

SEAL:	WCL
CHECKED BY:	WCL
ORIG. BY:	WCL
DATE:	
DRAWN BY:	DEM
DATE:	
DRAWING:	CP00237866
DATE:	01DEC11
DESCRIPTION:	
BUILDING:	
REV:	

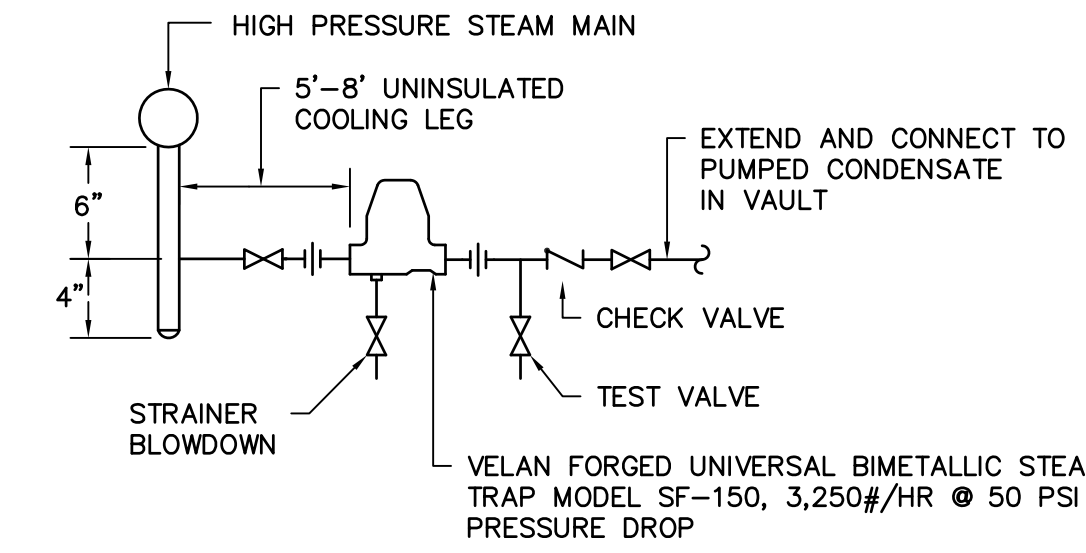
PROJECT TITLE: UTILITY INFRASTRUCTURE REPAIRS - 2012 WORK
COLUMBIA CAMPUS - SP# H27-6043-NA-B

GENERAL NOTES

- DO NOT SCALE DRAWINGS. VERIFY ALL REQUIRED INFORMATION IN THE FIELD BY VISITING SITE PRIOR TO SUBMITTING BID.
- EXACT ROUTING OF PIPING SHALL BE SET IN FIELD TO MINIMIZE CONFLICTS WITH ALL ABOVE AND UNDERGROUND STRUCTURES, TREES, FENCES, WALKS, WALLS, AND UTILITIES.
- ALL PIPING IS SHOWN DIAGRAMMATIC. HOWEVER, CONTRACTOR SHALL PROVIDE ALL REQUIRED FITTINGS, PIPING, AND INSULATION FOR ALL OFFSETS AND/OR CHANGES IN ELEVATIONS. WHERE NECESSARY DUE TO INTERFERENCE, CONTRACTOR SHALL MODIFY EXISTING PIPING, EQUIPMENT, ETC.
- ALL VALVES AND SPECIALTIES SHALL BE LINE SIZE UNLESS INDICATED OTHERWISE ON DRAWINGS.
- ALL STEAM AND PUMPED CONDENSATE SHALL PITCH DOWN A MINIMUM OF ONE INCH PER FIFTY FEET.
- ALL OPENINGS THROUGH EXISTING STRUCTURES SHALL BE CORE DRILLED.
- COLD SPRING ALL STEAM LINES FIFTY (50) PERCENT.
- WHERE PIPING ENTERS MANHOLE CONSTRUCT ENTRY AS REQUIRED. ALL PIPES TO BE SLEEVED AND LINK SEALED TO MAKE WATERTIGHT.
- ALL PIPING AND FITTINGS IN MANHOLES TO BE INSULATED, SEE SPECIFICATIONS.
- CONTRACTOR SHALL COORDINATE AND OBTAIN APPROVAL FROM OWNER FOR INTERRUPTIONS AND CONNECTIONS TO EXISTING UTILITY SYSTEMS.
- CONTRACTOR SHALL COORDINATE TREE AND LANDSCAPING REPLACEMENT WITH USC. IN GENERAL USC WILL REPLACE SMALL TREES THAT ARE NOTED TO BE REPLACED. CONTRACTOR IS RESPONSIBLE FOR SOD REPLACEMENT.
- ALL PIPING SHALL BE VENTED OF AIR AND FILLED WITH THEIR NORMAL FLUIDS OR GAS.
- CONTRACTOR SHALL CONTACT PALMETTO UTILITY PROTECTION SERVICES TO LOCATE UTILITIES PRIOR TO DIGGING. INFORMATION OBTAINED FROM PALMETTO UTILITY PROTECTION SERVICES AND DURING DIGGING SHALL BE INDICATED ON THE AS-BUILT DRAWINGS.
- CONSTRUCT TEMPORARY FENCING AROUND PROJECT AREA TO PROTECT THE SITE AND PEDESTRIANS.

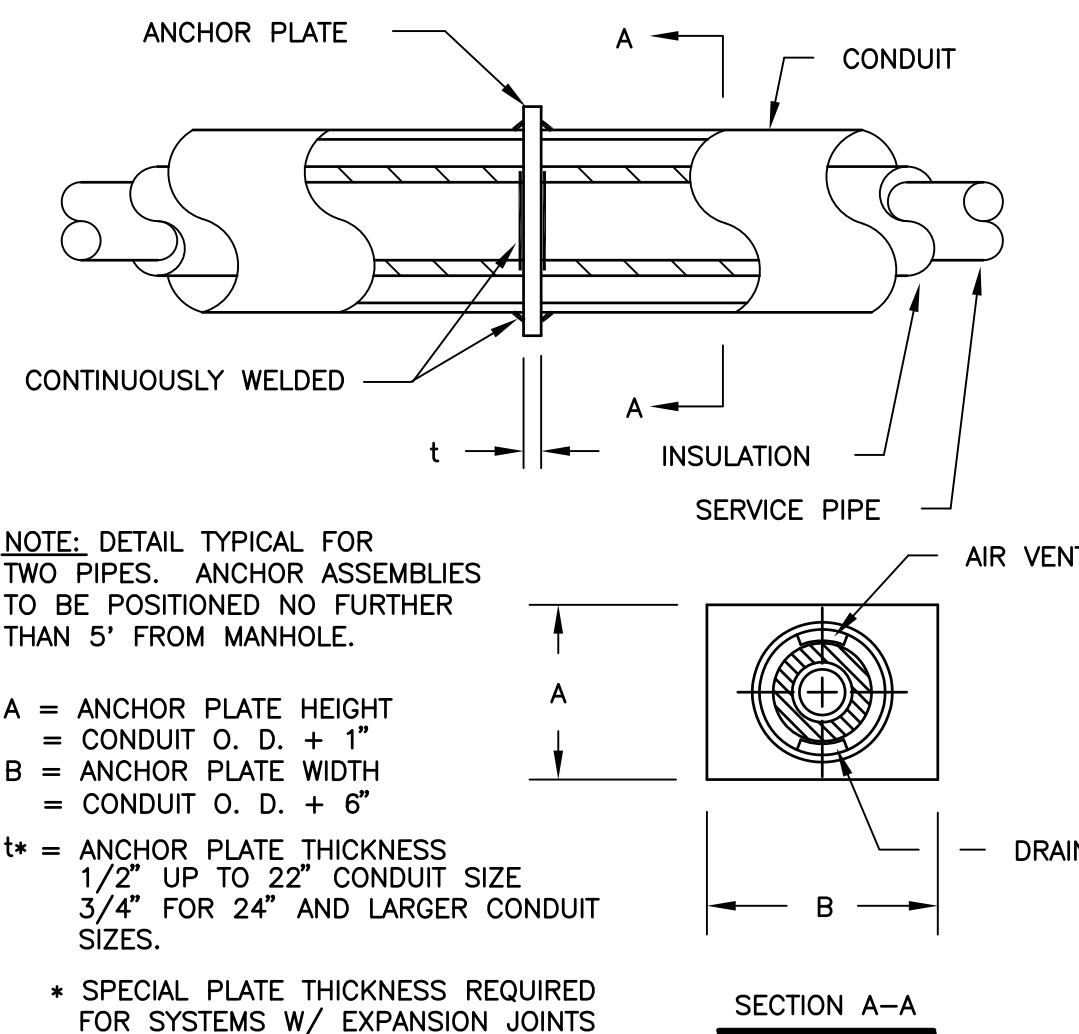
LEGEND

SYMBOL	DESCRIPTION
—S—	NEW HIGH PRESSURE STEAM LINE
—PC—	NEW PUMPED CONDENSATE LINE
---S---	EXISTING PIPE TO BE REMOVED OR ABANDONED
—PC—	EXISTING PUMPED CONDENSATE LINE
—S—	EXISTING HIGH PRESSURE STEAM LINE
—GC—	EXISTING GRAVITY CONDENSATE LINE
—CR—	EXISTING CHILLED WATER RETURN LINE
—CS—	EXISTING CHILLED WATER SUPPLY LINE
—E—	EXISTING HIGH VOLTAGE ELECTRICAL LINE
—C—	EXISTING COMMUNICATIONS LINE
—EC—	EXISTING ELECTRICAL AND COMMUNICATIONS PRIMARY DUCT
—SS—	EXISTING SANITARY SEWER LINE
—HG—	EXISTING HIGH PRESSURE GAS LINE
—LG—	EXISTING LOW PRESSURE GAS LINE
—SD—	EXISTING STORM DRAIN LINE
⊗	VELAN GATE VALVE, SEE SPECS
⊙	CONNECTION POINT OF NEW TO EXISTING



HIGH PRESSURE DRIP POINT

NO SCALE



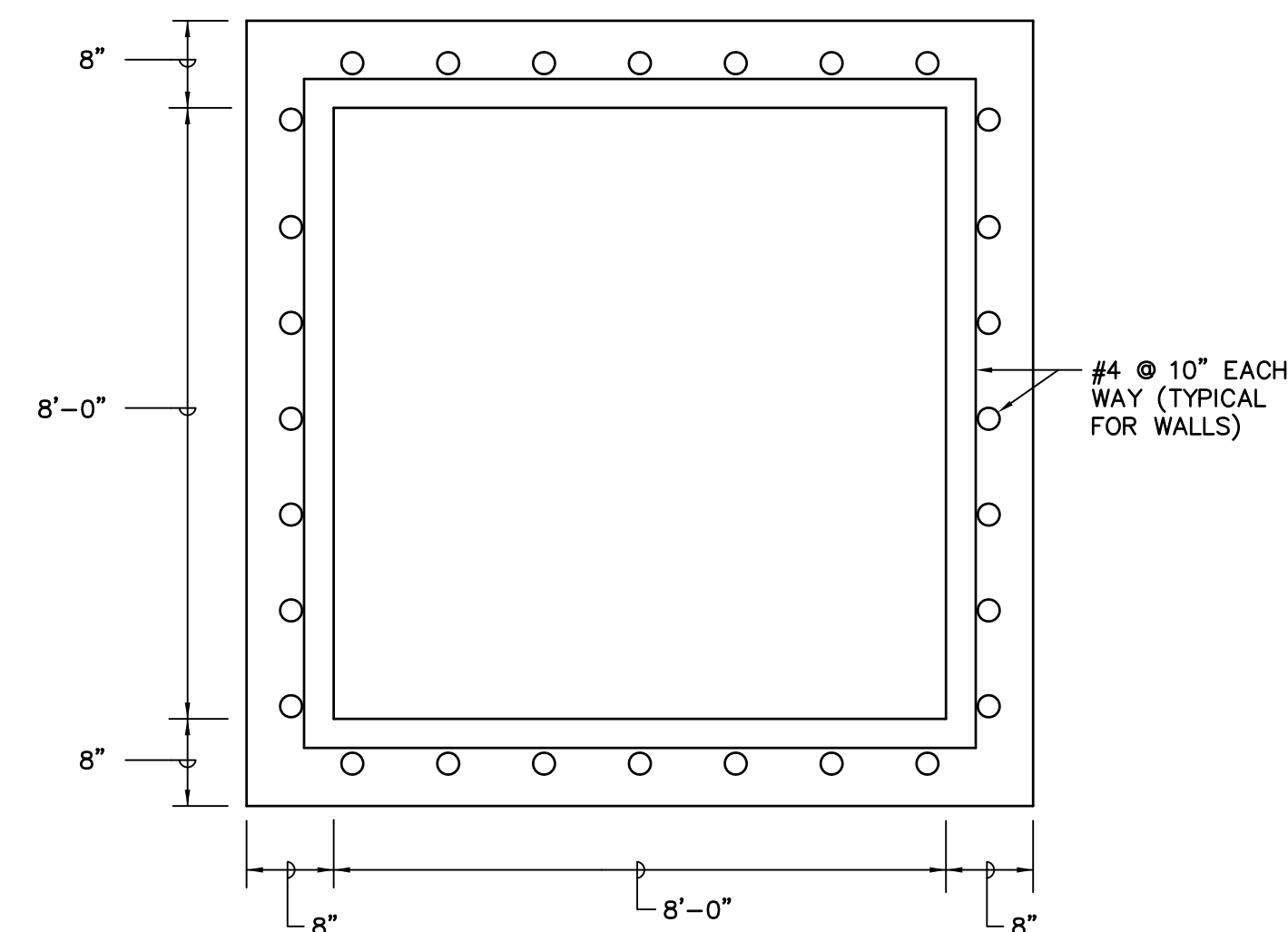
NOTE: DETAIL TYPICAL FOR TWO PIPES. ANCHOR ASSEMBLIES TO BE POSITIONED NO FURTHER THAN 5' FROM MANHOLE.

- A = ANCHOR PLATE HEIGHT = CONDUIT O. D. + 1"
- B = ANCHOR PLATE WIDTH = CONDUIT O. D. + 6"
- t = ANCHOR PLATE THICKNESS 1/2" UP TO 22" CONDUIT SIZE 3/4" FOR 24" AND LARGER CONDUIT SIZES.
- * SPECIAL PLATE THICKNESS REQUIRED FOR SYSTEMS W/ EXPANSION JOINTS

NOTE: A CONCRETE BLOCK SHALL BE CAST OVER THE PLATE AND CONDUIT AND SHALL BE AT LEAST 30" IN LENGTH AND SHALL EXTEND A MINIMUM OF 9" BEYOND THE TOP AND BOTTOM OF ANCHOR PLATE.

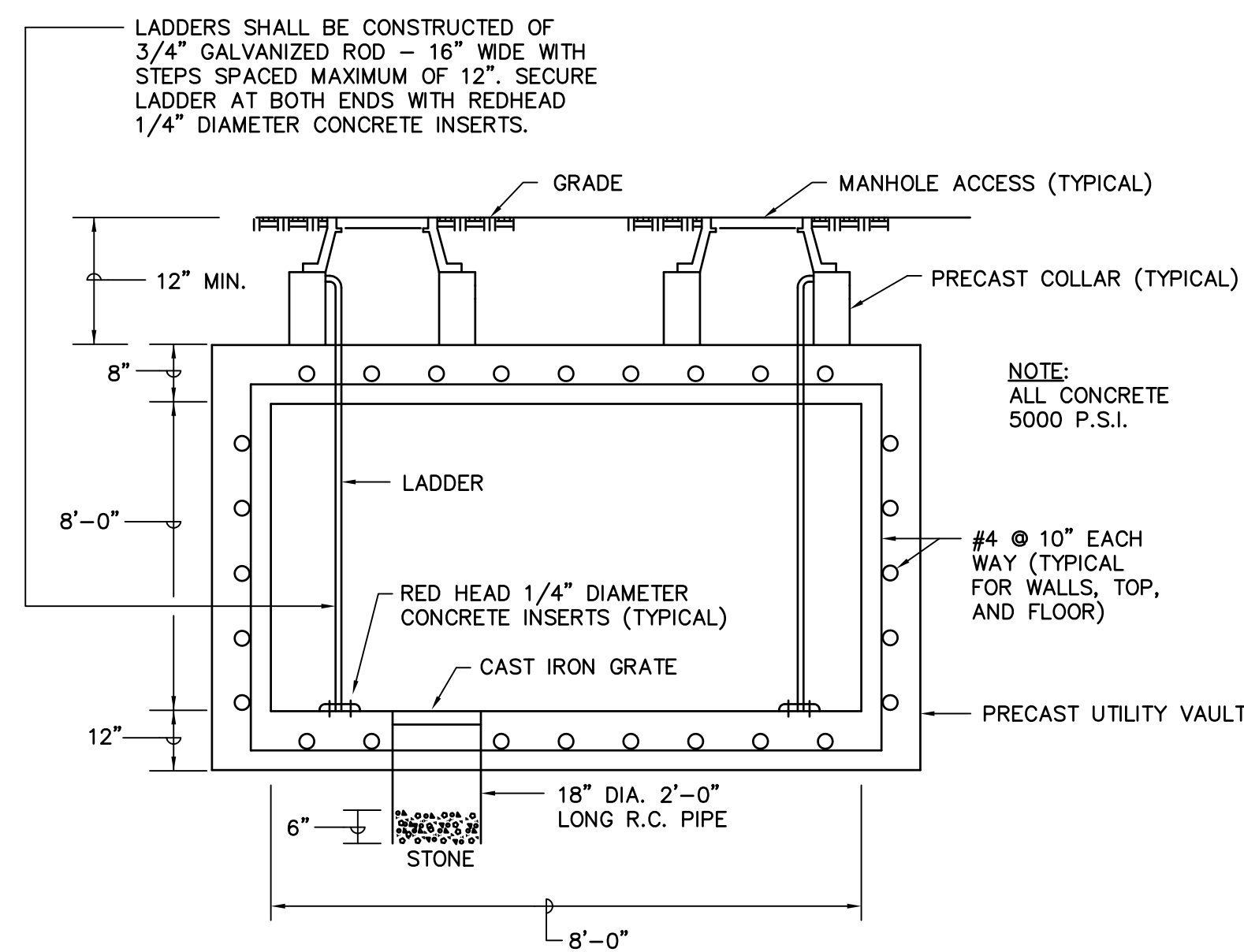
STANDARD ANCHOR ASSEMBLY

NO SCALE



MANHOLE PLAN VIEW

NO SCALE



UTILITY VAULT DETAIL

NO SCALE

LADDERS SHALL BE CONSTRUCTED OF 3/4" GALVANIZED ROD - 16" WIDE WITH STEPS SPACED MAXIMUM OF 12". SECURE LADDER AT BOTH ENDS WITH REDHEAD 1/4" DIAMETER CONCRETE INSERTS.

NOTE: ALL CONCRETE 5000 P.S.I.



Swygert & Associates
CONSULTING ENGINEERS
DBA Swygert & Assoc., Ltd. Telephone: (803) 791-9300
Post Office Box 11886 Fax: (803) 791-9830
Columbia, S.C. 29211 mail@swygert-associates.com