## STANDARD NOTES (Additional notes may be added as necessary) MODIFICATIONS ARE ACCEPTABLE TO MEET PROJECT CONDITIONS OCTOBER 2014

- All work shall be done in accordance with the latest Sewer Specifications and Standard Drawings of the Idaho Standards for Public Works Construction (ISPWC), Boise Public Works Department and/or the Ada County Highway District (ACHD) modifications to the ISPWC.
- The Contractor shall construct the sanitary sewer in accordance with the stamped plans approved by the Boise City Public Works Department. These plans will be provided to the Contractor by the Project Inspector prior to construction. Work shall not be done without the current set of approved plans.
- 3. Final approval and acceptance of all sewer construction will be by the Boise Public Works Department.
- 4. Sewer inspections will be by the Boise Public Works Department and their decisions should be considered as final. The Contractor will notify the Boise Public Works Department 48 hours prior to construction. Boise City will provide periodic inspections for an eight-hour day, from 8:00 a.m. to 5:00 p.m., for a forty hour week. The Contractor shall reimburse the City at rates established by the City for inspection in excess of the normal work week, including legal holidays. Overtime inspection rates and a list of legal holidays can be obtained from the Boise Public Works Department.
- Sewer construction will meet specific details and requirements of the Idaho Standards for Public Works
  Construction including Boise City revisions. Boise City revisions to the ISPWC standard drawings are <u>available</u>
  online.
- 6. Groundwater levels shall be maintained below the bottom of the trench during the pipe laying and pipe joining operations. All manholes located within limits of seasonal groundwater shall have the exterior of all concrete surfaces coated with two coats of Coal Tar Epoxy.
- 7. The Contractor shall install a removable plug upstream of SSMH \_\_\_\_\_\_ between SSMH \_\_\_\_\_ and SSMH . This plug shall remain in place during construction until final acceptance of this sewer project.
- 8. Service lines shall be marked in accordance with the specifications and standard drawing SD 512. Service line markers shall remain in place during construction and be present for final inspection. On lots where roof drains are utilized, the contractor shall color the roof drain markers to clearly differentiate roof drain markers from sewer service markers.
- 9. The Horizontal separation of the water and sewer mains shall be a minimum of ten (10) feet. Where it is necessary for sewer and water to cross each other and the sewer line is less than 18 inches below or above the water main, the sewer line crossing shall be P.V.C. pressure pipe conforming to AWWA C-900 or ASTM D2241, for a distance of 10' on both sides of water line. One full length of both water main and sewer line shall be centered over the crossing point so that all joints will be as far from the crossing as possible.
- 10. All stationing relates to the gravity sewer centerline.
- 11. The Contractor shall provide Boise City's Inspector with "cut sheets" for the staking provided for construction of the sanitary sewer. "Cut Sheets" shall be provided to the City prior to construction. Additionally, temporary bench marks must be provided to the Boise Public Works Department, Inspection section prior to the commencement of construction.

- 12. Prior to construction, Temporary Bench Marks (TBM's) shall be set in the field by a licensed surveyor or engineer and shall be flagged and clearly visible from all directions. A TBM shall be located within 100 feet of the tie-in to existing sewer and spaced no greater than 500 feet along the sewer alignment thereafter. TBM's shall have elevations tied to the NAVD 1988 Datum.
- 13. Sewer pipe with cover of greater than 3 feet, shall be bell and spigot, polyvinyl chloride (PVC), SDR 35, ASTM D-3034 for 4-inch through 15-inch and ASTM F679 for 18-inch through 27-inch as set forth by the Boise City Public Works Department. Sewer pipe with less than 3 feet of cover shall be ductile iron conforming to ANSI A-21.51 or AWWA C-151 minimum Class 50. A rubber ring is to be installed where the pipe is in contact with the manhole base and/or its channel in order to ensure a water-tight seal.
- 14. The sewer contractor shall supply all lid assemblies and the required number of riser and grade rings. The sewer contractor shall field verify the elevation of the top of the manhole cone to assure that ring elevations match final street grades. The maximum height of the grade rings shall be such that the finished grade elevation of the manhole frame and cover shall not be more than twenty-one (21") inches above the top of the manhole cone.
- 15. The paving contractor shall set the grade rings and pour the concrete collars per Standard Drawing No. SD 508. The paving contractor shall contact ACHD 24 hours prior to pouring concrete collars.
- 16. The trench backfill above the pipe zone will be inspected by the ACHD or by the developer's engineer in accordance with the latest edition of the "Construction Quality Assurance Manual". Compaction tests are required on the backfill above the pipe zone, within public right-of-way. Testing shall be conducted to meet all ACHD requirements and the results shall be submitted to Boise Public Works Department and ACHD prior to final acceptance.
- 17. The Boise Public Works Department may test the compaction of the sewer pipeline bedding. Testing will be done by an independent testing laboratory. The cost of the first test will be paid by the Boise Public Works Department. If the first test fails to meet required compaction, all re-testing shall be paid by the sewer contractor. The Contractor shall contact the Boise Public Works Department and/or testing laboratory to schedule the tests prior to any pipe laying and backfilling.
- 18. The Contractor shall leave the excavation for the upstream end of all service lines open for field verification of the invert elevation by the City's inspector. The Contractor shall not backfill the ends of service lines until he has obtained approval from Boise City's inspector or made other arrangements for the verification of service line invert elevations.
- 19. Prior to Final Acceptance, after all utilities are in and prior to paving, an air test shall be conducted. The Contractor shall contact the city of Boise a minimum of 24 hours prior to testing. All manholes shall be tested in accordance with the ISPWC and Boise City's modifications.
- 20. The sewer main shall be tested for deflection in accordance with the ISPWC and Boise City's modifications. All sewer lines shall be televised with a closed circuit television camera in accordance with the ISPWC and Boise City's modifications. No standing water shall be present.