DESIGN DATA - WEST OF MAIN AVE					
Traffic		Average Daily			
Current	2018	Pass: 2679	Trucks: 355	Total: 3034	
Forecast	2038	Pass: 3981	Trucks: 527	Total: 4508	
Clear Zone Distance: 14'			Design Speed: 35 mph		
Minimum Sight Dist. for Stopping: 250'			Bridges: N/A		
Pavement Design Life 30 (years)					
Design Accumulated One-Way Rigid ESALs: 2,314,337					

DESIGN DATA - EAST OF MAIN AVE					
Traffic		Average Daily			
Current	2018	Pass: 3523	Trucks: 91	Total: 3614	
Forecast	2038	Pass: 5236	Trucks: 135	Total: 5371	
Clear Zone Distance: 14'			Design Speed: 35 mph		
Minimum Sight Dist. for Stopping: 250'			Bridges: N/A		
Pavement Design Life 20 (years)					
Design Accumulated One-Way Flexible ESALs: 232,612					

	STATE	PROJECT NO.	PCN	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	21723	1	1

JOB #32
CITY OF DICKINSON, STARK COUNTY NORTH DAKOTA

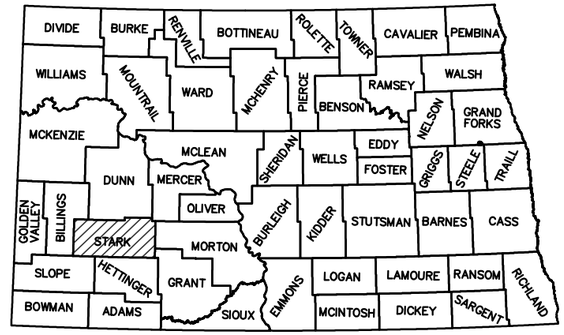
NDDOT PROJECT NO. SU-5-983(059)059
8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

Grading, Aggregate Base Course, Hot Mix Asphalt, PCC Pavement, Curb & Gutter, Sidewalks, Driveway, Valley Gutter, Signing, Pavement Marking, Lighting, & Water Main

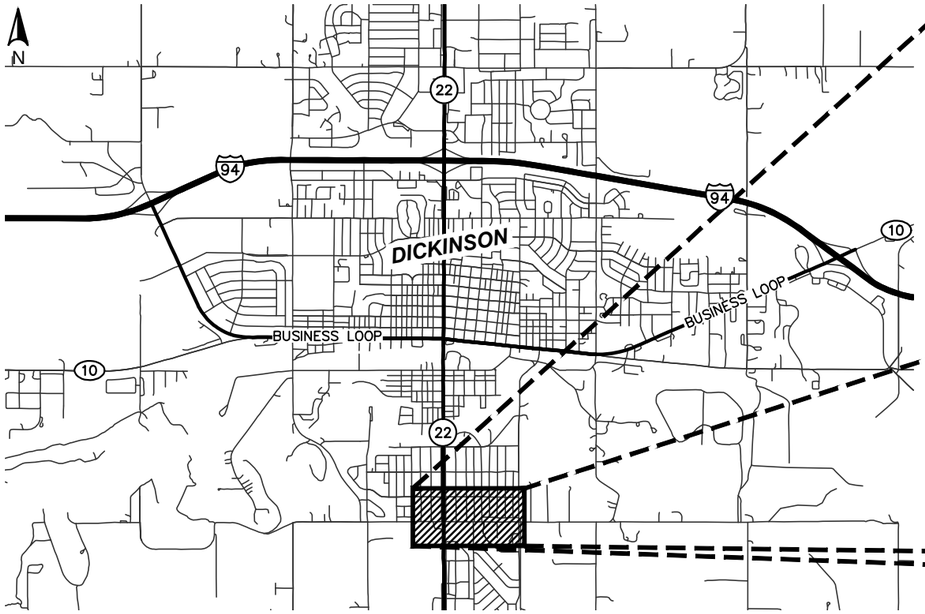
PROJECT NUMBER \ DESCRIPTION	NET MILES	GROSS MILES
SU-5-983(059)059	0.632	0.648

GOVERNING SPECIFICATIONS

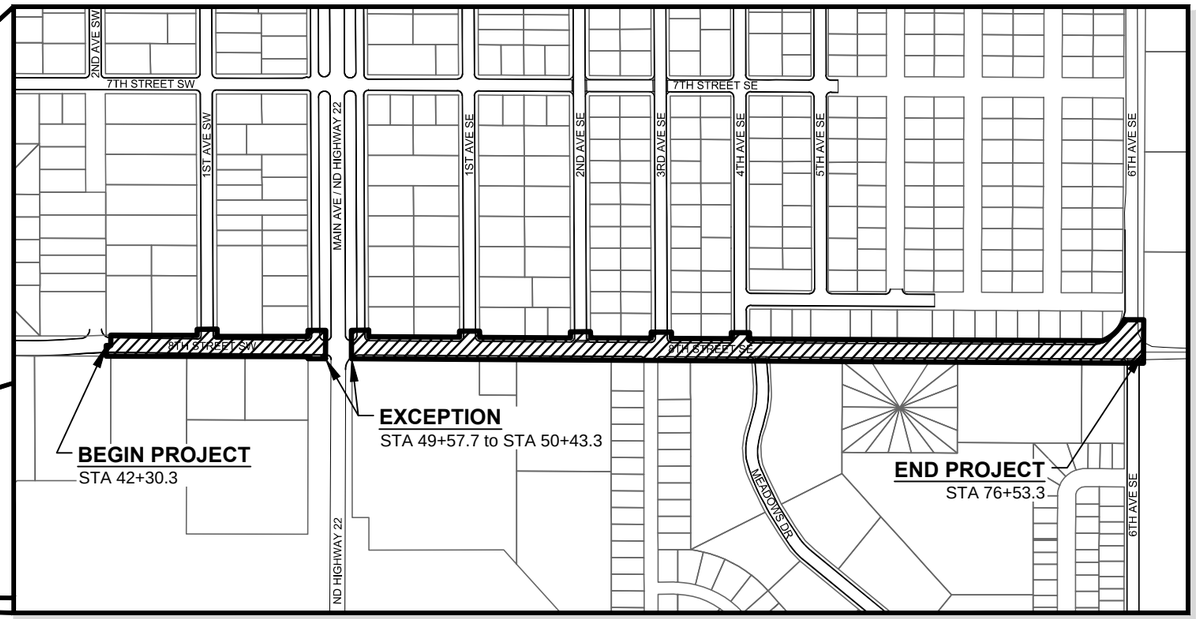
2014 Standard Specifications for Road and Bridge Construction adopted by the North Dakota Department of Transportation and the Supplemental Specifications effective on the date the project is advertised.



STATE COUNTY MAP



CITY MAP
1"=1 mile



DESIGNERS: HIGHLANDS ENGINEERING

Andrew Schrank, PE

KC Homiston, PE/LS

Andrew Albrecht, EIT

DESIGNERS: PRAIRIE ENGINEERING

Jeremy Butman, PE

CITY OF DICKINSON REVIEW

Craig Kubas /S/ Date: 9-1-17

Craig Kubas, City Engineer
City of Dickinson, ND

I hereby certify that the attached plans were prepared by me or under my direct supervision and that I am a duly registered professional engineer under the laws of the state of ND.

APPROVED DATE 9-1-17

Andrew Schrank /S/

Andrew Schrank, PE-9814
Highlands Engineering & Surveying, PLLC

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HIGHLANDS ENGINEERING

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	2	1

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LIST OF SPECIAL PROVISIONS (SP)

SP #	Description
SP 003(14)	Temporary Erosion and Sediment Best Management Practices
SP 525(14)	Street Lighting
SP 556(14)	Internal Manhole Chimney Seals

LIST OF STANDARD DRAWINGS

Standard No.	Description
D-101-1,-2,-3	NDDOT Abbreviations
D-101-10	NDDOT Utility Company and Organization Abbreviations
D-101-20,-21	Line Styles
D-101-30,-31,-32	Symbols
D-261-1	Erosion Control Fiber Roll Placement Details
D-550-2	Longitudinal Joint Details
D-550-3	Transverse Contraction Joint Details
D-550-4	Transverse Expansion Joint Detail
D-550-5	Transverse Construction Joint
D-704-2	Traffic Control for Coring of Hot Bituminous Pavement
D-704-7	Breakaway Systems for Construction Zone Signs - Perforated Tube
D-704-8	Breakaway Systems for Construction Zone Signs - U-Channel Post
D-704-9	Construction Sign Details Terminal and Guide Signs
D-704-10	Construction Sign Details Regulatory Signs
D-704-11	Construction Sign Details Warning Signs
D-704-12	Shoulder Closure Tapers
D-704-13	Barricade and Channelizing Device Details
D-704-14	Construction Sign Punching and Mounting Details
D-704-15	Road Closure Layouts
D-704-17	Sign Layout for One Lane Closure Two Lane Roadway
D-704-19	Road Closure and Lane Closure on a Two Way Road Layouts
D-704-21	Detour and Roadway Diversion Sign Layouts
D-704-22	Construction Truck and Temporary Detour Layouts
D-704-23	Short Term Urban Detour and Lane Closure on a Divided Highway Layouts
D-704-24	Shoulder Closures and Bridge Painting Layouts
D-701-25	Lane Closures on Urban Streets Layouts
D-704-26	Miscellaneous Sign Layouts
D-704-34	Sign Layout for One Lane Closure
D-704-34A	Traffic Control System Lane Shift Between a Lane Closure and an Opposite Lane Closure
D-704-50	Portable Sign Support Assembly
D-706-1	Bituminous Laboratory
D-748-1	Curb & Gutter and Valley Gutter
D-750-1	Concrete Driveway - Urban
D-750-2	Sidewalk
D-750-3	Curb Ramp Details
D-754-23	Perforated Tube Assembly Details
D-754-24	Mounting Details Perforated Tube
D-754-24A	Breakaway Coupler System for Perforated Tubes
D-754-25	Mounting Details Perforated Tube
D-754-26,-27,-29,-32	Sign Punching, Stringer and Support Location Details Regulatory, Warning, and Guide Signs
D-754-51	Sign Punching, Stringer and Support Location Details - Route Marker Signs
D-762-1	Pavement Marking Message Details
D-770-2A	Combination Feed Point Details
D-770-3	Pull Box Details

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
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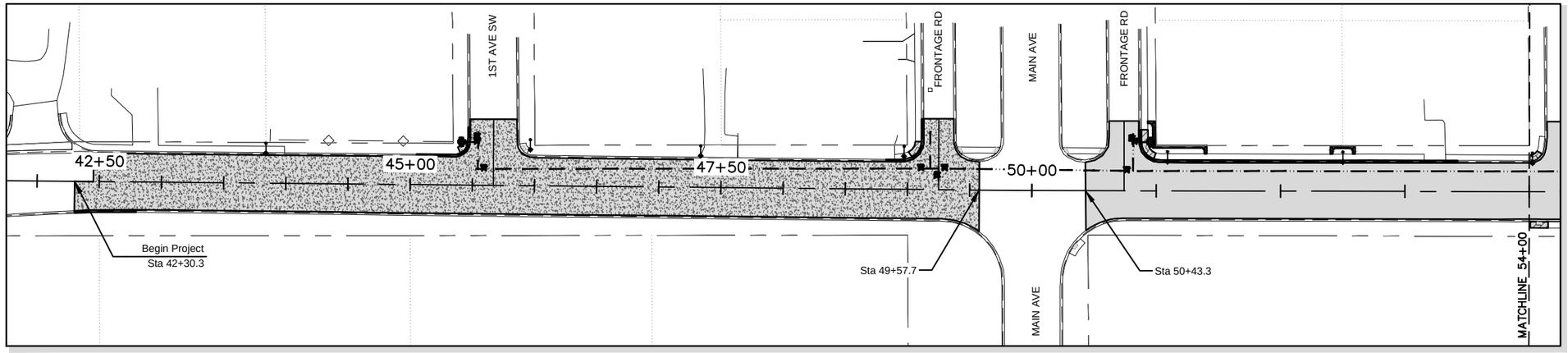

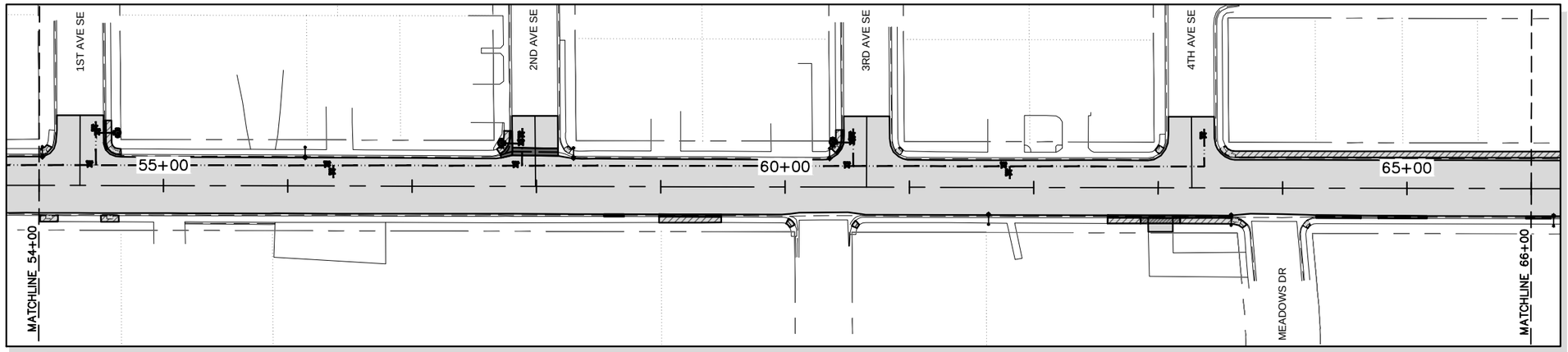

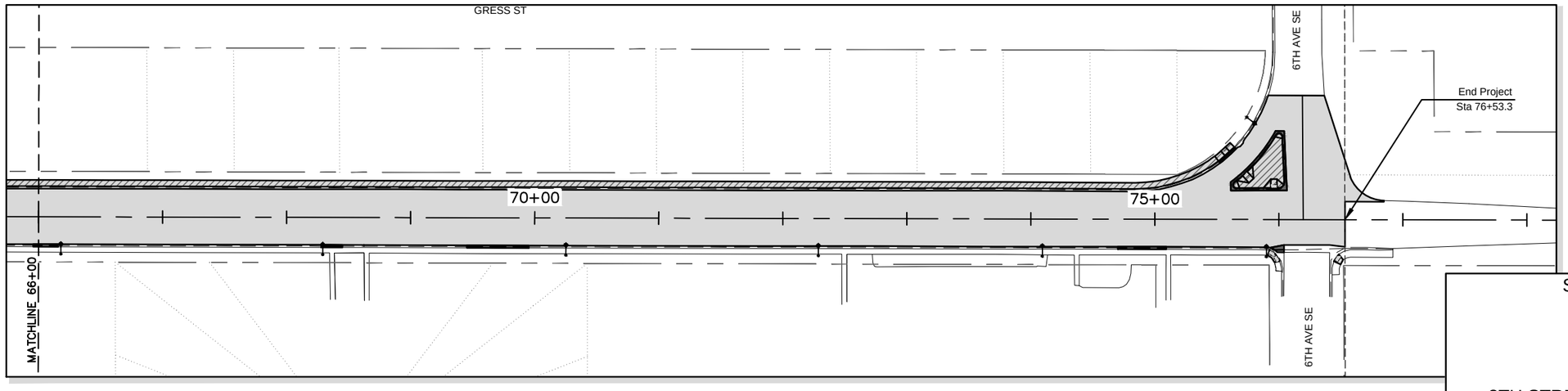

LEGEND

- SUPERPAVE FAA 40
- 8IN NON-REINF CONCRETE PVMT CL AE-DOWELED
- SIDEWALK CONCRETE
- DRIVEWAY CONCRETE
- CURB AND GUTTER
- VALLEY GUTTER
- WATER MAIN REPLACEMENT
- NEW LIGHT STANDARD

N W E S

0 100'

SCALE: 1" = 100'

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SCOPE OF WORK

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

9/1/2017 8:30:30 AM schrank h:\168199\project cad\current plans\004SW_001_scope.dwg

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
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NOTES

105-110 PAVEMENT SWEEPING: Sweep paved areas that were used by construction traffic before opening these areas to public traffic.

Sweep all newly constructed pavement no more than 24 hours before a scheduled final inspection.

Use a vacuum or pick-up type sweeper to perform this work.

105-200 UTILITY COORDINATION: A utility coordination meeting is required.

105-P01 COORDINATION WITH CITY FOR TRAFFIC INTERRUPTIONS: At least 48 hours prior to interrupting traffic flow or access notify Police (701.456.7762), Ambulance (701.225.1500), Fire Department (701.456.7625),and Dispatch (701.456.7620). Complete the City's *Application for Street Closure for Construction* form found on the City's web site *www.dickinsongov.com*, and comply with the required lead time for submitting the application.

108-100 WEEKLY PLANNING & REPORTING MEETING: A weekly planning and reporting meeting is required.

202-P01 REMOVAL OF PAVEMENT: Haul removed material to the City Bailer Building at 3389 Energy Drive and stockpile in designated location. Removed material shall become the property of the City once stockpiled. Contact Aaron Praus during normal business hours (701.456.7776) a minimum of one week prior to delivery to coordinate stockpiling. Include removal, loading, hauling, and stockpiling in the contract unit price for “Removal of Pavement”.

203-010 SHRINKAGE: 30% percent additional volume is included for shrinkage in earth embankment.

203-385 AVERAGE HAUL: No average haul has been computed for this project.

203-P01 COMMON EXCAVATION-TYPE A: If the Engineer and Contractor agree, plan quantity will be used as the measurement for payment for Common Excavation-Type A.

203-P02 COMMON EXCAVATION-WASTE: Remove existing aggregate base and subsoils from the bottom of removed pavements or existing grade to the proposed subgrade. Include removal, loading, hauling, and stockpiling in the contract unit price for “Common Excavation-Waste”.

Engineer will measure and pay for Common Excavation-Waste by taking the plan quantity for Common Excavation-Waste plus the difference between plan quantity and the measured quantity for "Removal of Pavement" after being converted to cubic yards using a unit weight of 2 Ton/CY. If changes are made to the improvements shown in these plans that would affect this quantity, the Engineer will measure those areas separately and add or subtract the quantity as appropriate.

216-P01 WATER: If City water is used, coordinate with the City of Dickinson to have them install a meter on an existing hydrant . The City will charge a $25.00 meter fee and $29.00 per MGal for water.

261-P01 WEIGHTED FIBER ROLLS: Provide Weighted Fiber Rolls that meet the following specifications:

- Non-degradable, extruded netting tube filled with wood curled excelsior and weighted inner core
- 8-inch roll diameter
- 6-foot roll length
- 8.33 lb/ft roll weight

Place weighted fiber rolls per the Plans to prevent sediment from leaving the work site. Fiber rolls may need to be relocated periodically to accommodate construction operations and traffic. Obtain approval from Engineer prior to removing or relocating weighted fiber rolls. Include cost for placement, maintenance, and relocations within the unit bid price for “Weighted Fiber Rolls”.

302-P01 RESHAPE AGGREGATE BASE COURSE: Where specified, reshape the existing aggregate base per the requirements of Specification Section 302.04 C. Compact any loose material using a pneumatic-tired roller meeting the requirements of Specification Section 302.02 until no rutting or displacement occurs under the roller operation. Include work in the unit price bid for "Reshape Aggregate Base Course".

550-P01 CONTRACTOR STAMP - PCC PAVEMENT: Delete Specification Section 550.04 H.1.e of the Standard Specifications and replace with the following:

Mark in each 3,000 square feet of pavement the Contractor's name, address, and year in which the pavement was constructed. Use a stamped letter that is 1-inch high by ¼-inch deep. Obtain Engineer's approval of the stamp prior to use.

704-255 TRAFFIC CONTROL FOR SHOULDER DROP-OFF: If the shoulder and adjacent driving lane are not even at the end of the day, the following criteria will apply:

Place the following sign assembly at the locations listed below.

Sign Assembly: Sign No. W8-9a-48 "Shoulder Drop Off" and supplemental plate Sign No. W20-52-54 to identify the distance.

Locations:

- In advance of the drop off;
- Spaced at each mile from the advance sign; and
- At major intersections (CMC routes, state and US highways, and Interstate Ramps).

If the difference in elevation between the shoulder and the driving lane is 2" or greater, construct a slough on the driving lane that is 4:1 or flatter.

If the difference in elevation between the shoulder and driving lane is less than 2", no slough is required.

Sign assemblies will be measured and paid for according to Section 704 "Temporary Traffic Control".

704-P01 TRAFFIC CONTROL SAFETY WEDGE: Leave the work area free of hazards during non-working hours by constructing a safety wedge per the Plan details. Hazards include drop-offs greater than 2-inches or embankment areas steeper than 4:1 adjacent to traffic lanes. If a hazard as defined herein exists after working hours, provide the required flagging and necessary traffic control devices at no additional cost until the wedge is constructed.

Include costs associated with the construction, maintenance, and removal of the wedge in the unit price bid for items as noted in the "Traffic Control Safety Wedge" detail.

704-P02 TEMPORARY ACCESS: Provide temporary access meeting the requirements of Specification Section 107.07 A per the "Temporary Access Aggregate" and the "Temporary Access Asphalt Wedge" details in the General Detail sheets. This includes providing access through work areas to adjacent driveways and road intersections that are to remain open to traffic. Temporary aggregate surfacing may also be used within the reconstruction area north of the roadway centerline at the 6th Avenue SE intersection. Temporary aggregate surfacing will not be allowed for through traffic on 8th Street South.

704-P03 TRAFFIC CONTROL DEVICES: The traffic control devices list has been developed using the layouts shown in Section 100 of the Plans for Phases 1 and 2, and the following layouts shown on the Standard Drawings included in Phase 3 of the traffic control devices list to be used when applicable work conditions exist.

- D-704-15 Road Closure Layouts, Type A: For temporary road closures.
- D-704-24 Shoulder Closures and Bridge Painting Layouts, Type U and R: For shoulder work with minor or no encroachments in the driving lane.
- D-704-25 Lane Closures on Urban Streets Layouts, Type V, W, and X: For lane closures, work behind curb, and work near intersections.
- D-704-26 Miscellaneous Sign Layouts, Type BB, DD, EE, FF, and GG: For areas where road conditions warrant.

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Registration Number
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	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
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NOTES

704-P04 TRAFFIC CONTROL – PHASING: The project includes two phases of construction, Phase 1 and Phase 2.

Phase sidewalk removals, replacement, and construction to keep existing sidewalk on one side of 8th Street South open at all times. Keep sidewalks open until sidewalk work is ready to begin. Close sidewalks as shown in Section 100 of the Plans.

PHASE 1: Close the north half of 8th Street South to complete the removal and replacement of the water system, perform pavement removals, common excavation, subgrade preparation, roadway reshaping, aggregate base course, curb and gutter, and pavement construction for Phase 1 work areas. Follow Phase 1 traffic control per Section 100 of the Plans. Immediately prior to installing Phase 1 traffic control, obliterate pavement markings from Sta 35+70 to 42+45 as shown by Section 100 of the Plans. Minor road intersections on the north side of 8th Street South may be closed during this phase. Keep 6th Avenue SE fully open to traffic per Phase 1-A until work is ready to begin within the intersection. Maintain traffic at the 6th Avenue SE intersection by phasing construction as shown by Phases 1-B, 1-C, and 1-D in Section 100 of the Plans. Prior to beginning Phase 1-C or 1-D, obliterate pavement markings from Sta 75+80 to 76+05 as shown in Section 100 of the Plans for traffic control Phase 1-C. Once these pavement markings are obliterated, do not use Phase 1-A traffic control unless short term pavement markings are installed as shown by the traffic control plans for Phase 2 in Section 100 of the Plans.

Phase 2 work may not begin until Phase 1 concrete paving west of Main Avenue and the bottom lift of Hot Mix Asphalt east of Main Avenue are complete and ready to be opened to traffic.

PHASE 2: Include pavement removals, common excavation, subgrade preparation, roadway reshaping, aggregate base course, curb and gutter, and pavement construction for Phase 2 areas. Follow Phase 2 traffic control per Section 100 of the Plans. Prior to installing Phase 2 traffic control, place permanent or short term pavement markings from Sta 75+97 to 76+20 as shown by the traffic control plans for Phase 2-A in Section 100 of the Plans. Minor road intersections on the south side of 8th Street South may be closed at times. Anytime Southview Avenue and/or Meadows Drive are closed, open 6th Avenue SE to traffic as shown by Traffic Control Phase 2-A. Anytime 6th Ave SE is closed, open Southview Avenue and Meadows Drive to traffic as shown by Traffic Control Phase 2-B.

722-P01 ADJUST GATE VALVE BOX: Include all labor, equipment, and materials needed to adjust previously installed gate valves and tracer wire boxes, and to construct concrete collars as shown by the "Gate Valve Box Adjustment" detail and "Utility Adjustment Concrete Collars" detail in Section 20 of the Plans in the unit price bid for "Adjust Gate Valve Box".

722-P02 ADJUST MANHOLE: Remove without damage and salvage existing manhole frames and grates. Remove existing adjustment rings and clean top of existing manhole structure. Allow City to inspect removed frames and grates to determine which items are to be salvaged to the City. Deliver items the City determines to be salvageable to the Public Works maintenance shop located at 3411 Public Works Boulevard. Dispose of items the City does not wish to salvage per Specification Section 107.17.

After manhole has been adjusted install an internal chimney seal per the "Internal Chimney Seal" detail in Section 20 of the Plans and the "Internal Manhole Chimney Seals" Special Provision.

Include all labor, equipment, and materials needed to remove existing frames and grates, to install and adjust new manhole frames and grates, to install internal chimney seals, and to construct concrete collars on existing manhole structures in the unit price bid for "Adjust Manhole".

748-P01 CURB AND GUTTER: Where curb and gutter is being replaced, the new curb and gutter section shall match the adjacent existing curb and gutter section unless otherwise noted. Construct new curb and gutter over 6-inches of Class 5 Aggregate Base. Construct a keyway as shown by the "Keyway for Curb & Gutter" detail on Standard Drawing D-748-1 in the back of the curb beginning 2-1/4-inches from the top of the curb with 'T' being equal to 6-inches.

Follow Standard Drawing D-750-3 when constructing curb and gutter sections at ramps.

When curb and gutter is being placed in a new location, construct standard curb and gutter as shown by the "Standard Curb and Gutter" detail in the Detail Sheets.

748-P02 CONTRACTOR STAMP - CURB AND GUTTER: Mark every 100 linear feet for new pours of continous curb and gutter, each end of property lines, and every curb and gutter patch per lot with the Contractor's name, address, and year in which the pavement was constructed. Use a stamped letter that is 1-inch high by ¼-inch deep. Obtain Engineer's approval of the stamp prior to use.

750-P01 SIDEWALK: Construct sidewalk per Standard Drawing D-750-2, but replace the "Sidewalk Detail (Installed adjacent to curb and gutter)" with the "Sidewalk Abutting Curb & Gutter" detail in the General Detail Sheets.

750-P02 CONTRACTOR STAMP - SIDEWALK: Mark every 100 linear feet for new pours of continous sidewalk, each end of property lines, and every sidewalk patch per lot with the Contractor's name, address, and year in which the pavement was constructed. Use a stamped letter that is 1-inch high by ¼-inch deep. Obtain Engineer's approval of the stamp prior to use.

754-P01 SIGNS: Allow the City to inspect signs and supports designated by the Plans to be removed from the project which will not be reset to determine which items are to be salvaged. Deliver salvageable items to the Public Works maintenance shop located at 3411 Public Works Boulevard. Dispose of items the City does not wish to salvage per Specification Section 107.17. Provide all equipment, labor, loading, unloading, and hauling in the unit price bid for "Steel Galv Posts-Telescoping Perforated Tube".

770-P01 LIGHTING SYSTEM-LANDSCAPING: If construction is in a previously seeded area, replace topsoil upon completion of backfilling and seed disturbed area per Standard Specification Section 251 using Seed Class I unless otherwise noted in the Plans. If construction is in an otherwise landscaped area, replace any disturbance to the existing landscaping to its existing condition unless otherwise noted in the Plans. Include cost of work in the unit price bid for the applicable lighting appurtenance being installed.

970-P01 STONE MULCH: In areas designated by the Plans, place 1-inch to 3-inch diameter round river rock to a depth of 4-inches. Rock shall be placed over Type S1 Geosynthetic Fabric meeting the requirements Standard Specification Section 858. Include materials and labor in the unit price bid for "Stone Mulch".

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	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	8	1

SPEC.	CODE	ITEM DESCRIPTION	UNITS	FED. AID QTY.	CITY QTY.	TOTAL QTY.
103	0100	CONTRACT BOND	LSUM	0.83	0.17	1
201	0352	REMOVAL OF TREES & BRUSH	LSUM	1		1
201	0370	REMOVAL OF TREES 10IN	EA	2		2
202	0136	REMOVAL OF PAVEMENT	TON	5,266		5,266
202	0174	REMOVAL OF PIPE ALL TYPES AND SIZES	LF		2,003	2,003
203	0101	COMMON EXCAVATION-TYPE A	CY	26		26
203	0113	COMMON EXCAVATION-WASTE	CY	4,428		4,428
216	0100	WATER	MGAL	145		145
230	0165	SUBGRADE PREPARATION-TYPE A-12IN	STA	26.3		26.3
251	0100	SEEDING CLASS I	ACRE	0.30		0.30
253	0201	HYDRAULIC MULCH	ACRE	0.30		0.30
261	0106	FIBER ROLLS 6IN	LF	1,332		1,332
261	0107	REMOVE FIBER ROLLS 6IN	LF	1,332		1,332
261	0200	WEIGHTED FIBER ROLLS	LF	144		144
261	0201	REMOVAL WEIGHTED FIBER ROLL	LF	144		144
302	0120	AGGREGATE BASE COURSE CL 5	TON	6,456		6,456
302	0407	RESHAPE AGGREGATE BASE COURSE	STA	7.2		7.2
401	0050	TACK COAT	GAL	714		714
401	0060	PRIME COAT	GAL	5,000		5,000
430	0040	SUPERPAVE FAA 40	TON	3,174		3,174
430	1000	CORED SAMPLE	EA	17		17
430	5828	PG 58-28 ASPHALT CEMENT	TON	190		190
550	0300	8IN NON-REINF CONCRETE PVMT CL AE-DOWELED	SY	3,884		3,884
702	0100	MOBILIZATION	LSUM	0.83	0.17	1
704	0100	FLAGGING	MHR	800		800
704	1000	TRAFFIC CONTROL SIGNS	UNIT	3,181		3,181
704	1052	TYPE III BARRICADE	EA	69		69
704	1054	SIDEWALK BARRICADE	EA	28		28
704	1060	DELINEATOR DRUMS	EA	161		161
704	1067	TUBULAR MARKERS	EA	166		166
704	1080	STACKABLE VERTICAL PANELS	EA	158		158
704	1500	OBLITERATION OF PAVEMENT MARKING	SF	595		595
706	0550	BITUMINOUS LABORATORY	EA	1		1
706	0600	CONTRACTOR'S LABORATORY	EA	1		1
708	1540	INLET PROTECTION-SPECIAL	EA	7		7
708	1541	REMOVE INLET PROTECTION-SPECIAL	EA	7		7
722	6140	ADJUST GATE VALVE BOX	EA	27		27
722	6200	ADJUST MANHOLE	EA	8		8
724	0210	FITTINGS-DUCTILE IRON	LBS		1,440	1,440
724	0270	REMOVE GATE VALVE & BOX	EA		14	14
724	0300	GATE VALVE & BOX 6IN	EA		8	8
724	0310	GATE VALVE & BOX 8IN	EA		15	15
724	0411	6IN HYDRANT	EA		5	5
724	0430	REMOVE HYDRANT	EA		5	5
724	0805	PLUG 6IN WATERMAIN	EA		2	2
724	0810	WATERMAIN 6IN PVC	LF		110	110
724	0830	WATERMAIN 8IN PVC	LF		1,899	1,899
724	0955	WATER SERVICE CONNECTION 1IN	EA		3	3
724	0975	WATER LINE CONNECTION 6IN	EA		3	3
724	0976	WATER LINE CONNECTION 6IN TO 8IN	EA		7	7
724	0980	WATER LINE CONNECTION 8IN	EA		3	3
724	1208	BORE & PUSH 8IN WATERMAIN	LF		100	100
748	0100	CURB & GUTTER	LF	1,171		1,171
748	1030	VALLEY GUTTER 72IN	SY	30		30
750	0100	SIDEWALK CONCRETE	SY	951		951
750	1000	DRIVEWAY CONCRETE	SY	16		16
750	2115	DETECTABLE WARNING PANELS	SF	216		216
754	0110	FLAT SHEET FOR SIGNS-TYPE XI REFL SHEETING	SF	262.1		262.1
754	0206	STEEL GALV POSTS-TELESCOPING PERFORATED TUBE	LF	582.6		582.6
754	0592	RESET SIGN PANEL	EA	2		2
754	8010	DYNAMIC SPEED DISPLAY SIGN	EA	2		2
762	0122	PREFORMED PATTERNED PVMT MK-MESSAGE(GROOVED)	SF	208		208
762	0430	SHORT TERM 4IN LINE-TYPE NR	LF	380		380
762	0434	SHORT TERM 8IN LINE-TYPE NR	LF	363		363
762	0436	SHORT TERM 24IN LINE-TYPE NR	LF	13		13
762	0442	SHORT TERM MESSAGE-TYPE NR	SF	48		48
762	1305	PREFORMED PATTERNED PVMT MK 4IN LINE-GROOVED	LF	12,045		12,045
762	1307	PREFORMED PATTERNED PVMT MK 6IN LINE-GROOVED	LF	954		954
762	1309	PREFORMED PATTERNED PVMT MK 8IN LINE-GROOVED	LF	885		885
762	1315	PREFORMED PATTERNED PVMT MK 12IN LINE-GROOVED	LF	85		85
762	1325	PREFORMED PATTERNED PVMT MK 24IN LINE-GROOVED	LF	627		627
770	0020	CONCRETE FOUNDATION-HIGHWAY LIGHTING	EA	20		20
770	0100	PULL BOX	EA	2		2
770	0330	2IN DIAMETER RIGID CONDUIT	LF	3,215		3,215
770	0504	UNDERGROUND CONDUCTOR N04-TYPE RHW	LF	6,766		6,766
770	0505	UNDERGROUND CONDUCTOR N06-TYPE RHW	LF	3,383		3,383
770	0735	FEED POINT-TYPE II-PAD MOUNTED	EA	1		1
770	1718	LT STD 8FT MA 32 FT POLE BREAKAWAY	EA	20		20
770	4210	LED LUMINAIRE	EA	20		20
770	4560	REMOVE LIGHT STANDARD	EA	2		2
770	4582	REMOVE CONCRETE FOUNDATION	EA	2		2
970	0070	STONE MULCH	SF	332		332
990	0230	TEMPORARY ACCESS	LSUM	1		1

QUANTITIES

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	10	1

BASIS OF ESTIMATE

REMOVAL OF PAVEMENT

		A		B		2 x (A x B / 27)
Material to be Removed	**Unit**	**Depth (FT)**	**End Area (SF)**	**Area (SF)**	**Linear Feet (LF)**	**Subtotal**
Mainline Bituminous & Concrete Surfacing @ 2 Ton/CY	Ton	0.42	---	164,300	---	5,112
Other Bituminous Surfacing @ 2 Ton/CY	Ton	0.42	---	824	---	26
Sidewalk Concrete @ 2 Ton/CY	Ton	0.33	---	1574	---	38
Driveway Concrete @ 2 Ton/CY	Ton	0.50	---	145	---	5
Curb and Gutter @ 2 Ton/CY	Ton	---	1.3	---	887	85
					Total	5,266

AGGREGATE BASE COURSE CL 5 @ 1.875 TON/CY FOR CURB & GUTTER, VALLEY GUTTER, SIDEWALK CONCRETE, AND DRIVEWAY CONCRETE

		A		B		C = A x B / 3	D = 1.875 * C
Item Aggregate Base will be Beneath	**Unit**	**Depth (FT)**	**End Area (SY)**	**Surface Area (SY)**	**Linear Feet (LF)**	**Volume (CY)**	**Subtotal**
Curb & Gutter - When Abutting New Sidewalk or Unpaved Areas *	Ton	---	0.5	---	622	104	195
Curb & Gutter - When Abutting Existing Sidewalk	Ton	---	0.3	---	549	55	103
Valley Gutter	Ton	0.33	---	30	---	3	6
Sidewalk & Driveway Concrete	Ton	0.33	---	967	---	106	199
						Total	503

* Includes aggregate base beneath and 1-foot behind curb & gutter.

HOT MIX ASPHALT RECONSTRUCTION AREA QUANTITIES EAST OF MAIN AVENUE

				Sta 50+43 to 76+53			
				A	B	C = A x B / 36	
Spec	**Code**	**Material**	**Unit**	**Surface Area (SY)**	**Depth (IN)**	**Volume (CY)**	**Total**
302	0120	Aggregate Base Course CL 5 @ 1.875 Ton/CY	Ton	14,287	8	3,175	5,953
401	0050	Tack Coat @ 0.05 Gal/SY (1 application)	Gal	14,287	---	---	714
401	0060	Prime Coat @ 0.25 Gal/SY	Gal	14,287	---	---	5,000
430	0040	Superpave FAA 40 @ 2 Ton/CY	Ton	14,287	4	1,587	3,174
430	5828	PG 58-28 Asphalt Cemet @ 6.0%	Ton	---	---	---	190

HBP CORED SAMPLES

	A	B	C	D			
Specification Section	**Distance (ft) ÷ 2000**	**Lanes**	**Lifts**	**Sublots (A x B x C)**	**Quantity (D x 2)**	**Quantity (1 per mile)**	**Unit**
430.04 I.2.b(1), "General"	1	4	2	8	16	---	EA
430.04 I.2.b(2), "Pavement Thickness Determination Cores"	---	---	---	---	---	1	EA
				Total	16	1	EA

WATER:
25 MGal/Mile of Dust Paliative = (0.63 Miles) x (25 MGal/Mile) = 16 MGal
20 Gal/Ton for Aggregates = (6,456 Ton) x (20 Gal/Ton) ÷ (1000 MGal/Gal) = 129 MGal

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BASIS OF ESTIMATE

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	11	1

EARTHWORK SUMMARY									
	Top of Existing Pavement to Proposed Subgrade Volume within Roadway (CY)	Pavement Removal Area within Roadway (SF)	Pavement Removal Volume within Roadway @ 5" Depth (CY)	Common Excavation within Roadway (CY)	Common Excavation for Sidewalk, Driveway, and Curb & Gutter Reconstruction Areas (CY)	Common Excavation for Sidewalk in New Locations (CY)	Embankment Required for Sidewalk in New Locations (CY)	PAY ITEM Common Excavation - Type A (CY)	PAY ITEM Common Excavation - Waste (CY)
	A	B	C = 5 * B / 324	D = A - C	E (See Table Below)	F	G	H = G	I = D + E + F - H
2nd Ave SW to Main Avenue	1,173	34,947	539	634	---	0	0	0	---
Main Avenue to 6th Ave SE	5,520	129,353	1,996	3,524	---	116	26	26	---
Total Project	6,693	164,300	2,535	4,158	180	116	26	26	4,428

NOTE: Quantity shown for embankment has been increased by 30% to account for shrinkage.

COMMON EXCAVATION FOR SIDEWALK, DRIVEWAYS, AND CURB & GUTTER RECONSTRUCTION AREAS

		A		B		A x B / 3
Item Earthwork is to be Performed Under	Unit	Depth (FT)	End Area (SY)	Area (SY)	Linear Feet (LF)	Subtotal
Curb & Gutter - When Abutting New Sidewalk or Unpaved Areas *	CY	---	0.5	---	622	104
Curb & Gutter - When Abutting Existing Sidewalk	CY	---	0.3	---	549	55
Sidewalk Reconstruction	CY	0.33	---	174	---	19
Driveway Reconstruction	CY	0.33	---	16	---	2
					Total = E	180

* Includes aggregate base beneath and 1-foot behind curb & gutter.

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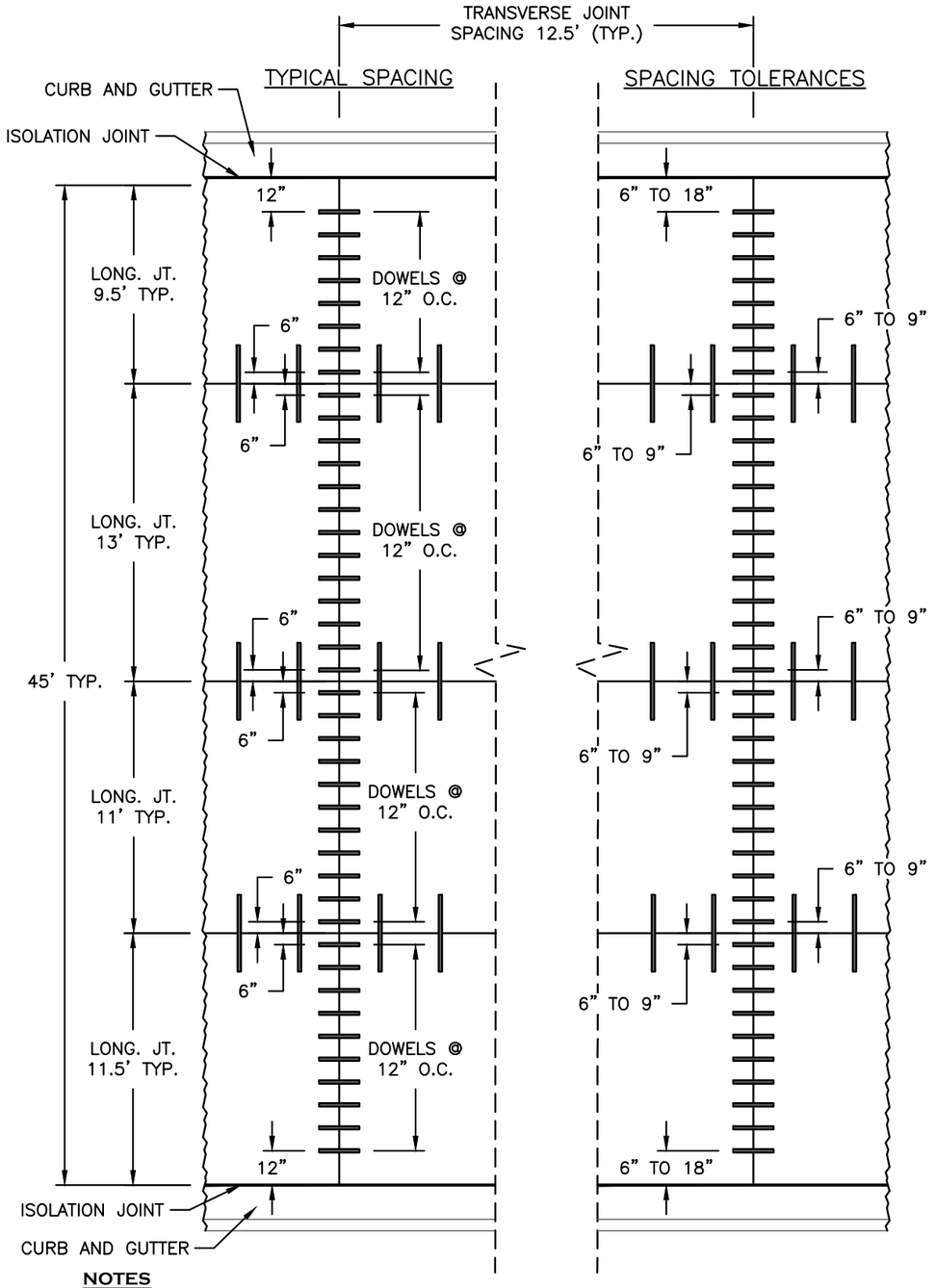
DATA TABLES
Earthwork Summary

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	20	1

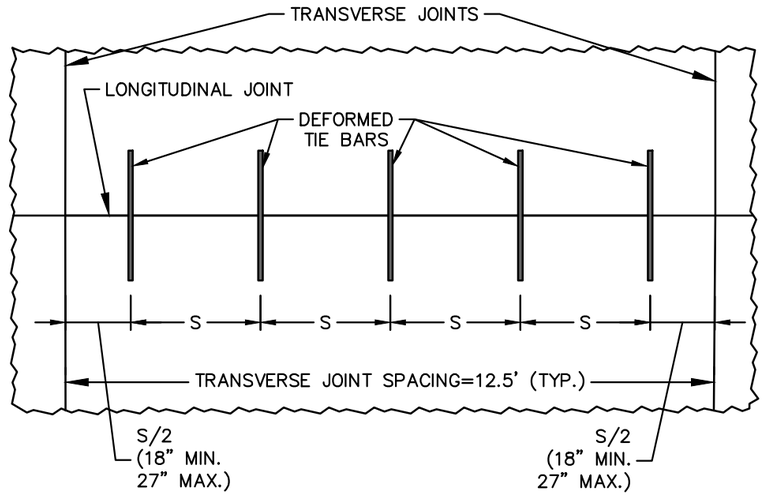


NOTES

1. TRANSVERSE JOINTS SHALL BE CONSTRUCTED PER STANDARD DRAWING D-550-3, EXCEPT THAT SPACING SHALL BE AS SHOWN ABOVE.
2. SEE SECTION 90 FOR JOINT LAYOUT.

TRANSVERSE DOWEL BAR SPACING

NOT TO SCALE



LONGITUDINAL JOINT TIE BAR SIZE, LENGTH, AND SPACING			
PVMT THICKNESS 'T'	STEEL GRADE	BAR SIZE & LENGTH	SPACING 'S'
8"	40	#6 BAR X 36"	27"

NOTES

1. LONGITUDINAL CONSTRUCTION JOINTS SHALL BE TIED BUTT JOINTS CONSTRUCTED PER STANDARD DRAWING D-550-2.
2. SEE SECTION 90 FOR JOINT LAYOUT.

LONGITUDINAL TIE BAR ASSEMBLY

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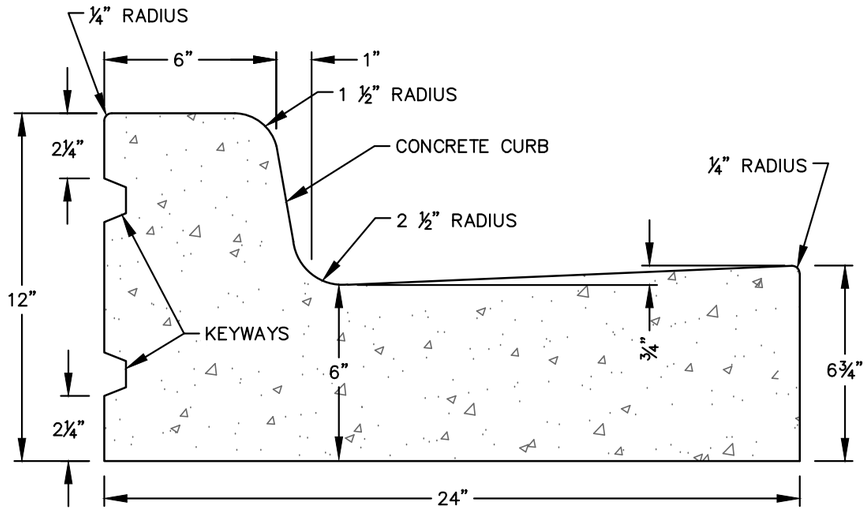
GENERAL DETAILS

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	20	2

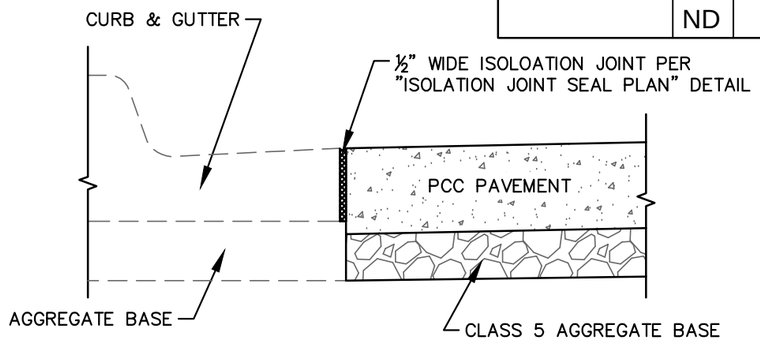


NOTES

1. CURB AND GUTTER SECTION FOR ALL CURB AND GUTTER CONSTRUCTED IN NEW LOCATIONS SHALL MATCH THE DETAIL SHOWN.
2. FOLLOW STANDARD DRAWING D-748-1 FOR CONSTRUCTION OF CURB AND GUTTER JOINTS AND SPACING.
3. KEYWAYS IN THE BACK OF THE CURB SHALL BE CONSTRUCTED WHEN THE BACK OF CURB WILL ABUT SIDEWALK OR OTHER CONCRETE PAVEMENT. CONSTRUCT KEYWAYS AS SHOWN BY THE "KEYWAY FOR CURB & GUTTER" DETAIL ON STANDARD DRAWING D-748-1 WITH 'T' EQUAL TO 6-INCHES.
4. CURB AND GUTTER SHALL NOT BE TIED TO ABUTTING PCC PAVEMENT.
5. WHERE CURB AND GUTTER ENDS AND DOES NOT ABUT EXISING CURB AND GUTTER, END THE CURB PER THE "BULLNOSE CURB" DETAIL.
6. CONSTRUCT CURB & GUTTER OVER 6-INCHES OF CLASS 5 AGGREGATE BASE. EXTEND BASE 12-INCHES BEHIND CURB WHEN AREAS BEHIND CURB ARE UNPAVED, OR WHEN PAVED AREAS BEHIND THE CURB ARE BEING RECONSTRUCTED. AGGREGATE BASE WILL BE MEASURED AND PAID FOR AS "AGGREGATE BASE COURSE CL 5".

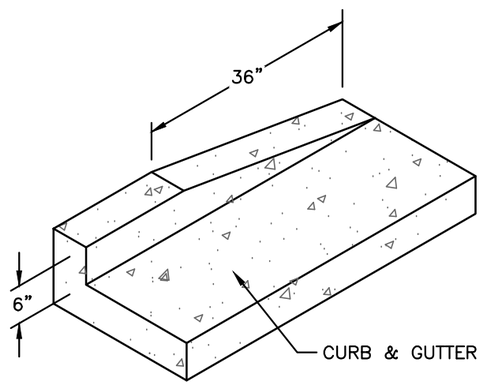
STANDARD CURB AND GUTTER

NOT TO SCALE



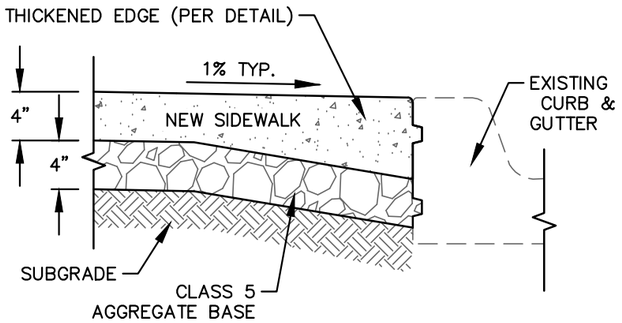
CURB & GUTTER ADJOINING PCC PAVEMENT

NOT TO SCALE

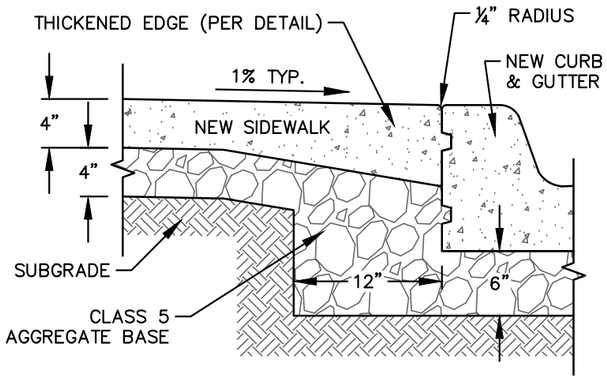


BULLNOSE CURB

NOT TO SCALE



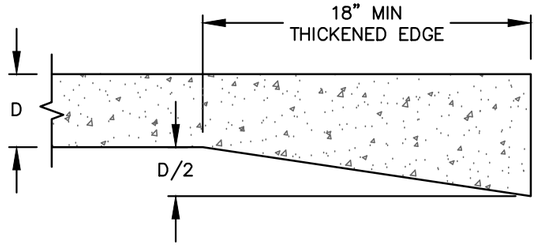
NEW SIDEWALK ADJACENT TO EXISTING CURB



NEW SIDEWALK ADJACENT TO NEW CURB

SIDEWALK ABUTTING CURB & GUTTER

NOT TO SCALE



THICKENED EDGE

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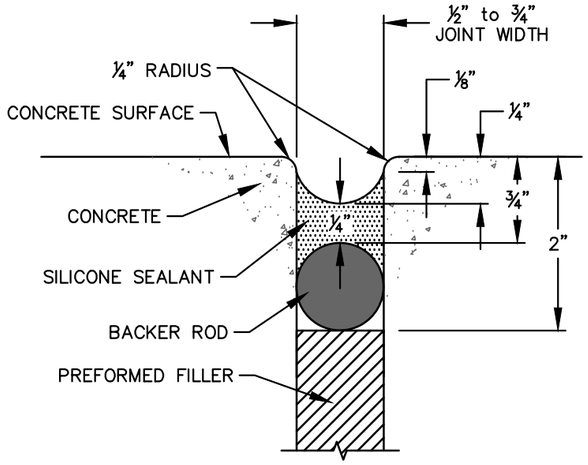
GENERAL DETAILS

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

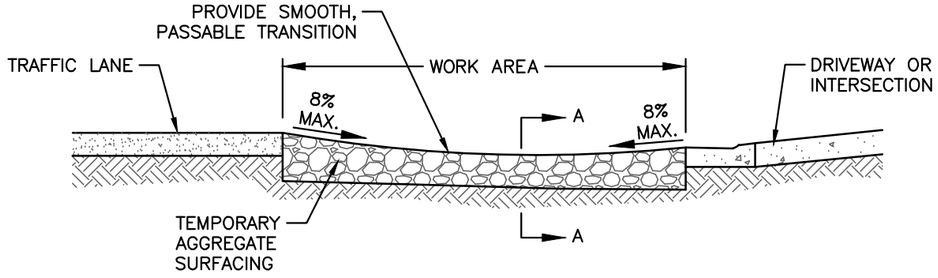
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	20	3



SILICONE SEALANT

ISOLATION JOINT SEAL PLAN

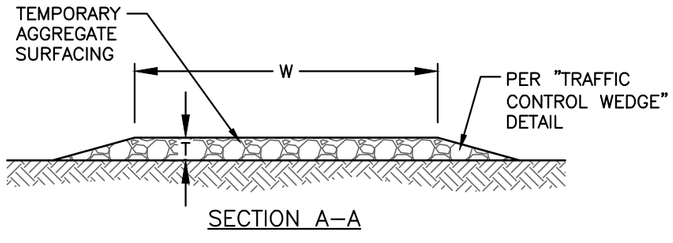
NOT TO SCALE



SECTION VIEW

NOTES

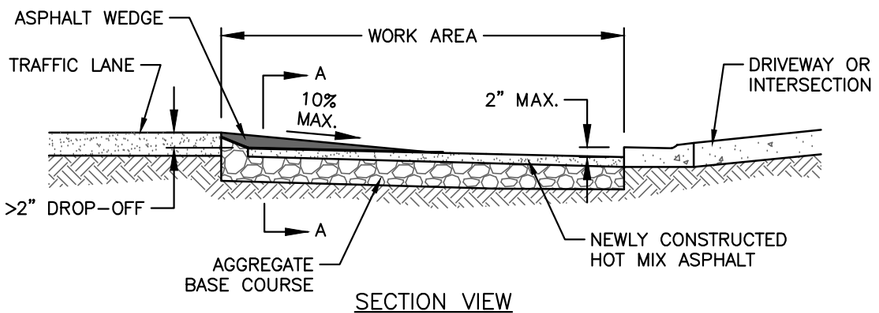
1. USE CLASS 5 AGGREGATE FOR TEMPORARY AGGREGATE SURFACING COMPACTED PER SPECIFICATION 302.04 B.
2. MINIMUM THICKNESS OF TEMPORARY SURFACING, T, SHALL BE AS FOLLOWS:
   - 2.1. DRIVEWAYS: T = 4-INCHES
   - 2.2. INTERSECTIONS WITH LOCAL STREETS: T = 6-INCHES
3. MINIMUM TOP WIDTH OF SURFACING, W, SHALL BE AS FOLLOWS. ADDITIONAL WIDTH MAY BE NEEDED IN SOME AREAS TO ACCOMODATE TURNING MOVEMENTS OF VEHICLES.
   - 3.1. RESIDENTIAL DRIVEWAYS: W = 10-FEET
   - 3.2. COMMERCIAL DRIVEWAYS: W = 20-FEET
   - 3.3. INTERSECTIONS WITH LOCAL STREETS: W = 30-FEET
4. INCLUDE MATERIALS AND LABOR NEEDED TO CONSTRUCT, MAINTAIN, REMOVE, AND RELOCATE THE TEMPORARY AGGREGATE ACCESS IN THE UNIT PRICE BID FOR "TEMPORARY ACCESS".
5. WHEN A TEMPORARY ACCESS IS NO LONGER NEEDED, THE TEMPORARY AGGREGATE SURFACING MAY BE SALVAGED AND REUSED AS AGGREGATE BASE COURSE CL 5. REUSED MATERIAL WILL BE MEASURED AND PAID FOR AS "AGGREGATE BASE COURSE CL 5.



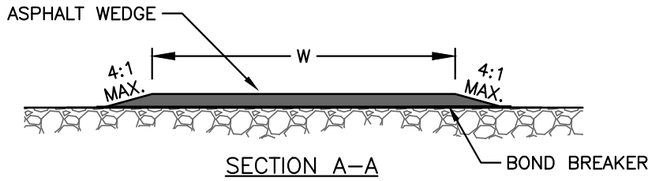
SECTION A–A

TEMPORARY ACCESS AGGREGATE

NOT TO SCALE



SECTION VIEW



SECTION A–A

NOTES

1. USE HOT MIX ASPHALT TO CONSTRUCT THE ASPHALT WEDGE.
2. MINIMUM TOP WIDTH OF SURFACING, W, SHALL BE AS FOLLOWS. ADDITIONAL WIDTH MAY BE NEEDED IN SOME AREAS TO ACCOMODATE TURNING MOVEMENTS OF VEHICLES.
   - 2.1. RESIDENTIAL DRIVEWAYS: W = 10-FEET
   - 2.2. COMMERCIAL DRIVEWAYS: W = 20-FEET
   - 2.3. INTERSECTIONS WITH LOCAL STREETS: W = 30-FEET
3. USE ROOFING FELT, TAR PAPER, OR OTHER ENGINEER APPROVED MATERIAL FOR THE BOND BREAKER.
4. INCLUDE MATERIALS AND LABOR NEEDED TO CONSTRUCT, MAINTAIN, AND REMOVE THE ASPHALT WEDGE IN THE UNIT PRICE BID FOR "TEMPORARY ACCESS" .

TEMPORARY ACCESS ASPHALT WEDGE

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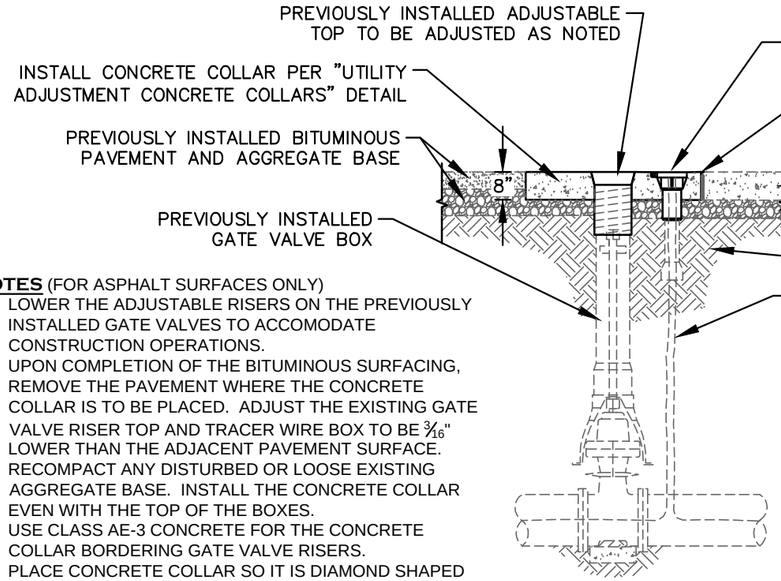
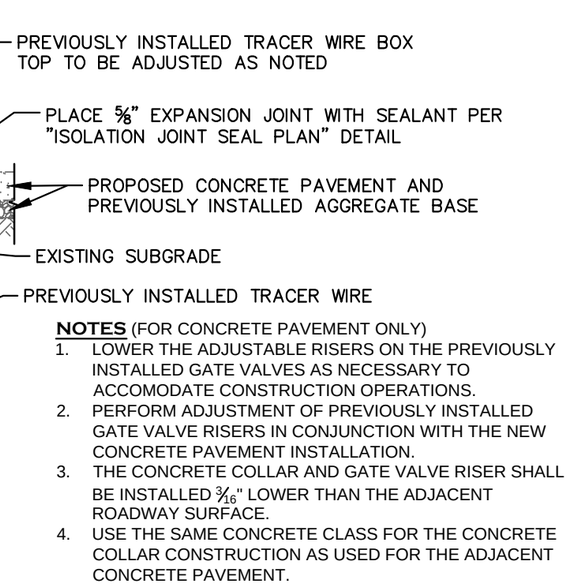
GENERAL DETAILS

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	20	4



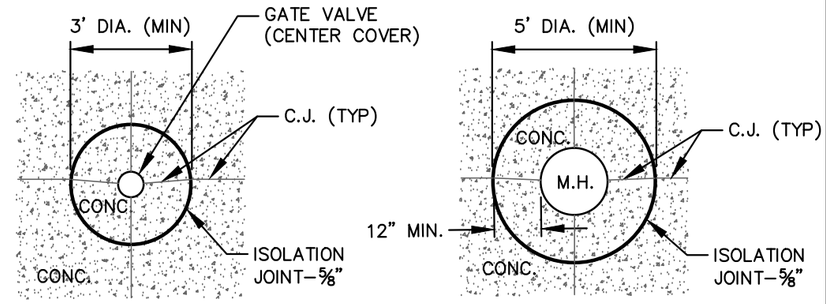


NOTES (FOR ASPHALT SURFACES ONLY)
1. LOWER THE ADJUSTABLE RISERS ON THE PREVIOUSLY INSTALLED GATE VALVES TO ACCOMODATE CONSTRUCTION OPERATIONS.
2. UPON COMPLETION OF THE BITUMINOUS SURFACING, REMOVE THE PAVEMENT WHERE THE CONCRETE COLLAR IS TO BE PLACED. ADJUST THE EXISTING GATE VALVE RISER TOP AND TRACER WIRE BOX TO BE 3/16" LOWER THAN THE ADJACENT PAVEMENT SURFACE. RECOMPACT ANY DISTURBED OR LOOSE EXISTING AGGREGATE BASE. INSTALL THE CONCRETE COLLAR EVEN WITH THE TOP OF THE BOXES.
3. USE CLASS AE-3 CONCRETE FOR THE CONCRETE COLLAR BORDERING GATE VALVE RISERS.
4. PLACE CONCRETE COLLAR SO IT IS DIAMOND SHAPED WITH THE DIRECTION OF TRAFFIC FLOW.

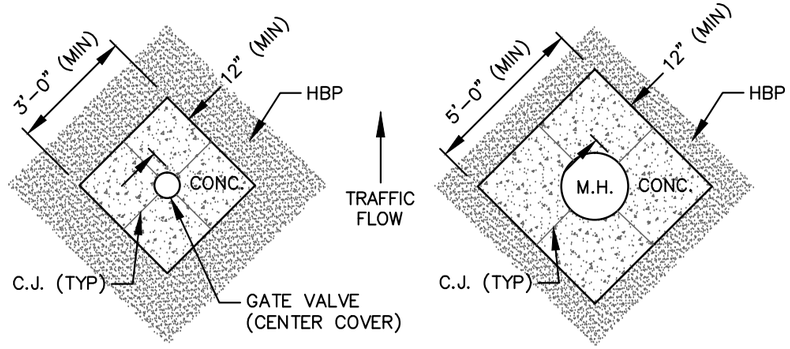
NOTES (FOR CONCRETE PAVEMENT ONLY)
1. LOWER THE ADJUSTABLE RISERS ON THE PREVIOUSLY INSTALLED GATE VALVES AS NECESSARY TO ACCOMODATE CONSTRUCTION OPERATIONS.
2. PERFORM ADJUSTMENT OF PREVIOUSLY INSTALLED GATE VALVE RISERS IN CONJUNCTION WITH THE NEW CONCRETE PAVEMENT INSTALLATION.
3. THE CONCRETE COLLAR AND GATE VALVE RISER SHALL BE INSTALLED 3/16" LOWER THAN THE ADJACENT ROADWAY SURFACE.
4. USE THE SAME CONCRETE CLASS FOR THE CONCRETE COLLAR CONSTRUCTION AS USED FOR THE ADJACENT CONCRETE PAVEMENT.

GATE VALVE AND BOX ADJUSTMENT

NOT TO SCALE

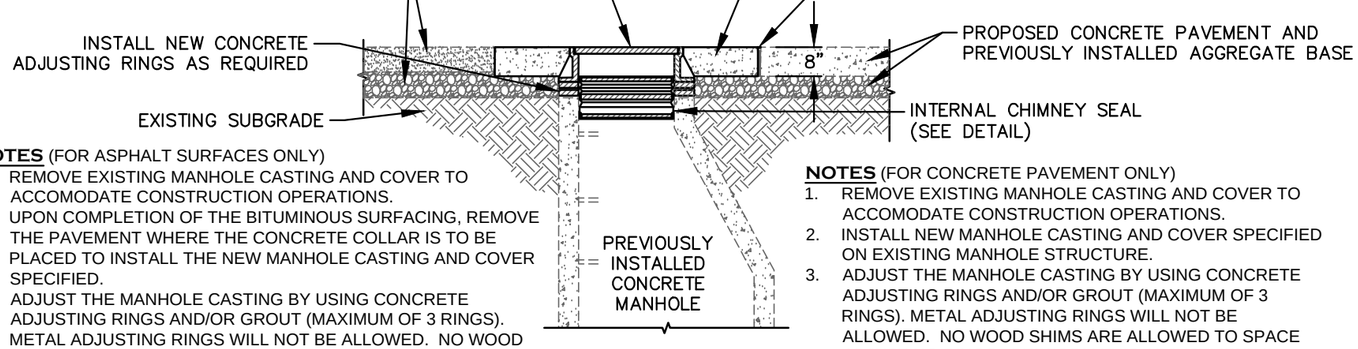


NOTE: UNLESS SHOWN OTHERWISE IN THE JONTING PLAN, USE ROUND COLLARS IN CONCRETE PAVEMENTS, AND USE DIAMOND SHAPED COLLARS IN BITUMINOUS PAVEMENTS.



UTILITY ADJUSTMENT CONCRETE COLLARS

NOT TO SCALE



NOTES (FOR ASPHALT SURFACES ONLY)
1. REMOVE EXISTING MANHOLE CASTING AND COVER TO ACCOMODATE CONSTRUCTION OPERATIONS.
2. UPON COMPLETION OF THE BITUMINOUS SURFACING, REMOVE THE PAVEMENT WHERE THE CONCRETE COLLAR IS TO BE PLACED TO INSTALL THE NEW MANHOLE CASTING AND COVER SPECIFIED.
3. ADJUST THE MANHOLE CASTING BY USING CONCRETE ADJUSTING RINGS AND/OR GROUT (MAXIMUM OF 3 RINGS). METAL ADJUSTING RINGS WILL NOT BE ALLOWED. NO WOOD SHIMS ARE ALLOWED TO SPACE ADJUSTING RINGS. RECOMPACT ANY DISTURBED OR LOOSE EXISTING AGGREGATE BASE.
4. INSTALL THE MANHOLE CASTING WITH COVER 3/16" LOWER THAN THE ADJACENT PAVEMENT SURFACE. INSTALL THE CONCRETE COLLAR EVEN WITH THE TOP OF THE PAVEMENT AND MANHOLE CASTING.
3. USE CLASS AE-3 CONCRETE FOR THE CONCRETE COLLAR BORDERING MANHOLES.
4. PLACE CONCRETE COLLAR SO IT IS DIAMOND SHAPED WITH THE DIRECTION OF TRAFFIC FLOW.

NOTES (FOR CONCRETE PAVEMENT ONLY)
1. REMOVE EXISTING MANHOLE CASTING AND COVER TO ACCOMODATE CONSTRUCTION OPERATIONS.
2. INSTALL NEW MANHOLE CASTING AND COVER SPECIFIED ON EXISTING MANHOLE STRUCTURE.
3. ADJUST THE MANHOLE CASTING BY USING CONCRETE ADJUSTING RINGS AND/OR GROUT (MAXIMUM OF 3 RINGS). METAL ADJUSTING RINGS WILL NOT BE ALLOWED. NO WOOD SHIMS ARE ALLOWED TO SPACE ADJUSTING RINGS. PERFORM THIS ADJUSTMENT IN CONJUCTION WITH THE NEW CONCRETE PAVEMENT INSTALLATION.
4. INSTALL THE MANHOLE CASTING WITH COVER 3/16" LOWER THAN THE ADJACENT PAVEMENT SURFACE. INSTALL THE CONCRETE COLLAR EVEN WITH THE TOP OF THE PAVEMENT AND MANHOLE CASTING.
5. USE THE SAME CONCRETE CLASS FOR THE CONCRETE COLLAR CONSTRUCTION AS USED FOR THE ADJACENT CONCRETE PAVEMENT.

MANHOLE ADJUSTMENT PLAN

NOT TO SCALE

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GENERAL DETAILS

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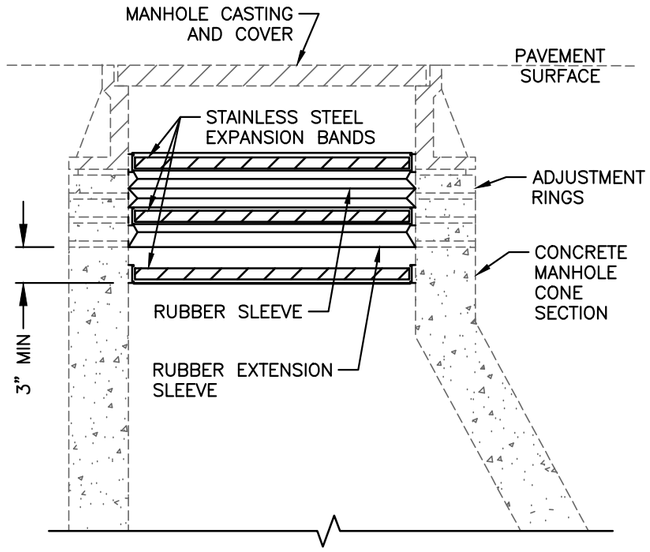
2ND AVE SW TO 6TH AVE SE

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	20	5



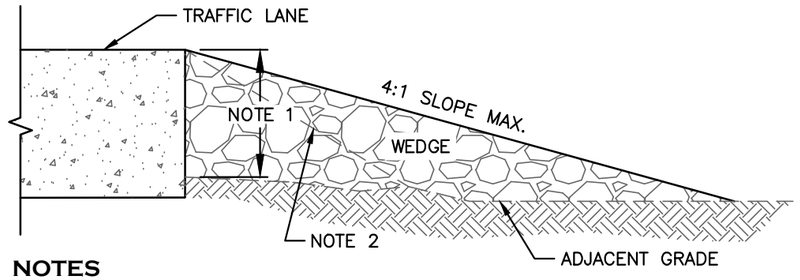
NOTES

1. THE RUBBER SLEEVE IS AVAILABLE IN HEIGHTS OF 8.5" (STANDARD) OR 10" (WIDE) OR 13" (EXTRA WIDE). THE SAME EXPANSION BANDS ARE USED ON ALL THREE.
2. SEE THE CHIMNEY HEIGHT TABLE BELOW FOR SEAL AND EXTENSION COMBINATIONS NEEDED TO SPAN FROM THE FRAME TO THE TOP OF THE CONE ON MANHOLES WITH VARIOUS CHIMNEY HEIGHTS. FRAME OFFSETS OR DIAMETER DIFFERENTIALS WILL REDUCE THESE SPAN HEIGHTS. PREPARE THE SURFACE IN ACCORDANCE WITH THE FRAME SEAL MANUFACTURER'S INSTRUCTIONS IF THIS VERTICAL SURFACE DOES NOT EXIST.
3. THE TOP OF THE CONE SHALL HAVE A MINIMUM OF 3" HIGH VERTICAL SEALING SURFACE THAT IS SMOOTH AND FREE OF ANY FORM OF OFFSETS OR EXCESSIVE HONEYCOMB.

SEALS AND EXTENSIONS	TO SPAN HEIGHTS OF:		
	W/ STANDARD SEAL	W/ WIDE SEAL	W/ EXTRA WIDE SEAL
SEAL ONLY	0" - 4.5"	2" - 7.5"	6" - 12"
SEAL + 7" EXTENSION	OVER 4.5" - 10.5"	OVER 7.5" - 13.5"	OVER 12" - 18"
SEAL + 10" EXTENSION	OVER 10.5" - 13"	OVER 13.5" - 16"	OVER 18" - 20.5"
SEAL + MULTI EXTENSIONS	OVER 13"	OVER 16"	OVER 20.5"
ADD 6" OF COVERAGE FOR EACH ADDITIONAL 7" EXTENSION ADD 8.5" OF COVERAGE FOR EACH ADDITIONAL 10" EXTENSION			

INTERNAL CHIMNEY SEAL

NOT TO SCALE



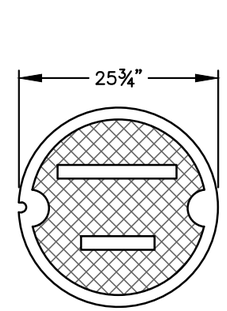
NOTES

1. CONSTRUCT WEDGE IF VERTICAL DROP IS GREATER THAN 2-INCHES ADJACENT TO TRAFFIC LANE DURING NON-WORKING HOURS.
2. USE WEDGE IF SLOPE IS GREATER THEN 4:1 ADJACENT TO TRAFFIC LANE DURING NON-WORKING HOURS.
3. USE ROOFING FELT, TAR PAPER, OR OTHER ENGINEER APPROVED MATERIAL FOR THE BOND BREAKER, WHERE REQUIRED.
4. THE WEDGE WILL NOT BE MEASURED AND PAID FOR SEPARATELY. INCLUDE MATERIALS AND LABOR NEEDED TO CONSTRUCT, MAINTAIN, RELOCATE, AND REMOVE THE WEDGE IN THE UNIT PRICE BID FOR THE ITEMS SHOWN IN THE TABLE BELOW.
5. WHEN A CLASS 5 AGGREGATE WEDGE IS NO LONGER NEEDED, THE AGGREGATE SURFACING MAY BE SALVAGED AND REUSED AS AGGREGATE BASE COURSE CL 5. REUSED MATERIAL WILL BE MEASURED AND PAID FOR AS "AGGREGATE BASE COURSE CL 5".

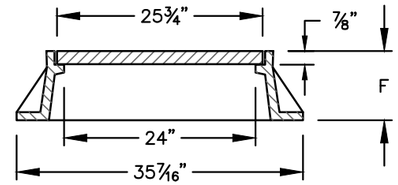
MATERIAL BENEATH WEDGE	ACCEPTABLE WEDGE MATERIALS	WEDGE INCLUDED IN UNIT PRICE BID FOR
Subgrade Soils	Subgrade Soils, Aggregate Base Course CL 5	Common Excavation-Waste
Aggregate Base Course CL 5	Aggregate Base Course CL 5	Aggregate Base Course CL 5
Hot Mix Asphalt	Hot Mix Asphalt over bond breaker	Superpave FAA 40
PCC Pavment	Hot Mix Asphalt over bond breaker	8IN Non-Reinf Concrete PVMT Cl AE-Doweled

TRAFFIC CONTROL SAFETY WEDGE

NOT TO SCALE



GRATE DETAIL



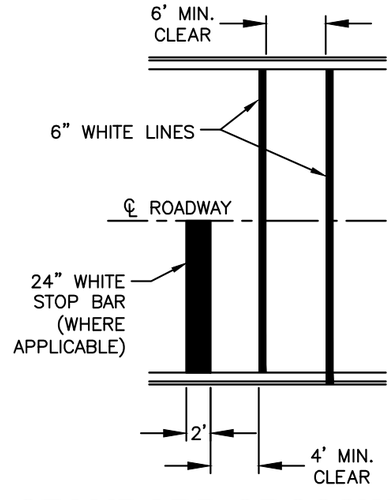
FRAME SECTION VIEW

LOCATION	F (INCHES)
Sta 45+69	7
Sta 49+33	4
Sta 50+66	7
Sta 54+22	7
Sta 54+33	4
Sta 55+97	7
Sta 57+99	4
Sta 60+66	7

NOTE: USE HEAVY DUTY, SELF SEALING FRAME AND GRATE OF A SIMILAR STYLE TO THAT SHOWN ABOVE MADE OF GRAY IRON WITH PICK HOLES.

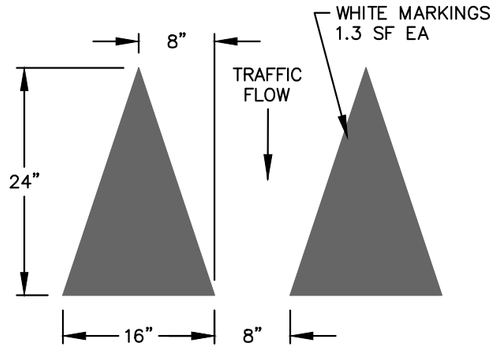
MANHOLE FRAME AND GRATE

NOT TO SCALE



STANDARD CROSSWALK

NOT TO SCALE



YIELD LINE LAYOUT

NOT TO SCALE

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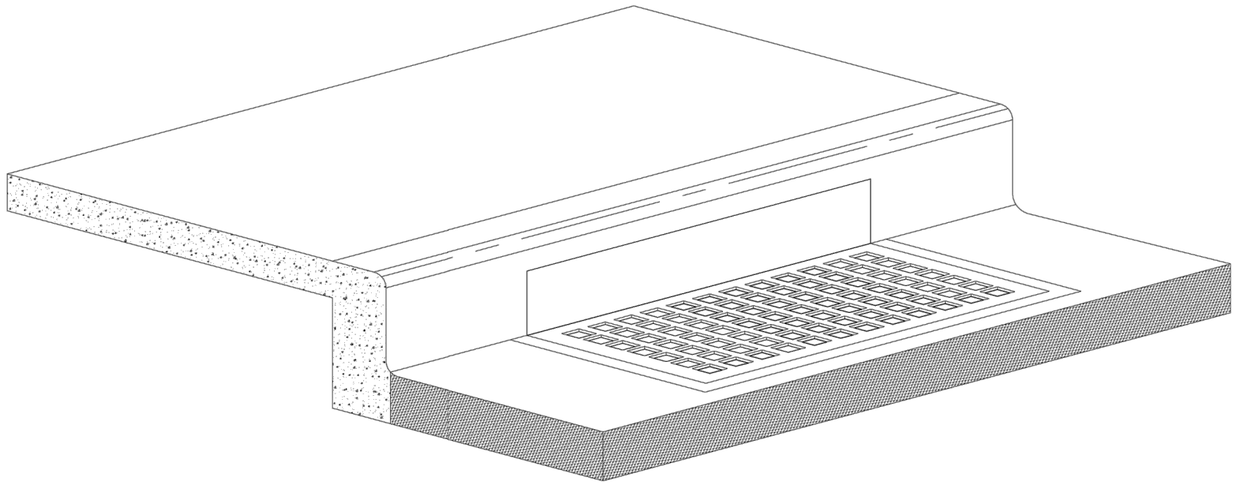
GENERAL DETAILS

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	20	6



Inlet Protection Device

Installation Notes:

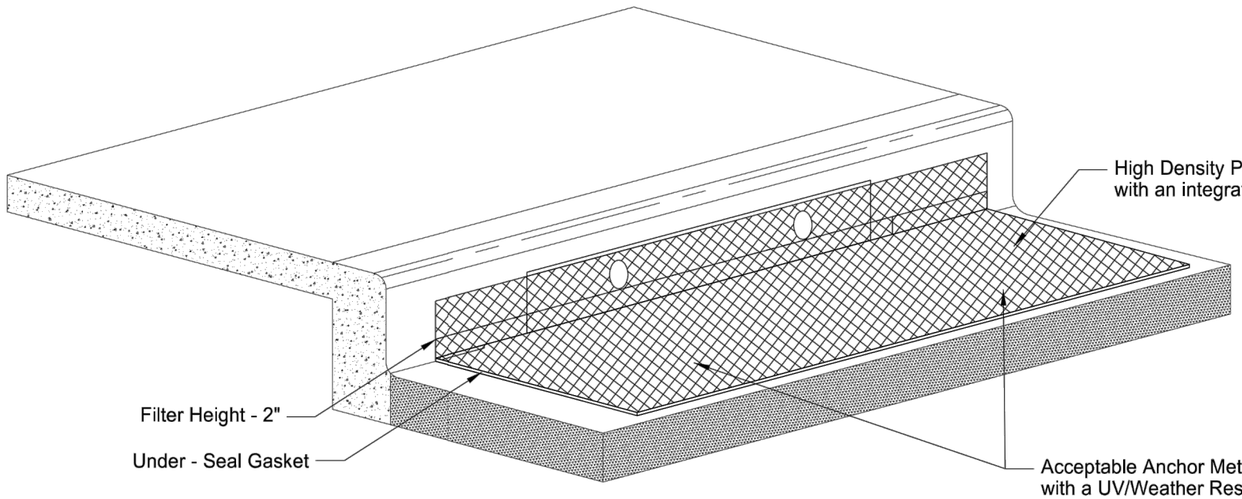
1. Place device tightly against drain opening and cover entire grate. Extend the device at least 2 inches past the grate toward the street.

2. Overlap the segments at longer openings.

3. Anchor the device so that water cannot flow behind it.

General Notes:

1. Remove material that falls into the inlet during maintenance or removal of the device.



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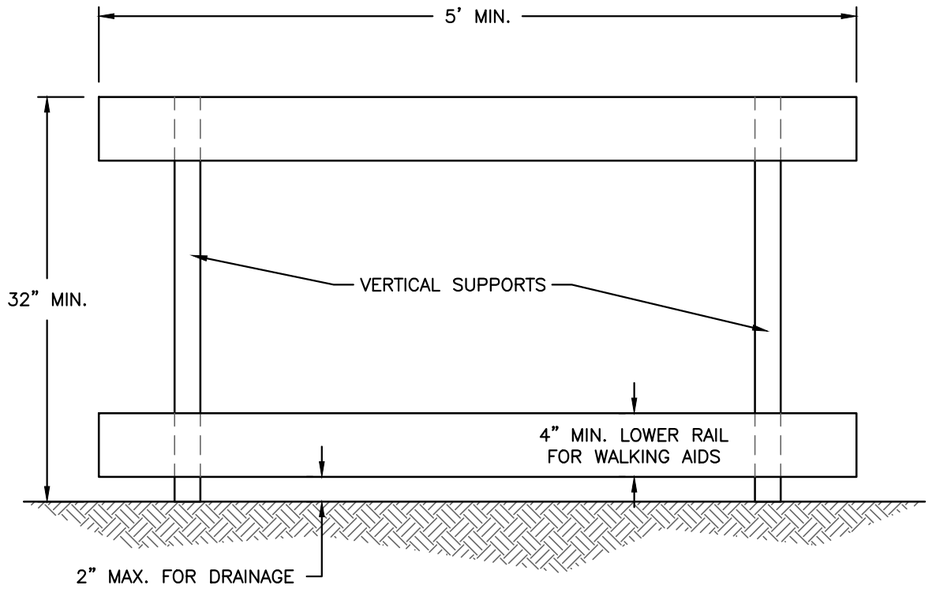
GENERAL DETAILS

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	20	7



NOTES

1. CONSTRUCT SELF STANDING SIDEWALK BARRICADE WITH NO SUPPORTS EXTENDING INTO THE PEDESTRIAN PATH.
2. CONSTRUCT ADA COMPLIANT AND NCHRP 350 APPROVED SIDEWALK BARRICADES.
3. INCLUDE ALL COSTS TO FURNISH, MAINTAIN, AND REMOVE THE SIDEWALK BARRICADES IN THE PRICE BID FOR "SIDEWALK BARRICADE."

SIDEWALK BARRICADE

NOT TO SCALE

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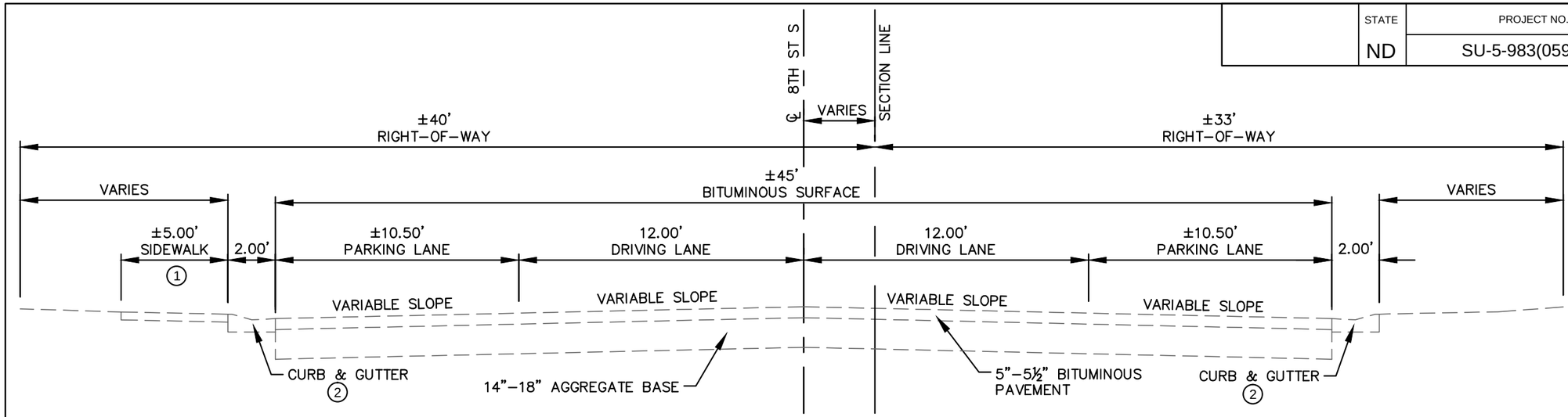
GENERAL DETAILS

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	30	1



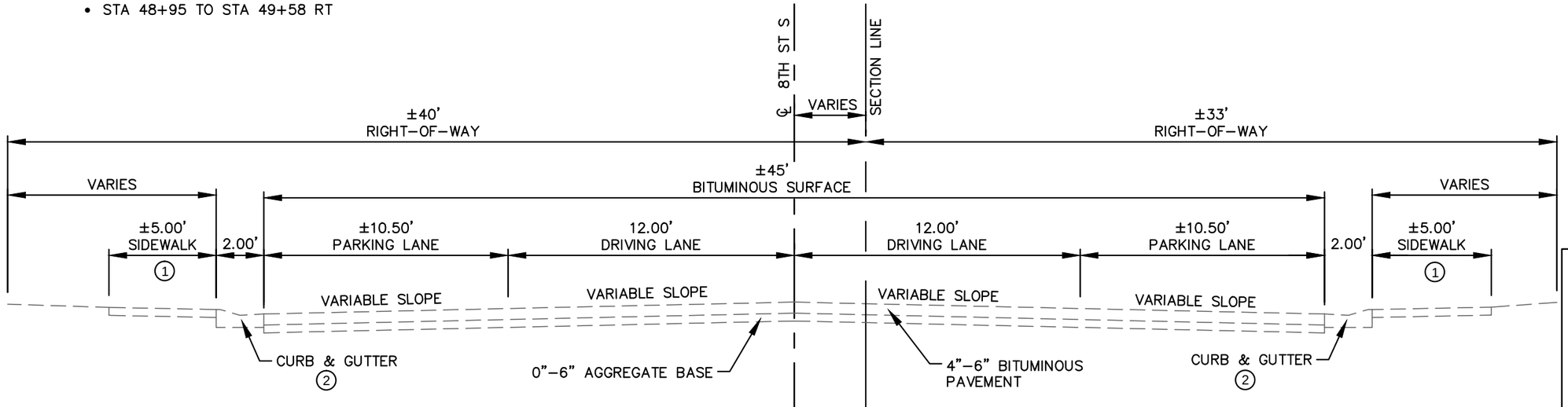
TYPICAL EXISTING ROADWAY SECTION

(NOT TO SCALE)

STA. 42+45 TO 49+58

(1) EXISTING SIDEWALK IS PRESENT ONLY AT THE FOLLOWING LOCATIONS:
- B.O.P. TO STA 43+99 LT
- STA 48+90 TO STA 79+58 LT

(2) CURB AND GUTTER IS MOUNTABLE TYPE CURB AND GUTTER EXCEPT AT THE FOLLOWING LOCATIONS THAT CONSIST OF STANDARD CURB AND GUTTER:
- STA 49+28 TO STA 49+58 LT
- STA 48+95 TO STA 49+58 RT



TYPICAL EXISTING ROADWAY SECTION

(NOT TO SCALE)

STA. 50+43 TO 76+53

(1) EXISTING SIDEWALK IS PRESENT ONLY AT THE FOLLOWING LOCATIONS:
- STA 50+43 TO STA 63+62 LT
- STA 54+00 TO E.O.P. RT

(2) CURB AND GUTTER IS MOUNTABLE TYPE CURB AND GUTTER EXCEPT AT THE FOLLOWING LOCATIONS THAT CONSIST OF STANDARD CURB AND GUTTER:
- STA 50+43 TO STA 50+61 LT
- STA 50+43 TO STA 50+72 RT
- STA 54+00 TO STA 57+68 RT
- STA 63+50 TO E.O.P. LT

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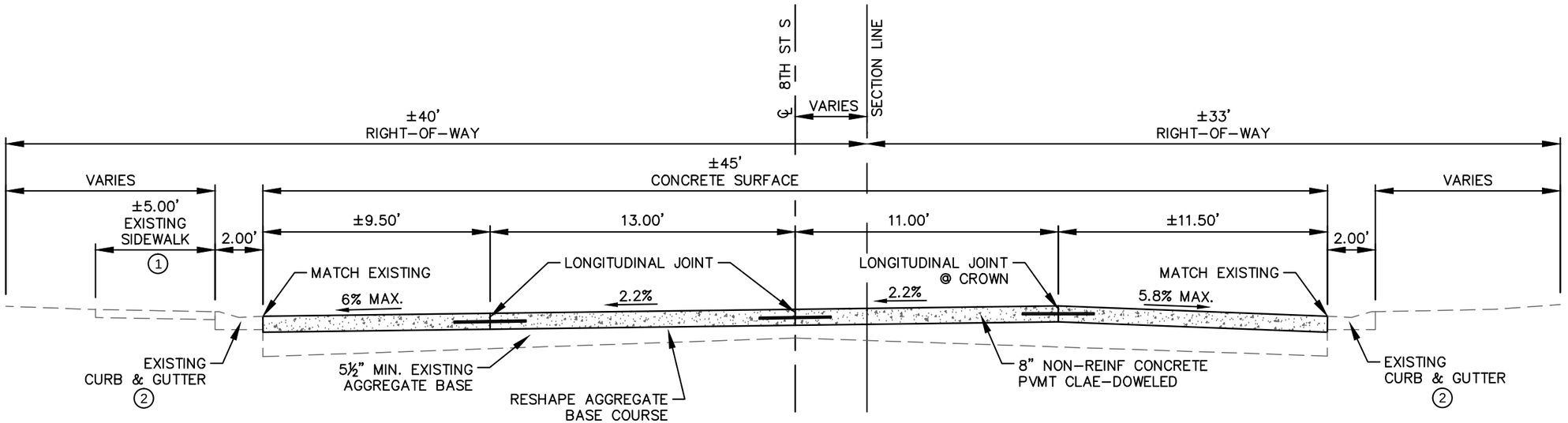
TYPICAL SECTIONS
Existing

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	30	2

TRANSITION AREAS: THE FOLLOWING AREAS ARE TRANSITION AREAS BETWEEN THE TYPICAL SECTIONS SHOWN. SEE CROSS-SECTION SHEETS FOR DETAILS AT THE FOLLOWING TRANSITION AREAS.

- STA. B.O.P. TO 43+50
- STA. 44+75 TO 45+50
- STA. 50+43 TO 51+50
- STA. 52+25 TO 52+50
- STA. 54+00 TO 54+75
- STA. 59+00 TO 62+25
- STA. 63+00 TO 65+00
- STA. 66+75 TO 67+50
- STA. 75+25 TO E.O.P.



TYPICAL PROPOSED ROADWAY SECTION

(NOT TO SCALE)

STA. 43+50 TO 44+75

(1) EXISTING SIDEWALK IS PRESENT ONLY AT THE FOLLOWING LOCATIONS:
- 43+50 TO STA 43+99 LT

(2) CURB AND GUTTER IS MOUNTABLE TYPE CURB AND GUTTER.

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TYPICAL SECTIONS
Proposed

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

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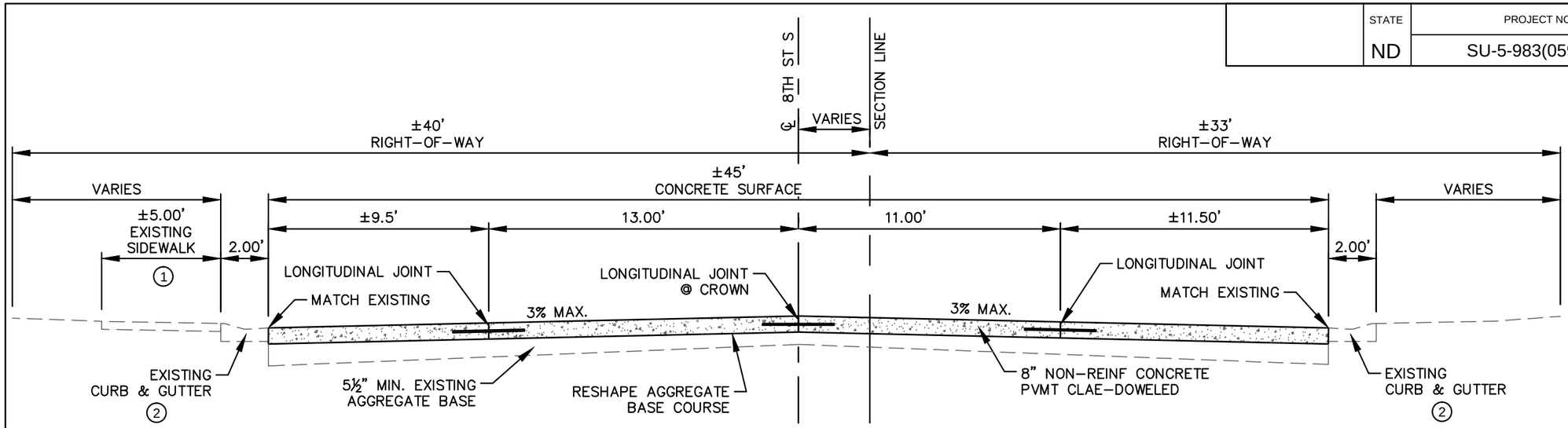
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	30	3



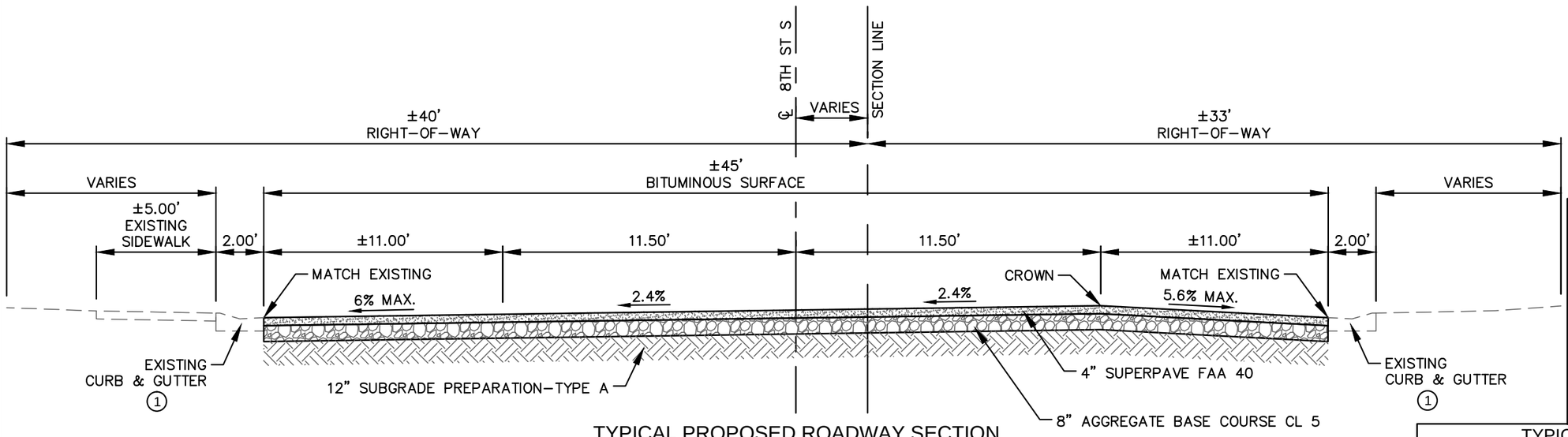
TYPICAL PROPOSED ROADWAY SECTION

(NOT TO SCALE)

STA. 45+50 TO 49+58

(1) EXISTING SIDEWALK IS PRESENT ONLY AT THE FOLLOWING LOCATIONS:
- STA 48+90 TO STA 49+58 LT

(2) CURB AND GUTTER IS MOUNTABLE TYPE CURB AND GUTTER EXCEPT AT THE FOLLOWING LOCATIONS THAT CONSIST OF STANDARD CURB AND GUTTER:
- STA 49+28 TO STA 49+58 LT
- STA 48+95 TO STA 49+58 RT



TYPICAL PROPOSED ROADWAY SECTION

(NOT TO SCALE)

STA. 51+50 TO 52+25

(1) CURB AND GUTTER IS MOUNTABLE TYPE CURB AND GUTTER.

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TYPICAL SECTIONS
Proposed

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2ND AVE SW TO 6TH AVE SE

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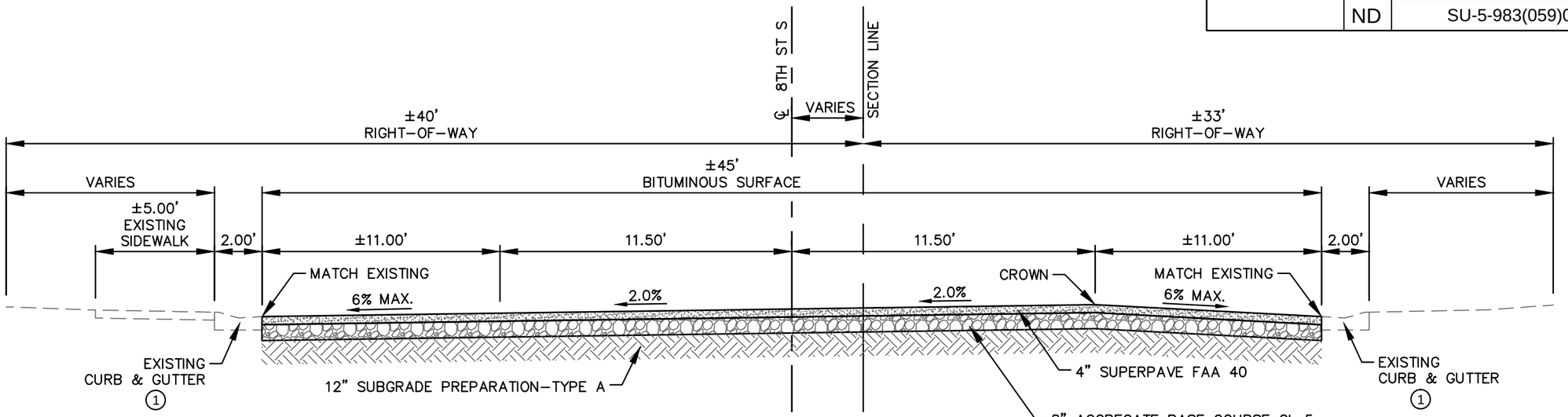
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	30	4

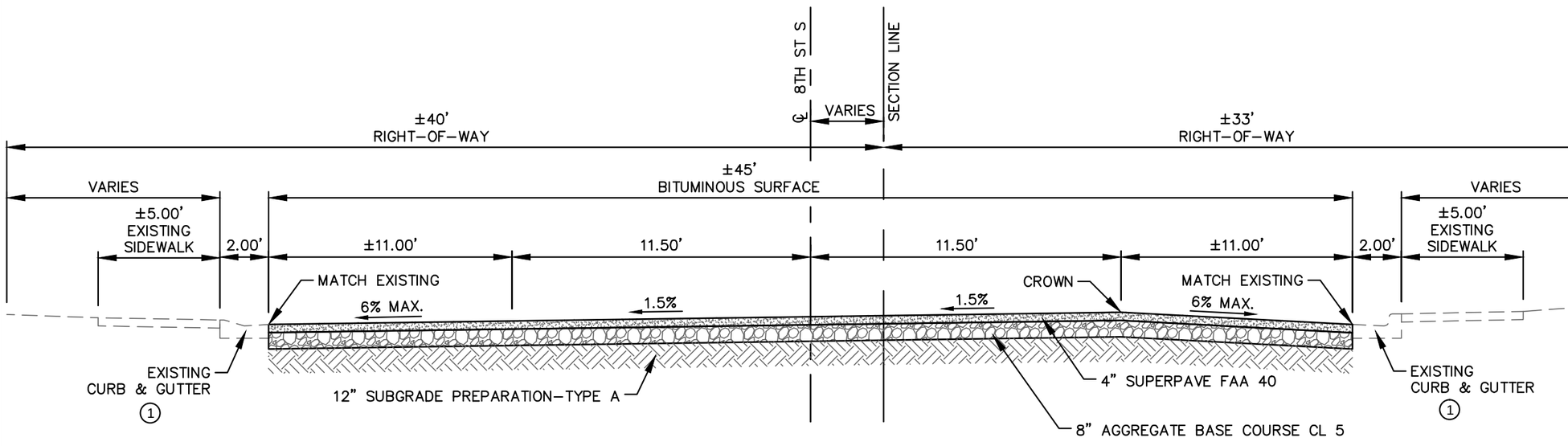


TYPICAL PROPOSED ROADWAY SECTION

(NOT TO SCALE)

STA. 52+50 TO 54+00

(1) CURB AND GUTTER IS MOUNTABLE TYPE CURB AND GUTTER.



TYPICAL PROPOSED ROADWAY SECTION

(NOT TO SCALE)

STA. 54+75 TO 59+00

(1) CURB AND GUTTER IS MOUNTABLE TYPE CURB AND GUTTER EXCEPT AT THE FOLLOWING LOCATIONS THAT CONSIST OF STANDARD CURB AND GUTTER:

- STA 54+75 TO STA 57+68 RT

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TYPICAL SECTIONS
Proposed

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

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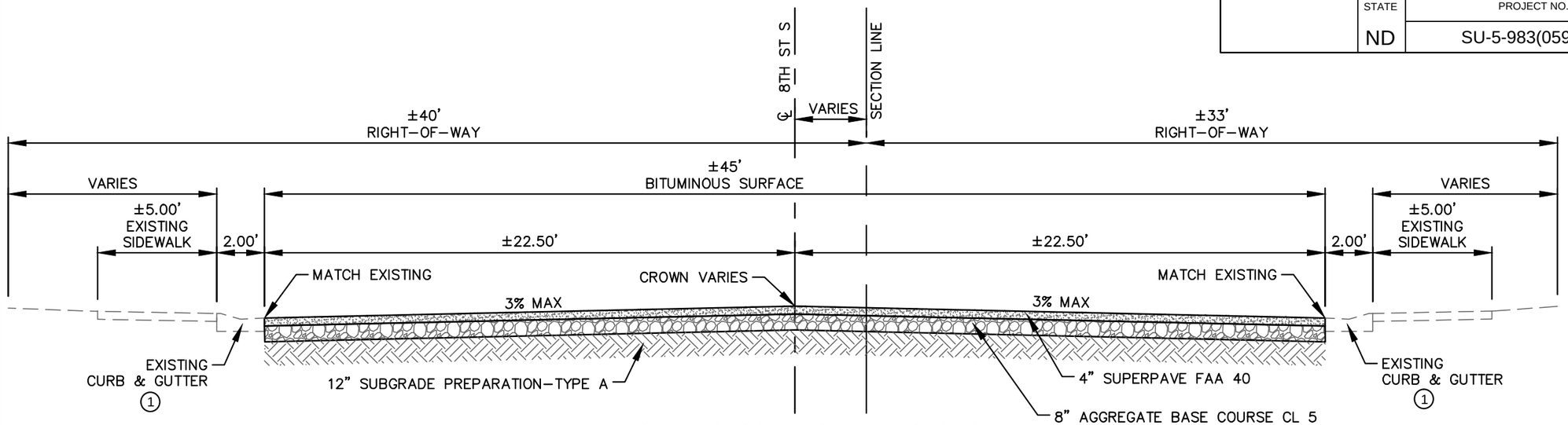
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	30	5

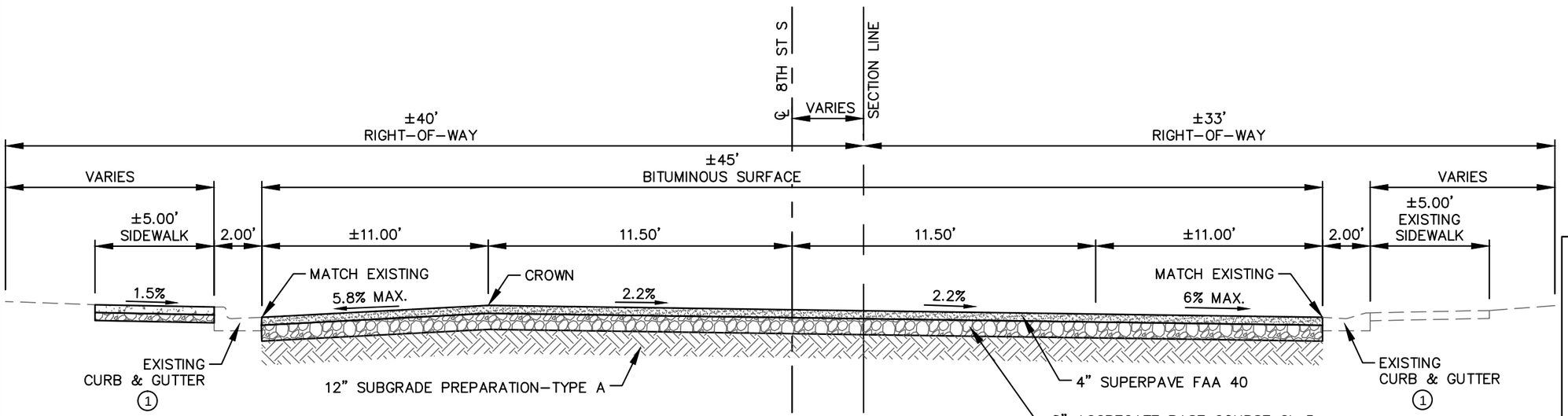


TYPICAL PROPOSED ROADWAY SECTION

(NOT TO SCALE)

STA. 62+25 TO 63+00

① CURB AND GUTTER IS MOUNTABLE TYPE CURB AND GUTTER.



TYPICAL PROPOSED ROADWAY SECTION

(NOT TO SCALE)

STA. 65+00 TO 66+75

① CURB AND GUTTER IS STANDARD CURB AND GUTTER ON THE LEFT SIDE AND MOUNTABLE TYPE CURB AND GUTTER ON THE RIGHT SIDE.

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TYPICAL SECTIONS
Proposed

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2ND AVE SW TO 6TH AVE SE

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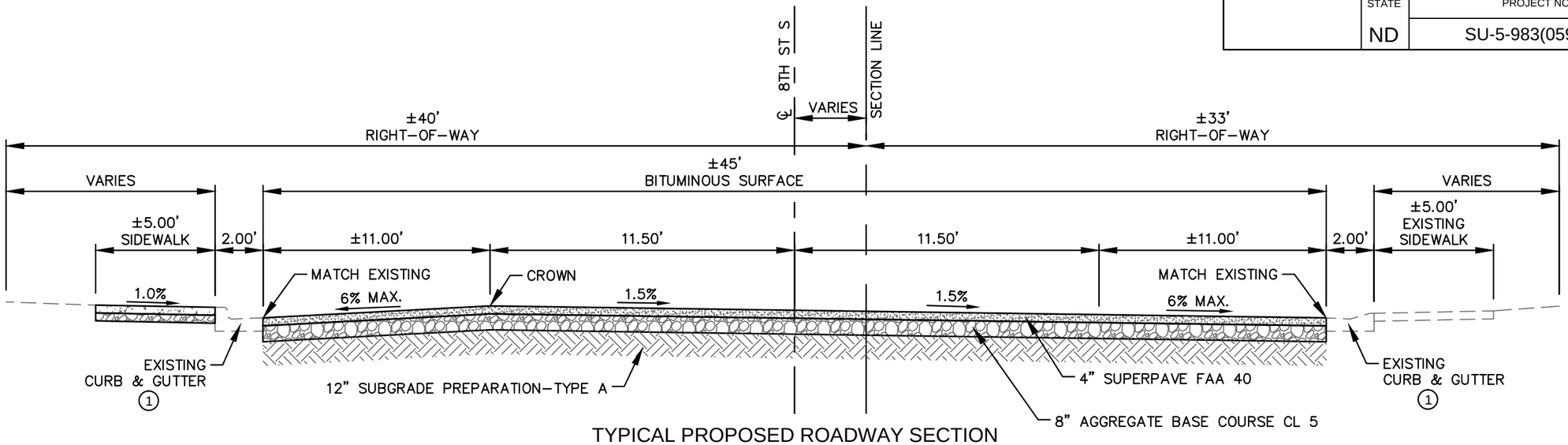
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	30	6



TYPICAL PROPOSED ROADWAY SECTION

(NOT TO SCALE)

STA. 67+50 TO 75+25

(1) CURB AND GUTTER IS STANDARD CURB AND GUTTER ON THE LEFT SIDE AND MOUNTABLE TYPE CURB AND GUTTER ON THE RIGHT SIDE.

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TYPICAL SECTIONS
Proposed

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

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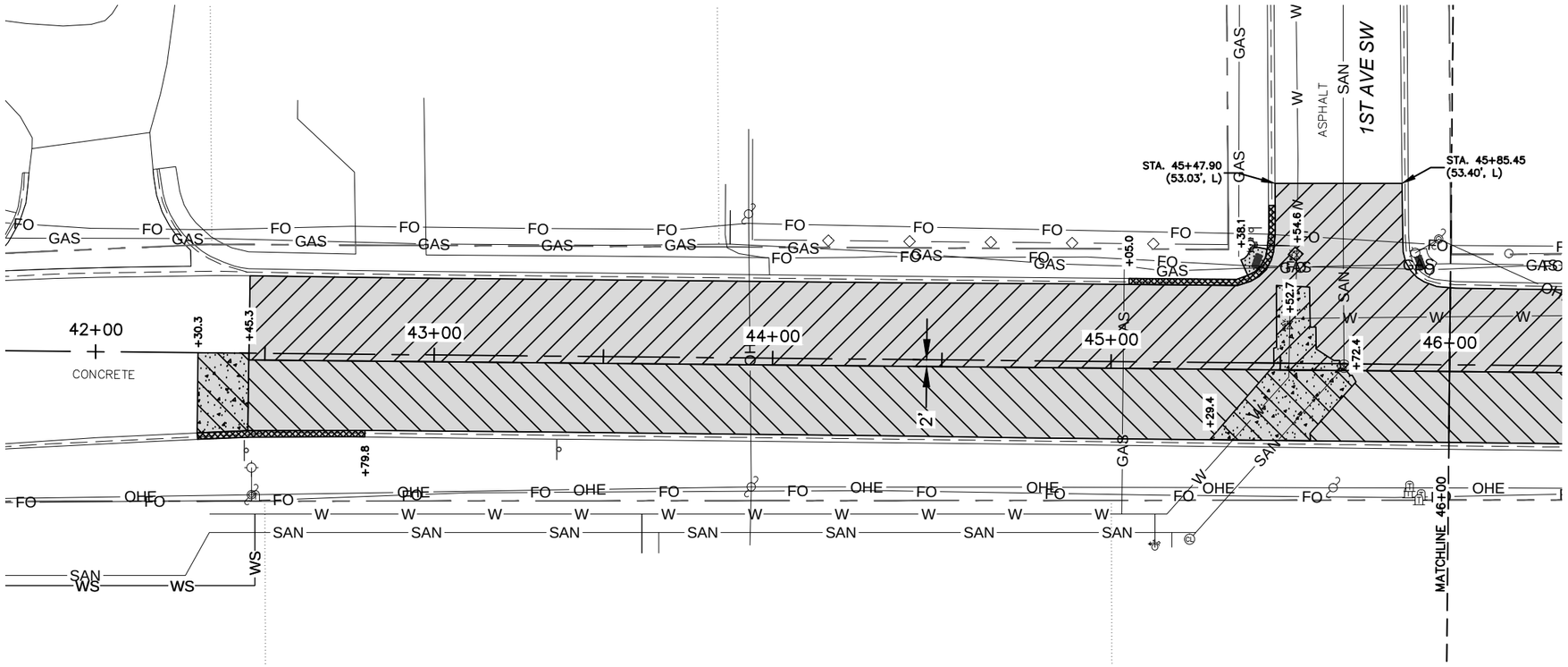
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	40	1



REMOVAL OF PAVEMENT

Sta 42+45 to 46+00 - Phase 1

Mainline Bituminous & Concrete	9,980 SF
Sidewalk Concrete	38 SF
Curb & Gutter	60 LF

Sta 42+30 to 46+00 - Phase 2

Mainline Bituminous & Concrete	7,668 SF
Curb & Gutter	50 LF

LEGEND

- PHASE 1 REMOVALS
- PHASE 2 REMOVALS
- REMOVAL OF BITUMINOUS SURFACING
- REMOVAL OF MAINLINE CONCRETE
- REMOVAL OF SIDEWALK CONCRETE
- REMOVAL OF CURB & GUTTER

0 40'

SCALE: 1" = 40'

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REMOVALS

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

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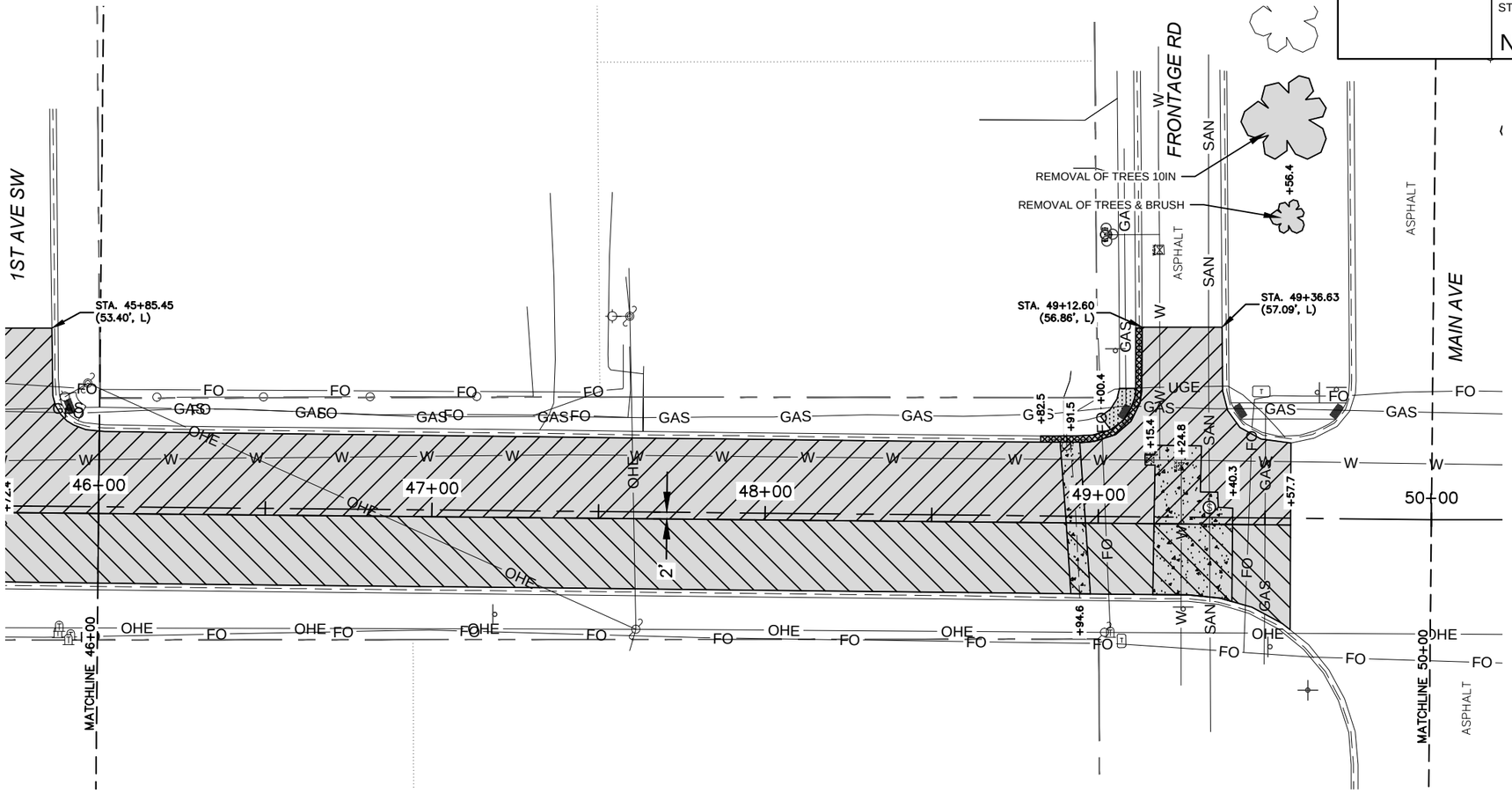
STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SU-5-983(059)059	40	2



REMOVAL OF PAVEMENT
Sta 46+00 to 49+58 - Phase 1
- Mainline Bituminous & Concrete 9,649 SF
- Sidewalk Concrete 65 SF
- Curb & Gutter 56 LF

Sta 46+00 to 49+58 - Phase 2
- Mainline Bituminous & Concrete 7,650 SF

REMOVAL OF TREES & BRUSH
Sta 49+56, Lt 0.5 LSUM

REMOVAL OF TREES 10IN
Sta 49+56, Lt 1 EA

LEGEND

- PHASE 1 REMOVALS
- PHASE 2 REMOVALS
- REMOVAL OF BITUMINOUS SURFACING
- REMOVAL OF MAINLINE CONCRETE
- REMOVAL OF SIDEWALK CONCRETE
- REMOVAL OF CURB & GUTTER

N W E S

0 40'

SCALE: 1" = 40'

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REMOVALS

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

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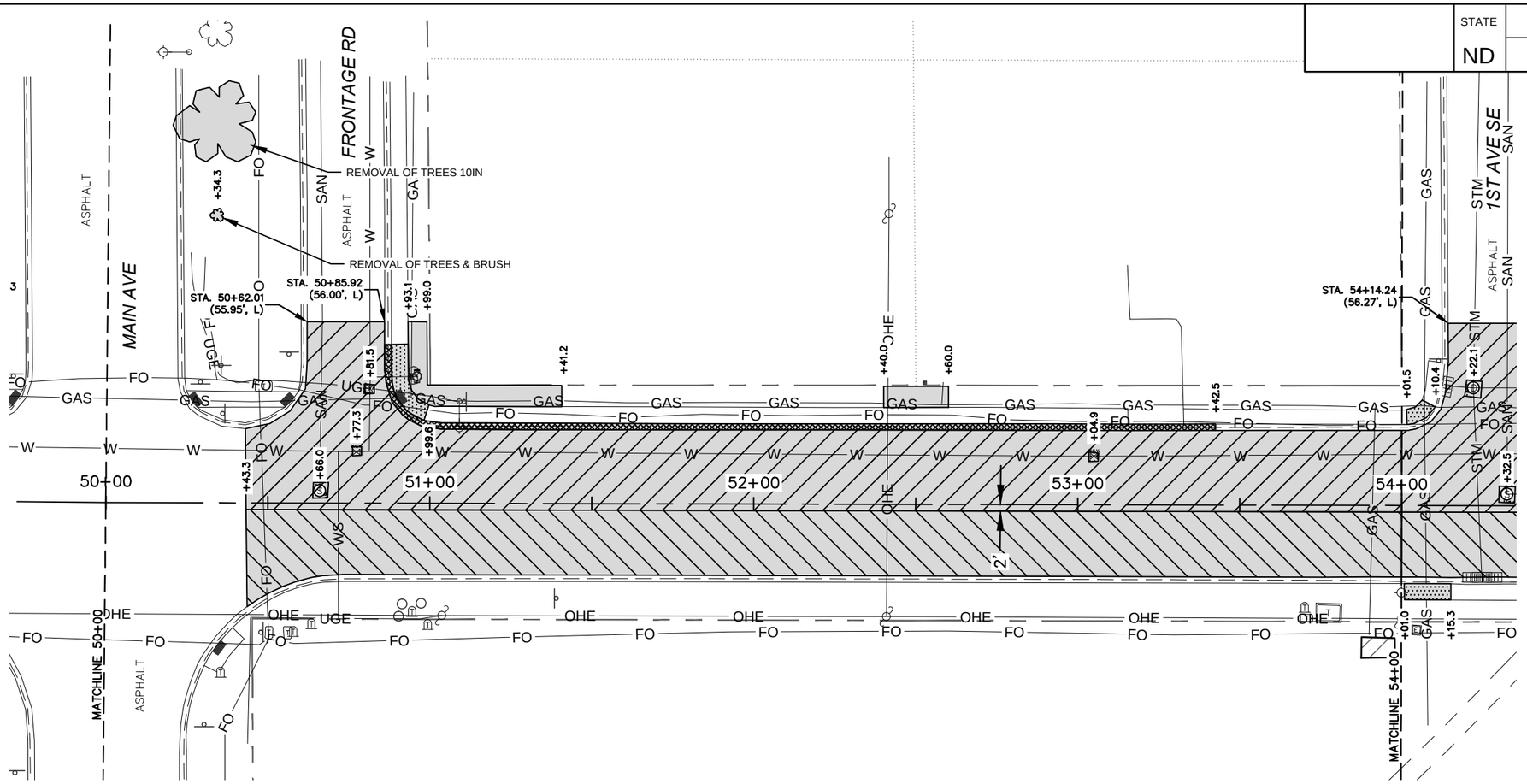
STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SU-5-983(059)059	40	3



REMOVAL OF PAVEMENT

Sta 50+43 to 54+00 - Phase 1	
Mainline Bituminous & Concrete	9,827 SF
Other Bituminous Surfacing	535 SF
Sidewalk Concrete	127 SF
Curb & Gutter	273 LF
Sta 50+43 to 54+00 - Phase 2	
Mainline Bituminous & Concrete	7,258 SF

REMOVAL OF TREES & BRUSH

Sta 50+34, Lt	0.5 LSUM

REMOVAL OF TREES 10IN

Sta 50+34, Lt	1 EA

LEGEND

- PHASE 1 REMOVALS
- PHASE 2 REMOVALS
- REMOVAL OF BITUMINOUS SURFACING
- REMOVAL OF MAINLINE CONCRETE
- REMOVAL OF SIDEWALK CONCRETE
- REMOVAL OF CURB & GUTTER

0 40'

SCALE: 1" = 40'

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REMOVALS

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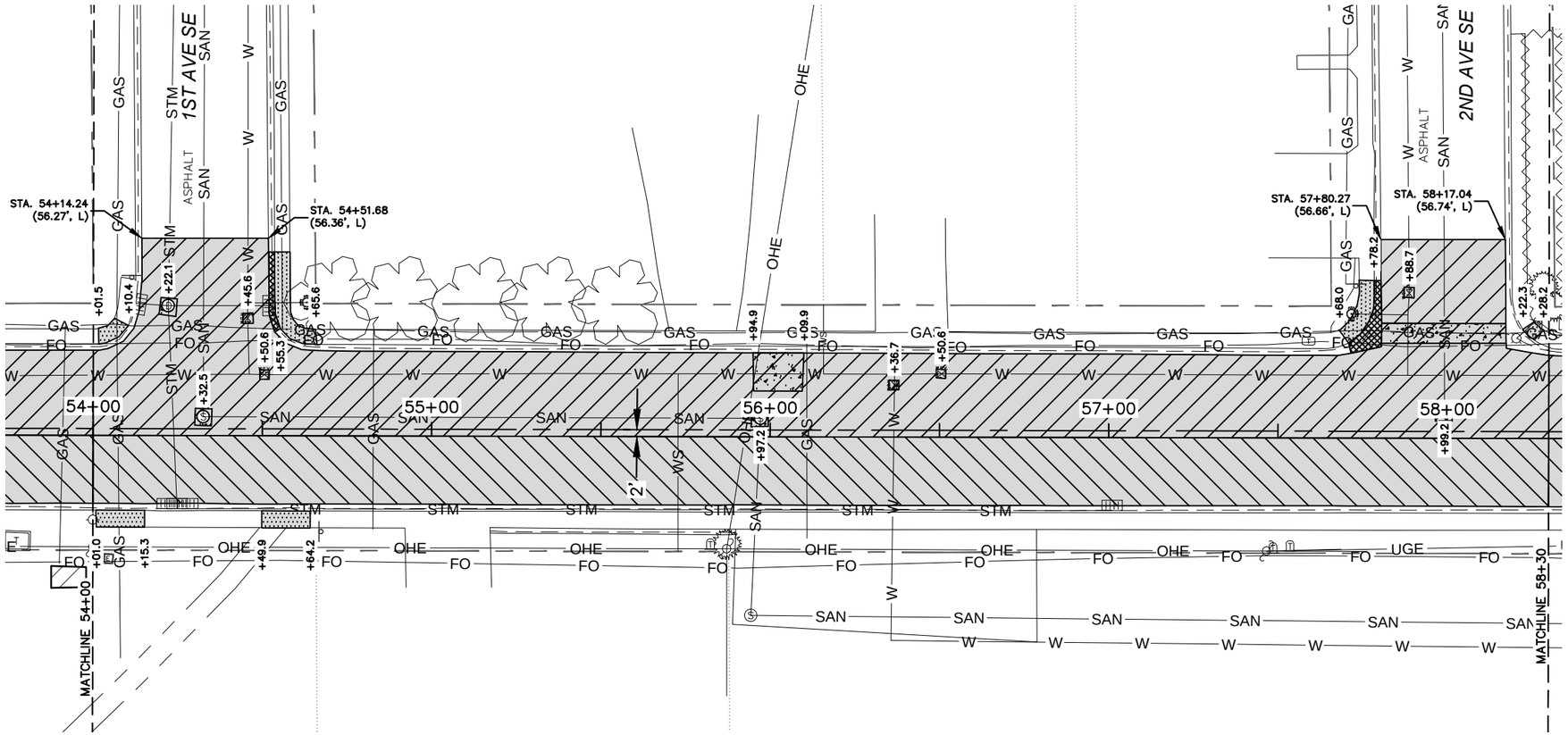
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	40	4



REMOVAL OF PAVEMENT

Sta 54+00 to 58+30 - Phase 1

Mainline Bituminous & Concrete	13,272 SF
Sidewalk Concrete	287 SF
Curb & Gutter	46 LF

Sta 54+00 to 58+30 - Phase 2

Mainline Bituminous & Concrete	8,665 SF
Sidewalk Concrete	143 SF

LEGEND

- PHASE 1 REMOVALS
- PHASE 2 REMOVALS
- REMOVAL OF BITUMINOUS SURFACING
- REMOVAL OF MAINLINE CONCRETE
- REMOVAL OF SIDEWALK CONCRETE
- REMOVAL OF CURB & GUTTER

0 40'

SCALE: 1" = 40'

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REMOVALS

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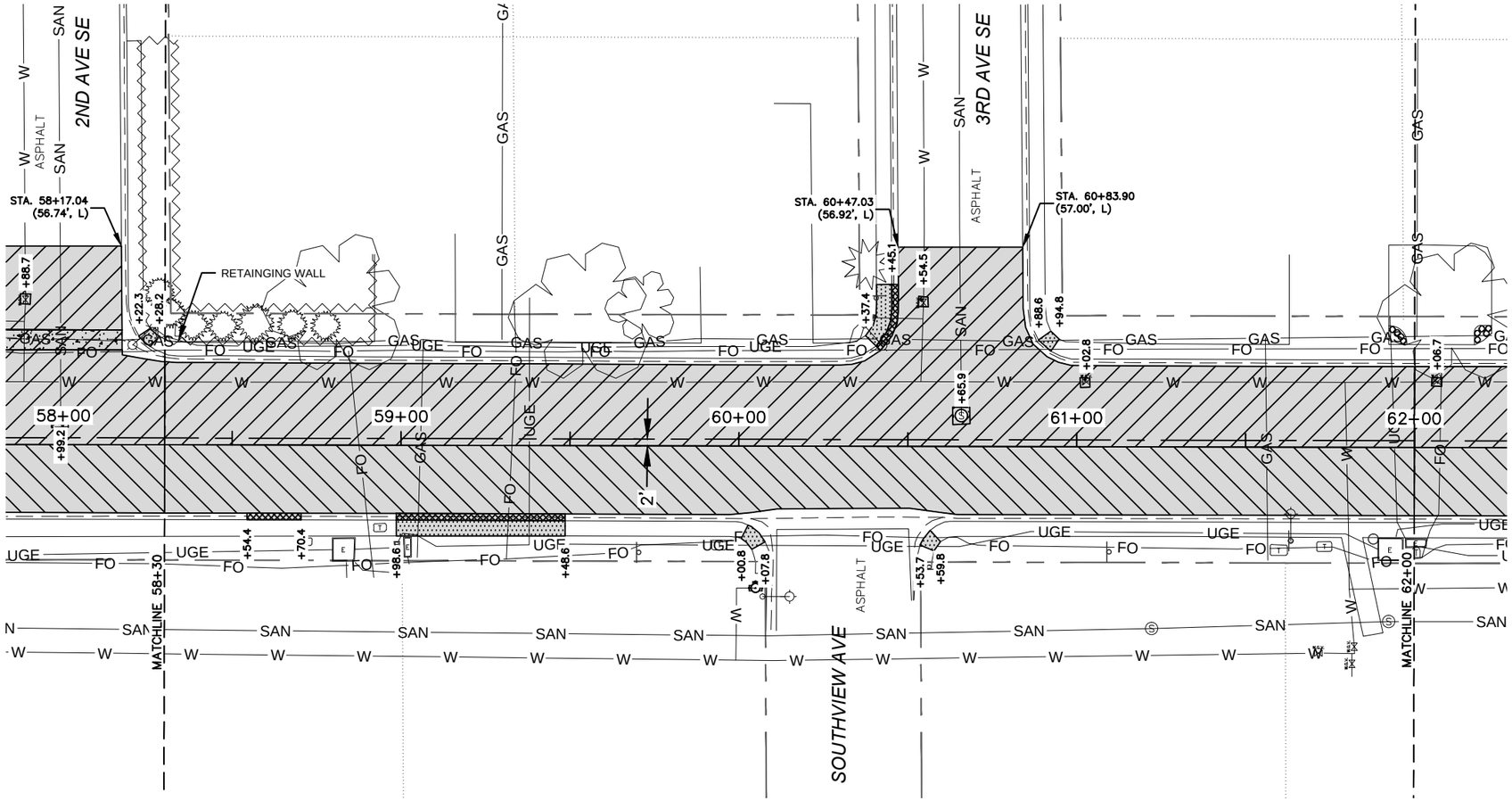
	ND	SU-5-983(059)059	40	5



REMOVAL OF PAVEMENT

Sta 58+30 to 62+00 - Phase 1

Mainline Bituminous & Concrete	10,316 SF
Sidewalk Concrete	98 SF
Curb & Gutter	20 LF

Sta 58+30 to 62+00 - Phase 2

Mainline Bituminous & Concrete	7,368 SF
Sidewalk Concrete	277 SF
Curb and Gutter	66 LF

LEGEND

- PHASE 1 REMOVALS
- PHASE 2 REMOVALS
- REMOVAL OF BITUMINOUS SURFACING
- REMOVAL OF MAINLINE CONCRETE
- REMOVAL OF SIDEWALK CONCRETE
- REMOVAL OF CURB & GUTTER

N W E S

0 40'

SCALE: 1" = 40'

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REMOVALS

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

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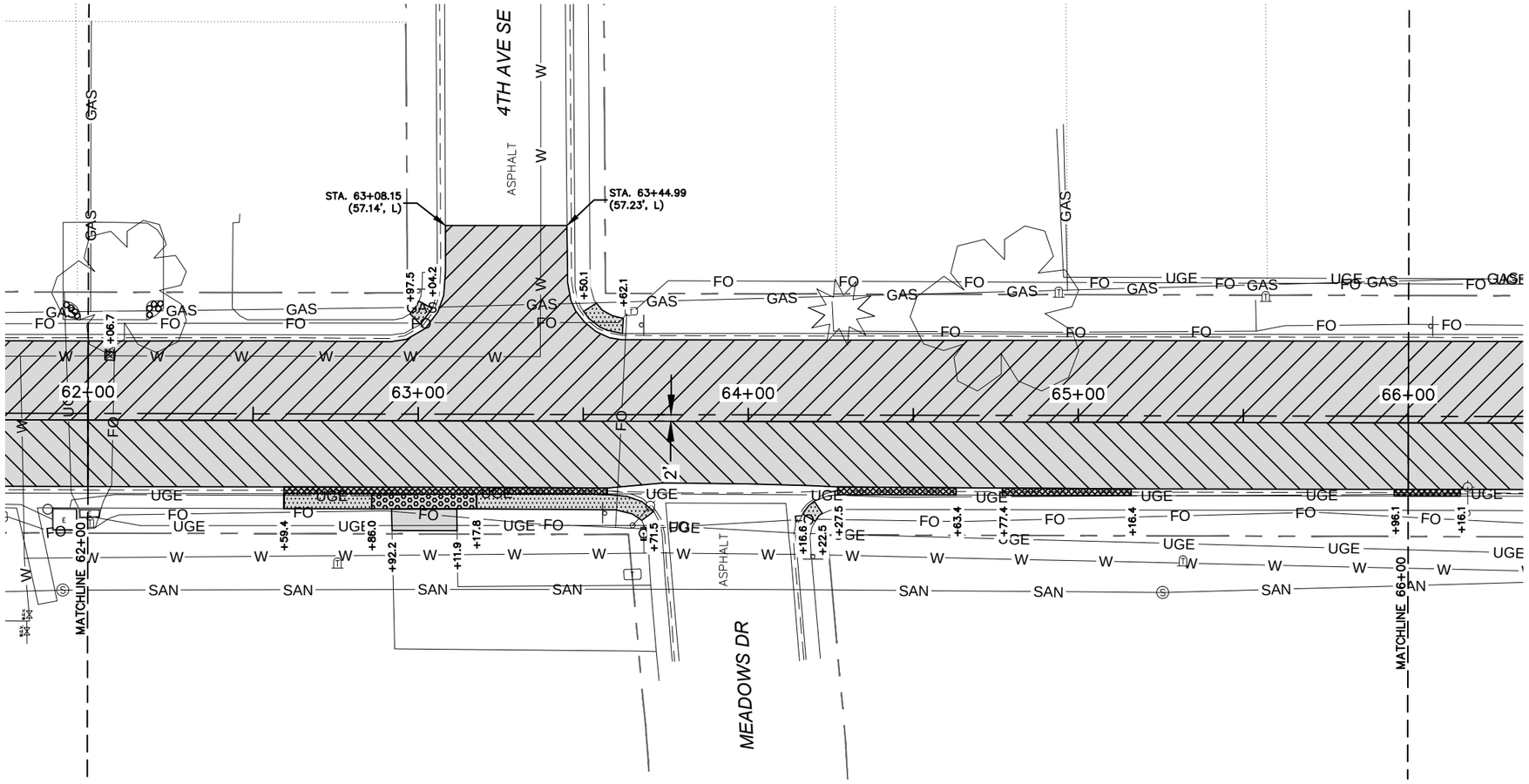
	ND	SU-5-983(059)059	40	6



REMOVAL OF PAVEMENT

Sta 62+00 to 66+00 - Phase 1

Mainline Bituminous & Concrete	11,225 SF
Sidewalk Concrete	79 SF

Sta 62+00 to 66+00 - Phase 2

Mainline Bituminous & Concrete	7,974 SF
Other Bituminous Surfacing	130 SF
Sidewalk Concrete	385 SF
Driveway Concrete	145 SF
Curb and Gutter	177 LF

LEGEND

- PHASE 1 REMOVALS
- PHASE 2 REMOVALS
- REMOVAL OF BITUMINOUS SURFACING
- REMOVAL OF MAINLINE CONCRETE
- REMOVAL OF SIDEWALK CONCRETE
- REMOVAL OF DRIVEWAY CONCRETE
- REMOVAL OF CURB & GUTTER

0 40'

SCALE: 1" = 40'

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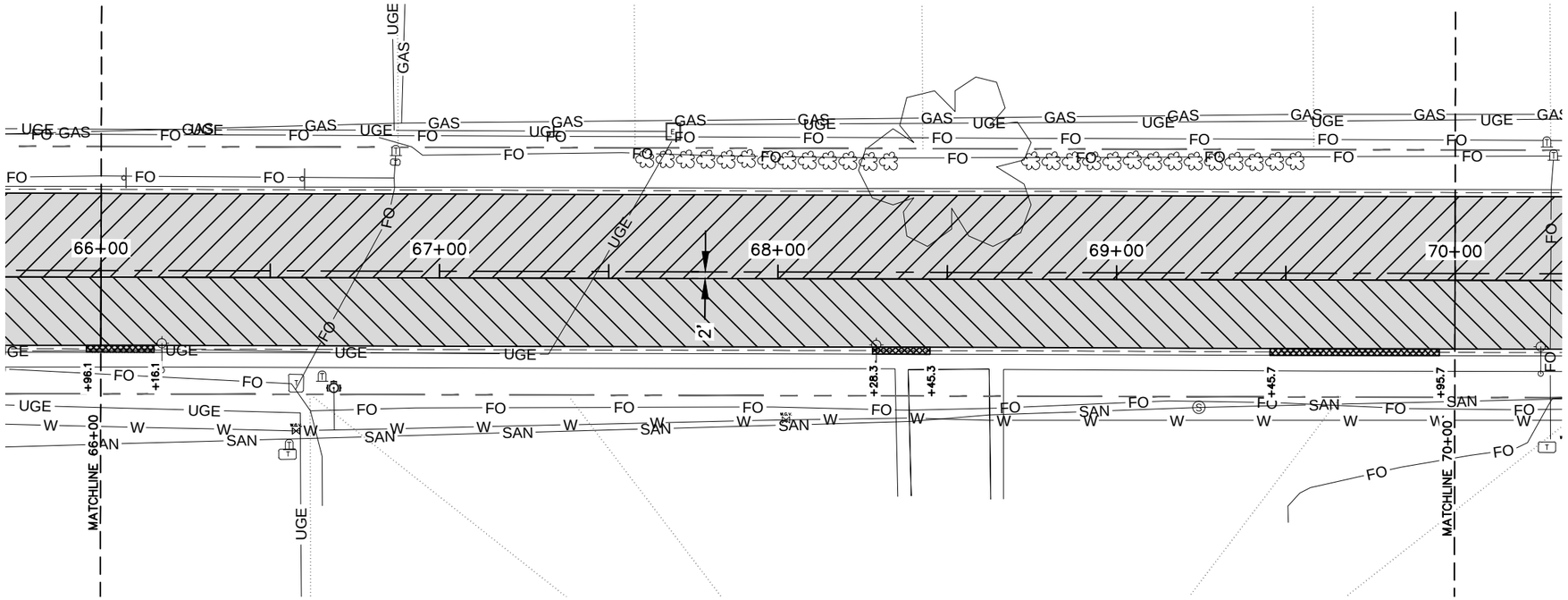
REMOVALS

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

9/5/2017 8:57:23 AM schrank h:\168199\project cad\current plans\040RM_001_removals.dwg

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	40	7



REMOVAL OF PAVEMENT

Sta 66+00 to 70+00 - Phase 1

Mainline Bituminous & Concrete	9,893 SF

Sta 66+00 to 70+00 - Phase 2

Mainline Bituminous & Concrete	8,062 SF
Curb and Gutter	83 LF

LEGEND

PHASE 1 REMOVALS

PHASE 2 REMOVALS

REMOVAL OF BITUMINOUS SURFACING

REMOVAL OF CURB & GUTTER

N W E S

0 40'

SCALE: 1" = 40'

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REMOVALS

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

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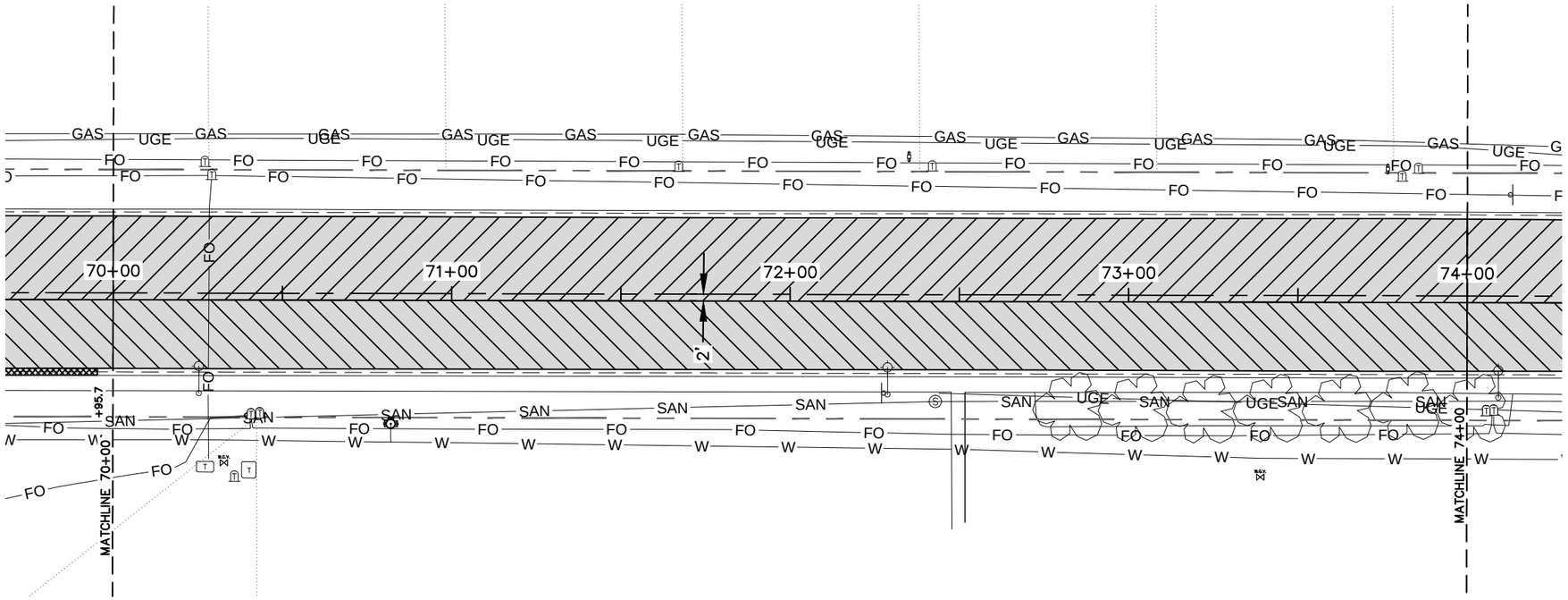
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	40	8



REMOVAL OF PAVEMENT

Sta 70+00 to 74+00 Phase - 1
Mainline Bituminous & Concrete 9,862 SF

Sta 70+00 to 74+00 Phase - 2
Mainline Bituminous & Concrete 8,097 SF

LEGEND

PHASE 1 REMOVALS

PHASE 2 REMOVALS

REMOVAL OF BITUMINOUS SURFACING

REMOVAL OF CURB & GUTTER

0 40'

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REMOVALS

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

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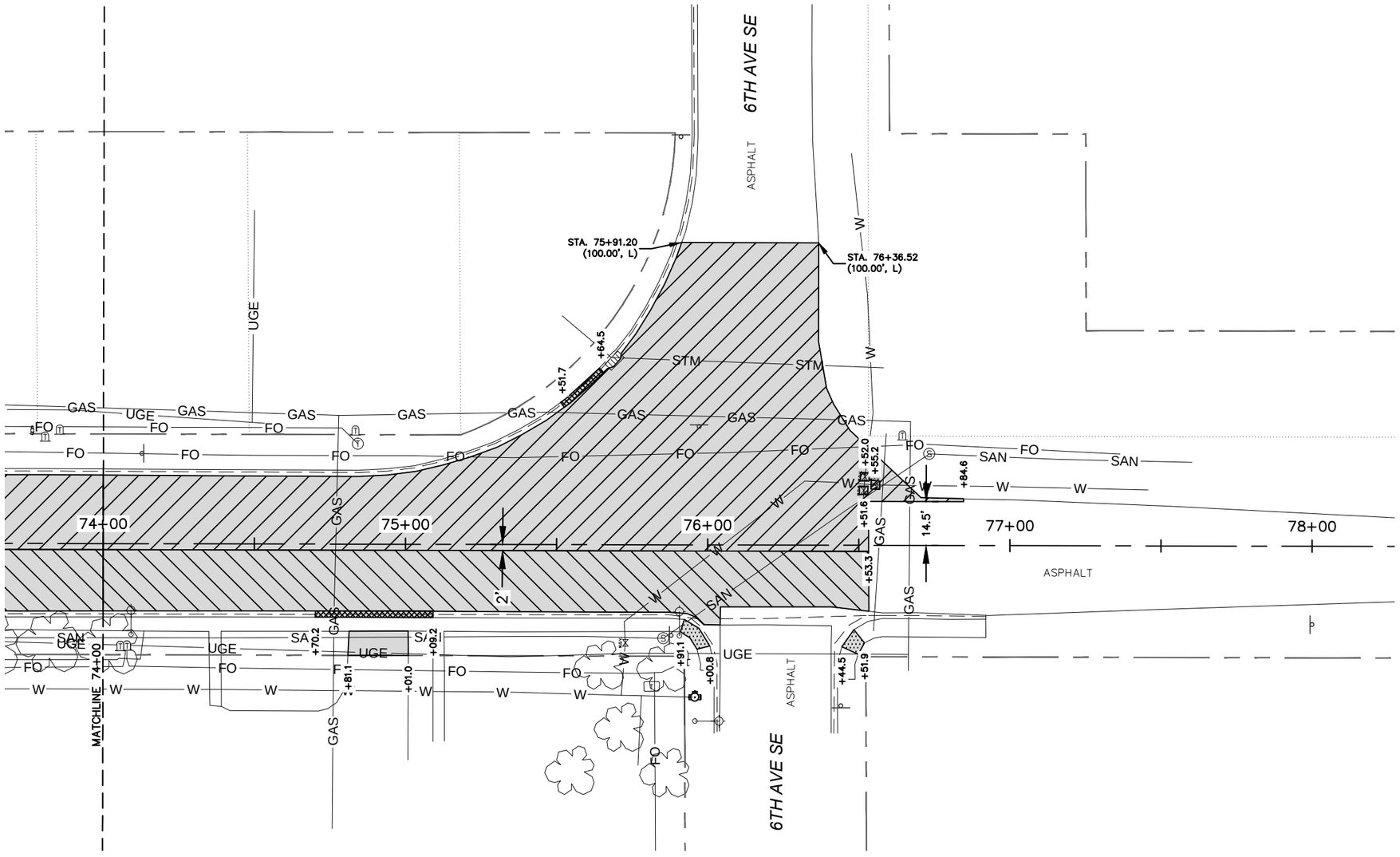

REMOVAL OF PAVEMENT

Sta 74+00 to 76+85 - Phase 1

Mainline Bituminous & Concrete	12,464 SF
Curb and Gutter	17 LF

Sta 74+00 to 76+53 Phase - 2

Mainline Bituminous & Concrete	5,070 SF
Other Bituminous Surfacing	159 SF
Sidewalk Concrete	75 SF
Curb and Gutter	39 LF

LEGEND

- PHASE 1 REMOVALS
- PHASE 2 REMOVALS
- REMOVAL OF BITUMINOUS SURFACING
- REMOVAL OF MAINLINE CONCRETE
- REMOVAL OF SIDEWALK CONCRETE
- REMOVAL OF CURB & GUTTER

0 40'

SCALE: 1" = 40'

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REMOVALS

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

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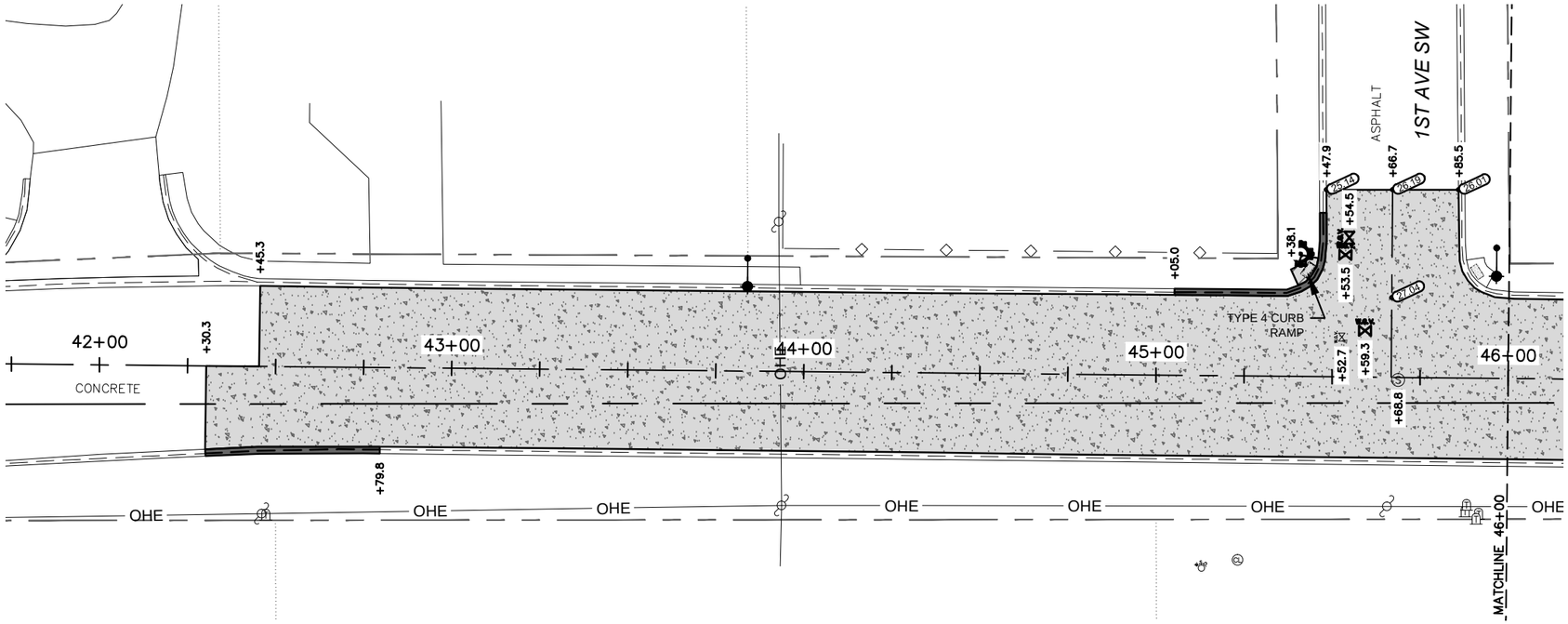

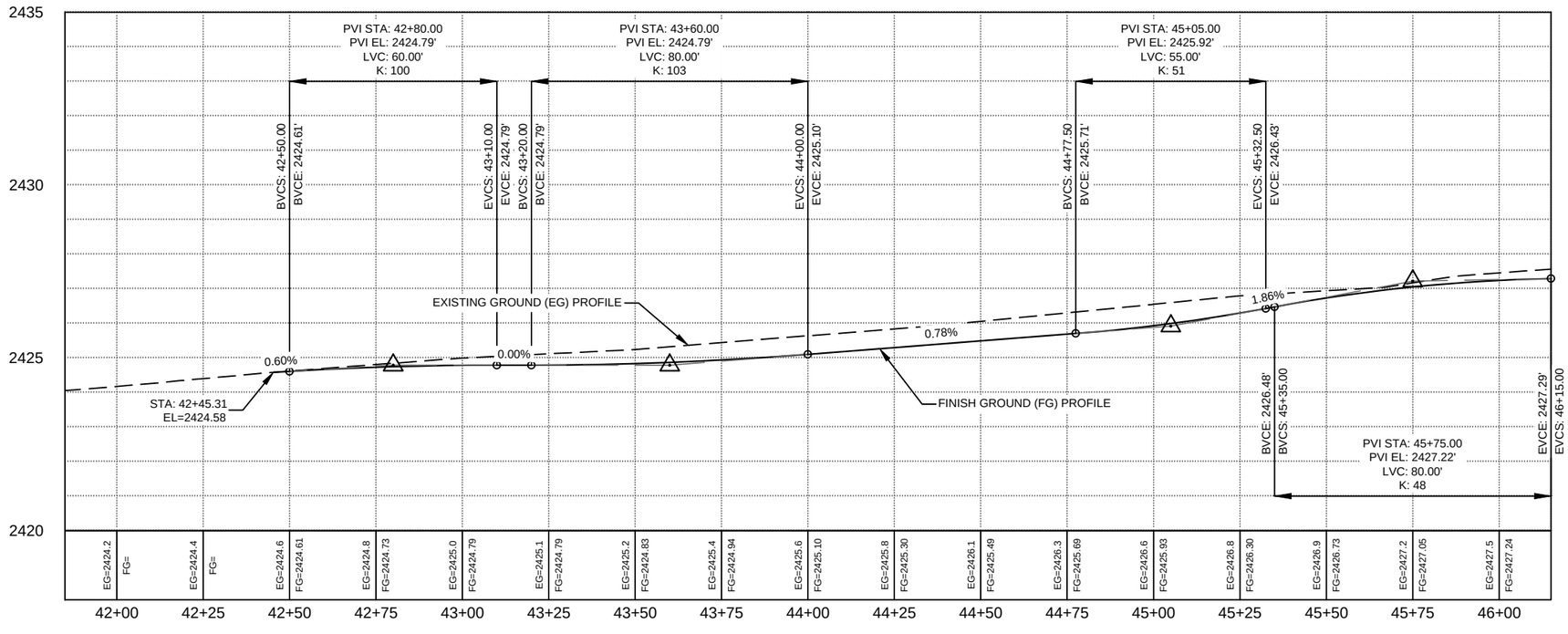

RESHAPE AGGREGATE BASE COURSE

Sta 42+45 to 46+00 Lt	1.78 STA
Sta 42+30 to 46+00 Rt	1.85 STA
	3.63 STA

8IN NON-REINF CONCRETE PVMT CL AE-DOWELED

Sta 42+45 to 46+00 Lt	1,030 SY
Sta 42+45 to 46+00 Rt	931 SY
	1,961 SY

ADJUST GATE VALVE BOX

Sta 45+53 Lt	1 EA
Sta 45+54 Lt	1 EA
Sta 45+55 Lt	1 EA
Sta 45+59 Lt	1 EA
	4 EA

ADJUST MANHOLE

Sta 45+69	1 EA
	1 EA

CURB & GUTTER

Sta 42+30 to 42+80 Rt	50 LF
Sta 45+05 to 45+48 Lt	60 LF
	110 LF

SIDEWALK CONCRETE

Sta 45+38 to 45+46 Lt	4 SY
	4 SY

DETECTABLE WARNING PANELS

Sta 45+42 Lt	8 SF
	8 SF

LEGEND

- 8IN NON-REINF CONCRETE PVMT CL AE-DOWELED
- CURB & GUTTER
- SIDEWALK CONCRETE

SCALE

HORIZONTAL: 1"=40'

VERTICAL: 1"=4'

0 40' H

0 4' V

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PLAN AND PROFILE

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

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STATE	PROJECT NO.	SECTION NO.	SHEET NO.
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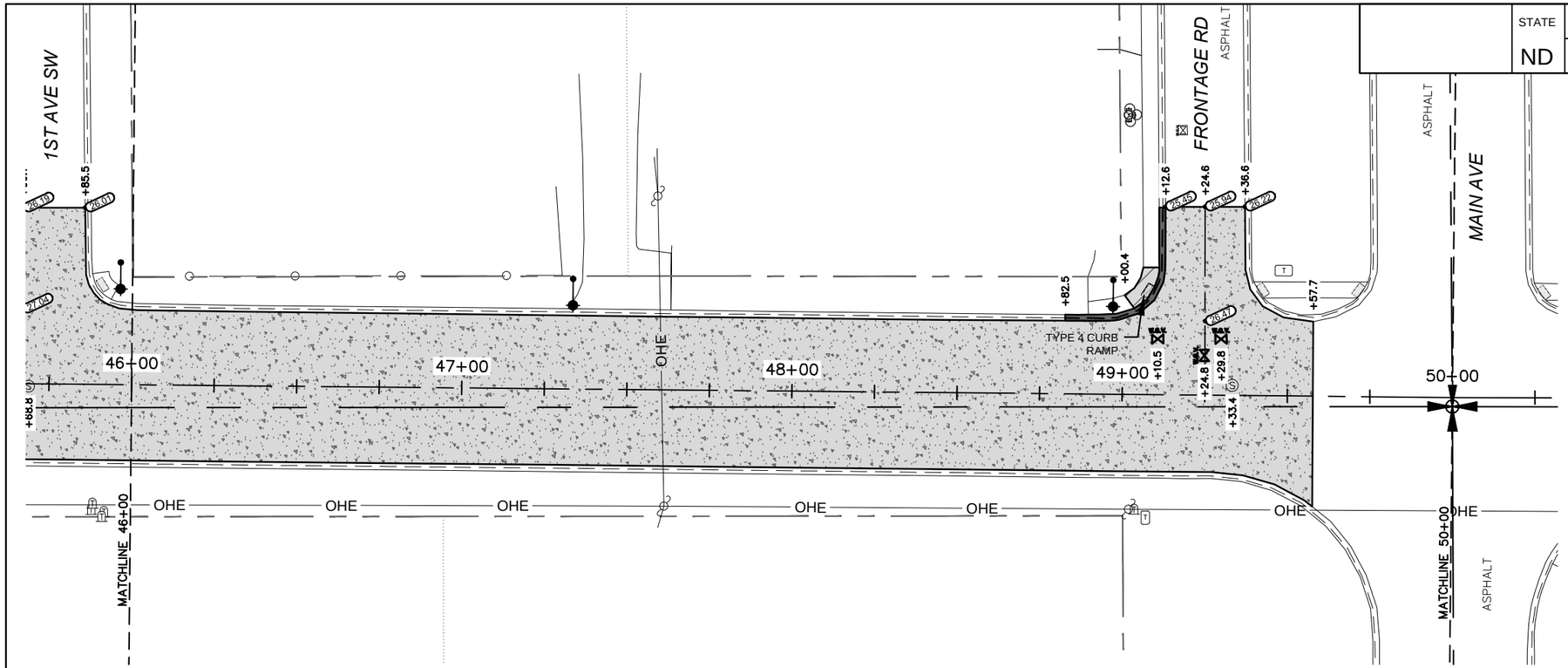

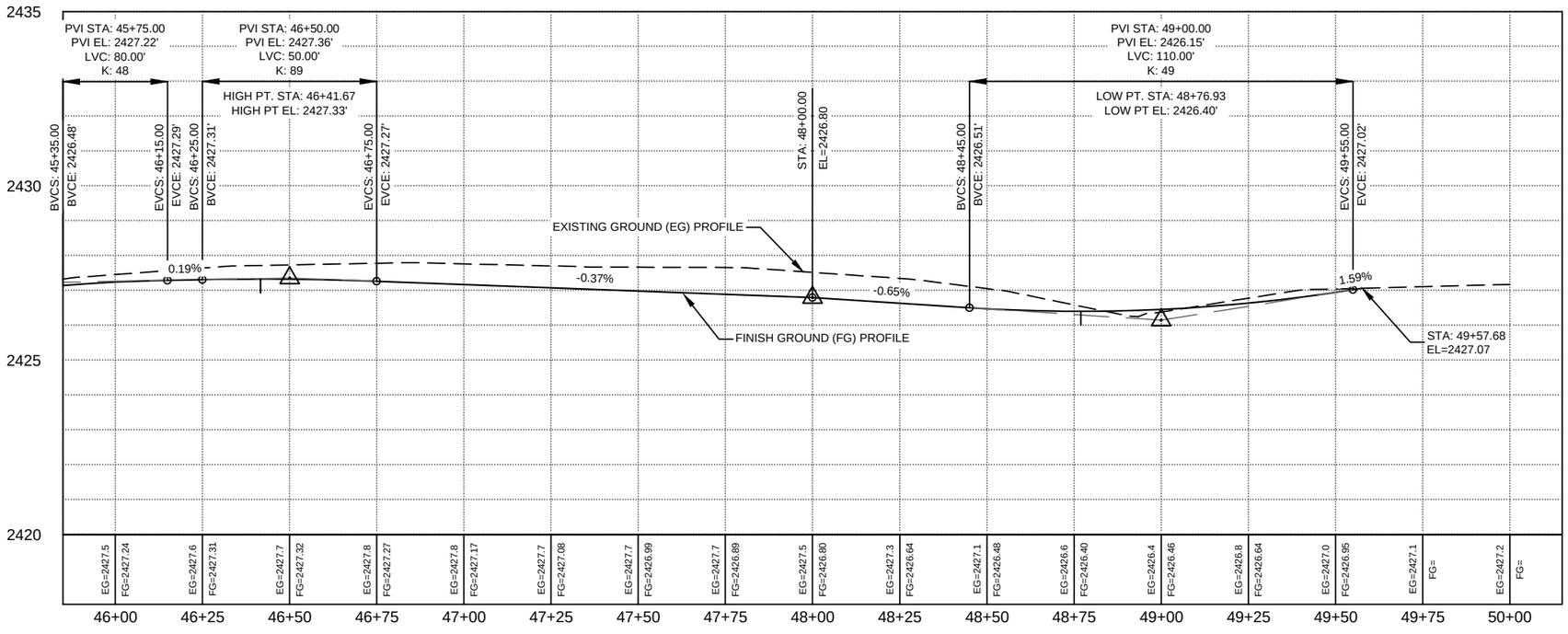

RESHAPE AGGREGATE BASE COURSE

Sta 46+00 to 49+58 Lt	1.79 STA
Sta 46+00 to 49+58 Rt	1.79 STA
	3.58 STA

8IN NON-REINF CONCRETE PVMT CL AE-DOWELED

Sta 46+00 to 49+58 Lt	993 SY
Sta 46+00 to 49+58 Rt	930 SY
	1,923 SY

ADJUST GATE VALVE BOX

Sta 49+11 Lt	1 EA
Sta 49+25 Lt	1 EA
Sta 49+30 Lt	1 EA
	3 EA

ADJUST MANHOLE

Sta 49+33 Lt	1 EA
	1 EA

CURB & GUTTER

Sta 48+82 to 49+13 Lt	56 LF
	56 LF

SIDEWALK CONCRETE

Sta 49+00 to 49+11 Lt	7 SY
	7 SY

DETECTABLE WARNING PANELS

Sta 49+03 Lt	8 SF
	8 SF

LEGEND

- 8IN NON-REINF CONCRETE PVMT CL AE-DOWELED
- CURB & GUTTER
- SIDEWALK CONCRETE

SCALE

HORIZONTAL: 1"=40'

VERTICAL: 1"=4'

0 40' H

0 4' V

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2ND AVE SW TO 6TH AVE SE

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STATE	PROJECT NO.	SECTION NO.	SHEET NO.
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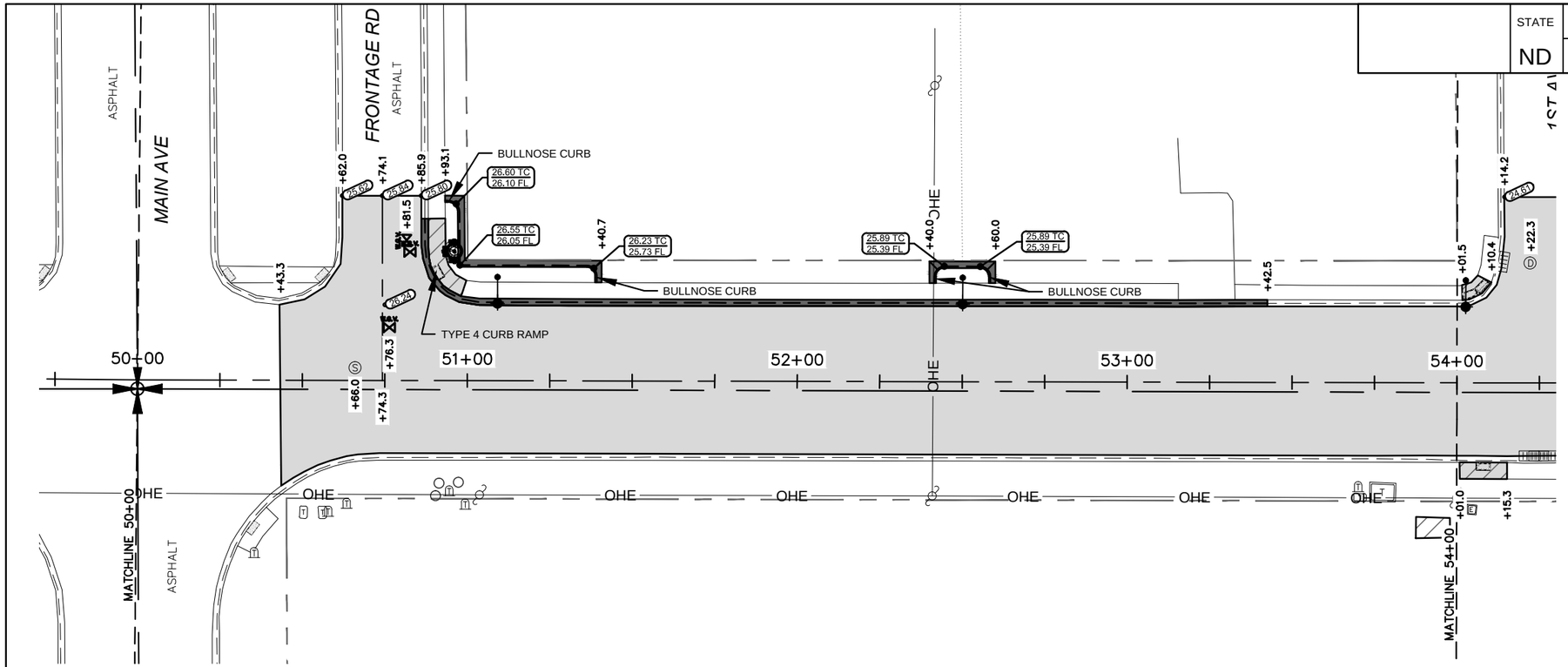

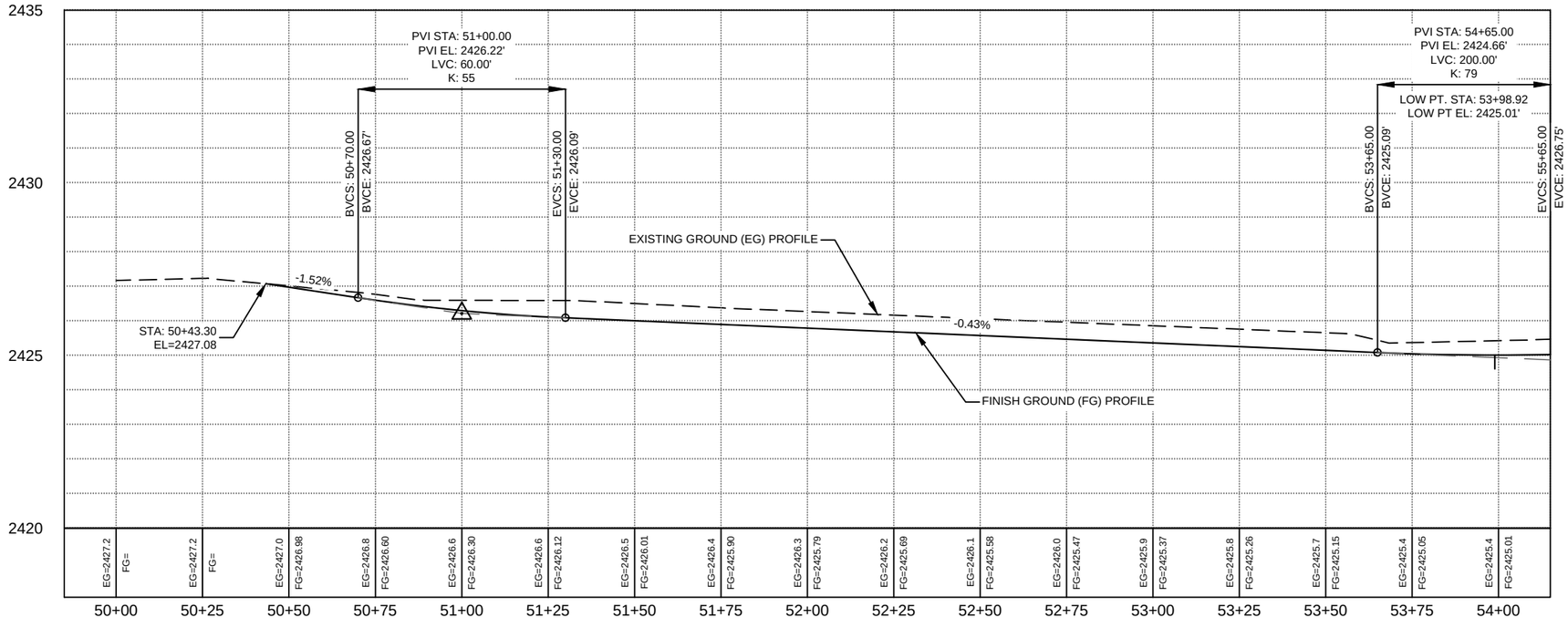

SUBGRADE PREPARTAION - TYPE A 12IN

Sta 50+43 to 54+00 Lt	1.79 STA
Sta 50+43 to 54+00 Rt	1.79 STA
	3.58 STA

HOT MIX ASPHALT

Sta 50+43 to 54+00 Lt	1013 SY
Sta 50+43 to 54+00 Rt	886 SY
	1899 SY

ADJUST GATE VALVE BOX

Sta 50+76 Lt	1 EA
Sta 50+82 Lt	2 EA
	3 EA

ADJUST MANHOLE

Sta 50+66 Lt	1 EA
	1 EA

CURB & GUTTER

Sta 50+86 to 53+43 Lt	257 LF
Sta 50+93 to 51+41 Lt	68 LF
Sta 52+40 to 52+60 Lt	25 LF
	350 LF

SIDEWALK CONCRETE

Sta 50+88 to 51+00 Lt	14 SY
	14 SY

DETECTABLE WARNING PANELS

Sta 50+88 Lt	8 SF
	8 SF

LEGEND

- HOT MIX ASPHALT
- CURB & GUTTER
- SIDEWALK CONCRETE

SCALE

HORIZONTAL: 1"=40'

VERTICAL: 1"=4'

0 40' H

0 4' V

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STATE	PROJECT NO.	SECTION NO.	SHEET NO.
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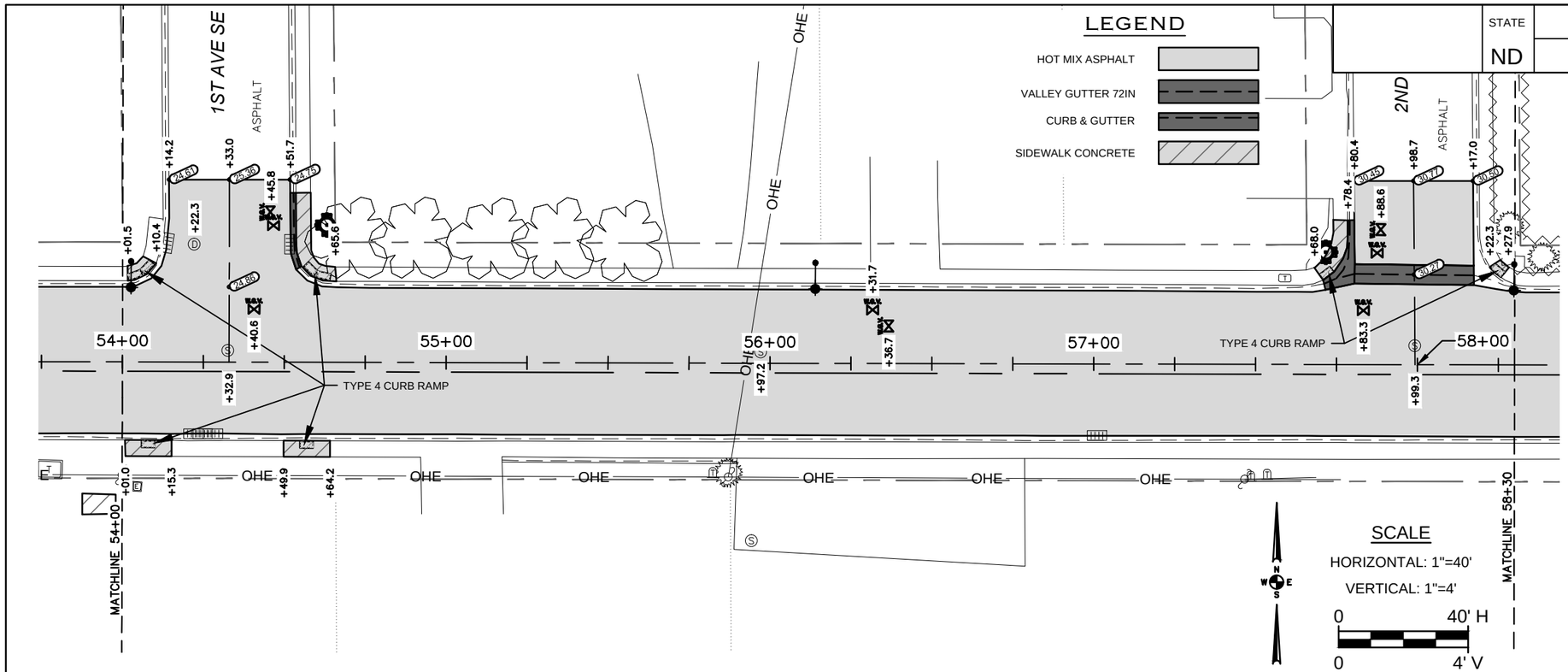

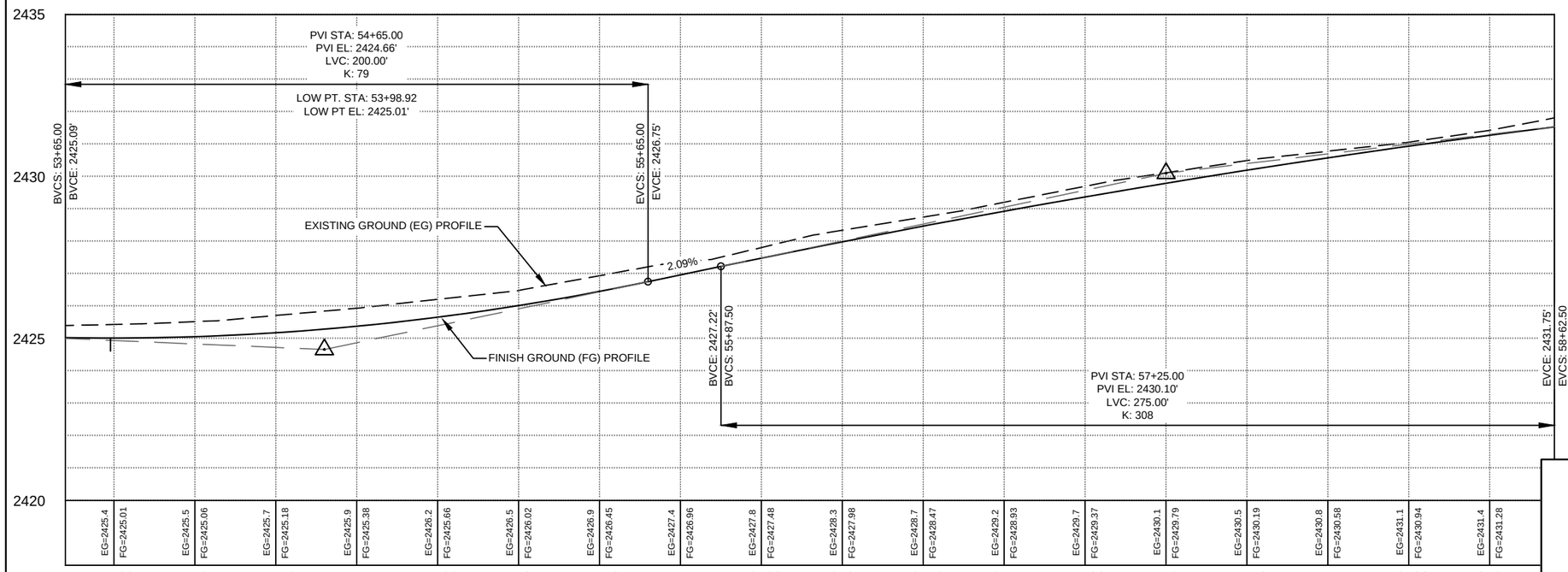

SUBGRADE PREPARTAION - TYPE A

Sta 54+00 to 58+30 Lt	2.15 STA
Sta 54+00 to 58+30 Rt	2.15 STA
	4.30 STA

VALLEY GUTTER-TYPE I 72IN

Sta 57+80 to 57+17 Lt	25 SY
	25 SY

HOT MIX ASPHALT

Sta 54+41 to 58+30 Lt	1355 SY
Sta 54+00 to 58+30 Rt	1058 SY
	2413 SY

ADJUST GATE VALVE BOX

Sta 54+41 Lt	1 EA
Sta 54+46 Lt	1 EA
Sta 54+48 Lt	1 EA
Sta 56+32 Lt	1 EA
Sta 56+37 Lt	1 EA
Sta 57+83 Lt	1 EA
Sta 57+87 Lt	1 EA
Sta 57+89 Lt	1 EA
	8 EA

ADJUST MANHOLE

Sta 54+22 Lt	1 EA
Sta 54+32 Lt	1 EA
Sta 55+97 Lt	1 EA
Sta 57+99 Lt	1 EA
	4 EA

CURB & GUTTER

Sta 54+52 to 54+55 Lt	23 LF
Sta 57+70 to 57+80 Lt	23 LF
	46 LF

SIDEWALK CONCRETE

Sta 54+01 to Sta 54+10 Lt	4 SY
Sta 54+01 to Sta 54+15 Rt	8 SY
Sta 54+50 to Sta 54+64 Rt	8 SY
Sta 54+52 to Sta 54+66 Lt	16 SY
Sta 57+68 to Sta 57+78 Lt	10 SY
Sta 58+22 to Sta 58+28 Lt	2 SY
	48 SY

DETECTABLE WARNING PANELS

Sta 54+05 Lt	16 SF
Sta 54+08 Rt	8 SF
Sta 54+58 Rt	8 SF
Sta 54+60 Lt	16 SF
Sta 57+72 Lt	8 SF
Sta 58+24 Lt	8 SF
	64 SF

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2ND AVE SW TO 6TH AVE SE

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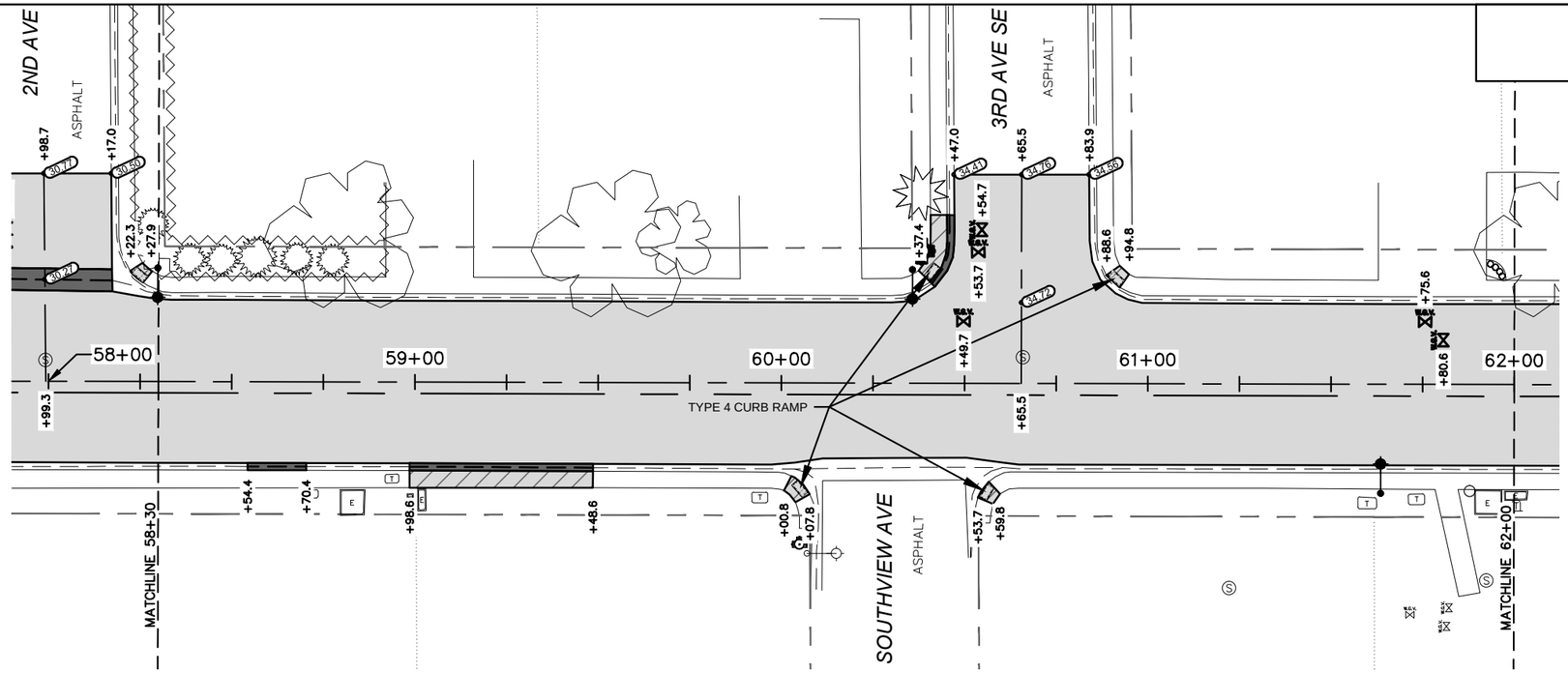

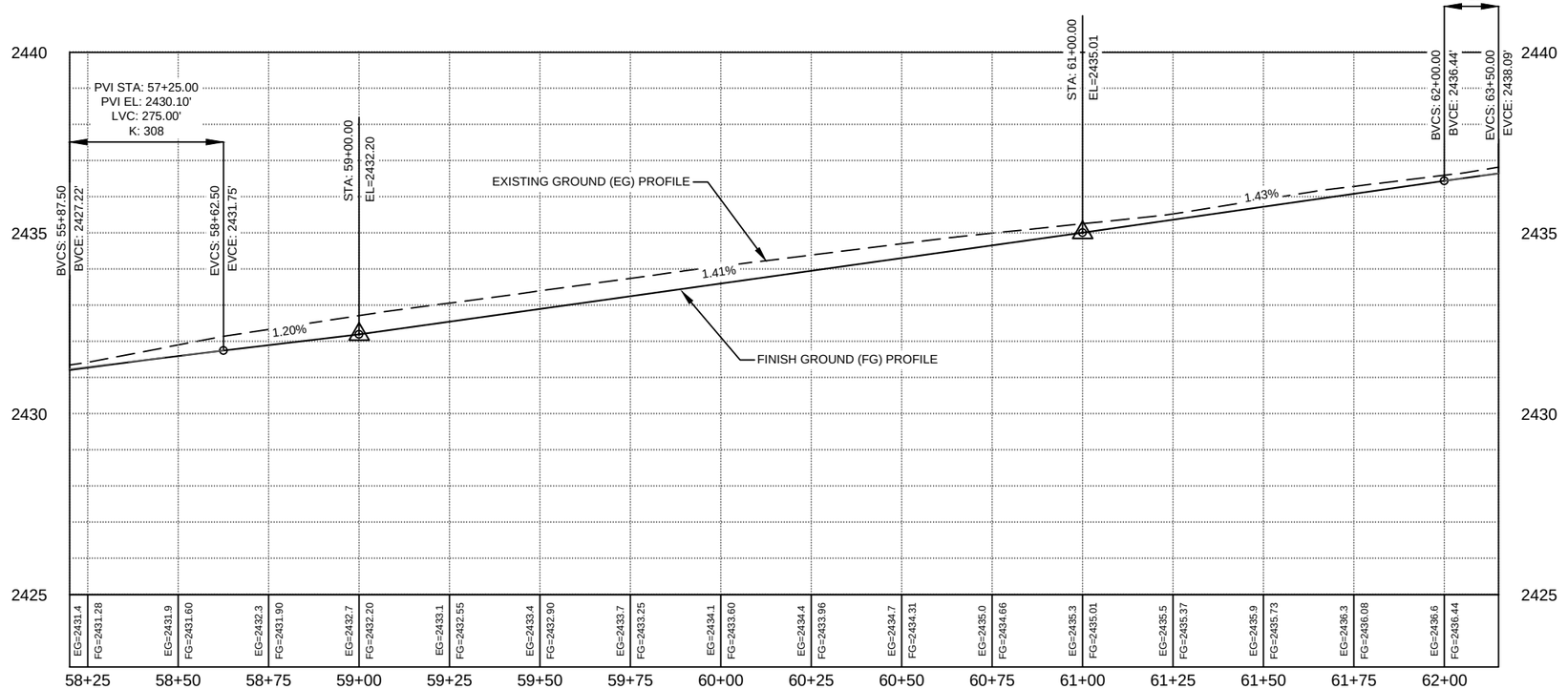

SUBGRADE PREPARTAION - TYPE A

Sta 58+30 to 62+00 Lt	1.85 STA
Sta 58+30 to 62+00 Rt	1.85 STA
	3.70 STA

HOT MIX ASPHALT

Sta 58+30 to 62+00 Lt	1064 SY
Sta 58+30 to 62+00 Rt	901 SY
	1965 SY

ADJUST GATE VALVE BOX

Sta 60+50Lt	1 EA
Sta 60+54 Lt	1 EA
Sta 60+55 Lt	1 EA
Sta 61+76 Lt	1 EA
Sta 61+81 Lt	1 EA
	5 EA

ADJUST MANHOLE

Sta 60+66 Lt	1 EA
	1 EA

CURB & GUTTER

Sta 58+54 to 58+70 Rt	16 LF
Sta 58+99 to 59+49 Rt	50 LF
Sta 60+39 to 60+47 Lt	20 LF
	146 LF

SIDEWALK CONCRETE

Sta 58+99 to 59+49 Rt	26 SY
Sta 60+01 to 60+08 Rt	3 SY
Sta 60+37 to 60+45 Lt	9 SY
Sta 60+54 to 60+60 Rt	2 SY
Sta 60+89 to 60+95 Lt	2 SY
	42 SY

DETECTABLE WARNING PANELS

Sta 60+06 Rt	8 SF
Sta 60+42 Lt	8 SF
Sta 60+55 Rt	8 SF
Sta 60+90 Lt	8 SF
	32 SF

LEGEND

- HOT MIX ASPHALT
- VALLEY GUTTER 72IN
- CURB & GUTTER
- SIDEWALK CONCRETE

SCALE

HORIZONTAL: 1"=40'

VERTICAL: 1"=4'

0 40' H

0 4' V

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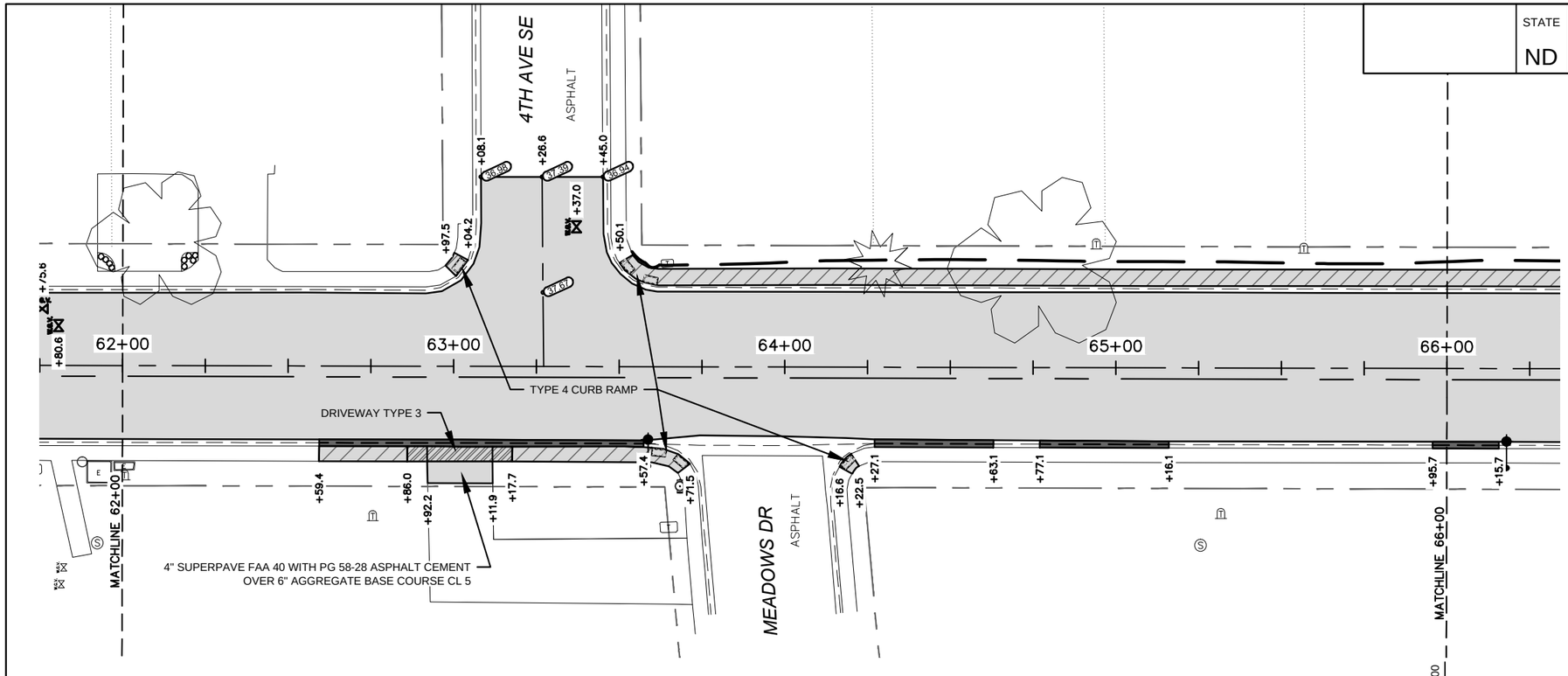

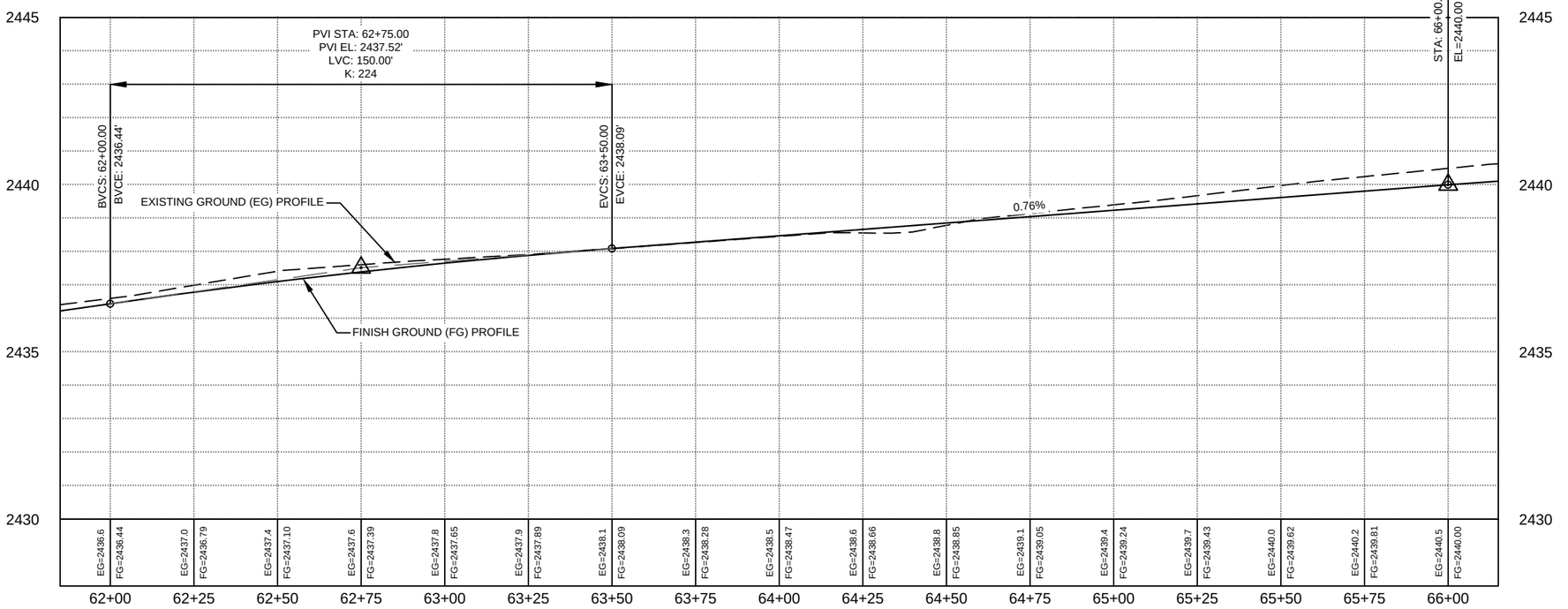

SUBGRADE PREPARTAION - TYPE A

Sta 62+00 to 66+00 Lt	2.00 STA
Sta 62+00 to 66+00 Rt	2.00 STA
	4.00 STA

HOT MIX ASPHALT

Sta 62+00 to 66+00 Lt	1158 SY
Sta 62+00 to 66+00 Rt	975 SY
Sta 62+92 to 63+12 Rt	14 SY
	2147 SY

ADJUST GATE VALVE BOX

Sta 63+37 Lt	1 EA
	1 EA

CURB & GUTTER

Sta 62+59 to 63+57 Rt	100 LF
Sta 64+27 to 64+63 Rt	36 LF
Sta 64+77 to 65+16 Rt	39 LF
Sta 65+96 to 66+00 Rt	4 LF
	179 SY

SIDEWALK CONCRETE

Sta 62+98 to 63+04 Lt	3 SY
Sta 63+50 to 66+00 Lt	138 SY
Sta 62+59 to 62+86 Rt	14 SY
Sta 63+18 to 63+72 Rt	27 SY
Sta 64+17 to 64+23 Rt	2 SY
	184 SY

DRIVEWAY CONCRETE

Sta 62+86 to 63+18 Rt	16 SY
	16 SY

DETECTABLE WARNING PANELS

Sta 63+02 Lt	8 SF
Sta 63+55 Lt	16 SF
Sta 63+66 Rt	16 SF
Sta 64+18 Rt	8 SF
	48 SF

LEGEND

- HOT MIX ASPHALT
- VALLEY GUTTER 72IN
- CURB & GUTTER
- SIDEWALK CONCRETE
- DRIVEWAY CONCRETE

SCALE

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VERTICAL: 1"=4'

0 40' H

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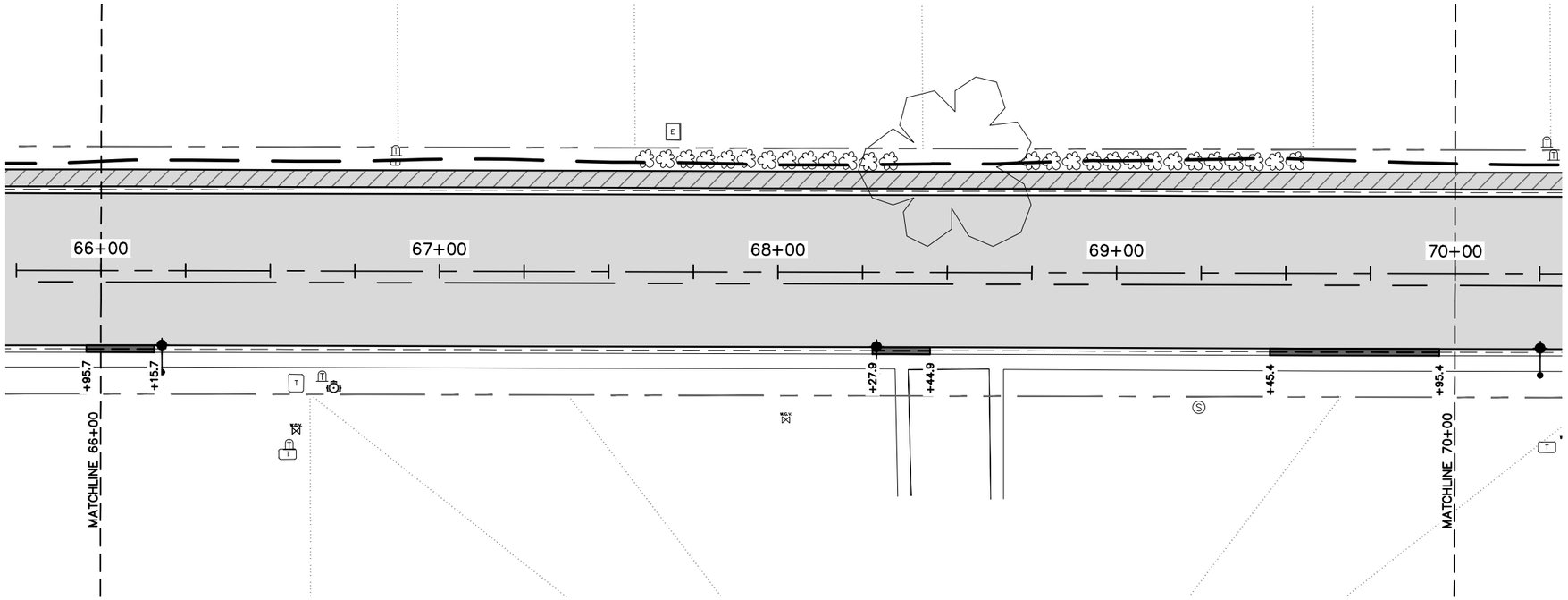


SUBGRADE PREPARTAION - TYPE A

Sta 66+00 to 70+00 Lt	2.00 STA
Sta 66+00 to 70+00 Rt	2.00 STA
	4.00 STA

HOT MIX ASPHALT

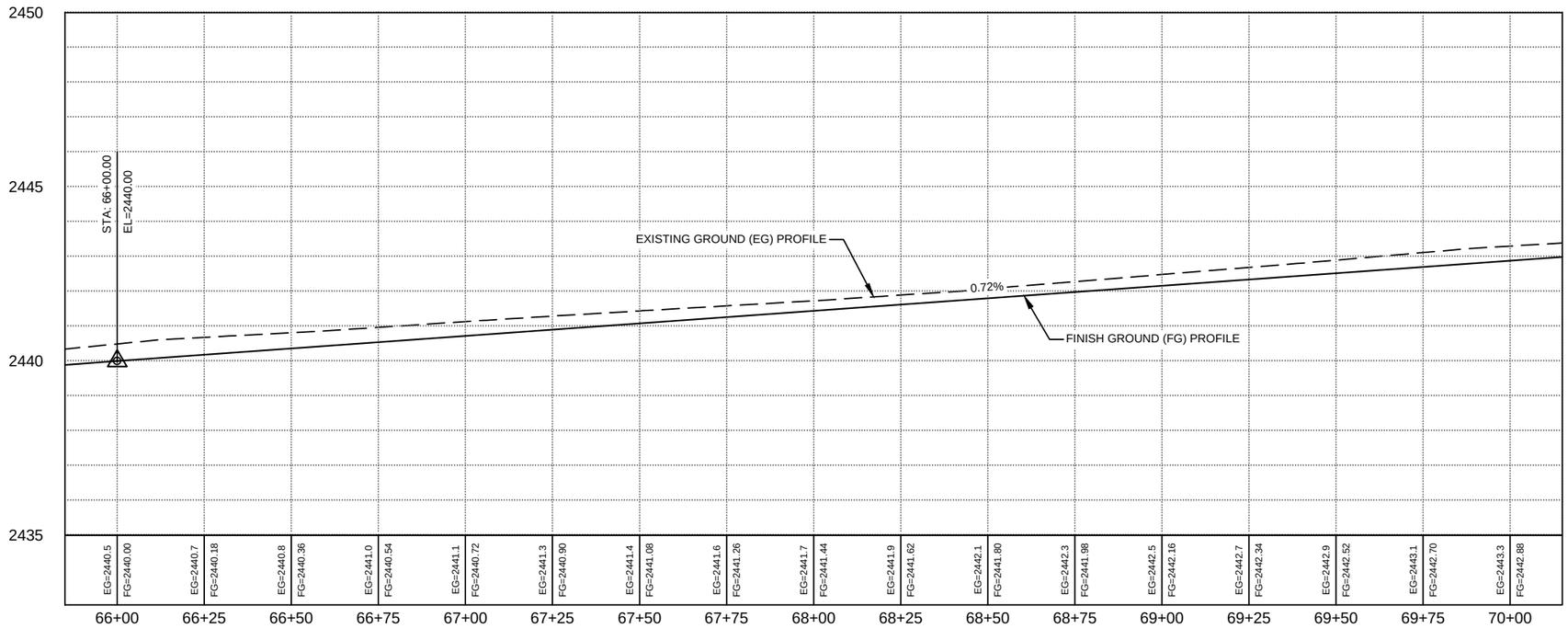
Sta 66+00 to 70+00 Lt	1010 SY
Sta 66+00 to 70+00 Rt	985 SY
	1995 SY

CURB & GUTTER

Sta 66+00 to 66+16 Rt	16 LF
Sta 68+28 to 68+45 Rt	17 LF
Sta 69+45 to 69+95 Rt	50 LF
	83 SY

SIDEWALK CONCRETE

Sta 66+00 to 70+00 Lt	222 SY
	222 SY



LEGEND

HOT MIX ASPHALT

CURB & GUTTER

SIDEWALK CONCRETE

SCALE

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0 40' H

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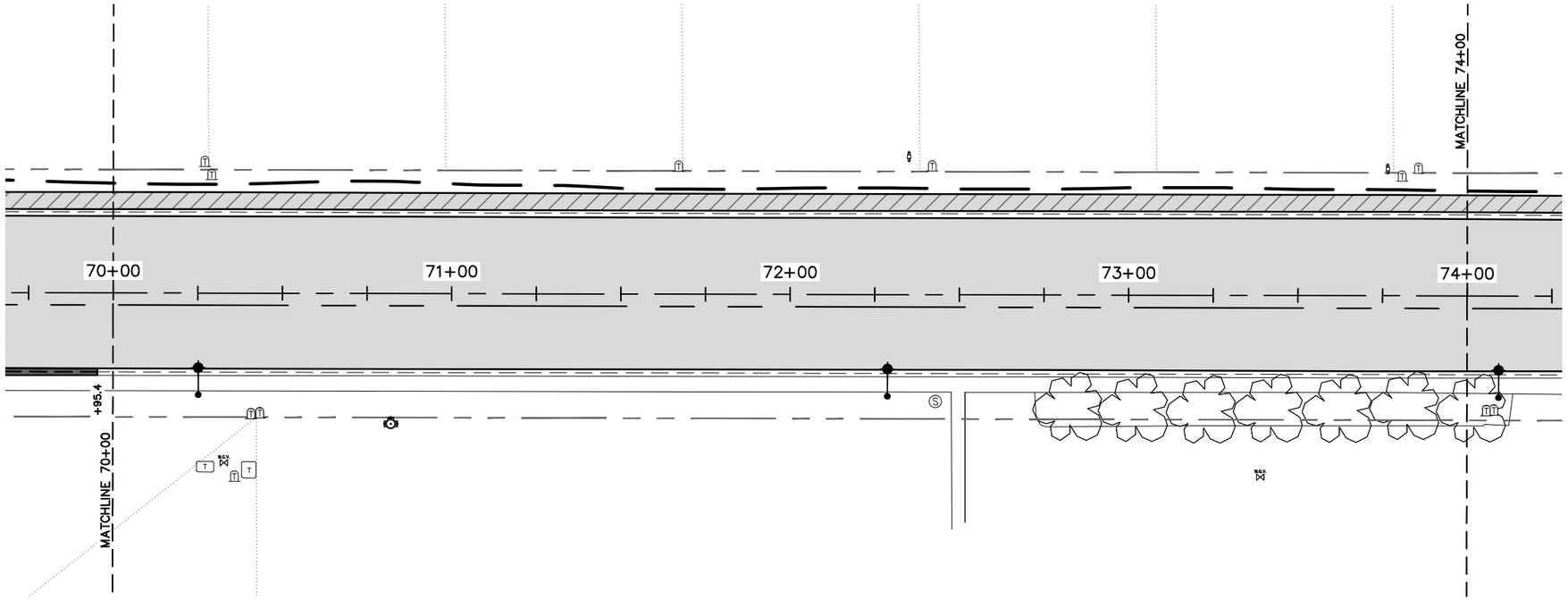

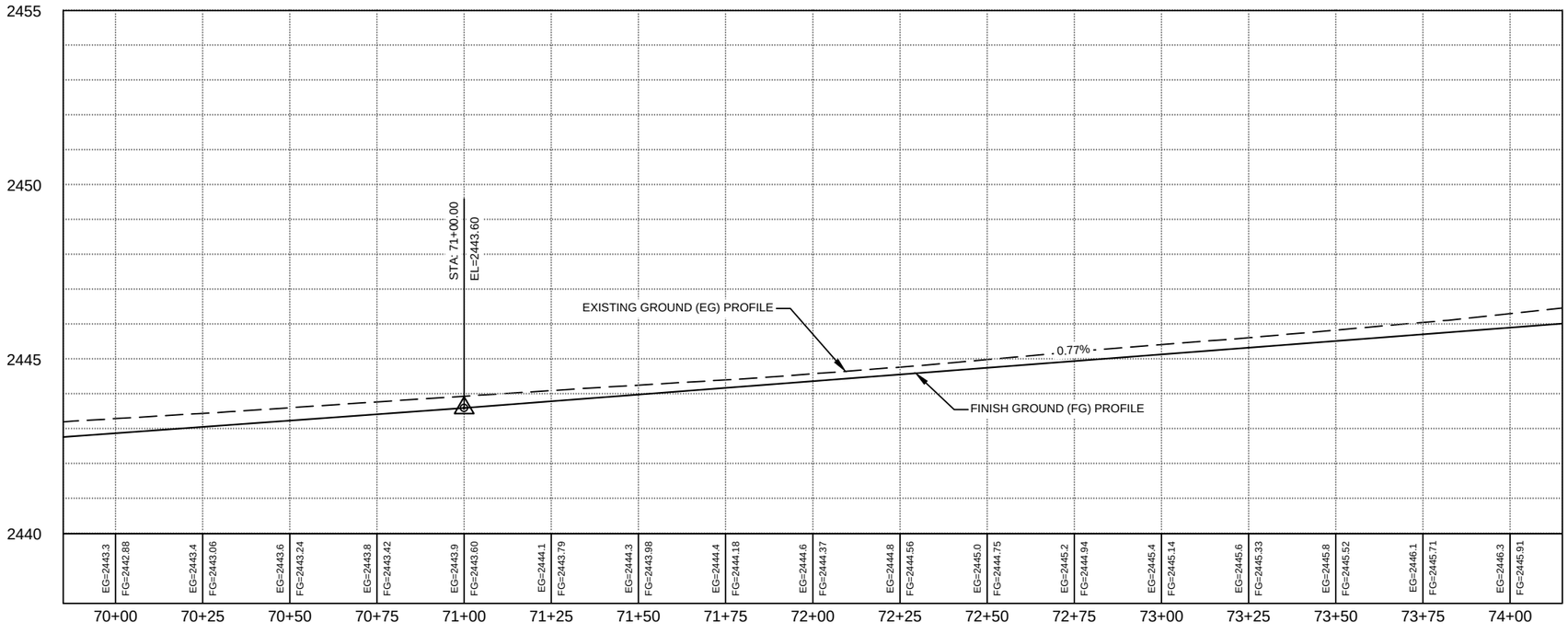

SUBGRADE PREPARTAION - TYPE A

Sta 70+00 to 74+00 Lt	2.00 STA
Sta 70+00 to 74+00 Rt	2.00 STA
	4.00 STA

HOT MIX ASPHALT

Sta 70+00 to 74+00 Lt	1007 SY
Sta 70+00 to 74+00 Rt	989 SY
	1996 SY

SIDEWALK CONCRETE

Sta 70+00 to 74+00 Lt	222 SY
	222 SY

LEGEND

- HOT MIX ASPHALT
- CURB & GUTTER
- SIDEWALK CONCRETE

N W E S

SCALE

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VERTICAL: 1"=4'

0 40' H

0 4' V

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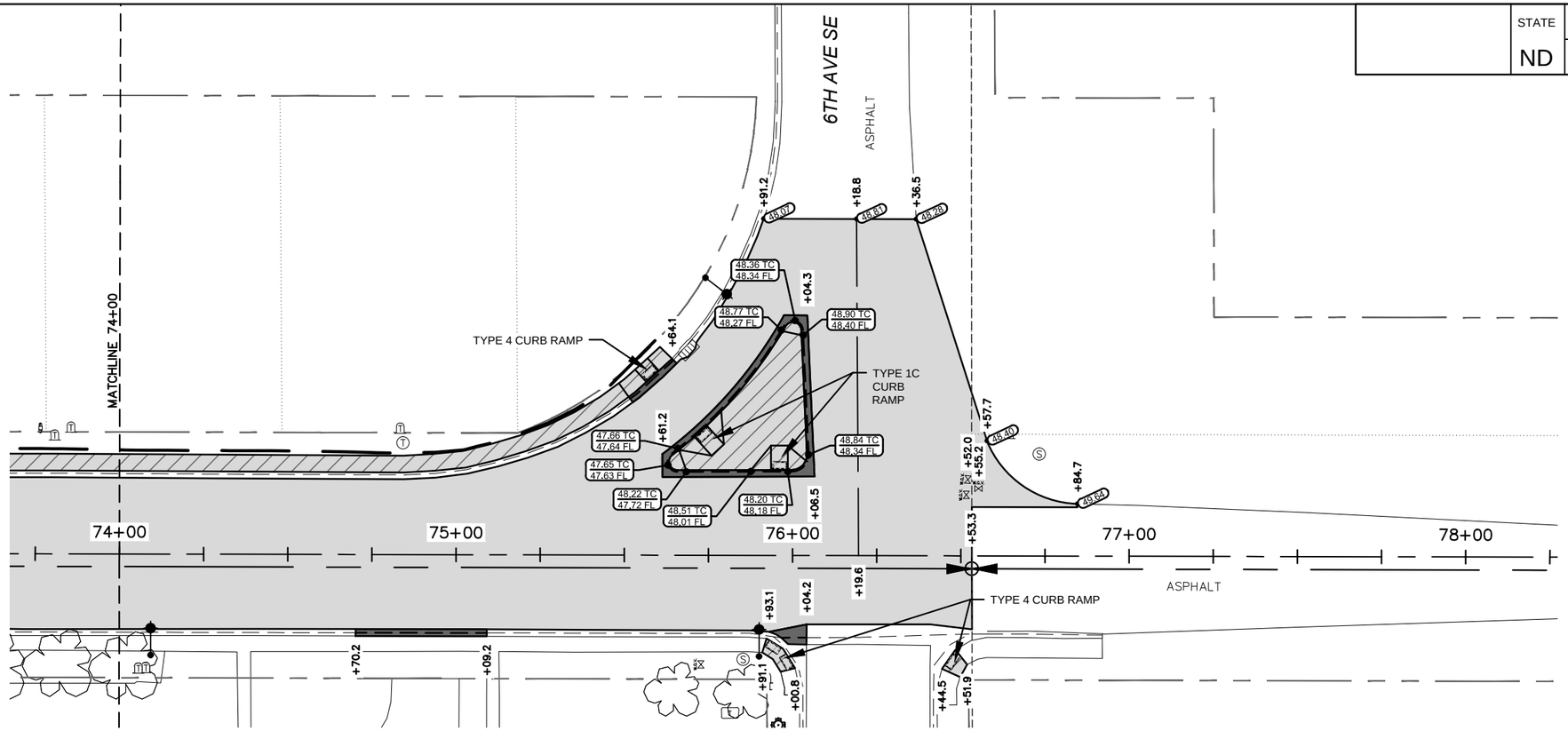

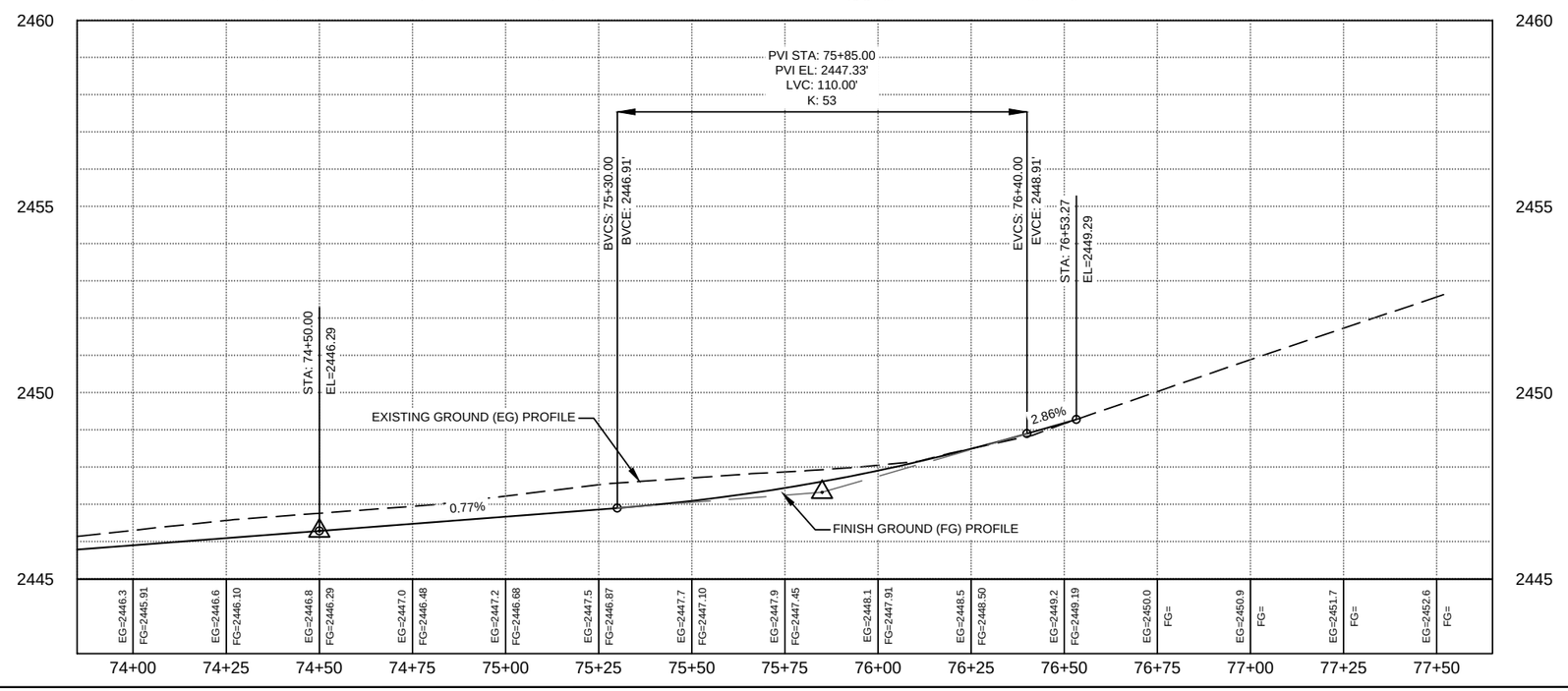

SUBGRADE PREPARTAION - TYPE A

Sta 74+00 to 76+85 Lt	1.43 STA
Sta 74+00 to 76+53 Rt	1.26 STA
	2.69 STA

VALLEY GUTTER-TYPE I 72IN

Sta 75+93 to 76+04 Rt	5 SY
	5 SY

HOT MIX ASPHALT

Sta 74+00 to 76+85 Lt	1257 SY
Sta 74+00 to 76+53 Rt	615 SY
	1872 SY

ADJUST GATE VALVE BOX

Sta 76+52 to 76+55 Lt	3 EA
	3 EA

CURB & GUTTER

Sta 74+70 to 75+09 Rt	39 LF
Sta 75+52 to 75+64 Lt	17 LF
Sta 75+61 to 76+07 Lt	145 LF
	201 LF

SIDEWALK CONCRETE

Sta 74+00 to 75+64 Lt	95 SY
Sta 75+61 to 76+07 Lt	105 SY
Sta 75+93 to 76+04 Rt	5 SY
Sta 76+45 to 76+52 Rt	3 SY
	208 SY

DETECTABLE WARNING PANELS

Sta 75+58 Lt	8 SF
Sta 75+73 Lt	8 SF
Sta 75+97 Lt	8 SF
Sta 75+97 Rt	16 SF
Sta 76+47 Rt	8 SF
	48 SF

LEGEND

- HOT MIX ASPHALT
- CURB & GUTTER
- SIDEWALK CONCRETE

N W E S

SCALE

HORIZONTAL: 1"=40'

VERTICAL: 1"=4'

0 40' H

0 4' V

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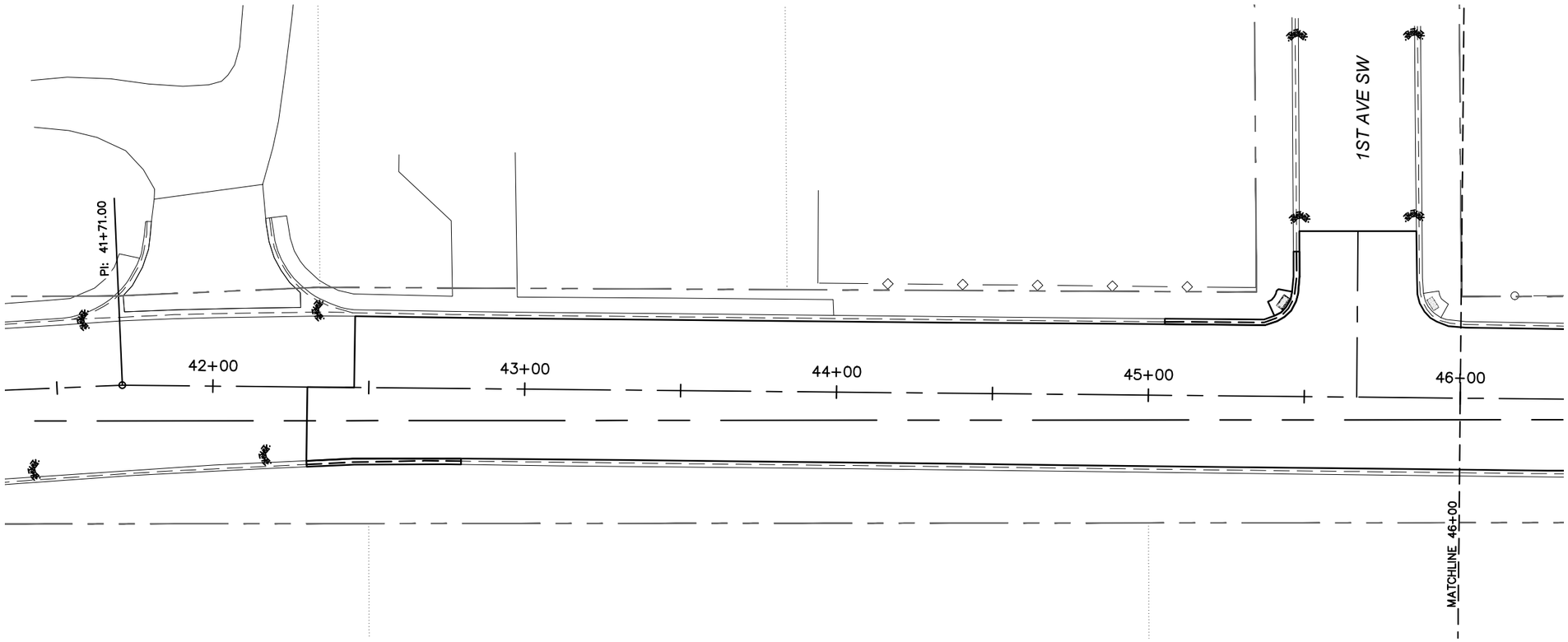
PLAN AND PROFILE

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

9/1/2017 8:33:42 AM schrank h:\168199\project cad\current plans\060PP_001_plan&profile.dwg

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	76	1



WEIGHTED FIBER ROLLS

Sta 41+40 to Sta 42+45	24 LF
Sta 45+40 to Sta 45+90 Lt	24 LF
	48 LF

LEGEND

WEIGHTED FIBER ROLLS

0 40'

SCALE: 1" = 40'

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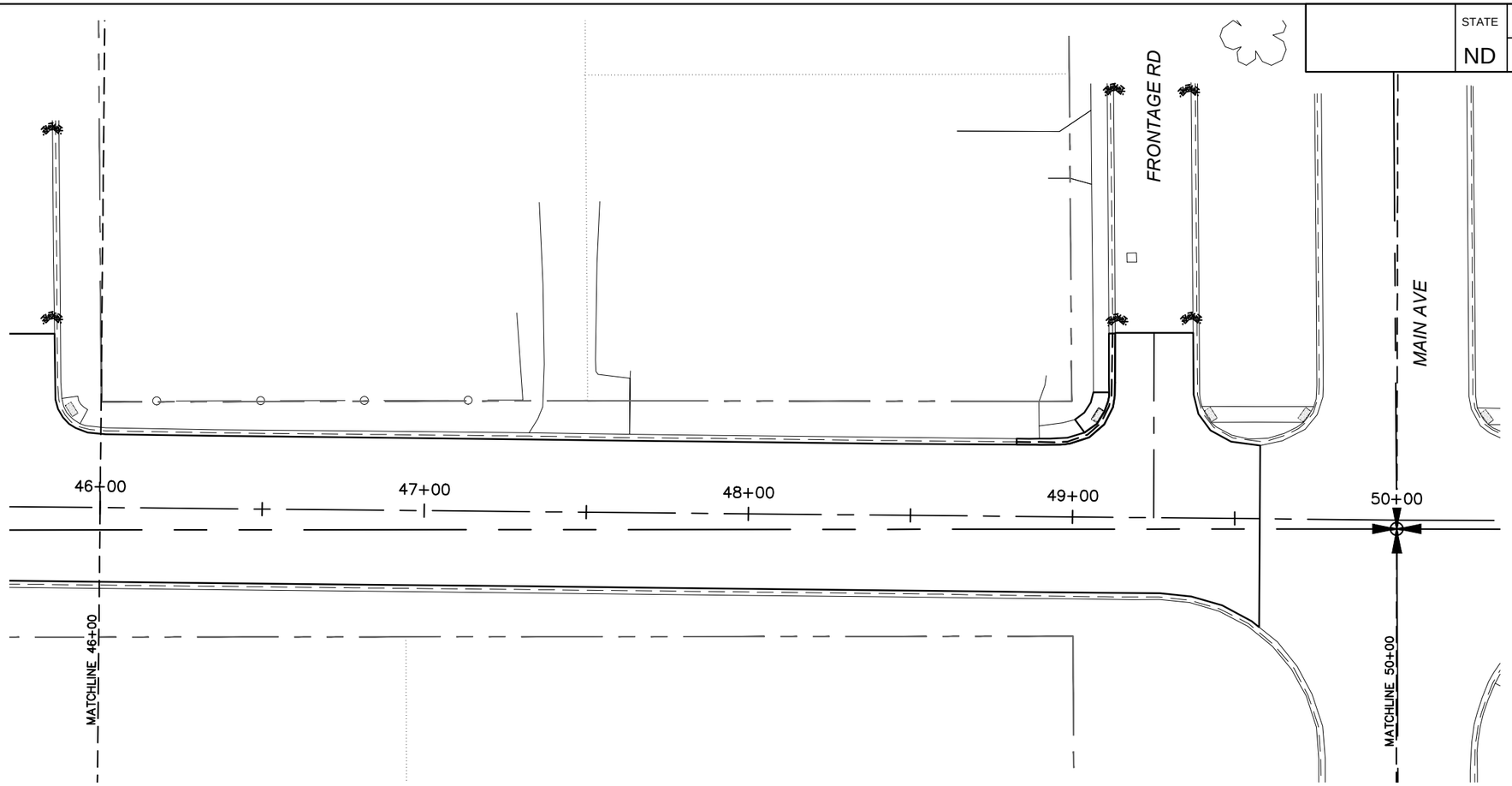
TEMPORARY EROSION CONTROL

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

9/5/2017 8:49:20 AM schrank h:\168199\project cad\current plans\076TE_001_temperosionctrl.dwg

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SU-5-983(059)059	76	2

WEIGHTED FIBER ROLLS
Sta 49+10 to Sta 49+40 Lt 24 LF



LEGEND

WEIGHTED FIBER ROLLS

0 40'
SCALE: 1" = 40'

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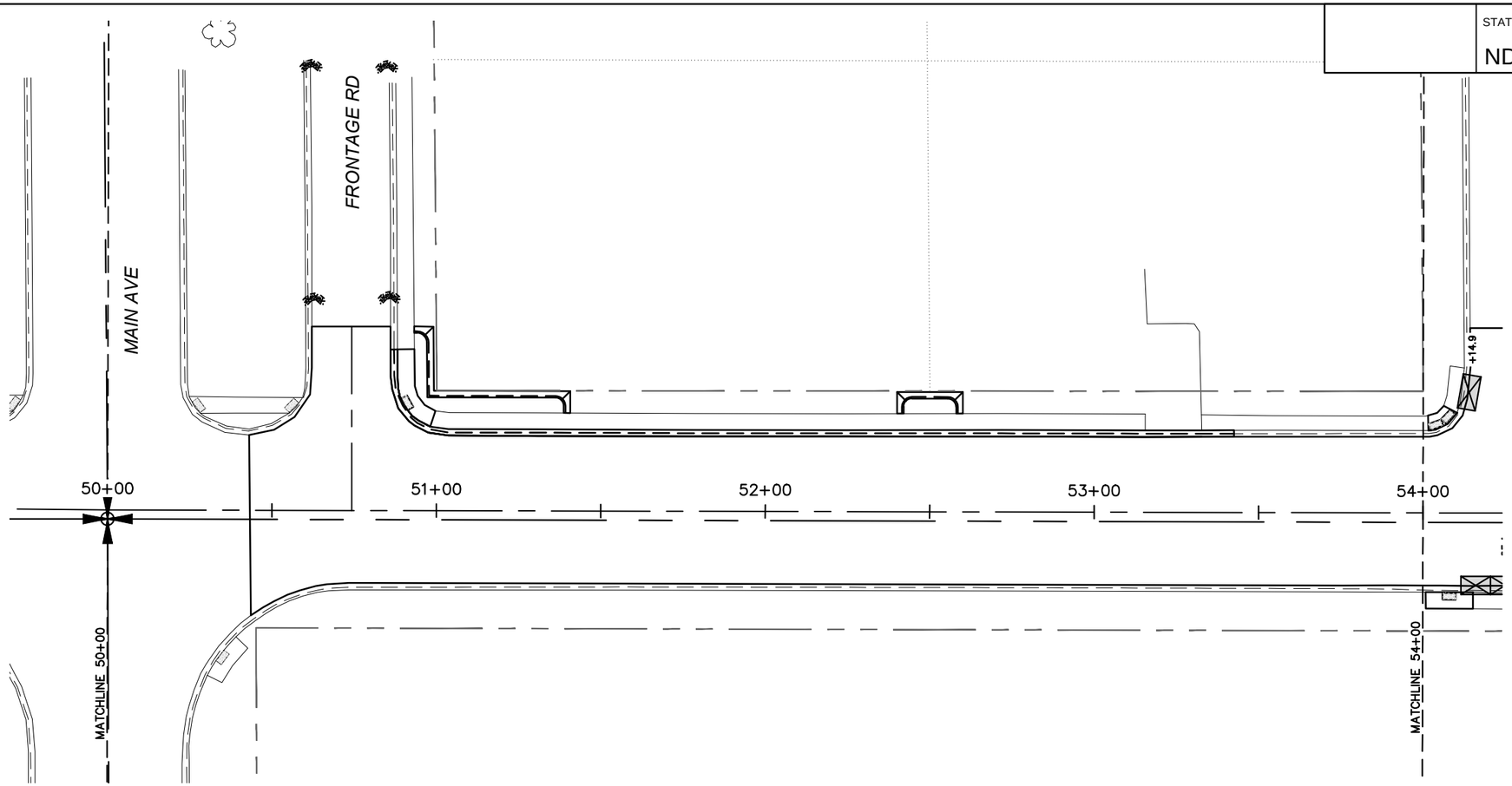
TEMPORARY EROSION CONTROL

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

9/5/2017 8:49:20 AM schrank h:\168199\project cad\current plans\076TE_001_temperosionctrl.dwg

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	76	3



WEIGHTED FIBER ROLLS
Sta 50+55 to Sta 50+90 Lt 24 LF

LEGEND

INLET PROTECTION-SPECIAL

WEIGHTED FIBER ROLLS

0 40'

SCALE: 1" = 40'

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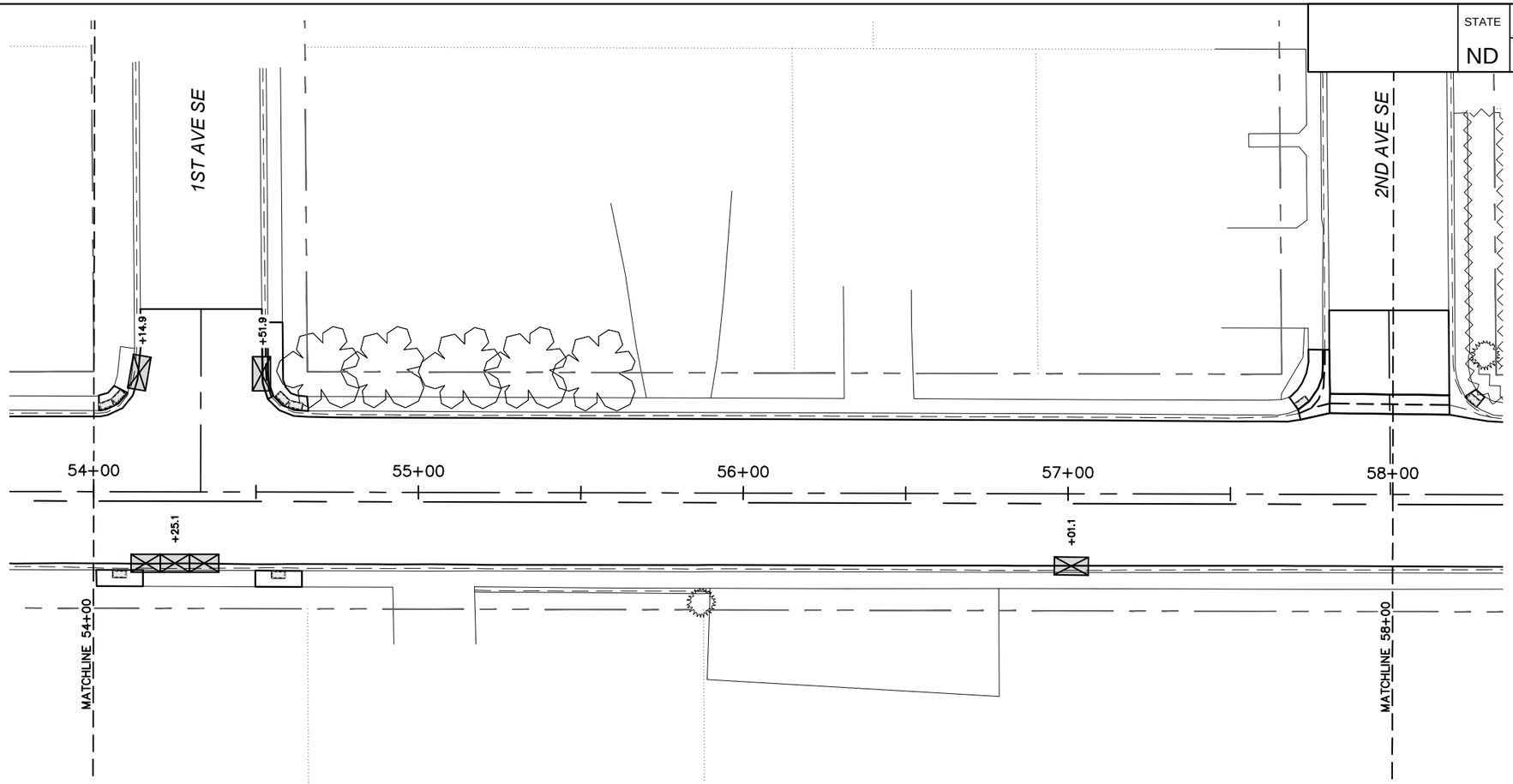
TEMPORARY EROSION CONTROL

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

9/5/2017 8:49:20 AM schrank h:\168199\project cad\current plans\076TE_001_temperosionctrl.dwg

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SU-5-983(059)059	76	4



INLET PROTECTION-SPECIAL

Sta 54+15 Lt	1 EA
Sta 54+25 Rt	3 EA
Sta 54+52 Rt	1 EA
Sta 57+01 Rt	1 EA
	6 EA

LEGEND

INLET PROTECTION-SPECIAL

0 40'

SCALE: 1" = 40'

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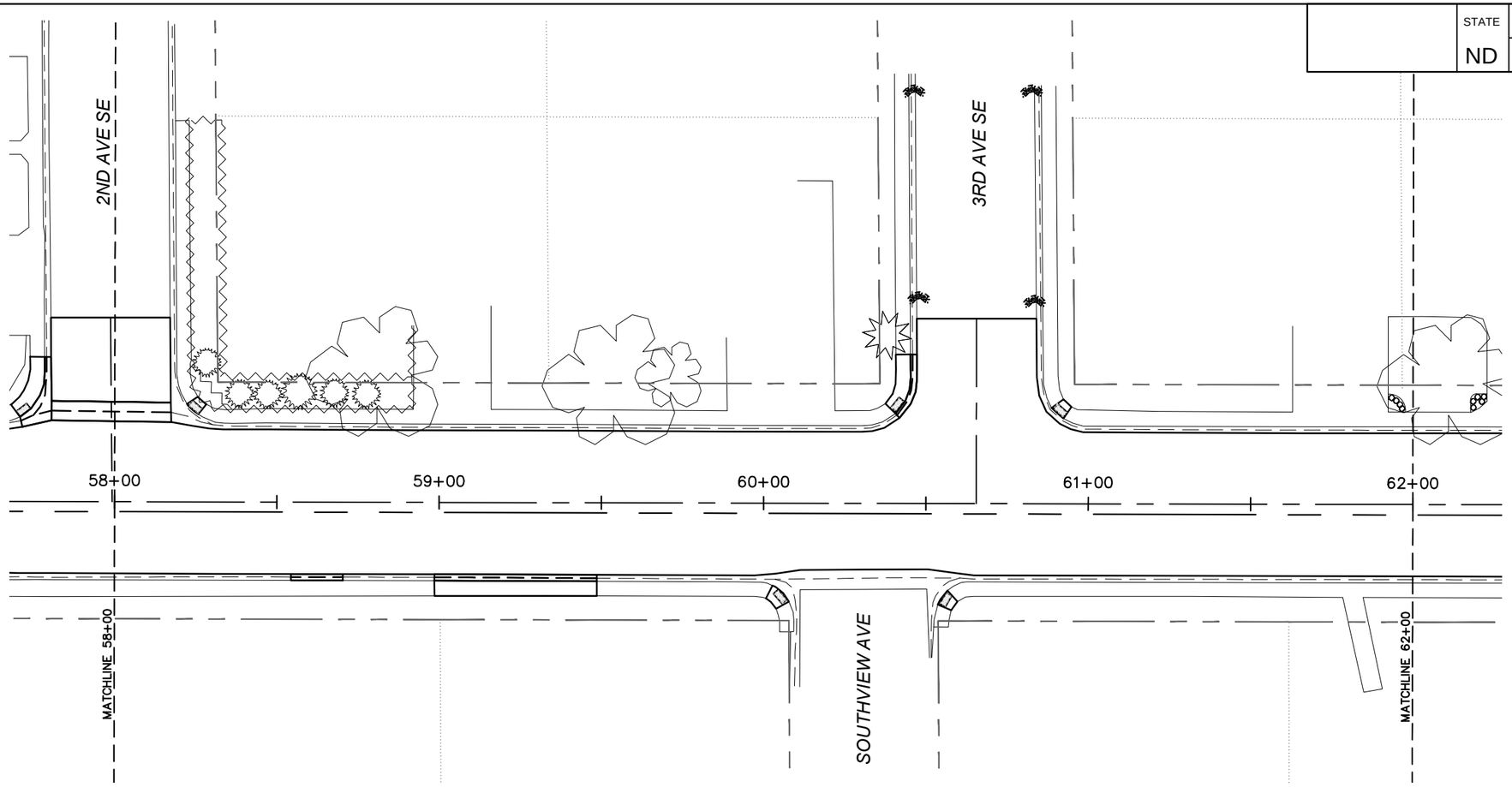
TEMPORARY EROSION CONTROL

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

9/5/2017 8:49:20 AM schrank h:\168199\project cad\current plans\076TE_001_temperosionctrl.dwg

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	76	5



WEIGHTED FIBER ROLLS
Sta 60+40 to Sta 60+90 Lt — 24 LF

LEGEND

WEIGHTED FIBER ROLLS

0 40'

SCALE: 1" = 40'

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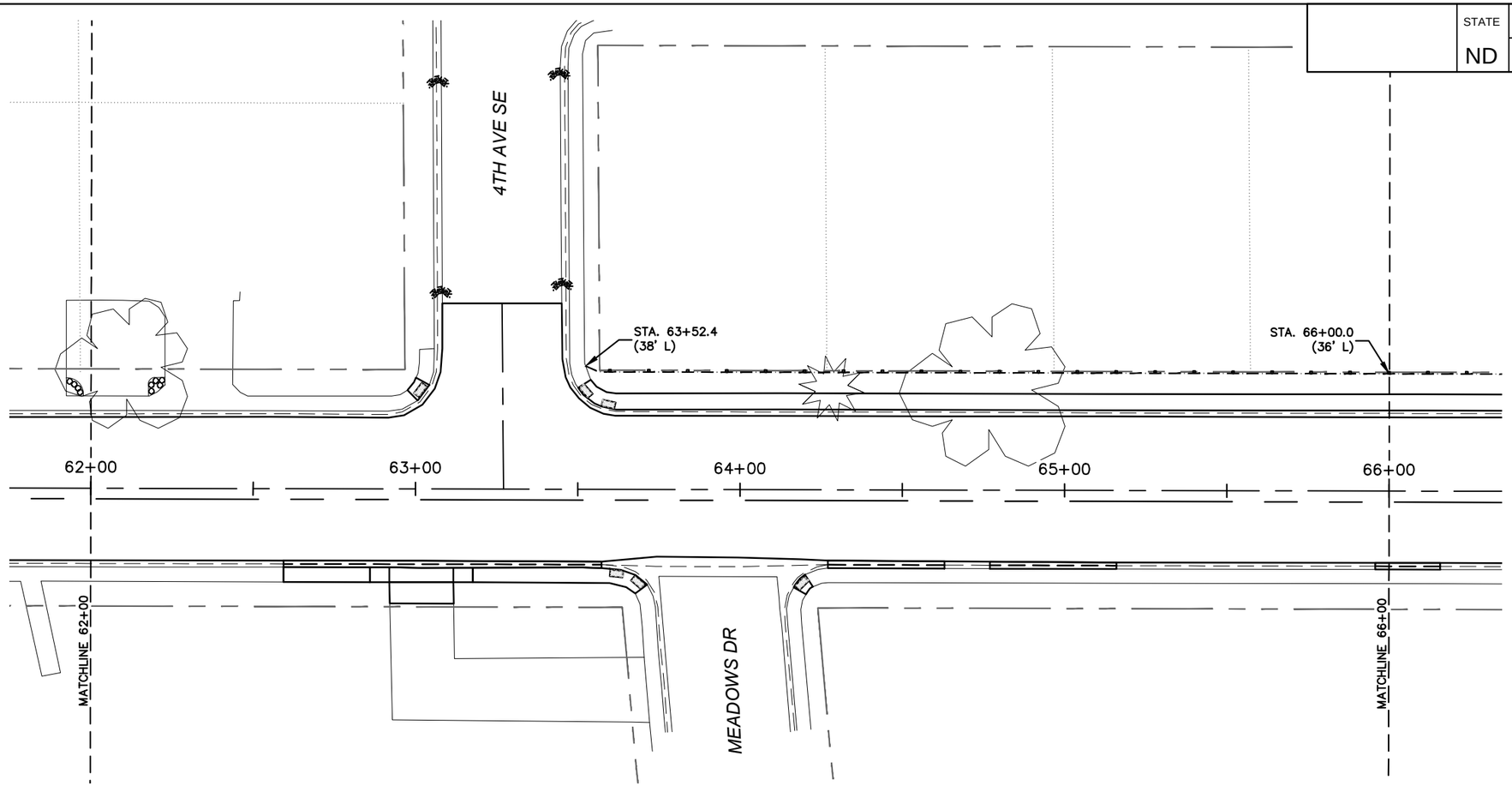
TEMPORARY EROSION CONTROL

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	76	6



FIBER ROLLS 6IN
Sta 63+52 to Sta 66+00 Lt 248 LF

WEIGHTED FIBER ROLLS
Sta 63+00 to Sta 63+50 Lt 24 LF

LEGEND

WEIGHTED FIBER ROLLS

FIBER ROLLS 6IN

0 40'

SCALE: 1" = 40'

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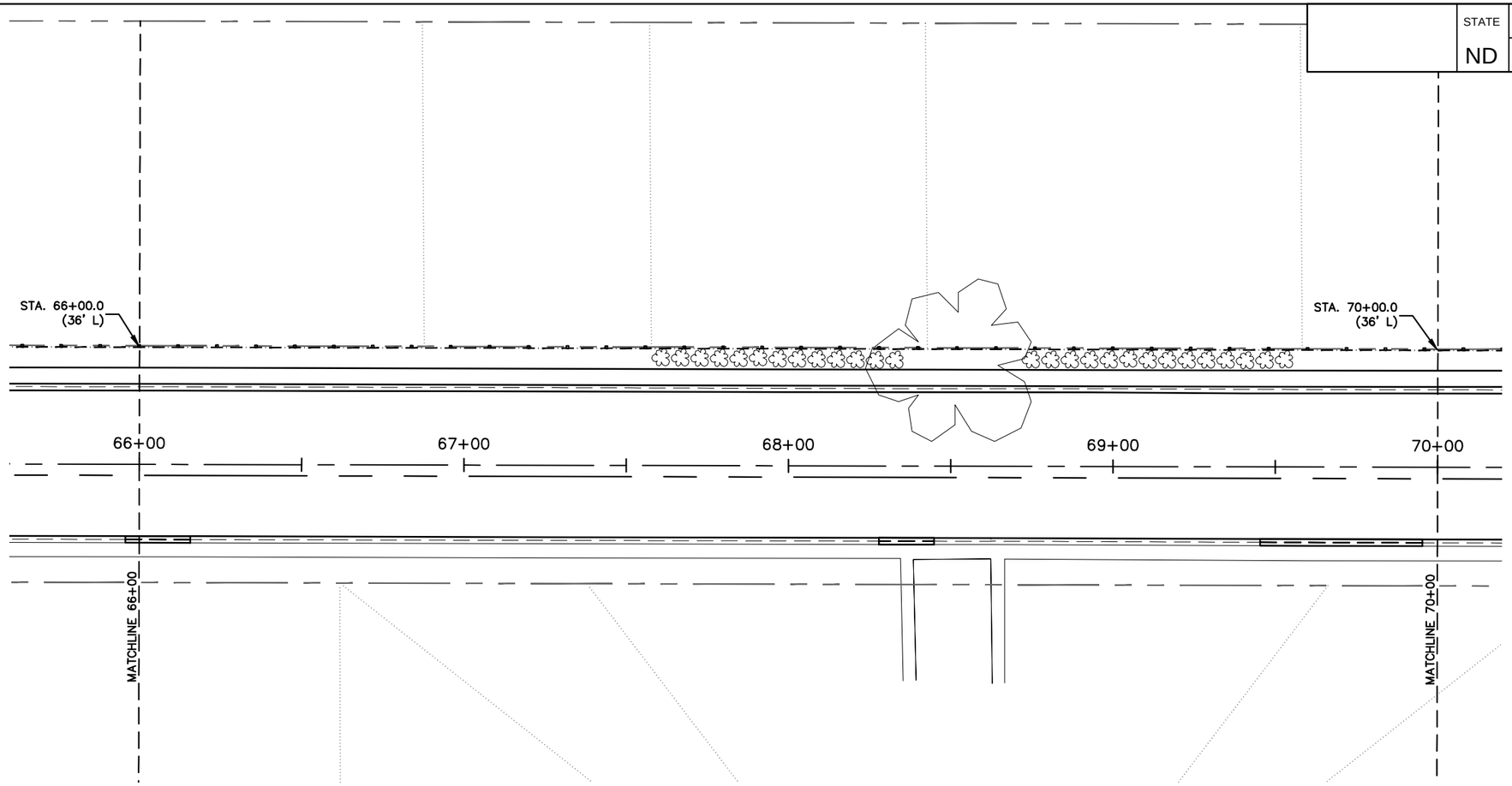
TEMPORARY EROSION CONTROL

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SU-5-983(059)059	76	7



FIBER ROLLS 6IN
Sta 66+00 to Sta 70+00 Lt 400 LF

LEGEND

FIBER ROLLS 6IN

0 40'
SCALE: 1" = 40'

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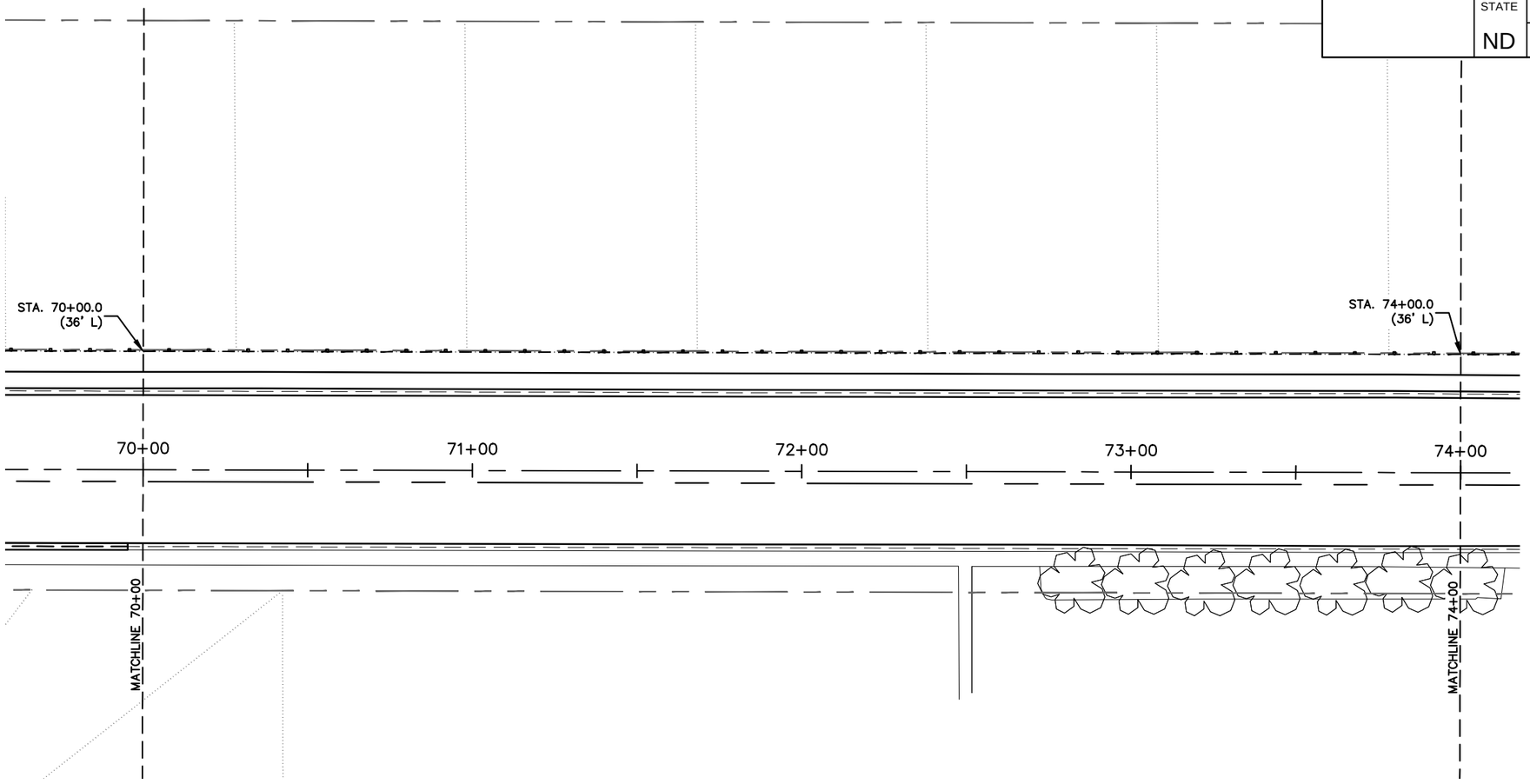
TEMPORARY EROSION CONTROL

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

9/5/2017 8:49:20 AM schrank h:\168199\project cad\current plans\076TE_001_temperosionctrl.dwg

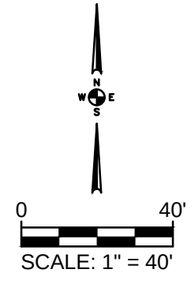
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	76	8

FIBER ROLLS 6IN
Sta 70+00 to Sta 74+00 Lt 400 LF



LEGEND

FIBER ROLLS 6IN



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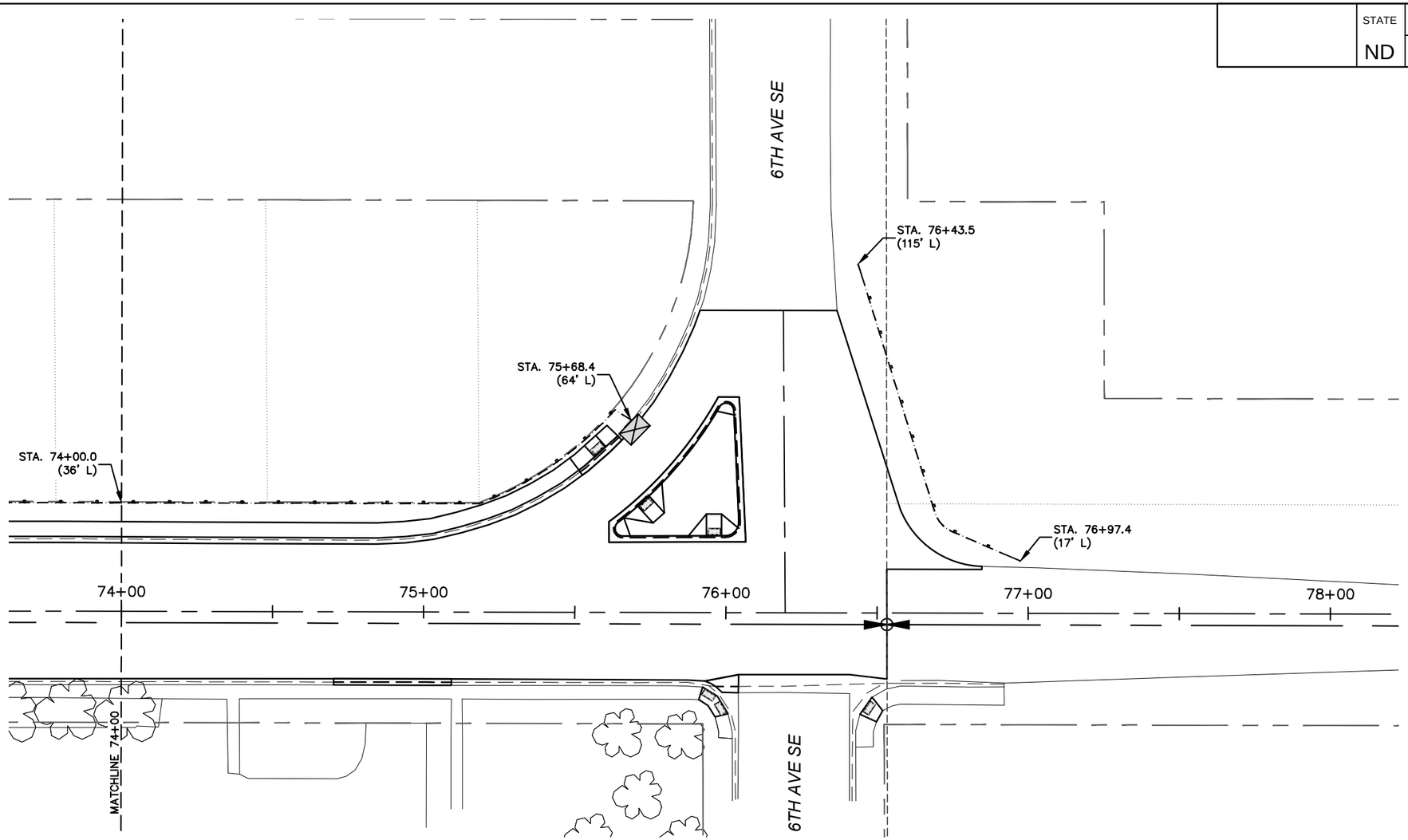
TEMPORARY EROSION CONTROL

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	76	9



FIBER ROLLS 6IN

Sta 74+00 to Sta 75+68 Lt	180 LF
Sta 76+40 to Sta 76+97 Lt	120 LF
	300 LF

INLET PROTECTION-SPECIAL

Sta 75+68 Lt	1 EA
	1 EA

LEGEND

INLET PROTECTION-SPECIAL

FIBER ROLLS 6IN

0 40'

SCALE: 1" = 40'

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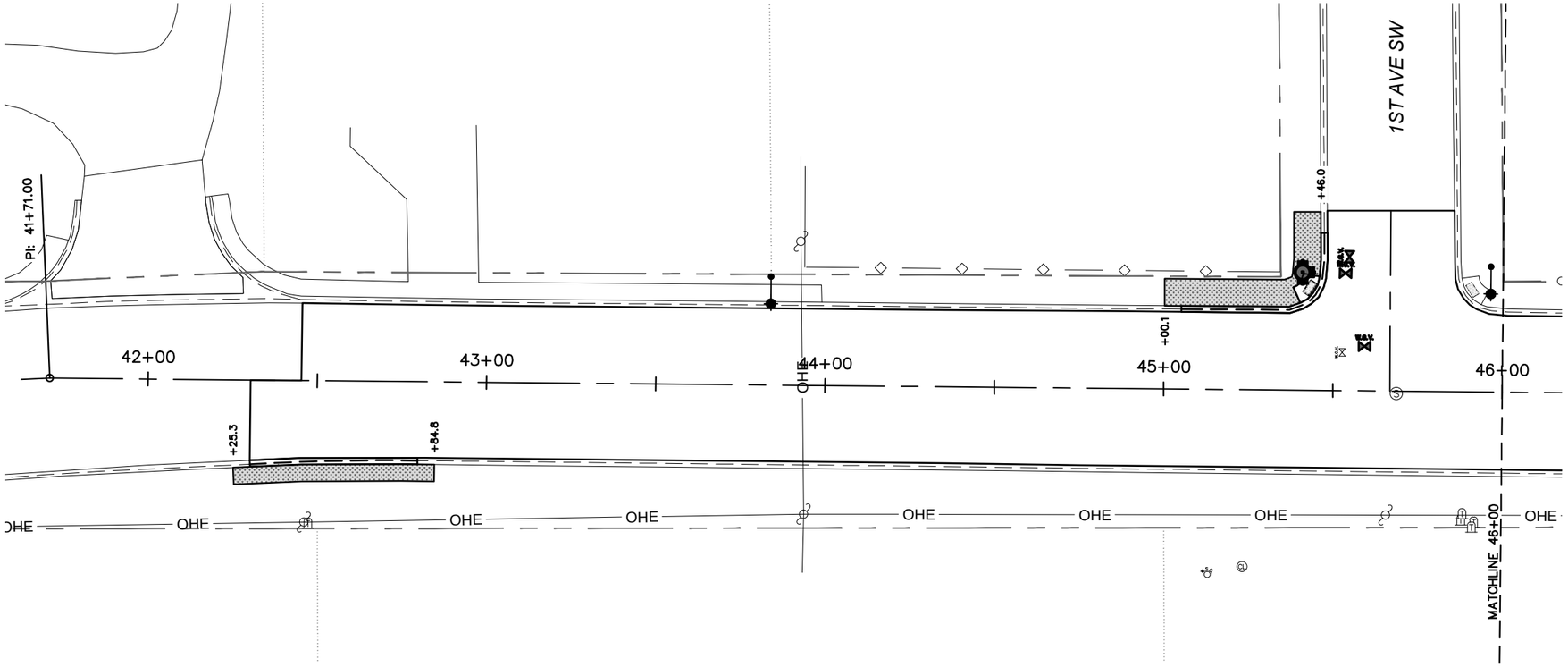
TEMPORARY EROSION CONTROL

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

9/5/2017 8:49:20 AM schrank h:\168199\project cad\current plans\076TE_001_temperosionctrl.dwg

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	77	1

SEEDING CLASS I AND HYDRAULIC MULCH
Sta 42+25 to Sta 46+00 0.01 AC



LEGEND

SEEDING - HYDRO MULCH

N W E S

0 40'

SCALE: 1" = 40'

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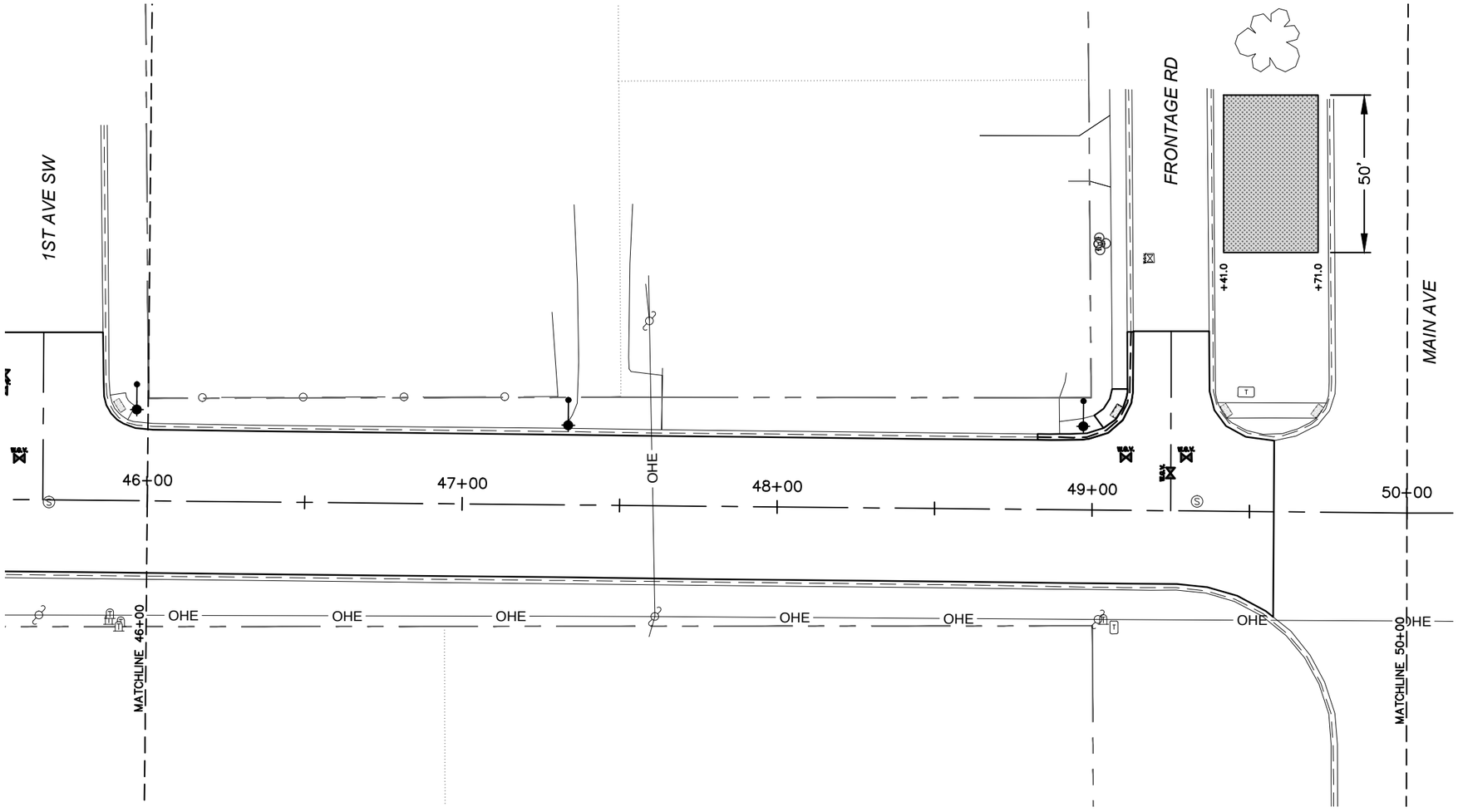
PERMANENT EROSION CONTROL

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

9/5/2017 8:48:52 AM schrank h:\168199\project cad\current plans\077PE_001_permerosionctrl.dwg

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	77	2

SEEDING CLASS I AND HYDRAULIC MULCH
Sta 46+00 to Sta 50+00 0.03 AC



LEGEND

SEEDING - HYDRO MULCH

0 40'

SCALE: 1" = 40'

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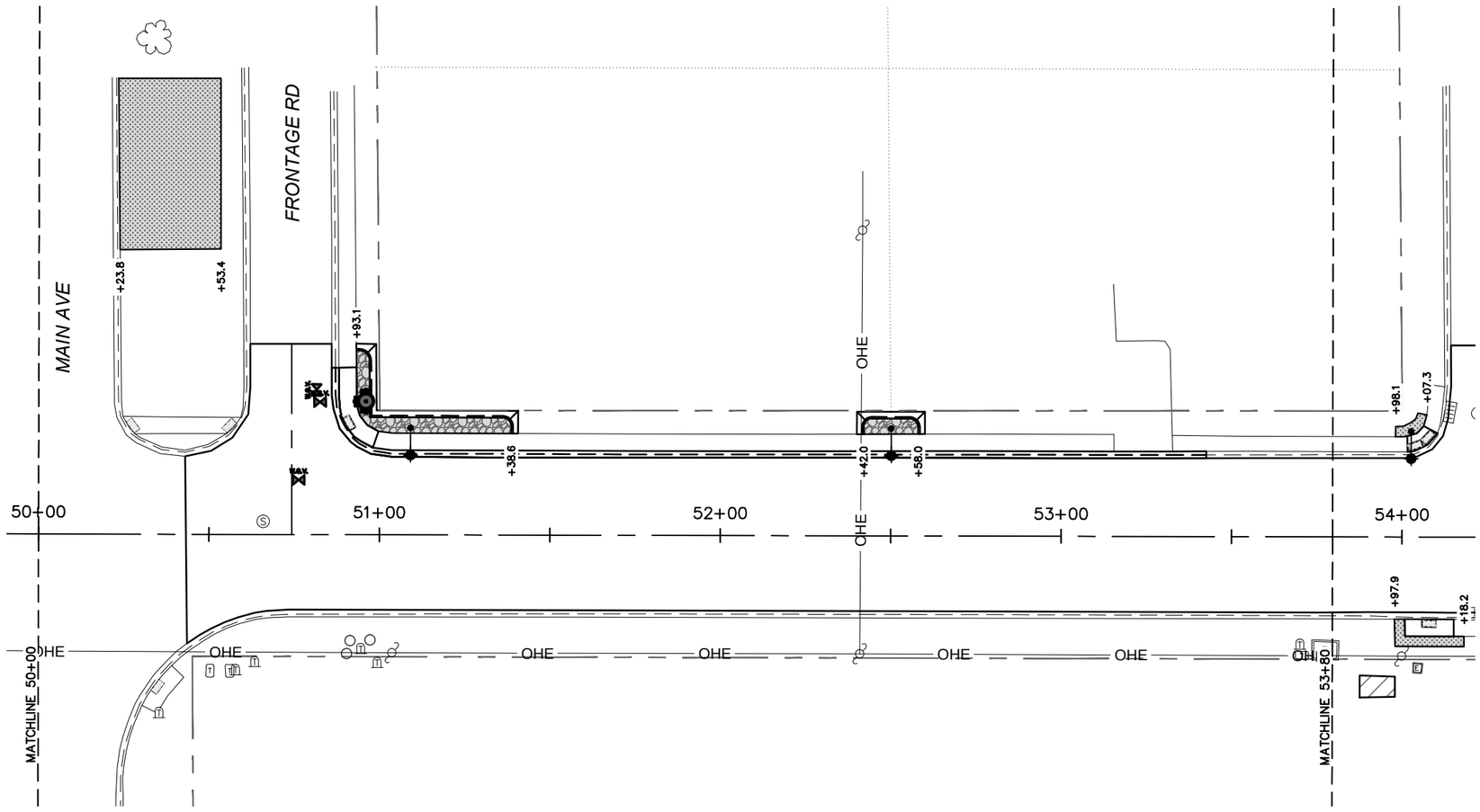
PERMANENT EROSION CONTROL

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

9/5/2017 8:48:52 AM schrank h:\168199\project cad\current plans\077PE_001_permerosionctrl.dwg

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	77	3



SEEDING CLASS I AND HYDRAULIC MULCH
Sta 50+00 to Sta 53+80 Lt 0.03 AC

STONE MULCH
Sta 50+93 to Sta 51+39 Lt 262 SF
Sta 52+42 to Sta 52+58 Lt 70 SF
332 SF

LEGEND

SEEDING - HYDRO MULCH

STONE MULCH

0 40'
SCALE: 1" = 40'

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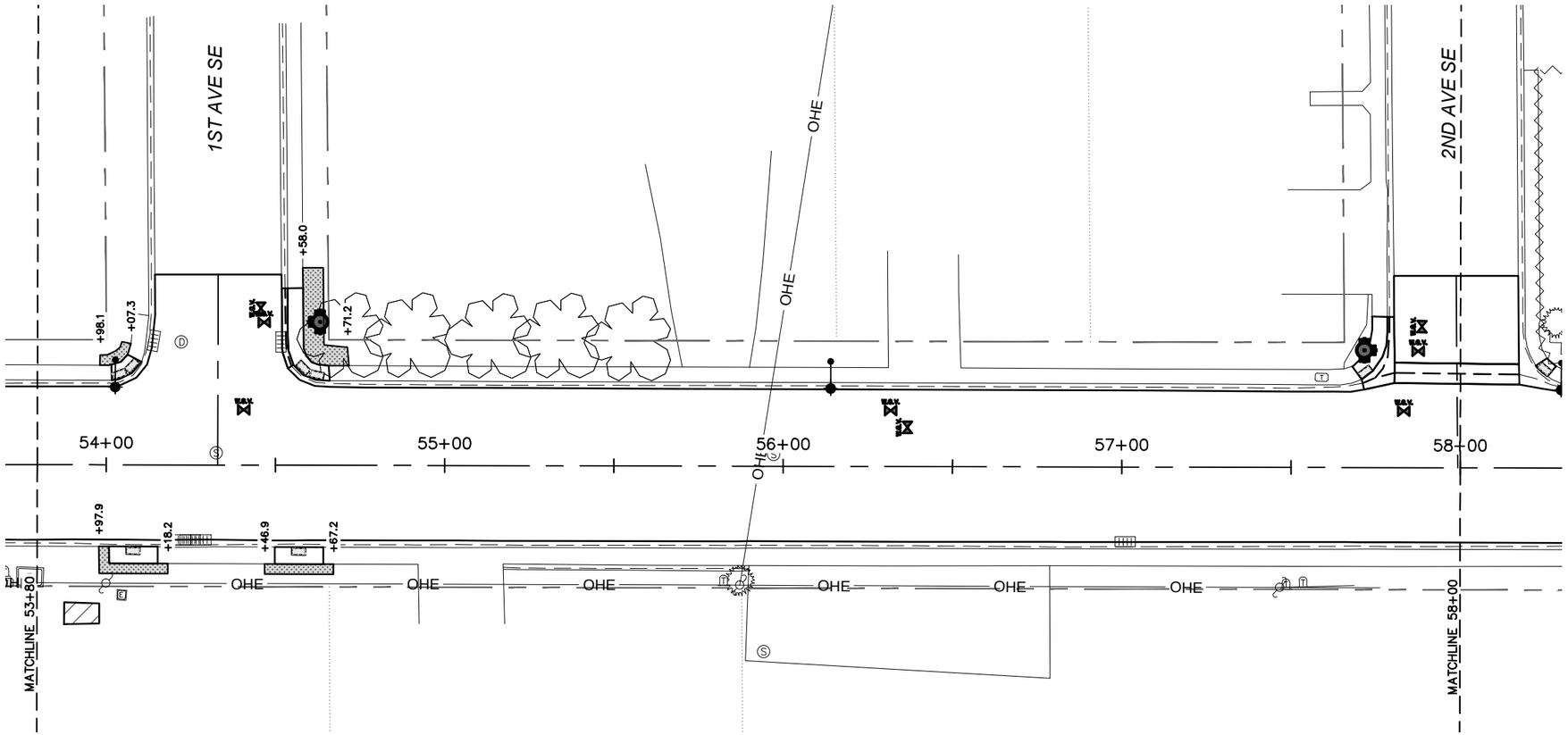
PERMANENT EROSION CONTROL

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

9/5/2017 8:48:52 AM schrank h:\168199\project cad\current plans\077PE_001_permerosionctrl.dwg

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	77	4

SEEDING CLASS I AND HYDRAULIC MULCH
Sta 53+80 to Sta 58+00 0.01 AC



LEGEND

SEEDING - HYDRO MULCH

0 40'

SCALE: 1" = 40'

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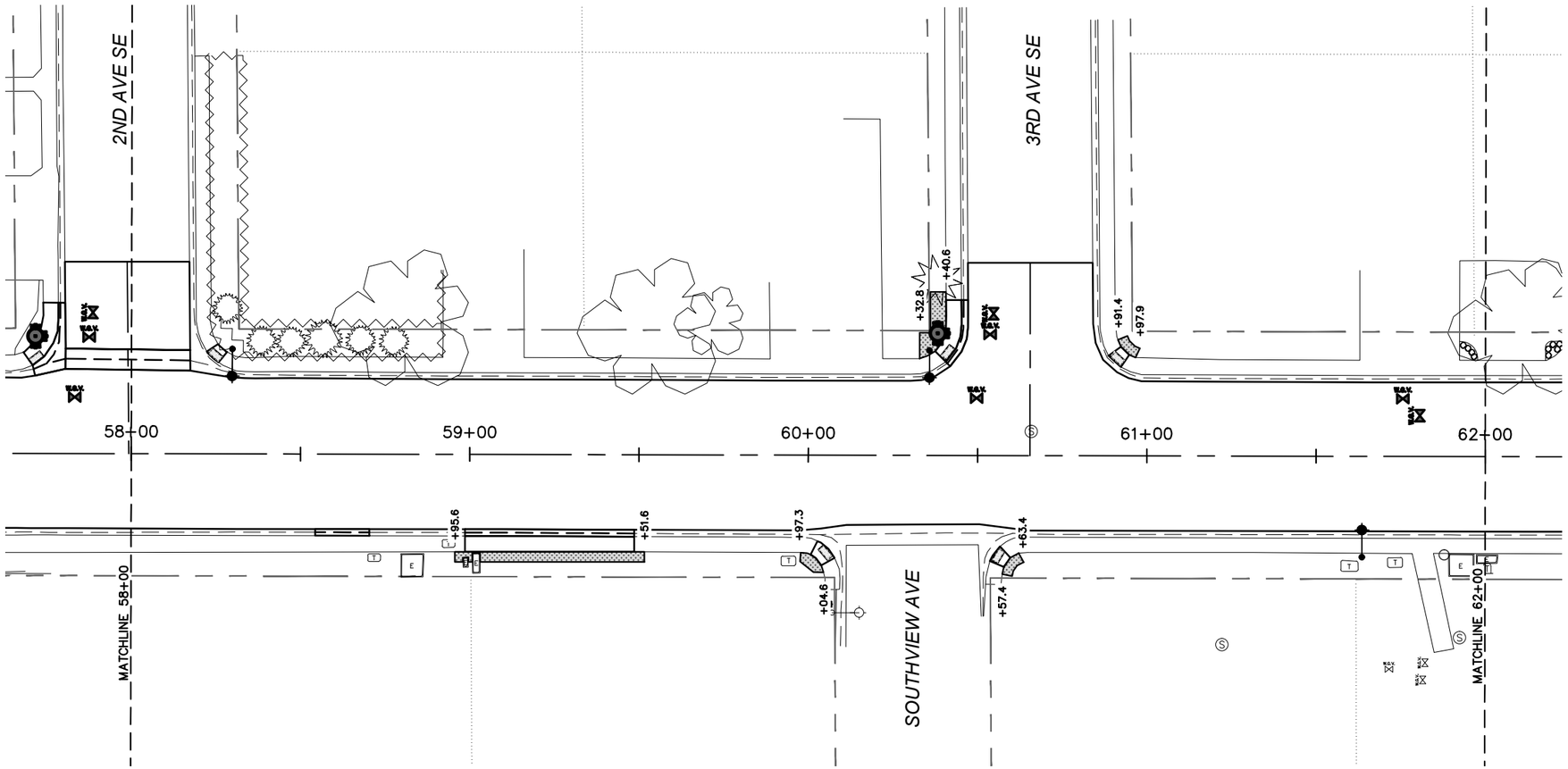
PERMANENT EROSION CONTROL

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

9/5/2017 8:48:52 AM schrank h:\168199\project cad\current plans\077PE_001_permerosionctrl.dwg

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	77	5

SEEDING CLASS I AND HYDRAULIC MULCH
Sta 58+00 to Sta 62+00 0.01 AC



LEGEND

SEEDING - HYDRO MULCH

0 40'
SCALE: 1" = 40'

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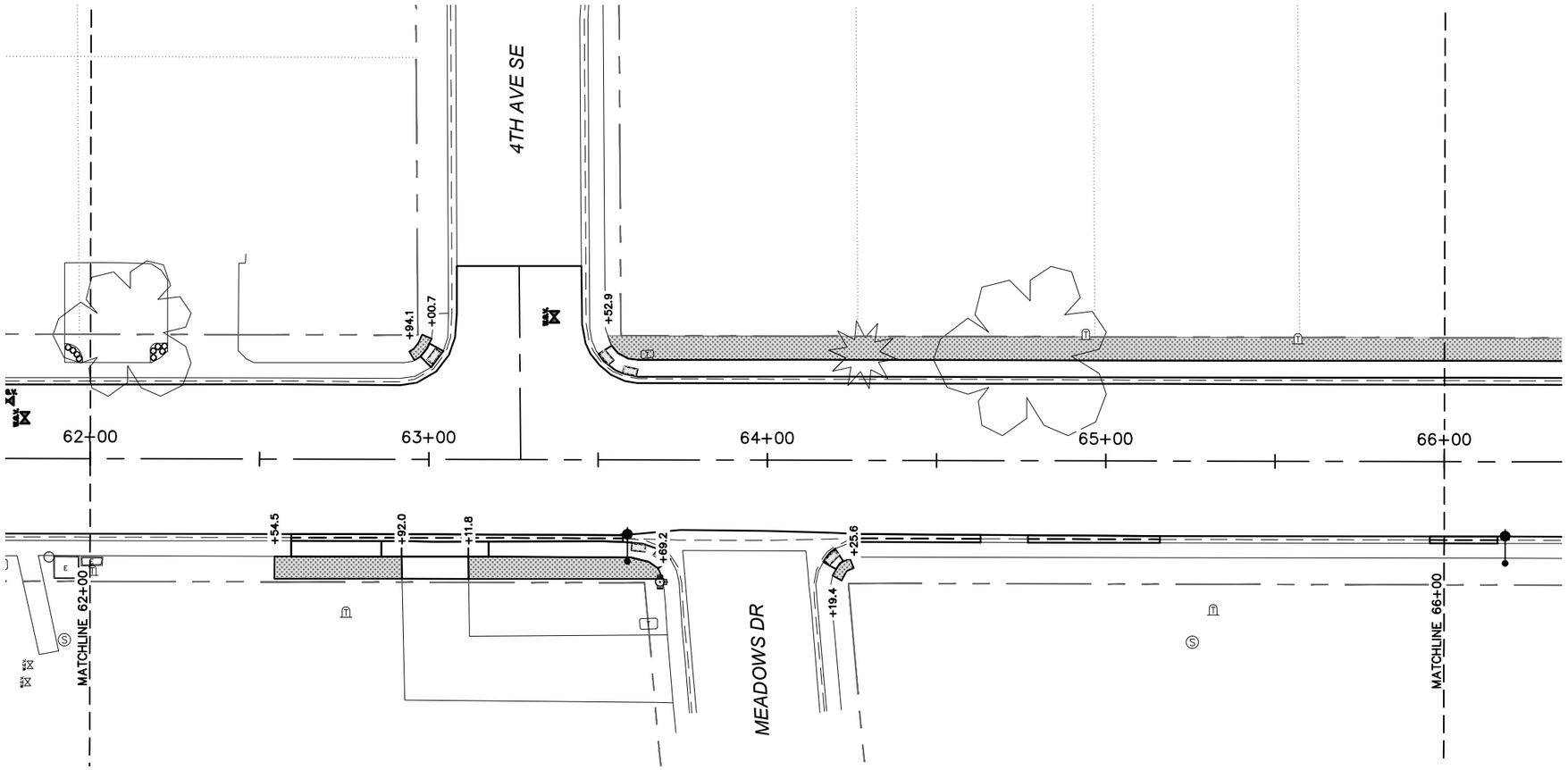
PERMANENT EROSION CONTROL

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

9/5/2017 8:48:52 AM schrank h:\168199\project cad\current plans\077PE_001_permerosionctrl.dwg

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	77	6

SEEDING CLASS I AND HYDRAULIC MULCH
Sta 62+00 to Sta 66+00 0.05 AC



LEGEND

SEEDING - HYDRO MULCH

0 40'
SCALE: 1" = 40'

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PERMANENT EROSION CONTROL

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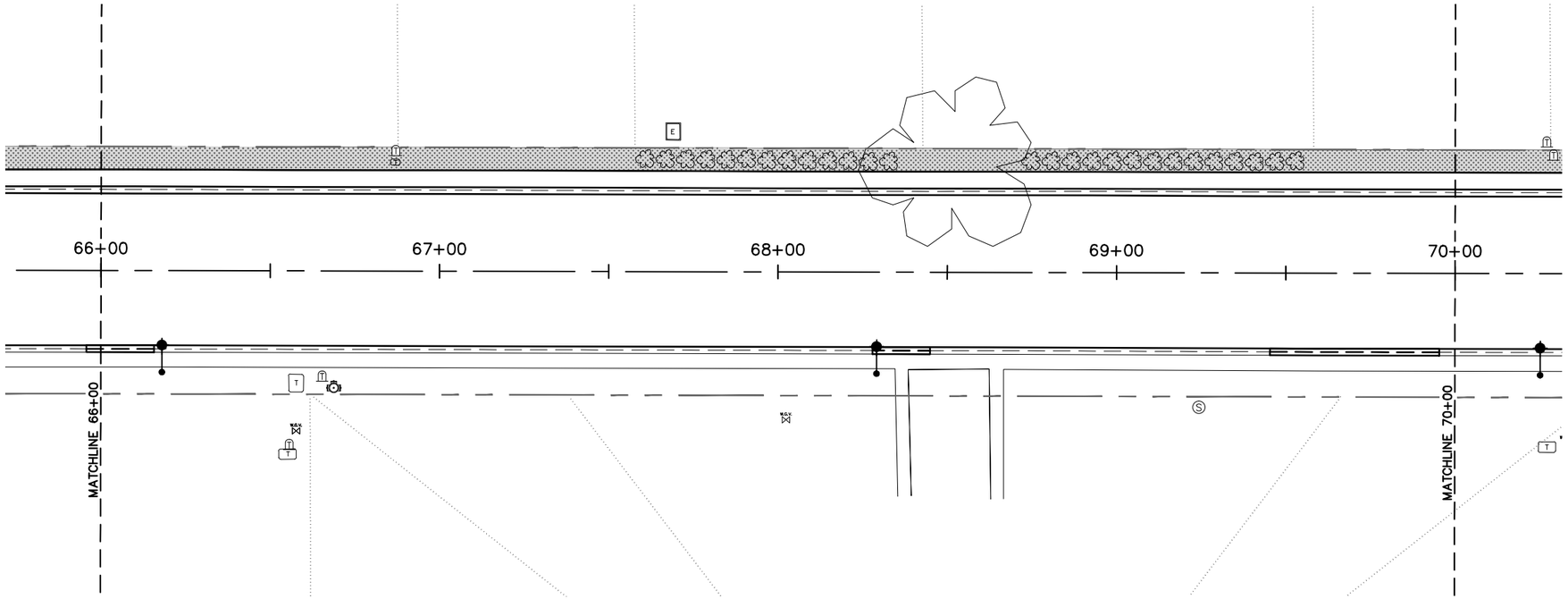
2ND AVE SW TO 6TH AVE SE

9/5/2017 8:48:52 AM schrank h:\168199\project cad\current plans\077PE_001_permerosionctrl.dwg

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	77	7

SEEDING CLASS I AND HYDRAULIC MULCH
Sta 66+00 to Sta 70+00 0.06 AC



LEGEND

SEEDING - HYDRO MULCH

0 40'
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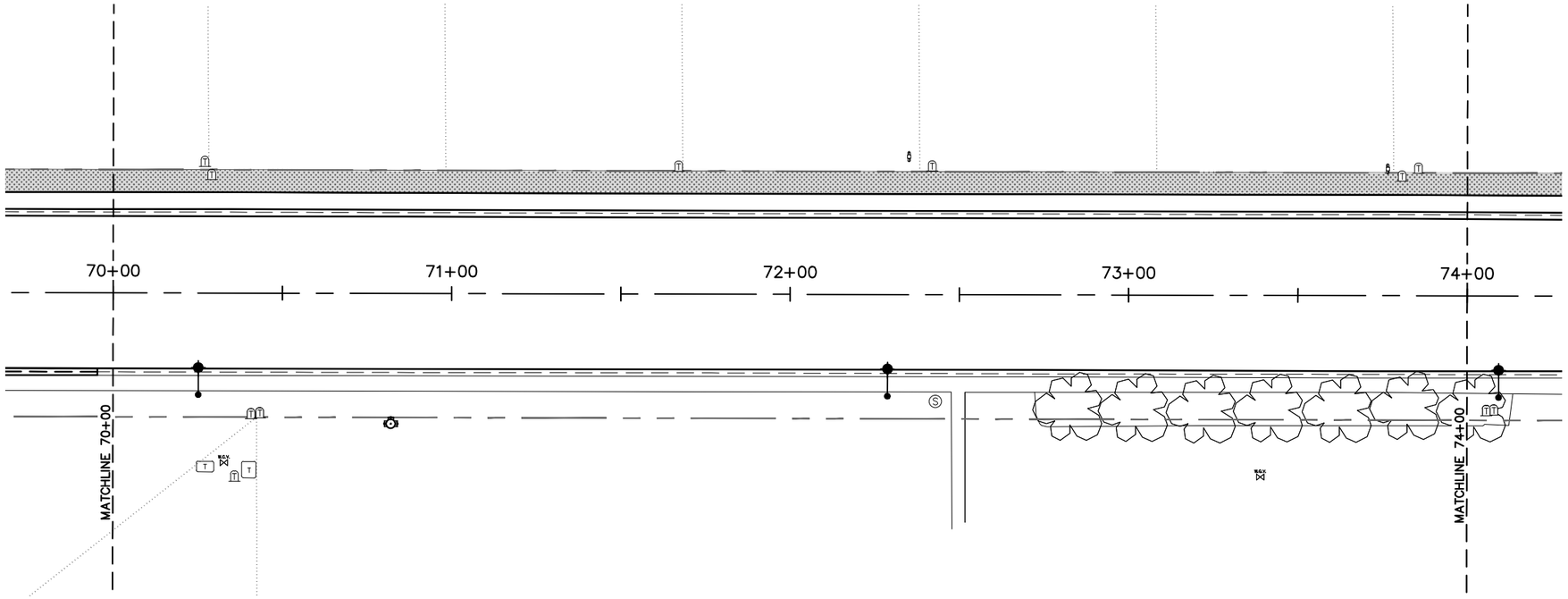
2ND AVE SW TO 6TH AVE SE

9/5/2017 8:48:52 AM schrank h:\168199\project cad\current plans\077PE_001_permerosionctrl.dwg

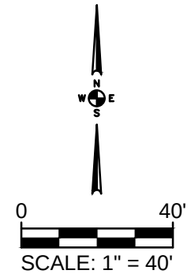
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	77	8

SEEDING CLASS I AND HYDRAULIC MULCH
Sta 70+00 to Sta 74+00 0.06 AC



LEGEND

SEEDING - HYDRO MULCH



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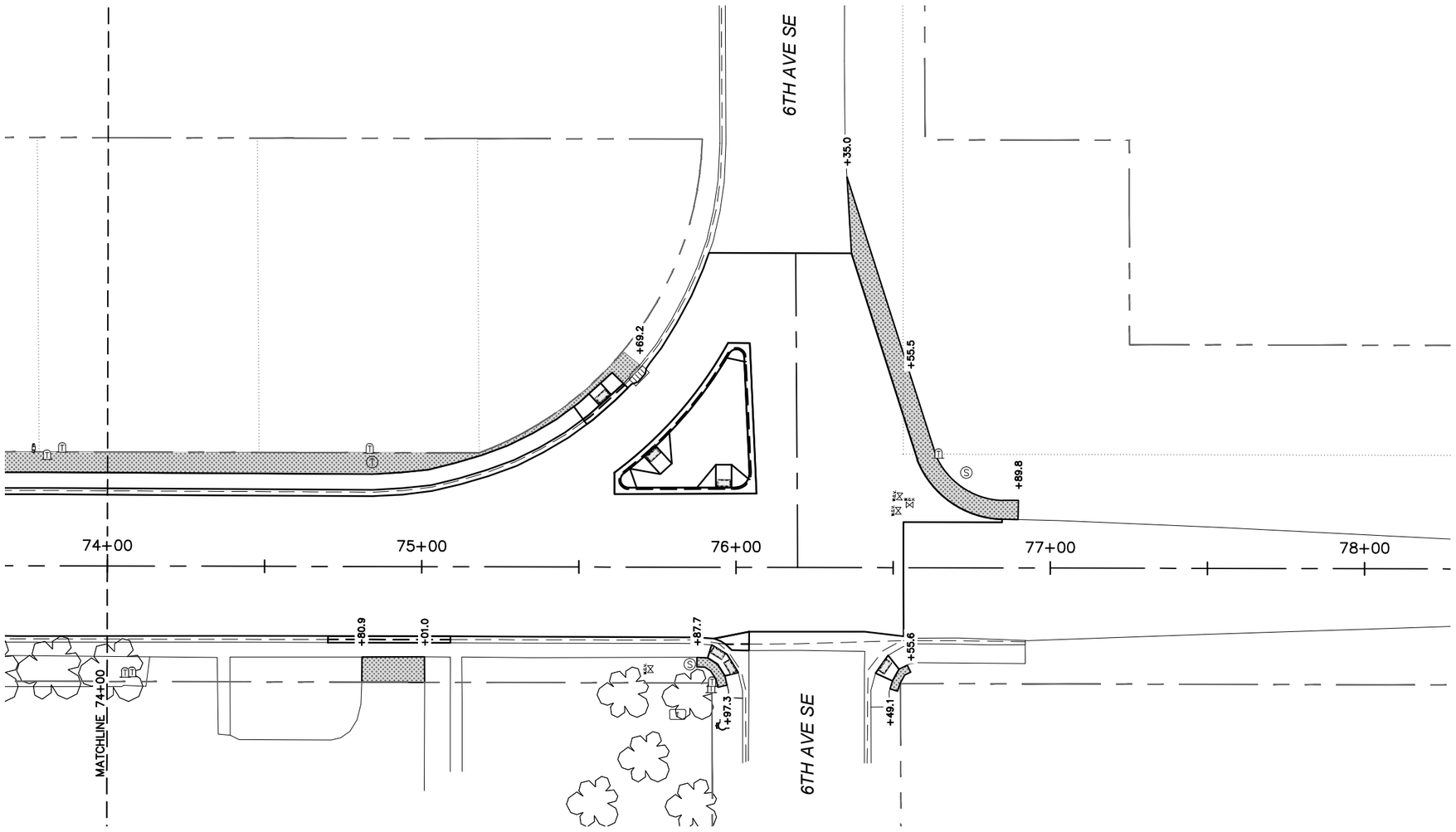
PERMANENT EROSION CONTROL

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	77	9

SEEDING CLASS I AND HYDRAULIC MULCH
Sta 74+00 to Sta 77+00 0.04 AC



LEGEND

SEEDING - HYDRO MULCH

0 40'

SCALE: 1" = 40'

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PERMANENT EROSION CONTROL

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

9/5/2017 8:48:52 AM schrank h:\168199\project cad\current plans\077PE_001_permerosionctrl.dwg

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	81	1

SURVEY COORDINATE DATA

HORIZONTAL ALIGNMENT			
Point	**Station**	**Northing**	**Easting**
POT-1	34+00.00	99,925.78	98,454.37
POT-2	39+00.00	99,926.20	98,954.37
POT-3	41+71.00	99,937.85	99,225.11
POT-4	50+00.00	99,929.84	100,054.08
POT-5	80+00.00	99,923.21	103,054.07

SURVEY CONTROL POINTS					
Point	**Northing**	**Easting**	**Elevation**	**Station**	**Offset**
CP-1	100,000.20	100,000.20	2426.93	49+45.44	69.84 LT
CP-2	99,959.19	97,105.15	2427.21	20+50.81	34.53 LT
CP-3	99,959.64	104,022.50	2491.69	89+38.34	38.56 LT

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NOTES:

Hoizontal Data: All coordinates are assumed coordinates derived from a local coordinate system. All coordinates and measurements are ground distances, international foot definition.

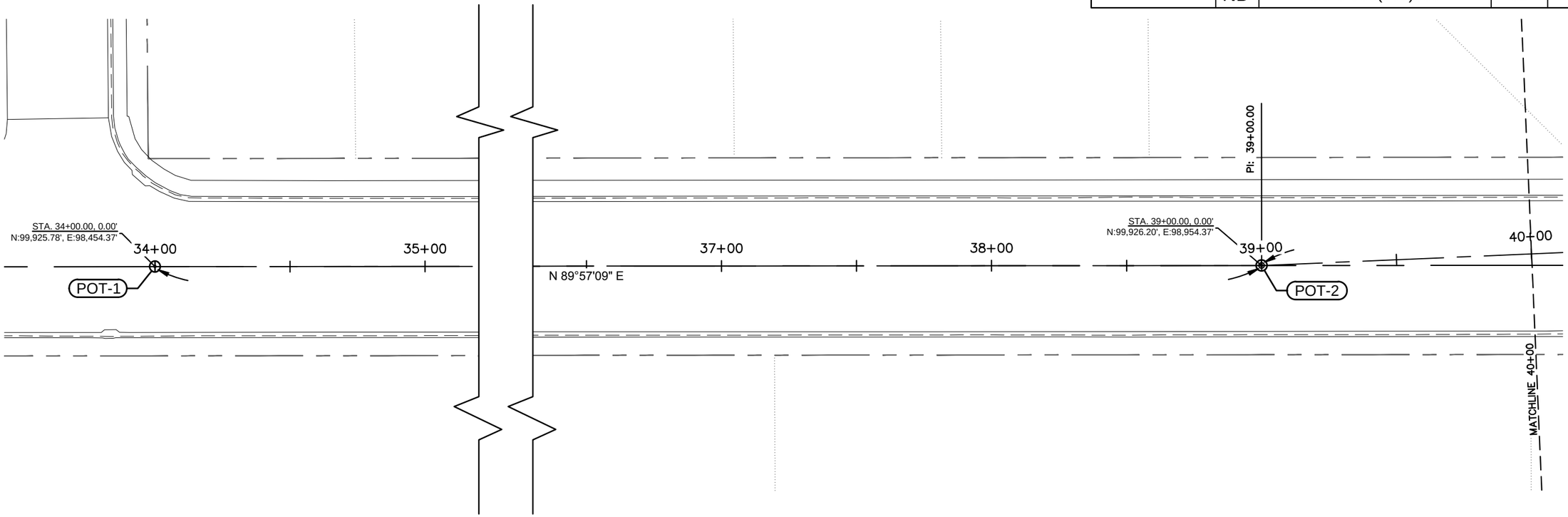
Vertical Data: NAVD-88, GEOID03 (CONUS)

Date Survey Completed: November, 2016

SURVEY COORDINATE DATA

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	82	1



LEGEND

- CONTROL POINT
- SECTION CORNER
- QUARTER CORNER
- SECTION LINE
- ROADWAY CL ALIGNMENT
- RIGHT-OF-WAY LINE
- PROPERTY LINE

0 40'

SCALE: 1" = 40'

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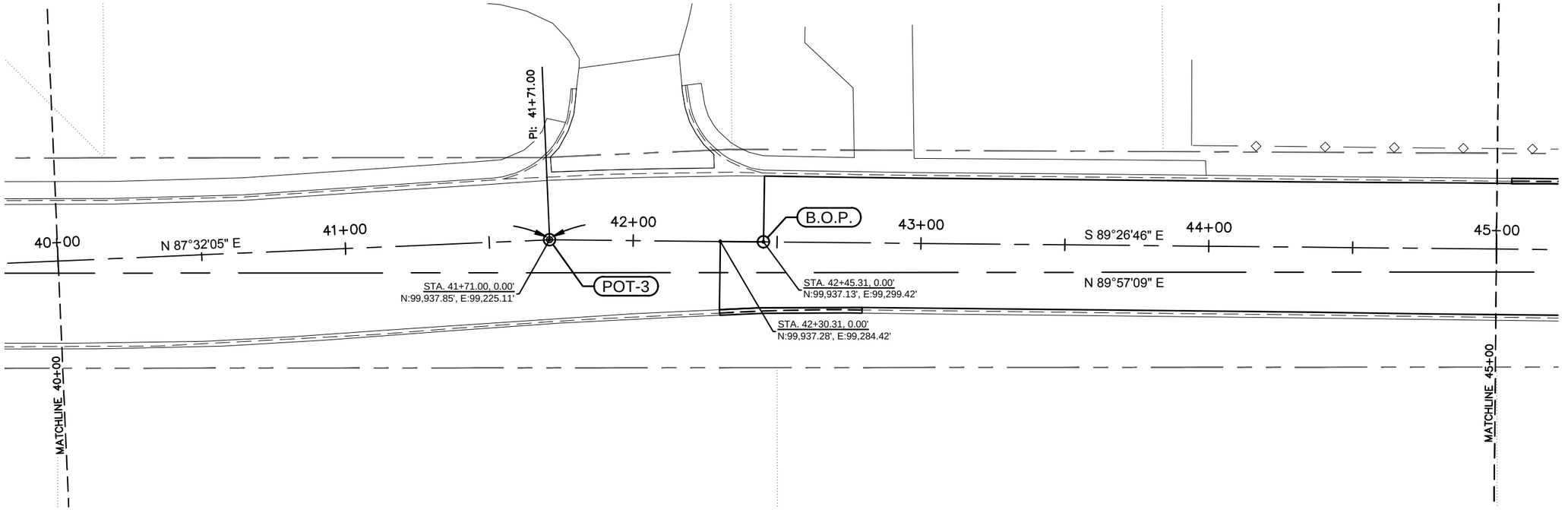
SURVEY DATA LAYOUT

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

8/18/2017 9:00:36 AM schrank h:\168199\project cad\current plans\082SD_001_surveylayout.dwg

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	82	2



LEGEND

- CONTROL POINT
- SECTION CORNER
- QUARTER CORNER
- SECTION LINE
- ROADWAY CL ALIGNMENT
- RIGHT-OF-WAY LINE
- PROPERTY LINE

0 40'

SCALE: 1" = 40'

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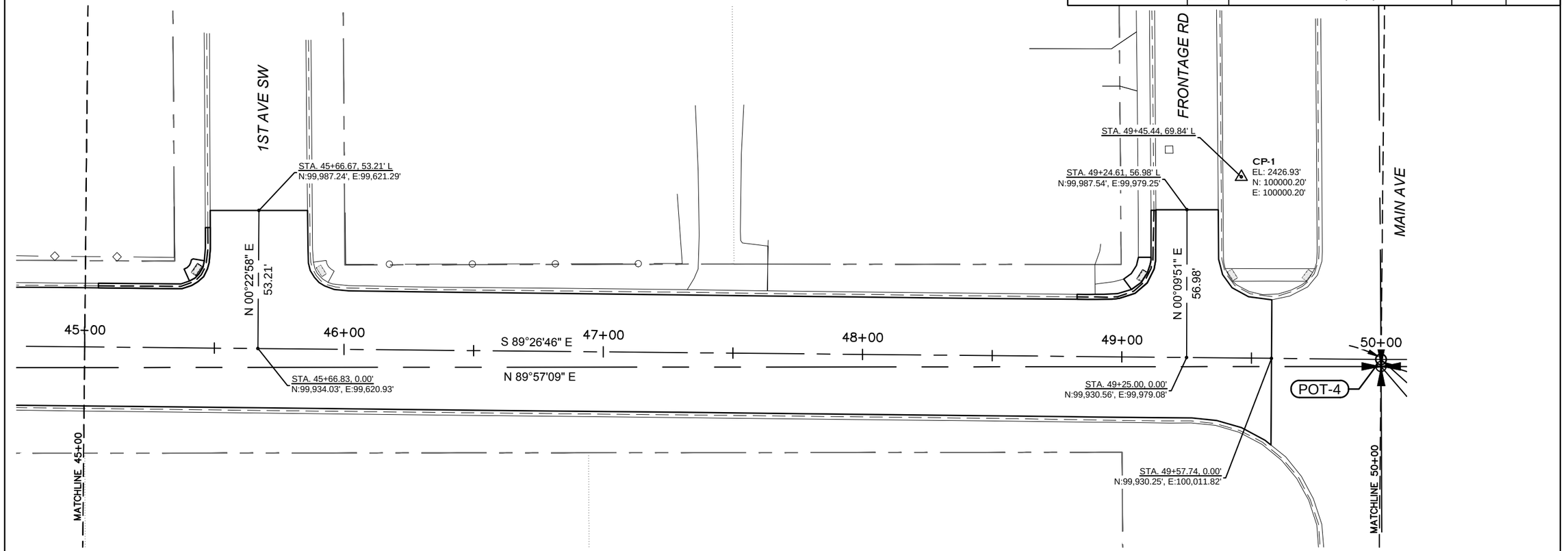
SURVEY DATA LAYOUT

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

8/18/2017 9:00:36 AM schrank h:\168199\project cad\current plans\082SD_001_surveylayout.dwg

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	82	3



LEGEND

- CONTROL POINT
- SECTION CORNER
- QUARTER CORNER
- SECTION LINE
- ROADWAY CL ALIGNMENT
- RIGHT-OF-WAY LINE
- PROPERTY LINE

0 40'

SCALE: 1" = 40'

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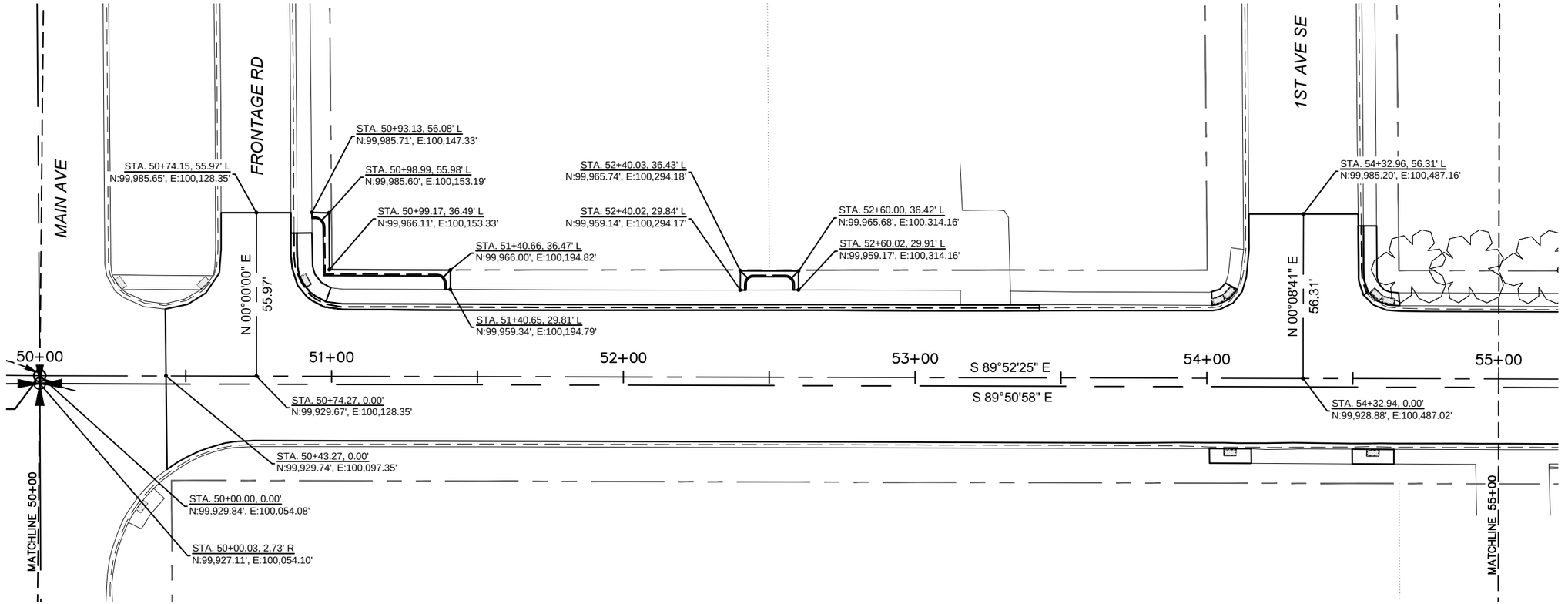
SURVEY DATA LAYOUT

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

8/18/2017 9:00:36 AM schrank h:\168199\project cad\current plans\082SD_001_surveylayout.dwg

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	82	4



LEGEND

- CONTROL POINT
- SECTION CORNER
- QUARTER CORNER
- SECTION LINE
- ROADWAY CL ALIGNMENT
- RIGHT-OF-WAY LINE
- PROPERTY LINE

0 40'

SCALE: 1" = 40'

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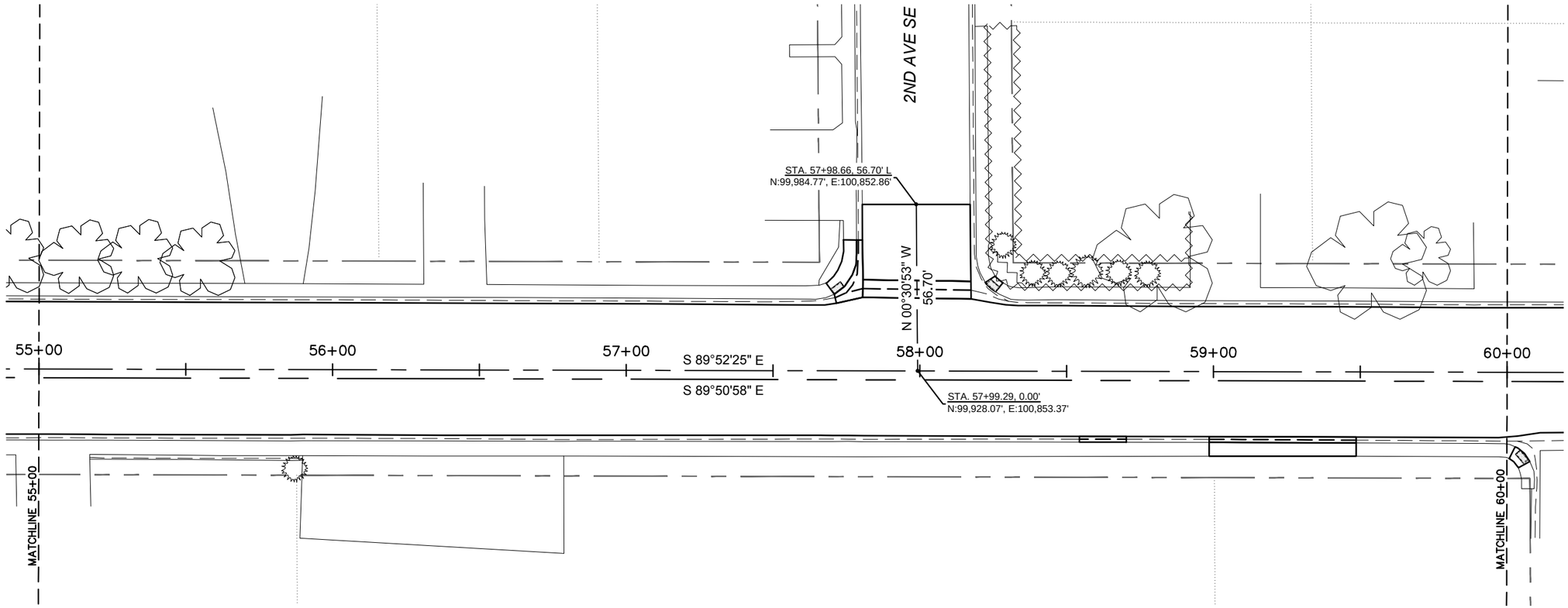
SURVEY DATA LAYOUT

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

8/18/2017 9:00:36 AM schrank h:\168199\project cad\current plans\082SD_001_surveylayout.dwg

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	82	5



LEGEND

- CONTROL POINT
- SECTION CORNER
- QUARTER CORNER
- SECTION LINE
- ROADWAY CL ALIGNMENT
- RIGHT-OF-WAY LINE
- PROPERTY LINE

N W E S

0 40'

SCALE: 1" = 40'

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SURVEY DATA LAYOUT

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

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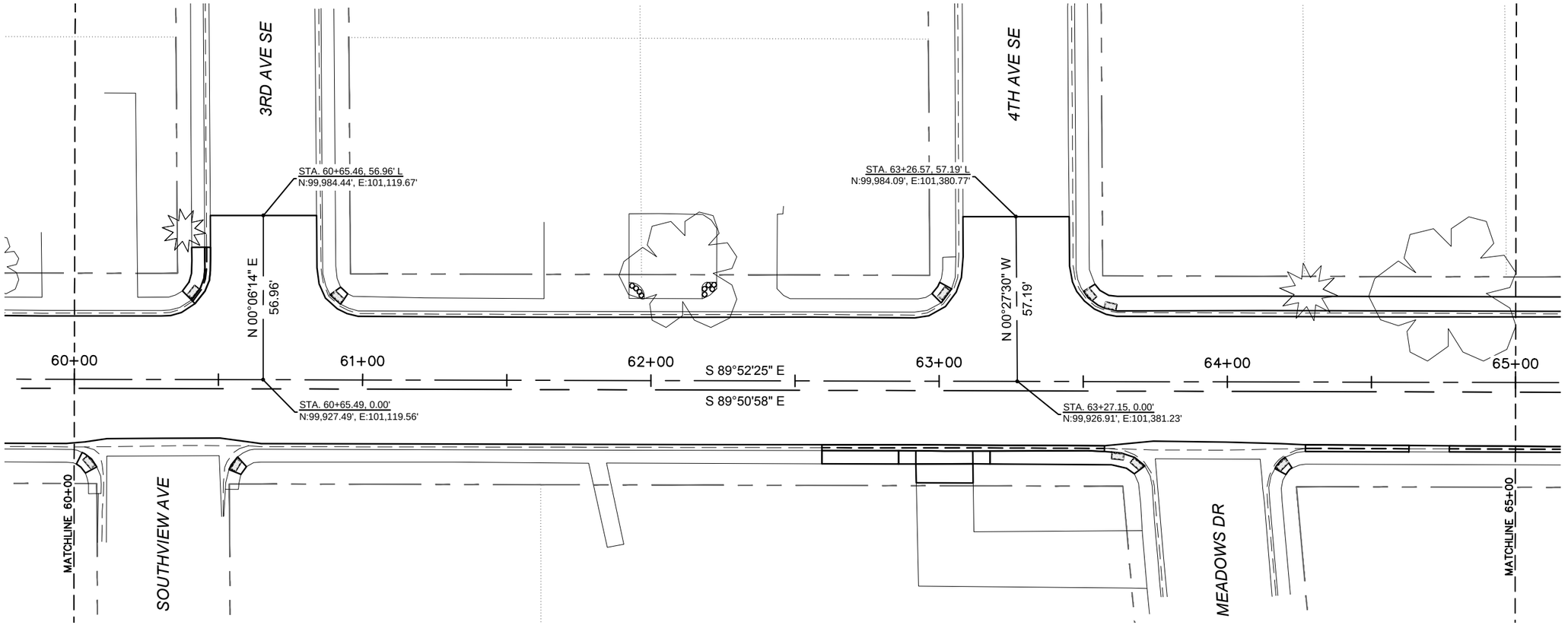
	ND	SU-5-983(059)059	82	6



LEGEND

- CONTROL POINT
- SECTION CORNER
- QUARTER CORNER
- SECTION LINE
- ROADWAY CL ALIGNMENT
- RIGHT-OF-WAY LINE
- PROPERTY LINE

0 40'

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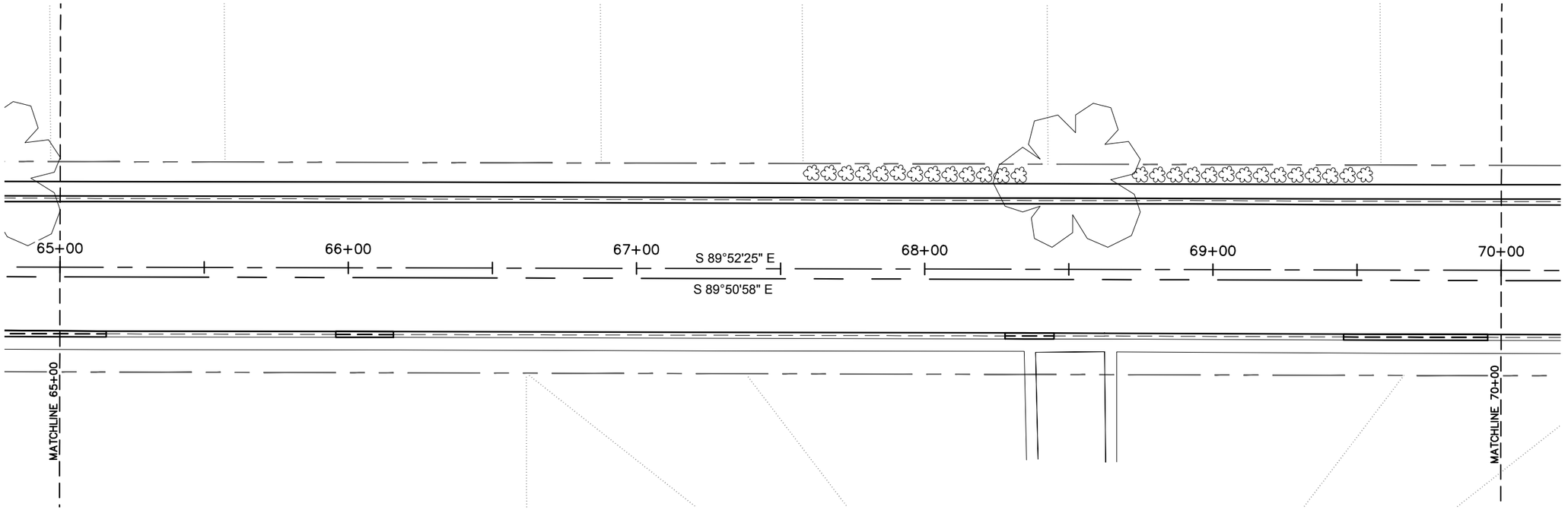
8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

8/18/2017 9:00:36 AM schrank h:\168199\project cad\current plans\082SD_001_surveylayout.dwg

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	82	7



LEGEND

CONTROL POINT

SECTION CORNER

QUARTER CORNER

SECTION LINE

ROADWAY CL ALIGNMENT

RIGHT-OF-WAY LINE

PROPERTY LINE

N W E S

0 40'

SCALE: 1" = 40'

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2ND AVE SW TO 6TH AVE SE

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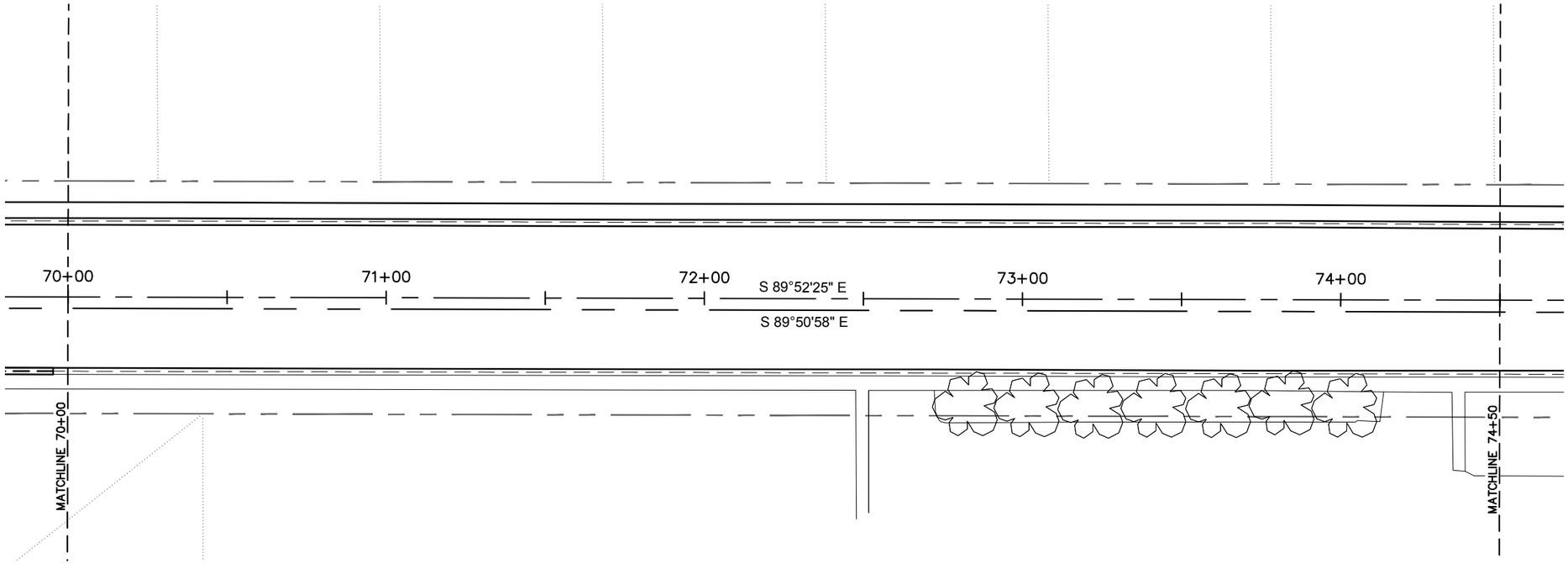
	ND	SU-5-983(059)059	82	8



LEGEND

- CONTROL POINT
- SECTION CORNER
- QUARTER CORNER
- SECTION LINE
- ROADWAY CL ALIGNMENT
- RIGHT-OF-WAY LINE
- PROPERTY LINE

N W E S

0 40'

SCALE: 1" = 40'

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SURVEY DATA LAYOUT

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

8/18/2017 9:00:36 AM schrank h:\168199\project cad\current plans\082SD_001_surveylayout.dwg

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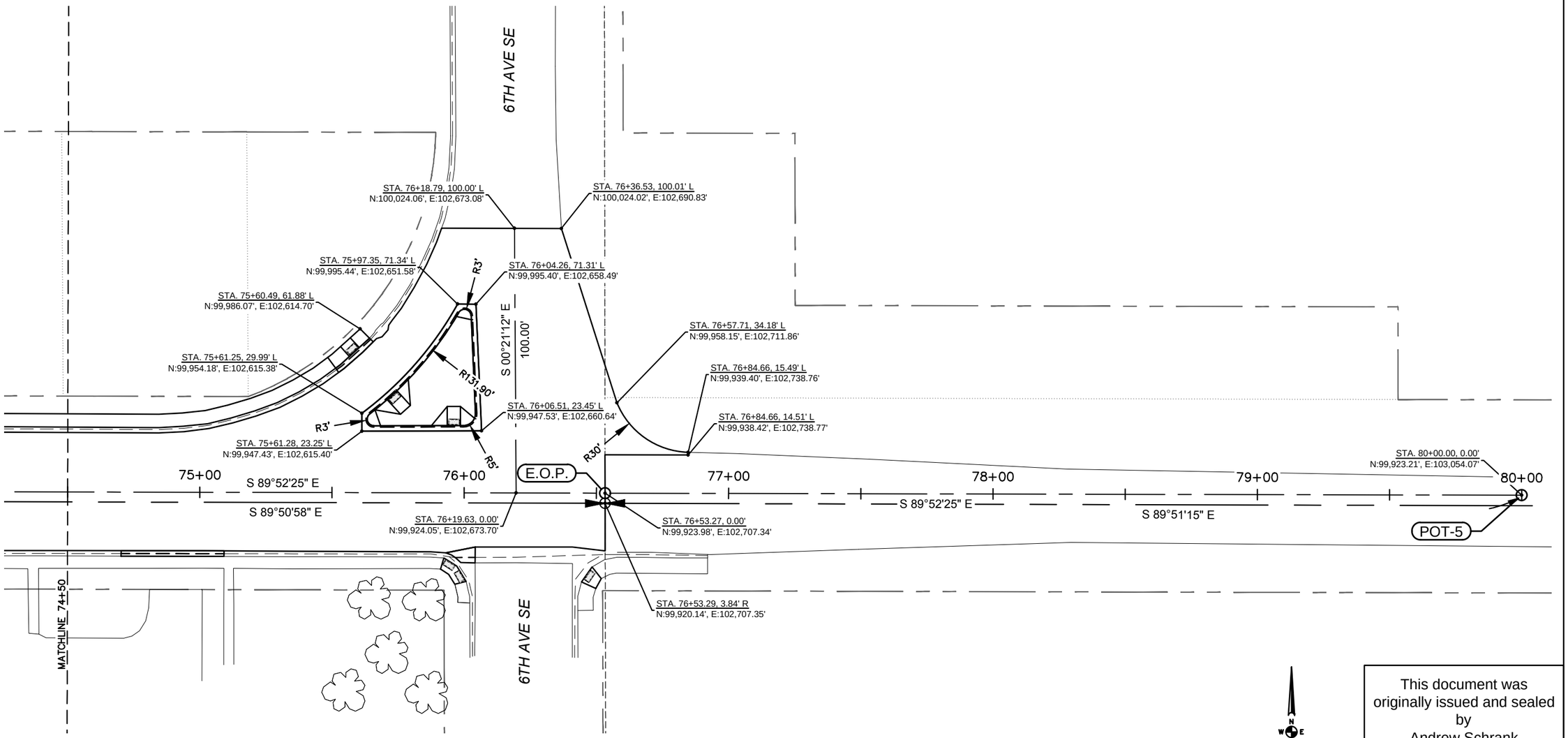

LEGEND

- CONTROL POINT
- SECTION CORNER
- QUARTER CORNER
- SECTION LINE
- ROADWAY CL ALIGNMENT
- RIGHT-OF-WAY LINE
- PROPERTY LINE

0 40'

SCALE: 1" = 40'

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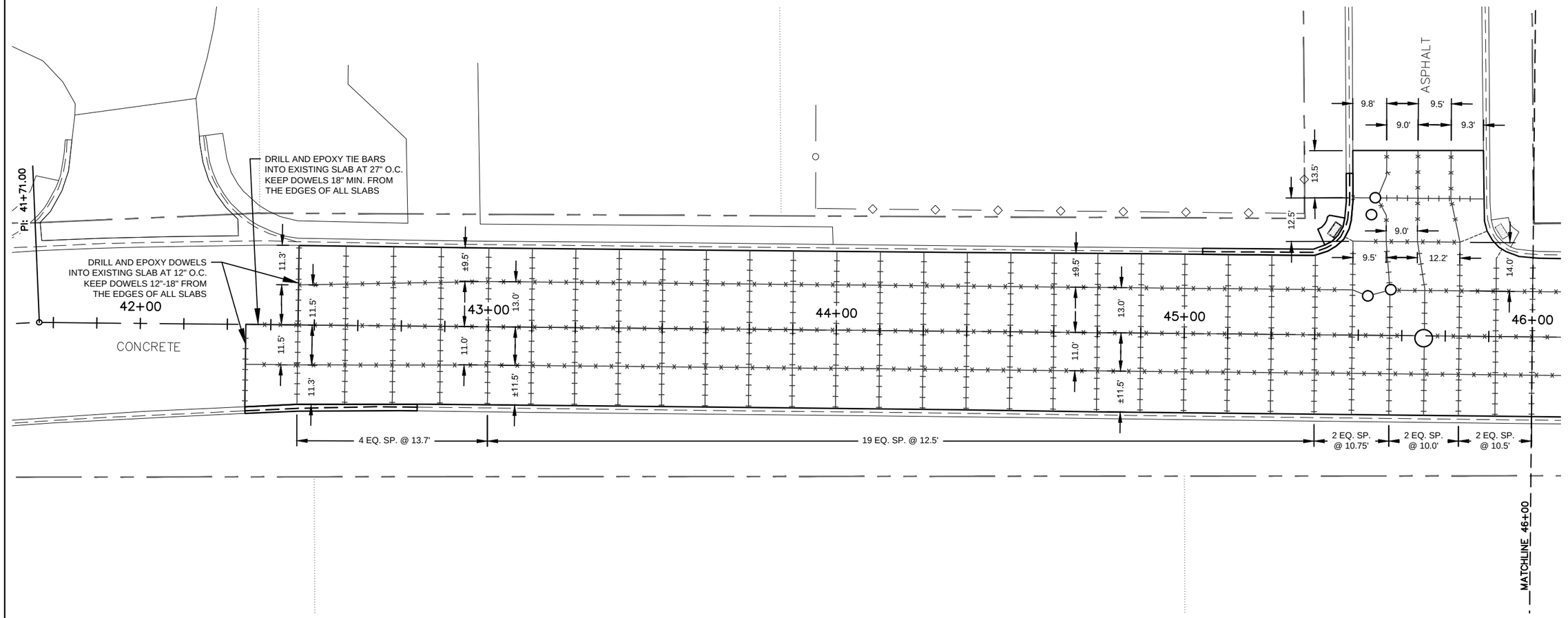
SURVEY DATA LAYOUT

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

8/18/2017 9:00:36 AM schrank h:\168199\project cad\current plans\082SD_001_surveylayout.dwg

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	90	1



N W E S

0 30'

SCALE: 1" = 30'

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LEGEND

TIED LONGITUDINAL JOINT

DOWELED TRANSVERSE JOINT

NON-DOWELED/NON-TIED CONTRACTION JOINT

PAVING LAYOUT

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

8/18/2017 9:03:59 AM schrank h:\168199\project cad\current plans\090PL_001_pvnglayout.dwg

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
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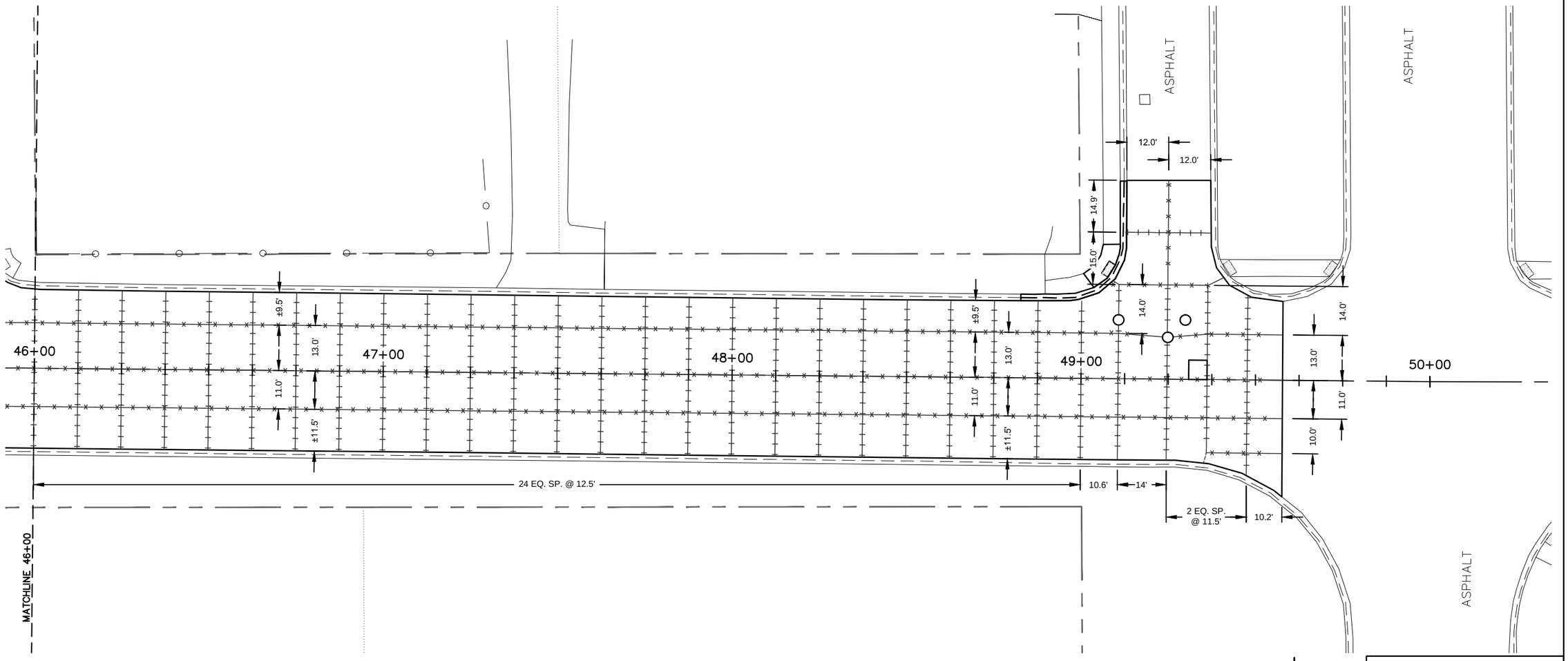

N W E S

0 30'

SCALE: 1" = 30'

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LEGEND

TIED LONGITUDINAL JOINT

DOWELED TRANSVERSE JOINT

NON-DOWELED/NON-TIED CONTRACTION JOINT

PAVING LAYOUT

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

8/18/2017 9:03:59 AM schrank h:\168199\project cad\current plans\090PL_001_pvnglayout.dwg

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SU-5-983(059)059	100	1

SIGN NUMBER	SIGN SIZE	DESCRIPTION	AMOUNT REQUIRED BY PHASE NO. 1	2	3		TOTAL AMOUNT REQUIRED	UNITS PER AMOUNT	UNITS SUB TOTAL
D3-36	36"x6"	STREET NAME SIGN (Sign and installation only)						6	
G20-1-60	60"x24"	ROAD WORK NEXT __ MILES						34	
G20-1b-60	60"x24"	WORK IN PROGRESS/ NO WORK IN PROGRESS (Sign and installation only)						26	
G20-2-48	**48"x24"**	**END ROAD WORK**	**8**	**18**	**2**		**18**	**19**	**342**
G20-4-36	36"x18"	PILOT CAR FOLLOW ME (Mounted to back of pilot car)						18	
G20-10-108	108"x48"	CONTRACTOR SIGN						64	
G20-50a-72	**72"x36"**	**ROAD WORK NEXT __ MILES RT & LT ARROWS**	**2**	**2**			**2**	**37**	**74**
G20-52a-72	72"x24"	ROAD WORK NEXT __ MILES RT or LT ARROW						30	
G20-55-96	96"x48"	SPEED LIMIT ENFORCED - MINIMUM FEE $80 WHEN WORKERS PRESENT						59	
M1-1-36	36"x36"	INTERSTATE ROUTE MARKER (Post and installation only)						10	
M1-4-24	24"x24"	U.S. ROUTE MARKER (Post and installation only)						10	
M1-5-24	24"x24"	STATE ROUTE MARKER (Post and installation only)						10	
M3-1-24	24"x12"	NORTH (Mounted on route marker post)						7	
M3-2-24	24"x12"	EAST (Mounted on route marker post)						7	
M3-3-24	24"x12"	SOUTH (Mounted on route marker post)						7	
M3-4-24	24"x12"	WEST (Mounted on route marker post)						7	
M4-8-24	24"x12"	DETOUR (Mounted on route marker post)						7	
M4-9-30	30"x24"	DETOUR ARROW RIGHT or LEFT/AHD AND RT or LT						15	
M4-10-48	48"x18"	DETOUR ARROW RIGHT or LEFT						23	
M5-1-21	21"x15"	ARROW AHD AND RT or LT(Mounted on route marker post)						7	
M5-2-21	21"x15"	ARROW AHD UP & RT or LT (Mounted on route marker post)						7	
M6-1-21	21"x15"	ARROW RT or LT (Mounted on route marker post)						7	
M6-2-21	21"x15"	ARROW UP & RT or LT (Mounted on route marker post)						7	
M6-3-21	21"x15"	ARROW AHD (Mounted on route marker post)						7	
R1-1-48	**48"x48"**	**STOP**	**2**	**5**			**5**	**32**	**160**
R1-1a-18	**18"x18"**	**STOP and SLOW PADDLE Back to Back**			**4**		**4**	**5**	**20**
R1-2-60	60"x60"	YIELD						29	
R2-1-48	**48"x60"**	**SPEED LIMIT __**	**2**	**2**	**4**		**4**	**39**	**156**
R2-1a-24	24"x18"	MINIMUM FEE $80 (Mounted on Speed Limit post)						10	
R3-7-48	48"x48"	LEFT or RIGHT LANE MUST TURN LEFT or RIGHT						35	
R4-1-48	48"x60"	DO NOT PASS						39	
R4-7-48	48"x60"	KEEP RIGHT SYMBOL						39	
R5-1-48	**48"x48"**	**DO NOT ENTER**	**2**				**2**	**35**	**70**
R6-1-36	36"x12"	ONE WAY RIGHT or LEFT						13	
R7-1-12	12"x18"	NO PARKING						11	
R9-9-30	**30"X18"**	**SIDEWALK CLOSED -BARRICADE MOUNTED**	**21**	**27**			**27**	**9**	**243**
R10-6-24	24"x36"	STOP HERE ON RED						16	
R11-2-48	48"x30"	ROAD CLOSED						28	
R11-2a-48	48"x30"	STREET CLOSED						28	
R11-2a-48	**48"x30"**	**STREET CLOSED - BARRICADE MOUNTED**	**7**	**3**			**7**	**12**	**84**
R11-3a-60	60"x30"	ROAD CLOSED __ MILES AHEAD LOCAL TRAFFIC ONLY						31	
R11-3c-60	60"x30"	STREET CLOSED __ MILES AHEAD LOCAL TRAFFIC ONLY						31	
R11-4a-60	60"x30"	STREET CLOSED TO THRU TRAFFIC						31	
R11-4a-60	**60"x30"**	**STREET CLOSED TO THRU TRAFFIC - BARRICADE MOUNTED**	**6**	**3**			**6**	**15**	**90**
W1-3-48	48"x48"	RIGHT or LEFT SHARP REVERSE CURVE ARROW						35	
W1-4-48	**48"x48"**	**RIGHT or LEFT REVERSE CURVE ARROW**	**2**	**2**			**2**	**35**	**70**
W1-4b-48	48"x48"	DOUBLE RIGHT or LEFT REVERSE CURVE ARROW						35	
W1-6-48	48"x24"	LARGE ARROW						26	
W1-6-48	**48"x27"**	**LARGE ARROW - BARRICADE MOUNTED**	**6**	**5**			**6**	**10**	**60**
W3-1-48	48"x48"	STOP AHEAD SYMBOL						35	
W3-3-48	48"x48"	SIGNAL AHEAD SYMBOL						35	
W3-4-48	**48"x48"**	**BE PREPARED TO STOP**			**2**		**2**	**35**	**70**
W3-5-48	**48"x48"**	**SPEED REDUCTION AHEAD**	**1**	**1**	**1**		**1**	**35**	**35**
W4-2-48	**48"x48"**	**RIGHT or LEFT LANE TRANSITION SYMBOL**	**1**	**1**			**1**	**35**	**35**
W5-1-48	**48"x48"**	**ROAD NARROWS**	**2**	**2**	**2**		**2**	**35**	**70**
W5-8-48	48"x48"	THRU TRAFFIC RIGHT LANE						35	
W5-9-48	48"x48"	ROAD WORK TRAFFIC ONLY DOWN & LT or RT ARROW						35	
W6-3-48	48"x48"	TWO WAY TRAFFIC SYMBOL						35	
W8-1-48	**48"x48"**	**BUMP**			**4**		**4**	**35**	**140**
W8-3-48	**48"x48"**	**PAVEMENT ENDS**			**2**		**2**	**35**	**70**
W8-7-48	48"x48"	LOOSE GRAVEL						35	
W8-9a-48	**48"x48"**	**SHOULDER DROP-OFF**			**2**		**2**	**35**	**70**
W8-11-48	**48"x48"**	**UNEVEN LANES**			**2**		**2**	**35**	**70**
W8-12-48	48"x48"	NO CENTER STRIPE						35	
W8-53-48	48"x48"	TRUCKS ENTERING HIGHWAY						35	
W8-54-48	48"x48"	TRUCKS ENTERING AHEAD or __ FT.						35	
W8-55-48	48"x48"	TRUCKS CROSSING AHEAD or __ FT.						35	
W8-56-48	48"x48"	TRUCKS EXITING HIGHWAY						35	
W9-3a-48	48"x48"	CENTER LANE CLOSED SYMBOL						35	
W12-2-48	48"x48"	LOW CLEARANCE SYMBOL						35	
W13-1-24	24"x24"	__ MPH ADVISORY SPEED PLATE (Mounted on warning sign post)						11	
W13-4-48	48"x60"	RAMP ARROW						39	
W14-3-48	48"x36"	NO PASSING ZONE						23	
W16-7P-12	**12"x24"**	**DIAGONAL ARROW RT or LT**	**18**	**30**			**30**	**3**	**90**
W20-1-48	**48"x48"**	**ROAD WORK AHEAD or _FT or _ MILE**	**7**	**16**	**2**		**16**	**35**	**560**
W20-2-48	48"x48"	DETOUR AHEAD or __ FT						35	
W20-3-48	48"x48"	ROAD or STREET CLOSED AHEAD or __ FT.						35	
W20-4-48	48"x48"	ONE LANE ROAD AHEAD or __ FT.						35	
W20-5-48	**48"x48"**	**RIGHT or LEFT LANE CLOSED AHEAD or __ FT.**	**1**	**1**			**1**	**35**	**35**
W20-7a-48	**48"x48"**	**FLAGGING SYMBOL**			**4**		**4**	**35**	**140**
W20-7k-24	**24"x18"**	**__ FEET (Mounted on warning sign post)**			**6**		**6**	**10**	**60**
W20-8-48	48"x48"	STREET CLOSED						35	

SIGN NUMBER	SIGN SIZE	DESCRIPTION	AMOUNT REQUIRED BY PHASE NO. 1	2	3		TOTAL AMOUNT REQUIRED	UNITS PER AMOUNT	UNITS SUB TOTAL
W20-51-48	48"x48"	EQUIPMENT WORKING						35	
W20-52-54	**54"x12"**	**NEXT __ MILES (Mounted on warning sign post)**			**2**		**2**	**12**	**24**
W21-1a-48	**48"x48"**	**WORKERS SYMBOL**			**2**		**2**	**35**	**70**
W21-2-48	48"x48"	FRESH OIL						35	
W21-3-48	48"x48"	ROAD MACHINERY AHEAD or __ FT						35	
W21-5-48	**48"x48"**	**SHOULDER WORK**			**1**		**1**	**35**	**35**
W21-5a-48	48"x48"	RIGHT or LEFT SHOULDER CLOSED						35	
W21-5b-48	48"x48"	RIGHT or LEFT SHOULDER CLOSED AHEAD or __ FT.						35	
W21-6a-48	48"x48"	SURVEY CREW AHEAD						35	
W21-50-48	48"x48"	BRIDGE PAINTING AHEAD or __ FT.						35	
W21-51-48	48"x48"	MATERIAL ON ROADWAY						35	
W22-8-48	48"x48"	FRESH OIL LOOSE ROCK						35	
	24"x24"	TAKE TURNS (6" D letters) (Mounted on stop sign post)						11	

SPECIAL SIGNS

Consign1	**60"x36"**	**Vehicles Over 8'-6" Wide Turn Here - Right Arrow**	**3**	**3**			**3**	**34**	**102**
Consign2	**60"x36"**	**Vehicles Over 8'-6" Wide Turn Here - Left Arrow**	**3**	**3**			**3**	**34**	**102**
Consign3	**60"x36"**	**Vehicles Over 8'-6" Wide Use Broadway St - Ahead Arrow**	**1**	**1**			**1**	**34**	**34**

SPEC & CODE

704-1000	TRAFFIC CONTROL SIGNS	TOTAL UNITS	3181

SPEC & CODE	DESCRIPTION	UNIT	QUANTITY BY PHASE NO. 1	2	3		TOTAL QUANTITY
704-0100	**FLAGGING**	MHR	**350**	**350**	**100**		**800**
704-1041	ATTENUATION DEVICE-TYPE B-55	EACH					
704-1043	ATTENUATION DEVICE-TYPE B-65	EACH					
704-1044	ATTENUATION DEVICE-TYPE B-70	EACH					
704-1050	TYPE I BARRICADES	EACH					
704-1051	TYPE II BARRICADES	EACH					
704-1052	**TYPE III BARRICADES**	EACH	**69**	**46**			**69**
704-1054	**SIDEWALK BARRICADE**	EACH	**21**	**28**			**28**
704-1060	**DELINEATOR DRUMS**	EACH	**161**	**128**	**10**		**161**
704-1065	TRAFFIC CONES	EACH					
704-1067	**TUBULAR MARKERS**	EACH	**166**	**125**	**150**		**166**
704-1070	DELINEATOR	EACH					
704-1072	FLEXIBLE DELINEATORS	EACH					
704-1081	**VERTICAL PANELS - BACK TO BACK**	EACH	**123**	**158**			**158**
704-1085	SEQUENCING ARROW PANEL - TYPE A	EACH					
704-1086	SEQUENCING ARROW PANEL - TYPE B	EACH					
704-1087	SEQUENCING ARROW PANEL - TYPE C	EACH					
704-1088	SEQUENCING ARROW PANEL - TYPE C - CROSSOVER	EACH					
704-1095	TYPE B FLASHERS	EACH					
704-1500	**OBLITERATION OF PVMT MK**	SF	**227**	**368**			**595**
704-3501	PORTABLE PRECAST CONCRETE MED BARRIER	LF					
704-3510	PRECAST CONCRETE MED BARRIER - STATE FURNISHED	EACH					
762-0200	RAISED PAVEMENT MARKERS	EACH					
762-0420	SHORT TERM 4IN LINE - TYPE R	LF					
762-0430	**SHORT TERM 4IN LINE - TYPE NR**	LF		**380**			**380**
762-0434	**SHORT TERM 8IN LINE - TYPE NR**	LF		**363**			**363**
762-0436	**SHORT TERM 24IN LINE - TYPE NR**	LF		**13**			**13**
762-0442	**SHORT TERM MESSAGE - TYPE NR**	SF		**48**			**48**
772-2110	FLASHING BEACON - POST MOUNTED	EACH					

NOTE:
If additional signs are required, units will be calculated using the formula from Section III-19.06 of the Design Manual.
http://www.dot.nd.gov/

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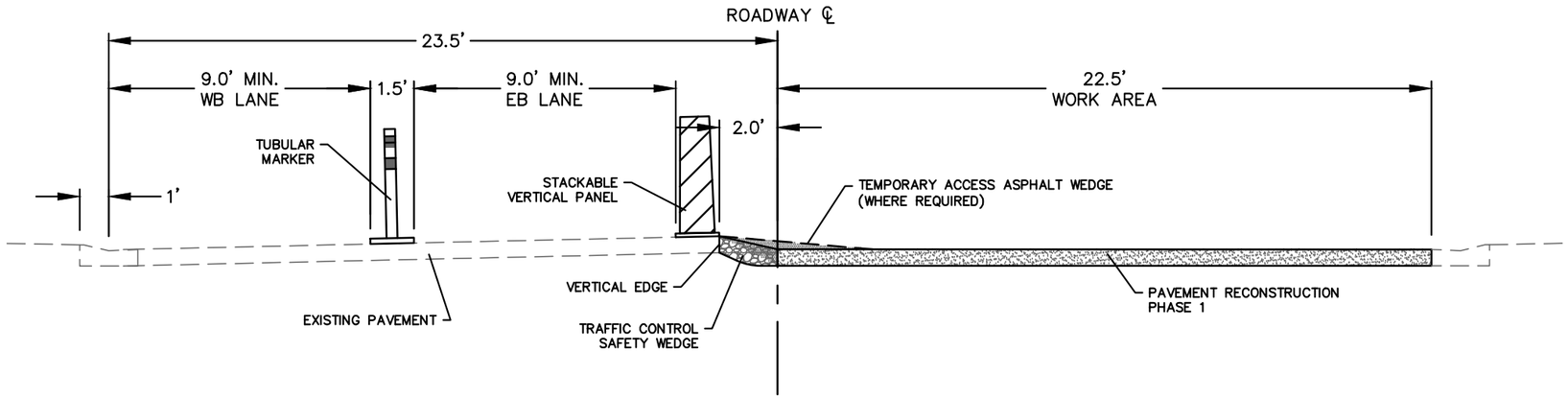
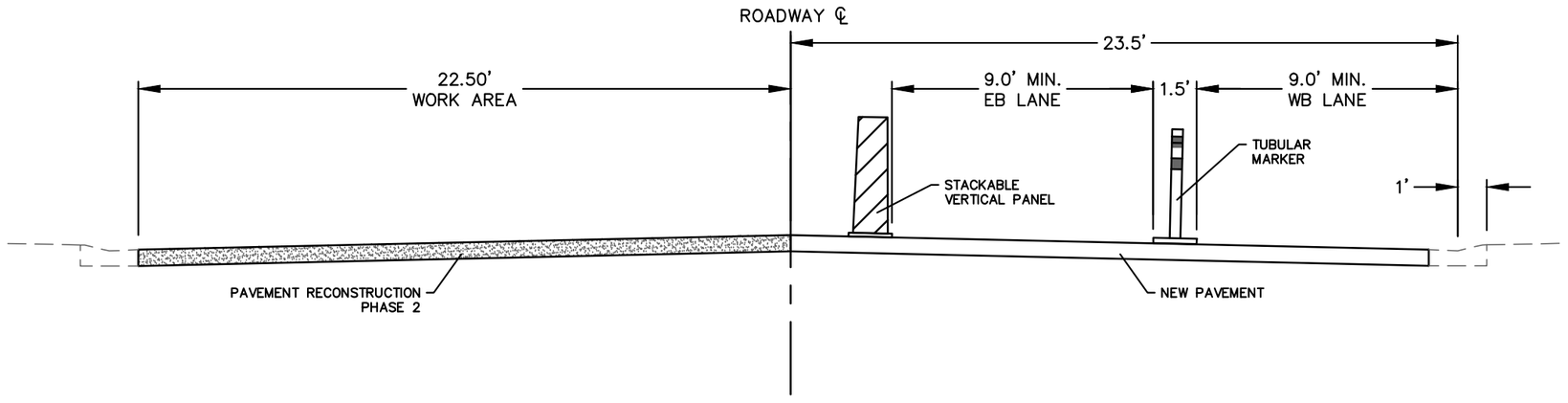
Traffic Control Devices List

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	100	2



PHASE 1 - TYPICAL TRAFFIC CONTROL SECTION

(NOT TO SCALE)



PHASE 2 - TYPICAL TRAFFIC CONTROL SECTION

(NOT TO SCALE)

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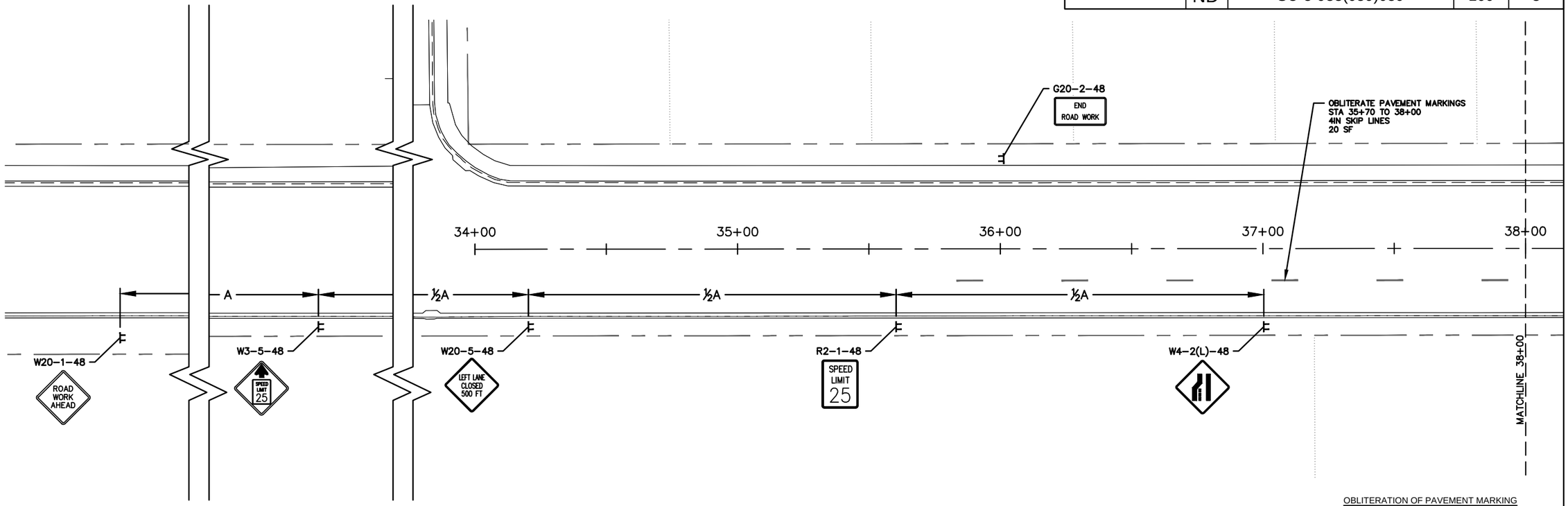
WORK ZONE TRAFFIC CONTROL
Typical Traffic Control Sections

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

9/1/2017 4:04:24 PM schrank h:\168199\project cad\current plans\100WZ_002_trafficctrl.dwg

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	100	3



OBLITERATION OF PAVEMENT MARKING

4" Skip Lines - White	
Sta 35+70 to 38+00 Rt	20 SF
	20 SF

TYPICAL TRAFFIC CONTROL DEVICE SPACING:

DELINEATOR DRUMS: 25-FEET
TUBULAR MARKERS: 25-FEET
STACKABLE VERTICAL PANELS: 25-FEET

TYPICAL TRAFFIC CONTROL SIGN SPACING:

35-MPH SPEED LIMIT AREAS: A = 280-FEET MIN.
25-MPH SPEED LIMIT AREAS: B = 150-FEET MIN.

LEGEND

- WORK AREA
- WORK ZONE TRAFFIC CONTROL SIGN
- SIDEWALK BARRICADE
- TYPE III BARRICADE
- DELINEATOR DRUM
- TUBULAR MARKER
- STACKABLE VERTICAL PANEL

N W E S

0 40'

SCALE: 1" = 40'

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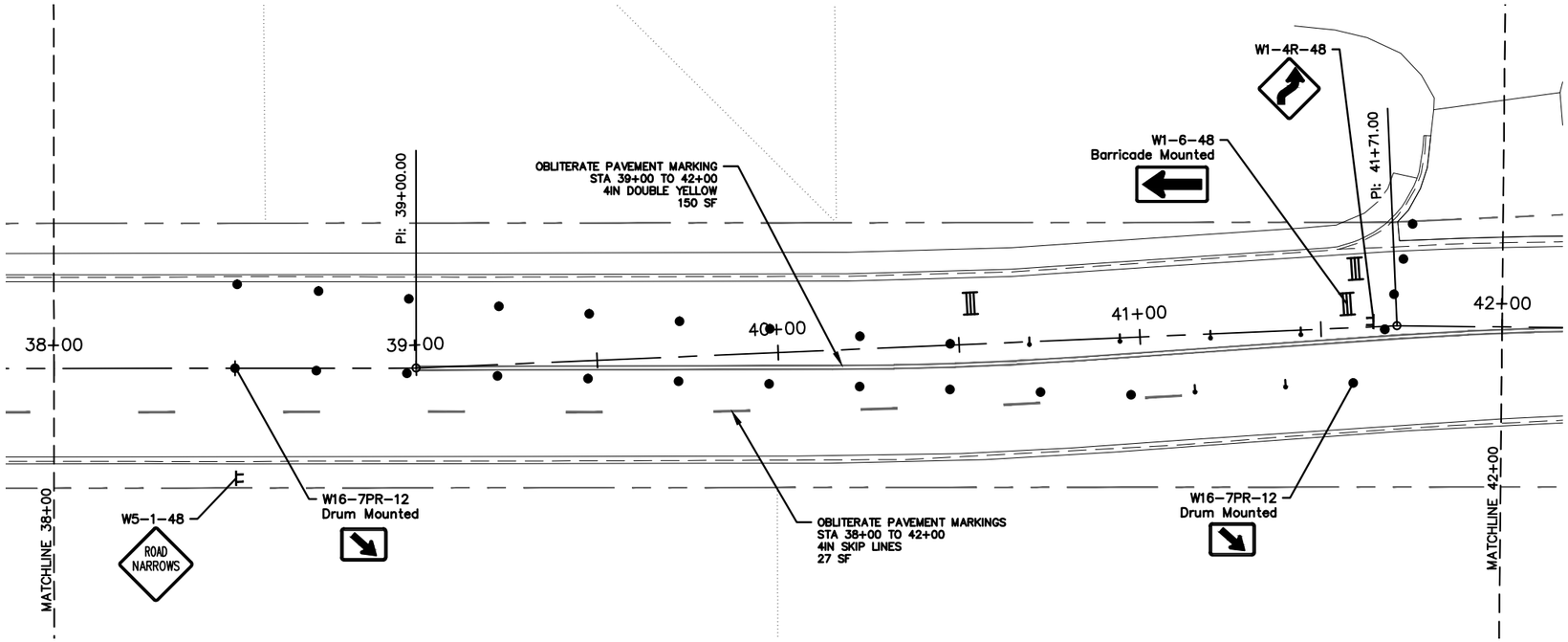
WORK ZONE TRAFFIC CONTROL
Phase 1

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	100	4



OBLITERATION OF PAVEMENT MARKING

4" Skip Lines - White

Sta 38+00 to 42+00 Rt	27 SF
	27 SF

Double Barrier Lines - Yellow

Sta 39+00 to 42+00 CL	150 SF
	150 SF

TYPICAL TRAFFIC CONTROL DEVICE SPACING:

DELINEATOR DRUMS: 25-FEET
TUBULAR MARKERS: 25-FEET
STACKABLE VERTICAL PANELS: 25-FEET

LEGEND

- WORK AREA
- WORK ZONE TRAFFIC CONTROL SIGN
- SIDEWALK BARRICADE
- TYPE III BARRICADE
- DELINEATOR DRUM
- TUBULAR MARKER
- STACKABLE VERTICAL PANEL

N W E S

0 40'

SCALE: 1" = 40'

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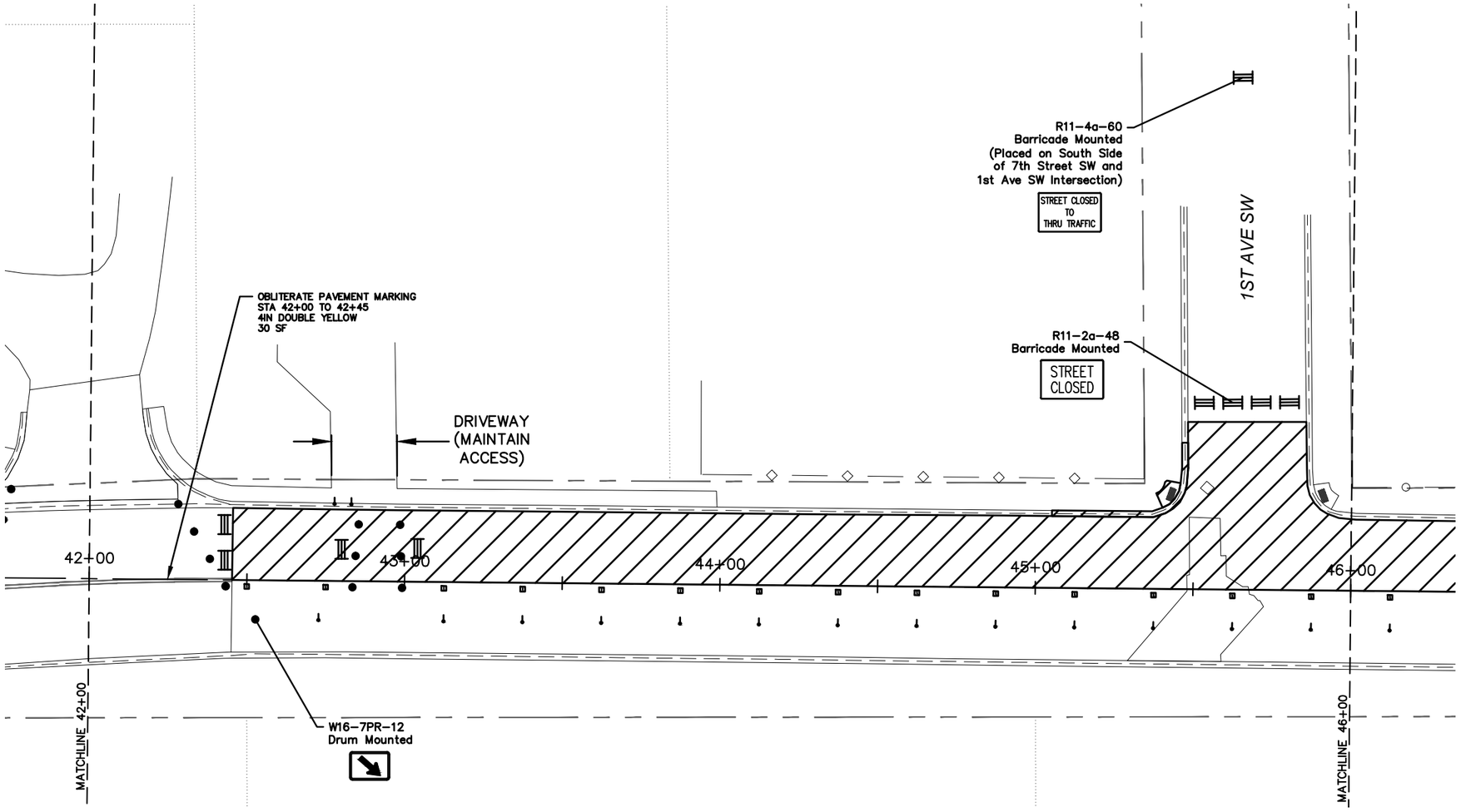
WORK ZONE TRAFFIC CONTROL
Phase 1

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	100	5

OBLITERATION OF PAVEMENT MARKING
Double Barrier Lines - Yellow
Sta 42+00 to 42+45 CL 30 SF
30 SF



TYPICAL TRAFFIC CONTROL DEVICE SPACING:

DELINEATOR DRUMS: 25-FEET
TUBULAR MARKERS: 25-FEET
STACKABLE VERTICAL PANELS: 25-FEET

NOTES:

TRAFFIC CONTROL DEVICES IN FRONT OF DRIVEWAYS MAY BE SHIFTED ALONG THE WIDTH OF THE DRIVEWAY TO ACCOMODATE CONSTRUCTION AND MAINTAIN ACCESS.

LEGEND

- WORK AREA
- WORK ZONE TRAFFIC CONTROL SIGN
- SIDEWALK BARRICADE
- TYPE III BARRICADE
- DELINEATOR DRUM
- TUBULAR MARKER
- STACKABLE VERTICAL PANEL

N W E S

0 40'
SCALE: 1" = 40'

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WORK ZONE TRAFFIC CONTROL
Phase 1

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

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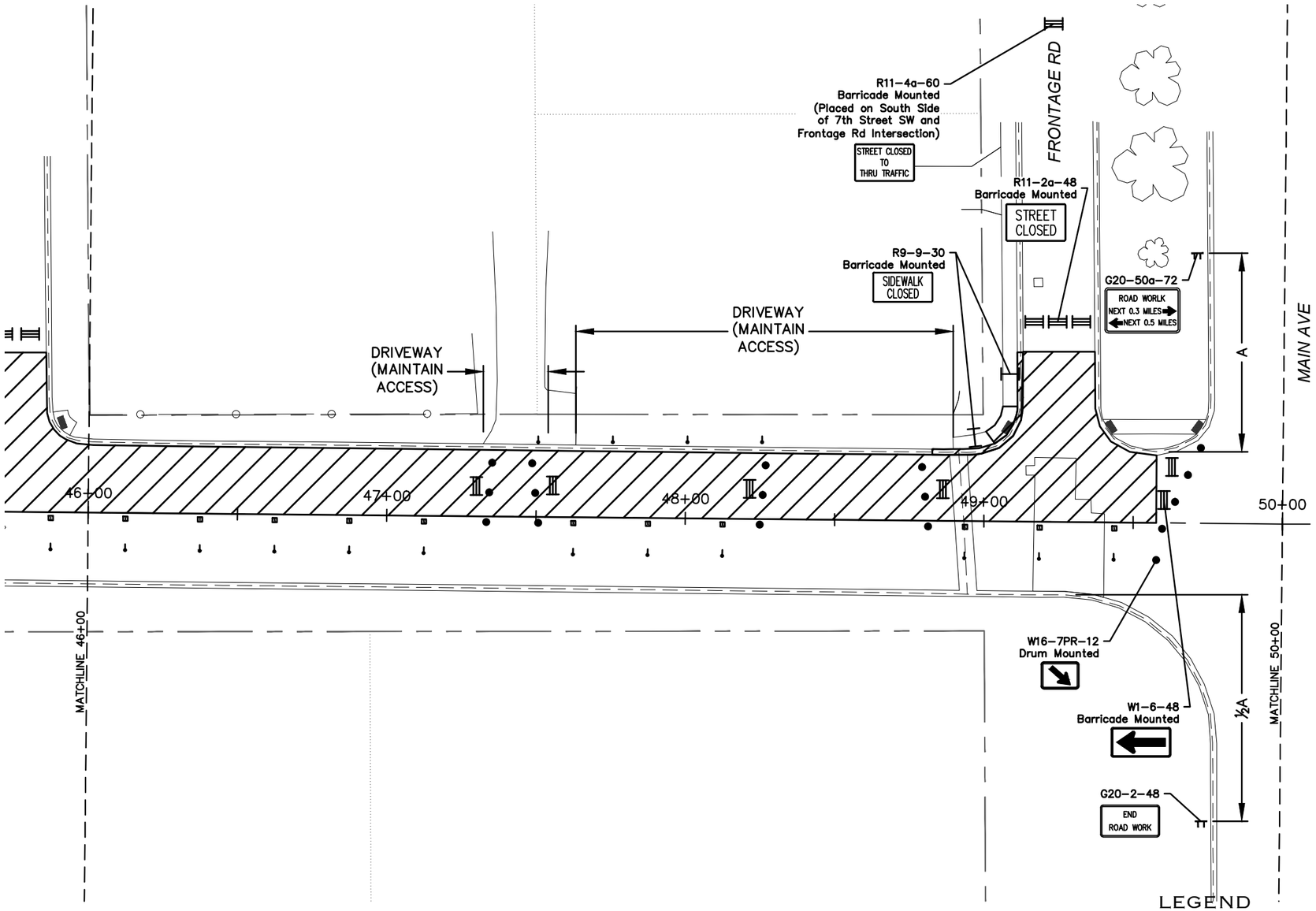
	ND	SU-5-983(059)059	100	6



TYPICAL TRAFFIC CONTROL DEVICE SPACING:

DELINEATOR DRUMS: 25-FEET
TUBULAR MARKERS: 25-FEET
STACKABLE VERTICAL PANELS: 25-FEET

TYPICAL TRAFFIC CONTROL SIGN SPACING:

35-MPH SPEED LIMIT AREAS: A = 280-FEET MIN.
25-MPH SPEED LIMIT AREAS: B = 150-FEET MIN.

NOTES:

TRAFFIC CONTROL DEVICES IN FRONT OF DRIVEWAYS MAY BE SHIFTED ALONG THE WIDTH OF THE DRIVEWAY TO ACCOMODATE CONSTRUCTION AND MAINTAIN ACCESS.

LEGEND

- WORK AREA
- WORK ZONE TRAFFIC CONTROL SIGN
- SIDEWALK BARRICADE
- TYPE III BARRICADE
- DELINEATOR DRUM
- TUBULAR MARKER
- STACKABLE VERTICAL PANEL

0 40'
SCALE: 1" = 40'

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WORK ZONE TRAFFIC CONTROL
Phase 1

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

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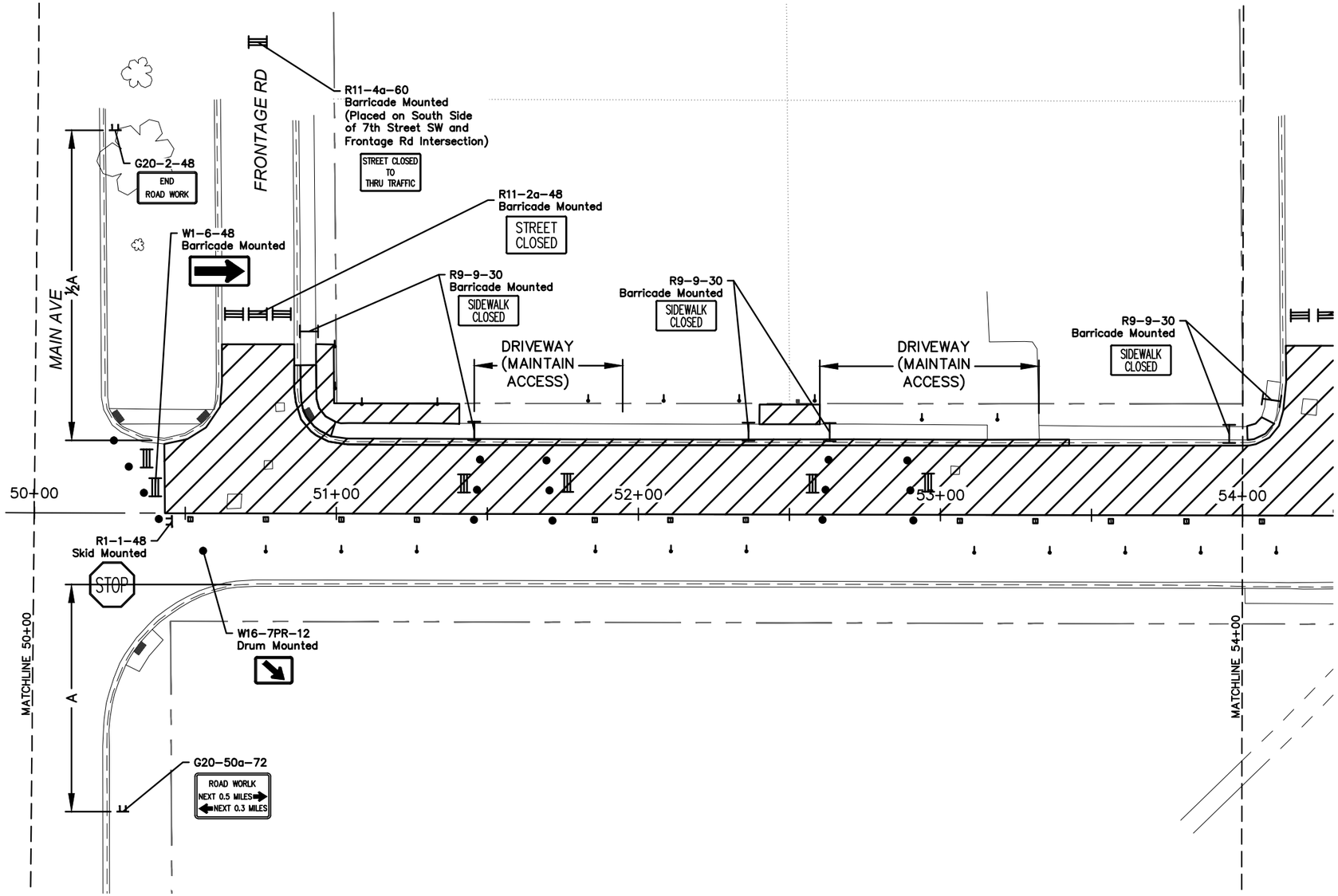
	ND	SU-5-983(059)059	100	7



TYPICAL TRAFFIC CONTROL DEVICE SPACING:

DELINEATOR DRUMS: 25-FEET
TUBULAR MARKERS: 25-FEET
STACKABLE VERTICAL PANELS: 25-FEET

TYPICAL TRAFFIC CONTROL SIGN SPACING:

35-MPH SPEED LIMIT AREAS: A = 280-FEET MIN.
25-MPH SPEED LIMIT AREAS: B = 150-FEET MIN.

NOTES:

TRAFFIC CONTROL DEVICES IN FRONT OF DRIVEWAYS MAY BE SHIFTED ALONG THE WIDTH OF THE DRIVEWAY TO ACCOMODATE CONSTRUCTION AND MAINTAIN ACCESS.

LEGEND

- WORK AREA
- WORK ZONE TRAFFIC CONTROL SIGN
- SIDEWALK BARRICADE
- TYPE III BARRICADE
- DELINEATOR DRUM
- TUBULAR MARKER
- STACKABLE VERTICAL PANEL

0 40'
SCALE: 1" = 40'

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WORK ZONE TRAFFIC CONTROL
Phase 1

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

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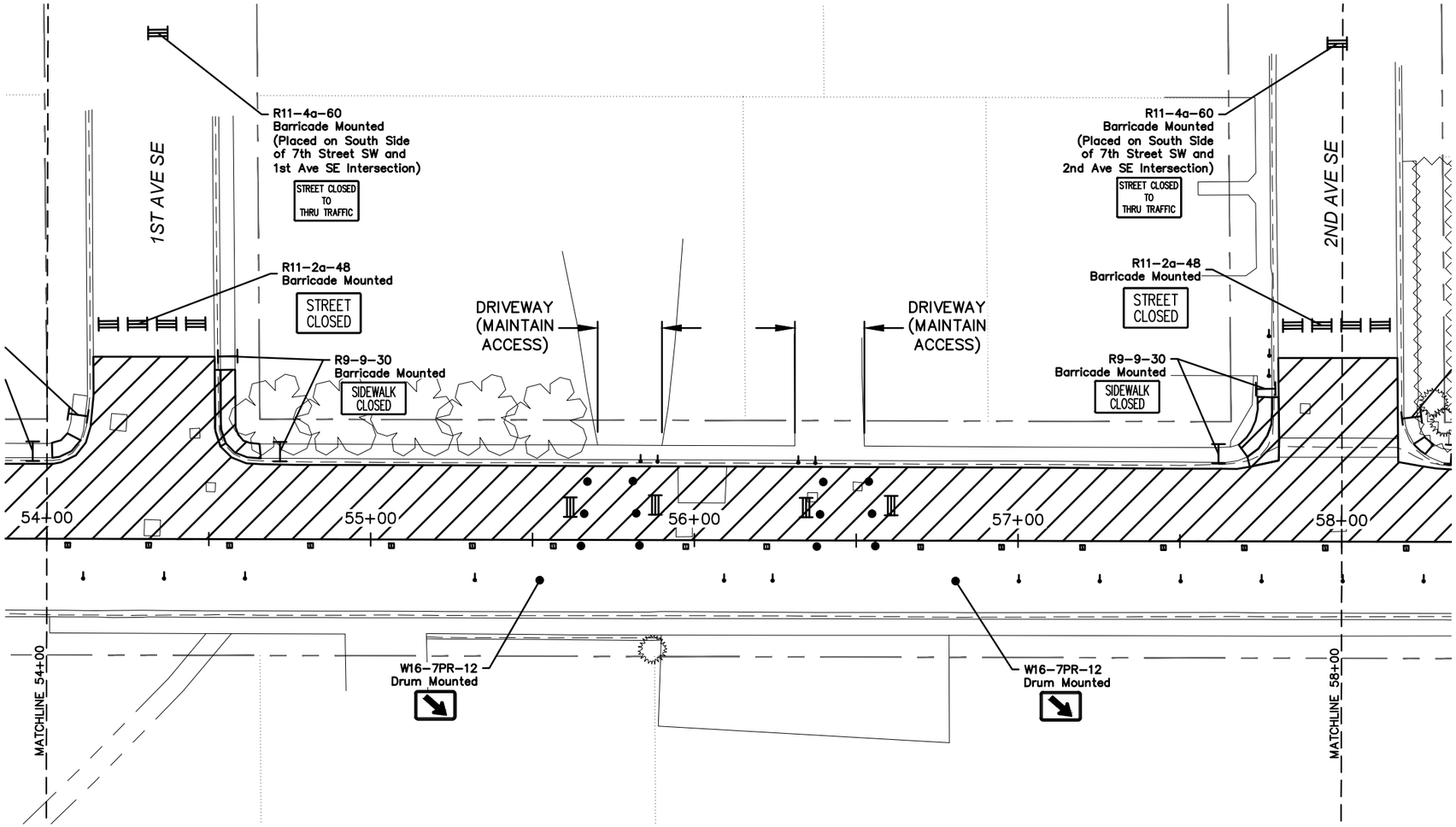
	ND	SU-5-983(059)059	100	8



TYPICAL TRAFFIC CONTROL DEVICE SPACING:

DELINEATOR DRUMS: 25-FEET
TUBULAR MARKERS: 25-FEET
STACKABLE VERTICAL PANELS: 25-FEET

NOTES:

TRAFFIC CONTROL DEVICES IN FRONT OF DRIVEWAYS MAY BE SHIFTED ALONG THE WIDTH OF THE DRIVEWAY TO ACCOMODATE CONSTRUCTION AND MAINTAIN ACCESS.

LEGEND

WORK AREA	
WORK ZONE TRAFFIC CONTROL SIGN	
SIDEWALK BARRICADE	
TYPE III BARRICADE	
DELINEATOR DRUM	
TUBULAR MARKER	
STACKABLE VERTICAL PANEL	

N
W E
S

0 40'

SCALE: 1" = 40'

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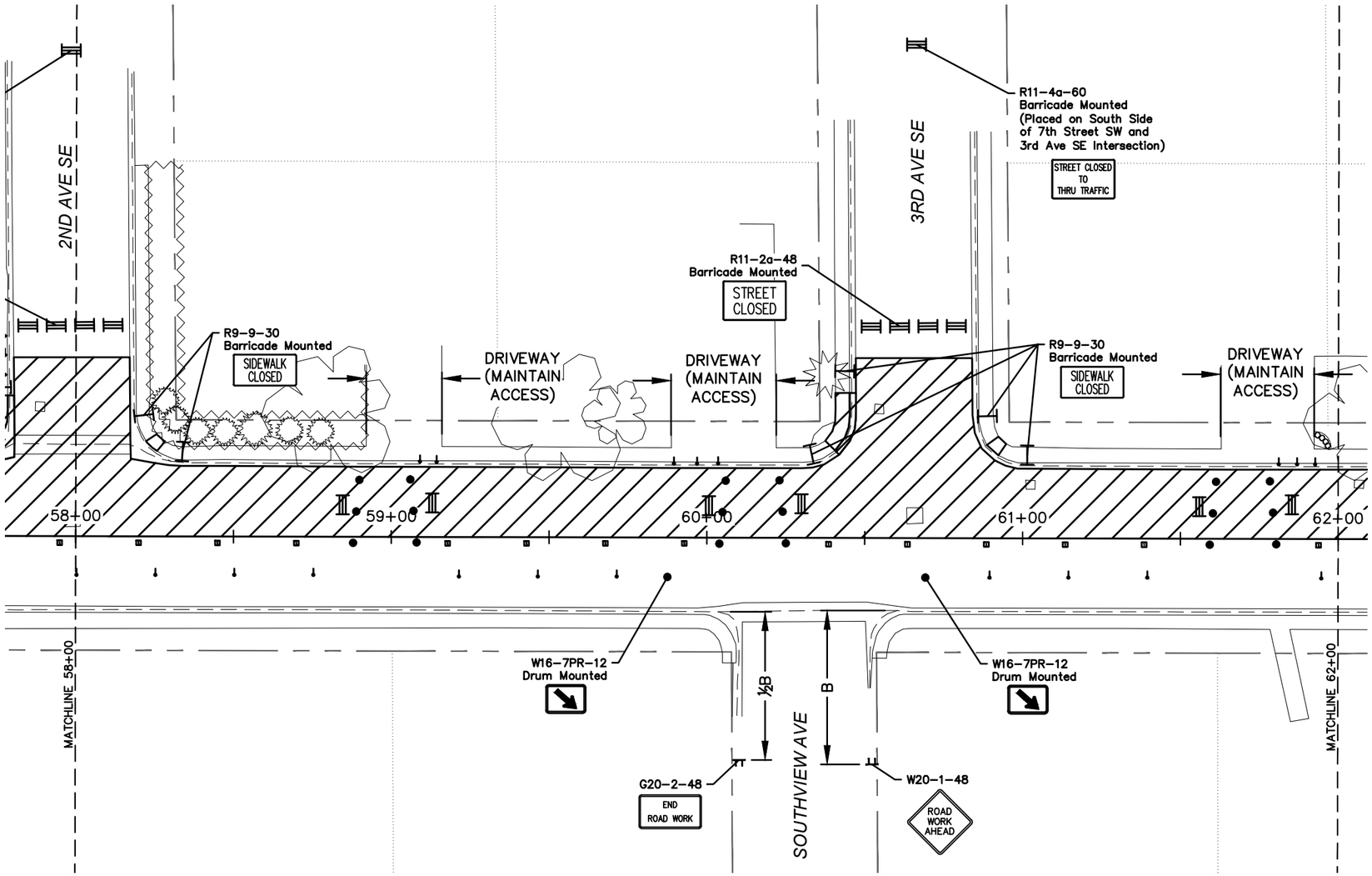
WORK ZONE TRAFFIC CONTROL
Phase 1

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	100	9



TYPICAL TRAFFIC CONTROL DEVICE SPACING:

DELINEATOR DRUMS: 25-FEET
TUBULAR MARKERS: 25-FEET
STACKABLE VERTICAL PANELS: 25-FEET

TYPICAL TRAFFIC CONTROL SIGN SPACING:

35-MPH SPEED LIMIT AREAS: A = 280-FEET MIN.
25-MPH SPEED LIMIT AREAS: B = 150-FEET MIN.

NOTES:

TRAFFIC CONTROL DEVICES IN FRONT OF DRIVEWAYS MAY BE SHIFTED ALONG THE WIDTH OF THE DRIVEWAY TO ACCOMODATE CONSTRUCTION AND MAINTAIN ACCESS.

LEGEND

- WORK AREA
- WORK ZONE TRAFFIC CONTROL SIGN
- SIDEWALK BARRICADE
- TYPE III BARRICADE
- DELINEATOR DRUM
- TUBULAR MARKER
- STACKABLE VERTICAL PANEL

N W E S

0 40'

SCALE: 1" = 40'

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WORK ZONE TRAFFIC CONTROL
Phase 1

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

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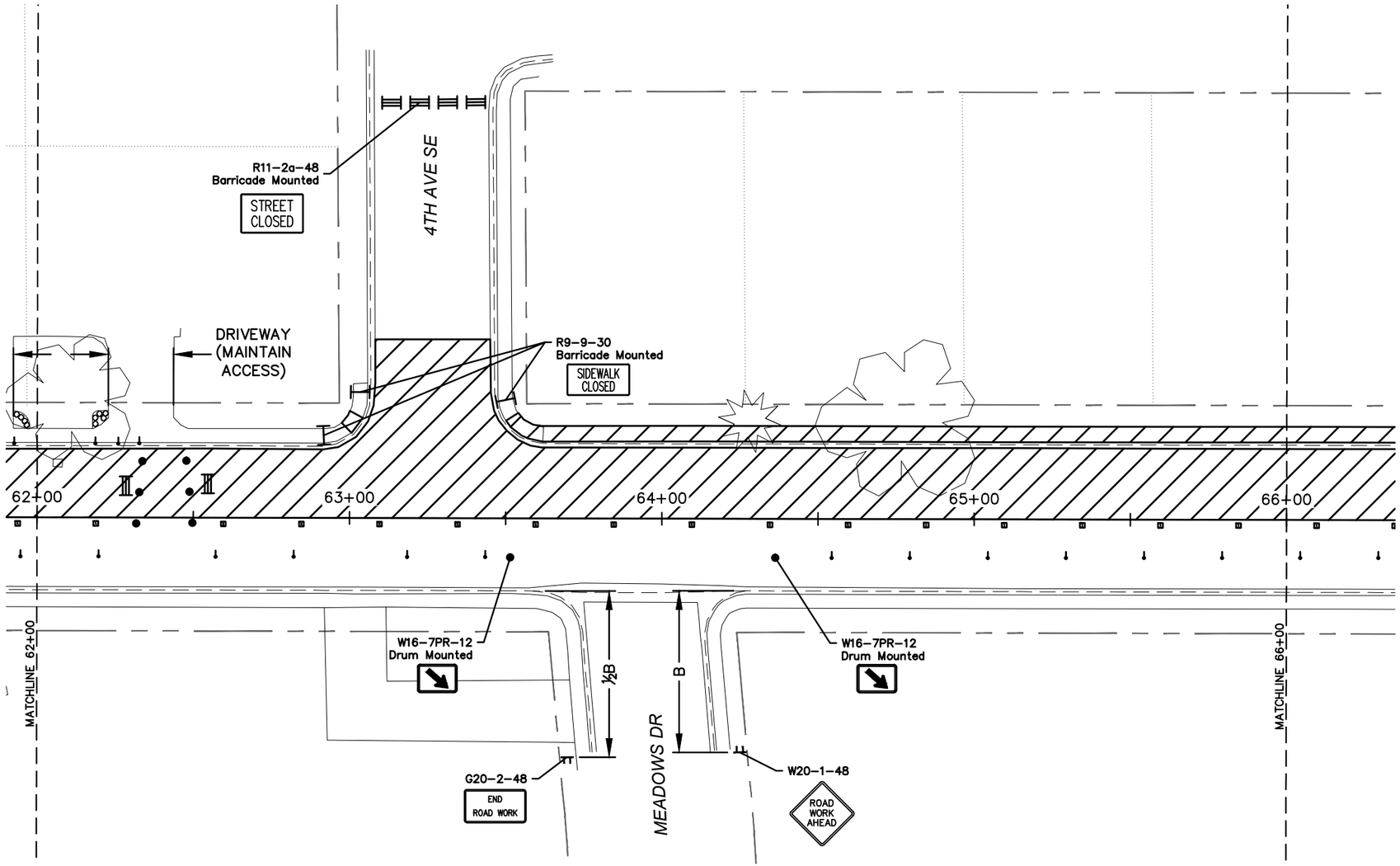
	ND	SU-5-983(059)059	100	10



TYPICAL TRAFFIC CONTROL DEVICE SPACING:

DELINEATOR DRUMS: 25-FEET
TUBULAR MARKERS: 25-FEET
STACKABLE VERTICAL PANELS: 25-FEET

TYPICAL TRAFFIC CONTROL SIGN SPACING:

35-MPH SPEED LIMIT AREAS: A = 280-FEET MIN.
25-MPH SPEED LIMIT AREAS: B = 150-FEET MIN.

NOTES:

TRAFFIC CONTROL DEVICES IN FRONT OF DRIVEWAYS MAY BE SHIFTED ALONG THE WIDTH OF THE DRIVEWAY TO ACCOMODATE CONSTRUCTION AND MAINTAIN ACCESS.

LEGEND

- WORK AREA
- WORK ZONE TRAFFIC CONTROL SIGN
- SIDEWALK BARRICADE
- TYPE III BARRICADE
- DELINEATOR DRUM
- TUBULAR MARKER
- STACKABLE VERTICAL PANEL

N W E S

0 40'

SCALE: 1" = 40'

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WORK ZONE TRAFFIC CONTROL
Phase 1

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

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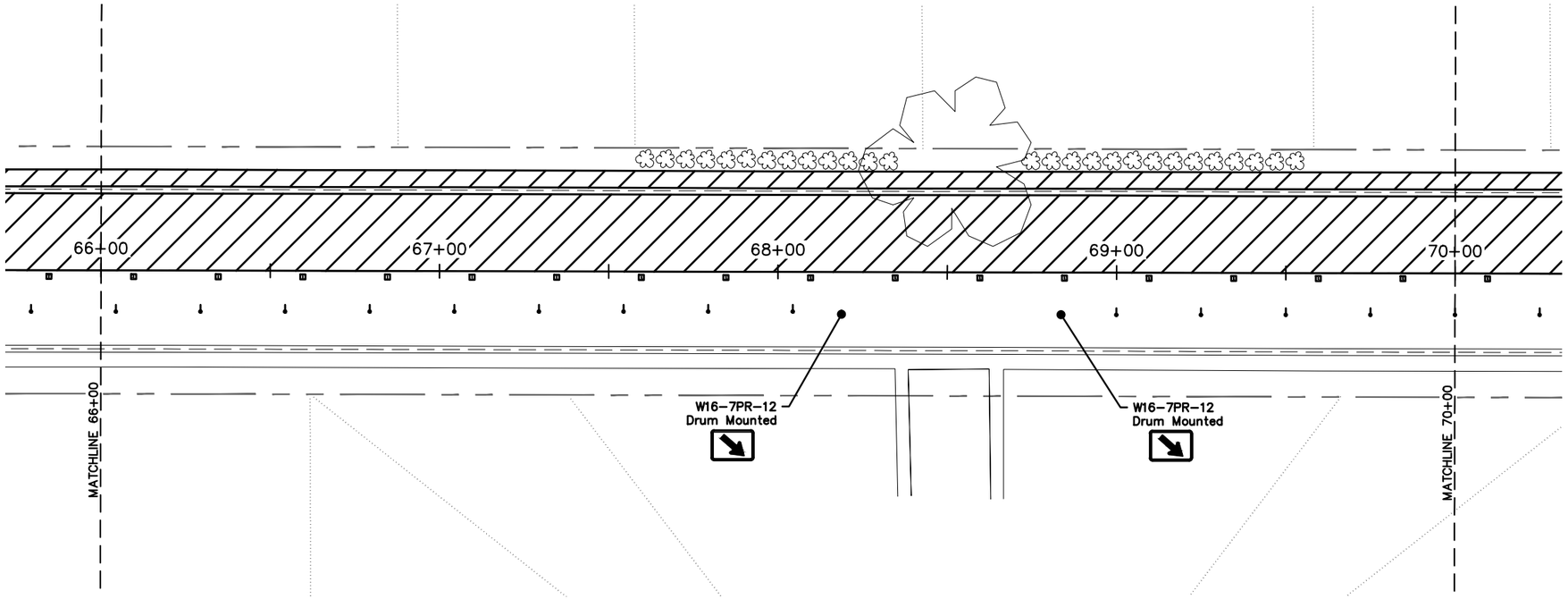
	ND	SU-5-983(059)059	100	11



TYPICAL TRAFFIC CONTROL DEVICE SPACING:

DELINEATOR DRUMS: 25-FEET
TUBULAR MARKERS: 25-FEET
STACKABLE VERTICAL PANELS: 25-FEET

LEGEND

- WORK AREA
- WORK ZONE TRAFFIC CONTROL SIGN
- SIDEWALK BARRICADE
- TYPE III BARRICADE
- DELINEATOR DRUM
- TUBULAR MARKER
- STACKABLE VERTICAL PANEL

N W E S

0 40'

SCALE: 1" = 40'

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WORK ZONE TRAFFIC CONTROL
Phase 1

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

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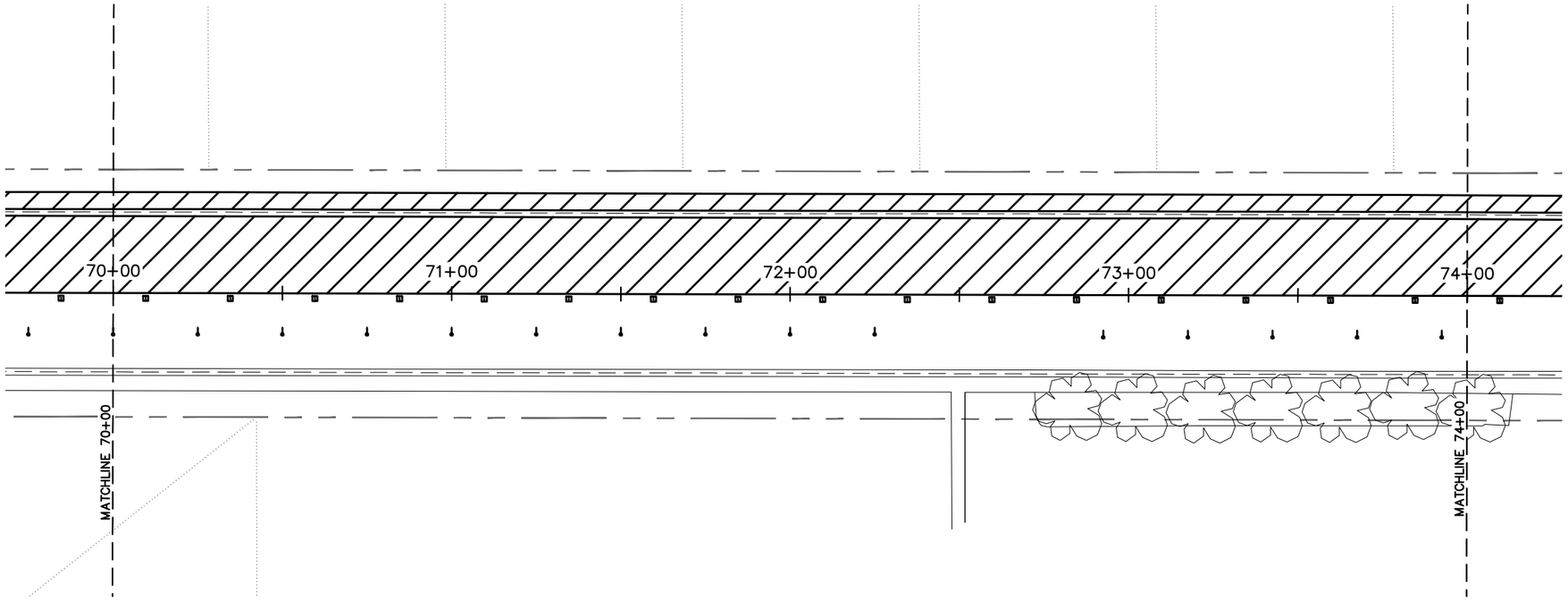

TYPICAL TRAFFIC CONTROL DEVICE SPACING:

DELINEATOR DRUMS: 25-FEET
TUBULAR MARKERS: 25-FEET
STACKABLE VERTICAL PANELS: 25-FEET

LEGEND

- WORK AREA
- WORK ZONE TRAFFIC CONTROL SIGN
- SIDEWALK BARRICADE
- TYPE III BARRICADE
- DELINEATOR DRUM
- TUBULAR MARKER
- STACKABLE VERTICAL PANEL

N W E S

0 40'

SCALE: 1" = 40'

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WORK ZONE TRAFFIC CONTROL
Phase 1

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

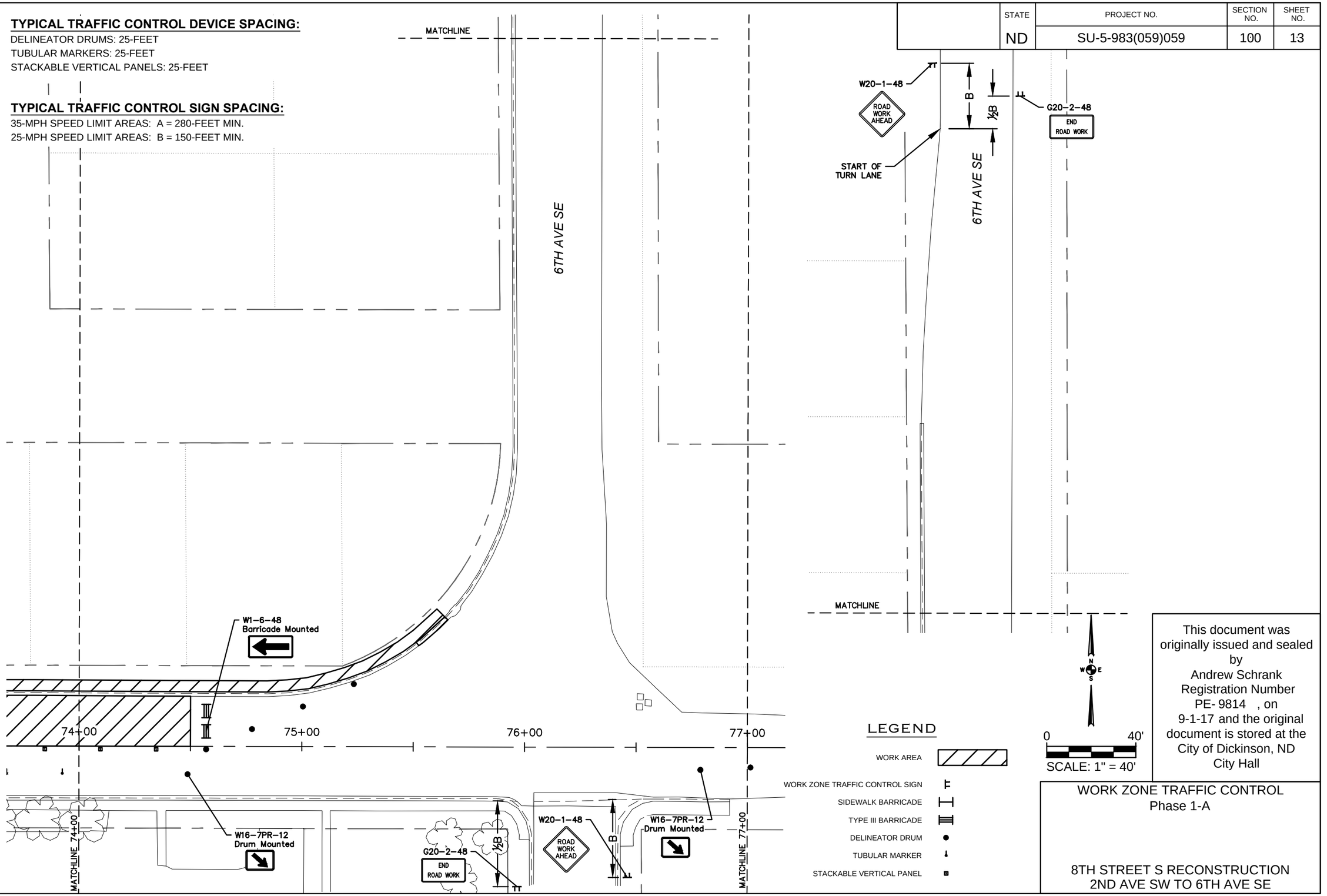
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	100	13

TYPICAL TRAFFIC CONTROL DEVICE SPACING:

DELINEATOR DRUMS: 25-FEET
TUBULAR MARKERS: 25-FEET
STACKABLE VERTICAL PANELS: 25-FEET

TYPICAL TRAFFIC CONTROL SIGN SPACING:

35-MPH SPEED LIMIT AREAS: A = 280-FEET MIN.
25-MPH SPEED LIMIT AREAS: B = 150-FEET MIN.



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WORK ZONE TRAFFIC CONTROL
Phase 1-A

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

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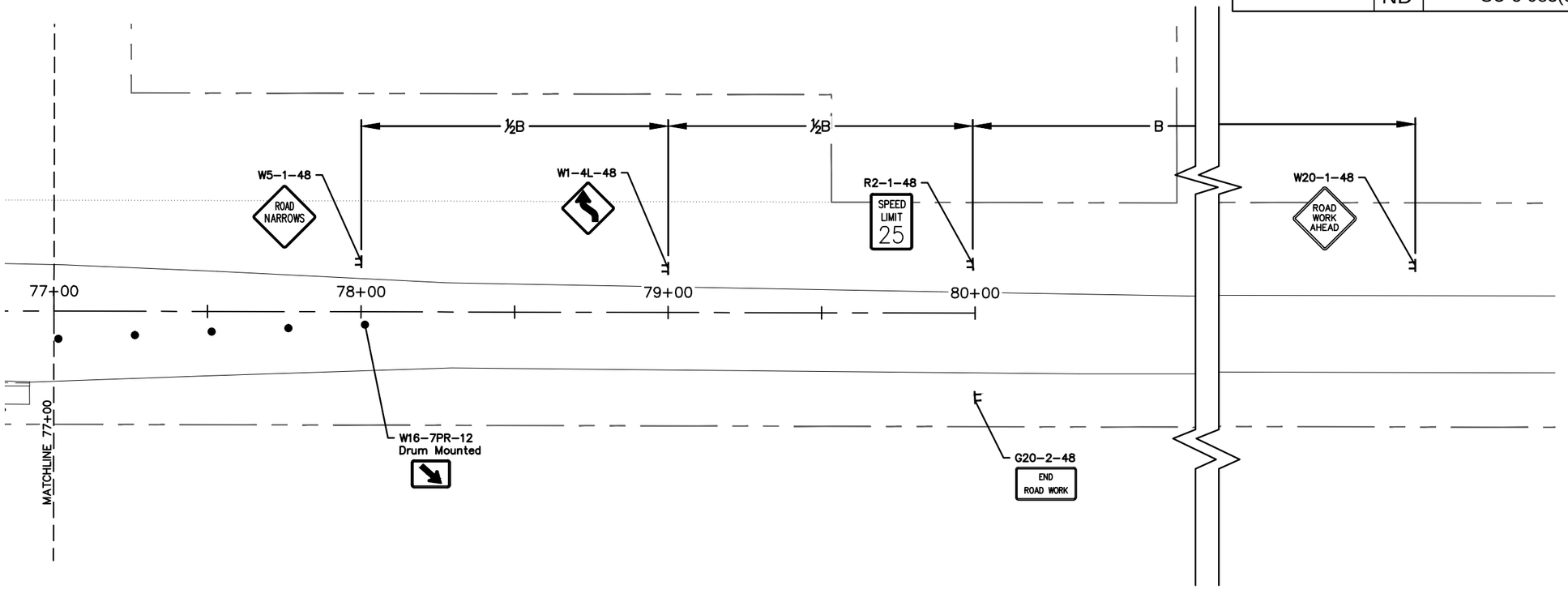

TYPICAL TRAFFIC CONTROL DEVICE SPACING:

DELINEATOR DRUMS: 25-FEET
TUBULAR MARKERS: 25-FEET
STACKABLE VERTICAL PANELS: 25-FEET

TYPICAL TRAFFIC CONTROL SIGN SPACING:

35-MPH SPEED LIMIT AREAS: A = 280-FEET MIN.
25-MPH SPEED LIMIT AREAS: B = 150-FEET MIN.

LEGEND

- WORK AREA
- WORK ZONE TRAFFIC CONTROL SIGN
- SIDEWALK BARRICADE
- TYPE III BARRICADE
- DELINEATOR DRUM
- TUBULAR MARKER
- STACKABLE VERTICAL PANEL

N W E S

0 40'

SCALE: 1" = 40'

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WORK ZONE TRAFFIC CONTROL
Phase 1-A

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

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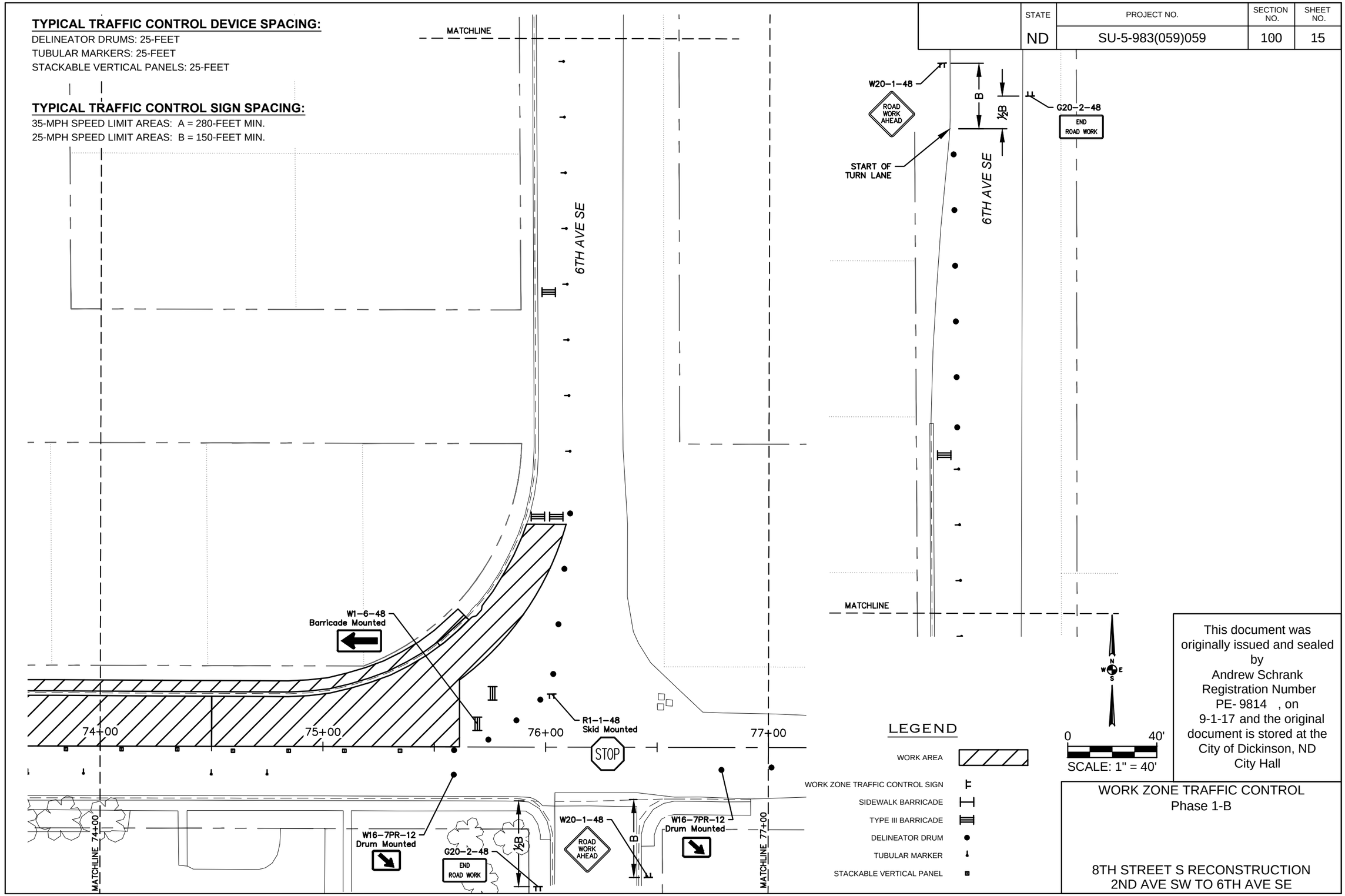
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	100	15

TYPICAL TRAFFIC CONTROL DEVICE SPACING:

DELINEATOR DRUMS: 25-FEET
TUBULAR MARKERS: 25-FEET
STACKABLE VERTICAL PANELS: 25-FEET

TYPICAL TRAFFIC CONTROL SIGN SPACING:

35-MPH SPEED LIMIT AREAS: A = 280-FEET MIN.
25-MPH SPEED LIMIT AREAS: B = 150-FEET MIN.



LEGEND

- WORK AREA
- WORK ZONE TRAFFIC CONTROL SIGN
- SIDEWALK BARRICADE
- TYPE III BARRICADE
- DELINEATOR DRUM
- TUBULAR MARKER
- STACKABLE VERTICAL PANEL

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WORK ZONE TRAFFIC CONTROL
Phase 1-B

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

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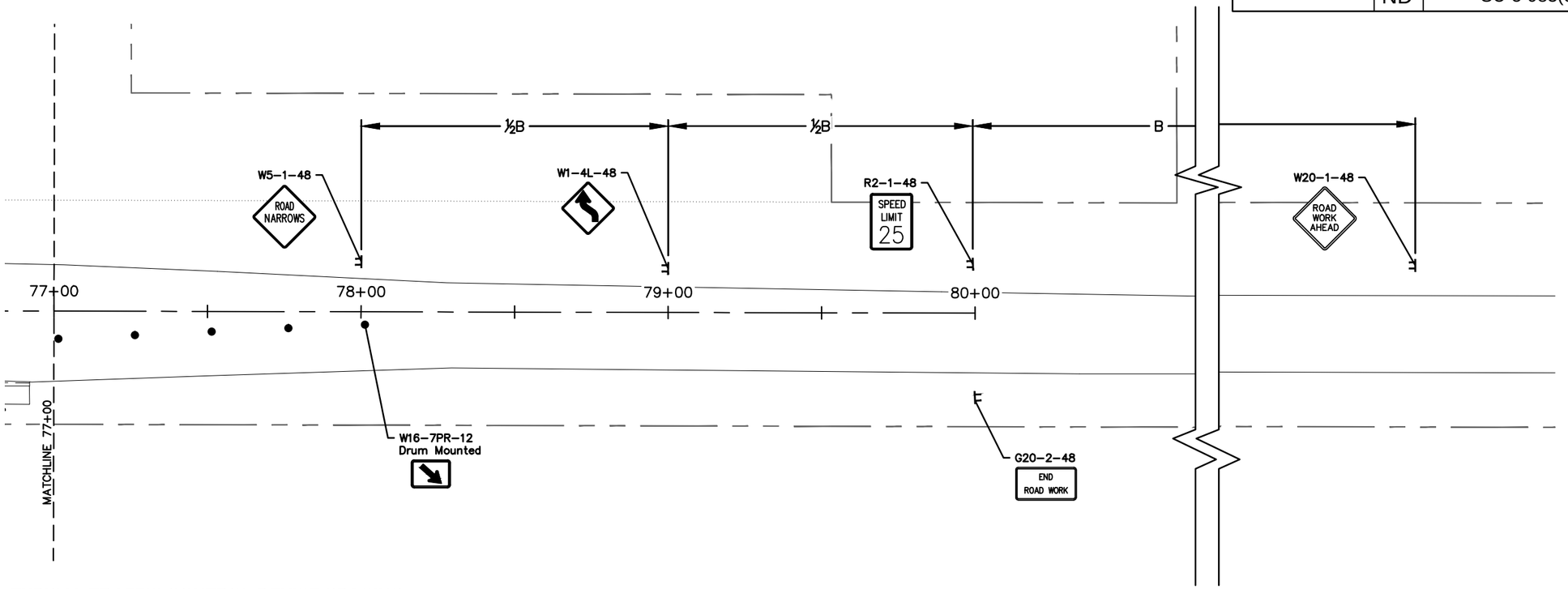
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	100	16



TYPICAL TRAFFIC CONTROL DEVICE SPACING:

DELINEATOR DRUMS: 25-FEET
TUBULAR MARKERS: 25-FEET
STACKABLE VERTICAL PANELS: 25-FEET

TYPICAL TRAFFIC CONTROL SIGN SPACING:

35-MPH SPEED LIMIT AREAS: A = 280-FEET MIN.
25-MPH SPEED LIMIT AREAS: B = 150-FEET MIN.

LEGEND

- WORK AREA
- WORK ZONE TRAFFIC CONTROL SIGN
- SIDEWALK BARRICADE
- TYPE III BARRICADE
- DELINEATOR DRUM
- TUBULAR MARKER
- STACKABLE VERTICAL PANEL

N W E S

0 40'

SCALE: 1" = 40'

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WORK ZONE TRAFFIC CONTROL
Phase 1-B

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

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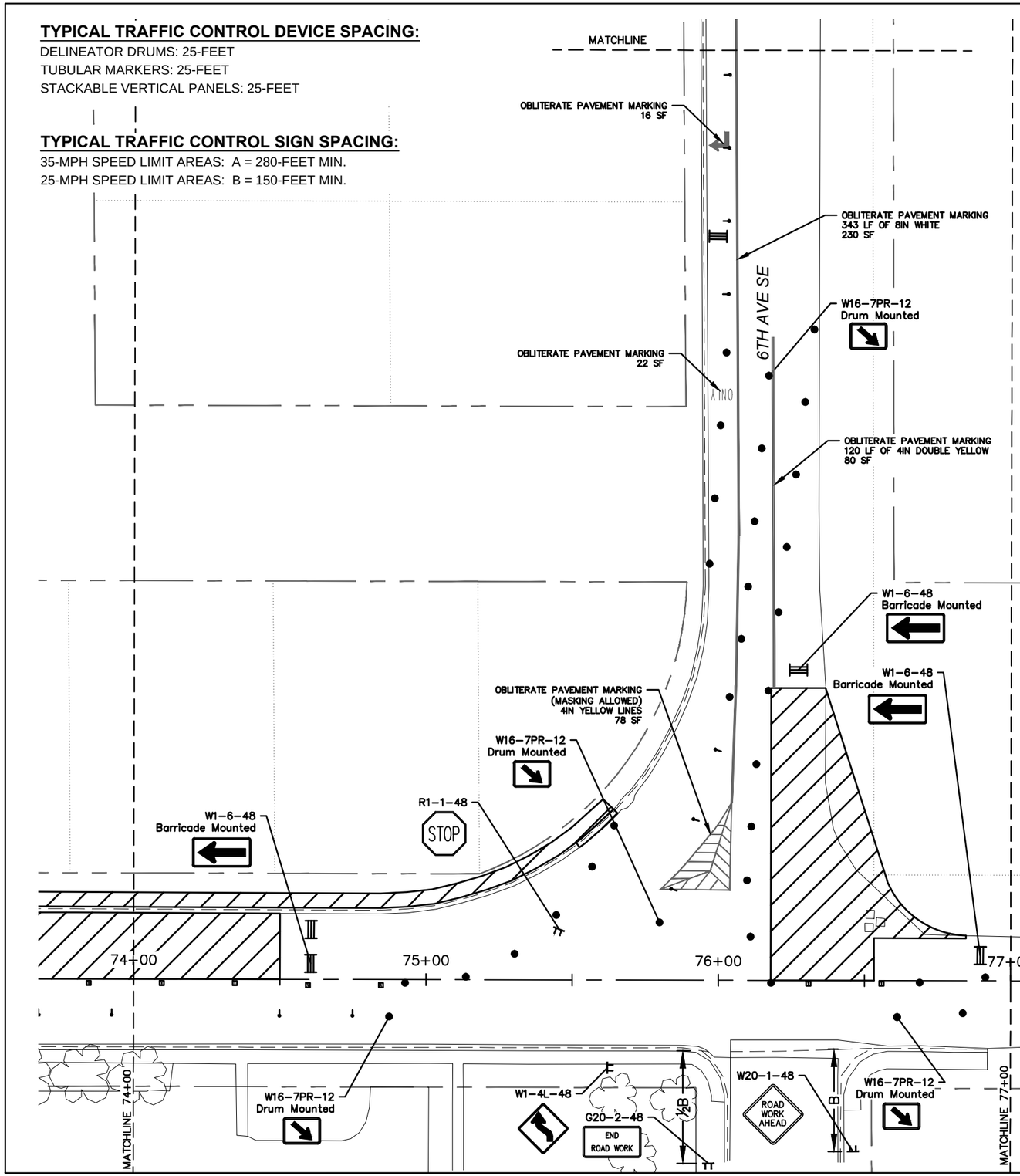
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	100	17

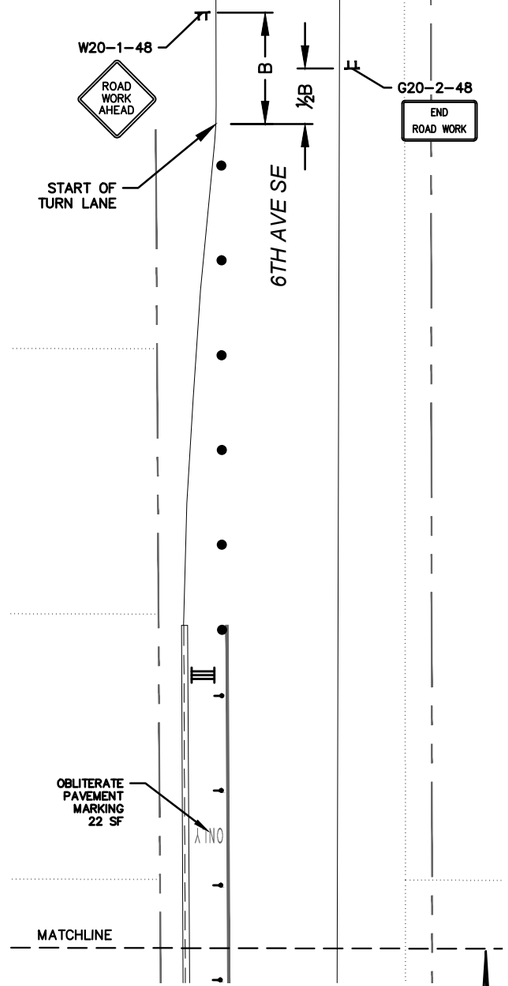
TYPICAL TRAFFIC CONTROL DEVICE SPACING:

DELINEATOR DRUMS: 25-FEET
TUBULAR MARKERS: 25-FEET
STACKABLE VERTICAL PANELS: 25-FEET

TYPICAL TRAFFIC CONTROL SIGN SPACING:

35-MPH SPEED LIMIT AREAS: A = 280-FEET MIN.
25-MPH SPEED LIMIT AREAS: B = 150-FEET MIN.





OBLITERATION OF PAVEMENT MARKING

8" Barrier Line - White	
Sta 76+05 Lt	230 SF
	230 SF
4" Lines - Yellow	
Sta 75+80 to 76+05 Lt	78 SF
	78 SF
Messages	
Sta 76+00 Lt	60 SF
	60 SF

LEGEND

- WORK AREA
- WORK ZONE TRAFFIC CONTROL SIGN
- SIDEWALK BARRICADE
- TYPE III BARRICADE
- DELINEATOR DRUM
- TUBULAR MARKER
- STACKABLE VERTICAL PANEL

0 40'
SCALE: 1" = 40'

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WORK ZONE TRAFFIC CONTROL
Phase 1-C

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

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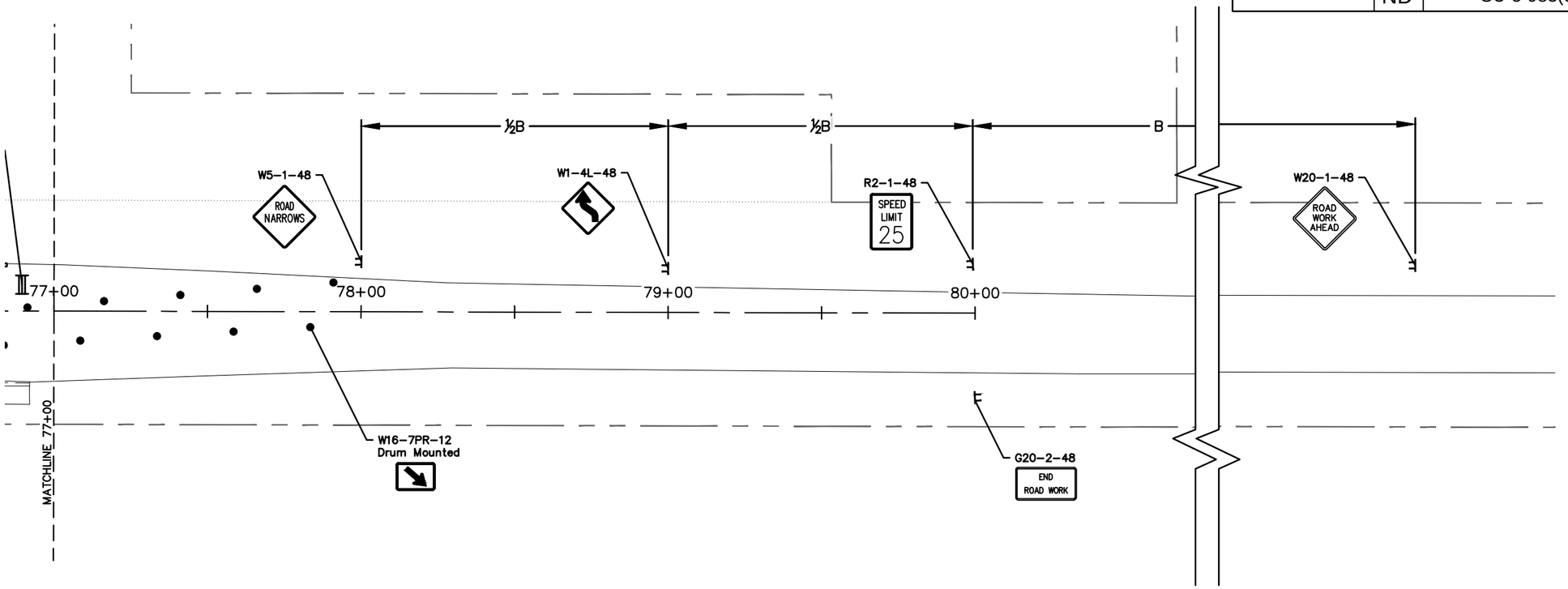
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	100	18



TYPICAL TRAFFIC CONTROL DEVICE SPACING:

DELINEATOR DRUMS: 25-FEET
TUBULAR MARKERS: 25-FEET
STACKABLE VERTICAL PANELS: 25-FEET

TYPICAL TRAFFIC CONTROL SIGN SPACING:

35-MPH SPEED LIMIT AREAS: A = 280-FEET MIN.
25-MPH SPEED LIMIT AREAS: B = 150-FEET MIN.

LEGEND

WORK AREA
WORK ZONE TRAFFIC CONTROL SIGN
SIDEWALK BARRICADE
TYPE III BARRICADE
DELINEATOR DRUM
TUBULAR MARKER
STACKABLE VERTICAL PANEL

0 40'
SCALE: 1" = 40'

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WORK ZONE TRAFFIC CONTROL
Phase 1-C

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

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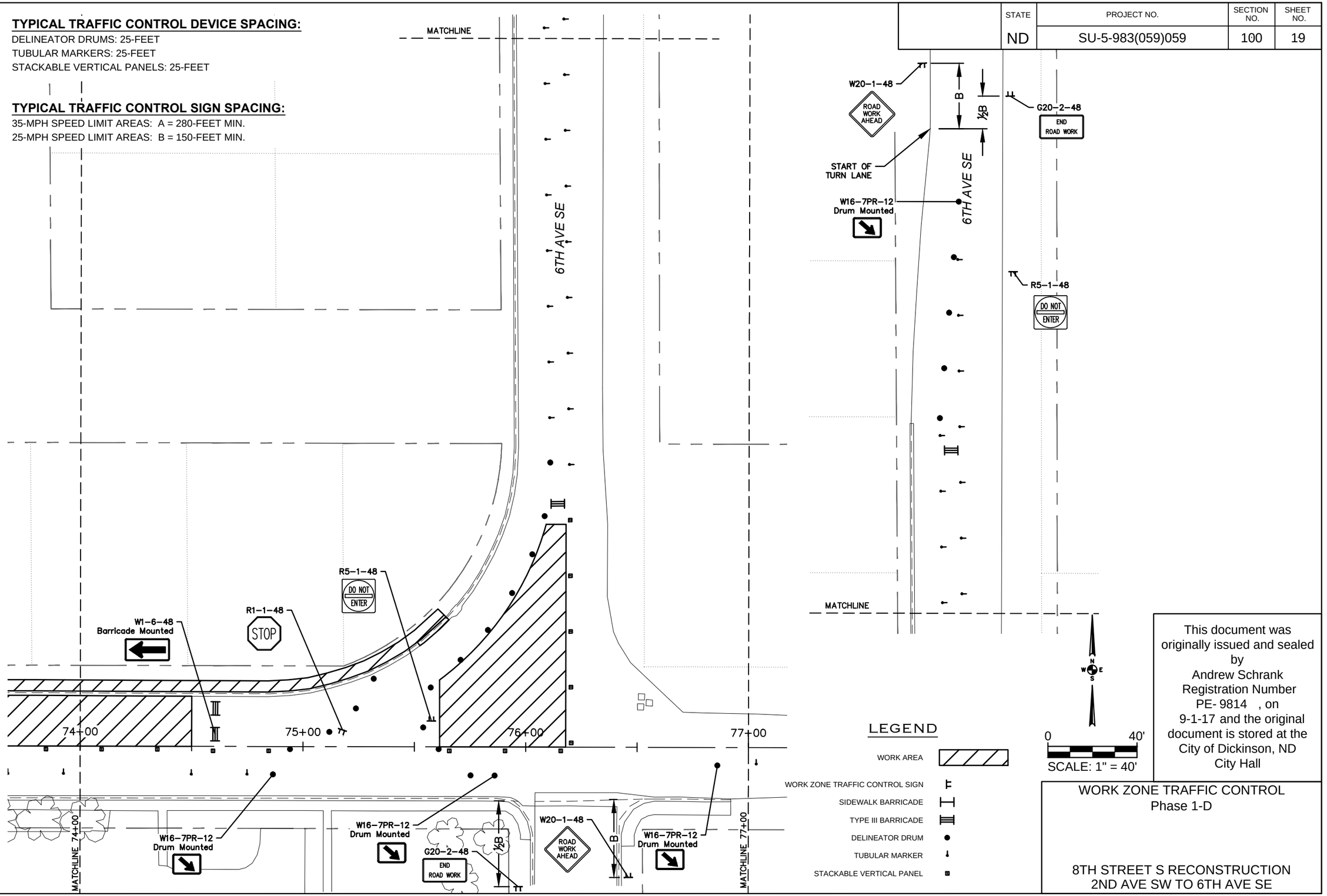
STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SU-5-983(059)059	100	19

TYPICAL TRAFFIC CONTROL DEVICE SPACING:

DELINEATOR DRUMS: 25-FEET
TUBULAR MARKERS: 25-FEET
STACKABLE VERTICAL PANELS: 25-FEET

TYPICAL TRAFFIC CONTROL SIGN SPACING:

35-MPH SPEED LIMIT AREAS: A = 280-FEET MIN.
25-MPH SPEED LIMIT AREAS: B = 150-FEET MIN.



LEGEND

- WORK AREA
- WORK ZONE TRAFFIC CONTROL SIGN
- SIDEWALK BARRICADE
- TYPE III BARRICADE
- DELINEATOR DRUM
- TUBULAR MARKER
- STACKABLE VERTICAL PANEL

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WORK ZONE TRAFFIC CONTROL
Phase 1-D

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

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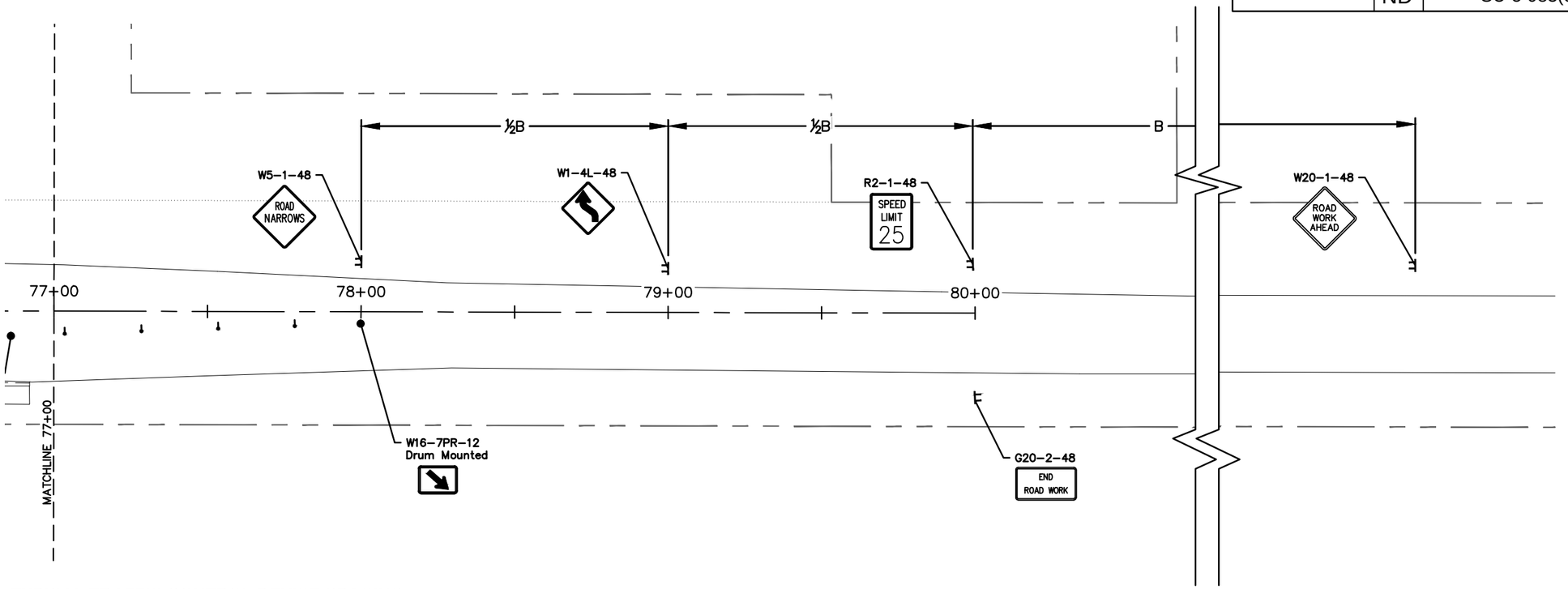
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	100	20



TYPICAL TRAFFIC CONTROL DEVICE SPACING:

DELINEATOR DRUMS: 25-FEET
TUBULAR MARKERS: 25-FEET
STACKABLE VERTICAL PANELS: 25-FEET

TYPICAL TRAFFIC CONTROL SIGN SPACING:

35-MPH SPEED LIMIT AREAS: A = 280-FEET MIN.
25-MPH SPEED LIMIT AREAS: B = 150-FEET MIN.

LEGEND

- WORK AREA
- WORK ZONE TRAFFIC CONTROL SIGN
- SIDEWALK BARRICADE
- TYPE III BARRICADE
- DELINEATOR DRUM
- TUBULAR MARKER
- STACKABLE VERTICAL PANEL

N W E S

0 40'

SCALE: 1" = 40'

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WORK ZONE TRAFFIC CONTROL
Phase 1-D

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

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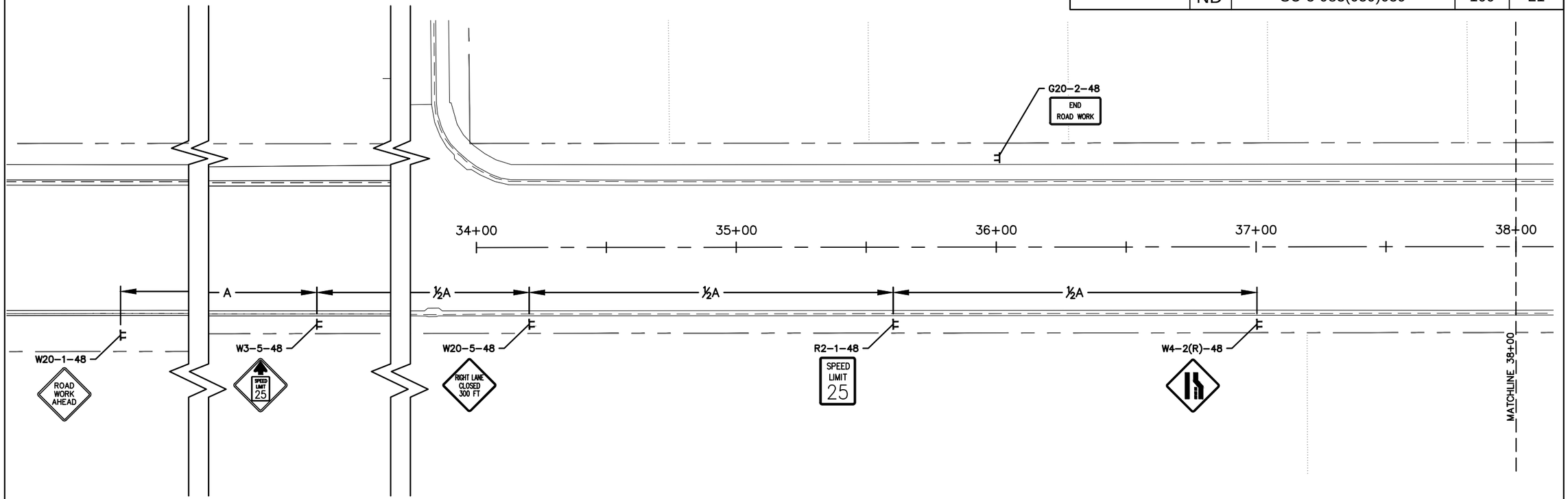
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	100	21



TYPICAL TRAFFIC CONTROL DEVICE SPACING:

DELINEATOR DRUMS: 25-FEET
TUBULAR MARKERS: 25-FEET
STACKABLE VERTICAL PANELS: 25-FEET

TYPICAL TRAFFIC CONTROL SIGN SPACING:

35-MPH SPEED LIMIT AREAS: A = 280-FEET MIN.
25-MPH SPEED LIMIT AREAS: B = 150-FEET MIN.

LEGEND

WORK AREA
WORK ZONE TRAFFIC CONTROL SIGN
SIDEWALK BARRICADE
TYPE III BARRICADE
DELINEATOR DRUM
TUBULAR MARKER
STACKABLE VERTICAL PANEL

0 40'
SCALE: 1" = 40'

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WORK ZONE TRAFFIC CONTROL
Phase 2

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

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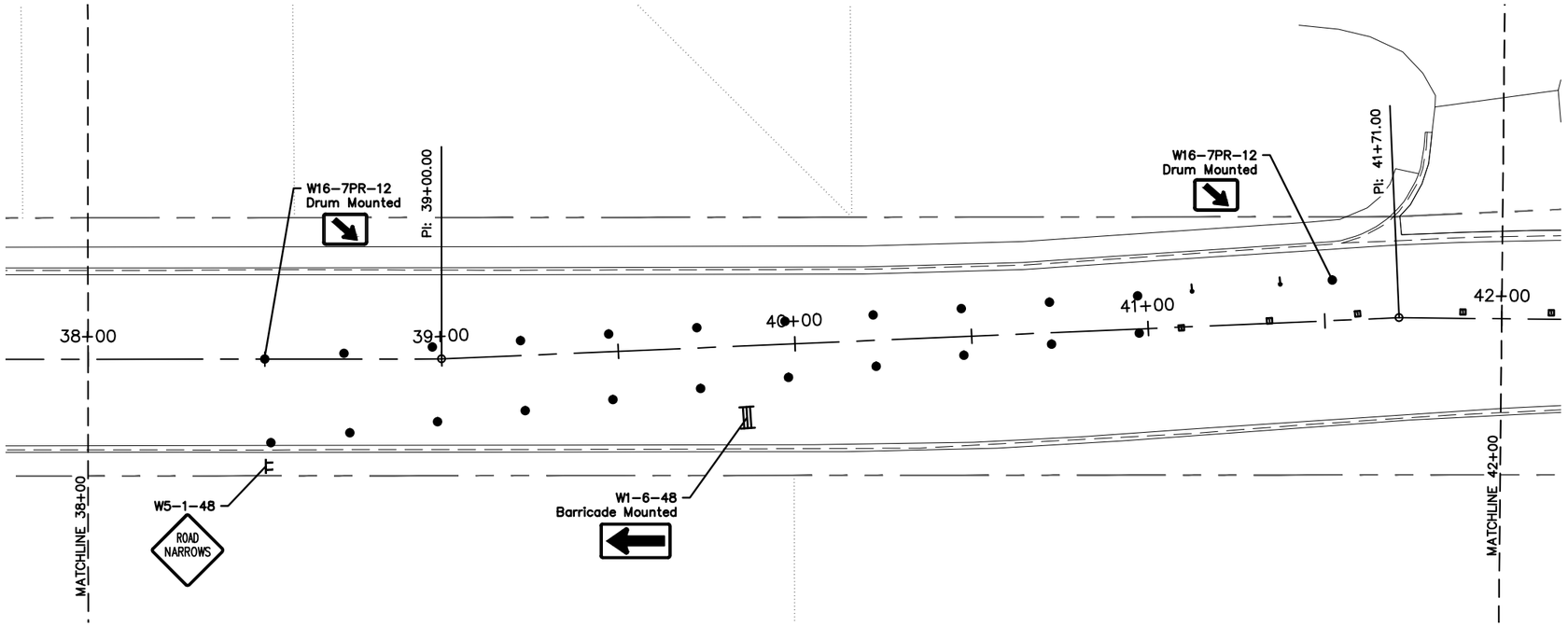
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	100	22



TYPICAL TRAFFIC CONTROL DEVICE SPACING:

DELINEATOR DRUMS: 25-FEET
TUBULAR MARKERS: 25-FEET
STACKABLE VERTICAL PANELS: 25-FEET

LEGEND

- WORK AREA
- WORK ZONE TRAFFIC CONTROL SIGN
- SIDEWALK BARRICADE
- TYPE III BARRICADE
- DELINEATOR DRUM
- TUBULAR MARKER
- STACKABLE VERTICAL PANEL

N W E S

0 40'

SCALE: 1" = 40'

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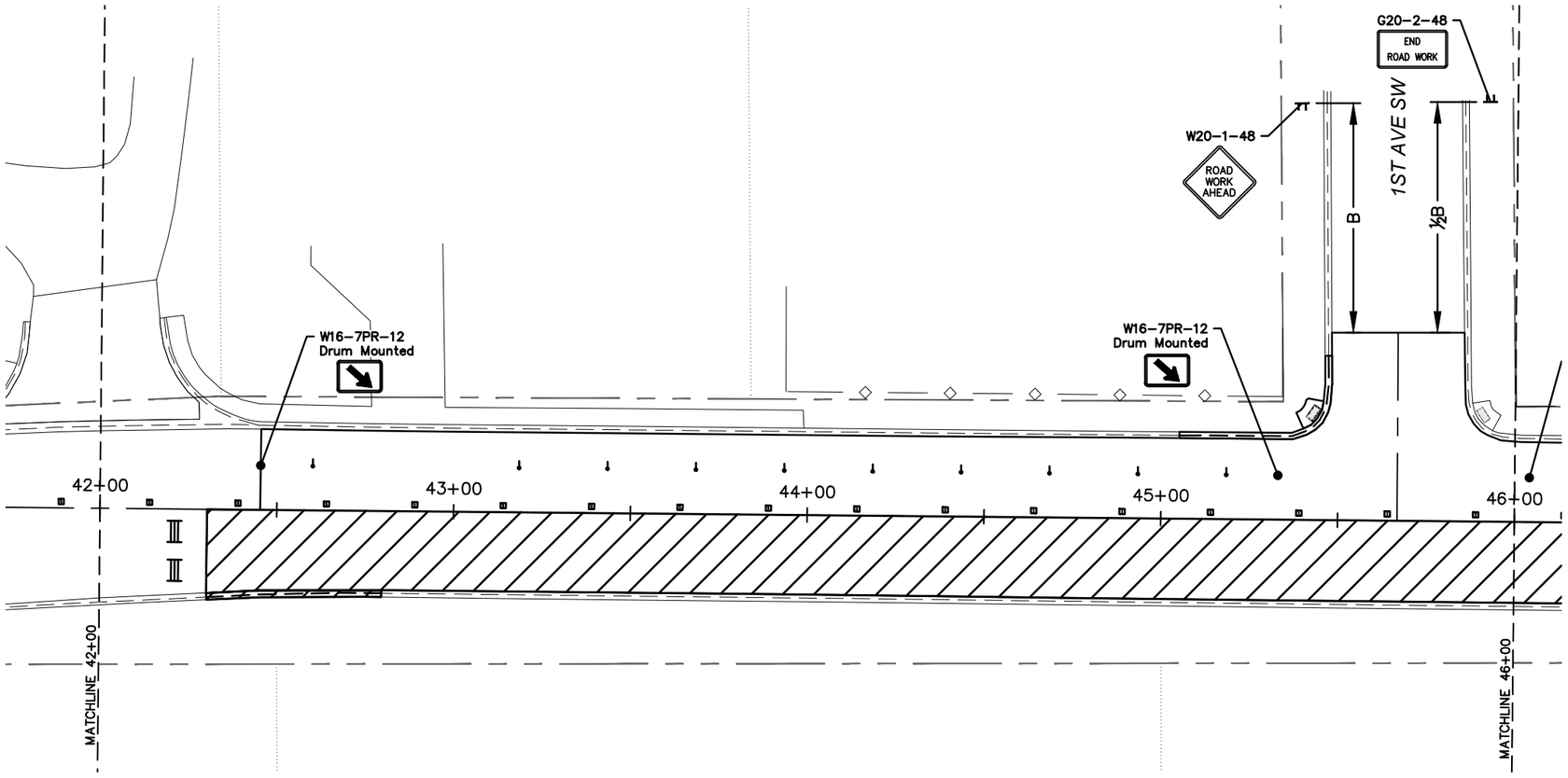
WORK ZONE TRAFFIC CONTROL
Phase 2

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	100	23



TYPICAL TRAFFIC CONTROL DEVICE SPACING:

DELINEATOR DRUMS: 25-FEET
TUBULAR MARKERS: 25-FEET
STACKABLE VERTICAL PANELS: 25-FEET

TYPICAL TRAFFIC CONTROL SIGN SPACING:

35-MPH SPEED LIMIT AREAS: A = 280-FEET MIN.
25-MPH SPEED LIMIT AREAS: B = 150-FEET MIN.

LEGEND

- WORK AREA
- WORK ZONE TRAFFIC CONTROL SIGN
- SIDEWALK BARRICADE
- TYPE III BARRICADE
- DELINEATOR DRUM
- TUBULAR MARKER
- STACKABLE VERTICAL PANEL

N W E S

0 40'

SCALE: 1" = 40'

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WORK ZONE TRAFFIC CONTROL
Phase 2

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

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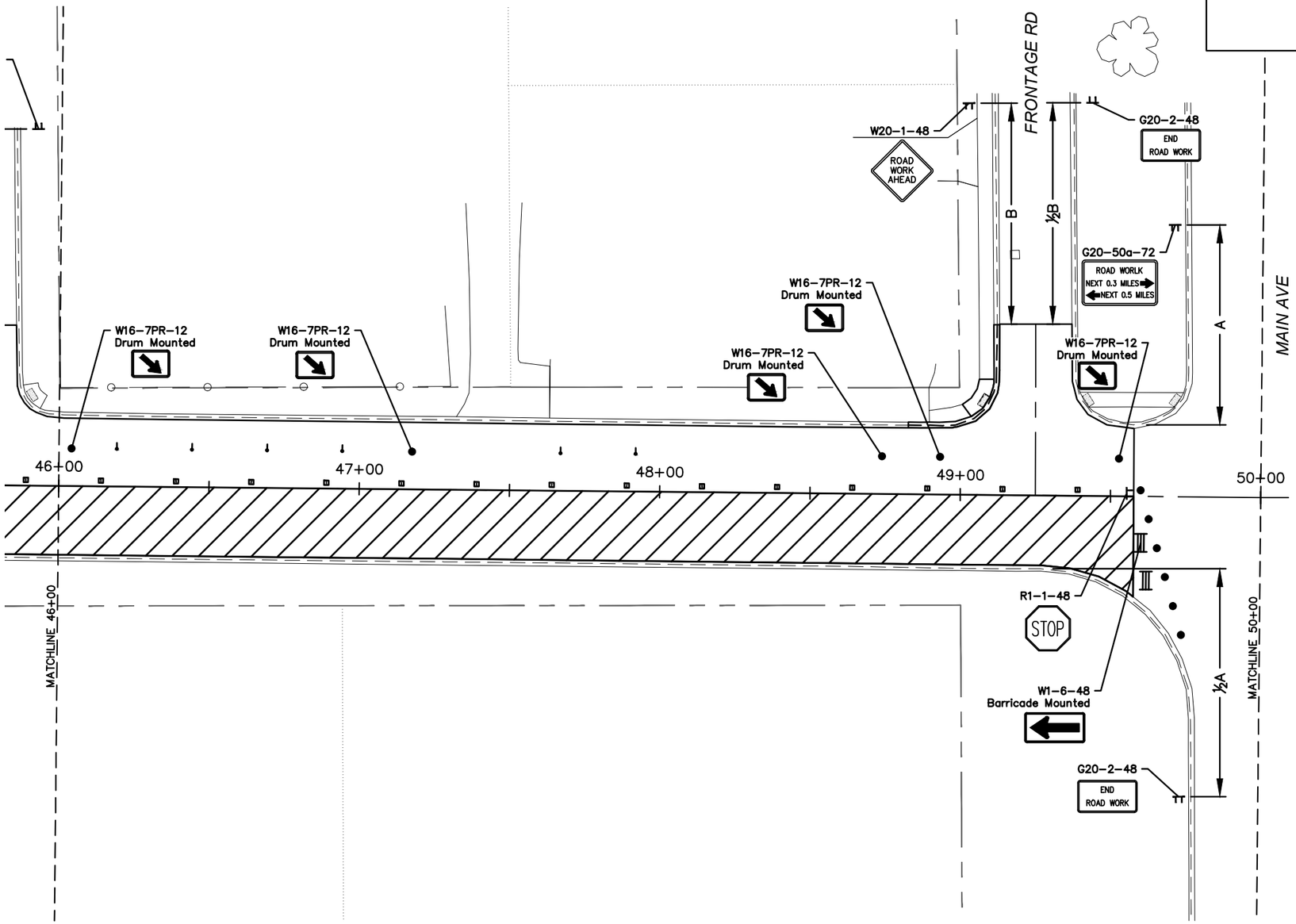
ND	SU-5-983(059)059	100	24



TYPICAL TRAFFIC CONTROL DEVICE SPACING:

DELINEATOR DRUMS: 25-FEET
TUBULAR MARKERS: 25-FEET
STACKABLE VERTICAL PANELS: 25-FEET

TYPICAL TRAFFIC CONTROL SIGN SPACING:

35-MPH SPEED LIMIT AREAS: A = 280-FEET MIN.
25-MPH SPEED LIMIT AREAS: B = 150-FEET MIN.

LEGEND

- WORK AREA
- WORK ZONE TRAFFIC CONTROL SIGN
- SIDEWALK BARRICADE
- TYPE III BARRICADE
- DELINEATOR DRUM
- TUBULAR MARKER
- STACKABLE VERTICAL PANEL

N W E S

0 40'

SCALE: 1" = 40'

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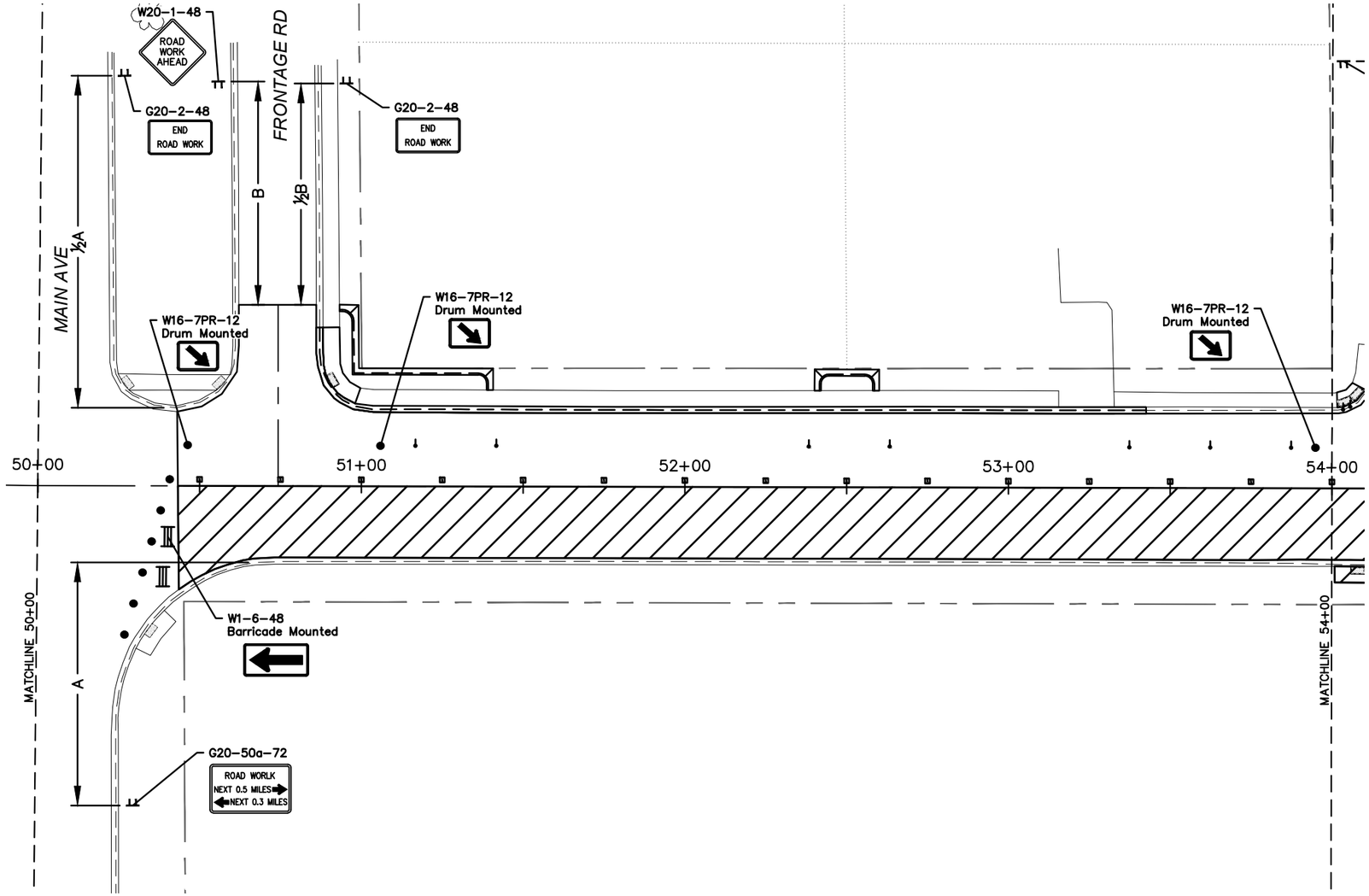
WORK ZONE TRAFFIC CONTROL
Phase 2

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	100	25



TYPICAL TRAFFIC CONTROL DEVICE SPACING:

DELINEATOR DRUMS: 25-FEET
TUBULAR MARKERS: 25-FEET
STACKABLE VERTICAL PANELS: 25-FEET

TYPICAL TRAFFIC CONTROL SIGN SPACING:

35-MPH SPEED LIMIT AREAS: A = 280-FEET MIN.
25-MPH SPEED LIMIT AREAS: B = 150-FEET MIN.

LEGEND

- WORK AREA
- WORK ZONE TRAFFIC CONTROL SIGN
- SIDEWALK BARRICADE
- TYPE III BARRICADE
- DELINEATOR DRUM
- TUBULAR MARKER
- STACKABLE VERTICAL PANEL

0 40'
SCALE: 1" = 40'

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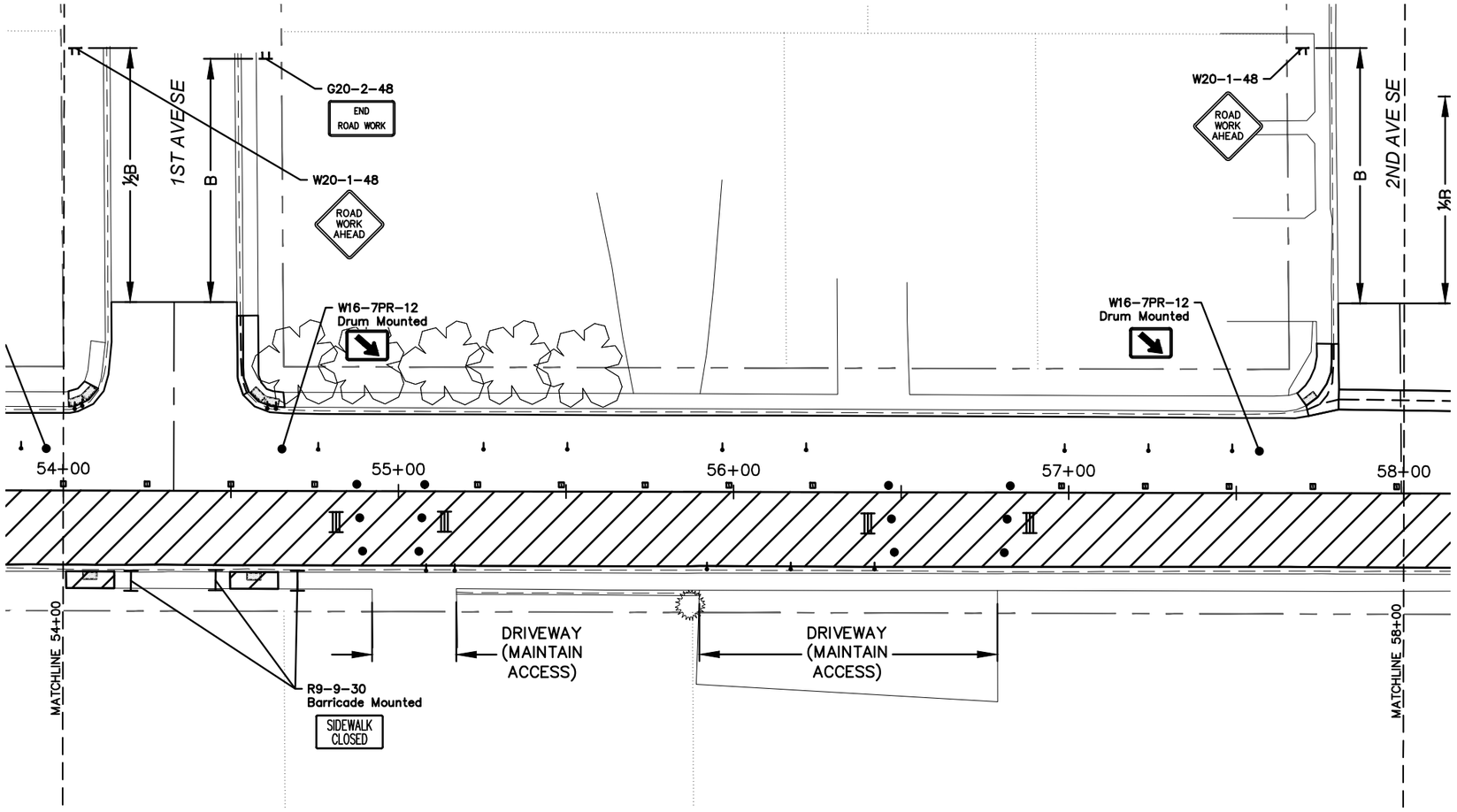
WORK ZONE TRAFFIC CONTROL
Phase 2

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	100	26



TYPICAL TRAFFIC CONTROL DEVICE SPACING:

DELINEATOR DRUMS: 25-FEET
TUBULAR MARKERS: 25-FEET
STACKABLE VERTICAL PANELS: 25-FEET

TYPICAL TRAFFIC CONTROL SIGN SPACING:

35-MPH SPEED LIMIT AREAS: A = 280-FEET MIN.
25-MPH SPEED LIMIT AREAS: B = 150-FEET MIN.

NOTES:

TRAFFIC CONTROL DEVICES IN FRONT OF DRIVEWAYS MAY BE SHIFTED ALONG THE WIDTH OF THE DRIVEWAY TO ACCOMODATE CONSTRUCTION AND MAINTAIN ACCESS.

LEGEND

- WORK AREA
- WORK ZONE TRAFFIC CONTROL SIGN
- SIDEWALK BARRICADE
- TYPE III BARRICADE
- DELINEATOR DRUM
- TUBULAR MARKER
- STACKABLE VERTICAL PANEL

N W E S

0 40'

SCALE: 1" = 40'

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WORK ZONE TRAFFIC CONTROL
Phase 2

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

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	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
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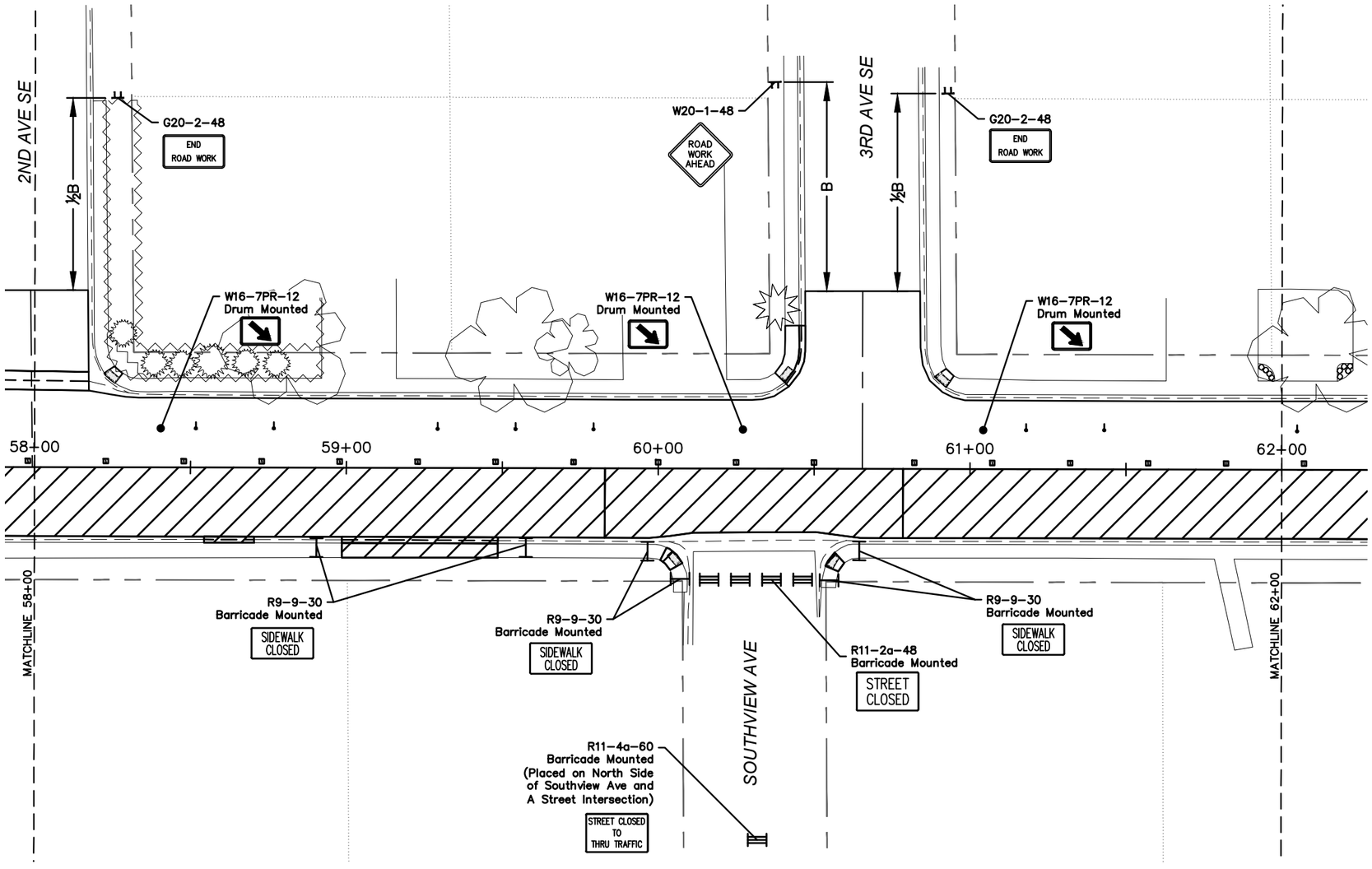

TYPICAL TRAFFIC CONTROL DEVICE SPACING:

DELINEATOR DRUMS: 25-FEET
TUBULAR MARKERS: 25-FEET
STACKABLE VERTICAL PANELS: 25-FEET

LEGEND

- WORK AREA
- WORK ZONE TRAFFIC CONTROL SIGN
- SIDEWALK BARRICADE
- TYPE III BARRICADE
- DELINEATOR DRUM
- TUBULAR MARKER
- STACKABLE VERTICAL PANEL

N W E S

0 40'

SCALE: 1" = 40'

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WORK ZONE TRAFFIC CONTROL
Phase 2-A

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

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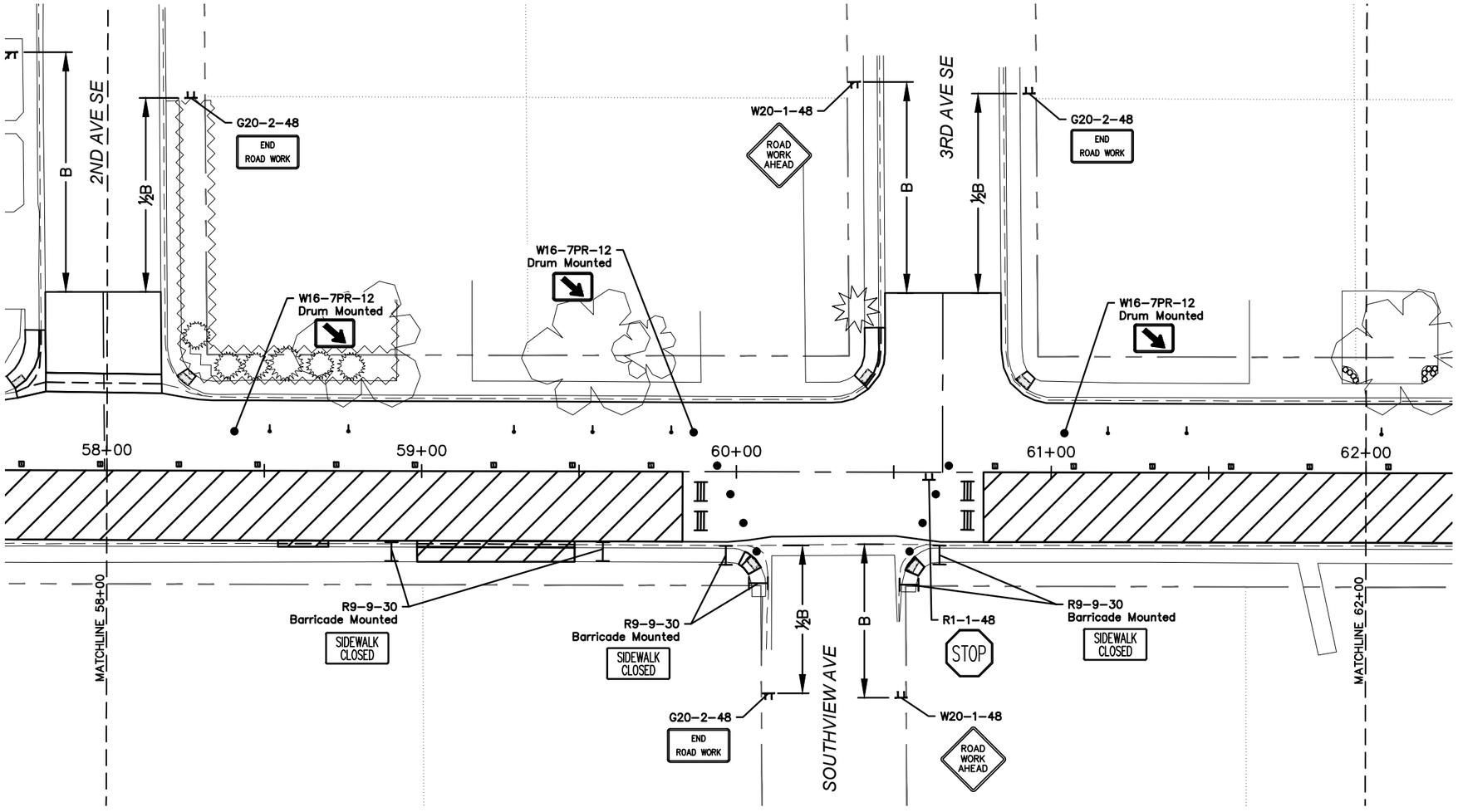
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	100	28



TYPICAL TRAFFIC CONTROL DEVICE SPACING:

DELINEATOR DRUMS: 25-FEET
TUBULAR MARKERS: 25-FEET
STACKABLE VERTICAL PANELS: 25-FEET

TYPICAL TRAFFIC CONTROL SIGN SPACING:

35-MPH SPEED LIMIT AREAS: A = 280-FEET MIN.
25-MPH SPEED LIMIT AREAS: B = 150-FEET MIN.

LEGEND

- WORK AREA
- WORK ZONE TRAFFIC CONTROL SIGN
- SIDEWALK BARRICADE
- TYPE III BARRICADE
- DELINEATOR DRUM
- TUBULAR MARKER
- STACKABLE VERTICAL PANEL

0 40'
SCALE: 1" = 40'

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WORK ZONE TRAFFIC CONTROL
Phase 2-B

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

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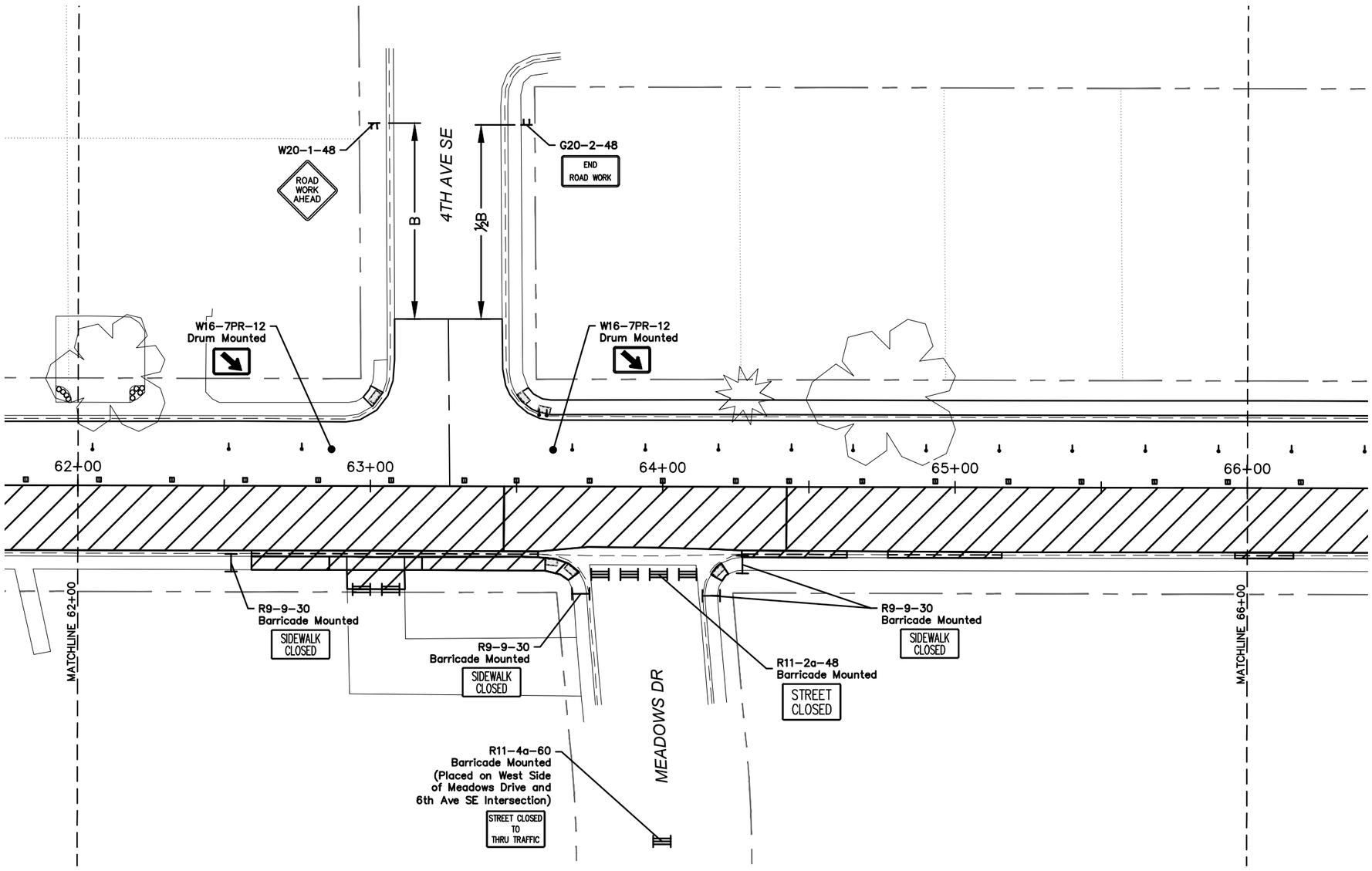
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	100	29



TYPICAL TRAFFIC CONTROL DEVICE SPACING:

DELINEATOR DRUMS: 25-FEET
TUBULAR MARKERS: 25-FEET
STACKABLE VERTICAL PANELS: 25-FEET

TYPICAL TRAFFIC CONTROL SIGN SPACING:

35-MPH SPEED LIMIT AREAS: A = 280-FEET MIN.
25-MPH SPEED LIMIT AREAS: B = 150-FEET MIN.

LEGEND

- WORK AREA
- WORK ZONE TRAFFIC CONTROL SIGN
- SIDEWALK BARRICADE
- TYPE III BARRICADE
- DELINEATOR DRUM
- TUBULAR MARKER
- STACKABLE VERTICAL PANEL

0 40'
SCALE: 1" = 40'

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WORK ZONE TRAFFIC CONTROL
Phase 2-A

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

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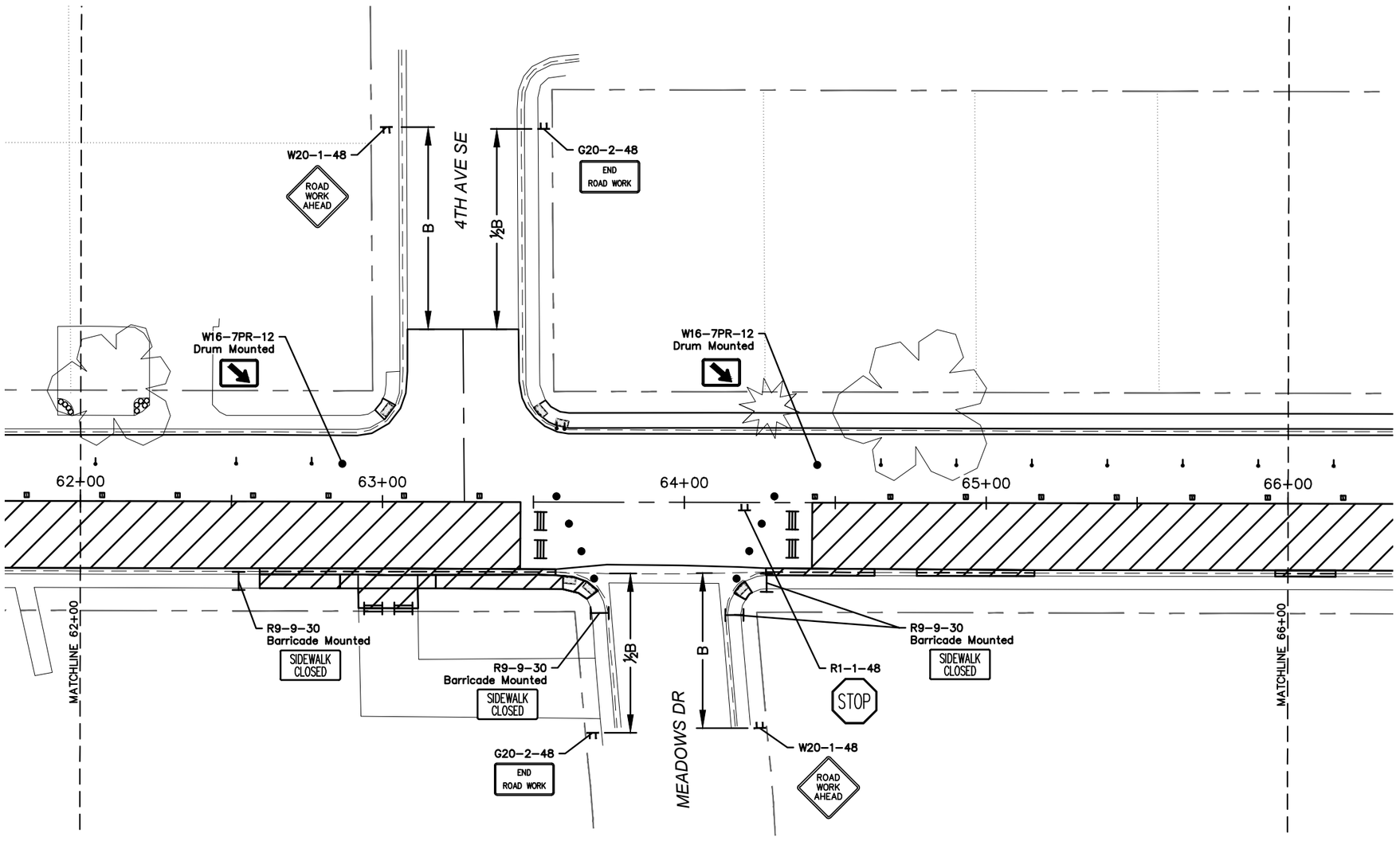

TYPICAL TRAFFIC CONTROL DEVICE SPACING:

DELINEATOR DRUMS: 25-FEET
TUBULAR MARKERS: 25-FEET
STACKABLE VERTICAL PANELS: 25-FEET

TYPICAL TRAFFIC CONTROL SIGN SPACING:

35-MPH SPEED LIMIT AREAS: A = 280-FEET MIN.
25-MPH SPEED LIMIT AREAS: B = 150-FEET MIN.

LEGEND

- WORK AREA
- WORK ZONE TRAFFIC CONTROL SIGN
- SIDEWALK BARRICADE
- TYPE III BARRICADE
- DELINEATOR DRUM
- TUBULAR MARKER
- STACKABLE VERTICAL PANEL

N W E S

0 40'

SCALE: 1" = 40'

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WORK ZONE TRAFFIC CONTROL
Phase 2-B

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

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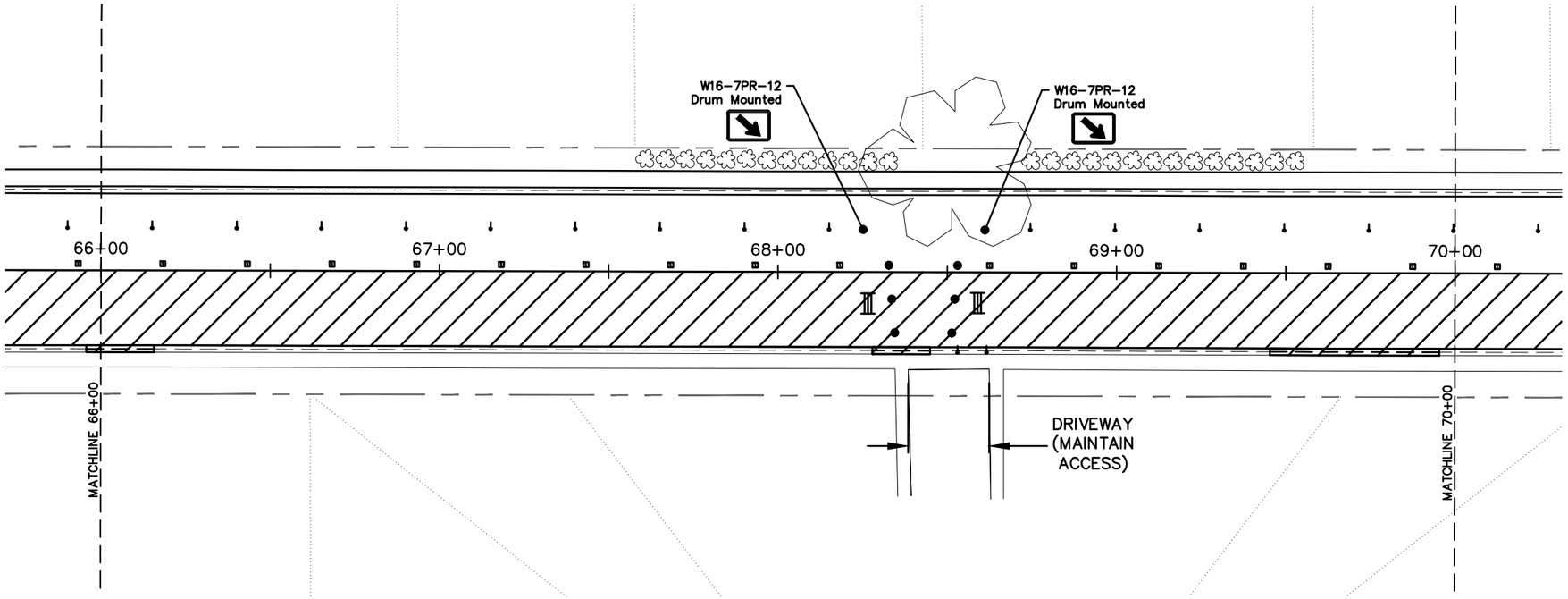

TYPICAL TRAFFIC CONTROL DEVICE SPACING:

DELINEATOR DRUMS: 25-FEET
TUBULAR MARKERS: 25-FEET
STACKABLE VERTICAL PANELS: 25-FEET

NOTES:

TRAFFIC CONTROL DEVICES IN FRONT OF DRIVEWAYS MAY BE SHIFTED ALONG THE WIDTH OF THE DRIVEWAY TO ACCOMODATE CONSTRUCTION AND MAINTAIN ACCESS.

LEGEND

WORK AREA
WORK ZONE TRAFFIC CONTROL SIGN
SIDEWALK BARRICADE
TYPE III BARRICADE
DELINEATOR DRUM
TUBULAR MARKER
STACKABLE VERTICAL PANEL

N W E S

0 40'

SCALE: 1" = 40'

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WORK ZONE TRAFFIC CONTROL
Phase 2

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

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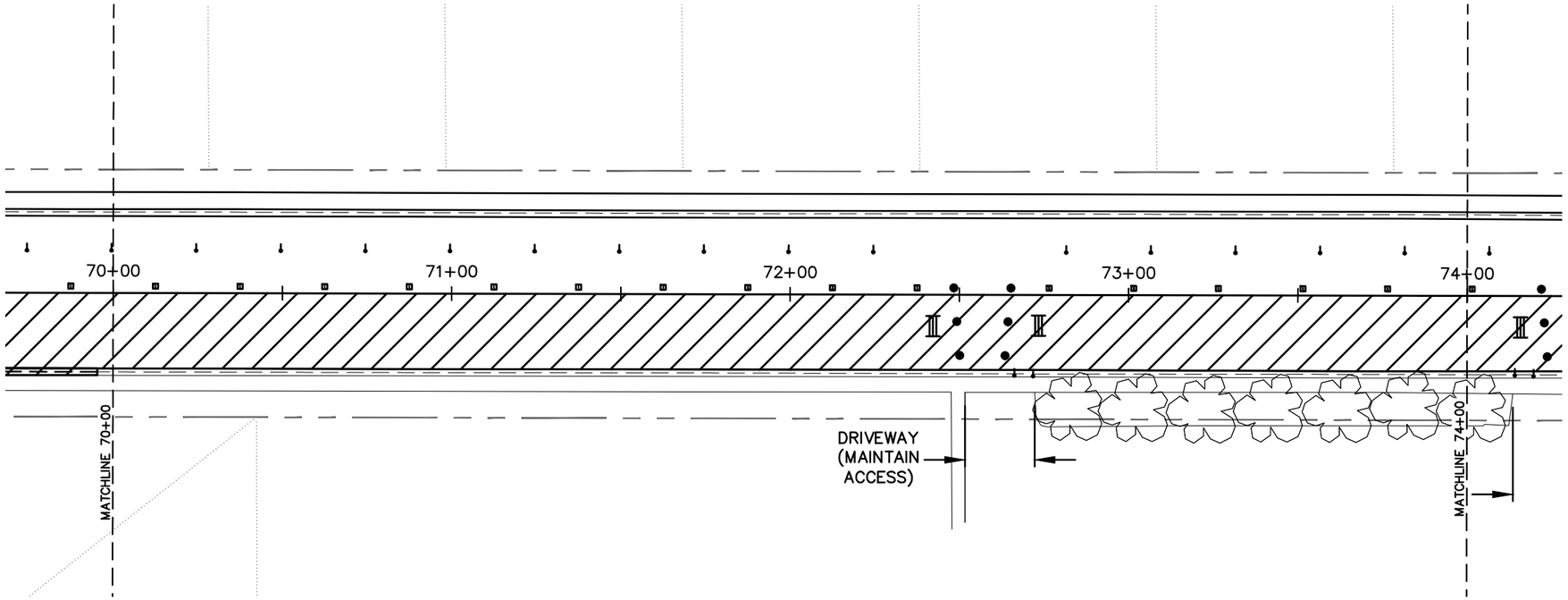
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	100	32



TYPICAL TRAFFIC CONTROL DEVICE SPACING:

DELINEATOR DRUMS: 25-FEET
TUBULAR MARKERS: 25-FEET
STACKABLE VERTICAL PANELS: 25-FEET

NOTES:

TRAFFIC CONTROL DEVICES IN FRONT OF DRIVEWAYS MAY BE SHIFTED ALONG THE WIDTH OF THE DRIVEWAY TO ACCOMODATE CONSTRUCTION AND MAINTAIN ACCESS.

LEGEND

- WORK AREA
- WORK ZONE TRAFFIC CONTROL SIGN
- SIDEWALK BARRICADE
- TYPE III BARRICADE
- DELINEATOR DRUM
- TUBULAR MARKER
- STACKABLE VERTICAL PANEL

N W E S

0 40'

SCALE: 1" = 40'

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WORK ZONE TRAFFIC CONTROL
Phase 2

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

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STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SU-5-983(059)059	100	33

TYPICAL TRAFFIC CONTROL DEVICE SPACING:

DELINEATOR DRUMS: 25-FEET
TUBULAR MARKERS: 25-FEET
STACKABLE VERTICAL PANELS: 25-FEET

TYPICAL TRAFFIC CONTROL SIGN SPACING:

35-MPH SPEED LIMIT AREAS: A = 280-FEET MIN.
25-MPH SPEED LIMIT AREAS: B = 150-FEET MIN.

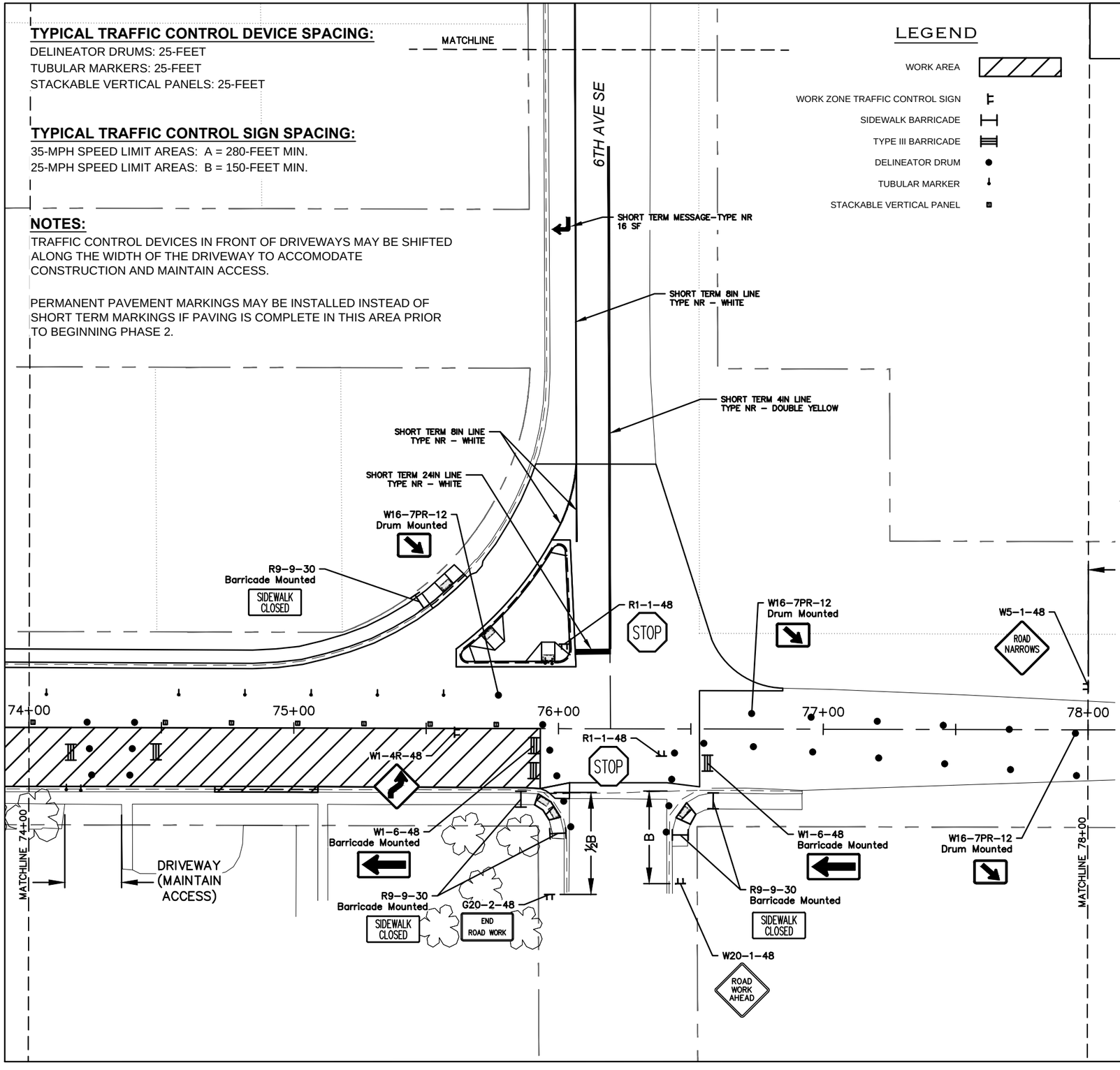
NOTES:

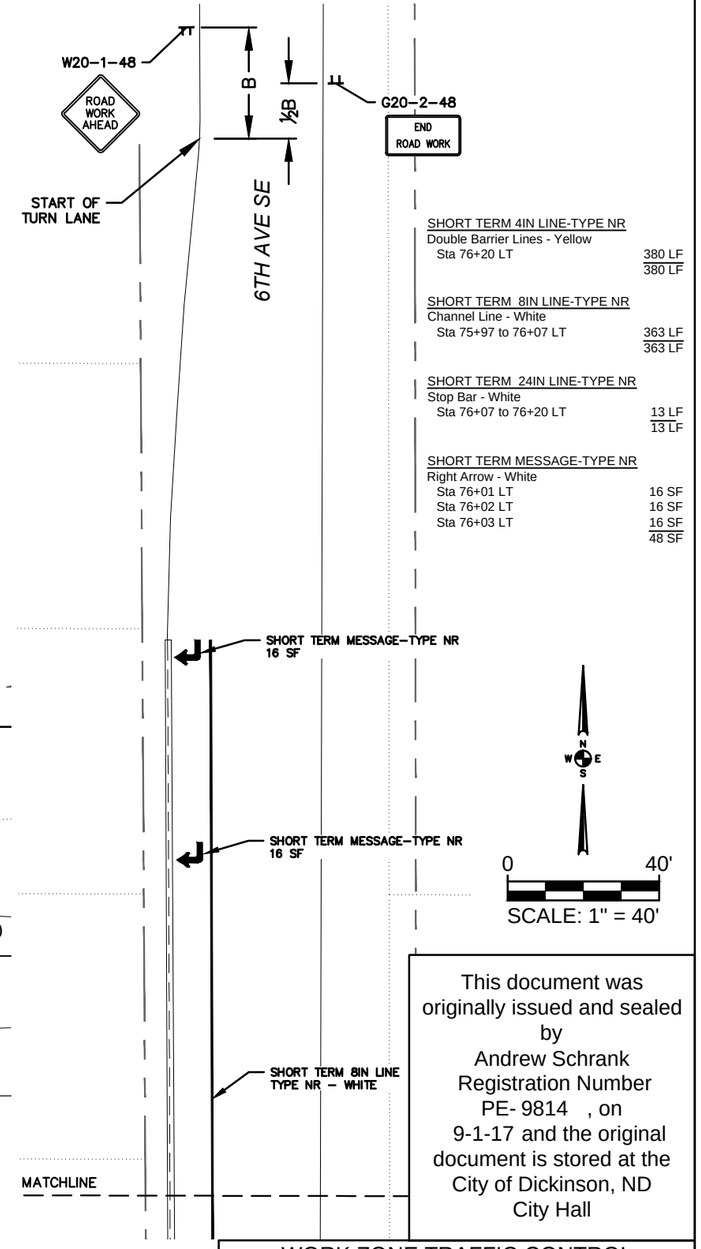
TRAFFIC CONTROL DEVICES IN FRONT OF DRIVEWAYS MAY BE SHIFTED ALONG THE WIDTH OF THE DRIVEWAY TO ACCOMODATE CONSTRUCTION AND MAINTAIN ACCESS.

PERMANENT PAVEMENT MARKINGS MAY BE INSTALLED INSTEAD OF SHORT TERM MARKINGS IF PAVING IS COMPLETE IN THIS AREA PRIOR TO BEGINNING PHASE 2.

LEGEND

- WORK AREA
- WORK ZONE TRAFFIC CONTROL SIGN
- SIDEWALK BARRICADE
- TYPE III BARRICADE
- DELINEATOR DRUM
- TUBULAR MARKER
- STACKABLE VERTICAL PANEL





SHORT TERM 4IN LINE-TYPE NR
Double Barrier Lines - Yellow

Sta 76+20 LT	380 LF
	380 LF

SHORT TERM 8IN LINE-TYPE NR
Channel Line - White

Sta 75+97 to 76+07 LT	363 LF
	363 LF

SHORT TERM 24IN LINE-TYPE NR
Stop Bar - White

Sta 76+07 to 76+20 LT	13 LF
	13 LF

SHORT TERM MESSAGE-TYPE NR
Right Arrow - White

Sta 76+01 LT	16 SF
Sta 76+02 LT	16 SF
Sta 76+03 LT	16 SF
	48 SF

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WORK ZONE TRAFFIC CONTROL
Phase 2-A

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SU-5-983(059)059	100	34

TYPICAL TRAFFIC CONTROL DEVICE SPACING:

DELINEATOR DRUMS: 25-FEET
TUBULAR MARKERS: 25-FEET
STACKABLE VERTICAL PANELS: 25-FEET

TYPICAL TRAFFIC CONTROL SIGN SPACING:

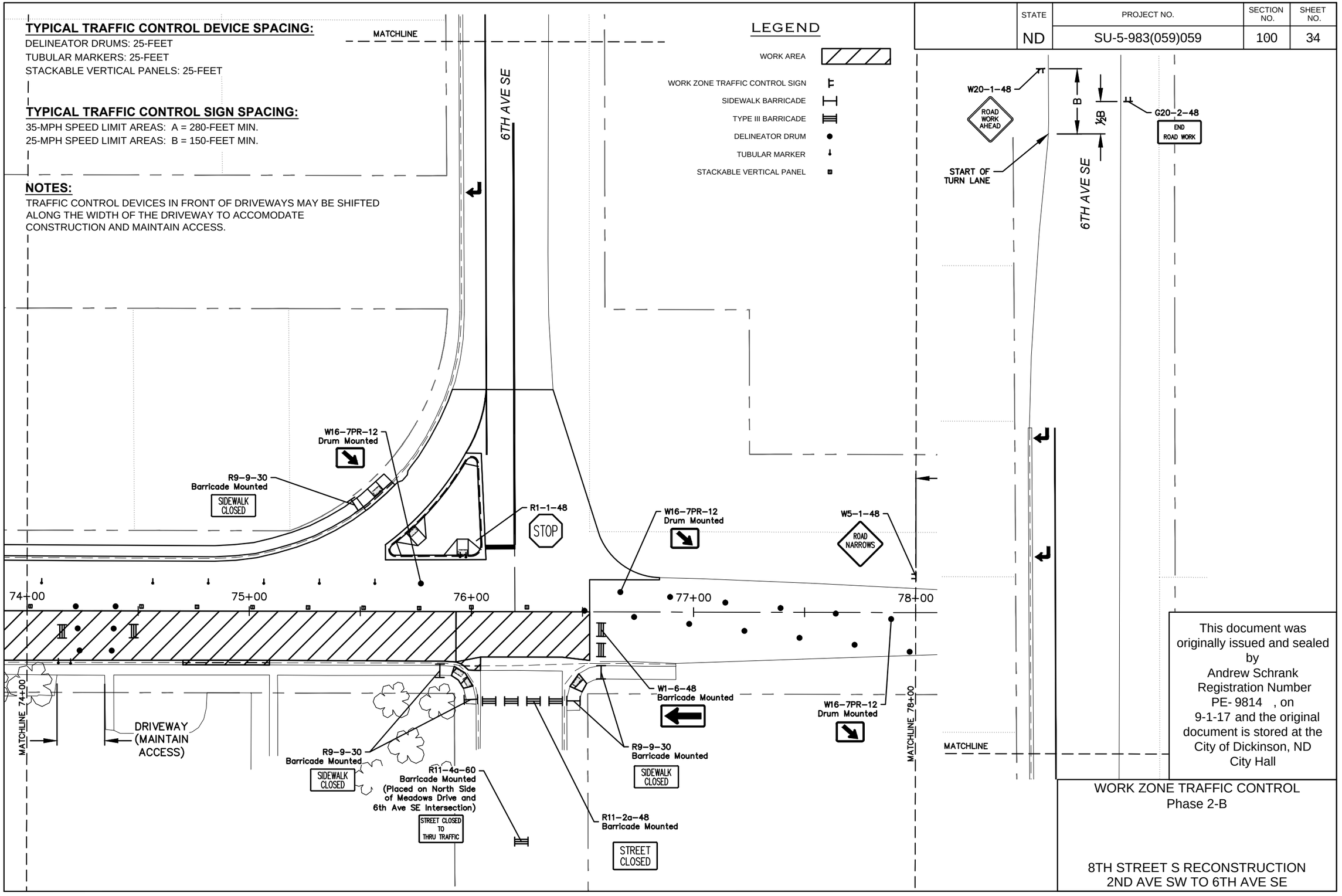
35-MPH SPEED LIMIT AREAS: A = 280-FEET MIN.
25-MPH SPEED LIMIT AREAS: B = 150-FEET MIN.

NOTES:

TRAFFIC CONTROL DEVICES IN FRONT OF DRIVEWAYS MAY BE SHIFTED ALONG THE WIDTH OF THE DRIVEWAY TO ACCOMODATE CONSTRUCTION AND MAINTAIN ACCESS.

LEGEND

- WORK AREA
- WORK ZONE TRAFFIC CONTROL SIGN
- SIDEWALK BARRICADE
- TYPE III BARRICADE
- DELINEATOR DRUM
- TUBULAR MARKER
- STACKABLE VERTICAL PANEL



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WORK ZONE TRAFFIC CONTROL
Phase 2-B

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

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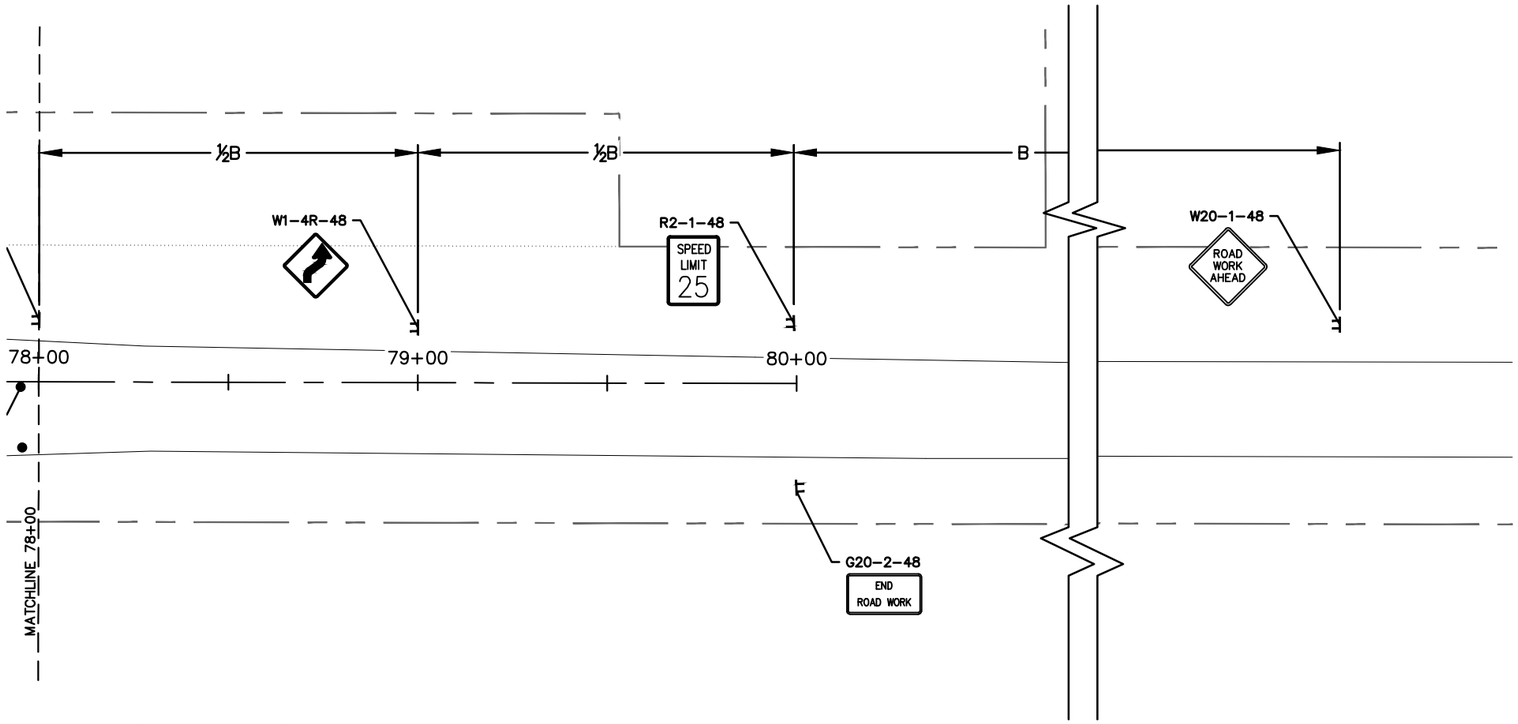
	ND	SU-5-983(059)059	100	35



TYPICAL TRAFFIC CONTROL DEVICE SPACING:

DELINEATOR DRUMS: 25-FEET
TUBULAR MARKERS: 25-FEET
STACKABLE VERTICAL PANELS: 25-FEET

TYPICAL TRAFFIC CONTROL SIGN SPACING:

35-MPH SPEED LIMIT AREAS: A = 280-FEET MIN.
25-MPH SPEED LIMIT AREAS: B = 150-FEET MIN.

LEGEND

WORK AREA
WORK ZONE TRAFFIC CONTROL SIGN
SIDEWALK BARRICADE
TYPE III BARRICADE
DELINEATOR DRUM
TUBULAR MARKER
STACKABLE VERTICAL PANEL

N W E S

0 40'

SCALE: 1" = 40'

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WORK ZONE TRAFFIC CONTROL
Phase 2

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

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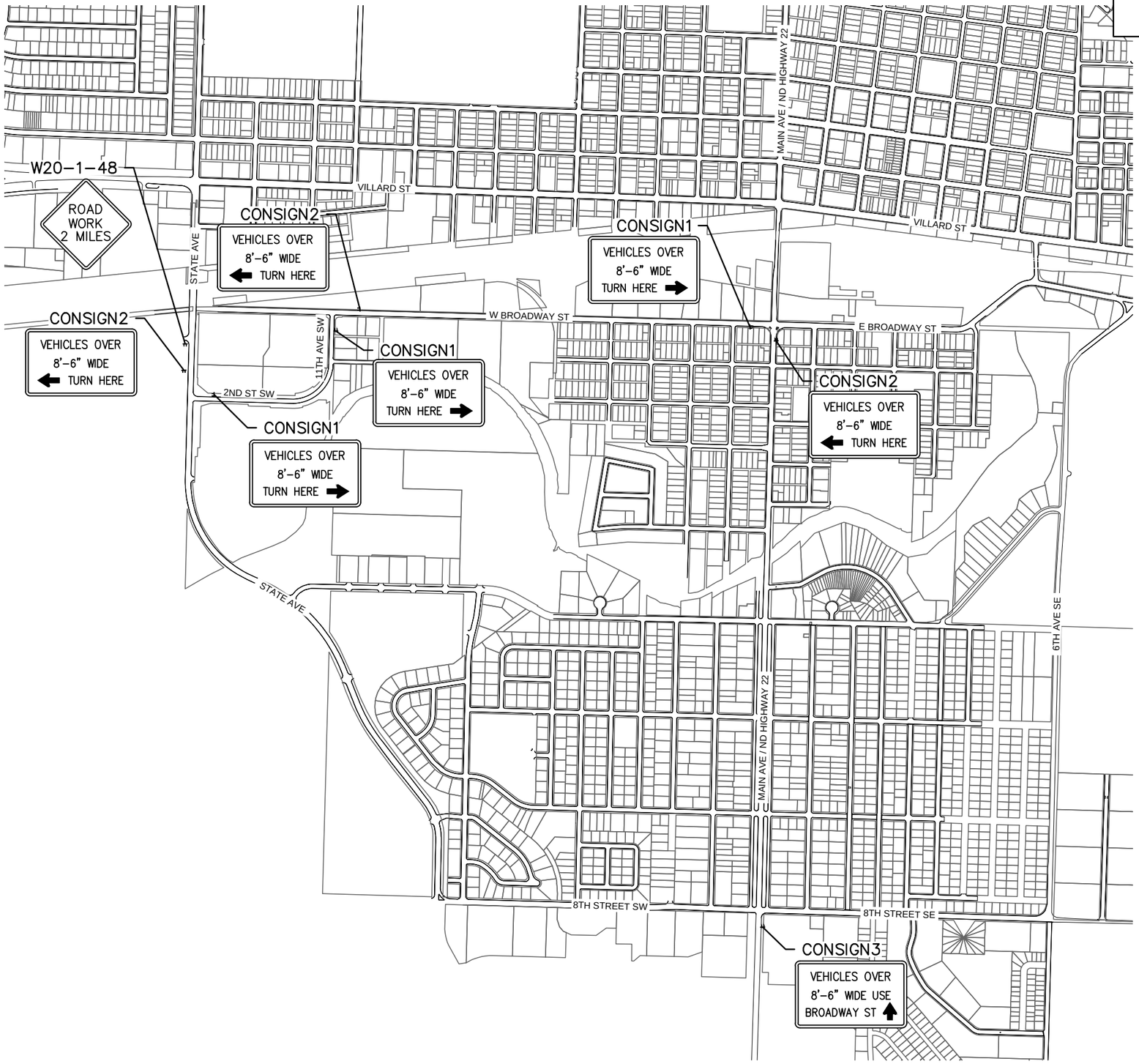
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	100	36



NOTES:

1. USE THIS LAYOUT WHEN LANE WIDTHS ARE REDUCED TO LESS THAN 10-FEET ON 8TH STREET SW.

0 1000'

SCALE: 1" = 1000'

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WORK ZONE TRAFFIC CONTROL
Overwidth Vehicles

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

9/1/2017 4:04:24 PM schrank h:\168199\project cad\current plans\100WZ_002_trafficctrl.dwg

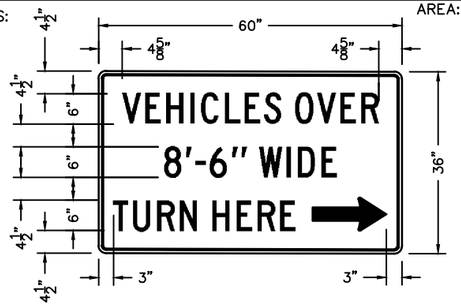
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	100	37

SIGN NUMBER	CONSIGN1
WIDTH x HEIGHT	60" x 36"
BORDER WIDTH	0.25" (inset 0.625")
CORNER RADIUS	1.5"
MOUNTING	Ground
BACKGROUND	TYPE: XI Reflective
	COLOR: Fluorescent Orange
LEGEND/BORDER	TYPE: Non-Reflective
	COLOR: Black

SYMBOL	X	Y	WID	HT	ANGLE
ARDD	42.3	4.6	14.6	6	0

STATIONS: n/a

AREA: 15.0 Sq.Ft.



Dimensions are in inches.tenths

Letter locations are panel edge to lower left corner

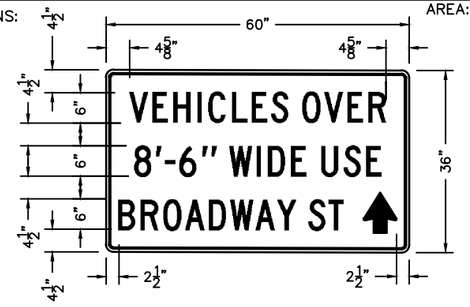
LETTER POSITION (X)																		LENGTH	SIZE	SERIES
V	E	H	I	C	L	E	S	O	V	E	R							50.7	6	C 2000
4.6	9.3	13.5	18.2	20.4	25.0	29.0	32.8	38.9	43.2	47.8	52.0									
8	'	–	6	"	W	I	D	E										34.1	6	C 2000
13.1	17.4	19.1	22.0	26.5	31.8	37.2	39.4	44.1												
T	U	R	N	H	E	R	E											36.1	6	C 2000
3.0	6.9	11.7	16.1	22.6	27.4	31.5	36.0													

SIGN NUMBER	CONSIGN1
WIDTH x HEIGHT	60" x 36"
BORDER WIDTH	0.25" (inset 0.625")
CORNER RADIUS	1.5"
MOUNTING	Ground
BACKGROUND	TYPE: XI Reflective
	COLOR: Fluorescent Orange
LEGEND/BORDER	TYPE: Non-Reflective
	COLOR: Black

SYMBOL	X	Y	WID	HT	ANGLE
ARDD	51.0	3.5	6	8	0

STATIONS: n/a

AREA: 15.0 Sq.Ft.



Dimensions are in inches.tenths

Letter locations are panel edge to lower left corner

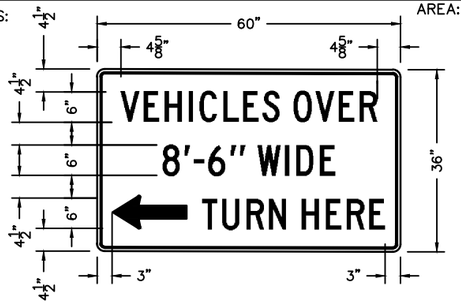
LETTER POSITION (X)																		LENGTH	SIZE	SERIES
V	E	H	I	C	L	E	S	O	V	E	R							50.7	6	C 2000
4.6	9.3	13.5	18.2	20.4	25.0	29.0	32.8	38.9	43.2	47.8	52.0									
8	'	–	6	"	W	I	D	E	U	S	E							48.9	6	C 2000
5.8	10.1	11.8	14.7	19.2	24.5	29.9	32.1	36.8	42.6	47.1	51.5									
B	R	O	A	D	W	A	Y	S	T									44.6	6	C 2000
2.5	7.0	11.4	15.7	20.4	24.6	29.6	33.9	40.0	44.0											

SIGN NUMBER	CONSIGN2
WIDTH x HEIGHT	60" x 36"
BORDER WIDTH	0.25" (inset 0.625")
CORNER RADIUS	1.5"
MOUNTING	Ground
BACKGROUND	TYPE: XI Reflective
	COLOR: Fluorescent Orange
LEGEND/BORDER	TYPE: Non-Reflective
	COLOR: Black

SYMBOL	X	Y	WID	HT	ANGLE
ARDD	3.0	4.6	14.6	6	0

STATIONS: n/a

AREA: 15.0 Sq.Ft.



Dimensions are in inches.tenths

Letter locations are panel edge to lower left corner

LETTER POSITION (X)																		LENGTH	SIZE	SERIES
V	E	H	I	C	L	E	S	O	V	E	R							50.7	6	C 2000
4.6	9.3	13.5	18.2	20.4	25.0	29.0	32.8	38.9	43.2	47.8	52.0									
8	'	–	6	"	W	I	D	E										34.1	6	C 2000
13.1	17.4	19.1	22.0	26.5	31.8	37.2	39.4	44.1												
T	U	R	N	H	E	R	E											36.1	6	C 2000
20.9	24.8	29.6	34.0	40.5	45.3	49.4	53.9													

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WORK ZONE TRAFFIC CONTROL
Construction Signing

8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
N.D.	SU-5-983(059)059	110	1

Sta/RP	Sign No.	Assembly No.	Flat Sheet For Signs IV SF	Flat Sheet For Signs XI SF	Sign Support Length 1st LF	2nd LF	3rd LF	4th LF	Support Size	Max Post Len LF	Sleeve Length 1st LF	2nd LF	3rd LF	4th LF	Sleeve Size	Anchor EA	Anchor LF	Anchor Size	Reset Sign Panel EA	Reset Sign Support EA	Break-Away EA	Comments
34+25 Rt		20		9.0	10.4				2.5 x 2.5 10 ga	12.9						1	4	3 x 3 7 ga			1	
36+00 Rt		10		7.5	10.2				2.25 x 2.25 12 ga	10.6						1	4	2.5 x 2.5 12 ga				
37+80 Lt		10		7.5	10.2				2.25 x 2.25 12 ga	10.6						1	4	2.5 x 2.5 12 ga				
43+84 Lt		8		3.0																		Mount on Light Standard
46+25 Rt		8		3.0	9.2				2 x 2 12 ga	14.6						1	4	2.25 x 2.25 12 ga				
46+40 Lt		7		1.5	8.7				2 x 2 12 ga	25.5						1	4	2.25 x 2.25 12 ga				
47+30 Lt		10		7.5	10.2				2.25 x 2.25 12 ga	10.6						1	4	2.5 x 2.5 12 ga				
48+97 Lt		7		1.5																		Mount on Light Standard
49+01 Lt		1			9.7				2 x 2 12 ga	10.5						1	4	2.25 x 2.25 12 ga	1			
49+26 Rt		34		8.0	9.2				2.5 x 2.5 12 ga	11.3						1	4	3 x 3 7 ga				
49+52 Rt		2		7.5	9.7				2.5 x 2.5 12 ga	12.1						1	4	3 x 3 7 ga				
49+70 Lt	SA A			8.3	11.3				2.5 x 2.5 12 ga	12.5						1	4	3 x 3 7 ga				Use fluorescent yellow-green signs.
50+30 Lt	SA A			8.3	11.3				2.5 x 2.5 12 ga	12.5						1	4	3 x 3 7 ga				Use fluorescent yellow-green signs.
50+43 Lt		2		7.5	9.7				2.5 x 2.5 12 ga	12.1						1	4	3 x 3 7 ga				
50+65 Rt		7		1.5	8.7				2 x 2 12 ga	25.5						1	4	2.25 x 2.25 12 ga				
50+74 Rt		34		8.0	9.2				2.5 x 2.5 12 ga	11.3						1	4	3 x 3 7 ga				
51+09 Lt		371																	1			Mount on Light Standard
52+25 Rt	SA A			8.3	11.3				2.5 x 2.5 12 ga	12.5						1	4	3 x 3 7 ga				Use fluorescent yellow-green signs.
53+25 Rt		7		1.5	8.7				2 x 2 12 ga	25.5						1	4	2.25 x 2.25 12 ga				
53+40 Lt		7		1.5	8.7				2 x 2 12 ga	25.5						1	4	2.25 x 2.25 12 ga				
54+00 Rt	SA A			8.3	11.3				2.5 x 2.5 12 ga	12.5						1	4	3 x 3 7 ga				Use fluorescent yellow-green signs.
54+66 Lt	SA A			8.3	11.3				2.5 x 2.5 12 ga	12.5						1	4	3 x 3 7 ga				Use fluorescent yellow-green signs.
55+80 Rt		8		3.0	9.2				2 x 2 12 ga	14.6						1	4	2.25 x 2.25 12 ga				
56+14 Lt		8		3.0																		Mount on Light Standard
57+00 Lt	SA A			8.3	11.3				2.5 x 2.5 12 ga	12.5						1	4	3 x 3 7 ga				Use fluorescent yellow-green signs.
57+00 Rt	SA B			7.5	12.3				2.5 x 2.5 12 ga	15.3	2.4				2.25 x 2.25 12 ga	1	4	3 x 3 7 ga			1	
59+35 Lt		8		3.0	9.2				2 x 2 12 ga	14.6						1	4	2.25 x 2.25 12 ga				
61+64 Rt		8		3.0																		Mount on Light Standard
62+00 Lt		8		3.0	9.2				2 x 2 12 ga	14.6						1	4	2.25 x 2.25 12 ga				
63+55 Rt	SA A			8.3	11.3				2.5 x 2.5 12 ga	12.5						1	4	3 x 3 7 ga				Use fluorescent yellow-green signs.
63+68 Lt	SA A			8.3	11.3				2.5 x 2.5 12 ga	12.5						1	4	3 x 3 7 ga				Use fluorescent yellow-green signs.
64+75 Rt		10		7.5	10.2				2.25 x 2.25 12 ga	10.6						1	4	2.5 x 2.5 12 ga				
66+07 Lt	SA A			8.3	11.3				2.5 x 2.5 12 ga	12.5						1	4	3 x 3 7 ga				Use fluorescent yellow-green signs.
66+18 Rt		8		3.0																		Mount on Light Standard

Basis of Estimate
Sign Support Lengths

The sign support lengths have been calculated using the following vertical clearances:

Areas where parking and/or pedestrian movement will occur - 84"

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Sign Summary
Perforated Tube

8th Street S Reconstruction

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
N.D.	SU-5-983(059)059	110	2

Sta/RP	Sign No.	Assembly No.	Flat Sheet For Signs IV SF	Flat Sheet For Signs XI SF	Sign Support Length 1st LF	2nd LF	3rd LF	4th LF	Support Size	Max Post Len LF	Sleeve Length 1st LF	2nd LF	3rd LF	4th LF	Sleeve Size	Anchor EA	Anchor LF	Anchor Size	Reset Sign Panel EA	Reset Sign Support EA	Break-Away EA	Comments
67+00 Lt		8		3.0	9.2				2 x 2 12 ga	14.6						1	4	2.25 x 2.25 12 ga				
69+55 Lt	SA B			7.5	12.3				2.5 x 2.5 12 ga	15.3	2.4				2.25 x 2.25 12 ga	1	4	3 x 3 7 ga			1	
70+25 Rt		8		3.0																		Mount on Light Standard
71+00 Lt		8		3.0	9.2				2 x 2 12 ga	14.6						1	4	2.25 x 2.25 12 ga				
73+20 Rt		7		1.5	8.7				2 x 2 12 ga	25.5						1	4	2.25 x 2.25 12 ga				
73+50 Lt		7		1.5	8.7				2 x 2 12 ga	25.5						1	4	2.25 x 2.25 12 ga				
74+00 Rt	SA A			8.3	11.3				2.5 x 2.5 12 ga	12.5						1	4	3 x 3 7 ga				Use fluorescent yellow-green signs.
75+32 Lt		4		3.9	9.8				2 x 2 12 ga	13.6						1	4	2.25 x 2.25 12 ga				
75+55 Lt	SA A			8.3	11.3				2.5 x 2.5 12 ga	12.5						1	4	3 x 3 7 ga				Use fluorescent yellow-green signs.
75+88 Rt	SA A			8.3	11.3				2.5 x 2.5 12 ga	12.5						1	4	3 x 3 7 ga				Use fluorescent yellow-green signs.
75+89 Lt	SA A			8.3	11.3				2.5 x 2.5 12 ga	12.5						1	4	3 x 3 7 ga				Use fluorescent yellow-green signs.
75+90 Lt	SA A			8.3	11.3				2.5 x 2.5 12 ga	12.5						1	4	3 x 3 7 ga				Use fluorescent yellow-green signs.
75+97 Lt		1		5.2	9.7				2 x 2 12 ga	10.5						1	4	2.25 x 2.25 12 ga				
78+00 Lt	SA A			8.3	11.3				2.5 x 2.5 12 ga	12.5						1	4	3 x 3 7 ga				Use fluorescent yellow-green signs.
Sub Total			0.0	262.1		**Total**	418.6									**Total**	164		2	0	3	
Grand Total			0.0	262.1		**Total**	418.6									**Total**	164		2	0	3	

Basis of Estimate
Sign Support Lengths

The sign support lengths have been calculated
using the following vertical clearances:

Areas where parking and/or pedestrian movement will occur - 84"

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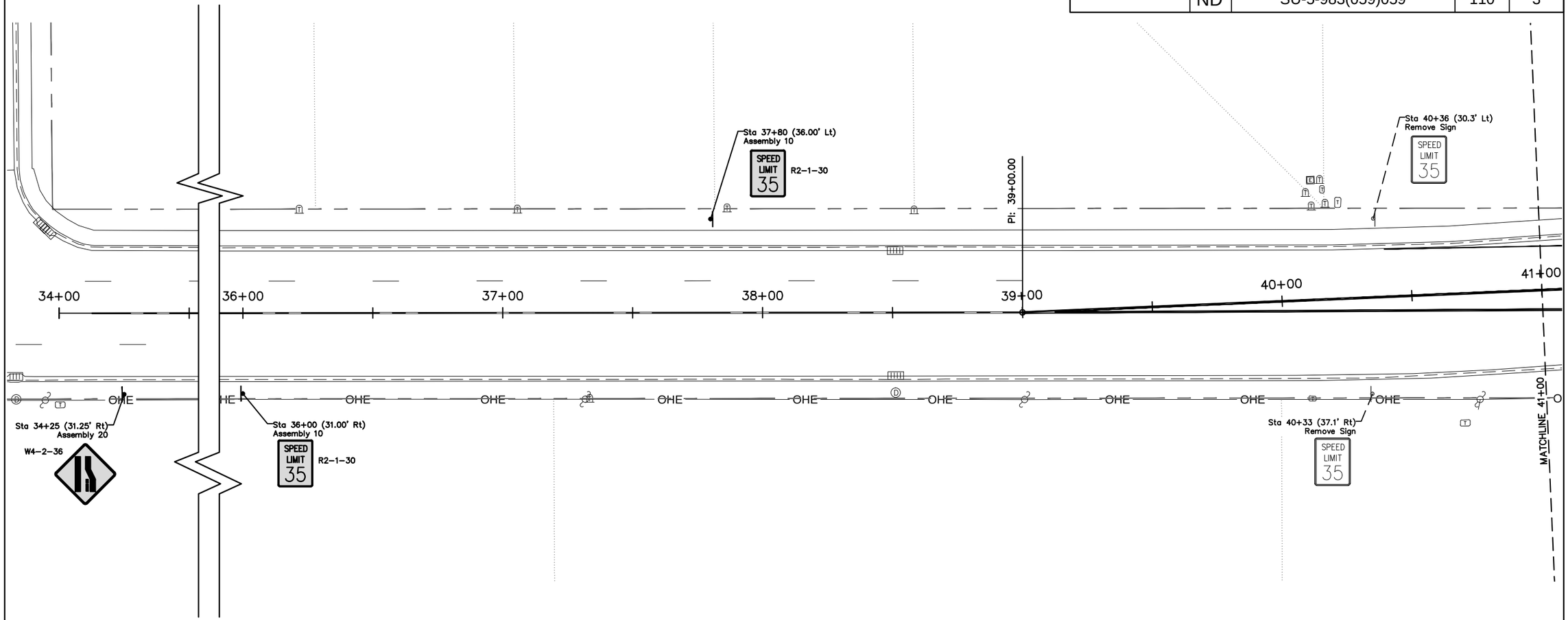
Sign Summary
Perforated Tube

8th Street S Reconstruction

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	110	3



0 40'

SCALE: 1" = 40'

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8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

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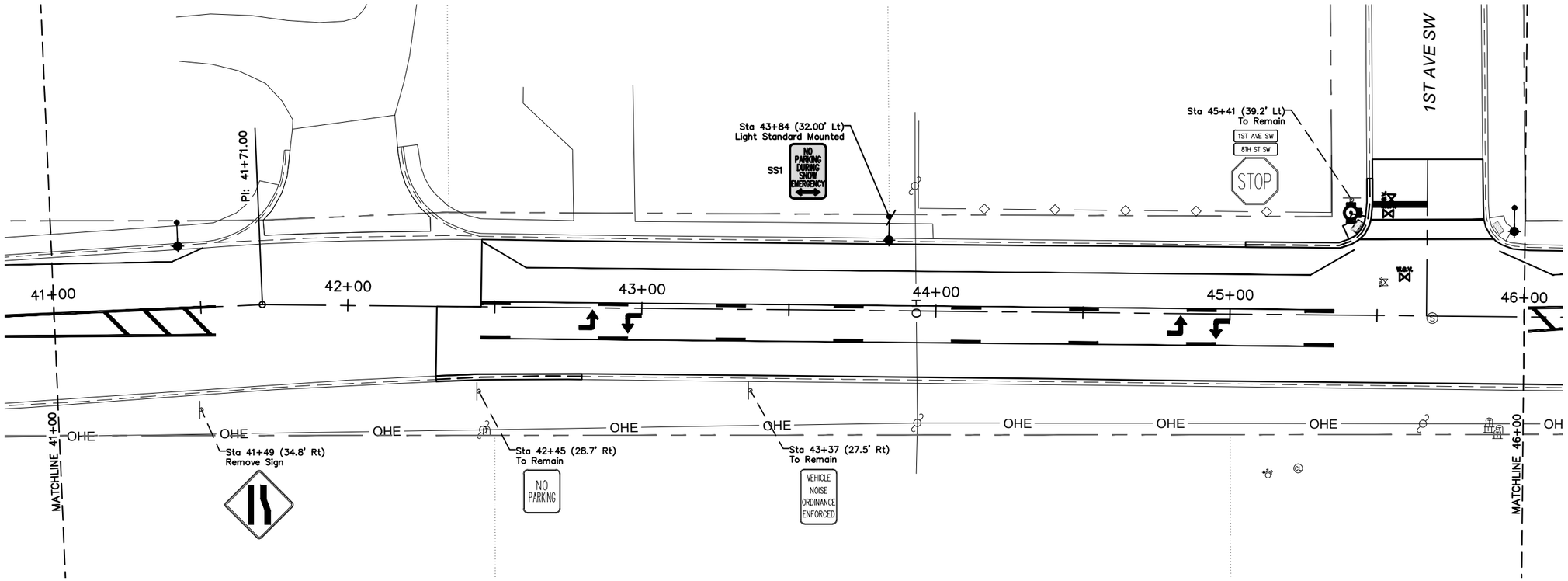
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	110	4



0 40'

SCALE: 1" = 40'

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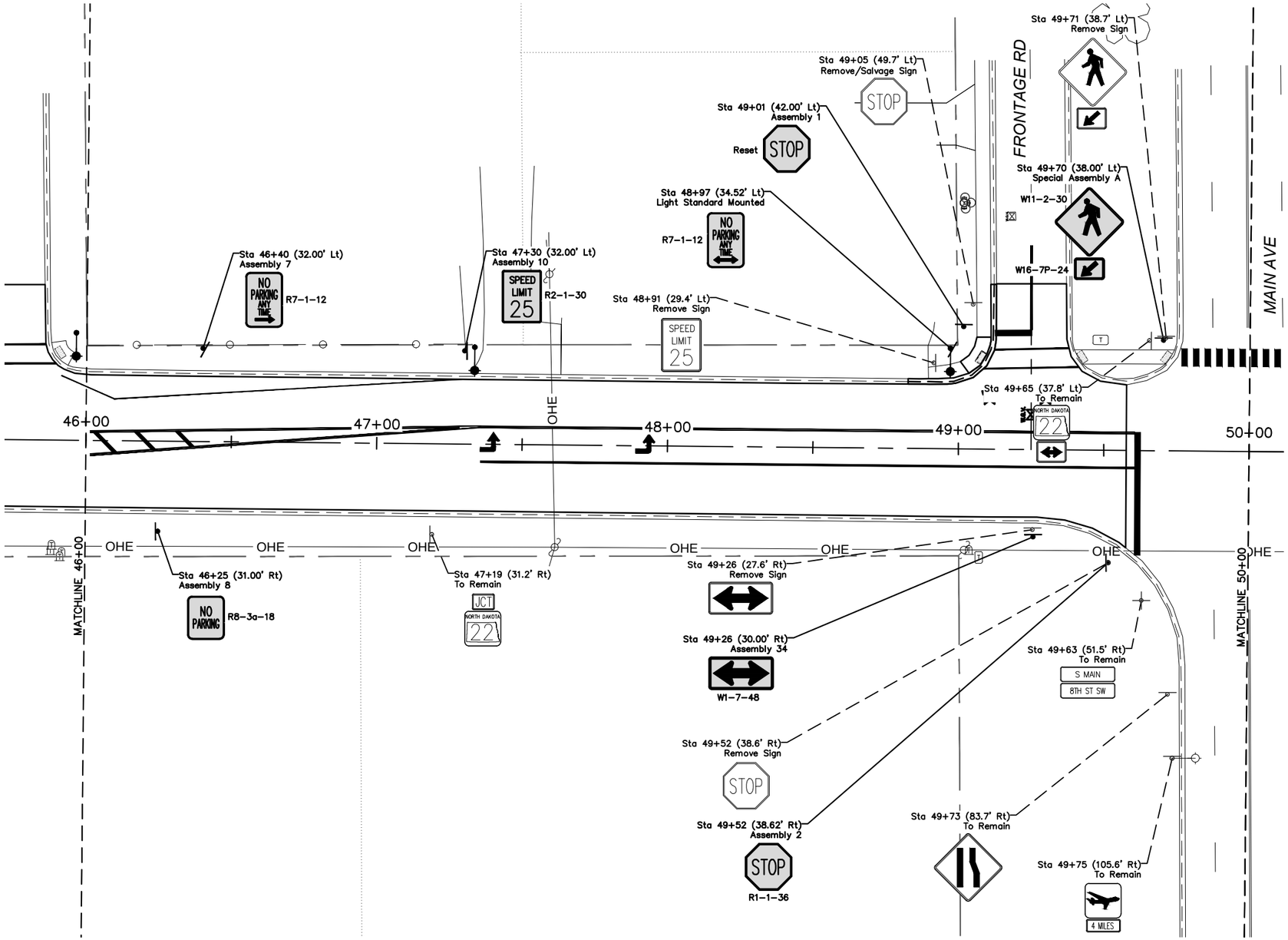
8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	110	5



0 40'

SCALE: 1" = 40'

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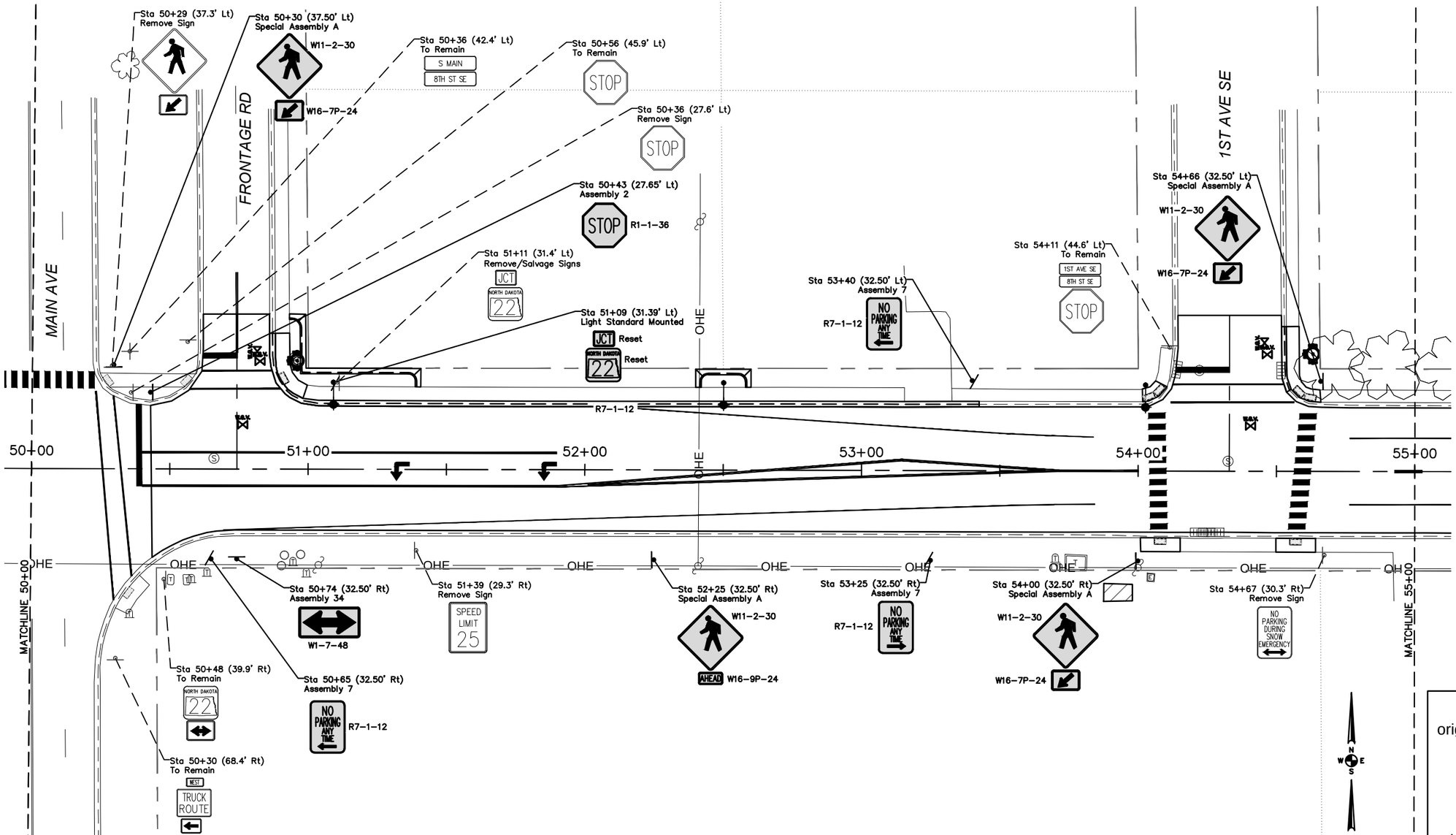
8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	110	6



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8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

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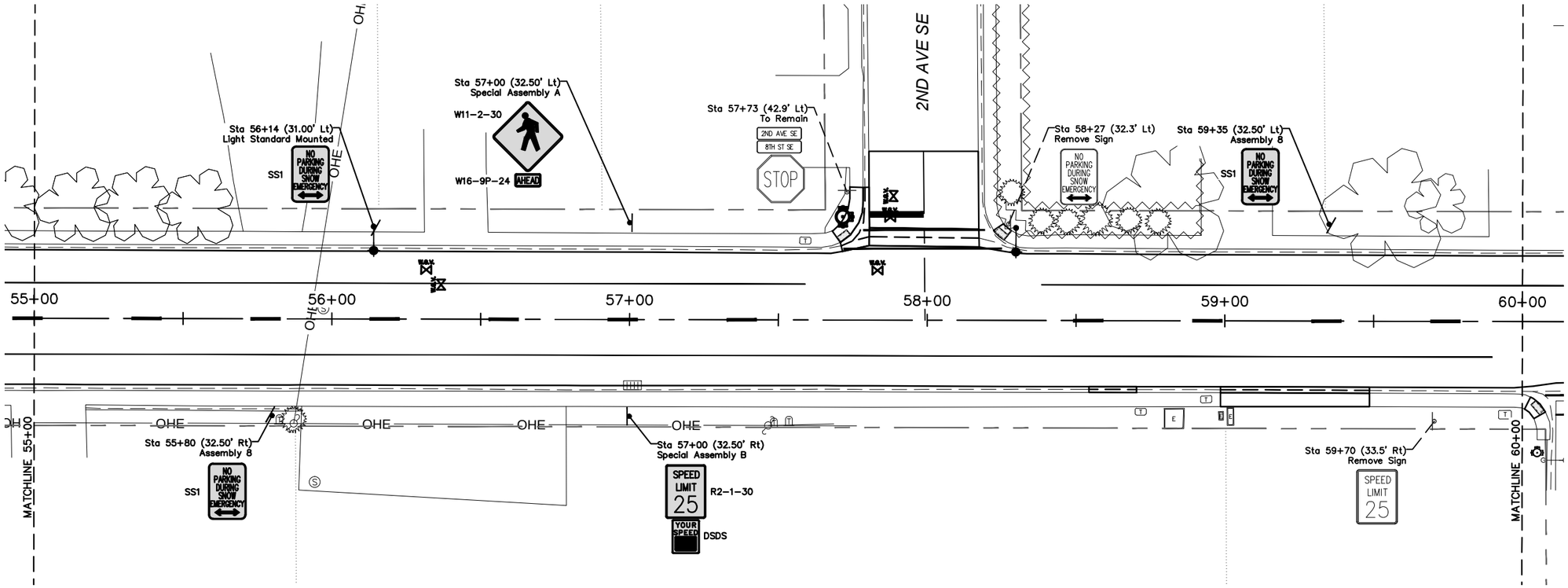
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	110	7



0 40'

SCALE: 1" = 40'

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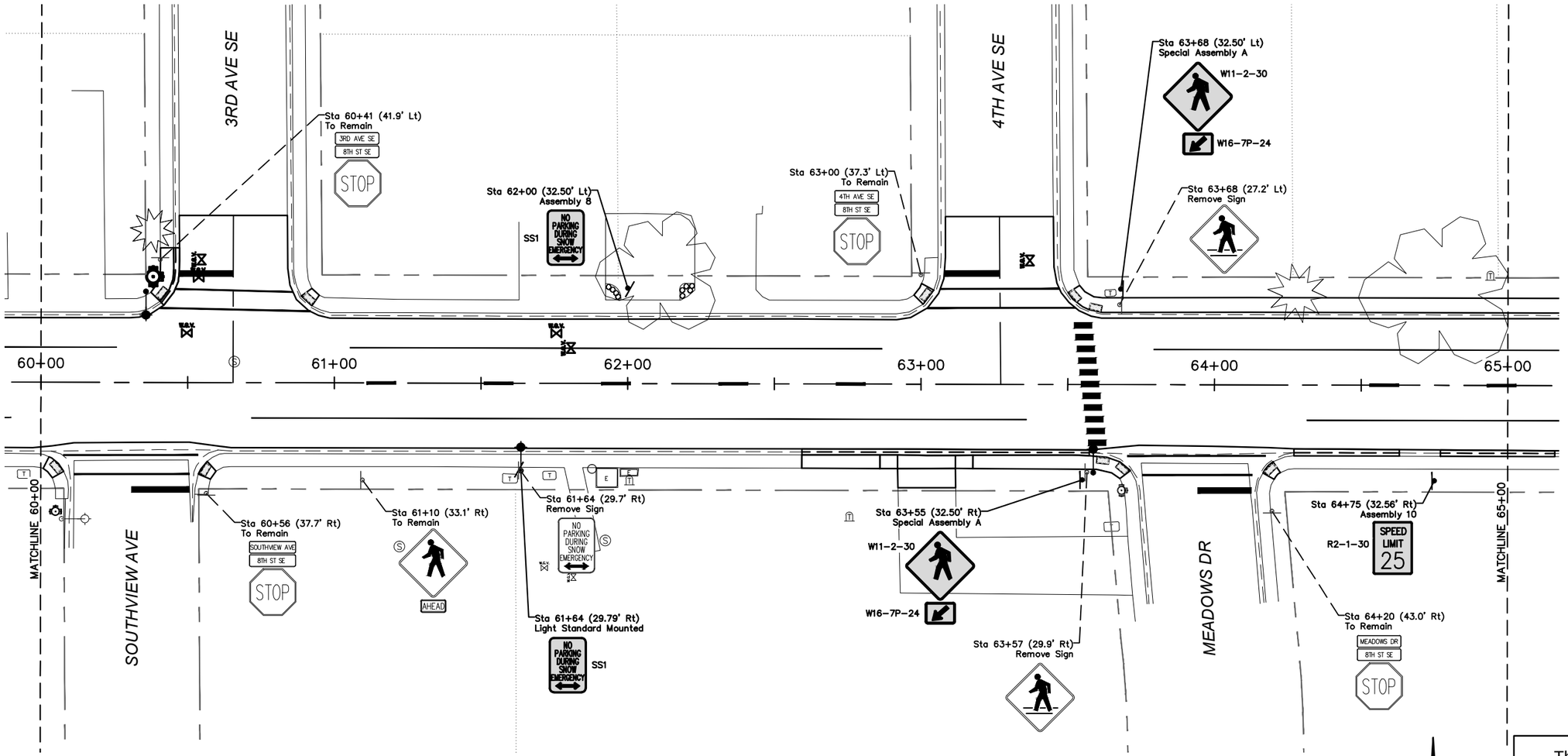
2ND AVE SW TO 6TH AVE SE

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	110	8



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2ND AVE SW TO 6TH AVE SE

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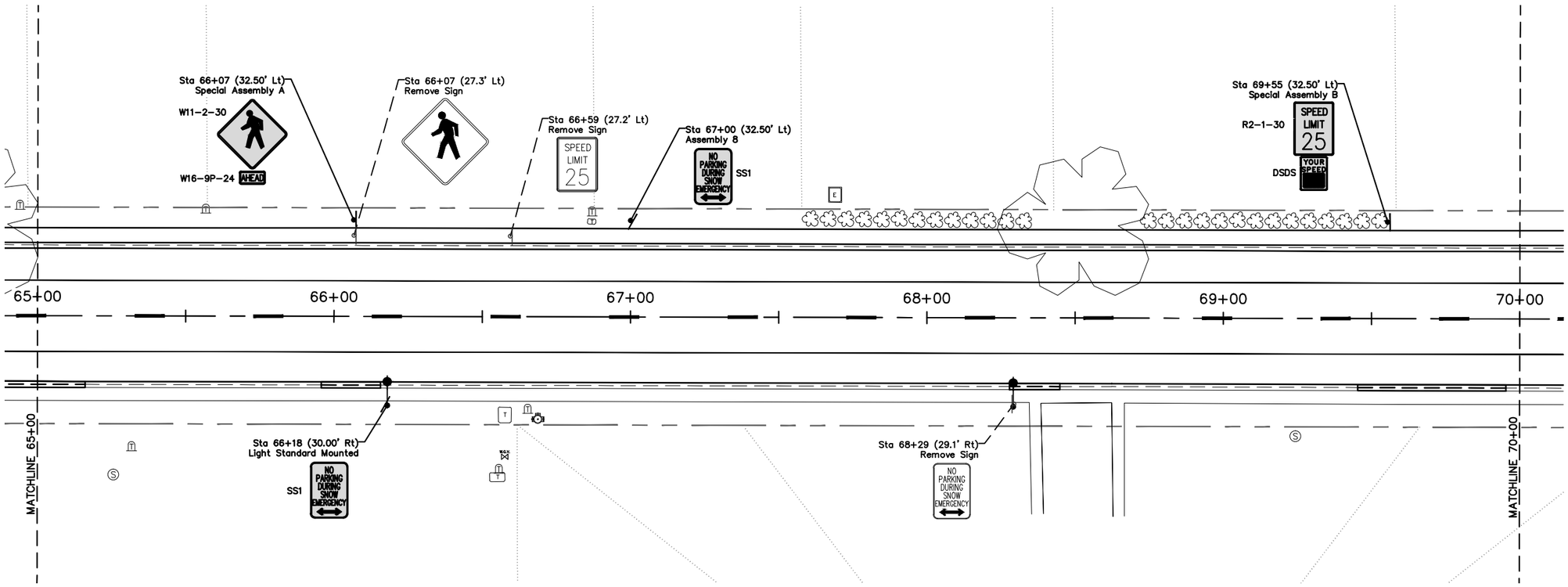
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	110	9



0 40'

SCALE: 1" = 40'

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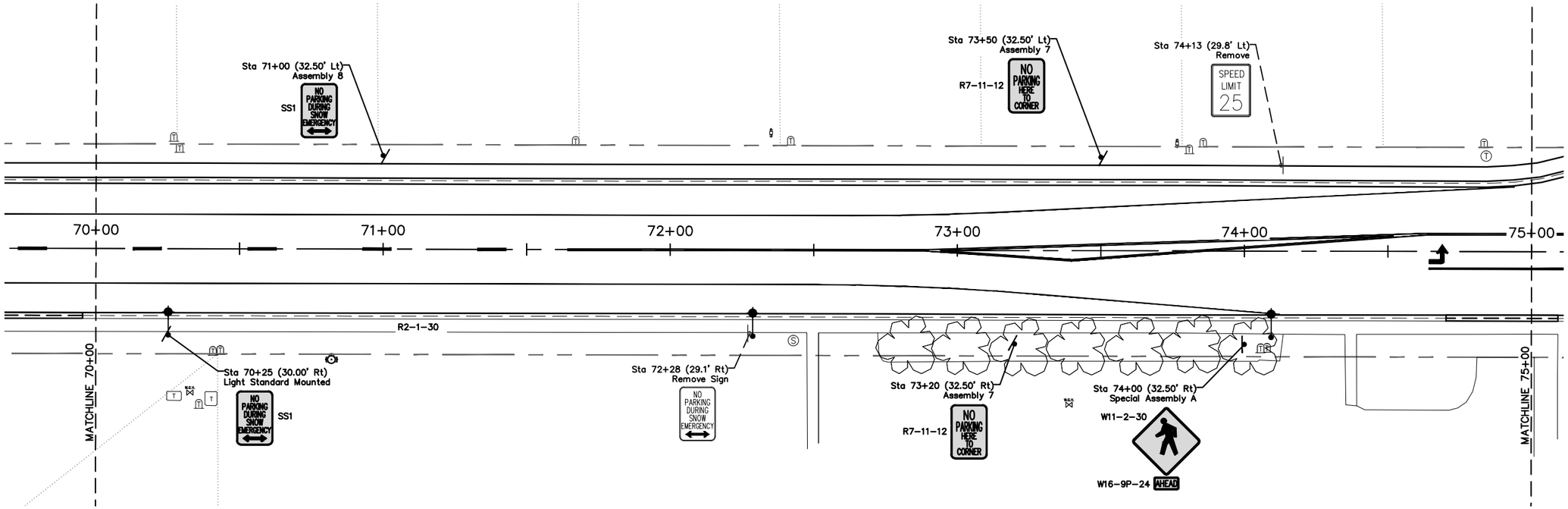
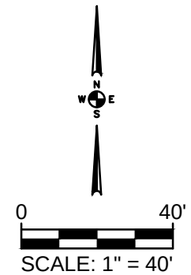
2ND AVE SW TO 6TH AVE SE

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	110	10





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2ND AVE SW TO 6TH AVE SE

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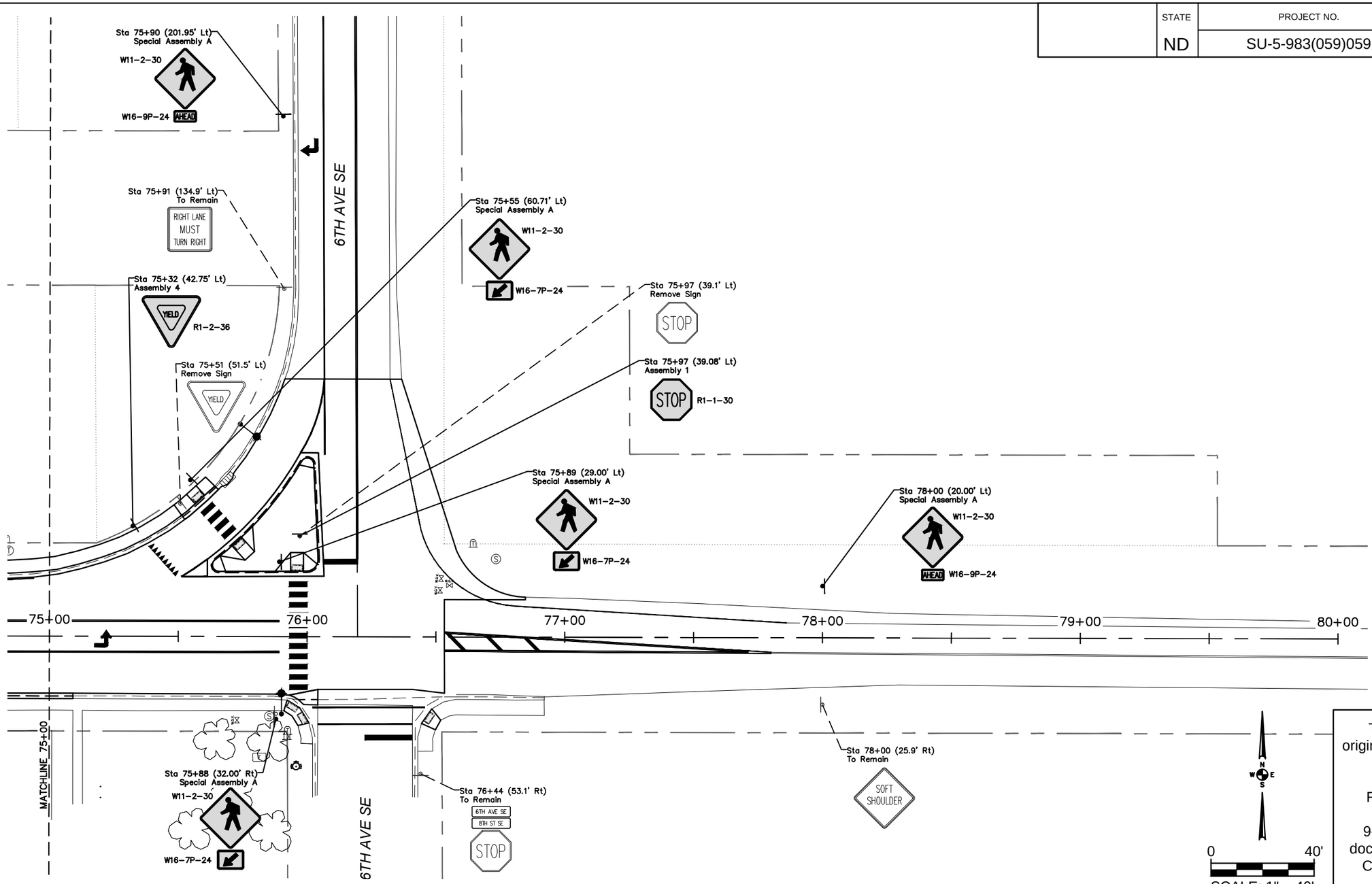
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	110	11



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2ND AVE SW TO 6TH AVE SE

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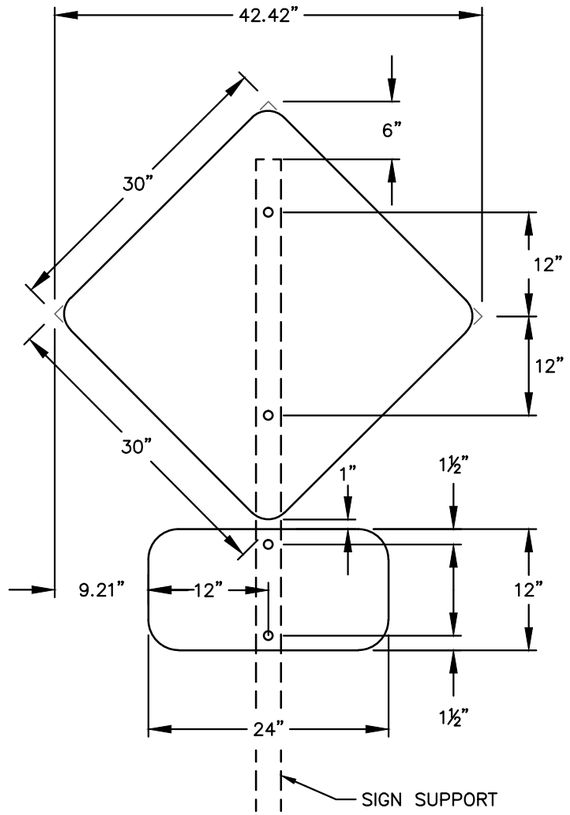
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	110	12



SPECIAL ASSEMBLY A (SA A)

SCALE: NOT TO SCALE

(PERFORATED STEEL TUBE)

Area: 8.3 SF

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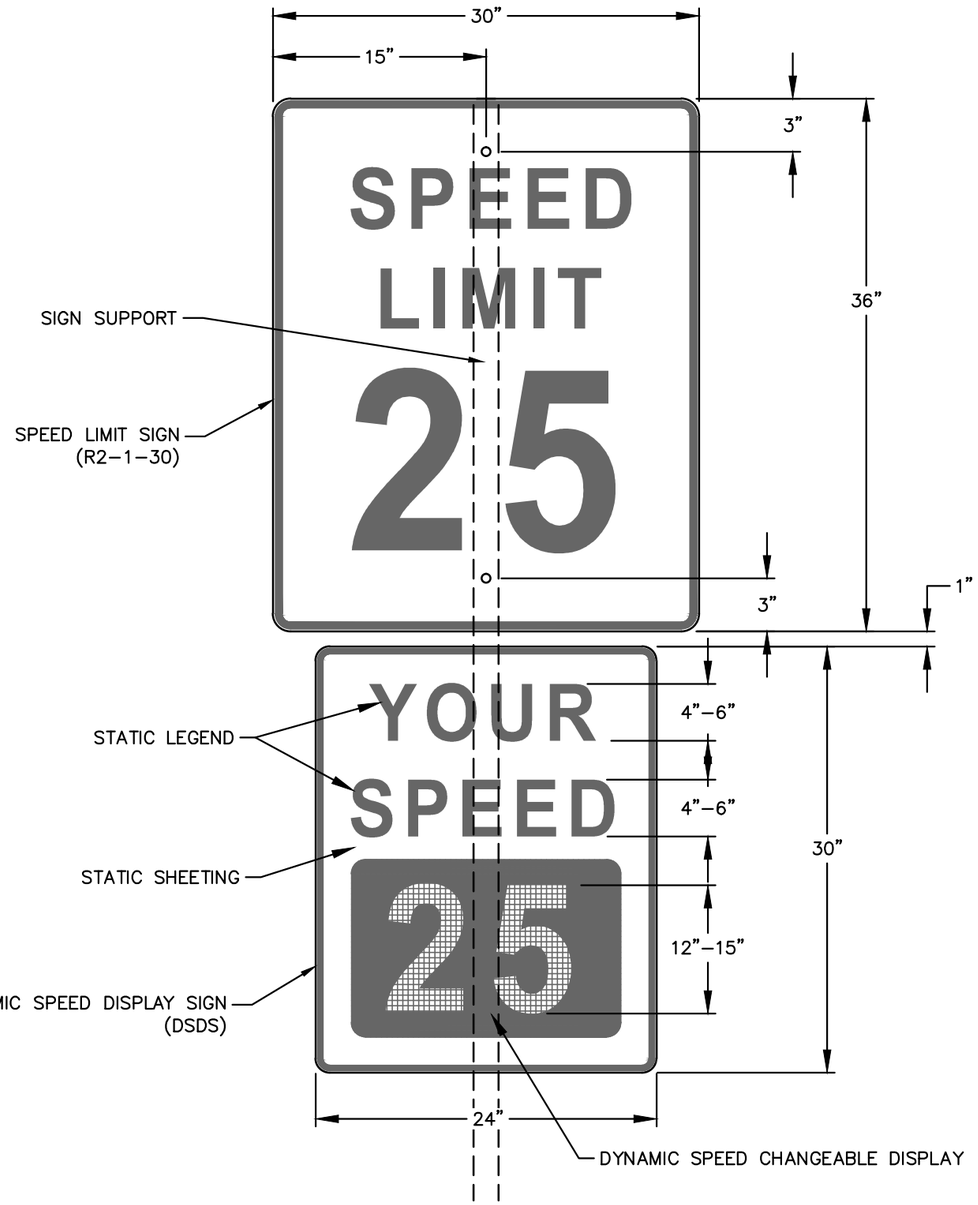
8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	110	13



SPECIAL ASSEMBLY B (SA B) - DYNAMIC SPEED DISPLAY SIGN

NOT TO SCALE
SIGN NUMBER: DSDS

DYNAMIC SPEED DISPLAY SIGN NOTES:

1. SIGN SHALL USE EITHER SERIES "E" OR "D" FONT.
2. STATIC SHEETING SHALL BE WHITE WITH BLACK LEGEND.
3. THE CHANGEABLE MESSAGE DISPLAY SHALL HAVE A BLACK BACKGROUND WITH AN AMBER (YELLOW) ILLUMINTAED LEGEND.
4. THE SIGN PUNCHING OF THE DYNAMIC SPEED DISPLAY SIGN SHALL BE AS RECOMMENDED BY THE MANUFACTURER
5. THE CHANGEABLE DISPLAY SHALL BE PROGRAMMED TO READ "XX" OR HAVE NO DISPLAY WHEN THE VEHICLE SPEED EXCEEDS 15 MPH OVER THE POSTED SPEED.
6. WHEN ACTIVATED, THE DYNAMIC SPEED DISPLAY SIGN SHALL GIVE DRIVERS IMMEDIATE FEEDBACK ON THEIR INDIVIDUAL DRIVING SPEED WHEN THE POSTED SPEED IS EXCEEDED. THE FLASH RATE SHALL BE BETWEEN 50 AND 60 CYCLES PER MINUTE WHEN THE POSTED SPEED IS EXCEEDED.
7. USE MATERIALS CAPABLE OF WITHSTANDING EXTREME TEMPERATURES AND THAT ARE VANDALISM RESISTANT. LENSES SHALL BE SHATTER PROOF PLEXIGLASS WITH WATER TIGHT SEALS.
8. ALL ELEMENTS OF THE DYNAMIC SPEED DISPLAY SIGN SHALL CONFORM TO GUIDANCE AND STANDARDS AS OUTLINED IN THE LATEST EDITION OF THE MUTCD ADOPTED BY THE NDDOT.
9. IDENTIFICATION AND CONTACT INFORMATION FOR THE MUNICIPALITY IN WHICH IT IS INSTALLED SHALL BE DISPLAYED ON THE CASE OF THE DYNAMIC SPEED DISPLAY SIGN.
10. THE SIGN SHALL BE SOLAR-POWERED.
11. THE COST OF FURNISHING AND INSTALLING THE DYNAMIC SPEED DISPLAY SIGN AND PROVIDING SOLAR POWER TO THIS SIGN SHALL BE PAID FOR IN THE BID ITERM FOR "DYNAMIC SPEED DISPLAY SIGN".

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8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

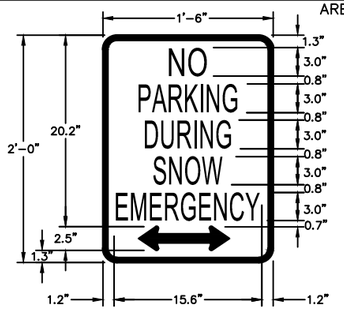
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	110	14

SIGN NUMBER	SS1
WIDTH x HEIGHT	1'–6" x 2'–0"
BORDER WIDTH	0.38" (inset 0.14")
CORNER RADIUS	1.5"
MOUNTING	Ground
BACKGROUND	TYPE: XI Reflective
	COLOR: White
LEGEND/BORDER	TYPE: XI Reflective
	COLOR: Red

SYMBOL	X	Y	WID	HT	ANGLE
AR_Type D	5.1	1.3	2.5	3.9	90
AR_Type D	9	1.3	2.5	3.9	270

STATIONS:
43+84, 32.00' Lt
55+80, 32.50' Rt
56+14, 31.00' Lt
59+35, 32.50' Lt
61+64, 29.70' Rt
62+00, 32.50' Lt
66+18, 30.00' Rt
67+00, 32.50' Lt
70+25, 30.00' Rt
71+00, 32.50' Lt

AREA: 3.0 Sq.Ft.



LETTER POSITION (X)																		LENGTH	SIZE	SERIES
N	O																	4.1	3	C 2000
7	9.3																			
P	A	R	K	I	N	G												11.3	3	B 2000
3.4	4.8	6.9	8.6	10.4	11.5	13.4														
D	U	R	I	N	G													9.8	3	B 2000
4.1	6	7.9	9.7	10.7	12.6															
S	N	O	W															7.3	3	B 2000
5.4	7.1	9	10.7																	
E	M	E	R	G	E	N	C	Y										15.6	3	B 2000
1.2	2.8	4.9	6.6	8.2	10.1	11.7	13.6	15.2												

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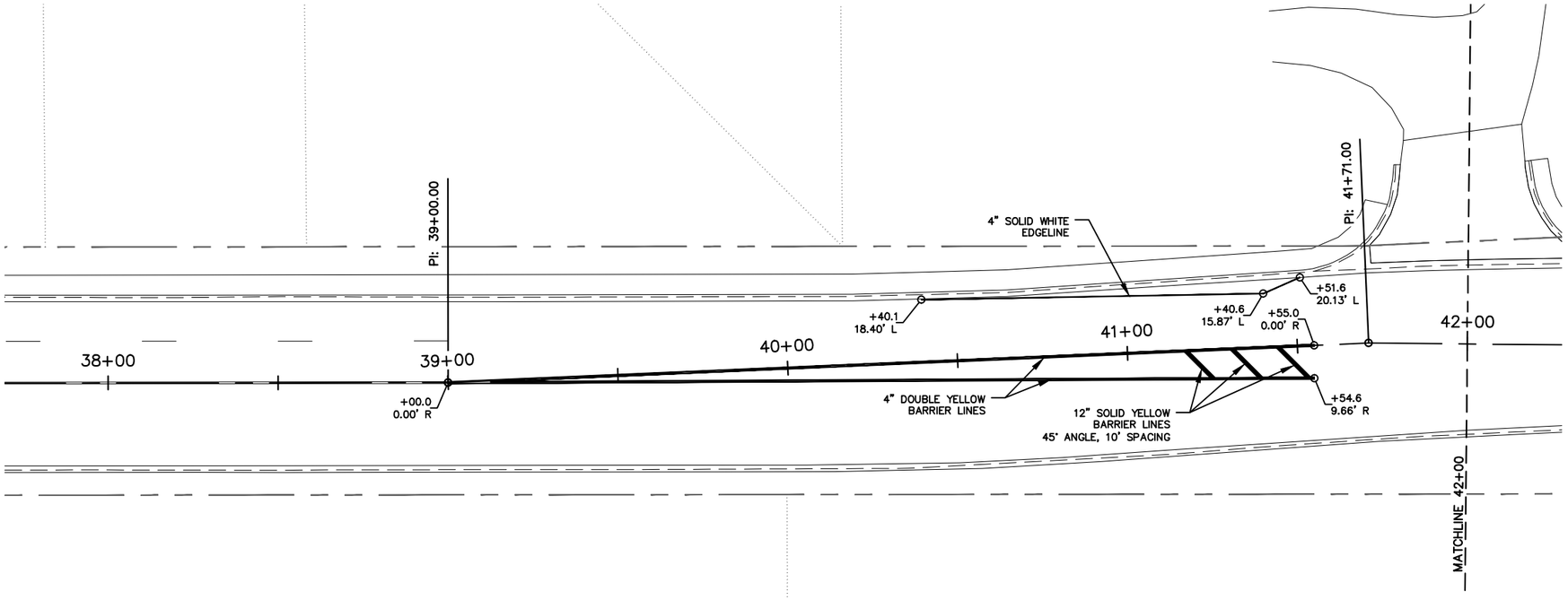
8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	120	1



PREFORMED PATTERNED PVMT MK 4IN LINE-GROOVED

Edge Lines - White

Sta 40+40 to 41+52 Lt	112 LF
	112 LF

Solid Lines - Double Yellow

Sta 39+00 to 41+55	1,020 LF
	1,020 LF

PREFORMED PATTERNED PVMT MK 12IN LINE-GROOVED

Solid Lines - Yellow

Sta 41+17 to 41+75 Rt	35 LF
	35 LF

LEGEND

OBLITERATE PAVEMENT MARKINGS

N W E S

0 40'

SCALE: 1" = 40'

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8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

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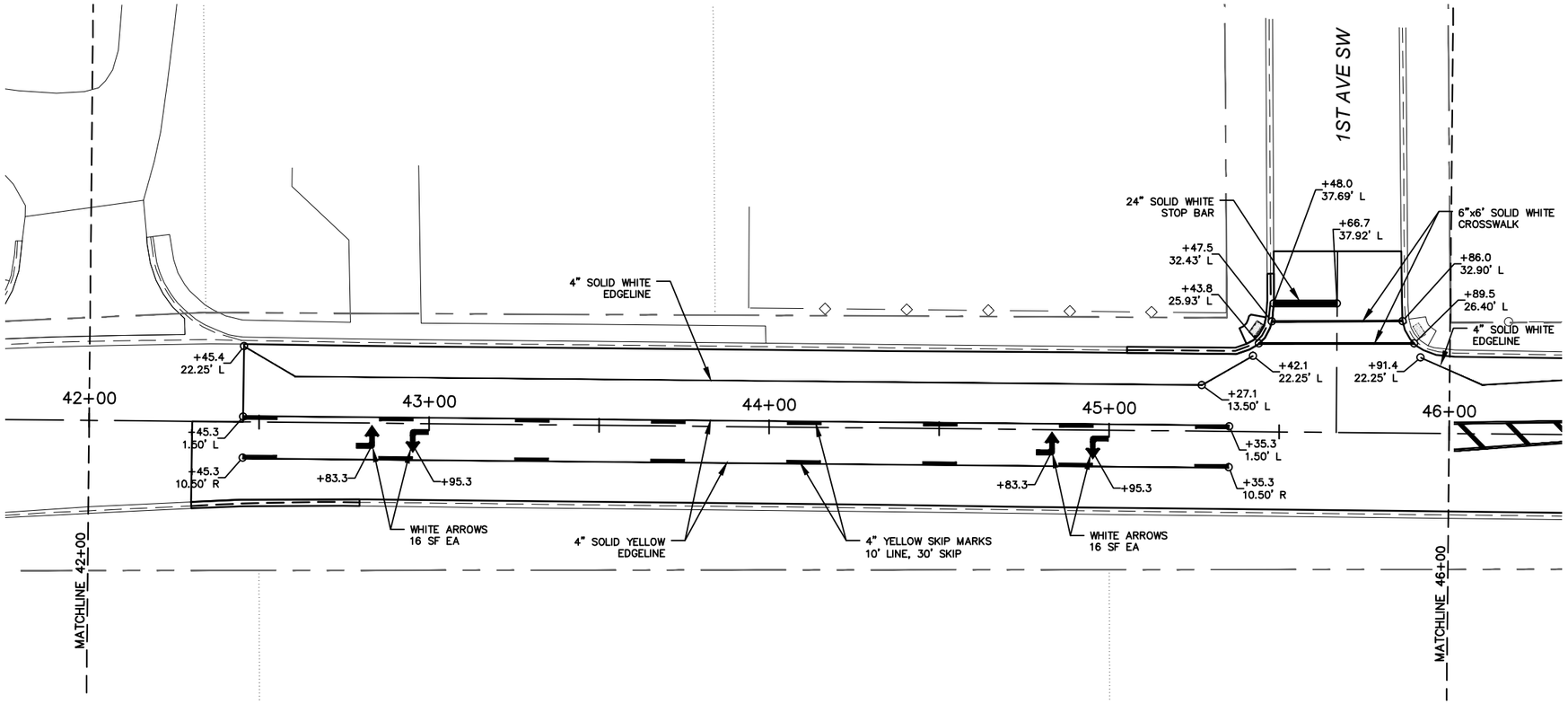
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	120	2



PREFORMED PATTERNED PVMT MK MESSAGE-GROOVED

Left Arrow - White	
Sta 43+83 Rt	16 SF
Sta 43+95 Rt	16 SF
Sta 44+83 Rt	16 SF
Sta 44+95 Rt	16 SF
	64 SF

PREFORMED PATTERNED PVMT MK 4IN LINE-GROOVED

Edge Lines - White	
Sta 42+45 to 45+42 Lt	301 LF
Sta 45+91 to 46+00 Lt	9 LF
	310 LF
Solid Lines - Yellow	
Sta 42+45 to 45+35 Lt	290 LF
Sta 42+45 to 45+35 Rt	290 LF
	580 LF
Skip Marks - Yellow	
Sta 42+45 to 45+35 Lt	80 LF
Sta 42+45 to 45+35 Rt	80 LF
	160 LF

PREFORMED PATTERNED PVMT MK 6IN LINE-GROOVED

White Crosswalk Line	
Sta 45+44 to 45+90 Lt	46 LF
Sta 45+48 to 45+86 Lt	38 LF
	84 LF

PREFORMED PATTERNED PVMT MK 24IN LINE-GROOVED

White Stop Bar	
Sta 45+48 to 45+67 Lt	19 LF
	19 LF

N W E S

0 40'

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8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

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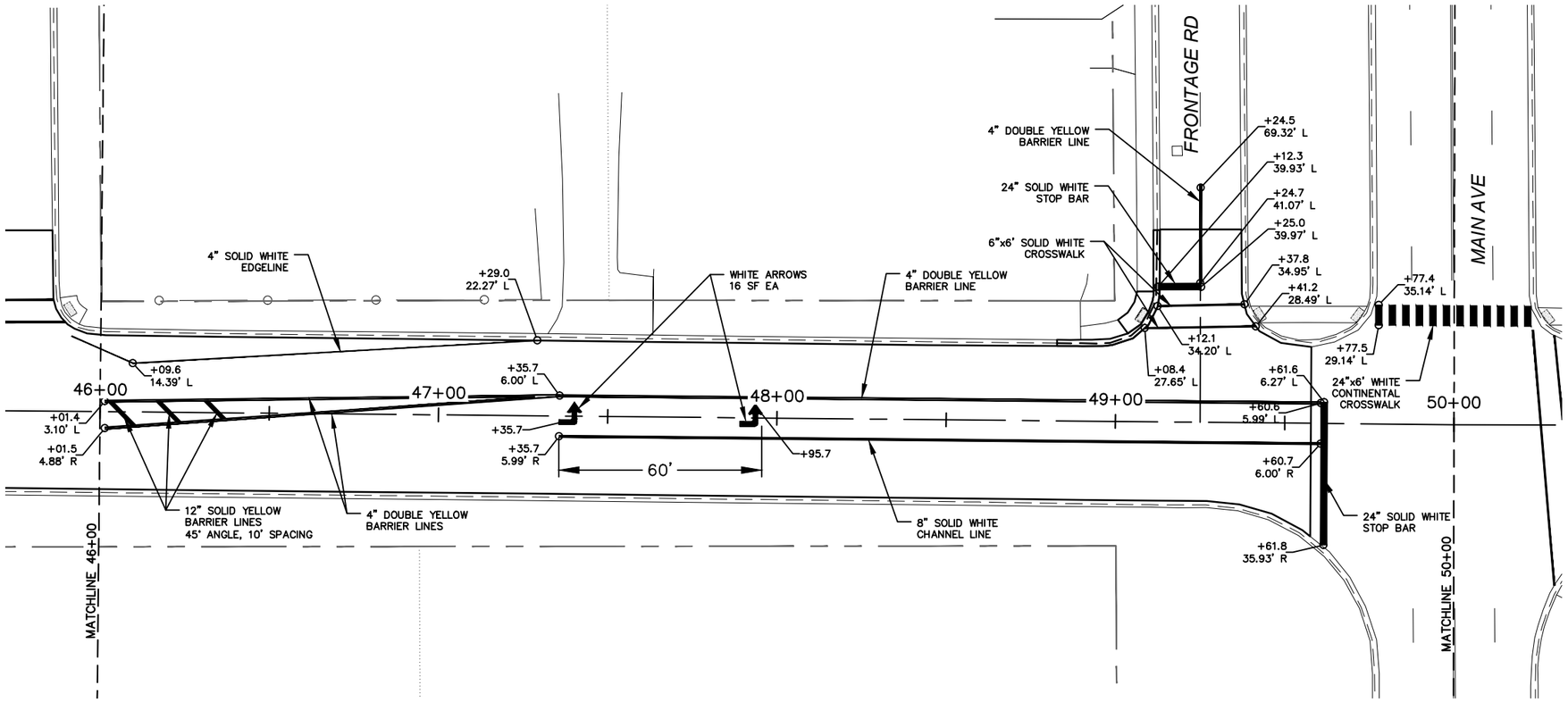
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	120	3



PREFORMED PATTERNED PVMT MK MESSAGE-GROOVED
Left Arrow - White

Sta 47+35 Rt	16 SF
Sta 47+95 Rt	16 SF
	32 SF

PREFORMED PATTERNED PVMT MK 4IN LINE-GROOVED
Edge Lines - White

Sta 46+00 to 47+29 Lt	130 LF
	130 LF

Solid Lines - Double Yellow

Sta 46+01 to 47+36	1,070 LF
Sta 47+36 to 49+62 Lt	450 LF
Sta 49+25 Lt	58 LF
	1,578 LF

PREFORMED PATTERNED PVMT MK 6IN LINE-GROOVED
White Crosswalk Line

Sta 49+08 to 49+41 Lt	33 LF
Sta 49+12 to 49+38 Lt	26 LF
	59 LF

PREFORMED PATTERNED PVMT MK 8IN LINE-GROOVED
White Channel Line

Sta 47+36 to 49+61 Rt	225 LF
	225 LF

PREFORMED PATTERNED PVMT MK 12IN LINE-GROOVED
Solid Lines - Yellow

Sta 46+01 to 46+37	26 LF
	26 LF

PREFORMED PATTERNED PVMT MK 24IN LINE-GROOVED
White Stop Bar

Sta 49+12 to 49+25 Lt	13 LF
Sta 49+62	42 LF
	55 LF

White Continental Crosswalk

Sta 49+78 to 50+00 Lt	36 LF
	36 LF

0 40'
SCALE: 1" = 40'

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2ND AVE SW TO 6TH AVE SE

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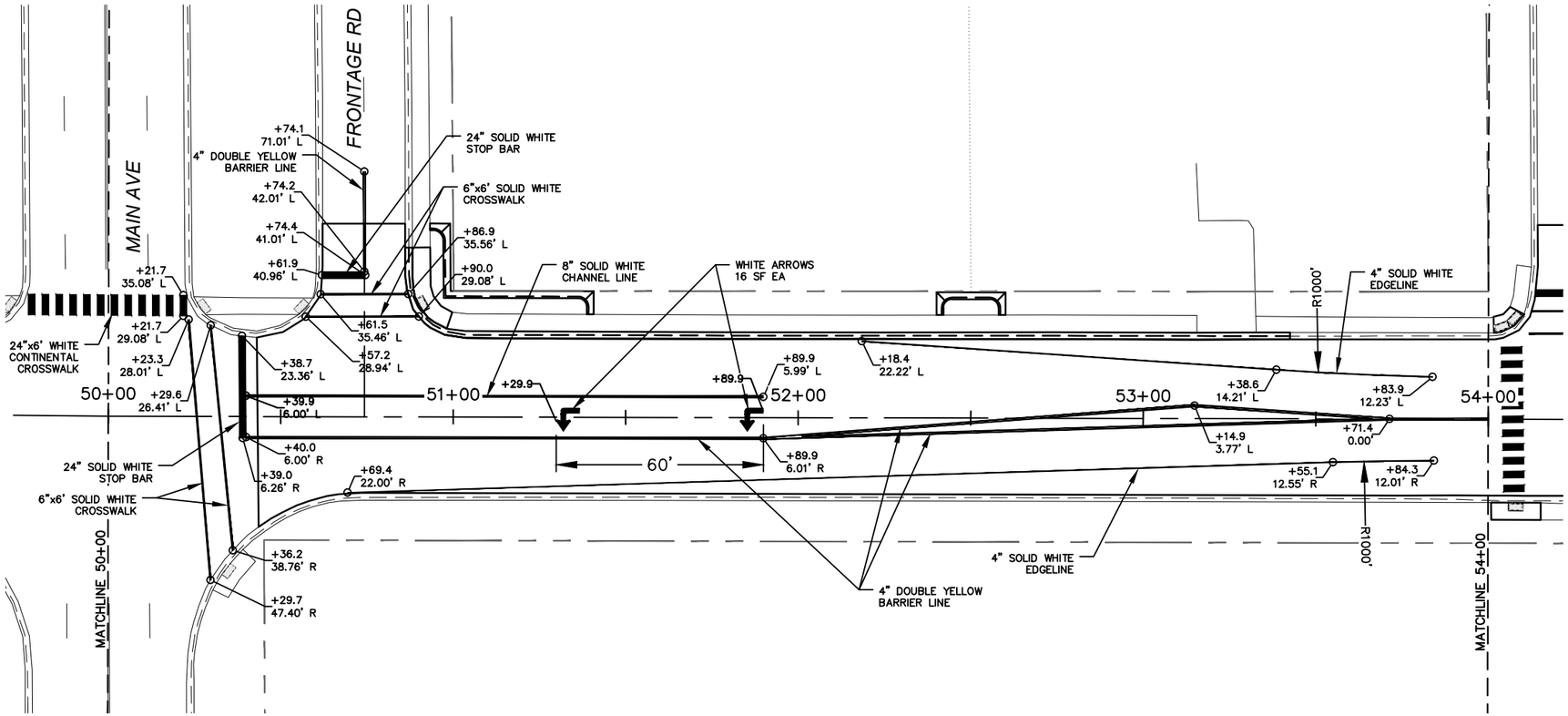
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	120	4



PREFORMED PATTERNED PVMT MK MESSAGE-GROOVED

Left Arrow - White	
Sta 51+30	16 SF
Sta 51+90	16 SF
	32 SF

PREFORMED PATTERNED PVMT MK 4IN LINE-GROOVED

Edge Lines - White	
Sta 52+18 to 53+84 Lt	166 LF
Sta 50+69 to 53+84 Rt	315 LF
	481 LF
Solid Lines - Double Yellow	
Sta 50+40 to 51+90	300 LF
Sta 51+90 to 53+71	726 LF
Sta 53+71 to 54+00	58 LF
Sta 50+74 Lt	58 LF
	1,142 LF

PREFORMED PATTERNED PVMT MK 6IN LINE-GROOVED

White Crosswalk Line	
Sta 50+23	76 LF
Sta 50+30	66 LF
Sta 50+57 to 50+90 Lt	33 LF
Sta 50+62 to 50+87 Lt	25 LF
	200 LF

PREFORMED PATTERNED PVMT MK 8IN LINE-GROOVED

White Channel Line	
Sta 50+40 to 51+90 Lt	150 LF
	150 LF

PREFORMED PATTERNED PVMT MK 24IN LINE-GROOVED

White Stop Bar	
Sta 50+39	30 LF
Sta 50+62 to 50+74 Lt	12 LF
	42 LF
White Continental Crosswalk	
Sta 50+00 to 50+22 Lt	36 LF
	36 LF

0 40'

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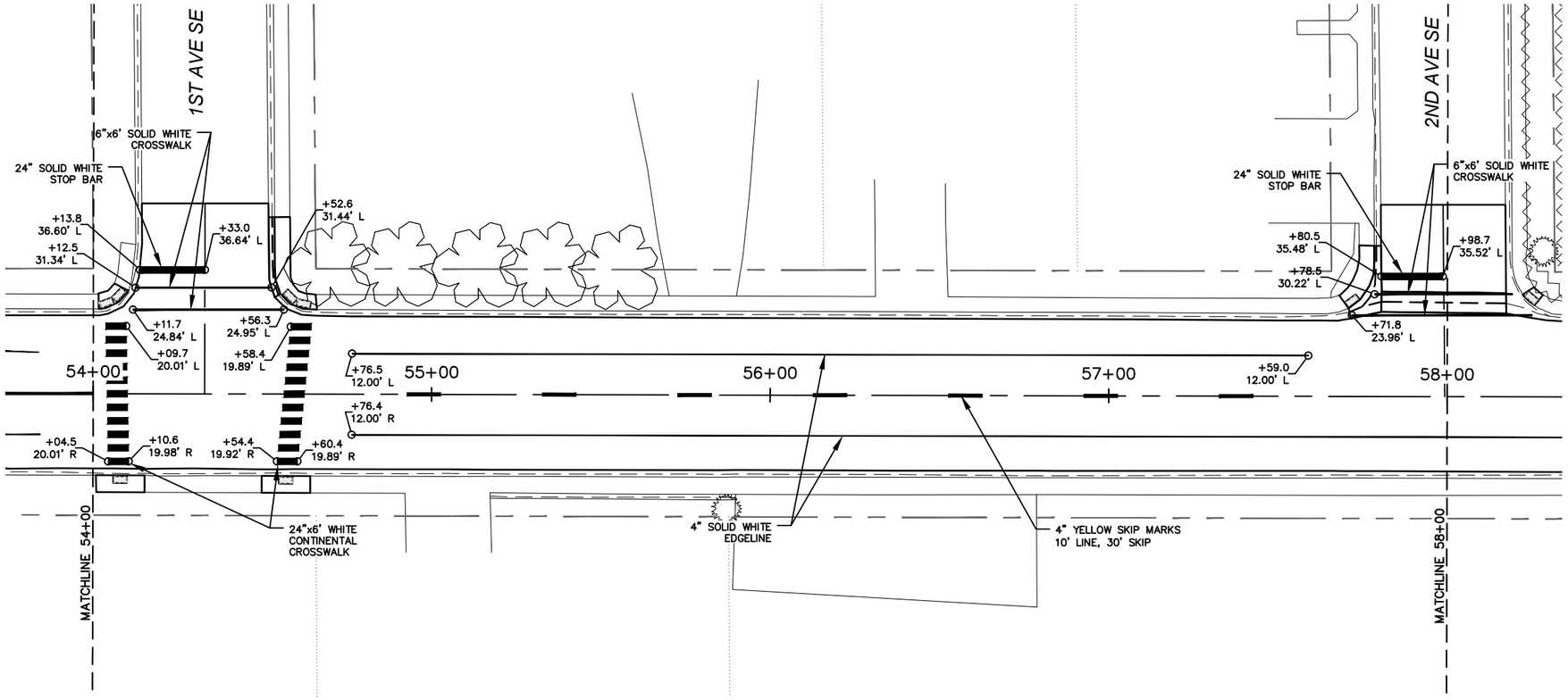
8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	120	5



PREFORMED PATTERNED PVMT MK 4IN LINE-GROOVED

Edge Lines - White

Sta 54+77 to 57+59 Lt	282 LF
Sta 54+77 to 58+00 Rt	323 LF
	605 LF

Skip Marks - Yellow

Sta 54+93 to 57+43	70 LF
	70 LF

PREFORMED PATTERNED PVMT MK 6IN LINE-GROOVED

White Crosswalk Line

Sta 54+12 to 54+56 Lt	44 LF
Sta 54+13 to 54+53 Lt	40 LF
Sta 57+72 to 58+00 Lt	28 LF
Sta 57+79 to 58+00 Lt	21 LF
	133 LF

PREFORMED PATTERNED PVMT MK 24IN LINE-GROOVED

White Stop Bar

Sta 54+14 to 54+33 Lt	19 LF
Sta 57+81 to 57+99 Lt	18 LF
	37 LF

White Continental Crosswalk

Sta 54+07	66 LF
Sta 54+57	66 LF
	132 LF

0 40'

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2ND AVE SW TO 6TH AVE SE

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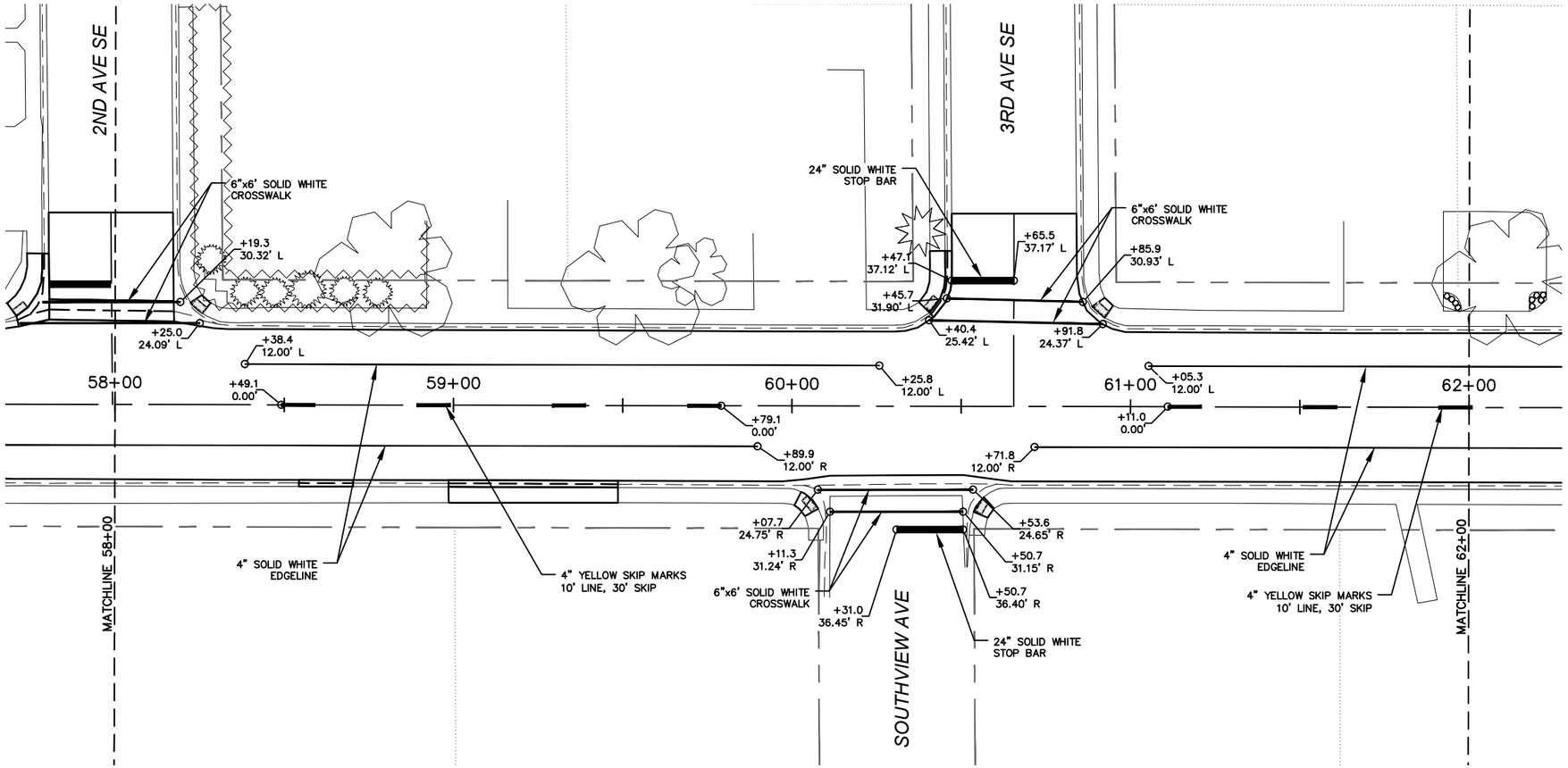
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	120	6



PREFORMED PATTERNED PVMT MK 4IN LINE-GROOVED

Edge Lines - White

Sta 58+00 to 59+90 Rt	190 LF
Sta 58+38 to 60+26 Lt	188 LF
Sta 60+72 to 62+00 Rt	128 LF
Sta 61+05 to 62+00 Lt	95 LF
	601 LF

Skip Marks - Yellow

Sta 58+49 to 59+79	40 LF
Sta 61+11 to 62+00	30 LF
	70 LF

PREFORMED PATTERNED PVMT MK 6IN LINE-GROOVED

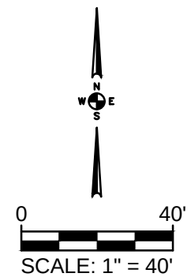
White Crosswalk Line

Sta 58+00 to 58+19 Lt	19 LF
Sta 58+00 to 58+25 Lt	25 LF
Sta 60+08 to 60+54 Rt	46 LF
Sta 60+11 to 60+51 Rt	40 LF
Sta 60+40 to 60+92 Lt	52 LF
Sta 60+47 to 60+86 Lt	39 LF
	221 LF

PREFORMED PATTERNED PVMT MK 24IN LINE-GROOVED

White Stop Bar

Sta 60+31 to 60+51 Rt	20 LF
Sta 60+47 to 60+66 Lt	18 LF
	38 LF



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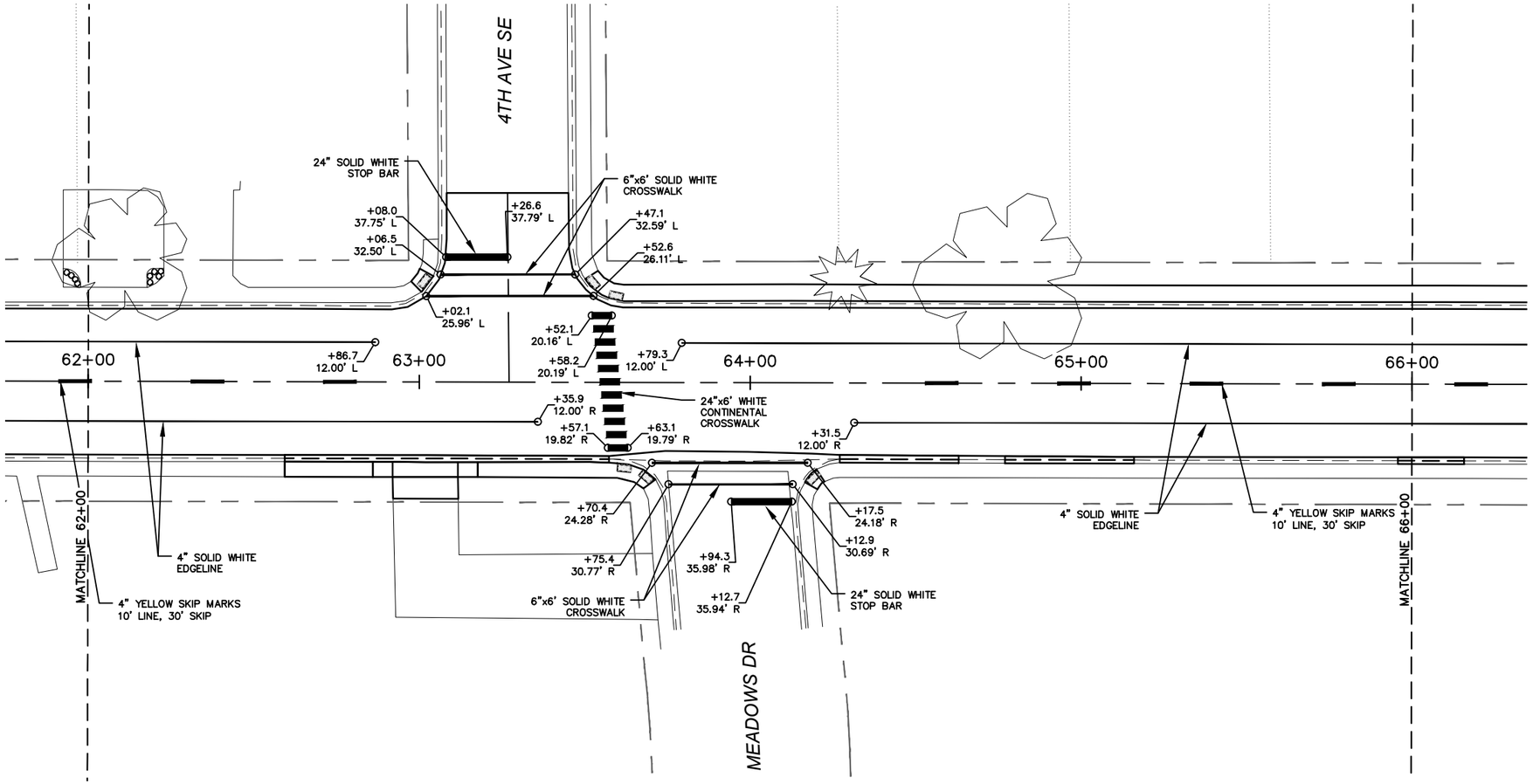
8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	120	7



PREFORMED PATTERNED PVMT MK 4IN LINE-GROOVED

Edge Lines - White

Sta 62+00 to 62+87 Lt	87 LF
Sta 62+00 to 63+36 Rt	136 LF
Sta 63+79 to 66+00 Lt	221 LF
Sta 64+32 to 66+00 Rt	168 LF
	612 LF

Skip Marks - Yellow

Sta 62+00 to 62+81	20 LF
Sta 64+53 to 66+00	40 LF
	60 LF

PREFORMED PATTERNED PVMT MK 6IN LINE-GROOVED

White Crosswalk Line

Sta 63+02 to 63+53 Lt	51 LF
Sta 63+08 to 63+47 Lt	39 LF
Sta 63+70 to 64+18 Rt	48 LF
Sta 63+75 to 64+13 Rt	38 LF
	176 LF

PREFORMED PATTERNED PVMT MK 24IN LINE-GROOVED

White Stop Bar

Sta 63+08 to 63+27 Lt	19 LF
Sta 63+94 to 64+13 Rt	19 LF
	38 LF

White Continental Crosswalk

Sta 63+52	66 LF
	66 LF

0 40'

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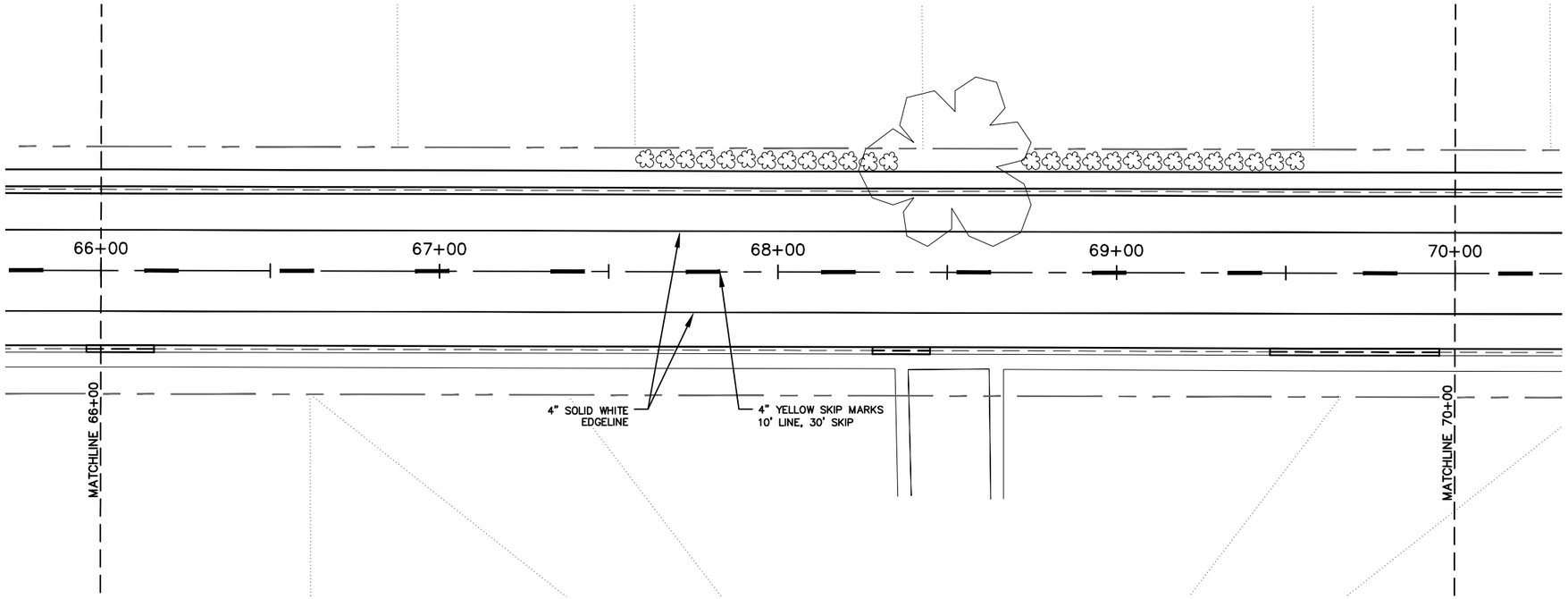
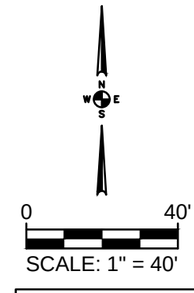
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	120	8



PREFORMED PATTERNED PVMT MK 4IN LINE-GROOVED

Edge Lines - White	
Sta 66+00 to 70+00 Lt	400 LF
Sta 66+00 to 70+00 Rt	400 LF
	800 LF
Skip Marks - Yellow	
Sta 66+00 to 70+00	100 LF
	100 LF



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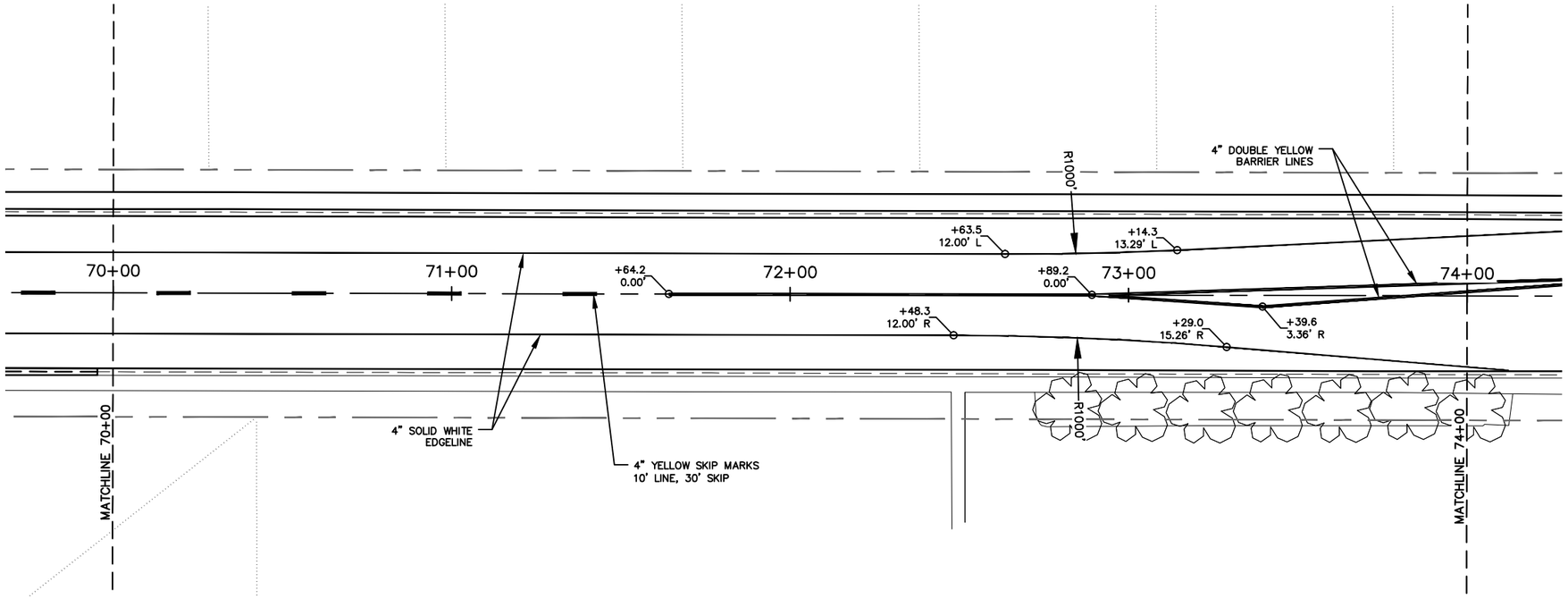
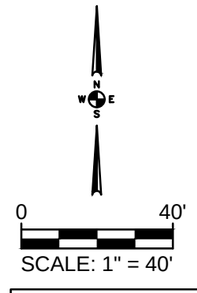
8TH STREET S RECONSTRUCTION
2ND AVE SW TO 6TH AVE SE

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	120	9



PREFORMED PATTERNED PVMT MK 4IN LINE-GROOVED

Edge Lines - White	
Sta 70+00 to 74+00 Lt	400 LF
Sta 70+00 to 74+00 Rt	400 LF
	800 LF
Skip Marks - Yellow	
Sta 70+00 to 71+64	40 LF
	40 LF
Solid Lines - Double Yellow	
Sta 71+64 to 72+89	250 LF
Sta 72+89 to 74+00	442 LF
	692 LF



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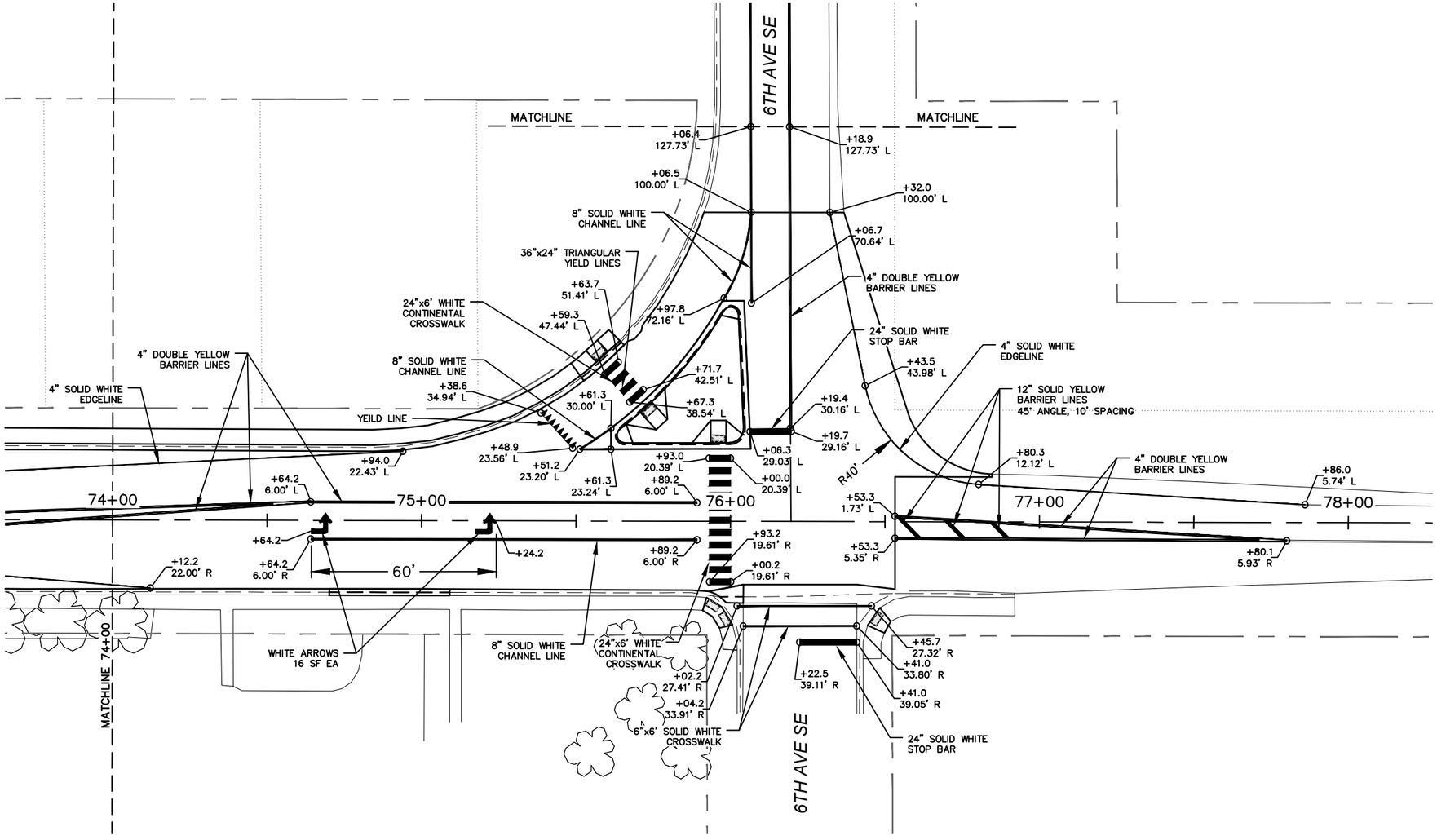
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	120	10



PREFORMED PATTERNED PVMT MK MESSAGE-GROOVED

Left Arrow - White	
Sta 74+64	16 SF
Sta 75+24	16 SF
	32 SF
Triangular Yield Lines	
Sta 75+39 to 75+49 Lt	11 SF
	11 SF

PREFORMED PATTERNED PVMT MK 4IN LINE-GROOVED

Edge Lines - White	
Sta 74+00 to 74+94 Lt	94 LF
Sta 74+00 to 74+12 Rt	12 LF
Sta 76+32 to 77+86 Lt	215 LF
	321 LF
Solid Lines - Double Yellow	
Sta 74+00 to 74+64	256 LF
Sta 74+64 to 75+89	250 LF
Sta 76+19 Lt	195 LF
Sta 76+53 to 77+80	508 LF
	1,209 LF

PREFORMED PATTERNED PVMT MK 6IN LINE-GROOVED

White Crosswalk Line	
Sta 76+02 to 76+46 Rt	44 LF
Sta 76+04 to 76+41 Rt	37 LF
	81 LF

PREFORMED PATTERNED PVMT MK 8IN LINE-GROOVED

Channel Line - White	
Sta 74+64 to 75+89 Rt	125 LF
Sta 75+50 to 75+61 Rt	22 LF
Sta 75+98 to 76+07 Lt	30 LF
Sta 76+07 Lt	57 LF
	234 LF

PREFORMED PATTERNED PVMT MK 12IN LINE-GROOVED

Solid Lines - Yellow	
Sta 76+53 to 76+90	24 LF
	24 LF

PREFORMED PATTERNED PVMT MK 24IN LINE-GROOVED

White Stop Bar	
Sta 76+06 to 76+20 Lt	13 LF
Sta 76+23 to 76+41 Rt	19 LF
	32 LF
White Continental Crosswalk	
Sta 75+59 to 75+72 LT	30 LF
Sta 75+93	66 LF
	96 LF

N
W E
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0 40'

SCALE: 1" = 40'

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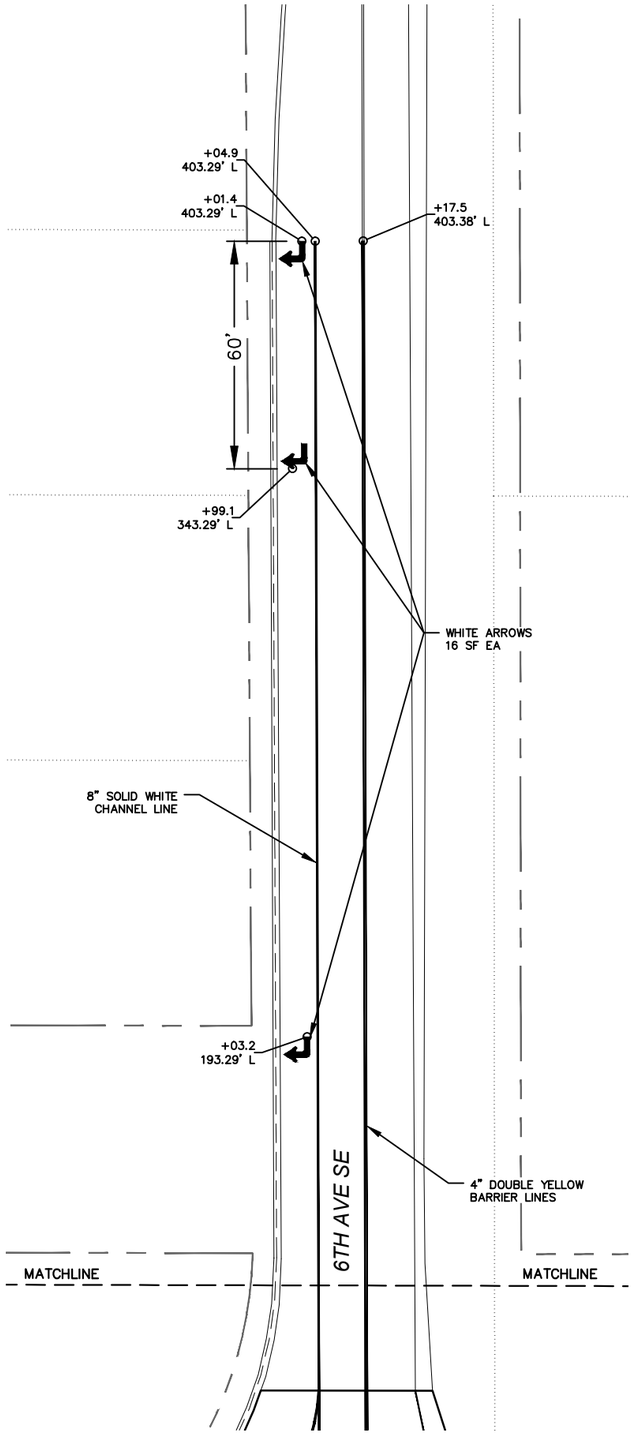
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SU-5-983(059)059	120	11



PREFORMED PATTERNED PVMT MK MESSAGE-GROOVED
Right Arrow - White

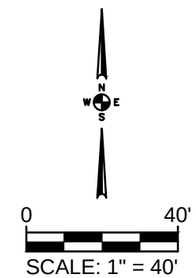
Sta 76+01	16 SF
Sta 76+02	16 SF
Sta 76+03	16 SF
	48 SF

PREFORMED PATTERNED PVMT MK 4IN LINE-GROOVED
Solid Lines - Double Yellow

Sta 76+18	552 LF
	552 LF

PREFORMED PATTERNED PVMT MK 8IN LINE-GROOVED
Channel Line - White

Sta 76+07	276 LF
	276 LF



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