

SUPPLY: 89 PSI 67 PSI 3579 GPM

DATE OF TEST: 2-21-07

Flow data provided by SLC
Water- Ray Eastman.
Pressures are noted reduced
for winter pressures.

STATIC
89 PSI

FLOW TEST
3579 GPM
67 PSI

REMOTE AREA I-1
DHQPT CALL
SYSTEM DEMAND
317 GPM @ 65 PSI
AT SRC. 250 GPM
HOSE ALLOWANCE
INCLUDED.

WATER FLOW G.P.M.



SYMBOLS SPRINKLER LEGEND								
TOTAL HEAD COUNT								
SYMBOL	QUANTITY	WFE	K=FACTOR	WFE	MODEL	SN	8 TEMP. RENSE	TYPE
85	(1/2",K=5.6)				TY331	1/2	DR 155 B	UP
Δ	21	(1/2",K=5.6)			TY331	1/2	DR 155 B	HSW
TOTAL SPRINKLERS								
76								
SPACE SPRINKLERS								
6								

JOINTS		
4	each	1 1/2" ELBOW
4	each	1 1/4 x 1 1/2 RED. TEE (ssf)
1	each	1" TEE
1	each	1 1/4 x 1 1/2 RED. TEE
6	each	1 1/2" RED. ELBOW
1	each	1 1/2 x 1 1/2 x 1 RED. TEE
2	each	1 1/2 x 1 1/4 x 1/2 RED. TEE
6	each	1 1/2 x 1 1/2 x 1/2 RED. TEE
5	each	1 x 1 1/2 RED. TEE
13	each	1 x 1/2 RED. ELBOW
22	each	1 ELBOW
1	each	1 1/2" COUPLING
16	each	2 1/2" ELBOW
36	each	2 1/2" GROOVED COUPLING
36	each	2 1/2" GROOVED COUPLING



SCOPE OF WORK: PROVIDE NEW SYSTEM RISER AND UNDERGROUND SUPPLY PIPES, REPLACE EXISTING SPRINKLERS WITH QUICK RESPONSE, PREPARED SPRINKLES AND PIPE WELD SHOWN AS REQUIRED PER EXISTING RISK OUTLET.

4. INSTALL, FLUSH AND TEST UNDERGROUND AS REQUIRED PER NFPA.

5. AUTOMATIC FIRE ALARM CALLS TO BE PROVIDED IN ACCORDANCE WITH NFPA #163, 2007 EDITION.

6. AUTOMATIC FIRE SPRINKLER SYSTEM SHALL BE INSTALLED IN STEEL PIPE WITH NFPA#203, 2007 ED., INSTALLATION OF SPRINKLER SYSTEMS.

7. ALL PIPING EXPOSED PIPING SHALL BE DYNADRAWN, 1/2" DIA MINIMUM

8. FITTINGS SHALL BE THREADED, WELDED AND GROOVED IN ACCORDANCE WITH LISTING AND NFPA #113 REQUIREMENTS. CPVC NOT ALLOWED FOR DETAIL.

9. SEISMIC BRACING AND FLEXIBLE COUPLINGS, SHALL BE PROVIDED AS REQUIRED FOR SEISMIC PROTECTION. METHOD OF BRACING MAY VARY BASED ON DETAIL.

10. MASONRY PENETRATIONS SHALL BE FIELD VERIFIED AND COORDINATED. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CORES AND PATCHES TO MATCH EXISTING FINISHES.

11. PROVIDE CLEARANCES AND FLEXIBLE COUPLINGS AS REQUIRED FOR SEISMIC PROTECTION OF SYSTEM AND FIELD RATED GYPSUM VALVES.

12. PROVIDE HANGERS AS REQUIRED PER NFPA #113. METHOD OF HANGING MAY DEVIATE FROM DETAILS SHOWN FOR REFERENCE.

13. MECHANICAL TESS SHALL NOT BE USED, UNLESS REQUIRED FOR FIELD OR LIMITED MATERIALS.

14. THE SPRINKLER CONTRACTOR SHALL COORDINATE WITH OTHER TRADES, EQUIPMENT, STRUCTURE AND PROVIDE ADDITIONAL SUPPORTS FOR SPRINKLER SYSTEMS. IF ANY PIPING SHALL BE REQUIRED AS REQUIRED WHERE CONFLICTS OCCUR, THE CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTING OFFSETS, OR REVISED CUT LENGTHS.

15. PROVIDE CLEARANCES AND COUPLINGS OR LOCATIONS, & DIMENSIONS ARE SCHEMATIC, AND SHALL BE USED FOR REFERENCE ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL OFFSETS AS REQUIRED FOR INSTALLATION. DEVIATING FROM AN APPROVED DESIGN SHALL BE AT OWNERS RISK. SEE SIZING DATA, PRIOR TO INSTALLATION.

16. PIPE CUTS ARE NOTED AT CUT LENGTHS FOR THREADED FITTINGS AND CENTER FOR WELDED OUTLETS AND GROOVED ENDS LENGTHS.

17. SUBSTITUTION OF SPRINKLERS AND OTHER DEVICES SHALL BE OF SAME TYPE, ENDURES, LISTING, WEIGHT, HANGERS AND OTHER MISC. DEVICES SHALL BE UL LISTED.

18. FINAL REDLINE AS-BUILT DRAWINGS SHALL BE PROVIDED BY THE TRADING CONTRACTOR. AS-BUILT DRAWINGS SHALL BE PROVIDED BY THE ENGINEER.

19. CONTRACTOR SHALL PROVIDE AUXILIARY DRAINS AS NEEDED FOR SYSTEMS. AS-BUILT DRAWINGS SHALL NOTE LOCATION OF ALL MAIN VALVES.

20. PROVIDE ADDITIONAL UNIONS AS NEADED BASE ON DIRECTION OF FLOW.

21. BUILDING IS CONSIDERED A HEATED BUILDING. IT SHALL BE THE OWNER'S RESPONSIBILITY TO PROVIDE AND MAINTAIN A MINIMUM TEMPERATURE OF 50°F. LOWER TEMPERATURES MAY CAUSE SYSTEM FAILURE. ALL TUBES SHALL BE INSULATED TO PREVENT FREEZING. FREEZING DUE TO EXCESSIVE DILUTATION.

22. SPRINKLER PROTECTION SYSTEM IS CONSIDERED AS FOLLOWING ORDINARY HAZARD GROUP FOR STORAGE & UTILITY. CORRIDORS AND OFFICE AREA TO BE CONSIDERED AS LIGHT HAZARD OCCUPANCY.

23. LOCATIONS OF UNIONS NOT REQUIRED WHEN HANGERS ARE LESS THAN 6' IN LENGTH.

24. ALL STANDARD COVERAGE SPRINKLERS SHALL BE SUPPLIED WITH DOWNBARS FOR PROTECTING SPRINKLER HEADS.

25. SPRINKLERS SHALL BE POSITIONED GREATER THAN 1 FT. FROM EDGE OF HVAC DIFFUSERS.

26. SPRINKLERS SHALL BE OFFSET FROM SURFACE MOUNTED LIGHTS AS REQUIRED PER NFPA #113.

27. NO SPECIFICATIONS ISSUED FOR PROJECT.

28. THIS SYSTEM SHALL TRANSMIT ALARM, TAMPER AND SUPERVISORY SIGNAL, TO AN APPROVED MONITOR STATION. A SUPERVISORY SIGNAL SHALL INDICATE A LOW BATTERY CONDITION. THE FIRE PUMP A POSITION OTHER THAN NORMAL OPERATION. SUPERVISORY SIGNAL SHALL BE TRANSMITTED TO THE CONTROL ROOM. CIRCUIT IS SHORTED, FAULTED, OR DISCONNECTED.

29. THE FIRE PREVENTION BUREAU SHALL BE NOTIFIED THREE DAYS IN ADVANCE OF ANY TESTING OF THE SYSTEM.

30. INSPECTION AND PIPE HANGER AND SWAY BRACING. WITNESS OF FLOW AND MAIN DRAIN TEST OF THE SYSTEM. INTERCONNECTED TO THE FIRE MONITOR STATION.

**342 SOUTH STATE STREET BLDG.
BASEMENT FIRE SPRINKLER PLAN**

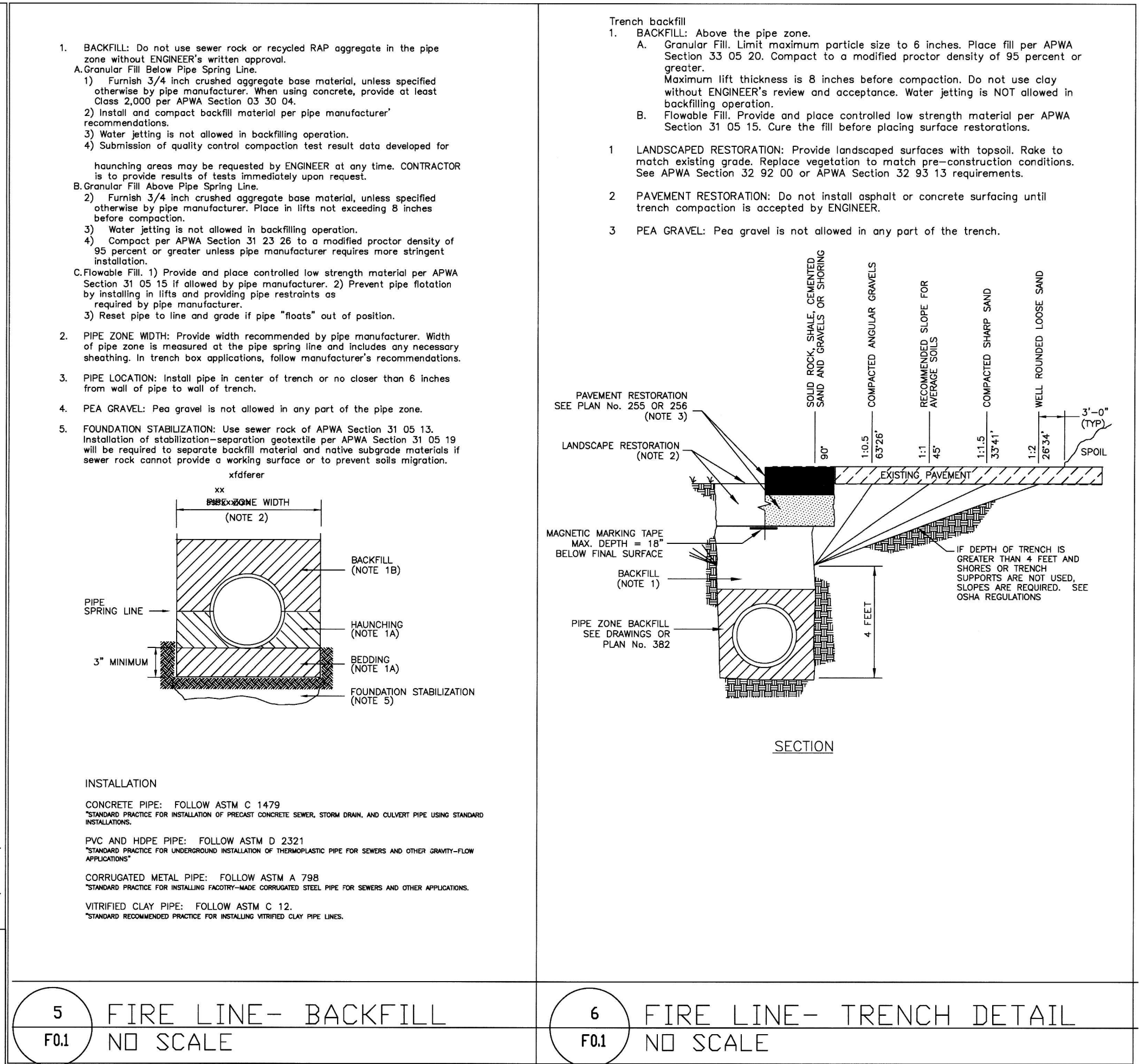
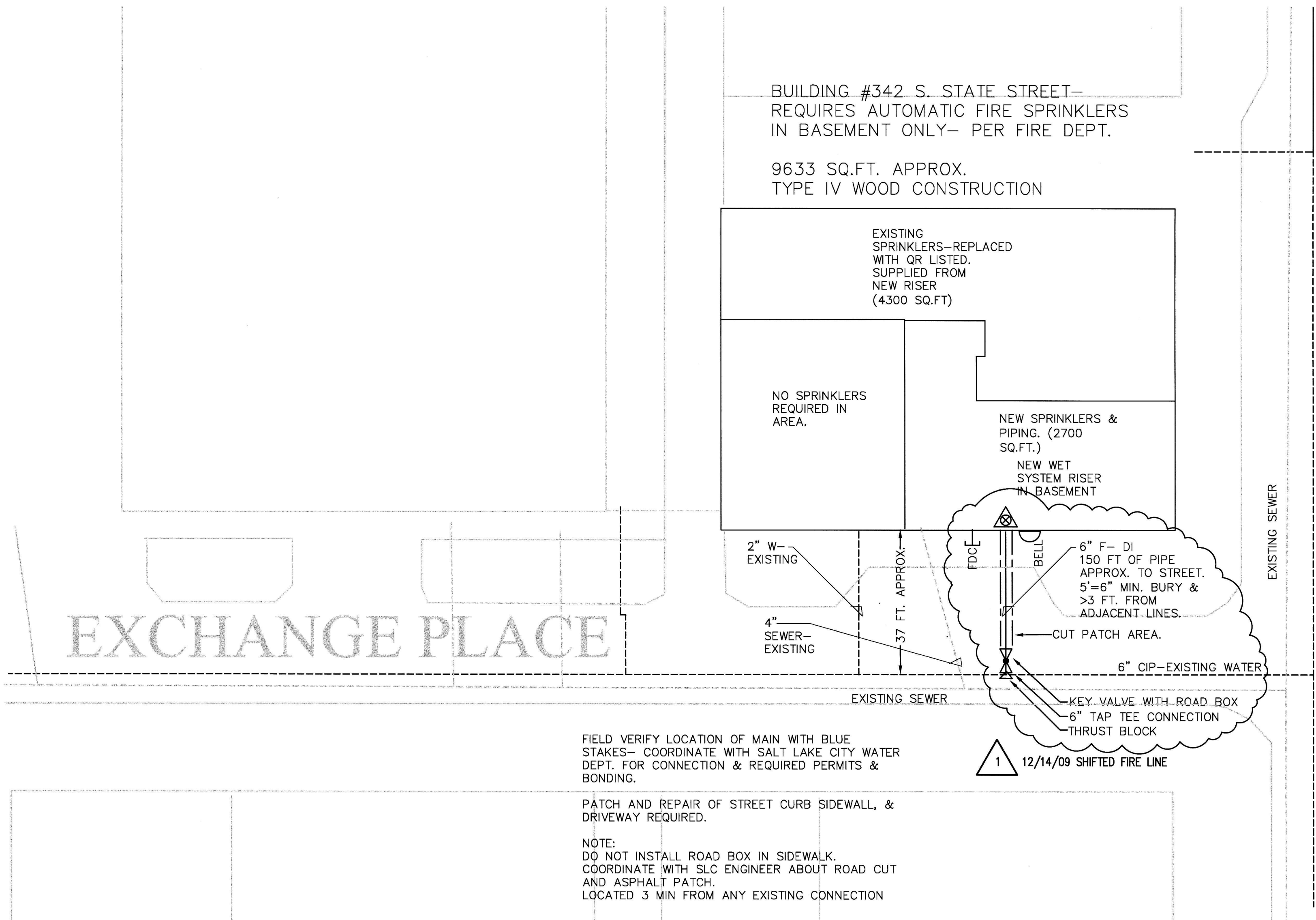
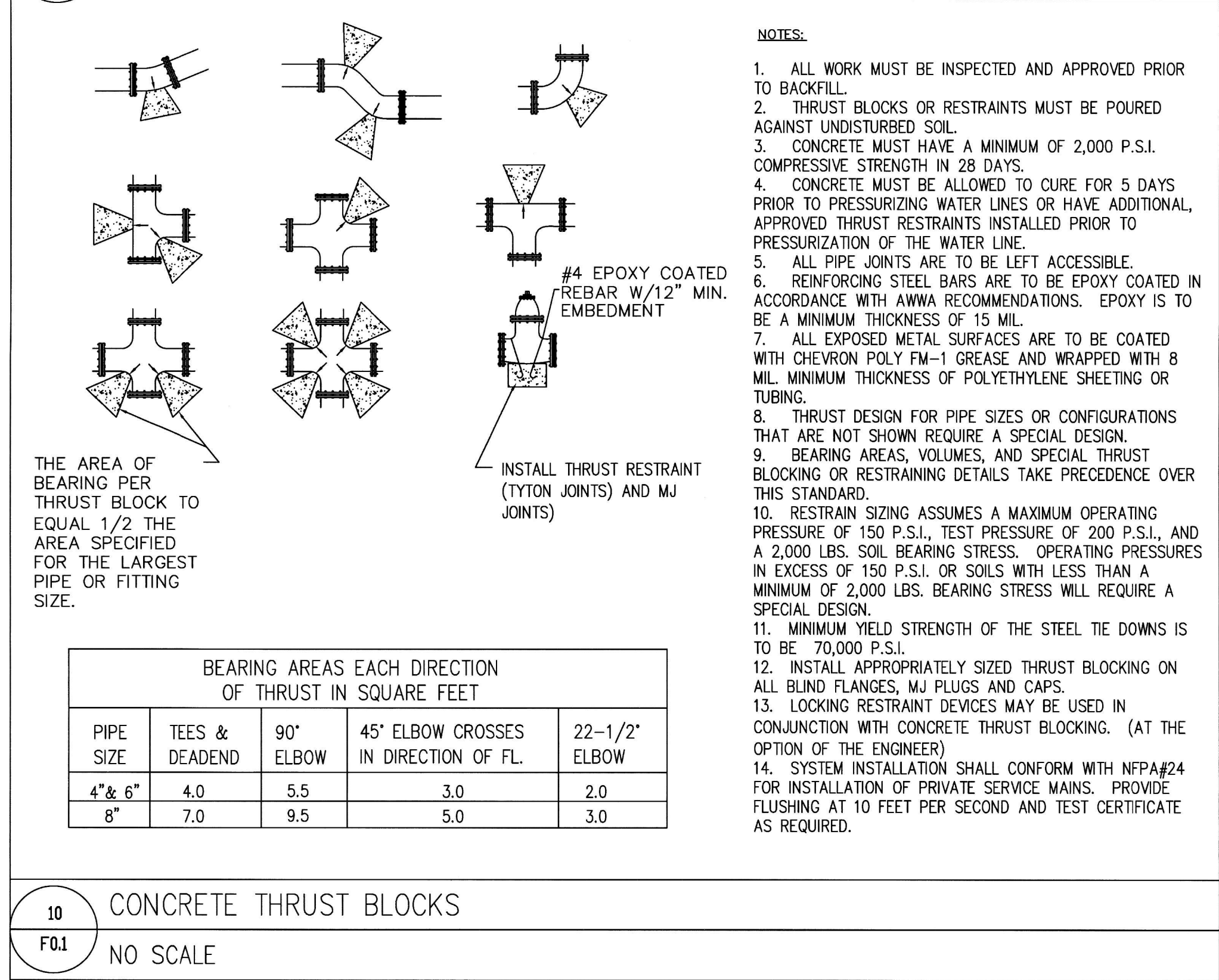
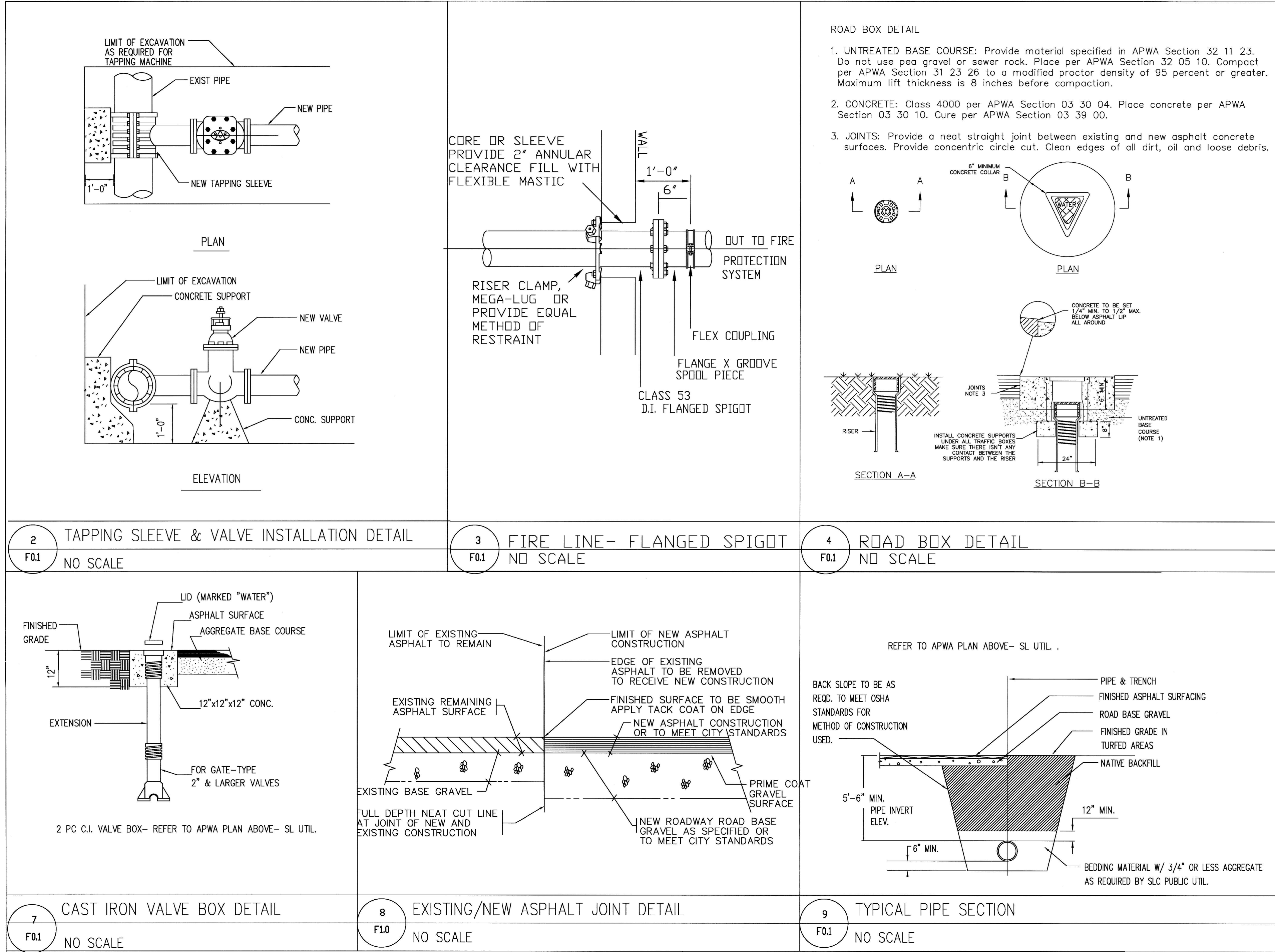
1971 West 3300 South, #A
West Valley City UT 84119

**FIRE SPRINKLER
PLAN- BASEMENT**

**FIRE SPRINKLER
PLAN- BASEMENT**

F-1.0





GENERAL NOTES

- ROADS SHALL BE ASPHALT, CONCRETE OR OTHER APPROVED DRIVING SURFACE MATCHING EXISTING SURFACE AND GRADE.
- FIRE LINE SHALL BE INSTALLED AND TESTED IN ACCORDANCE WITH NFPA #24, INSTALLATION OF PRIVATE SERVICE FIRE LINES.
- FIRE LINE SHALL BE BURIED GREATER THAN 5'-6" BELOW GRADE. REFER TO DETAILS FOR INSTALLATION REQUIREMENTS AND CLARIFICATION.
- ALL CONSTRUCTION IN STREET SHALL FOLLOW CITY & WATER DEPARTMENT SPECIFICATIONS AND REQUIREMENTS.
- THE EXISTING WATER DISTRIBUTION SYSTEM SHALL REMAIN IN SERVICE DURING CONSTRUCTION.
- IT IS THE CONTRACTORS SOLE RESPONSIBILITY TO LOCATE AND AVOID ANY/ALL UTILITIES.
- ALL WATER LINE CONSTRUCTION INCLUDING, BUT NOT LIMITED TO, REPLACEMENT OF CURB, SIDEWALK, TO BE IN ACCORDANCE WITH A.P.W.A. STANDARDS, PLANS AND SPECIFICATIONS (LATEST EDITION).
- REFER TO D.S.H.A. AND A.P.W.A. REQUIREMENTS AND SPECIFICATIONS FOR TRENCH DETAIL.
- CONTRACTOR SHALL SAWCUT ALL TRENCHES AND PROVIDE A SMOOTH CLEAN EDGE FOR PAVING.
- SELECT BEDDING AND BACK FILL IS REQUIRED 6" UNDER, 12" OVER PIPING & SERVICES.
- BEDDING AND BACK FILL: WATERLINE CONSTRUCTED IN DRY GROUND - SELECT SAND SHALL BE USED. WATERLINE CONSTRUCTED IN WET GROUND - 3/4" MINUS SHALL BE USED BEDDING SHALL BE COMPACTED TO 95% MINIMUM ASTM D-1557.
- MINIMUM TRENCH WIDTH SHALL BE EQUAL TO OUTSIDE PIPE DIAMETER PLUS 1 FT. EACH SIDE OF PIPE.
- IF DAMAGE IS CAUSED TO WATER OR SERVER MAIN, CONTRACTOR WILL BE HELD RESPONSIBLE FOR REPAIRS.
- GREASE AND WRAP ALL EXTERNAL FITTINGS AND BDLTS WITH GREASE AND 8 MIL PLASTIC, DUCT TAPE 8 MILL PLASTIC TIGHT.
- ALL BLOCKING MUST BE REINFORCED BY SECURE GROUND.

F.S.S.

Fire Suppression Services, Inc.

3802 South 2300 East
Salt Lake City, UT 84109
OFFICE 801-277-6464, Fax 278-1299

Craig Blue, P.E., Inc.
Fire Suppression Design
Consulting & Engineering

1971 West 3300 South #A
West Valley City, UT 84119

342 SOUTH STATE STREET BLDG. BASEMENT FIRE SPRINKLER PLAN

342 S. STATE ST, SALT LAKE CITY, UT

REVISIONS	
1	12/14/09 SHIFTED FIRE LINE
PROJECT #: 364	
DRAWN BY: CRB	
ISSUE DATE: 12/7/09	
SHEET CONTENTS	

FIRE SPRINKLER PLAN-UTILITIES



F-0.1