PROJECT SPECIAL PROVISIONS

Roadway 7-1-95

SP1R01

CLEARING AND GRUBBING: **9-17-02**

Perform clearing on this project to the limits established by Method "III" shown on Standard No. 200.03 of the Roadway Standards.

The 2002 Standard Specifications shall be revised as follows:

Page 2-3, Article 200-5

Delete the first sentence of this article and insert the following:

The property owner will have no right to use or reserve for his use any timber on the project. All timber cut during the clearing operations is to become the property of the Contractor, and shall be either removed from the project by him, or else shall be satisfactorily disposed of as hereinafter provided.

SP2R01

BUILDING REMOVAL: **01-01-02**

Remove the buildings and appurtenances listed below in accordance with Section 215 of the Standard Specifications and the following provisions:

Prior to removal of any building, comply with the notification requirements of Title 40 Code of Federal Regulations, Part 61, Subpart M, which are applicable to asbestos. Give notification to the North Carolina Department of Health and Human Services, Division of Epidemiology, Asbestos Hazard Management Branch and/or the appropriate county agency when enforcement of the Federal Regulation is performed by the county. Submit a copy of the notification to the Engineer prior to the building removal.

The Department has performed asbestos assessments for building items identified below. Copies of this report may be obtained through the Division Right-of-Way Agent. When asbestos is discovered after the opening of bids for the project, the cost of asbestos removal and disposal will be paid for in accordance with Article 104-7 of the Standard Specifications. Perform removal and disposal of asbestos in accordance with the requirements of Title 40 Code of Federal Regulations.

When a building has had or will have asbestos removed and the Contractor elects to remove the building such that it becomes a public area, the Contractor is responsible for any additional costs incurred including final air monitoring.

Comply with all Federal, State and local regulations when performing building removal and/or asbestos removal and disposal. Any fines resulting from violations of any regulation are the sole responsibility of the Contractor and the Contractor agrees to indemnify and hold harmless the Department against any assessment of such fines.

Prior to removal of any Underground Storage Tank (UST), comply with the notification requirements of the Title 40 Code of Federal Regulations, Part 280.71(a). Give notification to the appropriate regional office of the North Carolina Department of Environment, and Natural Resources, Division of Environmental Management, Groundwater Section. Submit a copy of the notification to the Engineer prior to the removal of the underground storage tank.

Permanently close UST systems by removal and dispose of in compliance with the regulations set forth in Title 40, Code of Federal Regulations, Part 280.71 and North Carolina Administrative Code Title 15A, Chapter 2, Subchapter 2N and any applicable local regulations. Assess Underground Storage Tank sites at closure for the presence of contamination as required in NCAC Title 15A, Chapter 2, Subchapter 2N, Section .0803 and as directed by the appropriate Regional Office of the Division of Environmental Management. Remove and dispose of UST systems and contents in a safe manner in conformance with requirements of American Petroleum Institute Bulletin 1604, "Removal and Disposal of Used Underground Petroleum Storage Tanks", Chapters 3 through 6. (Note: As an exception to these requirements, the filling of the tank with water as a means of expelling vapors from the tank as described in section 4.2.6.1 of API Bulletin 1604, will not be allowed. Where underground storage tanks are indicated below, there will be no direct payment for the closure or assessment. When the contract does not indicate the presence of storage tanks and storage tanks are discovered after the opening of bids for the project, the cost of closure, assessment and/or removal will be paid for in accordance with Article 104-7 of the Standard Specifications.

Disposition of any contaminated material associated with underground storage tanks will be made as provided in Article 107-26 of the Standard Specifications.

The Contractor shall remove the buildings and appurtenances which are listed below in accordance with Section 215 of the Standard Specifications and the following provisions:

Building Removal (Item No. 1)

Parcel #002 – Left of Survey Station 11+80, Survey Line L
1 Story Block Shed

SP2R15

BORROW EXCAVATION: **2-19-02**

Revise the 2002 Standard Specifications as follows:

Page 2-20, Article 230-6

After the first paragraph, insert the following paragraph:

"No direct payment will be made for the work of Evaluation of Potential Wetlands and Endangered Species as outlined above. Payment at the contract unit price for the pay item 'Borrow Excavation' or 'Grading - Lump Sum' will be considered full compensation for this work.'

SP2R37

SHOULDER AND FILL SLOPE MATERIAL(LUMP SUM GRADING) 5-21-02

General:

Perform the required shoulder and slope construction for this project in accordance with the applicable requirements of Section 226 of the Standard Specifications except as follows:

Construct the top 6 inches (150 mm) of shoulder and fill slopes with soils capable of supporting vegetation.

Provide soil with a P.I. greater than 6 and less than 25 and with a pH ranging from 5.5 to 6.8. Remove stones and other foreign material 2 inches (50 mm) or larger in diameter. All soil is subject to test and acceptance or rejection by the Engineer.

Obtain material from within the project limits or approved borrow source.

Compensation:

No direct payment will be made for this work, as the cost of this work will be considered to be a part of the work being paid for at the contract lump sum price for "Grading".

SP2R45

REINFORCED BRIDGE APPROACH FILLS: 03-18-03

Description:

This work consists of all work necessary to construct reinforced bridge approach fills in accordance with these provisions and the plans, and as directed by the Engineer.

Materials:

Geomembrane

Provide geomembrane that is impermeable, composed of polyethylene polymers or polyvinyl chloride, and meets the following physical requirements:

Property	Requirements	Test Method
Thickness	25 mils (0.6 mm) Minimum	ASTM D1593
Tensile Strength at Break	100 lb/inch (18 KN/M) Minimum	ASTM D638
Puncture Strength	40 lbs (0.2KN) Minimum	FTMS 101 C 2065
Moisture Vapor Transmission Rate	0.018 ounce/yard^2 (0.615 gm/ m^2) per Day Maximum	ASTM E96

Fabric

Refer to section 1056 for Type 2 Engineering Fabric and the following:

Use a woven fabric consisting of strong rot-proof synthetic fibers such as polypropylene, polyethylene, or polyester formed into a stable network such that the filaments or yarns retain their relative positions to each other.

Fabric Property	Requirements	Test Method
Minimum Flow Rate	2 gallons/min/square foot (1358 cm^3/sec/square meter)	ASTM D 4491

Lamination of fabric sheets to produce the physical requirements of a fabric layer will not be accepted. Furnish letters of certification from the manufacturer with each shipment of the fabric and geomembrane attesting that the material meets the requirements of this provision; however, the material is subject to inspection, test, or rejection by the Engineer at any time.

During all periods of shipment and storage, wrap the geomembrane and fabric in a heavy-duty protective covering to protect the material from ultraviolet rays. After the protective wrapping has been removed, do not leave the material uncovered under any circumstances for longer than 4 days.

Select Material

Provide select material meeting the requirements of Class III, Type 1 or Type 2, or Class V select material of section 1016 of the Standard Specifications. When select material is required under water, use select material class V only, up to one foot (300mm) above the existing water elevation.

4" (100mm) Diameter Corrugated Drainage Pipe and Fittings

Provide pipe and fittings that meet all the applicable requirements of Section 815 or 816 of the Standard Specifications.

Construction:

Place the geomembrane and fabric as shown on the plans or as directed by the Engineer. Perform the excavation for the fabric reinforced fill to the limits shown on the plans. Provide an excavated surface free of obstructions, debris, pockets, stumps, and cleared of all vegetation. The geomembrane or fabric will be rejected if it has defects, rips, holes, flaws, deterioration or damage incurred during manufacture, transportation, handling or storage. Lay all layers smooth, and free from tension, stress, folds, wrinkles or creases. Place all the fabric layers with the machine direction (roll direction) perpendicular to the backwall face. Overlap geomembrane or fabric splices perpendicular to the backwall face a minimum of 18 inches (450 mm). Geomembrane or fabric splices parallel to the backwall face will not be allowed.

Deposit and spread select material in successive, uniform, approximately horizontal layers of not more than 10 inches (250 mm) in depth, loose measurement, for the full width of the cross section, and keep each layer approximately level. Place and compact each layer of select material fill no more than 10 inches (250 mm) thick with low ground pressure equipment. Use hand operated equipment to compact the fill material within three feet (0.9 m) of the backwall and wingwalls as directed by the Engineer. Compact select material to a density equal to at least 95% of that obtained by compacting a sample of the material in accordance with AASHTO T99 as modified by the Department. Compact the top eight inches (200 mm) of select material to a density to at least 100% of that obtained by compacting a sample of the material in accordance with AASHTO T99 as modified by the Department. Density requirements are not applicable to select material, class V; however compact the fill with at least four passes of low ground pressure equipment on the entire surface as directed by the Engineer. The compaction of each layer of select material must be inspected and approved by the Department prior to the placement of the next fill layer. No equipment will be allowed to operate on the drainage pipe or any geomembrane/fabric layer until it is covered with at least six inches (150 mm) of fill material. Compaction must not damage the drainage pipe, geomembrane, or fabric under the fill. Cover the geomembrane/fabric with a layer of fill material within four days after placement of the geomembrane/fabric. Geomembrane and fabric that is damaged as a result of installation will be replaced as directed by the Department at no additional cost.

Place the geomembrane on the ground, and attach and secure it tightly to the vertical face of the backwall and wingwalls with adhesives, duct-tape, nails or any other method approved by the Engineer. Place the first fabric layer on the surface of the geomembrane with the same dimensions of the geomembrane. No material or void is allowed between the geomembrane and the first fabric layer. Place and fold the remaining fabric layers on the edges as shown on the plans or as directed by the Engineer. Provide vertical separation between fabric layers as specified on the plans. The number of fabric layers will be shown in the plans.

Place four inch (100 mm) diameter perforated drainage pipe along the base of the backwall and sloped to drain as shown on the plans. Completely wrap perforated drainage pipe and #78M stone with Type 2 Engineering Fabric as shown on the plan detail. Install a pipe sleeve through the bottom of or under the wing wall prior to placing concrete for the wing wall. The pipe sleeve must be of adequate strength to withstand the wingwall load. Place the pipe sleeve in position to allow the drainage pipe to go through the wing wall with a proper slope. Connect four-inch (100-mm) diameter nonperforated (plain) drainage pipe with a coupling to the perforated pipe near the inside face of the wingwall. Place the nonperforated drainage pipe through the pipe

sleeve, extend down to the toe of the slope and connect, to a ditch or other drainage systems as directed by the Engineer. For bridge approaches in cut sections where no side slope is available, direct the drainage pipe outlet to the end slope down to the toe using elbows as directed by the Engineer.

Measurement and Payment:

Compensation:

All work covered by this provision will be paid for at the contract lump sum price for "Reinforced Bridge Approach Fills, Station _____". Such price and payment will be full compensation for both approach fills at each bridge installation, including but not limited to furnishing, placing and compacting select material, furnishing and placing geomembrane and woven fabric, furnishing and placing pipe sleeve, drainage pipe, and stone, furnishing and installing concrete pads at the end of outlet pipes, excavation and any other items necessary to complete the work.

Payment will be made under:

Reinforced Bridge Approach Fills, Station _____	Lump Sum

SP4R01

AGGREGATE BASE COURSE GRADATION AND PLASTICITY INDEX: 10-16-01

Use aggregate base course material meeting the requirements of the Standard Specifications, except that it must have a maximum Plasticity Index (PI) of 3. Grade the minus 200 fraction of the aggregate base course material in accordance with footnote (a) of Tables 520-1, 1010-1, and 1010-2, whichever is applicable.

SP5R10

ASPHALT BINDER CONTENT OF ASPHALT PLANT MIXES: 11-21-00$_R$

The approximate asphalt binder content of the asphalt concrete plant mixtures used on this project will be as follows:

Asphalt Concrete Base Course, Type B 25.0__	4.3%
Asphalt Concrete Intermediate Course, Type I 19.0__	4.7%
Asphalt Concrete Surface Course, Type S 4.75A	7.0%
Asphalt Concrete Surface Course, Type SF 9.5A	6.5%
Asphalt Concrete Surface Course, Type S 9.5__	6.0%
Asphalt Concrete Surface Course, Type S 12.5__	5.5%

The actual asphalt binder content will be established during construction by the Engineer within the limits established in the Standard Specifications or Project Special Provisions.

SP6R15

PRICE ADJUSTMENT - ASPHALT BINDER FOR PLANT MIX: **11-21-00**

Price adjustments for asphalt binder for plant mix will be made in accordance with Section 620 of the Standard Specifications as modified herein.

The base price index for asphalt binder for plant mix is $210.28 per ton (metric ton).

This base price index represents an average of F.O.B. selling prices of asphalt binder at supplier's terminals on June 1, 2004.

SP6R25

CONSTRUCTION SURVEYING: **01-20-04**

Add the following after the first sentence of Section 801-1 of the January 2002 Standard Specifications:

Provide a stakeout of areas where an environmental permit is required prior to performing any construction in or adjacent to these areas. Stake out limits of the permitted work areas according to the approved permit drawings. Provide clear delineation by use of pink or other highly visible flagging. Insure construction limits do not exceed approved permitted work areas. Immediately notify the Resident Engineer of any variations of the stakeout limits when compared to the approved permit drawings.

Replace the fifth paragraph of Section 801-4 of the January 2002 Standard Specifications with the following:

Partial payments for the item of "Construction Surveying" will be made on each particular payment estimate based upon the percentage complete of the item of "Construction Surveying" as determined by the Engineer. The Contractor is required to submit a certified statement each month indicating the percentage of "Construction Surveying" work completed. The Resident Engineer will determine if the amount indicated is reasonably correct and the Resident Engineer will pay accordingly on the next partial pay estimate.

SP8R02

DISPOSAL OF WASTE AND DEBRIS: **2-19-02**

Revise the 2002 Standard Specifications as follows:

Page 8-9, Subarticle 802-2(7. Buffer Zones:)

At the end of the last sentence in this subarticle, add the words "unless superseded by an environmental permit."

SP8R03

GUARDRAIL POSTS AND OFFSET BLOCKS: **06-22-04**

Revise the *2002 Standard Specifications* as follows:

Page 10-69, Subarticle 1046-3

Delete this sub-article in its entirety and replace with the following:

1046-3 POSTS AND OFFSET BLOCKS.

(A) General:

The Contractor may at his option furnish either of the following types of steel guardrail posts. Only one type of post will be permitted at any one continuous installation. Use structural steel posts throughout the project, unless otherwise directed or detailed in the plans.

1. Steel W6 x 8.5 or W6 x 9.0 posts
2. Steel 4.5" x 6.0" "C" shape posts (C150 x 12.2 kg/m)

The Contractor may at his option furnish either of the following types of treated timber posts if specifically directed or detailed in the plans. Only one type of post will be permitted at any one continuous installation.

1. Timber 6" x 8" (152 mm x 203 mm) posts.
2. Timber 8" x 8" (203 mm x 203 mm) posts.

(B) Structural Steel Posts:

Fabricate steel posts for guardrail of the size and weight shown on the plans from structural steel complying with the requirements of Section 1072. Metal from which C shape posts are fabricated shall meet the requirements of ASTM A570 for any grade of steel, except that mechanical requirements shall meet the requirements of ASTM A36. Punch or drill the holes for connecting bolts. Burning will not be permitted. After fabrication, the posts shall be galvanized in accordance with Section 1076.

(C) Treated Timber Posts:

Timber guardrail posts shall be of treated southern pine meeting the requirements of Article 1082-2 and 1082-3.

Bore bolt holes to a driving fit for the bolts. A minus tolerance of 1 percent will be allowed in the length of the post. Perform all framing and boring before the posts receive preservative treatment.

(D) Offset Blocks:

Provide 8-inch deep recycled plastic or composite offset blocks that have been approved for use with the guardrail shown in the standard drawings and/or plans. Only one type of offset block will be permitted at any one continuous installation. Prior to beginning the installation of recycled offset block, submit the FHWA acceptance letter for each type of block to the Engineer for approval.

Treated timber offset blocks with steel beam guardrail will not be allowed unless required by Specifications, directed by the Engineer or detailed in the plans. Steel offset blocks with steel beam guardrail will not be allowed.

Recycled plastic or composite offset blocks shall be made from no less than 50% recycled plastic or composite, and shall meet the following minimum requirements:

- Specific Gravity: 0.950
- Compressive Strength in Lateral Direction:..... 1600 psi (11 MPa)
- Maximum Water Absorption: ..... 10% by weight
- Maximum Termite and Ant Infestation:..... 10%
- Testing..... Shall pass NCHRP Report 350, Test Level 3 by CRASH TESTING

Revise the *2002 Standard Roadway Drawings* as follows:

Sheet 4 of 6, Standard 862.03, delete the note and substitute the following:

Note: The midpost and offset block of the WTR section will require special bolt hole drilling in the thrie beam offset block and line post.

SP8R57

GUARDRAIL ANCHOR UNITS, TYPE 350: **04-20-04**

DESCRIPTION

Furnish and install guardrail anchor units in accordance with the details in the plans, the applicable requirements of Section 862 of the Standard Specifications, and at locations shown in the plans.

MATERIALS

The Contractor may at his option, furnish any one of the guardrail anchor units.

Guardrail anchor unit (ET-2000) as manufactured by:

TRINITY INDUSTRIES, INC.
2525 N. STEMMONS FREEWAY
DALLAS, TEXAS 75207
TELEPHONE: 1-800-644-7976

The guardrail anchor unit (SKT 350) as manufactured by:

ROAD SYSTEMS, INC.
3616 OLD HOWARD COUNTY AIRPORT
BIG SPRING, TEXAS 79720
TELEPHONE: (915) 263-2435

Prior to installation the Contractor shall submit to the Engineer:

1. FHWA acceptance letter for each guardrail anchor unit certifying it meets the requirements of NCHRP Report 350, Test Level 3, in accordance with Section 106-2 of the Standard Specifications.

2. Certified working drawings and assembling instructions from the manufacturer for each guardrail anchor unit in accordance with Section 105-2 of the Specifications.

No modifications shall be made to the guardrail anchor unit without the express written permission from the manufacturer. Perform installation in accordance with the details in the plans, and details and assembling instructions furnished by the manufacturer.

CONSTRUCTION

Guardrail end delineation is required on all approach and trailing end sections for both temporary and permanent installations. Guardrail end delineation consists of yellow reflective sheeting applied to the entire end section of the guardrail in accordance with Section 1088-3 of the Standard Specifications and is incidental to the cost of the guardrail anchor unit.

MEASUREMENT AND PAYMENT

Measurement and payment will be made in accordance with Articles 862.5 and 862-6 of the Standard Specifications.

Payment will be made under:

Guardrail Anchor Units, Type 350..... Each

SP8R65

AGGREGATE PRODUCTION: **11-20-01**

Provide aggregate from a producer who utilizes the new Aggregate Quality Control/Quality Assurance Program that is in effect at the time of shipment.

No price adjustment is allowed to contractors or producers who utilize the new program. Participation in the new program does not relieve the producer of the responsibility of complying with all requirements of the Standard Specifications. Copies of this procedure are available upon request from the Materials and Test Unit.

SP10R05

CONCRETE BRICK AND BLOCK PRODUCTION: **11-20-01**

Provide concrete brick and block from a producer who utilizes the new Solid Concrete Masonry Brick/Unit Quality Control/Quality Assurance Program that is in effect on the date that material is received on the project.

No price adjustment is allowed to contractors or producers who utilize the new program. Participation in the new program does not relieve the producer of the responsibility of complying with all requirements of the Standard Specifications. Copies of this procedure are available upon request from the Materials and Test Unit.

SP10R10

FINE AGGREGATE: **11-19-02**

Revise the 2002 Standard Specifications as follows:

Page 10-17, Table 1005-2

Make the following change to the table:

For Standard Size 2MS the following gradation change applies.

The minimum percent shown for material passing the No. 8 (2.36mm) sieve has been changed from 84 to **80.**

SP10R15

BORROW MATERIAL **02-17-04**

Revise the 2002 Standard Specifications as follows:

Page 10-44

Section 1018-2 II (b) Delete the last sentence in its entirety.

SP10R17

COATED, PAVED AND LINED CORRUGATED STEEL CULVERT PIPE: **10-21-03**

Revise the 2002 Standard Specifications as follows:

Section 1032-4(E) Optional Coatings for Bituminous Coated Pipe and Pipe Arch:

Page 10-58. Delete Numbers 2. and 3., and substitute the following;

2. Type B: In lieu of Type B, Half Bituminous Coated and Partially Paved galvanized pipe, aluminized pipe or polymeric coated pipe without bituminous coating and paving may be used.

3. Type C: In lieu of Type C, Fully Bituminous Coated and Partially Paved galvanized pipe, aluminized pipe or polymeric coated pipe without a bituminous coating and paving may be used.

SP10R25

TEMPORARY SHORING FOR MAINTENANCE OF TRAFFIC: **1-15-02$_R$**

Revise the 2002 Standard Specifications as follows:

Delete Section 1175 and insert the following:

Description

Furnish, install, and remove sheeting, shoring, and bracing necessary to maintain traffic at locations shown on the Traffic Control Plans, and other locations determined during construction. Shoring required to maintain traffic is defined as shoring necessary to provide lateral support to the side of an excavation or embankment parallel to an open travelway when a theoretical 2:1 or steeper slope from the bottom of the excavation or embankment intersects the existing ground line closer than five (5) feet (1.5 m) from the edge of pavement of the open travelway. Contractor has option of submitting their own shoring design or using the Standard shoring design, unless otherwise noted in the plans.

Materials

Sheet piling must be hot rolled and conform to the requirements of ASTM A328.

Steel piles must conform to the requirements of ASTM A36.

Timber and lumber must conform to the requirements of Article 1082-1 in Standard Specifications.

Include all materials proposed for use in temporary shoring in the shoring design submittal described below.

Provide a Type 7 Contractor's Certification for all shoring materials used.

Contractor Shoring Design

Submit shoring design for review and approval by the Engineer prior to beginning construction.

Submit calculations and detail drawings in accordance with section 410-4 of the Standard Specifications.

Design all temporary shoring in accordance with the latest edition of AASHTO's Guide Design Specifications for Bridge Temporary Works.

If temporary concrete barrier is to be located within three (3) feet (1 m) of the top of the shoring, measured to the back face of the barrier, then design the temporary shoring to resist the lateral

movement of the barrier when struck by a vehicle and extend the shoring out of the ground at least to the top elevation of the temporary concrete barrier. Design the temporary shoring to resist an impact load of two (2) kips/foot (29 kN/m) applied at one and half (1.5) feet (0.5 m) above ground. This shoring will be paid for as "Temporary Shoring - Barrier Supported". Temporary concrete barrier is paid for separately.

Standard Shoring Design

Select the appropriate shoring design from the "Standard Temporary Shoring for Maintenance of Traffic" detail drawing as shown in the plans.

Submit a "Standard Shoring Selection Form" to Engineer a minimum of fourteen (14) days prior to beginning construction of shoring.

Find Standard Shoring Selection Form as follows:

1. Go to NCDOT webpage (www.doh.dot.state.nc.us)
2. Click on Doing Business with NCDOT link
3. Scroll down and click on Soils and Foundation Design Section Forms link
4. Click on Standard Shoring Selection Form

Criteria for the Standard Shoring Designs

- Maximum height of shoring excavation is eleven (11) feet (3.35 meters).
- Groundwater table is not above bottom of shoring excavation.
- Traffic surcharge equal to 240 psf (11 kPa).
- Soldier pile spacing is six (6) feet (1.8 meters).
- Soldier pile embedment depths are for driven piles.
- Timber lagging must have minimum thickness of three (3) inches (76 mm).
- Timber must have a minimum allowable bending stress of 1000 psi (6895 kPa).

If conditions at the shoring location do not meet the criteria of the Standard shoring design as outlined above and in the plans, then Contractor must submit a shoring design to the Engineer for approval.

Construction Methods

Install and interlock steel sheet piles to a tolerance of not more than 3/8 inch per foot (30mm per meter) from vertical.

If soldier piles are used, then install piles to a tolerance of not more than 1/4 inch per foot (20mm per meter) from vertical.

If soldier piles are to be installed in drilled holes, then set piles in drilled holes and fill the holes as soon as practical after installing the piles.

Excavate or auger the soil and rock in two (2) foot (610 mm) diameter holes to the required embedment depth as shown on the approved design. Maintain holes, if required, by casing or

other means. Set soldier piles to bottom of the hole prior to backfilling. Backfill holes with Class A concrete to the bottom of excavation. Fill remainder of hole with a lean sand-grout mixture to the ground surface. Remove mixture as necessary to install timber lagging.

Use timber lagging with a minimum three (3) inch (76mm) thickness perpendicular to the pile flange. Install timber lagging with a minimum bearing distance of three (3) inches (76 mm) on each pile flange. Backfill voids behind lagging with granular material or compacted excavated material to the satisfaction of the Engineer.

Backfill and compact fill for shoring excavation prior to removal of shoring.

If the design embedment depth is not achieved, then notify the Engineer immediately.

Method of Measurement

The quantity of temporary shoring to be paid for will be the actual number of square feet (square meter) of exposed face of the shoring measured from the bottom of the shoring excavation or embankment to the top of the shoring, with the upper limit for pay purposes not to exceed one (1) foot (0.3 m) above the retained ground elevation.

The quantity of temporary shoring - barrier supported to be paid for will be the actual number of square feet (square meter) of exposed face of the shoring measured from the bottom of the excavation or embankment to the top of the shoring, with the upper limit for pay purposes not to exceed one (1) foot (0.3 m) above the retained ground elevation.

Basis of Payment

Payment for temporary shoring will only be made at locations where it is required in order to maintain traffic. Trench boxes are not considered temporary shoring for the maintenance of traffic and will not be paid for under this special provision. Such payment will include, but not limited to, furnishing all labor, tools, equipment, and all incidentals necessary to install shoring and complete the work as described in this special provision.

The quantity of shoring necessary for the maintenance of traffic, measured as provided above, will be paid for at the contract unit price per square foot (square meter) of "Temporary Shoring".

The quantity of shoring with temporary concrete barrier located within three (3) feet (1.0 meter) of the shoring will be paid for at the contract unit price per square foot (square meter) of "Temporary Shoring - Barrier Supported".

Payment will be made under:

Temporary Shoring.....Square Feet (Square Meter)
Temporary Shoring - Barrier Supported.....Square Feet (Square Meter)

SP11R01

DRUMS: **07-16-02**

Revise the 2002 Standard Specifications as follows:

Page 10-195, Subarticle 1089-5(C)

Delete the first (1st) sentence of the first (1st) paragraph and insert the following:

"Provide a minimum of three orange and two white alternating horizontal circumferential stripes covering the entire outside with each drum."

SP11R05

PAVEMENT MARKING GENERAL REQUIREMENTS: **07-16-02**

Revise the 2002 Standard Specifications as follows:

Page 12-10, Subarticle 1205-3(J)

Delete the first (1st) sentence of the first (1st) paragraph and insert the following:

"Have at least one member of every pavement marking crew working on a project certified through the NCDOT Pavement Marking Technician Certification Process. For more information contact the Traffic Control, Marking and Delineation Section of the North Carolina Department of Transportation at 919-250-4151 or http://www.doh.dot.state.nc.us/preconstruct/traffic/congestion/TC/"

SP12R01