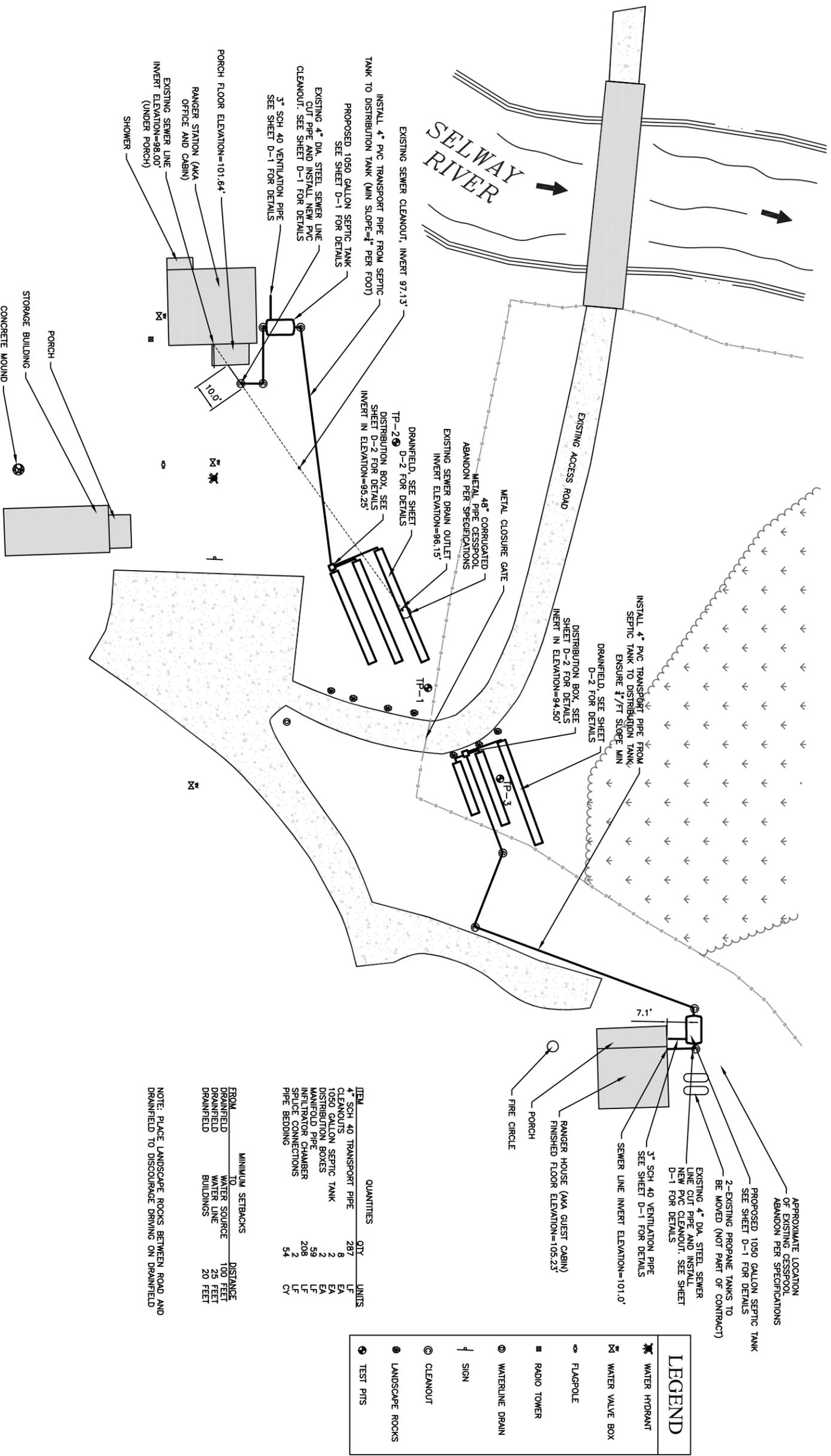


MAGRUDER WORK CENTER WASTEWATER TREATMENT SYSTEM BITTERROOT NATIONAL FOREST

LOCATED IN THE SW¹/₄, SECTION 3, T27N, R14E
IDAHO COUNTY, IDAHO



LEGEND	
	WATER HYDRANT
	WATER VALVE BOX
	FLAGPOLE
	RADIO TOWER
	WATERLINE DRAIN
	SIGN
	CLEANOUT
	LANDSCAPE ROCKS
	TEST PITS

ITEM	QUANTITIES	UNITS
4" SCH 40 TRANSPORT PIPE	287	LF
CLEANOUTS	8	EA
1050 GALLON SEPTIC TANK	2	EA
DISTRIBUTION BOXES	59	LF
MANIFOLD PIPE	208	LF
INFILTRATOR CHAMBER	2	LF
SPLICE CONNECTIONS	2	LF
PIPE BEDDING	54	CY

FROM	MINIMUM SETBACKS	DISTANCE
DRAINFIELD	TO WATER SOURCE	100 FEET
DRAINFIELD	WATER LINE	25 FEET
DRAINFIELD	BUILDINGS	20 FEET

NOTE: PLACE LANDSCAPE ROCKS BETWEEN ROAD AND DRAINFIELD TO DISCOURAGE DRIVING ON DRAINFIELD



MORRISON MAIERLE, INC.
An Employee-Owned Company

901 Technology Blvd.
Bozeman MT 59718
Phone: (406) 587-0721
Fax: (406) 587-1176

Engineers
Surveyors
Scientists
Planners

DRAWN BY: JLH
CHKD. BY: JLH
APPD. BY: JLH
DATE: 11/28/09

IDAHO COUNTY

MAGRUDER WORK CENTER
WASTEWATER TREATMENT SYSTEM

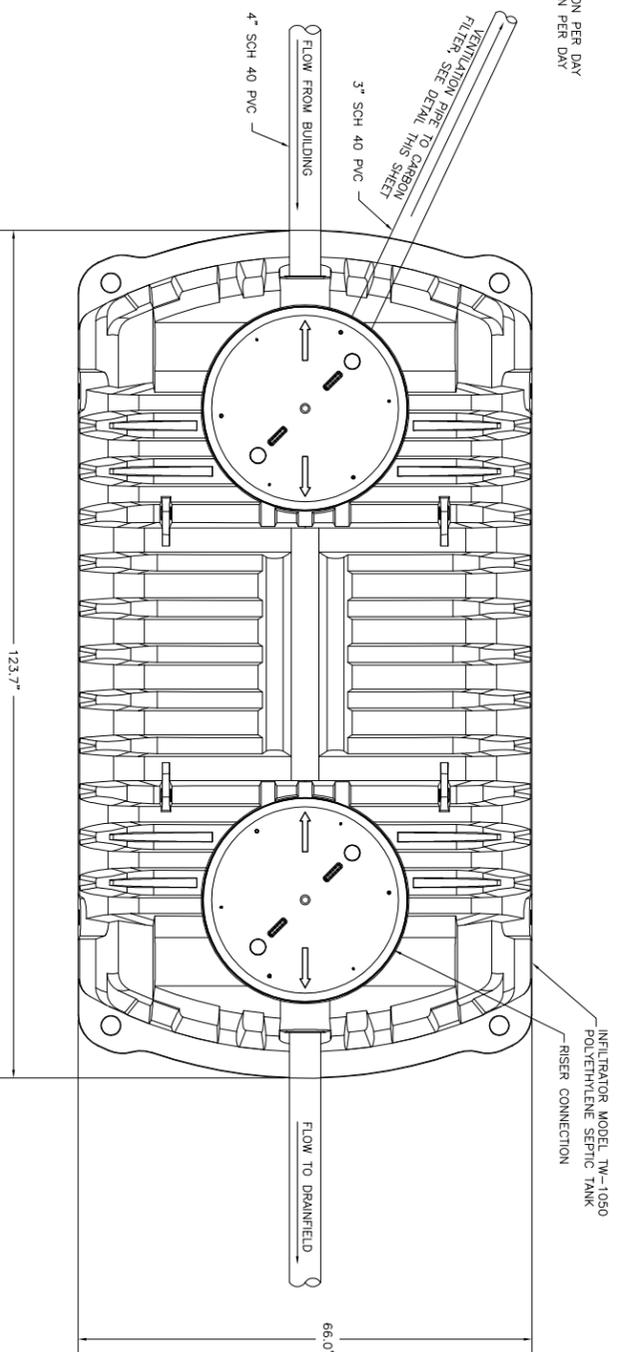
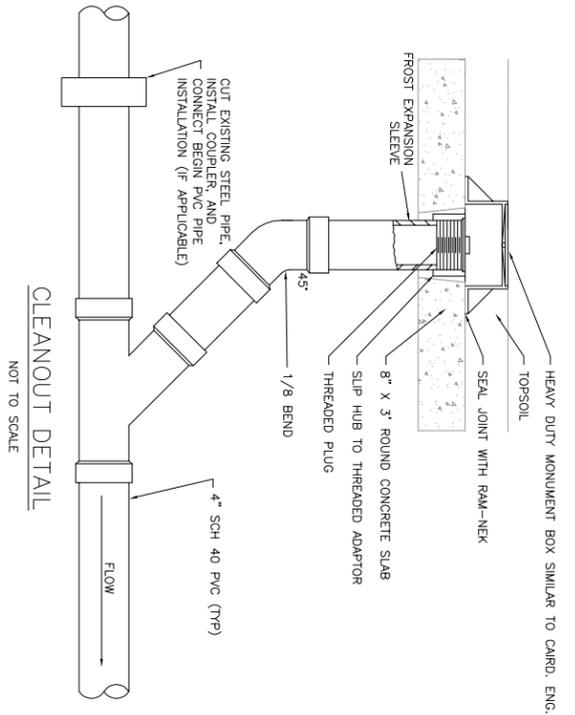
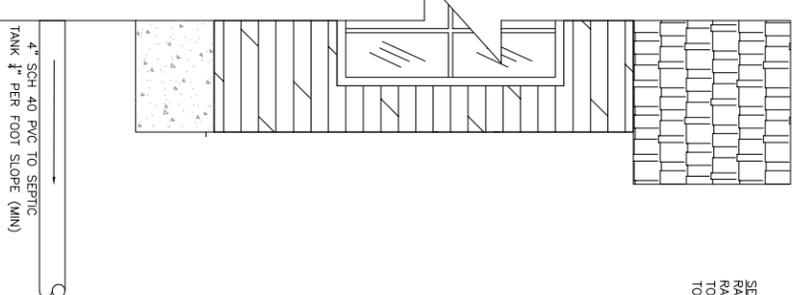
IDAHO

PROJECT NO.
0916.059.025

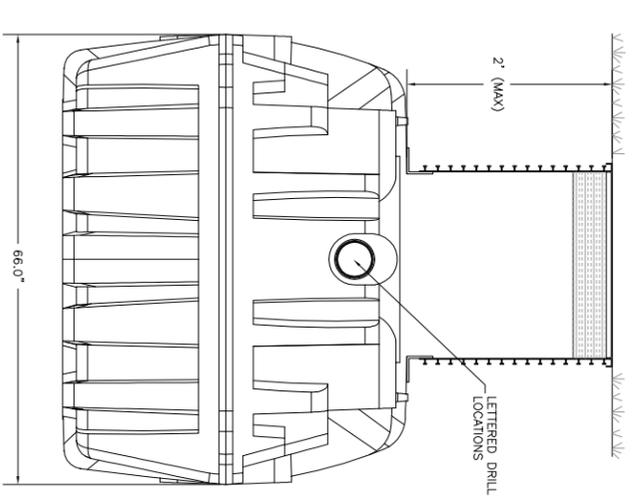
SITEPLAN

FIGURE NUMBER
1

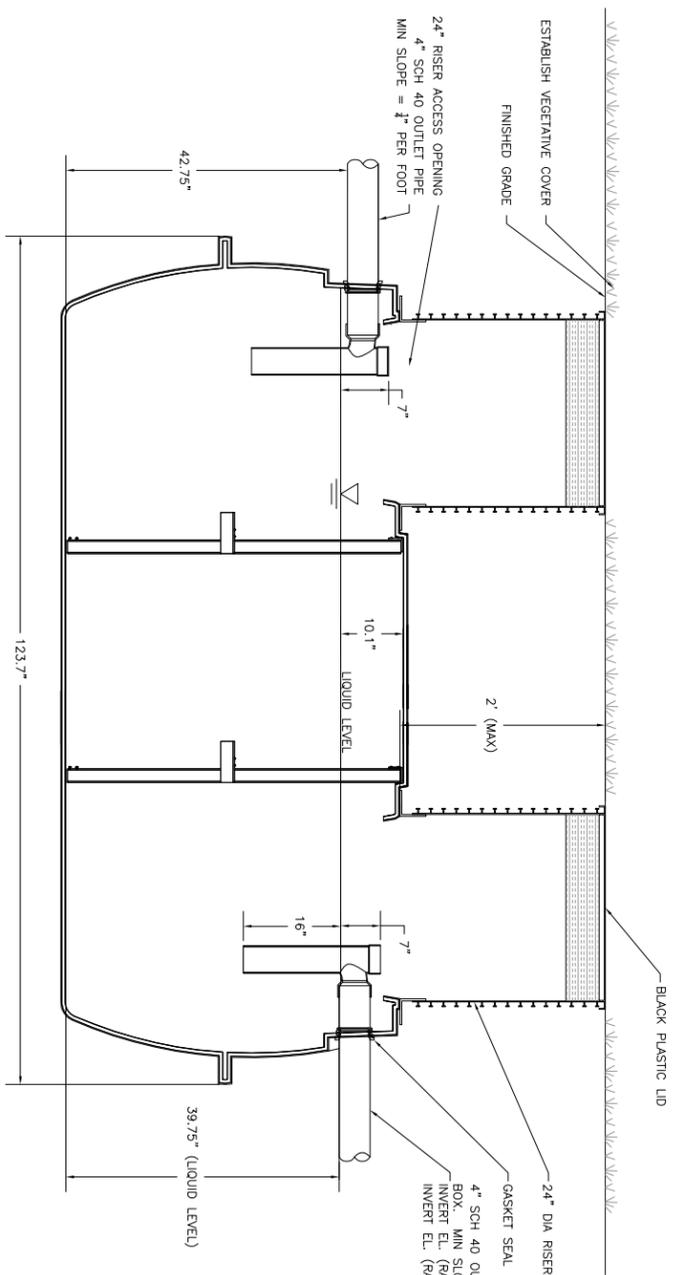
SEPTIC TANK TECHNICAL DATA
 RANGER STATION AVERAGE DAILY WASTEWATER FLOW=280 GALLON PER DAY
 RANGER HOUSE AVERAGE DAILY WASTEWATER FLOW=210 GALLON PER DAY
 TOTAL VOLUME OF SEPTIC TANK=1272 GALLONS
 TOTAL WORKING VOLUME OF SEPTIC TANK=1032 GALLONS



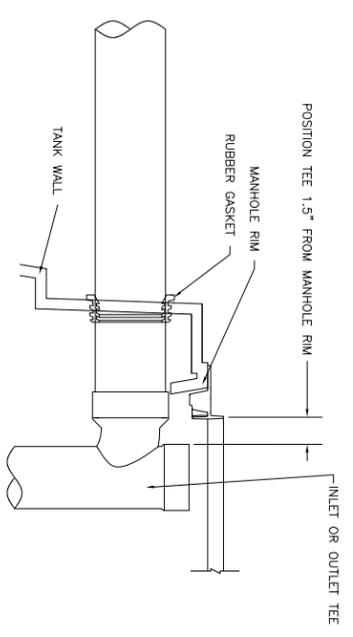
PLAN VIEW-1050 GALLON SEPTIC TANK
 NOT TO SCALE



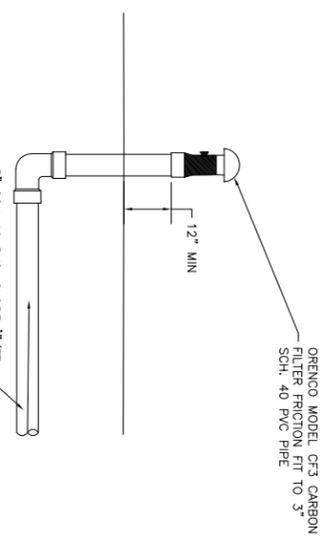
END VIEW-1050 GALLON SEPTIC TANK
 NOT TO SCALE



SIDE VIEW-1050 GALLON SEPTIC TANK
 NOT TO SCALE



PIPE PENETRATION DETAIL
 NOT TO SCALE



TANK VENTILATION DETAIL
 NOT TO SCALE

NOTE TO CONTRACTOR:
 1. INSTALLER SHALL FIELD AT A MINIMUM, A VALID STANDARD AND BASIC ALTERNATIVE INSTALLERS REGISTRATION PERMIT, FROM THE DIRECTOR OF THE IDAHO DEPARTMENT OF ENVIRONMENTAL QUALITY, ITS DESIGNEE OR AUTHORIZED AGENT.
 2. CONTRACTOR SHALL LOCATE ALL UTILITY LINES WITHIN PROPERTY PRIOR TO CONSTRUCTION.
 3. PRIOR TO CLOSE OF CONTRACT, CONTRACTOR SHALL SEED DISTURBED AREAS WITH GRASS SEED ACCEPTABLE TO THE OWNER.
 4. NO WATER SOFTENERS OR HOT TUB EFFLUENT SHALL BE ALLOWED TO ENTER SEPTIC SYSTEM. NOTIFY ENGINEER IMMEDIATELY IF EFFLUENT IS OTHER THAN "RESIDENTIAL STRENGTH."
 5. CONTRACTOR SHALL KEEP VALID INSTALLATION PERMIT ONSITE AT ALL TIMES.
 6. MAXIMUM TANK COVER IS 4 FEET.
 7. ALL TRANSPORT PILING SHALL DRAIN COMPLETELY.

VERIFY SCALE		REVISIONS	
NO.	DESCRIPTION	DATE	BY
THESE PRINTS MAY BE REDUCED, LINE BELOW ORIGINAL DRAWING			
MODIFY SCALE ACCORDINGLY			

MORRISON MAIBLLE, INC.
An Employee-Owned Company

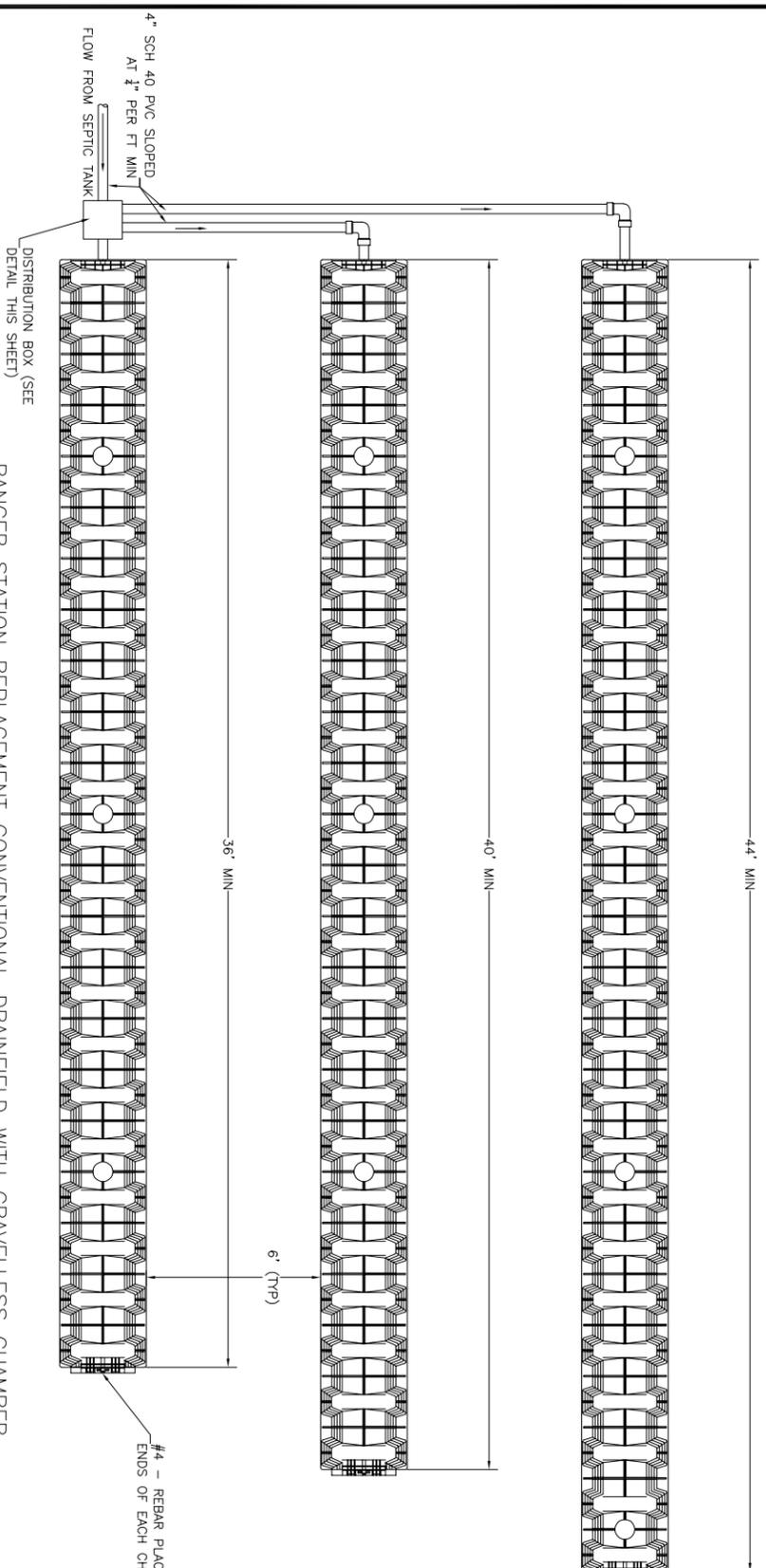
901 Technology Blvd.
 Bozeman, MT 59718
 Phone: (406) 587-0721
 Fax: (406) 587-1176

Engineers
 Surveyors
 Scientists
 Planners

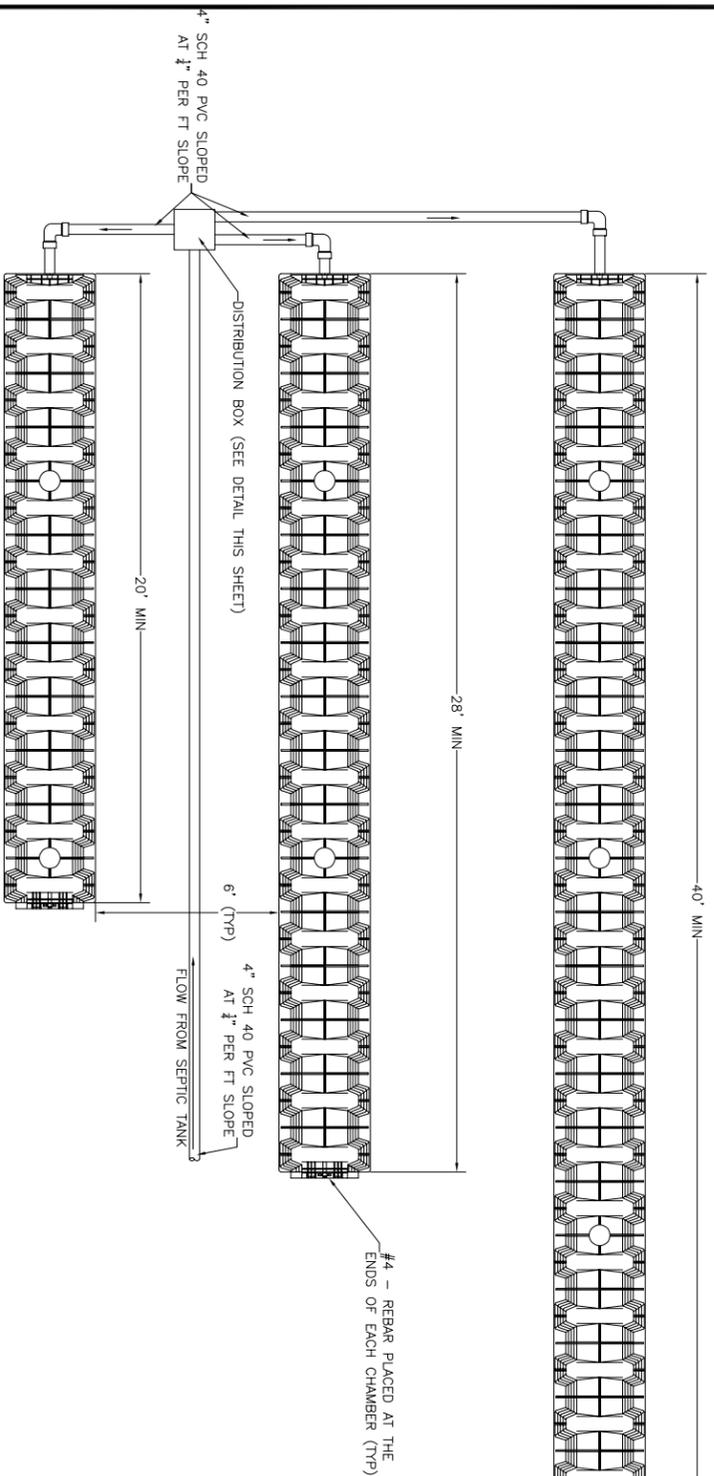
DRAWN BY: JI.H
 CHKD. BY: JI.H
 APPR. BY: JI.H
 DATE: 11/29/09
 Q.A. REVIEW
 BY: JI.H
 DATE: 11/22/09

IDAHO COUNTY
 MAGRUDER WORK CENTER
 WASTEWATER TREATMENT SYSTEM
 SEPTIC SYSTEM DETAILS

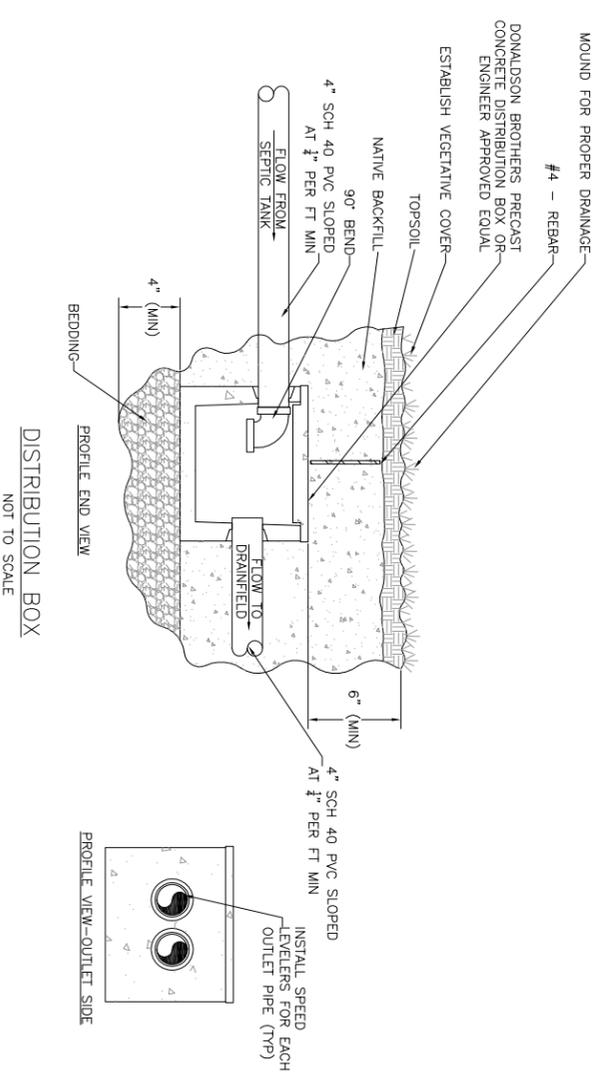
IDAHO
 PROJECT NUMBER
 09716J59J025
 SHEET NUMBER
 2
 DRAWING NUMBER
 D-1



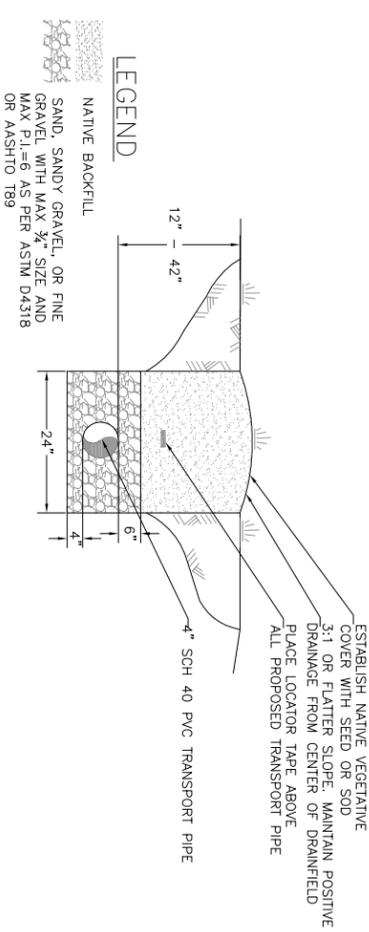
RANGER STATION REPLACEMENT CONVENTIONAL DRAINFIELD WITH GRAVELLESS CHAMBER
NOT TO SCALE



RANGER HOUSE REPLACEMENT CONVENTIONAL DRAINFIELD WITH GRAVELLESS CHAMBER
NOT TO SCALE

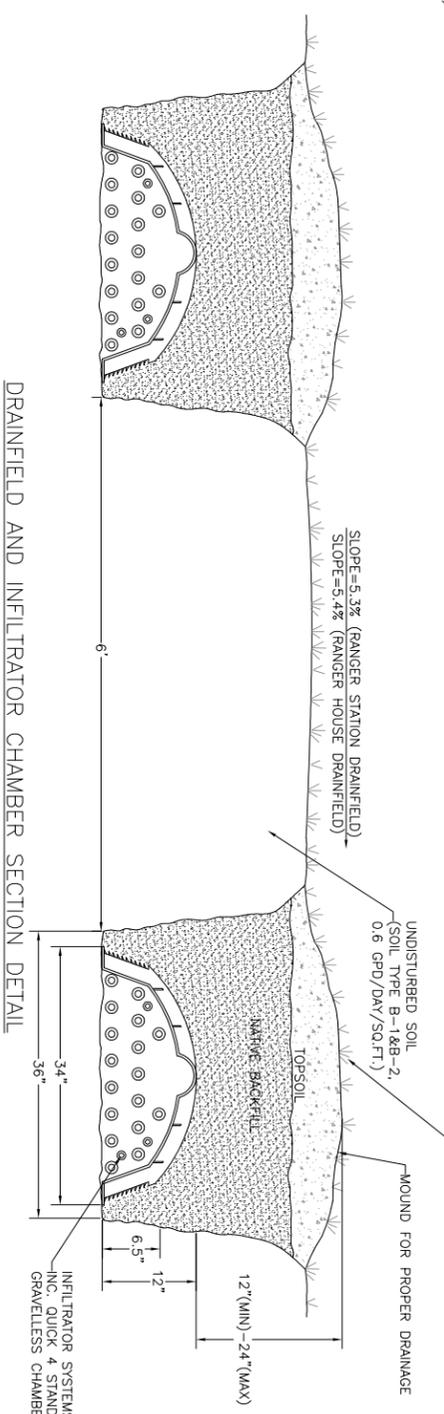


DISTRIBUTION BOX
NOT TO SCALE



PROPOSED TRANSPORT PIPE TRENCH DETAIL
PROFILE: NOT TO SCALE

- LEGEND
- NATIVE BACKFILL
 - SAND, SANDY GRAVEL, OR FINE GRAVEL WITH MAX 3/4" SIZE AND MAX P.I. = 6 AS PER ASTM D4318 OR AASHTO T89
- DRAINFIELD NOTES:
- 1) CONSTRUCTION OF DRAINFIELD SHALL NOT BE INITIATED IF SOIL MOISTURE CONTENT IS HIGH.
 - 2) PAKE TRENCH EDGES TO SMOOTHEN ANY SHEARED SOIL SURFACES.
 - 3) MINIMIZE CONSTRUCTION EQUIPMENT TRAFFIC ACROSS DRAINFIELD.
 - 4) TRENCHES SHALL BE LEVEL.
 - 5) RANGER STATION HAS 120' LINEAL FEET OF INFILTRATORS.
 - 6) RANGER HOUSE HAS 88' LINEAL FEET OF INFILTRATORS.



DRAINFIELD AND INFILTRATOR CHAMBER SECTION DETAIL
NOT TO SCALE

VERIFY SCALE: THESE PRINTS MAY BE REDUCED, LINE BELOW ORIGINAL DRAWING. MODIFY SCALE ACCORDINGLY.

NO.	DESCRIPTION	DATE	BY

MORRISON MAIBLIE, INC.
An Employee-Owned Company

901 Technology Blvd.
Bozeman, MT 59718
Phone: (406) 587-0721
Fax: (406) 587-1176

Engineers
Surveyors
Scientists
Planners

CHKD. BY: J.H.
APPR. BY: J.H.
DATE: 11/29/09
Q.A. REVIEW
BY: J.H.
DATE: 11/22/09

IDAHO COUNTY

MAGRUDER WORK CENTER
WASTEWATER TREATMENT SYSTEM

IDAHO

PROJECT NUMBER
0916J58J025

SHEET NUMBER
3

DRAWING NUMBER
D-2