SPECIAL PROVISIONS
&
SUPPLEMENTAL SPECIFICATIONS

CSI-Inch/Pound

Project No:	**F-0195(5)0**
PIN Desc:	**2300 EAST; I-80 TO 3900 SOUTH, PHASE I, SL Co.**
Concept:	**RECONSTRUCT & WIDEN INCLUDING SAFETY IMPROVEMENTS**
Location:	**Cnty:FA-2186; MP 3.68 - 5.35**
County:	**SALT LAKE**
Bid Opening:	**October 22, 2015**
	Date

THIS PROJECT REQUIRES USING THE ELECTRONIC CERTIFIED PAYROLL PROGRAM. SEE ATTACHMENT TO NOTICE TO CONTRACTORS. THIS IS A P&T (PRICE+TIME) PROJECT. ADDITIVES PERTAIN TO THIS PROJECT. QUALIFIED HEALTH INSURANCE COVERAGE REQUIRED. ELECTRONIC 3D CADD FILE/MODELS PROVIDED FOR INFORMATION ONLY ON PROJECT EXPLORER.

UDOT Keeping Utah Moving

Project #F-0195(5)0
Pin #8114

July 29, 2015

2012 - Standards

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38.	02769S	Preformed Thermoplastic Pavement Markings – Project Special Provision (09/16/14)
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40.	02771S	Curbs, Gutters, Driveways, Pedestrian Access Ramps, and Plowable End Sections – Project Special Provision (12/30/14)
41.	02776M	Concrete Sidewalk, Median Filler, and Flatwork – Project Special Provision (09/16/14)
42.	02787S	Crushed Stone – Project Special Provision (09/16/14)
43.	02812S	Pressurized Irrigation Systems – Project Special Provision (06/13/14)
44.	02814S	Re-establish Existing Landscape and Pressurized Irrigation System – Project Special Provision (09/16/14)
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47.	02824S	Wood Fence – Project Special Provision (09/16/14)
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49.	02828S	Ornamental Fence – Project Special Provision (09/16/14)
50.	02861M	Precast Retaining/Noise Walls – Project Special Provision (01/23/15)
51.	02873S	Site Furnishings – Project Special Provision (03/09/15)
52.	02890M	Retroreflective Sheeting – Supplemental Specification (11/06/14)
53.	02891S	Traffic Signs – Project Special Provision (09/17/15)
54.	02897S	Salt Lake County Monuments – Project Special Provision (09/16/14)
55.	02913S	Landscape Retaining Wall – Project Special Provision (09/16/14)

56. 02914S Landscape Boulder – Project Special Provision (09/16/14)
57. 02924S Invasive Weed Control – Department Special Provision (02/28/13)
58. 03055M Portland Cement Concrete – Supplemental Specification (04/25/13)
59. 03211M Reinforcing Steel and Welded Wire – Supplemental Specification (10/25/12)
60. 06055M Timber and Timber Treatment – Supplemental Specification (08/30/12)

I. 2012 Standard Specifications and Standard Drawings

The 2012 State of Utah Standard Specifications for Road and Bridge Construction and Standard Drawings Books apply on this project as static Specification and Drawing Books as well as all other applicable specification and drawing changes.

Refer to Part XV for other project specific specifications.

II. List of Supplemental Drawings

This page will be periodically updated to list all approved drawings by date of issue. Include Supplemental Drawings that are applicable to the project at the end of the Plan Set. Update Plan Set Sheet 1A with a listing of the applicable Supplemental Drawings.

Issue Date: September 19, 2012

Revised August 30, 2012

BA 2E	Precast Concrete Half Barrier – 32 Inch New Jersey Shape
BA 3L	Precast Concrete Constant Slope Half Barrier – 42 Inch
BA 4B4	W-Beam Guardrail Median Barrier Transition Hardware and Layout
BA 4D1	W-Beam Guardrail Installations
BA 4E2	W-Beam Guardrail with Curb and Gutter ≥ 5 Inches
BA 4F1	W-Beam Guardrail Buried In Backslope Terminal
BA 4H4	W-Beam Guardrail with Precast Barrier For Span ≥ 25 Ft
CB 11	Precast Concrete Standard Manhole
DD 14B	Typical Rural 2 Lane Road Intersection (Low Speed)
GW 5A	Pedestrian Access
GW 5B	Pedestrian Access
GW 5C	Pedestrian Access
SN 14D	Freeway Sign Frame Fabrication Details
SN 14E	Freeway Sign Bracket Details
TC 1	Traffic Control Drawing Series General Notes
TC 2B	Work Zone Signing
TC 3A	Hazard Mitigation
TC 4A	Standard Work Zone Signing General
TC 4B1	Reduced Speed Work Zone Signing General
TC 4B2	Reduced Speed Shoulder Work Zone Signing General
TC 4C	Traffic Control Project Limit Signing
TC 4D2	Work Zone Specialty Signs
TC 7	Median Crossover and 2-Lane, 2-Way Diversion
TC 18	Blunt End Protection for W-Beam Guardrail and Concrete Barrier
TC 19	Construction Access Points for Speeds of 55 MPH and Greater

Issue Date: November 14, 2012

Revised October 25, 2012

PV 03	Concrete Pavement Details 1 of 2
PV 04	Concrete Pavement Details 2 of 2

Issue Date: March 14, 2013

Revised February 28, 2013

AT 5A	Ramp Meter Detection Layout
AT 5B	Ramp Meter Queue Detection Layout
AT 5C	Ramp Meter Detection Zone Number Assignment
BA 4D3	W-Beam Guardrail Typical Line Post Embedment Special Conditions
CB 11	Precast Concrete Standard Manhole
DD 8	Structural Geometric Design Standards for Clearances
GW 4A	Concrete Driveways and Sidewalks
GW 4B	Concrete Driveways and Sidewalks
GW 5A	Pedestrian Access
GW 5B	Pedestrian Access
GW 5C	Pedestrian Access
GW 11	Sidewalks and Shoulders On Urban Roadways
PV 9	Dowel Bar Retrofit
SL 16	Solar Traffic Counting Station
SN 10A	Slipbase Sign Base (B3) Hardware
SN 10B	Slipbase Sign Base (B3) Installation
TC 3A	Hazard Mitigation

Issue Date: May 9, 2013

Revised April 25, 2013

AT 18	Utility Marker Post Details
GW 12A1	Active Pedestrian Controls for Railroad Crossings Sheet 1 of 2
GW 12A2	Active Pedestrian Controls for Railroad Crossings Sheet 2 of 2
GW 12B1	Passive Pedestrian Controls for Railroad Crossings Sheet 1 of 2
GW 12B2	Passive Pedestrian Controls for Railroad Crossings Sheet 2 of 2
GW 12C1	Pedestrian Controls Semi-Exclusive Railroad Alignments Sheet 1 of 2
GW 12C2	Pedestrian Controls Semi-Exclusive Railroad Alignments Sheet 2 of 2
GW 12D	Pedestrian Controls Street Running Railroad Alignment Signalized Intersections
GW 12E	Pedestrian Controls Street Running Railroad Alignment Unsignalized Intersections

Issue Date: July 17, 2013

Revised June 27, 2013

AT 6	Conduit Details
CC 8A	Grading and Installation Details Crash Cushion Type G
CC 8B	Grading and Installation Details for “3R” Projects End Treatment Type G
DD 18	Utility Location Requirements
ST 9	Location of Bicycle Detector Pavement Markings at Intersection
ST 10	Location of Bicycle Detector Pavement Markings in Bicycle Lane

Issue Date: September 16, 2013

Revised August 29, 2013

BA 4C1	W-Beam Guardrail Anchor Type 1
BA 5B1	Cable Barrier Placement
BA 5J1	Cable Barrier Median Hazard Protection
BA 5J2	Cable Barrier Span Greater Than or Equal 15 Ft to Less Than or Equal 30 Ft
ST 10	Location of Bicycle Detector Pavement Markings in Bicycle Lane

Issue Date: November 21, 2013

Revised October 31, 2013

AT 11A	CCTV Pole Mounting Details
AT 11B	Non-Intrusive Detector Mounting Details
AT 11C	Pole Mounted Cabinet Bracket
AT 15	RWIS Site and Foundation Details
AT 16	RWIS Tower Base and Service Pad Layout
AT 17	RWIS Ground Rod Installation and Tower Grounding
BA 1E	Concrete Barrier Column Protection
BA 4B3	W-Beam Guardrail Transition Curb Sections
BA 4G	W-Beam Guardrail Curve Breakaway Details
BA 5D1	Median Cable Barrier W-Beam Double Sided and Freeway Crossover Anchor System (Type C; C.A.T., Brakemaster)
BA 5D2	Median Cable Barrier W-Beam Double Sided and Freeway Crossover Anchor System (Type C; FLEAT-MT)
GW 1B	Raised Island and Plowable End Section
GW 1D	Median Reflector Details
GW 5C	Pedestrian Access
PV 10	Utility Orientation/Adjustments in PCCP
SL 6	Signal Head Details
SN 2A	School Speed Limit Assembly
SN 3	Overhead School Speed Limit Assembly
SN 6	Speed Reduction Sign Sequence
SN 13A	Tubular Steel Sign Mounting Requirements

TC 4D1	Work Zone Specialty Signs
TC 4D2	Work Zone Specialty Signs
TC 17	Traffic Control Work Zone Guardrail Intermediate End Protection

Issue Date: March 13, 2014

Revised February 27, 2014

BA 1E	Concrete Barrier Column Protection
DG 3	Fill Height for Plastic and Concrete Pipe
DG 4	Pipe Minimum Cover
DG 5	Drainage Pipe Installation
DG 10	Miscellaneous Pipe Details
SN 13C	Mounting Bar Placement for Small Signs

Issue Date: July 14, 2014

Revised June 26, 2014

BA 1A2	Concrete Barrier General Notes and Standard Details 2 of 2
BA 2A	Precast Concrete Barrier – 32 Inch New Jersey Shape
BA 2C	Precast Concrete Barrier – 32 Inch New Jersey Shape, Median Small Sign Section
BA 2D	Cast-In-Place Concrete Barrier – 32 Inch New Jersey Shape, 42 Inch Constant Slope Barrier Transition
BA 2E	Precast Concrete Half Barrier – 32 Inch New Jersey Shape
BA 4G	W-Beam Guardrail Curve Breakaway Details
BA 5B1	Cable Barrier Placement
BA 5B2	Cable Barrier Placement
GW 1C	Raised Island Details
PV 3	Concrete Pavement Details 1 of 2
SL 16	Solar Traffic Counting Station
TC 2C	Work Zone Advanced Warning Arrow Boards

Issue Date: November 20, 2014

Revised November 6, 2014

GW 5A	Pedestrian Access
GW 5B	Pedestrian Access
GW 5C	Pedestrian Access
GW 5D	Pedestrian Access
PV 3	Concrete Pavement Details 1 of 2
SL 1A	Traffic Signal Mast Arm Pole and Luminaire Extension
SL 4	Traffic Signal Mast Arm Pole Foundation
SL 7	Pedestrian Signal Assembly
SN 2A	School Speed Limit Assembly

SN 16A	Multi-Directional Breakaway Base for Steel I-Beam Supports, General Notes
SN 16B	Multi-Directional Breakaway Base for Steel I-Beam Sign Supports, Two Posts
SN 16C	Multi-Directional Breakaway Base for Steel I-Beam Sign Supports, Three Posts
SN 16D	Multi-Directional Breakaway Base for Steel I-Beam Sign Supports, Foundation Details
SN 16E	Multi-Directional Breakaway Base for Sign Post, (B7A)
SN 16F	Multi-Directional Breakaway Base for Sign Post, (B7B)
SN 16G	Multi-Directional Breakaway Base for Sign Post, (B7C)
SN 16H	Multi -Directional Breakaway Base for Round Pipe Single Post, (B7D)
SN 16I	Multi -Directional Breakaway Base for Round Pipe Double Post, (B7D)
ST 9	Location of Bicycle Detector Pavement Markings at Intersection
ST 10	Location of Bicycle Detector Pavement Markings in Bicycle Lane
TC 14A	Traffic Control Flagging Operation
TC 14B	Reduced Speed Signing for Pilot Car Operation (Conventional Roads)

Issue Date: March 12, 2015

Revised February 26, 2015

EN 3	Temporary Erosion Control (Slope Drain and Temporary Berm)
SL 1A	Traffic Signal Mast Arm Pole and Luminaire Extension 30 Ft Through 55 Ft
SL 1B	Traffic Signal Mast Arm Pole and Luminaire Extension 60 Ft Through 75 Ft
SL 2	Traffic Signal Mast Arm Mounting Details
SL 4	Traffic Signal Mast Arm Pole Foundation

Issue Date: May 14, 2015

Revised April 30, 2015

DD 3	Passing and Climbing Lanes
DD 19	Marked Pedestrian Crosswalk Enhancement Flowchart
PV 4	Concrete Pavement Details 2 of 2
PV 6A	Rumble Strips Shoulder Details
PV 6B	Rumble Strips Depth and Location Details
PV 7A	Typical Rumble Strip Shoulder Sequencing and Applications
PV 7B	Typical Rumble Strip Center Line Sequencing and Application
PV 8	Typical Rumble Strip Centerline Application
SL 17A	Pedestrian Signal Crosswalk
SL 17B	Pedestrian Hybrid Beacon Crosswalk
SL 17C	Flashing Beacon at a Crosswalk Intersection

Federal Projects With Full Size Plan Sheets

SL 17D	Flashing Beacon at Midblock Crosswalk
SN 19A	Preferential Lane Signing and Pavement Marking Details
SN 19B	Preferential Lane Access Opening Details
SN 19C	Preferential Lane Median Signing Spacing Greater 1 Mile
SN 19D	Preferential Lane Median Signing Spacing Equal to or Less Than 1 Mile
ST 1	Typical Pavement Markings No Pass Zone and Lane Reduction
ST 6A	Passing Lane Details
ST 6B1	Freeway Climbing Lane Inside Widening Detail
ST 6B2	Freeway Climbing Lane Outside Widening Detail

III. Materials Minimum Sampling and Testing Requirements

Follow the requirements of the Materials Minimum Sampling and Testing Requirements: http://www.udot.utah.gov/go/mstr

IV. Notice to Contractors

NOTICE TO CONTRACTORS

Sealed proposals will be received by the Utah Department of Transportation UDOT/DPS Building (4th Floor), 4501 South 2700 West, Salt Lake City, Utah. 84114-8220, until 2 o'clock p.m. Thursday, October 22, 2015, and at that time the download process of bids from the Project Delivery System to UDOT will begin, with the public opening of bids scheduled at 2:30 for 2300 EAST; I-80 TO 3900 SOUTH, PHASE I, SL Co., RECONSTRUCT & WIDEN INCLUDING SAFETY IMPROVEMENTS of Cnty:FA-2186; MP 3.68 - 5.35 in SALT LAKE County, the same being identified as Federal Aid Project No: F-0195(5)0.

Federal Regulations:
Davis-Bacon wages apply to this project and are made a part of these contract documents as required in the provisions of the Federal-Aid Highway Act of 1968. This contract is subject to all appropriate Federal Laws, including Title VI of the Civil Rights Act of 1964 and the Fair Labor Standards Act of 1938, (52 Stat. 1060).
SEE CERTIFIED PAYROLL SPECIAL REQUIREMENTS ATTACHEMENT.

Project Location: Cnty:FA-2186; MP 3.68 - 5.35

The principal items of work are as follows (for all items of work see attachment):
HMA - 1/2 inch
Traffic Control
Highway Decorative Lighting System 2300 East

The project is to be completed: to be determined by competitive bid.

Other Requirements:
All project bidding information, including Specifications and Plans, can be viewed, downloaded, and printed from UDOT's Project Development Construction Bid Opening Information website, http://www.udot.utah.gov/cns/bidopeninfo.htm. To bid on UDOT projects, bidders must use UDOT's Electronic Bid System (EBS). The EBS software is also available on this website.

Project information can also be reviewed at the main office in Salt Lake City, its Region offices, and its District offices in Price, Richfield, and Cedar City.

Project Plans cannot be downloaded or printed from the website unless your company is registered with UDOT. Go to UDOT's website to register. Registered companies may also obtain a **CD**, that contains the Specifications and Plans, from the main office, 4501 South 2700 West, Salt Lake City, (801) 965-4346, for a fee of $20.00, plus tax and mail charge, if applicable, none of which will be refunded.

Prequalification of bidders is required. Prior to submitting a bid, the bidder must have on file with the Utah Department of Transportation a completed and approved contractor's application for prequalification. Department processing time is 10 working days from receipt of properly executed documentation. Qualified Health Insurance is required on this project. Insurance must be submitted with executed contracts. See Standard Specification 00515 - 1.11(A).

As required, a contractor's license must be obtained from the Utah Department of Commerce.

Each bidder must submit an electronic bid bond from an approved surety company using UDOT's Electronic Bid System (EBS); or in lieu thereof, cash, certified check, or cashier's check for not less than 5% of the total amount of the bid, made payable to the Utah Department of Transportation, showing evidence of good faith and a guarantee that if awarded the contract, the bidder will execute the contract and furnish the contract bonds as required.

The right to reject any or all bids is reserved.

If you need an accommodation under the Americans with Disabilities Act, contact the Construction Division at (801) 965-4346. Please allow three working days.

Additional information may be secured at the office of the Utah Department of Transportation, (801) 965-4346.

Dated this 26th day of September, 2015.

UTAH DEPARTMENT OF TRANSPORTATION
Carlos M. Braceras, P.E., Director

Revised Date:

Revised September 8, 2015

NOTICE TO CONTRACTORS

Special Requirements Attachment
CERTIFIED PAYROLL

Effective as of 11/02/2009, construction contractors awarded a Federal-aid construction project are required to submit weekly certified payrolls to the Utah Department of Transportation using the (UDOT) Electronic Certified Payroll Program available in the UDOT Project Development Business System (PDBS). Submittal may be accomplished using one of two available options;

Option 1

The Contractor creates and continues to use the company's existing payroll software program to import the weekly certified payroll.

If Option 1 is chosen:

The software program format utilized by the Contractor must be certified by UDOT prior to the first import submittal.

The Contractor is required to go over the errors that show on the Import Summary Report. The Contractor is required to fix the issues related to these errors. If the issues related to these errors cannot be resolved with the import feature, the Contractor will need to manually input the employee payrolls in which the errors pertain.

NOTE: The apprentice payroll information is not part of the import feature. Any apprentice payroll information needs to be manually entered.

Option 2

The Contractor can access and utilize the Contractor Module in PDBS and enter the certified payroll information and submit to the UDOT project office. After the first payroll submission, personal addresses and full social security numbers are not to be used. After the first payroll submission of an employee, contractors and subcontractors must use the last four digits of the employee's social security number as an identifier.

Effective as of September 8, 2015, a $50 disincentive will be charged for each payroll not entered into the UDOT Electronic Certified Payroll Program within 7 days of the Payroll Date. This disincentive applies to both the General Contractor and all Subcontractors where Davis Bacon Wages apply.

For questions contact the Civil Rights Office.

V. Bidding Schedule

Utah Department of Transportation
Bidder's Schedule

Bid Opening Date: 10/22/2015
Region: REGION 2
Project Number: F-0195(5)0
County: SALT LAKE
PIN Description: 2300 EAST; I-80 TO 3900 SOUTH, PHASE I, SL Co.
Concept: RECONSTRUCT & WIDEN INCLUDING SAFETY IMPROVEMENTS
Location: Cnty:FA-2186; MP 3.68 - 5.35

Funding: FEDERAL
Innovative Contracting
Bid Items Version#: 1
DBE Goal: 9.00%

10 - ROADWAY

#	Item	Description	Quantity	Unit
1	00830001U	On the Job Training	1200	hour
2	012850010	Mobilization	1	lump sum
3	015540005	Traffic Control	1	lump sum
4	01554001P	VMS Sign	60	day
5	01557000*	Maintenance of Traffic	1	lump sum
6	015710025	Check Dam - 12 Inch Fiber Roll	473	foot
7	01571002P	Check Dam - (6" Bag Stone Filled)	52	each
8	01571003P	Silt Fence	369	foot
9	015710075	Drop-Inlet Barrier - 18 Inch Fiber Roll	60	foot
10	015710095	Fiber Roll - 12 Inch	701	foot
11	015710100	Gutter Inlet Barrier	82	each
12	01571010P	Double Gutter Inlet Barrier	37	each
13	015710115	Pipe-Inlet Barrier - 18 Inch Fiber Roll	15	foot
14	015720020	Dust Control and Watering	1101	1000 gallons
15	01891003P	Mailbox Assembly	6	each
16	018920010	Reconstruct Catch Basin	5	each
17	018920020	Reconstruct Cleanout Box	2	each
18	018920030	Reconstruct Meter Box	48	each
19	018920040	Reconstruct Valve Box	71	each
20	018920050	Reconstruct Manhole	75	each
21	018920060	Reconstruct Monument Box	10	each
22	020560015	Granular Borrow (Plan Quantity)	5770	cubic yard
23	02075002P	Geotextiles - Erosion Control	229	square yard
24	02216001*	Pothole Utility	20	each
25	022210025	Remove Manhole	1	each
26	022210030	Remove Catch Basin	26	each
27	022210035	Remove Diversion Box	20	each
28	02221004*	Remove Steel Plate	1	each
29	022210040	Remove Cleanout Box	3	each
30	02221005*	Remove Retaining Wall	310	foot
31	02221005P	Remove Tree	92	each
32	02221006*	Remove Wall	74	foot
33	02221008P	Remove Fence	2088	foot
34	02221009*	Remove Railroad Tie	1	each
35	022210095	Remove Pipe Culvert	3242	foot
36	02221009P	Relocate Fence	181	foot
37	022210106	Remove Mailbox	6	each
38	022210110	Remove Concrete Sidewalk	4320	square yard
39	022210115	Remove Concrete Driveway	382	square yard
40	02221012*	Remove Paved Ditch	819	foot
41	022210120	Remove Concrete Curb	215	foot

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.

Utah Department of Transportation
Bidder's Schedule

Bid Opening Date: 10/22/2015 **Region:** REGION 2
Project Number: F-0195(5)0 **County:** SALT LAKE
PIN Description: 2300 EAST; I-80 TO 3900 SOUTH, PHASE I, SL Co.
Concept: RECONSTRUCT & WIDEN INCLUDING SAFETY IMPROVEMENTS
Location: Cnty:FA-2186; MP 3.68 - 5.35

Funding: FEDERAL **Innovative Contracting**
Bid Items Version#: 1 **DBE Goal:**

#	Item	Description	Quantity	Unit
10 - ROADWAY				
42	022210125	Remove Concrete Curb and Gutter	5499	foot
43	022210140	Remove Raised Island	216	square yard
44	02221015P	Remove Concrete Pavement	2973	square yard
45	02221016P	Remove Asphalt Pavement	8298	square yard
46	022210170	Remove Precast Concrete Barrier	380	foot
47	023160020	Roadway Excavation (Plan Quantity)	16291	cubic yard
48	023180020	Surface Ditch	213	foot
49	02373001P	Loose Riprap (Plan Quantity)	50	cubic yard
50	02511001*	Relocate Water Meter	16	each
51	02511003*	Relocate Fire Hydrant	7	each
52	02511005*	Replace Fire Hydrant	2	each
53	02511006*	Reconstruct Fire Hydrant	1	each
54	02511007*	4" Salt Lake City Water Pipe Loop	14	each
55	02511008*	6" Salt Lake City Water Pipe Loop	5	each
56	02511011*	Replace 3/4" Water Service - Long	58	each
57	02511012*	Replace 1" Water Service - Long	23	each
58	02511013*	Replace 3/4" Water Service - Short	47	each
59	02511014*	Replace 1" Water Service - Short	9	each
60	02610160P	12 Inch - Reinforced Concrete Pipe, Irrigation/Storm Drain, Class C, Class V	325	foot
61	026101614	15 Inch - Reinforced Concrete Pipe, Irrigation/Storm Drain, Class C	4159	foot
62	026101616	18 Inch - Reinforced Concrete Pipe, Irrigation/Storm Drain, Class C	1731	foot
63	02610161P	15 Inch - Reinforced Concrete Pipe, Irrigation/Storm Drain, Class C, Class V	360	foot
64	02610162P	18 Inch - Reinforced Concrete Pipe, Irrigation/Storm Drain, Class C, Class V	67	foot
65	02610163P	12 Inch - Reinforced Concrete Pipe, Irrigation/Storm Drain, Class C	874	foot
66	02610164P	36 Inch - Reinforced Concrete Pipe, Irrigation/Storm Drain, Class C	573	foot
67	026110010	Hand-slide Gate 12 inch	40	each
68	02611001P	Hand-slide Gate 15 inch	16	each
69	026130030	Culvert End Section 18 inch	4	each
70	026330030	4 Foot Standard Manhole - CB 11	17	each
71	026330035	5 Foot Standard Manhole - CB 11	5	each
72	026330120	Concrete Drainage Structure 3 ft to 5 ft Deep - CB 9	34	each
73	02633016P	Modified CB 10	16	each
74	02633033P	Concrete Drainage Structure 3 ft to 5 ft Deep - DB 1	51	each
75	026330410	Double Catch Basin - CB 8	6	each
76	026350010	Diversion Box Solid Cover and Frame Type B	2	each
77	026350020	Open Curb Inlet Grate and Frame - GF 13	1	each
78	026350040	Rectangular Grate And Frame (Bicycle Safe Grating) - GF 3	2	each
79	026350045	Solid Cover and Frame - GF 5	2	each
80	027210020	Untreated Base Course (Plan Quantity)	4269	cubic yard
81	02737001*	Soft Spot Repair - Type A	250	square yard
82	02737002*	Soft Spot Repair - Type B	250	square yard

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Utah Department of Transportation
Bidder's Schedule

Bid Opening Date: 10/22/2015
Region: REGION 2
Project Number: F-0195(5)0
County: SALT LAKE
PIN Description: 2300 EAST; I-80 TO 3900 SOUTH, PHASE I, SL Co.
Concept: RECONSTRUCT & WIDEN INCLUDING SAFETY IMPROVEMENTS
Location: Cnty:FA-2186; MP 3.68 - 5.35

Funding: FEDERAL
Innovative Contracting
Bid Items Version#: 1
DBE Goal:

#	Item	Description	Quantity	Unit
10 - ROADWAY				
83	027410050	HMA - 1/2 inch	13658	ton
84	027520020	Portland Cement Concrete Pavement 9 inch Thick	1978	square yard
85	02771000P	Concrete Curb Type B3	38	foot
86	027710015	Concrete Curb Type B4	308	foot
87	027710025	Concrete Curb and Gutter Type B1	15135	foot
88	02771002P	Concrete Curb Type M2	132	foot
89	02771003P	Concrete Curb Type B5	322	foot
90	027710040	Concrete Driveway Flared, 6 inch Thick	23124	square foot
91	027710045	Concrete Driveway Flared, 7 inch Thick	9972	square foot
92	02771004P	Concrete Curb and Gutter Transition	2	each
93	027710050	Concrete Driveway Open, 6 inch Thick	219	square foot
94	027710058	Corner Pedestrian Access Ramp	38	each
95	027710059	Perpendicular/Parallel Pedestrian Access Ramp	7	each
96	027710086	Detectable Warning Surface	2	each
97	027710100	Plowable End Section	5	each
98	02771010P	Curb Cut	4	each
99	02771061P	Corner Pedestrian Access Ramp, Type A	2	each
100	02771062P	Corner Pedestrian Access Ramp, Type B	2	each
101	02771063P	Corner Pedestrian Access Ramp, Type C	7	each
102	02771064P	Corner Pedestrian Access Ramp, Type D	9	each
103	027760010	Concrete Sidewalk	37506	square foot
104	02776001P	Colored Concrete Sidewalk	17623	square foot
105	02776002P	Concrete Stairs	13	cubic yard
106	02776003P	Concrete Flatwork 4 inch thick	619	square foot
107	027760040	Concrete Flatwork 6 inch thick	59	square foot
108	02787001*	Crushed Stone (Plan Quantity)	1607	cubic yard
109	02821001P	4 ft Chain Link Fence, Type II	528	foot
110	02821003*	Temporary Fence, Type IV	502	foot
111	02821003P	6 ft Chain Link Fence, Type IV	612	foot
112	02821004*	Chain Link Gate, H= 4 ft X W= 3 ft	1	each
113	02821004P	Chain Link Gate, H= 4 ft X W= 4 ft	2	each
114	02821005*	Chain Link Gate, H= 6 ft X W= 3 ft	1	each
115	02824001*	6 ft Wood Fence	668	foot
116	02824002*	6 ft Wood Gate	1	each
117	02826001*	6 ft Vinyl Fence	204	foot
118	02828001*	Ornamental Fence	825	foot
119	02828002*	Ornamental Gate	1	each
120	02897001*	Survey Monument	2	each
121	02961005P	Rotomilling - 3 1/2 Inch	31155	square yard
122	13553001P	Lower Existing ATMS Conduit In Place	275	foot
123	16525001D	Highway Lighting System 2300 East(Est. Lump Qty: 1)	1	lump sum

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Location: Cnty:FA-2186; MP 3.68 - 5.35

Funding: FEDERAL
Innovative Contracting
Bid Items Version#: 1
DBE Goal:

#	Item	Description	Quantity	Unit
10 - ROADWAY				
124	16525001P	Lower buried power line in place	79	foot
20 - STRUCTURES				
125	02378016*	Retaining Wall P (Est. Qty. 87 Sq Ft.)	1	lump sum
126	02378017*	Retaining Wall Q (Est. Qty. 57 Sq Ft.)	1	lump sum
127	02861007*	Precast Retaining/Noise Wall 7 ft and less	84	foot
128	02913001*	Retaining Wall A (Est. Qty. 97 Sq Ft.)	1	lump sum
129	02913003*	Retaining Wall C (Est. Qty. 15 Sq Ft.)	1	lump sum
130	02913004*	Retaining Wall D (Est. Qty. 204 Sq Ft.)	1	lump sum
131	02913005*	Retaining Wall E (Est. Qty. 96 Sq Ft.)	1	lump sum
132	02913006*	Retaining Wall F (Est. Qty. 116 Sq Ft.)	1	lump sum
133	02913007*	Retaining Wall G (Est. Qty. 169 Sq Ft.)	1	lump sum
134	02913008*	Retaining Wall H (Est. Qty. 68 Sq Ft.)	1	lump sum
135	02913009*	Retaining Wall I (Est. Qty. 100 Sq Ft.)	1	lump sum
136	02913010*	Retaining Wall J (Est. Qty. 101 Sq Ft.)	1	lump sum
137	02913011*	Retaining Wall K (Est. Qty. 27 Sq Ft.)	1	lump sum
138	02913012*	Retaining Wall L (Est. Qty. 58 Sq Ft.)	1	lump sum
139	02913013*	Retaining Wall M (Est. Qty. 20 Sq Ft.)	1	lump sum
140	02913014*	Retaining Wall N (Est. Qty. 219 Sq Ft.)	1	lump sum
141	02913015*	Retaining Wall O (Est. Qty. 194 Sq Ft.)	1	lump sum
142	02913018*	Retaining Wall R (Est. Qty. 185 Sq Ft.)	1	lump sum
143	02913019*	Retaining Wall S (Est. Qty. 175 Sq Ft.)	1	lump sum
144	02913020*	Retaining Wall T (Est. Qty. 122 Sq Ft.)	1	lump sum
145	02913022*	Retaining Wall V (Est. Qty. 81 Sq Ft.)	1	lump sum
146	02913023*	Retaining Wall W (Est. Qty. 78 Sq Ft.)	1	lump sum
147	02913024*	Retaining Wall X (Est. Qty. 72 Sq Ft.)	1	lump sum
30 - LANDSCAPING				
148	023760010	Steep-Slope Erosion Control	3730	square yard
149	02787002*	Landscape Rock (Plan Quantity)	1855	square foot
150	02812001*	Pressurized Irrigation System	1	lump sum
151	02814001*	Re-Establish Landscaping	48495	square foot
152	02873001*	Tree Grate	34	each
153	02873002*	Leaning Rail (Bench)	2	each
154	029110010	Wood Fiber Mulch	1	acre
155	02912001P	Contractor Furnished Topsoil - 4 Inch Min (Plan Quantity)	9260	square yard
156	02912005P	Strip, Stockpile, and Spread Topsoil (Plan Quantity)	3719	square yard

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Location: Cnty:FA-2186; MP 3.68 - 5.35

Funding: FEDERAL **Innovative Contracting**
Bid Items Version#: 1 **DBE Goal:**

#	Item	Description	Quantity	Unit
30 - LANDSCAPING				
157	029220030	Broadcast Seed	3	acre
158	029220060	Turf Sod	21456	square foot
159	02932005P	Plant - No. 5 Container (Shrubs)	2383	each
160	02932008D	Plant - 2 inch Caliper (Tree)	214	each
161	02932013P	Plant - 7 ft Min Height (Evergreen)	133	each
40 - SIGNING				
162	027680005	4 inch Pavement Marking Tape - White	4228	foot
163	02768000P	6 inch Pavement Marking Tape - White	14537	foot
164	027680010	8 inch Pavement Marking Tape - White	955	foot
165	027680015	4 inch Pavement Marking Tape - Yellow	17270	foot
166	027680025	Pavement Message (Tape)	178	each
167	027680105	Pavement Message (Preformed Thermoplastic)	172	each
168	02768010P	Pavement Message (Preformed Thermoplastic)	1429	foot
169	02770001*	Pavement Message (Preformed Thermoplastic)	3042	square foot
170	02891001P	Sign Type A-1, 24 inch X 24 inch	2	each
171	02891002P	Sign Type A-1, 30 inch X 12 inch	2	each
172	02891003*	School Zone Flashing Beacon	2	each
173	02891003P	Sign Type A-1, 30 inch X 15 inch	6	each
174	028910040	Sign Type A-1, 24 inch X 12 inch	15	each
175	028910045	Sign Type A-1, 24 inch X 18 inch	6	each
176	02891004P	Sign Type A-1, 24 inch X 48 inch	2	each
177	028910050	Sign Type A-1, 24 inch X 30 inch	4	each
178	028910055	Sign Type A-1, 30 inch X 24 inch	4	each
179	02891005P	Sign Type A-1, 36 inch X 12 inch	2	each
180	028910060	Sign Type A-1, 30 inch X 30 inch	22	each
181	028910065	Sign Type A-1, 36 inch X 36 inch	13	each
182	02891006P	Sign Type A-1, 48 inch X 24 inch	4	each
183	028910075	Sign Type A-2	320	square foot
184	02891007P	Sign Type A-1, 30 inch X 27 inch	2	each
185	028910095	Sign Type A-2, 24 inch X 12 inch	2	each
186	028910100	Sign Type A-2, 24 inch X 18 inch	1	each
187	028910103	Sign Type A-2, 24 inch x 24 inch	2	each
188	028910120	Sign Type A-2, 36 inch X 36 inch	10	each
189	028910125	Sign Type A-2, 48 inch X 48 inch	8	each
190	02891018P	Sign Type A-2, 12 inch X 6 inch	2	each
191	02891019P	Sign Type A-2, 12 inch X 9 inch	6	each
192	02891020P	Sign Type A-2, 18 inch X 12 inch	5	each
193	02891021P	Sign Type A-2, 18 inch X 24 inch	1	each

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Location: Cnty:FA-2186; MP 3.68 - 5.35

Funding: FEDERAL **Innovative Contracting**
Bid Items Version#: 1 **DBE Goal:**

#	Item	Description	Quantity	Unit
40 - SIGNING				
194	02891022P	Sign Type A-2, 24 inch X 15 inch	2	each
195	02891023P	Sign Type A-2, 36 inch X 18 inch	1	each
196	02891024P	Sign Type A-2, 36 inch X 21 inch	1	each
197	02891025P	Sign Type A-2, 36 inch X 24 inch	2	each
198	028910270	Remove Sign Less Than 20 Square Feet	77	each
199	028910275	Remove Sign Greater Than or Equal to 20 Square Feet	2	each
200	02891028P	Relocate Sign Less Than 20 Square Feet	4	each
201	028910300	Small Sign Tubular Steel Post Base (B1)	12	each
202	028910320	Slipbase Sign Base (B3)	80	each
203	028910350	Sign Post Base (B6B) For S Section Steel Posts	6	each
204	028910355	Sign Post P1	4	each
205	028910360	Sign Post P2	8	each
206	028910365	Sign Post P3	39	each
207	028910370	Sign Post P4	34	each
208	028910375	Sign Post P5	9	each
209	028910410	Post S6 X 12.5	6	each
210	02892001P	Advanced Warning Sign w/Flashing Beacons	1	lump sum
50 - SIGNALS				
211	02892001D	Traffic Signal System 2300 East & Evergreen	1	lump sum
212	02892002D	Traffic Signal System 2300 East & 3300 South	1	lump sum
112 - ADDITIVE BIDDING				
		Description: Additive #01: Highway Lighting System		
213	012850010	Mobilization	1	lump sum
214	16525002D	Highway Decorative Lighting System 2300 East	1	lump sum
112 - ADDITIVE BIDDING				
		Description: Additive #02: Colored Intersection Markings		
215	012850010	Mobilization	1	lump sum
216	02769001*	Preformed Thermoplastic (Rust Red)	8913	square foot
217	02769002*	Preformed Thermoplastic (Brown)	12270	square foot
180 - TIME AND/OR LANE RENTAL				
218	00221000*	Contract Time Date Range: 350 - 380	0	calendar day

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Region: REGION 2
County: SALT LAKE

Funding: FEDERAL
Bid Items Version#: 1
DBE Goal:

Innovative Contracting

#	Item	Description		Quantity	Unit
185 - ADDITIVE TIME AND/OR LANE RENTAL					
	Description: Additive #01: Highway Lighting System				
219	00221000*	Contract Time	Date Range: 30 - 45	0	calendar day
185 - ADDITIVE TIME AND/OR LANE RENTAL					
	Description: Additive #02: Colored Intersection Markings				
220	00221000*	Contract Time	Date Range: 10 - 20	0	calendar day

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VI. Measurement and Payment

Insert Measurement and Payment here.

Measurement and Payment

Project # F-0195(5)0

Item #	Bid Item Number	Bid Item Name	UOM
1	00830001U	On the Job Training	hour
		Training Commitments listed in the Table of Contents for Federal projects, XI – 5 http://www.udot.utah.gov/main/f?p=100:pg::::1:T,V:1940	
2	012850010	Mobilization	lump sum
		Amount Paid / **When Paid** 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.	
3	015540005	Traffic Control	lump sum
		Amount Paid / **When Paid** 25% of the bid item amount. — With first estimate Remaining portion of bid item paid as a percentage of the contract completed. — With each subsequent estimate	
4	01554001P	VMS Sign	day
5	01557000*	Maintenance of Traffic	lump sum
		Amount Paid 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 furnishing, maintaining and removing fixed signs	
6	015710025	Check Dam - 12 Inch Fiber Roll	foot
		Measured along centerline of fiber roll	
7	01571002P	Check Dam - (6" Bag Stone Filled)	each
8	01571003P	Silt Fence	foot
9	015710075	Drop-Inlet Barrier - 18 Inch Fiber Roll	foot
		Measured along centerline of fiber roll	
10	015710095	Fiber Roll - 12 Inch	foot
		Measured along centerline of fiber roll.	
11	015710100	Gutter Inlet Barrier	each
12	01571010P	Double Gutter Inlet Barrier	each
13	015710115	Pipe-Inlet Barrier - 18 Inch Fiber Roll	foot
		Measured along centerline of fiber roll.	
14	015720020	Dust Control and Watering	1000 gallons
15	01891003P	Mailbox Assembly	each
16	018920010	Reconstruct Catch Basin	each
17	018920020	Reconstruct Cleanout Box	each
18	018920030	Reconstruct Meter Box	each
19	018920040	Reconstruct Valve Box	each
20	018920050	Reconstruct Manhole	each
21	018920060	Reconstruct Monument Box	each
22	020560015	Granular Borrow (Plan Quantity)	cubic yard
		In final position	

Item #	Bid Item Number	Bid Item Name	UOM
23	02075002P	Geotextiles - Erosion Control	square yard
		Measurement does not include overlaps	
24	02216001*	Pothole Utility	each
25	022210025	Remove Manhole	each
26	022210030	Remove Catch Basin	each
27	022210035	Remove Diversion Box	each
28	02221004*	Remove Steel Plate	each
29	022210040	Remove Cleanout Box	each
30	02221005*	Remove Retaining Wall	foot
31	02221005P	Remove Tree	each
32	02221006*	Remove Wall	foot
		Includes removal of dry well or drain field that is part of the disposal system	
33	02221008P	Remove Fence	foot
		Includes all line posts, brace posts, and foundations	
34	02221009*	Remove Railroad Tie	each
		Includes all attached parts and connections	
35	022210095	Remove Pipe Culvert	foot
36	02221009P	Relocate Fence	foot
		Includes all attached parts and connections	
37	022210106	Remove Mailbox	each
38	022210110	Remove Concrete Sidewalk	square yard
		Use the area of horizontal projection to calculate the area of steps	
39	022210115	Remove Concrete Driveway	square yard
40	02221012*	Remove Paved Ditch	foot
41	022210120	Remove Concrete Curb	foot
42	022210125	Remove Concrete Curb and Gutter	foot
43	022210140	Remove Raised Island	square yard
44	02221015P	Remove Concrete Pavement	square yard
		Regardless of the depth A. Does not include discontinued roads within the limits of the new roadbed or roads that are disturbed in performing other items of work.B. Exclude from measurement and payment under "Roadway Excavation."C. Includes curb and gutter integral to the concrete pavement.	
45	02221016P	Remove Asphalt Pavement	square yard
		Does not include discontinued roads within the limits of the new roadbed or roads that are disturbed in performing other items of work.	
46	022210170	Remove Precast Concrete Barrier	foot
47	023160020	Roadway Excavation (Plan Quantity)	cubic yard
48	023180020	Surface Ditch	foot
		Measured along centerline	
49	02373001P	Loose Riprap (Plan Quantity)	cubic yard
		Calculated using the in-place surface area and specified thickness.	
50	02511001*	Relocate Water Meter	each
51	02511003*	Relocate Fire Hydrant	each
52	02511005*	Replace Fire Hydrant	each
53	02511006*	Reconstruct Fire Hydrant	each
54	02511007*	4" Salt Lake City Water Pipe Loop	each
55	02511008*	6" Salt Lake City Water Pipe Loop	each

Item #	Bid Item Number	Bid Item Name	UOM
56	02511011*	Replace 3/4" Water Service - Long	each
		Includes all material, labor, and equipment to install a new 3/4" water service per Salt Lake City Public Utilities requirements, including pipe, fittings, excavation, backfill, compaction, pressure testing, disinfection, flushing, warning tape, tracer wire, gravel, reconnection of existing services, and all other items necessary to complete the work as shown in the plans. Includes granular borrow, UTBC, HMA, to match existing pavement section after any excavation and installation of water service. Reuse the existing meter and any existing radio reading equipment. Ensure all existing equipment is in working condition prior to and subsequent to service replacement.	
57	02511012*	Replace 1" Water Service - Long	each
		Includes all material, labor, and equipment to install a new 1" water service per Salt Lake City Public Utilities requirements, including pipe, fittings, excavation, backfill, compaction, pressure testing, disinfection, flushing, warning tape, tracer wire, gravel, reconnection of existing services, and all other items necessary to complete the work as shown in the plans. Includes granular borrow, UTBC, HMA, to match existing pavement section after any excavation and installation of water service. Reuse the existing meter and any existing radio reading equipment. Ensure all existing equipment is in working condition prior to and subsequent to service replacement.	
58	02511013*	Replace 3/4" Water Service - Short	each
		Includes all material, labor, and equipment to install a new 3/4" water service per Salt Lake City Public Utilities requirements, including pipe, fittings, excavation, backfill, compaction, pressure testing, disinfection, flushing, warning tape, tracer wire, gravel, reconnection of existing services, and all other items necessary to complete the work as shown in the plans. Includes granular borrow, UTBC, HMA, to match existing pavement section after any excavation and installation of water service. Reuse the existing meter and any existing radio reading equipment. Ensure all existing equipment is in working condition prior to and subsequent to service replacement.	
59	02511014*	Replace 1" Water Service - Short	each
		Includes all material, labor, and equipment to install a new 1" water service per Salt Lake City Public Utilities requirements, including pipe, fittings, excavation, backfill, compaction, pressure testing, disinfection, flushing, warning tape, tracer wire, gravel, reconnection of existing services, and all other items necessary to complete the work as shown in the plans. Includes granular borrow, UTBC, HMA, to match existing pavement section after any excavation and installation of water service. Reuse the existing meter and any existing radio reading equipment. Ensure all existing equipment is in working condition prior to and subsequent to service replacement.	
60	02610160P	12 Inch - Reinforced Concrete Pipe, Irrigation/Storm Drain, Class C, Class V	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 featuers are incidental to construction and no separate payment will be made. D. No separate payment will be made for required inspection and testing.	
61	026101614	15 Inch - Reinforced Concrete Pipe, Irrigation/Storm Drain, Class C	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 featuers are incidental to construction and no separate payment will be made. D. No separate payment will be made for required inspection and testing.	
62	026101616	18 Inch - Reinforced Concrete Pipe, Irrigation/Storm Drain, Class C	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 featuers are incidental to construction and no separate payment will be made. D. No separate payment will be made for required inspection and testing.	
63	02610161P	15 Inch - Reinforced Concrete Pipe, Irrigation/Storm Drain, Class C, Class V	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 featuers are incidental to construction and no separate payment will be made. D. No separate payment will be made for required inspection and testing.	
64	02610162P	18 Inch - Reinforced Concrete Pipe, Irrigation/Storm Drain, Class C, Class V	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 featuers are incidental to construction and no separate payment will be made. D. No separate payment will be made for required inspection and testing.	
65	02610163P	12 Inch - Reinforced Concrete Pipe, Irrigation/Storm Drain, Class C	foot
66	02610164P	36 Inch - Reinforced Concrete Pipe, Irrigation/Storm Drain, Class C	foot

Item #	Bid Item Number	Bid Item Name	UOM
67	026110010	Hand-slide Gate 12 inch	each
68	02611001P	Hand-slide Gate 15 inch	each
69	026130030	Culvert End Section 18 inch	each
70	026330030	4 Foot Standard Manhole - CB 11	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 ÷ 4 x 100) for any required field changes larger than 1 foot of specified plan dimensions. D. The Department will make no separate payment for testing upon failure of visual inspection.	
71	026330035	5 Foot Standard Manhole - CB 11	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 ÷ 4 x 100) for any required field changes larger than 1 foot of specified plan dimensions. D. The Department will make no separate payment for testing upon failure of visual inspection.	
72	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 ÷ 4 x 100) for any required field changes larger than 1 foot of specified plan dimensions. D. The Department will make no separate payment for testing upon failure of visual inspection.	
73	02633016P	Modified CB 10	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 ÷ 4 x 100) for any required field changes larger than 1 foot of specified plan dimensions. D. The Department will make no separate payment for testing upon failure of visual inspection.	
74	02633033P	Concrete Drainage Structure 3 ft to 5 ft Deep - DB 1	each
75	026330410	Double Catch Basin - CB 8	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 ÷ 4 x 100) for any required field changes larger than 1 foot of specified plan dimensions. D. The Department will make no separate payment for testing upon failure of visual inspection.	
76	026350010	Diversion Box Solid Cover and Frame Type B	each
		Refer to UDOT Standard Drawing Series DB 2	
77	026350020	Open Curb Inlet Grate and Frame - GF 13	each
		Refer to UDOT Standard Drawing Series CB 4	
78	026350040	Rectangular Grate And Frame (Bicycle Safe Grating) - GF 3	each

Item #	Bid Item Number	Bid Item Name	UOM
		Refer to UDOT Standard Drawing Series GF 3	
79	026350045	Solid Cover and Frame - GF 5	each
		Refer to UDOT Standard Drawing Series GF 5	
80	027210020	Untreated Base Course (Plan Quantity)	cubic yard
81	02737001*	Soft Spot Repair - Type A	square yard
82	02737002*	Soft Spot Repair - Type B	square yard
83	027410050	HMA - 1/2 inch	ton
		Includes aggregates, asphalt binder, hydrated lime, tack coat, and other additives, etc.	
84	027520020	Portland Cement Concrete Pavement 9 inch Thick	square yard
		Calculated from measured length multiplied by measured width not to exceed plan width.	
85	02771000P	Concrete Curb Type B3	foot
86	027710015	Concrete Curb Type B4	foot
		Measured along the roadway face. Includes excavation and untreated base course.	
87	027710025	Concrete Curb and Gutter Type B1	foot
		Measured along the roadway face. Includes excavation and untreated base course.	
88	02771002P	Concrete Curb Type M2	foot
		Measured along the roadway face. Includes dowel bars.	
89	02771003P	Concrete Curb Type B5	foot
		Measured along the roadway face. Includes excavation and untreated base course.	
90	027710040	Concrete Driveway Flared, 6 inch Thick	square foot
		Include Radius and Flares. Includes excavation and untreated base course. Includes all labor, equipment, and materials necessary for a complete driveway. The curb cut will remain part of the curb and gutter installation.	
91	027710045	Concrete Driveway Flared, 7 inch Thick	square foot
		Include Radius and Flares. Includes excavation and untreated base course. Includes all labor, equipment, and materials necessary for a complete driveway. The curb cut will remain part of the curb and gutter installation.	
92	02771004P	Concrete Curb and Gutter Transition	each
		Include Radius and Flares. Includes excavation and untreated base course. Includes all labor, equipment, and materials necessary for a complete driveway. The curb cut will remain part of the curb and gutter installation.	
93	027710050	Concrete Driveway Open, 6 inch Thick	square foot
		Include Radius and Flares. Includes excavation and untreated base course. Includes all labor, equipment, and materials necessary for a complete driveway. The curb cut will remain part of the curb and gutter installation.	
94	027710058	Corner Pedestrian Access Ramp	each
		Includes all labor, equipment, untreated base course, and materials necessary for a complete pedestrian access ramp according to GW Series Standard Drawings. The curb cut will remain part of the curb and gutter installation.	
95	027710059	Perpendicular/Parallel Pedestrian Access Ramp	each
		Includes all labor, equipment, untreated base course, and materials necessary for a complete pedestrian access ramp according to GW Series Standard Drawings. The curb cut will remain part of the curb and gutter installation.	
96	027710086	Detectable Warning Surface	each
		Includes all labor, equipment, and materials necessary for a complete upgraded pedestrian access ramp with the new detectable warning panel.	
97	027710100	Plowable End Section	each

Item #	Bid Item Number	Bid Item Name	UOM
		Includes excavation and untreated base course.	
98	02771010P	Curb Cut	each
		Includes excavation and untreated base course.	
99	02771061P	Corner Pedestrian Access Ramp, Type A	each
100	02771062P	Corner Pedestrian Access Ramp, Type B	each
101	02771063P	Corner Pedestrian Access Ramp, Type C	each
102	02771064P	Corner Pedestrian Access Ramp, Type D	each
103	027760010	Concrete Sidewalk	square foot
		Includes excavation and untreated base course.	
104	02776001P	Colored Concrete Sidewalk	square foot
		Includes excavation and untreated base course.	
105	02776002P	Concrete Stairs	cubic yard
		Includes excavation and untreated base course.	
106	02776003P	Concrete Flatwork 4 inch thick	square foot
		Includes excavation and untreated base course.	
107	027760040	Concrete Flatwork 6 inch thick	square foot
		Includes excavation and untreated base course.	
108	02787001*	Crushed Stone (Plan Quantity)	cubic yard
109	02821001P	4 ft Chain Link Fence, Type II	foot
		Measured parallel to the ground along the fence. Includes line posts, less openings.	
110	02821003*	Temporary Fence, Type IV	foot
		Measured parallel to the ground along the fence. Includes line posts, less openings.	
111	02821003P	6 ft Chain Link Fence, Type IV	foot
		Measured parallel to the ground along the fence. Includes line posts, less openings.	
112	02821004*	Chain Link Gate, H= 4 ft X W= 3 ft	each
		Measured parallel to the ground along the fence. Includes line posts, less openings.	
113	02821004P	Chain Link Gate, H= 4 ft X W= 4 ft	each
		Measured parallel to the ground along the fence. Includes line posts, less openings.	
114	02821005*	Chain Link Gate, H= 6 ft X W= 3 ft	each
		A. Double gates will be counted as two gates. B. Include barbed wire arms on gates.	
115	02824001*	6 ft Wood Fence	foot
116	02824002*	6 ft Wood Gate	each
117	02826001*	6 ft Vinyl Fence	foot
118	02828001*	Ornamental Fence	foot
119	02828002*	Ornamental Gate	each
120	02897001*	Survey Monument	each
121	02961005P	Rotomilling - 3 1/2 Inch	square yard
		Calculated from length multiplied by the average finished width of rotomilled surface	
122	13553001P	Lower Existing ATMS Conduit In Place	foot
		A. Includes all materials, labor, workmanship, equipment, documentation, inspection, and incidental items required for a complete system of conduit as described in the contract. Conduit may be installed by trenching, boring, or plowing unless otherwise specified. B. Includes duct seal, pull tape, conduit sweeps, fittings, conduit proofing, backfill, and warning tape. C. Includes flowable fill. D. Consultant inspection of mandrel test is paid for via consultant services contract.	
123	16525001D	Highway Lighting System 2300 East (Est. Lump Qty: 1)	lump sum

Item #	Bid Item Number	Bid Item Name	UOM
		Includes all labor, equipment, and materials necessary to provide a complete and fully operational highway lighting system.	
124	16525001P	Lower buried power line in place	foot
125	02378016*	Retaining Wall P (Est. Qty. 87 Sq Ft.)	lump sum
126	02378017*	Retaining Wall Q (Est. Qty. 57 Sq Ft.)	lump sum
127	02861007*	Precast Retaining/Noise Wall 7 ft and less	foot
		A. Includes all materials, labor, and equipment necessary to complete the item. B. Includes manufacturing, furnishing, and installing all items. C. Includes furnishing and installing concrete coating system.	
128	02913001*	Retaining Wall A (Est. Qty. 97 Sq Ft.)	lump sum
129	02913003*	Retaining Wall C (Est. Qty. 15 Sq Ft.)	lump sum
130	02913004*	Retaining Wall D (Est. Qty. 204 Sq Ft.)	lump sum
131	02913005*	Retaining Wall E (Est. Qty. 96 Sq Ft.)	lump sum
132	02913006*	Retaining Wall F (Est. Qty. 116 Sq Ft.)	lump sum
133	02913007*	Retaining Wall G (Est. Qty. 169 Sq Ft.)	lump sum
134	02913008*	Retaining Wall H (Est. Qty. 68 Sq Ft.)	lump sum
135	02913009*	Retaining Wall I (Est. Qty. 100 Sq Ft.)	lump sum
136	02913010*	Retaining Wall J (Est. Qty. 101 Sq Ft.)	lump sum
137	02913011*	Retaining Wall K (Est. Qty. 27 Sq Ft.)	lump sum
138	02913012*	Retaining Wall L (Est. Qty. 58 Sq Ft.)	lump sum
139	02913013*	Retaining Wall M (Est. Qty. 20 Sq Ft.)	lump sum
140	02913014*	Retaining Wall N (Est. Qty. 219 Sq Ft.)	lump sum
141	02913015*	Retaining Wall O (Est. Qty. 194 Sq Ft.)	lump sum
142	02913018*	Retaining Wall R (Est. Qty. 185 Sq Ft.)	lump sum
143	02913019*	Retaining Wall S (Est. Qty. 175 Sq Ft.)	lump sum
144	02913020*	Retaining Wall T (Est. Qty. 122 Sq Ft.)	lump sum
145	02913022*	Retaining Wall V (Est. Qty. 81 Sq Ft.)	lump sum
146	02913023*	Retaining Wall W (Est. Qty. 78 Sq Ft.)	lump sum
147	02913024*	Retaining Wall X (Est. Qty. 72 Sq Ft.)	lump sum
148	023760010	Steep-Slope Erosion Control	square yard
		Measurement does not include overlaps.	
149	02787002*	Landscape Rock (Plan Quantity)	square foot
150	02812001*	Pressurized Irrigation System	lump sum
		Include all labor, equipment, and materials necessary to provide a complete and fully operational pressurized irrigation system.	
151	02814001*	Re-Establish Landscaping	square foot
152	02873001*	Tree Grate	each
153	02873002*	Leaning Rail (Bench)	each
154	029110010	Wood Fiber Mulch	acre
155	02912001P	Contractor Furnished Topsoil - 4 Inch Min (Plan Quantity)	square yard
156	02912005P	Strip, Stockpile, and Spread Topsoil (Plan Quantity)	square yard
157	029220030	Broadcast Seed	acre
158	029220060	Turf Sod	square foot
159	02932005P	Plant - No. 5 Container (Shrubs)	each
160	02932008D	Plant - 2 inch Caliper (Tree)	each
161	02932013P	Plant - 7 ft Min Height (Evergreen)	each
162	027680005	4 inch Pavement Marking Tape - White	foot

Item #	Bid Item Number	Bid Item Name	UOM
		A. Do not measure the gap in the broken line. B. Include all costs for the Manufacturer's Service Representative and other technical assistance in the contract unit price.	
163	02768000P	6 inch Pavement Marking Tape - White	foot
164	027680010	8 inch Pavement Marking Tape - White	foot
		A. Do not measure the gap in the broken line. B. Include all costs for the Manufacturer's Service Representative and other technical assistance in the contract unit price.	
165	027680015	4 inch Pavement Marking Tape - Yellow	foot
		A. Do not measure the gap in the broken line. B. Include all costs for the Manufacturer's Service Representative and other technical assistance in the contract unit price.	
166	027680025	Pavement Message (Tape)	each
		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 Line = 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 Line = one message H. Include all costs for the Manufacturer's Service Representative and other technical assistance in the contract unit price.	
167	027680105	Pavement Message (Preformed Thermoplastic)	each
		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.	
168	02768010P	Pavement Message (Preformed Thermoplastic)	foot
169	02770001*	Pavement Message (Preformed Thermoplastic)	square foot
170	02891001P	Sign Type A-1, 24 inch X 24 inch	each
171	02891002P	Sign Type A-1, 30 inch X 12 inch	each
172	02891003*	School Zone Flashing Beacon	each
		Includes frame or mounting bar as required in SN Series Standard Drawings.	
173	02891003P	Sign Type A-1, 30 inch X 15 inch	each
		Includes frame or mounting bar as required in SN Series Standard Drawings.	
174	028910040	Sign Type A-1, 24 inch X 12 inch	each
		Includes frame or mounting bar as required in SN Series Standard Drawings.	
175	028910045	Sign Type A-1, 24 inch X 18 inch	each
		Includes frame or mounting bar as required in SN Series Standard Drawings.	
176	02891004P	Sign Type A-1, 24 inch X 48 inch	each
		Includes frame or mounting bar as required in SN Series Standard Drawings.	
177	028910050	Sign Type A-1, 24 inch X 30 inch	each

Item #	Bid Item Number	Bid Item Name	UOM
		Includes frame or mounting bar as required in SN Series Standard Drawings.	
178	028910055	Sign Type A-1, 30 inch X 24 inch	each
		Includes frame or mounting bar as required in SN Series Standard Drawings.	
179	02891005P	Sign Type A-1, 36 inch X 12 inch	each
		Includes frame or mounting bar as required in SN Series Standard Drawings.	
180	028910060	Sign Type A-1, 30 inch X 30 inch	each
		Includes frame or mounting bar as required in SN Series Standard Drawings.	
181	028910065	Sign Type A-1, 36 inch X 36 inch	each
		Includes frame or mounting bar as required in SN Series Standard Drawings.	
182	02891006P	Sign Type A-1, 48 inch X 24 inch	each
		Includes frame or mounting bar as required in SN Series Standard Drawings.	
183	028910075	Sign Type A-2	square foot
		Non Standard size signs. Includes frame or mounting bar as required in SN Series Standard Drawings.	
184	02891007P	Sign Type A-1, 30 inch X 27 inch	each
		Includes frame or mounting bar as required in SN Series Standard Drawings.	
185	028910095	Sign Type A-2, 24 inch X 12 inch	each
		Includes frame or mounting bar as required in SN Series Standard Drawings.	
186	028910100	Sign Type A-2, 24 inch X 18 inch	each
		Includes frame or mounting bar as required in SN Series Standard Drawings.	
187	028910103	Sign Type A-2, 24 inch x 24 inch	each
		Includes frame or mounting bar as required in SN Series Standard Drawings.	
188	028910120	Sign Type A-2, 36 inch X 36 inch	each
		Includes frame or mounting bar as required in SN Series Standard Drawings.	
189	028910125	Sign Type A-2, 48 inch X 48 inch	each
		Includes frame or mounting bar as required in SN Series Standard Drawings.	
190	02891018P	Sign Type A-2, 12 inch X 6 inch	each
		Includes frame or "Z" bar as required in SN Series Standard Drawings.	
191	02891019P	Sign Type A-2, 12 inch X 9 inch	each
		Includes frame or "Z" bar as required in SN Series Standard Drawings.	
192	02891020P	Sign Type A-2, 18 inch X 12 inch	each
		Includes frame or "Z" bar as required in SN Series Standard Drawings.	
193	02891021P	Sign Type A-2, 18 inch X 24 inch	each
		Includes frame or "Z" bar as required in SN Series Standard Drawings.	
194	02891022P	Sign Type A-2, 24 inch X 15 inch	each
		Includes frame or "Z" bar as required in SN Series Standard Drawings.	
195	02891023P	Sign Type A-2, 36 inch X 18 inch	each
		Includes frame or "Z" bar as required in SN Series Standard Drawings.	
196	02891024P	Sign Type A-2, 36 inch X 21 inch	each
		Includes all hardware necessary to attach overlay to existing panel.	

Item #	Bid Item Number	Bid Item Name	UOM
197	02891025P	Sign Type A-2, 36 inch X 24 inch	each
198	028910270	Remove Sign Less Than 20 Square Feet	each
199	028910275	Remove Sign Greater Than or Equal to 20 Square Feet	each
200	02891028P	Relocate Sign Less Than 20 Square Feet	each
		Includes removal and disposal of existing concrete sign base.	
201	028910300	Small Sign Tubular Steel Post Base (B1)	each
		Includes installation of socket, wedge, and concrete foundation as required by SN Series Standard Drawings.	
202	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.	
203	028910350	Sign Post Base (B6B) For S Section Steel Posts	each
		Includes base, installation of concrete foundation, and hardware to mount base to post as required by SN Series Standard Drawings.	
204	028910355	Sign Post P1	each
		Includes post and all hardware to mount sign to post as required by SN Series Standard Drawings.	
205	028910360	Sign Post P2	each
		Includes post and all hardware to mount sign to post as required by SN Series Standard Drawings.	
206	028910365	Sign Post P3	each
		Includes post and all hardware to mount sign to post as required by SN Series Standard Drawings.	
207	028910370	Sign Post P4	each
		Includes post and all hardware to mount sign to post as required by SN Series Standard Drawings.	
208	028910375	Sign Post P5	each
		Includes post and all hardware to mount sign to post as required by SN Series Standard Drawings.	
209	028910410	Post S6 X 12.5	each
		Includes post, post to base connection plate, fuse and splice plates, and all hardware to mount sign to post as required by SN Series Standard Drawings.	
210	02892001P	Advanced Warning Sign w/Flashing Beacons	lump sum
211	02892001D	Traffic Signal System 2300 East & Evergreen	lump sum
		Includes all labor, equipment, installation of state furnished materials, power source connection, mast arm mounted signs, and materials necessary to provide a complete and fully operational signal system.	
212	02892002D	Traffic Signal System 2300 East & 3300 South	lump sum
		Includes all labor, equipment, installation of state furnished materials, power source connection, mast arm mounted signs, and materials necessary to provide a complete and fully operational signal system.	
213	012850010	Mobilization	lump sum
		Amount Paid / **When Paid**	
		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.	
214	16525002D	Highway Decorative Lighting System 2300 East	lump sum

Item #	Bid Item Number	Bid Item Name	UOM
		Includes all labor, equipment, and materials necessary to provide a complete and fully operational highway lighting system.	
215	012850010	Mobilization	lump sum
		Amount Paid / **When Paid**	
		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.	
216	02769001*	Preformed Thermoplastic (Rust Red)	square foot
217	02769002*	Preformed Thermoplastic (Brown)	square foot

VII. Standard Drawings Index

STANDARD DRAWINGS INDEX (Supplemental Issue #12, May 14, 2015)
UTAH DEPARTMENT OF TRANSPORTATION

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	Advanced Traffic Management System (AT)	
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AT 2B	Ramp Meter Details	01/01/12
AT 3	Ramp Meter Overhead Sign Panel	01/01/12
AT 4	Typical Ramp Meter Signal Head Mounting	01/01/12
AT 5A	Ramp Meter Detection Layout	02/28/13
AT 5B	Ramp Meter Queue Detection Layout	02/28/13
AT 5C	Ramp Meter Detection Zone Number Assignment	02/28/13
AT 6	Conduit Details	06/27/13
AT 7A	Polymer Concrete Junction Box Details	01/01/12
AT 7B	Precast Concrete Fiber Optic and Utility Vault Details	01/01/12
AT 8	ATMS Cabinet	01/01/12
AT 9	ATMS Cabinet Disconnect and Transformer Frame	01/01/12
AT 10A	CCTV Mounting Detail and Wiring Diagram	01/01/12
AT 10B	CCTV Mounting Detail and Wiring Diagram	01/01/12
AT 10C	CCTV Mounting Detail and Wiring Diagram	01/01/12
AT 10D	Camera Cable Splicing Diagrams	01/01/12
AT 10E	CCTV DIP Switch Settings	01/01/12
AT 11A	CCTV Pole Mounting Details	10/31/13
AT 11B	Non-Intrusive Detector Mounting Details	10/31/13
AT 11C	Pole Mounted Cabinet Bracket	10/31/13
AT 12	CCTV Pole Foundations for CCTV Pole	01/01/12
AT 13	HAR Pole Detail	01/01/12
AT 14	Weigh In Motion Piezo Details	01/01/12
AT 15	RWIS Site and Foundation Details	10/31/13
AT 16	RWIS Tower Base and Service Pad Layout	10/31/13
AT 17	RWIS Ground Rod Installation and Tower Grounding	10/31/13
AT 18	Utility Marker Post Details	04/25/13
AT 19	Utility Marker Post Locations	01/01/12
	Barriers (BA)	
BA 1A1	Concrete Barrier General Notes and Standard Details 1 of 2	01/01/12
BA 1A2	Concrete Barrier General Notes and Standard Details 2 of 2	06/26/14
BA 1B	Concrete Barrier Median Installation	01/01/12
BA 1C	Concrete Barrier Shoulder Installation	01/01/12
BA 1D	Concrete Barrier Layout	01/01/12
BA 1E	Concrete Barrier Column Protection	02/27/14
BA 2A	Precast Concrete Barrier – 32 Inch New Jersey Shape	06/26/14

BA 2B	Precast Concrete Barrier – 32 Inch New Jersey Shape, Sloped End Section (Speeds ≤ 40 MPH)	01/01/12
BA 2C	Precast Concrete Barrier – 32 Inch New Jersey Shape, Median Small Sign Section	06/26/14
BA 2D	Cast-In-Place Concrete Barrier – 32 Inch New Jersey Shape, 42 Inch Constant Slope Barrier Transition	06/26/14
BA 2E	Precast Concrete Half Barrier – 32 Inch New Jersey Shape	06/26/14
BA 3A1	Cast-In-Place Concrete Constant Slope Barrier – 42 Inch 1 of 3	01/01/12
BA 3A2	Cast-In-Place Concrete Constant Slope Barrier – 42 Inch 2 of 3	01/01/12
BA 3A3	Cast-In-Place Concrete Constant Slope Barrier – 42 Inch 3 of 3	01/01/12
BA 3B	Cast-In-Place Concrete Constant Slope Barrier – 42 Inch, Electrical Details	01/01/12
BA 3C1	Cast-In-Place Concrete Constant Slope Barrier – 42 Inch, Sign Structure Foundation Transition 1 of 2	01/01/12
BA 3C2	Cast-In-Place Concrete Constant Slope Barrier – 42 Inch, Sign Structure Foundation Transition 2 of 2	01/01/12
BA 3D	Cast-In-Place Concrete Constant Slope Barrier – 42 Inch, Median Small Sign Section	01/01/12
BA 3E1	Cast-In-Place Concrete Constant Slope Barrier – 42 Inch, TL-5 1 of 2	01/01/12
BA 3E2	Cast-In-Place Concrete Constant Slope Barrier – 42 Inch, TL-5 2 of 2	01/01/12
BA 3F1	Cast-In-Place Concrete Constant Slope Barrier – 42 Inch, Bridge Parapet Transition 1 of 3	01/01/12
BA 3F2	Cast-In-Place Concrete Constant Slope Barrier – 42 Inch, Bridge Parapet Transition 2 of 3	01/01/12
BA 3F3	Cast-In-Place Concrete Constant Slope Barrier – 42 Inch, Bridge Parapet Transition 3 of 3	01/01/12
BA 3G	Precast Concrete Constant Slope Barrier – 42 Inch	01/01/12
BA 3H	Precast Concrete Constant Slope Barrier – 42 Inch, Sloped End Section (Speeds ≤ 40 MPH)	01/01/12
BA 3I1	Precast Concrete Constant Slope Barrier – 42 Inch, Median Small Section 1 of 2	01/01/12
BA 3I2	Precast Concrete Constant Slope Barrier – 42 Inch, Median Small Section 2 of 2	01/01/12
BA 3J	Precast Concrete Constant Slope Barrier – 42 Inch, 32 Inch New Jersey Shape Transition	01/01/12
BA 3K	Cast-In-Place Concrete Constant Slope Half Barrier – 42 Inch	01/01/12
BA 3L	Precast Concrete Constant Slope Half Barrier – 42 Inch	08/30/12
BA 3M1	Cast-In-Place Concrete Constant Slope Barrier – 54 Inch 1 of 3	01/01/12
BA 3M2	Cast-In-Place Concrete Constant Slope Barrier – 54 Inch 2 of 3	01/01/12

BA 3M3	Cast-In-Place Concrete Constant Slope Barrier – 54 Inch 3 of 3	01/01/12
BA 3N1	Cast-In-Place Concrete Constant Slope Barrier – 54 Inch, Median Small Sign Section 1 of 2	01/01/12
BA 3N2	Cast-In-Place Concrete Constant Slope Barrier – 54 Inch, Median Small Sign Section 2 of 2	01/01/12
BA 3O1	Cast-In-Place Concrete Constant Slope Barrier – 54 Inch, TL-5 1 of 3	01/01/12
BA 3O2	Cast-In-Place Concrete Constant Slope Barrier – 54 Inch, TL-5 2 of 3	01/01/12
BA 3O3	Cast-In-Place Concrete Constant Slope Barrier – 54 Inch, TL-5 3 of 3	01/01/12
BA 3P1	Cast-In-Place Concrete Constant Slope Barrier – 54 Inch, Bridge Parapet Transition 1 of 3	01/01/12
BA 3P2	Cast-In-Place Concrete Constant Slope Barrier – 54 Inch, Bridge Parapet Transition 2 of 3	01/01/12
BA 3P3	Cast-In-Place Concrete Constant Slope Barrier – 54 Inch, Bridge Parapet Transition 3 of 3	01/01/12
BA 3Q	Cast-In-Place Concrete Constant Slope Barrier – 54 Inch, 42 Inch Constant Slope Barrier Transition	01/01/12
BA 4A	W-Beam Guardrail Hardware	01/01/12
BA 4B1	W-Beam Guardrail Transition Hardware	01/01/12
BA 4B2	W-Beam Guardrail Transition Layouts Approach End and Trailing End	01/01/12
BA 4B3	W-Beam Guardrail Transition Curb Sections	10/31/13
BA 4B4	W-Beam Guardrail Median Barrier Transition Hardware and Layout	08/30/12
BA 4C1	W-Beam Guardrail Anchor Type 1	08/29/13
BA 4C2	W-Beam Guardrail Anchor Type II	01/01/12
BA 4D1	W-Beam Guardrail Installations	08/30/12
BA 4D2	W-Beam Guardrail Installations	01/01/12
BA 4D3	W-Beam Guardrail Typical Line Post Embedment Special Conditions	02/28/13
BA 4E1	W-Beam Guardrail with Modified Curb and Gutter	01/01/12
BA 4E2	W-Beam Guardrail with Curb and Gutter ≥ 5 Inches	08/30/12
BA 4F1	W-Beam Guardrail Buried In Backslope Terminal	08/30/12
BA 4F2	W-Beam Guardrail Buried In Backslope Terminal with Rub Rail	01/01/12
BA 4F3	W-Beam Guardrail Buried In Backslope Terminal Anchor	01/01/12
BA 4G	W-Beam Guardrail Curve Breakaway Details	06/26/14
BA 4H1	W-Beam Guardrail Nested Rail 12 Ft 6 Inch Span	01/01/12
BA 4H2	W-Beam Guardrail Nested Rail 18 Ft 9 Inch Span	01/01/12
BA 4H3	W-Beam Guardrail Nested Rail 25 Ft Span	01/01/12
BA 4H4	W-Beam Guardrail with Precast Barrier For Span ≥ 25 Ft	08/30/12
BA 4H5	W-Beam Guardrail Reduced Deflection Criteria	01/01/12

BA 4I	W-Beam Guardrail Right Shoulder Transition On Slopes Steeper Than 10:1 or Flatter or Equal to 6:1	01/01/12
BA 4J1	W-Beam Guardrail Typical Divided Roadways	01/01/12
BA 4J2	W-Beam Guardrail Typical Multilane Arterial	01/01/12
BA 4J3	W-Beam Guardrail Typical 2 Lane 2 Way	01/01/12
BA 5A	Cable Barrier Typical Hardware and Foundation Requirements	01/01/12
BA 5B1	Cable Barrier Placement	06/26/14
BA 5B2	Cable Barrier Placement	06/26/14
BA 5C1	Cable Barrier W-Beam Anchor Assembly	01/01/12
BA 5C2	Cable Barrier Parapet Departure Bracket	01/01/12
BA 5D1	Median Cable Barrier W-Beam Double Sided and Freeway Crossover Anchor System (Type C; C.A.T., Brakemaster)	10/31/13
BA 5D2	Median Cable Barrier W-Beam Double Sided and Freeway Crossover Anchor System (Type C; FLEAT-MT)	10/31/13
BA 5E1	Cable Barrier W-Beam Narrow Median Parapet or Concrete Barrier Anchor	01/01/12
BA 5E2	Cable Barrier W-Beam Approach Transition	01/01/12
BA 5E3	Cable Barrier W-Beam Precast Concrete Barrier Trailing Anchor	01/01/12
BA 5F1	Cable Barrier W-Beam Single Sided Approach Anchor System	01/01/12
BA 5F2	Cable Barrier W-Beam Single Sided Departure Anchor System	01/01/12
BA 5G	Cable Barrier W-Beam Freeway/Expressway Right Shoulder Anchor System	01/01/12
BA 5H	Cable Barrier W-Beam Right Shoulder Application	01/01/12
BA 5I1	Cable Barrier with Existing W-Beam Approach	01/01/12
BA 5I2	Cable Barrier with Existing W-Beam Trailing End	01/01/12
BA 5J1	Cable Barrier Median Hazard Protection	08/29/13
BA 5J2	Cable Barrier Span Greater Than or Equal 15 Ft to Less Than or Equal 30 Ft	08/29/13
BA 5K	Cable Barrier with Existing Crash Cushion Median Application	01/01/12

Catch Basins and Cleanouts (CB)

CB 1	Curb and Gutter Inlet	01/01/12
CB 2	Open Curb Inlet	01/01/12
CB 3	Shallow Catch Basin	01/01/12
CB 4	Open Curb Shallow Catch Basin	01/01/12
CB 5A	Standard Catch Basin and Cleanout Box	01/01/12
CB 5B	Standard Catch Basin and Cleanout Box Section	01/01/12
CB 6A	Drop Inlet Type “A”	01/01/12
CB 6B	Berm Apron with Drop Inlet Type “A”	01/01/12
CB 7A	Drop Inlet Type “B”	01/01/12
CB 7B	Normal Apron with Drop Inlet Type “B”	01/01/12
CB 8A	Double Catch Basin	01/01/12

CB 8B	Double Catch Basin	01/01/12
CB 9A	Standard Catch Basin and Cleanout Box Situation and Layout	01/01/12
CB 9B	Standard Catch Basin and Cleanout Box Section Details	01/01/12
CB 9C	Standard Catch Basin and Cleanout Box Schedule of Installation 18 Inch to 42 Inch RCP 12 Inch to 48 Inch CMP	01/01/12
CB 9D	Standard Catch Basin and Cleanout Box Schedule of Installation 48 Inch to 66 Inch RCP 60 Inch to 78 Inch CMP	01/01/12
CB 10A	Standard Catch Basin and Cleanout Box Situation and Layout	01/01/12
CB 10B	Standard Catch Basin and Cleanout Box Section Details	01/01/12
CB 10C	Standard Catch Basin and Cleanout Box Schedule of Installation 42 Inch to 60 Inch RCP 48 Inch to 72 Inch CMP	01/01/12
CB 11	Precast Concrete Standard Manhole	02/28/13
CB 12	Precast Concrete Drainage Box	01/01/12

Crash Cushions (CC)

CC 1	Crash Cushion and End Treatment Markings	01/01/12
CC 2	Crash Cushion Drainage Details Guideline A	01/01/12
CC 3	Crash Cushion and End Treatments Drainage Details Guideline B	01/01/12
CC 4A	Details for Placement Crash Cushions Type A, B, And D	01/01/12
CC 4B	Crash Cushion Mounted On Median Island	01/01/12
CC 4C	Crash Cushion Split Median Island w/RR Crossing	01/01/12
CC 5A	Grading and Placement Details Crash Cushion Type C Brakemaster	01/01/12
CC 5B	Grading and Placement Details Crash Cushion Type C C.A.T	01/01/12
CC 5C	Grading and Placement Details Crash Cushion Type C FLEAT-MT	01/01/12
CC 6	Crash Cushion Type E Sand Barrel Details	01/01/12
CC 7A	Grading and Installation Details End Treatment Type F Quad Trend 350	01/01/12
CC 7B	Grading and Installation Details End Treatment Type F BEAT-SSCC	01/01/12
CC 8A	Grading and Installation Details Crash Cushion Type G	06/27/13
CC 8B	Grading and Installation Details for “3R” Projects End Treatment Type G	06/27/13
CC 9A	Grading and Installation Details End Treatment Type H	01/01/12
CC 9B	Maintenance Only Grading and Installation Details End Treatment Type H	01/01/12

Diversion Boxes (DB)

DB 1A	Standard Diversion Box/Cover Plate/Grating for 18 Inch DIA. or 24 Inch DIA. Pipe	01/01/12
DB 1B	Standard Diversion Box Hinged Lid Details for 18 Inch DIA or 24 Inch DIA Pipe	01/01/12

DB 1C	Standard Diversion Box Bicycle Safe Grating Details for 18 Inch DIA or 24 Inch DIA Pipe	01/01/12
DB 1D	Standard Diversion Box Three Gate Box Sections for 18 Inch DIA or 24 Inch DIA Pipe	01/01/12
DB 1E	Standard Diversion Box Three Gate Box Sections for 18 Inch DIA or 24 Inch DIA Pipe	01/01/12
DB 1F	Standard Diversion Box Three Gate Box Sections for 18 Inch DIA or 24 Inch DIA Pipe	01/01/12
DB 2A	Standard Diversion Box w/Interchangeable Walls, Bottom Slab, Walls, and Apron Details	01/01/12
DB 2B	Standard Diversion Box w/Interchangeable Walls, Quantities Schedule	01/01/12
DB 2C	Standard Diversion Box w/Interchangeable Walls, Hand Slide Gate Details	01/01/12
DB 2D	Standard Diversion Box Type G Hand Slide Gate Details	01/01/12
DB 2E	Standard Diversion Box Hinged Lid (Solid Cover Plate) Type A Details Type I Plan	01/01/12
DB 2F	Standard Diversion Box Hinged Lid (Solid Cover Plate) Type A Details Type II Plan	01/01/12
DB 2G	Standard Diversion Box Hinged Lid Solid Cover Type B Details	01/01/12
DB 2H	Standard Diversion Box Hinged Lid Solid Cover Type B and C Details	01/01/12
DB 3A	Standard Diversion Box with Manhole Cover Situation and Layout	01/01/12
DB 3B	Standard Diversion Box with Manhole Cover Up to 42 Inch RCP and Up To 54 Inch CMP	01/01/12
DB 3C	Standard Diversion Box with Manhole Cover 48 Inch to 72 Inch RCP and 60 Inch to 84 Inch CMP	01/01/12
DB 4	Standard Transition Concrete Lined Ditch to Pipe or Diversion Box	01/01/12

Design Drawings (DD)

DD 1	Superelevation, Widening, and Edge Detail	01/01/12
DD 2	Surface Ditch, Benched Slope, and Cut Ditch Details	01/01/12
DD 3	Passing and Climbing Lanes	**04/30/15**
DD 4	Geometric Design for Freeways (Roadway)	01/01/12
DD 5A	Entrance and Exit Ramps At Crossroads	01/01/12
DD 5B	Entrance and Exit Ramps At Crossroads	01/01/12
DD 6	Entrance and Exit Ramp Geometrics	01/01/12
DD 7	Freeway Crossover	01/01/12
DD 8	Structural Geometric Design Standards for Clearances	02/28/13
DD 9	Structural Geometric Design Standards	01/01/12
DD 10	Rural Multi Lane Highways Other Than Freeways	01/01/12
DD 11	Rural Two Lane Highways	01/01/12
DD 12	Frontage and Access Roads (Under 50 ADT)	01/01/12

DD 13A	Typical Rural 2 Lane Road T-Intersection (High Speed)	01/01/12
DD 13B	Typical Rural 2 Lane Road T-Intersection (Low Speed) 40 MPH or Less	01/01/12
DD 14A1	Typical Rural 2 Lane Road Intersection (High Speed) 45 MPH or Higher	01/01/12
DD 14A2	Typical Rural 2 Lane Road Intersection (High Speed) with Left Turn Acceleration Lane	01/01/12
DD 14B	Typical Rural 2 Lane Road Intersection (Low Speed)	08/30/12
DD 15	Embankment for Bridge Placement	01/01/12
DD 16	Grade-Separated Arterials Other Than Freeways 50 to 60 MPH	01/01/12
DD 17	Clear Zone and Lateral Offset to Obstruction	01/01/12
DD 18	Utility Location Requirements	06/27/13
DD 19	Marked Pedestrian Crosswalk Enhancement Flowchart	**04/30/15**
	Drainage (DG)	
DG 1	Fill Height for Metal Pipe (Steel)	01/01/12
DG 2	Fill Height for Metal Pipe (Aluminum)	01/01/12
DG 3	Fill Height for Plastic and Concrete Pipe	02/27/14
DG 4	Pipe Minimum Cover	02/27/14
DG 5	Drainage Pipe Installation	02/27/14
DG 6	Safety Slope End Section for Circular and Arched Pipes	01/01/12
DG 7	Gasketed Joints or Coupling Bands for CMP	01/01/12
DG 8	Metal Culvert End Section	01/01/12
DG 9	Concrete Pipe Culvert End Sections	01/01/12
DG 10	Miscellaneous Pipe Details	02/27/14
	Environmental Controls (EN)	
EN 1	Temporary Erosion Control (Check Dams)	01/01/12
EN 2	Temporary Erosion Control (Silt Fence)	01/01/12
EN 3	Temporary Erosion Control (Slope Drain and Temporary Berm)	02/26/15
EN 4	Temporary Erosion Control (Drop Inlet Barriers)	01/01/12
EN 5	Temporary Erosion Control (Pipe Inlet and Gutter Inlet Barriers)	01/01/12
EN 6	Temporary Erosion Control (Sediment Trap and Stabilized Construction Entrance)	01/01/12
EN 7	Temporary Erosion Control (Straw Bale Barrier)	01/01/12
	Fence and Gates (FG)	
FG 1A	Right Of Way Fence and Gates (Wood Post)	01/01/12
FG 1B	Right Of Way Fence and Gates (Wood Post)	01/01/12
FG 2A	Right Of Way Fence and Gates (Metal Post)	01/01/12
FG 2B	Right Of Way Fence and Gates (Metal Post)	01/01/12
FG 3	Swing Gates Type I for Gates Less Than 17 FT	01/01/12

FG 4A	Standard Wildlife Escape Ramp Details	01/01/12
FG 4B	High Migratory Wildlife Escape Ramp Details	01/01/12
FG 4C	Corner Brace Wildlife Escape Ramp Details	01/01/12
FG 4D	Wildlife Pole Fence Detail	01/01/12
FG 5	Swing Gates Type II for Gates Wider Than 17 FT	01/01/12
FG 6	Chain Link Fence	01/01/12

Grates, Frames, and Trash Racks (GF)

GF 1	Manhole Frame and Grated Cover	01/01/12
GF 2	Manhole Frame and Solid Cover	01/01/12
GF 3	Rectangular Grate and Frame	01/01/12
GF 4	Directional Flow Grate and Frame	01/01/12
GF 5	Solid Cover and Frame	01/01/12
GF 6	Manhole Steps	01/01/12
GF 7	Standard Screw Gate and Frame	01/01/12
GF 8	2 FT x 2 FT Grate and Frame	01/01/12
GF 9	28 Inches x 24 Inches Directional Flow Grate and Frame	01/01/12
GF 10	Standard Trash Racks 90 Degree Crossing Angle	01/01/12
GF 11	Standard Trash Racks	01/01/12
GF 12	Standard Trash Racks	01/01/12
GF 13	Open Curb Inlet Grate and Frame	01/01/12
GF 14	Solid Cover for Std Dwg DB 1	01/01/12
GF 15	Standard Screw Grate and Frame	01/01/12
GF 16	Perpendicular Grate and Frame	01/01/12

General Road Work (GW)

GW 1A	Raised Island	01/01/12
GW 1B	Raised Island and Plowable End Section	10/31/13
GW 1C	Raised Island Details	06/26/14
GW 1D	Median Reflector Details	10/31/13
GW 2	Concrete Curb and Gutter Types	01/01/12
GW 3	Concrete Curb and Gutter Details	01/01/12
GW 4A	Concrete Driveways and Sidewalks	02/28/13
GW 4B	Concrete Driveways and Sidewalks	02/28/13
GW 5A	Pedestrian Access	11/06/14
GW 5B	Pedestrian Access	11/06/14
GW 5C	Pedestrian Access	11/06/14
GW 5D	Pedestrian Access	11/06/14
GW 6	Right Of Way Marker	01/01/12
GW 7	Newspaper and Mailbox Stop Layout	01/01/12
GW 8	Newspaper and Mailbox Supports	01/01/12
GW 9A	Delineation Hardware	01/01/12
GW 9B	Linear Delineation Panel and Installation Details	01/01/12
GW 10	Delineation Application	01/01/12
GW 11	Sidewalks and Shoulders On Urban Roadways	02/28/13

GW 12A1	Active Pedestrian Controls for Railroad Crossings Sheet 1 of 2	04/25/13
GW 12A2	Active Pedestrian Controls for Railroad Crossings Sheet 2 of 2	04/25/13
GW 12B1	Passive Pedestrian Controls for Railroad Crossings Sheet 1 of 2	04/25/13
GW 12B2	Passive Pedestrian Controls for Railroad Crossings Sheet 2 of 2	04/25/13
GW 12C1	Pedestrian Controls Semi-Exclusive Railroad Alignments Sheet 1 of 2	04/25/13
GW 12C2	Pedestrian Controls Semi-Exclusive Railroad Alignments Sheet 2 of 2	04/25/13
GW 12D	Pedestrian Controls Street Running Railroad Alignment Signalized Intersections	04/25/13
GW 12E	Pedestrian Controls Street Running Railroad Alignment Unsignalized Intersections	04/25/13

Paving (PV)

PV 1	Joints for Highways with Concrete Traffic Lanes and Shoulders	01/01/12
PV 2	Pavement/Approach Slab Details	01/01/12
PV 3	Concrete Pavement Details 1 of 2	11/06/14
PV 4	Concrete Pavement Details 2 of 2	**04/30/15**
PV 5	Urban Concrete Pavement Details	01/01/12
PV 6A	Rumble Strips Shoulder Details	**04/30/15**
PV 6B	Rumble Strips Depth and Location Details	**04/30/15**
PV 7A	Typical Rumble Strip Shoulder Sequencing and Applications	**04/30/15**
PV 7B	Typical Rumble Strip Center Line Sequencing and Application	**04/30/15**
PV 8	Typical Rumble Strip Centerline Application	**04/30/15**
PV 9	Dowel Bar Retrofit	02/28/13
PV 10	Utility Orientation/Adjustments in PCCP	10/31/13

Signals (SL)

SL 1A	Traffic Signal Mast Arm Pole and Luminaire Extension 30 Ft Through 55 Ft	02/26/15
SL 1B	Traffic Signal Mast Arm Pole and Luminaire Extension 60 Ft Through 75 Ft	02/26/15
SL 2	Traffic Signal Mast Arm Mounting Details	02/26/15
SL 3	Underground Service Pedestal Details	01/01/12
SL 4	Traffic Signal Mast Arm Pole Foundation	02/26/15
SL 5	Traffic Signal Pole	01/01/12
SL 6	Signal Head Details	10/31/13
SL 7	Pedestrian Signal Assembly	11/06/14
SL 8	Traffic Signal Cabinet Base Details	01/01/12
SL 9	Traffic Signal Loop Detector Details	01/01/12

SL 10	Traffic Counting Loop Detector Details	01/01/12
SL 11	Highway Luminaire Pole Ground Mount	01/01/12
SL 12	Luminaire Slip Base Details	01/01/12
SL 13	Highway Luminaire Pole Barrier Mount	01/01/12
SL 14	Highway Luminaire Pole Foundation Extension	01/01/12
SL 15	Single Transformer Substation Details	01/01/12
SL 16	Solar Traffic Counting Station	06/26/14
SL 17A	Pedestrian Signal Crosswalk	**04/30/15**
SL 17B	Pedestrian Hybrid Beacon Crosswalk	**04/30/15**
SL 17C	Flashing Beacon at a Crosswalk Intersection	**04/30/15**
SL 17D	Flashing Beacon at Midblock Crosswalk	**04/30/15**

Signs (SN)

SN 1	Signs At Railroad Crossings	01/01/12
SN 2A	School Speed Limit Assembly	11/06/14
SN 2B	School Speed Limit Assembly	01/01/12
SN 3	Overhead School Speed Limit Assembly	10/31/13
SN 4	Object Markers "T" Intersection and Pavement Transition Guidance	01/01/12
SN 5	Typical Installation for Milepost Signs	01/01/12
SN 6	Speed Reduction Sign Sequence	10/31/13
SN 7A	Placement of Ground Mount Signs	01/01/12
SN 7B	Placement of Ground Mount and Barrier Mount Signs	01/01/12
SN 8A	Temporary Use Ground Mounted Timber Sign Post	01/01/12
SN 8B	Temporary Use Ground Mounted Square Steel Sign Post	01/01/12
SN 9A	Small Sign Tubular Steel Post Base with Concrete (B1) (Socket System)	01/01/12
SN 9B	Small Sign Tubular Steel Post Base (B2A) (Triangular Steel Anchor System)	01/01/12
SN 9C	Small Sign Tubular Steel Post Base with Concrete (B2B) (Triangular Steel Anchor System in Concrete)	01/01/12
SN 10A	Slipbase Sign Base (B3) Hardware	02/28/13
SN 10B	Slipbase Sign Base (B3) Installation	02/28/13
SN 11A	Surface Mounted Tubular Steel Sign Base (B4A)	01/01/12
SN 11B	Side Mounted Tubular Steel Sign Base (B4B)	01/01/12
SN 12A	Barrier Mounted Tubular Steel Sign Bases (B5A and B5B)	01/01/12
SN 12B	Barrier Mounted Tubular Steel Sign Bases 20 SQ Ft or Less	01/01/12
SN 13A	Tubular Steel Sign Mounting Requirements	10/31/13
SN 13B	Tubular Steel Sign Mounting Hardware	01/01/12
SN 13C	Mounting Bar Placement for Small Signs	02/27/14
SN 14A	Freeway Sign Post Requirements	01/01/12
SN 14B	Freeway Sign Base and Post Requirements (B6A-B6B-B6C)	01/01/12
SN 14C	Freeway Sign Foundation and Fuse Plate Requirements	01/01/12
SN 14D	Freeway Sign Frame Fabrication Details	08/30/12
SN 14E	Freeway Sign Bracket Details	08/30/12
SN 15	Mounting Brackets and Clamps	01/01/12

SN 16A	Multi-Directional Breakaway Base for Steel I-Beam Supports, General Notes	11/06/14
SN 16B	Multi-Directional Breakaway Base for Steel I-Beam Sign Supports, Two Posts	11/06/14
SN 16C	Multi-Directional Breakaway Base for Steel I-Beam Sign Supports, Three Posts	11/06/14
SN 16D	Multi-Directional Breakaway Base for Steel I-Beam Sign Supports, Foundation Details	11/06/14
SN 16E	Multi-Directional Breakaway Base for Sign Post, (B7A)	11/06/14
SN 16F	Multi-Directional Breakaway Base for Sign Post, (B7B)	11/06/14
SN 16G	Multi-Directional Breakaway Base for Sign Post, (B7C)	11/06/14
SN 16H	Multi -Directional Breakaway Base for Round Pipe Single Post, (B7D)	11/06/14
SN 16I	Multi -Directional Breakaway Base for Round Pipe Double Post, (B7D)	11/06/14
SN 17	Freeway Crossover Signing	01/01/12
SN 18	Chevron Alignment Signs	01/01/12
SN 19A	Preferential Lane Signing and Pavement Marking Details	**04/30/15**
SN 19B	Preferential Lane Access Opening Details	**04/30/15**
SN 19C	Preferential Lane Median Signing Spacing Greater 1 Mile	**04/30/15**
SN 19D	Preferential Lane Median Signing Spacing Equal to or Less Than 1 Mile	**04/30/15**

Striping (ST)

ST 1	Typical Pavement Markings No Pass Zone and Lane Reduction	**04/30/15**
ST 2	Typical Pavement Markings Entrance Ramps	01/01/12
ST 3A	Typical Pavement Markings Exit Ramps	01/01/12
ST 3B	Typical Pavement Markings Exit Ramps	01/01/12
ST 4	Crosswalks, Parking, and Intersection Approaches	01/01/12
ST 5	Painted Median and Auxiliary Lane Details	01/01/12
ST 6A	Passing Lane Details	**04/30/15**
ST 6B1	Freeway Climbing Lane Inside Widening Detail	**04/30/15**
ST 6B2	Freeway Climbing Lane Outside Widening Detail	**04/30/15**
ST 7	Pavement Markings at Railroad Crossing	01/01/12
ST 8	School Crossing and School Message	01/01/12
ST 9	Location of Bicycle Detector Pavement Markings at Intersection	11/06/14
ST 10	Location of Bicycle Detector Pavement Markings in Bicycle Lane	11/06/14

Structures and Walls (SW)

SW 1A	Welded End Guard Unit	01/01/12
SW 1B	Precast Concrete Cattle Guard	01/01/12
SW 2	Noise Wall Placement Options	01/01/12

SW 3A	Precast Concrete Noise Wall 1 of 2	01/01/12
SW 3B	Precast Concrete Noise Wall 2 of 2	01/01/12
SW 4A	Precast Concrete Retaining/Noise Wall 1 of 3	01/01/12
SW 4B	Precast Concrete Retaining/Noise Wall 2 of 3	01/01/12
SW 4C	Precast Concrete Retaining/Noise Wall 3 of 3	01/01/12
SW 5	Precast Pilaster Post	01/01/12
SW 6	Precast Concrete Panel Surface Texture Options	01/01/12
	Traffic Control (TC)	
TC 1	Traffic Control Drawing Series General Notes	08/30/12
TC 2A	Work Zone Channelization Devices	01/01/12
TC 2B	Work Zone Signing	08/30/12
TC 2C	Work Zone Advanced Warning Arrow Boards	06/26/14
TC 2D	Delineator Mounted Work Zone Sign Bracket	01/01/12
TC 3A	Hazard Mitigation	02/28/13
TC 3B	Hazard Mitigation and Positive Protection Devices	01/01/12
TC 4A	Standard Work Zone Signing General	08/30/12
TC 4B1	Reduced Speed Work Zone Signing General	08/30/12
TC 4B2	Reduced Speed Shoulder Work Zone Signing General	08/30/12
TC 4C	Traffic Control Project Limit Signing	08/30/12
TC 4D1	Work Zone Specialty Signs	10/31/13
TC 4D2	Work Zone Specialty Signs	10/31/13
TC 5	Traffic Control Urban Intersection with Roadways Under 50 MPH	01/01/12
TC 6	Temporary Pedestrian Access Route	01/01/12
TC 7	Median Crossover and 2-Lane, 2-Way Diversion	08/30/12
TC 8	Traffic Control Lane Closure	01/01/12
TC 9	Work Zone Business Access Signing	01/01/12
TC 10	Traffic Control Expressway and Freeway Crossover/Turn Around	01/01/12
TC 11	Traffic Control Exit Ramp Gore	01/01/12
TC 12	Traffic Control Entrance Ramp Gore	01/01/12
TC 13	Traffic Control Shoulder Haul Road	01/01/12
TC 14A	Traffic Control Flagging Operation	11/06/14
TC 14B	Reduced Speed Signing for Pilot Car Operation (Conventional Roads)	11/06/14
TC 15	Traffic Control 2 Lane/2 Way Seal Coat with Cover Material	01/01/12
TC 16	Traffic Control for Non-Durable Pavement Marking	01/01/12
TC 17	Traffic Control Work Zone Guardrail Intermediate End Protection	10/31/13
TC 18	Blunt End Protection for W-Beam Guardrail and Concrete Barrier	08/30/12
TC 19	Construction Access Points for Speeds of 55 MPH and Greater	08/30/12

VIII. Use of Minority or Women Owned Banks

Federal Department of Transportation regulations and the Utah Department of Transportation encourage all contractors and suppliers to thoroughly investigate the services offered by banks controlled or owned by minorities or women and utilize their services as when possible.

IX. Bid Conditions
DISADVANTAGED BUSINESS ENTERPRISE (DBE)

POLICY

"Policy Statement"

It is the policy of the DEPARTMENT to take all necessary and reasonable actions to ensure DBEs as defined herein will have equal opportunity to participate in the performance of contracts financed in whole or in part with US Department of Transportation (DOT) funds under this agreement as modified herein.

"Objectives"

The objectives of this policy are to:

1. Ensure nondiscrimination in the award and administration of DOT assisted contracts;

2. Create a level playing field on which DBEs can compete fairly for DOT assisted contracts;

3. Ensure the DBE program is narrowly tailored in accordance with applicable law;

4. Ensure only firms who fully meet 49 CFR 26 eligibility standards are permitted to participate as DBEs;

5. Remove barriers to the participation of DBEs in Federal aid contracts;

6. Assist the development of firms who can compete successfully in the marketplace outside the DBE program; and

7. Provide appropriate flexibility in establishing and providing opportunities for DBEs.

"Responsibilities"

Implementation of the DBE Program is accorded the same priority as compliance with all other legal obligations incurred by the DEPARTMENT in financial assistance agreements with DOT.

1. The Civil Rights Office will be the DBE liaison officer, who will have direct, independent access to the Executive Director concerning DBE program matters. The Civil Rights Office will be responsible for implementing all aspects of the DBE program. Adequate staff will be assigned to administer the DBE program.

2. The ENGINEER is responsible for supervision of the DBE participation covered by the Contract.

DBE BID AND PERFORMANCE CONDITIONS

"Obligations"

The contractor, subcontractor, service provider, sub recipient, or supplier at any lower tier will not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor will carry out applicable requirements of 49 CFR part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the DEPARTMENT deems appropriate.

"Assurances"

Each contract between the DEPARTMENT and the Contractor and each subcontract at any lower tier must include the following assurance:

> The contractor, subcontractor, service provider, sub recipient, or supplier will not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor will carry out applicable requirements of 49 CFR 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the DEPARTMENT deems appropriate, which may include, but is not limited to:
> 1. Withholding monthly progress payments;
> 2. Assessing sanctions;
> 3. Liquidated damages; and/or
> 4. Disqualifying the contractor from future bidding as non-responsible.

Federal Projects With Full Size Plan Sheets

A. CONTRACT GOAL

1. The DEPARTMENT has determined that one or more contractors can reasonably be expected to compete for the work contained in the proposal for this project. It is, therefore, the direction of the DEPARTMENT that DBE firms will have an affirmative action opportunity to contract for the following percentage of work under this contract:

   If the DBE goal which is indicated in Section A, CONTRACT GOAL, of APPENDIX A, BID CONDITIONS, DISADVANTAGED BUSINESS ENTERPRISE (DBE) **is greater than 0.0 percent**, submit DBE Commitment. Refer to Bidding Requirements, Section D, Subsection 1,a, of this Special Provision. (The commitment dollar amount up to the amount of the assigned goal is Race Conscious DBE participation. Any commitment dollar amount in excess of the assigned goal is Race Neutral Participation.)

   CONTRACT DBE GOAL: 9 Percent

   NOTE: At the time of Bid on Additive Projects, DBE commitment can only be made on Base bid items. No Additive bid items may be committed.

2. GOALS

   a. GOAL FOR BID EVALUATION

      The above entered DBE percentage is a goal for bid evaluation to determine responsiveness of the proposal as it relates to this specification. Percentages for bidding purposes will be calculated using dollar values and quantities as shown in proposals received for this project. Bidders will compute the percentage of their DBE commitment by dividing the dollar amount of work being committed to certified DBE firms by the total dollar amount of the proposal. This will be the percentage of their DBE commitment reported in the Electronic Bidding System (EBS) software.

b. RACE CONSCIOUS GOAL

At the time of bid, DBE participation is considered race conscious on projects that are assigned a Goal for Bid Evaluation. The DBE commitment becomes a contract specification upon award. The Bidder must submit with its Bid Proposal a DBE Commitment, prepared within the EBS software, that indicates:

(1) Name of DBE firm
(2) Work items to be performed
(3) Total dollar amount of commitment

If the DBE commitment does not meet or exceed the assigned goal, the Bidder must submit with the Bid Proposal documentation of good faith efforts.

c. RACE NEUTRAL GOAL

At the time of bid, DBE participation is considered race neutral on projects that are NOT assigned a Goal (0%) for Bid Evaluation. In this instance, the DBE participation does not become a contract specification upon award. The Bidder must take equal opportunity action to allow DBEs to compete for and perform on subcontracts. Only work classifications that the Bidder will subcontract need to be considered in evaluating equal opportunity action in the bid preparation.

d. GOAL FOR CONTRACT PERFORMANCE

The Bidder’s DBE Commitment becomes an attachment to the Bid Proposal and is a condition of award, and thereby becomes a contract specification.

The committed dollar amount meeting the project goal for bid evaluation will be considered race conscious participation. Any dollar amounts in excess of the project goal for bid evaluation will be considered race neutral participation.

It is the intent of this Policy that the DBE Firm(s) listed for race conscious participation, as a minimum level of participation, will perform to the extent indicated in the Bidder's DBE Commitment. The minimum level of DBE participation includes:

(1) Indicated DBE firm(s),
(2) Indicated work item(s) (bid items),
(3) Indicated total dollar amounts.

Listed bid items will be considered committed in their entirety unless Bidders designate otherwise in their DBE Commitment. If the DBE will perform only a part of the bid item, i.e., haul only, the Bidder must indicate what part the DBE will perform (Partial Performance). If the DBE will perform only a part of the quantity of the bid item, the Bidder must indicate the estimated quantity of the work to be performed by the DBE (Partial Quantity).

Substitutions of DBE subcontractor(s), work item(s), or decreases of total dollar amount(s) **as indicated in the Bidder's DBE Commitment will not be allowed without prior submission of written justification to the ENGINEER and approval of the ENGINEER and the Civil Rights Office.**

After award of a contract, substitutions will not be allowed without prior submission of a written "hold harmless" statement from the DBE.

***Any change by the Contractor or the Department in the DBE commitment requires the change be approved by Change Order from the Civil Rights Office. The Contractor will not be entitled to any payment for work or material unless it is performed or supplied by the listed DBE, unless the required approval is obtained.**

Substitution of race neutral participation in excess of the Goal for Bid Evaluation requires equal opportunity efforts to substitute with other DBE participation.

*DEPARTMENT generated decreases of quantities in individual bid items do not require prior approval of the Civil Rights Office—but must be fully justified by the ENGINEER at the conclusion of the project in the Explanation of Overruns and Under-runs Statement. The ENGINEER'S justification will show the total estimated quantity, the final pay quantity as shown on the final estimate invoice, the quantity of the under-run, and the percent of under-run for the individual item. The explanation for the under-run will include the reasons for the under-run and will include as much detail as possible.

There is a difference between the under-run of quantity on individual bid items versus the under-run of DBE commitment on DBE committed bid items, in the approval process. Refer to asterisks (*) above.

e. GOAL FOR FINAL COMPLIANCE

Percentages for final compliance will be based on actual payments to DBEs. Over-runs and under-runs on individual contract items may require adjustments to the predetermined DBE percentage for a project if those items were not related to DBE performance. "The predetermined percentage for a project" refers to the percentage of the Contractor's DBE Commitment that becomes a contract specification upon award.

B. DEFINITIONS

For the purpose of this Special Provision, the following terms are defined:

1. Contract means a legally binding relationship obligating a seller to furnish supplies or services including but not limited to construction and professional services; and the buyer to pay for them.

2. Contractor means one who participates through a contract or subcontract (at any tier).

3. Disadvantaged Business Enterprise or DBE means a for profit small business concern.

   a. That has been certified to DBE status by the UUCP.

   b. That is at least 51 per cent owned by one or more individuals who are both socially and economically disadvantaged or, in the case of a corporation, where51 percent of the stock is owned by one or more such individuals; and

   c. Whose management and daily business operations are controlled by one or more of the socially and economically disadvantaged individuals who own it.

   d. Whose size is limited to the combined average annual gross receipts of **$23,980,000** from the previous three fiscal years. The Secretary of Transportation may adjust this amount from time to time for inflation.

      OR

      Whose size is limited to the current SBA Business size standard(s), found in 23 CFR part 121, tied to North American Industry Classification System (NAICS) Codes appropriate to the type(s) of work the firm seeks to perform in DOT-assisted contracts.

4. DBE Goals mean:

   a. UDOT's overall goal on DOT-assisted projects. The current approved DBE Goal and Methodology can be found at the following website:

      http://www.udot.utah.gov/main/f?p=100:pg:0:::1:T,V:2250,

   b. The race neutral portion of the overall goal reflects the level of DBE participation that would be expected without the effects of discrimination.

   c. The race neutral portion of the overall goal reflects the level of DBE participation achieved in response to assigned DBE goals. The race conscious portion of the overall goal reflects the level of DBE participation achieved in reponse to the assigned DBE project goals.

5. DBE Joint Venture means an association of a DBE firm and one or more other firms to carry out a single, for profit business enterprise, for which the parties combine their property, capital, efforts, skills, and knowledge, and in which the DBE is responsible for a distinct, clearly defined portion of the work of the contract and whose share in the capital contribution, control, management, risks, and profits of the joint venture to a degree commensurate with its ownership interest.

   The DBE Joint Venture must follow the directions found in the Joint Venture Bidding Process. This process is located at the following link: http://eprpw.dot.utah.gov/applets-production/ProjectExplorer/ProjectExplorer.asp then click on EBS Information.

   The DEPARTMENT's Civil Rights Office prior to bid opening must approve a DBE Joint Venture in order to be utilized for the satisfaction of contract DBE goals. For DBE participation counted towards goal see 49 CFR Part 26.55.

6. Equal Opportunity Action requires individuals to be considered on the basis of individual capacities and not on the basis of any characteristics generally attributed to the group.

   If a bidder requests or accepts bids for subcontract work, the bidder will request and accept bids from DBEs in the work classifications that potentially will be subcontracted.

7. Good Faith Efforts indicates the efforts made to achieve a DBE goal or other requirements by their scope, intensity, and appropriateness to the objective, which can reasonably be expected to fulfill the program requirements.

8. Lack of Financial Fitness is a performance-based definition based solely on failure to pay promptly. There is no reference to financial status or financial capability.

9. Prompt Payment means payment, including retention, made no later than 30 work days after receipt of payment by the Contractor or Subcontractor, Service Provider or Supplier at **any** lower tier.

10. Race Conscious is the committed dollar amount at the time of bid focused specifically on assisting only DBEs. UDOT must establish contract goals to meet the race conscious portion of its overall DBE goal. To ensure that the DBE program continues to be narrowly tailored to overcome the effects of discrimination, UDOT may adjust the use of contract goals as follows:

    a. If during the course of any year it is determined the overall goal will be exceeded, UDOT will reduce or eliminate the use of contract goals to the extent necessary to ensure the use of contract goals does not result in exceeding the overall goal.

    b. If it is determined that UDOT will fall short of its overall goal, then appropriate modifications in the use of race neutral and/or race conscious measures will be made to allow UDOT to meet the overall goal.

11. Race Neutral is the dollar amount that exceeds the committed amount at the time of bid and is, or can be, used to assist all small businesses. UDOT must meet the maximum feasible portion of its overall DBE goal by using race -neutral means of facilitating DBE participation. Race neutral DBE participation includes:

    a. Awarding a subcontract on a prime contract that does not carry a DBE goal,

    b. Awarding a subcontract on a prime contract in which the DBE was not considered in making the award even if there is a DBE goal.

    For the purposes of this part, race neutral includes gender neutrality.

12. Regular Employee is a person who:

    a. Would be working for the DBE firm under subcontract with any other contractor.

    b. Is a permanent employee of the DBE firm

       Or

       Has been recruited through the traditional recruitment and/or employment centers.

    c. Has not recently been employed by the prime contractor on the present project, another subcontractor on the present project, or the renter-leaser of equipment being used on the present project.

    d. Is not an employeeof a construction crew that regularly works for a non-DBE.

    e. Is not a licensed contractor who is at the time “unemployed” or “between jobs.”

13. Regular Equipment is owned or leased and operated on a long term agreement and not on an ad hoc or contract by contract agreement.

    a. The equipment would be used by the DBE firm on any other subcontract with any other contractor.

    b. The equipment would be owned by the DBE firm.

       Or

       The equipment would be leased/rented from traditional equipment lease/rental sources.

    c. The DBE firm would have a rental/lease agreement for any rented or leased equipment.

    d. The equipment cannot belong to:

       (1.) Prime Contractor
       (2.) Another subcontractor on the present project.
       (3.) Supplier of materials being installed by the DBE firm.

    e. The equipment cannot come from and be operated by another contractor.

14. Reasonable Bid

Any bid that meets the Department bidding requirements and is not greater than 10% above the Engineer's Estimate or exceeds available funds.

15. Responsible Bidder

A responsible bidder has the apparent ability and capacity to perform the contract requirements.

In addition to UDOT prequalification, when applicable, a responsible bidder is defined as one who has signed (manually or electronically) and submitted a bid with the DBE Bid Conditions Assurance of good faith effort included. Part I of this Policy certifies the intention to meet the DBE goal of a proposed contract or to continue a good faith effort. These goals may be met by subcontracting or leasing contracts with a DBE or purchasing material from a DBE, provided that the work or material becomes a part of a proposed contract.

16. Responsive Bidder

a. A responsive bidder is a bidder who unequivocally offers to provide services or supplies in conformity with the material terms of the solicitation. In addition to UDOT prequalification and other bidding requirements, a responsive bidder in relationship to this Policy is defined as one who submits evidence of proposed subcontract performance with certified DBE firms to achieve the required dollar amount necessary to achieve the percentage goal.

b. Bidders may be considered as presumptively responsive if they have failed to satisfy the advertised DBE goal set for the proposed contract but have certified in their bid that good faith efforts have been expended to meet the goal and they will continue during the performance of the contract to locate, solicit, and involve DBE firms for contract performance. Documentation of the bidder's good faith efforts must be included with the bid package for the DEPARTMENT's review and assessment. The DEPARTMENT will render any bid non-responsive that fails to do so.

17. Satisfactory Completion of a subcontract occurs when:

    a. The subcontractor has satisfactorily completed in all respects the work under the Contract.

    b. The Contractor and the subcontractor have notified the ENGINEER in writing that the work of the subcontractor has been completed.

    c. The Engineer will be given a reasonable length of time to check quantities if necessary. Checking quantities does not guarantee the absolute correctness of quantities.

    d. The Contractor and the subcontractor have satisfactorily executed and delivered to the ENGINEER all documents, certificates and proofs of compliance required by the Contract. The satisfactory execution and delivery of these documents, certificates and proofs of compliance to the ENGINEER is a material requirement of the contract.

    e. The ENGINEER accepts in writing the work of the subcontract.

    f. Satisfactory Completion refers only to payment of retainage and accrued interest. A determination of Satisfactory Completion and payment in full for work performed does not relieve the contractor nor the subcontractor from any contractual obligation.

18. Satisfactory Performance means work performed and materials furnished in conformity with the plans and specifications.

19. Service Provider means a broker or a middle man. A business person who buys, sells or performs a service for another in exchange for a mark up or commission.

20. Subcontractor

    A subcontracting arrangement is generally considered to exist when a person or firm assumes an obligation to perform a part of the contract work and the following conditions are present.

    a. The person or firm performing the work is specifically experienced and equipped for such work.

    b. Compensation is related to the amount of work accomplished rather than being on an hourly basis.

c. Choice of work methods, except as restricted by the specifications, and the furnishing and controlling of labor and equipment are exercised by the subcontractor with only general supervision being executed by the prime contractor.

d. Personnel involved in the operation are under the direct supervision of the subcontractor and are included on the subcontractor's payroll.

All conditions involved will be considered and no one condition alone will normally determine whether a subcontract actually exists.

In all cases, a DBE subcontractor must be an independent organization, and the ownership and control by the socially and economically disadvantaged individual(s) must be real and continuing.

The prime contractor, a subcontractor, or a supplier will not be responsible for the various operating and management activities of a DBE firm.

21. Supplier

Provides or furnishes materials, goods or services that may be incorporated into the project. The supply transaction is to be documented by an appropriate purchase agreement that includes the required provisions for Federal-aid construction projects.

22. UUCP The Utah Unified Certification Program (UUCP) provides “one-stop shopping” to applicants for DBE certification, such that an applicant is required to apply only once for a DBE certification that is honored by all recipients of Federal-aid Funds in the State of Utah.

C. DETERMINATION OF DBE CONTRACTOR’S ELIGIBILITY BY UUCP

1. Any Contractor may apply to the UUCP for status as a DBE. Applications will be made on forms provided by the UUCP entitled “UNIFORM CERTIFICATION APPLICATION” or “Information for Determining DBE Joint Venture Eligibility,” Form No. R-817. Application need not be made in connection with a particular bid. Only work contracted to certified DBE prime contractors or subcontractor to firms that have applied for and have been granted status as a DBE by the UUCP will be considered toward contract goals as established in Subsection A.

2. It will be the Contractor's responsibility to submit a DBE application so that the UUCP has time to review it. The UUCP will review applications in a timely manner but is not committed to approve DBE status within any given period of time. The UUCP must have ample lead time to review, evaluate, and verify information provided with an application.

3. The DEPARTMENT will maintain a UUCP Unified DBE Directory of DBE Contractors, vendors, service providers and suppliers that is updated as changes occur for the purpose of providing a reference source to assist any bidder in meeting the requirements of this bid condition. Bidders must use the most current DBE information available on the web site when submitting bids. A current UUCP DBE directory representing certified DBE Contractors is available through the UDOT Civil Rights Office, and also on the Internet at (click on this link):

   http://www.udot.utah.gov/main/f?p=100:pg:::::V,T:,198

   An electronic file of the UUCP DBE Directory is available for download to use in the Electronic Bidding System (EBS) at the following URL (click on this link):

   http://www.udot.utah.gov/main/f?p=100:pg:::::V,T:,317

4. In meeting the requirements of this bid condition, bidders are in no way limited to the DBE Directory referred to in 3 above in seeking out and negotiating with the DBE Contractors and determining which items of work will be subcontracted to DBE Contractors. Bidders will exercise their own judgments in selecting any subcontractor to perform any portion of the work.

   DBE credit will not be allowed toward race conscious goals for a firm or joint venture that has not been DBE certified by the UUCP.

D. BIDDING REQUIREMENTS

All bidders must satisfy the bidding requirements of this section D BIDDING REQUIREMENTS. A DBE prime contractor's performance does not count toward fulfilling the DBE goal. A prime bidder who is a DBE contractor will meet the DBE goal by using other DBE subcontractors or by using good faith efforts.

1. DBE Bid Assurance

a. Race Conscious Goal

Race conscious measure or program is one that is focused specifically on assisting only DBEs. This goal is the amount the prime must commit to DBEs at the time of bid or a good faith effort must be documented.

2. DBE Race Conscious Commitment

For a bid to be considered responsive, Bidders will submit the following information regarding DBE compliance with the EBS prepared Bid Proposal:

Submit a DBE Commitment of work that will be subcontracted to certified DBE firm(s) as listed in the UUCP's Directory or DBE firms that have been approved by the UUCP prior to bid opening.

a. The names of DBE firms that will participate in the contract;

b. A specific description of the work each named DBE firm will perform (list specific bid items). Listed bid items will be considered committed in their entirety unless Bidders designate otherwise in their DBE Commitment.

(1.) If mobilization is a bid item partially committed to a DBE, indicate the dollar amount of the DBE mobilization.

(2.) If a partial quantity is committed to a DBE, indicate the quantity committed to the DBE.

(3.) If a partial performance of an item is committed to a DBE, explain what part of the item the DBE will perform;

c. The dollar amount of participation by each named DBE firm;

d. If the contract goal is not met, evidence of good faith efforts is required at the time of bid.

The DBE Commitment is to be included in the prepared bid, and said information will be kept confidential and will be reviewed to determine the apparent low bidder has either met the DBE Contract Goal or has documented acceptable Good Faith Efforts.

3. DBE Race Neutral Participation

Race Neutral DBE participation includes anytime a DBE;

a. wins a Prime Contract through customary bidding procedures,

b. is awarded a subcontract on a prime contract that does not carry a DBE goal (0% goal),

c. wins a subcontract from a prime contractor that did not consider its DBE status in making the award (e.g., a prime contractor that uses a strict low bid system to award subcontracts).

4. DBE Written Confirmation

Low Bidder will submit to the Civil Rights Office within three (3) work days after the bid opening written confirmation from each DBE participating in the contract as provided in the Prime Contractor's DBE Commitment. The written confirmation will include the following information:

a. A description of the work to be performed (list specific bid items). Listed bid items will be considered committed in their entirety unless Contractors designate otherwise in their DBE commitment.

(1) If mobilization is a bid item that is partially committed, confirm the dollar amount of the mobilization to be performed.

(2) If a partial quantity is committed, confirm the quantity to be performed.

(3) If a partial performance of an item is committed, confirm what part of the item will be performed.

(4) Unit bid prices for each bid item committed to a DBE.

(5) Total dollar amounts (mathematical extensions) for each bid item committed to a DBE

b. The dollar amount of participation by each named DBE firm.

5. Good Faith Efforts

Bidders who fail to meet the DBE goal for bid evaluation must demonstrate with documentary evidence they made good faith efforts . Bidders are required to include the Good Faith Efforts Documentation with the EBS prepared Bid Proposal. The said information will be kept confidential and not reviewed unless the Bidder is otherwise determined to be the low Bidder or UDOT and authorized representatives elect to review said information in making their determination as to award of the contract. For the bid to be considered responsive, Bidders will include with the BID PROPOSAL specific documentary evidence that good faith efforts have been made to meet the goal.

Attached hereto and marked Exhibit A, and by this reference made a part hereof, is a list of actions that may be used to prove the type of efforts prospective Bidders should consider in their attempts to demonstrate good faith efforts. The list of actions, as contained in Exhibit A, is not intended to be an exclusive list of efforts that a prospective Bidder may wish to consider in demonstrating good faith efforts to satisfy DBE participation requirements. The determination of good faith efforts will be based upon the information and documentation of the actions supplied by the Bidder with their bid proposal. The DEPARTMENT reserves the right to investigate and verify such information or to request the low dollar Bidder clarify information submitted within 7 days of the time of bid. The 7 days will be reduced to 5 days beginning January 1, 2017.

Contacts that have been made with DBE firms regarding potential work to be subcontracted and the results of such contacts are to be submitted with the EBS prepared Bid Proposal in Race Neutral DBE Documentation which contains:

(1) The work classifications that will be subcontracted
(2) DBE firms contacted
(3) Method of contact (i.e. emails, letters, postings, etc.)
(3) Result of contact
(4) Name and contact info of anticipated DBE subcontractor(s)
(5) Anticipated work items to be performed by DBEs
(6) Anticipated dollar amount of subcontract(s)

The DBE information submitted includes the NAICS code applicable to the kind of work the DBE will perform on the contract, and, when a non-DBE subcontractor is selected over a DBE, copies of the quotes from each DBE and non-DBE subcontractor. The bidder will make copies of DBE subcontracts available upon request.

The following items are types of efforts that should be made for acceptable Good Faith Efforts:

(1) Conducting market research and solicit through all reasonable means DBEs with capability to do the proposed work
(2) May include attending pre-bid meetings and matchmaking events
(3) Posting notices; sending emails
(4) Solicit as early as possible
(5) Unbundling
(6) Establishing flexible timeframes

6. Award of the Contract

The award of the contract, if awarded, will be made to the apparent successful responsive, responsible Bidder who submitted a reasonable bid for the contract and has complied with this Subsection D Bidding Requirements.

7. Administrative Reconsideration

Good faith efforts as used herein will be determined on a case by case basis. If it is determined that the apparent low Bidder has failed to meet the requirements of Exhibit A, the bidder will be provided an opportunity for administrative reconsideration.

a. Official(s) who did not take part in the original determination will perform the administrative reconsideration.

b. The Bidder will have the opportunity to provide written documentation or argument concerning whether the goal was met or adequate good faith efforts were made.

c. The Bidder will have the opportunity to meet in person with the reconsideration official to discuss whether the goal was met or adequate good faith efforts were made.

d. The Bidder will be notified in writing of the decision and the basis for the decision.

e. The reconsideration decision is administratively final and is not appealable to FHWA or the DOT.

E. COUNTING DBE PARTICIPATION TOWARD GOALS FOR BID EVALUATION

1. The DEPARTMENT will recognize and grant DBE credit toward the goal for bid evaluation (race conscious goals) for work committed to DBE contractors ONLY in the types of work for which DBE certification has been granted by the UUCP prior to bid opening. It is necessary that all bidders refer to the UUCP DBE Directory for direction and guidance. A current copy of the DBE directory is available through the Civil Rights Office and on the Internet at (click on this link):

   http://www.udot.utah.gov/main/f?p=100:pg:::::V,T:,198

   An electronic file of the DBE Directory is available for downloading to use in the Electronic Bidding system (EBS) at the following URL (click on this link):

   http://www.udot.utah.gov/main/f?p=100:pg:::::V,T:,317

2. Commitments to DBEs that exceed the Goal for Bid Evaluation will be considered as both race conscious and race neutral. The dollar amount of the Goal for Bid Evaluation will be considered to be race conscious participation. Any dollar amounts in excess of the Goal for Bid Evaluation will be considered as race neutral participation.

3. When a DBE bids as a prime contractor and utilizes themselves as a DBE participant, their commitment will be counted as race conscious. The prime contractor is still encouraged to use other DBE subcontractors.

F. COUNTING DBE PARTICIPATION TOWARD GOALS FOR PERFORMANCE

Subcontracts to DBEs that exceed the Goal For Bid Evaluation will be considered in part as race conscious participation and in part as race neutral participation. Any dollar amounts in excess of the Goal For Bid Evaluation will be considered as race neutral participation.

It is intended that the Contractor will utilize the subcontractors designated in the DBE Commitment in the performance of the contract. Any changes in the Contractor's DBE Commitment, such as substitution of a DBE subcontractor, substitution of contract items, or decrease in total dollar amount must be approved by the DEPARTMENT and must be covered by a Change Order. Unauthorized substitutions or eliminations may result in the imposition of sanctions. Failure to meet the Goal for Performance established at the time of award by the Contractor's DBE Commitment, without adequate justification, including concurrence of the ENGINEER and Civil Rights Office, will result in the imposition of sanctions as provided in Part I of this Special Provision.

1. Contractors may count toward their contract goals a portion of the total dollar value of a joint venture contract eligible under the standards of this bid condition equal to the percentage of the ownership and controls of the DBE partner in the joint venture.

2. The ENGINEER will recognize and grant DBE credit for work performed by DBE contractors ONLY in the types of work for which DBE certification has been granted by the UUCP prior to bid opening. It is necessary all Bidders refer to the UUCP'DBE Directory for direction and guidance. A current copy of the UUCP DBE directory is available through the Civil Rights Office and on the Internet at (click on this link):

   http://www.udot.utah.gov/main/f?p=100:pg:::::V,T:,198

   An electronic file of the DBE Directory is available for download to use in the Electronic Bidding system (EBS) at the following URL (click on this link):

   http://www.udot.utah.gov/main/f?p=100:pg:::::V,T:,317

3. Contractors may count only the value of the work actually performed by the DBE toward the DBE goals.

   a. Work performed by the DBE’s own forces using “regular employees” and “regular equipment.”

   b. The cost of supplies and materials obtained and purchased by the DBE and equipment leased for the work of the contract.

c. Work that a DBE subcontracts to a lower tier DBE firm.

4. Contractors may not count toward the DBE goals:

a. Supplies and material purchased and equipment leased by the DBE from the prime Contractor or its affiliates or another subcontractor on the project.

b. Work that a DBE subcontracts to a lower tier non-DBE firm.

5. Contractors may count toward their goals only expenditures to a DBE that performs a commercially useful function in the work of the contract.

a. A DBE performs a “commercially useful function” when it is responsible for the execution of the work of the contract and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. To perform a commercially useful function, the DBE must also be responsible, with respect to materials and supplies used on the contract, for negotiating price, determining quality and quantity, ordering the material, and installing (where applicable) and paying for the material itself.

b. The DEPARTMENT will evaluate the amount of work subcontracted, industry practices, whether the amount the firm is to be paid under the contract is commensurate with the work it is actually performing and the DBE credit claimed for its performance of the work, and other relevant factors.

c. A DBE does not perform a commercially useful function if its role is limited to that of an extra participant in a transaction, contract, or project through which funds are passed in order to obtain the appearance of DBE participation. In determining whether a DBE is such an extra participant, the DEPARTMENT must examine similar transactions, particularly those in which DBEs do not participate.

d. A DBE does not perform a commercially useful function if it does not perform or exercise responsibility for at least 30 percent of the total cost of its contract with its own work force, or the DBE subcontracts a greater portion of the work of a contract than would be expected on the basis of normal industry practice for the type of work involved.

6. The DEPARTMENT will use the following factors in determining whether a DBE trucking company is performing a commercially useful function:

   a. The DBE must itself own and operate at least one fully licensed, insured, and operational truck used on the contract.

   b. The DBE must be responsible for the management and supervision of the entire trucking arrangement for the purpose of meeting DBE goals.

   c. The DBE receives credit for the total value of the transportation services it provides on the contract using trucks it owns, insures, and operates using drivers it employs.

   d. The DBE may lease trucks from another DBE firm, including an owner operator who is certified as a DBE. The DBE who leases trucks from another DBE receives credit for the total value of the transportation services the lessee DBE provides on the contract.

   e. The DBE may also lease trucks from a non DBE firm, including from an owner operator. The DBE who leases trucks from a non DBE is entitled to credit for the total value of the transportation services provided by non-DBE lessees as long as the DBE provides the employees for the leased trucks.

   f. A lease must indicate the DBE has exclusive use of and control over the truck. This does not preclude the leased truck from working for others during the term of the lease with the consent of the DBE, so long as the lease gives the DBE absolute priority for use of the leased truck. Leased trucks must display the name and identification number of the DBE.

7. Contractors may count expenditures with DBEs for materials or supplies as provided in the following:

   a. If the materials or supplies are obtained from a DBE manufacturer, 100 percent of the cost of the materials or supplies counts toward DBE goals.

      For purposes of this paragraph, a manufacturer is a firm that operates or maintains a factory or establishment that produces, on the premises, the materials, supplies, articles, or equipment required under the contract and of the general character described by the specifications.

b. If the materials or supplies are purchased from a DBE regular dealer, 60 percent of the cost of the materials or supplies counts toward DBE goals.

For purposes of this paragraph, a regular dealer is a firm that owns, operates, or maintains a store, warehouse, or other establishment in which the materials, supplies, articles or equipment of the general character described by the specifications and required under the contract are bought, kept in stock, and regularly sold or leased to the public in the usual course of business.

(1) To be a regular dealer, the firm must be an established, regular business that engages, as its principal business and under its own name, in the purchase and sale or lease of the products in question.

(2) A firm may be a regular dealer in such bulk items as petroleum products, steel, cement, gravel, stone, or asphalt without owning, operating or maintaining a place of business if the firm both owns and operates distribution equipment for the products. Any supplementing of regular dealers' own distribution equipment will be by a long-term lease agreement and not on an ad hoc or contract-by-contract basis.

(3) Packagers, brokers, manufacturers' representatives, or other persons or firms who arrange, or expedite transactions are not regular dealers.

(4) A DBE trucking company that picks up a product from a manufacturer or regular dealer and delivers the product to the Contractor performs a delivery service. Credit will not be given based on a percentage of the cost of the product; credit will be allowed only for the cost of the transportation service.

8. If the materials or supplies are purchased from a service provider, the fees or commission charged for assistance in the procurement of the materials and supplies, or fees or transportation charges for the delivery of materials or supplies, count toward the DBE goals.

   A Service Provider is a business that is neither a manufacturer nor a regular dealer but simply transfers title of a product from manufacturer to ultimate purchaser or a firm that puts a product into a container for delivery. A service provider charges a fee or a commission for assistance in the procurement of the materials and supplies, or fees or transportation for the delivery of materials or supplies required on a job site.

   a. Only the fees, commissions, or transportation performed by the DBE service provider count toward the DBE goals. The DEPARTMENT must determine the fees are reasonable and not excessive as compared with fees customarily allowed for similar services.

   b. No portion of the cost of the materials and supplies count toward the DBE goals. Documentary evidence of the supply agreements, i.e., sales contract, purchase order, etc., will be submitted to the Resident Engineer or Consultant Engineer at the Preconstruction Conference. The agreement will set forth the estimated quantities, unit prices, total dollar amounts, material guarantees, delivery, and payment requirements including the requirements listed part E, 4, e, of this DBE Special Provision.

9. Prompt payment for the work accomplished is an integral part of the concept of a commercially useful function.

See Section F, Subsection 6.a for a definition of “commercially useful function.”

10. When a DBE subcontractor is terminated, or fails to complete its work on the contract for any reason, the Contractor must make good faith efforts to find another DBE subcontractor to substitute for the original DBE. Direct these good faith efforts at finding another DBE to perform at least the same amount of work under the contract as the DBE that was terminated, to the extent needed to meet the contract goal established for the project. Document the good faith efforts. If the Department requests documentation under this provision, submit the documentation within 7 days, which may be extended for an additional 7 days if necessary at the request of the contractor, and the Department will provide a written determination to the contractor stating whether or not good faith efforts have been demonstrated.

Failure by the contractor to carry out the requirements of this part is a material breach of the contract and may result in the termination of the contract or such other remedies set forth in that section you deem appropriate if the prime contractor fails to comply with the requirements of this section.

G. CONTRACTOR'S RESPONSIBILITY

1. It is the Contractor's responsibility to determine the level of professional competence and financial responsibility of any proposed DBE subcontractor. The Contractor will ascertain the proposed DBE subcontractor is particularly experienced and equipped for the work of the subcontract.

2. It is the Contractor's responsibilities to monitor and assure DBE's listed to fulfill DBE goals perform a commercially useful function.

H. DBE SUBCONTRACTOR'S FAILURE TO PERFORM SUCCESSFULLY

If, during the performance of the contract, the Prime Contractor determines a DBE subcontractor is unable to perform successfully, the Contractor will make good faith efforts to replace the DBE subcontractor with another DBE to fulfill the Goal for Bid Evaluation. For Race Conscious DBE participation, the Contractor will consider the uncompleted DBE committed work items as well as other work items as a part of the good faith efforts. All substitutions of DBE subcontractors will receive prior approval by the Civil Rights Office.

The Contractor will not substitute DBE subcontractor(s), work item(s), nor decrease dollar amount(s) as indicated in the Contractor's DBE Commitment Substitutions for the **good cause reasons** defined in 49 CFR 26.53 without performing the following steps:

1. Give notice in writing to the DBE subcontractor, with a copy to Civil Rights, of their intent to substitute and the reason of its request.

2. Obtaining a written response from the DBE stating why they would object or oppose to the substitution or decrease. The Contractor must give the DBE five (5) days to respond to the notice of substitution.

3. Obtain Civil Rights Office written consent prior to any substitution, termination or decrease of DBE commitment.

The Contractor will not substitute DBE subcontractor(s), work item(s), nor decrease dollar amount(s) as indicated in the Contractor's DBE Commitment without prior submission of written justification to the ENGINEER and without prior approval of the ENGINEER and the Civil Rights Office.

Unauthorized substitutions of the DBE(s), under-runs of work item(s), or decreases in dollar amount(s) may result in the imposition of sanctions as allowed under Section I.

UDOT reserves the right to authorize completion of the work that was subcontracted to a DBE who is unable to perform successfully by either of the following methods:

1. Approve, at no additional cost to the DEPARTMENT, a replacement DBE subcontractor and, when appropriate, modify the contract to provide for reasonable extra time necessary to obtain a DBE replacement at no additional cost to the DEPARTMENT.

2. Direct the Contractor to perform at unit bid prices. In the event this option is selected, the percentage DBE goal will be adjusted as may be appropriate.

I. SANCTIONS

1. The Contractor's DBE Commitment becomes a 3-part commitment comprised of the DBE Contractor(s), work item(s) and dollar amount(s). The Commitment becomes a contract specification upon award of the contract and becomes the minimum goal for contract performance.

   If the Contractor fails to achieve the minimum goal established in the contract at the time of the award of the contract or later modified, the

contract payments will be reduced as a liquidated damage and not as a penalty by an amount equal to the dollar amount of work not performed by the DBE. The dollar amount of any sanction will be computed using the unit prices indicated in the DBE subcontract

Exceptions:

a. Any authorized adjustment in the DBE Commitment that has been approved by the ENGINEER and Civil Rights Office.

b. Race neutral participation.

2. The ENGINEER will deduct maximum points for Compliance with EEO when completing the Contract Performance Report.

J. RECORD KEEPING

1. The DEPARTMENT must create and maintain a Bidders list consisting of all firms bidding on prime contracts and bidding or quoting subcontractors on DOT-assisted projects. For every firm, the following information must be submitted annually:

a. Firm name

b. Firm address

c. Firm's status as a DBE or non-DBE

d. Age of firm

e. Annual gross receipts of the firm.

Every firm bidding or quoting as a prime or subcontractor at any level on DOT-assisted projects must register annually with UDOT.

NOTE: Items (a) and (b) will be completed in the current bidding software by using the 'Quote Comparison' and submitted with your bid.

2. With the bid or no later than 10 work days after bid opening date, each and every prime bidder must submit to the DEPARTMENT a list of all firms bidding and/or quoting as subcontractors, service providers or suppliers.* The Prime Bidder must also submit for each and every firm sub-quoting the following information:

a. Firm Name

b. Firm address

c. Work classification(s) bid by subcontractor, service provider or supplier:

(1) Building
(2) Concrete: Curb & gutter, Flatwork, Inlet Boxes, etc.
(3) Concrete: Structural
(4) Consulting firms
(5) Demolition
(6) Electrical: Hwy lighting, signals & fiber optics
(7) Equipment rentals and sales
(8) Excavation
(9) Fencing
(10) Grading
(11) Guardrail
(12) Landscaping & erosion control
(13) Miscellaneous
(14) Painting: Highway structures
(15) Painting: Highway striping & painted messages
(16) Paving: Asphalt highway & runway, etc.
(17) Paving: Concrete
(18) Paving: Miscellaneous
(19) Pipe Culverts, drainage, sewer & water
(20) Reconstruction : Manholes, etc.
(21) Rotomilling
(22) Sawing & sealing
(23) Signs permanent
(24) Steel reinforcing
(25) Steel structural
(26) Surveying
(27) Traffic Control: Flagging
(28) Traffic Control: Temp. Signs and Devices
(29) Trucking
(30) Supplier: Manufacturer
(31) Supplier: Regular Dealer
(32) Supplier: Service Provider

*NOTE: This requirement can be met with the ‘Quote Comparison’ function in the current bidding software. The report must be printed and faxed to the Civil Rights Department at (801) 965-4101.

Exhibit A

Suggested Actions and Required Documentation to Demonstrate

Good Faith Efforts to Comply With DBE Requirements

A Bidder must show that it took necessary and reasonable steps to achieve a DBE goal that, by their scope, intensity, and appropriateness, can reasonably be expected to fulfill the program requirement. The efforts employed should be those that would be taken if a Bidder were actively and aggressively trying to obtain DBE participation sufficient to meet the DBE contract goal. Mere pro forma efforts are not good faith efforts to meet the DBE contract requirements.

Documentary evidence of each action taken must be submitted with the Bid Proposal.

The following is taken, with some modification, from CFR 49 Part 26, Appendix A. It is not intended to be a mandatory checklist, nor is it intended to be exclusive or exhaustive.

GUIDANCE CONCERNING GOOD FAITH EFFORTS

I. When the DEPARTMENT establishes a contract goal on a Federal aid contract, a Bidder must, in order to be responsive, make good faith efforts to meet the goal. The Bidder can meet this requirement in either of two ways:

A. The Bidder can meet the goal, documenting commitments for participation by DBE firms sufficient for this purpose.

B. If it doesn't meet the goal, the Bidder can document adequate good faith efforts. This means that the Bidder must show that it took all necessary and reasonable steps to achieve a DBE goal or other requirement of this part that, by their scope, intensity, and appropriateness to the objective, could reasonably be expected to obtain sufficient DBE participation, even if they were not fully successful.

II. In any situation in which the DEPARTMENT has established a contract goal, CFR 49, Part 26 requires UDOT to use the good faith efforts mechanism of this part. It is up to the DEPARTMENT to make a fair and reasonable judgment whether a Bidder that did not meet the goal made adequate good faith efforts. It is important for the DEPARTMENT to consider the quality, quantity, and intensity of the different kinds of efforts that the Bidder has made. The efforts employed by the Bidder should be those that one could reasonably expect a Bidder to take if the Bidder were actively and aggressively trying to obtain DBE participation sufficient to meet the DBE contract goal. Mere pro forma efforts are not good faith efforts to meet the DBE contract requirements. The DEPARTMENT emphasizes, however, that its determination concerning the sufficiency of the firm's good faith efforts is a judgment call: meeting quantitative formulas is not required.

III The U. S. Department of Transportation also strongly cautions the DEPARTMENT against requiring that a Bidder meet a contract goal (i.e., obtain a specified amount of DBE participation) in order to be awarded a contract, even though the Bidder makes an adequate good faith efforts showing. This rule specifically prohibits UDOT from ignoring bona fide good faith efforts.

IV. The following is a list of types of actions that UDOT should consider as part of the Bidder’s good faith efforts to obtain DBE participation. It is not intended to be a mandatory checklist, nor is it intended to be exclusive or exhaustive. Other factors or types of efforts may be relevant in appropriate cases.

A. Soliciting through all reasonable and available means (e.g. attendance at pre bid meetings, advertising and/or written notices) the interest of all certified DBEs who have the capability to perform the work of the contract. The Bidder must solicit this interest within sufficient time to allow the DBEs to respond to the solicitation. The Bidder must determine with certainty if

the DBEs are interested by taking appropriate steps to follow up initial solicitations.

B. Selecting portions of the work to be performed by DBEs in order to increase the likelihood that the DBE goals will be achieved. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate DBE participation, even when the prime Contractor might otherwise prefer to perform these work items with its own forces.

C. Providing interested DBEs with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.

D. Negotiating in good faith with interested DBEs.

(1) It is the Bidder's responsibility to make a portion of the work available to DBE subcontractors and suppliers and to select those portions of the work or material needs consistent with the available DBE subcontractors and suppliers, so as to facilitate DBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of DBEs that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional agreements could not be reached for DBEs to perform the work.

(2) A Bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including DBE subcontractors, and would take a firm's price and capabilities as well as contract goals into consideration.

(a) The fact that there may be some additional costs involved in finding and using DBEs is not in itself sufficient reason for a bidder's failure to meet the contract DBE goal, as long as such costs are reasonable.

(b) No specific price differential has been established by 49 CFR 26. This approach allows flexibility.

(c) Along with the reasonableness of the cost necessarily comes the fact that prime Contractors are not expected to bear unreasonable costs.

(d) Any burden that a non-DBE subcontractor might face is also limited by the reasonableness of competing bids.

(3) The ability or desire of a prime Contractor to perform the work of a contract with its own organization does not relieve the Bidder of the responsibility to make good faith efforts. Prime Contractors are not, however, required to accept higher quotes from DBEs if the price difference is excessive or unreasonable.

(4) The ability or desire of a prime Contractor to bundle the work of a subcontractor who wishes to perform all the work of the subcontract with its own organization does not relieve the Bidder of the responsibility to require a subcontractor to make good faith efforts. Subcontractors are not required to accept higher quotes from lower tier DBEs if the price difference is excessive or unreasonable.

E. Not rejecting DBEs as being unqualified without sound reasons based on a thorough investigation of their capabilities. The Contractor's standing within its industry, membership in specific groups, organizations, or associations and political or social affiliations (for example union vs. non-union employee status) are not legitimate causes for the rejection or non-solicitation of bids in the Contractor's efforts to meet the project goal.

F. Making efforts to assist interested DBEs in obtaining bonding, lines of credit, or insurance as required by the recipient or Contractor.

G. Making efforts to assist interested DBEs in obtaining necessary equipment, supplies, materials, or related assistance or services.

H. Effectively using the services of available minority/women community organizations; minority/women Contractors' groups; local, state, and Federal minority/women business assistance offices; and other organizations as allowed on a case by case basis to provide assistance in the recruitment and placement of DBEs.

NOTE: The DBE 'Contact Log' in EBS, submitted as part of the Bid Proposal, can be used to document the following efforts:
IV. A.
IV. C.
IV. D. (1)

The 'Quote Comparison' in EBS, submitted as part of the Bid Proposal, can be used to document the following efforts:
IV. B.
IV. D. (3)

V. In determining whether a Bidder has made good faith efforts, the DEPARTMENT may take into account the performance of other Bidders in meeting the contract. For example, when the apparent successful Bidder fails to meet the contract goal, but others meet it, UDOT may reasonably raise the question of whether, with additional reasonable efforts, the apparent successful bidder could have met the goal. If the apparent successful Bidder fails to meet the goal, but meets or exceeds the average DBE participation obtained by other Bidders, you may view this, in conjunction with other factors, as evidence of the apparent successful Bidder having made good faith efforts.

Submit with the Bid Proposal documentary evidence to prove that good faith efforts were accomplished:

1. Submit copies of all solicitations: correspondence, faxes, advertisements, telephone logs with dates, times, names of persons contacted, nature of conversation, DBEs' responses, and etc.

2. If DBEs submitted quotes that were not used because the range of additional costs was determined to be excessive or unreasonable, submit the range that has been determined by the Bidder to be a reasonable range of additional costs and explain how that range was determined.

3. As a part of demonstrating a reasonable range of additional costs, submit copies of all subcontractor quotes, copies of spread sheet(s) which compare all DBE quotes with non-DBE quotes and which include bid item(s) quoted, work classifications, quantities, prices, and dollar amounts.

4. Submit a narrative of specific names and types of information, assistance, considerations given, and efforts to assist DBEs under Item IV, subparts C through F.

DBE BID ASSURANCE

DBE PARTICIPATION

If the DBE goal which is indicated in Section A, CONTRACT GOAL, of APPENDIX A, BID CONDITIONS, DISADVANTAGED BUSINESS ENTERPRISE (DBE) **is greater than 0.0 percent**, submit DBE Commitment.

By signing the BID REPORT (either manually or electronically), it is understood that those individuals who sign as owners or authorized representatives of the Bidder, have read and are familiar with APPENDIX A, SPECIAL PROVISION, BID CONDITIONS, DISADVANTAGED BUSINESS ENTERPRISE and hereby certify that good faith efforts (when applicable as defined by Section IX, Bid Conditions, D.5) have been utilized to meet or exceed the goal of the DBE Program as established by the DBE Special Provision.

Indicate intended DBE commitment.

_____ We intend to meet or exceed the contract goals as per the DBE Commitment which is submitted with the Bid Proposal (when project goal is greater than 0.0).

_____ We have not met the advertised DBE Project goal. A Good Faith Effort is required. We have provided the required documentation per 49 CFR, Part 26.53.

Documentation of Good Faith Efforts is not required on a 0.0 percent goal project.

X. Attention Contractors
E.E.O. Affirmative Action Requirements on
Federal and Federal-Aid Construction Contracts of $10,000 or More

Include the Notice of Requirement for Affirmative Action to Ensure Equal Employment Opportunity, Executive Order (EO) 11246, as amended (incorporated by reference & Appendix A - below) and the Standard Federal Equal Employment Opportunity Construction Contract Specifications set forth in §60-4.3 (incorporated by reference) in all requests for bids/solicitations on all contracts and subcontracts of $10,000 or more

Include in Appendix A, Notice of Requirement for Affirmative Action to Ensure Equal Employment Opportunity, the goals established by the Office of Federal Contract Compliance Programs (OFCCP) for minority and female participation in each craft on all contracts and subcontracts.

APPENDIX A (EO 11246)

The OFCCP goals for minority representation in each trade are shown below. The goal for female utilization (6.9 percent) applies to all contracts and subcontracts irrespective of their geographical location.

COUNTY	GOAL	COUNTY	GOAL	COUNTY	GOAL
Beaver	12.6	Box Elder	5.1	Cache	5.1
Carbon	5.1	Daggett	5.1	Davis	6.0
Duchesne	5.1	Emery	5.1	Garfield	12.6
Grand	10.2	Iron	12.6	Juab	5.1
Kane	12.6	Millard	5.1	Morgan	5.1
Piute	5.1	Rich	5.1	Salt Lake	6.0
San Juan	10.2	Sanpete	5.1	Sevier	5.1
Summit	5.1	Tooele	6.0	Uintah	5.1
Utah	2.4	Wasatch	5.1	Washington	12.6
Wayne	5.1	Weber	6.0		

These goals are applicable to all contractors' or subcontractors' construction work (whether or not it is Federal or Federally assisted) performed in the covered area.

The Bidder's attention is called to the "Equal Opportunity Clause" (form FHWA 1273- II 1 b, included in this contract) and the "Standard Federal Equal Employment Specifications" set forth in 41 CFR Part 60-4 (incorporated by reference).

Compliance with the Executive Order and the regulations in 41 CFR part 60-4 is based on the implementation of the "Equal Opportunity Clause," specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and the efforts to meet the goals.

Provide written notification to the Director of the Office of Federal Contract Compliance Programs within 10 working days of award of any construction subcontract in excess of $10,000 at any tier for construction work under the contract resulting from this solicitation. The notification lists the name, address and telephone number of the subcontractor; employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract will be performed.

Under Section 303 of EO 11246, only the U. S. Department of Labor (DOL) has the authority to determine compliance with EO 11246 and its implementing regulations. The Federal Highway Administration (FHWA) and the State highway agency (UDOT) do not have independent authority to determine compliance with EO 11246, 41 CFR Chapter 60, or the minority and female participation goals established by the Office of Federal Contract Compliance Programs (OFCCP), pursuant to 41 CFR Chapter 60.

If the State highway agency (UDOT) or the FHWA becomes aware of any possible violations of EO 11246 or 41 CFR Chapter 60, each has the authority and the responsibility to notify the OFCCP.

APPENDIX B

As used in these specifications:

a. Covered area: The geographical area described in the solicitation from which this contract resulted;
b. Director: Director, Office of Federal Contract Compliance Programs, United State Department of Labor, or any person to whom the Director delegates authority;
c. Employer identification number: The Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941.
d. Minority includes:
    (i) Black (all persons having origins in any of the black African racial groups not of Hispanic origin);
    (ii) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race);
    (iii) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and
    (iv) American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).

XI. Specific Equal Employment Opportunity Responsibilities

1. General

   a. The State Transportation Agency (STA) and Federal Highway Administration (FHWA) have the authority and the responsibility to ensure compliance with 23 USC Section 140 and Title VI of the Civil Rights Act of 1964, as amended, and related regulations, including 49 CFR Parts 21 and 23, and 23 CFR Parts 200, 230, and 633. Pursuant to this authority, the STA and the FHWA will conduct compliance reviews of contractors on federally funded highway projects to determine compliance with these laws and related regulations. The STA will prepare complete, written reports of findings of the compliance reviews. The FHWA will analyze the reports, and the evidence on which they are based.

   b. A contractor's EO requirements are in the contract provisions referenced in the FHWA-1273 (included herein). These include contractor acceptance of Section II, 1 c, and the obligation of the contractor to comply with specific EO activities at a minimum.

   c. Submit form PR-1391 in July and at other times when such information is required by the STA or the FHWA; and submit other documentation and reports as requested by the STA or the FHWA.

2. Equal Employment Opportunity (EEO)

   a. Where minorities and women have been excluded from certain classifications in a contractor's work force, the EEO affirmative action requirements specified in the contract will be implemented in good faith to provide EEO.

   b. The contractor will use the avenue afforded by the Training Special Provision (included herein) to increase minority and female employment in crafts where they have been underrepresented.

3. Minority and Female Average Availability Percentages – Utah

   a. Average percentages for minority (M) and female (F) availability in each trade, by County, are shown below. Availability is defined as "an estimate of the number of qualified minorities or women available for employment in a given job group."

COUNTY	M	F	COUNTY	M	F	COUNTY	M	F	COUNTY	M	F
Beaver	6.8	3.0	Box Elder	9.9	5.0	Cache	9.9	5.0	Carbon	12.3	3.0
Daggett	12.3	3.0	Davis	8.9	3.0	Duchesne	12.3	3.0	Emery	15.5	5.0
Garfield	15.5	5.0	Grand	15.5	5.0	Iron	6.8	3.0	Juab	8.2	4.0
Kane	15.5	5.0	Millard	6.8	3.0	Morgan	11.1	3.0	Piute	15.5	5.0
Rich	9.9	5.0	Salt Lake	21.6	5.0	San Juan	15.5	5.0	Sanpete	8.2	4.0
Sevier	15.5	5.0	Summit	11.1	3.0	Tooele	8.2	4.0	Uintah	12.3	3.0
Utah	11.9	4.0	Wasatch	11.1	3.0	Washington	10.0	4.0	Wayne	15.5	5.0
Weber	17.8	5.0									

b. The use of these average percentages in no way precludes the contractor from performing and documenting good faith efforts to recruit and employ minorities and females.

4. Compliance Determinations

a. The list below is a set of “Good-Faith Efforts” criterion established in FHWA’s regulatory and policy requirements that may be used to determine a contractor’s good faith efforts:

1. Contractor’s EEO Policy
2. Dissemination of the EEO Policy
3. Authority and Responsibility of EEO Officer
4. Periodic EEO meetings (EEO indoctrination)
5. Notices/posters on bulletin board
6. Advertising as an “EEO Employer”
7. Recruitment – Systematic and direct recruitment efforts with sources likely to yield minorities and women
8. Educate all new supervisors within 30 days of reporting to duty
9. Encourage present employees to refer minorities and women
10. Evaluates the spread of wages to determine whether discrimination exists
11. Investigates all complaints, promptly, and appropriate corrective action is taken
12. Assist in locating, qualifying, and increasing the skills of minorities and women
13. Fully uses training programs and advises employees and applicants of opportunities
14. Minorities and women exist in contractor’s training program
15. Ensure nonsegregated facilities
16. Minorities and women are employed in all occupations, crafts, and job classifications on an equal basis
17. Procedures establishing the monitoring of subcontractors’ compliance with nondiscrimination, EO and EEO obligations

18. The need for adequate records and reports
19. Minorities and women reach accumulating work hours expected based on their representation
20. Ensure a workplace free of harassment, intimidation, and coercion

b. Affirmative Action is determined based on the evaluation of the contractor's compliance with all of the above good faith efforts and on the contractor's efforts to achieve maximum results from the actions.

c. A contractor is in compliance when there is no evidence of discrimination in employment, training, DBE, Indian Preference provisions, equal opportunity requirements, or evidence every good faith effort has been made.

d. Include in the EEO Policy a commitment to provide a workplace free of harassment, intimidation, and coercion; ensure the policy is posted on the project bulletin board; ensure foreman and superintendents are trained in prevention of harassment, intimidation, and coercion; and take other affirmative actions as necessary to satisfy the requirements of 41 CFR 60 4.3.7a. At the time annual registration is due, the contractor will acknowledge that they have a workplace free of harassment, intimidation, and coercion.

5. Training Special Provisions

This Training Special Provisions supersedes subparagraph II 6b of the FHWA-1273, and is an implementation of 23 U.S.C.C.140 (a).

Provide training as follows as part of the equal employment opportunity affirmative action program:

Provide on-the-job training aimed at developing full journeymen in the type of trade or job classification involved.

The number of training hours to be trained under the special provision is __1200__ (amount to be filled in by the State Highway Department (STA)).

If a portion of the contract work is subcontracted, determine how many, if any, of the trainees are to be trained by the Subcontractor. Make this training special provision applicable to the subcontract. Retain the primary responsibility for meeting the training requirements imposed by this special provision. Where feasible, 25 percent of apprentices or trainees in each occupation will be in their first year of apprenticeship or training.

Distribute the number of trainees among the work classifications on the basis of needs and the availability of journeymen in the various classifications within a

reasonable area of recruitment. Prior to commencing construction, submit to the State highway agency for approval the number of trainees to be trained in each selected classification and training program to be used. Specify the starting time for training in each of the classifications. The STA gives credit for each trainee employed on the contract work that is currently enrolled or becomes enrolled in an approved program. Reimbursement is made for the trainees as specified in this provision.

Training and upgrading of minorities and women toward journeyman status is a primary objective of this Training Special Provision. Enroll minority trainees and women (e.g., by conducting systematic and direct recruitment through public and private likely to yield minority and women trainees) to the extent that such persons are available within a reasonable area of recruitment. Demonstrate the steps taken to achieve compliance with Federal Projects With Full Size Plan Sheets this Training Special Provision. This training commitment is not intended nor used to discriminate against any applicant for training, whether a member of a minority group or not.

Do not employ a trainee in any classification in which they have successfully completed a training course leading to journeyman status or in which they have been employed as a journeyman. Include appropriate questions in the employee application or by other suitable means to satisfy this requirement. Document the findings in each case. The training program selected, and approved by the STA and the FHWA, establishes the minimum length and type of training for each classification in that program. The STA and the FHWA approves a program if it meets the equal employment opportunity obligations and qualification of the average trainee for journeyman status in the classification concerned by the end of the training period. Furthermore, apprenticeship programs registered with the U.S. Department of Labor, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau and training programs approved but not necessarily sponsored by the U.S. Department of Labor, Manpower Administration, Bureau of Apprenticeship and training are considered acceptable if administered in a manner consistent with the equal employment obligations of Federal-aid highway construction contracts. Approval or acceptance of a training program is obtained from the State prior to commencing work on the classification covered by the program.

Provide training in the construction crafts rather than clerk typists or secretarial-type positions. Training is permissible in lower level management positions such as office engineers, estimators, timekeepers, etc., where the training is oriented toward construction applications. Training in the laborer classification if approved by the division office. Some off-site training is permissible as long as the training is an integral part of an approved training program and does not comprise a significant part of the overall training.

Trainees are paid at least 60 percent of the appropriate minimum journeyman's rate specified in the contract for the first half of the training period, 75 percent for the third quarter of the training period, and 90 percent for the last quarter of the training period, unless apprentices or trainees in an approved existing program are enrolled as trainees on this project. In that case, the appropriate rates approved by the Departments of Labor or Transportation in connection with the existing program will apply to all trainees being trained for the same classification who are covered by this Training Special Provision.

Furnish the trainee a copy of the program to be followed in providing the training. Provide each trainee with a certification showing the type and length of training satisfactorily completed.

Provide for the maintenance of records and furnish periodic reports documenting their performance under this Training Special Provision. UDOT form, Monthly Training Summary satisfies this reporting requirement. Contractor will accomplish entry of this information electronically by entry into PDBS at least monthly for the duration of the project.

a. Training Program Description: As part of the Equal Employment Opportunity Affirmative Action Program, the Contractor will provide on-the-job training aimed at developing full journey status in the type of trade or job classification involved. The number of hours of training to be provided under this contract will be as shown on the bid schedule. Apprentices must be enrolled in an Office of Apprenticeship Training Employer and Labor Services (OATELS - formerly BAT) approved program.

b. OBJECTIVE: Training and upgrading of minorities and women toward journey status is the primary objective of this program. The Contractor will enroll minorities and/or women, where possible, and document good faith efforts prior to the hire of non-minority males in order to demonstrate compliance with this Training Special Provision. This training commitment is not intended, and will not be used, to discriminate against any applicant for training, whether a member of a minority group or not.

c. PROJECT TRAINING GOAL: The formula for determining the training goal specified in the Training Special Provision will be as follows:

DESCRIPTION	SAMPLE				
Engineer's estimate times 33% equals total labor dollars.	$25,000,000	X	33%	=	$8,250,000
Total labor $ divided by $50/hr equals total labor hours.	$8,250,000	÷	*$50/hr	=	165,000 hrs.
Total labor hours times 5% equals project training hours.	165,000 hrs.	X	5%	=	8,250 hrs.

*$50.00 = labor cost per hour per employee – to be adjusted periodically to accommodate increase in cost.

e. GENERAL: Prior to beginning construction on the contract, the Contractor will submit Form C-130 (Formerly OJT100) indicating the training program to be used, the number of hours of training to be provided by classification, and the anticipated starting time for training in each selected classification.

f. Training should begin within 2 weeks of the anticipated start dates of project as outlined on the OJT 100 Form, unless otherwise authorized by the Resident Engineer (RE). Only after submission of documentation by the Contractor and approval by the RE, of efforts made in good faith, will authorization of a delay be made.

g. The Contractor will review annually the training and promotion potential of minority and women employees and will encourage eligible employees to apply for such training and promotion.

h. METHOD OF MEASUREMENT: The Contractor will be credited for each approved apprentice/trainee employed on the project and reimbursed on the basis of hours worked in the program to which he/she is indentured, as listed on the certified payrolls, and reported monthly, by the Contractor in the UDOT PDBS Contractor module, OJT Hours Worked screen. There will be no credit for training provided under this section prior to the Contractor's submittal and approval by the RE of the Apprentice/Trainee Certification from the appropriate agency. This certification expires 90 days from the date of issue, and must be renewed by the Contractor in order to keep the apprentice/trainee's hours eligible for reimbursement.

i. BASIS OF PAYMENT: Payment for contractor participating in the Apprenticeship Training Program will be made at a rate of $10.00 a hour, 20 hours per week, up to a maximum of 600 hours per project unless otherwise specified in accordance with 5,C of this provision. Payment will be made at the contract unit price of $10.00 for each hour of approved apprenticeship training actually provided. If the contractor provides training for more than the number of hours

specified on the bid schedule, the payment of $10.00 per hour continues to be paid for all hours of training provided, up to a maximum of double the assigned goal. No reimbursement will be provided to the contractor for hours in excess of twice the assigned training goal per project. All reimbursement payments made to the contractor for training must be paid to the agency administering the training program. Certified documentation showing the payment to the training agency is required to be submitted to the UDOT Civil Rights EEO and Labor Specialist when the project is complete.

A contractor will have fulfilled his/her responsibilities under this Training Special Provision if he/she has provided acceptable training to the number of trainees specified on the C-130 (Formerly OJT100) and the number of hours specified and shown on the bid schedule. EXAMPLE (a): Training Goal = 750 hours; Hours specified on bid schedule = 750. Contractor may use any number of trainees to satisfy the number of hours specified on the bid schedule but the number of trainees specified on the Form C-130 (Formerly OJT100) must be used unless change is approved by RE. EXAMPLE (b): Training Goal = 2000 hours; Hours specified on bid schedule = 2,000. Contractor may use any number of trainees to satisfy the number of hours specified on the bid schedule.

Any request for adjustment to the OJT Training Form or goal MUST be submitted and approved by the UDOT Civil Rights Office prior to substantial completion of project. Good Faith Efforts and mitigating circumstances will be considered in approval process.

LIQUIDATED DAMAGES: Where the Contractor has failed, by the end of the project, to provide the required number of hours of training and has failed to submit acceptable good faith efforts documentation which establishes exactly why he/she was unable to do so, the Contractor will be assessed an amount equal to the following damages to be deducted from the final progress payment:

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DESCRIPTION	**SAMPLE**				
Number of hours of training not provided, times the journey worker hourly scale plus benefits	**HOURS OF TRAINING NOT PROVIDED**	***JOURNEY WORKER**	**BASE PLUS FRINGE**	**TOTAL HOURLY WAGE OF TRAINEE**	**DAMAGES**
	600	OPERATOR – Blade Smooth/Finish	23.80 + 9.76	= 33.56	20,136.00
	500	CARPENTER	16.13 + 2.80	= 18.93	9,465.00
	600	IRONWORKER	21.84 + 9.92	= 31.76	19,056.00
	700	OPERATOR – Bulldozer	18.05 + 7.08	= 25.13	17,591.00
Total training hours not provided	2,400		**Project Total Damages**		66,248.00

*The journey worker scale is based on the classification identified in the approved programs submitted previously on the form C-130 (Formerly OJT100).

Federal Projects With Full Size Plan Sheets

(This form C-130 (Formerly OJT100) replaces the required Training Letter of Commitment and is to be completed and submitted to the UDOT Resident Engineer before or at the pre-construction meeting for the project. Form is found on the UDOT web site, Construction forms, DBE, EEO and Labor Forms).

TRAINING COMMITMENT FORM

(This form replaces the required Training Letter of Commitment and is to be completed and submitted to the UDOT Resident Engineer before or at the preconstruction meeting for the project.)

Date: _____

Project # _____ **Location** _____

Company _____

Address _____

City **State** **ZIP** **Phone**

Craft/Classification	Training Program	# Trainees	Starting Date	Approx # Hrs

Signature _____ **Title** _____ Date _____

XII. Title VI Appendix A and E

Title VI of the Civil Rights Act of 1964 – Non – Discrimination Notice; Attachment A

NON-DISCRIMINATION NOTICE

In accordance with Title VI of the Civil Rights Act of 1964, 78 Stat. 252, 42 U.S.C 2000d to 2000d-4 and the Title 49, Code of Federal Regulations. The text below, in its entirety, is in all contracts entered into by UDOT. All of the text except the final section, entitled "Incorporation of Provisions," should be included in any contract entered into by any UDOT contractor.

During the performance of this contract, for itself, its assignees and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

A. COMPLIANCE WITH TITLE VI OF THE CIVIL RIGHTS ACT OF 1964 FOR FEDERAL-AID CONTRACTS

1. **Compliance with Regulations:** The contractor shall comply with the Regulation relative to nondiscrimination in Federally-assisted programs of the Department of Transportation (hereinafter, "DOT") Title 49, Code of Federal Regulations, Part 21, as they may be amended from time to time, (hereinafter referred to as Regulations), which are herein incorporated by reference and made a part of this contract.

2. **Nondiscrimination:** The Contractor, with regard to the work performed by it during the contract, shall not discriminate on the grounds of race, color, sex, age, disability, income status, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor shall not participate either directly or indirectly in the discrimination prohibited by section 21.5 of the Regulations, including employment practices when the contract covers a program set forth in Appendix B of the Regulations.

3. **Solicitations for Subcontractors, Including Procurements of Materials and Equipment:** In all solicitations either by competitive bidding or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials or leases of equipment, each potential subcontractor or supplier shall be notified by the contractor of the contractor's obligations under this contract and the Regulations relative to nondiscrimination on the grounds of race, color, sex, age, disability, income status, or national origin.

4. **Information and Reports:** The contractor shall provide all information and reports required by the Regulations or directives issued pursuant thereto, and shall permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the (Recipient) or the (Name of Appropriate Administration) to be pertinent to ascertain compliance with such Regulations, orders and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish this information the contractor shall so certify to the (Recipient), or the (Name of Appropriate Administration) as appropriate, and shall set forth what efforts it has made to obtain the information.

5. **Sanctions for Noncompliance:** In the event of the contractor's noncompliance with the nondiscrimination provisions of this contract, the (Recipient) shall impose such contract sanctions as it or the (Name of Appropriate Administration) may determine to be appropriate, including, but not limited to:

    a. Withholding of payments to the contractor under the contract until the contractor complies, and/or

    b. Cancellation, termination or suspension of the contract, in whole or in part.

6. **Incorporation of Provisions:** The contractor shall include the provisions of paragraphs (1) through (6) in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Regulations, or directives issued pursuant thereto.

The contractor shall take such action with respect to any subcontractor procurement as the (Recipient) or the (Name of Appropriate Administration) may direct as a means of enforcing such provisions including sanctions for noncompliance: Provided, however, that, in the event a contractor becomes involved in, or is threatened with litigation with a subcontractor or supplier as a result of such direction, the contractor may request the (Recipient) to enter into such litigation to protect the interests of the (Recipient), and, in addition, the contractor may request the United States to enter into such litigation to protect the interests of the United States.

Title VI of the Civil Rights Act of 1964 – Non – Discrimination Notice; Attachment E

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

Pertinent Non-Discrimination Authorities:

- Title Vl of the Civil Rights Act of 1964 (42 U.S.C. § 2000d *et seq.*, 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21.
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 *et seq.)*, (prohibits discrimination on the basis of sex);
- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 *et seq.)*, as amended, (prohibits discrimination on the basis of disability); and 49 CFR Part 27;
- The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 610 l*et seq.)*, (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49 USC § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether suh programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131 – 12189) as implemented by Department of Transportation regulations at 49 C.F.R. parts 37 and 38;
- The Federal Aviation Administration's Non-discrimination statute (49 U.S.C. §47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-lncome Populations, which ensures discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1681 et seq).

FHWA-1273 -- Revised May 1, 2012

XIII. Required Contract Provisions
FEDERAL-AID CONSTRUCTION CONTRACTS

I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services).

   The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

   Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services). The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

   Contracting agencies may reference Form FHWA-1273 in bid proposal or request for proposal documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 are applicable to all Federal-aid construction contracts and to all related construction subcontracts of $10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding $10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR 230, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

1. **Equal Employment Opportunity:** Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

    a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.

    b. The contractor will accept as its operating policy the following statement:

    "It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."

2. **EEO Officer:** The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.

3. **Dissemination of Policy:** All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

    a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the

contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. **Recruitment:** When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

5. **Personnel Actions:** Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of

each investigation, the contractor will inform every complainant of all of their avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

9. **Selection of Subcontractors, Procurement of Materials and Leasing of Equipment:** The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

    a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.

    b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

10. **Assurance Required by 49 CFR 26.13(b):**

    a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.

    b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the contracting agency deems appropriate.

11. **Records and Reports:** The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

    a. The records kept by the contractor shall document the following:

        (1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;

        (2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and

        (3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;

    b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391. The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of $10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term

"facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding $2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 “Contract provisions and related matters” with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

1. Minimum wages

a. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH–1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b. (1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(ii) The classification is utilized in the area by the construction industry; and

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

c. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

d. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

2. Withholding

The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

3. Payrolls and basic records

a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

b. (1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g. , the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH–347 is available for this purpose from the Wage and Hour Division Web site at http://www.dol.gov/esa/whd/forms/wh347instr.htm or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency.

(2) Each payroll submitted shall be accompanied by a “Statement of Compliance,” signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH–347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.

(4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and trainees

a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

d. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

6. Subcontracts. The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

7. **Contract termination: debarment.** A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. **Compliance with Davis-Bacon and Related Act requirements.** All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

9. **Disputes concerning labor standards.** Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. **Certification of eligibility.**

    a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

    b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

    c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

The following clauses apply to any Federal-aid construction contract in an amount in excess of $100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

1. **Overtime requirements.** No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

2. **Violation; liability for unpaid wages; liquidated damages.** In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of $10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1.) of this section.

3. **Withholding for unpaid wages and liquidated damages.** The FHWA or the contacting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.

4. **Subcontracts.** The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

    a. The term “perform work with its own organization” refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:

        (1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;

        (2) the prime contractor remains responsible for the quality of the work of the leased employees;

        (3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and

        (4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

    b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.

2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is

evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C.3704).

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.

2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost $25,000 or more – as defined in 2 CFR Parts 180 and 1200.

1. Instructions for Certification – First Tier Participants:

a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. “First Tier Covered Transactions” refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). “Lower Tier Covered Transactions” refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). “First Tier Participant” refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). “Lower Tier Participant” refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the $25,000 threshold.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (https://www.epls.gov), which is compiled by the General Services Administration.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

* * * * *

2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

2. Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost $25,000 or more - 2 CFR Parts 180 and 1200)

a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. “First Tier Covered Transactions” refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). “Lower Tier Covered Transactions” refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). “First Tier Participant” refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). “Lower Tier Participant” refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the $25,000 threshold.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (https://www.epls.gov/), which is compiled by the General Services Administration.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

* * * * *

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

* * * * *

XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed $100,000 (49 CFR 20).

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

   a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

   b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed $100,000 and that all such recipients shall certify and disclose accordingly.

ATTACHMENT A - EMPLOYMENT AND MATERIALS PREFERENCE FOR APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS ROAD CONTRACTS

This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

1 During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

a. To the extent that qualified persons regularly residing in the area are not available.

b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.

c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.

5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

XIV. Wage Rates Applicable

GENERAL DECISION FILE FOR PROJECTS REPORT

Date: 9/22/2015

Project #: F-0195(5)0

General Decision #: UT20150065 **Modification:** 2 **Publication Date:** 08/21/2015

Counties: SALT LAKE, UT

Contractor Code		Hourly Rate	Fringes
110276	(2a) Blade/Grader	$25.89	15.65
110345	(3) Front End Loader (Over 5 cu. yds.), Backhoe Loader Combination, Rotomill	$25.37	15.65
110357	(4) Asphalt Laydown Machine, Asphalt Paver, Bulldozer, Front End Loader (2 to 5 cu. yds.), Grade Setter, Scraper, Oil Distributor	$24.37	15.65
110347	(5) Asphalt Roller, Front End Loader (Under 2 cu. yds.), Horizontal Directional Drill	$23.37	15.65
110296	(6) Screed	$22.41	15.65
110297	(7) Roller (Dirt and Grade Compaction)	$21.50	15.65
110332	Crane (35 to 100 tons) -2	$26.99	15.65
110333	Crane (Over 100 tons) -1	$28.33	15.65
110331	Crane (Under 35 tons) -3	$25.70	15.65
110341	Crane Oiler -5	$22.59	15.65
110348	Crane Piledriver 5	$22.59	15.65
110211	Operator: Power Equipment: (1) Mechanic	$27.55	15.65
120176	IRONWORKER STRUCTURAL	$26.18	19.10

Project #: F-0195(5)0

General Decision #: UT20150065 **Modification:** 2 **Publication Date:** 08/21/2015

Counties: SALT LAKE, UT

Contractor Code		Hourly Rate	Fringes
120261	IRONWORKER, REINFORCING	$26.61	11.60
130012	LABORER: (1) Traffic Control, sets cones and barrels	$20.59	8.65
130071	LABORER: (4) Asphalt Raker, Asphalt Shoveler	$21.11	8.65
140241	CARPENTER, Includes Form Work	$18.03	3.44
140015	CEMENT MASON/CONCRETE FINSHER	$16.53	2.79
140277	ELECTRICIAN, Includes Low Voltage Wiring for Traffic Cameras and Installation of Traffic Signals	$21.56	5.00
140017	LABORER: Common or General	$12.86	2.66
140019	LABORER: Flagger	$7.43	1.57
140023	LABORER: Grade Checker	$12.87	3.59
140020	LABORER: Landscape	$12.27	2.66
140021	LABORER: Mason Tender-Cement/Concrete	$13.17	3.21
140022	LABORER: Pipelayer	$12.60	2.79
140091	LABORER: Power Tool Operator: (Chain/Concrete Saw, Dirt Compactor (Hand Held), Hand Held Drill and Jackhammer Only)	$13.75	4.65

GENERAL DECISION FILE FOR PROJECTS REPORT

Date: 9/22/2015

Project #: F-0195(5)0

General Decision #: UT20150065 **Modification:** 2 **Publication Date:** 08/21/2015

Counties: SALT LAKE, UT

Contractor Code		Hourly Rate	Fringes
140039	OPERATOR: Backhoe/Excavator/Trackhoe	$17.96	6.81
140278	OPERATOR: Bobcat/Skid Steer/Skid Loader	$13.06	3.31
140327	OPERATOR: Broom/Sweeper	$16.78	6.55
140031	OPERATOR: Concrete Finishing Machine	$18.76	6.55
140032	OPERATOR: Concrete Pump, Truck Mounted	$19.18	4.23
140033	OPERATOR: Rock Chip Spreader	$16.29	7.08
140038	OPERATOR: Tractor	$18.01	6.73
140076	OPERATOR: Trencher	$24.35	6.70
140041	PAINTER (Parking Lot and Highway Striping Only)	$14.05	1.62
140089	SIGN INSTALLER (Permanent and Temporary Road Signs Only)	$12.27	2.66
150379	TRUCK DRIVER (Dump Truck, Bottom-end or side) Less than 8 cu. yds	$20.76	10.73
150099	TRUCK DRIVER (Lowboy)	$23.83	10.73
150052	TRUCK DRIVER (Pickup)	$20.59	10.73

Note: Executive Order (EO) 13658 establishes an hourly minimum wage of $10.10 for 2015 that applies to all contracts subject to the Davis-Bacon Act for which the solicitation is issued on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least $10.10 (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract. The EO minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

* an existing published wage determination
* a survey underlying a wage determination
* a Wage and Hour Division letter setting forth a position on a wage determination matter
* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION

XV. Special Provisions and Supplemental Specifications

Supplemental Specification
2012 Standard Specification Book

SECTION 00120M

BIDDING REQUIREMENTS AND CONDITIONS

Delete Article 1.6, paragraph A and replace with the following:

A. Meet Department requirements for prequalification before submitting a proposal on all projects where the Department Engineer's advertised estimate is greater than or equal to $3 million.
   1. Prequalification information is due at least 10 calendar days before submitting a proposal on projects requiring prequalification.

Delete Article 1.15, paragraph A20 and replace with the following:

20. Unsatisfactory performance on previous or current contracts or serving probation for actions on another project.

Delete Article 1.15, paragraph B and replace with the following:

B. The bidder may appeal in writing to the Department Deputy Director according to Utah Code Section 63G-6-801 through 806, as amended if the Department refuses to accept a proposal for any of the foregoing reasons.

Delete Article 1.17 and replace with the following:

1.17 PROPOSAL DELIVERY

A. Electronically transmit the proposal before the time specified in the Notice to Contractors.

B. A manually submitted bid must include both a signed hard copy and electronic version. Electronic media device (CD/Flash Drive) must not be blank or unreadable and must contain the correct electronic bid items txt file in the indicated format.
   1. File format- Proj#_UDOTContractorID_bidopendate.txt
   2. The signed hard copy takes precedence over a manually delivered electronic version in the case of discrepancies or initialed changes to unit prices or DBE commitment.

Delete Article 1.18 and replace with the following:

1.18 WITHDRAWING OR REVISING PROPOSALS

A. A proposal may be withdrawn or revised before the time set for receiving proposals.

B. Provide the request for withdrawal to the Department with a telephone call followed by documented electronic communications including a company authorized signature and the UDOT Contractor ID before the time set for receiving proposals.

C. Revise and save bid proposal using the current version of the Department's Electronic Bid System. Transmit to Department authorized repository before the time set for receiving proposals.

Delete Article 1.20 and replace with the following:

1.20 SUSPENSION

A. A Contractor will be placed on suspension if its contractor ratings performed by the Department do not meet the minimum standard outlined in the contractor rating process for any Department or Department administered projects.

1. The Contractor will not be allowed to bid on Department or Department administered projects while on suspension.

Add Article 1.21, paragraph A14

14. Contractor ratings performed by the Department do not meet the minimum standard outlined in the contractor rating process.

Add Article 1.27:

1.27 PUBLIC OPENING OF PROPOSALS

A. Proposals are publicly opened at the time indicated in the invitation for bids.

Add Article 1.28:

1.28 CONTRACTOR LICENSING

A. Apply and conform to the laws of Utah relative to the licensing of contractors.
   1. A contractor's license is required before submitting a bid. Exception: A Contractor may submit a bid on a Federal-aid highway project if they can become licensed in Utah before beginning construction (notice to proceed).
   2. Failure to do so will result in forfeiture of award.

B. Obtain a commercial license to perform work in Utah.
   1. A license will be required to proceed with work.
   2. All license requirements and application to perform heavy highway construction in the state of Utah requires the applicable license for the category of work being performed.
      a. The Prime contractor is required to hold an E-100 classification title/code or the applicable license relating to their specific category of work being performed.
      b. A Sub-contractor is required to hold the applicable license relating to their specific category of work being performed. Licensing is governed by:

         Utah Department of Commerce
         Occupational/Professional Licensing
         P O Box 145741
         Salt Lake City, UT 84114-6741
         (801)530-6628

July 8, 2015

SPECIAL PROVISION

PROJECT #F-0195(5)0
PIN #8114

SECTION 00221S

BIDDING CONTRACT TIME

Add Section 00221

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Procedures for bidding contract time for the Price + Time bidding process.
   1. Includes incentive/disincentive for early/late completion of project milestones.

B. Description of time component pricing, and time related incentive or disincentive.
   1. Refer to Section 00515M for information regarding bidding time and determination of the low bidder.
   2. Time is a bid item that captures societal costs and is used for evaluation of the low bidder. Incentive/Disincentive is the only time related payment. Refer to this Section, article 1.7.

1.2 RELATED SECTIONS

A. Section 00515M: Contract Award And Execution

B. Section 00555: Prosecution and Progress

1.3 REFERENCES **Not Used**

1.4 DEFINITIONS **Not Used**

1.5 SUBMITTALS **Not Used**

1.6 TIME COMPONENT

A. Determine the bid price for the time component as follows.
   1. Measure contract time in calendar days.
   2. Determine the number of consecutive calendar days required between each start milestone and finish milestone in Table 1.
      a. Consider all requirements of the contract when determining the number of calendar days,
      b. Include the days of the start milestone and finish milestone in the number of calendar days.

B. The Department does not guarantee that any milestone can be completed in the minimum calendar days shown in Table 1.

C. Bidders are responsible to complete the milestones within the time bid and according to project requirements.

D. The Department will consider the bid non-responsive if the bidder:
   1. Does not submit a bid for the time component.
   2. Submits a time component bid for any awardable portion of the contract which is outside the minimum or maximum range.

E. Negative amounts are not permitted for time related bid items.

F. Time is bid in calendar days. Consider seasonal project specific weather conditions during bid preparation.

Table 1

Determination of Calendar Days						
A	**B**	**C**	**D**	**E**	**F**	**G**
TIME SEGMENT	**START MILESTONE**	**FINISH MILESTONE**	**TIME-RELATED COST-RATE**	**TIME-RELATED COST-RATE METHOD**	**MIN**	**MAX**
			Dollars per calendar day	User Cost or Liquidated Damages	Calendar days	Calendar Days
1	10 Calendar days after Notice to Proceed	Substantial Completion	$2,130	Liquidated Damages	350	380
2 (Additive #1)	To Be Determined By Contractor	Substantial Completion	$2,130	Liquidated Damages	30	45
3 (Additive #2)	To Be Determined By Contractor	Substantial Completion	$2,130	Liquidated Damages	10	20

1.7 INCENTIVES/DISINCENTIVES RELATED TO "TIME"

A. Contract time related charges are determined by multiplying the number of calendar days accrued for each time segment by its corresponding time related cost rate and summing the products.

B. Document accrued time charges per time segment for the duration of the project.

C. Payments or deductions to the Contractor will be based on the difference between the time related bid amounts and the actual time charges assessed for the completed project.
   1. Payment for the incentive will be made in the project accounting system after substantial completion.
   2. Deduction for any milestone disincentive will be made on the first progress payment after the total number of calendar days bid for a milestone has passed without completion as defined in Table 1.

D. Incentive

1. The Contractor is eligible for incentive when a milestone is achieved before the number of calendar days bid as determined by the Department.
2. Payment is made at the rate shown in column D for the difference between the number of calendar days bid and the actual number of calendar days used to achieve the milestone when Column E is defined as “User Cost.”
3. Payment is made at the rate shown in the schedule of liquidated damages in Section 00555 based on the original contract amount when Column E is defined as “Liquidated Damages.”
4. The maximum dollar amount eligible for incentive payment for all combined milestones is $63,900.00

E. Disincentive
1. When the time related cost in Column E is defined as “User Cost.”
   a. The Contractor is assessed a disincentive when a milestone is not achieved within the number of calendar days bid as determined by the Department.
   b. Disincentive is assessed at the rate shown in column D for the difference between the number of calendar days bid and the actual number of calendar days used to achieve the milestone.
   c. There is no maximum dollar amount for disincentive charges.
   d. Liquidated damages are charged in addition to disincentive for the difference between the maximum calendar days and the actual number of days to achieve the milestone if milestone completion is not achieved prior to the maximum calendar days shown in Table 1. Refer to Section 00555.
2. When the time related cost in Column E is defined as “Liquidated Damages.”
   a. The Contractor is assessed disincentive at the rate shown in the schedule of liquidated damages in Section 00555 based on the original contract amount.
   b. Disincentive is assessed for the difference between the number of calendar days bid and the actual number of calendar days used to achieve the milestone.
   c. Disincentive applies until milestone completion or the maximum calendar days defined in Column G, whichever occurs first.

F. Liquidated Damages
1. Liquidated damages are assessed according to Section 00555 for the difference between the number of maximum calendar days from Column G and the actual number of calendar days used to achieve the milestone.

G. Timeline of Incentive, Disincentive, and Liquidated Damages

1. Refer to Figure 1

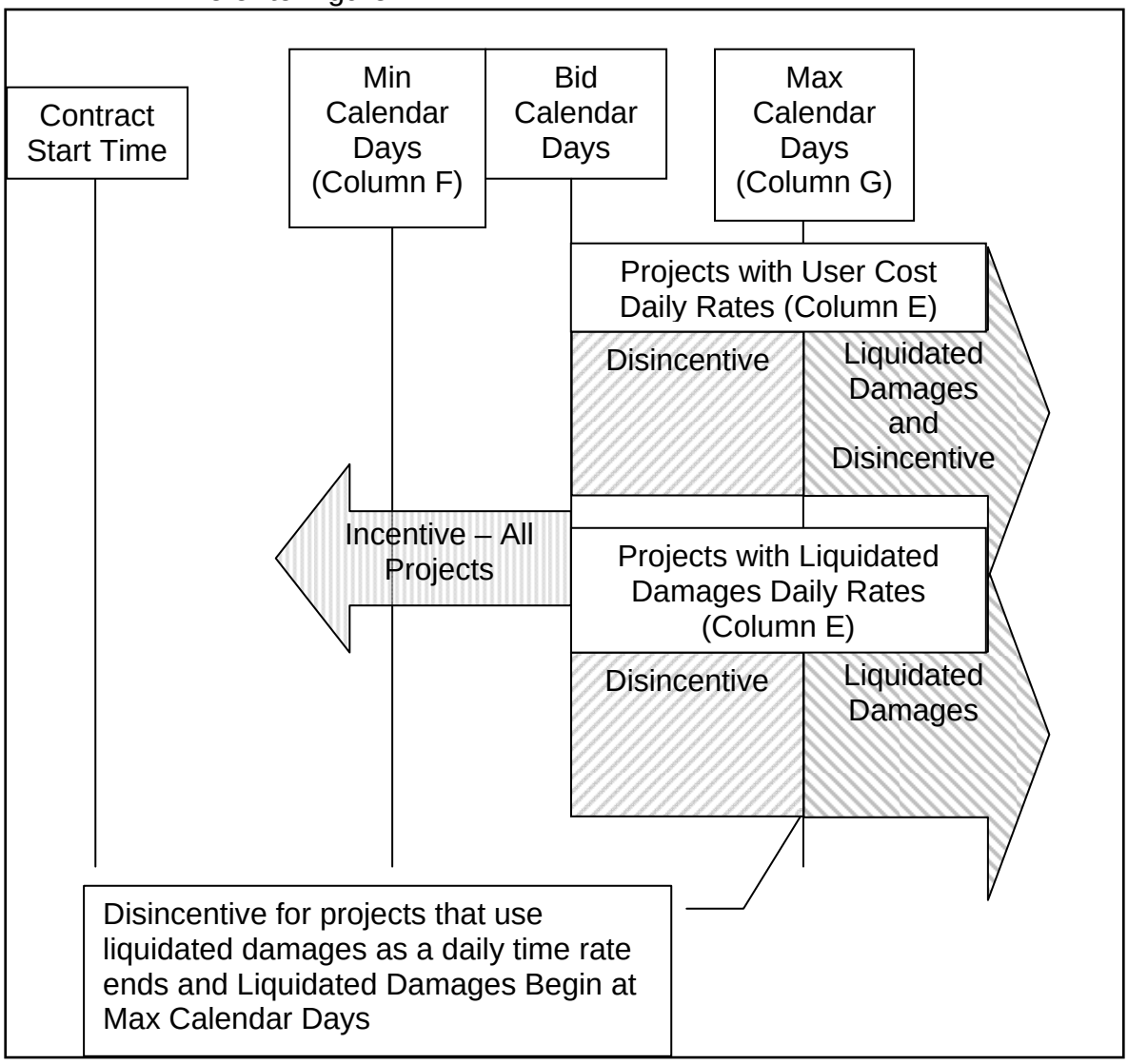

Figure 1 – Timeline of Incentive, Disincentive, and Liquidated Damages

PART 2 PRODUCTS Not Used

PART 3 EXECUTION Not Used

END OF SECTION

March 9, 2015

SPECIAL PROVISION

PROJECT #F-0195(5)0
PIN # 8114

SECTION 00305S

LOCAL AGENCIES STANDARDS, CONTACTS, AND INSPECTION

Add Section 00305:

PART 1 GENERAL

1.1 SECTION INCLUDES

A. The project includes relocation and/or construction of public improvements for Salt Lake City Public Utilities.

B. The public improvements include water lines and appurtenance parts.

C. When backfilling public utility improvements, use local city standards for pipe zone bedding, backfill and compaction. Outside the pipe zone, meet UDOT Standards, refer to UDOT DG series Standard Drawings.

D. Install the public improvements according to the following standards:
   1. Salt Lake City Public Utilities: Use the APWA 2012 Manual of Standard Plans and Specifications.

1.2 RELATED SECTIONS Not Used

1.3 REFERENCES Not Used

1.4 DEFINITIONS Not Used

1.5 SUBMITTALS

A. Contractor submits all signed Certificates of Compliance, to the Engineer, for materials involved in associated work. (The form can be found in the UDOT Materials Minimum Sampling and Testing forms).

B. Product Data: Manufacturer's technical product data and installation instructions.

C. Operating and Maintenance: Include maintenance data, parts lists, Product Data, and Shop Drawings.

D. Comply with Buy America requirements.

E. If the Local Agency performs any inspections, the local agency inspector submits progress reports to the Engineer at the end of each day.

1.6 QUALITY ASSURANCE

A. Reject any pipe which does not conform to Contract Documents or is cracked, chipped, crushed, dented, kinked, or otherwise unacceptable.

1.7 CONTACTS

A. The Engineer notifies the affected city or agency 5 working days prior to utility work or relocations. The anticipated utility impacts are associated with the following cities or agencies:
   1. Salt Lake City Public Utilities: Bernard Mo (801) 483-6835

1.8 INSPECTION

A. As part of the Contract, there are water lines, lighting, signing and appurtenant parts that are to be relocated and/or replaced. The City and/or Agency may provide an inspector for this work. The local agency will:
   1. Notify the Engineer when they arrive and when they leave the project site.
   2. Notify the Engineer of any work found to be unacceptable within normal work hours (8 am to 5 pm). The Engineer makes written notification to the Contractor of any corrective measures to be made.
   3. Keeps a daily progress report of any inspections.

PART 2 PRODUCTS Not Used

PART 3 EXECUTION

3.1 DISCREPANCIES AND CONFLICTS

A. Where discrepancies or conflicts exist between local agency standards and UDOT standards, specifications, and minimum sampling and testing requirements, the more stringent standards will govern.

END OF SECTION

February 26, 2015

SPECIAL PROVISION

PROJECT #F-0195(5)0
PIN #8114

SECTION 00515S

CONTRACT AWARD AND EXECUTION

Delete Article 1.6 and replace with the following:

1.6 PROPOSAL CONSIDERATION

A. This project uses a price + time or price + time + lane rental bidding process. These processes provide:
   1. For the determination of the low bidder based on the price of construction plus the costs associated with contract time and lane rental.
   2. An incentive/disincentive for completion of project time-related milestones based on durations established by Contractor bid as applicable.
   3. An incentive/disincentive for minimizing duration of lane and shoulder closures based on durations established by Contractor bid as applicable.

B. The Department publicly opens properly executed proposals using the current version of the Electronic Bid System (EBS) to compare bids on the basis of the summation of the products of the quantities and the unit bid prices.
   1. The Department makes the results of the comparisons available to the public.
   2. The unit bid prices govern if a discrepancy exists between unit bid prices and extensions.

C. The Department reserves the right to reject any or all proposals, waive technicalities, or advertise for new proposals.

D. The bidder can request withdrawal of a bid after bid opening by:
   1. Submitting to the Director for Construction and Materials a notarized affidavit within 24 hours after bid opening declaring a clerical or mathematical error in bid preparation.
   2. Submitting accompanying declaration with original work sheets used in bid preparation.
   3. Describing specific errors in detail.

4. Verifying that error has a significant monetary effect in the amount of 3 percent of the bid or greater.

E. The bidder may not request bid withdrawal for judgmental errors.

Supplemental Specification
2012 Standard Specification Book

SECTION 00515M

CONTRACT AWARD AND EXECUTION

Delete Article 1.11, paragraph A and replace with the following:

A. The awarded Contractor must return the signed contracts, properly executed contract bonds, National Safety Rating Scores, and all required insurances to the Department within 20 calendar days after notice of award.
   1. The bidder can withdraw the proposal without penalty if the Department does not execute the contract within 30 calendar days after receiving requisite signed contracts, bonds, and insurances.
   2. The contract is not considered in effect until executed by all parties.

Delete Article 1.11, paragraph B and replace with the following:

B. Qualified Health Benefit Plan
   The Department will issue a Notice to Proceed after the Contractor demonstrates that an offer of qualified health insurance coverage has been or will be maintained for the employees and their dependents for the duration of any contract entered between the Department and the Contractor.
   1. Provide certification of equivalency to a "qualified health insurance" plan as required by Utah Code 72-6-107.5.
   2. Demonstrate compliance of this requirement before the Notice of Proceed or approval to sublet work. Refer to http://www.udot.utah.gov/go/standardsreferences for guidance on this process for Qualified Health Insurance Coverage.
   3. Failure to demonstrate compliance of this requirement may result in cancellation of the contract.
   4. Provide two statements to "demonstrate" compliance. Statements need to be signed originals and on company letterhead. Separate letters for each subsidiary, contracting with Department, are required.
      a. Provide an original signed statement from the Contractor stating that they will maintain an offer of Qualified Health Insurance coverage as required by Utah Code 72-6-107.5 for the duration of any contract between Contractor and UDOT.

b. Provide a written statement of actuarial equivalency from:
   1) The Utah Insurance Department;
   2) An actuary selected by the contractor or the contractor's insurer; or
   3) An underwriter who is responsible for developing the employer group's premium rates.

March 14, 2013

SPECIAL PROVISION

PROJECT # F-0195(5)0
PIN # 8114

SECTION 00516S

ADDITIVE WORK BIDDING

Add Section 00516:

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Requirements of Additive Work Bidding.

1.2 RELATED SECTIONS

A. 00221S: Bidding Contract Time

B. 00515M: Contract Award and Execution

1.3 REFERENCES Not Used

1.4 DEFINITIONS Not Used

1.5 SUBMITTALS Not Used

1.6 BUDGET MAXIMIZATION

A. The Department has a set budget for this project and intends to award the maximum amount of work within that budget. The budget amount will be posted to the UDOT bid opening information website after 2:00 p.m. on the day scheduled for bid opening, prior to opening the bids.

B. The work is divided into segments for bidding purposes.
1. Base bid: Contract bid items 1-212, 218
2. Additive bid No. 1: Contract bid items 213-214, 219
3. Additive bid No. 2: Contract bid items 215-217, 220

C. Any bid proposal submitted without prices or times for each item in the base bid and all additives will be considered non-responsive.

1.7 BID PROPOSALS OVER PROJECT BUDGET

A. The segments are evaluated in the following order if all bid proposals for the price component of the base bid and all additives are greater than allocated project funds:
   1. Additive Bid No. 2
   2. Additive Bid No. 1
   3. Base Bid

B. The low bidder provides:
   1. A price component for the base and the greatest number of additives within the project budget.
   2. The lowest total bid for the sum of price, time, and lane rental items according to Section 00515M.

C. The Department awards the base and the greatest number of additives within the project budget or may seek additional funding to award a bid over the project budget according to this Section, article 1.9.

D. Tables 1 and 2 provide an example of determining the lowest bid proposal.

Table 1

Example Allocated Funds = $1,200,000				
Price (P) Component of Bid				
Contractor	**Base Bid**	**Additive Bid No.1**	**Additive Bid No. 2**	**Total**
A	$1,000,000	$100,000	$105,000	$1,205,000
B	$1,100,000	$100,000	$100,000	$1,300,000
C	$1,200,000	$100,000	$100,000	$1,400,000
Time (T) Component of Bid				
A	$400,000	$10,000	$10,000	$420,000
B	$250,000	$5,000	$10,000	$265,000
C	$100,000	$5,000	$5,000	$110,000
Total Price + Time				
A	$1,400,000	$110,000	$115,000	$1,625,000
B	$1,350,000	$105,000	$110,000	$1,565,000
C	$1,300,000	$105,000	$105,000	$1,510,000

   1. All price component bid proposals exceed the allocated funds. Additive Bid No. 2 is therefore excluded from further consideration.
   2. Bid proposals are recalculated using the Base Bid and Additive Bid No. 1 as shown in Table 2.

Table 2

Example Allocated Funds = $1,200,000				
Price (P) Component of Bid				
Contractor	**Base Bid**	**Additive Bid No.1**	**Additive Bid No. 2**	**Total**
A	$1,000,000	$100,000		$1,100,000
B	$1,100,000	$100,000		$1,200,000
C	$1,200,000	$100,000		$1,300,000
Time (T) Component of Bid				
A	$400,000	$10,000		$410,000
B	$250,000	$5,000		$255,000
C	$100,000	$5,000		$105,000
Total Price + Time				
A	$1,400,000	$110,000		$1,510,000
B	$1,350,000	$105,000		$1,455,000
C	$1,300,000	$105,000		$1,405,000

3. Contractor C's price component bid proposal for the Base Bid and Additive Bid No. 1 exceeds the allocated funds. Contractor C is therefore excluded from further consideration.
4. Contractors A and B both submitted price component bid proposals for the Base Bid and Additive Bid No. 1 within the project budget.
5. Contractor B has the lower total Price + Time bid of the Contractors still in consideration for the Base Bid and Additive No. 1
6. The contract is awarded to Contractor B for Base Bid and Additive Bid No. 1. The awarded contract amount is $1,200,000.

1.8 CONTRACT TIME

A. Contract time is determined for the base bid and all awarded additives according to Section 00221S.

1.9 ADDITIONAL FUNDING

A. The Department reserves the right to seek additional funding for the project.
   1. The Department will not seek additional funding for non included additive bids if it changes the determination of the low bidder.
   2. The Department may use the additional funding to award only the base bid.

3. Additional funding would not be sought in the above example because adding funds to accommodate Additive Bid No. 2 would result in a different low bid contractor.

PART 2 PRODUCTS Not Used

PART 3 EXECUTION Not Used

END OF SECTION

August 3, 2015

SPECIAL PROVISION

PROJECT #F-0195(5)0
PIN #8114

SECTION 00555M

PROSECUTION AND PROGRESS

Delete Article 1.14.D and replace with the following:

D. Refer to Section 00570 for definitions of substantial completion, physical completion, and contract completion. Substantial completion includes residential and commercial pressurized sprinkler systems are installed or repaired and in working order for each parcel impacted by construction activities.

Delete Article 1.7 and replace with the following:

1.7 NOTICE TO PROCEED

A. Proceed with work after receipt of written notice from the Department.

B. Time Charges begin 10 calendar days after Notice to Proceed, or first day of work, whichever occurs first.

C. Select the first day of work to achieve Substantial Completion within the number of calendar days bid.

D. After Notice of Award, notify the Engineer in writing at least 14 calendar days before beginning work.

Delete Article 1.9 and replace with the following:

1.9 BASELINE CONSTRUCTION SCHEDULE

A. Provide the Engineer with a baseline construction schedule meeting the requirements of this section. The schedule format is at the Contractor's discretion. Possible options include:
   1. A schedule created using spreadsheet software
   2. A schedule using Oracle's Primavera P6 or any scheduling software.

B. Schedule

1. Provide the Engineer the baseline construction schedule with schedule narrative within 14 calendar days of the Notice to Proceed.
    a. Provide one hard copy and one electronic copy, if applicable, in a format acceptable to the Engineer.
2. The Engineer reviews the schedule within 7 calendar days then meets with the Contractor to discuss any concerns.
3. Complete the final baseline schedule and obtain Engineer's acceptance within 15 calendar days from Notice to Proceed.
    a. Address the Engineer's comments and revise the schedule as necessary to obtain acceptance.
    b. No progress payments are made before the Engineer Accepts the baseline construction schedule.
4. The Contractor is solely responsible for planning and executing the work. Engineer's acceptance of the baseline schedule does not:
    a. Imply approval of any particular construction methods or relieve the Contractor's responsibility to provide sufficient materials, equipment, and labor to guarantee the completion of the project according to the contract.
    b. Attest to the validity of assumptions, activities, relationships, sequences, resource allocations, or any other aspect of the baseline construction schedule.
5. Failure to include any element of work required by the contract in the accepted baseline construction schedule does not relieve the Contractor's responsibility to perform such work.
6. The baseline construction schedule does not modify the contract requirements.

C. Schedule Requirements

Address the following:

1. Define a complete and logical plan, consistent with how the project was bid, that can realistically accomplish the work defined in the contract.
2. Include sufficient activities for adequate planning.
3. Define the continuous critical path. Begin at Notice to Proceed and end at Physical Completion.
4. Clearly and uniquely define each activity.
5. Define the duration of each activity.
6. Clearly identify the relationships or order of activities.

D. Schedule Narrative Requirements

1. Provide a schedule narrative that describes:
    a. The construction philosophy supporting the approach to the work outlined in the schedule.

b. Potential problems that may impact the scheduled completion date along with proposed solutions.
c. Coordination requirements with other entities.
d. Production rates and crew requirements, as bid by the contractor, for all major activities.
e. The work calendar used (like calendar days or work days) and holidays taken.

2. Certify that the baseline schedule represents how the work was bid or explain how it is different.

E. All costs to maintain the project schedule are solely the Contractor's obligation and at no additional cost to the Department.

F. The Contractor is responsible to coordinate any additional utility relocation work not completed prior to the beginning of roadway construction.

Include in the baseline construction schedule any anticipated utility relocation work shown in the plans.

Notify Engineer of any other utility work required for unidentified utilities that are uncovered during construction. Coordinate this work before coordinating the schedule for additional utility work.

The following utility relocation work and coordination are anticipated as part of this project:

1. Rocky Mountain Power
Poles in conflict with improvements, as noted in the construction drawings, have already been relocated by Rocky Mountain Power.
Rocky Mountain Power contacts:
Del Edwards (Distribution) – (801) 220-7307
E-mail: Del.Edwards@RockyMountain power.net
Steve Jensen (801) 220-2221 (Transmission)
E-mail: steve.jensen@rockymountain power.net

2. Questar Gas
Coordinate to accommodate Questar Gas relocations and looping, where conflicts are noted in the construction drawings. Contact Questar Gas a minimum of two weeks prior to constructing in an area where a conflict is noted. Questar Gas will relocate their own facilities. Questar Gas contact:
Rhonda Forde (801) 324-3158
E-mail: rhonda.forde@questar.com

3. Century Link
Relocation of Century Link fiber optic facilities will be completed before construction begins. Centurylink contact:

Cheryl Bolinder – (801) 974-8152
E-mail: cheryl.bolinder@centurylink.com

4. Comcast
Coordinate with Comcast a minimum of three weeks prior to constructing in an area where a conflict is noted on the plans.
Comcast contact:
Alex Vasquez (801) 831-6691
E-mail: alex_vasquez@cable.comcast.com.

5. Salt Lake City Public Utilities
Comply with the requirements of Section 0305S in these documents. Coordinate impacts to SLC water line crossing the I-80 on ramp.
Salt Lake City Public Utilities contact:
Bernard Mo (801) 483-6835 (Sewer & Water)
E-mail: bernard.mo@slcgov.com

6. UDOT
Coordinate with UDOT prior to construction in an area where ATMS work and street lighting are noted on the plans. UDOT contact:
Leon Hadley (801) 887-3765 (ATMS)
UDOT Traffic & Safety Design Engineer (801) 965-4195 (LIGHTING)

G. Irrigation and Canal Company coordination:

1. Ensure that all irrigation users receive water during scheduled delivery times between April 1 and October 15.

2. Contact irrigation and canal companies 2 weeks prior to beginning canal related or impacted construction activities.
Millcreek Water Users Company
Steve Anderson – President (801) 430-3996
Neff Ditch (Keller Lane to 3900 South
Bill Callister (801) 278-8611
Rick Coyle (801) 860-3860
Keller Ditch (Keller Lane to 3900 South)
Greg Neff (801) 232-1703
Brigham Young Ditch (North of 3300 South)
Brian Gurr (801) 755-1756

3. During the irrigation season (April 1 and October 15), maintain all active tailwater ditches.

Delete Article 1.10 and replace with the following:

1.10 CONSTRUCTION SCHEDULE UPDATES

A. Update the construction schedule regularly at intervals agreed to by the Engineer.
   1. Show actual start and finish dates
   2. Show impact of issues encountered

B. Provide the Engineer with one hard copy and one electronic (if appropriate).

C. Meet with the Engineer within seven calendar days of the update submittal to discuss all schedule related issues; specifically issues that may result in a request for added time or additional costs.

Delete Article 1.11, paragraph B and replace with the following:

B. Sunday and Category II Holiday Work

   1. Do not perform any work without written approval except for repairing or servicing equipment, protecting work, maintaining or curing concrete, and maintaining traffic on Category II holidays as defined in Section 00570.

   2. Provide advance notice to the Engineer no later than noon on the Wednesday before any Sunday or Category I holiday work.

Add the following to Article 1.11 LIMITATION OF OPERATIONS:

D. Maintain one lane of traffic open in each direction on 2300 East at all times during construction, unless otherwise approved by the Engineer.

   1. One 11 foot traffic lane with flaggers, during non-peak hours and with 5 minute maximum delay, is acceptable in two separate project sections, subject to Engineer's approval.
      a. Refer to Traffic Control specification (Section 01554) for definition of non-peak hours.

   2. Prepare, submit for approval by the Engineer, and implement an acceptable traffic control plan.

   3. Prior to construction, obtain any necessary and required permits from local municipalities to work within their rights-of-way.

4. Notify the residents and businesses within the anticipated work zone, at least 72 hours prior to lane closures.

E. Conform with Traffic Control (Section 01554) with the following limitations:

Lane Restrictions:

General:

1. A disincentive for non-compliance with the requirements and/or lane restrictions specified in this section will be assessed in the amount of $1,500 for each work day, $750 for each half work day, $375 for each quarter work day or $188 for each work hour of non-compliance.

2. Maintain pedestrian access to meet Federal requirements and as approved by the Engineer, in areas where pedestrian access currently exists. Contractor will be responsible for providing pedestrian detours when work is being conducted on drive approaches and sidewalks.

3. Maintain 11 foot minimum traffic lanes unless approved otherwise by the Engineer.

4. Maintain access to residences and businesses in the project area throughout construction, except as noted otherwise in this specification for driveway construction.

5. Stripe traffic lanes before opening to traffic. Remove existing striping completely to avoid confusion in lane transitions.

6. Observe the following road closures limitations, unless otherwise approved by the Engineer and the local governing municipality:
    a. Submit Traffic Control plan satisfying requirements of Section 01554 and Salt Lake County.
    b. No full closure of the following streets will be allowed: 2300 East, 3300 South, Delia Drive (3740 South), Four Woods Circle (3580 South). 3510 South, 3000 South, Fisher Lane East East (2940 South), Apple View Court (2915 South), and Hidden Acres Circle (2890 South).
    c. Full temporary closure of the following streets will be allowed, with the restriction that no adjacent road closures will take place at the same time: Arnett Drive (3820 South), 3700 South, Neffs Lane (3580 South), Keller Lane (3540 South), 3400 South, 3380 South, 3225 South, 3205 South, Lambourne Avenue West (3145 South) Lambourne Avenue East (3160 South), Gregson Avenue East (3080 South), Gregson Avenue West, Stillman Avenue (3020 South), Fisher Lane West (2935 South), Fisher Lane East (2940

South), 2880 South, Atkin Avenue (2835 South), Claybourne Avenue (2780 South), and Heritage Way (2760 South).

d. All closures are subject to an acceptable traffic control plan submitted to and approved by the Engineer. A one-time temporary full closure of each one of these streets will be allowed for up to seven (7) consecutive days. A seven-day advance notice is required for full closures.

7. No lane closures are allowed during the following municipal events:
   a. 4th of July Parade
   b. Salt Lake City Marathon in 2016. Coordinate exact date with the Engineer and allow for event in construction schedule.

8. Provide and/or maintain signing for bike/pedestrian crossing located at Claybourne Avenue (2780 South) as a part of the Traffic Control Plan.

9. Schedule work such that any work started within the roadway will be complete before the winter season and will not interfere with winter maintenance activities (snow removal). Do not perform any work within the roadway during the winter maintenance period unless approved by the Engineer.

<u>2300 East at Heritage Way (2760 South):</u>

1. Maintain right-turn traffic movement, Westbound Heritage Way to I-80 on ramp, at all times.

<u>2300 East at Claybourne Avenue (2780 South):</u>

1. Maintain one northbound and one southbound traffic lane at all times.
2. Maintain all intersection traffic movements at all times, including turning movements.

<u>2300 East at 3300 South:</u>

1. Maintain one traffic lane in all directions at all times.
2. Maintain all existing traffic lanes east bound and west bound from 5:00 am to 9:00 am Monday through Friday, and from 3:00 pm to 9:00 pm Monday through Friday, including turning movements.
3. No full closure of this intersection will be allowed. Contractor to limit work to one quadrant of the intersection at a time.

<u>2300 East at Evergreen Avenue (3435 South):</u>

1. Maintain one traffic lane in all directions at all times.
2. Maintain all intersection traffic movements at all times, including turning movements.
3. No full closure of this intersection will be allowed. Contractor to work on ¼ of the intersection at a time.

2300 East at 3900 South:

1. Maintain one northbound and one southbound traffic lane at all times.
2. Maintain all intersection traffic movements at all times, including turning movements

2300 East at all other street intersections:

1. Maintain one northbound and one southbound traffic lane at all times.
2. Maintain all intersection traffic movements at all times, including turning movements. See Section 1.11.E.6.c and 1.11.E.6.d in this document for limitations on lane closures.

F. Residential Access:

1. Notify all property owners and occupants 72 hours in advance of any full closure or partial closure of access to their driveway or other residential access points.
    a. In the Notice, explain the construction operation, expected closure time(s) and anticipated opening date(s).
    b. In the Notice, include the Public Involvement manager, Leah Jaramillo 801-556-7455, as a contact for any questions the residents may have.
    c. Have the Notice delivered by hand to an affected property owner a minimum of seventy two hours before the closure.
    d. Provide copies of all correspondence to the Engineer.
2. Contractor will be permitted one (1) six-day full driveway closure period per driveway 18 feet or less in width. Driveways wider than 18 feet will not be allowed to be completely closed.
3. Any residential property with two driveways cannot have both driveways closed at the same time.

G. Business Access:

1. Maintain vehicular access to all businesses along and across the construction work zone for the project duration.
2. Maintain business access from sidewalks at all times.
3. The driveways at 3802 South and 3778 South 2300 East cannot be closed at the same time.
4. Contractor will be permitted to reduce access to the existing businesses to one 10-foot minimum traffic lane to pave the driveway tie-in.
5. Provide signs at all temporary accesses. Fabricate Type P-2 signs, black on orange with a minimum letter size of 3 inches identifying the business access.
6. Notify all business owners and occupants 72 hours in advance of any closure or partial closure of access to their driveway.
    a. In the Notice, explain the construction operation, expected closure time(s) and anticipated opening date(s)
    b. Have the Notice delivered by hand to an affected business

owner a minimum of seventy two hours before the closure.

c. Provide copies of all correspondence to the Engineer.

7. Contractor will be permitted the following closure periods for commercial driveways:
   a. Business with one single access: one (3) three-day full driveway closure period. Provide on-street parking during closure.
   b. Business with large driveway, closing half driveway at a time: two (5) five-day half-driveway closures.
   c. Business with more than one access driveway: one (10) ten-day full driveway closure period per driveway.

   Driveway closures subject to the limitations in Paragraph 4.
8. At the Dan's Food Store, Contractor must maintain two accesses from 2300 East open at all times during construction, with the limitations stated in Paragraph 4.
9. At the business district located between Atkin Avenue and 2815 South, Contractor must maintain a sixty five (65) foot access width to the businesses during construction of the driveway and parking area. Maintain ADA access and number of handicap stalls.

H. Six (6) VMS signs are required for construction activity notice prior to construction. These six (6) signs will be paid for by bid item 0155700* Maintenance of Traffic. See sheet MT-1 for sign locations. Coordinate sign messages with the Engineer. Install six days in advance of construction. After six days, VMS sign can be removed with approval of Engineer. If after six days in advance of construction, Engineer requires signs to be left in place or moved to a new location, VMS signs will be paid for by bid item 01554001P VMS Sign. Coordinate duration of sign placement with Engineer.
Replace any partial or non-functioning VMS at no cost to the Owner. Messages must reflect current project conditions and properly advise motorists of construction activities and impacts. Relocate the VMS as directed by the Engineer and/or to accommodate traffic queuing. Warning signs must precede the queuing traffic at all times and be close enough to the work zone to maintain relevance.

I. Coordinate traffic control plans and construction activities with any adjacent active construction projects. This includes but is not limited to:

Parley's Trail; Tanner Park to Sugarhouse Park. (PRATT) Contact Walt Gilmore (385) 468-1821 at the Salt Lake County Parks and Recreation Department.

J. UTA Coordination;
1. Maintain bus access to all UTA bus stops along the project corridor.
2. Provide 7-day-notice to UTA prior to commencing construction activities that affect bus traffic. Coordinate with Michael Clara with UTA at (801) 287-2325.

3. Coordinate with UTA for bus route detours and limitations with developing all traffic control plans and when traffic control implementation is put in place or modified.
4. Do not remove any UTA Bus Stop Signs. Bus Stop signs will be relocated by UTA personnel. Contact Michael Clara with UTA at (801) 287-2325 to make arrangements for sign relocation thirty days before sign relocation is needed.

K. Maintain emergency vehicle access at all times. Prior to construction, and as work areas and traffic control changes, coordinate traffic control planning with local municipality Police, Post Office, Sanitation District, Fire and Public Works Departments and obtain any necessary permits.

L. Provide and install appropriate temporary environmental controls (e.g. Drop Inlet Barriers) at locations down gradient from active construction areas to ensure that project waste materials, debris and/or sediments do not enter adjacent storm drainage systems or water courses. The Contractor will be responsible to routinely inspect, adjust, and maintain all temporary environmental controls throughout construction. .

M. Provide the Region Two Communications Manager and Salt Lake County Public Relations manager, with two (2) weeks notice of beginning and ending construction.

<u>John Gleason, UDOT</u>
Email: jgleason@utah.gov
(801) 560-7740

<u>Stacee Adams, SL County</u>
Email: sadams@slco.org
(385)468-7130

N. Coordinate with U.S. Post Office and property owners to maintain mail delivery during construction. Contractor is responsible to coordinate construction activities with the U.S. Post Office 14 days prior to impacting mail delivery, impacting any existing mail boxes, or modifying mail delivery or pick up. Contact Heidi Clark at (801) 483-2604.

O. Obtain a Noise Permit from Salt Lake County. Contact James Bennett at (385) 468-3836. Contractor must notify James Bennett prior to any night-work. Night work will be allowed when and if approved by James Bennett.

P. Work around Rosecrest Elementary School zone areas:
1. No work is to take place in the safe walk zones and school crossing areas between stations 77+00 and 84+00 for Rosecrest Elementary School when school is in session from 8:00 am to 3:00 pm.

2. Schedule construction to avoid work activities between Stations 77+00 and 84+00, 30 minutes before school start time and 30 minutes after school while school is in session.

3. No work is to take place on Fisher Lane and 3000 South from Monday August 24, 2015 to June 3rd, 2016.

4. Keep the Rosecrest Elementary School principal, Tina West (385) 646-5002, (twest@granitschools.org) informed of construction activities in the vicinity of the school.

5. Contractor must install new functioning school zone warning signs or provide and maintain temporary school zone warning signs prior to removal of older existing school zone warning signs. Cost of temporary school zone warning signs is incidental to new signs.

Q. I-80 Ramp Limitations:

1. Two full closures of the I-80 off-ramp onto 2300 East will be allowed. These closures are allowed on a non-holiday weekend on Sunday night between 10:00 PM to Monday at 5:00 AM or Saturday night between 10:00 PM to Sunday 6:00 AM. Coordinate with UDOT Region Traffic Engineer, Jeff Lewis (801) 887-3759 to determine which night is best regarding traffic volume demand and special events. Provide seven days advance notice of closure.

2. Two full closures of the I-80 on-ramp from 2300 East will be allowed. These closures are allowed on a non-holiday weekend on Sunday night between 10:00 PM to Monday at 5:00 AM or Saturday night between 10:00 PM to Sunday 6:00 AM. Coordinate with UDOT Region Traffic Engineer, Jeff Lewis (801) 887-3759 to determine which night is best regarding traffic volume demand and special events. Provide seven days advance notice of closure.

3. The Parley's Trail (PRATT) is scheduled to be constructed in 2015. This includes a bridge over the 2300 East On Ramp to I-80 and a tunnel under the I-80 Off Ramp to 2300 East.
   a. Coordinate ramp closures with the Trail contractor.
   b. Provide one week notice to the Trail contractor for construction activities in the area.
   c. No work allowed in vicinity of I-80 ramps when Parley's Trail (PRATT) ramp closures are in place, unless approved by Engineer.

R. Use photo and/or video to document daily all clearing, removal and excavation work, behind the curb and gutter, along the frontage of the

Tesoro property located at the southeast corner of 3300 South and 2300 East. Photos and/or video need to include time and date information and be submitted weekly to the Engineer.

S. Preserve and protect the existing historic rock wall located at the southeast corner of the intersection of Neffs Lane and 2300 East.

T. Coordinate with UDOT, and Salt Lake County traffic signal groups prior to any signal modifications. Provide seven (7) days advance notice to schedule an inspection or have a representative on site.

1. For the signal at 3300 South and 2300 East, contact David Mount with the UDOT Signals Group (801) 330-4446 with at least seven (7) days advance notice to schedule an inspection of the work and to adjust any signals to accommodate construction activities.
2. For the signal at 3900 South and 2300 East and the signal at Evergreen Avenue (3435 South) and 2300 East, contact James Nell with the Salt Lake County Signals Group (801) 554-5623 with at least seven (7) days advance notice to schedule an inspection of the work and to adjust any signals to accommodate construction activities.

U. Salt Lake County will be fabricating and installing the signage along 2300 East and on all of the cross street intersections with the exception of:

1) Signs appearing on all signal mast arms
2) School zone signing
3) All roundabout signs and signs appearing on the I-80 on and off ramps.
4) Coordinate sign installation with Doug Swain (801) 580-8494 in the Salt Lake County Sign Shop to ensure that all traffic signs for the project are installed at the same time. with the exception of the School Zone Warning Signs. See Section 1.11.O.5 in this document for limitations on the School Zone Warning Signs.

V. Incorporate the following commitments made by Salt Lake County during right of way negotiations . These commitments are listed below by parcel number.

1) <u>Parcel #59 – 2282 East Four Woods Circle.</u>
   a) Reuse the existing boulders in the construction of the new boulder retaining wall.
   b) For new boulders, match the style and color of existing boulders.
   c) Obtain approval from the property owner, through the Engineer, on the placement of boulders prior to construction of the new wall.
   d) Three (3) trees will be removed as a part of this project. The property owner has been compensated and new replacement trees are not included in Re-establish Landscaping

2) Parcel #23 – 3772 South 2300 East.
   a) No construction equipment or materials will be placed in front of the property except as reasonably necessary to complete construction.

3) Parcel #65 – 2297 East Keller Lane. Install temporary fencing as per plans.

4) Parcel #79 – 3436 South 2300 East.
   a) Give property owner 7 days written notice of driveway closure for each driveway closed.

5) Parcel #85 – 3412 South 2300 East.
   a) Document size, color, and style of existing landscape rock in park strip.
   b) Upon completion of construction activities in front of this parcel, replace and restore the landscape rock to preconstruction condition.

6) Parcel #97 – 2266 East 3300 South. For the park strip in front of business:
   a) Provide parcel owner samples of colored concrete before construction.
   b) Prior to planting, coordinate with Engineer and property owner to establish tree locations in the park strip.

7) Parcel #100 – 2330 East 3300 South.
   a) Construct the south driveway first, half at a time to maintain access.
   b) Once the south driveway has cured to support semi-truck loading, the north driveway can be constructed in one section.
   c) Provide 30 day written notice prior to beginning driveway construction.

8) Parcel 119 – 3170 South 2300 East. Preserve and protect the privacy wall along the back of sidewalk. In the event of damage to the wall:
   a) Obtain property owner's approval of repair material through the Engineer.
   b) Once repairs have been made, obtain acceptance from property owner through the Engineer.
   c) Cost of wall repair is responsibility of Contractor.

9) Parcel 154 – 2963 South 2300 East. Protect in place existing wall along the back of sidewalk from the driveway south to the fence line. In the event of damage to the existing wall:
   a) Obtain property owner's approval of repair material through the Engineer.

b) Once repairs have been made, obtain acceptance from property owner through the Engineer.
c) Cost of wall repair is responsibility of Contractor.

Add the following to Article 1.14:

E. No time charged for placement of Portable Variable Message Signs five (5) calendar days prior to beginning work. Refer to Section 01554M.

END OF SECTION

October 7, 2014

SPECIAL PROVISION

PROJECT #F-0195(5)0
PIN #8114

SECTION 00570S

DEFINITIONS

Delete Article 1.7, paragraph A49, Table 1 and replace with the following:

Table 1

Holiday Categories	
Category I	**Category II**
Martin Luther King, Jr. Day	New Year's Day
Presidents' Day	Memorial Day
Veteran's Day	Independence Day
Day After Thanksgiving Day	Pioneer Day
	Labor Day
	Thanksgiving Day
	Christmas Day

END OF SECTION

Supplemental Specification
2012 Standard Specification Book

SECTION 00570M

DEFINITIONS

Delete Article 1.6, paragraph A45 and replace with the following:

45. MUTCD Utah Manual on Uniform Traffic Control Devices (This applies to all references to the MUTCD in Department Standard Specifications and Drawings, Supplemental Specifications and Drawings, Special Provisions, and Plan Sheets.) Refer to http://www.udot.utah.gov/go/standardsreferences for a link to the Utah MUTCD.

Delete Article 1.7, paragraph A38 and replace with the following:

38. **Debarment** – Action taken by the Department or federal government pursuant to policies or regulations that prohibits a person or company from performing work on a public project.

Delete Article 1.7, paragraph A49, Table 1 and replace with the following:

Table 1

Holiday Categories	
Category I	**Category II**
Martin Luther King, Jr. Day	New Year's Day
Presidents' Day	Memorial Day
Columbus Day	Independence Day
Veteran's Day	Pioneer Day
	Labor Day
	Thanksgiving Day
	Christmas Day

Delete Article 1.7, paragraph A66 through A104 and replace with the following:

66. **Probation** – Action taken by the Department pursuant to Department policies that prohibits a person or company from bidding on Department or Department administered projects.

67. **Profile Grade** – The trace of a vertical plane intersecting the top surface of the proposed wearing surface, usually along the longitudinal centerline of the roadbed. Profile grade means either elevation or gradient of such trace according to the context.
68. **Project** – The specific section of the highway or other specific property on which construction is to be performed together with all improvements to be constructed under the contract.
69. **Proposal** – A bidder's written response to a Department request for proposals. See Value Engineering Change Proposal.
70. **Responsible Bidder** – A bidder able to perform the specified work as determined by the Department.
71. **Responsive Bid** – A bid that meets all requirements of the invitation for bids.
72. **Resources** – The labor, equipment, materials, and incidentals necessary to perform work on a contract bid item or other element of work.
73. **Right-of-Way** – A general term denoting land, property, or interest acquired for or devoted to transportation purposes.
74. **Roadbed** – The graded portion of highway within top and side slopes, prepared as a foundation for the pavement structure and shoulders.
75. **Roadbed Material** – Material in cuts, embankments, and embankment foundations from the subgrade down that supports the pavement structure.
76. **Roadside** – The areas between the outside edges of the shoulders and the right-of-way boundaries including unpaved median areas between inside shoulders of divided highways and areas within interchanges.
77. **Roadside Development** – Items necessary for the preservation or replacement of landscape materials. Features may include suitable plantings and other improvements or ground cover to preserve and enhance the appearance and stability of the highway right-of-way or acquired easements for scenic improvements.
78. **Roadway** – The portion of a highway within the construction limits.
79. **Shoulder** – The portion of the roadway adjacent to the traveled way where vehicles may stop for emergencies and which supports base and surface courses.
80. **Sidewalk** – That portion of the roadway constructed exclusively for pedestrian use.
81. **Significant Change in Character of Work –** Work that differs materially in kind or nature from that involved or included in the original contract or results in the total quantity of a major contract item, as defined in this section, varying from the original contract quantity by more than 25 percent.
82. **Site of Work –** As defined in Title 29 CFR Part 5.2 (l).

83. **Specifications** – The compilation of provisions and requirements for the performance of prescribed work.
    a. **Special Provisions** – A unique specification or a modification or revision to the standard specifications applicable to an individual contract.
    b. **Supplemental Specifications** – Approved additions and revisions to the Standard Specifications.
    c. **Standard Specifications** – Specifications approved for general application and repetitive use.
84. **Specifications Format** – See the Specification Writer's Guide. Refer to http://www.udot.utah.gov/go/standardsreferences. The titles or headings of the sections, parts, articles, paragraphs, and sub-paragraphs in Standard Specifications and Special Provisions are intended for convenience of reference and have no bearing on their interpretation.
85. **Stabilization** – Modification of soils or aggregates by incorporating materials that increases load-bearing capacity, firmness, and resistance to weathering or displacement.
86. **State** – The State of Utah acting through its authorized representative.
87. **Structures** – Bridges, culverts, catch basins, drop inlets, retaining walls, cribbing, manholes, endwalls, buildings, sewers, service pipes, underdrains, foundation drains, and other such features that may be encountered in the work.
88. **Subcontractor** – An individual or legal entity to which a Contractor sublets part of the work.
89. **Substantial Completion** – Substantially complete. The day, determined by the Engineer, when all of the following have occurred:
    a. The public, including vehicles and pedestrians, has full and unrestricted use and benefit of the facilities both from the operational and safety standpoint including all Intelligent Transportation Systems (ITS) and Advanced Traffic Management Systems (ATMS).
    b. All safety features are installed and fully functional, including, but not limited to, illumination, signing, pavement markings, all coats of striping paint, barrier, guardrail, impact attenuators, delineators, and all other safety appurtenances.
    c. All remaining bid items in the contract are complete in addition to safety features. Only minor corrective work and replacement of temporary substitute facilities remains for physical completion.
    d. The Contractor and Engineer mutually agree that all work remaining will be performed without lane closures, trail or sidewalk closures, or further delays, disruption, or impediment to the public.

90. **Substructure** – All of the structure below the girders or main load carrying members of simple and continuous span bridges, including abutments, bent caps, columns, bents, footings, wingwalls, and skewbacks of arches.
91. **Superintendent** – The Contractor's authorized employee in responsible charge of the work.
92. **Superstructure** – All of the structure except the substructure as defined in this section.
93. **Surety** – The legal entity or individual, other than the Contractor, executing a bond furnished by the Contractor.
94. **Time Related Cost (Time component)** – A bid item that identifies a daily value based on user costs or liquidated damages. Time value is the sum of the products of the time-related cost rates multiplied by the time bid by the Contractor to achieve the milestones specified.
95. **Town, City, or District** – A subdivision of the county used to designate or identify the location of the contract.
96. **Traveled Way** – The portion of the roadway designated for the movement of vehicles, excluding shoulders and auxiliary lanes.
97. **Unbalanced Bid**
    a. **Mathematically Unbalanced** – A bid containing lump sum or unit bid items that do not include reasonable actual costs plus a reasonable proportionate share of the bidder's anticipated profit, overhead costs, and other indirect costs.
    b. **Materially Unbalanced** – A mathematically unbalanced bid that generates a reasonable doubt that awarding the contract to the bidder will result in the lowest ultimate cost to the Department.
98. **Unrestricted Traffic** – No traffic control measures in use that obstruct, delay, or in any way impede traffic flow, other than those specifically permitted in the contract.
99. **User Costs** – Costs incurred by the traveling public due to construction activities.
100. **Utility** – All privately, publicly, or cooperatively owned lines, facilities, and systems for producing, transmitting, or distributing communications, power, heat, gas, oil, water, waste, and storm water not connected with the highway drainage, signal systems, and other products that directly or indirectly serve the public. The utility company.
101. **Value Engineering Change Proposal** – A change proposed by the Contractor and considered by the Department intended to result in project cost savings to contract pay items without reducing the essential functions and characteristics of the project. Refer to Section 00725.

102. **Work** – The elements, activities, and incidentals necessary to complete a project (including labor, materials, equipment, and the interim products and stages attained in the course of reaching completion), and all alterations, amendments, or extensions made by change order or other written orders of the Engineer.

103. **Working Day** – Any calendar day, except:
    a. Saturdays, Sundays, and contract-designated holidays.
    b. Days between December 1 and February 29, inclusive.
    c. Days when the Contractor is specifically required by the contract or letter from the Engineer to suspend operations through no fault of the Contractor.
    d. Days when the Engineer determines that inclement weather or adverse conditions interfere with the progress of the work.
        1) When the Engineer determines that inclement weather prevents the Contractor from working with at least 75 percent of the normal labor and equipment force engaged in the work for at least 60 percent of the normal working day.
        2) When inclement weather stops the Contractor from beginning work at the normal starting hour and the crew is released as a result, it is not considered a working day even though conditions may improve and the major portion of the day could be considered suitable for operations.

104. **Working Drawings** – Drawings produced by the Contractor that supplement the contract drawings to provide information not included in the contract documents but that is required to fabricate, erect, transport, or temporarily support the structure or structural elements in the completion of the work. Working drawings do not supersede the contract drawings.

105. **Written Permission of the Engineer** – A letter signed by the Engineer granting specific permission and outlining limitations of the permission.

March 12, 2015

SPECIAL PROVISION

PROJECT #F-0195(5)0
PIN #8114

SECTION 00725M

SCOPE OF WORK

Delete Article 1.2 and replace with the following:

1.2 RELATED SECTIONS

A. Section 00221S: Bidding Contract Time

B. Section 00555: Prosecution and Progress

C. Section 00570: Definitions

D. Section 00727: Control of Work

E. Section 01282: Payment

F. Section 01355: Environmental Compliance

G. Section 01554: Traffic Control

H. Section 01741: Final Cleanup

Delete Article 1.5 and replace with the following:

1.5 SUBMITTALS

A. Refer to this Section, article 1.7, paragraph C.

Delete Article 1.7 and replace with the following:

1.7 PARTNERING

A Implement partnering according to the Partnering Field Guide. Refer to http://www.udot.utah.gov/go/standardsreferences.

B. Share all partnering costs equally with the Department.

C. Submit certificates for all required individuals, as listed in the Partnering Field Guide before execution of the first month's construction estimate. Failure to comply will result in 25 percent of the first estimates Mobilization payment up to $25,000 being withheld until all individuals have completed the required training.

Add Article 1.19, paragraph J5:

5. Time savings resulting from a VECP are not financially compensated to the Contractor above the maximum dollar amount eligible for incentive payment as specified in Section 00221S.

Supplemental Specification
2012 Standard Specification Book

SECTION 00727M

CONTROL OF WORK

Delete Article 1.28, paragraph B and replace with the following:

B. Employ a qualified safety person.
   1. Required qualifications
      a. Verifiable broad based safety background.
      b. One of the following degrees or certifications:
         1) College degree in Occupational Safety & Health (OSH) related field
         2) Associate Safety Professional (ASP)
         3) Certified Safety Professional (CSP)
         4) Certified Industrial Hygienist (CIH)
         5) Construction Health and Safety Technician (CHST)
         6) Associate in Risk Management (ARM)
         7) OSHA 500, or other nationally recognized OSH related field certification approved by UDOT Risk Management
      c. Must stay current on certification via the OSHA 502 or equivalent of 8 Continuing Education Units (CEU) in OSH related fields every 3years.
   2. Responsibilities
      a. Perform on-site safety inspections on a monthly basis, for jobs 45 days or longer in duration. Refer to the UDOT Safety and Health Manual.
      b. Coordinate all safety related efforts with the on-site competent safety person.
      c. Cannot perform production-related responsibilities on the project.

May 04, 2015

SPECIAL PROVISION

PROJECT #F-0195(5)0
PIN #8114

SECTION 00820S

LEGAL RELATIONS AND RESPONSIBILITY TO THE PUBLIC

Delete Article 1.18, paragraph B2 and replace with the following:

2. General Liability Insurance
   a. Provide General Liability insurance with the following minimum limits of liability:
      1) $5 million Bodily Injury and Property Damage – Each Accident
      2) $5 million General Aggregate
         a) The $5 million Bodily Injury and Property Damage – Each Accident and $5 million General Aggregate minimum limits of liability can be covered with a Stand Alone policy or a combination of a General Liability policy and an Excess Umbrella policy adding up to $5 million.
      3) $2 million Products and Complete Operations Annual Aggregate
      4) $5 million Pollution Liability Insurance

END OF SECTION

Supplemental Specification
2012 Standard Specification Book

SECTION 00820M

LEGAL RELATIONS AND RESPONSIBILITY TO THE PUBLIC

Delete Article 1.13 and replace with the following:

1.13 PROTECTING AND RESTORING PROPERTY AND LANDSCAPE

A. Preserve public and private property during the work.

B. Secure legal right to access the property before any work is performed on public or private property. All damage as a result of trespass will be the financial responsibility of the Contractor including additional acquisition costs.

C. The Engineer verifies the location of monuments and property line markers and provides written approval before they are moved, disturbed, or damaged.

D. Accept liability for any damage to public or private property resulting from defective work, materials, or non-execution of the contract until contract completion.

E. Restore damaged property and items removed temporarily during construction to a condition similar or equal to that existing before the damage at no cost to the Department.

F. Temporarily discontinue work if remains of prehistoric dwelling sites or artifacts of historical or archeological significance are encountered. Refer to Section 01355.

Delete Article 1.17, paragraph C and replace with the following:

C. Contractor and the Department agree to provide each other with a copy of the summons and complaint within a reasonable time if served with a lawsuit or Notice of Claim. Do not file a responsive pleading on behalf of the Department until receiving written notice that the Department chooses to have Contractor handle the defense. The Department will provide the Contractor such written notice in a timely manner allowing the Contractor adequate time to respond to the summons.

Delete Article 1.17, paragraph F3 and replace with the following:

3. Notify claimants of their right to request re-examination of denied or partially denied claims of $5,000 or less by the:

   UDOT Claims Re-Examination Board
   4501 South 2700 West
   West Valley City, UT 84114-8430
   Phone: (801) 965-4715

   a. The information provided to the claimant includes:
      1) A time deadline for requesting re-examination equal to seven days after notification of denial or partial denial
      2) Address and name of the person to whom it should be directed
      3) General information helpful in making a determination
      4) Department project number and location
   b. The claim can be overturned by the Department if claimant is not notified of right to request re-examination.

Delete Article 1.18, paragraph B.2.a and replace with the following:

a. Provide General Liability insurance with the following minimum limits of liability:
   1) $1 million Bodily Injury and Property Damage – Each Accident
   2) $3 million General Aggregate
   3) $3 million Products and Complete Operations Annual Aggregate

Supplemental Specification
2012 Standard Specification Book

SECTION 01282M

PAYMENT

Delete Article 1.8, paragraph A1 and replace with the following:

1. The Department does not allow compensation for loss of expected reimbursement or loss of anticipated profits suffered or claimed by the Contractor resulting either directly from such alterations or indirectly from unbalanced allocation among the contract items of overhead expense and subsequent loss of expected reimbursement or from any other cause.

Delete Article 1.9, paragraphs C and D and replace with the following:

C. Negotiated lump sum or unit prices for changes to the contract work will be based on the Contractor's estimate to do the work as validated by the Engineer's independent cost assessment. Support the price with a detailed cost estimate that includes the following information:
   1. Estimated labor hours based on agreed upon productivity rates.
      a. Use the actual cost of wages and benefits for the labor rates applied to the estimated man hours.
      b. Include certified accounting records verifying these costs or make them available upon request of the Engineer.
   2. Estimated material quantities based on agreed upon quantities.
      a. Use actual material costs as verified by supplier estimates or invoices.
      b. Use agreed to production rates for material produced on site.
   3. Estimated equipment hours based on agreed upon productivity rates.
      a. Use the lesser of the following for determining equipment costs:
         1) Rental rates obtained from the Rental Rate Blue Book for Construction Equipment according to this Section article 1.11.

2) Actual cost of the equipment to the Contractor based on internal equipment billing rates or actual rental rates supported by rental agreements for equipment applied to the estimated equipment hours. Include certified accounting records substantiating these costs or make them available upon request of the Engineer.

4. A 15 percent markup will be paid on all expenses identified above. This markup compensates the Contractor for home office overheads and profit.
5. The following additional markups will be allowed on the total of all work according to change order performed solely by subcontractors:
   a. 15 percent markup on first $75,000 of total subcontracted work.
   b. 10 percent markup on total of subcontracted work between $75,000 up to $250,000.
   c. 7.5 percent markup on total of subcontracted work exceeding $250,000.
6. No other expenses will be compensated unless approved by the Engineer.

Delete Article 1.10, paragraph A2 and replace with the following:

2. The Department does not compensate for the following:
   a. Labor inefficiencies caused by the Contractor.
   b. Consequential damages, including but not limited to, loss of bonding capacity, loss of bidding opportunities, and insolvency.
   c. Attorney's fees, claims preparation expenses, or litigation costs.

Delete Article 1.11 and replace with the following:

1.11 FORCE ACCOUNT

A. The Engineer may require the Contractor to work on a force account basis for the convenience of the Department or when the Contractor and Engineer are unable to negotiate an agreed upon price for changed or added work. Costs reimbursed according to this Section are considered full and complete compensation for the work performed.

B. Labor will be reimbursed at the actual cost of wages, benefits and burdens. A 15 percent markup will be paid on all labor expenses. This markup compensates the Contractor for field overheads, home office overheads, and profit.

1. Provide daily field records showing the labor hours charged to the force account work. The Engineer must approve these records daily.
2. Include certified accounting records verifying these costs or make them available upon request of the Engineer.

C. Materials installed and accepted by the Engineer as part of the force account work will be paid for at actual cost plus a 15 percent markup. The markup compensates the Contractor for field overheads, home office overheads, and profit.

1. Provide daily field records showing the materials installed as part of the force account work. The Engineer must review and approve these records daily.
2. Include copies of invoices and certified accounting records verifying these costs or make them available upon request of the Engineer.

D. Compensation for Equipment

1. The Department will pay the following:
   a. Hourly rates for machinery or special equipment, excluding small tools, authorized by the Engineer. Hourly rental rates are determined by the monthly rental rate found in the Rental Rate Blue Book for Construction Equipment divided by 176. The total hourly rates have been computed from equipment costs currently in effect and do not include costs for operating personnel.

      Obtain this publication through:
      Equipment Watch
      1735 Technology Drive, Suite 410
      San Jose, CA 95110-1313
      Phone: (800) 669-3282
      Fax: (800) 224-3527
      Refer to http://www.udot.utah.gov/go/standardsreferences.

      The rates require adjustment by a Regional Factor and a Depreciation Factor with operating and standby rates established as follows:
      1) Operating Rate – Hours the equipment is actually in use. This includes ownership and operating costs adjusted for depreciation and region factors.

2) Standby Rate – Compensation for equipment required to be at the work site but not operating. This rate is 50 percent of the adjusted ownership and operating costs computed above. The duration of allowable standby time must be approved in writing by the Engineer with a maximum of eight hours per day or 40 hours in a week.
3) The Department uses the shown capacity that is closest to the manufacturers when the manufacturer's rated capacity falls between those shown in the Rental Rate Blue Book for Construction Equipment.
4) Agree upon all rates in writing before beginning work.
5) Obtain approval from the Engineer for any equipment rental rates not provided before the start of any force account work.

2. The Department does not pay for pickup trucks used solely for transportation.
3. Provide daily field records showing the equipment hours charged to the force account work. The Engineer must review and approve these records daily.
4. Provide certified accounting records verifying these costs.

E. Subcontract work will be reimbursed in the same manner as the Contractor's work is reimbursed as described above.
1. The following additional markups will be allowed on the total of all work according to force account performed soley by subcontractors:
a. 15 percent markup on first $75,000 of total subcontracted work.
b. 10 percent markup on total of subcontracted work between $75,000 up to $250,000.
c. 7.5 percent markup on total of subcontracted work exceeding $250,000.
2. Provide daily field records showing the subcontract labor, material, and equipment charged to the force account work. The Engineer must review and approve these records daily.
3. Provide certified accounting records verifying these costs.

Delete Article 1.12 paragraph C and replace with the following:

C. Payments are based on estimates prepared by the Engineer of the value of work performed and materials in place under the contract and for payment for material on hand according to this Section. Payment will not

be made for material and work without complete acceptance documentation.

Delete Article 1.13 title and paragraph A and replace with the following:

1.13 PAYMENT FOR MATERIAL ON HAND (Stockpile)

A. Present the delivery copies of invoices. The Department may include advance partial payments for acceptable nonperishable materials purchased expressly for incorporation in the work when delivered in the vicinity of the project or stored in approved storage place.

1. The Engineer determines the amount to be included in the estimate but in no case will the amount exceed the value of the materials as shown on the delivery invoice or 75 percent of the in-place price, whichever is less.
2. Furnish evidence that the stockpiled materials are irrevocably obligated to the project when the approved storage location is other than the project site.
3. The Department does not pay when the invoice value of such materials, as determined by the Engineer, amounts to less than $2,000 or if materials are to be stored less than 30 calendar days, unless otherwise specified.
    a. The Department will waive the 30 day limit and pay advance payment for Pavement Marking Tape if the Pavement Marking Tape placement is delayed more than one week beyond the original CPM schedule date.
4. Furnish the Engineer certified paid invoices or a certified statement with a copy of the check showing payment within 60 calendar days following the date of the estimate invoice on which the stockpile material is to be paid by the Department.
5. Material will be removed from the next partial estimate as stockpiled materials if proper invoices showing payment to the supplier is not received.

Delete Article 1.15, paragraph A3 and replace with the following:

3. This provision is automatically invoked and becomes effective when the change in the cost of fuel warrants the adjustment during the course of construction of the project and remains in effect for the duration of the project.
    a. Adjustments are then made on all future partial estimates.

Add Article 1.16, paragraph A3:

3. The Contractor can choose to opt out of the Asphalt Cost Adjustment (ACA).
   a. Check the appropriate box on the bid proposal indicating the intent to opt out of the ACA.
   b. The ACA cannot be reactivated on a project for which the Contractor has opted out.

Delete Article 1.16, paragraph C.1.a.2) and replace with the following:

2) The high reported wholesale asphalt price (per ton) from the Argus Asphalt Report for Rocky Mountain and West coast asphalt prices for:
Denver
Las Vegas
Montana
Phoenix
Salt Lake City
Wyoming

Supplemental Specification
2012 Standard Specification Book

F-0195(5)0
PIN 8114

SECTION 01315M

PUBLIC INFORMATION SERVICES

Delete Article 3.1 paragraph D2 and replace with the following:

2. Deliver to the Region Communications Manager upon completion of the project.

Delete Article 3.1 paragraph H1 and replace with the following:

1. Provide copies of all fliers, e-mail, or other materials containing project information to the Engineer and the Region Communications Manager for review before distribution.

Supplemental Specification
2012 Standard Specifications Book

SECTION 01355M

ENVIRONMENTAL COMPLIANCE

Delete Article 3.7, paragraph A1 and replace with the following:

1. Cultural and Paleontological – Initiate consultation with a Department staff archaeologist to determine cultural resource survey needs and clearance requirements. The Department staff archaeologist provides clearance to the Engineer through written notification.

Supplemental Specification
2012 Standard Specification Book

SECTION 01455M

MATERIAL QUALITY REQUIREMENTS

Add Article 1.4, paragraph B:

B. Approved Products List (APL) - A list of products and materials that the Department accepts as meeting the requirements in the Department's Standard Specifications and Drawings. Refer to the Department Materials Web site to access the APL at http://www.udot.utah.gov/go/standardsreferences.

1. The APL does not include all acceptable products. It includes products submitted by manufacturers and reviewed by the Approved Products Panel.
2. Inclusion in the APL is not a product endorsement by the Department.

Add Article 1.5, paragraph E:

E. Completed APL Compliance Form and Manufacturer Instructions printed from the Department's Approved Products List Web site. Refer to the Department Materials Web site to access the APL at http://www.udot.utah.gov/go/standardsreferences. Refer to this Section, Article 1.18.

Add Article 1.11, paragraph D:

D. Provide the APL Compliance Form and Manufacturer Instructions instead of a Certificate of Compliance if the product is listed in the Department's APL. Refer to this Section, article 1.18.

1. Do not use the APL Compliance Form for acceptance when a project special provision modifies the product requirements in the Standard Specifications.

Add Article 1.18:

1.18 APL COMPLIANCE FORM

A. Provide the completed APL Compliance Form and Manufacturer Instructions printed from the Department's Approved Products List website instead of a Certificate of Compliance if the product is listed in the Department's APL. Refer to the Department Materials Web site to access the APL at http://www.udot.utah.gov/go/standardsreferences.

1. The Engineer will evaluate the suitability of the product for its intended use according to the restrictions in the APL.
2. Do not use the APL Compliance Form for acceptance when a project special provision modifies the product requirements in the Standard Specifications.

B. Buy America requirements still apply when acceptance is based upon the APL Compliance Form. Refer to this Section, article 1.16.

Supplemental Specification
2012 Standard Specification Book

SECTION 01456M

MATERIALS DISPUTE RESOLUTION

Delete Article 1.6, paragraph C and replace with the following:

C. Include the following items in the engineering analysis where applicable:
   1. Data supporting the Contractor's test results. Data must be based on project quality control testing.
      a. Split sample testing performed within the applicable contract.
      b. Contractor's test data for the disputed results along with all supporting test data and calculations for calculated values such as bulk specific gravity, maximum specific gravity, and ignition oven results for disputing VMA in asphalt concrete.
      c. Successful laboratory correlation information when required by material specification.
   2. Slump, air, yield, and similar items for disputing compressive strength of Portland cement concrete.
   3. Statistical analysis or identification of outliers.
   4. Procedures or issues leading to disputed acceptance test results.
   5. Incentive/Disincentive calculations based on both Contractor and Department test values, individually.

May 16, 2013

SPECIAL PROVISION

PROJECT #F-0195(5)0
PIN #8114

SECTION 01554M

TRAFFIC CONTROL

Add Article 3.8:

3.8 NOTIFICATION OF LANE CLOSURES AND SUBSEQUENT OPENINGS

A. Provide advance notification of every lane closure to the Resident Engineer (RE) or designee and the Region Communication Manager (RCM) or designee.
   1. Notify the RE and RCM or designee as soon as it is known that a lane closure is necessary to execute the work and at a minimum, 72 hours before the closure.
   2. Notify the RE and RCM or designee immediately when the schedule, location, or need for an upcoming lane closure changes.
   3. Include in the notification the route, the beginning and ending milepost/mile marker, number of lanes to be closed, direction of the closure, the date and time of the beginning of closure, and the date and time of the ending of the closure.

B. Provide real-time notification of every lane closure, and subsequent lane opening, to the UDOT Traffic Operations Center (TOC) at 801-887-3700.
   1. **Lane Closure**: Notify the TOC within 10 minutes before placing the first traffic control device in the travel lane.
   2. **Lane Opening:** Notify the TOC within 10 minutes after removing the last traffic control device in the lane.
   3. Include in the notification the route, the beginning and ending milepost/mile marker, number of lanes closed or opened, direction of the closure, and the date and time.

June 25, 2009

SPECIAL PROVISION

PROJECT #F-0195(5)0
PIN #8114

SECTION 01557S

MAINTENANCE OF TRAFFIC (MOT)

Add Section 01557:

PART 1 GENERAL

1.1 SECTION INCLUDES

A. MOT Maintainer

B. Maintenance of Traffic (MOT) plans, Materials, and labor necessary for implementation.

C. Variable message signs and construction signs

1.2 RELATED SECTIONS

A. Section 00555: Prosecution and Progress

B. Section 01554: Traffic Control

C. Section 02891: Traffic Signs

1.3 REFERENCES

A. Manual on Uniform Traffic Control Devices, Latest Edition (MUTCD).

1.4 DEFINITIONS

A. Maintenance of Traffic (MOT): The work necessary to advise the public of changes to normal traffic flow, and to indicate planned detours and alternate routes to closed roads. Use solely as advisory information to the public.

1.5 SUBMITTALS

A. Daily inspection reports on a form acceptable to the Engineer.

B. Proposed MOT plan to the Engineer for approval if a construction phase is proposed that is not covered by a Department supplied MOT plan.
   1. Submit proposed MOT plan to the Engineer 10 working days before the proposed MOT plan is to be implemented.

1.6 POST-BID REQUIREMENTS

A. Department provides MOT plans to be implemented as part of the bid package.

B. Attend a mandatory meeting as detailed in Section 01554.

C. Attendees of the mandatory meeting will review the Contractor's submitted traffic control plans and the Department's supplied MOT plans for compatibility. Modify plans where necessary, as set forth in Section 01554.

D. Do not begin work on the project until written approval of the MOT plan is received from the Engineer. No item of work can begin until the approved MOT plan is implemented for that phase of work.

1.7 MOT MAINTAINER

A. The Traffic Control Maintainer, as specified in Section 01554 is responsible for maintenance of MOT on the project. The Department makes no separate payment for maintenance of MOT.

B. Inspect MOT devices daily for compliance with the MOT plans.

1.8 MAINTENANCE OF MOT DEVICES

A. Maintain traffic control devices per Section 01554.

1.9 WAGE RATES FOR TRAFFIC CONTROL PERSONNEL (FEDERAL AID JOBS ONLY)

A. Refer to Section 01554 for wage rate information.

1.10 PAYMENT PROCEDURES

A. Partial Payments - Based on the percentage of the project completed, excluding the cost of MOT.
   1. Failure to comply with any of the requirements of this special provision will result in non-compliance.

B. Price Adjustments:
   1. The Department reduces payment if the MOT implemented is not in compliance with the approved MOT plan, as determined by the Engineer.
   2. The amount per day by which the Contractor's compensation will be reduced is calculated using the greater of the following:
      a. The daily charge in the Schedule of Liquidated Damages found in Section 00555 or
      b. The Contract lump sum bid price for MOT divided by the number of Contract days.

C. Payment for change in scope: Negotiate a price adjustment for MOT if the Engineer orders a change in the scope of work that requires modification to the approved MOT Plan.

PART 2 PRODUCTS

2.1 SIGNS

A. Refer to Section 02891.

B. Use type and configuration as directed by the MOT plans.

2.2 VARIABLE MESSAGE SIGNS (VMS)

A. Advance warning device
   1. Conform to guidelines set forth in Section 6F.55 of the MUTCD.
   2. Messages can be changed on-site and by dial-up modem

PART 3 EXECUTION

3.1 MODIFICATION OF MOT PLANS

A. Engineer may modify the MOT plans at any time.

B. Implement changes to the MOT plan before the end of the work shift.

C. Each phase of construction must be covered by an approved MOT plan.
   1. Do not begin work until the proposed MOT plan is approved for use, and has been fully implemented.

3.2 TRAFFIC CONTROL DEVICES

A. Installation and Maintenance:
   1. Install appropriate devices for each construction phase as identified in the appropriate MOT plan.
   2. Maintain devices to provide proper, continuous functionality.
   3. Wash devices weekly unless conditions warrant more frequent cleaning.
   4. Replace any device missing any part of the message or background.

B. Channelizing Devices: Use as directed by the MOT plan.
   1. Furnish a daily record of the number and location of all traffic control devices in use.
   2. Remove devices from the site of work when they are not needed for the immediate control of traffic.

3.3 VARIABLE MESSAGE SIGN (VMS)

A. The Department retains control of messages appearing on the VMS. Do not change the location or the message configuration of the VMS unless directed to by the Engineer in writing.

B. Place in view of oncoming traffic without obstructing traffic flow. Relocate VMS to match field conditions at no additional cost to Department.

C. Provide dial-up modem number to the Engineer.

D. Use necessary traffic control devices with VMS to provide safe operation.

E. Remove devices from the site of work when they are not needed for the immediate control of traffic.

F. Unless directed by the Engineer, display advance notification VMS messages for a minimum of seven days prior to any traffic impacts such as start of work, change in traffic directions, etc. at each end of the project.

G. Make two VMS signs available at all times during the project to be used as directed by the Engineer at no additional cost to the Department.

3.4 COORDINATION OF SIGNAL OPERATIONS

A. Notify the Engineer seven days prior to implementing a MOT plan (detour plans and alternate route plans) or any traffic control plan that impacts signal operations to allow the Engineer to coordinate any necessary signal timing adjustments with the TOC (Traffic Operations Center).

B. Changes to traffic signal operations will be done by the Department.

END OF SECTION

Supplemental Specification
2012 Standard Specification Book

SECTION 01571M

TEMPORARY ENVIRONMENTAL CONTROLS

Delete Article 2.1, paragraph B1 and replace with the following:

1. Silt Fence Fabric – Refer to AASHTO M 288, Table 7 – Temporary Silt Fence Property Requirements

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SECTION 01571M

TEMPORARY ENVIRONMENTAL CONTROLS

Add the following to Paragraph 1.5 SUBMITTALS:

C. Submit a sample and all manufacturer's information and specifications for mono-filament weave bag to Engineer for approval prior to installation.

D. Submit all manufacturer's information and specifications for Drop Inlet Filter Insert to Engineer for approval prior to installation.

Add the following to PART 1 GENERAL:

1.7 ALTERNATIVE TYPES

A. Check Dam (6" Bag – Stone Filled):
   1. A structure comprised of a mono-filament weave bag, filled with stone that is placed across a ditch or gutter to intercept and trap sediment. Construct so water will flow over a low point at the face of the gutter or in the middle of the dam and not around the sides.

B. Drop Inlet Barrier Filter Insert:
   1. A sediment control device that hangs from the drop inlet grate and is made from a permeable geotextile fabric. The filter prevents silt and sediment from entering the storm drain system.

C. Drop inlet Barrier (6" Bag - Stone Filled):
   1. A barrier comprised of mono-filament weave bag(s), filled with stone that is placed around a drop inlet that intercepts and traps sediment.

Add the following to PART 2 PRODUCTS:

2.2 ALTERNATIVE MATERIALS:

A. 6” Bag – Stone Filled:
   1. Mono-filament Weave Bag:
      a. Submit manufacturer’s information and material specification to Engineer for approval prior to installation.
      b. Bag Dimensions: 6 inch minimum diameter; 4 foot maximum length
      c. Bag Construction: Heat sealed to prevent rupture at longitudinal seam and made of High UV Mono-Filament Weave or approved equal.
      c. Bag Closures: Per manufacturer’s recommendation or approved equal.
   2. Stone Fill: Well-graded, 2 inches in diameter or less.

B. Filter Insert:
   1. Woven Geotextile Fabric:
      a. Submit manufacturer’s information and material specification to Engineer for approval prior to installation.
      b. Dimensions: Size to accommodate drop inlet dimensions
      c. Made of woven, high UV resistant Polypropylene, monofilament fabric or approved equal.
      d. Flow Rate: 200 – 300 gpm
      e. Sieve: US Standard Sieve #20-30
   2. Strapping:
      a. 2” min. width weather resistant polypropylene webbing
      b. Number and configuration sufficient to facilitate removal of insert and assure that insert will not fail (releasing material into the store drain) during use or maintenance.

Add the following to Part 3 EXECUTION:

Add the following to Paragraph 3.2 INSTALLATION:

G. Drop Inlet Filter Insert: Install per manufacturer’s specifications at locations indicated on the plans.

END OF SECTION

Supplemental Specification
2012 Standard Specification Book

SECTION 01721M

SURVEY

Delete Article 1.3 and replace with the following:

1.3 REFERENCES

A. UDOT Survey and Geomatics Standards Manual

Delete Article 1.5, paragraph C and replace with the following:

C. Submit a statement before beginning work indicating all Department provided horizontal and vertical control has been field checked and the control has been determined to be accurate within the tolerances specified in the Survey and Geomatics Standards Manual. Refer to http://www.udot.utah.gov/go/standardsreferences. Attach field survey information used to verify control. Notify the Engineer verbally and in writing if discrepancies are found.

September 1, 2015

SPECIAL PROVISION

PROJECT #F-0195(5)0
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SECTION 01892M

RECONSTRUCT CATCH BASIN, CLEANOUT, METER, VALVE, MANHOLE, AND MONUMENT BOXES

Add Article 3.1.C

C. The Contractor will replace any grates, frames, lids, rings, boxes, etc. damaged during the reconstruction process with new materials at no cost to the Department.

Add Article 3.2.D

D. The Contractor will replace any grates, frames, lids, rings, boxes, etc. damaged during the reconstruction process with new materials at no cost to the Department.

END OF SECTION

Supplemental Specification
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SECTION 02056M

EMBANKMENT, BORROW, AND BACKFILL

Delete Article 1.3, paragraph G and replace with the following:

G. UDOT Materials Manual of Instruction

H. UDOT Minimum Sampling and Testing Requirements

Delete Article 1.4, paragraph A and replace with the following:

A. Well-graded material – Material having an even distribution of different particle sizes. This even distribution of particles of different sizes results in a dense mass upon compaction.

Delete Article 1.5, paragraph A, and replace with the following:

A. Provide the following before delivering material to the project:
   1. Supplier and source of materials.
   2. Gradation analysis. Refer to AASHTO T 27 and T 11.
   3. Soil classification when applicable. Refer to AASHTO M 145.
   4. Maximum Dry Density and Optimum Moisture Determination
      a. Use AASHTO T 180 Method D for A-1 soils and AASHTO T 99 Method D for all other soils.

Delete Article 1.6, paragraph C, and replace with the following:

C. Density Requirements – Acceptance is on a lot-by-lot basis.
   1. Meet minimum density test average of 96 percent of maximum laboratory density with no single determination lower than 92 percent.
      a. Use AASHTO T 180 Method D for A-1 soils and AASHTO T 99 Method D for all other soils.
      b. Maintain appropriate moisture for compaction during processing.
   2. Meet 100 percent of established field density for free-draining granular backfill or for material with more than 30 percent retained on the ¾ inch sieve.
      a. Develop a field density compaction curve according to UDOT Materials Manual of Instruction Section 989 and approved by the Engineer.

Delete Article 2.9, and replace with the following:

2.9 PIPE FOUNDATION, BEDDING, AND BACKFILL

A. Pipe Foundation (When Required)
   1. Classification A-1. Refer to AASHTO M 145.
   2. Use suitable backfill material or granular backfill borrow when directed by Engineer.
   3. Use Free-Draining Granular Backfill or other uniformly graded materials only with the approval of the engineer and only if enclosed with an appropriate drainage geotextile. Refer to Section 02075.
   4. Over excavate and replace unsuitable materials according to Section 02317 when directed by the Engineer.

B. Pipe Bedding and Backfill
   1. Classification A-1. Refer to AASHTO M145.
   2. Non-plastic, well-graded material.
   3. Maximum aggregate size is 1½ inches for plastic pipe, 2 inches for all other pipes.

C. Other materials or trench configurations for pipe bedding and backfill may be used only upon approval of the Contractor's engineering proposal. Proposals using this option may include the use of native material or uniformly graded materials enclosed in an appropriate drainage geotextile. The Department decides whether or not to consider or approve the Contractor's engineering proposal. Any proposal must include all of the following:
   1. Stamped drawings and specifications signed and sealed by a Professional Engineer licensed in the state of Utah.
   2. Evaluation of site specific conditions and surrounding soils, including potential for migration of fines.
   3. A structural evaluation of the pipe support system for the proposed pipe that includes the pipe structural capacity and the depth of fill.
   4. Complete bedding or backfill source information including gradation, soil classification, and laboratory testing reports.

Delete Article 3.3, paragraphs C and D and replace with the following:

C. Structural Backfill Placement includes bridges, foundation, box culverts, drains, and other structures.
   1. Place suitable backfill material in structural backfill sections. Refer to Section 02317.
      a. Use granular backfill borrow when specified.
   2. Use appropriate compaction equipment adjacent to abutments, backwalls, approach slabs, wing walls, retaining walls, and other structures.

D. Pipe Foundation, Bedding, and Backfill
   1. Refer to Section 02317 and DG Series Standard Drawings for excavation and over-excavation requirements.
   2. Imported material for pipe bedding and pipe backfill and embankment in the pipe trench are incidental when constructed according to the plans and specifications. No separate measurement or payment for these items will be made except for pipe foundation work or other over-excavation of unsuitable material beyond the limits indicated in the contract.
   3. Place uniform layers of pipe backfill on both sides of the pipe.
   4. Use compaction equipment smaller than the trench width between the pipe and the trench wall. Expand the width of the trench to accommodate necessary compaction equipment.
   5. Fully compact the haunch areas. Hand-tamp areas where compaction equipment cannot compact the soil.

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SECTION 02216S

POTHOLE UTILITY

Add Section 02216:

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Use potholing to verify location, elevation and type of existing buried utilities.

1.2 RELATED SECTIONS Not Used

1.3 REFERENCES Not Used

1.4 DEFINITIONS Not Used

1.5 SUBMITTALS Not Used

PART 2 PRODUCTS Not Used

PART 3 EXECUTION

3.1 PREPARATION

A. Pothole after Blue Stakes has marked existing lines.
   1. Pothole only test hole locations approved by the Engineer where possible conflicts may be found.

B. Cooperate with the utility companies to protect their facilities.

C. Inform the Engineer 24 hours prior to any pothole. Pothole utility in the presence of the Engineer's representative.

3.2 RECORDS

A. Record coordinates of elevation and horizontal position, owner, material, size, number of ducts, casings and any other information relevant to identifying and establishing utility.

B. Provide written documentation to the Engineer within 24 hours of potholing. A licensed surveyor of the State of Utah must stamp documentation. All coordinates and bench marks are to be based on project coordinate system.

3.3 RESPONSIBILITY OF DAMAGED UTILITY

A. The Contractor is solely responsible for any damage to utility facilities resulting from pothole operations. No compensation will be given for any delays to the project schedule resulting from damages, repair time, materials or any other circumstance associated with damages to existing utilities caused by pothole operations..

3.4 CLEAN-UP

A. Backfill potholed utility with the excavated materials and according to UDOT standards.

B. Backfill any potholed utility to same depth and materials of surrounding pavement.

END OF SECTION

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SPECIAL PROVISION

PROJECT #F-0195(5)0
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SECTION 02221M

REMOVE STRUCTURE AND OBSTRUCTION

Delete Article 1.1, Paragraphs A through B and replace with the following:

1.1 SECTION INCLUDES

A. Remove, dispose of, or salvage buildings, fences, structures, retaining walls, pavements, paved ditches, diversion structures, concrete barrier, curb, gutter, driveways and approaches, sidewalk and similar hard surfaces, abandoned pipelines or utility items, and other obstructions that interfere with construction on or off the site including but not limited to items such as foundations, culverts, concrete work, septic tanks, and trees.

B. Salvage as specified or dispose of in an approved manner.

C. Salvaging items will need to meet Federal salvage requirements.

Add the following to Part 3:

3.24 REMOVE PAVED DITCH

A. Remove completely and dispose of per Article 3.3.

3.25 REMOVE RETAINING WALL

A. Remove completely and dispose of per Article 3.3.

3.26 REMOVE STEEL PLATE

A. Remove completely and dispose of per Article 3.3.

3.27 REMOVE RAILROAD TIE

A. Remove completely and dispose of per Article 3.3.

3.28 REMOVE WALL

A. Remove completely and dispose of per Article 3.3.

END OF SECTION

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SECTION 02316M

ROADWAY EXCAVATION

Delete Article 3.5, paragraph C and replace with the following:

C. Remove material in all cut sections to the depth shown. Scarify to an 8 inch depth and compact subgrade to at least 90 percent of maximum laboratory density before placing pavement section.

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SECTION 02378S

ROCK-FACED SLOPES

Add Section 02378:

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Construct Rock-Faced Slopes for Berm Embankments according to the details and at locations shown on the Plans.

B. Shape and maintain embankments.

C. Fill holes, pits, and other depressions left by removing unsuitable materials.

1.2 RELATED SECTIONS

A. Section 02056: Embankment, Borrow, and Backfill

B. Section 02075: Geotextiles

C. Section 02231: Site Clearing and Grubbing

D. Section 02316: Roadway Excavation

E. Section 02912: Topsoil

F. Section 02914S: Landscape Boulder

1.3 SUBMITTALS

A. The following shall be submitted to the Engineer by the rock-faced slope contractor at least two weeks *prior to the start of the work:*

1. A list of at least five previously completed projects of similar scope and purpose for approval by the Engineer. The list shall include a description of the project, relative size, and contact person with phone number.

2. Resumes of the management, supervisory, and key personnel, for approval by the Engineer.

PART 2 PRODUCTS

2.1 PREPARATION

A. Provide boulders to match the specification of Landscape Boulders in Section 02914S, Landscape Boulder.

B. Provide Geogrid as specified in Section 2075, Geotextiles.

C. Provide Separation Geotextile as specified in Section 2075, Geotextiles.

PART 3 EXECUTION

3.1 PREPARATION

A. Finish clearing and grubbing, and topsoil stripping before starting rock-faced slopes. Refer to Sections 02231 and 02912.

B. Provide and maintain satisfactory access to roads, streets, and adjacent property during all phases of construction according to the traffic control plan.

3.2 STANDARD PROCEDURES

A. Contractor-furnished borrow may be used and excavation wasted provided there is no additional cost to the Owner. Provide borrow that is equal to or better quality than the wasted excavation. Refer to Section 02056.

B. Maintain drainage
   1. Grade and maintain the roadway to ensure adequate drainage.
   2. Maintain pipe culverts and drainage ditches, or provide temporary facilities when interrupting irrigation systems, sewer, underdrainage, etc.

3.3 EXECUTION

A. For compaction process, follow Section 02056.

B. For Berm Embankment construction, follow Section 02056.

C. Remove and waste unsuitable material.

D. Construct berm embankment and rock-faced slopes concurrently. Maintain the elevations of the berm embankment and rock-faced slope within one-foot of each other.

E. Construct the Rock-Faced Slope using boulders, berm embankment, and geogrid reinforcement as follows:

   1. Geogrid reinforcement is not required for Rock-Faced Slopes with a height of 4 feet or less. Place a layer of separation geotextile between the rock facing and the berm embankment. Extend the separation geotextile at least 2 feet into the berm embankment at the bottom and top of the slope facing.

   2. For Rock-Faced Slopes greater than 4 feet in height, reinforce the berm embankment in a zone at least 8 feet wide behind the rock facing as shown in the Plans. Wrap the geogrid reinforcement up the face of the slope to the next reinforcement level to enclose the embankment slope backfill. Use a layer of separation geotextile between the geogrid reinforcement and the berm embankment. Extend the geotextile separation fabric at least 2 feet into the berm embankment at the bottom and the top of the geogrid reinforcement.

F. Anchor the first course of boulders in a trench at the base of the face of the slope. Extend the trench at least 12 inches below the finish ground surface at the face of the slope.

G. Generally place the largest boulders at the bottom of the wall with progressively smaller boulders towards the top of the slope. Embed the boulders at least 12 inches into the slope. Place the boulders, using hand-positioning when possible, so that each boulder is in firm contact and interlocked with adjacent boulders. Place smaller boulders and

cobbles in the voids between the boulders to increase the boulder-to-boulder interlock.

I. Construct the rock-faced slope to the line and grade shown on the plans, with the final slope of the rock-face not exceeding 3/4 horizontal to 1 vertical.

END OF SECTION

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SECTION 02511S

WATER UTILITIES

Add Section 02511:

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Materials and procedures for the installation of water mains and valves, relocation, reconstruction, and replacement of fire hydrants, water meters, and irrigation back flow preventers, water valves, and water pipe loops, and replacement of water services

1.2 RELATED SECTIONS

A. Section 00305S: Local Agencies Standards, Contacts, and Inspection

B. Section 00555M: Prosecution and Progress

C. Section 01455: Material Quality Requirements

1.3 REFERENCES

A. 2012 Edition of APWA Manual of Standard Specifications and Plans

B. Web site addresses for Water Utility specifications and plans
   1. Information regarding the 2012 APWA Manual of Standard Specifications and Plans can be found on the Web site at: http://utah.apwa.net/

1.4 CONTACTS

A. The Contractor notifies the Engineer and affected water utility in compliance with Utility requirements and in no case not less than 10 working days prior to utility work or relocations. The anticipated utility impacts are associated with the following water utilities:

1. Salt Lake City Public Utilities: Bernard Mo (801) 483-6835

1.5 INSPECTION AND TESTING

A. As part of the Contract, there are water facilities and appurtenant parts that are to be installed, relocated, reconstructed, replaced and tested. The Utility may provide an inspector for this work. The Contractor will:
   1. Notify the Engineer when they arrive and when they leave the project site.
   2. Notify the Engineer of any work found to be unacceptable within normal work hours (8 am to 5 pm). Provide the Engineer written notification of any corrective measures to be made.
   3. Keep a daily progress report and submit to the Engineer any inspections and results of public health tests required by the Utility.

1.6 DEFINITIONS Not Used

1.7 SUBMITTALS

A. Obtain approval of all products ,with data sheets, of all materials to be installed from the appropriate Utility and submit a copy to the Engineer.

B. Submit a copy of required permits from each Utility 10 working days prior to starting utility work.

C. Submits all signed Certificates of Compliance to the Engineer for materials involved in associated work.

D. Provide documentation to verify compliance to Section 01455 1.16 Buy America.

PART 2 PRODUCTS

2.1 WATER MAIN

A. Meet the appropriate Utility Company standards for materials and installation defined in Article 1.3 of this Section and at the location shown on the plans.
   1. Follow Utility Company standards for pipe bedding. Follow UDOT standards above the pipe zone for bedding and compaction
   2. The work includes connections to the existing water main, service reconnections, service replacements, elbows and bends,

disinfection, bacteria testing and disconnection and removal of the existing water main, fire hydrant or water meter.

2.2 WATER VALVE

A. Meet the appropriate Utility Company standards for materials and installation defined in Article 1.3 of this Section and at the locations indicated on the plans.

2.3 RELOCATE, REPLACE, OR RECONSTRUCT FIRE HYDRANT

A. Meet the appropriate Utility Company standards for materials and installation defined in Article 1.3 of this Section and at the locations indicated on the plans.

2.4 REPLACE WATER SERVICE

A. Meet the appropriate Utility Company standards for materials and installation defined in Article 1.3 of this Section and at the locations indicated on the plans.

2.5 SALT LAKE CITY WATER PIPE LOOP

A. Meet the appropriate Utility Company standards for materials and installation defined in Article 1.3 of this Section and at the locations indicated on the plans.

PART 3 EXECUTION

3.1 PREPARATION

A. Obtain all permits required to do the work.

B. Coordinate with the water Utilities for the installation of items performed by Utility forces.

C. Before trenching:
   1. Stake locations of mains, valves and fire hydrants.
   2. Contact Blue Stake to locate and mark utility lines.

D. Coordinate all water main shutdowns with the water Utility and notify the Engineer 3 working days prior to the shutdown.

3.2 INSTALLATION

A. Relocate and install water meters and fire hydrants.

B. Location of water meters, meter box and fire hydrants to be as shown on the plans or as directed by the Engineer to accommodate field conditions.

C. Unless otherwise noted, replace all existing water service lines with new pipe from the main supply line to the water meter and fire hydrant.

D. Coordinate the relocation and installation of water meters and fire hydrants with the water system authority.

END OF SECTION

Supplemental Specification
2012 Standard Specification Book

SECTION 02610

DRAINAGE PIPE

Delete Section 02610 and replace with the following:

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Materials and procedures for installing drainage pipe.

B. Class, type, and size designations for drainage pipe.

C. Inspection and acceptance.

1.2 RELATED SECTIONS

A. Section 01282: Payment

B. Section 02056: Embankment, Borrow, and Backfill

C. Section 02317: Structural Excavation

1.3 REFERENCES

A. AASHTO M 36: Corrugated Steel Pipe, Metallic-Coated, for Sewers and Drains

B. AASHTO M 167: Corrugated Steel Structural Plate, Zinc-Coated, for Field-Bolted Pipe, Pipe-Arches, and Arches

C. AASHTO M 170: Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe

D. AASHTO M 196: Corrugated Aluminum Pipe for Sewers and Drains

E. AASHTO M 197: Aluminum Alloy Sheet for Corrugated Aluminum Pipe

F. AASHTO M 198: Joints for Concrete Pipe, Manholes, and Precast Box Sections Using Preformed Flexible Joint Sealants

G. AASHTO M 207: Reinforced Concrete Elliptical Culvert, Storm Drain and Sewer Pipe

H. AASHTO M 219: Corrugated Aluminum Alloy Structural Plate for Field-Bolted Pipe, Pipe-Arches, and Arches

I. AASHTO M 243: Field Applied Coating of Corrugated Metal Structural Plate for Pipe, Pipe Arches, and Arches

J. AASHTO M 245: Corrugated Steel Pipe, Polymer Precoated, for Sewers and Drains

K. AASHTO M 246: Steel Sheet, Metallic-Coated and Polymer-Precoated for Corrugated Steel Pipe

L. AASHTO M 274: Steel Sheet, Aluminum-Coated (Type 2), for Corrugated Steel Pipe

M. AASHTO M 294: Corrugated Polyethylene Pipe, 300- to 1500-mm (12- to 60-in.) Diameter

N. AASHTO M 304: Poly (Vinyl Chloride) (PVC) Profile Wall Drain Pipe and Fittings Based on Controlled Inside Diameter

O. AASHTO M 330: Polypropylene Pipe

P. AASHTO MP 20: Steel Reinforced Polyethylene Pipe

Q. AASHTO PP 63: Pipe Joint Selection for Highway Culvert and Storm Drains

R. AASHTO LRFD Bridge Construction Specifications

S. ASTM A 849: Post-Applied Coatings, Pavings, and Linings for Corrugated Steel Sewer and Drainage Pipe

T. ASTM C 443: Joints for Concrete Pipe and Manholes, Using Rubber Gaskets

U. ASTM D 1056: Flexible Cellular Materials—Sponge or Expanded Rubber

V. ASTM D 1784: Rigid Poly (Vinyl Chloride) (PVC) Compounds and Chlorinated Poly (Vinyl Chloride) (CPVC) Compounds

W. ASTM D 3212: Joints for Drain and Sewer Plastic Pipes Using Flexible Elastomeric Seals

X. ASTM D 3350: Polyethylene Plastics Pipe and Fittings Materials

Y. ASTM F 477: Elastomeric Seals (Gaskets) for Joining Plastic Pipe

Z. ASTM F 949: Poly(Vinyl Chloride) (PVC) Corrugated Sewer Pipe With a Smooth Interior and Fittings

AA. ASTM F 2562: Steel Reinforced Thermoplastic Ribbed Pipe and Fittings for Non-Pressure Drainage and Sewerage

BB. ASTM F 2881: Polypropylene Pipe

CC. National Transportation Product Evaluation Program (NTPEP)

DD. Occupation Safety and Health Administration (OSHA)

EE. UDOT Minimum Sampling and Testing Requirements

FF. UDOT Quality Management Plan 505

1.4 DEFINITIONS

A. The following definitions apply to this Section and the DG Series Standard Drawings.

1. Backfill – Material used to fill the trench or excavation, exclusive of bedding material.
2. Bedding Material – Material on which a pipe is supported.
3. Cover – The vertical dimension above the crown to the finished fill elevation or pavement surface.
4. Crown – The top or highest point of a pipe.
5. Culvert – A pipe, open on both ends, that conveys surface runoff through an embankment.
6. Distortion – A deviation from a pipe's original shape due to earth pressure or surface loads.
7. Down Drain – A pipe that is connected to a drainage structure that drains vertically down to a surface below.
8. Drainage pipe – A pipe that conveys water regardless of shape and material type such as culverts, irrigation pipes, and storm drains.
9. End Section – A structure made of steel or concrete, attached to the ends of a pipe to retain the embankment and provide anchorage.
10. Foundation – The natural ground or prepared base.

11. Haunch – The area of backfill material placed under the pipe, between the spring line and the bottom of the pipe.
12. Headwall – A concrete wall placed at the end of a pipe to serve one or more of the following purposes:
    a. Protect embankment fill from scour or undermining
    b. Increase hydraulic efficiency
    c. Alter the direction of flow
    d. Anchor the pipe
    e. Provide needed structural support
13. Invert – The floor, bottom, or lowest part of the internal cross section of a pipe.
14. Irrigation Pipe – A pipe designed to convey seasonal irrigation water.
15. NASSCO – National Association of Sewer Service Companies.
16. NHS – National Highway System.
17. Nominal Diameter – The inside diameter of the pipe as specified in the plans.
18. NTPEP – National Transportation Product Evaluation Program
19. Pipe Corrosion Classifications:
    a. Class A – Pipe used in mostly non-reactive soils that requires no special materials, treatments, or coatings.
    b. Class B – Pipe used in moderately reactive and corrosive soils.
    c. Class C – Pipe used in soils that are highly reactive and corrosive.
    d. Class D – Untreated structural plate pipe used in mostly non-reactive and non-corrosive soils.
    e. Class E – Structural plate pipe used in highly reactive and corrosive soils.
20. Pipe Interior Roughness:
    a. Corrugated – Interior surface that is formed into a series of alternating crests and valleys with a Manning's "n" coefficient greater than 0.013.
    b. Smooth Lined – Interior surface that is essentially smooth, with a Manning's "n" coefficient less than or equal to 0.013.
21. Pipe Sample Unit – The length of pipe from inlet to outlet or from drainage structure to drainage structure.
22. Rise – The maximum vertical dimension of a pipe arch.
23. Slope drain – A pipe that is placed along the face of a cut or fill slope.
24. Span – The maximum horizontal dimension of a pipe arch.
25. Spring Line – The location of the maximum horizontal dimension of a pipe.
26. Storm Drain – A pipe that conveys surface drainage from one drainage structure to another or an outfall.

27. Working Drawings – Drawings produced by the Contractor that supplement the contract drawings to provide information not included in the contract documents but that are required to fabricate, erect, transport or temporarily support the structure or structural elements in the completion of the work.
    a. Approval of Working Drawings - Acceptance by the Department for use on the project.

1.5 SUBMITTALS

A. Manufacturer's Certificate of Compliance for the following:
    1. Material, structural, and coating according to requirements of Table 5.
    2. Pipe joints according to AASHTO PP 63. Refer to this Section, article 2.2.
    3. Concrete pipe manufacturer is prequalified according to UDOT Quality Management Plan 505, Precast/Prestressed Concrete Structures.
    4. Thermoplastic pipe manufacturer is compliant with the AASHTO NTPEP for the diameter of pipe specified in the plans.

B. Manufacturer's installation instructions for each type of pipe used and any incidental materials required for installation.

C. NASSCO pipe inspection certification.

D. Inspection reports. Refer to this Section, article 1.6.

E. Installation plan and working drawings for structural plate pipe. Refer to this Section, article 2.1 paragraph E.
    1. Working drawings must be sealed by a Professional Engineer (PE) or Professional Structural Engineer (SE) licensed in the State of Utah.

F. Repair plan when required according to this Section, article 1.6 paragraph D.

1.6 ACCEPTANCE

A. General

1. Inspect pipes after installation and placement of backfill according to Table 1 and Table 2.

Table 1

Roadway Functional Classification	Percent of Pipes to Inspect*
Interstate Freeways, NHS Highways and Arterials	100
Collectors and Local Roads	50

* Indicated in the project plans

Table 2

Pipe Testing Requirements				
Pipe Size	Visual		Deflection*	
	Manual	Remote	Manual	Mandrel**
≤ 48–inch dia.		X		X
> 48–inch dia.	X		X	

* Deflection testing is required for circular metal and thermoplastic pipe only

** A manual inspection or other method may be performed in place of a mandrel inspection with the approval of the Engineer

2. The Engineer will determine which pipe sample units to inspect when the percentage of pipes to inspect is less than 100 percent.
   a. Inspect additional pipe sample units with apparent defects or as directed by the engineer.
      1) Repair or replacement will be at the contractor's expense if pipe does not meet the acceptance criteria in this article.
      2) The Department will pay for the cost of additional inspection if pipe meets the acceptance criteria in this article.
3. Perform inspections so that pipe sample units and required repairs are accepted by the Engineer before placing pavement or finished grade. Exceptions to this requirement are at the discretion of the Engineer.

4. The Department will not make final payment for a pipe installation until the pipe has been inspected and accepted according to this article.
    a. Refer to Section 01282 regarding progress payments and payment for material on hand.
    b. Protect all pipe from damage throughout the duration of the project.
5. No inspection is required for any slope drain or down drain. No inspection is required for a pipe extension or pipe sample unit that is less than 20 ft long.
6. Clean and flush the pipe with water immediately before the inspection.
    a. Remove all material or debris from pipes.
    b. Do not discharge debris into other pipes, structures, or drainage ditches.
7. Submit an inspection report to the Engineer for each pipe sample unit as specified in this article for remote and manual inspections within five calendar days of completing inspection.
    a. The Engineer will determine acceptance within seven calendar days of receipt of complete inspection reports.
8. Notify the Engineer at least 24 hours before performing a mandrel inspection or a manual inspection of a pipe.

B. Remote Inspection
1. Perform remote inspection for pipes with a nominal diameter less than 48 inches using closed-circuit television (CCTV) video inspection and a mandrel test as outlined below.
2. Remote video inspection operator is to have a current NASSCO certification.
3. CCTV Equipment: Record video using a crawler mounted camera capable of panning and tilting to a 90 degree angle with the axis of the pipe and rotating 360 degrees.
4. CCTV Inspection: Produce a picture quality that satisfies the Engineer. Repeat unsatisfactory inspections at no additional cost to the Department. Use the video image to determine horizontal and vertical alignment deviations, joints gaps, and pipe damage.
    a. Center the camera head in the pipe both vertically and horizontally and use lighting sufficient to allow a clear picture of the entire periphery of the pipe.
    b. Do not move the crawler through the pipe at a speed greater than 30 ft/minute. Stop the crawler and video the entire circumference at each joint. Stop the crawler and zoom when necessary to video defects.

c. Video image must be continuously illuminated, clear, focused, and free from roll, static, or other image distortion qualities that may prevent the reviewer from evaluating the pipe's condition.
    1) Calibrate the video's lighting and focus to view the internal markings within the pipe.
d. Superimpose the pipe identification and location within the pipe on the video recording.
e. Document all defects with captions in the video.
    1) Note the defect at each location and provide a still image of the defective area in the inspection report.
    2) Document all cracks and joint separations.

5. Mandrel Inspection: Used for circular metal and thermoplastic pipes only.
    a. Perform the mandrel inspection for pipes in the presence of the Engineer or representative according to Table 2.
    b. Provide a mandrel that meets the following requirements to determine pipe deflection:
        1) The diameter of the mandrel, whether it is fixed or variable size, must be verified with a proving ring or other method according to manufacturer's guidelines.
        2) Contains at least nine equally spaced runners (40 degree angles).
        3) Length not less than the diameter.
    c. Provide a proving ring to verify mandrel size when requested by the Engineer.
    d. Mandrel Inspection Procedure
        1) Pull a mandrel that is 5 percent less than the pipe nominal inside diameter.
        2) The inspection is complete if the mandrel passes through at 5 percent.
        3) Accomplish the following before completing the inspection if the mandrel cannot pass through:
            a) Record the maximum distance achieved from the inlet side.
            b) Remove the mandrel and continue the inspection from the outlet end of the pipe toward the inlet end. Record the maximum distance achieved from the outlet side.
            c) Repeat with the mandrel set to 7.5 percent less than the pipe nominal inside diameter.

6. Prepare an Inspection Report and include:
    a. A video recording of each pipe inspection in a digital format.
    b. The project number, date, and time of the inspection for each pipe inspection, the pipe identification used in the plan set, and type and size of pipe.

c. Written and still image documentation of locations where alignment deviations, joint gaps, pipe damage, and any other deficiencies were observed.
d. The size of the mandrel and whether or not it was successfully pulled through the pipe.
1) Mandrel size and maximum distance pulled from each side of the pipe if the mandrel was not able to pass.

C. Manual Inspection
1. Perform manual inspection for pipes in the presence of the Engineer or representative according to Table 2.
a. Follow OSHA requirements for inspecting confined entry spaces.
2. Perform the following inspection:
a. Deflection (for circular metal and thermoplastic pipes only). Perform a mandrel inspection or take the following measurements every 10 ft along the length of the pipe to the nearest ¼ inch:
1) Vertically from the crown to invert
2) Horizontally at the spring line
3) Two measurements, each diagonally at 45 degrees to the pipe springline
b. Cracks – Measure observed cracks using a feeler gauge capable of measuring 0.01 inch. Other measuring devices may be used when approved by the Engineer.
c. Gaps – Measure and record the widest gap at each joint to the nearest ¼ inch.
3. Inspection Report
a. Include the project number, date and time of the inspection, the pipe identification used in the plan set, and type and size of pipe.
1) Document inspection results for deflection and observations of alignment deviations, joint gaps, and pipe damage. Include the type and location along the pipe for each measurement along with still images for each observation.

D. Acceptance
1. Each pipe sample unit is accepted after verifying that the allowable tolerances for the following requirements have been met:
a. Horizontal and vertical alignment deviations
b. Deflection
c. Joints gaps
d. Damage
2. Repair or replace damaged or improperly installed pipes at no cost to the Department.

3. Evaluate each pipe that does not meet the acceptance criteria described in this article and recommend appropriate action. Submit documentation that has been signed and sealed by a Professional Engineer (P.E.), competent in the structural design of pipe material being evaluated, either:
   a. No repair is required for the pipe to function and maintain its structural integrity over its design life.
   b. A repair is required to allow the pipe to function and maintain its structural integrity over its design life.
      1) Submit repair plans to the Engineer, obtain written approval from the Engineer before performing work.
      2) Inspect the repaired portion of the pipe and any feature potentially affected by the repair.
4. Alignment
   a. Evaluate each pipe that exceeds the alignment tolerances shown in Table 3 and recommend appropriate action.
   b. Evaluate each pipe that has areas where ponding occurs and recommend appropriate action.

Table 3

Installation Alignment Tolerances		
Design Grade	**Horizontal**	**Vertical***
		inch/100 ft
> 1%	Horizontal joint deflections not to exceed industry standards	1½
0.5% - 1%		1
< 0.5%		½

* Increase tolerance by 50 percent for culverts.

5. Distortion – Based on the percentage change from the nominal diameter.
   a. Evaluate each pipe with a distortion between 5 percent and 7.5 percent and recommend appropriate action.
   b. Remove and replace each pipe with a distortion greater than 7.5 percent.

6. Joint Gaps
   a. Evaluate each pipe joint with a gap exceeding the tolerance specified in Table 4 and recommend appropriate action according to manufacturer's recommendations.

Table 4

Joint Gap Tolerances	
Nominal Diameter (inches)	**Joint Gap (inches)**
12 to 36	0.75
42 to 48	1.00
54 to 90	1.25
96 to 144	1.75

   b. Repair joints showing visible signs of soil or water infiltration according to the approved plans submitted.

7. Damage – Fractures, cracks, or other defects passing through the walls or joints sufficient to impair strength, durability, function or product serviceability. Evaluate damage and recommend appropriate action according to this Section, Article 1.6 paragraph D.3.
   a. Metal pipe – Repair damaged, delaminated, or scaled coating on metal pipe according to the approved plans submitted.
   b. Plastic pipe – Evaluate pipes that show the following signs:
      1) Damaged pipe cross section such as dents, cuts, cracks, breaks, fractures, or deformations.
   c. Reinforced concrete pipe
      1) Evaluate pipes that show the following:
         a) Cracks between 0.01 inch and 0.10 inch
         b) Damaged pipe cross section such as breaks or fractures
         c) Broken bells or spigots
      2) Remove and replace pipe that show the following:
         a) Exposed reinforcing steel
         b) Imperfect proportioning mixing and casting such as honeycomb or open texture
      3) Repair or replace reinforced concrete pipe if cracks are greater than 0.10 inch.

PART 2 PRODUCTS

2.1 PIPE

A. General – pipes are identified according to interior roughness, joint type, diameter or span and rise, and corrosion class.
   1. Provide the type of pipe specified in the plans with the following exceptions:
      a. Provide any pipe type that meets the interior roughness requirements of Table 5 and the specified pipe joint rating and corrosion classification when no material type is specified in the plans.
      b. Substitutions to a higher pipe corrosion classification are allowed.
   2. Do not change the material type, strength, or thickness of the pipe along an installation unless approved in writing by the Engineer.
   3. Use the cover over the pipe to determine the strength or thickness. Refer to the DG Series Standard Drawings.
   4. Internally label each section of pipe with the manufacturer's name or trademark, nominal diameter, and manufacture date. Include the pipe class, gauge, and coating according to the pipe material type.
      a. Place the pipe so that the location of the label is above the spring line of the pipe.

Table 5

AASHTO/ASTM Specifications for Pipe					
Interior Roughness and Material Type	**Corrosion Class**				
	A	**B**	**C**	**D**	**E**
Corrugated					
Corrugated steel pipe and pipe arch	M 36	M 36 Polymeric Coating (outside only) M 245 & M 246 ASTM A 849 or Aluminized Type II Steel M 274	M 36 Polymeric Coating (both sides) M 245 & M 246 ASTM A 849	N/A	N/A
Corrugated aluminum pipe and pipe arch	M 196 M 197	M 196 M 197	M 196 M 197	N/A	N/A
Corrugated polyethylene (HDPE) pipe	M 294 ASTM D 3350	M 294 ASTM D 3350	M 294 ASTM D 3350	N/A	N/A
Smooth Lined					
Smooth lined corrugated polyethylene (HDPE) pipe	M 294 ASTM D 3350	M 294 ASTM D 3350	M 294 ASTM D 3350	N/A	N/A
Smooth lined polyvinyl chloride (PVC) pipe	M 304 & ASTM F 949 Cell Class # 12454C ASTM D 1784	M 304 & ASTM F 949 Cell Class # 12454C ASTM D 1784	M 304 & ASTM F 949 Cell Class # 12454C ASTM D 1784	N/A	N/A
Smooth lined polypropylene pipe	M 330 ASTM F 2881	M 330 ASTM F 2881	M 330 ASTM F 2881	N/A	N/A
Steel reinforced thermoplastic ribbed pipe	MP 20 ASTM F 2562	MP 20 ASTM F 2562	MP 20 ASTM F 2562	N/A	N/A
Spiral rib steel pipe and pipe arch	M 36	M 36 Polymeric Coating (outside only) M 245 & M 246, ASTM A 849 or Aluminized Type II Steel M 274	M 36 Polymeric Coating (both sides) M 245 & M 246 ASTM A 849	N/A	N/A
Spiral rib aluminum pipe and pipe arch	M 196 M 197	M 196 M 197	M 196 M 197	N/A	N/A
Reinforced concrete pipe	M 170 Type II Cement	M 170 Type II Cement	M 170 Type V Cement	N/A	N/A
Elliptical reinforced concrete pipe	M 207 Type II Cement	M 207 Type II Cement	M 207 Type V Cement	N/A	N/A

AASHTO/ASTM Specifications for Structural Plate Pipe					
Interior Roughness and Material Type	**Corrosion Class**				
	A	**B**	**C**	**D**	**E**
Corrugated					
Structural steel plate pipe and pipe arch	N/A	N/A	N/A	M 167	M 167 M 243
Aluminum alloy structural plate pipe and pipe arch	N/A	N/A	N/A	M 219	M 219

B. Reinforced Concrete Pipe
   1. Concrete pipe manufacturer is pre-qualified according to UDOT QMP 505.
   2. Do not cast lift holes except for circular pipe that has a nominal diameter greater than 54 inches or any elliptical pipe.
      a. Fill lift holes with a plug supplied by the manufacturer or with non-shrink grout according to the pipe manufacturer's recommendations.

C. Metal Pipe
   1. Do not allow pipes of different types of metal to contact each other.
   2. Use matching materials to make direct extensions of existing pipes.
   3. Do not use aluminum pipe when a paved invert is required unless protective measures are taken.
   4. Class B Aluminized Type II Steel is acceptable only when the minimum metal thickness is 16 gauge and where pH is greater than 5.5 and less than 8.5 and soil resistivity is greater than 1,500 ohm-centimeters.

D. Thermoplastic Pipe
   1. HDPE pipe – Do not use greater than 60 inch diameter.
      a. HDPE pipe manufacturer is compliant with NTPEP.
   2. PVC pipe – Do not use greater than 36 inch diameter.
   3. Do not use in permanent above ground installations unless approved in writing by the Engineer.

E. Structural Plate Pipe
   1. Spray or brush-coat all areas of aluminum pipe contacting concrete with an asphalt mastic or tar based material at least 0.05 inch thick. Refer to AASHTO M 243.
   2. Assembly
      a. Provide the Engineer an installation plan and working drawings showing the position of each plate and the assembly order.

b. Do not begin work until working drawings have been approved.
    1) The Department will review working drawings for general conformance with the design concept and compliance with the contract documents.
    2) Approval does not relieve the Contractor from responsibility for errors, correctness of details, conformance to the contract, and the successful completion of the work.
c. Follow the manufacturer's instructions.

F. Steel Reinforced Thermoplastic Ribbed Pipe
1. Do not use greater than 60 inch diameter.
2. Do not use in permanent above ground installations unless approved in writing by the Engineer.

G. Polypropylene Pipe
1. Do not use greater than 60 inch diameter.
2. Do not use in permanent above ground installations, unless approved in writing by the Engineer.

2.2 JOINTS OR COUPLING BANDS

A. General
1. Supply pipe joints that have been evaluated according to AASHTO PP 63.
    a. Culverts – Meet the silt-tight joint requirements of at least 2 psi for all culverts except where project plans or specifications require a higher pressure rating.
    b. Storm Drains and Irrigation Pipes – Meet the leak resistant joint requirements of at least 10.8 psi for all storm drains and irrigation pipes except where project plans or specifications require a higher pressure rating.
2. Comply with manufacturer's recommendations for connecting pipes and for connecting pipe to end sections, concrete headwalls, catch basins, and similar structures.
3. Elliptical, arched, and structural plate pipes are not pressure rated.

B. Reinforced Concrete Pipe
1. Use a rubber gasket joint that meets the requirements of ASTM C 443 for circular reinforced concrete pipe.
2. Use a mastic joint sealant that meets the requirements of AASHTO M 198 for elliptical reinforced concrete pipe.

C. Metal Pipe
1. Use an external corrugated connecting band with a neoprene sleeve/flat gasket. Refer to ASTM D 1056.
a. Continuous one piece construction closed-cell neoprene, skin on all sides.
b. Minimum thickness of ⅜ inch and no less than the width of the connection band used.
2. Re-roll ends of helically corrugated pipe to form at least two full annular corrugations each before being joined.
3. Refer to AASHTO LRFD Bridge Construction Specifications and AASHTO M 36 or M 245 with the following modifications for external corrugated connecting bands:
a. Use bands of the same or better corrosion class as the pipe. Maintain a minimum thickness of 16 gauge but not less than a 2 gauge step lighter than the pipe gauge.
b. Use bands with projections (dimple bands) only in extension of existing pipes or a field cut where annular corrugations do not exist.

D. Thermoplastic Pipe
1. Use bell and spigot joints with an elastomeric rubber seal that meets the requirements of ASTM F 477.

E Steel Reinforced Thermoplastic Ribbed Pipe
1. Use pipe joints that meet the requirements of ASTM D 3212.

2.3 PIPE BEDDING AND BACKFILL

A. Refer to Section 02056.

PART 3 EXECUTION

3.1 PREPARATION

A. Excavation
1. Refer to Section 02317.
2. Keep trenches free from water.

B. Foundation
1. Grade and prepare the bottom of the trench to provide a firm and uniform bearing throughout the entire length of the pipe. Do not use blocking to bring the pipe to grade.
2. Shape the foundation to have recesses to fit any projecting hubs or bells.

3.2 INSTALLATION

A. Refer to DG Series Standard Drawings, Standard Specifications, AASHTO LRFD Bridge Construction Specifications, and manufacturer's installation requirements for installing all types of pipe. Adhere to the more stringent requirement if there is a conflict between any of the above installation requirements.

B. Pipe Bedding
   1. Refer to Section 02056 and DG Series Standard Drawings for bedding requirements.
   2. Place the bottom of the pipe in contact with the bedding throughout its full length.
   3. Shape the bedding to have recesses to fit any projecting hubs or bells.

C. Pipe Placement
   1. Check pipe for alignment and grade when joining the sections.
   2. Remove and relay or replace pipe that is out of alignment, settled, or damaged.
   3. Verify joints are assembled properly.

D. Pipe Backfill
   1. Refer to Section 02056 for backfill requirements.
   2. Test frequency according to UDOT Minimum Sampling and Testing Requirements and Section 02056.

E. Provide adequate cover and protect pipe during project construction.

END OF SECTION

September 16, 2014

SPECIAL PROVISION

PROJECT #F-0195(5)0
PIN #8114

SECTION 02737S

ASPHALT PAVEMENT SOFT SPOT REPAIR

Add Section 02737:

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Remove and replace soft spots in the existing pavement, as directed by the Engineer. Remove the damaged asphalt leaving a square and vertical edge on all sides, replace the roadbase if necessary, and replace hot mix asphalt.

1.2 RELATED SECTIONS

A. Section 02075: Geotextiles

B. Section 02721: Untreated Base Course

C. Section 02741: Hot Mix Asphalt

D. Section 02742S: Project Specific Surfacing Requirements

E. Section 02748: Prime Coat/Tack Coat

1.3 REFERENCES Not Used

PART 2 PRODUCTS

2.1 GEOTEXTILES

A. Refer to Section 02075.

2.2 UNTREATED BASE COURSE

A. Refer to Section 02721.

2.2 HOT MIX ASPHALT

A. Mix Design and Material Requirements - Refer to Section 02741.

B. Project Specific Surfacing Requirements - Refer to Section 02742S.

C. Tack Coat Requirements - Refer to Section 02748.

PART 3 EXECUTION

3.1 REMOVE DETERIORATED ASPHALT SURFACING

A. Remove the deteriorated asphalt to a minimum depth of 6” or as determined by the Engineer. Remove by either saw cutting or rotomilling, leaving all edges square and vertical. Locate cut at least 6” beyond the visible limits of the distressed area. The minimum patch width is 3’ in all directions. If rotomilling is used, the mill must be at least 6’ wide and a minimum patch size of 6’ in all directions.

C. Remove the damaged asphalt surfacing without damaging the surrounding asphalt pavement. Remove all loose material and clean vertical edges prior to applying tack coat and paving.

3.2 BASE COURSE REQUIREMENTS FOR TYPE A (SURFACE ONLY) REPAIR

A. Grade and compact the existing base course surface.
   1. Use the largest piece of vibratory or impact compaction equipment possible.
   2. Control compaction using a nuclear density gauge.
   3. Continue compaction until additional work does not improve the measured density.

3.3 BASE COURSE REQUIREMENTS FOR TYPE B (FULL DEPTH) REPAIR

A. Excavate and remove 8” of existing base course. Install a geotextile separation fabric that conforms to Section 02075 of the UDOT Standard Specifications. Replace with new untreated base course that conforms to Section 02721 of the UDOT Standard Specifications.

B. Grade and compact the new base course surface.
   1. Use the largest piece of vibratory or impact compaction equipment possible.
   2. Control compaction using a nuclear density gauge.
   3. Continue compaction until additional work does not improve the measured density.

3.4 PLACE AND COMPACT HOT MIX ASPHALT

A. Tack all bituminous surfaces conforming to Section 02748 of the UDOT Standard Specifications.

B. Place and compact hot mix asphalt mix, conforming to Section 02741 of the UDOT Standard Specifications and Section 02742S, to within ¼" of the existing surface.
   1. Control compaction using a nuclear density gauge
   2. Compact material to a minimum of 92% of the theoretical maximum specific gravity, with special attention to joint density.

END OF SECTION

September 8, 2014

SPECIAL PROVISION

PROJECT #F-0195(5)0
PIN #8114

SECTION 02741M

Hot Mix Asphalt (HMA)

Delete Article 1.6, paragraph D8 and replace with the following:

8. The Department will reject the lot according to Table 1.

Delete Article 1.6, paragraph E1 and replace with the following:

1. According to Table 1.

Delete Table 1 and replace with the following:

Table 1

Incentive/Disincentive for Asphalt Binder Content, and Density	
PT Based on Min. Four Samples	**Incentive/Disincentive (Dollars/Ton)**
>99	1.50
96-99	1.00
92-95	0.60
88-91	0.00
84-87	-0.26
80-83	-0.60
76-79	-0.93
72-75	-1.27
68-71	-1.60
64-67	-1.93
60-63	-2.27
<60	Reject
Incentive/Disincentive for Gradation	
PT Based on Min. Four Samples	**Incentive/Disincentive (Dollars/Ton)**
>99	1.50
96-99	1.00
92-95	0.60
88-91	0.00
84-87	-0.26
80-83	-0.60
76-79	-0.93
72-75	-1.27
68-71	-1.60
64-67	-1.93
60-63	-2.27
56-59	-5.00
52-55	-10.00
<52	Reject

Delete Table 3 and replace with the following

Table 3

Quality Index Values for Estimating Percent Within Limits										
PU/PL	**n=3**	**n=4**	**n=5**	**n=6**	**n=7**	**n=8**	**n=10**	**n=12**	**n=15**	**n=20**
100	1.16	1.50	1.75	1.91	2.06	2.15	2.29	2.35	2.47	2.56
99	1.16	1.47	1.68	1.79	1.89	1.95	2.04	2.09	2.14	2.19
98	1.15	1.44	1.61	1.70	1.77	1.80	1.86	1.89	1.93	1.97
97	1.15	1.41	1.55	1.62	1.67	1.69	1.74	1.77	1.80	1.82
96	1.15	1.38	1.49	1.55	1.59	1.61	1.64	1.66	1.69	1.70
95	1.14	1.35	1.45	1.49	1.52	1.54	1.56	1.57	1.59	1.61
94	1.13	1.32	1.40	1.44	1.46	1.47	1.49	1.50	1.51	1.53
93	1.12	1.29	1.36	1.38	1.40	1.41	1.43	1.43	1.44	1.46
92	1.11	1.26	1.31	1.33	1.35	1.36	1.37	1.37	1.38	1.39
91	1.10	1.23	1.27	1.29	1.30	1.31	1.32	1.32	1.32	1.33
90	1.09	1.20	1.23	1.24	1.25	1.25	1.26	1.26	1.27	1.27
89	1.08	1.17	1.20	1.21	1.21	1.21	1.21	1.21	1.22	1.22
88	1.07	1.14	1.16	1.17	1.17	1.17	1.17	1.17	1.17	1.17
87	1.06	1.11	1.12.	1.12	1.12	1.13	1.13	1.13	1.13	1.13
86	1.05	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
85	1.03	1.05	1.05	1.05	1.05	1.04	1.04	1.04	1.04	1.04
84	1.02	1.02	1.02	1.01	1.01	1.01	1.00	1.00	1.00	1.00
83	1.00	0.99	0.98	0.97	0.97	0.96	0.96	0.96	0.96	0.96
82	0.98	0.96	0.95	0.94	0.94	0.93	0.93	0.92	0.92	0.92
81	0.96	0.93	0.92	0.91	0.90	0.90	0.89	0.89	0.89	0.88
80	0.94	0.90	0.88	0.87	0.86	0.86	0.85	0.85	0.85	0.85
79	0.92	0.87	0.85	0.84	0.83	0.83	0.82	0.82	0.82	0.81
78	0.89	0.84	0.82	0.81	0.80	0.79	0.79	0.78	0.78	0.78
77	0.87	0.81	0.79	.0.78	0.77	0.76	0.76	0.75	0.75	0.75
76	0.84	0.78	0.76	0.75	0.74	0.73	0.72	0.72	0.72	0.72
75	0.82	0.75	0.73	0.72	0.71	0.70	0.69	0.69	0.69	0.68
74	0.79	0.72	0.70	0.68	0.67	0.67	0.66	0.66	0.66	0.65
73	0.77	0.69	0.67	0.65	0.64	0.64	0.62	0.62	0.62	0.62
72	0.74	0.66	0.64	0.62	0.61	0.61	0.60	0.59	0.59	0.59
71	0.71	0.63	0.60	0.59	0.58	0.58	0.57	0.56	0.56	0.56
70	0.68	0.60	0.58	0.56	0.55	0.55	0.54	0.54	0.54	0.53
69	0.65	0.57	0.55	0.54	0.53	0.52	0.51	0.51	0.51	0.50
68	0.62	0.54	0.52	0.51	0.50	0.50	0.48	0.48	0.48	0.48
67	0.59	0.51	0.49	0.48	0.47	0.47	0.46	0.45	0.45	0.45
66	0.56	0.48	0.46	0.45	0.44	0.44	0.43	0.42	0.42	0.42
65	0.53	0.45	0.43	0.42	0.41	0.41	0.40	0.40	0.40	0.39
64	0.49	0.42	0.40	0.39	0.38	0.38	0.37	0.37	0.37	0.37
63	0.46	0.39	0.37	0.36	0.35	0.35	0.35	0.34	0.34	0.34
62	0.43	0.36	0.34	0.33	0.33	0.33	0.32	0.31	0.31	0.31
61	0.39	0.33	0.31	0.30	0.30	0.30	0.29	0.29	0.29	0.28
60	0.36	0.30	0.28	0.27	0.26	0.26	0.25	0.25	0.25	0.25
59	0.32	0.27	0.25	0.25	0.24	0.24	0.24	0.23	0.23	0.23

Table 3 Continued										
PU/PL	**n=3**	**n=4**	**n=5**	**n=6**	**n=7**	**n=8**	**n=10**	**n=12**	**n=15**	**n=20**
58	0.29	0.24	0.23	0.22	0.21	0.21	0.21	0.21	0.21	0.20
57	0.25	0.21	0.20	0.19	0.19	0.19	0.18	0.18	0.18	0.18
56	0.22	0.18	0.17	0.16	0.16	0.16	0.16	0.16	0.15	0.15
55	0.18	0.15	0.14	0.14	0.13	0.13	0.13	0.13	0.13	0.13
54	0.14	0.12	0.11	0.11	0.11	0.11	0.10	0.10	0.10	0.10
53	0.11	0.09	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
52	0.07	0.06	0.06	0.05	0.05	0.05	0.05	0.05	0.05	0.05
51	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Enter table in the appropriate “number of tests” column and round down to the nearest value.

Delete Article 2.4, and replace with the following:

2.4 RECLAIMED ASPHALT PAVEMENT (RAP) (Optional)

A. Do not adjust the asphalt binder grade if the lower end is already a PG XX-34.

B. Do not adjust the asphalt binder grade when RAP content is not more than 15 percent by total weight of the hot mix and RAP asphalt binder content is not more than 15 percent of the total asphalt binder content by weight.

C. Adjust asphalt binder grade according to AASHTO M 323 when RAP asphalt binder content is between 15 to 25 percent of the asphalt binder weight.
   1. Select one grade softer than the grade specified. Do not adjust the asphalt binder grade if the lower end is already a PG XX-34.
   2. Provide test reports indicating that the PG grade and quantity of the recovered asphalt binder is consistent throughout the stockpile.
   3. Limit RAP to 25 percent of the total weight of the hot mix and RAP binder to 25 percent of the total binder.

D. RAP aggregate is required to meet Table 5 with exception of Sand Equivalent. Refer to AASHTO T 176.

Add Article 2.6, paragraph A3 and A4:

3. Delete the first bullet of paragraph 960.04 in UDOT Materials Manual of Instruction 960.
4. Delete “SSD” from GsbSSD – fine and coarse aggregate specific gravities – AASHTO T 84 and T 85 of paragraph 960.05.02 in UDOT Materials Manual of Instruction 960.

Delete Table 8 and replace with the following:

Table 8

Volumetric Design Requirements	
HMA design mixing and compaction temperatures	Provided by the Engineer
Dust Proportion Range	0.6 – 1.40
Voids in Mineral Aggregate (VMA) at N_{Design} AASHTO R 35.9.2 using G_{sb} Dry. Equation based on percent of total mix.	12.0% - 13.0% for 1 inch 13.0% - 14.0% for ¾ inch 14.0% - 15.0% for ½ inch 15.0% - 16.0% for ⅜ inch
Hamburg Wheel Tracker UDOT Materials MOI 990	75 Design Gyrations and Greater Maximum 10 mm impression at 20,000 passes. Less than 75 Design Gyrations Maximum 10 mm impression at 10,000 passes.

September 16, 2014

SPECIAL PROVISION

PROJECT #F-0195(5)0
PIN #8114

SECTION 02742S

PROJECT SPECIFIC SURFACING REQUIREMENTS

Add Section 02742:

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Required PG Asphalt or emulsion.

B. Number of gyrations to use for Superpave Mix Design.

1.2 RELATED SECTIONS Not Used

1.3 REFERENCES Not Used

1.4 DEFINITIONS Not Used

1.5 SUBMITTALS Not Used

PART 2 PRODUCTS

2.1 MIXES

A. Hot Mix Asphalt (HMA – ½ inch):

1. PG ____64-34_____ Asphalt.
2. $N_{initial}$ ___7_____ N_{design}___75_____ N_{final}__115_____

PART 3 EXECUTION Not used

END OF SECTION

November 14, 2012

SPECIAL PROVISION

PROJECT #F-0195(5)0
PIN #8114

SECTION 02746M

HYDRATED LIME

Add the following to Article 1.6:

B. Comply with UDOT Quality Management Plan 514 Hot Mix Asphalt

Delete Article 3.1, paragraph B and replace with the following:

B. Method A: Dynamic Feed Lime Slurry
   1 Lime Slurry – One part lime and at least three parts water by weight. The amount of added water to meet the 3:1 lime slurry may be adjusted to account for the moisture in the stockpile. Use lime slurry with a minimum of one part water by weight of lime.
   2. Add at least 1 percent lime by weight of the virgin aggregate.
   3. Deliver lime slurry to the twin shaft pugmill for mixing with aggregate. The virgin aggregate/lime mixture will contain at least 3 percent water by weight of the virgin aggregate after the pugmill
   4. Adjust quantity (percent) of lime as necessary, based on results of Hamburg Wheel Tracker test.
   5. Verify that Lime Slurry equipment is operating at all times. The Engineer may require Method B, marination of the aggregate/hydrated lime mixture in the stockpile if the HMA is supplied without hydrated lime slurry treatment.

Delete Article 3.1, paragraph C4 and replace with the following:

4. Provide sufficient free moisture to thoroughly wet the aggregate and activate the lime before introducing hydrated lime.
   a. The aggregate/lime mixture will contain at least 3 percent water by weight of the virgin aggregate.

Delete Article 3.2, paragraph A and replace with the following:

A. Control, monitor, and document the lime addition process according to the requirements of the UDOT Quality Management Plan 514 Hot-Mix Asphalt.

Supplemental Specification
2012 Standard Specification Book

SECTION 02752M

PORTLAND CEMENT CONCRETE PAVEMENT

Delete Article 1.2, paragraph C – G and replace with the following:

C. Section 02742S: Project Specific Surfacing Requirements

D. Section 03055: Portland Cement Concrete

E. Section 03152: Concrete Joint Control

F. Section 03211: Reinforcing Steel and Welded Wire

Delete Article 1.3 paragraph E – G and replace with the following:

E. ASTM C 309: Liquid Membrane-Forming Compounds for Curing Concrete

F. American Concrete Institute (ACI) Standards

G. UDOT Minimum Sampling and Testing Requirements

H. UDOT Quality Management Plan

Delete Article 2.2 paragraph A and replace with the following:

A. Refer to ASTM C309, Type 2, Class A

Delete Article 3.6, paragraph A and replace with the following:

A. Refer to Section 02742S for required texture type. Provide a written texturing plan to the Engineer for approval before placing pavement. Show texturing locations and describe methods that will be used for hand texturing. Refer to Table 3.

Table 3

Pavement Texturing Options	
> 50 mph	**≤ 50 mph**
Longitudinal Tining	Longitudinal Tining
Diamond Grinding	Diamond Grinding
Transverse Tining	Transverse Tining
	Artificial Turf Drag

Delete Article 3.7, paragraph A and replace with the following:

A. Apply concrete curing compound to the entire pavement surface and exposed edges immediately after completing finishing operations.
   1. Apply the concrete curing compound in two approximately equal applications.
   2. Apply the second application in the opposite longitudinal direction as the first at a combined application rate equal to 100 ft^2/gal.
   3. Allow at least 30 minutes between applications.
   4. Hand spray small and irregular areas and areas inaccessible to mechanical spraying equipment.

B. Stop the paving operations if the concrete curing compound application behind the paving machine is delayed until the problem is resolved.
   1. Use fogging to keep the pavement moist until the concrete curing compound application resumes.
      a. Use fogging equipment with compressed air misters that atomize the water and produce a very fine mist and not a spray.
      b. Use equipment that allows for adjusting the rate of fogging depending on the conditions that are present.
      c. Maintain misters at least 5 ft above the concrete surface and aimed in a direction not lower than horizontal.
      d. Do not use fogging to apply excess water to the concrete surface to aid finishing.
      e. Do not affect the water/cement ratio of the concrete.
      f. Discontinue fogging when a fine coating of water or sheen is visible on the concrete surface.

2. Prevent damage to the pavement surface texture.

Delete Article 3.10, paragraph E and replace with the following:

E. Remove and replace panel with any full depth transverse crack within 4 ft or less of a transverse sawed joint.

Add Article 3.11, paragraph E:

E. Cold weather limitations in Section 03055 do not apply. Refer to this Section, Article 3.12 for cold weather limitations.

Supplemental Specification
2012 Standard Specification Book

SECTION 02768M

Pavement Marking Materials

(Warranty Specification)

Delete Article 1.5, paragraph B and replace with the following:

B. Installation Warranty
   1. Manufacturer provides a warranty bond or letter of credit to the Department's Engineer for Maintenance to cover the total installed price of the material on this project and any other projects where the manufacturer's material is installed.
   2. Submit material type, manufacturer, installation date, quantities, and project number to the Engineer for each project.
   3. Warranty bond or letter of credit covers the specified service life of the materials and begins after all pavement markings are installed and accepted.

September 16, 2014

SPECIAL PROVISION

PROJECT #F-0195(5)0
PIN #8114

SECTION 02769S

PREFORMED THERMOPLASTIC PAVEMENT MARKINGS

Add Section 02769:

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Methods and materials for installing retroreflective thermoplastic pavement marking materials suitable for use as roadway, intersection, commercial or private delineation and markings.

1.2 RELATED SECTIONS

A. Section 01554: Traffic Control

1.3 REFERENCES Not Used

1.4 DEFINITIONS Not Used

1.5 SUBMITTALS

A. Manufacturer Certification
   1. Manufacturer must be ISO 9001:2008 certified and provide proof of current certification.

B. Submit color chart with specified color samples.

1.6 PACKAGING

A. The preformed thermoplastic markings shall be placed in protective plastic film with cardboard stiffeners where necessary to prevent damage in transit. Linear material must be cut to a maximum of 3' long pieces. Legends and symbols must also be supplied in flat pieces. The cartons in which packed shall be non-returnable and shall not exceed 40" in length and 25" in width, and be labeled for ease of identification. The weight of the individual carton must not exceed seventy (70) pounds. A protective

film around the box must be applied in order to protect the material from rain or premature aging.

PART 2 PRODUCTS

2.1 HOT MELT THERMOPLASTIC PAVEMENT MARKING MATERIALS

A. The markings must be Rust Red and Brown thermoplastic products as shown on Landscape Detail Sheets (LSDTAD2-03 to LSDTAD2-05) with uniformly distributed glass beads throughout the entire cross sectional area. The markings must be resistant to the detrimental effects of motor fuels, lubricants, hydraulic fluids, antifreeze, etc. Lines, legends and symbols are capable of being affixed to bituminous and/or Portland cement concrete pavements by the use of the normal heat of a propane torch. Other colors shall be available as required.

B. Must be composed of an ester modified rosin resistant to degradation by motor fuels, lubricants etc. in conjunction with aggregates, pigments, binders and glass beads which have been factory produced as a finished product, and meets the requirements of the current edition of the Manual on Uniform Traffic Control Devices for Streets and Highways. The thermoplastic material must conform to AASHTO designation M249, with the exception of the relevant differences due to the material being supplied in a preformed state.

C. The markings must be capable of conforming to pavement contours, breaks and faults through the action of traffic at normal pavement temperatures. The markings shall have resealing characteristics, such that it is capable of fusing with itself and previously applied thermoplastic when heated with the torch.

D. The markings shall not have minimum ambient and road temperature requirements for application, storage, or handling.

2.2 GRADED GLASS BEADS

A. The material must contain a minimum of thirty percent (30%) intermixed graded glass beads by weight. The intermixed beads shall be conforming to AASHTO designation M247, with minimum 80% true spheres and minimum refractive index of 1.50.

B. The material must have factory applied coated surface beads in addition to the intermixed beads at a rate of 1 lb. (± 10%) per 10 sq. ft. These factory applied coated surface beads shall have a minimum of 90% true

spheres, minimum refractive index of 1.50, and meet the following gradation:

Size Gradation		Retained, %	Passing, %
US Mesh	µm		
12	1700	0 - 2%	98 - 100%
14	1400	0 - 3.5%	96.5 - 100%
16	1180	2 - 25%	75 - 98%
18	1000	28 - 63%	37 - 72%
20	850	63 - 72%	28 - 37%
30	600	67 - 77%	23 - 33%
50	300	89 - 95%	5 - 11%
80	200	97-100%	0 - 3%

2.3 PIGMENTS

A. White: The material shall be manufactured with sufficient titanium dioxide pigment to meet FHWA Docket No. FHWA-99-6190 Table 5 and Table 6 as revised and corrected.

B. Red, Blue, and Yellow: The material shall be manufactured with sufficient pigment to meet FHWA Docket No. FHWA-99-6190 Table 5 and Table 6 as revised and corrected. The yellow pigments must be organic and must be heavy-metal free.

C. Other Colors: The pigments must be heavy-metal free.

2.4 HEATING INDICATORS

A. The top surface of the material (same side as the factory applied surface beads) shall have regularly spaced indents. These indents shall act as a visual cue during application that the material has reached a molten state so satisfactory adhesion and proper bead embedment has been achieved and a post-application visual cue that the installation procedures have been followed.

2.5 SKID RESISTANCE

A. The surface, with properly applied and embedded surface beads, must provide a minimum resistance value of 45 BPN when tested according to ASTM E 303.

2.6 THICKNESS

A. The material must be supplied at a minimum thickness of 90 mils (2.29 mm).

2.7 VERSATILITY

A. As an option, turn arrows and combination arrows may come without surface applied glass beads, thus facilitating the use of those arrows as either left or right indicators, thereby reducing inventory requirements.

2.8 ENVIRONMENTAL RESISTANCE

A. The material must be resistant to deterioration due to exposure to sunlight, water, salt or adverse weather conditions and impervious to oil and gasoline.

2.9 RETROREFLECTIVITY

A. The material, when applied in accordance with manufacturer's guidelines, must demonstrate a uniform level of sufficient nighttime retroreflection when tested in accordance to ASTM E 1710. The applied material must have an initial minimum intensity reading of 500 $mcd \cdot m^{-2} \cdot lx^{-1}$ for white and 300 $mcd \cdot m^{-2} \cdot lx^{-1}$ for yellow as measured with an LTL-2000 or LTL-X Retroreflectometer.

Note: Initial retroreflection is affected by the amount of heat applied during installation. When ambient temperatures are such that greater amounts of heat are required for proper installation, initial retroreflection levels may be affected.

PART 3 EXECUTION

3.1 PREPARATION

A. Conduct surface preparations according to manufacturer's recommendations.

3.2 APPLICATION

A. Asphalt: The materials shall be applied using the propane torch method recommended by the manufacturer. The material must be able to be applied without minimum requirements for ambient and road temperatures and without any preheating of the pavement to a specific temperature. The material must be able to be applied without the use of a thermometer.

B. Portland Cement Concrete: The same application procedure shall be used as described under Section 3.2.A. However, a compatible primer sealer shall be applied before application to assure proper adhesion.

END OF SECTION

September 16, 2014

SPECIAL PROVISION

PROJECT #F-0195(5)0
PIN #8114

SECTION 02770S

SKID/SLIP RESISTANT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS

Add Section 02770:

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Methods and materials for installing a durable, high skid and slip resistant, thermoplastic pavement marking material suitable for use as bike lane, pathway, roadway, intersection, airport, commercial or private pavement delineation and markings. For use on asphalt or portland cement concrete pavement surfaces.

1.2 RELATED SECTIONS

A. Section 01554: Traffic Control

1.3 REFERENCES **Not Used**

1.4 DEFINITIONS **Not Used**

1.5 SUBMITTALS

A. Manufacturer Certification
   1. Manufacturer must be ISO 9001:2008 certified and provide proof of current certification.

1.6 PACKAGING

A. The preformed thermoplastic material shall be packaged in cardboard cartons. The cartons in which packed shall be non-returnable and shall not exceed 40 in. (1.02 m) in length and 25 in. (.64 m) in width. The cartons shall be labeled for ease of identification. The weight of the individual carton must not exceed fifty (50) pounds (23 kg). A protective film around the carton must be applied in order to protect the material from rain or premature aging.

PART 2 PRODUCTS

2.1 HOT MELT SKID/SLIP RESISTANT THERMOPLASTIC PAVEMENT MARKING MATERIALS

A. The material shall be a resilient preformed thermoplastic product containing a minimum thirty percent (30%) intermix of anti-skid/anti-slip elements and where the top surface contains anti-skid/anti-slip elements. These anti-skid/anti-slip elements must have a minimum hardness of 8 (Mohs scale).

B. The material shall be composed of an ester-modified rosin impervious to degradation by motor fuels, lubricants, etc., in conjunction with aggregates, pigments, binders, and anti-skid/anti-slip elements uniformly distributed throughout the material. The thermoplastic material shall conform to AASHTO designation M249, with the exception of the relevant differences due to the material being supplied in a preformed state, being non-reflective, and being of a color different from white or yellow.

C. The material shall be capable of conforming to pavement contours, breaks and faults through the action of traffic at normal pavement temperatures

D. The material shall be resistant to the detrimental effects of motor fuels, antifreeze, lubricants, hydraulic fluids, etc.

E. The material shall contain heating indicators evenly distributed on the surface that shall act as visual cues during both the application process and post-application.

F. The material shall be capable of being applied on bituminous and/or portland cement concrete pavements by the use of a handheld heat torch, infrared heater, or a blue-flame radiant heater.

G. The material shall be capable of being applied to asphalt and portland cement concrete surfaces without preheating the application surface to a specific temperature. The material shall be capable of being affixed to green concrete (concrete that has set but not appreciably hardened). The material shall not require the portland cement concrete application areas to be cured or dried out.

H. The material is typically supplied in segments measuring 2 ft. x 3 ft. (.61 m x .915 m). The material shall be capable of being applied in temperatures down to 45ºF without any special storage, preheating or treatment of the material before application.

2.2 PIGMENTS

A. The color of the pavement marking material shall be accordance with FHWA Memorandum dated April 15, 2011: Interim Approval for Optional Use of Green Colored Pavement for Bike Lanes (IA-14).

B. Daytime chromaticity coordinates for the color used for green colored pavement shall be as follows:

1		2		3		4	
x	y	x	y	x	y	x	y
0.230	0.754	0.266	0.500	0.367	0.500	0.444	0.555

C. Nighttime chromaticity coordinates for the color used for green colored pavement shall be as follows:

1		2		3		4	
x	y	x	y	x	y	x	y
0.230	0.754	0.336	0.540	0.450	0.500	0.479	0.520

D. The pigment system shall not contain heavy metals or any carcinogen, as defined in 29 CFR 1910.1200 in amounts exceeding permissible limits as specified in relevant Federal Regulations.

2.3 HEATING INDICATORS

A. The top surface of the material shall have regularly spaced indents. The closing of these indents during application shall act as a visual cue that the material has reached a molten state, allowing for satisfactory adhesion and proper embedment of the anti-skid/anti-slip elements, and a post-application visual cue that proper application procedures have been followed.

2.4 SKID RESISTANCE

A. The surface of the preformed thermoplastic material shall contain factory applied anti-skid elements with a minimum hardness of 8 (Mohs scale). Upon application the material shall provide a minimum skid resistance value of 60 BPN when tested according to ASTM E 303.

2.5 SLIP RESISTANCE

A. The surface of the preformed thermoplastic material shall contain factory applied anti-skid elements with a minimum hardness of 8 (Mohs scale). Upon application the material shall provide a minimum static coefficient of

friction of 0.6 when tested according to ASTM C 1028 (wet and dry), and a minimum static coefficient of friction of 0.6 when tested according to ASTM D 2047.

2.6 THICKNESS

A. The material shall be supplied at a minimum thickness of 90 mil (2.29 mm).

2.7 ENVIRONMENTAL RESISTANCE

A. The material shall be resistant to deterioration due to exposure to sunlight, water, salt or adverse weather conditions and impervious to oil and gasoline.

PART 3 EXECUTION

3.1 PREPARATION

A. Conduct surface preparations according to manufacturer's recommendations.

3.2 APPLICATION

A. Asphalt: The material shall be capable of being applied using the propane torch method, and, or infrared or blue flame heater recommended by the manufacturer. The material shall be capable of being applied at ambient and road temperatures down to 45ºF without any preheating of the pavement to a specific temperature. A sealer specified by the manufacturer shall be applied to the pavement surface prior to material application to ensure proper adhesion. A thermometer shall not be required during the application process. The pavement shall be clean, dry and free of debris. Supplier shall enclose application instructions with each box/package.

B. Portland Cement Concrete: The same application procedure shall be used as described under Section 3.2.A.

END OF SECTION

December 30, 2014

SPECIAL PROVISION

PROJECT #F-0195(5)0
PIN #8114

SECTION 02771S

CURBS, GUTTERS, DRIVEWAYS, PEDESTRIAN ACCESS RAMPS, AND PLOWABLE END SECTIONS

Add the following to PART 2

2.6 CORNER PEDESTRIAN RAMP, TYPE A

A. Construct corner pedestrian ramp modified as shown on detail sheet DT-1

2.7 CORNER PEDESTRIAN RAMP, TYPE B

A. Construct corner pedestrian ramp modified as shown on detail sheet DT-1

2.8 CORNER PEDESTRIAN RAMP, TYPE C

A. Construct corner pedestrian ramp modified as shown on detail sheet DT-1

2.9 CORNER PEDESTRIAN RAMP, TYPE D

A. Construct corner pedestrian ramp modified as shown on detail sheet DT-1

Add the following to Article 3.6, paragraph A:

3. Detectable warning surface will be red.

September 16, 2014

SPECIAL PROVISION

PROJECT #F-0195(5)0
PIN #8114

SECTION 02776M

CONCRETE SIDEWALK, MEDIAN FILLER, AND FLATWORK

Delete Article 1.2 and replace with the following:

1.2 RELATED SECTIONS

A. Section 02056: Embankment, Borrow, and Backfill

B. Section 02721: Untreated Base Course

C. Section 02821: Chain Link Fencing and Gates

C. Section 03055: Portland Cement Concrete

D. Section 03152: Concrete Joint Control

E. Section 03211: Reinforced Steel and Welded Wire

F. Section 03390: Concrete Curing

Add the following to Part 1:

1.5 SUBMITTALS

D. Submit color chart with specified color sample and patterns.

Add the following to Part 2:

2.1 PORTLAND CEMENT CONCRETE

C. Color: Integral coloring with Tan concrete color product. No white or natural look. No broadcasting of color on the surface of concrete. UV resistant.
   1. Color to be Tan as called out on Landscape Detail Sheet (LSDT02) or equal approved by Salt Lake County.

D. Pattern:
   1. Pattern shall be as shown on the Landscape Detail Sheet (LSDT02) and as approved by the ENGINEER.

E Sealant Compound: Liquid membrane, sealant compound used on stamped concrete paving shall be clear liquid, or clear when dry. Refer to Section 03390.

Add the following to Part 3:

3.2 PLACE AND FINISH CONCRETE

F. Add concrete base color to mix at the batch plant. Follow manufacturer's instructions.

G. Do not place concrete until sub-base course and forms have been checked for line and grade. Moisten sub-base if required to provide uniform dampened condition at time or placement.

H. Score pattern into fresh concrete in accordance with manufacturer's recommendations as shown on Landscape Detail Sheet (LSDT02).

I. Place concrete using methods which prevent segregation of mix. Consolidate concrete with external screen vibrator or other acceptable methods. Do not use mechanical vibrators.

J. Provide 5-foot test strip

Add the following to Part 3:

3.5 CONCRETE STAIRS

A. Construct per details and at locations indicated on project plans.

B. Stairs Handrail: See Section 02821.

END OF SECTION

September 16, 2014

SPECIAL PROVISION

PROJECT #F-0195(5)0
PIN #8114

SECTION 02787S

CRUSHED STONE

Add Section 02787:

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Provision and placement of crushed stone, including labor, materials, equipment, and incidentals, complete and ready for its intended use, in accordance with the plans and details and the requirements of these special provisions.

B. Provision and placement of landscape rock, including labor, materials, equipment, and incidentals, complete and ready for its intended use, in accordance with the plans and details and the requirements of these special provisions

1.2 RELATED SECTIONS Not Used

1.3 REFERENCES Not Used

1.4 DEFINITIONS Not Used

1.5 SUBMITTALS

A. Submit Crushed Stone samples from the proposed source depicting the color, shape, and size range to Engineer for approval a minimum of 14 days prior to installation.

B. Submit Landscape Rock samples from the proposed source depicting the color, shape, and size range to Engineer for approval a minimum of 14 days prior to installation.

PART 2 PRODUCTS

2.1 CRUSHED STONE

A. Provide clean, dirt free, 1-inch minimum and 4- inch maximum crushed stone.

2.2 LANDSCAPE ROCK

A. Provide clean, dirt free, rock cobble. Submit sample for approval prior to placement.

1. Type: River Cobble
2. Size Range: 6”-12”
3. Color: Browns and Tans

PART 3 EXECUTION

3.1 PLACEMENT

A. Before placing the Crushed Stone, obtain approval from Engineer of final grading.

B. Place Crushed Stone at the locations and to the depths indicated on the plan sheets.

C. Coordinate crushed stone placement with other landscape installation.

D. When placing crushed stone in stormwater storage areas, minimize any activity that may cause compaction to the subgrade. Avoid driving vehicles or equipment on subgrade after excavation.

E. Before placing the Landscape Rock, obtain approval from Engineer of final grading.

F. Place Landscape Rock at the locations and to the depths indicated on the plan sheets.

G. Coordinate Landscape Rock placement with other landscape installation.

END OF SECTION

June 13, 2014

SPECIAL PROVISION

PROJECT #F-0195(5)0
PIN #8114

SECTION 02812S

PRESSURIZED IRRIGATION SYSTEMS

Add Section 02812:

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Above ground, underground, and drip irrigation systems complete with heads, valves, controls, and accessories.

B. Install new irrigation systems in parkstrip areas, complete with heads, valves, controls, and accessories, and connect to existing front yard irrigation systems, as required within the project plans and specifications.

1.2 RELATED SECTIONS

A. Section 02231 – Site Clearing and Grubbing

B. Section 02912 – Top Soil

C. Section 02922 – Seed, Turf Seed, and Turf Sod

D. Section 02932 – Trees, Shrubs, and Groundcovers

E. Section 03055 – Portland Cement Concrete

1.3 REFERENCES

A. ASTM B 88: Copper Pipe

B. ASTM B687: Brass, Copper, and Chromium-Plated Pipe Nipples

C. ASTM D 1784: Rigid Poly (Vinyl Chloride) (PVC) Compounds and Chlorinated poly (Vinyl Chloride) (CPVC) Compounds

D. ASTM D 1785: Poly (Vinyl Chloride) PVC Plastic Pipe, Schedules 40, 80,

and 120

E. ASTM D 2464: Threaded Poly (Vinyl Chloride) (PVC) Plastic Pipe Fittings; Schedule 80

F. ASTM D 2466: Poly (Vinyl Chloride) (PVC) Plastic Pipe Fittings; Schedule 40

G. ASTM D 2672: Joints for IPS PVC Pipe Using Solvent Cement

H. ASTM F 656: Primers for Use in Solvent Cement Joints of Poly (Vinyl Chloride) (PVC) Plastic Pipe and Fittings

I. ASSE 1013, 1015: Backflow Preventers, Pressure Reducers

1.4 DEFINITIONS

A. Mainline: The system of pipes that carry water from the Point of Connection (POC) to the valves.

B. Lateral Lines: The system of pipes that carry water from the valves to the sprinkler heads or emitters.

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1.5 SUBMITTALS

A. Product Data: Manufacturer's technical data and installation instructions for all new materials.

B. Certificates of compliance to Engineer prior to installation.

C. Irrigation As-Built Drawings: Red-lined plan layout and details illustrating mainline and lateral lines location, size, and assembly. Include type and coverage of heads, type of valves, controllers, fittings and all accessories.

D. Operating and Maintenance Data for all new materials:
   1. Instructions covering full operation, care, and maintenance of system and controls and manufacturers parts catalog. Include drain procedures, blow out features for example.
   2. Instruct maintenance personnel in proper adjustment of sprinkler heads and use of special tools for adjustments.

E. Keys – Not Used

F. Deliver four (4) copies of submittals to the Engineer within 10 working days from date of Notice to Proceed. Furnish information in 3-ring binder with table of contents and index sheet. Index sections for different components and label with specification section number and name of

component. Furnish submittals for components on material list. Indicate which items are being supplied on catalog cut sheets, when multiple items are shown on one sheet. Incomplete submittals will be returned without review.

1.6 PERFORMANCE REQUIREMENTS

A. Location of sprinkler heads:
   1. Adjust head location as necessary to avoid existing plants and other obstructions.

B. Water Coverage:
   1. Each plant is to be watered by drip emitters.
   2. Trees are to be watered with (3) drip emitters that are located on the up-hill side of the rootball.
   3. Head to head coverage in turf areas (100 percent).

C. PVC Pipe: Must be stamped with certified NFS.

D. Verify and mark the location of all utilities and underground obstructions.

PART 2 PRODUCTS

2.1 PIPE AND FITTINGS

A. Mainline: Solvent welded schedule 40 PVC Purple Reclaimed water pipe through 1½ inch, then Class 200 PVC. ASTM D 1784 and ASTM D 1785.

B. Lateral line: Solvent welded schedule 40 PVC Purple Reclaimed water pipe through 1½ inch, then Class 200 PVC. Meet ASTM D 1784 and ASTM D 1785.

C. Pipe Fittings: Solvent welded schedule 40 PVC. Meet ASTM D 2466.

D. Valve Fittings: Solvent welded schedule 40 PVC. Meet ASTM D 2464.

E. Risers: Threaded schedule 80 PVC. Meet ASTM D 2464.

F. Copper Pipe: Type K as specified in ASTM B 88.

G. Copper Fittings: Wrought or cast as specified in ASTM B 687.

2.2 VALVES

A. Automatic Control Valve:

1. Body made of high-strength, non-corrosive PVC material.
2. Pressure regulating set at 20-120 psi.
3. Slow and smooth opening and closing with a manual flow control and internal bleed screw.
4. Highly efficient, totally encapsulated 24 VAC solenoid.
5. High-strength rubber or synthetic rubber diaphragm.

B. Gate Valve: Threaded brass construction, 200 psi rated (minimum) and sized according to main line.

C. Manual Drain Valve: ¾ inch bronze body, angle valve with replaceable seat disc and brass cross handle.

2.3 SPRINKLER HEADS

A. Fixed Riser
1. ½ inch x 24 inch schedule 80 riser Male Pipe Threads (MPT).
2. ½ inch shrub head adaptor Female Pipe Threads (FPT) x MPT.
3. ½ inch FPT barbed swing pipe adapter.

B. Pop-up Spray Head
1. Made of plastic and stainless steel materials.
2. Pop-up risers of 4 inch, 6 inch, and 12 inch.
3. Stainless steel retraction spring.
4. Ratcheting mechanism.
5. Side and bottom inlets on 6 inch and 12 inch heads.

2.4 PLASTIC NOZZLES

A. Fixed Spray
1. Radius patterns and gal/min as shown on plans.
2. Matched precipitation rates.
3. Stainless steel adjustment screw.
4. FPT to match ½ inch shrub head adapter.
5. Pressure regulating: Required when the psi at the sprinkler does not fall within the range recommended for its use. See manufacturer's specifications.
6. Filter screen.

B. Bubbler
1. Made of high-impact plastic.
2. Pressure compensating with adjustable flow and radius as shown on plans.
3. Half inch FPT.
4. Attach to fixed riser or pop-up spray.
5. Filter screen.

2.5 DRIP TUBING

A. Self cleaning, pressure compensating, polyethylene dripperline.

B. Dripper discharge: 0.6 gal/hr to 0.9 gal/hr and choice of 12 inch, 18 inch, or 24 inch spacing.

C. Pressure compensation range from 8 psi to 60 psi.

D. 0.63 inch (±0.01 inch) outside diameter; 0.54 inch (±0.01 inch) inside diameter.

2.6 LINE FLUSH VALVE

A. Made of high impact plastic.

B. Maximum flow rate per flush valve: 15 gal/min.

C. Automatic cleaning operation.

D. Can be disassembled allowing for winterization blow-out.

E. ½ inch MPT threads.

2.7 SWING PIPE

A. Flexible Polyethylene Pipe: Maximum flow 6.0 gal/min. Inside diameter of ½ inch (±0.01 inch) with a wall thickness of $^{3}/_{32}$ inch (±0.01 inch) and 80 psi rated.

B. Flexible Polyethylene Pipe: For flows exceeding 6 gal/min. Inside diameter of $^{15}/_{16}$ inch (±0.01 inch) with a wall thickness of $^{3}/_{32}$ inch (±0.01 inch) and 80 psi rated.

C. ½ inch Barbed Male Elbow: Plastic

D. ¾ inch Barbed Male Elbow: Plastic

E. 1 inch Barbed Male Elbow: Plastic

2.8 VALVE BOX

A. Precast concrete or plastic with adequate hand room to operate small tools and provisions for locking cover to frame.

2.9 WIRE

A. Provide wire for connecting remote control valves to the automatic controllers that is Type “UF”, 600 V, stranded or solid copper, single conductor wire with PVC insulation and bearing UL approval for direct underground burial feeder cable.
   1. Make all connections with UL approved type seal to make a waterproof connection.
   2. Bury wires in the same trench as the pipe where possible.

B. Provide wire with 0.060 inches insulation, minimum covering of ICC-100 compound for positive weatherproofing protection.
   1. Use a single conductor solid copper wire for wire sizes 14, 12, 10, and 8. Use stranded copper wire for sizes 6 and 4.
   2. Make control or “hot” wires red and all common or “ground” wires white.

2.10 WASHED AGGREGATE

A. 1½ inch maximum with 100 percent retained on a No. 4 sieve.

2.11 JOINT PRIMER AND SOLVENT CEMENT

A. Refer to ASTM F 656 and ASTM D 2672.

2.12 ACCESS SLEEVE

A. 2 inch, Schedule 40 PVC with a yellow rubber cap.

2.13 TEFLON TAPE

A. Use quality grade, domestically made 0.004 inch (± 0.001) on threaded joints.

2.14 CLASS B CONCRETE

A. Refer to Section 03055.

PART 3 EXECUTION

3.1 EXAMINATION

A. The Drawings do not show existing irrigation system components but they do indicate location areas where Pressurized Irrigation Systems are required. Verify existing irrigation systems to which the new Pressurized

Irrigation Systems will connect and determine appropriate components, as required to provide fully functional Pressurized Irrigation Systems for the parkstrip areas shown on the plans. The Contractor is also responsible to verify that existing irrigation systems to which the new Pressurized Irrigation Systems will connect are in working condition prior to construction.

B. Contractor is required to provide fully functional pressurized irrigation systems.

3.2 EXCAVATION

A. Stake pipe and sprinkler locations for approval.

B. Excavate trenches for sprinkler system pipe to provide 18 inches of cover over main lines and 9 inches over lateral lines.
   1. Do not damage roots where trenching is required in proximity to trees that are to remain.

C. Barricade trenches within the clear zone and along pedestrian routes that are left open overnight.

3.3 INSTALLATION

A. Minimize disturbance to the existing landscaping and irrigation system. Coordinate scheduling of connection to the existing irrigation system with property owner to minimize the downtime of their irrigation system.

B. General: Proceed with installation in accordance with the following:
   1. Install main line, automatic control valves, lateral lines, fittings, and heads/drip line as specified.
   2. Thoroughly flush main lines before installing automatic control valves, and laterals before installing sprinklers. .
   3. Adjust heads to be plumb and flush with finished grades, even with top of soil level or top of material level after completion of grading, seeding or sodding, and rolling of grass areas.

C. Piping: Assemble all mainline and lateral lines in accordance with manufacturer's recommendations with no cul-de-sacs.
   1. Pack the opening around the pipe with non-shrink grout at wall penetrations. Fill perimeter slot with backer rod and sealant at exterior face. Repair below grade waterproofing and make penetration watertight.
   2. Install PVC pipe in dry weather above 40 degrees F as specified by manufacturer's recommendations. Allow joints to cure a minimum of 8 hours before testing.

D. Sleeving: Coordinate sleeving installation before placing pavement.

E. Control Valves:
   1. Install at appropriate locations. Use Schedule 80 PVC pipe for nipples on valve header, length as necessary. Install valves two maximum per each standard, plastic valve box and provide 12 inches of expansion loop slack wire at all connections inside valve box.

F. Manual Drains: Install at locations indicated on plans and according to detail.

G. Air Relief Valve: Not Used.

H. Quick-Coupling Valves: Not Used.

I. Backflow Preventers: Not Used.

J. Valve Access Boxes:
   1. Install over all automatic control valves, manual control valves, or zone shutoff valves and sized to provide adequate room for maintenance.
   2. Install valve boxes flush with finish grade and place parallel or perpendicular to adjacent curbs, sidewalks, or driveways.
   3. Imprint a valve control number on each valve box cover that corresponds to the valve controller clock. Print the valve box number a minimum of one inch high in a permanent and legible manner.
   4. Place washed aggregate in sump.
   5. Install using Purple reclaimed corner lids for all boxes.

K. Wire and Electrical Work:
   1. Use electrical control and ground wire suitable for sprinkler control cable of size indicated on plans.
   2. Tape control wires to underside of pipe at 15 ft intervals.

L. Automatic Controller: Not Used.

M. Spray Heads, Fixed Risers and Bubblers:
   1. Install as required to provide 100 percent head to head coverage.
   2. Adjust sprinkler nozzles to allow for adequate coverage and minimize overspray onto walks, roads, driveways, and buildings.

3.4 TEST

A. Notify the Engineer 24 hours in advance of pressure testing the main line.

B. Hydrostatic pressure test all supply and pressure irrigation lines by maintaining full supply line water pressure for three consecutive hours before backfilling and after air pockets have been vented from the lines.

C. Test connections for leaks prior to backfilling and repair all leaks. Lateral lines may be tested in sections to expedite backfilling work.

3.5 BACKFILL OPERATION

A. Bed all pipe a minimum of 2 inches, surrounding the pipe with native material excavated from the trench and passing through a ½ inch sieve.

B. Prevent soil, rocks, or debris from entering pipes or sleeves.

C. Compact backfilled trenches thoroughly to prevent settling damage to grades or plant materials. Repair irrigation system and plants at no additional cost to Department.

3.6 PROTECTION OF EXISTING IRRIGATION SYSTEMS

A. Mark and protect any stop and waste valves that are within the limits of construction. If damaged, replace at no additional cost.

B. Cap and cut irrigation lines that will remain in operation.

C. Restore or replace all pipes, sprinkler heads, valves, connections, and other appurtenances that are damaged or removed during the construction process, with new materials of the same manufacturer or approved equal.

D. Reconfigure existing system, where necessary, due to construction impacts. Relocate heads and piping as necessary to create a fully functional and operational system that provides coverage at least equal to existing condition.

E. Restore or replace all landscaping that is disturbed by the installation or repair of irrigation systems.

F. Ensure that existing landscaping is provided adequate water for irrigation during construction.

3.7 FIELD QUALITY CONTROL

A. Notify the Engineer to schedule the inspection with the City of South Salt Lake after the Pressurized Irrigation Systems are completely installed and fully functional.

B. Make the required field adjustments and changes after the inspection.

3.8 MAINTAIN PRESSURIZED IRRIGATION SYSTEM

A. Provide temporary irrigation to properties affected by construction along the project corridor until new irrigation facilities are functional. Coordinate with property owners to maintain watering schedules.

B. Upon completion of temporary modifications to existing property sprinkler irrigation facilities, verify acceptability with the property owner.

C. Upon completion of construction activities provide written acceptance from the property owner to the Engineer.

3.7 RE-ESTABLISH EXISTING PARK STRIP PRESSURIZED IRRIGATION SYSTEM

A. Re-establish Existing Park Strip Pressurized Irrigation System shall include reconstruction of existing Irrigation system, and the extending of the irrigation system to include all areas impacted by construction that require irrigation.

B. Prior to excavation, identify all components of the existing irrigation system that will be removed/damaged during construction. This includes identifying the existing size, type, model, etc. of the heads, pipes, valves, controls, etc. Verify capacity of existing system with property owner. Coordinate existing irrigation system design with property owner.

C. Stake proposed pipe and sprinkler locations for approval by Engineer. Space sprinklers to provide head-to-head water coverage in all turf and other planting areas (100%).

D. Restore the irrigation system matching the existing material types and sizes.

E. Supply as-built drawings upon completion that depict installed locations of all pipes, wires, valves and sprinkler heads.

F. Upon completion of construction activities provide written acceptance from the property owner to the Engineer. Ensure system is connected to the existing system and works properly.

END OF SECTION

September 16, 2014

SPECIAL PROVISION

PROJECT #F-0195(5)0
PIN #8114

SECTION 02814S

RE-ESTABLISH EXISTING LANDSCAPE AND PRESSURIZED IRRIGATION SYSTEM

Add Section 02814:

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Restore and/or modify existing landscaping that is impacted by work on this project as required within the project plans and specifications.

B. Restore and/or modify existing irrigation systems that are impacted by work on this project as required within the project plans and specifications.

C. Install new irrigation systems in park strip areas, complete and working with heads, pipe, valves, controls, and accessories, and connect to existing front yard irrigation system, as required within the project plans and specifications.

D. Restore and replace sod areas disturbed by work on this project as required within the project plans and specifications.

1.2 RELATED SECTIONS

A. Section 02231 – Site Clearing and Grubbing

B. Section 02812 – Pressurized Irrigation Systems

C. Section 02912 – Topsoil

D. Section 02922 - Seed, Turf Seed, and Turf Sod

E. Section 02932 - Trees, Shrubs, and Groundcovers

1.3 REFERENCES

A. See related sections.

1.4 DEFINITIONS

A. See related sections.

1.5 SUBMITTALS

A. See related sections.

B. Product Data: Manufacturer's technical data and installation instructions for all new materials.

C. Existing Conditions Documentation: Photo documentation of existing conditions and materials to be disturbed, maintained, reestablished or modified.

D. Irrigation As-Built Drawings: Red-lined plan layout and details illustrating mainline and lateral lines location, size, and assembly. Include type and coverage of heads, type of valves, controllers, fittings and all accessories that have been re-established. Indicate on the drawings which components are new and which are salvaged.

E. Operating and Maintenance Data for all new materials:
   1. Instructions covering full operation, care, and maintenance of system and controls and manufacturers parts catalog. Include drain procedures, blow out features for example.
   2. Instruct maintenance personnel in proper adjustment of sprinkler heads and use of special tools for adjustments.

PART 2 PRODUCTS

2.1 EXISTING PRODUCTS

A. Salvage existing landscape materials for relocation. If the materials are damaged in the process of being salvaged or if the contractor is not able to relocate the material while maintaining the pre-construction condition, the material will be replaced with new material of equal color, size, form and value.
   1. Existing landscape materials include but are not limited to the following:
      a. Landscape Boulders
      b. Rock/wood mulch
      c. Topsoil
      d. Concrete Edging

e. Landscape Edging (steel and plastic)

2. Condition of all materials will be approved by the Engineer prior to relocation.
3. Plant material will be replaced “in kind” or as approved by the Engineer.
4. Salvage existing irrigation system components for relocation. If the components are damaged in the process of being salvaged or if they are not capable of providing a functional system, replace them with new components of one of the following manufacturers:
    a. Orbit Irrigation Products
    b. Toro
    c. Rain Bird

B. Do not salvage existing weed barrier.

C. Do not salvage existing pipe. All pipe material to be replaced will be new.

2.2 MATERIALS

A. Refer to the appropriate Related Section(s) for detailed material requirements.

PART 3 EXECUTION

3.1 EXAMINATION

A. The Drawings do not show existing landscape materials and/or irrigation system components but they do indicate locations where system impacts are anticipated. See detail sheet DT-43. The Contractor is responsible to verify construction impacts to the existing landscape and sod areas and\or Irrigation Systems, and determine appropriate relocation of the materials / Components as required by the plans. The Contractor is also responsible to verify that existing irrigation systems are in working condition prior to construction.

3.2 PREPARATION

A. If construction within the Right-of-Way or Temporary Construction Easement impacts existing landscape materials, sod areas, and/or an irrigation system, notify the owner that their landscaping, sod area, and/or irrigation system will be impacted and coordinate how the work will be accomplished and when the work is to begin so that the owners can be prepared for restricted access to the landscape and/or sod area and\or the irrigation system to be turned off.

1. Irrigation systems to plant materials that are to be maintained will not be interrupted for more than 3 consecutive calendars days, without prior approval from the Engineer and provision of alternate method of irrigation.
2. The contractor is required to replace, at no additional cost to the Department, any plant materials that are lost due to damage or lack of irrigation.

3.3 INSTALLATION

A. Minimize disturbance to the existing landscaping, sod, and irrigation system. Coordinate scheduling of restoration to minimize restricted access to the landscaped area and downtime of their irrigation system.

B. Landscape Materials:
1. Coordinate approval of materials to be relocated with the Engineer.
2. Remove, relocate, repair, and install all landscape materials as required to fully restore landscape area.

C. Sod Areas:
1. Use turf sod to repair and/or replace impacted sod areas. Refer to Section 02922.
2. Turf sod can be placed only after irrigation system is installed and operational.
3. Complete all final grading, irrigation work, trench settling, topsoil placement, and surface preparation before sod application.
4. Follow Turf Sod Placement requirements per Section 02922.

C. Irrigation System:
1. Excavate, relocate, repair, and install irrigation pipes, heads, valves and wires to provide a fully functional irrigation system with irrigation head spacing that provides head to head coverage and minimizes overspray onto sidewalks and roads.
2. Flag all locations where irrigation lines have been cut or broken.
3. Extend or provide new sleeving of all irrigation pipes and or wiring under all hard surfaces.
4. Test the system for leaks before backfilling.
5. Backfill and settle trenches and provide finish grading.

3.4 FIELD QUALITY CONTROL

A. Obtain approval of the final installation of all landscape materials and irrigation system components from the Engineer. Notify Engineer 14 days prior to need for final inspection.

B. Obtain a signed letter of acceptance from the property owner upon completion of the work on the landscape and/or sod area and/or irrigation system.

END OF SECTION

September 16, 2014

SPECIAL PROVISION

PROJECT #F-0195(5)0
PIN #8114

SECTION 02821S

CHAIN LINK FENCING AND GATES

Add Article 2.6:

2.6 HANDRAIL

A. Install handrail at locations shown on the plans.

B. Submit product specifications and shop drawings from the manufacturer to the Engineer for approval prior to installation.

C. Handrail rails and posts shall be made of Extruded Aluminum Pipe, ASTM B429, Aluminum alloy 6061-T6 and 6063-T3. Posts – 1 ½ inch IPS Schedule 80. Rails – 1 1/2"inch IPS Schedule 40. Intermediate Rail – 1 ½ inch IPS Schedule 40. Finish: clear anodized coating.

D. Construction shall comply with the international building codes, and meet ADA Standards.

Add the following to Part 3

3.4 TEMPORARY FENCE

A. Materials and procedures for constructing, maintaining and removing temporary fencing at locations indicated on the plans and as situations arise during construction to protect personal property.
   1. Use Chain Link Fence Type IV
      a. Provide post type suitable for setting in concrete footings, driving into ground or anchoring with base plates.
   2. Use bracing or concrete footings to provide rigidity where gates are required.
   3. Remove fence when no longer required for security or control. Backfill holes and compact.

B. Tie the existing property fences (in kind) into the installed temporary or final fencing, in order to completely enclose the side yards. Do not damage the existing side fence. Replace any damaged fenced areas at no additional expense to the Owner.

.

END OF SECTION

Supplemental Specification
2012 Standard Specification Book

SECTION 02821M

CHAIN LINK FENCING AND GATES

Delete Article 1.3, paragraph H and replace with the following:

H. ASTM F 1043: Strength and Protective Coatings on Steel Industrial Chain Link Fence Framework

I. ASTM F 1083: Pipe, Steel, Hot-Dipped Zinc-Coated (Galvanized) Welded, for Fence Structures

Delete Article 2.2, paragraph A1 and replace with the following:

1. Schedule 40, hot-dip galvanized coated pipe. Refer to ASTM F 1043 and ASTM F 1083.

September 16, 2014

SPECIAL PROVISION

PROJECT #F-0195(5)0
PIN #8114

SECTION 02824S

WOOD FENCE

Add Section 02824:

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Materials and procedures for installing wood fences and gates.

B. The generic classifications for wood fencing are rail fences (Type I), board fences (Type II), picket fences (Type III), and solid panel fences (Type IV).

1.2 RELATED SECTIONS

A. Section 03055: Portland Cement Concrete

1.3 REFERENCES

A. ASTM F537: Design, Fabrication, and Installation of Fences Constructed of Wood and Related materials

B. AASHTO M 232: Zinc Coating (Hot Dip) on Iron and Steel Hardware

C. ASTM F 1083: Pipe, Steel, Hot-Dipped Zinc-Coated (Galvanized) Welded, for Fence Structures

1.4 DEFINITIONS Not Used

1.5 SUBMITTALS

A. Shop Drawings: Layout of fence and gates with dimensions, details, and finishes of component accessories and post foundations.

B. Product Data: Manufacturer's catalogue cuts indicating material compliance and specified options.

PART 2 PRODUCTS

2.1 GENERAL

A. Class B Concrete – Refer to Section 03055.

2.2 CORNER, GATE, END, OR LINE POSTS

A. Minimum size 4-inch x 4-inch Cedar wood post.

2.3 BOTTOM AND TOP RAIL

A. Minimum size 2-inch x 4-inch x 8-foot Cedar stud.

2.4 SLATS

A. Redwood, Cedar, Combed Spruce, or other wood covering acceptable to the Engineer.

PART 3 EXECUTION

3.1 INSTALL POSTS

A. Set the Cedar posts true to line and grade in concrete bases at least two (2) feet in depth.

B. Fence posts to be sound and free from all decay, splits, multiple cracks, or any other defect which would weaken the posts or otherwise cause them to be structurally unsuitable for the purpose intended.

C. Maximum distance between posts in any section not to exceed eight (8) feet.

D. If matching existing fence, post height will match existing posts.

E. Set posts in concrete walls or masonry where required.
   1. Set posts or post sockets in concrete walls to a minimum 18 in depth.
   2. Use 0.048 inch thick galvanized metal pipe sleeve socket with an inside diameter that allows post to fit loosely.
   3. Coat the inside of the socket and the outside of the posts with bituminous paint.
   4. Use sulfur caulk or other expansive grout to fasten the post in the socket.

F. Set posts in concrete bases.
   1. Place a minimum of six (6) inches of concrete below the bottom of each post.
   2. Construct at least 12 inch diameter bases for end posts, corner posts, gate posts, and line posts.
   3. Place concrete around post is a continuous pour. Trowel finish around posts and slope to direct water away from posts.

3.2 INSTALL FENCE SLATS

A. Place fence slats on the roadway side of posts unless otherwise specified.

B. Place fence slats approximately one inch above the ground, and on a straight grade between posts by excavating high points of the ground. Filling depressions will be permitted only upon approval of the Engineer.

C. Fence slats to be sound and free from all decay or defects which would weaken or otherwise cause them to be unsuitable for fence slats.

D. Fence is to be 4’ or 6’ high to match existing.

3.3 INSTALL FENCE RAILINGS

A. Securely fasten the top and bottom railings to the posts with galvanized nails or other acceptable means.

B. Change in line of 30 degrees or more shall be considered as corners.

3.4 GATE INSTALLATION

A. Install gates plumb, level and secure for full opening without interference,

B. Attach hardware by means which will prevent unauthorized removal.

C. Adjust hardware for smooth operation.

D. Set keepers, stops, sleeves and other accessories into concrete.

END OF SECTION

September 16, 2014

SPECIAL PROVISION

PROJECT #F-0195(5)0
PIN #8114

SECTION 02826S

VINYL FENCE

Add Section 02826:

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Vinyl Fencing and accessories.

B. Relocation of Vinyl Fencing.

1.2 RELATED SECTIONS

A. Section 03055: Portland Cement Concrete

B. Section 05120: Structural Steel

1.3 SUBMITTALS

A. Shop Drawings: Layout of fence and gates with dimensions, details, and finishes of component accessories and post foundations. Submit to Engineer for approval.

B. Fencing material and type to be submitted for approval by Engineer.

PART 2 PRODUCTS

2.1 RAIL VINYL FENCE

A. Match fence type, material, and color to existing rail vinyl fence.

2.2 POST AND PANEL VINYL FENCE

A. Match fence type, material, and color to existing post and panel vinyl fence.

2.3 ACCESSORIES

A. Fence Accessories: Provide items required to complete fence system. Accessories must match existing fence accessories. Variations must be submitted to the Engineer for approval.

2.3 SETTING MATERIAL

A. Set posts in concrete bases: (see Section 03055 Portland Cement Concrete)

   a. Place concrete a minimum of 6 inches below each post.

   b. Construct at least 12 inch diameter bases for end posts, pull posts, corner posts, and gate posts. Use 9 inch diameter bases for line posts.

PART 3 EXECUTION

3.1 EXAMINATION

A. Verify areas to receive fencing are completed to final grades and elevations.

B. Ensure property lines and legal boundaries of work are clearly established.

3.2 INSTALLATION

A. Install fence in accordance with manufacturer's instructions.

B. Check each post for vertical and top alignment, and maintain in position during placement and finishing operation.

C. Align fence panels between posts. Firmly attach rail to posts per manufacturer's instructions. Ensure the panels and posts remain plumb.

D. Fence is to be 4' or 6' high to match existing. Posts are placed at 6' on center, with steel inserts at every other post and at corner and gate posts. Place line posts in 9" diameter by 36" deep concrete encasement. . Place corner and gate posts in 12" diameter by 42" deep concrete encasement.

3.3 ACCESSORIES

A. Install post caps and other accessories as required to complete the fence.

3.4 CLEANING

A. Clean up debris and unused material, and remove from site.

END OF SECTION

September 16, 2014

SPECIAL PROVISION

PROJECT #F-0195(5)0
PIN #8114

SECTION 02828S

ORNAMENTAL FENCE

Add Section 02828:

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Materials and procedures for installing ornamental fence and gate.

1.2 RELATED SECTIONS

A. Section 03055: Portland Cement Concrete.

1.3 REFERENCES

A. ASTM A 500: Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes.

B. ASTM A787: Electric-Resistance-Welded Metallic-Coated Carbon Steel Mechanical Tubing.

C. ASTM F 1083: Pipe, Steel, Hot-Dipped Zinc-Coated (Galvanized) Welded, for Fence Structures.

D. AASHTO M 111: Zinc (Hot dip Galvanized) Coatings on Iron and Steel Products.

PART 2 PRODUCTS

2.1 GENERAL

A. Class A(AE) Concrete. Refer to Section 03055.

2.2 POSTS, RAILS, PICKETS, AND MISCELLANEOUS HARDWARE

A. Fence Posts:

1. Posts shall be 2 ½” x 2 ½” x 0.120” and have a minimum yield strength of 46 ksi. ASTM A 500 Grade B.

2. Steel tube material shall have a black powder coat finish.

3. Posts shall be of sufficient height to correspond to a 4.0 foot (nominal) or a 6.0 foot (nominal) fencing system height.

B. Fence Rails:

1. Rails shall be 1 ½" x 1 ½" x 0.120" and have a minimum yield strength of 46 ksi. ASTM A 500 Grade B.

2. Steel tube material shall have a black powder coat finish.

C. Fence Pickets:

1. Pickets shall be ¾" x ¾" x 0.060" and have a minimum yield strength of 46 ksi. ASTM A 500 Grade B.

2. Steel tube material shall have a black powder coat finish.

D. Miscellaneous Hardware:

1. All miscellaneous hardware shall be supplied as indicated on the plans and shall be hot-dipped galvanized. AASHTO M 111.

PART 3 EXECUTION

3.1 INSTALLATION

A. Install ornamental fencing systems as indicated on the plans and in accordance with manufacturer's specifications.

END OF SECTION

January 23, 2015

SPECIAL PROVISION

PROJECT #F-0195(5)0
PIN #8114

SECTION 02861M

PRECAST RETAINING/NOISE WALLS

Add Article 1.5.B.3

3. Samples of the specified surface texture architectural treatments for approval before casting the Concrete Posts.
   a. Refer to the plans for the required surface texture architectural treatments.

Add Article 2.15.B.5

5. Provide the specified surface texture architectural treatment on the exposed sides of concrete posts. Remove all residue from panel surfaces.
   a. Use a concrete form liner to achieve the specified concrete texture.
   b. Provide post faces that are free of joint marks, grain, and other obvious defects. Provide corners including false joints that are uniform, straight, and sharp.

END OF SECTION

March 9, 2015

SPECIAL PROVISION

PROJECT #F-0195(5)0
PIN # 8114

SECTION 02873S

SITE FURNISHINGS

Add Section 02873:

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Leaning rails.

B. Tree grates.

1.2 RELATED SECTIONS Not Used

1.3 REFERENCES

A. ASTM Testing Standards:
1. ASTM B 117 – Standard Practice for Operating Salt Spray (Fog) Apparatus.
2. ASTM D 522 – Standard Test Methods for Mandrel Bend Test of Attached Organic Coatings.
3. ASTM D 523 – Standard Test Method for Specular Gloss.
4. ASTM D 2247 – Standard Practice for Testing Water Resistance of Coatings in 100% Relative Humidity.
5. ASTM D 2794 – Standard Test Method for Resistance of Organic Coatings to the Effects of Rapid Deformation (Impact).
6. ASTM D 3359 – Standard Test Methods for Measuring Adhesion by Tape Test.
7. ASTM D 3363 – Standard Test Method for Film Hardness by Pencil Test.
8. ASTM G 155 – Standard Practice for Operating Xenon Arc Light Apparatus for Exposure of Non-Metallic Materials.

B. ISO Testing Standards:
1. ISO 1520 – Paints and Varnishes – Cupping Test.
2. ISO 2815 – Paints and Varnishes – Buchholz Indentation Test.

C. ANSI/BIFMA Testing Standards:

1. ANSI/BIFMA X5.4-2005 – Standard Test for Lounge Seating

1.4 DEFINITIONS Not Used

1.5 SUBMITTALS

A. Product Data: Submit manufacturer's product data, storage and handling requirements and recommendations, installation methods and available colors, styles, patterns and textures.

B. Shop Drawings: Submit manufacturer's shop drawings, including plans and elevations, indicating overall dimensions.

C. Samples: Submit manufacturer's samples of materials, finishes, and colors.

D. Warranty: Manufacturer's standard warranty.

PART 2 PRODUCTS

2.1 LEANING RAIL

A. Size:
1. Depth: 7 inches
2. Overall Height: 30 inches
3. Length: 45 inches

B. Material: Extruded aluminum board is clear anodized (202-R1) and powder coated.

C. Mounting: Surface Mount

D. Color: Cosmic Blue

2.2 TREE GRATES

A. Style: Arizona Tree Grate

B. Size: 4'x6'

C. Material: Ductile Iron

D. Finish: Raw
a. Tree Grates to meet Buy America requirements.

PART 3 EXECUTION

3.1 GENERAL REQUIREMENTS

A: Site Examinations: Examine areas to receive furnishings.

1. Verify that substrates are stable and capable of supporting the weight of items covered under this section.
2. Verify that substrates have been adequately prepared to securely anchor those items that will be surface mounted.
3. Notify Engineer of conditions that would adversely affect installation or subsequent use.
4. Do not begin installation until unacceptable conditions are corrected.

3.2 INSTALLATION

A. Install rails in accordance with manufacturer's instructions at locations indicated on the Drawings.

B. Install rails on hard level surface.

3.3 ADJUSTING

A. Finish Damage: Repair minor damages to finish in accordance with manufacturer's instructions and as approved by Engineer.

B. Component Damage: Remove and replace damaged components that cannot be successfully repaired as determined by Engineer.

3.4 CLEANING

A. Clean furnishings promptly after installation in accordance with manufacturer's instructions.

B. Do not use harsh cleaning materials or methods that could damage finish.

3.5 PROTECTION

A. Protect installed furnishings to ensure that, except for normal weathering, furnishings will be without damage or deterioration at time of Substantial Completion..

END OF SECTION

Supplemental Specification
2012 Standard Specification Book

SECTION 02890M

RETROREFLECTIVE SHEETING

Delete Article 2.2, paragraph A1 and replace with the following:

1. Meet or exceed the minimum requirements of ASTM Type XI.

Delete Article 2.3, paragraph A1a and replace with the following:

a. Meet or exceed the minimum requirements of ASTM Type XI.

Delete Article 2.3, paragraph C1 and replace with the following:

1. Vertical panels, barricade Types I, II, and III, and directional indicator barricades.
   a. Meet or exceed the minimum requirements of ASTM Type XI.
   b. Use of standard orange acceptable.

Delete the text immediately following Table 3 and replace with the following:

4. Use fluorescent retroreflective sheeting for orange and yellow.

09/17/2015

SPECIAL PROVISION

F-0195(5)0
PIN 8114

SECTION 02891S

TRAFFIC SIGNS

Add the following to Part 3

3.8 FLASHING BEACON

A. Provide and install School Zone Flashing Beacons as shown on UDOT Standard Drawing SN 2A, use two (2) 12” LED Yellow Beacons per school speed limit sign, and one (1) 12” LED Yellow Beacon per Pedestrian Crossing Sign as shown on SS Sheets.

September 16, 2014

SPECIAL PROVISION

PROJECT #F-0195(5)0
PIN #8114

SECTION 02897S

SALT LAKE COUNTY MONUMENTS

Add Section 02897:

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Reference Salt Lake County:
Salt Lake County Surveyor
2001 South State Street, Suite N1500
P.O. Box 144575
Salt Lake City, Utah 84114-4575
Telephone: 385.468.8240

B. Department Surveyor:
ESI Engineering, Inc.
3500 South Main #205
Salt Lake City, Utah 84115
Telephone: 801.263.1752

1.2 RELATED SECTIONS

A. Section 03055: Portland Cement Concrete

B. Section 01892: Reconstruct Catch Basin, Cleanout, Meter, Valve, Manhole, and Monument Boxes

1.2 REFERENCES

A. Utah Code 17-23-14: Disturbed Corners – County Surveyor to be notified

B. Utah Code 17-23-17: Record Of Survey

C. Utah Code 17-23-17.5: Corner Perpetuation

D. Department procedure “2011 Design Network”

E. Salt Lake County Ordinance Chapter 14.17

1.3 DEFINITIONS Not Used

1.4 SUBMITTALS

A. The Department's Surveyor shall file Corner Perpetuation Sheets (Corner Record) of all reestablished monuments.

PART 2 PRODUCTS

2.1 SALT LAKE COUNTY MONUMENTS

A. Monument: Stamped brass monument cap, travel safe ring and lid.

2.2 CONCRETE

A. Class AA(AE) concrete per Section 03055.

PART 3 EXECUTION

3.1 SALT LAKE COUNTY MONUMENT PERMIT INFORMATION

A. The Department or its Consultant has hired ESI Engineering, Inc. (The Department's Surveyor) to survey the locations of the Salt Lake County Monuments, Right-Of-Way lines and Right-Of-Way Markers (if any).

B. In accordance with Utah State Code 17-23-14, a Monument Permit is issued by the Salt Lake County Surveyor prior to disturbing, damaging, removing, moving or covering any public survey monument. If a permit is not issued, a person may be guilty of a Class C misdemeanor and is additionally responsible for assessed penalties and fees.

C. Furthermore, Salt Lake County Ordinance Chapter 14.17 requires this permit be issued for monuments located throughout Salt Lake County. Work under a public survey monument permit shall be performed under the supervision of a licensed Utah Professional Land Surveyor (Utah PLS).

D. Penalties and additional fees shall be assessed if a permit is not issued before a monument is disturbed, damaged, removed, moved or covered.

E. A person shall apply for a permit in person or online. Obtain a permit in person using the form provided in the Salt Lake County Surveyor's Office, Recordation Division, at 2001 South State Street, N-1300, Salt Lake City, Utah, during business hours, M-F, 8:00 to 5:00 p.m. excluding legal holidays or obtain a permit online at www.surveyor.slco.org.

F. The Department's Surveyor will contact Salt Lake County Surveyors office to obtain the required permit and materials to reestablish the disturbed monuments.

G. The Department's Surveyor will survey and mark the center location of each Salt Lake County Monument and place four (4) offset straddles surrounding the surveyed center point. The offsets will be placed a minimum of three (3) feet from the center point, but may be further depending on soil and slope conditions. A nail or hub and tack will be set to mark the center point and offset straddles. The center point will be flagged using orange survey ribbon or paint. The offset straddles will be flagged using white survey ribbon or paint.

H. After staking, the Department's Surveyor shall notify the Salt Lake County Surveyor's office who will mobilize a survey crew to verify the locations of the center point and the offset straddles.

I. The Department's Surveyor will furnish the Contractor with the County brass monument cap and the travel safe ring and lid.

J. The Contractor shall construct the monument to satisfy all applicable Salt Lake County installation standards.

K. The Contractor shall NOT stamp marks on the monument cap.

L. Upon completion of construction, the Contractor shall notify the Department's Surveyor who will:
   a. Verify the control point is within UDOT or Salt Lake County accuracy standards, whichever is greatest, relative to the offset straddles.
   b. Notify the Salt Lake County Surveyor's office who will mobilize a survey crew to verify and stamp marks in the monument cap.

M. The Contractor shall be notified as to the results of the verification surveys.

N. If the Salt Lake County monuments are constructed outside of tolerance, the Contractor will reestablish and reconstruct at their own expense.

END OF SECTION

September 16, 2014

SPECIAL PROVISION

PROJECT #F-0195(5)0
PIN #8114

SECTION 02913S

LANDSCAPE RETAINING WALL

Add section 02913

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Design and construction of Landscape Retaining Walls using a wall system approved by the Engineer. Landscape retaining walls will be used as directed by the Engineer or as required by the plans. Landscape retaining walls will not exceed an exposed wall height of 3.5 feet. Installation of landscape retaining walls must be located behind curb and gutter and associated sidewalk.

B. The approved landscape retaining wall system will use concrete modular block units for the wall face and geogrid reinforcing elements as required.

C. Provide and install concrete modular block units to the lines and grades designated on the approved plans or as directed by the Engineer. Includes provision and installation of the base leveling pad, geogrid (as applicable), free draining fill, select backfill, and all incidental materials required by the approved wall system manufacturer's specifications and construction manual.

1.2 RELATED SECTIONS

A. Section 03055: Portland Cement Concrete

1.3 REFERENCES

A. "NCMA Design Manual for Segmental Retaining Walls," Second Edition.

B. ASTM C 1372 - Standard Specification for Segmental Retaining Wall Units.

1.4 DEFINITIONS

A. Concrete Modular Block Units: Dry-stacked masonry units used as the retaining wall fascia.

B. Select Backfill: Soil that is used as fill behind the concrete modular block unit, and within the reinforced soil mass (if applicable).

C. Free Draining fill: Material used (if applicable) within, between, and directly behind the concrete retaining wall units.

D. Geotextile Filter Fabric: Material used for separation and filtration of dissimilar soil types.

E. Foundation Soil: Existing soil mass supporting the base leveling pad and select backfill of the landscape retaining wall system.

F. Geogrid: Polymeric material designed specifically to reinforce the soil mass.

1.5 SUBMITTALS

A. The contractor will provide a System Specific Submittal Package (SSSP) to the Engineer for approval prior to installation of any landscape retaining wall.

1. SSSP will include the following:
    a. Product Data
        1) Material description and installation instructions for each manufactured product specified including concrete modular block, geogrid and fill materials.

        2) Supplier's certification stating that the proposed units are manufactured in complete compliance with approved wall system manufacturer's specifications and Section 2.1 of this specification.
    b. Samples
        1) Submit for approval at least 3 color alternative samples of proposed segmental concrete unit colors, matched to colors of local features, as otherwise indicated on the plans or as directed by the Engineer.

2) Submit one unit demonstrating the color, face pattern, and texture of the proposed concrete modular block unit as requested by the Engineer.

3) Submit 10-inch square or larger piece of the geogrid meeting the approved wall system manufacturer's specifications.

c. Final Design Drawings

1) Submit Four (4) sets of final design drawings for approval, include wall elevation views, geosynthetic reinforcement layout, pertinent details, and drainage provisions.

B. The Engineer will complete a review of the SSSP and provide the Contractor with written notification indicating the approval/rejection of the proposed wall system(s) within 15 working days, following receipt of the SSSP by the Engineer. Rejection notifications will provide comment/justification as to why the proposed wall system was rejected.

C. Do not initiate construction of any landscape retaining wall until the System Specific Submittal Package and Final Design Drawings have been reviewed and approved by the Engineer.

1. Review and approval of the drawings does not relieve the Contractor of any responsibility under the contract for the successful completion of the work.

1.6 DELIVERY STORAGE AND HANDLING

A. Deliver, store, and handle materials in accordance with manufacturer's recommendations, in such a manner as to prevent damage. Remove damaged or otherwise unsuitable material from the site.

B. Prevent mud, wet cement, adhesives and similar materials that may harm appearance of units, from coming in contact with system components.

1.7 WARRANTY

A. Supplier will warrant all materials for a period of one year against defect, shrinkage or deterioration.

B. Contractor will warrant all installation and workmanship for a period of one year following final acceptance of landscape retaining wall construction.

PART 2 PRODUCTS

2.1 GENERAL

A. All products will be in accordance with this specification and the approved wall system manufacturer's specifications.
   1. Notify the Engineer when UDOT and the selected wall system manufacturer's product specifications/requirements differ. The Engineer will determine the product to be used.
   2. Do not use any product that does not meet both UDOT and the selected wall system manufacturer's product specifications/requirements without approval from the Engineer.

2.2 CONCRETE MODULAR BLOCK UNITS

A. Provide machine formed. Portland cement concrete blocks specifically design for Segmental Retaining Wall applications. Concrete modular block units are to be purchased directly from a Manufacturer Certified distributor. Provide certification that the block conforms to the requirements and specifications of the approved wall system manufacturer.
   1. Verify the compatibility of all components and the environment in which the block will be used, including sulfate soils and/or groundwater.

B. Concrete modular block units will have minimum 28 day compressive strength of 3000 psi in accordance with ASTM C1372. The concrete units will have adequate freeze-thaw protection in accordance with ASTM C1372 or an average absorption rate of 7.5 lb/ft^3.

C. Finish and Appearance
   1. All units will be sound and free from cracks or other defects that would interfere with the proper placement of the unit or impair the strength or permanence of the construction.
   2. Minor cracks incidental to the usual method of manufacture or minor chipping resulting from shipment and delivery are not grounds for rejection.

3. The face or faces of units that are to be exposed will be free of chips, cracks or other imperfections when viewed from a distance of 20 feet.
4. Provide block that is uniform in color or as approved by the Engineer.

D. Acceptance
1. Units will be rejected for not meeting any of the requirements specified above. In addition, any of the following defects will be cause for rejection:
   a. Defects that indicate imperfect molding;
   b. Defects indicating honeycomb or open-texture concrete.
   c. Cracked or severely chipped units.
   d. Color variation on exposed face(s) of unit due to excess form oil or other reasons.

2.3 BASE LEVELING PAD

A. Material for base leveling pad will consist of compacted sand, gravel, or combination thereof and will be a minimum of 6 inches in depth. Extend the leveling pad laterally for a distance of at least 6 inches from the toe and heel of the lowermost concrete modular block unit.
1. All base leveling pad materials will conform to or exceed the requirements of the approved wall system manufacturer's specifications.

B. A base leveling pad consisting of cast-in-place concrete may be used as approved by the Engineer.
1. Use Class A or B concrete as per Section 03055.

2.4 FREE DRAINING FILL

A. Use free draining fill, consisting of crushed stone.
1. Free draining fill will conform to all requirements of the approved wall system manufacturer's specifications.
2. In general, free draining fill will be clean, well graded, compactable crushed stone, predominantly 3/8 to 3/4-inch, with no more than 5 percent passing the No 200 sieve

B. Geotextile will not be accepted as a substitute for free draining fill.

2.5 GEOGRID

A. Geogrid will conform to all requirements of the approved wall system manufacturer's specifications.

2.6 FIBERGLASS PINS

A. Provide fiberglass connecting pins as required.
   1. All fiberglass pins will be as manufactured and supplied by the approved wall system manufacturer.

2.7 GEOTEXTILE FILTER FABRIC

A. Geotextile filter fabric will conform to all requirements of the approved wall system manufacturer's specifications.

2.8 WALL CAP ADHESIVE

A. Use a medium-viscosity synthetic elastomeric polymer adhesive, meeting the requirements of the approved wall system manufacturer's specifications or an Engineer-approved equivalent.

2.9 PERFORATED HDPE WALL DRAIN

A. Use an 4" perforated HDPE wall drain wrapped in filter fabric as shown in the plans.

PART 3 EXECUTION

3.1 GENERAL

A. Construct all landscape retaining walls in accordance with the Contractor provided final design drawings, this specification, and the approved wall system manufacturer's recommendations, construction manual, details and specifications.
   1. Where these specifications and the selected wall system manufacturer's specifications/requirements differ, the stricter of the two will be applied.

B. The Contractor will have demonstrated experience with landscape retaining wall design and construction and be qualified to direct all landscape retaining wall construction at the site. The wall construction supervisor will be directly involved with and provide technical assistance during all phases of construction of the wall(s).

1. The wall construction supervisor is responsible for training the wall construction crew(s) and UDOT inspectors in proper quality control for construction of the walls.

3.2 EXCAVATION

A. Perform excavation (including removal of unsuitable soils) in accordance with the approved project specification and the approved wall system manufacturer's recommendations, construction manual, details and specifications.

3.3 FOUNDATION PREPARATION

A. Prepare foundation soil in accordance with the approved wall system manufacturer's recommendations, construction manual, details and specifications.

B. Foundation soil will be examined by the Engineer to ensure that the actual foundation soil strength meets or exceeds assumed design strength. Soil not meeting the required strength will be removed and replaced with acceptable material.

3.4 BASE LEVELING PAD

A. Prepare the foundation soils and/or base leveling pad material so as to construct the leveling pad to the design elevations shown on the drawings and to ensure complete contact of the concrete modular block units with the base leveling pad.

B. Construct base leveling pad in accordance with the approved wall system manufacturer's recommendations, construction manual, details and specifications.

3.5 CONCRETE MODULAR BLOCK UNIT INSTALLATION

A. Install all concrete modular block in accordance with the approved wall system manufacturer's recommendations, construction manual, details and specifications and as directed by the Engineer.

B. As approved by the Engineer, where the wall changes elevation, the units can be stepped with grade or turned into the embankment with a convex return end. Provide appropriate buried units on the compacted leveling pad in the area of the convex return end.

C. All tolerances (horizontal, vertical, joint offset/width etc.) to conform to the approved wall system manufacturer's recommendations, construction manual, details and specifications.

3.6 GEOTEXTILE FILTER FABRIC

A. Install geotextile filter fabric in accordance with the approved wall system and the geotextile manufacture's recommendations, construction manual, details and specifications.

3.7 GEOGRID INSTALLATION

A. Install geogrid, as required, according to the approved wall system and geogrid manufacturer's recommendations, construction manual, details and specifications.

3.5 WALL CAP INSTALLATION

A. Provide a permanent connection between the wall cap and the top course of the wall units using wall cap adhesive as described in article 2.8. Construct according to the approved wall system manufacturer's specifications.

3.6 PERFORATED HDPE WALL DRAIN

A. Install 4" perforated HDPE to drain at a 0.5% minimum grade to the lower back face of the wall as shown on the plans.

B. Embed drain in a 1' minimum thickness of free draining granular backfill and daylight near embankment toe.

C. Provide prefabricated mitered end section with animal guard to

prevent rodents from entering drain.

3.7 WARRANTY

A. Provide Supplier and Contractor warranties to the Engineer within 5 working days following the final acceptance of any landscape retaining wall.

END OF SECTION

September 16, 2014

SPECIAL PROVISION

PROJECT #F-0195(5)0
PIN #8114

SECTION 02914S

LANDSCAPE BOULDER

Add Section 02914:

PART 1 GENERAL

1.1 SECTION INCLUDES:

A. The work under this item consists of providing landscape boulders to be used in rock-faced slopes for berm embankments, including all labor, materials, equipment and incidentals, necessary to furnish the landscape boulders, in accordance with the plans and details.

1.2 RELATED SECTIONS

A. Section 02378S: Rock-Faced Slopes

PART 2 PRODUCTS

2.1 LANDSCAPE BOULDERS

A. Provide surface-select boulders that are naturally weathered and rounded in character without abrupt edges.

B. Provide boulders in the following color range; gray, gray-brown, gray-maroon or tan. Boulders with orange or yellow tints will not be accepted.

C. Submit photos of sample boulders to Engineer for approval.

D. Supply boulders based upon the following percentages:

Boulder Size Range (Smallest Dimension)	Percentage of Total Boulders Supplied
12 – 18 inches	40
18 – 24 inches	40
>24 inches	20

PART 3 EXECUTION

3.1 BOULDER PLACEMENT

A. Before placing boulders, stake their proposed locations for Engineer approval.

B. When handling boulders, take necessary measures to minimize scaring or chipping. Excessively scarred or broken boulders will be rejected.

C. Place boulders in a natural appearing manner by burying the bottom 1/3 of the boulder and setting the flattest surface in the ground.

D. Adjust boulder locations in the field as directed by the Engineer.

END OF SECTION

February 28, 2013

SPECIAL PROVISION

PROJECT #F-0195(5)0
PIN #8114

SECTION 02924S

INVASIVE WEED CONTROL

Add Section 02924:

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Controlling the introduction and spread of noxious weeds on construction projects.

1.2 RELATED SECTIONS Not Used

1.3 REFERENCES

A. Utah Noxious Weed Control Act

1.4 DEFINITIONS

A. Noxious weeds subject to control are listed on the Utah State Noxious Weed List and the county's weed list that applies based on the project location.

B. Refer to the Section, article 3.3 for a list of the Utah State Noxious Weeds (Table 1) and the county lists (Table 2) for additional noxious weeds.

1.5 SUBMITTALS Not Used

1.6 PAYMENT PROCEDURES

A. Include payment for cleaning earth-moving construction equipment under mobilization.

B. Pay for the control of invasive weeds using pre-emergent, selective, and non-selective herbicides by the unit area.

1.7 QUALITY ASSURANCE

A. Regulatory Requirements:
   1. Follow all regulatory, application, and safety precautions listed by the herbicide manufacturer. Refer to Utah Noxious Weed Control Act: Utah Code - Title 04 - Chapter 17.
   2. Apply herbicides using only state licensed pesticide applicators.

1.8 SEQUENCING

A. Clean all earth-moving equipment before bringing them on the project.

B. Treat existing noxious weeds 10 days before starting earthwork operations.

PART 2 PRODUCTS

2.1 HERBICIDE

A. Refer to this Section, article 3.3 for a list of noxious weeds subject to control and the recommended herbicide for each species.

B. Use commercially available herbicides specified to control the weed species identified.

PART 3 EXECUTION

3.1 PREPARATION

A. Use high-pressure water blasting or steam cleaning methods to clean all earth-moving construction equipment (scrapers, bulldozers, excavators, backhoes, trenchers) of dirt, mud, and seed residue before initially entering the project.

3.2 EXAMINATION

A. Verify and locate all noxious weeds on the project. Contact the county weed control supervisor or the Department's region landscape architect if assistance is needed for identification.

3.3 CONTROLLING INVASIVE WEEDS

A. Spray invasive weeds located within the project limits before starting earth disturbing activities and if they appear during construction. Use pre-emergent, selective, and non-selective herbicides as appropriate (See Noxious Weed Tables 1 and 2 below). Apply herbicide as directed on the manufacturer's label.

B. Noxious Weed Tables:

Table 1

Utah State Noxious Weeds		
Common Name	**Scientific Name**	**Herbicide**
Bermudagrass*	*Cynodon dactylon*	Glyphosate
Black henbane	*Hyoscyamus niger*	Tordon (picloram) & Escort
Canada thistle	*Cirsium arvense*	2,4-D, Dicamba, Picloram
Dalmation toadflax	*Linaria genistifolia*	Tordon (picloram)
Diffuse knapweed	*Centaurea diffusa*	2,4-D+Dicamba or Picloram or Clopyralid
Dyer's woad	*Isatis tinctoria*	2,4-D+Dicamba or Chlorsulfuron
Field bindweed	*Convolvulus arvensis*	Dicamba+2,4-d or Picloram
Hoary cress, (whitetop)	*Cardaria draba*	2,4-D+Dicamba or Chlorsulfuron
Houndstounge	*Cynoglossum officinale*	Tordon (picloram)
Johnsongrass	*Sorghum halepense*	Glyphosate
Leafy Spurge	*Euphorbia esula*	Dicamba or Picloram
Medusahead	*Taeniatherum caput-medusae*	Glyphosate
Musk thistle	*Carduus nutans*	2,4-D amine, Metsulfuron or Picloram
Ox-eye daisy	*Chrysanthemum leucanthemum*	Tordon (picloram) & clopyralid
Perennial pepperweed	*Lepidium latifolium*	Metsulfuron or Chlorsulfuron
Perennial sorghum	*Sorghum halepense*	Glyphosate
Poison hemlock	*Conium maculatum*	Tordon (picloram)
Purple loosestrife	*Lythrum salicaria*	Glyphosate (Rodeo aquatic label)

Quackgrass	*Elytrigia repens*	Glyphosate
Russian knapweed	*Centaurea repens*	Picloram, Clopyralid or Chlorsulfuron
Saltcedar	*Tamarix ramosissima*	Habitat or Arsenal
Scotch thistle	*Onopordum acanthium*	2,4-D amine, Metsulfuron or Picloram
Spotted knapweed	*Centaurea maculosa*	2,4-D+Dicamba, Picloram or Clopyralid
Squarrose knapweed	*Centaurea virgata*	Picloram
St. Johnswort	*Hypercium perforatum*	Tordon (picloram) & Escort
Sulfur cinquefoil	*Potentilla recta*	Tordon (picloram)
Yellow star-thistle	*Centaurea solstitialis*	Picloram or Clopyralid
Yellow toadflax	*Linaria vulgaris*	Tordon (picloram)
*Do not consider Bermudagrass a noxious weed in Washington County		

Table 2

County Noxious Weeds		
Common Name	**Scientific Name**	**Herbicide**
Beaver County		
Bull thistle	*Cirsium vulgare*	2,4-D amine or Dicamba
Box Elder		
Catchweed	*Asperugo procumbens*	2,4-D amine or Dicamba
Cache County		
Goatsrue	*Galega officinalis*	2,4-D+Dicamba
Puncturevine	*Tribulus terrestris*	2,4-D+Dicamba
Carbon County		
Russian olive	*Elaeagnus angustifolia*	2,4-D, Dicamba, or Glyphosate
Davis County		
Buffalobur	*Solanum rostratum*	2,4-D or Dicamba
Yellow nutsedge	*Cyperus esculentus*	Glyphosate
Duchesne County		
Russian olive	*Elaeagnus angustifolia*	2,4-D, Dicamba, or Glyphosate
Water hemlock	*Cicuta maculata*	2,4-D amine or Dicamba

Grand County		
Russian olive	*Elaeagnus angustifolia*	2,4-D, Dicamba, or Glyphosate
Iron County		
Western whorled milkweed	*Asclepias subverticillata*	2,4-D or Dicamba
Bull thistle	*Cirsium vulgare*	2,4-D amine or Dicamba
Punctureveine	*Tribulus terrestris*	2,4-D+Dicamba
Juab County		
Blue lettuce	*Lactuca pulchella*	2,4-D amine, Arsenal or Metsulfuron
Morgan County		
Common burdock	*Arctium minus*	2,4-D+Dicamba
Salt Lake County		
Garlic mustard	*Alliaria petiolata*	Glyphosate
Myrtle spurge	*Euphorbia myrsinities*	Glyphosate or Dicamba
San Juan County		
Camelthorn	*Alhagi pseudalhagi*	Arsenal
Russian olive	*Elaeagnus angustifolia*	2,4-D, Dicamba, or Glyphosate
Buffalobur	*Solanum rostratum*	2,4-D or Dicamba
Western whorled milkweed	*Asclepias subverticillata*	2,4-D or Dicamba
Sevier County		
Russian olive	*Elaeagnus angustifolia*	2,4-D, Dicamba, or Glyphosate
Summit County		
Common Burdock	*Arctium minus*	2,4-D+Dicamba
Vipers bugloss	*Anchusa officinalis*	2,4-D amine or Dicamba
Tooele County		
Jointed goatgrass	*Aegilops cylindrica*	Glyphosate
Uintah County		
Russian olive	*Elaeagnus angustifolia*	2,4-D, Dicamba, or Glyphosate
Utah County		
Common reed	Phragmites australis	
Washington County		
Western whorled milkweed	*Asclepias subverticillata*	2,4-D, or Dicamba
Silverleaf nightshade	*Solanum elaeagnifolium*	2,4-D or Dicamba

Wayne County		
Russian olive	*Elaeagnus angustifolia*	2,4-D, Dicamba, or Glyphosate
Bull thistle	*Cirsium vulgare*	2,4-D amine or Dicamba
Weber County		
Puncturevine	*Tribulus terrestris*	2,4-D+Dicamba
Use rates: Use rates for herbicides vary, follow the use rate on the LABEL for each herbicide		

END OF SECTION

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SECTION 03055M

PORTLAND CEMENT CONCRETE

Delete Article 2.1, Table 2, note ** and replace with the following:

** For *f* 'c over 4,000 psi, design and proportion mixes according to ACI Manual of Concrete Practice 301: Specifications for Concrete and project specific criteria. Use Table 2 Class AA(AE) Air Content Percentages according to coarse aggregate size for these mixes.

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SECTION 03211M

REINFORCING STEEL AND WELDED WIRE

Delete Article 1.3 and replace with the following:

1.3 REFERENCES

A. AASHTO M 31: Deformed and Plain Carbon-Steel Bars for Concrete Reinforcement

B. AASHTO M 55: Steel Welded Wire Reinforcement, Plain, for Concrete

C. AASHTO M 111: Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products

D. AASHTO M 235: Epoxy Resin Adhesives

E. AASHTO T 106: Compressive Strength of Hydraulic Cement Mortar (Using 50-mm or 2-in Cube Specimens)

F. ASTM A 108: Steel Bar, Carbon and Alloy, Cold-Finished

G. ASTM A 493: Stainless Steel Wire and Wire Rods for Cold Heading and Cold Forging

H. ASTM A 706: Low-Alloy Steel Deformed and Plain Bars for Concrete Reinforcement

I. ASTM A 767: Zinc-Coated (Galvanized) Steel Bars for Concrete Reinforcement

J. ASTM A 775: Epoxy-Coated Steel Reinforcing Bars

K. ASTM A 955: Deformed and Plain Stainless-Steel Bars for Concrete Reinforcement

L. ASTM A 970: Headed Steel Bars for Concrete Reinforcement

M. ASTM E 1512: Testing Bond Performance of Bonded Anchors

N. American Welding Society (AWS) Standards

O. Concrete Reinforcing Steel Institute (CRSI) Manual of Standard Practice

P. UDOT Quality Management Plans (QMP)

Add the following to Article 2.1:

C. Refer to ASTM A 955, Type XM-28, Grade 60 for deformed or plain stainless steel bars.

Delete Article 2.2, paragraph A and replace with the following:

A. Refer to ASTM A 775 or AASHTO M 111.

Delete Article 2.7, paragraph B and replace with the following:

B. Provide epoxy coated, painted, or plain basket assemblies with a U-shaped leg for the assembly frame and a minimum 0.3 inch diameter wire with sufficient structure to maintain the proper location and alignment of dowels during concrete pavement placement as approved by the Engineer.

Add the following to Article 2.7:

D. Provide bar supports and wire ties for use with stainless steel bars that meet the following:
   1. Meet the requirements of Table 2.
   2. Provide bar supports that are plastic coated, epoxy coated, plastic, or stainless steel conforming to the requirements of ASTM A 493, Type 316.
   3. Provide wire ties that are plastic coated, plastic, or stainless steel conforming to the requirements of ASTM A 493, Type 316, annealed.
   4. Provide tie-down wires that are plastic coated or stainless steel conforming to the requirements of ASTM A 493, Type 316, annealed.

Add the following to Article 2.8:

D. Use stainless steel splice coupler with stainless steel reinforcement.

Delete Article 3.1, paragraph B.1.a and replace with the following:

a. Meet requirements of ASTM A 775 Appendix A.2 for repair material.

Add the following to Article 3.1:

E. Ship, handle, and store stainless reinforcing steel so it does not come in contact with carbon steel.
   1. Cover stainless reinforcing steel with tarps during outdoor storage.
   2. Separate bundles of stainless reinforcing steel from other types of reinforcing steel with wooden spacers.
   3. Store stainless reinforcing steel on wooden supports off the ground or floor.

Add the following to Article 3.2:

O. Place stainless steel reinforcement so that it does not come in contact with carbon steel.
   1. Do not tie stainless steel to uncoated or coated carbon steel reinforcement, galvanized attachments, or galvanized conduits.
      a. Direct contact is not acceptable.
      b. Use nylon or polyethylene spacers to maintain a minimum 1 inch clearance between the two metals and bind them with nylon cable ties when stainless reinforcing steel or dowels must be near coated or uncoated carbon steel reinforcing or galvanized metals,.
      c. Either bar may be sleeved with a continuous ⅛ inch minimum thickness polyethylene or nylon tube extending at least 1 inch in each direction past the point of closest contact between the two dissimilar bars where insufficient space exists to maintain this minimum.
   2. Use only epoxy coated or non-metallic snap ties, straps, or other forming hardware in members that use stainless steel reinforcement to prevent corrosion from dissimilar metals.

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SECTION 06055M

TIMBER AND TIMBER TREATMENT

Delete Article 1.3 and replace with the following:

1.3 REFERENCES

A. AASHTO M 133: Preservatives and Pressure Treatment Processes for Timber

B. AASHTO M 168: Wood Products

C. AASHTO LRFD Bridge Requirements

D. Southern Pine Inspection Bureau (SPIB) Standard Grading Rules

E. Western Wood Products Association (WWPA) Standard Grading Rules

Delete Article 2.3 and replace with the following:

2.3 TREATMENT

A. Meet requirements of AASHTO LRFD Bridge Requirements.

B. Meet requirements of AASHTO M 133.