PAVING NOTES

1. CONCRETE FOR ALL STREETS AND PRIVATE DEVELOPMENTS SHALL BE IN ACCORDANCE WITH NCTCOG, FOURTH EDITION OR AS AMENDED CLASS "C" CONCRETE (SIX SACK 3,600 P.S.I. MACHINE, SEVEN SACK 4500 PSI HAND POUR, COMPRESSIVE @ 28 DAYS). ITEM 303.3.4.2(a) AND ITEM 303.5.6.2 HAND.

2. REINFORCING STEEL SHALL BE DEFORMED BARS NO. 3 ON 18 INCH CENTERS OR NO. 4 BARS ON 24 INCH CENTERS. REINFORCING SHALL BE IN BOTH DIRECTIONS ON CENTER. REINFORCING STEEL SHALL BE IN ACCORDANCE WITH ASTM 615, 616 AND 617.
3. ALL REINFORCING STEEL SHALL BE TIED (100%). REINFORCING STEEL SHALL BE SET ON PLASTIC CHAIRS. BAR LAPS SHALL BE MINIMUM 30 DIAMETERS. NO STEEL SHALL BE PLACED UNTIL THE SUBGRADE HAS BEEN TESTED AND PASSED.

4. EXPANSION JOINTS SHALL BE SPACED EVERY 600 FEET, AT ALL INTERSECTIONS AND CHANGES IN DIRECTION OF PAVING. ALLEYS SHALL HAVE A MINIMUM OF TWO EXPANSION JOINTS.

5. SAWED TRANSVERSE DUMMY JOINTS SHALL BE SPACED EVERY 15 FEET OR 1.25 TIMES LONGITUDINAL JOINT SPACING WHICHEVER IS LESS. SAWING SHALL OCCUR WITHIN 5 TO 12 HOURS AFTER THE POUR INCLUDING SEALING.

6. SUBGRADE UNDER PAVEMENTS SHALL BE A MINIMUM OF 7 INCHES OF LIME TREATED SUBGRADE. ONLY HYDRATED LIME SHALL BE UTILIZED. OPTIMUM LIME SHALL BE APPLIED. OPTIMUM LIME CONTENT SHALL BE DETERMINED DURING THE EXCAVATION BY THE USE OF A LIME SERIES TEST. LIME SERIES TEST SHALL BE TAKEN ALONG THE EXCAVATION AT ALL CHANGES IN SOIL AND A MINIMUM OF 300 FEET. LIME SERIES SHALL BE COMPLETED BY AN INDEPENDENT LABORATORY APPROVED BY THE CITY.
7. LIME TREATED SUBGRADE SHALL BE COMPACTED TO A DENSITY OF NOT LESS THAN 95 PERCENT OF THE MAXIMUM DENSITY AS DETERMINED BY ASTM D 698. MOISTURE CONTENT SHALL BE WITHIN −2 TO +4 OF OPTIMUM. DENSITY TEST RESULTS SHALL BE COMPLETED BY AN INDEPENDENT LABORATORY APPROVED BY THE CITY. ALL RESULTS SHALL BE PROVIDED TO THE CITY. SUBGRADE TESTING SHALL BE IN ACCORDANCE WITH NCTCOG ITEM 303.5.1 SUBGRADE.

8. LIME TRIMMINGS ARE NOT ACCEPTABLE FOR ANY USE.

9. ALL FILL SHALL BE COMPACTED BY MECHANICAL METHODS. MAXIMUM LOOSE LIFT FOR COMPACTION SHALL BE 8 INCHES. ALL LIFTS SHALL BE TESTED FOR DENSITY BY AN INDEPENDENT LABORATORY APPROVED BY THE CITY. DENSITY REQUIREMENT SHALL BE AS SHOWN ON THE PLANS FOR THE TYPE OF MATERIAL CALLED FOR IN THE PLANS.

10. ALL DISTURBED AREAS OF ROADWAY WORK SHALL HAVE GRASS ESTABLISHED IMMEDIATELY. GRASS SHALL MEET THE REQUIREMENTS OF ITEM 202, LANDSCAPING, OF NCTCOG SPECIFICATIONS, FOURTH EDITION OR AS AMENDED.

11. ALL AREAS TO BE EXCAVATED OR FILLED SHALL HAVE EROSION CONTROL PLACED PRIOR TO COMMENCING EARTHWORK. EROSION CONTROL DEVICES SHALL BE MAINTAINED THROUGHOUT THE PROJECT IN ACCORDANCE WITH NCTCOG ITEM 201, FOURTH EDITION OR AS AMENDED.

12. ALL SIDEWALKS SHALL INCLUDE BARRIER FREE RAMPS AT INTERSECTING STREETS, ALLEYS, DRIVEWAYS, ETC. BARRIER FREE RAMPS SHALL MEET CURRENT ADA REQUIREMENTS, BE INSTALLED BY THE DEVELOPER AND BE APPROVED BY THE TEXAS LICENSING BOARD.

13. SIDEWALKS SHALL BE DOWELED INTO PAVEMENT WHERE IT ABUTS DRIVEWAYS. EXPANSION JOINT MATERIAL SHALL BE USED AT THESE LOCATIONS.

14. NO VEHICLES SHALL BE PERMITTED ON CONCRETE PAVEMENT WITHOUT APPROVAL FROM THE CITY. THE CITY WILL MAKE DETERMINATION BASED ON CONCRETE BREAK REPORT.

15. CONCRETE MIX DESIGN SHALL BE SUBMITTED FOR REVIEW PRIOR TO PRECONSTRUCTION MEETING. REVISE THE FIRST PARAGRAPH OF NCTCOG SPEC. 303.2.1.3 COARSE AGGREGATE TO READ "CRUSHED STONE SHALL CONSTITUTE 100% OF THE COARSE AGGREGATE.

16. ALL PAVING FOR PARKING SHALL BE MIN. 5" THICK 3,600 P.S.I. CONCRETE SUBJECT TO CITY ENGINEER APPROVAL.

17. ALL AREAS NOT UNDER PAVING, INCLUDING ALL FRANCHISE UTILITY EASEMENTS, SHALL BE COMPACTED TO A DENSITY OF NOT LESS THAN 92 PERCENT OF THE MAXIMUM DENSITY.
18. CONCRETE PLANTS SHALL CONFORM TO TXDOT ITEMS 520 AND 522.

19. ANY CURB AND/OR STREET SECTION REMOVED FOR THE CONSTRUCTION OF A PRIVATE DRIVEWAY SHALL NOT BE REMOVED PRIOR TO 7 DAYS OF CONSTRUCTION OF THE DRIVEWAY. IF THE DRIVEWAY IS NOT CONSTRUCTED WITHIN THIS TIME FRAME AND EXCAVATION HAS BEEN MADE, EXCAVATION SHALL BE REPLACED UNTIL SUCH TIME CONSTRUCTION COMMENCES.

LINED CHANNELS

1. CONSTRUCTION JOINT SHOWN IN DETAILS FOR CONVENIENCE ONLY, MONOLITHIC CONSTRUCTION MAY BE USED.

2. ALL VISIBLE SURFACES SHALL BE A TROWEL FINISH.

3. ALL REINFORCING STEEL SHALL BE 3/8" DIAMETER AND SPACED 12" CENTER TO CENTER BOTH WAYS UNLESS OTHERWISE SPECIFIED.

4. IF WOOD FORMS ARE USED WITH CONSTRUCTION JOINT, THEY SHALL BE TWO, 2"x4", AND SHALL NOT BE REMOVED UNTIL CONCRETE ON SLOPES IS READY TO BE PLACE.

5. ALL CONCRETE IN LINED CHANNEL SHALL BE NCTCOG CLASS "A" (MINIMUM 3,000 P.S.I.) CONCRETE.

6. FLAT BOTTOM TO BE CONSTRUCTED WHEN CHANNEL WIDTH IS LESS THAN 12 FOOT.
7. 3/4" CHAMFER ON ALL CONCRETE CORNERS.

STORM SEWER

1. THE FLOOR OF THE EXCAVATION FOR INLET BOX MUST PROVIDE A FIRM, LEVEL BED FOR THE BASE SECTION TO REST UPON.

2. A MINIMUM OF 6 INCHES OF 1" DIAMETER (MAXIMUM) ROCK OR GRAVEL SHALL BE USED TO PREPARE THE BEDDING TO FINAL GRADE OR IN LIEU OF THIS, AT LEAST 6 INCHES OF 2−SACK CEMENT STABILIZED SAND SHALL BE USED TO PREPARE THE BEDDING TO GRADE. CEMENT STABILIZED−SAND SHALL BE ALLOWED TO SET BY KEEPING HOLE PUMPED DRY.

3. AFTER PIPE HAS BEEN LAID ON PROPER BEDDING, BACKFILLING TO COMMENCE WITH 8" MAXIMUM LOOSE LIFTS MECHANICALLY COMPACTED TO 95% STANDARD PROCTOR UNDER ROADWAY OR 12" MAXIMUM LOOSE LIFT BEHIND CURB. MAXIMUM SIZE ROCK IN BACKFILL SHALL NOT EXCEED 4 INCHES IN DIAMETER.

4. PRECAST INLETS MUST BE APPROVED BY THE CITY.

5. CONCRETE TO BE MINIMUM 4,200 P.S.I.

6. LOCKING DEVICE IS REQUIRED ON ALL STORM SEWER LIDS.

7. "NO DUMPING" WARNING PLAQUE TO BE INSTALLED ON ALL STANDARD AND RECESSED INLETS.

8. CONCRETE CAST−IN−PLACE INLETS SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4,200 P.S.I. @ 28 DAYS.

9. DELETED

10. EXISTING STORM SEWER PIPE AND/ OR LATERALS SHALL BE LOCATED PRIOR TO SETTING OF CONSTRUCTING INLET BOXES. IF ADJUSTMENT IN GRADE OF LATERAL IS REQUIRED, A REVISED DESIGN BY THE ENGINEER OF RECORD SHALL BE SUBMITTED TO THE CITY FOR APPROVAL.

11. REINFORCED CONCRETE PIPE CLASS III IS APPROVED WITHIN THE CITY.
12.COLOR TV INSPECTION SHALL BE COMPLETED ON THE STORM SEWER IN THE PRESENCE OF CITY REPRESENTATIVE AND THE ORIGINAL VHS FORMATTED TAPE SHALL BE GIVEN TO THE CITY AT THE COMPLETION OF THE INSPECTION.

SANITARY SEWER

1. ALL SEWER LINES CROSSING POTABLE WATERLINES SHALL BE AS SHOWN IN THE PLANS AND MEET TCEQ REQUIREMENTS.
2. PIPES 8 INCHES THROUGH 15 INCHES SHALL BE IN ACCORDANCE WITH ASTM D3034 WITH A MINIMUM SDR OF 35 OR ASTM D3350 AND DE 345434 C.
3. PIPES LARGER THAN 12 INCHES THROUGH 48 INCHES SHALL BE IN ACCORDANCE WITH ASTM STANDARDS F679, F794, F949 AND D3350/ DE 345434 C.
4. MANHOLES SHALL BE PRECAST. ALL MANHOLES SHALL BE WATER TIGHT. PRECAST MANHOLES SHALL HAVE JOINTS SEALED. ALL RING AND COVERS SHALL INCLUDE AN INTERNAL CHIMNEY SEAL.
5. ALL PIPE OPENINGS IN MANHOLES SHALL INCLUDE COUPLINGS WITH "O" RING RUBBER GASKETS.
6. STUBOUTS OUT OF MANHOLES SHALL BE FITTED WITH A STOPPER AND CAP. STUBOUTS SHALL BE A MINIMUM OF 5 FEET FROM MANHOLE AND BE SUPPORTED BY A CONCRETE CRADLE.
7. ALL DROP MANHOLES SHALL BE OF THE EXTERNAL TYPE.
8. MANHOLES SHALL BE VENTED IN ACCORDANCE WITH TCEQ REQUIREMENTS.
9. ALL SANITARY SEWER PIPE SHALL BE TESTED (NCTCOG ITEM 507.5) AFTER CONSTRUCTION. TESTING SHALL INCLUDE PRESSURE TESTING, MANDREL TEST (TCEQ REQUIRED) AND COLOR TV INSPECTION. COLOR TV INSPECTION SHALL BE COMPLETED IN PRESENCE OF CITY REPRESENTATIVE AND THE ORIGINAL VHS FORMATTED TAPE SHALL BE GIVEN TO THE CITY AT THE COMPLETION OF THE INSPECTION.
10. MANHOLES SHALL BE VACUUM TESTED IN THE PRESENCE OF THE CITY REPRESENTATIVE.
11. NO END−OF−LINE CLEANOUTS WILL BE ALLOWED. TERMINATE SEWER LINES WITH A MANHOLE.

ILLUMINATION

1. STREET LIGHT FOUNDATIONS SHALL BE CONSTRUCTED IN ACCORDANCE WITH TXU ELECTRIC DETAIL AND NOTES FOR 25' OR 30' MOUNTING HEIGHT ROUND STEEL POLE.
2. PROVIDE SQUARE CONCRETE MOW STRIP 18" FROM OUTSIDE OF POLE TO CORNER USING 3,000 P.S.I. CONCRETE WITH #3 BARS @ 18" AND ½" EXPANSION JOINT.
3. SUBDIVISION STREET LIGHTING TO CONFORM TO THE ZONING ORDINANCE. "DECORATIVE STREET LIGHTING SHALL BE PROVIDED ALONG RESIDENTIAL STREETS THROUGHOUT ALL RESIDENTIAL DEVELOPMENTS, PROVIDING LOW ILLUMINATION WITH SOLAR CONTROLS ON DECORATIVE POLES WITH SPACING RANGING FROM 250 FEET TO 350 FEET BETWEEN LIGHTS PLACED ON ALTERNATING SIDES OF THE STREET. A STREET LIGHTING PLAN MUST BE SUMITTED TO THE CITY ENGINEER FOR APPROVAL. THE CITY ENGINEER IS AUTHORIZED TO ALTER THE DISTANCE REQUIREMENT IF NEEDED IN AN EFFORT TO ACHIEVE THE BEST LIGHTING ARRANGEMENT POSSIBLE."

DETAILS

SPECIAL DETAILS OR MODIFICATIONS TO THESE STANDARD DETAILS TO BE UTILIZED ON ANY GIVEN PROJECT SHALL BE SUBMITTED TO THE CITY FOR APPROVAL FOR USE.

STREET SIGN SPECIFICATIONS:

STREET NAME SIGNS FOR ALL INTERSECTIONS BY THE CONSTRUCTION OF A SUBDIVISION SHALL BE FURNISHED AND INSTALLED BY THE DEVELOPER. THE INSTALLATION OF THE STREET SIGNS MUST BE PRIOR TO THE FINAL ACCEPTANCE OF THE SUBDIVISION. THE LEGEND SHALL CONTAIN THE NAME OF THE STREET, ANY SUFFIX AS DESIGNATED ON THE PLAT, AND THE BLOCK NUMBER AS ASSIGNED BY THE CITY. THE SIGN FACE SHALL BE HIP PRISMATIC WHITE W/BLUE EC FILM WITH CITY LOGO. THE SIGN PLATE SHALL BE 9 INCHES TALL AND 0.080 INCHES THICK FLAT BLADE ALUMINUM DRILLED. THE STREET NAME SHALL BE 6 INCH UPPER CASE LETTERS. THE SUFFIX AND BLOCK LETTERS SHALL BE 3 INCHES. ALL LETTERS SHALL BE WHITE. THE SIGNS SHALL BE MOUNTED ON A 2 INCH BY 12 FOOT SQUARE POST WITH A 2.25 INCH BY 36 INCH SQUARE GROUND ANCHOR AND 2.5 INCH BY 18 INCH SLEEVE. THE ANCHOR POST SHALL BE DRIVEN INTO THE GROUND AT A DEPTH OF 30 INCHES. THE STREET NAME SHALL BE MOUNTED 10 FEET FROM THE TOP OF THE CURB MEASURED TO THE BOTTOM OF THE LOWEST SIGN. SIGNS SHALL BE MOUNTED ON SQUARE POSTS USING DRIVE RIVETS, WASHER, SPACE AND CHERRY MATE RIVETS TO ATTACH ENDS OF SIGN TOGETHER.

WATER

1. ALL WATER LINE CROSSINGS OF SANITARY SEWER LINES SHALL BE AS SHOWN IN THE PLANS AND MEET TCEQ REQUIREMENTS.
2. PIPES 12 INCHES IN DIAMETER AND SMALLER SHALL BE POLYVINYL CHLORIDE (P.V.C.) MEETING THE REQUIREMENTS OF AWWA C900 DR 18 OR DUCTILE IRON PIPE (D.I.P.) MEETING THE REQUIREMENTS OF AWWA C 151 CLASS 50 PIPE. ALL D.I.P. SHALL BE WRAPPED WITH A POLYETHYLENE LINER.
3. FOR PIPES LARGER THAN 12 INCHES IN DIAMETER, THE PIPE SHALL BE REINFORCED CONCRETE CYLINDER PIPE (AWWA C301 OR AWWA C303), DUCTILE IRON PIPE (AWWA C151 CLASS 50) OR POLYVINYL CHLORIDE PIPE UP TO 18 INCHES MEETING THE REQUIREMENTS OF AWWA C905 − 235 P.S.I. RATED PIPE.
4. ALL VALVES ON PIPES 12 INCHES AND SMALLER SHALL BE RESILIENT SEALED WEDGE VALVES (AWWA C509).
5. ALL VALVES ON PIPES LARGER THAN 12 INCHES BUT SMALLER THAN 30 INCHES SHALL BE BUTTERFLY VALVES (AWWA C504) OR WEDGE VALVES (AWWA C509).
6. ALL VALVES ON PIPES 30 INCHES AND LARGER SHALL BE BUTTERFLY VALVES (AWWA C504).
7. EMBEDMENT SHALL BE AS SHOWN IN THE PLANS. BACKFILL WITHIN THE LIMITS OF EXISTING AND PROPOSED PAVEMENT SHALL BE COMPACTED TO 95% STANDARD PROCTOR. OUTSIDE PAVEMENT (EXISTING OR PROPOSED) SHALL BE COMPACTED TO MINIMUM OF 92% STANDARD PROCTOR. ALL COMPACTION SHALL BE BY MECHANICAL METHODS.
8. WATER LINES SHALL BE PRESSURE TESTED IN ACCORDANCE WITH NCTCOG ITEM 506. ALL WATER LINES SHALL BE SWABBED IN THE PRESENCE OF THE INSPECTOR PRIOR TO BACKFILLING.
9. ALL HORIZONTAL AND VERTICAL BENDS SHALL BE BLOCKED.
10. ALL FITTINGS SHALL INCLUDE MEGALUG CONNECTORS.
11. ALL FIRE HYDRANTS SHALL BE INSTALLED WITH A 24" x 24" SQUARE REINFORCED CONCRETE PAD.
12. ALL WATER LINES SHALL BE SWABBED IN THE PRESENCE OF THE INSPECTOR PRIOR TO BACKFULL.

SCREENING WALLS

1. CONCRETE − MINIMUM COMPRESSIVE STRENGTH OF 3,000 P.S.I. @ 28 DAYS.

2. REINFORCEMENT − ASTM A−36.

3. MASONRY − COMPRESSIVE STRENGTH SHALL BE PRESCRIBED IN ITEM 2.3.6 SPECIAL PROVISIONS.

4. WIND LOAD FOR DESIGN − 20 P.S.F.

5. PIER BEARING STRESSES − SEE BRICK SCREENING WALL NOTES.

6. MORTAR − TYPE "S".

7. PROVIDE CONTROL JOINTS AT 50 FEET.

8. PROVIDE EXPANSION JOINTS AT 200 FEET CENTER MAXIMUM.

9. PROVIDE PIER WITH MINIMUM 9 FOOT W/ 24 INCH DIAMETER BELL IN CLAY OR OTHER MATERIAL EXCEPT BLUE SHALE, 6 FOOT MINIMUM WITH 3 FOOT MINIMUM INTO BLUE SHALE.

10. ALL EXPOSED CONCRETE SHALL BE CLASS 2 RUBBED FINISHED SURFACE.

11. SIDEWALKS ADJACENT TO WALLS MUST BE 5−FOOT MINIMUM WIDTH FROM ALL PORTIONS OF THE WALL (INCLUDING PILASTERS, COLUMNS, ETC.).

12. MAXIMUM PILASTER SPACING 40 FEET.

13. WALLS SHALL NOT BE PLACED IN THE VISIBILITY EASEMENT OR STREET RIGHT OF WAY.

14. THE WALL SHALL BE A MINIMUM OF EIGHT FEET IN HEIGHT AS MEASURED FROM THE NEAREST ALLEY EDGE OR SIDEWALK GRADE, WHICHEVER IS THE HIGHER. THE COLOR OF THE WALL SHALL BE LIMITED TO EARTH−TONE COLORS, EXCLUDING GRAY, GREEN AND WHITE. THE COLOR OF THE WALL SHALL BE UNIFORM ON EACH SIDE OF A THOROUGHFARE FOR THE ENTIRE LENGTH BETWEEN INTERSECTING THOROUGHFARES, UNLESS OTHERWISE APPROVED BY THE CITY'S PUBLIC WORKS DEPARTMENT. THE FINISH OF THE WALL SHALL BE CONSISTENT ON ALL SURFACES.

15. IF WROUGHT IRON FENCING IS TO BE UTILIZED ON REQUIRED SCREENING, ALL WROUGHT IRON MUST BE SOLID STOCK, NO TUBULAR STEEL WILL BE ALLOWED.

STATE OF TEXAS
JOSEPH E. HELMBERGER
66040
REGISTERED PROFESSIONAL ENGINEER
02-28-07

NO.	REVISION	BY	DATE
4	ADD PAVING NOTE 19	JCH	9/12/07
3	DELETE STORM SEWER PARAGRAPH NO. 9	JCH	5/10/07
2	ADD STREET SIGN SPECIFICATIONS & ILLUMINATION REQUIREMENTS	JCH	1/5/07
1	REVISE PAVING NOTES NO. 1 & 5	JCH	5/16/06

CITY OF WYLIE, TEXAS

STANDARD CONSTRUCTION DETAILS

GENERAL NOTES

DATE: APRIL, 2005

SHEET
STD−00_R