FORM 129 A REV. 64

Minn. Proj. No. M 5110 (1)

STATE OF MINNESOTA

DEPARTMENT OF HIGHWAYS

STORM SEWER, CURB & GUTTER, BITUMINOUS SURFACING

CONSTRUCTION PLAN FOR & SIGNAL SYSTEM

County State Aid Highway No. 8

Between 5TH. ST. N.E. And C.S.A.H. 35

From A PT. 323.85' WEST AND SOUTH 75° 32' A DIS. FROM 276.98' FROM THE NORTH 1/4 COR. SEC.11 T.30 R.24 A PT. 20.00' WEST OF THE N.E COR. To SEC. 12 T.30 R.23

Give proper reference to Sections, Township and Range

GROSS LENGTH 5,910.0 FEET 1.119 MILES

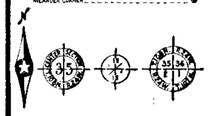
BRIDGES LENGTH ——— FEET ——— MILES

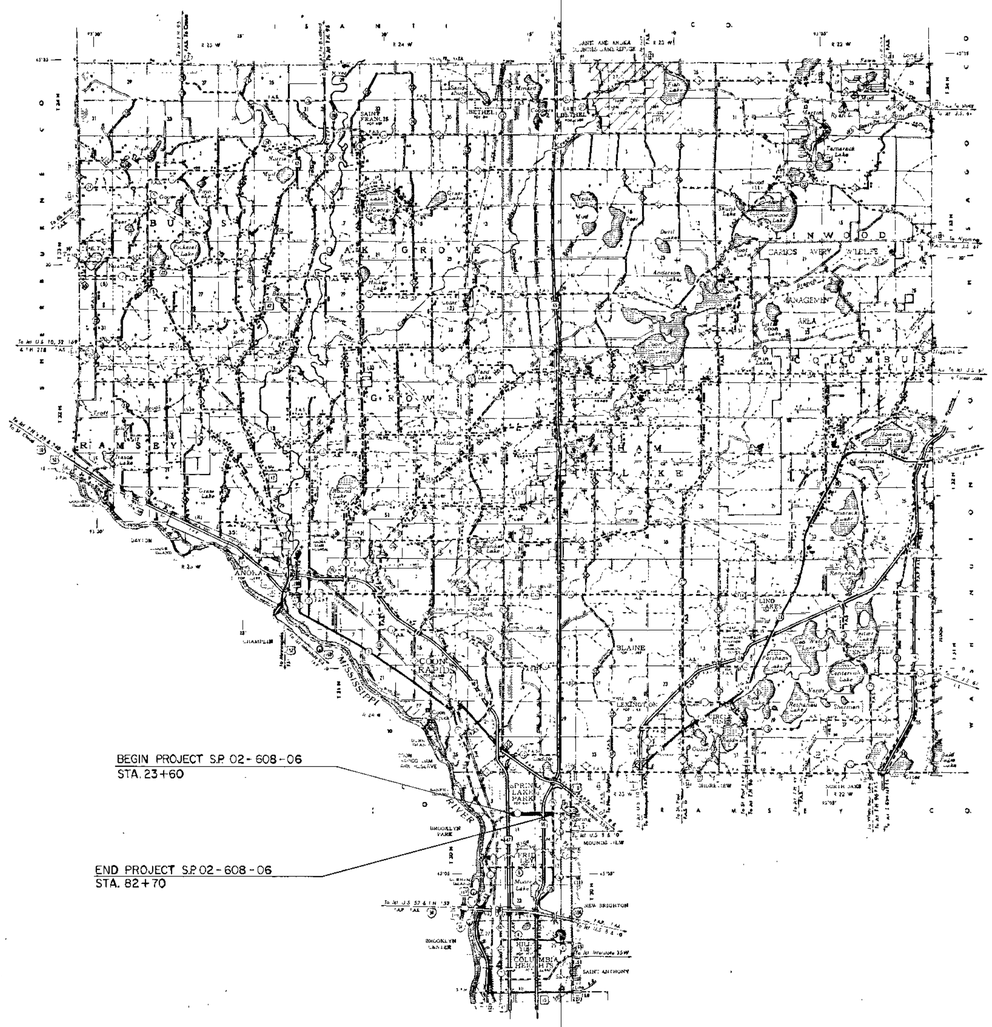
EXCEPTIONS LENGTH ——— FEET ——— MILES

NET LENGTH 5,910.0 FEET 1.119 MILES

CONVENTIONAL SIGNS

STATE LINE
COUNTY LINE
TOWNSHIP OR RANGE LINE
SECTION LINE
QUARTER LINE
SIXTEENTH LINE
RIGHT OF WAY LINE
PRESENT RIGHT OF WAY LINE
CONTROL OF ACCESS LINE
PROPERTY LINE (Except Land Lines)
VACATED PLATTED PROPERTY
CORPORATE OR CITY LIMITS
TRUNK HIGHWAY CENTER LINE
RETAINING WALL
RAILROAD
RAILROAD RIGHT OF WAY LINE
RIVER OR CREEK
DRY RUN
DRAINAGE DITCH
ELECTRIC POWER LINE
TELEPHONE OR TELEGRAPH LINE
JOINT TELEPHONE AND POWER
CONDUIT
TELEPHONE CABLE AERIAL
TELEPHONE CABLE UNDERGROUND
POWER CABLE UNDERGROUND
GAS MAIN
CULVERT
DROP INLET
GUARD RAIL
BARBED WIRE FENCE
WOVEN WIRE FENCE
CHAIN LINK FENCE
RAILROAD SNOW FENCE
STONE WALL OR FENCE
WATER
WATER PIPE
SEWER PIPE
DRAIN TILE
SPRINGS
MARSH
TIMBER
ORCHARD
BRUSH
NURSERY
CATCH BASIN
MANHOLE
FIRE HYDRANT
STREET LIGHT
RAILROAD CROSSING SIGN
RAILROAD CROSSING BELL
ELECTRIC WARNING SIGN
CROSSING GATE
CATTLE GUARD
OVERPASS (Highway Over)
UNDERPASS (Highway Under)
BRIDGE
BUILDING (One Story Frame)
F FRAME C CONCRETE
S STONE T TILE
B BRICK ST STUCCO
IRON PIPE OR ROD
MONUMENT (STONE, CONCRETE, OR METAL)
WOODEN HUB
GRAVEL PIT
SAND PIT
BORROW PIT
ROCK QUARRY
MEANDER CORNER





SCALE

INDEX MAP		2 MI.
PLAN & PROFILE	VERT.	5'
	HORIZ.	50'
CROSS SECTIONS		10'
SIGNING & STRIPPING PLAN		50'

INDEX OF SHEETS

THERE ARE 35 SHEETS IN THIS PLAN

DESIGN DESIGNATION

ADT (CURRENT YEAR) 11,780 (1983)

ADT (FUTURE YEAR) 20,026 (2003)

PROJ. H.C.A.D.T. (HEAVY COMMERCIAL) 600 - 1,100 (2003)

9 Ton Design Soil Factor 50%

Design Speed 40 MPH

Design Speed not achieved at:

STA. ——— TO STA. ——— MPH. ———

STA. ——— TO STA. ——— MPH. ———

SPECIFICATIONS REFERENCE

The 1978 Edition of The Minnesota Department of Transportation "Standard Specifications for Highway Construction" shall govern.

ALL APPLICABLE FEDERAL, STATE AND LOCAL LAWS AND ORDINANCES WILL BE COMPLIED WITH, IN THE CONSTRUCTION OF THIS PROJECT.

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.

Paul K. Kunz — DATE 3-12-82
COUNTY ENGINEER

ANOKA COUNTY REG. NO. 6549

RECOMMENDED FOR APPROVAL C.E. Weuhrelbaum 3/25, 1982
DISTRICT STATE AID ENGINEER

RECOMMENDED FOR APPROVAL R.A. Kuisel for K.W. Pe 7/5, 1982
DIRECTOR, TRAFFIC ENGINEERING

RECOMMENDED FOR APPROVAL A.L. Dahlin 3-22, 1982
STATE AID PLAN & SPECIFICATIONS ENGINEER

APPROVED 2/22, 1983 L.A. Hill
STATE AID ENGINEER

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED: ———
DIVISION ADMINISTRATION DATE

County Proj. No. ———

State Proj. No. 02-608-06 S.A.P. ———

ANOKA County, Minnesota. Plan No. ——— Sheet 1 of 33 Sheets

DAHMS PHOTO PRINT CO. MINNEAPOLIS, 1, MINN.

STATEMENT OF ESTIMATED QUANTITIES

	ITEM NO	ITEM	UNIT	TOTAL ESTIMATED QUANTITIES	TOTAL FINAL QUANTITIES
	2021.501	MOBILIZATION	LUMP SUM	1	
	2031.503	FIELD LABORATORY TYPE D	EACH	1	
	2101.502	CLEARING	TREE	9	
	2101.507	GRUBBING	TREE	6	
	2104.501	REMOVE FENCE	LIN. FT.	587	
	2104.501	REMOVE CURB & GUTTER	LIN. FT.	647	
	2104.501	REMOVE PIPE SEWERS	LIN. FT.	385	
	2104.503	REMOVE SIDEWALK	SQ. FT.	4,000	
	2104.505	REMOVE CONCRETE PAVEMENT	SQ. YD.	292	
(1)	2104.505	REMOVE BITUMINOUS PAVEMENT	SQ. YD.	859	
	2104.509	REMOVE MANHOLES & CATCH BASINS	EACH	18	
	2104.523	SALVAGE CASTINGS	EACH	26	
	2104.521	SALVAGE FENCE	LIN. FT.	48	
	0557.603	INSTALL FENCE	LIN. FT.	48	
(2)	2105.501	COMMON EXCAVATION	CU. YD.	5,192(P)	
	2105.525	TOPSOIL BORROW (L.V.)	CU. YD.	475	
(3)	2130.501	WATER	M GALLON	75	
(4)	2211.501	AGGREGATE BASE CLASS 5	TON	930	
	2331.504	BITUMINOUS MATERIAL FOR MIXTURE	TON	382	
(5)	2331.510	BINDER COURSE MIXTURE	TON	4,475	
(6)	2331.512	LEVELING COURSE MIXTURE	TON	1,495	
(7)	2331.514	BASE COURSE MIXTURE	TON	1,870	
(8)(16)	0331.601	2" THICK WEARING COURSE PLACED	SQ. YD.	4,730	
	2331.531	TEMPORARY LANE MARKING	ROAD STATION	180	
	2341.504	BITUMINOUS MATERIAL FOR MIXTURE	TON	207	
(9)	2341.508	WEARING COURSE MIXTURE	TON	3,130	
	2357.502	BITUMINOUS MATERIAL FOR TACK COAT	GALLON	4,170	
	2501.525	24" SPAN C.S. PIPE - ARCH APRONS	EACH	1	
	2501.525	29" SPAN R.C.PIPE - ARCH APRONS	EACH	1	
	2503.511	30" C.S. PIPE SEWER	LIN. FT.	20	
	2503.511	12" R.C. PIPE SEWER CL. IV	LIN. FT.	100	
	2503.541	12" R.C.PIPE SEWER DESIGN 3006 CL IV	LIN.FT.	447	
	2503.541	15" R.C.PIPE SEWER DESIGN 3006 CL IV	LIN. FT.	59	
	2503.541	18" R.C.PIPE SEWER DESIGN 3006	LIN. FT.	147	
	2503.521	24" SPAN C.S. PIPE-ARCH SEWER	LIN.FT.	41	
	2503.521	29" SPAN R.C.PIPE - ARCH SEWER CL IIA	LIN. FT.	74	
	2506.506	CONSTRUCT MANHOLES DESIGN A OR F	LIN. FT.	10.2	
	2506.507	CONSTRUCT CATCH BASINS DESIGN C OR G	LIN. FT.	79.0	
	2506.507	CONSTRUCT CATCH BASINS DESIGN H	LIN FT.	2.6	

STATEMENT OF ESTIMATED QUANTITIES (CON'T.)

	ITEM NO.	ITEM	UNIT	TOTAL ESTIMATED QUANTITIES	TOTAL FINAL QUANTITIES
	2506.507	CONSTRUCT CATCH BASINS DESIGN SPECIAL 1	LIN. FT.	13.7	
(10)(11)	2506.516	CASTING ASSEMBLIES	EACH	48	
	2506.521	INSTALL CASTINGS	EACH	23	
	2506.522	ADJUST FRAME AND RING CASTINGS	EACH	33	
(12)	2521.501	4" CONCRETE WALK	SQ. FT.	11,093	
	2521.501	5" CONCRETE WALK	SQ. FT.	1,160	
	2531.501	CONCRETE CURB AND GUTTER DESIGN B 612	LIN. FT.	1,152	
	2531.501	CONCRETE CURB AND GUTTER DESIGN B 618	LIN. FT.	11,240	
	2531.507	6" CONCRETE DRIVEWAY PAVEMENT	SQ. YD.	35	
	2531.507	8" CONCRETE DRIVEWAY PAVEMENT	SQ. YD.	357.9	
(13)	2301.503	CONCRETE PAVEMENT IRREGULAR WIDTH	SQ. YD.	351	
	2301.529	REINFORCEMENT BARS	POUND (P)	5,502	
	2301.531	EXPANSION JOINTS DESIGN EX-1	LIN. FT.	106	
	2301.536	DOWEL BAR ASSEMBLIES	LIN. FT.	92	
	2301.541	INTEGRANT CURB DESIGN B 6	LIN. FT.	379	
(14)	2545.521	3" RIGID STEEL CONDUIT - SIGNAL	LIN. FT.	286	
(17)	2545.521	1 1/2" RIGID STEEL CONDUIT- LIGHTING	LIN. FT.	76	
(14)	2545.553	PULL BOXES - SIGNALS	EACH	6	
	2564.501	F.&I. SIGN PANELS TYPE C	SQ. FT.	684.59	
	2575.501	ROADSIDE SEEDING	ACRE	0.40	
	2575.502	SEED MIXTURE 6	POUND	30	
	2575.505	SODDING	SQ. YD.	9,130	
	2575.511	MULCH MATERIAL TYPE 1	TON	0.80	
	2575.519	DISC ANCHORING	ACRE	0.40	
(15)	2575.531	COMMERCIAL FERTILIZER, ANALYSIS 10 - 10 - 10	TON	0.60	
	0504.502	ADJUST WATER GATE HOUSING	EACH	12	
	0504.602	RELOCATE HYDRANT	EACH	5	
	0504.602	ADJUST WATER STOP BOXES	EACH	2	
	0564.603	4" WIDE SOLID LINE - YELLOW PAINT	LIN. FT.	1,510	
	0564.603	4" WIDE SOLID LINE - WHITE PAINT	LIN. FT.	1,940	
	0564.603	8" WIDE CROSSWALK LINE - WHITE PAINT	LIN. FT.	380	
	0564.603	24" SOLID LINE - WHITE PAINT	LIN. FT.	284	
	0564.603	4" WIDE BROKEN LINE - WHITE PAINT	LIN. FT.	1,940	
	0564.603	4" DOUBLE SOLID LINE - YELLOW PAINT	LIN. FT.	6,390	
	0564.603	24" SOLID LINE - YELLOW PAINT	LIN. FT.	836	
	0564.602	PAVEMENT MESSAGE TYPE 1	EACH	17	
	0564.602	PAVEMENT MESSAGE TYPE 2	EACH	13	
	2565.501	FULL TRAFFIC ACTUATED TRAFFIC CONTROL SYSTEM	SIGNAL SYSTEM	1	
	0563.601	TRAFFIC CONTROL	LUMP SUM	1	

(1) FOR AREAS OF CONCRETE MEDIAN CONSTRUCTION AND AREAS OF REINFORCED CONC. CONSTRUCTION.

(2) INCLUDES 1,129 CU.YDS. SUBCUT FOR COMPACTION AND 670 CU.YDS. FOR BIKEWAY CONST.

(3) FOR DUST CONTROL.

(4) INCLUDES 835 TON FOR BIKEWAY AND 95 TON FOR DRIVEWAY RESTORATION.

(5) INCLUDES 345 TON FOR STREET APPROACHES.

(6) INCLUDES 65 TON FOR STREET APPROACHES.

(7) INCLUDES 170 TON FOR SEWER TRENCH RESTORATION.

(8) INCLUDES BITUMINOUS MATERIAL FOR MIXTURE

(9) INCLUDES 260 TON FOR STREET APPROACHES, 95 TON FOR DRIVEWAY RESTORATION.

(10) 10 TYPE A - 700-7 FRAME & 712 COVER, 4 TYPE B - SEE CB DESIGN SPECIAL 1

(11) 34 TYPE C - 521B CURB BOX ONLY.

(12) INCLUDES 1,928 SQ.FT. FOR MEDIAN.

(13) FOR PROTECTION OF 60" WATER CONDUIT.

(14) FOR FUTURE SIGNAL SYSTEM AT MADISON STREET.

(15) FOR ALL SEED AND SOD AREAS APPLIED AT THE RATE OF 300 LBS. PER ACRE.

(16) BIKEWAY / WALKWAY

(17) TO PROVIDE FOR LIGHTING BUS PASSENGER SHELTER (ELECTRICAL WIRING TO BE DONE BY OTHERS)

THE FOLLOWING STANDARD PLATES AS APPROVED BY FHWA SHALL APPLY ON THIS PROJECT

STANDARD PLATES

PLATE NO.	DESCRIPTION
0003 A	SPECIFICATION REFERENCE TO STANDARD PLATES
1100 N	EXPANSION JOINTS
1103 I	TYPICAL DOWEL BAR ASSEMBLY
1120 R	CONTRACTION JOINTS
3221 C	CORRUGATED STEEL PIPE COUPLING BAND
3000 I	REINFORCED CONCRETE PIPE
3006 C	GASKET JOINT FOR R.C. PIPE
3014 J	REINFORCED CONCRETE PIPE-ARCH
3010 F	CORRUGATED METAL PIPE CULVERT
3110 F	CONCRETE APRON FOR REINFORCED CONCRETE PIPE-ARCH
3122 I	METAL APRON FOR C.M. PIPE-ARCH CULVERT
3124 A	METAL APRON CONNECTION
1000 H	MANHOLE OR CATCH BASIN
1002 D	MANHOLE OR CATCH BASIN
1005 K	MANHOLE OR CATCH BASIN
1006 K	MANHOLE OR CATCH BASIN
1010 F	CONCRETE SHORT CONE & ADJUSTING RING
1011 D	PRECAST CONCRETE BASE
4101 C	RING CASTING FOR MANHOLE OR CATCH BASIN
4110 D	COVER CASTING FOR MANHOLE
4161 E	CURB BOX CASTING FOR CATCH BASIN
4180 G	MANHOLE OR CATCH BASIN STEP
7000 E	INTEGRANT CURBS
7035 J	CONCRETE WALK & CURB RETURNS AT ENTRANCES
7036 C	PEDESTRIAN CURB RAMP
7100 E	CONCRETE CURB AND GUTTERS
7110 E	CURB AND GUTTER CONSTRUCTION AT CATCH BASIN
7111 F	INSTALLATION OF CATCH BASIN CASTINGS
8000 H	STANDARD BARRICADES
8127 F	PRECAST CONCRETE HANDHOLL(OR PULLBOX)
8003 B	BREAKAWAY SIGN SUPPORT (PLASTIC)
9102 C	SODDING AT PIPE CULVERT ENDS

BASIS OF PLANNED QUANTITIES

2211 AGGREGATE BASE, CLASS-5, COMPACTED DENSITY 145 LBS./ CU. FT.

2331 PLANT MIXED BASE COURSE
BITUMINOUS MIXTURE 110 LBS./ SQ.YD. PER 1" THICKNESS
BITUMINOUS MATERIAL FOR MIXTURE 4.3% BY WEIGHT

2331 PLANT MIXED BINDER AND LEVELING COURSE
BITUMINOUS MIXTURE 110 LBS./ SQ.YD. PER 1" DEPTH
BITUMINOUS MATERIAL FOR MIXTURE 4.9% BY WEIGHT

2341 PLANT MIXED WEARING COURSE
BITUMINOUS MIXTURE 110 LBS./ SQ.YD. PER 1" THICKNESS
BITUMINOUS MATERIAL FOR MIXTURE 6.0% BY WEIGHT

2575 MULCH MATERIAL, TYPE-1
2 TONS/ ACRE

2575 SEED MIXTURE #6
75 LBS./ ACRE

2575 COMMERCIAL FERTILIZER, ANALYSIS 10 - 10 - 10
300 LBS./ ACRE

MISCELLANEOUS REMOVALS

STA. TO STA.	LOC.	DESCRIPTION	UNIT LIN.FT.	UNIT SQ.YD.
23+83	24'-50' LT.	CONC. CURB & GUTTER	13	
30+61 TO 30+75	23'-25' RT.	CONC. CURB & GUTTER	20	
31+16 TO 31+26	23'-47' RT.	CONC. CURB & GUTTER	30	
38+16	26' LT.	CONC. PAVEMENT + SIDEWALK SLAB		8
40+05	23'-60' LT.	CONC. CURB & GUTTER	40	
40+30	23'-60' LT.	CONC. CURB & GUTTER	10	
41+20	23'-35' RT.	CONC. CURB & GUTTER	35	
41+30	23'-50' RT.	CONC. CURB & GUTTER	35	
44+70	23'-50' RT.	CONC. CURB & GUTTER	30	
45+30	23'-50' RT.	CONC. CURB & GUTTER	30	
45+70	38'-53' RT.	CONC. CURB & GUTTER	15	
46+12	38'-57' RT.	CONC. CURB & GUTTER	15	
51+36	10'-50' RT.	CONC. CURB & GUTTER	10	
51+98	10'-53' RT.	CONC. CURB & GUTTER	13	
53+35	23'-47' RT.	CONC. CURB & GUTTER	25	
53+75	23'-47' RT.	CONC. CURB & GUTTER	25	
53+90	23'-47' RT.	CONC. CURB & GUTTER	25	
53+20	23'-47' RT.	CONC. CURB & GUTTER	25	
58+85	38'-16' RT.	CONC. CURB & GUTTER	10	
60+15	38'-18' RT.	CONC. CURB & GUTTER	10	
62+65	23'-38' RT.	CONC. CURB & GUTTER	15	
62+95	23'-26' RT.	CONC. CURB & GUTTER	15	
63+68 TO 63+40	23' RT.	CONC. CURB & GUTTER	135	
30+02	23'-53' LT.	CONCRETE PAVEMENT + DRAINAGE ISLAND		11
69+72	23'-58' LT.	CONCRETE PAVEMENT + ENTRANCE APPROACH		124
71+30	23'-35' LT.	CONCRETE PAVEMENT + SERVICE RD. APPROACH		119
		TOTALS =	947	292

CLEARING AND GRUBBING

STATION (TO STATION)	LOC.	CLEARING TREE	CLEARING ACRE	GRUBBING TREE	GRUBBING ACRE
38+55	36' LT.	1		1	
38+73	36' LT.	4		1	
64+39	12' LT.	1		1	
64+47	12' LT.	1		1	
64+78	12' LT.	1		1	
76+60	63' LT	1		1	
	TOTALS	9		6	

BITUMINOUS PAVEMENT REMOVAL ①

STATION	LOCATION	SQ.YDS.
36+29 TO 38+37	5'-13' LT.	185
39+36 TO 41+09	2' LT. TO 6' RT.	154
40+17	37'-61' LT.	53
52+00	39'-57' LT.	64
66+06 TO 67+30	8' TO 16' LT.	155
67+82 TO 67+95	41' TO 59' LT.	26
68+19 TO 68+32	11' TO 39' LT.	26
68+90 TO 69+03	42' TO 60' LT.	26
69+03 TO 70+04	3' RT. TO 5' LT.	170
	TOTAL =	859

① FOR MEDIAN CONSTRUCTION AND AREAS OF REINFORCED CONCRETE PAVEMENT CONST.

ADJUST WATER GATE HOUSING

STATION	LOCATION
1. 22+82	28' RT.
2. 29+90	25' RT.
3. 30+04	43' RT.
4. 30+07	33' RT.
5. 38+15	35' RT.
7. 51+61	33' RT.
8. 55+73	24' RT.
9. 64+68	13' RT.
10. 69+39	33' RT.
11. 69+77	33' RT.
12. 82+15	27' RT.

ADJUST WATER STOP BOXES.

STATION	LOCATION
1. 61+64	38' RT.
2. 65+46	31' RT.

ADJUST FRAME & RING CASTINGS

STA.	LOC.	TYPE	OWNERS
25+99	1' RT.	M.H.	SANITARY SEWER
21+28	28' RT	M.H	BELL TEL. CO.
24+35	27' LT	M.H	BELL TEL. CO.
26+10	12' RT.	M.H.	N.S.P. CO
26+19	4 LT.	M.H	SANITARY SEWER
28+05	13' RT.	M.H.	SANITARY SEWER
29+70	26' LT.	M.H.	BELL TEL. CO.
29+93	16' LT.	M.H.	STORM SEWER
30+05	35' RT.	M.H.	N.S.P. CO.
30+89	17 LT.	M.H	STORM SEWER
33+35	35' RT.	M.H.	N.S.P. CO.
34+19	25 LT.	M.H.	BELL TEL. CO.
34+87	19' LT.	M.H.	STORM SEWER
37+10	35' RT.	M.H.	N.S.P. CO.
37+82	35' RT.	M.H.	N.S.P. CO.
38+67	17' LT.	M.H.	STORM SEWER
39+15	26' LT.	M.H.	BELL TEL. CO.
41+10	24' RT.	M.H	N.S.P. CO.
42+72	17' LT.	M.H.	STORM SEWER
43+26	12' LT.	C.B.	STORM SEWER
44+57	35' RT	M.H	N.S.P. CO.
46+63	16' LT.	M.H.	STORM SEWER
46+24	10' LT.	C.B.	STORM SEWER
46+63	10' LT.	C.B.	STORM SEWER
46+05	26' LT.	M.H.	BELL TEL. CO.
46+54	38' RT	M.H	N.S.P. CO.
49+20	30' LT.	M.H.	ST.PAUL WATER WORKS
49+31	17' LT.	M.H.	STORM SEWER
49+54	37' LT.	C.B.	STORM SEWER
49+90	37' LT.	C.B.	STORM SEWER
52+18	26' RT.	M.H	N.S.P. CO.
52+61	18' LT.	M.H.	STORM SEWER
52+81	38' LT.	C.B.	STORM SEWER
53+20	39' LT.	C.B.	STORM SEWER
53+75	30' LT.	M.H.	ST.PAUL WATER WORKS
55+88	17' LT.	M.H	STORM SEWER
56+10	10' LT.	C.B.	STORM SEWER
56+17	10' LT.	C.B.	STORM SEWER
56+47	39' RT.	M.H	N.S.P. CO.
57+39	22 LT.	M.H	BELL TEL. CO.
58+21	29' RT.	M.H.	N.S.P. CO.
60+89	18' LT.	M.H.	STORM SEWER
61+07	39' LT.	C.B.	STORM SEWER
61+30	18' LT.	M.H.	ST.PAUL WATER WORKS
61+46	39' LT.	C.B.	STORM SEWER
63+52	28' RT.	M.H.	N.S.P. CO.
66-31	27' LT.	M.H.	BELL TEL. CO.
66+36	27' LT.	M.H.	BELL TEL. CO.
67+52	23' LT.	M.H	STORM SEWER
69+13	22' LT.	M.H	STORM SEWER
69+68	33' RT.	M.H.	SANITARY SEWER
69+88	22' RT.	M.H.	SANITARY SEWER
70+82	30' RT.	M.H.	STORM SEWER
74+08	27' LT.	M.H.	BELL TEL. CO.
77+00	39' RT.	M.H.	STORM SEWER

NOTE: SEE STORM SEWER SCHEDULE FOR M.H. & C.B. INCLUDED WITH STORM SEWER WORK. N.S.P. CO. & BELL TEL. CO. WILL BE ADJUSTED BY OTHERS.

CONCRETE DRIVEWAY PAVEMENT (APRONS)

STATION	LOCATION	SQ. YDS. 6"	SQ. YDS. 8"
25+80	RT.		15.9
27+10	RT.		15.9
28+85	RT.		15.9
29+83	RT.		15.9
31+99	RT.	7.0	
43+75	RT.		15.9
46+91	RT.	8.8	
55+12	LT.	7.9	
57+97	LT.	7.0	
58+27	LT.	9.7	
59+01	LT.	8.8	
60+85	RT.		17.7
61+10	RT.		10.6
62+33	RT.		22.4
62+81	RT.		28.6
63+27	RT.		24.0
65+73	RT.		28.6
65+55	RT.		28.6
66+05	RT.		13.7
66+80	RT.		33.7
71+24	RT.		30.2
72+09	LT.	7.0	
76+30	LT.		10.6
78+11	LT.		9.7
79+24	LT.	8.8	
TOTALS =		65.0	357.9

SPECIAL DETAILS

INPLACE TOPSOIL SHALL BE SALVAGED AND USED TO THE FULLEST EXTENT POSSIBLE PRIOR TO THE USE OF TOPSOIL BORROW ON AREAS DISTURBED BY CONSTRUCTION OPERATIONS. SALVAGE OF INPLACE TOPSOIL FOR USE IN TURF ESTABLISHMENT SHALL BE CONSIDERED TO BE INCIDENTAL TO COMMON EXCAVATION AND NO DIRECT COMPENSATION WILL BE MADE THEREFOR.

REMOVE BITUMINOUS PAVEMENT ITEM IS FOR REMOVAL OF BITUMINOUS IN MEDIAN CONSTRUCTION AREAS AND AREAS OF REINFORCED CONCRETE CONSTRUCTION ONLY. ANY OTHER BITUMINOUS REMOVAL SHALL BE CONSIDERED AS INCIDENTAL TO CURB AND GUTTER CONSTRUCTION.

DISPOSAL OF ANY EXCESS EXCAVATED MATERIAL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE DISPOSED OF IN ACCORDANCE WITH THE PROVISIONS OF 2104.

SIDEWALK CONSTRUCTION INCLUDES CONSTRUCTING PEDESTRIAN RAMPS IN EXISTING SIDEWALK AT ALL STREET CROSSINGS.

HEAVY CONSTRUCTION EQUIPMENT SHALL NOT BE ALLOWED TO CROSS OVER OR WORK ON THE 60" WATER CONDUITS. THE CONTRACTOR SHALL EMPLOY EQUIPMENT AND CONSTRUCTION METHODS INCLUDING HAND LABOR AS NECESSARY TO ACCOMPLISH THE WORK AS PLANNED OVER THE 60" WATER CONDUITS WITHOUT DAMAGE TO THE UTILITY.

RESTORE THE TOP 6" OF SEWER TRENCHES IN EXISTING STREET WITH 2331 BITUMINOUS BASE COURSE MIXTURE.

HYDRANT RELOCATION

	EXISTING LOCATION		PROPOSED LOCATION	
1	39+33	36' RT	39+33	48' RT
2	48-52	41' RT	48+58	41' RT
3	61+87	25' RT	61+87	31' RT
4	69+88	36' RT	69+88	42' RT
5	82+31	28' RT.	82+31	31' RT.

NOTE: ALL HYDRANT LEADS, TEE BASS, SPACING AND OTHER EQUIPMENT, WORK AND MATERIALS REQUIRED TO COMPLETE THE JOB AS SPECIFIED SHALL BE CONSIDERED AS INCIDENTAL TO RELOCATING HYDRANTS

REMOVE CONCRETE WALK

STATION	LOCATION	SQ.FT.
24+08 - 24+18	34' - 39' Rt.	75
30+70	37' - 42' Rt.	30
31+25	37' - 42' Rt.	30
33+70	37' - 42' Rt.	125
35+75	37' - 42' Rt.	125
38+13 - 38+38	37' - 42' Rt.	225
39+23	37' - 42' Rt.	75
41+20	36' - 41' Rt.	75
41+30	36' - 41' Rt.	75
43+40	30' - 50' Lt.	100
43+90	35' - 10' Rt.	75
44+70	33' - 38' Rt.	30
45+02	33' - 38' Rt.	30
47+38 - 48+38	33' - 38' Rt.	100
48+44 - 48+04	33' - 37' Rt.	100
51+20 - 51+35	33' - 38' Rt.	75
51+67 - 51+82	33' - 38' Rt.	75
52+52	33' - 38' Rt.	25
52+80	33' - 38' Rt.	25
54+38	33' - 38' Rt.	25
55+23	33' - 38' Rt.	25
55+63	23' - 33' Rt.	100
56+53	25' - 45' Lt.	100
57+13 - 57+68	33' - 38' Rt.	100
58+08 - 58+28	33' - 38' Rt.	100
59+75 - 59+85	33' - 75' Rt.	50
59+16 - 60+26	33' - 38' Rt.	50
60+05	33' - 38' Rt.	25
61+25 - 63+35	33' - 38' Rt.	1650
63+90 - 65+10	32' - 37' Rt.	750
43+90	35' - 40' Rt	75

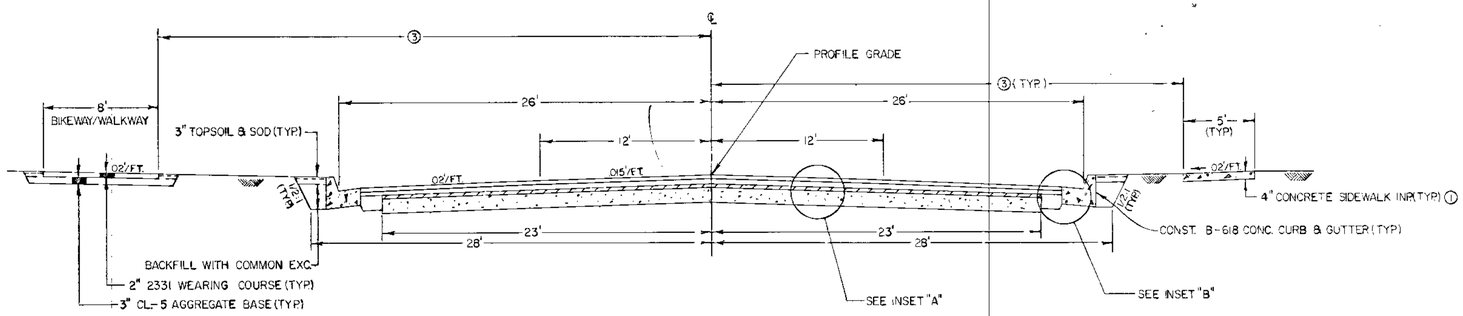
TOTAL SQ. FT. = 4000

State Proj. No. 02-608-06 S.A.P. Sheet No. 3 of 33 Sheets

TYPICAL SECTIONS

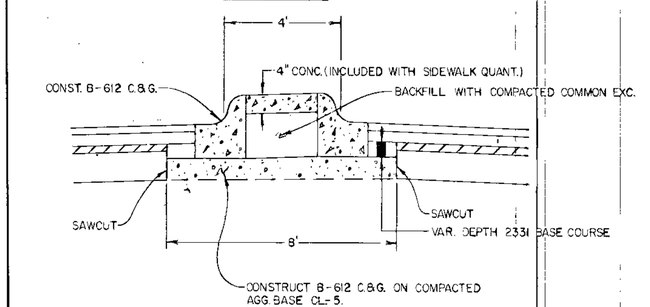
ALL DIMENSIONS NOMINAL

GRADING & BITUMINOUS
STA. TO STA.
24+00 - 30+48.39
48+90.47 - 57+99.53
78+95.47 - 82+70

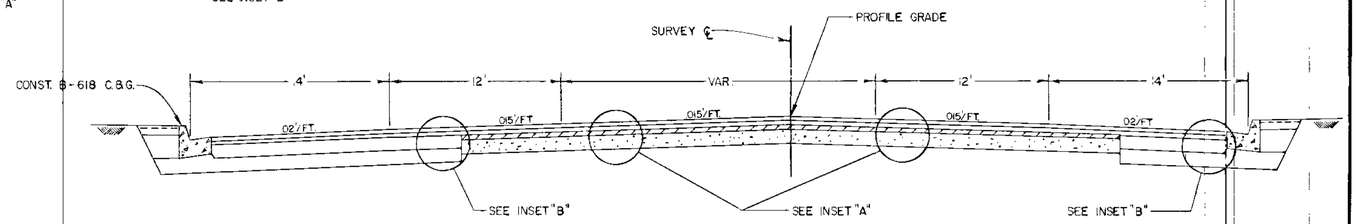


NOTE: SEED, MULCH (TYPE 1), & DISC ANCHOR ALL DISTURBED AREAS NOT SODDED.

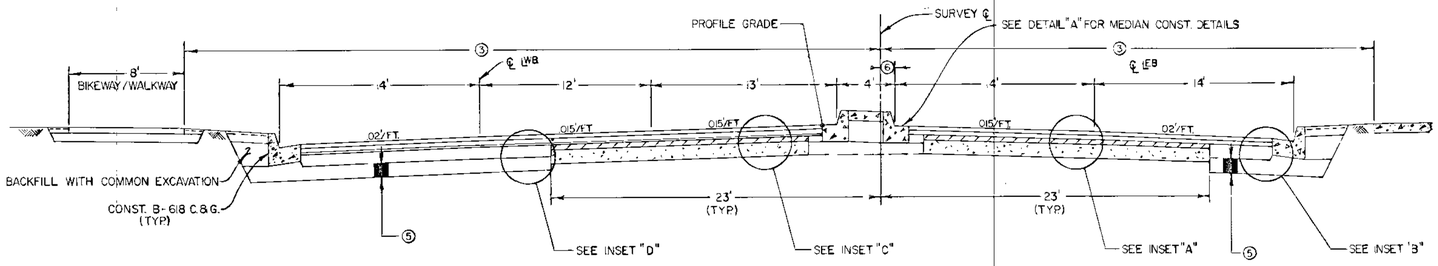
DETAIL "A"



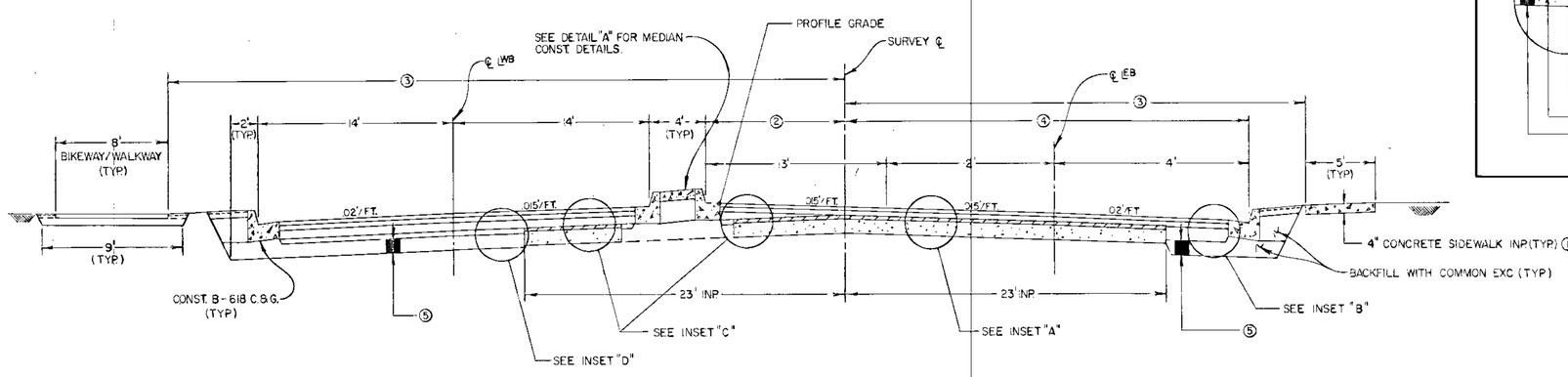
GRADING & BITUMINOUS
STA. TO STA.
30+48.39 - 36+33
41+05 - 48+90.47
57+99.53 - 66+10
70+90 - 78+95.47



GRADING & BITUMINOUS
STA. TO STA.
38+33 - 41+05
69+07 - 70+90

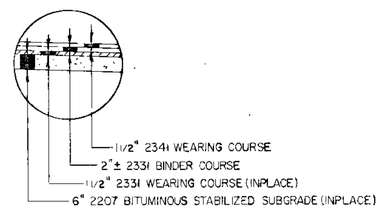


GRADING & BITUMINOUS
STA. TO STA.
36+33 - 38+33
66+10 - 67+76

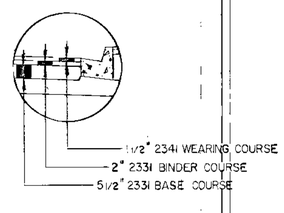


① CONST. NEW SIDEWALK STA. 69+84 - STA 82+50 ± FOR REPLACEMENT WALK LOCATIONS SEE PLAN SHEETS.
② 10' STA. 66+10 TO STA. 67+76.
7' STA. 36+33 TO STA. 38+33.
③ VAR. DISTANCE - SEE PLAN & X-SECTION.
④ 32' STA. 36+33 TO STA. 38+33.
29' STA. 66+10 TO STA. 67+76.
⑤ SUBCUT 5' FOR COMPACTION & UNIFORMITY OF SOILS IN AREAS 8' WIDE OR GREATER. IN AREAS LESS THAN 8' NO SUBCUT REQUIRED.
⑥ 4' STA. 39+40 TO STA. 41+05
1' STA. 69+07 TO STA. 70+90

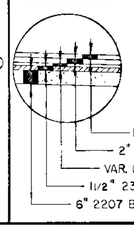
INSET "A"



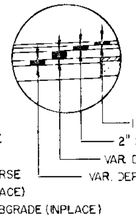
INSET "B"



INSET "C"



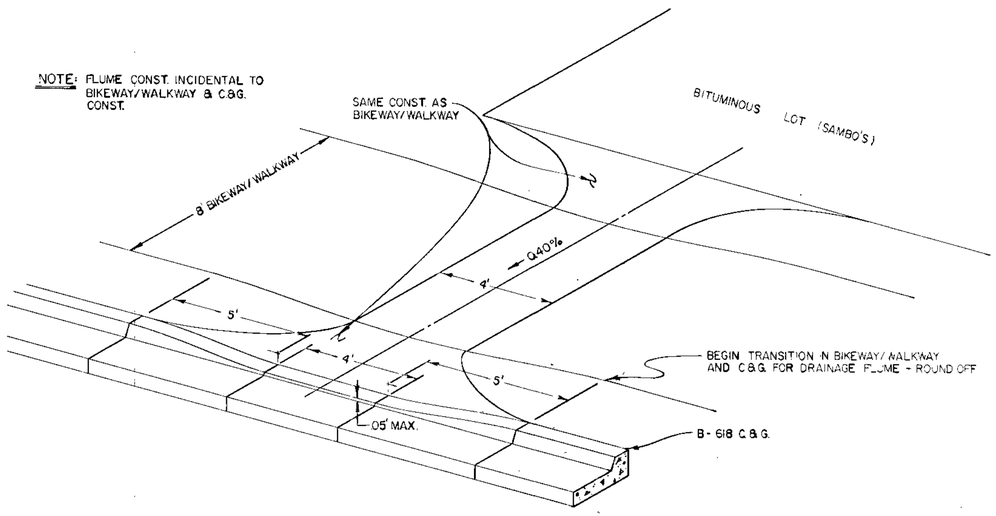
INSET "D"



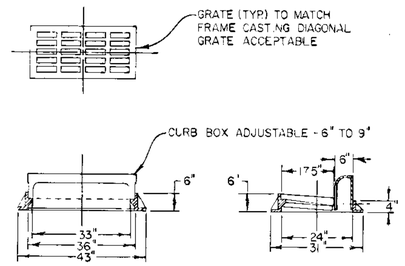
Fed. Proj. No.

DRAINAGE FLUME DETAIL

LOC. - STA 66+00 ± LT.



NOTE: TO BE USED WITH C.B. DESIGN SPECIAL I

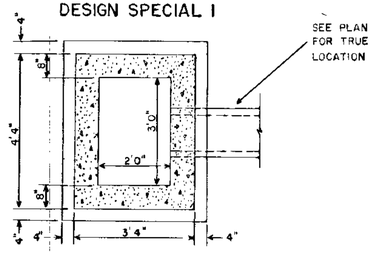


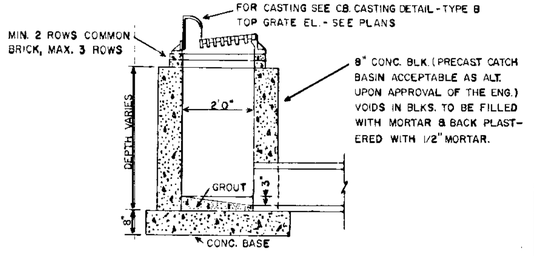
C.B. CASTING DETAIL - TYPE B

BILL OF REINFORCEMENT FOR STREET APPROACHES AND ENTRANCES

BAR	NO.	LENGTH	SHAPE	LOCATION
S-501	TWO SETS OF 18	15'-6"	STRAIGHT	ST. APPROACHES LT. 53+00 & 56+28
S-502	TWO SETS OF 2	10'-0"	STRAIGHT	ST. APPROACHES LT. 53+00 & 56+28
S-503	TWO SETS OF 5	31'-6" TO 37'-6"	STRAIGHT	ST. APPROACHES LT. 53+00 & 56+28
S-504	TWO SETS OF 4	1'-7" TO 26'-6"	STRAIGHT	ST. RADIUS 39+00 LT.
S-505	SIX SETS OF 11	1'-7" TO 16'-6"	STRAIGHT	RAD. LT. 40+17, 65+46 & 71+30
S-506	TWO SETS OF 8	1'-7" TO 26'-6"	STRAIGHT	RAD. LT. 39+00
S-507	TWO SETS OF 7	1'-7" TO 21'-6"	STRAIGHT	RAD. LT. 65+46
S-508	2	39'-4"	BENT	RAD. LT. 65+46
S-509	6	31'-5"	BENT	RAD. LT. 40+17, 65+46 & 71+30
S-510	2	23'-7"	BENT	RAD. LT. 69+72
S-511	TWO SETS OF 8	1'-7" TO 12'-3"	STRAIGHT	RAD. LT. 69+72
S-512	7	11'-9" TO 31'-9"	STRAIGHT	ENT. LT. 40+17
S-513	5	17'-9" TO 32'-9"	STRAIGHT	ENT. LT. 69+72
S-514	7	17'-9" TO 37'-9"	STRAIGHT	SERV. RD. LT. 71+30
S-515	28	21'-7"	STRAIGHT	ENT. 40+17 LT. & SERV. RD. 71+30 LT.
S-516	6	16'-7"	STRAIGHT	ENT. 69+72 LT.
S-517	7	9'-9" TO 29'-9"	STRAIGHT	ENT. 40+17 LT.
S-518	5	15'-9" TO 30'-9"	STRAIGHT	ENT. 69+72 LT.
S-519	7	15'-9" TO 35'-9"	STRAIGHT	SERV. RD. 71+30 LT.

DESIGN SPECIAL I

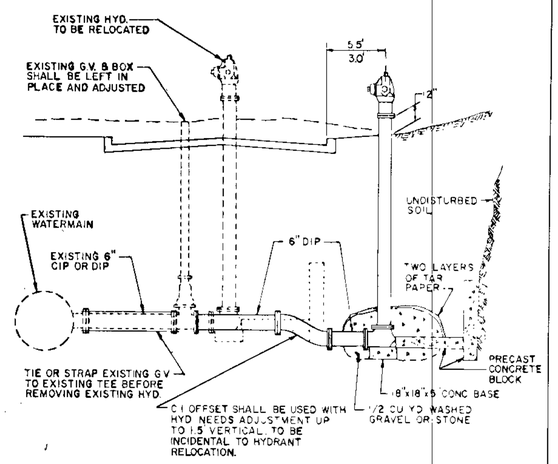




CATCH BASIN DESIGN SPECIAL I

SCALE: 1"=1'-0"

HYDRANT RELOCATION DETAIL



NOTE: HYDRANT RELOCATION SHALL INCLUDE, ALL TOOLS, MATERIALS AND LABOR TO SECURE THE EXISTING GATE VALVE TO THE EXISTING TEE, REMOVE AND RELOCATE THE EXISTING HYDRANT INCLUDING CAST IRON PIPE, GRAVEL, TYERS, COMPACTION OF DISTURBED SOILS AND ALL ELSE NECESSARY TO RELOCATE THE HYDRANT WITHOUT SHUTTING DOWN THE WATERMAIN

BILL OF REINFORCEMENT IRREGULAR WIDTH CONCRETE AT T.H.65

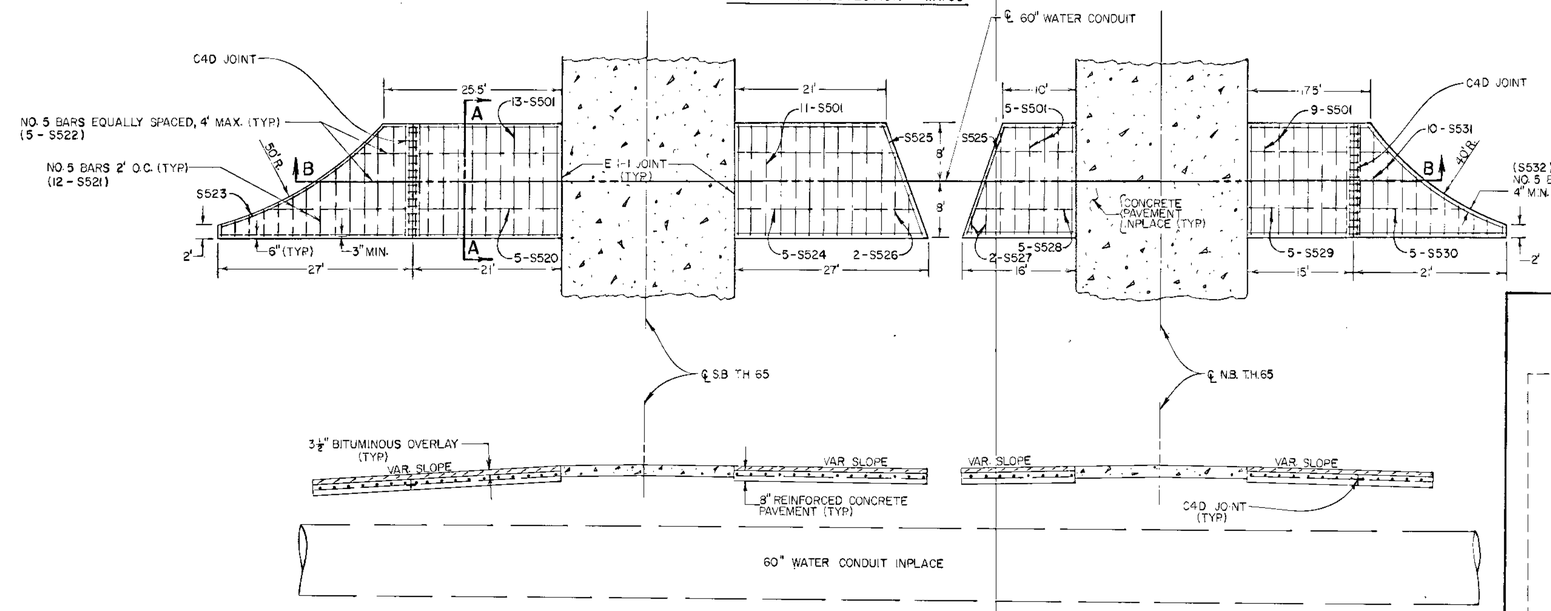
BAR	NO.	LENGTH	SHAPE
S-501	38	15'-6"	STRAIGHT
S-520	5	20'-5"	STRAIGHT
S-521	12	1'-6" TO 14'-8"	STRAIGHT
S-522	5	4'-0" TO 26'-6"	STRAIGHT
S-523	1	27'-0"	BENT
S-524	5	20'-6" TO 26'-3"	STRAIGHT
S-525	2	16'-6"	STRAIGHT
S-526	2	6'-0" TO 11'-0"	STRAIGHT
S-527	2	2'-6" TO 8'-0"	STRAIGHT
S-528	5	9'-6" TO 15'-3"	STRAIGHT
S-529	5	14'-5"	STRAIGHT
S-530	5	2'-0" TO 20'-5"	STRAIGHT
S-531	10	1'-6" TO 14'-9"	STRAIGHT
S-532	1	24'-0"	BENT

BILL OF REINFORCEMENT FOR PASSENGER SHELTER SLAB LT. 38+25

BAR	NO.	LENGTH	SHAPE
S-301	17	7'-0"	STRAIGHT
S-302	8	6'-0"	STRAIGHT
S-303	8	3'-0"	BENT

TYPICAL REINFORCED CONCRETE PAVEMENT (IRREGULAR WIDTH)

WATERMAIN PROTECTION – T.H. 65



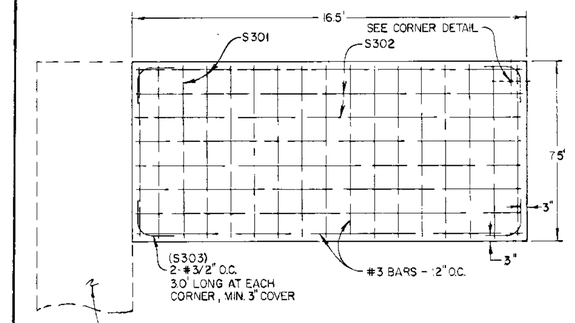
SECTION B – B

(2301) CONCRETE PAVEMENT, IRREGULAR WIDTH ①

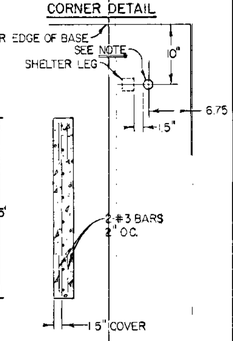
STATION	REMARKS	S.Y.	B-6 INTEGRANT CURB
38+25 LT.	SLAB FOR BUS PASSENGER SHELTER	14	
39+00 LT.	ADD RADIUS SECTION TO EXISTING PAVEMENT	42	79
40+17 LT.	ENTRANCE APPROACH	78	63
53+00 LT.	VAN BUREN STREET	62	32
65+46 LT.	ADD RADIUS SECTION TO EXISTING PAVEMENT	29	63
67+47 TO 67+95 LT.		64	
68+19 TO 68+16 LT.	CONST. PAVEMENT 3.5" LOWER THAN EXISTING CONC.	43	
68+51 TO 68+67 LT.	PAVEMENT TO ALLOW FOR OVER LAYING WITH BITUMINOUS	23	41
68+91 TO 69+27 LT.	PAVING.	47	
69+72 LT.	ENTRANCE APPROACH REPLACEMENT	78	47
71+30 LT.	SERVICE ROAD APPROACH REPLACEMENT	108	63
56+28 LT.	ABLE STREET (C.R. 101)	62	32
	TOTALS =	651	379

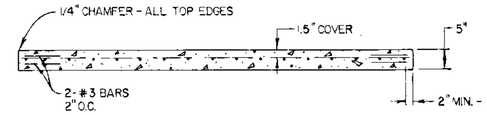
① FOR PROTECTION OF 60" WATER CONDUIT

PASSENGER SHELTER PAD

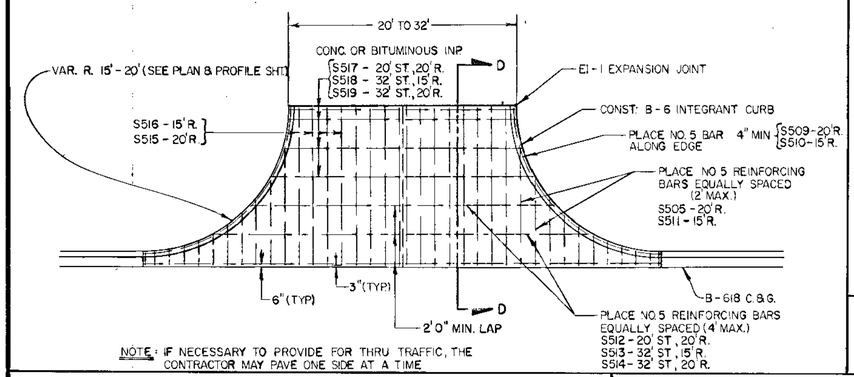


CORNER DETAIL



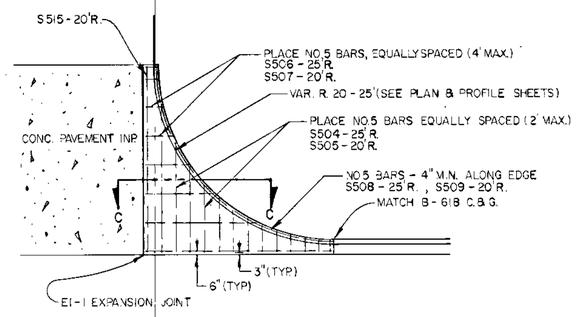


ENT. 40+17 LT. – 20' WIDE, 20'R.
ENT. 69+72 LT. – 32' WIDE, 15'R.
SERVICE RD. 71+30 LT. – 32' WIDE, 20'R.



NOTE: IF NECESSARY TO PROVIDE FOR THRU TRAFFIC, THE CONTRACTOR MAY PAVE ONE SIDE AT A TIME.

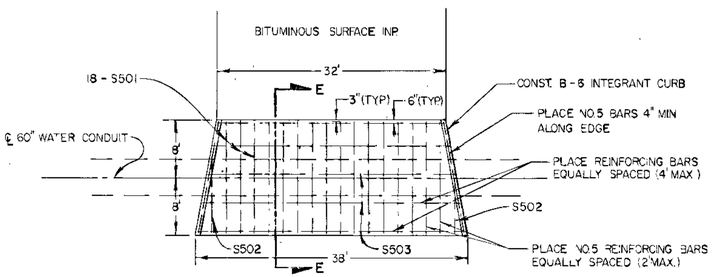
STREET APPROACH 39+00 LT., 25'R.
STREET APPROACH 65+46 LT., 20'R.

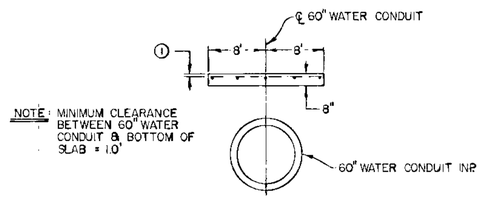


① REINFORCING BARS SHALL BE PLACED WITHIN THE LIMITS OF 3" – 5" BELOW THE SURFACE.

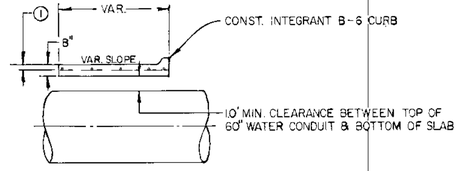
VAN BUREN ST. 53+00 LT.
ABLE ST. (C.R. 101) 56+28 LT.

NOTE: 1½" CONDUIT HOLE MAY BE PREFORMED AT THE TIME OF POURING, OR DRILLED AT A LATER TIME

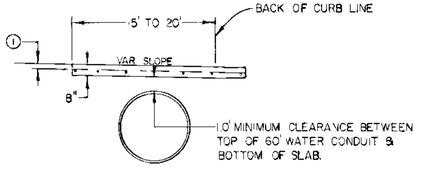




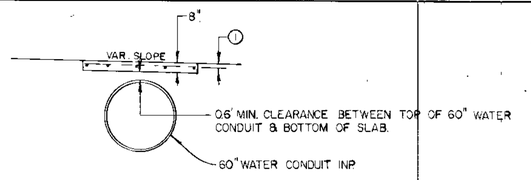
SECTION A – A



SECTION C – C



SECTION D – D



SECTION E – E

DRAINAGE

NO.	STA.	LOC.	REMARKS	TYPE	DESIGN	LIN. FT.	REMOVE SEWER PIPE	TOP	OUTLET	DRAINS TO	F&I CASTING ASSEMBLY	FURNISH & INSTALL R.C.P. SEWER PIPE 12" CL.-4	15' CL.-4	18' CL.-4	29" SPAN AP	C.S. SEWER PIPE 24' SPAN AP	30'	SODDING S.Y.
1	30+85	22' RT.	SALVAGE C.B. CASTING, F.& I. M.H. CASTING	C.B. INP.				885.63	~~882.00~~ 882.45	M.H. #2	A							
2	30+89	17' RT.	ADJUST CASTING TO NEW GRADE	M.H. INP.				885.89	880.~~76~~ 53	M.H. INP.								
3	30+94	22' LT.	SALVAGE C.B. CASTING, REMOVE C.B. STRUCTURE	C.B. INP.			8' ✓		882.00	M.H. #2								
4	30+97	12.9' LT. LWB	INSTALL C.B. CASTING FROM #3, F.&I. CURB BOX	C.B.	C OR G	~~3.4~~ 32		885.~~58~~ 61	882.~~93~~ 26	M.H. #2	C	~~11'~~ 14						
5	31+38	12.9' RT. LEB	INSTALL C.B. CASTING FROM #1, F.& I. CURB BOX	C.B.	C OR G	~~3.5~~ 30		886.~~90~~ 17	88~~2.27~~ 3.01	M.H. #1	C	~~53'~~ 54						
6	34+87	12.9' RT. LEB	INSTALL C.B. CASTING FROM #7, F.& I. CURB BOX	C.B.	C OR G	~~3.6~~ 32		889.1~~6~~8	88~~5.53~~ 6.26	M.H. #8	C	19 ~~14~~ (2)						
7	34+87	21' RT.	SALVAGE CASTING, REMOVE C.B. STRUCTURE	C.B. INP.			~~4'~~ 8		885.50	M.H. #8								
8	34+87	16' LT.	ADJUST CASTING TO NEW GRADE	M.H. INP.				889.87	883.80	M.H. #2								
9	34+93	21' LT.	SALVAGE C.B. CASTING, REMOVE C.B. STRUCTURE	C.B. INP.			8' ✓		885.50	M.H. #8								
10	35+08	12.9' LT. LWB	INSTALL C.3. CASTING FROM #9, F.& I. CURB BOX	C.B.	C OR G	~~3.8~~ 33		889.~~51~~ 60	886.~~57~~ 10	M.H. #8	C	~~30'~~ 31						
11	38+87	21' RT.	SALVAGE C.B. CASTING, F.& I. M.H. CASTING	C.B. INP.				894.93	887.~~30~~ 94	M.H. #13	A							
12	39+55	12.9' RT. LEB	INSTALL CASTING FROM #11, F.& I. CURB BOX	C.B.	C OR G	~~3.8~~ 25		891.8	887.~~38~~ 08	M.H. #11	C	~~09'~~ 71						
13	38+87	17' LT.	ADJUST CASTING TO NEW GRADE	M.H. INP.				891.86	886.~~14~~ 01	M.H. #8								
14	38+95	21' LT.	SALVAGE C.B. CASTING, REMOVE C.B. STRUCTURE	C.B. INP.			8' ✓		887.50	M.H. #13								
15	39+43	12.9' LT. LWB	INSTALL C.B. CASTING FROM #14, F.& I. CURB BOX	C.B.	C OR G	~~3.9~~ 43		891.~~88~~ 65	887.~~60~~ 14	M.H. #13	C	~~60'~~ 58						
16	42+72	17' LT.	ADJUST CASTING TO NEW GRADE	M.H. INP.				893.50	888.~~38~~ 20	M.H. #13								
17	42+72	21' RT.	SALVAGE C.B. CASTING, REMOVE C.B. STRUCTURE	C.B. INP.			4' ✓		889.50	M.H. #16								
18	42+72	12.9' RT. LEB	INSTALL C.B. CASTING FROM #17, F.& I. CURB BOX	C.B.	C OR G	~~3.3~~ 34		893.~~25~~ 27	889.~~60~~ 3	M.H. #16	C	12 ~~14'~~ (2)						
19	42+71	12.9' LT. LWB	INSTALL C.B. CASTING FROM #20, F.& I. CURB BOX	C.B.	C OR G	~~3.7~~ 44		893.13	88~~9.25~~ 54	M.H. #16	C	~~21'~~ 23						
20	42+93	42' LT.	SALVAGE C.B. CASTING, F.& I. M.H. CASTING	C.B. INP.				893.38	889.~~29~~ 26	M.H. #16	A							
* 21	43+26	42' LT.	ADJUST CASTING TO NEW GRADE Removed Poor condition	C.B. INP.	C or G	35		893.58	889.~~39~~ 90	C.B. #20	C							
22	43+52	12.9' LT. LWB	INSTALL C.B. CASTING FROM #23, F.& I. CURB BOX	C.B.	C OR G	~~3.6~~ 28		893.~~48~~ 59	~~889.67~~ 90.59	C.B. #21	C	~~10'~~ 26						
23	43+51	22' LT.	SALVAGE C.B. CASTING, REMOVE C.B. STRUCTURE	C.B. INP.			27' ✓		889.84	C.B. #21								
24																		
25	46+03	16' LT.	ADJUST CASTING TO NEW GRADE	M.H. INP.				895.55	~~891.26~~ 90.90	M.H. #16								
26	46+03	21' RT.	SALVAGE CASTING, REMOVE C.B. STRUCTURE	C.B. INP.			~~4'~~ 3		891.48	M.H. #25								
27	46+03	12.9' RT. LEB	INSTALL C.B. CASTING FROM #26, F.& I. CURB BOX	C.B.	C OR G	~~3.5~~ 33		895.~~21~~ 17	891.~~34~~ 67	M.H. #25	C	8' ✓ (2)						
28	46+24	40' LT.	ADJUST CASTING TO NEW GRADE, F.& I. CURB BOX	C.B. INP.				895.59	891.~~38~~ 59	M.H. #25	C'							
* 29	46+63	40' LT.	ADJUST CASTING TO NEW GRADE, F.& I. CURB BOX Removed	C.B. INP.	C or G	37		896.18	~~891.87~~ 92.04	C.B. #28	C							
30	46+86	12.9' LT. LWB	INSTALL C.B. CASTING FROM #31, F.& I. CURB BOX	C.B.	C OR G	~~3.4~~ 28		895.~~84~~ 77	892.~~32~~ 81	C.B. #29	C	~~29~~ 28						
31	46+80	21' LT.	SALVAGE CASTING, REMOVE C.B. STRUCTURE	C.B. INP.			27' ✓		892.00	C.B. #29								
32	49+31	17' LT.	ADJUST CASTING TO NEW GRADE	M.H. INP.				897.68	~~893.12~~ 2.43	M.H. #25								
33	49+31	21' RT.	SALVAGE CASTING, REMOVE C.B. STRUCTURE	C.B. INP.			~~4'~~ 6		893.38	M.H. #32								
34	49+31	24.9' RT.	INSTALL CASTING FROM #33, F.& I. CURB BOX	C.B.	C OR G	~~3.4~~ 31		897.~~28~~ 36	~~893.79~~ 4.07	M.H. #32	C	9 ~~8'~~ (2)						
35	49+54	37' LT.	ADJUST CASTING TO NEW GRADE, F.& I. CURB BOX	C.B. INP.				897.78	893.~~88~~ 93	M.H. #32	C							
36	49+90	37' LT.	ADJUST CASTING TO NEW GRADE, F.& I. CURB BOX	C.B. INP.				897.96	894.~~07~~ 51	C.B. #35	C							
37	50+14	24.9' LT.	INSTALL CASTING FROM #38, F.& I. CURB BOX	C.B.	C OR G	~~3.9~~ 25		89~~8.88~~ 05	~~894.21~~ 5.36	C.B. #36	C	32 ~~28'~~						
38	50+08	21' LT.	SALVAGE CASTING, REMOVE C.B. STRUCTURE	C.B. INP.			~~25~~ 27		894.20	C.B. #36								
39	52+61	18' LT.	ADJUST CASTING TO NEW GRADE	M.H. INP.				900.72	898.~~12~~ 76	M.H. #32								
40	52+61	22' RT.	SALVAGE CASTING, REMOVE C.B. STRUCTURE	C.B. INP.			4 6		896.30	M.H. #39								
41	52+61	24.9' RT.	INSTALL CASTING FROM #10, F.& I. CURB BOX	C.B.	C OR G	38		900.~~26~~ 49	896.23	M.H. #39	C	8' (2)	8'					
42	52+81	38' LT.	ADJUST CASTING TO NEW GRADE, F.& I. CURB BOX	C.B. INP.				901.53	896.~~85~~ 43	M.H. #39	C							
* 43	53+20	39' LT.	ADJUST CASTING TO NEW GRADE, F.& I. CURB BOX Removed	C.B. INP.	C or G	48		901.99	896.~~70~~ 94	C.B. #42	C							
44	53+44	24.9' LT.	INSTALL CASTING FROM #45, F.& I. CURB BOX	C.B.	C OR G	~~3.9~~ 27		900.~~82~~ 92	89~~8~~.02	C.B. #43	C	32 ~~29'~~						
45	53+39	20' LT.	SALVAGE CASTING, REMOVE C.B. STRUCTURE	C.B. INP.			~~28'~~ 30		897.00	C.B. #43								

* Structure in poor condition - Removed and Reconstructed

CASTING ASSEMBLIES

ASSEMBLY	ITEM	CASTING NO.	QUANTITIES
A	FRAME COVER	700 - 7 712	10 7 - .7
B	FRAME GRATE CURB BOX	SEE CASTING DETAIL TYPE-B SHEET NO. 5	4 5 - 4
(1) C	CURB BOX	821 B	34 ~~70~~ - 9

BASE SLAB + 0.7

(1) EXISTING CATCH BASIN CASTINGS HAVE NO CURB BOXES INSTALLED BUT HAVE A 1/8" STEEL PLATE ATTACHED TO COVER THE CURB BOX OPENING. THE CONTRACTOR SHALL BE REQUIRED TO REMOVE THE STEEL PLATE AS INCIDENTAL TO FURNISHING AND INSTALLING THE NEW CURB BOXES.

(2) FOR STORM SEWER PIPE THAT IS TO BE CONNECTED TO EXISTING PIPE, THE JOINTS SHALL BE OF NON-GASKET TYPE TO MATCH EXISTING PIPE JOINTS AND SEALED WITH AN APPROVED MASTIC MATERIAL.

3-19-84 W.A. [illegible]

DRAINAGE (CONTINUED)

NO.	STA.	LOC.	REMARKS	TYPE	DESIGN	LIN. FT.	REMOVE SEWER PIPE	TOP	OUTLET	DRAINS TO	F&I CASTING ASSEMBLY	FURNISH & INSTALL R.C.P. SEWER 12"CL.-4	15"CL.-4	18"CL.-2	29"SPAN	C.S.P. SEWER 24"SPAN	30"	SODDING S.Y.
46	55+88	17' LT.	ADJUST CASTING TO NLW GRADE	M.H.	INP.			901.95	897.~~37~~ 97	M.H.#39								
47	55+70	22' RT.	SALVAGE C.B. CASTING, F.& I. M.H. CASTING	C.B.	INP.			901.76	897.69 77	M.H.#48	A							
48	55+81	24.9' RT.	INSTALL C.B. CASTING FROM #47, F.& I. CURB BOX	C.B.	C OR G	2+8 2.9		901.79 54	897.~~38~~ 39 54	M.H.#47	C	18'	4'					
49	56+10	10' LT.	ADJUST CASTING TO NLW GRADE, F.& I. CURB BOX	C.B.	INP.			901.80	897 08 89	M.H.#48	C							
* 50	56+47	10' LT.	ADJUST CASTING TO NLW GRADE, F.& I. CURB BOX Removed	C.B.	INP.	C or G	54		901.82	897.~~45~~ 36	C.B.#49	C							
51	56+74	24.9' LT.	INSTALL C.B. CASTING FROM #52, F.& I. CURB BOX	C.B.		C OR G	6+2 0	901 8791	898.~~28~~ 03	C.B.#50	C	3'~~18~~						
52	56+65	21' LT.	SALVAGE C.B. CASTING, REMOVE C.B. STRUCTURE	C.B.	INP.		2~~6~~ 28'		898.00	C.B.#50								
53	60+89	16' LT.	ADJUST CASTING TO NLW GRADE	M.H.	INP.			902 95	898.~~05~~ 05	C.B.#16								
54	61+07	39' LT.	ADJUST CASTING TO NLW GRADE, F.& I. CURB BOX	C.B.	INP.			902.58	898.~~42~~ 79	M.H.#53	C							
* 55	61+16	39' LT.	ADJUST CASTING TO NLW GRADE, F.& I. CURB BOX Removed	C.B.	INP.	C or G	8.7	8'	902.45	899.~~02~~ 55	C.B.#54	C		20'					
56	64+95	13.5' LT. L WB		C.B.		SPECIAL I	2+8 3.0		900.~~88~~ 75	897.~~79~~ 17	C.B.#57	B	~~8'~~	8'					
57	65+03	13.5' LT. L WB		C.B.		SPECIAL I	2+8 3.1		900.~~88~~ 75	897.~~08~~ 91	M.H.#~~58~~ 68	B	~~28'~~	88					
~~58~~	~~65+03~~	~~91' LT.~~	~~SALVAGE C.B. CASTING, F.& I. M.H. CASTING Removed~~	~~C.B.~~	~~INP.~~	Deleted by C.O. # 1			~~897.48~~	~~M.H.#~~	~~A~~		~~81'~~						
~~59~~	~~65+03~~	~~21' RT.~~	~~SALVAGE C.B. CASTING, F.& I. M.H. CASTING Removed~~	~~C.B.~~	~~INP.~~	Deleted by C.O. # 1			~~897.38~~	~~C.B.#60~~	~~A~~								
60	65+03	13.5' RT. L WB	SALVAGE INP. M.H. CASTING, REMOVE M.H. STRUCT. 29' FT. CONST. C.B.	C.B.		SPECIAL I	5~~7~~ 4.0	900.~~82~~ 91	897.~~48~~ 24	C.B.#62	B							
61	64+85	13.5' RT. L WB		C.B.		SPECIAL I	2+8 3.1	900.~~88~~ 82	897.~~06~~ 99	C.B.#60	B	8'~						
62	65+81	12.9' RT. L WB	CONST. C.B. ON EXISTING 15" R.C.P. SEWER INSTALL C.B. CASTING FROM C.B.#58, F.& I. CURB BOX	C.B.		C OR G	2+8 4.0	901.~~80~~ 15	897.~~~~ 12	M.H.#64	C							
63	65+84	12.9' LT. L WB	INSTALL C.B. CASTING FROM C.B.# 58, F.& I. CURB BOX	C.B.		C OR G	2+8 3.7	901.~~82~~ 51	897.~~48~~ 38	M.H.#~~64~~A	C	20'			1 34'			
~~63A~~	~~65+84~~	~~7' RT. L WB~~	~~Deleted by C.O. # 1~~	~~M.H.~~	~~A OR F~~	~~4.7~~		~~901.77~~	~~897.08~~	~~M.H.#64A~~	~~A~~				~~0'~~			
64	66+99	29' RT.	SALVAGE C.B. CASTING, REMOVE 15" R.C.P. OUTLET, F.& I. 28" SPAN OUTLET WITH APRON. AD 2057	M.H.	INP.	Removed replaces C.O. # 1	78'	901.85	896.30 75	DITCH	A					~~24~~		16
64A	~~66+30~~ 66+~~78~~	~~8~~ RT. L WB		M.H.	A OR F	5.6 4.9		90~~6~~ 5.82	896.74	~~M.H.#~~ D.I.#2	A C			12 8.6~~8~~				
65	72+49	29.3' RT.	SALVAGE M.H. CASTING, REMOVE M.H. STRUCTURE	M.H.	INP.		2~~6~~ 6		897.74	M.H.#69	C							
65A	72+54	12.9' RT. L WB	CONST. C.B. ON EXISTING 15" R.C.P. SEWER. INSTALL C.B. CAST. FROM #66	C.B.		C OR G	3.4 ~	901.~~88~~ 19	897.~~68~~ 57	M.H.#69	C		8'~	5'				
66	72+19	24.0' RT.	SALVAGE C.B. CASTING, F.& I. M.H. CASTING Removed stubgrs not required	C.B.	INP.		8		898.14	M.H.#65A	A							
67	72+52	24.0' LT.	SALVAGE C.B. CASTING, REMOVE C.B. STRUCTURE	C.B.	INP.		1~~8~~ 8		898.22	C.B.#66								
68	72+52	12.9' LT. L WB	INSTALL C.B. CASTING FROM #67, F.& I. CURB BOX	C.B.	H	2.8 2.5	8'~	901.02	898.~~24~~	C.B.#66	C	22' (2)						
69	73+82	29.7' RT.	ADJUST CASTING TO NLW GRADE	M.H.	INP.			902.28	896.27	SEWER MAIN	SO.							
70	77+00	29.1' RT.	ADJUST CASTING TO NLW GRADE	M.H.	INP.			901.89	897.10	M.H.#69								
71	77+00	24.9' RT.	INSTALL C.B. CASTING FROM #72, F.& I. CURB BOX	C.B.		C OR G	2+8 4.2	901.37	897.~~54~~	M.H.#70	C	9'~~4~~ (2)						
72	77+00	24' RT.	SALVAGE C.B. CASTING, REMOVE C.B. STRUCTURE	C.B.	INP.		12'~		897.35	M.H.#70		5'~~8~~ (2)						
73	77+02	24' LT.	SALVAGE C.B. CASTING, REMOVE C.B. STRUCTURE	C.B.	INP.		18'~		897.81	C.B.#72								
74	77+02	12.9' LT. L WB	INSTALL C.B. CASTING FROM #73, F.& I. CURB BOX	C.B.		C OR G	2+8 3.5	901.~~8~~	897.~~82~~60	C.B.#71	C	12'~~18~~ (2)						
* 75	69+19	21' LT.	REMOVE 24" X 33" C.S.P. LT., F.& I. 28" SPAN C.S.P.-A. LT. EXTEND 30" C.S.P. LT. Removed	M.H.	A or F	46	3~~2~~ 36	903.12	898.59	DITCH		56'		Deleted by C.O. # 1		20'~		17
	~~74+85~~	~~32' LT.~~	~~Remove 12" x 36" CMP Driveway~~				32											
	~~76+29~~	~~32' LT.~~	~~Remove 18" x 34" CMP Driveway~~				34											

* STRUCTURE IN POOR CONDITION — REMOVED AND RECONSTRUCTED

CASTING ASSEMBLIES

ASSEMBLY	ITEM	CASTING NO.	QUANTITIES
A	FRAME	700 - 7	10
	COVER	712	
B	FRAME	SEE CASTING	4
	GRATE	DETAIL TYPE-B	
	CURB BOX	SHEET NO. 5	
(1) C	CURB BOX	821 B	34

(1) EXISTING CATCH BASIN CASTINGS HAVE NO CURB BOXES INSTALLED BUT HAVE A 1/8" STEEL PLATE ATTACHED TO COVER THE CURB BOX OPENING. THE CONTRACTOR SHALL BE REQUIRED TO REMOVE THE STEEL PLATE AS INCIDENTAL TO FURNISHING AND INSTALLING THE NEW CURB BOXES.

(2) FOR STORM SEWER PIPE THAT IS TO BE CONNECTED TO EXISTING PIPE, THE JOINTS SHALL BE OF NON-GASKET TYPE TO MATCH EXISTING PIPE JOINTS AND SEALED WITH AN APPROVED MASTIC MATERIAL.

3-19-34 W.A. Howard

HIGHWAY FEDERAL AID SHEET
PLATE 1-SINGLE PLAN AND PROFILE-LINE & DOT
TELEDYNE
PRINTED IN U.S.A.

3-17-94

S.P. 02-608-06 Sheet No. 9 of 33 Sheets

WB PI 31+60 = A PT 12' LT & ⊥ TO ℄ STA 31+60
Δ = 1°54'33" LT.
D = 1°00'
R = 5,729.58'
T = 95.47'
L = 190.92'

B.M. 6, ELEV. 889.56
DBL. SPIKE IN 10" ELM.
STA 33+60, 100' LT.

WB PI 35+50.78 = A PT 25' LT. & ⊥ TO ℄ STA 35+50
Δ = 1°54'33" RT.
D = 1°00'
R = 5,729.58'
T = 95.47'
L = 190.92'

CAUTION: HEAVY EQUIPMENT WILL NOT BE ALLOWED TO CROSS OR WORK OVER 60" WATER CONDUIT

WB PI 44+05.76 = A PT 25' LT. & ⊥ TO ℄ STA 44+05
Δ = 1°54'33" RT.
D = 1°00'
R = 5,729.58'
T = 95.47'
L = 190.92'

N

REMOVE 79' FENCE
32+74 TO 33+53, 34' LT.

REMOVE 460' FENCE
34+97 TO 39+57, 33' LT

REMOVE 13' FENCE
43+46 TO 43+59, 42' LT

SHELTER TO BE MOVED BY OTHERS
CONCRETE SLAB REMOVAL & REPLACEMENT
INCLUDED IN CONCRETE ITEMS.

CAUTION - BURIED POWER

CONSTRUCT
8' BIKEWAY/ WALKWAY

TERRACE ROAD

ST. PAUL

MONROE ST.

MADISON ST.

WB PC 30+64.53 = A PT 12' LT & ⊥ TO ℄ STA 30+64.53

WB PT 32+55.45

WB PC 34+55.31

WB PT 36+46.23

WB PC 43+10.29

WB PT 45+01.21

CONST. PED. CURB RAMPS (TYP.)

ENT. TO BE REMOVED BY OTHERS.

ENT. TO BE WIDENED BY OTHERS

CONST CONC. WALK

F & I. 11/2" X 76' R.S.C. FOR POWER SERVICE TO BUS SHELTER. LOCATION APPROX. ACTUAL LOC. TO BE DETERMINED IN THE FIELD.

10' UTILITY EASEMENT

F & I. HANDHOLES & 3" R.S.C. PIPE FOR FUTURE SIGNAL INSTALLATION

FRIDLEY MEDICAL CENTER

BITUMINOUS LOT

RELOCATE HYD. RT STA. 39+33 12' SOUTH

EB PI 31+60 = A PT 12' RT. & ⊥ TO ℄ STA 31+60
Δ = 1°06'58" RT.
D = 0°30'
R = 11,459.16'
T = 111.61'
L = 223.22'

EB PI 34+68.06 = A PT 18' RT. & ⊥ TO ℄ STA 34+68
Δ = 1°06'58" LT.
D = 0°30'
R = 11,459.16'
T = 111.61'
L = 223.22'

EB PI 42+40.06 = A PT 18' RT & ⊥ TO ℄ STA. 42+40
Δ = 1°08'45" LT.
D = 0°30'
R = 11,459.16'
T = 1459'
L = 229.17'

B.M. 7, ELEV. 896.07
TOP N.W. COR. SIDEWALK
PDQ STORE 110' RT.,
STA. 43+20.

NOTE: SEE SHEET NO. 6 FOR REINFORCED CONC. CONSTRUCTION DETAILS

EB PC 30+48.39 = A PT 12' RT. & ⊥ TO ℄ STA 30+48.39

EB PT 32+71.61

EB PC 33+56.45

EB PT 35+79.67

EB PC 41+25.47

EB PT 43+54.64

EB PC 44+25.52

PDQ STORE

12"X11" R.C.P. SEWER, 1.0%
682.03
881.92
880.70

12"X53' R.C.P. SEWER 0.50%
682.00
882.27

12"X30' R.C.P. SEWER, 0.50%
885.57
883.90
885.42

REMOVE C.B. # 7
885.59
883.90
12"X16' R.C.P. SEWER 1.0%

12"X60' R.C.P. SEWER, 0.50%
887.69
886.4
REMOVE C.B. # 4

12"X21' R.C.P. SEWER 1.0%
889.25
889.04
888.35

Quantities Shown in # 21

12"X19' R.C.P. SEWER, 0.50%
889.57
889.57

REMOVE C.B. # 7
888.35
889.50
869.60
12"X 4' R.C.P. SEWER, 1.0%

100' V.C.
M = 0.05'
PVC
PVT
+1.40%
+1.0%
+1.03%
27" R.C.P. SEWER INPLACE 0.80%
880.70

100' V.C.
M = 0.07'
PVC
PVT
+0.90%
+0.38%
27" R.C.P. SEWER INPLACE 0.56%
883.90

100' V.C.
M = 0.30'
PVC
PVT
+0.50%
+0.43%
+0.66%
21" R.C.P. SEWER INPLACE 0.74%
27" R.C.P. SEWER INPLACE 0.56%
886.4
888.35

STRUCTURE NOTATING CHART

HIGHWAY FEDERAL AID SHEET
PLATE 1-SINGLE PLAN AND PROFILE-LINE & DOT
METRIDYNE
PRINTED IN U.S.A.

3-19-84

S.P. 02-608-06 Sheet No. 10 of 33 Sheets

WB PI 44+05.76 = A PT. 25' LT. & ⊥ TO ℄ STA. 44+05
Δ = 1°54'33" RT.
D = 1°00'
T = 95.47'
L = 190.92'

REMOVE 35' FENCE
35' LT. STA. 44+79

WB PI 47+95.96 = A PT. 12' LT. & ⊥ TO ℄ STA. 47+95
Δ = 1°54'33" LT.
D = 1°00'
R = 5,729.58'
T = 95.47'
L = 190.92'

CAUTION: HEAVY EQUIPMENT WILL NOT BE ALLOWED TO CROSS OR WORK OVER 60" WATER CONDUIT

WB PI 58+95 = A PT. 12' LT. & ⊥ TO ℄ STA. 58+95
Δ = 1°54'33" LT.
D = 1°00'
R = 5,729.58'
T = 95.47'
L = 190.92'

WB PC 57+99.53 = A PT. 12' LT. & ⊥ TO ℄ STA. 57+99.53

WB PI 59+90.45

WB PT. 45+01.21

WB PC 47+00.49

WB PT. 49+91.41 = A PT. 12' LT. & ⊥ TO ℄ STA. 48+90.47

DENOTES BIKEWAY/WALKWAY EASEMENT

CONSTRUCT 8' BIKEWAY / WALKWAY

MATCH C.&G. CONST. TO CONC. SLAB CONST.

PI 56+29.49
Δ = 0°01'59" LT.

QUINCY ST.

ST. PAUL

JACKSON ST.

VAN BUREN ST.

ABLE ST.
CSAH 101

WORKS

VENT PIPE

EASEMENT

CONST. SIDEWALK & PEDESTRIAN RAMP

BAKER ST.

SCHOOL

BIT. LOT

3-S-B APT.

CONST. PED. CURB RAMPS (TYP.)

TEMPORARY CONST.

BITUMINOUS LOT

NOTE: new construction could at 28' 6" to 6 3 will not disturb existing roadway as water main cover is 6' on Van Buren St. No. est. A.H.

CAUTION - BURIED POWER -

EB PC 44+25.52

EB PT 46+54.69 = A PT 12' RT & ⊥ TO ℄ STA 46+54.69

EB PI 45+40.11 = A PT. 12' RT. & ⊥ TO ℄ STA 45+40
Δ = 1°08'45" RT.
D = 0°30'
R = 11,459.16'
T = 114.59'
L = 229.17'

BM 8, ELEV. 901.84
TOP N.E. COR. BOTTOM STEP, STA. 50+85, 80' RT.

NOTE: SEE SHEET NO. 6 FOR REINFORCED CONC. CONSTRUCTION DETAILS

EB PI 59+60 = A PT 12' RT. & ⊥ TO ℄ STA. 59+60
Δ = 0°34'23" RT.
D = 0°30'
R = 11,459.16'
T = 57.31'
L = 114.61'

EB PC 59+02.69 = A PT. 12' RT & ⊥ TO ℄ STA. 59+02.69

EB PT 60+17.30

REMOVE CB.#28

12" X 8' R.C.P. SEWER 0.50%

12" X 29' R.C.P. SEWER 0.50%

12" X 28' R.C.P. SEWER 0.50%

12" X 29' R.C.P. SEWER 1.0%

2' X 30' R.C.P. SEWER 0.5%

REMOVE CB.#33

12" X 8' R.C.P. SEWER 0.5%

REMOVE CB.#40

12" X 8' R.C.P. SEWER 0%

2' X 12' R.C.P. SEWER 1.0%

100' V.C.
M = 0.3'

200' V.C.
M = 0.5'

21" R.C.P. SEWER INPLACE 0.74%

21" R.C.P. SEWER INPLACE 0.64%

21" R.C.P. SEWER INPLACE 0.60%

21" R.C.P. SEWER INPLACE 0.50%

18" R.C.P. SEWER INPLACE 0.24%

+0.66% +0.50% +0.80% +0.98% +0.85% +0.27% +0.22%

P.V.T. P.V.C. P.V.T. P.V.C.

PI 898.08 PI 898.83 PI 900.30 PI 901.67 PI 902.38

891.26 893.42 895.42 897.14

905.00 900.00 895.00 890.00

STRUCTURE NOTATING CHART

45 50 55 60

HIGHWAY FEDERAL AID SHEET
PLATE 1-SINGLE PLAN AND PROFILE-LINE & DOT
TELEDYNE
PRINTED IN U.S.A.

SP 02-608-06 Sheet No. 11 of 33 Sheets

WB Pl. 58+95 = A PT. 12' LT. & ⊥ TO ℄ STA. 58+95
Δ = 1° 54' 33" LT.
D = 1° 00'
R = 5729.58'
T = 95.47'
L = 190.92'

SALVAGE 48" FENCE 37' LT., STA. 59+11 TO 59+59
INSTALL 48" FENCE, 44' LT., STA. 59+11 TO 59+59
(CHECK LOCATION OF 60" WATER MAIN)

WB Pl. 63+75.25 = A PT. 28' LT. & ⊥ TO ℄ STA. 63+75
Δ = 1° 54' 33" RT.
D = 1° 00'
R = 5,729.58'
T = 95.47'
L = 190.92'

NOTE: WATER MAIN PROTECTION Replaced at TAYLOR ST.

CAUTION: HEAVY EQUIPMENT WILL NOT BE ALLOWED TO CROSS OR WORK OVER 60" WATER CONDUITS

BM. 10, ELEV. 903.25
TOP SE. COR. BOTTOM STEP, HOUSE # 1115
STA. 72+50.

REMOVE CONC. PAVEMENT, INCL. CURB
REPLACE CONC. TO NEW GRADE
USE EXTREME CARE IN REMOVING CONC. OVER 60" WATER MAIN

WB Pl. 73+20 = A PT. 28' LT. & ⊥ TO ℄ STA. 73+20
Δ = 1° 54' 33" RT.
R = 5,729.58'
D = 1° 00'
T = 95.47'
L = 190.92'

DENOTES BIKEWAY/WALKWAY EASEMENT
FUTURE PARKING LOT LIMITS
CONSTRUCT 8' BIKEWAY / WALKWAY
PLACE 8" CONC. PAVEMENT
REMOVE CONC. SPILLWAY SEE SHEET NO. 5 FOR NEW CONST. DETAILS
TEL. BOOTH
SPILLWAY
BITUMINOUS LOT
I-S-F
ST. PAUL
TYLER ST.
TAYLOR ST.
CENTRAL AVE.
SERVICE RD.
WATER WORKS
EASEMENT
I-BUR
T-BUR
WB PT. 59+90.45
WB PC 62+79.78
WB PT. 64+70.70
WB PC 72+24.53
WB PT. 73+16.45
N.W. BELL TEL CO.
I-S-B AAMCO
2 S F
I-S-B
VFW
STD. OIL STA.
BIT. LOT
C.B. 58 & 59 Removed deleted by CO. #1
I-S-B PROSTOP
EB PC 59+02.69
A PT. 12' RT. & ⊥ TO ℄ STA. 59+02.69
EB PT 60+17.30
EB PC 62+92.70
EB PT 63+17.31
EB PC 72+62.71
EB PT. 73+17.30
HYDRANT STA. 61+87, 25' RT. RELOCATE 6' SOUTH
HYDRANT STA. 69+88, 36 RT. RELOCATE 6' SOUTH
CONST. PED. CURB RAMPS (TYP.)
CAUTION - BURIED POWER
SB TH 65
NB TH 65
VIRON RD.
PROPOSED NEW STREET TO BE CONSTRUCTED BY OTHERS.
CONSTRUCT 5' CONCRETE SIDEWALK
C.B. # 66 deleted

EB Pl. 59+60 = A PT. 12' RT. & ⊥ TO ℄ STA. 59+60
Δ = 0° 34' 23" RT.
D = 0° 30'
R = 11,459.16'
T = 57.31'
L = 114.61'

EB Pl. 62+60.01 = A PT. 15' RT. & ⊥ TO ℄ STA. 62+60
Δ = 0° 34' 23" LT
D = 0° 30'
R = 11,459.16'
T = 57.31'
L = 114.61'

EB Pl. 73+20 = A PT. 15' RT. & ⊥ TO ℄ STA. 73+20
Δ = 0° 34' 23" LT
D = 0° 30'
R = 11,459.16'
T = 57.29'
L = 114.59'

BM. 9, ELEV. 903.49
TOP. NW. COR. CONC. WALK, VFW. BLDG.

NOTE: SEE SHEET NO. 6 FOR REINFORCED CONC. CONSTRUCTION DETAILS.

OVERLAY WITH VAR. DEPTH 2341 BITUMINOUS WEARING COURSE
SEE TYPICAL BITUMINOUS SECTION - INSET "B"
CONST. REINFORCED CONC. 3 1/2" LOWER THAN EXISTING CONC. PAVEMENT & OVERLAY W.TH 2" BINDER & 1/2" BIT. WEARING COURSE

15" R.C.P. SEWER IN PLACE
897.42
897.31
896.53
897.50
+0.22%
200' V.C. M=0.17'
18" R.C.P. SEWER IN PLACE, 0.24%
898.66
898.82
899.01
15" R.C.P. SEWER INP., 0.50%
-0.45%
-0.40%
-0.50%
+0.20%
897.49
897.08
896.74
896.53
FL. 896.35
15" X 8" R.C.P. SEWER, 0.50%
8" X 9" R.C.P. SEWER, 0.37%
8" X 56" R.C.P. SEWER, 0.37%
28' SPAN X 74" RCP-A SEWER 0.24%
28' SPAN R.C.P.-A. APRON
+0.87%
50' V.C. M=0.03'
-0.39%
+0.31%
100' V.C. M=0.06'
897.74
897.69
896.27
15" R.C.P. SEWER INP.
30" C.M.P. INP.
FL. 898.6
24' SPAN X 4" CMP-A SEWER 0.63%
24' SPAN CMP-A APRON
EXTEND 30" X 20 C.M.P. SEWER
SALVAGE 30" C.M.P. APRON & INSTALL AS INCIDENTAL TO SEWER CONST.
898.24
898.4
897.74
898.10
897.69
12" X 8" R.C.P. SEWER 0.50%
2 R.C.P. SEWER INP. IN PLACE
12" X 22" R.C.P. SEWER, 0.47% (ASSPCC) - MATCH INP.)
12" X 8" R.C.P., 1.0%
897.50
897.42
2' X 8' R.C.P., 1.0%
897.77
897.68
2' X 20" R.C.P., 1.0%
897.49
12" X 20" R.C.P., 1.0%
897.45
897.25
897.08

STRUCTURE NOTATING CHART

HIGHWAY FEDERAL AID SHEET
PLATE 1-SINGLE PLAN AND PROFILE-LINE & DOT
TELEDYNE
PRINTED IN U.S.A.

3-19-84

S.P. 02-608-06 Sheet No. 12 of 33 Sheets

WB PI 78+00.25 = A PT. 12' LT. & ⊥ TO ℄ STA 78+00
Δ = 1° 54' 33" LT.
D = 1° 00'
R = 5,729.58'
T = 95.47'
L = 190.92'

CAUTION: HEAVY EQUIPMENT WILL NOT BE ALLOWED TO CROSS OR WORK OVER 60" WATER CONDUIT.

N

WB PT. 74+15.45

CONSTRUCT 8' BIKEWAY / WALKWAY

WB PC 77+04.78

WB PT 78+95.70 = A PT 12' LT & ⊥ TO ℄ STA 78+95.47

DENOTES BIKEWAY/WALKWAY EASEMENT

1-S-M

2-S-F

1-S-S

OLD CENTRAL

PI 82+62.80
Δ = 0° 23' 42" LT

END PROJECT S.P 02-608-06
STA. 82+70.0

12" X 30' C.M.P. ∠P

SIGN

2-S-F

BIT. LOT

60" ST. PAUL WATER WORKS EASEMENT 60"

6" 6"

30' 30' 30' 30'

BIT. PED. PED. PED. BIT.

45' 38' 38' 30'R

14' 12' 14'

75 80

7' (TYP.)

30' R.

CONSTRUCT 5' CONCRETE SIDEWALK

HYDRANT STA. 82+31, 28' RT.
RELOCATE 3' SOUTH

C.S.A.H. 35

EB PT. 73+77.30

EB PC 75+62.74

EB PT. 76+17.33 = A PT. 12' RT. & ⊥ TO ℄ STA 76+77.25

EB PI 76+20.03 = A PT. 12' RT. & ⊥ TO ℄ STA 76+20
Δ = 0° 34' 23" RT.
D = 0° 30'
R = 11,459.16'
T = 57.29'
L = 114.59'

B.M. 11, ELEV 905.16
TOP S.W. COR. BOT STEP, STA. 83+70 100' RT.

STRUCTURE NOTATNS (-HPU)

902.29 902.33 902.13 902.07 901.93 902.20 902.31 902.47 902.56 902.74 903.01 903.28

+31 +39 +34

PI 902.43 PI 901.93 PI 903.28

910.00 905.00 900.00 895.00

-0.31% -0.20% +0.27%

RVC 100' V.C. M=.006 EVT

15" RCP SEWER INPLACE

896.27 897.10

2" X 10' RCP SEWER 0.10% 69.82 89.35 89.34 89.30 89.10

12" X 12" RCP SEWER

12" RCP SEWER INPLACE

+70

901.86 901.93 901.72 901.70 901.75 901.72 901.85 902.13 902.30 902.56 902.73 903.00 902.99 902.91 902.99

+63 +73 +85

74 75 76 77 78 79 80 81 82 83

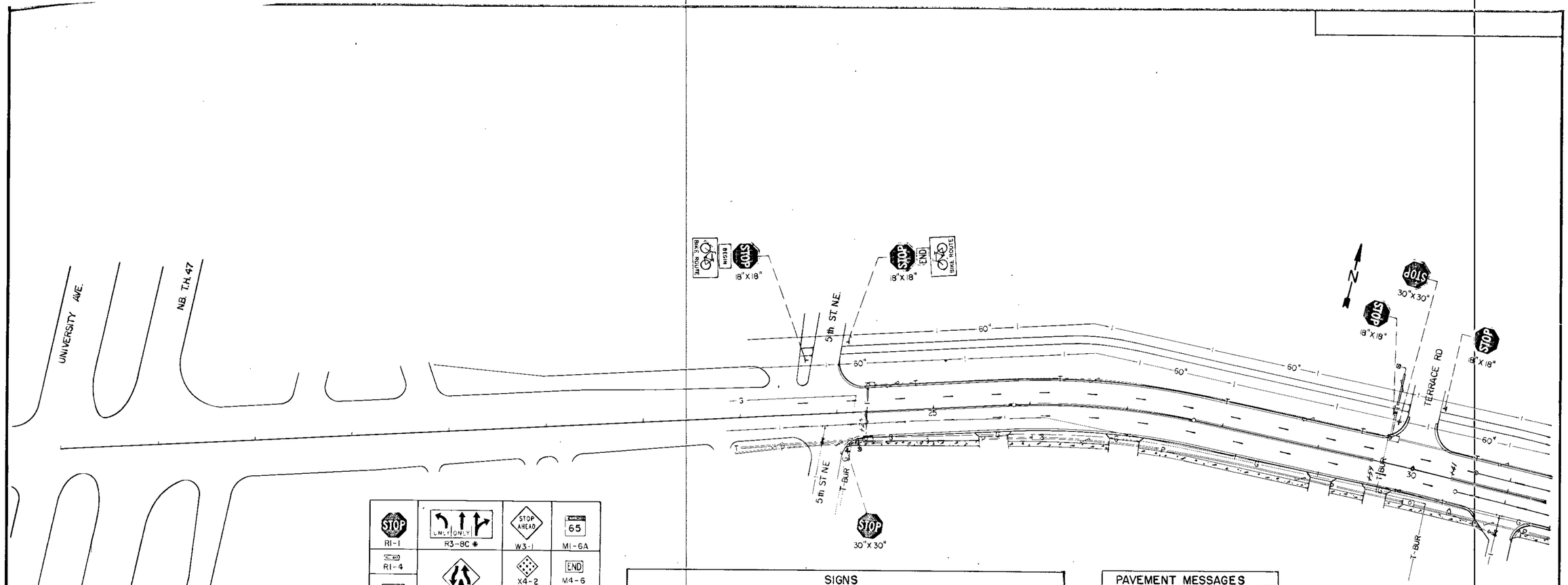
BALANCE

EXCAVATION	4,063 C.Y.	PAY QUANTITY
SUBCUT	1,129 C.Y.	5,192 C.Y.
FILL (1,083 C.Y. X 1.5 (SHRINKAGE) =		1,625 C.Y.
EXCESS MATERIAL	2,438 C.Y.	

HIGHWAY FEDERAL AID SHEET
PLATE 1-SINGLE PLAN AND PROFILE-LINE & DOT
TELEDYNE
PRINTED IN U.S.A.

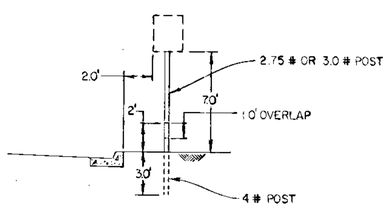
3-19-84

S.P. 02-608-06 Sheet No. 13 of 33 Sheets



STOP R1-1	R3-8C *	STOP AHEAD W3-1	SPEED LIMIT 65 M1-6A
SLOW R1-4	W6-1	X4-2	END M4-6
SPEED LIMIT 35 R2-1		SCHOOL S1-1 S1-P1	M6-4
SPEED LIMIT 40 R2-1	W6-3		OR M6-1
JCT M2-1A		8 M1-5	101 M1-5
DO NOT ENTER R5-1	W4-2(R)	35 M1-5	BEGIN M4-11
ONE WAY R6-1(R)			END M4-12
ONE WAY R6-1(L)	W11-2A S2-P2	R4-7	BIKE ROUTE D11-1
LEFT TURN LANE R3-X2			
RIGHT TURN LANE R3-X1	W11-2	SIGNAL AHEAD W3-3	

TYPICAL SIGN INSTALLATION



SIGNS

STD SIGN NUMBER	DESCRIPTION	SIZE	SQ. FT.	NUMBER REQUIRED	TOTAL SQ. FT.
R1-1	STOP	18"X18"	2.25	22	49.5
		30"X30"	6.25	18	112.5
		36"X36"	9.00	10	90.0
R1-4	ALL WAY	18"X18"	2.00	12	24.0
R2-1	SPEED LIMIT 35	36"X48"	12.00	2	24.0
	40	36"X48"	12.00	3	36.0
R4-7	KEEP RIGHT SYMBOL	24"X30"	5.00	3	15.0
R5-1	DO NOT ENTER	30"X30"	6.25	4	25.0
R6-1(R)	ONE WAY ARROW	36"X12"	3.00	7	21.0
R6-1(L)	ONE WAY ARROW	36"X12"	3.00	2	6.0
R3-X2	LEFT TURN LANE	30"X30"	6.25	4	25.0
R3-X1	RIGHT TURN LANE	30"X30"	6.25	1	6.25
R3-8C*	LANE DESIGNATION	54"X30"	11.25	2	22.50
W6-1	DIVIDED HIGHWAY	36"X36"	9.00	1	9.00
W6-3	TWO WAY TRAFFIC	30"X30"	6.25	1	6.25
W4-2(R)	PAVEMENT WIDTH TRANSITION	36"X36"	9.00	2	18.0
W11-2A	PEDESTRIAN CROSSING	30"X30"	6.25	2	12.5
W11-2	ADVANCE PEDESTRIAN CROSSING	30"X30"	6.25	1	6.25
W3-1	STOP AHEAD	30"X30"	6.25	2	12.5
		36"X36"	9.00	4	36.0
X4-2	HAZARD MARKER	18"X18"	2.25	8	18.00
S1-1	SCHOOL ADVANCE SIGN	36"X36"	9.00	1	9.00
S2-P2	DOWN ARROW	18"X24"	3.00	2	6.00
S1-P1	SCHOOL	18"X24"	3.00	1	3.00
M1-5	COUNTY ROUTE MARKER	24"X24"	4.00	10	40.00
M1-6A	MINNESOTA ROUTE MARKER	24"X24"	4.00	2	8.00
M2-1A	JCT	21"X13"	2.19	5	10.95
W3-3	SIGNAL AHEAD	18"X18"	2.25	2	4.50
M6-1	DIRECTIONAL ARROW	21"X15"	2.9	2	4.38
M6-4	DIRECTIONAL ARROW	21"X5"	2.9	1	2.19
M4-6	END	24"X12"	2.00	1	2.00
D11-1	BIKE ROUTE	24"X18"	3.00	6	18.00
M4-11	BEGIN	12"X4"	0.33	2	0.66
M4-12	END	12"X4"	0.33	2	0.66
				TOTAL =	684.59

*NOTE: THIS SIGN NUMBER INDICATES THE GENERAL LAYOUT ONLY, NOT THE SPECIFIC ARROW AND ONLY DESTINATIONS

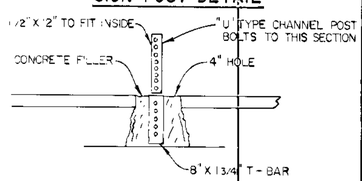
NOTE: ALL EXISTING SIGNS SHALL BE SALVAGED FOR ANOKA COUNTY EXCEPT M.T.C. SIGNS WHICH SHALL BE SALVAGED FOR THE CITIES OF SPRING LAKE PARK AND MEDLEY. THE SALVAGE OF SIGNS IS INCIDENTAL WORK. SALVAGED SIGNS SHALL BE DELIVERED TO THE APPROPRIATE AGENCY ON THE PROJECT.

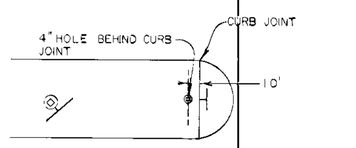
PAVEMENT MESSAGES

KIND	DESCRIPTION	LOCATION	QTY
TYPE-1	STOP AHEAD	39-10-3+66	1
TYPE-1	STOP	42+51	1
		42+52	1
		43+55	1
		43+55	1
		55+77	1
		55+77	1
		36+99	1
		36+99	1
		82+18	1
		82+18	1
TYPE-1	YIELD	38+26	1
		38+26	1
		38+26	1
		39+43	1
		39+43	1
		39+45	1
TYPE-1	WORD MESSAGE	TOTAL =	27
TYPE-2	ONLY	37+72-38+22	1
		39+72-40+28	1
		41+43-42+04	1
		54+31-54+87	1
		56+07-56+63	1
TYPE-2	ONLY	70+37-70+93	1
		54+31-54+87	1
		56+07-56+63	1
		70+37-70+93	1
TYPE-2		54-79	1
		56+35	1
		70+37-70+45	1
TYPE-2	ONLY	81+56-82+12	1
TYPE-2	WORD MESSAGES	TOTAL =	13

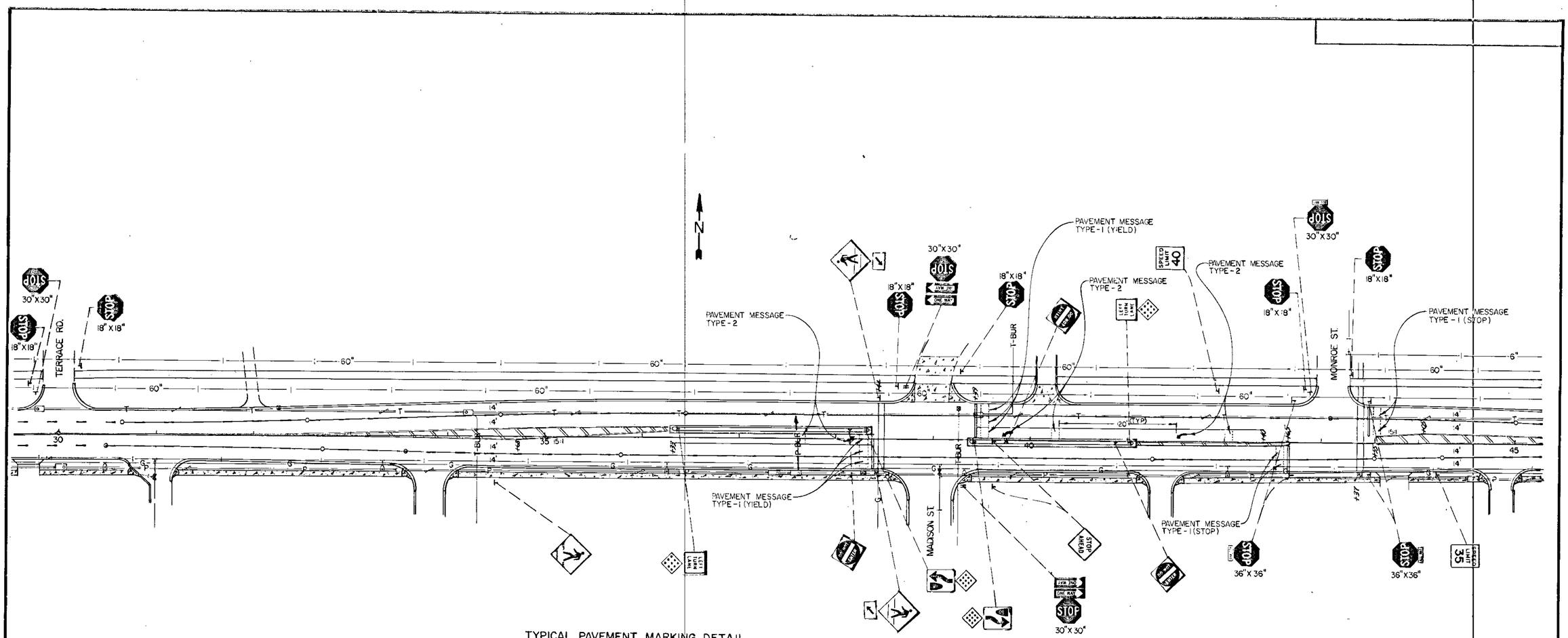
NOTE: PAVEMENT MESSAGES WILL BE PAID FOR ON THE BASIS OF TYPE. TYPE 1 MESSAGES CONSIST OF A COMPLETE WORD MESSAGE (I.E. STOP, YIELD OR STOP AHEAD IS ONE MESSAGE) TYPE 2 MESSAGES CONSIST OF A SYMBOL AND WORD MESSAGE WHERE APPROPRIATE AS SHOWN ABOVE. ANOKA COUNTY HIGHWAY DEPARTMENT WILL FURNISH THE TEMPLATES FOR ALL PAVEMENT MESSAGES. ARRANGEMENTS FOR USE OF THE TEMPLATES MUST BE MADE AT LEAST 24 HOURS IN ADVANCE.

SIGN POST DETAIL

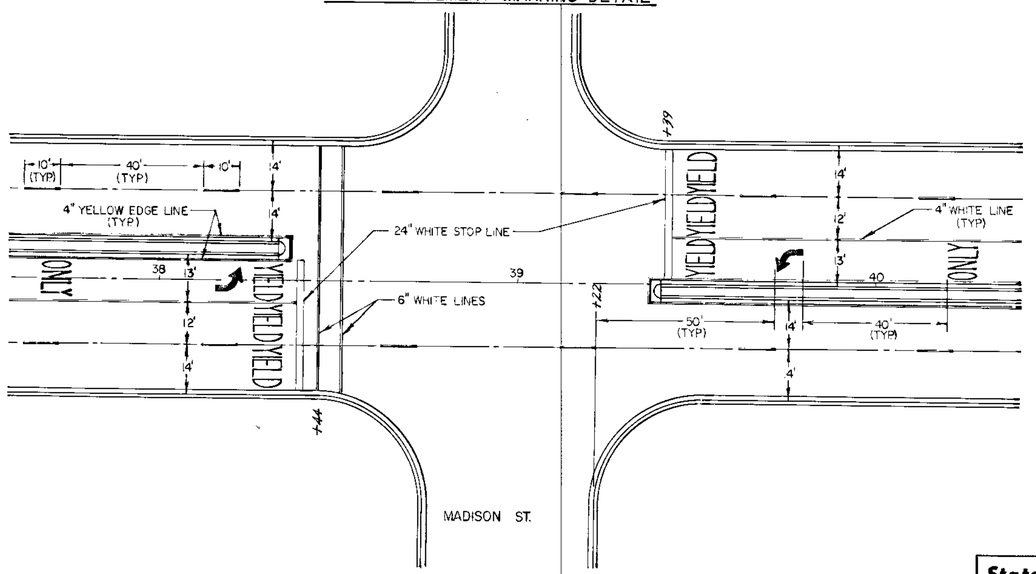




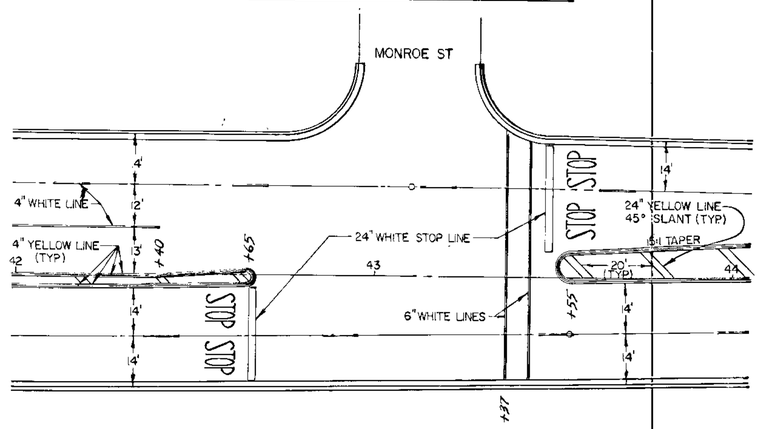
NOTE T-BAR FOR DO NOT ENTER SIGNS SHALL BE SET AT PROPER ANGLE.
REFER TO MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.



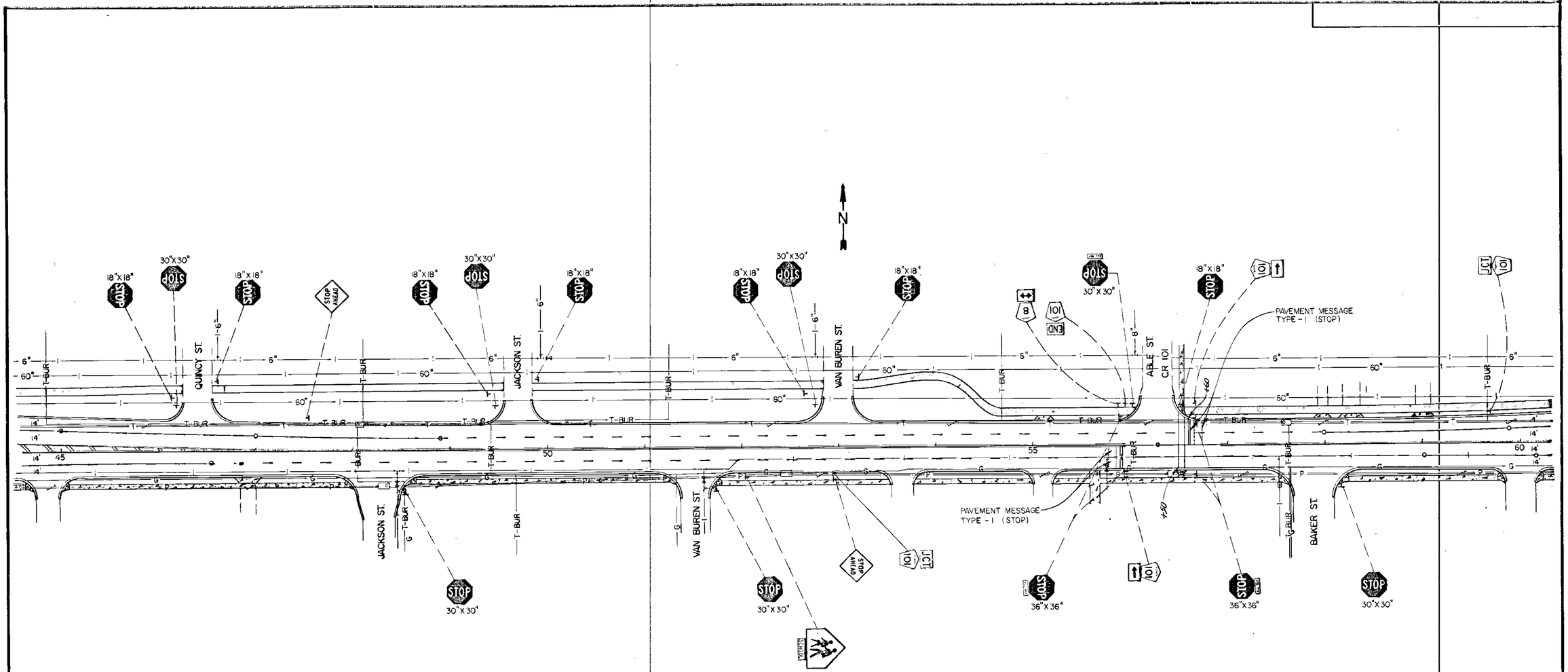
TYPICAL PAVEMENT MARKING DETAIL



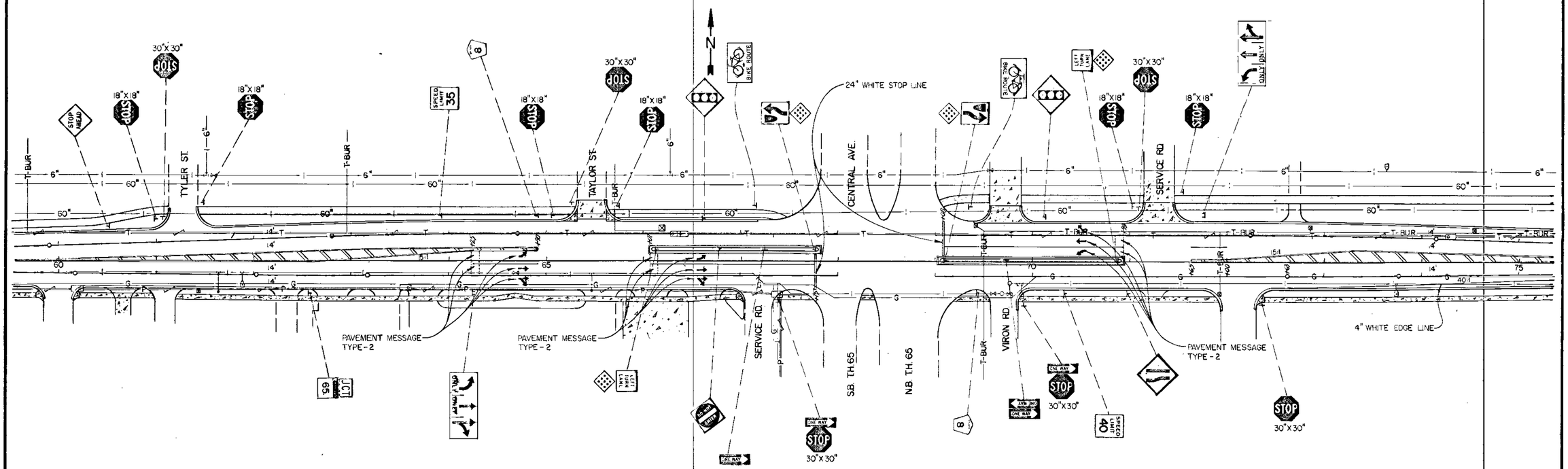
TYPICAL PAVEMENT MARKING DETAIL



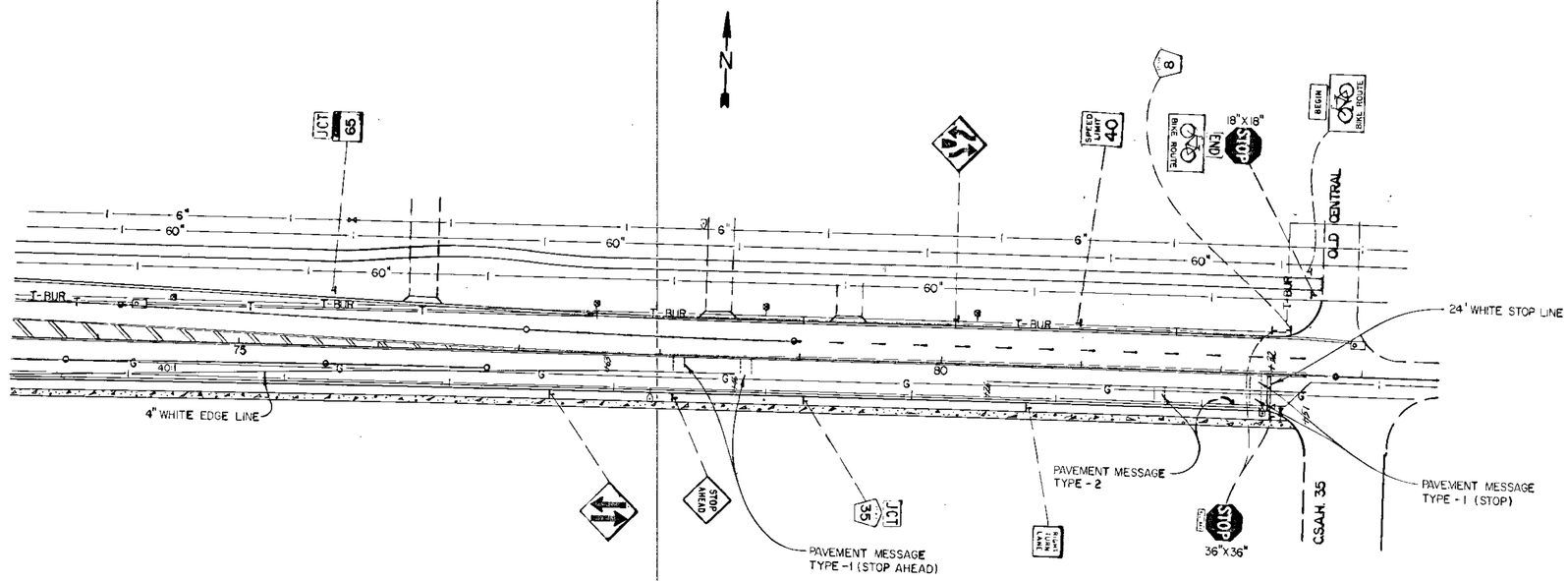
State Proj. No. S.A.P. 02-608-06 Sheet No. 15 of 33 Sheets



State Proj. No. S.A.P. 02-608-06 Sheet No. 16 of 33 Sheets



State Proj. No. S.A.P. 02-608-06 Sheet No. 17 of 35 Sheets

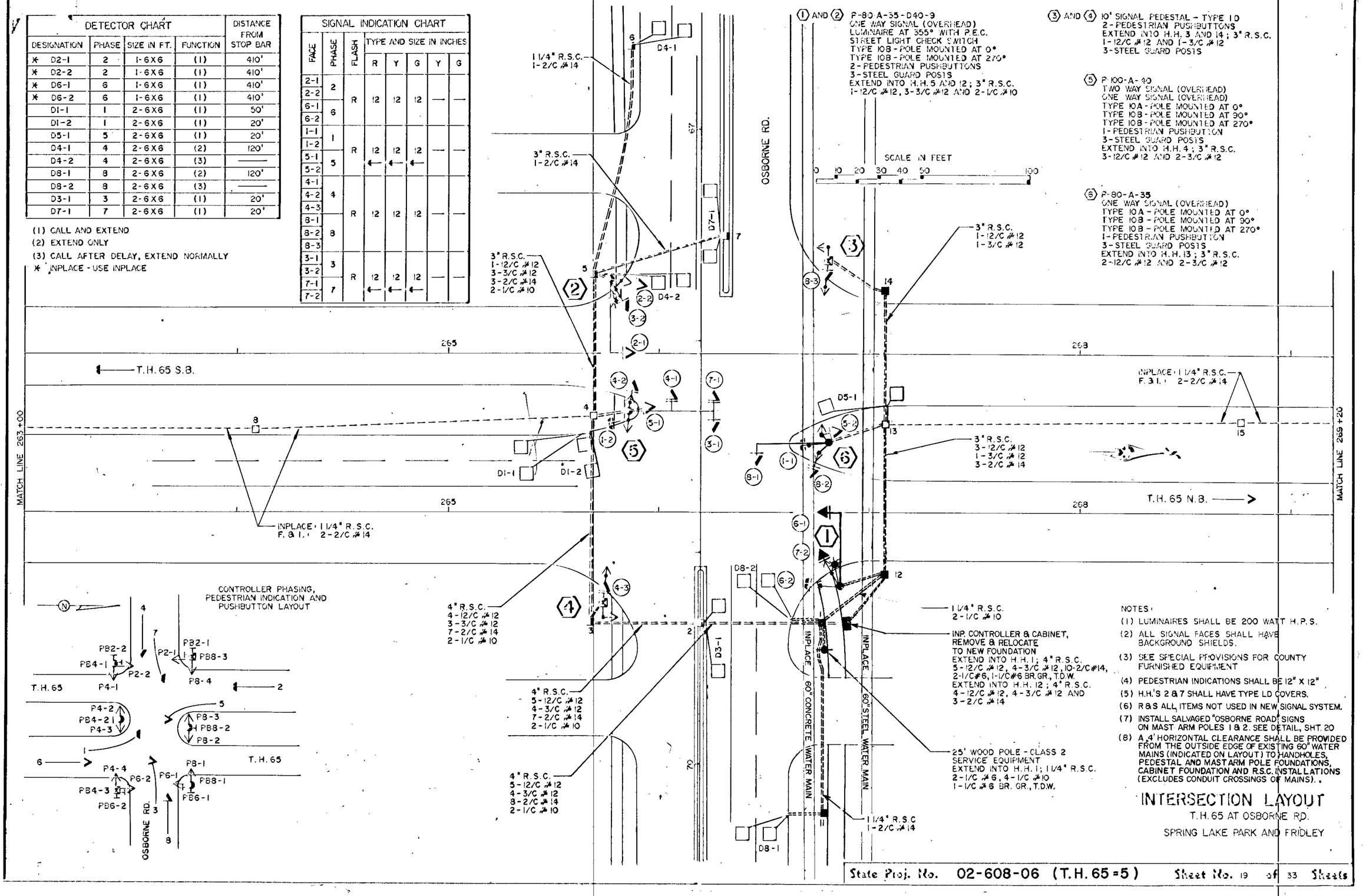


State Proj. No. S.A.P. 02-608-06 Sheet No. 18 of 33 Sheets

DETECTOR CHART				DISTANCE FROM STOP BAR
DESIGNATION	PHASE	SIZE IN FT.	FUNCTION	
* D2-1	2	1-6X6	(1)	410'
* D2-2	2	1-6X6	(1)	410'
* D6-1	6	1-6X6	(1)	410'
* D6-2	6	1-6X6	(1)	410'
D1-1	1	2-6X6	(1)	50'
D1-2	1	2-6X6	(1)	20'
D5-1	5	2-6X6	(1)	20'
D4-1	4	2-6X6	(2)	120'
D4-2	4	2-6X6	(3)	———
D8-1	8	2-6X6	(2)	120'
D8-2	8	2-6X6	(3)	———
D3-1	3	2-6X6	(1)	20'
D7-1	7	2-6X6	(1)	20'

(1) CALL AND EXTEND
(2) EXTEND ONLY
(3) CALL AFTER DELAY, EXTEND NORMALLY
* INPLACE - USE INPLACE

SIGNAL INDICATION CHART								
FACE	PHASE	FLASH	TYPE AND SIZE IN INCHES				
			R	Y	G	Y	G
2-1	2	R	12	12	12	—	—
2-2							
6-1	6						
6-2							
1-1	1	R	12	12	12	—	—
1-2							
5-1	5		←	←	←		
5-2							
4-1	4	R	12	12	12	—	—
4-2							
4-3							
8-1	8						
8-2							
8-3							
3-1	3	R	12	12	12	—	—
3-2			←	←	←		
7-1	7						
7-2							



① AND ② P-80-A-35-D40-9
ONE WAY SIGNAL (OVERHEAD)
LUMINAIRE AT 355° WITH P.E.C.
STREET LIGHT CHECK SWITCH
TYPE 10B - POLE MOUNTED AT 0°
TYPE 10B - POLE MOUNTED AT 270°
2 - PEDESTRIAN PUSHBUTTONS
3 - STEEL GUARD POSTS
EXTEND INTO H.H. 5 AND 12; 3" R.S.C.
1-12/C #12, 3-3/C #12 AND 2-1/C #10

③ AND ④ 10' SIGNAL PEDESTAL - TYPE 1D
2 - PEDESTRIAN PUSHBUTTONS
EXTEND INTO H.H. 3 AND 14; 3" R.S.C.
1-12/C #12 AND 1-3/C #12
3 - STEEL GUARD POSTS

⑤ P-100-A-40
TWO WAY SIGNAL (OVERHEAD)
ONE WAY SIGNAL (OVERHEAD)
TYPE 10A - POLE MOUNTED AT 0°
TYPE 10B - POLE MOUNTED AT 90°
TYPE 10B - POLE MOUNTED AT 270°
1 - PEDESTRIAN PUSHBUTTON
3 - STEEL GUARD POSTS
EXTEND INTO H.H. 4; 3" R.S.C.
3-12/C #12 AND 2-3/C #12

⑥ P-80-A-35
ONE WAY SIGNAL (OVERHEAD)
TYPE 10A - POLE MOUNTED AT 0°
TYPE 10B - POLE MOUNTED AT 90°
TYPE 10B - POLE MOUNTED AT 270°
1 - PEDESTRIAN PUSHBUTTON
3 - STEEL GUARD POSTS
EXTEND INTO H.H. 13; 3" R.S.C.
2-12/C #12 AND 2-3/C #12

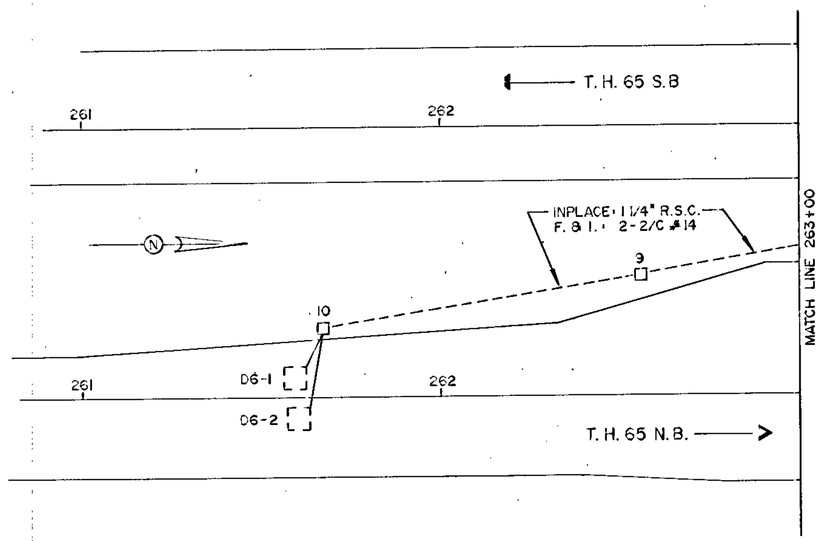
CONTROLLER PHASING, PEDESTRIAN INDICATION AND PUSHBUTTON LAYOUT

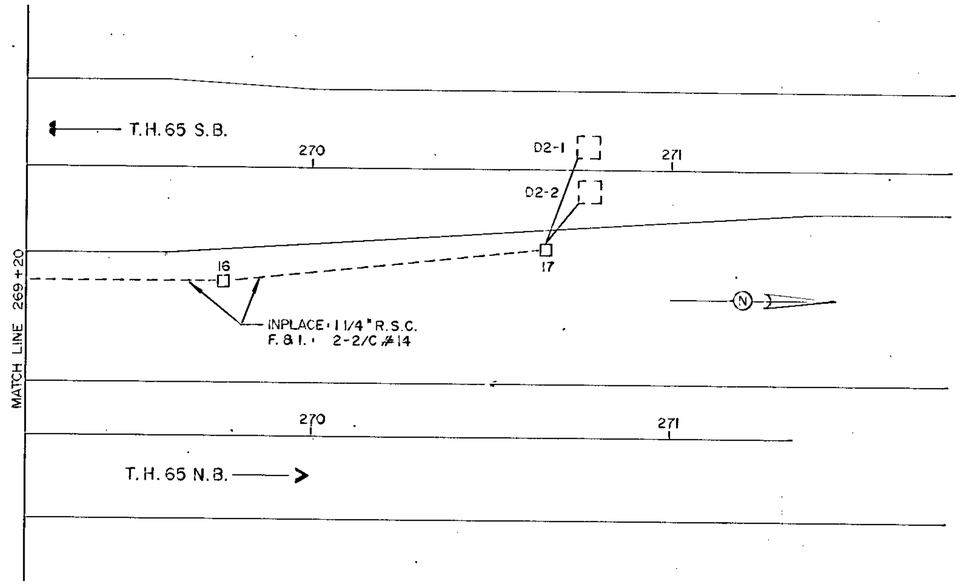
NOTES:
(1) LUMINAIRES SHALL BE 200 WATT H.P.S.
(2) ALL SIGNAL FACES SHALL HAVE BACKGROUND SHIELDS.
(3) SEE SPECIAL PROVISIONS FOR COUNTY FURNISHED EQUIPMENT
(4) PEDESTRIAN INDICATIONS SHALL BE 12" X 12"
(5) H.H.'S 2 & 7 SHALL HAVE TYPE LD COVERS.
(6) R & S ALL ITEMS NOT USED IN NEW SIGNAL SYSTEM.
(7) INSTALL SALVAGED "OSBORNE ROAD" SIGNS ON MAST ARM POLES 1 & 2. SEE DETAIL, SHT. 20
(8) A 4' HORIZONTAL CLEARANCE SHALL BE PROVIDED FROM THE OUTSIDE EDGE OF EXISTING 60" WATER MAINS (INDICATED ON LAYOUT) TO HANDHOLES, PEDESTAL AND MASTARM POLE FOUNDATIONS, CABINET FOUNDATION AND R.S.C. INSTALLATIONS (EXCLUDES CONDUIT CROSSINGS OF MAINS).

INTERSECTION LAYOUT

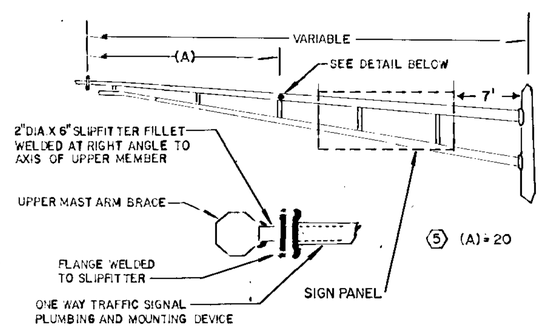
T.H. 65 AT OSBORNE RD.

SPRING LAKE PARK AND FRIDLEY





SALVAGED SIGN PANEL &
MID-ARM MOUNTING DETAIL



NOTE:
1. FOR STRUCTURAL DETAILS, TYPE D SIGNS, SEE Mn/DOT STANDARD SIGNS MANUAL, PAGE 105A.
2. FOR TYPE D STRINGERS AND PANEL-JOINT DETAIL, SEE Mn/DOT STANDARD SIGNS MANUAL.

I HEREBY CERTIFY THAT SHEETS 19 THROUGH 21 OF THIS PLAN WERE 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.

Dennis R. Eyler

DATE 2/24/82 REG. NO. 10792

DESIGN SQUAD BILL STUART

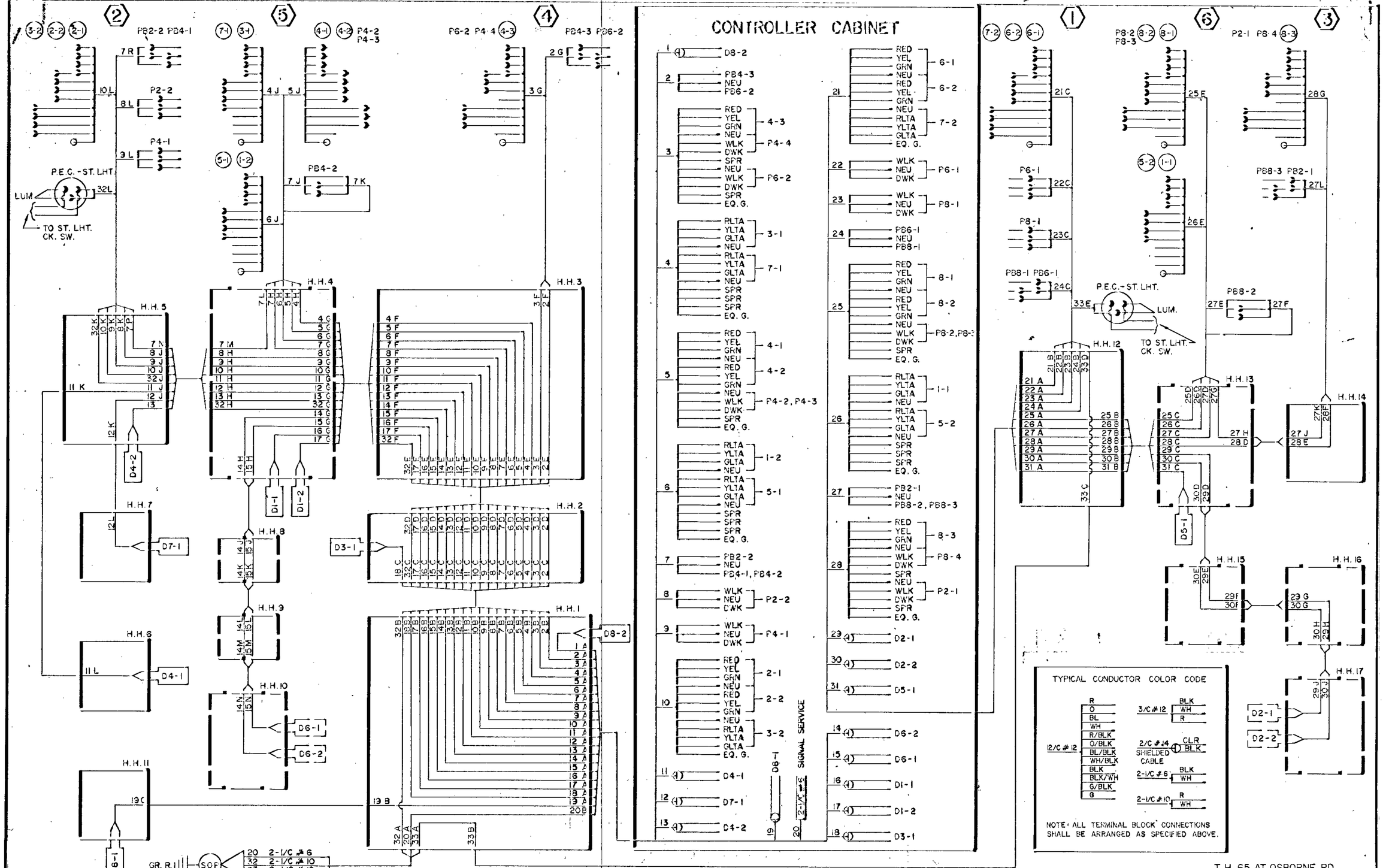
STANDARD PLATES	
PLATE NO.	DESCRIPTION
8110 C	TRAFFIC SIGNAL BRACKETING (POLE MOUNTED)
8111 E	TRAFFIC SIGNAL BRACKETING (PEDESTAL MOUNTED)
8112 C	PEDESTAL FOUNDATION
8115 C	PEDESTRIAN PUSH BUTTON INSTALLATION
8116 C	STEEL GUARD POST
8117 F	PRECAST CONCRETE HANDHOLE
8118 C	SERVICE EQUIPMENT & POLE, TRAFFIC CONTROL SIGNALS
8119 C	GROUND MOUNTED CABINET FOUNDATION
8122 C	PEDESTAL & PEDESTAL BASE
8123 B	POLE & MAST ARM (LUMINAIRE & TRAFFIC LIGHTS)
8124 C	SIGNAL HEAD MOUNTS
8130 D	SAW CUT LOOP DETECTORS
8120 G	POLE FOUNDATION P-80 & P-90
8126 B	P100 MAST ARM POLE FOUNDATION
8121 B	TRANSFORMER BASE WITH POLE BASE PLATE

DETAILS

T. H. 65 AT OSBORNE RD.

SPRING LAKE PARK AND FRIDLEY

State Proj. No. 02-608-06 (T.H. 65=5) Sheet No. 20 of 33 Sheets



WIRING DIAGRAM

T.H. 65 AT OSBORNE RD.
SPRING LAKE PARK AND FRIDLEY

State Proj. No. 02-608-06 (T.H. 65=5) Sheet No. 21 of 33 Sheets

SIGNAL INDICATION CHART

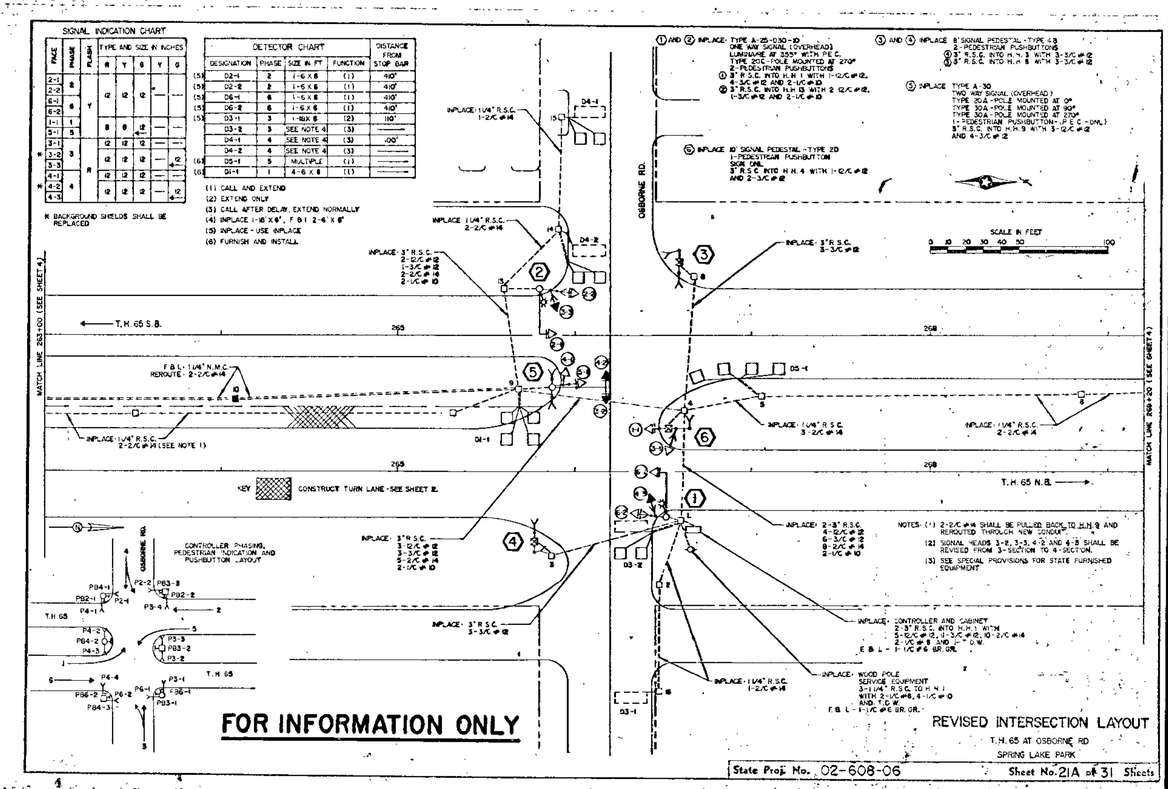
FACE	PHASE	FLASH	TYPE AND SIZE IN INCHES R	Y	G	Y	G
2-1	2	Y	12	12	12	*	—
2-2						*	—
6-1	6					—	—
6-2						—	—
1-1	1		8	8	12	—	—
5-1	5					←	
3-1	3	R	12	12	12	—	—
3-2			12	12	12	—	12
3-3						←	
4-1	4		12	12	12	—	—
4-2			12	12	12	—	12
4-3						←	

* BACKGROUND SHIELDS SHALL BE REPLACED

DETECTOR CHART

	DESIGNATION	PHASE	SIZE IN FT	FUNCTION	DISTANCE FROM STOP BAR
(5)	D2-1	2	1-6 X 6	(1)	410'
(5)	D2-2	2	1-6 X 6	(1)	410'
(5)	D6-1	6	1-6 X 6	(1)	410'
(5)	D6-2	6	1-6 X 6	(1)	410'
(5)	D3-1	3	1-6X 6	(2)	110'
	D3-2	3	SEE NOTE 4	(3)	———
	D4-1	4	SEE NOTE 4	(3)	100'
	D4-2	4	SEE NOTE 4	(3)	———
(6)	D5-1	5	MULTIPLE	(1)	———
(6)	D1-1	1	4-6 X 6	(1)	———

(1) CALL AND EXTEND
(2) EXTEND ONLY
(3) CALL AFTER DELAY, EXTEND NORMALLY
(4) INPLACE 1-18 X 6', F B I 2-4'X 6"
(5) INPLACE - USE INPLACE
(6) FURNISH AND INSTALL

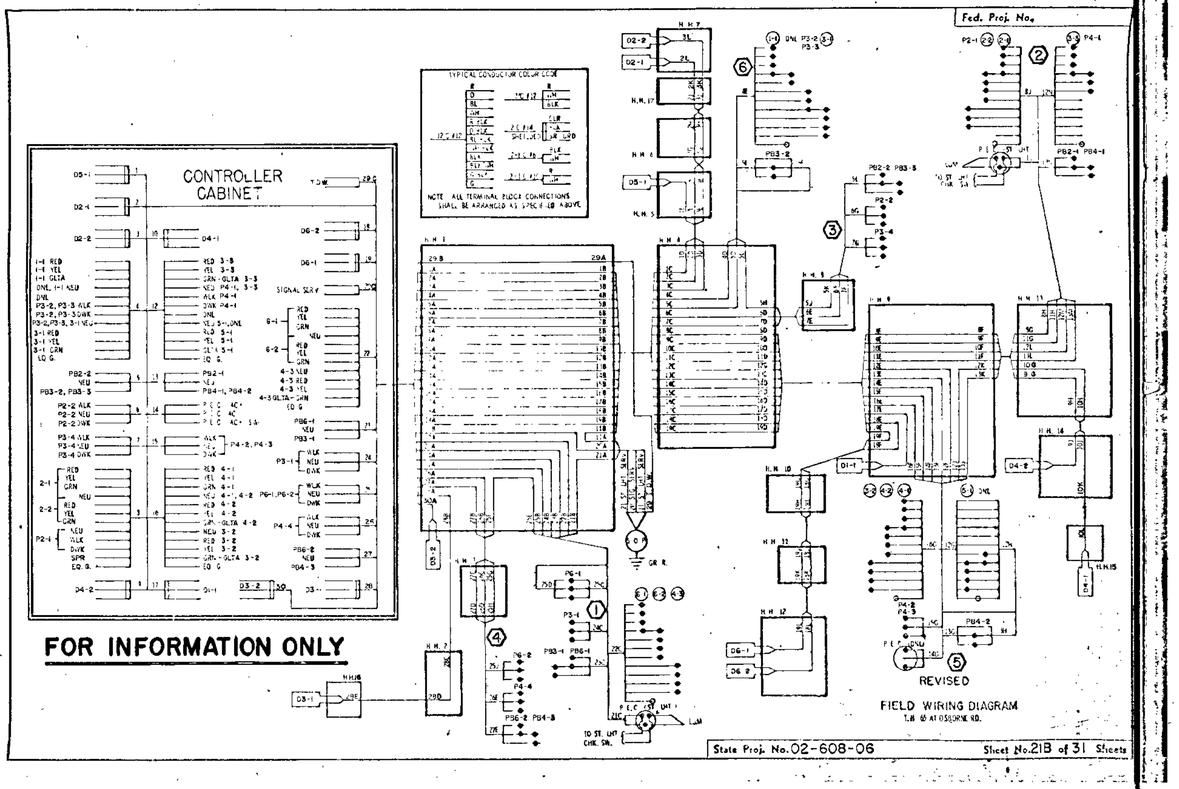


FOR INFORMATION ONLY

REVISED INTERSECTION LAYOUT
T.H. 65 AT OSBORNE RD
SPRING LAKE PARK

State Proj. No. 02-608-06 Sheet No. 21A of 31 Sheets

State Proj. No. 02-608-06 Sheet No. 21A of 33 Sheets


Fed. Proj. No.
CONTROLLER CABINET
TYPICAL CONDUCTOR COLOR CODE
NOTE ALL TERMINAL BLOCK CONNECTIONS SHALL BE ARRANGED AS SPECIFIED ABOVE
FOR INFORMATION ONLY
REVISED
FIELD WIRING DIAGRAM
T.R 65 AT OSBORNE RD.
State Proj. No. 02-608-06
Sheet No. 21B of 31 Sheets

Fed. Proj. No.

EXCAVATION EMBANKMENT

25+00 878.35

25+60 877.98 ℄ 24' BIT ENT

25+00 877.45

24+12 876.83 EAST GUTTER 5TH ST

ALLEY ENT 23+83 876.64 WEST GUTTER 5TH ST

℄ 30' ENT 23+48 876.27

23+00 875.87

30+92 885.74 WEST GUTTER HOSP ENT

EAST GUTTER TERRANCE RD 30+15 885.04

WEST GUTTER TERRANCE RD 29+94 884.67

29+00 883.41

28+00 882.07

27+00 879.97 ℄ 24' BIT ENT

STA 23+00 THUR STA 30+92

TELEDYNE POST CROSS SECTION 1011 9/76 HIRES

State Proj. No. 02-608-06 Sheet No. 22 of 33 Sheets

Fed. Proj. No.

EXCAVATION EMBANKMENT

35+00 889.80

99 0
SC 42

33+91 888.82 EAST GUTTER HOSP. ENT.

33+71 888.62 WEST GUTTER HOSP. ENT.

64 0
SC 23

33+00 887.82

63 0
SC 9

℄ 10' ENT. 32+00 886.74

23 9

31+46 886.07

9 3

31+16 885.90 EAST GUTTER HOSP. ENT.

EXCAVATION EMBANKMENT

39+22 891.90 EAST GUTTER MADISON ST.

31 0
SC 11

38+88 891.83 WEST GUTTER MADISON ST.

181 0
SC 37

38+00 891.53

158 0
SC 58

37+00 891.07

158 0
SC 58

36+00 890.60

134 0
SC 58

35+89 890.57 ℄ 20' BIT. ENT. TO BE REMOVED BY CONTR.

STA 31+16 THUR STA 39+22

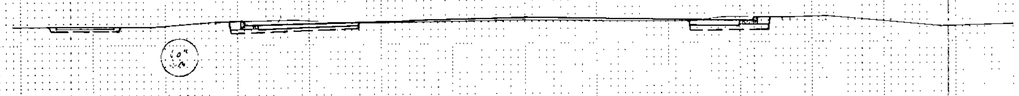
TELEPHONE POST CROSS SECTION 1011 9/76 HARRIS

State Proj. No. 02-608-06 Sheet No. 23 of 33 Sheets

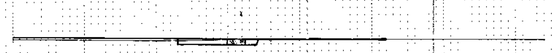
Fed. Proj. No.

EXCAVATION EMBANKMENT

42+00 893.23



42+46 892.94 EAST GUTTER ENT

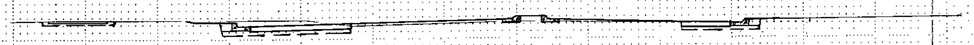


41+26 892.85 WEST GUTTER ENT

41+00 892.75

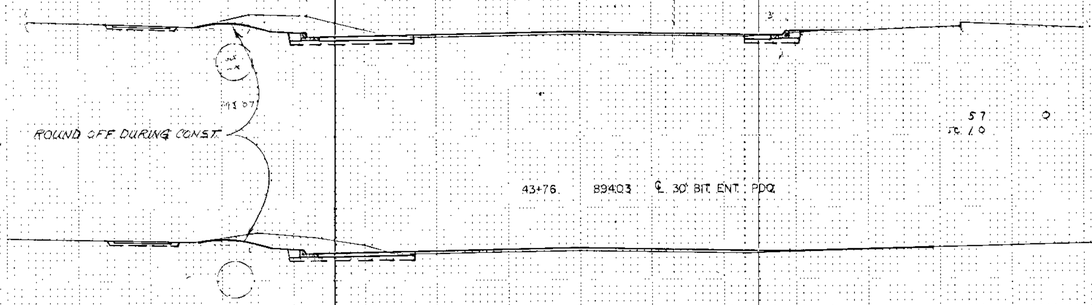
℄ 20' BIT ENT 40+16 892.33

40+00 892.28



EXCAVATION EMBANKMENT

44+00 894.9



43+76 894.03 ℄ 30' BIT ENT PDQ

℄ 5' SIDEWALK 43+39 893.83

EAST GUTTER MONROE ST 43+30 893.77

WEST GUTTER MONROE ST 42+94 893.62

42+85 893.59

STA 40+00 THUR STA 44+00

State Proj. No. 02-608-06

Sheet No. 24 of 33 Sheets

TELEFONE POLE CROSS SECTION 1011 9/76 MDOT

Fed. Proj. No.

EXCAVATION EMBANKMENT

47+00 895.91

46+91 895.85 ℄ 16' BIT. ENT.

℄ QUINCY ST. (30' BIT.) 46+43 895.62

46+00 895.34

44+98 894.82 EAST GUTTER ENT.

44+74 894.66 WEST GUTTER ENT.

EXCAVATION EMBANKMENT

50+00 898.09

℄ JACKSON ST. (BIT.) 49+70 897.85

49+00 897.27

48+45 896.79 EAST GUTTER JACKSON ST.

48+12 896.64 WEST GUTTER JACKSON ST.

48+00 896.61

STA 44+74 THUR. STA. 50+00

TELEPHONE POST CROSS SECTION 1011 9/76 HABD

State Proj. No. 02-608-06

Sheet No. 25 of 33 Sheets

Fed. Proj. No.

EXCAVATION EMBANKMENT

℄ VAN BUREN (BIT) 53+00 900.81

33 0

52+00 900.00

51+68 899.62 EAST GUTTER VAN BUREN

52 0

51+38 899.30 WEST GUTTER VAN BUREN

51+00 898.34

34 0

50+37 898.34

17 0

EXCAVATION EMBANKMENT

56+00 901.89

55+62 901.80 ℄ 10' SIDEWALK

31 0

℄ 2' ENT 55+10 901.70 ℄ 20' BIT ENT

37 0

54+23 901.44

26 0

54+00 901.34

9a 0

53+57 901.22 ℄ 20' BIT ENT

24 0

STA 50+37 THUR STA 56+00

State Proj. No. 02-608-06

Sheet No. 26 of 33 Sheets

Fed. Proj. No.

58+26 902.48 ℄ 18' B.T. ENT. (LT)

EXCAVATION IN EMBANKMENT

58+11 902.48 EAST GUTTER BAKER ST. (RT.)

57+95 902.42 ℄ 10' B.T. ENT (LT.)

57+69 902.28 WEST GUTTER BAKER ST. (RT.)

57+00 902.13

56+55 902.02 ℄ 5' SIDEWALK (LT.)

56+29 901.97 ℄ ABLE ST. (LT.)

EXCAVATION IN EMBANKMENT

62+06 902.44

61+28 902.73 ℄ TYLER ST. (LT.)

61+10 902.74 ℄ 20' B.T. ENT. (RT.)

60+62 902.70 ℄ 20' CONC. ENT (RT.)

60+00 902.78 ℄ B.T. ENT (RT.)

59+00 902.58 ℄ 16' B.T. ENT. (LT.)

STA. 56+29 THUR STA. 62+06

TELEDYNE POST CROSS SECTION 1011 9/76 HARRIS

State Proj. No. 02-608-06

Sheet No. 27 of 33 Sheets

Fed. Proj. No.

EXCAVATION EMBANKMENT

64+00 901.29

63+76 901.44 30' BIT ENT (RT)

63+28 901.62 28' BIT ENT (RT)

63+00 901.82

62+83 901.92 ℄ 20' BIT ENT (RT)

62+34 902.24 ℄ 22' BIT ENT

EXCAVATION EMBANKMENT

67+61 902.48

67+30 902.18 E. GUTTER SERVICE RD (RT)

67+00 901.99 W. GUTTER SERVICE RD (RT)

66+00 901.45

℄ TAYLOR ST (LT) 65+53 901.13 ℄ 30' BIT ENT (RT)

65+00 901.05

STA. 62+34 THUR STA. 67+61

State Proj. No. 02-608-06 Sheet No. 28 of 33 Sheets

TELLSTYNE POST CROSS SECTION 1011 9/76 HARRIS

EXCAVATION EMBANKMENT

Fed. Proj. No.

69+85 902.48 EAST GUTTER VIRON ST.

℄ 30' CONCRETE ENT. 69+72 902.56

69+55 902.64 WEST GUTTER VIRON ST.

69+19 902.83

EAST SHOULDER T.H.65
69+03 903.41

NORTH — ℄ MEDIAN — SOUTH
68+52 903.43 903.28 68+34

WEST SHOULDER T.H.65
67+82 902.81

EXCAVATION EMBANKMENT

73+00 901.68

℄ 10' ENT. LT. 72+68 901.53

72+00 901.57

℄ 30' CONC. SERVICE RD. ℄ 16 BIT. ENT. RT.
71+30 902.03

71+00 902.07

70+00 902.39

STA. 67+82 THUR STA. 73+00

TELEDYNE POST CROSS SECTION 1011 9/76 M0802

State Proj. No. 02-608-06 **Sheet No.** 29 **of** 33 **Sheets**

Fed. Proj. No.

EXCAVATION EMBANKMENT

78+00 901.72

34 27
30 7

77+00 901.75

℄ 20' BIT ENT (LT) 76+31 901.70

28 78
30 17

76+00 901.72

32 193
30 17

75+00 901.93

38 267
30 15

74+00 901.96

42 87
30 31

EXCAVATION EMBANKMENT

81+00 902.73

47 22

80+00 902.56

32 22

℄ 24' ENT (LT) 79+34 902.30

79+00 902.3

35 17

℄ 30' ENT (LT) 78+39 901.85

STA 74+00 THUR STA 81+00

TILLOTYPE POST CROSS SECTION 1011 9/76 NSBDS

State Proj. No. 02-608-06 Sheet No. 30 of 33 Sheets

Fed. Proj. No.

EROSION CONTROL

℄ C.S.A.H. 35
82+85 902.99

WEST EDGE C.S.A.H. 35 LT.
82+73 902.91

WEST EDGE C.S.A.H. 35 RT.
82+63 902.94

82+00 903.00

TOTALS:

EXC.	4,063	1,083 EMB.
S.C.	1,129	150% SHRINKAGE FACTOR
PAY QUANTITIES	5,192 C.Y.	1,625 C.Y. EMB.

4,063 C.Y. – 1,625 = 2,438 C.Y. EXCESS

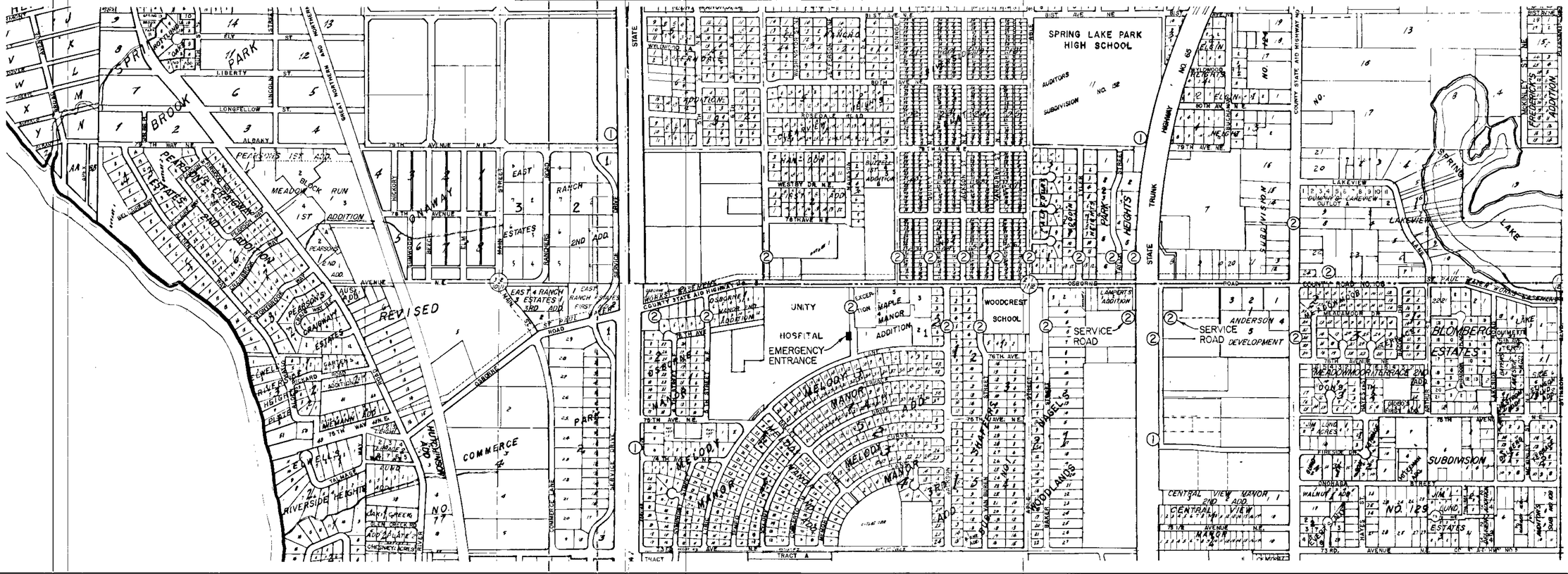
STA. 82+00 THUR STA. 82+85

TELLOYNE POST CROSS SECTION 1011 5/76 NSRB

State Proj. No. 02-608-06

Sheet No. 31 of 33 Sheets

TRAFFIC CONTROL DETAILS



①

TRAFFIC DELAY

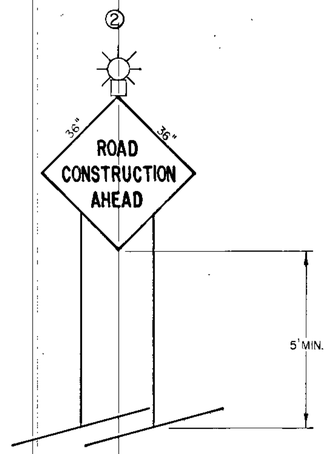
COUNTY 8

UNDER CONSTRUCTION

T.H. 47 TO C.S.A.H. 35

ALTERNATE ROUTES ADVISED

②



NOTES

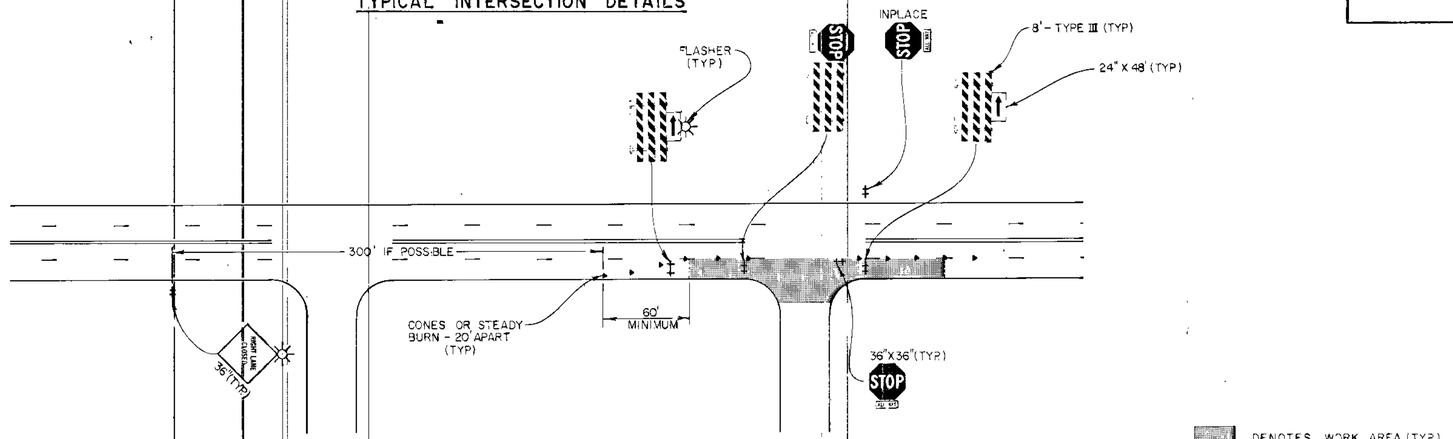
1) 2-LANE, 2-WAY TRAFFIC MUST BE MAINTAINED AT ALL TIMES.

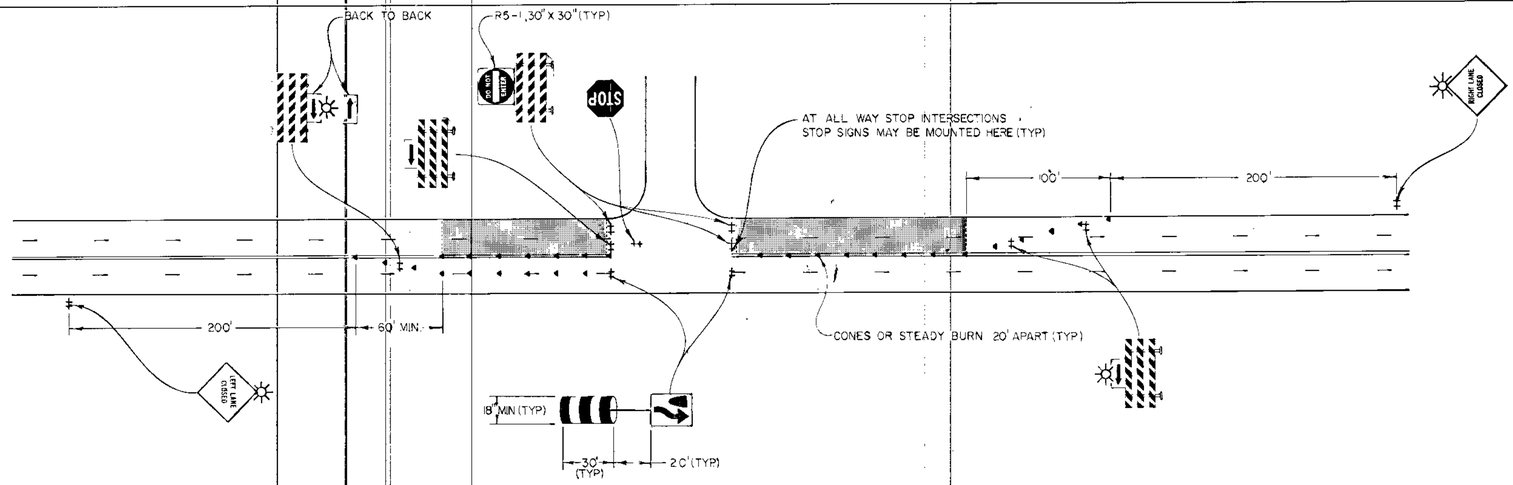
2) 4-WEIGHTS FOR BALLAST MUST BE PLACED ON ALL CONSTRUCTION SIGNS & BARRICADE SUPPORTS TO PREVENT OVERTURNING.

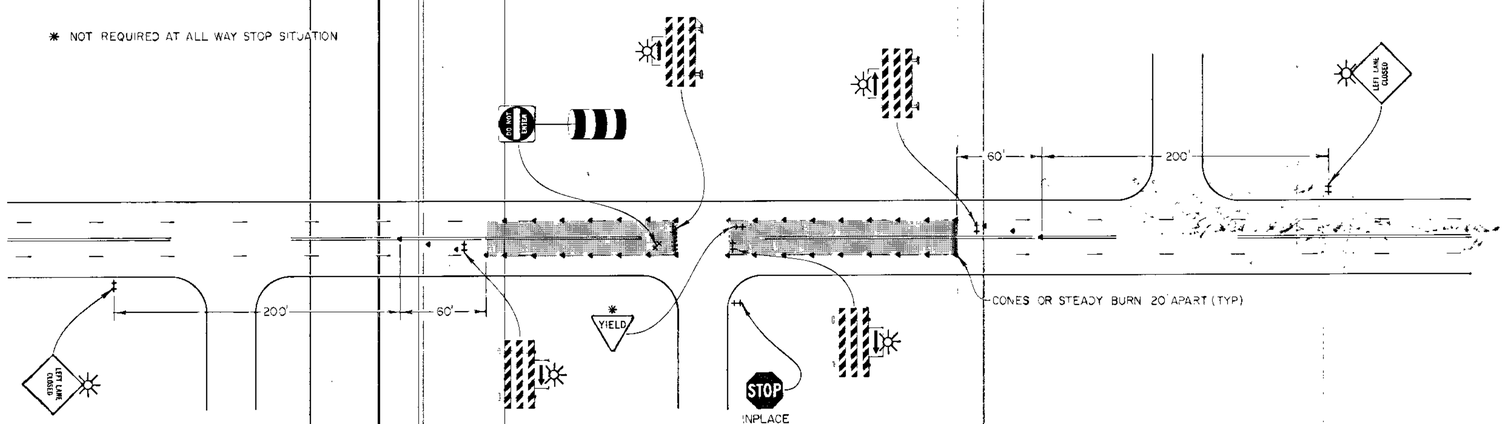
ESTIMATED QUANTITIES

NO.	QUANTITY
①	4
②	21

TYPICAL INTERSECTION DETAILS







NOTES

1. THESE DETAILS ARE TYPICAL FOR HANDLING INTERSECTIONS BETWEEN INTERSECTIONS STANDARD LANE CLOSURES AS SHOWN IN APPENDIX B OF THE MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES SHALL BE USED.
2. EXACT QUANTITIES WILL BE DEPENDENT ON LENGTH OF SECTION THE CONTRACTOR DESIRES TO WORK AT ONE TIME.