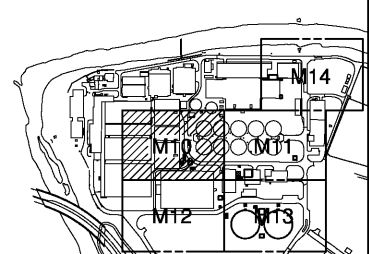


- NOTES:**
- CONTRACTOR SHALL PROVIDE ALL FITTINGS, ADAPTERS AND RESTRAINT DEVICES REQUIRED TO MAKE TIE-INS BETWEEN NEW PIPING AND EXISTING PIPING AND STRUCTURES.
 - CONTRACTOR SHALL FIELD VERIFY ALL LOCATIONS AND ELEVATIONS OF EXISTING PIPING PRIOR TO BEGINNING WORK.
 - 90° SCE LINE CONVERTED TO PE SERVICE.
 - RELOCATE EXISTING PIPING AS REQUIRED TO ALLOW INSTALLATION OF NEW ML, RAS AND PE PIPING. RECONNECT AND RELOCATE ALL SERVICES, HYDRANTS, ETC AS DIRECTED BY THE ENGINEER. CONTRACTOR SHALL REPLACE EXISTING PIPING THAT CANNOT BE REUSED AND SHALL PROVIDE ALL FITTINGS, BENDS, ADAPTERS, ETC AS REQUIRED TO RELOCATE THE PIPING AT NO ADDITIONAL COST TO THE OWNER.
 - SUPPORT STEAM AND CONDENSATE LINES ON WALL OF CLARIFIER AS REQUIRED TO EXCAVATE FOR SCE JCT BOX A.
 - PROVIDE TEMPORARY 10" PLUG DURING CONSTRUCTION.
 - STEAM AND CR PIPING SHALL BE INSTALLED IN ACCORDANCE WITH DETAILS 1 AND 2 ON M841 AND WITH SPECIFICATION SECTION 15521.
 - APPROXIMATE COORDINATE OF END OF PIPE IS N 3623337.50 E 11071732.50.

- PROCESS PIPE DESIGNATIONS**
- | | |
|------|--------------------------------|
| A | AIR |
| ADS | ANAEROBICALLY DIGESTED SLUDGE |
| ALS | ALUM SOLUTION |
| BAFE | BAF EFFLUENT |
| BAFI | BAF INFLUENT |
| BBW | BAF BACKWASH |
| BS | BLENDED SLUDGE |
| CAS | CAUSTIC SOLUTION |
| CLS | HYPOCHLORITE SOLUTION |
| CR | CONDENSATE RETURN |
| CS | COAGULATION SLUDGE |
| D | DRAIN |
| DAFS | DAF SUBNATANT |
| DG | DIGESTER GAS |
| DP | DRY POLYMER |
| DPD | DRAIN PUMP DISCHARGE |
| DSU | DIGESTER SUPERNATANT |
| EQ | EQUALIZATION |
| EOR | EQUALIZATION RETURN |
| FBWR | FILTER BACKWASH RECLAIM |
| FECL | FERRIC CHLORIDE |
| FD | FLOOR DRAIN |
| FE | FINAL EFFLUENT |
| FTE | FILTERED EFFLUENT |
| GR | GRIT |
| GTO | GRAVITY THICKENER OVERFLOW |
| HOCL | SODIUM HYPOCHLORITE |
| HPW | HOT POTABLE WATER |
| LPL | LIQUID POLYMER |
| ML | MIXED LIQUOR |
| MUW | MAKEUP WATER |
| NPW | NON-POTABLE WATER |
| OF | OUTFALL |
| P | POLYMER |
| PD | PROCESS DRAIN |
| PE | PRIMARY EFFLUENT |
| PS | PRIMARY SLUDGE |
| PTE | PRELIMINARY TREATMENT EFFLUENT |
| PW | POTABLE WATER |
| RAS | RETURN ACTIVATED SLUDGE |
| RD | ROOF DRAIN |
| RW | RAW WASTEWATER |
| S | SAMPLE |
| SA | SERVICE AIR |
| SBS | SODIUM BISULFITE |
| SC | SCUM |
| SCCE | SCUM CONCENTRATOR EFFLUENT |
| SCE | SECONDARY CLARIFIER EFFLUENT |
| SD | STORM DRAIN |
| SPD | SUMP PUMP DISCHARGE |
| SS | SANITARY SEWER |
| SW | SEAL WATER |
| TS | THICKENED SLUDGE |
| V | VENT |
| WAS | WASTE ACTIVATED SLUDGE |



				DESIGNED	DAN
				DRAWN	RWB
				CHECKED	
3	AS BUILT	OCT 2007	RLT	PROJ. ENGR.	DAN
2	CONSTRUCTION	MAR 2004	RLT		
1	REGULATORY APPROVAL	NOV 2003	RLT		
NO.	ISSUED FOR	DATE	BY	APPROVED	

THIS DRAWING WAS ORIGINALLY ISSUED FOR CONSTRUCTION AND SEALED BY ROBERT S. DIFIORE, SEAL NO. 22769

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RECORD DRAWING

HAZEN AND SAWYER
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**CITY OF ROANOKE
VIRGINIA**

**REGIONAL WATER POLLUTION CONTROL PLANT
PROCESS TRAIN IMPROVEMENTS**

**PARTIAL SITE PLAN
MECHANICAL
YARD PIPING**

THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.	DATE MARCH 2004	H & S JOB NUMBER 30788B
	CONTRACT NUMBER B	DRAWING NUMBER M10