MATCHLINE – SEE DRAWING M14

MATCHLINE – SEE DRAWING M10

MATCHLINE – SEE DRAWING M13

SECONDARY ANAEROBIC DIGESTER A

SECONDARY ANAEROBIC DIGESTER B

PRIMARY ANAEROBIC DIGESTER NO 6

SECONDARY ANAEROBIC DIGESTER C

PRIMARY ANAEROBIC DIGESTER NO 3

PRIMARY ANAEROBIC DIGESTER NO 4

PRIMARY ANAEROBIC DIGESTER NO 5

PRIMARY ANAEROBIC DIGESTER NO 7

DISINFECTION CHEMICAL FEED FACILITIES

66" SCE

36" BAFE

ROTATE BEND AS REQUIRED

2–45° BENDS

36" BAFE, CL 896.0±

2–45° BENDS

ROTATE TEE AS REQUIRED

66" SCE

CL 897.50

CL 897.50

HANDHOLE

MH A4
TOP EL 904.9±
INV IN 899.94±
INV OUT 899.84±
N 3623341.0±
E 11072429.6±

N

18" BBW

BIOLOGICAL AERATED FILTERS

66" SCE

8" SS 352.5' @ 0.98%

8" SLUDGE

12" DIG

8" SLUDGE

8" SLUDGE

MH B1
TOP EL 907.58
INV IN 902.53
INV OUT 902.43
N 3623088.58
E 11072435.03

WASTE GAS BURNER (800)

GAS METER

6" PDG

1" NG BY ROANOKE GAS, TYP

48" PLUG

8" SLUDGE

66" SCE

8" SS 352.5' @ 0.98%

12"x4" BOTTOM OUTLET TEE, LOW POINT IN STEAM LINE, SEE NOTE 4

SEE 1/M841
SEE 2/M841

3" CR

SLOPE

SLOPE

12" STEAM
6" TS

SLOPE

4" STEAM

SLOPE

6" TS

POLYMER FILL PANEL

SLOPE

8" SLUDGE

10" DAFS

PLUG 8" TEE

8" SLUDGE

4" D TO DAF THICKENER BASEMENT

3" P

12" STEAM

3" CR

4" D

3" D

CL 906.00

1 1/2" PW

3" P

12" STEAM

6" PDG

1" NG

BOILER BUILDING (840)

4"x1" RED

4" TEE

2" PW

STEAM

3" D

GAS METER

6" TS

3" P

DAF THICKENER MODIFICATIONS (740)

2" SPD

CO

1 1/2" PW

3" P

3" STEAM, 1 1/2" CR, SEE NOTE 5

RELOCATED 2" CLS

4" NG BY ROANOKE GAS

2" CLS

MAINTENANCE BUILDING

## NOTES:

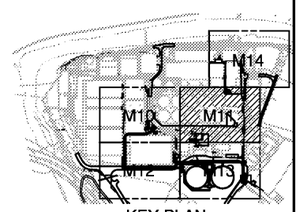
1 CONTRACTOR SHALL PROVIDE ALL FITTINGS, ADAPTERS AND RESTRAINT DEVICES REQUIRED TO MAKE TIE–INS BETWEEN NEW PIPING AND EXISTING PIPING AND STRUCTURES.

2 CONTRACTOR SHALL FIELD VERIFY ALL LOCATIONS AND ELEVATIONS OF EXISTING PIPING PRIOR TO BEGINNING WORK.

3 UNDERGROUND CHEMICAL LINES SHALL BE BRAIDED PVC TUBING IN PVC CASING PIPE AND WILL HAVE ONE DUTY AND ONE SPARE.

4 INSTALL 12"x4" BOTTOM–OUTLET TEE. ROUTE 4" STEAM TO DAF BUILDING PUMP ROOM. SLOPE 12" STEAM PIPING TO LOW POINT (12"x4" TEE) FOR CONDENSATE RECOVERY. SLOPE 4" STEAM TO LOW POINT IN PUMP ROOM. INSTALL F&T STEAM TRAP ON DRIP LEG. ROUTE STEAM TRAP DISCHARGE TO DAF BUILDING CONDENSATE RECOVERY SYSTEM. TIE NEW 4" STEAM LINE INTO EXISTING 4" STEAM LINE. SEE BOTTOM PLAN ON DRAWING M741 FOR ADDITIONAL INFORMATION.

5 STEAM AND CR PIPING SHALL BE INSTALLED IN ACCORDENCE WITH DETAILS 1 AND 2 ON M841 AND WITH SPECIFICATION SECTION 15521.




KEY PLAN

1"=20'–0"

20 10 0 20'

| NO. | ISSUED FOR | DATE | BY |
|---|---|---|---|
| 3 | REGULATORY APPROVAL | JUNE 2006 | RLT |
| 2 | CONSTRUCTION | MAR 2004 | RLT |
| 1 | REGULATORY APPROVAL | NOV 2003 | RLT |

DESIGNED DAN
DRAWN RWB
CHECKED
PROJ. ENGR. DAN
APPROVED

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

THIS DOCUMENT ORIGINALLY ISSUED FOR CONSTRUCTION AND SEALED BY RONALD L. TAYLOR, SEAL NO. 024649

RECORD DRAWING

HAZEN AND SAWYER
Environmental Engineers & Scientists
4011 WestChase Blvd, Raleigh, North Carolina 27607

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 M11

PLOT DATE 03/29/04 10:30am FILE= H:\307887\307888\MECH\m011 by RBATCHELOR XREF=307888\misc\307861b, 001\sp-st, 001\sp-mb, 001\sp-st-aerial-2002, 001\sp-st-names-B, 001\KEY PLAN B,