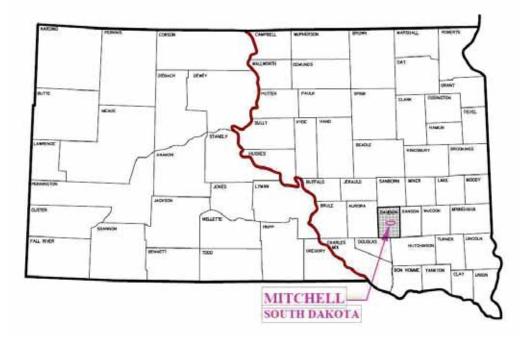
Revised: 8/16/2022 Revised: 9/29/2022

PROJECT STATE OF SOUTH DAKOTA P TAPU (27)



STATE OF SOUTH DAKOTA DEPARTMENT OF TRANSPORTATION PLANS FOR PROPOSED

PROJECT P TAPU (27) **DAVISON COUNTY**

SHARED USE PATH, GRADING, CURB AND GUTTER, CONCRETE SIDEWALK AND SIGNING PCN07RF

INDEX OF SHEETS

TITLE AND LAYOUT SHEET SHEET NO. 1 SHEET NO. 2 -14 SHEET NO. 15-16 SHEET NO. 17-19 **SHEET NO. 20-35** SHEET NO. 36 SHEET NO. 36-A SHEET NO. 37-52 SHEET NO. 53-64 SHEET NO. 65-68 SHEET NO. 69-80 SHEET NO. 81 SHEET NO. 82-92 SHEET NO. 92-105 **CROSS SECTIONS**

NOTES TYPICAL SECTIONS TRAFFIC CONTROL **EROSION AND SEDIMENT CONTROL** HORIZONTAL ALIGNMENT/CONTROL SIDEWALK PLAN AND PROFILE SHEETS CURB AND GUTTER PLAN SHEETS PERMANENT SIGNING CONSTRUCTION EASEMENTS SPECIAL DETAILS STANDARD PLATES

DESIGN DESIGNATION

4,348.35 FT LENGTH OF **EXCEPTIONS:** 00.00 FT 0.000 MILES NET LENGTH: 4,348.35 FT 0.824 MILES

STORM WATER PERMIT

MAJOR STREAM: DRY RUN CREEK MAJOR WATER BODY: NONE AREA DISTRUBED: 1.8 ACRES TOTAL PROJECT AREA: 2.5 ACRES APPROX. BEGIN LAT/LONG: 43.6950/98.0281 BEGIN (Norway Ave.)

00+03.00

BEGIN (Rowley St.) 50+00.00

> END (Rowley St.) 59+88.84



PROJECT LOCATION



END (Norway Ave.) 33+62.51



November 2, 2022

ESTIMATE OF QUANTITIES

LOTIMATE OF QUARTITIES				
BID ITEM NUMBER	ITEM	QUANTITY	UNIT	
009E0010	Mobilization	Lump Sum	LS	
100E0020	Clear and Grub Tree	12	Each	
100E0100	Clearing	Lump Sum	LS	
110E0300	Remove Concrete Curb and/or Gutter	574	Ft	
110E0500	Remove Pipe Culvert	121	Ft	
110E1010	Remove Asphalt Concrete Pavement	2,070.9	SqYd	
110E1100	Remove Concrete Pavement	26.1	SqYd	
110E1130	Remove Concrete Driveway Pavement	245.0	SqYd	
110E1140	Remove Concrete Sidewalk	426.0	SqYd	
110E1300	Remove Concrete Retaining Wall	140.0	Ft	
120E0010	Unclassified Excavation	2,441	CuYd	
120E0600	Contractor Furnished Borrow Excavation	616	CuYd	
230E0010	Placing Topsoil	723	CuYd	
260E1010	Base Course	1,663.0	Ton	
260E2010	Gravel Cushion	899.1	Ton	
260E3010	Gravel Surfacing	45.5	Ton	
320E1200	Asphalt Concrete Composite	676.7	Ton	
380E3020	6" PCC Driveway Pavement	98.0	SqYd	
380E3520	6" PCC Approach Pavement	157.0	SqYd	
380E4010	6" PCC Fillet Section	106.0	SqYd	
632E1320	2.0"x2.0" Perforated Tube Post	161.5	Ft	
632E3203	Flat Aluminum Sign, Nonremovable Copy High Intensity	40.0	SqFt	
632E3205	Flat Aluminum Sign, Nonremovable Copy Super/Very High Intensity	17.1	SqFt	
633E1260	High Build Waterborne Pavement Marking Paint, 24" White	264	Ft	
634E0110	Traffic Control Signs	441.3	SqFt	
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS	
634E0275	Type 3 Barricade	7	Each	
634E2000	Longitudinal Pedestrian Barricade	33	Ft	
634E2020	Temporary Curb Ramp	1	Each	
634E2050	Temporary Sidewalk	40	SqFt	
650E2100	Special Concrete Curb and Gutter	907	Ft	
650E3060	Type B6 Concrete Curb	152	Ft	
650E3200	Special Concrete Curb	135	Ft	
651E0040	4" Concrete Sidewalk	264	SqFt	
651E0060	6" Concrete Sidewalk	35,467	SqFt	
651E0160	6" Reinforced Concrete Sidewalk	48	SqFt	
651E7000	Type 1 Detectable Warnings	186	SqFt	
730E0206	Type D Permanent Seed Mixture	316	Lb	
731E0100	Fertilizing	1,534	Lb	
732E0250	Fiber Mulching	3,106	Lb	
734E0845	Sediment Control at Inlet with Frame and Grate	4	Each	
734E0847	Sediment Control at Type S Reinforced Concrete Drop Inlet	7	Ft	
900E0010	Refurbish Single Mailbox	3	Each	

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SPECIFICATIONS

South Dakota Standard Specifications for Roads and Bridges, 2015 Edition and Required Provisions, Supplemental Specifications and Special Provisions as included in the proposal.

ENVIRONMENTAL COMMITMENTS

The SDDOT is committed to protecting the environment and uses Environmental Commitments as a communication tool for the Engineer and Contractor to ensure that attention is given to avoid, minimize, and/or mitigate an environmental impact. Environmental commitments to various agencies and the public have been made to secure approval of this project. An agency with permitting authority can delay a project if identified environmental impacts have not been adequately addressed. Unless otherwise designated, the Contractor's primary contact regarding matters associated with these commitments will be the Project Engineer. During construction, the Project Engineer will verify that the Contractor has met Environmental Commitment requirements. These environmental commitments are not subject to change without prior written approval from the SDDOT Environmental Office.

Additional guidance on SDDOT's Environmental Commitments can be accessed through the Environmental Procedures Manual found at: https://dot.sd.gov/media/documents/EnvironmentalProceduresManual.pdf >

For questions regarding change orders in the field that may have an effect on an Environmental Commitment, the Project Engineer will contact the Environmental Engineer at 605-773-3180 or 605-773-4336 to determine whether an environmental analysis and/or resource agency coordination is necessary.

Once construction is complete, the Project Engineer will review all environmental commitments for the project and document their completion.

COMMITMENT B: FEDERALLY THREATENED, ENDANGERED, AND PROTECTED SPECIES

COMMITMENT B5: NORTHERN LONG-EARED BAT

This project is within the range of suitable habitat for the Northern Long-Eared Bat (NLEB) and project work will avoid conflicts with NLEB roosting habitat.

Action Taken/Required:

Tree removal will occur between November 1st and March 31st.

The following avoidance, minimization, and mitigation measures are required:

General AMM 1 - All operators, employees and contractors working in areas of known or presumed bat habitat are aware of all FHWA/FRA/FTA environmental commitments, including applicable Avoidance and Minimization Measures.

COMMITMENT C: WATER SOURCE

The Contractor will not withdraw water with equipment previously used outside the State of South Dakota or previously used in aquatic invasive species (AIS) positive waters within South Dakota without prior approval from the SDDOT Environmental Office. To prevent and control the introduction and spread of invasive species into the project vicinity, all equipment will be power washed with hot water (≥140 °F) and completely dried for a minimum of 7 days prior to subsequent use. South Dakota administrative rule 41:10:04:02 forbids the possession and transport of AIS; therefore, all attached dirt, mud, debris and vegetation must be removed and all compartments and tanks capable of holding standing water must be drained. This includes, but is not limited to, all equipment, pumps, lines, hoses and holding tanks.

Action Taken/Required:

The Contractor will obtain the necessary permits from the regulatory agencies such as the South Dakota Department of Agriculture and Natural Resources (DANR) and the United States Army Corps of Engineers (USACE) prior to water extraction activities.

Additional information and mapping of water sources impacted by Aquatic Invasive Species in South Dakota can be accessed at: < http://sdleastwanted.com/maps/default.aspx >

< South Dakota Administrative Rule 41:10:04 Aquatic Invasive Species: https://sdlegislature.gov/rules/DisplayRule.aspx?Rule=41:10:04 >

COMMITMENT D: WATER QUALITY STANDARDS

COMMITMENT D1: SURFACE WATER QUALITY

This project may be in the vicinity of multiple streams and wetlands. These waters are considered waters of the state and are protected under Administrative Rules of South Dakota (ARSD) Chapter 74:51. Special construction measures may have to be taken to ensure that this water body is not impacted.

Action Taken/Required:

The Contractor is advised that the South Dakota Surface Water Quality Standards, administered by the South Dakota Department of Agriculture and Natural Resources (DANR), apply to this project. Special construction measures will be taken to ensure the above standard(s) of the surface waters are maintained and protected.

COMMITMENT D2: SURFACE WATER DISCHARGE

The DANR General Permit for Temporary Discharge is required for temporary dewatering and discharges to waters of the state. The effluent limit for total suspended solids will be 90 mg/L 30-day average. The effluent limit applies to discharges to all waters of the state except discharges to waters classified as cold water permanent fish life propagation waters according to the ARSD 74:51:01:45. For discharges to waters of the state classified as cold water permanent fish life propagation waters, the effluent limit for total suspended solids will be 53 mg/L daily maximum.

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The permittee has the option of completing effluent testing or implementing a pollution prevention plan for compliance with this permit. If the permittee develops a pollution prevention plan instead of total suspended solids sampling, the plan must be developed and implemented prior to discontinuing total suspended solids sampling. Refer to Section 4.0 of the permit. If any pollutants are suspected of being discharged, a sample must be taken for those parameters listed in Section 3.4 of the permit.

Refer to Commitment D1: Surface Water Quality for stream classification.

Action Taken/Required:

If construction dewatering is required and this project is currently covered under a General Permit for Stormwater Discharges Associated with Construction Activities, the Contractor will need to submit the dewatering information to the SDDANR using the following form:

< http://denr.sd.gov/des/sw/eforms/AddTempInfoFillable.pdf >

The Contractor will provide a copy of the approved permit or the submitted dewatering information to the Project Engineer prior to proceeding with any dewatering activities. The approved permit or submitted dewatering information must be kept on-site and as part of the project records.

Effluent monitoring, as a result of dewatering activities, will be summarized for each month and recorded on a separate Discharge Monitoring Report (DMR) and submitted to DANR monthly. Additional information can be found at:

< http://denr.sd.gov/des/sw/WhatisaDMR.aspx >



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COMMITMENT E: STORM WATER

Construction activities constitute 1 acre or more of earth disturbance and/or work in a waterway.

Action Taken/Required:

The DANR General Permit for Stormwater Discharges Associated with Construction Activities is required for construction activity disturbing one or more acres of earth and work in a waterway. The SDDOT is the owner of this permit and will submit the NOI to DANR 15 days prior to project start in order to obtain coverage under the General Permit. Work can begin once the DANR letter of approval is received.

The Contractor must adhere to the "Special Provision Regarding Storm Water Discharges to Waters of the State."

The Contractor will complete the DANR Contractor Certification Form prior to the pre-construction meeting. The form certifies under penalty of law that the Contractor understands and will comply with the terms and conditions of the permit for this project. Work may not begin on this project until this form is signed and submitted to DANR.

The form can be found at:

< https://denr.sd.gov/des/sw/eforms/CGPAppendixCCA2018Fillable.pdf >

The Contractor is advised that permit coverage may also be required for offsite activities, such as borrow and staging areas, which are the responsibility of the Contractor.

Storm Water Pollution Prevention Plan

The Storm Water Pollution Prevention Plan (SWPPP) will be developed prior to the submittal of the NOI and will be implemented for all construction activities for compliance with the permit. The SWPPP must be kept on-site and updated as site conditions change. Erosion control measures and best management practices will be implemented in accordance with the SWPPP.

The DOT 298 Form will be used for site inspections and to document changes to the SWPPP. A copy of the completed inspection form will be filed with the SWPPP documents and retained for a minimum of three years.

The inspection will include disturbed areas of the construction site that have not been finally stabilized, areas used for storage materials, structural control measures, and locations where vehicles enter or exit the site. These areas will be inspected for evidence of, or the potential for, pollutants entering the drainage system. Erosion and sediment control measures identified in the SWPPP will be observed to ensure that they are operating correctly, and sediment is not tracked off the site.

Information on storm water permits and SWPPPs are available on the following websites:

SDDOT: < https://dot.sd.gov/doing-business/environmental/stormwater >

DANR: < http://denr.sd.gov/des/sw/stormwater.aspx >

EPA: < https://www.epa.gov/npdes >

COMMITMENT H: WASTE DISPOSAL SITE

The Contractor will furnish a site(s) for the disposal of construction and/or demolition debris generated by this project.

Action Taken/Required:

Construction and/or demolition debris may not be disposed of within the Public ROW.

The waste disposal site(s) will be managed and reclaimed in accordance with the following from the General Permit for Construction/Demolition Debris Disposal Under the South Dakota Waste Management Program issued by the Department of Agriculture and Natural Resources.

The waste disposal site(s) will not be located in a wetland, within 200 feet of surface water, or in an area that adversely affects wildlife, recreation, aesthetic value of an area, or any threatened or endangered species, as approved by the Environmental Office and the Project Engineer.

If the waste disposal site(s) is located such that it is within view of any ROW, the following additional requirements will apply:

- 1. Construction and/or demolition debris consisting of concrete, asphalt concrete, or other similar materials will be buried in a trench separate from wood debris. The final cover over the construction and/or demolition debris will consist of a minimum of 1 foot of soil capable of supporting vegetation. Waste disposal sites provided outside of the Public ROW will be seeded in accordance with Natural Resources Conservation Service recommendations. The seeding recommendations may be obtained through the appropriate County NRCS Office. The Contractor will control the access to waste disposal sites not within the Public ROW with fences, gates, and placement of a sign or signs at the entrance to the site stating, "No Dumping Allowed".
- 2. Concrete and asphalt concrete debris may be stockpiled within view of the ROW for a period not to exceed the duration of the project. Prior to project completion, the waste will be removed from view of the ROW or buried, and the waste disposal site reclaimed as noted above.

The above requirements will not apply to waste disposal sites that are covered by an individual solid waste permit as specified in SDCL 34A-6-58, SDCL 34A-6-1.13, and ARSD 74:27:10:06.

Failure to comply with the requirements stated above may result in civil penalties in accordance with South Dakota Solid Waste Law, SDCL 34A-6-1.31.

ated above may result in civil a Solid Waste Law, SDCL 34A-6-

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All costs associated with furnishing waste disposal site(s), disposing of waste, maintaining control of access (fence, gates, and signs), and reclamation of the waste disposal site(s) will be incidental to the various contract items.

This City of Mitchell will accept asphalt and concrete debris free of charge at there stockpile site located southwest of the 8th Avenue and Ohlman Street intersection. Please contact Kevin Roth the Street Superintendent at (605)995-8465 for more information.

COMMITMENT I: HISTORIC PRESERVATION OFFICE CLEARANCES

The SDDOT has obtained concurrence with the State Historic Preservation Office (SHPO or THPO) for all work included within the project limits and all department designated sources and designated option material sources, stockpile sites, storage areas, and waste sites provided within the plans.

Action Taken/Required:

All earth disturbing activities not designated within the plans require a cultural resource review prior to scheduling the pre-construction meeting. This work includes but is not limited to: Contractor furnished material sources, material processing sites, stockpile sites, storage areas, plant sites, and waste areas.

The Contractor will arrange and pay for a record search and when necessary, a cultural resource survey. The Contractor has the option to contact the state Archaeological Research Center (ARC) at 605-394-1936 or another qualified archaeologist, to obtain either a records search or a cultural resources survey. A record search might be sufficient for review if the site was previously surveyed; however, a cultural resources survey may need to be conducted by a qualified archaeologist.

The Contractor will provide ARC with the following: a topographical map or aerial view in which the site is clearly outlined, site dimensions, project number, and PCN. If applicable, provide evidence that the site has been previously disturbed by farming, mining, or construction activities with a landowner statement that artifacts have not been found on the site.

The Contractor will submit the cultural resources survey report to SDDOT Environmental Office, 700 East Broadway Avenue, Pierre, SD 57501-2586. SDDOT will submit the information to the appropriate SHPO/THPO. Allow **30 Days** from the date this information is submitted to the Environmental Engineer for SHPO/THPO review.

In the event of an inadvertent discovery of human remains, funerary objects, or if evidence of cultural resources is identified during project construction activities, then such activities within 100 feet of the inadvertent discovery will Immediately cease and the Project Engineer will be immediately notified. The Project Engineer will contact the SDDOT Environmental Office, who will contact the appropriate SHPO/THPO within 48 hours of the discovery to determine an appropriate course of action.

SHPO/THPO review does not relieve the Contractor of the responsibility for obtaining any additional permits and clearances for Contractor furnished material sources, material processing sites, stockpile sites, storage areas, plant sites, and waste areas that affect wetlands, threatened and endangered species, or waterways. The Contractor will not utilize a site known or suspected of having contaminated soil or water. The Contractor will provide the required permits and clearances to the Project Engineer at the preconstruction meeting.

GRADING OPERATIONS

No direct payment will be made for grading operations. Preparing subgrade and gravel base course to the required elevations will be incidental to the project.

No direct payment will be made for scarifying and recompacting the subgrade and will be considered incidental to the project. The Contractor will scarify and recompact to the depths identified in the plans.

Water for compaction of subgrade and embankments will be provided by the City of Mitchell at no cost to the Contractor. The Contractor will be responsible to load, haul, and place the water where needed on the project. The Contractor will be required to obtain a water meter from the City of Mitchell to track the water use. No additional payment will be made to the Contractor for watering subgrade and embankments and will be considered incidental to the project.

CLEARING

The Contractor will contact the Engineer prior to completing clearing activities to determine the limits of clearing. Damaged or destroyed trees, shrubs or vegetation will be replaced at no cost to the project.

CLEAR AND GRUB TREE

The contract unit price per each "Clear and Grub Tree" will be full compensation for all removal and disposal of trees. The trees identified to be removed are identified in the below table.

TABLE OF CLEAR AND GRUB TREET

		Quantity	
Station	L/R	(Each)	
8+12	R	1	.mullion.
9+68	R	1	WILL OFF COL
9+71	L	1	PROPESSION
10+28	R	1	PROFESSION AND PREGNO PREGNO
12+06	R	1	PROFESSION AND THE REGNO OF THE PROPERTY OF TH
12+97	L	1	10000 ==
14+52	L	1	
14+75	L	1	
15+18	L	1	
16+17	L	1	
17+16	L	1	OVIH DAKO"
24+43	L	1	1/4 0/11/22
	_		- 8/16/22
	Total:	12	8/16/22 MILLIAN STATE OF THE ST

UTILITIES

The Contractor will be aware that the existing utilities shown in the plans were surveyed prior to the design of this project and might have been relocated or replaced by a new utility facility prior to construction of this project, might be relocated or replaced by a new utility facility during the construction of this project, or might not require adjustment and may remain in its current location. The Contractor will contact each utility owner and confirm the status of all existing and new utility facilities. The utility contact information is provided elsewhere in the plans or bidding documents.

Utility Company	CenturyLink
Address	125 S. Dakota Ave.
City, State, Zip	Sioux Falls, SD 57104
Contact Name	Chris Adamson
Contact Number	605-977-2835

Utility Company	Santel Communications
Address	PO Box 67
City, State, Zip	Woonsocket, SD 57385
Contact Name	Scott Beekman
Contact Number	605-999-8593

Utility Company	SDN Communications
Address	2900 W 10 th St.
City, State, Zip	Sioux Falls, SD
Contact Name	Lawrence Escobin
Contact Number	605-978-1094

Utility Company	Midco
Address	1305 N Terry Ave.
City, State, Zip	Sioux Falls, SD 605-274-8545
Contact Name	Preston Ragle
Contact Number	605-274-8545
E-mail	Preston.Ragle@Midco.com

Utility Company	Northwestern Energy
Address	300 S Burr
City, State, Zip	Mitchell, SD 57301
Contact Name	Kyle Hohn
Contact Number	605-995-4409

Utility Company	Mitchell Telecom
Address	1801 N. Main
City, State, Zip	Mitchell, SD 57301
Contact Name	Jon Mueller
Contact Number	605-990-1000 / 605-999-7519

Utility Company	Northern Natural Gas
Address	1120 Centre Point Dr. STE 400
City, State, Zip	Mendota Heights, MN
Contact Name	Mike Garry
Contact Number	605-743-2541

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Utility Company	Davison Rural Water System
Address	PO Box 668
City, State, Zip	Mitchell, SD 57301
Contact Name	Daniel Schroeder
Contact Number	605-996-2266

TABLE OF UNCLASSIFIED EXCAVATION

Unclassified Excavation

		(CuYd)
General Excavation		798
Roadway Excavation		920
Topsoil		723
	Total	2,441

Contractor Furnished

	(CuYd)
Embankment	1,088
Imported Materials From Excavation	-798
Shrinkage (30%)	326
Total Embankment	616

PROCEDURES FOR DETERMINING UNCLASSIFIED EXCAVATION QUANTITY

The plans quantity for Unclassified Excavation will be the basis of payment unless changes are directed by the Engineer.

The Topsoil quantity in the Table of Unclassified Excavation is an estimate. The quantity of Topsoil from the cuts will be paid for twice as Unclassified Excavation, as it will be in both the Excavation and Topsoil quantities. This will be full compensation for Excavation, which includes necessary undercutting to provide space for placement of topsoil.

CONTRACTOR FURNISHED BORROW EXCAVATION

The Contractor will provide a suitable site for Contractor furnished borrow excavation material. The Contractor is responsible for obtaining all required permits and clearances for the borrow site. The borrow material will be approved by the Engineer. The plans quantity for "Contractor Furnished Borrow Excavation" as shown in the Estimate of Quantities will be the basis of payment for this item.

Restoration of the Contractor furnished borrow excavation site will be the responsibility of the Contractor.

REMOVAL OF ASPHALT AND CONCRETE

The City of Mitchell will take asphalt and concrete clean of debris and steel at their street shop located southwest of the 8th Avenue and Ohlman Street (Highway 37 Bypass).

TABLE OF ASPHALT CONCRETE PAVEMENT REMOVAL

				Quantity
Station	to	Station	L/R	(SqYd)
0+00		0+17	L/R	3.5
2+11		2+29	L	19.1
3+15		3+34	L/R	9.8
3+69		3+80	L/R	9.2
6+93		7+11	L/R	9.0
7+46		7+62	L/R	8.9
8+60		8+72	L/R	49.2
9+83		10+11	L/R	54.1
13+13		13+42	L/R	58.1
15+44		15+72	L/R	52.3
17+98		18+16	L/R	9.7
18+49		18+67	L/R	11.8
20+11		20+89	L/R	141.0
21+85		22+14	L	21.4
23+62		23+88	L	19.3
25+26		25+49	L/R	36.7
31+10		31+77	L/R	116.3
50+06		50+32	L/R	15.8
51+39		53+00	R	324.2
53+00		56+00	R	574.5
56+00		59+00	R	298.3
59+00		59+89	R _	189.9

Total: 2,070.9



TABLE OF CONCRETE CURB AND/OR GUTTER REMOVAL

				Quantity
Station	to	Station	L/R	(Ft)
0+42		0+72	R	30
0+96		1+70	R	75
2+00		2+41	R	42
3+16		3+32	L/R	30
3+71		3+80	L/R	25
6+93		7+10	L/R	27
7+46		7+61	L/R	25
18+00		18+13	L/R	20
18+52		18+65	L/R	21
20+11			L/R	18
20+34		20+67	L	55
21+84			L	7
22+13			L	7
23+62			L	7
23+87			L	7
25+25			L/R	6
25+46			L/R	21
26+98			L/R	22
27+20			L/R	4
31+12		31+22	L/R	32
31+47		31+67	L/R	89
50+07		50+31	L/R	34
			Total:	574

TABLE OF CONCRETE DRIVEWAY PAVEMENT REMOVAL

				Quantity
Station	to	Station	L/R	(SqYd)
0+15		1+17	R	31.5
1+06		1+15	L	22.6
1+44		1+61	L	44.0
21+81		22+17	R	25.5
23+58		23+91	R	22.6
25+25		25+45	R	11.5
26+99		27+19	L/R	65.3
29+84		30+14	R _	21.6
			Total:	244.6

TABLE OF SIDEWALK REMOVAL

Station	to	Station	L/R	Quantity (SqYd)
0+05		3+29	L/R	190.2
3+76		5+50	L/R	106.5
5+50		7+07	L/R	15.5
7+49		7+61	L/R	14.5
21+84		22+14	L/R	15.5
23+62		23+87	L/R	13.6
32+72		33+68	L/R	64.3
50+83		50+87	L/R	5.8
			Total·	425 9

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TABLE OF REMOVE CONCRETE PAVEMENT

				Quantity
Station	to	Station	L/R	(SqYd)
0+01		0+16	L/R	9.3
25+18		25+25	R	3.5
25+45		25+53	R	3.7
26+88		26+99	R	4.8
27+19		27+29	R _	4.8
			Total:	26.1

TABLE OF REMOVE RETAINING WALL

Station	to	Station	L/R	Quantity (Ft)
0+13		1+06	L	100
1+15		1+44	L _	40
			Total:	140

TABLE OF REMOVE PIPE CULVERT

Station	to	Station	L/R	Quantity (SqYd)
52+06		52+46	L	40
57+92		58+30	L	38
59+42		59+85	L/R	43
			Total·	121

TABLE OF SPECIAL CONCRETE CURB AND GUTTER

				Quantity
Station	to	Station	L/R	(Ft)
0+41.61		0+71.61	R	30.0
0+96.09		1+04.09	R	8.0
1+17.93		1+43.78	R	25.9
1+62.77		1+70.77	R	8.0
2+00.24		2+08.24	R	8.0
2+33.54		2+41.54	R	8.0
3+32.83			L	7.8
6+93.71		6+96.12	R	2.4
7+10.11			L	1.7
7+46.98			L	1.6
25+45.96			L	13.3
27+00.06			L	14.2
50+25.47		50+31.05	R	5.6
51+39.76		52+17.98	R	78.2
52+37.98		57+96.31	R	558.3
58+26.31		59+45.31	R	122.0
59+75.32		59+88.84	R _	13.5
			Total:	906.5

STATE OF	PROJECT	SHEET	TOTAL SHEETS
SOUTH DAKOTA	P TAPU (27)	7	105

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TABLE OF SPECIAL CONCRETE GUTTER

			Quantity
Station to	Station	L/R	(Ft)
1+04.09	1+17.93	R	13.8
1+43.78	1+62.77	R	19.0
2+08.24	2+33.54	R	25.3
52+17.98	52+37.98	R	20.0
57+96.31	58+26.31	R	27.0
59+45.31	59+75.32	R _	30.0
		_	

Total: 135.1

TABLE OF TYPE B6 CONCRETE CURB

			Quantity
Station to	Station	L/R	(Ft)
20+10.61		L	5.5
20+34.21	20+67.74	L	44.4
21+84.30		L	6.0
22+13.96		L	6.0
23+61.98		L	6.0
23+87.95		L	6.0
31+12.48	31+18.11	L	8.6
31+50.12	31+67.35	L _	69.0
		_	
		Total:	151.5

6" PCC FILLET SECTIONS

Payment for "6" PCC Fillet Section" will be based on plans quantity. If additions or reductions to the area of PCC fillet sections are ordered by the Engineer, payment will be made in accordance with the contract unit price per square yard for "6" PCC Fillet Section".

TABLE OF 6" PCC FILLET SECTION

0	0:		Radius	Quantity	
Station to	Station	L/R	(Ft)	(SqYd)	
0+01.90	0+16.26	L/R	14.50	9.3	
3+16.00	3+32.98	L/R	17.00	10.4	
3+70.11	3+92.13	L/R	17.00	10.7	
6+96.15	7+10.18	L/R	14.50	10.0	
7+47.04	7+61.04	L/R	14.50	10.0	PEGAO
17+98.52	18+14.52	L/R	14.50	11.2	WINDEOFESSION
18+49.54	18+65.53	L/R	14.50	11.2	JI'VO Prasses
25+18.15	25+25.87	R	10.00	3.6	REGNO .
25+45.96	25+53.54	R	10.00	3.6	<i>X</i> •
26+89.48	26+99.79	R	10.00	4.8	12066
27+20.15	27+29.26	R	10.00	4.8 €	II - TOPE BALLY
50+07.21	50+25.47	L/R	22.00	16.6 💆 🗖	The state of the s
			Total:	106.2	

TYPE 1 DETECTABLE WARNINGS

Detectable warnings will be in compliance with the Americans with Disabilities Act regulations. The detectable warnings will be installed according to the manufacturer's installation instructions.

A concrete thickness equal to the adjacent concrete sidewalk thickness and 2 inches of granular cushion material will be placed below the Type 1 Detectable Warnings. When concrete is placed below the detectable warnings then the concrete thickness will be transitioned at the rate of 1" per foot to match the adjacent concrete sidewalk thickness.

The detectable warnings will be a brick red color for application in concrete curb ramps. Cast iron plates may be a natural patina (weathered steel).

Type 1 Detectable Warning Panels will be one of the following products:

Type 1 Detectable Warnings

	<u>_</u> _
<u>Product</u>	<u>Manufacturer</u>
Detectable Warning Plate Cast Iron Plate	Neenah Foundry Company Neenah, WI 800-558-5075 http://www.neenahfoundry.com/
Detectable Warning Plate Cast Iron Plate	Deeter Foundry Lincoln, NE 800-234-7466 http://www.deeter.com/
Detectable Warning Plate Cast Iron Plate(No Coating)	East Jordan Iron Works, Inc. 301 Spring Street East Jordan, MI 49727 800-626-4653 http://www.ejiw.com
Iron Dome Cast Iron Detectable Warning Tile	ADA Solutions, Inc. 323 Andover Street Suite 3 Wilmington, MA 01887 800-372-0519 https://adatile.com
TufTile (wet-set) Cast Iron Replaceable Tile	TufTile 1200 Flex Court Lake Zurich, IL 60047 888-960-8897 http://www.tuftile.com/

Type 1 Detectable Warnings will be installed along a radius at the locations as shown in the plans. The radius necessary will be as shown in the plans. Payment for the radius detectable warnings will be at the contract unit price per square foot for "Type 1 Detectable Warnings".

Type 1 Detectable Warning Panels with a radius will be one of the following products:

Type 1 Detectable Warnings (Radius)

<u>Product</u>	<u>Manufacturer</u>			
Detectable Warning Plate Cast Iron Plate	Neenah Foundry Company Neenah, WI 800-558-5075 http://www.neenahfoundry.com/			
Detectable Warning Plate Cast Iron Plate (No Coating)	East Jordan Iron Works, Inc. 301 Spring Street East Jordan, MI 49727 800-626-4653 http://www.ejiw.com			
Iron Dome Cast Iron Detectable Warning Tile	ADA Solutions, Inc. 323 Andover Street Suite 3 Wilmington, MA 01887 800-372-0519 https://adatile.com			
TufTile (wet-set) Cast Iron Replaceable Tile	TufTile 1200 Flex Court Lake Zurich, IL 60047 888-960-8897 http://www.tuftile.com/			

TABLE OF TYPE 1 DETECTABLE WARNINGS

Station	L/R	Quantity (SqFt)
0+08.15	0.00' L/R	20
3+22.47	0.00' L/R	28
3+78.48	0.00' L/R	28
7+06.06	0.00' L/R	20
7+50.79	0.00' L/R	20
18+09.67	0.00' L/R	20
18+54.57	0.00' L/R	20
50+13.79	0.00' L/R	30
	Total:	186

STATE OF			TOTAL SHEETS
SOUTH DAKOTA	P TAPU (27)	8	105

6" PCC DRIVEWAY PAVEMENT

The concrete for the 6" PCC Driveway Pavement will comply with the requirements of the specifications for Class M6 Concrete, unless otherwise specified in the Plans. The mix design can meet either Class M6 Concrete specifications or conform to the Contractor Furnished Mix Design for PCC Pavements Special Provision.

The surface of the 6" PCC Driveway Pavement will have a maximum 10% slope and the tie-ins will match the existing and/or new adjoining PCC Approach Pavement.

Contraction joints in the 6" PCC Driveway Pavement will be $1\frac{1}{2}$ inches deep if formed in the fresh concrete using a suitable grooving tool. If a saw is used to cut the contraction joints, then the depth of the joint will be at least $\frac{1}{4}$ the thickness of the approach pavement.

All costs for furnishing and placing the 6" PCC Driveway Pavement and constructing the expansion and contraction joints including labor, equipment, and materials (including the earthen backfill) will be incidental to the contract unit price per square yard for 6" PCC Driveway Pavement.

Payment for any excavation required for placing the 6" PCC Driveway Pavement and granular material will be incidental to the contract unit price of the surfacing material.

All costs for furnishing and placing the granular material will be incidental to the contract unit price per ton for Gravel Cushion.

TABLE OF 6" PCC DRIVEWAY PAVEMENT

	Quantity
L/R	(SqYd)
L	22.6
L	44.1
L	31.2
Total:	97.9
	L L L

TABLE OF 6" PCC APPROACH PAVEMENT

Station	to	Station	L/R	Quantity (SqYd)
15+43.64		15+73.64	R	12.7
20+19.98		20+36.74	R	12.8
20+65.29		20+91.29	R	11.7
21+80.98		22+17.34	R	17.3
23+58.41		23+90.95	R	16.2
25+24.02		25+48.20	R	16.3
26+97.99		27+22.15	R	16.3
29+84.76		30+14.62	R	13.9
31+14.08		31+54.08	R	16.7
52+15.98		52+39.98	R	6.1
57+94.31		58+28.31	R	8.7
59+43.31		59+77.32	R	8.7
			Total:	157.4

CONCRETE SIDEWALK

The concrete sidewalk will be constructed in accordance with Section 651.

Due to the extra depth required, the granular cushion material required, as per the typical sections, will be paid for separately at the contract unit price per ton for Gravel Cushion. The gravel cushion will meet the requirements of Section 882. Compaction will be to the satisfaction of the Engineer.

TABLE OF 4" CONCRETE SIDEWALK - 5' WIDE

Station	to	Station	L/R	Quantity (SqFt)
0+08.13		0+13.00	L	48.2
3+22.72		3+29.68	L	61.0
3+98.74		4+03.74	L	89.0
7+55.98		7+60.98	L	25.0
50+83.59		50+87.59	L/R	40.9
			Total:	264.1

TABLE OF 6" CONCRETE SIDEWALK – 8' WIDE

Station	to	Station	L/R	Quantity (SqFt)
0+05.13		3+05.98	L/R	2385.4
3+16.00		3+29.68	L/R	83.1
3+76.23		5+50.00	L/R	1385.5
5+50.00		7+07.13	L/R	1269.2
7+50.00		8+50.00	L/R	811.6
8+50.00		11+00.00	L/R	2000.0
11+00.00		13+00.00	L/R	1600.0
13+00.00		16+00.00	L/R	2400.0
16+00.00		18+11.19	L/R	1700.1
18+52.92		19+00.00	L/R	388.6
19+00.00		22+00.00	L/R	2400.0
22+00.00		25+00.00	L/R	2400.0
25+00.00		28+00.00	L/R	2400.0
28+00.00		31+00.00	L/R	2400.0
31+00.00		33+62.25	L/R	2098.0

Total: 25,694.2

TABLE OF 6" CONCRETE SIDEWALK - 10' WIDE

.		.		Quantity
Station	to	Station	L/R	(SqFt)
50+09.53		53+00.00	L/R	2892.8
53+00.00		56+00.00	L/R	3000.0
56+00.00		59+00.00	L/R	3000.0
59+00.00		59+88.00	L/R	880.0
			Total·	9 772 8

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TABLE OF 6" REINFORCED CONCRETE SIDEWALK - 8' WIDE

				Quantity
Station	to	Station	L/R	(SqFt)
3+05.98		3+16.00	L/R	48.2
			Total:	264 1

ASPHALT CONCRETE COMPOSITE

Asphalt for tack SS-1h or CSS-1h will be applied prior to each lift of Asphalt Concrete Composite. Asphalt for tack will be applied at a rate of 0.09 gallons per square yard on existing pavement or milled asphalt concrete surfaces and at a rate of 0.06 gallons per square yard on primed base course or new asphalt concrete pavement. The Asphalt for tack will be applied for the full width of the bottom layer of Asphalt Concrete Composite plus one-half foot additional on the outside shoulder.

Asphalt to be placed within the street will have 4 inches of asphalt and 12 inches of base course.

Asphalt to be placed at driveways will have 3 inches of asphalt and 8 inches of base course.

TABLE OF ASPHALT CONCRETE COMPOSITE

				Quantity
Station	to	Station	L/R	(Ton)
0+00.90		0+17.31	L/R	1.2
2+10.63		2+28.89	L	4.5
3+14.95		3+33.83	L/R	1.6
3+69.05		3+80.45	L/R	1.3
6+93.10		7+11.16	L/R	1.4
7+46.02		7+61.91	L/R	1.3
8+59.60		8+72.27	L/R	6.6
9+83.18		10+11.09	L/R	5.1
13+12.65		13+42.23	L/R	5.4
15+43.81		15+72.19	L	2.5
17+97.52		18+15.54	L/R	2.8
18+48.56		18+66.66	L/R	2.8
20+11.11		20+89.48	L	11.1
21+84.64		22+13.54	L	3.2
23+61.88		23+87.52	L	2.8
25+26.18		25+49.11	L	2.4
31+10.02		31+77.15	L	11.5
50+06.20		50+32.11	L/R	1.8
,51+38.76		59+88.84	R	607.4
,51+38.76			Total:	676.7

STATE OF	PROJECT	SHEET	TOTAL SHEETS
SOUTH DAKOTA	P TAPU (27)	9	105

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BASE COURSE

Existing base course will remain in place and be recompacted prior to placement of new concrete curb and gutter or asphalt concrete patches if sufficient base course is present. The area will be prepared as specified if sufficient base course is not present. The below quantities have been provided if sufficient base course is not available.

Base course will be placed on Rowley Street where new asphalt surfacing is required. The base course will be installed as specified.

TABLE OF BASE COURSE

				Quantity
Station	to	Station	L/R	(Ton)
0+00.90		0+17.31	L/R	6.5
0+41.61		0+71.61	R	3.0
0+96.09		1+70.77	R	7.5
2+00.24		2+41.54	L	16.7
3+14.95		3+33.83	L/R	8.6
3+69.05		3+80.45	L/R	7.4
6+93.10		7+11.16	L/R	7.2
7+46.02		7+61.91	L/R	7.2
8+59.60		8+72.27	L/R	23.4
9+83.18		10+11.09	L/R	19.1
13+12.65		13+42.23	L/R	20.5
15+43.81		15+72.19	L	9.5
17+97.52		18+53.53	L/R	7.8
18+48.56		18+66.66	L/R	7.8
20+10.61		20+89.48	L	43.0
21+84.30		22+13.96	L	12.5
23+61.88		23+87.95	L	11.0
25+26.18		25+49.11	L	13.6
26+98.48		27+00.06	L	3.6
27+20.15		27+29.26	L	2.2
31+10.02		31+77.15	L	44.5
50+06.20		50+32.11	L/R	11.0
51+38.76		59+88.84	R	1,369.4
			Total:	1,663.0

TABLE OF GRAVEL SURFACING

					Quantity
	Station	to	Station	L/R	(Ton)
	29+87.00		30+12.29	L	6.6
;	52+18.00		52+38.00	L	8.8
;	52+17.98		52+39.25	L	13.2
	57+96.03		58+26.26	L	8.5
	59+45.25		59+75.11	L	8.4
				Total:	45.5

MAILBOXES

The Contractor will reset the existing mailboxes on new posts with the necessary support hardware for single mailbox assemblies. The local Postmaster will determine the recommended mounting height of the mailboxes throughout the project. The Contractor will coordinate with the Engineer on the proper postal representative to contact.

All costs for removing existing mailboxes, providing temporary mailboxes, and resetting mailboxes with new posts and necessary support hardware will be incidental to the contract unit price per each for "Refurbish Single Mailbox".

TABLE OF REFURBISH SINGLE MAILBOX

		Single
Station	L/R	(Each)
0+88	R	1
1+34	R	1
2+07	R _	1
	Total:	3



PLACING TOPSOIL

The thickness will be approximately six inches.

The estimated amount of topsoil to be placed is as follows:

					Quantity	
Station	to	Station	L	/R	(CuYd)	
0+13		1+07		L	8.7	
1+16		1+45		L	2.9	
1+62		2+11		L	4.0	
2+28		3+31		L	8.9	
3+79		4+03		L	3.0	
3+79		7+02		R	21.9	
4+08		7+08		L	26.0	
7+49		7+56		L	0.6	
7+55		8+61		R	8.0	
7+61		8+61		L	24.6	
8+72		9+83		/R	51.0	
10+11		13+13		/R	125.6	
13+42		15+44		/R	34.6	
15+72		18+07		R	15.2	
15+72		18+12		L	19.1	
18+52		20+11		L	12.7	
18+58		20+11		R	10.3	
20+35		20+67		/R	4.7	
20+89		21+84		/R	14.1	
22+13		23+62		/R	22.8	
23+88		25+24		/R	21.7	
25+48		26+98		/R	26.0	
27+22		29+53	I	L	17.9	
27+22		29+87		R	20.4	
30+12		31+18		R	7.2	
30+44		31+18		L	6.3	
31+48		33+69		/R	26.3	
50+10		50+84		L	6.0	
50+21		50+84		R	2.4	
50+88		52+18		/R	26.1	
52+38		57+96		/R	122.4	
58+26		59+45		/R	20.2	
59+75		59+88	L,	/R	1.7	
			То	otal:	723.3	

STATE OF			TOTAL SHEETS
SOUTH DAKOTA	P TAPU (27)	10	105

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MYCORRHIZAL INOCULUM

Mycorrhizal inoculum will consist of mycorrhizal fungi spores and mycorrhizal fungi-infected root fragments in a solid carrier. The carrier may include organic materials, calcinated clay, or other materials consistent with application and good plant growth. The supplier will provide certification of the fungal species claimed and the live propagule count. The inoculum will include the following fungal species:

25% Glomus intraradices

25% Glomus aggregatum or deserticola

25% Glomus mosseae 25% Glomus etunicatum

All seed will be inoculated by the seed supplier with a minimum of 20,000 live propagules of mycorrhizal fungi per 1,000 square feet. All costs of inoculating the seed will be incidental to the contract unit price per pound for the corresponding permanent seed mixture.

The mycorrhizal inoculum will be as shown below or an approved equal:

<u>Product</u>	<u>Manufacturer</u>		
MycoApply	Mycorrhizal Applications, Inc. Grants Pass, OR Phone: 1-866-476-7800 www.mycorrhizae.com		
AM 120 Multi Species Blend	Reforestation Technologies Int Gilroy, CA Phone: 1-800-784-4769 www.reforest.com		

FERTILIZING

The Contractor will apply an all-natural slow release fertilizer prior to seeding or placing sod. The all-natural fertilizer will have a minimum guaranteed analysis of 4-4-4 and be USDA Certified BioBased. It should provide a minimum of 4% (N) nitrogen with a minimum water insoluble nitrogen (WIN) fraction of 2.07%, a minimum of 4% (P2O5) available phosphate, a minimum of 4% (K2O) soluble potash, and a maximum carbon to nitrogen ratio (C:N ratio) of 5:1. The all-natural fertilizer will be free of weed-seed and pathogens accomplished through thermophilic composting, and not mechanical or chemical sterilization, to assure presence of beneficial soil microbiology. The fertilizer will have a near neutral pH, a low salt index, a low biological oxygen demand, contain organic humic and fulvic acids, and have high aerobic organism counts. The fertilizer will also be stable, free of bad odors, and be unattractive as a food source for animals. It should also be in a granular form that is easily spread.

The application rate is 34 pounds per 1,000 square feet.

The all-natural slow release fertilizer will be as shown below or an approved equal:

<u>Product</u>	<u>Manufacturer</u>
Sustane	Sustane Corporate Headquarters Cannon Falls, Minnesota Phone: 1-800-352-9245 www.sustane.com
Perfect Blend	Perfect Blend, LLC Bellevue, WA Phone: 1-866-456-8890 www.perfect-blend.com

PERMANENT SEEDING

The areas to be seeded consist of all newly graded areas within the project limits except for the top of roadways and the shared use path.

45,102 square feet of newly graded areas are to be seeded.

Type D Permanent Seed Mixture will consist of the following:

Grass Species	Variety	Pure Live Seed (PLS) (Pounds/1000 SqFt)
Kentucky Bluegrass	Avalanche, Appalachian, Wildhorse, Blue Bonnet, Action	1.4
Perennial Ryegrass	Turf Type Varieties	1.4
Creeping Red Fescue	Epic, Boreal, Chantilly	1.4
Chewings Fescue	Ambrose, K2, Zodiac, Shadow III	1.4
Alkali Grass	Fults, Fults II, Quill, Salty	1.4
	Total:	7

FIBER MULCHING

Fiber mulch will be applied in a separate operation following permanent seeding.

Fiber mulch will be applied at the rate of 3,000 pounds per acre.

The Contractor will allow the fiber mulch to cure a minimum of 18 hours prior to watering or any storm event to ensure proper cohesion between the soil and fiber particles.

The fiber mulch provided will be from the approved product list. The approved product list for fiber mulch may be viewed at the following internet site:

http://apps.sd.gov/HC60ApprovedProducts/main.aspx

TABLE OF FIBER MULCHING

				Quantity
Station	to	Station	L/R	(Lb)
0+13		1+07	L	37.3
1+16		1+45	L	12.4
1+62		2+11	L	17.1
2+28		3+31	L	38.2
3+79		4+03	L	12.9
3+79		7+02	R	94.2
4+08		7+08	L	111.7
7+49		7+56	L	2.5
7+55		8+61	R	34.5
7+61		8+61	L	105.7
8+72		9+83	L/R	219.1
10+11		13+13	L/R	539.5
13+42		15+44	L/R	148.6
15+72		18+07	R	65.1
15+72		18+12	L	82.0
18+52		20+11	L	54.6
18+58		20+11	R	44.1
20+35		20+67	L/R	20.3
20+89		21+84	L/R	60.6
22+13		23+62	L/R	97.7
23+88		25+24	L/R	93.1
25+48		26+98	L/R	111.6
27+22		29+53	L	76.9
27+22		29+87	R	87.7
30+12		31+18	R	30.9
30+44		31+18	L	27.0
31+48		33+69	L/R	113.0
50+10		50+84	L	25.6
50+21		50+84	R	10.3
50+88		52+18	L/R	112.3
52+38		57+96	L/R	525.6
58+26		59+45	L/R	86.6
59+75		59+88	L/R	7.5

Total: 3.106.2



STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	P TAPU (27)	11	105

Manufacturer

SEDIMENT CONTROL AT INLETS WITH FRAMES AND GRATES

This type of sediment control device should be used where there is pavement in the vicinity of the drop inlets and storm water or sediment could possibly enter the frame and grate. Sediment Control at Inlet with Frame and Grate will be installed prior to working in the vicinity of the drop inlets.

The Contractor will be responsible for maintaining and repairing the sediment control devices for the duration of the project for which sediment control measures are required. Maintenance will be scheduled to prevent storm water from backing up into the driving lane.

"Sediment Control at Inlet with Frame and Grate" will be paid for one time at each location, regardless of the number of times the sediment control devices are installed, inspected, cleaned, removed, repaired, or replaced. All costs associated with furnishing, installing, inspecting, maintaining, cleaning, sediment removal, and repairing Sediment Control at Inlet with Frame and Grate will be incidental to the contract unit price per each for "Sediment Control at Inlet with Frame and Grate".

Sediment collection devices will be:

A commercial made sediment collection device from the "Sediment Control at Inlet with Frame and Grate" list or an approved equal. The device will be installed in reinforced concrete drop inlets in accordance with the manufacturer's recommendations.

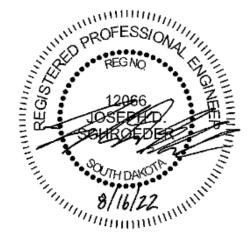
Sediment Control at Inlet with Frame and Grate Approved List:

<u>Product</u>	<u>Manufacturer</u>
InfraSafe Debris Collection Device with filter sock	Royal Environmental Systems, Inc. Stacy, MN Phone: 1-800-817-3240 www.royalenterprises.net
Dandy Curb Sack and Dandy Curb Bag for curb inlets. Dandy Bag, Dandy Sack, and Dandy Pop for median drains.	Dandy Products Inc. Powell, OH Phone: 1-800-591-2284 www.dandyproducts.com
Silt Trapper	Storm Water Solutions Lakeville, MN Phone: 1-952-461-4376 www.silttrapper.com
DIP Basket	Skyview Construction Co., LLC Summit, SD Phone: 1-605-520-0555
FLEXSTORM Inlet Filters	Inlet and Pipe Protection, Inc. Naperville, IL Phone: 1-866-287-8655 www.inletfilters.com
GR-8 Guard or Combo Guard	ERTEC Environmental Systems LLC Alameda, CA Phone: 1-866-521-0724 www.ertecsystems.com

Sediment Catchers Shaun Jensen Brookings, SD Phone: 1-605-690-4950 Grate FX, Slammer, or VertiPro Enviroscape ECM, Ltd. Deshler, OH Phone: 1-419-278-2000 www.strawblanket.com **BX Inlet Sediment Boxes** BX Civil and Construction Dell Rapids, SD Phone: 1-605-428-5483 bx-cc.com EZ-Flo and EZ-Catch Flo-Water, LLC West Des Moines. IA Phone: 1-515-577-6763 www.flo-water.net Basin Bag CSI Geoturf Highland, MI Phone: 1-248-887-0855 https://geoturf.com/

TABLE OF SEDIMENT CONTROL AT INLETS WITH FRAMES AND GRATES

Station	Quantity (Each)
0+04 L	1
6+92 R	1
7+47 L	1
33+51 R	1
	4



Revised 8/16/22 - JDS SEDIMENT CONTROL AT TYPE S REINFORCED CONCRETE DROP INLETS

The sediment control device provided will be from the list shown below. Refer to Standard Plate 734.11 for details.

Product

EZ-ClipGuard

Smart Curb Filter

TSL

<u> </u>	
Dandy Curb	Dandy Products Inc. Powell, OH Phone: 1-800-591-2284 www.dandyproducts.com
Gutterbuddy	ACF Environmental
	Richmond, VA Phone: 1-800-448-3636 www.acfenvironmental.com
Curb Inlet Guard	ECTEC Environmental Systems LLC Alameda, CA Phone: 1-866-521-0724

West Des Moines, IA Phone: 1-515-577-6763 www.flo-water.net	Flo-Wat	ter LLC
Phone: 1-515-577-6763		,
		,
www.no-water.net		
	www.iic	-water.net

www.ertecsystems.com

Three Sons Landscaping
Rapid City, SD
Phone: 1-605-391-1903

12" Silt Sock	Aspen Ridge Lawn and Landscaping,LLC
	Rapid City, SD
	Phone: 1-605-716-4080

	1 000 1 10 1000	
https://a	spenridgelandscaping.co	m/

GeoCurve	GeoSolutions, Inc.
	Austin, TX
	Phone: 1-512-330-0796

www.geosolutionsinc.com
NoFlood, Inc.

noflood.com

Fort My	ers, FL
Phone:	1-239-776-1671

TABLE OF SEDIMENT CONTROL AT TYPE S REINFORCED CONCRETE DROP INLETS

	Clear Opening Width	Quantity*
Station	(Ft)	(Ft)
3+13 L	5	7
	Total	7

* Quantity shown is the minimum length required and will be the basis of payment.

GENERAL TRAFFIC CONTROL

Existing guide, route, informational logo, regulatory, and warning signs will be removed by the City prior to work starting. Any delineators and signs damaged or lost by the Contractor will be replaced by the Contractor at no cost to the Owner.

All temporary traffic control sign locations will be set in the field by the Contractor and verified by the Engineer prior to installation.

Portable sign supports will not be located on sidewalks, bicycle facilities, or other areas designated for pedestrian or bicycle traffic.

If there is a discrepancy between the traffic control plans, standard plates, and the MUTCD, whichever is more stringent will be used, as determined by the Engineer.

Work will not be allowed during hours of darkness.

Fixed location signing placed more than 4 calendar days prior to the start of construction will be covered or laid down until the time of construction. The covers must be approved by the Engineer prior to installation. The cost of materials, labor, and equipment necessary to complete this work will be incidental to other contract items. No separate payment will be made. All fixed location signs, sign posts, and breakaway bases will be removed within 7 calendar days following pavement marking.

Traffic will be maintained on the driving lanes unless specifically shown as closed in these plans.

The Contractor will notify businesses/homeowners a minimum of two weeks prior to construction to inform them of upcoming construction and again a minimum of 48 hours prior to any blocked access to make appropriate arrangements.

The Contractor will utilize standard plate 634.03 to separate all work from the traveling public. This will only be used when the Contractor is working in that specific area. The closure will be taken down if work sits idle for more than four working days. The closure may not be more than 300 feet long at one location. Multiple locations may be approved by the Engineer. The channelizing devices will close the driving lane providing a work area for the Contractor. "Shoulder Work" signs will not be utilized. This closure will be incidental to Traffic Control, Miscellaneous.

TEMPORARY CURB RAMP

Temporary curb ramps should be firm, stable, and have a non-slip surface. They will not warp or buckle, and should be made of materials strong enough to support a weight of 800 pounds. Temporary curb ramps will be yellow or color contrasting and contain marked edges, so they are noticeable by pedestrians who have visual impairments. Lateral joints or gaps between surfaces will be a maximum of 0.5 inches in width. Temporary curb ramps will include detectable warning panels.

Temporary curb ramps will have a width of 60 inches. Temporary curb ramps will have a maximum slope of 8.3% and have free draining surfaces with a maximum cross slope of 2%. Handrails on temporary curb ramps are not required unless the curb ramp has a rise exceeding 6 inches and a length exceeding 72 inches. The temporary curb ramp will be parallel to the curb.

All costs will be incidental to the contract unit price per each for "Temporary Curb Ramp".

LONGITUDINAL PEDESTRIAN BARRICADE

Longitudinal pedestrian barricades should not be used to provide positive protection for pedestrians.

To prevent any tripping hazard to pedestrians, ballast will be located behind or internal to the device.

When longitudinal pedestrian barricades are combined in a series, the maximum gap between devices that do not interlock will be one inch. Joints between devices that do interlock will be closed and flush to prevent canes or small wheels from being trapped and to facilitate safe hand trailing. When used as a sidewalk closure mechanism, longitudinal pedestrian barricade must run the entire width of the sidewalk. Longitudinal pedestrian barricade should provide a color contrasting pattern. Black should not be used to color any base on a device. The devices should comply with the general color and stripe pattern requirements of Section 6F.68 of the MUTCD.

Longitudinal pedestrian barricade will have continuous bottom and top surfaces. The top surface will be smooth to allow safe hand trailing. Both upper and lower surfaces will share a common vertical plane.

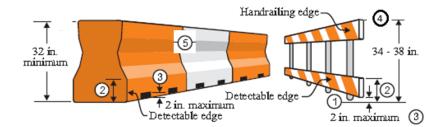
All costs will be incidental to the contract unit price per foot for "Longitudinal Pedestrian Barricade".

 STATE OF SOUTH DAKOTA
 PROJECT
 SHEET SHEETS
 TOTAL SHEETS

 P TAPU (27)
 12
 105

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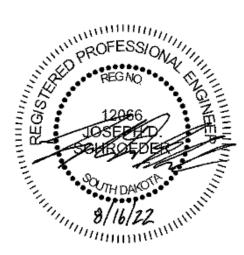
PEDESTRIAN CHANNELIZING DEVICE DETAILS



Longitudinal Pedestrian Barrier

Longitudinal Pedestrian Barricade

- 1. Barricade rail supports may not extend into the pedestrian walkway more than 4 inches from the face of the barricade.
- 2. The top edge of the bottom portion will be a minimum of 8 inches above the walkway.
- 3. Devices will not block water drainage from the walkway. A gap height or opening from the walkway surface up to a maximum of 2 inches in height is allowed for drainage purposes.
- 4. The top edge of the longitudinal pedestrian barricade is to be used as a guiderail to provide visual and tactile guidance to pedestrians along a designated route. The top surface should have a minimum width of 0.5 inches to allow the hand to feel the surface. The surface should be smooth and free of any sharp or abrasive elements to allow safe hand trailing.
- 5. Longitudinal pedestrian barrier used to provide positive protection from traffic to pedestrians should be crashworthy.

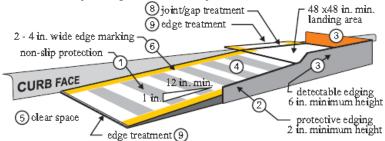


STATE OF SOUTH DAKOTA PROJECT SHEET SHEETS TOTAL SHEETS 105 P TAPU (27) 13 105

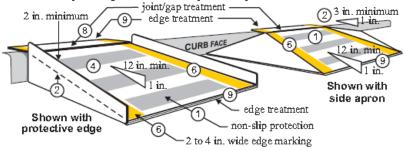
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TEMPORARY CURB RAMP DETAILS

Temporary Curb Ramp - Parallel to Curb



Temporary Curb Ramp - Perpendicular to Curb



- 1. Curb ramps will be 48-inch minimum width with a firm, stable, and non-slip surface.
- 2. Protective edging with a 2-inch minimum height will be installed when the curb ramp or landing platform has a vertical drop of 6 inches or greater or has a side apron slope steeper than 33:1 (33%). Protective edging should be considered when curb ramps or landing platforms have a vertical drop of 3 inches or more.
- Detectable edging with 6 inches minimum height and contrasting color will be installed on all curb ramp landings where the walkway changes direction (turns).
- 4. Curb ramps and landings should have a 50:1 (2%) maximum cross slope.
- 5. A minimum clear space of 48 inch x 48 inch minimum will be provided above and below the curb ramp, with a 60 inch x 60 inch clear space preferred.
- 6. The curb ramp walkway edge will be marked with a contrasting color 2 to 4 inch wide marking. The marking is optional where color contrasting edging is used.
- 7. Water flow in the gutter system will have minimal restriction.
- 8. Lateral joints or gaps between surfaces will be less than 0.5 inches in width.
- 9. Changes between surface heights should not exceed 0.5 inches. Lateral edges between 0.25 inches and 0.5 inches in height, should be vertical up to 0.25 inches in height and beveled at 2:1 between 0.25 inches and 0.5 inches in height.

HIGH BUILD WATERBORNE PAVEMENT MARKING PAINT

All materials will be applied as per manufacturer's recommendations. High build waterborne pavement marking paint will conform to the supplemental specifications for Section 980.1 B.

Reflective media will consist of glass beads.

RETROREFLECTIVITY FOR PAVEMENT MARKING PAINT

The Department may take retroreflectivity readings on the pavement marking lines after 2 days and within 30 days of the line application using either a portable or mobile retroreflectometer that conforms to 30-meter geometry. If the Department chooses to take retroreflectivity readings, three retroreflectivity readings will be taken on each line at each test location. The three readings will be averaged and become the reading for that test location.

If the Department chooses to take retroreflectivity readings, three readings will be taken on the edge lines and lane lines in the direction of application. For combination solid yellow and skip yellow lines for turn lanes and for centerline markings on two-way roadways, three readings will be taken in one direction, the reflectometer will be turned 180 degrees and three more readings will be taken. The six readings for the centerline markings will be averaged and become the test reading for that test location.

If the Department chooses to take readings, the minimum retroreflectivity values will be 275 mc/m²/lux for white and 170 mc/m²/lux for yellow.

GENERAL PERMANENT SIGNING

New sign installations will be staked in the field by the Contractor and checked by the Engineer. The Contractor will give the Engineer a minimum of one week to check staked locations prior to signpost installation. Lateral offset of signs will be as shown in the plans or as directed by the Engineer. The Contractor will be responsible for contacting South Dakota One Call to locate the utilities at the staked sign installation locations.

When signs are mounted in an assembly, they will be 1-2 inches apart vertically and horizontally.

The height of the post must not exceed the minimum height needed by more than 0.5 feet. Any portion that extends above the sign will be cut off. No separate payment will be made for cutting the post or for that length cut off. Aluminum U-Channel stiffeners will be used on all signs 36 inches or greater in width and will conform to ASTM B221 Alloy 6063-T6 or 6061-T6. The U-Channel will be 2 inches in width and free of holes. The U-Channel stiffeners will also be used to connect various signs together so that an entire sign assembly can be erected on a single installation. Stiffeners may be fastened to signs by use of 1/4-inch diameter drive rivets.

The Contractor will use 3/8-inch diameter rust proof machine sign bolts, flat metal washers, neoprene washers (against the sign sheeting), lock washers, and nuts to fasten the sign to the channel aluminum and posts. A minimum of two bolts will extend through each post.

Prior to ordering signs, the Contractor will verify dimensions, background, border, and legend of the signs.

Prior to use, the Contractor will provide documentation for the sign support devices showing they meet the applicable NCHRP 350 or MASH requirements.

NEW PERMANENT SIGNING

All signs will be manufactured in accordance with the sheeting manufacturer's recommendations utilizing a matched component system,

including inks, electronic cuttable films, and protective overlay films. All Flat Aluminum Signs, Nonremovable Copy High Intensity will have sheeting in conformance with the requirements of ASTM D4956 Type IV. All Flat Aluminum Signs, Nonremovable Copy Super/Very High Intensity will have sheeting in conformance with the requirements of ASTM D4956 Type

All costs associated with furnishing and installing the new permanent signs, and with furnishing and installing stiffeners and hardware will be incidental to the contract unit price per square foot for "Flat Aluminum Sign, Nonremovable Copy High Intensity" or "Flat Aluminum Sign, Nonremovable Copy Super/Very High Intensity".

SQUARE TUBE ANCHOR SLEEVE

XI.

The Contractor will furnish and install new $2.5" \times 2.5" \times 18"$, 12 Gauge square tube anchor sleeve or equivalent components as approved by the Engineer for $2.0" \times 2.0"$ perforated tube posts. A $2.25" \times 2.25" \times 4'$, 12 Gauge perforated tube post will be used as the anchor post for installation with the square tube anchor sleeve.

SIGNPOST INSTALLATION IN CONCRETE

On concrete surfaces, a core will be drilled out (for installation in existing concrete) or a block out will be used (for installation in new concrete) for sign installation. The core or block out diameter will be sized accordingly depending on post size. Concrete surrounding the core or block out must not be cracked or damaged.

All costs associated with installation in concrete will be incidental to the sign installation.



DIGITALLY PRINTED SIGNS

Digitally printed signs will be allowed on this project. If the Contractor elects to provide digitally printed signs, such signs will adhere to the following specifications.

PROTECTIVE OVERLAY FILM

Permanent traffic signs printed with digital ink systems will be fabricated with a full sign protective overlay film designed to provide a smooth surface needed for retroreflectivity, and to protect the sign from fading and UV degradation. The overlaminate will comply with the retroreflective sheeting manufacturer's recommendations to ensure proper adhesion and transparency and will also meet the reflective film durability as identified in Table 1.

FABRICATION

Retroreflective sheeting will be applied to a properly cleaned and prepared aluminum sign blank in accordance with the retroreflective sheeting manufacturer's recommendations. Sign legend will be applied using digital print technologies and systems in accordance with the retroreflective sheeting manufacturer's recommendations and the requirements of these plans.

Finished signs will be free of ragged edges and must be supplied clean and free of scratches, grease, oil, lubricants or other contaminants. Minor blemishes (dirt speck, dust, etc.) may settle on the fresh ink surface or become entrapped between the sheeting surface and transparent overlay film due to static charge within the sign shop environment. Any blemish must be minor and not interfere with the communication of the sign message to the motorist. The blemish must not be visible to the naked eye when viewed from 30 feet or greater.

After application of the retroreflective sheeting, sign blanks will be stacked and packaged face to face, back to back, and protected in accordance with the sheeting manufacturer's recommendations. Finished signs will be securely packaged to prevent damage during transit or storage according to the sheeting manufacturer's recommendations.

TRAFFIC SIGN PERFORMANCE WARRANTY PROVISIONS

Based on the ASTM Type of sheeting specified, traffic control signs will be warranted for the duration shown in Table 1. Full product terms and conditions are as established by each sheeting manufacturer and may contain certain limitations based on sheeting and ink colors, and geographic exposure of the sign. A copy of the warranty document with complete details of terms and conditions will be supplied if requested by the Engineer.

CERTIFIED DIGITAL SIGN FABRICATOR

Sign fabricators using digital imaging methods to produce regulated traffic signs must be certified by the reflective sheeting manufacturer whose materials are used to produce the delivered signs.

STATE OF	PROJECT	SHEET	TOTAL SHEETS
SOUTH DAKOTA	P TAPU (27)	14	105

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DATE TAGGING SIGNS WITH PERTINENT INFORMATION

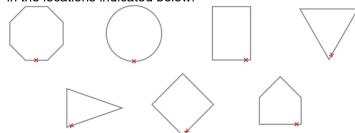
All digitally printed signs are required to be date-tagged with the following 2 components:

1. Date tags on the back of signs

Tags will have the following information and be fabricated with material and printing system that are as durable as the warranted sign.

- · Name of Sign Fabricator
- · Date the sign was fabricated (month and year)
- · Process that was used for sign fabrication (digitally printed)
- · Supplier of sheeting that was used for fabricating the sign.
- 2. Border date

The month and year (mm/yyyy) of sign fabrication will be printed in the border of the sign in 3/8" sans serif font. Border date will be printed with the same warranted printed system as the sign face. The date should be printed in the locations indicated below.

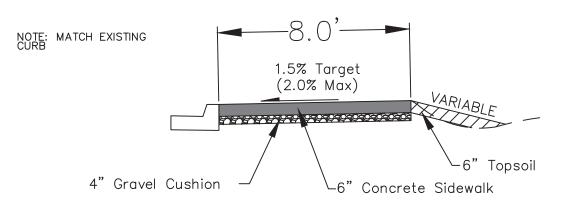




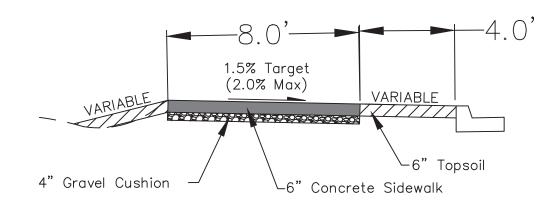
Revised: 8/16/2022 Revised: 9/29/2022

STATE OF SOUTH DAKOTA P TAPU (27) 15

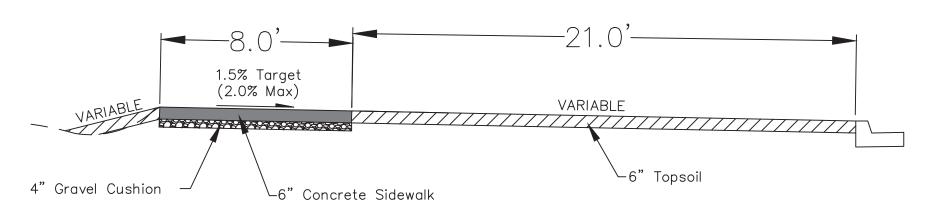
TYPICAL SECTIONS



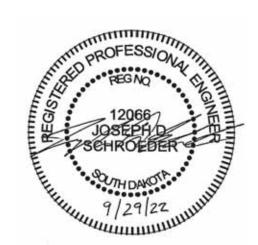
TYPICAL SECTION - 0+16 TO 3+28



<u>TYPICAL SECTION - 3+73 TO 7+72</u> - 13+81 TO 31+43



TYPICAL SECTION - 7+72 TO 13+81



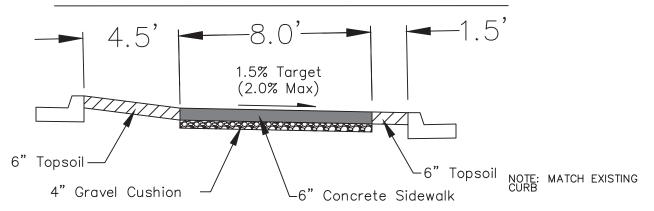
Revised: 8/16/2022 Revised: 9/29/2022

STATE OF SOUTH DAKOTA

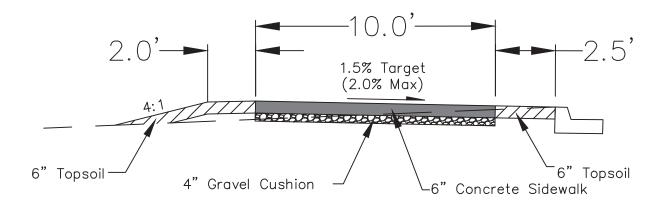
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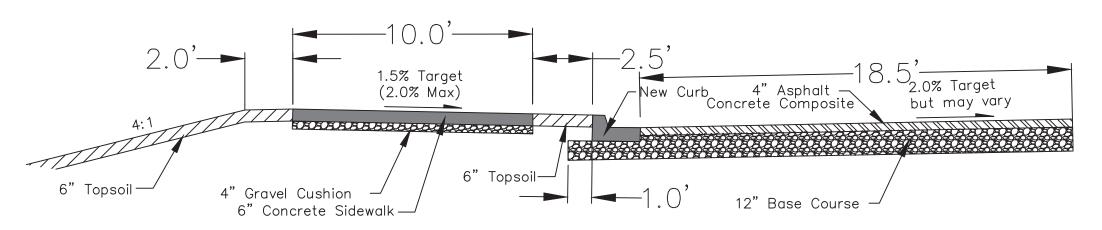
TYPICAL SECTIONS



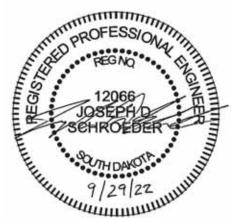
TYPICAL SECTION -31+43 TO 33+62



TYPICAL SECTION -50+10 TO 51+30



TYPICAL SECTION - 51+30 TO 59+75



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2	STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
		P TAPU (27)	17	105

M4 - 8

M4 - 8

M6 - 3

Rowley St

IORTH BOUN

DETOUR

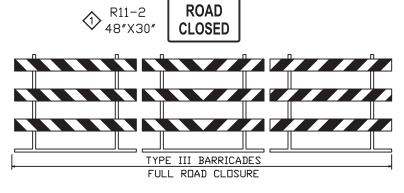
Rowley St

GENERAL TRAFFIC CONTROL NOTES:

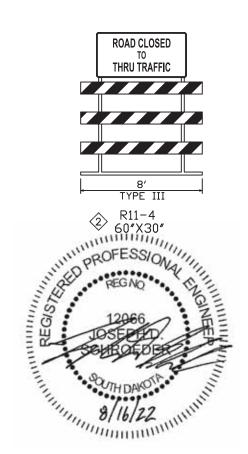
- 1.) Traffic control and safety of the traveling public will be the responsibility of the contractor. The traffic control signage as shown on the following sheet shows the minimum signage required for each portion of the project. Actual site conditions and the Contractor's method of operations shall dictate whether additional or fewer signs will be required. Miscellaneous traffic control devices such as but not limited to cones, barrels, flashers, Type I and Type II barricades will be placed by the contractor as needed to direct traffic around the construction
- 2.) The Contractor will provide at least 24 hours advanced notice of road closures to the City of Mitchell, the local fire department and all residents and businesses located in the Construction area.
- 3.) The Contractor will notify the Street Superintendent and the local fire department when roads are reopened.
- 4.) The Contractor will verify all sign location prior to placement with the Owner to ensure proper sign locations and placement.

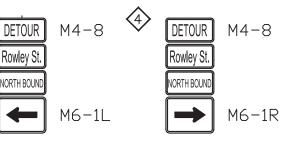
Sign Number	Sign Size	Description	Amount Reqd.	SF	Project Sign SF
M4-8A	24" x 18"	End Road Work	4	3	12
M4-8	24" x 12"	Detour	24	2	48
M5-1L	21" x 15"	Left Turn Ahead Arrow	5	2.2	11
M5-1R	21" x 15"	Right Turn Ahead Arrow	5	2.2	11
M6-1L	21" x 15"	Left Turn Arrow	5	2.2	11
M6-1R	21" x 15"	Right Turn Arrow	5	2.2	11
M6-3	21" x 15"	Straight Arrow	4	2.2	8.8
R11-2	48" x 30"	Road Closed	2	10	20
R11-4	60" x 30"	Road Closed to Thru Traffic	1	12.5	12.5
W20-2	48" x 48"	Detour Ahead	6	16	96
W20-3	48" x 48"	Road Closed Ahead	6	16	96
	24" x 12"	Rowley St.	24	2	48
	24" x 12"	North Bound	14	2	28
	24" x 12"	South Bound	14	2	28
TYPE III BAR	RICADES	3.7	7	18,0	5 1
-	,		Total		441.3

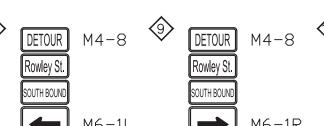
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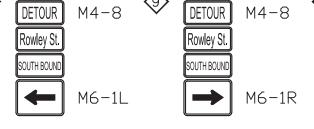


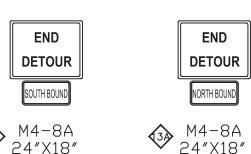
 $N\Box TE$: The direction of stripes on type 3 baricades for each road closure shall be oriented to meet the requirements of the MUTCD latest edition.













DETOUR

Rowley St



Rowley St

ORTH BOUN

DETOUR

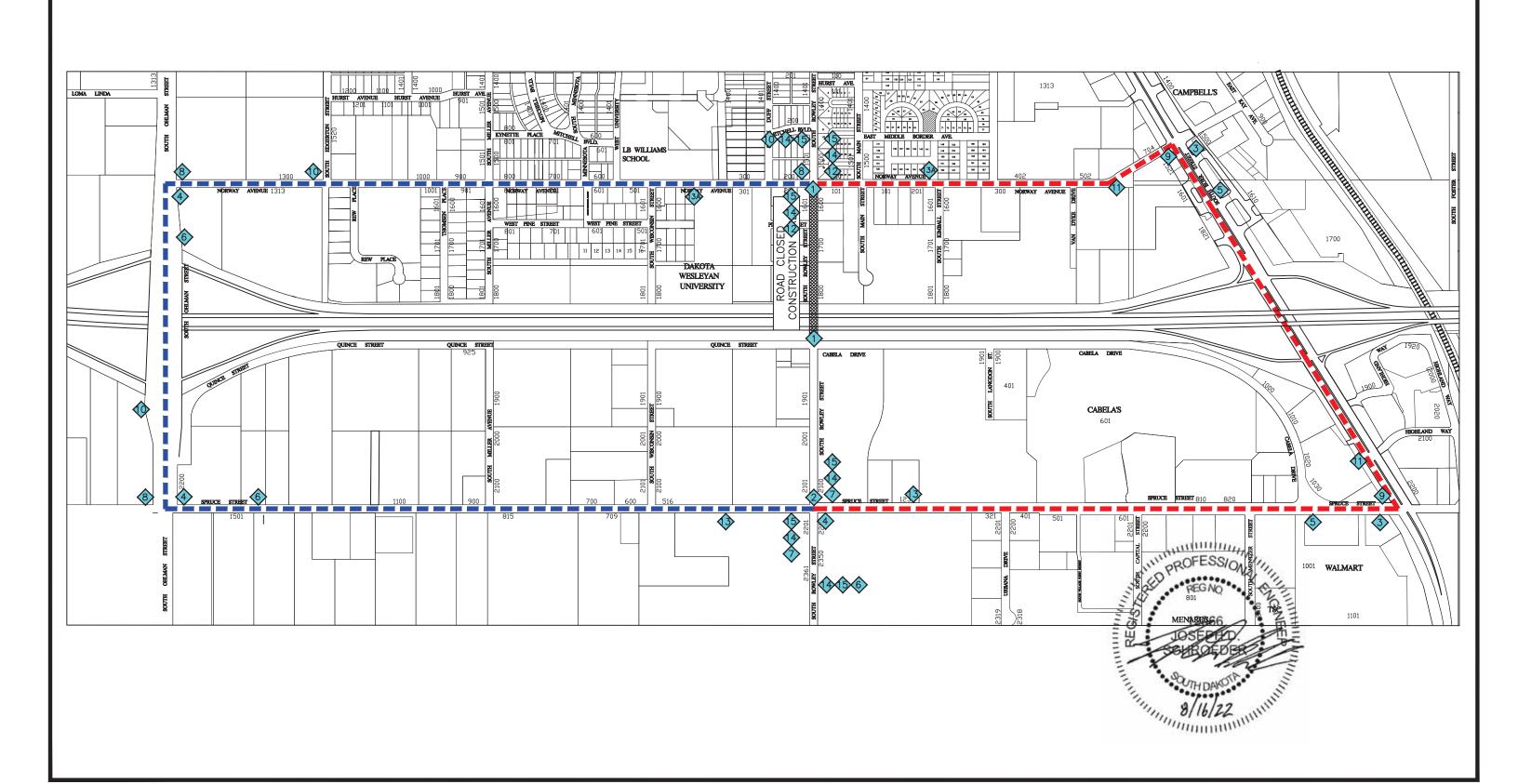
Rowley St

Revised: 8/16/2022

STATE OF	PROJECT	SHEET	,
SOUTH DAKOTA	P TAPU (27)	18	Ħ

ROWLEY CLOSURE DETOUR





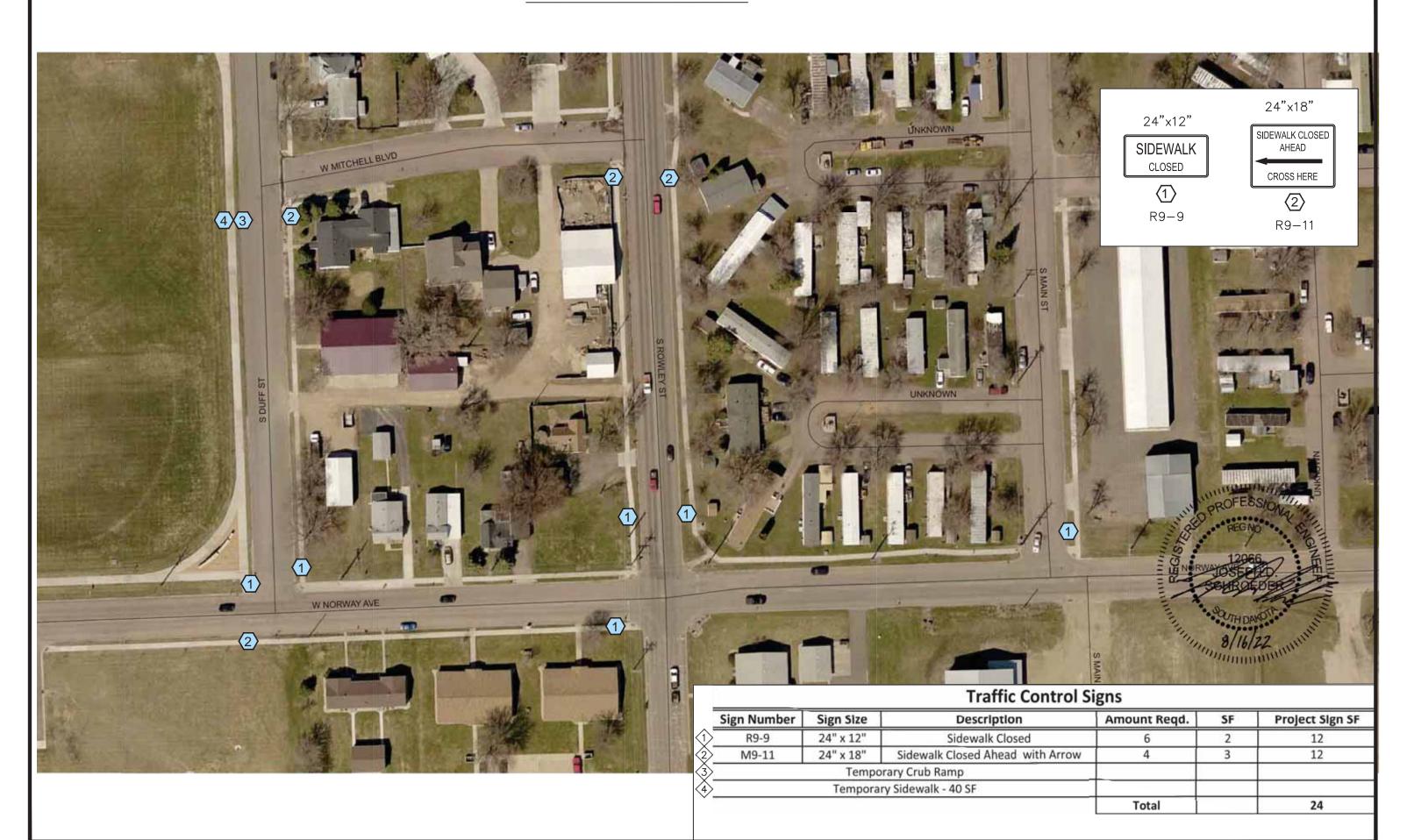
Revised: 8/16/2022

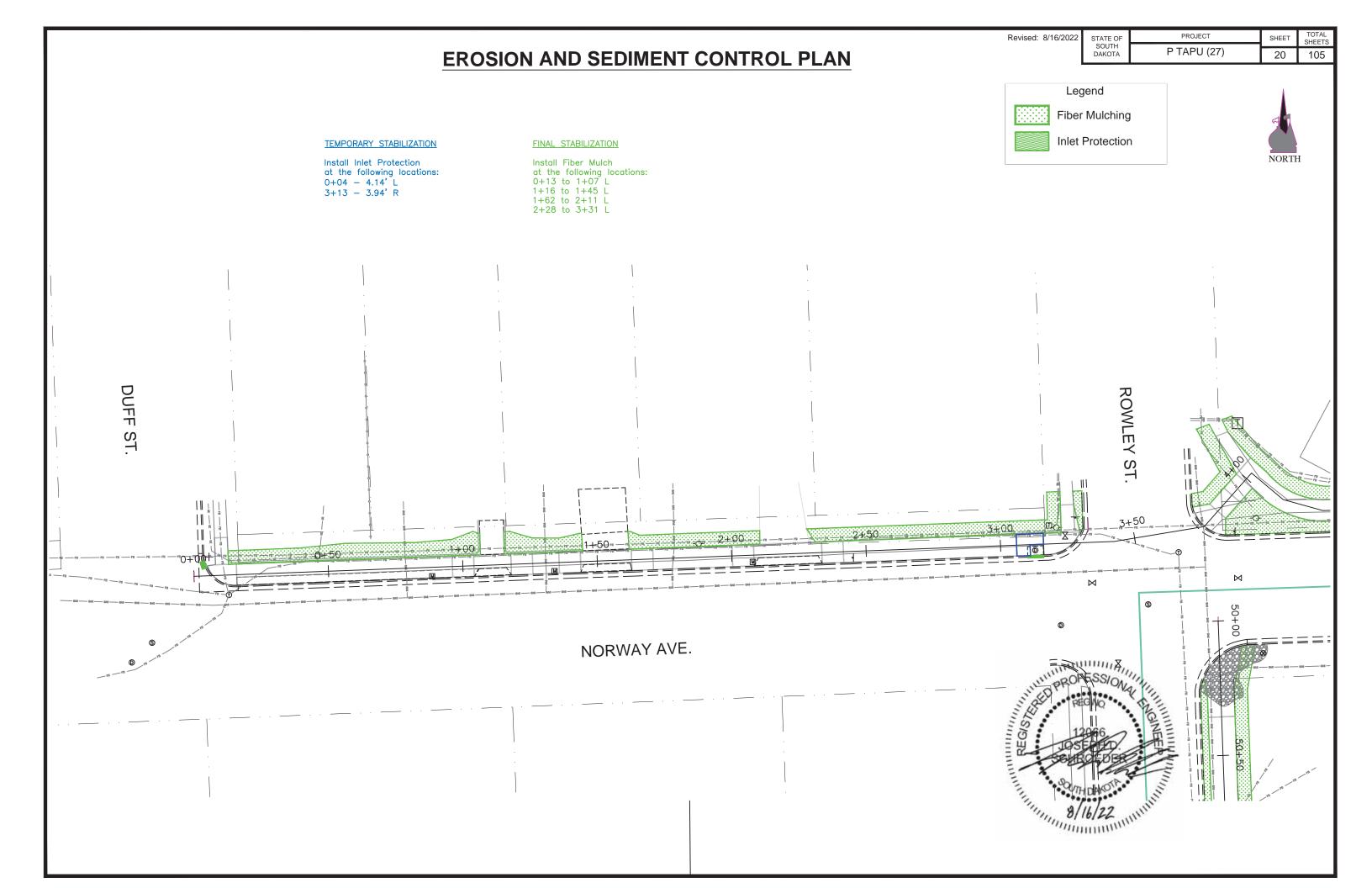
STATE OF SOUTH DAKOTA P TAPU (27)

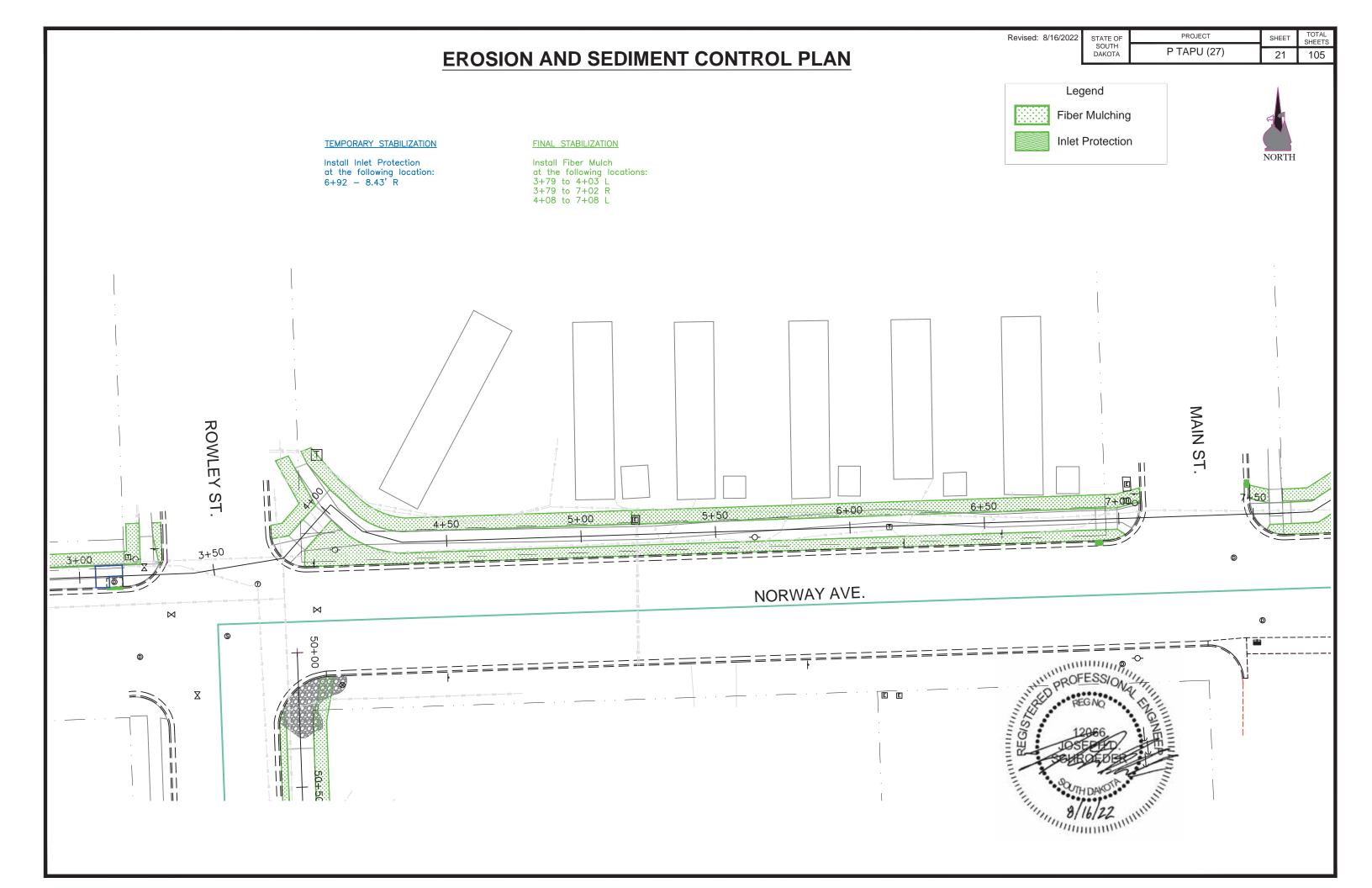
SHEET TOTAL SHEETS

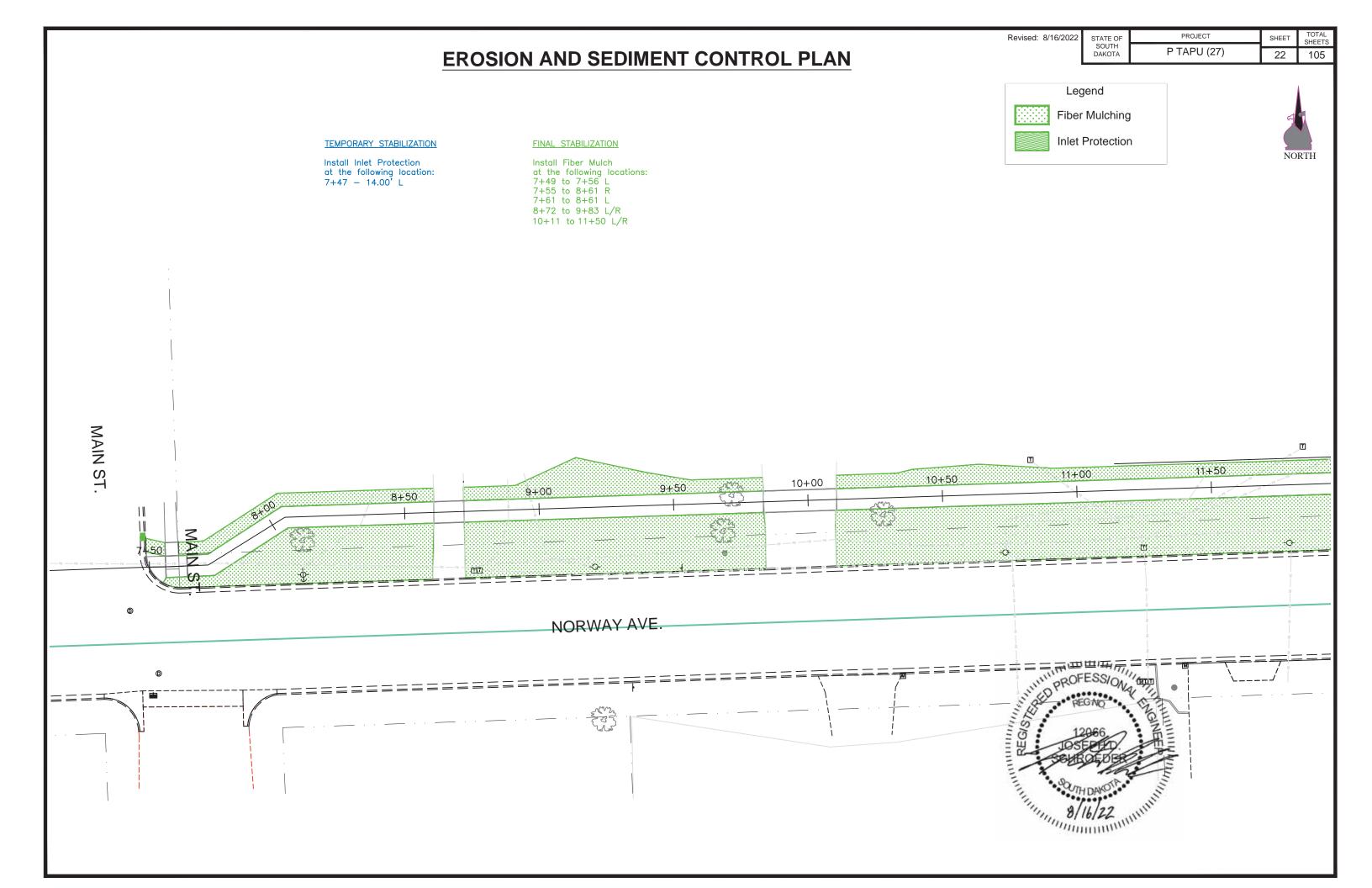
19 105

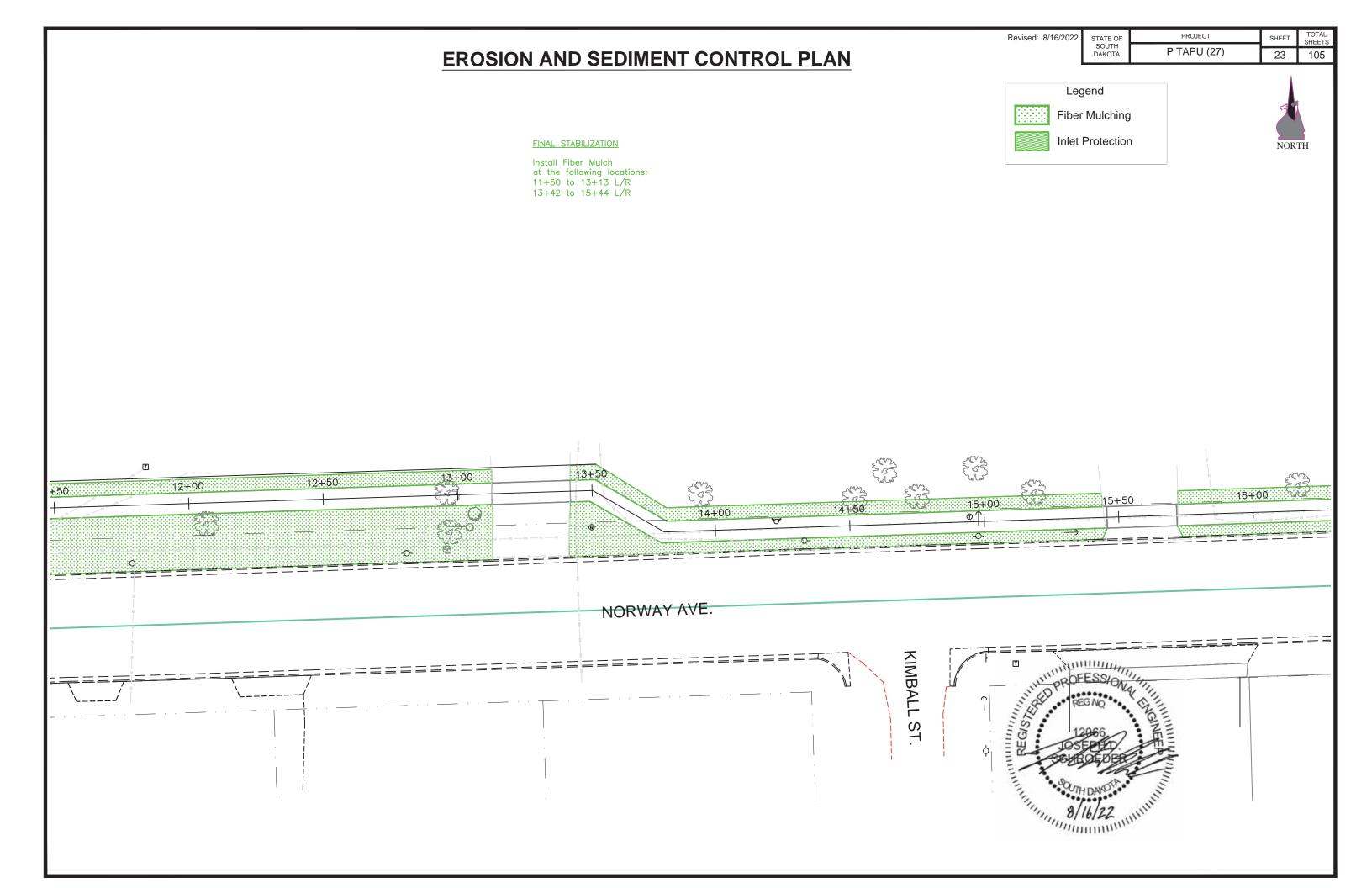
SIDEWALK CLOSURE

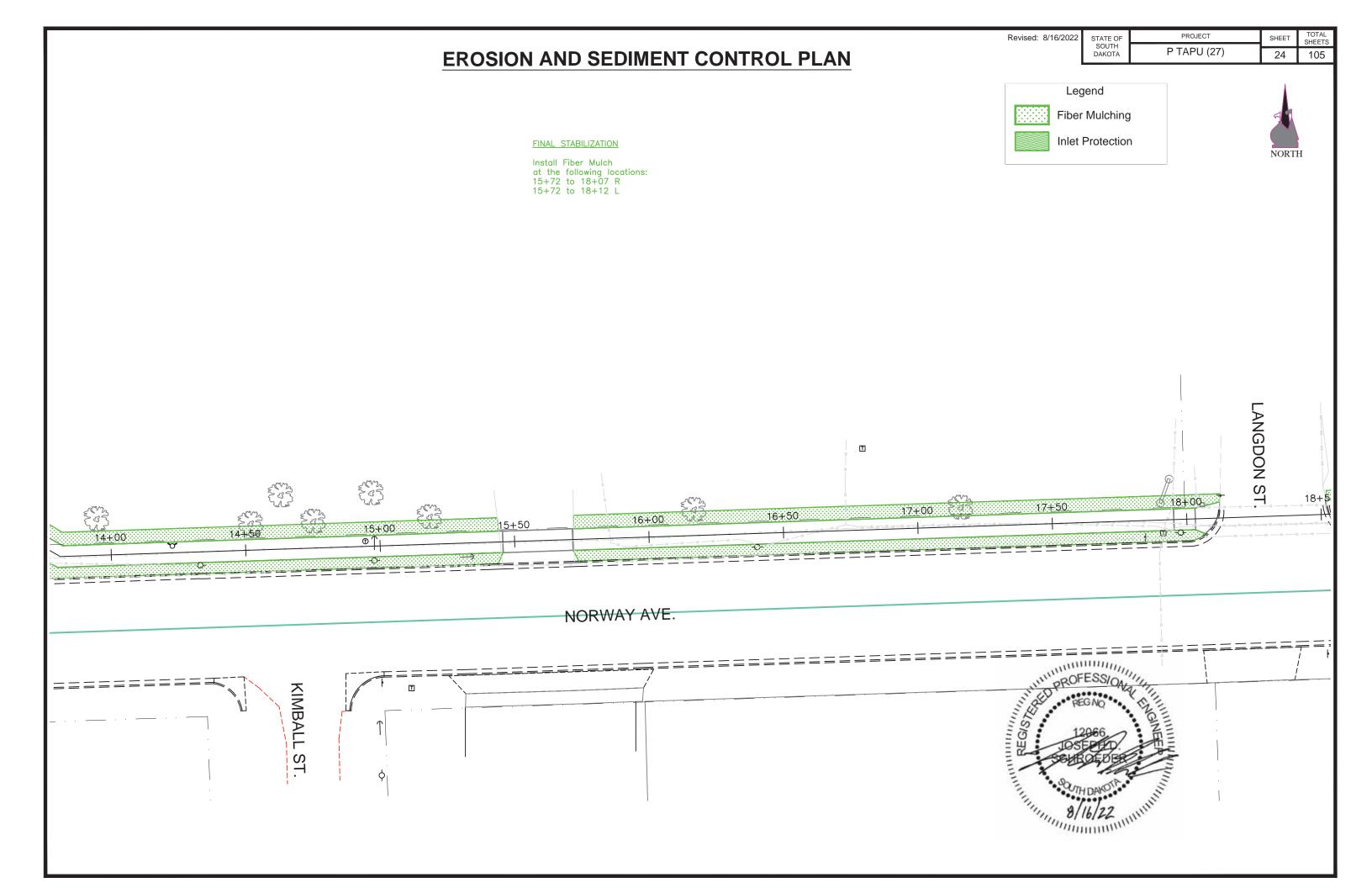


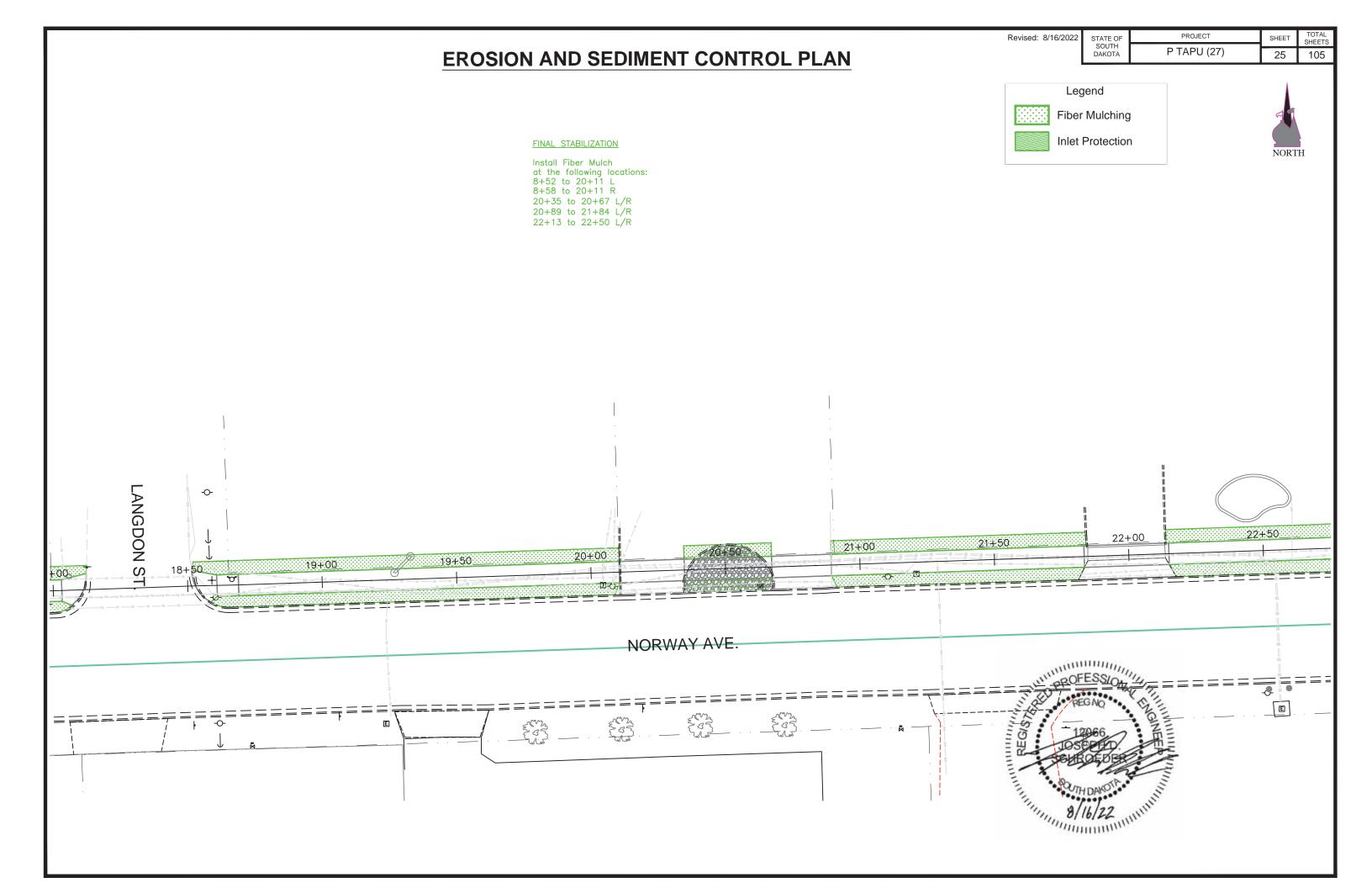


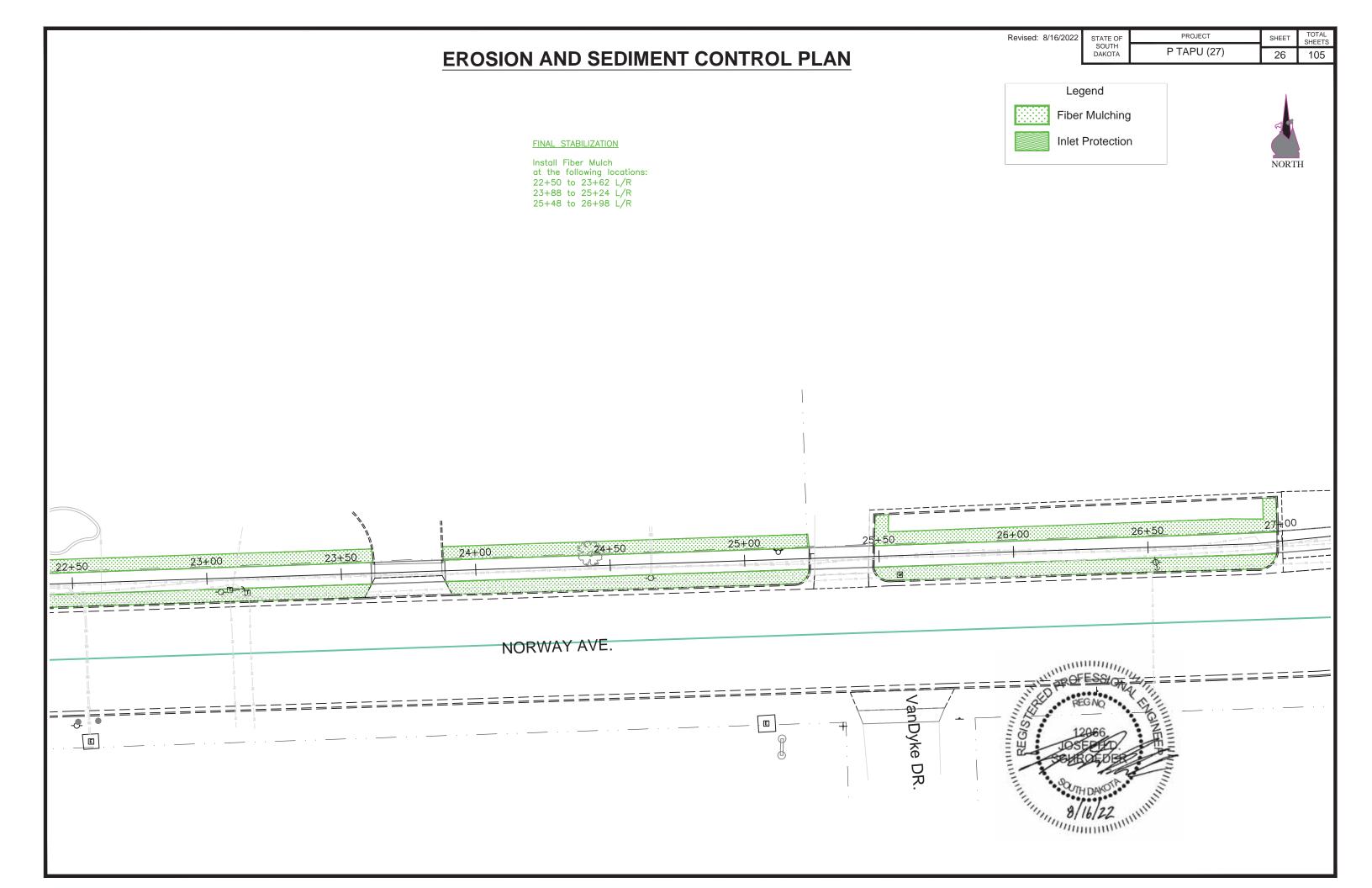


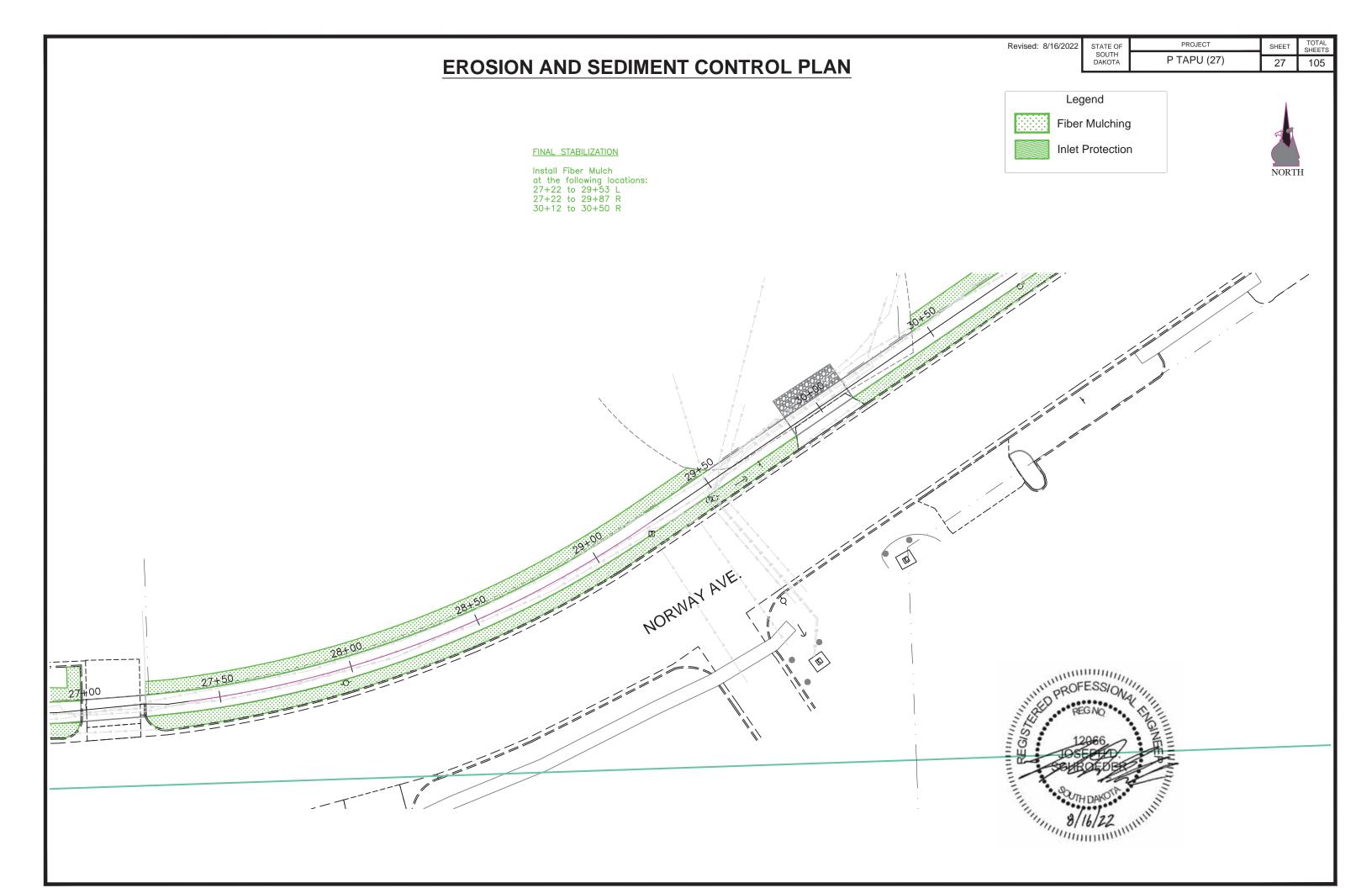


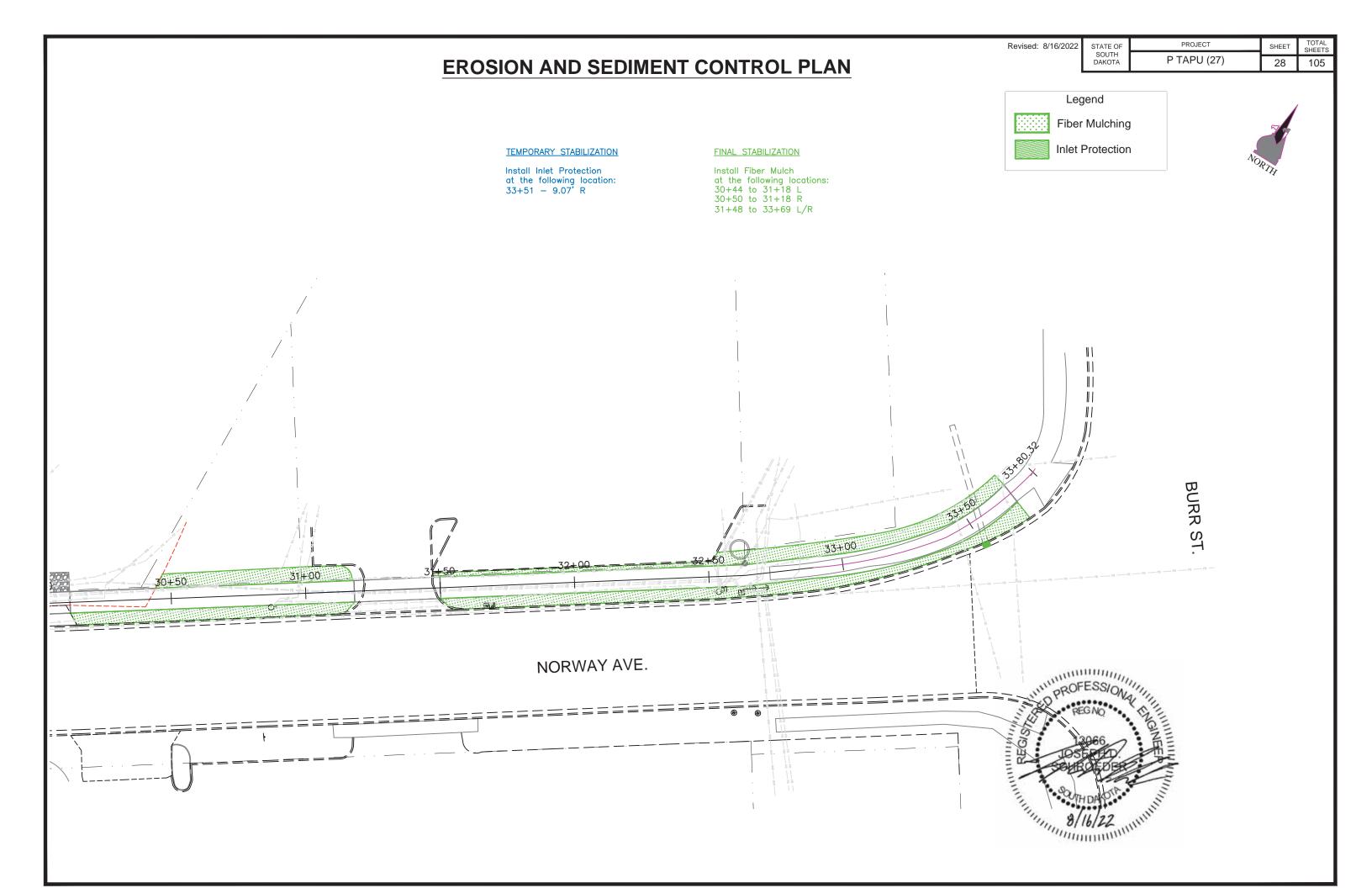


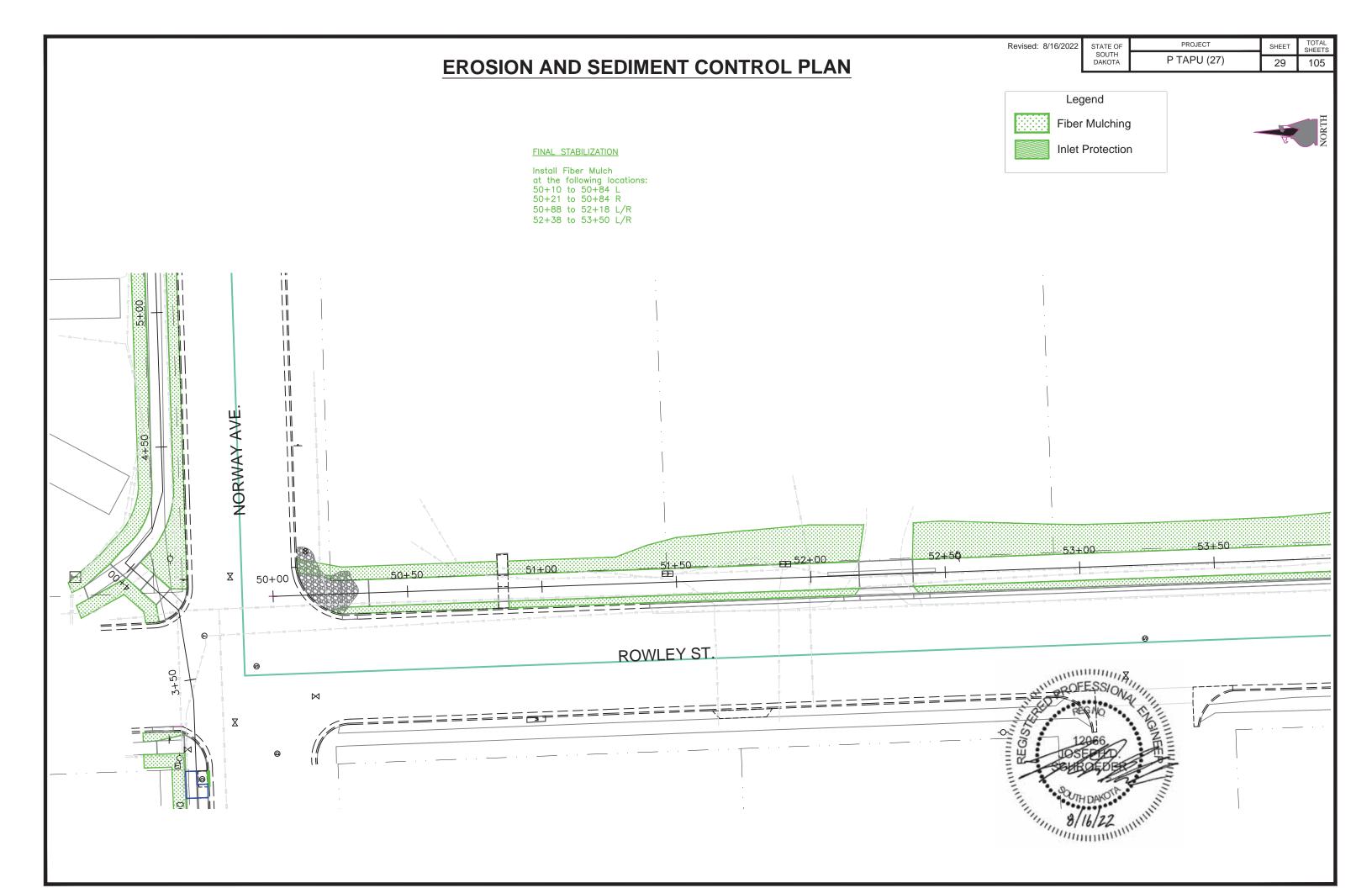


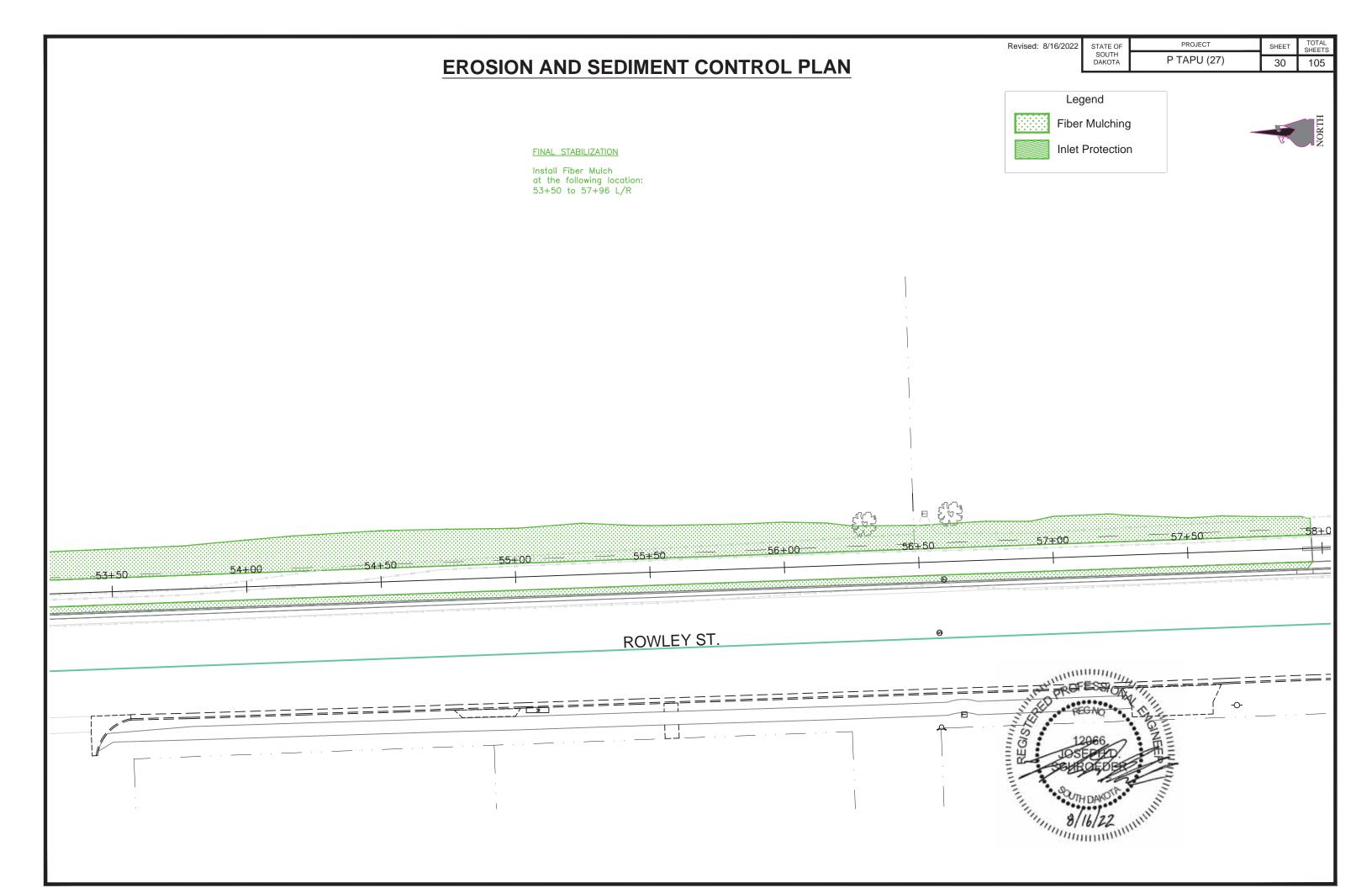


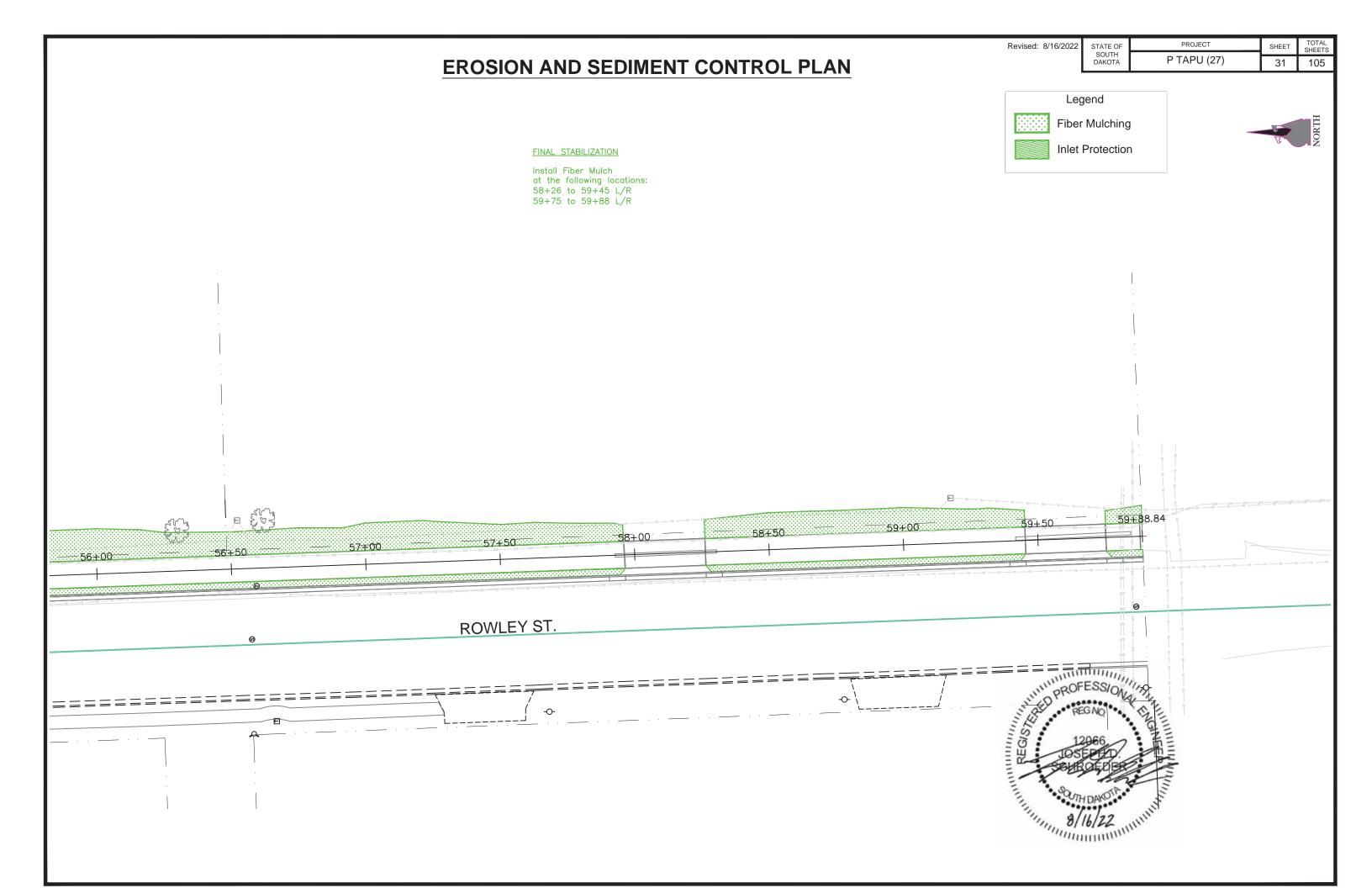












STORMWATER POLLUTION PREVENTION PLAN CHECKLIST

(The numbers left of the title headings are **reference numbers** to the <u>GENERAL PERMIT FOR STORM WATER DISCHARGES ASSOCIATED</u> WITH CONSTRUCTION ACTIVITIES (Stormwater Permit))

5.3 (2): STAFF TRAINING/SWPPP IMPLEMENTATION

To promote stormwater management awareness specific for this project, the Contractor's Erosion Control Supervisor should provide correspondence of how the SWPPP will be implemented. The Contractor's Erosion Control Supervisor is responsible for providing this information at the preconstruction meeting, and subsequently completing an attendance log, which should identify site-specific implementation of the SWPPP and the names of the personnel who attended the preconstruction meeting. Documentation of the preconstruction meeting will be filed with the SWPPP documents.

5.3 (3): DESCRIPTION OF CONSTRUCTION ACTIVITIES

- > 5.3 (3a): Project Limits (See Title Sheet)
- > 5.3 (3a): Project Description (See Title Sheet)
- > 5.3 (4): Site Map(s) (See Title Sheet and Plans)
- Major Soil Disturbing Activities (check all that apply)
 - ⊠Clearing and grubbing
- ⊠Excavation/borrow
- ⊠Grading and shaping
- Silling
- Other (describe):
- > 5.3 (3b): Total Project Area 2.5 Acres
- > 5.3 (3b): Total Area to be Disturbed 1.8 Acres
- > 5.3 (3c): Maximum Area Disturbed at One Time No Constraints
- > 5.3 (3d): Existing Vegetative Cover (%) 90%
- > 5.3 (3d): Description of Vegetative Cover Residential Lawn grass
- > 5.3 (3e): Soil Properties: NA
- > 5.3 (3f): Name of Receiving Water Body/Bodies Dry Run Creek
- > 5.3 (3g): Location of Construction Support Activity Areas TBD

5.3 (3h): ORDER OF CONSTRUCTION ACTIVITIES

The Contractor will enter the Estimated Start Date.

Description	Estimated Start Date
Install perimeter protection where runoff may exit site.	
Install perimeter protection around stockpiles.	
Clearing and grubbing.	
Remove and stockpile topsoil.	
Stabilize disturbed areas.	
Install sidewalk, curb and gutter and related.	1111111
Final grading.	ESSIO
Final paving.	Way 1/1/
Removal of protection devices.	GNO ON
Reseed areas disturbed by removal activities	0066
NEW YORK	OF DE
The san	16/22

5.3 (5): DESCRIPTION AND MAINTENANCE OF CONTROL MEASURES

All controls will be maintained in good working order. Necessary repairs will be initiated within 24 hours of the site inspection report. Include the technical reasoning for selecting each control. (check all that apply)

Perimeter Controls (See Detail Plan Sheets)

Description	Estimated Start Date
⊠ Natural Buffers (within 50 ft of Waters of State)	
☐ Silt Fence	
☐ Erosion Control Wattles	
☐ Temporary Berm / Windrow	
☐ Floating Silt Curtain	
Stabilized Construction Entrances	
☐ Entrance/Exit Equipment Tire Wash	
Other: There are large amounts of natural buffers	

Structural Erosion and Sediment Controls

Description	Estimated Start Date
⊠ Silt Fence	
☐ Temporary Berm/Windrow	
☐ Erosion Control Wattles	
☐ Temporary Sediment Barriers	
☐ Erosion Bales	
☐ Temporary Slope Drain	
☐ Turf Reinforcement Mat	
Riprap	
Gabions	
☐ Rock Check Dams	
☐ Sediment Traps/Basins	
Culvert Inlet Protection	
☐ Transition Mats	
☐ Median/Area Drain Inlet Protection	
⊠ Curb Inlet Protection	
☐ Interceptor Ditch	
☐ Concrete Washout Facility	
☐ Work Platform	
☐ Temporary Water Barrier	
☐ Temporary Water Crossing	
Permanent Stormwater Ponds	
☐ Permanent Open Vegetated Swales	
☐ Natural Depressions to allow for Infiltration	
☐ Sequential Systems that combine several practices	
Other:	

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Dust Controls

Description	Estimated Start Date
☐ Tarps & Wind impervious fabrics	
☐ Watering	
☐ Stockpile location/orientation	
☐ Dust Control Chlorides	
□Other	

Dewatering BMPs

Description	Estimated Start Date
☐ Sediment Basins	
☐ Dewatering bags	
☐ Weir tanks	
☐ Temporary Diversion Channel	
Other:	

Stabilization Practices (See Detail Plan Sheets)

(Stabilization measures will begin the following work day whenever earth disturbing activity on any portion of the site has temporarily or permanently ceased. Temporary stabilization will be completed as soon as practicable but no later than 14 days after initiating soil stabilization activities (3.18))

Description	Estimated Start Date
⊠Vegetation Buffer Strips	
☐ Temporary Seeding (Cover Crop Seeding)	
□ Permanent Seeding	
Sodding	
☐ Planting (Woody Vegetation for Soil Stabilization)	
☐ Mulching (Grass Hay or Straw)	
☐ Fiber Mulching (Wood Fiber Mulch)	
☐ Soil Stabilizer	
☐ Bonded Fiber Matrix	
☐ Fiber Reinforced Matrix	
☐ Erosion Control Blankets	
Surface Roughening (e.g. tracking)	
Other:	

Wetland Avoidance

Will construction and/or erosion and sediment controls impinge on regulated wetlands? Yes \(\subseteq \) No \(\subseteq \) If yes, the structural and erosion and sediment controls have been included in the total project wetland impacts and have been included in the 404 permit process with the USACE.

5.3 (6): PROCEDURES FOR INSPECTIONS

- Inspections will be conducted at least once every 7 days.
- All controls will be maintained in good working order. Necessary repairs will be initiated within 24 hours of the site inspection report.
- Silt fence will be inspected for depth of sediment and for tears to ensure the fabric is securely attached to the posts and that the posts are well anchored. Sediment buildup will be removed from the silt fence when it reaches 1/3 of the height of the silt fence.
- Sediment basins and traps will be checked. Sediment will be removed when depth reaches approximately 50 percent of the structure's capacity, and at the conclusion of the construction.
- Check dams will be inspected for stability. Sediment will be removed when depth reaches ½ the height of the dam.
- All seeded areas will be checked for bare spots, washouts, and vigorous growth free of significant weed infestations.
- Inspection and maintenance reports will be prepared on form DOT 298 for each site inspection, this form will also be used to document changes to the SWPPP. A copy of the completed inspection form will be filed with the SWPPP documents.
- The SDDOT Project Engineer and Contractor's Erosion Control Supervisor are responsible for inspections. Maintenance and repair activities are the responsibility of the Contractor. The SDDOT Project Engineer will complete the inspection and maintenance reports and distribute copies per the distribution instructions on DOT 298.

5.3 (7): POST CONSTRUCTION STORMWATER MANAGEMENT

Stormwater management will be handled by temporary controls outlined in "DESCRIPTION AND MAINTENANCE OF CONTROL MEASURES" above, and any permanent controls needed to meet permanent stormwater management needs in the post construction period will be shown in the plans and noted as permanent.

5.3 (8): POLLUTION PREVENTION PROCEDURES

5.3 (8a): Spill Prevention and Response Procedures

Material Management

- Housekeeping
 - Only needed products will be stored on-site by the Contractor.
 - Except for bulk materials the contractor will store all materials under cover and/or in appropriate containers.
 - Products must be stored in original containers and labeled.
 - Material mixing will be conducted in accordance with the manufacturer's recommendations.
 - When possible, all products will be completely used before properly disposing of the container off-site.
 - The manufacturer's directions for disposal of materials and containers will be followed.
 - The Contractor's site superintendent will inspect materials storage areas regularly to ensure proper use and disposal.
 - Dust generated will be controlled in an environmentally safe manner.

Hazardous Materials

- Products will be kept in original containers unless the container is not resealable and provide secondary containment as applicable.
- Original labels and material safety data sheets will be retained in a safe place to relay important product information.

- If surplus product must be disposed of, manufacturer's label directions for disposal will be followed.
- Maintenance and repair of all equipment and vehicles involving oil changes, hydraulic system drain down, de-greasing operations, fuel tank drain down and removal, and other activities which may result in the accidental release of contaminants will be conducted on an impervious surface and under cover during wet weather to prevent the release of contaminants onto the ground.
- Wheel wash water will be collected and allowed to settle out suspended solids prior to discharge. Wheel wash water will not be discharged directly into any stormwater system or stormwater treatment system.
- Potential pH-modifying materials such as: bulk cement, cement kiln dust, fly ash, new concrete washings, concrete pumping, residuals from concrete saw cutting (either wet or dry), and mixer washout waters will be collected on site and managed to prevent contamination of stormwater runoff.

Spill Control Practices

In addition to the previous housekeeping and management practices, the following practices will be followed for spill prevention and cleanup if needed.

- For all hazardous materials stored on site, the manufacturer's recommended methods for spill cleanup will be clearly posted. Site personnel will be made aware of the procedures and the locations of the information and cleanup supplies.
- Appropriate cleanup materials and equipment will be maintained by the Contractor in the materials storage area on-site. As appropriate, equipment and materials may include items such as brooms, dust pans, mops, rags, gloves, goggles, kitty litter, sand, sawdust, and plastic and metal trash containers specifically for cleanup purposes.
- All spills will be cleaned immediately after discovery and the materials disposed of properly.
- The spill area will be kept well ventilated and personnel will wear appropriate protective clothing to prevent injury from contact with a hazardous substance.
- After a spill a report will be prepared describing the spill, what caused it, and the cleanup measures taken. The spill prevention plan will be adjusted to include measures to prevent this type of spill from reoccurring, as well as clean up instructions in the event of reoccurrences.
- The Contractor's site superintendent, responsible for day-to-day operations, will be the spill prevention and cleanup coordinator.

> Spill Response

The primary objective in responding to a spill is to quickly contain the material(s) and prevent or minimize migration into stormwater runoff and conveyance systems. If the release has impacted on-site stormwater, it is critical to contain the released materials on-site and prevent their release into receiving waters. If a spill of pollutants threatens stormwater or surface water at the site, the spill response procedures outlined below must be implemented in a timely manner to prevent the release of pollutants.

- The Contractor's site superintendent will be notified immediately when a spill or the threat of a spill is observed. The superintendent will assess the situation and determine the appropriate response.
- If spills represent an imminent threat of escaping erosion and sediment controls and entering receiving waters, personnel will be directed to respond immediately to contain the release and notify the superintendent after the situation has been stabilized.

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- Spill kits containing appropriate materials and equipment for spill response and cleanup will be maintained by the Contractor at the site
- If oil sheen is observed on surface water (e.g. settling ponds, detention ponds, swales), action will be taken immediately to remove the material causing the sheen. The Contractor will use appropriate materials to contain and absorb the spill. The source of the oil sheen will also be identified and removed or repaired as necessary to prevent further releases.
- If a spill occurs the superintendent or the superintendent's designee will be responsible for completing the spill reporting form and for reporting the spill to SDDANR.
- Personnel with primary responsibility for spill response and cleanup will receive training by the Contractor's site superintendent or designee. The training must include identifying the location of the spill kits and other spill response equipment and the use of spill response materials.
- Spill response equipment will be inspected and maintained as necessary to replace any materials used in spill response activities.

5.3 (8b): WASTE MANAGEMENT PROCEDURES

Waste Disposal

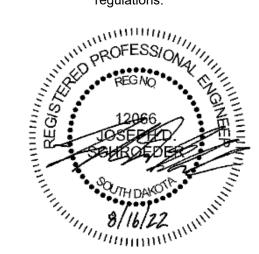
 All liquid waste materials will be collected and stored in approved sealed containers. All trash and construction debris from the site will be deposited in the approved containers. Containers will be serviced as necessary, and the trash will be hauled to an approved disposal site or licensed landfill. All onsite personnel will be instructed in the proper procedures for waste disposal and notices stating proper practices will be posted. The Contractor is responsible for ensuring waste disposal procedures are followed.

> Hazardous Waste

 All hazardous waste materials will be disposed of in a manner specified by local or state regulations or by the manufacturer. Site personnel will be instructed in these practices, and the Contractor will be responsible for seeing that these practices are followed.

> Sanitary Waste

Portable sanitary facilities will be provided on all construction sites.
 Sanitary waste will be collected from the portable units which must be secured to prevent tipping and serviced in a timely manner by a licensed waste management Contractor or as required by any local regulations.



5.3 (9): CONSTRUCTION SITE POLLUTANTS

The following materials or substances are expected to be present on the site during the construction period. These materials will be handled as noted under the heading "POLLUTION PREVENTION PROCEDURES" (check all that apply).

\triangleright	□ Detergents
\triangleright	⊠ Paints
\triangleright	Metals
\triangleright	⊠ Bituminous Materials
	☐ Petroleum Based Products
\triangleright	☐ Diesel Exhaust Fluid
	☐ Cleaning Solvents
\triangleright	☐ Wood
\triangleright	□ Cure
	☐ Texture
\triangleright	☐ Chemical Fertilizers
\triangleright	Other:

Product Specific Practices

Petroleum Products

All on-site vehicles will be monitored for leaks and receive regular preventive maintenance to reduce the chance of leakage. Petroleum products will be stored in tightly sealed containers which are clearly labeled.

Fertilizers

Fertilizers will be applied only in the amounts specified by the SDDOT. Once applied, fertilizers will be worked into the soil to limit the exposure to stormwater. Fertilizers will be stored in an enclosed area. The contents of partially used fertilizer bags will be transferred to sealable containers to avoid spills.

Paints

All containers will be tightly sealed and stored when not required for use. The excess will be disposed of according to the manufacturer's instructions and any applicable state and local regulations.

Concrete Trucks

Contractors will provide designated truck washout facilities on the site. These areas must be self-contained and not connected to any stormwater outlet of the site. Upon completion of construction, the area at the washout facility will be properly stabilized.

5.3 (10): NON-STORMWATER DISCHARGES

The following non-stormwater discharges are anticipated during the course of this project (check all that apply).

>	Discharg	ges	from	water	line	flushing.
	_					

- Pavement wash-water, where no spills or leaks of toxic or hazardous materials have occurred.
- Uncontaminated ground water associated with dewatering activities.

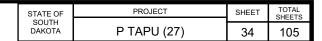
5.3 (11): INFEASIBILITY DOCUMENTATION

If it is determined to be infeasible to comply with any of the requirements of the Stormwater Permit, the infeasibility determination must be thoroughly documented in the SWPPP.

7.0: SPILL NOTIFICATION

In the event of a spill, the Contractor's site superintendent will make the appropriate notification(s), consistent with the following procedures:

- A release or spill of a regulated substance (includes petroleum and petroleum products) must be reported to SDDANR immediately **if any one of the following** conditions exists:
 - The release or spill threatens or is able to threaten waters of the state (surface water or ground water)
 - The release or spill causes an immediate danger to human health or safety
 - The release or spill exceeds 25 gallons
 - The release or spill causes a sheen on surface water
 - The release or spill of any substance that exceeds the ground water quality standards of ARSD Chapter 74:54:01
 - The release or spill of any substance that exceeds the surface water quality standards of ARSD Chapter 74:51:01
 - The release or spill of any substance that harms or threatens to harm wildlife or aquatic life
 - The release or spill is required to be reported according to Superfund Amendments and Reauthorization Act (SARA) Title III List of Lists, Consolidated List of Chemicals Subject to Reporting Under the Emergency Planning and Community Right to Know Act, US Environmental Protection Agency.
- ➤ To report a release or spill, call SDDANR at 605-773-3296 during regular office hours (8 a.m. to 5 p.m. Central Standard Time). To report the release after hours, on weekends or holidays, call South Dakota Emergency Management at 605-773-3231. Reporting the release to SDDANR does not meet any obligation for reporting to other state, local, or federal agencies. Therefore, you must also contact local authorities to determine the local reporting requirements for releases. A written report of the unauthorized release of any regulated substance, including quantity discharged, and the location of the discharge will be sent to SDDANR within 14 days of the discharge.



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5.4: SWPPP CERTIFICATIONS

Certification of Compliance with Federal, State, and Local Regulations

The Storm Water Pollution Prevention Plan (SWPPP) for this project reflects the requirements of all local municipal jurisdictions for storm water management and sediment and erosion control as established by ordinance, as well as other state and federal requirements for sediment and erosion control plans, permits, notices or documentation as appropriate.

> South Dakota Department of Transportation

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

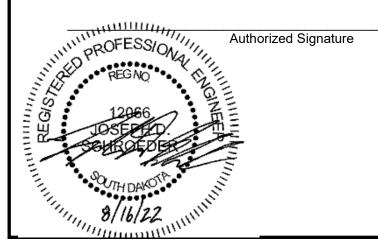
The Below ?

Authorized Signature (See the General Permit, Section 7.4 (1))

Prime Contractor

This section is to be executed by the General Contractor after the award of the contract. This section may be executed any time there is a change in the Prime Contractor of the project.

I certify under penalty of law that this document and all attachments will be revised or maintained under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.



CONTACT INFORMATION

The following personnel are duly authorized representatives and have signatory authority for modifications made to the SWPPP:

> Contractor Information:

•	Prime Contractor Name:		
•	Contractor Contact Name: _		
•	Address:		-
•			_
•	City:	State:	Zip:
•	Office Phone:	Field:	
	Cell Phone:	Fax:	

Erosion Control Supervisor

Name:		
Address:		
•		
• City:	State:	Zip:

Cell Phone:SDDOT Project Engineer

Name:

_	Name.			
•	Business Address: _			_
•	Job Office Location: _			_
•	City:	State:	Zip:	
	Office Phone:	Field:		
	Cell Phone:	Fax:		

Office Phone: Field:

Fax:

> SDDANR Contact Spill Reporting

- Business Hours Monday-Friday (605) 773-3296
- Nights and Weekends (605) 773-3231

> SDDANR Contact for Hazardous Materials.

(605) 773-3153

> National Response Center Hotline

(800) 424-8802.

> SDDANR Stormwater Contact Information

- SDDANR Stormwater (800) 737-8676
- Surface Water Quality Program (605) 773-3351

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5.5: REQUIRED SWPPP MODIFICATIONS

> 5.5 (1): Conditions Requiring SWPPP Modification The SWPPP must be modified, including the site map(s), in response to any of the following conditions:

- When a new operator responsible for implementation of any part the SWPPP begins work on the site.
- When changes to the construction plans, sediment and erosion control measures, or any best management practices on site that are no longer accurately reflected in the SWPPP. This includes changes made in response to corrective actions triggered by inspections.
- To reflect areas on the site map where operational control has been transferred (including the date of the transfer) or has been covered under a new permit since initiating coverage under this general permit.
- If inspections by site staff, local officials, SDDANR, or U.S. EPA determine that SWPPP modifications are necessary for compliance with the Stormwater Permit.
- To reflect any revisions to applicable federal, state, or local requirements that affect the control measures implemented at the
- If approved by the Secretary, to reflect any changes in chemical water treatment systems or controls, including the use of a different water treatment chemical, age rates, different areas, or methods of application.

> 5.5 (2): Deadlines for SWPPP Modification

Any required revisions to the SWPPP must be completed within 7 calendar days following any of the items listed above.

> 5.5 (3): Documentation of Modifications to the Plan

All SWPPP modification records are required to be maintained showing the dates of when the modification occurred. The records must include the name of the person authorizing each change and a brief summary of all changes.

> 5.5 (4): Certification Requirements

All modifications made to the SWPPP must be signed and certified as required in Section 7.4.

> 5.5 (5): Required Notice to Other Operators

If there are multiple operators at the site, the Contractor's Erosion Control Supervisor must notify each operator that may be impacted by the change to the SWPPP within 24 hours.

When modifications as described above occur, the SWPPP will be modified to provide appropriate protection to disturbed areas, all storm water structures, and adjacent waters. The SDDOT Project Engineer will modify the SWPPP using the DOT 298 form and drawings on the plan will be modified to reflect the needed changes. Copies of the DOT 298 forms and the SWPPP will be retained on site in a designated place for review throughout the course of the project. A copy of the DOT 298 form will be given to the Contractor Erosion Control Supervisor and a copy will be emailed to the SDDOT Environmental Section in accordance with the DOT 298 Form.

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HORIZONTAL ALIGNMENT DATA

				1.775000	WAY AVENU	E			
).	BEARING	DELTA ANGLE	TANGENT	EXTERNAL	LENGTH	RADIUS	P.C.	P.I.	P.T.
	N 87"50'09.21" E				342.287'				3+42.29'
_	N 80°33'59.72" E				33.945'	1			3+76.23'
_	N 41°21'43.29" E				15.564'				3+91.80'
	N 41*36'45.86" E				10.946'				4+02.74'
_	S 50°03'20.67" E				15.344'				4+18.09'
_	S 74°32'36.53" E				15.343'				4+33.43'
_	N 88°06'18.76" E				84.724'				5+18.15'
_	N 88°08'13.41" E				45.876'				5+64.03'
_	N 88°06'10.99" E				49.796'				6+13.83'
-	N 88°00'10.44" E				38.922'				6+52.75'
_	N 88°07'24.09" E				54.380'				7+07.13'
	N 88°00'34.09" E				42.610'				7+49.74
	N 89*13'57.46" E			_	6.316'				7+56.05'
8	N 87°31'31.11" E				15.794'				7+71.85'
2	N 58°03'25.49" E			_	33.580'				8+05.43'
	N 88°09'12.87" E				66.610'				8+72.04'
	N 88*09'12.87" E			-	111.664'				9+83.70'
	N 88*09'12.87" E				26.893'				10+10.59'
	N 88°09'12.87" E				128.022'				11+38.62'
	N 88°09'12.87" E				211.614'				13+50.23'
	S 59°52'40.91" E				30.753'				13+80.98'
-	N88° 06' 07.94"E				51.707'				14+32.69
-	N88° 06' 07.94"E				64.508'				14+97.20'
	N88* 06' 07.94"E				74.432'	:			15+71.63'
-	N88° 06' 07.94"E				65.972'		-		16+37.60'
_	N88° 06' 07.94"E				157.574'				17+95.18'
	N88" 03' 09.98"E				16.016'				18+11.19'
-	N88° 00′ 21.06″E				41.724'				18+52.92'
_	N88° 43' 30.77"E				15.973'				18+68.89'
	N88* 04' 45.51"E				316.406'				21+85.30'
_	N88" 04' 45.51"E				27.652'				22+12.95'
2	N88° 04' 45.51"E				150.036'				23+62.98'
	N88° 04' 45.51"E				24.457'				23+87.44'
4	N88° 04' 45.51"E				120.516'				25+07.96'
	N88° 05' 00.45"E				8.003'				25+15.96'
_	N88* 07' 58.61"E				8.085'				25+24.04'
_	N88" 06' 47.74"E				24.153'				25+48.20'
	N88° 06' 49.41"E				8.757'				25+56.95'
	N88° 05' 39.22"E				8.000'				25+64.95'
-	N88" 05' 39.20"E				116.522'				26+81.48'
	N88° 07' 41,43"E				8.000'				26+89.48'
8	N84" 22' 11.12"E				8.518				26+97.99'
1	N84" 22' 11.12"E				24.171'				27+22.17'
	S89° 24' 50.00"E				8.289'				27+30.45'
	N82" 13' 48.18"E	N 70133130 0 41 5	12.59	40.040)	8.011'	201 6201	22.55.49	22.51.20	2/+38.47
		N 78°32'20.94" E	12.67'	12.618'	25.228'	391.629'	27+38.47'	27+51.08	27+38.47' 27+63.69' 29+25.06', 30+98.62' 31+12-16'
		N 54"55'52.14" E	81.85	81.844'	161.366'	391.629'	27+63.69'	28+45.54	29+25.06
	N55° 46' 57.87"E				173,560'				30+98.62
	N55° 40′ 52.93″E				13.544'				31+12-16
	N55* 40' 52.93"E				10.074'				31+247.260
	N55° 40' 52.93"E				24.310'				31+45.50 31+Z3.50
	N55" 40' 52.93"E				27.253				31+23.80
8	N55° 40' 52.93"E				89.678'				32+63.48
	N51° 27' 57.30"E		22.727	2277117	25.558'	444 444		122 727 727	32+89.04
		N 34°25'44.10" E	25.44'	25.448'	50.520'	169.899'	32+89.04	33+14.48'	33+39:56'
		N 20"58'08.46" E	14.74'	14.740'	29.344'	124.910'	33+39.56'	33+54.30'	33+68.90
7		N 15°43'53.10" E	5.71'	5.713' RO\	WLEY STREET	124.910' T	33+68.90'	33+74.61'	33+39:56' 33+68.90', 33+80.32''//,
_	BE LOW!	DECEM 11.5.5	**********			-			
).	BEARING	DELTA ANGLE	TANGENT	EXTERNAL	LENGTH	RADIUS	P.C.	P.I.	P.T.
8	S 02°03'50.85" E				988.843'	9	<u>u</u>		59+88.84

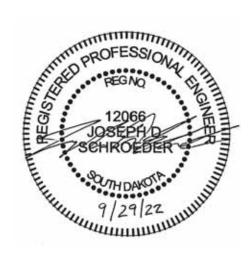
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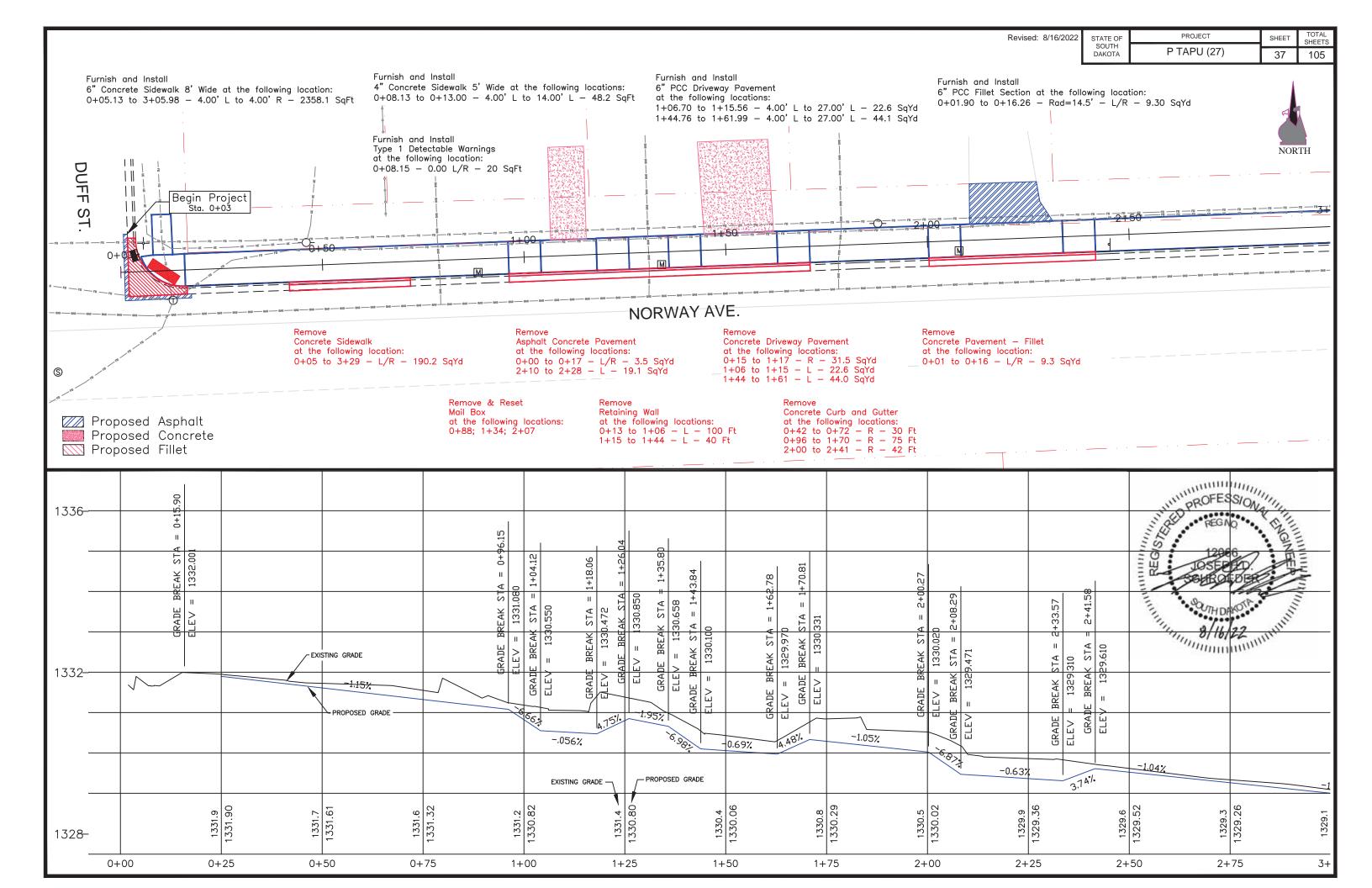
١	STATE OF	PROJECT	SHEET	TOTAL SHEETS
ı	SOUTH			SHEETS
ı	DAKOTA	P TAPU (27)	36-A	105

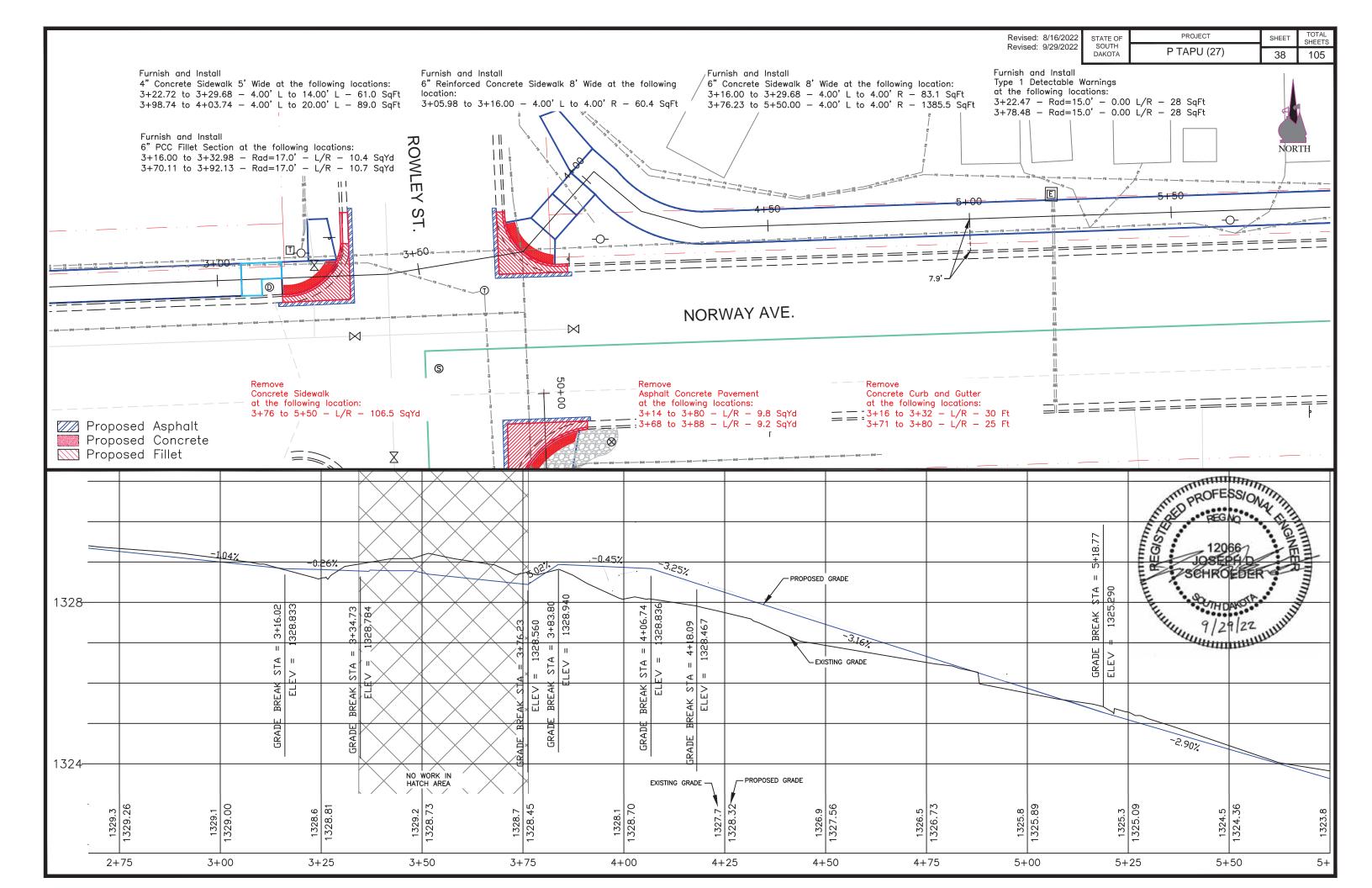
LEGEND OF SYMBOLS

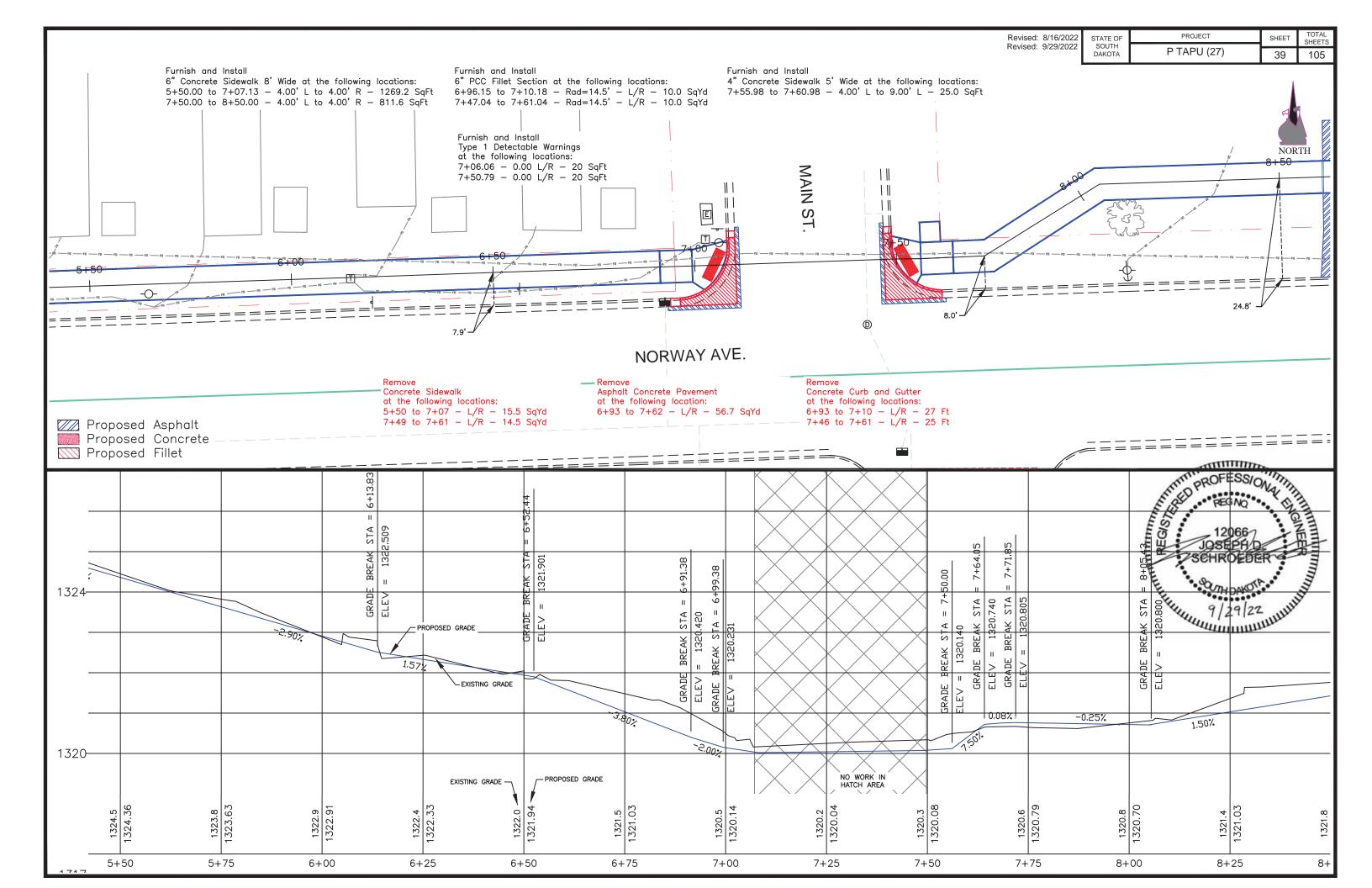
	Section Line
	Property Line
—— GAS ——— GAS —————————————————————————	Gas Main
	Water Main
	Storm Sewer
— FO — FO — FO —	Fiber Optic
—— UE ——— UE ——— UE ———	Underground Power
	Fence
	Retaining Wall
=======================================	Conc. Curb & Gutter
	Sidewalk
	Asphalt
	Culvert
	Building
	Landscaping

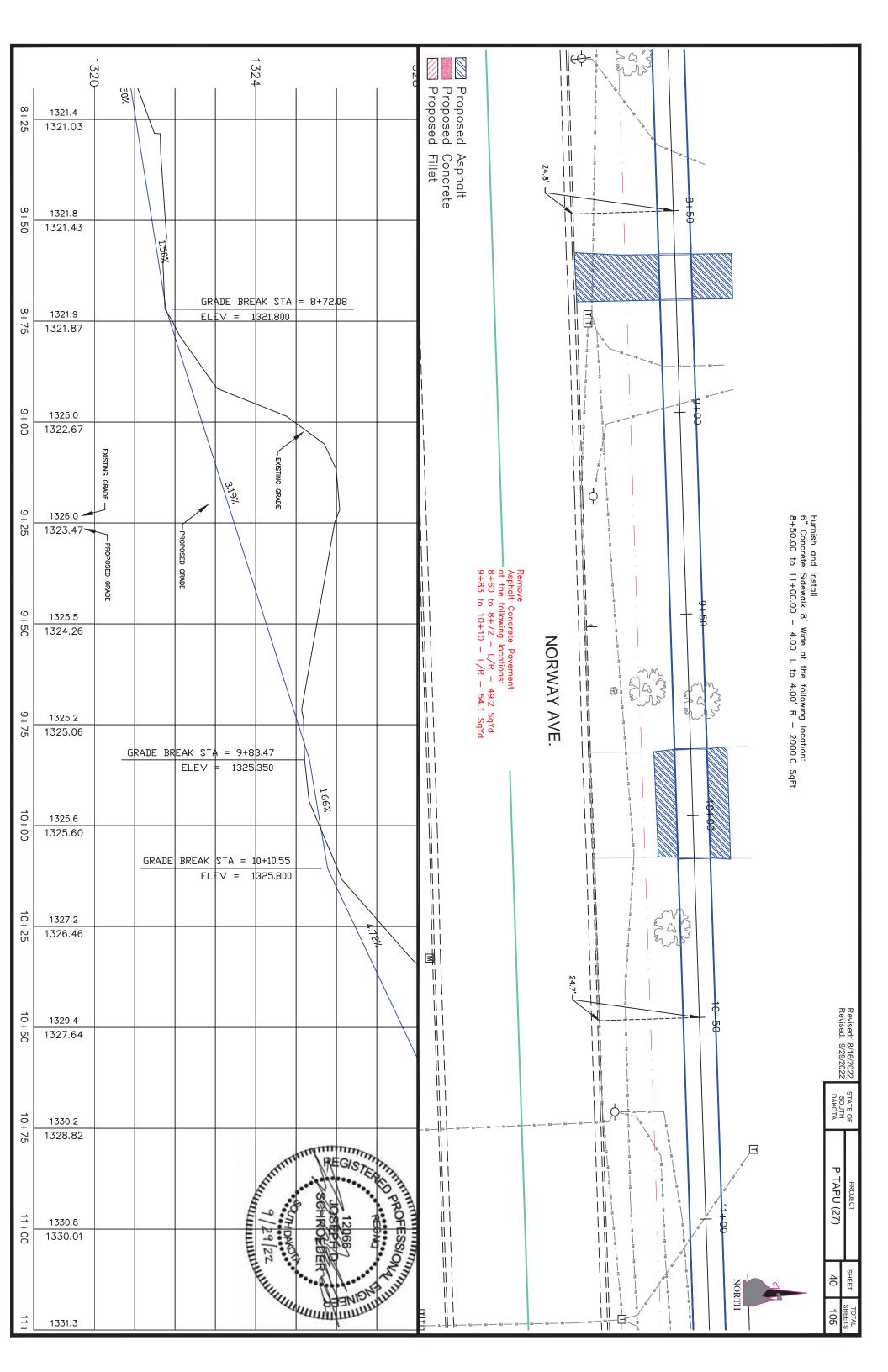
Street Sign Stop/Yield Sign Commercial Sign Storm Sewer Manhole S Sanitary Sewer Manhole Water Valve Manhole T Telephone Manhole \otimes Water Shutoff Ε Electrical Ped T Telephone Ped Mailbox Sump Curb Discharge Bollard Deciduous Tree Shrub Power Pole Guy Wire Gas Valve \bowtie Watermain Valve & Box Storm Catch Basin V Fire Hydrant

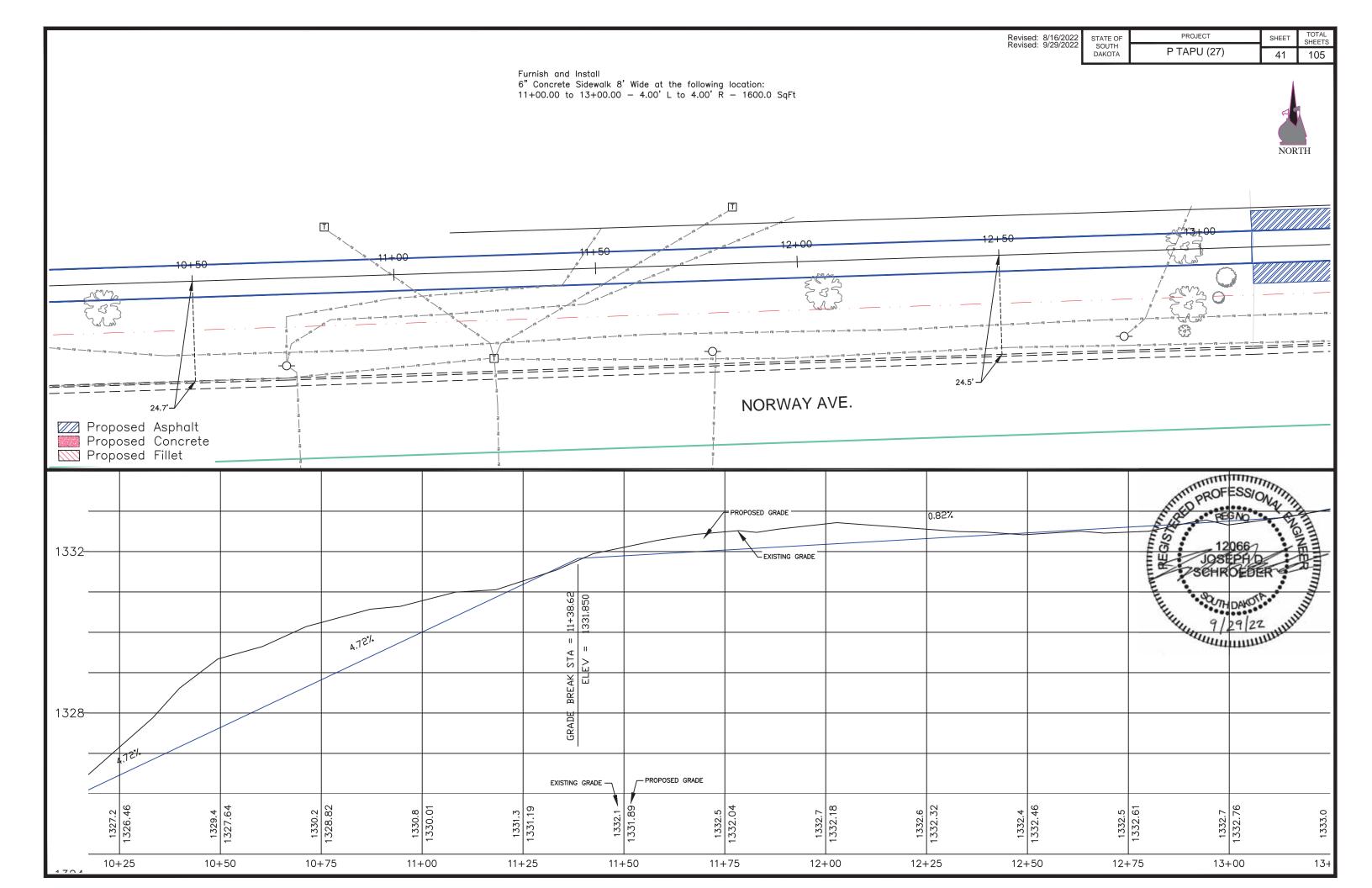


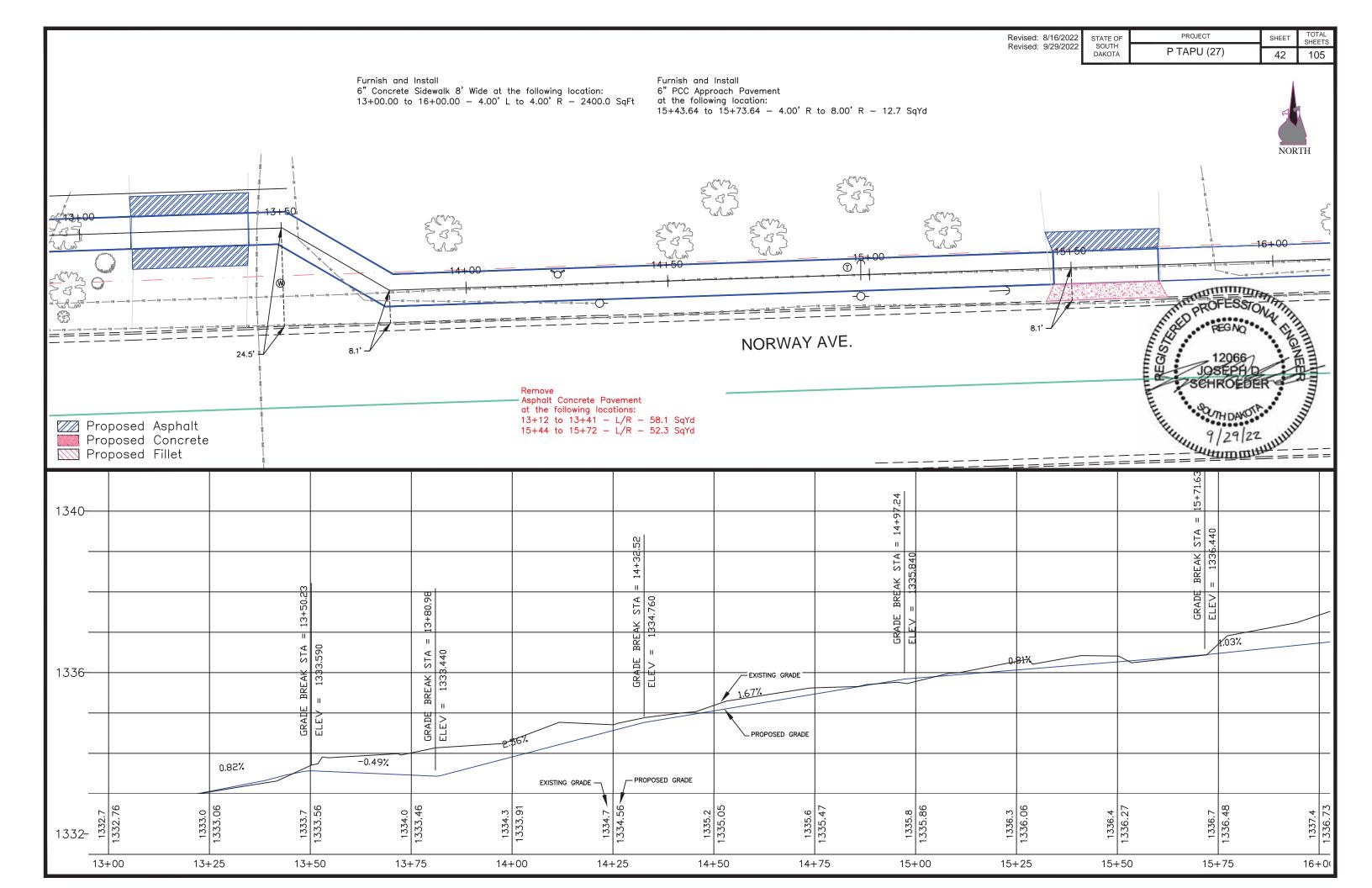




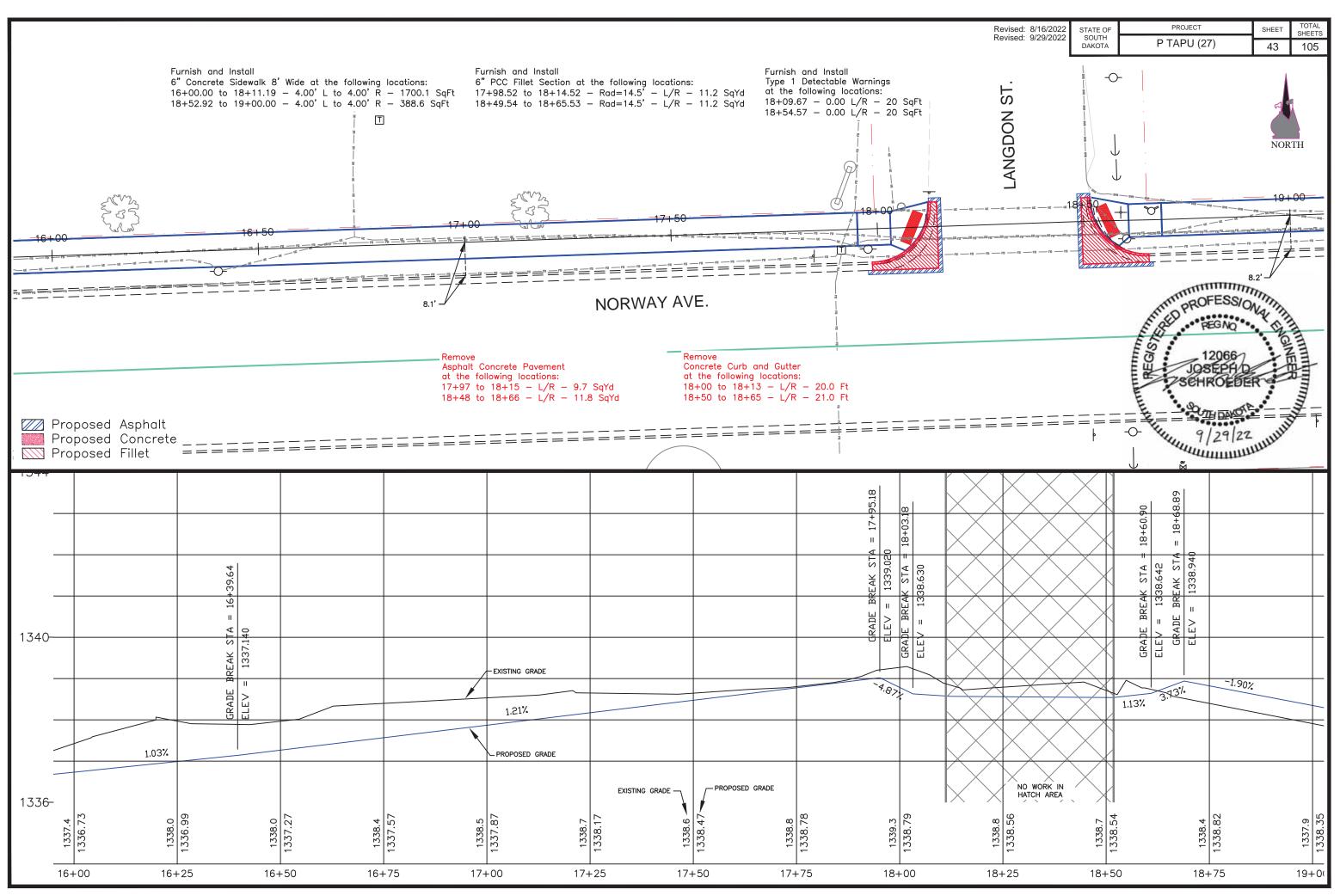


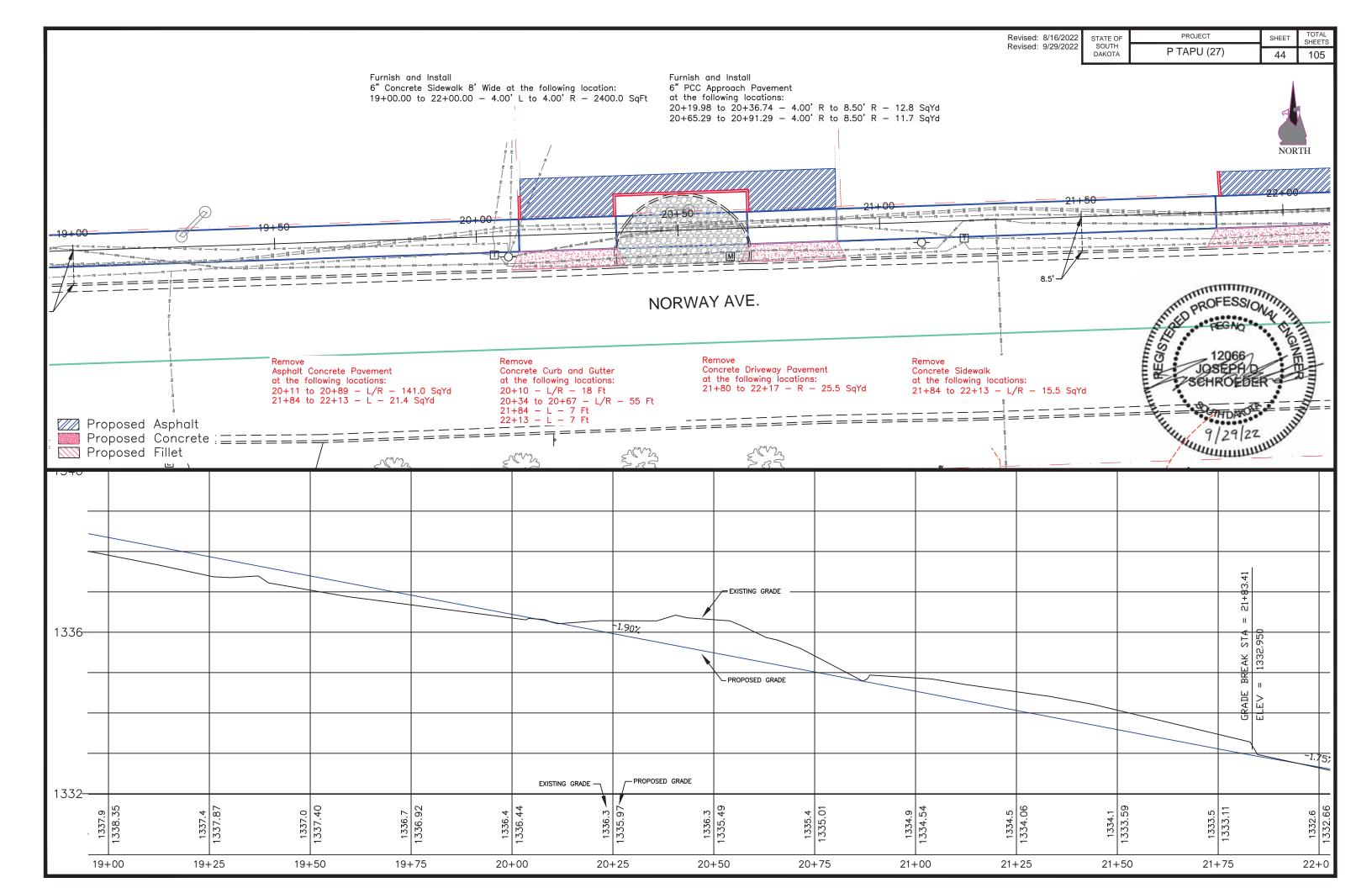


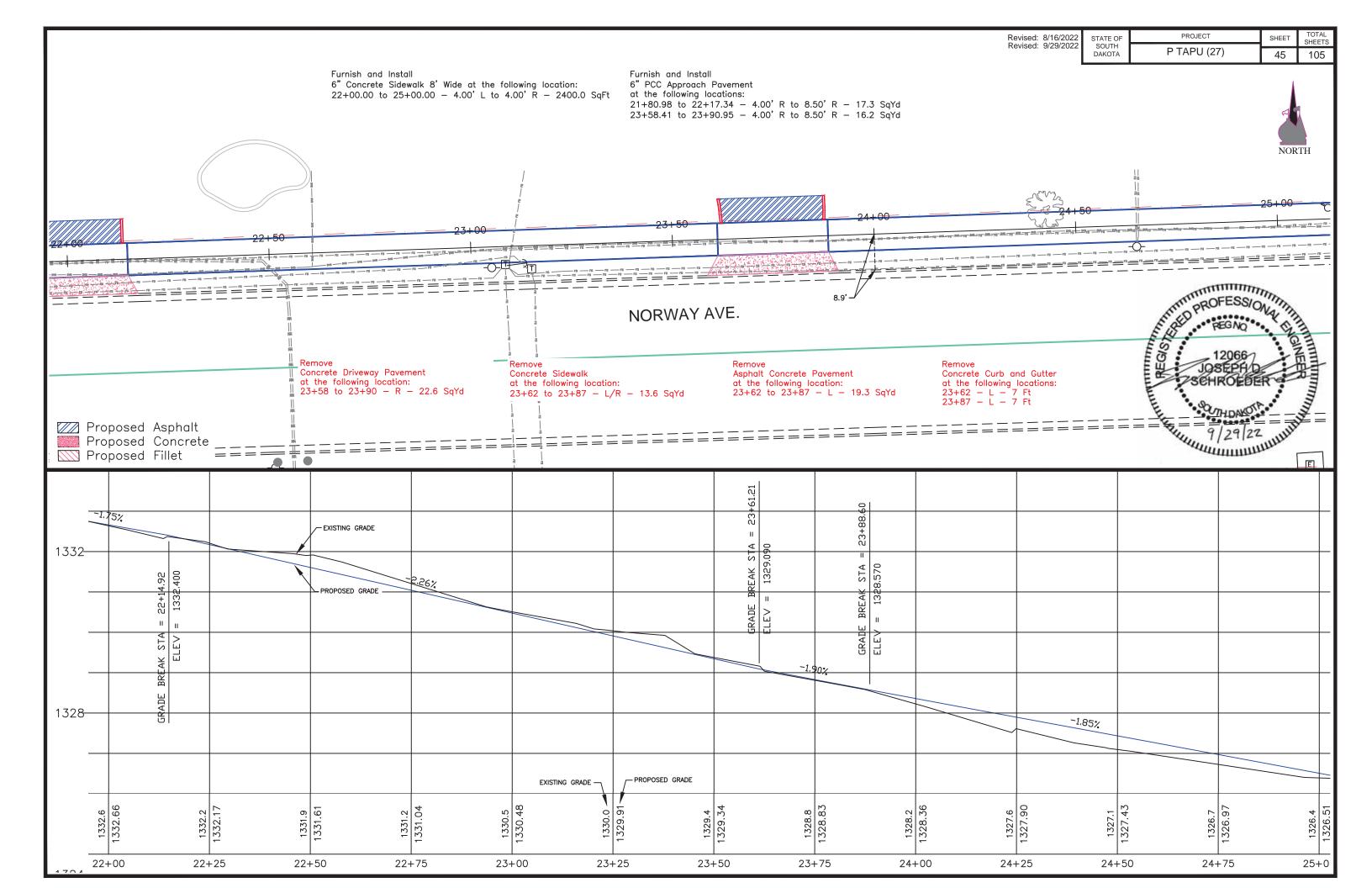


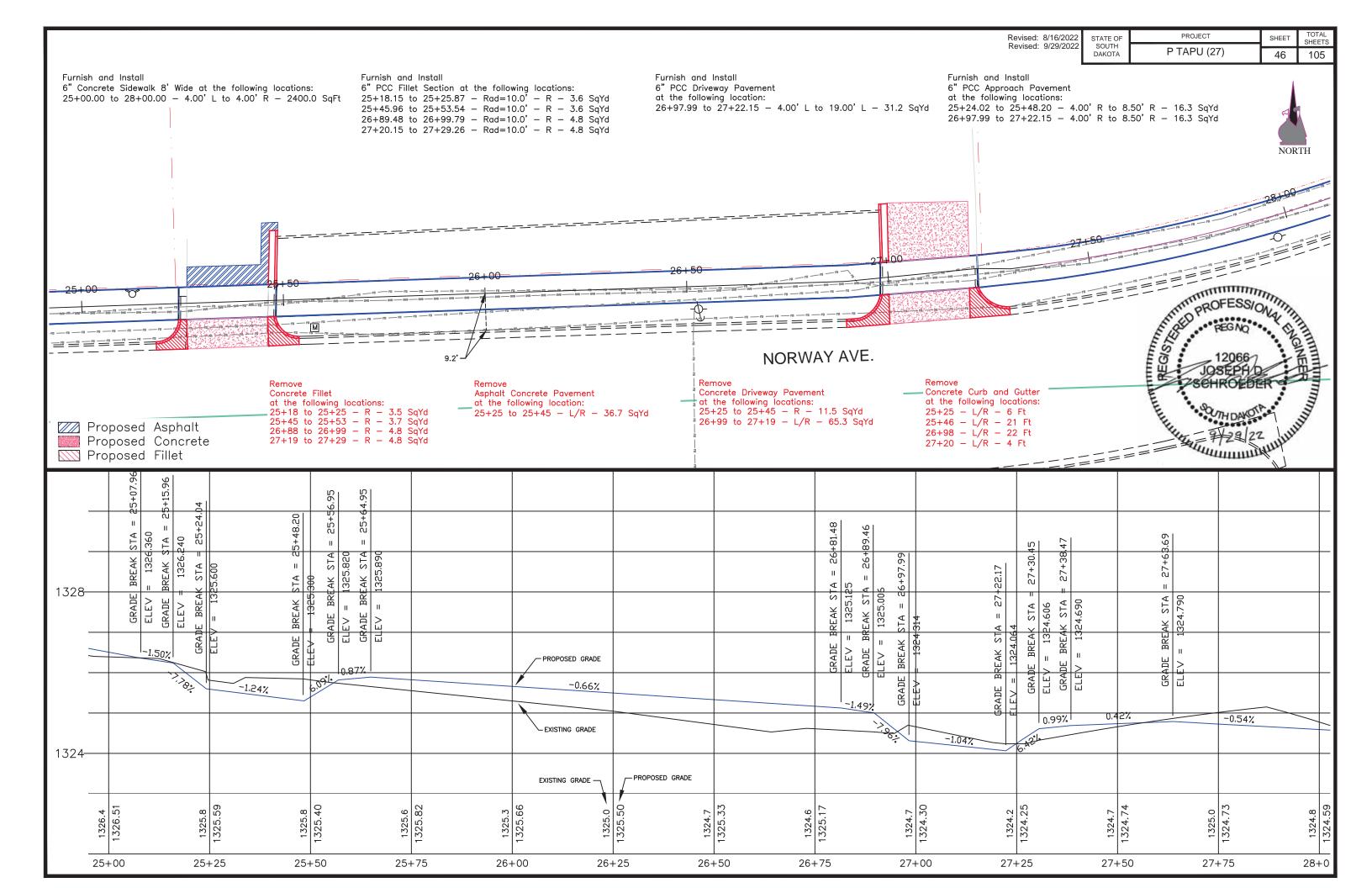


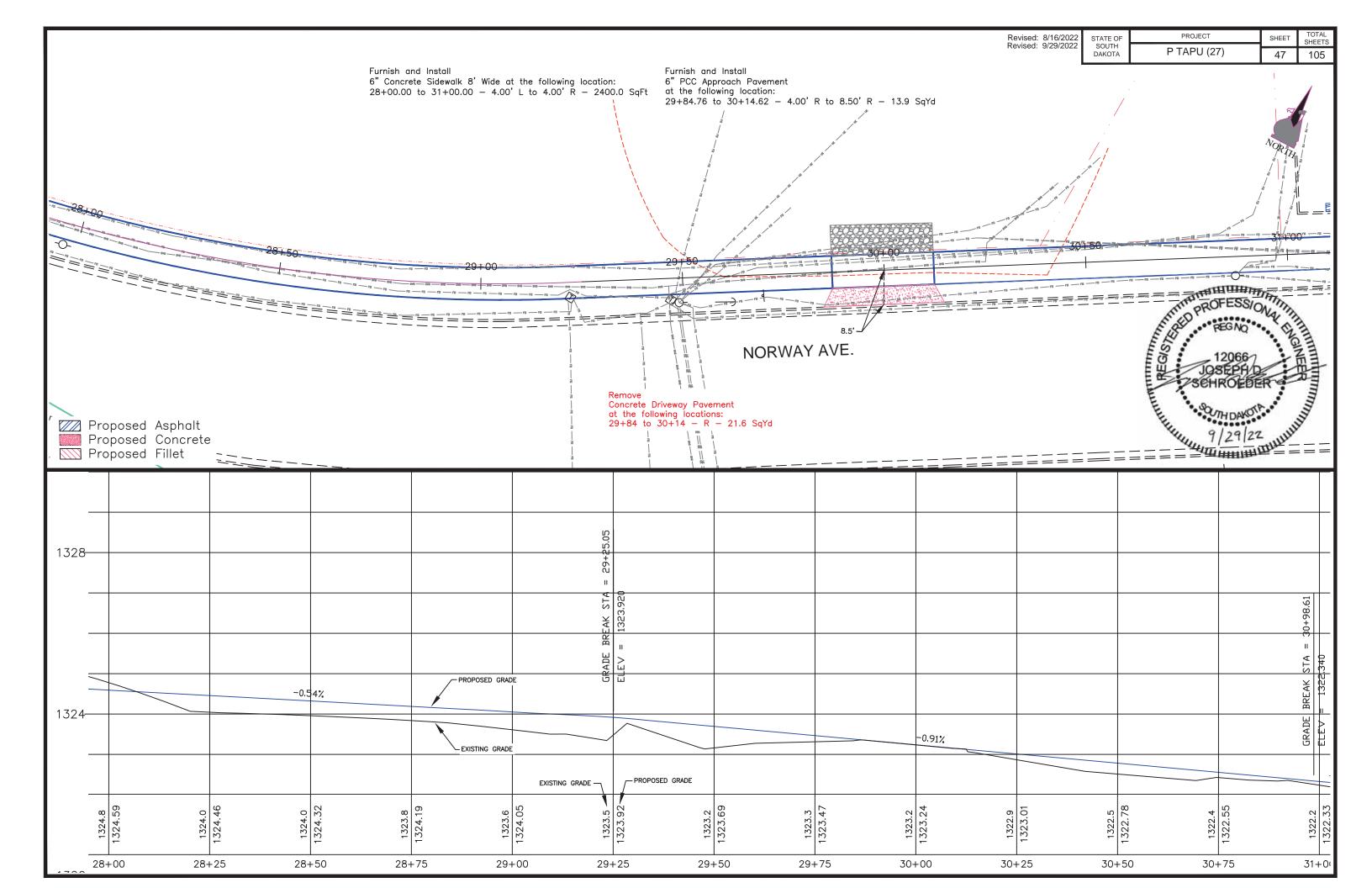
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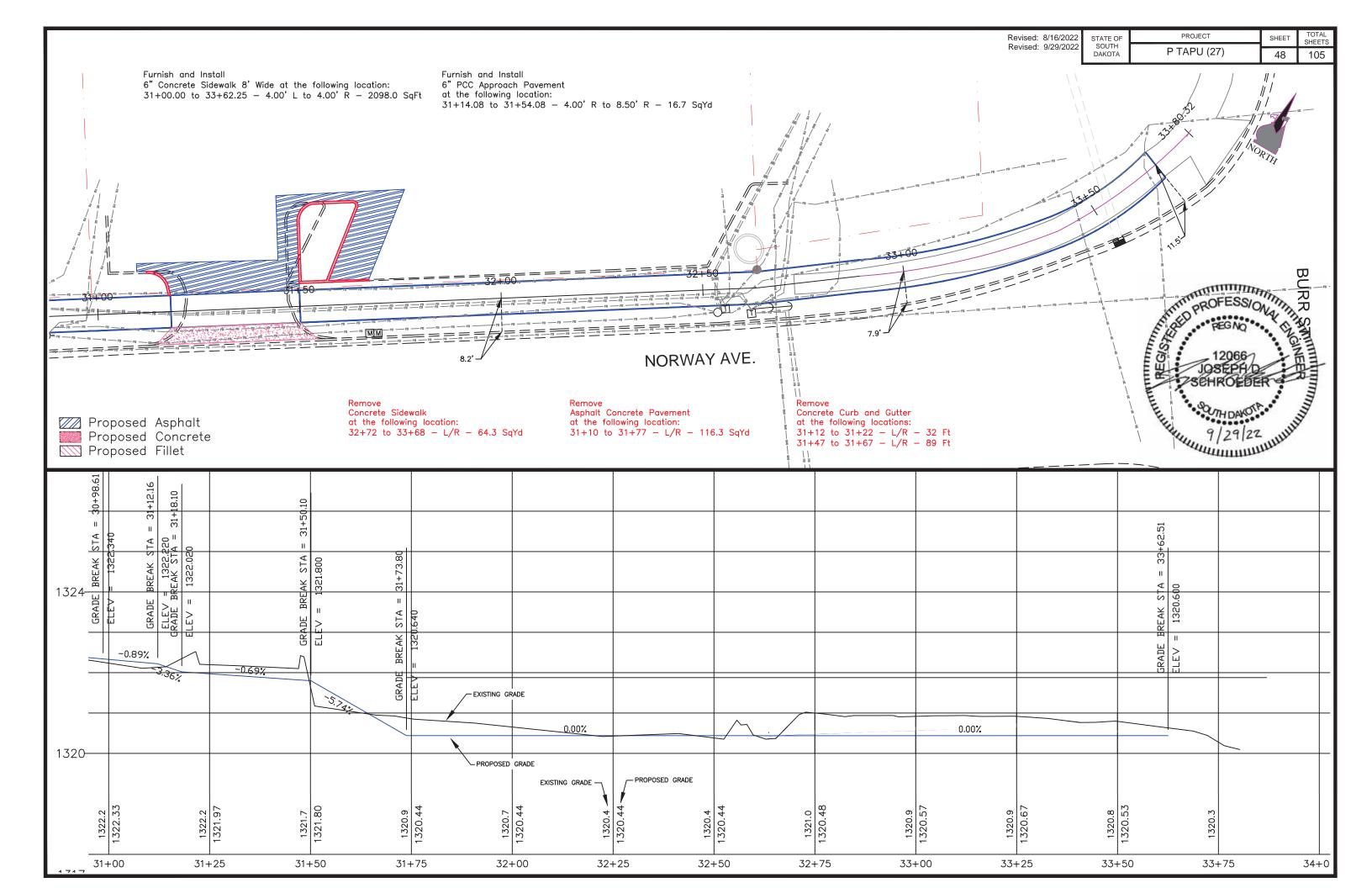


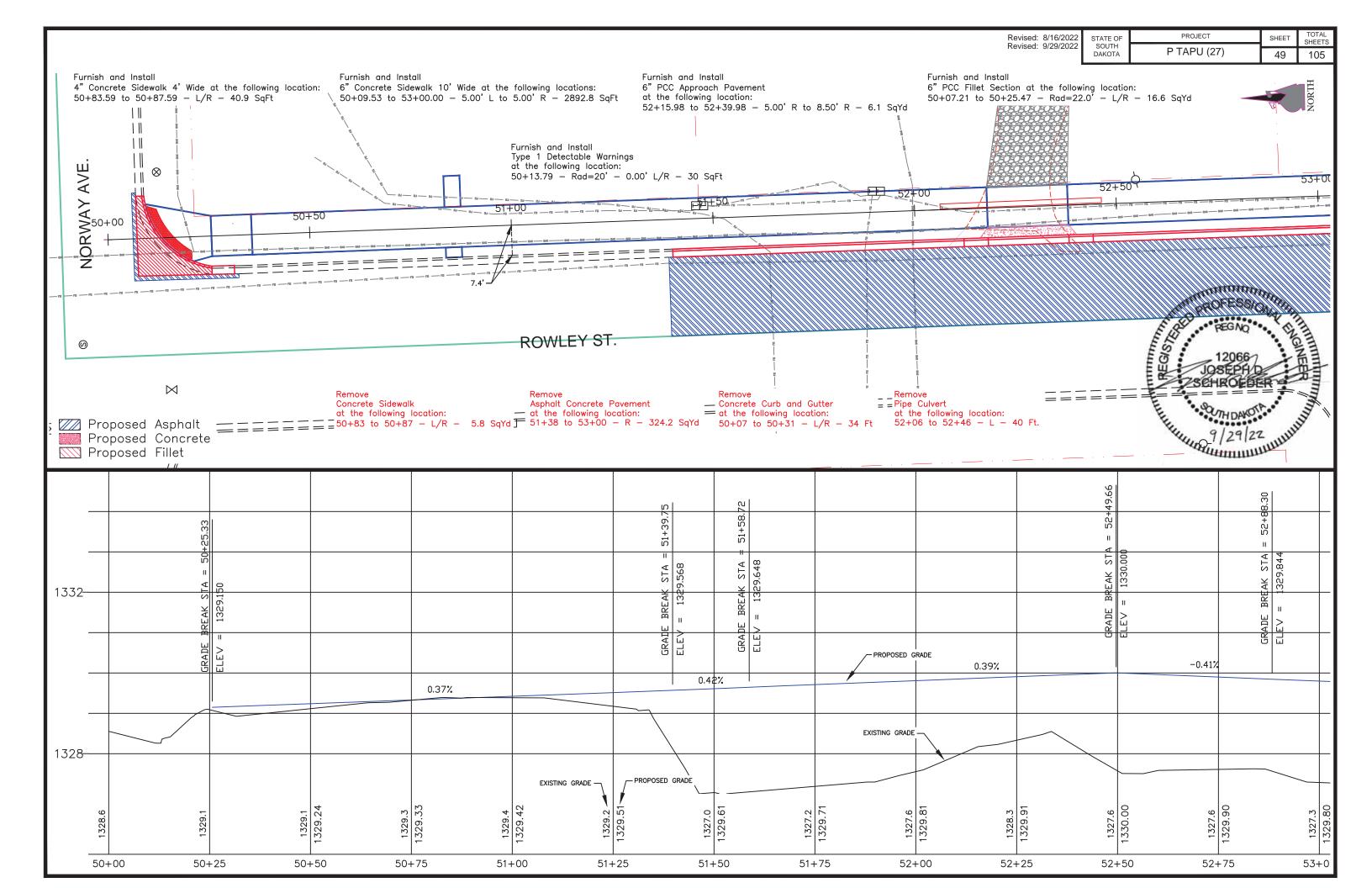


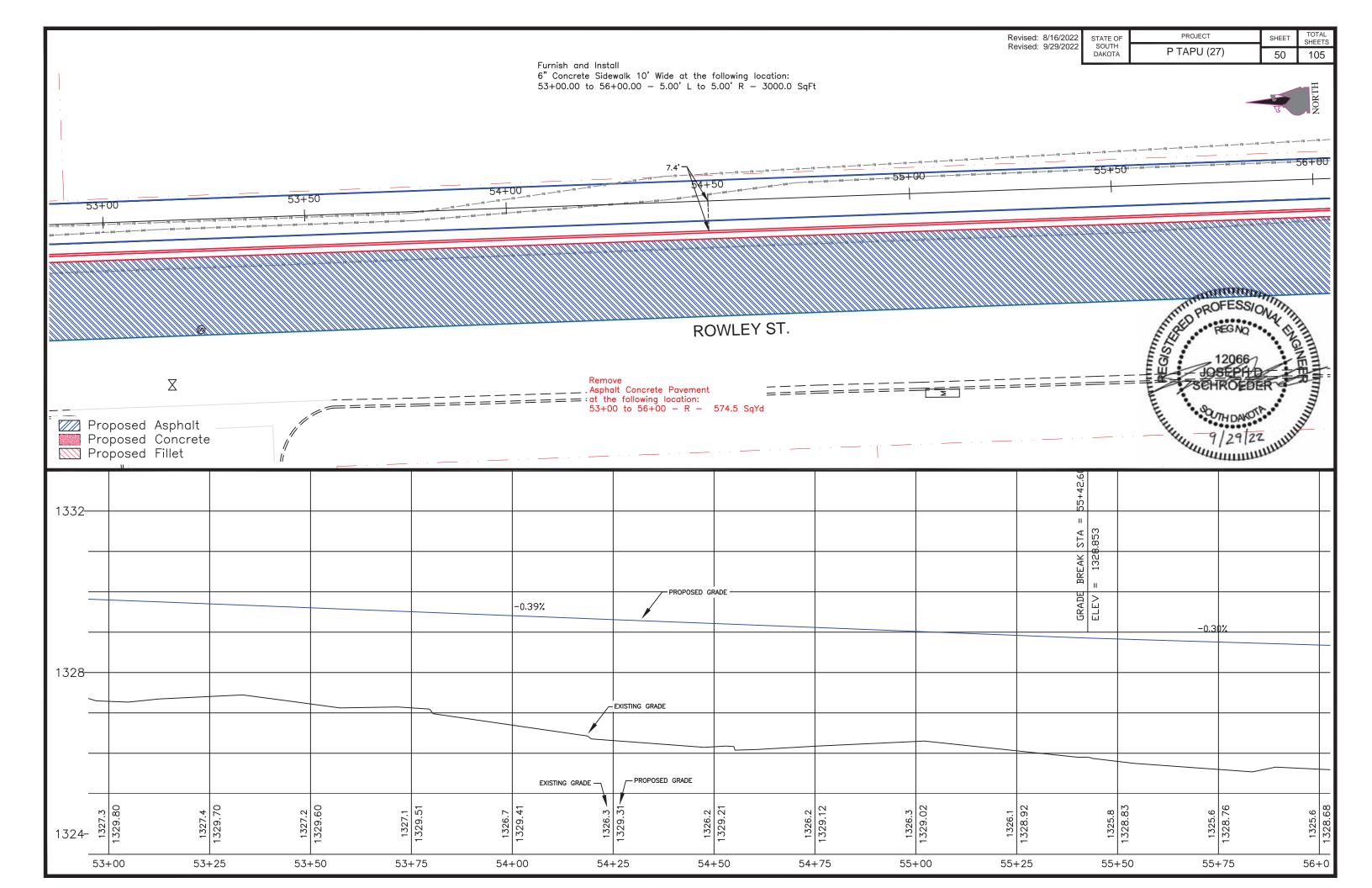


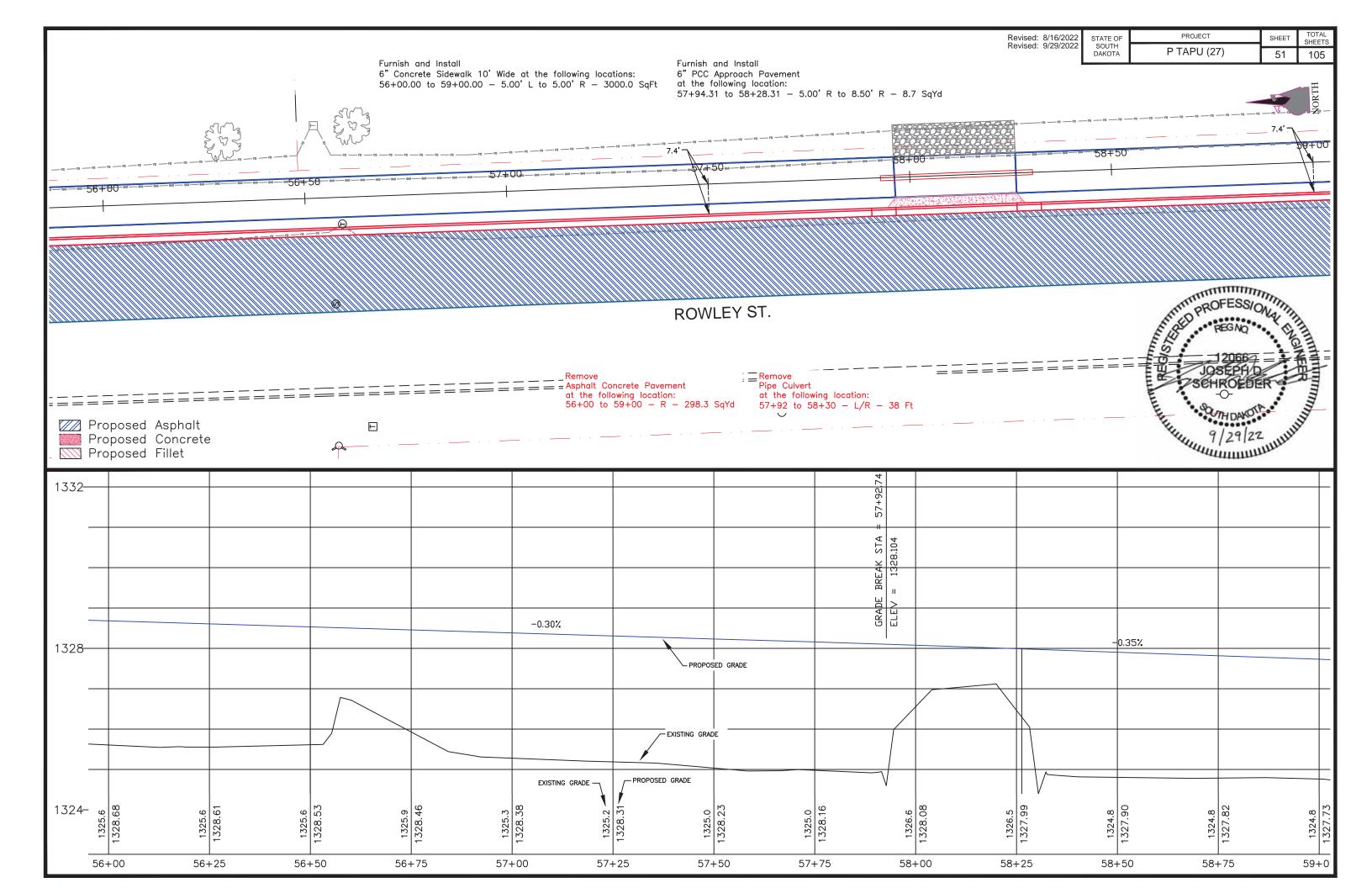


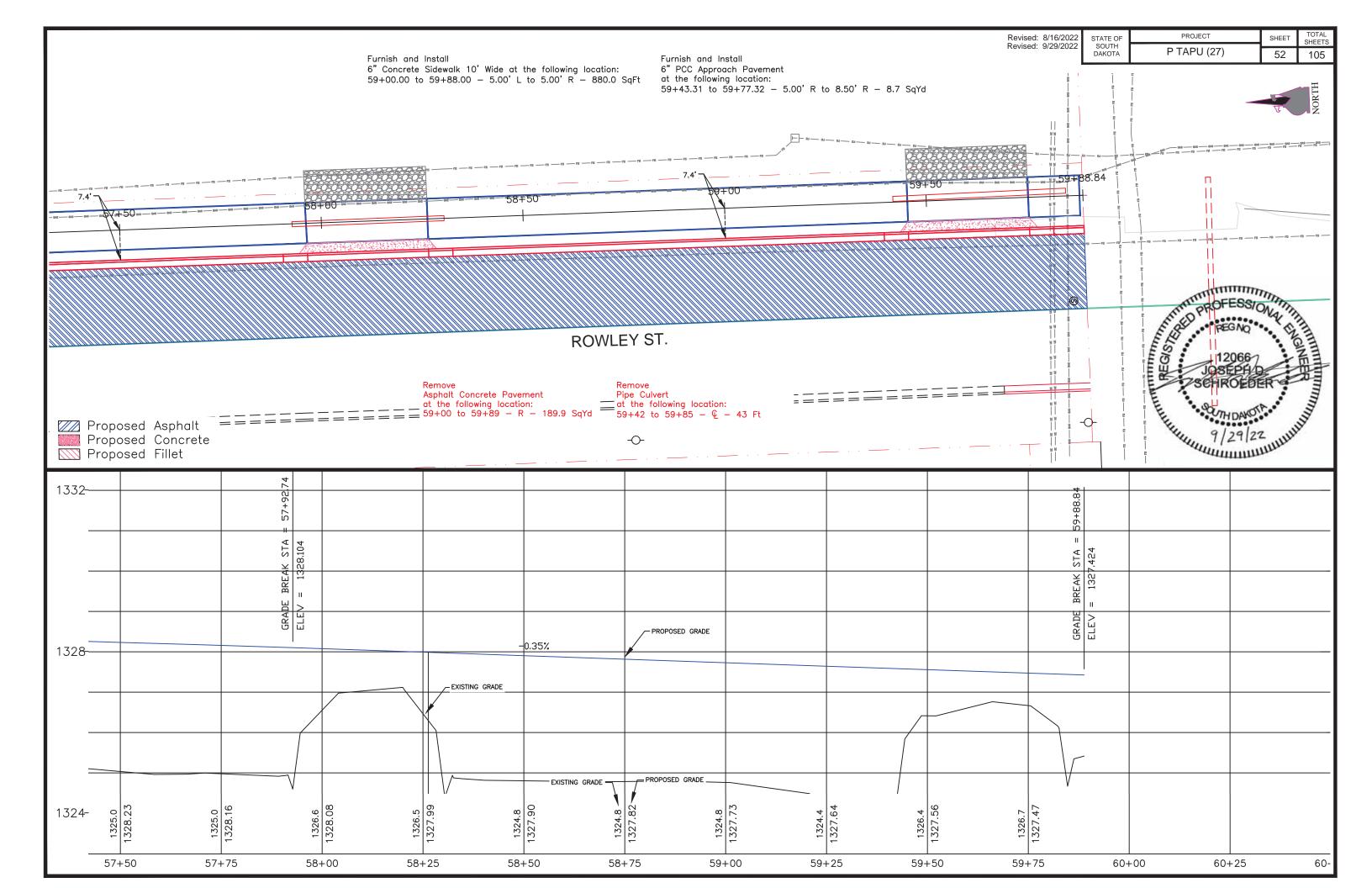












CURB & GUTTER PLAN

Revised: 8/16/2022 STATE OF SOUTH

STATE OF SOUTH DAKOTA P TAPU (27)

SHEET TOTAL SHEETS

53 105



Sta: 0+01.90 - 8.39' Lt
Begin Concrete Fillet Section with
12.0' Radius to Back of Curb
Match Existing Curb
TC Elev = 1332.23
FL Elev = 1331.73

S

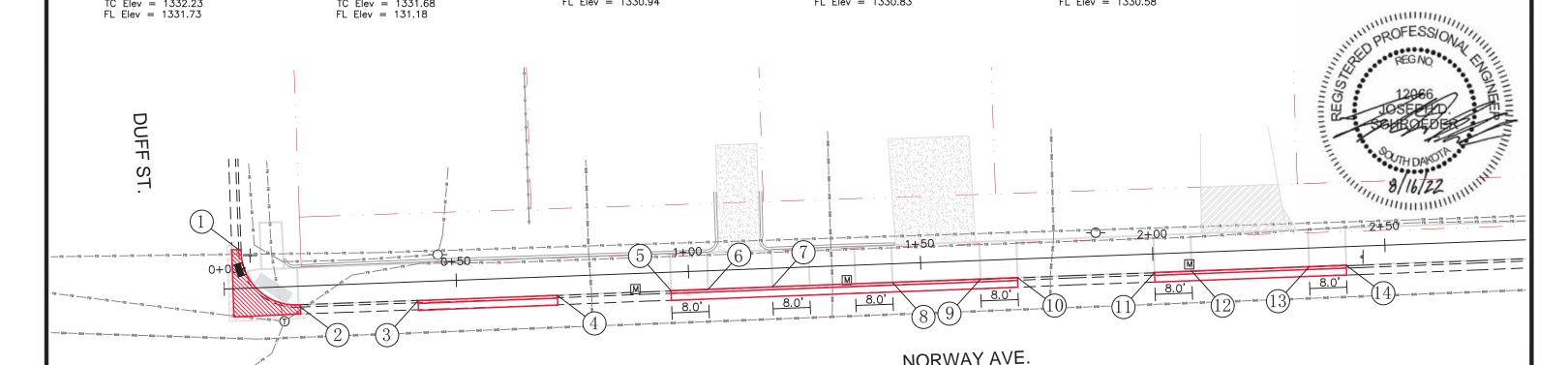
Sta: 0+16.26 — 3.99' Rt End Concrete Fillet Section with 12.0' Radius to Back of Curb Match Existing Curb TC Elev = 1331.68 FL Elev = 131.18

Sta: 0+41.61 - 3.99' Rt
Begin Special Concrete Curb & Gutter
Match Existing Curb
TC Elev = 1331.44
FL Elev = 1330.94

Sta: 0+71.61 - 4.00' Rt
End Special Concrete Curb & Gutter
Match Existing Curb
TC Elev = 1331.33
FL Elev = 1330.83

Sta: 0+96.09 - 3.98' Rt
Begin Special Concrete Curb & Gutter
Match Existing Curb
TC Elev = 1331.08
FL Elev = 1330.58

Sta: 1+04.09 - 4.00' Rt End Special Concrete Curb & Gutter Begin Special Concrete Gutter



- 7 Sta: 1+17.93 4.00' Rt
 End Special Concrete Gutter
 Begin Special Concrete Curb & Gutter
- 8 Sta: 1+43.78 4.00' Rt
 End Special Concrete Curb & Gutter
 Begin Special Concrete Gutter
- 9 Sta: 1+62.77 4.00' Rt End Special Concrete Gutter Begin Special Concrete Curb & Gutter
- Sta: 1+70.77 4.00' Rt
 End Special Concrete Curb & Gutter
 Match Existing Curb
 TC Elev = 1331.28
 FL Elev = 1330.78
- Sta: 2+00.24 4.00' Rt
 Begin Special Concrete Curb & Gutter
 Match Existing Curb
 TC Elev = 1330.05
 FL Elev = 1329.55

- 12) Sta: 2+08.24 4.00' Rt End Special Concrete Curb & Gutter Begin Special Concrete Gutter
- Sta: 2+33.54 4.00' Rt End Special Concrete Gutter Begin Special Concrete Curb & Gutter
- Sta: 2+41.54 4.00' Rt
 End Special Concrete Curb & Gutter
 Match Existing Curb
 TC Elev = 1329.57
 FL Elev = 1329.07

CURB & GUTTER PLAN

Revised: 8/16/2022 S

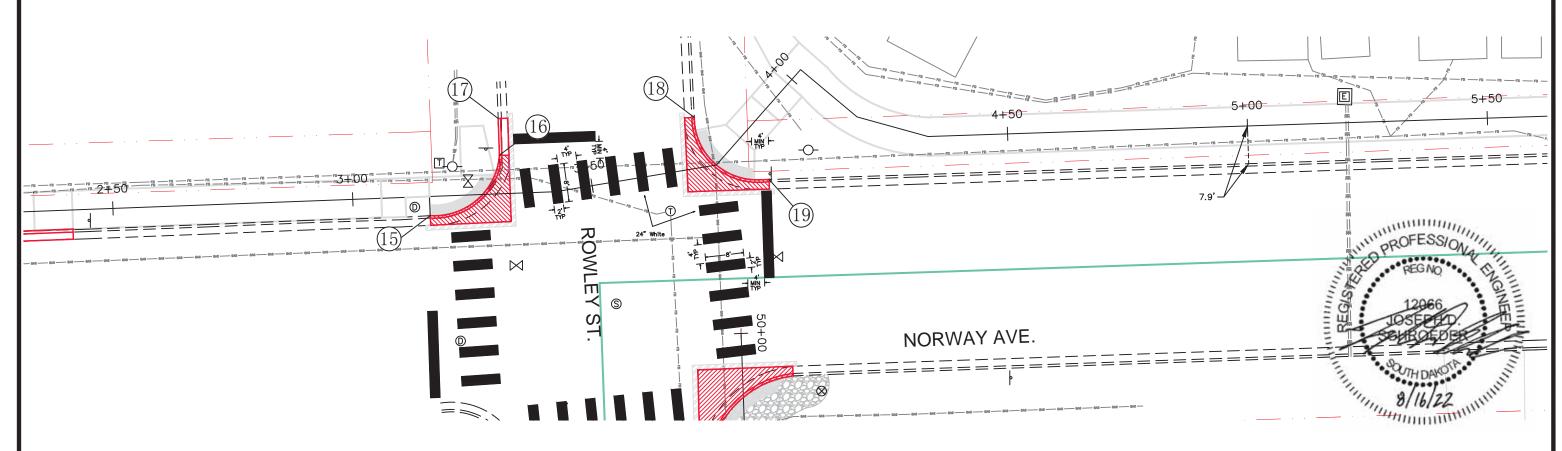
STATE OF SOUTH DAKOTA P TAPU (27)



SHEET

54

105



- Sta: 3+16.00 4.00' Rt
 Begin Concrete Fillet Section with
 15.0' Radius to Back of Curb
 Match Existing Curb
 TC Elev = 1328.80
 FL Elev = 1328.30
- Sta: 3+32.83 7.92' Lt
 End Concrete Fillet Section with
 15.0' Radius to Back of Curb
 TC Elev = 1328.90
 FL Elev = 1328.40
- Sta: 3+32.83 15.67' Lt End Special Concrete Curb & Gutter Match Existing Curb TC Elev = 1328.98 FL Elev = 1328.48
- Sta: 3+70.05 10.83' Lt
 Begin Concrete Fillet Section with
 15.0' Radius to Back of Curb
 Match Existing Curb
 TC Elev = 1329.13
 FL Elev = 1328.63
- Sta: 3+91.83 14.75' Rt
 End Concrete Fillet Section with
 15.0' Radius to Back of Curb
 Match Existing Curb
 TC Elev = 1328.84
 FL Elev = 1328.34

CURB & GUTTER PLAN

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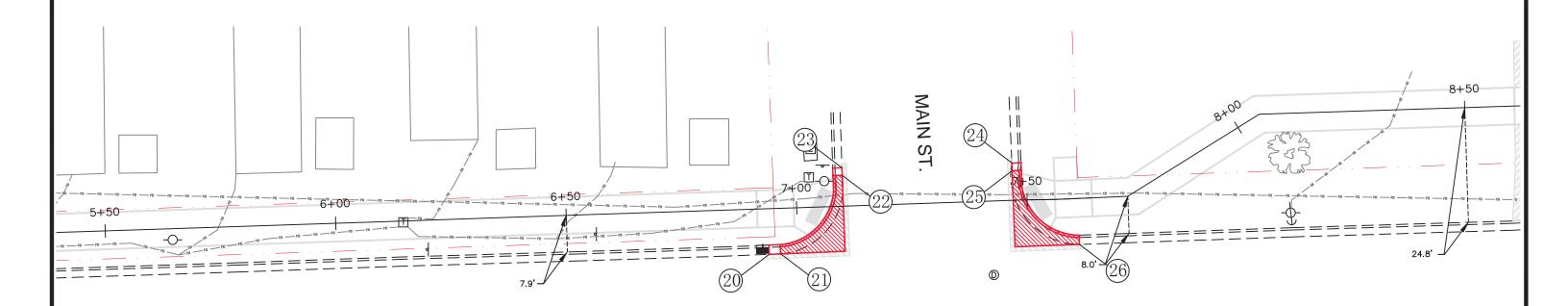
 P TAPU (27)
 55
 105



Sta: 6+93.71 to 6+98.12 - 7.86' Rt Begin Special Concrete Curb & Gutter Match Existing Curb TC Elev = 1320.50 FL Elev = 1320.00 Sta: 6+96.12 - 7.86' Rt
Begin Concrete Fillet Section with
15.0' Radius to Back of Curb
TC Elev = 1320.83
FL Elev = 1320.53

Sta: 7+10.11 - 6.69' Lt
End Concrete Fillet Section with
15.0' Radius to Back of Curb
TC Elev = 1320.41
FL Elev = 1319.91

Sta: 7+10.11 - 8.34' Lt
End Special Concrete Curb & Gutter
Match Existing Curb
TC Elev = 1320.40
FL Elev = 1320.90



NORWAY AVE.

0

Sta: 7+46.98 - 8.05' Lt
End Special Concrete Curb & Gutter
Match Existing Curb
TC Elev = 1320.48
FL Elev = 1319.98

Sta: 7+46.98 - 6.41' Lt
Begin Concrete Fillet Section with
15.0' Radius to Back of Curb
TC Elev = 1320.50
FL Elev = 1320.00

Sta: 7+61.02 - 7.95' Rt
End Concrete Fillet Section with
15.0' Radius to Back of Curb
Match Existing Curb
TC Elev = 1320.75
FL Elev = 1320.25



CURB & GUTTER PLAN

Revised: 8/16/2022

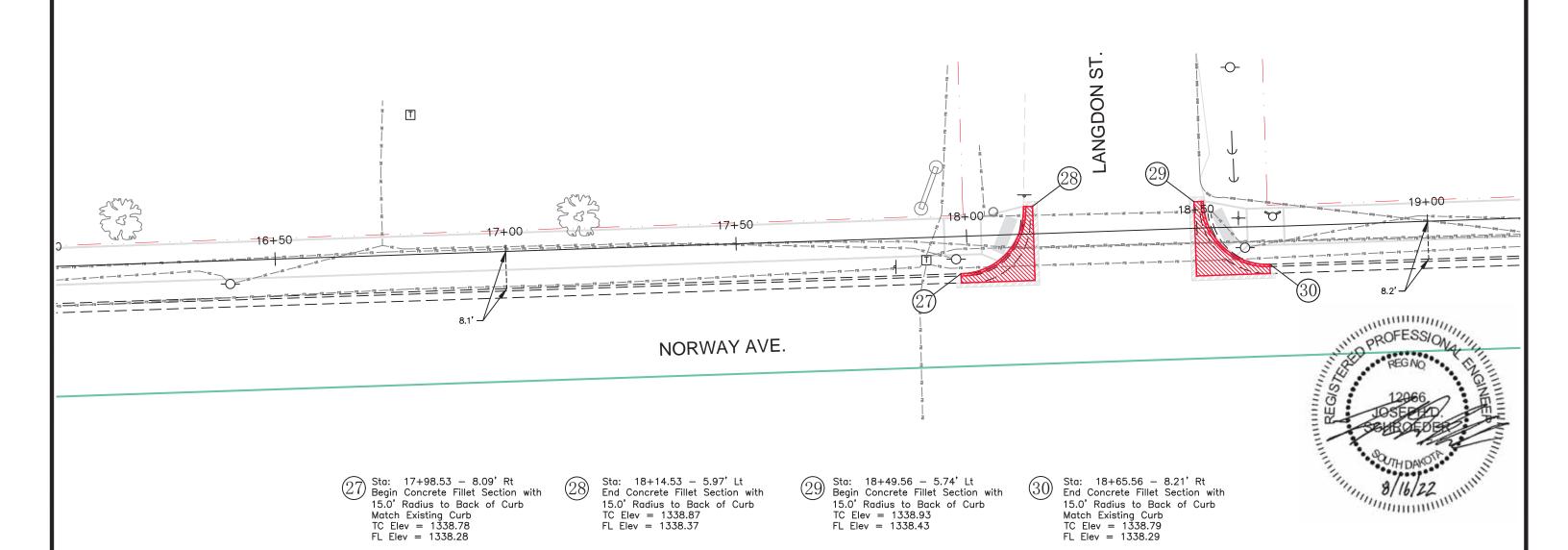
STATE OF SOUTH DAKOTA P TAPU (27)



SHEET

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105



CURB & GUTTER PLAN

Revised: 8/16/2022

STATE OF SOUTH DAKOTA P TAPU (27)

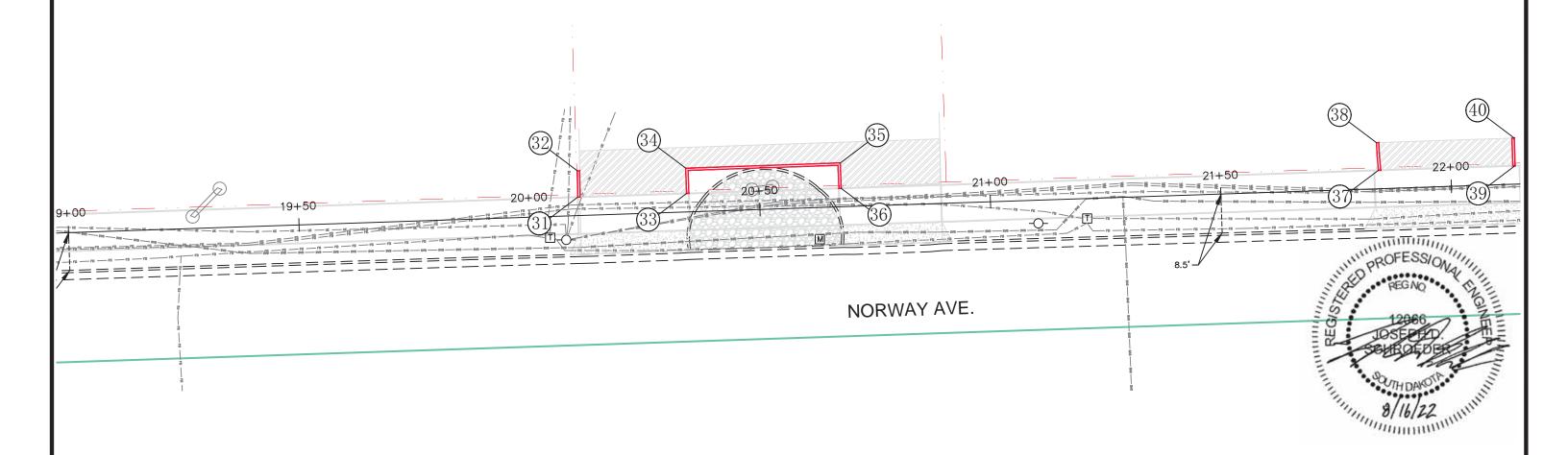
SHEET TOTAL SHEETS

57 105



Sta: 20+10.61 - 4.00' Lt Begin Type B6 Curb TC Elev = 1336.82 (Theo) FL Elev = 1336.32 Sta: 20+10.61 - 9.50' Lt End Type B6 Curb Match Existing Curb TC Elev = 1336.13 FL Elev = 1335.63

33 Sta: 20+34.21 - 4.08' Lt Begin Type B6 Curb TC Elev = 1336.37 (Theo) FL Elev = 1335.87 Sta: 20+34.21 - 9.50' Lt Type B6 Curb TC Elev = 1335.93 FL Elev = 1335.43 35) Sta: 20+67.74 - 9.50' Lt Type B6 Curb TC Elev = 1335.83 FL Elev = 1335.33



Sta: 20+67.74 - 4.00' Lt End Type B6 Curb TC Elev = 1335.74 (Theo) FL Elev = 1335.24 Sta: 21+84.30 - 4.00' Lt Begin Type B6 Curb TC Elev = 1333.51 (Theo) FL Elev = 1333.01

Sta: 21+84.30 - 10.00' Lt End Type B6 Curb Match Existing Curb TC Elev = 1333.46 FL Elev = 1332.96

Sta: 22+13.96 - 4.00' Lt End Type B6 Curb TC Elev = 1333.00 (Theo) FL Elev = 1332.50 Sta: 22+13.96 - 10.00' Lt
Begin Type B6 Curb
Match Existing Curb
TC Elev = 1332.90
FL Elev = 1332.40

CURB & GUTTER PLAN

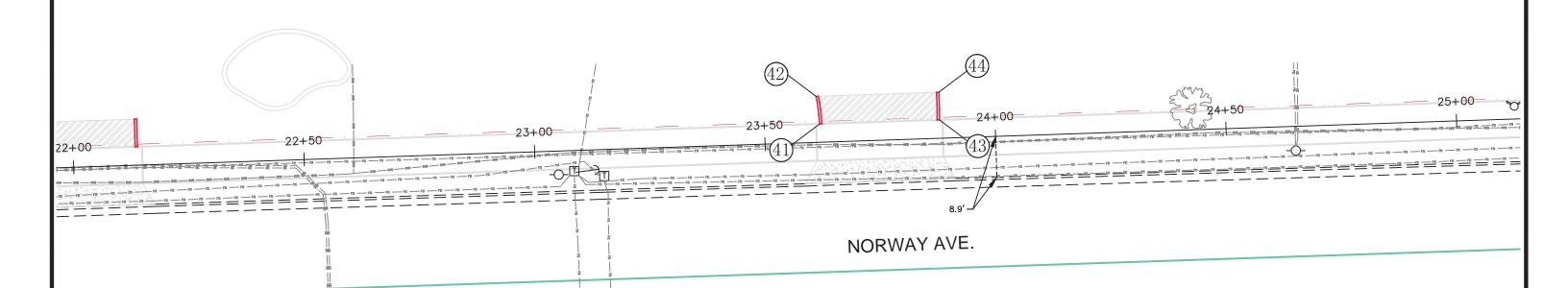
Revised: 8/16/2022

 STATE OF SOUTH DAKOTA
 PROJECT
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 P TAPU (27)
 58
 105



- Sta: 23+61.98 4.0' Lt Begin Type B6 Curb TC Elev = 1329.66 (Theo) FL Elev = 1329.16
- Sta: 23+61.98 10.0' Lt End Type B6 Curb Match Existing Curb TC Elev = 1329.88 FL Elev = 1329.38
- 3 Sta: 23+87.95 4.0' Lt Begin Type B6 Curb TC Elev = 1329.66 (Theo) FL Elev = 1329.16
- Sta: 23+87.95 10.0' Lt End Type B6 Curb Match Existing Curb TC Elev = 1329.50 FL Elev = 1329.00





CURB & GUTTER PLAN

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 P TAPU (27)
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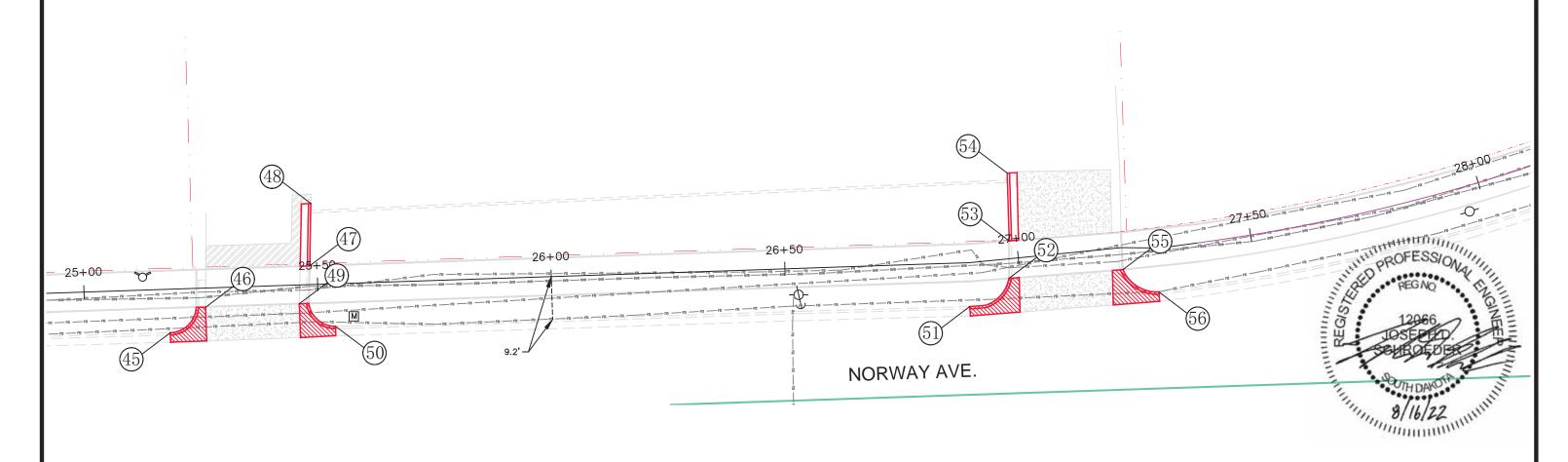
Sta: 25+18.16 - 9.29' Rt
Begin Concrete Fillet Section with
5.0' Radius to Back of Curb
Match to Existing Curb
TC Elev = 1326.21
FL Elev = 1325.71

Sta: 25+25.87 - 4.00' Rt End Concrete Fillet Section with 5.0' Radius to Back of Curb TC Elev = 1326.02 (Theo) FL Elev = 1325.52 Sta: 25+45.96 - 4.00' Lt
Begin Special Concrete Curb & Gutter
TC Elev = 1325.88 (Theo)
FL Elev = 1325.38

Sta: 25+45.96 - 17.34' Lt
Begin Special Concrete Curb & Gutter
Match Existing Curb
TC Elev = 1325.26
FL Elev = 1324.76

Sta: 25+45.96 - 4.00' Rt
Begin Concrete Fillet Section with
5.0' Radius to Back of Curb
TC Elev = 1325.72 (Theo)
FL Elev = 1325.22

Sta: 25+53.53 - 9.09' Rt
End Concrete Fillet Section with
5.0' Radius to Back of Curb
Match to Existing Curb
TC Elev = 1325.78
FL Elev = 1325.28



Sta: 26+89.24 - 9.38' Rt
Begin Concrete Fillet Section with
5.0' Radius to Back of Curb
Match to Existing Curb
TC Elev = 1324.94
FL Elev = 1324.44

Sta: 27+00.06 - 4.23' Rt
End Concrete Fillet Section with
5.0' Radius to Back of Curb
TC Elev = 1324.72 (Theo)
FL Elev = 1324.22

Sta: 27+00.06 - 18.20' Lt End Special Concrete Curb & Gutter Match Existing Curb TC Elev = 1323.22 FL Elev = 1322.72 Sta: 27+19.79 - 4.66' Rt
Begin Concrete Fillet Section with
5.0' Radius to Back of Curb
TC Elev = 1324.48 (Theo)
FL Elev = 1323.98

Sta: 27+29.46 - 9.40' Rt
End Concrete Fillet Section with
5.0' Radius to Back of Curb
Match to Existing Curb
TC Elev = 1324.83
FL Elev = 1324.33

CURB & GUTTER PLAN

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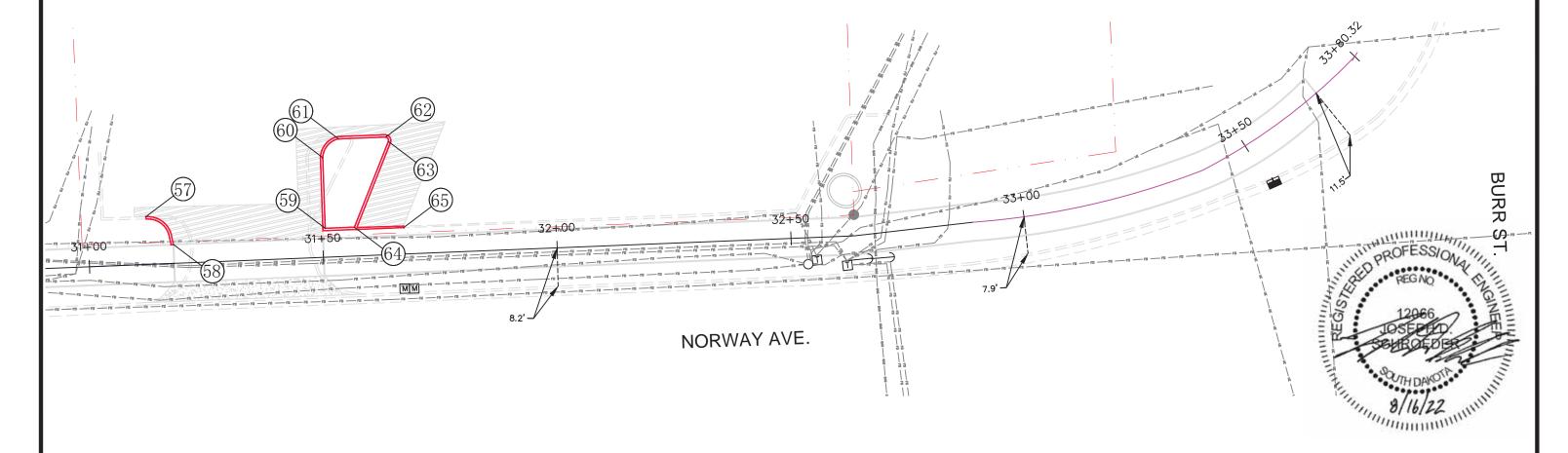
 P TAPU (27)
 60
 105



Sta: 31+12.48 - 9.70' Lt Begin Type B6 Curb Match Existing Curb TC Elev = 1322.15 FL Elev = 1321.65

Sta: 31+18.11 - 4.00' Lt End Type B6 Curb TC Elev = 1323.65 (Theo) FL Elev = 1323.15 $\begin{array}{c} \textbf{(59)} \\ \textbf{Sta:} \\ \textbf{31+50.12} \\ \textbf{-5.69'} \\ \textbf{Lt} \\ \textbf{Begin} \\ \textbf{Type} \\ \textbf{B6} \\ \textbf{Curb} \\ \textbf{TC} \\ \textbf{Elev} \\ \textbf{=1321.80} \\ \textbf{FL} \\ \textbf{Elev} \\ \textbf{=1321.30} \\ \end{array}$

60 Sta: 31+50.12 - 5.69' Lt Begin Radius Type B6 Curb RAD = 4.00' TC Elev = 1320.87 FL Elev = 1320.37



61) Sta: 31+54.10 - 25.19' Lt End Radius Type B6 Curb RAD = 4.00' TC Elev = 1320.63 FL Elev = 1320.13 Sta: 31+64.76 - 24.18' Lt End Radius Type B6 Curb RAD = 1.00' TC Elev = 1320.68 FL Elev = 1320.18 64 Sta: 31+57.17 - 5.66' Lt Type B6 Curb TC Elev = 1321.00 FL Elev = 1320.50 65 Sta: 31+67.35 - 5.66' Lt End Type B6 Curb Match Existing Curb TC Elev = 1320.40 FL Elev = 1319.90

CURB & GUTTER PLAN

Revised: 8/16/2022

STATE OF SOUTH DAKOTA P TAPU (27) 61

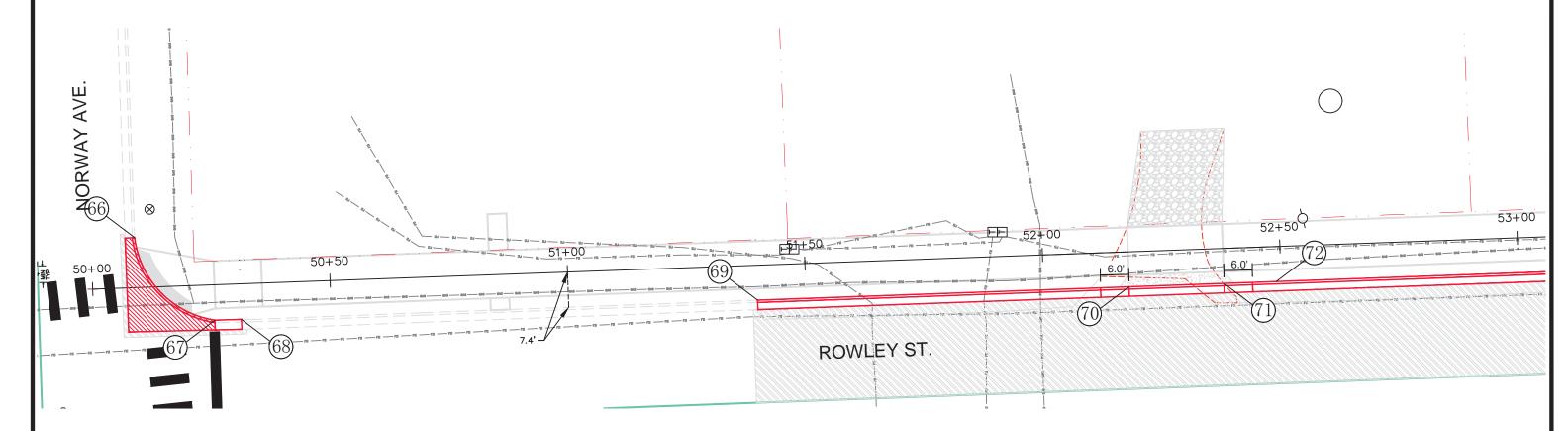


105

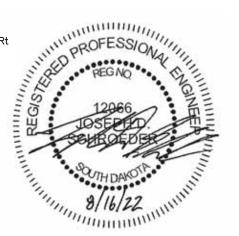
Sta: 50+09.21 - 10.52' Lt
Begin Concrete Fillet Section with
20.0' Radius to Back of Curb
Match Existing Curb
TC Elev = 1328.37
FL Elev = 1327.87

Sta: 50+25.47 - 7.44' Rt End Concrete Fillet Section with 20.0' Radius to Back of Curb TC Elev = 1328.98 FL Elev = 1328.48 Sta: 50+31.05 - 7.49' Rt
End Special Concrete Curb & Gutter
Match Existing Curb
TC Elev = 1329.10
FL Elev = 1328.60

Sta: 51+39.76 - 7.35' Rt
Begin Special Concrete Curb & Gutter
Match Existing Curb
TC Elev = 1329.42
FL Elev = 1328.92



Sta: 52+17.98 - 7.35' Rt End Special Concrete Curb & Gutter Begin Special Concrete Gutter T1) Sta: 52+37.98 - 7.35' Rt End Special Concrete Gutter Begin Special Concrete Curb & Gutter T2) Sta: 52+49.00 - 7.36' Rt Grade Break
TC Elev = 1329.85
FL Elev = 1329.35



CURB & GUTTER PLAN

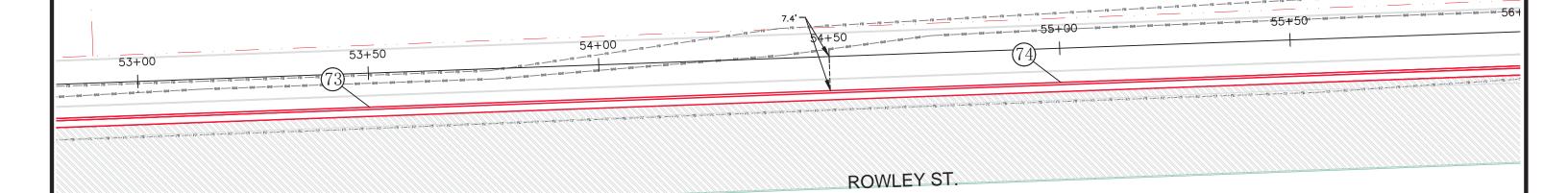
Revised: 8/16/2022

STATE OF SOUTH DAKOTA P TAPU (27) 62



T3 Sta: 53+50.00 - 7.38' Rt Grade Break
TC Elev = 1329.45
FL Elev = 1328.95

74) Sta: 55+50.00 - 7.42' Rt Grade Break TC Elev = 1328.68 FL Elev = 1328.18



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PROJECT Revised: 8/16/2022 STATE OF SOUTH DAKOTA Note concerning underground utilities: All underground utilities are based on field locations as marked by the utility company locate people. Utility lines were created from those markings, conversations with the utility locate, and existing utility maps. Utility locations should be verified in the field before construction. **CURB & GUTTER PLAN** P TAPU (27) Sta: 58+26.31 — 7.42' Rt End Special Concrete Gutter Begin Special Concrete Curb & Gutter TC Elev = 1327.84 (Theo) FL Elev = 1327.34 T5 Sta: 56+50.00 - 7.44' Rt Grade Break
TC Elev = 1328.38
FL Elev = 1327.88 Sta: 57+96.31 - 7.44' Rt End Special Concrete Curb & Gutter Begin Special Concrete Gutter
TC Elev = 1327.94 (Theo)
FL Elev = 1327.44 6.0'

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ROWLEY ST.



SHEET

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CURB & GUTTER PLAN

Revised: 8/16/2022

STATE OF SOUTH DAKOTA P TAPU (27)

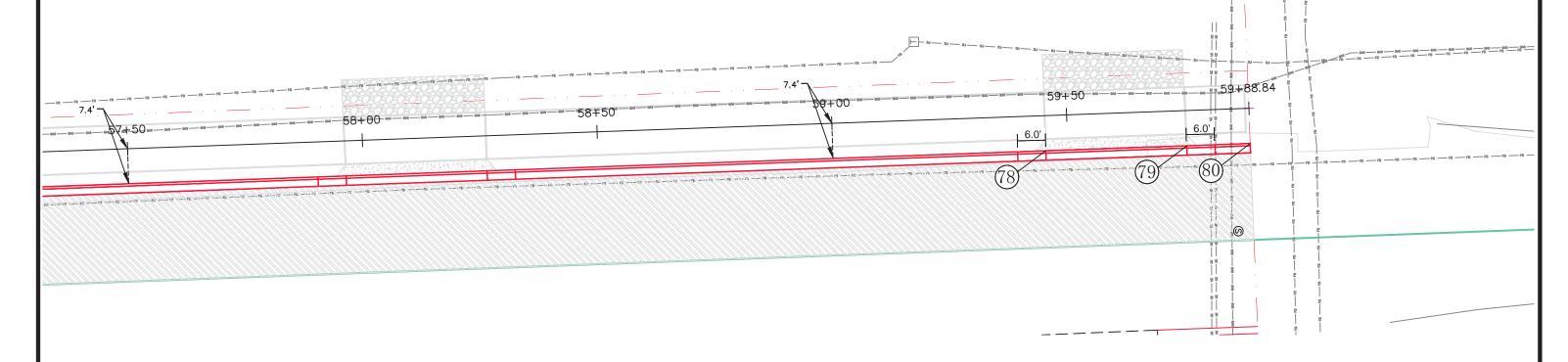
SHEET TOTAL SHEETS

64 105



Sta: 59+45.31 - 7.44' Rt End Special Concrete Curb & Gutter Begin Special Concrete Gutter TC Elev = 1327.42 (Theo) FL Elev = 1326.92 Sta: 59+75.32 - 7.50' Rt
End Special Concrete Gutter
Begin Special Concrete Curb & Gutter
TC Elev = 1327.32 (Theo)
FL Elev = 1326.82

Sta: 59+88.84- 7.50' Rt End Special Concrete Curb & Gutter TC Elev = 1327.27 FL Elev = 1326.77





Revised: 8/16/2022

2 STATE OF SOUTH DAKOTA

P TAPU (27) 65 10

PERMANENT SIGNAGE QUANTITIES

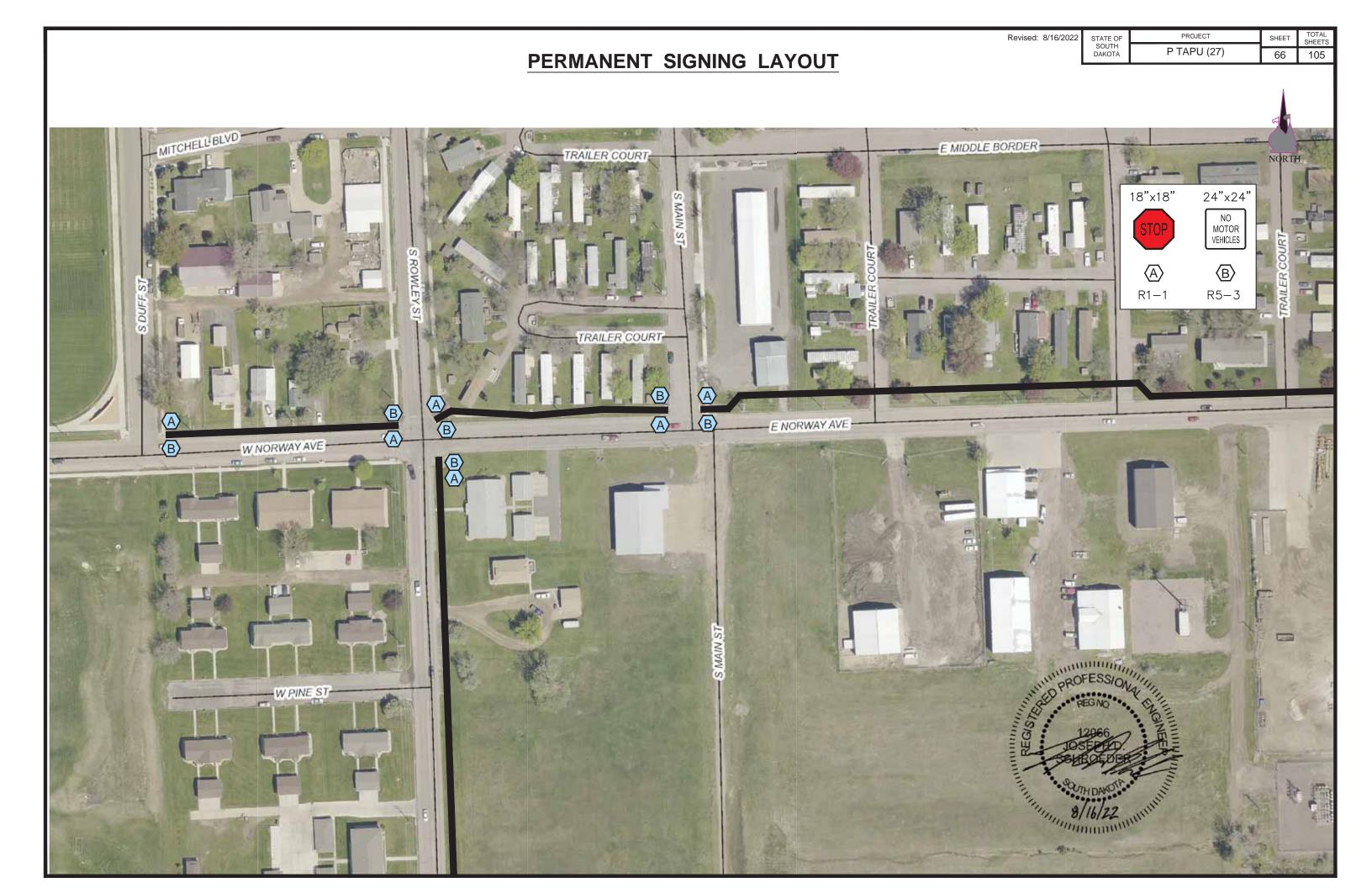
PERMANENT SIGNAGE						
SIGN CODE	SIGN SIZE	SIGN SIZE SF	DESCRIPTION	SHEETING	NUMBER REQUIRED	TOTAL SF
R1-1	18" x 18"	1.9	Stop Bike	TYPE XI	9	17.1
R5-3	24" x 24"	4.0	No Motor Vehicles	TYPE IV	10	40.0

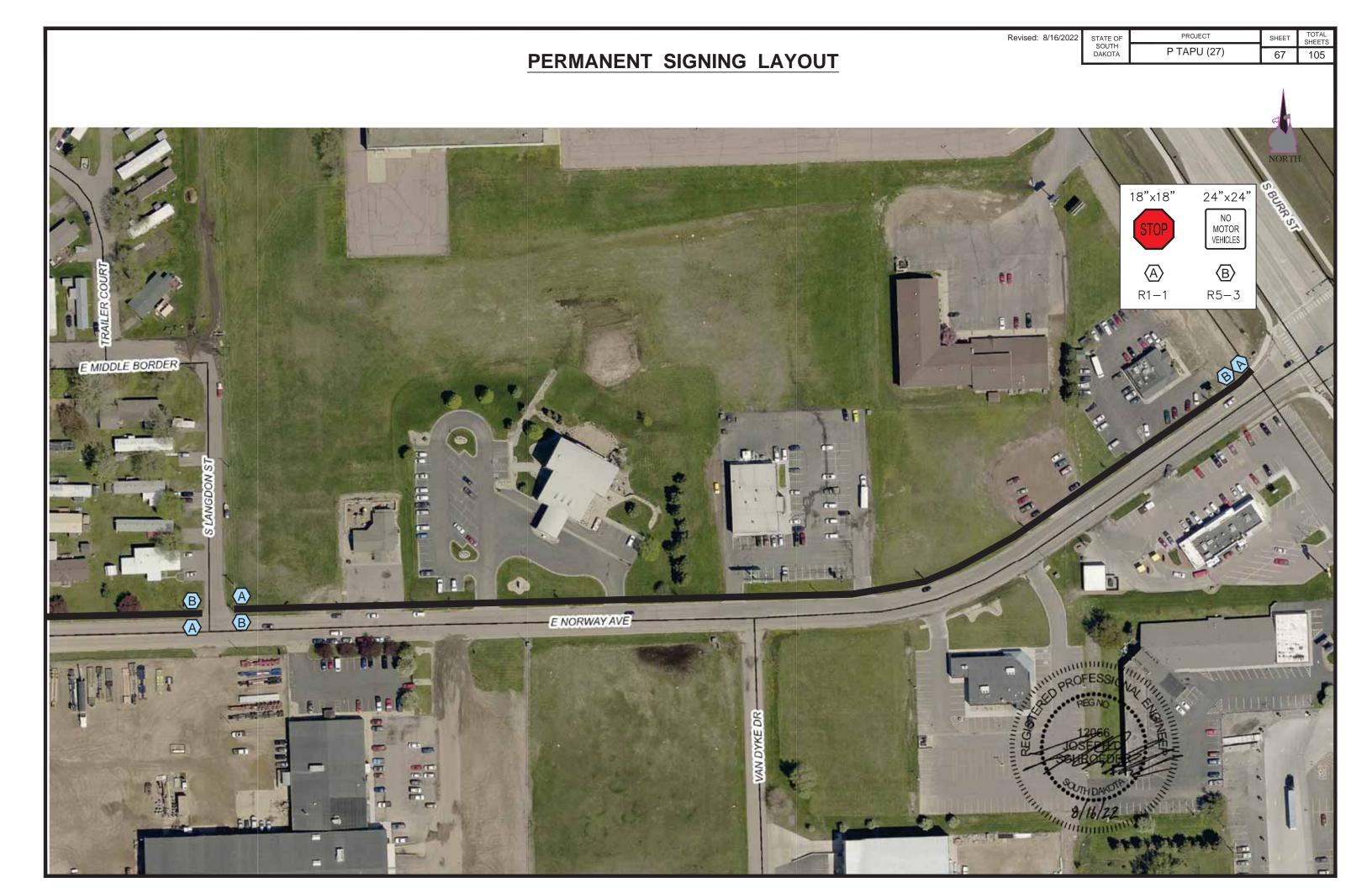


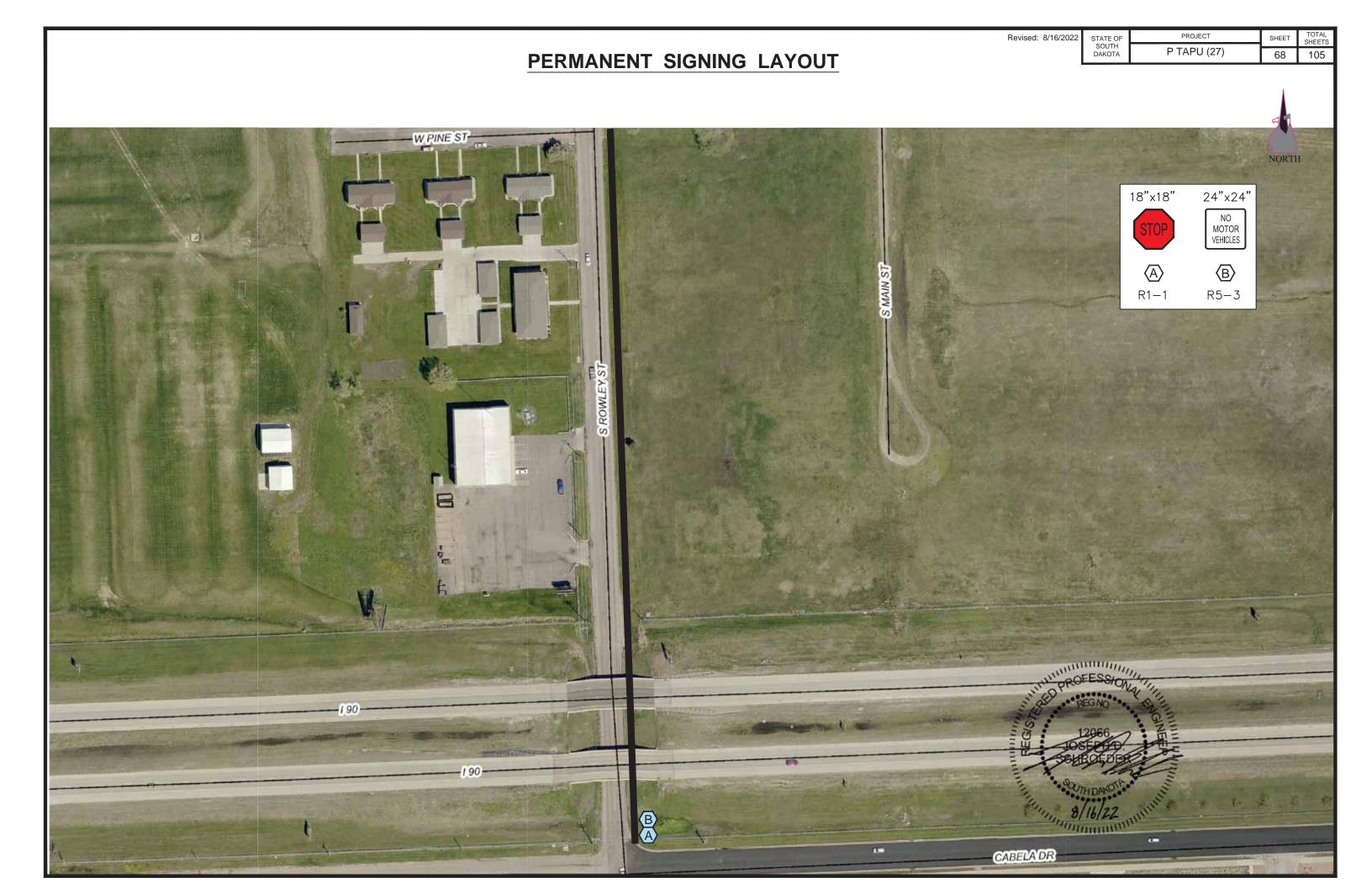


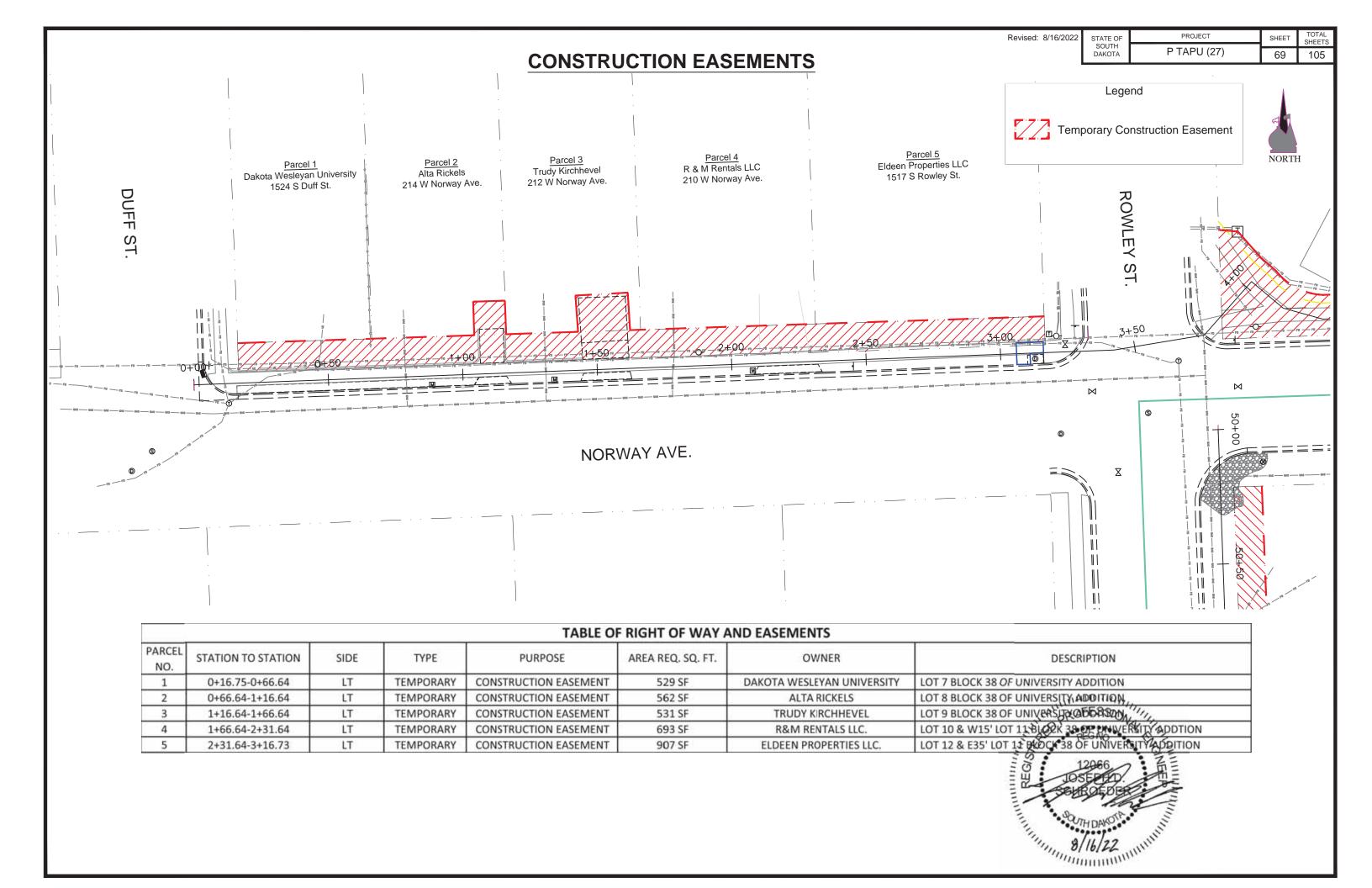
SIGN PLACEMENT					
STATION	LT/RT	SIGN CODE	2.0"x2.0" PERFORATED TUBE POST LENGTH (Ft)		
0+16	7.5' Lt	Α	9.5		
0+16	2.0' Rt	В	9.5		
3+14	7.5' Lt	В	9.5		
3+14	2.0' Rt	Α	9.5		
3+88	7.5' Lt	Α	9.5		
3+88	7.5' Rt	В	9.5		
6+90	7.5' Lt	В	9.5		
6+90	7.5' Rt	Α	9.5		
7+64	7.5' Lt	Α	9.5		
7+64	7.5' Rt	В	9.5		
17+95	7.5' Lt	В	9.5		
17+95	7.5' Rt	Α	9.5		
18+69	7.5' Lt	Α	9.5		
18+69	7.5' Rt	В	9.5		
33+69	7.5' Lt	В	9.5		
50+36	7.5' Lt	AB	9.5		
62+63	7.5' Lt	AB	9.5		
- 22		TOTAL	161.5		

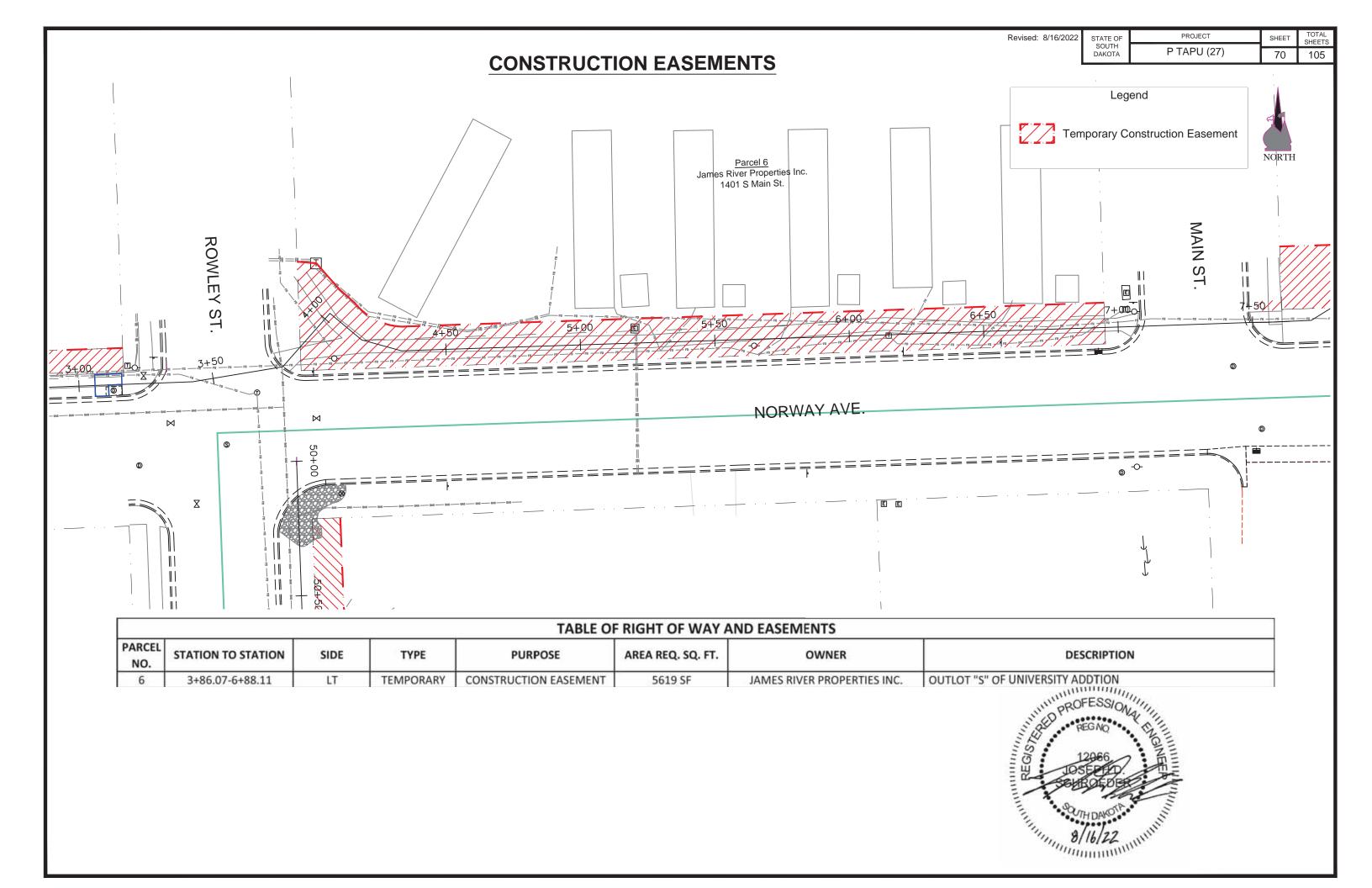


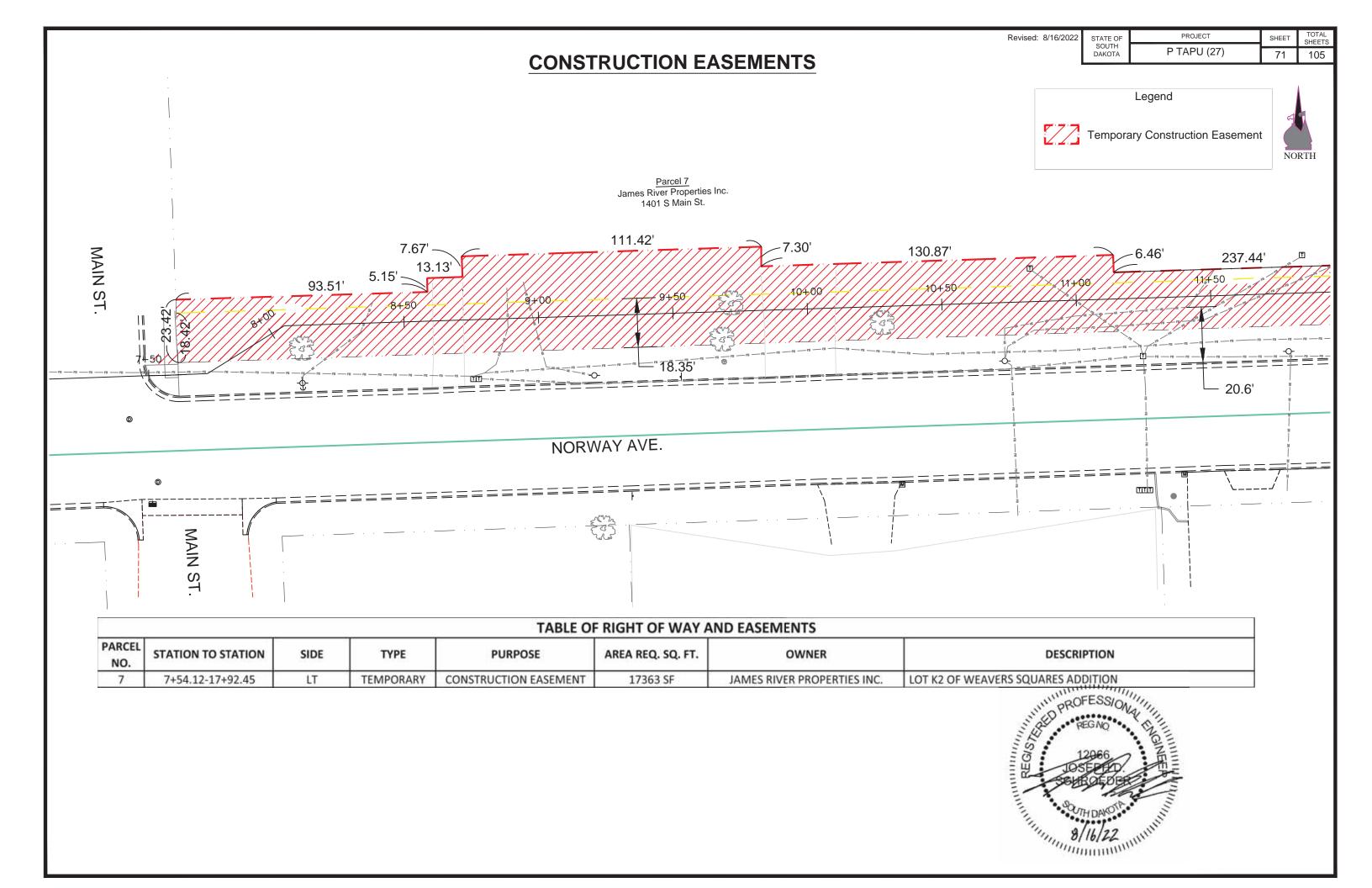




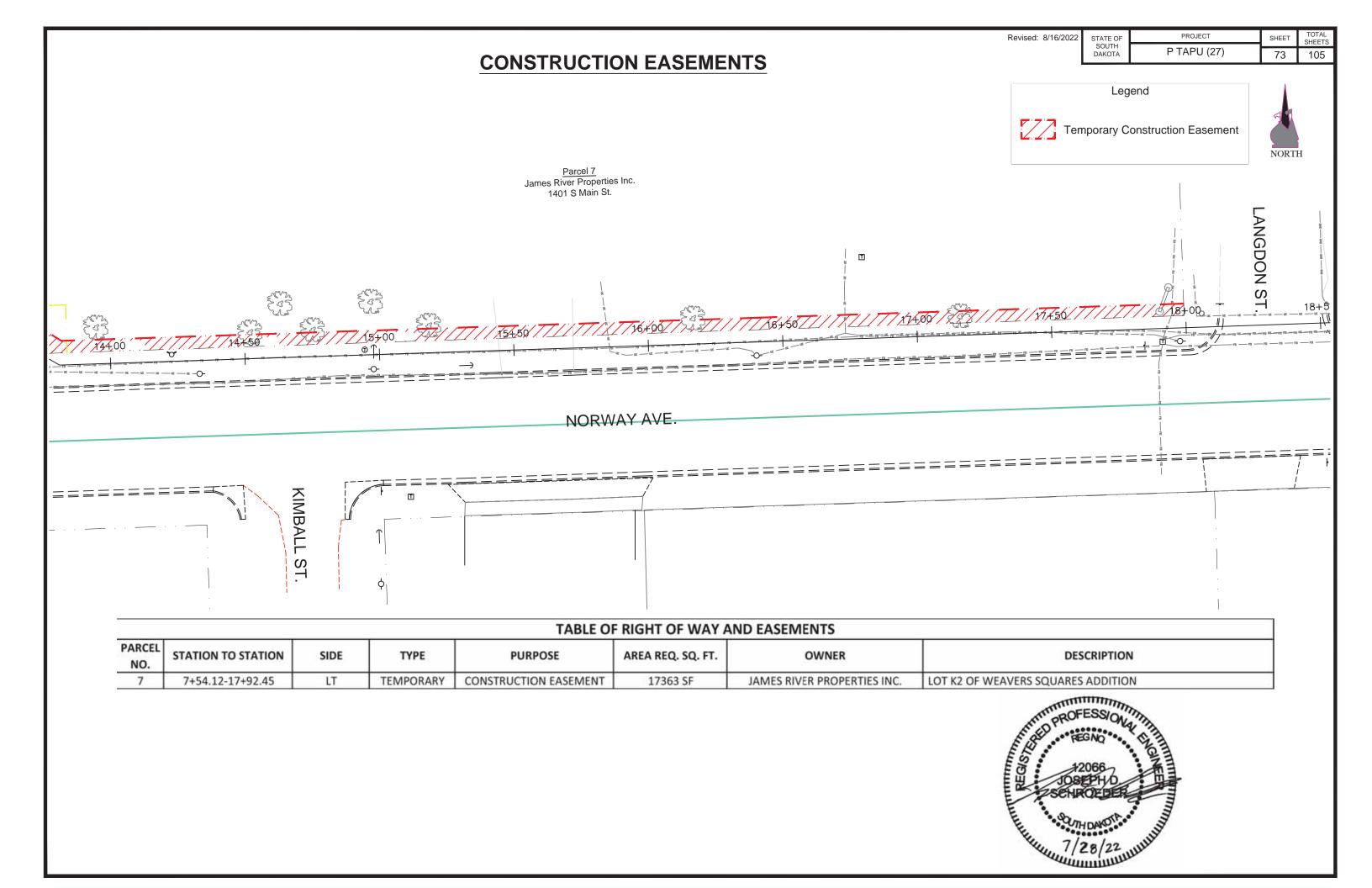








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James River Properties Inc.
1401 S Main St. 1401 S Main St. NORWAY AVE. KIMBALL ST TABLE OF RIGHT OF WAY AND EASEMENTS PARCEL AREA REQ. SQ. FT. STATION TO STATION **PURPOSE** SIDE TYPE OWNER DESCRIPTION NO. 7+54.12-17+92.45 CONSTRUCTION EASEMENT 17363 SF JAMES RIVER PROPERTIES INC. LOT K2 OF WEAVERS SQUARES ADDITION TEMPORARY



 Revised: 8/16/2022
 STATE OF SOUTH DAKOTA
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 TO SHE

 P TAPU (27)
 74
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CONSTRUCTION EASEMENTS

Legend

Temporary Construction Easement



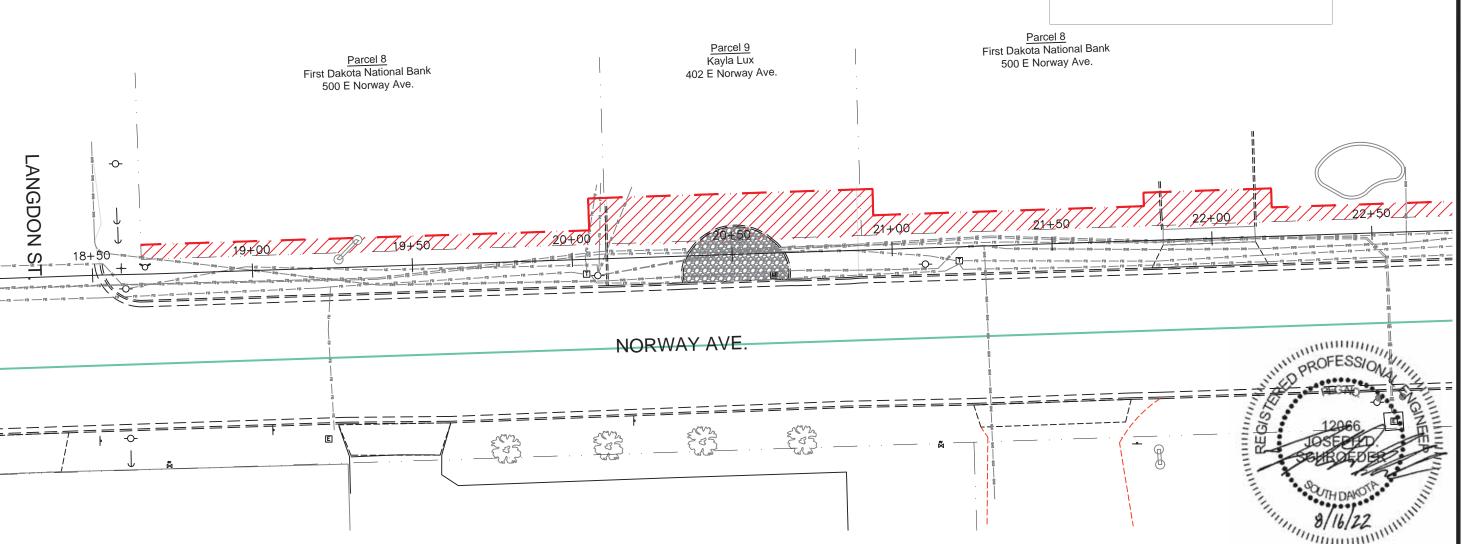
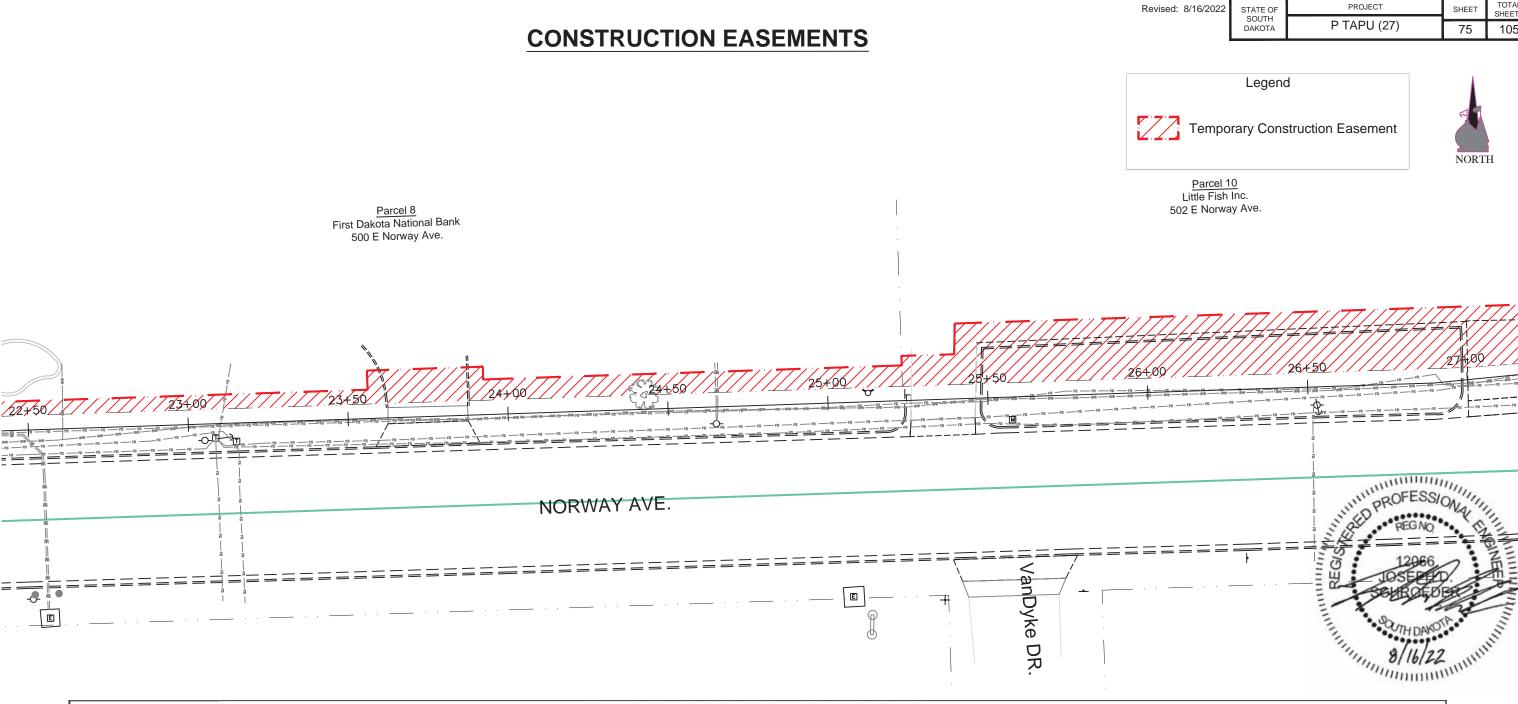
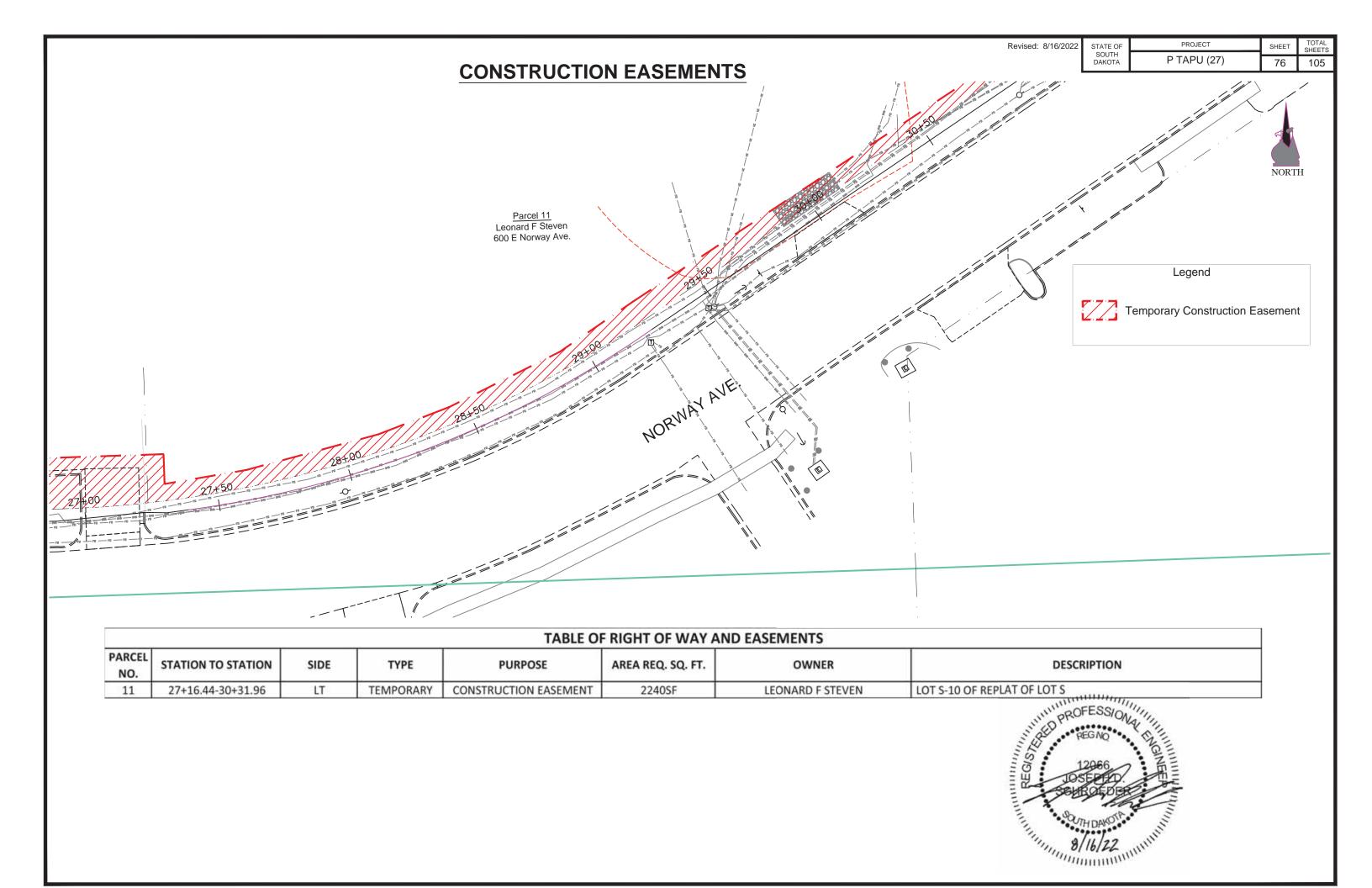
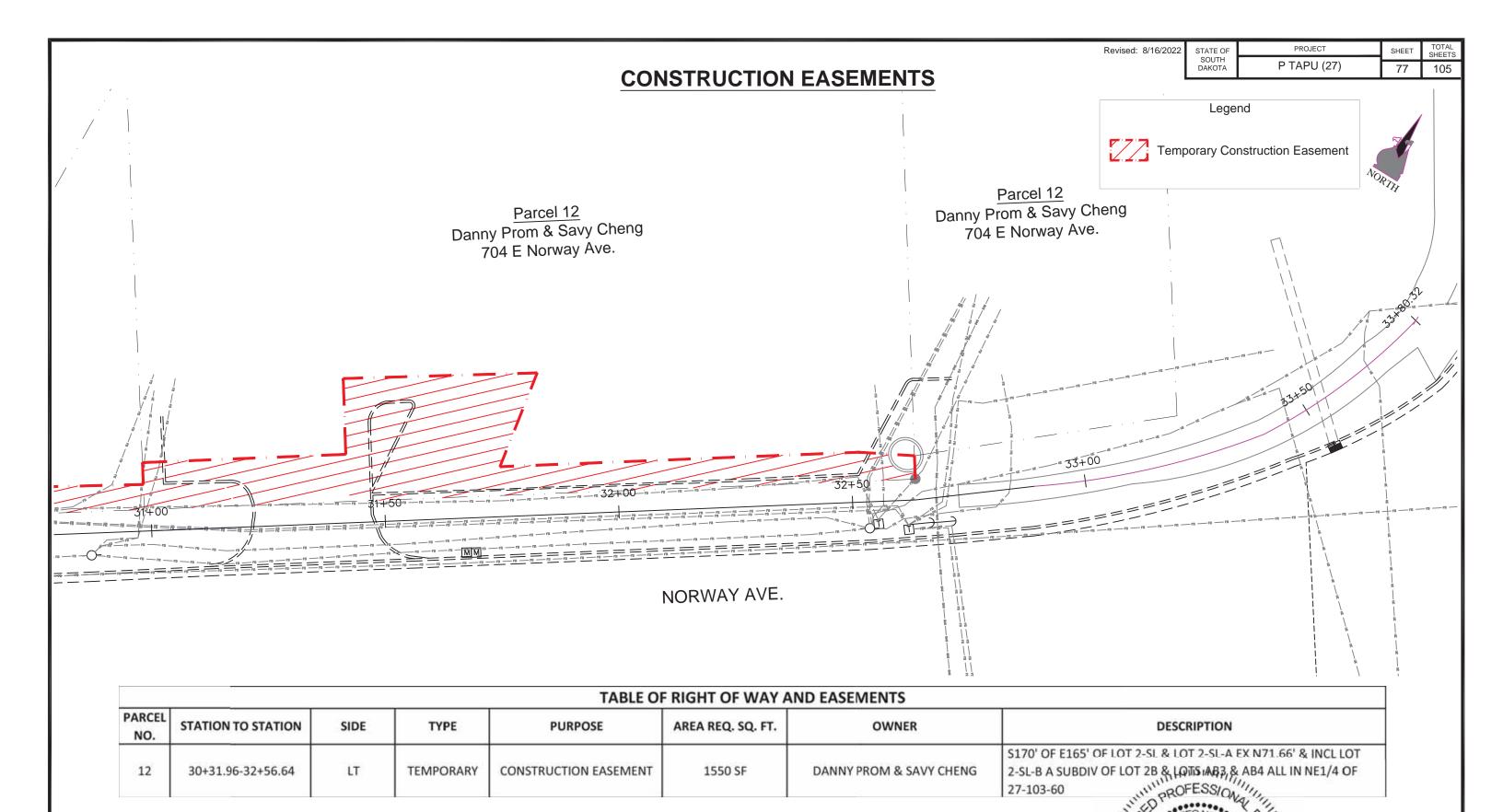


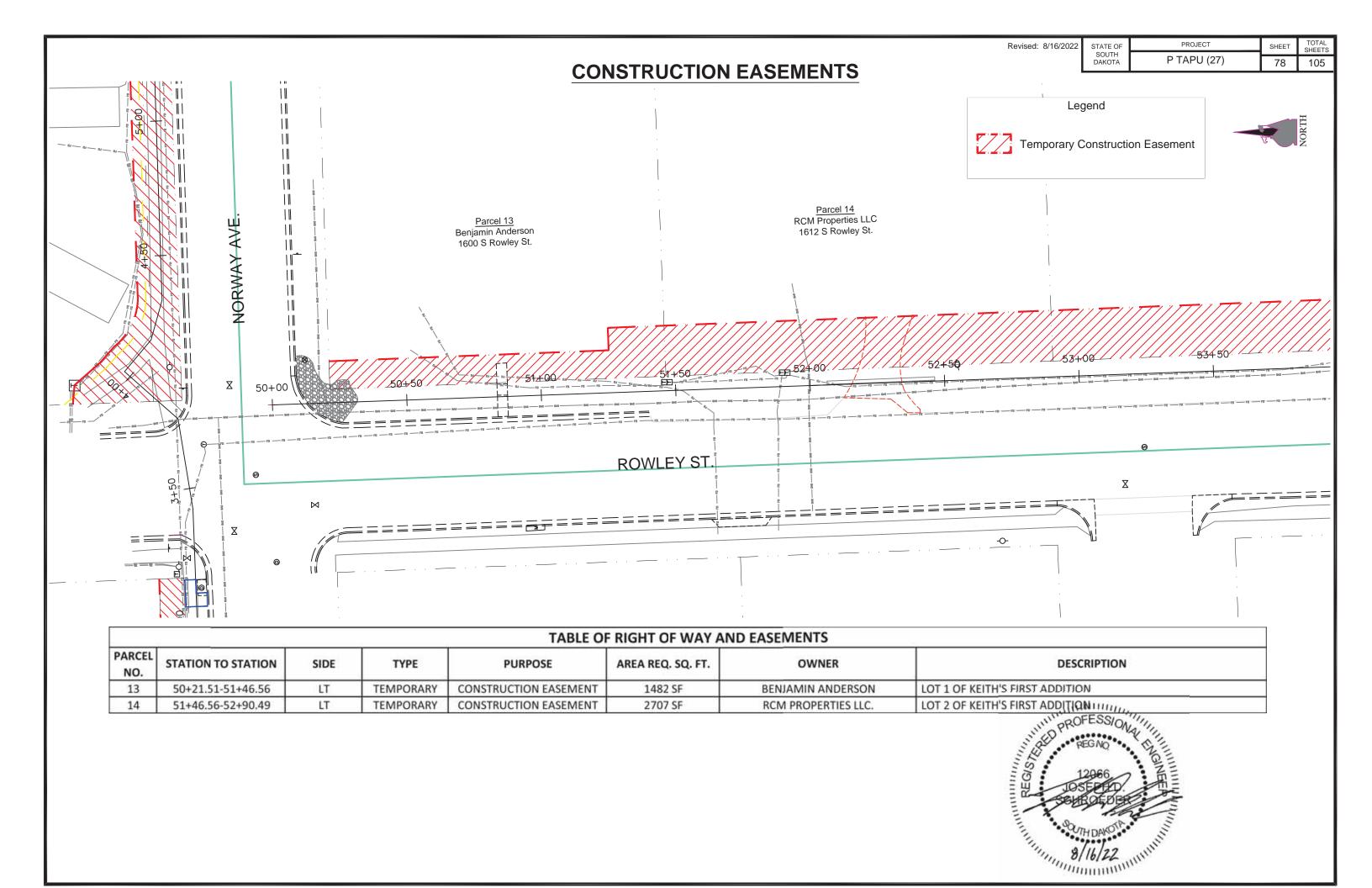
	TABLE OF RIGHT OF WAY AND EASEMENTS								
PARCEL NO.	STATION TO STATION	SIDE	ТҮРЕ	PURPOSE	AREA REQ. SQ. FT.	OWNER	DESCRIPTION		
8	18+58.43-20+03.61	ΙΤ	TEMPORARY	CONSTRUCTION EASEMENT	3545 SF	FIRST DAKOTA NATIONAL BANK	BALANCE OF REPLAT OF LOT S LYING SOUTH OF S-8, S-4 & S-7 IN NW1/4 OF 27-103-60 EX LOTS S9, S10 & S11 & EX E80' OF		
	20+83.60-25+16.48		TEIVIII OTU III I	CONSTRUCTION EXCENSENT	33 13 31	THO DANG TATO WILL DANG	W225.3' OF \$137.5'		
9	20+03.61-20+83.60	LT	TEMPORARY	CONSTRUCTION EASEMENT	1151 SF	KAYLA LUX	E80' OF W225.3' OF S137.5' FROM THE BALANCE OF THE REPLAT OF LOT S IN THE NW1/4 OF 27-130-60		

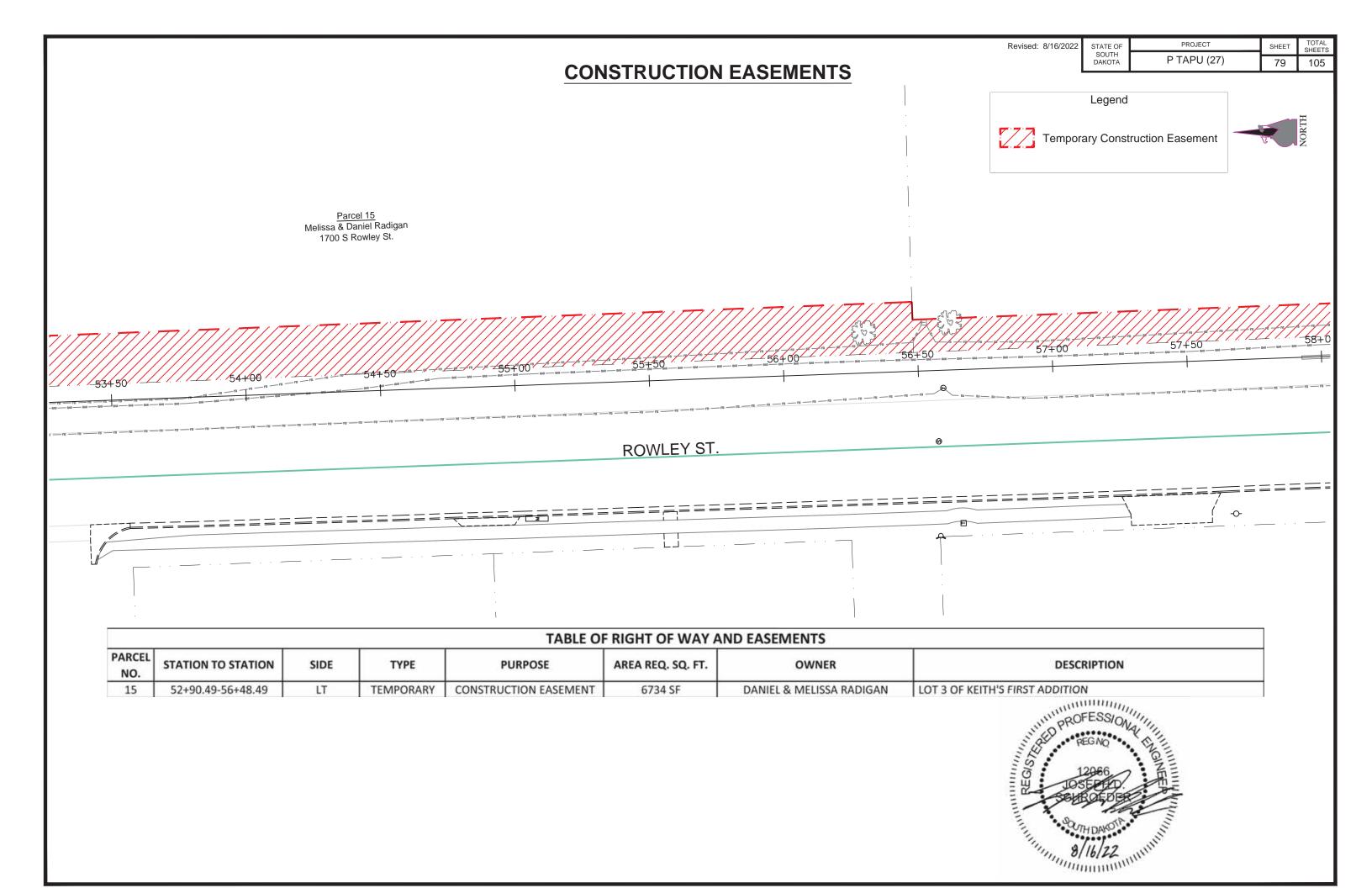


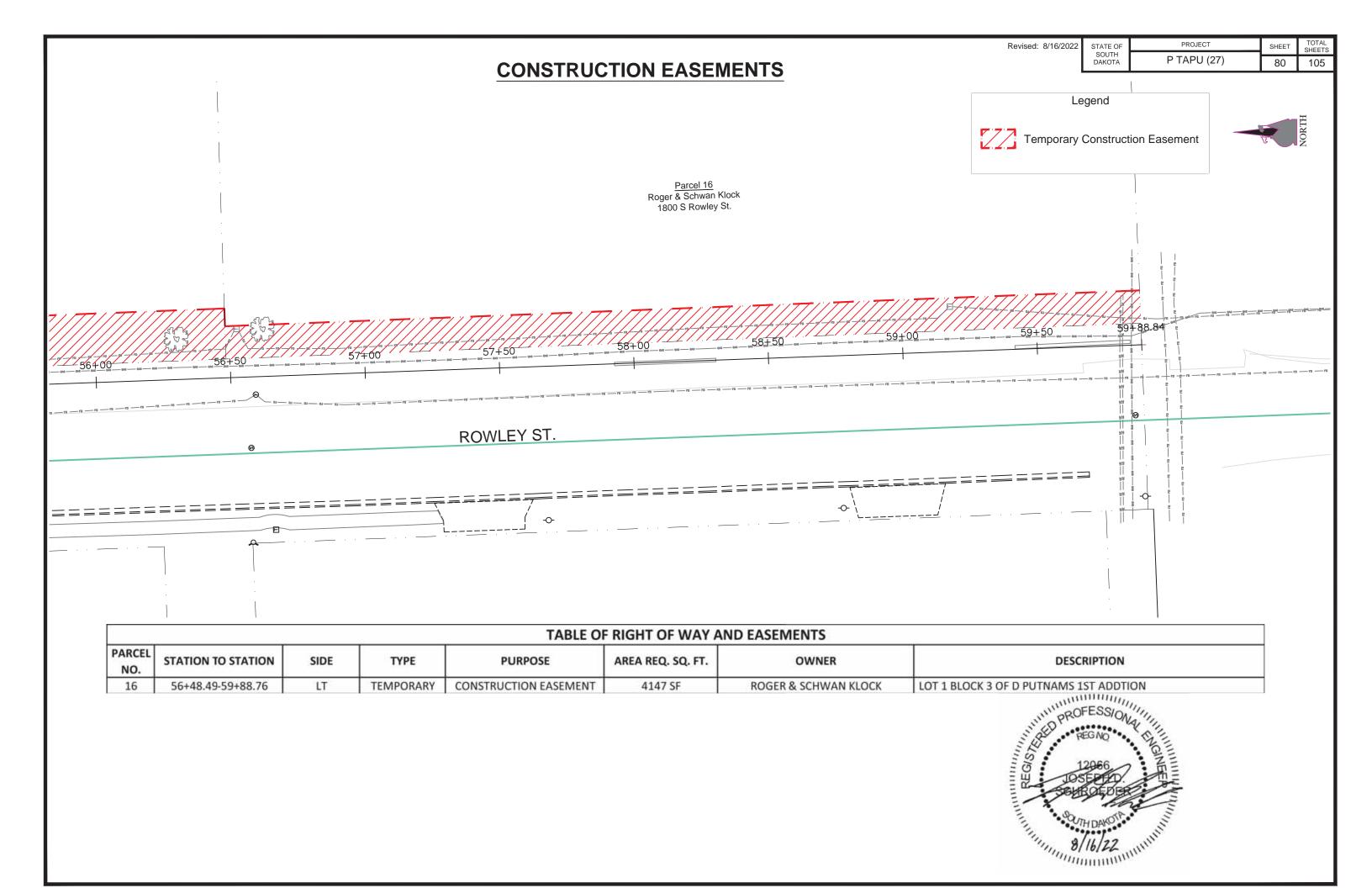
9.	TABLE OF RIGHT OF WAY AND EASEMENTS								
PARCEL NO.	STATION TO STATION	SIDE	ТҮРЕ	PURPOSE	AREA REQ. SQ. FT.	OWNER	DESCRIPTION		
8	18+58.43-20+03.61	LT	TEMPORARY	CONSTRUCTION EASEMENT	3545 SF	FIRST DAKOTA NATIONAL BANK	BALANCE OF REPLAT OF LOT S LYING SOUTH OF S-8, S-4 & S-7 IN NW1/4 OF 27-103-60 EX LOTS S9, S10 & S11 & EX E80' OF		
	20+83.60-25+16.48	521)					W225.3' OF S137.5'		
10	25+16.48-27+16.44	LT	TEMPORARY	CONSTRUCTION EASEMENT	3631 SF	MPR REAL ESTATE HOLDINGS LLC.	LOT S-11 OF REPLAT OF LOT S		











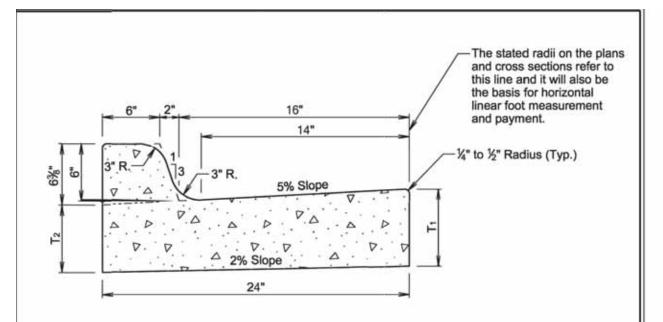
Revised: 8/16/2022

PROJECT STATE OF SHEET SOUTH P TAPU (27) 81

OFESSIONA

8/16/22 MINIMAN

OPROFESSIONA,



TYPE	T ₁ (inches)	T ₂ (inches)
B66	6	5 1/16
B67	7	6 1/16
B68	8	7 1/16
B68.5	8.5	7 9/16
B69	9	8 1/16
B69.5	9.5	8 9/16
B610	10	9 1/16
B610.5	10.5	9 9/16

GENERAL NOTES:

When concrete curb and gutter longitudinally adjoins new concrete pavement, the method of attachment will be by one of the methods shown on standard plate 380.11.

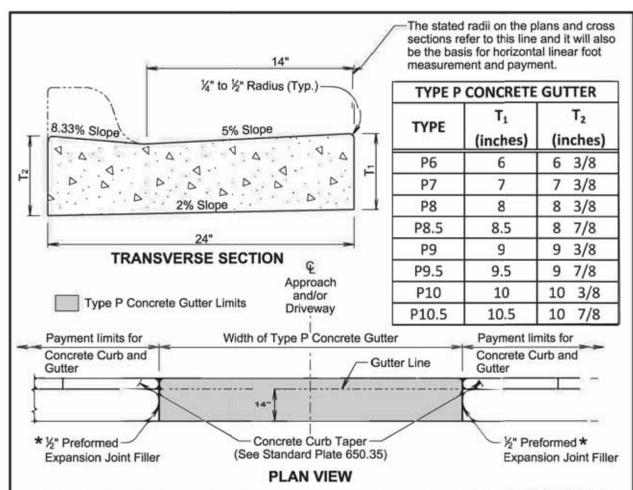
See standard plate 650.90 for expansion and contraction joints in the curb and gutter.

January 2, 2022



SPECIAL CONCRETE CURB AND GUTTER

Sheet I of I



*Joint will not be needed if concrete curb and gutter and type P concrete gutter is placed at the same time. If the 1/2" preformed expansion joint filler is provided, then the joint will be sealed in accordance with standard plate 650.90.

GENERAL NOTES:

The concrete for the type P concrete gutter will comply with the requirements of the specifications for class M6 concrete.

When concrete gutter longitudinally adjoins new concrete pavement, the method of attachment will be by one of the methods shown on standard plate 380.11.

Transverse contraction joints will be constructed at 10-foot intervals in the concrete gutter except when concrete gutter is constructed adjacent to mainline PCC pavement. When concrete gutter is constructed adjacent to mainline PCC pavement, a transverse contraction joint will be constructed in the concrete gutter at each mainline PCC pavement transverse contraction joint location.

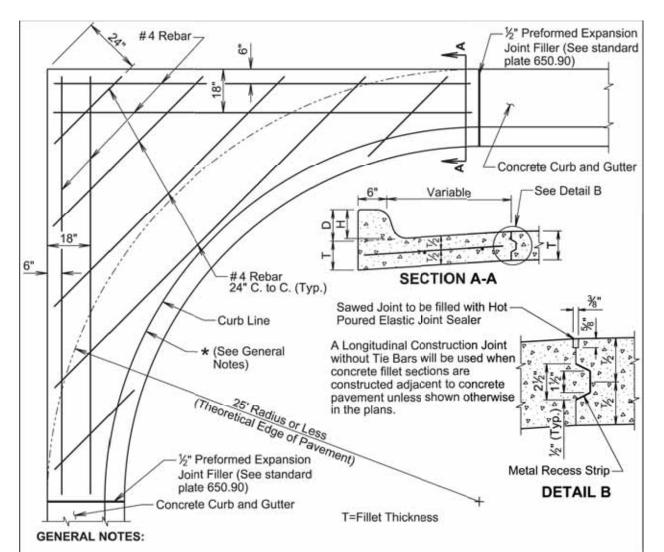
When concrete gutter is placed monolithically with mainline PCC pavement, the transverse contraction joints in the concrete gutter will be sawed and sealed the same as the transverse contraction joints in the mainline

When concrete gutter is not placed monolithically with the mainline PCC pavement and when the adjacent mainline surfacing is not PCC concrete, the transverse contraction joints in the concrete gutter will be 11/2 inches deep if formed in the fresh concrete using a suitable grooving tool. If a saw is used to cut the contraction joints, then the depth of the joint will be at least 1/4 the thickness of the concrete.



SPECIAL CONCRETE GUTTER

Sheet I of I



If a curb ramp is constructed adjacent to a PCC fillet section, the curb will need to be modified. Refer to the corresponding curb ramp standard plate or other special details in the plans for modification of the PCC fillet section.

Dimensions D, H, and T will conform to those shown on the appropriate curb and gutter standard plate.

All rebar will be in conformance with Sections 480 and 1010 of the Specifications. All rebar will have a minimum of 3 inches of clear cover.

Class M6 Concrete will be used in construction of the fillets.

The concrete curb will be monolithic with the concrete fillet. No separate payment for this curb will be made as the curb is considered a part of the fillet.

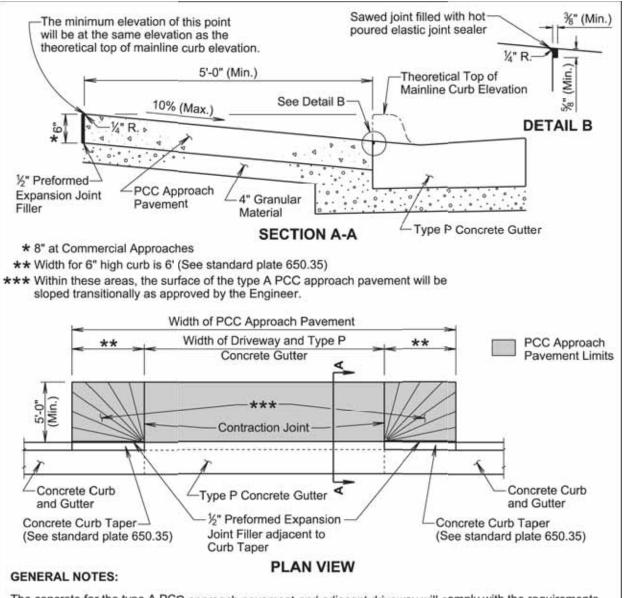
Joints will be constructed at 10-foot intervals except when fillets are constructed adjacent to PCC Pavement. If there is adjacent PCC Pavement the joints will be extended from edge of pavement through the fillet section as directed by the Engineer.

The cost for all materials, labor, and incidentals necessary to construct the PCC fillet section with curb and gutter will be incidental to the contract unit price per square yard for the corresponding PCC fillet section contract item.

June 26, 2019

	SDO	PCC FILLET SECTION WITH	PLATE NUMBER 380.16
Published Date: 3rd Qtr. 2022	OT	TYPE B CURB AND GUTTER	Sheet I of I

STATE OF	PROJECT	SHEET	TOTAL SHEETS
SOUTH DAKOTA	P TAPU (27)	82	105



The concrete for the type A PCC approach pavement and adjacent driveway will comply with the requirements of the Specifications for class M6 concrete unless otherwise stated in the plans.

Contraction joints in the type A PCC approach pavement will be 1½ inches deep if formed in the fresh concrete using a suitable grooving tool. If a saw is used to cut the contraction joints, then the depth of the joint will be at least ¼ the thickness of the approach pavement. Additional contraction joints not shown in the Plan View will be spaced as follows:

One joint at the center of the approach for driveways 16 feet to 24 feet wide.

Two joints spaced at equal intervals for driveways greater than 24 feet to 40 feet wide.

All costs for furnishing and placing the type A PCC approach pavement and constructing the expansion and contraction joints including labor, equipment, excavation, and materials including the earthen backfill and granular material, will be incidental to the contract unit price per square yard for the corresponding PCC Approach Pavement contract item.

June 26, 2019

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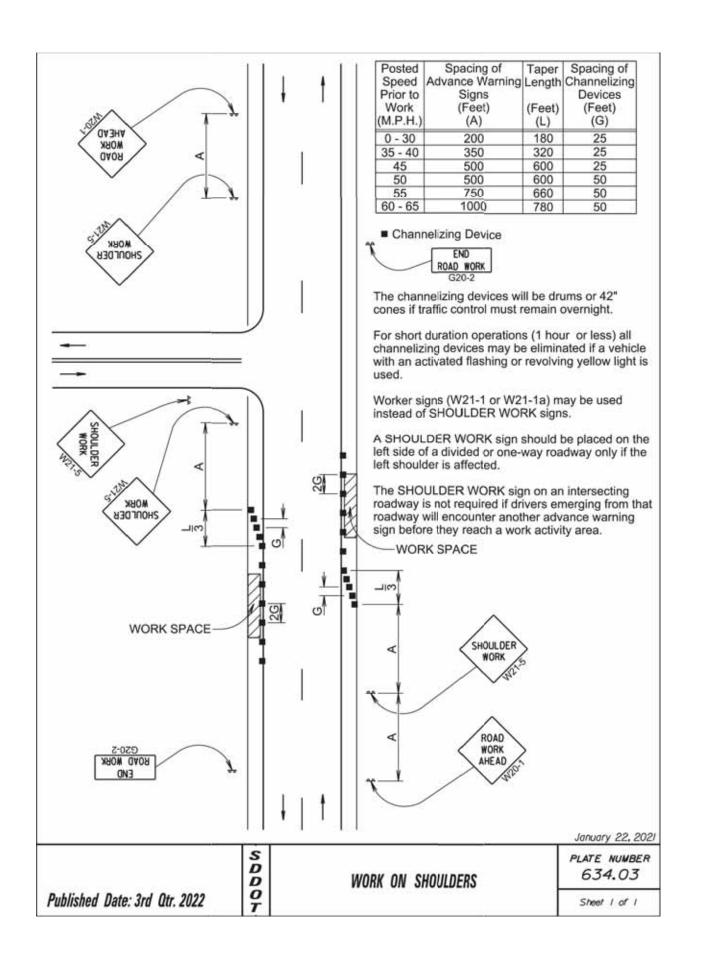
PLATE NUMBER 380.40

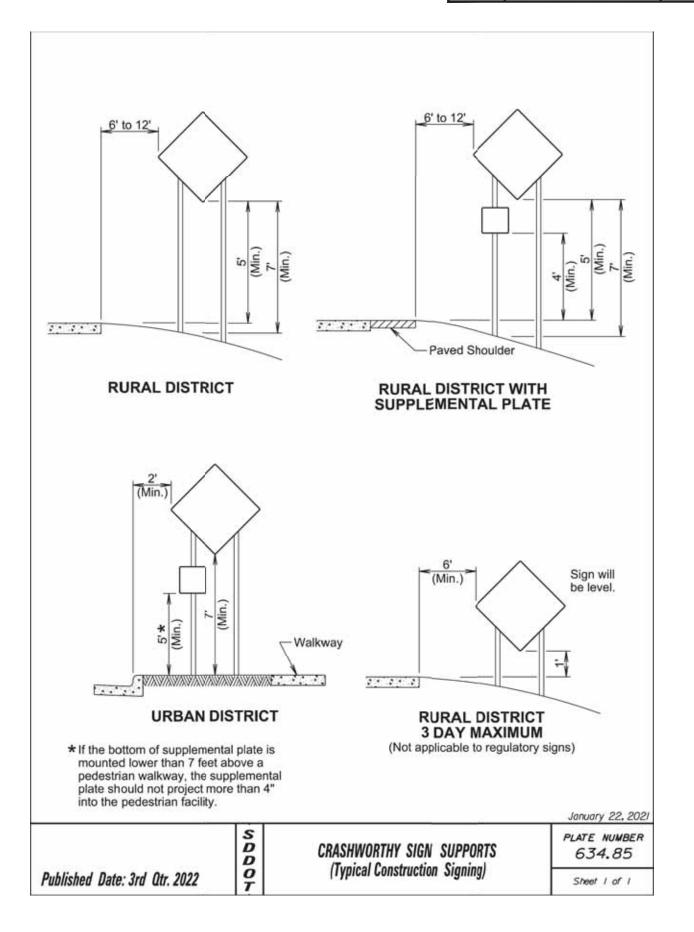
Published Date: 3rd Qtr. 2022

TYPE A
PCC APPROACH PAVEMENT

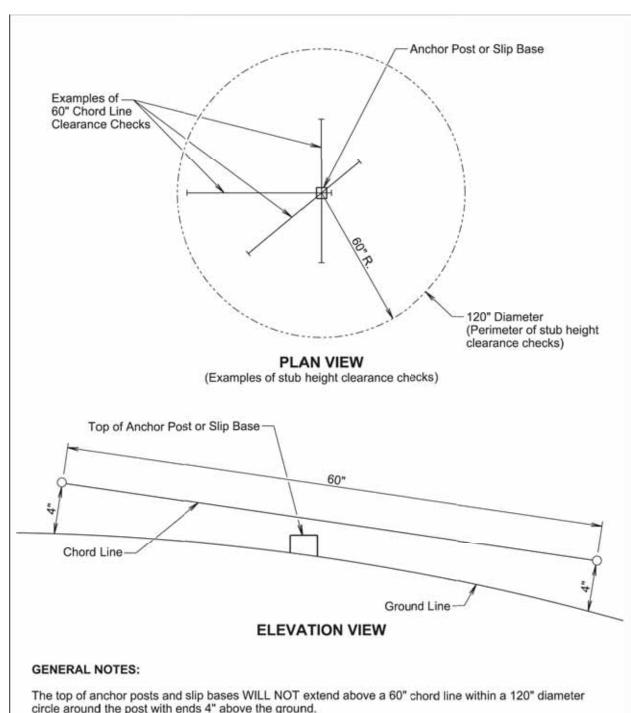
Sheet I of I

STATE OF	PROJECT	SHEET	TOTAL SHEETS
SOUTH DAKOTA	P TAPU (27)	83	105





STATE OF	PROJECT	SHEET	TOTAL SHEETS
SOUTH DAKOTA	P TAPU (27)	84	105

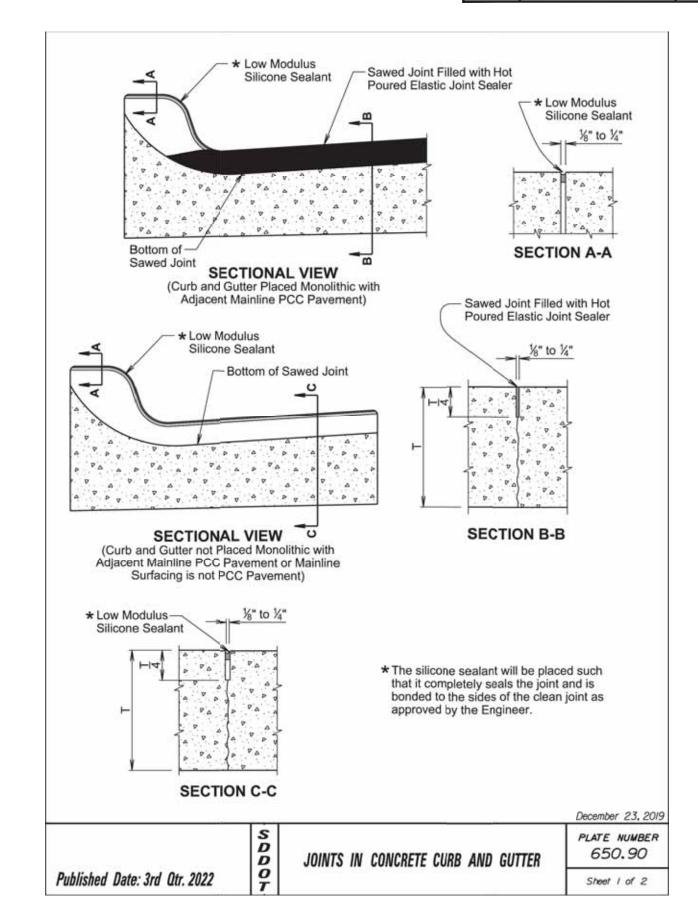


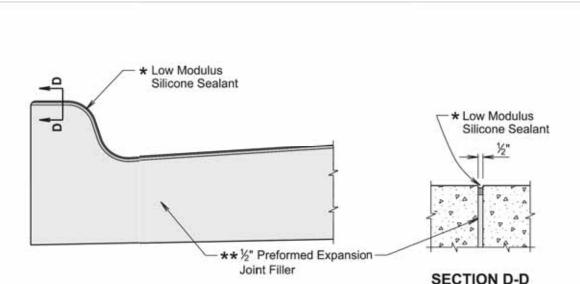
circle around the post with ends 4" above the ground.

At locations where there is curb and gutter adjacent to the breakaway sign support, the stub height will be a maximum of 4" above the ground line at the localized area adjacent to the breakaway support stub.

The 4" stub height clearance is not necessary for U-channel lap splices where the support is designed to yield (bend) at the base.

SDDOT PLATE NUMBER 634.99 BREAKAWAY SUPPORT STUB CLEARANCE Published Date: 3rd Qtr. 2022 Sheet I of I





SECTIONAL VIEW

(Curb and Gutter at ½" Preformed Expansion Joint Filler Location)

> The silicone sealant will be placed such that it completely seals the joint and is bonded to the sides of the clean joint as approved by the Engineer.

GENERAL NOTES:

For illustrative reason, only the type B curb and gutter is shown.

** A ½-inch preformed expansion joint filler will be placed transversely in the curb and gutter at the following locations:

At each junction between the radius return of curb and gutter, and curb and gutter which is parallel to the project centerline.

At each junction between new curb and gutter and existing curb and gutter.

Transverse contraction joints will be constructed at 10 foot intervals in the concrete curb and gutter except when the concrete curb and gutter is constructed adjacent to mainline PCC pavement. When concrete curb and gutter is constructed adjacent to mainline PCC pavement, a transverse contraction joint will be constructed in the concrete curb and gutter at each mainline PCC pavement transverse contraction joint location.

When concrete curb and gutter is not placed monolithically with the mainline PCC pavement or when the adjacent mainline surfacing is not PCC concrete, the transverse contraction joints in the concrete curb and gutter will be 1½ inches deep if formed in the fresh concrete using a suitable grooving tool. If a saw is used to cut the contraction joints, then the depth of the joint will be at least ¼ the thickness of the concrete and the joint will be sealed in accordance with the details shown above.

Published Date: 3rd Qtr. 2022

Sheet 2 of 2

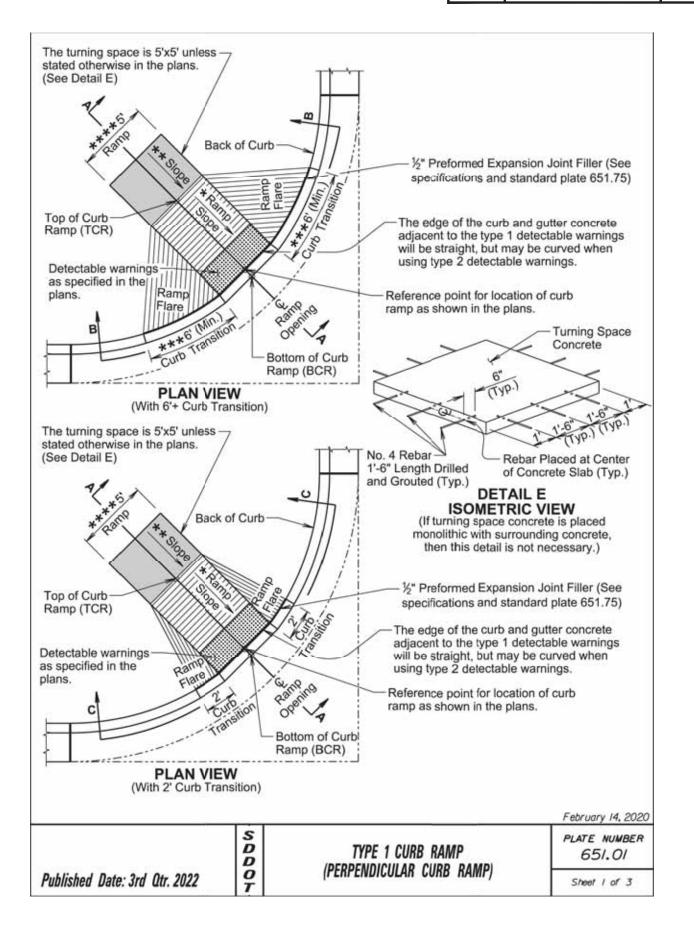
STATE OF SOUTH DAKOTA P TAPU (27)

STATE OF SOUTH P TAPU (27)

SHEET TOTAL SHEETS

105

105

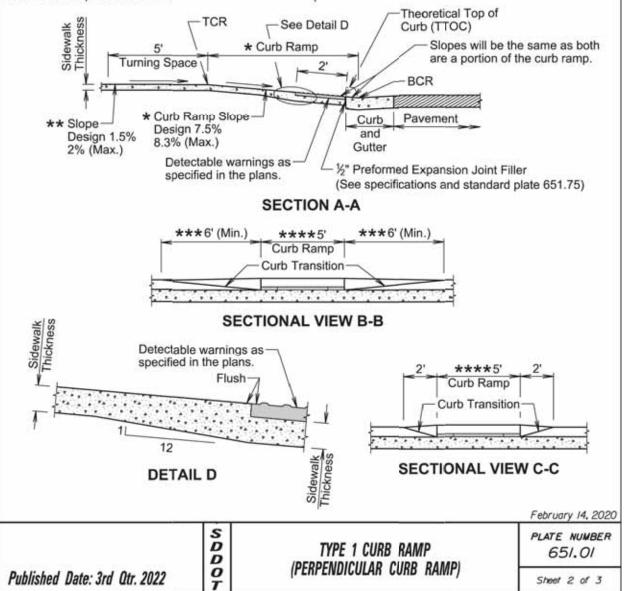


Curb ramp slopes are designed at 7.5% unless stated otherwise in the plans. The curb ramp may have a maximum slope of 8.3% and will not exceed 15' in length unless stated otherwise in the plans.

The curb ramp length may be computed based on the intersection of a continuous 1.5% theoretical slope from theoretical top of curb (TTOC) with the curb ramp using a continuous 7.5% curb ramp slope. The * elevation of point TCR will always be higher than the elevation of point TTOC unless specified otherwise in the plans. The curb ramp length dimension as shown in the plans will be adjusted as necessary to meet all slope and length requirements based on field geometrics.

The cross slope of the ramp will not be steeper than 2%. Plans are designed using a 1.5% slope unless stated otherwise in the plans.

- ** The slope in the turning space will not be steeper than 2% in any direction of pedestrian travel. Plans are designed using a 1.5% slope unless stated otherwise in the plans.
- *** The curb transition will be a minimum of 6' long, a maximum of 10' long, and the curb transition slope will not be steeper than 10% unless stated otherwise in the plans. The curb transition length will be adjusted as necessary to meet slope and length requirements based on field geometrics.
- **** The ramp width is 5' unless stated otherwise in the plans.



Sheet 2 of 3

STATE OF	PROJECT	SHEET	TOTAL SHEETS
SOUTH DAKOTA	P TAPU (27)	86	105

GENERAL NOTES:

For illustrative purpose only, type 1 detectable warnings are shown in the drawings.

For illustrative purpose only, PCC fillet sections are shown in the drawings. The curb ramp depicted on this standard plate may be used with a PCC fillet section or curb and gutter.

For illustrative purpose only, the curb ramp location is shown at the center of a PCC fillet section. The curb ramp will be placed at the location stated in the plans.

Sidewalk will not be placed adjacent to the curb ramp flares when a 2-foot curb transition is used unless shown otherwise in the plans.

* Care will be taken to ensure a uniform grade on the curb ramp, free of sags and short grade changes.

Surface texture of the curb ramp will be obtained by coarse brooming transverse to the slope of the curb ramp.

The normal gutter line profile will be maintained through the area of the ramp opening.

Joints will be sawed or tooled into the concrete adjacent to the detectable warnings to alleviate possible corner cracking.

Care will be taken to ensure that the surface of the detectable warnings are clean and maintains a uniform

The detectable warnings will be cut as necessary to fit the plan specified limits of the detectable warnings. Cost for cutting the detectable warnings will be incidental to the corresponding detectable warning contract

There will be no separate payment for curb ramps. The curb ramp will be measured and paid for at the contract unit price per square foot for the corresponding concrete sidewalk contract item. The square foot area of the detectable warnings will be included in the measured and paid for quantity of sidewalk.

If rebar is placed in the turning space as depicted in detail E, the cost of the materials, labor, and equipment to furnish and install the rebar will be incidental to the contract unit price per square foot for the corresponding concrete sidewalk contract item.

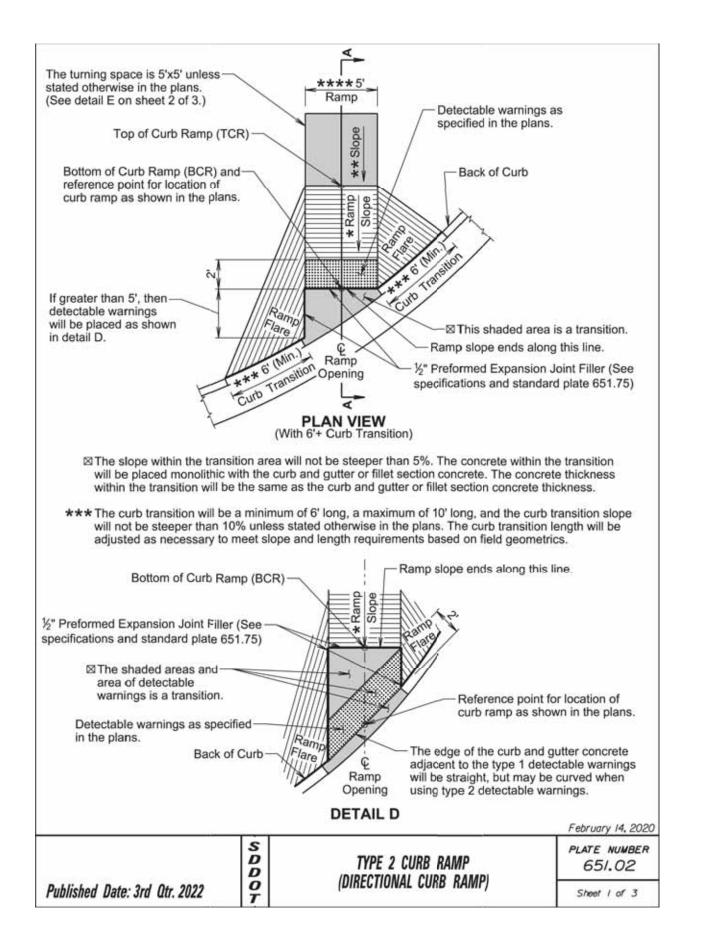
The curb transitions and ramp opening will be measured and paid for at the contract unit price per foot for the corresponding curb and gutter contract item when curb and gutter is used. The curb transitions and ramp opening will be measured and paid for at the contract unit price per square yard for the corresponding PCC fillet section contract item when a PCC fillet section is used.

The type 1 detectable warnings will be measured to the nearest square foot. All costs for furnishing and installing the type 1 detectable warnings including labor, equipment, materials, and incidentals will be paid for at the contract unit price per square foot for "Type 1 Detectable Warnings".

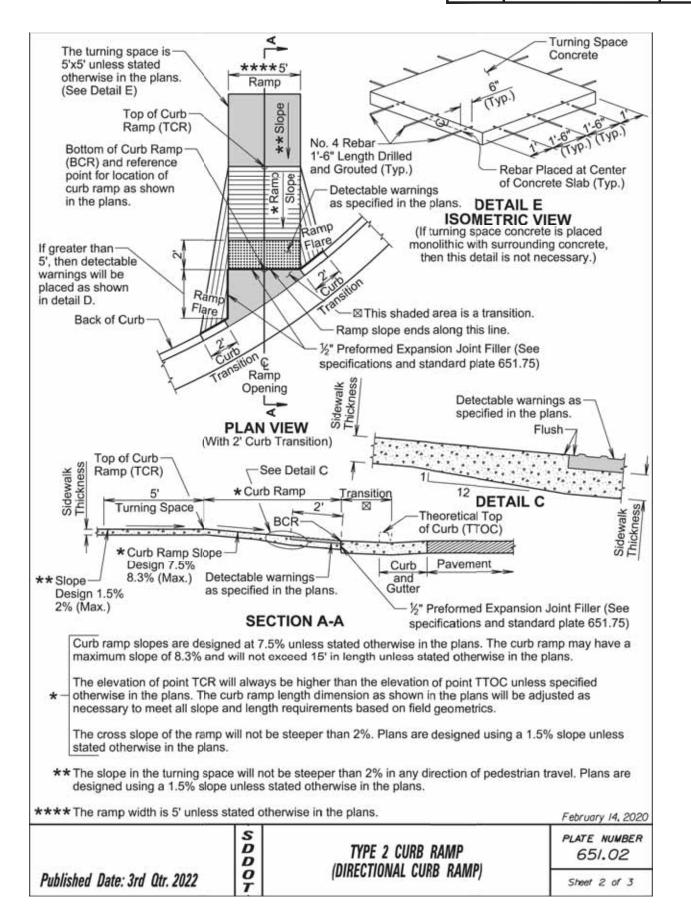
The type 2 detectable warnings will be measured to the nearest square foot. All costs for furnishing and installing the type 2 detectable warnings including labor, equipment, and materials, including adhesive, necessary sealant or grout, and necessary grinding will be paid for at the contract unit price per square foot for "Type 2 Detectable Warnings".

February 14, 2020

PLATE NUMBER D TYPE 1 CURB RAMP 651.01 D (PERPENDICULAR CURB RAMP) 0 Published Date: 3rd Qtr. 2022 Sheet 3 of 3



STATE OF	PROJECT	SHEET	TOTAL SHEETS
SOUTH DAKOTA	P TAPU (27)	87	105



GENERAL NOTES:

For illustrative purpose only, type 1 detectable warnings are shown in the drawings.

The curb ramp depicted on this standard plate may be used with a PCC fillet section or curb and gutter. The curb ramp will be placed at the location stated in the plans.

Sidewalk will not be placed adjacent to the curb ramp flares when a 2-foot curb transition is used unless shown otherwise in the plans.

* Care will be taken to ensure a uniform grade on the curb ramp, free of sags and short grade changes.

Surface texture of the curb ramp will be obtained by coarse brooming transverse to the slope of the curb ramp.

The normal gutter line profile will be maintained through the area of the ramp opening.

Joints will be sawed or tooled into the concrete adjacent to the detectable warnings to alleviate possible corner cracking.

Care will be taken to ensure that the surface of the detectable warnings are clean and maintains a uniform color.

The detectable warnings will be cut as necessary to fit the plan specified limits of the detectable warnings. Cost for cutting the detectable warnings will be incidental to the corresponding detectable warning contract item.

There will be no separate payment for curb ramps. The curb ramp will be measured and paid for at the contract unit price per square foot for the corresponding concrete sidewalk contract item. The square foot area of the detectable warnings will be included in the measured and paid for quantity of sidewalk.

If rebar is placed in the Turning Space as depicted in DETAIL E, the cost of the materials, labor, and equipment to furnish and install the rebar will be incidental to the contract unit price per square foot for the corresponding concrete sidewalk contract item.

The curb transitions and ramp opening will be measured and paid for at the contract unit price per foot for the corresponding curb and gutter contract item when curb and gutter is used. The curb transitions and ramp opening will be measured and paid for at the contract unit price per square yard for the corresponding PCC fillet section contract item when a PCC fillet section is used.

All costs for furnishing and installing the transition area at the base of the curb ramp will be incidental to the contract unit price per foot for the corresponding curb and gutter contract item when curb and gutter is used and will be incidental to the contract unit price per square yard for the corresponding PCC fillet section contract item when a PCC fillet section is used.

The type 1 detectable warnings will be measured to the nearest square foot. All costs for furnishing and installing the type 1 detectable warnings including labor, equipment, materials, and incidentals will be paid for at the contract unit price per square foot for "Type 1 Detectable Warnings".

The type 2 detectable warnings will be measured to the nearest square foot. All costs for furnishing and installing the type 2 detectable warnings including labor, equipment, and materials, including adhesive, necessary sealant or grout, and necessary grinding will be paid for at the contract unit price per square foot for "Type 2 Detectable Warnings".

February 14, 2020

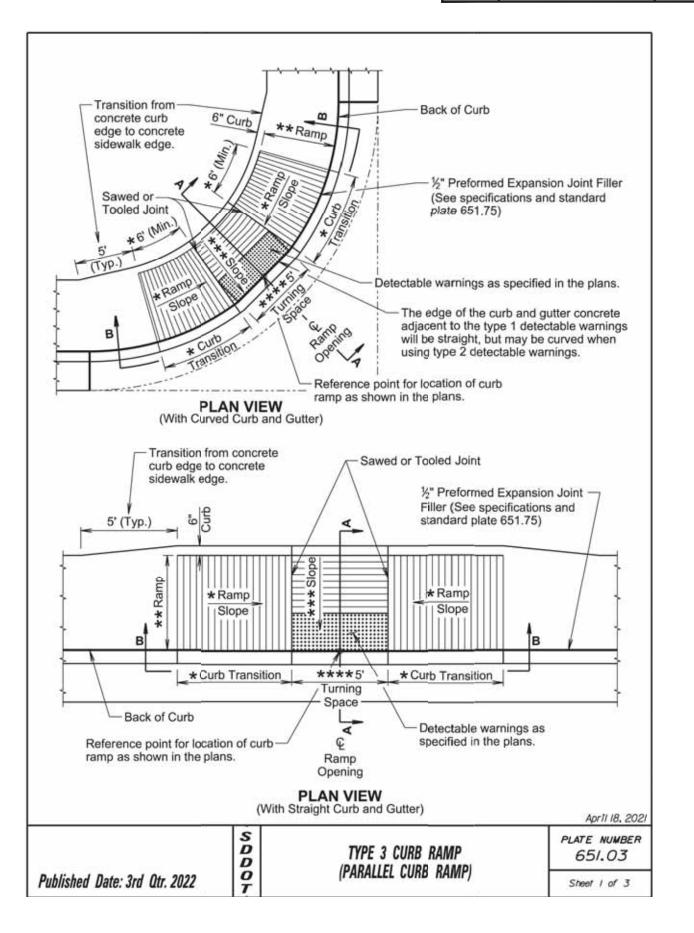
Published Date: 3rd Otr. 2022

TYPE 2 CURB RAMP
(DIRECTIONAL CURB RAMP)

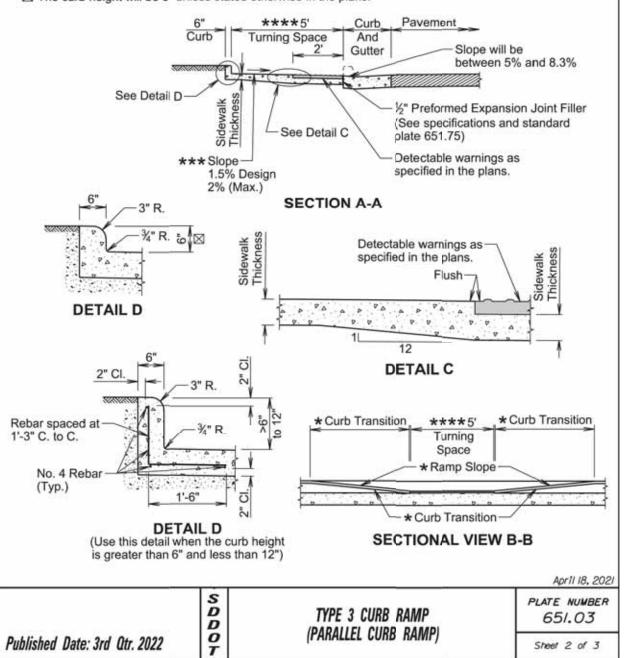
PLATE NUMBER 651.02

Street 3 of 3

STATE OF	PROJECT	SHEET	TOTAL SHEETS
SOUTH DAKOTA	P TAPU (27)	88	105



- * The curb transition slope will match the curb ramp slope. Curb ramp slopes are designed at 7.5% unless stated otherwise in the plans. The curb ramp may have a maximum slope of 8.3% at any location of the curb ramp and will not exceed 15' in length unless stated otherwise in the plans. The curb transitions and curb ramp lengths will be adjusted as necessary to meet all slope and length requirements based on field geometrics.
- ** The cross slope of the ramp will not be steeper than 2% and the ramp width is 5' unless stated otherwise in the plans. Plans are designed using a 1.5% cross slope for the ramp unless stated otherwise in the plans.
- *** The slope in the turning space will not be steeper than 2% in any direction of pedestrian travel. Plans are designed using a 1.5% slope unless stated otherwise in the plans.
- *** The turning space is 5'x5' unless stated otherwise in the plans.
 - ∑ The curb height will be 6" unless stated otherwise in the plans.



STATE OF	PROJECT	SHEET	TOTAL SHEETS
SOUTH DAKOTA	P TAPU (27)	89	105

GENERAL NOTES:

For illustrative purpose only, type 1 detectable warnings are shown in the drawings.

For illustrative purpose only, a PCC fillet section is shown in one of the drawings. The curb ramp depicted on this standard plate may be used with a PCC fillet section or with curb and gutter.

The curb ramp will be placed at the location stated in the plans.

Sidewalk adjacent to the curb ramp will be as shown in the plans.

Care will be taken to ensure a uniform grade on the curb ramp, free of sags and short grade changes.

Surface texture of the curb ramp will be obtained by coarse brooming transverse to the slope of the curb ramp.

The normal gutter line profile will be maintained through the area of the ramp opening.

Joints will be sawed or tooled into the concrete adjacent to the detectable warnings to alleviate possible corner cracking (see plan view for joint location).

Care will be taken to ensure that the surface of the detectable warnings are clean and maintains a uniform color.

The detectable warnings will be cut as necessary to fit the plan specified limits of the detectable warnings. Cost for cutting the detectable warnings will be incidental to the corresponding detectable warning contract item.

When curb height is greater than 6" and less than 12", reinforcing steel is required in accordance with the detail on sheet 2 of 3. The reinforcing steel will conform to ASTM A615, Grade 60. Cost for furnishing and installing the reinforcing steel will be incidental to the contract unit price per square foot for the corresponding concrete sidewalk contract item.

There will be no separate payment for curb ramps. The curb ramp will be measured and paid for at the contract unit price per square foot for the corresponding concrete sidewalk contract item. The square foot area of the detectable warnings and the curb along the short radius will be included in the measured and paid for quantity of sidewalk.

The curb transitions and ramp opening will be measured and paid for at the contract unit price per foot for the corresponding curb and gutter contract item when curb and gutter is used. The curb transitions and ramp opening will be measured and paid for at the contract unit price per square yard for the corresponding PCC fillet section contract item when a PCC fillet section is used.

The type 1 detectable warnings will be measured to the nearest square foot. All costs for furnishing and installing the type 1 detectable warnings including labor, equipment, materials, and incidentals will be paid for at the contract unit price per square foot for "Type 1 Detectable Warnings".

The type 2 detectable warnings will be measured to the nearest square foot. All costs for furnishing and installing the type 2 detectable warnings including labor, equipment, and materials, including adhesive, necessary sealant or grout, and necessary grinding will be paid for at the contract unit price per square foot for "Type 2 Detectable Warnings".

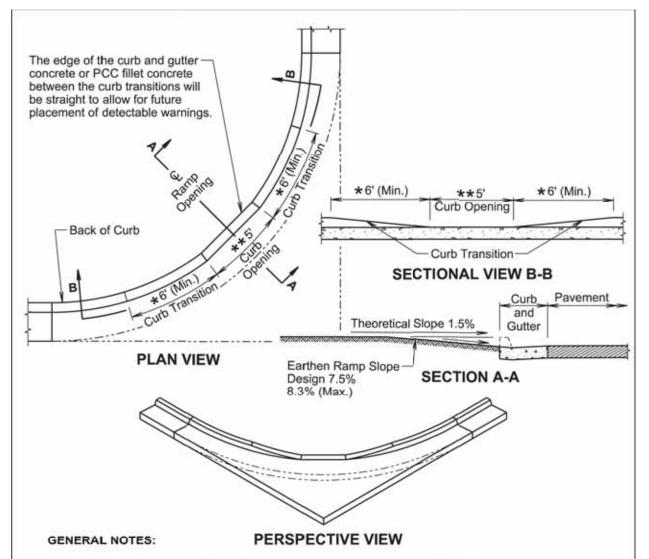
April 18, 2021

Published Date: 3rd Qtr. 2022

TYPE 3 CURB RAMP
(PARALLEL CURB RAMP)

PLATE NUMBER
651.03

Sheet 3 of 3



For illustrative purpose only, the curb opening location is shown at the center of the fillet section. The curb opening will be placed at the location(s) stated in the plans.

For illustrative purpose only, PCC fillet sections are shown in the above drawings. The curb opening depicted on this standard plate may be used with a PCC fillet section or with curb and gutter.

- * The curb transition will be a minimum of 6' long, a maximum of 10' long, and the curb transition slope will not be steeper than 10% unless stated otherwise in the plans. The curb transition length will be adjusted as necessary to meet the slope and length requirements based on the field geometrics.
- ** The curb opening width is 5' unless stated otherwise in the plans.

The normal gutter line profile will be maintained through the area of the curb opening.

The curb transitions and opening will be measured and paid for at the contract unit price per foot for the corresponding curb and gutter contract item when curb and gutter is used. The curb transitions and opening will be measured and paid for at the contract unit price per square yard for the corresponding PCC fillet section contract item when a PCC fillet section is used.

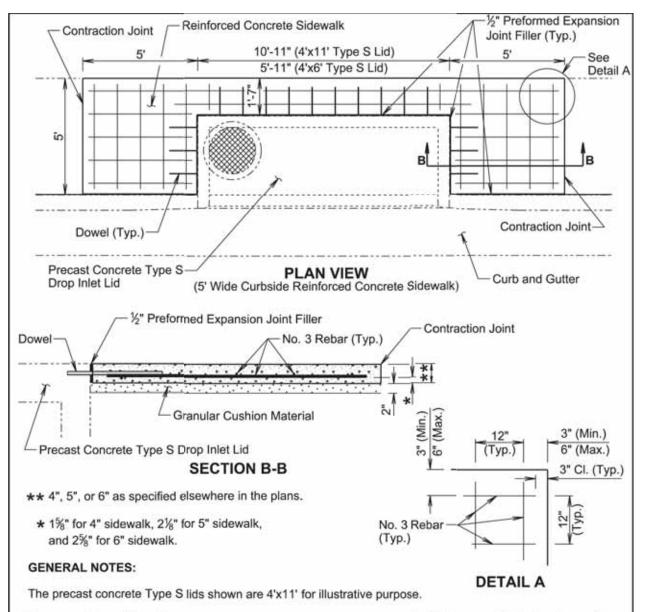
February 14, 2020

Published Date: 3rd Qtr. 2022

CURB OPENING AND CURB TRANSITIONS
IN CURB AND GUTTER FOR FUTURE
CURB RAMP AND CURBSIDE SIDEWALK

Street | of |

Т	STATE OF	PROJECT	SHEET	TOTAL SHEETS
1	SOUTH DAKOTA	P TAPU (27)	90	105



The cross slope of the sidewalk and precast concrete type S drop inlet lid will be as specified elsewhere in the plans.

The reinforcing steel will conform to Section 1010 of the Specifications. The Contractor will be in conformance with the construction requirements of Section 480.3 of the Specifications.

When lapping of reinforcing steel is necessary, the No. 3 rebar will be lapped 12".

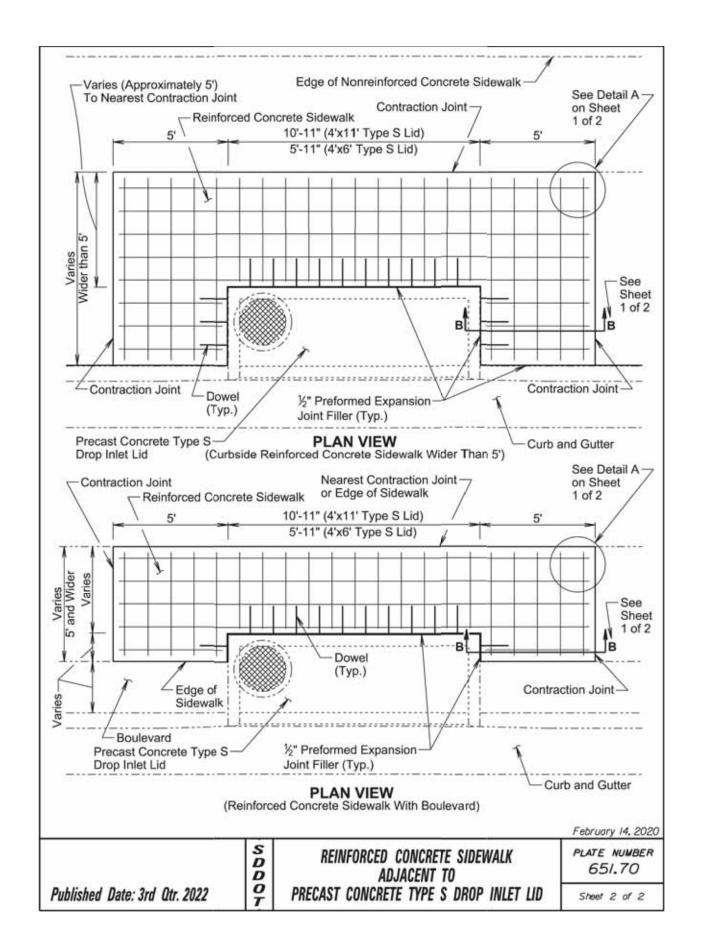
The reinforced concrete sidewalk will conform to the requirements of Section 651 of the Specifications.

All costs for constructing the reinforced concrete sidewalk including labor, equipment, tools, backfilling, furnishing and placing materials, including granular cushion, reinforcing steel, preformed expansion joint filler, and incidentals will be included in the contract unit price per square foot for the corresponding reinforced concrete sidewalk contract item.

Published Date: 3rd Qtr. 2022

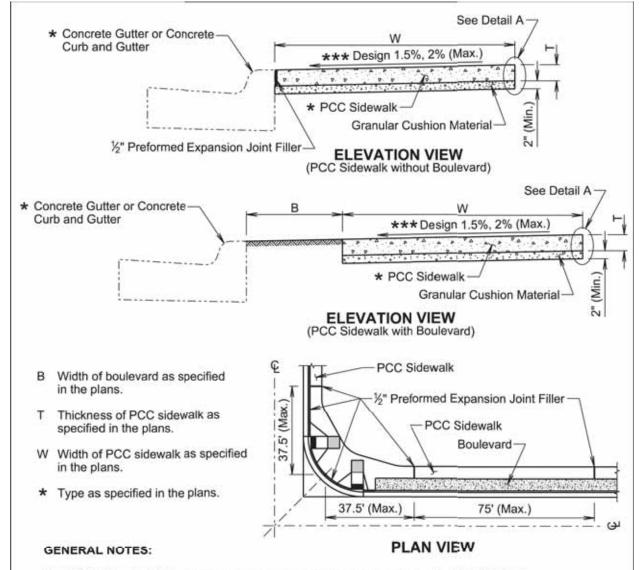
REINFORCED CONCRETE SIDEWALK
ADJACENT TO
PRECAST CONCRETE TYPE S DROP INLET LID

Steel 1 of 2



 STATE OF SOUTH DAKOTA
 PROJECT
 SHEET
 TOTAL SHEETS

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 91
 105



The PCC sidewalk will be constructed in accordance with Section 651 of the Specifications.

*** The cross slope of the sidewalk is designed at 1.5% and the maximum slope allowed is 2% unless specified otherwise in the plans.

The maximum length between expansion joints in the PCC sidewalk is 75 feet.

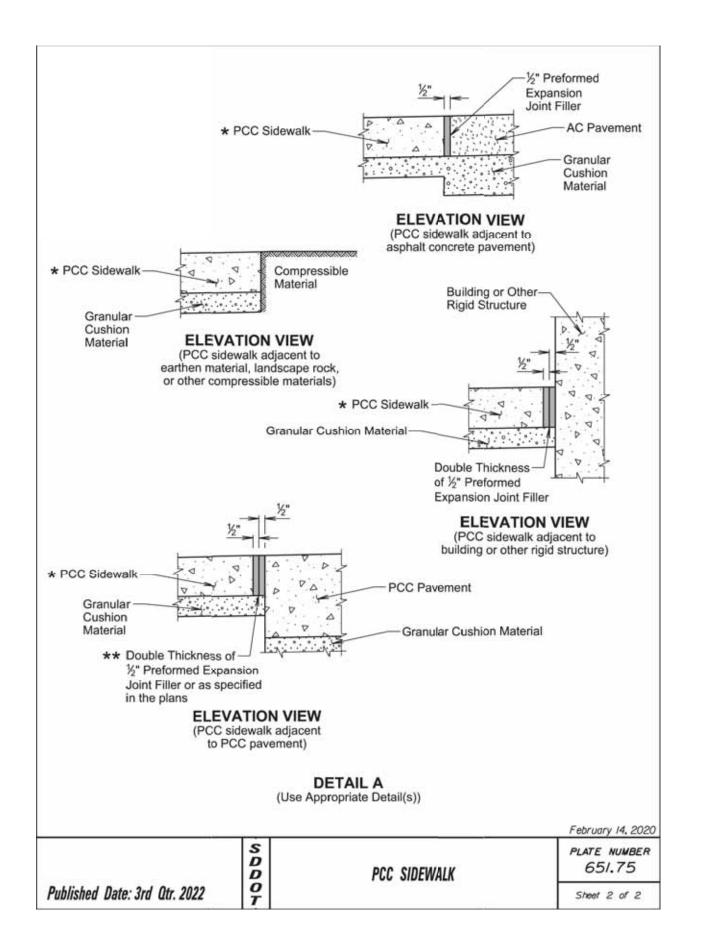
PCC sidewalk placed adjacent to intersection of roadways will have an expansion joint placed transversely a maximum of 37.5 feet from the intersection. See Plan View.

An expansion joint in the PCC sidewalk will consist of a ½ -inch thick preformed expansion joint filler material placed full depth and width of the PCC sidewalk.

** Large areas of PCC pavement adjacent to the PCC sidewalk may require a different joint treatment than shown in the detail. If a different joint detail is necessary, plans will contain the joint detail and the Contractor will construct the joint treatment in accordance with the plans.

February 14, 2020

	S D D O T	PCC SIDEWALK	PLATE NUMBER 651.75
Published Date: 3rd Qtr. 2022			Sheet I of 2



	STATE OF	PROJECT	SHEET	TOTAL SHEETS	
SOUTH DAKOTA	P TAPU (27)	92	105		

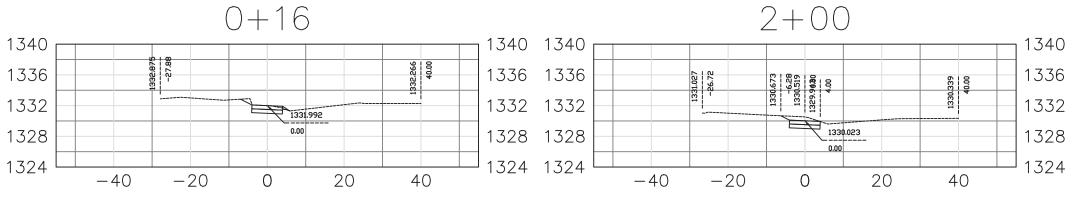


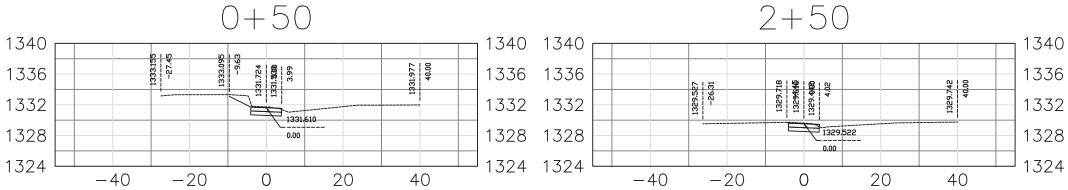
STATE OF PROJECT
SOUTH
DAKOTA P TAPU (27)

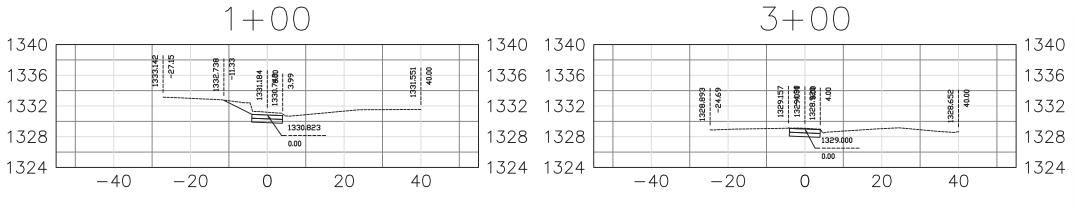
Revised: 8/16/2022

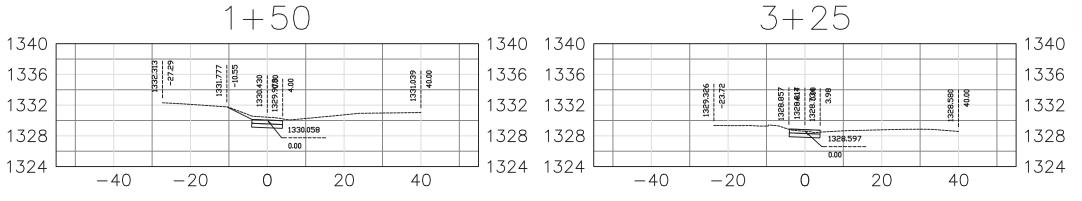
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 TOTAL SHEETS

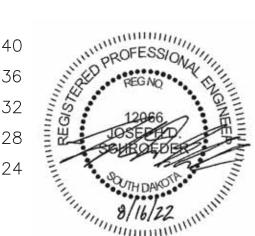
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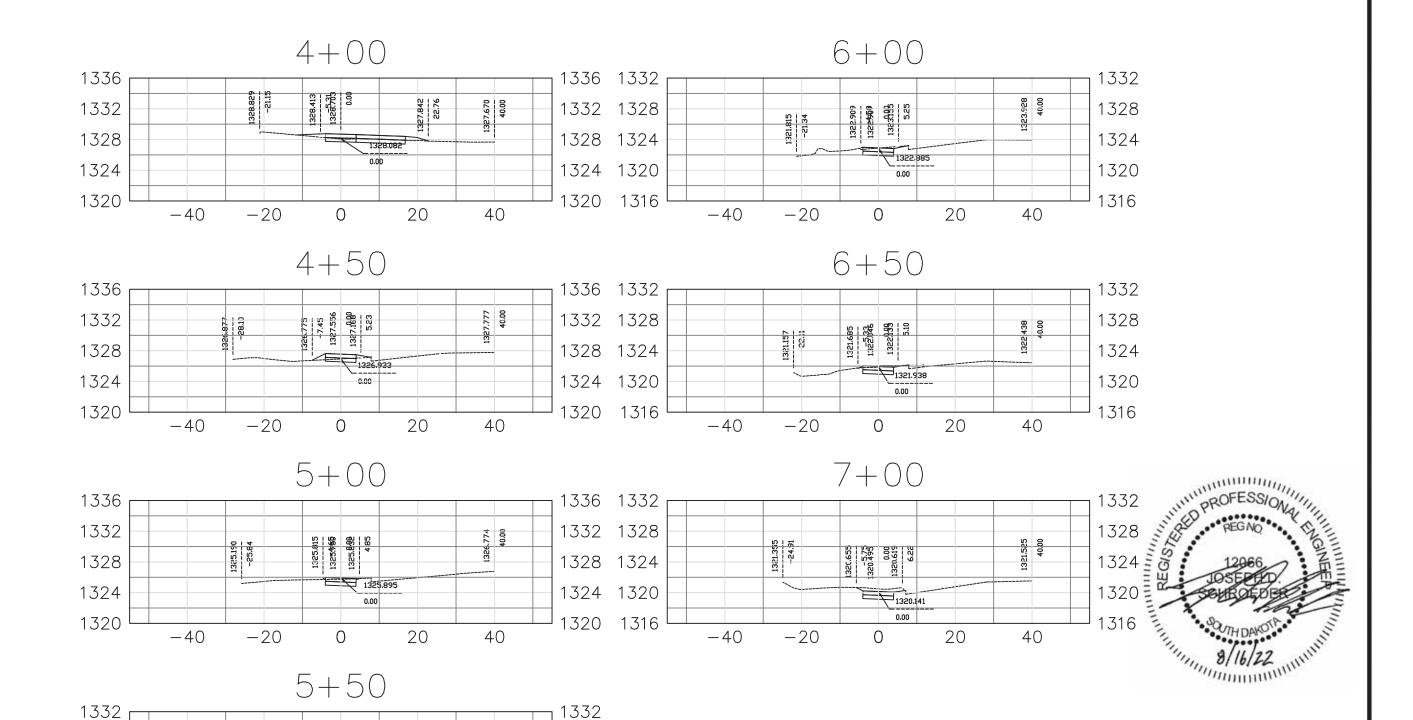
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 STATE OF SOUTH DAKOTA
 PROJECT
 SHEET SHEETS
 TOTAL SHEETS

 P TAPU (27)
 94
 105

Revised: 8/16/2022

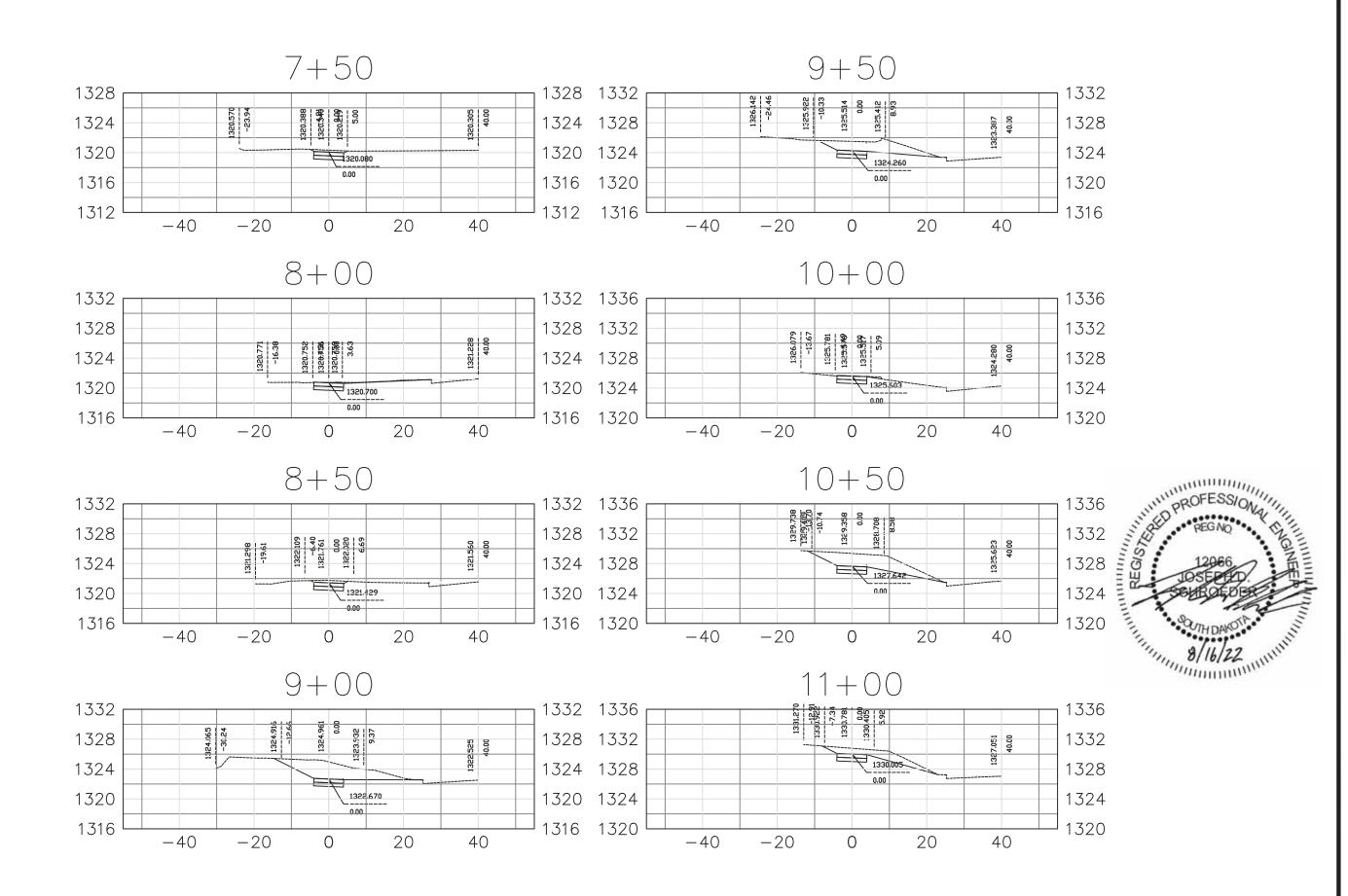




 STATE OF SOUTH DAKOTA
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 SHEET

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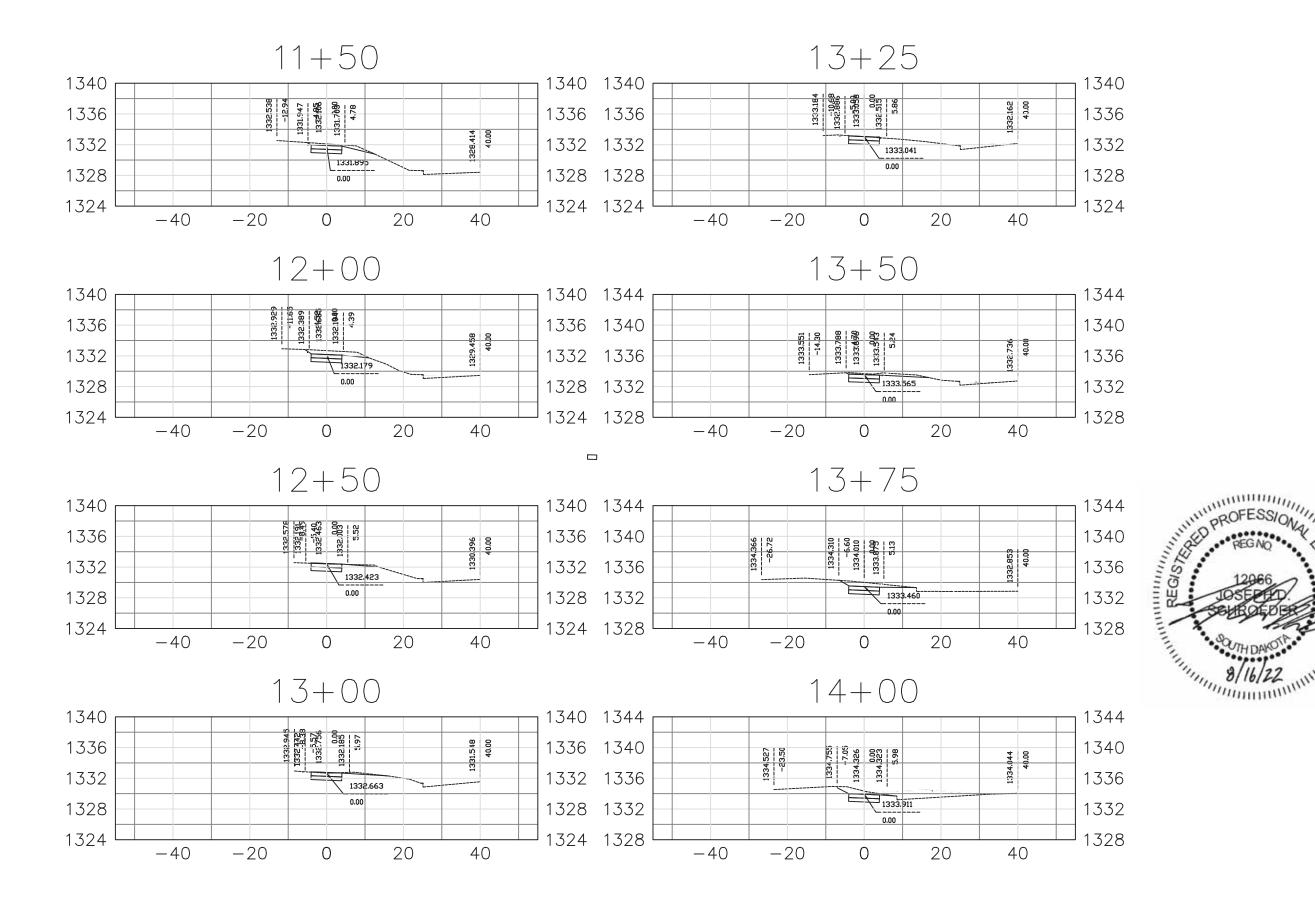


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SHEET



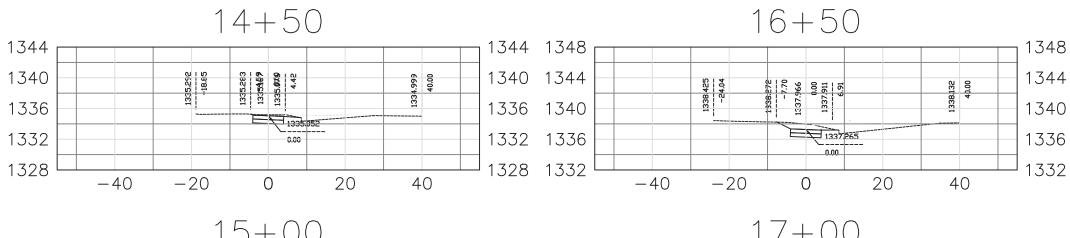


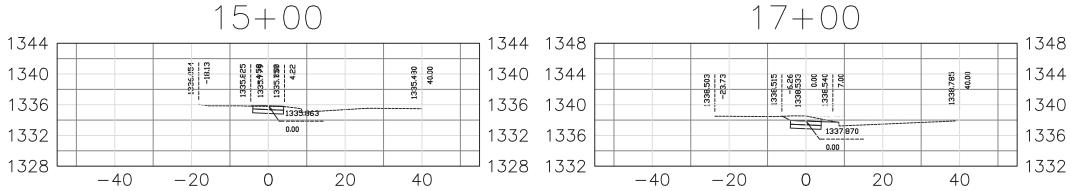


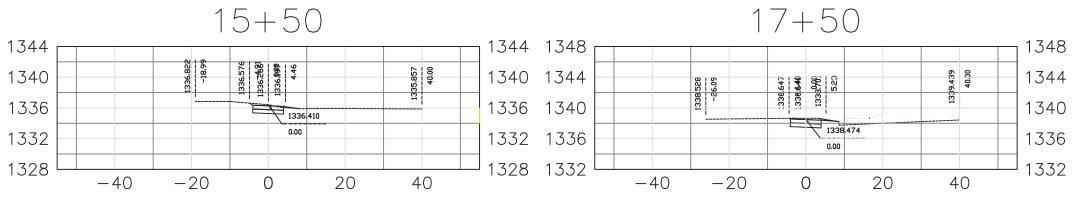
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SOUTH
DAKOTA P TAPU (27)

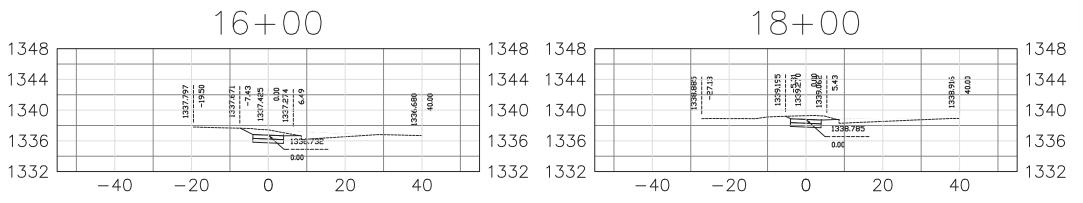
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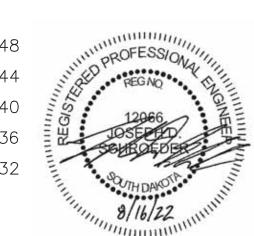
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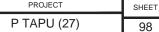


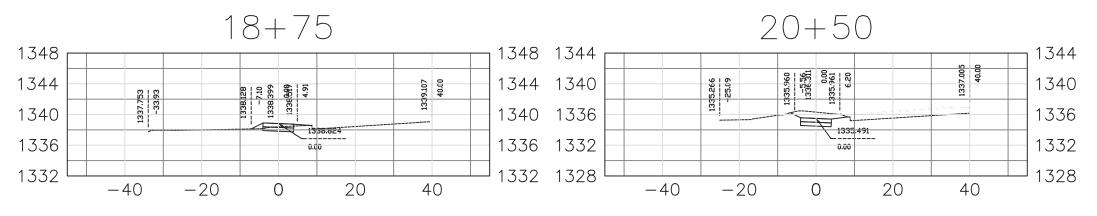


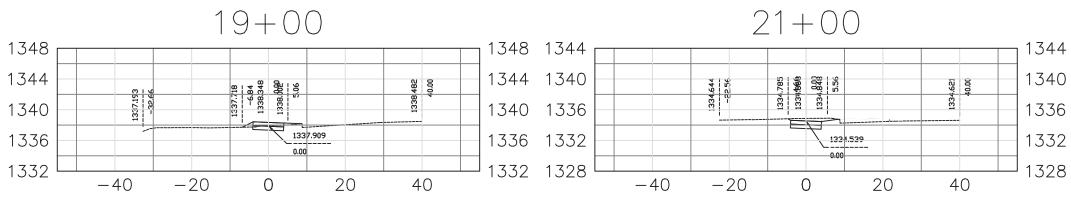


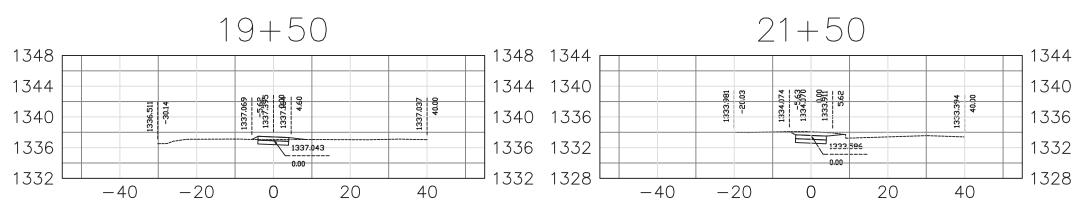
STATE OF PROJECT
SOUTH
DAKOTA P TAPU (2

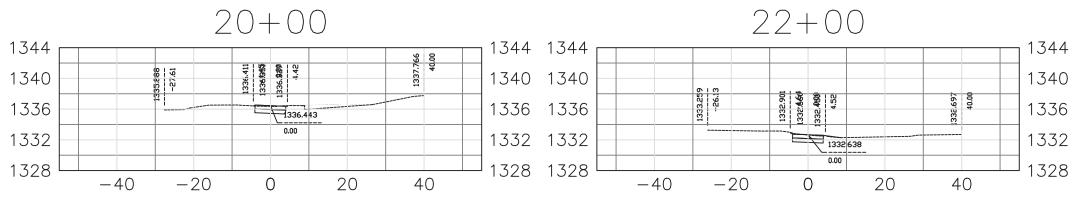
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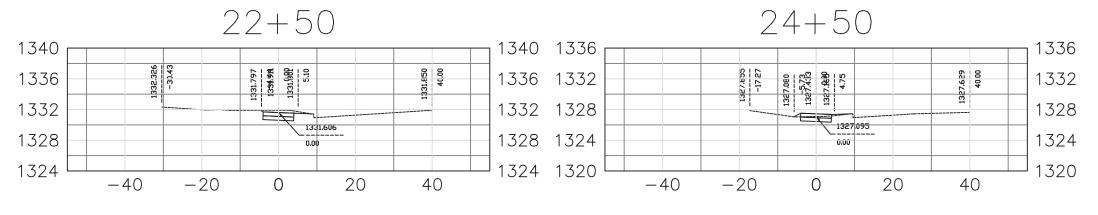


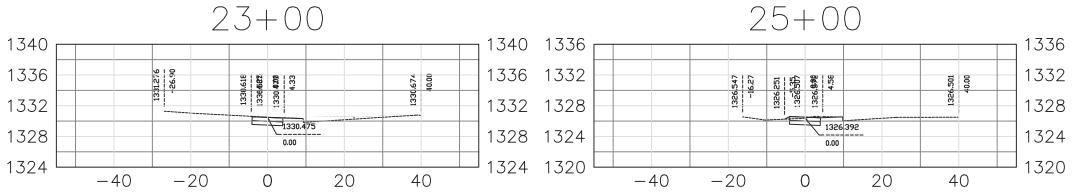
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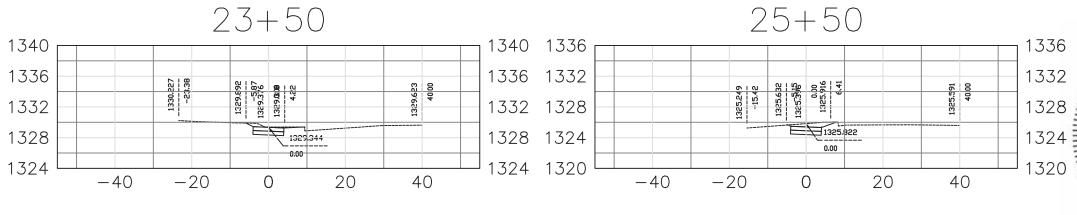
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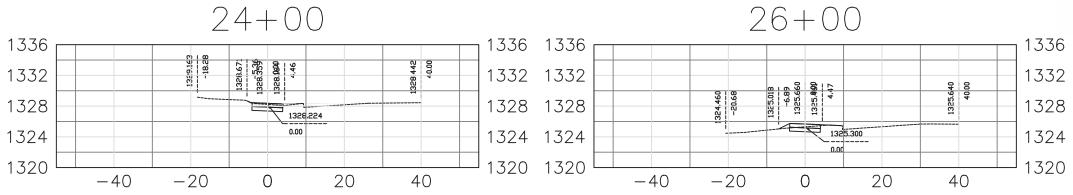
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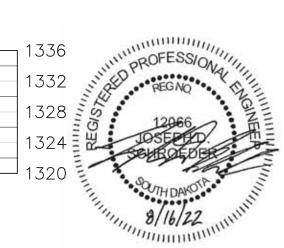
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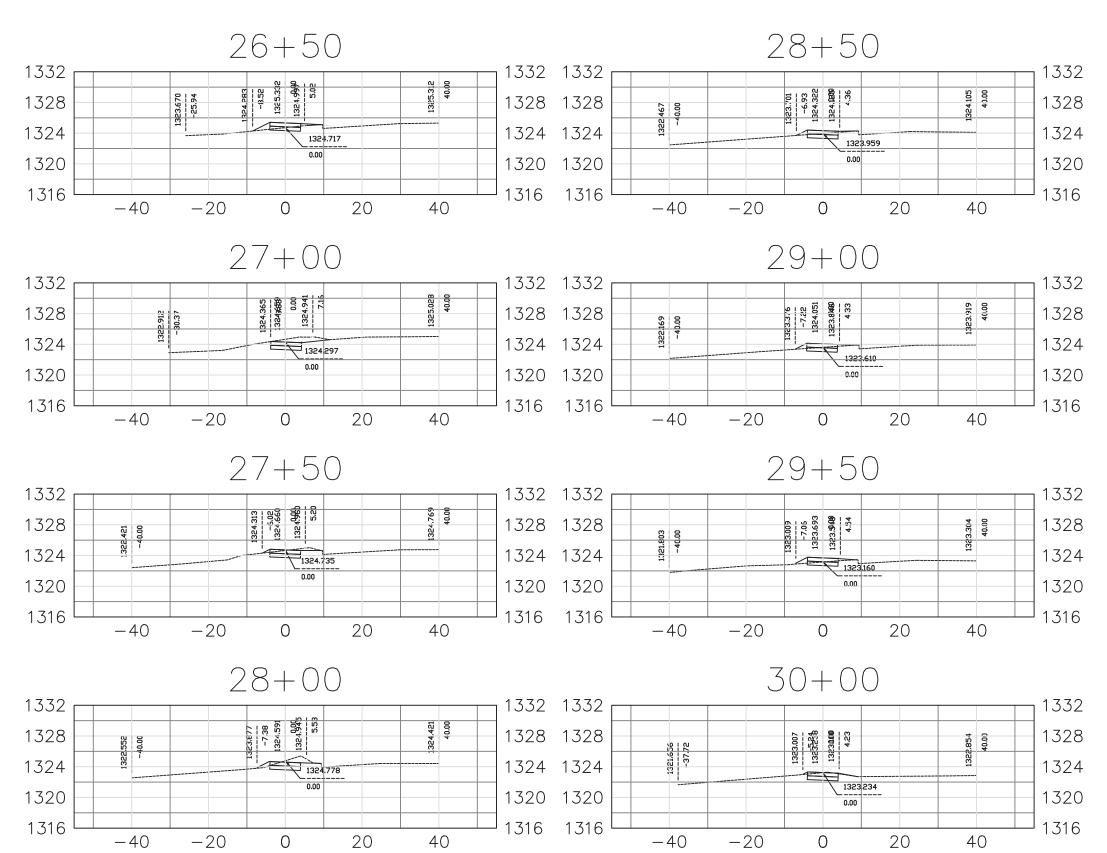




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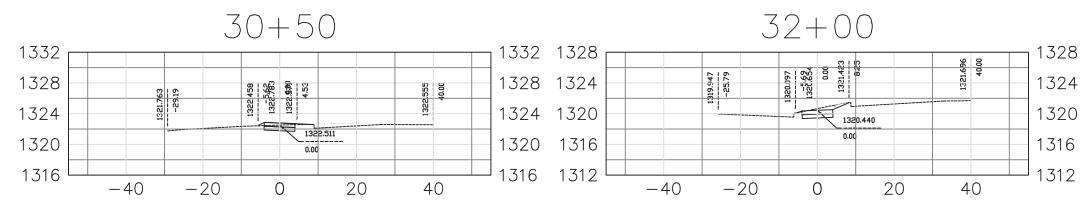


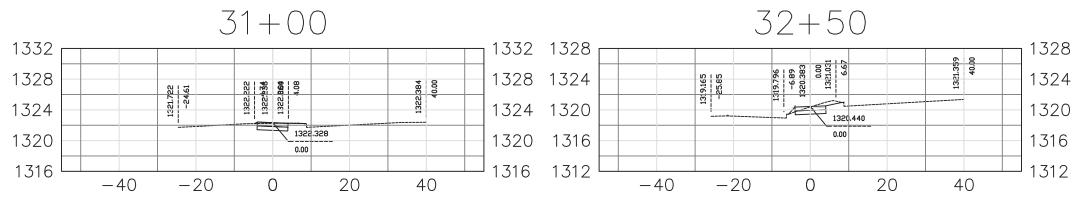
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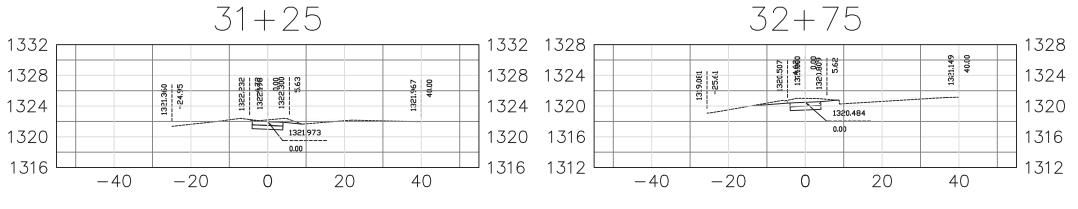
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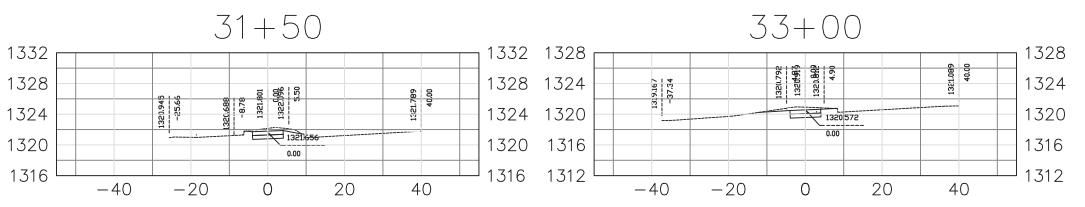
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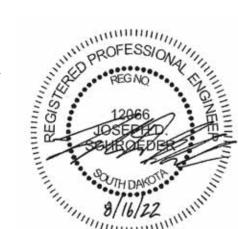
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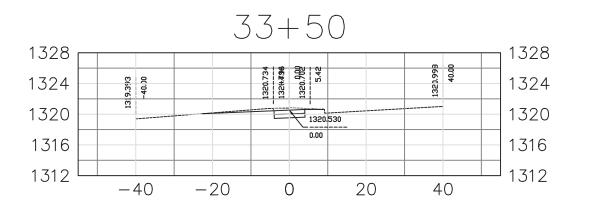


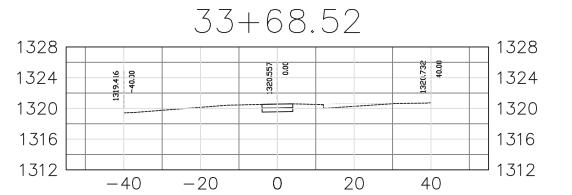




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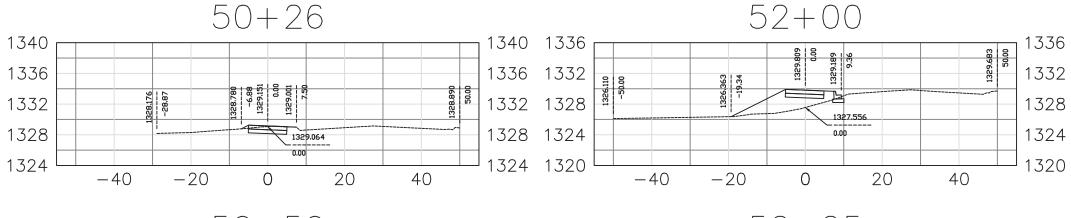


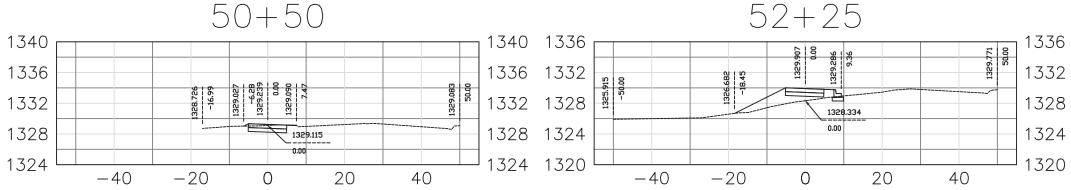
STATE OF PROJECT
SOUTH DAKOTA P TAPU (27)

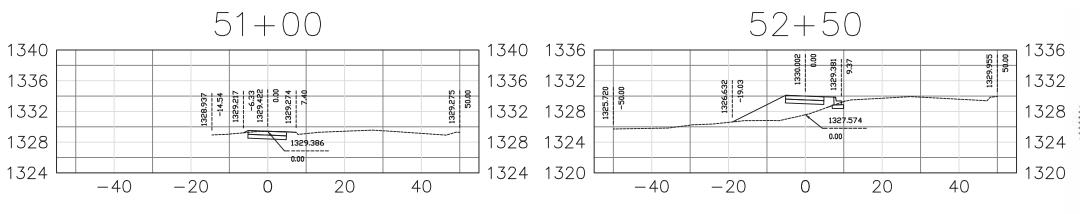
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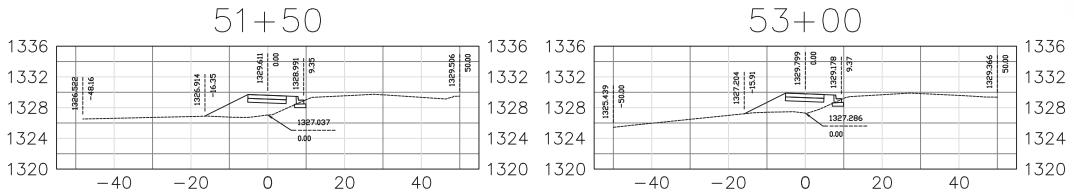
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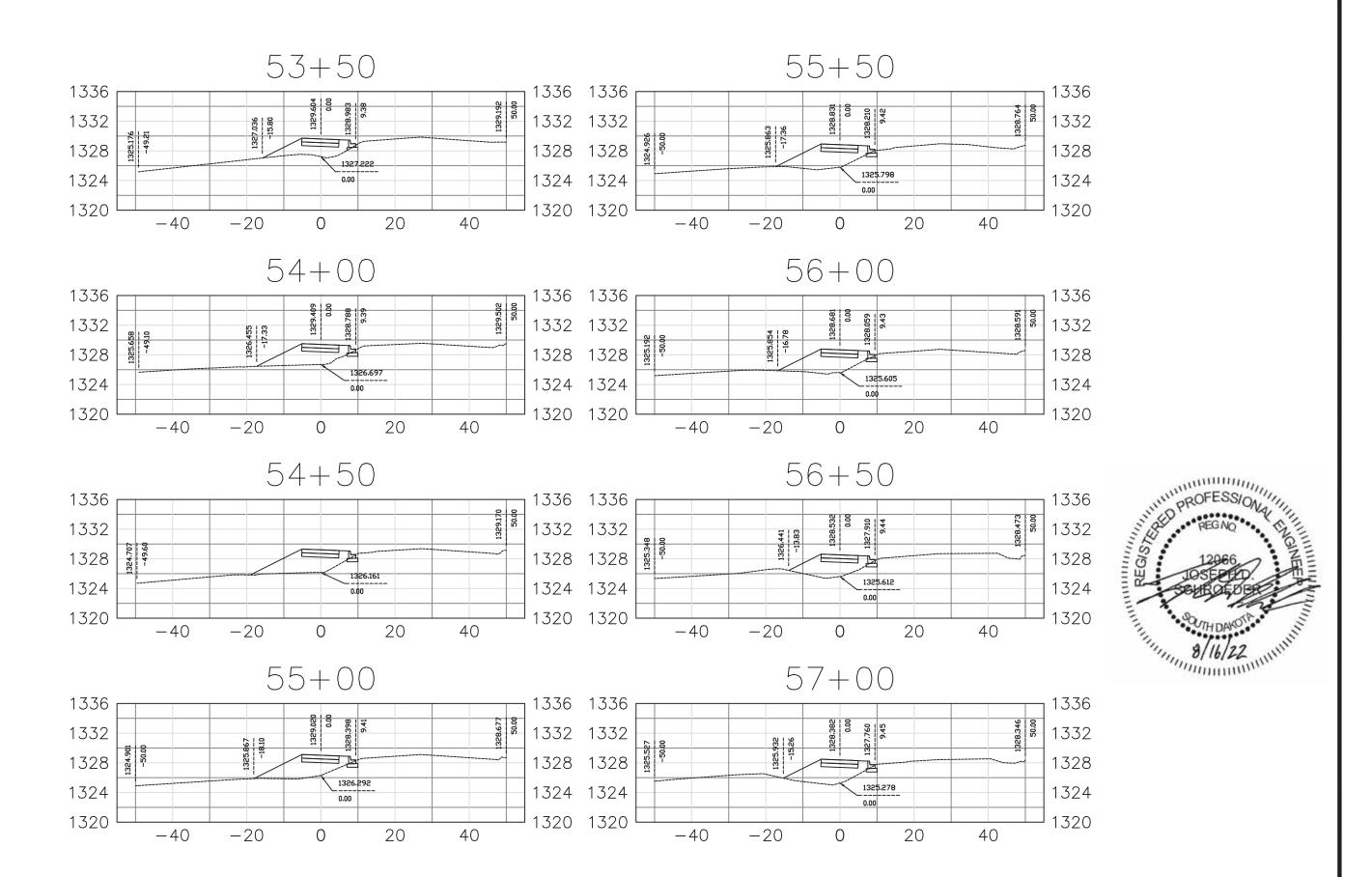


STATE OF PROJECT
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