

WEST ENERGY STEAM EXPANSION JOINTS

STATE PROJECT NUMBER H27-Z339 COLUMBIA, SC

CONSTRUCTION DOCUMENTS

DRAWING INDEX

GENERAL

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MECHANICAL

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AND LEGEND

**CAMPUS PLANNING
AND CONSTRUCTION**
 COLUMBIA, SC 29208

SEAL:

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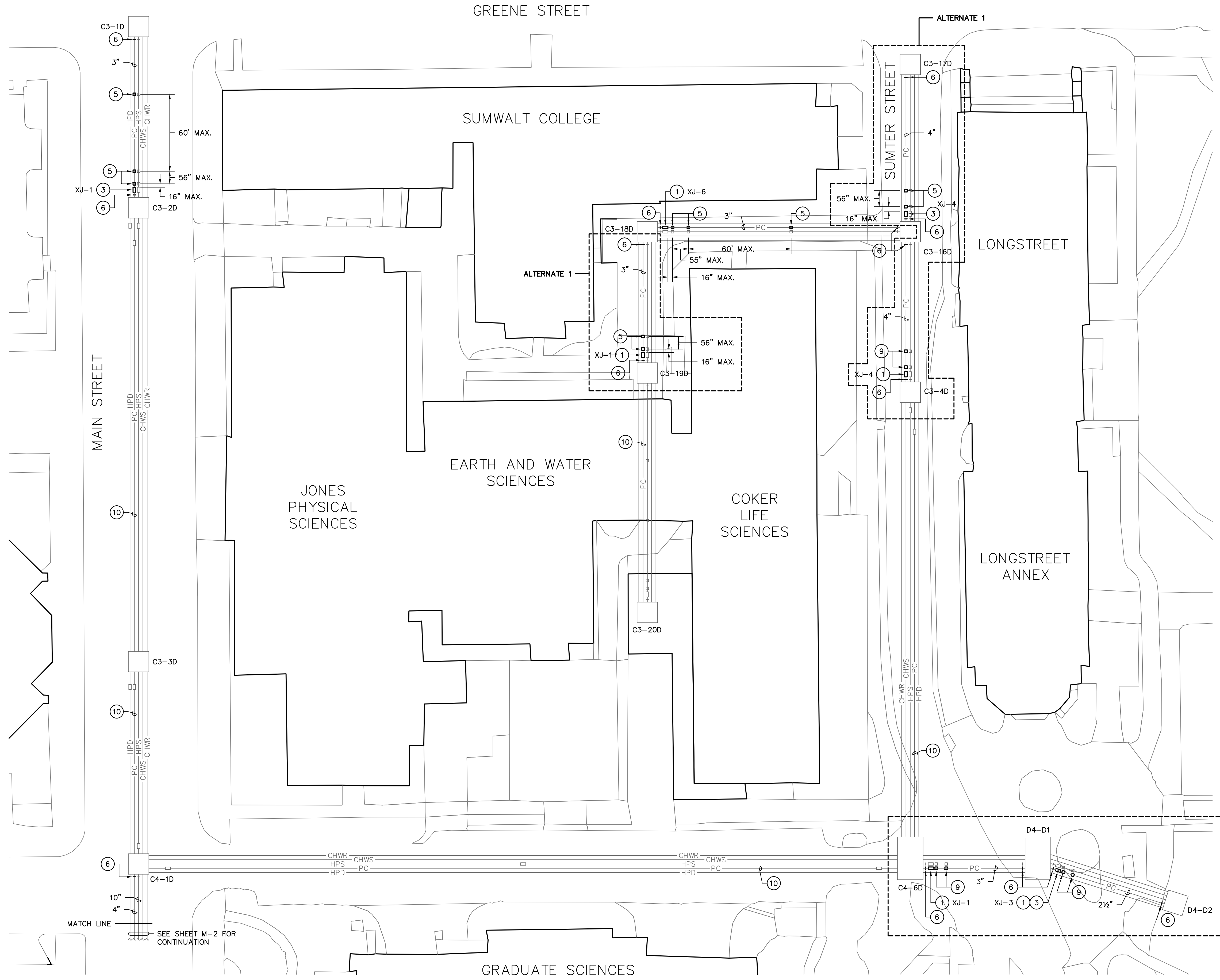
PROJECT TITLE: WEST ENERGY
STEAM EXPANSION JOINTS
 STATE PROJECT NUMBER: H27-Z339
 University of South Carolina

SHEET: T-1
 OF
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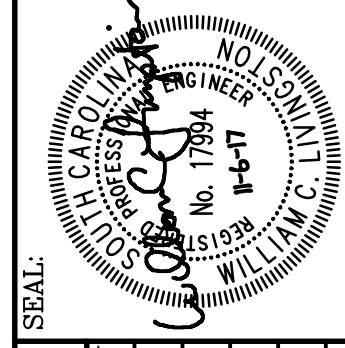
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 CONSULTING ENGINEERS

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 Columbia, S.C. 29211 mail@swygert-associates.com

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- NOTES TO SHEET**
- 1 REMOVE EXISTING EXPANSION JOINT AND INSTALL NEW JOINT IN EXISTING LOCATION.
 - 2 REMOVE EXISTING EXPANSION JOINT AND INSTALL SPOOL PIPE IN EXISTING LOCATION.
 - 3 INSTALL EXPANSION JOINT.
 - 4 INSTALL EXPANSION JOINT AND ANCHOR TO STRUCTURAL STEEL.
 - 5 INSTALL PIPE GUIDE.
 - 6 ANCHOR PIPE TO EXISTING TUNNEL STRUCTURAL STEEL.
 - 7 REMOVE EXISTING ANCHOR.
 - 8 INSTALL EXPANSION JOINT IN HIGH PRESSURE DRIP PIPE.
 - 9 EXISTING GUIDES TO REMAIN IN SERVICE.
 - 10 EXISTING PIPE EXPANSION SYSTEM TO REMAIN.



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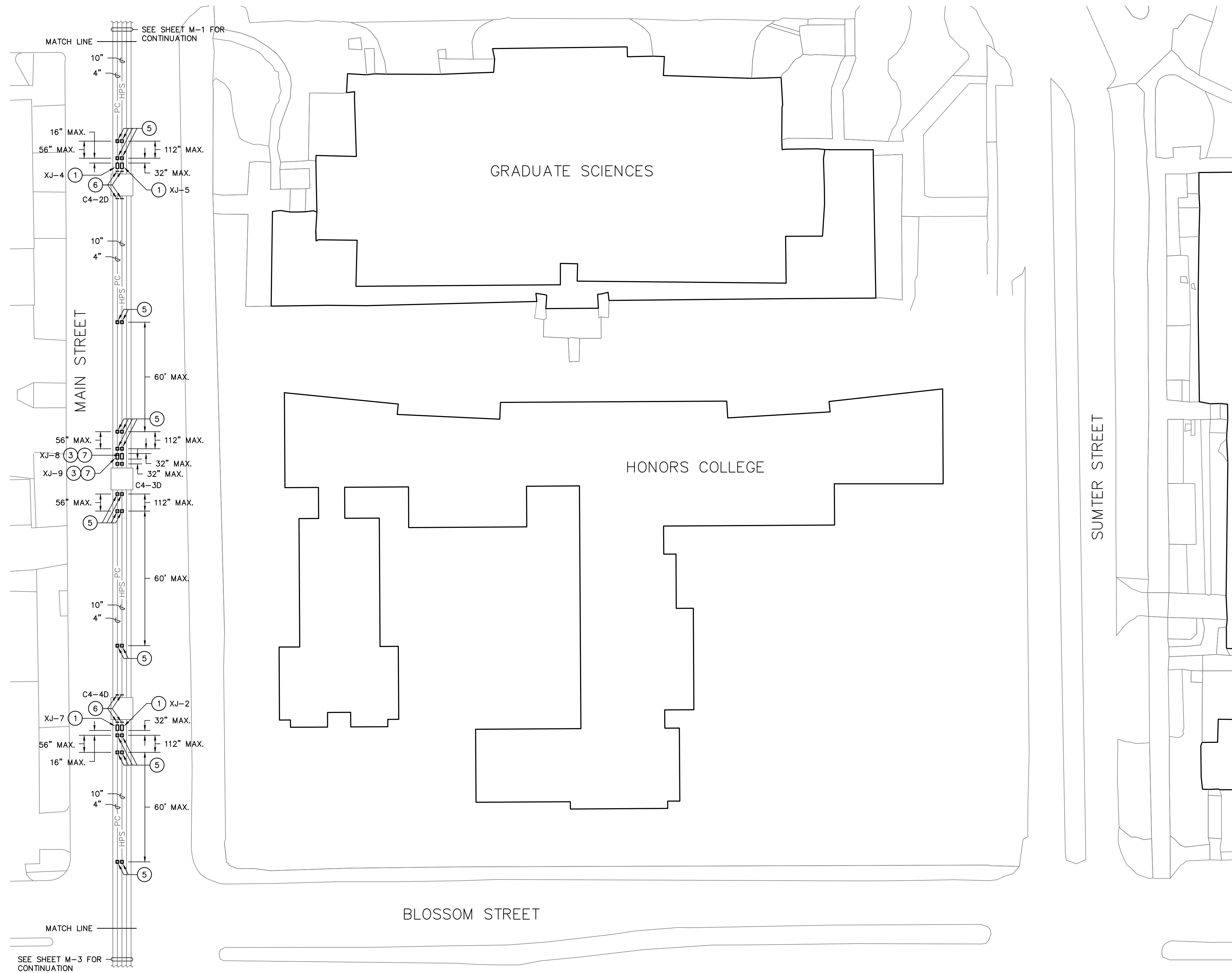
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1 SITE PLAN - RENOVATION
 SCALE: 1" = 30'

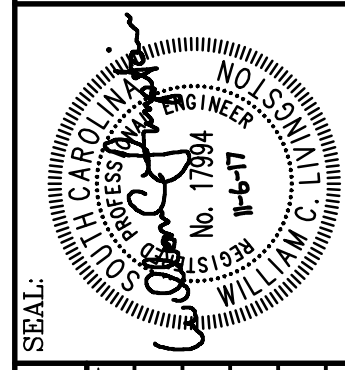
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SHEET: **M-1**
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- NOTES TO SHEET**
- ① REMOVE EXISTING EXPANSION JOINT AND INSTALL NEW JOINT IN EXISTING LOCATION.
 - ② REMOVE EXISTING EXPANSION JOINT AND INSTALL SPOOL PIPE IN EXISTING LOCATION.
 - ③ INSTALL EXPANSION JOINT.
 - ④ INSTALL EXPANSION JOINT AND ANCHOR TO STRUCTURAL STEEL.
 - ⑤ INSTALL PIPE GUIDE.
 - ⑥ ANCHOR PIPE TO EXISTING TUNNEL STRUCTURAL STEEL.
 - ⑦ REMOVE EXISTING ANCHOR.
 - ⑧ INSTALL EXPANSION JOINT IN HIGH PRESSURE DRIP PIPE.
 - ⑨ EXISTING GUIDES TO REMAIN IN SERVICE.
 - ⑩ EXISTING PIPE EXPANSION SYSTEM TO REMAIN.

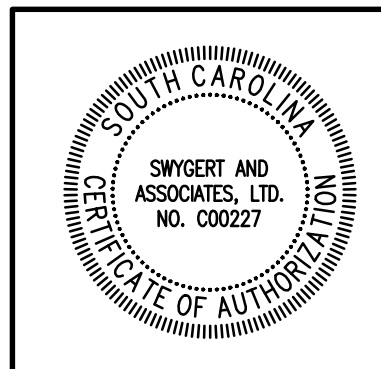


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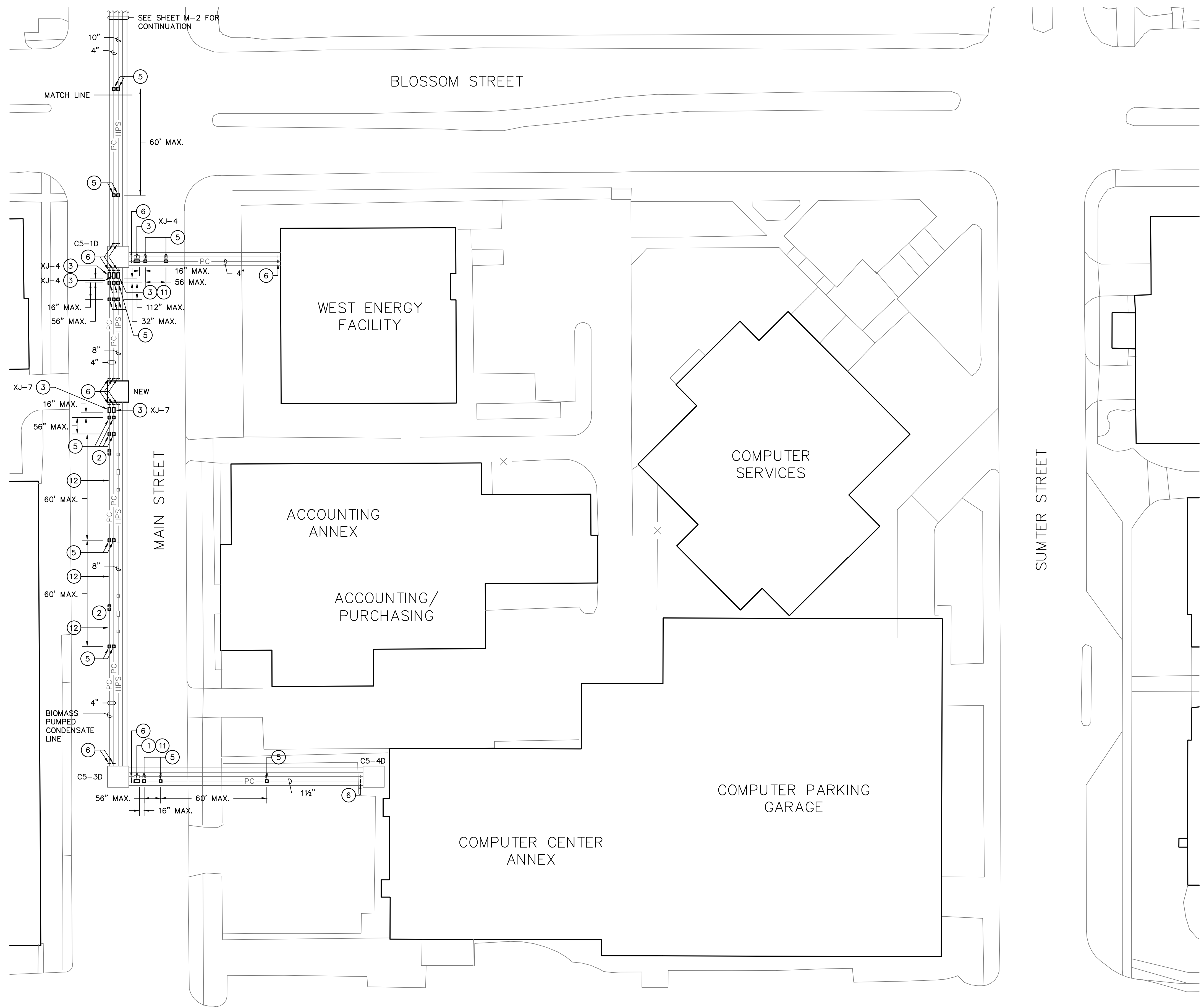
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1 SITE PLAN - RENOVATION
 W-2 SCALE: 1" = 30'



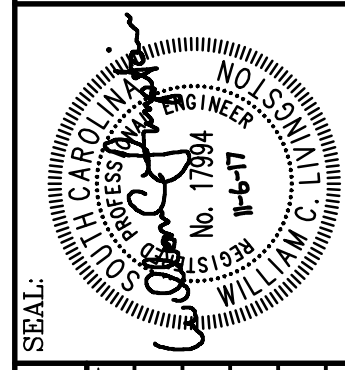
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- NOTES TO SHEET**
- ① REMOVE EXISTING EXPANSION JOINT AND INSTALL NEW JOINT IN EXISTING LOCATION.
 - ② REMOVE EXISTING EXPANSION JOINT AND INSTALL SPOOL PIPE IN EXISTING LOCATION.
 - ③ INSTALL EXPANSION JOINT.
 - ④ INSTALL EXPANSION JOINT AND ANCHOR TO STRUCTURAL STEEL.
 - ⑤ INSTALL PIPE GUIDE.
 - ⑥ ANCHOR PIPE TO EXISTING TUNNEL STRUCTURAL STEEL.
 - ⑦ REMOVE EXISTING ANCHOR.
 - ⑧ INSTALL EXPANSION JOINT IN HIGH PRESSURE DRIP PIPE.
 - ⑨ EXISTING GUIDES TO REMAIN IN SERVICE.
 - ⑩ EXISTING PIPE EXPANSION SYSTEM TO REMAIN.
 - ⑪ INSTALL NEW EXPANSION JOINT FURNISHED BY USC.
 - ⑫ EXISTING PIPE GUIDES NEED TO BE REPAIRED AND ALIGNED. IF EXISTING GUIDES MEET SPACING REQUIREMENTS THEY MAY BE USED IN LIEU OF NEW GUIDES.

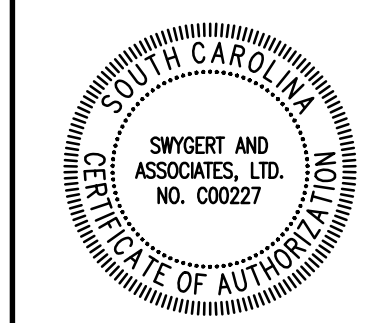
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1 SITE PLAN - RENOVATION
W-3 SCALE: 1" = 30'



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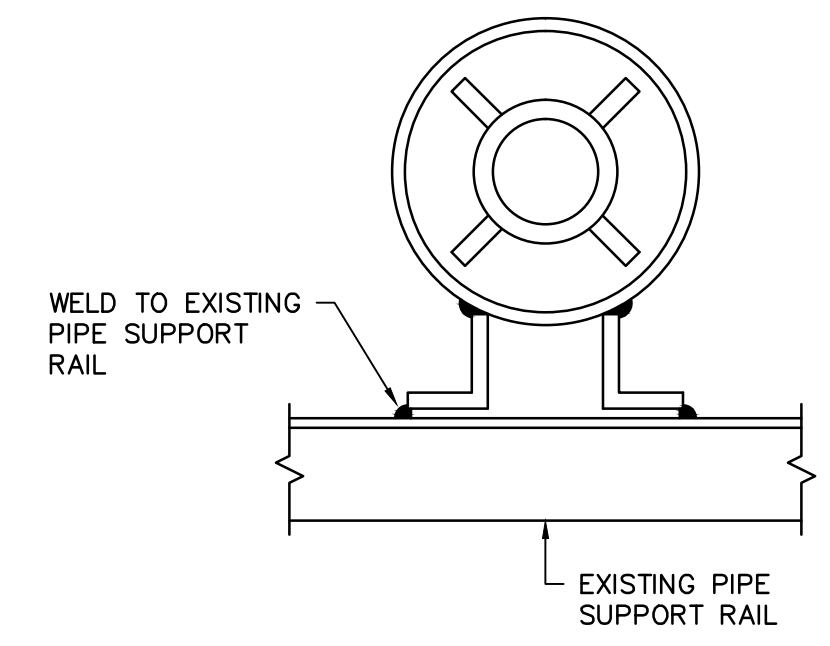
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EXPANSION JOINT SCHEDULE				
TAG	MODEL	TYPE	SIZE	EXPANSION
XJ-1	FPS/300	SINGLE	3"	4"
XJ-2	FPS/300	SINGLE	10"	8"
XJ-3	FPS/300	SINGLE	2-1/2"	4"
XJ-4	FPS/300	SINGLE	4"	4"
XJ-5	FPS/300	SINGLE	10"	4"
XJ-6	FPS/300	SINGLE	3"	6"
XJ-7	FPS/300	SINGLE	4"	8"
XJ-8	FPS/300	DUAL	10"	12"
XJ-9	FPS/300	DUAL	4"	12"

- ### 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.
 - 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.
 - ALL PIPING SHALL BE VENTED OF AIR AND FILLED WITH THEIR NORMAL FLUIDS OR GAS.
 - CONSTRUCT TEMPORARY FENCING AROUND PROJECT AREA TO PROTECT THE SITE AND PEDESTRIANS.
 - COORDINATE WITH DOT AS REQUIRED IF CONTRACTOR ELECTS TO CLOSE LANES IN MAIN STREET TO ACCESS VALVES.

LEGEND

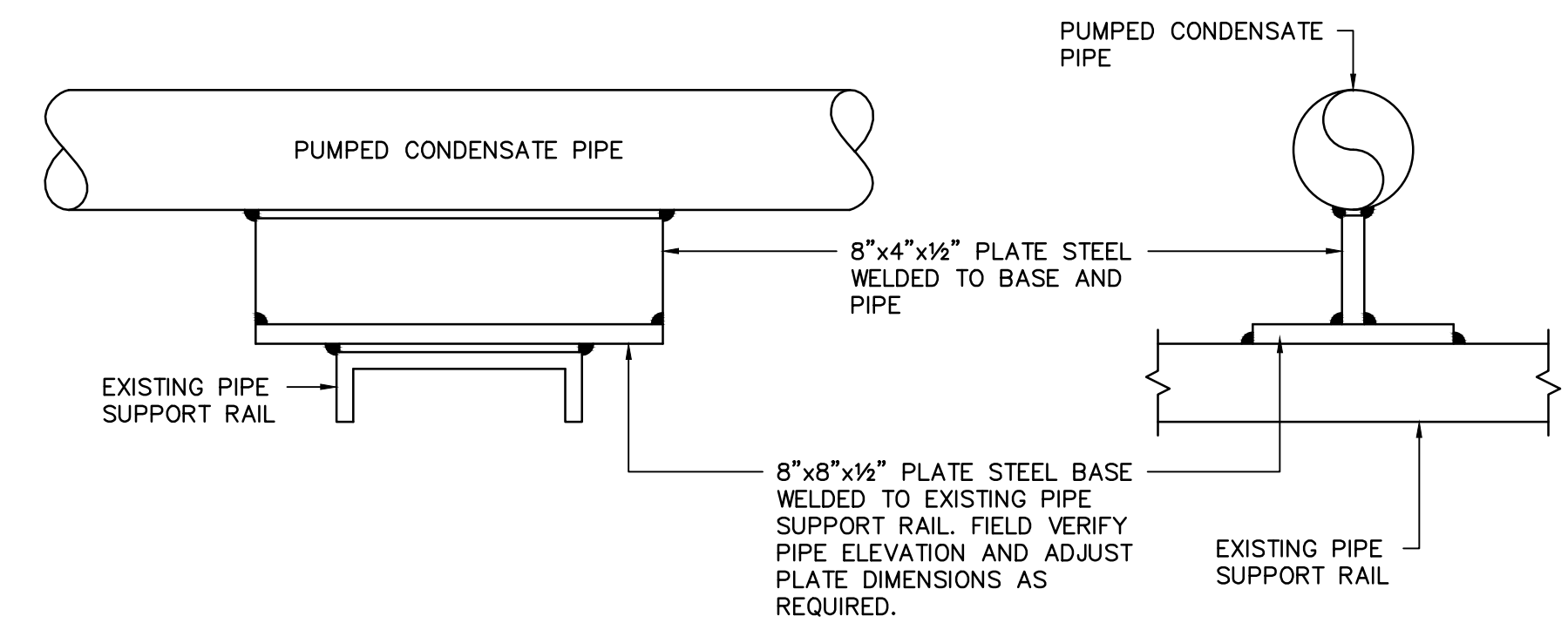
SYMBOL	DESCRIPTION
	NEW HIGH PRESSURE STEAM LINE
	NEW PUMPED CONDENSATE LINE
	EXISTING PIPE TO BE REMOVED OR ABANDONED
	EXISTING PUMPED CONDENSATE LINE
	EXISTING HIGH PRESSURE STEAM LINE
	EXISTING GRAVITY CONDENSATE LINE
	EXISTING CHILLED WATER RETURN LINE
	EXISTING CHILLED WATER SUPPLY LINE
	EXISTING HIGH VOLTAGE ELECTRICAL LINE
	EXISTING COMMUNICATIONS LINE
	EXISTING ELECTRICAL AND COMMUNICATIONS PRIMARY DUCT
	EXISTING SANITARY SEWER LINE
	EXISTING HIGH PRESSURE GAS LINE
	EXISTING LOW PRESSURE GAS LINE
	EXISTING STORM DRAIN LINE
	VELAN GATE VALVE, SEE SPECS
	CONNECTION POINT OF NEW TO EXISTING



PIPE GUIDE DETAIL

NO SCALE

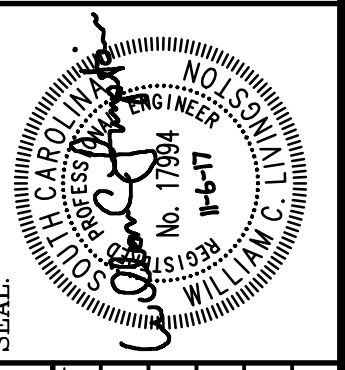
NOTE THAT SOME PIPE IS HUNG AND ANCHOR/GUIDE DETAILS WILL VARY SOME. VERIFY ALTERNATIVE METHODS WITH ENGINEER.



ANCHOR DETAIL

NO SCALE

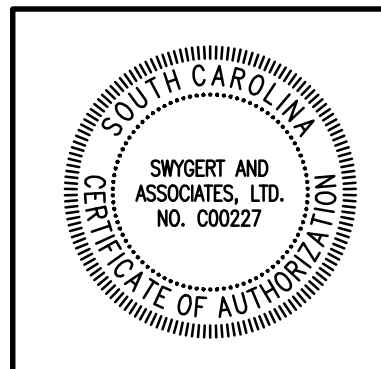
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SHEET: M-4
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