

COLORADO DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISIONS
23652 HORIZON & G ROAD ROUNDABOUT

The 2023 Standard Specifications for Road and Bridge Construction controls construction of this project. The following special provisions supplement or modify the Standard Specifications and take precedence over the Standard Specifications and plans.

PROJECT SPECIAL PROVISIONS

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NOTICE TO BIDDERS

Bidders shall review the 'Instruction to Bidders' section of the City of Grand Junction's Purchasing Divisions Invitation for Bid (IFB) document for detailed instructions on the bidding process and requirements.

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DISADVANTAGED BUSINESS ENTERPRISE (DBE) CONTRACT GOAL

This is a federally assisted construction project. As described in the CDOT DBE Standard Special Provision, the Bidder shall make good faith efforts to meet the following contract goal:

7% Percent DBE participation.

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ON THE JOB TRAINING CONTRACT GOAL

The Department has determined that On the Job Training shall be provided to trainees with the goal of developing full journey workers in the types of trade or classification involved. The contract goal for On-the-Job Trainees working in an approved training plan in this Contract has been established as follows:

Minimum number of total On the Job Training required: 320 hours

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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, whichever comes later, unless such time for beginning the work is changed by the Chief Engineer in the "Notice to Proceed." The Contractor shall complete all work within 180 calendar days in accordance with the "Notice to Proceed."

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**REVISION OF SECTION 102,
PROJECT PLANS AND OTHER DATA**

Section 102 of the Standard Specifications is hereby revised for this project as follows:

Sections 102 is deleted and replaced with the City of Grand Junction, General Contract Conditions.

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**REVISION OF SECTION 107,
PERFORMANCE OF SAFETY CRITICAL WORK**

Section 107 of the Standard Specifications is hereby revised as follows:
Add subsection 107.061 immediately following subsection 107.06 as follows:
107.061 Performance of Safety Critical Work. The following work elements are considered safety critical work for this project:

- (1) Work requiring the use of cranes or other lifting equipment,
- (2) Night work (if approved by engineer),
- (3) Trenching
- (4) Caisson work
- (6) Overhead signing
- (7) Work over or adjacent to river, stream, or other protected water way.

The Contractor shall submit, for record purposes only, an initial detailed construction plan that addresses safe construction of each of the safety critical elements. The detailed construction plan shall be submitted two weeks prior to the safety critical element conference described below. The construction plan shall be stamped "Approved for Construction" and signed by the Contractor. The construction plan will not be approved by the Engineer.

The Construction Plan shall include the following:

- (1) Safety Critical Element for which the plan is being prepared and submitted.
- (2) Contractor or subcontractor responsible for the plan preparation and the work.
- (3) Schedule, procedures, equipment, and sequence of operations.
- (4) Temporary works required: falsework, bracing, shoring, etc.
- (5) Additional actions that will be taken to ensure that the work will be performed safely.
- (6) Names and qualifications of workers who will be in responsible charge of the work:
 - A. Years of experience performing similar work
 - B. Training taken in performing similar work
 - C. Certifications earned in performing similar work
- (7) Names and qualifications of workers operating cranes or other lifting equipment
 - A. Years of experience performing similar work
 - B. Training taken in performing similar work
 - C. Certifications earned in performing similar work

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REVISION OF SECTION 107,
PERFORMANCE OF SAFETY CRITICAL WORK

- (8) The construction plan shall address how the Contractor will handle contingencies such as:
- A. Unplanned events (storms, traffic accidents, etc.)
 - B. Structural elements that don't fit or line up
 - C. Work that cannot be completed in time for the roadway to be reopened to traffic
 - D. Replacement of workers who don't perform the work safely
 - E. Equipment failure
 - F. Other potential difficulties inherent in the type of work being performed

(9) Name and qualifications of Contractor's person designated to determine and notify the Engineer in writing when it is safe to open a route to traffic after it has been closed for safety critical work.

A safety critical element conference shall be held two weeks prior to beginning construction on each safety critical element. The Engineer, the Contractor, the safety critical element subcontractors, and the Contractor's Engineer shall attend the conference.

After the safety critical element conference, and prior to beginning work on the safety critical element, the Contractor shall submit a final construction plan to the Engineer for record purposes only. The final construction plan shall be stamped "Approved for Construction" and signed by the Contractor.

The Contractor shall perform safety critical work only when the Project Engineer or Designated Representative is on the project site. The Contractor's Engineer shall be on site to inspect and provide written approval of safety critical work for which he provided stamped construction details. Unless otherwise directed or approved, the Contractor's Engineer need not be on site during the actual performance of safety critical work but shall be present to conduct inspection for written approval of the safety critical work.

When ordered by the Engineer, the Contractor shall immediately stop safety critical work that is being performed in an unsafe manner or will result in an unsafe situation for the traveling public. Prior to stopping work, the Contractor shall make the situation safe for work stoppage. The Contractor shall submit an acceptable plan to correct the unsafe process before the Engineer will authorize resumption of the work.

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**REVISION OF SECTION 107,
PERFORMANCE OF SAFETY CRITICAL WORK**

When ordered by the Engineer, the Contractor shall remove workers from the project that are performing the safety critical work in a manner that creates an unsafe situation for the workers or the public in accordance with subsection 108.06.

Should an unplanned event occur, or the safety critical operation deviate from the submitted plan, the Contractor shall immediately cease operations on the safety critical element, except for performing any work necessary to ensure worksite safety, and provide proper protection of the work and the traveling public. If the Contractor intends to modify the submitted plan, the Contractor shall submit a revised plan to the Engineer prior to resuming operations.

All costs associated with the preparation and implementation of each safety critical element construction plan will not be measured and paid for separately but shall be included in the work.

Nothing in this section shall be construed to relieve the Contractor from ultimate liability for unsafe or negligent acts or to be a waiver of the Colorado Governmental Immunity Act on behalf of the Department.

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**REVISION OF SECTION 202
REMOVAL OF TRAFFIC SIGNALS**

Subsection 202.02 shall include the following:

The Contractor shall not remove the existing traffic signals until the temporary signals installed are operational.

Subsection 202.03 shall include the following:

The Contractor is responsible for the removal of the traffic signals. The Contractor shall salvage the signals and associated components and deliver them to the City Maintenance yard at 333 West Avenue, Grand Junction. These items are the property of the City of Grand Junction. The Contractor shall contact Tom Lanam, at (970) 314-5200, a minimum of 48 hours prior to any removal of the traffic signals so that the City can turn off the electricity. The foundation caissons / pads will be removed and disposed of by the Contractor to a minimum of 5 feet below final grade. If it is determined that the foundation is in direct conflict with a utility, then the foundation shall be removed to a depth determined by the Project Engineer.

Subsection 202.11 shall include the following:

Removal of Traffic Signal shall include all equipment, materials and labor necessary to remove, salvage, and deliver the components of the traffic signal to the location listed above.

Subsection 202.12 shall include the following: Payment will be made under:

<u>Pay Item</u>	<u>Pay Unit</u>
Removal of Traffic Signal Equipment	LS

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**REVISION OF SECTION 203
MUCK EXCAVATION**

Section 203 shall include the following:

Muck Excavation shall be performed by the Contractor on an as needed basis, in accordance with the specifications, as directed by the Engineer.

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**REVISION OF SECTION 203
POTHOLING**

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

Subsection 203.05(g) shall include the following:

All potholing shall be accomplished using noninvasive, vacuum equipment. All potholing methods and locations shall be preapproved by the Engineer. Any potholing that has not been preapproved by the Engineer shall be at the Contractor's expense.

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**REVISION OF SECTION 209
DUST PALLIATIVE (MAGNESIUM CHLORIDE)**

Section 209 shall include the following:

Dust palliative (magnesium chloride) shall be performed by the Contractor on an as needed basis, in accordance with the specifications, as directed by the Engineer.

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REVISION OF SECTION 213
MULCHING

Section 213 of the Standard Specifications is hereby revised for this project as follows:

Subsection 213.02, include the following:

Inorganic Mulch Type #1 for shrub bed mulch shall be 1-1/2 inch tan granite rock, as is naturally available in the region. Rock mulch shall be free of trash, sticks or roots. Submit sample to the Engineer for approval at least 30 days prior to placing on project.

Inorganic Mulch Type #2 for shrub bed mulch shall be 3" Purple La Sal Granite, as is naturally available in the region. Rock mulch shall be free of trash, sticks or roots. Submit sample to the Engineer for approval at least 30 days prior to placing on project.

Inorganic Mulch Type #3 for shrub bed mulch shall be 1-2" Rounded and Washed River Rock to match existing landscape rock at 705 Horizon, and as is naturally available in the region. Rock mulch shall be free of trash, sticks or roots. Submit sample to the Engineer for approval at least 30 days prior to placing on project.

Landscape boulders shall be natural Tan granite stone (blasted or shot rock will not be accepted) without fractures or structural defects. Landscape boulders to be approved by the Landscape Architect prior to placement. Sizes shall be A) +/- 2'x3'x2' OR B) +/- 3'x5'x2'

In Subsection 213.02, delete the final paragraph and replace with the following:

Metal landscape border shall be commercial type: galvanized steel, aluminum or factory painted steel edging, 1/8" x 4" with tapered steel stakes as supplied by the manufacturer or approved equal.

In Subsection 213.03, include the following:

g) Inorganic Mulch (Decorative). A 3-inch layer of Inorganic Mulch shall be uniformly applied to all planting beds as shown on the plans or as directed.

h) Landscape Boulders. Landscape boulders shall be installed at the locations shown per the Drawings and Details. Locations of all landscape boulders shall be approved by the Landscape Architect prior to installation.

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REVISION OF SECTION 213
MULCHING

Subsection 213.05, Basis of Payment, add the following to the other pay items:

<u>Pay Item</u>	<u>Pay Unit</u>
Mulching (Special)	SF
Landscape Boulders	Each
Metal Landscape Border (1/8"x4")	LF
Metal Plants (Special)	Each

Wood Chip Mulch will not be measured and paid for separately but shall be included in the cost of Deciduous Tree.

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REVISION OF SECTION 214
PLANTING

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

Subsection 214.02, include the following:

(e) Biosol for plantings. Biosol soil amendment shall be “Biosol Planters Kit” as manufactured by Rocky Mountain Bio Products s, 10801 E 54th Avenue, Denver, CO 80239 (888)696-8960, (20 lb. Biosol, 50 lb. humate, and 1 lb. all-purpose mycorrhizae).

Subsection 214.03, delete section (a) and replace with the following:

(a) Planting Seasons. Plants shall be planted in accordance with the Contract. Areas to be planted shall be brought to the lines and grades designated or approved. The location of plants shown in the Contract is approximate to the degree that unsuitable planting locations shall be avoided. Locations and layouts shall be approved by the Landscape Architect before preparatory work for planting is started.

All layout staking for planting shall be done by the Contractor and shall be approved by the Landscape Architect before planting holes are prepared.

Subsection 214.03 (c), include the following:

Areas designated in shrub beds to receive soil conditioner shall be prepared by applying soil conditioner at a rate of 6 cu. Yds. Per 1000 sq ft over all landscape areas, discing or rototilling, the soil to a depth of 8 inches. After this has been done, all rocks bigger than 1 inch shall be picked up and removed from the site.

Subsection 214.03 (d), delete the first paragraph and replace with the following:

(d) Backfilling. Backfill mix shall be a mixture of organic soil amendment and existing site soils which are free of toxic substances, branches or roots, non-composted vegetation and stones over 1” in diameter. Backfill mix shall be composed of one-part organic soil amendment and two parts existing site soils.

Subsection 214.03, include the following:

(j) Biosol for plantings. Biosol Mix shall be incorporated at the rates shown on the Drawings and Details.

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**REVISION OF SECTION 214
PLANTING**

Subsection 214.06, include the following:

Water, fertilizer, Biosol and organic soil amendment (soil conditioner) for the plant pit backfill will not be measured and paid for separately but shall be included in the work.

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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.

MATERIALS AND CONSTRUCTION REQUIREMENTS

240.02 The Contractor shall schedule 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 protected by the Migratory Bird Treaty Act (MBTA). The Contractor shall retain a qualified wildlife biologist for this project. 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 biologist's 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.

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 shall be submitted to the Engineer.

(a) *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 within the work limits for active migratory bird nests. The Contractor's wildlife biologist shall also survey for active migratory bird nests within 50 feet outside work limits. Contractor personnel shall enter areas outside CDOT right of way 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 active 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:

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 tree and shrub removal or trimming.

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

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 CDOT biologist. This buffer dimension may be changed if determined appropriate by the CDOT 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.



- (b) *Work on structures.* The Contractor shall prosecute 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 prosecute the work on structures during the primary breeding season, April 1 through August 31, unless he takes the following actions:
 - (1) The Contractor shall remove existing nests prior to April 1. If the Contract is not awarded prior to April 1 and CDOT has removed existing nests, then the monitoring of nest building shall become the Contractor's responsibility upon Notice to Proceed.
 - (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.

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PROTECTION OF MIGRATORY BIRDS
BIOLOGICAL WORK PERFORMED BY THE CONTRACTOR'S BIOLOGIST

- (3) If the birds have started to build any nests, they shall be removed before the nest is completed. Water shall not be used to remove the nests if nests are located within 50 feet of any surface waters.
- (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 $\frac{3}{4}$ inch by $\frac{3}{4}$ inch or less.

If an active nest become 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 wildlife 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.

- (c) *Taking of a Migratory Bird.* 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.

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

METHOD OF MEASUREMENT

240.03 Wildlife Biologist will be measured by the actual authorized number of hours a wildlife biologist is on site performing the required tasks.

Removal of nests will be measured by the actual number of man-hours spent removing inactive nests just prior to and during the breeding season, April 1 through August 31.

During this period, the Contractor shall submit to the Engineer each week for approval a list of the workers who removed nests and the number of hours each one spent removing nests.

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.

Payment will be made under:

Pay Item

Wildlife Biologist

Removal of Nests

Netting

Pay Unit

Hour

Hour

Square Yard

Payment for 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)

Payment for Removal of Nests will be full compensation for all work and material required to complete the work.

Payment for netting will be full compensation for all work and material required to complete the item. Overlaps of netting will not be measured and paid for separately, but shall be included in the work. Maintenance and replacement, removal, and disposal of netting will not be measured and paid for separately, but shall be included in the work.

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

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REVISION OF SECTION 250
ENVIRONMENTAL, HEALTH, AND SAFETY MANAGEMENT
(RADIOACTIVE MATERIAL HANDLING AND WASTE DISPOSAL)

Section 250 of the *Standard Specifications* is hereby revised for this project as follows:

Subsection 250.03 shall include the following:

This project may involve work with radioactive soils associated with the Uranium Mill Tailings Radiation Control Act (UMTRCA, 1978) and the Uranium Mill Tailings Remedial Action (UMTRA) project by the Department of Energy. Uranium mill tailings may, or may not, have been identified at properties adjacent to the project area; however, per the CDPHE, radioactive contaminated soils may be present in the project location due to past uranium mill tailings uncovered in the area. Areas of excavation shall be scanned for radioactive readings. If gamma readings are at or above 20 uR/H, excavated materials shall be considered contaminated with radioactive tailings and shall be handled and disposed of properly.

Subsection 250.05 (d) Hazardous Waste Disposal shall include the following:

The Contractor shall review and implement material handling protocols for radioactive materials outlined in the CDPHE's *Uranium Mill Tailings Management Plan -- for managing Title I uranium mill tailings encountered during construction activities in Western Colorado,*" (latest version). Upon request, a copy of this plan is available from the CDPHE's website, or from the CDOT Region 3 Environmental Unit.

As referenced in the *Uranium Mill Tailings Management Plan*, if on-site disposal of tailings is not feasible, off-site disposal of radioactive tailings shall be coordinated by the Health and Safety Officer (HSO) and with Mr. Michael Cosby, CDPHE Environmental Protection Specialist (Phone: 970-248-7171). Off-site disposal of radioactive material shall be approved by the Project Engineer. Work shall cease when the Monitoring Technician or Project Engineer determines that the required material handling procedures are not, or cannot, be followed (i.e. with high winds or worker non-cooperation).

Subsection 250.10 add the following to the sixth paragraph:

Additional excavation of uncontaminated material to accommodate burial of tailings will be paid as unclassified excavation or shall be included in the work if the project is an embankment (CIP) project. Additional work for implementing the CDPHE's Uranium Mill Tailings Management Plan will not be paid for separately but shall be included in the work.

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REVISION OF SECTION 250
ENVIRONMENTAL, HEALTH, AND SAFETY MANAGEMENT
(RADIOACTIVE MATERIAL HANDLING AND WASTE DISPOSAL)

Payment for Hazardous Waste Disposal (Radioactive) will be made at the appropriate contract unit price for the disposal of material determined to be radioactive hazardous waste. The contract unit price will be full compensation for furnishing all materials, labor, equipment, tools, storage containers for transport, containerization of material for up to 60 days, and incidentals necessary to complete this work. This includes all handling of the material, loading for disposal, unloading for disposal, and borrow material required for replacement of excavated material disposed of off-site.

Hazardous Waste Disposal (Off-site Disposal). Transport costs and disposal fees will be paid for by a planned force account in accordance with subsection 109.04

Pay Item

Environmental Health and Safety Management
Monitoring Technician
Health and Safety Officer
Hazardous Waste Disposal (Radioactive)
F/A Hazard Waste Disposal (Off-Site Disposal) ♣

Pay Unit

Lump Sum
Hour
Hour
Cubic Yard
F/A

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**REVISION OF SECTION 420
GEOTEXTILE (SEPARATOR) (CLASS 2)**

Section 420 shall include the following:

Geotextile (Separator) (Class 2) shall be performed by the Contractor on an as needed basis, in accordance with the specifications, as directed by the Engineer.

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**REVISION OF SECTION 623,
IRRIGATION SYSTEM**

Section 623 of the Standard Specifications is hereby revised for this project as follows:

In Subsection 623.03 Backflow Preventer, Delete and Replace with the following:
Pressure Vacuum Breaker shall be reduced pressure Wilkins 375XL, bronze body with black fusion epoxy coating, including Blow-out/Flush Fitting, two check valves, a relief valve, two gate or ball valves, and test cocks for field testing, unions at both ends.

In Subsection 623.04 Automatic Controllers, delete and replace with the following:
Satellite Hardware: Provide, install, and test control system complete with interface components, communication hardware, and control units. To ensure compatibility with City of Grand Junction's existing Rain Bird IQ Central Control system, acceptable manufacturer and model is Rain Bird ESP-LXIVM. Provide Shop Drawing to show components that ensure operability.

Electrical Conduit: Use PVC Schedule 40 conduit conforming to dimensions and tolerances established by ASTM Standard D-1785. Use Schedule 40, Type 1, PVC Solvent weld sweep fittings for PVC conduit conforming to ASTM standards D2466 and D1784 for buried installations. Use rigid metallic conduit with sweep elbows for above grade installations.

Wire Markers: Prenumbered or labeled with indelible nonfading ink, made of permanent, nonfading material.

Installation: City of Grand Junction requires that all IQ and controller equipment be accomplished by a contractor experienced with installation of IQ systems.

Lightning Protection: Provide one 12'' x 36'' x 0.0625'' ground plate, one 5/8'' x 10-foot copper clad UL listed grounding rod. 30 feet of #6 AWG bare copper grounding wire, two 6-inch round valve boxes, and one CADWELD connector at satellite controller.

In Subsection 623.08 Control Wiring 24 Volt, delete 3rd and 4th Sentence and Table for Color Key.

In Subsection 623.08 Flow Sensor, delete and replace with the following:
Flow Sensor shall be Rainbird 1'' FS-100B, Brass in-line that transmits an electronic pulse through conductors to Controller. Provide at least 20 inches of straight unobstructed pipe upstream of the sensor and at least 10 inches of straight unobstructed pipe downstream from the sensor.

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**REVISION OF SECTION 623,
IRRIGATION SYSTEM**

In Subsection 623.09 Drip Emitters, delete the 4th Sentence and replace with the following:

Drip Emitters shall be single outlet Netafim Techflow PC (Pressure compensating) Drippers, with flow rate of 1 GPH and shall be installed on the Drip Emitter Tubing.

Where shown on drawings, Tree Dripper coverage shall be provided by Netafim Techline CV, flow rate of 0.9 GPH. (Bid as "Sprinkler System")

In Subsection 623.10, delete section (a) and replace with the following:

(a) Mainline Pipe. Lateral line pipe shall be Schedule 40, solvent weld PVC manufactured from virgin material in conformance with ASTM D 2241. Pipe size shall be as shown on drawings. Fittings shall be injected-molded schedule 40 PVC conforming to ASTM D 2609, cell classification 12454-B.

In Subsection 623.10, delete section (b) and replace with the following:

(b) Lateral Line Pipe. Lateral line pipe shall be Class 200 PVC manufactured from virgin material in conformance with ASTM D 2241. Pipe size shall be as shown on drawings. Fittings shall be injected-molded schedule 40 PVC conforming to ASTM D 2609, cell classification 12454-B.

In Subsection 623.10, delete section (e) and replace with the following:

(e) Detectable Underground Marking Tape. The Contractor shall provide utility line marking tape for installation above all mainline and lateral pipe, which does not have control wire placed in the same trench.

In Subsection 623.11, Strainer, delete and replace with the following:

Strainer shall be a VU-FLOW "T" Type (to fit within designated Backflow Enclosure) Filter, with 140 mesh stainless steel screen. Strainer shall be flushed via a ball valve located on the strainer.

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IRRIGATION SYSTEM**

In Subsection 623.12, delete section (f) and replace with the following:

(f) Mainline Isolation Valves. Isolation valves (3” or less) are to be a Spears PVC ball valve, same size as main line, manufactured of PVC type 1, Cell Classification 12454-B, with polypropylene handle, and EPDM O Rings, and shall be listed by NSF for use in potable water service.

In Subsection 623.25 Irrigation As-Constructed Plans, delete items 1-4, and add the following:

- (1) Every 20 ft of mainline
- (2) Every 20 ft of wire
- (3) All Control Valves
- (4) All Isolation Valves
- (5) All Quick Coupling valves
- (6) All blowouts
- (7) All Sleeve locations

Delete subsection 623.28 Final Landscape Acceptance, and replace with the following:

Before final landscape acceptance is granted, the Contractor shall perform an overall operation and pressure test and confirm the irrigation system is correctly functioning. This includes two weeks of automatic operation from the City of Grand Junction irrigation “Central Computer”. The Contractor shall inspect all irrigation components and make repairs and adjustments as necessary. The Contractor shall complete spring start-up (pressurization) and repair all damage to the irrigation system.

In Subsection 623.32 Method of Measurement, Drip emitters, delete paragraph and replace with the following:

Drip Emitters shall be measured by the number of Netafim PC Dripper Point Source emitters, and shall include the capillary tubing, tubing stakes and Barb Transfer Fittings. “Sprinkler System” will be measured as a lump sum for Tree Dripper lines shown on the drawings and details, and shall include the Polypipe header, Netafim Techline CV tubing, tubing stakes, Compression Tee, and all fittings necessary for the Netafim Techline portion of drip irrigation. Include Tree Dripper lines in Lump Sum. Lump Sum for “Sprinkler System” does not include the entire Irrigation System.

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Automatic Controller System components will be measured by the number of units of each size installed and accepted, including concrete pad, conduit, bolts, enclosure/pedestal, ground wire, power source wire, and all other items necessary to complete the work as shown on the plans and in Subsection 623.04.

Subsection 623.33, Basis of Payment, add the following to the other pay items:

<u>Pay Item</u>	<u>Pay Unit</u>
1-1/2 Inch Ball Valve	Each
1 Inch Flow Sensor (Special)	Each
60 Station Automatic Controller (Special)	Each

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**REVISION OF SECTION 626,
PUBLIC INFORMATION SERVICES**

Section 626 of the Standard Specifications is hereby revised for this project as follows:

Subsection 626.01 shall include the following:

The Contractor shall provide the following public information services on an ongoing basis throughout the duration of the project:

The Contractor shall attend one public meeting, which will include the City of Grand Junction Staff, concerned local agencies, businesses and residents; and second public meeting may be necessary mid-progress and will be determined by the Project Engineer. The City will coordinate the meeting location. The focus will be to inform attendees of project plans and schedules and to establish and/or update a contact list for those interested in receiving information about the project. At the meetings, Contractor shall be prepared to discuss work, phasing, traffic impacts, etc.

The Contractor shall prepare and distribute flyers (by hand) to the residents and businesses directly adjacent to the project limits two weeks prior to beginning of construction. The flyer shall be printed on orange paper and shall discuss the project's ongoing work, the anticipated completion date and the schedule for the forthcoming month including, but not limited to road/lane closures, driveway and/or cross street work, paving, and other pertinent information that the landowner and businesses may need to know (including an invitation to receive e-mailed and/or text message project updates via CDOT's GovDelivery system). The flyer shall provide the name of the Contractor's point of contact, the telephone number.

The Contractor shall meet individually with each of the landowners and businesses whose access is directly impacted by construction prior to the commencement of those specific operations. The Contractor shall submit access plans to the Engineer for approval before working around or closing any of the accesses.

Subsection 626.02 shall include the following:

The Engineer will monitor all public information services. When the Contractor provides acceptable public information services in accordance with these specifications, partial payments for the pay item Public Information Services will be made as the work progresses.

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REVISION OF SECTION 626,
PUBLIC INFORMATION SERVICES

These partial payments will be made as follows:

When 5% of the original Contract amount is earned, 25% of the amount bid for this item will be paid.

When 10% of the original Contract amount is earned, 40% of the amount bid for this item, less all previous payments, will be paid.

When 25% of the original Contract amount is earned, 50% of the amount bid for this item, less all previous payments, will be paid.

When 75% of the original Contract amount is earned, 75% of the amount bid for this item, less all previous payments, will be paid.

When 100% of the original Contract amount is earned, 100% of the amount bid for this item, less all previous payments, will be paid.

Failure to provide acceptable public information services will result in withholding of progress payment for this item. Continued failure to provide the services required will result in non-payment of the corresponding percentage of the original bid item and may result in suspension of the work in those areas affected until proper notification is provided by the Contractor.

For the purpose of this Specification, the term “original Contract amount” as used above, shall mean the amount bid for the construction items on this Contract, not including the amounts bid for Public Information Services and Mobilization.

Payment for Public Information Services will be full compensation for all flyers, press releases, newspaper ads, website, meeting rooms, public information office, telephone lines, and all other labor and materials required to complete the item, except signs. Signs will be measured and paid for in accordance with Section 630.

Payment will be made under:

<u>Pay Item</u>	<u>Pay Unit</u>
Public Information Management (Tier III)	Day

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**REVISION OF SECTION 627,
PAVEMENT MARKING**

Section 627 of the Standard Specifications is hereby revised for this project as follows:

Section 627.09 shall include the following:

Prior to placement of preformed thermoplastic pavement marking material, the surface to which the material is to be applied shall be ground with a grinding machine which is capable of adjusting from 4-inch-wide passes to 12-inch-wide passes.

The grinding procedure shall produce a horizontal, smooth surface to a depth of 120 mils +/- 10 mils, unless otherwise approved. The procedure shall be capable of grinding a 10-foot straight line with a tolerance of +/- 1 inch. The area of removal shall be no more than 1-inch wider than the stencil that is to be applied with the following exception: Turn arrows shall be ground with multiple passes to minimize extra grinding; no rectangular grinds will be allowed.

After grinding, all loose material shall be removed prior to application of pavement marking material. All leading edges of material shall be beveled at a 45° -degree angle.

Section 627.13 shall include the following:

<u>Pay Item</u>	<u>Pay Unit</u>
Preformed Thermoplastic Pavement Marking (Word-Symbol)	Square Foot
Preformed Thermoplastic Pavement Marking (Xwalk-Stop Line)	Square Foot

Grinding will not be measured and paid for separately but shall be included in the work. All preformed thermoplastic stencils shall be installed with sealer per the manufacturers' recommendations.

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**REVISION OF SECTION 630,
CONSTRUCTION ZONE TRAFFIC CONTROL**

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

Subsection 630.01 shall include the following:

This project shall require the mobilization, operation, and maintaining of portable message sign panels. Three portable message sign panels will be required to be available for utilization on the project, within 12 hours of the Engineer's request, for the duration of the project. Additional portable message sign panels may be required during the progress of the work. Multiple mobilizations of the sign panels may also be required.

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 sign functions 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.

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- (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 7 Calendar 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.

Subsection 630.15 shall include the following:
Portable message sign panels will be measured as follows:
By the actual number of days each portable message sign is used on the project as approved by the Engineer except as noted in the Traffic Control Plan.

Subsection 630.16 shall include the following:

<u>Pay Item</u>	<u>Pay Unit</u>
Portable Message Sign Panel	Day

Prior to obtaining this item the Contractor shall submit the trade name, model number and specifications of the portable message sign panels the Contractor intends to use to the Engineer for approval. ADDCO Manufacturing Co. Inc., American Signal Company, Winko-Matic Signal Company, and Precision Solar Controls Inc. are known to produce a suitable portable message sign panel. The Engineer’s decision concerning acceptability of this item shall be final.

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

Add subsection 630.051 immediately following subsection 630.05 as follows:
630.051 Channelizing Device (Special). Channelization Device (Special) shall be traffic cones that are high density polyethylene, fluorescent orange in color. Retroreflectorization of cones shall conform to MUTCD (2003) Section 6F.59, Cones. The retroreflectorized material shall be selected from the Colorado Approved Products List and shall have a smooth, sealed outer surface that will display the same approximate color day and night. Channelization Device (Special) traffic cones shall be 42 inches tall with an additional 3 inch “handle”. Each cone shall weigh 3 pounds and have a base weight of 30 pounds. The top of the cone shall be 4 inches wide and taper to 8.5 inches wide at the bottom.

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Subsection 630.16 shall include the following:

<u>Pay Item</u>	<u>Pay Unit</u>
Channelizing Device (Special)	Each

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

Subsection 630.01 shall include the following:

This work shall consist of furnishing, installing, maintaining and removing Traffic Signal (Temporary) as needed to control mainline and interchange ramp traffic during construction phasing. Up to three intersections may need temporary traffic signals.

Subsection 630.04 shall include the following:

(a) Installation: The Contractor shall install the Traffic Signal (Temporary) as required to meet the construction schedule. The Contractor shall notify the Engineer at least 48 hours in advance when the Traffic Signal (Temporary) is ready to be turned on. Representatives of CDOT will then inspect the installation. After the approval, the maintenance of the Traffic Signal (Temporary) shall become the responsibility of the Contractor until the Engineer directs removal. The Contractor shall be responsible for maintaining the signals in proper operating condition. Any damage to the Traffic Signal (Temporary) from any cause whatsoever shall be repaired by the Contractor at his own expense. The Contractor may institute action to recover damages from a responsible third party. If, at any time, the Contractor fails to perform any work deemed necessary by the Engineer to keep the Traffic Signal (Temporary) in proper operating condition, CDOT reserves the right to have other contractors perform the needed work. The cost of such work will be deducted from the amount due to the Contractor. All materials and labor required to install the Traffic Signal (Temporary) and adjust traffic signal heads during construction shall be the responsibility of the Contractor. All equipment installed shall remain the property of the Contractor.

(b) Span Wire Installation: This work shall consist of furnishing, installing, or resetting the traffic signal controller and cabinet, steel span wire poles, span wire with accessories, signal heads, electrical service and all cable and wiring as necessary.

(c) Construction and Material Requirements: The Contractor shall construct the span wire signal in accordance with CDOT Standard S-614-41.

(d) Removal of Traffic Signal (Temporary): The Contractor shall remove the Traffic Signal (Temporary) when notified to do so by the Engineer. The Contractor shall be responsible for proper disposal of unusable material. Any holes resulting from removal of the poles shall be backfilled and compacted by the Contractor in accordance with Section 203.06.

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(e) Wiring: Type and size of wire and cable to be used and installation methods employed shall conform to the requirements of the National Electrical Code and to the IMSA cable specifications.

(f) Resetting Traffic Signal Heads: The Contractor shall reset temporary traffic signal heads as required or as directed by the Engineer to accommodate traffic shifts as needed. All resetting of temporary heads to accommodate construction traffic shifts will not be measured and paid for separately but shall be included in the unit price for Traffic Signal (Temporary).

(g) Synchronization: Costs for synchronizing signals (as necessary) shall be included in the price of Traffic Signal (Temporary).

(h) Signal Failure: Cost for Uniformed Traffic Control and flagging due to failure of the Traffic Signal (Temporary) shall be at the contractor's expense.

Section 630.15 shall include the following:

This work will be paid for at the unit price for Traffic Signal (Temporary), and shall be payment in full for all materials, equipment, and labor necessary to install the Traffic Signal (Temporary), maintain and operate the signals, and to remove them regardless of the number of intersections being controlled.

Section 630.16 shall include the following:

Payment will be made under:

<u>Pay Item</u>	<u>Pay Unit</u>
Traffic Signal (Temporary)	Each

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FORCE ACCOUNT ITEMS

DESCRIPTION

This special provision contains the Department's estimate for force account items included in the Contract. The estimated amounts marked with an "*" will be added to the total bid to determine the amount of 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.

Force Account Item	Quantity	Estimated Amount
F/A On-the-Job Training	Hour	640
F/A Minor Contract Revisions	LS	1
F/A Quality Incentive Payment	LS	1
F/A Roadway Smoothness Incentive	LS	1
F/A Asphalt Cement Cost Adjustment	LS	1
F/A Fuel Cost Adjustment	LS	1
F/A Erosion Control	LS	1
F/A Project First Program	LS	1
F/A Concrete Pavement Incentive	LS	1

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TRAFFIC CONTROL PLAN - GENERAL

The contractor shall submit a Traffic Control Plan (TCP) for approval by the Engineer prior to the beginning of any construction. The key elements of the Contractor's method of handling traffic (MHT) are outlined in subsection 630.08.

The components of the Traffic Control Plan for this project are included in the following:

- (1) Subsection 104.04 and Section 630 of the specifications.
- (2) Schedule of Construction Traffic Control Devices.
- (3) Standard Plan S-630-1, Traffic Controls for Highway Construction, Cases 2, 3, 10, 12, 14, 16, 18 and 24, 26, 30, 31, 32, 33; and Standard Plan S-630-2.

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

The Contractor shall not have construction equipment or materials in the lanes open to traffic at any time.

The Contractor shall maintain at his own expense that portion of the existing roadway being used to carry traffic so that traffic may readily pass over it.

The contract TCP components are not all-inclusive. The Contractor shall submit a detailed TCP for construction to the Engineer for approval prior to the implementation. The Contractor shall submit the detailed TCP at least 3 weeks before start of work for review and approval. The TCP shall meet the requirements of the plans and specifications.

In addition to the items required for MHTs in Section 630 as revised, each TCP submittal shall:

- (1) address any required oversize load restrictions to ensure the safety of workers and the traveling public
- (2) address traffic signal operations
- (3) address temporary bus stops

The Engineer may require revisions to the Contractor's TCP or associated MHTs if it is determined that implementation of the plan results in excessive delays to the traveling public. New or revised MHTs shall be submitted at least seven days before implementation, unless otherwise approved by the Engineer.

Allowable delays and working times shall be in accordance with Revision of Section 108-Prosecution and Progress.

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The Contractor shall develop and maintain a MHT for pedestrian circulation. The Contractor shall provide and maintain a safe environment for pedestrians surrounding work zones at all times. The Contractor shall provide and maintain appropriate pedestrian detour signage at each intersection to direct pedestrians. Where a segment of the sidewalk is closed during the construction, a new pathway or the sidewalk on the opposite side of the street shall be maintained with proper signage that marks detour routes for pedestrians. MHTs shall detail all of the Pedestrian devices and fence necessary for that operation.

Night work will not be allowed on this project unless approved by the engineer. All traffic control for night work shall be in accordance with the MUTCD. Adequate illumination of flagging stations shall include the use of light plants whenever night flagging operations are being conducted, as approved by the Engineer. Light plants and multiple mobilizations of light plants will not be paid for separately but shall be included in the work.

The Contractor shall be required to coordinate with Grand Valley Transit bus routing to determine the stop locations and maintain appropriate signage at each intersection.

All available public parking is reserved for the public. Contractor and subcontractor employee personal vehicle parking is prohibited in these locations. Parking of Contractor or subcontractor vehicles or construction equipment in existing public parking space is allowed only in the zones that are closed for construction. Parking of Contractor, subcontractor or employee construction or personal vehicles (or construction equipment) in private residential or business parking space is also strictly prohibited. Suitable transportation to the work site for personnel whose vehicles are parked off site shall be provided by the Contractor.

Access Maintenance Plan

Unless otherwise included in the plans or directed by the Engineer, the Contractor shall maintain continuous access to all roadways, side streets, walkways, alleyways, driveways, and other sidewalks and pathways at all times. Sidewalks shall remain open to pedestrians to the greatest extent practicable. If a sidewalk has to be closed, an alternate access shall be provided with appropriate signage. To the greatest extent possible, driveways shall be re-constructed when the access is closed for concrete pavement placement.

At least 7 calendar days prior to beginning work on any driveway or private access, the Contractor shall notify each business or resident of the expected construction schedule.

The Contractor shall develop an Access Maintenance Plan (AMP) in coordination with all

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affected owners and tenants. A sample form of the AMP shall be developed for this purpose by the Contractor and submitted to the Engineer for review and approval. The AMP shall address any special needs any business or residence has for Americans with Disabilities Act (ADA) access or any other special needs. A place on the AMP form shall address special needs and ADA issues.

The AMP shall detail the effects to the accesses including closing dates, time and duration, and, if applicable, barricades, fencing and temporary means of access with all affected owners and tenants in a work area. The AMP shall include the address, the station location, the work periods affected, and show documentation of coordination, including the appropriate property owner signatures, and the date of the contact. Contact information regarding the companies that make frequent deliveries to the affected businesses shall be obtained and details of access changes shall be provided to these companies by the Public Information Manager along with other routine public information.

The signed AMP shall be submitted, as part of the corresponding method of handling traffic, to the Project Engineer for approval one week prior to the start of any work which will affect the signatory properties. If the Contractor is unable to obtain approval and signatures, documentation of “good faith efforts” to obtain said approval and signatures shall be submitted.

The Contractor will not be allowed to begin work until the plan is accepted. If Contractor does not have approved AMP forms completed for all accesses within a work area, the Engineer may delay progress of work for the affected accesses. Such delay shall not be the basis for a claim for additional contract time or compensation.

Access to the Engineer’s field facilities shall be maintained at all times by the Contractor.

Oversize Load Restrictions

It is anticipated that oversize loads will need to be accommodated during the construction of this project. The Contractor, the City, and the Engineer will coordinate oversize load restrictions that assure the least interference with oversize loads using Horizon Drive.

Other Special Traffic Control Requirements

Signs and stands shall not be permitted to be left on sidewalks or landscaped areas overnight. Equipment shall not be stored within 20 feet of the currently traveled roadway lanes on the interstate and ramps; and within 10 feet of the currently traveled roadway

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lanes on city streets.

The Contractor shall provide each flagger, the Traffic Control Supervisor, and the Project Engineer with a minimum 5-watt VHF radio in order to provide adequate communications during construction. The radios shall have sufficient range to communicate a minimum of 5 miles. The MHT submitted by the Contractor shall address radio communications.

Traffic Control Management shall include all Traffic Control Supervisors and helpers necessary to perform the work. There shall be a minimum of one helper for each Traffic Control Supervisor required for the project. At least one Traffic Control Supervisor and one Helper shall be on site at all times when construction activities are underway.

Although Traffic Control items such as Variable Message Sign Panels, Traffic Control Management or Traffic Control Inspection, and construction traffic control signs may be required and used prior to the beginning of contract time, no payment will be made for the use of any item prior to the beginning of contract time. All work performed prior to commencement of Contract time shall be considered subsidiary to mobilization.

Helpers for the Traffic Control Management item may give flagger breaks. However, the time shall be included in the item for Traffic Control Management and shall not be paid as additional flagging hours. The TCS helper(s) shall be paid Traffic / Sign Laborer wages. The Traffic Control Supervisor shall be paid Truck Driver / Pickup Truck (Includes Pilot and Sign/Barricade Truck) wages for all hours that they are on the project.

The Contractor shall provide Traffic Control Supervisor(s) (TCS) with at least one year of experience, as accepted by the Engineer. A copy of the certification of the Traffic Control Supervisor(s) shall be provided to the Engineer at least two days prior to the project preconstruction conference.

A meeting will be scheduled each working day with the Contractor's superintendent, the Traffic Control Supervisor(s), and the Project Engineer for discussion, submittal and approval of the MHT(s) for the next day's scheduled work. Work that has not been scheduled and requires a MHT that has not been approved shall not be allowed. Work which does not require a MHT may proceed if approved by the Engineer.

The Contractor will not be permitted to have workers or equipment operating on the paved shoulders adjacent to open lanes.

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The required TCS Diary shall be submitted to the Engineer by 10:00 a.m. each following day and shall include a listing of all flagging hours, labor hours, and traffic control devices in use.

All Construction Zone Traffic Control Devices shall be continuously maintained in accordance with Section 630 of the Standard Specifications. The TCS shall establish a set maintenance and cleaning schedule. A copy of the maintenance and cleaning schedule shall be provided to the Engineer.

Truck turn-around locations shall be as approved by the Engineer. All truck turn-around locations adjacent to project limits shall also be included in an MHT. Traffic Control Devices and Flagging required for truck turn-around locations will not be paid for separately but shall be included in the work.

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

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UTILITIES

Known utilities within the limits of this project are:

- Ute Water
- Charter
- Xcel (Gas + Electric)
- Century Link
- United Private Networks
- City of Grand Junction Storm
- City of Grand Junction Sewer

The work described in these plans and specifications requires coordination between the Contractor and the utility companies in accordance with subsection 105.11 in conducting their respective operations as necessary to complete the utility work with minimum delay to the project.

The work listed below shall be performed by the Contractor in accordance with the plans and specifications, and as directed by the Engineer. The Contractor shall keep each utility company advised of any work being done to its facility, so that the utility company can coordinate its inspections for final acceptance of the work with the Engineer.

CITY OF GRAND JUNCTION (Sanitary & Storm Sewer) - Prior Notice 20 working days
Contractor Responsibilities -

Contractor is responsible for coordinating with the City of Grand Junction for the sanitary sewer and storm sewer construction associated within the project limits. There are approximately 8 manholes/inlets to be adjusted and 5 new inlets, as identified in the construction plans. A pre-construction field review should be completed prior to the start of any construction work. Please coordinate any sanitary and storm manhole elevation adjustments with said utility owner. Contractor is responsible for protecting all existing sanitary and storm lines and manholes from damage due to the Contractor's operations. During construction should the Contractor discover a conflict with any sanitary and storm lines or manholes the Contractor shall notify the Engineer immediately.

CITY OF GRAND JUNCTION (Traffic Signal) - Prior Notice 20 working days
Contractor Responsibilities -

Contractor is responsible for coordinating with the City of Grand Junction for removal of traffic signal poles, traffic signal controllers and cabinets, pull boxes, light standards and foundations and the placement of electrical conduit, pull boxes, wiring and lighting appurtenances associated within the project limits as identified in the plans. A pre-construction field review should be completed prior to the start of any construction work.

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UTILITIES

The Contractor shall also coordinate as necessary with and the City of Grand Junction when activating or setting lighting appurtenances.

CITY OF GRAND JUNCTION (Irrigation) - Prior Notice 10 working days

Contractor Responsibilities -

Contractor is responsible for coordinating with the City of Grand Junction for the placement of irrigation appurtenances associated within the project limits as identified in the plans. A pre-construction field review should be completed prior start of any construction work.

The work listed below will be performed by the utility owners or their agents:

UTE WATER CONSERVANCY DISTRICT - Prior Notice 20 working days

Contractor is responsible for coordinating the relocation of water valves as show in the plans. Ute Water will perform replacement of approx. 40-ft of 18-inch; 18x12 & 18x8 tees; 12- & 8-in GVs. This may take up to six working days to complete by their Contractor. Contractor coordination will be required for traffic control and scheduling.

GENERAL:

The Contractor shall comply with Article 1.5 of Title 9, CRS ("Excavation Requirements") when excavation or grading is planned in the area of underground utility facilities. The Contractor shall notify all affected utilities at least two (2) business days, not including the day of notification, prior to commencing such operations. The Contractor shall contact the Utility Notification Center of Colorado (UNCC) at (8-1-1) or 1-800-922-1987 to have locations of UNCC registered lines marked by member companies. All other underground facilities shall be located by contacting the respective company. Utility service laterals shall also be located prior to beginning excavating or grading.

The location of utility facilities as shown on the plan and profile sheets, and herein described, were obtained from the best available information.

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

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UTILITIES

The Utility Contact List is as follows for this project:

Utility	Contact Name	Phone	Email
Ute Water	Dave Priske	970-242-7491	dpriske@utewater.org
Charter/Spectrum	Mark Kostelecky	970-623-9415	mark.kostelecky@charter.com
	Jeff Valdez	970-263-2314	jeff.valdez@charter.com
City of GJ - Sewer	Bill Etcheverry	970-256-4167	bille@gjcity.org
City of GJ- Storm	Chris Spears	970-244-1584	chriss@gjcity.org
Ciy of GJ - Traffic	Eric Mocko	970-256-4017	ericmock@gjcity.org
Ciy of GJ - Fiber (Traffic)	Eric Mocko	970-256-4017	ericmock@gjcity.org
Xcel Energy (Gas/Electric)	Sarah Darricau	970-244-2656	<a href="mailto:Darricau, Sarah M <sarah.m.darricau@xcelenergy.com>">Darricau, Sarah M <sarah.m.darricau@xcelenergy.com>
	Brenda Boes	970-260-6177	Brenda.k.boes@xcelenergy.com
CenturyLink/Lumen	Chris Johnson	970-244-4311	Chris.Johnson5@centurylink.com
Grand Valley Power (Electric)	Mike Gardner	970-623-8565	mgardner@gvp.org
Grand Valley Irrigation	Phil Bertrand	970-242-2762	-
Unite Private Networks (UPN)	Kevin Shucard		kevin.shucard@upnfiber.com