

PAVEMENT & JOINT SEALING NOTES

- 1. ALL CONCRETE FOR PAVEMENT SHALL BE A 6.0 SACK MIX. SHALL HAVE A MINIMUM 3600 PSI COMPRESSION AT 28 DAYS. SHALL HAVE 5 ± 1% ENTRAINED AIR, AND SHALL BE REINFORCED WITH #3 BARS ON 16" C/C BOTH WAYS AS A MINIMUM UNLESS OTHERWISE NOTED. HAND PLACED CONCRETE SHALL BE A 6.5 SACK MIX. PAVEMENT MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE APPLICABLE SECTIONS OF THE LATEST EDITION "STANDARD SPECIFICATIONS" FOR PUBLIC WORKS CONSTRUCTION PREPARED BY THE NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS. SLP FORMED CONCRETE SHALL HAVE A MAXIMUM SLUMP OF 2". HAND PLACED CONCRETE SHALL HAVE A MAXIMUM 5" SLUMP. ALL REINFORCEMENT SHALL BE CHAIRED.
2. THE JOINTS SHALL CONFORM TO THE LOCATIONS AND DETAILS SHOWN ON THESE PLANS. SPECIFIC SAWED CONTRACTION OR CONSTRUCTION JOINT LOCATIONS ARE NOT SHOWN. THE CONTRACTOR SHALL SUBMIT A LAYOUT INDICATING THE SAWED JOINT LOCATIONS TO BE REVIEWED AND APPROVED BY THE ENGINEER. ISOLATION JOINTS SHALL BE PROVIDED AT ALL MANHOLE RIMS, LIGHT STANDARDS AND OTHER SIMILAR INSTALLATIONS.
3. PROVIDE SAWED JOINTS AT MAXIMUM 12.5' FOR 5" CONCRETE, 15' FOR 6" CONCRETE AND 17.5' FOR 7" CONCRETE. DO NOT PLACE SAWED JOINT LONGITUDINALLY ALONG LOW POINT OR AT GUTTER LINE. SAWINGS OF JOINTS SHALL BEGIN AS SOON AS CONCRETE HAS HARDENED SUFFICIENTLY TO PERMIT SAWING WITHOUT EXCESSIVE RAVELLING. COMPLETE ALL SAWED JOINTS BEFORE UNCONTROLLED SHRINKAGE CRACKING OCCURS.
4. DO NOT PLACE SAND OR SELECT FILL BENEATH CONCRETE PAVEMENT SIDEWALKS, DRIVE APPROACHES, OR HANDICAP RAMPS FOR LEVEL UP COURSE. UTILIZE COMPACTED NATIVE MATERIALS.
5. BACKFILL ALL CURBS TO EDGE OF SUBGRADE WITH ONSITE CLAY SOILS. SOILS. COMPACT TO A MIN. 95% OF THE MAX. DRY DENSITY AS DETERMINED BY ASTM D-698, AT MOISTURE RANGING FROM -1 TO +3 OF THE OPTIMUM VALUE.
6. CONTRACTOR SHALL SAW-CUT TIE-INS AT EXISTING CURBS AS NECESSARY TO ENSURE SMOOTH TRANSITIONS. CONTRACTOR SHALL SAW-CUT AND TRANSITION TO MEET EXISTING PAVEMENT AS NECESSARY TO ENSURE PROPER DRAINAGE. (TYP. ALL INTERSECTIONS)
7. ALL EXPANSION, CONTRACTION, AND CONSTRUCTION JOINTS IN PAVED AREAS SHALL BE SEALED IN ACCORDANCE WITH THESE SPECIFICATIONS AND THE JOINT SEALING MANUFACTURERS RECOMMENDATIONS.
8. CLEAN ALL JOINTS PRIOR TO PLACEMENT OF JOINT SEALING MATERIAL IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.
9. PROVIDE BACKER RODS FOR JOINTS WITHOUT PREMOLED JOINT MATERIAL IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS. INSTALL CERA-ROD MANUFACTURED BY W. R. MEADOWS OR EQUAL.
10. EXPANSION AND ISOLATION JOINT MATERIAL TO BE PREMOLED EXPANSION JOINT MATERIAL AS RECOMMENDED BY JOINT SEALING MANUFACTURER WITH JOINT CAP TO PROTECT SEALANT RESERVOIR.
11. TYPICALLY JOINT SEALING MATERIAL IS PLACED BELOW SURFACE OF CONCRETE TO NEAR FULL LEVEL. CERTAIN PRODUCTS SUCH AS SOFT SEAL ARE RECOMMENDED TO BE PLACED TO FULL LEVEL. REFER TO MANUFACTURERS RECOMMENDATIONS.
12. THE CONTRACTOR SHALL CONSTRUCT ALL DRIVEWAY APPROACHES IN CONFORMANCE WITH APPLICABLE CITY STANDARD ORDINANCES AND REQUIREMENTS. CONTRACTOR SHALL CONFIRM APPLICABLE DRIVEWAY OR ACCESS PERMITS HAVE BEEN OBTAINED PRIOR TO CONSTRUCTION.
13. THE CONTRACTOR SHALL SUBMIT A JOINTING PLAN TO PROJECT ENGINEER PRIOR TO CONSTRUCTION FOR APPROVAL.
14. ALL DIMENSIONS ARE TO BACK OF CURB, UNLESS NOTED OTHERWISE.
15. ALL COORDINATES ARE TO BACK OF CURB, UNLESS NOTED OTHERWISE.
16. ALL EDGE OF PAVEMENT WITH NO CURB SHALL HAVE A THICKENED EDGE.
17. SEE ARCHITECTURAL PLANS FOR BUILDING DIMENSIONS.

WALKWAY, MARKING, AND SIGNAGE NOTES

- 1. ALL PEDESTRIAN WALKWAYS UTILIZED FOR DISABLED ACCESS ROUTE SHALL CONFORM TO LOCAL, STATE, AND FEDERAL REGULATIONS INCLUDING THE "STATE OF TEXAS PROGRAM FOR THE ELIMINATION OF ARCHITECTURAL BARRIERS", "TEXAS ACCESSIBILITY STANDARDS" (TAS) AND THE "AMERICANS WITH DISABILITIES ACT OF 1990" (ADA).
2. THE CONTRACTOR SHALL OBTAIN ALL REQUIRED CITY PERMITS AND NOTIFY THE CITY PRIOR TO CONSTRUCTING PUBLIC SIDEWALKS.
3. UNLESS REQUIRED OTHERWISE BY CITY REGULATIONS, ALL WALKWAYS SHALL BE CONSTRUCTED OF MINIMUM 3000 PSI CONCRETE AND A MINIMUM CEMENT CONTENT OF 5.0 SACKS PER CUBIC YARD. ALL SIDEWALKS SHALL BE REINFORCED WITH A MINIMUM OF #3 BARS AT 24" CENTERS EACH WAY. WALKWAYS LOCATED AT THE CENTER OF THE THICKNESS OF THE STEEL SHALL BE PLACED ON CHAIR SUPPORTS BEFORE CONCRETE PLACEMENT. IF NECESSARY, DURING CONCRETE PLACEMENT, THE STEEL SHALL BE PULLED UP TO INSURE THE PROPER LOCATION OF REINFORCEMENT.
4. WALKWAYS SHALL BE CONSTRUCTED TO THE LINE AND GRADE INDICATED ON THE PLANS OR THE TYPICAL LOCATIONS SHOWN ON THE PAVING PLANS IN RELATION TO PROPOSED CURB. SEE PAVEMENT NOTE #1 ABOVE.
5. PRIVATE SIDEWALKS SHALL BE CONSTRUCTED ON NATIVE MATERIALS. DO NOT PLACE SAND UNDER PRIVATE SIDEWALKS OR HANDICAP RAMPS FOR LEVEL UP COURSE. PUBLIC SIDEWALKS SHALL BE CONSTRUCTED ACCORDING TO CITY DETAILS.
6. FORMS SET FOR SIDEWALKS SHALL BE TRUE TO LINE AND GRADE AND SHALL PROVIDE A MAXIMUM SLOPE OF 1/4" PER FOOT ACROSS THE SIDEWALK UNLESS INDICATED OTHERWISE ON THE PLANS. FORMS SHALL BE SET TO PROVIDE FOR A FULL DEPTH OF CONCRETE INDICATED ON THE PLANS AND FORMS SHALL REMAIN IN PLACE A MINIMUM OF 24 HOURS. UPON REMOVAL OF THE FORM WORK, THE CONTRACTOR SHALL IMMEDIATELY BACKFILL THE EDGES OF THE WALK FOR A MINIMUM OF ONE FOOT (1') EACH SIDE OF THE WALK.
7. 24" X 3/4" DIA. ASPHALT COATED DOWELS WITH 5" X 13/16" DOWEL SLEEVE SHALL BE INSTALLED ON 16" CENTERS, ALONG WITH REDWOOD EXPANSION BOARD AND SEALING COMPOUND AS PER STANDARD EXPANSION JOINT DETAIL SHEET ALONG PERIMETER OF WHEEL CHAIR RAMP AND SIDEWALK.
8. PROVIDE 1/8" MIN. LAP BETWEEN REINFORCING STEEL IN STREET AND REINFORCING STEEL IN WHEEL CHAIR RAMP.
9. SUBGRADE FOR WALKWAYS ABUTTING CURBS, WITHIN PARKING ISLAND AREAS OR BETWEEN THE PARKING AREA AND BUILDING, SHALL BE PLACED ON COMPACTED FILL OR FIRM COMPACTED EXCAVATED GRADE. FILLS FOR SIDEWALKS SHALL CONFORM TO THE SAME REQUIREMENTS AS CONTROLLED DENSITY FILLS IN PARKING AREAS WITH THE COMPACTED MATERIAL EXTENDING A MINIMUM 18" BEYOND THE WALKWAY.
10. JOINT SEALING MATERIAL UTILIZED IN WALKWAY AREAS BETWEEN THE PARKING AREA AND THE BUILDING FOR EXPANSION JOINTS SHALL CONSIST OF "FOURTHANE" MANUFACTURED BY W. R. MEADOWS, INC. OR EQUAL. THIS INCLUDES WALKWAYS ABUTTING PERIMETER PARKING IN FRONT OF BUILDING.
11. FOR WALKWAYS 6' IN WIDTH OR LESS, GROOVED OR SAWED CONTRACTION JOINTS SHALL BE MADE AT UNIFORM INTERVALS EQUAL TO THE WIDTH OF THE SIDEWALK. ON WALKWAYS GREATER THAN 6' IN WIDTH CONTRACTION JOINTS SHALL BE SAWED. CONTRACTION JOINTS SHALL ONLY BE SEALED WHERE CONCENTRATED RUNOFF OCCURS IN PARKING AREAS, ENTRANCES AND WALKWAYS AT THE BUILDING. SEAL PARKING LOT CONCENTRATED RUNOFF AREAS SAME AS PARKING PAVEMENT. SEAL WALKWAYS WITHIN 50 FEET OF BUILDING WITH "DECK-O-SEAL" AS MANUFACTURED BY W. R. MEADOWS OR EQUAL.

- 12. CONCRETE FINISH SHALL BE BROOMED FOR ALL WALKWAYS LESS THAN 6' IN WIDTH AND MINOR ACCESS ROUTES GREATER THAN 6' IN WIDTH. THE FRONT ENTRANCE AND TWO SIDE MAJOR ENTRANCES SHALL BE SPECIAL TREATED AND FINISHED AS DESCRIBED ON THE DETAILED SITE LAYOUT. ALL HANDICAP ACCESS RAMPS SHALL HAVE SURFACE TEXTURE FINISH COMPLYING WITH ADA GUIDELINE 4.29.2.
13. JOINT SEALING MATERIAL FOR WALKWAY AND EXPANSION JOINTS IN THE INTERNAL PARKING AREAS AND EXTERNAL OPEN AREAS SHALL BE "HI SPEC" MANUFACTURED BY W. R. MEADOWS OR EQUAL.
14. CLEAN ALL JOINTS IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATION PRIOR TO SEALING.
15. ALL SIGNS, PAVEMENT MARKINGS, AND OTHER TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. SEE SPECIAL NOTE.
16. ALL PAVEMENT MARKINGS SHALL BE FOUR (4) INCHES WIDE COLOR WHITE UNLESS INDICATED OTHERWISE ON THE DRAWINGS. STRIPING TO BE 2 COATS OF PAINT. SECOND COAT TO THE APPLIED IMMEDIATELY PRIOR TO OBTAINING A CERTIFICATE OF OCCUPANCY.
17. A MINIMUM CLEARANCE OF TWO (2) FEET SHALL BE MAINTAINED BETWEEN THE FACE OF CURB AND ANY PART OF A TRAFFIC SIGN.
18. ALL DIMENSIONS ARE TO BACK OF CURB UNLESS INDICATED OTHERWISE.
19. CONTRACTOR SHALL FURNISH AND INSTALL ALL PAVEMENT MARKINGS AS SHOWN ON THE PLANS AND CITY STANDARD DETAIL SHEETS.
20. CONTRACTOR SHALL CONSIDERATE INSTALLATION OF ALL SIGNS, PAVEMENT MARKINGS, AND OTHER TRAFFIC CONTROL DEVICES WITH OTHER CONTRACTORS ON THE SITE AND CITY INSPECTOR.
21. FIRE LANE STRIPING WIDTH AND RADIUS SHALL BE COORDINATED WITH THE FIRE MARSHALL WHERE THE FIRE LANE IS INDICATED ON THE PLANS. THE FIRE LANE IS ANTICIPATED TO REQUIRE SOLID SIX-INCH RED CONTINUOUS STRIPING ON BOTH SIDES AND CURB RETURNS. THE WORDS "FIRE LANE - NO PARKING" SHALL BE PAINTED ON MINIMUM 20 FOOT CENTERS WITH FOUR INCH WHITE LETTERS WITHIN SOLID RED STRIPE PER FIRE CODE. PAINT TYPE AND COLOR SHALL BE APPROVED BY THE CITY TRAFFIC ENGINEER.
WHEN REQUIRED DURING CONSTRUCTION OR OTHER TEMPORARY USE, APPROVED SIGNS SHALL BE PROVIDED AND MAINTAINED FOR FIRE APPARATUS ACCESS ROADS TO IDENTIFY SUCH ROADS AND PROHIBIT THE OBSTRUCTION THEREOF OR BOTH. SIGNS MUST BE SECURED SO THAT THEY CANNOT BE MOVED UNTIL PERMANENT FIRE LANE IS PAINTED.

TESTING

- 1. REFER TO PROJECT GEOTECHNICAL RECOMMENDATIONS FOR FREQUENCY OF CONCRETE TESTING AND TEST METHODS. ALL CONCRETE SHALL BE TESTED. IF TESTING IS NOT ADDRESSED IN GEOTECHNICAL RECOMMENDATIONS PROVIDE AS PER NCTCOES ITEM 5.8.6.(c) AND ITEM 7.4.5.(A&B).

UTILITY NOTES

- 1. ALL PIPE LENGTHS ARE HORIZONTAL DISTANCES AND ARE APPROXIMATE.
2. ALL WATER AND SANITARY SEWER BULKHEADS TO TERMINATE APPROXIMATELY 5 FEET OUTSIDE THE BUILDING UNLESS OTHERWISE NOTED. THE END OF THESE SERVICE LINES SHALL BE TIGHTLY PLUGGED OR CAPPED AND MARKED UNTIL SUCH TIME AS CONNECTION IS MADE INSIDE BUILDING.
3. SITE UTILITY CONTRACTOR SHALL PROVIDE ALL THE MATERIALS AND APPURTENANCES NECESSARY FOR THE COMPLETE INSTALLATION OF THE UTILITIES. ALL PIPE AND FITTINGS SHALL BE INSPECTED BY THE CONSTRUCTION INSPECTOR PRIOR TO BEING COVERED. THE INSPECTOR MUST ALSO BE PRESENT DURING PRESSURE TESTING AND DISINFECTION OF MAINS AND HIS SIGNATURE OF APPROVAL IS REQUIRED.
4. ALL WORK SHALL COMPLY WITH ALL APPLICABLE CODES, REGULATIONS, AND/OR LOCAL STANDARDS IMPOSED BY LOCAL UTILITY, AND THE CITY.
5. THE SITE UTILITY CONTRACTOR SHALL MAKE ARRANGEMENTS WITH THE LOCAL UTILITY AUTHORITY FOR CONNECTION TO THE EXISTING MAINS.
6. ALL FIRE HYDRANTS ARE 6" DIAMETER WITH A 6" DIAMETER LINE UNLESS NOTED OTHERWISE. FIRE HYDRANT SHALL BE SET SUCH THAT NOZZLE NOZZLE CONNECTIONS FACE THE STREET OR FIRE LANE.
7. ALL WATER LINES SHALL HAVE A MINIMUM COVER OF 42" OVER THE WATER PIPE AS MEASURED FROM THE TOP OF THE PIPE TO THE EXISTING GROUND, OR THE PROPOSED FINISHED GROUND, WHICHEVER IS APPLICABLE.
8. CONTRACTOR SHALL ADJUST LOCATION OF PROPOSED WATER LINES AS REQUIRED TO AVOID CONFLICTS WITH STORM SEWER OR OTHER UTILITIES.
9. THRUST BLOCKS AND ANCHOR FITTINGS SHALL BE PROVIDED AT ALL "TEES, ELBOWS, AND BENDS" OF SUFFICIENT SIZE TO COMPLY WITH MINIMUM STANDARDS OF N.E.P.A. - 24 FOR EXISTING SOIL CONDITIONS.
9a. ALL JOINTS AND FITTINGS SHALL BE MECHANICAL JOINTS. ALL JOINTS ARE TO BE SET SCREW RETAINER GLANDS (MEG-A-LUG) OR APPROVED EQUIVALENT.
10. BASED ON SECTION 704.2 OF THE CURRENT EDITION OF THE STANDARD PLUMBING CODE, CLEANOUTS ARE REQUIRED AT A MAXIMUM SPACING OF 75 FEET ON UTILITY LEAD-INS TO BUILDINGS. CONTRACTOR TO PROVIDE CLEANOUTS WITHIN 5 FEET OF BUILDING.
11. ALL GATE VALVES TO BE PROVIDED WITH CAST IRON BOXES AND 2' X 2' CONCRETE PADS.
12. SHOULD LATENT SOIL CONDITIONS NECESSITATE, CONTRACTOR SHALL INSTALL SPECIAL SUPPORTS FOR PIPING AND/OR APPURTENANCES INCLUDING THE REMOVAL OF UNSUITABLE MATERIAL AND BACKFILLING WITH GRAVEL OR OTHER MATERIAL. CONTRACTOR SHALL PERFORM ANY SUCH WORK AS DIRECTED BY THE CIVIL ENGINEER AND/OR SOILS ENGINEER AT NO ADDITIONAL COST TO THE OWNER.
13. THE SITE UTILITY CONTRACTOR SHALL COOPERATE AND WORK WITH OTHER CONTRACTORS ON THE SITE.
14. ALL MANHOLES OVER FIVE (5) FEET IN DEPTH SHALL HAVE A STANDARD CONCENTRIC COVER.
15. ALL MATERIALS SHALL BE U.L. LISTED AND FACTORY MUTUAL APPROVED UNLESS DIRECTED OTHERWISE BY THE ENGINEER.
16. EXISTING UTILITIES AND UNDERGROUND FACILITIES INDICATED ON THESE PLANS HAVE BEEN LOCATED FROM REFERENCE INFORMATION SUPPLIED BY VARIOUS OWNERS OF THE FACILITIES. THE ENGINEER DOES NOT ACCEPT RESPONSIBILITY FOR THE UTILITY LOCATIONS SHOWN. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY BOTH HORIZONTALLY AND VERTICALLY THE LOCATION OF ALL EXISTING UTILITIES AND UNDERGROUND FACILITIES PRIOR TO CONSTRUCTION, TO TAKE NECESSARY PRECAUTIONS IN ORDER TO PROTECT ALL FACILITIES ENCOUNTERED, AND TO NOTIFY THE ENGINEER PROMPTLY OF ALL CONFLICTS OF THE WORK WITH EXISTING UTILITIES FROM DAMAGE DURING CONSTRUCTION. ANY DAMAGES BY THE CONTRACTOR TO EXISTING UTILITIES SHALL BE REPAIRED BY THE CONTRACTOR AT HIS EXPENSE.

- 17. PIPE 2" AND SMALLER SHALL BE TYPE K COPPER. FITTINGS SHALL BE COPPER OR CAST BRONZE. JOINTS SHALL BE SOLDER OR FLARE TUBE TYPE.
18. UTILITY LEAD-INS TO BUILDING SHALL NOT BE INSTALLED UNTIL BUILDING PLANS ARE COMPLETED AND LOCATIONS ESTABLISHED ON THE ARCHITECTURAL PLUMBING PLANS. LEAD-INS MAY CHANGE 15' HORIZONTALLY AND 3' VERTICALLY PRIOR TO INSTALLATIONS AT NO ADDITIONAL COST TO OWNER. LOCATION, SIZE, AND INVERT ELEVATIONS OF SANITARY SEWER SHALL BE COORDINATED WITH THE APPROVED PLUMBING PLANS FOR THE BUILDING.
19. ALL TRENCHES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 AND THE STANDARDS THEREIN AND APPLICABLE STATE AND LOCAL REGULATIONS. CONTRACTOR SHALL PROVIDE TRENCH SAFETY PLANS DESIGNED AND SEALED BY A REGISTERED PROFESSIONAL ENGINEER.
20. CONTRACTOR SHALL REFER TO SITE GEOTECHNICAL REPORT FOR DETAILS ON COMPACTION, BACKFILL, PROOFROLLING AND TESTING.
21. ALL CONSTRUCTION ON ALL PUBLIC SEWER & WATER SYSTEMS SHALL BE IN ACCORDANCE WITH CITY STANDARDS DETAILS.
22. UNDERGROUND FIRE SPRINKLER LINE SHALL BE CLASS 200.
23. UNDERGROUND FIRE LINE SHALL BE INSTALLED BY A LICENSED CONTRACTOR PERMITTED TO INSTALL FIRE PREVENTION PIPE.
24. ALL WATER LINES SHALL BE DR 14 CLASS 200 PVC.

GENERAL GRADING & DRAINAGE NOTES

- 1. EXISTING UTILITIES AND UNDERGROUND FACILITIES INDICATED ON THESE PLANS HAVE BEEN LOCATED FROM REFERENCE INFORMATION SUPPLIED BY VARIOUS OWNERS OF THE FACILITIES. THE ENGINEER DOES NOT ACCEPT RESPONSIBILITY FOR THE UTILITY LOCATIONS SHOWN. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY BOTH HORIZONTALLY AND VERTICALLY THE LOCATION OF ALL EXISTING UTILITIES AND UNDERGROUND FACILITIES PRIOR TO CONSTRUCTION, TO TAKE NECESSARY PRECAUTIONS IN ORDER TO PROTECT ALL FACILITIES ENCOUNTERED, AND TO NOTIFY THE ENGINEER PROMPTLY OF ALL CONFLICTS OF THE WORK WITH EXISTING FACILITIES. THE CONTRACTOR SHALL PRESERVE AND PROTECT ALL EXISTING UTILITIES FROM DAMAGE DURING CONSTRUCTION. ANY DAMAGES BY THE CONTRACTOR TO EXISTING UTILITIES SHALL BE REPAIRED BY THE CONTRACTOR AT HIS EXPENSE. EXISTING TOPOGRAPHIC INFORMATION SHOWN IS BASED ON IN-FIELD SURVEY PREPARED BY WIER AND ASSOCIATES ON MARCH 26, 2002. (EXCLUDES BELOW GRADE PUBLIC UTILITY LOCATIONS PROVIDED BY UTILITY COMPANY AS DESCRIBED ABOVE)
2. NEW FINISHED CONTOURS SHOWN ARE TOP OF PAVING IN AREAS TO RECEIVE PAVEMENT AND TOP OF TOPSOIL IN AREAS TO BE SEEDED, TOP OF RIP-RAP IN AREAS LINED WITH ROCK.
3. AREAS OUTSIDE OF THE PARKING LOT PERIMETERS SHOWN TO BE SEEDED SHALL RECEIVE TOPSOIL TO DEPTH INDICATED ON LANDSCAPE ARCHITECT PLANS. THIS TOPSOIL TO BE PLACED AND LEVELED BY THE GRADING CONTRACTOR.
4. ROUGH GRADING ELEVATIONS SHALL BE AS FOLLOWS UNLESS OTHERWISE NOTED:
3' BELOW FINISHED CONTOURS IN SEEDED AREAS.
6' BELOW FINISHED CONTOURS IN PAVED AREAS, AND ROCK RIP-RAP AREAS.
5. DIMENSIONS ON BUILDINGS ARE FOR GRADING PURPOSES ONLY AND ARE NOT TO BE USED TO LAYOUT FOOTINGS.
6. GRADING CONTRACTOR SHALL NOTIFY AND COOPERATE WITH ALL UTILITY COMPANIES OR FIRMS HAVING FACILITIES ON OR ADJACENT TO THE SITE BEFORE DISTURBING, ALTERING, REMOVING, RELOCATING, ADJUSTING OR CONNECTING TO SAID FACILITIES. CONTRACTOR SHALL PAY ALL COSTS IN CONNECTION WITH THE ALTERATION OF OR RELOCATION OF THE FACILITIES. CONTRACTOR SHALL RAISE OR LOWER TOPS OF EXISTING MANHOLES AS REQUIRED TO MATCH FINISHED GRADES IN CONFORMANCE WITH CITY STANDARDS.
7. GRADING CONTRACTOR SHALL COOPERATE AND WORK WITH ALL OTHER CONTRACTORS PERFORMING WORK ON THIS PROJECT TO INSURE PROPER AND TIMELY COMPLETION OF THIS PROJECT.
8. THE GRADING CONTRACTOR SHALL USE WHATEVER MEASURES ARE REQUIRED TO PREVENT SILT AND CONSTRUCTION DEBRIS FROM FLOWING ONTO ADJACENT PROPERTIES. THIS CAN BE ACCOMPLISHED BY SMALL TEMPORARY SEDIMENT PONDS, SILT FENCES OF STEEL WIRE & BURLAP OR BARRIERS OF CEDAR TREES AND/OR BALES OF STRAW. CONTRACTOR SHALL COMPLY WITH ALL LOCAL EROSION, CONSERVATION, AND SILTATION ORDINANCES. CONTRACTOR SHALL REMOVE ALL TEMPORARY EROSION CONTROL STRUCTURES UPON COMPLETION OF PERMANENT DRAINAGE FACILITIES AND THE ESTABLISHMENT OF A STAND OF GRASS SUFFICIENT TO PREVENT EROSION.
9. FOR THE WORK ON THE STATE OR CITY RIGHT-OF-WAY, THE GRADING CONTRACTOR SHALL:
A. NOT STORE MATERIAL, EXCESS DIRT OR EQUIPMENT ON THE SHOULDERS OF PAVEMENT IN CASE OF MULTI-LANE HIGHWAYS, IN THE MEDIUM STRIPS. THE PAVEMENT SHALL BE KEPT FREE FROM ANY MUD OR EXCAVATION WASTE FROM TRUCKS OR OTHER EQUIPMENT. ON COMPLETION OF THE WORK ALL EXCESS MATERIAL SHALL BE REMOVED FROM THE RIGHT-OF-WAY.
B. SHALL PROVIDE ALL NECESSARY AND ADEQUATE SAFETY PRECAUTIONS SUCH AS SIGNS, FLAGS, LIGHTS, BARRICADES AND FLAGMEN AS REQUIRED BY THE LOCAL AUTHORITIES AND IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. THE GRADING CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR AND HOLD HARMLESS THE CITY AND THE OWNER FROM ANY CLAIMS FOR DAMAGE DONE TO EXISTING PRIVATE PROPERTY, PUBLIC UTILITIES, OR TO THE TRAVELING PUBLIC.
C. SHALL COMPLETE THE WORK TO THE SATISFACTION OF THE CITY ENGINEERING DIVISION AND OBTAIN A LETTER FROM THE DEPARTMENT STATING THAT THE WORK UNDER PUBLIC JURISDICTION IS ACCEPTABLE.

PARKING LOT GRADING NOTES

- 1. THIS GRADING PLAN DOES NOT INCLUDE CONSTRUCTION OF THE FOUNDATION FOR THE BUILDING PAD AND THE AREAS ADJACENT TO THE BUILDING. THE OWNER SHALL SELECT THE FOUNDATION DESIGN OPTION WHICH WILL ESTABLISH THE CONSTRUCTION TECHNIQUE TO BE USED FOR THE FOUNDATION PAD AND AREAS OF THE BUILDING. REFER TO THE PROJECT GEOTECHNICAL REPORT FOR FOUNDATION CONSTRUCTION RECOMMENDATIONS.
2. CONSTRUCTION OF SITE GRADING AND EMBANKMENT SHALL MEET OR EXCEED THE RECOMMENDATION PROVIDED IN THE PROJECT GEOTECHNICAL REPORT.
3. AREAS WHICH ARE A MINIMUM 5 FEET HORIZONTALLY OF THE PARKING PAVEMENT AND EMBANKMENT SLOPES ADJACENT TO PARKING AREA SHALL BE CONSTRUCTED AS PER THE PROJECT GEOTECHNICAL ENGINEER'S RECOMMENDATIONS. THE BELOW SPECIFICATIONS ARE MINIMUM REQUIREMENTS AND SHALL BE SUPERSEDED BY THE PROJECT GEOTECHNICAL RECOMMENDATIONS IF IN CONFLICT. THE SPECIFICATIONS ARE AS FOLLOWS:
A. THE AREA SHALL BE STRIPPED OF VEGETATION A MINIMUM 6-INCHES OR DEEPER AS DIRECTED BY THE PROJECT GEOTECHNICAL ENGINEER TO STABLE SUBGRADE AND PROOFROLLED. PROOFROLLING CONSISTS OF ROLLING THE ENTIRE SUBGRADE WITH A HEAVILY LOADED TANDEN AXLE DUMP TRUCK OR OTHER APPROVED EQUIPMENT CAPABLE OF APPLYING SIMILAR WHEEL LOADS. ANY SOFT, WET OR WEAK FILL OR NATURAL SOILS WHICH DO NOT COMPACT BY PROOFROLLING SHALL BE REMOVED AND RECOMPACTED AS OUTLINED HEREIN. THE PROOFROLLING OPERATION MUST BE PERFORMED UNDER THE OBSERVATION OF A QUALIFIED GEOTECHNICAL ENGINEER OR HIS REPRESENTATIVE AND DENSITY CONTROL TESTED.
B. ON-SITE SOILS WITH PLASTICITY INDEX ANTICIPATED TO BE GREATER THAN IS, WHICH INCLUDES ANY DARK COLORED SURFACE CLAY SOILS, CAN BE ALSO USED AS GRADE RAISE FILL OUTSIDE THE PROPOSED BUILDING AREA. THESE CLAY SOILS SHALL BE COMPACTED TO A DRY DENSITY OF AT LEAST 95 PERCENT OF STANDARD PROCTOR AND NOT EXCEEDING 100 PERCENT. THE COMPACTED MOISTURE CONTENT OF THE CLAYS DURING PLACEMENT SHALL BE BETWEEN OPTIMUM AND FOUR (4) PERCENTAGE POINTS ABOVE OPTIMUM.
C. COMPACTION SHALL BE ACCOMPLISHED BY PLACING THE FILL IN 8 INCH THICK LOOSE LIFT AND THE SPECIFIED MINIMUM DRY DENSITY. IT IS IMPERATIVE THAT THE FILL PARTICLE SIZE BE LESS THAN SIX INCHES IN DIAMETER. IF LARGER CLODS ARE ENCOUNTERED DURING GRADING, THEN THESE CLODS MUST BE BROKEN DOWN PRIOR TO FINAL PLACEMENT IN THE FILL. THIS MAY REQUIRE PLACEMENT OF THE MATERIAL, AN INITIAL COMPACTIVE EFFORT TO BREAK THE CLODS DOWN, SCARIFYING, WETTING AND RECOMPACTING. COMPACTION OF ALL FILL AND BACKFILL SHALL BE DONE BY A SHEEPSFOOT ROLLER.

- D. POST NECESSARY BONDS AS REQUIRED BY THE CITY AND/OR STATE.
10. GRADING CONTRACTOR SHALL TAKE ALL AVAILABLE PRECAUTIONS TO CONTROL DUST. CONTRACTOR SHALL CONTROL DUST BY SPRINKLING, BY APPLYING CALCIUM CHLORIDE, OR BY OTHER METHODS AS DIRECTED BY ENGINEER AND/OR OWNER'S REPRESENTATIVE, AT NO ADDITIONAL COST TO OWNER.
11. REFER TO PAVING DETAILS FOR TYPE OF PAVING AND BASE TO BE USED.
12. GRADING CONTRACTOR IS RESPONSIBLE FOR REMOVING ANY EXISTING STRUCTURES, FENCES, DEBRIS, OR TREES REMAINING ON SITE AND SHALL COORDINATE WITH GENERAL CONTRACTOR.
13. GRADING CONTRACTOR TO COMPLY WITH ALL STATE AND LOCAL SEDIMENT CONTROL AND AIR POLLUTION ORDINANCES OR RULES.
14. A QUALIFIED SOILS LABORATORY SHALL DETERMINE THE SUITABILITY OF THE EXISTING SUBGRADE AND EXISTING ON-SITE MATERIAL PRIOR TO BEGINNING ANY FILLING OPERATION.
15. UNSUITABLE EXCAVATED MATERIALS AND ALL WASTE RESULTING FROM CLEARING AND GRUBBING SHALL BE DISPOSED OF OFF-SITE BY GRADING CONTRACTOR. CONTRACTOR SHALL OBTAIN ALL NECESSARY CITY, STATE, AND/OR FEDERAL PERMITS.
16. ALL EXCAVATING IS UNCLASSIFIED AND SHALL INCLUDE ALL MATERIALS ENCOUNTERED.
17. BEFORE ANY MACHINE WORK IS DONE, CONTRACTOR SHALL STAKE OUT AND MARK THE ITEMS ESTABLISHED BY THE SITE PLAN. CONTROL POINTS SHALL BE PRESERVED AT ALL TIMES DURING THE COURSE OF THE PROJECT. LACK OF PROPER WORKING POINTS AND GRADE STAKES MAY REQUIRE CESSATION OF OPERATIONS UNTIL SUCH POINTS AND GRADES HAVE BEEN PLACED TO THE OWNER'S SATISFACTION.
18. TEMPORARY EROSION CONTROL DEVICES TO BE INSTALLED PRIOR TO BEGINNING OF GRADING. CONTRACTOR SHALL MAINTAIN ALL TEMPORARY EROSION CONTROL DEVICES AND SHALL REMOVE SILT FROM BERM DITCHES, SILT DAMS, AND SILT FENCES AS NEEDED.
19. ALL ON-SITE GRASS AREAS AND REGRADED OFFSITE AREAS SHALL BE SOODED. CONTRACTOR SHALL APPLY WATER, FERTILIZER, AND ALL OTHER NECESSARY NUTRIENTS AND CARE UNTIL ROOT SYSTEMS ARE ESTABLISHED.
20. CONTRACTOR SHALL OBTAIN A GRADING PERMIT FROM CITY ENGINEERING DEPARTMENT.
21. ALL COMPACTION SHALL BE PREPARED USING A SHEEPSFOOT ROLLER.

- D. IN ORDER FOR THE FILL MATERIALS TO PERFORM AS INTENDED, THE FILL MATERIAL MUST BE PLACED IN A MANNER WHICH PRODUCES A GOOD UNIFORM FILL COMPACTED WITHIN THE DENSITY AND MOISTURE RANGES OUTLINED IN THE PRECEDING PARAGRAPHS. FIELD DENSITY TESTS SHALL BE PERFORMED ON FILL SOILS TO CONFIRM THIS PERFORMANCE AS CONSTRUCTION PROGRESSES. FOR THE PROPOSED PARKING AND DRIVEWAY AREAS, TESTING AT A FREQUENCY OF NO LESS THAN (1) ONE TEST PER LIFT PER EACH 5,000 SQUARE FEET SHALL BE PROVIDED FOR FILL AND PROOF ROLLING.
4. THESE SPECIFICATIONS DO NOT INCLUDE GRADING AND PREPARATION OF THE BUILDING FOUNDATION AREA. THE CONTRACTOR SHALL CONFIRM FOUNDATION CONSTRUCTION COMPACTON, MOISTURE CONTROL, SELECT FILLS AND/OR TREATMENT WITH THE OWNER, THE PROJECT GEOTECHNICAL ENGINEER AND STRUCTURAL ENGINEER.
EROSION CONTROL NOTES:
1. CONTRACTOR TO INSTALL PIPE SEDIMENT FILLER AT END OF EACH WORK DAY TO PREVENT ENTRY OF SEDIMENT INTO PROPOSED STORM SEWERS DURING CONSTRUCTION.
2. ALL STAGING AREAS, VEHICLE PARKING AREAS, STOCKPILES, SPOILS, ETC. SHALL BE LOCATED SUCH THAT THEY DO NOT ADVERSELY AFFECT THE STORM WATER QUALITY.
3. ONSITE FUEL STORAGE TANKS SHALL BE PROTECTED BY A BERMED OR OTHERWISE SPILL PROTECTED AREA.
4. A CENTRAL PIT/WASH BASIN SHOULD BE CONSTRUCTED ON SITE FOR THE PURPOSE OF TRUCK WASHING.
5. A MAINTENANCE PROGRAM SHALL BE DEVELOPED USING BEST MANAGEMENT PRACTICES FOR THIS PROJECT.
6. IN ORDER TO KEEP DISTURBANCE TO A MINIMUM, VEGETATION SHOULD BE REESTABLISHED ON ALL DENUDEED AREAS IN A TIMELY MANNER.
7. GENERAL CONTRACTOR AND OWNER/DEVELOPER ARE RESPONSIBLE FOR PREVENTING SEDIMENT OR OTHER POLLUTANTS FROM LEAVING THE SITE. CARE SHALL BE EXERCISED TO PREVENT THE FLOW OF OFF-SITE TRACKING OF SEDIMENT OR OTHER POLLUTANTS TO ADJACENT ROADWAYS, INLETS, STORM SEWERS AND DRAINAGE DITCHES.
9. ALL PERIMETER EROSION CONTROL MEASURES AND ROCK STABILIZED EXIT MUST BE IN PLACE BEFORE STARTING SOIL DISTURBING ACTIVITIES.
10. THE GENERAL CONTRACTOR OR OWNER SHALL INSPECT EROSION CONTROL MEASURES AT LEAST ONCE EACH WEEK AND WITHIN 24 HOURS AFTER A STORM EVENT OF 1/2 INCH OR GREATER. RECORDS OF EACH INSPECTION SHOULD BE RETAINED ON SITE WITH THE SWPPP (IF REQUIRED). CONTRACTOR TO REPLACE OR REPAIR DAMAGED MEASURES AS NECESSARY. EROSION CONTROL MEASURES THAT PROVE TO BE INEFFECTIVE SHALL BE REPLACED WITH MORE EFFECTIVE MEASURES OR ADDITIONAL MEASURES WITHIN SEVEN (7) CALENDAR DAYS.
11. CONTRACTOR SHALL CLEAN ADJACENT ROADWAYS ONCE DAILY AT A MINIMUM TO PREVENT SILTATION OF THE PUBLIC STORM SYSTEM. TO THE EPA AND COPIES TO THE CITY OF ROCKWALL.
12. FOR ALTERNATIVE STABILIZATION AND EROSION CONTROL MEASURES, REFER TO THE CONSTRUCTION BEST MANAGEMENT PRACTICES (CBMP) MANUAL PUBLISHED BY NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS.
13. IF "SLUMP" PUMPS ARE USED TO REMOVE WATER FROM EXCAVATED AREAS, CONTRACTOR TO FILTER THE DISCHARGE TO REMOVE SEDIMENT AND OTHER POLLUTANTS BEFORE THE WATER ENTERS STORM DRAIN FACILITIES OR LEAVES THE SITE.
14. ROCK STABILIZED ACCESS SHALL BE CONSTRUCTED AT ALL POINTS USED AS AN EXIT FROM THE CONSTRUCTION SITE.
15. CONTRACTOR TO LIMIT ANY PROPOSED LIME STABILIZATION OPERATIONS TO THAT WHICH CAN BE MIXED AND COMPACTED BY THE END OF EACH WORK DAY. SILT FENCE IS NOT EFFECTIVE IN FILTERING LIME SINCE THE GRAIN SIZE IS SIGNIFICANTLY SMALLER THAN THE OPENING IN THE FABRIC.
16. STORE ALL TRASH AND BUILDING MATERIAL IN AN ENCLOSURE UNTIL PROPER DISPOSAL AT OFFSITE FACILITIES.
17. SURFACE STABILIZATION MEASURES MUST BE INITIATED 14 DAYS IN ANY AREA WHERE CONSTRUCTION ACTIVITY TEMPORARILY OR PERMANENTLY CEASES FOR A PERIOD OF 21 DAYS OR MORE.
18. CONTRACTOR TO CONTROL POLLUTANTS OCCURRING IN STORM WATER DISCHARGES AFTER CONSTRUCTION ACTIVITIES ARE COMPLETE.

RECORD DRAWING DECEMBER 6, 2002

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PRECISION SHEET METAL GENERAL NOTES

STATE OF TEXAS REGISTERED PROFESSIONAL ENGINEER RONALD R. RAMIREZ 81821 DATE: 12-07-2002 I.A.# 02032 SHEET NO. 2

ALL REFERENCES TO "CITY" SHALL BE "THE CITY OF ROCKWALL"

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