- CONTRACTOR SHALL SUPPORT UTILITIES WHERE CROSSING WITH PROPOSED STORM SEWERS, WATER LINES AND STORM SEWERS. METHOD OF SUPPORT SHALL BE PROVIDED TO THE OWNER 24 HOURS PRIOR TO CROSSING.
- 4. THE LOCATION OF ALL TXU GAS LINES AND SBC UNDERGROUND PHONE LINES IN THESE PLANS ARE APPROXIMATE. THE CONTRACTOR SHALL CONTACT TXU AND SBC TO VERIFY LOCATION AND DEPTH OF ALL EXISTING GAS AND PHONE LINES PRIOR TO CONSTRUCTION.
- CONTRACTOR SHALL HAVE AND PAY FOR T.X.U. AND/OR SOUTHWESTERN BELL TELEPHONE SUPPORT AND PROTECT ALL POWER, GUY WIRES OR CABLE AND/OR LIGHT POLES IN THE WORK AREA.
- 6. ANY FENCE REMOVED FOR CONVENIENCE OF CONSTRUCTION SHALL BE REPLACED OR RECONSTRUCTED. NEW MATERIALS SHALL MATCH EXISTING FENCES. ALL WOOD FENCES SHALL BE REPLACED WITH NEW CEDAR WITH THE POSTS MATCHING THE EXISTING POSTS.
- 7. TEMPORARY FENCING SHALL BE REQUIRED WHERE THERE IS EVIDENCE OF LIVESTOCK AND WHERE DAMAGED OR REMOVED FENCES ARE NOT TO BE REPLACED BY THE END OF SAME WORK DAY.
- 8. REMOVAL OF RESIDENTIAL DRIVEWAYS SHALL BE COORDINATED WITH THE PROPERTY OWNER
- 9. THE CONTRACTOR SHALL REPLACE ALL SHRUBS, PLANTS, TREES, ETC. THAT ARE REMOVED FOR CONVENIENCE OF CONSTRUCTION AT HIS EXPENSE. NEW SHRUBS, PLANTS, TREES, ETC. SHALL BE EQUAL TO OR BETTER THAN THE EXISTING ONES OR MEET THE NEEDS AND APPROVAL OF THE PROPERTY OWNER AND THE CITY.
- 10. THE CONTRACTOR SHALL PROTECT ALL UNDERGROUND SPRINKLER SYSTEMS. AN IRRIGATOR LICENSED IN THE STATE OF TEXAS SHALL REPAIR ALL DAMAGE CAUSED BY CONSTRUCTION WITHIN 48 HOURS. ALL COSTS SHALL BE BORNE BY THE CONTRACTOR.
- 11. THE CONTRACTOR SHALL NOT DISPOSE OF WASTE OR ANY MATERIALS INTO STREAMS OR WATERWAYS. THE CONTRACTOR SHALL SECURE ALL EXCAVATION AT THE END OF EACH DAY AND DISPOSE OF ALL EXCESS MATERIALS. DISPOSAL SITE SHALL BE DOCUMENTED AND PROVIDED TO THE CITY.
- 12. THE CONTRACTOR SHALL OBTAIN TPDES STORM WATER PERMIT, POST ALL PERMITS ON THE CONSTRUCTION SITE, SUBMIT A NOTICE OF INTENT (NOI) AND SUBMIT A NOTICE OF TERMINATION (NOT). THE CONTRACTOR AND HIS SUB-CONTRACTORS SHALL BE THE SOLE OPERATOR AND PERMITTEES OF THE CONSTRUCTION SITE.
- 13. CONTRACTOR SHALL GRADE GROUND AND DITCHES DISTURBED BY CONSTRUCTION TO PREVENT PONDING OF STORM WATER RUNOFF. GRADING SHALL BE SUBSIDIARY TO THE APPROPRIATE BID ITEM FOR UNCLASSIFIED STREET AND UNCLASSIFIED CHANNEL EXCAVATION. TOPSOIL SHALL BE STOCKPILED AND REPLACED TO A MINIMUM DEPTH OF 6-INCHES AND DISC HARROWED TO A MINIMUM DEPTH OF 4-INCHES (NO PAY ITEM). CONTRACTOR SHALL REPLACE GRASS AREAS DISTURBED BY CONSTRUCTION ACTIVITIES WITH SOLID SOD OR BY HYDROMULCHING AS PROVIDED IN THE CONSTRUCTION PLANS. SODDED AND HYDROMULCHED AREAS SHALL BE WATERED AND MAINTAINED FOR A PERIOD OF NO LESS THAN 72-HOURS. EACH DAY THE CONTRACTOR SHALL WATER THE AREAS UNTIL THE PROPERTY OWNER ASSUMES RESPONSIBILITY OF HYROMULCHED OR SODDED AREAS. THE CONTRACTOR SHALL NOTIFY THE PROPERTY OWNER IN WRITING WITH A COPY SENT TO THE CITY OF ROCKWALL THAT THEY ARE TO ASSUME RESPONSIBILITY OF MAINTENANCE OF THE HYDROMULCHED OR SODDED AREAS AT A SPECIFIED TIME AND DATE
- 14. CONTRACTOR SHALL REPLACE ANY TREES REMOVED OR DESTROYED THAT ARE NOT SHOWN IN THESE PLANS TO BE REMOVED OR SHALL PAY FAIR MARKET VALUE TO OWNER AS DETERMINED BY THE OWNER.
- 15. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING SERVICE LINES CROSSED OR EXPOSED BY CONSTRUCTION OPERATIONS. WHERE EXISTING SERVICE LINES ARE CUT, BROKEN OR DAMAGED, THE CONTRACTOR SHALL IMMEDIATELY REPLACE THE SERVICE LINE WITH SAME TYPE OF ORIGINAL CONSTRUCTION OR BETTER.
- 16. THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN AND REMOVE ALL NECESSARY TRAFFIC CONTROL CONTROL DEVICES IN CONFORMANCE WITH THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (PART VI).
- 17. THE CONTRACTOR SHALL PROVIDE ACCESS AT ALL TIMES AND DURING EACH PHASE OF CONSTRUCTION TO ALL LOCAL RESIDENTS, BUSINESSES, MAIL SERVICE AND TRASH PICK-UP.
- 18. THE CONTRACTOR SHALL PROVIDE 4 INCHES OF TOPSOIL IN ALL PARKWAYS AND AREAS TO BE SODDED OR HYDROMULCHED. TOP SOIL SHALL BE APPROVED BY THE CITY IN WRITING. TOPSOIL SHALL BE SUBSIDIARY TO PLACEMENT OF GRASS OR HYDROMULCH.
- 19. TURF MAT SHALL BE NORTH AMERICAN GREEN TYPE SC250 VMAX SERIES OR APPROVED EQUAL.

## PAVING NOTES

- ALL PROPOSED HMAC STREET PAVEMENT SHALL CONSIST OF 4-INCHES OF TYPE B (BASE) WITH 2-INCHES OF TYPE D (SURFACE), or 1-1/2-INCHES OF TYPE D (SURFACE) FOR OVERLAYS, IN ACCORDANCE WITH NCTCOG ITEMS 5.7 AND 2.4.13.
- 2. CONCRETE FOR ALL CURB AND GUTTERS, VALLEY GUTTERS, DRIVEWAYS, SIDEWALKS AND BRICK PAVER BORDERS AND BASES SHALL BE IN CONFORMANCE WITH NCTCOG ITEM 7.4.5, CLASS "C" CONCRETE (3600 P.S.I.). THE CONTRACTOR SHALL UTILIZE ONE CONCRETE MIX DESIGN THROUGHOUT THE PROJECT. CONCRETE MIX DESIGN SHALL BE SUBMITTED FOR REVIEW.
- 3. REINFORCING STEEL SHALL BE IN ACCORDANCE WITH ASTM 615, 616 AND 617.
- 4. ALL REINFORCING STEEL SHALL BE TIED (100%). REINFORCING STEEL SHALL BE SET ON PLASTIC CHAIRS. BAR LAPS SHALL BE MINIMUM 30 DIAMETERS.
- 5. SAWED TRANSVERSE DUMMY JOINTS SHALL BE SPACED EVERY 15' OR 1.25 TIMES LONGITUDINAL BUTT JOINT SPACING WHICHEVER IS LESS. SAWING SHALL OCCUR WITHIN 5 TO 12 HOURS AFTER THE POUR INCLUDING SEALING. OTHERWISE THE SECTION SHALL BE REMOVED AND LONGITUDINAL BUTT JOINT CONSTRUCTED.
- 8-INCH FLEXIBLE BASE SUBGRADE SHALL BE COMPACTED TO A 95% MODIFIED PROCTOR DENSITY (ASTM D1557). 6-INCH COMPACTED SUBGRADE SHALL BE COMPACTED TO A 95% STANDARD PROCTOR DENSITY (ASTM D698). DENSITY TEST RESULTS SHALL BE COMPLETED BY AN INDEPENDENT LABORATORY APPROVED BY THE CITY. ALL RESULTS SHALL BE PROVIDED TO THE CITY. THERE SHALL BE NO SEPARATE PAYMENT FOR DETERMINATION OF MAXIMUM DENSITY, ALL COSTS SHALL BE INCLUDED IN THE APPROPRIATE ITEMS OF THE BID SCHEDULE.
- 7. ALL FILL SHALL BE COMPACTED BY SHEEPS FOOT ROLLER. MAXIMUM LOOSE LIFT FOR COMPACTION SHALL BE 8 INCHES. ALL LIFTS SHALL BE TESTED FOR DENSITY BY AN INDEPENDENT LABORATORY APPROVED BY THE CITY.
- 8. ALL AREAS OUTSIDE PAVEMENT DISTURBED BY CONSTRUCTION ACTIVITIES SHALL HAVE GRASS ESTABLISHED IMMEDIATELY. GRASS SHALL MEET THE REQUIREMENTS OF ITEM 3.8, 3.9, 3.10 & 3.11 OF NCTCOG. PAYMENT SHALL BE MADE UNDER THE APPROPRIATE BID SCHEDULE ITEM. AREAS DISTURBED OUTSIDE THE R.O.W. OR LIMITS OF CONSTRUCTION SHALL HAVE GRASS ESTABLISHED IMMEDIATELY AT THE CONTRACTORS EXPENSE.
- 9. ALL AREAS TO BE EXCAVATED OR FILLED SHALL HAVE EROSION CONTROL PLACED PRIOR TO COMMENCING EARTHWORK AS PROVIDED IN THE APPROPRIATE SECTION OF THE BID SCHEDULE. EROSION CONTROL DEVICES SHALL BE MAINTAINED THROUGHOUT THE PROJECT IN ACCORDANCE WITH NCTCOG ITEM 3.12.
- 10. ALL PROPOSED SIDEWALKS SHALL INCLUDE BARRIER FREE RAMPS AT INTERSECTING STREETS, ALLEYS, DRIVEWAYS, ETC. BARRIER FREE RAMPS SHALL MEET CURRENT ADA REQUIREMENTS AND BE APPROVED BY THE TEXAS LICENSING BOARD.
- 11. SIDEWALKS SHALL BE DOWELED INTO PAVEMENT WHERE IT ABUTS DRIVEWAYS. EXPANSION JOINT MATERIAL SHALL BE USED AT THESE LOCATIONS (NO PAY ITEM).
- 12. CONTRACTOR SHALL REMOVE AND PROPERLY DISPOSE OF ALL EXISTING CONCRETE AND HMAC PAVEMENT AS REQUIRED FOR CONSTRUCTION OF THE PROJECT. ALL COSTS SHALL BE INCLUDED IN THE APPROPRIATE ITEMS IN THE BID SCHEDULE.
- 13. ALL CONNECTIONS OF PROPOSED CONCRETE PAVEMENT TO EXISTING CONCRETE PAVEMENT SHALL INCLUDE A LONGITUDINAL BUTT JOINT AS THE LOAD TRANSFER DEVICE SEE DETAIL THIS SET OF PLANS. CONCRETE SAW CUTS FOR ALL DRIVEWAYS AND SIDEWALKS SHALL BE SUBSIDIARY TO THE APPROPRIATE BID ITEM FOR DRIVEWAY AND SIDEWALK REPLACEMENT.
- 14. ALL PROPOSED GRAVEL PAVEMENT SHALL CONSIST OF 6-INCHES OF NCTCOG ITEM 2.1.3 GRAVEL AND SHALL BE IN ACCORDANCE WITH NCTCOG ITEM 4.4. FINISHED GRADE UNDER GRAVEL PAVEMENT AREAS SHALL BE COMPACTED TO 95% STANDARD PROCTOR BY USE OF MECHANICAL OR HAND TAMPING DEVICES.
- 15. THERE SHALL BE NO SEPARATE PAYMENT FOR SUBGRADE PREPARATION UNDER DRIVEWAY AREAS AND ALL COST SHALL BE INCLUDED IN THE APPROPRIATE ITEMS OF THE BID SCHEDULE.
- 16. PAYMENT FOR REMOVAL AND REPLACEMENT OF STREET, DRIVE AND SIDEWALK PAVEMENTS SHALL BE BASED ON PLAN QUANTITY AND NO ADJUSTMENTS WILL BE MADE UNLESS APPROVED IN WRITING BY THE CITY ENGINEER.
- 17. ALL PAVEMENTS TO BE REMOVED AND REPLACED SHALL BE SAW OUT ALONG NEAT LINES AS SHOWN IN THE PLANS. PROPOSED CONCRETE PAVEMENT SHALL BE CONSTRUCTED WITH LONGITUDINAL CONSTRUCTION JOINTS AT ALL CONNECTIONS TO EXISTING CONCRETE PAVEMENT.

## WATER LINE AND SANITARY SEWER NOTES:

- 1. PROPOSED WATER LINES SHALL BE AWWA C-900 PVC, CLASS 200. UNLESS OTHERWISE SHOWN IN ON WATER, SANITARY SEWER OR STORM SEWER PROFILES, PROPOSED WATER LINES SHALL BE CONSTRUCTED WITH A MINIMUM COVER OF 4-FT. PROPOSED WATER LINE EMBEDMENT SHALL BE NCTCOG CLASS "B-3" AS AMENDED BY THE CITY OF ROCKWALL'S PUBLIC WORKS STANDARDS OF DESIGN AND CONSTRUCTION MANUAL.
- WATER LINES SHALL BE CENTERED OVER ALL PROPOSED SANITARY SEWER CROSSINGS. WATER LINE JOINTS SHALL BE 9-FEET FROM SANITARY SEWER CROSSINGS. UNLESS OTHERWISE SHOWN, WATER LINES SHALL BE AT LEAST 2-FEET ABOVE SANITARY SEWER CROSSINGS.
- CONTRACTOR SHALL COORDINATE THE SHUTTING DOWN OF THE EXISTING CLARK STREET 20-INCH WATER LINE WITH THE CITY FOR THE INSTALLATION OF BUTTERFLY VALVES, CONNECTIONS AND VERTICAL RELOCATION AT RUSK. THE CITY SHALL OPERATE ALL WATER VALVES.
- 4. ALL OUTLETS ON PROPOSED WATER LINES SHALL BE FLANGED OUTLETS. ALL VALVES CONNECTED TO THE OUTLETS SHALL BE FLANGED X FLANGED OR FLANGED X MECHANICAL JOINT. VALVES CONNECTED TO OUTLETS SHALL BE FLANGED.
- 5. CONTRACTOR SHALL FURNISH AND INSTALL GASKET ON WATER LINES BETWEEN ALL DISSIMILAR METALS AND AT VALVES (BOTH EXISTING AND PROPOSED).
- 6. ALL FIRE HYDRANTS AND VALVES REMOVED AND SALVAGED SHALL BE RETURNED TO THE OWNER OR TO A LOCATION ACCEPTABLE TO THE OWNER.
- 7. WATER LINE MATERIALS SHALL BE IN ACCORDANCE WITH THE CITY OF ROCKWALL'S STANDARDS OF CONSTRUCTION DESIGN MANUAL, SECTION 5. SANITARY SEWER MATERIALS SHALL BE IN ACCORDANCE WITH THE CITY OF ROCKWALL'S STANDARDS OF CONSTRUCTION DESIGN MANUAL, SECTION 6.
- 8. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL LOCATE ALL SANITARY SEWER SERVICES ALONG CLARK STREET AND INTERSECTING STREETS WITH PROPOSED SANITARY SEWERS. ALL EXISTING SANITARY SEWER SERVICES SHALL BE TRANSFERRED FROM EXISTING SANITARY SEWERS. TRANSFERRING SERVICES SHALL INCLUDE CLEANOUTS, TEES, WYES, PLUGS AND CONNECTION. PAYMENT FOR TRANSFERRING SANITARY SEWER SERVICES SHALL BE PAID PER EACH, UNDER THE APPROPRIATE BID SCHEDULE ITEM.
- PROPOSED SANITARY SEWER EMBEDMENT SHALL BE NCTCOG CLASS "B-2" AS AMENDED BY THE CITY OF ROCKWALL'S PUBLIC WORKS STANDARDS OF DESIGN AND CONSTRUCTION MANUAL.
- 10. BLUE EMS PADS SHALL BE INSTALLED AT EVERY CHANGE IN DIRECTION, VALVE AND SERVICE ON THE PROPOSED WATER LINE.
- 11. GREEN EMS PADS SHALL BE INSTALLED AT EVERY MANHOLE, CLEANOUT, AND SERVICE ON THE PROPOSED SANITARY SEWER.
- 12. CONTRACTOR TO INSTALL NEW METER BOXES AND ALL FITTINGS EXCEPT THE METERS PER EACH SERVICE COMPLETE INCLUDING CONNECTION TO THE MAIN LINE.
- 13. THE PIPE MATERIAL FOR THE EXISTING 20-INCH WATER LINE SHOWN ON SHEETS 34 THROUGH 42 IS REINFORCED CONCRETE CYLINDER PIPE.

## STORM SEWER NOTES:

THESE DOCUMENTS ARE FOR BIDDING, CONSTRUCTION.

AND PERMIT PURPOSES.

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- STORM SEWER JUNCTION BOXES SHALL BE PRE-CAST STRUCTURES. THE CONTRACTOR SHALL SUBMIT A SHOP DRAWING DESIGN FOR EACH STORM SEWER JUNCTION BOX TO THE CITY FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION. JUNCTION BOX DESIGN SHALL BE SIGNED, SEALED AND DATED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF TEXAS. CONCRETE TO BE A MINIMUM 4,200-PSI AT 28 DAYS.
- 2. CULVERTS SHALL BE DIRECT BURIAL. CULVERT "A" IS SPECIFIED AS CAST IN PLACE. CULVERT "B" IS SPECIFIED AS PRE-CAST. IF THE CONTRACTOR ELECTS TO CONSTRUCT CULVERT "A" AS PRE-CAST. THE CONTRACTOR SHALL SUBMIT A SHOP DRAWING DESIGN OF A PRE-CAST CULVERT TO THE CITY FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION. A PRE-CAST CULVERT "A" SHALL BE DESIGNED, SIGNED, SEALED AND DATED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF TEXAS.
- 3. PROPOSED STORM SEWER EMBEDMENT SHALL BE NCTCOG CLASS "B" AS AMENDED BY THE CITY OF ROCKWALL'S PUBLIC WORKS STANDARDS OF DESIGN AND CONSTRUCTION MANUAL.

THE TxDOT STANDARD DETAIL SHEETS UTILIZED IN THESE PLANS HAVE BEEN SELECTED UNDER MY RESPONSIBLE SUPERVISION AS BEING APPLICABLE TO THE PROJECT.

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MATTI-EW HICKEY

85480

CITY OF ROCKWALL, TEXAS

CLARK STREET GENERAL NOTES

BIRKHOFF, HENDRICKS & CONWAY, L.L.P.

CONSULTING ENGINEERS

SHEET NO.

OF X SHEETS!

 Dallas, Texas

 DESIGNED BY:
 M.H.
 PROJECT:
 2003-120

 DRAWN BY:
 B.H.C.
 DATE:
 AUGUST, 2004