

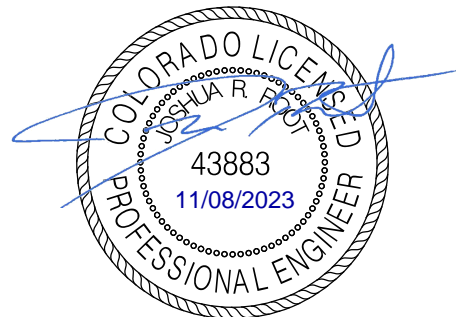
**EAGLE COUNTY  
PUBLIC WORKS**

**PROJECT SPECIAL PROVISIONS**

**US 6/HILLCREST DRIVE ROUNDABOUT PROJECT**



**For Roadway Design**



**For Drainage Design**



**For Lighting Design**



**For Utility Coordination**

## STANDARD CONSTRUCTION DETAILS AND SPECIFICATIONS

The Standard Specifications for Construction used for this Project shall be the Colorado Department of Transportation “Standard Specifications for Road and Bridge Construction,” adopted in 2023 and as hereinafter modified.

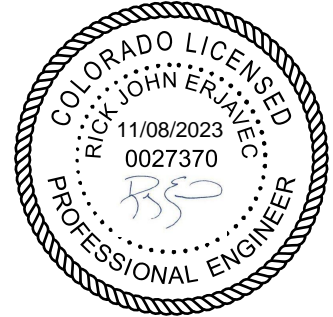
### PROJECT SPECIAL PROVISIONS

| <u>Section</u>                                                                                                     | <u>Date</u>   | <u>Page</u> |
|--------------------------------------------------------------------------------------------------------------------|---------------|-------------|
| Index Pages                                                                                                        | (Nov 1, 2023) | PSP-1-3     |
| Notice to Bidders                                                                                                  | (Nov 1, 2023) | PSP-4       |
| Commencement and Completion of Work                                                                                | (Nov 1, 2023) | PSP-5       |
| Revision of Section 101 – Definitions and Terms                                                                    | (Nov 1, 2023) | PSP-6       |
| Revision of Section 104 – Scope of Work                                                                            | (Nov 1, 2023) | PSP-7       |
| Revision of Section 106 – Conformity to the Contract of Hot Mix Asphalt                                            | (Nov 1, 2023) | PSP-8       |
| Revision of Section 107 – Legal Relations and Responsibility to Public                                             | (Nov 1, 2023) | PSP-9       |
| Revision of Section 107 – Protection and Restoration of<br>Property and Landscaping                                | (Nov 1, 2023) | PSP-10      |
| Revision of Section 108 – Prosecution and Progress                                                                 | (Nov 1, 2023) | PSP-11      |
| Revision of Section 109 – Measurement and Payment                                                                  | (Nov 1, 2023) | PSP-12      |
| Revision of Section 201 – Clearing and Grubbing                                                                    | (Nov 1, 2023) | PSP-13      |
| Revision of Section 202 – Removal of Asphalt Mat (Planing)                                                         | (Nov 1, 2023) | PSP-14      |
| Revision of Section 202 – Removal of Structures and Obstructions                                                   | (Nov 1, 2023) | PSP-15      |
| Revision of Section 202 – Removal of Lighting                                                                      | (Nov 1, 2023) | PSP-16      |
| Revision of Section 202 – Clean Valve Box                                                                          | (Nov 1, 2023) | PSP-17      |
| Revision of Section 203 – Excavation and Embankment                                                                | (Nov 1, 2023) | PSP-18      |
| Revision of Section 206 – Excavation and Backfill For Structures                                                   | (Nov 1, 2023) | PSP-19      |
| Revision of Section 210 – Valve Box and Manhole Adjustments                                                        | (Nov 1, 2023) | PSP-20-21   |
| Revision of Section 214 – Planting                                                                                 | (Nov 1, 2023) | PSP-22-23   |
| Revision of Section 216 – Soil Retention Covering                                                                  | (Nov 1, 2023) | PSP-24      |
| Revision of Section 217 – Herbicide Treatment                                                                      | (Nov 1, 2023) | PSP-25-26   |
| Revision of Section 240 – Protection of Migratory Birds Biological Work<br>Performed by the Contractor's Biologist | (Nov 1, 2023) | PSP-27-29   |
| Revision of Section 304 – Aggregate Base Course                                                                    | (Nov 1, 2023) | PSP-30      |
| Revision of Section 403 – Hot Mix Asphalt                                                                          | (Nov 1, 2023) | PSP-31-33   |
| Revision of Section 403 – Hot Mix Asphalt Ticket Collection                                                        | (Nov 1, 2023) | PSP-34      |
| Revision of Section 412 – Concrete Pavement                                                                        | (Nov 1, 2023) | PSP-35      |
| Revision of Section 603 – Culverts and Sewers                                                                      | (Nov 1, 2023) | PSP-36      |
| Revision of Section 604 – Inlets                                                                                   | (Nov 1, 2023) | PSP-37      |
| Revision of Section 604 – Manholes                                                                                 | (Nov 1, 2023) | PSP-38-39   |
| Revision of Section 609 – Curb and Gutter                                                                          | (Nov 1, 2023) | PSP-40      |
| Revision of Section 610 – Median Cover Material                                                                    | (Nov 1, 2023) | PSP-41      |
| Revision of Section 613 – Lighting                                                                                 | (Nov 1, 2023) | PSP-42-43   |
| Revision of Section 619 – Water Lines                                                                              | (Nov 1, 2023) | PSP-44      |
| Revision of Section 620 – Hot Mix Asphalt Testing, Ignition Furnace                                                | (Nov 1, 2023) | PSP-45      |
| Revision of Section 621 – Detour Pavement                                                                          | (Nov 1, 2023) | PSP-46      |
| Revision of Section 630 – Portable Message Sign Panel                                                              | (Nov 1, 2023) | PSP-47-48   |
| Revision of Section 630 – Traffic Control Management                                                               | (Nov 1, 2023) | PSP-49      |
| Revision of Section 703 – Aggregates                                                                               | (Nov 1, 2023) | PSP-50      |
| Revision of Section 703 – Concrete Curing Materials and Admixtures                                                 | (Nov 1, 2023) | PSP-51      |
| Revision of Section 715 – Lighting and Electrical Materials                                                        | (Nov 1, 2023) | PSP-52-53   |
| Force Account Items                                                                                                | (Nov 1, 2023) | PSP-54      |
| Traffic Control Plan – General                                                                                     | (Nov 1, 2023) | PSP-55-56   |

Special Construction Requirements  
Utilities

(Nov 1, 2023)  
(Nov 1, 2023)

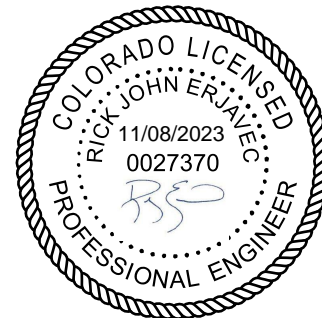
PSP-57-58  
PSP-59-64



MY RESPONSIBILITY IS LIMITED TO THE  
SELECTION OF THE STANDARD SPECIAL  
PROVISION.

**COLORADO DEPARTMENT OF TRANSPORTATION  
SPECIAL PROVISIONS  
US6/Hillcrest Roundabout Intersection  
STANDARD SPECIAL PROVISIONS**

| <u>Section</u>                                                                                    | <u>Date</u>       | <u>No. of Pages</u> |
|---------------------------------------------------------------------------------------------------|-------------------|---------------------|
| Revision of Section 103 – Colorado Resident Bid Preference                                        | (October 1, 2023) | 1                   |
| Revision of Section 105 – Construction Drawings                                                   | (October 1, 2023) | 1                   |
| Revision of Section 105 – Control of Work                                                         | (October 1, 2023) | 1                   |
| Revision of Section 105 – Dispute Review Board and<br>Claims for Unresolved Disputes              | (October 1, 2023) | 9                   |
| Revision of Sections 105 and 106 – Buy America Requirements-<br>Non-Federal Aid Highway (FHWA)    | (October 1, 2023) | 3                   |
| Revision of Section 106 – Conformity to the Contract of Hot Mix Asphalt<br>(Less than 5,000 Tons) | (October 1, 2023) | 3                   |
| Revision of Section 109 – Prompt Payment (Local Agency)                                           | (October 1, 2023) | 2                   |
| Revision of Section 207 – Topsoil                                                                 | (October 1, 2023) | 9                   |
| Revision of Section 208 – As-Constructed Survey                                                   | (October 1, 2023) | 3                   |
| Revision of Section 212 – Soil Amendments, Seeding, and Sodding                                   | (October 1, 2023) | 25                  |
| Revision of Section 401 – Reclaimed Asphalt Pavement                                              | (October 1, 2023) | 2                   |
| Revision of Sections 412 and 705 – Preformed Compression Seals                                    | (October 1, 2023) | 2                   |
| Revision of Section 601 – Structural Concrete                                                     | (October 1, 2023) | 5                   |
| Affirmative Action Requirements Equal Employment Opportunity                                      | (October 1, 2023) | 13                  |
| Special Construction Requirements, Fire Protection Plan                                           | (October 1, 2023) | 2                   |



MY RESPONSIBILITY IS LIMITED TO THE  
SELECTION OF THE STANDARD SPECIAL  
PROVISIONS

## NOTICE TO BIDDERS

It is recommended that bidders on this project review the work site, plan details, and attend the scheduled pre-bid conference. Prospective bidders shall contact the following authorized Eagle County representative(s) with any questions:

Eagle County Representative: Rickie Davies, P.E., PTOE  
Senior Staff Engineer  
500 Broadway  
PO Box 168  
Eagle, CO 81631  
Email: [Richard.davies@eaglecounty.us](mailto:Richard.davies@eaglecounty.us)  
Phone: (970) 328-3567

The above referenced individual is the only representative with authority to provide any information, clarification, or interpretation regarding the plans, specifications, and any other Contract Documents or requirements. Contact with any other employee of Eagle County, or any other individuals regarding this project, is not authorized. Any information obtained from other than the authorized County representatives shall be considered invalid in the preparation of a proposal for this project.

All references to the Colorado Division of Highways, Colorado Department of Transportation, and/or Department or Division shall also mean Eagle County.

## **COMMENCEMENT AND COMPLETION OF WORK**

The Contractor shall commence work under the Contract on or before the 15th day following Contract execution or the 30th day following the date of award, or April 1st whichever comes later, unless such time for beginning the work is changed by the Engineer in the "Notice to Proceed." The Contractor shall complete all work by September 30th, 2024, in accordance with the "Notice to Proceed."

## **REVISION OF SECTION 101 DEFINITIONS AND TERMS**

Section 101 of the Standard Specifications is hereby revised for this project as follows:

**Award.** REPLACE “Department” WITH “County”.

**Bidder.** In the CDOT definition REPLACE “Department” WITH “County”.

**CDOT Resident Engineer.** Add “For this project, the CDOT Resident Engineer will generally be replaced by County Engineer”.

**Department.** REVISE to read: “Department of Public Works, Eagle County, Colorado.”

**Engineer.** DELETE in its entirety and REPLACE WITH “The Project Engineer, who may be a county employee or hired consultant who has been appointed or authorized by the County to oversee the technical aspects of the work and to administer the Contract on behalf of the County.”

**Laboratory.** REVISE to read: “Any testing laboratory designated by the Engineer.”

**Plans.** REPLACE “Department” WITH “County”.

**Project Engineer.** REPLACE “Chief Engineer’s” WITH “County’s”. REPLACE “CDOT” WITH “County”. REPLACE “Resident” with “County.”

**Proposal Form.** REVISE to read: “The documents furnished by the County on which the offer of a bidder is submitted. Also called Bid Proposal or Bid Form.”

**Workplace Violence.** REPLACE “CDOT” WITH “County”.

Add the following to end of section 101:

The US 6/Hillcrest Roundabout Intersection project is being funded and managed by the Eagle County and permitted through a CDOT access permit. Where these specifications reference “Colorado Department of Transportation” “CDOT” or “Department” in reference to the contract management and project management, it shall be replaced by “Eagle County”. References to CDOT Engineer or personnel shall be replaced by County Engineer or personnel.

**REVISION OF SECTION 104  
SCOPE OF WORK**

Delete subsection 104.03 and replace with the following:

The contractor shall perform unforeseen work, for which there is no price included in the contract, whenever the extra work is necessary or desirable for contract completion. This work shall be performed in accordance with the Contract and as directed and will be paid for as provided under the general conditions.

RETAIN Section 1.04.04 Maintaining Traffic. REPLACE “Department” WITH “County”.



**REVISION OF SECTION 106  
CONFORMITY TO THE CONTRACT OF HOT MIX ASPHALT**

Section 106 of the Standard Special Provisions is hereby revised for this project as follows:

Subsection 106.05 shall include the following:

For this project, Contractor process control testing of gradation, asphalt content and longitudinal joint density of hot mix asphalt is voluntary.

The Contractor shall provide a materials tester qualified in accordance with CP-10 for sampling the materials for the Department and for conducting a roller pass study for density. The materials tester shall be on site and available for sampling at all times while paving is occurring, unless otherwise approved by the Engineer.

Acceptance testing will be performed by the County's Engineer with contractor sampling. Acceptance testing for density shall be completed using cores.

The cost of complying with these requirements shall not be paid for separately but shall be included in the work.

**REVISION OF SECTION 107  
LEGAL RELATIONS AND RESPONSIBILITY TO PUBLIC**

Add the following to subsection 107.02:

The contractor shall obtain County Right of Way Permit, CDOT Special Use Permit, CDPHE permits, and all other applicable local, state, and federal permits. Contractor shall meet all requirements of required permits, including the CDOT Access Permit #320150.

Delete Section 107.05 and replace with the following:

No federal funding is being used for this project. Federal aid provisions are not a requirement of this contract.

Delete subsection 107.08

Add the following to subsection 107.15:

Eagle County, and CDOT shall be named as additional insured on the contractor's insurance policy. Policy shall also be supplemented by umbrella excess liability insurance with a limit of not less than \$5,000,000 per occurrence.

Subsection 107.12 shall include the following:

The Contractor shall save existing vegetation, except for those that must be removed to accommodate construction of the project. The Contractor shall fence specific areas of vegetation to be protected in the field as shown in the plans or as directed by the Engineer.

The Contractor shall perform all the work in such a manner that the least environmental damage will result. Any questionable areas or items shall be brought to the attention of the Engineer for approval prior to vegetation removal or any damaging activity. Damaged or destroyed fenced trees, shrubs, or wetlands, which could have been saved, shall be replaced at the expense of the Contractor.

If any trees or shrubs are to be removed between April 1<sup>st</sup> and August 31<sup>st</sup>, a survey must be completed for active nests. If an active nest(s) is found, no work may be done within 50 feet of the nest(s) until the nest(s) become inactive. These requirements are in order to avoid the Migratory Bird Act of 1918.

If the vegetation fence is knocked down or destroyed by the Contractor, the Engineer will suspend the work, wholly or in part, until the fence is repaired to the Engineer's satisfaction at the Contractor's expense. Time lost due to such suspension will not be considered a basis for adjustment of time charges but will be charged as contract time.

Fence (Plastic) will be measured and paid for in accordance with Section 607.

**REVISION OF SECTION 107  
PROTECTION AND RESTORATION OF PROPERTY AND LANDSCAPING**

Subsection 107 of the standard Specifications is hereby revised for this project as follows:

Subsection 107.12 shall include the following:

It is the Contractor's responsibility to take a sufficient number of pre-construction photographs/videos to resolve any disputes, which may arise regarding the conditions prior to and subsequent to construction. The Contractor shall provide copies Of the preconstruction photographs/videos to the Engineer prior to the start of work. Any potential problems should be identified at that time. Progress and record photographs/videos shall be provided by the Contractor as appropriate to resolve any disputes and to completely document the work performed as a supplement to the Record Drawings. In general, the photographs/videos should be sufficient to show that all work was properly completed in accordance with the plans and specifications.

Existing lighting and irrigation systems shall be maintained and operational through the duration of the project.

All landscaping elements, including irrigation system components, disturbed or damaged during construction shall be noted by the Contractor and replaced in-kind.

**REVISION OF SECTION 108  
PROSECUTION AND PROGRESS**

Retain Section 108.09. Delete remainder of Section 108 and replace with the following:

Supplement the General Conditions by adding the following:

Contractor shall attend pre-construction meeting, pre-paving meetings, environmental pre-construction meetings, weekly progress meeting, and other meetings as determined by the County. Contractor shall also attend County inspections and site visits as needed throughout the project.

Salient features to be shown on the Contractor's Progress Schedule are:

1. Mobilization, Erosion Control, Construction Signing (Advanced Warning)
2. Construction Surveying
3. Detour(s)
4. Clearing and Grubbing, Tree Removals
5. Best Management Practices
6. Traffic Control (phase changes)
7. Removal of Pavement, Removal of Sidewalk, Curb & Gutter
8. Storm Sewer System
9. Lighting
10. Earthwork and Grading
11. Aggregate Base Course
12. Concrete Paving
13. Concrete - Curb and Gutter and Sidewalk
14. Hot Mix Asphalt Paving
15. Final Striping and Signing
16. Anticipated Substantial Completion and Opening to Traffic
17. Anticipated Final Completion
18. Project Cleanup

No work will be allowed within the right-of-way during November, December, January, February or March. All concrete and hot mix asphalt shall be placed prior to September 30, 2024.

The County inspects and approves work on the project from 7 am to 7 pm Monday through Friday. No work shall occur on holidays, as defined in section 101.02, or on Fridays prior to holiday weekends. Saturday work will not be allowed without the authorization of CDOT and the County Engineer.

**REVISION OF SECTION 109  
MEASUREMENT AND PAYMENT**

Revise subsection 109.01 to add:

Water will not be measured and paid for separately but will be included in the work.

**REVISION OF SECTION 201  
CLEARING AND GRUBBING**

Section 201 of the Standard Specifications is hereby revised for this project as follows:

**DESCRIPTION**

Subsections 201.01 shall include the following:

Tree removals shall be included in clearing and grubbing.

Delete Subsection 201.01 and replace with the following:

This work consists of clearing, grubbing, removing and disposing of boulders, removing and disposing of vegetation, including trees (trees of all sizes and calipers), and debris from all areas to be graded, borrow pits, and other areas shown in the Contract or required by the work. Topsoil and organic-rich soils are not considered suitable for reuse as fill and shall be removed from the site.

Care shall be taken to avoid disturbing subgrade soils and supporting soils that will remain in place as they can rut and pump under repeated construction traffic. The final subgrade shall be sloped to promote drainage.

**CONSTRUCTION REQUIREMENTS**

Subsection 201.02 shall include the following:

Existing trees, shrubs, bushes or grass, outside the designated work areas but inside the project limits that are damaged due to the Contractor's operations shall be replaced in kind at the Contractor's expense.

**REVISION OF SECTION 202  
REMOVAL OF ASPHALT MAT (PLANING)**

Section 202 of the Standard Specifications is hereby revised for this project as follows:

**DESCRIPTION**

Subsection 202.01 shall include the following:

This work consists of the removal and disposal of existing asphalt mat within the project limits as shown on the plans or at locations directed by the Project Manager.

**CONSTRUCTION REQUIREMENTS**

Subsection 202.09 shall include the following:

Irregularities and distresses on the milled or unfinished surface, such as, but not limited to, delamination, raveling, and potholes that are identified by the Project Manager shall be repaired as soon as possible. All milled or unfinished surfaces shall be covered with new asphalt within 3 calendar days.

The roadway shall be left in a safe and usable condition at the end of each workday. The Contractor shall take appropriate measures to ensure that the surface does not trap or hold water. All required pavement markings removed shall be restored before the roadway is opened to traffic.

**METHOD OF MEASUREMENT**

Subsection 202.11 shall include the following:

The removal of asphalt mat (planing) will be measured by the area, in square yards, completed to the required depth and accepted.

Haul and fees for recycling shall not be measured and paid for separately but shall be included in the bid item.

**BASIS OF PAYMENT**

Subsection 202.12 shall include the following:

Payment will be made under:

| <b>Pay Item</b>                  | <b>Pay Unit</b> |
|----------------------------------|-----------------|
| Removal of Asphalt Mat (Planing) | Square Yard     |

Payment will be full compensation for all work, materials and equipment necessary for removal of the asphalt mat, hauling, and disposal of the removed materials at the recycling facility.

**REVISION OF SECTION 202  
REMOVAL OF STRUCTURES AND OBSTRUCTIONS**

Section 202 of the Standard Specifications is hereby revised for this project as follows:

Subsection 202.02 shall be revised to include the following:

Excess material generated by the installation of the drains, sewers and water mains shall be removed and disposed of by the Contractor. Final grade at the trenches shall match subgrade of the road reconstruction.

Subsection 202.09 shall be revised to include the following:

Milling is the same operation as planing. The designated asphalt shall be removed and disposed of by the Contractor. Asphalt removed shall include the road base material.

Add the following to Section 202:



**REVISION OF SECTION 202  
REMOVAL OF LIGHTING**

Section 202 of the Standard Specifications is hereby revised for this project to include the following:

**CONSTRUCTION REQUIREMENTS**

Subsection 202.04 Signs and Traffic Signals is hereby revised to include the following:

*Removal of Light Standard* – Removal of Light Standard shall be completed by the Contractor and shall include the removal of the luminaire. Electrical conductors shall be removed back to the nearest existing light standard to remain or re-routed to re-connect an existing circuit for other existing light standards to remain in place. The remaining empty conduit shall be abandoned in place. Any un-used direct-bury cable shall be disconnected and abandoned in place below grade (remove all exposed cable). The Contractor shall return the light standards and roadway luminaires to the Town as directed by the Town.

*Removal of Light Standard Foundation* – Removal of Light Standard Foundation shall be completed by the Contractor and shall include backfilling the hole with compacted soil to return to finished grade. If the whole foundation cannot be removed by reasonable means, the Contractor shall request approval from the Town to remove the top 24-inches, or other depth, as approved by the Town, and abandon the remaining foundation in place.

**BASIS OF PAYMENT**

Subsection 613.12 is hereby revised to include the following:

Payment will be made under:

| <b>Pay Item</b>                      | <b>Pay Unit</b> |
|--------------------------------------|-----------------|
| Removal of Light Standard            | Each            |
| Removal of Light Standard Foundation | Each            |
| Removal of Electrical Equipment      | Lump Sum        |

All work necessary and incidental to the removal of light standards and foundations as shown in the plans will not be measured and paid for separately but shall be included in the work.

**REVISION OF SECTION 202  
CLEAN VALVE BOX**

Section 202 of the Standard Specifications is hereby revised for this project as follows:

**CONSTRUCTION REQUIREMENTS**

Subsection 202.02 shall include the following:

The Contractor shall clean each valve box of all foreign debris such that the operating nut of the valve is fully accessible to operation. The Engineer will obtain the Owner's inspection and written approval before accepting the work.

**BASIS OF PAYMENT**

Subsection 202.12 shall include the following:

| <b>Pay Item</b> | <b>Unit</b> |
|-----------------|-------------|
| Clean Valve Box | Each        |

**REVISION OF SECTION 203  
EXCAVATION AND EMBANKMENT**

Section 203 of the Standard Specifications is hereby revised for this project as follows:

**CONSTRUCTION REQUIREMENTS**

Subsection 203.05 shall be revised as follows:

Subsection 203.05(c) shall be revised as follows:

If, after the scarification and recompacting of the bases of cuts and fills is complete, the Engineer determines the subgrade to be yielding excessively, the Engineer may direct the Contractor to perform Unsuitable Material work in accordance with Std. 203.05(c).

The second sentence of 203.05 (c) shall be replaced with:

The excavated area shall be backfilled and compacted to the finished graded section with AASHTO A-1 or A-2-2 material. If soft or yielding soils are encountered after over excavation of 2 feet, a geogrid (Tensar biaxial BX1200, Tensar triaxial TX5 or equivalent shall be installed at the base of the over excavation before backfilling.

**METHOD OF MEASUREMENT**

Subsection 203.11 shall be replaced with the following:

Unsuitable material will be measured by the cubic yard in place, and shall include removal and replacement of unsuitable material, blading, shaping, scarifying, compacting the subgrade, finishing and maintenance of the finished surface.

Geogrid will be measured by the square yard and include all work associated with supplying and installing Tensar biaxial BX1200, Tensar triaxial TX5 or approved equivalent at the base of the over excavation before backfilling.

Replace (f) Proof Rolling with the following:

Proof rolling will not be measure or paid for separately but included in the cost of the work.

**BASIS OF PAYMENT**

Subsection 203.12 shall include the following:

The accepted quantities measured as provided above will be paid for at the contract unit price for each of the pay items listed below that appear in the bid schedule.

| <b>Pay Item</b>       | <b>Pay Unit</b> |
|-----------------------|-----------------|
| Unsuitable Material   | Cubic Yard      |
| Geogrid Reinforcement | Square Yard     |

**REVISION OF SECTION 206  
EXCAVATION AND BACKFILL FOR STRUCTURES**

Delete Section 206.06 (b) and replaced with the following:

Structure excavation and backfill shall not be measured. All structure excavation and backfill shall be included in the unit cost of the structure and shall not be paid separately.

## **REVISION OF SECTION 210 VALVE BOX AND MANHOLE ADJUSTMENTS**

Section 210 of the Standard Specifications is hereby revised for this project as follows:

Subsection 210.10 shall include the following:

The Contractor shall notify each utility company (Owner) prior to any construction that will involve the adjustment of its valve boxes or manholes.

Each Owner will mark all of its valve boxes and manholes that will be involved in the specified construction area.

Prior to commencing construction, the Contractor shall coordinate and conduct, with the Engineer and each Owner, an inspection of all impacted manholes and valve boxes. The purpose of this inspection will be to account for all valve boxes and manholes involved in the construction and determine their accessibility and condition. The Contractor shall provide traffic control for this inspection and for the final inspection. The Contractor shall coordinate construction with the Owner to allow sufficient time for the Owner to make all necessary repairs to, or supply replacements for valve boxes and manholes before construction begins in the area of the valve boxes and manholes. All parties shall agree on the condition of each valve box and manhole prior to construction.

The Contractor shall replace all valve box sections damaged or misplaced during construction with new valve box sections complying with the requirements of the Owner's specifications. The Contractor shall set each valve box to be adjusted so that it is  $\frac{1}{4}$  inch to  $\frac{1}{2}$  inch below the final grade of the paved surface, or to the satisfaction of the Owner, and so that it is plumb over the operating nut of the valve.

The Contractor shall replace all manhole sections damaged or misplaced during construction with new manhole ring and cover complying with the requirements of the Owner's specification. The Contractor shall adjust each manhole so that it is  $\frac{1}{4}$  inch to  $\frac{1}{2}$  inch below the final grade of the paved surface, or to the satisfaction of the Owner. Some adjustments may require the addition, removal, or replacement of a manhole or cone section. If manhole adjustment requires a manhole cone or barrel section to be added, removed, or replaced, this work will not be considered as "Adjust Manhole", but shall be performed in accordance with the Section 210 requirements for the item "Modify Manhole".

The Contractor shall prevent tools, concrete, dirt, or debris of any kind from falling into the channel of the existing manhole. The Contractor shall clean or remove debris from downstream sewer that enters as a result of the Contractor's work.

When the project includes planing prior to resurfacing, the Contractor shall first lower all valve boxes and manholes below the surface to be planed and then adjust them up to final grade after the paving operation is complete.

Prior to the final inspection, the Contractor shall thoroughly clean all valve boxes designated for cleaning. This work shall be performed in accordance with the Section 202 requirements for the item "Clean Valve Box".

The Contractor shall coordinate and conduct, with the Engineer and each Owner, a final inspection upon completion of construction. This inspection shall assure that all valve boxes and manholes are in compliance with these requirements. The Engineer will obtain the Owner's written approval before accepting the work.

Subsection 210.12 shall include the following:

The Contractor will be paid separately for each valve box or manhole adjustment completed down and for each adjustment completed up.

-2-

**REVISION OF SECTION 210  
VALVE BOX AND MANHOLE ADJUSTMENTS**

Subsection 210.13 shall include the following:

Payment will be made under:

| <b>Pay Item</b>           | <b>Pay Unit</b> |
|---------------------------|-----------------|
| Adjust Valve Box/ Manhole | Each            |
| Modify Manhole            | Each            |

Adjustments that include adding, removing, or replacing a manhole cone or barrel section will be paid for under the Section 210 pay item, Modify Manhole.

Cleaning designated valve boxes will be paid for under the Section 202 pay item, Clean Valve Box.

**REVISION OF SECTION 214  
PLANTING**

Section 214 of the Standard Specifications is hereby revised for this project as follows:

Subsection 214.02 shall include the following:

Submittals:

1. The Contractor shall submit a plant list, stating source of material, including nursery and origin of plants growing stock within one month after award of contract. Contractor shall submit plant list and anticipated source and supplier for approval prior to procurement of plant material.
2. Within a month after notice to proceed, the Contractor shall submit a landscape material storage plan and installation schedule to the Engineer for review prior to planting operations.

Plant inspection:

1. After delivery of plant material, the Contractor shall contact the Engineer and Landscape Architect for approval of all plant material.
2. The Contractor shall remove rejected materials immediately from the site at his expense.

Subsection 214.02 (a) shall include the following:

Harvesting areas shall be marked prior to cutting operations for Engineer's approval.

Subsection 214.03 (a) shall include the following:

Installation of plant materials will not be permitted until earthwork, topsoil and adjacent site improvements are substantially complete.

Subsection 214.03 (i) shall include the following:

All plants shall be watered within four hours of planting.

Add the following to the end of subsection 214.03:

No trees shall be removed from the project site until marked for removal with Town Representative. All new landscaping, including trees, shrubs, grass, perennials, and mulch, shall be marked with flags and marking paints and approved by Town Representative prior to planting.

Contractor shall implement weed control measures to prevent and remove weed growth from all disturbed areas throughout the establishment period. Weed control measures may include the following:

- i. Watering topsoil prior to seeding and applying acceptable herbicides to topsoil prior to planting
- ii. Installation of weed control barriers in mulch beds
- iii. Application of localized herbicides to eliminate weed growth
- iv. Mechanical removal of weeds

-2-

**REVISION OF SECTION 214  
PLANTING**

Subsection 214.04 shall be revised to include the following:

Delete “Establishment period begins immediately and lasts for a period of 12 months” and replace with “Establishment period begins immediately and lasts for a period of 24 months”. Add “the warranty and guarantee, as well as the performance and payment bonds, shall be in full effect for all landscaping for the 24 month establishment period. Weed removal and control shall be performed by the contractor during the establishment period.



**REVISION OF SECTION 216  
SOIL RETENTION COVERING**

Revise Section 216 of the Standard Specifications for this project to include the following:

**DESCRIPTION**

Subsection 216.01 shall include the following:

The work of this section consists of furnishing, placing, and securing turf reinforcement mats for erosion control and vehicle over tracking along the back side of curb as shown on the plans.  
prepared subgrade for a trail surface.

**MATERIALS**

Subsection 216.02 shall include the following:

Turf reinforcement will consist of NDS Tufftrack grass pavers, part number TT24, made of 100% recycled polyolefin, 24"x24"x1 1/2"-contains 120 nested hexagonal cells; compressive strength (empty pavers) 86,563 lb.; compressive strength (native soil filled pavers) 400,00lb or approved equal.

**CONSTRUCTION REQUIREMENTS**

Subsection 216.03 shall include the following:

Placing:

The Contractor is responsible for controlling placement of the Turf Reinforcement following the manufactures recommendations. The honeycomb cells shall be infilled with topsoil and seeding as shown in the plans.

Subgrade Preparation:

The Turf Reinforcement shall be placed directly on a lightly compacted planting base which is installed over a compacted base.

**METHOD OF MEASUREMENT**

Subsection 216.07 shall include the following:

The accepted quantity of Turf Reinforcement will be paid for by the square yard at the contract unit price. Payment will be full compensation for all work necessary to supply and install and complete the work.

**BASIS OF PAYMENT**

Subsection 216.08 shall include the following:

|                                  |                        |
|----------------------------------|------------------------|
| <b><u>Pay Item</u></b>           | <b><u>Pay Unit</u></b> |
| Turf Reinforcement Mat (Special) | Square Yard            |

**REVISION OF SECTION 217  
HERBICIDE TREATMENT**

**Section 217 of the Standard Specifications is hereby revised for the project as follows:**

**DESCRIPTION**

**Delete Subsection 217.01 and replace with the following:**

All areas to be disturbed or planted within the project area, regardless of final disposition, shall be treated with herbicide before disturbance. After seeding and planting and near the end of the project, seeded and planted areas shall receive additional applications of herbicides. All applications shall target noxious weeds designated by the Colorado Department of Agriculture including List A, B, C, and Watch List species. Recommended treatments for noxious weeds identified in the project area are summarized in the following table. Additional recommended treatments for noxious weeds including those not listed in the table below, can be found on the Colorado Department of Agriculture’s website at <https://www.colorado.gov/pacific/agconservation/noxious-weed-species>

| Noxious Weed                                 | Plant Growth Characteristics                                                                                             | State List <sup>1</sup> | Project Priority    | Recommended Treatments                                                                                                                                                                                                                                                                                                                                                                                                                      |
|----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|-------------------------|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Canada thistle<br>( <i>Cirsium arvense</i> ) | Aggressive rhizomatous perennial of moist/wet sites; seeds and plant parts easily transported by construction equipment. | B                       | Moderate - Suppress | <p><b>Mechanical Control:</b> Due to the species’ extensive root system, hand-pulling and tilling stimulate the growth of new plants and are not recommended. Mowing every 10 to 21 days during the growing season can be effective.</p> <p><b>Herbicide Control:</b> Aminopyralid (Milestone), Clopyralid + Triclopyr, Amiocyclopyracholor + chlorosulfur, or Picloram applied in spring before flowering and/or during fall regrowth.</p> |

<sup>1</sup>List A Species in Colorado that are designated by the Commissioner for eradication.

**List B** Species are species for which the Commissioner, in consultation with the state noxious weed advisory committee, local governments, and other interested parties, develops and implements state noxious weed management plans designed to stop the continued spread of these species.

**List C** Species are species for which the Commissioner, in consultation with the state noxious weed advisory committee, local governments, and other interested parties, will develop and implement state noxious weed management plans designed to support the efforts of local governing bodies to facilitate more effective integrated weed management on private and public lands.

**CONSTRUCTION REQUIREMENTS**

**Section 217.03 shall include the following:**

The Contractor shall comply with the following best management practices in all construction areas to prevent the spread of noxious weeds and minimize potential effects from treatment:

-2-

**REVISION OF SECTION 217  
HERBICIDE TREATMENT**

- Minimization of soil disturbance to the greatest extent possible
- Clean all construction-related equipment thoroughly before off-loading at the project site and after working with weed-contaminated soils
- Coordination of weed management efforts with adjacent landowners to the extent possible
- Avoidance of non-target injury to passing pedestrians and motorists, adjacent native plant communities, landscaping, sensitive wildlife habitat (prairie dogs), and nearby beekeeping operations (if present)
- Herbicides can be used immediately adjacent to wetlands, riparian areas, and/or water bodies only if the label indicates its use is appropriate for such areas
- Application of herbicides immediately adjacent to active prairie dog colonies will not be permitted
- Noxious weeds observed in and near the construction area or planting areas will be treated with herbicides or mechanically removed prior to the start of construction to minimize spread
- Monitor all areas treated for noxious weeds during construction and re-treat to prevent re-establishment of noxious weeds

**Delete the last paragraph in Subsection 217.03, “Herbicides shall not be...”**

**METHOD OF MEASUREMENT**

**Delete Subsection 217.04 and replace with the following:**

Herbicide Treatment shall be measured by the number of person-hours required to apply herbicide, as approved by the Engineer.

Mechanical control shall be included in the cost of Clearing and Grubbing.

Seeding shall be included in the cost of 212 Seeding (Native).

**BASIS OF PAYMENT**

**Section 217.05 shall include the following:**

Payment shall be made under:

| <b>Pay Item</b>     | <b>Pay Unit</b> |
|---------------------|-----------------|
| Herbicide Treatment | Hour            |

**REVISION OF SECTION 240  
PROTECTION OF MIGRATORY BIRDS  
BIOLOGICAL WORK PERFORMED BY THE CONTRACTOR'S BIOLOGIST**

Section 240 is hereby added to the Standard Specifications for this project as follows:

**DESCRIPTION**

**240.01** This work consists of protecting migratory birds during construction work on structures.

**MATERIALS AND CONSTRUCTION REQUIREMENTS**

**240.02** The Contractor shall schedule construction activity, including clearing and grubbing operations and work on structures, to avoid taking (pursue, hunt, take, capture, or kill; attempt to take, capture, kill or possess) migratory birds or their nests protected by the Migratory Bird Treaty Act (MBTA). If construction activity is to occur between April 1 and August 31, then the following specifications must be followed and the Contractor shall retain a qualified wildlife biologist to determine where nest removal may occur or will be required during construction. The wildlife biologist shall have a minimum of three years' experience conducting migratory bird surveys and implementing the requirements of the MBTA. The Contractor shall submit documentation of the biologists' education and experience to the Engineer for acceptance. A biologist with less experience may be used by the Contractor subject to the approval of the Engineer based on review of the biologist's qualifications. If all construction activities occur after August 31 and before April 1, then the requirements set forth in this specification are not required. In Colorado, most nesting and rearing activities occur between April 1 and August 31.

The wildlife biologist shall record the location of each protected nest, bird species, the protection method used, and the date installed. A copy of these records will be submitted to the Engineer.

(A) *Raptor Nest Survey.* A wildlife biologist shall conduct raptor nest surveys within 0.5 mile of the construction site prior to the start of construction and prior to each construction phase. This survey can be done with binoculars or other optics. If construction activities are located within Colorado Parks and Wildlife (CPW) recommended buffer zone for specific raptors, "NO WORK" zones shall be established around active sites during construction according to the CPW standards or as recommended by the wildlife biologist in consultation with CPW. The "NO WORK" zone shall be marked with either fencing or signing. Work shall not proceed within a "NO WORK" zone until the wildlife biologist has determined that the young have fledged or the nest is unoccupied.

(B) *Vegetation Removal.* When possible, vegetation shall be cleared prior to the time when active nests are present. Vegetation removal activities shall be timed to avoid the migratory bird breeding season which begins on April 1 and runs to August 31. All areas scheduled for clearing and grubbing between April 1 and August 31 shall first be surveyed by the wildlife biologist within 50 feet of the work limits for active migratory bird nests, including raptors. Contractor personnel shall enter areas to perform surveys only if a written, signed document granting permission to enter the property has been obtained from the property owner. The Contractor shall document all denials of permission to enter property. The Contractor shall avoid all migratory bird nests. The Contractor shall avoid the area within 50 feet of the active nests or the area within the distance recommended by the biologist until all nests within that area have become inactive. Inactive nest removal and other necessary measures shall be incorporated into the work as follows.

-2-

**REVISION OF SECTION 240  
PROTECTION OF MIGRATORY BIRDS  
BIOLOGICAL WORK PERFORMED BY THE CONTRACTOR'S BIOLOGIST**

1. *Tree and Shrub Removal or Trimming.* Tree and shrub removal or trimming shall occur before April 1 or after August 31 if possible. If tree and shrub removal or trimming will occur between April 1 and August 31, a survey for active nests shall be conducted by the wildlife biologist within the seven days immediately prior to the beginning of work in each area of tree and shrub removal or trimming. The survey shall be conducted for each phase of any tree or shrub removal or trimming.

If an active nest containing eggs or young birds is found, the tree or shrub containing the active nest shall remain undisturbed and protected until the nest becomes inactive. The nest shall be protected by placing fence (plastic) a minimum distance of 50 feet from each nest to be undisturbed. This buffer dimension may be changed if determined appropriate by the wildlife biologist and approved by the Engineer. Work shall not proceed within the fenced buffer area until the young have fledged or the nests have become inactive. If the fence is knocked down or destroyed by the Contractor, the Engineer will suspend the work, wholly or in part, until the fence is satisfactorily repaired at the Contractor's expense. Time lost due to such suspension will not be considered a basis for adjustment of time charges, but will be charged as contract time.

2. *Grasses and Other Vegetation Management.* Due to the potential for encountering ground nesting birds' habitat, if work occurs between April 1 and August 31, the area shall be surveyed by a wildlife biologist within the seven days immediately prior to ground disturbing activities.

The undisturbed ground cover to 50 feet beyond the planned disturbance, or to the right-of-way line, whichever is less, shall be maintained at a height of 6 inches or less beginning April 1 and continuing until August 31 or until the end of ground disturbance work, whichever comes first.

If birds establish a nest within the survey area, an appropriate buffer of 50 feet will be established around the nest by the wildlife biologist. This buffer dimension may be changed if determined appropriate by the wildlife biologist and approved by the Engineer. The Contractor shall install fence (plastic) at the perimeter of the buffer. Work shall not proceed within the buffer until the young have fledged or the nests have become inactive.

If the fence is knocked down or destroyed by the Contractor, the Engineer will suspend the work, wholly or in part, until the fence is satisfactorily repaired at the Contractor's expense. Time lost due to such suspension will not be considered a basis for adjustment of time charges, but will be charged as contract time.

- (C) *Work on Structures.* The Contractor shall conduct work on structures in a manner that does not result in a taking of migratory birds protected by the Migratory Bird Treaty Act (MBTA). The Contractor shall not conduct the work on structures during the primary birding season, April 1 through August 31, unless the Contractor takes the following actions:

1. The Contractor shall remove existing inactive nests prior to April 1.
2. During the time that the birds are trying to build or occupy their nests, between April 1 and August 31, the Contractor shall monitor the structures at least once every three days for any nesting activity.
3. If the birds have started to build any nests, the nests shall be removed before they are completed. Water shall not be used to remove the nests if nests are located within 50 feet of any surface waters.

-3-

**REVISION OF SECTION 240  
PROTECTION OF MIGRATORY BIRDS  
BIOLOGICAL WORK PERFORMED BY THE CONTRACTOR'S BIOLOGIST**

- 4. Installation of netting may be used to prevent nest building. The netting shall be monitored and repaired or replaced as needed. Netting shall consist of a mesh with openings that are 3/4 inch by 3/4 inch or less.

If an active nest becomes established, i.e., there are eggs or young in the nest, all work that could result in abandonment or destruction of the nest shall be avoided until the young have fledged or the nest is unoccupied as determined by the Contractor’s biologist and approved by the Engineer. The Contractor shall prevent construction activity from displacing birds after they have laid their eggs and before the young have fledged. If the project continues into the following spring, this cycle shall be repeated. When work on the structure is complete, the Contractor shall remove and properly dispose of netting used on the structure. The taking of a migratory bird shall be reported to the Engineer. The Contractor shall be responsible for all penalties levied by the U. S. Fish and Wildlife Service (USFWS) for the taking of a migratory bird.

**METHOD OF MEASUREMENT**

**240.03** Wildlife Biologist will be full compensation for all work and materials required to complete the item, including wildlife biologist, wildlife survey, and documentation (record of nest location and protection method).

Clearing and grubbing will be measured and paid for in accordance with Section 201. Mowing will not be measured and paid for separately, but shall be included in the work. Removal and trimming of trees will be measured and paid for in accordance with Section 202.

Fence needed to protect migratory birds and nests will be measured and paid for in accordance with Section 607.

Netting will be measured by the square yard of material placed to keep birds from nesting on the structure. Square yards will be calculated using the length of netting measured where it is attached to the ground and the average height of the netting where it is attached to the structure.

**BASIS OF PAYMENT**

**240.04** The accepted quantities measured as provided above will be paid for at the contract unit price for each of the pay items listed below that appear in the bid schedule.

| <b>Pay Item</b>    | <b>Pay Unit</b> |
|--------------------|-----------------|
| Wildlife Biologist | Hour            |
| Removal of Nests   | Hour            |

**REVISION OF SECTION 304  
AGGREGATE BASE COURSE**

Section 304 of the Standard Specifications is hereby revised for this project as follows:

**MATERIALS**

Subsection 304.02 shall include the following:

Materials for the subbase shall be Aggregate Base Course (Class 1) as shown in subsection 703.03.

Materials for the base course shall be Aggregate Base Course (Class 6) as shown in subsection 703.03

The aggregate base course (Class 1) and (Class 6) must meet the graduation requirements and have a resistance value of at least 70 and 78 respectively when tested by the Hveem Stabilometer method.

Testing of aggregate base course shall be completed through density testing through the County's third-party tester. Contractor is responsible for coordinating testing. Aggregate base course shall be accepted for density on a lot of basis. A lot will consist of one day's production where it is not expected to exceed 2,400 sq. yds. A lot will consist of one-half day's production where a day's production is expected to consist of between 2,400 and 4,800 sq. yds.

Each lot shall be divided into two equal sublots. One test shall be made for each subplot. Sampling locations will be determined by a random basis in accordance with statistical procedures contained in ASTM D3665.

**REVISION OF SECTION 403  
HOT MIX ASPHALT**

Section 403 of the Standard Specifications is hereby revised for this project as follows:

Subsection 403.02 shall include the following:

The design mix for hot mix asphalt shall conform to the following:

| <b>Table 403-1</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                    |                          |                        |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|--------------------------|------------------------|
| <b>Property</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <b>Test Method</b> | <b>Value For Grading</b> |                        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                    | SX (75)                  | Patching               |
| Air Voids, percent at:<br>N (design)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | CPL 5115           | 3.0 – 4.0                | 3.0 – 4.0              |
| Lab Compaction (Revolutions):<br>N (design)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | CPL 5115           | 75                       | 75                     |
| Stability, minimum                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | CPL 5106           | 28                       | 28                     |
| Aggregate Retained on the 4.75 mm (No. 4) Sieve for S, SX and SG, and on the 2.36mm (No. 8) Sieve for ST and SF with at least 2 Mechanically Induced fractured faces, % minimum*                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | CP 45              | 70                       | 70                     |
| Accelerated Moisture Susceptibility Tensile Strength Ratio (Lottman), minimum                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | CPL 5109 Method B  | 80                       | 80                     |
| Minimum Dry Split Tensile Strength, kPa (psi)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | CPL 5109 Method B  | 205 (30)                 | 205 (30)               |
| Grade of Asphalt Cement, Top Layer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                    | PG 58-34                 | PG 58-34               |
| Grade of Asphalt Cement, Layers below Top                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                    | PG 58-28                 | PG 58-28               |
| Voids in the Mineral Aggregate (VMA) % minimum                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | CP 48              | See Table 403-2          | See Table 403-2        |
| Voids Filled with Asphalt (VFA), %                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | AI MS-2            | 65-80                    | 65-80                  |
| Dust to Asphalt Ratio<br>Fine Gradation<br>Coarse Gradation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | CP 50              | 0.6 – 1.2<br>0.8 – 1.6   | 0.6 – 1.2<br>0.8 – 1.6 |
| <p>Note: AI MS-2 = Asphalt Institute Manual Series 2</p> <p>Note: The current version of CPL 5115 is available from the Region Materials Engineer.</p> <p>Note: Mixes with gradations having less than 40% passing the 4.75 mm (No. 4) sieve shall be approached with caution because of constructability problems.</p> <p>Note: Gradations for mixes with a nominal maximum aggregate size of one-inch or larger are considered a coarse gradation if they pass below the maximum density line at the #4 screen.<br/>Gradations for mixes with a nominal maximum aggregate size of 3/4" or smaller are considered a coarse gradation if they pass below the maximum density line at the #8 screen.</p> |                    |                          |                        |



-2-

**REVISION OF SECTION 403  
HOT MIX ASPHALT**

All mix designs shall be run with a gyratory compaction angle of 1.25 degrees and properties must satisfy Table 403-1. The Form 43 will establish construction targets for Asphalt Cement and all mix properties at Air Voids up to 1.0 percent below the mix design optimum. CDOT will establish the production asphalt cement and volumetric targets based on the Contractor’s mix design and the relationships shown between the hot mix asphalt mixture volumetric properties and asphalt cement contents on the Form 429. CDOT may select a different AC content other than the one shown at optimum on the Contractor’s mix design in order to establish the production targets as contained on the Form 43.

**Table 403-2**

| Nominal<br>Maximum Size*,<br>mm (inches) | Minimum Voids in the Mineral Aggregate (VMA)                                                                                                                                                                                                                                                        |      |      |      |
|------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|------|------|
|                                          | ***Design Air Voids **                                                                                                                                                                                                                                                                              |      |      |      |
|                                          | 3.0%                                                                                                                                                                                                                                                                                                | 3.5% | 4.0% | 3.0% |
| 37.5 (1½)                                | 11.5                                                                                                                                                                                                                                                                                                | 11.6 | 11.7 | 11.5 |
| 25.0 (1)                                 | 12.5                                                                                                                                                                                                                                                                                                | 12.6 | 12.7 | 12.5 |
| 19.0 (¾)                                 | 13.5                                                                                                                                                                                                                                                                                                | 13.6 | 13.7 | 13.5 |
| 12.5 (½)                                 | 14.5                                                                                                                                                                                                                                                                                                | 14.6 | 14.7 | 14.5 |
| 9.5 (¾)                                  | 15.5                                                                                                                                                                                                                                                                                                | 15.6 | 15.7 | 15.5 |
|                                          |                                                                                                                                                                                                                                                                                                     |      |      |      |
|                                          | * The Nominal Maximum Size is defined as one sieve larger than the first sieve to retain more than 10%.<br>** Interpolate specified VMA values for design air voids between those listed.<br>*** VMA values for production air voids adjustments shall be based on target air voids on the Form 43. |      |      |      |

The Contractor shall prepare a quality control plan outlining the steps taken to minimize segregation of HMA. This plan shall be submitted to the Engineer and approved prior to beginning the paving operations. When the Engineer determines that segregation is unacceptable, the paving shall stop, and the cause of segregation shall be corrected before paving operations will be allowed to resume.

CDOT approved Warm Mix Asphalt (WMA) may be allowed on this project in accordance with CP-59. If the Contractor proposes and is allowed by the Engineer to place any pavement at temperatures below those shown in

-3-

**REVISION OF SECTION 403  
HOT MIX ASPHALT**

Table 401-3 of the Standard Specifications, WMA shall be required. However, the use of WMA does not change any temperature requirements unless otherwise approved by the Engineer. Unique requirements for WMA design, production and acceptance testing as documented during CDOT WMA approval shall be submitted and approved prior to creation of the Form 43 and before any WMA production on the project. Any delays to the project due to WMA submittal and review shall be considered within the Contractor’s control and will be non-excusable.

For haul times over 1 hour or distances greater than 50 miles from the asphalt plant to the laydown machine, whichever is less, a chemical additive shall be added to extend the asphalt compaction temperature window. The minimum dosage shall be that specified by the manufacturer for use as a compaction aid. A separate mix design will not be required for this use of warm mix asphalt. The additive used shall be an approved product. The Contractor shall notify the Engineer of the product to be used and the dosage prior to use.

A minimum of one percent hydrated lime by weight of the combined aggregate shall be added to the aggregate for all hot mix asphalt.

Acceptance samples shall be taken at the location specified in either Method B or C of CP 41, as determined by the Region Construction and Materials personnel.

Subsection 403.03 shall include the following:

The Contractor shall construct the work such that all roadway pavement placed prior to the time paving operations end for the year, shall be completed to the full thickness required by the plans. The

Contractor's Progress Schedule shall show the methods to be used to comply with this requirement.

Delete subsection 403.05 and replace with the following:

Subsection 403.05 shall include the following:

| <b>Pay Item</b>                            | <b>Pay Unit</b> |
|--------------------------------------------|-----------------|
| Hot Mix Asphalt (Grading SX)(75)(PG 58-28) | Ton             |
| Hot Mix Asphalt (Grading SX)(75)(PG 58-34) | Ton             |
| Hot Mix Asphalt (Patching)(Asphalt)        | Ton             |

Aggregate, asphalt recycling agent, asphalt cement, warm mix asphalt and/or other additives, hydrated lime, and all other work and materials necessary to complete each Hot Mix Asphalt item will not be paid for separately but shall be included in the unit price bid. Any change to the submitted mix design optimum asphalt cement content to establish production targets on the Form 43 will not be measured and paid for separately, but shall be included in the work. No additional compensation will be considered or paid for any additional asphalt cement, plant modifications, or additional personnel required to produce the HMA as a result in a change to the mix design asphalt cement content. Historically, typical asphalt cement increases reflected on the Form 43 are up to 0.5 percent. However, the Contractors bidding the work shall anticipate the AC increases typical of their mixes and factor it into their unit prices.

Excavation, preparation, and tack coat of areas to be patched will not be measured and paid for separately, but shall be included in the work.

**REVISION OF SECTION 403  
HOT MIX ASPHALT TICKET COLLECTION**

Section 403 of the Standard Specifications is hereby revised for this project as follows: Subsection 403.05 shall include the following:

The Contractor shall collect the scale ticket on each load when it is delivered to the project site, and ensure that the information required in subsection 109.01 is shown on each ticket:

The scale tickets shall be available on site for County personnel to inspect.

Each day the Contractor shall provide to the Engineer envelopes which contain the previous day's signed tickets and the following:

1. On each envelope: Project number, date of paving, type of material, daily total and cumulative total.
2. One of the following:
  - A. Two adding machine tape tabulations of the weight tickets with corresponding totals run and signed by different persons,
  - B. One signed adding machine tape tabulation of the weight tickets that has been checked and signed by a second person,
  - C. Signed check tape of computer scale tickets that have a cumulative total. These scale tickets must be consecutive and without voids adjustments.
3. A listing of any overweight loads on the envelope, including ticket numbers and amount over legal limit.
4. A comparison of the actual yield for each day's placement to the theoretical yield. Theoretical yield shall be based on the actual area paved, the planned thickness, and the actual density of the mixture being placed. Any variance greater than +2.5% shall be indicated on the envelope and a written explanation included.

The Contractor shall provide a vehicle identification sheet that contains the following information for each vehicle:

- (1) Vehicle number
- (2) Length
- (3) Tare weight
- (4) Number of axles
- (5) Distance between extreme axles
- (6) All other information required to determine legal weight.
- (7) Legal weight limit.

**REVISION OF SECTION 412  
CONCRETE PAVEMENT**

Section 412 of the Standard Specifications is hereby revised for this project as follows:

**DESCRIPTION**

Subsection 412.01 shall include the following:

Concrete Pavement (8 inch) (Special) shall be installed at the roundabout truck apron in accordance with the roadway plans.

Concrete Pavement (8 inch) (Special) shall be stained concrete Davis Color San Diego Buff #5237. The surface pattern shall be Matcrete Random Cobblestone pattern or approved equal as accepted by the Engineer.

Concrete Pavement (8 inch)(Fastrack) may be installed on northbound and southbound Hillcrest Drive along the splitter islands to help facilitate construction phasing and minimize disruption to traffic.

**BASIS OF PAYMENT**

Subsection 412.24 section (a) shall be revised to include the following:

Payment will be made under:

| <b>Pay Item</b>                      | <b>Pay Unit</b> |
|--------------------------------------|-----------------|
| Concrete Pavement (8 Inch) (Special) | Square Yard     |
| Concrete Pavement (8 Inch)(Fastrack) | Square Yard     |

**REVISION OF SECTION 603  
CULVERTS AND SEWERS**

Section 603 of the Standard Specifications is hereby revised for this project as follows:

**BASIS OF PAYMENT**

Subsection 603.13 shall include the following:

Structure excavation and structure backfill shall not be paid for separately but shall be included in the cost of the item.

**REVISION OF SECTION 604  
INLETS**

Section 604 of the Standard Specifications is hereby revised for this project as follows:

Subsection 604.04 (a) shall include the following:

The Contractor may use precast inlets on the project.

## **REVISION OF SECTION 604 MANHOLES**

Section 604 of the Standard Specifications is hereby revised for this project as follows:

### **DESCRIPTION**

Subsection 604.01 shall include the following:

Manhole (Special) consists of a precast water quality structure as shown in the plans. Acceptable alternatives for the water quality structure includes:

- Stormceptor
- Downstream Defender
- ADS Barraccuda
- AquaShield AquaSwirl
- Forterra/BioClean SciClone Separator

The Manhole (Special) shall meet the requirement of treating the water quality flow rate of 1.6 cfs and bypasses the 100 year flow rate of 4.8 cfs. Treatment must be met by 80% removal of the 60 micron particle from the peak runoff rate from the water quality flow rate.

### **MATERIALS**

Subsection 604.02 shall include the following:

The Contractor shall submit six sets of shop drawings for the structure for review prior to ordering materials. The shop drawings shall include all horizontal and vertical dimensioning of the structure and inflow and outflow pipes, reinforcement, and joint type and locations. The shop drawings shall be specific to the site location and shall also show the adjacent features (existing and proposed) such as right-of-way lines, utilities, edges of pavement, or any other features potentially impacted by the structure. The site location shall be inspected in the field by the Contractor prior to preparing the shop drawings to ensure that all such information is shown. Any proposed modifications to the storm sewer layout to accommodate the structure shall also be shown. The shop drawings shall be signed and sealed by a Professional Engineer registered in the State of Colorado.

The manhole Special structure shall be capable of achieving an 80 percent average annual reduction in the total suspended solids load. The Contractor shall provide documentation from the manufacturer that the structure will meet this requirement. The structure shall be independently tested and verified by a third party. The structure shall be equipped with a peak flow bypass separator system that regulates the flow rate into the treatment chamber and conveys peak flows directly to the outlet pipe such that re-suspension of material previously collected in the treatment chamber cannot occur. The cover of each structure shall clearly indicate that it is an oil/sediment separator. The proposed structures shall be reviewed by the Engineer prior to the Contractor ordering materials.

### **CONSTRUCTION REQUIREMENTS**

Subsection 604.03 shall include the following:

The Contractor shall provide shoring as required for the installation of the water quality structures in accordance with Section 206 to avoid any impacts to existing utilities or traffic operations. Any damage to existing utilities or pavement shall be repaired immediately at the Contractor's expense.

-2-

**REVISION OF SECTION 604  
MANHOLES**

Subsection 604.04(b) shall include the following:

The structures shall be subject to inspection by the Engineer at the place of manufacture and/or installation. Final acceptance of the structures and any components of the structure are at the discretion of the Engineer. The structure and all components of the structure shall be stored, handled, and installed per the manufacturer’s recommendations.

**METHOD OF MEASUREMENT**

Subsection 604.06 shall include the following:

Manhole Slab Base (Special) will be measured by the complete unit, including adjusting ring and locking cover, steps, grout, all piping, tees and connecting devices, oil ports, inserts, weirs, orifice plates, internal inlet and outlet pipes, and any other incidental components of the structure. Structure excavation and backfill, rock excavation, dewatering, bed course material, and any necessary shoring will not be measured and paid for separately but shall be included in the work.

**BASIS OF PAYMENT**

Subsection 604.07 shall include the following:

Manhole Slab Base (Special) will be paid for at the contract unit price and shall include all labor, materials and hardware and all other appurtenances necessary to complete the installation in accordance with the plans.

Payment will be made under:

| <b>Pay Item</b>             | <b>Pay Unit</b> |
|-----------------------------|-----------------|
| Manhole Slab Base (Special) | Each            |



**REVISION OF SECTION 609  
CURB AND GUTTER**

Section 609 of the Standard Specifications is hereby revised for this project as follows:

**DESCRIPTION**

Subsection 609.01 shall be revised to include the following:

The types of curb include the following:

Curb and Gutter Type 2 (Section I-M) (Special)

**CONSTRUCTION REQUIREMENTS**

Subsection 609.04 shall be revised to include the following:

Curb and Gutter Type 2 (Section I-M) (Special) shall be installed at the roundabout center island in accordance with the roadway plans. 6 inches of Aggregate Base Course (Class 6) shall be placed below all curb and gutter as shown in the plans.

**BASIS OF PAYMENT**

Subsection 609.07 shall be revised to include the following:

Payment will be made under:

| <b>Pay Item</b>                                | <b>Pay Unit</b> |
|------------------------------------------------|-----------------|
| Curb and Gutter Type 2 (Section I-M) (Special) | Linear Feet     |

**REVISION OF SECTION 610  
MEDIAN COVER MATERIAL**

Section 610 of the Standard Specifications is hereby revised for this project as follows:

**DESCRIPTION**

Subsection 610.01 shall include the following:

The types of median cover material include the following:

Median Cover Material (6 Inch Patterned Concrete)

**MATERIALS**

Subsection 610.02, delete the second paragraph and replace with the following:

Concrete shall be Class B and shall conform to Section 601. Color shall be stained concrete Davis Color San Diego Buff #5237. The surface pattern shall be Matcrete Random Cobblestone pattern or approved equal as accepted by the Engineer.

**CONSTRUCTION REQUIREMENTS**

Subsection 610.03 shall be revised shall be revised by replacing section (b) with the following:

Construction requirements shall conform to the requirements of subsection 608.03. The surface pattern shall be Matcrete Random Cobblestone pattern or approved equal as accepted by the Engineer.

**BASIS OF PAYMENT**

Subsection 610.05 shall be revised to include the following:

Payment will be made under:

**Pay Item**

Median Cover Material (6 Inch Patterned Concrete)

**Pay Unit**

Square Foot

## **REVISION OF SECTION 613 LIGHTING**

Sections 613 of the Standard Specifications are hereby revised for this project as follows:

Subsection 613.01 is hereby revised to include:

Work performed under this section shall be in conformance with CDOT *Standard Specifications for Road and Bridge Construction* and Holy Cross Energy *Consumer Service Facilities Metering Guidebook (current edition)*.

Subsection 613.02 is hereby revised to include:

The Electrical Contractor shall furnish and install Luminaires and Light Standards as specified in the Luminaire Schedule shown on the plans.

*Removal of Light Standard.* Removal of all existing roadway or parking light standards and luminaires shall be performed by Holy Cross Energy. The existing roadway lighting assemblies located within the project limits are designated to be returned to Holy Cross Energy. The Contractor shall remove the existing roadway light, pole, and arm and return the entire assembly without damage to Holy Cross Energy. All conductors shall be removed back to the nearest device, light, or point of electrical service. The existing conduit may be abandoned in place. Contractor shall maintain circuit continuity and electrical service to all remaining lights and devices on that circuit.

Subsection 613.03 General is hereby revised to include:

The electrical point of service and service entrance portion of the installation shall be in compliance with the rules, regulations, and requirements of the utility company supplying power to the project. If there is a conflict between the utility codes or standards and these specifications and/or drawings, the most stringent requirements shall apply.

The Electrical Contractor shall protect all existing surface and underground utilities that are scheduled to remain in place.

The Electrical Contractor shall ensure that all work, all materials employed, all required equipment, and the manner and method of installation conform to accepted construction and engineering practices, and that each piece of equipment is in satisfactory working condition to properly perform its functional operation.

Where removal of existing hardscape (i.e. sidewalk, roadway etc.) or softscape (e.g. sod, planting material etc.) is required, the Electrical Contractor shall remove only the material necessary to do the work. Upon completion of the work, the disturbed area shall be restored to that of, or better than, pre-construction condition.

The Electrical Contractor shall ensure that all installers are licensed in their craft in accordance with applicable regulations and the regulations pertaining to journeyman to apprentice ratios are complied with. Upon request, installers shall provide proof of licensure where such licensure is required.

Subsection 613.03 General, delete the second paragraph and replace with the following:

Each system shall be installed as shown on the plans or as designated. The Contractor shall furnish and install all incidentals necessary to provide a complete working unit or system.

The Contractor is to study all related drawings and report any errors or omissions to the Engineer prior to bidding. The Contractor shall be responsible for the exact fitting of all materials and equipment in the project.

-2-

**REVISION OF SECTION 613  
LIGHTING**

The lighting and electrical drawings that constitute an integral part of this contract shall serve as working drawings. The electrical system layouts indicated on the drawings are generally diagrammatic, but shall be followed as closely as actual construction and work of other trades will permit. Govern exact routing of conduit and wiring and the locations of luminaires and electrical enclosures by the curb and sidewalk and the equipment served. Take all dimensions from roadway plan drawings and field conditions. Do not scale from lighting and electrical drawings.

Subsection 613.05 Light Standards, is hereby revised to include the following:

Pole shall be of the specified type and size shown on the plans.

Light standards shall be installed as shown on the plans. The careful erection and aligning of the light standards to a plumb position is essential. The assembled lighting standard shall, under dead load and at equal ambient temperatures, be as near to true vertical alignment as practical.

Subsection 613.07 Conduit, is hereby revised to include the following:

Where cutting, channeling, chasing, or drilling of roadway, sidewalks, or other surfaces is necessary for the proper installation of raceway or other electrical equipment, the work shall be carefully laid out in advance and carefully done. Any damage to the equipment or any defaced finished surface shall be repaired by skilled mechanics of the trades involved at no additional cost to the owner.

Verify locations of all existing and/or new underground utilities prior to installing conduit and, if damaged by this Electrical Contractor, replace immediately in an approved manner and at no expense to the owner.

Subsection 613.08 Wiring, the first paragraph, is hereby revised to include:

Install all wire continuous from terminal to terminal. Splices in cables when approved shall be made in pull boxes. Make branch circuit splices in splice boxes with water proof splice blocks. Splices shall be held to a minimum. Pull no wire into any portion of the conduit system until all construction work that might damage the wire has been completed.

Subsection 613.12 is hereby revised as follows:

| <b>Pay Item</b>                     | <b>Pay Unit</b> |
|-------------------------------------|-----------------|
| Removal of Light Standard           | Each            |
| Removal of Luminaire                | Each            |
| Removal of Electrical Equipment     | Lump Sum        |
| 2-Inch Electrical Conduit (Plastic) | Linear Foot     |
| Pullbox (11"x18"x12")               | Each            |
| Wiring                              | Lump Sum        |
| Luminaire (LED) (8000 Lumens)       | Each            |
| Light Standard Steel (35 Foot)      | Each            |
| Light Standard Foundation           | Each            |
| Transformer Base Aluminum           | Each            |
| Meter Power Pedestal                | Each            |

**REVISION OF SECTION 619  
WATER LINES**

Section 619 of the Standard Specifications is hereby revised for this project to include the following:

**DESCRIPTION**

This Work consists of the construction of barrier material for the protection of sanitary sewer lines crossing storm lines in accordance with these specifications, the lines and locations shown on the plans, and the following:

- Eagle River Water and Sanitation District Rules and Regulations for Water and Wastewater Service, latest edition

The more stringent requirements shall govern in case of a conflict.

Subsection 619.02 shall be revised for this project to include the following:

**MATERIALS**

Insulation board shall meet the following requirements:

Insulation board shall be in accordance with ASTM C578-Type V Standard Specification for Rigid Cellular Polystyrene Thermal Insulation. Compressive strength shall be 100 psi minimum per ASTM D1621. Water absorption, ASTM, 0.3% by volume, maximum. Insulation shall be DOW HIGHLOAD 100, OWENS CORNING FOAMULAR 1000 or approved equal.

Subsection 619.03 shall be revised for this project to include the following:

**CONSTRUCTION REQUIREMENTS**

Insulation board shall be installed in cases where the minimum bury requirement of four feet six inches (4'6") cannot be achieved. For every foot out of compliance with the minimum cover requirement, installation of 1-inch insulation board is required. Minimum bury depth shall be measured from the ground surface to top of pipe.

Insulation board shall be installed between storm and sanitary sewers in cases where the vertical separation is between one and two feet. Insulation board shall extend at least three feet beyond the pipe crossing.

Subsection 619.05 shall be revised for this project to include the following:

**BASIS OF PAYMENT**

Payment will be made under:

| <u>Pay Item</u>  | <u>Pay Unit</u> |
|------------------|-----------------|
| Insulation Board | SF              |

Payment for Insulation Board will include all labor and materials required to complete the work in accordance with the plans, specifications, and standards.

**REVISION OF SECTION 620  
HOT MIX ASPHALT TESTING, IGNITION FURNACE**

If Reclaimed Asphalt Pavement is to be included in the Hot Mix Asphalt supplied on this project then the following shall apply:

Section 620.03 of the Standard Specifications is hereby revised to include the following:

In addition to the details shown in the plans for this project, the field laboratory shall include a forced air ignition furnace conforming to the requirements of CPL 5120. The Forced Air Ignition Furnace shall be installed per manufacturer's recommendations. The Forced Air Ignition Furnace shall be installed and functioning a minimum of one week prior to beginning production of HMA.

Asphalt content shall be measured following CPL 5120. Residual aggregate obtained by this method shall be used for gradation analysis according to CP 31.

**REVISION OF SECTION 621  
DETOUR PAVEMENT**

Section 621 is hereby added to the Standard Specifications for this project and shall include the following:

**DESCRIPTION**

**621.01** This work consists of detour pavement design, constructing detour pavement as shown in the plans for all phases of construction on US6 and Hillcrest Drive; maintenance of the detour pavement; removal of the detour pavement; and removal and replacement of appurtenances required to construct and operate the detours including but not limited to curb and gutter, detour pavement, embankment material and unclassified excavations.

**MATERIALS**

**621.02** All materials required for detour shall comply with project standard specifications and special provisions.

Detour pavement shall conform to Hot Mix Asphalt (Grading SX)(75)(PG 58-28).

The contractor will be responsible for the pavement design.

The Contractor shall be responsible for quality control required to assure adequate quality of embankment material, aggregate base course, hot mix asphalt used in the construction of the detour pavement.

**CONSTRUCTION REQUIREMENTS**

**621.03** The detour locations and dimensions for all phases of construction shall be as shown on the plans. If the materials and thickness furnished for the detour pavement result in an inadequate detour structure, the Contractor will provide additional thickness, materials, or other measures necessary to provide a satisfactory pavement for the life of the detour. These additional improvements shall be furnished at no additional cost.

All necessary signs, pavement markings and other traffic control devices shall be provided in accordance with the traffic control plan.

**MAINTENANCE OF DETOUR**

**621.04** The Contractor shall maintain the detour for the entire period that it is open to traffic. Any distress that affects the ride, safety, or serviceability of the detour roadway shall be corrected to the satisfaction of the Engineer at the expense of the Contractor.

**METHOD OF MEASUREMENT**

**621.05** Detour pavement will be measured by the square yard complete in place.

**BASIS OF PAYMENT**

**621.06** The design, completed and accepted work for the detour, maintenance of the detour, removing the detour, removal and replacement of appurtenances required to construct and operate the detours, shall be included in the unit price for Detour Pavement. This price shall include all labor, equipment and materials to complete the work.

Payment will be made under:

| <b>Pay Item</b> | <b>Pay Unit</b> |
|-----------------|-----------------|
| Detour Pavement | Square Yard     |

Signs, pavement markings and other traffic control devices for the detour are not included the Detour Pavement Pay Item and will be paid for in accordance with Sections 614 and 630.

**REVISION OF SECTION 630  
PORTABLE MESSAGE SIGN PANEL**

Section 630 of the Standard Specifications is hereby revised for this project as follows:

Subsection 630.01 shall include the following:

This work includes furnishing, operating, and maintaining a portable message sign panel.

Add subsection 630.031 immediately following subsection 630.03 as follows:

**630.031 Portable Message Sign Panel.** Portable message sign panel shall be furnished as a device fully self-contained on a portable trailer, capable of being licensed for normal highway travel, and shall include leveling and stabilization jacks. The panel shall display a minimum of three - eight character lines. The panel shall be a dot-matrix type with an LED legend on a flat black background. LED signs shall have a pre-default message that activates before a power failure. The sign shall be solar powered with independent back-up battery power. The sign shall be capable of 360 degrees rotation and shall be able to be elevated to a height of at least five feet above the ground measured at the bottom of the sign. The sign shall be visible from one-half mile under both day and night conditions. The message shall be legible from a minimum of 750 feet. The sign shall automatically adjust its light source to meet the legibility requirements during the hours of darkness. The sign enclosure shall be weather tight and provide a clear polycarbonate front cover.

Solar powered message signs shall be capable of operating continuously for 10 days without any sun. All instrumentation and controls shall be contained in a lockable enclosure. The sign shall be capable of changing and displaying sign messages and other sign features such as flash rates, moving arrows, etc.

Each sign shall also conform to the following:

- (1) In addition to the onboard solar power operation with battery back-up, each sign shall be capable of operating on a hard wire, 100-110 VAC, external power source.
- (2) All electrical wiring, including connectors and switch controls necessary to enable all required signfunctions shall be provided with each sign.
- (3) Each sign shall be furnished with an operating and parts manual, wiring diagrams, and trouble-shooting guide.
- (4) The portable message sign shall be capable of maintaining all required operations under Colorado mountain-winter weather conditions.
- (5) Each sign shall be furnished with an attached license plate and mounting bracket.
- (6) Each sign shall be wired with a 7-prong male electric plug for the brake light wiring system.

Subsection 630.13 shall include the following:

The portable message sign panel shall be on the project site at least 10 business days prior to the start of active roadway construction. Maintenance, storage, operation, relocation to different sites during the project, and all repairs of portable message sign panels shall be the responsibility of the Contractor.



-2-

**REVISION OF SECTION 630  
PORTABLE MESSAGE SIGN PANEL**

**METHOD OF MEASUREMENT**

Subsection 630.15 shall include the following:

Portable message sign panels will be measured the following way:

- (1) By the maximum number of approved units in use on the project at any one time.

**BASIS OF PAYMENT**

**Pay Item**  
Portable Message Sign Panel

**Pay Unit**  
Each

**REVISION OF SECTION 630  
TRAFFIC CONTROL MANAGEMENT**

Section 630 of the Standard Specifications is hereby revised as follows:

Subsection 630.11 shall include the following:

The Contractor's Superintendent and Traffic Control Manager (TCM) shall be equipped with a mobile telephone unit at all times that has a local number for contact with one another, the Project Engineer, or emergency response dispatchers when emergency services are required. The TCM shall make immediate contact with emergency personnel as required to assist accident victims, expedite the removal of broken-down vehicles, and maintain the smooth flow of traffic.

The Construction Superintendent shall also have a mobile telephone available for use.

The Contractor shall supply a 5-watt, FM band hand-held radio, capable of transmitting and receiving on three frequencies throughout the limits as required for traffic and safety control, to the Project Engineer, Assistant Project Engineer, Head Tester, Traffic Control Supervisor, each flagger, and other personnel as required. The radios shall be equipped with battery chargers and rechargeable batteries. The radios shall be supplied one week prior to the commencement of work.

Subsection 630.15 shall include the following:

Portable hand-held radios will not be measured and paid for separately but shall be included in the work.

**REVISION OF SECTION 703  
AGGREGATES**

Subsection 703.08 shall be revised shall be revised by replacing section (a) with the following:

Bed course material for sidewalks, curbing, and bikeways shall consist of 6 inches of Aggregate Base Course (Class 6).

**REVISION OF SECTION 703  
CONCRETE CURING MATERIALS AND ADMIXTURES**

Subsection 711.03 shall be revised shall be revised by adding the following:

Accelerators and admixtures added to pavements with reinforcement or other metal, shall be non-chloride and shall be non-corrosive.

Color additives for colored concrete shall be manufactured by Davis colors, 3700 East Olympic Blvd., Los Angeles, CA or an approved equal.

The random cobblestone stamped concrete truck apron for the project will be, Davis Color San Diego Buff #5237

The random cobblestone stamped median cover material will be, Davis Color San Diego Buff #5237.

## REVISION OF SECTION 715 LIGHTING AND ELECTRICAL MATERIALS

Section 715 of the CDOT Standard Specifications is hereby revised for this project to include the following:

Subsection 715.04 Luminaires and Light Sources, (b) Roadway Luminaires is hereby revised to include the following:

*Roadway Luminaires* – Type ‘LS1’ roadway luminaires shall be provided as described in the Luminaire Schedule in the Plans.

Subsection 715.04 Luminaires and Light Sources, (e) Pedestrian Luminaires shall be added per the following:

Subsection 715.08 is hereby revised to include the following:

*Lighting Control Center*– Lighting Control Center (LCC): For this project the lighting control center shall have in addition to what is shown on this example:

1. Enclosure – Enclosure to be NEMA 4, 12ga., hot dipped galvanized, continuously welded seams ground to a smooth finish, re-enforced bracing wherever necessary, minimum size 36-inch-wide x 60 inch high x 16 inch deep, (with an 18” welded skirt on the bottom half of the enclosure), bottomless, with heavy-duty mounting flange on base, mount directly to concrete pad (no leg kit) with minimum of six ½ inch x 10-inch concrete anchors. Provide piano hinged door with document pocket on inside of door and back panel. Enclosure shall be sized to fit all components listed below. Size up enclosure as needed without increasing the height above 60 inches. Paint entire enclosure and all exterior exposed conduit and equipment mounted on the enclosure standard color gray to match.
2. Meter Disconnect - 100A, 250V, 3-pole, heavy duty, NEMA 3R, fusible disconnect switch and FRNR type fuses size as indicated on the one-line diagram with separate neutral and ground bus. Mount disconnect on the back side of the NEMA 4 enclosure and paint to match.
3. Meter – 200A, 3-phase, NEMA 3R, meter housing with lever bypass to Xcel Energy’s specifications. Mount meters on the back side of the NEMA 4 enclosure and paint to match. Provide close chase nipple through back of NEMA 4 enclosure to the panel inside the enclosure.
4. Panel Boards – NEMA 1, 100A, 208Y/120V-3ph-4W load center (see ‘LCC1’ for number of poles, main and branch breakers) Square D #QO327M100 (panel) with #QOC30US (cover) and #PK23GTA (ground bar) or approved equal by GE, Eaton, Siemens or Cutler-Hammer. Mounted inside the NEMA 4 enclosure.
5. HVAC Unit – Externally mounted HVAC unit, 120V-1ph heating, ventilation and air conditioning in NEMA 4X stainless steel enclosure. Size per manufacturer recommendation.
6. Terminal Strip – 600V rated, terminal strips with lugs to accept 4-12AWG copper wire, all end caps, mounting hardware and marker strips number of points as required, minimum of thirty (30) points. Mount inside NEMA 4 enclosure.
7. Plastic Wireway – 2 inch high x 2 inch wide x length as required slotted plastic wireway with snap-on cover. Panduit or approved equal.
8. Maintenance Receptacle – 15A, 120V, GFCI duplex receptacle in 1-gang back box and cover plate. Mounted inside the NEMA 4 enclosure
9. Surge Protection Device - 10kA nominal, 80kA per phase (80kA per mode), 200kA short circuit, UL listed 1449 fourth edition, UL 96A and NFPA 780 lightning protection. ASCO # #510-120Y-P- 16-A-W-A-J-2-0 or approved equal. Mount inside NEMA 4 enclosure maximum of 18 inches of conductors to panel breaker connection.
10. Ground Rods – ¾ inch x 10 foot long, copper-clad driven ground rods, Exothermic weld or direct bury rated lug connect ground conductor to ground rods. (2) rods required per lighting control center, installed a minimum of eight feet apart.

-2-

**REVISION OF SECTION 715  
LIGHTING AND ELECTRICAL MATERIALS**

“Arc-Flash Hazard Warning” labels shall be furnished and installed by the electrical contractor per the National Electric Code- NEC 110.16 and the NFPA 70E, and all other labels required by NFPA 70 shall be installed on all new panels.

**FORCE ACCOUNT ITEMS**

**DESCRIPTION**

This special provision contains the Town's estimate for force account items included in the Contract. The estimated amounts *marked with an asterisk* will be added to the total bid to determine the amount of the performance and payment bonds. Force Account work shall be performed as directed by the Engineer.

**BASIS OF PAYMENT**

Payment will be made in accordance with subsection 109.04. Payment will constitute full compensation for all work necessary to complete the item.

Force account work valued at \$5,000 or less, that must be performed by a licensed journeyman in order to comply with federal, state, or local codes, may be paid for after receipt of an itemized statement endorsed by the Contractor.

| <u>Force Account Item</u>                | <u>Quantity</u> | <u>Estimated Amount</u> |
|------------------------------------------|-----------------|-------------------------|
| F/A Minor Contract Revisions             | F.A.            | \$ 50,000*              |
| F/A Furnish and Install Electric Service | F.A.            | \$ 25,000               |
| F/A Erosion Control                      | F.A.            | \$ 5,000                |
| F/A Relocate Utilities                   | F.A.            | \$50,000                |

\*F/A Minor Contract Revisions consists of minor work authorized and approved by the Engineer, which is not included in the contract plans or specifications and is necessary to accomplish the scope of work of this contract.

F/A Furnish and Install Electrical Service This work consists of obtaining power sources from Holy Cross at locations specified in the plans for landscaping and lighting and as directed by the Engineer.

F/A Erosion Control – Supplemental erosion control measures suggested by the Erosion Control Supervisor or Engineer, but not provided for in the contract plans or specifications. All items shall be approved by the Engineer prior to installation, or they will be at no cost to the project.

F/A Relocation consists of adjusting or relocating utilities and coordination with the affected utilities.

## TRAFFIC CONTROL PLAN – GENERAL

The key elements of the Contractor's method of handling traffic (MHT) are outlined in subsection 630.10(a).

The MHT shall include the following as a minimum:

1. Detailed diagrams showing the size and location of all proposed traffic control devices.
2. Access plan for all businesses.
3. Access plan for pedestrians.
4. Emergency vehicle access plan.
5. Supporting documentation as required.
6. Flagger number and locations.

The suggested plan for construction phasing is included in the plans. If the Contractor proposes to use a different phasing plan a written proposal shall be submitted by the Contractor and be approved by the Engineer before work commences. This proposal shall include detailed drawings of any phasing changes.

The components of the TCP for this project are included in the following:

- (1) Subsection 104.04 and Section 630 of the specifications.
- (2) Standard Plan S-630-1, Traffic Controls for Highway Construction, Case 17, 18, & 19 and Standard Plan S-630-2.
- (3) Schedule of Construction Traffic Control Devices.
- (4) Signing Plans.
- (5) Construction phasing details.
- (6) Detour Details.

Unless otherwise approved by the Engineer, the Contractor's equipment shall follow normal and legal traffic movements. The Contractor's ingress and egress of the work area shall be accomplished with as little disruption to traffic as possible. Traffic control devices shall be removed by picking up the devices in a reverse sequence to that used for installation. This may require moving backwards through the work zone. When located behind barrier or at other locations shown on approved traffic control plans, equipment may operate in a direction opposite to adjacent traffic.

CDOT may have entered into operating agreements with one or more law enforcement organizations for cooperative activities. Under such agreements, at the sole discretion of CDOT, law enforcement personnel may enter the work zone for enforcement purposes and may participate in the Contractor's traffic control activities. The responsibility under the Contract for all traffic control resides with the Contractor and any such participation by law enforcement personnel in Contractor traffic control activities will be referenced in either the Special Provisions or General Notes of the plans depending on whether the Contractor is to hire local law enforcement or if CDOT is contracting with Colorado State Patrol for uniformed traffic control. Nothing in this Contract is intended to create an entitlement, on the part of the Contractor, to the services or participation of the law enforcement organization.

Special Traffic Control Plan requirements for this project are as follows:

During the construction of this project, traffic shall use the present traveled roadway unless identified on the plans or approved by the Engineer.

The Contractor shall not have construction equipment or materials in the lanes open to traffic at any time, unless approved by the Engineer.



-2-

## TRAFFIC CONTROL PLAN - GENERAL

The contractor shall be aware of residences within the area. the contractor will be limited to construction activities within the residential areas between 7:00 am to 7:00 pm. no work will be allowed at night, Saturdays, Sundays or legal holidays without prior authorization from the engineer. all construction equipment is to be well-maintained and include appropriate sound control measures, such as mufflers and sound enclosures. if the engineer or the county receive complaints about construction noise, the contractor will assist to limit the noise output from construction. these measures may include noise blankets on engines and quiet use generators. sound control measures will be installed at the contractor's expense and will be incidental to the project."

The Contractor shall not perform any work requiring lane closure on the roadway between the hours of 6am and 9am and between 2pm and 5pm Monday through Friday, or as directed.

Lane Closures for US 6 shall be in accordance with the latest CDOT Region 3 Lane Closure Strategy. Any variances from the basic closure schedule will require approval from the Traffic Operations Engineer.

The Contractor shall maintain one continuous eastbound lane of vehicular traffic and one continuous westbound lane of traffic on US 6.

Contractor shall also maintain continuous traffic control on Hillcrest Drive and shall always maintain access to transit. Up to two weekend one-lane road operations will be allowed from 9pm Friday night through 5am, Monday morning to complete construction on Hillcrest Drive.

During the reconstruction work, only one lane may be closed to traffic at any time unless approved by the Engineer. Traffic shall not be delayed for more than 5 minutes or as directed by the Engineer.

The Contractor shall also maintain access to all businesses and residences during construction including the access to the Eagle River Water and Sanitation District facilities.

Pedestrian traffic shall be maintained through the construction zones. Temporary curb ramps shall be installed consisting of compacted base course or other ADA compliant surface. Pedestrian routes shall be a minimum of 5' wide, meet ADA requirements, and be separated from traffic by appropriate barriers.

At least one week prior to starting construction, the Contractor shall notify the County Engineer of the date the Contractor intends to start construction.

All costs incidental to the foregoing requirements shall be included in the original contract prices for the project.

## **SPECIAL CONSTRUCTION REQUIREMENTS**

1. The Contractor shall be responsible for obtaining a staging area. Contractor to obtain approval before staging. Contractor responsible for signing and fencing staging area and providing for safe operations in the parking area. Contractor may stage trailer and a portion of materials and equipment. Large material and other items likely to damage pavement shall be stored at the Town's overflow parking lot on Airport Road. Any damage to asphalt, concrete, landscaping, or other parking lot improvements will be repaired or replaced at the cost of the contractor.
2. The Contractor shall be responsible for obtaining right of way permit, CDOT special use permits, CDPHE stormwater discharge and dewatering permits, and all other local, state, and federal permits as required.
3. The Contractor shall meet all County and CDOT code, standards, and other requirements.
4. The Contractor shall submit traffic control plans and phasing plans (if different than the proposed phasing plan). The plan will specifically identify how the traveling public (both vehicles and pedestrians) will be protected and how pedestrian and traffic will be maintained through the intersection for the duration of the project. The Plan shall be submitted to the Engineer at least 5 working days prior to when work begins.
5. The Contractor shall utilize an approved concrete washout structure for all concrete operations.
6. The Contractor shall submit a plan to maintain drainage during construction as approved by the Engineer. Maintaining drainage will not be paid for separately, but shall be included in the cost of the work.
7. The Contractor shall complete the work regardless of the weather. Extra equipment, labor, and materials may be required for the Contractor to meet the schedule and will not be paid for separately. The Contractor shall place a temporary lift of asphalt in all areas open to traffic if a winter shutdown is required prior to completion of final paving. All costs associated with placement, maintenance, and removal of temporary asphalt will be paid for by the Contractor. If the Contractor requires a winter shutdown, all costs associated with the winter shutdown will be paid for by the Contractor.
8. Any temporary shoring, excavation supports, or retaining walls required to construct the project are the Contractor's responsibility to identify, locate, design, construct, and maintain at no additional cost to the County. The Contractor is responsible for reviewing the plans, determining the need for these structures, and including the cost for them in their original bid.
9. The Contractor's personnel on the construction site shall wear appropriate personal protective equipment (PPE), related to the construction activity at all times.
10. Night work will not typically be allowed on this project. Requests for night work shall be made to the County Engineer and CDOT.
11. No staging of equipment shall interfere with access to or parking at adjacent businesses.

-2-

**SPECIAL CONSTRUCTION REQUIREMENTS**

12. Employee vehicle parking is prohibited where it conflicts with safety, access, or flow of traffic. No employee parking will be allowed within the right-of-way. The Contractor and the Engineer, prior to starting work, shall locate parking areas to be approved by the Engineer.
13. Access to adjacent business areas shall be maintained at all times.

All costs associated with the foregoing requirements will not be paid for separately, but shall be included in the cost of the work.

**UTILITIES**

Known utilities within the limits of this project are:

| <b>UTILITY COMPANY</b>                                   | <b>CONTACT NAME</b> | <b>TELEPHONE</b> | <b>E-MAIL</b>                    |
|----------------------------------------------------------|---------------------|------------------|----------------------------------|
| Black Hills Energy-Distribution (BHE)                    | Mark Fadick         | 970-914-8326     | Mark.fadick@blackhillscorp.com   |
| Black Hills Energy-Distribution (BHE)                    | Tanner Harris       | 970-390-5481     | Tanner.harris@blackhillscorp.com |
| Black Hills Energy-Transmission (BHE)                    | Kacee Rogers        | 970-712-6550     | Kacee.rogers@blackhillscorp.com  |
| Black Hills Energy – Distribution and Transmission (BHE) | Tom Warnes          | 970-989-7053     | Thomas.warnes@blackhillscorp.com |
| Comcast                                                  | Aaron Rudd          | 720-708-8902     | Aaron_Rudd@comcast.com           |
| Eagle River Water and Sanitation District (ERWSD)        | Niko Nemcanin       | 970-471-1084     | Nnemcanin@erwsd.org              |
| Eagle River Water and Sanitation District (ERWSD)        | Jeff Schneider      | 970-477-5415     | JSchneider@erwsd.org             |
| Holy Cross Energy (HCE)                                  | Todd Foral          | 970-748-4307     | TForal@holycross.com             |
| Lumen                                                    | Jason Sharpe        | 970-328-8290     | Jason.sharpe@lumen.com           |

All new underground facilities, including laterals up to the structure or building being served, installed as part of this project must be electronically locatable when installed, in compliance with Colorado Revised Statutes, Title 9, Article 1.5.

**PART 1 - CONTRACTOR SHALL PERFORM THE WORK LISTED BELOW:**

Coordinate project construction with performance by the utility owner of each utility work element listed in Part 2 below. Perform preparatory work specified in Part 2 for each utility work element. Provide an accurate construction schedule that includes all utility work elements to the owner of each impacted utility. Provide each utility owner with periodic updates to the schedule. Conduct necessary utility coordination meetings and provide other necessary accommodations as directed by the Engineer. Notify each utility owner in writing, with a copy to the Engineer, prior to the time each utility work element is to be performed by the utility owner. Provide notice, as specified in Part 2, immediately prior to the time the utility work must begin to meet the project schedule.

Provide traffic control, as directed by the Engineer, for any utility work performed by the utility owner within the project limits expected to be coordinated with construction. However, traffic control for utility work outside of typical project work hours shall be the responsibility of the utility owner.

Perform each utility work element for every utility owner listed in Part 1. Notify each utility owner in advance of any work being done by the Contractor to its facility, so that the utility owner can coordinate its inspections for final acceptance of the work with the Engineer. Obtain written acceptance from the utility owner for work performed by Contractor.

**All Utility Companies**

The Contractor will contact each utility company a minimum of 2 business days, unless otherwise noted, prior to working in the vicinity of the utility company’s facilities so that the utility company can provide an inspector and/or complete any necessary adjustments or relocations.

-2-  
**UTILITIES**

If a need for utility work by either the Contractor or a utility company arises, the following shall apply:

The Contractor shall be responsible for coordinating the adjustment of utilities on this project. The

Contractor shall keep each utility company advised of any work being performed in the vicinity of their facilities, so that each utility company can coordinate any needed locates, adjustments or inspections. Contractor shall provide the appropriate utility company ample notice, but not less than two (2) working days, prior to commencing activities in the vicinity of their facilities. Any additional work performed by the Contractor on behalf of the impacted utility company shall not be paid for by Eagle County nor the Edwards Metro District but shall be paid by the utility company requiring the work, unless otherwise agreed to in writing by the Engineer.

**Black Hills Energy (BHE)**

The Contractor shall expose three feet of the gas line at US6 Sta 107+50 RT after removing the existing culvert and place at least one foot of Class B bedding material above the gas line centered on the new culvert.

The Contractor shall have a stand-by from BHE on site when excavating within 25 feet of the 12-inch gas line near US6 Sta 110+10 RT. If the gas line is exposed, the Contractor shall place at least one foot of Class B bedding material above the gas line centered on the new culvert.

The Contractor shall expose the gas line crossing the storm sewer at US6 Sta 110+05 LT and place Class B bedding material from the top of the gas line to the base of the planned pavement.

The Contractor shall expose the gas line in the vicinity of the test station at Hillcrest Sta 200+75 RT and trench to the location of the new test station behind the planned sidewalk so BHE can relocate the test station marker and attach new leads from the gas line to the marker. After the new leads and test station marker have been installed by BHE, the Contractor shall backfill the excavation.

The Contractor shall verify the location of the gas lines near planned guard rail posts east of Hillcrest and locate the new guard rail posts at least one foot from the gas lines.

**Timing:** The Contractor shall notify BHE at least one week in advance of excavating near BHE's gas lines. The Contractor shall notify BHE at least two weeks in advance of needing BHE to adjust their test stations.

**Comcast**

The Contractor shall coordinate with Comcast regarding work which was to have been completed prior to construction, including the relocation of Comcast's overhead fiber to Holy Cross Energy's new poles at US6 Sta 110+55 LT. If the work has not been completed prior to construction, then the Contractor shall coordinate with Comcast to complete the work.

The Contractor shall coordinate with Comcast who shall adjust the handhole located near Hillcrest Sta 201+45 RT as needed. The Contractor shall grade to final grade in advance of the field adjustment.

The Contractor shall verify the location of Comcast's fiber conduit(s) near planned guard rail posts east of Hillcrest and locate the new guard rail posts at least one foot from the conduit(s).

**Timing:** The Contractor shall notify Comcast at least two weeks in advance of needing Comcast to adjust its handhole. The Contractor shall notify Comcast at least one week in advance of excavating in the vicinity of Comcast's buried facilities.

-3-  
**UTILITIES**

**Eagle River Water and Sanitation District (ERWSD)**

All work shall comply with the current ERWSD Rules and Regulations.

The Contractor shall clean and adjust the water valve located near US6 Sta 110+50 RT and adjust the sanitary manholes located near US6 Sta 113+68 LT and Hillcrest Sta 201+65 RT to accommodate grade change. The adjustment of the manholes shall be to ¼” to ½” below final grade of the surface. The Contractor shall coordinate inspections with ERWSD.

The Contractor shall insulate the sanitary sewer with a four inch thickness of rigid insulation board where there will be less than 4.5 feet of cover between the manhole at US6 Sta 107+25 RT and US6 Sta 108+16 RT, as shown in the plans and in accordance with Detail D-10.

The Contractor shall insulate the sanitary sewer with a six inch thickness of rigid insulation board where there will be less than two feet of separation between the sanitary and the new storm sewer at Hillcrest Sta 201+38 LT, as shown in the plans and in accordance with Detail D-10. The insulation shall extend at least three feet beyond the pipe crossing.

**Timing:** The Contractor shall notify ERWSD at least one week in advance of excavating in the vicinity of ERWSD’s facilities. The Contractor shall provide the utility owner written notice 5 days immediately prior to each required inspection.

**Holy Cross Energy (HCE) – Distribution**

The Contractor shall coordinate with HCE regarding work which was to have been completed prior to construction, including the relocation of the poles at US6 Sta 109+90 RT and US6 Sta 109+93 RT and the overhead electric crossing US6 at Hillcrest Dr. If the work has not been completed prior to construction, the Contractor shall coordinate with HCE to complete the work.

The Contractor shall coordinate with HCE regarding the pole and guy wire/anchor near Hillcrest Sta 201+25 LT which may be impacted during excavation for the drainage improvements west of Hillcrest Dr.

**Timing:** The Contractor shall notify HCE three weeks in advance of beginning excavation for the drainage improvements west of Hillcrest Dr.

**Holy Cross Energy (HCE) – Lighting**

The Contractor shall install new poles, luminaires, raceway and foundations for streetlights, luminaires and foundations for streetlights as shown in the lighting plans and project specifications.

The Contractor shall contact HCE at 970-949-5892 so HCE can disconnect power to the light pole near Hillcrest Sta 200+45 LT as shown in the lighting plans.

The Contractor shall be responsible for the coordination of power source work to be performed by HCE. The Contractor shall perform the required coordination to establish power sources for lighting as shown on the lighting plans. The Contractor shall perform all work necessary to maintain existing power source to the devices called for in the lighting plans and per the standard for any non-metered sources. All cost charges from the power service provider, and all necessary materials, labor and coordination required to make final connection to power sources required for permanent operation of equipment as shown in the lighting plans shall be reimbursed from the F/A Furnish and Install Electrical Service.

**Timing:** The Contractor shall notify HCE at least two weeks in advance of needing HCE to make the power source connection. The Contractor shall contact HCE at least one week in advance to disconnect power to the existing light pole.

-4-

**UTILITIES****Lumen**

The Contractor shall verify the location of Lumen's conduit(s) in the vicinity of the drainage pipe near US6 Sta 107+50 LT and coordinate with Lumen regarding measures to be taken by Lumen to field adjust or protect the conduit(s) in place.

The Contractor shall expose Lumen's cables for approximately 20 feet on either side of the planned drainage crossing at Hillcrest Sta 200+45 (US6 Sta 109+35 to US6 Sta 109+75 LT) so Lumen forces can field adjust the cables in conjunction with the installation of the drainage pipe and backfill the trench beyond the drainage pipe. The Contractor shall hold a field meeting with Lumen prior to starting the work.

The Contractor shall confirm whether Lumen's conduit(s) will need to be adjusted in the vicinity of the planned inlet near US6 Sta 110+95 RT and coordinate with Lumen if a field adjustment is necessary. The Contractor shall expose Lumen's conduits in the vicinity of the inlet in advance of the field adjustment.

The Contractor shall coordinate with Lumen who shall adjust the handhole near US6 Sta 111+13 RT and the pedestals near US6 Sta 107+30 RT and US6 Sta 112+30 LT to accommodate grade change. The Contractor shall achieve final grade in advance of the adjustment.

The Contractor shall verify the location of Lumen's conduit(s) near planned guard rail posts east of Hillcrest and locate the new guard rail posts at least one foot from the conduit(s).

**Timing:** The Contractor shall notify Lumen at least six weeks in advance of needing the cables near Hillcrest Sta 200+45 adjusted; it is expected to take two days to complete the work. The Contractor shall notify Lumen one week in advance of excavating in the vicinity of Lumen's other facilities. The Contractor shall notify Lumen at least two weeks in advance of needing the handhole and pedestal to be adjusted; it is expected to take two weeks to schedule and one day to complete each adjustment.

**Unknown Utility Owner**

The Contractor shall clear the inlet excavation near US6 Sta 112+32 RT for utilities in conflict. The Contractor shall identify and coordinate with the utility owner as needed.

**PART 2 - UTILITY OWNERS SHALL PERFORM THE WORK LISTED BELOW:**

Although the Contractor shall provide traffic control for utility work expected to be coordinated with construction, traffic control for utility work outside of typical project work hours or outside of project limits shall be the responsibility of the utility owner. The utility owner shall prepare and submit to the

Engineer a Method of Handling Traffic for utility work to be performed outside typical project work hours or outside of project limits. The utility owner shall obtain acceptance of the Method of Handling Traffic from the Engineer prior to beginning the utility work to be performed outside typical project work hours or outside of project limits.

This work will be performed by the utility owners as necessary to avoid conflicts with construction activities. New locations shall be as indicated in the plans. Utility owners shall comply with schedule requirements of the Contractor and make every effort not to impact the overall construction schedule. Unless otherwise approved by the Engineer, abandoned aboveground appurtenances such as pedestals shall be removed and abandoned underground utilities and manholes/handholds shall be abandoned in place.

Utility owners are responsible for obtaining all necessary permits from CDOT and Eagle County as required.

-5-  
**UTILITIES**

**Black Hills Energy (BHE)**

BHE shall provide a standby when requested in advance by the Contractor.

BHE shall relocate the test station at Hillcrest Sta 200+75 RT to behind the new sidewalk as shown in the plans after the Contractor has exposed the gas line and trenched to the location of the new test station.

**Timing:** This work is to be coordinated with construction. The Contractor shall notify BHE at least one week in advance of excavating near BHE's gas lines. The Contractor shall notify BHE at least two weeks in advance of needing BHE to relocate their test stations.

**Comcast**

Comcast forces shall relocate its overhead fiber on the south side of US-6 to HCE's new poles at US6 Sta 110+55 LT.

Comcast forces shall adjust its handhole located near Hillcrest Sta 201+45 RT as needed after the Contractor has achieved final grade.

**Timing:** The overhead fiber relocation is expected to be completed prior to construction; if it has not been completed prior to construction, Comcast shall coordinate with HCE and the Contractor to complete the work. The handhole adjustment is to be coordinated with construction; it is expected to take two weeks to schedule and one day to complete the field adjustment.

**Eagle River Water and Sanitation District (ERWSD)**

ERWSD forces shall inspect utility work performed by the Contractor listed in Part 1 above.

**Timing:** The Contractor shall provide the utility owner written notice 5 days immediately prior to each required inspection.

**Holy Cross Energy – Distribution**

HCE shall relocate the poles at US6 Sta 109+90 RT and US6 Sta 109+93 RT and the overhead electric crossing US6 at Hillcrest Dr. as shown in the plans. The new guy wires shall be installed to avoid the two-track road.

**Timing:** This work is expected to be completed prior to construction. If it has not been completed prior to construction, HCE shall coordinate with the Contractor and complete the work.

HCE shall coordinate with the Contractor to protect the pole and guy wire/anchor near Hillcrest Sta 201+25 LT during excavation for the drainage improvements west of Hillcrest Dr.

**Timing:** This work is expected to be coordinated with construction. The Contractor shall notify HCE three weeks in advance of beginning excavation for the drainage improvements west of Hillcrest Dr. It is expected to take two weeks to schedule and one week to implement.

**Holy Cross Energy (HCE) – Lighting**

HCE shall disconnect power to the light pole at Hillcrest Sta 200+45 LT when requested by the Contractor at least one week in advance.



**-6-**  
**UTILITIES**

After the Contractor has completed the installation of the proposed lighting including poles, luminaire, conduit, and wiring coiled at the pole mounted transformer, HCE shall make the final connections to the power source.

**Timing:** This work is to be coordinated with construction. It is expected to take one day to disconnect power to the light pole and one day to make the final connections to the power source.

**Lumen**

Lumen shall coordinate with the Contractor regarding Lumen's conduit(s) in the vicinity of the drainage pipe near US6 Sta 107+50 LT and field adjust or protect the conduit(s) in place.

Lumen forces shall field adjust its cables near Hillcrest Sta 200+45 to accommodate the new drainage crossing after they have been exposed by the Contractor. Lumen forces shall backfill the trench beyond the drainage pipe.

Lumen forces shall field adjust its conduits as needed in the vicinity of the planned inlet near US6 Sta 110+95 RT after they have been exposed by the Contractor.

Lumen forces shall adjust the handhole near US6 Sta 111+13 RT and the pedestals near US6 Sta 107+30 RT and US6 Sta 112+30 LT to accommodate grade change. The Contractor shall achieve final grade in advance of the adjustment. The adjustment shall be to ¼" to ½" below final grade of the surface.

**Timing:** This work is to be coordinated with construction. It is expected to take six weeks to schedule and two days to complete the field adjustment near Hillcrest Sta 200+45. It is expected to take two weeks to schedule and one day to complete each handhole and pedestal adjustment.

**GENERAL:**

The Contractor shall comply with Article 1.5 of Title 9, CRS ("Excavation Requirements") when excavating or grading is planned in the area of underground utility facilities. Unless otherwise specified above, the Contractor shall notify all affected utilities at least two (2) business days, not including the actual day of notice, prior to commencing such operations. The Contractor shall contact Colorado 811 at phone no. **811 or co811.org** to have locations of Colorado 811 registered lines marked by member companies. All other underground facilities shall be located by contacting the respective owner. Utility service laterals shall also be located prior to beginning excavation or grading.

The locations of utility facilities as shown on the plans were obtained from the best available information. No warranty is made for the adequacy or accuracy of subsurface information provided. The Contractor shall cooperate with the utility owners in their relocation operations.

All costs incidental to the foregoing requirements will not be paid for separately but shall be included in the work.