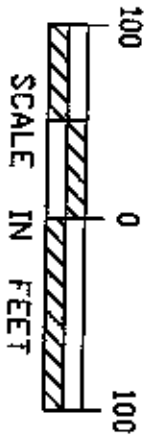
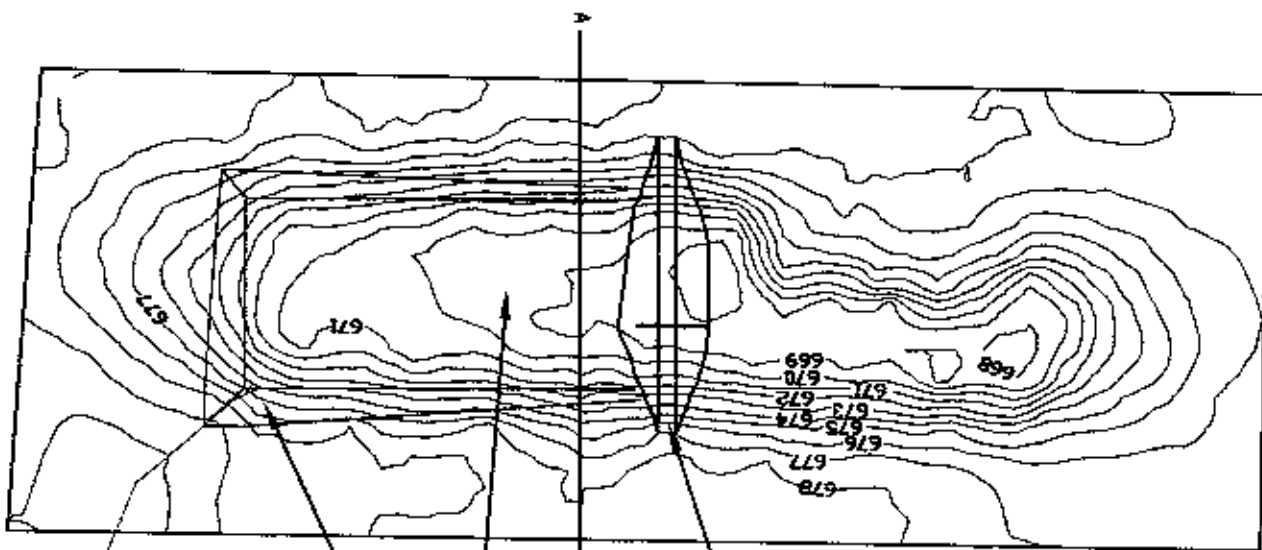




SITE PLAN VIEW

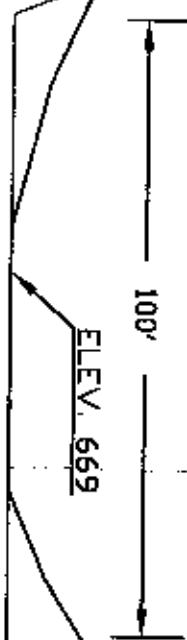


EMBANKMENT
POND
DUTILET STRUCTURE

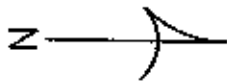
15" PVC SUPPLY PIPE

NATURAL GROUND

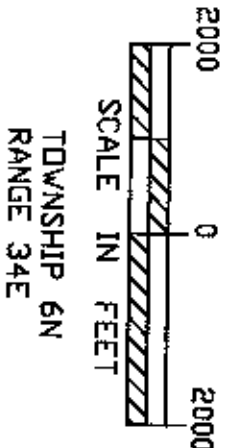
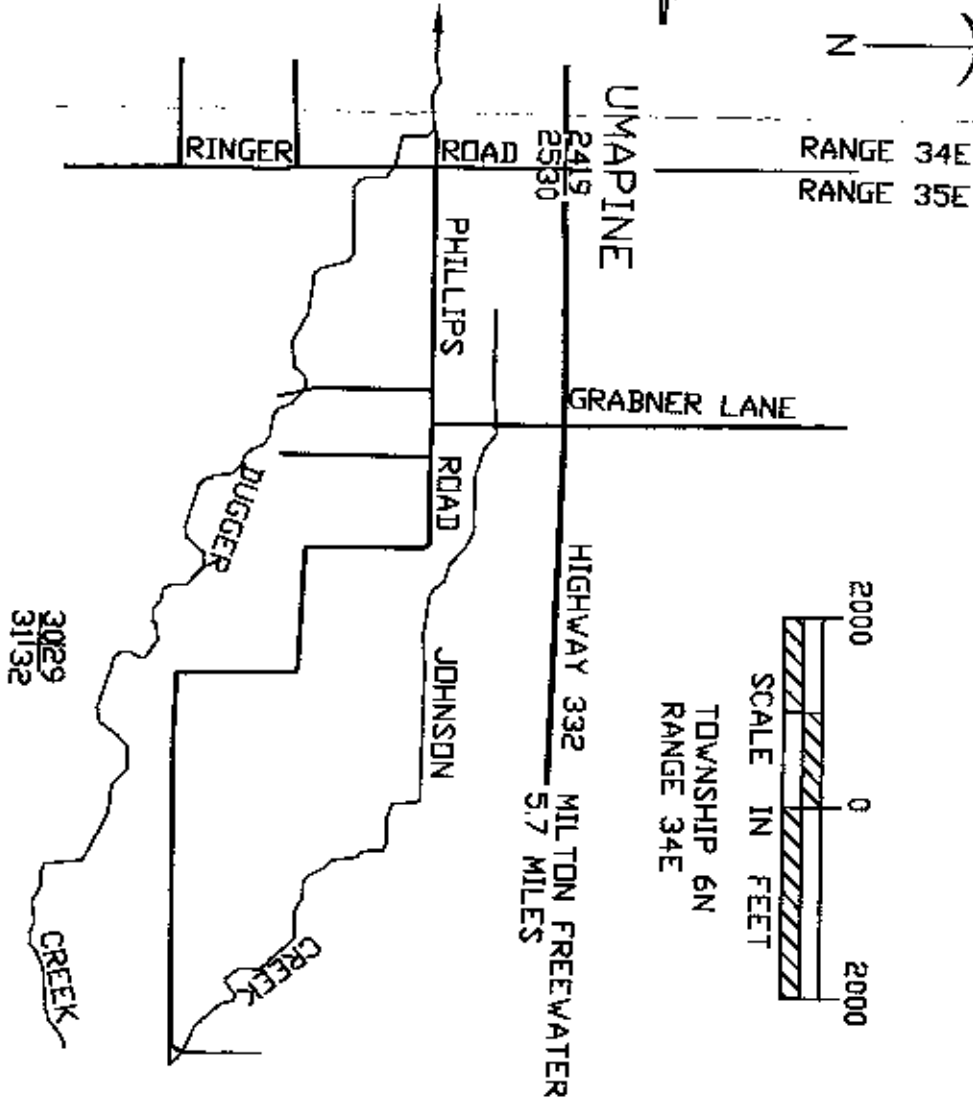
SECTION AA



CONSTRUCTED POND



LOCATION MAP



WWBWC/HBDIC UMAPINE RECHARGE PROJECT
PROJECT SITE PLAN AND LOCATION MAP
UMATILLA COUNTY, OREGON

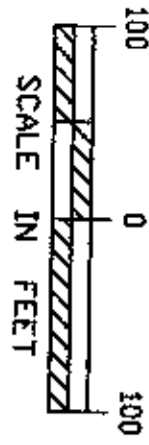
B H ENGINEERING

DESIGNED: B. HEWES	DATE: 5/12
CHECKED:	
APPROVED:	

EXPIRES 6/30/2013

CAD FILE
umarcgpln
SHEET 1
OF 4

0+00 CONNECT TO THE EXISTING RICHARTZ PIPELINE.
 0+00 = +/- 66+75 ON THE RICHARTZ PIPELINE.
 0+04-15' GEAR OPERATED BUTTERFLY VALVE.
 0+06-15' TEE WITH 3" CONTINUOUS ACTING AIR-VAC VALVE.
 0+20 INSTALL 15' FLOW METER IN 48" MANHOLE.



PIPE CENTER LINE

PC 5+00

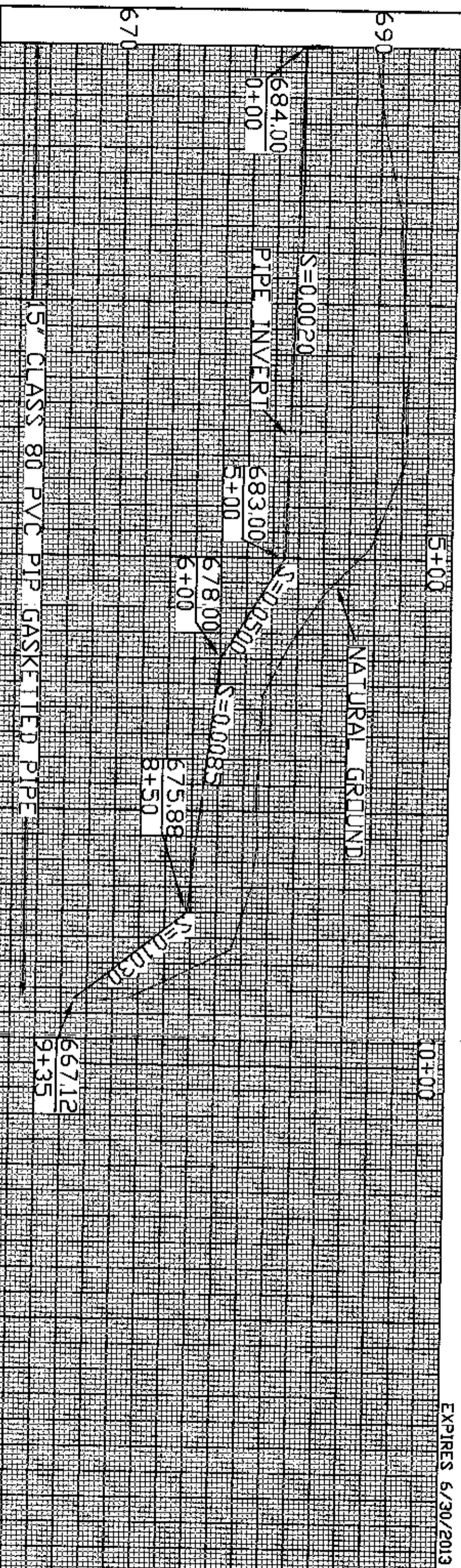
9+35 OUTLET STRUCTURE
 SEE DETAIL SHEET 3

CONSTRUCTED POND BOTTOM
 ELEVATION 669 FEET

NOTES
 INSTALL PIPE ACCORDING TO NATURAL RESOURCES CONSERVATION SERVICE SPECIFICATION 430DD. CURVE RADIUS IS 1000 FEET. THE 48" MANHOLES NEAR THE PIPE ENTRANCE ARE TO EXTEND ABOVE THE GROUND SURFACE AT LEAST 18" TO ALLOW THEM TO BE SEEN IN THE CROP.



EXPIRES 6/30/2013



Standard Notes, 10/1/2012 10:46 AM - mrcgpp

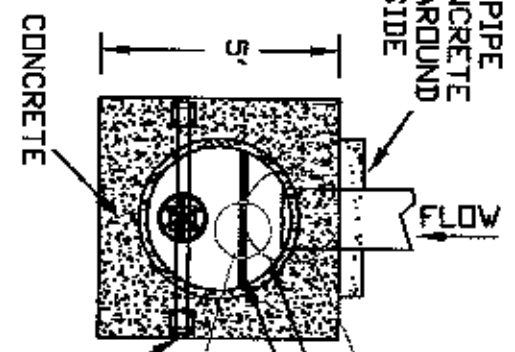
WWBWC/HBDIC UMAPINE RECHARGE PROJECT
 SUPPLY PIPE PLAN & PROFILE
 UMATILLA COUNTY, OREGON

DATE	
DESIGNED <u>B. HEWES</u>	<u>5/12</u>
PLOTTED	
APPROVED	

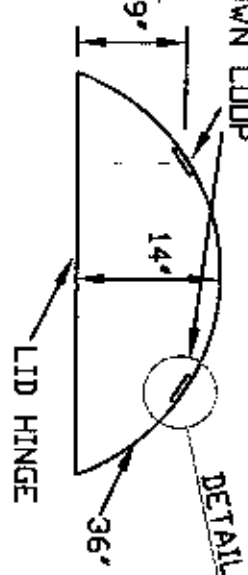
CAD FILE
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 SHEET 2
 OF 4

PLAN VIEW

15" PVC PIPE WITH CONCRETE COLLAR AROUND THE OUTSIDE



LID HOLD DOWN LOOP
LID HINGE



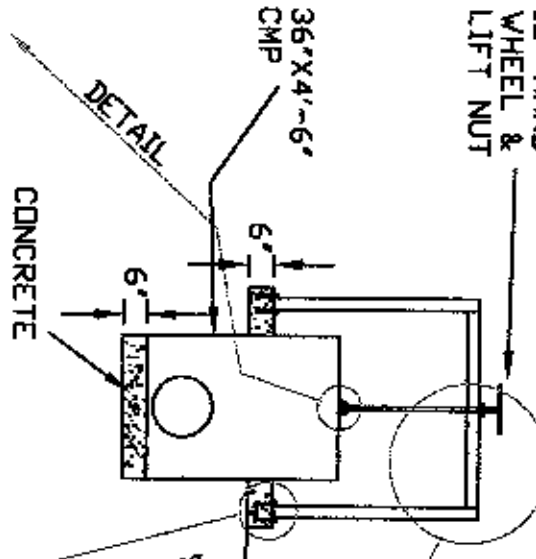
LOOP DETAIL
WELD TO THE INSIDE OF THE CMP WITH THE INSIDE OF THE LOOP 1" ABOVE THE TOP OF THE CMP



HINGE DETAIL
OPEN 3/4" X 33" ROD 1" X 6" PIPE 4 NEEDED

12" HAND WHEEL & LIFT NUT

ELEVATION VIEW



LID LIFT DETAIL

36" X 4" X 6" CMP
1/2" DIA. ACME THREAD ROD
1/4" X 2" X 2" W/ 5/8" HOLE 2 NEEDED
1/4" X 6" X 6" LID PLATE
WELD

BASE DETAIL

5" ANCHOR BOLT 4 NEEDED
1/4" X 3" X 3" X 48" ANGLE WELD TO PLATE
1/4" X 6" X 6" LID PLATE

SUPPORT DETAIL

1/4" X 3" X 3" X 48" ANGLE
1/4" X 3" X 3" X 54.5" WELD ON TOP OF THE VERTICAL ANGLE CLIP TO FIT
1/2" DIA. LIFT COLLAR HOLE IN WELD TO ANGLE
27.5" DIMENSION

NOTES
AT THE ESTIMATED DESIGN FLOW THE LID OPENING SHOULD BE ABOUT 6". USE 4000 PSI STRENGTH CONCRETE, NEED 0.5 CU. YD. REINFORCE THE UPPER SLAB WITH A #4 BAR LOCATED 3" FROM THE OUTER EDGE, NEED 4-4'-6" BARS.
LID FOR THE OUTLET TO BE FABRICATED OUT OF 3/16" STEEL AND BE 40" IN DIAMETER. USE 1" PIPE PIECES THROUGH THE LOOPS ON THE CMP TO TIGHTLY HOLD THE LID DOWN.



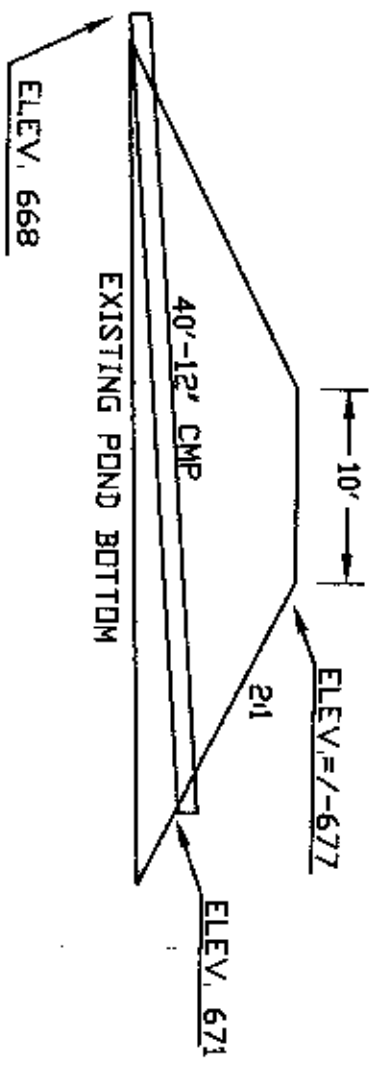
WWBWC/HBDIC UMAPINE RECHARGE PROJECT
MISCELLANEOUS DETAILS
UMATILLA COUNTY, OREGON
B H ENGINEERING

DATE	5/12
DESIGNED	B. HEWES
CHECKED	
APPROVED	

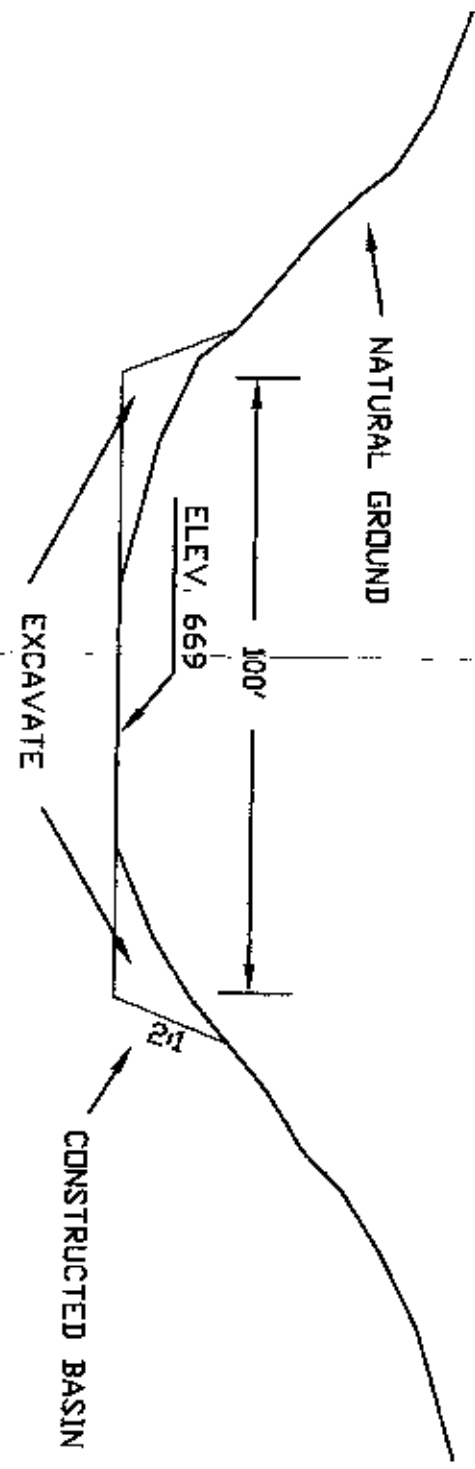
EXPIRES 6/30/2013

CAD FILE umarcgout
SHEET 3 OF 4

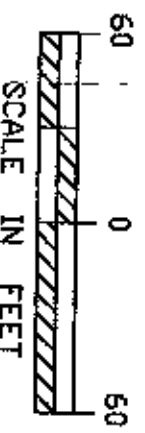
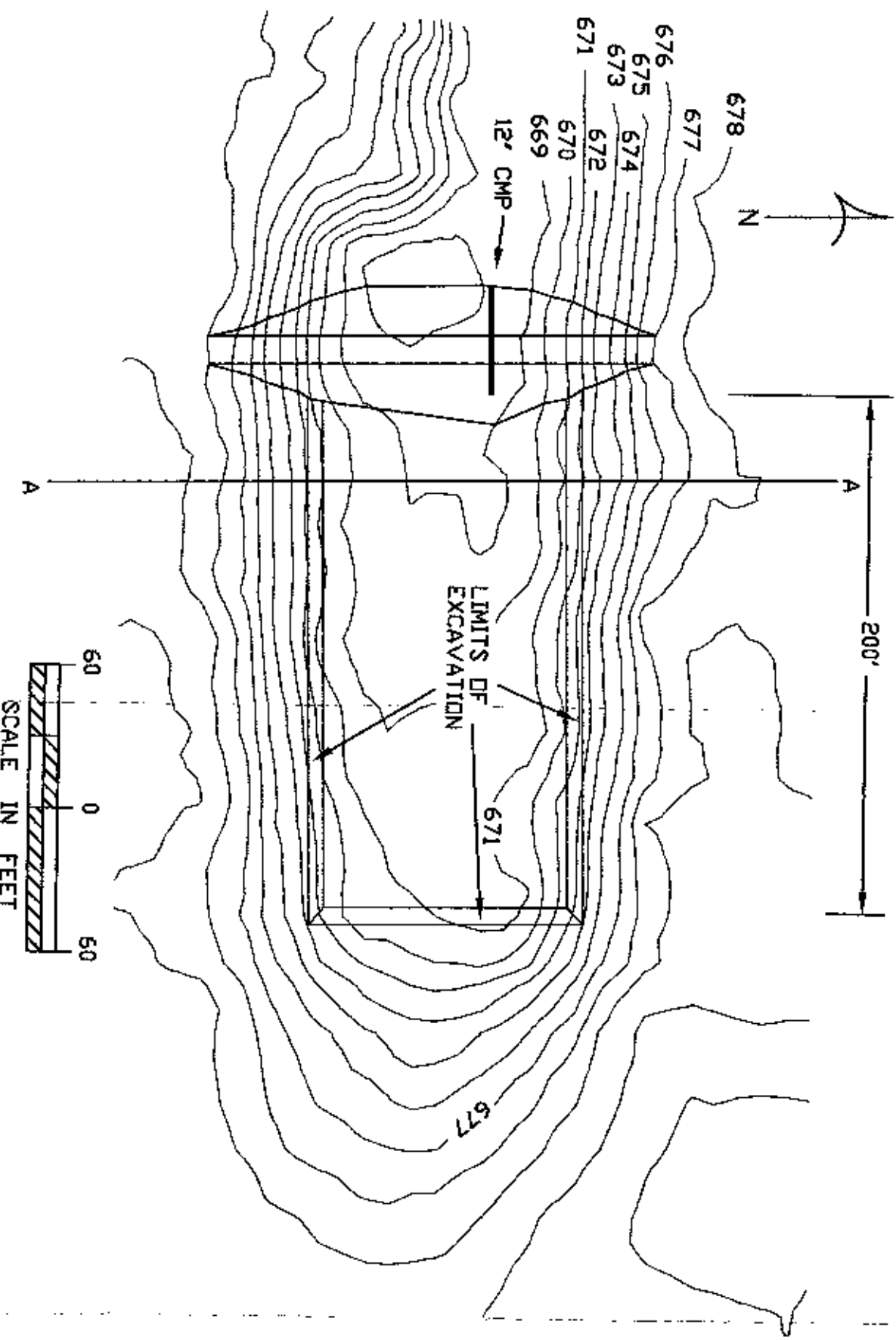
EMBANKMENT CROSS SECTION



SECTION AA



NOTES
 ESTIMATED EXCAVATION VOLUME ABOUT 900 CU. YD.
 CONSOLIDATE THE EMBANKMENT FILL USING A VIBRATING ROLLER COMPACTOR. USE AT LEAST TWO PASSES OVER 1" THICK, LOOSE LAYERS.



Bernard Hewes, RES/19/2002 709 PA/overlapping

DESIGNED	B. HEWES	DATE	5/12
CHECKED			
APPROVED			

WWBWC/HBDIC UMAPINE RECHARGE PROJECT
 BASIN DETAILS
 UMATILLA COUNTY, OREGON
 B H ENGINEERING



EXPIRES 6/30/2013

CAD FILE
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 SHEET 4
 OF 4