

## **GENERAL CONSTRUCTION NOTES**

1. Prior to Construction, the CONTRACTOR or his/her Authorized Representative shall convene a Pre-Construction Conference between Haltom City Personnel, the Consulting Engineer, OWNER (if applicable), Public Utility Companies and any other affected parties. Notify the City Engineer at (817) 834-9036 at least 72 hours prior to the time of the Pre-Construction conference. A second notice is required to the Engineering Department Construction Inspection 24 hours prior to the beginning of Construction.
2. The Contractor shall bring copies of the contract with the Owner and copies of the performance and payment bonds covering all work that will be considered infrastructure. A fifty percent (50%) maintenance bond, made out to the City of Haltom City, covering the cost involved with all infrastructure and covering a time period of two (2) years from the date of acceptance of the work. A check for five percent (5%) of the amount chargeable as infrastructure, as the fee for inspecting the work, made out to the City of Haltom City.
3. All material and construction shall conform to applicable Specifications of the City of Haltom City, the North Central Council of Governments "Standard Specifications for Public Works Construction" (SSPWC), latest edition and applicable City of Haltom City "Standard of Construction".
4. Prior to any Construction, the CONTRACTOR shall apply for and secure all permits from the appropriate authorities. Including a permit for construction in a flood plain, if applicable.
5. The CONTRACTOR shall verify depths and locations of all utilities prior to any construction. Any discrepancies with the Construction Plans found in the field shall be brought immediately to the attention of the Consulting Engineer and/or City Engineer and the City of Haltom City Engineering Department Construction Inspector (Project Inspector).
6. The CONTRACTOR shall give 48 hours' notice to the City of Haltom City and 24 hours to the Engineering Department Construction Inspection before beginning each phase of Construction.
7. Any existing utilities, pavement, curbs, sidewalks, structures, signs (and their poles), trees, etc., will be assumed to be in good condition unless otherwise noted on the plans and brought to the attention of the Project Inspector.
8. When Construction is being carried out within Easements, the CONTRACTOR shall confine his/her work to within the Permanent and/or Temporary Easements. Prior to Final Acceptance, the CONTRACTOR shall be responsible for removing all trash and debris within the Permanent and Temporary Easements. Clean-Up shall be to the satisfaction of the City Engineer.
9. During Construction, all Material Testing shall be coordinated with the Project Inspector. The CONTRACTOR will be responsible to comply with Specifications. Testing shall be done by an Independent Testing Laboratory, approved by the City of Haltom City. The Project Inspector shall be present during all tests. The Project Inspector shall be given a minimum of 24 hours advance notice prior to any Testing. For all "City-funded" Projects, Inspections and Tests as required by the CITY will initially be paid for by the city of Haltom City. For all Projects not funded by the City of Haltom City, Inspections and Tests as required by the CITY will be paid for by either the CONTRACTOR or

the DEVELOPER. However, in both situations, the CONTRACTOR shall furnish, at his/her expense, all necessary specimens and samples for testing. Any Test Results not meeting the Specifications shall require additional Tests and Inspections, both of which shall be paid for by the CONTRACTOR. The City Engineer and/or the Project Inspector will determine the additional Testing and Extra Inspection required to insure conformance with the City's specification.

10. Any non-City Utilities (cable, electric, gas, telephone, etc.) damaged by the CONTRACTOR will be the responsibility of the CONTRACTOR to repair. Any City Utilities (Sanitary Sewer and Water) damaged by the CONTRACTOR will be the responsibility of the CONTRACTOR to repair.
11. All areas disturbed or exposed during construction shall be re-vegetated in accordance with the Construction Plans and/or Project Specifications. Re- vegetation of all disturbed or exposed areas shall consist of sodding, seeding or hydro-mulch as approved by the Project Inspector. However, the type of re- vegetation must equal or exceed the type of vegetation present before Construction unless otherwise requested by the Property Owner in writing.
12. The City Engineer shall not be petitioned for Acceptance of the Construction Improvements until the CONTRACTOR has satisfied the Project Inspector as to completion of the project. The Project Inspector shall contact the City Engineering Department to set up the final inspection.

## **GRADING NOTES**

1. All Soil Compaction performed below proposed Streets shall be compacted to a minimum of 95% Standard Proctor Density at 1% below to 3% above the Optimum Moisture Content of the Soil Material.
2. The Project Inspector shall determine if existing trees are salvageable, otherwise the CONTRATOR will be responsible for removal, as indicated on the drawings.
3. The CONTRACTOR shall be responsible for removing any Unsuitable Material encountered during the Construction. Suitable Material shall be used for replacement. The contractor shall notify the construction inspector before any material is removed, so that the Inspector can keep account of the material removed.
4. No Grading or Removal of Excess Material shall be allowed within the FLOODPLAIN, as defined by FEMA, without having an approved Flood Plain Construction Permit.
5. All work shall be in accordance with the Haltom City Standard of Construction.
6. Materials and workmanship shall meet City of Haltom City Standard Specifications and/or NCTCOG Standard Specifications for Public Works.
7. The City Engineer shall not be petitioned for Acceptance of the Construction Improvements until the CONTRACTOR has satisfied the Project Inspector as to completion of the project. The Project Inspector shall contact the City Engineering Department to set up the final inspection.

## PAVING NOTES

1. Backfill behind the Curb shall be compacted to a minimum of 95% Standard Proctor Density to within three inches (3") of top of Curb. Material used for backfill shall be primarily granular with no rocks larger than 1-1/2 inches in the greatest dimension.
2. Depth of cover for all crossings under Pavement, including Cable TV, Electric, Gas, Telephone, Water Services, etc., shall be a minimum of thirty inches (30") below Sub-grade.
3. All Curb Returns at Intersections between Residential Streets shall have a twenty-foot (20') radius, unless otherwise approved by the City Engineer. All Curb Returns with Collector Streets shall have a twenty-five-foot (25') Radius, unless otherwise approved by the City Engineer.
4. Street Right-of-Way shall be graded at a slope of ¼ inch per foot toward the Curb unless otherwise indicated. However, in no case shall the width, behind the Curb, of Right-of-Way at ¼ inch per foot slope be less than ten feet (10') unless a specific request for an Alternate Grading Scheme is made to and Approved by the City of Haltom City.
5. A Licensed Professional Engineer shall perform a Lime Series Test to determine the amount and rate of Lime application to comply with Haltom City Specifications.
6. New Residential Subdivision Streets shall be constructed per the City of Haltom City Standard Details of Construction:
  - a. Street Surfaces shall consist of six inches (6") Of Reinforced Concrete, minimum, with #3 Bars At 18-inch Center-Center both directions
  - b. All Steel for Reinforcement shall be FY 60.
  - c. All Street Pavement will be constructed on an eight-inch (8") minimum, Lime Stabilized Sub-grade, with lime applied as directed by the Licensed Engineer, but not less than 40 pounds/square yard.
  - d. Lime shall be applied in a slurry form.
7. Contraction Joints: Transverse Contraction Joints shall be sawed joints perpendicular to the centerline and surface of the Pavement. Contraction Joints at fifteen-foot (15') intervals shall be sawed as soon as sawing can be accomplished without damage to the pavement surface.
8. Expansion Joints: Transverse Expansion Joints shall be formed perpendicular to the centerline and surface of the Pavement.
9. Barricades constructed to City of Haltom City Standard Details of Construction shall be installed on all Dead-End Streets and as necessary during Construction to maintain job and public safety.
10. Temporary Street Barricades shall remain at all points of Ingress and Egress to prevent public use until such street(s) receive Final Acceptance from the City Engineer.
11. Any existing Pavement, Curbs and/or Sidewalks damaged or removed will be replaced by the CONTRACTOR at the expense of the CONTRACTOR to the satisfaction of the Project Inspector.

12. All work shall be in accordance with the Haltom City Standard Details of Construction.
13. Materials and workmanship shall meet City of Haltom City Standard Specifications and/or NCTCOG Standard Specifications for Public Works.
14. The City Engineer shall not be petitioned for Acceptance of the Construction Improvements until the CONTRACTOR has satisfied the Project Inspector as to completion of the project. The Project Inspector shall contact the City Engineering Department to set up the final inspection.

## **STORM DRAINAGE NOTES**

1. The existing Public Records are NOT intended to be an exact Reference for the locations of existing Utilities. They are merely provided for information purposes only. It is the duty of the CONTRACTOR to ascertain whether any other Facilities (additional) other than those on the Construction Plans may be present.
2. All Reinforced Concrete Pipe shall be Class III unless otherwise noted.
3. Backfill shall be compacted to 95% Standard Proctor Density in a maximum of six inch (6") loose lifts to the bottom of the pavement. Moisture Content shall be from minus 1% to plus 3% of Optimum Moisture Content.
4. Pre-cast Inlets are NOT acceptable.
5. Inlet Structures greater than ten feet (10') in length shall have two (2) rings and covers.
6. All Storm Sewer Drainage Main(s) shall have a minimum size of 21" DIA.
7. All Storm Sewer Drainage Main(s) shall have a minimum grade of 0.25%.
8. All work shall be in accordance with the Haltom City Standard Details of Construction.
9. Materials and workmanship shall meet City of Haltom City Standard Specifications and/or NCTCOG Standard Specifications for Public Works Construction.
10. The City Engineer shall not be petitioned for Acceptance of the construction Improvements until the CONTRACTOR has satisfied the Project Inspector as to completion of the project. The Project Inspector shall contact the City Engineering Department to set up the final inspection.

## **WATER NOTES**

1. The existing Public Records are NOT intended to be an exact Reference for the locations of existing Utilities. They are merely provided for information purposes only. It is the duty of the CONTRACTOR to ascertain whether any other Facilities (additional) other than those on the Construction Plans may be present.
2. Contact the City of Haltom City Public Works Department for assistance in obtaining existing Water Main locations.
3. Pipe Material for Water Mains shall be PVC (AWWA C-900, minimum, Class 200, DR-18 for 6-inch diameter and 8-inch diameter) or Ductile Iron (AWA C-100, Class 51).
4. Depth of cover for all Water Mains out of the Pavement Area shall be 36 inches minimum. Depth of cover for all mains under pavement shall be a minimum of thirty inches (30") below the bottom of the proposed Sub-grade.
5. All Ductile Iron Fittings shall be wrapped with minimum 8 MIL Polyethylene.
6. Minimum clearance between Water Mains and Sanitary Sewer Mains is ten feet (10') measured between outside of pipe diameters.
7. The CONTRACTOR shall contact the Project Inspector 48 hours prior to connection to existing Water Mains.
8. Water Line Flushing or any activity using a large quantity of water must be scheduled with the City of Haltom City Public Works Department.
9. The CONTRACTOR, at his/her expense, shall perform Sterilization of all potable Water Mains constructed and shall provide all equipment (including test gauges), supplies (including concentrated chlorine disinfecting material), and necessary labor required for the Sterilization Procedure. The Sterilization Procedure shall be monitored by the Project Inspector. Water samples will be collected by the Project Inspector to verify each treated line has attained an initial chlorine concentration of 50 mg/l.
10. Sampling taps shall be brought up to three feet (3') above grade and shall be easily accessible for City Personnel. At the CONTRACTOR'S request and in his/her presence, samples for Bacteriological Testing will be collected by the City of Haltom City employees not less than 24 hours after the treated Water Main has been flushed of the concentrated chlorine solution and refilled with water approved by the City. The CONTRACTOR shall supply a Check or Money Order, payable to the Texas Department of Health, to cover the fee charged for testing each water sample.
11. The CONTRACTOR, at his/her expense, shall perform Quality Testing for Pressure Pipe Hydrostatic Design of all Water Mains constructed and shall provide all equipment (including pumps and gauges), supplies and labor necessary to perform the Tests. Quality and Pressure Testing shall be monitored by the Project Inspector.

12. The CONTRACTOR shall provide the Project Inspector no less than 48 hours' notice prior to performing Sterilization, Quality Testing or Pressure Testing.
13. The CONTRACTOR shall not open or close any valves unless authorized by the City of Haltom City Public Works Department.
14. All Valve Boxes and Covers shall be Cast Iron.
15. All Fire Hydrants shall be M&H (No. 129 NS), 3'-6" Barrel.
16. All Water Mains and Water Services shall be installed over Storm Sewers.
17. All Gate Valves shall be M&H Resilient Seat.
18. All work shall be in accordance with the Haltom City Standard Details of Construction.
19. Materials and workmanship shall meet City of Haltom City Standard Specifications and or NCTCOTG Standard Specifications for Public Works Construction.
20. The City Engineer shall not be petitioned for Acceptance of the Construction Improvements until the CONTRACTOR has satisfied the Project Inspector as to completion of the project. The Project Inspector shall contact the City Engineering Department to set up the final inspection.



## **TRAFFIC MARKING NOTES**

1. Any Methods, Street Markings and Signage necessary for warning motorists, warning pedestrians or diverting traffic during Construction shall conform to the Manual of Uniform Traffic Control Devices for Streets and Highways, latest edition.
2. All Pavement Markings, Markers, Paint, Traffic Buttons, Traffic Control Devices and Signage shall be installed in accordance with the Texas Department of Transportation Standard Specifications for Construction of Highways, Streets and Bridges and the Manual on Uniform Traffic Control Devices for Streets and Highways, latest edition.

## **TRENCH SAFETY NOTES**

1. The CONTRACTOR shall comply with the Laws of the State of Texas and the U.S. Occupational Safety and Health Administration Regulations. All Trenches over five feet (5') in depth in either hard and stable or soft and unstable soil shall be sloped, shored, sheeted, braced, or otherwise supported. Furthermore, all trenches less than five feet (5') in depth shall also be effectively protected when hazardous ground movement may be expected. Trench Safety Systems to be utilized for any Project shall be the responsibility of the CONTRACTOR and NOT the City of Haltom City.
2. In accordance with the U.S. Occupational Safety and Health Administration Regulations, when employees are required to be in trenches four feet (4') or more, adequate means of exit, such as a ladder or steps, must be provided and located so as to require no more than twenty-five feet (25)' of lateral travel.

## **SANITARY SEWER NOTES**

1. The existing Public Records are NOT intended to be an exact Reference for the locations of existing Utilities. They are merely provided for information purposes only. It is the duty of the CONTRACTOR to ascertain whether any other Facilities (additional utilities) other than those on the Construction Plans may be present.
2. Contact the City of Haltom City Public Works Department for assistance in obtaining existing Sanitary Sewer Main locations.
3. PVC Pipe Material for Gravity Sanitary Sewer Mains shall be as follows:

<u>Depths up to 10ft.</u>	<u>SDR-35 or PS-46</u>
<u>Depths between 10ft. – 20ft</u>	<u>SDR-26 or PS-115</u>
<u>Depths greater than 20ft.</u>	<u>C-900 or DR-18</u>

See plans for pressure pipe size.

4. Minimum clearance between Water Mains and Sanitary Sewer Mains is ten feet (10') measured between outside of pipe diameters.
5. The CONTRACTOR shall contact the Project Inspector 48 hours prior to connection to existing Sanitary Sewer Mains.
6. The CONTRACTOR, at his/her expense, shall perform Quality Testing for all Sanitary Sewer Mains installed and shall provide all equipment (including pumps and gauges), supplies and labor necessary to perform the tests. Quality Testing shall be monitored by the Project Inspector.
7. Sanitary Sewer Services shall be 4-inch diameter PVC pipe, minimum.
8. All Sanitary Sewer Manholes shall be 60" dia. Pre-cast or Cast-In-Place. Sanitary Sewer Manhole Rings and Covers shall be as shown on SS-001. No Steps shall be installed in the Manholes.
9. All work shall be in accordance with the Haltom City Standard Details of Construction.
10. Materials and workmanship shall meet City of Haltom City Standard Specifications and/or NCTCOG Standard Specifications for Public Works Construction.
11. The City Engineer shall not be petitioned for Acceptance of the Construction Improvements until the CONTRACTOR has satisfied the Project Inspector as to completion of the project. The Project Inspector shall contact the City Engineering Department to set up the final inspection.