

**GENERAL**

- ALL CONSTRUCTION MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THESE DRAWINGS AND THE SPECIFICATIONS.
- CONTRACTOR SHALL MAINTAIN ADEQUATE DRAINAGE AT ALL TIMES. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL STORM WATER CONTROL, EROSION CONTROL, PUMPING AND DEWATERING NECESSARY FOR THE CONSTRUCTION OF THIS PROJECT. THIS WORK SHALL BE CONSIDERED INCIDENTAL, AND NOT A SEPARATE PAY ITEM.
- CONTRACTOR SHALL LOCATE EXISTING UTILITIES PRIOR TO COMMENCING CONSTRUCTION OF THIS PROJECT. CONTRACTOR SHALL NOTIFY OWNER OF ANY POTENTIAL CONFLICT IN A TIMELY MANNER. EXCAVATED AREAS SHALL BE BACKFILLED AS DESCRIBED IN THE GEOTECHNICAL REPORT.
- ANY STRUCTURAL EXCAVATION AND BACKFILL SHALL BE CONSIDERED INCIDENTAL AND NOT A SEPARATE PAY ITEM.
- MEASUREMENT FOR PAYMENT FOR THE JUNCTION BOXES WILL BE LUMP SUM. THIS PRICE SHALL BE FULL COMPENSATION FOR ALL STRUCTURAL EXCAVATION, TEMPORARY SHORING, FORMWORK, CONCRETE, REINFORCING STEEL, COMPACTED BACKFILL, WATERSTOPS, OTHER ACCESSORIES, AND ALL LABOR, TOOLS, MATERIALS, EQUIPMENT AND INCIDENTALS NECESSARY FOR COMPLETE CONCRETE STRUCTURES.
- COMPLETE SHOP DRAWINGS FOR THE STRUCTURAL WORK SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO COMMENCEMENT OF CONSTRUCTION. A PERIOD OF AT LEAST 10 WORKING DAYS SHALL BE PROVIDED FOR THIS REVIEW. REVIEW OF SHOP DRAWINGS BY THE ENGINEER DOES NOT RELIEVE THE CONTRACTOR OF FULL RESPONSIBILITY FOR CORRECT FABRICATION AND CONSTRUCTION OF THE WORK.
- ANY DEVIATION FROM, ADDITION TO, SUBSTITUTION FOR, OR MODIFICATION TO THE STRUCTURE OR ANY PART OF THE STRUCTURE SHOWN ON THESE DRAWINGS SHALL BE SUBMITTED IN WRITING TO THE ENGINEER FOR REVIEW. SHOP DRAWINGS THAT ARE SUBMITTED FOR REVIEW DO NOT CONSTITUTE "IN-WRITING" UNLESS IT IS CLEARLY NOTED THAT SPECIFIC CHANGES ARE BEING SUGGESTED.
- THE CONTRACTOR SHALL REFER TO THE CIVIL DRAWINGS FOR ELEVATIONS NOT SHOWN AND FOR EXACT LOCATIONS AND DIMENSIONS. THE CONTRACTOR SHALL COMPARE THE STRUCTURAL PLANS AND SECTIONS WITH THE CIVIL PLANS AND SECTIONS AND REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO COMPLETION OF THE SHOP DRAWINGS.
- THE CONTRACTOR SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS AT THE SITE AND SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES BETWEEN THE ACTUAL CONDITIONS AND INFORMATION SHOWN ON THE DRAWINGS BEFORE PROCEEDING WITH THE WORK.
- THE STRUCTURAL DRAWINGS ARE NOT TO BE SCALED FOR DETERMINATION OF QUANTITIES, LENGTHS, OR FIT OF MATERIALS.
- THE STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE METHODS OF CONSTRUCTION UNLESS SO STATED OR NOTED. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE WORKMEN AND OTHER PERSONS DURING CONSTRUCTION.
- THE CONTRACTOR SHALL PROVIDE TEMPORARY ERECTION BRACING AND SHORING OF ALL STRUCTURAL WORK AS REQUIRED FOR STABILITY OF THE STRUCTURE DURING ALL PHASES OF CONSTRUCTION. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY CONDITION WHICH, IN HIS OPINION, MIGHT ENDANGER THE STABILITY OF THE STRUCTURE OR CAUSE DISTRESS IN THE STRUCTURE.
- ANY INCONSISTENCIES OR DISCREPANCIES THAT MAY OCCUR WITHIN OR BETWEEN THE DRAWINGS AND SPECIFICATIONS, THE GREATER QUANTITY OF ITEMS SHOWN, AND THE MOST COSTLY PRODUCT OR INSTALLATION METHOD SHALL BE PROVIDED, UNLESS INSTRUCTED OTHERWISE BY THE ARCHITECT/ENGINEER. IT SHALL BE DEEMED THAT THE CONTRACTOR BID AND INTEND TO EXECUTE THE MORE STRINGENT OR HIGHER QUALITY REQUIREMENT WITHOUT ANY INCREASE TO THE CONTRACT SUM OR CONTRACT TIME.

**EARTHWORK AND FOUNDATIONS**

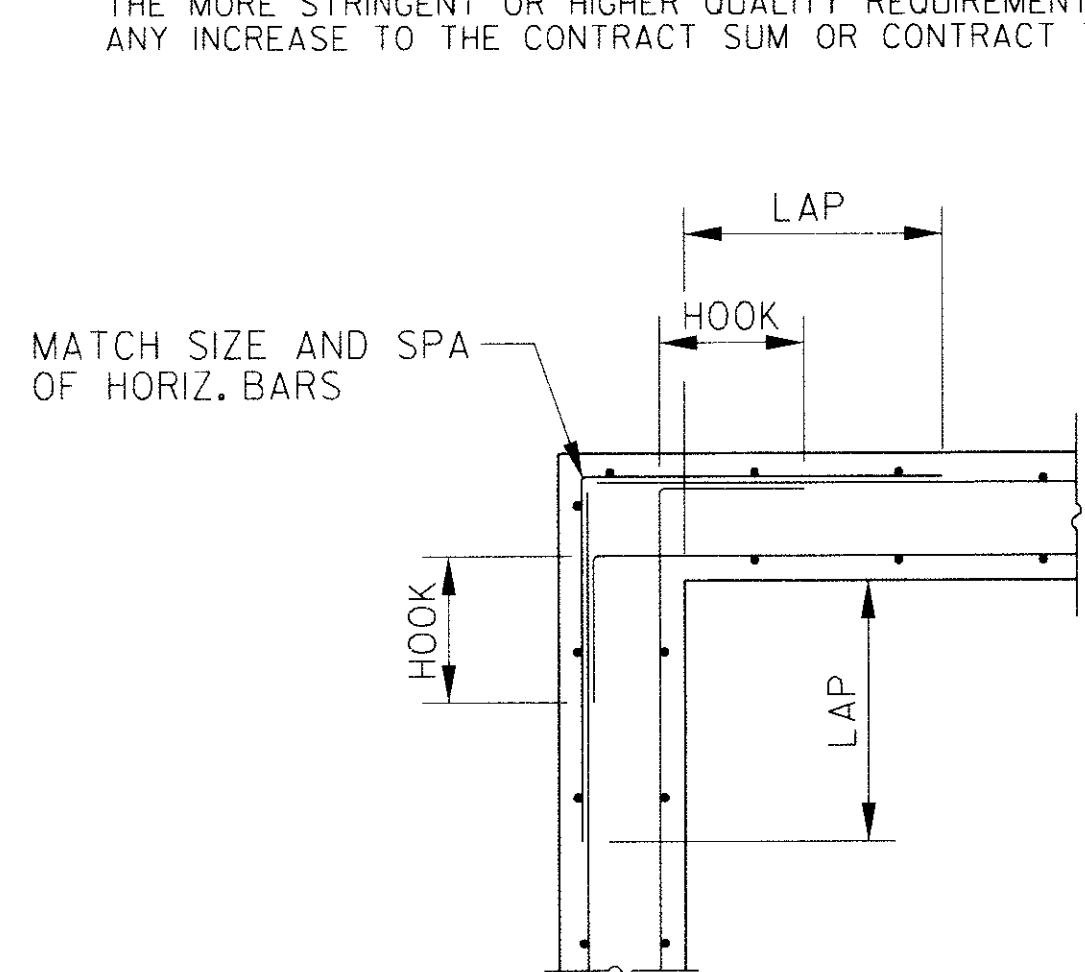
- THE FOUNDATION DESIGN IS IN ACCORDANCE WITH A SUBGRADE INVESTIGATION AND REPORT (1406-09-01) BY CMJ ENGINEERING, INC. DATED SEPTEMBER 22, 2009.
- A QUALIFIED GEOTECHNICAL ENGINEER SHALL BE RETAINED TO OBSERVE ALL GRADING OPERATIONS AND THE REQUIRED TESTING FOR IMPLEMENTING THE RECOMMENDATIONS OF THE AFOREMENTIONED SUBSURFACE INVESTIGATION AND REPORT. THESE TESTS AND OBSERVATIONS SHALL INCLUDE BUT NOT NECESSARILY BE LIMITED TO THE FOLLOWING:
  - IDENTIFICATION OF BEARING MATERIAL
  - VERIFICATION OF ADEQUATE PENETRATION OF THE FOUNDATION EXCAVATION INTO THE BEARING LAYER
  - VERIFICATION THAT THE BASE AND SIDES OF THE EXCAVATION ARE CLEAN OF LOOSE CUTTINGS
  - DETERMINATION OF WHETHER THE AMOUNT OF SEEPAGE ENCOUNTERED IS SUFFICIENT TO REQUIRE THE USE OF EXCAVATION DEWATERING METHODS.
- BACKFILL AROUND THE JUNCTION BOXES SHALL CONSIST OF SITE-EXCAVATED MATERIAL WITH ALL FRAGMENTS LARGER THAN FOUR INCHES IN MAXIMUM DIMENSION REMOVED AND SHALL BE FREE OF ALL ORGANIC AND DELETERIOUS MATERIAL. FILL SHALL BE PLACED IN COMPACTED LIFTS NOT EXCEEDING 8 INCHES THICK AND SHALL BE UNIFORMLY COMPACTED TO A MINIMUM OF 95 PERCENT OF ASTM D 698 STANDARD PROCTOR DENSITY AT A MOISTURE CONTENT THREE POINTS BELOW TO THREE POINTS ABOVE THE SOIL'S OPTIMUM MOISTURE CONTENT.
- THE PREPARATION OF AREAS TO RECEIVE THE BOTTOM SLAB SHALL INCLUDE:
  - STRIPPING OF VEGETATION, ROOTS, OLD CONSTRUCTION DEBRIS, AND OTHER ORGANIC MATERIAL.
  - PROOFROLLING ANY EXPOSED SUBGRADE IN THE PRESENCE OF THE GEOTECH'S REPRESENTATIVE.
  - OVEREXCAVATION OF ANY SOFT AREAS AND REPLACEMENT WITH SELECT FILL PLACED ACCORDING TO THE GEOTECH REPORT.
- IF POSSIBLE, ALL CONCRETE FOR FOUNDATIONS SHALL BE PLACED ON THE SAME DAY THE EXCAVATION IS MADE. EACH FOUNDATION EXCAVATION SHOULD BE CLEAN, DRY, AND FREE OF ANY LOOSE SOIL OR UNCOMPACTED FILL. ALL SATISFACTORY FOUNDATION EXCAVATIONS SHALL BE ADEQUATELY PROTECTED AGAINST DETRIMENTAL CHANGES IN CONDITIONS SUCH AS FREEZING, DISTURBANCE, DRYING OR SATURATION. THE EXPOSED FOUNDATION SOILS SHALL NOT BE ALLOWED TO BECOME EXCESSIVELY DRY OR WET BEFORE PLACEMENT OF CONCRETE. THE MOISTURE CONTENT AND CONDITION OF THE SOILS SHOULD BE MAINTAINED IN A DAMP, BUT NOT WET, CONDITION BOTH DURING AND AFTER CONSTRUCTION.
- CARE SHALL BE TAKEN DURING GRADING OPERATIONS TO AVOID DAMAGE TO FOOTINGS AND OTHER SUBSTRUCTURES.
- COMPACTION WITHIN FIVE FEET OF THE BOX WALLS SHALL BE ACHIEVED WITH HAND COMPACTION EQUIPMENT. THE CONTRACTOR SHALL RELEVEL ALL AREAS OF BACKFILL WHERE SETTLEMENT OCCURS. CARE SHALL BE TAKEN THAT THE BACKFILL IS NOT OVERCOMPACTED. THIS WORK SHALL BE CONSIDERED INCIDENTAL, AND NOT A SEPARATE PAY ITEM.
- BACKFILLING ALONG ALL SIDES OF THE STRUCTURES SHALL PROCEED SIMULTANEOUSLY TO PREVENT UNBALANCED LATERAL PRESSURES DURING CONSTRUCTION.
- DESIGN OF CONCRETE WALLS ARE BASED ON AT-REST LATERAL EARTH PRESSURE (EQUIVALENT FLUID PRESSURE) OF 110 PCF.

**CAST-IN-PLACE REINFORCED CONCRETE**

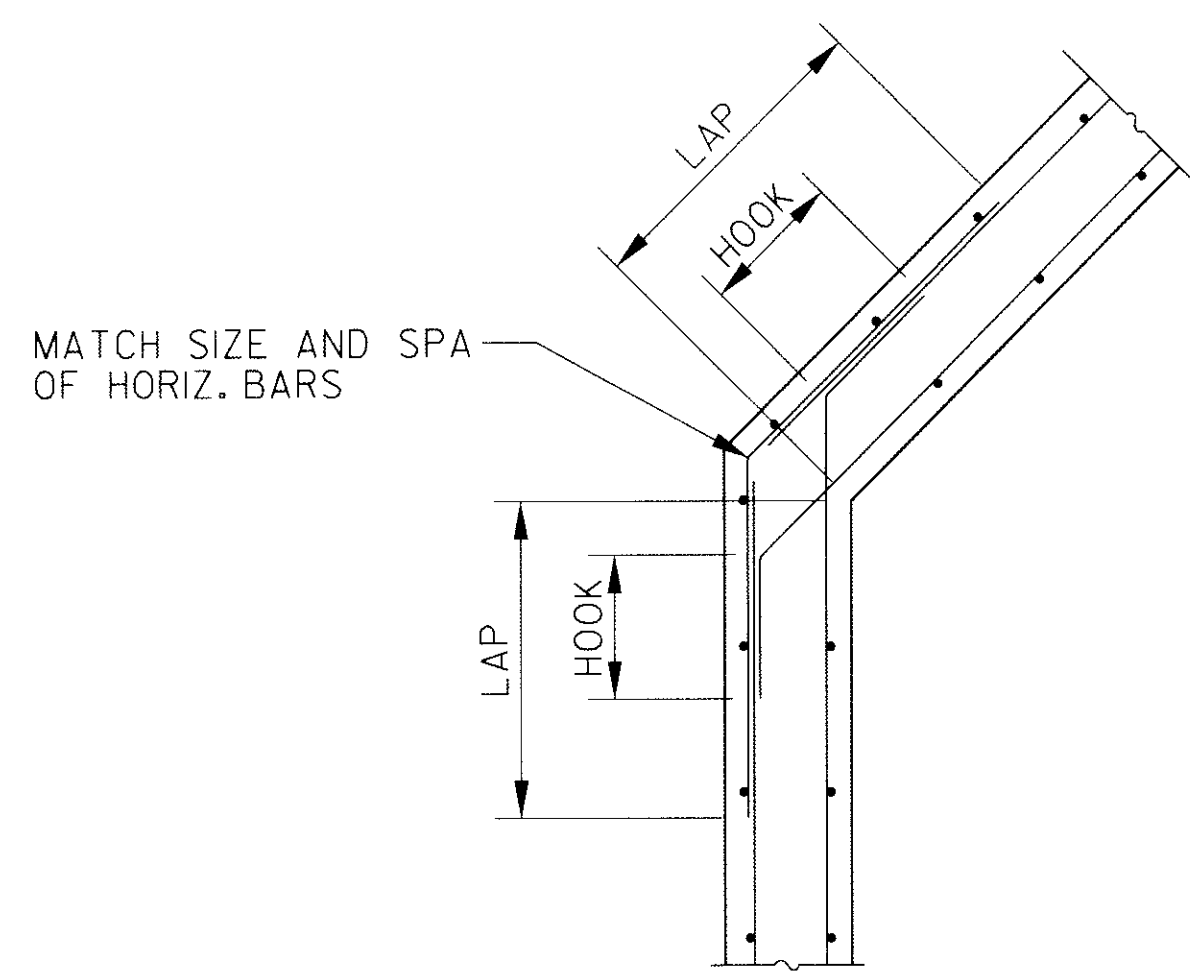
- ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE MOST RECENT EDITION OF THE ACI318 BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE.
- MILD STEEL REINFORCING BARS SHALL CONFORM TO ASTM A-615, NO. 3 BARS SHALL BE GRADE 40. LARGER BARS SHALL BE GRADE 60.
- MILD STEEL REINFORCEMENT AND ACCESSORIES SHALL BE DETAILED AND FABRICATED IN ACCORDANCE WITH ACISP-66.
- PORTLAND CEMENT SHALL BE A SINGLE BRAND CONFORMING TO ASTM C-150, TYPE I, UNLESS OTHERWISE APPROVED.
- NORMAL WEIGHT AGGREGATES SHALL CONFORM TO ASTM C-33. ALL CONCRETE SHALL USE NORMAL WEIGHT AGGREGATES, UNLESS NOTED OTHERWISE.
- ALL ADDITIVES FOR AIR ENTRAINMENT, WATER REDUCTION, AND SET CONTROL SHALL BE USED IN ACCORDANCE WITH THE MANUFACTURER'S DIRECTIONS. THE USE OF CALCIUM CHLORIDE IS PROHIBITED.
- THE MAXIMUM NOMINAL SIZE OF COARSE AGGREGATE SHALL BE 1".
- CONCRETE SLUMPS SHALL BE AS FOLLOWS:
  - SLOPING SURFACES.....3" MAX
  - CONCRETE CONTAINING SUPER PLASTICIZER .....8" MAX
  - ALL OTHER CONCRETE.....4" MAX
- MILD STEEL REINFORCEMENT SHALL BE PLACED AND SECURED IN ACCORDANCE WITH CRSI RECOMMENDED PRACTICE FOR PLACING REINFORCING BARS.
- THE TESTING LABORATORY SHALL BE NOTIFIED AFTER THE MILD STEEL REINFORCEMENT AND EMBEDS ARE POSITIONED PRIOR TO EACH CONCRETE PLACEMENT. NO CONCRETE SHALL BE PLACED UNTIL THESE ITEMS ARE CHECKED AND APPROVED BY THE TESTING LABORATORY.
- CONCRETE PROTECTION FOR REINFORCEMENT SHALL BE AS FOLLOWS (UNLESS NOTED OTHERWISE ON THE DRAWINGS).
  - a. TOP SLAB .....1 1/2" FOR #5 AND SMALLER BARS  
2" FOR #6 AND LARGER BARS
  - b. BASE SLAB .....2" TOP  
3" BOTTOM
  - c. WALLS .....2" SIDES AND BOTTOM
- WATERSTOPS SHALL BE PROVIDED AT ALL CONSTRUCTION JOINTS AND PIPE WALL PENETRATIONS. ALL WATERSTOPS AT WALL AND SLAB JOINTS SHALL BE PVC TYPE 741 AS MANUFACTURED BY GREENSTREAK OR APPROVED EQUAL. ALL WATERSTOPS AT PIPE PENETRATIONS SHALL BE TYPE SF302 BY SYNKO-FLEX OR APPROVED EQUAL. INSTALL IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
- CONCRETE SHALL CONFORM TO TxDOT CLASS S AND SHALL HAVE A 28-DAY COMPRESSIVE STRENGTH OF 4200 PSI, MINIMUM.
- IN AREAS OF CONFLICT BETWEEN REINFORCING STEEL, BLOCKOUTS, OR PIPES, THE REINFORCEMENT SHALL BE BENT OR ADJUSTED TO CLEAR.

MODEL NAMES \$PLTRDVS\$

SDATES \$TIMES \$SUBSESSCLIENTS\$FILELS



NOTE:  
WALLS SHALL BE CAST MONOLITHICALLY.



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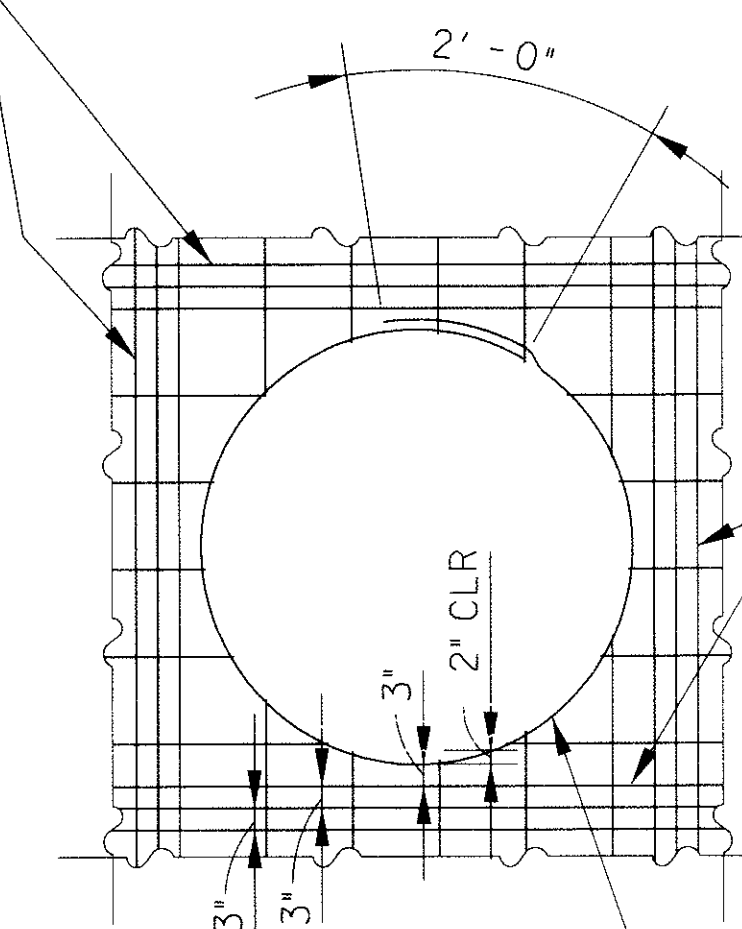
TYPICAL 90 DEG. WALL CORNER DETAIL TYPICAL WALL CORNER > 90 DEG. DETAIL

SCALE: N.T.S.

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BAR TABLE		
SIZE	LAP (IN)	HOOK (IN)
#3	15	6
#4	19	8
#5	24	10
#6	29	12
#7	42	14
#8	48	16
#9	54	20
#10	60	22
#11	66	24

6 ADDITIONAL #5 BARS, 3 EACH FACE AT OPNG > 24"  
4 ADDITIONAL #5 BARS, 2 EACH FACE AT OPNG < 24"



6 ADDITIONAL #5 BARS, 3 EACH FACE AT OPNG > 24"  
4 ADDITIONAL #5 BARS, 2 EACH FACE AT OPNG < 24"

TYP PIPE PENETRATION DETAIL

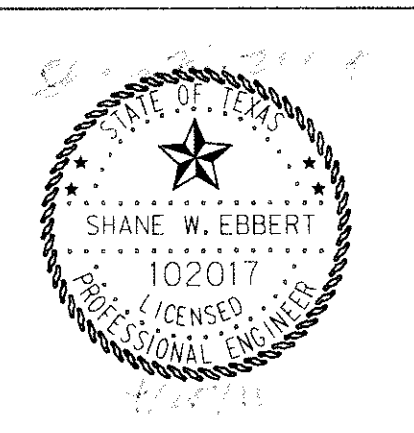
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**ROCKWALL COUNTY**  
**COURTHOUSE**  
 ROCKWALL COUNTY  
 ROCKWALL, TEXAS



Revision No.	Date	Description
A	04/08/2010	CITY COMMENTS

**RECORD DRAWING**  
 APRIL 2011  
 These Record Documents have been prepared based upon information provided by Manhattan Construction. The Design Professional has not verified the accuracy and / or completeness of this information and shall not be responsible for any errors or omissions which may be incorporated herein as a result. Design Consultant: Halff Associates, Inc.  
**RECORD DRAWING SUBMITTAL**



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 Scale: AS NOTED

Sheet Title  
 JUNCTION BOX GENERAL NOTES

**S0.01**  
 Sheet Number