

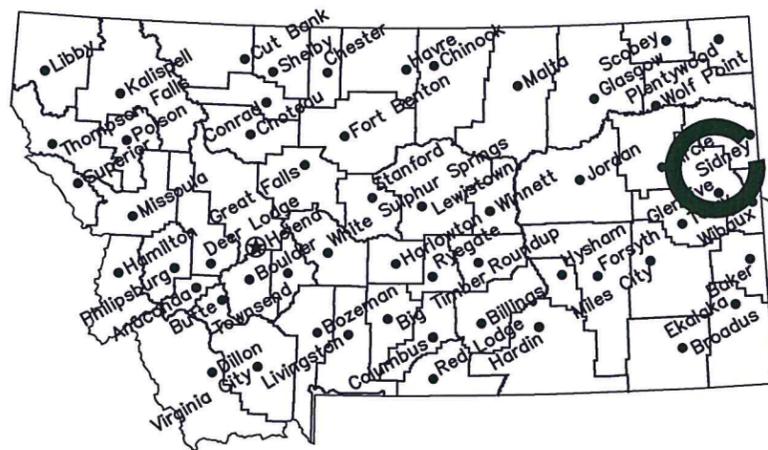
MONTANA FISH, WILDLIFE & PARKS

INTAKE FISHING ACCESS SITE

2018 WATER SYSTEM RE-BID PROJECT

near Intake, Dawson County, Montana

FWP # 7153728

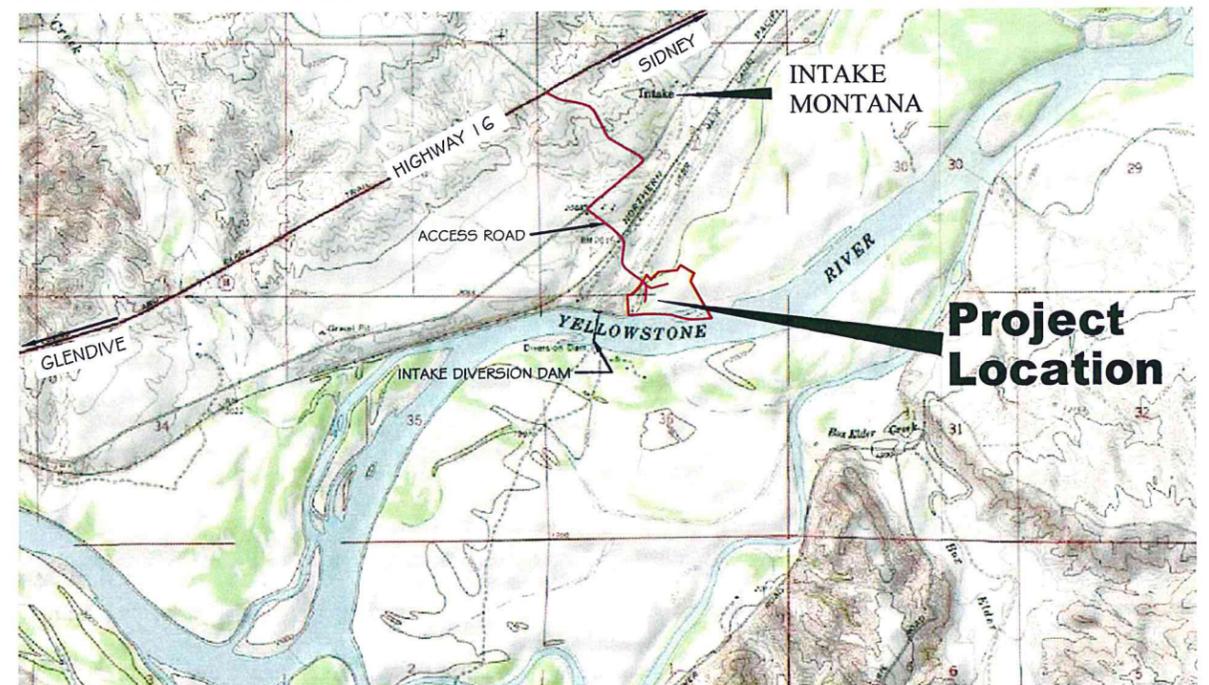


Location Map

No Scale

Project Location

North



Vicinity Map

No Scale

MONTANA FISH, WILDLIFE AND PARKS
DESIGN AND CONSTRUCTION

MAILING ADDRESS: PO BOX 200701
HELENA, MT 59620-0701
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DRAWING INDEX

- 1 COVER SHEET
- 2 FISHING ACCESS SITE & CAMPING AREA
- 3 WATER SYSTEM LAYOUT
- 3 WELL SITE PLAN
- 4 WELL DETAILS
- 5 WELL HOUSE



Tom Mannatt	March 10, 2018
DRAWN BY:	DATE:
Phillip Jagoda	March 10, 2018
CHECKED BY:	DATE:

REVISD BY:	DATE:
APPROVED BY:	DATE:

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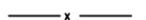
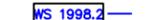


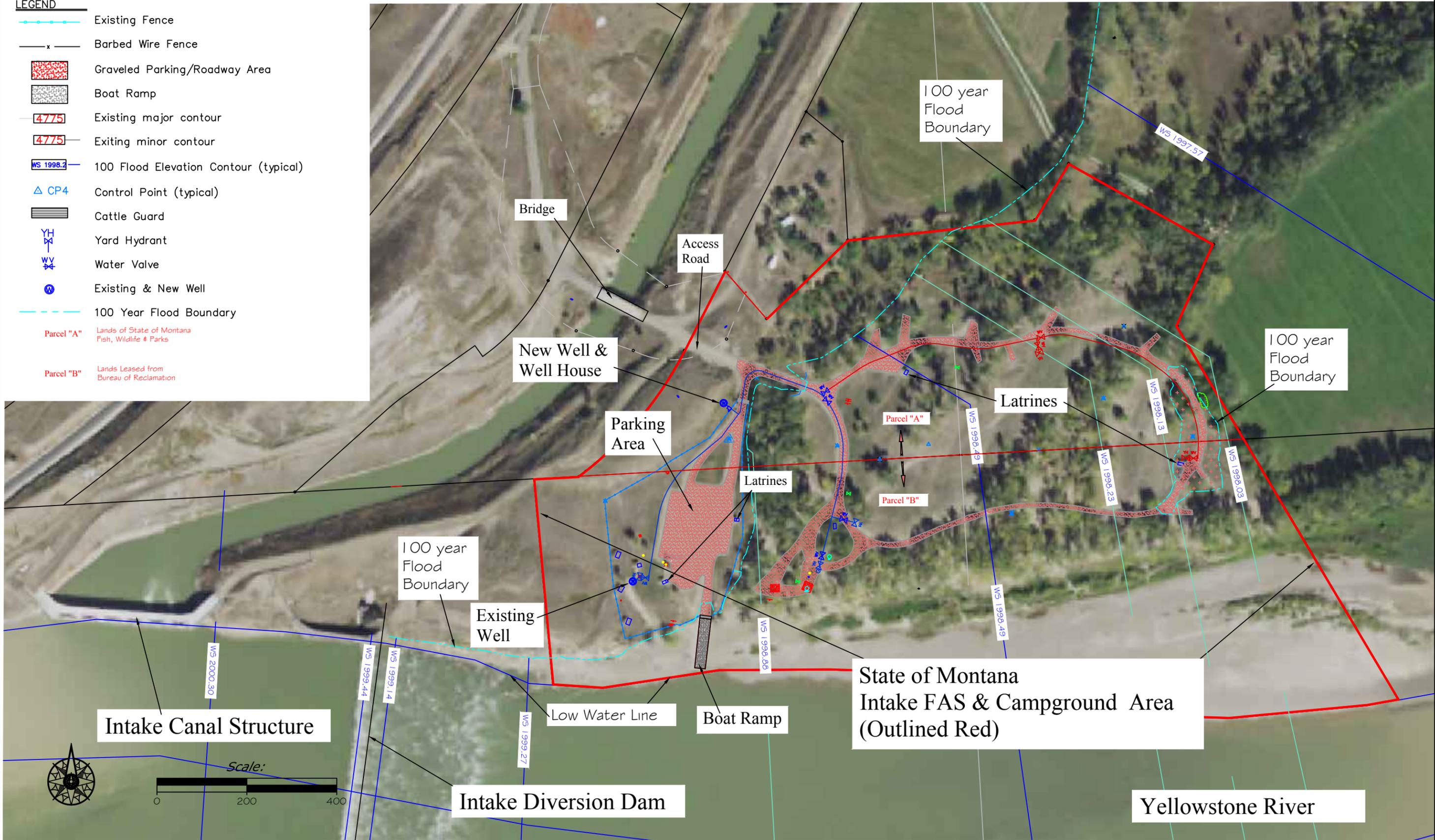
**Montana Fish,
Wildlife & Parks**

135

Cover Sheet
INTAKE FISHING ACCESS SITE

SHEET: 1 of 6

- LEGEND**
-  Existing Fence
 -  Barbed Wire Fence
 -  Graveled Parking/Roadway Area
 -  Boat Ramp
 -  Existing major contour
 -  Existing minor contour
 -  100 Flood Elevation Contour (typical)
 -  Control Point (typical)
 -  Cattle Guard
 -  Yard Hydrant
 -  Water Valve
 -  Existing & New Well
 -  100 Year Flood Boundary
 -  Parcel "A" Lands of State of Montana Fish, Wildlife & Parks
 -  Parcel "B" Lands Leased from Bureau of Reclamation



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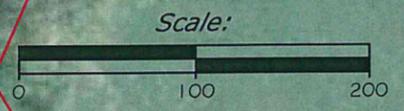
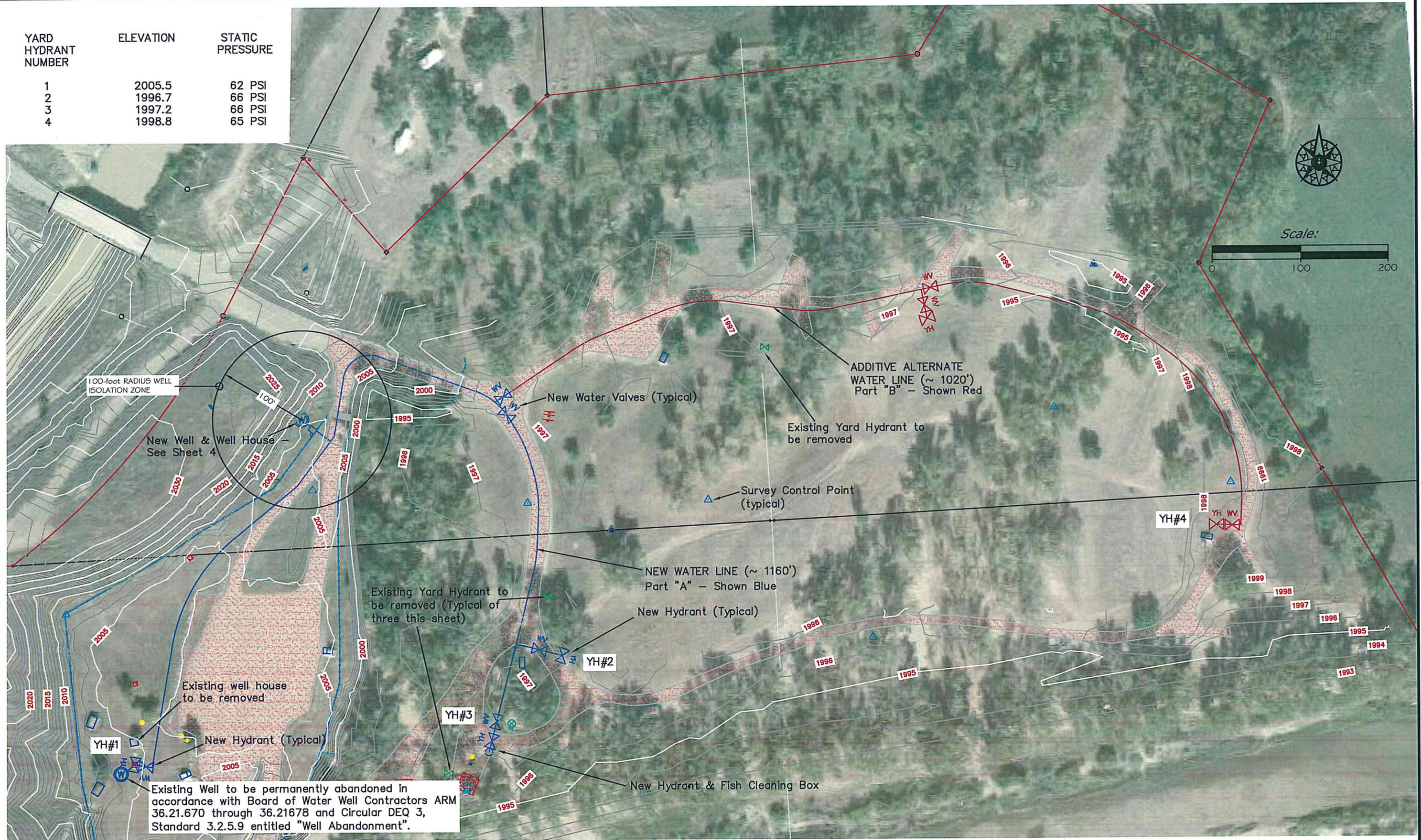
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Intake Fishing Access Site & Campground Area
 Intake Water System Improvements Project

YARD HYDRANT NUMBER	ELEVATION	STATIC PRESSURE
1	2005.5	62 PSI
2	1996.7	66 PSI
3	1997.2	66 PSI
4	1998.8	65 PSI



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Tom Mannatt April 9, 2018
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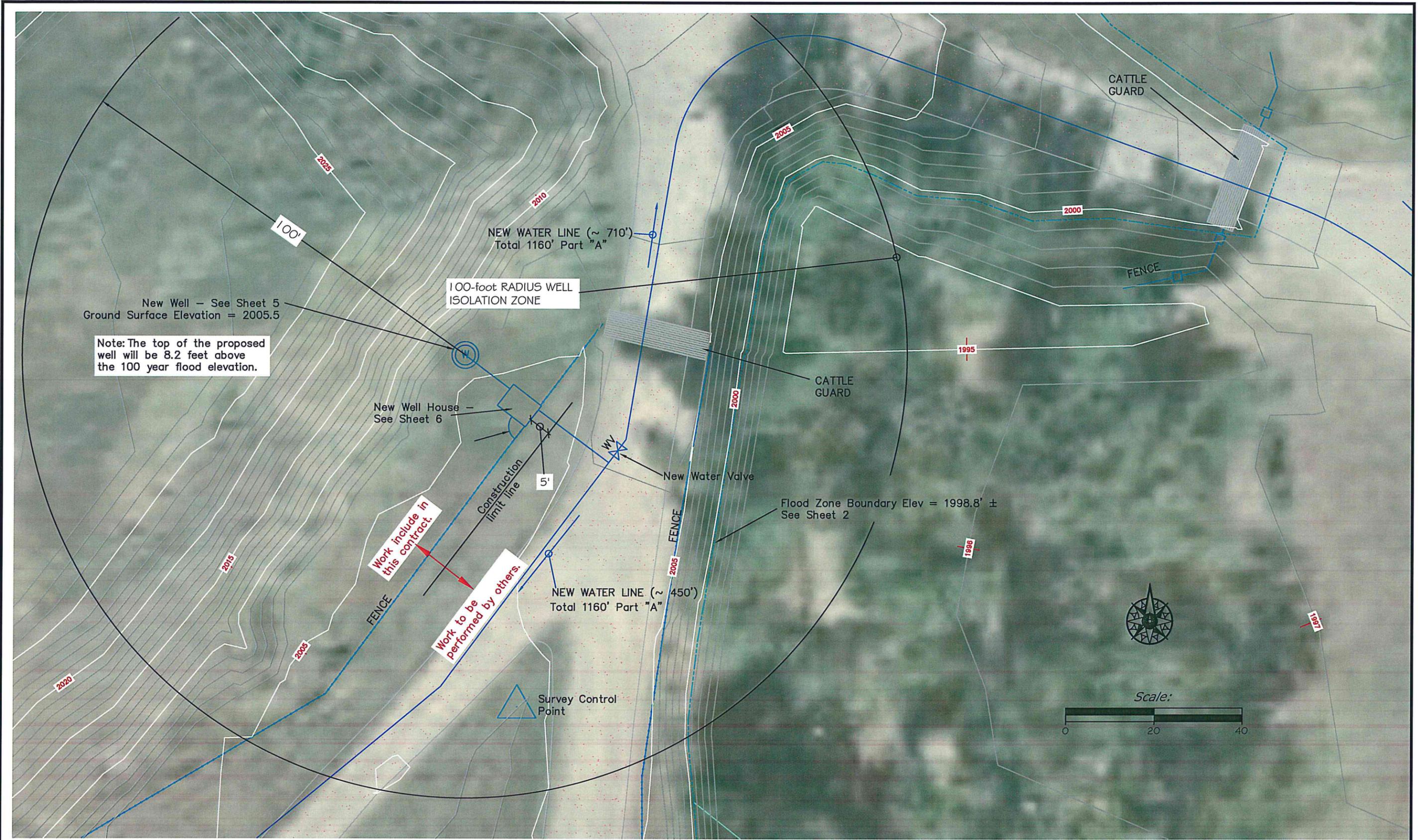
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**Montana Fish,
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Water System Layout
 Intake Fishing Access Site

SHEET: 3 of 6



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Tom Mannatt April 9, 2018
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 [Signature] 4/9/18
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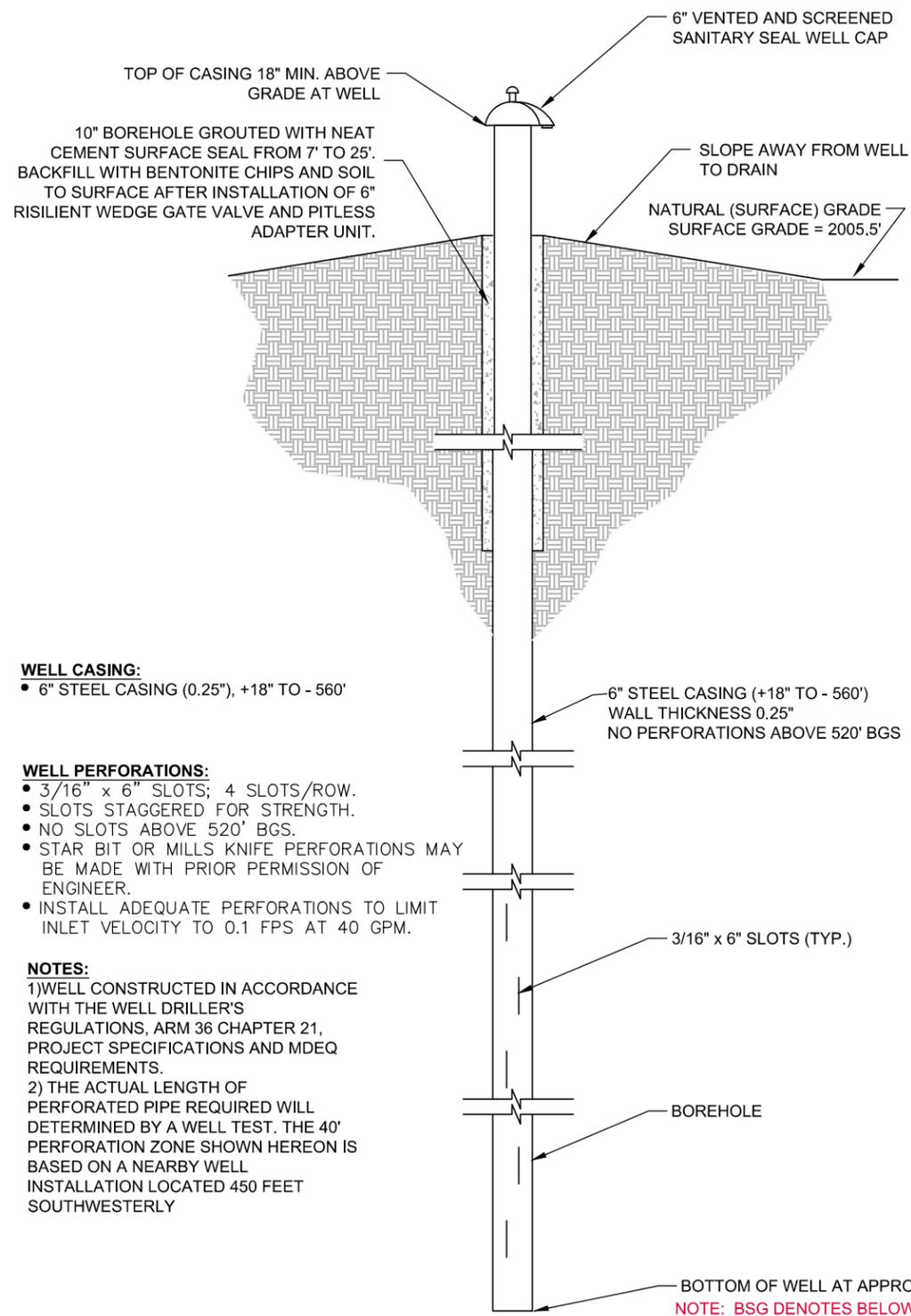


Montana Fish & Wildlife

Well Site Plan
 Intake Fishing Access Site

SHEET: 4 of 6

TYPICAL SIX-INCH WELL CONSTRUCTION (<35 GPM)



WELL CASING:

- 6" STEEL CASING (0.25"), +18" TO - 560'

WELL PERFORATIONS:

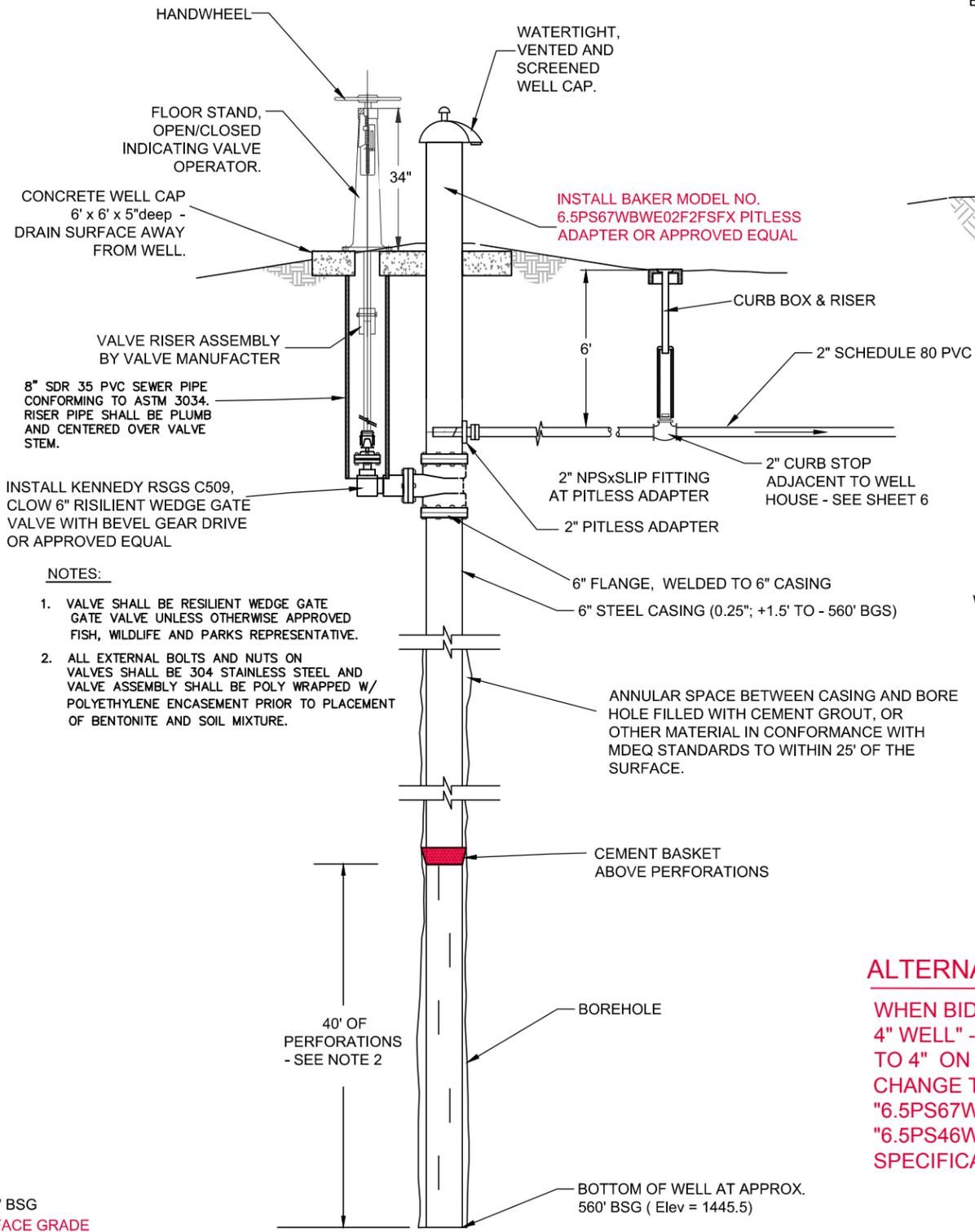
- 3/16" x 6" SLOTS; 4 SLOTS/ROW.
- SLOTS STAGGERED FOR STRENGTH.
- NO SLOTS ABOVE 520' BGS.
- STAR BIT OR MILLS KNIFE PERFORATIONS MAY BE MADE WITH PRIOR PERMISSION OF ENGINEER.
- INSTALL ADEQUATE PERFORATIONS TO LIMIT INLET VELOCITY TO 0.1 FPS AT 40 GPM.

NOTES:

- WELL CONSTRUCTED IN ACCORDANCE WITH THE WELL DRILLER'S REGULATIONS, ARM 36 CHAPTER 21, PROJECT SPECIFICATIONS AND MDEQ REQUIREMENTS.
- THE ACTUAL LENGTH OF PERFORATED PIPE REQUIRED WILL DETERMINED BY A WELL TEST. THE 40' PERFORATION ZONE SHOWN HEREON IS BASED ON A NEARBY WELL INSTALLATION LOCATED 450 FEET SOUTHWESTERLY

DRAWING NOT TO SCALE

TYPICAL SIX-INCH WELL PLUMBING

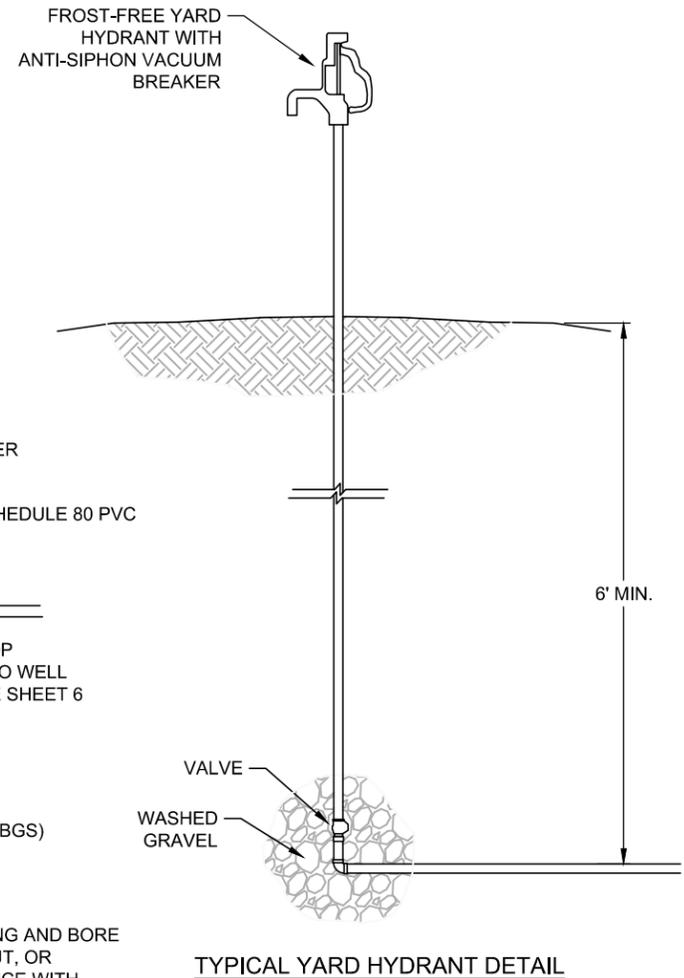


8" SDR 35 PVC SEWER PIPE CONFORMING TO ASTM 3034. RISER PIPE SHALL BE PLUMB AND CENTERED OVER VALVE STEM.

INSTALL KENNEDY RSGS C509, CLOW 6" RISILIENT WEDGE GATE VALVE WITH BEVEL GEAR DRIVE OR APPROVED EQUAL

- NOTES:**
- VALVE SHALL BE RESILIENT WEDGE GATE VALVE UNLESS OTHERWISE APPROVED FISH, WILDLIFE AND PARKS REPRESENTATIVE.
 - ALL EXTERNAL BOLTS AND NUTS ON VALVES SHALL BE 304 STAINLESS STEEL AND VALVE ASSEMBLY SHALL BE POLY WRAPPED W/ POLYETHYLENE ENCASEMENT PRIOR TO PLACEMENT OF BENTONITE AND SOIL MIXTURE.

DRAWING NOT TO SCALE



ALTERNATE BID #1 NOTE:

WHEN BIDDING, ALTERNATE BID#1- "THE 4" WELL" - CHANGE ALL 6" REFERENCES TO 4" ON THIS SHEET. ADDITIONALLY, CHANGE THE PITLESS PART NUMBER "6.5PS67WBWE02F2SFX" TO READ "6.5PS46WBWE02F2SFX" - SEE SPECIFICATIONS PROPOSAL

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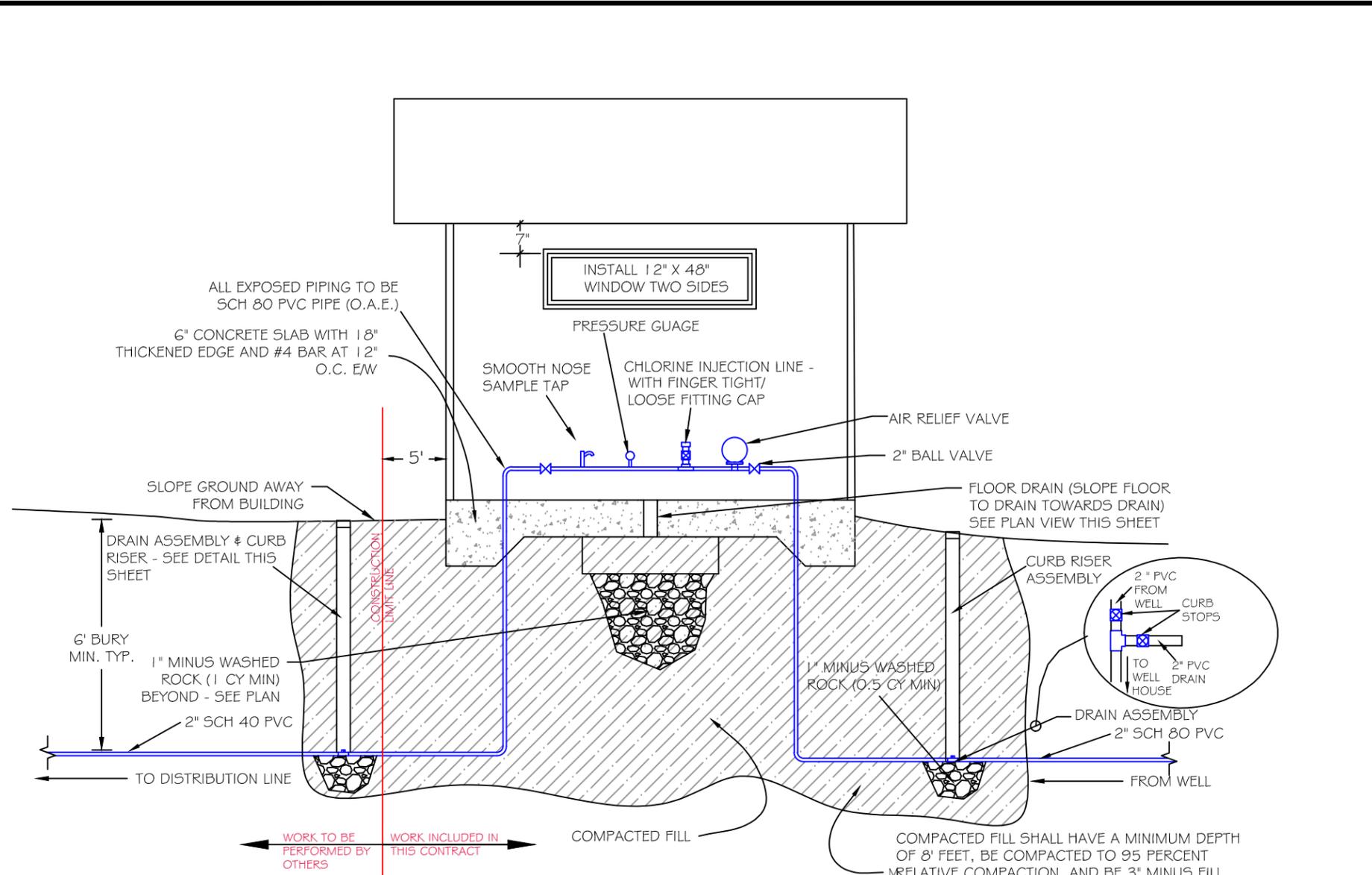
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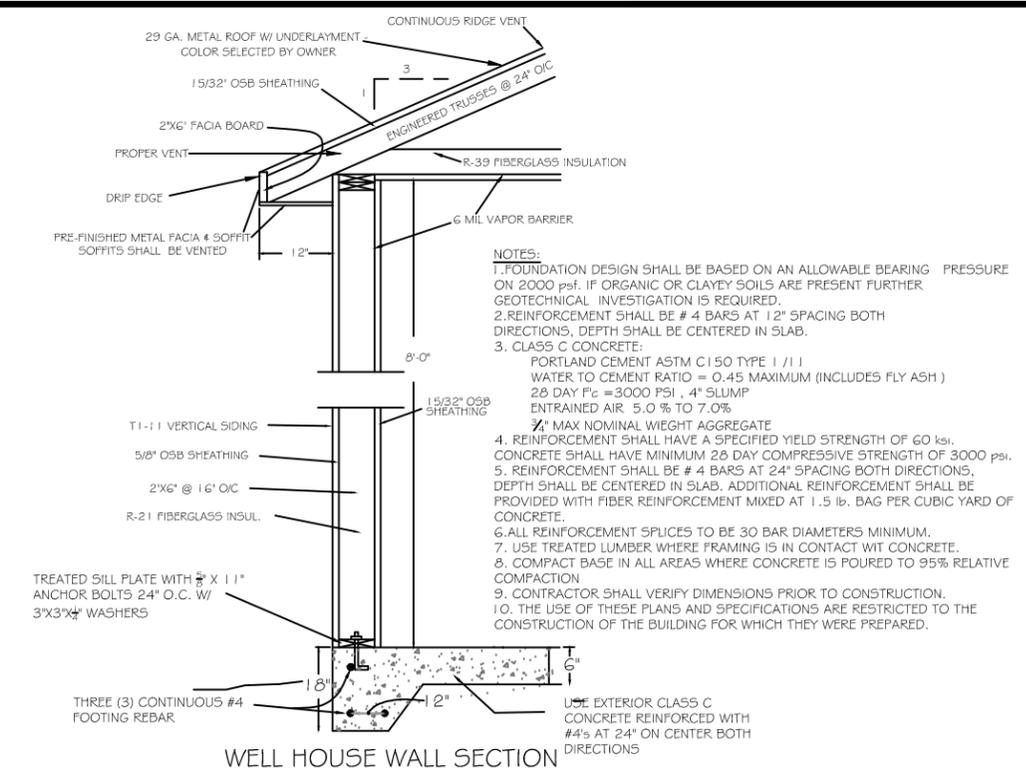
Montana Fish, Wildlife & Parks

Well Details
Intake Fishing Access Site

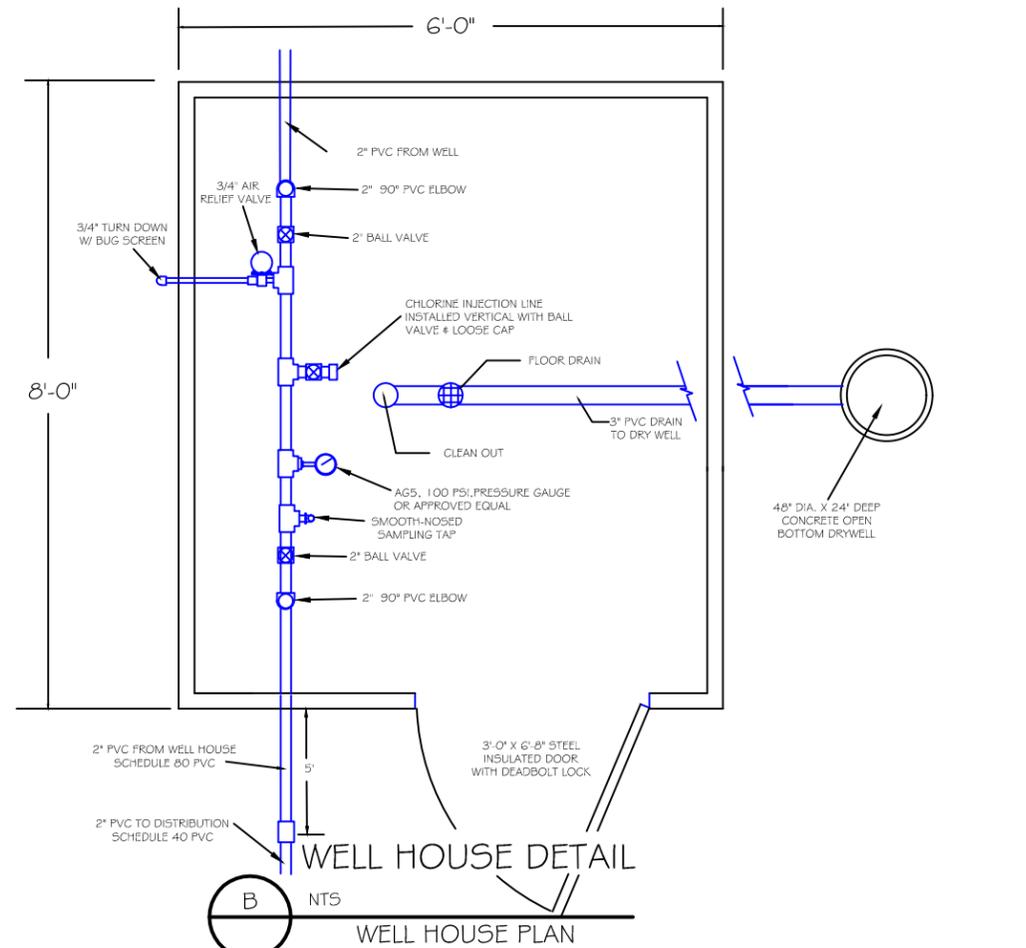
SHEET: 5 of 6



WELL HOUSE ELEVATION

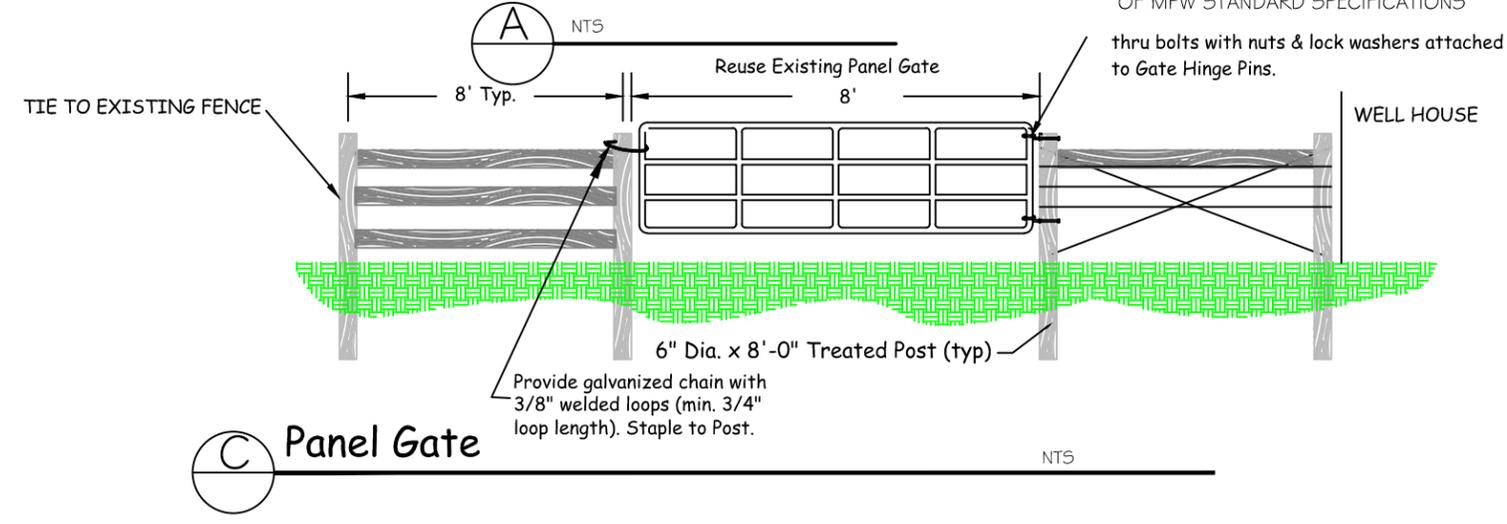


WELL HOUSE WALL SECTION



WELL HOUSE DETAIL

WELL HOUSE PLAN



Panel Gate

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WELL HOUSE
INTAKE FISHING ACCESS SITE