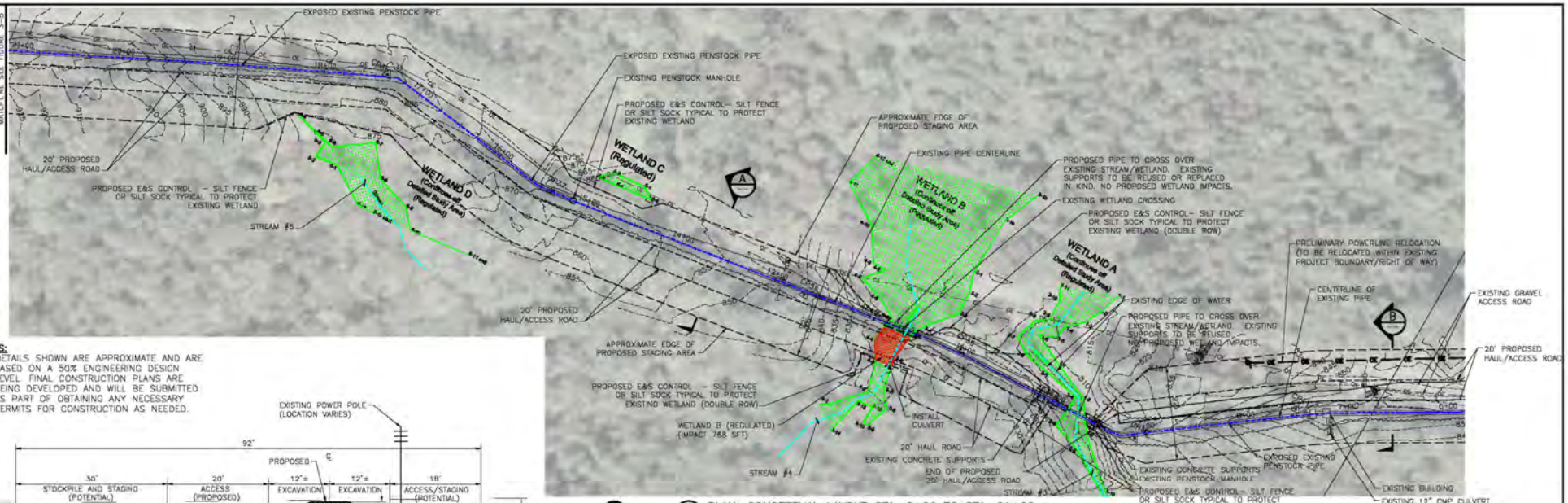
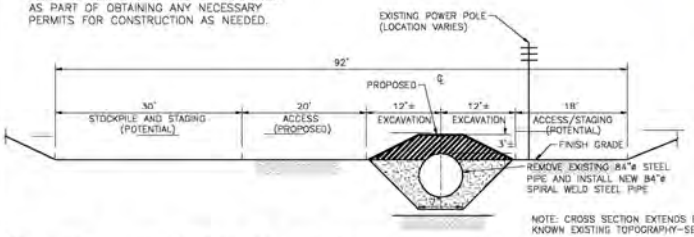
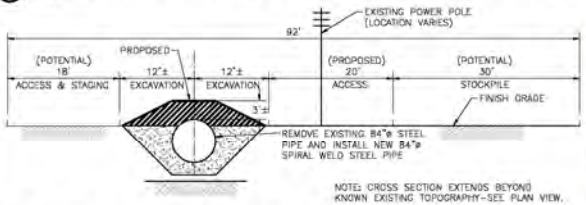


NOTES:

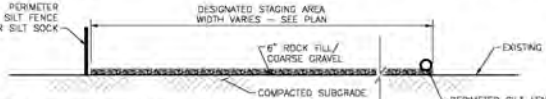
1. DETAILS SHOWN ARE APPROXIMATE AND ARE BASED ON A 50% ENGINEERING DESIGN LEVEL. FINAL CONSTRUCTION PLANS ARE BEING DEVELOPED AND WILL BE SUBMITTED AS PART OF OBTAINING ANY NECESSARY PERMITS FOR CONSTRUCTION AS NEEDED.



A TYPICAL SECTION: NEW 84" DIA. STEEL CONSTRUCTION SECTION STA. 12+00 TO 35+90
SCALE: 1"=10'



B TYPICAL SECTION: NEW 84" DIA. STEEL PIPE SECTION STA. 2+00 TO 9+00
SCALE: 1"=10'

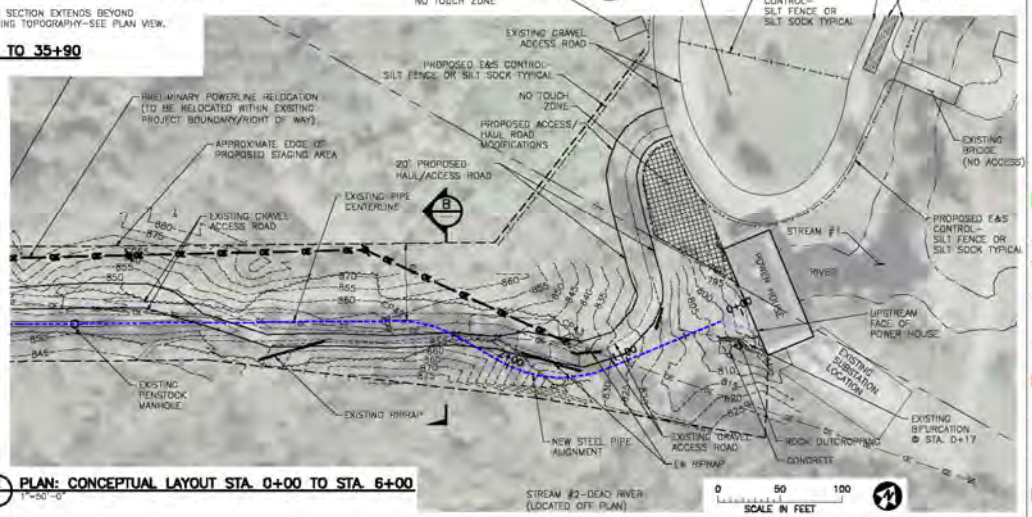


C SECTION: DESIGNATED STAGING AREA (TYP.)
NOT TO SCALE

PRELIMINARY DESIGN:
- ISSUE FOR REGULATORY REVIEW ONLY
- NOT FOR CONSTRUCTION

1 PLAN: CONCEPTUAL LAYOUT STA. 6+00 TO STA. 21+00
1"=50'-0"

0 50 100
SCALE IN FEET



2 PLAN: CONCEPTUAL LAYOUT STA. 0+00 TO STA. 6+00
1"=50'-0"

0 50 100
SCALE IN FEET

LEGEND

- TOPOGRAPHIC SURVEY CONTROL POINT
- EXISTING TREE LINE
- EXISTING ELEVATION INDEX CONTOUR
- EXISTING WATER LINE
- EXISTING EDGE OF GRAVEL
- EXISTING CONCRETE OR ASPHALT EXTENT
- EXISTING OVERHEAD ELECTRIC
- EXISTING DITCH
- EXISTING PROPERTY LINE
- EXISTING WETLAND AND FLAG NO.
- EXISTING SIGN
- EXISTING RIPRAP
- EXISTING ROCK OUTCROPPING
- REMOVE EXISTING 84" STEEL PIPE AND REPLACE WITH 84" SPIRAL WELD STEEL PIPE STATION 2+00 - 35+90
- REMOVE EXISTING STEEL PIPE AND BIFURCATION AND REPLACE WITH NEW STEEL PIPE AND BIFURCATION BETWEEN POWERHOUSE AND STATION 2+00
- PROPOSED WETLAND IMPACT AREA
- PROPOSED E&S CONTROL - SILT FENCE OR SILT SOCK TYPICAL SEE 2/C-1
- PROPOSED E&S CONTROL- SILT FENCE OR SILT SOCK TYPICAL (DOUBLE ROW) SEE 4/C-1
- PROPOSED ROCK CONSTRUCTION ENTRANCE SEE 1/C-1

NO.	BY	CHK	APP.	DATE	REVISION DESCRIPTION
A	MRM	MAK2	WJF	10OCT2008	ISSUED FOR PERMITTING - NOT FOR CONSTRUCTION
B	MRM	MAK2	WJF	30NOV2008	REVISED ENVIRONMENTAL PLAN SUBMITTAL
C	MJJ	MAK2	WJF	10DEC2008	COMMENTS FROM RIZZO/INTEGRYS
D	MJJ	MAK2	WJF	23DEC2008	REVISED ALIGNMENT
E	MJJ	MAK2	WJF	09FEB2009	FERC SUBMITTAL
F	MJJ	MAK2	WJF	26FEB2009	REVISIONS/INTEGRYS

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MICHIGAN.

SIGNATURE _____

PRINTED NAME: WILLIAM J. FORSMARK

DATE _____ REG. NO. 39572

RELEASED TO/FOR	A	B	C	D	E	F	G
CLIENT	10/10	11/20	12/10	12/23	02/04	02/26	
FERC							03/04
CONSTRUCTION							

DATE RELEASED

BARR
Corporate Headquarters: Minneapolis, Minnesota Ph: 1-800-632-2277

Project Office:
BARR ENGINEERING CO.
4700 WEST 77TH STREET
MINNEAPOLIS, MN.
55435-4803
Ph: 1-800-632-2277
Fax: (952) 832-2601
www.barr.com

Scale	AS SHOWN
Date	10OCT2008
Drawn	RLG/MRM
Checked	MAK2/WJF
Designed	MAK2
Approved	

UPPER PENINSULA POWER CO.
MARQUETTE COUNTY, MI

MCCLURE PENSTOCK REPLACEMENT
MARQUETTE COUNTY, MI

CONCEPTUAL LAYOUT
STA. 0+00 TO STA. 21+00

BARR PROJECT No. 22/52-088
CLIENT PROJECT No.
DWG. No. FIGURE 3-4
REV. No. 0

CADD USER: Mark Kreisscher PLD: M:\CAD\22522088\SHEET 2.DWG PLOT SCALE: 1:1 PLOT DATE: 3/4/2009 3:01 PM
Xrefs: xb_Drawing - M:\xref\22522088\20147_1.DWG M:\xref\22522088\30453_1.DWG
PIT: M:\CAD\22522088\SHEET 2.DWG PLU at 1: 02/09/2009 07:34:27