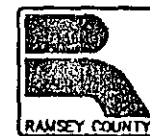


CSAH 96

REGIONAL TRAIL

MINNESOTA DEPARTMENT OF TRANSPORTATION



RAMSEY COUNTY
Department of Public Works

CSAH 96 REGIONAL TRAIL

CONSTRUCTION PLAN FOR PATHWAY (GRADING, AGGREGATE BASE & WALK SURFACING)

LOCATED ON: CSAH 96 BETWEEN 259.9 m W. of LEXINGTON AVE. AND 17.8 m W. of MACKUBIN ST. (Geographic Description)

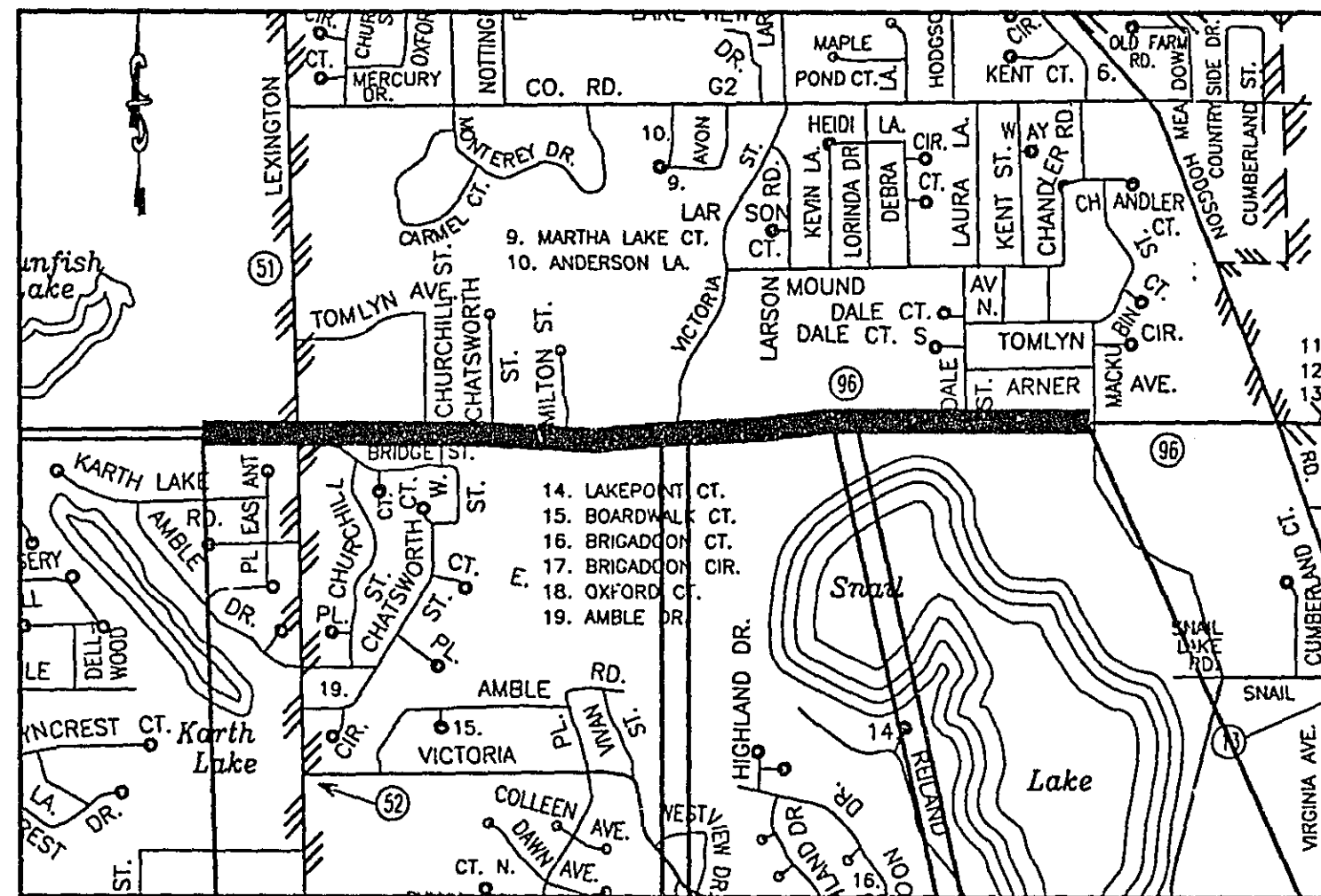
LEGAL DESCRIPTION: FROM A POINT 11.85 m SOUTH OF EAST BOUND C.S.A.H. 96 AND 259.9 m WEST OF CENTERLINE LEXINGTON AVE. TO A POINT 13.05 m SOUTH OF EAST BOUND C.S.A.H. 96 AND 17.80 m WEST OF MACKUBIN ST. LOCATED WITHIN THE NORTHEAST QUARTER OF SECTION 23, NORTH HALF OF SECTION 23, NORTHWEST QUARTER OF SECTION 24, ALL LOCATED IN TOWNSHIP 30, RANGE 23, RAMSEY COUNTY, MINNESOTA

STATE PROJ. NO. 91-090-04

GROSS-LENGTH 2,202.783 METERS 2.203 KILOMETERS
BRIDGE-LENGTH 0 METERS 0 KILOMETERS
EXCEPTIONS-LENGTH 119.975 METERS 0.120 KILOMETERS
NET-LENGTH 2,082.808 METERS 2.083 KILOMETERS

LEGEND

- EXISTING GATE VALVE
- EXISTING HYDRANT
- EXISTING CURB BOX
- EXISTING MANHOLE FOR STORM AND SANITARY SEWER
- EXISTING CATCH BASIN
- EXISTING POWER POLE
- EXISTING SANITARY SEWER
- EXISTING STORM SEWER
- EXISTING WATERMAIN
- EXISTING CURB AND GUTTER
- EXISTING UNDERGROUND GAS MAIN
- EXISTING UNDERGROUND TELEPHONE LINE
- EXISTING UNDERGROUND POWER
- EXISTING OVERHEAD POWER
- EXISTING FENCE
- EXISTING TREE
- EXISTING TREE LINE
- EXISTING STREET SIGN
- EXISTING CONTOUR
- PROPOSED CONTOUR
- PROPOSED REDUCER
- PROPOSED TEE
- PROPOSED GATE VALVE
- PROPOSED HYDRANT
- PROPOSED MANHOLE FOR STORM AND SANITARY SEWER
- PROPOSED CATCH BASIN
- PROPOSED WATERMAIN
- PROPOSED SANITARY SEWER
- PROPOSED STORM SEWER
- PROPOSED CURB AND GUTTER



BEGIN S.P. 91-090-04
STA. 3+262.15

BEGIN EXCEPTION
STA. 4+426.994

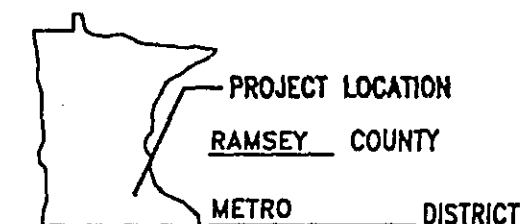
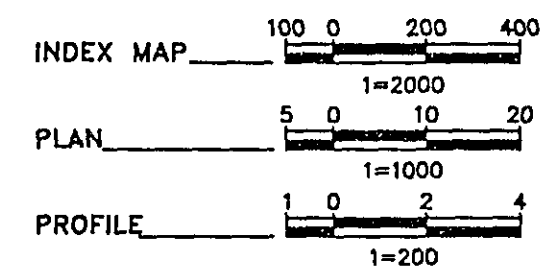
END EXCEPTION
STA. 4+487.655

END S.P. 91-090-04
STA. 5+464.933

PATHWAY DESIGN DATA:

S.P. 91-090-04
C.S.A.H. 96 REGIONAL TRAIL
DESIGN SPEED 30 km/h
STOPPING DISTANCE BASED ON:
1400 mm HEIGHT OF EYE
0.0 mm HEIGHT OF OBJECT

SCALES IN METERS



MINN. PROJ. NO. TEA1300(027)
MINN. PROJ. NO.

GOVERNING SPECIFICATIONS AS AMENDED

THE 1995 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION". ALL TRAFFIC CONTROL SIGNING AND DEVICES SHALL CONFORM TO THE MUTCD, INCLUDING THE FIELD MANUAL FOR TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS DATED APRIL 1995.

INDEX

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	TYPICAL SECTION, DETAILS, STD. PLATES
3-10	PLAN AND PROFILE
11-12	CROSS SECTIONS
2A	PIPE RAILING DETAILS

THIS PLAN SET CONTAINS 13 SHEETS



BRW, INC.
Thresher Square, 798 Third Street So.
Minneapolis, MN 55415, Phone 612/370-0700, Fax 612/370-1370
I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

BRW, INC.
DATE May 2, 1997 REG. NO. 22814
ENGINEER Bryan S. Brown

APPROVED [Signature] 6.2.97
CITY OF ARDEN HILLS

APPROVED [Signature] 05/27/97
CITY OF SHOREVIEW

Recommended For Approval [Signature] 6/9/97
RAMSEY COUNTY PROJECT MANAGER

APPROVED [Signature] 6/10/97
RAMSEY COUNTY ENGINEER

Recommended For Approval [Signature] 6/17/97
METRO-ASSISTANT DIVISION ENGINEER-STATE AID

APPROVED FOR STATE AID DIVISION [Signature] 5-12-97
STATE AID ENGINEER

I HEREBY CERTIFY THAT THE FINAL FIELD REVISIONS, IF ANY, OF THIS PLAN WERE MADE BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

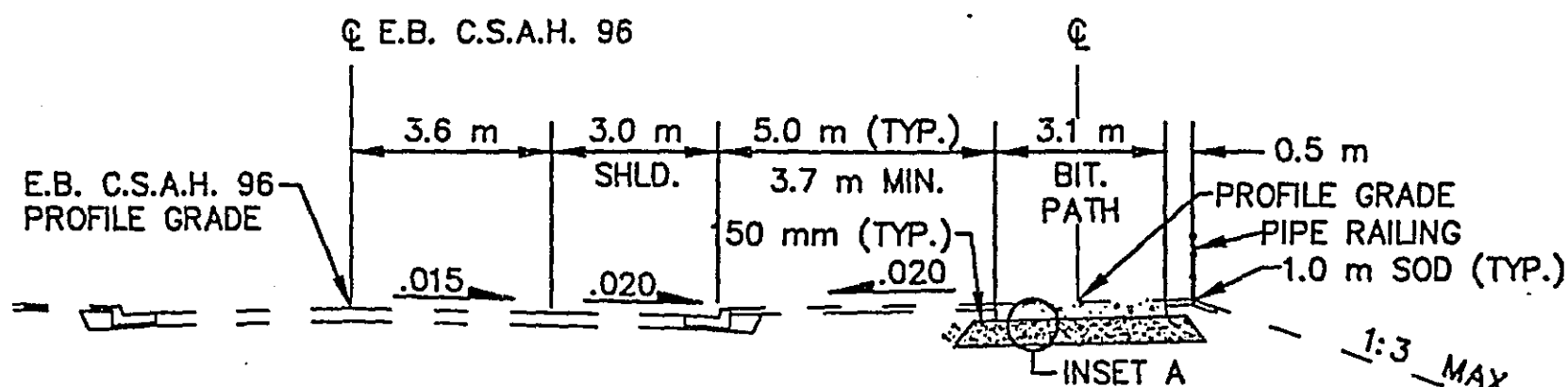
DATE 28-163 REG. NO. 28-163

DATE	SHEET NO.	APPROVED BY

ALL QUANTITIES AND DIMENSIONS ON THIS PLAN ARE IN METRIC UNITS.

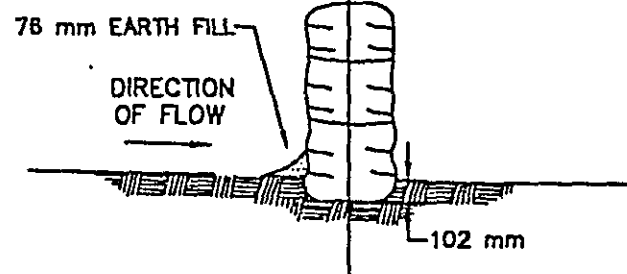
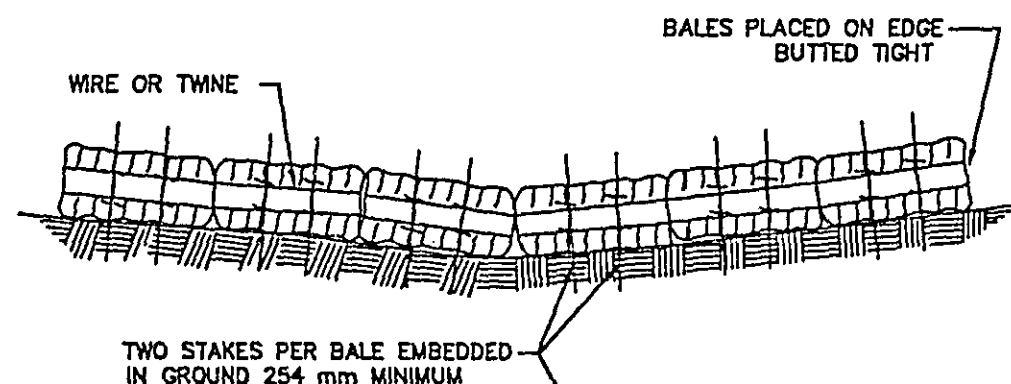
STATE PROJ. NO. S.P. 91-090-04 SHEET NO. 1 OF 12 SHEETS

© C.S.A.H. 96



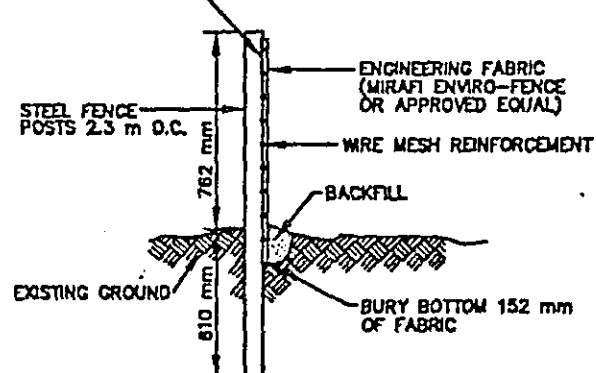
C.S.A.H. 96

STA. 3+262.150 TO STA. 4+426.994
STA. 4+487.655 TO STA. 4+495.692
STA. 4+799.650 TO STA. 5+464.933



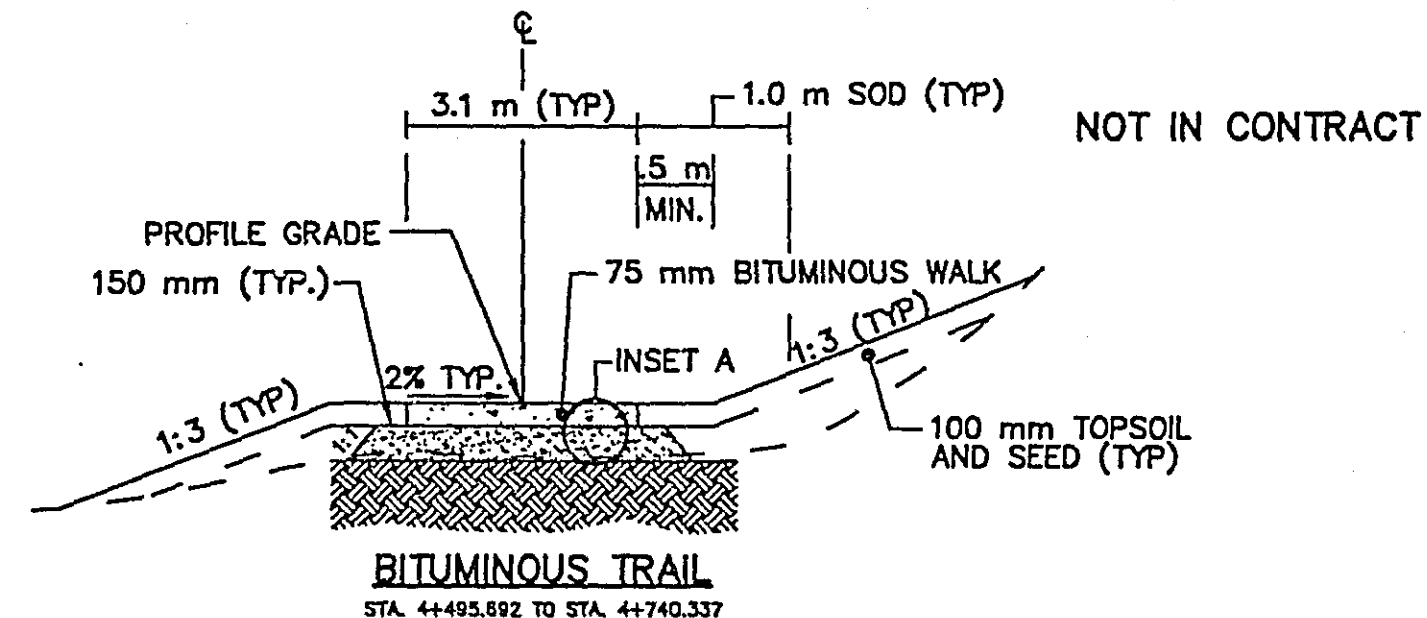
HAY BALES

OVERLAP GEOTEXTILE
FABRIC 152 mm AND FASTEN



NOTE:
PAID FOR AS SILT FENCE-HEAVY DUTY
CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF ALL
EROSION CONTROL MATERIALS FOLLOWING TURF ESTABLISHMENT

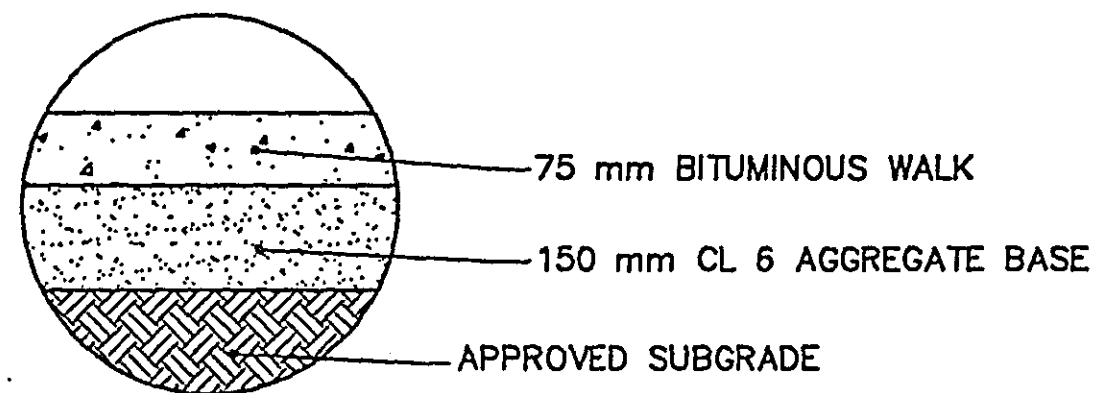
EROSION CONTROL FENCE



NOT IN CONTRACT

BITUMINOUS TRAIL

STA. 4+495.892 TO STA. 4+740.337



INSET A

NOTE:
AGGREGATE BASE CLASS 6 QUANTITY FOR
BITUMINOUS WALK WILL BE PAID UNDER
THE AGGREGATE BASE CLASS 8 BID ITEM.

STANDARD DETAIL PLATES

THE FOLLOWING STANDARD PLATES, APPROVED BY THE DEPARTMENT OF TRANSPORTATION,
FEDERAL HIGHWAY ADMINISTRATION, SHALL APPLY ON THIS PROJECT.

PLATE NO.	DESCRIPTION
M8000	STANDARD BARRICADES

- NOTES:
1. PROVIDED FOR DITCH CHECKS, TO BE INSTALLED AS DIRECTED BY THE ENGINEER.
 2. TO BE INSTALLED IN ONE METER WIDTHS ADJACENT TO BITUMINOUS TRAIL.
 3. TO BE MAINTAINED THROUGHOUT CONTRACT.
 4. COMMON EXCAVATION QUANTITIES ARE BASED ON A UNIFORM CUT AREA OF .883 SQUARE METERS.

STATEMENT OF ESTIMATED QUANTITIES						
C.S.A.H. 96 REGIONAL TRAIL						
S.P. 91-090-04						
NOTE NO.	MNDOT SPEC. NO.	ITEM DESCRIPTION	UNIT	TOTAL PROJECT QUANTITIES	S.P. PART. ITEMS	S.P. STORM SEWER ITEMS
	2021.501	MOBILIZATION	Lump Sum	1.00	1.00	
4	2105.501	COMMON EXCAVATION	m3	(P) 1539.00	1539.00	
	2211.503	AGGREGATE BASE (CV), CLASS 6	m3	(P) 929.00	929.00	
	2521.511	75mm BITUMINOUS WALK	m2	5438.00	5438.00	
	0563.601	TRAFFIC CONTROL	Lump Sum	1.00	1.00	
	2402.585	PIPE RAILING	m	775.00	775.00	
1	2573.501	BALE CHECK	Each	20.00	20.00	
3	2573.502	SILT FENCE, TYPE HEAVY DUTY	m	150.00	150.00	
2	2575.505	SODDING TYPE LAWN	m2	4200.00	4200.00	

REV. NO.	BY	DATE	REVISIONS DESCRIPTION
1	RJG	5-12-97	MNDOT STATE AID COMMENTS
2	RJG	7-18-97	AS PER STATE AID COMMENTS

DESIGN FILE:
35182-001-9701
DRAWN BY:
RJG,MLS
DESIGN BY:
GSB
CHECKED BY:
JGH
DWG. NAME:
96PTHDT1
DATE:
APRIL 21, 1997

XREF DRAWINGS



B R W INC.
Thresher Square, 700 Third Street So.
Minneapolis, MN 55418, Phone 612/370-0700, Fax 612/370-1878

I HEREBY CERTIFY THAT THIS PLAN,
SPECIFICATION OR REPORT WAS PREPARED BY ME
OR UNDER MY DIRECT SUPERVISION AND THAT I AM
A DULY REGISTERED PROFESSIONAL ENGINEER UNDER
THE STATE OF MINN. STATUTES SECTION 328.02 TO
328.16.

DATE: 5/2/97 WNN REG. NO. 22814



C.S.A.H. 96 REGIONAL TRAIL
TYPICAL SECTIONS
AND DETAILS



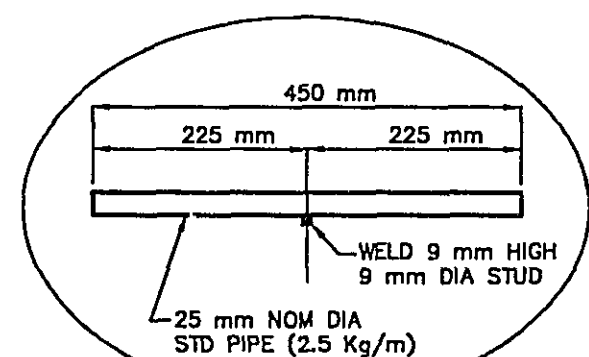
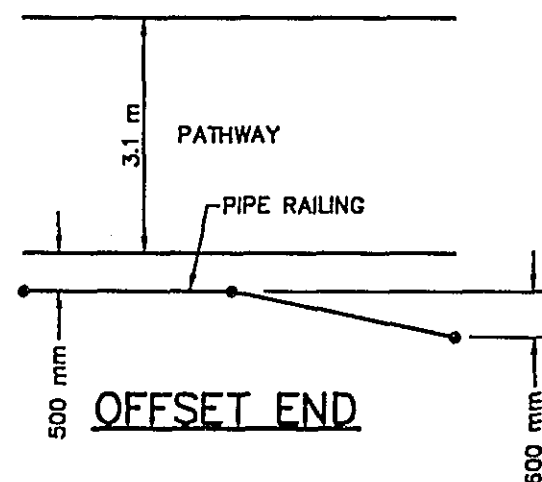
ALL QUANTITIES AND
DIMENSIONS ON
THIS PLAN ARE IN
METRIC UNITS.

CITY PROJECT
COUNTY PROJECT
S.P. 91-090-04
S.A.P.

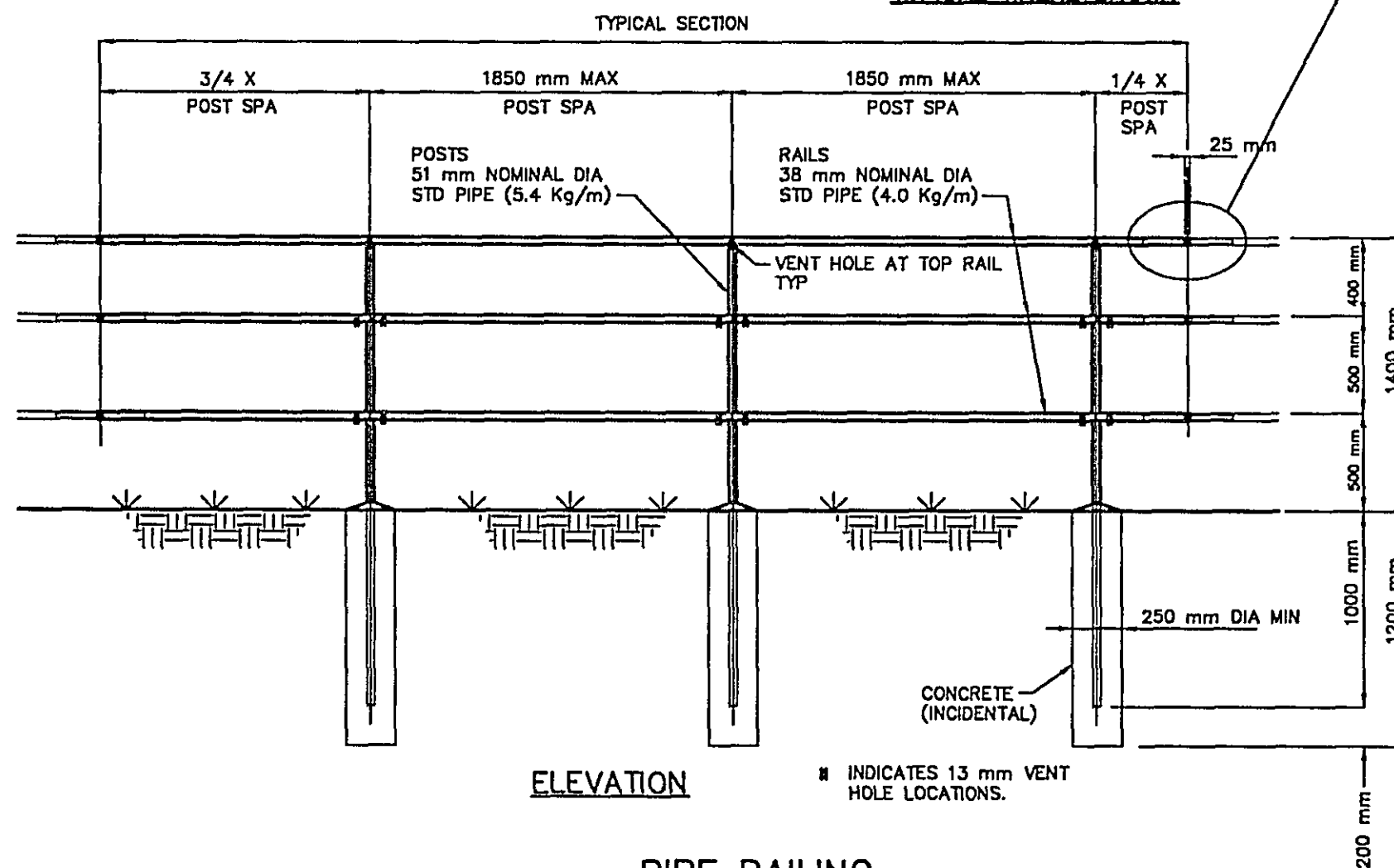
SHEET NO.

2

12



RAIL FIELD SPLICE
TYPICAL WHERE SHOWN



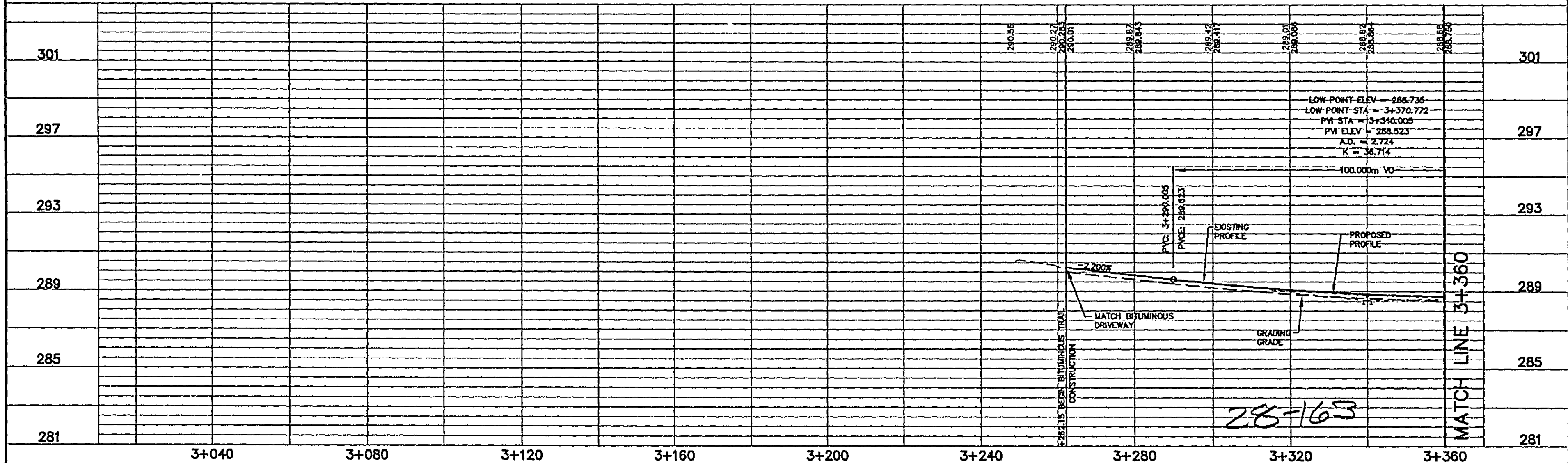
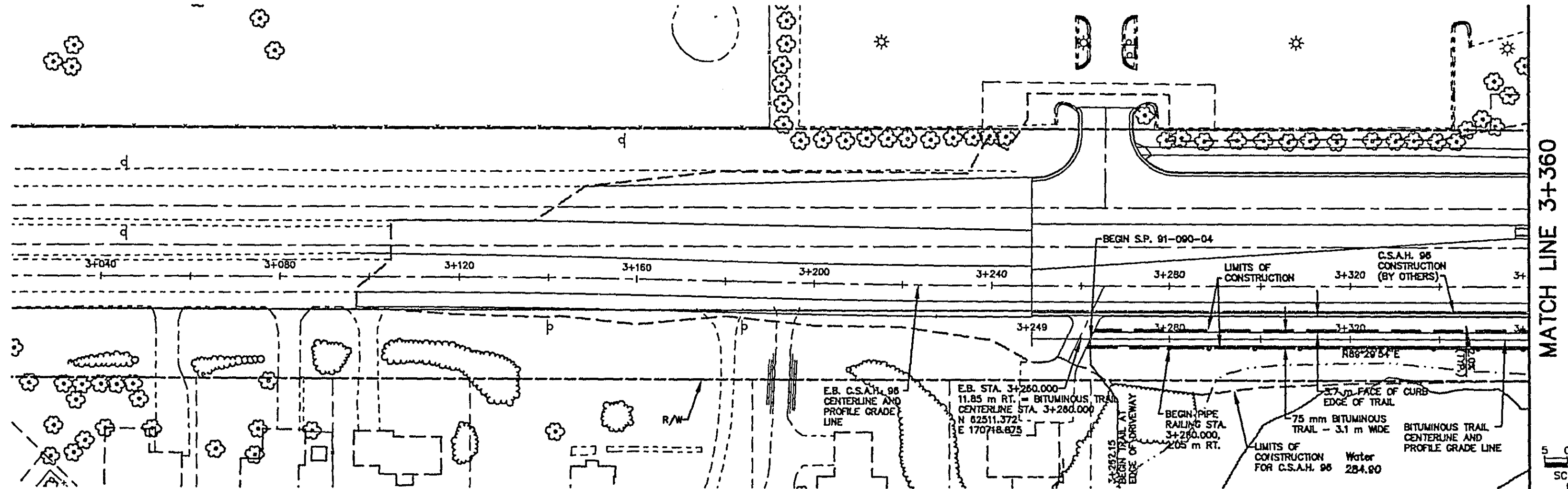
NOTE:

- ALL POSTS TO BE VERTICAL.
- RAILS TO FOLLOW GRADE OF TRAIL.
- RAIL SECTIONS TO SPAN A MINIMUM OF 3 POSTS.
- TOP RAIL SHALL JOIN END POST WITH A WELDED CAP. ALL JOINTS ARE TO BE WELDED.
- CHANGES IN ALIGNMENT OR SLOPE TO BE MADE AT POSTS.
- FABRICATION TO BE IN ACCORDANCE WITH MNDOT 2402 AND 2471.
- MATERIAL FOR PIPE SHALL CONFORM TO ASTM A53.
- GALVANIZE AFTER FABRICATION IN ACCORDANCE WITH ASTM A123.
- CONCRETE SHALL BE IN ACCORDANCE WITH MNDOT 2401, MIX 3A32. (INCIDENTAL)
- SEE TYPICAL SECTION FOR RAIL LOCATION & OFFSET FROM TRAIL.
- ALL ENDS TO BE OFFSET SEE DETAIL FOR END OFFSET.
- ALL DIMENSIONS IN MILLIMETERS UNLESS OTHERWISE NOTED.
- PAYMENT SHALL BE MADE UNDER 2402.585 "PIPE RAILING", BY THE METER AND SHALL INCLUDE ALL ITEMS SHOWN ON DETAIL.
- RAILING SHALL BE SHOP PAINTED RAL 6005 (DARK GREEN).

28-163

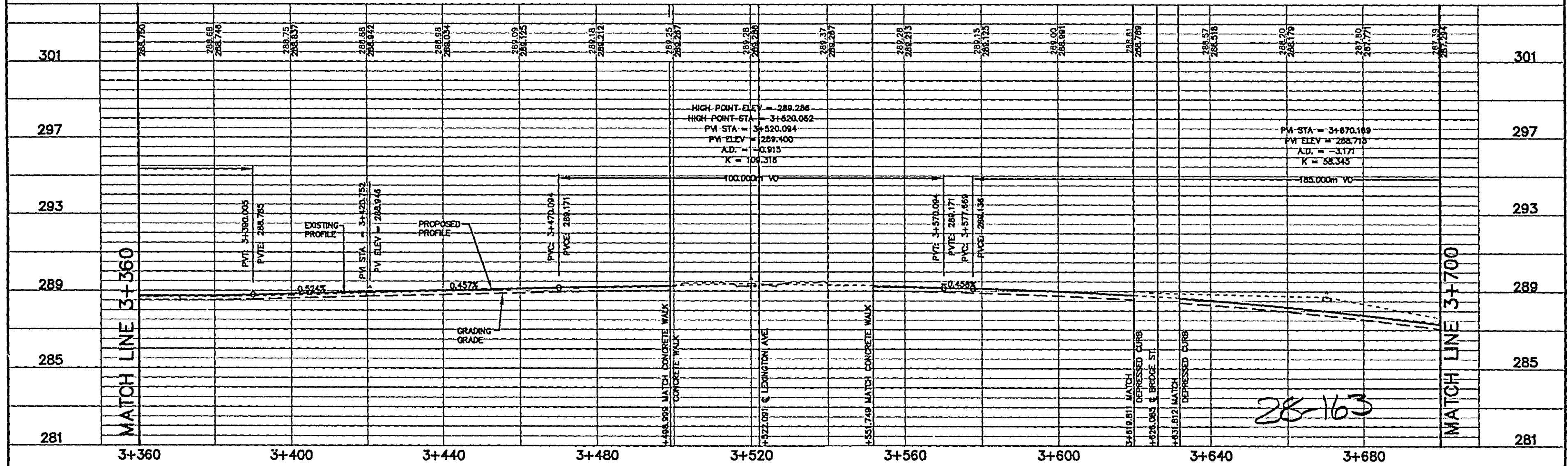
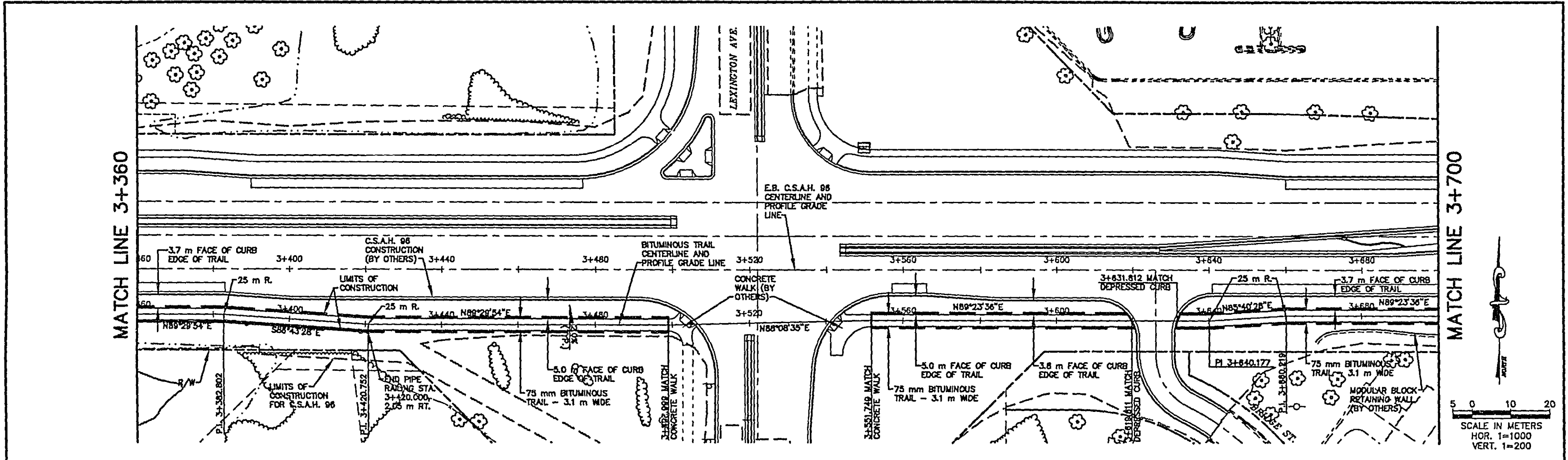
REV. NO.	BY	DATE	REVISIONS DESCRIPTION	DESIGN FILE:	XREF DRAWINGS	C.S.A.H. 96 REGIONAL TRAIL	CITY PROJECT	SHEET NO.
1	RJC	5-12-97	MNDOT STATE AID COMMENTS	35182-001-9701		PIPE RAILING DETAILS	COUNTY PROJECT	2A
2	RJC	7-18-97	AS PER STATE AID COMMENTS				S.P. 91-090-04	12
							S.A.P.	

PLOT DATE: Jul 28, 1997 1:33pm DISK FILE NAME: (13_c4) R:\TH96\3831\PATHWAY\PLAN-SHT\96THPP1.DWG



REV. NO.	BY	DATE	REVISIONS DESCRIPTION	DESIGN FILE:	XREF DRAWINGS	I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE STATE OF MINN. STATUTES SECTION 326.02 TO 326.16. DATE: 5/12/97 MINN. REG. NO. 22814	C.S.A.H. 98 REGIONAL TRAIL REGIONAL TRAIL PLAN AND PROFILE STA. 3+282.15 TO STA 3+380	CITY PROJECT COUNTY PROJECT S.P. 91-090-04 S.A.P.	SHEET NO. 3 12
1	RJG	5-12-97	MINN. STATE AID COMMENTS	35182-001-9701	TH96RVEG TH96RPTH 3831RESM 3831RROW 3831RPRD 3831RHYD 3831RETO 3831RETD 3831RBLD				
2	RJG	7-18-97	AS PER MINN. STATE AID COMMENTS	DRAWN BY: RJG, GSB CHKD. BY: JSH DATE: APRIL 21, 1997	DWG. NAME: 96THPP1				

PLOT DATE: Jul 28, 1997 2:08pm DISK FILE NAME: (13_c4) R:\TH96\3831\PATHWAY\PLAN-SHT\96THPP2.DWG



REV. NO.	BY	DATE	REVISIONS DESCRIPTION
1	RJG	7-18-97	AS PER MINN DOT STATE AID COMMENTS

DESIGN FILE:	35182-001-9701
DRAWN BY:	RJG
DESIGN BY:	RJG, GSB
CHECKED BY:	DWG. NAME:
DATE:	APRIL 21, 1997

XREF DRAWINGS
TH96RYEG TH96RPTH 3831RESM 3831RROW 3831RPRD 3831RHYD 3831RETO 3831RERO 3831RBLD

B R W
INC.
Thresher Square, 700 Third Street So.
Minneapolis, MN 55414, Phone 612/278-0700, Fax 612/278-1378

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE STATE OF MINN. STATUTES SECTION 326.02 TO 326.18.

Gregory J. Brown
DATE: 5/28/97 MINN. REG. NO. 22814

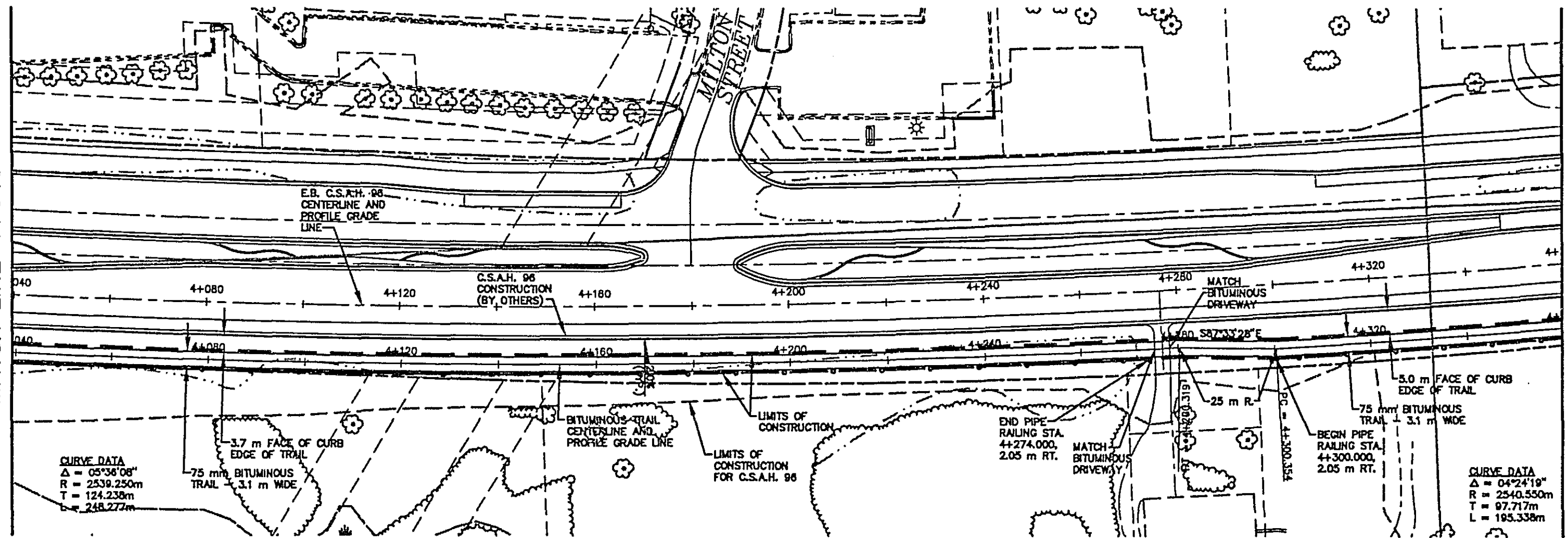
C.S.A.H. 98 REGIONAL TRAIL
REGIONAL TRAIL PLAN AND PROFILE
STA. 3+360 TO STA. 3+700

CITY PROJECT	COUNTY PROJECT	S.P.	S.A.P.
		91-090-04	

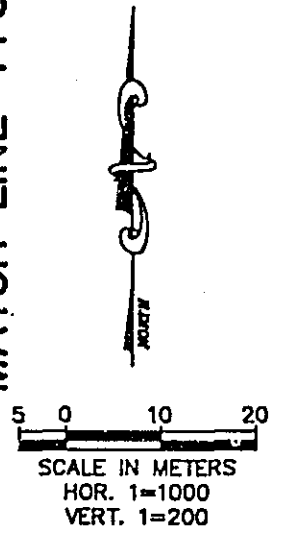
SHEET NO.	12
-----------	----

PLOT DATE: Jul 28, 1997 2:19pm DISK FILE NAME: (13_c4) R:\TH96\3831\PATHWAY\PLAN-SHT\96THPP4.DWG

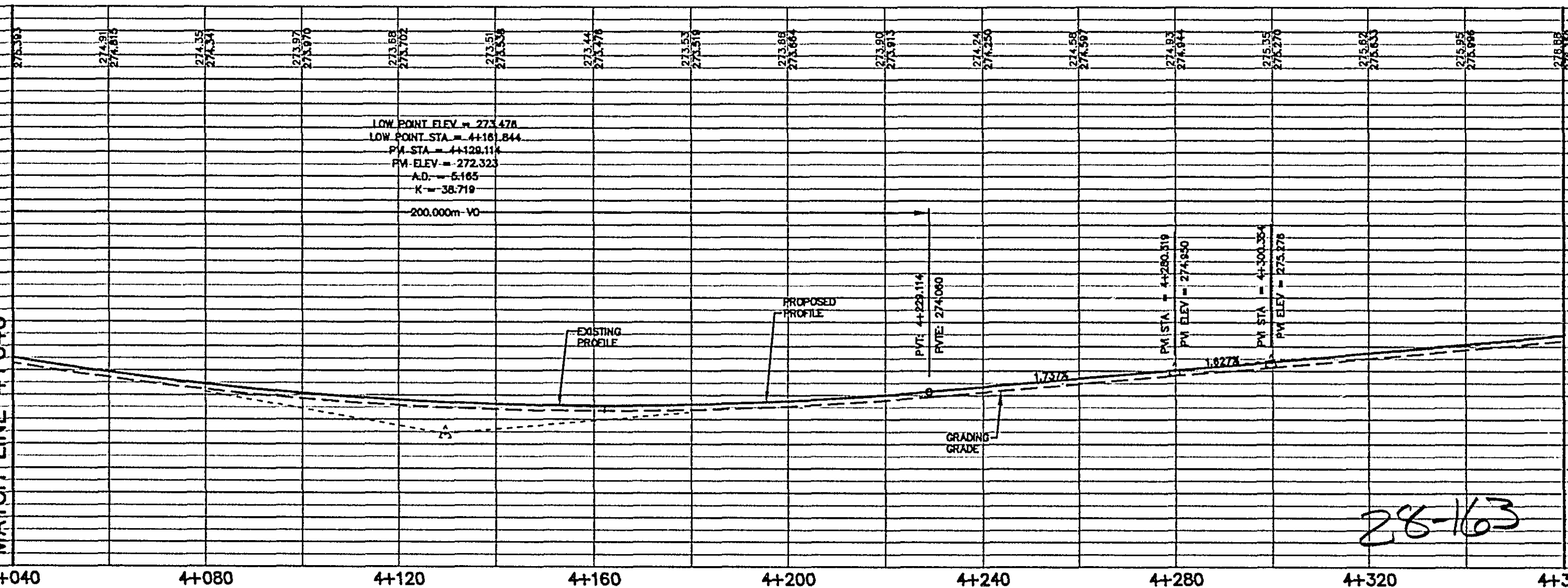
MATCH LINE 4+040



MATCH LINE 4+360



MATCH LINE 4+040



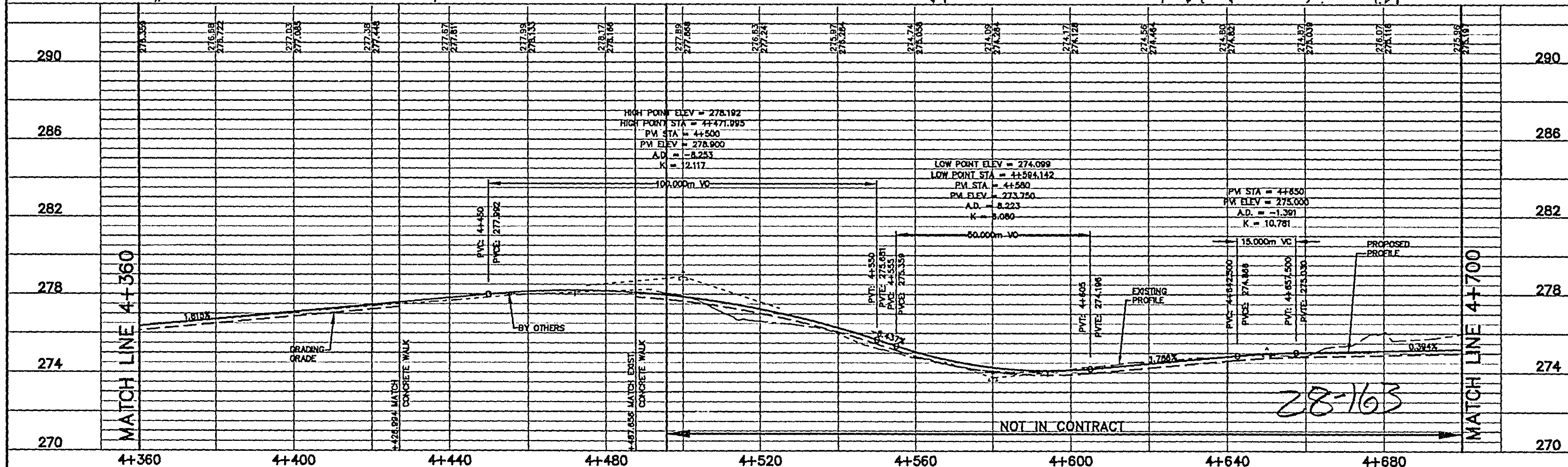
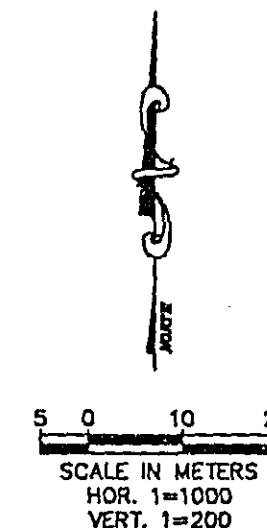
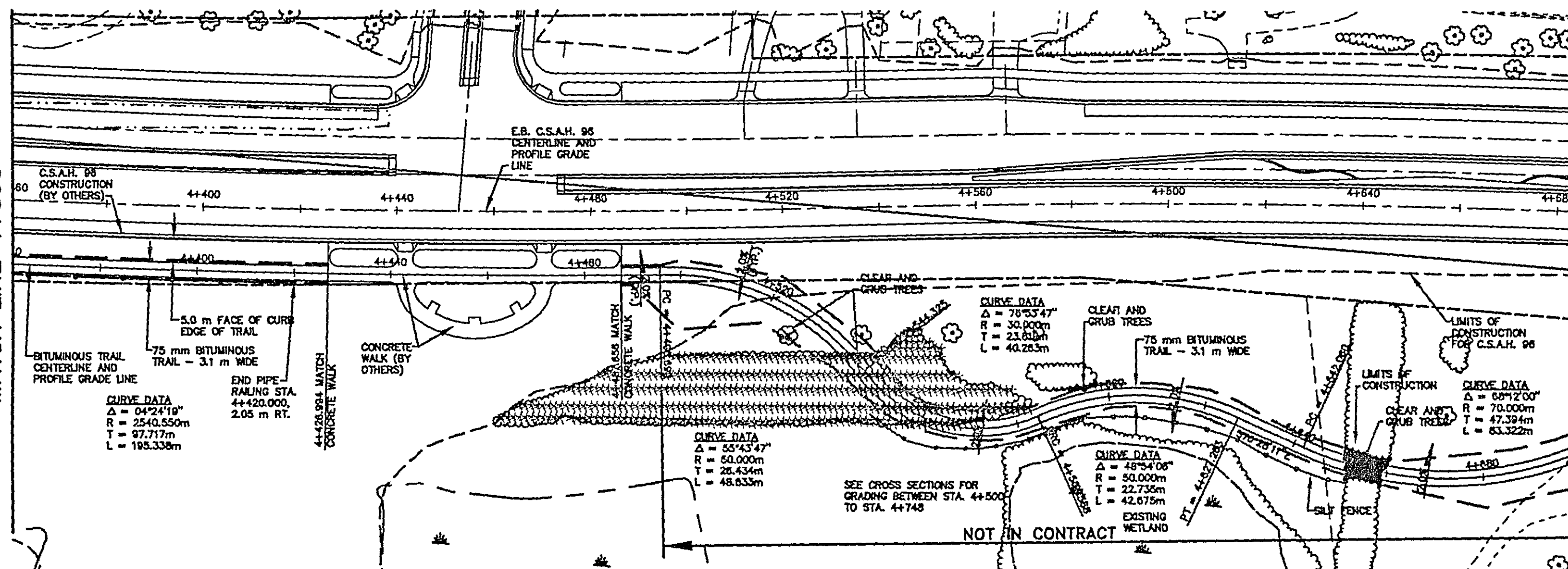
MATCH LINE 4+360

REV. NO.		BY	DATE	REVISIONS DESCRIPTION	DESIGN FILE: 35182-001-9701	XREF DRAWINGS		 H R W INC. Thresher Square, 700 Third Street So. Minneapolis, MN 55415, Phone 612/370-0700, Fax 612/370-1278	I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE STATE OF MINN. STATUTES SECTION 328.02 TO 328.16. DATE: 5/18/97 MINN. REG. NO. 22814	 C.S.A.H. 96 REGIONAL TRAIL REGIONAL TRAIL PLAN AND PROFILE STA. 4+040 TO STA 4+360	CITY PROJECT		SHEET NO. 6 12
1		RJG	7-18-97	AS PER MNDOT STATE AID COMMENTS	DRAWN BY: RJG	DESIGN BY: RJG,CSB	COUNTY PROJECT						
					CHKD. BY: JBH	DWG. NAME: 96PTHPP4	S.P.						
					DATE: APRIL 21, 1997		S.A.P.						

PLOT DATE: Jul 28, 1997 2:22pm DISK FILE NAME: (13_c4) R:\TH95\3831\PATHWAY\PLAN-SHT\96PTHPP5.DWG

MATCH LINE 4+360

MATCH LINE 4+700



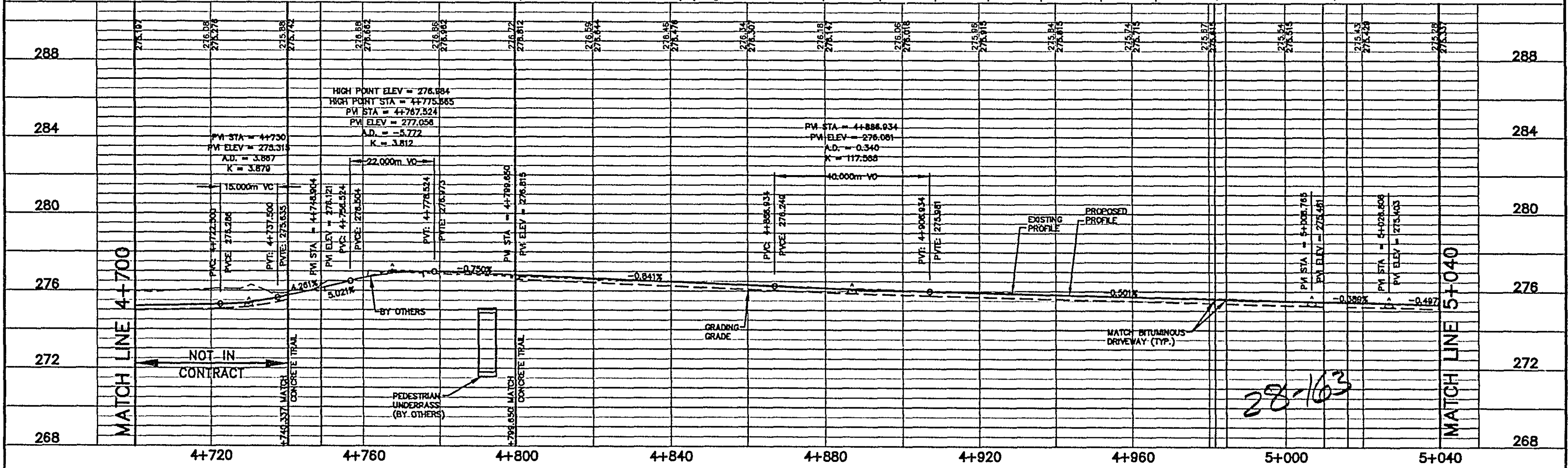
REV. NO.	BY	DATE	REVISIONS DESCRIPTION	DESIGN FILE:	XREF DRAWINGS	I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE STATE OF MINN. STATUTES SECTION 328.02 TO 328.18. DATE: 6/2/97 MINN. REG. NO. 22814	C.S.A.H. 95 REGIONAL TRAIL REGIONAL TRAIL PLAN AND PROFILE STA. 4+360 TO STA 4+700	CITY PROJECT COUNTY PROJECT S.P. 91-090-04 S.A.P.	SHEET NO. 7 12
1	RJC	7/18/97	AS PER STATE AID COMMENTS	351B2-001-9701	TH96RVEG TH96RPTH 3831RESM 3831RBLO 3831RROR 3831RPRD 3831RHYD 3831RITO 3831RERO				

DISK FILE NAME: (13_C4) R:\TH96\3831\PATHWAY\PLAN-SHT\96THPP6.DWGOT DATE: Jul 18, 1997 10:25am

MATCH LINE 4+700

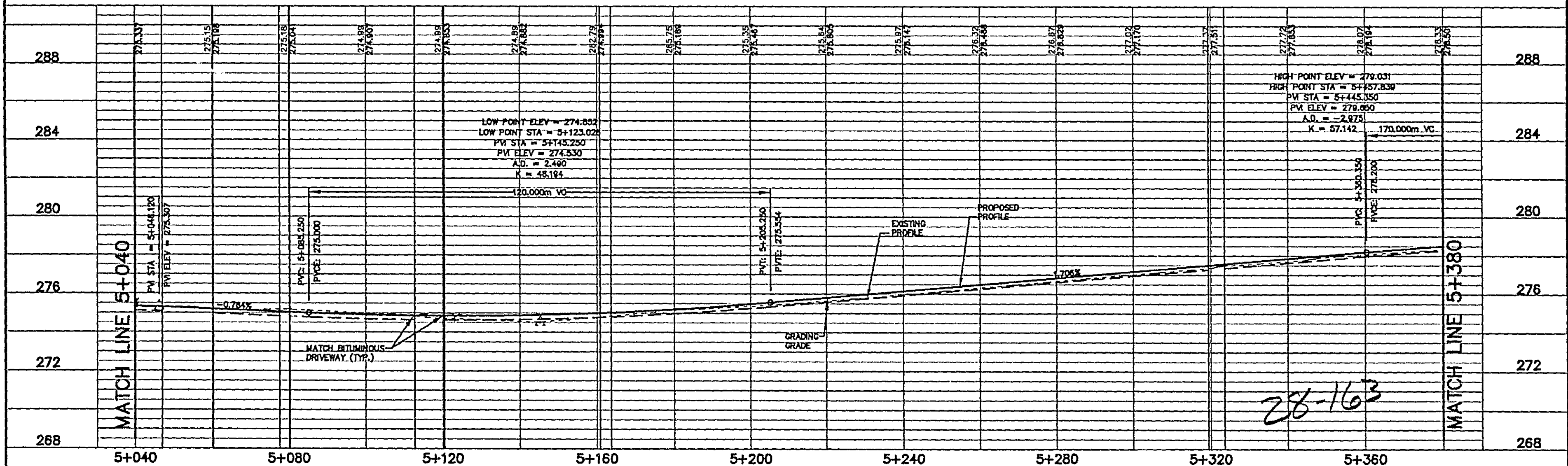
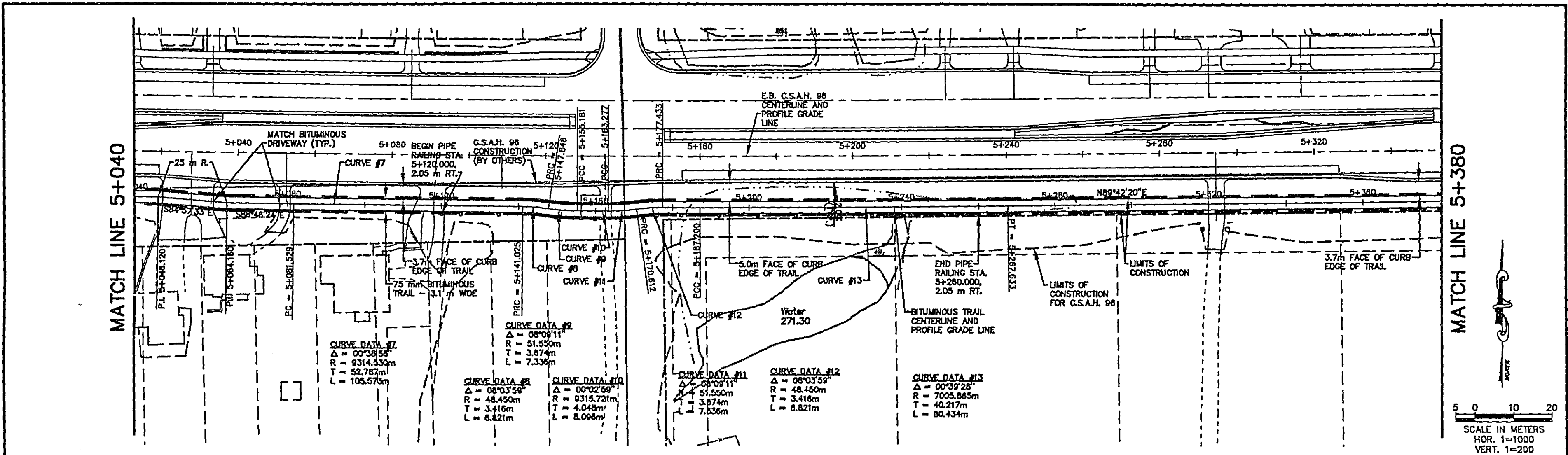
MATCH LINE 5+040

5 0 10 20
SCALE IN METERS
HOR. 1=1000
VERT. 1=200



REV. NO.		BY	DATE	REVISIONS DESCRIPTION	DESIGN FILE: 35182-001-9701	XREF DRAWINGS	B R W INC. Thresher Square, 700 Third Street So. Minneapolis, MN 55415, Phone 612/576-0700, Fax 612/576-1278		I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE STATE OF MINN. STATUTES SECTION 326.02 TO 326.16. <i>Gregory A. Brown</i> DATE: 5/27/97 MINN. REG. NO. 22814		C.S.A.H. 96 REGIONAL TRAIL REGIONAL TRAIL PLAN AND PROFILE STA. 4+700 TO STA 5+040		CITY PROJECT COUNTY PROJECT S.P. 91-090-04 S.A.P.		SHEET NO. 8 12	
1 RJC 7/16/97 AS PER STATE AID COMMENTS					DRAWN BY: RJC DESIGN BY: RJC.GSB CHKD. BY: JEH DWG. NAME: 96THPP6. DATE: APRIL 21, 1997		TH96RVEG TH96RPTH 3831RSD 3831RUPS 3831RBLD 3831RROW 3831RPRD 3831RHYD 3831RETO									

PLOT DATE: Jul 29, 1997 6:42am DISK FILE NAME: (13_c4) R:\TH96\3831\PATHWAY\PLAN-SH\96PTHPP7.DWG



REV. NO.	BY	DATE	REVISIONS DESCRIPTION
1	RJC	7-16-97	STATE AID COMMENTS

DESIGN FILE: 35182-001-9701	XREF DRAWINGS TH96RVEG TH96RPTH 3831RSHD 3831RROW 3831RPRD 3831RHYD 3831RETO 3831RERO
DRAWN BY: RJC	DESIGN BY: RJC
CHECKED BY: JBH	DWG. NAME: 96PTHPP7
DATE: APRIL 21, 1997	

B R W INC.
Thresher Square, 700 Third Street So.
Minneapolis, MN 55415, Phone 612/370-0700, Fax 612/370-1278

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE STATE OF MINN. STATUTES SECTION 328.02 TO 328.18.

Gary S. Bloom
DATE: 5/29/97 MINN. REG. NO. 22814

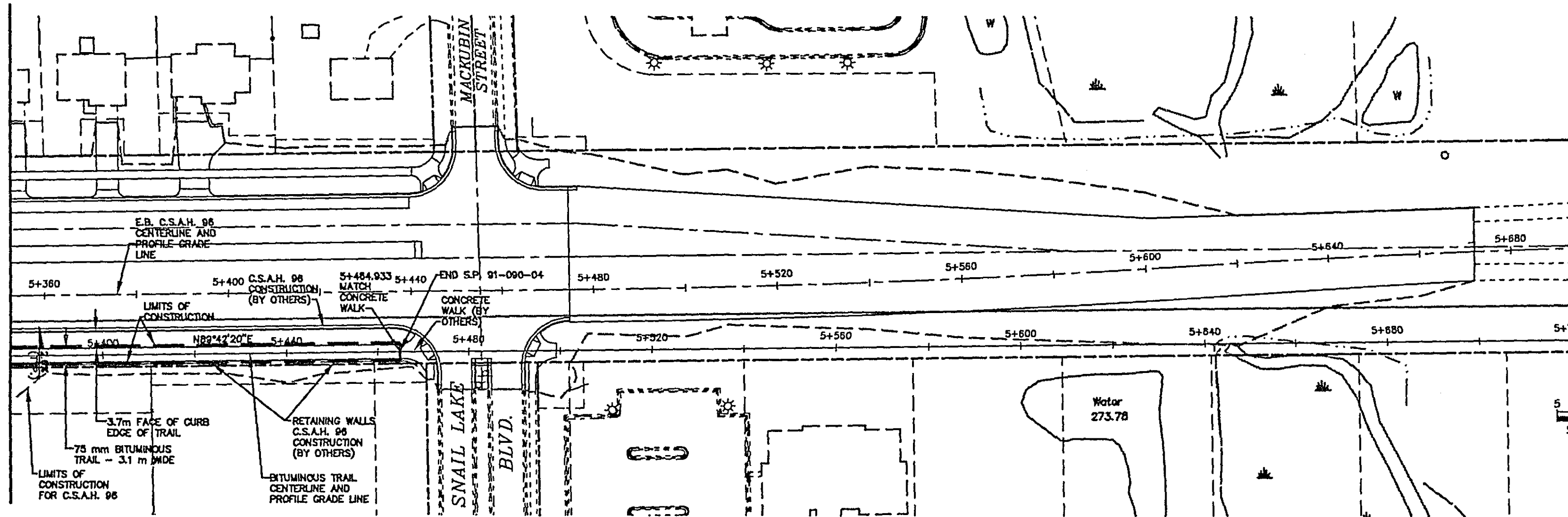
C.S.A.H. 96 REGIONAL TRAIL
REGIONAL TRAIL PLAN AND PROFILE
STA. 5+040 TO STA. 5+380

CITY PROJECT	S.P. 91-090-04	S.A.P.
COUNTY PROJECT		

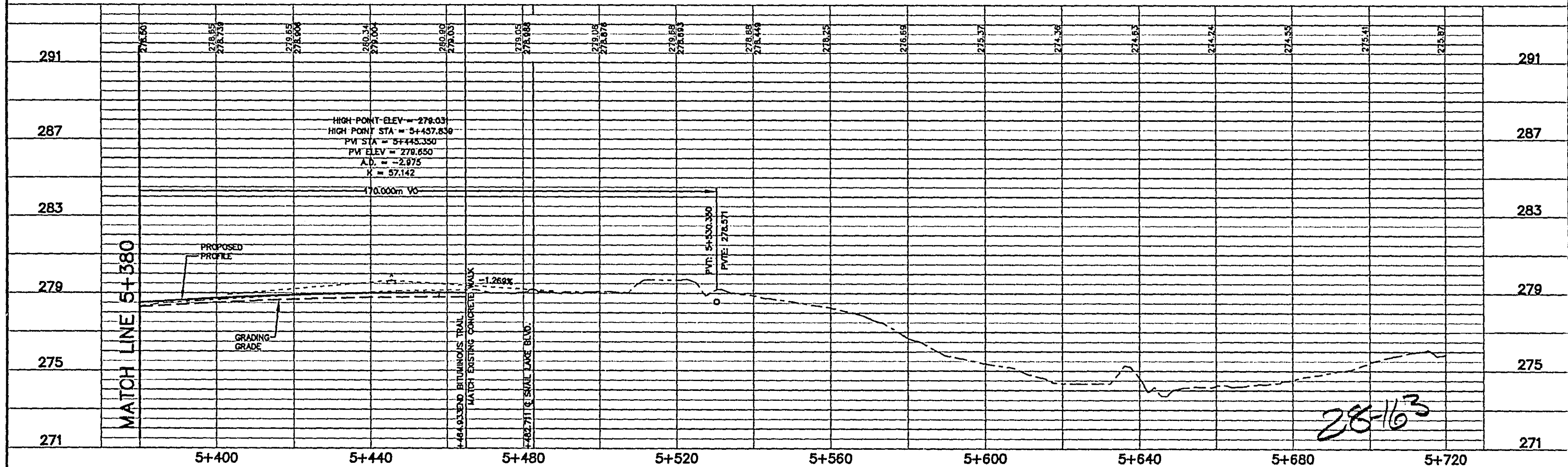
SHEET NO.
9
12

DISK FILE NAME: (13_c4) R:\TH96\3831\PATHWAY\PLAN-SH\96THPPB.DWGOT DATE: May 12, 1997 -1:40pm

MATCH LINE 5+380



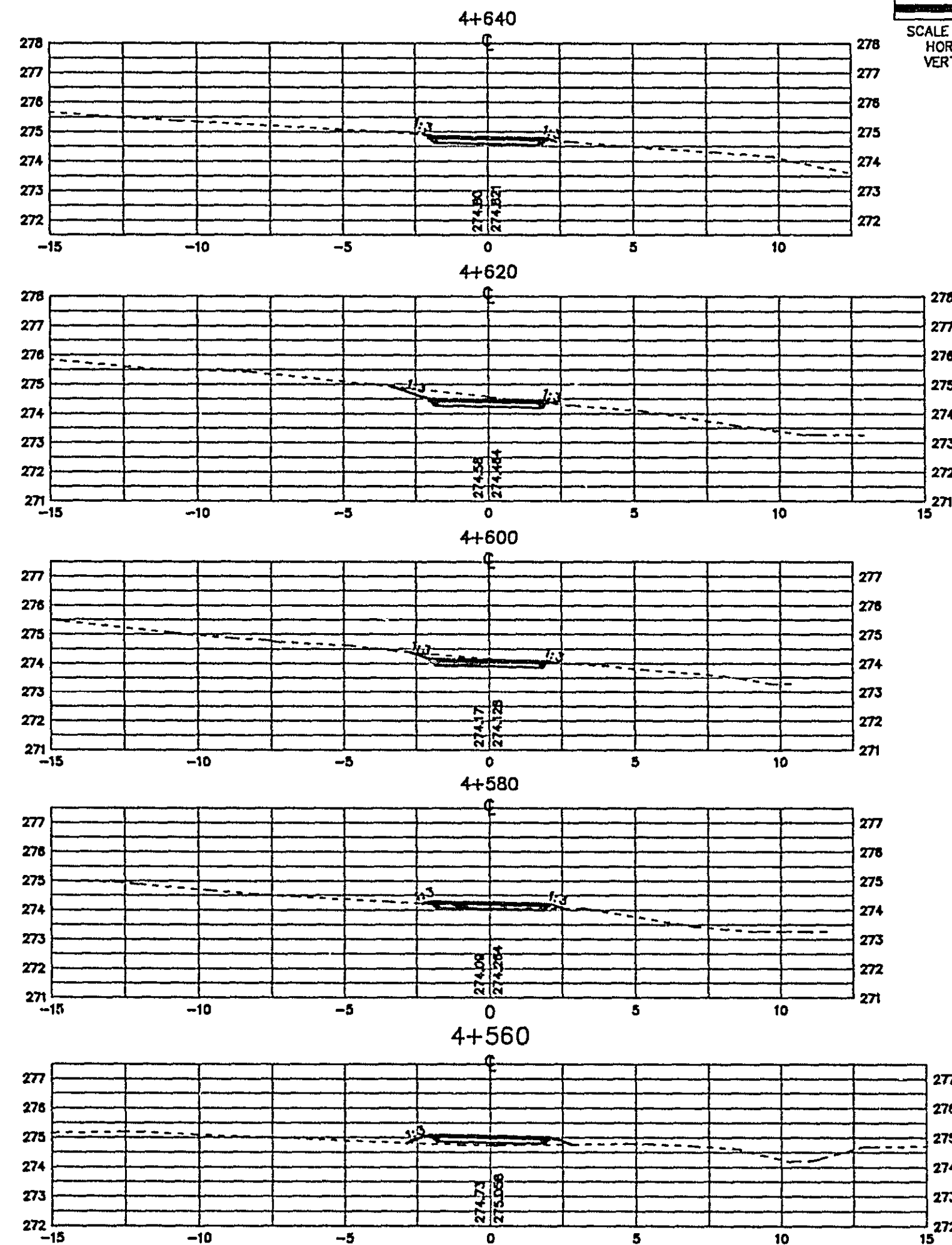
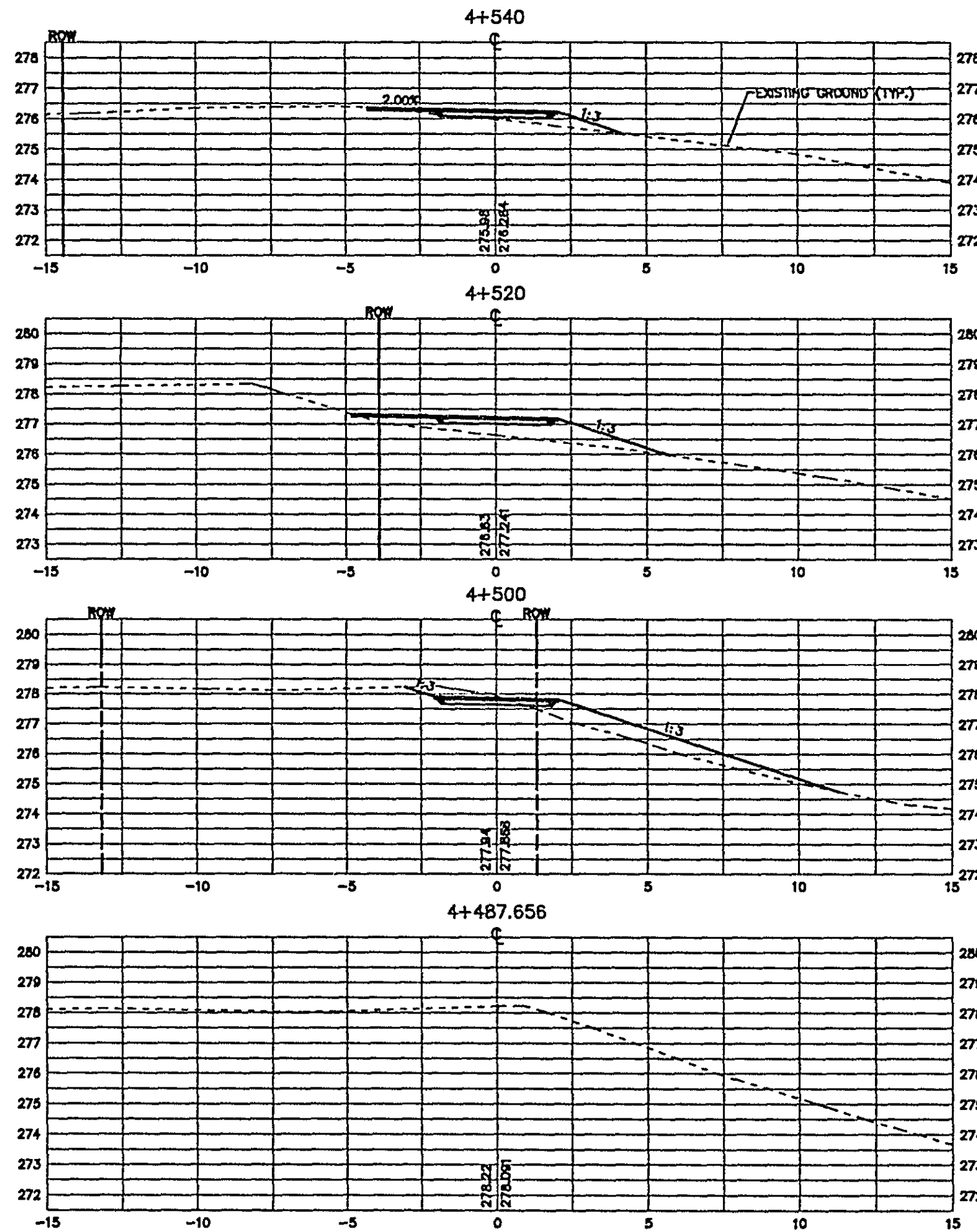
SCALE IN METERS
HOR. 1=1000
VERT. 1=200



REV. NO.	BY	DATE	REVISIONS DESCRIPTION	DESIGN FILE:	XREF DRAWINGS	I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE STATE OF MINN. STATUTES SECTION 328.02 TO 328.18.	C.S.A.H. 98 REGIONAL TRAIL REGIONAL TRAIL PLAN AND PROFILE STA. 5+380 TO STA. 5+487	CITY PROJECT COUNTY PROJECT S.P. 91-090-04 S.A.P.	SHEET NO. 10 12
1	RJC	5-12-97	MINN. STATE AID COMMENTS	35182-001-9701	TH96RVEG TH96RPTH 3831RESM 3831RERD 3831RROW 3831RPRD 3831RHYD 3831RETO 3831RERD				
				DRAWN BY: RJC,CSB	B R W INC. Threshoe Square, 700 Third Street So. Minneapolis, MN 55415, Phone 612/278-0700, Fax 612/278-1278	DATE: 5/27/97 H.A. REG. NO. 22814			
				CHECKED BY: JGH					
				DWG. NAME: 96THPPB					
				DATE: APRIL 21, 1997					

NOT IN CONTRACT

0 2.5 5.0
SCALE IN METERS
HOR. 1=200
VERT. 1=200

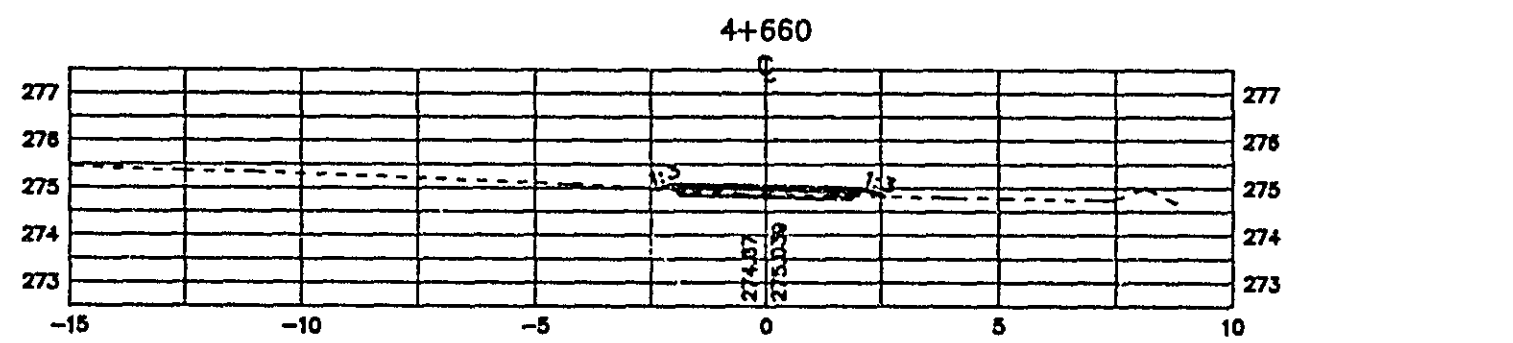
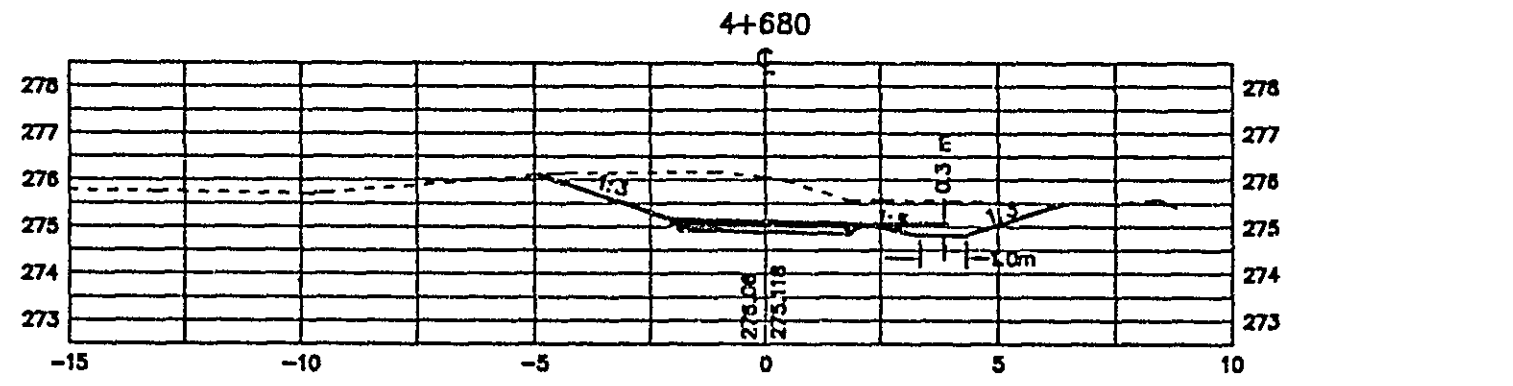
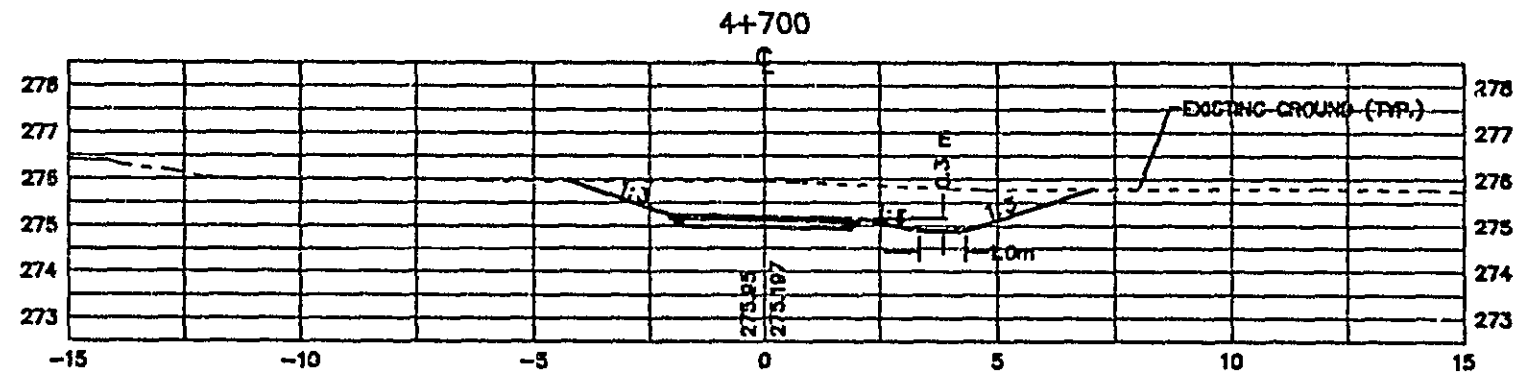
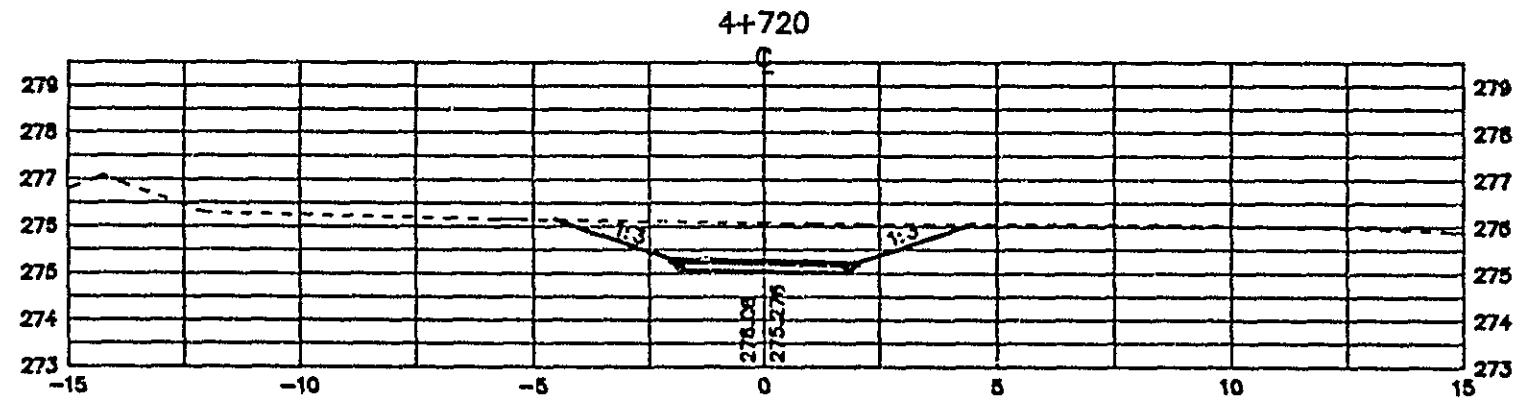
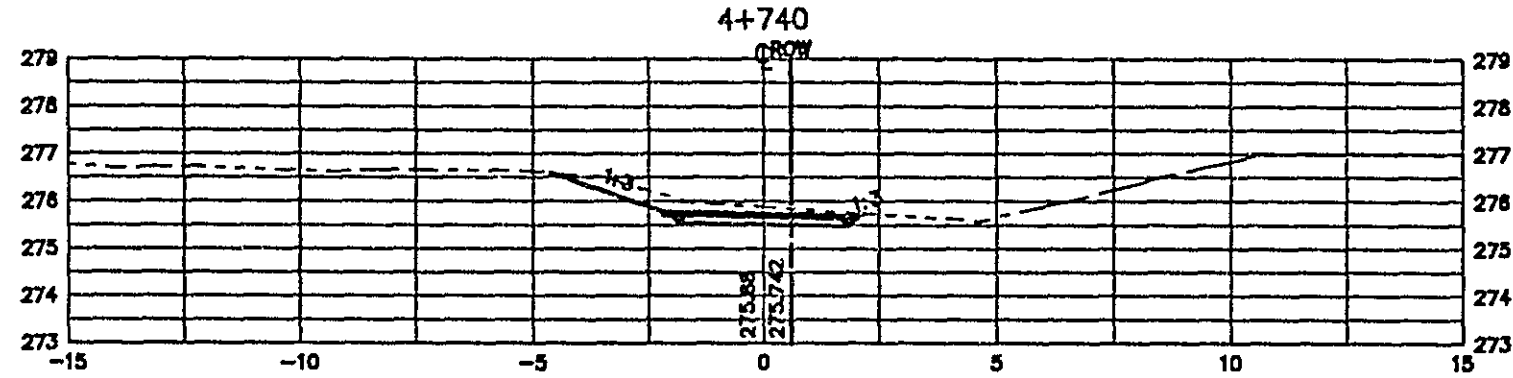
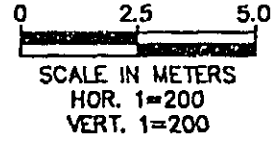


28-163

DISK FILE NAME: (13_c4) R:\TH86\3831\PATHWAY\PLAN-SHT\96PTHCS1.DWGLOT DATE: Jul 28, 1997 10:54am

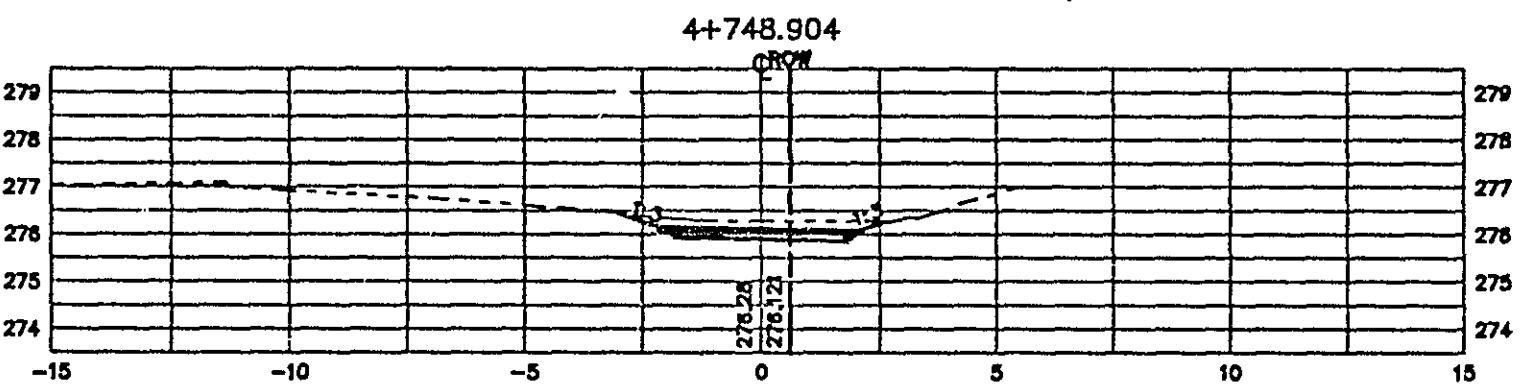
REV. NO.	BY	DATE	REVISIONS DESCRIPTION	DESIGN FILE:	XREF DRAWINGS	 B R W INC. Thresher Square, 700 Third Street So. Minneapolis, MN 55411, Phone 612/376-0700, Fax 612/376-1278	I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE STATE OF MINN. STATUTES SECTION 326.02 TO 326.16.		 C.S.A.H. 98 REGIONAL TRAIL REGIONAL TRAIL CROSS SECTIONS STA. 4+487.656 TO STA 4+640	CITY PROJECT		SHEET NO. 11 12
1	RJC	7/18/97	AS PER STATE AID COMMENTS	35182-001-9701	96PTHXSC		 DATE: 5/2/97 MAIL REC. NO. 22814			COUNTY PROJECT S.P. 91-090-04 S.A.P.		
				DRAWN BY: RJC DESIGN BY: RJC, GSB CHKD. BY: JBH DWG. NAME: 96PTHCS1. DATE: APRIL 21, 1997								

NOT IN CONTRACT



STATION	AREAS Square Meters		VOLUMES Cubic Meters		CUMULATIVE VOLUMES Cubic Meters	
	CUT	FILL	CUT	FILL	CUT	FILL
4+487.656	0.000	0.000	7.601	23.245	7.601	23.245
4+500	1.232	3.762	48.032	35.642	55.633	58.886
4+520	3.560	0.000	37.074	9.746	92.707	68.632
4+540	0.056	0.992	0.533	16.304	93.240	84.936
4+560	0.000	0.599	2.561	6.666	95.801	91.602
4+580	0.257	0.058	13.908	0.603	109.709	92.205
4+600	1.126	0.004	26.865	0.117	136.573	92.322
4+620	1.535	0.008	23.567	0.203	160.140	92.524
4+640	0.822	0.012	10.727	0.840	170.868	93.364
4+660	0.254	0.070	84.178	0.705	255.045	94.069
4+680	8.146	0.000	162.217	0.000	417.262	94.069
4+700	7.876	0.000	141.889	0.000	559.151	94.069
4+720	6.178	0.000	82.912	0.000	642.063	94.069
4+740	2.113	0.000	24.238	0.000	666.301	94.069
4+748.904	3.331	0.000	0.000	0.000	666.301	94.069

NOTES:
COMMON EXCAVATION QUANTITIES FOR STATIONS 3+262 TO 4+426,
4+487 TO 4+495, 4+799 TO 5+464 ARE BASED ON A UNIFORM CUT
AREA OF 0.883 SQUARE METERS. TOTAL COMMON EXCAVATION QUANTITY
EQUALS 666.3m³ + 0.883m²(1743.6 METERS) = 2205.9m³



28-163

DISK FILE NAME: (13_C4) R:\TH95\3831\PATHWAY\PLAN-SHT\96PTHCS2.DWGOT DATE: Jul 18, 1997 10:30am

REV. NO. 1	BY RJC	DATE 7/18/97	REVISIONS DESCRIPTION AS PER STATE AID COMMENTS	DESIGN FILE: 35182-001-9701	REF. DRAWINGS 96PTHCS2	 B R W INC. Thrasher Square, 790 Third Street So. Minneapolis, MN 55415, Phone 612/278-0700, Fax 612/278-1278	I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE STATE OF MINN. STATUTES SECTION 328.02 TO 328.16. DATE: 5/24/97 MINN. REG. NO. 22814	 C.S.A.H. 96 REGIONAL TRAIL REGIONAL TRAIL CROSS SECTIONS STA. 4+480 TO STA 4+748.904	 CITY PROJECT COUNTY PROJECT S.P. 91-090-04 S.A.P.	SHEET NO. 12 12
			DRAWN BY: RJC	DESIGN BY: RJC, GSD	CHKD. BY: JBH					