form at the conclusion of the project.
- E. Complete the Large Construction Site Notice for the TCEQ Storm Water Program and post the Notice at the site on the Storm Water 3P board at a location that is visible to the public.
- F. Do not begin clearing, grading, or other work involving disturbance of ground surface cover until applicable permits have been obtained; furnish all documentation required to obtain applicable permits.
- G. Timing: Put preventive measures in place as soon as possible after disturbance of surface cover and before precipitation occurs.
- H. Storm Water Runoff: Control increased storm water runoff due to disturbance of surface cover due to construction activities for this project.
 - 1. Prevent runoff into storm and sanitary sewer systems, including open drainage channels, in excess of actual capacity or amount allowed by authorities having jurisdiction, whichever is less.
 - 2. Anticipate runoff volume due to the most extreme short term and 24-hour rainfall events that might occur in 25 years.
- I. Erosion On Site: Minimize wind, water, and vehicular erosion of soil on project site due to construction activities for this project.
 - 1. Control movement of sediment and soil from temporary stockpiles of soil.
 - 2. Prevent development of ruts due to equipment and vehicular traffic.
 - 3. If erosion occurs due to non-compliance with these requirements, restore eroded areas at no cost to City of San Antonio.
- J. Erosion Off Site: Prevent erosion of soil and deposition of sediment on other properties caused by water leaving the project site due to construction activities for this project.
 - 1. Prevent windblown soil from leaving the project site.
 - 2. Prevent tracking of mud onto public roads outside site.
 - 3. Prevent mud and sediment from flowing onto sidewalks and pavements.
 - 4. If erosion occurs due to non-compliance with these requirements, restore eroded areas at no cost to City of San Antonio.

- K. Sedimentation of Waterways On Site: Prevent sedimentation of waterways on the project site, including rivers, streams, lakes, ponds, open drainage ways, storm sewers, and sanitary sewers.
 - 1. If sedimentation occurs, install or correct preventive measures immediately at no cost to City of San Antonio; remove deposited sediments; comply with requirements of authorities having jurisdiction.
 - 2. If sediment basins are used as temporary preventive measures, pump dry and remove deposited sediment after each storm.
- L. Sedimentation of Waterways Off Site: Prevent sedimentation of waterways off the project site, including rivers, streams, lakes, ponds, open drainage ways, storm sewers, and sanitary sewers.
 - 1. If sedimentation occurs, install or correct preventive measures immediately at no cost to City of San Antonio; remove deposited sediments; comply with requirements of authorities having jurisdiction.
- M. Open Water: Prevent standing water that could become stagnant.
- N. Maintenance: Maintain temporary preventive measures until permanent measures have been established.

1.03 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.01 EXAMINATION

- A. Examine site and identify existing features that contribute to erosion resistance; maintain such existing features to greatest extent possible.

3.02 PREPARATION

- A. Schedule work so that soil surfaces are left exposed for the minimum amount of time.

3.03 SCOPE OF PREVENTIVE MEASURES

- A. In all cases, if permanent erosion resistant measures have been installed temporary preventive measures are not required.
- B. Construction Entrances: Traffic-bearing aggregate surface.
 - 1. Width: As required; 20 feet, minimum.
 - 2. Length: 50 feet, minimum.
 - 3. Provide at each construction entrance from public right-of-way.
 - 4. Where necessary to prevent tracking of mud onto right-of-way, provide wheel washing area out of direct traffic lane, with drain into sediment trap or basin.
- C. Linear Sediment Barriers: Made of silt fences.
 - 1. Provide linear sediment barriers:
 - a. Along downhill perimeter edge of disturbed areas, including soil stockpiles.
 - 2. Space sediment barriers with the following maximum slope length upslope from barrier:
 - a. Slope of Less Than 2 Percent: 100 feet..
 - b. Slope Between 2 and 5 Percent: 75 feet.
 - c. Slope Between 5 and 10 Percent: 50 feet.
 - d. Slope Between 10 and 20 Percent: 25 feet.
 - e. Slope Over 20 Percent: 15 feet.
- D. Storm Drain Curb Inlet Sediment Trap: Protect each curb inlet using one of the following measures:
 - 1. Filter fabric wrapped around hollow concrete blocks blocking entire inlet face area; use one piece of fabric wrapped at least 1-1/2 times around concrete blocks and secured to prevent dislodging; orient cores of blocks so runoff passes into inlet.

2. Straw bale row blocking entire inlet face area; anchor into pavement.
- E. Storm Drain Drop Inlet Sediment Traps: As detailed on drawings.
- F. Temporary Splash Pads: Stone aggregate over filter fabric; size to suit application; provide at downspout outlets and storm water outlets.
- G. Soil Stockpiles: Protect using one of the following measures:
 1. Cover with polyethylene film, secured by placing soil on outer edges.
 2. Cover with mulch at least 4 inches thickness of pine needles, sawdust, bark, wood chips, or shredded leaves, or 6 inches of straw or hay.
- H. Mulching: Use only for areas that may be subjected to erosion for less than 6 months.
- I. Temporary Seeding: Use where temporary vegetated cover is required.

3.04 INSTALLATION

- A. Traffic-Bearing Aggregate Surface:
 1. Excavate minimum of 6 inches.
 2. Place geotextile fabric full width and length, with minimum 12 inch overlap at joints.
 3. Place and compact at least 6 inches of 1.5 to 3.5 inch diameter stone.
- B. Silt Fences:
 1. Store and handle fabric in accordance with ASTM D4873.
 2. Where slope gradient is less than 3:1 or barriers will be in place less than 6 months, use nominal 16 inch high barriers with minimum 36 inch long posts spaced at 6 feet maximum, with fabric embedded at least 4 inches in ground.
 3. Where slope gradient is steeper than 3:1 or barriers will be in place over 6 months, use nominal 28 inch high barriers, minimum 48 inch long posts spaced at 6 feet maximum, with fabric embedded at least 6 inches in ground.
 4. Where slope gradient is steeper than 3:1 and vertical height of slope between barriers is more than 20 feet, use nominal 32 inch high barriers with woven wire reinforcement and steel posts spaced at 4 feet maximum, with fabric embedded at least 6 inches in ground.
 5. Install with top of fabric at nominal height and embedment as specified.
 6. Do not splice fabric width; minimize splices in fabric length; splice at post only, overlapping at least 18 inches, with extra post.
 7. Wherever runoff will flow around end of barrier or over the top, provide temporary splash pad or other outlet protection; at such outlets in the run of the barrier, make barrier not more than 12 inches high with post spacing not more than 4 feet.
- C. Temporary Seeding:
 1. When hydraulic seeder is used, seedbed preparation is not required.
 2. When surface soil has been sealed by rainfall or consists of smooth undisturbed cut slopes, and conventional or manual seeding is to be used, prepare seedbed by scarifying sufficiently to allow seed to lodge and germinate.
 3. If temporary mulching was used on planting area but not removed, apply nitrogen fertilizer at 1 pound per 1000 sq ft.
 4. On soils of very low fertility, apply 10-10-10 fertilizer at rate of 12 to 16 pounds per 1000 sq ft.
 5. Incorporate fertilizer into soil before seeding.
 6. Apply seed uniformly; if using drill or cultipacker seeders place seed 1/2 to 1 inch deep.
 7. Irrigate as required to thoroughly wet soil to depth that will ensure germination, without causing runoff or erosion.
 8. Repeat irrigation as required until grass is established.

3.05 MAINTENANCE

- A. Inspect preventive measures weekly, within 24 hours after the end of any storm that produces 0.5 inches or more rainfall at the project site, and daily during prolonged rainfall.

- B. Repair deficiencies immediately.
- C. Silt Fences:
 - 1. Promptly replace fabric that deteriorates unless need for fence has passed.
 - 2. Remove silt deposits that exceed one-third of the height of the fence.
 - 3. Repair fences that are undercut by runoff or otherwise damaged, whether by runoff or other causes.
- D. Clean out temporary sediment control structures weekly and relocate soil on site.
- E. Place sediment in appropriate locations on site; do not remove from site.

3.06 CLEAN UP

- A. Remove temporary measures after permanent measures have been installed, unless permitted to remain by Architect.
- B. Clean out temporary sediment control structures that are to remain as permanent measures.
- C. Where removal of temporary measures would leave exposed soil, shape surface to an acceptable grade and finish to match adjacent ground surfaces.

END OF SECTION