

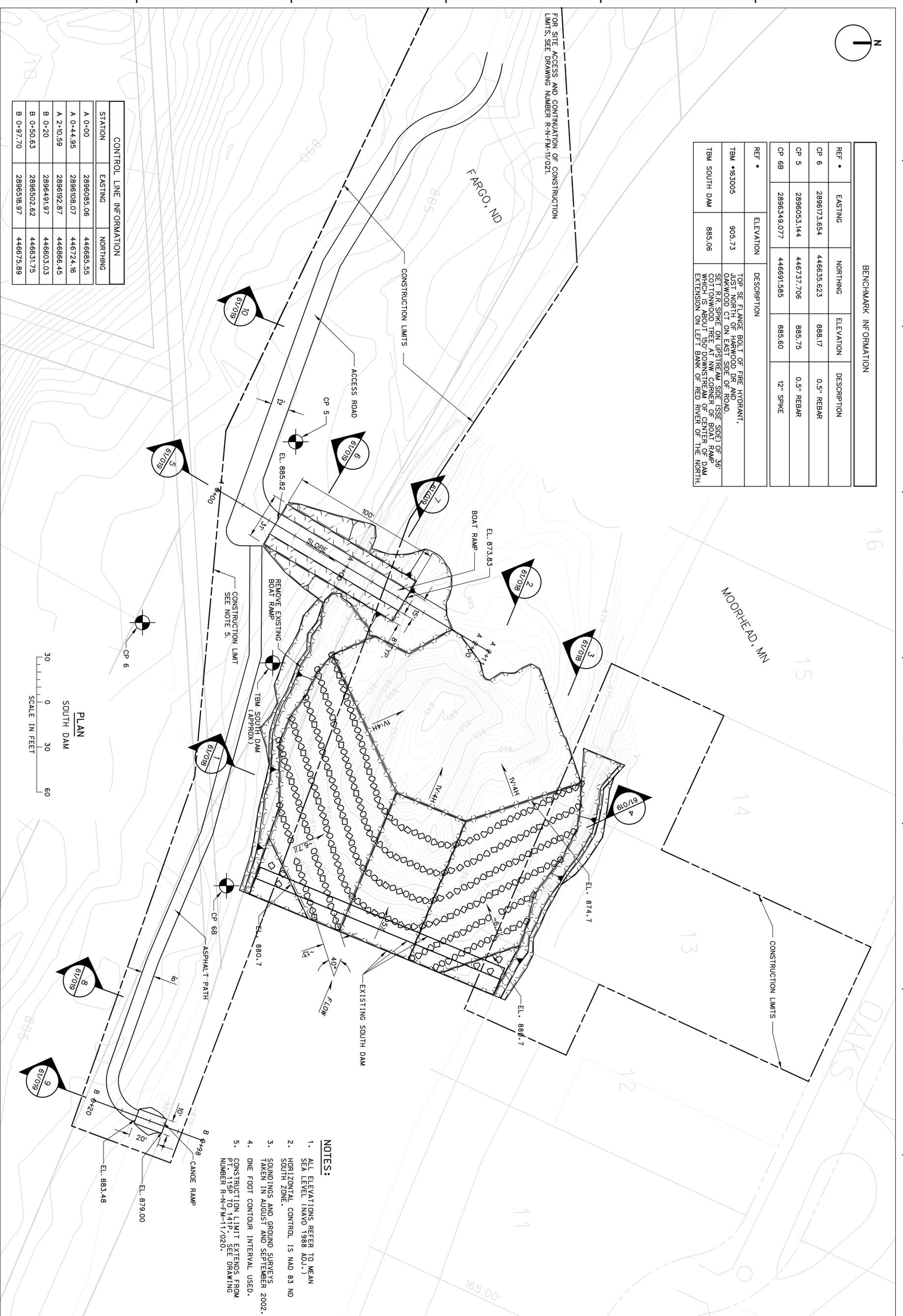
BENCHMARK INFORMATION

REF •	EASTING	NORTHING	ELEVATION	DESCRIPTION
CP 6	2896173.654	446635.623	888.17	0.5" REBAR
CP 5	2896053.144	446737.706	885.75	0.5" REBAR
CP 6B	2896349.077	446691.585	885.60	12" SPIKE
REF •	ELEVATION	DESCRIPTION		
TBM *163005	905.73	TOP SE FLANGE BOLT OF FIRE HYDRANT, JUST NORTH OF HARWOOD DR AND OAKWOOD CT ON EAST SIDE OF ROAD.		
TBM SOUTH DAM	885.06	SET R.R. SPIKE ON UPSTREAM SIDE (SEE SIDE) OF 36' COTTONWOOD TREE AT NW CORNER OF BOAT RAMP WHICH IS ABOUT 150' DOWNSTREAM OF CENTER OF DAM EXTENSION ON LEFT BANK OF RED RIVER OF THE NORTH.		

CONTROL LINE INFORMATION

STATION	EASTING	NORTHING
A 0+00	2896085.06	446695.55
A 0+44.95	2896108.07	446724.16
A 2+10.59	2896192.87	446866.45
B 0-20	2896491.97	446603.03
B 0-50.63	2896502.62	446631.75
B 0-97.70	2896518.97	446675.89

FOR SITE ACCESS AND CONTINUATION OF CONSTRUCTION LIMITS, SEE DRAWING NUMBER R-N-FM-11/021.

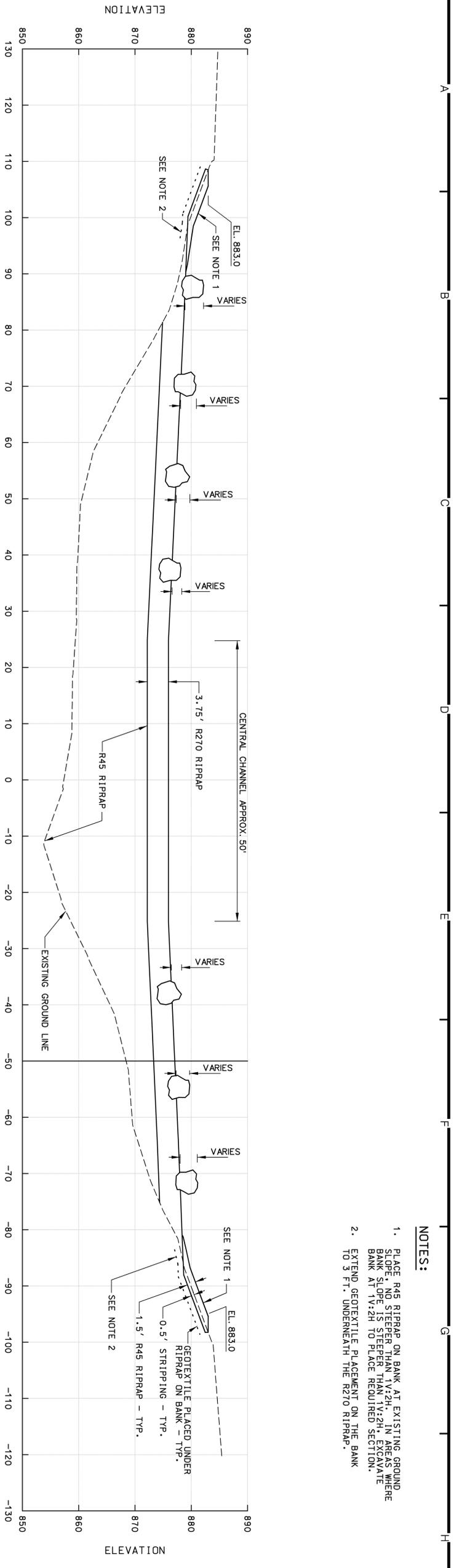


PLAN  
SOUTH DAM

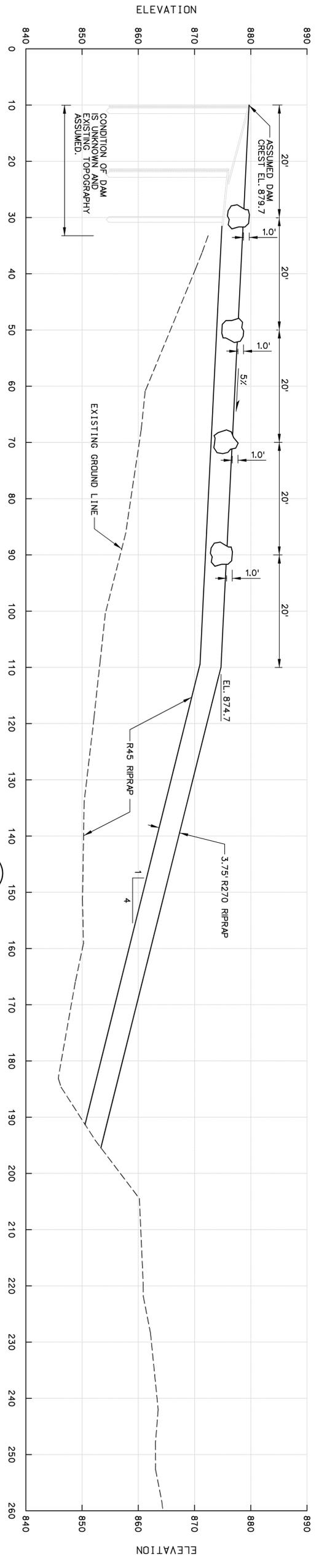
NOTES:

1. ALL ELEVATIONS REFER TO MEAN SEA LEVEL (NAD 1988 ADJ.)
2. HORIZONTAL CONTROL IS NAD 83 ND SOUTH ZONE.
3. SOUNDINGS AND GROUND SURVEYS TAKEN IN AUGUST AND SEPTEMBER 2002.
4. ONE FOOT CONTOUR INTERVAL USED.
5. CONSTRUCTION LIMIT EXTENDS FROM PT. 115P TO 141P. SEE DRAWING NUMBER R-N-FM-11/020.

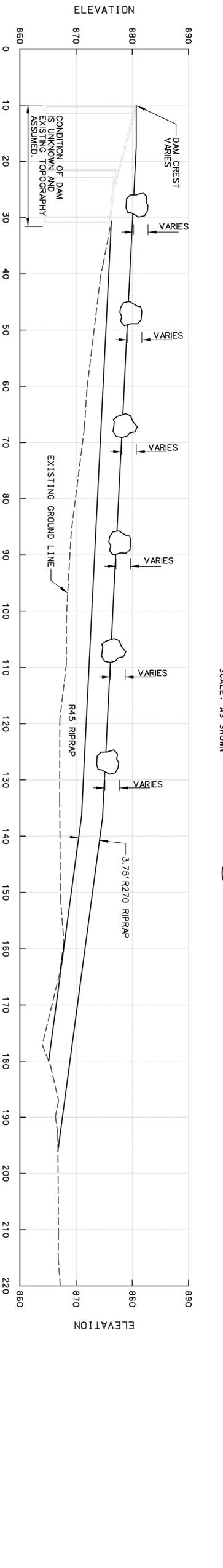
SOUTH DAM AQUATIC RESTORATION <b>DRAWING CLASSIFICATION</b> PLAN SOUTH DAM	DEPARTMENT OF THE ARMY ST. PAUL, MINNESOTA CORPS OF ENGINEERS ST. PAUL DISTRICT	DESIGNED: BKJ/JGS CHECKED: GMF/DWR DRAWN: BKJ DESIGNED: AWB CHECKED: PMF	SCALE: CADD FILE NAME: SOL. NO.: AE APPROVING OFFICIAL:	DATE: JUN 2003 FMAC164002.DGN DACW37-03-R-0009	AS-BUILT AS OF SEP 2005	
	DRAWING NUMBER: R-P-FM- 61/017 SHIT 2 OF 4	Symbol Description Date Appr.		(Empty table for symbols and approvals)		



**TYPICAL SECTION**  
SCALE: AS SHOWN



**PROFILE 2**  
CENTER OF CHANNEL  
SCALE: AS SHOWN



**PROFILE 3**  
CHANNEL OFFSET  
SCALE: AS SHOWN

- NOTES:**
1. PLACE R45 RIPRAP ON BANK AT EXISTING GROUND SLOPE, NO STEEPER THAN 1V:2H, IN AREAS WHERE BANK SLOPE IS STEEPER THAN 1V:2H. EXCAVATE BANK AT 1V:2H TO PLACE REQUIRED SECTION.
  2. EXTEND GEOTEXTILE PLACEMENT ON THE BANK TO 3 FT. UNDERNEATH THE R270 RIPRAP.

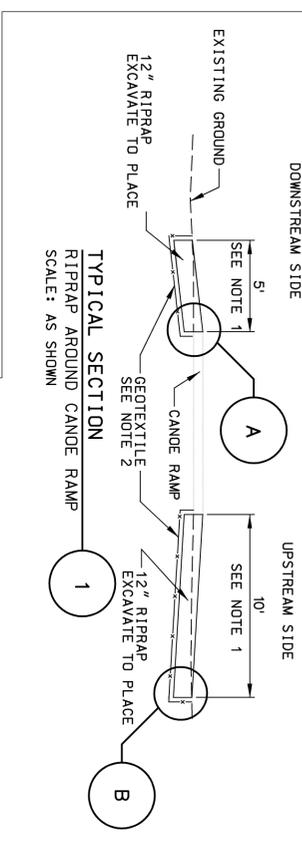
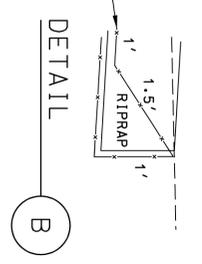
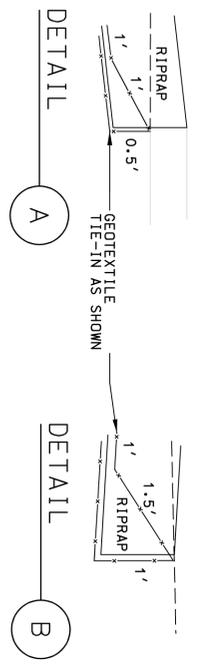
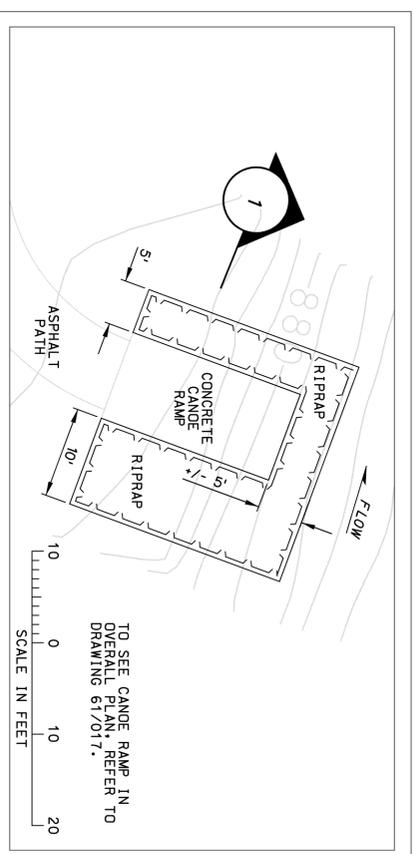
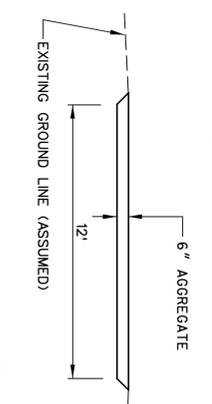
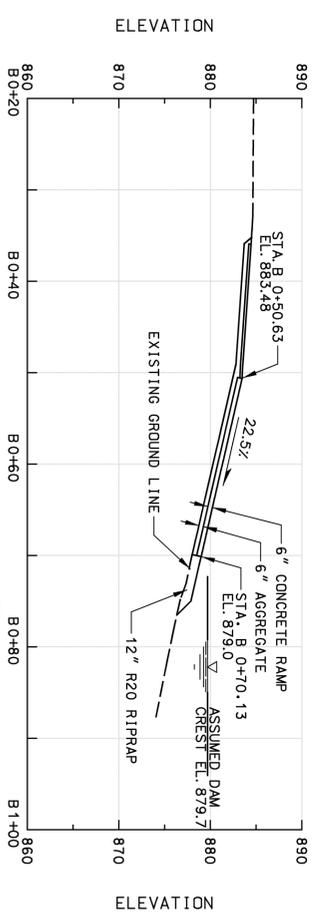
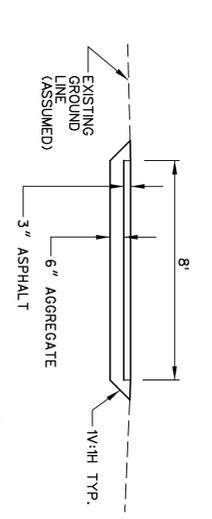
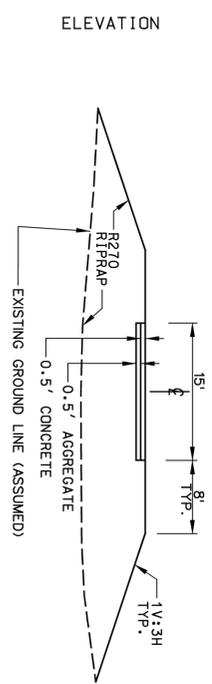
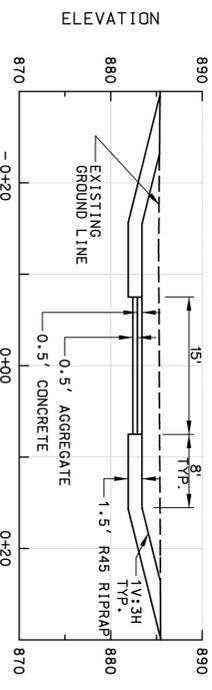
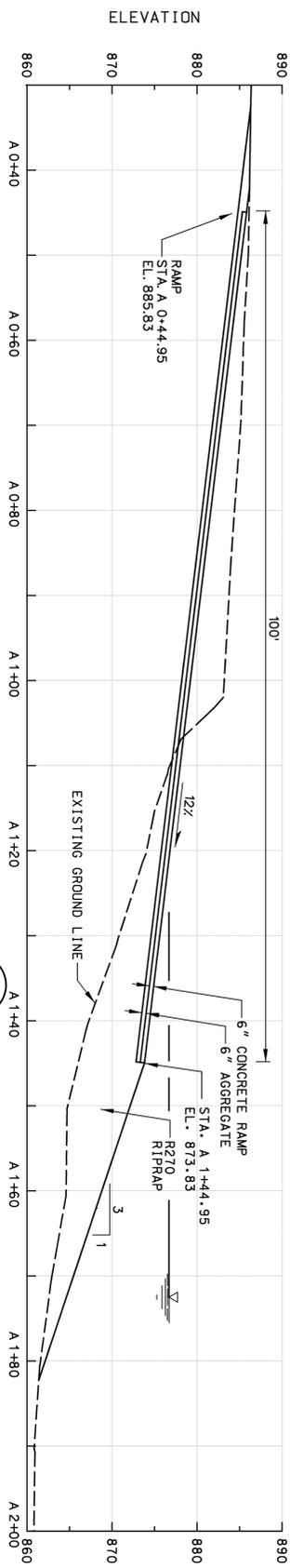
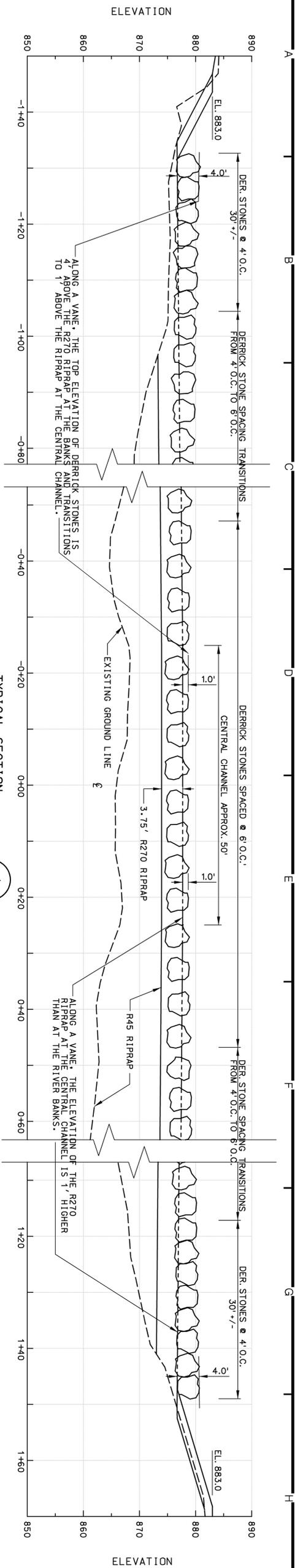
Symbol	Description	Date	Appr.
	AS-BUILT AS OF SEP 2005		

DESIGNED: BKJ/JGS	SCALE: AS SHOWN	DATE: JUN 2003
CHECKED: GMF/DWR	CADD FILE NAME: FMAC364003.DGN	
DRAWN: BKJ	SOL. NO: DACW37-03-R-0009	
DESIGNED: AWB	AE APPROVING OFFICIAL:	
CHECKED: PMF		

DEPARTMENT OF THE ARMY  
ST. PAUL, MINNESOTA  
CORPS OF ENGINEERS  
ST. PAUL DISTRICT

SOUTH DAM AQUATIC RESTORATION  
**DRAWING CLASSIFICATION**  
TYPICAL SECTIONS AND PROFILES  
SOUTH DAM

DRAWING NUMBER:  
**R-P-FM-61/018**  
SHEET 3 OF 4



- NOTES:**
1. ABOVE THE WATERLINE - TAPER RIPRAP SO THAT THE FINISHED SURFACE IS FLUSH WITH THE CANOE RAMP AND NECESSARY TO PLACE RIPRAP AND GEOTEXTILE ABOVE WATERLINE. EXCAVATION IS NOT NECESSARY.
  2. GEOTEXTILE SHALL BE PLACED TO UNDERLAY RIPRAP. TIE-IN AS SHOWN IN DETAILS A AND B.

SOUTH DAM AQUATIC RESTORATION <b>DRAWING CLASSIFICATION</b> TYPICAL SECTIONS AND PROFILES SOUTH DAM	DEPARTMENT OF THE ARMY ST. PAUL, MINNESOTA CORPS OF ENGINEERS ST. PAUL DISTRICT	DESIGNED: BKJ/JGS CHECKED: GMF/DWR DRAWN: BKJ DESIGNED: AWR CHECKED: PMF	SCALE: AS SHOWN CADD FILE NAME: F:\MAC364004.DGN SOL. NO.: DACW37-03-R-0009 AE APPROVING OFFICIAL:	DATE: JUN 2003
	US Army Corps of Engineers St. Paul District			