

4/18/08 09:59 CURT R.T.P. \INVERNESS\INVR18\DESIGN\MCC-1\R-1\11.DWG XREFS: C:\PROGRAM FILES\AUTOCAD 2004\DRAWINGS\INVERNESS - S. ARBER\11-TITLE-RUSS.DWG IMAGES: P:\INVERNESS\INVR18\DESIGN\BASES\MECH\_SEAL.JPG

EQUIPMENT, PIPING AND MISCELLANEOUS SYMBOLOGY	
MISCELLANEOUS	
	LINE TURNING DOWN
	LINE TURNING UP
	WYE-STRAINER
	UNION
	PIPE BREAK
HVAC SYMBOLOGY	
	24x18 SUPPLY AIR OR OUTSIDE AIR DUCT (SECTION CUT, FIRST DIMENSION DUCT WIDTH)
	EXHAUST AIR OR RETURN AIR DUCT (SECTION CUT)
	SUPPLY AIR OR OUTSIDE AIR DUCT (NO SECTION CUT)
	EXHAUST AIR OR RETURN AIR DUCT (NO SECTION CUT)
	STANDARD BRANCH - FOR SUPPLY AIR W/ EXTRACTOR AND RETURN AIR W/O EXTRACTOR
	ELBOW - W/TURNING VANES
	RECTANGULAR DUCT OR OPENING SIZE - FIRST NUMBER INDICATES SIZE OF SIDE SHOWN
	ROUND DUCT SIZE
	VD = VOLUME DAMPER BDD = BACKDRAFT DAMPER
	MOTOR OPERATED DAMPER
	FLEXIBLE CONNECTION
	ACOUSTICAL LINING - DUCT DIMENSIONS FOR NET FREE AREA
	SIZE CFM SUPPLY AIR REGISTER OR GRILLE - W/ DUCT MOUNTED EXTRACTOR
	SIZE CFM EXHAUST AIR OR RETURN AIR REGISTER OR GRILLE
HVAC INSTRUMENTATION	
	THERMOSTAT
	DAMPER ACTUATOR
ABBREVIATIONS	
AFF = ABOVE FINISHED FLOOR	
FOB = FLAT ON BOTTOM	
FOT = FLAT ON TOP	
OED = OPEN END DUCT	

INDIRECT MAKE-UP AIR UNIT PERFORMANCE DATA												
MARK NO.	LOCATION	CFM*	INPUT MEH	GAS VALVE	TEMP. RISE °F	GAS PRESS TO UNIT IN WC	TOTAL SP IN WC	MOTOR			UNIT ILLUSTRATED	REMARKS
								HP**	VOLTS	PH		
MU 208	LIFT STATION	900	80	MOD	80	7	1.25	1/3	120	1	HASTINGS SBD-215	

\*CFM AT 6500 FT ELEVATION  
\*\* MINIMUM HORSEPOWER

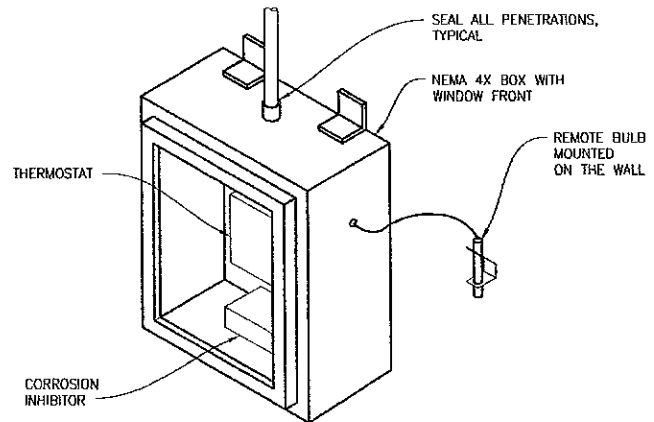
FAN PERFORMANCE DATA*											
MARK NO.	LOCATION	TYPE	CFM*	SP DROP INS WC	RPM	STATIC EFF %	MOTOR			UNIT ILLUSTRATED	REMARKS
							HP**	VOLTS	PH		
EF 209	LIFT STATION	UPBLAST	900	0.5	1079	59	1/4	120	1	LOREN COOK 135 ACRUB	

\*CFM AT 6500 FT ELEVATION  
\*\* MINIMUM HORSEPOWER

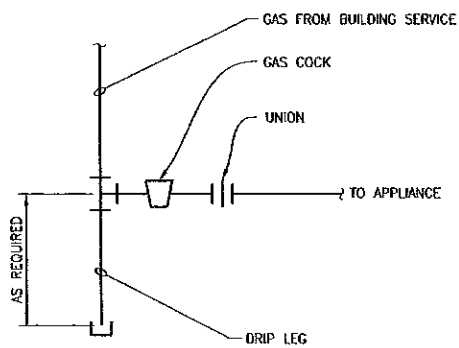
LOUVER PERFORMANCE DATA											
MARK NO.	LOCATION	LOUVER DIM		CFM	MATERIAL	FINISH	FREE AREA SQ FT	WATER PENETRATION	SP DROP INS WC	UNIT ILLUSTRATED	REMARKS
		WIDTH	HEIGHT								
LVR 1	BLOWER BUILDING	88"	108"	20075	ALUM	PER ARCHITECT	37.6	0	0.065	RUSKIN ELF 375 DX	SEE ARCH DRAWINGS FOR MOUNTING HEIGHT

INTAKE HOOD PERFORMANCE DATA										
MARK NO.	LOCATION	HOOD DIM			THROAT DIM		MATERIAL	TYPE OF SERVICE	UNIT ILLUSTRATED	REMARKS
		WIDTH	LENGTH	HEIGHT	WIDTH	LENGTH				
IH 101	BLOWER BUILDING	71.75"	191.75"	37"	60"	180"	ALUM	INTAKE	LOREN COOK TRE	

MOTOR OPERATED DAMPER PERFORMANCE DATA								
MARK NO.	LOCATION	SERVES	DAMPER DIM		TYPE OF OPENING	TYPE OF SERVICE	UNIT ILLUSTRATED	REMARKS
			WIDTH	HEIGHT				
MOD 24	BLOWER BUILDING	GENERATOR	44"	40"	DUCT	INTAKE	RUSKIN CD-50	
MOD 25	BLOWER BUILDING	GENERATOR	48"	48"	DUCT	CIRCULATION	RUSKIN CD-50	
MOD 26	BLOWER BUILDING	GENERATOR	86"	108"	DUCT	EXHAUST	RUSKIN CD-50	

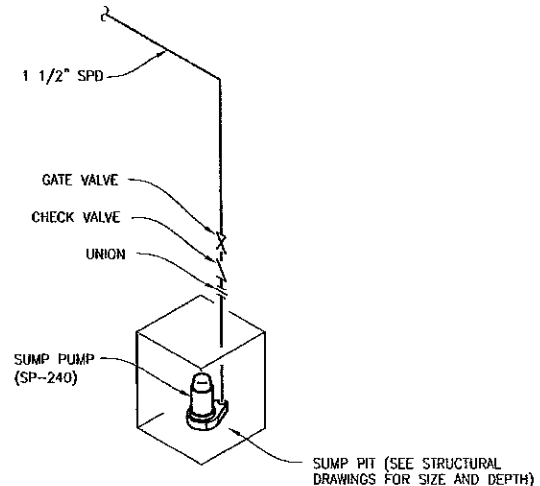


THERMOSTAT MOUNTING

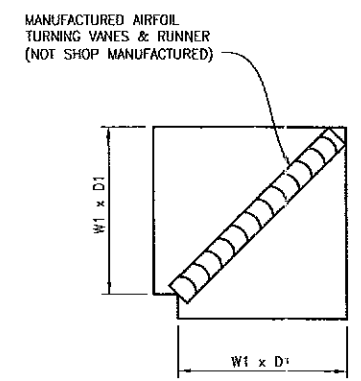


NOTE:  
1. PROVIDE FLEXIBLE CONNECTOR TO APPLIANCE PER LOCAL CODE.

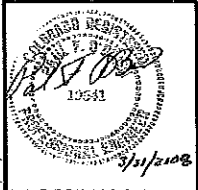
GAS APPLIANCE CONNECTION



SUMP PUMP DETAIL



SQUARE THROAT 90° ELBOW WHEN DUCT SIZE EQUAL



VERIFY SCALES			
NO.	DATE	REVISION	BY
0	04/2008	ISSUED FOR BID	

BAR IS ONE INCH ON ORIGINAL DRAWING.  
0" = 1"  
IF NOT ONE INCH ON THIS DRAWING, ADJUST SCALES ACCORDINGLY.

DESIGNED BY:	PFO
DRAWN BY:	CBD
CHECKED BY:	
DATE:	APRIL 2008

**Arber**  
Water, Wastewater & Rouse Engineers

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198 Union Boulevard, Suite 200  
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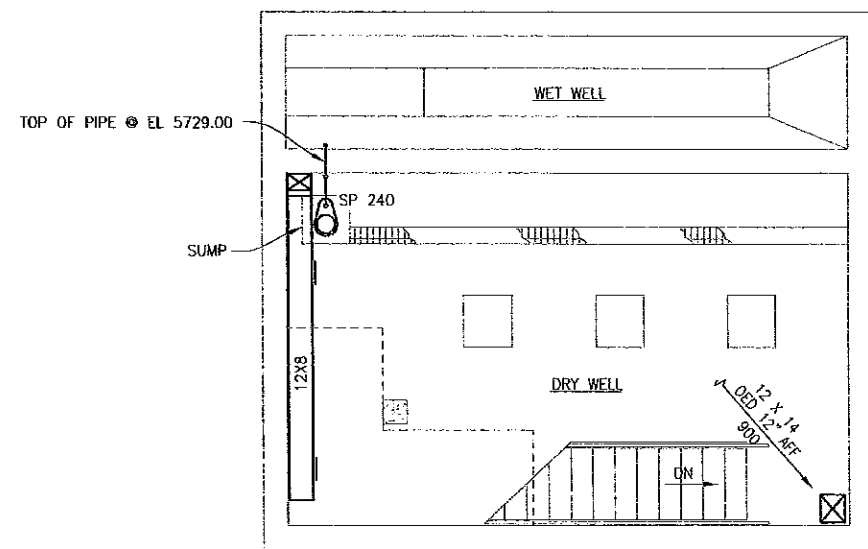


**INVERNESS WATER AND SANITATION DISTRICT  
INVERNESS LIFT STATION NO. 2**

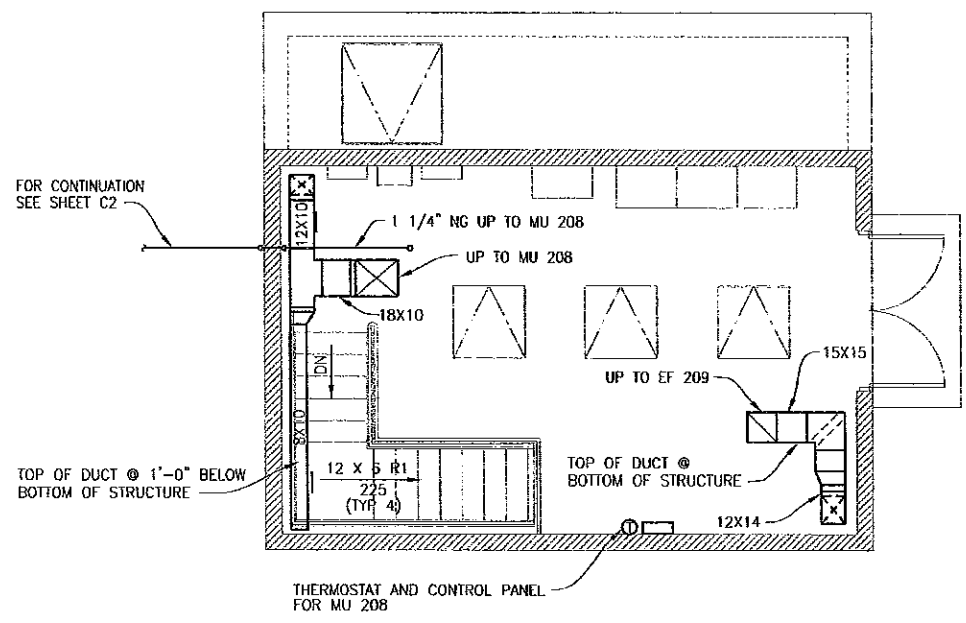
**LEGEND,  
ABBREVIATIONS, SCHEDULES,  
AND DETAILS**

PROJECT NO.	INVR18
SHEET NO.	<b>M1</b>
32 OF 57	DWG. OF

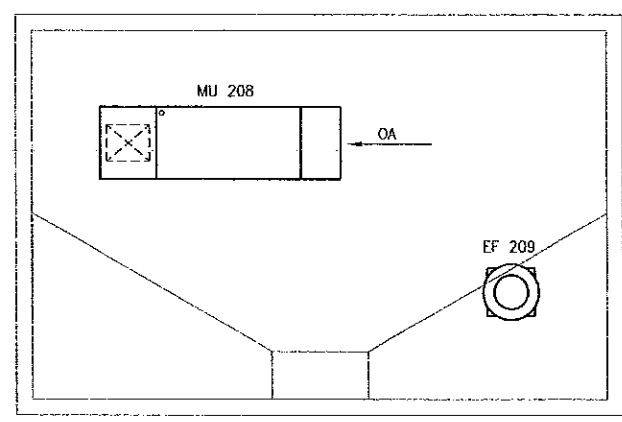
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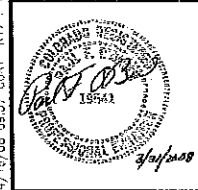
**LOWER PLAN**  
1/4"=1'-0"



**UPPER PLAN**  
1/4"=1'-0"



**ROOF PLAN**  
1/4"=1'-0"



VERIFY SCALES		NO.	DATE	REVISION	BY	CHK.	DESIGNED BY:
BAR IS ONE INCH ON ORIGINAL DRAWING.		0	04/2008	ISSUED FOR BID			PPO
IF NOT ONE INCH ON THIS DRAWING, ADJUST SCALES ACCORDINGLY.							CBD
							DATE: APRIL 2008

DESIGNED BY: PPO  
DRAWN BY: CBD  
CHECKED BY:  
DATE: APRIL 2008

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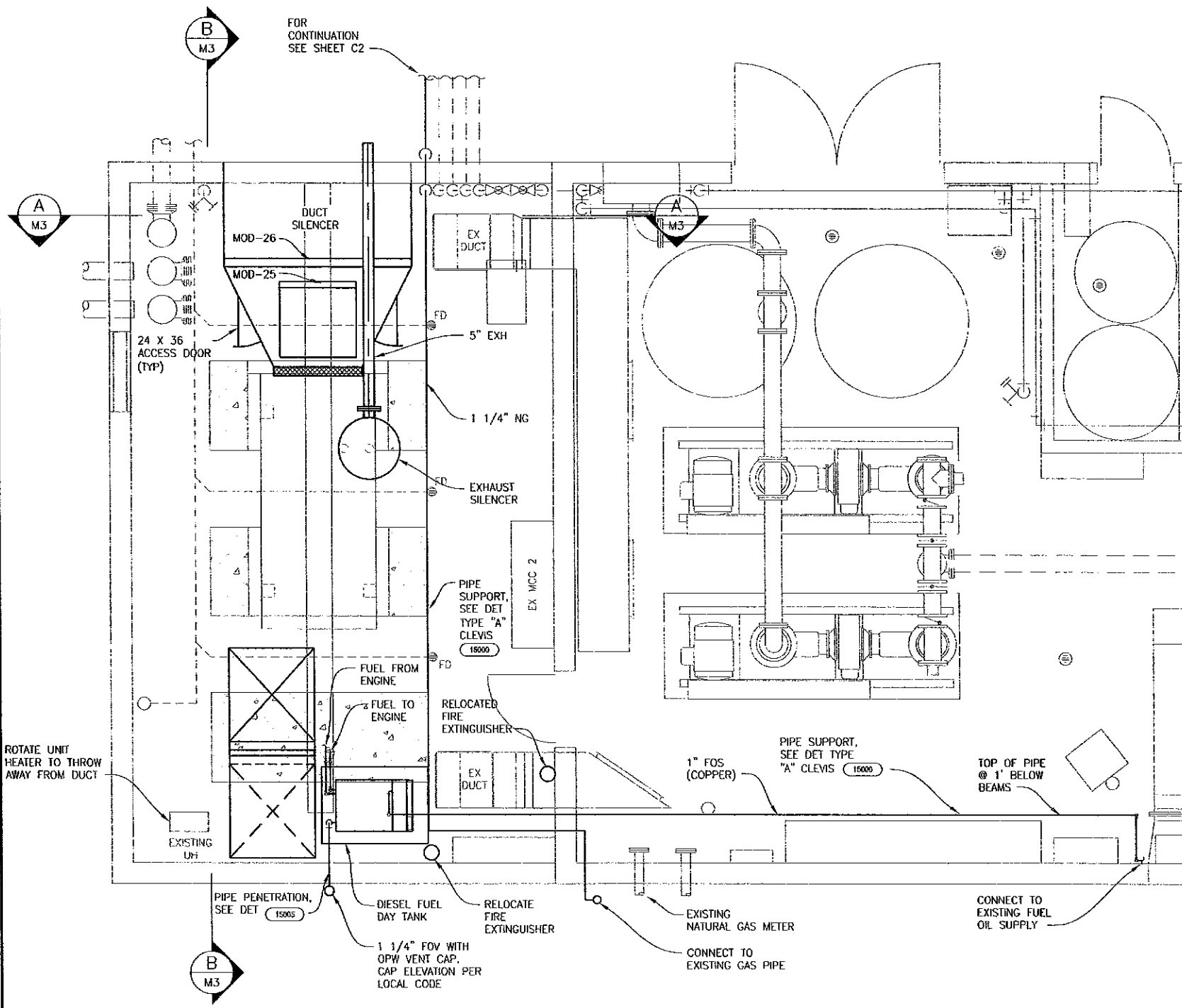
**RSE**  
RUSS SASAKURA ENGINEERING  
LITTLETON, COLORADO

**INVERNESS WATER AND SANITATION DISTRICT  
INVERNESS LIFT STATION NO. 2**

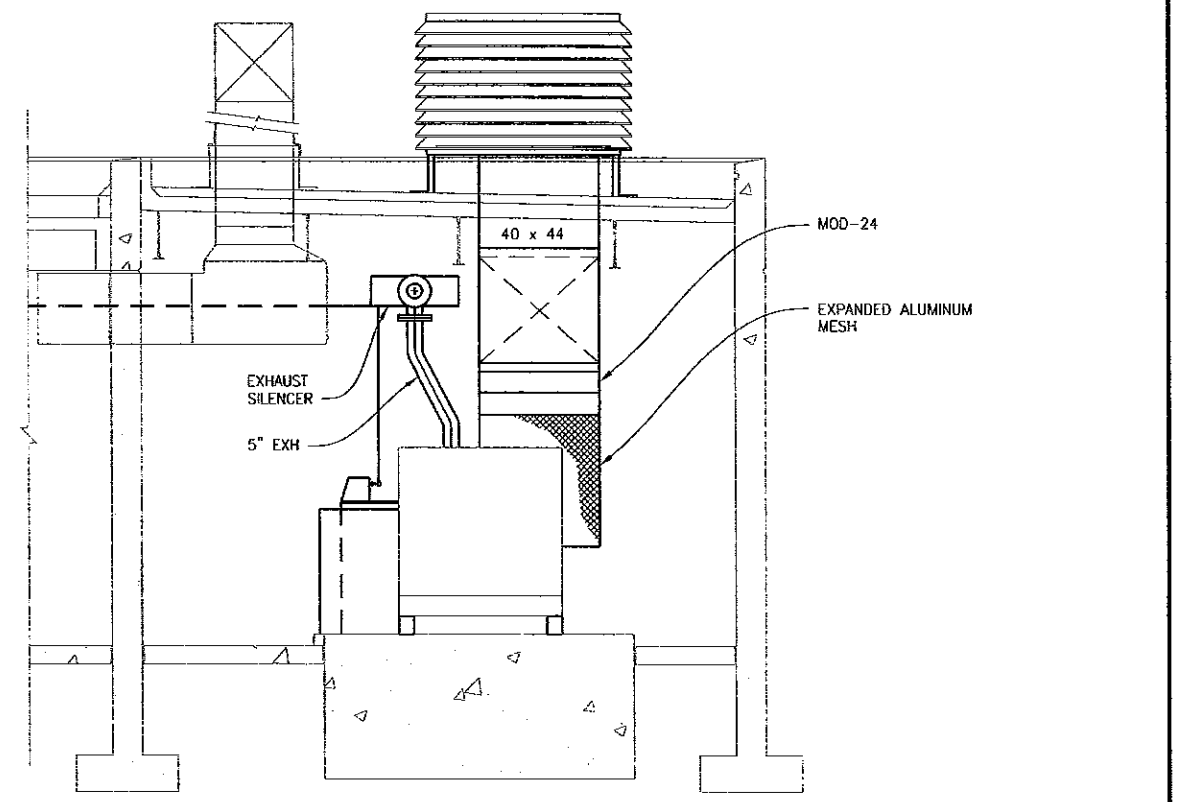
**LIFT STATION PLANS**

PROJECT NO.	INVR18
SHEET NO.	<b>M2</b>
DWG. OF	33 57

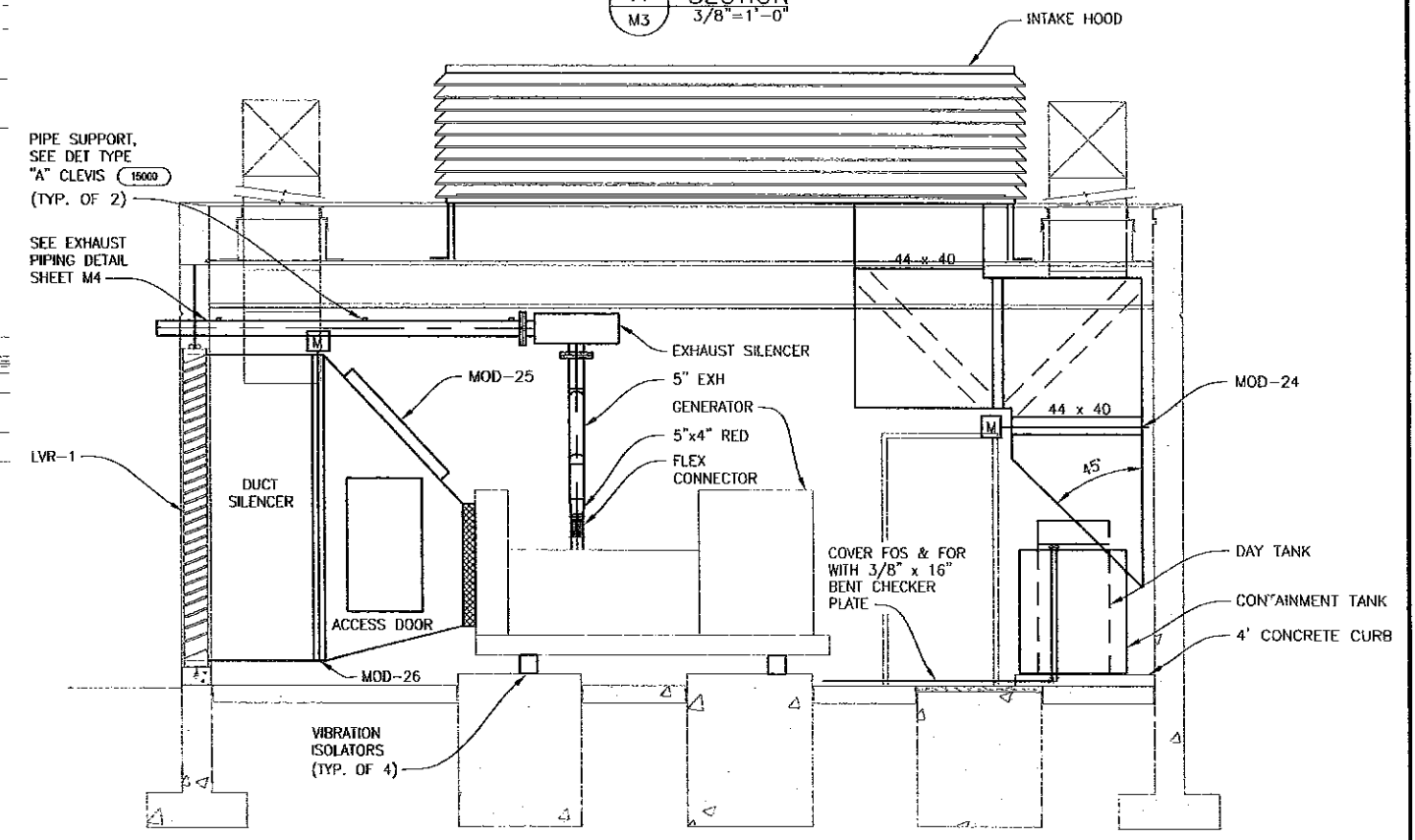
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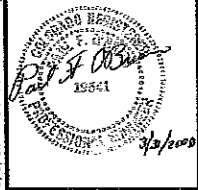
**PLAN**  
3/8"=1'-0"



**A SECTION**  
3/8"=1'-0"



**B SECTION**  
3/8"=1'-0"



VERIFY SCALES		NO.	DATE	REVISION	BY	CHK.	DESIGNED BY:
BAR IS ONE INCH ON ORIGINAL DRAWING.		0	04/2008	ISSUED FOR BID			PFD
0" = 1"							CBD
IF NOT ONE INCH ON THIS DRAWING, ADJUST SCALES ACCORDINGLY.							
DATE: APRIL 2008							

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 Wiley, Wastewater & Reuse Engineers

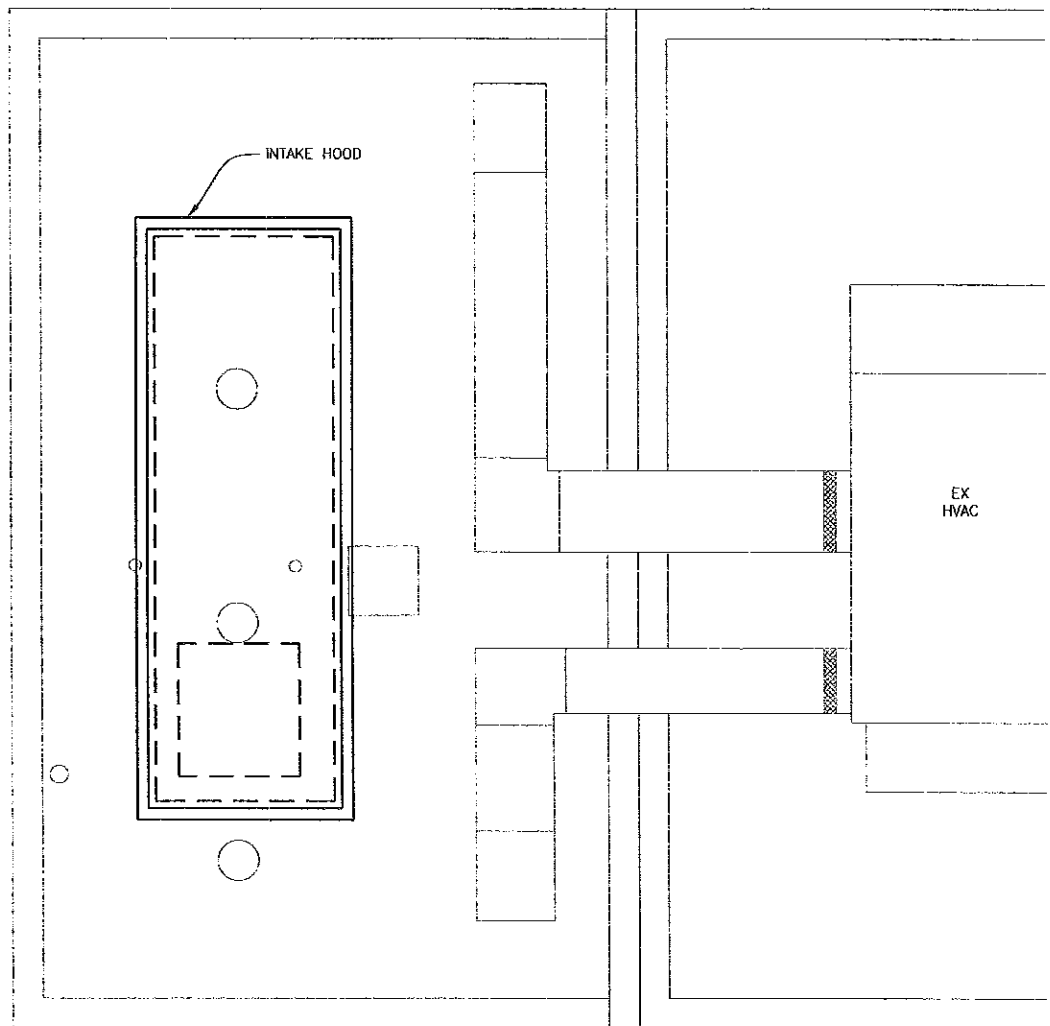
**RSE**  
 RUSS SASAKURA ENGINEERING  
 LITTLETON, COLORADO

**INVERNESS WATER AND SANITATION DISTRICT  
 INVERNESS LIFT STATION NO. 2**

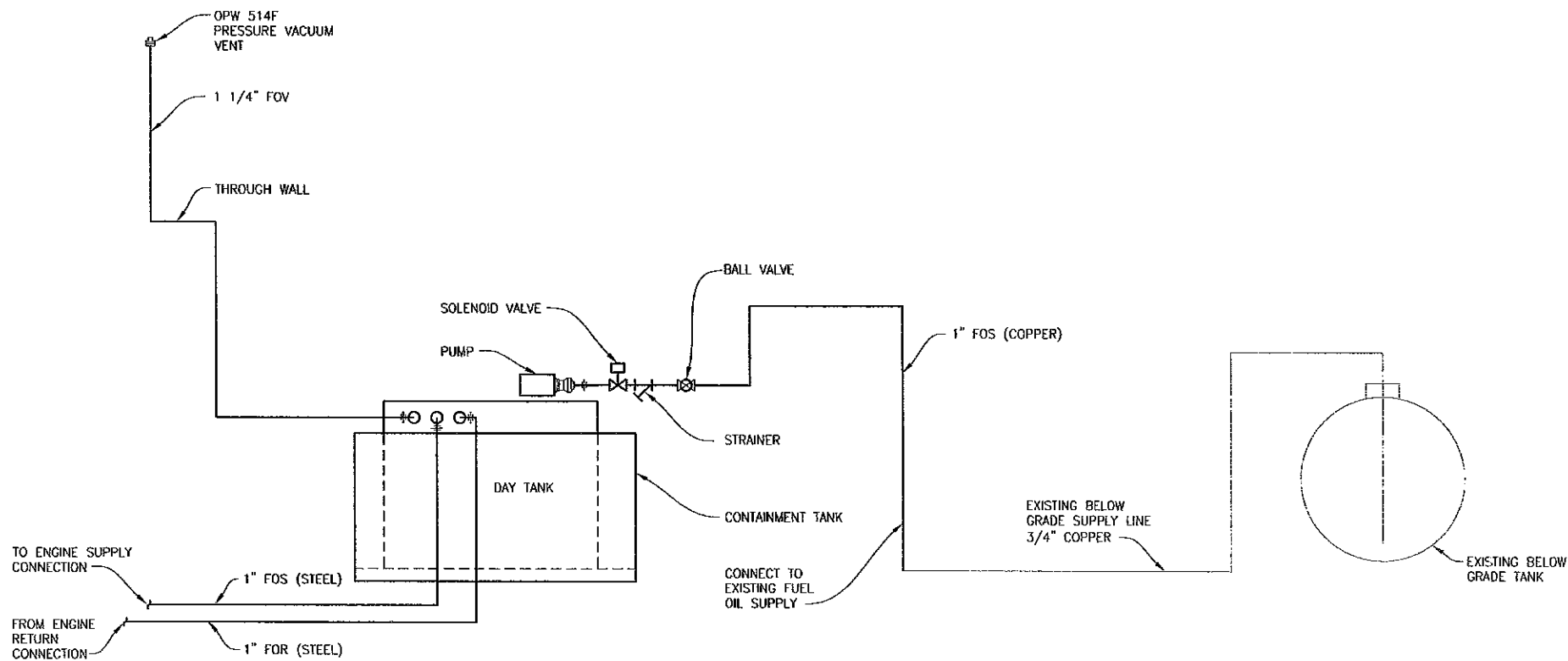
**BLOWER BUILDING IMPROVEMENT PLAN  
 AND SECTIONS**

PROJECT NO.	INVR18
SHEET NO.	<b>M3</b>
DWG. OF	34 OF 57

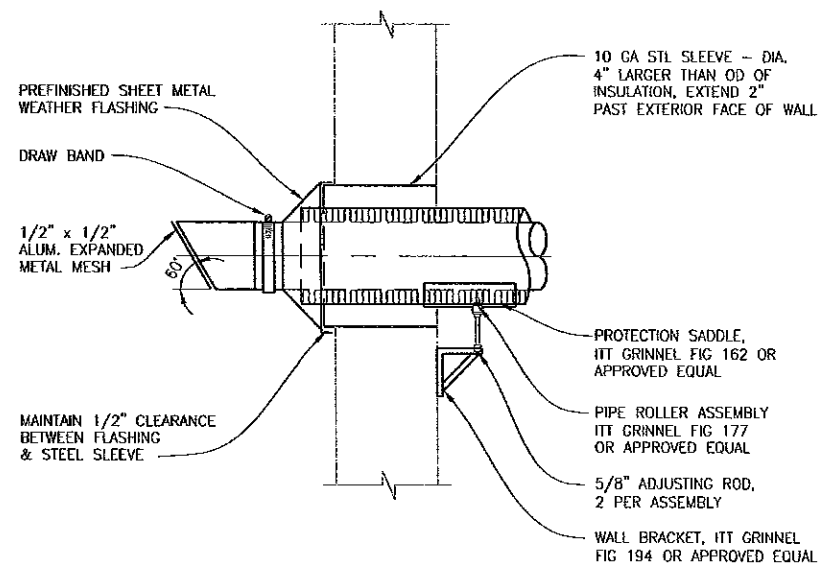
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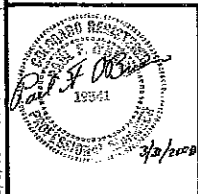
ROOF PLAN  
3/8" = 1'-0"



FUEL SYSTEM DIAGRAM  
NO SCALE



GENERATOR EXHAUST DETAIL  
NO SCALE



NO.	DATE	REVISION	BY	CHK.	DESIGNED BY:
0	04/2008	ISSUED FOR BID			PFO
					DRAWN BY: CBD
					CHECKED BY:
					DATE: APRIL 2008

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 LITTLETON, COLORADO

**INVERNESS WATER AND SANITATION DISTRICT**  
**INVERNESS LIFT STATION NO. 2**

**BLOWER BUILDING**  
**ROOF PLAN AND DETAILS**

PROJECT NO. INVR18
SHEET NO. <b>M4</b>
35 OF 57 DWG. OF