

CITY OF ST. PAUL
 Department of Public Works
 CONSTRUCTION PLAN
 for
 PHALEN VILLAGE PUBLIC IMPROVEMENTS
 CITY PROJECT 98-P-1163

Includes
 AMES LAKE WETLAND
 CITY PROJECT 98-S-1862

Includes
 GRADING, CONCRETE CURB & GUTTER, AGGREGATE BASE, AND BITUMINOUS PAVING,
 STREET LIGHTING, TRAFFIC SIGNAL ON
 PROSPERITY AVENUE (CSAH 64) - JOHNSON PKWY. TO ROSE AVE.

And
 JOHNSON PKWY. (CSAH 64)-233 m SOUTH OF PROSPERITY TO PROSPERITY AVE.
 S.A.P. 62-664-04, 164-020-90

GROSS LENGTH 691.88 m
 BRIDGES LENGTH 00 m
 EXCEPTIONS LENGTH 00 m
 NET LENGTH 691.88 m

And
 JOHNSON PKWY. - PROSPERITY TO 170 m NORTH OF PROSPERITY AVE.

S.A.P. 164-129-11
 GROSS LENGTH 152.00 m
 BRIDGES LENGTH 00 m
 EXCEPTIONS LENGTH 00 m
 NET LENGTH 152.00 m

And
 CLARENCE ST. - PROSPERITY TO 104 m NORTH OF PROSPERITY AVE.

S.A.P. 164-253-03
 GROSS LENGTH 85.00 m
 BRIDGES LENGTH 00 m
 EXCEPTIONS LENGTH 00 m
 NET LENGTH 85.00 m

DESIGN DESIGNATION

	PROSPERITY AVE. JOHNSON PKWY. TO ROSE AVE.	JOHNSON PKWY. 233 m SOUTH TO PROSPERITY TO PROSPERITY	JOHNSON PKWY. 175 m NORTH	CLARENCE ST. PROSPERITY TO 104 m NORTH
PRESENT ADT (1998)	7,000	17,700	7,375	4,500
PROJECTED ADT (2018)	12,000	14,000	5,500	5,000
FUNCTIONAL CLASSIFICATION:	ARTERIAL	ARTERIAL	COLLECTOR	COLLECTOR
NO. OF TRAFFIC LANES	2	2	2	2
NO. OF PARKING LANES	2	0	0	0
SOIL FACTOR	R50	R50	R50	R50
EN18 FACTOR	1,800,113	1,044,422	470,199	810,983
DESIGN LOAD (METRIC TON)	8.2	8.2	8.2	8.2
DESIGN SPEED (km/Hour)	50	50	50	50
STOPPING SIGHT DISTANCE BASED ON: 1070 mm HEIGHT OF EYE & 150 mm HEIGHT OF OBJECT				

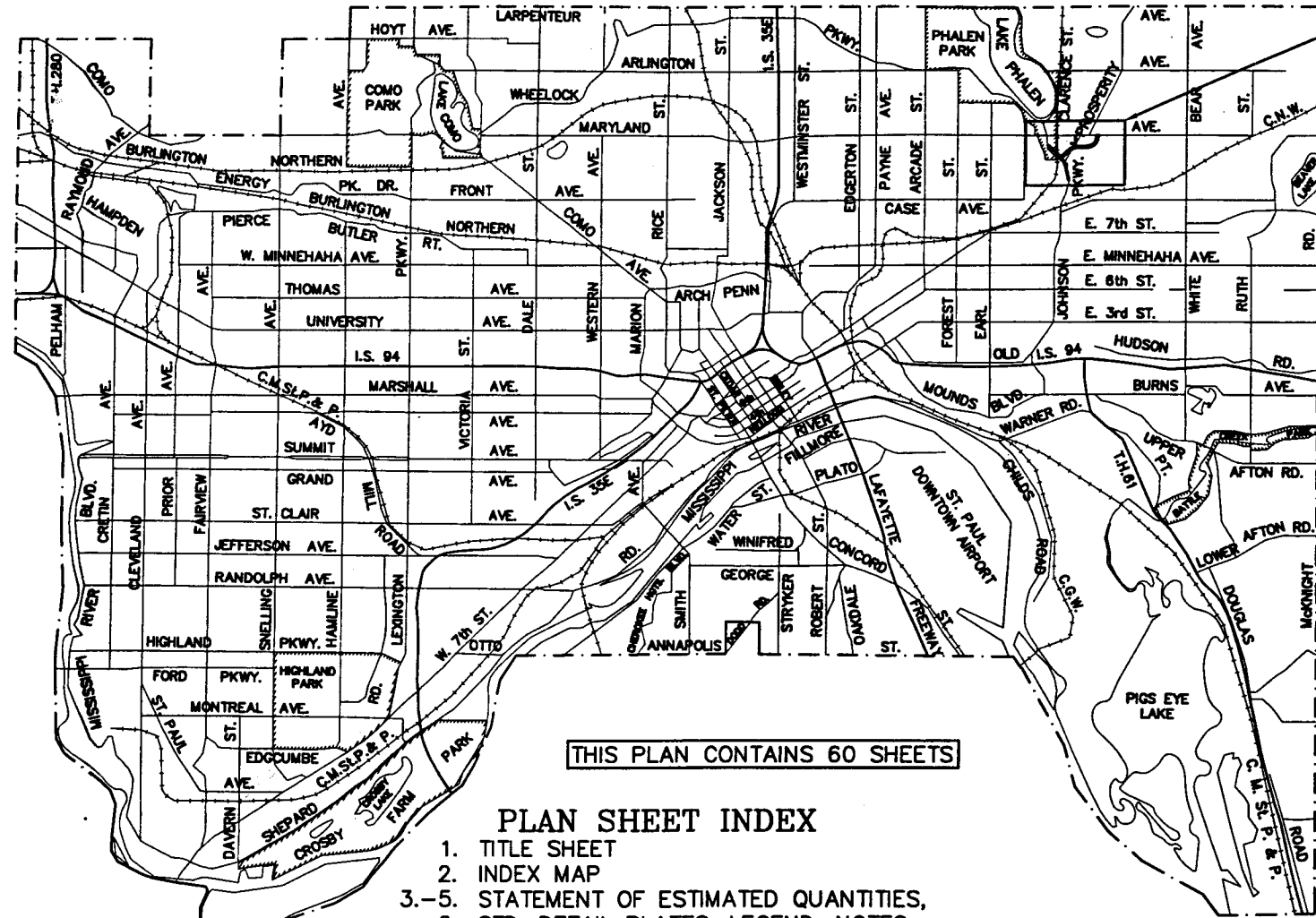
ATTENTION: THIS IS A METRIC PROJECT

PAVING
 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.
 DATE: 7-16-98 REG. NO. 18955

28-291

APPROVED: *Randy Leath* 7/16/98
 Manager, Construction/Street Engineering Division
 APPROVED: *Thomas D. Egert* 7/17/98
 City of Saint Paul Engineer
 APPROVED: *Paul A. St. Martin* 7/30/98
 Ramsey County Engineer

RECOMMENDED FOR APPROVAL: Metro - Assistant Division Engineer - State Aid: 19
 Reviewed for Compliance with State Aid Rules/Policy
 APPROVED FOR STATE AID DIVISION: Approved for State Aid Funding: State Aid Engineer 19



THIS PLAN CONTAINS 60 SHEETS

PLAN SHEET INDEX

1. TITLE SHEET
2. INDEX MAP
- 3.-5. STATEMENT OF ESTIMATED QUANTITIES,
6. STD. DETAIL PLATES, LEGEND, NOTES
- 7.-10. CHARTS
- 11.-17. TYPICAL SECTIONS, CONSTRUCTION DETAILS
- 18.-19. EROSION & SEDIMENT CONTROL PLANS
- 20.-21. PLANTING DETAILS
- 22.-24. AMES LAKE WETLAND PLANS
- 25.-31. PAVING PLANS
- 32.-33. STRIPING PLANS
- 34.-35. PLANTING PLANS
- 36.-39. STREET LIGHTING PLANS
- 40.-44. TRAFFIC SIGNAL PLANS
- 45.-53. BRIDGE DEMOLITION PLANS
- 54.-59. CROSS SECTIONS
60. BERM GRADING & RESTORATION PLAN

BIKEWAY DESIGN DESIGNATION

S.A.P. 164-129-11
 BURLINGTON NORTHERN TRAIL RELOCATION
 280 m SOUTH OF PROSPERITY TO
 300 m NORTH OF PROSPERITY
 DESIGN SPEED 30 km/h
 STOPPING SIGHT BASED ON:
 1400 mm HEIGHT OF EYE
 0 mm HEIGHT OF OBJECT

SPECIFICATIONS

THE 1995 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION
 "STANDARD SPECIFICATIONS FOR CONSTRUCTION" SHALL GOVERN
 THESE SHALL BE FURTHER AMENDED BY THE CITY OF SAINT PAUL
 "STANDARD SUPPLEMENTAL SPECIFICATIONS FOR CONSTRUCTION"
 AND THE SPECIAL PROVISIONS.
 ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE
 "MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES"
 INCLUDING "FIELD MANUAL FOR TEMPORARY TRAFFIC CONTROL
 LAYOUTS, APRIL 1995."



1000 m

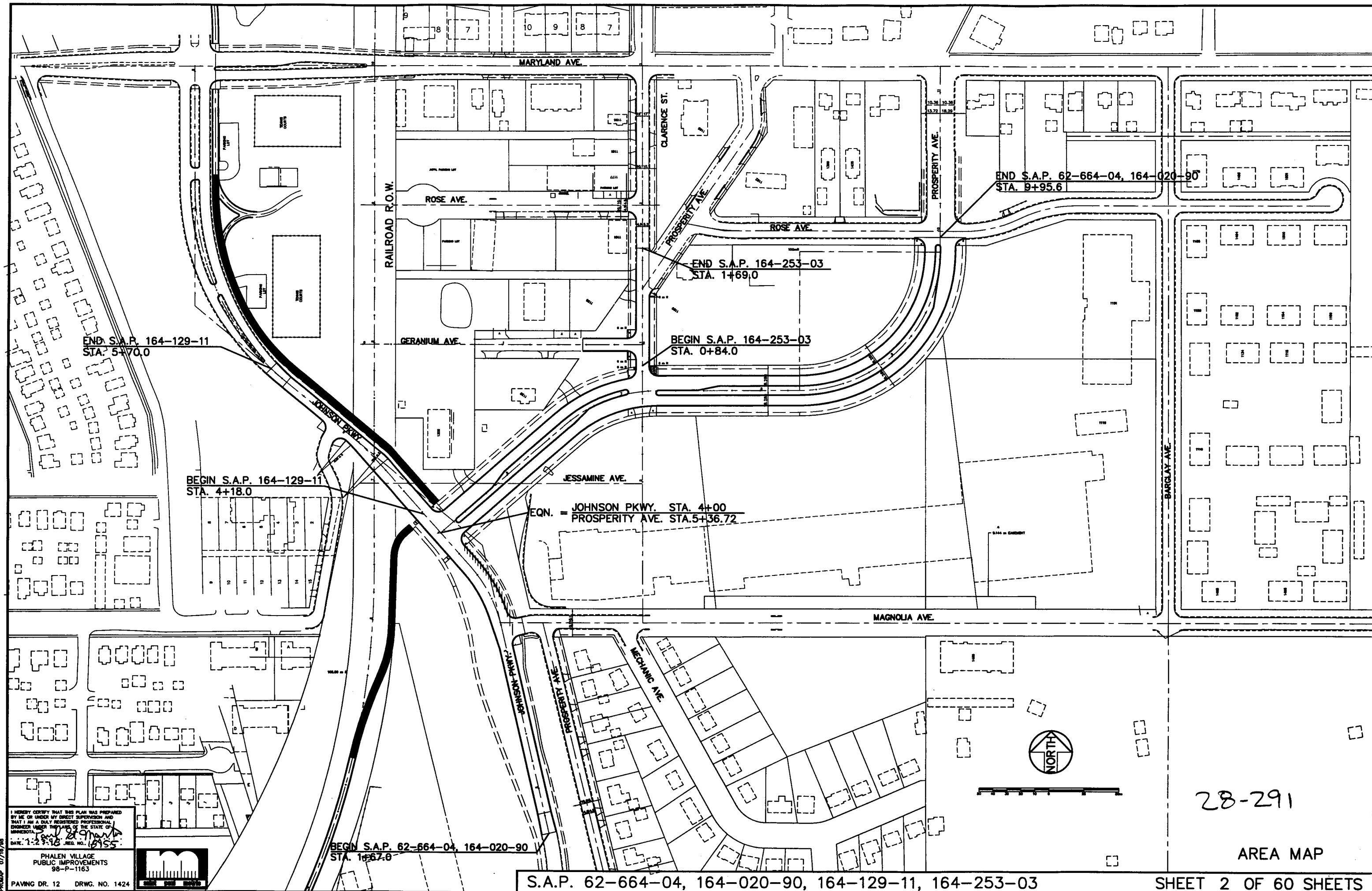
PROFILE 07/01/98

PHALEN VILLAGE
 PUBLIC IMPROVEMENTS
 98-P-1163
 PAVING DR. 12 DRWG. NO. 1424



S.A.P. 62-664-04, 164-020-90, 164-129-11, 164-253-03

SHEET 1 OF 60 SHEETS



END S.A.P. 164-129-11
STA. 5+70.0

BEGIN S.A.P. 164-129-11
STA. 4+18.0

END S.A.P. 164-253-03
STA. 1+69.0

BEGIN S.A.P. 164-253-03
STA. 0+84.0

END S.A.P. 62-664-04, 164-020-90
STA. 9+95.6

EQN. = JOHNSON PKWY. STA. 4+00
PROSPERITY AVE. STA. 5+36.72

BEGIN S.A.P. 62-664-04, 164-020-90
STA. 1+67.0

S.A.P. 62-664-04, 164-020-90, 164-129-11, 164-253-03



28-291

AREA MAP

SHEET 2 OF 60 SHEETS

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 MISSISSIPPI.
DATE: 1-27-18 REG. NO. 16955
PHALEN VILLAGE PUBLIC IMPROVEMENTS 98-P-1163
PAVING DR. 12 DRWG. NO. 1424



PHALEN VILLAGE PUBLIC IMPROVEMENTS			QUANTITIES																
			TOTAL			S.A.P. 62-664-04 RAMSEY COUNTY		S.A.P. 164-020-90 CITY OF SAINT PAUL		STORM SEWER 100% S.A.P. 62-664-04 0% S.A.P. 164-020-90		98-P-1163 S.A.P. 164-129-11 CITY OF SAINT PAUL		S.A.P. 164-253-03 CITY OF SAINT PAUL		CITY OF SAINT PAUL 100% CITY OF SAINT PAUL LOCAL FUNDS		98-S-1862 CITY OF SAINT PAUL AMES LAKE WETLAND 100% CITY OF SAINT PAUL	
NOTE	ITEM NO.	CONTRACT ITEM	UNIT	TOTAL ESTIMATED QUANTITIES	TOTAL FINAL QUANTITIES	ESTIMATED QUANTITIES	FINAL QUANTITIES	ESTIMATED QUANTITIES	FINAL QUANTITIES	ESTIMATED QUANTITIES	FINAL QUANTITIES	ESTIMATED QUANTITIES	FINAL QUANTITIES	ESTIMATED QUANTITIES	FINAL QUANTITIES	ESTIMATED QUANTITIES	FINAL QUANTITIES	ESTIMATED QUANTITIES	FINAL QUANTITIES
	2021.501	MOBILIZATION	LUMP SUM	1		0.38		0.28		0.03		0.10		0.03		0.03		0.27	
	2031.501	FIELD OFFICE TYPE D	EACH	1		0.38		0.28		0.03		0.10		0.03		0.03		0.27	
	2101.511	CLEARING AND GRUBBING	LUMP SUM	1		0.4						0.3				0.3		0.3	
	2104.501	REMOVE CONCRETE CURB & GUTTER	m	1,908		1,669						239							
	2104.503	REMOVE CONCRETE WALK	m2	1,293		854						439							
	2104.503	REMOVE CONCRETE DRIVEWAY	m2	320		280								40					
	2104.503	REMOVE ROADWAY PAVEMENT	m2	4,419		3,323						1,096							
	2104.503	REMOVE PARKING LOT PAVEMENT	m2	52,810		13,350													39,460
	2104.503	REMOVE BITUMINOUS BIKE PATH	m2	2,110								2,110							
	2104.509	REMOVE MANHOLE OR CATCH BASIN	EACH	42		19						5							18
	2104.509	REMOVE CONCRETE STAIRS	EACH	1															1
	2104.509	REMOVE LIGHT POLE	EACH	9		4													5
	2104.601	REMOVE SIGN	LUMP SUM	1		1													
	2104.602	RELOCATE VEHICULAR GATE	EACH	1								1							
	2104.602	RELOCATE WOOD INFORMATION SIGN	EACH	3								3							
	2104.603	REMOVE TIMBER PILE	m	970															970
(1)	2105.501	COMMON EXCAVATION (P)	m3	2,996		1,820		707				322		147					
(1)	2105.507	SUBGRADE EXCAVATION	m3	3,082		1,450		653				594		385					
(1)	2105.607	BERM EXCAVATION (P)	m3	16,137		10,914		4,244				594		385					
(1)	2105.607	WETLAND EXCAVATION (P)	m3	54,400		8,756		3,404											42,240
(1)	2105.607	EXCAVATION SPECIAL (P)	m3	12,950		9,324		3,626											
	2105.525	TOPSOIL BORROW (L.V.)	m3	1,568		1,348						108		112					
	2105.535	SALVAGED TOPSOIL (L.V.)	m3	675				675											
	2123.610	STREET SWEEPING	hour	75		40		20				10		5					
(1)	2118.502	AGGREGATE SURFACING, CLASS 5	t	405		238		92				50		25					
	2118.502	AGGREGATE SURFACING, CLASS SPECIAL	t	420		270													150
	2130.501	WATER	m3	4,820		4,148						330		342					
(1)	2211.503	AGGREGATE BASE PLACED, CLASS 5	m3	2,504		1,331		518				469		186					
(1)	2331.604	50 mm BITUMINOUS SURFACE	m2	782		475		185						122					
	2331.508	TYPE 41 WEARING COURSE MIXTURE	t	158								158							
	2331.514	TYPE 31 BASE COURSE MIXTURE	t	208								208							
(1)	2331.603	SAWED/SEALED JOINT	m	1,345		785		285				170		105					
(1)	2340.508	TYPE 41 WEARING COURSE MIXTURE	t	1,223		692		269				162		100					
(1)	2340.510	TYPE 41 BINDER COURSE MIXTURE	t	1,569		911		354				213		91					
(1)	2340.514	TYPE 31 BASE COURSE MIXTURE	t	2,546		1,585		616				213		132					
(1)	2357.502	BITUMINOUS MATERIAL FOR TACK COAT	LITER	3,085		1,746		679				408		252					
	2442.501	REMOVE OLD BRIDGE	LUMP SUM	1		0.67						0.33							

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S060-01A 7/22/88


PHALEN VILLAGE PUBLIC IMPROVEMENTS 98-P-1163 PAVING DR. 12 DRWG. NO. 1424	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. DATE: 7-23-88 REG. NO. 1945
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PHALEN VILLAGE PUBLIC IMPROVEMENTS			QUANTITIES																			
NOTE	ITEM NO.	CONTRACT ITEM	UNIT	TOTAL ESTIMATED QUANTITIES	TOTAL FINAL QUANTITIES	98-P-1163												98-S-1862				
						S.A.P. 62-664-04 RAMSEY COUNTY		S.A.P. 164-020-90 CITY OF SAINT PAUL		STORM SEWER 100% S.A.P 62-664-04 0% S.A.P 164-020-90		S.A.P. 164-129-11 CITY OF SAINT PAUL		S.A.P. 164-253-03 CITY OF SAINT PAUL		CITY OF SAINT PAUL 100% CITY OF SAINT PAUL LOCAL FUNDS		CITY OF SAINT PAUL AMES LAKE WETLAND 100% CITY OF SAINT PAUL				
						ESTIMATED QUANTITIES	FINAL QUANTITIES	ESTIMATED QUANTITIES	FINAL QUANTITIES	ESTIMATED QUANTITIES	FINAL QUANTITIES	ESTIMATED QUANTITIES	FINAL QUANTITIES	ESTIMATED QUANTITIES	FINAL QUANTITIES	ESTIMATED QUANTITIES	FINAL QUANTITIES	ESTIMATED QUANTITIES	FINAL QUANTITIES	ESTIMATED QUANTITIES	FINAL QUANTITIES	
	2451.609	GRANULAR BACKFILL	t	840																240		
	2451.609	GRANULAR BEDDING AND/OR FOUNDATION	t	220							600										100	
	2501.515	450 mm R.C. PIPE APRON, CLASS V	EACH	1							120										1	
	2501.515	900 mm R.C. PIPE APRON, CLASS III	EACH	1																	1	
	2503.511	300 mm PVC PIPE SEWER, C-900	m	219																		
	2503.511	300 mm DIP SEWER, CLASS 50	m	62																	219	
	2503.541	300 mm R.C. PIPE SEWER, DESIGN 3006, CLASS V	m	174																	62	
	2503.541	375 mm R.C. PIPE SEWER, DESIGN 3006, CLASS V	m	239			51		33				54			36						
	2503.541	450 mm R.C. PIPE SEWER, DESIGN 3006, CLASS V	m	154			73		37				6			20						
	2503.541	525 mm R.C. PIPE SEWER, DESIGN 3006, CLASS V	m	65																		154
	2503.541	675 mm R.C. PIPE SEWER, DESIGN 3006, CLASS III	m	77																		
	2503.541	900 mm R.C. PIPE SEWER, DESIGN 3006, CLASS III	m	78																		
	2503.602	CONCRETE SADDLE	EACH	1																		78
	2503.603	150 mm DIP CLASS 50 SANITARY SEWER SERVICE STUB	m	63																		
	2503.603	200 mm DIP CLASS 50 STORM SEWER SERVICE STUB	m	76																		63
	2503.603	900 mm STEEL CASING PIPE, 12.5 mm WALL THICKNESS	m	34																		76
	2504.602	ADJUST VALVE BOX	EACH	5																		
	2504.604	50 mm INSULATION	m2	15																		
	2506.511	RECONSTRUCT MANHOLE	m	4																		
	2506.522	ADJUST FRAME AND RING CASTING	EACH	17																		
	2506.602	INTERIM SEDIMENT CONTROL FOR CATCH BASINS	EACH	33																		
	2506.602	CONSTRUCT MANHOLE, DESIGN TYPE I	EACH	8																		
	2506.602	CONSTRUCT MANHOLE, DESIGN TYPE III	EACH	2																		5
	2506.602	CONSTRUCT MANHOLE, DESIGN TYPE IV	EACH	6																		3
	2506.602	CONSTRUCT MANHOLE, DESIGN TYPE V	EACH	1																		2
	2506.602	CONSTRUCT CATCH BASIN, DESIGN TYPE 7A	EACH	1																		
(2)	2521.501	100 mm CONCRETE WALK	EACH	34			12		12				5			5						
	2521.501	150 mm CONCRETE WALK	m2	2,464			1,219		1,094							151						
	2531.501	CONCRETE CURB AND GUTTER, DESIGN B624	m	188																		
(3)	2531.501	CONCRETE CURB AND GUTTER, DESIGN B612 MODIFIED	m	2,535			1,809		420				306			188						
	2531.507	200 mm CONCRETE DRIVEWAY PAVEMENT	m2	107																		
	2540.602	PROJECT SIGN	EACH	1																		
	2545.602	LIGHTING UNIT TYPE L 10	EACH	14																		
	2545.602	LUMINAIRE TYPE R150	EACH	14					8				5									1
	2545.602	LIGHT BASE FOUNDATION TYPE ST	EACH	34					8				5									1
	2545.602	LIGHTING UNIT TYPE IT6-300	EACH	21					25				5			2						2
	2545.602	LUMINAIRE TYPE C150	EACH	21					18						2							1
	2545.602	SERVICE PANEL	EACH	1					18						2							1
	2545.602	PULLBOX - LIGHTING	EACH	2					2						1							
	2545.602	PULLBOX - SIGNAL	EACH	7					2													
	2545.602	REMOVE & SALVAGE SERVICE PANEL	EACH	1									3			3						1
	2545.602	REMOVE & SALVAGE 9.1 m BENT STRAW	EACH	20					15				3			2						

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SPEED-DIA 7/72/98

PHALEN VILLAGE PUBLIC IMPROVEMENTS 98-P-1163 PAVING DR. 12 DRWG. NO. 1424	I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A BUILT REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA. 
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PHALEN VILLAGE PUBLIC IMPROVEMENTS			QUANTITIES																
			TOTAL			S.A.P. 62-664-04 RAMSEY COUNTY		S.A.P. 164-020-90 CITY OF SAINT PAUL		STORM SEWER 100% S.A.P. 62-664-04 0% S.A.P. 164-020-90		98-P-1163 S.A.P. 164-129-11 CITY OF SAINT PAUL		S.A.P. 164-253-03 CITY OF SAINT PAUL		CITY OF SAINT PAUL 100% CITY OF SAINT PAUL LOCAL FUNDS		98-S-1882 CITY OF SAINT PAUL AMES LAKE WETLAND 100% CITY OF SAINT PAUL	
NOTE	ITEM NO.	CONTRACT ITEM	UNIT	TOTAL ESTIMATED QUANTITIES	TOTAL FINAL QUANTITIES	ESTIMATED QUANTITIES	FINAL QUANTITIES	ESTIMATED QUANTITIES	FINAL QUANTITIES	ESTIMATED QUANTITIES	FINAL QUANTITIES	ESTIMATED QUANTITIES	FINAL QUANTITIES	ESTIMATED QUANTITIES	FINAL QUANTITIES	ESTIMATED QUANTITIES	FINAL QUANTITIES	ESTIMATED QUANTITIES	FINAL QUANTITIES
	2545.602	REMOVE LIGHT FOUNDATION	EACH	20								3		2					
	2545.603	50 mm NMC TRENCH & RESTORE/PUSH	m	55															
	2545.603	50 mm NMC BEHIND CURB	m	1,603								316		24				47	
	2545.603	38 mm NMC BEHIND CURB	m	78										78					
	2545.603	1/C #4 A.W.G.	m	5,176								610		306				102	
	2545.603	1/C #8 A.W.G. BARE GROUND	m	1,723								270		102				47	
(1)	2563.601	TRAFFIC CONTROL	LUMP SUM	1		0.72		0.28											
	2564.602	PAVEMENT MESSAGE (LT ARROW) POLY PREFORMED	EACH	12		10							2						
	2564.602	PAVEMENT MESSAGE (DIAMOND) POLY PREFORMED	EACH	11		11													
	2564.602	PAVEMENT MESSAGE (BIKE) POLY PREFORMED	EACH	11		11													
	2564.602	PAVEMENT MESSAGE (ONLY) POLY PREFORMED	EACH	11		11													
	2564.603	100 mm SOLID LINE WHITE - POLY PREFORMED	m	2,322		2,030							292						
	2564.603	200 mm SOLID LINE YELLOW-POLY PREFORMED	m	73		40							33						
	2564.603	100 mm DOUBLE SOLID LINE YELLOW - POLY PREFORMED	m	193		140							53						
	2564.604	200 mm CROSSWALK MARKING - POLY PREFORMED	m2	44		35							9						
(4)	2564.533	FURNISH SIGN PANELS TYPE D	m2	3.75		2.5							1.25						
(4)	2564.536	INSTALL SIGN PANEL TYPE D	EACH	3		2							1						
(4)	2565.511	FULL TRAFFIC ACTUATED TRAFFIC CONTROL SIGNAL SYSTEM	SIG. SYS.	1		0.67							0.33						
(4)	2565.601	TRAFFIC CONTROL INTERCONNECTION	LUMP SUM	1		0.67							0.33						
	2565.601	EMERGENCY VEHICLE PREEMPTION SYSTEM	LUMP SUM	1				0.67					0.33						
	2571.501	AUSTRIAN PINE, 2.4 m HT B&B	TREE	7				7											
	2571.502	PRAIRIE SPIRE ASH, 60 mm CAL B&B	TREE	7											7				
(5)	2571.502	AUTUMN BLAZE MAPLE, 60 mm CAL B&B	TREE	137		6		65					66						
	2571.502	SWAMP WHITE OAK, 60 mm CAL B&B	TREE	39				39											
	2571.502	NO. PIN OAK, 60 mm CAL B&B	TREE	47				47											
(6)	2573.502	SILT FENCE, TYPE HEAVY DUTY	m	2,020		952		196											872
	2573.603	SNOW FENCE	m	140															140
	2573.510	RISER STANDPIPE	EACH	1															1
	2575.501	SEEDING	HA	7.5				2											5.5
	2575.502	SEED MIXTURE 100A	kg	650				100											550
	2575.505	SODDING, TYPE LAWN	m2	13,253		10,371		1,200					826		856				
	2575.511	MULCH MATERIAL TYPE 1	t	34				9											25
	2575.519	DISK ANCHORING	HA	7.5				2											5.5
	2575.523	EROSION CONTROL BLANKETS, CATEGORY 2	m2	1,840				1,840											
	2575.541	MOWING	HA	4				4											
	2575.605	SEED MIXTURE SPECIAL	HA	1				1											

NOTES

- (1) THESE QUANTITIES SPLIT 72% S.A.P. 62-664-04 AND 28% S.A.P. 164-020-90 FOR WORK ON CSAH 64
- (2) THE LIMIT OF THE PARTICIPATION BY S.A.P. 62-664-04 FOR THIS ITEM IS THE QUANTITY FOR ITEM NO. 2104.503 REMOVE CONCRETE WALK ON CSAH 64 PLUS 25% OF ANY ADDITIONAL WALK CONSTRUCTED ON CSAH 64 OVER AND ABOVE THE QUANTITY FOR ITEM NO. 2104.503 REMOVE CONCRETE WALK
- (3) THE LIMIT OF THE PARTICIPATION BY S.A.P. 62-664-04 FOR THIS ITEM IS THE QUANTITY FOR ITEM NO. 2104.501 REMOVE CONCRETE CURB AND GUTTER ON CSAH 64 PLUS 25% OF ANY ADDITIONAL B-612 MODIFIED CURB AND GUTTER CONSTRUCTED ON CSAH 64 OVER AND ABOVE THE QUANTITY FOR ITEM NO. 2104.501 REMOVE CONCRETE CURB AND GUTTER
- (4) THESE QUANTITIES SPLIT 67% S.A.P. 62-664-04 AND 33% S.A.P. 164-129-11
- (5) THE LIMIT OF THE PARTICIPATION BY S.A.P. 62-664-04 FOR THIS ITEM IS 25% OF THE TREES REMOVED FOR THE CONSTRUCTION OF CSAH 64
- (6) INCLUDES 700 m OF SILT FENCE IN BERM REMOVAL AREA. THE 700 m IS SPLIT 72% S.A.P. 62-664-04 AND 28% S.A.P. 164-020-90

28-291

S08-01A 7/22/98

PHALEN VILLAGE PUBLIC IMPROVEMENTS 98-P-1163 PAVING DR. 12 DRWG. NO. 1424	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. DATE: 7-23-98 REG. NO.: 1949	
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STATEMENT OF ESTIMATED QUANTITIES

STANDARD DETAIL PLATES

ST. PAUL PLATE NO.	STANDARD DETAIL
M1206	CONCRETE DRIVEWAY, TYPE 6
M2015	CATCH BASIN, DESIGN TYPE 7A
M2101	MANHOLE, DESIGN TYPE I
M2103	MANHOLE, DESIGN TYPE III & III-S
M2104	MANHOLE, TYPE IV
M2105	MANHOLE, DESIGN TYPE V & V-S
M2201	FRAME CASTING 'A'
M2202	COVER CASTINGS B, & D
M2306	RECONNECTION OF HOUSE SERVICES
M2309	CATCH BASIN CONNECTION
M2310	TYPICAL FILL SECTION
M2311	ANCHOR CLAMP DETAIL
M2317	TYPES OF TRENCH BEDDING
M2318	CONCRETE SADDLE FOR PIPE CROSSINGS
M3004	PEDESTRIAN CURB RAMP FOR HANDICAPPED
M3005	PEDESTRIAN CURB RAMP FOR HANDICAPPED
M3006	PEDESTRIAN CURB RAMP FOR HANDICAPPED
N/A	PEDESTRIAN CURB RAMP FOR HANDICAPPED (TEXT)
M3007	STANDARD INTERSECTION CONSTRUCTION
M3008	SAWED/SEALED JOINTS
M3100	CONCRETE CURB AND GUTTER, DESIGN B
M3106	CONCRETE CURB AND GUTTER, DESIGN B-612 MODIFIED
M3109	B- 612 MODIFIED CURB AND GUTTER @ TYPE 7A CATCH BASIN

THESE STANDARD PLATES AS APPROVED BY THE FHWA SHALL APPLY

MnDOT PLATE NO.	STANDARD DETAIL
M3000L	REINFORCED CONCRETE PIPE
M3006G	GASKET JOINT FOR R.C. PIPE
M3100G	CONCRETE APRON FOR REINFORCED CONCRETE PIPE
M3133C	RIPRAP AT RCP OUTLETS
M3145E	CONCRETE PIPE TIES

EXISTING & REMOVAL LEGEND

=====	EXISTING CURB & GUTTER	/ A \	ASPHALT DRIVE
-----	EXISTING CURB	/ C \	CONCRETE DRIVE
- - - - -	EXISTING WALK	/ D \	DIRT DRIVE
⊕	HYDRANT	/ G \	GRAVEL DRIVE
/	UTILITY POLE		
X	LIGHT STANDARD		
⬆	TRAFFIC SIGNAL		
⊙	UTILITY MANHOLE		
⊙	EXISTING MANHOLE (NO. REFERS TO EXISTING SEWER CHART)		
⊙	EXISTING CATCH BASIN (NO. REFERS TO EXISTING SEWER CHART)		
	EXISTING SIDE INLET		
--- 300 mm ---	EXISTING SEWER		
--- 150 mm W ---	EXISTING PIPE OR C.B. LEAD, CONSTR. 200 mm BRICK BULKHEAD		
--- 100 mm G ---	EXISTING UTILITY GATE VALVE		
T.S.	EXISTING WATER VALVE		
⊕	EXISTING WATER MAIN		
⊕	EXISTING GAS MAIN		
⊕	EXISTING CONDUIT (L=LIGHTING, T=TELEPHONE, E=ELECTRIC, T.S.=TRAFFIC SIGNAL, F.O.=FIBER OPTIC)		
⊕	EXISTING TREE (NO. REFERS TO SIZE)		
---	REMOVE CONCRETE CURB AND GUTTER		
---	REMOVE CONCRETE CURB		
---	REMOVE CONCRETE WALK		
---	REMOVE CONCRETE DRIVE		
⊕	REMOVE TREE (NO. REFERS TO SIZE)		
⊕	REMOVE STUMP		
---	REMOVE TRENCH PAVEMENT		

CONSTRUCTION LEGEND

=====	CONSTRUCT PAVEMENT (SEE TYPICAL SECTIONS)
=====	CONSTRUCT CURB (SEE TYPICAL SECTION FOR TYPE)
=====	CONSTRUCT CURB & GUTTER (SEE TYPICAL SECTION FOR TYPE)
⊙	ADJUST MANHOLE (NO. REFERS TO EXISTING SEWER CHART)
⊙	ADJUST UTILITY MANHOLE
⊕	CONSTRUCT CONCRETE WALK (100 mm THICK MAINLINE WALK AND OUTWALKS) (150 mm THICK IN PEDESTRIAN RAMP AREAS)
⊕	CONSTRUCT CONCRETE DRIVEWAY PAVEMENT (TYPE 6) 150 mm THICK UNLESS OTHERWISE NOTED.
+	ADJUST WATER GATE VALVE HOUSING
⊕	PEDESTRIAN CURB RAMP (STD. PL. M3004B, M3005B, M3006B)
⊕	CONSTRUCT CATCH BASIN (NO. REFERS TO SEWER CONST. CHART)
⊕	CONSTRUCT CATCH BASIN LEAD (300 mm DIA. UNLESS OTHERWISE NOTED)
⊕	NEW MANHOLE- TYPE AS NOTED (NO. REFERS TO SEWER CONST. CHART)
⊕	NEW TYPE IV OR IV-A MANHOLE MANHOLE (NO. REFERS TO SEWER CONST. CHART)
S	150 mm DIP CL 50 SANITARY STUB
ST	200 mm DIP CL 50 STORM STUB

BASIS FOR ESTIMATED QUANTITIES

2340.XXX	- BITUMINOUS MIXTURES - 59.67kg/M2 PER 25 mm
2357.502	- BITUMINOUS MATERIAL FOR TACK COAT ESTIMATED AT 0.23 LITRE PER m2 PER APPLICATION
2575.502	- SEED MIXTURE 100A - 100kg/ha

COMMON METRIC UNITS AND CONVERSIONS

QUANTITY	FROM ENGLISH	TO METRIC	MULTIPLY BY
LENGTH	MILE	km	1.609 344
	FOOT	m	0.304 800
	INCH	mm	25.400 000
	YARD	m	0.914 400
AREA	SQUARE YARD	m ²	0.836 127
	SQUARE FOOT	m ²	0.092 903
	ACRE	ha (10 000 m ²)	0.404 687
VOLUME	CUBIC YARD	m ³	0.764 555
	GALLON	L	3.785 412
MASS	POUND	kg	0.453 592
	TON	metric ton	0.907 184

CONSTRUCTION NOTES

ALL CURB RADII 6 METERS UNLESS OTHERWISE NOTED.
 300 mm CATCH BASIN LEADS TO BE CLASS V
 375 mm CATCH BASIN LEADS TO BE CLASS V
 WHERE EXISTING UTILITIES ARE IN CONFLICT WITH SEWER CONSTRUCTION, THE UTILITY COMPANY WILL RELOCATE, OFFSET OR SUPPORT THE UTILITY UNLESS OTHERWISE INDICATED ON THE PLAN SHEET OR STATED IN THE SPECIAL PROVISIONS.
 WHERE EXISTING FIRE HYDRANTS AND/OR LIGHT STANDARDS CONFLICT WITH CONSTRUCTION, THEY WILL BE RELOCATED BY OTHERS.
 GAS MAINS SHOWN ON THE PLAN SHEETS ARE EXISTING MAINS.
 IN CONJUNCTION WITH THIS SEWER AND PAVING PROJECT, N.S.P. MAY ABANDON SOME OF THE GAS MAINS IN THE AREA AND CONSTRUCT NEW MAINS IN THE BOULEVARD.
 SOIL CLASSIFICATION SHOWN ON SOIL BORINGS IS ACCORDING TO A.S.T.M. DESIGNATION D2487 "STANDARD TEST METHOD FOR CLASSIFICATION OF SOILS FOR ENGINEERING PURPOSES".
 ALL CONCRETE WALK IN QUADRANT AREAS AT THE CORNERS OF INTERSECTIONS SHALL BE 150 mm THICK.
 ALL PEDESTRIAN CURB RAMP FOR THE HANDICAPPED SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY OF SAINT PAUL STANDARD DETAIL PLATES M3004B, M3005B, M3006B
 UTILITY COMPANIES WILL RELOCATE THEIR FACILITIES CONCURRENTLY WITH THE CONSTRUCTION OPERATIONS UNDER THIS CONTRACT. CONTRACTOR SHALL SCHEDULE CONSTRUCTION IN COOPERATION WITH UTILITY RELOCATION.
 NEW SANITARY SEWER AND WATER SERVICE LOCATIONS ON THE PLANS SHALL BE VERIFIED BY THE CONTRACTOR WITH THE ENGINEER PRIOR TO CONSTRUCTION. SERVICE LOCATIONS MAY BE ADJUSTED AS REQUESTED BY THE ENGINEER.
 ANY DEWATERING AND OR ANY USE OF TRENCH BOX, SHEETING, SHORING, OR OTHER METHODS OR MEANS OF CONSTRUCTION NECESSARY TO COMPLETE CONSTRUCTION WITHIN THE CONSTRUCTION LIMITS OR SLOPE EASEMENTS SHOWN WILL BE CONSIDERED TO BE INCIDENTAL AND NO DIRECT COMPENSATION WILL BE MADE THEREFORE.
 COMPACTION OF GRADING ITEMS SHALL BE ACCOMPLISHED IN ACCORDANCE WITH SPEC. 2105.3F2 "QUALITY COMPACTION METHOD".
 WHEN CONNECTION TO EXISTING BITUMINOUS PAVEMENT IS REQUIRED, THE EDGE OF EXISTING PAVEMENT SHALL BE CUT TO A NEAT LINE PRIOR TO CONSTRUCTING ASPHALT SURFACING.
 USE TACK COAT BETWEEN ALL BITUMINOUS LIFTS.
 COMPACTION OF ALL BITUMINOUS ITEMS SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE "ORDINARY COMPACTION METHOD". AS DETAILED IN SPECIAL PROVISIONS.
 WATER, GAS, ELECTRIC, TELEPHONE, SEWER, AND T.V. CABLE LINES SHOWN ON THE DRAWINGS ARE PLOTTED FROM THE BEST INFORMATION AVAILABLE AT THE TIME OF PLAN PREPARATION, BUT MAY NOT REFLECT ACTUAL LOCATIONS OR ELEVATIONS. THE CONTRACTOR SHALL VERIFY LOCATION OF ALL UTILITIES BEFORE BEGINNING CONSTRUCTION WHICH MAY BE AFFECTED BY A UTILITY CONFLICT. THE CONTRACTOR SHALL GIVE 48 HOURS NOTICE TO THE OWNERS OF ALL KNOWN UTILITIES BEFORE STARTING ANY OPERATIONS AFFECTING THOSE PROPERTIES, OR BEGINNING EXCAVATION IN THE VICINITY OF THOSE PROPERTIES. THE CONTRACTORS ATTENTION IS DIRECTED TO SECTION 1507 IN THE STANDARD SPECIFICATIONS.
 ALL USES OF THE WORD "INCIDENTAL" IN THESE CONSTRUCTION DOCUMENTS SHALL BE CONSTRUED TO MEAN INCIDENTAL WORK FOR WHICH NO DIRECT COMPENSATION SHALL BE MADE.

28-291

LEGEND,
 STANDARD DETAIL PLATES,
 METRIC CONVERSION TABLE,
 AND NOTES
 SHEET 6 OF 60 SHEETS

LEGEND 07/16/98

PHALEN VILLAGE
 PUBLIC IMPROVEMENTS
 98-P-1163
 PAVING DR. 12 DRWG. NO. 1424

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DAILY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
 DATE: 7-23-98 REG. NO.: 18855



EXISTING SEWER STRUCTURE CHART										
STRUC. NUMBER	LOCATION			REMAIN		REMOVE		ADJ.	NOTES	FUNDING
	STATION	LT.	CL	RT.	AS IS	M.H.	C.B.	M.H.		
JOHNSON PARKWAY - STA 1+67 TO STA 3+70										
100	2+80.4	11.4					X			A
101	2+91.0	8.8				X				A
102	2+96.0			6.0			X			A
103	3+10.0			35.0				X		A
104	3+77.8			16.4				X		A
JOHNSON PARKWAY - STA 3+70 TO STA 5+80										
105	4+25.1			12.2			X			A
106	4+28.0			16.8			X			A
107	4+30.8			18.2				X		A
108	4+35.8			22.8				X		A
109	4+46.0			16.4				X		A
110	4+51.6	0.4					X			B
111	4+54.4			8.8			X			B
112	4+95.8	5.6					X			B
113	5+00.2	8.8						X		B
114	5+07.8	1.8						X		B
115	5+17.6			5.6			X			B
116	5+20.4	5.2					X			B
117	5+11.8			19.4				X		B
118	5+21.0			20.2				X		B
119	5+61.4	1.6						X		B
120	6+43.0			4.8	X					
121	6+48.0			9.2	X					
122	6+48.6			9.8	X					
PROSPERITY - JOHNSON PARKWAY TO STA 8+20										
123	5+75.1			14.4			X			A
124	5+81.2			24.0		X				A
125	5+87.8			24.8			X			A
126	5+89.6			15.0				X		A
127	5+91.0			7.6			X			A
128	5+94.8			4.2				X		A
129	6+01.8			1.0				X		A
130	6+09.1	3.4							RECONSTRUCT MANHOLE 1.5 m	A
131	6+04.4			4.8				X		A
132	6+06.2			10.8					RECONSTRUCT MANHOLE 1.5 m	A
133	6+51.6	14.6					X			A
134	6+53.8	7.0						X		A
135	6+55.2	2.8					X			A
PROSPERITY - STA 8+20 TO ROSE AVENUE										
136	9+94.5			18.3	X					
137	9+98.0			4.2	X					
138	9+99.5			2.5	X					
139	10+06.0			19.0	X					

EXISTING SEWER STRUCTURE CHART										
STRUC. NUMBER	LOCATION			REMAIN		REMOVE		ADJ.	NOTES	FUNDING
	STATION	LT.	CL	RT.	AS IS	M.H.	C.B.	M.H.		
GERANIUM - STA. 1+00 TO CLARENCE ST.										
140	1+72.4			X					X	C
141	1+77.8	1.6							X	C
CLARENCE - PROSPERITY TO OLD PROSPERITY										
142	1+20.2			4.8						RECONSTRUCT MANHOLE 1.0 m
143	1+37.2			3.8					X	C
144	1+40.4			0.4					X	C
145	1+47.2			4.8					X	C
146	1+70.4	4.2					X			
147	1+74.6			2.2	X					
148	1+75.8			X	X					
149	1+78.2			4.8	X					
AMES LAKE WETLAND REMOVALS										
200	SEE PLAN								X	D
201	SEE PLAN								X	D
202	SEE PLAN								X	D
203	SEE PLAN								X	D
204	SEE PLAN								X	D
205	SEE PLAN								X	D
206	SEE PLAN								X	D
207	SEE PLAN								X	D
208	SEE PLAN								X	D
209	SEE PLAN								X	D
210	SEE PLAN								X	D
211	SEE PLAN								X	D
212	SEE PLAN								X	D
213	SEE PLAN								X	D
214	SEE PLAN								X	D
215	SEE PLAN								X	D
216	SEE PLAN								X	D
217	SEE PLAN								X	D
218	SEE PLAN								X	D
219	SEE PLAN								X	D
220	SEE PLAN								X	D
221	SEE PLAN								X	D
222	SEE PLAN								X	D

FUNDING
A SAP 62-664-04, 164-020-90
B SAP 164-129-11
C SAP 164-253-03
D AMES LAKE WETLAND
E ST. PAUL LOCAL FUNDS

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EXISTING SEWER CHART
SHEET 7 OF 60 SHEETS

MAINLINE SEWER CONSTRUCTION CHART

STRUC. NO.	LOCATION			CONST. M. H. TYPE	PIPE LENGTH (METERS)							NOTES	FUNDING	
	STATION	LT	CL		RT	300 mm PVC C-900	300 mm DIP CL 50	900 mm RCP CL III	675 mm RCP CL III	525 mm RCP CL V	450 mm RCP CL V			375 mm RCP CL V
JOHNSON PARKWAY - STATION 1+67 TO 3+70														
M0	3+06.0			6.9	IV								CONSTRUCT OVER EXISTING 450 mm SEWER	A
PROSPERITY AVENUE JOHNSON PARKWAY TO STA 8+20														
S1	6+39.0			4.0	V								CONSTRUCT OVER EXISTING 1350 mm SEWER	E
S2	7+10.0			7.0	I	64								E
S3	7+66.0			8.1	I	55								E
M1	7+03.0	7.0			IV			52					CONSTRUCT CONCRETE SADDLE (STD PLATE M2318) WHERE PIPE CROSSES 1350mm SANITARY INTERCEPTOR	A
M2	7+26.0	6.0			IV			25						A
M3	7+91.0	6.0			IV				65					A
P1	SEE PLAN				APRON								450 mm RCP CL V PIPE APRON	D
P2	7+82.0	8.0			IV					56				D
P3	7+18.4	8.0			IV					64				D
PROSPERITY AVENUE - STA 8+20 TO ROSE AVENUE														
S4	8+29.0			8.1	I		62							E
S5	8+75.0			8.1	I	50								E
S6	9+22.0			8.1	I	50								E
M4	8+40.0	7.1			IV						48			A
M5	9+00.0	7.1			IV						55			A
CLARENCE - PROSPERITY TO OLD PROSPERITY														
P4	0+97.2			2.0	IV					23.5				D
GERANIUM - STA 1+00 TO CLARENCE STREET														
P5	1+92.0			2.0	III					10				D
P6	1+58.0			2.0	III								34 m OF 900 mm STEEL CASING PIPE, 12.5 mm WALL THICKNESS INSERTED WITH 34 m of 450 mm RCP, CL V	D
AMES LAKE WETLAND OUTLET														
P7	SEE PLAN				APRON			78					900 mm RCP CL III PIPE APRON	D

FUNDING
 A SAP 62-664-04, 164-020-90
 B SAP 164-129-11
 C SAP 164-253-03
 D AMES LAKE WETLAND
 E ST. PAUL LOCAL FUNDS

28-291

PHALEN VILLAGE PUBLIC IMPROVEMENTS 98-P-1163 PAVING DR. 12 DRWG. NO. 1424	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. DATE: 5-22-88	
---	--	---

CATCH BASIN CONSTRUCTION CHART

STRUC. NO.	LOCATION		CONST C.B. TYPE	PIPE LENGTH, m		NOTES	FUNDING
	STATION	LT. RT.		300 mm	375 mm		
JOHNSON PARKWAY - STA 1+67 TO STA 3+70							
700	3+02.0	4.6	7A	9.2			A1
701	3+02.0		7A		2.6		A1
JOHNSON PARKWAY - STA 3+70 TO STA 5+80							
702	3+80.2	6.6	7A	13.2			A1
703	3+80.2		7A		44.4		A1
704	4+49.6	6.6	7A	13.2			B
705	4+49.6		7A		6.0		B
706	4+94.1	4.6	7A	15.0			B
707	5+19.8	4.6	7A	12.2			B
708	5+19.8		7A	13.2			B
PROSPERITY - JOHNSON PARKWAY TO STA 8+20							
709	6+50.0	10.6	7A	5.8			A1
710	6+50.0	3.6	7A	5.4			A1
711	6+50.0		7A	7.0			A1
712	6+50.0		7A		12.0		A1
713	7+13.6	19.8	7A	12.4			C
714	7+06.4	10.6	7A		5.4		A1
715	7+01.4		7A	10.0			A1
716	7+02.8		7A		4.4		A1
717	7+02.8	3.6	7A		3.4		A1
718	7+20.6	19.0	7A	11.4			C
719	7+28.2	10.6	7A		4.0		A2
720	7+28.4		7A	7.0			A2
721	7+29.0		7A		4.4		A2
722	7+29.0	0.6	7A		6.8		A2
723	7+93.0	10.6	7A	4.4			A2
724	7+93.0		7A	7.0			A2
725	7+93.0		7A		7.4		A2
726	7+93.0	3.6	7A		3.4		A2
PROSPERITY - STA 8+20 TO ROSE AVENUE							
727	9+03.0	10.6	7A	4.0			A2
728	9+03.0	3.6	7A	4.0			A2
729	9+00.0		7A	7.0			A2
730	9+00.0		7A		11.0		A2
CLARENCE - PROSPERITY TO OLD PROSPERITY							
731	1+11.4	4.2	7A	11.8			C
732	1+03.4	12.4	7A		8.6		C
733	0+94.8	12.4	7A		11.0		C

FUNDING

- A1 SAP 62-664-04
- A2 SAP 164-020-90
- B SAP 164-129-11
- C SAP 164-253-03
- D AMES LAKE WETLAND
- E ST. PAUL LOCAL FUNDS

28-291

PROPOSED CATCH BASIN
CONSTRUCTION CHART

SAP 62-664-04, 164-020-90, 164-129-11, 164-253-03

SHEET 9 OF 60 SHEETS

cont-see 2, 4, 24, 28

PHALEN VILLAGE PUBLIC
IMPROVEMENTS
98-P-1163
PAVING DR. 12 DRWG. NO. 1424

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED
BY ME OR UNDER MY DIRECT SUPERVISION AND
THAT I AM A FULLY LICENSED PROFESSIONAL
ENGINEER UNDER THE LAWS OF THE STATE OF
MINNESOTA. *D. J. [Signature]*
DATE: 7-22-98 REG. NO. 1985



PLANT MATERIALS LIST


ITEM NO.	CONTRACT ITEM	UNIT	CODE	BOTANICAL NAME	COMMON NAME	SIZE	TYPE	QUANTITY				TOTAL
								BOULEVARD LOCATION				
								A	B	C	D	
2571.501	AUSTRIAN PINE, 2.4 m HT B&B	TREE	P/A	PINUS NIGRA	AUSTRIAN PINE	2.4 HT	B&B	7				7
2571.502	PRAIRIE SPIRE ASH, 60 mm CAL B&B	TREE	A/PS	FRAXINUS PENNSYLVANIA	PRAIRIE SPIRE ASH	60 mm CALIPER	B&B				7	7
2571.502	AUTUMN BLAZE MAPLE, 60 mm CAL B&B	TREE	M/AB	ACER HYBRID	AUTUMN BLAZE MAPLE	60 mm CALIPER	B&B		71	66		137
2571.502	SWAMP WHITE OAK, 60 mm CAL B&B	TREE	O/SW	QUERCUS BICOLOR	SWAMP WHITE OAK	60 mm CALIPER	B&B		39			39
2571.502	NO. PIN OAK, 60 mm CAL B&B	TREE	O/PN	QUERCUS ELLISOIDALIS	NO. PIN OAK	60 mm CALIPER	B&B	47				47

BOULEVARD LOCATION A - SAP 62-664-04, 164-020-90 (JOHNSON PARKWAY -SOUTH OF PROSPERITY)
 BOULEVARD LOCATION B - SAP 62-664-04, 164-020-90 (PROSPERITY AVENUE)
 BOULEVARD LOCATION C - SAP 164-129-11 (JOHNSON PARKWAY NORTH OF PROSPERITY)
 BOULEVARD LOCATION D - SAP 164-253-03 (CLARENCE STREET)

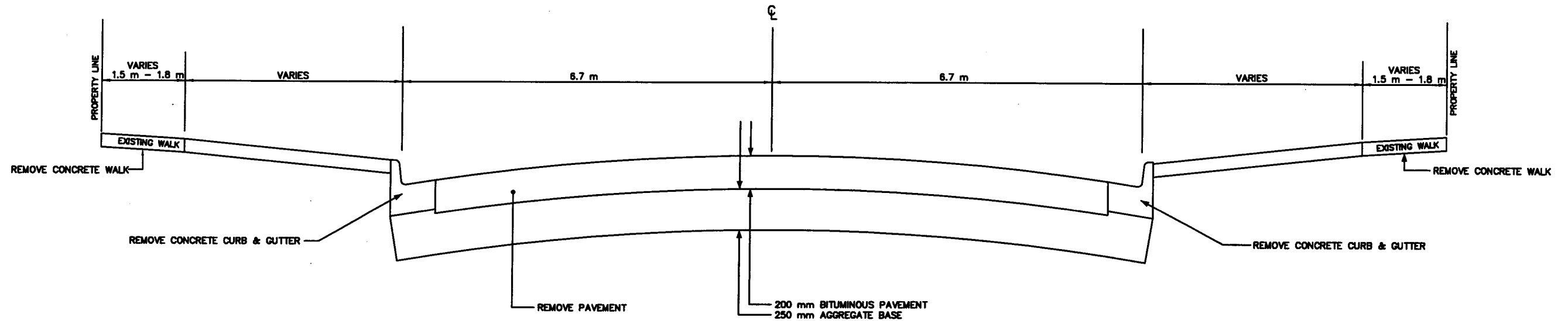
237 trees

28-291

PLANT-MAT 7/13/98

PHALEN VILLAGE PUBLIC IMPROVEMENTS 98-P-1163 PAVING DR. 12 DRWG. NO. 1424	I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A B.L.T. REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA. DATE: 1-23-98 REG. NO. 19955	
---	---	---

EXISTING TYPICAL SECTION
 OLD PROSPERITY AVENUE - JESSAMINE TO CLARENCE



ZB-291

CLDPROT 04/22/98

PHALEN VILLAGE
 PUBLIC IMPROVEMENTS

PAVING DR. 12 DRWG. NO. 1424

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A QUALIFIED PROFESSIONAL ENGINEER LICENSED UNDER THE LAWS OF THE STATE OF MISSOURI.

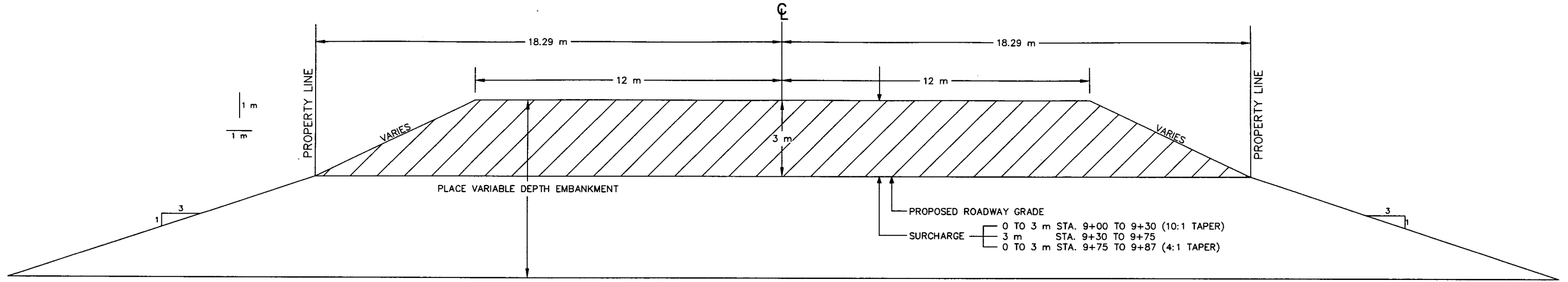
[Signature]
 DATE: 5-22-98 REG. NO. 18955

S.A.P. 62-664-04

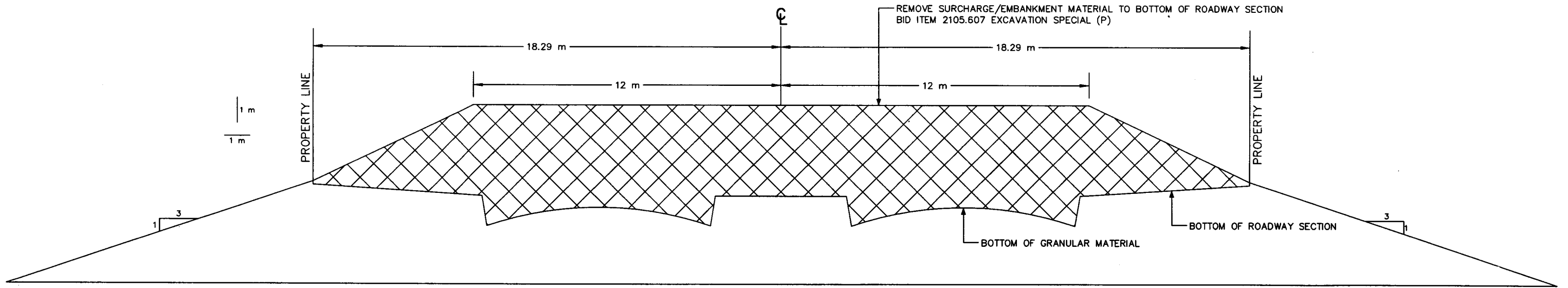


EXISTING
 OLD PROSPERITY AVENUE
 TYPICAL SECTION
 SHEET 11 OF 60

PROSPERITY AVENUE TYPICAL SECTION
SURCHARGE INSTALLATION



SURCHARGE REMOVAL



28-291

SUKI-1A 0/13/98

PHALEN VILLAGE
PUBLIC IMPROVEMENTS
98-P-1163

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DAILY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

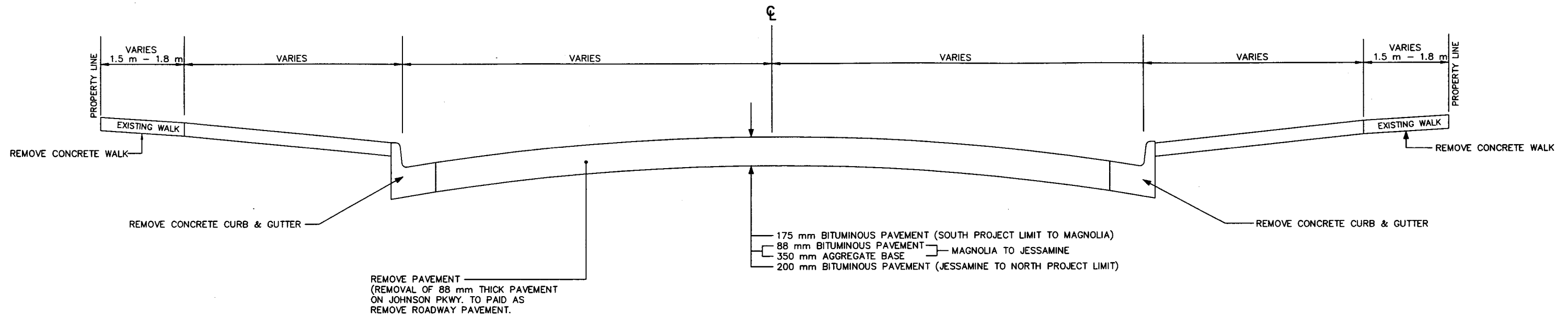
Paul J. M...
DATE: 7-23-98 REG. NO.: 18455

S.A.P. 62-664-04, 164-020-90

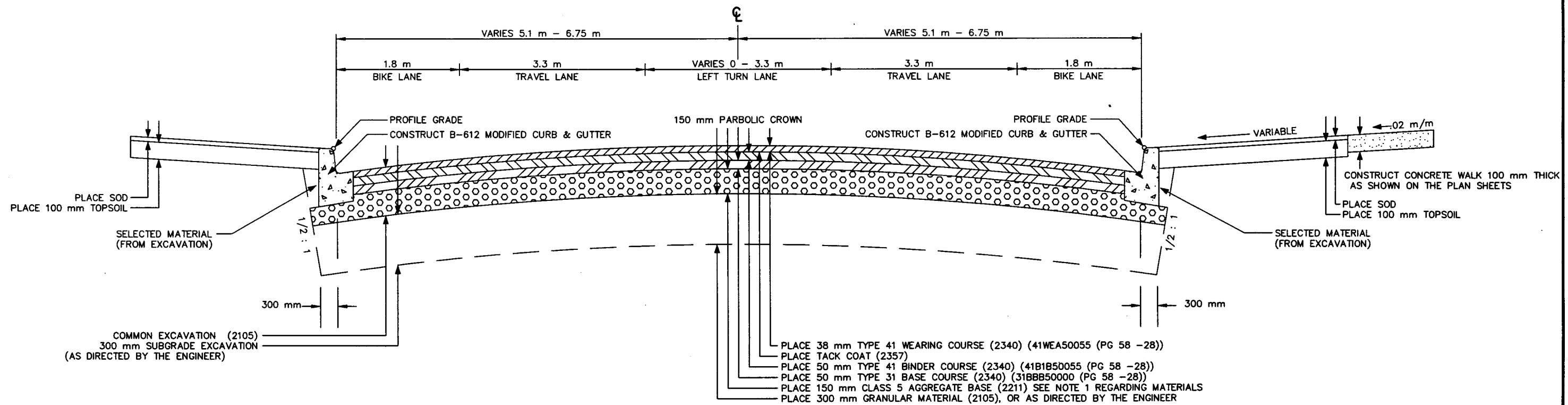


PROSPERITY AVENUE
SURCHARGE INSTALLATION
AND REMOVAL
TYPICAL SECTION
SHEET 13 OF 60

EXISTING TYPICAL SECTION



PROPOSED TYPICAL SECTION



NOTE 1: BASE TO BE CLASS 5 100% CRUSHED QUARRY, MINE ROCK, RECYCLED CONCRETE OR ASPHALT PAVEMENT MATERIAL.

28-291

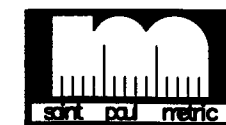
JOHT-01A 07/13/98

PHALEN VILLAGE
PUBLIC IMPROVEMENTS
98-P-1163

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.
DATE: 7-23-98 REG. NO. 1655

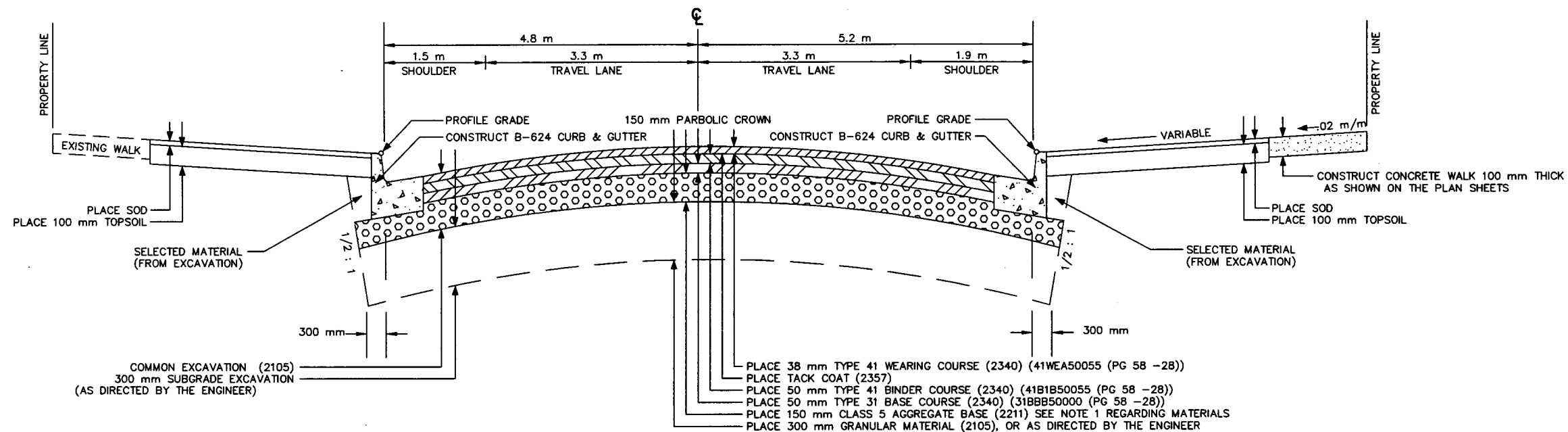
PAVING DR. 12 DRWG. NO. 1424

S.A.P. 164-129-11, 62-664-04



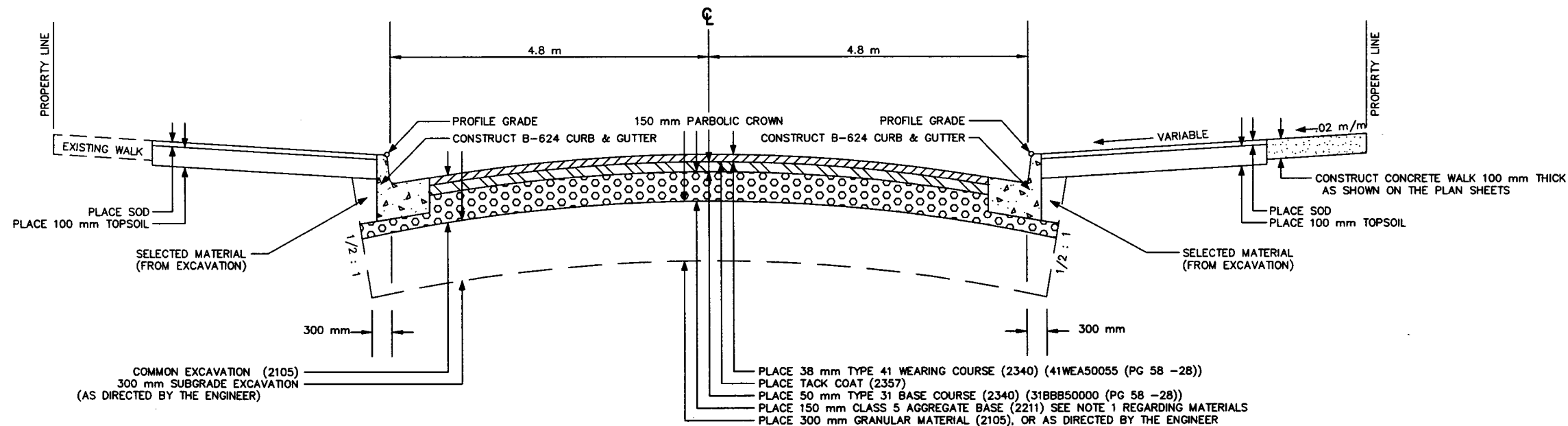
JOHNSON PARKWAY
TYPICAL SECTIONS
SHEET 14 OF 60

CLARENCE STREET TYPICAL SECTION



NOTE 1: BASE TO BE CLASS 5 100% CRUSHED QUARRY, MINE ROCK, RECYCLED CONCRETE OR ASPHALT PAVEMENT MATERIAL.

GERANIUM AVENUE TYPICAL SECTION



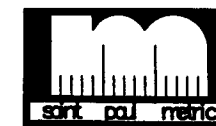
NOTE 1: BASE TO BE CLASS 5 100% CRUSHED QUARRY, MINE ROCK, RECYCLED CONCRETE OR ASPHALT PAVEMENT MATERIAL.

28-291

CLAT-01A 07/13/98

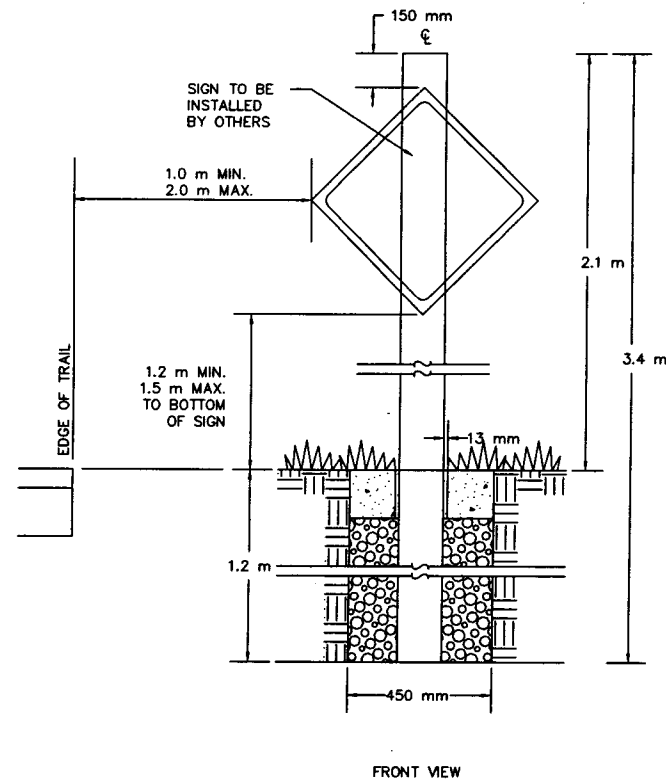
PHALEN VILLAGE PUBLIC IMPROVEMENTS 98-P-1163	I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA. DATE: 7-23-98 REG. NO. 18955
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S.A.P. 164-253-03

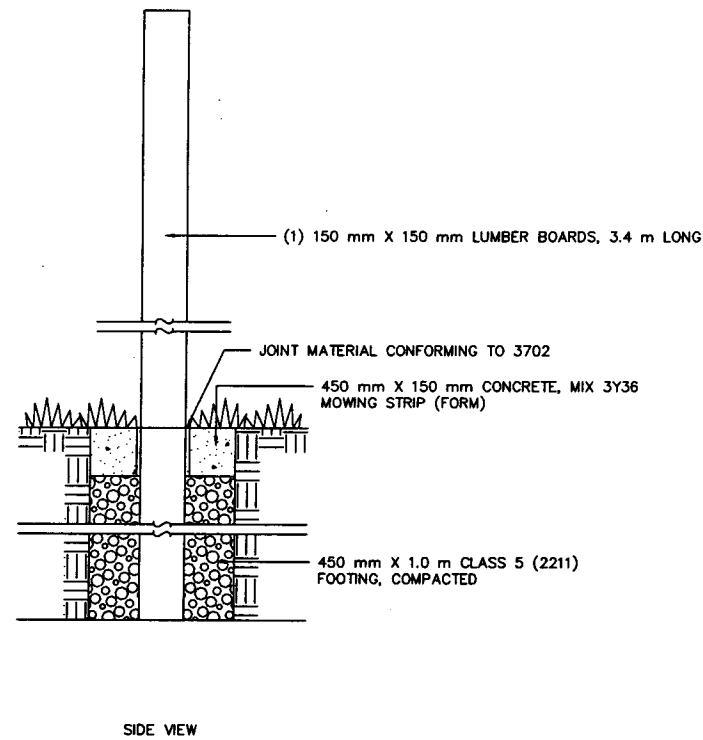


CLARENCE STREET
 GERANIUM AVENUE
 TYPICAL SECTIONS
 SHEET 15 OF 60

BIKE PATH TYPICAL SECTION

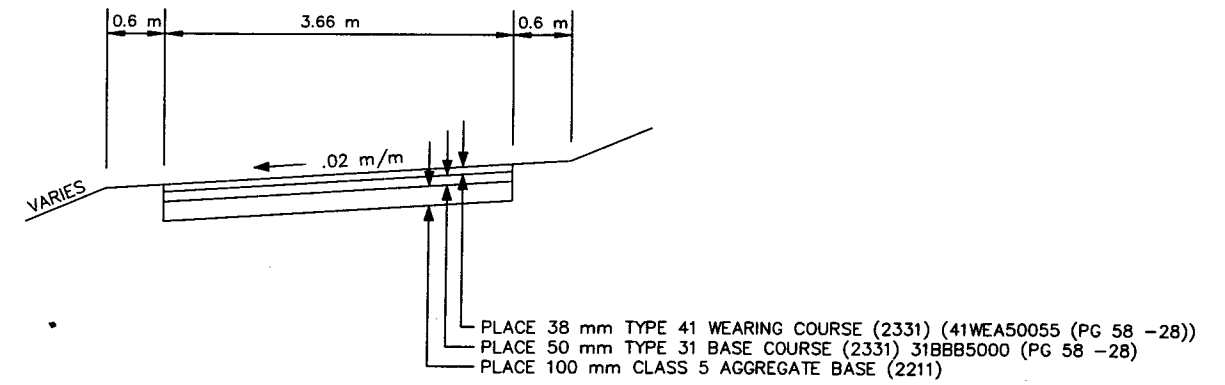


WOOD INFORMATION SIGN

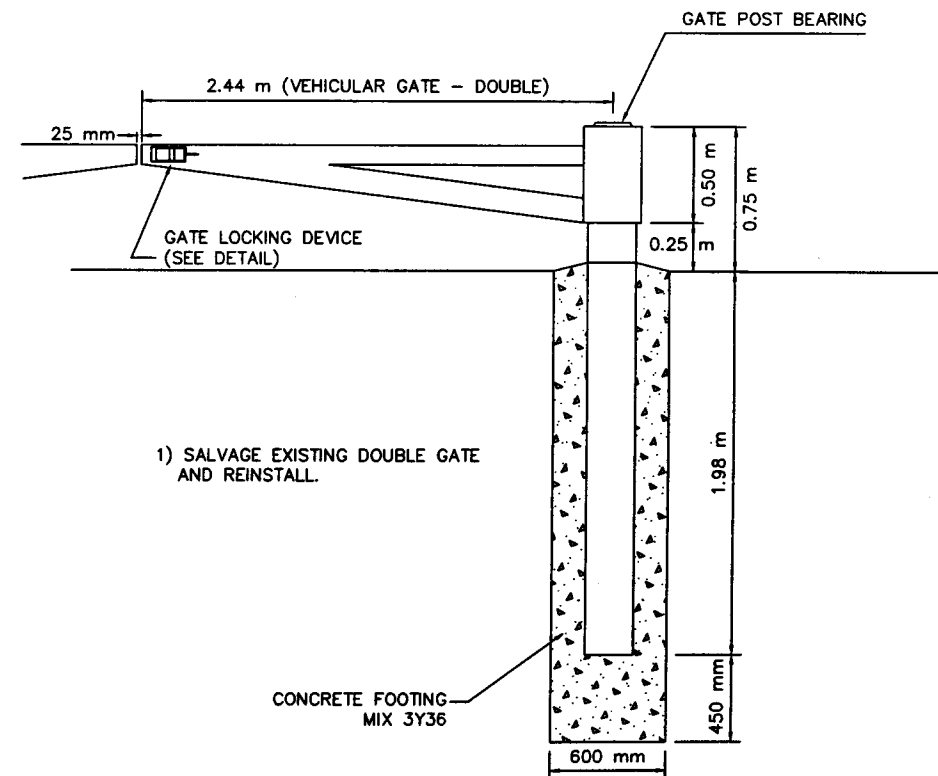


SIDE VIEW

NOTE: FURNISHING AND INSTALLING THE CONCRETE STRIP AND THE CLASS 5 FOOTING MATERIAL WILL BE CONSIDERED INCIDENTAL TO THE WOOD INFORMATION SIGN CONSTRUCTION AND NO DIRECT COMPENSATION WILL BE MADE THEREFOR.



PLACE 38 mm TYPE 41 WEARING COURSE (2331) (41WEA50055 (PG 58 -28))
 PLACE 50 mm TYPE 31 BASE COURSE (2331) 31BBB5000 (PG 58 -28)
 PLACE 100 mm CLASS 5 AGGREGATE BASE (2211)



1) SALVAGE EXISTING DOUBLE GATE AND REINSTALL.

VEHICULAR GATE

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CONSTRUCTION DETAILS
 BIKE PATH TYPICAL SECTION

SHEET 16 OF 60 SHEETS

BIKET-01A 98/05/01

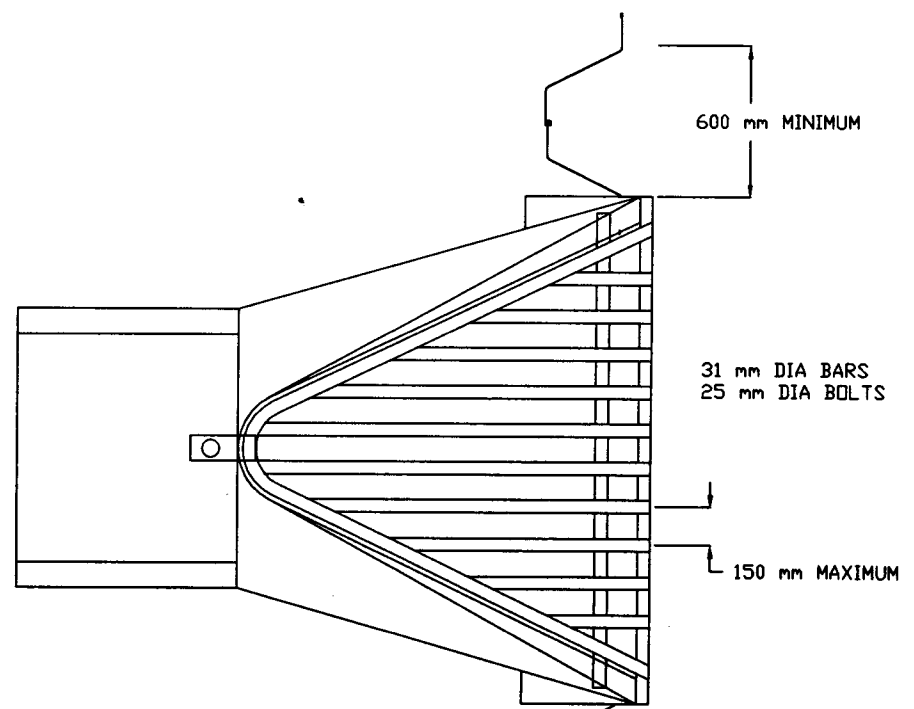
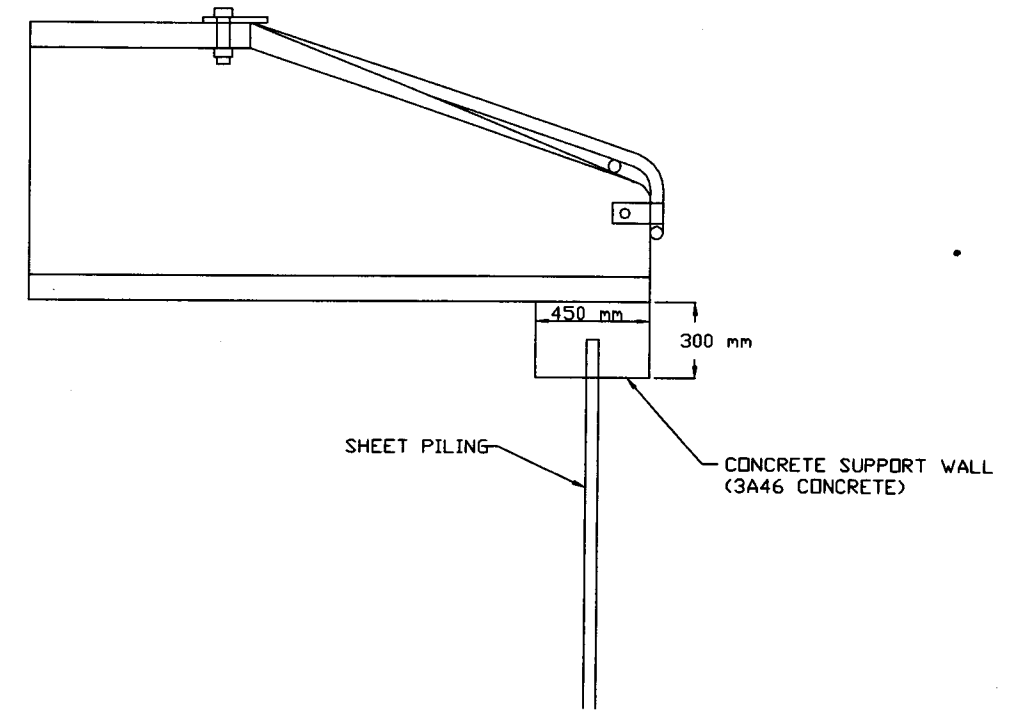
PHALEN VILLAGE
 PUBLIC IMPROVEMENTS
 98-P-1163
 PAVING DR. 12 DRWG. NO. 1424

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DAILY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
 DATE: 5-22-98 REG. NO. 18855



S.A.P. 164-129-11

FLARED END SECTION DETAIL



COLD ROLLED SHEET STEEL PILING SPZ-22 (ASTM-572 GR 50), 3.0 m LONG SECTIONS CONTINUOUS UNDER FLARED END SECTION.

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NOTES:

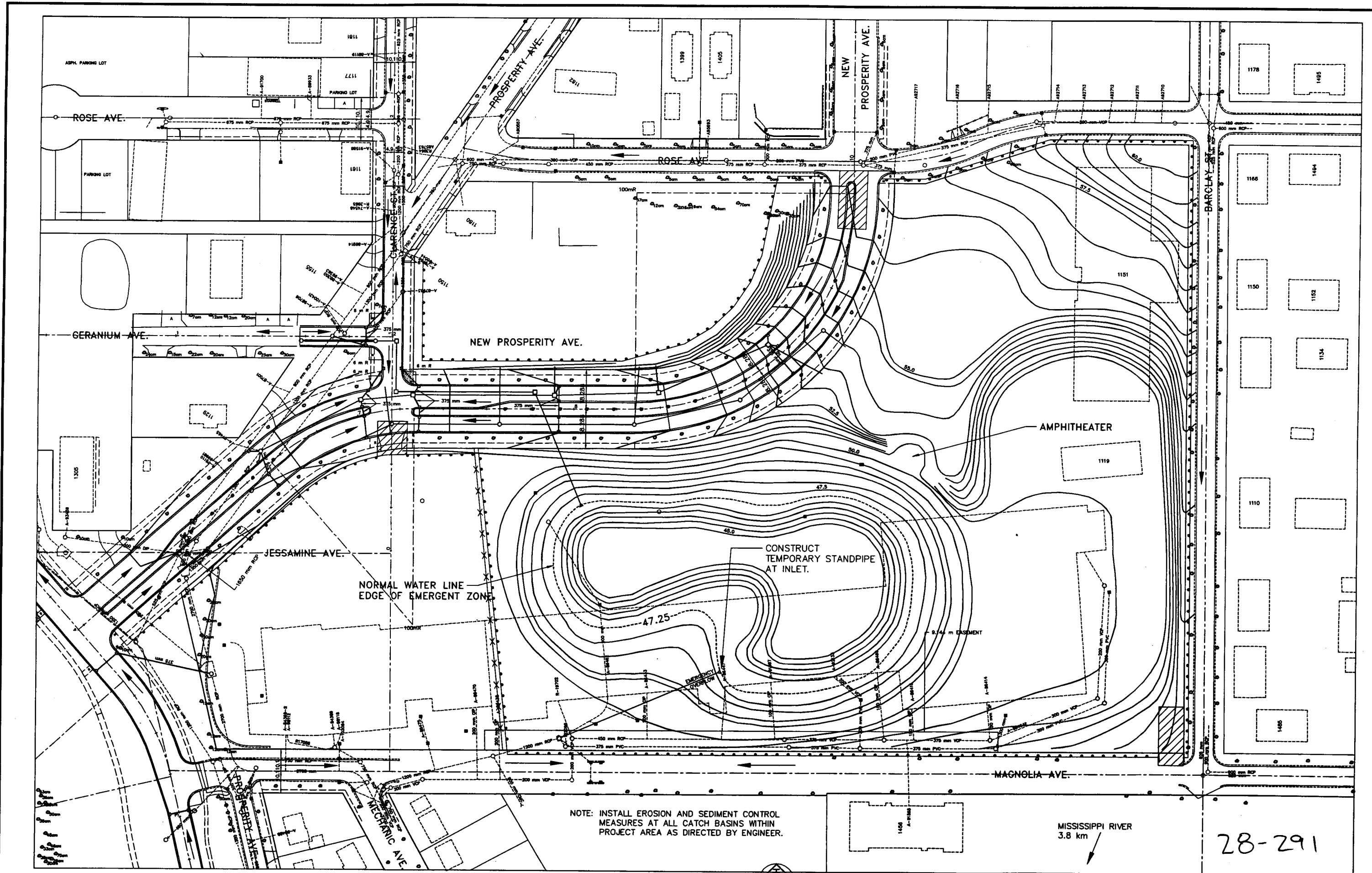
1. SEE MN/DOT STANDARD PLATE M3100G FOR FLARED END SECTION
2. FLARED END SECTION TO BE TIED TO ADJACENT PIPE USING TWO 19 mm DIAMETER EYE BOLT TIES (MN/DOT STD. PLATE M3145E).
3. METAL GRATE TO BE EQUAL TO NORTH STAR CONCRETE COMPANY DRAWING A-27C.
4. CONTRACTOR MAY SUBMIT ALTERNATE METAL GRATE DETAIL FOR APPROVAL.
5. CONSTRUCT CLASS III RIPRAP AT FLARED END SECTION AS PER MNDOT STANDARD PLATE M3133B.

FLARED DET. 4/20/98

PHALEN VILLAGE
PUBLIC IMPROVEMENTS
98-P-1163
PAVING DR. 12 DRWG. NO. 1424

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
DATE: 5-22-98 REG. NO.: 16958





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ALWP-03A 98/04/29

PHALEN VILLAGE
PUBLIC IMPROVEMENTS
98-P-1163
PAVING DR. 12 DRWG. NO. 1424

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER LICENSED IN THE STATE OF MINNESOTA.
DATE: 5-22-98 REG. NO. 17871



→ DIRECTION OF FLOW

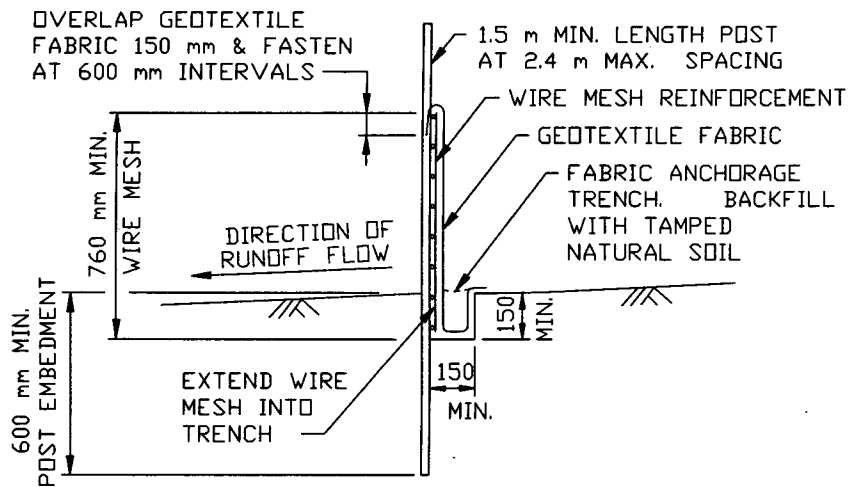
- HEAVY DUTY SILT FENCE
- ▨ ROCKED CONSTRUCTION ENTRANCE
- X — TEMPORARY SNOW FENCE



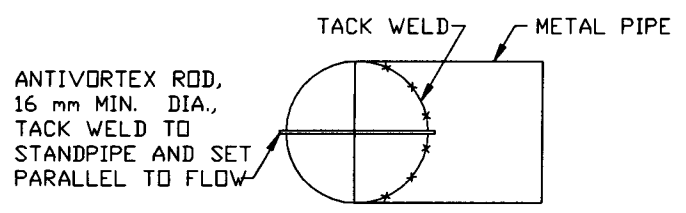
ELECTRONIC SURVEY

S.A.P. 62-664-04, 164-202-90, 164-129-11, 164-253-03

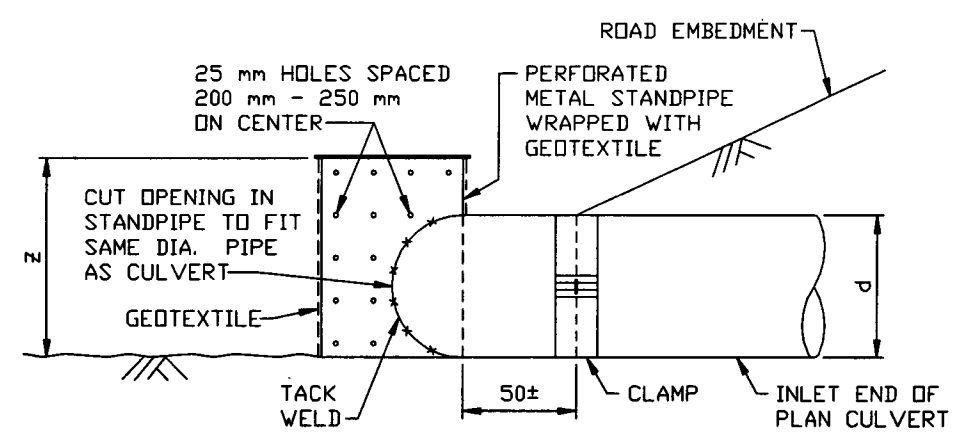
EROSION AND SEDIMENTATION
CONTROL PLAN
SHEET 18 OF 60 SHEETS



HEAVY DUTY
SILT FENCE DETAILS
TO PROTECT AREAS FROM SHEET FLOW
(SEE SPEC. 3886)



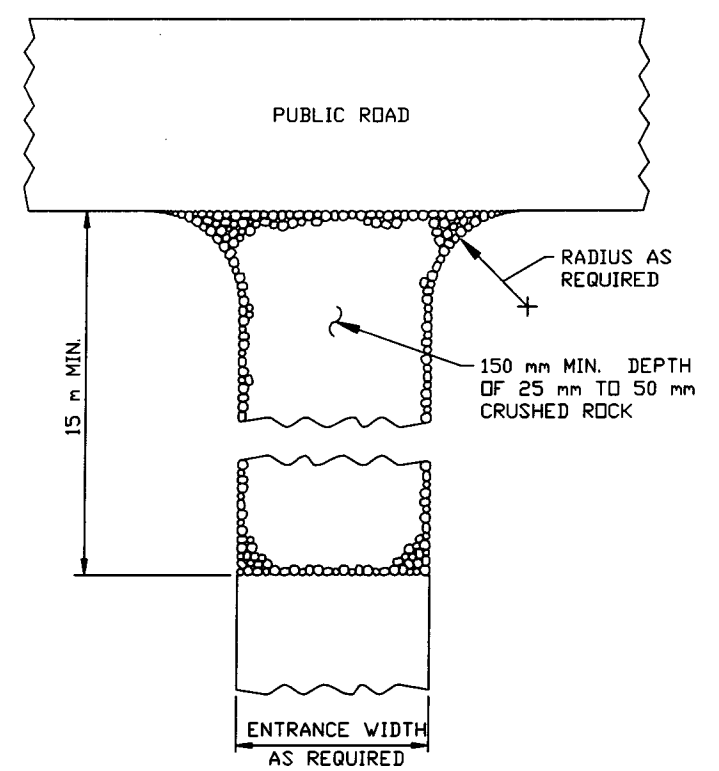
PLAN VIEW



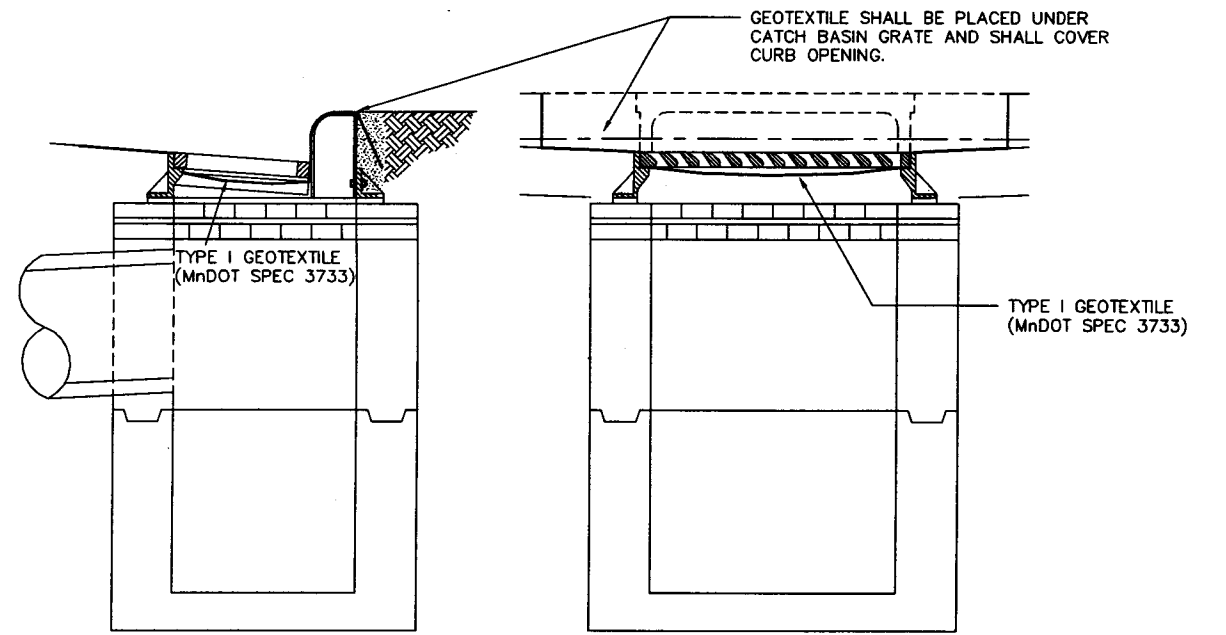
ELEVATION
TEMPORARY STANDPIPE
FOR SEDIMENT CONTROL ON CULVERT INLET

d = DIA. OF STANDPIPE EQUAL TO DIA. OF PLAN CULVERT
z = LENGTH OF PERFORATED STANDPIPE d(+ 300 mm)

DESIGN CRITERIA:
CULVERT SIZE: 300 - 900 mm
STORM FREQUENCY: 10 YR. - 24 HR.

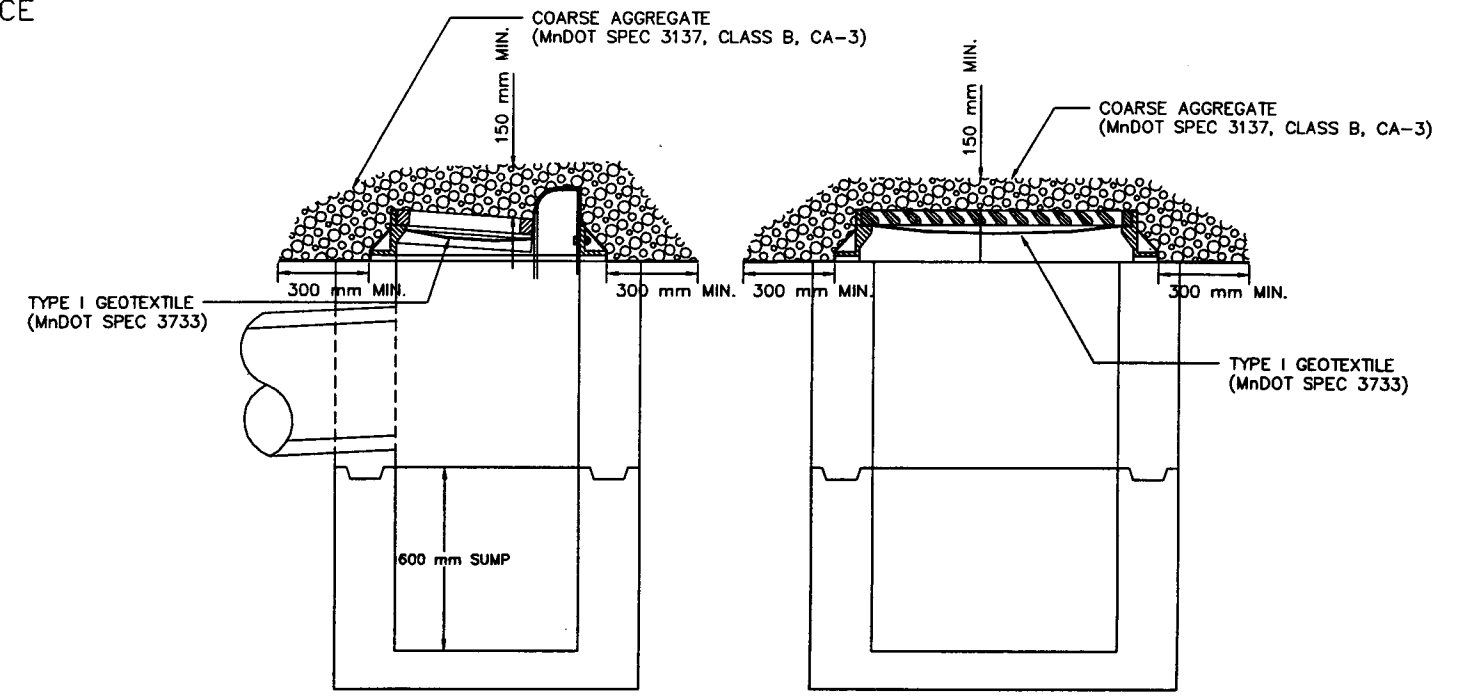


ROCK CONSTRUCTION ENTRANCE



INCIDENTAL SEDIMENT CONTROL FOR CATCH BASINS

- NOTES:
- INCIDENTAL SEDIMENT CONTROL REQUIRED FOR ALL CATCH BASINS ONCE CURB AND GUTTER IS CONSTRUCTED AND UNTIL CLASS V IS PLACED ON ROADWAY AND BOULEVARDS HAVE BEEN RESTORED. EXISTING CATCH BASINS AS IDENTIFIED SHALL ALSO RECEIVE INCIDENTAL SEDIMENT CONTROL FROM THE TIME UPSTREAM CONSTRUCTION ACTIVITIES BEGIN UNTIL CLASS V IS PLACED ON THE ROADWAY AND THE BOULEVARDS HAVE BEEN RESTORED. INCIDENTAL SEDIMENT CONTROL FOR CATCH BASINS SHALL BE AN INCIDENTAL ITEM FOR WHICH NO DIRECT COMPENSATION WILL BE GIVEN.
 - CONTRACTOR TO INSPECT "INCIDENTAL SEDIMENT CONTROL FOR CATCH BASINS" EVERY 7 DAYS AND WITHIN 24 HOURS AFTER EVERY RAIN EVENT. CONTRACTOR TO REPLACE GEOTEXTILE IF IT BECOMES NONFUNCTIONAL AS A SEDIMENT CONTROL.
 - SUMPS SHALL BE KEPT FUNCTIONAL. CONTRACTOR SHALL CLEAN SUMP IF SEDIMENT IS WITHIN 300 mm OF OUTLET PIPE.



INTERIM SEDIMENT CONTROL FOR CATCH BASINS

- NOTES:
- INTERIM SEDIMENT CONTROL REQUIRED FOR THE IDENTIFIED CATCH BASINS PRIOR TO CURB AND GUTTER CONSTRUCTION. BID ITEM 2506.602
 - CONTRACTOR TO INSPECT "INTERIM SEDIMENT CONTROL FOR CATCH BASINS" EVERY 7 DAYS AND WITHIN 24 HOURS AFTER EVERY RAIN EVENT. CONTRACTOR TO REPLACE COARSE AGGREGATE AND/OR GEOTEXTILE IF IT BECOMES NONFUNCTIONAL AS A SEDIMENT CONTROL.
 - SUMPS SHALL BE KEPT FUNCTIONAL. CONTRACTOR SHALL CLEAN SUMP IF SEDIMENT IS WITHIN 300 mm OF OUTLET PIPE.

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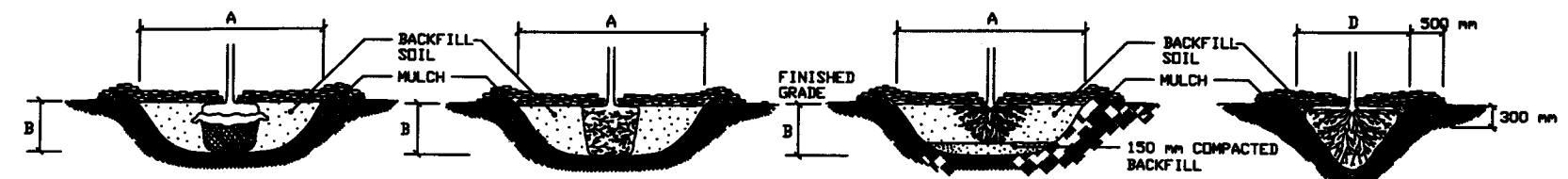
PROJ. 4/30/98

PHALEN VILLAGE
PUBLIC IMPROVEMENTS
98-P-1163

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.

PAVING DR. 12 DRWG. NO. 1424 DATE: 5-22-98 REG. NO. 18955

PLANTING HOLE DIMENSIONS (MINIMUM WIDTH DOES NOT APPLY IN MASS PLANTING BEDS)			
PLANT TYPE	PLANT SIZE (UP TO AND INCLUDING)	APPROXIMATE HOLE WIDTH (MILLIMETERS)	
		A	B
EVERGREEN TREES	0.9 m B.B.	1070	280
	1.2 m B.B.	1290	330
	1.5 m B.B.	1520	330
	1.8 m B.B.	1670	380
	2.1 m B.B.	1830	400
	2.4 m B.B.	2060	460
	2.7 m B.B.	2280	510
3.0 m B.B.	2590	530	
SHADE & FLOWERING TREES	25 mm B.R.	1370	350
	31 mm B.R.	1520	350
	38 mm B.R.	1670	380
	45 mm B.R.	1830	400
	50 mm B.R.	2130	480
	50 mm B.B.	1830	400
	63 mm B.B.	2130	480
	75 mm B.B.	2440	510
EVERGREEN SHRUBS (UPRIGHT)	0.6 m B.B.	760	230
	0.9 m B.B.	1220	300
	1.2 m B.B.	1600	350
EVERGREEN SHRUBS (SPREADING)	0.4 m spread B.B.	760	200
	0.6 m spread B.B.	910	230
	0.8 m spread B.B.	1070	280
	0.9 m spread B.B.	1220	300
DECIDUOUS SHRUBS	0.4 m B.R.	760	200
	0.6 m B.R.	840	230
	0.9 m B.R.	1070	280
	1.2 m B.R.	1220	300
	1.5 m B.R.	1370	350
	1.8 m B.R.	1520	350
	0.4 m B.B.	660	180
	0.6 m B.B.	760	200
	0.9 m B.B.	910	230
CONTAINER GROWN PLANTS	Cellpacks	150	64
	57 mm cont.	180	75
	90 mm cont.	250	75
	100 mm cont.	280	100
	110 mm cont.	330	120
	1 Liter cont.	380	140
	4 L cont.	460	150
	7 L cont.	580	190
	11 L cont.	740	220
20 L cont.	760	280	
25 L cont.	940	280	
40 L cont.	1120	350	
55 L cont.	1140	380	
75 L cont.	1520	430	
100 L cont.	1830	400	

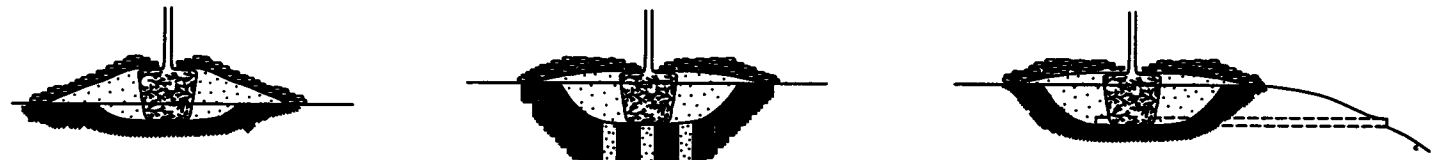


1. SCARIFY SIDES AND BOTTOM OF HOLE. PROCEED WITH CORRECTIVE PRUNING AS DIRECTED BY ENGINEER.
2. SET PLANT ON UNDISTURBED NATIVE SOIL, OR THOROUGHLY COMPACTED BACKFILL SOIL AT THE SAME DEPTH (IF PROPER) AS IT WAS GROWN IN THE NURSERY.
3. PLANT SHALL BE PLACED IN PLANTING HOLE WITH BURLAP AND WIRE BASKET, IF USED, INTACT. ONCE IN PLACE, THE PLANT SHALL BE BACKFILLED TO WITHIN 300mm OF THE TOP OF THE ROOTBALL AND WATERED. THE TOP LOOPS OF THE WIRE BASKETS SHALL BE REMOVED AND THE BURLAP SHALL BE FOLDED OR CUT BACK.
4. PLUMB AND BACKFILL WITH THE BACKFILL SOIL SPECIFIED.
5. APPLY WATER TO SETTLE PLANTS AND FILL VOIDS THEN CONSTRUCT 75 mm DEPTH WATERING BASIN.
6. WATER THOROUGHLY WITHIN 2 HOURS.
7. PLACE MULCH WITHIN 48 HOURS OF THE SECOND WATERING UNLESS SOIL MOISTURE IS EXCESSIVE.

- NOTES:
1. THE PLANTING DETAILS REPRESENT ADEQUATELY DRAINED SOIL CONDITIONS. THE CONTRACTOR SHOULD EXERCISE DISCRETION IN SETTING PLANTS 25 mm-75 mm HIGHER IN POORLY DRAINED SOILS.
 2. ON 1:2 SLOPES OR GREATER, DO NOT CONSTRUCT THE UPHILL HALF OF THE WATERING BASIN.
 3. ON WET, POORLY DRAINED SOILS, DO NOT CONSTRUCT WATERING BASIN.
 4. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ADEQUATE DRAINAGE IN HEAVY POORLY DRAINED OR IMPERVIOUS SOILS.
 5. PLANTS SHOULD BE SET AT THE PROPER DEPTH WHEREBY THE BEGINNING TAPER OF THE ROOT FLARE IS AT THE SAME ELEVATION AS THE FINISHED SOIL GRADE. THIS SHOULD BE THE SAME DEPTH AS THE PLANTS WERE GROWN AT IN THE NURSERY. NOTE THAT THE ROOTS OF BALLED AND BURLAPPED PLANTS ARE UNACCEPTABLE WHEN THEY ARE COVERED BY MORE THAN 100mm OF SOIL IN THE TOP OF THE BALL.
 6. DELAY MULCH PLACEMENT IF NECESSARY TO ALLOW MORE TIME FOR EXCESS SOIL MOISTURE TO EVAPORATE FROM PLANTING AREAS BEFORE PLACING MULCH.

SPADE SIZE (DIA. ')	DAK TREES (CALIPER)	DECIDUOUS/DRAMMENTAL TREES (CALIPER)	EVERGREEN TREES (HEIGHT)
1.07 m	25 mm to 38 mm	50 mm to 75 mm	1.5 m to 2.1 m
1.52 m	38 mm to 63 mm	75 mm to 100 mm	2.1 m to 2.7 m
1.98 m	63 mm to 90 mm	100 mm to 150 mm	2.7 m to 4.2 m
2.16 m	90 mm to 130 mm	150 mm to 200 mm	2 m to 3.4 m

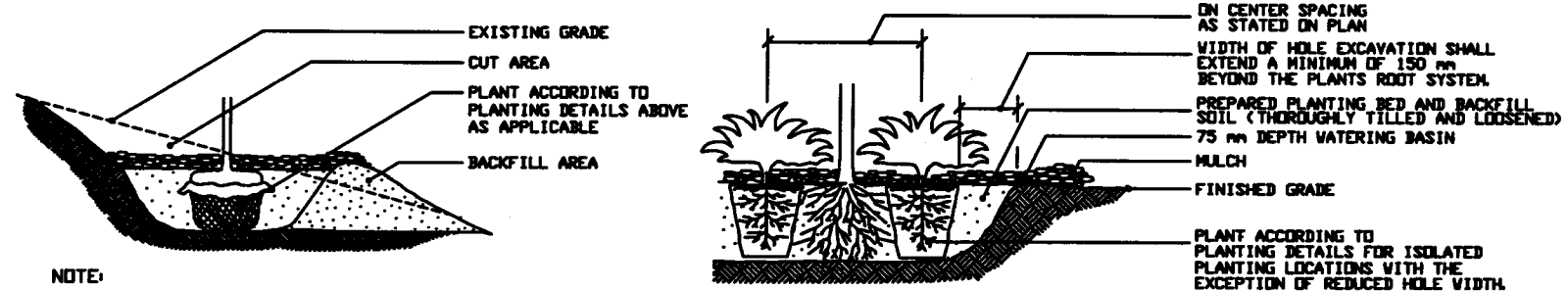
PLANTING DETAILS FOR ISOLATED PLANTING LOCATIONS



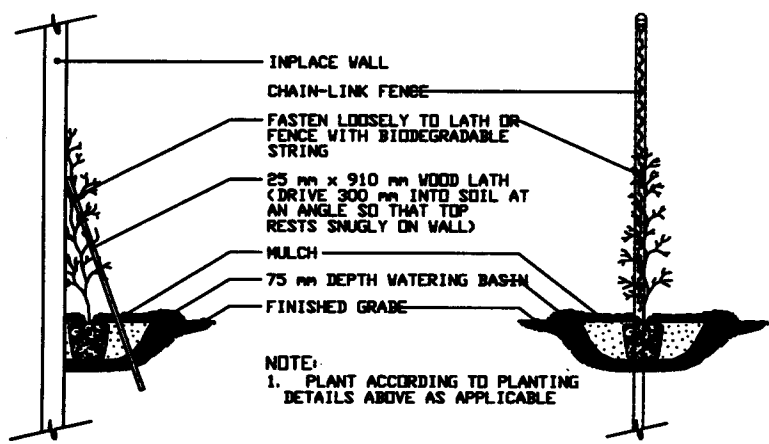
1. EXCAVATE HOLE OR BED 1/4 THE DEPTH OF THE ROOT MASS.
 2. SET ROOT MASS IN HOLE.
 3. CONSTRUCT BERM WITH SANDY LOAM TOPSOIL EXTENDING THE BERM BASE TO A WIDTH 3 TIMES THE HEIGHT OF THE BERM.
 4. COMPLETE PLANTING ACCORDING TO PLANTING DETAILS ABOVE AS APPLICABLE.
1. EXCAVATE HOLE OR BED TO ALLOW PLACING TOP OF ROOT MASS 25 mm-75 mm HIGHER THAN FINISHED GRADE.
 2. AUGER 200 mm DIAMETER HOLES ENTIRELY THROUGH IMPERVIOUS OR POORLY DRAINED HARD PAN SOIL LAYER TO ADEQUATELY DRAINED SUBSOIL.
 3. BACKFILL AUGER HOLES WITH A THOROUGHLY INCORPORATED MIXTURE OF 50% SAND AND 50% INPLACE SOIL.
 4. COMPLETE PLANTING ACCORDING TO PLANTING DETAILS ABOVE AS APPLICABLE.
1. EXCAVATE HOLE OR BED TO ALLOW PLACEMENT OF THE TOP OF THE ROOT MASS 25 mm-75 mm HIGHER THAN FINISHED GRADE.
 2. INSTALL 100 mm MINIMUM DIAMETER DRAIN TILE DAYLIGHTING AT A LOWER GRADE AS APPROVED BY THE ENGINEER.
 3. COMPLETE PLANTING ACCORDING TO PLANTING DETAILS ABOVE AS APPLICABLE.

ALTERNATIVE PLANTING DETAILS IN POORLY DRAINED SOIL

(NEED AND ALTERNATIVE SELECTION SHALL BE DETERMINED BY CONTRACTOR SUBJECT TO APPROVAL BY THE ENGINEER.)



- NOTE:
1. EXTENDED EXCAVATION AND BACKFILL SOIL TO A POINT DOWNSLOPE EQUAL TO OR LOWER IN ELEVATION THAN THE BOTTOM OF THE HOLE DIRECTLY BENEATH THE PLANT TO INSURE ADEQUATE DRAINAGE IN HEAVY SOILS. GRANULAR SOIL MUST BE ADDED AS BACKFILL IN AREAS OF POOR DRAINAGE.



VINE PLANTING DETAIL

PLANTING DETAIL FOR STEEP SLOPES

PLANTING DETAIL FOR MASS PLANTING BEDS

GENERAL NOTES - SEE SPECIAL PROVISIONS FOR SPECIFIC PROJECT REQUIREMENTS

- PLANTING HOLE ALL ISOLATED TREE PLANTING LOCATIONS AND PLANTING BEDS SHALL BE CULTIVATED BY TILLING TO A MINIMUM DEPTH OF 250 mm. SOIL AMENDMENTS SHALL BE APPLIED DURING CULTIVATION.
- BACKFILL SOIL USE CULTIVATED AND AMENDED SOIL EXCAVATED FROM PLANTING HOLES. REMOVE ALL DEBRIS INCLUDING ROCKS LARGER THAN 75 mm DIA.
- FERTILIZER: NONE
MN/DOT 3881
- COMPOST: NONE
X Mn/DOT 3890
- MULCH MATERIAL: Mn/DOT 3882 TYPE 6. UNLESS OTHERWISE SPECIFIED.
- TREE STAKING: TREE STAKING (ALL SIZES) WILL NOT BE REQUIRED UNLESS SPECIFIED OR NECESSARY TO MAINTAIN TREES IN A PLUMB CONDITION WHERE VANDALISM, SOIL, OR WIND CONDITIONS ARE A PROBLEM OR AS REQUESTED BY THE ENGINEER.
- TREE PAINTING: PAINT OAKS, LINDENS, LOCUSTS, MAPLES, CRABAPPLES, AND MOUNTAIN ASHES. ONLY UNDILUTED EXTERIOR WHITE LATEX BASE PAINT IS ACCEPTABLE.
- RODENT PROTECTION: PROVIDE ON ALL DECIDUOUS TREES AND PINE TREES UNLESS OTHERWISE SPECIFIED.
- MASS PLANTINGS: PLANT SPACING OF 1.5 m OR LESS SHALL BE MASS CULTIVATED BY TILLING. PLANT IN STAGGERED ROWS ON THE PERIMETER FIRST, THEN UNIFORMLY FILL IN WITH REMAINING QUANTITY USING TRIANGULAR SPACING, UNLESS SPECIFIED OTHERWISE. PROVIDE 1.5 m RADIUS CLEAR OF SHRUBS AROUND EACH DECIDUOUS TREE AND 2.4 m RADIUS AROUND EACH EVERGREEN TREE. THIS RADIUS (CLEARANCE) SHALL BE MEASURED FROM THE CENTER OF THE TREE TO THE CENTER OF THE SHRUB. NOTIFY ENGINEER OF GROSS PLANT QUANTITY SURPLUS OR DEFICIENCY IMMEDIATELY. PLANT SPACINGS OF 3 m OR LESS SHALL BE MASS MULCHED.

PLANTING PLAN: RESPECT STATED DIMENSIONS BEFORE SCALING FROM PLAN.

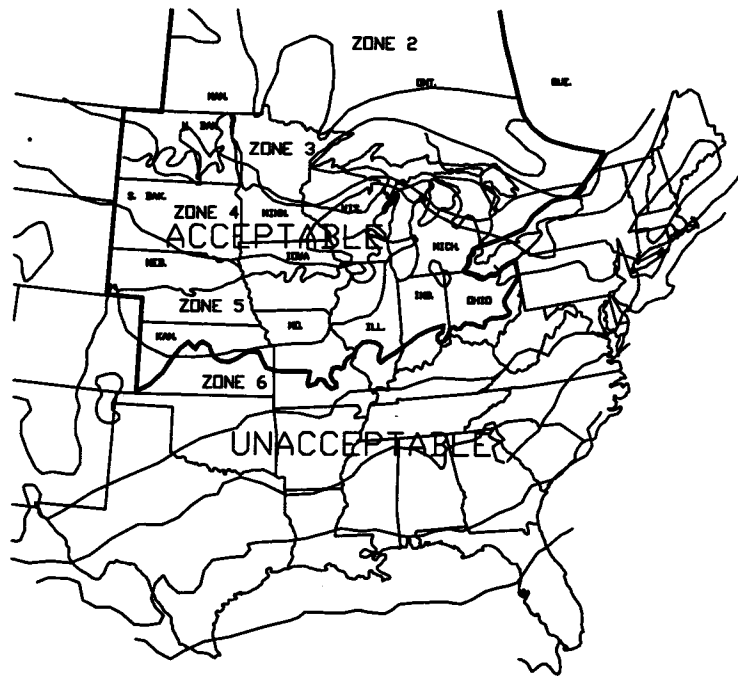
PLANT TYPE	AVERAGE AMOUNT OF WATER PER APPLICATION (LITERS)
MACHINE TRANSPLANTED TREES (75 mm CALIPER+)	190-380
BALLED & BURLAPPED TREES	75±
BARE ROOT TREES	55±
BALLED & BURLAPPED SHRUBS	40±
BARE ROOT OR CONTAINER SHRUBS	25±
WOODY SEEDLINGS	15±
HERBACEOUS GROUNDCOVERS AND VINES	10±

- 1) THE WATERING GUIDELINES ASSUME A SOIL CONDITION WITH ADEQUATE BUT NOT EXCESSIVE OR POOR DRAINAGE. WATERING INTERVALS AND AMOUNT OF APPLICATION MUST BE VARIED CONSIDERING PREVAILING SOIL MOISTURE AND WEATHER CONDITIONS THROUGHOUT THE GROWING SEASON. ADEQUATE BUT NOT EXCESSIVE SOIL MOISTURE IN THE ROOT ZONE OF NEW PLANTINGS MUST BE MAINTAINED AT ALL TIMES THROUGHOUT THE GROWING SEASON FOR THE FIRST TWO YEARS FOLLOWING PLANTING. WATERING MAY BE REQUIRED WEEKLY OR INFREQUENTLY. THIS DETERMINATION SHALL BE MADE BY THE CONTRACTOR.
- 2) THE CONTRACTOR IS ADVISED THAT THE WATERING GUIDELINES ARE NOT REQUIREMENTS OF THE CONTRACT ALTHOUGH FAILURE TO CORRECT WATER DEFICITS BY SUPPLEMENTAL WATERING OR FAILURE TO COMPENSATE FOR EXCESSIVE SOIL MOISTURE AND DRAINAGE PROBLEMS MAY RESULT IN UNACCEPTABLE PLANTS LEADING TO REDUCED OR NO PAYMENT.

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STANDARD PLANTING DETAILS (A)
DATED OCT. 14, 1996



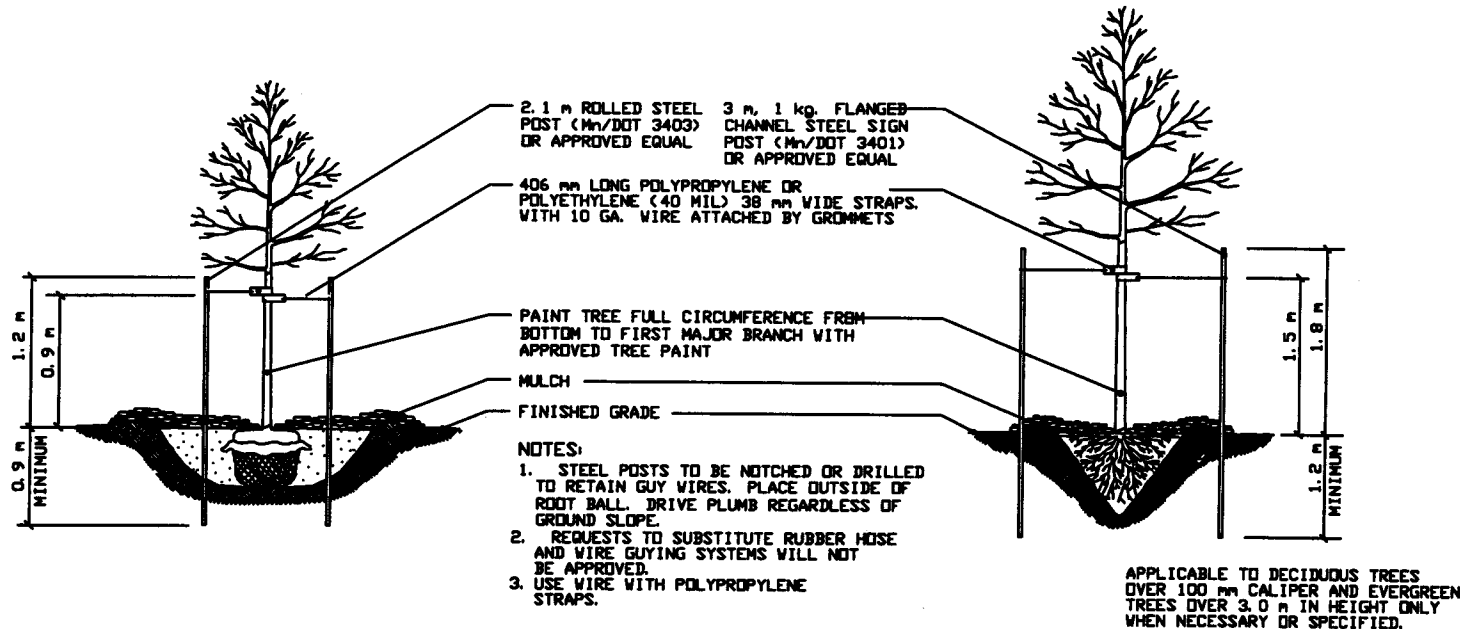
- ZONE 1 BELOW -45° C
- ZONE 2 -45° to -40°
- ZONE 3 -40° to -35°
- ZONE 4 -35° to -30°

STATE INSPECTED PLANTS GROWN WITHIN ZONES 1-4 AND THE ACCEPTABLE GROWING RANGE FOR A MINIMUM OF 2 YEARS MAY BE USED ON ALL PROJECTS UNLESS OTHERWISE SPECIFIED.

- ZONE 5 -30° to -25° C

STATE INSPECTED PLANTS GROWN WITHIN ZONE 5 AND THE ACCEPTABLE GROWING RANGE FOR A MINIMUM OF 2 YEARS ARE ALLOWED ONLY ON PROJECTS WITHIN ZONE 4 IN MINNESOTA UNLESS CERTIFIED AS MINNESOTA ZONE HARDY IN ZONES 3 AND 2.

PLANT STOCK NOT GROWN WITHIN THE ACCEPTABLE ZONES AND GROWING RANGE FOR A MINIMUM OF 2 YEARS MAY BE ACCEPTED IF THE SEED SOURCE OR ROOT AND GRAFT STOCK IS CERTIFIED AND DOCUMENTED AS MIDWEST AND NORTHERN GROWN AND MINNESOTA ZONE HARDY.

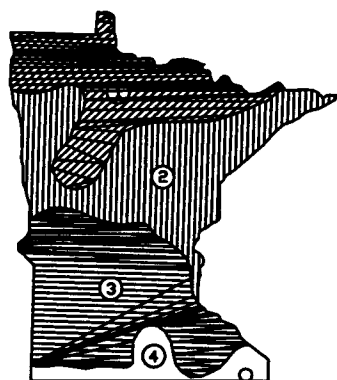


STANDARD TREE STAKING / GUYING AND PAINTING DETAIL

LARGE MACHINE - TRANSPLANT TREE STAKING / GUYING AND PAINTING DETAIL

ACCEPTABLE GROWING RANGE FOR MIDWEST AND NORTHERN GROWN PLANT STOCK

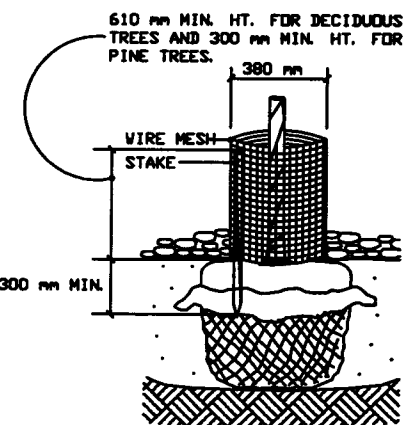
SOURCE: U. S. D. A. PLANT HARDINESS ZONE MAP



	SPRING			FALL	
	SEEDLING	DECIDUOUS	EVERGREEN	DECIDUOUS	EVERGREEN
1	APRIL 15 TO MAY 15	APRIL 21 TO JUNE 1	APRIL 21 TO JUNE 1	OCT. 1 TO NOV. 1	AUG. 25 TO SEPT. 15
2	APRIL 7 TO MAY 15	APRIL 14 TO JUNE 1	APRIL 14 TO MAY 24	OCT. 1 TO NOV. 6	AUG. 25 TO SEPT. 15
3	APRIL 1 TO MAY 15	APRIL 7 TO JUNE 1	APRIL 7 TO MAY 17	OCT. 10 TO NOV. 15	AUG. 25 TO SEPT. 15
4	APRIL 1 TO MAY 15	APRIL 1 TO MAY 25	APRIL 1 TO MAY 15	OCT. 15 TO NOV. 20	SEPT. 5 TO OCT. 1

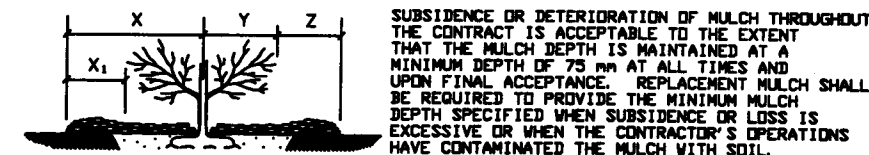
- NOTES:
- SEEDLING INCLUDES DECIDUOUS AND EVERGREEN STOCK.
 - ACTUAL DATES MAY CHANGE DEPENDING UPON SEASONAL CONDITIONS AS DETERMINED BY THE ENGINEER.
 - FALL PLANTING MAY NOT BE RECOMMENDED OR ALLOWED. SEE SPECIAL PROVISIONS FOR SPECIFIC PROJECT REQUIREMENTS. THE FOLLOWING PLANTS ARE NOT RECOMMENDED FOR FALL INSTALLATION: HAWTHORNE, RUSSIAN OLIVE, DOGWOOD, POPLAR, HACKBERRY, LINDEN, IRONWOOD, HONEYLOCUST, BIRCH, MOUNTAIN ASH, MAPLE, WILLOW, CRABAPPLE, PLUM/CHERRY, OAKS, SUMAC.

OPTIMUM PLANTING DATE ZONES IN MINNESOTA



- NOTE:
- THE BOTTOM WHORL OF BRANCHES MAY HAVE TO BE REMOVED TO PERMIT INSTALLATION OF 300 mm MIN. HT. RODENT GUARDS ON PINE TREES.
 - 1 3/4" x 1/2" 53/64 23/64 071 3/4" LE

RODENT PROTECTION DETAIL

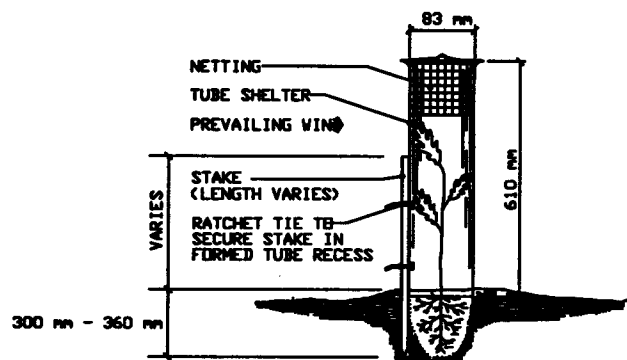


SUBSIDENCE OR DETERIORATION OF MULCH THROUGHOUT THE CONTRACT IS ACCEPTABLE TO THE EXTENT THAT THE MULCH DEPTH IS MAINTAINED AT A MINIMUM DEPTH OF 75 mm AT ALL TIMES AND UPON FINAL ACCEPTANCE. REPLACEMENT MULCH SHALL BE REQUIRED TO PROVIDE THE MINIMUM MULCH DEPTH SPECIFIED WHEN SUBSIDENCE OR LOSS IS EXCESSIVE OR WHEN THE CONTRACTOR'S OPERATIONS HAVE CONTAMINATED THE MULCH WITH SOIL.

TYPE OF PLANT	X CENTER OF PLANT TO MULCH LINE	X ₁ EDGE OF BRANCHING TO MULCH LINE	Y DEPTH OF MULCH (mm)		Z DEPTH OF MULCH (mm)	
			MIN	MAX	MIN	MAX
EVERGREEN TREES	VARIABLES	0.9 m MIN.	100	150	100	150
DECIDUOUS TREES	0.9 m MIN.	N/A	100	150	100	150
EVERGREEN SHRUBS	VARIABLES	0.9 m MIN.	75	100	100	150
DECIDUOUS SHRUBS	0.9 m MIN.	N/A	100	150	100	150
VINES	0.6 m MIN.	N/A	100	150	100	150
GROUNDCOVERS	VARIABLES	0.6 m MIN.	75	100	75	100
MACHINE-TRANSPLANTED TREES	300 mm FROM EDGE OF HOLE		100	150	100	150

- NOTE:
- REMOVE MULCH PLACED TO A DEPTH GREATER THAN THAT SPECIFIED WHEN DIRECTED BY THE ENGINEER.

MULCH PLACEMENT DETAIL



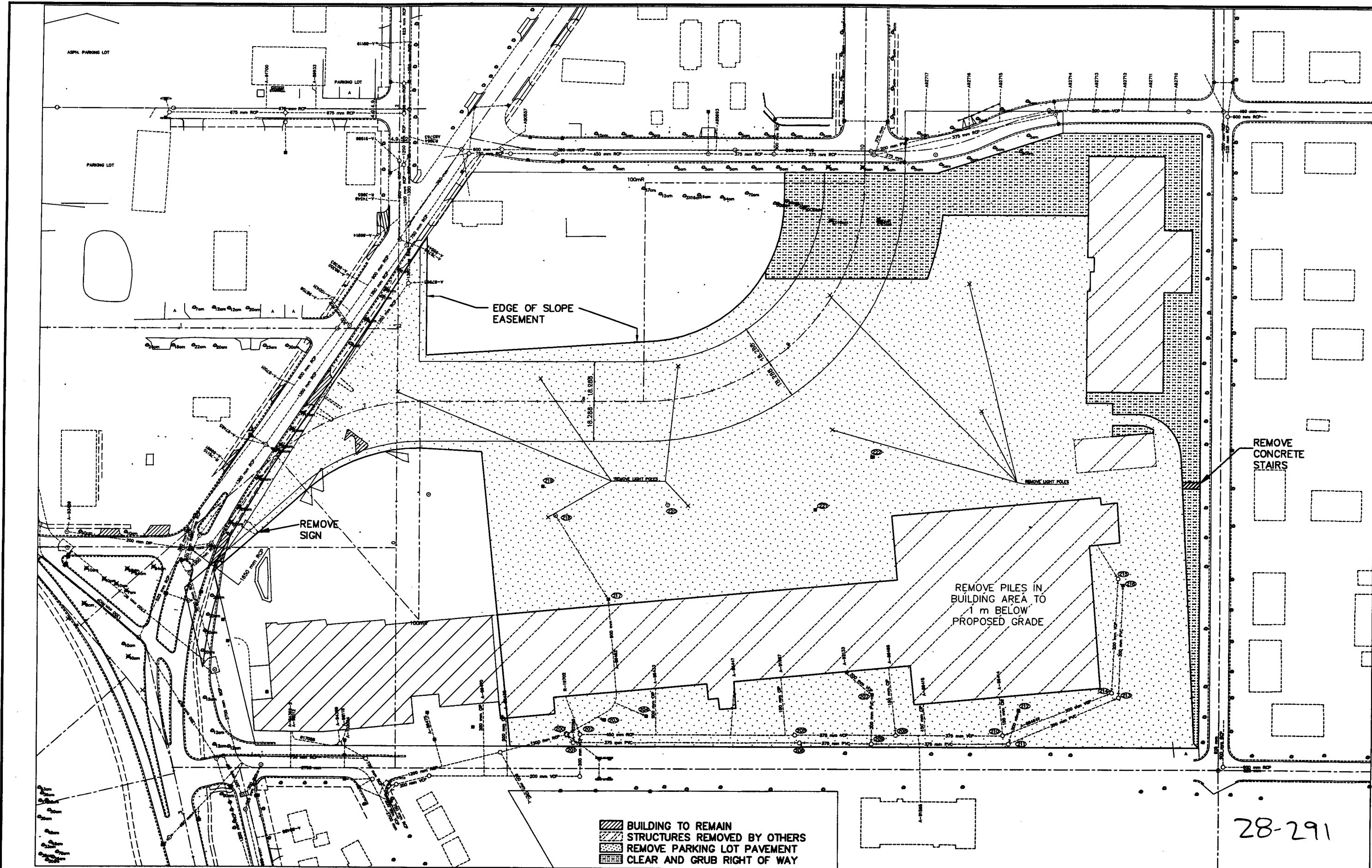
USE SEAMLESS, EXTRUDED, TWIN-WALL, RIGID AND SEMI TRANSLUCENT POLYPROPYLENE TUBES WITH A TOP RIM FLARED OUTWARD TO PREVENT ABRASION TO STEMS AND BRANCHES. THE SHELTERS WILL BE SECURED WITH NYLON RATCHET-LOCKING TIES ATTACHED TO A 25 mm x 25 mm WHITE OAK STAKE IN A SECURE MANNER TO PREVENT DISLIDGING OR TWISTING. THE BOTTOM OF THE TUBE WILL BE IMBEDDED A MINIMUM OF 25 mm BELOW THE SURFACE OF THE SOIL WITHOUT DISTURBING THE TREE ROOTS. A PLASTIC PHOTO DEGRADABLE NETTING COVER AND SLEEVE SHALL BE INSTALLED OVER THE TOP OF THE TUBE TO PREVENT ENTRAPMENT OF BIRDS.

SEEDLING TREE SHELTER DETAIL

28-291



STANDARD PLANTING DETAILS (B)
DATED OCT. 14, 1996



28-291

- BUILDING TO REMAIN
- STRUCTURES REMOVED BY OTHERS
- REMOVE PARKING LOT PAVEMENT
- CLEAR AND GRUB RIGHT OF WAY



ELECTRONIC SURVEY

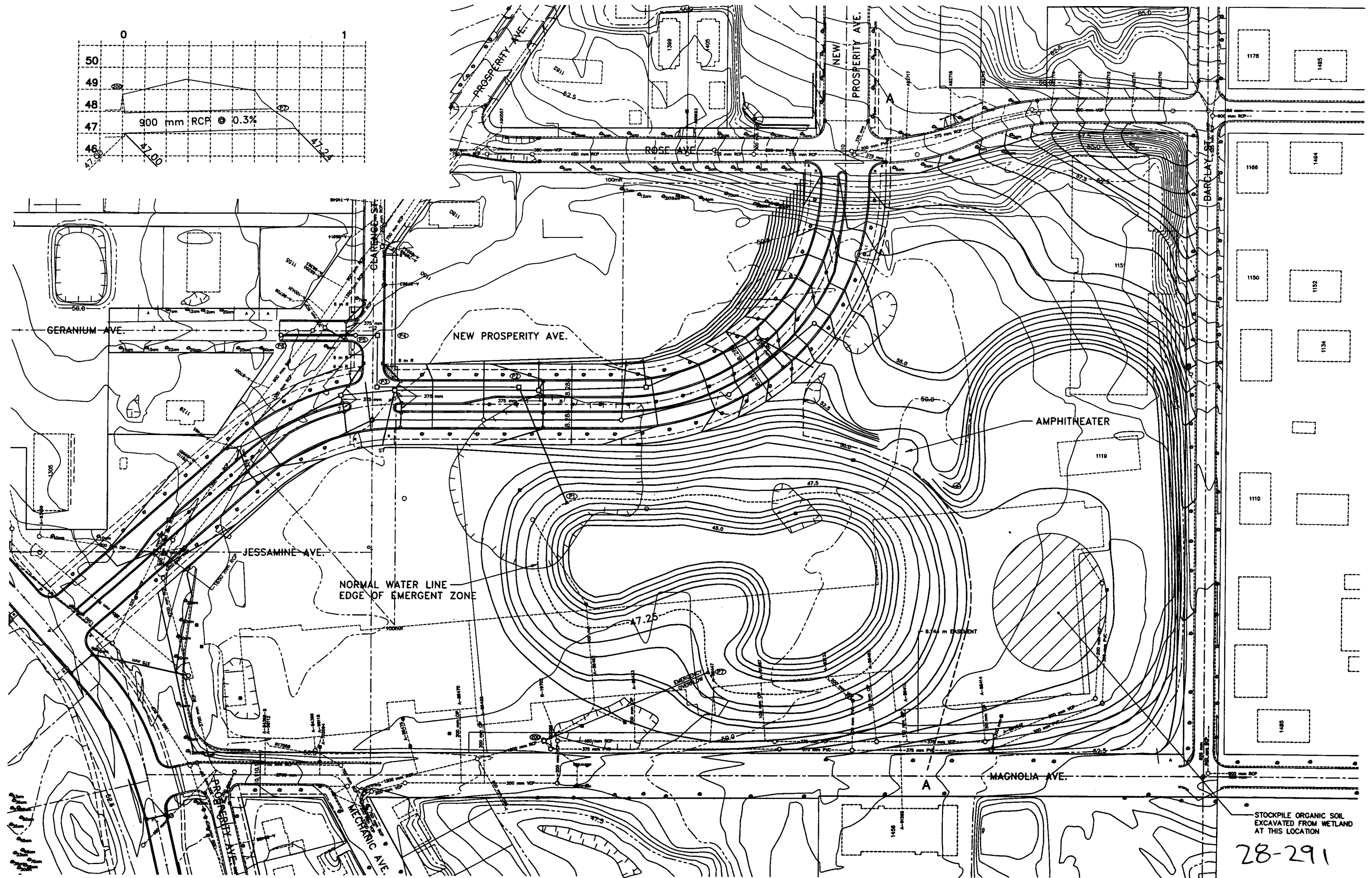
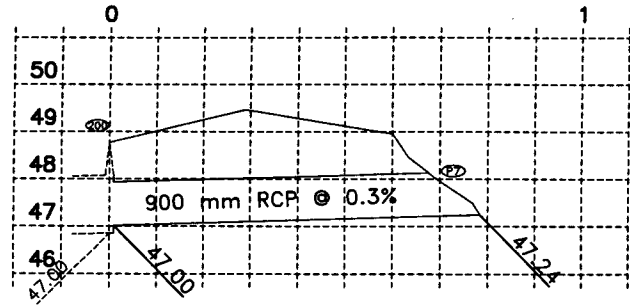
AMES LAKE WETLAND
REMOVAL PLAN
SHEET 22 OF 60 SHEETS

ALWP-01A 98/04/29

PHALEN VILLAGE
PUBLIC IMPROVEMENTS
98-P-1163
PAVING DR. 12 DRWG. NO. 1424

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
DATE: 5-21-98 REG. NO. 19855





ALP-02A 98/05/14

PHALEN VILLAGE
PUBLIC IMPROVEMENTS
98-P-1163
PAVING DR. 12 DRWG. NO. 1424

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.
DATE: 7-22-98 REG. NO. 18355



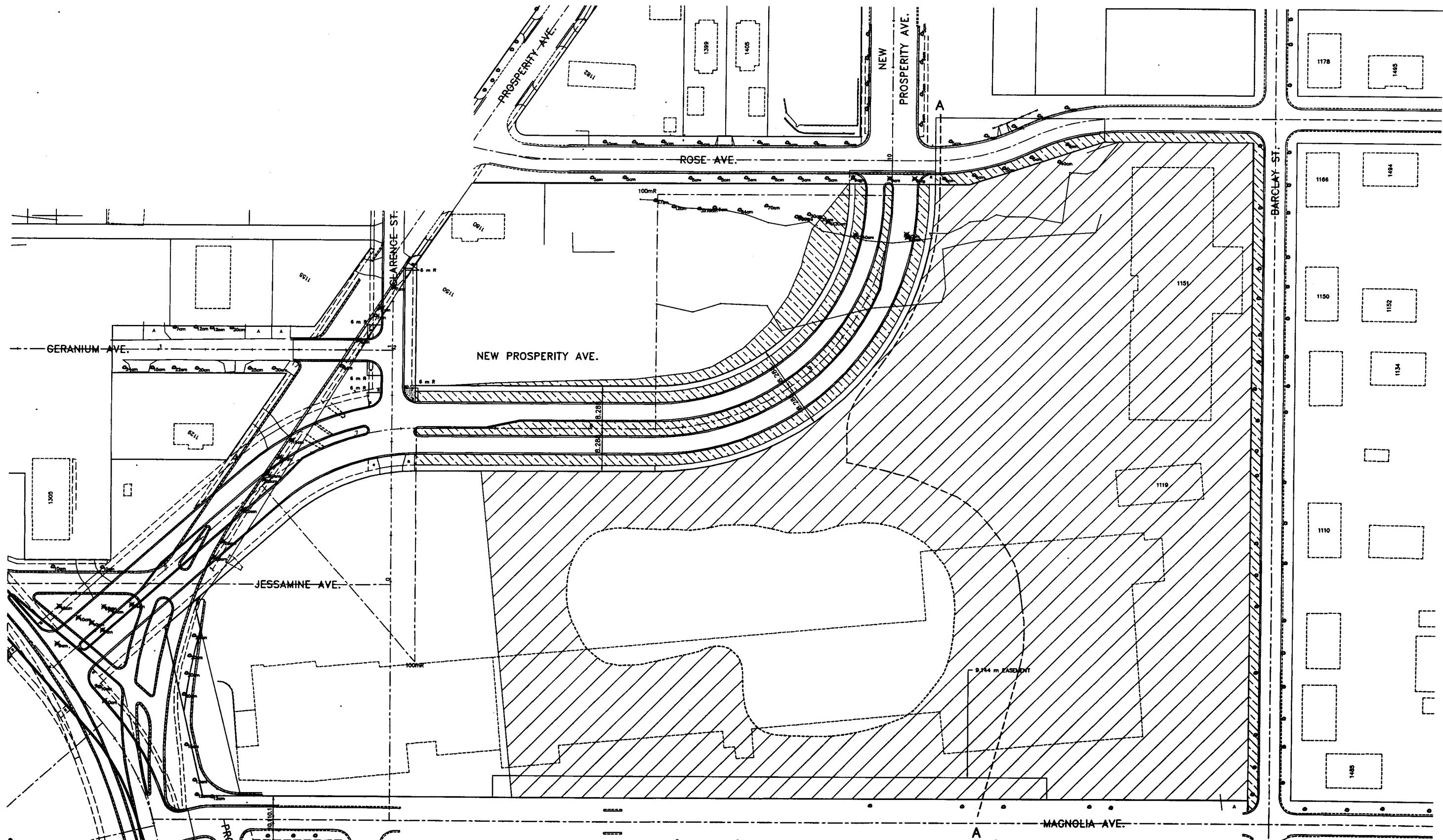
NOTE: PROPOSED ELEVATIONS SHOWN EAST OF LINE A-A ARE DEPENDENT ON AMOUNT OF EMBANKMENT MATERIAL GENERATED FROM SITE AND ARE SUBJECT TO CHANGE.



78 m OF
900 mm RCP CL III
APRPN P7 TO MH 200



28-291

AMES LAKE WETLAND
GRADING PLAN
SHEET 23 OF 60 SHEETS



-  SEED AND MULCH DISTURBED AREA WITH MNDOT SEED MIXTURE 100A AND TYPE 1 MULCH.
-  PLACE SOD AND 100 mm TOPSOIL IN DISTURBED AREA.



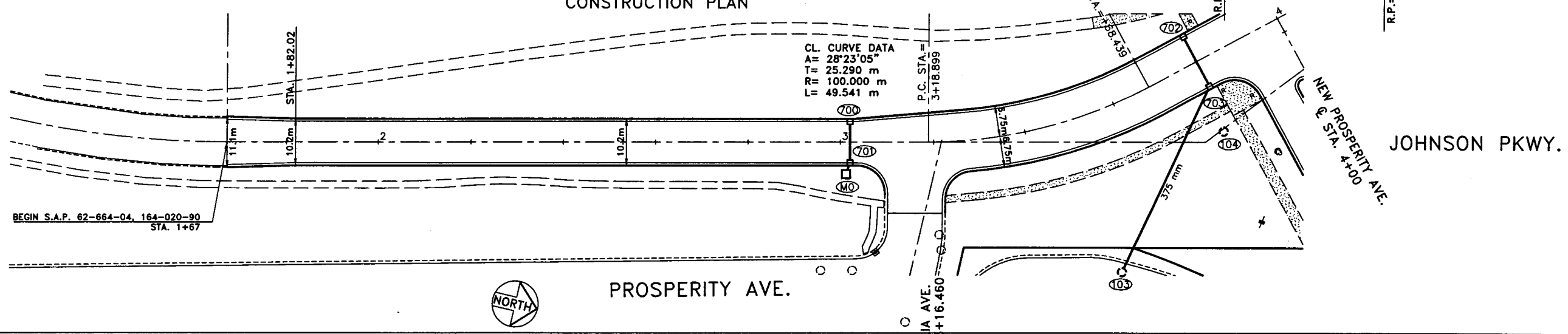
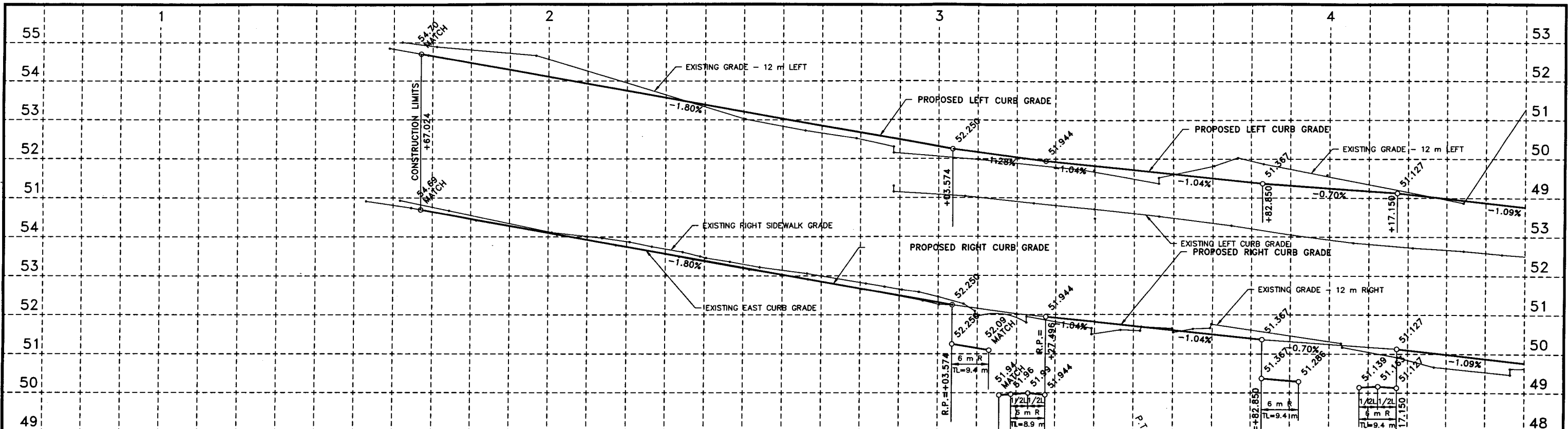
28-291

AMES LAKE WETLAND
TURF ESTABLISHMENT
SHEET 24 OF 60 SHEETS

PHALEN VILLAGE
PUBLIC IMPROVEMENTS
98-P-1163
PAVING DR. 12 DRWG. NO. 1424



I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DAILY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.



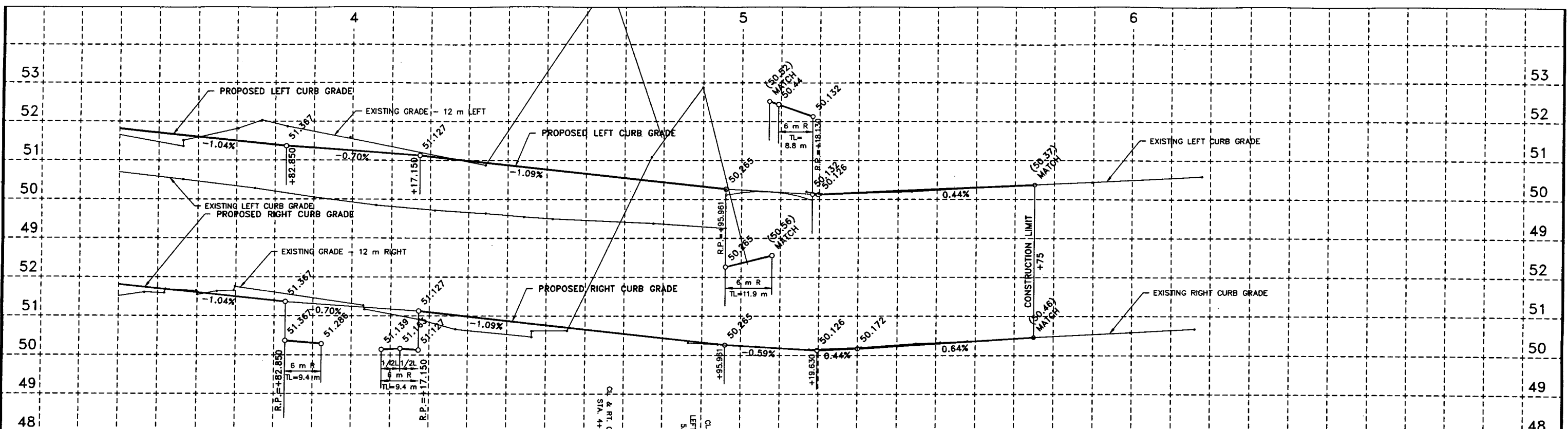
100-01A 98/05/01

PHALEN VILLAGE
 PUBLIC IMPROVEMENTS
 98-P-1163
 PAVING DR. 12 DRWG. NO. 1424

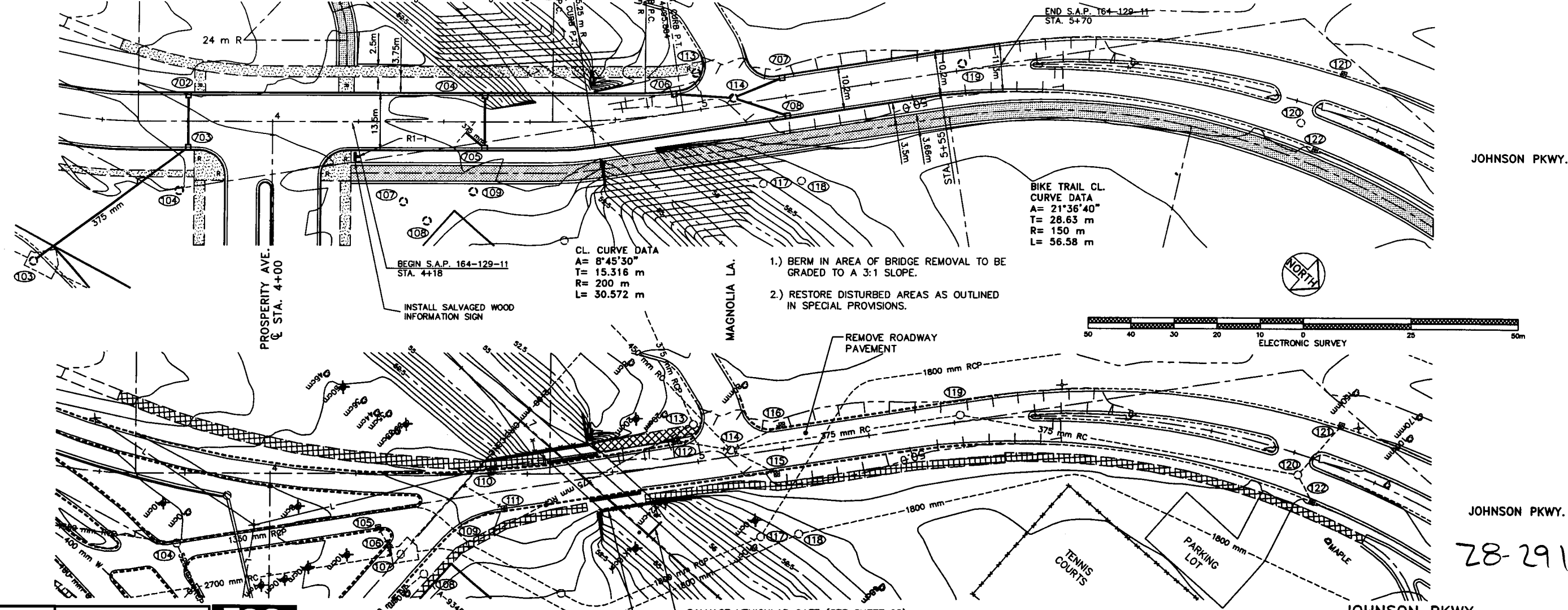
I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DAILY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
 DATE: 5-21-98 REG. NO.: 19985



28-291



CONSTRUCTION PLAN



- 1.) BERM IN AREA OF BRIDGE REMOVAL TO BE GRADED TO A 3:1 SLOPE.
- 2.) RESTORE DISTURBED AREAS AS OUTLINED IN SPECIAL PROVISIONS.

JHP-02A 98/07/06

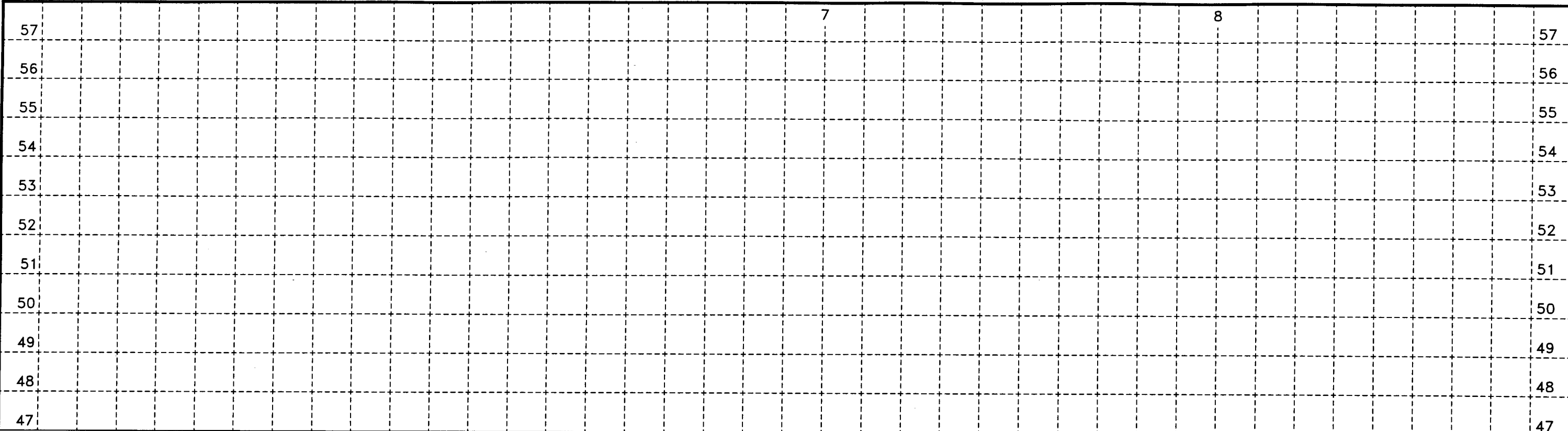
PHALEN VILLAGE
PUBLIC IMPROVEMENTS
98-P-1163
PAVING DR. 12 DRWG. NO. 1424

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.
DATE: 7-23-98 REG. NO. 19943

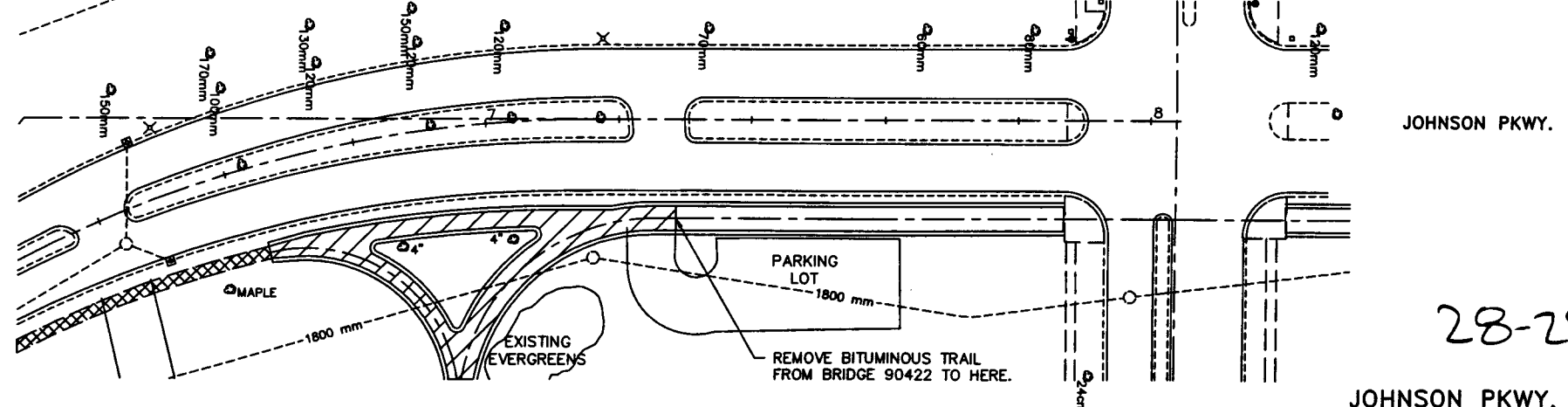
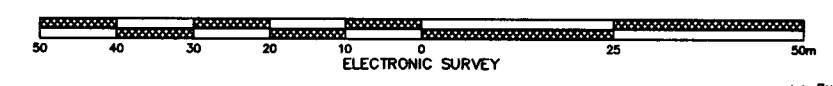
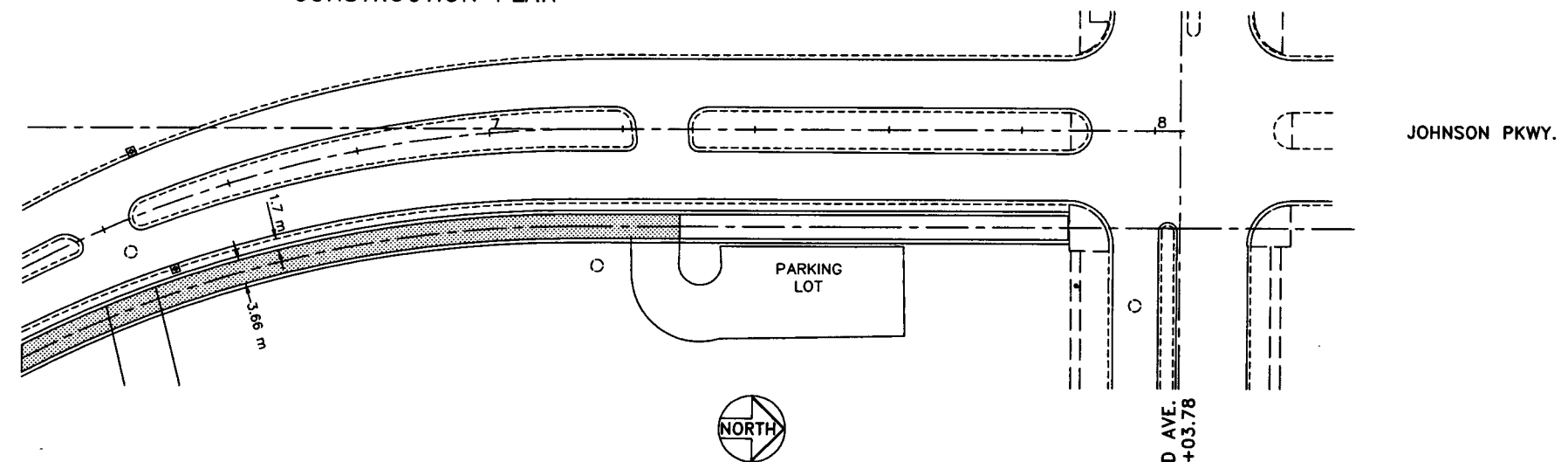


78-291

JOHNSON PKWY. -
Sta. 3+70 to Sta. 6+50
SHEET 26 OF 60 SHEETS



CONSTRUCTION PLAN



28-291

JOHNSON PKWY. -
Sta. 6+70 to Maryland Ave.
SHEET 27 OF 60 SHEETS

DRP-03A 98/05/01

PHALEN VILLAGE
PUBLIC IMPROVEMENTS
98-P-1163

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.

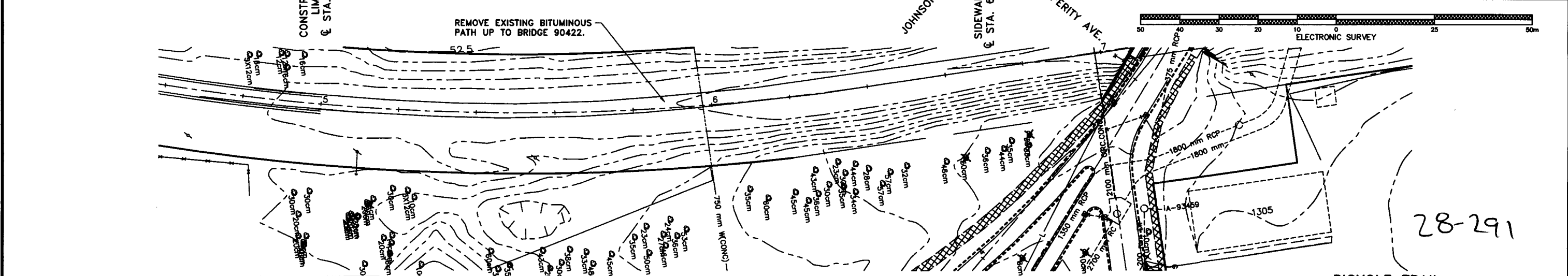
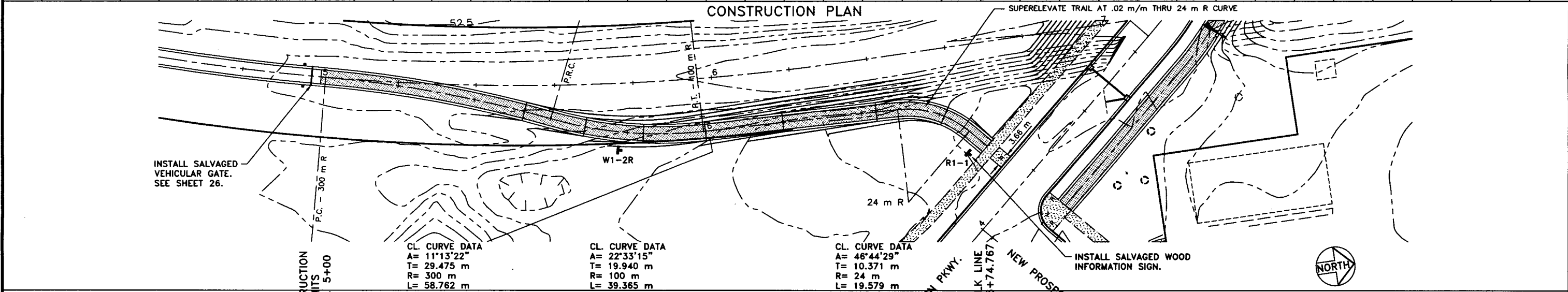
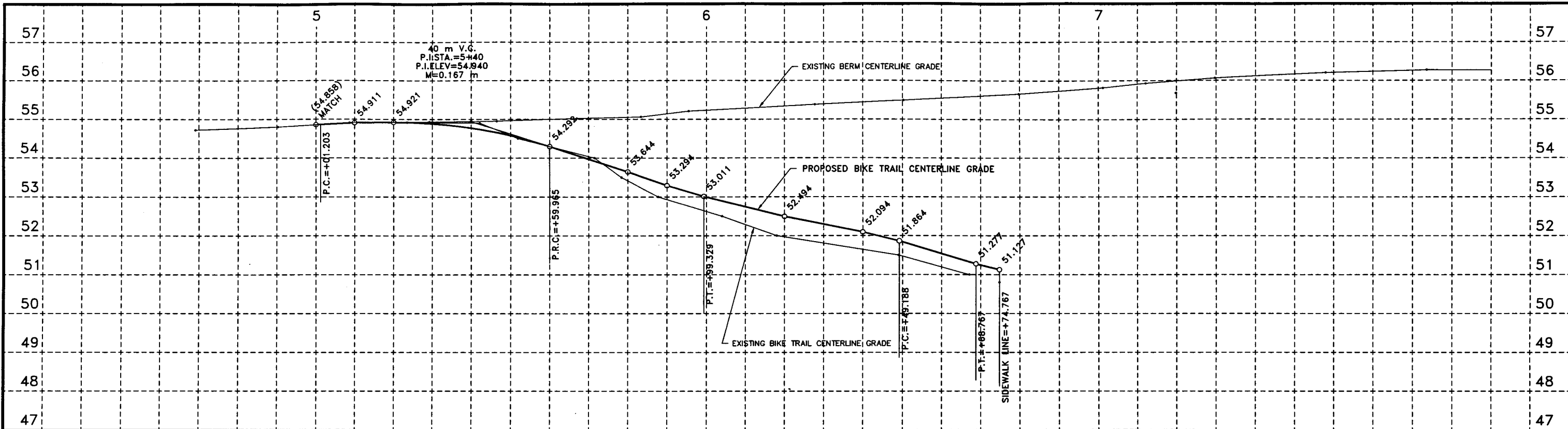
DATE: 5-22-98 REG. NO. 11995

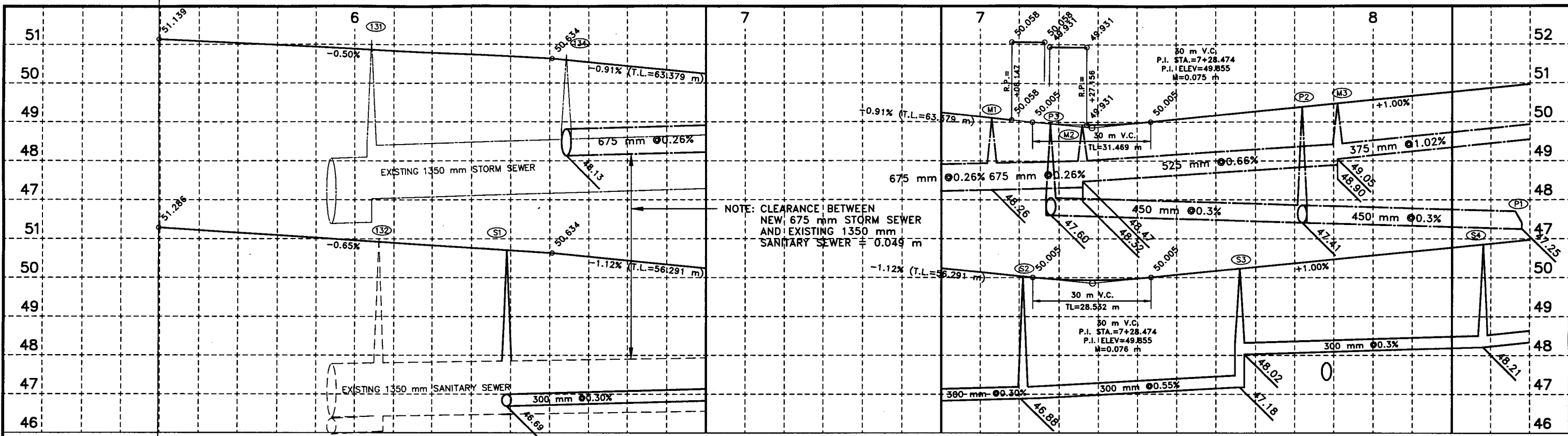


PAVING DR. 12 DRWG. NO. 1424

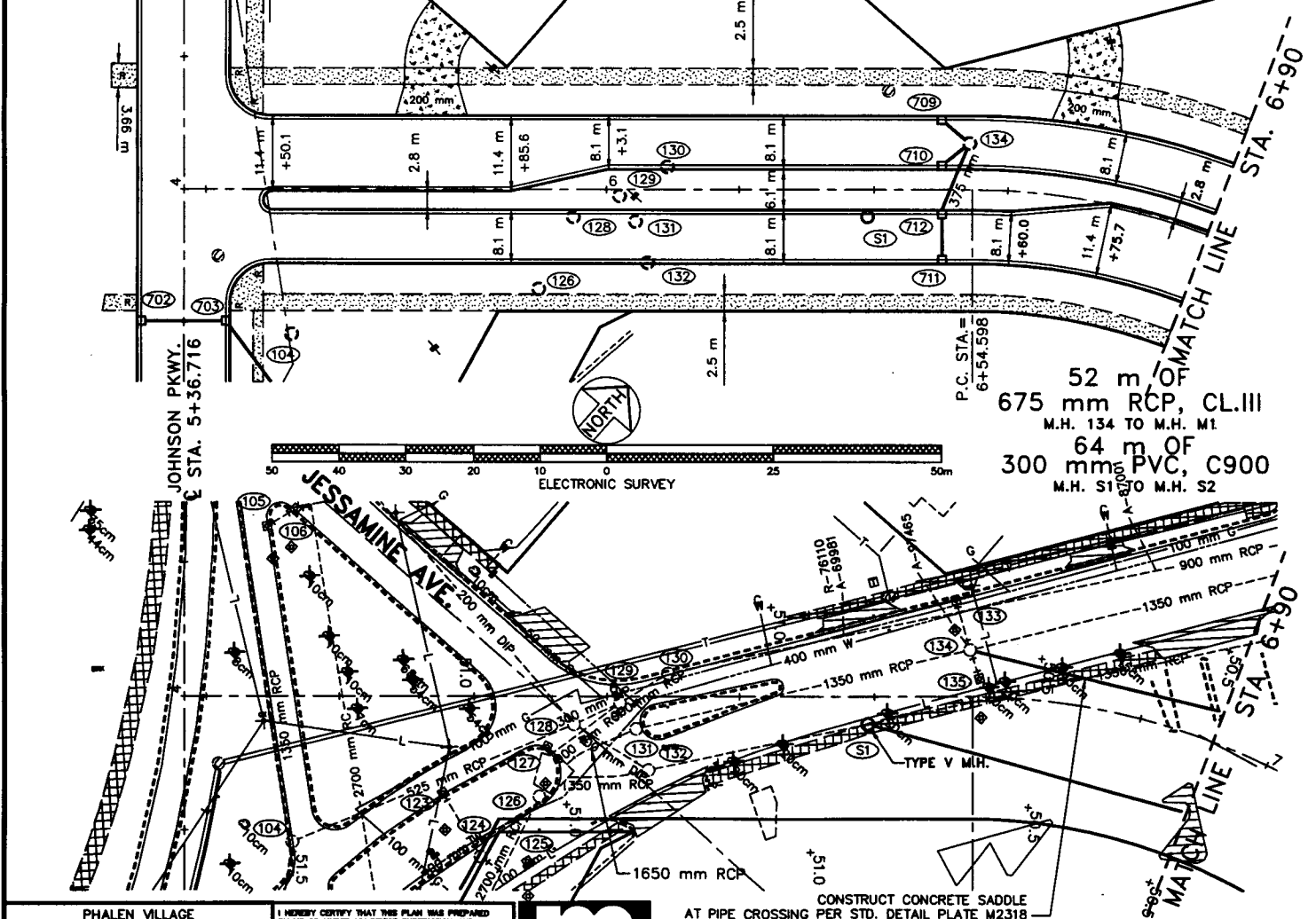
EXISTING AND REMOVAL PLAN

M.S.A. PROJ. NO. 164-129-11

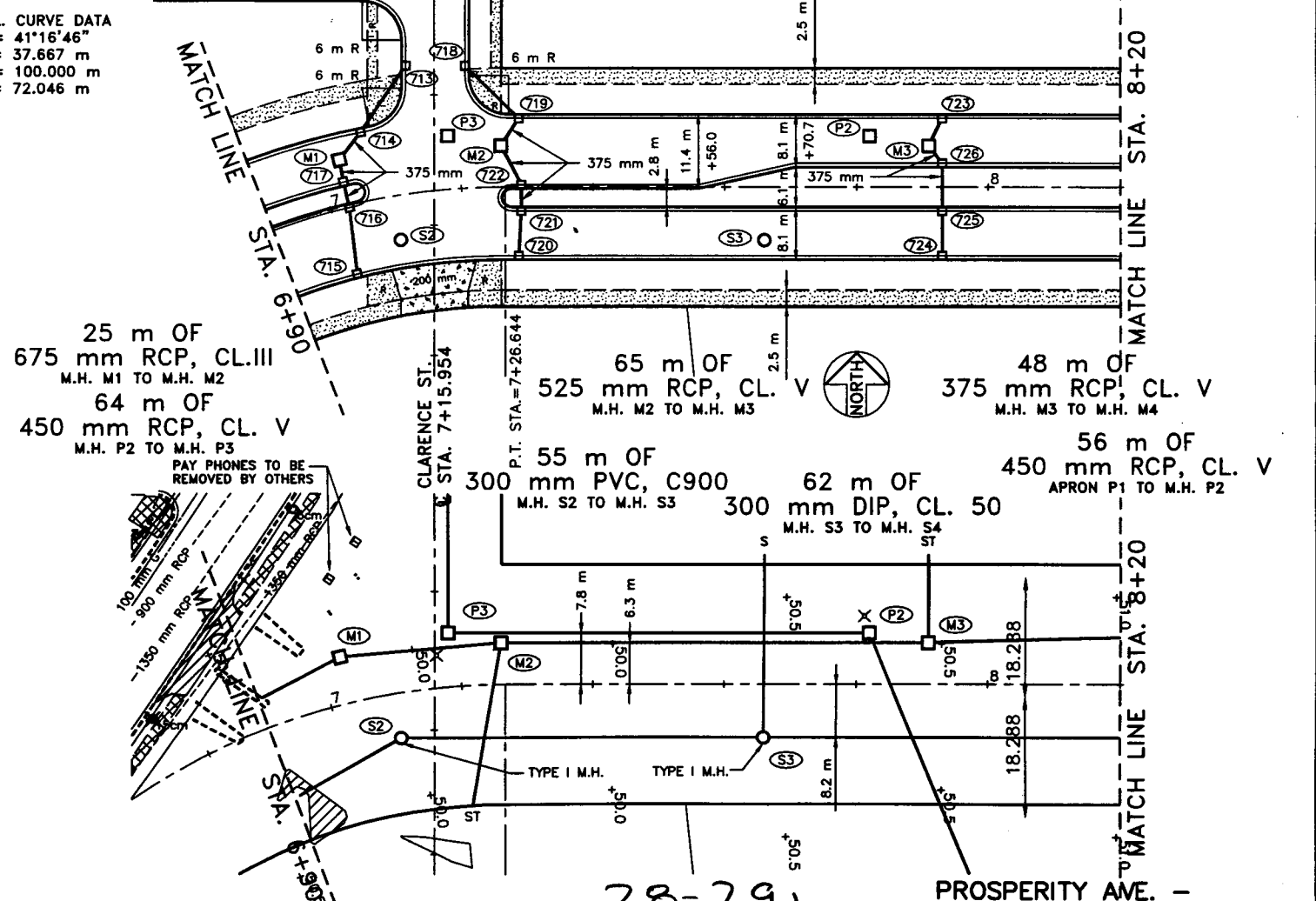




CONSTRUCTION PLAN



EXISTING AND REMOVAL PLAN



SAP 62-664-04, 164-020-90, 164-129-11, 164-253-03

PROSPERITY AVE. - Johnson Pkwy. to Sta. 8+20 SHEET 29 OF 60 SHEETS

PROP-01A 98/07/16

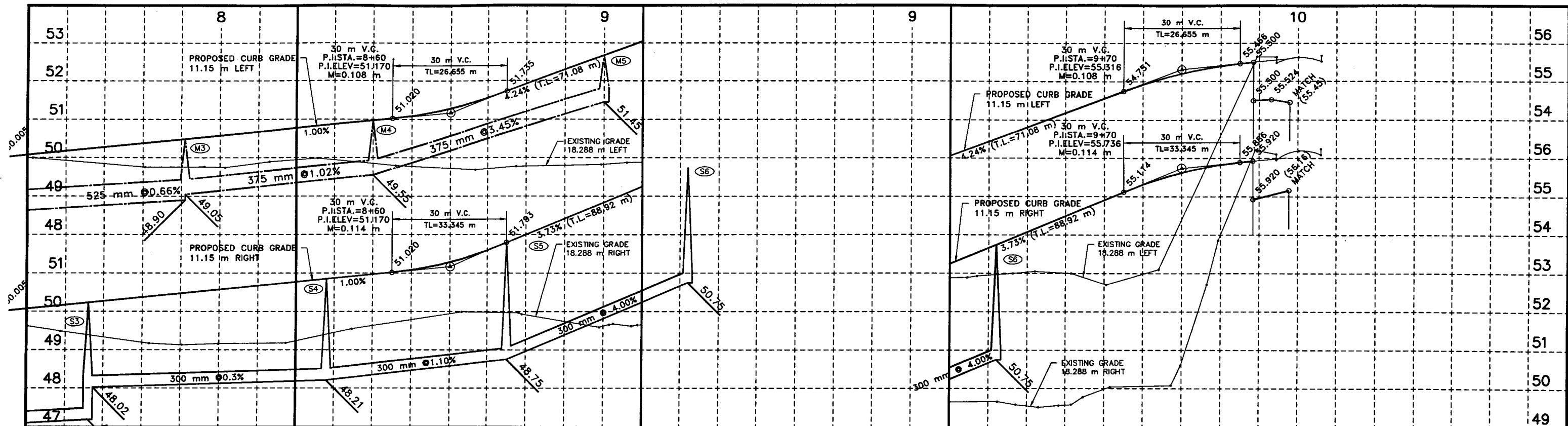
PHALEN VILLAGE PUBLIC IMPROVEMENTS 98-P-1163

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DAILY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

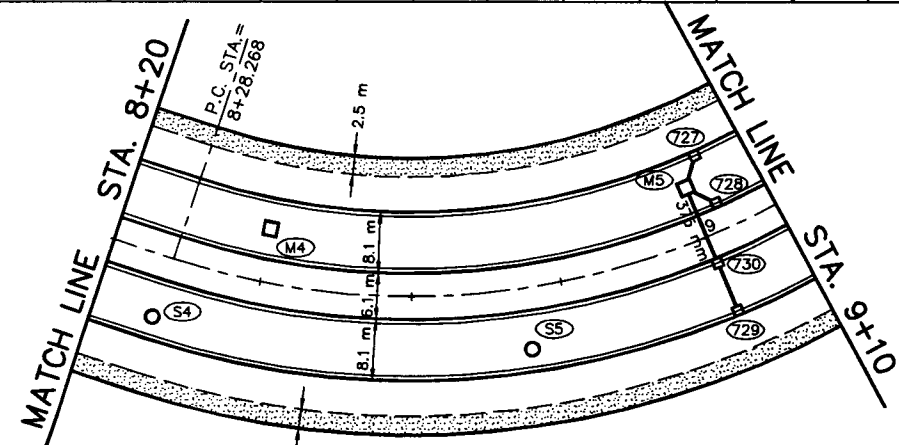


DATE: 7-23-98

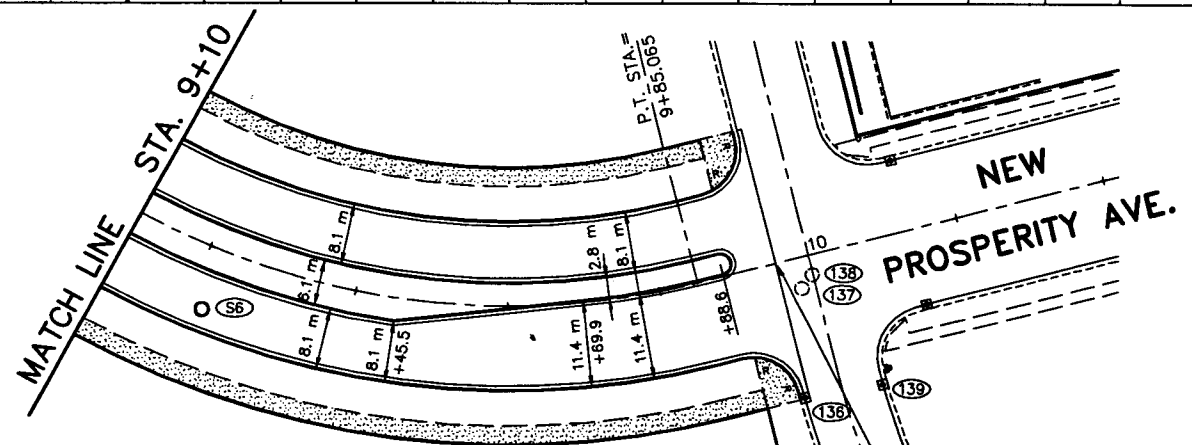
28-291



CONSTRUCTION PLAN

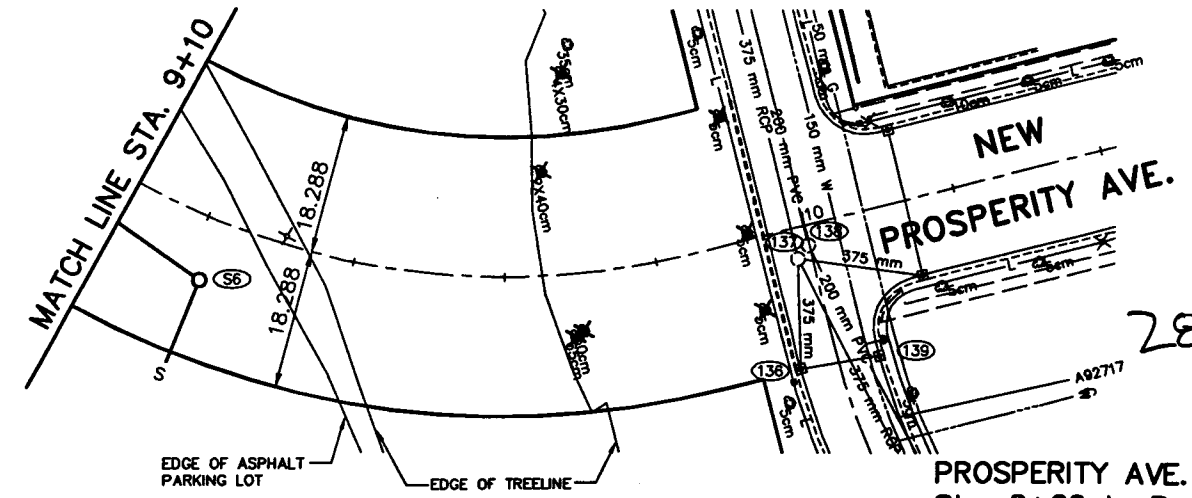
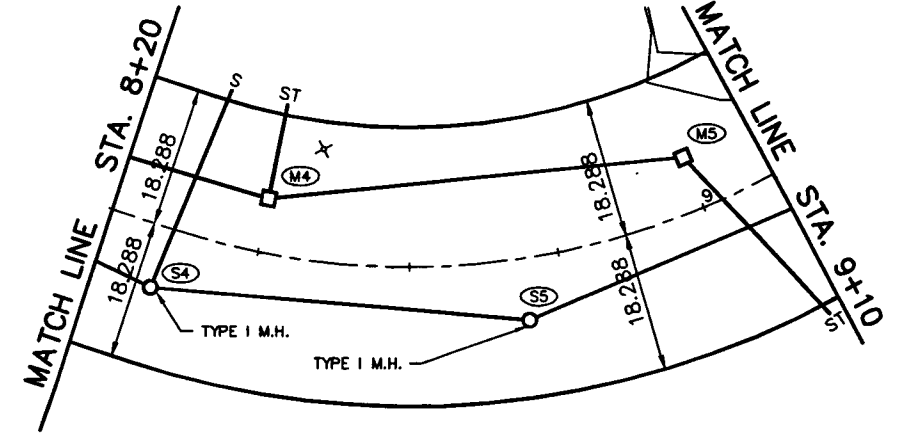
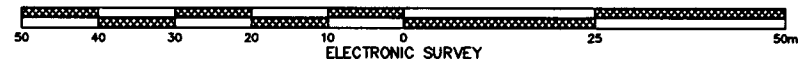


CL. CURVE DATA
 A = 89°50'17"
 T = 99.718 m
 R = 100.000 m
 L = 156.797 m



CLARENCE ST.
 @ STA. 7+15.954

50 m OF 300 mm PVC, C-900 M.H. S4 TO M.H. S5
 50 m OF 300 mm PVC, C-900 M.H. S5 TO M.H. S6



EXISTING AND REMOVAL PLAN

SAP 62-664-04, 164-020-90, 164-129-11, 164-253-03

PROSPERITY AVE. -
 Sta. 8+20 to Rose Ave.
 SHEET 30 OF 60 SHEETS

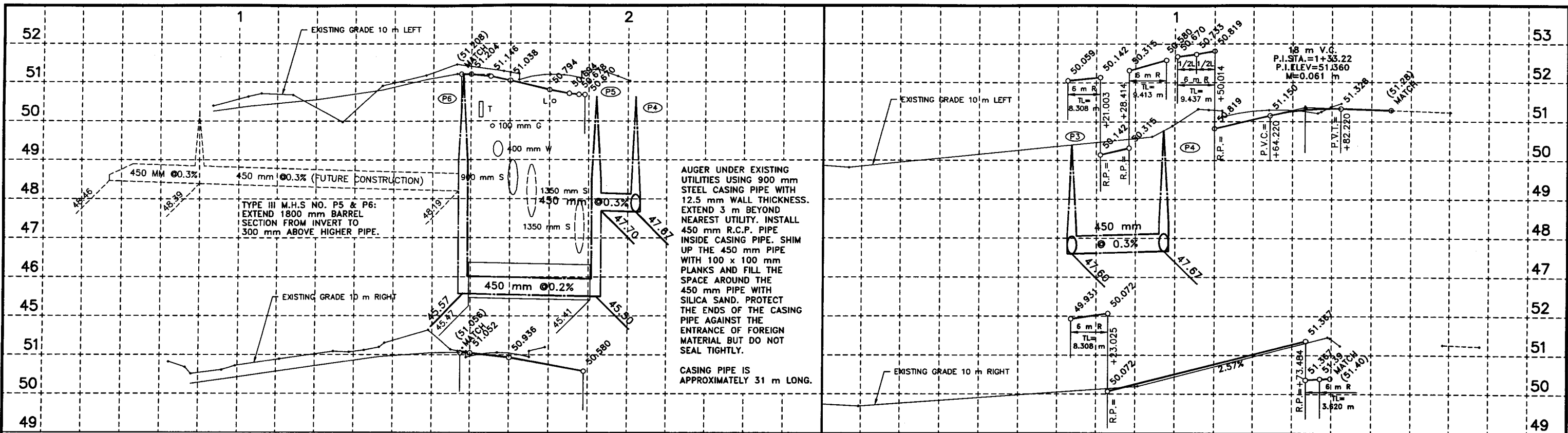
PROJ-02A 86/04/28

PHALEN VILLAGE
 PUBLIC IMPROVEMENTS
 98-P-1163
 PAVING DR. 12 DRWG. NO. 1424

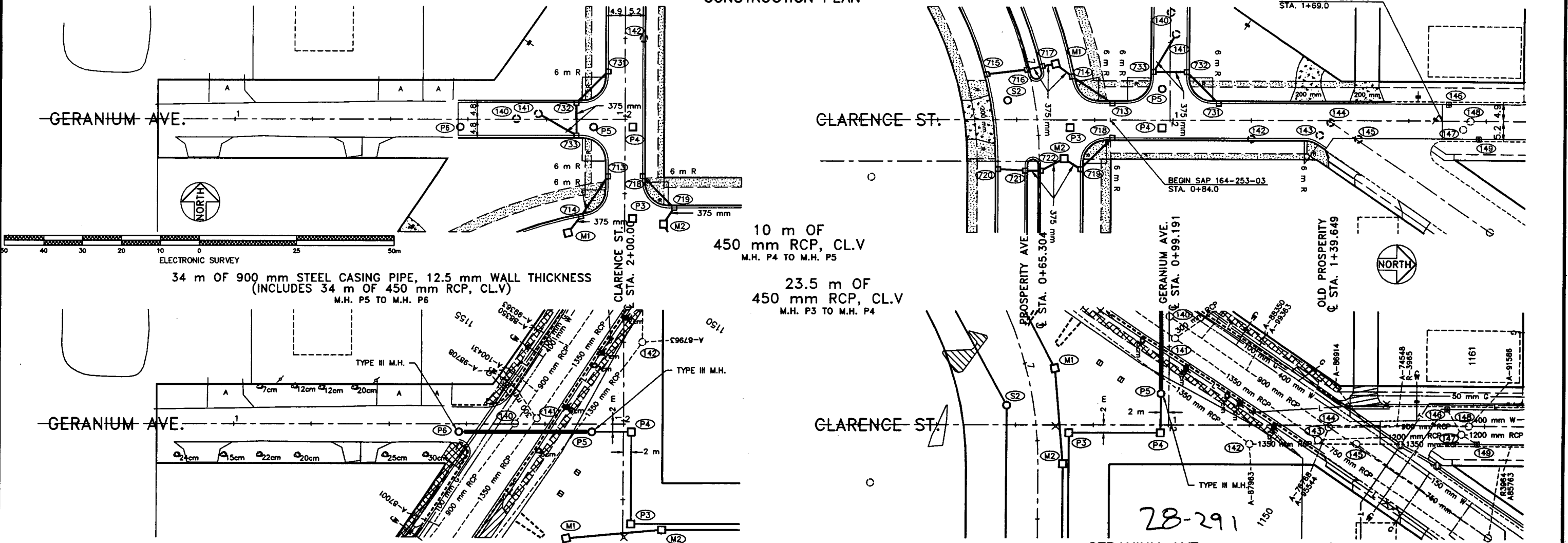
I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
 DATE: 5-22-98 REG. NO.: 18955



28-291



CONSTRUCTION PLAN



CLAP-01A 98/04/29

PHALEN VILLAGE
PUBLIC IMPROVEMENTS
98-P-1163

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DAILY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

PAUL J. GARDNER

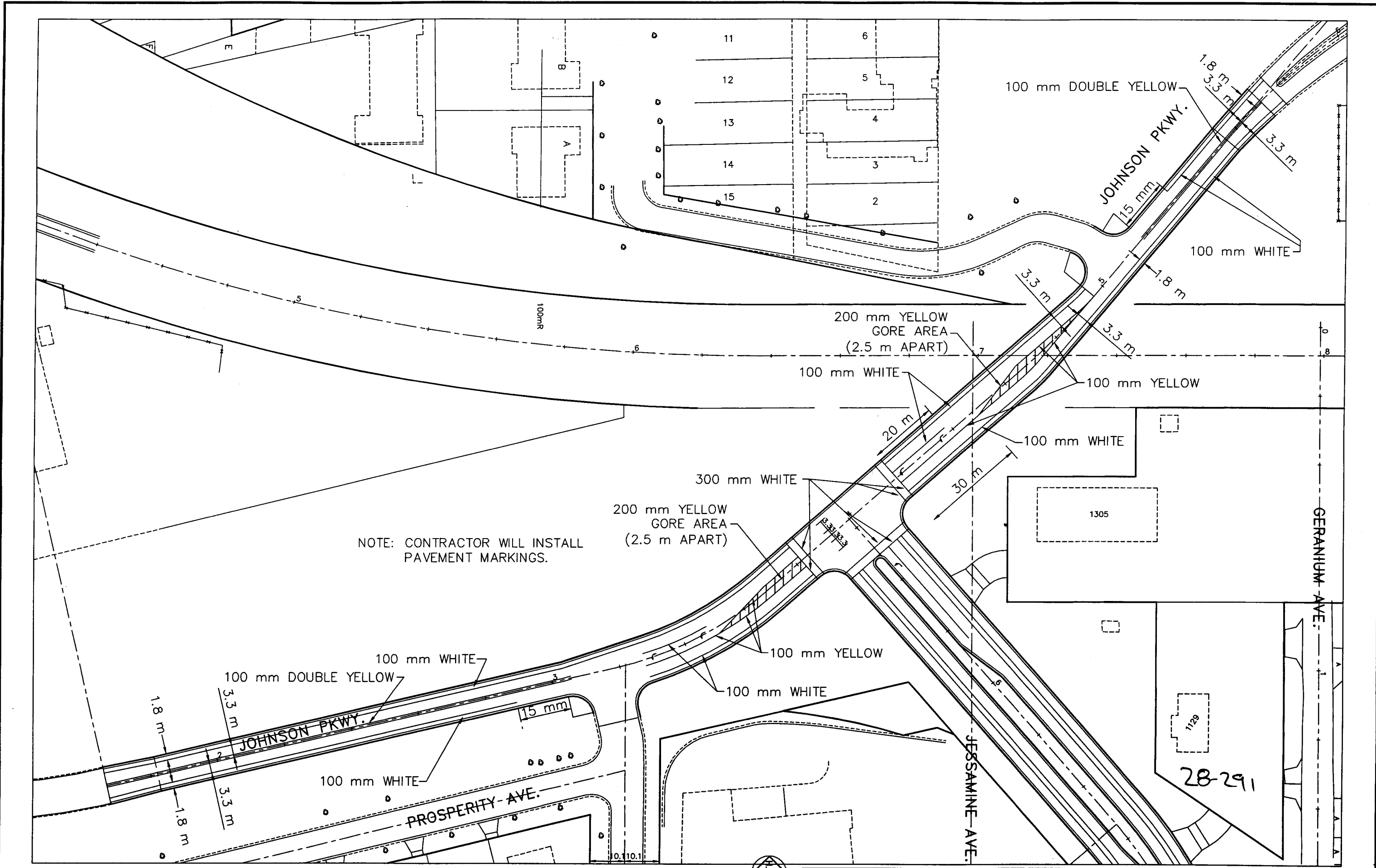


EXISTING AND REMOVAL PLAN

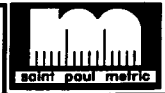
SAP 62-664-04, 164-020-90, 164-129-11, 164-253-03

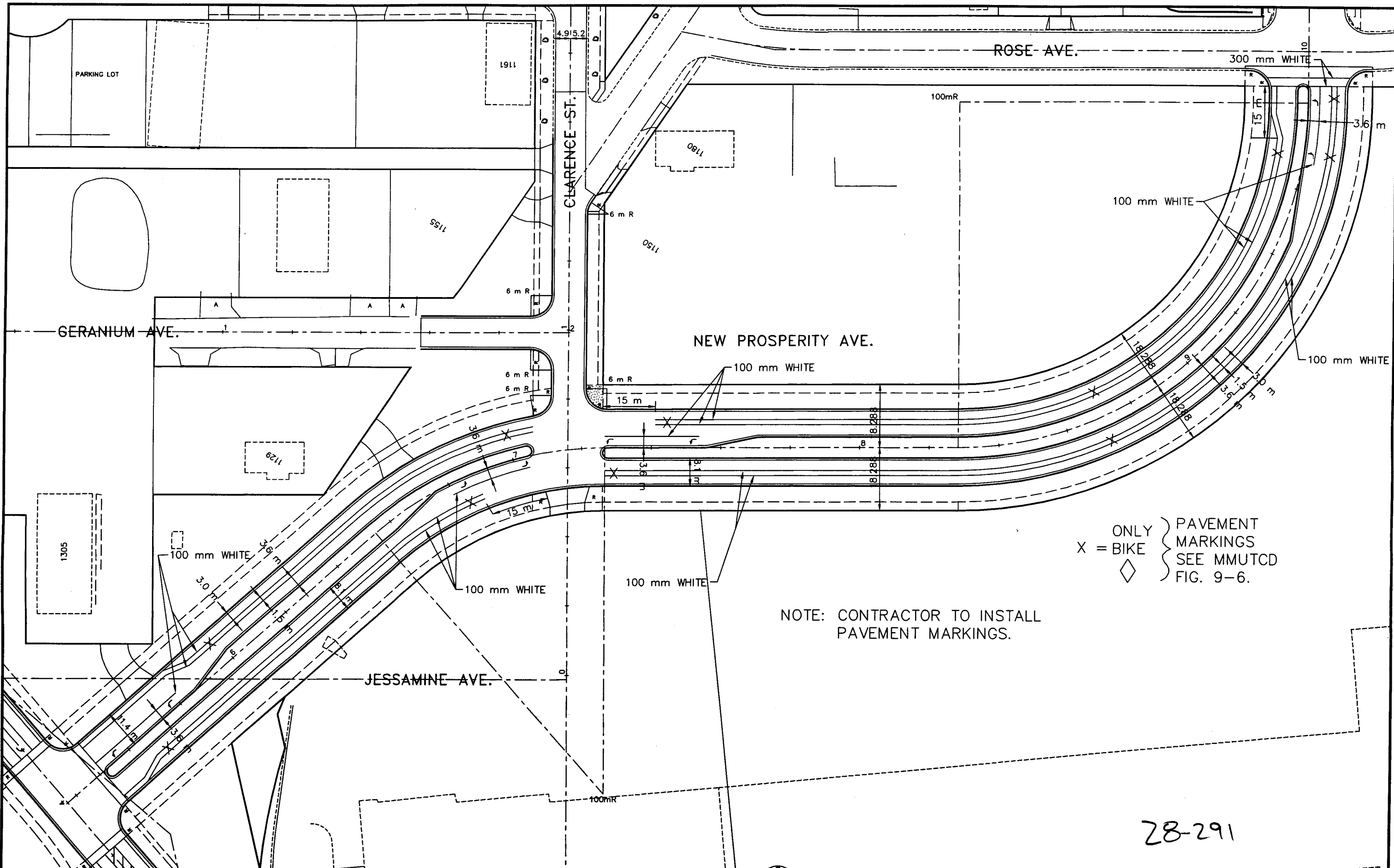
GERANIUM AVE. - Sta. 1+57 to Clarence St.

CLARENCE ST. - Prosperity to Old Prosperity
SHEET 31 OF 60 SHEETS



NOTE: CONTRACTOR WILL INSTALL PAVEMENT MARKINGS.





X = BIKE
 ◇ ONLY
 } PAVEMENT MARKINGS
 } SEE MMUTCD
 } FIG. 9-6.

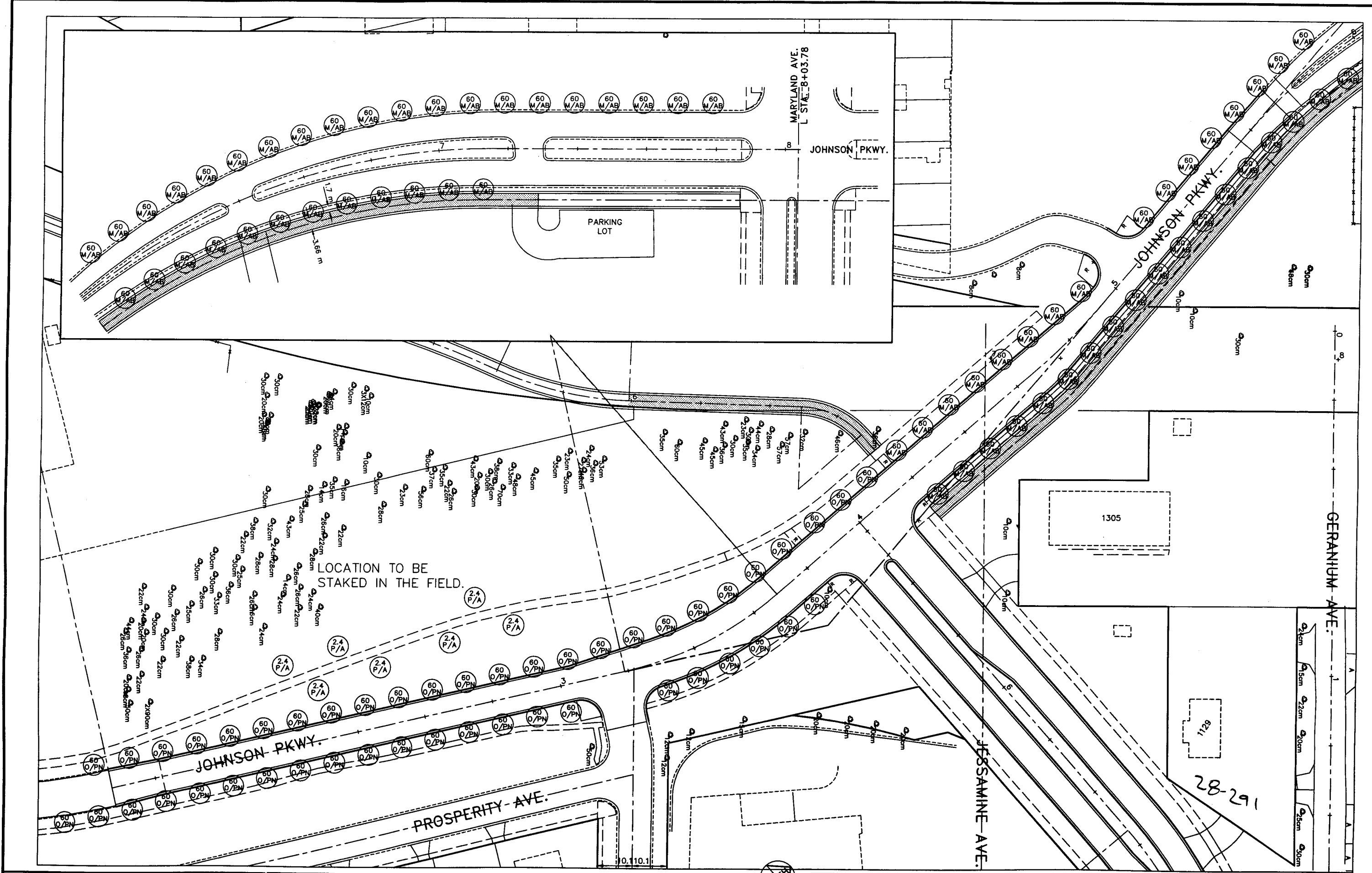
NOTE: CONTRACTOR TO INSTALL PAVEMENT MARKINGS.

28-291

ALP-00A 98/04/15
 PHALEN VILLAGE
 PUBLIC IMPROVEMENTS
 98-P-1163
 I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DAILY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
 DATE: 5-23-98
 30mm pour metric

NORTH
 50 40 30 20 10 0 10 20 30 40 50m
 ELECTRONIC SURVEY
 S.A.P. 62-664-04, 164-020-90, 164-129-11, 164-253-03

PROSPERITY AVE.
 STRIPING PLAN
 SHEET 33 OF 60 SHEETS



AMP-07A 98/07/07

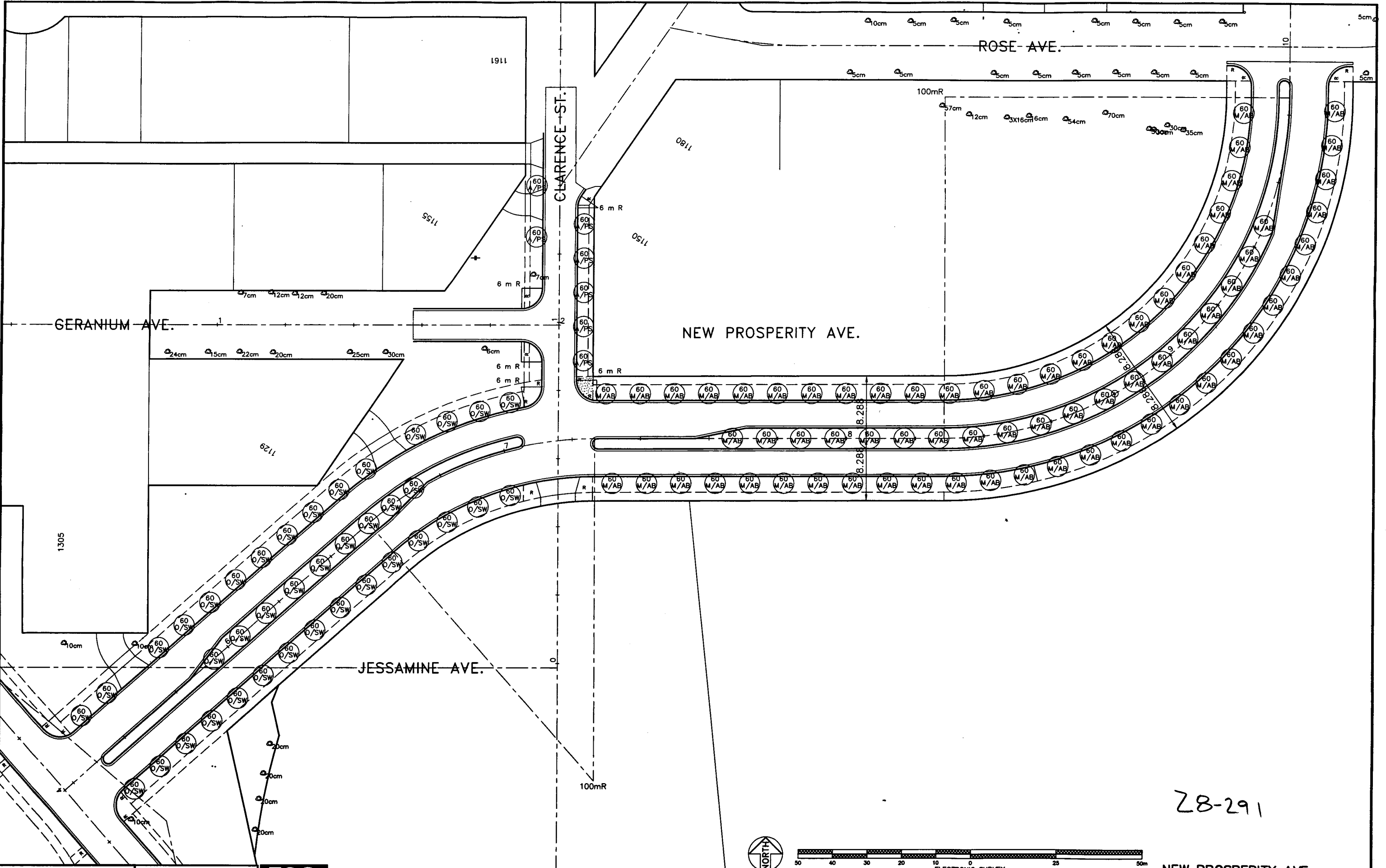
PHALEN VILLAGE
PUBLIC IMPROVEMENTS
98-P-1163
PAVING DR. 12 DRWG. NO. 1424

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DAILY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
DATE: 7-23-98

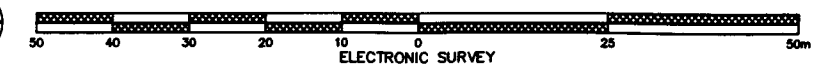


S.A.P. 62-664-04, 164-020-90, 164-129-11, 164-253-03

JOHNSON PARKWAY
TREE PLANTING PLAN
SHEET 34 OF 60 SHEETS



28-291



ALW-08A 98/07/07

PHALEN VILLAGE
PUBLIC IMPROVEMENTS
98-P-1163
PAVING DR. 12 DRWG. NO. 1424

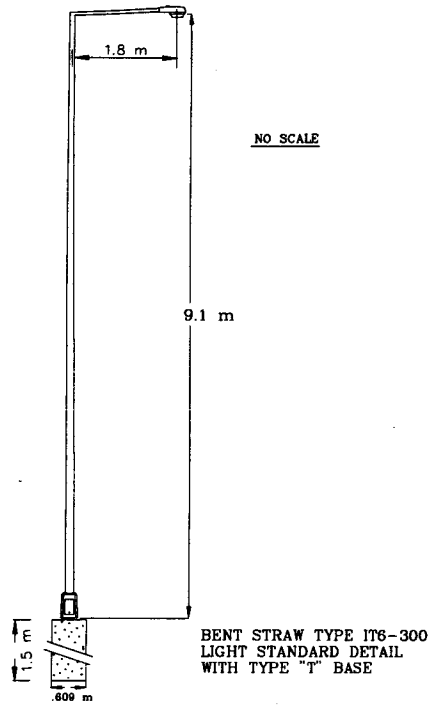
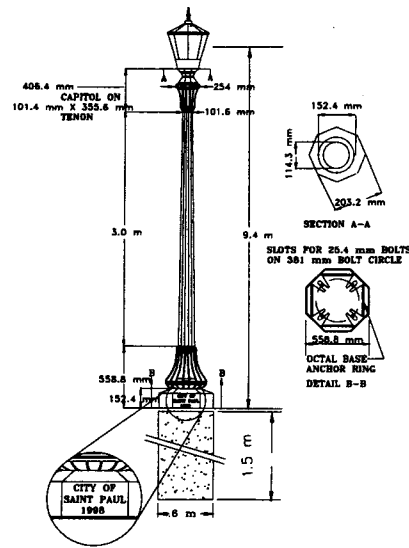
I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DAILY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
DATE: 7-23-98 REG. NO. 19935



S.A.P. 62-664-04, 164-020-90, 164-129-11, 164-253-03

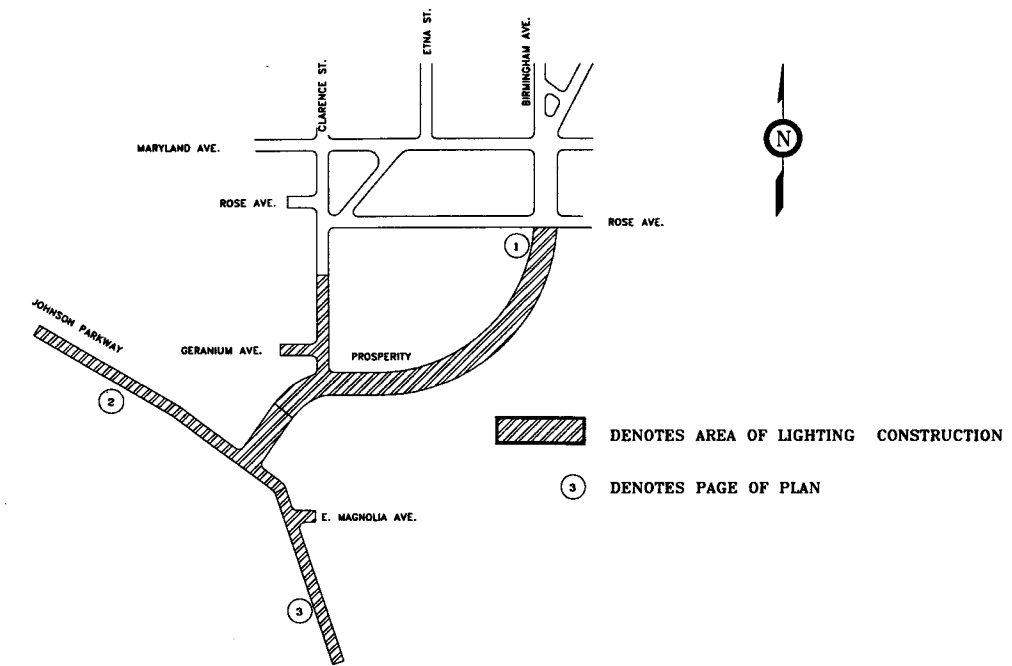
NEW PROSPERITY AVE.
TREE PLANTING PLAN
SHEET 35 OF 60 SHEETS

SINGLE LANTERN STYLE
LIGHT STANDARD DETAIL
LANTERN TYPE L-10



LIGHTING LEGEND

	PULLBOX TO BE INSTALLED
	EXISTING PULLBOX
	UTILITY/POWER POLE
	FEEDPOINT TO BE INSTALLED
	PHOTOELECTRIC CONTROL TO BE INSTALLED
	PROVIDE CONDUIT STUB
	EXISTING LIGHT STANDARD
	LIGHT STANDARD TO BE INSTALLED, X INDICATES THE UNIT NUMBER
	BENT STRAW WITH SIGNALS
	NEW CONDUIT
	EXISTING CONDUIT
	CONDUIT END CAPPED
	3-1/c #6 A.W.G. 1-1/c #8 BARE
	3-1/c #4 A.W.G. 1-1/c #8 BARE
	REMOVE 3-1/c #6 A.W.G. INSTALL 3-1/c #4 A.W.G.
	1-1/c #8 BARE
	3-1/c #4 A.W.G.
	FIRE HYDRANT
	TREE
	GROUND ROD TO BE INSTALLED
	EXISTING SIGNAL PEDESTAL FOUNDATIONS
	CONTROLLER CABINET ASSEMBLY & FOUNDATION - IN PLACE



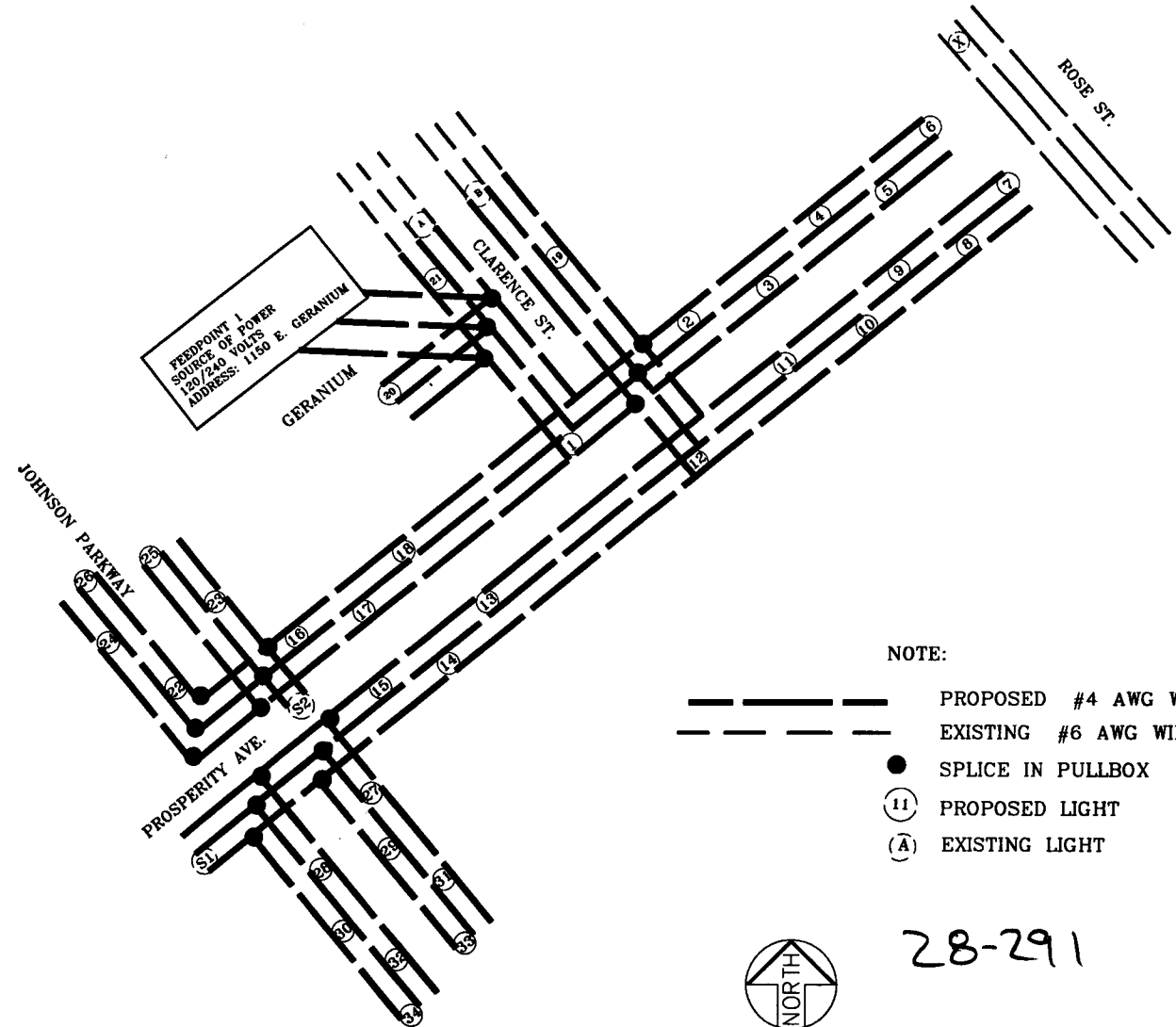
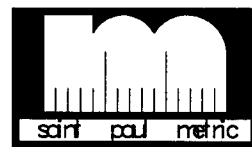
STATEMENT OF ESTIMATED QUANTITIES

ITEM NO.	ITEM	UNIT	ESTIMATED QUANTITIES			ACTUAL QUANTITIES		
			M.S.A. ELIGIBLE	NON-M.S.A. ELIGIBLE	TOTAL	M.S.A. ELIGIBLE	NON-M.S.A. ELIGIBLE	TOTAL
2545.602	LIGHTING UNIT TYPE L10	EACH	13		13			
2545.602	LUMINAIRE TYPE R150	EACH	13		13			
2545.602	LIGHT BASE FDN. TYPE ST	EACH	33	1	34			
2545.602	LIGHTING UNIT TYPE IT6-300	EACH	20	1	21			
2545.602	LUMINAIRE TYPE C150	EACH	20	1	21			
2545.603	50mm N.M.C. T&R/PUSH	METER	51		51			
2545.603	50mm N.M.C. BEHIND CURB	METER	1673	42	1715			
2545.603	38mm N.M.C. BEHIND CURB	METER	78		78			
2545.603	1/C #4 A.W.G.	METER	4905	90	4995			
2545.603	1/C #6 A.W.G.	METER	54		54			
2545.603	1/C #8 A.W.G. BR. GND	METER	1679	42	1721			
2545.602	SERVICE PANEL	EACH	1		1			
2545.602	PULLBOX - LIGHTING	EACH	2		2			
2545.602	R&S SERVICE PANEL	EACH	1		1			
2545.602	R&S 9.1 m BENT STRAW	EACH	20		20			
2545.602	REMOVE LIGHT FOUNDATION	EACH	20		20			

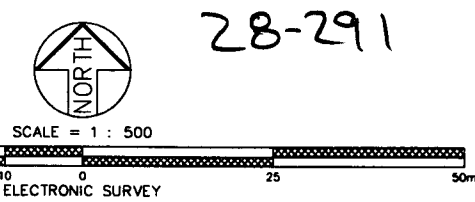
R150 = REDESIGNED LANTERN LUMINAIRE AND WATTAGE
T&R/PUSH = TRENCH, RESTORE AND/OR PUSH
L10 = 3.05 m LANTERN STYLE POLE
FDN. = FOUNDATION
ST = STANDARD
R&S = REMOVE AND SALVAGE

STANDARD DETAIL PLATES

ST. PAUL DES. NO.	MDOT DES. NO.	STANDARD DETAIL
M5009		UNDERGROUND ELECTRICAL CONDUIT PLACEMENT
M5008		LIGHT STANDARD FOOTING DETAIL
M5007		STREET LIGHTING FEED CABINET



NOTE:
 - - - - - PROPOSED #4 AWG WIRE
 _____ EXISTING #6 AWG WIRE
 ● SPLICE IN PULLBOX
 (11) PROPOSED LIGHT
 (A) EXISTING LIGHT



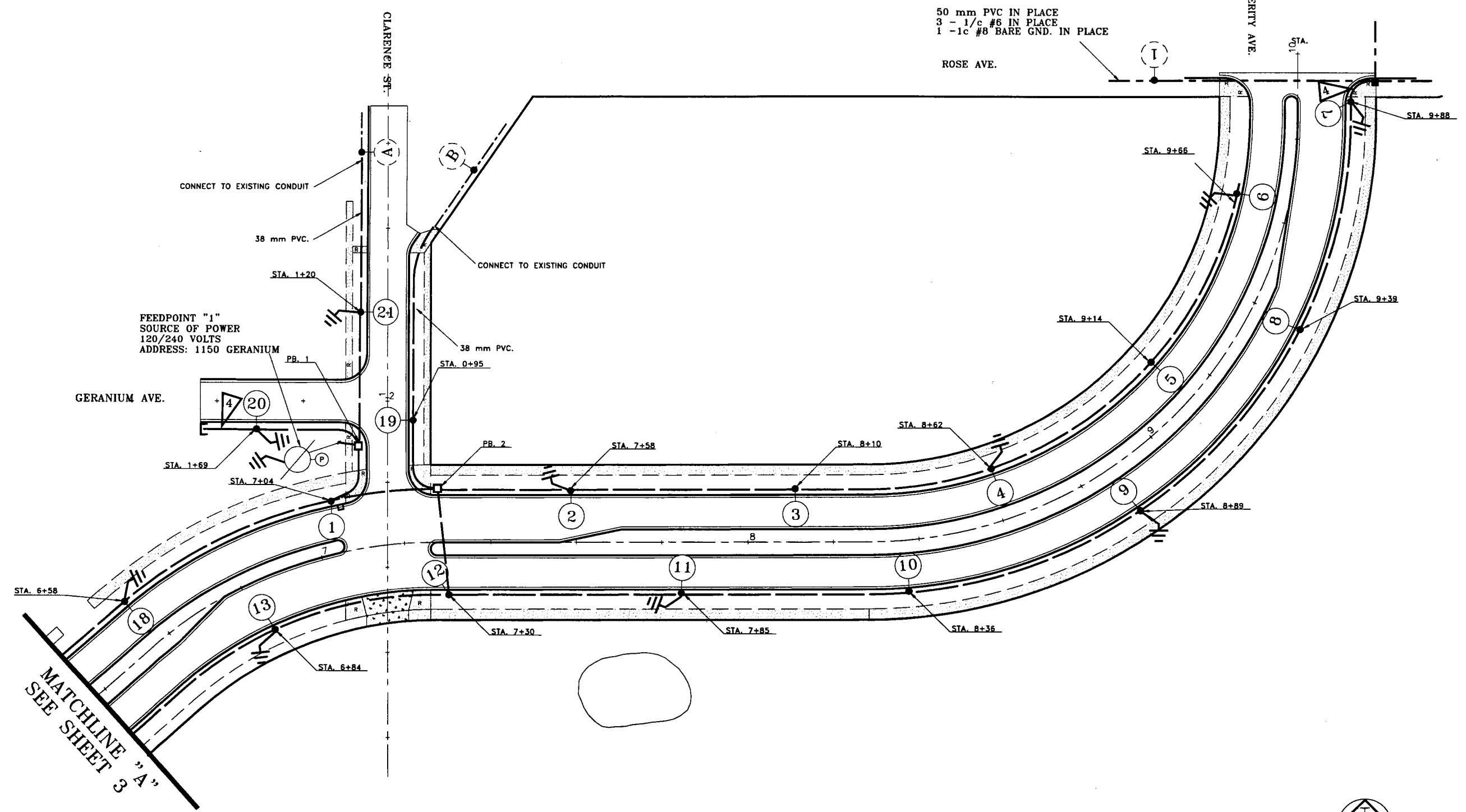
I HEREBY CERTIFY THAT I HAVE REVIEWED THIS PLAN AND THAT I AM A MASTER ELECTRICIAN CERTIFIED UNDER THE LAWS OF THE STATE OF MINNESOTA.
Robert J. Eggen
 DATE 6/4/98 REG. NO. AMD 4773

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.
Michael J. Eggen
 DATE June 2, 1998 REG. NO. 11359

S.A.P. 164-020-90 , 164-129-11, 62-664-04

CONSTRUCTION PLAN

- LIGHTING NOTES:
- 1) ALL WIRE ON THIS PLAN SHEET SHALL BE 2 UNLESS OTHERWISE FLAGGED.
 - 2) ALL CONDUIT ON THIS PLAN SHEET SHALL BE 50 mm P.V.C. UNLESS OTHERWISE NOTED.
 - 3) ALL UNITS ON THIS PLAN SHEET SHALL BE TYPE IT6-300 POLES WITH C150 LUMINAIRES UNLESS OTHERWISE NOTED.
 - 4) ALL UNITS SHALL BE SET BACK 1.2 m FROM THE FACE OF THE CURB OR AS DIRECTED BY THE ENGINEER.



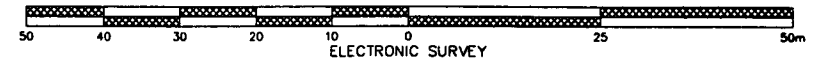
50 mm PVC IN PLACE
 3 - 1/c #6 IN PLACE
 1 - 1c #8 BARE GND. IN PLACE

FEEDPOINT "1"
 SOURCE OF POWER
 120/240 VOLTS
 ADDRESS: 1150 GERANIUM

MATCHLINE "A"
 SEE SHEET 3



SCALE = 1 : 500



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.

Michael J. Eggum
 DATE June 2, 1998 REG. NO. 11359

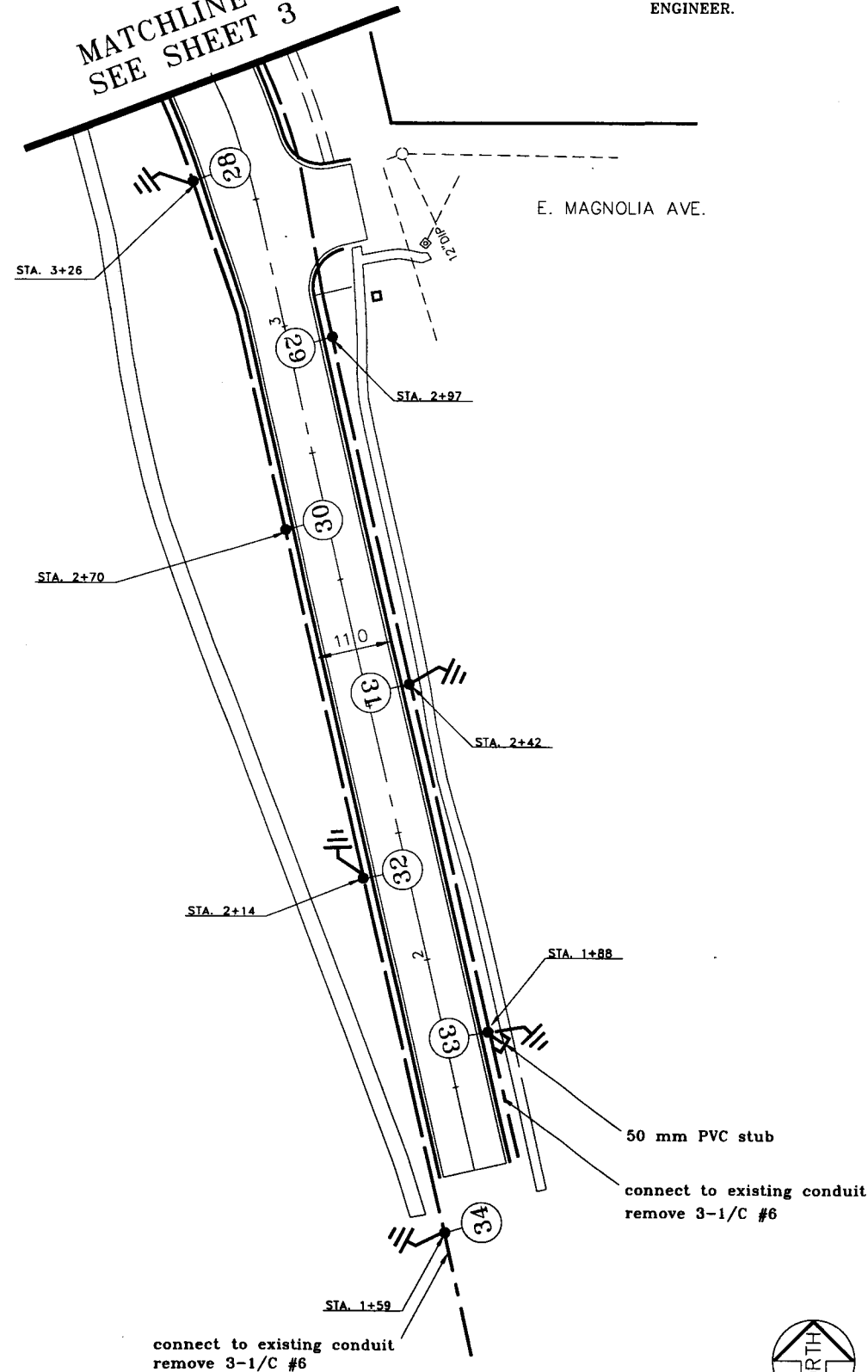


S.A.P. 164-020-90 , 164-129-11, 62-664-04

28-291

CONSTRUCTION PLAN

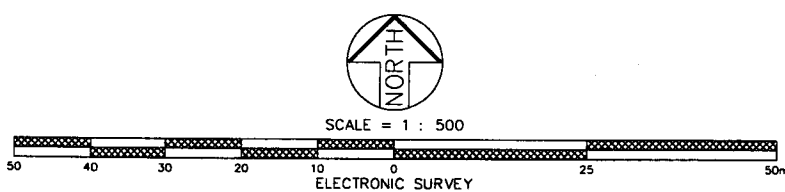
MATCHLINE "B"
SEE SHEET 3



- LIGHTING NOTES:
- 1) ALL WIRE ON THIS PLAN SHEET SHALL BE UNLESS OTHERWISE FLAGGED.
 - 2) ALL CONDUIT ON THIS PLAN SHEET SHALL BE 50 mm P.V.C. UNLESS OTHERWISE NOTED.
 - 3) ALL UNITS ON THIS PLAN SHEET SHALL BE TYPE L-10 HAVING R150 LUMINAIRES UNLESS OTHERWISE NOTED.
 - 4) ALL UNITS SHALL BE SET BACK 1.2 m FROM THE FACE OF THE CURB OR AS DIRECTED BY THE ENGINEER.

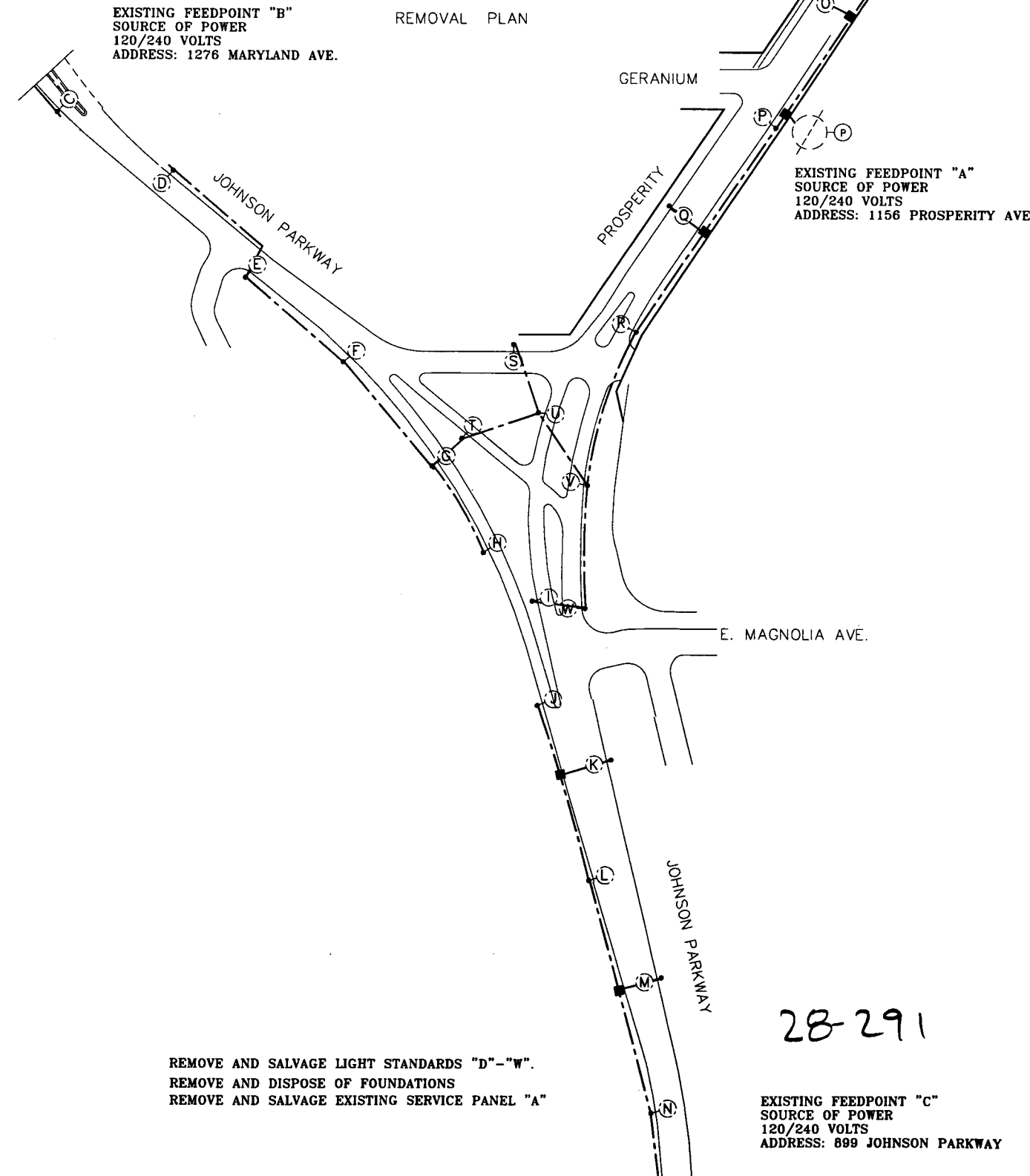
connect to existing conduit
remove 3-1/C #6

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.
Michael J. Eggum
DATE June 2, 1998 REG. NO. 11359



S.A.P. 164-020-90 , 164-129-11, 62-664-04

REMOVAL PLAN



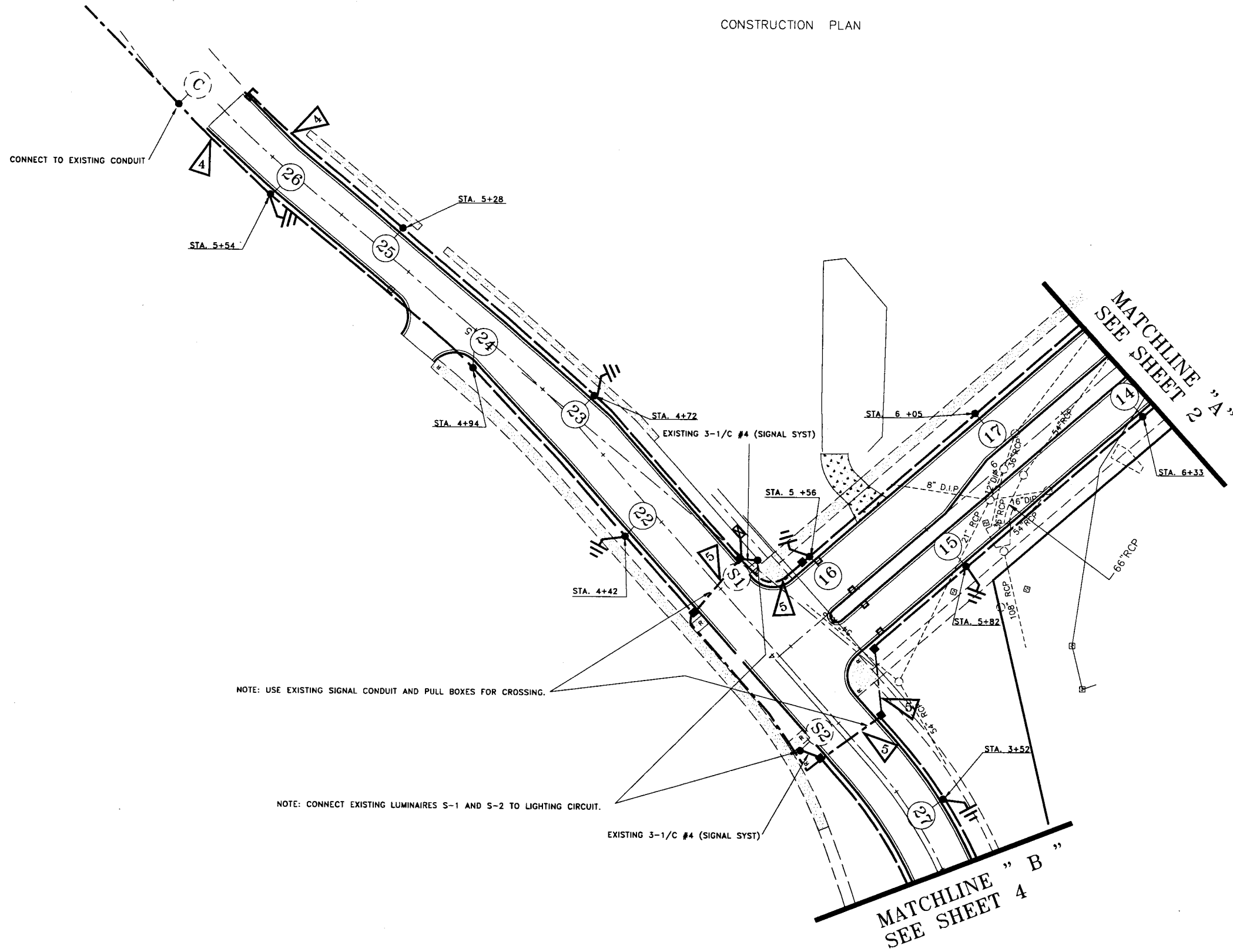
REMOVE AND SALVAGE LIGHT STANDARDS "D"- "W".
REMOVE AND DISPOSE OF FOUNDATIONS
REMOVE AND SALVAGE EXISTING SERVICE PANEL "A"

28-291

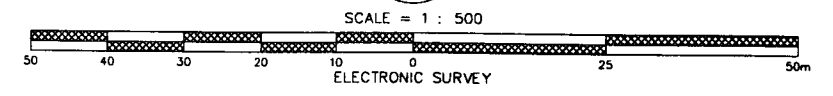
EXISTING FEEDPOINT "C"
SOURCE OF POWER
120/240 VOLTS
ADDRESS: 899 JOHNSON PARKWAY

CONSTRUCTION PLAN

- LIGHTING NOTES:
- 1) ALL WIRE ON THIS PLAN SHEET SHALL BE 2 UNLESS OTHERWISE FLAGGED.
 - 2) ALL CONDUIT ON THIS PLAN SHEET SHALL BE 50 mm P.V.C. UNLESS OTHERWISE NOTED.
 - 3) UNITS 14,15,16,17 SHALL BE TYPE IT6-300 POLES WITH TYPE C150 LUMINAIRES.
 - 4) UNITS 22 - 27 SHALL BE TYPE L10 POLES WITH TYPE R150 LUMINAIRES.
 - 5) ALL UNITS SHALL BE SET BACK 1.2 m FROM THE FACE OF THE CURB OR AS DIRECTED BY THE ENGINEER.



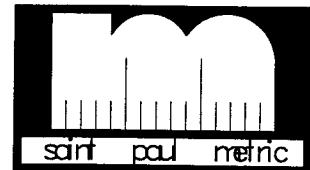
28-291



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.

Michael J. Eggen

DATE June 3, 1998 REG. NO. 11359



S.A.P. 164-020-90 , 164-129-11, 62-664-04

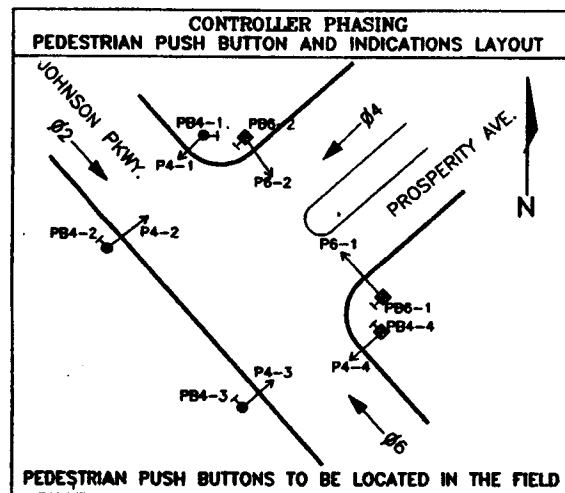
STREET LIGHTING SYSTEM
 CITY PROJECT 98-P-1183 PROSPERITY
 PROSPERITY JOHNSON PARKWAY
 STA. 5 +37 - STA. 6 +37 STA. 3+40 - STA. 5+75

FACE	PHASE	FLASH	INDICATION SIZE (mm)					
			R	Y	G	R	Y	G
2-1	2	R	300	300	300			
2-2	2	R	300	300	300			
2-3	2	R	300	300	300			
4-1	4	R	200	200	200			
4-2	4	R	300	300	300			
4-3	4	R	300	300	300			
4-4	4	R	200	200	200			
6-1	6	R	300	300	300			
6-2	6	R	300	300	300			
6-3	6	R	300	300	300			

HAND HOLE CHART	
H.H. NO.	HAND HOLE SIZE (mm)
1	432 X 762 X 610
2	432 X 762 X 610
3	330 X 610 X 610
4	330 X 610 X 610
5	432 X 762 X 610
6	330 X 610 X 305
7	330 X 610 X 610
8	432 X 762 X 610
9	330 X 610 X 305

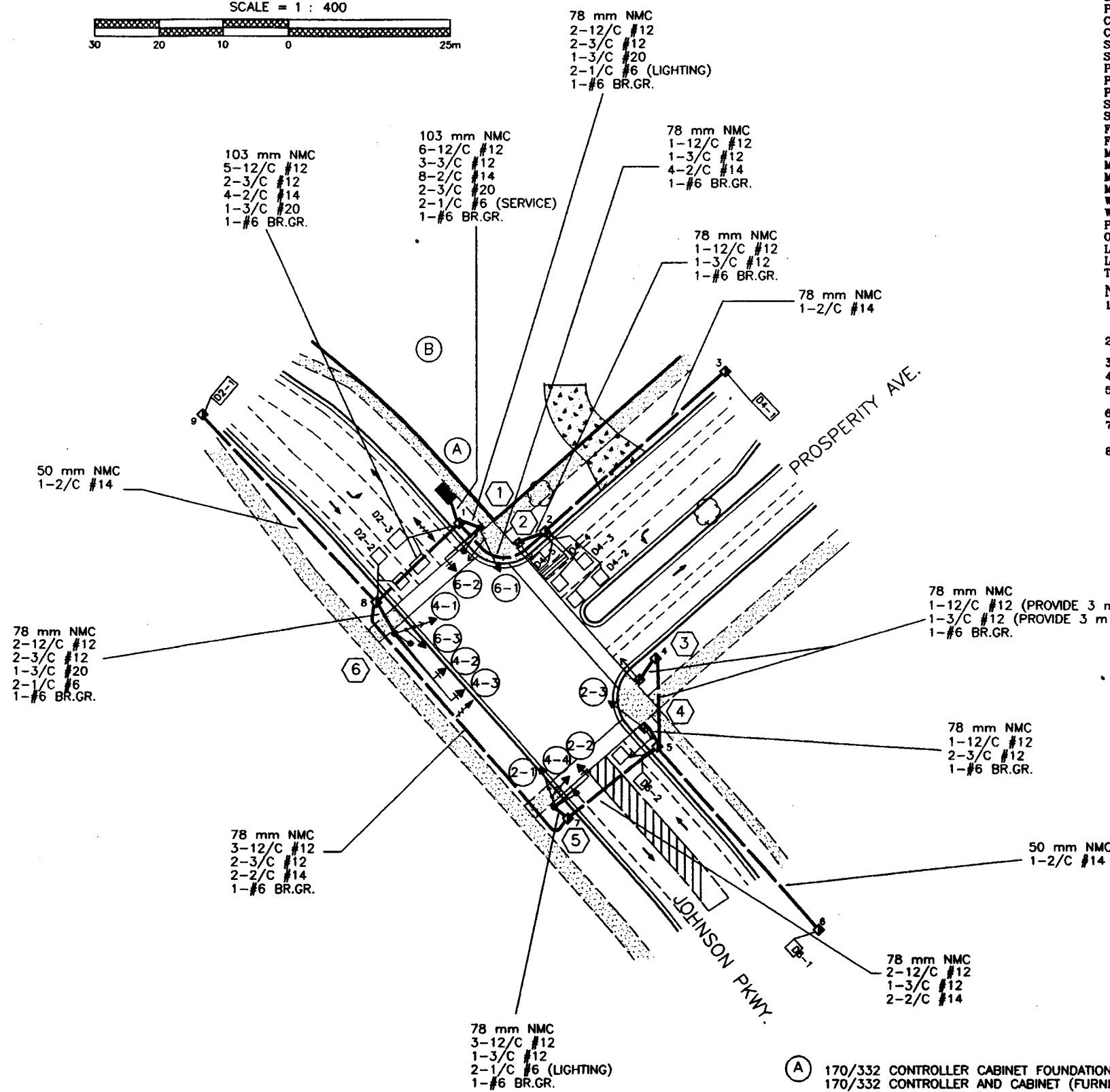
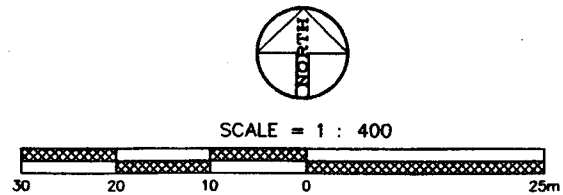
DETECTOR CHART			
DESIGNATION	PHASE	QUANTITY - SIZE (m)	DISTANCE TO STOP BAR (m)
D4-1	4	1-2x4	40
D4-2	4	2-2x2	1:4.9
D4-3	4	2-2x2	1:4.9
D4-4	4	1-4.5x.9	1
D4-5	4	1-2x2	1
D6-1	6	1-2x4	40
D6-2	6	2-2x2	1:4.9
D2-1	2	1-2x4	40
D2-2	2	2-2x2	1:4.9
D2-3	2	2-2x2.4	1:4.9

* SEE SPECIAL DETAIL FOR QUADRUPOLE BICYCLE LOOP



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.

DATE 1/30/98 REG. NO. 21832



LEGEND

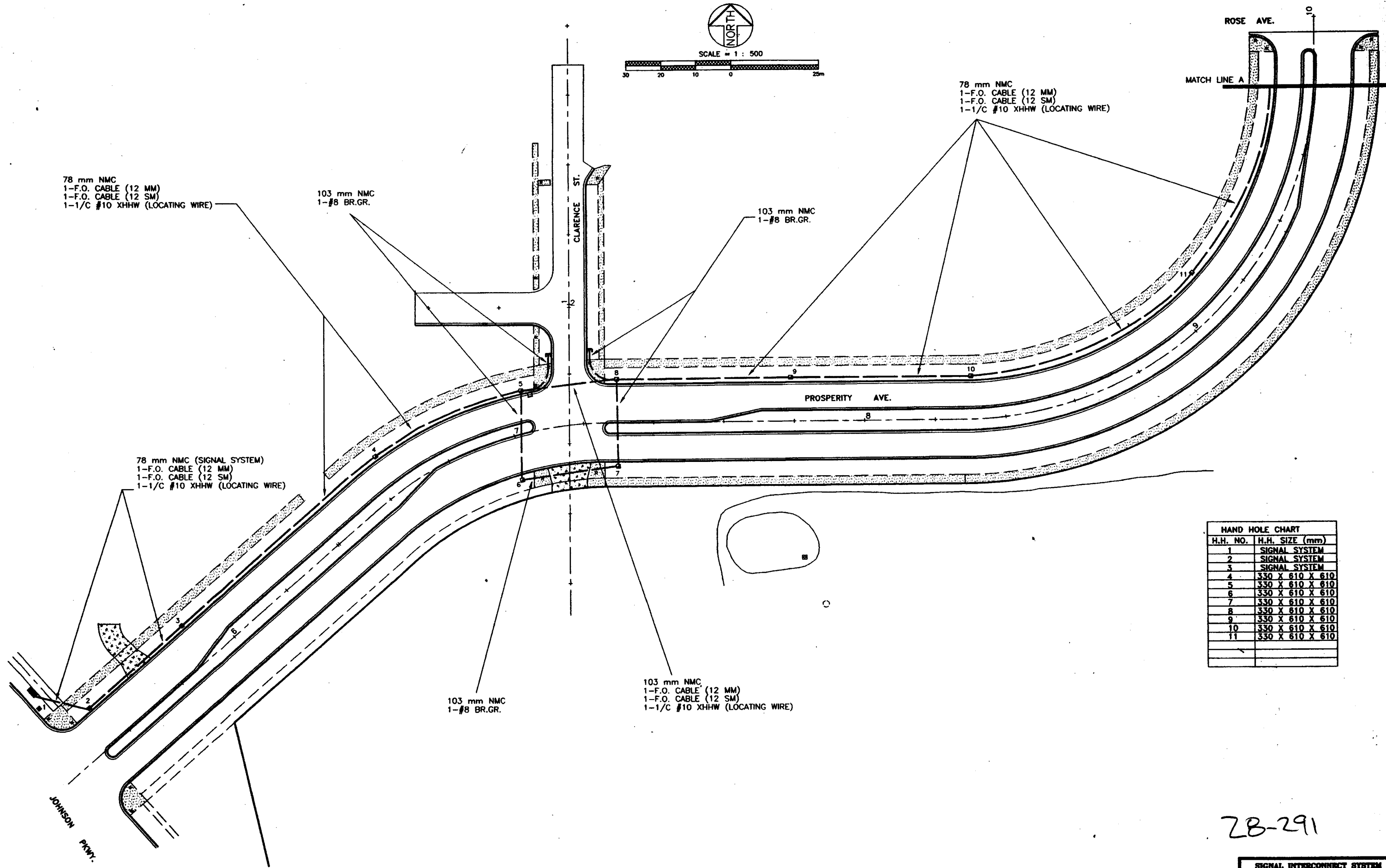
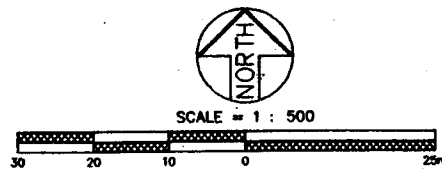
SIGNAL INSTALLATION NO.	(Symbol)
SIGNAL FACE NO.	(Symbol)
CONTROLLER CABINET ASSEMBLY & FOUNDATION	(Symbol)
CONTROLLER CABINET ASSEMBLY & FOUNDATION - IN PLACE	(Symbol)
SIGNAL PULLBOX	(Symbol)
PULLBOX - IN PLACE	(Symbol)
CONDUIT INSTALLATION	(Symbol)
CONDUIT - IN PLACE	(Symbol)
SIGNAL FACE	(Symbol)
SIGNAL FACE - IN PLACE	(Symbol)
PEDESTRIAN INDICATION	(Symbol)
PEDESTRIAN INDICATION - IN PLACE	(Symbol)
PEDESTRIAN PUSH BUTTON - NEW OR IN PLACE AS NOTED	(Symbol)
SIGNAL PEDESTAL POLE AND FOUNDATION	(Symbol)
SIGNAL PEDESTAL POLE AND FOUNDATION - IN PLACE	(Symbol)
FOUNDATION FOR LIGHTING OR SIGNAL POLE	(Symbol)
FOUNDATION FOR LIGHTING OR SIGNAL POLE - IN PLACE	(Symbol)
MAST ARM ASSEMBLY & FOUNDATION	(Symbol)
MAST ARM ASSEMBLY & FOUNDATION - IN PLACE	(Symbol)
MAST ARM ASSEMBLY, FOUNDATION & LUMINAIRE	(Symbol)
MAST ARM ASSEMBLY, FOUNDATION & LUMINAIRE - IN PLACE	(Symbol)
WOOD POLE	(Symbol)
WOOD POLE - IN PLACE	(Symbol)
POWER SOURCE	(Symbol)
OPTICOM DETECTOR	(Symbol)
LOOP DETECTOR	(Symbol)
LOOP DETECTOR - IN PLACE	(Symbol)
TEMPORARY SIGNAL	(Symbol)

- ### NOTES:
- CONTROLLER CABINET ASSEMBLY (INCLUDES- CONTROLLER, WIRED CABINET & CONTROL EQUIPMENT)-FURNISHED BY THE CITY INSTALLED BY THE CONTRACTOR.
 - MAST ARM ASSEMBLY (INCLUDES- TRUSS ARM, MAST ARM POLE, TRANSFORMER BASE, ANCHOR BOLTS & LUMINAIRE EXTENSION).
 - EACH OVERHEAD SIGNAL FACE SHALL HAVE A BACKGROUND SHIELD (4 TOTAL).
 - ALL PEDESTRIAN INDICATIONS SHALL BE 300X300 mm.
 - SEE SPECIAL PROVISIONS AND TRAFFIC CONTROL INTERCONNECTION (SHEETS -) FOR INTERCONNECT REQUIREMENTS.
 - SEE SPECIAL PROVISIONS AND LIGHTING PLAN FOR LIGHTING REQUIREMENTS.
 - THE E.V.P. DETECTORS AND LIGHTS AT POLES 1 AND 6 WILL BE FURNISHED BY THE CITY AND INSTALLED BY THE CONTRACTOR.
 - ALL SIGNAL AND PEDESTRIAN INDICATIONS SHALL BE EQUIPPED WITH LED (LIGHT EMITTING DIODE) TRAFFIC LAMPS (SEE SPECIAL PROVISIONS).

- TYPE PA85-A-6.1-X9.1-1.8 (X AT 0°)
TYPE PA85 POLE FOUNDATION
ONE WAY SIGNAL (OVERHEAD) MOUNT AT 0°
ONE WAY SIGNAL (TYPE 10C) MOUNT AT 0°
150 WATT H.P.S. LUMINAIRE
TWO WAY EVP DETECTOR AND LIGHTS
PEDESTRIAN PUSH BUTTON AND DECAL
50 mm NMC STUB
- SIGNAL PEDESTAL
SIGNAL PEDESTAL FOUNDATION
ONE WAY SIGNAL (TYPE 4A)
PEDESTRIAN PUSH BUTTON
50 mm NMC STUB
- SIGNAL PEDESTAL
SIGNAL PEDESTAL FOUNDATION
ONE WAY SIGNAL (TYPE 4A)
PEDESTRIAN PUSH BUTTON
50 mm NMC STUB
- SIGNAL PEDESTAL
SIGNAL PEDESTAL FOUNDATION
ONE WAY SIGNAL (TYPE 1B)
PEDESTRIAN PUSH BUTTON
50 mm NMC STUB
- TYPE PA85-A-6.1-X9.1-1.8 (X AT 0°)
TYPE PA85 POLE FOUNDATION
ONE WAY SIGNAL (OVERHEAD) MOUNT AT 0°
TWO WAY SIGNAL (TYPE 10B) MOUNT AT 270°
150 WATT H.P.S. LUMINAIRE
PEDESTRIAN PUSH BUTTON
50 mm NMC STUB
- TYPE PA100-A-12.2-X9.1-1.8 (X AT 270°)
TYPE PA100M POLE FOUNDATION
ONE WAY SIGNAL (OVERHEAD) MOUNT AT 0°
ONE WAY SIGNAL (OVERHEAD) MOUNT AT 4.1 m
TWO WAY SIGNAL (TYPE 20B) MOUNT AT 0°
150 WATT H.P.S. LUMINAIRE
ONE WAY EVP DETECTOR AND LIGHT
PEDESTRIAN PUSH BUTTON AND DECAL
50 mm NMC STUB

- (A) 170/332 CONTROLLER CABINET FOUNDATION (PRE-CAST)
170/332 CONTROLLER AND CABINET (FURNISHED BY THE CITY)
78 mm NMC STUB-OUT CAP BOTH ENDS
- (B) SOURCE OF POWER: TO BE DETERMINED IN THE FIELD
SERVICE EQUIPMENT
ADDRESS: TO BE DETERMINED IN THE FIELD

SIGNAL SYSTEM INTERSECTION LAYOUT PROSPERITY AVENUE AT JOHNSON PARKWAY	DATE 1/28/98
	PREPARED BY: JTM
	DWG. NO. S-1433



78 mm NMC
1-F.O. CABLE (12 MM)
1-F.O. CABLE (12 SM)
1-1/C #10 XHHW (LOCATING WIRE)

103 mm NMC
1-#8 BR.GR.

103 mm NMC
1-#8 BR.GR.

78 mm NMC
1-F.O. CABLE (12 MM)
1-F.O. CABLE (12 SM)
1-1/C #10 XHHW (LOCATING WIRE)

78 mm NMC (SIGNAL SYSTEM)
1-F.O. CABLE (12 MM)
1-F.O. CABLE (12 SM)
1-1/C #10 XHHW (LOCATING WIRE)

103 mm NMC
1-#8 BR.GR.

103 mm NMC
1-F.O. CABLE (12 MM)
1-F.O. CABLE (12 SM)
1-1/C #10 XHHW (LOCATING WIRE)

HAND HOLE CHART	
H.H. NO.	H.H. SIZE (mm)
1	SIGNAL SYSTEM
2	SIGNAL SYSTEM
3	SIGNAL SYSTEM
4	330 X 610 X 610
5	330 X 610 X 610
6	330 X 610 X 610
7	330 X 610 X 610
8	330 X 610 X 610
9	330 X 610 X 610
10	330 X 610 X 610
11	330 X 610 X 610

28-291

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.
DATE: 12/19/97 REC. NO. 22022

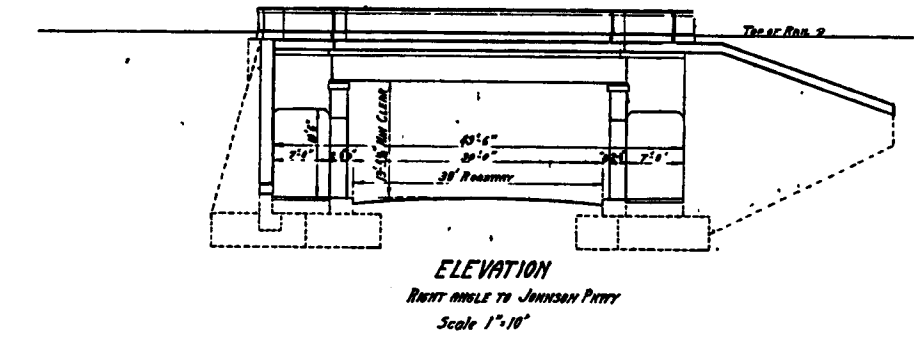
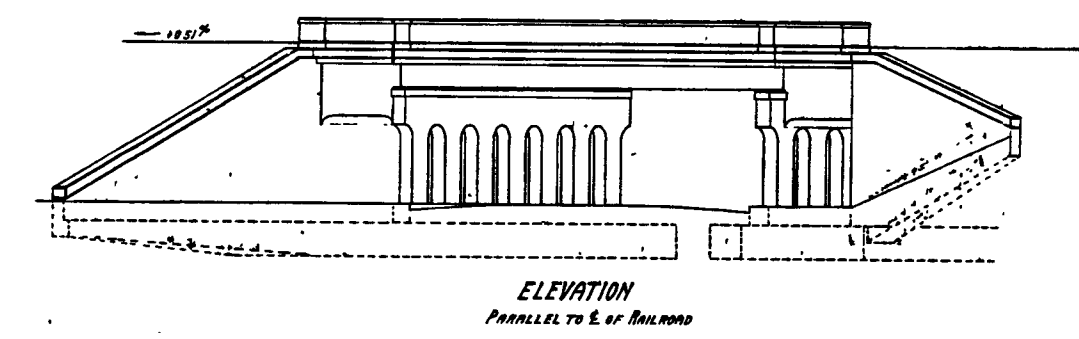
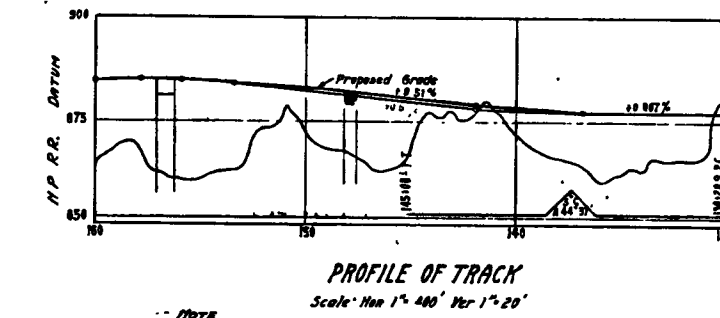
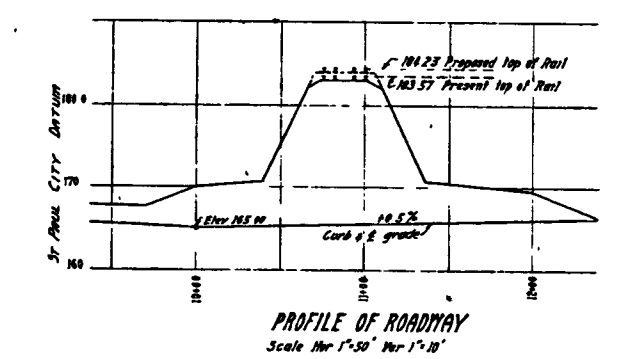
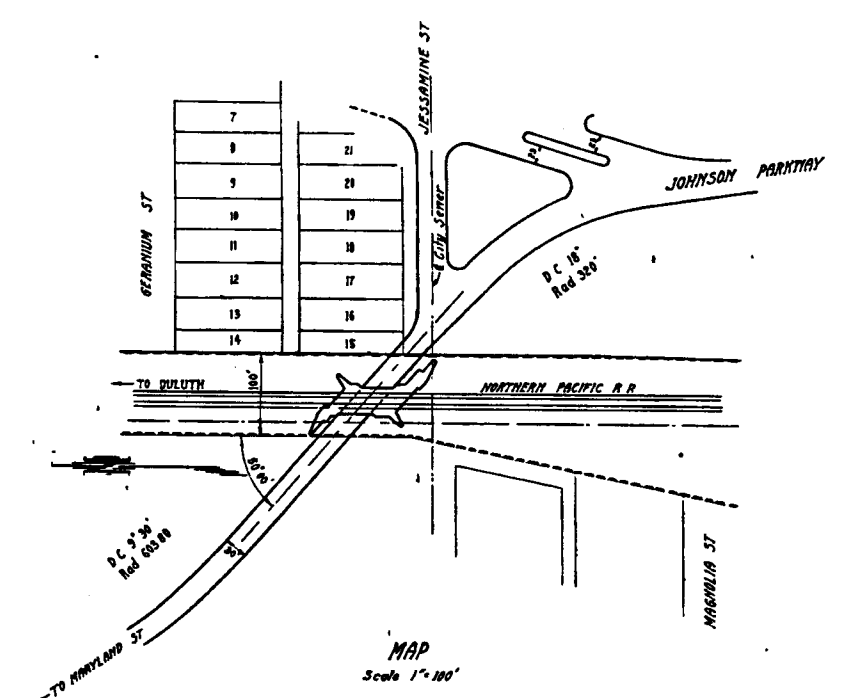
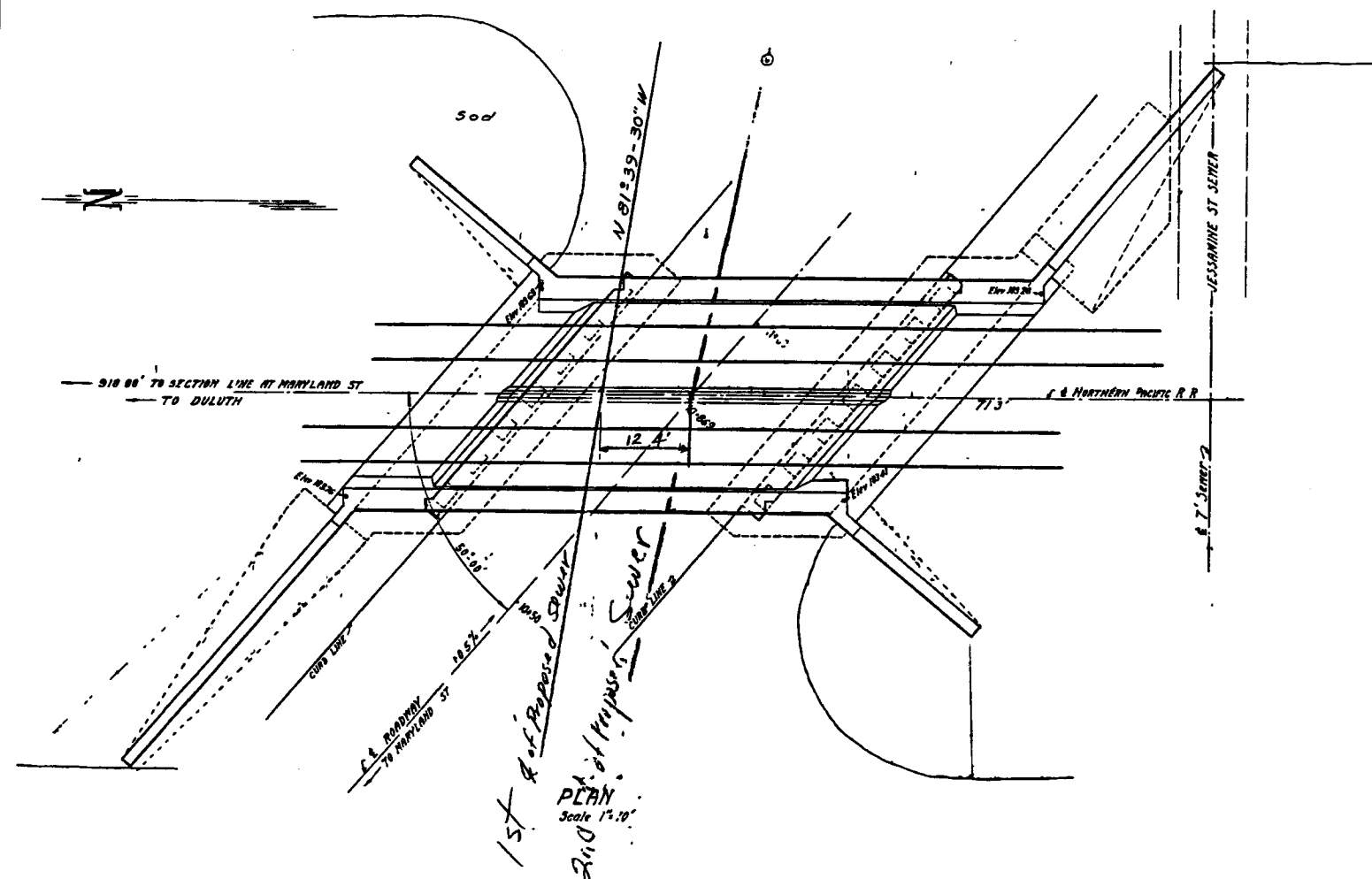


SIGNAL INTERCONNECT SYSTEM
PROSPERITY AVE.
JOHNSON PKWY. TO MARYLAND AVE.

S.A.P. NO. 164-020-90; 164-129-11; 62-664-04

CITY PROJECT NO. 98-P-1163

42/60



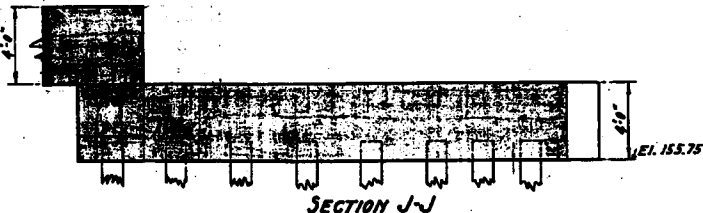
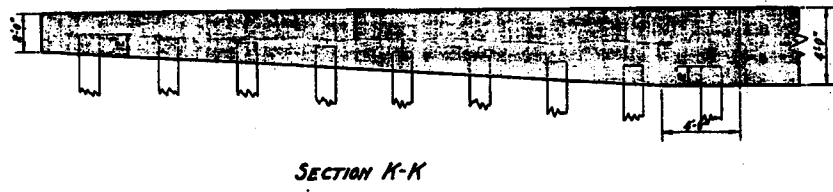
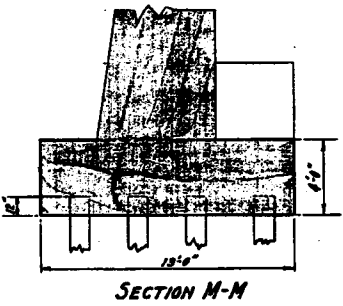
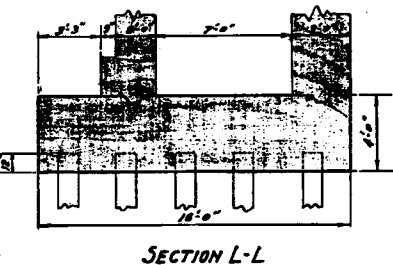
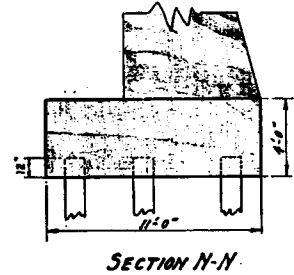
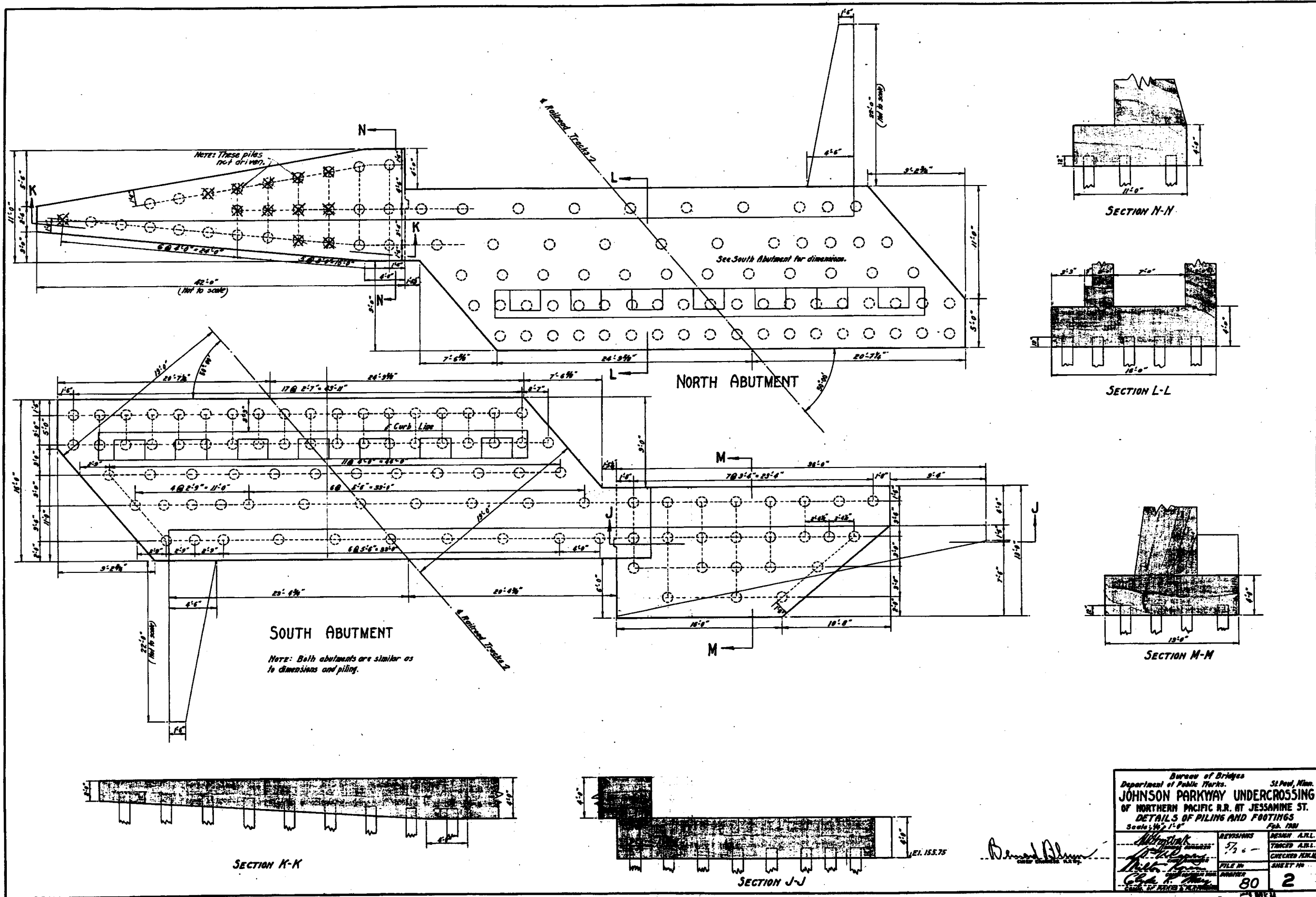
MICRO-FILMED
 BR. NO 90422 DE NO 80
 Bureau of Bridges
 Department of Public Works St Paul, Minn
JOHNSON PARKWAY UNDERCROSSING
 OF NORTHERN PACIFIC R.R. AT JESSAMINE ST.
 GENERAL PLAN
 Scale As shown Feb 1931
 REVISIONS
 FILE NO SHEET NO
 28-291
 Field Book-1268

FOR INFORMATION ONLY
 IMAGE NOT TO SCALE

DESIGNED		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 SIGNED <i>Tracy C. Mor</i> DATE <i>5/22/31</i> REG. NO. <i>10529</i>
DGN CHECK		
DRAWN	RLB	
DWG CHECK		

PREPARED BY **BRIDGE DIVISION** FOR THE CITY OF ST. PAUL, DEPARTMENT OF PUBLIC WORKS
Pedestrian Trail (Old Railroad Bed)
Over Johnson Parkway
 Old Plan Sheets - For Information Only

STATE AID PROJECT NUMBER:	164-129-11	PROJECT:	P1163
CAD DRAWING NAME:	/cad/bridges/dwgs/p1163/info1.dwg	DRAWER:	
DATE:		SHEET NO. 45 OF 60 SHEET(S)	
		Bridge No. 90422	

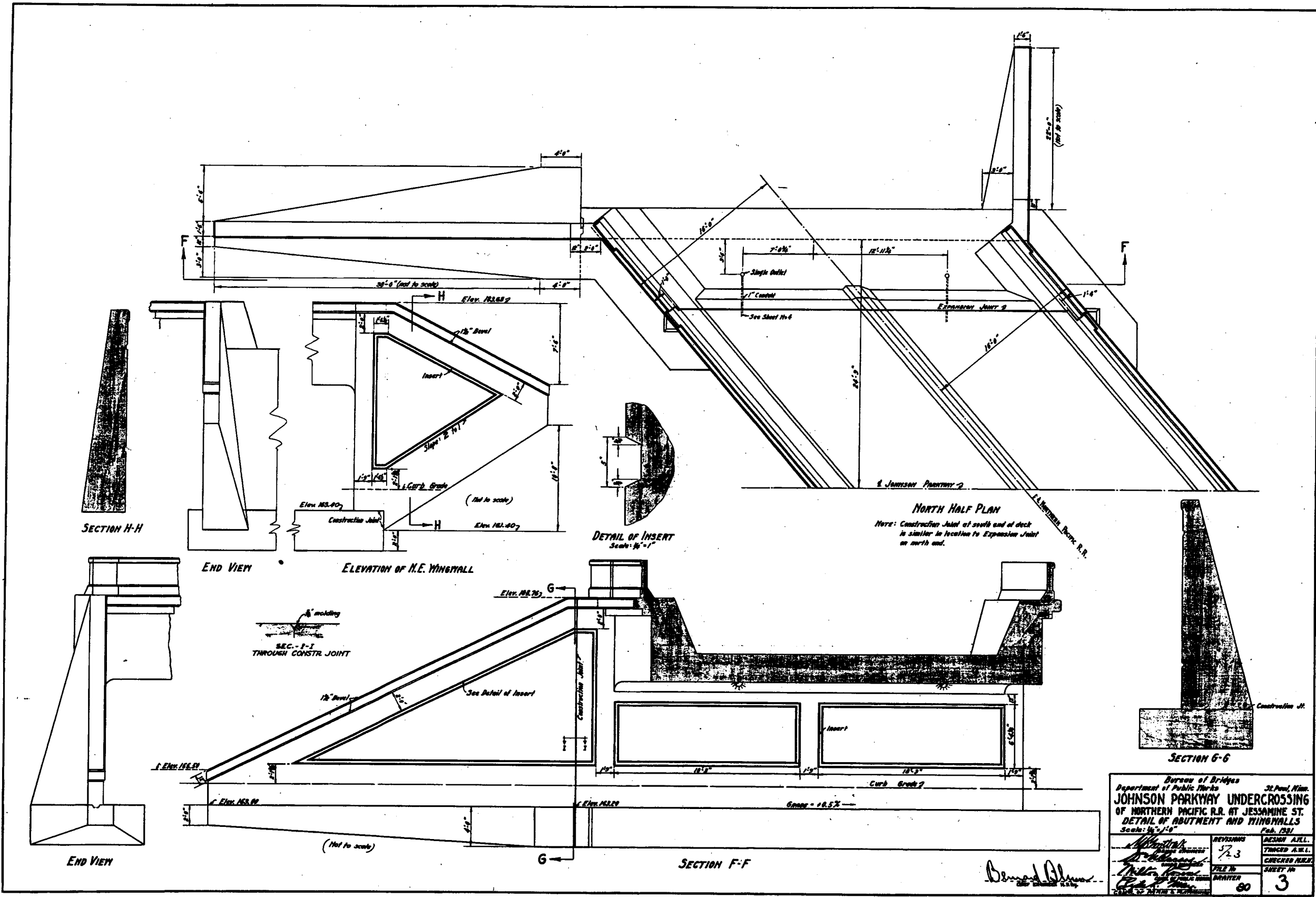


Bureau of Bridges Department of Public Works St. Paul, Minn.		JOHNSON PARKWAY UNDERCROSSING OF NORTHERN PACIFIC R.R. AT JESSAMINE ST. DETAILS OF PILING AND FOOTINGS Scale: 1/2" = 1'-0"	
DESIGNED	REVISIONS	DESIGN A.E.L.	FILE NO.
DRAWN	5/22/98	STICED A.B.L.	80
DWG CHECK		CHECKED J.M.L.	2
SIGNED <i>Tracy C. Moe</i> DATE 5/22/98 REG. NO. 10529		SHEET NO. 2	

28-291

FOR INFORMATION ONLY
IMAGE NOT TO SCALE

	DESIGNED	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 SIGNED <i>Tracy C. Moe</i> DATE 5/22/98 REG. NO. 10529	PREPARED BY BRIDGE DIVISION FOR THE CITY OF ST. PAUL, DEPARTMENT OF PUBLIC WORKS Pedestrian Trail (Old Railroad Bed) Over Johnson Parkway Old Plan Sheets - For Information Only	STATE AID PROJECT NUMBER:	164-129-11	PROJECT:	P1163
	DGN CHECK			DRAWN	DWG CHECK	CAD DRAWING NAME:	/cad/bridges/dwgs/p1163/info2.dwg
				DATE:		SHEET NO. 46 OF 80 SHEET(S)	



Bureau of Bridges Department of Public Works St. Paul, Minn.	
JOHNSON PARKWAY UNDERCROSSING OF NORTHERN PACIFIC R.R. AT JESSAMINE ST. DETAIL OF ABUTMENT AND WINGWALLS Scale: 3/4" = 1'	
REVISED	FILE NO.
723	90
DESIGNED	DRAWER
TRACED A.M.L.	CHECKED A.M.L.
3	3

Bernard Olson

28-291

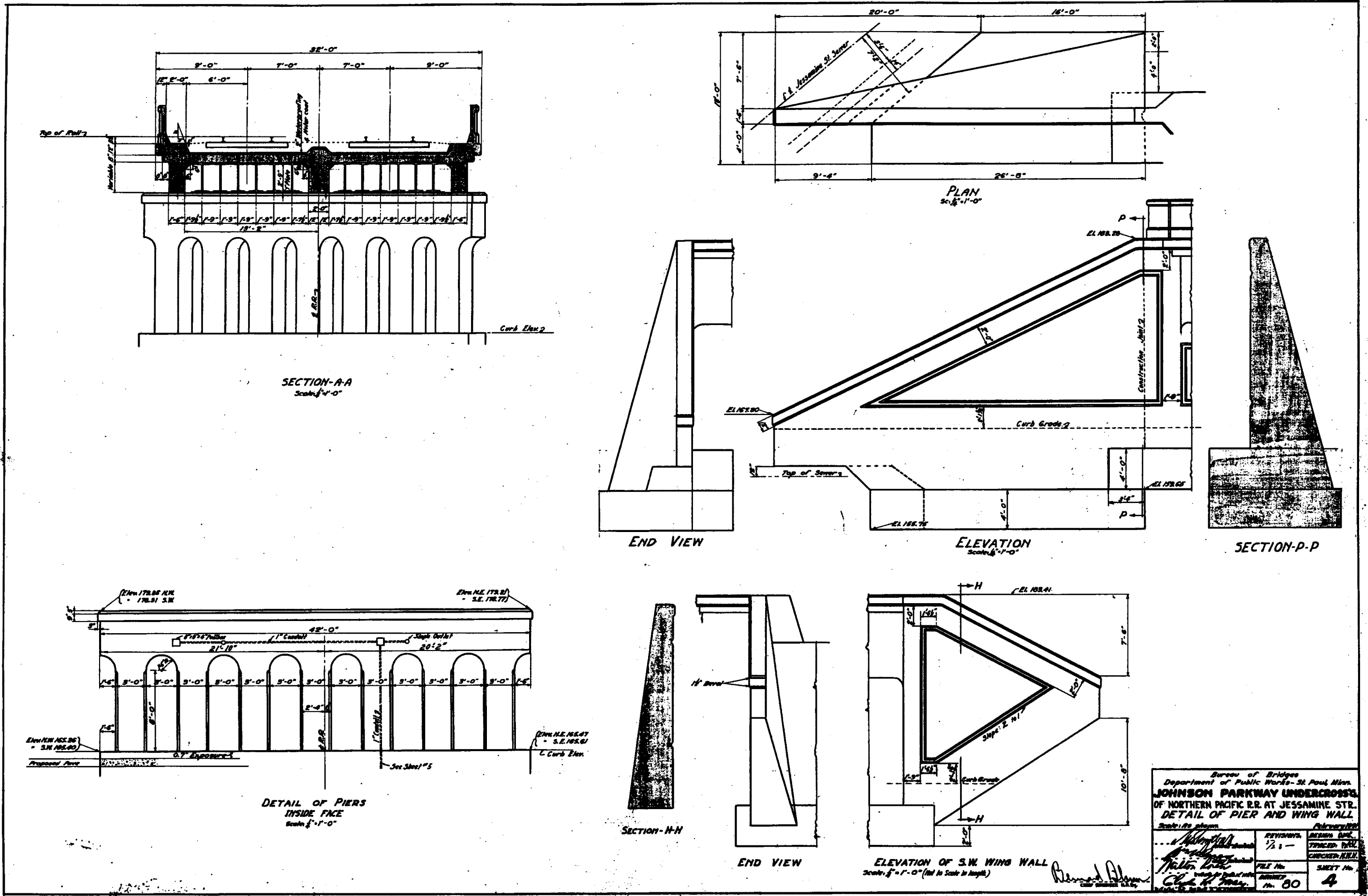
FOR INFORMATION ONLY
IMAGE NOT TO SCALE

DESIGNED		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
DGN CHECK		
DRAWN	RLB	
DWG CHECK		
SIGNED <i>Ray C. Moe</i> DATE <i>5/22/80</i> REG. NO. <i>10529</i>		

PREPARED BY BRIDGE DIVISION FOR THE CITY OF ST. PAUL, DEPARTMENT OF PUBLIC WORKS
Pedestrian Trail (Old Railroad Bed)
Over Johnson Parkway
Old Plan Sheets - For Information Only

STATE AID PROJECT NUMBER:	164-129-11
CAD DRAWING NAME:	/cad/bridges/dwgs/p1163/info3.dwg
DATE:	
SHEET NO. 47 OF 60 SHEET(S)	

PROJECT:	P1163
DRAWER:	
Bridge No.	90422



FOR INFORMATION ONLY
IMAGE NOT TO SCALE

Bureau of Bridges Department of Public Works - St. Paul Minn.			
JOHNSON PARKWAY UNDERCROSSING OF NORTHERN PACIFIC R.R. AT JESSAMINE ST. DETAIL OF PIER AND WING WALL			
Scale: As shown	REVISIONS	APPROVED	DATE
	1/2 1-	TRACY C. MAE	
		CHECKED: RLB	
	FILE No.	SHEET No.	
	80	4	

28-291

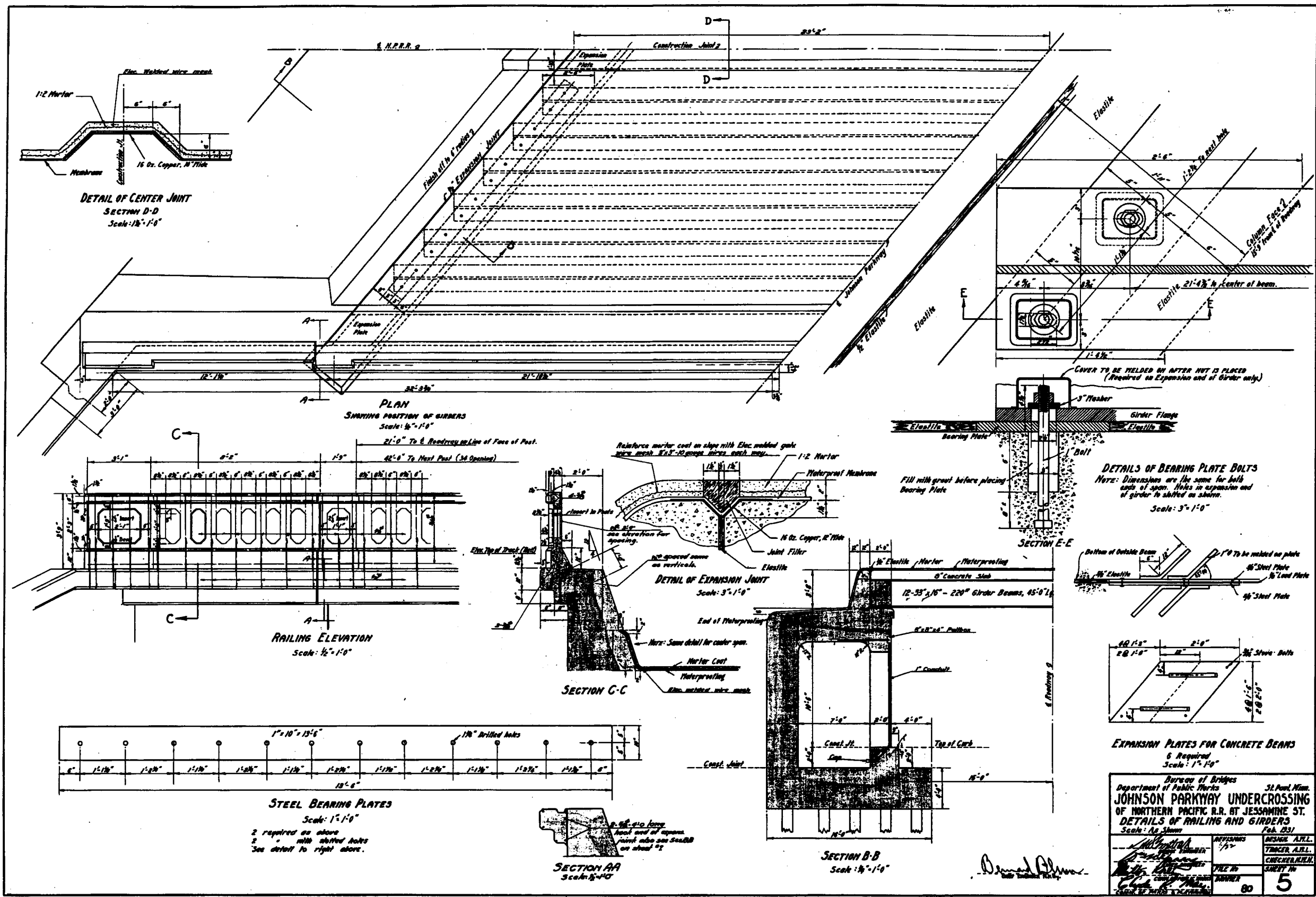
	DESIGNED	I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA SIGNED <i>Tracy C. Mae</i> DATE <i>5/22/98</i> REG. NO. <i>10529</i>
	DGN CHECK	
	DRAWN RLB	
	DWG CHECK	

PREPARED BY BRIDGE DIVISION FOR THE CITY OF ST. PAUL, DEPARTMENT OF PUBLIC WORKS
Pedestrian Trail (Old Railroad Bed)
Over Johnson Parkway
 Old Plan Sheets - For Information Only

STATE AID PROJECT NUMBER:	164-129-11
CAD DRAWING NAME:	/cad/bridges/dwgs/p1163/info4.dwg
DATE:	
SHEET NO. 48 OF 60 SHEET(S)	

PROJECT:	P1163
DRAWER:	
Bridge No.	90422

FOR INFORMATION ONLY
IMAGE NOT TO SCALE



Bureau of Bridges Department of Public Works ST. PAUL, MINN.	
JOHNSON PARKWAY UNDERCROSSING OF NORTHERN PACIFIC R.R. AT JESSAMINE ST. DETAILS OF RAILING AND GIRDERS	
Scale: As Shown	
REVISED	DATE
1/17	
CHECKED	DATE
TRACER, A.R.L.	
CHECKER, R.H.H.	
DRAWN	DATE
80	
SHEET NO.	5

28-29

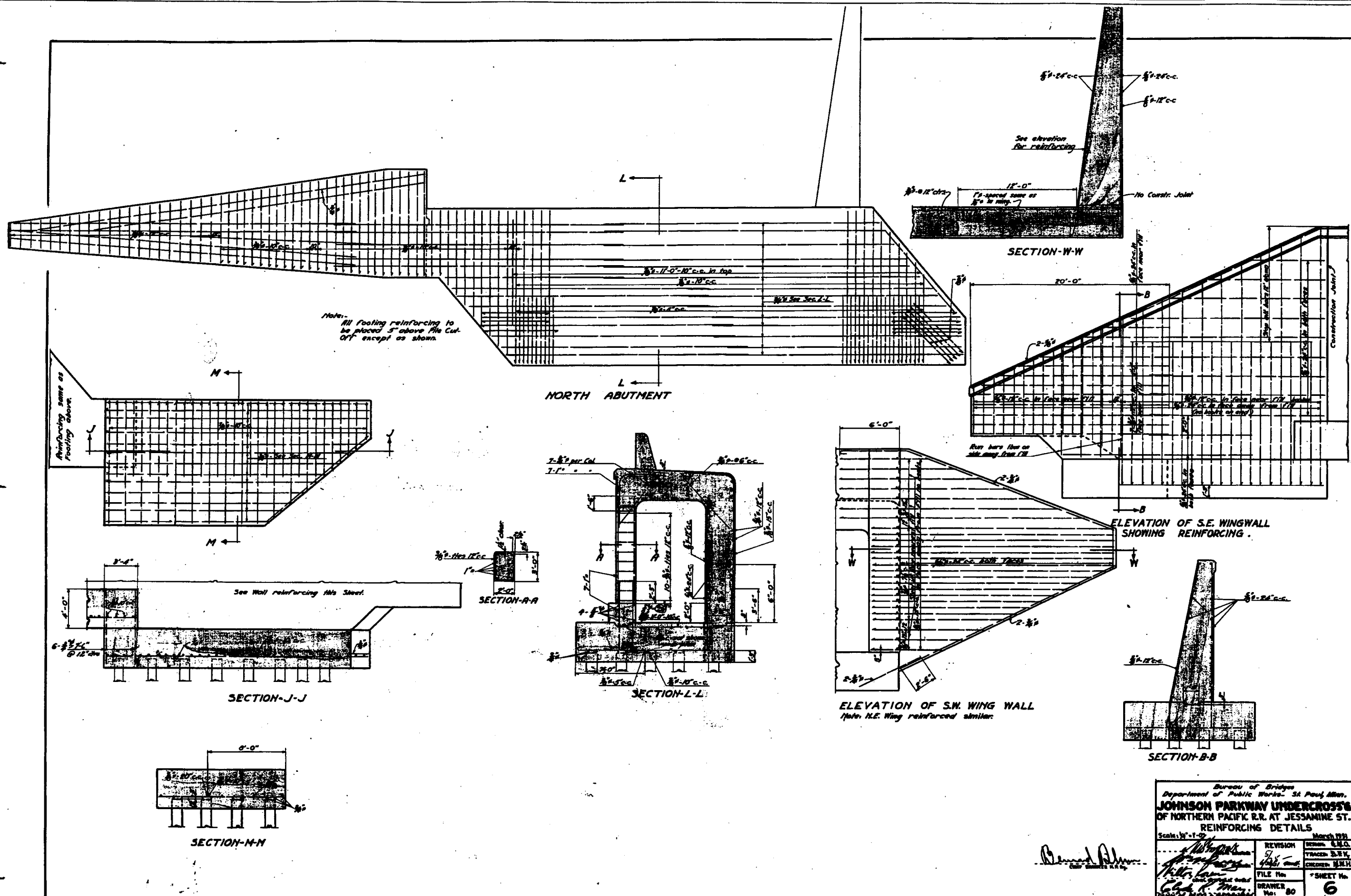
MICRO-LINED

DESIGNED		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
DGN CHECK		
DRAWN	RLB	
DWG CHECK		
SIGNED	<i>Tracy C. Moe</i>	
DATE	5/22/78	REG. NO. 10527

PREPARED BY BRIDGE DIVISION FOR THE CITY OF ST. PAUL, DEPARTMENT OF PUBLIC WORKS
**Pedestrian Trail (Old Railroad Bed)
 Over Johnson Parkway**
 Old Plan Sheets - For Information Only

STATE AID PROJECT NUMBER:	164-129-11
CAD DRAWING NAME:	/cad/bridges/dwgs/p1163/info5.dwg
DATE:	
SHEET NO.	49 OF 80 SHEET(S)

PROJECT:	P1163
DRAWER:	
Bridge No.	80422



Bureau of Bridges
 Department of Public Works, St. Paul, Minn.
JOHNSON PARKWAY UNDERCROSSING
 OF NORTHERN PACIFIC R.R. AT JESSAMINE ST.
REINFORCING DETAILS
 Scale: 1/4" = 1'-0"

REVISION	REVISION	REVISION	REVISION
5/8	4/8	4/8	4/8
FILE No.	DRAWER	DATE	SHEET No.
	80		6

March 1931
 TRACER: B.R.V.
 CHECKER: M.M.H.
 MICROFILMED

28-291

FOR INFORMATION ONLY
 IMAGE NOT TO SCALE

DESIGNED _____
 DGN CHECK _____
 DRAWN RLB
 DWG CHECK _____

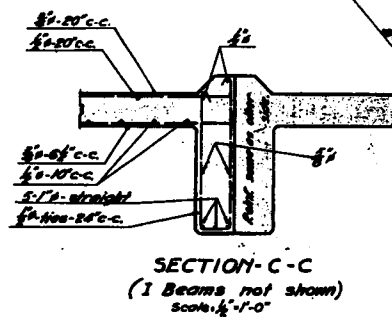
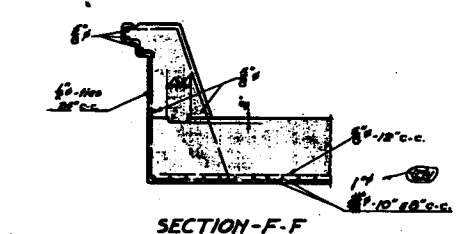
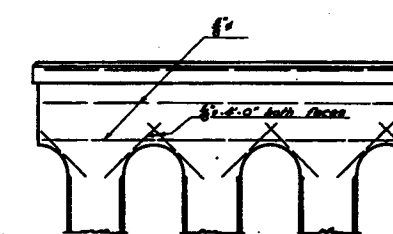
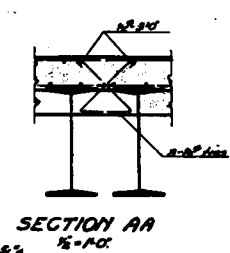
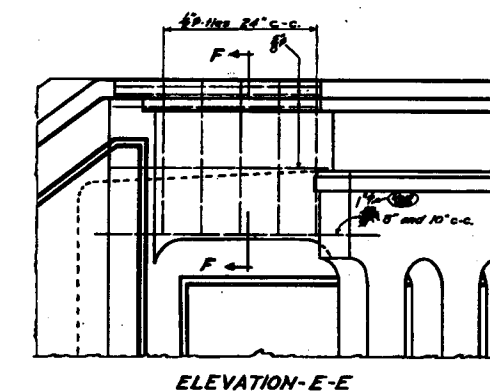
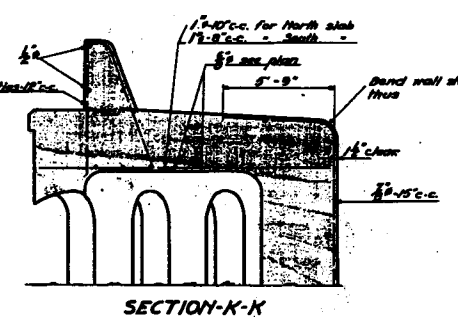
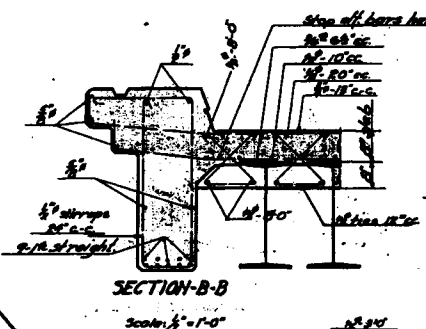
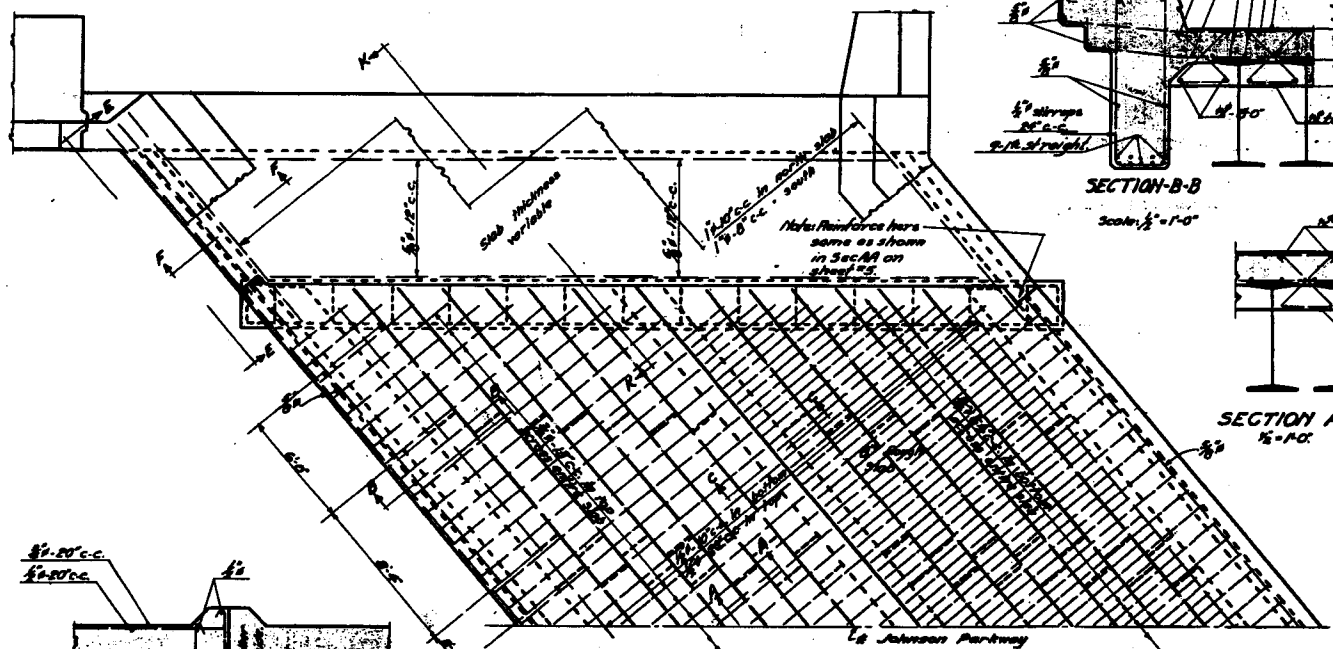
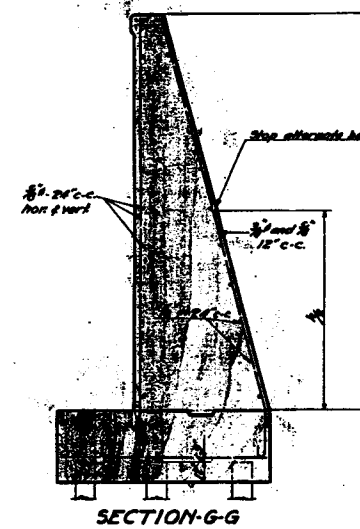
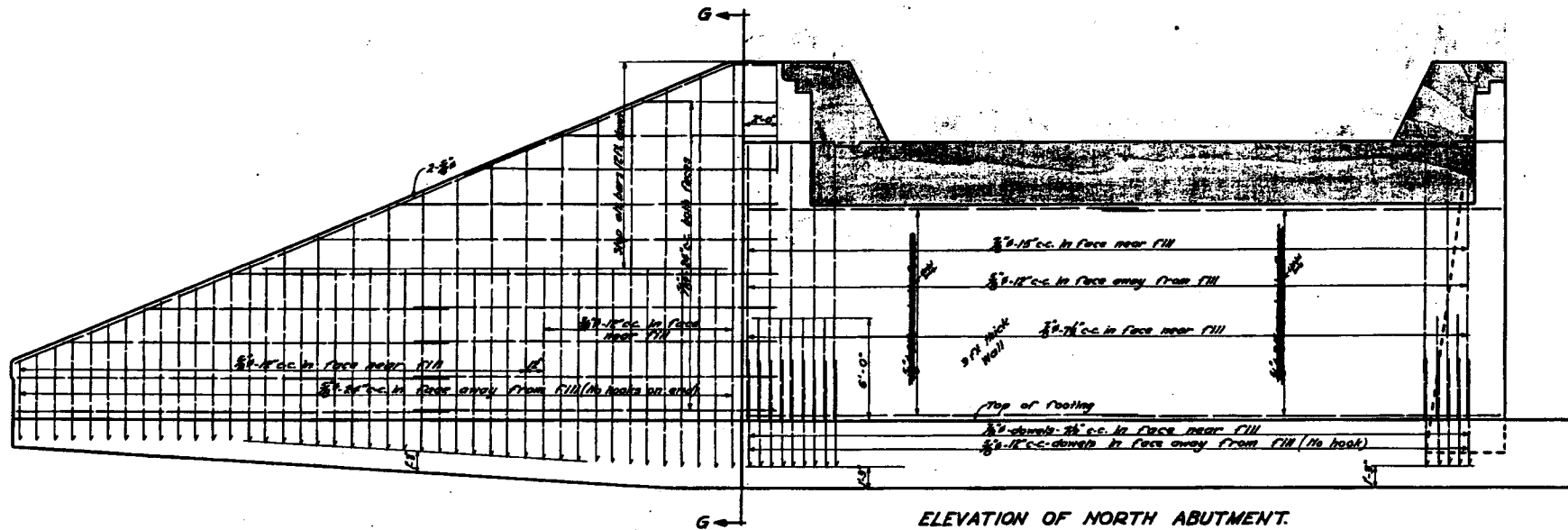
I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA

Signed *Tracy C. Moe* DATE *5/22/78* REG. NO. *10529*

PREPARED BY **BRIDGE DIVISION** FOR THE CITY OF ST. PAUL, DEPARTMENT OF PUBLIC WORKS
Pedestrian Trail (Old Railroad Bed)
Over Johnson Parkway
 Old Plan Sheets - For Information Only

STATE AID PROJECT NUMBER: 164-129-11
 CAD DRAWING NAME: /cad/bridges/dwgs/p1163/info6.dwg
 DATE: _____ SHEET NO. 50 OF 60 SHEET(S)

PROJECT: P1163
 DRAWER: _____
Bridge No. 90422



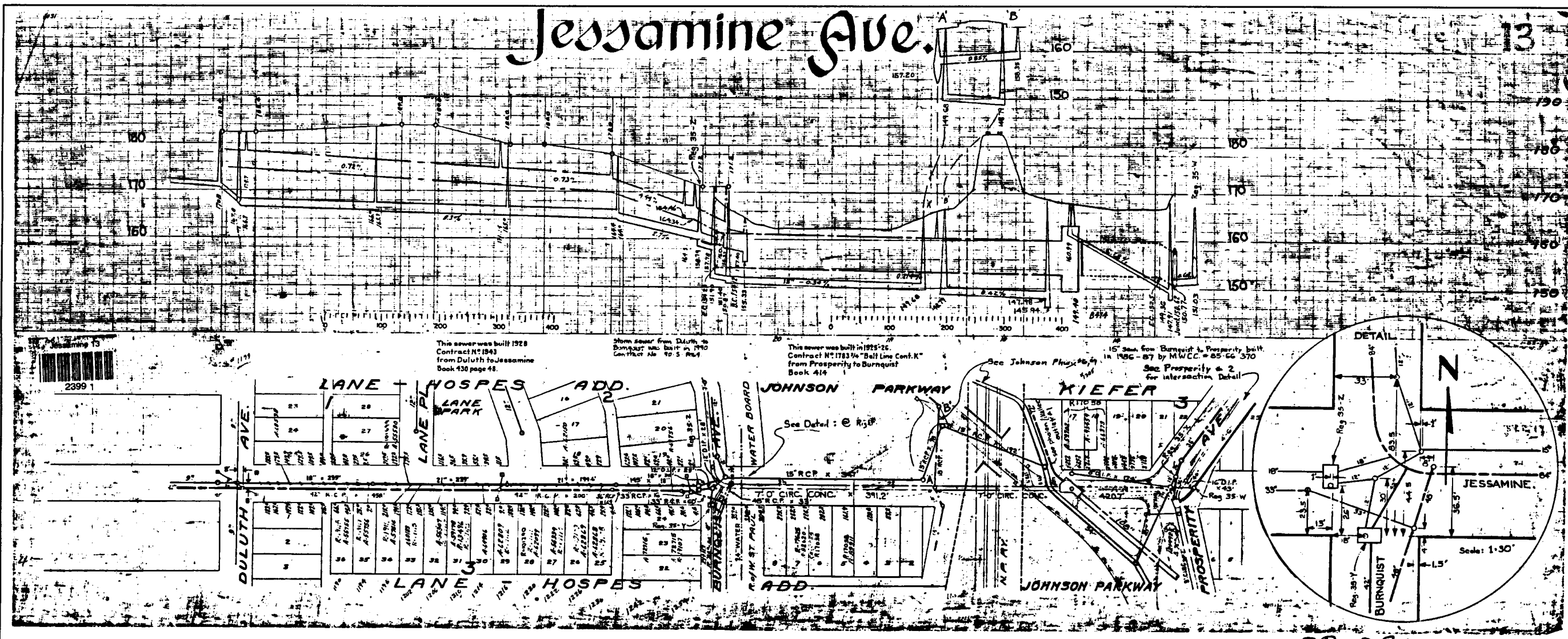
Bureau of Bridges Department of Public Works - St. Paul, Minn.		
JOHNSON PARKWAY UNDERCROSSING OF NORTHERN PACIFIC R.R. AT JESSAMINE ST. REINFORCING DETAILS		
Scale: 1/2" = 1'-0"	REVISIONS	March 1911
DESIGNED: <i>W. H. ...</i>	DESIGN: C.M.D.	TRACED: E.P.V.
DRAWN: <i>W. H. ...</i>	CHECKED: M.W.	
FILE NO.	SHEET NO.	
NO. 80	7	

Bernard Blum
CITY ENGINEER

28-291

FOR INFORMATION ONLY
IMAGE NOT TO SCALE

	DESIGNED		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 SIGNED <i>Tracy C. Moe</i> DATE <i>5/24/18</i> REG. NO. <i>10529</i>	PREPARED BY BRIDGE DIVISION FOR THE CITY OF ST. PAUL, DEPARTMENT OF PUBLIC WORKS Pedestrian Trail (Old Railroad Bed) Over Johnson Parkway Old Plan Sheets - For Information Only	STATE AID PROJECT NUMBER:	164-129-11	PROJECT:	P1163
	DGN CHECK				CAD DRAWING NAME:	/cad/bridges/dwgs/p1163/info7.dwg	DRAWN:	
	DRAWN	RLB			DATE:		BRIDGE NO.	90422
	DWG CHECK				SHEET NO.	51 OF 60 SHEET(S)		



28-291

FOR INFORMATION ONLY
IMAGE NOT TO SCALE

	DESIGNED		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 SIGNED <i>Tracy C. Moore</i> DATE <i>5/22/98</i> REG. NO. <i>10529</i>
	DGN CHECK		
	DRAWN	RLB	
	DWG CHECK		

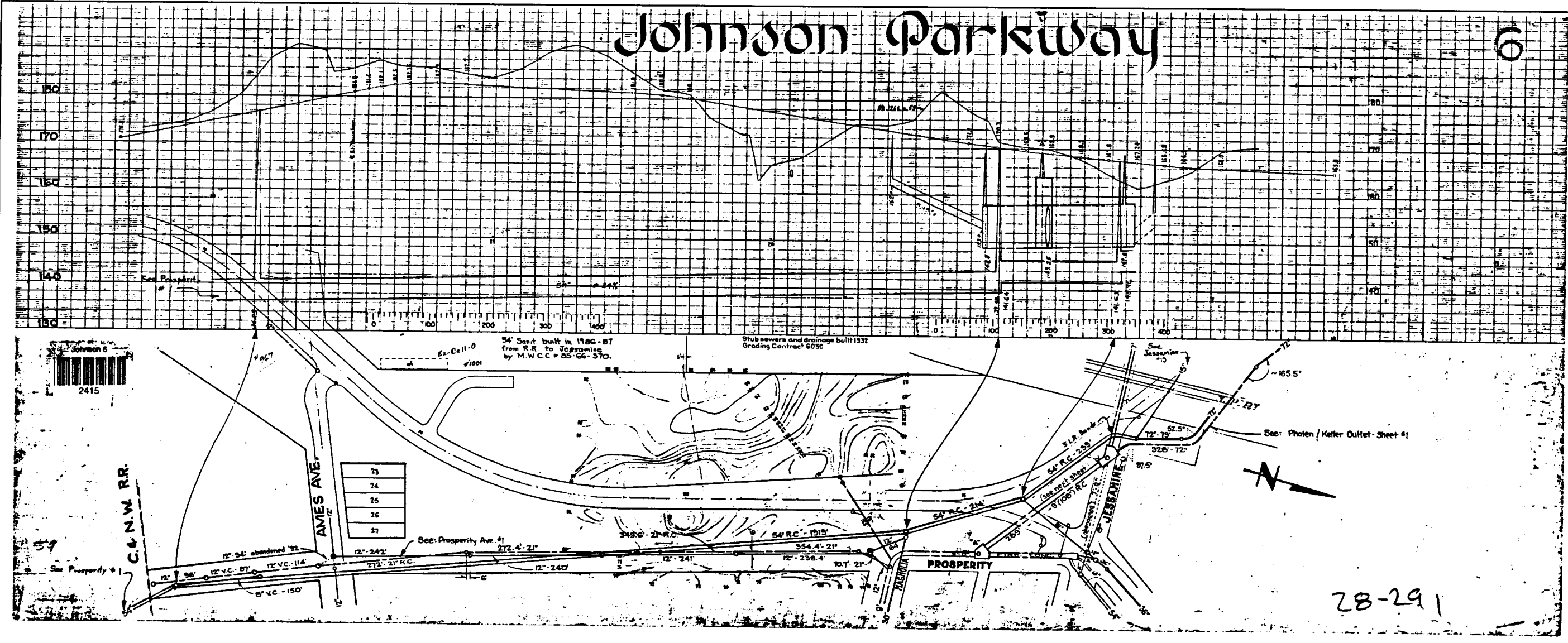
PREPARED BY BRIDGE DIVISION FOR THE CITY OF ST. PAUL, DEPARTMENT OF PUBLIC WORKS
Pedestrian Trail (Old Railroad Bed)
Over Johnson Parkway
 Old Sewer Plan Sheets - For Information Only

STATE AND PROJECT NUMBER:	164-129-11
CAD DRAWING NAME:	/cad/bridges/dwgs/p1163/info9.dwg
DATE:	
SHEET NO.	52 OF 60 SHEET(S)

PROJECT:	P1163
DRIVER:	
Bridge No.	90422

Johnson Parkway

6

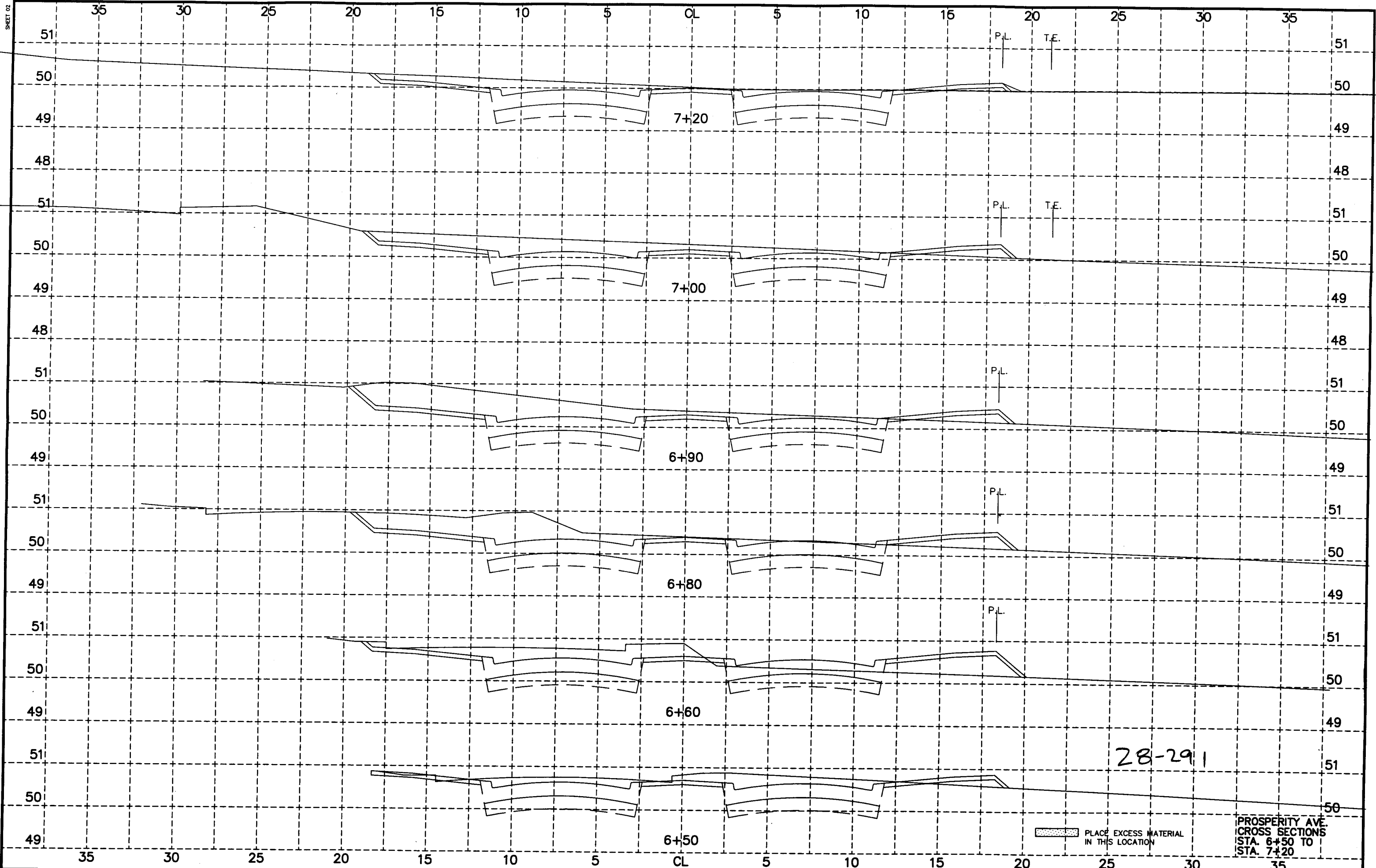


FOR INFORMATION ONLY
IMAGE NOT TO SCALE

28-291

	DESIGNED	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 SIGNED <i>Tracy C. Moe</i> DATE <i>5/23/11</i> REG. NO. <i>10529</i>	PREPARED BY BRIDGE DIVISION FOR THE CITY OF ST. PAUL, DEPARTMENT OF PUBLIC WORKS Pedestrian Trail (Old Railroad Bed) Over Johnson Parkway Old Sewer Plan Sheets - For Information Only	STATE AID PROJECT NUMBER: 164-129-11	PROJECT: P1183
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	DRAWN: RLB			DATE:	SHEET NO. 53 OF 80 SHEET(S)
	DWG CHECK				

SHEET 02



28-291

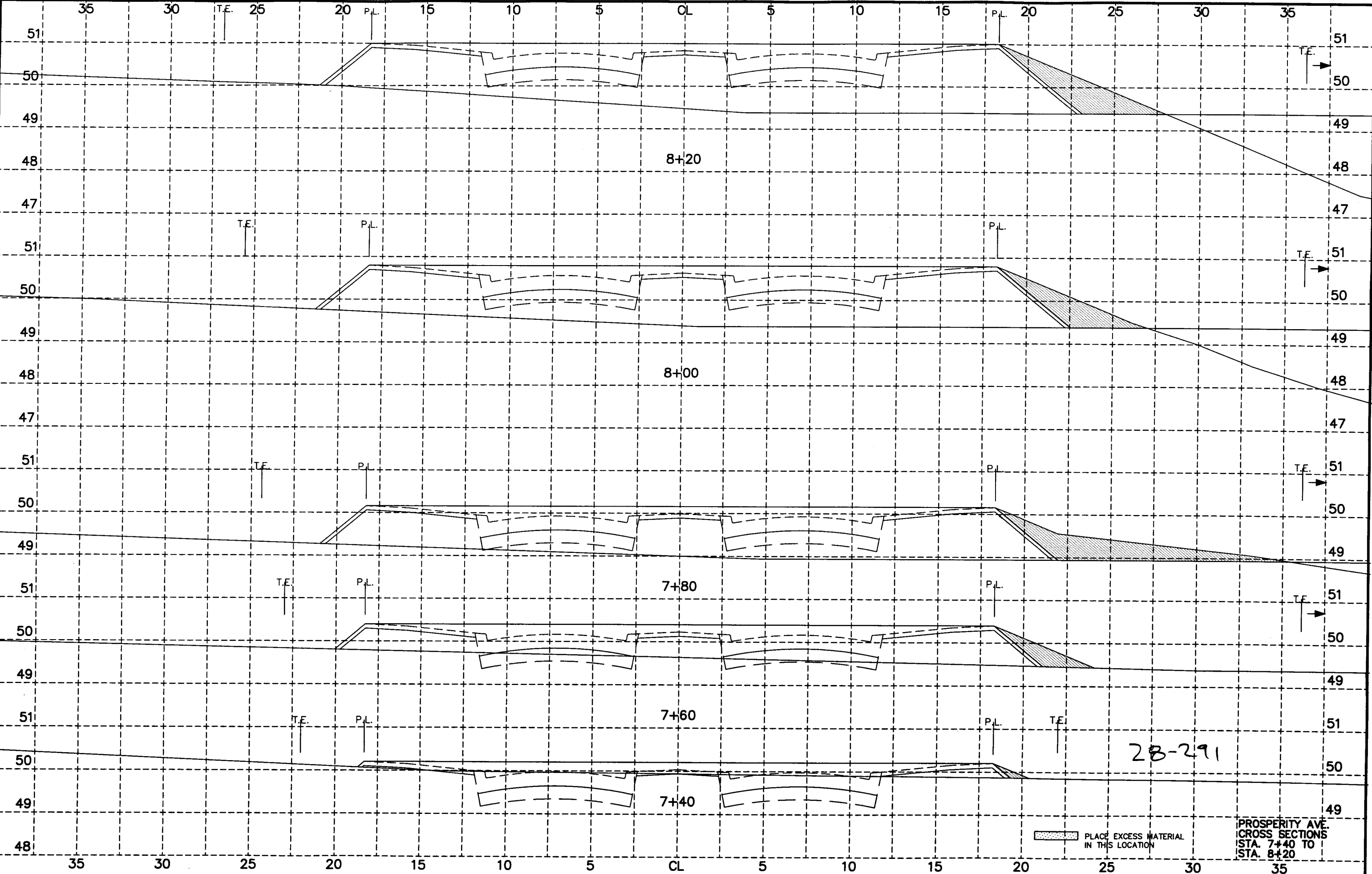
PLACE EXCESS MATERIAL IN THIS LOCATION

PROSPERITY AVE CROSS SECTIONS STA. 6+50 TO STA. 7+20

PROS-01A 98/07/02

SHEET 03

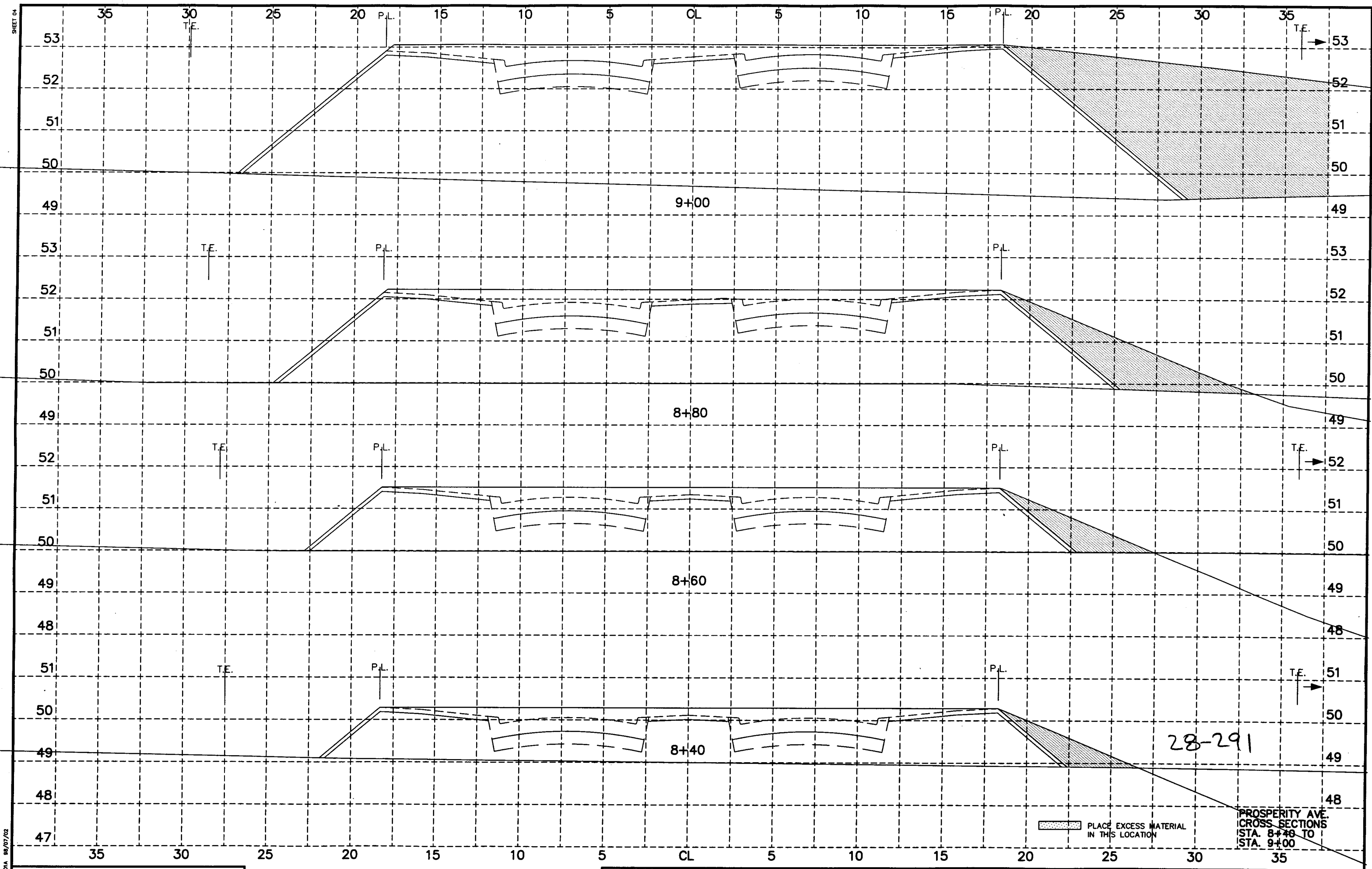
PROS-01A 98/07/02




28-291

PLACE EXCESS MATERIAL IN THIS LOCATION

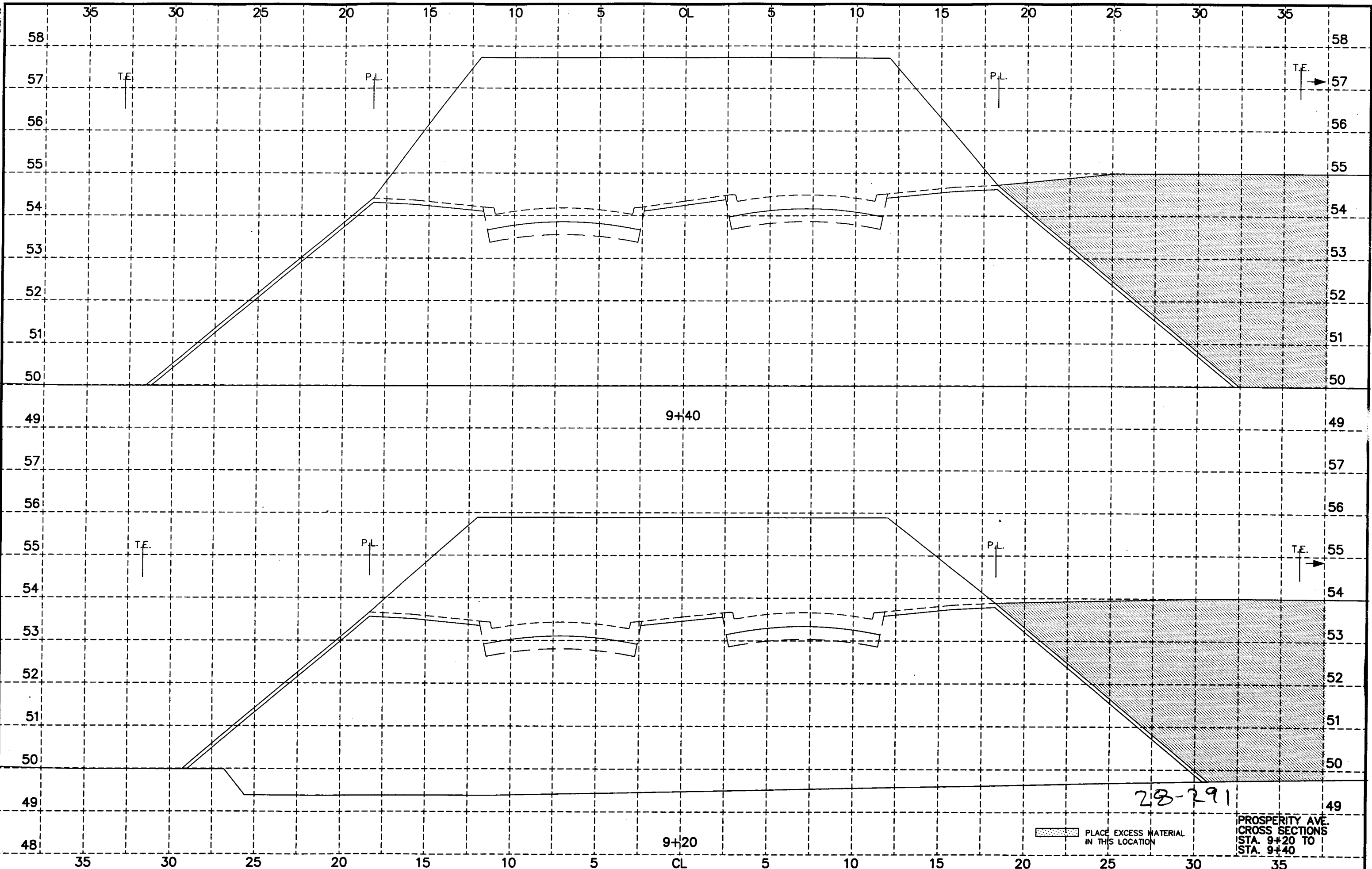
PROSPERITY AVE.
CROSS SECTIONS
STA. 7+40 TO
STA. 8+20



 PLACE EXCESS MATERIAL IN THIS LOCATION
 PROSPERITY AVE. CROSS SECTIONS STA. 8+40 TO STA. 9+00

28-291

SHEET 03

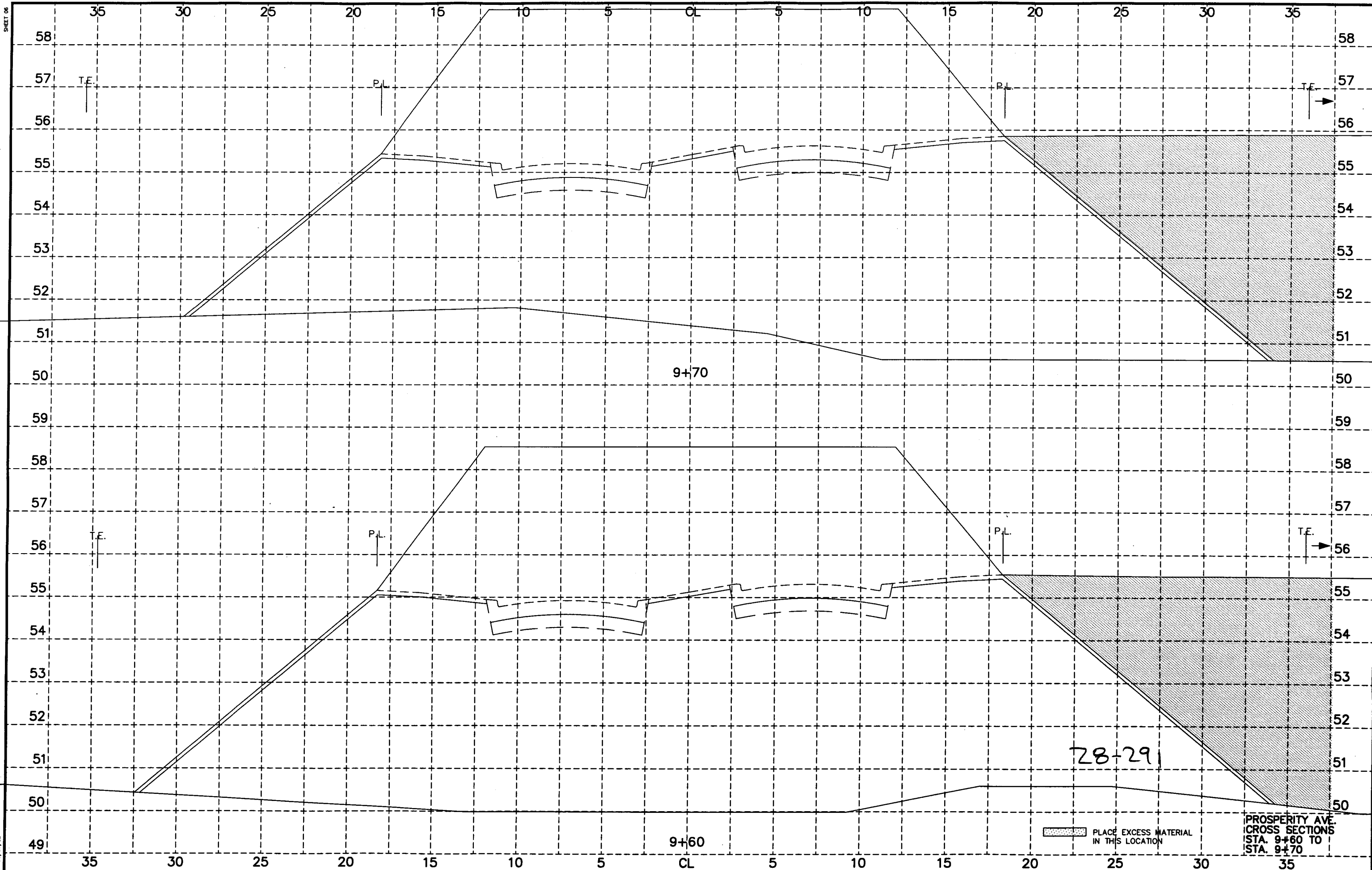


PROS-01A 98/07/02

PLACE EXCESS MATERIAL
IN THIS LOCATION

PROSPERITY AVE.
CROSS SECTIONS
STA. 9+20 TO
STA. 9+40

28-291



SHEET 06

PROS-01A 98/07/02

98-P-1163 PHALEN VILLAGE PUBLIC IMPROVEMENTS
PAVING DRAWER 12 DRAWING NO. 1424

SAP 62-664-04, 164-020-90

SHEET 58 OF 60 SHEETS

PLACE EXCESS MATERIAL
IN THIS LOCATION

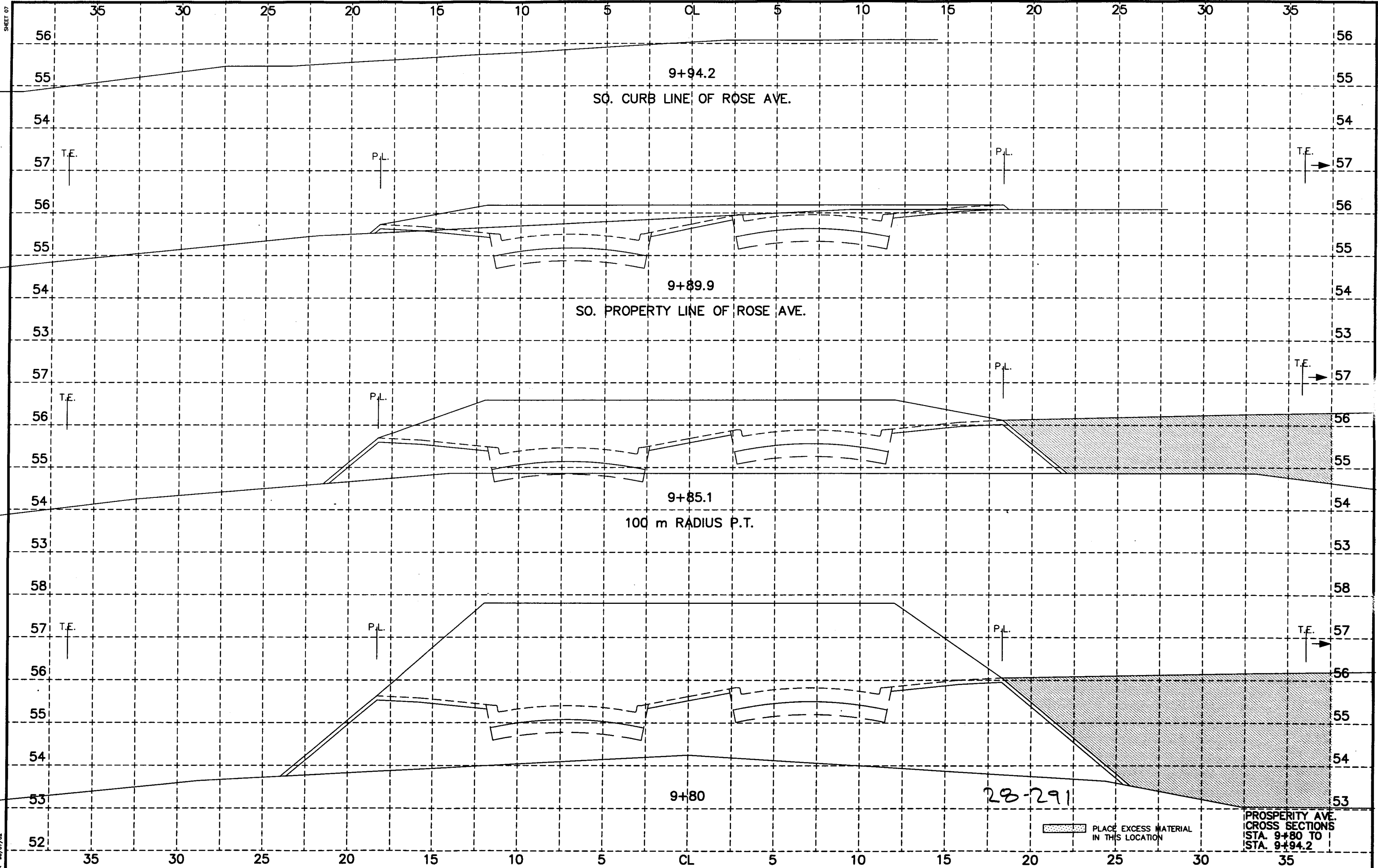
PROSPERITY AVE.
CROSS SECTIONS
STA. 9+60 TO
STA. 9+70


9+70

9+60

28-29

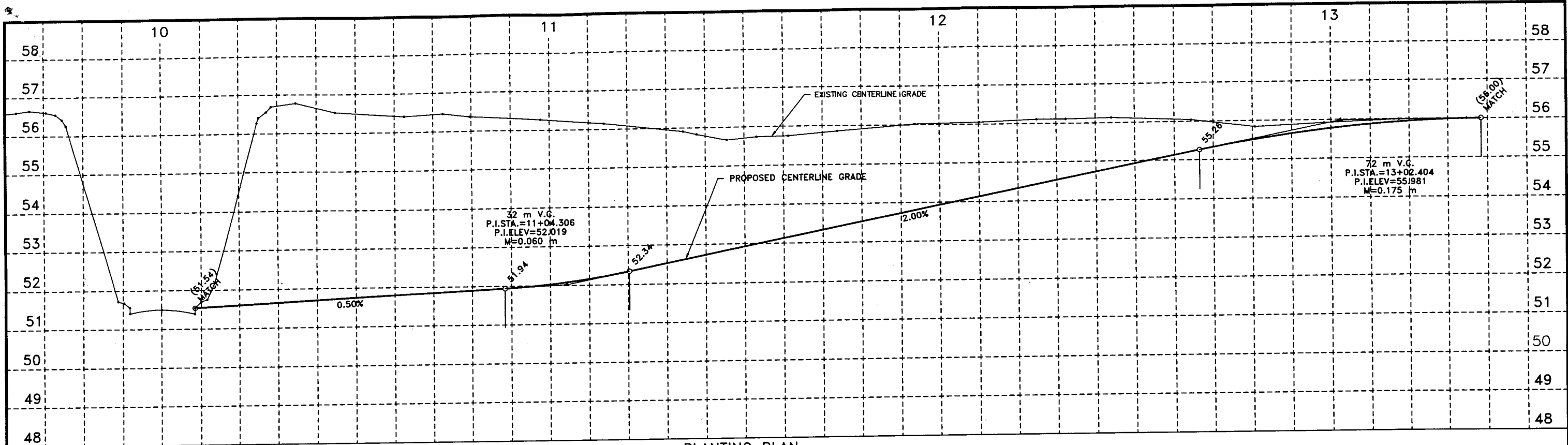
SHEET 07



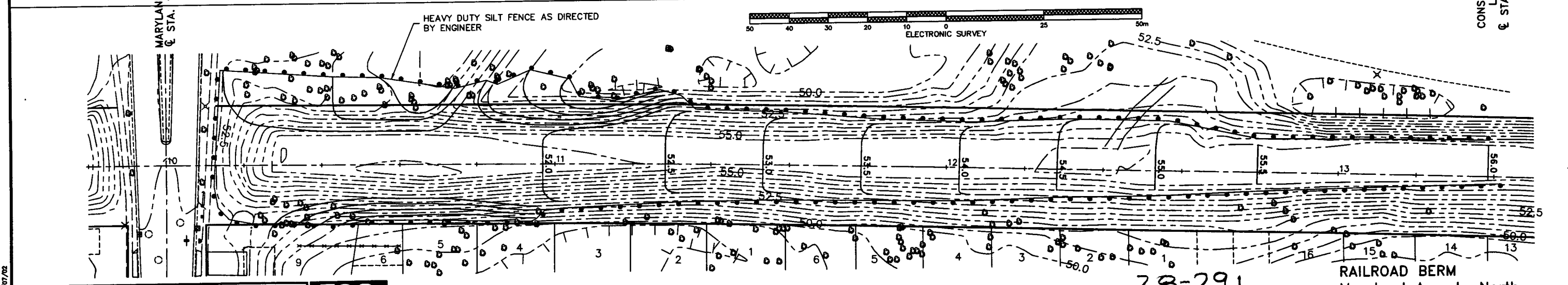
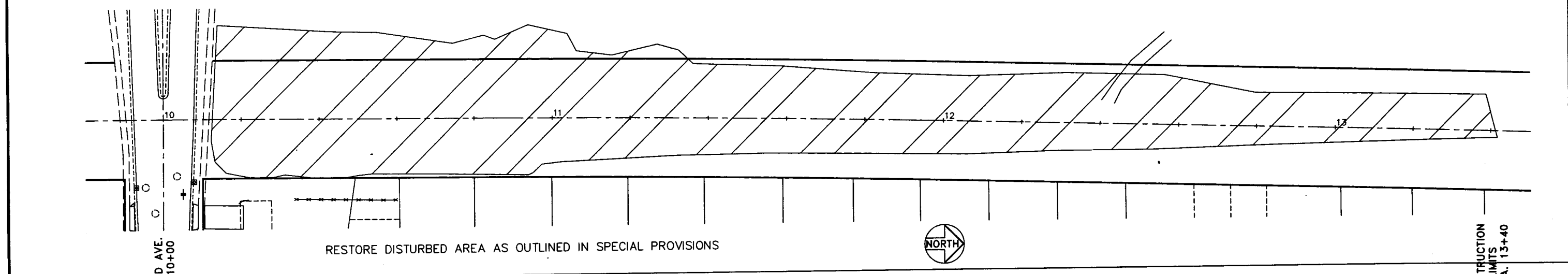
 PLACE EXCESS MATERIAL
 IN THIS LOCATION

PROSPERITY AVE.
 CROSS SECTIONS
 STA. 9+80 TO
 STA. 9+94.2

28-291



PLANTING PLAN



PROSPERITY/JOHNSON PKWY.
98-P-1163
PAVING DR. 12 DRWG. NO. 1424

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DAILY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.



EXISTING AND GRADING PLAN SAP 62-664-04, 164-020-90, 164-129-11, 164-253-03

28-291

RAILROAD BERM
Maryland Ave. to North
SHEET 60 OF 60 SHEETS