

# NOTIFICATION OF ADDENDUM

## ADDENDUM NO. 1

**DATED 5/27/2015**

<b>Control</b>	<b>2958-01-013</b>
<b>Project</b>	<b>SSW 2958-01-013</b>
<b>Highway</b>	<b>FM 2869</b>
<b>County</b>	<b>WOOD</b>

Ladies/Gentlemen:

Attached please find an addendum on the above captioned project. Included in the attachment is an addendum notification which details the changes and the respective proposal pages which were added and/or changed.

Except for new bid insert pages, it is unnecessary to return any of the pages attached.

Bid insert pages must be returned with the bid proposal submitted to the Department, unless your firm is submitting a bid using a computer print out. The computer print out must be changed to reflect the new bid item information.

Contractors and material suppliers, etc. who have previously been furnished informational proposals are not being furnished a copy of the addendum. If you have a subcontractor on the above project, please advise them of this addendum. Acknowledgment of this addendum is not requested if your company has been issued a proposal stamped "This Proposal Issued for Informational Purposes."

You are required to acknowledge receipt of this addendum on the Addendum Acknowledgement form contained in your bid proposal by placing a mark in the box next to the respective addendum.

Failure to Acknowledge receipt of this addendum in your bid proposal will result in your bid not being read.

SUBJECT: PLANS AND PROPOSAL ADDENDUMS

PROJECT: SSW 2958-01-013

CONTROL: 2958-01-013

COUNTY: WOOD

LETTING: 06/04/2015

REFERENCE NO: 0527

**PROPOSAL ADDENDUMS**

-----

PROPOSAL COVER

BID INSERTS (SH. NO.:

X GENERAL NOTES (SH. NO.: G, H, I, J

SPEC LIST (SH. NO.:

SPECIAL PROVISIONS:

ADDED:

DELETED:

SPECIAL SPECIFICATIONS:

ADDED:

DELETED:

X OTHER: PLAN SHEETS 5C & 5D

DESCRIPTION OF ABOVE CHANGES

(INCLUDING PLANS SHEET CHANGES)

Added note under Item 341:

The use of Recycled Asphalt Shingles is not allowed.

**Project Number:**

**Sheet**

**County:** WOOD

**Control:** 2958-01-013

**Highway:** FM 2869

**GENERAL NOTES:**

<b>One Course Surface Treatment Data</b>	
<b>Item</b>	<b>Application</b>
	<b>OCST</b>
Asphalt, Type - Grade	AC 10-2TR, AC 20-5TR, OR AC- 20 XP
Asphalt, Rate (gal./sq. yd.)	0.42
Aggregate, Type	PD OR PL
Aggregate, Grade	GR 3
Aggregate, Rate (cu. yd./sq. yd.)	1/90
Aggregate Class***	B
Flakiness Index	25

\*\*\*See rated source quality catalog

**GENERAL.**

Perform work as necessary off the right of way on temporary construction easements for driveway construction. All work performed in these areas will be paid for under the pertinent bid items of the Contract.

Remove all vegetation from pavement edges, intersections, and driveways prior to planing operations, seal coat, or ACP operations. This work will not be paid for directly, but will be subsidiary to the bid items of the Contract.

Provide a 20-ft. length per 1-in. depth temporary taper at all transverse joints in the travel lane before opening to traffic. This work will not be paid for directly, but will be subsidiary to the bid items of the Contract.

**ITEM 4. SCOPE OF WORK**

Preserve the integrity of all right of way monuments within project limits. Right of way monuments damaged or destroyed during construction must be replaced by a registered professional land surveyor (RPLS), at the Contractor’s expense.

**ITEM 5. CONTROL OF THE WORK**

If utility lines need adjustments during construction operations, modify operations and continue the work in a manner that will allow others to make the utility adjustments. Additional working time may be allowed for delays caused by these utility adjustments.

**Project Number:**

**Sheet**

**County:** WOOD

**Control:** 2958-01-013

**Highway:** FM 2869

Use "Method C" for construction surveying in accordance with Section 5.9.3.

Maintain and re-establish the centerline stations throughout project as required for each phase of work.

## **ITEM 7. LEGAL RELATIONS AND RESPONSIBILITIES**

Do not initiate activities in a project specific location (PSL) associated with a U.S. Army Corps of Engineers (COE) permit area that has not been previously evaluated by the COE as part of the permit review of this project. Such activities include haul roads, equipment staging areas, borrow pits, and disposal sites. "Associated," defined here, means "materials are delivered to or from the PSL." The permit area includes all waters of the U.S. or associated wetlands affected by activities associated with this project. Special restrictions may be required for this work. The Contractor is responsible for all consultations with the COE regarding activities (including PSL) that have not been previously evaluated by the COE. Provide the Department with a copy of all consultations or approvals from the COE before initiating activities.

Proceed with activities in PSL that do not affect a COE permit area if Contractor determines that the PSL is non-jurisdictional or proper COE clearances have been obtained in jurisdictional areas or have been previously evaluated by the COE as part of the permit review of this project. The Contractor is responsible for documenting his determination that his activities do not affect a COE permit area. Maintain copies of determination for review by the Department or any regulatory agency.

Keep mailboxes in a position accessible to the carrier's vehicle along the travelway. When grading operations necessitate the moving of mailboxes, place mailboxes nearby at a location accessible to the carrier's vehicle. Return mailboxes to a position accessible to the carrier's vehicle along the travelway when grading operations are not in progress. The Contractor may mount mailboxes on a portable stand that keeps the mailbox in a level position approximately 42 in. above the pavement.

Furnish mounts for mailboxes in accordance with the Compliant Work Zone Traffic Control Device List for temporary mailboxes.

Coordinate with the local mail carrier where to place temporary mailboxes.

Concrete truck drivers and concrete pump operators are required to wash out only in designated areas specifically constructed for eliminating run-off. Dispose of materials in accordance with federal, state, and local requirements.

**Project Number:**

**Sheet**

**County:** WOOD

**Control:** 2958-01-013

**Highway:** FM 2869

### **ITEM 9. MEASUREMENT & PAYMENT**

In accordance with Article 9.1, "Measurement of Quantities," furnish the tare and maximum gross weights as well as the volume capacity of all vehicles, trucks, truck-tractors, trailers, semi-trailers, or combination of such vehicles used to deliver materials for this Contract. Also, furnish calculations supporting these weights and capacities. Provide all measurements required for pay a minimum of 2 days before the trucks are used.

### **ITEM 100. PREPARING RIGHT OF WAY**

Perform work as necessary off the right of way on temporary or drainage easements and at those locations where improvements have been taken or partially taken by right of way acquisition. Review these locations with the Area Engineer. The cost of this work will be included in the unit price bid for this Item.

### **ITEMS 110 & 132. EXCAVATION & EMBANKMENT**

Excavation and embankment for driveways, intersections, and crossovers will not be paid for directly, but will be subsidiary to the various bid items unless otherwise shown on the plans.

In a cut section, if the soil encountered in the subgrade is unsuitable for reasons other than excess moisture, this material will be declared "waste" and the Contractor will be required to undercut for a minimum depth of 1.0 ft. and a maximum depth as determined and replaced with a material having a plasticity index of 6 to 18. This required undercutting will be paid for under Item 110, "Excavation."

When excavation is required to adjust stream flow lines at culvert ends, flatten the side slopes of channels and the backslopes of parallel ditches to the maximum extent possible within the existing right of way and channel easements.

### **ITEM 112. SUBGRADE WIDENING**

In a cut section, if the soil encountered in the subgrade is unsuitable or unstable, undercut a minimum depth of 1 ft. and a maximum depth as directed. Replace with a material having a plasticity index of 6 to 18.

### **ITEM 132. EMBANKMENT**

Furnish Type C embankment consisting of suitable earth material (rock, loam, clay, or other approved materials) that will form a stable embankment. The top 2 ft. of embankment material should have a plasticity index between 6 and 18.

**Project Number:**

**Sheet**

**County:** WOOD

**Control:** 2958-01-013

**Highway:** FM 2869

### **ITEM 134. BACKFILLING PAVEMENT EDGES**

Place mulch sod for backfilling pavement edges using an approved road widener. The use of this machine will allow mulch sod for backfilling the pavement edge to be placed from the final roadway surface. Use a self-propelled machine capable of transferring mulch sod from a dump truck located on the pavement surface to the front slope along the pavement edge. This machine may have a strike-off that will spread the mulch sod to conform to the typical section. The dump trucks and road widener must travel in the direction of the traffic unless otherwise approved. The use of this machine will be subsidiary to Item 134.

### **ITEM 150. BLADING**

Any required mowing and pulverizing before blading will not be paid for directly, but will be subsidiary to Item 150.

Use blading to reshape ditches, after placement of driveway pipe and use blading to reshape slopes as directed.

Compact blading material as directed.

### **ITEM 162. SODDING FOR EROSION CONTROL**

Spread mulch sod by the end of each day and final finish within 4 days after dumping.

Do not dump mulch sod from the finished surface of the roadway unless otherwise approved.

Place mulch sod at installations of culvert extensions, safety end treatments and metal beam guard fence as directed.

### **ITEM 164. SEEDING FOR EROSION CONTROL**

The rates, types of seed, asphalt, and locations for the straw mulch and broadcast seed items will be determined if temporary erosion control is needed.

Mow tall vegetation prior to placement of erosion control measures in order to provide optimal growing conditions. This work will not be paid for directly, but will be subsidiary to the bid items of the Contract.

The season and seed mixture for “Broadcast Seeding (Temporary Erosion Control) (Cool Season)” and “Broadcast Seeding (Temporary Erosion Control) (Warm Season)” is specified below:

Cool Season -	September 1 thru November 30
Warm Season -	May 1 thru August 31

**Project Number:**

**Sheet**

**County:** WOOD

**Control:** 2958-01-013

**Highway:** FM 2869

### **ITEM 166. FERTILIZER**

Place fertilizer at the rate of 1 lb. per 9 sq. yd. on prepared area before placing mulch sod and 1 lb. per 9 sq. yd. top dressing after placing mulch sod.

Place fertilizer at the rate of 1 lb. per 9 sq. yd. on areas prepared for seeding.

### **ITEM 168. VEGETATIVE WATERING**

Apply water to all newly placed sod or seeded areas the same day of installation. Maintain the sod or seeded areas in a completely watered condition. Do not allow sod or seeded areas to dry out so that water stress is evident.

### **ITEM 314. EMULSIFIED ASPHALT TREATMENT**

Before application, dilute the SS-1 emulsion with water up to a maximum dilution of 50% at a distribution rate of 0.30 gal. per sq. yd.

### **ITEM 316. SEAL COAT**

Protect all existing bridges, curbs, and other exposed concrete surfaces from asphaltic materials by any acceptable method. Removal of excessive asphaltic materials deposited on these surfaces will be at the Contractor's expense.

During surface treatment application, if existing conditions warrant, vary the lane widths, transitions, and intersection areas as directed.

Perform rolling as directed with equipment complying with Section 210.2.4.2, "Medium Pneumatic Tire." This work will not be paid for directly, but will be subsidiary to pertinent Items.

Complete surface treatment and allow surface to cure for 10 days before placing asphaltic concrete pavement unless otherwise authorized or directed.

Do not apply asphalt later than 1 hour before sunset unless otherwise approved.

Place surface treatments between May 1 and August 31 unless otherwise directed.

The rates shown on the plans for asphalt and aggregate are for estimating purposes only. The rates may be varied as directed.

**ITEM 320. EQUIPMENT FOR ASPHALT CONCRETE PAVEMENT**

Provide either a material transfer vehicle or material transfer paver for the level-up course of this project. The material transfer vehicle must be self-propelled, wheel mounted and capable of receiving material from haul trucks separate from the paver. The 20-ton minimum capacity hopper must be equipped with a pivoting discharge conveyor and must have a means of remixing the asphaltic material before placement. The material transfer paver, if supplied, must consist of a mobile, self-propelled asphalt paver incorporating an integral mix loadout elevator (conveyor) having a minimum rated capacity of 750 ton per hour. The conveyor system must have a means of remixing the asphaltic concrete material before discharging into the paver hopper and must be equipped with either a truck dump hopper attachment or a minimum 20-ton capacity surge hopper. If a material transfer paver utilizing the truck dumper hopper attachment is used, the haul trucks must stop a minimum of 1 foot into the truck. In addition, paving will not be allowed to begin until the paver has reached its full storage capacity.

**ITEM 340. DENSE-GRADED HOT-MIX ASPHALT (Small Quantity)**

The Engineer may accept a previously approved design, if prior experience using the design was satisfactory. Unless waived by the Engineer, a trial batch will be required as outlined in Item 340. The Hamburg Wheel Tracking requirements are waived for driveways.

Give the State inspector at the spreading and finishing machine 1 weight ticket for each load of material. When directed, weigh asphaltic concrete loads on public scales to ensure the proper weight of material.

For driveways designated by the Engineer to be reconstructed, scarify, blade smooth, sprinkle, and compact to the extent necessary to produce a firm, stable foundation prior to placement of ACP. This work will not be paid for directly, but will be subsidiary to Item 340.

When using crushed gravel as a coarse aggregate for ACP, use 1% lime as an antistripping agent.

For materials paid for by the ton, provide a summary spreadsheet in accordance with Article 520.2, "Equipment."

**ITEM 341. DENSE-GRADED HOT-MIX ASPHALT**

Provide Class A coarse aggregate for the surface as listed in the Department's *Bituminous Rated Source Quality Catalog* (BRSQC).

When using crushed gravel as a coarse aggregate for ACP, use 1% lime as an antistripping agent.

Target laboratory molded density is 97%.

**Project Number:**

**Sheet**

**County:** WOOD

**Control:** 2958-01-013

**Highway:** FM 2869

Give the State inspector at the spreading and finishing machine one weight ticket for each load of material. When directed, weigh asphaltic concrete loads on public scales to ensure the proper weight of material.

For materials paid for by the ton, provide a summary spreadsheet in accordance with Article 520.2, "Equipment."

All RAP used on this project must be fractionated. If an existing mix design is submitted for use as Warm Mix Asphalt (WMA), then a new trial batch with passing Hamburg Wheel test results is required.

Use an electrical impedance (non-nuclear) measurement gauge to determine mat segregation and joint density for Part V and Part VIII of test procedure TEX-207-F. Do not use nuclear density gauges or thin lift gauges for segregation or joint density determinations. Data reporting for mat segregation and joint density must be performed on Department templates.

The use of Recycled Asphalt Shingles is not allowed.

#### **ITEM 351. FLEXIBLE PAVEMENT STRUCTURE REPAIR**

Replace the unstable pavement structure with 6 in. of asphaltic concrete pavement base (Type C), unless otherwise directed. The Engineer will determine the exact locations and limits of pavement repair in the field prior to beginning this Item of work. ACP testing may be waived as directed.

#### **ITEM 401. FLOWABLE BACKFILL**

Use an accelerator that produces a set time in 4 hours. Provide a rheofill or equivalent air entrainment to ensure flowability. Anchor pipes to ensure no movement or displacement by the flowable fill. Furnish paper type cylinder test molds.

#### **ITEM 421. HYDRAULIC CEMENT CONCRETE**

The Engineer will provide strength-testing equipment.

Provide the Engineer with a mixture design report using Department-provided software in accordance with Section 421.4.1, "Classification of Concrete Mix Designs," of the standard specifications. Include in the report the producer's plant, all materials sources, and a unique identification number for the design.

Air is not required on concrete cast-in-place elements on this project. If the Contractor proposes the use of an existing concrete design containing air, the Engineer must approve the design in

**Project Number:**

**Sheet**

**County:** WOOD

**Control:** 2958-01-013

**Highway:** FM 2869

writing prior to placement. If utilized, air testing will be performed in accordance with the specifications.

**ITEM 432. RIPRAP**

Locations and quantities may be varied as directed by the Engineer to accommodate field conditions.

**ITEM 464. REINFORCED CONCRETE PIPE**

Removal of portions of the existing structure, including headwalls, safety end treatments, and pipe, is subsidiary to Item 464.

**ITEM 467. SAFETY END TREATMENT**

Reshape embankment side slopes and provide embankment as required. Add mulch sod to achieve a smooth uniform finish around the installation of the safety end treatments and culvert extensions as directed.

**ITEM 496. REMOVING STRUCTURES**

All materials removed under this Item are the property of the Contractor.

**ITEM 502. BARRICADES, SIGNS, AND TRAFFIC HANDLING**

The traffic control plan for this Contract consists of: the installation and maintenance of warning signs and other traffic control devices shown on the plans; specification data, which may be included in the general notes; applicable provisions of the Texas Manual on Uniform Traffic Control Devices (TMUTCD); traffic control plan sheets included on the plans; standard BC sheets; Compliant Work Zone Traffic Control Device List, and Item 502 of the standard specifications.

Inspect and correct deficiencies each day throughout the duration of the Contract.

Provide at least one employee on call nights and weekends (or any other time that work is not in progress) for maintenance of signs and traffic control devices. This employee must have an address and telephone number near the project, as approved. Notify the Engineer in writing of the name, address, and telephone number of this employee. The Engineer will furnish this information to local law enforcement officials.

In addition to providing a Contractor's Responsible Person and a phone number for emergency contact, have an employee available to respond on the project for emergencies and for taking corrective measures within 30 minutes.

Sign all roads intersecting the project in accordance with current BC standards.

Refer to the traffic control plan sheets for traffic handling through the work area. Contractor may vary the signing arrangement and spacing as necessary to fit field conditions; however, any proposed changes in the traffic control plan must be approved before implementation.

When the sequence of work is shown on the plans, the Contractor may submit an alternate proposal for approval. Submit in writing all proposed variations and revisions.

High-visibility safety apparel is required for workers in accordance with the General Notes on current BC standards.

Place and maintain signs, channelizing devices, and flaggers to direct and route traffic at any location and for any period of time as may be required or directed.

When operations require a lane closure, provide cones, vertical panels, drums, signs, flaggers, and flashing arrow panels as necessary to route traffic around the closed lane as shown on the plans and as directed. Lane closures will be limited to one specific lane as directed.

Unless otherwise approved, lane closures for minor or major construction operations will not be allowed on Good Friday, Easter weekend, Memorial Day, Memorial Day weekend, July 4th, Labor Day, Labor Day weekend, Thanksgiving Day thru Sunday, Christmas Eve, Christmas Day, New Year's Eve, New Year's Day, Friday thru Sunday (10/16 thru 10/18) for Autumn Trails ride weekend, or on any other high traffic days or holidays as determined.

Erect R4-1 (Do Not Pass) and R4-2 (Pass With Care) signs to mark existing no-passing zones as directed. (These signs will not be required if these zones will not be eliminated during construction.)

Maintain existing roadside signs within this project's limits during this Contract. In order to accommodate the grading or other operations, temporarily relocate these signs in accordance with the TMUTCD as directed. This work will not be paid for directly, but will be subsidiary to Item 502.

Provide truck-mounted attenuators (TMA) as shown on the appropriate traffic control plan sheets. Provide a letter certifying that all TMA used on this project meet NCHRP 350 or AASHTO Manual for Assessing Safety Hardware (MASH) requirements.

Regulate all construction activities and equipment to minimize inconvenience to the traveling public. At points where it is necessary for trucks to stop, load, or unload, provide warning signs and flaggers to protect the traveling public.

The pavement must be entirely open to traffic each night. Remove or clearly barricade all material stockpiles, equipment left overnight, or any obstruction within 30 ft. of a travelway as approved.

The Contractor Force Account "Safety Contingency" is intended to be used for work zone enhancements that could not be foreseen in the project planning and design stage for the purpose of improving the effectiveness of the Traffic Control Plan. These enhancements will be mutually agreed upon by the Engineer and the Contractor's Responsible Person based on weekly or more frequent traffic management reviews on the project. The Engineer may choose to use existing bid items if it does not slow the implementation of enhancement.

When a culvert extension, inlet construction, or safety end treatment, etc. is within 30 ft. of a travel lane, delineate these areas as shown on current BC standards. In addition, provide a 4-ft. high plastic construction fence at or around any structure or obstruction that would be a hazard to pedestrians unless otherwise approved. Erect fence using a minimum of 4-T-posts, one at each corner of the structure or obstruction.

Where there is excavation adjacent to the pavement edge, provide adequate warning signs, vertical panels, drums, and lights at the pavement edge as directed. Treat pavement drop-offs created by ACP operations in a similar manner in accordance with the details shown on the plans.

When excavation is required next to a travel lane carrying traffic and widening is not completed by the end of the day's operation, place sufficient backfill against the edge of the travel lane in order to provide a 3:1 slope, unless otherwise permitted on the plans. Provide backfill containing a durable crushed stone type of flexible base or other materials as approved. When work resumes on this excavated area, carefully remove and dispose of the backfill material. Materials and labor for this work will not be paid for directly, but will be subsidiary to the various bid items of the Contract.

Provide a pilot vehicle.

Do not perform base widening on both sides of the roadway simultaneously.

Prior to beginning work, the Contractor and Engineer should agree on the allowable length of lane closure.

The use of edge-line channelizers will not be allowed unless a plan is submitted and approved by the Engineer demonstrating the proper use of color and sheeting configuration.

All work required by these general notes, except as provided for by Item 502, will not be paid for directly, but will be subsidiary to Item 502 unless otherwise shown on the plans.

**ITEM 506. TEMPORARY EROSION, SEDIMENTATION, AND ENVIRONMENTAL CONTROLS**

Remove dirt, silt, rocks, debris, and other foreign matter that accumulates in all structures due to project erosion and Contractor's operations. Keep stream channels open at all times. This work will not be paid for directly, but will be subsidiary to this Item.

The total disturbed area for this project is 35.07 acres. The disturbed area in this project, all project locations in the Contract, and Contractor project specific locations (PSLs) within 1 mile of the project limits for the Contract, will further establish the authorization requirements for storm water discharges. The Department will obtain an authorization to discharge storm water from the Texas Commission on Environmental Quality (TCEQ) for the construction activities shown on the plans. Obtain any required authorization from the TCEQ for any Contractor PSLs for the construction support activities on or off right of way. When the total area disturbed for all projects in the Contract and PSLs within 1 mile of the project limits exceeds 5 acres, provide a copy of the Contractor NOI for PSLs on the right of way to the Engineer (to the appropriate MS4 operator when on an off-State system route).

The Engineer will provide copies of the Construction Site Notice and Notice of Intent. Post and maintain these documents at the project limits and at major roadways intersecting the project as directed. This work will be subsidiary to Item 506.

**ITEM 540. METAL BEAM GUARD FENCE**

Do not paint treated timber posts.

Place mulch sod before installing guard fences.

Use timber posts on all metal beam guard fence except where steel posts are required in accordance with "Low Fill Culvert Post Mounting" details shown on standard sheet MBGF.

Length of steel posts for low fill culvert post mounting will be determined in the field to ensure proper metal beam guard fence height.

**ITEMS 540 & 542. METAL BEAM GUARD FENCE & REMOVING METAL BEAM GUARD FENCE**

Prior to removal of existing MBGF and associated appurtenances, submit to the Engineer for approval a work plan, including a detailed timeline, outlining removal and reinstallation of safety features. It is the intent that the Contractor has the necessary materials and labor force available to reinstall the safety features prior to beginning the removal process.

**Project Number:**

**Sheet**

**County:** WOOD

**Control:** 2958-01-013

**Highway:** FM 2869

Regardless of when the Contractor installs proposed MBGF, set the rail height to account for any subsequent surfacing work in order to be in accordance with standard MBGF upon completion of the Contract.

**ITEM 542. REMOVING METAL BEAM GUARD FENCE**

The Engineer will determine the metal beam guard fence and post to be salvaged. Stack the salvaged metal beam guard fence and post at the stockpile located at the intersection of FM 2869 and FM 852.

**ITEM 544. GUARDRAIL END TREATMENTS**

The type of GET will be Type 1 unless otherwise shown on the plans.

**ITEM 560. MAILBOX ASSEMBLIES**

Use round posts, set in concrete, with 12 in. reflector tape for all mailbox installations.

**ITEM 585. RIDE QUALITY FOR PAVEMENT SURFACES**

Use Surface Test Type B pay adjustment schedule 3 to evaluate ride quality of the travel lanes in accordance with Item 585, "Ride Quality for Pavement Surfaces."

**ITEM 658. DELINEATOR AND OBJECT MARKER ASSEMBLIES**

Accept ownership of unsalvageable delineator and object marker assemblies and remove from the right of way.

**ITEM 662. WORK ZONE PAVEMENT MARKINGS**

Contractor may use paint and beads for work zone pavement markings (non-removable).

Dispose of all empty paint containers and unused paint in accordance with federal, state, and local requirements.

Do not use foil backed pavement markings as removable work zone pavement markings. Removable work zone pavement markings must be pliant polymer detour grade (removable) material or other markings that can be obliterated or removed to the satisfaction of the Engineer.

**ITEM 666. RETROREFLECTORIZED PAVEMENT MARKINGS**

Use the spray method for application of the thermoplastic compound for lane lines, barrier lines, edge lines and channelizing lines.

**Project Number:**

**Sheet**

**County:** WOOD

**Control:** 2958-01-013

**Highway:** FM 2869

Extrude hot to the pavement surface thermoplastic compound for arrows, stop lines, yield triangles, transverse lines, crosswalk lines, words and symbols.

For lengths greater than 300 ft., the Contractor is responsible for the placement of pilot guideline markings. Place markings in the proper alignment as established by the Contractor and approved by the Engineer. Previously placed tabs that are preserved on the approved alignment may be used as a guide for the placement of pilot guideline markings. Controlled surveys may be required for the proper placement of tabs and for the proper placement of control points for pilot guideline markings.

Provide a crew experienced in the work of installing pilot guideline markings and in the necessary traffic control. Supply all the equipment, personnel, traffic control, and materials necessary for the placement of pilot guideline markings as directed. All work must be in conformance with Part VI of the TMUTCD.

Pilot guideline markings placed on the roadway for alignment purposes should be temporary in nature and must not establish a permanent marking on the roadway. The Engineer will approve materials used for pilot guideline markings and equipment used for placement.

The Engineer will establish beginning and ending points of no passing zones.

Furnish Type II glass beads conforming to DMS-8290, "Glass Traffic Beads," for this project.

#### **ITEM 672. RAISED PAVEMENT MARKERS**

Provide dispensing equipment such that the bituminous material can be directly applied from the melting pot to the pavement surface without secondary handling. Dispensing material from the melting pot into a separate container and then to the pavement surface will not be permitted. Intermittent agitation of the bituminous material must be by a method approved by the Engineer to ensure even heat distribution and must be such that the adhesive is agitated at approved and consistent intervals.

This page intentionally left blank.