

# Department of Transportation

## Office of Project Development

700 E Broadway Avenue

Pierre, South Dakota 57501-2586 605/773-3268

FAX: 605/773-2614

October 2, 2015

### ADDENDUM NO. 1

**RE: Item #2, October 7, 2015 Letting - IM 0904(57)189, NH 0083(85)87, PCN 035E, 05H6, Jones, Lyman County - PCC Overlay, Pavement Repair, and Edge Drains**

#### TO WHOM IT MAY CONCERN:

The following addenda to the plans shall be inserted and made a part of your proposal for the referenced project.

**SPECIAL PROVISIONS:** Please remove the Special Provisions checklist and replace with attached Special Provisions checklist revised 10/1/15.

Please remove the "Special Provision for Contract Time", dated 8/12/15 and replace with the "Special Provision for Contract Time", dated 10/1/15.

**BID ITEM FILE:** NO CHANGE

**PLANS:** Please destroy sheets F4, F5, F6, and F8 and replace with the enclosed sheets, dated 9/29/15.

**Sheet F4:** TABLE OF UNCLASSIFIED EXCAVATION was revised

**Sheet F5:** SALVAGE AND STOCKPILE ASPHALT MIX AND GRANULAR BASE MATERIAL table was revised.

**Sheet F6:** REMOVE GRANULAR MATERIAL table was revised.

**Sheet F8:** CONSTRUCTION HAUL ROAD note was revised.

Sincerely,

Sam Weisgram  
Engineering Supervisor

SW/cj

CC: John Forman, Pierre Region Engineer  
Doug Sherman, Winner Area Engineer

REV. 10/1/15

SPECIAL PROVISIONS

PROJECT NUMBER(S): IM 0904(57)189, NH 0083(85)87 PCN: 035E, 05H6

TYPE OF WORK: GRADING AND PCC SURFACING

COUNTIES: JONES, LYMAN

The following clauses have been prepared subsequent to the Standard Specifications for Roads and Bridges and refer only to the above described improvement, for which the following Proposal is made.

The Contractor's attention is directed to the need for securing from the Department of Environment & Natural Resources, Foss Building, Pierre, South Dakota, permission to remove water from public sources (lakes, rivers, streams, etc.). The Contractor should make his request as early as possible after receiving his contract, and insofar as possible at least 30 days prior to the date that the water is to be used.

Mark Anderson is the official in charge of the Pierre Career Center for Jones, Lyman Counties.

**THE FOLLOWING ITEMS ARE INCLUDED IN THIS PROPOSAL FORM:**

**Special Provision for Contract Time, dated 10/1/15.**

**Special Provision for Prosecution and Progress, dated 1/20/15.**

**Special Provision for On-The-Job Training Program, dated 7/10/12.**

**Special Provision Regarding Section 404 of the Clean water Act, dated 7/9/15.**

**Fact Sheet #3.**

**Special Provision for Specialty Items, dated 8/26/15.**

**Special Provision for Contractor Staking, dated 8/24/15.**

**Special Provision for PI PCC Pavement Smoothness with 0.2" Blanking Band (PCCP Overlay), dated 8/28/15.**

**Special Provision for IRI PCC Pavement Smoothness, dated 9/8/15.**

**Special Provision for Portland Cement Concrete Pavement Overlay (Thick), dated 8/28/15.**

**Special Provision for Contractor Furnished Mix Designs for PCC Pavement, dated 6/19/15.**

Special Provision for Contractor Administered Preconstruction Meeting, dated 4/18/13.  
Fuel Adjustment Affidavit, DOT form 208 dated 7/15.  
Standard Title VI Assurance, dated 7/14/08.  
Special Provision For Disadvantaged Business Enterprise, dated 5/20/15.  
Special Provision For EEO Affirmative Action Requirements on Federal and Federal-aid  
Construction Contracts, dated 9/1/97.  
Special Provision For Required Contract Provisions Federal-aid Construction Contracts, Form  
FHWA 1273 (Rev. May/1/12), dated 4/30/13.  
Required Contract Provisions Federal-aid Construction Contracts, Form  
FHWA 1273 (Rev. 5/1/12).  
Special Provision Regarding Minimum Wage on Federal-Aid Projects, dated 4/30/13.  
Wage and Hour Division US Department of Labor Washington DC.  
- US Dept. of Labor Decision Number SD100010, dated 8/30/13.  
Special Provision for Price Schedule for Miscellaneous Items, dated 8/3/15.

Special Provision Regarding Storm Water Discharge, dated 5/3/13.  
General Permit for Storm Water Discharges Associated with Construction  
Activities, dated 2/1/10. <http://denr.sd.gov/des/sw/IPermits/ConstructionGeneralPermit2010.pdf>

\* \* \* \*

**STATE OF SOUTH DAKOTA  
DEPARTMENT OF TRANSPORTATION**

**SPECIAL PROVISION  
FOR  
CONTRACT TIME**

**PROJECT IM 0904(57)189 & NH 0083(85)87; PCN 035E & 05H6  
JONES & LYMAN COUNTIES**

**OCTOBER 1, 2015**

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**SD 248 Asphalt Patching**

The Contractor will place approximately 4,000 tons of asphalt concrete composite material on SD248 for strengthening by May 15, 2016.

If the Contractor does not complete the required asphalt concrete composite material on SD248 for strengthening by the May 15, 2016 interim completion requirement, the Department will make a disincentive assessment in the amount of \$500 per working day. The Department will count working days in accordance with Section 8.6 A.

The Contractor will place the remaining estimated 2,000 tons of asphalt concrete composite material on SD248 by the September 30 field work completion date.

**Vivian Weigh in Motion Site Upgrade**

If the Contractor begins the weigh in motion site upgrade prior to August 3, 2016, the Contractor will complete the weight in motion site upgrade prior to August 3, 2016. If the Contractor does not begin the weigh in motion site upgrade prior to August 3, 2016, the Department will not allow the Contractor to begin the weigh in motion site upgrade until after August 14, 2016.

The Contractor will open all lanes at the weigh in motion upgrade site to unimpeded traffic from August 3, 2016 to August 14, 2016 (inclusive). In addition, the Department will not allow single lane closures, unmarked lanes, shoulder drop offs, or any work that impedes traffic on the project from August 3, 2016 to August 14, 2016 (inclusive).

If the Contractor does not comply with the above requirements, the Department will make a disincentive assessment in the amount of \$2,000 per calendar day for any calendar day traffic is impeded at the weigh in motion upgrade site from August 3, 2016 to August 14, 2016 (inclusive).

## **US83 Repair Work**

The Contractor will complete the US83 repair work portion of the project prior to the field work completion date.

## **I-90 Sta. 0+00 to 445+70**

### **Substantial Completion**

The Contractor will substantially complete the I-90 Sta. 0+00 to 445+70 portion of the project by the July 29, 2016 substantial completion date.

The Department will consider the work substantially complete when all lanes are open and traffic can move unimpeded through the I-90 Sta. 0+00 to 445+70 portion of the project at the posted speed, and the Contractor has completed all work except the following:

Edge drain outlet extensions, pipe extensions, pipe end replacement, seeding, mulching, permanent erosion control measures, westbound temporary ramp detour removal, eastbound temporary ramp detour construction, and project cleanup.

The Engineer, in his or her sole discretion will determine when the project is substantially complete.

The Department wants to accelerate the project by offering an incentive to the Contractor. The Department will make an incentive payment in the amount of \$8,000 per calendar day for each calendar day the Contractor substantially completes the work prior to the required substantial completion date. For all days up to and including August 14, 2016, the Department will make a disincentive assessment in the amount of \$8,000 per calendar day for each calendar day the work is not completed beyond required substantial completion date. For all days following August 14, 2016, the Department will make a disincentive assessment in the amount of \$4,000 per calendar day for each calendar day the work is not completed beyond August 14, 2016. The Department will charge calendar days in accordance with Section 8.6 B.

The maximum incentive for this portion of the project is limited to \$180,000. There is no maximum disincentive.

Following the substantial completion of the project and either prior to or following the Sturgis Motorcycle Rally Restriction, the Department will allow single lane closures for the completion of the remaining items of work (edge drain outlet extensions, pipe extensions, pipe end replacement, seeding, mulching, permanent erosion control measures, westbound temporary ramp detour

removal, eastbound temporary ramp detour construction, and project cleanup). The Department will allow single lane closures during daylight hours only and only when the Contractor is actively performing work. Daylight hours will be defined as sunrise to sunset.

### **Sturgis Motorcycle Rally Restrictions**

Once the Contractor substantially completes the I-90 Sta. 0+00 to 445+70 portion of the project the following requirements will apply:

The Department will not allow single lane closures, unmarked lanes, shoulder drop offs, or any work that impedes traffic on the I-90 Sta. 0+00 to 445+70 portion of the project from August 3, 2016 to August 14, 2016 (inclusive) due to the Sturgis Motorcycle Rally.

### **Field Work Completion**

The Contractor will complete all work on the project by the September 30, 2016 field work completion date.

### **Time Extensions**

The Contractor may request a time extension for the substantial completion requirement and field work completion requirement. The Department will consider these time extension requests using the same considerations that apply when granting an extension of Contract Time under Section 8.7, except:

- 1) Extra work or an increase in quantities will not qualify for an automatic extension of time based on a proportional increase in the contract amount; and,
- 2) In the case of a time extension of the substantial completion requirement, for consideration of all days prior to and including August 14, 2016, the incentive/disincentive amount is \$8,000 per calendar day. In the case of a time extension of the substantial completion requirement, for consideration of all days following August 14, 2016, the incentive/disincentive amount is \$4,000 per calendar day.

### **Failure to Complete on Time**

The Contractor will substantially complete the project prior to the substantial completion requirement or the substantial completion requirement as amended by formally approved time extensions. If the Contractor does not complete the work by the

substantial completion requirement or the substantial completion requirement as amended by formally approved time extensions, the Department will assess liquidated damages in accordance with Section 8.8 in addition to the disincentive assessment for substantial completion. The Department will assess liquidated damages for each calendar day the work (project) is late until the Contractor substantially completes the work.

In the event the Contractor does not substantially complete the work on time, the Department will charge calendar days in accordance with Section 8.6 B.

The Contractor will complete all work on the project prior to the field work completion requirement or the field work completion requirement as amended by formally approved time extensions. If the Contractor does not complete all work by the field work completion requirement or the field work completion requirement as amended by formally approved time extensions, the Department will assess liquidated damages in accordance with Section 8.8. The Department will assess liquidated damages for each working day the work (project) is late until the Contractor completes all field work.

In the event the Contractor does not complete all field work on time, the Department will charge working days in accordance with Section 8.6 C.

### **Expected Adverse Weather Days**

The Department has provided Attachment 1 for information purposes only as a guide to bidders. This table depicts the typical number of adverse weather days expected for any given month, based on historical records. The Department will consider this project a surfacing project in Zone 2.

The Department will consider expected adverse weather days cumulative in nature over the time period when the Contractor is actively pursuing completion of the work. The Department will not consider adverse weather days during an extended period of time when the Contractor is not pursuing completion of the work. When considering a time extension for substantial completion or field work completion of the project, the Engineer will compare the total number of expected adverse weather days against the total number of actual adverse weather days for the time period during which the work was being completed.

\* \* \* \* \*



# ATTACHMENT 1

Figure A - Expected Adverse Weather Days for South Dakota

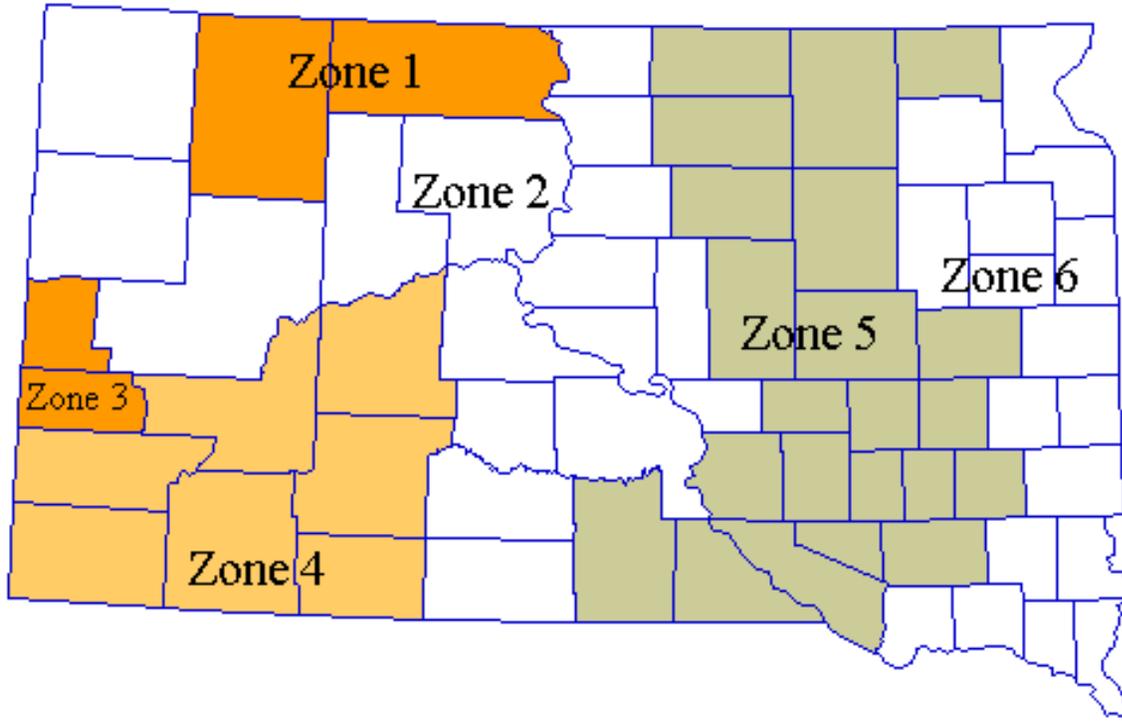


Table 1 - Expected Adverse Weather Days for South Dakota

	Grading Projects						Surfacing and Structural Projects					
	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6
Jan	18	18	16	16	22	24	18	18	15	16	21	23
Feb	19	18	12	14	19	21	19	18	12	14	19	21
Mar	12	10	9	8	11	13	12	10	9	8	10	12
Apr	6	5	8	5	6	6	5	4	6	4	4	4
May	6	6	8	6	6	6	5	5	6	4	4	5
Jun	7	6	7	6	7	8	5	5	5	4	5	6
Jul	5	5	6	5	6	7	4	4	5	3	4	5
Aug	4	4	5	4	5	6	3	3	4	3	4	4
Sep	3	3	4	3	4	5	2	2	3	2	3	4
Oct	4	3	5	3	4	4	3	3	4	2	3	3
Nov	11	9	8	7	10	12	11	9	8	7	10	11
Dec	21	19	15	14	20	22	21	19	15	14	20	22

NOTE: Includes Holidays and Weekends.

Revised: 29 Sep 15, RML

**TABLE OF UNCLASSIFIED EXCAVATION**

Location of Removal Areas	Salvaged Asphalt Mix and Granular Base Material	Salvaged Granular Material	Remove Granular Material	Remove Concrete Pavement	## 2' Subgrade Excavation for Select Subgrade Topping	Waste Material
	CuYds	CuYds	CuYds	CuYds	CuYds	CuYds
I-90 WBL						
Sta. 0+00 -1' to Sta. 6+76.0	114.1	368.1		401.2	2,840.6	471.5
Sta. 74+85.9 to Sta. 86+74.6	182.6	686.2		704.4	5,888.5	1,332.8
Sta. 268+88.1 to Sta. 272+28.1, includes both shoulders	29.2	115.0		260.3	1,548.8	225.0
Sta. 273+51.9 to Sta. 277+51.9, includes both shoulders		59.3		393.2	1,822.1	289.3
Sta. 439+05.0 to Sta. 445+70.0	111.9	263.1		394.1	2,794.5	460.3
		1491.7				
Exit 191 Westbound Ramps						
Sta. 10+19.8 to Sta. 29+70.3 On Ramp	959.0					9.7
Sta. 0+15.3 to Sta. 14+87.1 Off Ramp	727.2					0.8
Exit 192 Westbound Ramps						
Sta. 10+17.8 to Sta. 13+29.8 On Ramp				196.4		86.7
Sta. 7+70.3 to Sta. 10+82.3 Off Ramp				196.4		86.7
Weigh Area						
Sta. 10+19.8 to Sta. 25+29.9						382.3
Westbound Ramp Detours						
Exit 192 In Place On Ramp Detour	** 571.6		# 2,200.6			
Exit 192 In Place Off Ramp Detour	** 445.6		# 1,474.5			
Eastbound Ramp Detours						
Exit 192 Future Off Ramp Detour	** 33.9					** 545.5
Exit 192 Future On Ramp Detour	** 33.9					** 706.4
I-90 Westbound Lanes Full Depth Repair				44.4		
US83 Shoulders						
Sta. 10+95.0 to Sta. 12+20.5 Lt.	10.5					
Sta. 13+46.2 to Sta. 44+71.5 Lt.	209.5					
Sta. 10+93.4 to Sta. 12+09.3 Rt.	9.7					
Sta. 12+73.5 to Sta. 43+77.2 Rt.	208.1					
Subtotals	3,646.7	1,491.7	3,675.1	2,590.4	14,894.5	4,597.0
* TOTAL	30,895.4					

\* Plans quantity will be the basis of measurement and payment for the above mentioned work.

\*\* Material will be removed near the completion of the project. This material can be reused as Base Course, Salvaged to construct the Eastbound ramp detours, no blending required.

# Material will be removed near the completion of the project. The material is 3,675.1 cu.yds. of Pit Run which can be reused to construct the Eastbound ramp detours.

## Quantity includes 3,723.8 cu.yds. of excess material which may be used as Contractor Furnished Borrow Excavation.

**COLD MILLING ASPHALT CONCRETE**

The Los Angeles Abrasion Loss value on the aggregate used for the in place asphalt concrete could not be determined.

Cold Milling Asphalt Concrete is estimated to produce 464.2 tons of salvaged asphalt concrete material. Cold Milled Asphalt Concrete shall be crushed and reused as Base Course, Salvaged and Gravel Cushion, Salvaged provided it is blended at a ratio not exceeding 1 part asphalt concrete material to 1 part Granular Material, Furnish.

**TABLE OF COLD MILLING ASPHALT CONCRETE**

Location	Cold Milling Asphalt Concrete SqYd	Depth of Cold Milling Asphalt Concrete Inches
<b>Exit 191 Westbound On Ramp</b>		
Sta. 10+45.0 to Sta. 10+85.0	87.6	0" to 1"
Sta. 10+85.0 to Sta. 29+30.3	4,039.2	1"
Sta. 29+30.3 to Sta. 29+70.3	514.7	1" to 2"
<b>Exit 191 Westbound Off Ramp</b>		
Sta. 0+15.3 to Sta. 0+55.3	601.2	2" to 1"
Sta. 0+55.3 to Sta. 14+45.0	3,041.9	1"
Sta. 14+45.0 to Sta. 14+85.0	87.6	1" to 0"
<b>TOTAL</b>	<b>8,372.2</b>	

**SALVAGE AND STOCKPILE ASPHALT MIX AND GRANULAR BASE MATERIAL**

Asphalt mix and granular base material shall be salvaged from the location shown in the Table of Salvage and Stockpile Asphalt Mix and Granular Base Material. The salvaged material shall be stockpiled at a site furnished by the Contractor and satisfactory to the Engineer.

The quantity of salvaged asphalt mix and granular base material may vary from the plans. The Contractor will be required to use all the salvaged material on this project by decreasing or increasing the quantity of Base Course or Gravel Cushion as necessary, or as directed by the Engineer. Plans quantity will be the basis of measurement and payment for the above mentioned work.

**SALVAGE AND STOCKPILE ASPHALT MIX AND GRANULAR BASE MATERIAL (CONTINUED)**

No adjustment in the contract unit price per ton for salvaged material will be made because of a variation in salvaged material quantities.

An estimated 7,356.6 tons (3,892.3 cu.yds.) will be salvaged during this operation, including cold milling quantities. The salvaged material will be reused as Base Course, Salvaged and Gravel Cushion, Salvaged. Only 5,306.1 tons of salvaged material will be available for construction of the permanent roadway (mainline, ramps, guardrail, and etc.) due to salvaging operation near the completion of the project. The 5,306.1 tons of salvaged material will be blended with Granular Material, Furnish.

**TABLE OF SALVAGE AND STOCKPILE ASPHALT MIX AND GRANULAR BASE MATERIAL**

Location of Removal Areas	Salvaged Asphalt Mix and Granular Base Material Tons
<b>I-90 WBL</b>	
Sta. 0+00 -1' to Sta. 6+76.0	215.7
Sta. 74+85.9 to Sta. 86+74.6	345.2
Sta. 268+88.1 to Sta. 272+28.1, includes both shoulders	55.2
Sta. 439+05.0 to Sta. 445+70.0	211.5
<b>Exit 191 Westbound Ramps</b>	
Sta. 10+19.8 to Sta. 29+70.3 On Ramp	1,812.5
Sta. 0+15.3 to Sta. 14+87.1 Off Ramp	1,374.4
<b>Westbound Ramp Detours</b>	
Exit 192 In Place On Ramp Detour	** 1,080.2
Exit 192 In Place Off Ramp Detour	** 842.1
<b>Eastbound Ramp Detours</b>	
Exit 192 Future Off Ramp Detour	** 64.1
Exit 192 Future On Ramp Detour	** 64.1
<b>US83 Shoulders</b>	
Sta. 10+95.0 to Sta. 12+20.5 Lt.	19.8
Sta. 13+46.2 to Sta. 44+71.5 Lt.	396.0
Sta. 10+93.4 to Sta. 12+09.3 Rt.	18.3
Sta. 12+73.5 to Sta. 43+77.2 Rt.	393.3
<b>* TOTAL</b>	<b>6,892.4</b>

\* Plans quantity will be the basis of measurement and payment for the above mentioned work.

\*\* Material will be removed near the completion of the project, estimated quantity equals 2,050.5 tons. This material can be reused as Base Course, Salvaged to construct the Eastbound Ramp Detours without blending with Granular Material, Furnished.

**BLEND & STOCKPILE GRANULAR MATERIAL**

Salvage and Stockpile Asphalt Mix and Granular Base Material estimated at 5,306.1 tons shall be blended with 5,306.1 tons of Granular Material, Furnish and shall be blended and stockpiled at the contractor furnished stockpile site(s). A computerized scale along with a scale operator shall be provided by the Contractor at the stockpile site to weigh the salvaged material prior to blending.

Asphalt mix and granular base material shall be blended with Granular Material, Furnish at a rate of 50% salvaged asphalt mix and granular base material and 50% Granular Material, Furnish to obtain stockpile material. Prior to incorporation into the stockpile, cold milled asphalt material shall be run over a 1 1/2" screen to remove large chunks. No further testing of the material will be required. The use of a pugmill to blend the materials will be accepted.

Calibrated conveyor(s) shall be used to provide a uniform blending of the materials. Material shall be blended prior to incorporation into the pile.

All other costs for hauling, stockpiling, and blending asphalt mix and granular base material and Granular Material, Furnish shall be incidental to the contract unit price per ton for "Blend and Stockpile Granular Material".

An estimated 2,885.4 tons of blended material and an estimated 2,050.5 tons of unblended material will be used on this project as Base Course, Salvaged (total Base Course, Salvaged = 4,935.9 tons). An estimated 7,726.8 tons of blended material will be used on this project as Gravel Cushion Salvaged.

**GRANULAR MATERIAL, FURNISH**

Granular Material shall be furnished by the Contractor for use in blending with the salvaged asphalt mix and granular base material from this project.

The Granular Material shall be Base Course meeting the requirements of Section 882.

All other costs for hauling, stockpiling, and blending asphalt mix material and Granular Material, Furnish shall be incidental to the contract unit price per ton for "Blend, Haul & Stockpile Granular Material".

Revised: 29 Sep 15, RML

### SALVAGE AND STOCKPILE GRANULAR MATERIAL

Granular material shall be salvaged from the location shown in the Table of Salvage and Stockpile Granular Material and typical sections. The salvaged material shall be stockpiled at a site furnished by the Contractor and satisfactory to the Engineer.

The quantity of salvaged granular base material may vary from the plans. The Contractor will be required to use all the salvaged material on this project. Plans quantity will be the basis of measurement and payment for the above mentioned work.

No adjustment in the contract unit price per ton for salvaged material will be made because of a variation in salvaged material quantities.

The salvaged material shall be reused on this project as Select Subgrade Topping.

### TABLE OF SALVAGE AND STOCKPILE GRANULAR MATERIAL

Location of Removal Areas	Salvaged Granular Material
	Tons
I-90 WBL	
Sta. 0+00 -1' to Sta. 6+76.0	695.8
Sta. 74+85.9 to Sta. 86+74.6	1,297.0
Sta. 268+88.1 to Sta. 272+28.1, includes both shoulders	217.4
Sta. 273+51.9 to Sta. 277+51.9, includes both shoulders	112.1
Sta. 439+05.0 to Sta. 445+70.0	497.3
* TOTAL	2,819.6

\* Plans quantity will be the basis of measurement and payment for the above mentioned work.

### REMOVE GRANULAR MATERIAL

Location of Removal Areas	Remove Granular Material
	CuYds
Westbound Ramp Detours	
Exit 192 In Place On Ramp Detour	2,200.6
Exit 192 In Place Off Ramp Detour	1,474.5
* TOTAL	3,675.1

\* Plans quantity will be the basis of measurement and payment for the above mentioned work. The material being removed is Pit Run, estimated 3,675.1 cu.yds (6,945.9 tons). The granular material may be reused as Pit Run for the construction of the Eastbound Ramp Detours. Refer to the typical sections for location of material. This quantity is based on a unit weight of 1.89 tons per cubic yard for the reclaimed granular aggregate.

### RECLAIMED CONCRETE AGGREGATE

PCC Pavement (RCA) removed from within the project limits will be crushed to a minus 2.5 inch size. Asphalt from the shoulders and from the asphalt patch areas should be salvaged separately. All in place rebar shall be separated and removed from the RCA. Existing rebar will become the property of the Contractor.

All in place PCC Pavement will be reused on this project. There is an estimated 4,055.7 tons (2,546.0 cu.yds.) of PCC Pavement on this project that will be crushed and reused in the Select Subgrade Topping material. This quantity is based on a unit weight of 118 lbs. per cubic foot for the reclaimed concrete aggregate.

Payment for the placement of RCA is included in the Select Subgrade Topping bid item.

### TABLE OF REMOVE CONCRETE PAVEMENT

Location	In Place PCC Pavement
	SqYds
I-90 - Westbound Mainline	
Sta. 0+00 -1' to Sta. 6+76.0	1,805.3
Sta. 74+85.9 to Sta. 86+74.5	3,169.6
Sta. 268+88.1 to Sta. 272+28.1	906.6
Sta. 273+51.9 to Sta. 277+51.9	1,066.6
Sta. 439+05.0 to Sta. 445+70.0	1,773.3
I-90 Westbound Outside and Median Shoulders	
Sta. 270+78.1 to Sta. 272+28.1	233.3
Sta. 273+51.9 to Sta. 277+51.9	622.2
Exit 192 Westbound Ramps	
Sta. 10+17.8 to Sta. 13+29.8 On Ramp	832.0
Sta. 7+70.3 to Sta. 10+82.3 Off ramp	832.0
I-90 Westbound Lanes Full Depth Repair	200.0
Total	11,440.9

### EXCESS GRANULAR MATERIAL

Excess granular material at the end of project construction will be hauled and stockpiled at the Murdo Maintenance Yard - NE1/4 Sec 13-T2S-R28E Jones County.

### EXCAVATION FOR SELECT SUBGRADE TOPPING

In the places where the PCC Pavement surfacing is being removed (begin/end of project, adjacent bridges, and excavation for clearance under the structures), the upper subgrade soil shall be modified by mixing the excavated soil with salvaged surfacing materials prior to resurfacing.

After the existing PCCP and asphalt shoulders are removed, the existing base course shall be removed and stockpiled. The removed PCCP will be crushed to a minus 2.5 inch size. As the existing base course is lime treated, it may be necessary to crush it also to obtain the minus 2.5 inch material that is desired.

The exposed subgrade will be excavated to a depth of 2 feet below the top of the proposed subgrade, accounting for grade changes. The salvaged PCCP and base course will be blended with the excavated soil and used as "Select Subgrade Topping" to backfill the excavation area. The blended backfill material will consist of a ratio of approximately 3:1 excavated soil to crushed PCCP and salvaged base course. The entire subgrade shall be constructed using this blended material.

If any extremely soft or oversaturated subgrade is encountered during the excavation for select topping, contact the Geotechnical Engineering Activity for assistance with possible mitigation procedures.

It is anticipated that there will be approximately 3,723.8 CuYds of embankment material more than what is needed. The excavated material not needed for the "Select Subgrade Topping" shall be used as Contractor Furnished Borrow Excavation or wasted at a site approved by the Engineer. The excess material may be disposed of in the State ROW to flatten inslopes as approved by the Engineer.

If waste material is disposed of in the State ROW, the removal and replacement of the topsoil and seeding shall be incidental to the contract unit price per cubic yard for "Unclassified Excavation".

Payment to remove the subgrade shall be paid for once as Unclassified Excavation.

**EXISTING EDGE DRAIN OUTLETS**

Prior to construction at slope widening/flattening locations along the length of the project on the WB median and outside shoulders, the Contractor shall locate and protect the Edge Drain Outlets and concrete Headwalls during construction. The Contractor will ensure all outlets function properly during construction. It is estimated that there are approximately 172 edge drain outlets.

Existing edge drain outlets located in the areas of the mainline slope widening/flattening and the ramp gore areas will need to be extended out to the new inslopes with 4" PVC Edge Drain Outlet Pipe and 4" Standard Weight Black Steel Pipe. The 4" Standard Weight Black Steel Pipe will be 5' long at all locations. The in place and new 4" PVC Edge Drain Outlet Pipe lengths will be adjusted to ensure the Concrete Headwall will be located properly along the new inslope. The Concrete Headwalls shall be removed and reset as directed by the Engineer. All costs associated with furnishing and extending/reducing the pipes, removing/resetting the concrete headwalls, fill material, bends, couplers, caps, fittings, labor, equipment, tools and incidentals necessary to satisfactorily complete the work shall be incidental to the contract lump sum price for Incidental Work.

Any edge drain outlet pipes and headwalls damaged during construction shall be repaired at the Contractor's expense and to the satisfaction of the Engineer.

**CONTRACTOR FURNISHED BORROW EXCAVATION**

The Contractor shall provide a suitable site for Contractor Furnished Borrow Excavation material to be used at the locations listed in the Table of Contractor Furnished Borrow Excavation.

Placement of the Contractor Furnished Borrow Excavation will be to the satisfaction of the Engineer.

Water for Embankment is estimated at the rate of 10 gallons of water per cubic yard of Contractor Furnished Borrow Excavation

The Contractor is responsible for obtaining all required permits and clearances for the borrow site as stated in Commitment I: Historical Preservation Office Clearances in Section A. The borrow material shall be approved by the Engineer.

Restoration of the Contractor Furnished Borrow Excavation site shall be the responsibility of the Contractor.

The Unclassified Excavation waste material may be used as Contractor Furnished Borrow Excavation for inslope flattening and widening as required, see typical sections. The outside and median shoulder inslope shall be at a 6:1 or flatter to at least the clear zone (36' from edge of median driving lane and 30' from edge of outside driving lane). All slopes for median ditch blocks and maintenance crossover shall be a 10:1 or flatter. Care shall be taken so that a minimum 4" depth of topsoil shall be placed over the entire disturbed area while proper drainage is maintained. Final acceptance of the inslopes will be at the discretion of the Engineer.

**TABLE OF CONTRACTOR FURNISHED BORROW EXCAVATION**

Location	Contractor Furnished Borrow Excavation	Water For Embankme nt
	CuYds	Mgal
<b>Mainline – Inslope Flattening</b>		
Sta. 0+00 -1' to Sta. 445+70, Outside and Median Shoulders	17,800.0	229.6
Culvert End Replacement	115.0	1.5
<b>Gore Areas</b>		
Exit 191 On Ramp	433.3	5.6
Exit 191 Off Ramp	100.6	1.3
Exit 192 On Ramp	668.9	8.6
Exit 192 Off Ramp	223.1	2.9
Weigh Area On Ramp	337.0	4.3
Weigh Area Off Ramp	131.1	1.7
<b>Ramps</b>		
Exit 191 On Ramp Sta. 10+19.8 to Sta. 29+70.3	1,589.0	20.5
Exit 191 Off Ramp Sta. 0+15.3 to Sta. 14+87.1	1,215.8	15.7
Exit 192 On Ramp Sta. 10+17.8 to Sta. 13+29.8	207.3	2.7
Exit 192 Off Ramp Sta. 7+70.3 to Sta. 10+82.3	212.6	2.7
Weigh Area On Ramp Sta. 10+14.0 to Sta. 15+61.3	119.2	1.5
Weigh Area Off Ramp Sta. 20+12.2 to Sta. 25+56.4	116.4	1.5
<b>Guardrail Westbound Lane – Permanent</b>		
MRM 191.15 WB Median Shoulder	1,768.3	22.8
MRM 192.65 WB Median Shoulder	911.9	11.8
Str. # 38-200-190 End Bridge Outside Shoulder	46.1	0.6
End Bridge Median Shoulder	662.6	8.5
<b>Guardrail Westbound Lane – Traffic Control</b>		
Str. # 38-200-190 Begin Bridge Outside Shoulder	67.6	0.9
Begin Bridge Median Shoulder	49.1	0.6
<b>Guardrail Eastbound Lane – Traffic Control</b>		
Str. # 38-200-191 End Bridge Outside Shoulder	82.0	1.1
End Bridge Median Shoulder	43.0	0.6
<b>TOTAL</b>	<b>26,899.9</b>	<b>347.0</b>

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**BACKFILLING OF DIGOUTS**

Included in the Estimate of Quantities are 50 cubic yards of Base Course or per mile and 0.6 Mgal of Water for Granular Material per mile for backfilling of digouts of the existing surface at locations to be designated by the Engineer. Compaction of the Base Course for the digouts shall be to the satisfaction of the Engineer. An estimated 8.402 miles is required for I-90 Westbound lanes and an estimated 0.810 miles is required for US83.

**CONSTRUCTION HAUL ROAD**

Included in the Estimate of Quantities are 1,000 tons of Gravel Cushion or Gravel Cushion, Salvaged per mile and 12 MGal of Water for Granular Material per mile for the purpose of haul road construction. The use of this material will be at the discretion of the Contractor. Any additional construction and removal for the construction haul road shall be the Contractor's responsibility. The Contractor shall receive no additional compensation for this work. An estimated 8.401 miles required for project.

**BASE COURSE, SALVAGED**

The Base Course, Salvaged shall be obtained from the stockpile site(s) provided by the Contractor from the blended and salvaged material produced on this project and may be used without further testing.

Base Course, Salvaged taken from stockpile sites shall be run over a 1 1/2 inch screen prior to placement.

Base Course, Salvaged shall be compacted according to the requirements of the Specifications. All other requirements for Base Course, Salvaged shall apply.

**GRAVEL CUSHION, SALVAGED**

The Gravel Cushion, Salvaged shall be obtained from the stockpile site(s) provided by the Contractor from the blended and salvaged material produced on this project and may be used without further testing.

Gravel Cushion, Salvaged taken from stockpile sites shall be run over a 1 1/2 inch screen prior to placement.

The Contractor will be required to use all the Gravel Cushion, Salvaged on this project by decreasing or increasing the quantity of Gravel Cushion necessary, or as directed by the Engineer.

Gravel Cushion, Salvaged shall be compacted according to the requirements of the Specifications. All other requirements for Gravel Cushion, Salvaged shall apply.