SPECIAL PROVISIONS
IDAHO FEDERAL AID PROJECT NO. A012(009)

US-12, 18th St to Clearwater Rv Br, Lewiston Nez Perce County

The following Special Provisions and all addenda issued supplement or modify the 2017 Idaho Transportation Department Standard Specifications for Highway Construction, January 2017 Quality Assurance Manual, and January 2017 QA Special Provisions (QASP), June 2017 Standard Drawings, Title VI Special Provisions, FHWA-1273 Federal-Aid Required Contract Provisions with supplement, EEO Special Provisions 2011, DBE RC Special Provisions, and General Wage Decision ID170097.

SOURCE IDENTIFICATION

Designated source(s): Designated source(s) are not identified for this contract/project.

Contractor provided source(s): Provide approved source(s) for all materials. A list of Department owned or controlled sources is available at the District office.

Cost. For Department controlled sources, the source recovery fee will be the applicable rate as established in the Department's Materials Manual Section 270.02.05 Source Control at the time of bidding.

CONTRACT TIME AND LIQUIDATED DAMAGES

All work shall be completed by October 2, 2019

The amount of liquidated damages for failure to complete the work on time will be $3,200 per day.

CONTRACTOR NOTES

DBE PROGRAM REQUIREMENTS

Failure to comply with the DBE program requirement of **X.XX%** is a **Breach of Contract**. Whenever the Engineer determines, after investigating and obtaining evidence the Contractor has not complied with the DBE Special Provisions, the Engineer will take corrective action. Refer to the Standard Specifications for Highway Construction, Section 110.

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

(1) Withholding monthly progress payments;
(2) Assessing sanctions;
(3) Liquidated damages; and/or
(4) Disqualifying the contractor from future bidding as non-responsible.

For additional DBE Program information see the ITD DBE Program at: http://apps.itd.idaho.gov/apps/ocr/civil/pdf/dbeplan.pdf

AIR

Use methods and devices reasonably available to control, prevent, and otherwise minimize atmospheric emissions or discharges of atmospheric contaminants. Excessive dust emissions are not permitted during the handling and storage of materials required for construction. Reduce dust that originates from construction operations and prevent dust from damaging dwellings or causing a nuisance. This includes periodically spraying exposed soils with water and covering trucks transporting materials likely to produce fugitive dust.

Control operation emissions by implementing best practices measures as identified in the Idaho Department of Environmental Quality's (IDEQ's) Rules for Control of Fugitive Dust [Idaho Administrative Procedures Act] IDAPA 58.01.01.650 et al.) This includes the following measures:

- Schedule or sequence construction, when feasible, to keep disturbed areas to a minimum.
- Spray exposed soil with water or other suppressant to reduce emissions and deposition of particulate matter.
- Use wind fencing, when feasible and necessary, to reduce disturbance to soils.
- Minimize dust emissions during transport of fill material or soil by wetting down or by ensuring adequate freeboard (space from the top of the material to the top of the truck bed) on trucks.
- Cover loads to reduce emission during material transportation/hauling.
- Provide wheel washers, or similar BMP, at construction site accesses to reduce track-out of site materials onto the adjacent roadway network.
- Remove tracked-out materials deposited onto adjacent roadways.
- Wet material stockpiles to prevent wind-blown emissions.
- Establish vegetative cover on bare ground as soon as possible after grading to reduce windblown dust.
- Promptly clean up spills of transported material on public roadways.
- Cover dirt, gravel, and debris piles as needed to reduce dust and wind-blown debris.

Limit onsite traffic as much as feasible to reduce soil upheaval, dust, and the transport of material to roadways. Locate construction equipment and staging areas away from sensitive receptors. Cover hot asphalt when not in active use to minimize onsite odors. Maintain all machinery and vehicle engines in good mechanical condition to minimize exhaust emissions. Use ultra low-sulfur diesel fuel in both diesel on-road trucks and diesel construction equipment to reduce both sulfur dioxide and particulate matter emissions from engines.

BACKFILL

Except as otherwise noted, all voids and cavities created by removal items (trees, pipes, signs, etc) shall be completely filled with ¾" Type A aggregate base in accordance with 703, compacted to the level of the surrounding ground in accordance with 205.03, Class A compaction. The Department considers filling voids incidental to the associated removal items and no additional measurement and payment will be made for aggregate base and backfilling.

¾" Type A aggregate base in accordance with 703 shall be used in lieu of ISPWC Division 300 bedding and backfill material.

CONCRETE JOINT PLAN

Submit a concrete joint plan for all concrete paving on this project. The Concrete joint plan shall use the Contractor's drawing title block and be signed and sealed by an Engineer licensed in Idaho. The Department considers all costs to develop and gain approval for the concrete joint plans as incidental to Item Z629-05A - Mobilization.

PROJECT COORDINATION

Establish a weekly coordination meeting between the Department and the Contractor and its subcontractors. The meeting location, attendees, agenda, duration, and location shall be agreed upon by the team members during the initial kickoff meeting. No separate payment will be provided to the Contractor or its subcontractors for coordination meetings.

COORDINATION WITH CITY OF LEWISTON

Complete work to adjust city owned facilities, as shown in the roadway plans.

Coordinate with the City of Lewiston on an as-needed basis throughout the duration of the project and involve the Department in all coordination unless directed otherwise. No separate payment will be provided to coordinate with the City of Lewiston.

Contact the City of Lewiston to coordinate inspections.

City of Lewiston Contact:
Shawn Stubbers, PE, City Engineer
City of Lewiston
215 D Street Suite B
Lewiston, ID 83501
Phone: (208) 746-1316, x 8050
sstubbers@cityoflewiston.org

DEWATERING

All dewatering for the project shall be considered incidental to Item Z629-05A - Mobilization and no separate payment will be made.

DAMAGE BEYOND CONSTRUCTION LIMITS

Damage to any area or items outside the construction limits of this project including, but not limited to, existing landscape, irrigation and storm drain facilities and pavement shall be promptly restored to original condition, or better. The cost to complete such repairs is considered incidental to other items of work and no separate payment will be made.

All items within the temporary construction easements including, but not limited to, trees, bushes, utilities, pipes, driveways, planters, signs, sprinklers, lawns, etc. shall be retained and protected unless specifically noted otherwise on the plans.

DIVERSITY MANAGEMENT SYSTEM 01/17

Vendor Account
All contractors, consultants, suppliers, and service providers bidding and performing the Department's federal-aid funded projects are required to register as vendors at https://itd.dbesystem.com. Vendors register online once, with annual reminders to check and update their company information as needed.

The information vendors provide in the registration process is federally required. Also, vendors must have system accounts in order to participate in the Department's online contract payment reporting program. This system is used by many neighboring states, so conduct a search for your business before creating new account. If you have questions, the Department's diversity management system includes a "Help/First Time Visitors" section and training tutorials.

Bidder Registration
A bidders registration questionnaire is required after a vendor account has been created. If you have questions, the Department's diversity management system includes a "Help/First Time Visitors" section and training tutorials.

ELECTRICAL WORK 01/17

This contract contains work for which the Department believes a licensed electrical firm will be required. Complete the sheet provided for compliance with 67-2310 Idaho Code, or provide an explanation as to why an electrical license is not required.

EMERGENCY SERVICES

Notify all emergency services including police, fire, ambulance, EMS and dispatch a minimum of 24 hours and maximum of 48 hours prior to commencing construction activities or modifying traffic patterns. Provide the Emergency Services with one telephone number in which they can contact the Contractor's on-site project supervisor at any time during construction.

EMPLOYMENT AGENCY 01/17

The designated employment agency is as follows:

Idaho Department of Labor Office
1158 Idaho Street,
Lewiston, Idaho 83501-1960

ENVIRONMENTAL REQUIREMENT - CONSTRUCTION GENERAL PERMIT 09/17

A National Pollutant Discharge Elimination System (NPDES) General Permit for Discharges from Construction Activities (CGP) is required for this project. Comply with the CGP. Terms that are directly referenced or defined in the CGP and used in this note include:

Commencement of Earth-Disturbing Activities
Commencement of Pollutant-Generating Activities
Construction Activities
Construction Site
Construction Support Activities
Corrective Action
Erosion and Sediment Control Requirements
Inspections
Pollutant-Generating Activities
Pollution Prevention Measures
Pollution Prevention Requirements
Prohibited Discharges
Required SWPPP Modifications
Stormwater Team
Storm Event
SWPPP (Stormwater Pollution Prevention Plan)

Installation Requirements
Maintenance Requirements
Notice of Intent (NOI)
Notice of Termination (NOT)
Operator
SWPPP Certification
SWPPP Modification Records
Upset
Work Day
Water Quality Standards

Stormwater Pollution Prevention Plan (SWPPP)

A SWPPP is comprised of a set of plan sheets and an associated narrative document. Draft preliminary SWPP Plan Sheets and narrative are included with the bid package. They are not complete. The SWPPP is a living document. Amend the plans and narrative to conform to the Contractor's current sequencing and operation.

Develop the SWPPP, including Contractor designated construction support activities and new construction activities or pollutant-generating activities added due to changes. This includes required SWPPP modifications during construction.

1. A preliminary draft of the SWPPP is included in the contract. Use the SWPPP template provided by the Department to develop the initial SWPPP in accordance with CGP requirements.
2. Submit the completed initial SWPPP in a 3-ring binder with dividers and tabs, unless otherwise approved. The Engineer may also require submittal of an electronic, editable version of the SWPPP. Submit for review and approval no later than the pre-construction meeting.
3. Allow 15 calendar days for Engineer review, unless otherwise specified. Incorporate revisions, based on Engineer review, and resubmit. The Department will not make adjustments in cost or time for Engineer's failure to approve all or part of a SWPPP.
4. Verify SWPPP certification requirements are met by required operators and that each operator has completed a separate notice of intent (NOI). Coordinate electronic NOI filing with the Engineer.
5. Do not begin commencement of earth disturbing activities or commencement of pollutant-generating activities until EPA has acknowledged receipt of required NOIs on the EPA's website and the 14 calendar day waiting period is over. After the 14 day waiting period, the Contractor is considered covered under the permit unless EPA notifies the Contractor of an authorization delay or denial.
6. Follow requirements to post a notice of your permit coverage and post-authorization additions to the SWPPP in accordance with the CGP.
7. Do not allow construction activities, construction support activities, or pollutant-generating activities beyond the limits or schedule shown in the SWPPP or plans.

Water Pollution Control Manager (WPCM)

A WPCM is a construction stormwater manager, qualified per the Department's Water Pollution Control Manager Course requirements. Ensure the Contractor's WPCM meets the specified WPCM training qualification requirements.

WPCM Training Qualification Requirements

Designate a qualified WPCM (s). Submit to the Engineer the WPCM (s) contact information and training qualifications no later than the pre-construction meeting. Once approved, insert the qualification information into the SWPPP.

WPCM qualification is valid for the duration of the 2017 CGP unless 2 years lapse without being designated as a WPCM on a Department contract/project, and as that designated WPCM, personally conduct required inspections, and complete and sign the required forms for at least 2 ITD-2802s (Stormwater Compliance Inspections).

Provide a designated WPCM (s) qualified throughout the work.

WPCM Responsibilities

1. Ensure Contractor compliance with Clean Water Act and CGP requirements.
2. Manage SWPPP implementation, required SWPPP modifications, and maintain SWPPP modification records. Submit proposed modifications for Engineer approval. Obtain necessary signatures and certifications from operators for required SWPPP modifications.
3. Ensure completion of erosion and sediment control requirements and pollution prevention requirements. Complete installation requirements and maintenance requirements in the timeframes specified in the CGP. Sign inspection reports to certify these actions were satisfactorily completed.
4. Ensure completion of corrective actions, including reporting, and recordkeeping. Obtain necessary signatures and certifications from operators for corrective actions.
5. Perform inspections per the specified frequency requirements and documentation requirements.
6. Ensure installation, operation, and maintenance of effective erosion and sediment control measures and pollution prevention measures per CGP requirements. Complete required SWPPP modifications, corrective actions, and inspections until the work is complete and the contractor is released of responsibility by filing of the notice of termination (NOT), or as otherwise specified.
7. Request the Engineer's written approval to file an NOT when conditions for terminating CGP coverage have been met. Do not submit an NOT without the Engineer's written approval. Provide the most current version of the SWPPP, at the time of work completion, to the Engineer when making the request.
8. Verbally report prohibited discharges, discharges exceeding water quality standards, other discharges which may endanger health or the environment, or any upset conditions to the Engineer immediately. Provide a written report to the Engineer within 24 hours using ITD-2790 form (Notice of Potential Violation of the Construction General Permit or Notice of Prohibited Discharge).
9. Retain completed copies of CGP required documentation and recordkeeping in the SWPPP and at the construction site, or at an Engineer approved offsite location.
10. Ensure resolution of compliance issues, and regular communications with the Department as part of the CGP required stormwater team and as required by the Engineer.

WPCM Inspection Frequency Requirements

Perform stormwater compliance inspections, and inspect the construction site and applicable construction support activities as follows:

1. A minimum of once every 7 calendar days during construction activities and pollutant-generating activities, but more often if required to maintain full compliance with the CGP.

2. Within 24 hours of a storm event producing 0.25 inches or greater, even if the storm event is still continuing.
3. Within 24 hours of the end of a storm event where consecutive 24 hour periods produced 0.25 inches or greater.
4. Within 24 hours of the occurrence of runoff from snowmelt sufficient to cause a discharge.
5. During the SWPPP, specify normal work days. Modify the SWPPP when significant changes are made to the normal work day schedule.
6. If a storm event producing 0.5 inches or greater within 24 hours occurs outside the normal work days, complete an inspection within 24 hours to verify and document project compliance with the CGP.
7. WPCM inspection frequency may be reduced by the Engineer in writing in accordance with the CGP.

WPCM Inspection Documentation Requirements

1. Perform a joint inspection with the Department's inspector, if available, and sign the completed ITD-2802 form (Stormwater Compliance Inspection), or
2. Complete an independent inspection using the most recent version of the ITD-2802 form, documenting completion of the independent WPCM inspection.
3. Sign and date ITD-2802 form within 24 hours of completion of any inspection.
4. Insert the signed WPCM inspection into the applicable SWPPP recordkeeping section as directed within 24 hours of completion of an independent WPCM inspection.
5. Submit a copy of any signed independent WPCM inspection within 24 hours at the Engineer's request.

Basis of Payment

The Department considers SWPPP development, revisions, modifications, and costs associated with the NPDES permitting and compliance process as incidental and included in the contract pay items, unless otherwise specified in the contract.

Penalties and Damages

Fines, penalties, and costs to the Department for the Contractor's failure to comply with the Clean Water Act, to mitigate environmental damage, or to resolve regulatory actions will be deducted from moneys due the Contractor.

ENVIRONMENTAL REQUIREMENT – TURBIDITY MONITORING 01/17

To be compliant with the contract permits, this contract requires collecting and analyzing water samples as follows:

A. Data Collection

1. Analyze all samples following instrument manufacturer's written instructions.
2. Properly and regularly calibrate the turbidimeter in accordance with the manufacturer's written instructions.
3. Verify instrument calibration in accordance with the manufacturer's written instructions.

4. The person(s) who collects, analyzes, and records samples shall meet the definition of a "qualified person" as defined in the CGP Section 4.1.1.
5. Sample collection shall be done on a grab sample basis. A grab sample, also known as a catch sample, consists of a single sample taken at a specific time giving a snapshot of water quality and may be manual or automated. If the sample collection will be automated and the sample data will not be reviewed after each sampling event, telemetry equipment must be used that will notify the operator when parameters are exceeded.
6. Sample intervals shall be twice daily, or as directed, and shall be evenly distributed throughout the work day to give an accurate representation of construction activities. If additional samples are collected, beyond those required, only the results of the required monitoring events need to be recorded in the SWPPP.
7. Collect samples in pairs during each sample interval. A pair of samples shall consist of one upstream of project discharge to determine background turbidity levels and one downstream of project discharge or within any visible plume to determine turbidity levels leaving the project site.
8. Modify sample interval and/or location if unsafe conditions warrant. Document any modification to the sample interval or location in the sample logbook.
9. If monitoring equipment will be physically located in the water body, then the following conditions shall apply:
    - In Section 10, navigable waters (http://www.nww.usace.army.mil/Portals/28/docs/regulatory/ContactUs/Section%2010%20Waters_map.pdf), a Nationwide Permit #5 from USACE is required.
    - If any temporary fill is needed to construct or maintain the monitoring equipment, a 404 permit from USACE is required.

B. Exceedances

1. Immediately cease all earth disturbing construction activities if an increase of 50 NTUs instantaneously or 25 NTUs over ten consecutive days over the background turbidity level occurs or a plume is observed originating from the project, unless a short term exceedance is approved.
2. Take immediate action to address the cause of the exceedance per CGP Section 5.
3. Increase monitoring frequency to hourly until state water standards are met.
4. Construction activities may continue once turbidity readings return to within 25 NTUs of background levels and actions have been taken to address the cause of the exceedance.
5. Provide a verbal report to the Engineer within 24 hours of any water quality exceedance, followed by a written report within 5 days using form ITD-2790 (Notice of Potential Violation of the Construction General Permit or Notice of Prohibited Discharge).

C. Logbook and Diary

1. Maintain a legible, organized logbook and construction diary at the construction site and make it available for inspection with the SWPPP.
2. All logbook entries shall include the following information:
    - Date.
    - Time.
    - Sample location .
    - Instrument calibration verification.
    - Turbidity result (NTUs).

- Cloud cover (cloudy, partly cloudy, or clear), wind direction and speed, precipitation in last 24hrs (inches), and ambient air temperature (◦F) at the time of sample collection.
- Visual observations of any discharge per CGP 4.1.6.6.b.
- If applicable, corrective actions taken and their observed effectiveness per B.2 above.
- Printed name and signature of the sample collector.

3. Include photographic documentation of any visible variation in water quality.
4. Include a map or sketch, including GPS coordinates, of each sample location.
5. Submit routine monitoring data to the Engineer or to regulatory agencies upon request.

EQUIPMENT AND PETROLEUM STAGING AREAS

All staging and storage areas for equipment and materials (including fuel) must be approved by the Resident Engineer prior to use. Obtain all necessary environmental clearances prior to use. All costs associated with environmental clearances shall be considered incidental to other items of work and no separate payment will be made.

Locate all staging and storage areas, including fuel, a minimum of 150 feet away from any active water feature.

ESTIMATING BASIS

The unit weights in the estimating basis were determined from area history and past project experience. This information is provided to be used by the designer for developing reasonable project quantities. The actual quantities will vary dependent on contractor furnished source, crushing operation, and mix designs. The Contractor is responsible for determining actual unit weights based on the material produced and provide adequate materials for the project plus any losses to stockpile operation or other wastes.

EXCESS MATERIALS SITE

Excess material sites shall conform to the requirements of Subsection 205.03(A) - General. If excavated existing roadway materials are not recycled for use on the project, broken asphalt or tailings shall be removed from the project site. All excess or unsuitable material removed from the project shall become the property of the Contractor.

EXISTING ROADWAY MATERIAL

Existing roadway materials may be reused as aggregate base for construction of the new pavement section. If existing aggregate base or asphalt concrete pavement are to be utilized in any portion of the work, these materials shall have a maximum size of 0.75 inch. Material larger than 0.75 inch shall be separated by screening or other approved means, and broken down by mechanical means to pass a 0.75 sieve and uniformly incorporated with the balance of the tailings. The newly constructed pavement support section may include up to 15 percent reclaimed asphalt pavement (RAP). Incidental oversize may be allowed by the Engineer if it is not detrimental to the mixture. If the gradation is determined to be detrimental, the take such action as necessary to correct the oversize problem.

If existing pavement material is recycled, a preconstruction meeting shall be held with the contractor and construction representatives from the project administrator to review excavation and paving procedures pertaining to protecting the subgrade. This project will be constructed using WAQTC QA/QC requirements.

Upon written request 10 calendar days before the bid opening date, the Department will provide a missing job classification, wage rate, and fringe benefit rate as outlined on FHWA-1273 IV.1.b to all plan holders as addenda.

IDAHO IMPLEMENTATION OF AASHTO MANUAL FOR ASSESSING SAFETY HARDWARE, 2ND EDITION (2016)

For contracts with a letting date [bid opening date] after the dates below, only safety hardware evaluated using the AASHTO 2016 MASH criteria will be allowed for new permanent installations and full replacements:

- December 31, 2017: w-beam barriers and cast-in-place concrete barriers
- June 30, 2018: w-beam terminals
- December 31, 2018: cable barriers, cable barrier terminals, and crash cushions
- December 31, 2019: bridge rails, transitions, all other longitudinal barriers (including portable barriers installed permanently), all other terminals, sign supports, and all other breakaway hardware

For projects utilizing December 2016 Standard Drawings release or earlier the following shall apply: replace all guardrail and concrete barrier standard drawing "G" sheets with the 612 & 613 series from the June 2017 Standard Drawings release. The June 2017 Standard Drawings release is available through the following website: http://apps.itd.idaho.gov/apps/StandardDrawings/StandardDrawings.htm

ISPWC

This project includes references to the Idaho Standards for Public Works Construction (ISPWC). In the event of conflicts between ITD specifications and ISPWC specifications, the ITD specifications shall govern.

MATERIALS PHASE REPORTS

The following materials reports prepared for this project are available from the Idaho Transportation Department District 2, 2600 Frontage Road, Lewiston, Idaho 83501:

- Combined Phase II, III & V Report dated April 26, 2017.

MEDIA RELATIONS

The Idaho Transportation Department will handle all media relations on the project. Refer media inquiries and requests to the Idaho Transportation Department.

PAVEMENT SURFACE SMOOTHNESS

Flexible pavement will be constructed according to straightedge smoothness requirements defined in 405.03.

PERMITS & LICENSE AGREEMENTS

Comply with all terms and conditions of the approved permits. Copies of the permits shall remain onsite and readily available for review at all times by any Contractor working on the site as well as any federal,

state, or local governmental personnel. Additionally, allow governmental personnel to inspect the authorized activities at any time to ensure that the work is compliant with these permits.

ITD will enter into an agreement with the City of Lewiston for this project. Comply with all conditions of the agreement, including work windows and restrictions.

Apply for and obtain a construction access permit from the City of Lewiston prior to beginning construction. The purpose of this permit is to ensure there is no residual damage to City of Lewiston roadways and facilities due to the Contractor's operations. The permit will also require the Contractor to maintain, throughout construction, any existing City of Lewiston roadways and facilities impacted by the Contractor's operations. Coordinate with the City of Lewiston obtain the permit.

City of Lewiston Contact:

Shawn Stubbers, PE, City Engineer
City of Lewiston
215 D Street Suite B
Lewiston, ID 83501
Phone: (208) 746-1316, x8050
sstubbers@cityoflewiston.org

The Contractor is responsible for modifying their means and methods, as necessary, in order to perform all project work within the limitations (including site access and work windows) and requirements of all project permits and license agreements. All costs associated with permit and license agreement compliance shall be incidental to Z629-05A - Mobilization.

POSTAL DELIVERY

Ensure that the mailboxes providing mail delivery to area residents remain in service during construction, even if they have to be moved multiple times. Coordinate with pertinent property owners and the Postal Service so that mail delivery is not interrupted during construction. No separate measurement or payment shall be made for maintaining postal delivery service and this work will be considered incidental to Z629-05A - Mobilization.

PRIVATE APPROACHES

Maintain access to private approaches at all times during construction. Work with adjacent residential homeowners to minimize disturbance of access to the extent practical, and provide notification to them at least 7 calendar days ahead of any change in access.

All materials and labor needed to construct temporary driveways and approaches for temporary access, including but not limited to excavation, embankment, base material, temporary driving surface, drainage inlets or pipes, and the removal thereof when no longer needed, shall be incidental to Item Z629-05A - Mobilization.

PROTECTION OF EXISTING UTILITIES

Protect all existing utilities, structures, pipes, and irrigation and drainage features unless otherwise noted. Repair to the Owner's satisfaction, at no cost to the Department, any such facilities damaged by construction operations. Transmit all stormwater and irrigation flows through project areas at all times.

Potable and non-potable water supplies used to water existing landscaped areas shall be maintained at all times. This may require temporary relocations of sprinkler systems. Temporary sprinkler system

relocations or temporary watering of landscaped areas by other means will be paid for under S912-05B – SP Landscape Repair.

SAWCUTTING

Sawcutting of existing concrete or asphalt pavement shall be incidental to related removal items. No additional payment will be provided for sawcutting.

SOFT SOIL

Disturbed or saturated subgrade conditions may occur during subgrading. Disturbed or saturated soil encountered in the proposed pavement areas should be removed to firm or medium dense, undisturbed soil and replaced with compacted granular borrow or special backfill. The cost associated with over-excavation of soil disturbed by construction shall be incidental with no separate payment being made.

Anticipate moisture sensitive subgrade soil throughout the project alignment. These subgrades will be prone to rutting or pumping under construction machinery or if they become wetter than optimum moisture content at the time of construction.

SITE STRIPPING

All topsoil, soils with organics, and undocumented fill must be stripped from within the limits of the roadway prism prior to placement of embankments or excavation of cuts. Wasting of these materials stripped or excavated from the site shall be incidental to the excavation.

STAGING AND TEMPORARY TRAFFIC CONTROL

Staging Plans:
Staged construction will be required on this project, as identified in the project plans. No separate payment will be made for staged construction, the work being considered incidental to Z629-05A - Mobilization.

Temporary Traffic Control Plans:
Submit a temporary traffic control plan for each proposed construction stage. Temporary traffic control plans shall clearly indicate how traffic will be routed through the work zone including, but not limited to, temporary pavements, lane restrictions, lane shifts, and placement of all temporary traffic control devices and pavement markings. All temporary traffic control plans shall use the Contractor's drawing title block and be signed and sealed by an Engineer licensed in Idaho. The plans shall specifically identify all work impacting utilities, drainage and irrigation facilities, nighttime work, lane closures, detours, pedestrian ADA access, and work occurring during the following time periods:

Prepare all temporary traffic control plans in conformance with the Manual on Uniform Traffic Control Devices (MUTCD) for Streets and Highways, as adopted by the State. Allow 14 calendar days for the Engineer to review staging and traffic control plans. Allow seven (7) calendar days for each resubmittal. There is no guarantee, real or implied, that an alternate plan will be approved. Once alternate plans are approved, the approved plans must be followed unless new plans are submitted and approved.

The Department considers all costs to develop and gain approval of any staging and/or temporary traffic control plans as incidental to Item Z629-05A - Mobilization.

Temporary Signal Modifications:
Temporary modifications to the existing or new signal will be necessary at certain stages of construction. All temporary modifications to the signals during construction, all work required to transition operation

between the existing and new signal signals, and additional temporary signals required will be paid under S904-05C - SP Temporary Traffic Signal.

ADA

No separate payment will be made for providing accessible routes, the work being considered incidental to Z629-05A - Mobilization.

The needs and control of all road users (motorists, bicyclists, and pedestrians within the highway and/or public right-of-way, including persons with disabilities in accordance with the Americans with Disabilities Act of 1990 (ADA), Title II, Paragraph 35.130) through the work zone is essential. The primary function of the staging and traffic control plan is to provide for the reasonably safe and efficient movement of road users through work zone while reasonably protecting workers, responders to traffic incidents, and equipment.

Temporary facilities, including reasonably safe pedestrian routes around work sites, are also covered by the accessibility requirements of the Americans with Disabilities Act of 1990 (ADA) (Public Law 101-336, 104 Stat.327, July 26, 1990. 42 USC 12101-12213 (as amended)). Maintain practical continuity where accessible facilities already exist.

The temporary facilities shall be detectable and include accessibility features consistent with the features present in the existing pedestrian facility. The temporary route should enable pedestrians to negotiate through or bypass the construction site while minimizing the retracing of their steps or going significantly out of their way. Additional consideration must be given to the disabled since they may not have the physical or cognitive ability to improvise (e.g. balancing along the curb or a very narrow path) or use unofficial alternatives (e.g. using an adjacent grass surface). Temporary routes must meet the accessibility guidelines of the ADA for permanent facilities and shall be marked with the proper signage. Should existing crosswalks at signalized intersections be closed or made inaccessible, temporary crosswalks should be painted in an accessible location. Temporary signals with crosswalks should include pedestrian phases.

Do not block temporary walkways with contractor parking, materials piles, signs, rubble or rubbish. Construction equipment and equipment operation must be separated from the temporary walkways.

Complete frequent checks of the pedestrian and bicycle accommodations made during construction to ensure that the temporary traffic control plan is followed, traffic control devices are maintained in good condition, and safe, accessible pedestrian and bicycle routes are available at all times.

Traffic Control Devices:

All temporary traffic control devices are to be in place and approved by the Engineer prior to the Contractor starting work. All temporary signing and channelization, as well as covering of existing traffic control signs, shall be per the MUTCD, as adopted by the Department. The Engineer or their representative will be the sole judge in determining the acceptability of the condition and appearance of the temporary traffic control devices. Devices determined to be unacceptable are to be immediately removed from the job site and replaced with the appropriate devices at no additional cost.

Deliver an itemized list of all traffic control items installed on the project to the project inspector within 48 hours of installation.

Work and materials required to cover existing traffic control signs during construction, then restore them to their original condition following construction is considered Traffic Control Maintenance and paid under Item 626-105A.

Temporary traffic control signs that are not needed at the end of the work day are to be laid down or removed from the work site. Signs that are laid down shall be delineated buy the use of reflective tape, cones, or barrels. Signs mounted on portable supports are not to be placed horizontally; this creates a hazardous obstruction.

STOCKPILING MATERIALS, EQUIPMENT STAGING, AND PARKING

Sites used for stockpiling materials, staging equipment, parking and all other activities shall require written approval to assure compliance with Subsection 107.17, Environmental and Cultural Resources Protection. The Contractor will be responsible for all expenses involved in obtaining any clearance not provided by the State.

SUBGRADE SEPARATION GEOTEXTILE

Subgrade separation geotextile may be used to facilitate construction of embankments over wet or soft foundation soils, as needed. If used for this purpose, subgrade separation geotextile will be incidental to the cost of the project.

SUBGRADE PROTECTION

Protect soil subgrades during construction activities and determine how best to achieve this requirement using appropriate equipment and procedures. No separate measurement or payment shall be made for any excavation or replacement of excavated material below subgrade elevations made necessary due to degradation of the subgrade from construction activities or construction traffic.

TACK COAT

Substitution of CSS-1H for CSS-1 Tack Coat will be allowed.

USE TAX 08/17

The exercise of control over State-owned material by a Contractor who is improving real property (e.g., roadways) will incur the imposition of a use tax by the State.

Contact the Idaho State Tax Commission (Telephone No. 208-334-7618) concerning 63-3609, Idaho Code and IDAPA 35.01.02.012 and 35.01.02.013.

For aggregates, the amount of the use tax will differ depending on whether the material is obtained from a State-owned material source or whether it is obtained from a State-owned stockpile. Use tax is due on the fair market value of the material, and the crushed value (processed material) is higher than for unprocessed material.

The use tax will also differ depending on whether a Contractor crushed the material and placed it on the roadway, or if the Contractor only performed one of these operations and hired a subcontractor to perform the other. If the contractor hires a subcontractor to crush the material, he must pay a sales tax to the crusher for this fabrication labor. If the Contractor crushed and applies the material, or gives material he crushed to a subcontractor for application, the Contractor owes use tax on the royalty value.

The estimated cost of ITD supplied materials is:

ITEM NO.	QUANTITY	SUPPLIED BY	DESCRIPTION
1	1	ITD	Lewis and Clark Trail Sign Sign# SD-01. (2 Ea.) Adopt a Highway Sign "Life Board" Sign# D14-101 (1 Ea.) Cost = $600.00
2	1	ITD	Seed at $200/AC for 0.40 AC total Cost = $80.00

IDAPA 35.01.02.082

UTILITY COORDINATOR PROVIDED BY THE CONTRACTOR 01/17

Provide an individual whose primary responsibility is to coordinate the work with each utility company and the railroad company that will or may affect the utility company's or railroad company's property, facilities, or operations. Ensure this individual is readily available by telephone whenever there is work being done by the Contractor, subcontractor, lower-tier subcontractor, utility company, or railroad company.

The Department will not make separate payment for coordinating the work that affect each utility company's or railroad company's property, facilities, or operations. This work coordination is incidental and included in the ground disturbing construction contract pay items.

Ensure this individual is responsible for the following activities and makes documents generated by these activities available to the Contractor, utility company, railroad company, and the Engineer:

1. Maintaining and posting a list of emergency telephone numbers for the Contractor and its subcontractors (including lower-tier subcontractors), each utility company, railroad company, and the Engineer.
2. Notifying the Contractor and its subcontractors (including lower-tier subcontractors), each utility company, railroad company, and the Engineer of a method, including telephone number, to contact the utility coordination individual. An alternate contact person with telephone number will be provided for situations when the utility coordination individual is not available.
3. Maintaining and documenting in writing all instructions, general discussions, or meetings notes that involve work on each utility company's or railroad company property or facilities or work which has or may affect the utility or railroad operations.
4. Maintaining and documenting in written or printed format the proposed and actual time schedules of work on utility or railroad property or facilities. Time schedules are to show the Contractor and its subcontractor (including lower-tier subcontractors), and each utility company or railroad company activities.
5. Maintaining and documenting in writing a diary of work each day that involve utility or railroad property and facilities, and any work that has or may affect the utility or railroad operations.
6. Coordinating with each utility company and the Engineer to resolve utility conflict and for any needed change orders to address utility conflicts.

UTILITY COORDINATION MEETING

A specific Utility Coordination Meeting with all Utilities will be held within three (3) calendar days after the Pre-Construction Meeting to initiate the coordination of all planned utility relocations. Attendees should include personnel from all utility companies requiring relocation, the Contractor, and ITD personnel.

The Contractor is advised to anticipate that most utility relocations and adjustments will need to occur concurrently with the roadway and drainage improvements. Coordination and scheduling of work with the Private Utilities will be critical to meet the completion date.

The Contractor is also advised that pile driving activities to construct the retaining wall along the east side of 21st Street may be complicated due to the proximity of overhead utilities. Coordinate with Avista and others for limited temporary shut-downs.

WORK AROUND WATERWAYS

Work and/or staging in waterways will not be permitted. Take measures to prevent the entrance of concrete and other construction materials into waterways. Upland disposal of dredged material, temporary structures, and vegetative or construction debris must be done in a manner that prevents the materials from entering waterways. All construction debris shall be removed from the site and properly disposed of.

Petroleum products, hazardous, toxic, and/or deleterious materials shall not be stored, disposed of, or accumulated adjacent to or in the immediate vicinity of waterways. Adequate measures and controls must be in place to ensure that those materials will not enter open water as a result of high water, precipitation runoff, wind, storage facility failure, accidents in operations, or unauthorized third party activities.

Vegetable based hydraulic fluid shall be used on equipment directly adjacent to open water. Daily inspections by the Contractor of all fluid systems on equipment to be used near open water shall be done to assure no leaks or potential leaks exist prior to equipment use. A log book of these inspections shall be kept on site and provided to IDEQ upon request.

Equipment and machinery must be removed from the vicinity of any waterway prior to refueling, repair, and/or maintenance. Equipment and machinery shall be steam cleaned of oils and grease in an upland location or staging area with appropriate wastewater controls and treatment. Any wastewater or wash water must not be allowed to enter waters of the US.

The use of chemicals such as soil stabilizers, dust palliatives, sterilants, growth inhibitors, fertilizers, deicing salts, etcetera during construction and operation shall be limited to the best estimate of optimum application rates. All reasonable measures shall be taken to avoid excess application and introduction of chemicals into open water.

Stream bank vegetation shall be protected to the extent practical during construction. Disturbed areas shall be planted with willows or native woody vegetation (as approved by the Engineer) and shall be seeded with a native perennial grass/forb/shrub mixture (as approved by the Engineer) to reduce erosion, restore bank cover and habitat, and inhibit invasion of noxious weeds. This project does not require the Contractor to disturb stream bank vegetation and this item shall therefore be incidental to the contract if required as a result of the Contractor's activities.

WORKING HOURS

Both daytime and nighttime work is encouraged for this project. This contract specifies nighttime work as a requirement for some construction activities. The Contractor will obtain approval for scheduled nighttime work a minimum of 14 calendar days in prior to nighttime work. Allow a minimum of seven (7) calendar days for Department review and approval of nighttime work schedules. Nighttime work shall be completed during the hours of 10 PM to 5 AM. All pile driving activities adjacent to the Red Lion Hotel shall be limited to daylight hours only between 8 AM to 5 PM.

Lighting for all night work shall be paid for under Item S626-35A - Night Work Lighting. Comply with all applicable noise and lighting ordinances. Limit the use of night work lighting that directly impacts the Red Lion and Inn America hotels.

YEARLY FIELD LABORATORY QUALIFICATIONS

Up to 14 days advance notice will be required for the initial or yearly laboratory qualification inspection by District 2 Materials. Contractors are encouraged to schedule qualification inspections well in advance of projected testing.

ON PAGE 21, SUBSECTION 101.04 – DEFINITIONS

Add the following:

Run Chart. A plot of data in time sequence.

ON PAGE 29, SUBSECTION 103.02 - AWARD OF CONTRACT 01/17

Add the following after the second paragraph.

The Department may delay the award to obtain approvals from the Local Sponsor, Board, and/or the FHWA. The Department will not consider increases in costs because of this delay in award.

ON PAGE 39, SUBSECTION 105.03 – CONFORMITY WITH PLANS AND SPECIFICATIONS

Add after the first sentence:

For the quality characteristics of the items included in Table 106.03-1 and subject to quality analysis, acceptance will be based on the requirements of the Quality Assurance Special Provision (QASP).

ON PAGE 39, SUBSECTION 105.07 – UTILITY FACILITIES MOD 1/17

Add the following:

Coordinate with utility owners to determine the exact location of all existing utilities before initiating construction activities. The Contractor is fully responsible for all damages resulting from failure to coordinate with utility owners.

Request locates of buried utility facilities by contacting the Utility One-Call Center by calling 1-800-342-1585 or faxing 1-800-342-1586.

Buried utility facilities owned by the state of Idaho could be located within the project site and may or may not be shown on the plans. State of Idaho owned utility facilities include traffic signals, illumination, traffic recording sites, weather monitoring sites, video detection systems, and electronic

message signs. Request locates of buried utility facilities owned by the state of Idaho by contacting the District 2 Traffic Signal Foreman.

Coordinate with the Engineer to contact the appropriate utility company and arrange the initial utility hook up, when utility service (e.g., electrical, phone, water) for highway components (e.g., luminaries, signals, ITS) is required for the contract work. Supply utility service in a timely manner to allow for testing of highway components. Pay any fees charged by the utility company and provide the Engineer acceptable proof of payment for reimbursement.

Utility Contact Information:

Avista Corporation – Gas and Electricity
Nate Von Lindern
Ph. 208-798-1476
Nathan.VonLindern@avistacorp.com

Avista is responsible for the natural gas services and power lines within the project vicinity. Avista has a live 4" gas line under 21st Street, located approximately 8-feet off the east curb line and dead ends at Locomotive Park. The gas line also ties into a 6" line under G Street. There are two gas service lines connecting to the Red Lion Hotel (from 21st Street) and Harley Davidson (from G Street) to be aware of. It is anticipated that one additional service line may be impacted with the proposed project improvements, which is located within the Main Street cul-de-sac within Locomotive Park. Avista has several abandoned gas lines within the project area, including along the west side of 21st Street and the south side of G Street. Coordinate the relocation of the gas lines concurrent with the installation of the proposed storm drain trunk line. Avista estimates that they will need approximately 3-weeks to complete their relocation work.

Most of Avista's power lines are located overhead on poles. It is anticipated that four power poles will need to be re-located along the east side of 21st Street. This will also necessitate the adjustments of the overhead power located along the south side of Idaho Street, where the line crosses 21st Street. The only underground power that is anticipated to be located within the project disturbance limits are the power service line connecting to the Red Lion Hotel (from a power pole located along 21st Street) and within the Main Street cul-de-sac at Locomotive Park. It is anticipated that Avista will move and relocate the impacted power poles prior to commencement of the roadway improvements. Coordinate with Avista to be able to complete pile driving activities.

Cable One
Tom Donohue
Ph. 208-791-5032
Thomas.Donohue@cableone.biz

Cable One has an underground fiber optic cable that crosses the Clearwater River Bridge on the west side. The line continues south, and crosses US-12 heading easterly near Station 118+50. The fiber optic line extends to the southeast toward the Main Street/22nd Street intersection, following the un-named drainage ditch. It is anticipated that this fiber optic line may need adjustment to install the proposed storm drain outfall into the ditch. Coordinate the adjustment of the fiber optic line concurrent with the installation of the proposed storm drain trunk line.

Cable One's facility maps show additional facilities located on the south side of Main Street near 22nd Street, but Cable One has indicated that these facilities have been abandoned.

CenturyLink
Julio Mendez
Ph. 208-798-8380
julio.mendez@centurylink.com

CenturyLink has an underground conduit bank (approximately 1-foot thick) with fiber optic and copper cables that crosses the Clearwater River Bridge on the east side. The line continues south to a pedestal located in the landscape area located on the northeast quadrant of the intersection. From the pedestal, the lines continue to a manhole located on the south side of Main Street, where they turn westerly and follow the toe of slope to 21st Street. The conduit bank continues southerly, being located under the east side of 21st Street. Coordinate the adjustment of the fiber optic line concurrent with the installation of the proposed storm drain trunk line. CenturyLink estimates that they will need approximately 2-3-weeks to complete their relocation work.

CenturyLink recently submitted a permit request to provide a fiber optic line to the Harley Davidson building. It should be anticipated this proposed line has been installed prior to commencing the intersection improvements. The line is anticipated to cross 21st St near Station 110+30 and be approximately 11 feet below ground.

CenturyLink also has a communication line located on Avista's power poles along the south side of Idaho Street. The line crosses 21st Street, and continues southerly along Avista's poles on the east side of the road. The aerial conduit is anticipated to be relocated prior to the commencement of the roadway improvements.

ITD - Signal
Curtis Arnzen
Ph. 208-799-4222
Curtis.arnzen@itd.idaho.gov

ITD's existing signal cabinet is located on the west side of the intersection between US-12 and G Street. The Avista Power service is believed to be coming from the overhead power lines located along the north side of G Street (which end at the project limits). Several underground conduits exist throughout the intersection footprint serving the signal and many adjacent street lights.

Lewiston City Utilities
Shawn Stubbers
Ph. 208-746-1316, x 8050
SStubbers@cityoflewiston.org

The City of Lewiston owns the water, storm drain, and sanitary sewer lines within the project vicinity. All the existing water lines and storm drain lines will be replaced with the proposed project improvements. The existing sanitary sewer lines will remain in place. There is an existing 12" sanitary line that flows northward along 21st Street toward Locomotive Park. Additionally, there is a 36" sanitary line that crosses US-12 flowing from Locomotive Park back towards G Street. All improvements to the City of Lewiston utilities are to be performed by the Contractor.

Port of Whitman (& Port of Lewiston)
Ron Glessner
Ph. 208-661-5648
ron@outsidemain.com

The Port of Whitman manages and helps facilitate all the Port of Lewiston utilities.

The Port of Whitman has an underground fiber optic line that crosses the Clearwater River Bridge on the west side with Cable One's facilities. An additional empty conduit was installed for the Port of Whitman within Cable One's trench crossing US-12, and continuing southeasterly toward the Main Street/22nd Street intersection along the natural ditch bank. The proposed storm drain discharge may conflict with this conduit. Coordinate the adjustment of the fiber optic line concurrent with the installation of the proposed storm drain trunk line.

From the junction box located just south of the bridge, the Port of Whitman also has a fiber optic line that extends through Locomotive Park, and crosses US-12 (near Station 281+80) and G Street (near Station 63+50). Once on the south side of G Street, the fiber optic line turns westerly and continues down G Street. The Port estimates that they will need approximately 2-3-weeks to lower the cable to accommodate the G Street improvements.

The only Port of Lewiston facility is a fiber optic line that is located on the Avista power poles along the south side of Idaho Street. When the line crosses 21st Street, the fiber optic line goes underground on the east side of 21st Street and continues in a southeasterly direction providing a connection to the Red Lion Hotel. The underground fiber is located within the public right-of-way and will need to be relocated. It is anticipated that the aerial conduit will be relocated prior to the commencement of the roadway improvements.

Utility Service Interruption:

Notify in writing any impacted residents, schools, and business owners 7 days in advance of any service interruptions.

ON PAGE 62, SUBSECTION 106.03 – SAMPLES, TESTS, AND CITED SPECIFICATIONS

Add the following:

Sampling and testing for quality control and acceptance will be in accordance with the "Material Subject to Statistical Based Acceptance," shown in Table 106.03-1.

Maintain and make available to the Engineer, quality control charts (as a minimum, a run chart as the material is being produced) for each sieve or quality characteristic to be used in the statistical analysis. The intent is to identify trends in the data. Where applicable, the run chart will be plotted with upper and lower specification limits as specified for statistical analysis.

For acceptance gradation testing by the Contractor, each sample will be taken in accordance with AASHTO T 2, except that the sample size will be doubled. The sample obtained will be split in accordance with AASHTO R 76, and half of it will be assigned an ID number and tested by the Contractor. The other half of the sample will be sealed in a canvas sack or plastic bucket, marked with the sample ID number, stored in a weather protected enclosure, and reserved for use in retesting if needed, until notified by the Department that it can be discarded.

In the event that an acceptance test result for fracture, sand equivalent, cleanness value, 100 percent passing, 97-100 percent passing, and 95-100 percent passing requirements fails to meet specifications, the Contractor will immediately obtain another sample and retest. If the second test also fails to meet specifications, production will be suspended and adjustments made in order to produce material within the specification limits.

Open-graded rock base (rock cap Class I) will be tested for acceptance at the crusher as indicated in Table 106.03-1. The Contractor's acceptance tests from the crusher, once verified, are used for quality analysis for open-graded rock base (rock cap Class I). Only 3/4 inch and #4 sieves will be used for quality analysis.

When rock cap is stockpiled before hauling to the roadway, testing for final gradation acceptance from the stockpile will be by the Department and based only on the percent passing the No. 4 sieve. The criteria for the final gradation acceptance of stockpiled rock cap are 0-10 percent passing the No. 4 sieve.

In the event that the final acceptance test result for open-graded rock base (rock cap Class I) in the stockpile fails (i.e., greater than 10 percent passing the No. 4 sieve), the Department will immediately obtain another sample and retest. If the second test also fails to meet specifications, hauling will be suspended and adjustments made in order to produce acceptable material.

AASHTO T 308 will be used for asphalt binder content testing followed by AASHTO T 30 for aggregate gradation acceptance testing. The plant mix sample used for asphalt binder content, gradation, and volumetric acceptance testing will be doubled in size. The sample will be split in accordance with AASHTO R 47 and half of the sample will be tested for asphalt content, gradation, and volumetrics. The other half of the sample will be sealed in a box, marked with the sample ID number, stored in a weather-protected enclosure, and reserved for use in retesting if approved, until notified by the Department that it can be discarded.

Verification Testing. Verification of the Contractor acceptance testing will be performed by the Department. The Department will obtain a minimum of 2 random samples per lot. For open-graded rock cap, the Department will obtain a minimum of 1 random sample per lot. Sampling and testing will be performed using the same point of sampling and test methods noted in Table 106.03-1 for acceptance. Test results will be completed and provided no later than the next calendar day. Verification test results will not be substituted for acceptance results.

Verification results will be used to evaluate the Contractor's acceptance test results as outlined in the February 1996 *AASHTO Implementation Manual for Quality Assurance*, Appendix F, "Comparison of Quality Control and Acceptance Tests," using a level of significance (α) of 0.01. The data will be evaluated on a cumulative basis and not on a lot-by-lot basis as follows:

1). If the evaluation indicates the test results are consistent (i.e., t-test passes), then the Engineer will combine the Contractor's tests into lots for the quality analysis. The lots will be used by the Engineer to represent the material produced in the quality analysis.

2). If the evaluation indicates the test results are inconsistent (i.e., t-test fails), production will be stopped. The Engineer will review the Contractor test procedures, calculations, and documentation to determine the source of the differences. Production will not be allowed to resume until the source of the differences is determined and corrected. If the source of the differences is determined to be caused by the Contractor, the Department will not grant additional contract time.

Independent Assurance. Independent assurance on acceptance and verification testing will be performed in accordance with the Independent Assurance section of the minimum testing requirements contained in the Department's QA Manual. The results of independent assurance will not be used as a basis of acceptance. Independent assurance will be the Department's responsibility.

Dispute Resolution Significant Difference. For 405 Superpave hot mix asphalt dispute density testing, cores obtained from the same location as the nuclear or non-nuclear gauge test will be used.

Table 106.03-A – Dispute Resolution Significant Difference

Characteristic	*Significant Difference*
Air Voids	0.5 percent
VMA	0.5 percent
Asphalt Content	0.2 percent
Percent Compaction	1 percent
#4 or Larger Sieves	4 percent
#8 to #30 Sieves	3 percent
#50 to #100 Sieves	2 percent
#200 Sieve	1.0 percent
Sand Equivalent	4
Fracture Count	5 percent
Cleanness Value	6

Quality Analysis. Quality analysis will not be performed if the total quantity of material is less than the quantity computed for 2 tests or less at the frequencies shown in Table 106.03-1, or for any testing associated with the acceptance test strip.

Acceptance tests will be included in the quality analysis and grouped into lots. Tests can only be excluded with Engineer's approval. Quality analysis will be by lot. Lot size will be determined by the Engineer. The following criteria will be used:

1) A lot is based on work shift's production.
2) Minimum lot size is 3 tests.
3) If the work shift is represented by less than 3 tests, the test(s) will be combined with the following work shift.
4) If the final work shift is represented by less than 3 tests, the test(s) will be combined with the previous work shift.
5) The plant mix acceptance test strip is 1 lot.

Table 106.03-1 Material Subject to Statistical Based Acceptance

Material	Quality Characteristic	Test Method	Quality Control		Acceptance	
			Minimum Testing Frequency	Point of Sampling	Minimum Testing Frequency [a]	Point of Sampling
301 Granular Subbase	Gradation 703.11	FOP for AASHTO T 27	One test for gradation for each 5,500 Ton (By Contractor)	From crusher	One test for gradation for each 5,500 Ton (By Contractor)	From windrow or roadway
	Sand Equivalent	FOP for AASHTO 176 (Alt. Method #2), Mechanical	Same frequency as gradation. (By Contractor)	From crusher	Same frequency as gradation. (By Department Pass/fail, no statistical analysis)	From windrow or roadway
303 Aggregate Base	Gradation 703.04	FOP for AASHTO T 27 with FOP for AASHTO T 11 (use wash method for all gradation measurements)	1 test minimum per 1,000 Ton (By Contractor)	From crusher	1 test minimum per 1,000 Ton (By Contractor)	From windrow or roadway
	Sand Equivalent	FOP for AASHTO T 176 (Alt. Method #2), Mechanical	Same frequency as gradation. (By Contractor)	From crusher	Same frequency as gradation. (By Department Pass/fail, no statistical analysis)	From windrow or roadway
	Fracture Count	FOP for AASHTO T 335, Method 1	Same frequency as gradation. (By Contractor)	From crusher	Same frequency as gradation. (By Department Pass/fail, no statistical analysis)	From windrow or roadway
307 Open Graded Rock Base (Rock Cap Class I)	Gradation 703.08	FOP for AASHTO T 27	1 test minimum per 1,000 Ton (By Contractor)	From crusher conveyor belt, FOP for AASHTO T 2	ALL MATERIAL PRODUCED: 1 test minimum per 2,500 Ton (By Contractor)	From crusher conveyor belt, FOP for AASHTO T 2 (By Contractor)
					ADDITIONAL TESTING REQUIRED FOR ACCEPTANCE OF STOCKPILED ROCK CAP: 1 test minimum per 5,000 Ton (By Department)	From stockpile (By Department)
307 Open Graded Rock Base (Class II & III)	Gradation 703.08	FOP for AASHTO T 27	One test for gradation for each 1,000 Ton (By Contractor)	From crusher	One test for gradation for each 2,500 Ton (By Contractor)	From windrow or roadway
404 Cover Coat Material	Gradation 703.06	FOP for AASHTO T 27 with FOP for AASHTO T 11 (use wash method for all gradation measurements)	1 test minimum per 400 Ton (By Contractor)	From crusher	1 test minimum per 400 Ton (By Contractor)	At point of loading to the roadway.
	Cleanness Value	Idaho T 72	Same frequency as gradation. (By Contractor)	From crusher	Same frequency as gradation. (By Department Pass/fail, no statistical analysis)	At point of loading to the roadway.
	Fracture Count	FOP for AASHTO T 335, Method 1	Same frequency as gradation. (By Contractor)	From crusher	Same frequency as gradation. (By Department, Pass/fail, no statistical analysis)	At point of loading to the roadway.

Material	Quality Characteristic	Test Method	Quality Control		Acceptance	
			Minimum Testing Frequency	Point of Sampling	Minimum Testing Frequency [a]	Point of Sampling
405 SuperPave Class SP2	Asphalt Content	FOP for AASHTO T 308	By the Contractor as needed to control the operation.	At the mixing plant and/or on roadway	1 test minimum per 750 Ton (By Contractor)	FOP for AASHTO T 168 [c]
	Gradation – As per the JMF, quality analysis on the following sieves: See 703.05 for sieves to be used in quality analysis	For Quality Control: AASHTO FOP for T 27 with FOP for AASHTO T 11 (use wash method for all gradation measurements) For Acceptance: FOP for AASHTO T 30	By the Contractor as needed to control the operation. 1 test minimum per 1,500 Ton (By Contractor)	From the cold feed belt	1 test minimum per 750 Ton (By Contractor)	FOP for AASHTO T 168 [c]
	Fracture Count	FOP for AASHTO T 335, Method 1	By the Contractor as needed to control the operation. 1 test minimum per 1,500 Ton (By Contractor)	From the cold feed belt	N/A	N/A
	Sand Equivalent	FOP for AASHTO T 176 (Alt. Method #2), Mechanical	By the Contractor as needed to control the operation. 1 test minimum per 1,500 Ton (By Contractor)	From the cold feed belt	N/A	N/A
	Density	FOP for AASHTO T 355 [b] or FOP for AASHTO T 343	1 test minimum per 750 Ton (By Contractor)	From roadway	1 test minimum per 750 Ton (By Department)	From roadway [b]
	Recycled Asphalt Pavement	FOP for AASHTO T 308 and FOP for AASHTO T 30	By the Contractor as needed to control the operation. 1 test minimum per 1,500 Ton (By Contractor)	From the RAP cold feed belt	N/A	N/A
405 Superpave HMA Class SP3 & SP5	Asphalt Content	FOP for AASHTO T 308	By the Contractor as needed to control the operation.	At the mixing plant and/or on roadway	N/A	N/A
	Gradation – As per the JMF, quality control on the following sieves: See 703.05 for sieves to be used	For Quality Control: FOP for AASHTO T 30 (use wash method for all gradation measurements)	By the Contractor as needed to control the operation. 1 test minimum per 1,500 Ton (By Contractor)	At the mixing plant and/or on roadway	N/A	N/A
	Air Voids @ N_{design}	FOP for AASHTO T 312; FOP for AASHTO T 166 Method A or AASHTO T 331; FOP for AASHTO T 209; AASHTO T 269; See QA Manual for calculations	By the Contractor as needed to control the operation. 1 test minimum per 1,500 Ton (By Contractor)	At the mixing plant and/or on roadway	1 test minimum per 750 Ton (By Contractor)	FOP for AASHTO T 168 [c]
	VMA @ N_{design}	FOP for AASHTO T 312; FOP for AASHTO T 166 Method A or AASHTO T 331; See QA Manual for calculations	By the Contractor as needed to control the operation. 1 test minimum per 1,500 Ton (By Contractor)	At the mixing plant and/or on roadway	1 test minimum per 750 Ton (By Contractor)	FOP for AASHTO T 168 [c]
	Density	FOP for AASHTO T 355 [b] or FOP for AASHTO T 343	1 test minimum per 750 Ton (By Contractor)	From roadway	1 test minimum per 750 Ton (By Department)	From roadway [b]
	Recycled Asphalt Pavement	FOP for AASHTO T 308 and FOP for T 30	By the Contractor as needed to control the operation. 1 test minimum per 1,500 Ton (By Contractor)	From the RAP cold feed belt	N/A	N/A
635 Anti-Skid Material in Stockpile	Gradation 703.10	FOP for AASHTO T 27 with FOP for AASHTO T 11 (use wash method for all gradation measurements)	By the Contractor as needed to control the operation	From crusher	1 test minimum per 1,000 Ton (By Contractor)	From crusher or if previously crushed, final stockpile location

Note: 1.Refer to the QA Manual for the minimum test requirements (MTR) for minimum testing not included in Table 106.03-1.

(a) If the total quantity of material is less than the minimum testing frequency for 2 tests from Table 106.03-01, acceptance testing will be the Department's responsibility. If the total quantity of material is less than the minimum testing frequency for 1 test from Table 106.03-01, acceptance will be per QA Manual Section 270.04.

(b) When a test strip is not required, density acceptance is based on cores as specified in 405.L.

(c) The plate method is the primary method for obtaining samples from the roadway. For lifts of 0.2 feet or less, samples may be obtained from the plant using an attached sampling device or from haul units. For projects where the minimum frequency is more than 3 tests and samples are not taken from the roadway, the Department will obtain at least 2 additional samples from the roadway, behind the paver, using the plate method for information to identify possible handling or placement variability. These tests will not be used as verification tests. The 2 roadway samples will be taken randomly in the first and second thirds of the project. The samples will be tested by the Department for asphalt content per AASHTO T 308 and gradation per AASHTO T 30. The test results will be evaluated by comparing to the average of the production test results up to that point. The comparison must be within the significant difference as shown in Table 106.03-A. For SuperPave (SP3 and SP5) items, the 2 roadway samples will be tested by the Department for air voids and VMA. The test results will be compared to the average of the production test results up to that point. The comparison must be within the significant difference as shown in Table 106.03-A. When the difference in the test result is significant, the Contractor will determine the cause of the difference and will make any necessary corrections.

Statistical Analysis. Unless otherwise specified, quality levels and pay factors will be computed as specified herein.

For aggregate, the upper and lower specification limits for gradations will be set based on the applicable requirements in 703 except as specified below.

1) Only the percent within the lower specification limit (PL) will be calculated when the upper specification limit is 100 percent passing and the lower specification limit is 94, 93, 92, 91, or 90 percent passing.
2) Only the percent within the upper specification limit (Pu) will be calculated when 0 percent passing is the lower specification limit.
3) Test results will not be included in the quality analysis for fracture, sand equivalent, cleanness value, 100 percent passing, or for any sieves where the upper specification limit is 100 percent passing and the lower specification limit is 95 percent passing or greater.

For 404 materials, when the lower specification limit is 0 percent and the upper specification limit is less than 3 percent, the upper specification limit will be 3 percent for statistical analysis. A 2 percent tolerance will be given for the percentage retained on the maximum sized sieve provided that 100 percent of the material passes the next larger sieve size. Only #4 and #8 sieves will be used for quality analysis.

The upper and lower specification limits for Superpave quality characteristics will be set by the following limits:

Quality Characteristic	**Limits**				
SP 2 mixtures					
No.4 sieve and larger sieves, %	C-JMF value ± 5.0				
No. 8 to No. 30 sieves, %	C-JMF value ± 4.0				
No. 50 to No. 100 sieves, %	C-JMF value ± 3.0				
No. 200 sieve and smaller sieves, %	C-JMF value ± 1.5				
Asphalt Binder Content, %	C-JMF value ± 0.3				
SP 3 – SP5 mixtures					
Laboratory Air Voids, % N_{design}	4.0 ± 1.0				
Minimum VMA, % at N_{design}	Nominal Max. Aggregate Size				
	1½"	1"	¾"	½"	3/8"
	11.0	12.0	13.0	14.0	15.0

In no cases will the upper and lower specification limits be outside the control points specified in 703.05, which also specifies the sieve sizes to be used in the statistical analysis.

When a nuclear gauge or an electronic surface contact device (ESCD) is used to determine density, the upper and lower specification limits will be respectively set as 91.0 percent and 96.0 percent for quality analysis. When cores are used to determine density, the upper and lower specification limits defined in 405.03.L will apply.

For purposes of determining conformance with these specifications, an observed value or a calculated value will be rounded to the nearest unit in the last right digit used in expressing the specification limit, in accordance with the rounding method of ASTM E 29-13, *Using significant digits in test data to determine conformance with specifications*, except when the next digit beyond the last place to be retained is 5, and there are no digits beyond this 5, or only zeros, or non-zeros, increase by 1 the digit in the last place retained (regardless if it is odd or even).

a. Determine the arithmetic mean, X.

$$\overline{X} = \frac{\sum x_i}{n}$$

Where:

Σ = Summation.
x_i = Individual test value.
n = Total number test values.

b. Compute the sample standard deviation (S).

$$S = \sqrt{\frac{\sum(x_i - \overline{X})^2}{n-1}}$$

c. Compute the upper quality index (Qu).

$$Q_u = \frac{USL - \overline{X}}{S}$$

Where:

USL = Upper specification limit.
S = Standard deviation.

d. Compute the lower quality index (QL).

$$Q_L = \frac{\overline{X} - LSL}{S}$$

Where:

LSL = Lower specification limit.
S = Standard deviation.

e. Determine PU (percent within the upper specification limit, which corresponds to a given QU) from Table 106.03-2. If a USL is not specified, PU will be 100.

f. Determine PL (percent within lower specification limit, which corresponds to a given QL) from Table 106.03-2. If a LSL is not specified or the specification is zero (0), PL will be 100.

g. Determine the quality level (QL) (the total percent within the specification limits).

Quality Level (QL) = (PU + PL) – 100

h. For asphalt binder content and air voids, each lot will be assigned a pay factor using the following equation:

$$\frac{55 + (0.5)QL}{100}$$

For all other quality characteristics, use the quality level from step g and determine the pay factor from Table 106.03-3.

Table 106.03-2

PU or PL Percent Within Limits for Positive Values of QU or QL for a given Sample Size (n)

PWL	*n* = 3	*n* = 4	*n* = 5	*n* = 6	*n* = 7	*n* = 8	*n* = 9	*n* = 10 to 11	*n* = 12 to 14	*n* = 15 to 18
100	1.16	1.50	1.79	2.03	2.23	2.39	2.53	2.65	2.83	3.03
99	–	1.47	1.67	1.80	1.89	1.95	2.00	2.04	2.09	2.14
98	1.15	1.44	1.60	1.70	1.76	1.81	1.84	1.86	1.91	1.93
97	–	1.41	1.54	1.62	1.67	1.70	1.72	1.74	1.77	1.79
96	1.14	1.38	1.49	1.55	1.59	1.61	1.63	1.65	1.67	1.68
95	–	1.35	1.44	1.49	1.52	1.54	1.55	1.56	1.58	1.59
94	1.13	1.32	1.39	1.43	1.46	1.47	1.48	1.49	1.50	1.51
93	–	1.29	1.35	1.38	1.40	1.41	1.42	1.43	1.44	1.44
92	1.12	1.26	1.31	1.33	1.35	1.36	1.36	1.37	1.37	1.38
91	1.11	1.23	1.27	1.29	1.30	1.30	1.31	1.31	1.32	1.32
90	1.10	1.20	1.23	1.24	1.25	1.25	1.26	1.26	1.26	1.27
89	1.09	1.17	1.19	1.20	1.20	1.21	1.21	1.21	1.21	1.22
88	1.07	1.14	1.15	1.16	1.16	1.16	1.16	1.17	1.17	1.17
87	1.06	1.11	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
86	1.04	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
85	1.03	1.05	1.05	1.04	1.04	1.04	1.04	1.04	1.04	1.04
84	1.01	1.02	1.01	1.01	1.00	1.00	1.00	1.00	1.00	1.00
83	1.00	0.99	0.98	0.97	0.97	0.96	0.96	0.96	0.96	0.96
82	0.97	0.96	0.95	0.94	0.93	0.93	0.93	0.92	0.92	0.92
81	0.96	0.93	0.91	0.90	0. 90	0.89	0.89	0.89	0.89	0.88
80	0.93	0.90	0.88	0.87	0.86	0.86	0.86	0.85	0.85	0.85
79	0.91	0.87	0.85	0.84	0.83	0.82	0.82	0.82	0.82	0.81
78	0.89	0.84	0.82	0.80	0.80	0.79	0.79	0.79	0.78	0.78
77	0.87	0.81	0.78	0.77	0.76	0.76	0.76	0.75	0.75	0.75
76	0.84	0.78	0.75	0.74	0.73	0.73	0.72	0.72	0.72	0.71
75	0.82	0.75	0.72	0.71	0.70	0.70	0.69	0.69	0.69	0.68
74	0.79	0.72	0.69	0.68	0.67	0.66	0.66	0.66	0.66	0.65
73	0.76	0.69	0.66	0.65	0.64	0.63	0.63	0.63	0.62	0.62
72	0.74	0.66	0.63	0.62	0.61	0.60	0.60	0.60	0.59	0.59
71	0.71	0.63	0.60	0.59	0.58	0.57	0.57	0.57	0.57	0.56
70	0.68	0.60	0.57	0.56	0.55	0.55	0.54	0.54	0.54	0.53
69	0.65	0.57	0.54	0.53	0.52	0.52	0.51	0.51	0.51	0.50
68	0.62	0.54	0.51	0.50	0.49	0.49	0.48	0.48	0.48	0.48
67	0.59	0.51	0.47	0.47	0.46	0.46	0.46	0.45	0.45	0.45
66	0.56	0.48	0.45	0.44	0.44	0.43	0.43	0.43	0.42	0.42
65	0.52	0.45	0.43	0.41	0.41	0.40	0.40	0.40	0.40	0.39
64	0.49	0.42	0.40	0.39	0.38	0.38	0.37	0.37	0.37	0.36
63	0.46	0.39	0.37	0.36	0.35	0.35	0.35	0.34	0.34	0.34
62	0.43	0.36	0.34	0.33	0.32	0.32	0.32	0.32	0.31	0.31
61	0.39	0.33	0.31	0.30	0.30	0.29	0.29	0.29	0.29	0.29
60	0.36	0.30	0.28	0.27	0.27	0.27	0.26	0.26	0.26	0.26
59	0.32	0.27	0.25	0.25	0.24	0.24	0.24	0.24	0.23	0.23
58	0.29	0.24	0.23	0.22	0.21	0.21	0.21	0.21	0.21	0.21
57	0.25	0.21	0.20	0.19	0.19	0.19	0.18	0.18	0.18	0.18
56	0.22	0.18	0.17	0.16	0.16	0.16	0.16	0.16	0.16	0.15
55	0.18	0.15	0.14	0.14	0.13	0.13	0.13	0.13	0.13	0.13
54	0.14	0.12	0.11	0.11	0.11	0.11	0.10	0.10	0.10	0.10
53	0.11	0.09	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
52	0.07	0.06	0.06	0.05	0.05	0.05	0.05	0.05	0.05	0.05
51	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

NOTE: For negative values of Q_U or Q_L, P_U or P_L is equal to 100 minus the table value for P_U or P_L. If the value of Q_U or Q_L does not correspond exactly to a figure in the table, use the next higher figure.

Table 106.03-3

Pay Factors

Pay Factor for a given Sample Size(n) and Quality Level

Pay Factor	***n* = 3**	***n* = 4**	***n* = 5**	***n* = 6**	***n* = 7**	***n* = 8**	***n* = 9**	***n* = 10 to *n*=11**	***n* = 12 to *n*=14**	***n* = 15 to *n*=18**
1.05	100	100	100	100	100	100	100	100	100	100
1.04	90	91	92	93	93	93	94	94	95	95
1.03	80	85	87	88	89	90	91	91	92	93
1.02	75	80	83	85	86	87	88	88	89	90
1.01	71	77	80	82	84	85	85	86	87	88
1.00	68	74	78	80	81	82	83	84	85	86
0.99	66	72	75	77	79	80	81	82	83	85
0.98	64	70	73	75	77	78	79	80	81	83
0.97	62	68	71	74	75	77	78	78	80	81
0.96	60	66	69	72	73	75	76	77	78	80
0.95	59	64	68	70	72	73	74	75	77	78
0.94	57	63	66	68	70	72	73	74	75	77
0.93	56	61	65	67	69	70	71	72	74	75
0.92	55	60	63	65	67	69	70	71	72	74
0.91	53	58	62	64	66	67	68	69	71	73
0.90	52	57	60	63	64	66	67	68	70	71
0.89	51	55	59	61	63	64	66	67	68	70
0.88	50	54	57	60	62	63	64	65	67	69
0.87	48	53	56	58	60	62	63	64	66	67
0.86	47	51	55	57	59	60	62	63	64	66
0.85	46	50	53	56	58	59	60	61	63	65
0.84	45	49	52	55	56	58	59	60	62	64
0.83	44	48	51	53	55	57	58	59	61	63
0.82	42	46	50	52	54	55	57	58	60	61
0.81	41	45	48	51	53	54	56	57	58	60
0.80	40	44	47	50	52	53	54	55	57	59
0.79	38	43	46	48	50	52	53	54	56	58
0.78	37	41	45	47	49	51	52	53	55	57
0.77	36	40	43	46	48	50	51	52	54	56
0.76	34	39	42	45	47	48	50	51	53	55
0.75	33	38	41	44	46	47	49	50	51	53

NOTE: To obtain a given pay factor, the computed Quality Level will equal or exceed the value in the table. Delete pay factor rows more than 1.0 where quality incentives are not allowed.

ON PAGE 66, SUBSECTION 106.08 TEST FACILITIES

Delete the first two paragraphs and substitute the following:

Provide Field Laboratory or use the services of a testing agency approved by the Engineer.

The City of Lewiston reserves the right to furnish an off-site qualified field laboratory for its own use. Provide the items and services as listed in the remainder of this subsection.

ON PAGE 69, SUBSECTION 106.16 DISPOSAL MATERIALS

Add the following:

Existing base course and asphalt concrete pavement excavated from the proposed alignment during construction may be reused as aggregate for the project, provided they are processed to meet the requirements in this specification. If this material is not re-used, the contractor shall have a designated site where excess asphalt tailings or other unsuitable materials not incorporated in the project shall be disposed. No separate payment will be made for the acquisition or operation of either site or for the loading and hauling of the materials to the site. The excess materials site shall be approved by the Engineer, have an Archeological Clearance (if required), and an approved Reclamation Plan will also be necessary prior to use and shall comply with Subsections 107.17 and 1-7.18 of the Standard Specifications.

ON PAGE 78, SUBSECTION 107.17 – ENVIRONMENTAL AND CULTURAL RESOURCE PROTECTION 01/17

Delete 107.17.B. National Pollutant Discharge Elimination System Permit

ON PAGE 87, SUBSECTION 108.03 – PROJECT SCHEDULE

After the first paragraph in Section A. General, add the following:

Include relevant critical dates such as environmental dates (migratory bird nesting season), in water work restrictions, permit restrictions, access restrictions, utility relocations, property access restrictions, etc. The schedule shall also identify construction stages/phases, traffic shifts, and locations of work.

ON PAGE 129, SUBSECTION 201.01 – DESCRIPTION

Insert the following in the first sentence after the word shrubs:

grasses and grass-like plants, all existing plant materials,

Delete the second paragraph and add the following:

Areas to be cleared and grubbed will normally be the area confined by an offset of five feet (5') outside the grading area unless limited by right-of-way or special features. Special areas of clearing and grubbing, beyond the grading area limits, may be necessary around pipe culverts, minor structures, irrigation systems, or as shown on the plans, or as directed by the Engineer.

All trees that are not specifically required to be removed for construction purposes shall be retained and protected unless otherwise shown in the plans or directed by the Engineer. Removal of trees for the sole purpose of facilitating construction operations will not be allowed.

ON PAGE 153, SECTION 212 – EROSION AND SEDIMENT CONTROL

Add the following after the first paragraph of Subsection 212.01 – Description:

The Diversion Channel shall be used in conjunction with Items S901-06A– SP Stone Filter Dam and S904-05F – SP Miscellaneous Ditch Work to route flowing water in the drainage ditch around the construction area. A plastic liner (or visqueen barrier) is to be used to keep the construction work area dry.

Add the following at the end of Subsection 212.02 – Materials:

Material for Diversion Channel shall be constructed out of commercially available sand bags or rip rap as paid under Item 624-005B – Loose Riprap (15").

The plastic liner (or visqueen barrier) shall be of sufficient thickness (4-mill or greater) to not easily tare during installation and other construction activities.

ON PAGE 134, SUBSECTION 205.02 (B) – GRANULAR BORROW

Add the following after the second sentence:

Provide Granular Borrow for structural backfill with a maximum particle size of 4 inches.

ON PAGE 165, SUBSECTION 301.05 – BASIS OF PAYMENT

Add the following:

Aggregate Pay Factor. Upon submittal and approval of the Contractor's test data as detailed in 106.03, acceptable material will have a pay factor of 1.00.

When RAP material is included in acceptable subbase, the natural material will be tested as specified in 301, and the blended material will be paid at a 1.00 pay factor.

ON PAGE 169, SUBSECTION 303.05 – BASIS OF PAYMENT

Add the following:

Calculation of Bonus. The bonus to be paid or deducted for _____ Aggregate Type _____ for base accepted by the Department will be computed using the following formula:

$B = (A)\ (0.5)\ (PF_{AV} - 1)\ (Q)$

Where:

B = Total bonus to be paid for _____ Aggregate Type _____ for base accepted.
A = Unit bid price.
Q = Total quantity of _____ Aggregate Type _____ for base accepted.
PF_{AV} = Weighted average based on quantity of material in each lot. See 106.03.

The bonus to be paid or deducted for _____ Aggregate Type _____ for base in stockpile accepted by the Department will be computed using the following formula:

B = (A) (PFAV - 1) (Q)

Where:
B = Total bonus to be paid for _____ Aggregate Type _____ for base in stockpile accepted.
A = Unit bid price.
Q = Total quantity of _____ Aggregate Type _____ for base in stockpile accepted.
PF_{AV} = Weighted average based on quantity of material in each lot. See 106.03.

NOTE: The bonus may be a negative amount (i.e., a deduction from the total amount bid for the item).

ON PAGE 173, SUBSECTION 307.05 – BASIS OF PAYMENT

Add the following:

Aggregate Pay Factor. Upon submittal and approval of contractor acceptance test data as specified in 106.03, acceptable material will have a pay factor of 1.00.

ON PAGE 187, SUBSECTION 404.05 – BASIS OF PAYMENT

Add the following:

If the aggregate pay factor is less than 0.75, the Engineer may allow the material to be left in place with a price adjustment if the finished product is found to be capable of performing its intended purpose. The price adjustment will be 50 percent of the contract unit bid price multiplied by the total quantity of material with a pay factor less than 0.75.

Calculation of Bonus. The bonus to be paid or deducted for Cover Coat Material Class _____ accepted by the Department, excluding material in stockpile and material with a pay factor less than 0.75 allowed to remain in place with a price adjustment, will be computed using the following formula:

B = (A) (0.3) (PFAV - 1) (Q) when units are or T
B = (A) (0.2) (PFAV - 1) (Q) when units are SY

Where:
B = Total bonus to be paid for Cover Coat Material Class _____ accepted.
A = Unit bid price.
Q = Total quantity of Cover Coat Material Class _____ accepted.
PF_{AV} = Weighted average based on quantity of material in each lot. See 106.03

The bonus to be paid or deducted for Cover Coat Material Class _____ in stockpile accepted by the Department will be computed using the following formula:

B = (A) (PF_{AV} - 1) (Q)

Where:
B = Total bonus to be paid for Cover Coat Material Class _____ in stockpile accepted.
A = Unit bid price.
Q = Total quantity of over Coat Material Class _____ in stockpile accepted.
PF_{AV} = Weighted average based on quantity of material in each lot. See 106.03.

NOTE: The bonus may be a negative amount (i.e., a deduction from the total amount bid for the item).

ON PAGE 218, SUBSECTION 405.05 – SUPERPAVE HOT MIX ASPHALT SP3 AND SP5 – BASIS OF PAYMENT

A pay factor of 1.00 will be used for calculating composite pay factor for density, air voids, and VMA for acceptable SuperPave plant mix pavement incorporated into the acceptance test strip.

Density pay factor for SuperPave plant mix leveling course will be 1.00.

Pay factors for approaches and miscellaneous paving not placed with mainline paving will be 1.00.

A composite pay factor for air voids ($CPF_{(AIRVOIDS)}$) will be computed as:

$(PF_{AV})\ (0.3) = CPF_{(AIRVOIDS)}$

Where:
PF_{AV} = Weighted average based on quantity of material in each lot. See 106.03.

A composite pay factor for VMA ($CPF_{(VMA)}$) will be computed as:

$(PF_{AV})\ (0.3) = CPF_{(VMA)}$

Where:
PF_{AV} = Weighted average based on quantity of material in each lot. See 106.03.

A composite pay factor for density ($CPF_{(Dens.)}$) will be computed as follows:

$(PF_{AV})\ (0.4) = CPF_{(Dens.)}$

Where:
PF_{AV} = Weighted average based on quantity of material in each lot. See 106.03.

Calculation of Bonus. The bonus to be paid or deducted for SuperPave plant mix pavement accepted by the Department, excluding plant mix pavement for test strips, approaches and miscellaneous paving not placed with mainline paving, will be computed using the formula:

$B = (A)\ ((CPF_{(AIRVOIDS)} + CPF_{(VMA)} + CPF_{(Dens.)}) - 1)\ (Q)$

Where:
B = Total bonus to be paid for plant mix pavement accepted.
A = Unit bid price.
Q = Total quantity of plant mix pavement accepted.

NOTE: The bonus may be a negative amount (i.e., a deduction from the total amount bid for the item).

ON PAGE 250 SUBSECTION 411.03, PARAGRAPH H - JOINTS

Delete all following the first paragraph and replace with the following:

Joints shall meet the requirements of Subsection 409.03, Paragraph H – Joints.

Joint sealing shall meet the requirements of Subsection 409.03, Paragraph N – Sealing Joints.

Joint widths will be consistent, and neoprene compression seals shall be used.

ON PAGE 251 SUBSECTION 411.03, PARAGRAPH J – FINAL FINISH

Delete the entire section and replace with the following:

Final finish shall meet the requirements of Subsection 409.03 (J) – Final Finish.

ON PAGE 251 SUBSECTION 411.05, BASIS OF PAYMENT

Add the following:

All special joint conditions, such as thickened edge isolation joints and concrete to plant mix transitions, will be considered incidental to Urban Concrete Pavement, and will not be paid separately.

ON PAGE 326 SUBSECTION 505.03 CONSTRUCTION REQUIREMENTS, A. General

Delete the third sentence, first paragraph, and add the following:

Test piles and production piles may be driven with a vibratory hammer. Dynamic test results will not be required.

Delete the second and fourth sentences, second paragraph.

ON PAGE 327 SUBSECTION 505.03 CONSTRUCTION REQUIREMENTS, G. Pile Bearing Capacity

Delete Subsection G. Pile Bearing Capacity

ON PAGE 328 SUBSECTION 505.03 CONSTRUCTION REQUIREMENTS, O. Alignment, Location, and Orientation

Delete the second and fifth sentences.

ON PAGE 362, SUBSECTION 605.02 – MATERIALS

Add the following after the last paragraph:

Corrugated Metal Pipe (CMP) will not be allowed by the City of Lewiston for this project.

Use water class pipe as required on City of Lewiston Standard Drawing Detail 4-1 for potable and non-potable crossings.

All large diameter manholes (>60") shall be pre-cast manholes meeting the requirements of ASTM C478, with the manhole lid designed for AASHTO H-25 Live Loads. Prior approval of the shop drawings will be required on all precast units. All other requirements for Type C manholes (such as steps, rims, etc) shall apply to the large diameter manholes.

All manhole frame and covers shall meet the requirements of City of Lewiston Standard Detail 6-5.

ON PAGE 364, SUBSECTION 605.03 – CONSTRUCTION REQUIREMENTS

Add the following after the last paragraph of Section B:

All manholes shall be channelized to provide a smooth conveyance of water through the structure.

ON PAGE 364, SUBSECTION 605.05 – BASIS OF PAYMENT

Add the following after the last paragraph:

Coring, grouting, and all connections to existing structures or pipes shall be considered incidental to the contract unit price of pipe installation. Cost to repair or replace pipes damaged during construction operations shall also be considered incidental to the contract unit price of pipe installation.

The Department considers substituting pipe material to water class, where required, as incidental to the unit price bid and no additional payment will be made.

ON PAGE 386, SUBSECTION 619.01 – DESCRIPTION 01/17

Delete 1 & 2 and replace with:

Type 1 - Multiple circuit, LED sign lighting.
Type 2 - Multiple circuit, LED street lighting.

ON PAGE 386, SUBSECTION 619.02 – MATERIALS: 01/17

Add the following:

LED Luminaires……713.01

ON PAGE 395, SUBSECTION 621.03.D – CONSTRUCTION REQUIREMENTS: SEEDING MOD 01/17

Delete the first sentence of paragraph 3:

The Department will provide seed at no cost to the Contractor unless otherwise specified.

Replace with the following:

The Contractor will furnish seed as specified in 711.05.

ON PAGE 395, SUBSECTION 621.03 – CONSTRUCTION REQUIREMENTS MOD 01/17

Add the following to 621.03.D:

Use the following (UPLAND) seed mix and rates:

Grasses	Bulk Lbs/Ac
Ephraim Crested Wheatgrass (AGCR)	4
Native Red Fescue (FERUR)	5
Durar Hard Fescue (FEOVD)	5
Mt Home Sandberg Bluegrass (POSE)	4
Anatone Bluebunch WG (PSSPS)	8

Legumes	Bulk Lbs/Ac
Ladak Alflafa (MESAL)	3

Use the following (RIPARIAN) seed mix and rates:

Grasses	Bulk Lbs/Ac
Nebraska Sedge (Carex nebrascensis)	8
Baltic Rush (Juncus balticus)	4
Streambank Wheatgrass "Sodar" (Elymus lanceolatus)	8
Slender Wheatgrass (Elymus trachycaulus ssp. Trachycaulus)	5

ON PAGE 402, SUBSECTION 624.02 – MATERIALS MOD. 01/17

Add the following:

Meet the riprap size requirement as follows:

Nominal Riprap Class by Median Particle Diameter		d_{15}		d_{50}		d_{85}		d_{100}
Class	Diameter	Min	Max	Min	Max	Min	Max	Max
IV	15 in	9.2	13.0	14.5	17.5	19.5	23.0	30.0
VII	24 in	14.5	21.0	23.0	27.5	31.0	37.0	48.0

The Engineer will accept size by visual inspection.

ON PAGE 402, SUBSECTION 624.03 – CONSTRUCTION REQUIREMENTS

Add the following:

All work below Ordinary High Water (OHW) will be considered in-stream work and all in-stream work requirements will apply. If work activities along the embankment above OHW result in debris or materials falling below OHW, this work will be considered in-stream work and all in-stream work requirements will apply.

ON PAGE 402, SUBSECTION 624.03 – CONSTRUCTION REQUIREMENTS

Add the following:

Place materials at locations shown on the project plans or as directed.

ON PAGE 402, SUBSECTION 624.05 – BASIS OF PAYMENT

Delete the second paragraph, and replace it with the following:

All excavation required to make a complete installation will be considered incidental to this pay item and no separate payment will be made.

ON PAGE 417, SUBSECTION 630.03 – CONSTRUCTION REQUIREMENTS

Delete line item 1 under Section A and replace with the following:

1. For permanent pavement markings, place 2 paint applications of 17 mils wet film thickness. Place the paint applications 10 or more days apart. For temporary traffic control pavement markings, place 1 application of 17 mils wet film thickness.

ON PAGE 423, SUBSECTION 635.05 – BASIS OF PAYMENT

Add the following:

Calculation of Bonus. The bonus to be paid or deducted for anti-skid material accepted by the Department will be computed using the following formula:

$B = (A)\ (PF_{AV} - 1)\ (Q)$

Where:
B = Total bonus to be paid for anti-skid material in Stockpile accepted.
A = Unit bid price.
Q = Total quantity of anti-skid material in stockpile accepted.
PF_{AV} = Weighted average based on quantity of material in each lot. See 106.03.

NOTE: The bonus may be a negative amount (i.e., a deduction from the total amount bid for the item).

ON PAGE 424, SUBSECTION 640.02 – MATERIALS

Add the following:

All riprap geotextiles shall be Type II.

ON PAGE 528, SUBSECTION 713.13 – ELECTRICAL SERVICE PEDESTALS

Add the following:

Type 3 with UPS (Service Pedestal)

The Type 3 with UPS cabinet manufactured by one of the following or an approved equal:

- Meyers Electrical Products. Catalog No. MEUG24-M110/M100-ITD (Mod) with UPS meeting the specified performance requirements listed below.
- Milbank No. CP3B2212HBWNT04 with UPS meeting specified performance requirements listed below.
- Tesco Controls Inc. Ensure the cabinet is similar in quality and features to Catalog No. 28-105F with UPS meeting the specified performance requirements listed below.

Ensure the service cabinet is equipped with an Uninterruptable Power Supply (UPS) or Battery Back-Up System (BBS) system designed to allow traffic signal to operate when AC power is disrupted. UPS/BBS performance requirements:

- Input Voltage: 120VAC
- Output Voltage: 120VAC
- Minimum Rated Output Power: 1800W and 2400VA.
- Minimum Battery Run-Time: With the Input Voltage source switched off, the UPS/BBS shall be capable of continuous operation at Rated Output Power and Output Voltage for a period not less than 4 hours at all temperatures within the Operating Temperature Range.
- Maximum Battery Recharge Time: 24 hours
- Battery: Completely sealed and maintenance-free
- Bypass: Provide UPS maintenance bypass switch
- Operating Temperature Range: -25C to +74C

S203-26A REM OF LUMINAIRE

Description. Remove existing luminaires (poles and foundations) at the locations shown on the plans.

Materials. Not specified.

Construction Requirements. Remove luminaire poles, arms, and fixtures completely from the project site.

Disconnect the power source for the luminaires in accordance with ITD and Avista requirements.

Dispose of all material, including foundations that are removed. Fill cavities left by the foundation removal with aggregate base and compact to the level of the surrounding ground in accordance with 205.03, Class A compaction. Dispose of all removed material as specified in 203.03.

Contact Cameron Elliot the City of Lewiston Traffic Maintenance Foreman (208) 746-1316 and salvage existing LED luminaires (20 Total) from existing luminaires/signal poles and store on site for later pickup by City of Lewiston representatives.

Method of Measurement. The Engineer will measure acceptably completed work for each luminaire removed, regardless of the number of fixtures attached.

Basis of Payment. The Department will pay for accepted quantities at the contract unit price as follows:

Pay Item	Pay Unit
Rem of Luminaire	EACH

S203-27A REM OF PIPE

Description. Remove pipe and provide and place aggregate base in cavities created by the pipe removal.

Materials: ¾" Type A aggregate base shall be in accordance with 703.

Construction Requirements. Removed pipe will become the property of the Contractor. Completely remove pipe and associated material from the project site. Dispose of material in accordance with 203.02 and 203.03.

Fill cavities created by the pipe removal with ¾" Type A aggregate base, compacted to the level of the surrounding ground in accordance with 205.03, Class A compaction.

Method of Measurement. The Engineer will measure acceptably completed work per linear foot of pipe removed.

Basis of Payment. The Department will pay for accepted quantities at the contract unit price as follows:

Pay Item	Pay Unit
Rem of Pipe	FT

Excavation, Structure Excavation, and Type A aggregate base to fill voids will not be measured and paid for, but shall be considered as subsidiary work and the cost thereof included in the contract unit price for Rem of Pipe.

S203-45A REM OF EXISTING SIGNS

Description. Remove and dispose of existing sign faces, sign posts, and foundations as shown on the plans or as directed.

Construction Requirements. Remove and dispose of the existing sign(s), sign post(s), and foundation(s) marked on the plans to be removed. Cavities left by the foundation removal are to be filled and compacted to the level of the surrounding ground as approved by the Engineer. Dispose of all removed material in accordance with 203.03. Fill cavities left by the foundation removal with ¾" Type A aggregate base and compact to the level of the surrounding ground in accordance with 205.03, Class A compaction.

Method of Measurement. The Engineer will measure acceptably completed work by each sign assembly at its location regardless of the number of signs attached to a single or double post.

Basis of Payment: The Department will pay for accepted quantities at the contract unit price as follows:

Pay Item	Pay Unit
Rem of Existing Signs	EACH

The Department considers fill and compaction of voids and removal of concrete foundation as incidental and the cost included in the contract unit price.

S501-15A RETAINING WALL (SOLDIER PILE)

Description. Furnish permanent soldier pile retaining walls in accordance with the lines, grades and dimensions shown or as directed.

Qualifications. At least 30 days before starting wall construction, submit documents to show evidence of successful completion of at least three similar permanent soldier pile retaining walls of equal or greater size and complexity. The submittal shall include brief project descriptions, and current owner names, contact persons and telephone numbers. Upon receipt of an acceptable experience qualifications submittal, the Engineer will have 15 days to approve or reject the proposed soldier pile retaining wall contractor.

Submittals.

1. Perform surveying before beginning wall construction and provide a work plan that states specifically how retaining wall construction will be performed, including an excavation/installation sequence. Submit the work plan for review and approval a minimum of 3 weeks before starting any retaining wall excavation.
   a. Work plan shall include methods and operation requirements for working around the overhead power and utility lines while maintaining appropriate clearances with the equipment. Confirmation of scheduled Avista power shut-down is required.

2. Maintain and submit a complete and accurate record of all soldier pile embedment depths. Immediately report to the Engineer any unusual condition encountered during installation.

3. Before project completion, furnish the Engineer with a copy of the soldier pile retaining wall as-built drawings in PDF format as specified in Section 105.02.

Materials.

General. Furnish Certificates of Compliance certifying that the applicable materials are in compliance with the specifications. Do not use materials that are not in compliance with the specifications, or supplied from non-approved sources or sources not listed in the contract documents without written approval. Remove non-compliant materials at no cost to the Department.

Steel Material. Provide steel soldier piles, connection materials, embedded items, and all miscellaneous steel materials that meet ASTM A-36 or higher grade.

Lagging. Timber lagging shall be Douglas Fir-Larch, grade No. 2 or better following the WCLIB or WWPA grading rules. All lagging delivered to the project shall have a grade stamp and a grading certificate.

Prefabricated Drainage Mat. Provide prefabricated drainage mat (e.g. Miradrain) consisting of a single or double dimpled polymeric core with a geotextile attached that meets the requirements specified in Section 718.05, for Type I Drainage Geotextiles.

Construction Requirements.

Site Verification. Verify proposed soldier pile retaining wall dimensions and locations before any structural member is fabricated or installed. Examine the site and obtain the Materials Phase IV Foundation Investigation Report, available at ITD for review. Conduct any other investigation necessary to construct the soldier pile retaining walls.

Pile Installation. Drive steel soldier piles to the required depths. Ensure the soldier piles are within 3% of plumb and soldier pile tops are within 4 inches horizontally of plan location or as directed. Correct any pile that is out of the required alignment or position at no cost to the Department. Other methods of pile installation, such as placing piles in drilled holes, can be employed instead of driving, if approved and at

no additional cost to the Department. Perform all pile driving during the day between the hours of 8 AM and 5 PM.

Wall Excavation and Backfill Compaction. Perform excavation in accordance with Section 210, Structure Excavation and Compacting Backfill, and in reasonably close conformity to the lines, grades and limits shown in the plans or as established. The Department will consider all structure excavation related to the walls as incidental to the soldier pile retaining wall construction.

Lagging Installation. Install timber lagging as shown in the plans or as directed. Completely fill all voids between the excavated cut face and the back of the lagging with sand/water slurry or other approved free draining, self-compacting material to prevent soil from sloughing into the voids between the lagging and the cut face.

Ensure that no more than 3.5 feet of vertical soil face of soil is exposed at any time during excavation and lagging installation.

Prefabricated Drainage Mat. The drainage system should consist of drainage mats installed between the proposed concrete fascia and timber lagging with an underdrain pipe at the base of the fascia/lagging as shown in the plans. The underdrain pipe should be connected to the proposed roadway drainage system.

A 4-foot-wide strip of prefabricated drainage mat shall be installed for the full height of the concrete fascia panel, centered between soldier pile flanges, unless otherwise shown in the Plans. The prefabricated drainage mat shall be attached to the lagging in accordance with the manufacturer's recommendations. The fabric side shall face the lagging. Splicing of the prefabricated drainage mat shall be in accordance with the manufacturer's recommendations. Ensure the hydraulic connection of the prefabricated drainage mat to the previously installed material does not impede the vertical flow of water. Tape all joints in the prefabricated drainage mat to prevent concrete intrusion during concrete fascia panel construction.

Method of Measurement. The method of measurement for furnishing, fabricating, constructing and testing all materials for the soldier pile retaining walls, including piles, lagging, and pile driving and all structure excavation related to the walls, internal drainage system, access road, compaction and any other incidental items required to furnish, construct, test, and complete the soldier pile retaining walls in accordance with the plans and specifications, shall be by the square foot of exposed wall face surface area.

The quantity, in square feet of wall surface area to be paid for will be measured from the bottom of concrete fascia to the top of pile.

Basis of Payment. The Department will pay for accepted quantities at the contract unit price as follows:

Pay Item	Pay Unit
Retaining Wall (Soldier Pile)	SF

S501-30A SP BRIDGE, PARTIAL MEDIAN CURB REMOVAL

Description. Remove the top portion of the median curb as shown on the plans.

Material. Provide a cementitious material used for patching and repairing the concrete surfaces that is fast setting, non-sag, non-metallic repair mortar and that meets the requirements of ASTM C 928, Type R3. Extend repair mortar as required using thoroughly washed and cleaned pea gravel granular material. Submit certified test results for Engineer approval before using the product.

Construction Requirements. Take care during removal operations to prevent damage to the structure and retained reinforcing steel. Form and replace concrete over break or other damage outside the limits designated on the plans as Engineer approved and at no additional cost to the Department.

During removal operations all removed materials and liquids must be contained and will not be allowed into the Clearwater River below. There exists a ½" joint between the two parallel bridge decks and median curb. Resealing this joint with a hot pour rubber joint material before/during the removal process is the preferred method of containing these materials. Obtain Engineer's approval of other containment methods.

Dispose of material removed in accordance with 203 of the Standard Specifications.

Remove the existing reinforcement flush with the top of the concrete deck/pavement. Paint surfaces of the embedded reinforcement that are exposed after removal with concrete gray colored epoxy paint.

Patch and repair pockets in the curb created by the removal of the reinforcement so the surface is flush to the top of the concrete deck/pavement. Meet the manufacturer's recommendations when applying mortar. Provide a certification from the manufacturer that the Contractor performing this work is an "Approved Contractor" for applying the specified product. Obtain Engineer's approval of removal methods.

Surface preparation for concrete surfaces. Square cut or under cut the perimeter of the proposed patched area to a minimum depth of ½-inch. Use care to prevent damaging the existing reinforcement. Remove deteriorated, loose or unsound concrete using jackhammers having a nominal rating of not more than 15 lb and held at an angle not exceeding 45 degrees from the concrete surface. Sandblast the cavity and the immediate surrounding concrete area to remove dirt, oil, grease, paint, corrosion deposits, dust, laitance, and bond-inhibiting materials. Prepare surface of cavity by mechanical scarification or sandblasting to provide a minimum surface profile of ±⅛ inch.

Method of Measurement. The Engineer will measure acceptably completed work by the foot complete removal of concrete median curb including approved containment method.

Basis of Payment. The Department will pay for accepted quantities at the contract unit price as follows:

Pay Item	Pay Unit
SP Bridge, Partial Median Curb Removal	FT

S501-51A SP BRIDGE CONC. FASCIA PANEL

Description: Construct the concrete fascia panels and the cement concrete gutter as shown on the plans and includes all materials, equipment and labor necessary to do so.

Materials:

- Concrete for the fascia panels will be Class 40A in accordance with Section 502 of the Standard Specifications.
- Metal Reinforcement will be in accordance with Section 503 of the Standard Specifications.
- Stud connectors will be in accordance with Section 708 of the Standard Specifications.

- Pre-formed expansion joint filler will be in accordance with Section 704 of the Standard Specifications.
- PVC pipe will be in accordance with Section 706 of the Standard Specifications.

Submittals:

Shop Drawings: Working drawings will be submitted for approval in accordance with Section 105 of the Standard Specifications. The submittal shall include complete details of the method, materials and equipment proposed for use in the construction of the concrete fascia panels and the cement concrete gutter.

Forms: Forms to be in accordance with 502.03 of the Standard Specifications. Submit to the Engineer working drawings, loading assumptions, allowable material stresses used in the design, and final design calculations for the proposed forming system. Design calculations shall be stamped by a Professional Engineer licensed in the State of Idaho.

Construction Requirements: Approval of the shop drawings will not relieve the Contractor of the full responsibility for constructing the fascia panels as shown on the plans and approved shop drawings. The Contractor will not cast any concrete before approval of the shop drawings and structural calculations are complete.

Removal of Forms: Removal of formwork to be in accordance with Table 502.03-5 of the Standard Specifications.

Finish Requirements: The exposed face of the fascia panels shall receive an "Ordinary Surface Finish" as defined in 502.03 of the Standard Specifications.

Curing: The concrete fascia panels to be cured in accordance with 502.03 of the Standard Specifications.

Cement Concrete Gutter: The cement concrete gutter to be constructed as shown in the plans.

Method of Measurement: Concrete Fascia Panels will be measured by the square foot, complete in place, and shall include all materials, equipment and labor. The cement concrete gutter is considered incidental to the concrete fascia panels.

The quantity, in square feet of concrete fascia panel surface area to be paid for will be measured from the bottom of concrete fascia panel to the top of concrete fascia panel.

Basis of Payment. The Department will pay for accepted quantities at the contract unit price as follows:

Pay Item	Pay Unit
SP Bridge Conc. Fascia Panel	SF

S600-15A ADJUST VALVE BOX

Description. Adjust existing water valve risers and covers up or down to allow for roadway construction activities and then to match the finished grade. This item includes removing concrete collars and necessary pavement, resetting the valve boxes to the proper grade, and pouring a concrete collar around the frame.

Materials. Materials shall be equal to or better than that in the existing structure and shall meet the applicable requirements of the following sections:

Non Structural Concrete Class 30	509
Metals & Reinforcing Steel	708

Construction Requirements. Meet with the City of Lewiston Water Department to review the existing system and perform an inspection before beginning construction. Protect all valves through the duration of construction. Defective valves that exist at the time of inspection shall be replaced by the Owner. Thereafter, the Contractor shall assume responsibility for protection of the facilities within the construction area and adjust the valve covers to the finished roadway grade and specifications, as soon as practical after the paving has been completed.

Adjust valve boxes to allow for roadway construction activities and then adjust to final grade and construct a concrete collar after paving is completed. All methods used in the construction of the concrete collars shall be in accordance with City of Lewiston Standard Drawings 1-10 and 4-2. Preliminary adjustments may be required to allow for milling operations and placement of base courses and paving over valve.

Replace material broken during removal or adjustment at no additional cost to the Department.

Traffic shall not be allowed on new concrete structures for seven (7) days.

Method of Measurement. The Engineer will measure acceptably completed work per each item adjusted.

Basis of Payment. The Department will pay for accepted quantities at contract unit price as follows:

Pay Item	**Pay Unit**
Adjust Valve Box	EACH

The cost of concrete collars, reinforcing steel, structure excavation, bedding, compaction backfill, and other associated materials will not be paid for separately, but shall be considered as incidental to this item.

S600-20A FIRE HYDRANT ASSEMBLY
S600-45A WATER LINE (8")
S600-45B WATER LINE (16")

Description. Relocate and install a fire hydrant assembly or water lines at the locations shown on the plans. The existing hydrant and/or valve may be re-used, with approval from the Engineer.

Materials. Materials shall conform to Division 400 of the 2017 ISPWC, and City of Lewiston Standard Drawings 1-8, 1-10, 4-1, 4-2, 4-4, and 4-12, except as modified herein.

Provide all appurtenance materials including Ductile Iron pipe fittings, bedding, mechanical joints, thrust block, finder wire, and concrete collar.

All pipe bedding and backfill shall be ¾" Type A aggregate base in accordance with 703.

The following revisions to Section 401 – Water Pipe and Fittings of the 2017 ISPWC shall apply:

Standard Drawings SD-403 (THRUST BLOCK AND DETAILS); delete this sheet and replace with City of Lewiston Standard Drawing 4-4.

Standard Drawings SD-404 (FIRE HYDRANT DETAIL); delete this sheet and replace with City of Lewiston Standard Drawing 4-12. Annotate the 6" Pipe to require Class 350 Ductile Iron.

Standard Drawings SD-407 (POTABLE AND NON- POTABLE WATER LINE SEPARATION); delete this sheet and replace with City of Lewiston Standard Drawing 4-1.

2.3.A Ductile Iron Pipe; replace subparagraphs 1-3 with the following:

A. Pressure class shall be 350 unless otherwise specified.
B. The pipe shall be cement-mortar lined in accordance with AWWA C104.
C. All joints shall be push-on and gasketed in compliance with AWWA C111.

2.3.D Ductile Iron Fittings; add the following:

5. Gaskets and bolts for flanged joints shall conform to the requirements of AWWA C207. Gasket shall be cloth-inserted 1/8" thick sheet rubber, fully cut with holes to pass bolts.

2.9 Mechanical Restraint; delete subparagraph B and replace with the following:

B. Unless otherwise indicated by the Plans or directed by the Engineer, all mechanical joints 12" and smaller shall be equipped with GripRing (Romac Industries), MJ Field Lok (US Pipe), AllGrip/PVCGrip (Star Pipe) ring-type gripping restraints, or approved equal. Mechanical joints larger than 12" shall be equipped with RoamcGrip (Romac Industries) Megalug (EBAA Iron), Stargrip (Star Pipe), Uniflange Series 1400/1500 (Ford meter Box) radical-wedge type mechanical joint restraints, or approved equal. Mechanical joint restraints shall be of a type compatible with the pipe material.

2.10 Locating Wire; add the following;

All wire joints shall be connected with V twist watertight wire nut enclosures.

C. Marking tape shall consist of inert blue polyethylene plastic that is impervious to all known alkalis, acids, chemical reagents, and solvents likely to be encountered in the soil. The tape shall be color coded and shall be imprinted continuously over its entire length in permanent black ink. The message shall convey the type of line buried below and shall also have the word "Caution" prominently shown. The width of the tape shall be as recommended by the manufacturer for the depth of installation.

Construction Requirements. Installation of all pipe, fittings and finder wire, disinfection, and testing shall conform to Division 400 of the 2017 ISPWC, and City of Lewiston Standard Drawings 1-10, 4-2, and 4-12, except as modified herein.

The following revisions to Section 401 – Water Pipe and Fittings of the 2017 ISPWC shall apply:

3.2 Pipe installation; Add the following to Subparagraph O:

Install marking tape during backfilling at 18 inches to 24 inches above the crown of the pipe.

3.4 Thrust Block; amend subparagraph A with the following:

Use of thrust blocks will not eliminate requirement for mechanical restraint of joints.

3.7 Locating Wire; replace subparagraphs A and B with the following:

A. Locating wire shall be replaced continuously the full length of the newly installed pipeline, with loops extending at least 2 feet above finish grade at each valve location. Locate wire shall be secured so that it remains at the top of the pipeline during and after pipe zone backfill. All Splices shall be encased in a water resistant wire nut. No bare wire shall be exposed. The two ends of the wire shall be knotted to prevent strain on the splice. Branch connections shall be made without cutting the main wire. Utilizing a connection clip and sealing the joint the same as splices.

B. The Contractor Shall be responsible for testing the tracer wire system for conductivity. Testing for conductivity shall be completed prior to finish surfacing activities. If the tracer wire does not function as intended, the repair the system to the satisfaction of the Engineer.

3.9.A Flushing and Disinfection; replace subparagraph 3 with the following:

3. Provide and install Combination Blowoff & & Sampling Taps in the locations indicated by the Engineer. These shall remain in place until the new water main is successfully pressure-tested, disinfected, and flushed. Remove all such appurtenances at the direction of the Engineer.

3.10 Connections to Existing Mains; replace subparagraphs B through D with the following:

B. Cut and remove pipeline components as indicated by the plans and as necessary for the installation of the required fittings at the points of connection. Determine the exact length of the existing water main that must be removed, and shall cut and bevel all pipe ends to prevent damage to couplings or gaskets during installation of the new fittings. The exterior of the existing pipe end shall be cleaned to a sound, smooth finish before installation of the fittings. All damage to existing pipelines to remain in-service that is caused by the Contractor's operations shall be repaired by the Contractor at no expense to the City or the Department.

C. Provide and install all pipeline, fittings, and other components necessary to complete the connection of the new water main and the existing pipeline(s). All fittings, pipeline, thrust blocking, restraints, and other components required to complete the connection shall be provided and installed by the Contractor at no additional cost to the City or the Department.

D. When work is started on the connection, it shall proceed continuously without interruption, and as rapidly as possible until completed. If the connection to the existing system involves turning off the water, the Contractor shall be responsible for notifying the residents affected by the shutoff. No shutoff of mains will be permitted overnight, over weekends, or on holidays.

E. No connections or modifications to the existing water system shall be made unless the Engineer or authorized representative of the City's Water Department is present. All such connections or modifications shall be completed between 6:30 a.m. and 5 p.m., Monday through Friday, unless requested and approved a minimum of 2 working days in advance.

3.11 Abandonment of Existing Mains; replace subparagraphs A through D with the following:

A. When modifications to the existing system abandon old water mains, the unconnected ends shall be plugged or capped where indicated by the Plans or directed by the Engineer. Provide and install a cast iron plug or cap, or cast a concrete bulkhead at the cut end of the pipeline.

B. When required by the contract or directed by the Engineer, remove existing hydrants, valve, and valve boxes. Deliver all removed hydrants to the City's Water Transmission Shop, 2605 16th Street, Lewiston. These items shall remain the property of the City of Lewiston.

The water line shall be a fully restrained system, with mechanical joints and/or field-lock gaskets.

The water lines shall be constructed with a minimum of 48" cover above the pipe. Maintain potable / non-potable water line separations meeting IDAPA 58.01.08.

Maintain water service to all adjacent properties throughout construction. If unable to do so, coordinate with the City to schedule and notify impacted property owners of short duration interruptions.

It shall be the responsibility of the Contractor to provide adequate protection and maintenance of all underground and surface utility structures, drains, sewers, and other obstructions encountered in the progress of work. When the required grade or alignment of the pipe is obstructed by existing utility structures (such as conduits, ducts, pipes, branch connections to main sewers, or main drains), the obstruction shall be permanently supported, relocated, removed, reconstructed, or bypassed. Such work shall conform to the owner's specifications and shall take place in cooperation with the owners of such utility structures.

Before lowering the pipe into position in the trench, all dirt and foreign matter that cannot be removed by normal flushing shall be cleaned by mechanical means. During laying operations, no debris, hand tools, clothing, or other materials shall be placed in the pipe. Keep pipe clean during and after installation.

The Contractor shall be responsible for all work effort and associated costs with pressure and bacteriological testing of the completed potable water main. Testing shall be performed by a certified testing laboratory. A copy of all test results shall be furnished to the Engineer and the City Water Superintendent prior to acceptance.

Only the City of Lewiston Water Department may open or close valves. Notify the Public Works Department a minimum of two (2) working days prior to opening or closing any existing water valves and a minimum of ten (10) working days prior to scheduling any other work activities that City Staff is required to perform. Notify patrons without service two (2) working days prior or immediately under emergency circumstances.

Method of Measurement. The Engineer will measure acceptably completed work per each item installed, or by the foot along the pipe centerline. No deductions will be made for the length of any fittings, valves, couplings, etc. contained within the measured length.

Basis of Payment. The Department will pay for accepted quantities at contract unit price as follows:

Pay Item	Pay Unit
SP Fire Hydrant Assembly	EACH
SP Water Line (8")	FT
SP Water Line (16")	FT

All required fittings are considered incidental to this bid item and no separate payment will be made. Any additional fittings required to complete the work which are not shown on the plans shall be furnished and installed by the Contractor, and no separate payment will be made.

This item shall include all costs associated with relocating (or installing new) fire hydrant assemblies and water lines at the locations shown on the project plans. Payment shall be full compensation for all labor, equipment and materials necessary for a complete and workable installation including excavation, bedding, backfill, pipe connections, fittings, valves, pipe, finder wire, valve box, hydrant, restraint (thrust blocking/mechanical joints), disinfection, testing, and all additional appurtenances not specified on the bid schedule.

S626-06A PORTABLE CHANGEABLE MESSAGE SIGN (PCM SIGN) MOD 09/14

Description. Provide Portable Changeable Message Sign (PCM SIGN or PCMS) in accordance with the Manual on Uniform Traffic Control Devices (MUTCD) as adopted by the Department and as required for the Engineer approved traffic control plan.

Materials. Provide the PCMS and all of its elements and systems to operate in an ambient air temperature range of -20°F to +160°F. Provide a PCMS consisting of a sign cabinet, a message sign panel, a control system, a power source, and a mounting and transportation trailer or truck as specified:

a) Sign cabinet constructed of seamless aluminum extrusion with continuous welded corners appropriately sealed to withstand typical weather conditions. Provide a secure lock on the cabinet to prevent tampering.

b) Message sign panel that displays a minimum of three message lines each consisting of a minimum of eight characters per line. Each character must have a minimum height of 18 inches, except as noted below, and use, as a minimum, a five-wide pixel by seven-high pixel matrix, with a minimum of 3 inches between characters. Provide the message sign panel with black background and a front face covered with a UV stable, impact resistant, non-glare protective material. Provide the message sign panel with an adjustable display rate (minimum of 3 seconds per phase and maximum of two phases) so that the entire message can be read at least twice at the speed posted in advance of the PCMS.

   If the PCMS is used where the posted speed is less than 45 mph, a shorter character height may be used provided that the message is legible from at least 650 feet under both day and night conditions. If the PCMS is mounted on a service patrol truck, a character height as short as 10 inches may be used.

   Provide the message sign panel with a viewing angle left and right of center a minimum of 17 degrees. Use light emitting diodes (LEDs) for the character pixel matrix operating at a dominant wavelength between 590 nm and 650 nm as defined by the 1931 CIE Chromaticity Diagram. Under low light level conditions, automatically adjust the light source to meet the legibility requirements and not impair drivers' vision.

Provide the message sign panel to be rotated 359 degrees about its vertical axis when trailer mounted and to remain fixed in the selected position until readjusted by the operator.

Design PCMS messages with the following factors:

- Each message phase is understandable independent of any other phase.
- If the message can be displayed in one phase, present the traffic condition in the first line, the location or distance ahead in the center line, and the recommended driver action in the bottom line.
- Use an additional PCMS if the message needs more than two phases.
- Use abbreviations only if they are MUTCD compliant.
- Do not allow the text to scroll, flash or travel horizontally or vertically across the sign face.

c) Control system that includes an hour meter, a keyboard, a display screen, NTCIP compliant software, and any other hardware necessary for complete programming and operation of the PCMS. Optionally, provide a modem compatible with the Department's existing equipment to allow for remote operation of the PCMS. The control system can maintain continuous operation and memory with battery backup when primary battery power is unavailable. Securely protect the control system from tampering by securing it in the locked cabinet and by providing password protection.

Provide software for the PCMS which:

- Has in memory a minimum of fifty standard MUTCD messages and can store fifty custom messages created by the operator.
- Allows for download of the system software and download of MUTCD message library upgrades.
- Is multiple site-licensed for message programming by more than one laptop computer or by an off-site computer via modem.
- Can check the battery charge level either at the PCMS or off-site by computer via modem.
- Previews the message on the display screen before displaying on the sign panel.
- Displays an automatic programmed default message when a low battery or other condition causes a PCMS failure.
- Can change the default password.

d) Power source of a primary battery and a solar battery charging system to provide continuing operation. The batteries are Marine/RV deep cycle batteries. Provide a weatherproof 120 VAC standard receptacle and a built-in temperature-stable battery charger to allow for connection to an external power source for maintenance of a full charge in the batteries.

e) Mount the PCMS on a trailer or a truck as specified:

Trailer mounted – Entire PCMS mounted on a transportation trailer with standard ball type hitch, safety chains, easily removable or collapsible tongue, sign lifting and rotating mechanism for a minimum height of 7 feet from the roadway surface to the bottom of the sign, solar panel which can be angled to prevent the accumulation of rain or snow, and a battery charge level indicator. The PCMS and solar panel withstand wind gusts up to 90 mph when in operating position with outriggers in place. The trailer wire harness extends a minimum of 24 inches beyond the hitch ball and includes an automotive style trailer plug.

Truck mounted – The PCMS is securely mounted on a truck using a method approved by the sign manufacturer. A remote interior-mounted control system monitor displays the current condition and message of the PCMS and allows programming of the PCMS from the cab of the host vehicle. When the sign is in use, its bottom is 7 feet minimum above the roadway surface. The PCMS withstands wind gusts or highway speeds up to 90 mph when in operating position. The wiring harness and the PCMS controls are compatible with the host vehicle's electrical system.

Construction Requirements. Furnish, erect, program and maintain the PCMS. Change display messages and relocate the PCMS for the duration of the project. Operate the PCMS 24 hours per day during construction operations in accordance with American Traffic Safety Service Association (ATSSA) Guidelines for the Use of Portable Changeable Message Signs. Provide maintenance for the PCMS so it can remain in full and continual service anytime it is needed. Change the PCMS control system password from the default password to prevent tampering.

Method of Measurement. The Engineer will measure acceptably completed work by the Day.

Basis of Payment. The Department will pay for accepted quantities at the contract unit price as follows:The Department will pay for days of operation at the contract unit price as follows, which includes all operations and maintenance costs:

Pay Item	Pay Unit
PCM Sign	Day

The Department considers all operations and maintenance costs as incidental and the cost included in the contract unit price.

S626-35A NIGHT WORK LIGHTING MOD 11/15

Description. Provide temporary illumination for all work on this project between half hour before sunset and half hour after sunrise or as directed.

Construction Requirements. Provide Portable lighting during the hours of darkness at each operation. Maintain a minimum of 5 foot-candles of illumination for each flagging station and work area. Provide self-generating light towers (Gas or Diesel) with fixtures using metal halide or high pressure lamps capable of producing required illumination from a minimum height of 30 feet. Equip all paving equipment with automotive type light sources mounted in such a manner as to illuminate all work areas at the levels specified. Optimize illumination using the requirements of Section 6F.82 of the Manual on Uniform Traffic Control Devices as adopted by the State. Provide necessary lights or other devices for a safe environment for all operations and personnel doing the work and inspection. Maintain on site one additional light plant as a backup. Use backup light plant to illuminate flagging station when the flagging station is being moved to another location.

Method of Measurement. The Engineer will measure acceptably completed work by the lump sum.

Basis of Payment. The Department will pay for accepted quantities at the contract unit price as follows:

Pay Item	Pay Unit
Night Work Lighting	LS

S900-50A CONTINGENCY AMOUNT WATER POLLUTION AND EROSION CONTROL 12/15

Description. Install and maintain erosion control measures not foreseen in the design of the project. These measures are not shown on the plans but may be ordered for the life of the contract. These measures may consist of seeding, erosion blanket, slope drains, check dams, straw bales and barriers, sediment traps, ditches, berms, swales, dikes, fiber mats, netting, gravel, mulches, and other erosion control devices or methods.

Coordinate contingency erosion control provisions with the permanent erosion control features specified elsewhere in the contract. Use practical, economical, effective, and continuous devices or methods with the permanent erosion controls throughout the construction and post construction period.

Materials. Materials shall meet the requirements specified in the following Subsections:

Seeding	621.02	Mulch	711.10
Metal Apron	708.21	Erosion Blanket	711.11
Pipe	708.21	Gabion	715
Riprap	711.04	Revet Mattress	715
Commercial Fertilizer	711.07	Geotextile	718

Before use provide Engineer approved commercial grade materials.

Construction Requirements. Correct conditions that develop during construction that were not foreseen during the design of the project. These measures are to temporarily control erosion that develops during normal construction practices, which are not associated with the permanent erosion control features on the project.

Perform erosion and pollution control required due to Contractor's negligence, carelessness, or failure to install permanent controls as a part of the work as scheduled or ordered, at Contractor's expense.

Temporary erosion and pollution control may include construction work outside the right-of-way where such work is necessary as a result of roadway construction such as borrow pit operations, haul roads, and equipment storage sites.

Maintain erosion control features installed by the Contractor. Follow Section 212 – Erosion and Sediment Control for all temporary erosion and pollution control

Method of Measurement. The Engineer will measure acceptably completed work by contingency amount.

The Engineer will measure work not covered by other sections in accordance with 109.03 Payment for Quantity Variations, Contract Revisions, and Delays, part 5. Force Account.

Basis of Payment. The Department will pay for accepted quantities at the contract unit price as follows:

Pay Item	**Pay Unit**
Contingency Amount Water Pollution and Erosion Control	CA

S900-50B CONTINGENCY AMOUNT DIRECTED LANDSCAPING

Description. Install landscaping features as directed by the Engineer and the City of Lewiston.

Materials. All materials shall match existing product in quantity, size, and color to the extent possible, including pressure irrigation, mulch, bark, decorative rock, topsoil and plant material. All plant material shall conform to American Standard for Nursery Stock.

Construction Requirements. Prior to any construction activities, document (via photos and/or hand sketches) the location, type, number, size/caliper, and condition of the existing landscaping in areas that will be disturbed. To the extent reasonable, minimize damage to the existing landscaping and vegetation within the right-of-way and easement areas during construction.

Handle all trees/plant material with care. Planting shall occur during early spring (March/April) or fall (September-November) to facilitate establishment. Weather and other circumstances may require variances from these dates.

The establishment period for the landscaping shall be 8-weeks after all other work under the contract is substantially completed. During the establishment period, provide and ensure sufficient watering of landscaping. Watering shall occur a minimum of three (3) times per week with an average water depth of 1-inch of water per week during the spring/summer timeframe with less water required during the fall.

Method of Measurement. The Engineer will measure acceptably completed work by contingency amount.

The Engineer will measure work not covered by other sections in accordance with 109.03 Payment for Quantity Variations, Contract Revisions, and Delays, part 5. Force Account.

Basis of Payment. The Department will pay for accepted quantities at the contract unit price as follows:

Pay Item	Pay Unit
Contingency Amount Directed Landscaping	CA

S901-05A SP 24" YELLOW CHANNELIZER

Description. Furnish and install 24" channelizers along the raised median islands and curbs as shown on the Plans.

Materials. The channelizers shall be fluorescent yellow plastic or other approved yielding materials and shall be 24 inches minimum height, minimum 3 inches wide when facing traffic and shall have two 3-inch-wide retro-reflective white horizontal bands placed a maximum of 2 inches from the top, with a minimum space of 2 inches and no more than 6 inches between the bands.

The channelizers shall be a separate post and base system with impact resistance. Product shall conform to MUTCD and NCHRP 350 standards. Post shall be a clover-leaf design. No metal pins allowed in the bases, Bases will be mounted directly to the surface of the roadway.

Construction Requirements. Install all channelizers in compliance with the manufacturer's recommendations. Fasten bases to the pavement by an approved adhesive, or by other Engineer approved method. Install Channelizers at the locations shown on the Plans, unless otherwise directed by the Department. All channelizer installations will comply with the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD).

Method of Measurement. The Engineer will measure acceptably completed work by each channelizer installed.

Basis of Payment. The Department will pay for accepted quantities at the contract unit price as follows:

Pay Item	Pay Unit
SP 24" Yellow Channelizer	EACH

24" Yellow Channelizer includes furnishing and installing the base, post, adhesive, and other miscellaneous installation equipment.

S901-05D SP REMOVE AND RESET SIGN ON NEW POST

Description. Remove existing sign, post, and assembly, temporarily storing the existing sign, and then resetting the sign at the location shown on the plans, or as directed.

Materials. Materials will be in accordance with Subsection 616.02.

Construction Requirements. Contractor to remove the existing sign, including post and foundation. Cavities left by the foundation removal to be filled with ¾" Type A aggregate base and compacted to the level of the surrounding ground in accordance with 205.03, Class A compaction.

Provide and install a new sign post and assembly in accordance with Section 616. Reset the existing sign on the new post and assembly and properly dispose of existing post, foundation, and assembly.

Replace any sign damaged or destroyed due to Contractor's negligence at no cost to the Department.

Method of Measurement. The Engineer will measure acceptably completed work by each sign assembly, regardless of the number of signs or posts in the assembly.

Basis of Payment. The Department will pay for accepted quantities at the contract unit price as follows:

Pay Item	Pay Unit
SP Remove and Reset Sign on New Post	EACH

Sign post and foundations to be paid under their respective pay items.

S901-05E SP LEWISTON TYPE 1 CATCH BASIN
S901-05F SP LEWISTON CURB DROP INLET

Description. Construct and install City of Lewiston Type 1 Catch Basin inlets and Curb Drop Inlets at the locations identified in the plans, or as directed.

Materials. All materials shall meet the requirements of Division 600 of the 2017 ISPWC, and Lewiston Standard Details 6-1, 6-6, 6-7, 6-8, and 6-10.

Construction Requirements. Construction and installation of the catch basins shall meet the requirements of Division 600 of the 2017 ISPWC, and Lewiston Standard Details 6-1, 6-6, 6-7, 6-8, and 6-10.

Method of Measurement. The Engineer will measure acceptably completed work per each item installed, complete in place.

Basis of Payment. The Department will pay for accepted quantities at the contract unit price as follows:

Pay Item	Pay Unit
SP Lewiston Type 1 Catch Basin	EACH
SP Lewiston Curb Drop Inlet	EACH

The Department considers all excavation, bedding, backfill, pipe connections, frames, and grates needed to make a complete installation of the inlet as incidental to this pay item and no separate payment will be made.

S901-05G SP RELOCATE IRR BOX / VALVE

Description. Remove and relocate existing pressure irrigation control box and associated valves and underground main lines to a location outside of the project improvements and that is acceptable to the Owner (or City).

Materials. All materials shall match the existing materials to the extent practical, or shall meet the requirements of Division 900 of the 2017 ISPWC.

Construction Requirements. Construction and installation shall meet the requirements of Division 900 of the 2017 ISPWC.

Relocate all pressure irrigation main lines, branches, valves, and boxes outside of the proposed project improvements to a location that is acceptable to the Owner (or City). Sleeve irrigation lines that go underneath hard improvements (sidewalks, etc).

Method of Measurement. The Engineer will measure acceptably completed work per each item installed, complete in place.

Basis of Payment. The Department will pay for accepted quantities at the contract unit price as follows:

Pay Item	Pay Unit
SP Relocate Irr Box/Valve	EACH

The Department considers all excavation, bedding, backfill, pipe connections, valves, and boxes needed to make a complete installation as incidental to this pay item and no separate payment will be made.

S901-06A SP STONE FILTER DAM

Description. Construct dams at the locations shown on the plans and in reasonably close conformity with the lines and dimensions shown on the plans or as directed. Stone filter dams (or sand bag dams) are to be used in conjunction with Items 212-025A – Diversion Channel and S904-05F – SP Miscellaneous Ditch Work to route flowing water in the drainage ditch around the construction area.

Materials. Material for rock check dams shall be commercially available sand bags, rip rap material (later placed and paid under Item 624-005B) or rock have a minimum median rock size (D_{50}) of 6-inches that is angular field or quarry stones, resistant to weathering and of approved quality.

The plastic liner (or visqueen barrier) shall be of sufficient thickness (4-mill or greater) to not easily tear during installation and other construction activities.

Construction Requirements. Place stones so they are in contact with each other with the voids filled with finer material producing a well graded compact mass. Use a plastic liner (visqueen barrier) to prevent water from entering the work area.

After the pipe installation is complete and the channel banks have been stabilized, completely remove the Stone Filter Dams and Diversion Channel from the drainage ditch (or move and install as part of the riprap pad). Remove all plastic materials completely from the ditch.

Method of Measurement. The Engineer will measure acceptably completed work per each item installed.

Basis of Payment. The Department will pay for accepted quantities at the contract unit price as follows:

Pay Item	Pay Unit
SP Stone Filter Dam	EACH

The Department considers all work and material needed to make a complete installation, including the visqueen barrier, as incidental to this pay item and no separate payment will be made.

S901-06B SP 8" VALVE
S901-06C SP 16” VALVE
S901-06D SP CUT AND CAP WATER
S901-06E SP WATERLINE SERVICE

Description. Install valves, caps, service lines, and associated appurtenances in conjunction with the waterline construction at the locations shown on the plans.

Materials. Materials shall conform to Division 400 of the 2017 ISPWC, and City of Lewiston Standard Drawings 1-8, 1-10, 4-1, 4-2, 4-3, 4-4, and 4-6, except as modified herein.

Provide all appurtenance materials including bedding, restraints, finder wire, and concrete collar.

The following revisions to Section 404 – Water Service line and Meters of the 2017 ISPWC shall apply:

2.4 Appurtenances; delete all subparagraphs A through H and replace with the following:

A. Components used as a part of Water Service Line and Meters shall be as required by City of Lewiston Standard Drawings 4-6, as directed by the Engineer.

Standard Drawings SD-401 (WATER SERVICE CONNECTION); delete this sheet and replace with City of Lewiston Standard Drawing 4-6. Change Note B to reference NSF 61 Annex F & G.

Standard Drawings SD-403 (THRUST BLOCK AND DETAILS); delete this sheet and replace with City of Lewiston Standard Drawing 4-4.

Standard Drawings SD-406 (VALVE BOX AND LID DETAIL); delete this sheet and replace with City of Lewiston Standard Drawing 4-2.

All Specification references to replaced Standard Drawing shall be deemed to refer to the designated replacement City of Lewiston Standard Drawings.

Construction Requirements. All work shall conform to Division 400 of the 2017 ISPWC, and City of Lewiston Standard Drawings 1-8, 1-10, 4-1, 4-2, 4-3, 4-4, and 4-6, except as modified herein.

Extend all service lines from the water main corporation stop to the meter. Splicing will not be allowed. If the existing meter and tub are in good condition, as determined by the City, the Contractor may reconnect the waterline service to the existing meter.

Only the City of Lewiston Water Department may open or close valves. Notify the Public Works Department a minimum of two (2) working days prior to opening or closing any existing water valves and a minimum of ten (10) working days prior to scheduling any other work activities that City Staff is required to perform. Notify patrons without service two (2) working days prior or immediately under emergency circumstances.

Method of Measurement. The Engineer will measure acceptably completed work per each item installed, complete in place.

Basis of Payment. The Department will pay for accepted quantities at the contract unit price as follows:

Pay Item	**Pay Unit**
SP 8" Valve	EACH
SP 16" Valve	EACH
SP Cut and Cap Water	EACH
SP Waterline Service	EACH

This item shall include all costs associated with installing valves, caps, and service lines at the locations shown on the project plans. Payment shall be full compensation for all labor, equipment and materials necessary for a complete and workable installation including excavation, bedding, backfill, fittings, valves, pipe, valve box, restraint (thrust blocking/mechanical joints), and all additional appurtenances not specified on the bid schedule.

S901-06F SP WATERLINE CONNECTION

Description. Connect newly constructed waterline to the existing system after pressure and disinfection testing of the new lines are complete. Operations shall be planned to cause minimum inconvenience to customers on existing mains and shall be done under the rules, regulations, and supervision of the City.

Materials. Materials shall conform to Division 400 of the 2017 ISPWC. All appurtenance materials shall be provided by the Contractor including bedding, restraints, and finder wire.

Construction Requirements. Construction activities shall conform to Division 400 of the 2017 ISPWC.

The City of Lewiston will require that the existing water system be operational until connections are made to the new pipes. It is anticipated that the Contractor may need to perform both 16" water line connections concurrently. The remaining connections may occur at the Contractor's discretion as long as the system remains operational.

Connections must be performed by a City of Lewiston approved Contractor and Crew only, and under the supervision of the City. Work will only be allowed after a current certificate of insurance is provided by the Contractor.

No connections or modifications to the existing water system shall be made unless an authorized representative of the City's Water Department is present. All such connections or modifications shall be completed between 6:30 a.m. and 5:00 p.m., Monday through Friday, unless requested and approved two (2) weeks working days in advance. There shall be no shutoff of mains overnight, over weekends, or on holidays without City Engineer approval two (2) weeks in advance.

The shut-offs required to connect the new system must be scheduled and approved with the City of Lewiston two (2) weeks prior to work. Patrons without service shall be notified by the Contractor a minimum of one (1) week prior to work. Cards shall be prepared and delivered to patrons of the area where water is to be cut off advising them when service will be cut off and the approximate duration of the interruption of service. City personnel has the authority to suspend connections that they deem cannot be completed within the approved time period. A connection shall not be made during adverse weather conditions.

Do not open or close any valve, without authorization of the City. When work is started on a connection, it shall proceed continuously without interruption, and as rapidly as possible until completed.

Provide and install combination blowoff and sampling taps to remain in place until the new water main is successfully pressure-tested, disinfected, and flushed. All disinfection will be performed by the City. Remove all such appurtenances at the direction of the City.

The tie-in shall be made by cutting the existing water main and inserting a standardized mechanical joint fitting. No connection shall be located within 3 pipe diameters of any other fitting or pipe joint.

Cutting of waterlines shall be done with a hydraulic pipe cutter. When a cut is made into a water line, excavation shall be kept dry to prevent water from entering pipe and to assist in keeping pipe and fittings clean.

Cut and remove pipeline components as indicated by the plans and as necessary for the installation of the required fittings at the points of connection. Determine the exact length of the existing water main that must be removed, and cut and bevel all pipe ends to prevent damage to couplings or gaskets during installation of the new fittings. Clean the exterior of the existing pipe end to a sound, smooth finish before installation of fittings. Repair all damage to existing pipelines to remain in-service that is caused by the Contractor's operations at no expense to the City or the Department.

Provide and install all pipeline, fittings, and other components necessary to complete the connection of the new water main and the existing pipeline(s). Provide and install all fittings, pipeline, thrust blocking, restraints, and other components required to complete the connection at no additional cost to the City or the Department.

HTH or similar chemical for disinfection shall be dusted into each fitting and each piece of pipe as they are installed in the system.

After connection is completed, water supply valve shall be opened just enough to fill the line and bleed air from the line through a temporary blow-off or hydrant. As soon as water reaches the temporary blow-off or hydrant, the supply valve shall be closed and chlorinated water allowed to set in the hydrant supply line for 30 minutes, after which supply valve shall be opened and line flushed.

Method of Measurement. The Engineer will measure acceptably completed work per each item installed, complete in place.

Basis of Payment. The Department will pay for accepted quantities at the contract unit price as follows:

Pay Item	Pay Unit
SP Waterline Connection	EACH

Payment shall be full compensation for all labor, equipment, and materials necessary to complete a waterline connection including excavation, bedding, backfill, fittings, valves, pipe, restraints, and all additional appurtenances not specified on the bid schedule.

S904-05A SP TURBIDITY MONITORING

Description. Provide equipment and manpower necessary to monitor turbidity levels in the unnamed drainage channel to meet the requirements of the 401 Certification.

Materials. Stationary (non-portable) or portable standard turbidity testing equipment may be used. Equipment shall be shall be submitted for approval prior to its use.

Construction Requirements. The Clean Water Act requires States to set water quality standards sufficient to protect designated and existing beneficial uses. In Idaho, "Sediment shall not exceed quantities which impair designated beneficial uses. Determinations of impairment shall be based on water quality monitoring and the information utilized as described in Section 350." (Idaho Administrative Procedures Act (IDAPA) 58.01.02 .200.08). In Idaho State Water Quality Standards for Aquatic Life (Section 250), "Turbidity shall not exceed background turbidity by more than 50 Nephelometric Turbidity Units (NTUs) instantaneously (at any point in time) (IDAPA Idaho Code 58.01.02.350.01.a).

In Section 350 (Rules Governing Nonpoint Source Activities), "Best management practices should be designed, implemented, and maintained to provide full protection or maintenance of beneficial uses. Violations of water quality standards which occur in spite of implementation of best management practices will not be subject to enforcement action. However, if subsequent water quality monitoring and surveillance indicate water quality standards are not met due to nonpoint source impacts, even with the use of current best management practices, the practices will be evaluated and modified as necessary by the appropriate agencies in accordance with the provisions of the Administrative Procedures Act." (IDAPA 58.01.02.350.01.a).

Prepare and submit a Turbidity Monitoring Plan to ITD and IDEQ for approval prior to commencing in-water work and project activities that may result in a disturbance to water quality. The plan must demonstrate how the applicant will meet the requirement for monitoring contained in the 401 Certification. A suggested resource for developing an effective monitoring plan can be found at: http://water.usgs.gov/owq/FieldManual/

Perform turbidity testing and monitor turbidity in the unnamed drainage channel during all in-water work and project activities that may result in a disturbance to water quality. Provide testing equipment, equipment setup and maintenance, turbidity monitoring and reporting. A properly and regularly calibrated turbidimeter is required.

Locate turbidity monitoring sites upstream from the project impact area of sufficient distance to provide a valid sample of background conditions and downstream (not to exceed 100 feet) from the project impact area in an area of the creek which is fully mixed. If construction results in an increase over background

turbidity greater than 50 NTU instantaneously or 25 NTU over ten consecutive days, construction shall be ceased until levels return to below 25 NTU; and corrective actions shall be taken prior to continuing work. When monitoring is required, if there are no in-stream work activities perform turbidity testing 2 times per day with a minimum of 4 hours between samples; during in stream construction activities perform a turbidity test every 2 hours. Provide all reports daily to the Engineer. The project inspector shall review the results daily to confirm compliance with the State Water Quality Standards and provide copies of the results to IDEQ if requested. If State Water Quality Standards have not been met IDEQ will be notified immediately. Testing equipment shall be shall be approved by the Engineer prior to its use and shall be stationary (not portable), located in the thalweg of the creek prior to ground disturbing activities. Provide signage on the creek to notify users of the potential hazards.

Reports shall have the following minimum information:

- Current construction activity
- Brief weather conditions (cloud cover, wind direction and speed, precipitation in last 24hrs (inches), and ambient air temperature (◦F) at the time of sample collection).
- Precipitation if any
- Sampling location
- Date
- Time
- Results in NTU's
- Instrument calibration verification
- Visual observations of any discharge, per CGP 4.1.6.6.b.
- If applicable, corrective actions taken and their observed effectiveness per B.2 above
- Printed name and signature of the sample collector
- Include a map or sketch with GPS coordinates of each sample location.

Additionally, visual monitoring (including photographic documentation) shall be conducted to assess the effectiveness of the BMPs. If a plume is observed, then the project is likely causing an exceedance (violation) of the turbidity standard. Provide routine monitoring data to the Engineer or to regulatory agencies upon request.

Method of Measurement. The Engineer will measure acceptably completed work by the lump sum.

Basis of Payment. The Department will pay for accepted quantities at the contract unit price as follows:

Pay Item	Pay Unit
SP Turbidity Monitoring	LS

S904-05B SP REM OF SIGNAL

Description. Remove all existing signal poles, mast arms, cabinets and equipment, signal heads, street lighting, splice vault, conduit, and junction boxes designated on plans to be removed as part of this contract. The existing wireless camera radio device is to be relocated to the new signal cabinet.

Materials. Backfill material will be aggregate base in accordance with 303.

Construction Requirements. Remove all existing signal poles, mast arms, cabinets and equipment, signal heads, street lighting, splice vault, conduit, and junction boxes at the existing intersection.

Prior to terminating operation of the existing signal, the new signals poles, mast arms, signal heads, and other ancillary items shall be installed and ready for transition of signal operation. All costs and efforts associated with modifying either the existing or new signal to manage traffic during construction stages shall be covered under 626-100A Misc. Temporary Traffic Control Items.

Coordinate work with the Department Traffic Signal Foreman one (1) week prior to initiating the work of transitioning signal operation and removal of the existing signal. Coordinate the disconnection of power to the traffic signal and illumination with the appropriate utility.

The existing signal cabinet (not including the equipment) will be salvaged to ITD District 2. Also the 5 LED luminaires from the existing signal poles will be salvaged to the City of Lewiston. All other remaining items removed shall become the property of the Contractor and removed from the project site.

Completely remove foundations and backfill cavities left by foundation removal. Foundation and excavation materials shall be disposed of in accordance with 203. Backfill cavities to the level of the surrounding ground with aggregate base. Backfill compaction shall meet the requirements of Class A compaction in accordance with 205.03.

The Contractor will contact Cameron Elliot the City of Lewiston Traffic Maintenance Foreman (208) 746-1316 and salvage existing LED luminaires from existing luminaires poles and store on site for later pickup by City of Lewiston representatives.

Method of Measurement. The Engineer will measure acceptably completed work by the lump sum.

Basis of Payment. The Department will pay for accepted quantities at the contract unit price as follows:

Pay Item	Pay Unit
SP Rem of Traffic Signal	LS

S904-05C SP TEMPORARY TRAFFIC SIGNAL

Description. Design, install, maintain, and remove temporary traffic signals as required through all stages of project construction. This work will also include transitions from existing, temporary, and permanent traffic signal control. These items shall include any modification of existing traffic signals, including adjustments, realignments and repositioning of signal indications, pedestrian indications, video detection, etc. as necessary during construction to accommodate traffic flow. These items shall include coordination with ITD and the City of Lewiston. Temporary signals shall include video detection and intersection lighting.

Materials. Temporary signal materials to conform to the requirements of Section 656-Traffic Signal Installation. Usage of existing signal equipment is acceptable. As-built plans and information about the existing equipment can be obtained from ITD District 2 Traffic Section. Video detection shall be used for the temporary signals.

Construction Requirements. Design of the temporary traffic signal to be performed by a Professional Engineer licensed in the State of Idaho who has a minimum of five years of experience in the design of signals of similar types and sizes. Contractor to design, install, use, and maintain temporary traffic signals in accordance with the MUTCD, as adopted by the Department. Submit temporary signal design to the Engineer for approval prior to installation. Allow the Engineer three (3) weeks to review each submittal of the design. Submit shop drawings to the Engineer for approval prior to fabrication of

elements. It will take up to 20 working days to review the shop drawings and seven (7) calendar days for each resubmittal.

The locations of any new controller, service pedestals, poles, and junction boxes shall be marked in the field by the Contractor and approved by the Engineer prior to construction and installation.

During construction of Stage 1 and Stage 1, Phase 1 provide a protective/permissive signal for the southbound US 12 left turn movement to E Main Street.

Programming and maintenance of temporary signals is included in these items. Timing of the temporary signals will be performed by ITD/City of Lewiston. Contractor will notify ITD/City of Lewiston 48 hours in advance of temporary signal activation. Contractor calculations shall be submitted to Engineer for approval prior to construction.

Method of Measurement. Temporary Traffic Signals will be measured on a lump sum basis.

Basis of Payment. Payment for accepted work will be made as follows:

Pay Item	Pay Unit
SP Temporary Traffic Signal	LS

No additional payment will be made for multiple relocations and/or adjustments of Temporary Traffic Signals throughout construction.

S904-05D SP HYBRID RADAR AND VIDEO DETECTION SYSTEM

Description. Econolite Autoscope Duo radar and image detection system.

Materials. The following items are the only approved sole source traffic signal controller and video detection system allowed under this contract:

Traffic Signal Controller: Econolite Cobalt ATC Controller with NEMA TS2 Fully-Actuated ATC Cobalt Touch Software.

Econolite Autoscope Duo radar and image detection system: The traffic signal shall be supplied with a complete and operable dual video/radar detection system for vehicle detection at the intersection. This includes video and radar equipment including high-resolution, color video cameras, radar sensors, waterproof and dust-tight housings, zoom lenses, mounting brackets, internal cabinet components, RS-485/coax/power cabling, and all necessary hardware to service intersection approaches as shown on the plans. The dual video/radar detector card shall include an Ethernet 10/100 Base-T RJ45 connection, SDLC DB-15 connector, RS-485 Bus, and USB connector and be capable of mounting into NEMA TS-1 detector slots within the confines of the controller cabinet shown on the plans. The dual video-radar interface panel shall be a fuse protected, 110/220 VAC 50/60 Hz panel. Any controller cabinet modification or additional cabinet equipment required for the functionality of specific models of dual video/radar detection systems shall be provided by the video/radar equipment supplier and the cost considered incidental to the traffic signal installation pay item. The dual video/radar detection system shall be an Econolite Duo Autoscope system.

Furnish black and white video monitor with a minimum 9” diagonal screen, and switched inputs from a minimum of four (4) sources. Provide video input format per the camera manufacturer’s requirements.

Correct, prior to approval for installation, any component that does not comply with the specification or fails during testing, at Contractor expense.

Deliver the equipment submitted for inspection and testing to:

Cameron Elliott, Traffic Maintenance Forman
CElliot@CityofLewiston.org
(208) 791-9941

Construction Requirements. Installation of the dual video/radar detection system shall include the following:

- Refer to manufacturer's requirements for installation of all equipment.
- Install the camera/radar sensor and brackets;
- Aim and configure the cameras for optimum field of view. (Detection zones for each approach shall be based on the approach speed limit and configured as per the detector loop spacing plan shown in ITD Standard Drawing 656-10. More than one camera for each approach may be needed to meet detector loop spacing plan requirements.).
- Pull wire (comm., coax, & power) to each camera through new conduits. Splicing of the cable is not allowed between the cabinet and sensors.
- Install detector card into an available detector slot in the traffic signal cabinet.
- Install fuse protected interface panel in the traffic signal cabinet for proper fault and surge protection of the sensors.
- Provide proper terminations for the comm./power cable at the traffic signal cabinet and sensor locations.
- Install video processing unit in cabinet.
- Furnish and install a panel, in the signal cabinet, mounted with proper fault and surge protection for the video camera. Where applicable, include switch rated circuit breakers for fault protection. The engineer will not allow Fuses.
- Provide proper terminations for the video cable at cabinet and camera.
- Terminate the video processor input/output cable harness in cabinet (if needed), as directed.
- Provide training for programming video image processing unit.

Contact the City Traffic Maintenance Foreman at least 3 working days prior to the dual video/radar detection installation to coordinate inspection of the installation, determine the final location of the camera/radar sensors, install and orient the sensors, establish detection zones, and calibrate the system for operation. Submit entire system to the City Traffic Maintenance Foreman for operational testing prior to installation.

Method of Measurement. The Engineer will measure acceptably completed work by the lump sum.

Basis of Payment. The Department will pay for accepted quantities at the contract unit price as follows:

Pay Item	**Pay Unit**
SP Hybrid Radar and Video Detection System	LS

The Department considers the cost of any controller cabinet modification or additional cabinet equipment required for the functionality of specific models of video detection systems, by the video equipment supplier, incidental to the video detection pay item.

S904-05E SP PRE-EMPT DETECTION SYSTEM

Description. Install emergency vehicle pre-emption detectors at each intersection, as detailed on the project plans.

Construction Requirements. Furnish and install all material as shown on the plans, along with any miscellaneous hardware installed and provided by the Contractor in for a complete, operable installation.

Method of Measurement. The Engineer will measure acceptably completed work by the lump sum.

Basis of Payment. The Department will pay for accepted quantities at the contract unit price as follows:

Pay Item	Pay Unit
Pre-Empt Detection System	LS

S904-05F SP MISCELLANEOUS DITCH WORK

Description. Install a temporary diversion dam to dewater and re-route the existing flows in the drainage ditch around the construction area to be able to install the 72" outlet pipe and the riprap. Once the riprap has been placed, the native existing topsoil from the ditch shall be placed over top of the riprap rock to fill in the majority of the voids.

Materials. Existing top soil excavated from the ditch shall be stock piled and re-spread after the installation of the riprap mat.

Construction Requirements. Divert all flows (including potential high storm flows) in the existing drainage ditch around the construction activities sufficient to install the 72" drainage pipe and riprap in the dry.

Perform the diversion work in conjunction with Items 2012-025A – Diversion Ditch and S901-06A – SP Stone Filter Dam. Place the sand bags, riprap, or angular rock in a location sufficient to isolate the work area. Place the plastic liner (or visqueen barrier) on the exterior side of the diversion to ensure a dry work area.

Install item 605-125A – 72" Storm Sewer Pipe with items 624-005A and 624-005B – Loose Riprap as required. Once installed, remove the diversion ditch and stone filter dam (and associated plastic) from the existing drainage way.

Replace a portion of the top soil excavated from the existing ditch over top of the installed rip rap mat. Lightly water the top soil sufficient to distribute the soil into the voids of the rip rap, but not wet enough to create a turbid discharge downstream. Place the top soil to a depth of approximately 1-inch above the riprap rock, and lightly compact using a vibratory hammer.

Perform bank stabilization as paid under Items 621-010A – Seeding and S912-05E – SP Erosion Control Blanket.

Method of Measurement. The Engineer will measure acceptably completed work by the lump sum.

Basis of Payment. The Department will pay for accepted quantities at the contract unit price as follows:

Pay Item	Pay Unit
Miscellaneous Ditch Work	LS

The Department considers all items needed to install and repair the existing ditch, not included in a separate pay item, as incidental and included in the unit bid price.

S912-05A SP COLORED AND PATTERNED CONCRETE

Description. Construct colored patterned concrete as directed and at the locations shown on the plans, or as directed by the Engineer. Curing and sealing the finished patterned concrete is included in this work.

Materials. Use Class 30 Concrete in accordance with Section 509 – Nonstructural Concrete. Curing compound shall meet the requirements of 709.01.

Color hardener or approved equal shall be regular grade. Submit color and pattern samples for approval prior to construction. Imprint pattern shall be "Ashlar Slate/Stone" pattern with 4" – 6" x 6" – 18" stone dimensions. Stone pattern texture shall be "Cut Stone" with a tooled joint appearance. Joint appearance width shall be approximately 1/4" with a 3/8" depth. Maximum pattern relief shall be 11/16".

Imprint tools shall be mat type for texturing freshly placed concrete. Form release agent shall be per the manufacturer's recommendations and shall be non-staining, dissipative type. Concrete shall be sealed per the manufacturer's recommendations to improve weathering and mildew resistance.

Construction Requirements. Place concrete in accordance with Section 614 – Sidewalks, Driveways, and Curb Ramps, except as modified herein.

Color shall be brick red and shall be integral in the concrete mix. Color hardener, or approved equal, shall be added to the transit mixer on site. When the concrete is still in the plastic stage of set, imprinting tools shall be applied to make the approved patterned surface. Properly tamp tools into the surface to achieve the required texture, with uniformity of pattern and depth of stamping. Utilize bond breaker to keep tools from sticking to fresh concrete. Release material shall be applied to the troweled surface prior to imprinting.

Concrete curing shall be clear and meet the requirements of 502.03.J.

Submit field samples of texture and pattern for approval prior to beginning work. Sample shall be 48 inches by 48 inches in size, representative of the final finish. Work will not be allowed to proceed until the sample has been approved. Construct new samples, as necessary, to obtain approval. The sample may be constructed within the patterned concrete area shown on the project plans. The Contractor shall be responsible for removing samples that are not accepted and approved. The approved sample shall be the reference standard for all patterned concrete constructed for the project.

Method of Measurement. The Engineer will measure acceptably completed work by the square yard.

Basis of Payment. The Department will pay for accepted quantities at the contract unit price as follows:

Pay Item	Pay Unit
SP Colored and Patterned Concrete	SY

3/4" Aggregate Type A will be paid under 303-022A. All other costs including labor, materials, forming, fillers, and finishing shall be included in the unit bid price for this item. No separate payment will be made for curing and sealing finished concrete. The Department considers the cost of these items as incidental and included in the unit bid price.

S912-05B SP LANDSCAPE REPAIR

Description. Repair areas which have been disturbed on private or City property as a result of construction activities. Areas shall be repaired to a pre-project or better condition.

Materials. All materials shall match existing product in quantity, size, and color to the extent possible, including pressure irrigation, mulch, bark, decorative rock, topsoil and plant material. All plant material shall conform to American Standard for Nursery Stock.

Grass sod shall match existing grass species to the extent practical. If grass species cannot be matched, sod shall consist of Merion, Park, Delta or Windsor Kentucky Bluegrass, or as approved. Grass sod shall be submitted for approval before cutting for delivery to the planting site. Delivered sod shall show evidence of having been properly handled and cared for. Sod showing evidence of improper handling or discoloration due to prolonged storage prior to delivery and placement will be rejected. Individual sod pieces shall be cut to a uniform size with square corners at a uniform depth of 1 to 1 1/4 inches.

Trees shall be replaced in like kind and size. The maximum replacement tree size shall be 6" caliper.

Weed barrier shall be a woven non-biodegradable, UV resistant fabric that is rated for a minimum of 20-years with a 3.0-oz/yard thickness.

All irrigation pipe and sprinkler heads shall match the existing irrigation system in type and size. If pressure class of existing PVC irrigation pipe cannot be documented, Schedule 80 PVC pipe shall be used matching the existing pipe size.

Acceptance of all material will be by the Engineer's inspection with ITD form 854.

Construction Requirements. Prior to any construction activities, document (via photos and/or hand sketches) the location, type, number, size/caliper, and condition of the existing landscaping in areas that will be disturbed. Coordinate with the City and adjacent property owners prior to construction activities to assist the Contractor in identifying pressure irrigation sprinkler head locations. Provide documentation to the Engineer prior to removing existing landscaping materials.

To the extent reasonable, damage to the existing landscaping and vegetation within the right-of-way and easement areas shall be minimized during construction. Repair and/or replace the existing landscaping to a pre-project or better condition, using the photo documentation as a benchmark. If the Contractor fails to properly document the existing landscaping condition, the landscaping shall be restored to the satisfaction of the land owner at no additional cost to the Department.

All sprinkler heads and irrigation pipe damaged during construction shall be removed and new pipes and sprinkler heads shall be installed to manufacturer's recommendations. New or relocated sprinkler heads shall be spaced to ensure adequate and uniform coverage.

All trees/plant material shall be handled with care. Planting shall occur during early spring (March/April) or fall (September-November) to facilitate establishment. Weather and other circumstances may require variances from these dates.

All old damaged turf shall be removed to a uniform depth. Place a minimum of 6 inches of topsoil in areas where topsoil has been damaged or removed. In areas where the existing topsoil is retained and is sufficient, a soil amendment shall be spread uniformly to a depth of 2 inches and thoroughly rototilled to a depth of four inches.

After cultivation, the area shall be carefully fine graded and rolled to provide a fine textured, smooth and firm surface, free of any foot prints, undulations or irregularities. The finished grade of the sod bed shall be 1 1/4 to 1 1/2 inches below the finished grade of the walks to permit the placing of sod to final grade 1/4 inch below the finished grade of the walks.

The first row of sod shall be laid in a straight line and subsequent rows placed parallel to and tightly against each other. Lateral joints shall be staggered. Care shall be exercised to insure that the sod is not stretched or overlapped, and that all joints are butted tight. After placing sod, the lawn shall be adequately rolled diagonally and watered heavily.

If planting beds were disturbed, the plant materials shall be planted after the amended soil has been spread. A weed barrier shall be laid prior to vegetation being planted. Surface treatments matching the existing condition shall be evenly spread across the disturbed area at a 2 inch minimum depth or matching existing depth, whichever is thicker.

After replacing the landscaping to match the pre-project condition, it shall be watered heavily. Fertilizer shall be applied at the manufacturer's recommended rate one month after re-landscaping is complete.

The establishment period for the landscaping shall be 8-weeks after all other work under the contract is substantially completed. During the establishment period, provide and ensure sufficient watering of landscaping. Watering shall occur a minimum of three (3) times per week with an average water depth of 1-inch of water per week during the spring/summer timeframe with less water required during the fall.

Method of Measurement. The Engineer will measure acceptably completed work by the square yard.

Basis of Payment. The Department will pay for accepted quantities at the contract unit price as follows:

Pay Item	Pay Unit
SP Landscape Repair	SY

The Department considers all labor, documentation, materials, grading, topsoil, sodding, landscaping, sprinkler repair, fertilizer, watering, and warranty as included in the unit bid price for this item. No separate payments will be made for any plant material that does not survive and has to be replaced under the warranty period.

S912-05C SP PAVEMENT REPAIR

Description. Repair existing paved asphalt areas with associated base material and Hot Mix Asphalt (HMA). Asphalt in repair areas shall be placed in reasonable close conformity with the existing lines, grades, and thicknesses; or as directed by the Engineer.

Materials. Obtain all aggregate from approved Contractor Furnished Sources. Aggregate sources shall meet the requirements of Section 703 - Aggregates unless otherwise allowed. Asphalt binder shall meet the applicable requirements of Section 702 - Asphalt. Superpave Mix Designs shall meet the applicable requirements of Section 405 – Superpave Hot Mix Asphalt and shall require approval.

The bituminous HMA shall be composed of a mixture of 3/4-inch, 1/2-inch, or 3/8-inch nominal maximum size aggregate, natural filler or commercial additives, if required, and asphalt binder. Superpave HMA Class SP3 using PG 58-28 binder (or better) and a minimum of 1/2 percent anti-strip additive shall be used. Alternate Superpave binders may be approved. The mix design shall meet all corresponding Superpave requirements. Volumetric testing will not be required.

Construction Requirements. Install base material at a thickness that matches or exceeds the existing pavement base. Saw-cut existing asphalt to provide neat lines prior to placing the Pavement Repair HMA. Treat the joint between the existing plant mix and the repair area with a tack coat of CSS-1 diluted emulsified asphalt.

Minimum thickness of HMA repairs shall be 0.50 ft, or matching existing, whichever is greater.

Placement operations shall comply with the applicable requirements in the Standard Specifications. Placement of plant mix shall not begin until authorized.

Compact the patch using rollers meeting the requirements of 306.03 or as approved. Compaction shall consist of a minimum of eight roller passes while the material is at or above 200˚ F. Avoid cracking, shoving, or displacing the HMA pavement repair. The Engineer will observe the contractor's compaction operation and document equipment and compaction effort at each location.

Acceptance. An acceptance test strip is not required. Pavement Repair will be accepted by certification as provided in Subsection 106.04, using form ITD-851. Contractor test results shall be provided. Compaction will be accepted using form ITD-850 documenting the equipment used and roller passes for each location. Independent assurance sampling and testing will not be required.

Method of Measurement. The Engineer will measure acceptably completed work by the square yard.

Basis of Payment. The Department will pay for accepted quantities at the contract unit price as follows:

Pay Item	**Pay Unit**
SP Pavement Repair	SY

The unit bid price shall apply regardless of the actual quantity supplied. No separate payment will be made for asphalt, additives, 3/4" aggregate base. All other work and material including temporary patching, tack coat and saw-cutting shall be incidental.

S912-05D SP LANDSCAPE ROCK REPAIR

Description. Furnish and install weed barrier and decorative landscape rock at the areas indicated on the plans, or as directed by the Engineer.

Materials. Weed barrier shall be a minimum of 3-oz and come with a 12-year manufacture warranty. Decorative landscape rock shall be a clean material with pebbles generally ranging from 1/2-inch to 2 inches. Match the existing landscape rock used around the perimeter of the Harley Davidson parcel to the extent possible.

Construction Requirements. Compact any fill placed in the vicinity of the rock landscape. Place the weed barrier on the prepared subgrade according to manufacture recommendations. Weed barrier seams shall overlap a minimum of 12-inches. Utilize stakes or staples to prevent weed barrier from moving during installation of rock.

Place rock over weed barrier with care to not puncture the barrier or allow it to move. Spread the rock to a uniform 4-5 inches so the top of the rock is flush with the adjacent concrete surroundings.

Method of Measurement. The Engineer will measure acceptably completed work by the square yard.

Basis of Payment. The Department will pay for accepted quantities at the contract unit price as follows:

Pay Item	Pay Unit
SP Rock Landscape Repair	SY

The Department considers ancillary materials, weed barrier, equipment, and labor as incidental and subsidiary to the work.

S912-05E SP EROSION CONTROL BLANKET

Description. Furnish and install erosion control blanket in accordance with Section 621 at the areas indicated on the plans, or as directed by the Engineer.

Materials. Provide materials as specified in:

Rolled Erosion Control Product (RECP)	711.11

Construction Requirements. Install in accordance with applicable portions of Section 621.03.

Method of Measurement. The Engineer will measure acceptably completed work by the square yard.

Basis of Payment. The Department will pay for accepted quantities at the contract unit price as follows:

Pay Item	Pay Unit
SP Erosion Control Blanket	SY