



LEGEND	
	EXISTING STEAM LINE
	EXISTING STEAM MANHOLE
	EXISTING WATER LINE
	EXISTING UNDERGROUND TELEPHONE
	EXISTING UNDERGROUND ELECTRIC
	EXISTING STORM DRAIN
	EXISTING SANITARY SEWER
	EXISTING CHILLED WATER SUPPLY
	EXISTING CHILLED WATER RETURN
	HIGH PRESSURE STEAM (HPS), PUMPED CONDENSATE (COND), AND HIGH PRESSURE RETURN (HPC) PIPING - SEE SCHEDULE THIS DWG. FOR SIZING
	THRUST BLOCK, REFER TO M-500 SERIES DRAWINGS FOR DETAILS

- DRAWING NOTES:**
- STEAM DISTRIBUTION PIPING REFERS TO HIGH-PRESSURE STEAM (HPS), PUMPED CONDENSATE RETURN (COND), AND HIGH-PRESSURE RETURN (HPC).
 - THE CONTRACTOR SHALL COORDINATE WITH THE UNIVERSITY FOR ANY STEAM SHUTDOWNS REQUIRED TO COMPLETE THE WORK.
 - THE UTILITY SURVEY PROVIDED BY THE UNIVERSITY SHOWS THE LOCATION OF THE MANHOLE COVER, NOT THE EDGE OF THE MANHOLE. WHEN RELEASING MATERIALS FOR FABRICATION, THE CONTRACTOR SHALL ORDER AN ADDITIONAL 10 FEET OF PIPING FOR EACH SYSTEM TO ENSURE THE PIPE HAS SUFFICIENT LENGTH FOR INSTALLATION.
 - INSTALL DIRECT-BURIED STEAM DISTRIBUTION PIPING FOLLOWING THE REQUIREMENTS OF THE PIPE MANUFACTURER. THE REQUIREMENTS INCLUDE, BUT ARE NOT LIMITED TO:
 - MINIMUM COVER (DETAIL 3/M-502).
 - DISTANCE BETWEEN PIPES, AND BETWEEN PIPES AND EDGES OF EXCAVATION (DETAIL 3/M-502).
 - WALL PENETRATION REQUIREMENTS (DETAIL 4/M-502).
 - THRUST BLOCKS AT ALL CHANGES OF DIRECTIONS (DETAILS 5/M-502 AND 6/M-502).
 - THRUST BLOCKS AT WALL PENETRATIONS (DETAIL 7/M-502).
 - REFER TO 'SITE RESTORATION NOTES' ON DRAWING T-002 FOR INFORMATION ABOUT FINAL GRADE AND SITE RESTORATION.
 - DIRECT-BURIED PIPING THRUST RESTANT SYSTEM TO BE DESIGNED BY THE MANUFACTURER OF THE DIRECT-BURIED PIPING SYSTEM.
 - NO SURVEY INFORMATION PROVIDED. INVERT ELEVATIONS OF EXISTING STORM DRAIN PIPING CROSSING THE NEW STEAM DISTRIBUTION SYSTEM ARE APPROXIMATE BASED ON FIELD OBSERVATIONS. THE CONTRACTOR SHALL CONFIRM ALL PIPE INVERTS IN THE FIELD PRIOR TO RELEASING MATERIALS FOR FABRICATION.

DIRECT-BURIED PIPING SYSTEM SCHEDULE

PIPE START SECTION	PIPE END SECTION	SYSTEM	NOMINAL SIZE	CASING OD	REQUIRED MANUFACTURER	REQUIRED PIPING SYSTEM
NORTH STEAM VAULT (SEA05-ST-0011)	NORRIS MANHOLE (SEA05-ST-0030)	HPS	6"	12.50"	THERMAL PIPE SYSTEMS INC.	SUPER TEMP-TITE
		COND	4"	9.38"	THERMAL PIPE SYSTEMS INC.	SUPER TEMP-TITE
		HPC	3"	8.38"	THERMAL PIPE SYSTEMS INC.	SUPER TEMP-TITE
NORRIS MANHOLE (SEA05-ST-0030)	TILLMAN HALL	HPS	3"	8.38"	THERMAL PIPE SYSTEMS INC.	SUPER WELD-TITE
		COND	1.25"	6.38"	THERMAL PIPE SYSTEMS INC.	SUPER WELD-TITE
		HPC	0.75"	6.38"	THERMAL PIPE SYSTEMS INC.	SUPER WELD-TITE

- NOTES:**
- REFER TO SPECIFICATION SECTION 33 61 00 ON DWG. M-703 FOR ADDITIONAL INFORMATION.
 - PIPING SYSTEM MANUFACTURER TO SIZE THRUST BLOCKS.

1 STEAM SYSTEM - MODIFICATION PLAN



NO.	08/09/2024	ISSUED FOR CONSTRUCTION	DWG
REV	DATE	REVISION	INT.

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Project Details NEUBER DEMOLITION & ENVIRONMENTAL CLEMSON DEMO ENGINEERING SUPPORT 5 CLEMSON, SC 29634	Drawing Title UTILITY PLAN - STEAM DISTRIBUTION SYSTEM MODIFICATIONS	 RAMBOLL AMERICAS ENGINEERING SOLUTIONS, INC. CERTIFICATE OF AUTH: C00743
Location: JOHNSTONE SITE	Designer / Professional Engineer Responsible: B. Biggers	
Project Number: 1940106830	Designed by: D. Gordon	Drawn by: B. Fostakovskyy
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