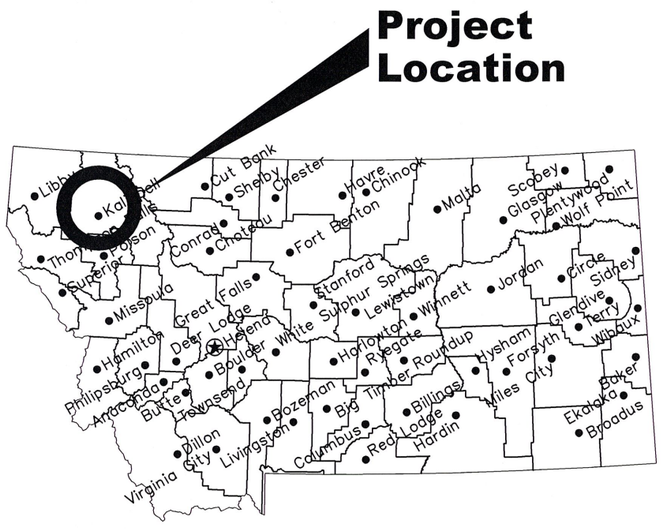
MONTANA FISH, WILDLIFE & PARKS

Pine Grove Pond Fishing Access Site
ACCESSIBLE FISHING PLATFORMS

near Kalispell, MT

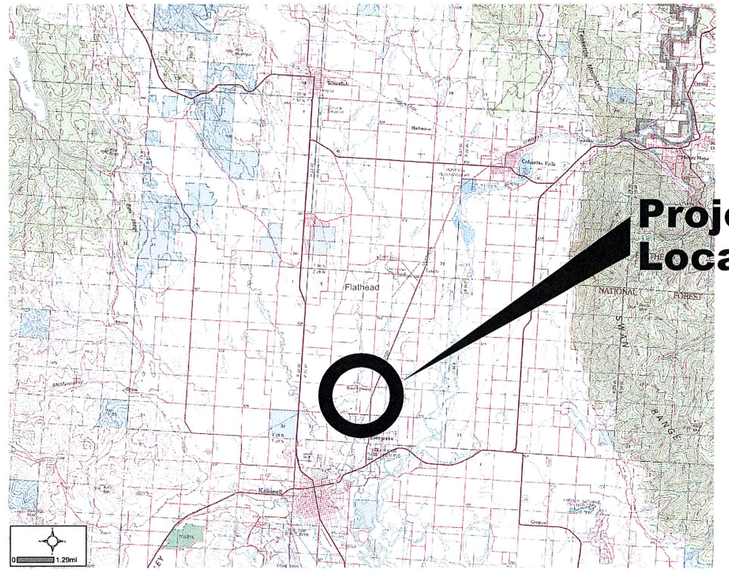
FWP# 7133702



Location Map

No Scale

North



Vicinity Map

No Scale

MONTANA FISH, WILDLIFE AND PARKS
DESIGN AND CONSTRUCTION

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

PHYSICAL ADDRESS:
1522 9th AVENUE
HELENA, MT 59601

TEL 406.841.4000
FAX 406.841.4004
fwp.mt.gov/Doing Business/Design&Construction

DRAWING INDEX

C1 COVER SHEET
C2 OVERALL SITE PLAN
C3 PROPOSED FISHING PLATFORM #1 SITE PLAN
C4 PROPOSED FISHING PLATFORM #2 SITE PLAN
S1 ACCESSIBLE FISHING PLATFORM PLAN
S2 ACCESSIBLE FISHING PLATFORM SECTION
S3 ACCESSIBLE FISHING PLATFORM SECTION
S4 ACCESSIBLE FISHING PLATFORM FRAMING PLAN

MONTANA
JASON SENN
No. 21922PE
LICENSED PROFESSIONAL ENGINEER
1/19/16

M. McNearney May 11, 2015 DRAWN BY: DATE:	APPROVED BY: DATE:	APPROVED BY: DATE:	Montana Fish, Wildlife & Parks
J. Senn January 19, 2016 CHECKED BY: DATE:	APPROVED BY: DATE:	APPROVED BY: DATE:	

Cover Sheet
Pine Grove Pond FAS (near Kalispell, MT)

SHEET: C1 of 4

ENTRANCE ROAD

PUBLIC PARKING AREA
(TO REMAIN OPEN)

CONTRACTOR STAGING/STOCKPILINGING AREA

PINE GROVE POND FAS

Construct 5' x ~120'
Concrete Accessible Sidewalks

Construct 10' x 20'
Accessible Fishing Platforms

Platform #2

Platform #1

Existing Fishing Platform

ESTIMATED SIDEWALK QUANTITIES

Material	Quanity	Unit
PLATFORM #1		
Excavation (Sidewalk)	20	CY
Embankment (Sidewalk)	10	CY
3/4" Minus CBC (4" Depth)	7	SY
Concrete Sidewalk (4" Depth)	556	SF
Revegetation	690	SF
PLATFORM #2		
Excavation (Sidewalk)	10	CY
Embankment (Sidewalk)	20	CY
3/4" Minus CBC (4" Depth)	8	SY
Concrete Sidewalk (4" Depth)	618	SF
Revegetation	640	SF

NOTES:

1. Construct temporary earthen coffer dam for concrete pier construction, see Section 99995 ADA Fishing Platforms for additional information. Expect wet conditions, will require use of pumps for minor dewatering.

2. Owner will establish initial survey control and alignment grade stakes, see Technical Specification 01050, Field Engineering for additional Contractor surveying requirements.

3. Protect existing pedestrian benches from damage during construction. Contractor responsible to repair and/or replace damaged benches at no cost to the Owner.

4. Contractor can use the existing south parking area for staging and stockpiling, with exceptions, see Technical Specification 01010.

5. Any utilities depicted on these plans are in accordance with their achieved "Quality Levels" as defined in the American Society of Civil Engineer's document ASCE 38, "Standard for the Collection and Depiction of Existing Subsurface Utility Data."

M. McNearney 5/7/15			
DRAWN BY: DATE:	REVISED BY: DATE:	APPROVED BY: DATE:	Montana Fish, Wildlife & Parks
J. Senn 1/19/16			
CHECKED BY: DATE:	APPROVED BY: DATE:	APPROVED BY: DATE:	

Overall Site Plan

Pine Grove Pond FAS (near Kalispell, MT)

SHEET: C2 of 4

Scale:

0 15' 30'

CONTROL POINTS

Description	Northing	Easting	Elevation
CP1	10,000.00	5,000.00	1,000.00
CP2	9,404.16	5,694.22	981.05

LEGEND

Existing Features

Control Point (CP2)

Edge of Path

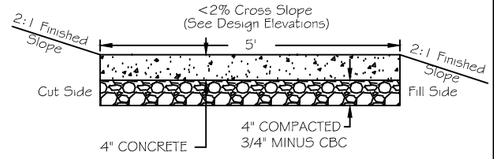
Asphalt Trail

Proposed Features

Concrete Path

Fishing Platform

Finsihed Elev. 995.17



SIDEWALK SECTION
(Not to Scale)

8' Rad. (Typ.)

Slope Stake Catch (Fill)

Existing Bench

Proposed 10'x20' Accessible Fishing Platform
FF Elev. (981.0)

Pond Elevation (978.1)
Topo Survey, 4-1-15

Concrete Sidewalk,
Accessible Grade (<5%)

Slope Stake Catch (Cut)

Existing Pathway (Paved)

984.83 984.60 984.32 984.66 984.50 984.32 983.43 983.33 983.53 983.43 981.15 981.00 981.00 981.25 981.00 981.00 5' 20' 10' 10'

966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985

985 984 983 982 982 982

M. McNearney 5/7/15			
DRAWN BY: DATE:	REVISED BY: DATE:	APPROVED BY: DATE:	Montana Fish, Wildlife & Parks
J. Senn 1/19/16			
CHECKED BY: DATE:	APPROVED BY: DATE:	APPROVED BY: DATE:	

Proposed Fishing Platform #1 Site Plan

Pine Grove Pond FAS (near Kalispell, MT)

SHEET: C3 of 4

Pond Elevation (978.1)
Topo Survey, 4-1-15

Proposed 10'x20' Accessible Fishing Platform
FF Elev. (981.0)

Existing Bench

Slope Stake Catch (Fill)

Slope Stake Catch (Cut)

Concrete Sidewalk,
Accessible Grade (<5%)

Existing Pathway

8' Rad. (Typ.)

10'

20'

5'

966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984

981.00 981.00 981.18 981.00 981.00 981.28

983.96 986.15 986.42 986.69 986.15 986.32 986.57 984.01

984 983 982 981 980 979

Scale:

0 15' 30'

CONTROL POINTS

Description	Northing	Easting	Elevation
CP1	10,000.00	5,000.00	1,000.00
CP2	9,404.16	5,694.22	981.05

LEGEND

Existing Features

- Control Point (CP2)
- Edge of Path
- Asphalt Trail

Proposed Features

- Concrete Path
- Fishing Platform
- Finsihed Elev. 995.17

<2% Cross Slope
(See Design Elevations)

2:1 Finished Slope — Cut Side — 5' — 2:1 Finished Slope — Fill Side

4" CONCRETE

4" COMPACTED 3/4" MINUS CBC

SIDEWALK SECTION
(Not to Scale)

M. McNearney 5/7/15 DRAWN BY: DATE:	REVISED BY: DATE:	APPROVED BY: DATE:
J. Senn 1/19/16 CHECKED BY: DATE:	APPROVED BY: DATE:	APPROVED BY: DATE:

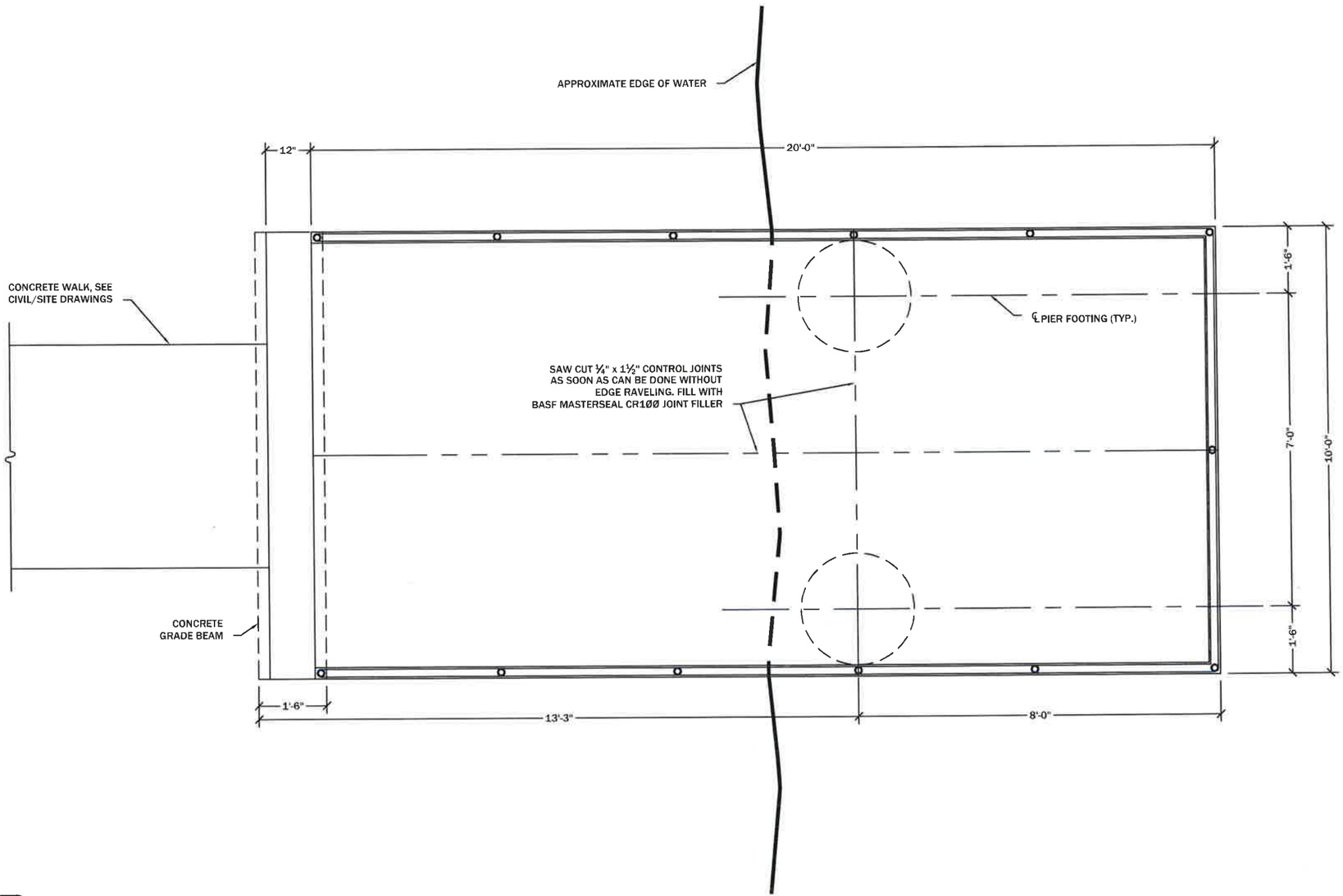
Montana Fish, Wildlife & Parks

121

Proposed Fishing Platform #2 Site Plan

Pine Grove Pond FAS (near Kalispell, MT)

SHEET: C4 of 4



GENERAL NOTES:

1. SUBMIT STEEL FABRICATION SHOP DRAWINGS FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.
2. STEEL GRADES: ASTM A992 FOR WIDE FLANGE BEAMS. ASTM A36 FOR PLATES, CHANNELS AND ANGLES. ASTM A500 GRADE B FOR PIPE. ASTM 325 FOR CONNECTION BOLTS. ASTM 307 FOR ANCHOR BOLTS. ASTM A615 GRADE 60 FOR PLAIN, DEFORMED, REINFORCING BARS.
3. USE 5/8 INCH DIAMETER BOLTS FOR STEEL FRAMING CONNECTIONS. USE 3/4 INCH DIAMETER ANCHOR BOLTS.
4. ALL STRUCTURAL STEEL AND HANDRAIL TO BE POWDER COAT PAINTED, SEE SPECIAL PROVISIONS.
5. WELDER QUALIFICATIONS AND WELDING METHODS TO COMPLY WITH REQUIREMENTS OF AWS D1.1. USE E70XX ELECTRODES. TO THE EXTENT PRACTICABLE, MAKE ALL WELDS PRIOR TO PAINTING. TOUCH UP WELDS MADE AFTERWARD WITH REPAIR PAINT.
6. USE VULCRAFT 1.5VL20 GALVANIZED METAL FLOOR DECKING. FASTEN WITH HILTI X-CR 16 P8 STAINLESS STEEL FASTENERS ON 4/36 PATTERN AT INTERIOR SUPPORTS AND AT 12 INCHES MAX ON CENTER AROUND PERIMETER. SIDELAP FASTENERS TO BE BUTTON PUNCH CRIMPS AT 24 INCHES ON CENTER.
7. CONCRETE MIX DESIGNS TO PRODUCE 28-DAY COMPRESSIVE STRENGTH OF 4,000 PSI MINIMUM, WITH 4% TO 6% ENTRAINED AIR, MAX SLUMP OF 4 INCHES, AND INCORPORATING 3/4 INCH MAX SIZE AGGREGATE. SLAB CONCRETE TO ALSO INCORPORATE FIBERMESH-150 POLYPROPELYNE FIBERS AT THE RATE OF 1.5 POUNDS OF PER CUBIC YARD. SUBMIT CONCRETE MIX DESIGNS FOR REVIEW AND APPROVAL PRIOR TO INCORPORATING INTO WORK.

MONTANA
A. COLT
WISE
13718PE
LICENSED
PROFESSIONAL ENGINEER

4' 3' 2' 1' 0 2' 4' 6'

Platform Plan

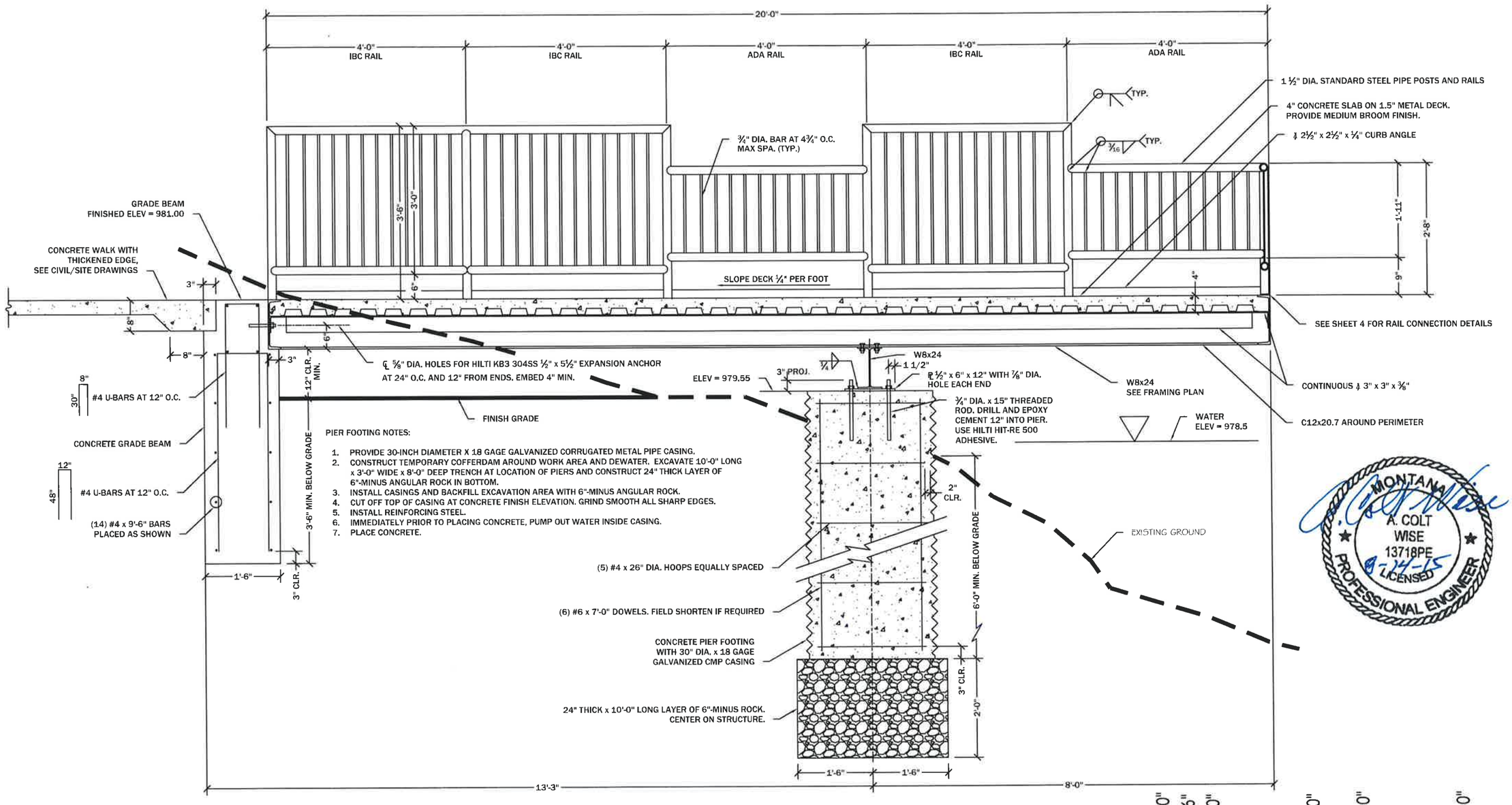
HDR
1715 S. RESERVE STREET, SUITE C
MISSOULA, MT 59801
(406) 532-2200

G. SMITH	JULY 02, 2015	D. HIROSE	AUGUST 03, 2015		
DRAWN BY:	DATE:	APPROVED BY:	DATE:	APPROVED BY:	DATE:
C. WISE	JULY 02, 2015	M. McNEARNEY	AUGUST 14, 2015		
CHECKED BY:	DATE:	APPROVED BY:	DATE:	APPROVED BY:	DATE:

Montana Fish, Wildlife & Parks

Accessible Fishing Platform Plan
Pine Grove Fishing Access Site

SHEET: S1 of 4



MONTANA A. COLT WISE 13718PE LICENSED PROFESSIONAL ENGINEER 7-14-15

Longitudinal Section

HDR
1715 S. RESERVE STREET, SUITE C
MISSOULA, MT 59801
(406) 532-2200

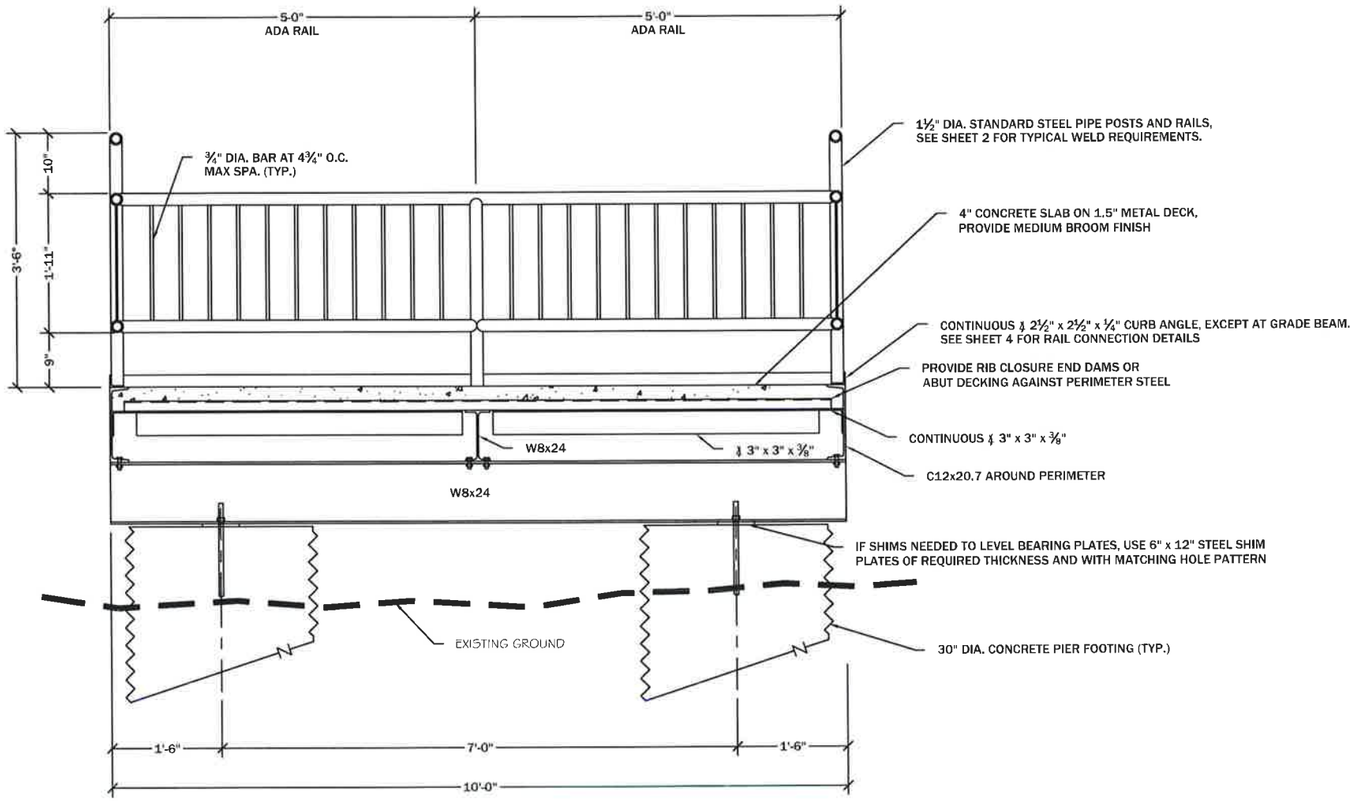
G. SMITH	JULY 02, 2015	D. HIROSE	AUGUST 03, 2015		
DRAWN BY:	DATE:	APPROVED BY	DATE:	APPROVED BY:	DATE:
C. WISE	JULY 02, 2015	M. McNEARNEY	AUGUST 14, 2015		
CHECKED BY:	DATE:	APPROVED BY:	DATE:	APPROVED BY:	DATE:

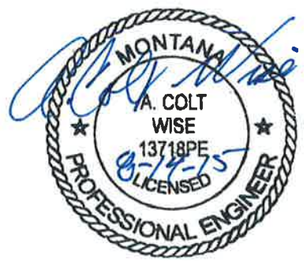
Montana Fish, Wildlife & Parks

Accessible Fishing Platform Section

Pine Grove Fishing Access Site

SHEET: S2 of 4





1715 S. RESERVE STREET, SUITE C
MISSOULA, MT 59801
(406) 532-2200

Cross Section

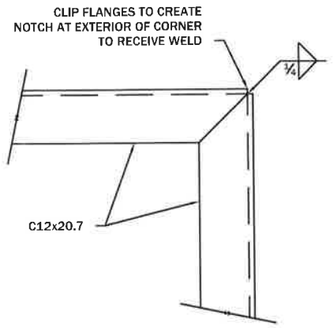
G. SMITH	JULY 02, 2015	D. HIROSE	AUGUST 03, 2015		
DRAWN BY:	DATE:	APPROVED BY:	DATE:	APPROVED BY:	DATE:
C. WISE	JULY 02, 2015	M. McNEARNEY	AUGUST 14, 2015		
CHECKED BY:	DATE:	APPROVED BY:	DATE:	APPROVED BY:	DATE:

Montana Fish, Wildlife & Parks

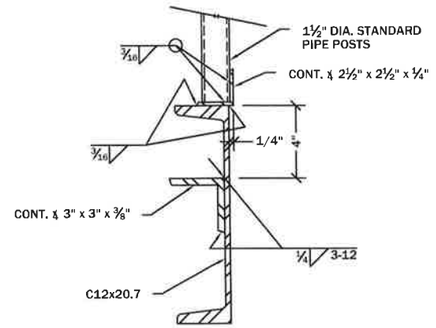
Accessible Fishing Platform Section

Pine Grove Fishing Access Site

SHEET: S3 of 4

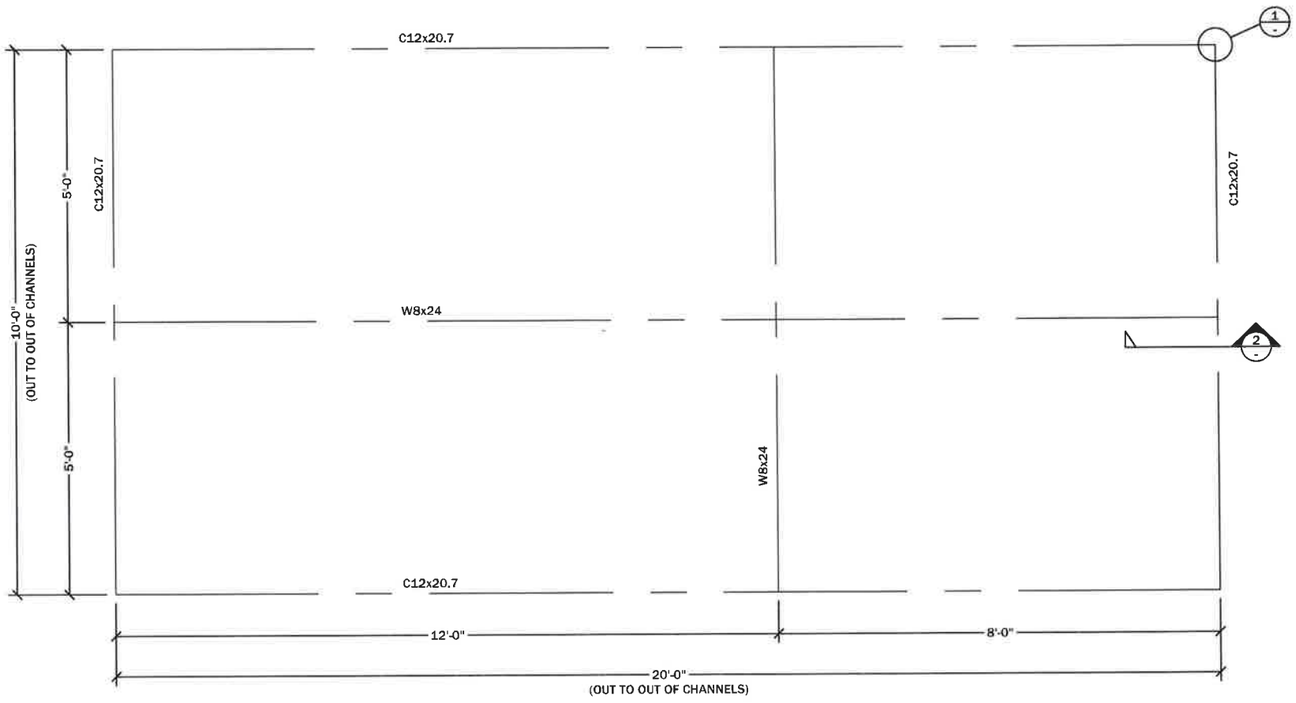


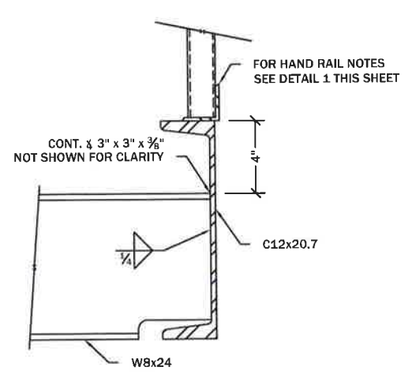
PLAN



SECTION

EXTERIOR CORNER CONNECTION 1
1 1/2" = 1'-0"





CONNECTION DETAIL 2
1 1/2" = 1'-0"

MONTANA
A. COLT
WISE
13718PE
8-14-15
LICENSED
PROFESSIONAL ENGINEER

HDR
1715 S. RESERVE STREET, SUITE C
MISSOULA, MT 59801
(406) 532-2200

Platform Framing Plan

4' 3' 2' 1' 0 2' 4' 6'

G. SMITH	JULY 02, 2015	D. HIROSE	AUGUST 03, 2015		
DRAWN BY:	DATE:	APPROVED BY:	DATE:	APPROVED BY:	DATE:
C. WISE	JULY 02, 2015	M. McNEARNEY	AUGUST 14, 2015		
CHECKED BY:	DATE:	APPROVED BY:	DATE:	APPROVED BY:	DATE:

Montana Fish, Wildlife & Parks

Accessible Fishing Platform Framing Plan

Pine Grove Fishing Access Site

SHEET: S4 of 4