TELEPHONE SERVICE REQUIREMENTS:

SPECIAL NOTE: NEW PHONE SERVICE TO BUILDING IS TO BE UNDERGROUND SERVICE.

CONTRACTORS TO SCHEDULE INSTALLATION OF U/G TELEPHONE SERVICE CONDUIT WITH OWNER. CONTACT (417) 874-7288.
2" PVC SCHEDULE 40 CONDUIT WITH RIGID GALVANIZED STEEL LONG SWEEP BENDS @ 18-24" DEPTH FOR PHONE SERVICE. PROVIDE MINIMUM 1/4" POLYPROPYLENE PULL LINE. PLACE CONDUIT A MINIMUM OF 12" FROM U/G ELECTRIC CONDUIT IN

CAP END OF CONDUIT AT PROPERTY LINE BELOW FINISHED GRADE AND INSTALL CABLE MARKER FOR PHONE COMPANY. NECESSARY. OTHERWISE, CONTINUE PHONE SERVICE CONDUIT TO A POLE AND INSTALL RIGID GALVANIZED STEEL CONDUIT A MINIMUM 12' (ft.) ABOVE FINISHED GRADE ATTACHED TO POLE.

CONTRACTOR SHALL COORDINATE INSTALLATION AND VERIFY REQUIREMENTS WITH PHONE COMPANY, PLUS INCLUDE AL FEES (IF ANY) BY PHONE COMPANY FOR INSTALLATION OF 25 PAIR CABLE, IN MENTIONED CONDUIT, TO CONTRACTOR INSTALLED 4' X 6' X 3" FIRE RETARDING BACKBOARD (IF PLYWOOD, PAINT BOARD W/FIRE RETARDING PAINT) WITHIN BUILDING, CONTRACTOR TO PROVIDE #6 AWG CU, GROUND TO TELEPHONE EQUIPMENT LOCATION FROM ELECTRICAL GROUNDING ELECTRODE SYSTEM. FINAL CONNECTIONS AND INSIDE PHONE WIRING BY OWNER.

ONLY IF UNDERGROUND PHONE SERVICE IS NOT AVAILABLE-CONTRACTOR SHALL INSTALL APPROPRIATE OVERHEAD PHONE SERVICE RISER, WEATHER HEAD, ETC. COORDINATE WITH CITY & PHONE CO.

EXISTING CONDITIONS NOTES:

1. THE CONTRACTOR IS REQUIRED TO INSPECT FOR EXISTING CONDITIONS/INSTALLATIONS AND AVAILABLE INFORMATION PRIOR TO SUBMITTING A BID, REFER TO SPECIFICATIONS ALSO. 2. EXISTING INSTALLATIONS (SUCH AS WATER MAINS/LINES, GAS MAINS/LINES, SEWER MAINS/LINES, TELEPHONE

LINES, POWER LINES, AND UTILITY STRUCTURES IN THE VICINITY OF THE WORK TO BE DONE) ARE INDICATED ON THE DRAWINGS ONLY TO THE EXTENT THAT SUCH INFORMATION HAS BEEN MADE AVAILABLE TO OR DISCOVERED BY THE ENGINEER IN PREPARING THE DRAWINGS. THERE IS NO GUARANTEE AS TO THE ACCURACY OR COMPLETENESS OF SUCH INFORMATION, AND ALL RESPONSIBILITY FOR THE ACCURACY AND COMPLETENESS THEREOF IS EXPRESSLY DISCLAIMED.

3. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR LOCATING ALL EXISTING INSTALLATIONS. 4. ANY DELAY, ADDITIONAL WORK, FEES OR EXTRA COST TO THE CONTRACTOR CAUSED BY OR RESULTING FROM DAMAGE TO OR MODIFICATION OF EXISTING INSTALLATIONS BY THE CONTRACTOR OR AFFECTED UTILITY COMPANY SHALL NOT CONSTITUTE A CLAIM FOR EXTRA WORK, ADDITIONAL PAYMENT OR DAMAGES. 5. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONSTRUCTION PRIOR TO SUBMITTING HIS BID. NO EXTRAS WILL BE PAID DUE TO UNANTICIPATED EXISTING CONDITIONS/INSTALLATIONS.

GENERAL NOTES:

1. ALL WATER MAINS TO HAVE THRUST BLOCKS PER CITY OF ROCKWALL, TEXAS STANDARDS 2. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH CITY OF ROCKWALL, TEXAS STANDARDS AND SPECIFICATIONS. 3. WATER MAINS AND SERVICES SHALL BE CLASS 200 PVC MINIMUM. SEWER LATERALS SHALL BE SDR 35 MINIMUM.

SEWER FORCEMAIN SHALL BE CLASS 200 PVC MINIMUM. 4. IF ANY CONFLICT ARISES BETWEEN SPECIFICATIONS ON THESE DESIGN PLANS AND CITY OF ROCKWALL, TEXAS

6. INSTALL GREEN EMS DISKS AT EVERY SEWER MANHOLE, EVERY 100' ON FORCE MAIN, AND SERVICE.

GENERAL NOTES:

1. LOCATION OF EXISTING UNDERGROUND UTILITIES ARE APPROXIMATE AND ARE NOT NECESSARILY ALL OF SAME. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE APPROPRIATE UTILITY COMPANY TO DETERMINE THE EXACT LOCATION OF ALL UTILITIES AND/OR UNDERGROUND STRUCTURES PRIOR TO THE INITIATION OF ANY CONSTRUCTION, CONTRACTOR SHALL ALSO ASSUME FULL RESPONSIBILITY FOR DAMAGE TO ANY UTILITIES ENCOUNTERED WITHIN CONSTRUCTION

PERIMETERS FOR SITE LOCATION OF EXISTING UTILITIES. 2. CONTRACTOR SHALL ENSURE UNINTERRUPTED SEWER SERVICE ON EXISTING SEWER AND SERVICE CONNECTIONS BY PROVIDING AMPLE TEMPORARY WASTEWATER PUMPING AND/OR

BYPASSING. 3. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL PROPERTIES.

4. CONTRACTOR SHALL NOTIFY THE CITY OF ROCKWALL, TX CONSTRUCTION INSPECTION OFFICE A MINIMUM OF 24 HOURS PRIOR TO BEGINNING ANY CONSTRUCTION.

5. ALL AREAS IN CUT OF FILL WHERE VEGETATION HAS BEEN REMOVED SHALL BE SEEDED, MULCHED, FERTILIZED, AND/OR SODDED AS REQUIRED TO PREVENT EROSION. 6. THE CONTRACTOR SHALL VERIFY EXISTING DATA AND REPORT ANY SIGNIFICANT DISCREPANCIES

7. ALL SANITARY SEWER TO BE CONSTRUCTED AS PER CITY OF ROCKWALL, TX STANDARD CONSTRUCTION SPECIFICATIONS, SANITARY SEWER SERVICE CONNECTIONS TO BE INSTALLED AS

PER CITY OF ROCKWALL, TX STANDARDS. 8. ALL SEWER MANHOLE LIDS IN OPEN AREAS ARE TO BE CONSTRUCTED 0.5' ABOVE PROPOSED GRADE, IN BACKYARDS, MANHOLE LIDS ARE TO BE 1.5' ABOVE INITIAL GRADE, 0.5' ABOVE FINAL

GRADE. IN PARKING LOTS, LIDS ARE TO MATCH THE FINISH GRADE. 9. ALL SANITARY SEWER, INCLUDING SERVICE CONNECTIONS, WHICH HAS LESS THAN 1.5' CLEARANCE (OUTSIDE OF PIPES) WITH DRAINAGE OR IN FILLED AREAS SHALL BE CLASS 50 D.I.P. OR CONCRETE ENCASED, 10' BOTH SIDES OF CROSSING, ALL DUCTILE IRON PIPE SHALL BE POLYETHYLENE LINED OR SHALL BE TREATED WITH PROTECTO 401 OR APPROVED EQUAL 10. THE CITY OF ROCKWALL, TX SHALL HAVE INGRESS/EGRESS RIGHTS TO USE PRIVATE DRIVES AND

RESPONSIBILITY FOR THE MAINTENANCE OF SAID PRIVATE DRIVES AND YARDS. 11. NO TREES, SHRUBS, PERMANENT STRUCTURES OR OTHER UTILITIES (EXCEPT CROSSINGS) WILL BE ALLOWED WITHIN SANITARY SEWER EASEMENT

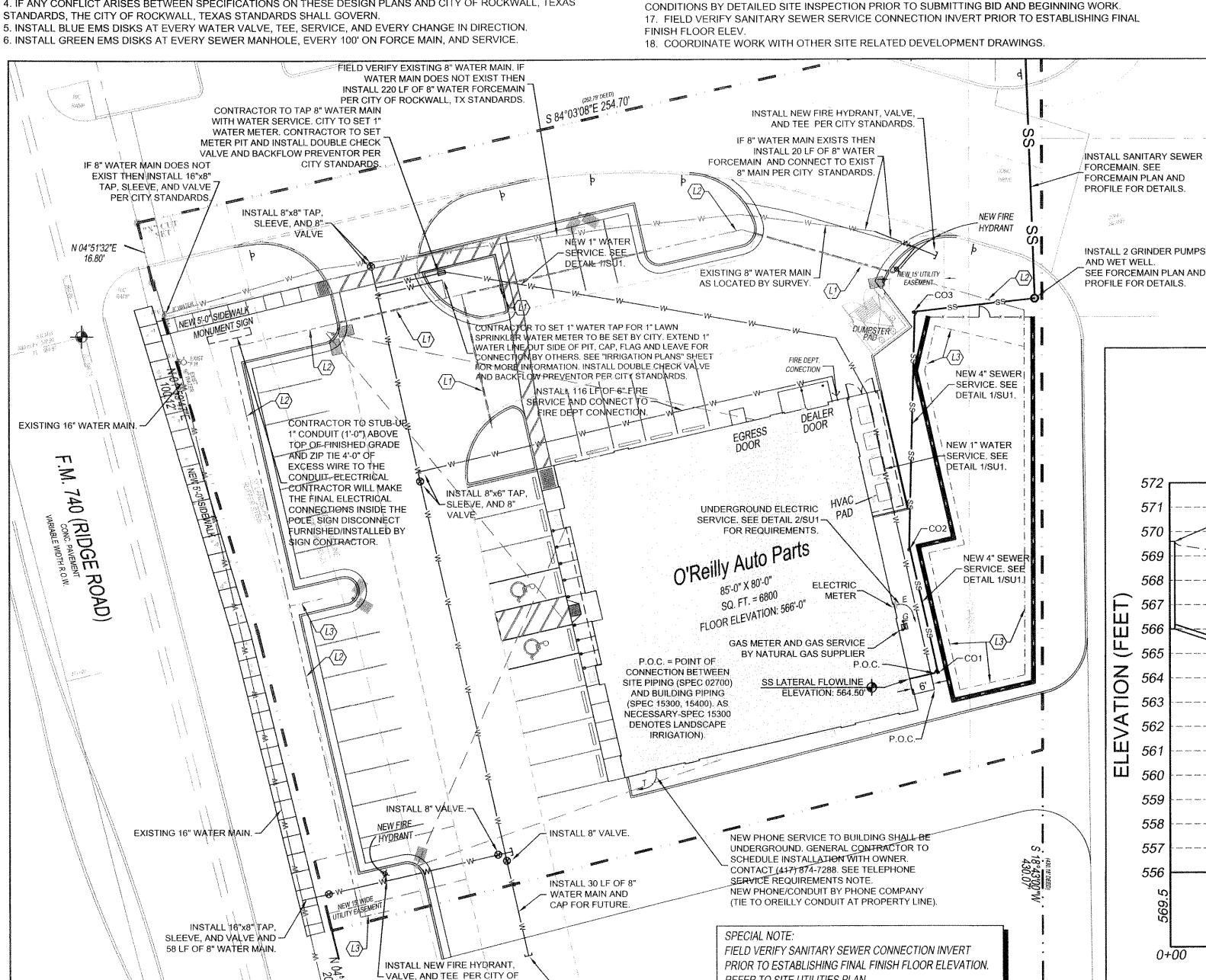
12 NO OTHER UTILITIES OR SERVICES MAY OCCUPY SANITARY SEWER EASEMENTS IN PRIVATE DRIVES AND YARDS EXCEPT FOR CROSSINGS

YARDS FOR THE PURPOSE OF MAINTAINING ALL PUBLIC SEWER LINES AND SHALL BEAR NO

13. ALL SANITARY SEWER MANHOLES IN REVERSE CROWN STREETS, ALLEYS OR DRIVES (PUBLIC OR PRIVATE) SHALL BE PROVIDED WITH GASKETS AND PLUGS FOR "PICK HOLES" TO PREVENT DRAINAGE INFLOW INTO SEWER SYSTEM

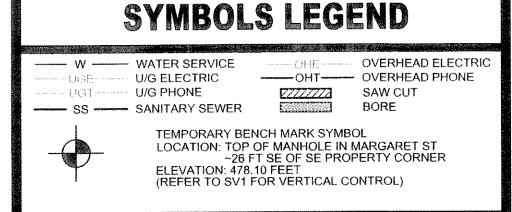
14. THE CONTRACTOR SHALL PROVIDE ADEQUATE AND EFFECTIVE EROSION CONTROL AS NECESSARY TO PREVENT ANY SILTATION INTO EXISTING DRAINAGE SYSTEM AND/OR ADJACENT

15. REFER TO PROJECT MANUAL FOR ADDITIONAL REQUIREMENTS. 16. EXISTING SITE CONDITIONS BASED UPON SURVEY SUBMITTED BY OWNER. FIELD VERIFY EXISTING CONDITIONS BY DETAILED SITE INSPECTION PRIOR TO SUBMITTING BID AND BEGINNING WORK. 17. FIELD VERIFY SANITARY SEWER SERVICE CONNECTION INVERT PRIOR TO ESTABLISHING FINAL



INSTALL 1-8" PLUG.



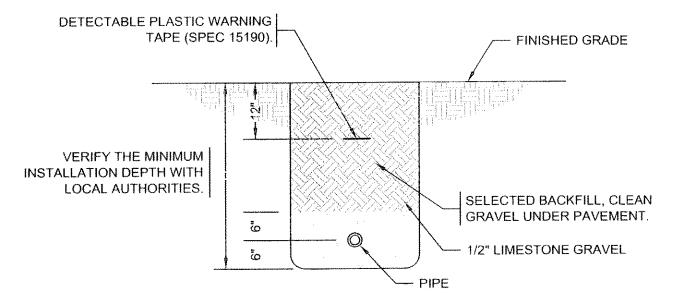


IRRIGATION LINE KEY NOTES:

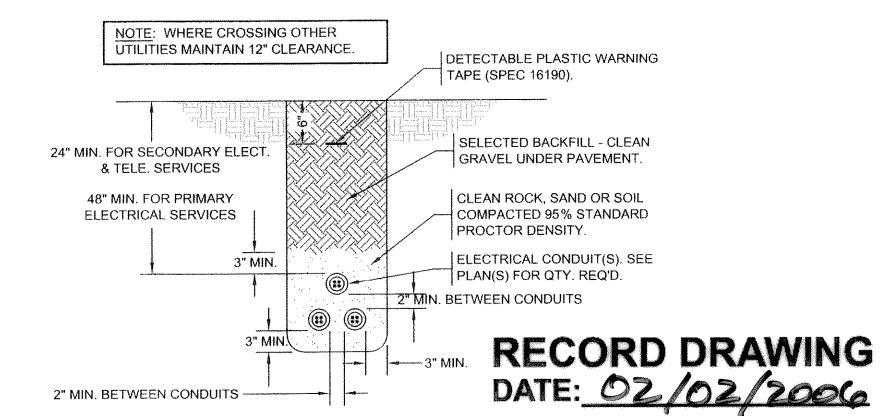
(1) SLEEVES: 4" SCHEDULE 40 PVC SLEEVE REQUIRED BY IRRIGATION PLAN. REFER TO SHEET L3 FOR DETAILS.

(L2) MAIN LINE: 1" SCHEDULE 40 PVC AS REQUIRED BY IRRIGATION PLAN. REFER TO SHEET L3 FOR DETAILS.

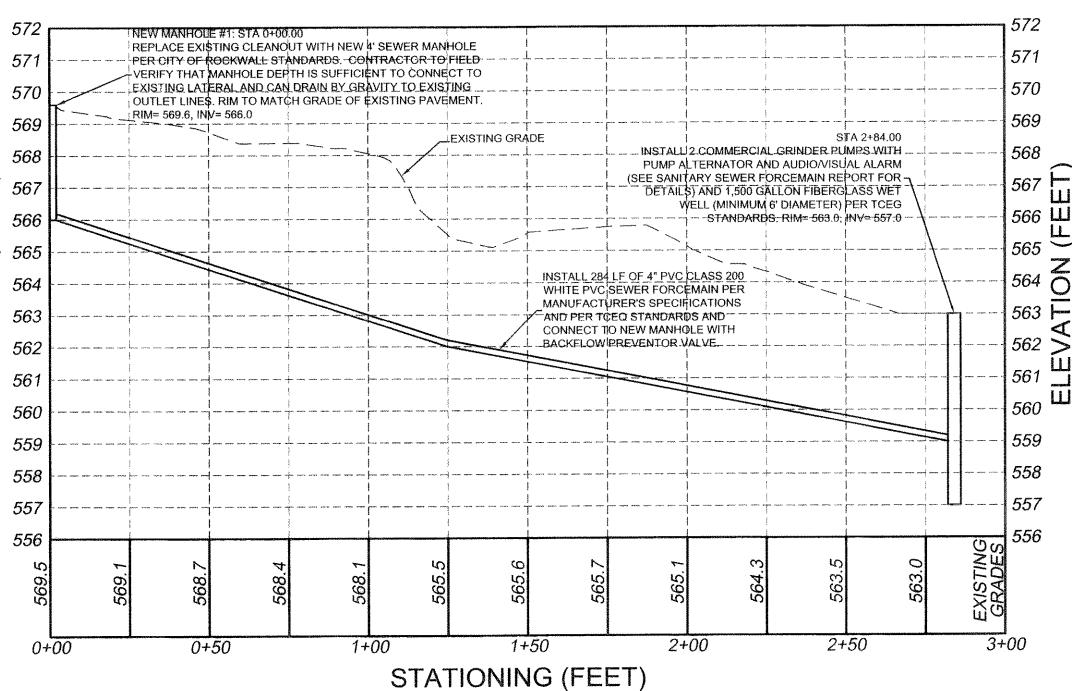
(L3) LATERAL: 3/4" CLASS 200 PVC AS REQUIRED BY IRRIGATION PLAN. REFER TO SHEET L3 FOR DETAILS



PIPE INSTALLATION DETAIL



4 UNDERGROUND ELECTRICAL CONDUITS



FORCEMAIN PROFILE HORIZONTAL SCALE: 1" = 30' VERTICAL SCALE: 1" = 3

REPLACE EXISTING CLEANOUT WITH NEW 4 SEWER MANHOLE PER CITY OF ROCKWALL STANDARDS. CONTRACTOR TO FIELD VERIFY THAT MANHOLE DEPTH IS SUFFICIENT TO CONNECT TO EXISTING LATERAL AND CAN DRAIN BY GRAVITY TO EXISTING OUTLET LINES. RIM TO MATCH GRADE OF EXISTING PAVEMENT. RIM~ 569.6. INV= 566.0 REMOVE AND REPAIR EXIST PAVEMENT PER CITY OF ROCKWALL, TX STANDARDS AS REQUIRED TO INSTALL NEW FORCEMAIN AND MANHOLE.

INSTALL 284 LF OF 4" PVC CLASS 200 WHITE PVC SEWER FORCEMAIN PER -MANUFACTURER'S SPECIFICATIONS AND PER TCEQ STANDARDS AND CONNECT TO NEW MANHOLE.

STA 1+36: CENTER OF BORE -BORE 30 LF OF EXIST CONCRETE DRIVEWAY.

> STA 2+50: CENTER OF BORE BORE 60 LF OF EXIST CONCRETE DRIVEWAY.

> > STA 2+84.00 **INSTALL 2 COMMERCIAL** GRINDER PUMP (SEE REPORT) AND 1,500 GALLON FIBERGLASS WET WELL (MINIMUM 6' DIAMETER) PER TCEG STANDARDS. RIM= 563.0, INV= 557.0

FORCEMAIN

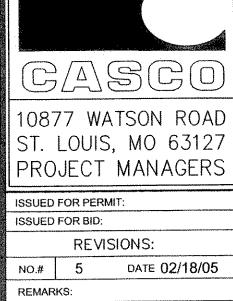
SEWER FORCEMAIN DESIGN CRITERIA:

REFER TO SANITARY SEWER FORCEMAIN REPORT FOR DETAILS. O'REILLY AUTO PARTS: EMPLOYEES: 10 EMPLOYEES @ 15 GPD = 150 GPD CUSTOMERS: 6800 SQ.FT. @ 200 GPD/1000 SQ.FT = 1,360 GPD

FUTURE SOUTH LOT: ESTIMATED DESIGN FLOWS SET BASED UPON RETAIL COMMERCIAL DEVELOPMENT

TOTAL DESIGN FLOWS FROM LOTS = ~ 2.0 GPM (~3.000 GPD ESTIMATED PEAK DESIGN FLOW = 2.0 GPM * 3 = 6 GPM RINDER PUMP STATION SHALL MEET THE FLOW AND TOTAL DYNAMIC HEAD OUTLINED IN THE SANITARY SEWER FORCEMAIN REPORT FOR THIS PROJECT. THI GRINDER PUMP SHALL NOT HAVE A PUMP CYCLE OF LESS THAN 6 MINUTES PER TCEQ STANDARDS. THE WET WELL SHALL HAVE STORAGE VOLUME OF A MINIMUM OF 1,500 GALLONS AND WITH A DEPTH CAPABLE OF GRAVITY DRAINING THE SE

SITE UTILITIES PLAN



FINAL APPROVED **ENGINEERING PLANS**

PHONE: 417-866-2741 JOB NO.: 904522 CHECKED: NSB 03/01/04 1" = 20' CALE:

SITE UTILITIES PLAN

ROCKWALL, TX STANDARDS.

REFER TO SITE UTILITIES PLAN.