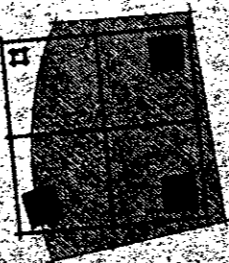


SBS Project For  
 Transcontinental Realty, Inc.  
 Aircraft Hangar  
 16321 Addison Rd.

# H L M ARCHITECTS, INC.

HENSLEY LAMKIN MARTINEZ RACHEL  
 7557 RAMBLER ROAD  
 DALLAS, TEXAS  
 PH 214 369-2150  
 SUITE 706  
 75231  
 FAX 214 369-2166



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 H L M ARCHITECTS, INC.

ISSUED: 06-02-2000

DRAWN BY: DJ

REVISIONS

00032

MP2



**SKIPPER + ROBINSON**

CONSULTING ENGINEERS INC.  
 2351 W. NORTHWEST HWY, SUITE 2215  
 DALLAS, TEXAS 75220

**S+R**  
 CONSULTING ENGINEERS INC. TEL: (214) 802-1900  
 FAX: (214) 802-8598

ENCLOSURE 2501

DESIGN FS GC FS

rod found for  
 rod found for  
 each iron rod  
 left from rod  
 OF BEGINNING  
 as follows:  
 Road, 670.40 feet  
 seconds West  
 rod found for corner;  
 rod found for corner;  
 BEGINNING,  
 rod found for  
 Mile facilities.  
 Miles as set forth  
 Reamy dated  
 Dallas County,  
 of Dallas  
 and Volume  
 of taxiway  
 feet  
 West  
 45.01  
 for

### III. PLUMBING

#### A. SCOPE OF WORK:

1. PROVIDE ALL MATERIALS, EQUIPMENT, LABOR, FEES AND PERMITS, AND PAY ALL COSTS CONNECTED WITH THE INSTALLATION OF COMPLETE PLUMBING SYSTEMS AND AS SHOWN ON PLANS AND AS HEREINAFTER SPECIFIED.
2. IT IS THE INTENT OF THIS SPECIFICATION AND OF THE PLANS TO PROVIDE COMPLETE INSTALLATIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FURNISH ALL ITEMS OF MATERIAL AND LABOR AND ALL OTHER COSTS TO COMPLETE THE CONTRACT WITHIN THE INTENT OF THIS SPECIFICATION AND THE PLANS EVEN THOUGH EACH AND EVERY ITEM NECESSARY IS NOT SPECIFICALLY MENTIONED OR SHOWN.
3. SUBMIT MANUFACTURER'S BROCHURES ON PLUMBING FIXTURES TO THE ARCHITECT / ENGINEER FOR APPROVAL.
4. WORK INCLUDED BUT NOT INCLUSIVE:  
THE PLUMBING SYSTEM REQUIRED FOR THIS WORK AS INDICATED ON THE DRAWINGS AND INCLUDES, BUT IS NOT LIMITED TO:
  - a. DOMESTIC COLD WATER SYSTEM, INCLUDING DISTRIBUTION AND BACKFLOW PREVENTION, AS REQUIRED BY CODE AND CONNECTION TO WATER MAIN.
  - b. DOMESTIC HOT WATER SYSTEM, INCLUDING WATER HEATER, CIRCULATING PUMPS AND DISTRIBUTION.
  - c. SANITARY SEWER SYSTEM, INCLUDING DISTRIBUTION AND CONNECT TO SANITARY SEWER MAIN AND GREASE TRAP.
  - d. NATURAL GAS SYSTEM, INCLUDING DISTRIBUTION, METER, AND CONNECTION TO GAS MAIN.
  - e. A COMPLETE SYSTEM OF COMPRESSED AIR DISTRIBUTION PIPING WITH ALL VALVES, QUICK CONNECTING DEVICES AND APPURTENANCES.
  - f. CORROSION PROTECTION FOR ALL PIPING SYSTEMS.
  - g. PLUMBING FIXTURES AND TRIM, INCLUDING FURNISHING, SETTING, AND FINAL CONNECTIONS.
  - h. GAS CONNECTIONS TO ALL AIR HEATING EQUIPMENT
  - i. THERMAL INSULATION OF PIPING.
  - j. ROUGH-IN FOR CONNECTION TO FUTURE PLUMBING FIXTURES.
  - k. ALL PERMITS AND FEES.
  - l. INSPECTION AND TESTING.

#### B. MATERIALS AND WORKMANSHIP

##### 1. UTILITY CONNECTIONS:

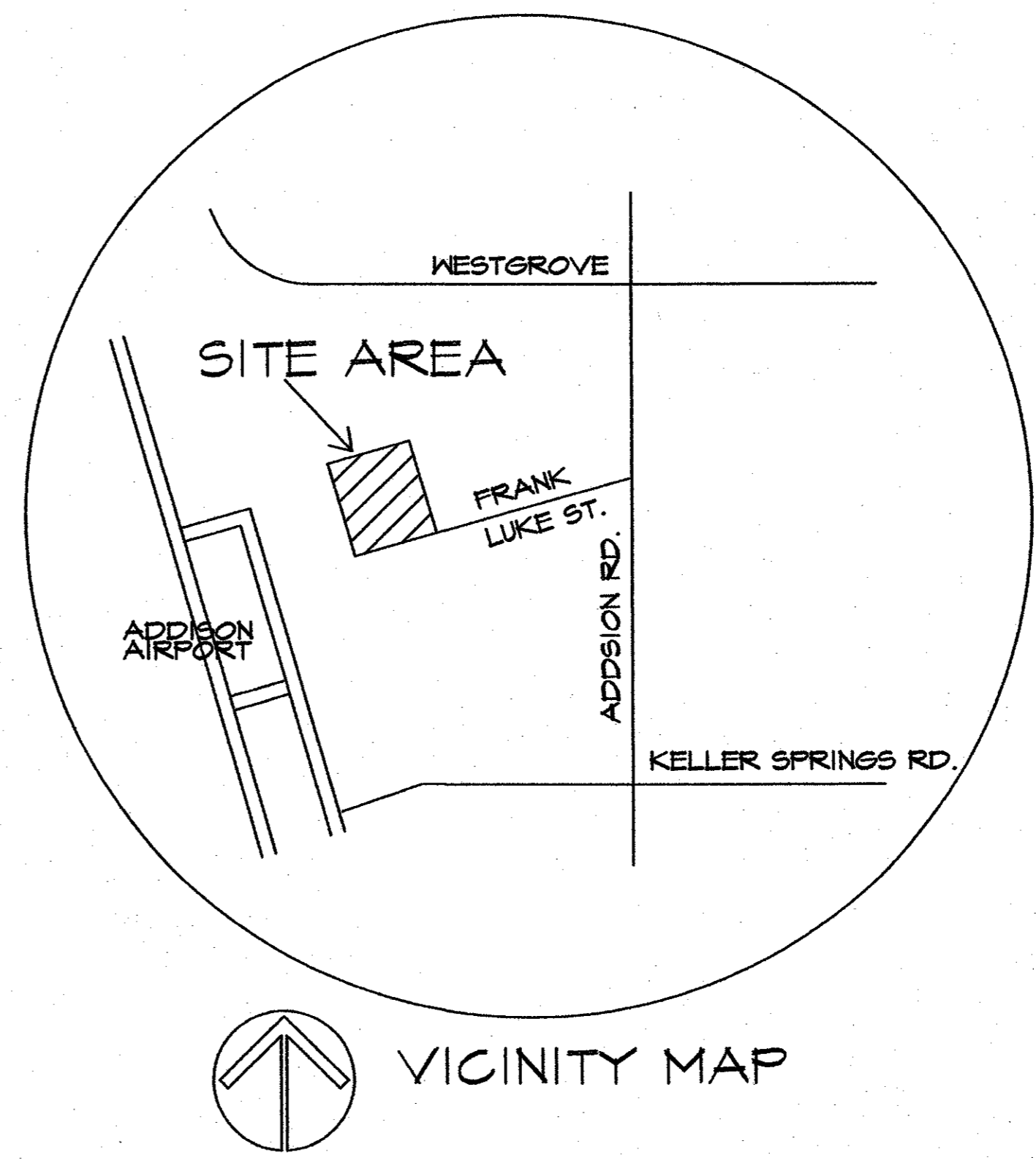
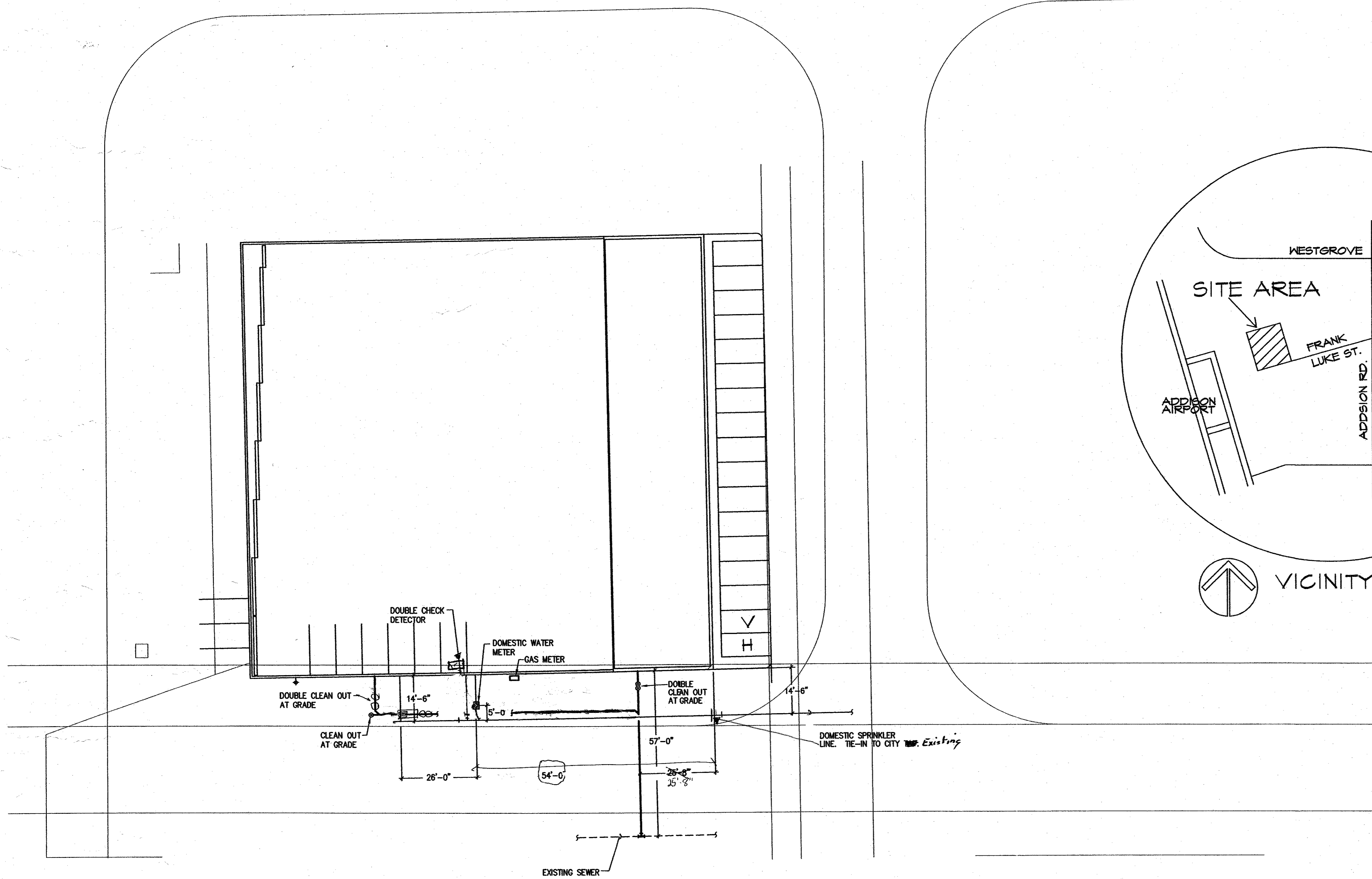
- a. THIS CONTRACTOR SHALL, BEFORE COMMENCEMENT OF THE PROJECT, VERIFY THE LOCATION, DEPTH, SIZE, AND PRESSURE OR GRADE OF ALL UTILITY LINES TO WHICH HE IS TO MAKE CONNECTIONS FOR SERVICE. IF, FOR ANY REASON, CONDITIONS APPEAR THAT WILL ADVERSELY AFFECT THE PROPER INSTALLATION AND OPERATION OF THE SYSTEMS, SUCH CONDITIONS SHALL BE REPORTED TO THE ARCHITECT IN WRITING FOR HIS DECISION.
- b. ALL CHARGES FOR CONNECTIONS TO UTILITY SERVICES AND COST FOR CUTTING AND PATCHING OF PAVING, CURBS, WALKS, ETC., REQUIRED FOR THE SERVICES SHALL BE INCLUDED IN THE BID.

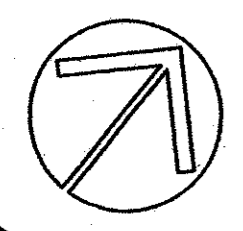
##### 2. SANITARY SEWER SYSTEM AND CONDENSATE DRAIN

- a. FURNISH AND INSTALL A COMPLETE SANITARY SYSTEM OF SOIL, WASTE, AND VENT PIPING FOR ALL FIXTURES, DRAINS, EQUIPMENT DISCHARGES, ETC. AS SHOWN ON THE DRAWINGS AND/OR HEREINAFTER SPECIFIED. ALL PIPING SHALL RUN STRAIGHT AS POSSIBLE AND INSTALLED TO BE GRADE 1/4" PER FOOT MINIMUM.
- b. UNLESS OTHERWISE NOTED ON THE PLANS, ALL SANITARY SYSTEM SOIL, WASTE, AND VENT PIPING SHALL BE ASPHALTUM COATED SERVICE WEIGHT CAST IRON SOIL PIPE AND FITTINGS. JOINTS SHALL BE MADE WITH "TY-SEAL" DOUBLE SEAL NEOPRENE GASKETS AND "LUBRIFAST" COMPOUND. THE CONTRACTOR SHALL INSTALL ALL UNDERGROUND SANITARY WITH LEAD AND OAKUM JOINTS. CAULKING LEAD DEPTH SHALL NOT BE LESS THAN 1". AT THE CONTRACTOR'S OPTION, AND WHERE ALLOWED BY LOCAL CODE, THE SANITARY SYSTEM MAY BE CONSTRUCTED OF PVC PIPING (DWV GRADE) AND "DRAINAGE WASTE" FITTINGS. INSTALL THE SYSTEM IN ACCORDANCE WITH THE LOCAL CODE.
- c. SANITARY VENTS SHALL EXTEND 15" ABOVE ROOF. FLASH SANITARY VENTS WITH A FABRICATED WATERPROOFING FLASHING CONSISTING OF A BASE AND A RISER SLEEVE ALL MADE OF 4-LB SHEET LEAD. JOINTS AND SEAMS OF FABRICATED FLASHINGS SHALL BE WELDED. FLASHING BASE SHALL EXTEND OVER THE ROOF 12" FROM THE STACK. DRESS THE FLASHING RISER OVER TOP OF AND DOWN INTO THE VENT STACK FOR A RAINTIGHT LEAKPROOF INSTALLATION. (FLASH WITH ROOFING MANUFACTURER ACCESSORIES TO MAINTAIN WARRANTY ON PENETRATIONS.)
- d. PROVIDE CLEANOUTS WHERE INDICATED ON THE PLANS AND AS REQUIRED FOR SNAKING OF THE SANITARY SYSTEM PIPING. ADJUST CLEANOUT BODIES TO HAVE THE ACCESS COVER TOP SURFACE FLUSH WITH FINISH FLOOR. CLEANOUT SPACING IN STRAIGHT PIPE LENGTHS SHALL NOT EXCEED 50' INSIDE AND 100' OUTSIDE.
- e. EXPOSED PIPE CONNECTIONS TO WASTE STACKS LOCATED IN TOILETS AND OTHER FINISHED SPACES SHALL BE CHROME PLATED.
- f. PROVIDE CONDENSATE DRAIN PIPING FOR THE AIR COMPRESSOR AS INDICATED ON THE PLANS AND AS REQUIRED. PIPING SHALL BE TYPE M HARD COPPER WITH CAST BRASS DRAINAGE FITTINGS. MAKE JOINTS WITH 50/50 SOLDER.

##### 3. FLOOR DRAINS:

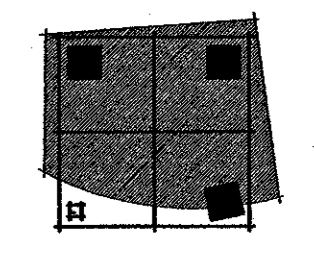
- a. INSTALL FLOOR DRAINS SO THAT THE TOP OF DRAIN IS FLUSH WITH FINISH FLOOR (QUARRY TILE OR CONCRETE). SLOPE TO DRAIN SHALL BE IN ACCORDANCE WITH THE FOUNDATION PLAN.
- b. SHALL BE OF CAPACITIES, CHARACTERISTICS, SIZES, ETC., AS INDICATED AND SCHEDULED ON THE DRAWINGS.




**01 SITE PLAN - MEP**  
 SCALE: 1" = 20'  
2

**SBS PROJECT FOR**  
**TRANSCONTINENTAL REALTY, INC.**  
**AIRCRAFT HANGER**  
 16921 ADDISON ROAD,  
 ADDISON, TEXAS

**H L M ARCHITECTS, INC.**  
 HENSLEY LAWKIN MARTINEZ RACHEL  
 7557 RAMBLER ROAD  
 DALLAS, TEXAS  
 PH 214 369-2150  
 SUITE 706  
 75231  
 FAX 214 369-2166




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ISSUED: 06-02-2000

DRAWN BY: JRM

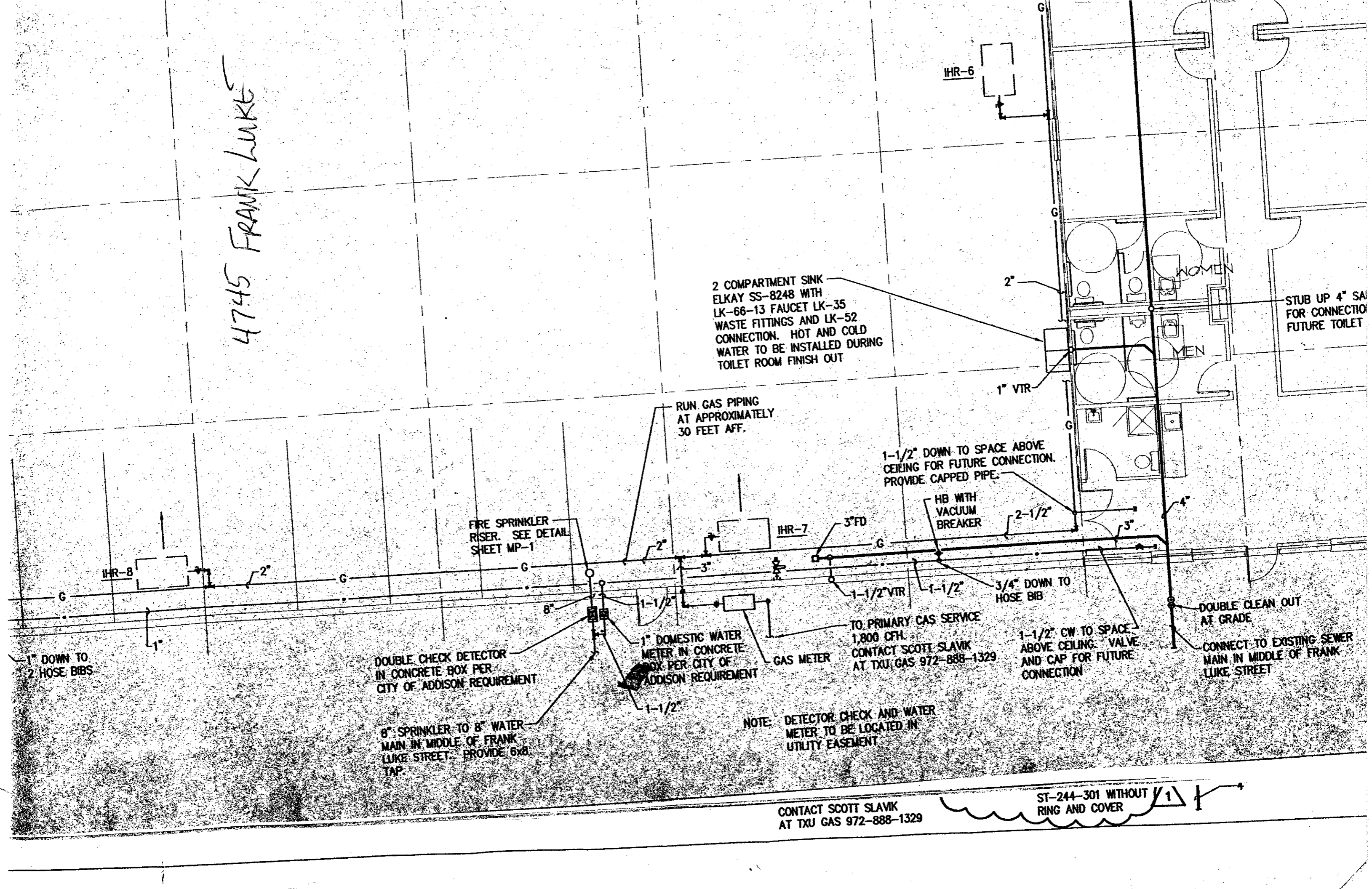
REVISIONS	DATE
1 GENERAL REVISIONS	10/02/00
2 SITE COORDINATION	02/02/01

00032


**SKIPPER + ROBINSON**  
 CONSULTING ENGINEERS INC.  
 2301 W. NORTHWEST HWY., SUITE 2215  
 DALLAS, TEXAS 75220  
 TEL. (214) 902-1900  
 FAX. (214) 902-8588  
SRC Job # 1 2501 DESIGN FS CC FS

**P1.1**

4745 FRANK LUKE



2 COMPARTMENT SINK  
ELKAY SS-8248 WITH  
LK-66-13 FAUCET LK-35  
WASTE FITTINGS AND LK-52  
CONNECTION. HOT AND COLD  
WATER TO BE INSTALLED DURING  
TOILET ROOM FINISH OUT

RUN GAS PIPING  
AT APPROXIMATELY  
30 FEET AFF.

1-1/2" DOWN TO SPACE ABOVE  
CEILING FOR FUTURE CONNECTION.  
PROVIDE CAPPED PIPE.

HB WITH  
VACUUM  
BREAKER

FIRE SPRINKLER  
RISER. SEE DETAIL  
SHEET MP-1

1" DOWN TO  
2 HOSE BIBS

DOUBLE CHECK DETECTOR  
IN CONCRETE BOX PER  
CITY OF ADDISON REQUIREMENT

1" DOMESTIC WATER  
METER IN CONCRETE  
BOX PER CITY OF  
ADDISON REQUIREMENT

GAS METER

TO PRIMARY GAS SERVICE  
1,800 CFH.  
CONTACT SCOTT SLAVIK  
AT TXU GAS 972-888-1329

1-1/2" CW TO SPACE  
ABOVE CEILING. VALVE  
AND CAP FOR FUTURE  
CONNECTION

DOUBLE CLEAN OUT  
AT GRADE

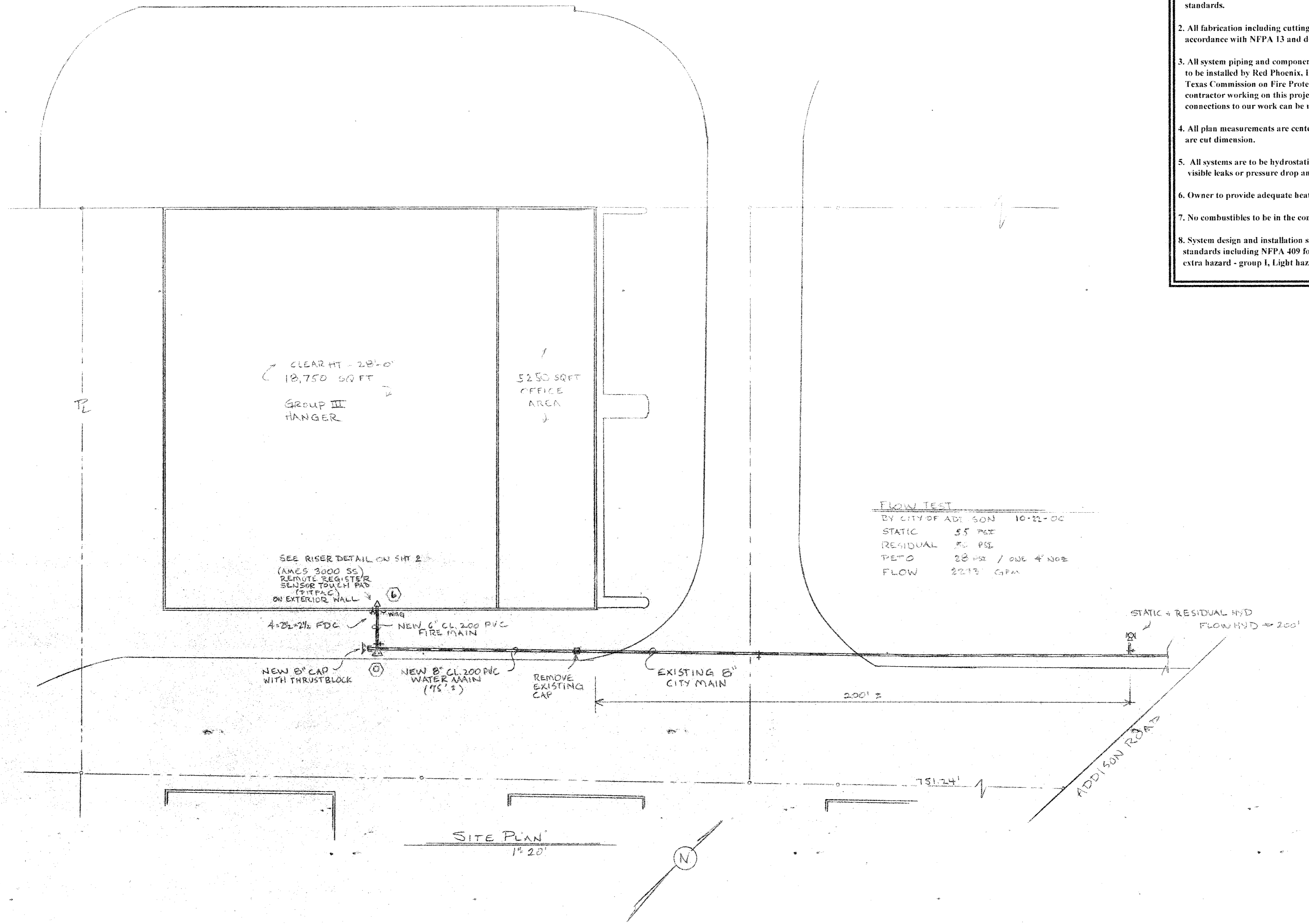
CONNECT TO EXISTING SEWER  
MAIN IN MIDDLE OF FRANK  
LUKE STREET

NOTE: DETECTOR CHECK AND WATER  
METER TO BE LOCATED IN  
UTILITY EASEMENT

CONTACT SCOTT SLAVIK  
AT TXU GAS 972-888-1329

ST-244-301 WITHOUT  
RING AND COVER

- General Notes**
1. All equipment and materials (including piping, fittings, hangers, sprinklers, valves and devices) are to be UL and/or FM listed and in accordance with NFPA 13. All underground materials including piping, fittings, valves and thrust blocking are to be UL and/or FM listed and/or in accordance with NFPA 24. All installations to be in accordance with the manufacture's listings and in accordance with applicable NFPA standards.
  2. All fabrication including cutting, threading, roll grooving, and welding shall be in accordance with NFPA 13 and done in an Texas certified fabrication shop.
  3. All system piping and component installation, including fire main underground piping to be installed by Red Phoenix, Inc. or by any fire sprinkler contractor licensed by the Texas Commission on Fire Protection. A copy of the license of any other fire sprinkler contractor working on this project must be on file at Red Phoenix, Inc. before any connections to our work can be made.
  4. All plan measurements are center line to center line unless noted otherwise; (xx'-xx") are cut dimension.
  5. All systems are to be hydrostatic tested at 200 psi for a period of two hours with no visible leaks or pressure drop and witnessed by the local fire department.
  6. Owner to provide adequate heat (40° F+) to prevent piping from freeze damage.
  7. No combustibles to be in the concealed spaces.
  8. System design and installation shall be in accordance with all applicable NFPA standards including NFPA 409 for Class III airplane hangers and NFPA 13 extra hazard - group I, Light hazard, and the authority having jurisdiction.



RED PHOENIX, INC. SCRO405  
2711 COOMBS CREEK DR.  
DALLAS, TX 75211  
214 351 8698

Joe S. Bailey  
CME-0078

JOB: 091  
TRANSCONTINENTAL REALTY, INC.  
AIRCRAFT HANGER  
16021 ADDISON RD.  
ADDISON, TX

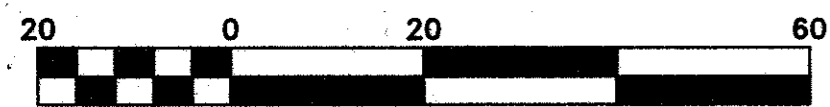


FRANK LUKE

38-12

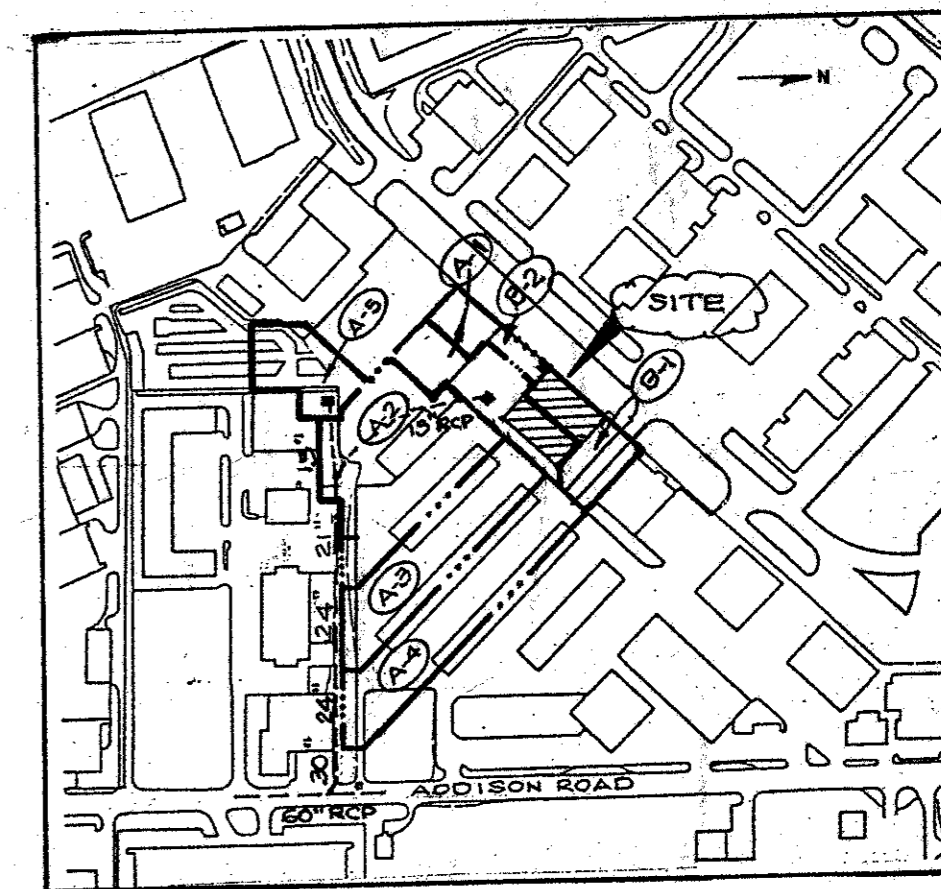
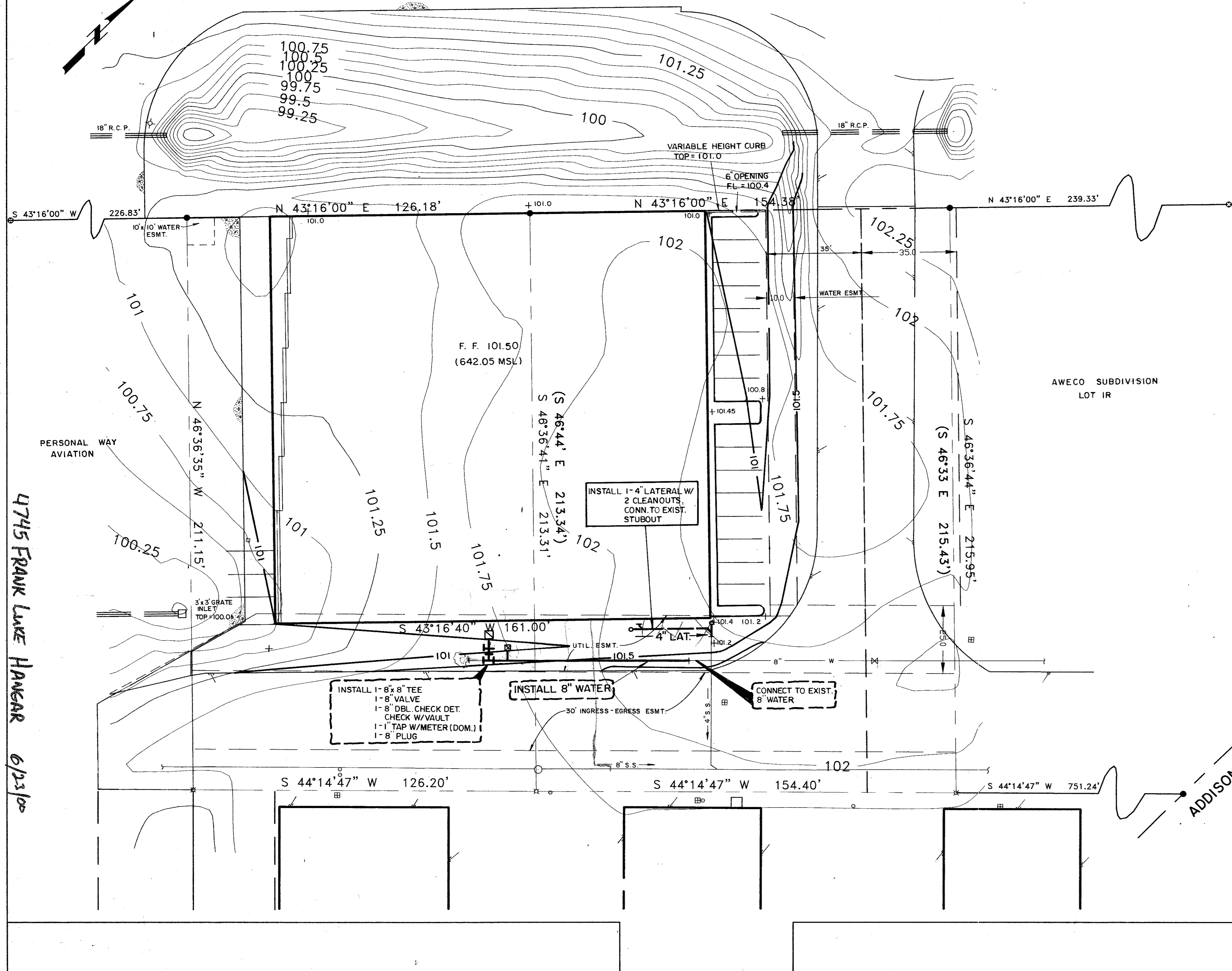
**LEGEND**

- IRON ROD FOUND
- IRON ROD SET
- ⊗ "X" FOUND IN CONCRETE
- ⊕ P.K. NAIL FOUND
- ⊕ WATER METER
- ⊕ TELEPHONE RISER
- ⊕ SANITARY SEWER MANHOLE
- ⊕ CLEANOUT
- ⊕ LIGHT POLE
- ( ) INDICATES RECORD DATA PER TITLE COMMITMENT



Scale 1" = 20 ft

TAXIWAY

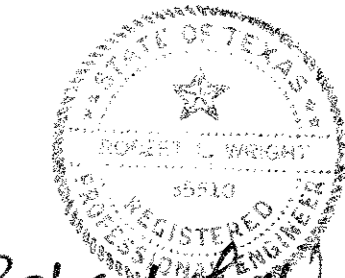


**DRAINAGE AREA MAP**

D.A.	AREA	C	I	Q	Comments
A-1	1.0	0.85	8.74	7.4	3x3' G.I.
A-2	2.1	0.85	8.74	15.6	3x3' G.I.
A-3	1.6	0.85	8.74	11.9	10" C.I.
A-4	1.9	0.85	8.74	14.1	10" C.I.
A-5	0.5	0.85	8.74	3.7	V-Inlet
B-1	0.57	0.85	8.74	4.2	Swale
B-2	0.36	0.85	8.74	2.7	Swale

4745 FRANK LUKE HANAKR 6/23/00

FRANK LUKE HANAKR



Robert A. Smith  
6-23-00

# GRADING PLAN

## AWECO SUBDIVISION LOT 2R

### TOWN OF ADDISON, TEXAS

**NEEDHAM WRIGHT ENGINEERS**  
A Pate Engineers, Inc. Company  
10290 MONROE DRIVE  
SUITE 101  
DALLAS, TEXAS, 75229  
PH. (214) 357-2981  
FAX (214) 357-2985

DATE: 6-20-00  
SCALE: 1" = 20'

B8-12