# DIVISION 00820 McDERMOTT TRUNK SEWER

SUPPLEMENTAL SPECIFICATIONS (ISPWC 2020 EDITION) AND SPECIAL PROVISIONS

# DIVISION 00820 PRIME IDAHO, INC. McDERMOTT TRUNK SEWER MERIDIAN, IDAHO

# OWNER'S REVISIONS TO THE STANDARD SPECIFICATIONS (ISPWC 2017 EDITION) AND SPECIAL PROVISIONS

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APPENDIX B	City of Meridian Erosion and Sediment Control Plan Checklist (Appendix E of City of Meridian's CSWMP)
APPENDIX C	United States Army Corps of Engineers Authorization (Pending)
APPENDIX D	Form 00830 Property Owner Release Form
APPENDIX E	Geotechnical Investigation
APPENDIX F	Groundwater Monitoring Well Measurements

#### **GENERAL INFORMATION**

These Technical Specifications and Special Provisions are written as modifications to the City of Meridian's 2023 Supplemental Specifications and Drawings to the Idaho Standards for Public Works Construction (ISPWC). Special Provisions are written as supplemental technical specifications to the City of Meridian's 2023 Supplemental Specifications and Drawings to the ISPWC.

This document pertains to the following entities and naming conventions:

- OWNER: Toll Brothers, Inc.
- ENGINEER: J-U-B Engineers, Inc.
- CITY: City of Meridian Public Works Department
- ACHD: Ada County Highway District
- NHD: Nampa Highway District
- ITD: Idaho Transportation Department
- NMID: Nampa & Meridian Irrigation District
- DEQ: Idaho Department of Environmental Quality
- EPA: U.S. Environmental Protection Agency
- CONTRACTOR: To Be Determined

All work shall conform to the requirements of the 2020 edition of the ISPWC, ACHD Supplemental Specifications to ISPWC, 2023 City of Meridian Supplemental Specifications and Drawings to ISPWC, and all applicable agency permitting requirements. In addition, all work shall conform to these revisions to the Standard Specifications and Special Provisions. In the case of conflict, the more stringent requirements shall be adhered to.

The Contractor is required to have copies of the following standards on-site at all times during construction of the project:

- All applicable permits
- ACHD Standards
- NHD Standards
- Technical Specifications and Special Provisions
- Project Plans
- 2023 City of Meridian Supplemental Specifications & Drawings to the ISPWC
- 2020 ISPWC

The CONTRACTOR shall be responsible for complying with the City of Meridian Construction Storm Water Management Plan (CSWMP); refer to **Appendix A** for specifications. A Storm Water Pollution Prevention Plan (SWPPP) and Narrative shall be prepared by the Contractor and approved by the City of Meridian prior to construction.

A total land disturbance of greater than one (1) acre is anticipated; therefore, an EPA Construction General Permit, a Storm Water Pollution Prevention Plan (SWPPP), Notice of Intent (NOI), and Notice of Termination (NOT) will be required in addition to meeting all local and sediment control requirements for this Project. CONTRACTOR shall include all costs associated with the requirements to prepare, submit, and file all required permits and provide all work to manage storm water systems. Cost for this work will be included in the "Storm Water Management" pay item. Preparation shall include all utility

relocations necessary to complete the project as the utility companies will operate under the CONTRACTOR's EPA Construction and SWPPP Plan.

# GENERAL PROJECT INFORMATION, SCHEDULE, AND COORDINATION

- A. Coordinate all work activation with the Owner, City of Meridian Engineering Department (Clint Dolsby, 208-898-5500), ACHD (as applicable), NHD (as applicable), and NMID. Work shall be performed to minimize disruption to adjacent farming and irrigation operations.
- B. NMID operates and maintains Eight Mile Lateral and the Sky Pilot Drain that cross the proposed sewer alignment. The CONTRACTOR shall contact a NMID representative two (2) weeks prior to construction. A license agreement with NMID is in progress. No work on the NMID facilities or within NMID easements will be allowed until a final license agreement is secured. NMID will require silt fence along the boundary of their easement adjacent to trenching operations. Silt fence must be removed at the time of final completion.

NMID Contact: Dave Duvall - Water Superintendent 466-0663

- C. All work shall be subject to final acceptance by the CITY and Owner, and, as applicable, ACHD, NHD and NMID. In areas where work takes place on private property, a signed Property Owner Release form must be obtained from the property owner. Prior to final payment, the CONTRACTOR shall perform a final walk-through with said agencies and owners and perform all necessary corrective work to the full satisfaction of the respective parties. No debris, soil, or other materials shall be allowed within the waterways unless specifically allowed by the Joint Agency Permits located in **Appendix C**. A Property Owner Release Form is included herein; see Document 00830, **Appendix D**.
- D. The CONTRACTOR shall maintain any and all storm and irrigation water conveyance during construction. CONTRACTOR is required to prepare an irrigation facility security plan, prepared by and Idaho licensed professional engineer, and submit to NMID prior to commencement of any construction.
- E. Approval of dewatering discharges to any surface waters has not been secured by the Owner. CONTRACTOR shall be required to obtain all other necessary approvals to any other location.
- F. All fences, irrigation facilities, utility services, landscaping, signs, power poles and other miscellaneous facilities, removed or altered during construction shall be replaced in-kind or restored to their pre-existent condition prior to final completion. Unless specifically called for on the Bid Schedule, this work shall be incidental to the contract, and no payment will be made unless item(s) are specifically listed on the Bid Form.
- G. Work shall be performed to minimize disruption to local residences, farming operations, and irrigation water delivery or conveyance. The CONTRACTOR shall maintain irrigation delivery to areas of landscaping that are not disturbed. Areas that are disturbed must be restored to the conditions described in Section 307 and in accordance with applicable permits.
- H. This work shall be completed to minimize disruption of traffic. Refer to SP-2138 and SP-2139. Traffic control must be approved and in-place prior to construction. The CONTRACTOR shall contact ACHD Traffic at 387-6190 after the "notice to proceed" date is established. Temporary surface restoration shall be maintained as required by ACHD until final surfacing is completed. Final surfacing shall be completed as specified in Section 307 of this document. Coordinate all

- work with affected property owners and agencies, and maintain a minimum of one vehicular egress/ingress access open at all times.
- In the event these specifications or special provisions conflict with any requirement, condition or provision of State or Federal agency permits, the State or Federal agency permit requirement, condition or provision shall prevail.
- J. No staging areas have been secured for this project. The OWNER also has potential staging area(s) off of Ustick Road.
- K. All Contractors working on the project are solely responsible for compliance with all applicable safety laws of any jurisdictional body. The CONTRACTOR shall be responsible for all barricades, safety devices, and control of traffic within and around the construction area. Temporary construction safety fencing and all other work associated with these work restrictions shall be incidental to the project and the cost included in appropriate unit bid prices. Safety and protection of the Work remain the sole responsibility of the CONTRACTOR.

# OWNER'S REVISIONS TO THE STANDARD SPECIFICATIONS (ISPWC 2012 EDITION) AND SPECIAL PROVISIONS

# Section 201 - Clearing and Grubbing and Removal of Obstructions

#### **PART 3 – WORKMANSHIP**

Part 3.2 shall be amended to include the following:

- F. Remove and Reset Fence
  - 1. Where called for on the Plans, remove existing fence (regardless of type) and reinstall at the designated location. The existing fence material shall be protected and reused. Document condition of existing fence prior to removal. Fence shall be reinstalled in accordance with Section 2040 Fencing. Additional material and hardware may be required to make a complete installation. Excess material not used shall be disposed of by the Contractor in accordance with Part 3.2.

#### PART 4 - MEASUREMENT AND PAYMENT

Part 4.1 shall be amended to include the following:

- G. Remove and Reset Fence: By the lineal foot measured along the centerline of the reinstalled fence. Includes full compensation for all materials, labor and equipment necessary for completing the work and all appurtenances not itemized in the Bid Schedule.
  - 1. Bid Schedule Payment References: 201.4.1.G.1.
  - 2. Bid Schedule Description: Remove and Reset Fence (Type)\_\_\_...lineal foot (LF)

## Section 203 - Soil Materials

#### **PART 2 - MATERIALS**

Amend Part 2.1 to include the following:

F. Waterway Soil Type S6: Native materials within the waterway crossing areas as shown on the Plans and excavated to the depth and stockpiled in accordance with the permits listed in **Appendix C** of these Specifications.

## Section 205 – Dewatering

#### **PART 1 - GENERAL**

Amend Part 1.3 to include the following:

D. Special Provisions relating to this Work.

## Amend Part 1.4.A to include the following:

- A. Submit to the Owner, Engineer, IDEQ and, if necessary, NMID a dewatering plan sealed by a licensed Idaho Professional Engineer and a statement of the method, installation and details of the dewatering system proposed. Submittal of a dewatering plan shall not be interpreted as acceptance or approval by the Owner or Engineer and shall include at a minimum:
  - 1. Major components of the dewatering system including size, location and spacing and details. Include a description of a program that will be employed to verify dewatering performance before excavation and continued monitoring protocol during construction to comply with Idaho Water Quality Standards and the Construction General Permit (CGP).
  - 2. Dewatering disposal or discharge locations, jurisdictional acceptance of discharge and capacity of receiving facilities to accommodate flows.
  - 3. Prepare contingency plans for equipment or power failure, and higher than expected flows when capacity of planned discharge and disposal location may conceivably be exceeded.
  - 4. Location and details of Best Management Practices (BMP's).
  - 5. All permits obtained by the Contractor for the construction and operation of the dewatering system and permit conditions for approval to discharge.

## Add Part 1.6

#### 1.6 PREPARATION

- A. Notify State and Federal agencies prior to initiating the work per the IDEQ permit requirements.
- B. Verify dewatering system performance in accordance with this Section prior to excavation. Continue dewatering until backfilling is completed.
- C. Employ temporary erosion and sedimentation control measures per this Section and comply with provisions of the approved SWPPP and Appendices A and B. Further guidelines for the SWPPP and Storm Water Management are included in SP-2216.

## PART 3 - WORKMANSHIP

Amend Part 3.1 to include the following:

- F. Prepare contingency plans for equipment or power failure, dewatering pump sanding, and unexpected flow conditions.
- G. Dewatering will be required for construction of the work. Wet and unstable soils will be encountered during excavation and proper dewatering will be critical during construction. Information related to groundwater and soil conditions can be found in the Geotechnical information located in **Appendix E**.

- H. The CONTRACTOR shall perform investigations, analysis, evaluations, and design as necessary to determine the soils ability to dewater, well point spacing and locations, and discharge points.
- I. No permits have been secured by the Owner for discharge to surface water other than the pending permit application for discharge to the Sky Pilot Drain. The Owner has not secured permission from landowners to discharge onto private property or private drains, or canals. The CONTRACTOR shall be responsible for securing any necessary permits and approvals based on the dewatering system used. Submit a dewatering plan to the Engineer and IDEQ for review. In addition, submit the Dewatering Plan to affected irrigation/drainage district having jurisdiction.

Replace the following paragraphs in Part 3.2:

#### 3.2 CONSTRUCTION REQUIREMENTS

- A. Dewater and dispose of water in accordance with applicable ordinances, State water quality standards, and agreements in such a manner that it does not cause damage to public or private property or to cause a nuisance or menace to the general public. Operate dewatering system such that adjacent structures or property are not endangered by the reduction in the groundwater level. Do not discharge water to an offsite drainage facility without prior written approval from the operator of the facility. The discharge of storm water, surface water, groundwater, or subsurface drainage water to the sanitary sewer is prohibited.
- B. Portable power generation equipment shall incorporate noise suppression devices to reduce noise during non-work periods to a level of not more than 60 decibels as measured at the adjoining private property lines.
- C. Comply with Idaho Water Quality Standards, latest edition, for discharge of water to surface water.
- D. Draw static water level to at least two feet (2') below the bottom of and prior to excavation in accordance with the dewatering recommendations provided in the Geotechnical information found in **Appendix E**.
- E. The CONTRACTOR will be responsible for devising a system to achieve the required level of dewatering. The CONTRACTOR shall submit details of this plan as previously described in Part 1.4 of this Section.
- F. Compact native soil prior to placing foundation base materials for structures according to Section 305.
- G. Prevent softening of the bottom of the excavation and the formation of "quick" conditions or "boils" during excavation. The occurrence of such conditions, due to inadequate dewatering, will require over-excavation and subsequent backfilling of Type I 3/4" crushed aggregate with geotextile wrap and as detailed on the Plans at no additional cost to the Owner.

- H. Maintain hydrostatic pressure in the trench at or near zero during installation of pipe and bedding. Draw static water level to at least two feet (2') below the bottom of the excavation for pipeline trenching and three feet (3') below the lowest point of excavation to maintain the undisturbed state of the foundation soils and allow placement of bedding, foundation and backfill materials to the required density.
- Additional costs for bottom stabilization, due to inadequate dewatering, and noncompliance with the performance specification included herein, as determined by the Engineer, will be considered incidental to the work.
- J. Install and operate the dewatering system so that adjacent structures or property are not endangered by the reduction in the groundwater level. Continue to operate the dewatering system to meet the requirements of these specifications until the impacted area is backfilled and compacted.
- K. Control surface runoff to prevent entry or collection of water in excavations.
- L. Contractor's superintendent shall routinely observe conditions in excavations where dewatering is being performed on a daily basis to verify performance requirements are being met and that conditions in the excavation are in accordance with the Contract Documents.
- M. If the Contractor elects to discharge to surface waters and obtains all necessary approvals and permits to do so, Contractor shall comply with IDEQ's monitoring requirements related to the surface water classification. Requirements may include:
  - 1. Dewatering discharge water quality (turbidity, sediment) and quantity.
  - 2. Dewatering discharge monitoring and sampling daily, weekly, and/or continuously as stipulated by IDEQ, at any locations required therein.
  - 3. Submission of monitoring and sampling report to the appropriate agencies.
- N. The Contractor shall provide sediment removal from dewatering discharges necessary to meet the water quality requirements of this Section. It is anticipated that at a minimum it will be necessary for the Contractor to use well points, sediment basins, geotextile dams, straw bales, and siltation channels to meet the water quality requirements. The location and type of water quality treatment facilities shall be shown on the dewatering plan. Water quality treatment facilities shall be removed and the disturbed area restored to original condition in accordance with the surface restoration requirements in Section 307 and the Contract Plans. The cost for construction, operation, maintenance, removal, and restoration of water quality treatment facilities, sediment basins or other methods utilized by the Contractor, shall be considered incidental to dewatering.
- O. Contractor is required to prepare and manage the approved SWPP plan.

  Dewatering discharge locations must be approved prior to construction. Fines incurred due to Contractor's failure to comply with all requirements of this section will be paid at no cost to the Owner.

P. Notify the Owner's RPR of any observations that may jeopardize the Work or are not in accordance with the Contract Documents.

Replace Section 3.3 with the following:

## 3.3 TERMINATION

- A. Allow groundwater to return to static level after all trench excavations are backfilled and compacted and structure excavations are backfilled and compacted.
- B. Prevent disturbance of the compacted backfill and prevent flotation or movement of installed pipelines or structures.
- C. Remove or abandon all temporary improvements associated with the dewatering system in accordance with these specifications and any applicable state and federal rules and regulations.
- D. Provide surface restoration as required to repair/replace any surface impacted by dewatering activities to a condition as good as or better than preconstruction conditions at no additional cost to the Owner. Surface rehabilitation performed as a result of dewatering activities is considered incidental and no additional payment will be made.
- E. Comply with any dewatering termination requirements of the City, State and Federal permits.

Add the following to Part 3.4:

D. The Contractor shall be fully responsible for complying with the water quality requirements. Contractor shall devise dewatering system to achieve such requirements. Such temporary facilities may be constructed on-site, as approved by the landowner, and will be required to be removed after completion. Captured sediment must be retained and disposed of at a site furnished by the Contractor. Discharging directly into adjacent surface waters without treatment shall not be permitted.

Add the following at the end of the last sentence of Part 3.4.A: "...and applicable monitoring provisions of the CGP."

Add part 3.6 as follows:

#### 3.6 PROTECTION

- A. Dewater and dispose of water in a manner, which complies with State and Federal Regulations.
- B. Comply with all requirements for discharge rates, points of discharge, water quality, etc.

- C. Control surface runoff to prevent entry or collection of water in excavations, and to minimize erosion.
- D. Continue dewatering activities until final backfill of trench and structure excavations are complete.

#### **PART 4 - MEASUREMENT AND PAYMENT**

Amend Part 4.1 to include preparation of dewatering and contingency plans as well as other necessary permits, labor, materials, or equipment required to complete this task as described.

## **Section 301 – Trench Excavation**

#### **PART 1 - GENERAL**

Amend Part 1.4 to include the following:

D. Prior to disposal of waste material from the project, the CONTRACTOR shall provide a written approval from all property owners accepting material from the Project and releasing the Owner and Engineer from any responsibility for the material. Provide a release form to the Owner prior to disposal of material.

#### Add Part 1.7

## 1.7 PREPARATION

- A. Notify State and Federal agencies prior to initiating the work and in accordance with permit requirements.
- B. Notify adjacent landowners per SP-2139.
- C. Verify dewatering system performance in accordance with Section 205 prior to excavation. Continue dewatering until backfilling is completed.
- D. Employ temporary erosion and sedimentation control measures per Section 205

   Dewatering, comply with agency permits, Appendix A, and the approved
   Project SWPPP. Further guidelines for the SWPPP and Storm Water
   Management are included in SP-2216.

#### Add Part 1.8:

## 1.8 DESIGN REQUIREMENTS

A. Temporary shoring systems will be required on all excavations and shall be designed to accommodate anticipated loading, groundwater, and soil conditions. Employ and deploy shoring/excavation support systems without causing damage to adjacent structures, features, or the Work. Submit shoring and trenching plan to the Engineer two weeks prior to trenching in areas shown on the Plans. Shoring designs shall be performed by State of Idaho licensed Professional

Engineer if excavation depths exceed 20' or as required by OSHA. Minimum shoring design and performance criteria is provided in **Appendix E**—Geotechnical Report.

#### **PART 3 - WORKMANSHIP**

Amend Part 3.1.A to include the following: Trench details shall be as shown on the Plans.

Amend 3.1.D to read:

D. If the trench bottom is disturbed during excavation, compact to 95% maximum dry density as measured by ASTM D-1557 prior to placement of the bedding or foundation stabilization material. Cut out soft areas not capable of insitu compaction and backfill per the Geotechnical Report, **Appendix E**. Backfill and compact with Type I 3/4" aggregate material with geotextile wrap as necessary and compact to density equal to or greater than the requirements of subsequent backfill material. Soft areas of subgrade resulting from a lack of dewatering shall be corrected at no additional cost to the Owner.

Amend Part 3.7 to require all traffic control to also conform to the requirements set forth in the associated right-of-way permits.

Amend Part 3.8 to include the following:

E. A written release form, Document 00830, is provided in **Appendix D**.

Add the following to Part 3.11:

H. Travelable surface shall be maintained behind and ahead of pipe laying area to allow local landowner's access to their properties and access to those services listed in SP-2139 and as required by the right-of-way permits. The temporary surface shall be graded smooth with crushed rock surfacing, graded and maintained with water or other suitable treatment as necessary to minimize dust. Condition of travelable surface shall be maintained to the satisfaction of the jurisdictional roadway authority.

Amend Part 3.12.A, Paragraphs 1 and 2 as follows:

Replace the word "Engineer" with "the City of Meridian".

Amend Part 3.12.A.3 to read as follows:

3. The trench must be completely backfilled at the end of each workweek, prior to weekends and holidays, and during shutdown periods. Safety and protection of the Work remains the sole responsibility of the CONTRACTOR.

Amend Part 3.12.B to include the following: Trench width shall conform to the details shown on the Plans. Costs associated with trench widths in excess of what is shown on the Plans will be borne by the Contractor and considered incidental to the Work.

Amend Part 3.15.B to require groundwater dewatering to a level of at least two feet (2') below the trench bottom.

Part 3.17.C shall be amended to include the following:

Prepare and submit a SWPP Plan and Narrative to the City of Meridian for review and approval. Refer to **Appendices A, B, and C**. Plan shall be prepared by a certified plan designer.

#### PART 4 - MEASUREMENT AND PAYMENT

No separate measurement of payment will be made for trench excavation. The cost of this work shall be considered incidental to and included in the unit bid price for the gravity sewer.

# <u>Section 304 – Trench Foundation Stabilization</u>

#### **PART 2 - MATERIALS**

Amend Part 2 to include the following:

#### 2.4 GEOTEXTILE

Geotextile shall be woven filter fabric.

#### **PART 3 – WORKMANSHIP**

Amend part 3.1.D to require compaction to at least 95% maximum density as measured by ASTM D-1557

Amend Part 3.2 to include the following:

- A. Place Type I bedding material in lifts no greater than 6 inches.
- B. Compaction shall be 95% per ASTM D-1557.
- C. In wet or unstable soils and/or excavations deeper than the static groundwater elevation, Type I 3/4" aggregate shall be wrapped in geotextile meeting the requirements of Section 304.2.4. The geotextile shall be placed against the bottom and sides of the excavation prior to placing the foundation material. The geotextile shall not be torn, punctured, or noticeably stretched. The geotextile shall overlap a minimum of 12" on top of the foundation material. No other joints in the geotextile around the perimeter of the foundation material shall be permitted. Pipe bedding placement shall not disturb the overlap joint. Longitudinal joints in the geotextile along the pipe shall be installed with a minimum 12" overlap.

#### **PART 4 - MEASUREMENT AND PAYMENT**

No separate measurement of payment will be made for trench foundation stabilization. The cost of this work shall be considered incidental to and included in the unit bid prices for the gravity sewer.

## Section 305 - Pipe Bedding

## **PART 2 - MATERIALS**

Remove Part 2.3. Type II bedding will not be allowed.

#### **PART 3 - WORKMANSHIP**

Amend Part 3.1.A to require compaction to at least 95% maximum density as per ASTM D-1557.

Amend Part 3.11.A.1 to require Class A-1 Bedding for all gravity sewer pipes, unless otherwise specified. Loose lifts shall be placed to a maximum 6-inch depth prior to compaction.

# **PART 4 – MEASUREMENT AND PAYMENT**

No separate measurement of payment will be made for pipe bedding. The cost of this work shall be considered incidental to and included in the unit bid price for the gravity sewer.

## Section 306 - Trench Backfill

#### **PART 1 - GENERAL**

Amend Part 1.4 to include the following:

B. Submit a Contractor Quality Control Plan (CQCP) that delineates the Contractor's proposed plan to meet the compaction standards included herein and in accordance with the Geotechnical Evaluation prepared by AllWest, dated March 28, 2019, and included in **Appendix E**.

Amend Part 1 to include the following:

#### 1.7 COORDINATION

- A. Notify the City prior to commencing work.
- B. Obtain permitting from and notify ITD, ACHD and NHD (as appropriate) per their permitting requirements prior to commencing work within their right-of-way.

## **PART 2 - MATERIALS**

Replace Part 2.2.A as follows:

A. Excavated trench material free from cinders, ashes, refuse, organic and frozen material, cobbles or boulders with a greatest dimension exceeding 8 inches, or other unsuitable materials. It is anticipated that some native excavated materials may be suitable for trench backfill with proper moisture conditioning. Materials excavated from below the water table must be adequately conditioned for reuse in trench backfill.

## Replace Part 2.2.C as follows:

C. If suitable native material, as determined by the pertinent roadway jurisdiction, is not used for backfill, import suitable backfill material at no additional cost to the Owner.

#### Add Part 2.2.D as follows:

D. Imported trench backfill material must be used in areas under Nampa Highway District jurisdiction

## Replace Part 2.3.A as follows:

- A. Trench backfill above water table: 6-inch minus uncrushed aggregate, <30% retained on ¾-inch sieve, ≤15% passing No. 200 sieve, non-plastic.
- B. Trench backfill below water table: 6-inch minus uncrushed aggregate, ≤10% passing No. 4 sieve, ≤5% passing No. 200 sieve, non-plastic.

## **PART 3 - WORKMANSHIP**

Amend Part 3.1.E to refer to the typical trench detail included in the Plans.

## Amend Part 3.1 to include the following:

- F. Provide access to the trench during construction when required by the Engineer or representative of appropriate jurisdictional agency for testing and observation of the work.
- G. Verify fill materials to be reused are acceptable.

Amend Part 3.2.A to require compaction to at least 95% maximum density as measured by ASTM D-1557 in the case of the trench bottom disturbance.

## Amend Part 3.2 to include the following:

F. Employ temporary erosion and sedimentation control measures per Section 205 – Dewatering and the approved SWPPP.

## Amend Part 3.3.B. to include the following:

- 1. Require 95% compaction per ASTM D-1557 from top of bedding to subgrade. All compaction testing will be considered incidental to the related gravity and pressure sewer pay items.
- 5. Type A-1 compaction only.
- 6. CONTRACTOR shall bear all costs associated with compaction testing and re-testing that are not provided by ACHD. The Contractor shall be responsible for the minimum testing frequency as follows:

#### a. Horizontal Location:

Test at start of trench with subsequent tests a maximum of every five hundred (500) feet. Test a minimum of two locations in trenches less than five hundred (500) feet in length. Street crossings shall be tested at a minimum of two (2) locations for each vertical location specified below, or as required by pertinent roadway jurisdiction.

#### b. Vertical Location:

At every horizontal location, obtain one test at half the depth of one trench, one test at the top of the trench, and subsequent test(s) at locations where materials or construction procedures change. Test at additional lift locations as required by pertinent roadway jurisdiction and the City of Meridian.

Amend Part 3 to include the following:

#### 3.7 BACKFILL SYSTEMS APPLICATION

A. Type A trench backfill system with Type A-1 Compaction per Part 3.3 shall be utilized for all sewer pipe trench backfills.

#### PART 4 - MEASUREMENT AND PAYMENT

No separate measurement of payment will be made for trench backfill. The cost of this work shall be considered incidental to and included in the unit bid price for the gravity sewer.

## **Section 307 – Street Cuts and Surface Repairs**

## PART 1 – GENERAL

Amend Part 1.4 to include the following:

C. Submit Form 00830 - Property Owner Release for associated work. See **Appendix D**.

Amend Part 1 to include the following:

### 1.8 SURFACE REPAIR ON PRIVATE PROPERTIES

- A. The Owner has not secured construction easements other than any shown on the plans. Provide construction coordination and adhere to surface repair requirements on or adjacent to private properties.
- B. Take photographs and or video to document existing conditions of structures, landscaping, surfaces, and other improvements on private properties. Provide copies to the Engineer prior to start of work.

- C. Give the property owners fourteen (14) days notice prior to commencing work on their property(ies).
- D. Obtain a written release from the property owner (Form 00830) indicating that the surface restoration and site cleanup has been completed satisfactorily. Submit release forms to Engineer. Partial payment shall not be considered until release has been obtained.
- E. Site cleanup and surface restoration shall be a continuous and ongoing process. Final site restoration shall be completed within 10 days of completing pipe installation on or adjacent to the property.
- F. Erect temporary safety barriers and/or fences to adequately secure the construction area from the remainder of the private property.

#### **PART 2 - MATERIALS**

All street cuts and surface repairs shall conform to the Technical Specifications and Plan details, in addition to ACHD revisions to the standard specifications where located in the public rights-of-ways. In the case of conflicting requirements, the more stringent standards shall apply.

Amend Part 2.2.A to including the following:

Plant Mix Pavement SP-3, PG 70-28 shall be used or equivalent as approved by pertinent roadway jurisdiction. The aggregate shall be in accordance with Section 803 and shall have a nominal maximum size of 1/2".

Amend Part 2.3 to include the following:

Aggregate base for street restoration shall be 3/4" crushed aggregate base course Type I in accordance with Section 802.

Aggregate subbase for street restoration shall be 6" minus uncrushed aggregate in accordance with Section 801.

Add the following Section to Part 2:

#### 2.7 RESTORATION FOR WATERWAY CROSSINGS

- A. In areas designated as "incidental with waterway crossing" on the Plans, the top twelve inches (12"), or greater as required by the permits located in **Appendix C**, of the existing native excavated materials (Type S6) shall be reused.
- B. Waterway bank vegetation disturbed by the Contractor adjacent to the crossing shall be revegetated with plant species per the requirements of the State and Federal permits located in **Appendix C** to establish growth density equal to or greater than preconstruction conditions.

#### **PART 3 - WORKMANSHIP**

Delete Part 3.1.C.

## Amend Part 3.1.D to include the following:

D. Unless otherwise approved by the Engineer, the following surface restoration timelines shall apply. In all locations, except within paved streets, surface restoration shall be completed within 10 calendar days after the last run of pipe has been tested, and accepted by the Engineer. Surface restoration within paved streets shall be completed within 10 calendar days after the last run of pipe has been tested, and accepted by the Engineer. In cases where inclement weather prevents final "Full Width" restoration, temporary surfacing shall be placed as required in Part 3.7. If these surface restoration timelines requirements are not met, the CONTRACTOR shall stop pipe-laying operations until such time as these requirements are met.

Amend Part 3.5 to including the following:

C.

## D. Miscellaneous Surface Restoration (Cultivated Field)

- Restore surface in accordance with Section 306.3.4.D Topsoil and Finish Work except as amended herein. All work is subject to the approval of the Engineer and landowner.
- All topsoil, to nominal 18" depth and within the permanent and temporary construction easement shall be removed and stockpiled as directed by Section 201 prior to construction.
- 3. Place topsoil over temporary construction easement to a minimum depth shown on the Plans or greater to match existent surface elevations prior to construction completion. Topsoil shall meet requirements of Section 203 for Topsoil Type S1, and shall be approved by the landowner. Screen material as necessary to meet requirements in addition to removing all rock greater than 2 inches in diameter. CONTRACTOR shall fine grade topsoil and ensure original grading to pre-existing irrigation patterns to the full satisfaction of the landowner and/or tenant farmer, and Engineer.

# E. Miscellaneous Surface Restoration (Dirt Road)

- Restore surface in accordance with Section 306.3.4.D Topsoil and Finish
  Work except as amended herein. All work is subject to the approval of
  the Engineer and landowner.
- Within the limits of the Dirt Road, the surface shall be graded smooth and compacted to provide a surface sufficient for driving at a minimum width of 10 feet. Surface shall be free of rocks larger than 2 inches in diameter and vegetation.
- Dirt Road surface restoration also includes the Natural Ground surface restoration and/or Cultivated Field surface restoration for areas adjacent

to dirt roads which may not be called out separately on the plans. Any disturbed surface area adjacent to dirt roads shall be restored per the requirements for Natural Ground and Cultivated Field surface restoration.

Amend Part 3.7 to read "TYPE "C" SURFACE RESTORATION (Gravel Approaches)."

Amend Part 3.7.A to read "Restore gravel surfaces removed during trenching operations or where a gravel driveway approach is required and specified for finished grade."

Amend Part 3.7.B to require trenching per the typical detail included in the Plans.

Amend Part 3.7.C to specify a compacted gravel depth in accordance with the Plan details.

Amend Part 3.7.E to require compaction measurement per ASTM D-1557.

Amend Part 3.10.D and E. to require minimum surfacing thickness shall be as shown on the Plans.

Amend Part 3.10.C. to require compaction of base course to 95%, ASTM D-1557, surface restorations, or in accordance with the ACHD or NHD (as applicable), whichever is more stringent.

Part 3.10. Amend to include the following:

- G. All trenches in asphalt pavement shall have crushed aggregate base level with adjacent asphalt pavement, graded smooth, and compacted at the end of each workday, except as otherwise required herein. Temporary gravel patches shall be maintained smooth and free of holes, depressions, or other surface irregularities until the permanent restoration is complete. The CONTRACTOR shall provide water for dust control until permanent surface restoration is complete. Placement and subsequent removal of temporary gravel surfacing, maintenance of temporary surfacing, and water for dust control shall be considered incidental with the surface repair Bid Items of Section 307. Temporary patches shall also comply with ACHD's or NHD's requirements (as applicable).
- H. Conform to ACHD or NHD (as applicable) and Section 810 weather limitations for plant-mix pavement placement. If weather limitations for plant mix asphalt cannot be met during contract time, remove 2" surfacing and replace with 2" depth temporary cold mix asphalt surfacing until acceptable weather conditions occur. Placement and subsequent removal of temporary gravel surfacing shall be considered incidental with the surface repair Bid Items of Section 307. Temporary patches or surfacing shall be maintained smooth, free of holes, depressions, or other surface irregularities until the permanent patch or surfacing is installed. Temporary cold mix asphalt surfacing shall be incidental with full width surface restoration bid items.
- All asphalt match lines for pavement repair shall be parallel and/or perpendicular to the center line of the street and include any area damaged by equipment during trenching operations.

- J. CONTRACTOR shall replace the pavement surface to ensure match line does not fall within the wheel path of a lane.
- K. Flowable fill or imported material may be required if the native trench material is deemed unsuitable by ACHD Inspector, does not meet compaction standards, or time is a critical factor.
- L. Any exceptions to these rules shall be pre-approved in writing by ACHD Staff before construction begins.
- M. Saw cut all edges of pavement removal areas. Saw cut full depth of asphalt pavement.

Add the following Section to Part 3:

## 3.14 WETLAND SURFACE RESTORATION (INCIDENTAL WITH WATERWAY CROSSING)

- A. Complete restoration work in compliance with requirements set forth in the State and Federal permits located in **Appendix C** and these Specifications.
- b. Replace excavated native topsoil to a depth of at least twelve inches (12"), or greater as required by the permits located in **Appendix C**. Compact to 85% relative dry density compaction per ASTM D-1557. Allow slight mounding over top of trench. Restoration shall be an ongoing process. Upon placement of topsoil, the restoration area shall be protected from further construction activities. No equipment of vehicular travel will be allowed.
- c. Waterway bank vegetation disturbed by the Contractor adjacent to the crossing shall be revegetated or seeded with native grass and shrub species to establish growth density equal to or greater than preconstruction conditions, unless otherwise specified in applicable permitting requirements located in **Appendix C**, upon completion of topsoil replacement. Provide initial watering and approved fertilizer application if recommended by the agency specifying plant product species.
- d. Employ erosion control blankets or other temporary side slope stabilization measures as required by the approved SWPPP and the permits located in **Appendix C**.
- e. Place and shape top backfill material within 0.2 foot plus, 0.0 foot minus of preconstruction levels, grades, and contours. Contractor shall survey crossing as necessary to establish preconstruction elevations.

# **PART 4 - MEASUREMENT AND PAYMENT**

Amend Part 4.1 requiring that areas disturbed by the CONTRACTOR, but not immediately over new pipe as installed or otherwise identified as a pay item shall be repaired to these standards. The type of surface restoration or combination of types, called out on the plans signifies the primary type(s) of surface restoration required for work above the pipe and within the easements. It is expected that some additional Natural Ground surface restoration will be required adjacent to the surface restoration called

out on the plans. No separate measurement or payment will be made for this surface repair and the cost of this work shall be considered incidental to and included in the unit bid price for the related surface restoration bid items.

Add the following to Part 4.1.A.

- 9. Bid Schedule Payment Reference: 307.4.1.A.9
- 10. Bid Schedule Description: Miscellaneous Surface Restoration (Dirt Road)...linear feet (LF).
- 11. Bid Schedule Payment Reference: 307.4.1.A.11
- 12. Bid Schedule Description: Miscellaneous Surface Restoration (Cultivated Field)...acre (AC).

Amend Part 4.1.E.1 Bid Schedule Description to read "Type "C" Surface Restoration (Gravel Approach)...square yard (SY)."

## Section 308 - Boring and Jacking

## **PART 1 – GENERAL**

Revise Part 1.1 to include:

Bore and jack steel casing sleeves under the Eight Mile Lateral and Sky Pilot Drain crossings.

## Add Part 1.7 GENERAL DESIGN PERFORMANCE REQUIREMENTS:

- A. The CONTRACTOR is responsible for the design of a boring/tunneling system and all ancillary systems to achieve the final constructed work elements and elevations as contemplated by the Contract Documents.
- B. Casing sizes shown on the Plans shall be considered nominal. If the Contractor's means or methods require a larger diameter casing, the Contractor shall submit to the Engineer for review. No additional payment will be made for casing modifications from the nominal sizing and thickness shown on the Plans and requirements described in these specifications.
- C. Design casing pipe for service earth pressure, jacking forces, factors of safety, and other pressures present plus H20 loading with associated recommended impact factors. Casing joints shall be watertight. Design shall be performed by a State of Idaho licensed Professional Engineer.
- D. Design jacking and receiving pits, bracing, backstops, for structural loads required to advancing a uniform load to the casing pipe at the required advancing speed. Refer to the Geotechnical Report in **Appendix E** for shoring design requirements.

- E. The casing installation shall be installed in such a manner which shall not cause ground subsidence and shall remove or crush cobbles if encountered. Pressure grout void outside casing if created.
- F. Contractor is fully responsible in field verifying actual locations of all utilities within the work zone. Contractor shall maintain service of all existing utilities and irrigation facilities.
- G. Comply with OSHA, state and local requirements for providing a safe and stable excavation, protection of the work, and adjacent properties and structures.
- H. Support excavation faces to protect the work and adjacent properties and structures from damage.
- I. Employ and deploy shoring/excavation support structures, without causing damage to nearby structures, roadway or utilities.

#### **PART 2 - MATERIALS**

Amend Part 2.1.A to include that all sleeve installations shall be in accordance with the local, state and federal permits referenced in the Appendices.

## Amend Part 2.2.A as follows:

Conform to ASTM A252 with minimum wall thickness or thicker as shown on the Plans. Submit casing manufacturer certification of compliance with these specifications.

## Amend Part 2.2.B as follows:

Diameter of steel casing pipe shall conform to the details shown on the Plans.

#### Amend Part 2.3.B as follows:

At the discretion of the Engineer, provide grout ports within the pipe wall with no fewer than four (4) holes per 20 feet of casing pipe and spaced no closer than 120 degrees apart. Grout ports are to be 1-1/2" to 2" diameter with check valves installed. Grout hole placement shall be equally spaced along the axis of the pipe and the grout connections through the casing pipe are to be plugged.

Grout for filling the void between the casing pipe and the soil shall consist of Portland cement, water and fluidizers as required to produce a satisfactory pumpable grout with a minimum 7-day compressive strength of at least 500 psi.

## Amend Part 2.4.A as follows:

Natural skids such as redwood or cedar are not allowed. Casing spacer shall be stainless steel, PSI model "S12GN2" centered restrained or prior approved equivalent. Casing spacers shall be designed to provide 1.00" clearance between runner and top of the casing wall. Runner height shall be sufficient to resist pipeline flotation. Minimum number of runners shall be as shown on the Plans.

Amend Part 2.4.A and B to refer to the details shown on the Plans.

## Amend Part 2.5.A as follows:

Carrier pipe shall be in accordance with Section 505 and shall be as shown on the Plans. Carrier pipe installed inside casings shall have joint restraints.

Amend Section 308 to include the following:

## 2.6 ANNULAR SPACE BACKFILL

Refer to City of Meridian Supplemental Specification 2.6.

## 2.7 END SEALS

A. End seals shall be PSI Model "C" or approved equivalent for sleeves where a carrier pipe is installed.

#### 2.8 JOINT RESTRAINTS

A. Carrier pipe bell and spigot joints within casings shall be mechanically restrained.

## **PART 3 – WORKMANSHIP**

Amend Part 3.1 to include:

## 3.1 GENERAL REQUIREMENTS

- A. Bore or jack, as necessary, at the locations indicated in the Contract Documents and staked in the field for the installation of pipelines, services, utilities and ancillary items.
- B. Call One-Cal/Dig-Line for locates.
- C. Identify required lines, levels, contours, and datum.
- C. Verify location of potentially conflicting utilities and pipelines.
- D. Adhere to all requirements of the applicable permitting authorities, refer to Appendices.
- E. Coordinate with utility owners and the Owner to allow relocation of utilities and pipelines, if necessary.
- F. Allow for uninterrupted and continuous use of surrounding utilities and pipelines as specified elsewhere.
- G. Verify dewatering performance as required in Section 205.

- H. Underpin or shore up adjacent structures which may be damaged by excavation work, including utilities.
- I. Dewater area in accordance with Section 205.
- J. Employ a designed shoring system. Utilize interlocking sheet piling, soldier piling, guide rail systems, or other prefabricated access pit forms constructed of segmented panels. Provide all necessary measures to support adjacent cut slopes, pavement, utilities or structures existing outside of pit excavation. Install to allow removal of temporary shoring system upon completion of the work, without imparting settlement or voids. Continuously monitor shoring system performance. All excavated faces shall be shored.
- K. Jacking and receiving pits shall be excavated to the minimum size required to perform the work within the rights-of-ways and/or construction easements shown on the Plans. Design all shoring and jacking restraints systems required to complete the work and to conform to OSHA local and state regulations. Design temporary restraints and/or bypass systems to maintain functioning of existing utilities in the construction area. All pits left exposed overnight shall be adequately barricaded. Adequate reflectors/warning lighting shall be provided. Provide additional vehicular barriers as required by ACHD. All aspects of safety issues are the sole responsibility of the Contractor.
- L. Steel casing shall be installed to the lines and grades shown on the Plans. Variation from line and grade of the casing shall not exceed those established for the gravity sewer (carrier pipe) or reduce the sewer grade below those shown on the Plans.
- M. The casing shall be installed in such a manner not to cause ground subsidence or voids. File daily reports with the Engineer when boring work is being completed.

## Amend Part 3.5.B to include the following:

- 4. In addition to the requirements for the boring and jacking plans shall include:
  - A. Field verify location and depths of existing utilities in the crossing area and submit with crossing plan.
  - B. Provide a description of the monitoring and protocols for determine the presence of voids outside of the installed casing. Document existing conditions of the waterway prior to proceeding with the work and file with crossing plan.

Amend Part 3.5.D to include: Monitor the quantity of material excavated from the casing installation to ensure no caving or undermining occurs.

Amend Part 3.5.L. to require bore pits to be backfilled using Type A-1 trench backfill system as specified in Section 306.

Amend Part 3 to include:

## 3.6 CASING SLEEVE INSTALLATION

- A. Utilize open trenching to install casing sleeves to the line, grade and elevations as indicated on the Plans. Install casing sleeve using SD-301 typical trench detail, with Type A-1 bedding system.
- B. Install casing spacers/insulators per manufacturer's recommendations and the details shown on the Plans. Insure no floatation is allowed from inside of the casing to the runner height. Casing spacers shall be aligned and uniformly distribute weight.
- C. For sleeves to accommodate future utilities, install steel caps on both ends of the steel sleeves. Seal weld water tight.

## PART 4 - MEASUREMENT AND PAYMENT

Delete Part 4. Any borings shall be paid for under Special Provision SP-2220.

## Section 405 - Non-Potable Water Line Separation

#### **PART 3 – WORKMANSHIP**

Amend Part 3.2.A to require a minimum of horizontal separation of 50 feet between water system wells and all non-potable water lines and force mains.

Amend Part 3.2.B to include the following:

C. Well Separation: When 50-feet of horizontal separation cannot be maintained, non-potable water lines must be sleeved according to SP-2223.

## Section 501 - Gravity Sewers

#### **PART 2 - MATERIALS**

Amend Part 2.1 to require gravity sewer pipe be solid wall, PS 46, PVC pipe conforming to the requirements of Part 2.2.B.

## **PART 3 - WORKMANSHIP**

Amend part 3.2.C to require dewatering to two feet (2') below the lowest point of excavation.

Add the following to Section 3.2.Q.

1. Under no circumstances shall the installed grades be less than the design grades shown on the Plans. Exercise extreme care in maintaining grade control.

## **PART 4 - MEASUREMENT AND PAYMENT**

Amend Part 4.1.B to include all required testing including CCTV and trench backfill compaction testing, as well as any trench foundation stabilization that may be necessary during construction.

## Section 502 - Manholes

## **PART 2 - MATERIALS**

Add the following to Part 2.1:

- D. Pre-caster shall supply concrete footings if deemed necessary per the buoyancy calculations.
- E. Manhole frames, covers, and other accessories shall be in accordance with ISPWC and as shown on the Plans.

## **PART 3 - WORKMANSHIP**

Amend Part 3.3.A to include the following:

- 4. Due to the depth and groundwater conditions anticipated for all manholes on the project, the Kor-N-Seal connection will require the following installation requirements:
  - a. Model # S206-34 connector with double wedges.
  - b. Inlet pipe connection angle must be straight with a maximum deflection of 2°.
  - c. Inspect the I.D. of the piping hole and repair any voids. Apply Sikaflex 1A or equivalent to the I.D. surface of the hole in the band area. Allow the Sikaflex 1A material to setup for ½ day or overnight before full torque of the wedges.
  - d. Upgrade hose clamps to power gear clamps.
  - e. Apply Sikaflex 1A between the pipe O.D. and the I.D. of the connector in the hose clamp area.

Amend Part 3.3.E as follow:

E. Do not grout interior of boot.

Part 3.5.B shall be amended to include construction variation of invert elevation to be within 0.05 feet of design elevations. Variation must not reduce the minimum sewer grades shown on the Plans.

Part 3.12.A shall be revised to require all manholes to be vacuum tested.

### **PART 4 – MEASUREMENT AND PAYMENT**

Amend the Part 4.1.A.2 Bid Schedule Description to read "Sanitary Sewer Manhole – Size \_\_\_\_\_, Type ...each (EA)."

## Amend Part 4.1.F to read as follows:

- F. Connection to Existing Manhole/Sewer: Connection to existing sewer/manhole shall be on a per-each basis, regardless of type, size of connection. Payment shall include all equipment, labor, tools, materials, piping, couplings, fittings, core drilling, manhole adapters, demolition, manhole channel reconstruction, line plugging, and all other necessary items for a complete installation.
  - 1. Bid Schedule Payment Reference: 502.4.1.F.1
  - 2. Bid Schedule Description: Connect to Existing Sewer Manhole......Each (EA).

## Section 601 - Culvert, Storm Drain and Gravity Irrigation Pipe

Amend Part 1.5 to include the following:

C. Existing structural deficiencies shall be recorded by the CONTRACTOR and verified by governing irrigation, drainage or roadway jurisdiction before beginning work.

#### **PART 2 - MATERIALS**

Amend Part 2.2.H as follows:

1. Minimum Class III.

Add Part 2.2.O as follows:

- O. Solid Wall PVC Pipe Sizes 8 inch to 36 inch: AWWA C 900.
  - 2. Pressure Class: As indicated in the Contract Documents.
  - 3. Joints: Elastomeric gasket joints with ASTM F 477 with elastomeric gaskets.

#### **PART 3 – WORKMANSHIP**

Part 3 shall be amended to include the following:

- 3.6 REMOVE AND REPLACE CULVERT
  - A. CONTRACTOR shall install the new culvert at the invert elevations of the culvert that was removed. Contractor shall document invert elevations prior to removal.
  - B. Open trench culvert replacement of facilities operated by an irrigation district will only be allowed outside of the irrigation season and in full accordance with applicable irrigation district irrigation district Permits and License Agreement provisions.

## **PART 4 - MEASUREMENT AND PAYMENT**

Amend Part 4.1 to include the following:

- B. Remove and Replace Culvert: Per linear foot to match the size and material indicated on the Plans.
  - 1. Bid Schedule Payment Reference: 601.4.1.B.5
  - 2. Bid Schedule Description: Remove and Replace Culvert Size\_\_\_\_\_, Shape \_\_\_\_\_, Material\_\_\_\_\_, Class\_\_\_\_\_... Linear Foot (LF).

# Section 703 - Cast-in-Place Concrete

See Plans for cast-in-place concrete specifications.

#### **PART 3 - WORKMANSHIP**

Amend Part 3 to include the following:

- 3.6 FIELD QUALITY CONTROL
  - A. This section shall take precedence over ISPWC, Section 703, Part 3.6.
  - B. Field inspection and testing will be performed in accordance with ACI 301 and provided by the CONTRACTOR.
  - C. Submit proposed mix design to testing firm for review prior to commencement of Work.
  - D. Tests of cement and aggregates may be performed to ensure conformance with specified requirements.
  - E. Three concrete test cylinders for each load of 10 cubic yards of concrete or less and one set of three concrete test cylinders for each additional 10 cubic yards or fraction thereof. One set of the test cylinders shall be cured under job conditions and two in an approved laboratory. One cylinder shall be tested for compressive strength in seven days, and the remaining two cylinders at 28 days. Test cylinders shall be made, cured, stored and delivered to the laboratory in accordance with ASTM C31 and tested in accordance with ASTM C39.
  - F. One slump test will be taken for each set of test cylinders taken.
  - G. Air Entrainment Test: Accurately measure the amount of entrained air using ASTM C-173 or ASTM C-231 testing method for all concrete pours. One test will be taken for every set of test cylinders taken.

Amend Part 3.8 to read as follows:

3.8 DEFECTIVE CONCRETE

- A. Defective Concrete: Concrete not conforming to required lines, details, dimensions, tolerances or specified requirements.
- B. Repair or replacement of defective concrete will be determined by the Engineer.
- C. Do not patch, fill, touch-up, repair, or replace exposed concrete except upon express direction of Engineer for each individual area.

Amend Part 3 to include the following;

#### 3.9 SAWCUTTING

- A. Demonstrate to the satisfaction of the Engineer, prior to commencing Work, that sawcutting machinery and personnel are capable of completing this Work in accordance with the Contract Documents.
- B. Minimize overrun at corners when sawcutting and fill slots with epoxy adhesive.
- C. Coat cut faces with Carboline Bitumastic 300M to protect exposed rebar.
- D. Cuttings must be disposed of off-site.
- E. All sawcuts shall be neatline vertical and horizontal.

#### **Section 704 – Precast Concrete**

# **PART 2 - MATERIALS**

Part 2.1.A, shall be amended to read all cement used on the project shall be Type II Modified Portland Cement, in accordance with ASTM C150.

Add Part 2.8

## 2.8 PRECAST CONCRETE STRUCTURES AND VAULTS

A. Precast concrete structures and vaults shall conform to the details shown on the Plans.

## **Section 706 – Other Concrete Construction**

## PART 1 - General

Amend Part 1 to include:

## 1.6 CONCRETE REPAIR OF PRIVATE IMPROVEMENTS IN PUBLIC RIGHT-OF-WAY

A. Any private concrete improvements damaged on private property <u>or</u> public right-of-way during construction must be replaced by the CONTRACTOR. The Owner has not secured the construction easements on private properties except as shown on the Plans. Limits of rights-of-way and easements are generally shown on the Plans. CONTRACTOR must obtain necessary easements to complete

the repairs on private property. This does not relieve the CONTRACTOR's responsibilities as stated in this Specification and elsewhere in the Contract Documents. Provide construction coordination and adhere to surface repair requirements on or adjacent to private properties.

- B. Take photographs and/or video to document existing conditions of structures, landscaping, surfaces, and other improvements on or adjacent to private properties. Provide copies to the Engineer prior to start of work.
- C. Give the property owner fourteen (14) days notice prior to commencing work on their property(ies).
- D. Obtain a written release from the property owner (Form 00830) indicating that the surface restoration and site cleanup has been completed satisfactorily. Submit release forms to Engineer. Partial payment shall not be considered until release has been obtained.
- E. Site cleanup and surface restoration shall be a continuous and ongoing process. Final site restoration shall be completed within 10 days of completing pipe installation on or adjacent to the property.
- F. Erect temporary safety barriers and/or fences to adequately secure the construction area from the remainder of the private property.

### **PART 3 - WORKMANSHIP**

Amend Part 3.6 to include the following:

F. Concrete that is damaged or removed during construction shall be replaced in-kind to the satisfaction of the property owner.

## **Section 810 – Plant Mix Pavement**

#### PART 1 – GENERAL

Add the following to Part 1:

1.4 Submittals: Contractor to submit a mix design to ACHD for approval prior to placement.

## **PART 2 - MATERIALS**

Amend Part 2.1 CLASSIFICATION to include the following:

Plant mix pavement shall be ½" Superpave HMA Class SP-3 (PG 70-28 binder grade).

Amend Part 2.4 ANTI-STRIPPING ADDITIVE to include the following:

Asphalt shall have 0.5% anti-strip added at the refinery.

#### **PART 3 – WORKMANSHIP**

Amend Part 3.7.C to include the following:

Apply CSS-1 tack coat to existing asphalt at pavement matches, and along vertical faces of curb and gutter.

## **PART 4 - MEASUREMENT AND PAYMENT**

Amend Part 4.1. to include the following:

Paved Driveway Approach includes excavation, eight (8) inches of crushed aggregate for base, Type 1, and 2.5 inches of plant mix pavement. Aggregate placement shall be in accordance with Section 802.

- 5. Bid Schedule Payment Reference: 810.4.1.A.5.
- 6. Bid Schedule Description: Paved Driveway Approach...square yard (SY)

## <u>Section 1103 – Construction Traffic Control</u>

## **PART 1 – GENERAL**

Amend Part 1.1.A to state the Contractor is responsible to furnish, erect, maintain and relocate all necessary traffic control devices as required to complete the Work and as required by ITD, ACHD or NHD (as applicable). The Contractor shall provide and pay for creation and implementation of the Traffic Control Plan (TCP) and any related permits. Costs for this work shall be considered incidental to the Traffic Control pay item listed in the Bid Schedule.

## **PART 3 – WORKMANSHIP**

Amend Part 3.1.B to require that the CONTRACTOR obtain a construction right-of-way permit from ITD, ACHD and NHD for all applicable work in public rights-of-ways a minimum of 48 hours prior to construction. CONTRACTOR shall comply with ITD, ACHD or NHD requirements and permit provisions in addition to these Specifications. CONTRACTOR shall obtain an approved Traffic Control Plan (TCP). Any deviation from the approved TCP will require submittal and approval from ITD, ACHD and NHD prior to implementation.

Contact affected residences and other entities listed below and identified elsewhere in the contract documents a minimum of two (2) weeks prior to any construction activities. These entities include but are not limited to:

- 1) Property owners adjacent to construction.
- 2) Nampa & Meridian Irrigation District.

Replace the following in Part 3.1:

F. The CONTRACTOR shall minimize time for the traffic detours. If any major arterial is open to traffic, but the traffic is constricted to one lane, flaggers are required to control traffic through the work zone. Flagging will be considered incidental to the Traffic Control pay item listed in the Bid Schedule.

## Amend Part 3.1 to include the following:

- L. The CONTRACTOR shall provide two 24-hour contacts for traffic control, including names, addresses, phone numbers, 24-hour pager numbers, and cell phone numbers. The CONTRACTOR shall be responsible for responding to complaints regarding project traffic control at all times. Response to traffic control complaints shall be incidental to and the cost included in the unit bid price for traffic control. On failure of the CONTRACTOR to respond to traffic control complaints within 1-hour, the Owner may correct any traffic control deficiencies and the cost will be withheld from the CONTRACTOR's payment. A minimum of two hours shall be charged for each occasion and shall include the cost of labor, equipment, materials, administrative, rentals, and other expenses.
- M. The CONTRACTOR shall not commence daily construction activities, or continue construction activities, if traffic control has not been placed or maintained in accordance with the approved traffic control plan.
- N. The CONTRACTOR must notify emergency response agencies of all traffic closures and detours and update them of any changes a minimum of 48 hours in advance.
- O. Vehicular access to all residences, and the NMID's Eight Mile Lateral (during irrigation season) access must be maintained at all times. Coordinate trenching and surface repair operations with all affected landowners.

## **Section 1104 – Permanent Pavement Markings**

#### **PART 3 – WORKMANSHIP**

Amend Part 3.2 to include the following:

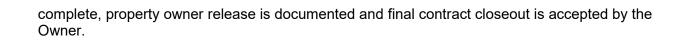
F. CONTRACTOR shall locate, dimension, and document all pavement markings and stripes, including color, prior to excavation or other roadway disturbance. Striping and other pavement markings that are damaged during construction shall be replaced to the same dimensions, locations, and colors that were in place prior to construction or as otherwise required by ITD, ACHD or NHD. All costs associated with this work shall be considered incidental to surface restoration pay items.

# Section 2010 - Mobilization

## **PART 4 - MEASUREMENT AND PAYMENT**

Amend Part 4.1.A to delete the first paragraph of this section and replace with the following:

Mobilization: By the lump sum basis and shall not exceed five (5) percent of the contract amount of the base bid schedule. There shall be no measurement for Mobilization. Allowable partial payment of mobilization is as follows: 1) Payment of fifty (50) percent of Mobilization Bid Price shall be made on the first monthly progress estimate. 2) Payment for the remaining fifty (50) percent will be made when all equipment is removed, testing and final clean-up is



## **SPECIAL PROVISIONS**

## SP-2110 - Summary of Work

#### PART 1 GENERAL

#### 1.1 SECTION INCLUDES

- A. General description of work.
- B. Contractor use of site and premises.
- C. Work sequence.
- D. Owner occupancy.
- E. Applicable standards.

#### 1.2 GENERAL DESCRIPTION OF WORK

- A. The Owner will award a contract for the complete project as described in the contract documents. The project generally includes:
  - 1. Construction of 8", 10" and 30" PVC gravity sewer main and surface repairs.

## 1.3 CONTRACTOR USE OF SITE AND PREMISES

- A. Limit use of site and premises:
  - 1. Reduce impacts to adjacent properties and business operations.
  - 2. Minimize disruption of traveling public.
- B. Construction operations limited to limits of rights-of-way, work limits, and easements and as shown on the Plans.
- C. Time Restrictions for Performing Work. Work shall be restricted to weekdays, except City of Meridian and/or State of Idaho holidays unless authorized by the jurisdictional agencies. No work shall be performed on weekends unless authorized by the City of Meridian and ITD, ACHD or NHD (as applicable).

# 1.4 WORK SEQUENCE

- A. Construct work in an orderly and timely manner and minimize vehicular traffic disruption and disturbance to adjacent properties and businesses. Accommodate traffic and access requirements during the construction period. Coordinate construction schedule and operations with Owner.
- B. Initiate work sequenced as agency permitting is secured.

C. Refer to the Contract Documents for specific work restrictions.

# 1.6 APPLICABLE STANDARDS

- A. Comply with all applicable local, state, and federal standard codes and regulations.
- B. Comply with the requirements of any other necessary permits.

# PART 2 PRODUCTS

Not Used

# PART 3 EXECUTION

Not Used

**END OF SECTION** 

## SP-2125 – Measurement and Payment

#### PART 1 GENERAL

#### 1.1 SECTION INCLUDES

- A. General Description of Measurement and Payment.
- B. Specific Descriptions of Measurement.

## 1.2 GENERAL DESCRIPTION OF MEASUREMENT AND PAYMENT

- A. Measurement and payment for Items listed on the Bid Schedule shall conform to the ISPWC and subsequent revisions listed in the Revisions to the Standard Specifications, unless specifically modified herein and in Division 00800.
- B. Items listed in the Bid Form as lump sum shall include all work necessary for a complete and fully functional installation as generally described in the Technical Specifications and Contract Documents.
- C. Partial payment for unit price pay items and lump sum pay items partially completed at the end of monthly pay periods shall be made based upon the Engineer's interpretation of the percentage of work completed. Partial payment for materials delivered and stored will be considered if said materials have been submitted to the Engineer, for review per SP-2143, and supporting invoices and documentation have been provided. All materials must be delivered and secured on-site.
- D. If the actual work requires more or fewer quantities than those quantities indicated in the Bid Form, the Contractor shall provide the required quantities at the unit bid prices.
- E. Payment includes: Full compensation for all required labor, products, tools, equipment, transportation, services and incidentals, erection, application or installation of an item of the work, testing and acceptance, close-out items such as owner's training, O&M materials, and equipment demonstrations including overhead and profit, and taxes.
- F. Prepare a detailed Schedule of Values for the lump sum bid items and submit at the preconstruction meeting in accordance with the Contract Documents.

  Provide substantiating pricing data as requested by the Engineer.
- G. Unless otherwise specified in the Contract Documents, payment for lump sum bid items only partially completed at the end of monthly pay periods shall be made based upon the Engineer's interpretation of the percentage of work completed in conjunction with the approved Schedule of Values submitted by the CONTRACTOR.

# 1.3 SPECIFIC DESCRIPTIONS OF MEASUREMENT

A. There will be no measurement for lump sum (LS), which shall include all work for the complete installation as generally described in the Plans and the Technical Specifications.

**END OF SECTION** 

## **SP-2127 – Applications for Payment**

#### PART 1 GENERAL

## 1.1 SECTION INCLUDES

A. Procedures for preparation and submittal of Applications for Payment.

## 1.2 RELATED SECTIONS

- A. Contract Documents.
- B. SP-2125 Measurement and Payment.
- C. SP-2128 Change Order Procedures.
- D. SP-2143 Submittals.
- E. SP-2152 Contract Closeout.

#### 1.3 FORMAT

- A. ISPWC 00620 Application for Payment or other as acceptable to Owner.
- B. For each item in the Bid Form, provide a column for listing: Item Number, Description of work, Unit Price, Quantity, Amount, Previous Applications: Work in Place under this Application: Authorized Change Orders; Total Completed to Date of Application; Percentage of Completion; Balance to Finish; and Retainage.

## 1.4 PREPARATION OF APPLICATIONS

- A. Present required information in typewritten form.
- B. Execute certification by signature of authorized officer.
- C. Use data from Bid Form. Provide dollar value in each column for each line item for portion of work performed.
- D. List each authorized Change Order as an extension on continuation sheet, listing Change Order number and dollar amount as for an original item of Work.
- E. Prepare Application for Final Payment as specified in SP-2152 and the General Conditions.

#### 1.5 SUBMITTAL PROCEDURES

- A. Submit three (3) copies of each Application for Payment.
- B. Payment Period: Submit signed copies to Engineer once each month.

C. Submit under transmittal letter specified in SP-2143.

## 1.6 SUBSTANTIATING DATA

- A. When Engineer requires substantiating information, submit data justifying dollar amounts in question.
- B. Provide one copy of data with cover letter for each copy of submittal. Show application number and date, and line item by number and description.

## **PART 2 PRODUCTS**

Not Used

## PART 3 EXECUTION

Not Used

**END OF SECTION** 

## **SP-2128 – Change Order Procedures**

#### PART 1 GENERAL

# 1.1 SECTION INCLUDES

- A. Submittals.
- B. Documentation of change in Contract Price and Contract Time.
- C. Change procedures.
- D. Construction Change Authorization.
- E. Stipulated Price Change Order.
- F. Unit price change order.
- G. Time and material change order.
- H. Execution of change orders.
- I. Correlation of Contractor submittals.

## 1.2 RELATED SECTIONS

- A. Contract Documents.
- B. S2125 Measurement and Payment.
- C. SP-2127 Applications for Payment.
- D. SP-2143 Submittals.
- E. SP-2149 Material and Equipment.
- F. SP-2152 Contract Closeout.

## 1.3 SUBMITTALS

- A. Submit name of the individual authorized to receive change documents, and be responsible for informing others in Contractor's employ or Subcontractors of changes to the Work.
- B. Change Order Forms: ISPWC 00650 Change Order or other as acceptable to OWNER.
- 1.4 DOCUMENTATION OF CHANGE IN CONTRACT PRICE AND CONTRACT TIME

- A. Maintain detailed records of work done on a time and material basis. Provide full information required for evaluation of proposed changes, and to substantiate costs of changes in the Work.
- B. Document each quotation for a change in cost or time with sufficient data to allow evaluation of the quotation.
- C. On request, provide additional data to support computations:
  - 1. Quantities of products, labor, and equipment.
  - 2. Taxes, insurance and bonds.
  - 3. Overhead and profit.
  - 4. Justification for any change in Contract Time.
  - 5. Credit for deletions from Contract, similarly documented.
- D. Support each claim for additional costs, and for work done on a time and material basis, with additional information:
  - 1. Origin and date of claim.
  - 2. Dates and times work was performed, and by whom.
  - 3. Time records and wage rates paid.
  - 4. Invoices and receipts for products, equipment, and subcontracts, similarly documented.

#### 1.5 CHANGE PROCEDURES

- A. The Engineer will advise of minor changes in the Work not involving an adjustment to Contract Price or Contract Time by issuing a field order.
- B. The Engineer may issue a Notice of Change which includes a detailed description of a proposed change with supplementary or revised Drawings and specifications, a change in Contract Time for executing the change with a stipulation of any overtime work required and the period of time during which the requested price will be considered valid. Contractor will prepare and submit an estimate within the time specified in the General Conditions.
- C. The Contractor may propose a change by submitting a request for change to the Engineer, describing the proposed change and its full effect on the Work, with a statement describing the reason for the change, and the effect on the Contract Price and Contract Time with full documentation and a statement describing the effect on Work by separate or other contractors. Document any requested substitutions in accordance with SP-2149.

## 1.6 CONSTRUCTION CHANGE AUTHORIZATION

- A. Engineer may issue a Work Change Directive or other authorization, signed by the Owner instructing the Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order.
- B. The document will describe changes in the Work, and will designate method of determining any change in Contract Price or Contract Time.

C. Promptly execute the change in Work.

## 1.7 STIPULATED PRICE CHANGE ORDER

A. Based on Notice of Change and Contractor's fixed price quotation or Contractor's request for a Change Order as approved by OWNER.

## 1.8 UNIT PRICE CHANGE ORDER

- A. For pre-determined unit prices and estimated quantities, the Change Order will be executed on a fixed unit price basis.
- B. For unit costs or quantities of units of work, which are not pre-determined, execute Work under a Change Order.
- C. Changes in Contract Price or Contract Time will be computed as specified for Time and Material Change Order.

## 1.9 TIME AND MATERIAL CHANGE ORDER

- A. Submit itemized account and supporting data after completion of change, within time limits indicated in the Conditions of the Contract.
- B. Engineer will recommend to the OWNER the change allowable in Contract Price and Contract Time as provided in the Contract Documents.
- C. Maintain detailed records of work done on Time and Material basis.
- D. Provide full information required for evaluation of proposed changes, and to substantiate costs for changes in the Work.

## 1.10 EXECUTION OF CHANGE ORDERS

A. Execution of Change Orders: Engineer will issue Change Orders for signatures of parties as provided in the Conditions of the Contract.

## 1.11 CORRELATION OF CONTRACTOR SUBMITTALS

- A. Promptly revise Application for Payment forms to record each authorized Change Order as a separate line item and adjust the Contract Price.
- B. Promptly revise progress schedules to reflect any change in Contract Time, revise sub-schedules to adjust time for other items of work affected by the change, and resubmit.
- C. Promptly enter changes in Project Record Documents.

# PART 2 PRODUCTS

Not Used

# PART 3 EXECUTION

Not Used

**END OF SECTION** 

## SP-2138 - Construction Phasing and Scheduling

#### PART 1 GENERAL

#### 1.1 SECTION INCLUDES

A. This item shall consist of all necessary labor, equipment, and materials required to provide construction phasing in accordance with the requirements of this section.

#### PART 2 MATERIALS

**NOT USED** 

#### PART 3 WORKMANSHIP

#### 3.1 PHASING

- A. Organize and schedule the work to meet the schedule limitations and overall time for completion.
- B. Comply with ACHD and NHD requirements for impacts to their roadway system, and obtain necessary permits prior to construction.
- C. The Owner must be given 5 working days notice for any road or intersection closure or restriction minimum unless otherwise required by ITD, ACHD or NHD.
- D. Access to farmed areas and properties adjacent to the project must be provided for at all times unless written agreements are reached with the individual property owners and other access accommodations are made or unless otherwise indicated in the Contract Documents.
- E. Allow access for pedestrians to safely circulate around the project site in accordance with the MUTCD. Provide clear signage for pedestrian information about established pathways and provide a crossing guard during critical school hours if conditions warrant.
- F. Allow access for agencies and utilities to operate and maintain their improvements within and outside the project area.
- G. Submit a detailed project sequencing diagram for approval showing work areas and roadway or intersection closures or restrictions along with a traffic and pedestrian flow diagrams and traffic control plans for each phase of work. Update the project sequencing diagram and resubmit if schedule or sequence changes after start of construction.

#### 3.2 SCHEDULE

A. Prepare a written schedule for the entire project and submit the schedule to the Engineer within two (2) working days after the preconstruction conference.

- B. The schedule shall include start date, completion date, days for completion, float, and time restrictions as stated herein. At a minimum, the following major items of work shall be included on the schedule: mobilization, gravity sewer installation, manhole installation, testing and CCTV, surface restoration, and construction traffic control.
- C. Provide a detailed week behind and two-week ahead of schedule at each weekly progress meeting.
- D. Provide an updated schedule along with monthly requests for payments. The updated schedule shall include the original schedule, actual completion to date for work completed, and anticipated completion dates for remaining work. If completion of work is behind the CONTRACTOR's original schedule, as modified by any approved changes in the contract time, provide a revised schedule and documentation of resources to be used to meet the contract times. Requests for payment will not be processed and will be returned to the CONTRACTOR unless the request is accompanied by an updated schedule, and if required, a revised schedule and documentation of resources.

#### 3.3 FIELD ENGINEERING AND SURVEYS

A. Unless otherwise specified, the Owner shall furnish initial land survey and reference points for construction control. The established control points are shown on the Plans, and which are to be protected by the Contractor. Contractor shall be responsible for all necessary construction staking for locating components of the Work based on identified control points and information on the Plans. Prior to construction, the Contractor shall utilize the services of an Idaho PLS to verify the control point information contained on the Plans. Contractor will convey any discrepancies to the Engineer for resolution. The Contractor shall provide and be responsible for establishing additional horizontal control alignments and vertical elevations, for maintaining all construction surveying and staking, setting and maintaining all additional survey control required for the construction of the projects. All construction staking and surveying shall be performed by survey crew personnel under the supervision of a professional licensed surveyor registered in the State of Idaho.

Preserve benchmarks, construction stakes, and reference points within the construction limits as shown on the Plans and shall immediately notify the ENGINEER, OWNER, OWNER the Owner's Project Representative of any existing federal, state, county, city and private land monuments encountered which are not shown on the Plans.

Preserve all lot, block, property corners and street intersection monuments outside the construction limits. If such monuments are disturbed, the Contractor shall have them replaced by a licensed surveyor at the Contractor's sole expense, otherwise the Owner shall contract a licensed surveyor to re-establish the lost monument in accordance with the provisions of the Corner and Perpetuation and Filing Act, Idaho Code 55-1601 through 55-1613 and this cost will be deducted from the final payment. All costs associated with maintaining or replacing monuments shall be incidental to the project, unless specifically listed on the Bid Form.

Verify setbacks and easements, confirm drawing dimensions and elevations.

The Contractor shall remove all construction stakes remaining at project completion. The cost of this work shall be considered incidental to the project.

B. The Contractor shall comply with all laws, ordinances, rules and regulations bearing on the conduct of his work. If the Contractor observes that the drawings and specifications are at a variance therewith or observes other conflicts or conditions requiring clarification, he shall notify the Engineer, in writing, and any necessary changes shall be adjusted as provided in the contract for changes in work. The Owner has an eight working-hour (8) grace period to respond and/or correct. The "no harm, no compensation or time" rule applies

## PART 4 MEASUREMENT AND PAYMENT

4.1 There shall be no measurement for construction phasing and scheduling. This work shall be incidental to and the cost included in the sewer and related bid items.

**END OF SECTION** 

## **SP-2139 – Construction Coordination**

#### PART 1 GENERAL

## 1.1 SECTION INCLUDES

A. This item shall consist of all necessary labor, equipment, and materials required to provide coordination of construction activities with residents, farmers, services, and local agencies.

### PART 2 MATERIALS

NOT USED

## PART 3 WORKMANSHIP

## 3.1 WEEKLY PROJECT STATUS MEETINGS

- A. The CONTRACTOR shall conduct weekly construction progress meetings. The CONTRACTOR and SUBCONTRACTORs shall attend the meetings. The design consultant may also be requested to attend if information is needed.
- B. The CONTRACTOR shall maintain up-to-date record drawings of the construction including: variances from the design sewer grade and alignment, limits of backfill types, locations of structures, location and depth of underground utilities, and any other sub-surface features or conditions including the limits and depths. These drawings shall be updated daily during construction and may be reviewed by the Engineer at the weekly project status meeting.

## 3.2 COORDINATION WITH UTILITIES

A. Utility information is shown only for surface features and, if provided, by the owner of the utility, for non-surface features. The information shown in the Plans is for reference purposes only and does not necessarily represent actual field conditions. The Engineer assumes no liability for the accuracy of the information shown, or conflicts due to inaccurate or incomplete utility information. Call Dig Line (811) a minimum of 48 hours (2 working days) prior to any excavation to request utility locations.

## 3.3 COORDINATION WITH IRRIGATION/DRAINAGE ENTITIES

- A. Contact and work with the property owners, irrigation districts, ditch riders, or any other parties as necessary to coordinate with irrigation facilities required under this contract.
- B. Contact the Nampa-Meridian Irrigation District two weeks prior to construction (Contact: Dave Duvall, 466-0663).

## 3.4 SERVICES COORDINATION

- A. Coordinate construction activities to minimize disruption of services. Attend and participate in a services coordination meeting at the start of construction and as required during construction to resolve service issues.
- B. Provide uninterrupted solid waste service to all properties during construction. If the CONTRACTOR's operation prevents access to properties for solid waste pick-up, move individual household solid waste containers, bags, and other items accepted by the solid waste hauler to an accessible location. The containers shall be returned to the households after pick-up. Prevent damage or loss of containers and replace containers damaged or lost.
- C. Meet with the West Ada School District and school bus service providers to minimize disruption of these services and plan alternative routes.
- D. Coordinate with the U.S. Postal service and provide access for mail delivery to all properties during construction.
- E. Emergency services (Police, Fire, & Paramedic) access shall be provided at all times during construction. Coordinate with these agencies on a weekly basis as to status of project, access, and special concerns.

## 3.5 LANDOWNER/RESIDENT/TENANT FARMER/BUSINESS COORDINATION

- A. Notify adjacent residents, businesses, Nampa-Meridian Irrigation District, ACHD, NHD, and other CONTRACTORs mobilized in the project vicinity within two (2) weeks in advance of starting work.
- B. Provide, and distribute door hangers to all affected residences. Information shall include a brief description of work, anticipated time frame, project phasing points, traffic impacts, CONTRACTOR contact phone number, how services will be maintained, and any additional information on minimizing construction impacts.
- C. Notification of planned service disruptions (water main shutdowns, sewer service interruptions, etc.) shall be made to residents 48 hours in advance and shall include the extent and type of service disruption, CONTRACTOR's contact name and phone number, and date and time of disruption.
- D. Safe vehicular and pedestrian access shall be maintained at all time to all properties abutting or project, and maintenance access to governing irrigation and drainage authorities. Local access to the properties immediately adjacent to the project area shall be maintained at all times during the project, except when work is being performed immediately in front of a property's access. When access will be restricted, notify the property owner 72 hours (3 working days) in advance and arrange for alternate parking (on or off street) within 0.1 miles of the property. Access restrictions shall be limited to minimum possible. Maintain one functional access to all affected businesses. CONTRACTOR shall not begin said construction if CONTRACTOR fails to provide the required notices. Delays in CONTRACTOR's schedule and all costs associated with such a delay due to the

CONTRACTOR's failure to notify property owners shall be at CONTRACTOR's sole expense.

# PART 4 MEASUREMENT AND PAYMENT

4.1 There shall be no measurement for construction coordination. This work shall be incidental to the cost included in the gravity sewer and related unit bid items.

**END OF SECTION** 

## **SP-2141 – Special Project Considerations**

#### PART 1 GENERAL

#### 1.1 SECTION INCLUDES

- A. General Project Special Considerations.
- B. Refer to the Plans, Technical Specifications, Contract and other Contract Documents for additional requirements and specific stipulations.

#### 1.2 NEIGHBORHOOD CONSIDERATIONS

- A. The project will be constructed adjacent to and near residential homes. The Contractor shall conduct work so as to minimize disturbance to local residences. All local noise ordinances shall be adhered to. See SP-2147 for temporary power service.
- B. Under no circumstances will a shutdown of utility services be allowed.
- C. Coordinate with the utility companies to allow continuous operation and service of water, wastewater, fire protection, EMS services, trash, mail, school, etc., during construction.

#### 1.3 OTHER CONSIDERATIONS

- A. If not otherwise specified, the Contractor shall secure all other permits required to complete the work.
- B. Dewatering to construct the project will be required. Contractor shall be responsible to determine groundwater conditions and ability of soils to dewater prior to starting work. Refer to Section 205 Dewatering.

## 1.4 WORK AREAS, LIMITS OF DISTURBANCE, AND SURFACE RESTORATION

- A. Confine work within project boundaries and rights-of-ways shown on the Plans. Any damage to areas outside the project boundary shall be repaired to the satisfaction of the Owner to a condition equal to or better than pre-project conditions at no additional cost to the Owner, including areas disturbed during temporary stockpiling of materials and equipment, and construction staging activities.
- B. Any underground pipe or other facility that is damaged by the Contractor shall be repaired to pre-project conditions and to the satisfaction of the Engineer and utility purveyor at no additional cost to the Owner.
- C. No stockpiling of material is allowed outside the designated project boundary unless separately secured by the Contractor from the affected landowner. All surplus excavated material must be stockpiled within the project boundary and ultimately removed from the Owner's property.

# 1.5 INSURANCE REQUIREMENTS

A. Refer to the Contract Documents for Insurance Requirements for the project.

# PART 2 PRODUCTS

Not Used

# PART 3 EXECUTION

Not Used

**END OF SECTION** 

## SP-2143 - Submittals

#### PART 1 GENERAL

#### 1.1 SECTION INCLUDES

- A. Submittal procedures.
- B. Construction progress schedules.
- C. Proposed products list.
- D. Shop drawings.
- E. Product data.
- F. Manufacturers' instructions.
- G. Manufacturers' certificates.
- H. Construction photographs.
- I. Record drawings.

#### 1.2 RELATED SECTIONS

A. SP-2145 - Quality Control.

## 1.3 SUBMITTAL PROCEDURES

- A. Except for samples or when exception is previously agreed to by Engineer, all submittals shall be submitted electronically via email or contractor-provided cloud-based software (e.g. Procore®). If the latter method is chosen, the contractor will provide electronic access to the Owner and the Engineer. Each submittal shall be attached as a single file less than 7 megabytes in portable document format (\*.pdf). If the single file is greater than 7 megabytes, multiple files may be submitted, although the number of files shall be minimized. The term "submittal" as used herein shall be understood to include detail design calculations, shop drawings, fabrication and installation drawings, erection drawings, lists, graphs, operating instructions, catalog sheets, data sheets, samples, and similar items.
- B. The first page of each electronic submittal shall be the transmittal attached to this section. On the transmittal, the CONTRACTOR shall note all deviations from the governing technical specifications and/or drawing and shall reference the appropriate paragraph of the section or page of the drawing. If the reason for the deviation from the specifications is not readily apparent, a written explanation shall be included immediately following the transmittal.

If there are no deviations, the statement shall be noted as such. Any submittal not accompanied by a transmittal and compliance statements will be rejected.

Submittals shall be carefully reviewed by an authorized representative of the Contractor prior to submission to the Engineer.

The transmittal of each submittal shall be dated, signed, and certified by the Contractor as being correct and in strict conformance with the Contract Drawings and the Specifications, unless approved otherwise by the Engineer. Any noncertified submittals shall be returned to the Contractor without action taken by the Engineer, and any delays caused thereby shall be the total responsibility of the Contractor.

- C. Immediately following the transmittal and explanation of deviations, each electronic submittal shall contain a copy of the governing technical specification.
- D. The submittal information shall follow the specification.
- E. Submittals (and the PDF document file) shall be sequentially numbered. Resubmittals shall be indicated by a letter following the submittal number. The letter "A" shall always be implied with the first submittal.
- F. A separate transmittal form (and separate PDF document file) shall be used for each specific item or class of material or equipment for which a submittal is required. Combining of items will be permitted only when the items taken together constitute a manufacturer's package or are so functionally related that expediency indicates review of the group or package as a whole.
- G. The Engineer will respond to submittals via email with a comment sheet in portable document format (\*.pdf).
- H. Fabrication of an item shall not be commenced before the Engineer has reviewed the pertinent submittals and responded, unless allowed otherwise by the Engineer. Revisions indicated on submittals shall be considered as changes necessary to meet the requirements of the Contract Drawings and Specifications and shall not be taken as the basis of claims for extra work.
- I. The Engineer's review of Contractor's submittals shall not relieve the Contractor of the entire responsibility for the correctness of details and dimensions. The Contractor shall assume all responsibility and risk for any misfits due to any errors in Contractor-submitted submittals. Any fabrications or other work performed in advance of the receipt of approved submittals shall be entirely at the Contractor's risk and expense. The Contractor shall be responsible for the dimensions and the design of adequate connections and details.

## 1.4 CONSTRUCTION PROGRESS SCHEDULES

- A. Incorporate the work described herein into construction progress schedules and submit and update schedules per the Contract Documents.
- B. Submit revised schedules with each Application for Payment identifying changes since previous version.

## 1.5 PROPOSED PRODUCTS LIST

- A. Within seven (7) days after date of Owner-Contractor agreement on the work, submit complete list of major products proposed for use, with name of manufacturer, trade name, and model number of each product.
- B. For products specified only by reference standards, give manufacturer, trade name, model or catalog designation, and reference standards.

# 1.6 SHOP DRAWINGS

- A. Submit electronically as detailed in Section 1.3.
- B. Indicate special utility characteristics, utility connection requirements, and location of utility outlets for service for functional equipment and appliances.

#### 1.7 PRODUCT DATA

- A. Submit electronically as detailed in Section 1.3.
- B. Mark electronic copy to identify applicable products, models, options, and other data. Supplement manufacturers' standard data to provide information unique to this Project.
- C. Indicate product utility characteristics, utility connection requirements, and location of utility outlets for service for functional equipment and appliances.

#### 1.8 MANUFACTURERS' INSTRUCTIONS

- A. Submit manufacturers' printed instructions for delivery, storage, assembly, installation, start-up, adjusting, and finishing, in quantities specified for Product Data.
- B. Indicate special procedures, perimeter conditions requiring special attention, and special environmental criteria required for application or installation.
- C. Identify conflicts between manufacturers' instructions and Contract Documents.

## 1.9 MANUFACTURERS' CERTIFICATES

- A. When specified in individual specification Sections, submit manufacturer's certificate electronically to Engineer for review.
- B. Indicate material or product conforms to or exceeds specified requirements. Submit supporting reference date, affidavits, and certifications as appropriate.
- C. Certificates may be recent or previous test results on material or Product, but must be acceptable to Engineer.

## 1.10 CONSTRUCTION PHOTOGRAPHS AND PRECONSTRUCTION VIDEOS

A. As required by individual specification sections.

## 1.11 RECORD DRAWINGS

A. Submit all record drawing data per the contract closeout procedures in the Contract.

## 1.12 SUBMITTAL LIMITS

- A. Two submittals will be permitted for each item in this section at no cost to the Contractor. The two submittals include one initial submittal and one resubmittal.
- B. All submittals requiring a third review by the Engineer shall be considered unresponsive and the Owner will charge the Contractor on a Time and Materials basis for the third and all subsequent reviews and all related administrative costs not to exceed \$1,000.00 for each resubmittal.
- C. All submittals, unless noted otherwise in the Contract Documents shall be submitted within eight weeks from Notice to Proceed. Those items requiring resubmittal shall be submitted within four weeks from date of return to Contractor.

#### PART 2 PRODUCTS

Not Used

## PART 3 EXECUTION

Not used

#### PART 4 MEASUREMENT AND PAYMENT

4.1 There shall be no measurement for Submittals. This work shall be incidental to the cost included in the gravity sewer and related unit bid items.

**END OF SECTION** 

## SP-2145 – Quality Control

#### PART 1 GENERAL

#### 1.1 SECTION INCLUDES

- A. Quality assurance/control of installation.
- B. References.
- C. Construction observation and testing laboratory services.
- D. Manufacturers' field services and reports.

## 1.2 RELATED SECTIONS

- A. Contract Documents.
- B. SP-2143 Submittals.
- C. SP-2149 Material and Equipment.

## 1.3 QUALITY ASSURANCE/CONTROL OF INSTALLATION

- A. Monitor quality control over suppliers, manufacturers, Products, services, site conditions, and workmanship, to produce Work of specified quality.
- B. Comply fully with manufacturers' instructions, including each step in sequence.
- C. Should manufacturers' instructions conflict with Contract Documents, request clarification from the Engineer.
- D. Comply with specified standards as a minimum quality for the Work except when more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
- E. Perform work by persons qualified to produce workmanship of specified quality.
- F. Secure Products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion or disfigurement.

#### 1.4 REFERENCES

- A. Conform to reference standard by date of issue current on date of Contract Documents.
- B. Should specified reference standards conflict with Contract Documents, request clarification from Engineer before proceeding.

C. The contractual relationship of the parties to the Contract shall not be altered from the Contract Documents by mention or inference otherwise in any reference document.

#### 1.5 CONSTRUCTION OBSERVATION AND TESTING LABORATORY SERVICES

- A. Contractor shall provide quality control, which shall include the initial and subsequent inspections of Contractor's Work to ensure that the Work conforms to the Contract Documents. Submit Quality Control Program to the Engineer for review prior to Construction in accordance with SP-2143.
- B. Contractor shall designate the person responsible for Contractor's quality control while Work is in progress, and shall notify Engineer and permitting agencies, in writing, prior to any change in quality control representative assignment.
- C. The Contractor shall establish a quality control program as necessary to assure the project meets the requirements of the Contract Documents. The Contractor's quality control program shall at a minimum include the inspections and testing required by the Contract Documents and such additional inspections and testing which are necessary to allow the Contractor to verify the acceptability of the work and product. All documentation of the Contractor's quality control efforts including test reports will be submitted to the Engineer as they become available to the Contractor.
- D. The Contractor shall provide access to the Owner, jurisdictional agencies and Engineer for observation of the work.
- E. Contractor will employ and pay for services of testing laboratory acceptable to the Engineer and permitting agencies to perform all specified testing as specified in the Project Manual and as required by the permitting agencies.
  - 1. Prior to start of Work, submit testing laboratory name, and telephone number, and names of on-site specialist and responsible officer.
  - 2. Submit copy of report of laboratory facilities inspection made by Materials Reference Laboratory of National Bureau of Standards during most recent inspection, with memorandum of remedies of deficiencies reported by inspection.
  - 3. Submit qualifications of a certified SWPP plan preparer and compliance monitoring firm.
- F. The Contractor shall provide the equipment and manpower to conduct all tests as required in the specifications.
- G. The Contractor shall notify the Engineer of the time in which tests are to be run forty-eight (48) hours prior to testing.
- H. Reports will be submitted by the Contractor to the Owner, jurisdictional agencies, and Engineer weekly indicating results of tests and indicating compliance or non-compliance with Contract Documents.

I. Cooperate with Engineer; furnish samples of materials, design mix, equipment, tools, storage and assistance as requested.

#### 1.6 MANUFACTURERS' FIELD SERVICES AND REPORTS

- A. When specified in individual specification Sections or agency permits, require material or Product suppliers or manufacturers to provide qualified staff personnel to observe site conditions, conditions of surfaces and installation, quality of workmanship, start-up of equipment, test, adjust, and balance of equipment as applicable, and to initiate instructions when necessary.
- B. Individuals to report, in writing, observations and site decisions or instructions given to applicators or installers that are supplemental or contrary to manufacturers' written instructions.
- C. Submit report within fifteen (15) days of observation to Engineer for review.

#### 1.7 PROJECT LIMITS

A. Confine all equipment, tools, and materials to the locations, easements, work limits, and rights-of-way shown on the Plans, except when expressly authorized by Owner or Engineer.

### PART 2 PRODUCTS

Not Used

## PART 3 EXECUTION

Not Used.

## PART 4 MEASUREMENT AND PAYMENT

4.1 There shall be no measurement for Quality Control. This work shall be incidental to the cost included in the gravity sewer and related unit bid items.

**END OF SECTION** 

## SP-2147 - Construction Facilities and Temporary Controls

#### PART 1 GENERAL

#### 1.1 SECTION INCLUDES

- A. Temporary Utilities: Water, electricity and sanitary facilities.
- B. Temporary Controls: Barriers, enclosures and fencing, protection of the Work, and water control.
- C. Storm Water Management.
- D. Construction Facilities: Access roads and parking.

#### 1.2 RELATED SECTIONS

- A. Section 205 Dewatering.
- B. SP-2152 Contract Close-out (Final cleaning).
- C. SP-2216 Storm Water Management.

## 1.3 TEMPORARY WATER SERVICE

A. Provide, maintain and pay for suitable quality water required for construction operations and testing as specified in the Project Manual.

## 1.4 TEMPORARY SANITARY FACILITIES

A. Provide and maintain required facilities and enclosures.

#### 1.5 TEMPORARY ELECTRICITY

A. Provide, maintain and pay for temporary electricity as needed for construction. Contractor is advised that the continuous use of portable gas/diesel generators is prohibited. All local noise ordinances shall be adhered to.

#### 1.6 BARRIERS

- A. Provide barriers to prevent unauthorized entry to construction areas, to allow for Owner's use of site, to protect public safety, and to protect existing facilities and adjacent properties from damage from construction operations.
- B. Provide protection for vegetation, if any, designated to remain. Replace damaged vegetation which shall be considered incidental.
- C. Protect non-owned vehicular traffic, stored materials, site and structures from damage.

## 1.7 WATER CONTROL

- A. Grade the site to drain. Maintain excavations free of water. Provide, operate, and maintain pumping equipment as needed.
- B. Protect work zone from puddling or running water. Provide water barriers as required to protect site from soil erosion and puddling.
- C. Contractor shall follow BMPs for dewatering activities. Contractor shall not degrade adjacent surface water due to dewatering operations.

#### 1.8 DUST CONTROL

- A. This item shall consist of furnishing and applying water required in construction and for dust control in accordance with the requirements of these specifications and the approved ESC/SWPPP.
- B. Water, when required, shall be applied at the locations and in the amounts required to properly compact the work. An adequate water supply shall be provided by the Contractor. The equipment used for watering shall be of ample capacity and of such design as to assure uniform application of water in the amounts required.
- C. If required, watering shall be done at night or at other times when evaporation loss will be at a minimum.
- D. In watering of subgrades, the Engineer may direct the Contractor to apply water in such quantities that the subgrade shall be compacted at a moisture content in excess of "optimum moisture." In no case will the Contractor be required to apply water in excess of three percent (3%) greater than optimum moisture.
- E. The Contractor shall also apply water during the course of the work to control dust, maintaining all embankment and base courses in a damp condition.
- F. The Contractor shall provide sufficient equipment to apply water as directed for controlling dust caused by construction activities. If dusty conditions continue to exist due to insufficient or inadequate watering practices or lack of watering equipment, it shall cause the closing down of those operations affected until remedied. Watering shall be done on Saturdays, Sundays, and holidays at the same frequency and amounts as specified for work days at the Contractor's expense.
- G. Watering equipment shall consist of watertight tanks mounted on trucks, adequately powered, and capable of applying water as required. The water shall be applied under pressure from the tank through a spray apparatus as directed. The spray apparatus shall be equipped as to provide uniform, unbroken spread of water over the surface being watered. A suitable device for positive shut-off and for regulating the flow of water shall be located so as to permit positive drive control from the cab.

#### 1.9 STORMWATER MANAGEMENT

A. Refer to SP-2216.

## 1.10 POLLUTION CONTROL

- A. Provide methods, means, and facilities to prevent contamination of soil, water, and atmosphere from discharge of noxious, toxic substances, and pollutants produced by construction operations.
- B. Equipment and fuel storage shall be kept secured. Waste oil and waste fluids shall not be stored or changed at any construction site.
- C. Spills of hazardous or toxic materials shall be promptly reported to the Idaho Department of Environmental Quality (IDEQ). Contractor shall take emergency measures to limit the amount of the releases at Contractor's own expense.
- D. Provide means of removing mud from vehicle wheels before entering public streets.

#### 1.11 SECURITY

A. Provide security and facilities to protect work from unauthorized entry, vandalism or theft.

#### 1.12 NOISE CONTROL

- A. Comply with local and county ordinance regarding noise generation and work hours. Construction involving noisy operations, including starting and warming up of equipment, and blasting shall be restricted to the hours specified in the Contract Documents.
- B. Notification of special circumstances or emergency conditions that require work beyond the hours specified herein shall be provided as follows:
  - The Contractor shall notify the Engineer and City of Meridian 48 hours in advance of any proposed extended work hours for preauthorization. Notification shall include a written request for authorization to perform work specified and the circumstances that warrant this request. This notification shall include any additional measures to mitigate noise generated by this construction activity if deemed necessary by the Engineer.
  - 2. If an emergency situation occurs that warrants extended hours, the Contractor shall notify the Engineer immediately upon determining the need for this work.

## 1.13 TREE AND PLANT PROTECTION

A. Cultivated Areas and Other Surface Improvements: All landscaped areas and other surface improvements which are damaged by actions of the Contractor shall be restored to a condition equal to or better than it was prior to construction. Areas shall not be cleared until related construction activities require the work. If irrigation system components are damaged or removed to facilitate construction

in cultivated or landscaped areas, it is the responsibility of the Contractor to replace them at no cost to the Owner.

## 1.14 PROTECTION OF INSTALLED WORK

- A. Protect installed Work and provide special protection where specified in individual specification sections.
- B. Provide temporary and removable protection for installed products. Control activity in immediate work area to minimize damage.

### 1.15 PUBLIC ACCESS

- A. Provide detours and traffic control as required by the approved traffic control plan.
- B. Provide and maintain access to fire hydrants free of obstructions.
- C. Provide and maintain access for emergency vehicles.

## 1.16 PARKING

- A. Do not allow construction personnel to park in any way which may affect the access of emergency vehicles or access to adjacent properties. Parking within NMID property will require approval by NMID.
- B. Arrange for temporary surface parking areas to accommodate construction personnel. Parking in adjacent local roads (McDermott or Ustick Roads, Becky Lane, W. Kostalota Lane, Morgan Grove Lane) is not allowed.

## 1.17 PROGRESS CLEANING

- A. Maintain areas free of waste materials, debris, and rubbish. Maintain site in a clean and orderly condition.
- B. Remove waste materials, debris, and rubbish from site periodically and dispose offsite in approved solid waste facilities at no additional cost to owner.
- C. Provide necessary containment and clean-up of all hazardous/dangerous materials onsite that result from Contractor's actions.
- D. Dispose of all hazardous/dangerous waste in approved hazardous waste facilities that result from Contractor's actions.

#### 1.18 FIELD OFFICES AND SHEDS

- A. Provide temporary office to house record drawings.
- B. Office: Weather-tight, with lighting, electrical outlets, telephone service, and heating equipment, and equipped with sturdy furniture and drawing display table.

# 1.19 REMOVAL OF UTILITIES, FACILITIES, AND CONTROLS

- A. Remove temporary above-grade or buried utilities, equipment, facilities, materials, prior to Substantial Completion.
- B. Clean and repair damage caused by installation or use of temporary work.
- C. Restore existing facilities used during construction to original condition. Restore permanent facilities used during construction to specified condition.

## PART 2 PRODUCTS

Not Used

## PART 3 EXECUTION

Not Used

## PART 4 MEASUREMENT AND PAYMENT

4.1 There shall be no measurement for Construction Facilities and Temporary Controls.

This work shall be incidental to the cost included in the gravity sewer and related unit bid items.

**END OF SECTION** 

## SP-2149 - Materials and Equipment

#### PART 1 GENERAL

#### 1.1 SECTION INCLUDES

- A. Products.
- B. Transportation and handling.
- C. Storage and protection.
- D. Product options.
- E. Substitutions.

#### 1.2 RELATED SECTIONS

A. SP-2145 - Quality Control.

#### 1.3 PRODUCTS

- A. Products: Means new material, machinery, components, equipment, fixtures, and systems forming the Work. Does not include machinery and equipment used for preparation, fabrication, conveying and erection of the Work. Products may also include existing materials or components required for reuse.
- B. Do not use materials and equipment removed from existing premises, except as specifically permitted by the Contract Documents.
- C. Provide interchangeable components of the same manufacturer, for similar components.

## 1.4 TRANSPORTATION AND HANDLING

- A. Transport and handle products in accordance with manufacturer's instructions.
- B. Promptly inspect shipments to assure that products comply with requirements, quantities are correct, and products are undamaged.
- C. Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement, or damage.

## 1.5 STORAGE AND PROTECTION

- A. Store and protect products in accordance with manufacturer's instructions, with seals and labels intact and legible. Store sensitive products in weather-tight, climate controlled enclosures.
- B. For exterior storage of fabricated products, place on sloped supports, above ground.

- C. Provide off-site storage and protection when site does not permit on-site storage or protection within project easements or rights-of-way.
- D. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to avoid condensation.
- E. Store loose granular materials on solid flat surfaces in a well-drained area. Prevent mixing with foreign matter.
- F. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement, or damage.
- G. Arrange storage of products to permit access for observation and documentation. Periodically inspect to assure products are undamaged and are maintained under specified conditions.

#### 1.6 PRODUCT OPTIONS

- A. Products Specified by Reference Standards or by Description Only: Any product meeting those standards or description.
- B. Products Specified by Naming One or More Manufacturers: Products of manufacturers named and meeting specifications, no options or substitutions allowed unless stated otherwise. Submit a request for substitution for any manufacturer not named.

#### 1.7 SUBSTITUTIONS

- A. Engineer will consider requests for Substitutions only within thirty (30) days after date of Owner-Contractor agreement.
- B. Substitutions may be considered when a product becomes unavailable through no fault of the Contractor.
- C. Document each request with complete data substantiating compliance of proposed Substitution with Contract Documents.
- D. A request constitutes a representation that the Contractor:
  - 1. Has investigated proposed product and determined that it meets or exceeds the quality level of the specified product.
  - 2. Will provide the same warranty for the Substitution as for the specified product.
  - 3. Will coordinate installation and make changes to other Work, which may be required for the Work to be complete with no additional cost to Owner.
  - 4. Waives claims for additional costs or time extension, which may subsequently become apparent.

- 5. Will reimburse Owner for review or redesign services associated with re-approval by Engineer and authorities.
- E. Substitutions will not be considered when they are indicated or implied on shop drawing or product data submittals, without separate written request, or when acceptance will require revision to the Contract Documents.
- F. Substitution Submittal Procedure:
  - 1. Submit electronically in accordance with SP-2143 the request for Substitution for consideration. Limit each request to one proposed Substitution.
  - 2. Submit shop drawings, product data, and certified test results attesting to the proposed product equivalence.
  - 3. The Engineer will notify Contractor, in writing, of decision to accept or reject request.

## PART 2 PRODUCTS

Not Used

## PART 3 EXECUTION

Not used

**END OF SECTION** 

# SP-2152 - Contract Closeout

#### PART 1 GENERAL

#### 1.1 SECTION INCLUDES

- A. Closeout procedures.
- B. Final cleaning.
- C. Project record documents.
- D. Operation and maintenance data.
- E. Warranties.
- F. Spare parts and maintenance materials.
- G. Inspection compliance.
- H. Protection of installed construction.

## 1.2 RELATED SECTIONS

- A. SP-2147 Construction Facilities & Temporary Controls
- B. SP-2150 Starting of Systems

## 1.3 CLOSEOUT PROCEDURES

- A. Submit written certification that Contract Documents have been reviewed, Work has been observed and documented, and that Work is complete in accordance with Contract Documents and ready for Engineer's review.
- B. Provide submittals to Engineer that are required by governing or other authorities.
- C. Submit final Application for Payment identifying total adjusted Contract Sum, previous payments, and sum remaining due.
- D. Secure final approvals from all permitting agencies.
- E. Secure approvals of final surface restoration of all work on private property.

## 1.4 FINAL CLEANING

- A. Execute final cleaning prior to final inspection.
- B. Clean site; rake clean all exterior, visible, and landscaped surfaces.

- C. Remove waste and surplus materials, rubbish, and construction facilities from the site.
- D. Sweep paved roadways and clean storm drainage facilities.

### 1.5 PROJECT RECORD DOCUMENTS

- A. Maintain on site, one set of the following record documents; record actual revisions to the Work:
  - 1. Contract Drawings including ISPWC and Meridian Standard Drawings and Specifications.
  - 2. Specifications.
  - 3. Addenda.
  - 4. Change Orders and other Modifications to the Contract.
  - 5. Reviewed shop drawings, product data, and samples.
  - 6. Manufacturer's instruction for assembly, installation and adjusting.
- B. Store Record Documents separate from documents used for construction.
- C. Ensure entries are complete and accurate, enabling future reference by Owner.
- D. Record information concurrent with construction progress.
- E. Specifications: Legibly mark and record at each Product section description of actual Products installed, including the following:
  - 1. Manufacturer's name and product model and number.
  - 2. Product substitutions or alternates utilized.
  - 3. Changes made by Addenda and Modifications.
- F. Record Documents and Shop Drawings: Legibly mark each item to record actual construction including:
  - 1. Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements.
  - 2. Field changes of dimension and detail.
  - 3. Details not on original Contract Drawings.
- G. Delete Engineer seal from all documents.
- H. Submit documents to Engineer with final Application for Payment.

## 1.6 WARRANTIES

A. The Contractor shall file with the Engineer a certified statement that each piece of equipment will function satisfactorily and that within two years from the date of the City of Meridian's final project acceptance letter (unless a longer warranty period is otherwise specified in other technical specifications), the Contractor shall remove and replace at his expense and without charge to the Owner or his assignee, piece for piece, each piece of equipment, or part thereof, which shall

prove defective within the guarantee period. <u>See the City's currrent</u> <u>Supplemental Specifications and Drawings to the ISPWC for further information</u> regarding the City's required 2-year warranty and corrections period.

- B. The Contractor shall also file with the Engineer a certified guarantee from the manufacturer, that the manufacturer guarantees their equipment for a minimum period of one year from the date of delivery (unless a greater warranty period is otherwise specified in other technical specifications). The manufacturer shall guarantee that they will remove and replace at their expense all equipment or parts thereof which shall prove defective within the guarantee period.
- C. All guarantee work shall be done promptly by either the Contractor or the manufacturer upon submittal of proof of defect.
  - 1. Provide duplicate notarized copies.
  - 2. Execute and assemble transferable warranty documents from Subcontractors, suppliers, and manufacturers.
  - 3. Submit prior to final application for Payment.
  - 4. For items of Work delayed beyond date of Substantial Completion, provide updated submittal within 10 days after acceptance, listing date of acceptance as start of warranty period.

#### 1.7 SPARE PARTS AND MAINTENANCE MATERIALS

- A. Provide products, spare parts, maintenance and extra materials in quantities specified in individual specification Sections.
- B. Deliver to Project site or to site designated by Owner.

## 1.8 INSPECTION COMPLIANCE

A. Submit documentation of electrical inspections from governing authority.

### 1.9 PROTECTION OF INSTALLED CONSTRUCTION

- A. Protect installed work from damage by construction operations.
- B. Provide special protection where specified in individual specification sections.
- C. Provide temporary and removable protection for installed products. Control activity in immediate work area to prevent damage.
- D. Protect finished floors and other surfaces from traffic, dirt, wear, damage, or movement of heavy objects, by protecting with durable sheet materials.

## PART 2 PRODUCTS

**NOT USED** 

# PART 3 EXECUTION

NOT USED

# PART 4 MEASUREMENT AND PAYMENT

4.1 No measurement or payment shall be made for Contract Close-out. All work required herein shall be considered incidental to other related pay items.

**END OF SECTION** 

## SP-2153 – Remove, Reset or Replace Miscellaneous Item

### PART 1 GENERAL

## 1.1 SECTION INCLUDES

A. This item shall consist of all necessary work and materials required to remove, replace, or reset signs, trees, fences, and any other miscellaneous items as encountered in the field to accommodate the Work. Work will be performed on public and private properties.

#### 1.2 COORDINATION

- A. Meet with the private property owners to determine suitable site for materials being replaced or reset.
- B. Document existing condition and quantity of materials, anticipated to be reset or replaced with photographs, and file with Engineer prior to commencing work.

#### 1.3 RELATED SECTIONS

A. Section 307 – Street Cuts & Surface Repairs

#### PART 2 MATERIALS

#### 2.1 MISCELLANEOUS MATERIALS

A. Existing signs, mailboxes, supports, hardware, posts, and related items shall be reused unless damaged or called out for replacement. If materials are damaged during construction, replace in-kind at CONTRACTOR's expense.

## 2.2 FENCE

A. Existing fencing (regardless of type) shall be carefully removed to accommodate construction activities and reset after completion of surface repairs. If the fence is damaged during removal it shall be replaced in-kind to the satisfaction of the property owner.

#### PART 3 WORKMANSHIP

## 3.1 PROTECTION

A. Satisfactorily restore any damage to existing facilities, materials, or structures, resulting from carelessness or negligence of CONTRACTOR to their original condition at CONTRACTOR's expense.

#### 3.2 MISCELLANEOUS ITEMS AND MATERIALS

A. Exercise care in the removal, replacement, or resetting of miscellaneous items to avoid damage and minimize disturbance to adjacent work area.

- B. Remove, transport, and place items in temporary site provided by the CONTRACTOR or an on-site location approved by property owner.
- C. Upon completion of the work, relocate items to their original position prior to construction and restore all surfacing impacted during relocation to condition existent prior to initiating the work.
- D. Obtain a written release form from the private property owner indicating relocation or replacement of items and surface restoration has been completed satisfactorily. Submit release forms to Engineer for application of payment on this Bid Item. See provided Document 00830 in **Appendix D**.

# 3.2 REFERENCE AND RESET LAND MONUMENT

- A. Document land monument elevation and location prior to removal. Upon completion of Work, reset land monument to prior location and elevation.
- B. Record locations and elevations of all reinstalled land monuments.

## PART 4 MEASUREMENT AND PAYMENT

4.1 No measurement or payment shall be made for removal, replacement, or resetting of various items encountered during construction unless specifically called for on the Bid Schedule. All other items shall be considered incidental to and included in other pay items.

**END OF SECTION** 

# SP-2170 - Site Clearing

### **PART 1 GENERAL**

## 1.1 SECTION INCLUDES

- A. General site clearing.
- B. Preparation.
- C. Protection of existing features.
- D. Removing and disposing of organic material and other miscellaneous debris.
- E. Excavation of topsoil.
- F. Clean-up.

# 1.2 RELATED SECTIONS

- A. 203 Soil Materials
- B. SP-2125 Measurement and Payment.
- C. SP-2143 Submittals.
- D. SP-2145 Quality Control.

# 1.3 REFERENCES

Not used.

### PART 2 PRODUCTS

Not Used.

# PART 3 EXECUTION

# 3.1 GENERAL

- A. Coordinate site clearing work within project boundaries shown on the Plans at all times.
- B. Under no circumstances shall any disturbance occur outside of the project boundary.

# 3.2 PROTECTION OF EXISTING FEATURES

A. Protect benchmarks, survey monuments, and roads from damage and displacement.

- B. Protect all adjoining property and features.
- C. Protect all above and belowground utilities from damage and displacement.
- D. Limit site clearing within the project boundaries shown on the Plans. Prevent damage to other areas and existing features in areas adjacent to the site.
- E. Retain and protect all trees vegetation, shrubs, fencing, roads, structures, utilities and other items noted on Drawings to remain during construction.
- F. Contractor is responsible for the repair or replacement of any damage resulting from clearing activities at no additional cost to Owner.

### 3.3 CLEARING

- A. Clear areas required for access to site and execution of Work.
- B. Remove vegetation within construction limits.
- C. Limit clearing and construction operation to areas required for construction, designated by the Engineer and described in the Plans.

# 3.4 REMOVAL

- A. Remove debris and extracted plant life from staging and storm water treatment areas. Open burning and burial in trenches in prohibited.
- B. Strip all topsoils and store onsite at locations provided by the Owner. The depth of stripping will generally be eighteen (18) inches. Dispose and level the stripped material at a location approved by the Owner and Engineer. Spread the stripped material over the excavated material disposal locations. Level excess stripped material.
- C. Dispose all materials at locations that are in compliance with all Federal, State, and Local regulations.
- D. Grade areas in which groundwater is encountered to drain.
- E. Remove unsuitable materials and dispose of off-site.

#### 3.5 CLEANUP

A. Upon completion of the site work and project, clean the entire work area.

Remove all excess excavated material, rocks, boulders, logs, trees, pipe, or debris of any type from the site and dispose at a site acceptable to Federal, State, and Location Regulations. Refer to related specification sections and the Plan details for surface repair requirements.

#### **END OF SECTION**

# SP-2216 - Storm Water Management

#### PART 1 GENERAL

#### 1.1 SECTION INCLUDES

- A. A total land disturbance of greater than one (1) acre is anticipated; therefore an EPA Construction General Permit, a Storm Water Pollution Prevention Plan (SWPPP), Notice of Intent (NOI), and Notice of Termination (NOT) will be required for this Project. CONTRACTOR shall include all costs associated with the requirements to prepare, submit, and file all required permits and provide all work to install, maintain, and manage storm water systems. All local and sediment control requirements shall also be met.
- B. Submit an Erosion and Sediment Control Plan (ESCP) to the City prior to commencing construction activities. The ESCP must meet the requirements outlined in the City of Meridian CSWMP and ACHD storm water management requirements. Refer to **Appendix A**.

### 1.2 REQUIREMENTS

- A. The CONTRACTOR shall submit the SWPP Plan and narrative to the City prior to commencing construction activities.
- B. SWPPP Section 6.3, regarding training staff, is to be completed prior to NOI filing and EPA waiting period begins. Provide copies of credentials for individual(s) named.

# PART 2 MATERIALS

AS REQUIRED BY SWPPP

#### PART 3 WORKMANSHIP

# 3.1 STORM WATER POLLUTION PREVENTION MANAGEMENT

- A. It is anticipated that construction of this project will result in a total land disturbance exceeding one (1) acre. Therefore, the CONTRACTOR shall be responsible for all requirements to prepare, submit, and file all required permits including an EPA General Construction Permit, a Storm Water Pollution Prevention Plan (SWPPP), Notice of Intent (NOI), and Notice of Termination (NOT) and provide all work to manage storm water systems in addition to meeting all local and sediment control requirements.
- B. Prepare an ESCP and SWPPP narrative for review by the Owner and regulatory entities. These documents shall meet the requirements of the current Construction General Permit (CGP). Any revisions to these documents during construction shall meet the requirement generally set forth in the City of Meridian CSWMP, Section 8300 of the Ada County Highway District Policy Manual, and the City of Meridian CSWMP on the City website at <a href="http://www.meridiancity.org/engineering.aspx?id=271">http://www.meridiancity.org/engineering.aspx?id=271</a>. Plan designer is to be

certified by either ITD, ACHD, or Boise City and include a detailed compliance monitoring program. The Construction Site Discharge Control Plan must include measures to protect the existing ACHD storm drain systems inside and outside the project boundaries from mud, dust, debris, and other pollutants generated or transported due to this project. "Pollutants" are as listed or defined in Section 8300 of the Ada County Highway District Manual. Additionally, this item must protect all "waters of the United States of America". Acceptable methods or "Best Management Practices" (BMPs) for controlling pollutant transport from this site can be found in a number of publications available including, but not limited to:

Idaho Department of Environmental Quality: Phone: (208) 373-0502 or on the internet: http://www.deq.state.id.us/water/stormwater\_catalog/index.asp

United States Environmental Protection Agency – Region 10: (800) 424-4372 or on the internet: <a href="https://www.epa.gov/r10earth/stormwater.htm">www.epa.gov/r10earth/stormwater.htm</a>

Idaho Transportation Department, ESC Manual, Phone: (208)-334-8476

- C. Prior to the beginning of construction, file the NOI and have the EPA approved SWPPP/Construction Site Discharge Control Plan in place. The CPM shall include timing for submittal of both the Contractor and City NOI's, as well as the required waiting periods after NOI is reported on the web site.
- D. The construction SWPPP shall include measures to protect "waters of the United States of America" inside and outside the project boundaries from stormwater pollution sedimentation and erosion. It is anticipated that check dams, straw bales or wattles, silt fences, jute mats, and other BMP's may be required to meet performance stipulations of the reference permits. Such temporary facilities may be constructed on-site and will be required to be removed after completion. Install silt fences around soil or aggregate material stockpile areas to contain silts and prevent siltation of surface waters or runoff to adjacent properties. Employ erosion and siltation control necessary to complete the work and conform to these Specifications and permit provisions. Any required silt fence for stockpile areas, outside the silt fencing already shown on the Plans, is considered incidental to the "Storm Water Management" pay item.
- E. Implement the SWPPP Plan and any required changes during the project and after substantial completion. Periodically inspect compliance of the SWPPP using an independent firm regularly engaged specifically in this work with personnel meeting Boise City or equivalent certification. Frequency of the periodic inspections shall be a minimum of one (1) inspection per week or more if required by the EPA General Construction Permit, or when construction activities, means, methods or sequences change. Schedule inspections with the Owner's RPR a minimum 48 hours in advance.
- F. Implement a NOT after the City has reviewed and approved a Request to Terminate NOT from the Contractor. Remove all related items after completion of the required work.

## PART 4 MEASUREMENT AND PAYMENT

- 4.1 There is no measurement for Storm Water Management. This item includes all necessary work to complete storm water management as required by local, state, and federal agencies and in accordance with the Contract Documents. Payment will be on a lump sum basis in the amount listed on the Bid Form, and shall be made 50% on the first monthly payment and pro-rated through the subsequent pay estimates. All permitting fees are to be included in this bid item.
  - A. Storm Water Management
    - 1. Bid Schedule Payment Reference: SP-2216.4.1.A.1
    - 2. Bid Schedule Description: Storm Water Management .....Lump Sum (LS).

**END OF SECTION** 

# SP-2220 - Waterway Crossings

#### **PART 1 - GENERAL**

#### 1.2 SECTION INCLUDES

- A. This Specification consists of designing, furnishing, installing, maintaining, and removing portable cofferdams or stream diversion systems, and bypass piping systems necessary to construct pipelines across waterways. This work shall be in full accordance with the Agency Permits and Idaho Department of Environmental Quality requirements. See **Appendix C** for more information.
- B. Open cut crossings of the Eight Mile Lateral and Sky Pilot Drain are not allowed.

### 1.2 REFERENCES

- A. ANSI/ASTM C136 Method for Sieve Analysis of Fine and Coarse Aggregates.
- B. ANSI/ASTM D698 Test Methods for Moisture-Density Relations of Soils and Soil-Aggregate Mixtures, Using 5.5 lb (2.49 kg) Rammer and 12 inch (304.8 mm) Drop.
- C. ASTM D2049 Test Method for Relative Density of Cohesionless Soils.
- D. Appendix C Applicable State/Federal Permit Requirements.
- E. IDAPA 58.01.16.430.02.k Idaho Wastewater Rules, Wastewater Pipelines in Relation to Surface Water Bodies.

# 1.3 SUBMITTALS

- A. Submit manufacturer's material and installation information, stability calculations, proposed crossing plan, staging or phasing plan and contingency plans for the crossing. Specify construction time, sequence, and contingencies if an increase in stream flow(s) is encountered.
- B. Submit shop drawings of major equipment items proposed to be incorporated in the work.
- C. Submit dewatering plan per Specification Section 205 Dewatering.

# **PART 2 - MATERIALS**

## 2.1 SURFACE RESTORATION

A. Surface restoration associated with the waterway crossing shall be as detailed in Section 307 and shall be considered incidental to the "Waterway Crossing" pay item.

# 2.2 JOINT RESTRAINTS (Carrier Pipe)

A. Joint restraints shall be Romac Industries 600 Series Pipe Restraining System, or prior approved equivalent. Joint restraints are required for all waterway crossings.

## 2.3 BACKFILL

A. Trench backfill shall be Type I aggregate or other material that will not readily erode, cause siltation, damage pipe during placement, or corrode the pipe.

# 2.4 SLEEVE

A. All waterway crossings shall be sleeved per the City of Meridian Standard Detail SW1 unless otherwise specified on the Plans.

# **PART 3 – WORKMANSHIP**

### 3.1 EXAMINATION

- A. Verify fill materials to be reused are acceptable.
- B. Verify dewatering systems are in compliance with performance requirements of Section 205, SP-2216, and applicable Federal/State Permits. Obtain short-term activity exemption from Idaho Department of Environmental Quality.
- C. Notify Engineer and affected agencies 48 hours prior to erection of the diversion system(s).

### 3.2 PREPARATION

- A. Identify required lines, levels, contours, and datum.
- B. Verify location, maintain and protect existing utilities and pipelines which pass through work area.
- C. Protect plant life and other features on the stream bank from disruption. Maintain limited egress/ingress corridors to construction site to limit vegetation and waterway impact.
- D. Employ dewatering and erosion/sedimentation control systems in concurrence with the approved SWPPP and in conjunction with the waterway diversion system.
- E. Plan for a safe, clean, and accessible construction site. Diversion site size shall be planned to allow for efficient trenching operations.

### 3.3 INSTALLATION

- A. Open trench crossings will not be allowed.
- B. No equipment will be allowed below the ordinary high water mark, unless full bypass of flow is in-place.
- C. Without impacting the pre-existent conveyance of waterway flows, remove or relocate large obstructions if encountered.

- D. Place leveling material, only if required, in areas of voids or depressions to provide a suitable level and uniform subgrade for the cofferdam system. The use of leveling material shall be minimized to the greatest practical extent as possible. Geotextile will be required beneath leveling course. Use of this material may cause delays in construction, due to review by regulatory agencies.
- E. Contractor shall repair/restore canal banks, if disturbed, to original condition or better or in accordance with permits.

## 3.5 PROTECTION OF FINISHED WORK

A. Protect completed work.

### **PART 4 - MEASUREMENT AND PAYMENT**

- 4.1 Measurement for Waterway Crossings shall be on a per-each basis at the locations designated on the Bid Schedule. This item will include all necessary work to complete the waterway crossings, sleeve or casing, joint restraints, excavation, backfill, compaction, testing and all other work items required by the state and federal permits and in accordance with the Contract Documents. Measurement and payment for the carrier pipe and associated appurtenances will be in the appropriate sanitary sewer pay item.
  - A. Waterway Crossing
    - 1. Bid Schedule Payment Reference: SP-2220.4.1.A.1
    - 2. Bid Schedule Description: Waterway Crossing Bore/Jack Eight Mile Lateral, 54-Inch Steel Casing .....Lump Sum (LS).
  - B. Waterway Crossing
    - 1. Bid Schedule Payment Reference: SP-2220.4.1.A.2
    - 2. Bid Schedule Description: Waterway Crossing Bore/Jack Sky Pilot Drain (McDermott Road), 54-Inch Steel Casing ......Lump Sum (LS).
  - C. Waterway Crossing
    - 1. Bid Schedule Payment Reference: SP-2220.4.1.A.2
    - 2. Bid Schedule Description: Waterway Crossing Bore/Jack Sky Pilot Drain (Ustick Road), 24-Inch Steel Casing .....Lump Sum (LS).

**END OF SECTION** 

# SP-2222 - Power Pole Support

#### **PART 1 - GENERAL**

#### 1.1 SECTION INCLUDES

A. This item consist of all necessary work including labor, materials, equipment and coordination required to retain and protect power poles.

# **PART 2 - MATERIALS**

NOT USED

# **PART 3 – WORKMANSHIP**

### 3.1 POWER POLES

A. The Contractor shall be responsible for coordinating with Idaho Power Company and paying all costs associated with providing temporary support for the power poles during construction as required to safely complete trenching operations adjacent to the power poles.

#### PART 4 - MEASUREMENT AND PAYMENT

- 4.1 Measurement and payment shall be made for the following items as listed on the Bid Form and described herein. Payment shall include all costs associated with furnishing, installing and removing power pole supports, temporary relocation of guy supports, and all coordination and work sequencing necessary to retain the power poles during construction.
  - A. Power Pole Support: Payment shall be on per each basis.
    - 1. Bid Schedule Payment Reference: SP-2222.4.1.A.1
    - 2. Bid Schedule Description: Power Pole Support .....each (EA).

# SP-2223 - PVC Sleeve

#### **PART 1 - GENERAL**

#### 1.1 SECTION INCLUDES

A. This item consists of all necessary work and materials required to sleeve the sewer main where separation distance between non-potable and potable is not adequate. This item does not include casing pipe beneath the Eight Mile Lateral or the Sky Pilot Drain.

### 1.2 REFERENCES

A. City of Meridian Supplemental Specifications

# **PART 2 - MATERIALS**

# 2.1 GENERAL

A. All components must meet the requirements of the applicable section of the ISPWC, City of Meridian Standard Specifications, in addition to the requirements specified herein.

#### 2.2 PVC SLEEVE

A. PVC sleeve: water class pipe, PVC C905 DR41 in accordance with Section 401 - Water Pipe and Fittings. PVC sleeve size shall conform to the details shown on the Plans.

# 2.3 CASING INSULATORS

A. Natural skids such as redwood or cedar will not be allowed. Casing insulator must be all non-metallic commercially fabricated as manufactured by Advance Products, PSI "Ranger" or prior approved equivalent. Casing insulators must be designed to provide one inch (1") clearance between runner and top the casing wall. Runner height must be sufficient to resist pipe floatation. Minimum number of runners as specified by the manufacturer.

#### 2.4 WATERTIGHT END SEALS

A. Seamless neoprene rubber boot (60 durometer synthetic rubber) with a minimum thickness of 1/8". End seal connections: 3/4" wide T304 stainless steel bands. Product shall be Advanced Products & Systems, Inc. Model AC Push-On or prior approved equal.

# **PART 3 - WORKMANSHIP**

3.1 PVC sleeves shall be constructed per Plan details.

### **PART 4 - MEASUREMENT AND PAYMENT**

4.1 There is no measurement for PVC sleeves. This work shall be incidental to and included in the Gravity Sewer Main bid item.