STATE OF LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

LETTER BID PROPOSAL



STATE PROJECT NO. 005-10-0038
US 90 TURN LANE AT HOMEPLACE ROAD
(STEEPLE CHASE SUB)
JEFFERSON PARISH
ROUTE US 90



STATE PROJECT NO(S). 005-10-0038

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NOTICE TO CONTRACTORS (10/08)

Sealed paper bids for the following project will be received by the Department of Transportation and Development (DOTD). Bids can be delivered to the DOTD District 02 Design Office, 7252 Lakeshore Drive, New Orleans, LA 70452 until 10:00 a.m on **Thursday, December 18, 2008**. Beginning at 10:00 a.m., all bids will be publicly opened and presented in the Grille Room. No bids will be received after 10:00 a.m. Any person requiring special accommodations shall notify DOTD at (504) 816-7309 not less than 3 business days before bid opening.

STATE PROJECT NO. 005-10-0038

DESCRIPTION: US 90 Turn Lane At Homeplace Road (Steeple Chase Sub)

ROUTE: US 90 PARISH: Jefferson LENGTH: 0.289 miles.

TYPE: Widen Asphaltic Roadway, Add Drainage Structures, Add New Striping And Markers

LIMITS: State Project No. : 005-10-0038 C.S.L.M. 2.968 TO C.S.L.M. 3.257

LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT FOR:

(Contracting Agency).

ESTIMATED COST RANGE: \$250,000 to \$500,000

PROJECT ENGINEER: Capote, Nelson (504) 361-6495 PROJECT MANAGER: Gaudet, Corey (504) 816-7312

COST OF PROPOSAL FORMS: Free

COST OF PLACE: Included In Proposal (no additional charge)

Bids must be prepared and submitted in accordance with Section 102 of the 2006 Louisiana Standard Specifications for Roads and Bridges as amended by the project specifications, and must include all information required by the proposal.

NOTICE TO CONTRACTORS (CONTINUED)

Plans and/or proposals may be obtained from 7252 Lakeshore Drive, New Orleans, LA, 70124, or by contacting the DOTD; Email: coreygaudet@dotd.la.gov, Phone (504) 816-7312, FAX: (504) 816-7302, or by written requests sent to the above address. Proposals will not be issued later than 24 hours prior to the time set for opening bids. The purchase price for plans and proposals is non-refundable.

The U. S. Department of Transportation (DOT) operates a toll free "Hotline" Monday through Friday, 8:00 a.m. to 5:00 p.m., eastern time. Anyone with knowledge of possible bid rigging, bidder collusion, or other fraudulent activities should call 1-800-424-9071. All information will be treated confidentially and caller anonymity will be respected.

GENERAL BIDDING REQUIREMENTS (08/06): The specifications, contract and bonds governing the construction of the work are the 2006 Edition of the Louisiana Standard Specifications for Roads and Bridges, together with any supplementary specifications and special provisions attached to this proposal.

Bids shall be prepared and submitted in accordance with Section 102 of the Standard Specifications.

The plans herein referred to are the plans approved and marked with the project number, route and Parish, together with all standard or special designs that may be included in such plans. The bidder declares that the only parties interested in this proposal as principals are those named herein; that this proposal is made without collusion or combination of any kind with any other person, firm, association, or corporation, or any member or officer thereof; that careful examination has been made of the site of the proposed work, the plans, Standard Specifications, supplementary specifications and special provisions above mentioned, and the form of contract and payment, performance, and retainage bond; that the bidder agrees, if this proposal is accepted, to provide all necessary machinery, tools, apparatus and other means of construction and will do all work and furnish all material specified in the contract, in the manner and time therein prescribed and in accordance with the requirements therein set forth; and agrees to accept as full compensation therefore, the amount of the summation of the products of the quantities of work and material incorporated in the completed project, as determined by the engineer, multiplied by the respective unit prices herein bid.

It is understood by the bidder that the quantities given in this proposal are a fair approximation of the amount of work to be done and that the sum of the products of the approximate quantities multiplied by the respective unit prices bid shall constitute gross sum bid, which sum shall be used in comparison of bids and awarding of the contract.

The bidder further agrees to perform all extra and force account work that may be required on the basis provided in the specifications.

The bidder further agrees that within 15 calendar days after the contract has been transmitted to him, he will execute the contract and furnish the Department satisfactory surety bonds.

If this proposal is accepted and the bidder fails to execute the contract and furnish bonds as above provided, the proposal guaranty shall become the property of the Department; otherwise, said proposal guaranty will be returned to the bidder; all in accordance with Subsection 103.04.

MAINTENANCE OF TRAFFIC (08/06): Subsection 104.03 of the 2006 Standard Specifications is amended to include the following requirements.

The contractor shall provide for and maintain through and local traffic at all times and shall conduct his operations in such manner as to cause the least possible interference with traffic at junctions with roads, streets and driveways.

The contractor shall conduct his paving operations on one side of the roadway at a time. The side of the roadway, including shoulder, that is open to traffic shall be clear at all times.

When the plans show asphaltic concrete pavement layers to be placed in thicknesses of 2 inches (50 mm) or less, the contractor will be permitted to pave in one lane for a full day; the adjacent lane may be paved the following workday. When pavement layers are greater than 2 inches (50 mm) thickness, the contractor shall place approximately 1/2 of each day's production in one lane and the remainder in the adjacent lane.

At the end of each day's paving operations, temporary pavement markings shall be in place and proper signs and barricades displayed. During the period that all lanes are open to traffic, the contractor shall neither store material nor park equipment on roadway shoulders.

When asphaltic concrete pavement is cold planed to a depth of 2 inches (50 mm) or less, the contractor will be permitted to cold plane in one lane for a full day; the adjacent lane may be cold planed the following workday. When the depth of cold planing is greater than 2 inches (50 mm), the contractor shall cold plane approximately 1/2 of each day's production in one lane and the remainder in the adjacent lane.

All asphaltic concrete pavement new construction, overlays, and shoulder surfacing operations open to traffic shall be conducted in accordance with the following requirements.

- 1. Shoulder Subgrade Preparation: Any required embankment widening shall be completed before placement of the asphaltic concrete overlay. All vegetation shall be removed from existing shoulders before beginning temporary or final shoulder construction.
- 2. Temporary Shoulder Construction: Temporary shoulder construction described herein shall be completed at the end of each day's operations for all asphaltic concrete courses except the final wearing course. There shall be no drop-off from the pavement edge to the shoulder. The contractor shall blade and shape existing shoulder material against, and approximately level with, the top of the pavement surfacing to form a temporary shoulder with a uniform slope from the pavement edge to the existing shoulder line, or to a point 10 feet (3 m) from the pavement edge. If existing shoulder materials are insufficient, the contractor shall furnish, place and shape additional shoulder surfacing materials to form the temporary shoulder. Existing and/or additional materials for temporary shoulders shall be to the satisfaction of the engineer. Compaction shall be by approved methods.

No direct payment will be made for constructing and subsequently reshaping temporary shoulders, except payment for additional materials under appropriate pay items.

SUBLETTING OF CONTRACT (01/83): In accordance with Subsection 108.01 of the Standard Specifications, the following items are designated as "Specialty Items":

Item 202-02-G, Removal of Surfacing & Stabilizing Base

Item 202-02-H, Removal of Guard Rail

Item 202-02-I, Removal of Concrete Headwall

Item 731-02, Reflectorized Raised Pavement markers

Item 732-01-C, Plastic Pavement Striping (8" Width)

Item 732-01-E, Plastic Pavement Striping (24" Width)

Item 732-02-A, Plastic Pavement Striping (Solid Line)(4" Width)

Item 732-03-A, Plastic Pavement Striping (Broken Line)(4" Width)

Item 732-04-A, Plastic Pavement Legends and Symbols (Arrow)

Item 732-04-C, Plastic Pavement Legends and Symbols (Only)

PAYMENT ADJUSTMENT (03/07): Section 109, Measurement and Payment of the 2006 Standard Specifications and the supplemental specifications thereto, is amended to add the following.

This project is designated for payment adjustment for asphalt cements and fuels in accordance with Subsection 109.09 as follows.

109.09 PAYMENT ADJUSTMENT (ASPHALT CEMENTS AND FUELS).

(a) General: Payment for contract items indicated herein will be adjusted to compensate for cost differentials of Performance Graded (PG) asphalt cements, gasoline, and diesel fuel when such costs increase or decrease more than 5 percent from the Department's established base prices for these items. The base price indices for asphalt cements and fuels will be the monthly price indices in effect at the time bids are opened for the project. The base price indices for asphalt cements will be as stated in paragraph (b) below. The base price index for fuels will be as stated in paragraph (c) below.

Payment adjustments will be made each monthly estimate period when a price index for this period varies more than 5 percent from its respective base price index. The monthly price indices to be used with each monthly estimate will be the price indices for the month in which the estimate period begins.

If the project is placed in default, payment adjustments will be based on the monthly price indices used for the last monthly estimate period prior to the project being placed in default, unless a monthly price index decreases in which case the lower monthly price index will be used.

If it is determined after completion of work on any eligible item that the total quantity paid to date must be adjusted to reflect more accurate quantity determinations, the Department will prorate the additional quantity to be added or subtracted over all previous estimate periods in which the item of work was performed in order to determine additional payment adjustments. If payment adjustments were made during any of these partial estimate periods, this added or subtracted quantity that has been prorated will likewise have payment adjustments calculated and included.

(b) Performance Graded (PG) Asphalt Cements: The base price index will be the monthly price index in effect at the time of bid opening as shown elsewhere herein. The monthly price indices will be the average, excluding the extreme outliers, of the unit prices for PG 64-22, the average, excluding the extreme outliers, of the unit prices for PG 70-22m, and the average, excluding the extreme outliers, of the unit prices for PG 76-22m. The monthly prices for each of these asphalt materials will be F.O.B. refinery or terminal as determined from the quoted prices effective on the first calendar day of each month from suppliers of these materials. Suppliers considered are those who have requested to participate in the liquid asphalt index determination and have supplied materials on DOTD projects within the past twelve months. These suppliers and materials shall be listed on the Department's Qualified Products List (QPL 41) and must be marketed in Louisiana.

Payment adjustments will be made in accordance with the following formulas:

If Monthly Price Index exceeds Base Price Index, $P_a = (A - 1.05B) \times C \times D \times (1.00 + T)$

If Base Price Index exceeds Monthly Price Index, $P_a = (0.95B - A) \times C \times D \times (1.00 + T)$

Where	e:	
P_a	=	Price adjustment (increase or decrease) for asphalt cement.
A	=	Monthly Price Index for respective PG 64-22, PG 70-22m, or PG 76-22m
		in dollars per ton/megagram.
В	=	Base Price Index for respective PG 64-22, PG 70-22m, or PG 76-22m in
		dollars per ton/megagram.
C	=	Tons/megagrams of asphaltic concrete.
D	=	Percent of respective asphalt cement, per job mix formula, in decimals.

Louisiana sales tax percentage, in decimals. (Note: Local tax is not considered)

The engineer will furnish the weights (mass) of asphaltic concrete placed during the monthly estimate period with the respective asphalt cement content, excluding the asphalt content in reclaimed asphaltic pavement (RAP) as per job mix formula. If the asphalt cement content changes during the estimate period, the respective weight (mass) of asphaltic concrete produced at each cement content will be reported.

Item 510-02, Pavement Widening, and all contract pay items under Sections 502 and 508, will be eligible for payment adjustments of asphalt materials. No payment adjustment will be made for other asphalt materials, including emulsions and cutbacks.

The base price indices for asphalt cements and fuels will be posted on the DOTD internet website before the 10th calendar day of each month at the following URL: www.dotd.louisiana.gov/lettings/lac_price_index/priceindices.asp.

(c) Fuels: The base price index for this project will be the monthly price index in effect when bids are opened for the project. The monthly price index will be the minimum price quotations for unleaded gasoline and No. 2 diesel fuel listed for the New Orleans area in *Platt's Oilgram and Price Report* effective on the first calendar day of each month.

Payment adjustment will be made in accordance with the following formulas:

If Monthly Price Index exceeds Base Price Index,

$$P_a = (A - 1.05B) \times Q \times F$$

If Base Price Index exceeds Monthly Price Index, $P_a = (0.95B - A) \times Q \times F$

Where:

Т

 P_a = Price adjustment.

A = Monthly Price Index in dollars per gallon/liter.

B = Base Price Index in dollars per gallon/liter.

Q = Pay Item Quantity (Pay Units).

F = Fuel Usage Factor Gal (L)/Pay Unit.

The following is a listing of contract pay items that are eligible for payment adjustment and the fuel usage factors that will be used in making such adjustment. Contract items that expand the items listed herein by use of letter designations are also eligible for fuel price adjustments; for example:

Item 601-01-G, Portland Cement Concrete Pavement 8 inches (200 mm) thick.

ELIGIBLE CONTRACT PAY ITEMS & FUEL USAGE FACTORS FOR FUEL PAYMENT ADJUSTMENT

ITEM NO.	PAY ITEM	UNITS	MIN. ORIGINAL CONTRACT QUANTITY FOR PAY ADJUSTMENT	FUEL USAG	E FACTORS Gasoline
203-01 ¹	General Excavation	gal/cu yd	10,000 cu yd	0.29	0.15
203-02	Drainage Excavation	gal/cu yd	10,000 cu yd	0.29	0.15
203-03 ¹	Embankment	gal/cu yd	10,000 cu yd	0.29	0.15
203-04	Nonplastic Embankment	gal/cu yd	10,000 cu yd	0.29	0.15
203-07	Borrow (Vehicular Measurement)	gal/cu yd	10,000 cu yd	0.29	0.15
301-01	Class I Base Course	gal/cu yd	3,000 cu yd	0.88	0.57
301-02	Class I Base Course (" Thick)	gal/sq yd	50,000 sq yd	0.04	0.03
302-01	Class II Base Course	gal/cu yd	3,000 cu yd	0.88	0.57
302-02	Class II Base Course (" Thick)	gal/sq yd	50,000 sq yd	0.04	0.03
303-01	In-Place Cement Stabilized Base Course	gal/sq yd	50,000 sq yd	0.04	0.03
304-02	Lime Treatment (Type B)	gal/sq yd	50,000 sq yd	0.04	0.03
304-03	Lime Treatment (Type C)	gal/sq yd	50,000 sq yd	0.04	0.03
304-04	Lime Treatment (Type D)	gal/sq yd	50,000 sq yd	0.04	0.03
305-01	Subgrade Layer (" Thick)	gal/sq yd	50,000 sq yd	0.04	0.03
308-01	In-Place Cement Treated Base Course	gal/sq yd	50,000 sq yd	0.04	0.03
401-01	Aggregate Surface Course (Net Section)	gal/cu yd	3,000 cu yd	0.88	0.57
401-02	Aggregate Surface Course (Adjusted Vehicular Measurement)	gal/cu yd	3,000 cu yd	0.88	0.57
502-01	Superpave Asphaltic Concrete	gal/ton	1000 ton	2.40^{3}	0.2
502-02	Superpave Asphaltic Concrete	gal/cu yd	500 cu yd	4.80 ⁴	0.4
502-03	Superpave Asphaltic Concrete ("Thick)	gal/sq yd	10,000 sq yd	0.13 ^{5,6}	0.016
508-01	Asphaltic Concrete (SMA)	gal/ton	1000 ton	2.40^{3}	0.2
510-02	Pavement Widening	gal/sq yd	3,000 sq yd	0.86	0.24
601-01	Portland Cement Concrete Pavement (" Thick)	gal/sq yd	15,000 sq yd	0.11	0.15

- 1 If project has both 203-01 & 203-03, only the item with larger quantity is eligible.
- 2 For fuel adjustment purposes, the term "diesel" shall represent No. 2 or No. 4 fuel oils or any of the liquified petroleum gases, such as propane or butane.
- 3 If natural gas or coal is used instead of diesel for aggregate drying and heating the fuel usage factor shall be 1.67 gal/ton.
- 4 If natural gas or coal is used instead of diesel for aggregate drying and heating the fuel usage factor shall be 13.34 gal/cu yd.
- 5 If natural gas or coal is used instead of diesel for aggregate drying and heating the fuel usage factor shall be 0.09 gal/sq yd.
- 6 Per inch of thickness.

ELIGIBLE CONTRACT PAY ITEMS & FUEL USAGE FACTORS FOR FUEL PAYMENT ADJUSTMENT (METRIC)

ITEM NO.	PAY ITEM	UNITS	MIN. ORIGINAL CONTRACT QUANTITY FOR	FUEL USAG	E FACTORS
			PAY ADJUSTMENT	Diesel ²	Gasoline
203-01	General Excavation	l/m^3	7,600 m ³	1.44	0.74
203-02	Drainage Excavation	l/m ³	7,600 m ³	1.44	0.74
203-03 ¹	Embankment	1/m ³	7,600 m ³	1.44	0.74
203-04	Nonplastic Embankment	l/m³	7,600 m ³	1.44	0.74
203-07	Borrow (Vehicular Measurement)	l/m^3	7,600 m ³	1.44	0.74
301-01	Class I Base Course	l/m^3	2,300 m ³	4.36	2.82
301-02	Class I Base Course (mm Thick)	1/m ²	41,800 m ²	0.18	0.14
302-01	Class II Base Course	$1/m^3$	2,300 m ³	4.36	2.82
302-02	Class II Base Course (mm Thick)	l/m^2	41,800 m ²	0.18	0.14
303-01	In-Place Cement Stabilized Base Course	l/m^2	41,800 m ²	0.18	0.14
304-02	Lime Treatment (Type B)	l/m^2	41,800 m ²	0.18	0.14
304-03	Lime Treatment (Type C)	l/m^2	41,800 m ²	0.18	0.14
304-04	Lime Treatment (Type D)	1/m ²	41,800 m ²	0.18	0.14
305-01	Subgrade Layer (mm Thick)	l/m^2	41,800 m ²	0.18	0.14
308-01	In-Place Cement Stabilized Base Course	l/m^2	41,800 m ²	0.18	0.14
401-01	Aggregate Surface Course (Net Section)	l/m^3	2,300 m ³	4.36	2.82
401-02	Aggregate Surface Course (Adjusted Vehicular Measurement)	l/m³	2,300 m ³	4.36	2.82
502-01	Superpave Asphaltic Concrete	l/Mg	900 Mg	10.013	0.83
502-02	Superpave Asphaltic Concrete	l/m³	400 m ³	23.774	1.98
502-03	Superpave Asphaltic Concrete (mm Thick)	l/m²	8,400 m ²	0.59 ^{5,6}	0.45 ⁶
508-01	Asphaltic Concrete (SMA)	l/Mg	900 Mg	10.013	0.83
510-02	Pavement Widening	1/m ²	2,500 m ²	3.89	1.09
601-01	Portland Cement Concrete Pavement (mm Thick)	l/m ²	12,500 m ²	0.5	0.68

- 1 If project has both 203-01 & 203-03, only the item with larger quantity is eligible.
- 2 For fuel adjustment purposes, the term "diesel" shall represent No. 2 or No. 4 fuel oils or any of the liquified petroleum gases, such as propane or butane.
- 3 If natural gas or coal is used instead of diesel for aggregate drying and heating the fuel usage factor shall be 6.97 l/mg.
- 4 If natural gas or coal is used instead of diesel for aggregate drying and heating the fuel usage factor shall be 16.53 l/m³.
- 5 If natural gas or coal is used instead of diesel for aggregate drying and heating the fuel usage factor shall be 0.41 l/m².
- 6 Per mm of thickness.

SUPERPAVE ASPHALTIC CONCRETE MIXTURES (11/07): Section 502 of the 2006 Standard Specifications and the supplemental specifications thereto, is amended as follows.

Subsection 502.02, Materials.

Table 502-2, Superpave Asphalt Cement Usage, is deleted and the following substituted.

Table 502-2

Superpave Asphalt Cement Usage

Current Traffic Load Level	Mixture Type	Grade of Asphalt Cement
	Wearing Course	PG 70-22m
Level 1	Binder Course	PG 70-22m
	Base Course	PG 64-22
Level 2	Wearing Course	PG 76-22m
Level 2	Binder Course	PG 76-22m
Level A	Incidental Paving	PG 70-22m

Note: A PG 82-22 rm, Waste Tire Rubber Modified Asphalt, may be substituted for any other grade of asphalt cement.

Subsection 502.14, Lot Sizes.

The first sentence of the first paragraph is deleted and the following is substituted.

502.14 LOT SIZES. A lot is a segment of continuous production of asphaltic concrete mixture from the same job mix formula produced for the Department at a specific plant, delivered to a specific DOTD project.

CULVERTS AND STORM DRAINS (08/07): Section 701 Culverts and Storm Drains of the 2006 Standard Specifications and the supplemental specifications, thereto is deleted and the following substituted.

SECTION 701 CULVERTS AND STORM DRAINS

701.01 DESCRIPTION. This work consists of furnishing, installing, and cleaning pipe, pipe arch, storm drains and sewers, also referred to as culverts or conduit, in accordance with these specifications and in conformity with lines and grades shown on the plans or established.

701.02 MATERIALS. Materials shall comply with the following sections and subsections:

Usable Soil	203.06(a)
Selected Soil	203.06(b)
Plastic Soil Blanket	203.10
Mortar	702.02
Flowable Fill	710
Portland Cement Concrete	901
Reclaimed Asphaltic Pavement (RAP)	1003.01 & 1003.04(d)
Stone	1003.03(b)
Recycled Portland Cement Concrete	1003.03(c)
Granular Material	1003.07
Bedding Material	1003.08
Concrete Sewer Pipe	1006.02
Reinforced Concrete Pipe	1006.03
Reinforced Concrete Pipe Arch	1006.04
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Gasket Materials	1006.06
Plastic Pipe	1006.07
Split Plastic Coupling Bands	1006.07(d)(4)
Plastic Yard Drain Pipe	1006.09
Bituminous Coated Corrugated Steel Pipe and	
Pipe Arch	1007.02
Structural Plate for Pipe, Pipe Arch and Arch	1007.04
Corrugated Aluminum Pipe and Pipe Arch	1007.05
Coupling Bands	1007.09
Reinforcing Steel	1009
Geotextile Fabric	1019

- (a) Side Drain Pipe or Side Drain Pipe Arch: When the item for Side Drain Pipe or Side Drain Pipe Arch is included in the contract, the contractor has the option of furnishing reinforced concrete pipe or reinforced concrete pipe arch, corrugated metal pipe or corrugated metal pipe arch, or plastic pipe, as allowed by EDSM II.2.1.1 or unless otherwise specified.
- (b) Cross Drain Pipe or Cross Drain Pipe Arch: When the item for Cross Drain Pipe or Cross Drain Pipe Arch is included in the contract, the contractor has the option of furnishing reinforced concrete pipe or reinforced concrete pipe arch, corrugated metal pipe or corrugated metal pipe arch, or plastic pipe, as allowed by EDSM II.2.1.1 or unless otherwise specified.
- (c) Storm Drain Pipe or Storm Drain Pipe Arch: When the item for Storm Drain Pipe or Storm Drain Pipe Arch is included in the contract, the contractor has the option of furnishing reinforced concrete pipe or reinforced concrete pipe arch, or plastic pipe, as allowed by EDSM II.2.1.1 or unless otherwise specified.
- (d) Yard Drain Pipe: When the item for Yard Drain Pipe is included in the contract, the contractor has the option of furnishing concrete sewer pipe, plastic yard drain pipe or plastic pipe in accordance with Section 1006 unless otherwise specified.
 - (e) Material Type Abbreviations:

(1) Reinforced Concrete Pip	((1)) Reinf	orced	Concrete	Pipe
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RCP Reinforced Concrete Pipe
RCPA Reinforced Concrete Pipe Arch

(2) Corrugated Metal Pipe:

CAP Corrugated Aluminum Pipe CAPA Corrugated Aluminum Pipe Arch

CMP Corrugated Metal Pipe
CMPA Corrugated Metal Pipe Arch
CSP Corrugated Steel Pipe
CSPA Corrugated Steel Pipe Arch

BCCSP Bituminous Coated Corrugated Steel Pipe
BCCSPA Bituminous Coated Corrugated Steel Pipe Arch

(3) Plastic Pipe:

PP Plastic Pipe

PVCP Polyvinyl Chloride Pipe

RPVCP Ribbed Polyvinyl Chloride Pipe

CPEPDW Corrugated Polyethylene Pipe Double Wall

(f) Joint Type Abbreviations:

T1 Type 1 Joint T2 Type 2 Joint

Type 3 Joint

(g) Quality Assurance for Pipe: Manufacturing plants will be periodically inspected for compliance with specified manufacturing methods, and material samples will be randomly obtained for laboratory testing for verification of manufacturing lots. Materials approved at the manufacturing plant will be subject to visual acceptance inspections at the jobsite or point of delivery.

701.03 EXCAVATION. For all pipe, when the sides of the trench are stable as evidenced by the sides of the trench being able to maintain a vertical cut face, the minimum trench width at the bottom of the excavation will be 18 inches (460mm) on either side of the outside diameter of the pipe. If the sides of the trench are unstable, the width of the trench at the bottom of the excavation, for plastic or metal pipe, shall be a minimum width of at least 18 inches (460mm) or one pipe diameter on each side of the outside diameter of the pipe, which ever is greater. Surplus material or excavated material that does not conform to the requirements of Subsection 203.06(a) shall be satisfactorily disposed of in accordance with Subsection 202.02. Moisture controls including backfill materials selection and dewatering using sumps, wells, well points or other approved processes may be necessary to control excess moisture during excavation, installation of bedding, over-excavated trench backfilling, pipe placement and pipe backfill.

(a) Over-excavation: When unsuitable soils as defined in Subsection 203.04 or a stable, non-yielding foundation cannot be obtained at the established pipe grade, or at the grade established for placement of the bedding, unstable or unsuitable soils below this grade shall be removed and replaced with granular material meeting the requirements of Subsection 1003.07, bedding materials meeting the requirements of Subsection 1003.08 or Type A backfill. All granular, backfill materials placed below the established pipe or bedding grade shall be placed in lifts not exceeding 8 inches (200 mm) thick and sufficiently compacted by hand or a dynamic mechanical hand compaction device over the surface of each lift to form a stable, non-yielding foundation at the surface of the established bedding or pipe grade.

When rock is encountered, it shall be removed below grade and replaced with material complying with Subsection 1003.07, bedding materials meeting the requirements of Subsection 1003.08 or Type A backfill. The compacted earth cushion shall have a thickness under the pipe of at least 1/2 inch per foot (40 mm/m) of fill height over the top of the pipe with a minimum thickness of 8 inches (200 mm). All granular, backfill materials placed below the established pipe or bedding grade shall be placed in lifts not exceeding 8 inches (200 mm) thick and sufficiently compacted by hand or a dynamic mechanical hand operated compaction device over the surface of each lift to form a stable, non-yielding foundation at the surface of the established bedding or pipe grade.

Materials used to backfill in an over-excavated portion of a trench do not require encasement in a Geotextile Fabric.

Density of approved materials placed in over-excavated trenches will not be measured or determined.

701.04 FORMING PIPE BED. Bedding material, when specified, shall be constructed in accordance with Section 726. Materials allowed for bedding shall be as specified in Subsection 1003.08 or may be Type A backfill materials. When bedding materials are specified, additional excavation shall be performed below established pipe grade and the bedding material placed in lifts not exceeding 8 inches (200 mm) thick and lightly compacted by hand or a dynamic hand compaction device over the surface of each lift.

When the bottom of the pipe is not laid in a trench but is constructed above natural soils, a uniform bed shall be constructed as specified for the bottom of a trench.

Density of approved bedding materials will not be measured or determined.

701.05 LAYING PIPE. Pipe laying shall begin at the downstream end of the line. The pipe shall be in contact with the foundation throughout its length. Bell or groove ends of pipe and outside circumferential laps of riveted metal pipe shall be placed facing upstream. Riveted seam metal pipe shall be placed with longitudinal laps at sides. Pipes in each continuous line shall have the same wall thickness. Metal pipes provided with lifting lugs shall be handled only by these lugs.

After pipe has been laid and before backfill is placed, the engineer will inspect the pipe for alignment, grade, integrity of joints, and coating damage.

701.06 JOINING PIPE.

- (a) Joint Usage:
- (1) Type 1 (T1) joints shall be used for side drains under drives and similar installations.
- (2) Type 2 (T2) joints shall be used for cross drains under roadways, including turnouts.
- (3) Type 3 (T3) joints shall be used for closed storm drain systems, flumes and siphons.
- (b) Concrete Pipe: Concrete pipe may be either bell and spigot, or tongue and groove. The method of joining pipe sections shall be such that ends are fully entered and inner surfaces are flush and even.

An approved mechanical pipe puller shall be used for joining pipes over 36 inches (900 mm) in diameter. For pipe 36 inches (900 mm) or less in diameter, any approved method for joining pipe may be used which does not damage the pipe.

Joints shall comply with Subsection 1006.05, and shall be sealed with gasket material installed in accordance with the manufacturer's recommendations.

(c) Metal Pipe: Metal pipe shall be firmly joined by coupling bands. Bands shall be centered over the joint.

For Type 1 joints, approved gasket material shall be placed in one corrugation recess on each side of the joint at the coupling band and on each band connection in such manner to prevent leakage.

When Type 2 or 3 joints are specified, joining of metal pipe sections shall conform to the following provisions:

- (1) General: Band joints shall be sealed with gasket material. Gasket material shall be placed in accordance with the plan details.
- (2) Circular Section: Connecting bands shall be of an approved design and shall be installed in accordance with plan details.
- (3) Arch Section: Connecting bands shall be a minimum of 12 inches (300 mm) wide for pipe arch less than 36 inches (900 mm) round equivalent diameter, and a minimum of 21 inches (525 mm) wide for 36 inches (900 mm) round equivalent diameter pipe arch and greater. Bands shall be connected at the ends by approved angle or strap connections. Connecting bands used for 36 inches (900 mm) round equivalent diameter pipe arch and above shall be 2-piece bands.
- (d) Plastic Pipe: Joints for plastic pipe shall be either bell and spigot or split coupling bands.

(1) Bell and Spigot Type Joint System: The method of joining pipe sections shall be such that ends are fully entered and inner surfaces are flush and even.

Any approved method for joining pipe may be used which does not damage the pipe.

Joints shall be approved and shall be sealed with a gasket system utilizing gasket material complying with Subsection 1006.06(a).

(2) Split Coupling Type Joint System: Split coupling bands shall comply with all dimensional and material requirements of Subsection 1006.07. The bands shall be centered over the joint. The split coupling band shall be secured to the pipe with a minimum of five stainless steel or other approved corrosion resistant bands.

Joints shall be approved and shall be sealed with gasket material. Gasket material shall be placed in the first two corrugation recesses on each side of the pipe connections. Gasket material shall also be placed on each band connection to prevent leakage. When flexible plastic gasket material is used it shall be a minimum of 1/2 inch (13 mm) in size. The bands shall be tightened to create overlap of the band and shall adequately compress the gasket material.

- (e) Connections: Approved connections shall be used when joining new pipes to existing pipes. When concrete collars are required in order to extend the ends of existing pipes that have been damaged or to join different types or sizes of pipes, the concrete collars shall be constructed in accordance with plan details, the applicable requirements of Section 901, and as directed.
- (f) Geotextile Fabric, Pipe Joints: For concrete, metal and plastic pipes, Types 2 and 3 joints shall be wrapped with geotextile fabric for a minimum of 12 inches (300 mm) on each side of joint for pipe 36 inches (900 mm) or less in diameter and a minimum of 18 inches (450 mm) on each side of the joint for pipe greater than 36 inches (900 mm) in diameter. Ends of the fabric shall be lapped at least 10 inches (250 mm). The edges and ends of fabric shall be suitably secured for the entire circumference of the pipe.

701.07 RELAYING PIPE. If specified or directed, existing pipes shall be removed and suitable sections relaid as specified for new pipes.

701.08 BACKFILLING.

(a) General: Prior to backfilling, pipes found to be damaged or out of alignment or grade shall be removed and reinstalled, or replaced.

Type A backfill material shall be stone, recycled portland cement concrete, flowable fill, or RAP.

Type B backfill materials are selected soils. Where Type B backfill materials are called for, Type A backfill materials may be substituted.

When corrugated metal pipe is used, the backfill material shall be tested and shall have a resistivity greater than 1500 ohm-cm and a pH greater than 5 when tested in accordance with DOTD TR 429 and DOTD TR 430 respectively.

When Type A backfill material is used, geotextile fabric surrounding this backfill shall be placed in accordance with Subsection 726.03 between the aggregate backfill material and all other natural or placed soils in the trench or embankment. Care shall be taken to prevent damage to geotextile fabric during placement of backfill material. For concrete pipe, the fabric shall enclose not only the initial backfill but shall be wrapped over the top of the pipe with at least 12 inches (300 mm) of overlap.

When a trench box or trench sheeting is used in unstable soils and/or for worker safety, and when moved during backfilling operations, filling and additional compaction of the disturbed zone of backfill must take place immediately and in a manner acceptable to the engineer.

Initial backfill is a structural backfill encasing the pipe from the bottom of the pipe to the springline for concrete pipe and to a point one foot (0.3 m) above the top of the pipe for both metal and plastic pipe. Final backfill is not a structural backfill and shall extend from the top of the initial backfill to the top of the natural ground or subgrade in cut areas or to the top of existing ground in fill areas. Any fill required above the final backfill is considered and treated as embankment.

- (b) Backfill Applications: For projects using A+B+C bidding method where rigid and flexible pavement alternates are considered, backfill application (2) below, "Cross Drains Under Flexible Pavements", shall apply for either rigid or flexible pavements.
- (1) Under Concrete Pavements: Type B backfill may be used as initial and final backfill for all pipes, culverts or drains under concrete pavements. Placement and compaction shall be as specified in Heading (d) below.
- (2) Cross Drains Under Flexible Pavements: All reaches, exclusive of those portions of the pipe which are under shoulders, of cross drains and all other culverts, pipes or drains that cross the centerlines of the new roadway or centerlines of existing roadways, such as intersections and are under flexible pavements shall receive an initial backfill of Type A material. Type B backfill materials may be used as final backfill for all pipes. Placement and compaction shall be as specified in Heading (c) and (d) below. Where the subgrade is above existing ground, embankment material as specified for the remainder of the project shall be used from the top of the final backfill to the top of the established embankment grade.
- (3) Other Drains Under Flexible Pavements: All reaches of all culverts, pipes or drains under flexible pavements that do not cross the centerlines of new roadway or centerlines of existing roadways, and exclusive of those portions of the pipe which are totally under shoulders, shall receive an initial and final backfill of Type B material. Placement and compaction shall be as specified in Heading (d) below. Where the subgrade is above existing ground, embankment material as specified for the remainder of the project shall be used from the top of the final backfill to the top of the established embankment grade.
- (4) Other Areas: All culverts, pipes or drains in nonpaved areas or paved areas that serve as driveways or shoulders shall receive an initial and final backfill of Type B material. Placement and compaction shall be as specified in Heading (d) below.
- (5) Pipes Subject to Construction Traffic; The embankment or pipe backfill shall be constructed to a minimum of 24 inches (600 mm) over the pipe before heavy construction equipment is allowed to cross the installation. Where practical, installations with less than 24 inches (600 mm) of cover over the top of the pipe shall be constructed after heavy hauling is completed over the pipe location. After completion of hauling operations, the contractor shall remove excess cover material. Pipe damaged by hauling and backfilling operations shall be removed and reinstalled, or replaced, at no direct pay.
- (c) Placement and Compaction; Type A Backfill: For all pipes, culverts and conduits under paved and nonpaved areas, where Type A backfill material is used, the Type A backfill shall be thoroughly hand compacted under the pipe haunches and then dynamically compacted in layers not exceeding 8 inches (200 mm) compacted thickness. Compaction under the haunches of the pipe shall initially be by hand tamping or other acceptable means, until a level is reached that the dynamic tamping can commence. Each lift shall be compacted by applying at least eight passes of a hand operated, dynamic mechanical compaction device over the surface of each lift. With approval of the engineer, layer thickness may be increased to 12 inches (300 mm) with verification of satisfactory installation and performance. If flowable fill is used it shall be furnished, placed and consolidated in accordance with Section 710. The contractor shall control

placement operations during initial backfill operations so as not to damage protective coatings on metal pipes. The contractor shall repair damaged coatings at no additional pay.

- (d) Placement and Compaction; Type B Backfill: For all pipes, culverts and conduits, where Type B backfill is allowed, the Type B material shall be placed in layers not exceeding 8 inches (200 mm) compacted thickness. Compaction shall be with suitable mechanical equipment. With approval of the engineer, layer thickness may be increased to 12 inches (300 mm) with verification of satisfactory installation and performance.
- (e) Placement and Compaction; Trenchless or Partial Trench Condition: All pipes, culverts, drains and conduits placed with any portion of the pipe above existing ground must also comply with Subsections (a),(b) (c) and (d) above for the portion of the pipe within a trench and that portion of the pipe not constructed in a trench. The width of initial and final backfill of that portion above existing ground and not within a trench will be constructed to such a width that the requirements for placement, compaction and density are met.
- (f) Density Requirements: The in place density of Type A backfill materials and bedding materials, will not be measured or determined. Type A backfill, exclusive of RAP and flowable fill, shall be placed at or near optimum moisture content determined in accordance with DOTD TR 415 or 418. RAP materials shall be placed and compacted in a slightly moist condition.

The maximum dry density of initial or final Type B backfill under all paved areas which are to be under traffic will be determined in accordance with DOTD TR 415 or TR 418 and inplace density determined in accordance with DOTD TR 401. Initial and final Type B backfill under all paved areas, under traffic, shall be placed at or near optimum moisture content determined in accordance with DOTD TR 415 or TR 418. Each layer shall be compacted by approved methods prior to the placement of a subsequent layer. The engineer will approve the compaction method based upon validation that such method, including moisture control, will achieve at least 95 percent of maximum dry density as determined in accordance with DOTD TR 401. With approval of the engineer, density testing may be waived on subsequent layers with backfill installation in accordance with approved compaction methods and continued satisfactory performance.

Initial and final backfill in unpaved areas or paved areas such as shoulders or driveways, shall be placed evenly and compacted along the length of the culvert, pipe or drain from the top of the initial backfill to the top of the subgrade. Layered backfill shall be compacted at least to the density of the adjoining existing soils or the compaction required of the laterally adjoining layers of soil immediately outside the trench for embankment elevations. Initial and final backfill shall be placed and compacted at or near optimum moisture content determined in accordance with DOTD TR 415 or TR 418.

- 701.09 INSPECTION OF PIPES. After completion of embankment and prior to roadway surfacing, the engineer shall inspect pipes for proper alignment and integrity of joints. Any misaligned pipe or defective joints shall be corrected by the contractor at no direct pay.
- (a) Plastic Pipe: Installed plastic pipe shall be tested to ensure that vertical deflections do not exceed 5.0 percent. Maximum allowable deflections shall be governed by the mandrel requirements stated herein.

Deflection tests shall be performed no sooner than 30 calendar days after installation and compaction of backfill. The pipe shall be cleaned and inspected for offsets and obstructions prior to testing.

For pipe 36 inches (900 mm) and less in diameter, a mandrel shall be pulled through the pipe by hand to ensure that maximum allowable deflections have not been exceeded. The mandrel shall be approved by the engineer prior to use. Use of an unapproved mandrel or a

mandrel altered or modified after approval will invalidate the test. If the mandrel fails to pass, the pipe is overdeflected.

Unless otherwise permitted, overdeflected pipe shall be uncovered and, if not damaged, reinstalled. Damaged pipe shall not be reinstalled, but shall be removed and replaced with new pipe. Any pipe subjected to any method or process other than removal, which attempts, even successfully, to reduce or cure any overdeflection, shall be removed and replaced with new pipe.

The mandrel shall be a rigid, nonadjustable, odd-numbered legged (minimum 9 legs) mandrel having a length not less than its nominal diameter or 24 inches (600 mm), whichever is less. The minimum diameter at any point shall be 5.0 percent less than the base inside diameter of the pipe being tested. The mandrel shall be fabricated of steel, aluminum or other approved material fitted with pulling rings at each end. The nominal pipe size and outside diameter of the mandrel shall be stamped or engraved on some segment other than a runner. A suitable carrying case shall be furnished.

For pipe larger than 36 inches (900 mm) in diameter, deflection shall be determined by a method approved by the engineer. If a mandrel is selected, the minimum diameter, length, and other requirements shall conform to the above requirements.

Mandrel testing shall be conducted by the contractor in the presence of the engineer. Mandrel testing shall be at no direct pay.

(b) Metal Pipe: If the inside diameter of metal pipe or rise dimension of metal pipe arch deflects more than 5.0 percent from original dimensions, they shall be removed and reinstalled, unless they do not rebound or are damaged. Pipe or pipe arch which are damaged or do not rebound shall be removed and replaced at no direct pay. Measurement of deflection will be made by the engineer away from rerolled ends.

701.10 CLEANING PIPES.

(a) Existing Pipes: Pipes designated to be cleaned shall be cleaned of soil, debris and other materials to the invert of the pipe. Designated pipes shall be cleaned by approved methods that will not damage the pipes. Any damage caused by the contractor's operations shall be satisfactorily repaired at no direct pay.

Removed soil, debris and other materials shall be disposed of in accordance with Subsection 202.02 or as otherwise approved in writing.

(b) Contractor Installed Pipes: Prior to final acceptance, pipes shall be cleaned of all debris and soil to the invert of the pipe at no direct pay.

Removed soil, debris and other materials shall be disposed of in accordance with Subsection 202.02 or as otherwise approved in writing.

701.11 STUBBING AND PLUGGING PIPES. When it is required that pipes be plugged, such plugs shall be constructed of Class R concrete complying with Section 901. Thickness of plug and method of construction shall be as directed.

When new pipes are to be stubbed into new or existing pipes or other structures, the connection shall be made with approved mortar complying with Subsection 702.02.

- 701.12 MEASUREMENT. Pipe, both new and relaid, will be measured in linear feet (lin m) as follows unless stated otherwise.
- (a) Pipe not confined by fixed structures will be measured by the number of joints at the nominal length of each joint.
- (b) Pipe confined by fixed structures will be measured along the pipe between the termini of pipe in structure walls.

- (c) Pipe confined by a fixed structure on one end and unconfined at the other end will be measured along the pipe from the terminus of pipe in the structure wall to the unconfined end of pipe.
- (d) Fabricating of pipe tees, elbows and other fittings will be measured per each fitting. The length of pipe in such fittings will be included in the pay length measurement of pipes of which they form a part.
- (e) Excavation required for installation of pipes will not be measured for payment, except as otherwise specified in Subsection 203.14.
- (f) Furnishing and placing backfill material below existing ground level for pipes will not be measured for payment. Backfill material needed to complete backfill above natural ground and around pipes that extend above natural ground will be measured and payment will be made under applicable earthwork items. When specified, flowable fill will be measured and paid for in accordance with Section 710.
 - (g) Plugging and stubbing of pipes will not be measured for payment.
 - (h) Cleaning existing pipes will be measured by the length of pipe cleaned and accepted.
 - (i) Concrete collars will be measured per each.

701.13 PAYMENT.

(a) Payment for pipe will be made at the contract unit price per linear foot (lin m) of the types and sizes specified.

When plastic pipe is specified on the plans or elected to be used by the contractor, payment will be made at the contract unit price per linear foot (lin m) of the types and sizes specified in accordance with the payment schedule of Table 701-1.

Table 701-1
Payment Schedule for Plastic Pipe

Percent Payment	Stage of Completeness
75	After placement and backfill has been completed
25	After the pipe has met vertical deflection requirements in accordance with Subsection 701.09(a)

- (b) Payment for fabricating pipe tees, elbows and other fittings will be made at the contract unit price per each fitting.
- (c) When unstable conditions are encountered, the additional excavation will not be measured for payment; however, the additional materials furnished and placed for the pipe foundation will be measured and paid for as follows:
- (1) Granular Materials: Payment will be made under the embankment item. The net section volume of the materials will be multiplied by 3 to determine the pay volume. When the contract does not include a pay item for embankment, payment will be made in accordance with Subsection 104.02.
- (2) Bedding Material: Measurement and payment will be made in accordance with Section 726. When the contract does not include a pay item for bedding material, payment will be made in accordance with Subsection 104.02.

- (d) Payment for cleaning existing pipes will be made at the contract unit price per linear foot (lin m).
 - (e) Payment for concrete collars will be made at the contract unit price per each.

Payment will be made under:

Item No.	Pay Item	Pay Unit
701-01	Cross Drain Pipe (Size & Type)	Linear Foot (Lin m)
701-02	Cross Drain Pipe Arch (Size & Type)	Linear Foot (Lin m)
701-03	Storm Drain Pipe (Size & Type)	Linear Foot (Lin m)
701-04	Storm Drain Pipe Arch (Size & Type)	Linear Foot (Lin m)
701-05	Side Drain Pipe (Size)	Linear Foot (Lin m)
701-06	Side Drain Pipe Arch (Size)	Linear Foot (Lin m)
701-07	Yard Drain Pipe (Size)	Linear Foot (Lin m)
701-08	Relaying Pipe	Linear Foot (Lin m)
701-09	Fabricating Pipe Fittings	Each
701-10	Reinforced Concrete Pipe (Extension)	Linear Foot (Lin m)
701-11	Reinforced Concrete Pipe Arch (Extension)	Linear Foot (Lin m)
701-12	Corrugated Metal Pipe (Extension)	Linear Foot (Lin m)
701-13	Corrugated Metal Pipe Arch (Extension)	Linear Foot (Lin m)
701-14	Cleaning Existing Pipes	Linear Foot (Lin m)
701-15	Concrete Collar	Each
701-16	Plastic Pipe (Extension)	Linear Foot (Lin m)

PLASTIC PAVEMENT MARKINGS (09/07): Section 732 of the 2006 Standard Specifications and the supplemental specifications thereto, is amended as follows.

Subsection 732.03, Construction Requirements for Plastic Pavement Marking Material. Heading (a) is amended as follows.

The first paragraph is deleted and the following substituted.

(a) Equipment for Standard (Flat) Thermoplastic Marking Material: The application equipment shall consist of an extrusion die or a ribbon gun that simultaneously deposits and shapes lines at a thickness of 90 mils (2.3 mm) or greater on the pavement surface. When restriping onto existing thermoplastic markings, only a ribbon gun shall be used. Finished markings shall be continuous and uniform in shape, and have clear and sharp dimensions. Applicators shall be capable of producing various widths of traffic markings. Applicators shall produce sharply defined lines and provide means for cleanly cutting off stripe ends and applying broken lines. The ribbon extrusion die or shaping die shall not be more than 2 inches (50 mm) above the roadway surface during application. A spray application will only be allowed when applying 40 mil (1.0 mm) thermoplastic.

Heading (e) is deleted and the following substituted.

(e) Application of Surface Primer: A single component surface primer will be required prior to placement of preformed plastic markings over an existing painted stripe, over oxidized asphalt, or when striping over existing thermoplastic on portland cement concrete surfaces unless otherwise directed by the engineer. A two component epoxy primer sealer will be required prior to placement of thermoplastic materials on portland cement concrete surfaces unless otherwise directed by the engineer.

ITEM S-001, RUMBLE STRIPS (GROUND-IN)(04/01): This item consists of cutting 1/2 inch (13 mm) deep depressions into asphaltic concrete shoulders in accordance with plan details, this special provision, and as directed.

The cutting tool shall be equipped with a rotary type cutting head and a power unit. The cutting head shall have the cutting tips arranged in a pattern to provide a relatively smooth cut (approximately 1/16 inch (1.5 mm) between peaks and valleys). The cutting head shall be suspended independently from the power unit to allow the cutting head to self-align with the slope of the shoulder and any irregularities in the shoulder surface. The cutting tool shall be equipped with guides to provide a consistent alignment of each cut in relation to the roadway and to provide uniformity and consistency throughout the project.

The rumble strips shall be cut into the finished shoulders after the final wearing course has been placed.

Solid residue resulting from cutting operations shall be removed from pavement and shoulder surfaces by the contractor before such residue is blown by traffic or wind.

The contractor shall demonstrate to the project engineer the ability to achieve the desired surface inside each depression without tearing or snagging the asphalt prior to beginning the work.

Acceptance measurements will be performed by the Department on a random basis to ensure conformance with the specifications.

Rumble strips (ground-in) will be measured by the mile (km), plan quantity, constructed and accepted in accordance with these specifications. The plan quantity is based on the roadway length minus bridge lengths for each shoulder on which ground-in rumble strips are constructed.

Payment for rumble strips (ground-in) will be made at the contract unit price in accordance with Subsection 109.02.

Payment will be made under:

Item S-001, Rumble Strips (Ground-in), per mile (km).

ITEM NO. S-002, FULL DEPTH SAWCUT OF EXISTING PAVEMENT: This item consists of saw cutting existing pavement and base materials at locations designated for patching and at driveways.

The saw cutting, which is to be performed by approved methods and under the direction of the engineer, shall be full depth.

Measurement for saw cutting pavement will be made by the linear foot along the saw cut. Payment will be made at the contract unit price per linear foot which includes all materials, labor, equipment and incidentals to complete the item.

Payment will be under:

Item S-002, Full Depth Sawcut of Existing Pavement, per linear foot.

CONTRACT TIME (03/05): The entire contract shall be completed in all details and ready for final acceptance in accordance with Subsection 105.17(b) within thirty (30) working days.

Prior to assessment of contract time, the contractor will be allowed 30 calendar days from the date stipulated in the Notice to Proceed to commence with portions of the contract work including but not limited to assembly periods, preparatory work for materials fabrications such as test piles, or other activities which hinder progress in the beginning stages of construction. Prior to issuance of the Notice to Proceed, the Department will consider extending the assembly period upon written request from the contractor justifying the need for additional time.

The contractor shall be responsible for maintenance of traffic from the beginning of the assembly period. During the assembly period, the contractor will be allowed to do patching and other maintenance work necessary to maintain the roadway with no time charges when approved by the engineer.

If the contractor begins regular construction operations prior to expiration of the assembly period, the assessment of contract time will commence at the time construction operations are begun.

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LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT SUPPLEMENTAL SPECIFICATIONS

(FOR 2006 STANDARD SPECIFICATIONS)

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LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT SUPPLEMENTAL SPECIFICATIONS

The 2006 Louisiana Standard Specifications for Roads and Bridges and supplemental specifications thereto are amended as follows.

SECTION 101 - GENERAL INFORMATION, DEFINITIONS, AND TERMS:

Subsection 101.03 – Definitions (07/07), Pages 3 - 13).

Delete the definition for "Proposal/Bid Guaranty" and substitute the following.

Proposal / Bid Guaranty. The required security furnished with a bid. The only form of security acceptable is a Bid Bond.

SECTION 102 - BIDDING REQUIREMENTS:

Subsection 102.09 – Proposal / Bid Guaranty (07/07), Page 19.

Delete the contents of this subsection and substitute the following.

PROPOSAL/BID GUARANTY. Each bid shall be accompanied by a proposal/bid guaranty in an amount not less than five percent of the total bid amount when the bidder's total bid amount as calculated by the Department in accordance with Subsection 103.01 is greater than \$50,000. No proposal/bid guaranty is required for projects when the bidder's total bid amount as calculated by the Department is \$50,000 or less. The official total bid amount for projects that include alternates is the total of the bidder's base bid and all alternates bid on and accepted by the Department. The proposal/bid guaranty submitted by the bidder shall be a bid bond made payable to the contracting agency as specified on the bid bond form provided in the construction proposal. No other form of security will be accepted.

The bid bond shall be on the "Bid Bond" form provided in the construction proposal, on a form that is materially the same in all respects to the "Bid Bond" form provided, or on an electronic form that has received Department approval prior to submission. The bid bond shall be filled in completely, shall be signed by an authorized officer, owner or partner of the bidding entity, or each entity representing a joint venture; shall be signed by the surety's agent or attorney-in-fact; and shall be accompanied by a notarized document granting general power of attorney to the surety's signer. The bid bond shall not contain any provisions that limit the face amount of the bond.

The bid bond will be written by a surety or insurance company that is in good standing and currently licensed to write surety bonds in the State of Louisiana by the Louisiana Department of Insurance and also conform to the requirements of LSA-R.S. 48:253.

All signatures required on the bid bond may be original, mechanical reproductions, facsimiles or electronic. Electronic bonds issued in conjunction with electronic bids must have written Departmental approval prior to use. The Department will make a listing of approved electronic sureties providers on the Bidx.com site.

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SECTION 108 – PROSECUTION AND PROGRESS:

<u>Subsection 108.04 – Prosecution of Work (03/05) Pages 74 and 75.</u>

Add the following sentence to the third paragraph of Heading (b).

Should the surety or the Department take over prosecution of the work, the contractor shall remain disqualified for a period of one year from the completion of the project, unless debarment proceedings are instituted.

When the Department of Transportation and Development is not the contracting agency on the project, the second paragraph under Heading (c) is deleted.

SECTION 202 – REMOVING OR RELOCATING STRUCTURES AND OBSTRUCTIONS:

Subsection 202.06 – Plugging or Relocating Existing Water Wells (03/04), Page 105.

Delete the first sentence and substitute the following.

All abandoned wells shall be plugged and sealed at the locations shown on the plans, or as directed by the engineer, in accordance with the "Water Well Rules, Regulations, and Standards, State of Louisiana." This document is available at the Department of Transportation and Development, Water Resources Section, P. O. Box 94245, Baton Rouge, Louisiana 70804-9245. The Water Resource Section's telephone number is (225) 274-4172.

SECTION 302 – CLASS II BASE COURSE:

Subsection 302.05 – Mixing (08/06), Pages 152 and 153.

Delete the first sentence of Subheading (b)(1), In-Place Mixing, and substitute the following.

In-place mixing shall conform to Heading (a)(1) except that the percentage of Type I portland cement required will be 6 percent by volume.

SECTION 308 – IN-PLACE CEMENT TREATED BASE COURSE:

All Subsections within Section 308 - (07/07), Pages 191 - 198.

Whenever the reference to "DOTD TR-432, Method D" is used, it shall mean "DOTD TR-432".

SECTION 502 – SUPERPAVE ASPHALTIC CONCRETE MIXTURES:

Subsection 502.02 – Materials (08/06), Pages 210 – 213.

Delete Table 502-3, Aggregate Friction Rating under Subheading (c)(1) and substitute the following.

Table 502-3
Aggregate Friction Rating

Friction Rating	Allowable Usage	
I	All mixtures	
II	All mixtures	
III	All mixtures, except travel lane wearing courses with plan ADT greater than 7000 ¹	
IV	All mixtures, except travel lane wearing courses ²	

¹ When plan current average daily traffic (ADT) is greater than 7000, blending of Friction Rating III aggregates and Friction Rating I and/or II aggregates will be allowed for travel lane wearing courses at the following percentages. At least 30 percent by weight (mass) of the total aggregates shall have a Friction Rating of I, or at least 50 percent by weight (mass) of the total aggregate shall have a Friction Rating of II. The frictional aggregates used to obtain the required percentages shall not have more than 10 percent passing the No. 8 (2.36 mm) sieve.

SECTION 704 – GUARD RAIL:

Subsection 704.03 – General Construction Requirements (01/05), Pages 368 and 369.

Add the following to Heading (d), Guard Rail End Treatments.

All end treatments shall bear a label indicating the manufacturer and exact product name of the end treatment along with its assigned NCHRP 350 test level. This label shall resist weathering and shall be permanently affixed to the railing in such a way as to be readily visible.

SECTION 713 – TEMPORARY TRAFFIC CONTROL:

Subsection 713.06 - Pavement Markings (08/06), Pages 400 - 403.

Delete Table 713-1, Temporary Pavement Markings and substitute the following.

² When the average daily traffic (ADT) is less than 2500, blending of Friction Rating IV aggregates with Friction Rating I and/or II aggregates will be allowed for travel lane wearing courses at the following percentages. At least 50 percent by weight (mass) of the total aggregate in the mixture shall have a Friction Rating of I or II. The frictional aggregates used to obtain the required percentages shall not have more than 10 percent passing the No. 8 (2.36 mm) sieve.

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Table 713-1
Temporary Pavement Markings^{1,2}

	remporary ravement markings							
		Two-lane Highways	Undivided Multilane Highways	Divided Multilane Highways				
STORT HURS	ADT<150 0; or ADT>150 0 and time<3 days	Lane lines 4-foot (1.2 m) tape on 40- foot (12 m) centers; with "Do Not Pass" and "Pass With Care" signs as required						
	ADT>150 0; Time>3 days and<2 weeks	Lane lines 4-foot (1.2-m) tape on 40-foot (12-m) centers with no passing zone markings						
	All ADT's with time <2 weeks		Lane lines 4-foot (1.2m) tape on 40-foot (12 m) centers; double yellow centerline	Lane lines 4- foot (1.2 m) tape on 40- foot (12 m) centers				
LONG TERM	T WOOKS	Standard lane lines, no-passing zone markings, legends and symbols and when pavement width is 22 feet (6.7 m) or greater, edge lines	Standard lane lines, centerlines, edge lines, and legends and symbols	Standard lane lines, centerlines, edge lines, and legends and symbols.				

¹No-passing zones shall be delineated as indicated whenever a project is open to traffic. ²On all Asphaltic Surface Treatments that are open to traffic and used as a final wearing course or as an interlayer, temporary pavement markings (tabs) on 20-foot (6 m) centers shall be used, in lieu of the 4-foot (1.2 m) tape, on 40-foot (12 m) centers.

SECTION 729 – TRAFFIC SIGNS AND DEVICES:

Subsection 729.02 – Materials (04/07), Pages 456 and 457.

Delete the contents of Heading (a), Sign and Marker Sheeting, and substitute the following.

(a) Sign and Marker Sheeting: Sheeting material for sign panels, delineators, barricades and other markers shall comply with Section 1015. All permanent signs shall meet the requirements of ASTM D 4956, Type III, except as follows:

Reflective sheeting for the permanent signs of Table 729-1 shall meet the requirements of ASTM D 4956, Type IX or Type X as modified in Subsection 1015.05.

Table 729-1
Permanent Signs for Use With Type IX or X (modified) Reflective Sheeting

Sign	MUTCD Number		
Sign	MOTOD Number		
Stop	R1-1		
Yield	R1-2		
4-Way	R1-3		
All Way	R1-4		
Do Not Enter	R5-1		
Wrong Way	R5-1a		
Chevrons	W1-8		
No Passing Zone Pennants	W14-3		
Type 3 Object Marker	OM-3 (Right & Left)		
Type 2 Object Marker			
Guardrail End Decals			

Subsection 729.04, Fabrication of Sign Panels and Markers (04/07), Pages 458 – 460.

Delete the third paragraph of Heading (c), Sheeting Application and substitute the following.

ASTM D 4956 Type IX or X (modified) reflective sheeting shall be applied with an orientation determined by the engineer to obtain the optimum entrance angle performance. Fabricated vertical splices in ASTM D 4956 Type IX or X (modified) reflective sheeting will be allowed only when the horizontal dimension of the sign face or attached shield is in excess of the maximum manufactured width of the sheeting. Fabricated vertical splices in ASTM D 4956 Type IX or X (modified) reflective sheeting will also be allowed when the specified orientation will create excessive sheeting waste.

SECTION 804 – DRIVEN PILES:

Subsection 804.08 – Construction Requirements (04/07), Pages548 – 554.

Delete the first sentence of Heading (a), Preboring and substitute the following.

Preboring by augering, wet-rotary drilling, or other methods used to facilitate pile driving will not be permitted unless specified in the plans or allowed by the engineer.

Delete the first sentence of Heading (b), Jetting and substitute the following. Jetting will not be permitted unless allowed in the plans or allowed by the engineer.

SECTION 901 – PORTLAND CEMENT CONCRETE:

Subsection 901.06 – Quality Control of Concrete (08/06), Pages 726 – 731.

Add the following to the contents of Heading (b), Quality Control Tests.

The contractor shall be responsible for monitoring the components (cement, mineral and chemical admixtures, aggregates) in their mix to protect against any changes due to component variations. As component shipments arrive, the contractor shall verify slump, air content and set

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time by testing at ambient temperatures. The contractor shall make adjustments to the mix design to rectify any changes which would adversely affect constructability, concrete placement or the specifications. The contractor shall submit test results to the Department for review each day of paving. Testing to validate component consistency will be documented on the control logs. Conformance or variation in mix parameters (workability, set times, air content, etc.) shall be noted on the control logs. The contractor shall provide a copy of the proposed testing plan to the engineer for record. Acceptance of the plan does not relieve the contractor's responsibility for consistency.

Subsection 901.08 – Composition of Concrete (12/05), Pages 732 – 734.

Add the following to Heading (a).

The blended cement containing up to 50 percent of grade 100 or grade 120 ground granulated blast-furnace slag must be in compliance with Subsection 1001.04 for portland blast-furnace slag cement.

SECTION 1003 – AGGREGATES:

Subsection 1003.02 – Aggregates for Portland Cement Concrete and Mortar (07/07),

Pages 763 – 766.

Delete the contents of Heading (c), Aggregates for Types B and D Pavements, and substitute the following.

(c) Aggregates for Types B and D Pavements: For the combined aggregates for the proposed portland cement concrete pavement mix, the percent retained based on the dry weight (mass) of the total aggregates shall meet the requirements of Table 1003-1A for the type of pavement specified in the plans. Additionally, the sum of the percents retained on any two adjacent sieves so designated in the table shall be at least 12 percent of the total combined aggregates. The maximum amounts by weight (mass) of deleterious materials for the total aggregate shall be the same as shown in Subsection 1003.02(b).

Table 1003-1A
Aggregates for Types B and D Pavements

Aggregates for Types B and B Tavements					
U.S. Sieve	Metric Sieve	Percent Retained of Total Combined Aggregates			
U.S. Sieve		Pavement Type			
		Type B	Type D		
2 1/2 inch	63 mm	0	0		
2 inch	50 mm	0	0-20		
1 1/2 inch	37.5 mm	0-20	0-20		
1 inch	25.0 mm	0-20			
3/4 inch	19.0 mm				
1/2 inch	12.5 mm				
3/8 inch	9.5 mm				
No. 4	4.75 mm	***			
No. 8	2.36 mm	*			
No. 16	1.18 mm				
No. 30	600 μm				
No. 50	300 μm	0-20	0-20		
No. 100	150 μm	0-20	0-20		
No. 200	75 μm	0-5	0-5		

Note: For the sieves in the shaded areas, the sum of any two adjacent sieves shall be a minimum of 12 percent of the total combined aggregates.

Each type of aggregate to be used in the proposed mixture shall be sampled and tested individually. The percent of total combined aggregates retained shall be determined mathematically based on the proportions of the combined aggregate blend. All gradation calculations shall be based on percent of dry weight (mass).

SECTION 1005 – JOINT MATERIALS FOR PAVEMENTS AND STRUCTURES:

Subsection 1005.04 – Combination Joint Former/Sealer (11/05), Pages 782 and 783.

Delete Heading (a) and substitute the following.

(a) Description: This joint former/sealer is intended for use in simultaneously forming and sealing a weakened plane in portland cement concrete pavements.

The material shall consist of an elastomeric strip permanently bonded either mechanically or chemically at the top of each of two rigid plastic side frames and covered with a removable plastic top cap. Side frames shall be of such configuration that when the sealer is inserted into plastic concrete and vibrated, a permanent bond forms between side frames and concrete.

Delete Heading (b)(1) and substitute the following.

(1) Elastomer: The elastomer strip portion of the material shall be manufactured from vulcanized elastomeric compound using polymerized chloroprene or thermoplastic vulcanizate as the base polymer, and shall comply with the following requirements:

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<u>Property</u>	ASTM Test Method	Require	ements
		Polymerized Chloroprene	Thermoplastic Vulcanizate
Tensile Strength, kPa, Min. Elongation at Break, % Min. Hardness, Shore A Properties after Aging, 70 h @ 100°C Tensile Strength, % Loss, Max. Elongation, % loss, Max. Hardness, pts. increase, Max. Ozone Resistance, 20% strain or bentloop,	D 412 D 412 D 2240 D 573	12,400 200 65 ± 10 20 25 10	7,400 400 65 ± 10 20 25 10
300 pphm in air, 70 h @ 40°C Oil Swell, IRM 903, 70 h @ 100°C, wt change, % Max.	D 1149 D 471	no cracks 45	no cracks 75

Delete Headings (b)(2) and (b)(3) and substitute the following:

- (2) Bond of Elastomer to Plastic: The force required to shear the elastomer from the plastic shall be a minimum of 5.0 pounds per linear inch (90 g/mm) of sealer when tested in accordance with DOTD TR 636.
- (3) Bond of Plastic to Cement Mortar: This bond will be evaluated and shall meet the following requirements:

The force required to separate the cement mortar from the plastic shall be a minimum of 5.0 pounds per linear inch (90 g/mm) of sealer when tested in accordance with DOTD TR 636.

SECTION 1006 - CONCRETE AND PLASTIC PIPE:

Subsection 1006.09 – Plastic Yard Drain Pipe (06/07), Page 789.

Delete the contents of Subheading (a)(3), Ribbed Polyvinyl Chloride Pipe (RPVCP) and substitute the following.

Ribbed Polyvinyl Chloride Pipe (RPVCP): Ribbed Polyvinyl Chloride Pipe shall comply with ASTM F 794, Series 46 or ASTM F 949 (46 psi).

SECTION 1013 – METALS:

Subsection 1013.09 – Steel Piles (08/06) Page 822.

Delete the title and references to "Steel Piles" in this subsection and substitute "Steel H Piles".

SECTION 1015 – SIGNS AND PAVEMENT MARKINGS:

Subsection 1015.04 – Sign Panels (05/07), Pages 832 and 833.

Delete the contents of Heading (a), Permanent Sign Panels and substitute the following.

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(a) Permanent Sign Panels: Flat panels shall be aluminum sheets or plates complying with ASTM B 209, Alloy 6061-T6 or Alloy 5052-H38. Extruded aluminum panels shall comply with ASTM B 221 (ASTM B 221M), Alloy 6063-T6 and after fabrication, have a flatness equal to or less than 0.031 inch per foot of length and 0.004 inch per inch of width.

Subsection 1015.05 - Reflective Sheeting (05/07), Pages 833 – 838.

Add the following to Heading (a), Permanent and Temporary Standard Sheeting.

- Type X (Modified) (White, Yellow, Red) A super high-intensity retroreflective sheeting having highest retroreflectivity characteristics at medium distances. This sheeting is typically an unmetalized microprismatic retroreflective element material. This material shall meet the requirements of ASTM D 4956 Type X except as modified below.
- (1) Retroreflectivity: Minimum Coefficients of Retroreflection for Type X (Modified) White, Yellow, and Red sheeting shall be as specified in Table 1015-a.

Table 1015-a
Coefficients of Retroreflection for Type X (Modified) Sheeting¹

Observation Angle, degrees			Yellow	Red
0.2	-4	600	450	90
0.2	+30	300	225	45
0.5	-4	. 240	180	36
0.5	+30	120	90	18

¹Minimum Coefficient of Retroreflection (R_A) (cd lx⁻¹m⁻²)

Heading (d), Accelerated Weathering.

Delete Table 1015-3, Accelerated Weathering Standards and substitute the following.

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Table 1015-3 Accelerated Weathering Standards¹

Accelerated weathering Standards						
Toma	Retroreflectivity ²			Colorfastness ³		
Туре	Orange		All colors, except orange		Orange	All colors, except orange
III	1 year	80 ⁴	3 years	80 ⁴	1 year	3 years
III (for drums)	1 year	80 ⁴	1 year	80 ⁴	1 year	1 year
VI	VI $\frac{1/2}{\text{year}}$ 50^5		1/2 year	50 ⁵	1/2 year	1/2 year
IX	Not used		3 years	80 ⁶	Not used	3 years
X (Fluorescent Orange)	1 year	80 ⁷	Not us	ed	1 year	Not used
X (Modified)	Not	used	3 years	80 ⁸	Not used	3 years

¹At an angle of 45° from the horizontal and facing south in accordance with ASTM G 7 at an approved test facility in Louisiana or South Florida.

Heading (e), Performance.

Delete Table 1015-4, Reflective Sheeting Performance Standards and substitute the following.

²Percent retained retroreflectivity of referenced table after the outdoor test exposure time specified.

³Colors shall conform to the color specification limits of ASTM D 4956 after the outdoor test exposure time specified.

⁴ASTM D 4956, Table 8.

⁵ASTM D 4956, Table 13.

⁶ASTM D 4956, Table 3.

⁷ASTM D 4956, Table 4.

⁸ DOTD Standard Specifications, Table 1015-a.

Table 1015-4 Reflective Sheeting Performance Standards

	Retroreflectivity ¹ Durability ²				
Туре	Orange		All colors, except orange		Colorfastness ³
III	3 years 80 ⁴		10 years	80 ⁴	3 years
IX	Not used		7 years	80 ⁵	3 years
X (Fluorescent. Orange)	3 years	80 ⁶	Not used		3 years
X (Modified)	Not used		7 years	807	3 years

¹Percent retained retroreflectivity of referenced table after installation and the field exposure time

Heading (g), Sheeting Guaranty.

Delete Table 1015-5, Manufacturer's Guaranty-Reflective Sheeting and substitute the following.

specified. ²All sheeting shall maintain its structural integrity, adhesion and functionality after installation and the field exposure time specified.

³All colors shall conform to the color specification limits of ASTM D4956 after installation and the field exposure time specified.

⁴ASTM D4956, Table 8.

⁵ASTM D 4956, Table 3.

⁶ASTM D 4956, Table 4.

⁷ DOTD Standard Specifications, Table 1015-a.

Table 1015-5
Manufacturer's Guaranty-Reflective Sheeting

Туре		eld location to its eness at no cost to f failure occurs	Manufacturer shall replace the sheeting required to restore the sign face to its original effectiveness at no cost to the Department if failure occurs during the time period ¹ as specified below
	Orange	All colors, except orange	All colors, except orange
III	<3 years	<7 years	7-10 years
IX	Not used	<5 years	5-7 years
X (Fluorescent Orange)	<3 years	Not used	Not used
X (Modified)	Not used	< 5 years	5-7 years

¹From the date of sign installation.

Subsection 1015.11 - Preformed Plastic Pavement Marking Tape (06/07), Pages 842 - 844.

Delete the contents of this subsection and substitute the following. 1015.11 PREFORMED PLASTIC PAVEMENT MARKING TAPE.

- (a) General: Preformed plastic pavement marking tape shall be approved products listed on QPL 64 and shall comply with ASTM D4505 Retroreflectivity Level I or Level II, or DOTD Intersection Grade (as specified below), except as modified herein. The marking tape shall be Class 2 or 3. The type and color shall be in accordance with the plans and the MUTCD.
- (b) Thickness: All preformed plastic pavement marking tape shall have a minimum overall thickness of 0.060 inches (1.5 mm) when tested without the adhesive.
- (c) Friction Resistance: The surface of the Retroreflectivity Level II preformed plastic pavement marking tape shall provide a minimum frictional resistance value of 35 British Polish Number (BPN) when tested according to ASTM E303. The surface of the Retroreflectivity Level I and DOTD Intersection Grade preformed plastic pavement marking tape shall provide a minimum frictional resistance value of 45 BPN when tested according to ASTM E303. Values for the Retroreflectivity Level I material with a raised surface pattern as defined in ASTM D4505 are calculated by averaging values taken at downweb and at a 45 degrees angle from downweb.
- (d) Retroreflective Requirements: The preformed plastic pavement marking tape shall have the minimum initial specific luminance values shown in Table 1015-7 when measured in accordance with ASTM D 4061.

Table 1015-7
Specific Luminance of Preformed Plastic Tape

			Specific Luminance		
	Observation	Entrance	(mcd/sq m/lx)		
Type	Angle, degrees	Angle, degrees	White	Yellow	
Retroreflectivity Level I	1.05	88.76	500	300	
DOTD Intersection Grade	1.05	88.76	375	250	
Retroreflectivity Level II	1.05	88.76	250	175	

(e) Durability Requirements: The DOTD Intersection Grade preformed plastic pavement marking tape shall show no appreciable fading, lifting or shrinkage for a least 12 months after placement when placed in accordance with the manufacturer's recommended procedures on pavement surfaces having a daily traffic count not to exceed 15,000 ADT per lane.

The Retroreflectivity Level I preformed plastic pavement marking tape shall show no appreciable fading, lifting or shrinkage for a least 4 years after placement for longitudinal lines and at least 2 years after placement for symbols and legends.

The Retroreflectivity Level I preformed plastic pavement marking tape shall also retain the following reflectance values for the time period detailed in Table 1015-8.

Table 1015-8
Retained Specific Luminance for Retroreflectivity Level I
Preformed Plastic Pavement Marking Tape

			Specific Luminance						
	Observation	Entrance	(mcd/sq m/lx)						
<u>Time</u>	Angle, degrees	Angle, degrees	White	Yellow					
1 year	1.05	88.76	400	240					
4 years (2 years for symbols and legend)	1.05	88.76	100	100					

(f) Plastic Pavement Marking Tape Guaranty (DOTD Intersection Grade and Retroreflectivity Level I): If the plastic pavement marking tape fails to comply with the performance and durability requirements of this subsection within 12 months for DOTD Intersection Grade and 4 years for Retroreflectivity Level I, the manufacturer shall replace the plastic pavement marking material at no cost to the Department.

SECTION 1020 - TRAFFIC SIGNALS:

Subsection 1020.01 – Traffic Signal Heads (06/07), Pages 873 – 884.

Delete the contents of Heading (a), General Requirements and substitute the following.

(a) General Requirements: Traffic signal sections, beacon sections and pedestrian signal sections shall be of the adjustable type. Materials and construction of each section shall be the same.

Signals shall be constructed for either 8 or 12-inch (200 mm or 300 mm) lens in accordance with the plans. Signal sections shall have three to five sections per face and beacon

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sections have only one section per face. Signal sections and associated brackets shall be finished inside and out with two coats of high grade dark olive green enamel, color number 14056 according to Federal Standard No. 595b with each coat independently baked. Visors shall be coated green on the outside and black on the inside. Edges shall be deburred and smooth with no sharp edges.

Subsection 1020.04 – Poles for Traffic Signal Systems (06/07), Pages 890 – 894.

Delete the sixth paragraph of Heading (a), Pedestal Support Signal Poles, and substitute the following.

Pedestals shall be finished with at least one coat of rustproofing primer, applied to a clean surface and one coat of dark olive green enamel, color number 14056 according to Federal Standard

No. 595b.

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TITLE SHEET

DATE

SHEET

10/2008

STATE | 005-10-0038

F-2

	NDEX	TO SHEETS	TAGASTION DESCRIPTION
SHEET	NO.	DESCRIPTION	LOCATION DESCRIPTION

I - IG TITLE SHEET THE PROJECT BEGINS ON US 90 AT STA, 19+15 AT C.S.L.M. 3.034 APPROXIMATELY 270 FT FROM HOMEPLACE ROAD AND 2 - 20 TYPICAL SECTIONS AND DETAILS PROCEEDS EAST ALONG US 90 TO STA, 30+93 AT C.S.L.M. 3.257 APPROXIMATELY 852 FT PAST HOMEPLACE ROAD. 3 - 30 SUMMARY SHEETS

TOTAL SHEETS 20

PLAN SHEETS DRAINAGE DETAIL SHEET

DETAIL SHEETS

TRAFFIC CONTROL DETAILS

4 - 4c

7 - 7d

5 -6 - 6c

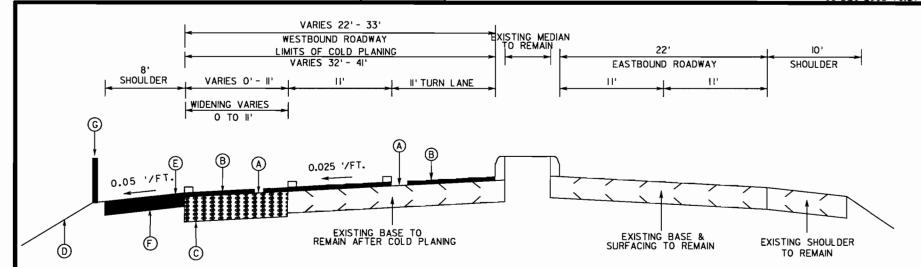
SCOPE OF PROJECT

THE SCOPE OF THIS PROJECT IS TO WIDEN THE EXISTING ROADWAY, ADD A LEFT TURN LANE ON THE WESTBOUND SIDE OF US 90 AT HOMEPLACE DRIVE, AND TO COLD PLANE 1.5" OFF THE EXISTING ROADWAY SURFACE AND OVERLAY THE EXISTING ROADWAY WITH 1.5" OF SUPERPAVE ASPHALTIC CONCRETE.

LENGTH OF PROJECT

DESCRIPTION	GROSS LENGTH	EXCEPTION		BRIDGE LENGTH		WAY GTH
STA TO STA	FEET	FEET	FEET	MILES	FEET	MILES
STA. 19+15 TO STA. 30+93	1178				1178	0.224
TOTAL LENGTH OF BRID	OGES					
TOTAL LENGTH OF ROA			1178	0.224		
TOTAL MILES	0.224					

DISTRICT DOTE	US 90 TURN LANE AT HOMEPLACE				DESIGNED CHECKED	CM6 MJ6	PARISH	JEFFERSON	N E
Per pota	ROAD (STEEPLE CHASE SUB))			DETAILED CHECKED		FEDERAL PROJECT		
R	"FLECTRON	M.	VATE N		DATE SHEET	10/2008	STATE PROJECT	005-10-0038][=



TYPICAL FINISHED SECTION

TO APPLY: STA. 19+15 TO STA. 30+93 (LOG MILE 3.034 TO LOG MILE 3.257)

- (A) COLD PLANE 1.5" AVG. OFF EXISTING SURFACE AND WIDENED SECTION (ITEM 509-01).
- (B) REQ'D. I.5" AVG. ASPHALTIC CONCRETE (LEVEL 2F) (WEARING COURSE) (ITEM 502-01).
- (C) REQ'D. 8.5" PAVEMENT WIDENING (ITEM 510-02-H). EXISTING SURFACING AND BASE TO BE REMOVED AND PAID FOR UNDER (ITEM 510-02-H).
- (D) BORROW TO BE PLACED AS DIRECTED BY THE PROJECT ENGINEER (ITEM 203-07).
- (E) REQ'D RUMBLE STRIPS (GROUND-IN) TO BE PLACED ALONG PAVED SHOULDERS. SEE SPECIAL DETAIL (ITEM S-001).
- (F) REQ'D. 4.0" AVG. ASPHALTIC CONCRETE (LEVEL 2F) (WEARING COURSE) (ITEM 502-01). EXISTING EMBANKMENT TO BE REMOVED TO DEPTH TO ACCOMADATE A.C. AND REMAINING EMBANKMENT COMPACTED PRIOR TO PLACEMENT OF A.C. COST TO BE INCLUDED IN PRICE BID FOR OTHER ITEMS.
- (G) REQ'D TEMPORARY SILT FENCING (ITEM 204-06).

NOTE: CONTRACTOR SHALL BE ALLOWED TO RETAIN 100% OF RAP GENERATED FROM COLD PLANING.

THE DEPARTMENT DOES NOT GUARANTEE IN ANY WAY THE QUALITY OF THE RAP MATERIAL.

NOTE: PAVEMENT WIDENING TO BE PLACED TO THE TOP OF EXISTING PAVEMENT PRIOR
TO COLD PLANING OPERATION AND COLD PLANED 1.5" AND OVERLAYED 1.5".

NOTE: LIMITS OF A.C. PAVEMENT WIDENING MAY BE ADJUSTED IN FIELD BY P.E.

☐ REQ'D STRIPING SHALL CONFORM TO STANDARD PLAN PM-OI.

NTS



GENERAL CONSTRUCTION NOTES

- I. THE CONTRACTOR SHALL PROVIDE FOR AND MAINTAIN THROUGH AND LOCAL TRAFFIC AT ALL TIMES AND SHALL CONDUCT HIS OPERATIONS IN SUCH MANNER AS TO CAUSE THE LEAST POSSIBLE INTERFERENCE WITH TRAFFIC. AT LEAST ONE ONE LANE OF TRAFFIC SHALL REMAIN OPEN AT ALL TIMES AND NO LANES MAY BE CLOSED WHEN WORK IS NOT BEING CONDUCTED AND WHEN WORKERS ARE NOT PRESENT.
- 2. THE CONTRACTOR SHALL MAINTAIN DRAINAGE. ALL COST TO BE INCLUDED IN PRICE BID FOR OTHER ITEMS. ALL MATERIAL DEPOSITED IN ANY DRAINAGE FEATURE (DITCHES, CROSSDRAINS, ETC.) DURING CONSTRUCTION SHALL BE CLEANED OUT BEFORE FINAL ACCEPTANCE.
- 3. THE CONTRACTOR SHALL CONTACT AND COORDINATE WORK WITH ALL UTILITIES LOCATED IN PROJECT AREA. CONTRACTOR SHALL PROVIDE 14 DAYS NOTICE TO UTILITY COMPANIES PRIOR TO BEGINNING WORK. ANY DAMAGE DONE TO UTILITIES SHALL BE REPAIRED AT NO COST TO THE DEPARTMENT. LOCATIONS OF UTILITIES SHOWN ON PLANS ARE APPROXIMATE, CONTRACTOR SHALL CONTACT UTILITY COMPANIES FOR EXACT LOCATIONS PRIOR TO BEGINNING WORK.
- 4. THE CONTRACTOR SHALL PROVIDE A SMOOTH TIE IN AT THE BEGINNING AND ENDING OF ASPHALTIC CONCRETE OVERLAY.
- 5. THE CONTRACTOR SHALL NOT LEAVE ANY HOLES LEFT OPEN OVERNIGHT. ANY DROP OFF AT THE EDGE OF THE ROAD GREATER THAN 2" SHALL BE DELINEATED BY PLACING LIGHTED CONES/BARRELS ALONG THE EDGE OF THE SHOULDER AT ALL TIMES.
- 6. REQ'D CROSS SLOPE OF ROADWAY SHALL BE DEVELOPED DURING COLD PLANING OF ROADWAY.
- 7. THE SUBMITTAL OF A BID WILL BE UNDERSTOOD TO INDICATE THAT THE BIDDER HAS INSPECTED THE WORK SITE AND HAS BECOME THOROUGHLY FAMILIAR WITH THE PLANS, GENERAL PROVISIONS, SPECIAL PROVISIONS, SUPPLEMENTAL SPECIFICATIONS AND TECHNICAL SPECIFICATIONS. THE FAILURE OR OMISSION OF ANY BIDDER TO EXAMINE ANY OF THE ABOVE SHALL IN NO WAY RELIEVE THE CONTRACTOR FROM ANY OBLIGATION IN RESPECT TO THE BID.



ASPHALTIC CONCRETE ROADWAY AND SHOULDER SURFACING

STA.	STA. LOCATION		LENGTH (FEET)	1.5 COLD PL ASPHALTIC I (AVG. THICKNESS)	ANING PAVEMENT	1.5 SUPER ASPHALTIC (WEARING COUR	PAVE CONCRETE	8.5 ° THIC ASPHALTIC CC PAVEMENT WID	NCRETE	4.0 SUPERF ASPHALTIC C WEARING COURS	AVE ONCRETE
				WIDTH (FT)	SQ.YDS.	WIDTH (FT)	TONS	WIDTH (FT)	SQ.YDS.	WIDTH (FT)	TONS
19+15	21+65	ROADWAY AND SHOULDERS	250.0	VARIES 24 - 33	1014	VARIES 22 - 33	63.0	VARIES 0 - 11	153	8.0	48.9
21+65	23+73	ROADWAY AND SHOULDERS	208.0	33	763	33	62.9	11	254	8	40.7
23+73	25+38	ROADWAY AND SHOULDERS	165.0	33	605	33	49.9	11	202	8	32.3
25+38	30+93	ROADWAY AND SHOULDERS	555.0	VARIES 24 - 33	2251	VARIES 33 -21	139.9	VARIES 11 - 0	339	8.0	108.5
ADDITIONA	L FOR TRANS	ITION FROM 8' TO 10' SHOULDERS									25.0
<u>ADDITIONA</u>	L FOR DRIVES	S AND TURNOUTS					30.0				
additiona	DDITIONAL FOR CROSSOVERS AND TURNLANES						70.0				
ADDITIONAL FOR SPOT LEVELING AND SLOPE CORRECTION					500		70.0				
		TOTAL			5132		485.8		948	·	255.4

[@] ASPHALTIC CONCRETE FOR TURNOUTS TO BE PAID FOR UNDER PAVED DRIVES AND TURNOUTS (ITEM 502-01-A).

US 90 TURN LANE AT HOMEPLACE ROAD (STEEPLE CHASE SUB)		[[DESIGNED CAME	PARISH	JEFFERSON	NO.
PROAD (STEEPLE CHASE SUB))		DETAILED CMC	FEDERA PROJEC	AL T	<u>)- =</u>
ROADWAY SURFACING SHEET ROAD	NATE VATE		DATE 10/2 SHEET	STATE PROJEC	т 005-10-0038]"

SUMMARY OF ESTIMATED QUANTITES

ITEM NO.	ITEM	UNIT	QUANTITIES
202-02-H	REMOVAL OF GUARD RAIL	LIN. FT.	100.00
202-02-1	REMOVAL OF CONCRETE HEADWALL	LIN. FT.	24.00
202-03	RELOCATION OF EXISTING SIGNS	EACH	4.00
203-01	GENERAL EXCAVATION	CU.YD.	750.00
203-02	DRAINAGE EXCAVATION	CU.YD.	1000.00
203-07	BORROW (VEHICULAR MEASUREMENT)	CU. YD.	220
204-06	TEMPORARY SILT FENCING	LIN. FT.	1178
502-01	SUPERPAVE ASPHALTIC CONCRETE	TON	711.2
502-01-A	SUPERPAVE ASPHALTIC CONCRETE, DRIVES, TURNOUTS AND MISCELLANEOUS	TON	30.0
509-01	COLD PLANING ASPHALTIC PAVEMENT	SQ.YD.	5132
509-02	CONTRACTOR RETAINED RECLAIMED ASPHALTIC PAVEMENT	CU.YD.	-286
510-01-B	PAVEMENT PATCHING (12* MINIMUM THICKNESS)	SQ.YD.	50
510-02-H	PAVEMENT WIDENING (8.5" THICKNESS)	SQ.YD.	948
310-02-11	FAVEMENT PIDENING (6.5 INIONICSS)	34.1b.	540
711-04	GEOTEXTILE FABRIC	SQ.YD.	40
713-01	TEMPORARY SIGNS AND BARRICADES	LUMP SUM	LUMP
713-02-C	TEMPORARY PAVEMENT MARKINGS (8" WIDTH)	LIN. FT.	300
713-02-E	TEMPORARY PAVEMENT MARKINGS (24" WIDTH)	LIN. FT.	940
713-03-A	TEMPORARY PAVEMENT MARKINGS (BROKEN LINE)(4" WIDTH)(4" LENGTH)	MiLE	2.442
713-03-B	TEMPORARY PAVEMENT MARKINGS (BROKEN LINEX4" WIDTHX 10" LENGTH)	MILE	0.814
713-04-A	TEMPORARY PAVEMENT MARKINGS (SOLID LINE)(4" WIDTH)	Mile	1.012
717-01	SEEDING	POUND	12
718-01	FERTILIZER	POUND	350
726-01	BEDDING MATERIAL	CU.YD.	15.000
727-01	MOBILIZATION	LUMP SUM	LUMP
731-02	REFLECTORIZED RAISED PAVEMENT MARKERS	EACH	600
732-01-C	PLASTIC PAVEMENT STRIPING (8" WIDTH)	LIN. FT.	300
732-01-E	PLASTIC PAVEMENT STRIPING (24" WIDTH)	LIN. FT.	470
732-02-A	PLASTIC PAVEMENT STRIPING (SOLID LINE)(4" WIDTH)	MILE	0.506
732-03-A	PLASTIC PAVEMENT STRIPING (BROKEN LINE)(4" WIDTH)	MILE	0.407
732-04-A	PLASTIC PAVEMENT LEGENDS AND SYMBOLS (ARROW)	EACH	2
732-04-C	PLASTIC PAVEMENT LEGENDS AND SYMBOLS (ONLY)	EACH	1
740-01	CONSTRUCTION LAYOUT	LUMP SUM	LUMP
805-12-A	REINFORCED CONCRETE BOX CULVERTS(4' x 3' (1200mm x 900mm))	LIN. FT,	32
S-001	RUMBLE STRIPS (GROUND IN)	MILE	0.23
S-002	FULL DEPTH SAW CUT OF EXISTING PAVEMENT	LIN. FT.	1214

[•] TO BE USED AT LOCATIONS AND AS DIRECTED BY PROJECT ENGINEER.

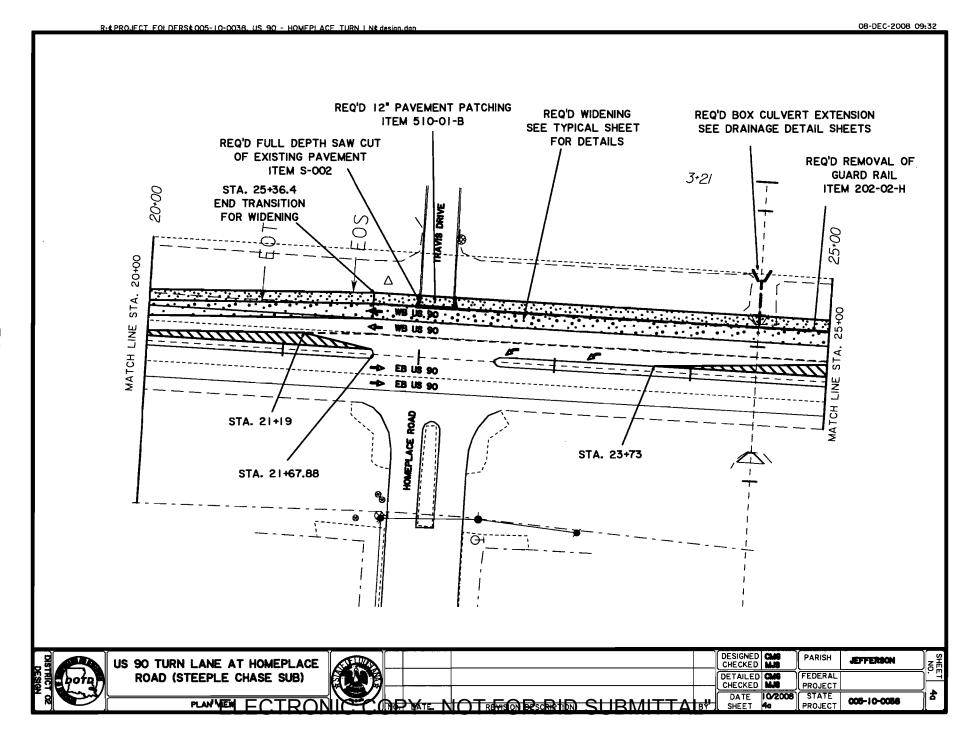


US 90 TURN LANE AT HOMEPLACE ROAD (STEEPLE CHASE SUB)



	DESIGNED CHECKED	CM6 MB	PARISH	JEFFERSON
	DETAILED CHECKED	CAMB MAR	FEDERAL PROJECT	
Ψ,	DATE SHEET	10/2008 3e	STATE PROJECT	005-10-0038

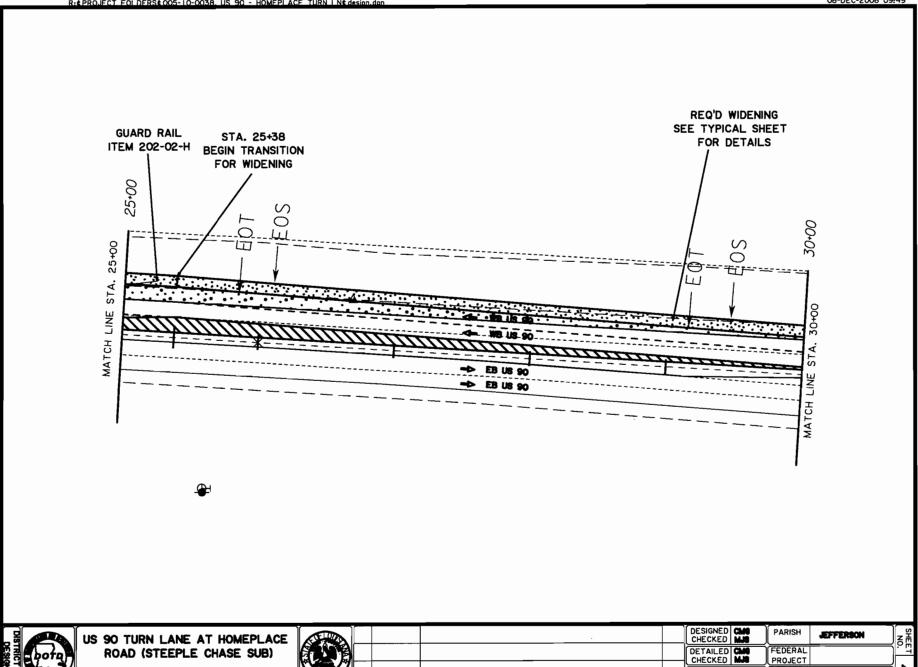
PLAN VIEW

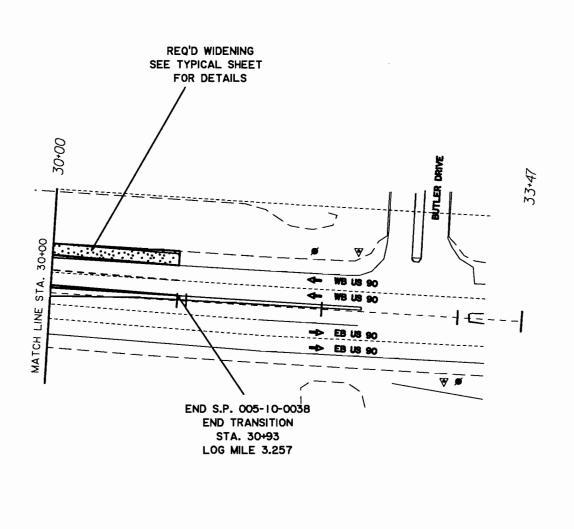


PROJECT STATE

005-10-0088

DATE | 10/2008

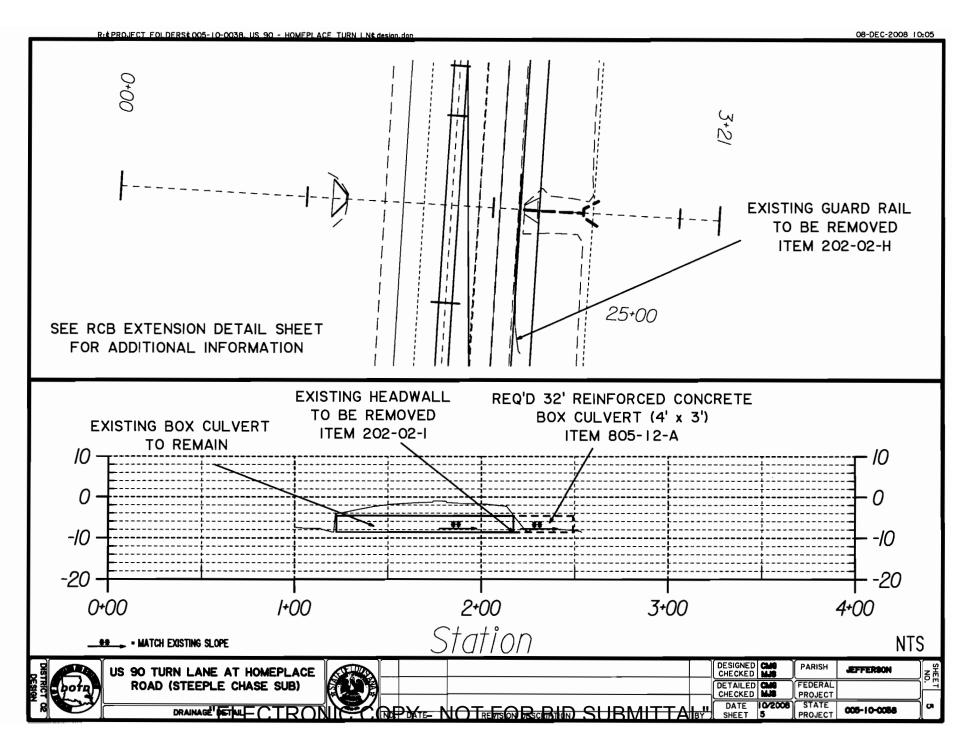






US 90 TURN LANE AT HOMEPLACE ROAD (STEEPLE CHASE SUB)

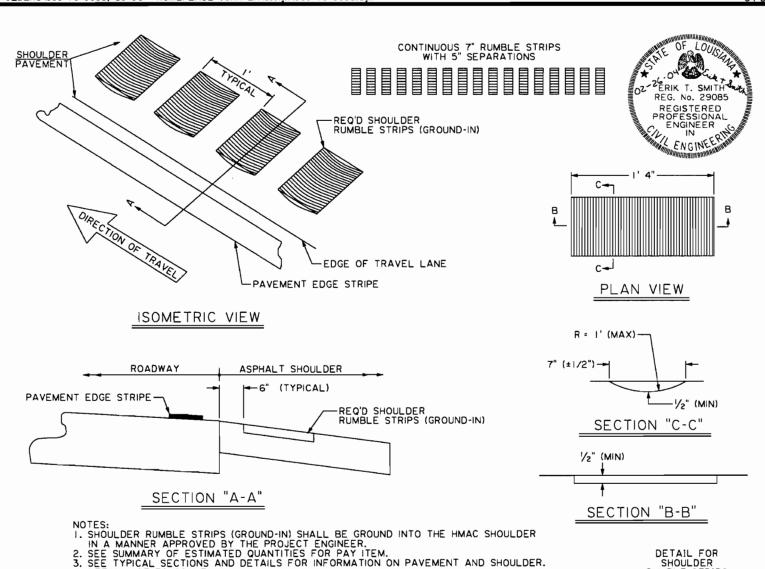
A	_					DESIGNED CHECKED		PARISH	JEFFERSON	_] 2
角						DETAILED		FEDERAL PROJECT		7
′/	—	D \/ N	IOT FOR DID	CHOMITTA		DATE	10/2008	STATE	005-10-0088	∜;
(JI NO	H MATE I	NI () REIVISION DESCRIPTION)	SUBMITTAL	BY)	SHEET	4c]	PROJECT	***************************************	

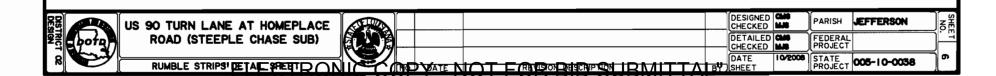


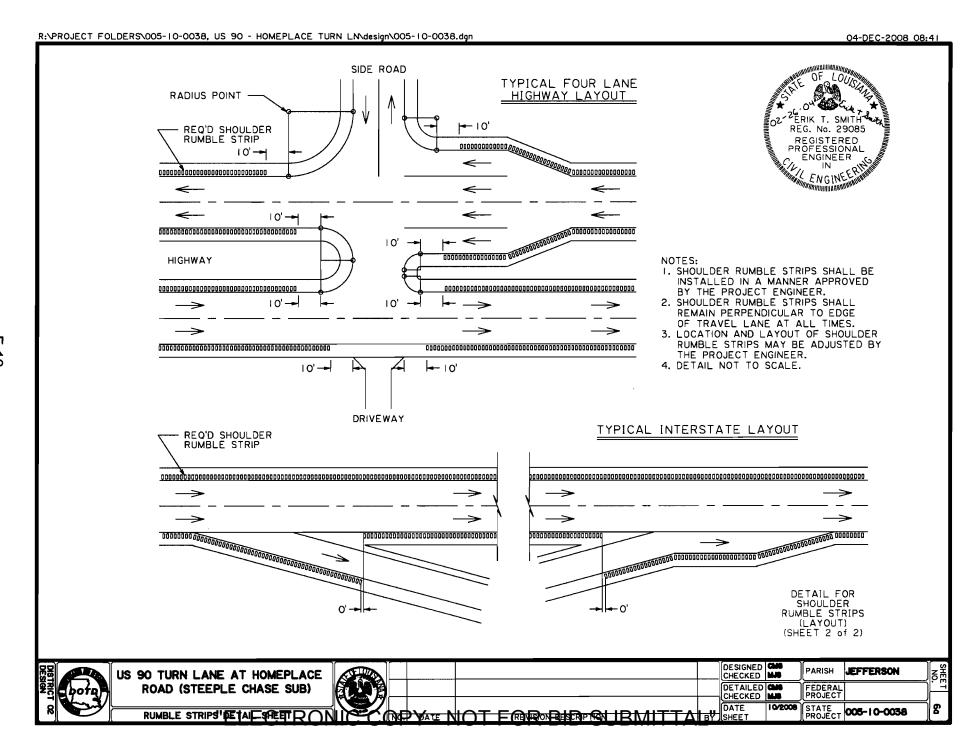
4. DETAIL NOT TO SCALE.

RUMBLE STRIPS

(GROUND-IN) (SHEET | of 2)







EXISTING

BASE

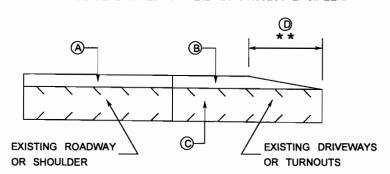
VARIES

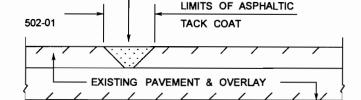
PATCHING DETAIL

DRIVEWAY OR TURNOUT DETAIL (ITEM 502-01-A).

DETAIL OF APRON AT TURNOUT (TYPICAL)

- * MATCH EXISTING RADIUS
- * * TO BE DETERMINED IN FIELD BY PROJECT ENGINEER.





ASPHALTIC CONCRETE

JOINT REPAIR DETAIL

- SECTION H-H
- (A) ASPHALTIC CONCRETE (COURSES AND TYPES AS SHOWN ON TYPICAL SECTION).
- (B) ASPHALTIC CONCRETE, PAY AS 502-01-A, CONTRACTORS OPTIONS ARE: 1. MATCH ROADWAY TYPICAL SECTION.
- © EXISTING PAVED DRIVEWAY OR TURNOUT TO REMAIN UNLESS EXISTING MATERIAL IS AGGREGATE. REPLACE AGGREGATE DRIVEWAY
 WITH 4.0" ASPHALTIC CONCRETE. TOTAL MINIMUM THICKNESS OF NEW PAVED DRIVEWAY OR TURNOUT INCLUDING OVERLAY MATERIAL IS 4.0".

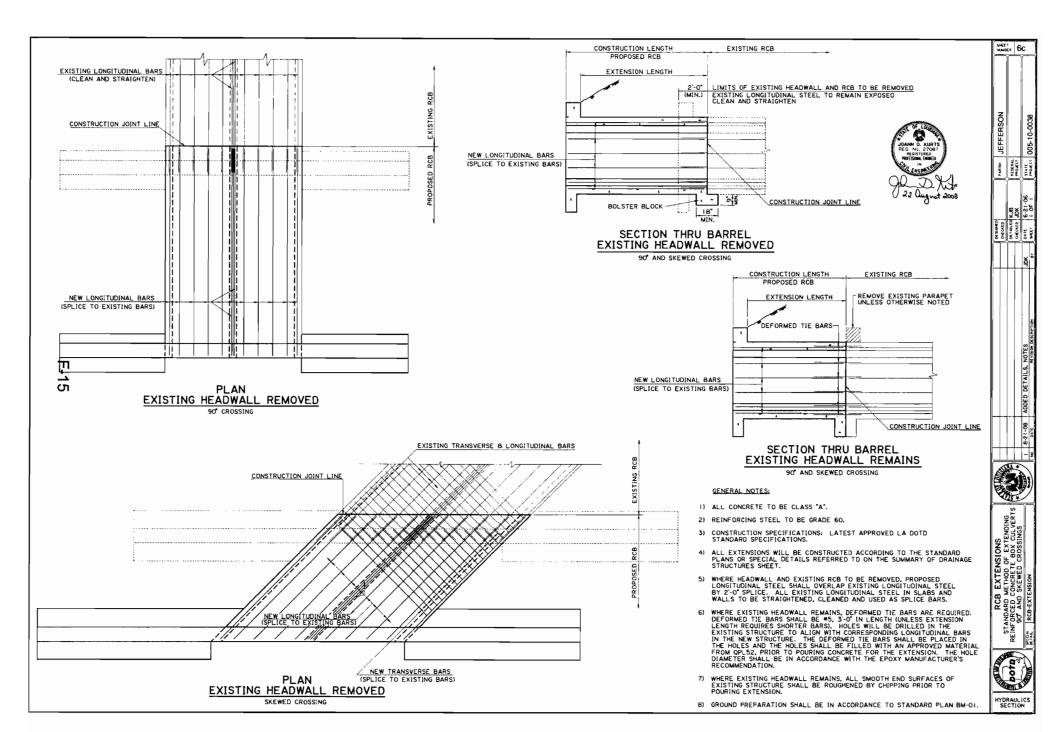
ASPHALTIC CONCRETE

- (D) AS DETERMINED BY THE PROJECT ENGINEER.
- (E) 12" MIN. (PATCHING SHALL EXTEND TO BOTTOM OF EXISTING BASE) (ROADWAY). 6" MIN. (PATCHING SHALL EXTEND TO BOTTOM OF EXISTING BASE) (SHOULDER).

NOTE: USE DETAILS APPLICABLE TO THIS PROJECT



F-14



GENERAL PROVISIONS

- All Temporary Traffic Control Devices used shall be in accordance with the LeDOTD Standard Specifications for Control Devices (MUTCO), and shall meet the Hatland Cooperative Highway Research Program (NCHRP) 350 for
- Migrerials used for Temporary Traffic Controls shall be in accordance with the LeDCTD Standard Specifications for ande and Bridges and when applicable the LaDOTD Qualified Products List (QPL).
- a No temporary traffic contrals shall be eracted without the approval of the Project Engineer and until work le
- about to begin, unique they are covered. a Na lane cigavres, lane shifts, diversions, or detaurs shall accur althout the authorization of the Project Engineer.
- installation, maintenance, and appropriate of all temporary traffic control devices called for in these plans ar and by the Project Engineer for the protection of the traveling public on well as all Department and construction
- . The contractor shall also be responsible for the of all permanent signs and pavement markings left in place as sessantial to the eafs movement and guidance of fraffic within
- e The District Traffic Operations Engineer (DTOE) shell serve as a fachnical adviser to the Project Engineer for all Treffic Control
- *Road Work Next XX Miles* sign shall be required on all projects equal to or greater than 2 miles and located of the beginning of the project unless otherwise noted. The distance on the sign shall be stated to the nearest whole mile. The sign shall be a min 36"X60" unless otherwise nated.
- @ Warning signs used for lone clasures or lone white in which the by shall be returned to full public use within 12 hours or les may be placed on NCHRF350 approved partiable eign frames.
- @ if the epochy on the plane need to be aftered, the new specing need to be approved by the Project Engineer.

SPEED LIMITS

- Speed limits shot be lowered by IQ mph for any that requires one or mare of the fall (A) the condition of the original highway to degraded due to milled surfaces or unevan pay (B) work is in progress in the immediate vicinity of the traval way requiring ione cleanres, ione width reductions, or law speed diversions; (C) workers present on the shoulder within 2" of the edge of traveled way without barrier protection.
- The reduced epoed cone shall only apply to these persons of the project limits affected. The Project Engir may often SPEED LIMIT WHEN FLASHING signs to
- @ At the and of the reduced speed zone, a speed first ste deploying the original epsed limit before construction shall be
- e if conditions warrent, the District Traffic Operations Engineer may authorize the reduction of the speed 2mit by more than

PAVEMENT MARKINGS (see QPL)

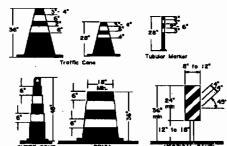
- @ All povement markings within the Brits of the project that are in conflict with the project eigning or the required traffic increments shall be removed from the povement by blost cleaning or grinding Existing striping shall not be painted ever with black paint or
- If special povement markings are needed, they shall be reflectorized,
- removable, and accompanied by the proper algrage.

 © Temporary Raised Pavement Markers (RPMs) may be added to i temperary striping in areas of transition, in lowers, In detours, and in other areas of need by directed by the Project
- at of temporary personant markings shall conform to section 713 of the Standard Specifications. If no pay from exists, temperary markings will be considered incidental to

- All signs used for temporary traffic centrals shall fallow the Department's Traffic Control (TC) details and the MUTCD. Signs shown in the TC Bustrations are typical and may vary with each specific condition.
- · Mare appropriate signing for a specific condition may be and reviewed by the District Traffic Operations Engineer.
- When projects are separated by less than one mile, they shall
- At no time shot signs werning against a porticular aparation be lett in piece once the aparation has been completed or where
- Signs over 10 sq ft shall be maunted on two peet and sign over 20 sq ft shall be mounted on at least three past.
- Signe shall have a minimum of two belts per past Permanent signs no longer applicable or in annition shall be
- removed or covered with a eirong, lightweight, spaque material · Worning signs used for temporary traffic controls shall meet the following guidelines unless otherwise noted in the piones (A) size shall be 48' x 48', (B) see the Departments Standard s and the QPL for sheeting information, (C) o minimum of a 2 ib U-Channel poet shall be used driven to minimum depth of 3', (Q) sign height shot be a minimum of 5'
- pedestriane or bicycle traffic in which it shall be a minist of 7. (E) lateral distance of signs shall be a minimum of 6' from the edge of shoulder or edge of povement If no shoulder exist and 2' from the back of earb in urben areas @ Vinvi Rail Up clans will be allawed for short form (less than 12
- hours) daytime work provided that they meet all size, color, retrerefactivity requirements, and NCHRF 350.
- Mosh raite stars shall not be allowed on any project.
- e All signs shall be removed or covered whon no lenger applicable. a Contractor shall use soution not to damage existing signs which oin in place. Any OOTO signs damaged by work operations

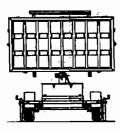
CHANNELIZING DEVICES

- The following devices may be used: Tubular Markers, Vertical Panels, Cones, Drums, and Super Cones. Drums (at standard spacing) and Super Conse (at/getondard epacing) are the only devices allowed to be used in toper areas on the interstate system during daylight hours. Only drums can be
- used in topers during night operati The specing of channeling devices in a toper should not exceed a distance in fact equal to 1.0 times the posted speed limit in mph (with a maximum of 50 test).
- The specing of channelizing devices in a tangent should not exceed a distance in fast equal to 2.0 times the posted opened first in mph (with a maximum of LOC feet) unless etherwise noted.
- a Retroraffective material pattern used on super cones aboli metal
- @ 28° traffic cones are not allowed en: 1) interestetes, 2) Highways with epoeds greater than 40 mph. During night time operations: 1) 28" and 36" cones are not allowed, 2) drums are the any device allowed in the



PORTABLE CHANGEABLE MESSAGE SIGNS

- Changeable Messags Signs (CMS) shall be used an el interetate Highways and on all other randways (where space is available) with on ADT greater than 20,000 and should be delinedted with retrareflective TTC devices. CMS will be paid for by each.
- @ When used in advence at a lane closure or a lane shift, the CMS. should be placed on the right hand side at the road a minim determined by the Engineer on other highways.
- @ If vehicles are queing beyond the 2 mile CMS, on additional CMS should be placed on the right hand side of the read approximately 5 miles in advance of the teper for interstates.
- CMS messages shall be approved by the Dietrict Tratific Operations Engineer (DTOE).
- they should be removed. If not removed, they should be ehelded by guardral or berriers: or if the previous two options are not



FLAGGERS

- All flaggers must be qualified. The contractor shall be responsible for training or assuring that all flaggers are qualified to perform such as those offered by the American Treffic Safety Services Association (ATSSA), The Associated General Contractors of America (ABC) or other courses approved by the Louisiana DOTD's Work Zone Took Force. The contractor shall be responsible for getting the flagge
- When Utilized, a flogger shall use a minimum (8 inch potagonal shape sign on a minimum 6' stop/slow podds and weer ANSI Class 2 Lime Green yest during day time operations and AMSI Class 3 Lime Green ansemb night operations. In all flogging aparations, the flogger must be visible from the flagger advance warning eign,



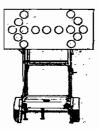
TYPE III BARRICADES

- All barricodes shall use Type 3 High Intensity Sheeting on both eides of the parriages.
- ◆ All Type III Borrisadov shall be a minimum at 8 feet in long!
- and must must NCHRP 350 recurrements.
- When signs and lights are to be mounted to a barricods, they must meet NC-RP 350 requirements.

MUTCD Wabsite: http://mulcd.fhwq.dpt.gov/

- Flashing Arrow Ponels shall be used for fone closures on all facilities with 2 or more lones in a single direction
- and a speed first greater than 35 mph.

 When used, ficehing errow parels should be loc the shoulder at the beginning at the toper.
- Where the shoulder width is limited, the fleshing errow panel should be placed within the closed lane as close to the beginning of the toper as practical.
- · All Firehing Arrow Panels used on high speed roods (45 mph and greater) shall be 4' E 8' Type C.
- @ When Floshing Arrow Ponels signs are not being used, they should be removed; if not removed, they should be shielded by quardral or barriers; or if the previous two aptions are not feesble, they should be delineated with retroreflective TTC devices.

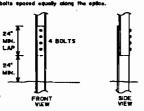


LIGHTING (see QPL)

- @ When used for overnight closures, lighting shall suppl all barricodes that are placed in a closed ione or that arrend ocross a highway. Two Type B. High intensity lights shall be used per lane closed in rural ereas. In urban areas two Type A Law Intensity Lights may be used where adequate ent Bahtins is avail
- @ One Type B High Intensity Aght shall be used to a the first sign (or pair of signs) that gives worning about a ure during night time operations.
- @ Type C steedy burn lights shall be used on all the devices in the toper as wall as the first two devices in the

ALLOWABLE LAP SPLICE FOR U-CHANNEL POST

a U-Channel poets may be spliced where long lengths are required. The upper section sholl diverting the lawer section by at least 24 lendes. The bottom edge of the upper section of the optics shall be a minimum of 24 lendes above the ground. The spliced sections shall be secured with at least four fine











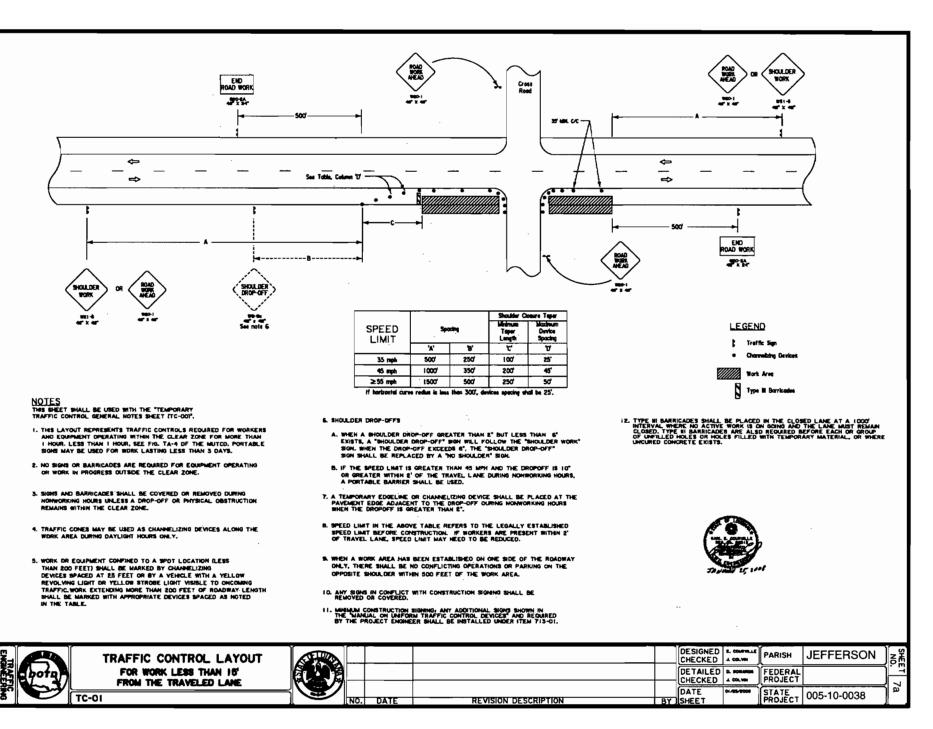
TEMPORARY TRAFFIC CONTROL GENERAL NOTES SHEET

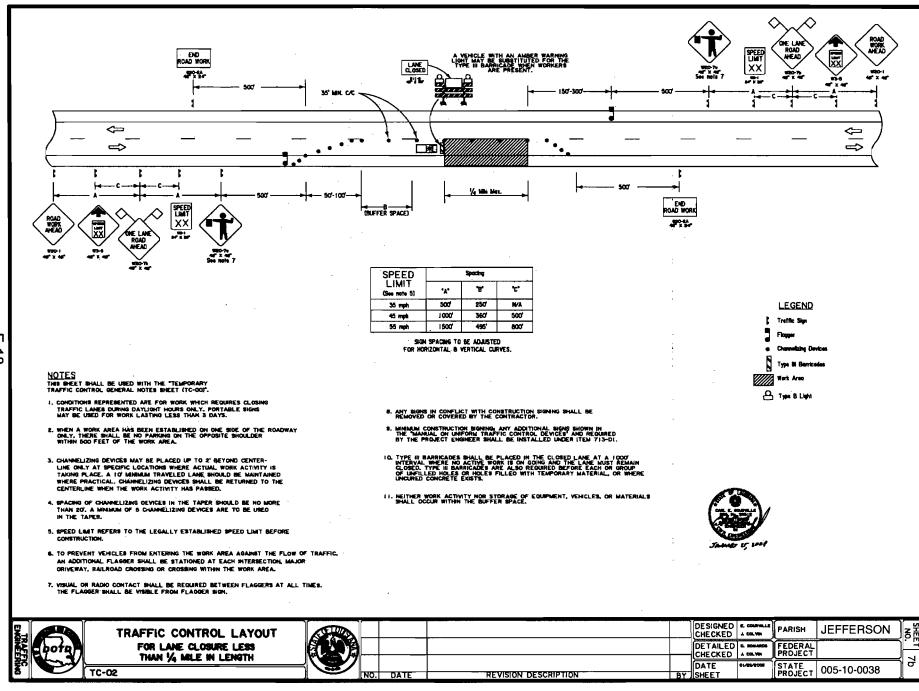
TC-00

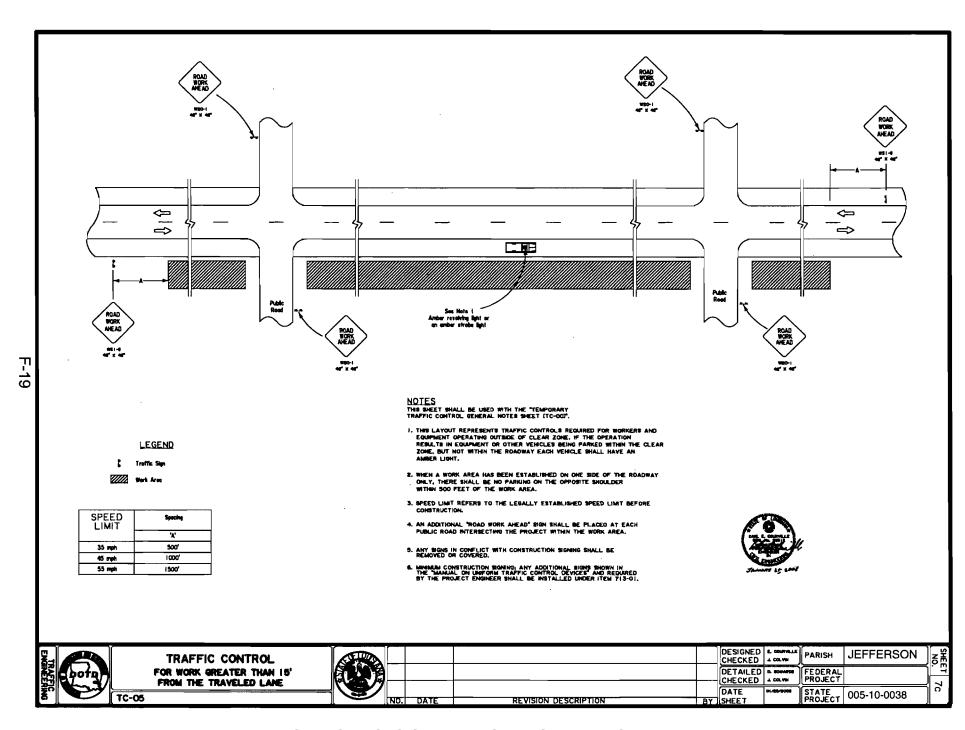


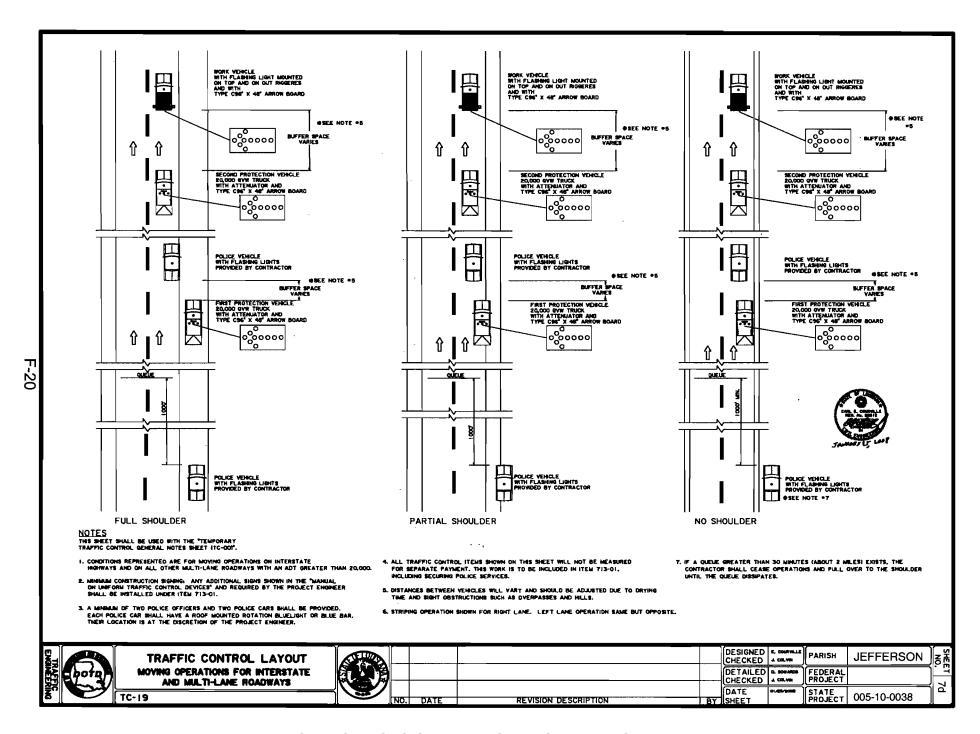
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STATE OF LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT



LETTER BID PROPOSAL RETURNABLES FOR

STATE PROJECT NO. 005-10-0038
US 90 TURN LANE AT HOMEPLACE ROAD
(STEEPLE CHASE SUB)
JEFFERSON PARISH
ROUTE US 90

BID BOND

A Bid Bond is required when the bidder's total bid amount as calculated by the Department in accordance with Subsection 103.01 is greater than \$50,000. (See Section 102 of the Project Specifications.)

	, as Principal
(Bidder) and	, as Surety,
	of Transportation and Development, (hereinafter 5%) of the bidder's total bid amount as calculated by all and Surety bind themselves, their heirs, executors,
Signed and sealed this day o	of, 20
Department on a contract for the construction of S' Turn lane at Homeplace Road, Route US 90 Principal, within the specified time, enters into the	, Jefferson Parish, if the bid is accepted and the
Principal (Bidder or First Partner to Joint Venture)	If a Joint Venture, Second Partner
Ву	By
Authorized Officer-Owner-Partner	Authorized Officer-Owner-Partner
Typed or Printed Name	Typed or Printed Name
	Surety
Ву	(Seal)
	Attorney-in-Fact
Typed or	Printed Name
To receive a copy of the contract and subsequent correspect to the bid bonds, the following information	orrespondence / communication from LA DOTD, with must be provided:
Bonding Agency or Company Name	Address
Agent or Representative	Phone Number / Fax Number

07/07

PAGE:

DATE: 12/08/08 13:33

LEAD PROJECT: 005-10-0038 OTHER PROJECTS:

ITEM NUMBER	APPROXIMATE QUANTITY	UNIT OF MEASURE	PAY ITEM UNIT PRICE (IN WORDS, INK OR TYPED)
н-20-202	00	TOOA AKANT.I	REMOVAL OF GUARD RAIL
	9		DOLLARS
			CENTS
			REMOVAL OF CONCRETE HEADWALL
202-02-I	24.0	LINEAR FOOT	DOLLARS
			CENTS
			RELOCATION OF EXISTING SIGN
202-03	4	БАСН	DOLLARS
-4			CENTS
			GENERAL EXCAVATION
203-01	750	CUBIC YARD	DOLLIARS
			CENTS
			DRAINAGE EXCAVATION
203-02	1,000	CUBIC YARD	DOLLARS
			CENTS
			BORROW (VEHICULAR MEASUREMENT)
203-07	220	CUBIC YARD	DOLLARS
			CENTS

7

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LEAD PROJECT: 005-10-0038 OTHER PROJECTS:

ITEM	APPROXIMATE QUANTITY	UNIT OF MEASURE	PAY ITEM UNIT PRICE (IN WORDS, INK OR TYPED)
204-06	1,178	LINEAR FOOT	TEMPORARY SILT FENCING DOLLARS
			CENTS
502-01	711.2	TON	SUPERPAVE ASPHALTIC CONCRETE DOLLARS
			CENTS
502-01-A	30.0	TON	SUPERPAVE ASPHALTIC CONCRETE, DRIVES, TURNOUTS AND MISCELLANEOUS DOLLARS
•			CENTS
	٦ د د	COREY PREIOR	COLD PLANING ASPHALTIC PAVEMENT
10-00	70110	ANNI ANNONS	OD
			CENTS CONTRACTOR RETAINED RECLAIMED ASPHALTIC PAVEMENT
509-02	-286	CUBIC YARD	
			CENTS
			PAVEMENT PATCHING (12" MINIMUM THICKNESS)
510-01-B	50	SQUARE YARD	DOLLARS
			CENTS

PAGE:

DATE: 12/08/08 13:33

005-10-0038 LEAD PROJECT: OTHER PROJECTS:

CENTS CENTS DOLLARS CENTS DOLLARS DOLLARS CENTS DOLLARS DOLLARS CENTS DOLLARS CENTS TEMPORARY PAVEMENT MARKINGS (BROKEN LINE) (4" WIDTH) (4' LENGTH) (IN WORDS, INK OR TYPED) TEMPORARY PAVEMENT MARKINGS (24" WIDTH) TEMPORARY PAVEMENT MARKINGS (8" WIDTH) PAY ITEM UNIT PRICE PAVEMENT WIDENING (8.5" THICKNESS) TEMPORARY SIGNS & BARRICADES GEOTEXTILE FABRIC SQUARE YARD SQUARE YARD LINEAR FOOT LINEAR FOOT UNIT OF MEASURE LUMP SUM 2.442 MILE 948.0 APPROXIMATE QUANTITY 940 300 40 LUMP FOR BID SUBMITTAL" 713-03-A 510-02-H ITEM NUMBER NOT 711-04

"ELECTRONIC COPY

DATE: 12/08/08 13:33 PAGE:

LEAD PROJECT: 005-10-0038 OTHER PROJECTS:

APPROXIMATE QUANTITY MEASURE TEMPORARY PAVEMENT MARKINGS (BROKEN LINE) (4" WIDTH) (10' LENGTH)
0.814 MILE
1.012 MILE
SEEDING 12 POUND
350 POUND
BEDDING MATERIAL 15.0 CUBIC YARD
LUMP LUMP SUM

DATE: 12/08/08 13:33 PAGE:

LEAD PROJECT: 005-10-0038 OTHER PROJECTS:

APPROXIMATE QUANTITY	Y	UNIT OF MEASURE	PAY ITEM UNIT PRICE (IN WORDS, INK OR TYPED) RPFIRCTORIZED RAIGED DAVEMENT MARKERS
600 EACH	EAC	E	REFLECTORIZED RAISED FAVEMENT MARKNERS
			CENTS
			PLASTIC PAVEMENT STRIPING (8" WIDTH)
300 LINEAR	LINEA	R FOOT	DOLLARS
			CENTS
			PLASTIC PAVEMENT STRIPING (24" WIDTH)
470 LINEAR	LINEAR	FOOT	DOLLARS
			CENTS
			PLASTIC PAVEMENT STRIPING (SOLID LINE) (4" WIDTH)
0.506 MILE	MILE		DOLLARS
			CENTS
	5		PLASTIC PAVEMENT STRIPING (BROKEN LINE) (4" WIDTH)
	H I		DOLLIARS
			CENTS
			PLASTIC PAVEMENT LEGENDS & SYMBOLS (ARROW)
2 БАСН	EACH		DOLLARS
			CENTS

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DATE: 12/08/08 13:33 PAGE:

LEAD PROJECT: 005-10-0038 OTHER PROJECTS:

ITEM NUMBER	APPROXIMATE QUANTITY	UNIT OF MEASURE	PAY ITEM UNIT PRICE (IN WORDS, INK OR TYPED)
732-04-C		БАСН	PLASTIC PAVEMENT LEGENDS & SYMBOLS (ONLY)
			DOLLARS
740-01	LUMP	LUMP SUM	CONSTRUCTION LAYOUT DOLLARS
			CENTS
805-12-A	32.0	LINEAR FOOT	REINFORCED CONCRETE BOX CULVERTS (4'X 3') DOLLARS
6			CENTS
S-001	0.230 MILE	MILE	RUMBLE STRIPS (GROUND IN) DOLLARS
			CENTS
S-002	1,214	LINEAR FOOT	FULL DEPTH SAW CUT OF EXISTING PAVEMENT
			DOLLARS

CONSTRUCTION PROPOSAL SIGNATURE AND EXECUTION FORM

THIS FORM, THE SCHEDULE OF ITEMS, AND THE PROPOSAL GUARANTY MUST BE COMPLETED AS INDICATED AND SUBMITTED TO THE LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT (DOTD) TO CONSTITUTE A VALID BID

STATE PROJECT NO(S).	005-10-0038
FEDERAL AID PROJECT NO(S).	N/A
NAME OF PROJECT	US 90 TURN LANE AT HOMEPLACE ROAD (STEEPLE CHASE ROAD)

I (WE) HEREBY CERTIFY THAT I (WE) HAVE CAREFULLY EXAMINED THE PROPOSAL, PLANS AND SPECIFICATIONS, INCLUDING ANY AND ALL ADDENDA, AND THE SITE OF THE ABOVE PROJECT AND AM (ARE) FULLY COGNIZANT OF ALL PROPOSAL DOCUMENTS, THE MASTER COPY OF WHICH IS ON FILE AT DOTD HEADOUARTERS IN BATON ROUGE, LA., AND ALL WORK MATERIALS AND LABOR REQUIRED THEREIN, AND AGREE TO PERFORM ALL WORK, AND SUPPLY ALL NECESSARY MATERIALS AND LABOR REQUIRED FOR SUCCESSFUL AND TIMELY COMPLETION OF THE ABOVE PROJECT AND TO ACCEPT THE SUMMATION OF THE PRODUCTS OF THE UNIT PRICES BID ON THE SCHEDULE OF ITEMS ATTACHED HERETO AND MADE A PART HEREOF MULTIPLIED BY THE ACTUAL QUANTITY OF UNIT OF MEASURE PERFORMED FOR EACH ITEM, AS AUDITED BY DOTD, AS FULL AND FINAL PAYMENT FOR ALL WORK, LABOR AND MATERIALS NECESSARY TO COMPLETE THE ABOVE PROJECT, SUBJECT TO INCREASE ONLY FOR PLAN CHANGES (CHANGE ORDERS) APPROVED BY THE DOTD CHIEF ENGINEER OR HIS DESIGNEE. THIS BID IS SUBMITTED IN ACCORDANCE WITH THE GENERAL BIDDING REQUIREMENTS IN THE CONSTRUCTION PROPOSAL AND ALL SPECIAL PROVISIONS, PLANS, SUPPLEMENTAL SPECIFICATIONS, AND THE LOUISIANA STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES (2006 EDITION). I (WE) UNDERSTAND THAT THE SUMMATION OF THE PRODUCTS OF THE UNIT PRICES BID ON THE SCHEDULE OF ITEMS MULTIPLIED BY THE ESTIMATED QUANTITY OF UNIT OF MEASURE FOR EACH ITEM, ALONG WITH ANY OTHER FACTORS SPECIFIED TO BE APPLICABLE SUCH AS CONSTRUCTION TIME AND/OR LANE RENTAL, SHALL BE THE BASIS FOR THE COMPARISON OF BIDS. I (WE) UNDERSTAND THAT THE SCHEDULE OF ITEMS MUST CONTAIN UNIT PRICES WRITTEN OUT IN WORDS AND THAT THE SCHEDULE OF ITEMS SUBMITTED AS PART OF THIS BID IS ON THE FORM SUPPLIED BY DOTD IN THE BID PROPOSAL, MY (OUR) PROPOSAL GUARANTY IN THE AMOUNT SPECIFIED FOR THE PROJECT IS ATTACHED HERETO AS EVIDENCE OF MY (OUR) GOOD FAITH TO BE FORFEITED IF THIS BID IS ACCEPTED BY DOTD AND I (WE) FAIL TO COMPLY WITH ANY REQUIREMENT NECESSARY FOR AWARD AND EXECUTION OF THE CONTRACT, AS WELL AS, SIGN AND DELIVER THE CONTRACT AND PAYMENT/PERFORMANCE/RETAINAGE BOND AS REQUIRED IN THE SPECIFICATIONS.

NONCOLLUSION DECLARATION (APPLICABLE TO FEDERAL-AID PROJECTS)

I (WE) DECLARE UNDER PENALTY OF PERJURY UNDER THE LAWS OF THE UNITED STATES AND THE STATE OF LOUISIANA THAT I (WE) HAVE NOT DIRECTLY OR INDIRECTLY, ENTERED INTO ANY AGREEMENT, PARTICIPATED IN ANY COLLUSION, OR OTHERWISE TAKEN ANY ACTION IN RESTRAINT OF FREE COMPETITIVE BIDDING IN CONNECTION WITH THE CONTRACT FOR THIS PROJECT NOR VIOLATED LA. R.S. 48:254.

BIDDER'S DBE GOAL STATEMENT (APPLICABLE TO DBE GOAL PROJECTS)

IF THIS PROJECT IS DESIGNATED BY SPECIAL PROVISION AS A DISADVANTAGED BUSINESS ENTERPRISE (DBE) GOAL PROJECT IN ACCORDANCE WITH THE DBE PROVISIONS OF THIS CONTRACT, THE BIDDER ASSURES DOTD THAT HE/SHE WILL MEET OR EXCEED THE DBE CONTRACT GOAL, OR IF THE BIDDER CANNOT MEET THE REQUIRED DBE GOAL, THE BIDDER ASSURES DOTD THAT HE/SHE HAS MADE AND CAN DOCUMENT GOOD FAITH EFFORTS MADE TOWARDS MEETING THE GOAL REQUIREMENT IN ACCORDANCE WITH THE CONTRACT AND DBE PROGRAM MANUAL INCORPORATED HEREIN BY REFERENCE.

THE APPARENT LOW BIDDER SHALL COMPLETE AND SUBMIT TO THE DOTD COMPLIANCE PROGRAMS OFFICE, FORM CS-6AAA AND ATTACHMENT(S) AND, IF NECESSARY, DOCUMENTATION OF GOOD FAITH EFFORTS MADE BY THE BIDDER TOWARD MEETING THE GOAL, WITHIN TEN BUSINESS DAYS AFTER THE OPENING OF BIDS FOR THIS PROJECT. RESPONSIVENESS OF INFORMATION SUPPLIED IN THIS SECTION OF THIS CONSTRUCTION PROPOSAL SIGNATURE AND EXECUTION FORM IS GOVERNED BY THE DBE REQUIREMENTS INCLUDED WITHIN THE SPECIFICATIONS AND DBE PROGRAM MANUAL.

CERTIFICATION OF EMPLOYMENT OF LOUISIANA RESIDENTS TRANSPORTATION INFRASTRUCTURE MODEL FOR ECONOMIC DEVELOPMENT (TIME) PROJECTS (APPLICABLE TO TIME PROJECTS)

IF THIS PROJECT IS DESIGNATED BY SPECIAL PROVISION AS A TRANSPORTATION INFRASTRUCTURE MODEL FOR ECONOMIC DEVELOPMENT (TIME) PROJECT AS DEFINED IN ACT NO. 16 OF THE 1989 FIRST EXTRAORDINARY SESSION OF THE LEGISLATURE WHICH ENACTED PART V OF CHAPTER 7 OF SUBTITLE II OF TITLE 47 OF THE LOUISIANA REVISED STATUTES OF 1950, COMPRISED OF R.S. 47:820.1 THROUGH 820.6.

THE BIDDER CERTIFIES THAT AT LEAST 80 PERCENT OF THE EMPLOYEES EMPLOYED ON THIS TIME PROJECT WILL BE LOUISIANA RESIDENTS IN ACCORDANCE WITH LOUISIANA R.S. 47:820.3.

N PARTICIPATION IN PAYMENT ADJUSTMENT (ASPHALT CEMENT AND FUELS) STATEMENT

IF THIS PROJECT IS DESIGNATED BY SPECIAL PROVISION AS BEING SUBJECT TO PAYMENT ADJUSTMENT FOR ASPHALT CEMENT AND/OR FUELS, THE BIDDER HAS THE OPTION OF REQUESTING EXCLUSION FROM SAID PAYMENT ADJUSTMENT PROVISIONS THAT ARE ESTABLISHED BY SPECIAL PROVISION ELSEWHERE HEREIN.

IF THE BIDDER DESIRES TO BE EXCLUDED FROM THESE PAYMENT ADJUSTMENT PROVISIONS,

THE BIDDER IS REQUIRED TO MARK HERE

FAILURE TO MARK THIS BOX PRIOR TO BID OPENING WILL CONSTITUTE FORFEITURE OF THE BIDDER'S OPTION TO REQUEST EXCLUSION.

BIDDER SIGNATURE REQUIREMENTS (APPLICABLE TO ALL PROJECTS)

THIS BID FOR THE CAPTIONED PROJECT IS SUBMITTED BY: Name of Principal (Individual, Firm, Corporation, or Joint Venture) If Joint Venture, Name of First Partner If Joint Venture, Name of Second Partner (Louisiana Contractor's License Number of Second Partner to Joint (Louisiana Contractor's License Number of Bidder or First Partner to Joint Venture) (Business Street Address) (Business Street Address) (Business Mailing Address, if different) (Business Mailing Address, if different) (Area Code and Telephone Number of Business) (Area Code and Telephone Number of Business) (Telephone Number and Name of Contact Person) (Telephone Number and Name of Contact Person) (Telecopier Number, if any) (Telecopier Number, if any) ACTING ON BEHALF OF THE BIDDER, THIS IS TO ATTEST THAT THE UNDERSIGNED DULY AUTHORIZED REPRESENTATIVE OF THE ABOVE CAPTIONED FIRM, CORPORATION OR BUSINESS, BY SUBMISSION OF THIS BID, AGREES AND CERTIFIES THE TRUTH AND ACCURACY OF ALL PROVISIONS OF THIS PROPOSAL, INCLUSIVE OF THE REQUIREMENTS, STATEMENTS, DECLARATIONS AND CERTIFICATIONS ABOVE AND IN THE SCHEDULE OF ITEMS AND PROPOSAL GUARANTY. EXECUTION AND SIGNATURE OF THIS FORM AND SUBMISSION OF THE SCHEDULE OF ITEMS AND PROPOSAL GUARANTY SHALL CONSTITUTE AN IRREVOCABLE AND LEGALLY BINDING OFFER BY THE BIDDER. (Signature) (Signature) (Printed Name) (Printed Name) (Title) (Title) (Date of Signature) (Date of Signature) CONTRACTOR'S TOTAL BASE BID IT IS AGREED THAT THIS TOTAL, DETERMINED BY THE BIDDER, IS FOR PURPOSES OF OPENING AND READING BIDS ONLY, AND THAT THE LOW BID FOR THIS PROJECT WILL BE DETERMINED FROM THE EXTENSION AND TOTAL OF THE BID ITEMS BY DOTD. CS-14AA 08/06