

# City of Colleyville General Notes

## PUBLIC WORKS DEPARTMENT

### GENERAL NOTES

1. All construction shall be in strict accordance with the standards of the City of Colleyville and governed by the City of Colleyville Infrastructure Construction Provisions and Details (July 2014), Texas Department of Transportation Texas Standard Specification 1993 Edition, and the North Central Texas Council of Government's Standard Specifications for Public Works Construction latest edition.
2. A copy of the Colleyville Infrastructure Construction Provisions and Details (July 2014) can be obtained from the following city website:  
[www.colleyville.com/publicworks/engineeringdivision/ConstructionStandardsandDetails](http://www.colleyville.com/publicworks/engineeringdivision/ConstructionStandardsandDetails)
3. All materials and workmanship shall conform to the City of Colleyville Standards where they differ from NCTCOG standards.
4. Work performed in the state highway right-of-way. An application and appropriate plans must be submitted directly to TxDOT for review.
5. A permit is required to cut a city street or work within the right-of-way. The permit is issued by the Public Works Department. Contact number 817-503-1366.
6. The location of underground facilities indicated on the plans is taken from public records. It is the contractor's responsibility to make arrangements with the owners of such underground facilities prior to working in the area to confirm their exact location and to determine whether any additional facilities other than those shown on the plans may be present. The contractor shall preserve and protect all underground facilities. If existing underground utilities are damaged, the contractor will be responsible for the cost of repairing the utility.

UNDERGROUND FACILITY OWNER    811 (214) 869-8352

AT&T	(214) 745-2964
AT&T Texas (call DIGTESS)	(800) 344-8377
Atmos Energy	(817) 359-1313
Charter Communications	(817) 822-8745
City of Colleyville	(817) 748-8082
DIGTESS (Line Locates)	(800) 344-8377
8Level (3) Communications	(877) 366-8344
Oncor Electric Delivery	(817) 215-6688
One Source Communications	(817) 692-6042
TRI County Electric	(817) 431-1541
Verizon Engineering	(972) 578-3354

7. Where existing utilities or service lines are cut, broken or damaged, the Contractor shall replace or repair the utilities or service lines with the same type of original material and construction, or better, unless otherwise shown or noted on the plans, at his own cost and expense. The Contractor shall immediately notify the Inspector at once of any conflicts in grades and

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alignment.

8. All excavations, trenching and shoring operations shall comply with the requirements of the U.S. Department of Labor, OSHA, "Construction Safety and Health Regulations.", Vol. 29, Subpart P. pg. 128 - 137, and any amendments thereto.
9. This item shall govern the control measures necessary to prevent and control soil erosion, sedimentation, and water pollution which may degrade receiving waters including rivers, streams, lakes, reservoirs, ground water, and wetlands. The control measures contained herein shall be installed and maintained throughout the construction contract and coordinated with any permanent or temporary pollution control features specified elsewhere on the plans and in the specifications to assure effective and continuous water pollution control throughout the construction and post construction periods. These control measures shall not be used as a substitute for the permanent pollution control measures unless otherwise directed by the City in writing. The controls may include silt fences, straw bale dikes, rock berms, diversion dikes, interceptor swales, sediment traps, and basins, pipe slope drains, inlet protection, stabilized construction entrances, seeding, sodding, mulching, soil retention blankets or other structural or non-structural storm water pollution control.
10. The Contractor shall restore all areas disturbed by construction to original condition or better. Restored areas include, but are not limited to trench backfill, side slopes, sprinkler systems, fences, culvert pipes, drainage ditches, driveways, private yards and roadways.
11. Any changes needed after construction plans have been released, shall be approved by the City Engineer. These changes must be received in writing from the design engineer. The Director of Public Works shall approve any deviations from state regulations.
12. Record Drawings: The Contractor shall keep one (1) record copy of all specifications, drawings, addenda, modifications, and shop drawings at the site in good order and annotated to show all changes made during the construction process. These drawings shall be available to the Engineer and the City and shall be delivered to the City upon completion of the project and prior to the release of final payment and/or initial acceptance letter.
13. The contractor shall provide "red lined" marked prints to the Engineer prior to final Inspection indicating all construction which deviated from the plans or was constructed in addition to that indicated on the plans.
14. The contractor must field verify existing service locations prior to installing new services. When installing a new water line, all existing services must be connected to the new line or as directed by the City Engineer.
15. The contractor shall keep records for Record Drawings and shall submit markups to the city inspector prior to scheduling a final walkthrough inspection.
16. Prior to construction, a pre-construction meeting shall be held with representatives from the general contractor, sub-contractors, the design Engineer, and the City of Colleyville staff.
17. All construction must adhere to the City of Colleyville Tree Preservation Ordinance

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## GENERAL NOTES - WATER IMPROVEMENTS

1. The contractor must field verify existing service locations prior to installing new services.
2. When installing a new water line, all existing services must be connected to the new line.
3. All water meters up to 2" in diameter shall be installed by City Personnel. All water meters exceeding 2" diameter shall be inspected and accepted by City a of Colleyville representative.
4. Fire hydrants shall be located three to eight feet behind the back of curb as shown in the details. This will also include splash pads which are considered subsidiary to the fire hydrant placement.
5. All water lines 4" thru 12" shall be Class 150(DR18) a n d conform to AWWA C-900 DR-18 minimum, with NSF seal, pressure tested and disinfected in accordance with NCTCOG STD. SPECS. (see C1.7)Water mains to have a minimum of 42" cover to the top of pipe.
6. Service line connectors, under 2" shall be Class K soft copper and connected with compression fittings. All taps and services shall be constructed as 1" or larger. 3/4" taps and service lines are prohibited
7. Water services shall be backfilled in granular sand as per details.
8. Water services should be located at the property line. Each location is to be stamped on the curb with 2" high letter "W".
9. Water meter boxes will be installed after paving activities have been completed.
10. Curb stops should be tested for leakage and full flow when system is pressure tested.
11. All fire hydrant assemblies to be equipped with a 6" gate valve and box shall be installed as per the details. Hydrants will be shall be painted Kemluster Red prior to acceptance by the City. The contractor shall put 2 coats of paint or until approved by the City.
12. Any water valves located within pavement areas shall be adjusted to final grade by the paving Contractor. The paving Contractor shall adjust water valve assembly to final grade and place a monolithically. (concrete pad in HMAC) No block outs will be allowed.
13. Fire hydrants shall be equipped with 4-1/2" Storz adapter for connection with 5" hose.
14. When a water line is bored, the casing shall be capped and valves added on either side.
15. All fittings and bends shall have Mega Lug retainer glands in addition to standard thrust blocking as required by Standard Details.
16. For valves with operating nuts 6' below ground shall be installed with a 1and1/4" solid stem extension (Detail W-1).

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## **GENERAL NOTES - SANITARY SEWER IMPROVEMENTS**

1. Sanitary sewer PVC pipe shall be SDR 35 if depth of line is 10' or less and SDR 26 if depth of line is greater than 10'.
2. Pipe shall have Cl. B (S-8) embedment, or better. Backfill shall be select material compacted to 95% standard proctor density.
3. After completion of all testing (i.e. mandrel & air) Contractor shall perform a Television inspection and provide videotape to PW Inspections.
4. A 2" high letter "S" shall be stamped on the curb to mark the location of the sewer services. The service should be located in the center of each lot.
5. Contractor to place a 3/4" plywood false bottom in all sanitary sewer manholes before paving Contractor begins work.
6. Rim elevations of the proposed sanitary sewer manholes in streets are to be constructed by utility contractor and adjusted by paving Contractor to finished grade at time of paving. Block outs are not allowed.
7. Manholes 10' in depth or less shall be 4ft in diameter. 10 ft. plus or drop manholes shall be 5ft. in diameter
8. All Drop Manholes shall be inside drops as per detail S-4.
9. All trenches shall be compaction tested at the rate of one test per 300 L.F. of trench per lift. Lifts shall be no greater than 12" loose. Tests shall be staggered so that tests of adjacent lifts are not directly over the previous lift. If the distance between manholes exceeds 300 L.F., a minimum of 2 tests per lift shall be taken or as directed by the City. The paving contractor shall not begin work until the City of Colleyville has approved all trench work.
10. All manholes shall be vacuumed tested.
11. Any service tie-in to an existing manhole must be cored.
12. Clean-outs to be provided on all services and located at the property/ROW line.

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## GENERAL NOTES - PAVING IMPROVEMENTS

1. All fill shall be compacted to a density of at least ninety-five (95%) percent standard proctor as per ASTM D 698 at or above optimum moisture content. Lifts shall be as specified per the soils lab recommendation and as approved by the City. All fill shall be tested as installed and certified by an approved soils laboratory
2. All streets, unless alternative design is submitted by lab, designed by the triaxial method as specified in Texas Highway Department requirements and approved by the City of Colleyville, and shall be constructed on a minimum of (8") inches of stabilized subgrade (lime and/or cement) as soil tests indicate. Compaction shall be ninety-five (95%) percent density as per AASHTO designation TISO. Density tests shall be taken every 1,000 square yards or less, as required by City Inspector.

**TABLE 1 – RECOMMENDED % AND QUANTITIES OF LIME/CEMENT**

Plasticity Index (PI)	Assumed Unit Dry Weight (pcf)	% Lime	Quantity of Lime (lbs./sy)	% Cement	Quantity of Cement (lbs/sy)
0 – 15	120	0	0	5	36*
16 – 25	116	3	21	5	35
26 – 35	112	4	27	5	34
36 – 45	100	5	30	6	36

3. The sub-grade shall be proof rolled and observed by the construction inspector prior to and after sub-grade stabilization.
4. Curb and gutter shall consist of steel reinforced concrete and shall be six (6") inches high and thirty (30") inches wide.
5. The parkways and streets shall be rough cut to a plus or minus one-tenth (0.1') feet of their respective final grades.
6. Construction of wheel chair ramps will be the responsibility of the paving Contractor at the time of public Improvements.
7. Individual water and sewer services and water valves shall have a suitable marker ("W") for water, "S" for sanitary sewer and "V" for valves) stamped on the face of the curb, or if no curb is constructed, on the top of the pavement. The marks shall be a minimum of two (2") inches in height and width. Water services shall be located 10' upstream from the sanitary sewer service, with the sewer service at the center of the front of the lot.
8. The Contractor shall proceed with paving no more than seventy-two (72) hours after density / moisture tests have been taken and passed by the City's testing firm. In the event paving operations have not commenced within the seventy-two-(72) hour limit, a retest shall be required at the Contractor's expense.
9. Manhole rim elevations, clean-outs, valve boxes, fire hydrants, etc. shall be adjusted to finished grade by the paving contractor at the time of paving. No block outs allowed
10. The paving contractor shall be responsible for all "Permanent Survey Reference Monuments" as described in the subdivision ordinance including concrete monuments at all boundary corners. The paving

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contractor shall install a blue reflector in the street centerline at the location on each fire hydrant.

11. HMAC Paving- Binder shall have no more than 15% RAP, all Surface mix shall be virgin. No RAS is allowed. Mix design shall be submitted to City prior for approval.
12. Concrete Paving- No manufactured sand is allowed.
13. All re-enforcing still shall be domestic and meet the TxDot steel mill guide lines.

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## **GENERAL NOTES - STORM DRAINAGE IMPROVEMENTS**

1. All storm sewer and culvert pipe and fittings shall be ASTM C76, Class III, IV, V reinforced concrete pipe (RCP), installed with a bell and a spigot and jointed with ram neck.
2. Backfill shall be  $\frac{3}{4}$  to 1" rock, 6" minimum for the bedding (more if ground water is Encountered), and rock placed up to the center or spring line of the pipe. Trench shall be excavated wide enough to get a mechanical tamper beside the pipe to achieve 95% density.
3. After completion of all storm sewer installation, the contractor shall perform a television inspection and provide a videotape to the Public Works Department Inspections.
4. Install a benchmark on a drainage structure within or near the site. A letter including the location and elevation of the benchmark must be submitted to Public Works prior to the final acceptance of the project as well as in the GIS Assets form.
5. All storm sewer pipes larger than 36" must be wiped with non-shrink grout after inspection and approval.
6. No pre-cast inlets are allowed.