GENERAL NOTES

1. ALL CONSTRUCTION, TESTING AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CITY OF ROCKWALL'S STANDARD SPECIFICATIONS AND GENERAL DESIGN STANDARDS, NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS' (NCTCOG) 3RD EDITION STANDARDS AND THESE PLANS. IN THE EVENT OF CONFLICT, THE MOST STRINGENT SHALL APPLY.

2. CONTRACTOR SHALL COORDINATE WITH THE OWNER, ENGINEER OR HIS REPRESENTATIVE, AND CITY REPRESENTATIVE REGARDING ANY DEVIATIONS FROM THESE PLANS.

3. CONTRACTOR SHALL FURNISH A MAINTENANCE BOND TO THE CITY TO RUN TWO (2) YEARS FROM THE DATE OF FINAL ACCEPTANCE OF ALL PUBLIC IMPROVEMENTS. THE COST OF THE MAINTENANCE BOND SHALL BE INCLUDED IN THE BID PRICE - NO EXTRA PAYMENT ALLOWED.

4. CONTRACTOR SHALL INDEMNIFY, HOLD HARMLESS AND DEFEND, AT ITS OWN EXPENSE, THE OWNER, DEVELOPER, OWNER'S REPRESENTATIVES, PROJECT ARCHITECT, AND RKM CONSULTING ENGINEERS, INC., INCLUDING THE OFFICERS, SERVANTS AND EMPLOYEES OF THE AFOREMENTIONED, FROM AND AGAINST ANY AND ALL CLAIMS OR SUITS FOR PROPERTY LOSS, PROPERTY DAMAGE, PERSONAL INJURY, INCLUDING DEATH, ARISING OUT OF, OR ALLEGED TO ARISE OUT OF, THE WORK AND SERVICES TO BE PERFORMED HEREUNDER BY CONTRACTOR, ITS OFFICERS, AGENTS, EMPLOYEES, SUBCONTRACTORS, LICENSEES OR INVITEES, WHETHER OR NOT ANY SUCH INJURY, DAMAGE OR DEATH IS CAUSED, IN WHOLE OR IN PART, BY THE NEGLIGENCE OR ALLEGED NEGLIGENCE OF THE AFOREMENTIONED.

5. THE PRIME CONTRACTOR SHALL FURNISH THE OWNER WITH SATISFACTORY PROOF OF COVERAGE BY INSURANCE REQUIRED BY THE CONTRACT DOCUMENTS IN AMOUNTS AND BY CARRIERS SATISFACTORY TO THE OWNER. ALL INSURANCE REQUIREMENTS MADE UPON THE CONTRACTOR SHALL APPLY TO ALL SUBCONTRACTORS SHOULD THE PRIME CONTRACTOR'S INSURANCE NOT COVER THE SUBCONTRACTOR'S WORK OPERATIONS.

6. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN NEAT AND ACCURATE CONSTRUCTION RECORD PLANS. A COPY OF THESE RECORD PLANS SHALL BE SUBMITTED TO THE ENGINEER UPON COMPLETION OF CONSTRUCTION.

7. CONTRACTOR SHALL BE RESPONSIBLE FOR THE DISPOSAL OF ALL EXISTING MATERIALS TO BE REMOVED. CONTRACTOR SHALL DISPOSE OF ALL EXCESS MATERIALS OFFSITE OR AS DIRECTED BY THE OWNER.

8. CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO AVOID PROPERTY DAMAGE TO ADJACENT PROPERTIES DURING CONSTRUCTION OF THIS PROJECT. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ANY DAMAGES TO ADJACENT PROPERTIES THAT OCCURS DURING CONSTRUCTION OF THIS PROJECT.

9. SAFETY NOTICE TO CONTRACTOR: THESE PLANS, PREPARED BY RKM CONSULTING ENGINEERS, DO NOT EXTEND TO OR INCLUDE DESIGNS OR SYSTEMS PERTAINING TO THE SAFETY OF THE CONSTRUCTION CONTRACTOR OR ITS EMPLOYEES, AGENTS OR REPRESENTATIVES IN THE PERFORMANCE OF THE WORK. THE SEAL OF RKM CONSULTING ENGINEERS' REGISTERED PROFESSIONAL ENGINEER(S) HEREON DOES NOT EXTEND TO ANY SUCH SAFETY SYSTEM THAT MAY NOW OR HEREAFTER BE INCORPORATED IN THESE PLANS. THE CONSTRUCTION CONTRACTOR SHALL PREPARE OR OBTAIN THE APPROPRIATE SAFETY SYSTEMS, INCLUDING THE PLANS AND SPECIFICATIONS REQUIRED BY THE HOUSE BILL 662 AND 665 ENACTED BY THE TEXAS STATE LEGISLATURE IN THE 70TH LEGISLATURE - REGULAR SESSION. IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT APPLIES CONTINUOUSLY AND SHALL NOT BE LIMITED TO NORMAL WORKING HOURS.

10. REFER TO GEOTECHNICAL INVESTIGATION REPORT NO. 07-13883 PREPARED BY RONE ENGINEERING IN MARCH, 2008 FOR SUBSURFACE CONDITIONS, PAVEMENT RECOMMENDATIONS, SUBGRADE PREPARATION, SITEWORK AND EARTHWORK CONSIDERATIONS.

EXISTING FACILITIES NOTES

1. THE EXISTENCE AND LOCATIONS OF ALL UNDERGROUND UTILITIES SHOWN (MAIN LINES, NO LATERAL OR SERVICES SHOWN) ON THE DRAWINGS WERE OBTAINED FROM AVAILABLE RECORDS AND ARE APPROXIMATE. NEITHER THE OWNER NOR THE ENGINEER NOR THE CITY ASSUMES ANY RESPONSIBILITY FOR UTILITIES NOT SHOWN OR NOT IN THE LOCATION SHOWN. THE CONTRACTOR SHALL DETERMINE THE DEPTH AND LOCATION OF EXISTING UNDERGROUND UTILITIES PRIOR TO TRENCHING 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. CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE RESPECTIVE AGENCIES AND COORDINATING THE LOCATION AND MARKING OF ALL FRANCHISE AND CITY UTILITIES PRIOR TO CONSTRUCTION.

2. ANY CONTRACTOR / SUBCONTRACTOR PERFORMING WORK ON THIS PROJECT SHALL FAMILIARIZE HIMSELF WITH THE SITE AND SHALL BE SOLELY RESPONSIBLE FOR ANY DAMAGE TO EXISTING FACILITIES RESULTING DIRECTLY OR INDIRECTLY FROM HIS OPERATIONS. SAID EXISTING IMPROVEMENTS SHALL INCLUDE BUT NOT BE LIMITED TO BERMS, DITCHES, FENCES, AND PLANTS. ANY REMOVAL OR DAMAGE TO EXISTING IMPROVEMENTS SHALL BE REPLACED OR REPAIRED TO ITS ORIGINAL OR BETTER CONDITION BY THE CONTRACTOR AT HIS EXPENSE.

3. CONTRACTOR SHALL SALVAGE AND PROTECT ALL PUBLIC UTILITIES IN THE CONSTRUCTION OF THIS PROJECT INCLUDING, BUT NOT LIMITED TO, POWER POLES, SIGNS, MANHOLES, TELEPHONE RISERS, WATER VALVES, CLEANOUTS, FIRE HYDRANTS, CABLES.

4. ALL EXISTING TRAFFIC AND STREET SIGNS DISTURBED DURING CONSTRUCTION SHALL BE REINSTALLED WHERE APPLICABLE BY THE CONTRACTOR.

5. CONTRACTOR SHALL USE ALL NECESSARY SAFETY PRECAUTIONS TO AVOID CONTACT WITH OVERHEAD AND UNDERGROUND POWER LINES.

HORIZONTAL AND VERTICAL CONTROL NOTES

1. CONTRACTOR SHALL REVIEW AND VERIFY ALL DIMENSIONS SHOWN ON THE PLANS AND ALL FIELD CONDITIONS THAT MAY AFFECT CONSTRUCTION. SHOULD DISCREPANCIES OCCUR, THE CONTRACTOR SHALL NOTIFY THE ENGINEER TO OBTAIN THE ENGINEER'S CLARIFICATION BEFORE COMMENCING WITH THE CONSTRUCTION.

2. CONTRACTOR SHALL VERIFY AND COORDINATE ALL DIMENSIONS SHOWN, INCLUDING THE HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING AND PROPOSED UTILITIES. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AT ONCE OF ANY DISCREPANCIES.

3. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONSTRUCTION SURVEYING REQUIRED, UNLESS OTHERWISE SPECIFIED BY THE OWNER.

4. ALL DIMENSIONS ARE TO FACE OF CURB WHERE CURB IS PRESENT.

GRADING NOTES

1. CONTRACTOR SHALL CLEAR AND GRUB THE SITE AND PLACE, COMPACT, AND MOISTURE CONDITION ALL FILL PER THE PROJECT GEOTECHNICAL ENGINEER'S SPECIFICATIONS. THE FILL MATERIAL TO BE USED SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT. ALL WORK AND MATERIALS FOR CLEARING AND GRUBBING SHALL BE INCLUDED IN THE COST OF THE PROJECT - NO ADDITIONAL PAYMENT WILL BE ALLOWED.

2. ALL EXCAVATING IS UNCLASSIFIED AND SHALL INCLUDE ALL MATERIALS ENCOUNTERED. UNUSABLE EXCAVATED MATERIAL AND ALL WASTE RESULTING FROM SITE CLEARING AND GRUBBING SHALL BE DISPOSED OF OFFSITE BY THE GRADING CONTRACTOR AT HIS EXPENSE.

3. EXISTING CONTOURS AS SHOWN ON THIS PLAN WERE TAKEN FROM A FIELD TOPOGRAPHIC SURVEY PREPARED BY DOUGLAS S. LOOMIS, R.P.L.S.

4. GRADING CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES FOR ANY REQUIRED UTILITY ADJUSTMENTS AND/OR RELOCATIONS.

5. BEFORE ANY EARTHWORK IS DONE, THE CONTRACTOR SHALL STAKE OUT AND MARK THE LIMITS OF PAVEMENT AND OTHER ITEMS ESTABLISHED BY THE PLANS. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY ENGINEERING AND SURVEYING FOR LINE AND GRADE CONTROL POINTS RELATED TO EARTHWORK.

6. REFER TO STRUCTURAL AND GEOTECHNICAL SPECIFICATIONS FOR BUILDING PAD PREPARATION. ALL FILL PLACEMENT AND BUILDING PAD PREPARATION SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER. ALL FILL SHALL BE COMPACTED WITH A SHEEPS FOOT-ROLLER TO 95 PERCENT STANDARD PROCTOR.

7. PROPOSED CONTOURS AND SPOT ELEVATIONS SHOWN IN PAVED AREAS REFLECT TOP OF PAVEMENT SURFACE OR TOP OF CURB AT CURB LINE. THE LIMITS OF EARTHWORK IN PAVED AREAS IS THE BOTTOM OF PAVEMENT.

8. ALL SLOPES SHALL BE GRADED TO 3:1 OR FLATTER UNLESS OTHERWISE INDICATED ON THE PLANS.

9. CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE AWAY FROM ALL BUILDINGS AT ALL LOCATIONS (2% MIN.).

10. PROPOSED ELEVATIONS AT CURB ARE TOP OF PAVEMENT. ADD 0.5' (6") FOR TOP OF CURB ELEVATION.

11. FINISH GRADING ELEVATIONS IN PAVED AREAS ARE AS FOLLOWS: SIX (6) INCHES BELOW FINISHED CONTOURS FOR HEAVY DUTY PAVEMENT AREAS, FIVE (5) INCHES BELOW FINISHED CONTOURS FOR LIGHT DUTY PAVING. LANDSCAPE AREAS ARE FINISHED CONTOURS.

12. ALL SLOPES AND AREAS DISTURBED BY CONSTRUCTION SHALL BE GRADED SMOOTH AND TOPSOIL APPLIED (DEPTH TO BE AS SPECIFIED IN THE LANDSCAPE DOCUMENTS). IF ADEQUATE TOPSOIL IS NOT AVAILABLE ON-SITE, THE CONTRACTOR SHALL PROVIDE TOPSOIL, APPROVED BY THE OWNER, AS NEEDED. ANY AREAS DISTURBED FOR ANY REASON PRIOR TO FINAL ACCEPTANCE OF THE PROJECT SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.

13. THE POND'S SIDES AND BOTTOM WILL BE STABILIZED WITH ANCHORED SEEDED CURLEX (OR SOD) PRIOR TO PAVING.

EROSION CONTROL NOTES

1. CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE, OR LOCAL EROSION, CONSERVATION, AND SILTATION ORDINANCES.

2. FOR CONSTRUCTION BEST MANAGEMENT PRACTICES (BMP's), AND DETAILS OF STABILIZATION AND EROSION CONTROL MEASURES, REFER TO THE "INTEGRATED STORM WATER MANAGEMENT - DESIGN MANUAL FOR CONSTRUCTION", DECEMBER 2003 PREPARED BY THE NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS (NCTCOG).

3. PERIMETER EROSION CONTROL MEASURES AND THE ROCK STABILIZED CONSTRUCTION EXIT MUST BE IN PLACE PRIOR TO ANY SOIL DISTURBANCE.

4. THE GENERAL CONTRACTOR SHALL INSPECT EROSION CONTROL MEASURES AT LEAST ONCE EACH WEEK AND WITHIN 24 HOURS AFTER A STORM EVENT OF 0.5 INCH OR GREATER TO MAINTAIN FUNCTION OF THE CONTROLS. MAINTENANCE IS CRUCIAL TO EROSION CONTROL EFFECTIVENESS. EROSION CONTROL MEASURES THAT PROVE TO BE INEFFECTIVE SHALL BE REPLACED WITH MORE EFFECTIVE MEASURES OR ADDITIONAL MEASURES.

5. CONTRACTOR SHALL TAKE ALL AVAILABLE PRECAUTIONS TO CONTROL DUST. CONTRACTOR SHALL CONTROL DUST BY SPRINKLING WATER, OR BY OTHER MEANS APPROVED BY THE CITY AND ENGINEER AND AT NO ADDITIONAL COST TO THE OWNER.

6. CONTRACTOR IS RESPONSIBLE FOR PREVENTING THE FLOW OR OFF-SITE TRACKING OF SEDIMENT AND OTHER POLLUTANTS TO EXISTING STREETS AND ADJACENT PROPERTIES.

7. CONTRACTOR SHALL INSTALL A TEMPORARY STABILIZED CONSTRUCTION ENTRANCE AT A LOCATION SUITED TO THE MOVEMENT OF CONSTRUCTION TRAFFIC INTO AND OUT OF THE SITE. THE CONSTRUCTION ENTRANCE SHALL MEET THE "INTEGRATED STORM WATER MANAGEMENT - DESIGN MANUAL FOR CONSTRUCTION", DECEMBER 2003 PREPARED BY THE NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS (NCTCOG) 3RD EDITION AND SHALL BE A MINIMUM OF TWENTY FEET (20') IN WIDTH AND FIFTY FEET (50') IN LENGTH. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ACCESS POINTS AND PREVENTING EXIT AT UNPROTECTED LOCATIONS.

8. CONTRACTOR SHALL MAINTAIN ADEQUATE SITE DRAINAGE DURING ALL PHASES OF CONSTRUCTION. THE CONTRACTOR SHALL USE SILT FENCES (OR OTHER METHODS APPROVED BY THE ENGINEER AND CITY) AS REQUIRED TO PREVENT SILT AND CONSTRUCTION DEBRIS FROM FLOWING ONTO ADJACENT PROPERTIES.

9. IF "SUMP" PUMPS ARE USED TO REMOVE WATER FROM EXCAVATED AREAS, THE CONTRACTOR SHALL FILTER THE DISCHARGE TO REMOVE SEDIMENT AND OTHER POLLUTANTS BEFORE THE WATER LEAVES THE SITE.

10. CONTRACTOR SHALL REMOVE ALL TEMPORARY EROSION CONTROL DEVICES UPON COMPLETION OF PERMANENT DRAINAGE FACILITIES AND THE ESTABLISHMENT OF A STAND OF GRASS OR OTHER GROWTH TO PREVENT EROSION.

11. ALL SURFACE AREAS DISTURBED WITHIN OR ADJACENT TO THE CONSTRUCTION LIMITS MUST BE PERMANENTLY STABILIZED. STABILIZATION IS OBTAINED WHEN THE SITE IS COVERED WITH IMPERVIOUS STRUCTURES, PAVING OR A UNIFORM PERENNIAL VEGETATIVE COVER. THE PERENNIAL VEGETATION MUST HAVE A COVERAGE DENSITY OF AT LEAST 75 PERCENT (MIN. HT. OF 1"). STABILIZATION IS REQUIRED BEFORE TERMINATING MAINTENANCE AND REMOVAL OF EROSION CONTROL MEASURES AND MUST BE CITY ACCEPTED.

12. PERMANENT SOIL EROSION CONTROL MEASURES SHALL BE INSTALLED WITHIN FOURTEEN (14) DAYS OF COMPLETION OF FINISHED GRADING FOR ANY AREA DISTURBED DURING CONSTRUCTION. REFER TO LANDSCAPE AND IRRIGATION CONSTRUCTION DOCUMENTS FOR FINAL RESTORATION OF ALL DISTURBED AREAS.

13. DISTURBED SOIL MUST BE STABILIZED WITHIN FOURTEEN (14) DAYS IN AREAS WHERE GRADING IS TEMPORARILY OR PERMANENTLY STOPPED FOR MORE THAN TWENTY-ONE (21) DAYS. IN THE EVENT THAT FINAL EROSION CONTROL MEASURES CANNOT BE COMPLETED, TEMPORARY MEASURES SHALL BE INSTALLED AND MAINTAINED AT NO ADDITIONAL COST TO THE OWNER. AREAS DISTURBED SHALL BE SEEDED, FERTILIZED, MULCHED, WATERED AND MAINTAINED UNTIL HARDY GRASS GROWTH IS ESTABLISHED IN ALL AREAS. SEEDING SHALL BE BROADCAST SEEDING (BERMUDA GRASS) IN ACCORDANCE WITH NCTCOG SPECIFICATIONS ITEM 3.10 "SEEDING".

PAVING NOTES

1. ALL CONCRETE PAVING SHALL BE OF THE THICKNESS AS SHOWN ON THE PLANS AND HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,600 POUNDS PER SQUARE INCH IN 28 DAYS. CONCRETE WILL HAVE A ONE INCH (1") TO FOUR INCH (4") SLUMP AND REINFORCED WITH #3 BARS @ 18" O.C.E.W. REINFORCING SHALL BE SUPPORTED BY CHAIRS SPACED AT 16 S.F. (4' X 4' PATTERN) MAXIMUM INTERVAL. FIRELANE PAVEMENT SHALL BE MIN. 6" 3,600 POUNDS PER SQUARE INCH IN 28 DAYS, 6 SACK MIX FOR MACHINE POUR AND 6 1/2 SACK MIN. FOR HAND POUR.

2. ALL REINFORCING STEEL SHALL BE NEW DOMESTIC BILLET STEEL CONFORMING TO ASTM A-615, GRADE 60, AND SHALL BE SUPPORTED BY BAR CHAIRS.

3. CONCRETE SHALL BE FLOAT FINISHED OR AS SPECIFIED BY THE OWNER AND CURED FOR A MINIMUM OF 72 HOURS.

4. CONTRACTOR SHALL PROOF-ROLL THE SUBGRADE WITH HEAVY PNEUMATIC EQUIPMENT. ANY SOFT OR PUMPING AREAS SHALL BE EXCAVATED TO A FIRM SUBGRADE AND BACKFILLED FOLLOWING PROCEDURES DESCRIBED IN THE SITE GRADING SECTION OF THE PROJECT GEOTECHNICAL INVESTIGATION REPORT.

5. ALL SUBGRADE AREAS SHALL BE SCARIFIED TO A DEPTH OF 6 INCHES AND UNIFORMLY RECOMPACTED TO A MINIMUM DENSITY OF 95 PERCENT OF ASTM D698 DENSITY AT OPTIMUM MOISTURE CONTENT UNLESS OTHERWISE SHOWN ON THE CONSTRUCTION PLANS OR AS DIRECTED BY THE GEOTECHNICAL ENGINEER. ALL FILL TO BE COMPACTED WITH SHEEPS FOOT ROLLER. ALL SUBGRADE AREAS IN PUBLIC AREAS, INCLUDING FIRE LANES, SHALL MEET THE CITY REQUIREMENTS. NO SAND ALLOWED.

6. TESTING OF MATERIALS REQUIRED FOR THE CONSTRUCTION OF THE PAVING IMPROVEMENTS SHALL BE PERFORMED BY AN APPROVED AGENCY FOR TESTING MATERIALS. THE NOMINATION OF THE TESTING LABORATORY AND THE PAYMENT OF SUCH TESTING SERVICES SHALL BE MADE BY THE CONTRACTOR. THE OWNER SHALL CONTRACT THE LABORATORY TO DO THE TESTING OF MATERIALS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO SHOW BY STANDARD TESTING PROCEDURES THAT THE WORK CONSTRUCTED MEETS THE CITY REQUIREMENTS.

7. BREAKOUTS FOR REMOVAL OF EXISTING PAVEMENT AND CURBS SHALL BE MADE BY SAWCUTTTING THE EXISTING THE FULL DEPTH.

8. CONTRACTOR SHALL SUBMIT A JOINT SPACING PLAN TO THE ENGINEER PRIOR TO PLACEMENT OF CONCRETE PAVEMENT. CONTROL JOINTS SHALL BE INSTALLED AT A MAXIMUM SPACING OF TWELVE FEET (12') O.C.E.W. FOR 6" THICK PAVEMENT AND FIFTEEN FEET (15') O.C.E.W. FOR 5" PAVEMENT. ALL JOINTS SHALL EXTEND THROUGH THE CURB. MINIMUM LENGTH OF OFFSET JOINTS AT RADIUS POINTS IS 1. 5 FEET. ALL JOINTS SHALL BE SEALED WITH JOINT SEALANT. EXPANSION JOINTS SHALL BE INSTALLED AT A MAXIMUM SPACING OF NINETY FEET (90'). LEVEL UP SAND WILL NOT BE ALLOWED UNDER CONCRETE PAVING. PAVEMENT SHALL BE POURED IN MAXIMUM THIRTY FOOT (30') WIDE STRIPS OR PUMPED.

9. JOINT SEALANT SHALL BE TWO PART SELF LEVELING POLYURETHANE SEALANT (SONOBORN SL-2 OR EQUAL). SPECIFICATIONS SHALL BE SUBMITTED TO THE ENGINEER PRIOR TO INSTALLATION.

10. PROPOSED PAVEMENT SHALL MATCH ELEVATIONS OF EXISTING PAVEMENT WHERE THEY MEET.

11. CONTRACTOR SHALL FURNISH A MAINTENANCE BOND TO THE CITY TO RUN TWO (2) YEARS FROM THE DATE OF ACCEPTANCE OF THE PROJECT.

12. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING "RECORD DRAWING" PLANS TO THE ENGINEER.

PAVEMENT MARKINGS AND SIGNAGE NOTES

1. ALL SIGNS, PAVEMENT MARKINGS, AND OTHER TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES".

2. CONTRACTOR SHALL FURNISH AND INSTALL ALL PAVEMENT MARKINGS FOR FIRE LANES, PARKING STALLS, HANDICAPPED PARKING SYMBOLS, AND MISCELLANEOUS STRIPING WITHIN PARKING LOT AND AROUND BUILDING AS SHOWN ON THE PLANS. ALL PAINT FOR PAVEMENT MARKINGS SHALL ADHERE TO SECTION 2. 9 OF THE NCTCOG STANDARD SPECIFICATIONS UNDER "TRAFFIC PAINT".

3. FIRE LANES SHALL BE DESIGNATED BY CONTINUOUS PAINTED LINES SIX (6) INCHES IN WIDTH ON EACH SIDE OF THE FIRE LANE STARTING AT THE ENTRANCE FROM THE STREET AND TO BE CONTINUED TO THE EXIT. FIRE LANES SHALL BE MARKED ON THE VERTICAL FACE OF THE CURB WHERE CURB IS PRESENT ALONG THE ENTIRE LENGTH OF THE FIRE LANE. FIRE LANES SHALL BE PAINTED WITH RED TRAFFIC PAINT WITH THE WORDINGS "NO PARKING" AND "FIRE LANE" PAINTED ON THE LINES AT INTERVALS OF TWENTY-FIVE FEET (25'). THE LETTERING SHALL BE FOUR INCHES (4") HIGH WITH A ONE INCH (1") WIDE STROKE PAINTED WITH WHITE TRAFFIC PAINT (2 COATS).

4. ALL HANDICAP RAMPING, STRIPING, AND PAVEMENT MARKINGS SHALL CONFORM TO THE TEXAS DEPARTMENT OF LICENSING AND REGULATION'S TEXAS ACCESSIBILITY STANDARDS (TAS), AND THE AMERICANS WITH DISABILITIES ACT (ADA) OF 1990 AND AMENDMENTS THERETO.

5. ALL PARKING SPACES AND STRIPED ISLANDS SHOWN ON PROPOSED SITE SHALL BE MARKED WITH TWO COATS 4" WIDE WHITE PAINTED PAVEMENT STRIPING. ALL PARKING SPACES ARE NINE (9) FEET IN WIDTH UNLESS OTHERWISE NOTED.

STORM SEWER

1. ALL WORK, UNLESS OTHERWISE NOTED, SHALL CONFORM TO THE CITY OF ROCKWALL STANDARD SPECIFICATION AND THE NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS (NCTCOG) 3RD EDITION STANDARDS.

2. THE CONTRACTOR SHALL FURNISH A MAINTENANCE BOND TO THE CITY TO RUN TWO (2) YEARS FROM THE DATE OF FINAL ACCEPTANCE OF THE WATER, STORM SEWER & SANITARY SEWER IN PUBLIC EASEMENTS.

3. TOP RIM ELEVATIONS OF ALL STORM SEWER MANHOLES AND INLETS SHALL BE COORDINATED WITH TOP OF PAVEMENT, TOP OF CURB OR FINISHED GRADE. THE CONTRACTOR SHALL SET ALL UTILITIES TO PROPER LINE AND GRADE PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT.

4. CONTRACTOR SHALL PROVIDE ALL MATERIALS AND APPURTENANCES NECESSARY FOR COMPLETE INSTALLATION OF THE STORM SEWER. THE CONTRACTOR'S BID PRICE SHALL INCLUDE ALL INSPECTION FEES. AS AN ALTERNATE, THE OWNER RESERVES THE RIGHT TO PAY THE INSPECTION FEES DIRECTLY TO THE CITY.

5. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.

SANITARY SEWER NOTES

1. ALL WORK, UNLESS OTHERWISE NOTED, SHALL CONFORM TO THE CITY OF ROCKWALL STANDARD SPECIFICATIONS AND THE NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS (NCTCOG) 3RD EDITION.

2. THE CONTRACTOR SHALL FURNISH A MAINTENANCE BOND TO THE CITY TO RUN TWO (2) YEARS FROM THE DATE OF FINAL ACCEPTANCE OF THE WATER, STORM SEWER & SANITARY SEWER IN PUBLIC EASEMENTS.

3. TOP RIM ELEVATIONS OF ALL SANITARY SEWER MANHOLES SHALL BE COORDINATED WITH TOP OF PAVEMENT OR FINISHED GRADE. THE CONTRACTOR SHALL SET ALL UTILITIES TO PROPER LINE AND GRADE PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT.

4. ALL PVC SEWER PIPE SHALL BE SDR 35, GREEN IN COLOR, CONFORM TO ASTM D 3034, AND SHALL BE LAID ON AN EMBEDMENT PER THE CITY AND NCTCOG SPECIFICATIONS.

5. ALL SANITARY SEWER LATERALS SHALL BE FOUR (4) INCHES MINIMUM IN DIAMETER.

6. SANITARY SEWER PIPE MUST BE KEPT CLEAN OF BROKEN CONCRETE, DIRT OR ANY OTHER DEBRIS RESULTING FROM CONSTRUCTION OPERATIONS.

7. ALL SANITARY SEWER MAINS ARE TO HAVE 1 - 21' JOINT CENTERED ON EITHER SIDE OF WATER MAINS WHERE CROSSING OCCURS. THIS JOINT MUST HAVE A 150 PSI PRESSURE RATING IF THE VERTICAL SEPARATION IS LESS THAN TWO FEET.

8. ALL TRENCHES SHALL BE TAMPED AND COMPACTED TO 95% PROCTOR.

9. NO WATER JETTING OF BACKFILL IS ALLOWED.

10. CONTRACTOR SHALL TIE A ONE (1) INCH WIDE PIECE OF RED PLASTIC FLAGGING TO END OF SEWER SERVICE OR DEAD END RUN EXPOSED AFTER BACKFILL. THE END OF ALL SEWER SERVICES SHALL BE MARKED WITH GREEN EMS LOCATOR PAD. AFTER CURB AND PAVING IS COMPLETED, THE CONTRACTOR SHALL CUT THE CURB TO MARK THE SEWER SERVICE.

11. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING "RECORD" PLANS TO THE ENGINEER SHOWING THE LOCATION OF WATER AND SEWER SERVICES. THIS INFORMATION SHALL BE PLACED ON THE ENGINEERING PLANS AND MARKED "RECORD DRAWINGS" BY THE ENGINEER. COPIES OF THESE "RECORD DRAWINGS" PLANS SHALL BE FURNISHED TO THE CITY AS REQUIRED. TIES SHALL BE MADE BY DISTANCE MEASUREMENTS FOR ALL MANHOLES, CLEANOUTS, AND SERVICES.

12. ALL SANITARY SEWER LINES SHALL BE TESTED FOR INFILTRATION AND EXFILTRATION IN ACCORDANCE WITH THE CITY OF ROCKWALL'S STANDARD SPECIFICATIONS. TV INSPECTIONS, LOW PRESSURE AIR TESTING, VACUUM TESTING OF THE MANHOLES AND MANDREL TESTING ARE REQUIRED ON ALL SEWER LINES.

13. GREEN EMS DISK SHALL BE PLACED AT EVERY MANHOLE, SERVICE AND CLEANOUT.

WATER NOTES

1. ALL MATERIALS AND INSTALLATION SUCH AS VALVES, FIRE HYDRANTS, FITTINGS, STRUCTURES AND APPURTENANCES THERETO SHALL BE IN ACCORDANCE WITH THE CITY OF ROCKWALL'S STANDARDS AND THE NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS (NCTCOG) 3RD EDITION.

2. CONTRACTOR SHALL COORDINATE OPERATION OF ALL EXISTING VALVES WITH THE CITY. CONTACT THE ENGINEERING DEPARTMENT INSPECTOR.

3. CONTRACTOR SHALL FURNISH A MAINTENANCE BOND TO THE CITY TO RUN TWO (2) YEARS FROM THE DATE OF ACCEPTANCE OF THE WATER, STORM SEWER & SANITARY SEWER IN PUBLIC EASEMENTS.

4. THE SITE UTILITY CONTRACTOR SHALL PROVIDE ALL MATERIALS AND APPURTENANCES NECESSARY FOR COMPLETE INSTALLATION OF THE UTILITIES. ALL PUBLIC PIPE, STRUCTURES, AND FITTINGS SHALL BE INSPECTED BY THE CITY INSPECTOR PRIOR TO BEING COVERED. THE INSPECTOR MUST ALSO BE PRESENT DURING DISINFECTION AND PRESSURE TESTING OF ALL MAINS. THE CONTRACTOR'S BID PRICE SHALL INCLUDE ALL INSPECTION FEES. AS AN ALTERNATE, THE OWNER RESERVES THE RIGHT TO PAY THE INSPECTION FEES DIRECTLY TO THE CITY.

5. ALL 6", 8", 10", AND 12" WATER MAINS SHALL BE BLUE PVC AWWA C900, DR 14, CLASS 200 MINIMUM WATER PIPE AND HAVE A MINIMUM COVER AS FOLLOWS: 6", 8", 10", AND 12": 48" BELOW FINISHED PAVEMENT GRADE, OR 60" BELOW EXISTING OR FINISHED GRADE IN UNPAVED AREAS, OR AS REQUIRED TO CLEAR OTHER UTILITIES.

6. ALL WATER SERVICES SHALL BE AS FOLLOWS:

a. UNLESS OTHERWISE SHOWN ON THE PLANS, THE WATER SERVICES SHALL BE TWO (2) INCH DIAMETER SDR 9 POLYTUBE CTS. TAPPING SADDLES SHALL BE USED. TAPS AT MAINS SHALL BE MARKED WITH BLUE EMS LOCATOR PADS. BLUE EMS DISK SHALL BE INSTALLED AT EVERY CHANGE IN DIRECTION, SERVICE AND VALVES.

b. THE CONTRACTOR SHALL TIE A ONE (1) INCH WIDE PIECE OF BLUE PLASTIC FLAGGING TO THE WATER SERVICE METER SETTER AND SHALL LEAVE A MINIMUM OF 36 INCHES OF FLAGGING EXPOSED AFTER BACK FILL AFTER CURB AND PAVING IS COMPLETE.

7. ALL TAPPING SLEEVES AND VALVES SHALL BE FULL BODY CAST IRON.

8. ALL SERVICE LINE FITTINGS SHALL BE COMPRESSION.

9. MEGA LUGS SHALL BE USED ON ALL BENDS AND TEES.

10. ANCHOR FITTINGS SHALL BE USED TO ATTACH FIRE HYDRANTS.

11. FIRE HYDRANTS SHALL BE PAINTED IN ACCORDANCE WITH THE CITY OF ROCKWALL'S STANDARDS.

12. STEAMER NOZZLES ON FIRE HYDRANTS SHALL BE EIGHTEEN INCHES (18") ABOVE THE TOP OF THE CURB OR FINISHED GRADE, AND SHALL FACE THE CENTER OF THE FIRE LANE OR STREET. FIRE HYDRANTS SHALL BE LOCATED TWO (2) FEET BEHIND THE CURB UNLESS NOTED OTHERWISE ON THE PLANS.

13. VALVE BOXES SHALL BE FURNISHED AND SET ON EACH GATE VALVE. AFTER THE FINAL CLEAN-UP AND ALIGNMENT HAS BEEN COMPLETED, THE CONTRACTOR (UTILITY) SHALL POUR A CONCRETE BLOCK 24" X 24" X 6" AROUND ALL VALVE BOXES SO THE FINISHED GRADE IS LEVEL WITH THE FINISHED GROUND. VALVE STACKS SHALL BE FULL LENGTH CAST IRON.

14. ALL WATER AND SANITARY SEWER SERVICES SHALL TERMINATE FIVE (5) FEET OUTSIDE THE BUILDING, UNLESS NOTED OTHERWISE.

15. ALL FIRE HYDRANTS, FITTINGS, VALVES, AND PIPE ENDS SHALL BE BLOCKED WITH CONCRETE PER CITY STANDARDS.

16. WATER LINES CROSSING UNDER STORM DRAINS AND SANITARY SEWER LINES SHALL HAVE A MINIMUM OF 24" CLEARANCE BETWEEN UTILITIES. WATER LINES SHALL BE ENCASED IN CONCRETE 10' (FEET) EITHER SIDE OF UTILITY CROSSING. WHERE WATER LINES CROSS CREEKS OR DITCHES THE WATER LINE SHALL BE PROTECTED BY CONCRETE ENCASEMENT 10' (FEET) PAST SLOPE ON EACH SIDE.

17. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SITE TRENCH SAFETY DURING ALL PHASES OF CONSTRUCTION. THE CONTRACTOR SHALL SUBMIT A TRENCH EXCAVATION PROTECTION PLAN, SEALED BY A LICENSED ENGINEER IN THE