



State of Utah

GARY R. HERBERT  
*Governor*

SPENCER J. COX  
*Lieutenant Governor*

## DEPARTMENT OF TRANSPORTATION

CARLOS M. BRACERAS, P.E.  
*Executive Director*

SHANE M. MARSHALL, P.E.  
*Deputy Director*

November 1, 2016

TO ALL BIDDERS CONCERNED:

SUBJECT:

F-0040(155)28 / Pin 013721  
US-40; Daniels Canyon Shoulder Repair  
Addendum Number: 2

To Whom It May Concern:

We are submitting the following changes to the subject project.

1. The Bid Opening has been revised. The Bid Opening date has been changed from November 8, 2016 to **November 15, 2016**.
2. The "Table of Contents" has been revised. Special Provision 02721M "Untreated Base Course (UTBC)" has been added.
3. The "Bidding Schedule" has been revised.

Bidders **must download** the revised Bidder's Schedule "Bid Item Version 3" from the UDOT website at <http://www.udot.utah.gov/index.php?m=c&tid=317>

Item No. 31, 02721001P "Untreated Base Course (Shouldering)" has been changed to 02721001\* to refer to the 02721M Project Special provision that has been added.

Item No. 81, 01571002P "12 Foot Check Dam - 12 Inch Fiber Roll" has had the Unit changed to "Each".

Item No. 91, 02721001P "Untreated Base Course (Shouldering)" has been changed to 02721001\* to refer to the 02721M Project Special provision that has been added.

Item No. 124, 01571002P "12 Foot Check Dam - 12 Inch Fiber Roll" has had the Unit changed to "Each".

Item No. 133, 02721001P "Untreated Base Course (Shouldering)" has been changed to 02721001\* to refer to the 02721M Project Special provision that has been added.

4. The “Measurement and Payment” has been revised.

Item No. 31, 02721001P “Untreated Base Course (Shouldering)” has been changed to 02721001\* and additional clarification has been added on what is included under the payment of this item.

Item No. 81, 01571002P “12 Foot Check Dam - 12 Inch Fiber Roll” has had the Unit changed to “Each”.

Item No. 91, 02721001P “Untreated Base Course (Shouldering)” has been changed to 02721001\* and additional clarification has been added on what is included under the payment of this item.

Item No. 124, 01571002P “12 Foot Check Dam - 12 Inch Fiber Roll” has had the Unit changed to “Each”.

Item No. 133, 02721001P “Untreated Base Course (Shouldering)” has been changed to 02721001\* and additional clarification has been added on what is included under the payment of this item.

5. Special Provision 02721M “Untreated Base Course (UTBC)” has been added
6. Plan Sheet SM-01, SM-13 and SM-18 have been revised.

Please consider these revisions before submitting your bid.

**\*\*\* DUE TO THE SIZE ONLY THE COVER LETTER WILL BE E-MAILED OR FAXED. \*\*\***

**\*\*\* ADDENDUM IS AVAILABLE AND MAY BE DOWNLOADED FROM THE UDOT WEBSITE AT <http://eprpw.dot.utah.gov>**

**RECEIPT OF THIS ADDENDUM MUST BE ACKNOWLEDGED WHEN YOU SUBMIT YOUR BID. YOUR BID WILL BE DECLARED NON-RESPONSIVE IF YOU DO NOT ACKNOWLEDGE THIS ADDENDUM.**

Sincerely,

**Larry Montoya**

Digitally signed by Larry Montoya  
DN: o=Utah Department of Transportation,  
email=lmontoya@utah.gov, cn=Larry  
Montoya  
Date: 2016.11.01 10:24:27 -06'00'

Larry Montoya  
Project Manager

Attach:

## Federal Projects With Full Size Plan Sheets

	<u>Section No.</u>	<u>Title – Type (current date)</u>
1.	00120M	Bidding Requirements and Conditions – Supplemental Specification (02/26/15)
2.	00221S	Bidding Contract Time – Innovative Contracting (P+T) Special Provision (Calendar Day Projects) (07/08/15)
3.	00515M	Contract Award and Execution – Construction Special Provision, Innovative Contracting (P+T) Special Provision (02/26/15)
4.	00515M	Contract Award and Execution – Supplemental Specification (02/26/15)
5.	00516S	Additive Work Bidding – Innovative Contracting Special Provision (03/14/13)
6.	00555M	Prosecution and Progress – Project Special Provision (07/19/16)
7.	00570M	Definitions – Supplemental Specification (10/22/15)
8.	00725M	Scope of Work – Innovative Contracting (P+T) Special Provision (03/12/15)
9.	00727M	Control of Work – Supplemental Specification (10/22/15)
10.	00820M	Legal Relations and Responsibility to the Public – Project Special Provision (07/19/16)
11.	00820M	Legal Relations and Responsibility to the Public – Supplemental Specification (08/27/15)
12.	01282M	Payment – Supplemental Specification (08/27/15)
13.	01315S	Public Information Services – Project Special Provision (07/19/16)
14.	01355M	Environmental Compliance – Supplemental Specification (10/31/13)
15.	01452M	Pavement Smoothness – Supplemental Specification (06/25/15)
16.	01455M	Material Quality Requirements – Materials Special Provision (04/13/16)
17.	01455M	Material Quality Requirements – Supplemental Specification (02/25/16)
18.	01456M	Materials Dispute Resolution – Supplemental Specification (02/28/13)
19.	01554M	Traffic Control – Project Special Provision (07/19/16)
20.	01554M	Traffic Control – Supplemental Specification (11/06/14)
21.	01571	Temporary Environmental Controls – Supplemental Specification (06/25/15)
22.	01721	Survey – Supplemental Specification (02/25/16)
23.	02056M	Embankment, Borrow, and Backfill – Supplemental Specification (04/30/15)
24.	02061S	Rockery Slopes – Project Special Provision (08/10/16)
25.	02072S	Geogrid – Sub-Grade Stabilization – Materials Special Provision (03/12/14)
26.	02075M	Geotextiles – Supplemental Specification (04/30/15)
27.	02316M	Roadway Excavation – Supplemental Specification (06/26/14)
28.	02373M	RIPRAP – Supplemental Specification (06/27/13)
29.	02610	Drainage Pipe – Supplemental Specification (02/27/14)

## Federal Projects With Full Size Plan Sheets

30. 02633M Concrete Drainage Structures – Supplemental Specification (10/22/15)
31. 02721M Untreated Base Course (UTBC) - Project Special Provision (11/1/16)
32. 02726S Access Road – Project Special Provision (07/19/16)
33. 02735M Micro-Surfacing – Materials Special Provision (12/16/14)
34. 02737S Soft Spot Repair – Project Special Provision (03/18/15)
35. 02741M Hot Mix Asphalt (HMA) – Materials Special Provision (09/08/14)
36. 02742S Project Specific Surfacing Requirements – Department Special Provision (06/30/15)
37. 02746M Hydrated Lime – Materials Special Provision (11/14/12)
38. 02748M Prime Coat/Tack Coat – Project Special Provision (07/13/16)
39. 02748M Prime Coat/Tack Coat – Supplemental Specification (10/22/15)
40. 02761 Longitudinal Rumble Strip – Supplemental Specification (04/30/15)
41. 02765M Pavement Marking Paint – Materials Special Provision (10/05/15)
42. 02765M Pavement Marking Paint – Supplemental Specification (02/26/15)
43. 02768M Pavement Marking Materials – Supplemental Specification (08/29/13)
44. 02785S Chip Seal Coat – Project Special Provision (07/19/16)
45. 02822M Right-of-Way Fence and Gate – Supplemental Specification (08/30/12)
46. 02841M W-Beam Guardrail – Supplemental Specification (08/29/13)
47. 02843M Crash Cushions and Barrier End Treatments – Supplemental Specification (06/27/13)
48. 02844M Concrete Barrier – Supplemental Specification (10/22/15)
49. 02890M Retroreflective Sheeting – Supplemental Specification (11/06/14)
50. 02891M Traffic Sign – Supplemental Specification (02/28/13)
51. 02924S Noxious Weed Control – Department Special Provision (08/10/16)
52. 03055M Portland Cement Concrete – Supplemental Specification (10/22/15)
53. 03211M Reinforcing Steel and Welded Wire – Supplemental Specification (10/25/12)
54. 03390 Concrete Curing – Supplemental Specification (10/22/15)
55. 03393M Concrete Healer/Sealer – Supplemental Specification (08/30/12)
56. 06055M Timber and Timber Treatment – Supplemental Specification (08/30/12)



## Utah Department of Transportation Bidder's Schedule

**Bid Opening Date:** 11/15/2016  
**Project Number:** F-0040(155)28  
**PIN Description:** US-40; Daniels Canyon Shoulder Repair  
**Concept:** Adding a lane/shoulder  
**Location:** US-40; MP 23.30 - 31.60

**Region:** REGION 3  
**County:** WASATCH

**Funding:** FEDERAL  
**Bid Items Version#:** 3

**DBE Goal:** 5.00%

**Innovative Contracting**

#	Item	Description	Quantity	Unit
<b>10 - ROADWAY</b>				
1	012850010	Mobilization	1	lump sum
2	01315010*	Public Information Services	1	lump sum
3	01554001*	Traffic Control	1	lump sum
4	01554002*	Portable Variable Message Sign	9	device day
5	01571002P	12 Foot Check Dam - 12 Inch Fiber Roll	88	each
6	015710075	Drop-Inlet Barrier - 18 Inch Fiber Roll	120	foot
7	015710095	Fiber Roll - 12 Inch	40300	foot
8	015710115	Pipe-Inlet Barrier - 18 Inch Fiber Roll	324	foot
9	015720020	Dust Control and Watering	3809	1000 gallons
10	017210010	Survey	1	lump sum
11	020560015	Granular Borrow (Plan Quantity)	23189	cubic yard
12	02061001*	Rockery Slope	410	foot
13	02075000*	Geogrid - Subgrade Improvement, Type 2	3808	square yard
14	020750010	Geotextiles - Separation	210	square yard
15	022210075	Remove Guardrail	6449	foot
16	022210080	Remove Fence	439	foot
17	02221009P	Remove Pipe Culvert	10	foot
18	022210100	Remove Culvert End Section	4	each
19	022210170	Remove Precast Concrete Barrier	6631	foot
20	02231002P	Clearing and Grubbing (Plan Quantity)	21	acre
21	02316002P	Roadway Excavation (Plan Quantity)	40641	cubic yard
22	023730010	Loose Riprap	125	cubic yard
23	023760020	Flexible Channel Liner	5687	square yard
24	02610117P	24 Inch Culvert, Metal Pipe, Class C, Corrugated	437	foot
25	02610118P	15 Inch Culvert, Metal Pipe, Class C, Corrugated	60	foot
26	02610119P	36 Inch x 48 Inch Culvert, Metal Pipe, Class C, Corrugated	10	foot
27	026130040	Culvert End Section 24 inch	8	each
28	02613005P	Culvert End Section 36 x 48 Inch	1	each
29	02613010D	Safety Slope End Section for Circular Pipe 24 inch	1	each
30	026330120	Concrete Drainage Structure 3 ft to 5 ft Deep - CB 9	5	each
31	02721001*	Untreated Base Course (Shouldering)	25118	foot
32	027210020	Untreated Base Course (Plan Quantity)	15257	cubic yard
33	02726030*	4 Inch Gravel Access	8	each
34	02735002P	Micro Scratch Course	25770	foot
35	02737003*	Borrow Soft Spot Repair	3808	square yard
36	02741005*	HMA - 1/2 inch	19063	ton
37	02748004P	Emulsified Asphalt	21	ton
38	02761002P	Longitudinal Rumble Strip - Asphalt	66616	foot
39	02761003P	Continuous Longitudinal Rumble Strip - Asphalt	33411	foot
40	02765005*	Pavement Marking Paint	1435	gallon
41	02785002*	Chip Seal Coat	164337	square yard

\*Note: Item numbers ending with "\*" or "P" identify a change to the Standard Specification, Supplemental Specifications or Measurement and payment. Read all related documents carefully.



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**Project Number:** F-0040(155)28

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**Innovative Contracting**

**Bid Items Version#:** 3

**DBE Goal:**

#	Item	Description	Quantity	Unit
<b>10 - ROADWAY</b>				
42	027850060	Emulsified Asphalt LMCRS-2	243	ton
43	028220010	Right-of-Way Fence, Type A (Metal Post)	434	foot
44	02822010P	Right-of-Way Brace Post - Type A	13	each
45	028410030	W-Beam Guardrail Transition Element	19	each
46	028410056	W-Beam Guardrail Curved	27	foot
47	028410066	W-Beam Guardrail Nested - various spans	38	foot
48	028410090	W-Beam Guardrail Anchor Type 1	2	each
49	028410097	W-Beam Guardrail 3 ft 1 1/2 inch on center punched and 84 inch Steel Post	22270	foot
50	028420010	Delineator Type I	141	each
51	028420030	Delineator - Culvert Marker	18	each
52	028420040	Delineator - Maintenance Marker	4	each
53	028430035	End Treatment Type G	15	each
54	02843003P	End Treatment Type F	1	each
55	028430040	End Treatment Type H	16	each
56	02843004P	Relocate End Treatment Type F	1	each
57	028440010	Precast Concrete Barrier - 32 Inch (New Jersey Shape)	4128	foot
58	028440070	Precast Concrete Constant Slope Barrier-42 Inch, 32 Inch(New Jersey Shape)Transition, No Stabiz Pins	4	each
59	028440180	Cast-In-Place Concrete Constant Slope Barrier - 42 Inch Stepped Median Barrier	67	foot

### 30 - LANDSCAPING

60	02376001P	Steep-Slope Erosion Control (Plan Quantity)	430	square yard
61	02911001P	Wood Fiber Mulch (Plan Quantity)	12	acre
62	029120050	Strip, Stockpile, and Spread Topsoil (Plan Quantity)	107034	square yard
63	02922001P	Drill Seed (Plan Quantity)	8	acre
64	02922003P	Broadcast Seed (Plan Quantity)	5	acre
65	02924000*	Noxious Weed Control	1	acre
66	029310010	Pole Planting	20	each
67	029310020	Willow Cutting	60	each

### 40 - SIGNING

68	028910020	Sign Type A-1	158	square foot
69	028910042	Sign Type A-1, 24 inch x 24 inch	5	each
70	028910065	Sign Type A-1, 36 inch X 36 inch	9	each
71	028910075	Sign Type A-2	79	square foot
72	028910103	Sign Type A-2, 24 inch x 24 inch	2	each
73	028910120	Sign Type A-2, 36 inch X 36 inch	2	each
74	028910270	Remove Sign Less Than 20 Square Feet	24	each

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**County:** WASATCH

**Funding:** FEDERAL  
**Bid Items Version#:** 3

**DBE Goal:**

**Innovative Contracting**

#	Item	Description	Quantity	Unit
<b>40 - SIGNING</b>				
75	028910285	Relocate Sign Less Than 20 Square Feet	2	each
76	028910320	Slipbase Sign Base (B3)	41	each
77	028910365	Sign Post P3	30	each
78	028910370	Sign Post P4	11	each

### 112 - ADDITIVE BIDDING

Description: Additive #01:

79	012850010	Mobilization	1	lump sum
80	01554001*	Traffic Control	1	lump sum
81	01571002P	12 Foot Check Dam - 12 Inch Fiber Roll	8	each
82	015710095	Fiber Roll - 12 Inch	3688	foot
83	015720020	Dust Control and Watering	359	1000 gallons
84	017210010	Survey	1	lump sum
85	020560015	Granular Borrow (Plan Quantity)	1770	cubic yard
86	02075000*	Geogrid - Subgrade Improvement, Type 2	309	square yard
87	022210075	Remove Guardrail	1025	foot
88	02231002P	Clearing and Grubbing (Plan Quantity)	2	acre
89	02316002P	Roadway Excavation (Plan Quantity)	3224	cubic yard
90	023760020	Flexible Channel Liner	621	square yard
91	02721001*	Untreated Base Course (Shouldering)	1918	foot
92	027210020	Untreated Base Course (Plan Quantity)	1219	cubic yard
93	02726030*	4 Inch Gravel Access	1	each
94	02735002P	Micro Scratch Course	2046	foot
95	02737003*	Borrow Soft Spot Repair	309	square yard
96	02741005*	HMA - 1/2 inch	1309	ton
97	02748004P	Emulsified Asphalt	2	ton
98	02761002P	Longitudinal Rumble Strip - Asphalt	5114	foot
99	02761003P	Continuous Longitudinal Rumble Strip - Asphalt	2557	foot
100	02765005*	Pavement Marking Paint	113	gallon
101	02785002*	Chip Seal Coat	12713	square yard
102	027850060	Emulsified Asphalt LMCRS-2	19	ton
103	028410030	W-Beam Guardrail Transition Element	1	each
104	028410056	W-Beam Guardrail Curved	13	foot
105	028410090	W-Beam Guardrail Anchor Type 1	1	each
106	028410097	W-Beam Guardrail 3 ft 1 1/2 inch on center punched and 84 inch Steel Post	2469	foot
107	028420010	Delineator Type I	7	each
108	028420040	Delineator - Maintenance Marker	1	each
109	028430035	End Treatment Type G	2	each
110	02843003P	End Treatment Type F	1	each
111	028430040	End Treatment Type H	1	each

\*Note: Item numbers ending with "\*" or "P" identify a change to the Standard Specification, Supplemental Specifications or Measurement and payment. Read all related documents carefully.



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**Location:** US-40; MP 23.30 - 31.60

**Region:** REGION 3

**County:** WASATCH

**Funding:** FEDERAL

**Innovative Contracting**

**Bid Items Version#:** 3

**DBE Goal:**

#	Item	Description	Quantity	Unit
<b>112 - ADDITIVE BIDDING</b>				
Description: Additive #01:				
112	028440070	Precast Concrete Constant Slope Barrier-42 Inch, 32 Inch(New Jersey Shape)Transition, No Stabiz Pins	2	each
113	028440180	Cast-In-Place Concrete Constant Slope Barrier - 42 Inch Stepped Median Barrier	20	foot
114	028910075	Sign Type A-2	4	square foot
115	028910270	Remove Sign Less Than 20 Square Feet	1	each
116	028910320	Slipbase Sign Base (B3)	1	each
117	028910365	Sign Post P3	1	each
118	02911001P	Wood Fiber Mulch (Plan Quantity)	1	acre
119	029120050	Strip, Stockpile, and Spread Topsoil (Plan Quantity)	7535	square yard
120	02922001P	Drill Seed (Plan Quantity)	1	acre
121	02922003P	Broadcast Seed (Plan Quantity)	1	acre

### 112 - ADDITIVE BIDDING

Description: Additive #02:

122	012850010	Mobilization	1	lump sum
123	01554001*	Traffic Control	1	lump sum
124	01571002P	12 Foot Check Dam - 12 Inch Fiber Roll	34	each
125	015710095	Fiber Roll - 12 Inch	368	foot
126	015720020	Dust Control and Watering	301	1000 gallons
127	017210010	Survey	1	lump sum
128	020560015	Granular Borrow (Plan Quantity)	1429	cubic yard
129	02075000*	Geogrid - Subgrade Improvement, Type 2	198	square yard
130	02231002P	Clearing and Grubbing (Plan Quantity)	1	acre
131	02316002P	Roadway Excavation (Plan Quantity)	2897	cubic yard
132	023760020	Flexible Channel Liner	1848	square yard
133	02721001*	Untreated Base Course (Shouldering)	1615	foot
134	027210020	Untreated Base Course (Plan Quantity)	913	cubic yard
135	02735002P	Micro Scratch Course	1722	foot
136	02737003*	Borrow Soft Spot Repair	198	square yard
137	02741005*	HMA - 1/2 inch	1225	ton
138	02748004P	Emulsified Asphalt	2	ton
139	02761002P	Longitudinal Rumble Strip - Asphalt	4306	foot
140	02761003P	Continuous Longitudinal Rumble Strip - Asphalt	2153	foot
141	02765005*	Pavement Marking Paint	107	gallon
142	027680105	Pavement Message (Preformed Thermoplastic)	2	each
143	02785002*	Chip Seal Coat	10530	square yard
144	027850060	Emulsified Asphalt LMCRS-2	16	ton
145	028410030	W-Beam Guardrail Transition Element	2	each
146	028410097	W-Beam Guardrail 3 ft 1 1/2 inch on center punched and 84 inch Steel Post	925	foot
147	028420010	Delineator Type I	13	each
148	028420040	Delineator - Maintenance Marker	2	each

\*Note: Item numbers ending with "\*" or "P" identify a change to the Standard Specification, Supplemental Specifications or Measurement and payment. Read all related documents carefully.



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**County:** WASATCH

**Funding:** FEDERAL

**Innovative Contracting**

**Bid Items Version#:** 3

**DBE Goal:**

#	Item	Description	Quantity	Unit
<b>112 - ADDITIVE BIDDING</b>				
Description: Additive #02:				
149	028430040	End Treatment Type H	2	each
150	028440010	Precast Concrete Barrier - 32 Inch (New Jersey Shape)	320	foot
151	028910020	Sign Type A-1	18	square foot
152	028910065	Sign Type A-1, 36 inch X 36 inch	1	each
153	028910075	Sign Type A-2	10	square foot
154	028910270	Remove Sign Less Than 20 Square Feet	2	each
155	028910320	Slipbase Sign Base (B3)	5	each
156	028910365	Sign Post P3	4	each
157	028910370	Sign Post P4	1	each
158	02911001P	Wood Fiber Mulch (Plan Quantity)	1	acre
159	029120050	Strip, Stockpile, and Spread Topsoil (Plan Quantity)	5552	square yard
160	02922001P	Drill Seed (Plan Quantity)	1	acre
161	02922003P	Broadcast Seed (Plan Quantity)	1	acre

### 180 - TIME AND/OR LANE RENTAL

162	00221000*	Contract Time - Base Bid	Date Range: 80 - 100	0 day
163	00221003*	Contract Time - Time Segment 2 - Paint	Date Range: 1 - 4	0 day
164	00221004*	Contract Time - Time Segment 3 - Plantings	Date Range: 1 - 4	0 day

### 185 - ADDITIVE TIME AND/OR LANE RENTAL

165	00221001*	Contract Time - Additive #1	Date Range: 10 - 30	0 day
166	00221002*	Contract Time - Additive #2	Date Range: 10 - 30	0 day

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# Measurement and Payment

Project # F-0040(155)28

11/01/2016

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Item #	Bid Item Number	Bid Item Name	UOM
1	012850010	Mobilization	lump sum
		<b>Amount Paid</b>	<b>When Paid</b>
		The lesser of 25% of Mobilization or 2.5% of contract The lesser of 50% of Mobilization or 5% of contract The lesser of 75% of Mobilization or 7.5% of contract The lesser of 100% of Mobilization or 10% of contract Amount bid in excess of 10% of contract price.	With first estimate With estimate following completion of 5% of contract With estimate following completion of 10% of contract With estimate following completion of 20% of contract Project Acceptance-Final
Includes all costs associated with Railroad Flagging, inspection, and cleanup crew according to Section 00725.			
2	01315010*	Public Information Services	lump sum
25% of bid item amount. With first estimate.			
Remaining portion of bid item paid as a percentage of the contract completed. With each subsequent estimate.			
3	01554001*	Traffic Control	lump sum
25% of the bid item amount paid with first estimate. Remaining portion of bid item paid as a percentage of the contract completed with each subsequent estimate. Includes the cost to provide, install and maintain Variable Message Signs (VMS) during construction.			
4	01554002*	Portable Variable Message Sign	device day
Includes the cost to provide, install and maintain Variable Message Signs (VMS) three days prior to construction.			
5	01571002P	12 Foot Check Dam - 12 Inch Fiber Roll	each
In final position.			
6	015710075	Drop-Inlet Barrier - 18 Inch Fiber Roll	foot
Measured along centerline of fiber roll			
7	015710095	Fiber Roll - 12 Inch	foot
Measured along centerline of fiber roll.			
8	015710115	Pipe-Inlet Barrier - 18 Inch Fiber Roll	foot
Measured along centerline of fiber roll.			
9	015720020	Dust Control and Watering	1000 gallons
10	017210010	Survey	lump sum
		25% of the bid item amount A total of 40% of bid item amount A total of 75% of bid item amount A total or 90% of bid item amount	When the project is 5% complete When the project is 10% complete When the project is 50% complete When the project is 75% complete
The Department retains the remaining 10 percent of bid item amount until the project is completed and the red-lined hard copy plan set showing as-constructed features denoting changes from the original design is provided to the Engineer and verified complete.			
11	020560015	Granular Borrow (Plan Quantity)	cubic yard
In final position			
12	02061001*	Rockery Slope	foot
Includes all labor, equipment, and materials necessary to construct rockery slope according to the project plans including, but not limited to, excavation, erosion control geotextile, free draining granular backfill, transporting and placement rocks, embankment, and final grading.			
13	02075000*	Geogrid - Subgrade Improvement, Type 2	square yard
Includes all labor, materials and equipment associated with Geogrid - Subgrade Improvement, Type 2 placement as part of Borrow Soft Spot Repair. Estimated quantities are based on preliminary field review for bidding purposes only. Repair the actual quantities determined by the Engineer. Geogrid - Subgrade Improvement, Type 2 may be reduced, deleted, or increased over the bid quantities from the contract. The price of the actual quantity will be paid at the contract unit price if any of these situations occur. Quantity does not include overlap.			
14	020750010	Geotextiles - Separation	square yard



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Item #	Bid Item Number	Bid Item Name	UOM
		Measurement does not include overlaps	
15	022210075	Remove Guardrail	foot
		Includes posts, end treatments, transition elements, and anchorages	
16	022210080	Remove Fence	foot
		Includes all line posts, brace posts, and foundations	
17	02221009P	Remove Pipe Culvert	foot
		Includes all attached parts and connections	
18	022210100	Remove Culvert End Section	each
19	022210170	Remove Precast Concrete Barrier	foot
20	02231002P	Clearing and Grubbing (Plan Quantity)	acre
		Includes the removal of all trees within the area to be cleared.	
21	02316002P	Roadway Excavation (Plan Quantity)	cubic yard
		Includes excavation of all types of materials. Including soil and rock.	
22	023730010	Loose Riprap	cubic yard
		Calculated using the in-place surface area and specified thickness.	
23	023760020	Flexible Channel Liner	square yard
		Measurement does not include overlaps.	
24	02610117P	24 Inch Culvert, Metal Pipe, Class C, Corrugated	foot
		A. Measured along centerline of pipe B. Trench excavation, pipe bedding and backfill as shown in the Standard Drawings are incidental to construction and no separate payment will be made. C. Connections to drainage structures or features are incidental to construction and no separate payment will be made. D. No separate payment will be made for required inspection and testing. E. Includes material cost and placement of flowable fill as backfill to the bottom of the new pavement section.	
25	02610118P	15 Inch Culvert, Metal Pipe, Class C, Corrugated	foot
		A. Measured along centerline of pipe B. Trench excavation, pipe bedding and backfill as shown in the Standard Drawings are incidental to construction and no separate payment will be made. C. Connections to drainage structures or features are incidental to construction and no separate payment will be made. D. No separate payment will be made for required inspection and testing. E. Includes material cost and placement of flowable fill as backfill to the bottom of the new pavement section.	
26	02610119P	36 Inch x 48 Inch Culvert, Metal Pipe, Class C, Corrugated	foot
		A. Measured along centerline of pipe B. Trench excavation, pipe bedding and backfill as shown in the Standard Drawings are incidental to construction and no separate payment will be made. C. Connections to drainage structures or features are incidental to construction and no separate payment will be made. D. No separate payment will be made for required inspection and testing. E. Includes material cost and placement of flowable fill as backfill to the bottom of the new pavement section.	
27	026130040	Culvert End Section 24 inch	each
28	02613005P	Culvert End Section 36 x 48 Inch	each
29	02613010D	Safety Slope End Section for Circular Pipe 24 inch	each
		Includes all appurtenances and labor to furnish and install a complete safety slope end section as shown on Standard Drawing DG-6.	
30	026330120	Concrete Drainage Structure 3 ft to 5 ft Deep - CB 9	each
		A. Consists of all necessary materials required to make a complete drainage structure including but not limited to the following: Concrete, reinforcing steel, grate and frame, manhole steps, and any other items required in standard drawings. B. The connection to any pipe culvert or other drainage feature will be incidental to construction and no separate payment will be made for this work. C. The Department will pay a percentage of the unit bid price in addition to the price for each structure, proportional to volume changes (example: a 4 ft deep box increased by 1.5 ft, the percentage of increase in payment is $1.5 \div 4 \times 100$ ) for any required field changes larger	



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Item #	Bid Item Number	Bid Item Name	UOM
		than 1 foot of specified plan dimensions. D. The Department will make no separate payment for testing upon failure of visual inspection.	
31	02721001*	Untreated Base Course (Shouldering)	foot
		Includes all work incidental to placement of shouldering material. Includes clearing of vegetation, hauling, placement, grading, and compaction of UTBC. Includes dust control and watering.	
32	027210020	Untreated Base Course (Plan Quantity)	cubic yard
33	02726030*	4 Inch Gravel Access	each
		Includes the labor, materials, and grading necessary to construct driveway approach, including Untreated Base Course (UTBC). Does not include roadway excavation.	
34	02735002P	Micro Scratch Course	foot
		Measurement is along the existing centerline rumble strips to be filled. Includes length (not including gaps), 4 foot width, and depth of microsurface placed to fill rumble strip depression.	
35	02737003*	Borrow Soft Spot Repair	square yard
		Includes all labor, materials and equipment incidental to the Soft Spot Repair, including roadway excavation, disposal of excavated material, hauling, placement, compaction, and borrow or other materials as approved by the Engineer. Includes Dust Control and Watering. Estimated quantities are based on preliminary field review for bidding purposes only. Actual quantities needed for repair will be determined by the Engineer. Borrow Soft Spot Repair may be reduced, deleted, or increased beyond the bid quantities listed in the contract. Actual quantities placed will be paid at the contract unit price.	
36	02741005*	HMA - 1/2 inch	ton
		Includes aggregates, asphalt binder, hydrated lime, and other additives, etc.	
37	02748004P	Emulsified Asphalt	ton
		Measurement will be taken from weight tickets provided from a certified scale. Payment will be adjusted to the percentage of oil content of the emulsion.	
38	02761002P	Longitudinal Rumble Strip - Asphalt	foot
		Measured length includes grind areas and gaps between sequences. Measured length does not include a break in the sequence (off/onramps, intersections, structures, etc.) Includes labor and materials to apply asphalt flush/seal coat.	
39	02761003P	Continuous Longitudinal Rumble Strip - Asphalt	foot
		Measured length includes grind areas and gaps between sequences. Measured length does not include a break in the sequence (off/onramps, intersections, structures, etc.) Includes labor and materials to apply asphalt flush/seal coat.	
40	02765005*	Pavement Marking Paint	gallon
41	02785002*	Chip Seal Coat	square yard
		Includes cover material, blotter material, and flush coat. Emulsified asphalt paid separately.	
42	027850060	Emulsified Asphalt LMCRS-2	ton
43	028220010	Right-of-Way Fence, Type A (Metal Post)	foot
		Measured parallel to the ground along the fence including line posts, less openings.	
44	02822010P	Right-of-Way Brace Post - Type A	each
45	028410030	W-Beam Guardrail Transition Element	each
		Includes guardrail with posts, blocks, hardware, curb section, and barrier reflectors. Use same post type as designated in project typical installation.	
46	028410056	W-Beam Guardrail Curved	foot
		Includes shop-bent rail elements, 6 ft 3 inch rail elements, CRT posts and blocks with banding, anchor system, specialty bolt hardware, and barrier reflectors.	
47	028410066	W-Beam Guardrail Nested - various spans	foot
		Includes additional rail elements and CRT posts and blocks with banding when required and barrier reflectors.	
48	028410090	W-Beam Guardrail Anchor Type 1	each
		Includes standard 12 foot 6 inch W-beam guardrail with posts, foundation tube, blocks, hardware, object marker, and marker post.	



# Measurement and Payment

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Item #	Bid Item Number	Bid Item Name	UOM
49	028410097	W-Beam Guardrail 3 ft 1 1/2 inch on center punched and 84 inch Steel Post	foot
Includes W-beam 3 ft 1 1/2 inch on center W-beam guardrail with posts, blocks, hardware, and barrier reflectors.			
50	028420010	Delineator Type I	each
Includes removal and disposal of existing delineators.			
51	028420030	Delineator - Culvert Marker	each
Includes removal and disposal of existing delineators.			
52	028420040	Delineator - Maintenance Marker	each
Includes removal and disposal of existing delineators.			
53	028430035	End Treatment Type G	each
Includes all crash cushion markings, marker posts and plates, object markers, and all mounting hardware.			
54	02843003P	End Treatment Type F	each
Includes all crash cushion markings, marker posts and plates, object markers, and all mounting hardware. Includes all cost to install concrete pad according to the applicable standard drawing.			
55	028430040	End Treatment Type H	each
Includes all crash cushion markings, marker posts and plates, object markers, and all mounting hardware.			
56	02843004P	Relocate End Treatment Type F	each
Includes all costs to relocate end treatment and reinstall per the applicable standard drawings. Includes providing and installing any unusable parts from the existing assembly.			
57	028440010	Precast Concrete Barrier - 32 Inch (New Jersey Shape)	foot
Includes connection pins, stabilization pins, and barrier reflectors. Includes asphalt impregnated polyurethane foam when required. See BA Series, Standard Drawings.			
58	028440070	Precast Concrete Constant Slope Barrier-42 Inch, 32 Inch(New Jersey Shape)Transition, No Stablz Pins	each
Includes connection pins and barrier reflectors. Includes asphalt impregnated polyurethane foam when required. See BA Series, Standard Drawings.			
59	028440180	Cast-In-Place Concrete Constant Slope Barrier - 42 Inch Stepped Median Barrier	foot
Includes barrier reflectors. See BA Series, Standard Drawings.			
60	02376001P	Steep-Slope Erosion Control (Plan Quantity)	square yard
Measurement does not include overlaps.			
61	02911001P	Wood Fiber Mulch (Plan Quantity)	acre
62	029120050	Strip, Stockpile, and Spread Topsoil (Plan Quantity)	square yard
63	02922001P	Drill Seed (Plan Quantity)	acre
64	02922003P	Broadcast Seed (Plan Quantity)	acre
65	02924000*	Noxious Weed Control	acre
66	029310010	Pole Planting	each
67	029310020	Willow Cutting	each
68	028910020	Sign Type A-1	square foot
69	028910042	Sign Type A-1, 24 inch x 24 inch	each
Includes frame or mounting bar as required in SN Series Standard Drawings.			



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Item #	Bid Item Number	Bid Item Name	UOM
70	028910065	Sign Type A-1, 36 inch X 36 inch	each
Includes frame or mounting bar as required in SN Series Standard Drawings.			
71	028910075	Sign Type A-2	square foot
Non Standard size signs. Includes frame or mounting bar as required in SN Series Standard Drawings.			
72	028910103	Sign Type A-2, 24 inch x 24 inch	each
Includes frame or mounting bar as required in SN Series Standard Drawings.			
73	028910120	Sign Type A-2, 36 inch X 36 inch	each
Includes frame or mounting bar as required in SN Series Standard Drawings.			
74	028910270	Remove Sign Less Than 20 Square Feet	each
75	028910285	Relocate Sign Less Than 20 Square Feet	each
Includes removal and disposal of existing concrete sign base.			
76	028910320	Slipbase Sign Base (B3)	each
Includes installation of top casting, stub base, concrete foundation, and core drilling as required by SN Series Standard Drawings.			
77	028910365	Sign Post P3	each
Includes post and all hardware to mount sign to post as required by SN Series Standard Drawings.			
78	028910370	Sign Post P4	each
Includes post and all hardware to mount sign to post as required by SN Series Standard Drawings.			
79	012850010	Mobilization	lump sum
<b>Amount Paid</b>		<b>When Paid</b>	
The lesser of 25% of Mobilization or 2.5% of contract		With first estimate	
The lesser of 50% of Mobilization or 5% of contract		With estimate following completion of 5% of contract	
The lesser of 75% of Mobilization or 7.5% of contract		With estimate following completion of 10% of contract	
The lesser of 100% of Mobilization or 10% of contract		With estimate following completion of 20% of contract	
Amount bid in excess of 10% of contract price.		Project Acceptance-Final	
Includes all costs associated with Railroad Flagging, inspection, and cleanup crew according to Section 00725.			
80	01554001*	Traffic Control	lump sum
25% of the bid item amount paid with first estimate. Remaining portion of bid item paid as a percentage of the contract completed with each subsequent estimate. Includes the cost to provide, install and maintain Variable Message Signs (VMS) during construction.			
81	01571002P	12 Foot Check Dam - 12 Inch Fiber Roll	each
In final position.			
82	015710095	Fiber Roll - 12 Inch	foot
Measured along centerline of fiber roll.			
83	015720020	Dust Control and Watering	1000 gallons
84	017210010	Survey	lump sum
25% of the bid item amount		When the project is 5% complete	
A total of 40% of bid item amount		When the project is 10% complete	
A total of 75% of bid item amount		When the project is 50% complete	
A total or 90% of bid item amount		When the project is 75% complete	
The Department retains the remaining 10 percent of bid item amount until the project is completed and the red-lined hard copy plan set showing as-constructed features denoting changes from the original design is provided to the Engineer and verified complete.			
85	020560015	Granular Borrow (Plan Quantity)	cubic yard

# Measurement and Payment

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Item #	Bid Item Number	Bid Item Name	UOM
		In final position	
86	02075000*	Geogrid - Subgrade Improvement, Type 2	square yard
		Includes all labor, materials and equipment associated with Geogrid - Subgrade Improvement, Type 2 placement as part of Borrow Soft Spot Repair. Estimated quantities are based on preliminary field review for bidding purposes only. Repair the actual quantities determined by the Engineer. Geogrid - Subgrade Improvement, Type 2 may be reduced, deleted, or increased over the bid quantities from the contract. The price of the actual quantity will be paid at the contract unit price if any of these situations occur. Quantity does not include overlap.	
87	022210075	Remove Guardrail	foot
		Includes posts, end treatments, transition elements, and anchorages	
88	02231002P	Clearing and Grubbing (Plan Quantity)	acre
		Includes the removal of all trees within the area to be cleared.	
89	02316002P	Roadway Excavation (Plan Quantity)	cubic yard
		Includes excavation of all types of materials. Including soil and rock.	
90	023760020	Flexible Channel Liner	square yard
		Measurement does not include overlaps.	
91	02721001*	Untreated Base Course (Shouldering)	foot
		Includes all work incidental to placement of shouldering material. Includes clearing of vegetation, hauling, placement, grading, and compaction of UTBC. Includes dust control and watering.	
92	027210020	Untreated Base Course (Plan Quantity)	cubic yard
93	02726030*	4 Inch Gravel Access	each
		Includes the labor, materials, and grading necessary to construct driveway approach, including Untreated Base Course (UTBC). Does not include roadway excavation.	
94	02735002P	Micro Scratch Course	foot
		Measurement is along the existing centerline rumble strips to be filled. Includes length (not including gaps), 4 foot width, and depth of microsurface placed to fill rumble strip depression.	
95	02737003*	Borrow Soft Spot Repair	square yard
		Includes all labor, materials and equipment incidental to the Soft Spot Repair, including roadway excavation, disposal of excavated material, hauling, placement, compaction, and borrow or other materials as approved by the Engineer. Includes Dust Control and Watering. Estimated quantities are based on preliminary field review for bidding purposes only. Actual quantities needed for repair will be determined by the Engineer. Borrow Soft Spot Repair may be reduced, deleted, or increased beyond the bid quantities listed in the contract. Actual quantities placed will be paid at the contract unit price.	
96	02741005*	HMA - 1/2 inch	ton
		Includes aggregates, asphalt binder, hydrated lime, and other additives, etc.	
97	02748004P	Emulsified Asphalt	ton
		Measurement will be taken from weight tickets provided from a certified scale. Payment will be adjusted to the percentage of oil content of the emulsion.	
98	02761002P	Longitudinal Rumble Strip - Asphalt	foot
		Measured length includes grind areas and gaps between sequences. Measured length does not include a break in the sequence (off/onramps, intersections, structures, etc.) Includes labor and materials to apply asphalt flush/seal coat.	
99	02761003P	Continuous Longitudinal Rumble Strip - Asphalt	foot
		Measured length includes grind areas and gaps between sequences. Measured length does not include a break in the sequence (off/onramps, intersections, structures, etc.) Includes labor and materials to apply asphalt flush/seal coat.	
100	02765005*	Pavement Marking Paint	gallon
101	02785002*	Chip Seal Coat	square yard
		Includes cover material, blotter material, and flush coat. Emulsified asphalt paid separately.	
102	027850060	Emulsified Asphalt LMCRS-2	ton
103	028410030	W-Beam Guardrail Transition Element	each

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Item #	Bid Item Number	Bid Item Name	UOM
		Includes guardrail with posts, blocks, hardware, curb section, and barrier reflectors. Use same post type as designated in project typical installation.	
104	028410056	W-Beam Guardrail Curved	foot
		Includes shop-bent rail elements, 6 ft 3 inch rail elements, CRT posts and blocks with banding, anchor system, specialty bolt hardware, and barrier reflectors.	
105	028410090	W-Beam Guardrail Anchor Type 1	each
		Includes standard 12 foot 6 inch W-beam guardrail with posts, foundation tube, blocks, hardware, object marker, and marker post.	
106	028410097	W-Beam Guardrail 3 ft 1 1/2 inch on center punched and 84 inch Steel Post	foot
		Includes W-beam 3 ft 1 1/2 inch on center W-beam guardrail with posts, blocks, hardware, and barrier reflectors.	
107	028420010	Delineator Type I	each
		Includes removal and disposal of existing delineators.	
108	028420040	Delineator - Maintenance Marker	each
		Includes removal and disposal of existing delineators.	
109	028430035	End Treatment Type G	each
		Includes all crash cushion markings, marker posts and plates, object markers, and all mounting hardware.	
110	02843003P	End Treatment Type F	each
		Includes all crash cushion markings, marker posts and plates, object markers, and all mounting hardware. Includes all cost to install concrete pad according to the applicable standard drawing.	
111	028430040	End Treatment Type H	each
		Includes all crash cushion markings, marker posts and plates, object markers, and all mounting hardware.	
112	028440070	Precast Concrete Constant Slope Barrier-42 Inch, 32 Inch(New Jersey Shape)Transition, No Stablz Pins	each
		Includes connection pins and barrier reflectors. Includes asphalt impregnated polyurethane foam when required. See BA Series, Standard Drawings.	
113	028440180	Cast-In-Place Concrete Constant Slope Barrier - 42 Inch Stepped Median Barrier	foot
		Includes barrier reflectors. See BA Series, Standard Drawings.	
114	028910075	Sign Type A-2	square foot
		Non Standard size signs. Includes frame or mounting bar as required in SN Series Standard Drawings.	
115	028910270	Remove Sign Less Than 20 Square Feet	each
116	028910320	Slipbase Sign Base (B3)	each
		Includes installation of top casting, stub base, concrete foundation, and core drilling as required by SN Series Standard Drawings.	
117	028910365	Sign Post P3	each
		Includes post and all hardware to mount sign to post as required by SN Series Standard Drawings.	
118	02911001P	Wood Fiber Mulch (Plan Quantity)	acre
119	029120050	Strip, Stockpile, and Spread Topsoil (Plan Quantity)	square yard
120	02922001P	Drill Seed (Plan Quantity)	acre
121	02922003P	Broadcast Seed (Plan Quantity)	acre
122	012850010	Mobilization	lump sum
		<b>Amount Paid</b>	<b>When Paid</b>

# Measurement and Payment

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Item #	Bid Item Number	Bid Item Name	UOM
		<p>The lesser of 25% of Mobilization or 2.5% of contract                      The lesser of 50% of Mobilization or 5% of contract                      The lesser of 75% of Mobilization or 7.5% of contract                      The lesser of 100% of Mobilization or 10% of contract                      Amount bid in excess of 10% of contract price.</p> <p>Includes all costs associated with Railroad Flagging, inspection, and cleanup crew according to Section 00725.</p>	<p>With first estimate                      With estimate following completion of 5% of contract                      With estimate following completion of 10% of contract                      With estimate following completion of 20% of contract                      Project Acceptance-Final</p>
123	01554001*	Traffic Control	lump sum
		<p>25% of the bid item amount paid with first estimate.                      Remaining portion of bid item paid as a percentage of the contract completed with each subsequent estimate.                      Includes the cost to provide, install and maintain Variable Message Signs (VMS) during construction.</p>	
124	01571002P	12 Foot Check Dam - 12 Inch Fiber Roll	each
		In final position.	
125	015710095	Fiber Roll - 12 Inch	foot
		Measured along centerline of fiber roll.	
126	015720020	Dust Control and Watering	1000 gallons
127	017210010	Survey	lump sum
		<p>25% of the bid item amount                      A total of 40% of bid item amount                      A total of 75% of bid item amount                      A total or 90% of bid item amount</p> <p>The Department retains the remaining 10 percent of bid item amount until the project is completed and the red-lined hard copy plan set showing as-constructed features denoting changes from the original design is provided to the Engineer and verified complete.</p>	<p>When the project is 5% complete                      When the project is 10% complete                      When the project is 50% complete                      When the project is 75% complete</p>
128	020560015	Granular Borrow (Plan Quantity)	cubic yard
		In final position	
129	02075000*	Geogrid - Subgrade Improvement, Type 2	square yard
		<p>Includes all labor, materials and equipment associated with Geogrid - Subgrade Improvement, Type 2 placement as part of Borrow Soft Spot Repair.                      Estimated quantities are based on preliminary field review for bidding purposes only. Repair the actual quantities determined by the Engineer. Geogrid - Subgrade Improvement, Type 2 may be reduced, deleted, or increased over the bid quantities from the contract. The price of the actual quantity will be paid at the contract unit price if any of these situations occur.                      Quantity does not include overlap.</p>	
130	02231002P	Clearing and Grubbing (Plan Quantity)	acre
		Includes the removal of all trees within the area to be cleared.	
131	02316002P	Roadway Excavation (Plan Quantity)	cubic yard
		Includes excavation of all types of materials. Including soil and rock.	
132	023760020	Flexible Channel Liner	square yard
		Measurement does not include overlaps.	
133	02721001*	Untreated Base Course (Shouldering)	foot
		Includes all work incidental to placement of shouldering material. Includes clearing of vegetation, hauling, placement, grading, and compaction of UTBC. Includes dust control and watering.	
134	027210020	Untreated Base Course (Plan Quantity)	cubic yard
135	02735002P	Micro Scratch Course	foot
		<p>Measurement is along the existing centerline rumble strips to be filled.                      Includes length (not including gaps), 4 foot width, and depth of microsurface placed to fill rumble strip depression.</p>	
136	02737003*	Borrow Soft Spot Repair	square yard
		Includes all labor, materials and equipment incidental to the Soft Spot Repair, including roadway excavation, disposal of excavated material, hauling, placement, compaction, and borrow or other materials as approved by the Engineer. Includes Dust Control and Watering. Estimated quantities are based on preliminary field review for bidding purposes only. Actual quantities needed for repair will be determined by the Engineer. Borrow Soft Spot Repair may be reduced, deleted, or increased beyond the bid quantities listed in the contract. Actual quantities placed will be paid at the contract unit price.	



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Item #	Bid Item Number	Bid Item Name	UOM
137	02741005*	HMA - 1/2 inch Includes aggregates, asphalt binder, hydrated lime, and other additives, etc.	ton
138	02748004P	Emulsified Asphalt Measurement will be taken from weight tickets provided from a certified scale. Payment will be adjusted to the percentage of oil content of the emulsion.	ton
139	02761002P	Longitudinal Rumble Strip - Asphalt Measured length includes grind areas and gaps between sequences. Measured length does not include a break in the sequence (off/onramps, intersections, structures, etc.) Includes labor and materials to apply asphalt flush/seal coat.	foot
140	02761003P	Continuous Longitudinal Rumble Strip - Asphalt Measured length includes grind areas and gaps between sequences. Measured length does not include a break in the sequence (off/onramps, intersections, structures, etc.) Includes labor and materials to apply asphalt flush/seal coat.	foot
141	02765005*	Pavement Marking Paint	gallon
142	027680105	Pavement Message (Preformed Thermoplastic)  Measurement A. Letter = one message B. Arrow = one message C. Multi-headed arrow = one message per arrow D. School crossbars = one message per 24 inch x 10 ft bar E. Crosswalk = two message per lane and two messages per shoulder F. Stop Bar = one message per lane and one message per shoulder G. Railroad crossing markings = seven messages per lane 1. R = one message each (two required) 2. X = two messages 3. Transverse Bar = one message each (two required) 4. Stop Bar = one message H. Include all costs for the Manufacturer's Service Representative and other technical assistance in the contract unit price.	each
143	02785002*	Chip Seal Coat Includes cover material, blotter material, and flush coat. Emulsified asphalt paid separately.	square yard
144	027850060	Emulsified Asphalt LMCRS-2	ton
145	028410030	W-Beam Guardrail Transition Element Includes guardrail with posts, blocks, hardware, curb section, and barrier reflectors. Use same post type as designated in project typical installation.	each
146	028410097	W-Beam Guardrail 3 ft 1 1/2 inch on center punched and 84 inch Steel Post Includes W-beam 3 ft 1 1/2 inch on center W-beam guardrail with posts, blocks, hardware, and barrier reflectors.	foot
147	028420010	Delineator Type I Includes removal and disposal of existing delineators.	each
148	028420040	Delineator - Maintenance Marker Includes removal and disposal of existing delineators.	each
149	028430040	End Treatment Type H Includes all crash cushion markings, marker posts and plates, object markers, and all mounting hardware.	each
150	028440010	Precast Concrete Barrier - 32 Inch (New Jersey Shape) Includes connection pins, stabilization pins, and barrier reflectors. Includes asphalt impregnated polyurethane foam when required. See BA Series, Standard Drawings.	foot
151	028910020	Sign Type A-1	square foot
152	028910065	Sign Type A-1, 36 inch X 36 inch Includes frame or mounting bar as required in SN Series Standard Drawings.	each



# Measurement and Payment

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Item #	Bid Item Number	Bid Item Name	UOM
153	028910075	Sign Type A-2	square foot
Non Standard size signs. Includes frame or mounting bar as required in SN Series Standard Drawings.			
154	028910270	Remove Sign Less Than 20 Square Feet	each
155	028910320	Slipbase Sign Base (B3)	each
Includes installation of top casting, stub base, concrete foundation, and core drilling as required by SN Series Standard Drawings.			
156	028910365	Sign Post P3	each
Includes post and all hardware to mount sign to post as required by SN Series Standard Drawings.			
157	028910370	Sign Post P4	each
Includes post and all hardware to mount sign to post as required by SN Series Standard Drawings.			
158	02911001P	Wood Fiber Mulch (Plan Quantity)	acre
159	029120050	Strip, Stockpile, and Spread Topsoil (Plan Quantity)	square yard
160	02922001P	Drill Seed (Plan Quantity)	acre
161	02922003P	Broadcast Seed (Plan Quantity)	acre

November 1, 2016

**SPECIAL PROVISION**

**PROJECT # F-0040(155)28  
PIN # 13721**

**SECTION 02721M**

**UNTREATED BASE COURSE (UTBC)**

**Add the following Article to Part 3 “EXECUTION”:**

**3.2 SHOULDERING MATERIAL INSTALLATION**

- A. Place shouldering material along the existing edge of pavement to fill in areas of existing edge rut. Use untreated base course for shouldering material meeting Type III requirements.
- B. Place shouldering material at a 6:1 slope to catch the existing slope, or to a maximum distance of 6-feet from the pavement edge.
- C. Grade material to top of pavement edge and blend into existing slope.
- D. Compact using a minimum of two passes with a roller or as directed by Engineer
- E. Damage to pavement caused during placement is repaired by the Contractor at no additional cost to the Department.

# BASE BID

MISCELLANEOUS SUMMARY		
BASE BID		
DESCRIPTION	QUANTITY	UNITS
MOBILIZATION	1	LUMP
PUBLIC INFORMATION SERVICES	1	LUMP
TRAFFIC CONTROL	1	LUMP
PORTABLE VARIABLE MESSAGE SIGN	9	DEVD
SURVEY	1	LUMP

## SUMMARY OF ITEMS

BID ITEMS	PAY ITEM NUMBER	PAY ITEM NAME	UNIT	QUANTITY	SHEET NUMBER	CALLOUT LOCATION
1	01540010	MOBILIZATION	LUMP	1	SM-01	
2	01540010	PUBLIC INFORMATION SERVICES	LUMP	1	SM-01	
3	01540010	TRAFFIC CONTROL	LUMP	1	SM-01	
4	01540020	PORTABLE VARIABLE MESSAGE SIGN	DEVD	9	SM-04	CENTER OF DITCH
5	01571002P	12 FOOT CHECK DAM - 12 INCH FIBER ROLL	FT	120	SM-04	CENTER OF INLET
6	015710095	FIBER ROLL - 12 INCH	FT	40,300	SM-04	
7	015710115	PIPE INLET BARRIER - 18 INCH FIBER ROLL	FT	324	SM-04	
8	015720020	DUST CONTROL AND WATERING	1000 GAL	3,809	SM-03	CULVERT END
9	017210010	SURVEY	LUMP	1	SM-01	
10	025690015	GRANULAR BORROW (PLAN QUANTITY)	CU YD	23,189	SM-06	
11	025690015	ROCKERY SLOPE	FT	410	SM-03	
12	025750007	GEOTEXTILES - SEPARATION	SO YD	3,308	SM-06	
13	025750010	REMOVE GUARDRAIL	SO YD	210	SM-04	
14	025750015	REMOVE GUARDRAIL	FT	6,489	SM-02	
15	025750060	REMOVE PIPE CULVERT	FT	408	SM-02	
16	025750060	REMOVE PIPE CULVERT	FT	4	SM-02	
17	025750070	REMOVE PRECAST CONCRETE BARRIER	EACH	6,631	SM-02	
18	025750070	REMOVE PRECAST CONCRETE BARRIER	FT	21	SM-03	
19	025750070	REMOVE PRECAST CONCRETE BARRIER	ACRE	40,641	SM-03	
20	025750070	ROADWAY EXCAVATION (PLAN QUANTITY)	CU YD	125	SM-04	
21	025750070	ROADWAY EXCAVATION (PLAN QUANTITY)	SO YD	4,887	SM-04	
22	025750070	ROADWAY EXCAVATION (PLAN QUANTITY)	FT	437	SM-05	
23	025750070	ROADWAY EXCAVATION (PLAN QUANTITY)	FT	60	SM-05	
24	025750070	ROADWAY EXCAVATION (PLAN QUANTITY)	FT	10	SM-05	
25	025750070	ROADWAY EXCAVATION (PLAN QUANTITY)	EACH	8	SM-06	
26	025750070	ROADWAY EXCAVATION (PLAN QUANTITY)	FT	25,770	SM-06	
27	025750070	ROADWAY EXCAVATION (PLAN QUANTITY)	TON	3,808	SM-06	
28	025750070	ROADWAY EXCAVATION (PLAN QUANTITY)	TON	19,063	SM-06	
29	025750070	ROADWAY EXCAVATION (PLAN QUANTITY)	TON	21	SM-06	
30	025750070	ROADWAY EXCAVATION (PLAN QUANTITY)	FT	66,816	SM-05	
31	025750070	ROADWAY EXCAVATION (PLAN QUANTITY)	GAL	1,455	SM-09	
32	025750070	ROADWAY EXCAVATION (PLAN QUANTITY)	SO YD	164,337	SM-06	
33	025750070	ROADWAY EXCAVATION (PLAN QUANTITY)	TON	243	SM-06	
34	025750070	ROADWAY EXCAVATION (PLAN QUANTITY)	FT	434	SM-09	
35	025750070	ROADWAY EXCAVATION (PLAN QUANTITY)	EACH	3	SM-09	
36	025750070	ROADWAY EXCAVATION (PLAN QUANTITY)	EACH	19	SM-07 & SM-08	
37	025750070	ROADWAY EXCAVATION (PLAN QUANTITY)	FT	27	SM-07 & SM-08	
38	025750070	ROADWAY EXCAVATION (PLAN QUANTITY)	FT	38	SM-07 & SM-08	
39	025750070	ROADWAY EXCAVATION (PLAN QUANTITY)	EACH	2	SM-07 & SM-08	
40	025750070	ROADWAY EXCAVATION (PLAN QUANTITY)	FT	22,270	SM-07 & SM-08	
41	025750070	ROADWAY EXCAVATION (PLAN QUANTITY)	EACH	141	SM-10	
42	025750070	ROADWAY EXCAVATION (PLAN QUANTITY)	EACH	18	SM-10	
43	025750070	ROADWAY EXCAVATION (PLAN QUANTITY)	EACH	4	SM-10	
44	025750070	ROADWAY EXCAVATION (PLAN QUANTITY)	EACH	15	SM-07 & SM-08	
45	025750070	ROADWAY EXCAVATION (PLAN QUANTITY)	EACH	1	SM-07 & SM-08	
46	025750070	ROADWAY EXCAVATION (PLAN QUANTITY)	EACH	16	SM-07 & SM-08	
47	025750070	ROADWAY EXCAVATION (PLAN QUANTITY)	EACH	4,128	SM-07 & SM-08	
48	025750070	ROADWAY EXCAVATION (PLAN QUANTITY)	EACH	4	SM-07 & SM-08	
49	025750070	ROADWAY EXCAVATION (PLAN QUANTITY)	FT	67	SM-07 & SM-08	
50	025750070	ROADWAY EXCAVATION (PLAN QUANTITY)	ACRE	430	SM-05	
51	025750070	ROADWAY EXCAVATION (PLAN QUANTITY)	SO YD	12	SM-05	
52	025750070	ROADWAY EXCAVATION (PLAN QUANTITY)	SO YD	107,034	SM-05	
53	025750070	ROADWAY EXCAVATION (PLAN QUANTITY)	ACRE	8	SM-05	
54	025750070	ROADWAY EXCAVATION (PLAN QUANTITY)	ACRE	5	SM-05	
55	025750070	ROADWAY EXCAVATION (PLAN QUANTITY)	ACRE	1	SM-05	
56	025750070	ROADWAY EXCAVATION (PLAN QUANTITY)	EACH	20	SM-05	
57	025750070	ROADWAY EXCAVATION (PLAN QUANTITY)	EACH	60	SM-05	
58	025750070	ROADWAY EXCAVATION (PLAN QUANTITY)	EACH	68	SM-11 & SM-12	
59	025750070	ROADWAY EXCAVATION (PLAN QUANTITY)	EACH	9	SM-11 & SM-12	
60	025750070	ROADWAY EXCAVATION (PLAN QUANTITY)	EACH	79	SM-11 & SM-12	
61	025750070	ROADWAY EXCAVATION (PLAN QUANTITY)	EACH	2	SM-11 & SM-12	
62	025750070	ROADWAY EXCAVATION (PLAN QUANTITY)	EACH	2	SM-11 & SM-12	
63	025750070	ROADWAY EXCAVATION (PLAN QUANTITY)	EACH	24	SM-11 & SM-12	
64	025750070	ROADWAY EXCAVATION (PLAN QUANTITY)	EACH	2	SM-11 & SM-12	
65	025750070	ROADWAY EXCAVATION (PLAN QUANTITY)	EACH	41	SM-11 & SM-12	
66	025750070	ROADWAY EXCAVATION (PLAN QUANTITY)	EACH	30	SM-11 & SM-12	
67	025750070	ROADWAY EXCAVATION (PLAN QUANTITY)	EACH	11	SM-11 & SM-12	
68	025750070	ROADWAY EXCAVATION (PLAN QUANTITY)	EACH	11	SM-11 & SM-12	
69	025750070	ROADWAY EXCAVATION (PLAN QUANTITY)	EACH	11	SM-11 & SM-12	
70	025750070	ROADWAY EXCAVATION (PLAN QUANTITY)	EACH	11	SM-11 & SM-12	
71	025750070	ROADWAY EXCAVATION (PLAN QUANTITY)	EACH	11	SM-11 & SM-12	
72	025750070	ROADWAY EXCAVATION (PLAN QUANTITY)	EACH	11	SM-11 & SM-12	
73	025750070	ROADWAY EXCAVATION (PLAN QUANTITY)	EACH	11	SM-11 & SM-12	
74	025750070	ROADWAY EXCAVATION (PLAN QUANTITY)	EACH	11	SM-11 & SM-12	
75	025750070	ROADWAY EXCAVATION (PLAN QUANTITY)	EACH	11	SM-11 & SM-12	
76	025750070	ROADWAY EXCAVATION (PLAN QUANTITY)	EACH	11	SM-11 & SM-12	
77	025750070	ROADWAY EXCAVATION (PLAN QUANTITY)	EACH	11	SM-11 & SM-12	
78	025750070	ROADWAY EXCAVATION (PLAN QUANTITY)	EACH	11	SM-11 & SM-12	

PROJECT: US-40: DANIELS CANYON  
 PROJECT NUMBER: F-0040(155)28  
 PROJECT: SHOULDER REPAIR  
 SHEET NO.: SM-01  
 DATE: 11/1/2016  
 CHECKED BY: [Signature]  
 DRAWN BY: [Signature]  
 APPROVED: [Signature]  
 PROFESSIONAL ENGINEER: [Signature]  
 REVISIONS: [Table with columns for NO., DATE, APPROVED BY, TWT, REVISD PAY ITEM NUMBER, REVISIONS]



# ADDITIVE #2

MISCELLANEOUS SUMMARY ADDITIVE #2			
DESCRIPTION	QUANTITY	UNITS	
MOBILIZATION	1	LUMP	
TRAFFIC CONTROL	1	LUMP	
FIBER ROLL - 12 INCH	34	EACH	
DUST CONTROL AND WATERING	368	FT	
SURVEY	301	1000 GAL	
GRAVULAR BORROW (PLAN QUANTITY)	1	LUMP	
GEOSRID - SUBGRADE IMPROVEMENT TYPE 2	1,429	CU YD	
CLEARING AND GRUBBING (PLAN QUANTITY)	198	SO YD	
ROADWAY EXCAVATION (PLAN QUANTITY)	1	ACRE	
FLEXIBLE CHANNEL LINER	2,897	CU YD	
UNTREATED BASE COURSE (SHOULDERING)	1,848	SO YD	
MICRO SCRATCH COURSE	913	FT	
BORROW SOFT SPOT REPAIR	1,722	FT	
HMA - 1/2 INCH	198	SO YD	
EMULSIFIED ASPHALT	1,225	TON	
LONGITUDINAL RUMBLE STRIP - ASPHALT	2	TON	
CONTINUOUS LONGITUDINAL RUMBLE STRIP - ASPHALT	4,306	FT	
PAVEMENT MARKING PAINT	2,153	FT	
PAVEMENT MESSAGE (PERFORMED THERMOPLASTIC)	107	GAL	
CHIP SEAL COAT	2	EACH	
EMULSIFIED ASPHALT LMCRS-2	10,530	SO YD	
W-BEAM GUARDRAIL TRANSITION ELEMENT	16	TON	
W-BEAM GUARDRAIL 3 FT 1 1/2 INCH ON CENTER PUNCHED AND 84 INCH STEEL POST	2	EACH	
DELINEATOR TYPE II	925	FT	
DELINEATOR - MAINTENANCE MARKER	13	EACH	
END TREATMENT TYPE H	2	EACH	
PRECAST CONCRETE BARRIER - 32 INCH (NEW JERSEY SHAPE)	320	FT	
SIGN TYPE A-1	18	SO FT	
SIGN TYPE A-1, 36 INCH X 36 INCH	1	EACH	
SIGN TYPE A-2	10	SO FT	
REMOVE SIGN LESS THAN 20 SQUARE FEET	2	EACH	
SUBBASE SIGN BASE (B3)	5	EACH	
SIGN POST P3	4	EACH	
SIGN POST P4	1	EACH	
WOOD FIBER MULCH (PLAN QUANTITY)	1	ACRE	
STRIP STOCKPILE AND SPREAD TOPSOIL (PLAN QUANTITY)	5,562	SO YD	
DRILL SEED (PLAN QUANTITY)	1	ACRE	
BROADCAST SEED (PLAN QUANTITY)	1	ACRE	

SUMMARY OF ITEMS ADDITIVE #2						
BID ITEMS	PAY ITEM NUMBER	PAY ITEM NAME	UNIT	QUANTITY	SHEET NUMBER	CALLOUT LOCATION
122	012650010	MOBILIZATION	LUMP	1	SM-18	
123	01554001*	TRAFFIC CONTROL	LUMP	1	SM-18	
124	01573002P	12 FOOT CHECK DAM - 12 INCH FIBER ROLL	LUMP	1	SM-19	
125	015710095	FIBER ROLL - 12 INCH	EACH	34	SM-19	CENTER OF DITCH
126	015730020	DUST CONTROL AND WATERING	FT	368	SM-19	
127	017210010	SURVEY	1000 GAL	301	SM-18	
128	025560015	GRAVULAR BORROW (PLAN QUANTITY)	CU YD	1,429	SM-20	
129	02573003*	GEOSRID - SUBGRADE IMPROVEMENT TYPE 2	SO YD	198	SM-20	
130	02233002P	CLEARING AND GRUBBING (PLAN QUANTITY)	ACRE	1	SM-19	
131	02516002P	ROADWAY EXCAVATION (PLAN QUANTITY)	CU YD	2,897	SM-19	
132	025760020	FLEXIBLE CHANNEL LINER	SO YD	1,848	SM-19	
133	02721001*	UNTREATED BASE COURSE (SHOULDERING)	FT	1,815	SM-20	
134	027210020	UNTREATED BASE COURSE (PLAN QUANTITY)	CU YD	913	SM-20	
135	02736002P	MICRO SCRATCH COURSE	FT	1,722	SM-20	
136	02737003*	BORROW SOFT SPOT REPAIR	SO YD	198	SM-20	
137	02741005*	HMA - 1/2 INCH	TON	1,225	SM-20	
138	02748004P	EMULSIFIED ASPHALT	TON	2	SM-20	
139	02763002P	LONGITUDINAL RUMBLE STRIP - ASPHALT	FT	4,306	SM-20	
140	02763003P	CONTINUOUS LONGITUDINAL RUMBLE STRIP - ASPHALT	FT	2,153	SM-20	
141	02765005*	PAVEMENT MARKING PAINT	GAL	107	SM-21	
142	027660105	PAVEMENT MESSAGE (PERFORMED THERMOPLASTIC)	EACH	2	SM-21	
143	02765002*	CHIP SEAL COAT	SO YD	10,530	SM-20	
144	027650060	EMULSIFIED ASPHALT LMCRS-2	TON	16	SM-20	
145	028410030	W-BEAM GUARDRAIL TRANSITION ELEMENT	EACH	2	SM-20	
146	028410097	W-BEAM GUARDRAIL 3 FT 1 1/2 INCH ON CENTER PUNCHED AND 84 INCH STEEL POST	FT	925	SM-20	
147	028450010	DELINEATOR TYPE II	EACH	13	SM-21	
148	028450040	DELINEATOR - MAINTENANCE MARKER	EACH	2	SM-21	
149	028440010	END TREATMENT TYPE H	EACH	2	SM-20	
150	028440010	PRECAST CONCRETE BARRIER - 32 INCH (NEW JERSEY SHAPE)	FT	320	SM-20	
151	028910020	SIGN TYPE A-1	SO FT	18	SM-21	
152	028910065	SIGN TYPE A-1, 36 INCH X 36 INCH	EACH	1	SM-21	
153	028910075	SIGN TYPE A-2	SO FT	10	SM-21	
154	028910270	REMOVE SIGN LESS THAN 20 SQUARE FEET	EACH	2	SM-21	
155	028910320	SUBBASE SIGN BASE (B3)	EACH	5	SM-21	
156	028910365	SIGN POST P3	EACH	4	SM-21	
157	028910370	SIGN POST P4	EACH	1	SM-21	
158	02911001P	WOOD FIBER MULCH (PLAN QUANTITY)	ACRE	1	SM-19	
159	029110050	STRIP STOCKPILE AND SPREAD TOPSOIL (PLAN QUANTITY)	SO YD	5,562	SM-19	
160	02923001P	DRILL SEED (PLAN QUANTITY)	ACRE	1	SM-19	
161	02923003P	BROADCAST SEED (PLAN QUANTITY)	ACRE	1	SM-19	