

GN

GENERAL NOTES

GN – General Notes

Overview

The following General Notes shall apply to all construction projects, public or private. The Owner's Engineer may supplement the General Notes with project-specific notes with City approval.

General Notes for All Construction Activities

1. All construction, testing, and materials shall be in accordance with the City's current standards, details, and specifications.
2. Testing and inspection of materials shall be performed by a commercial testing laboratory approved by the City. Contractor shall furnish materials or specimens for testing, and shall furnish suitable evidence that the materials proposed to be incorporated into the work are in accordance with the specifications.
3. Contractor shall notify the City at least 48 hours prior to beginning construction.
4. Contractor is responsible for obtaining all necessary permits and approvals prior to beginning any construction. Contact ROW Inspection division of Public Works at 972-292-5820 for a permit to work within City ROW.
5. Contractors are allowed to make connections to the City water system by opening an account and renting a fire hydrant meter from the Department of Public Works. The company or individual is solely responsible for the cost of the rental equipment and its proper use within the City of Frisco water system. The company or individual is also responsible for the cost of the water used. Refer to the City of Frisco Fire Hydrant Meter Policy (<http://friscotexas.gov/DocumentCenter/View/11332>) for fees and requirements.
6. Contractor must keep available onsite, at all times, approved construction plans and copies of any required permits along with the appropriate versions of the following references: City of Frisco Engineering Standards, NCTCOG specifications, TxDOT specifications, TxDOT standard drawings.
7. All shop drawings, working drawings or other documents which require review by the City, shall be submitted by the Contractor sufficiently in advance of scheduled construction to allow no less than 14 calendar days for review and response by the City.
8. Contractor shall be responsible for all required construction surveying and staking and shall notify the City of any discrepancies prior to proceeding with any work.
9. Contractor shall be responsible for protecting all survey markers including iron rods, property corners, or survey monuments within the limits of construction and outside ROW during construction. Any survey markers disturbed during construction shall be replaced by the Contractor at no cost to the City.
10. Contractor shall provide a construction schedule and weekly progress reports.

11. Contractor is responsible for keeping streets and driveways adjacent to the project free of mud and debris at all times. Contractor shall clean up and remove all loose material resulting from construction operations. The Contractor shall take all available precautions to control dust.
12. The existence and locations of the public and franchise utilities shown on the drawings were obtained from available records and are approximate. The Contractor shall determine the depth and location of existing underground utilities prior to excavating, trenching, or drilling and shall be required to take any precautionary measures to protect all lines shown and / or any other underground utilities not of record or not shown on the plans. The Contractor shall be responsible for contacting all public agencies and franchise utilities 48 hours prior to construction. (Texas811 1-800-344-8377) The Contractor may be required expose these facilities at no cost to the City. The Contractor will be responsible for damages to utilities if the damage is caused by negligence or failure to have locates performed.
13. Contractor shall be responsible for any damage to existing facilities or adjacent properties during construction. Any removal or damage to existing facilities shall be replaced or repaired to equal or better condition by the Contractor.
14. Contractor shall not store materials, equipment or other construction items on adjacent properties or right-of-way without the prior written consent of the property owner and the City.
15. Temporary fencing shall be installed prior to the removal of existing fencing. Temporary fencing shall be removed after proposed fencing is approved by the City. All temporary and proposed fencing locations shall be subject to field revisions as directed by the City.
16. Unusable excavated material, or construction debris shall be removed and disposed of offsite at an approved disposal facility by the Contractor at his expense.
17. It is the Contractor's responsibility to maintain a neat and accurate record of construction for the City's records.

General Notes for Traffic Control

1. Contractor shall be responsible for furnishing and installing all temporary and permanent traffic control in accordance with the minimum requirements of the latest revision of the Texas Manual on Uniform Traffic Control Devices (TMUTCD) and TxDOT Barricade and Construction Standards.
2. Contractor shall not impede traffic on existing streets, driveways, alleys, or fire lanes open to the public. In the event the construction work requires the closure of an existing street, alley, or fire lane, the Contractor shall request the road closure through the City Traffic Division 972-292-5400 a minimum of 48 hours in advance of the requested closure. Closures will not be allowed prior to 9:00 a.m. or after 3:30 p.m., Monday through Friday unless otherwise approved by the City.

General Notes for Paving

1. All paving construction, testing, and materials, including concrete, reinforcement, jointing, and subgrade preparation and treatment shall be in accordance with the City's current standards, details, and specifications unless otherwise noted.
2. No earthwork, lime application, or other preparation of the subgrade for paving of streets, alleys, or fire lanes shall be initiated without authorization from the City. The City will authorize the subgrade

work in preparation for paving after utility trench backfill testing has been completed and verified to meet the City requirements.

3. Placing of Concrete Pavement:
 - A. Machine Finished: A Slip-form paving machine shall be used for all public streets and alleys unless otherwise approved by the Director of Engineering Services.
 - B. Hand Finished: Hand finished pavement is permitted for turn lanes, deceleration lanes, driveway approaches, or panel replacement of public streets or alleys.
4. Contractor is responsible for ensuring all pedestrian work meets or exceeds the current American with Disabilities Act Accessibility Guidelines (ADAAG) and the Texas Accessibility Standards (TAS). The Contractor shall remove and replace any constructed or installed items not meeting the current ADAAG and TAS requirements at no additional cost to the City.

General Notes for Traffic Signals and Street Lighting

1. All traffic signal and street lighting construction, testing, and materials shall be in accordance with the City's current standards, details, and specifications unless otherwise noted. All electrical work shall be in accordance with the most current National Electrical Code, City and TxDOT specifications and standards.
2. Contractor shall notify the Traffic Department (Tracy Nichols) at least 7 business days prior to any work, provide a construction schedule and weekly progress reports to the Traffic Department, and notify the Traffic Department at least 48 hours prior to signal turn-on.
3. Contractor shall coordinate electrical services with the City and either ONCOR or COSERV representatives (according to their respective area).
4. Contractor shall coordinate with the electric company to de-energize any overhead or underground power lines. Any cost associated with de-energizing the power line and/or any other protective measures required shall be at no cost to City.
5. The Contractor shall coordinate with the appropriate utility company and TxDOT/NTTA (if within TxDOT/NTTA ROW) prior to beginning erection of poles, luminaries and structures located near any overhead or underground utilities.
6. Proposed concrete foundation and conduit alignment shall be staked by the Contractor and approved by the City prior to installation.
7. Contractor shall contact the City Traffic Department (between 8 am – 5pm) for inspection prior to pouring any concrete foundation and digging for conduit runs at least 48 hours in advance.
8. Contractor shall have a qualified IMSA Level II or a TRF453 certified technician on the project site to place the traffic signals in operation.
9. Electrical work shall be performed by certified persons in accordance with the requirements of the contract and may be rejected as unsuitable for use due to poor workmanship. The required electrical certification course is available and is scheduled periodically by TEEX. Alternatively, the Contractor may purchase an entire course for their personnel to be held at a time and location of their choice as

negotiated through TEEX. For more information, contact: TEXAS ENGINEERING EXTENSION SERVICE (TEEX), TxDOT ELECTRICAL SYSTEM COURSE, (979) 845-6563.

10. The Contractor shall not place pedestrian crosswalk and stop bar pavement markings until signal is operational.
11. All lighting poles, fixtures, and arms which are removed shall be delivered to the City Public Works facility (11300 Research Road, Frisco, Texas 75034) by the Contractor and will remain the property of the City. Contact the Traffic Department at least 24 hours in advance of delivery.
12. During the 30-day traffic signal test period, Contractor shall respond to and diagnose all trouble calls with qualified personnel within a reasonable travel time from a Dallas address, but not more than two (2) hours maximum. Contractor shall repair any malfunctions of signal equipment supplied by Contractor on the project. A local telephone number (not subject to frequent changes) where trouble calls are to be received on a 24-hour basis shall be provided to the City by the Contractor. Appropriate repairs shall be made within 24 hours. The Contractor shall keep a record of each trouble call reported in the logbook provided by the City and shall notify the City of each trouble call. The error log in the malfunction management unit (MMU) shall not be cleared during the 30-day test period without the approval of the City.
13. Texas State Law, Article 1436C, makes it unlawful to operate equipment or machines within 10-feet of any overhead electrical lines unless danger against contact with high voltage overhead lines has been effectively guarded against pursuant to the provisions of this Article. When construction operations require working near an overhead electrical line, the Contractor shall contact the owner/operator of the overhead electrical line to make adequate arrangements and to take necessary safety precautions to ensure that all laws, electrical line owner/operator requirements and standard safety practices are met.

General Notes for Storm Drain

1. All storm drain construction, testing, and materials shall be in accordance with the City's current standards, details, and specifications unless otherwise noted.
2. Contractor shall submit a Trench Safety Plan prior to the Pre-Construction Meeting.
3. Two weeks prior to connecting to existing storm drain lines, the contractor should inspect the existing line and contact the stormwater inspector should the line need to be cleaned.
4. Contractor should inspect all storm drain outfalls no earlier than two weeks prior to final inspection and remove all silt and debris.

General Notes for Water and Wastewater

1. All water and wastewater construction, testing, and materials shall be in accordance with the City's current standards, details, and specifications unless otherwise noted.
2. Contractor shall submit a Trench Safety Plan prior to the Pre-Construction Meeting.
3. Contractor shall not operate existing valves. Contact the City's Public Works Department to request valve changes.

4. Any existing fire hydrant that is modified and has a date that exceeds 8 years in age shall be replaced and the old fire hydrant returned to the Public Works Department by the Contractor at his expense.
5. Any existing manhole with an opening smaller than 30" diameter that is modified shall have the cone section, ring, and cover replaced with a minimum of 30" diameter cone section, ring, and cover by the Contractor at his expense.

General Notes for Landscaping

1. All landscaping construction, installation, testing, and materials shall be in accordance with the City's current standards, details, and specifications unless otherwise noted.
2. Contractor shall avoid damage to existing trees. When necessary, trees and shrub trimming for construction shall be performed by certified tree worker or under the direction of a registered landscape architect or certified arborist.
3. Contractor shall locate and protect all existing landscape irrigation systems. Damage to existing irrigation systems and landscape materials shall be restored to equal or better condition at no cost to City.
4. Prior to obtaining a grading permit or scheduling a pre-construction meeting:
 - A. Where transplanting or tree removal is required, Contractor must apply for a Tree Permit. Contact Development Services Landscape Architect for Tree Permit.
 - B. All tree markings and protective fencing must be installed by the Contractor and be inspected by the City's Landscape Architect.
 - C. Coordinate with Parks Department on any trees that require being transplanted or removed from medians.
5. All trees which are to remain on site shall be protected with a 4' tall brightly colored plastic fence placed at the drip line of the trees.
6. Trees to be removed may be chipped and used for mulch on site or hauled off-site. Burning of removed trees, stumps, or foliage requires written approval by the Fire Department.
7. Plant materials shall not impede or obstruct vision or route of travel for vehicular, pedestrian, or bicycle traffic along City right-of-way, visibility easements, sidewalks or other easements.
8. No signs, wires, or other attachments other than those of a protective nature shall be attached to any tree to remain on site.
9. If topsoil is to be added to a rough grade, till 3 to 4 inches deep, then add topsoil for better binding and eliminate laying.
10. Spray existing weeds with non-selective herbicide prior to sod installation.
11. Apply pre-emerge (Ronstar) prior to sod installation.
12. The Owner's representative reserves the right to inspect sod farm to select sod to be harvested.

13. Inspection of turfgrass sod by the Owner's representative may be made at the growing site, but such inspection will not preclude rejections after delivery to the job site.
14. No more turfgrass sod shall be delivered to the job site on any day than can be placed and watered on that day.
15. The general contractor shall be responsible for having adequate water available at the site prior to and during installation of the turfgrass sod.
16. Any turfgrass sod so rejected shall be removed from the site immediately and replaced with accepted turfgrass sod.
17. Contractor shall provide optimum installation time period for sod. No installation on frozen soil. No harvest of frozen sod.
18. Planting time for medians is March to September.
 - A. Outside of this time frame the median shall be stabilized.
 - B. Escrow for the removal of temporary stabilization and installation of buffalo grass sod per spec.

General Notes for Irrigation

1. All irrigation construction, installation, testing, and materials shall be in accordance with the City's current standards, details, and specifications unless otherwise noted.
2. A permit from the Building Inspection Division is required for each irrigation system.
3. Contractor shall notify the Parks Department prior to any modifications to the existing irrigation system.
4. Contractor shall contact the Parks Department to coordinate work prior to commencing work on any existing irrigation and prior to any installation of new irrigation.
5. Contractor shall locate and protect all existing landscape irrigation systems. Damage to existing irrigation systems and landscape materials shall be restored to equal or better condition at no cost to City.
6. Contractor shall program each controller zone based on sprinkler type, plant variety, soil characteristic, slope and solar orientation as designated on the plans. The Contractor shall coordinate with the City Parks Department for approval of the controller settings.
7. Contractor shall be responsible for coordinating with franchise utility provider to provide power to each irrigation controller. Contractor shall have underground power lines installed from power source up to the controller. Contractor shall meet controller specifications for power requirements.
8. Contractor shall set a temporary controller to establish landscape. Once landscape is established, Contractor shall contact the City's Parks and Recreation Department for assistance on installation of a Motorola controller.

General Notes for Erosion Control & Stormwater

1. Erosion control devices shall be installed on all projects prior to beginning construction and shall be maintained throughout the project in a condition acceptable to the City.
2. Steel posts shall not be used to install erosion control measures within City ROW.
3. Wire reinforcement shall be used on all silt fence used for erosion control.
4. Asphalt bags shall be placed at construction entrances to prevent curb damage.
5. Geotextile fabric shall be placed on subgrade prior to stone placement for construction entrances.
6. No equipment shall be cleaned on-site, or other liquids deposited and allowed to flow overland or subterranean within the limits of the critical root zone of trees that remain on site. This includes paint, oil, solvents, asphalt, concrete, concrete equipment wash water, mortar of similar materials.

General Notes for Water Wells

1. All water well materials, construction, and testing, shall be in accordance with the City's current standards, details, and specifications unless otherwise noted.
2. Components and Materials in Contact with Water for Human Consumption shall comply with the requirements of the Safe Drinking Water Act and other applicable federal, state, and local requirements. Provide certification by manufacturer or an accredited certification organization recognized by the Authority Having Jurisdiction that components and materials comply with the maximum lead content standard in accordance with NSF/ANSI 61 and NSF/ANSI 372.
3. All required submittals shall be directed to the City of Frisco Utility Operations Superintendent.
4. Contractor shall submit copies of all permits and associated permitting information required to complete the Work. Where applicable, Contractor will obtain drilling permits from the appropriate regulatory districts and authorities.
5. Contractor shall be licensed in the State of Texas 16 Texas Administrative Code, Chapter 76, Water Well Drillers and Water Well Pump Installers. Contractor shall submit a copy of the Texas Water Well Driller's License for the Field Superintendent and copies of licenses for all other personnel working on the Project that possess a designation as a Texas Water Well Driller or Driller's Apprentice
6. Contractor shall submit a diagram showing the diameter and depth of all holes.
7. Contractor shall site the well in accordance with Title 16, Texas Administrative Code, Chapter 76.100, Technical Requirements--Locations and Standards of Completion for Wells.
8. Downhole tools and equipment that may be positioned directly above borehole or completed well shall arrive onsite free of surface deposits of friable solids; for example, mud, sand, grout, caked on cuttings and cleaned of grease, oils, and other petroleum products. Exception is provided for normal amounts of thread joint compound on drill pipe and tool joints, and normal amounts of lubricating grease on mechanical equipment is allowed.
9. Contractor shall comply with applicable permits, laws, and regulations in disposing of drilling fluids, drill cuttings, and water generated during grouting. The permits, laws and regulations shall include, but not be limited to, the following:

- A. The water quality effluent limitations specified in the project's NPDES Permit.
 - B. Federal, state, and local laws, regulations, and ordinances related to disposing of materials generated in constructing wells.
10. Do not empty, spill, splash, or slosh containerized drilling mud and fluids onto ground surface while moving containers, pipes and equipment.
 11. Volatile wastes and other potential sources of pollution shall be properly stored in covered metal containers at least 150 feet from the well.
 12. Wastes shall not be buried or burned on the Site or disposed of into storm drains, sanitary sewers, streams, or waterways. All wastes shall be removed from the Site and disposed of in a manner complying with local ordinances and antipollution laws. Waste from spilled oils and material from maintenance activities are specifically prohibited from being disposed of onsite.
 13. Factory Tests are required for motors greater than 75 horsepower in accordance with IEEE 112 for polyphase motors.
 14. Contractor shall submit copies of all required data and as-built construction records required to be submitted to regulatory districts and authorities for well registration.