MANHOLE ADJUSTMENTS

NORTH OF C.S.A.H 12

STATION	MANHOLE NO.	OFFSET	ADJUST GRADE
0+001	406	22.50 m RIGHT	276.150
0+050	407	6.90 m LEFT	275.724
0+130	408	6.90 m LEFT	275.281
0+180	409	6.90 m LEFT	274.903
0+240	410	6.90 m LEFT	274.447
0+340	411	6.90 m LEFT	273.817
0+460	412	6.90 m LEFT	275.895
0+530	413	6.90 m LEFT	276.896
0+620	414	6.90 m LEFT	276.282
0+740	415	6.90 m LEFT	277.047
0+860	416	6.90 m LEFT	277.821
0+910	417	6.90 m RIGHT	278.795

MANHOLE ADJUSTMENT

SOUTH OF C.S.A.H 12

STATION	MANHOLE NO.	OFFSET	PROPOSED ELEVATION
0+013.22	405	8.70 m LEFT	276.453
0+080	404	8.70 m LEFT	275.901
0+140	403	7.70 m LEFT	273.688
0+250	402	6.90 m LEFT	270.037
0+360	401	6.90 m LEFT	268.384
0+426.111	108	6.90 m LEFT	269.142
0+480.23	109	6.90 m LEFT	269.447
0+593.873	110	6.90 m LEFT	270.017
0+710	111	6.90 m LEFT	270.928
0+782.979	112	6.90 m LEFT	273.126
0+880	113	6.90 m LEFT	275.462
0+950	114	6.90 m RIGHT	275.515
1+000	115	6.90 m LEFT	275.071
1+090	116	6.90 m LEFT	274.655
1+210	117	6.90 m LEFT	276.603
1+285	118	6.90 m LEFT	278.122
1+360	119	6.90 m LEFT	278.385
1+420	120	6.90 m LEFT	276.948
1+518.534	121	6.90 m LEFT	274.102
1+640	122	6.90 m LEFT	272.427
1+760	123	6.90 m LEFT	269.771
1+820	124	6.90 m LEFT	269.459
1+880	201	6.90 m LEFT	269.147
1+940	202	6.90 m LEFT	269.407
2+000	203	6.90 m LEFT	269.843
2+060	204	6.90 m LEFT	270.830
2+120	205	6.90 m LEFT	271.160
2+180	206	6.90 m LEFT	270.723
2+240	207	6.90 m LEFT	270.575
2+360	208	6.90 m LEFT	272.187
2+408	209	6.80 m LEFT	272.305
2+460	210	4.00m LEFT	271.969

GATE VALVE ADJUSTMENT

SOUTH OF C.S.A.H NO. 12

STATION	OFFSET	PROPOSED ELEVATION
0+028.455	13.61 m LEFT	276.444
0+024.496	0.02 m RIGHT	276.356
0+187.678	11.94 m LEFT	271.986
0+346.177	11.95 m LEFT	268.448
0+416.155	0.00 m LEFT	269.044
0+502.804	12.81 m LEFT	269.666
0+506.241	4.92 m RIGHT	269.546
0+577.674	0.08 m RIGHT	269.823
0+770.322	0.00 m LEFT	272.580
0+878.586	4.85 m RIGHT	275.409
0+934.112	11.98 m LEFT	275.716
1+088.174	0.00 m RIGHT	–
1+108.486	11.99 m LEFT	274.966
1+261.040	11.99 m LEFT	277.730
1+395.023	11.96 m LEFT	277.824
1+501.835	11.94 m LEFT	274.395
1+507.196	0.03 m LEFT	274.083
1+530.041	0.00 m LEFT	273.886
1+647.475	11.97 m LEFT	272.318
1+799.994	0.01 m RIGHT	–
1+813.404	11.87 m LEFT	269.591
1+980.043	12.04 m LEFT	269.717
2+084.553	12.08 m LEFT	271.163
2+100.461	0.00 m LEFT	–
2+221.780	11.86 m LEFT	270.568
2+355.645	18.96 m LEFT	272.211
2+367.111	0.03 m RIGHT	–
2+393.326	0.01 m RIGHT	–
2+462.245	12.74 m LEFT	271.943

GATE VALVE ADJUSTMENT

C.S.A.H 13

STATION	OFFSET	ADJUST GRADE
0+422	3.5	–
0+563	3.5	–

BITUMINOUS SUMMARY

PROJECT NO.	LOCATION STATION	TO	STATION	TYPE 41 WEAR t	TYPE 31 BINDER t	TYPE 31 BASE t	BITUMINOUS DRIVEWAY t	BITUMINOUS PATH t	TACK COAT L	GEO–TEXTILE m^2	MILLING m^2	SAWING m
NORTH OF CSAH 12												
204–020–03	0+000	–	1+026	1600	1800	3400	22	400	8100	6300		12
204–020–03	0+168	–	0+364 CSAH 13	66	66	124	17		316		12	11
SOUTH OF CSAH 12												
204–133–01	0+000	–	2+567	4200	4200	8000		600	21000		159	100
CSAH 13												
71–613–08	1+026	–	1+920	1450					2800			
AT CSAH 12												
				65		81			155			16

BITUMINOUS PAVEMENT REMOVAL

TYLER STREET SOUTH OF CSAH 12

STATIONING	QTY (m^2)
0+518 120 m LT. – 1+830 18 m RT.	2980
2+428 – 2+500	1600
TYLER STREET NORTH OF CSAH 12	
0+168 – 0+364	2451
AT CSAH 12	
71 m RT – 71 m LT	1050

CONCRETE CURB & GUTTER, CONCRETE WALK

PROJECT NO.	LOCATION STATION	TO	STATION	CONCRETE DRIVEWAY APRON m^2	CONC C & G B618 m	100 mm CONCRETE SIDEWALK m^2	PED RAMP EA.
NORTH OF CSAH 12							
204–020–03	0+000	–	1+026	12	3780	1700	4
SOUTH OF CSAH 12							
204–133–01	0+000	–	2+567	34	9730	4800	16

TURF ESTABLISHMENT

PROJECT NO.	LOCATION STATION	TO	STATION	SOD m^2	TOPSOIL m^3	SEEDING ha
NORTH OF CSAH 12						
204–020–03	0+000	–	1+026	18000	1800	
204–020–03	AT CSAH 13				180	0.18
SOUTH OF CSAH 12						
204–133–01	0+000 – 2+567			44570	4557	
204–133–01	1+870 RT				10	0.01
204–133–01	1+520 – 1+590 LT				150	0.15
204–133–01	0+800 – 0+900 RT				250	0.25
204–133–01	NEAR STMH A–13, A–14				430	0.43
TOTAL				62570	7277	1.02

CONCRETE MEDIAN

PROJECT NO.	LOCATION STATION	TO	STATION	CONCRETE MEDIAN m^2	CONC. MEDIAN NOSE EA
NORTH OF CSAH 12					
204–020–03	0+000	–	1+026	100	4
SOUTH OF CSAH 12					
204–133–01	0+000	–	2+567	1200	14

THE FOLLOWING STANDARD PLATES, AS APPROVED BY THE FHWA SHALL APPLY.

STANDARD PLATES

PLATE NO.	DESCRIPTION
M3000L	REINFORCED CONCRETE PIPE
M3006G	GASKET JOINT FOR RC PIPE
M3040F	CORRUGATED METAL PIPE CULVERT
M3100G	CONCRETE APRON FOR REINFORCED CONCRETE PIPE
M3123J	METAL APRON FOR C.S. PIPE
M3124B	METAL APRON CONNECTION
M3133C	RIP RAP AT RCP OUTLETS
M3145E	CONCRETE PIPE TIES
M3221C	CORRUGATED STEEL PIPE COUPLING BANDS
M4006L	MANHOLE OR CATCH BASIN
M4009H	MANHOLE OR CATCH BASIN SECTIONAL CONCRETE PIPE
M4020G	MANHOLE OR CATCH BASIN COVER
M4129G	CATCH BASIN FRAME CASTING
M7035K	CONCRETE WALK & CURB RETURNS AT ENTRANCES
M7036D	PEDESTRIAN CURB RAMP
M7100G	CONCRETE CURB AND GUTTER DESIGN B AND DESIGN V
M7113A	CONCRETE APPROACH NOSE DETAIL
M8000I	STANDARD BARRICADES
M8115D	PEDESTRIAN PUSH BUTTON INSTALLATION
M8121D	TRANSFORMER BASE AND POLE BASE PLATE
M8123D	POLE AND MAST ARM
M8126F	POLE FOUNDATION (PA90 AND PA100)
M9102D	TURF ESTABLISHMENT AREAS AT PIPE CULVERT ENDS
M9323D	BARBED WIRE FENCE
M8114A	PVC HANDHOLE/PULLBOX

MANHOLE ADJUSTMENTS

CSAH 13

STATION	MANHOLE NO.	OFFSET	ADJUST GRADE
0+298	418	0	–
0+356	419	0	–

MANHOLE ADJUSTMENTS

175TH STREET

STATION	MANHOLE NO.	OFFSET	ADJUST GRADE
1+006.9	121A	0	274.003

BASIS FOR ESTIMATED QUANTITIES

AGGREGATE BASE, CLASS 5:
COMPACTED DRY DENSITY – 2160 kg/m3
BITUMINOUS PAVEMENT:
2340 TYPE 41 – 2.4 kg/m2/mm
2340 TYPE 31 – 2.4 kg/m2/mm
BITUMINOUS TACK COAT:
0.23 L/m^2

CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL REMOVE AND REINSTALL EXISTING SIGNS AS DIRECTED BY THE ENGINEER.
2. PLAN SHEET STATIONING REFERS TO SURVEY BASELINE.
3. PROFILE ELEVATIONS REFER TO WESTBOUND AND EASTBOUND CENTERLINES. SEE REFERENCE POINT IN TYPICAL SECTION.

DESIGNED BY: ---- DRAWN BY: GGJ
APPROVED: ---- JOB NUMBER 800110J
CAD DATE: October 18, 1999 10:01:25 a.m.
CAD FILE: 800110T\MISC\CHARTS.DWG

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 LAWS OF THE STATE OF MINNESOTA.

DATE _____ REG.NO. 15316

NO.	DATE	BY	REVISION DESCRIPTION

1326 ENERGY PARK DRIVE
ST. PAUL, MINNESOTA 55108
(612) 644-4389
Howard R. Green Company
CONSULTING ENGINEERS

CITY OF ELK RIVER
EASTERN AREA
TYLER STREET IMPROVEMENTS

TABULATIONS
SP 71-613-08, SP 204-020-03, SP 204-133-01, SP 204-132-03

SHEET NO. G-5