

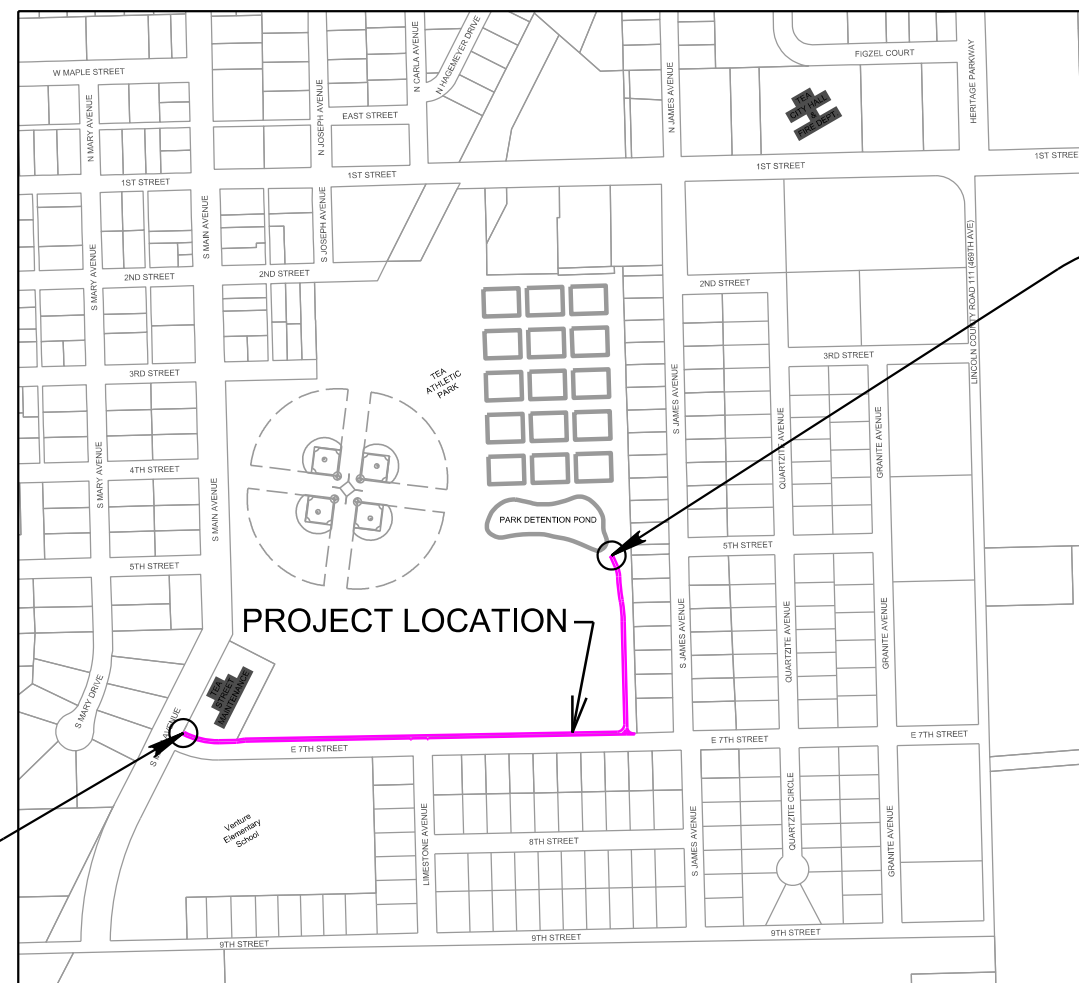


Major Stream: Big Sioux River
Area Disturbed: 69,704 SF (1.600 Acres)
Total Project Area: 69,704 SF (1.600 Acres)
Approx. Begin Lat,Long: 43°26'28.26"N, 96°49'59.68"W

Begin Project
Sta 10+05.0

GRADING AND CONCRETE SIDEWALK

PCN 0746



| | | |
|----------------------|------------|-------------|
| Gross Length | 2,267 Feet | 0.429 Miles |
| Length of Exceptions | 0 Feet | 0 Miles |
| Net Length | 2,267 Feet | 0.429 Miles |

FOR BIDDING PURPOSES ONLY

REV DATE:
INITIAL:

| | |
|---------------|-------------------------------|
| Sheet 1: | Title Sheet and Overview Map |
| Sheet 2: | Estimate of Quantities |
| Sheet 3-4: | Environmental Commitments |
| Sheets 5-13: | General Notes and Tables |
| Sheet 14: | Control Data |
| Sheet 15: | Horizontal Alignments Table |
| Sheet 16: | Typical Sections |
| Sheet 17: | Existing Topography Symbology |
| Sheet 18: | Erosion and Sediment Control |
| Sheets 19-23: | Plan and Profile Sheets |
| Sheet 24: | Grading Details |
| Sheet 25: | Pavement Markings |
| Sheets 26-30: | Standard Plates |
| Sheets 31-37: | Cross Sections |

PROJECT P TAPU(26)
End Project
Sta 31+71.2

3

May 5, 2021

| | | | |
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ESTIMATE OF QUANTITIES

| BID ITEM NUMBER | ITEM | QUANTITY | UNIT |
|--------------------|---|----------|------|
| 009E0010 | Mobilization | Lump Sum | LS |
| 009E3230 | Grade Staking | 0.425 | Mile |
| 009E3250 | Miscellaneous Staking | 0.425 | Mile |
| 009E3301 | Engineer Directed Surveying/Staking | 20.0 | Hour |
| 110E1700 | Remove Silt Fence | 2,327 | Ft |
| 120E0010 | Unclassified Excavation | 1,463 | CuYd |
| 120E0600 | Contractor Furnished Borrow Excavation | 2,679 | CuYd |
| 120E6300 | Water for Vegetation | 317.6 | MGal |
| 230E0100 | Remove and Replace Topsoil | Lump Sum | LS |
| 260E2010 | Gravel Cushion | 727.0 | Ton |
| 450E7001 | 8" High Density Polyethylene Pipe, Furnish | 64 | Ft |
| 450E7002 | 8" High Density Polyethylene Pipe, Install | 64 | Ft |
| 634E0110 | Traffic Control Signs | 36.0 | SqFt |
| 634E0120 | Traffic Control, Miscellaneous | Lump Sum | LS |
| 634E0275 | Type 3 Barricade | 4 | Each |
| 634E2000 | Longitudinal Pedestrian Barricade | 30 | Ft |
| 651E0040 | 4" Concrete Sidewalk | 323 | SqFt |
| 651E0060 | 6" Concrete Sidewalk | 21,539 | SqFt |
| 651E5000 | Sidewalk Drain | 10.0 | Ft |
| 734E0010 | Erosion Control | Lump Sum | LS |
| 734E0602 | Low Flow Silt Fence | 2,327 | Ft |
| 734E0620 | Repair Silt Fence | 582 | Ft |
| 734E0847 | Sediment Control at Type S Reinforced Concrete Drop Inlet | 8 | Ft |
| 734E5010 | Sweeping | 8 | Hour |
| 900E1310 | Concrete Washout Facility | 1 | Each |
| 900E1320 | Construction Entrance | 1 | Each |

SPECIFICATIONS

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

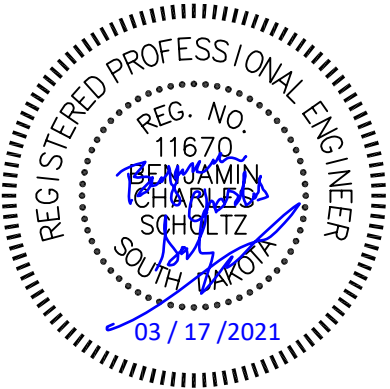
PROJECT COORDINATION

The City of Tea continues to develop and improve the athletic park for the community that includes pedestrian pathways along the public right-of-way and throughout the outdoor complex. The installation of this shared-use pedestrian path is part of the third phase of these improvements.

Contractor will coordinate Concrete Washout Area location with the City of Tea Maintenance Staff prior to placement.

Several properties located directly south of the project area along East 7th Street are currently under development for residential construction. Additionally, Venture Elementary School – part of the Tea Area School District is also located near the west end of the project along East 7th Street near the South Main Avenue Intersection.

The Contractor must consider their construction activities respective to the maintenance and access for the adjacent properties and school operations.



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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/doing-business/environmental/about-environmental>

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 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 shall 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 Environment and Natural Resources (DENR) 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](https://sdlegislature.gov/rules/DisplayRule.aspx?Rule=41:10:04)

COMMITMENT E: STORM WATER

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

Action Taken/Required:

The DENR 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 DENR 15 days prior to project start in order to obtain coverage under the General Permit. Work can begin once the DENR 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 DENR 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 DENR.

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 off-site 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.

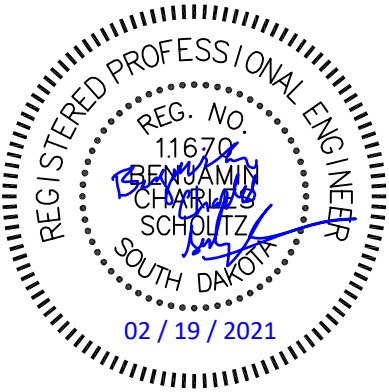
The inspection will include disturbed areas of the construction site that have not been finally stabilized, areas used for storage materials, structural control measures, and locations where vehicles enter or exit the site. These areas will be inspected for evidence of, or the potential for, pollutants 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>

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

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



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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 Environment 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 shall 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.

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.

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.

COMMITMENT M: SECTION 4(f)/6(f) RESOURCES

COMMITMENT M1: SECTION 4(f) PROPERTY

A Section 4(f) Evaluation concluded there are no feasible and prudent alternatives to avoiding Section 4(f) property located within the project.

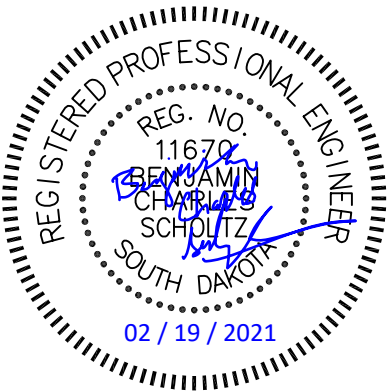
| Station | Section 4(f) Property |
|---------------|-----------------------|
| 10+00 – 31+79 | Tea Athletic Complex |

Action Taken/Required:

The following measures are required to minimize harm to the above Section 4(f) property:

- Access to the Tea Athletic Complex shall be maintained at all times, except for the time needed to temporarily occupy the property. The duration of the temporary occupancy shall be less than the time needed for construction of the project.
- Appropriate signage shall be installed to alert users of Tea Athletic Complex of construction activities, access restrictions or closures, and to direct users to secondary access points as if appropriate.
- The staging and/or storage of construction equipment or materials shall not take place outside proposed construction limits that are within the defined boundaries of the 4(f) property.

The Contractor is not permitted to stage equipment or materials within [name of park(s)]. The Contractor will notify the Project Engineer if additional easement is needed to complete the work adjacent to any Section 4(f) property. The Project Engineer will obtain an appropriate course of action from the Environmental Office before proceeding with construction activities that affect any Section 4(f) property.



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GRADING OPERATIONS

Water for Embankment is estimated at the rate of 10 gallons of water per cubic yard of Embankment minus Waste. The estimated quantity of Water for Embankment is 41 MGal. No separate payment will be made for the Water for Embankment and all costs associated will be incidental to the contract unit price per cubic yard of “Unclassified Excavation”.

Compaction of earth embankment will be per the Specified Density Method.

Rock is not anticipated to be encountered with the project limits.

A quantity of 64 feet of 8” High Density Polyethylene Pipe to support drainage through/beneath the share use path has been included in the plans quantities for installation a locations to be determined by the Engineer.

PROCEDURES FOR DETERMINING UNCLASSIFIED EXCAVATION QUANTITY

When plan quantities are used for payment, the Unclassified Excavation quantity will be used for final payment and the plans quantity of Topsoil and salvaged surfacing items listed in the Table of Unclassified Excavation will not be adjusted according to field measurements.

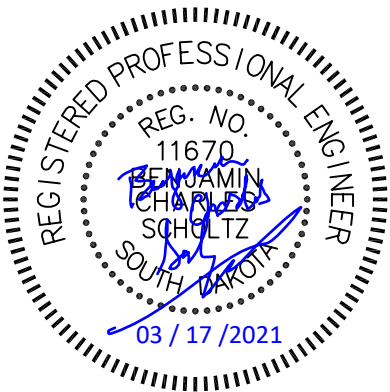
TABLE OF UNCLASSIFIED EXCAVATION

| | (CuYd) |
|-----------------------------|--------|
| Excavation | 97 |
| Strip Topsoil | 1,366 |
| Place Topsoil | 1,366 |
| Contractor Furnished Borrow | 2,679 |

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.



SIDEWALK DRAIN

With variations of the path elevation respective to adjacent grades, it is anticipated that a thru-sidewalk drain will be required to facilitate cross-path drainage to minimize the accumulation of standing water or ice on the path surface.

The location of this sidewalk drain will be determined by the engineer during construction and must be installed in accordance with the applicable Standard Plate.

The following images are provided as general reference for such a drain as used elsewhere in the City of Tea. Refer to Standard Plate 651.50 for additional details on this assembly.

Example of Sidewalk Drainage Grate & Channel:



TABLE OF 6” CONCRETE SIDEWALK

Placement of cushion material beneath the 6” sidewalk in accordance with the depths defined in the typical sections will be paid for at the contract unit price per ton for “gravel cushion”.

| Station | to | Station | L/R | (SqFt) | Quantity (CuYd) | (Ton) |
|---------|----|---------|-----|----------|--------------------|-------|
| 10+05.0 | | 31+71.2 | L | 21,539.0 | 398.9 | 727.0 |
| Total: | | | | 21,539.0 | 398.9 | 727.0 |

TABLE OF 4” CONCRETE SIDEWALK

Placement of cushion material beneath the 4” sidewalk will be incidental to the sidewalk installation in accordance with Section 651 of the Standard Specifications. The quantities below are included for estimating purposes.

| Station | to | Station | L/R | (SqFt) | Quantity (CuYd) | (Ton) |
|---------|----|---------|-----|--------|--------------------|-------|
| 40+21.6 | | 40+65.9 | L | 209.0 | 1.3 | 2.4 |
| 50+17.8 | | 50+33.8 | L | 114.0 | 0.7 | 1.3 |
| Total: | | | | 323.0 | 2.0 | 3.7 |

GENERAL TRAFFIC CONTROL

Existing guide, route, informational logo, regulatory, and warning signs will be temporarily reset and maintained during construction. Removing, relocating, covering, salvaging, and resetting of existing traffic control devices, including delineation, will be the responsibility of the Contractor. Cost for this work will be incidental to the contract unit prices for the various items unless otherwise specified in the plans. Any delineators and signs damaged or lost will be replaced by the Contractor at no cost to the State.

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

All construction operations will be conducted in the general direction of traffic movement.

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.

Unless otherwise stated in these plans, work will not be allowed during hours of darkness.

Traffic Control Signs, as shown in the Estimate of Quantities, are estimates. Contractor's operation may require adjustments in quantities, either more or less. Payment will be for those signs actually ordered by the Engineer and used.

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.

Four (4) Type 3 Barricades are included in the estimate of quantities for placement in proximity to a construction entrance and/or temporary staging or stockpiling areas

SHEETING FOR TRAFFIC CONTROL SIGNS

All fluorescent orange background material on traffic control signs shall conform to the requirements of ASTM D4956 Type IX or XI. All other traffic control signs and background colors will conform to the requirements of ASTM D4956 Type IV.

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TEMPORARY PEDESTRIAN ACCESS ROUTE

A Temporary Pedestrian Access Route (TPAR) will be provided when crosswalks, sidewalks, or other pedestrian facilities are blocked, closed, or relocated. A TPAR may consist of a combination of existing and/or temporary pedestrian facilities. The TPAR will be kept free of any obstructions and hazards, such as holes, debris, mud, snow, construction equipment, traffic control signing, stored materials, etc.

The Contractor will notify the Engineer at least 72 hours prior to start of any construction operation that will necessitate a change in pedestrian access.

LONGITUDINAL PEDESTRIAN BARRICADE

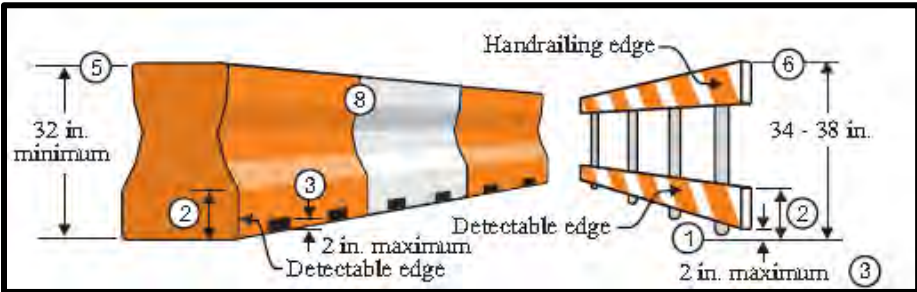
Longitudinal Pedestrian Barricades should not be used to provide positive protection for pedestrians.

Barricade rail supports may not project into pedestrian routes more than 4 inches from the face of the barricade. 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. A gap height or opening from the walkway surface up to a maximum of 2 inches is allowed for drainage purposes. The top edge of the bottom portion will be a minimum of 8 inches above the walkway. The top of the top portion will be between 34 and 38 inches above the walkway. 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".



NOTES:

- 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. When either device is combined in a series, the maximum gap between devices that do not interlock will be 1 inch. Joints between devices that do interlock should be closed and flush to prevent canes or small wheels from being trapped and to facilitate safe hand trailing.

TRAFFIC CONTROL, MISCELLANEOUS

All costs for traffic control, including signs, will be incidental to the contract lump sum price for "Traffic Control, Miscellaneous".

As a majority of work for this project is anticipated to be performed beyond the road shoulder/curb, traffic control items are anticipated to include, but are not limited to the following:

- Adjustment of various traffic control signs or barricades to facilitate construction phasing
- Placement and adjustment of traffic cones or barrels to facilitate delineation of traffic around barricades and temporary staging areas

TRAFFIC CONTROL SIGNS

The following signs are anticipated for use/installation with this project:

- Two (2) "Road Work Ahead" signs
 - For placement at each end of the project
- Two (2) "Sidewalk Closed" signs
 - For placement at each end of the project

ITEMIZED LIST FOR DETOUR AND RESTRICTION SIGNING

| SIGN CODE | SIGN DESCRIPTION | CONVENTIONAL ROAD | | | |
|-----------|------------------|---|-----------|---------------|------|
| | | NUMBER | SIGN SIZE | SQFT PER SIGN | SQFT |
| R9-9 | SIDEWALK CLOSED | 2 | 24" x 12" | 2.0 | 4.0 |
| W20-1 | ROAD WORK AHEAD | 2 | 48" x 48" | 16.0 | 32.0 |
| | | CONVENTIONAL ROAD DETOUR AND RESTRICTION SIGNING SQFT | | | |
| | | 36.0 | | | |

PLACING TOPSOIL

The thickness will be approximately 6 inches within the right-of-way and 6 inches on temporary easements.

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

| Station | to | Station | Topsoil (CuYd) |
|---------|----|---------|-------------------|
| 10+05.0 | | 31+71.2 | 1,346.7 |
| 40+51.6 | | 40+65.9 | 41.9 |
| 50+17.8 | | 50+33.8 | 25.6 |
| Total: | | | 1,414.2 |

REMOVE AND REPLACE TOPSOIL

Prior to beginning sidewalk operations, a 6" depth of topsoil will be removed or bladed away from E 7th Street and left in a windrow a minimum of 3' from back of the existing curb. Following completion of construction, topsoil will be spread evenly over the disturbed areas.

The estimated amount of topsoil to be removed and replaced is 1414.2 CuYd.

All costs associated with removing and replacing the topsoil along areas to be resurfaced will be incidental to the contract lump sum price for "Remove and Replace Topsoil".

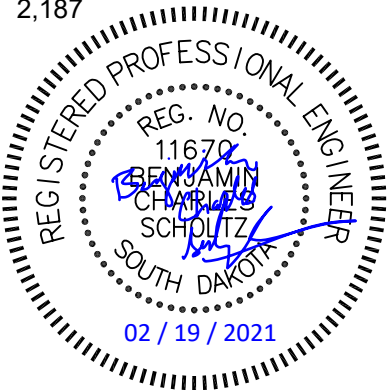
EROSION CONTROL

The estimated area requiring erosion control is 47,633 square feet. All costs for the erosion control work for furnishing, placing, and maintaining erosion control including equipment, labor, will be incidental to the contract lump sum price for "Erosion Control".

The limits of erosion control work will be determined by the Engineer during construction.

TABLE OF EROSION CONTROL

| Bid Item | Unit | Approx. Quantity |
|-------------------------------|------|------------------|
| Water for Vegetation | Mgal | 317.6 |
| Type D Permanent Seed Mixture | Lb | 334 |
| Fertilizing | Ton | 0.81 |
| Fiber Mulching | Lb | 2,187 |



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

| Product | Manufacturer |
|---------------|--|
| 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 |

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

PERMANENT SEEDING

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

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 |

WATER FOR VEGETATION

Water for vegetation consists of applying water to seeded areas to enhance germination and/or root growth. When watering, use the following guidelines:

Immediately after seeding:

- Keep the topsoil moist but not excessively wet until the seed has germinated.
- Water a minimum of 3 days a week for 2 weeks preferably watering 2 or 3 times a day in small quantities.
- Use fine spray and low pressure to avoid topsoil wash and to prevent uncovering buried seeds.

After emergence:

- Topsoil will be kept thoroughly moistened by sprinkling, as necessary, for 6 weeks. After the 6-week period, an inspection will be made to determine if grass is established enough to suspend watering. Continue watering until grass has been thoroughly established.
- Never apply water at a rate faster than the topsoil can absorb.
- Water during early morning hours or early evening hours.
- Do not water when rain is forecasted for the area.
- If rainfall occurs, suspend watering according to rainfall amount.

An estimated 60 Gallons of water per square yard of seeding area was used to compute the quantity for the bid item "Water for Vegetation".

All costs for furnishing and applying the water including hauling, materials, equipment, labor, and incidentals necessary will be paid for at the contract unit price per Mega Gallon (MGal) for "Water for Vegetation".

FIBER MULCHING

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

An additional 2% by weight of tackifier will be added to the fiber mulch product selected from the approved product list. If the product selected has guar gum tackifier included, then the additional 2% of tackifier will be guar gum. If the product selected has synthetic tackifier included, then the additional 2% of tackifier will be synthetic.

Fiber mulch will be applied at the rate of 2,000 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.

All costs for the additional tackifier added to the fiber mulch including labor, equipment, and materials will be incidental to the contract unit price per lump sum for "Erosion Control".

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

| Station | to | Station | L/R | Quantity (Lb) |
|---------|----|---------|-----|------------------|
| 10+05 | | 31+71.2 | L/R | 2,191 |
| Total: | | | | 2,191 |

LOW FLOW SILT FENCE

The low flow silt fence fabric provided will be from the approved product list. The approved product list for low flow silt fence may be viewed at the following internet site:

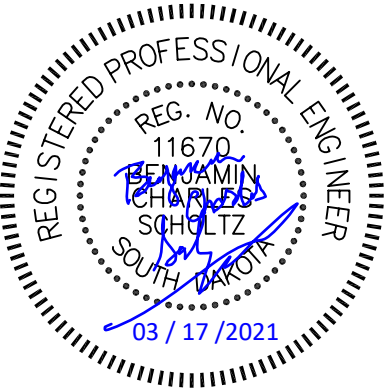
<http://apps.sd.gov/HC60ApprovedProducts/main.aspx>

Low flow silt fence will be placed at the locations noted in the table and at locations that will minimize siltation of adjacent streams, lakes, dams, or drainage areas as determined by the Engineer during construction. Refer to Standard Plate 734.04 for details.

An additional quantity of Low Flow Silt Fence has been added to the Estimate of Quantities for temporary sediment control.

TABLE OF LOW FLOW SILT FENCE

| Station | L/R | Location | Quantity (Ft) |
|----------------------|-----|--------------------|------------------|
| 10+06 to 31+72 | L | North/West of Path | 2,127 |
| Additional Quantity: | | | 200 |
| Total: | | | 2,327 |



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 | Manufacturer |
|-------------------------|---|
| Dandy Curb | Dandy Products Inc. Dublin, 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 www.ertecsystems.com |
| EZ-ClipGuard | Flo-Water, LLC West Des Moines, IA Phone: 1-515-577-6763 www.flo-water.net |
| 12" Compost Filter Sock | Dioten Engineering, Inc. Rapid City, SD Phone: 1-605-430-7213 |
| 12" Silt Sock | Aspen Ridge Lawn and Landscaping,LLC Rapid City, SD Phone: 1-605-415-0695 www.siltsocksd.com |
| GeoCurve | GeoSolutions, Inc. Austin, TX Phone: 1-512-445-0796 www.geosolutionsinc.com |
| Smart Curb Filter | NoFlood, Inc. Fort Myers, FL Phone: 1-239-776-1671 noflood.com |

TABLE OF SEDIMENT CONTROL AT TYPE S REINFORCED CONCRETE DROP INLETS

| Station | L/R | Clear Opening Width (Ft) | Quantity* (Ft) |
|---------|-----|-----------------------------|-------------------|
| 23+76.5 | R | 6 | 8 |

Total: 8
* Quantity shown is the minimum length required and will be the basis of payment.

UTILITIES

The Contractor will contact the involved utility companies through South Dakota One Call (1-800-781-7474) prior to starting work. It will be the responsibility of the Contractor to coordinate work with the utility owners to avoid damage to existing facilities.

Utilities are not planned to be affected on this project. If utilities are identified near the improvement area through the SD One Call Process as required by South Dakota Codified Law 49-7A and Administrative Rule Article 20:25, the Contractor will contact the Engineer to determine modifications that will be necessary to avoid utility impacts.

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.

STREET SWEEPING

Vehicle tracking of sediment from the construction site will be minimized. Street sweeping will be used if erosion and sediment control best management practices are not adequate to prevent sediment from being tracked onto the street.

The Contractor will use a pickup broom having integral self-contained storage to clean the roadway. The pickup broom used will be a minimum of 6 feet wide and have working gutter brooms.

All costs for cleaning the roadway with a pickup broom will be incidental to the contract unit price per hour for "Sweeping".

CONSTRUCTION ENTRANCE

The Contractor will install a Construction Entrance at locations where there is a potential for mud tracking and sediment flow from the construction site and work area onto a paved public roadway.

It is the Contractor's option to use the SDDOT Construction Entrance (See SDDOT Construction Entrance notes and details), a product from the list provided in these notes, or other products or processes as approved by the Engineer during construction.

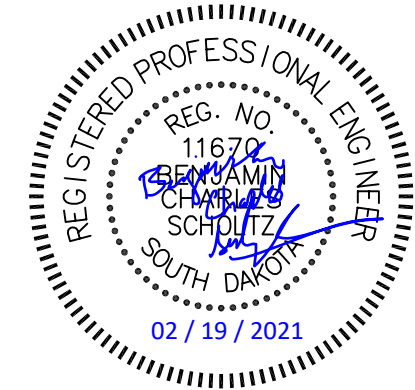
If the Contractor elects to use one of the products listed in the table, then the Contractor will install the construction entrance product in accordance with the manufacturer's installation instructions or as directed by the Engineer.

The Contractor will maintain the construction entrance such that mud tracking and sediment flow will not enter the roadway or adjacent drainage areas. The construction entrance will be routinely inspected, and the Contractor will repair or replace material as deemed necessary by the Engineer.

All costs for furnishing, installing, maintaining, and removal of the construction entrance including equipment, labor, materials, and incidentals will be included in the contract unit price per each for "Construction Entrance".

The following table is a list of known construction entrance products available for use:

| Product | Manufacturer |
|---|---|
| Grizzly Rumble Grate (10' width and 24' length required) | Trackout Control, LLC Tempe, AZ Phone: 1-800-761-0056 www.trackoutcontrol.com |
| Rumble Grid (12' width and 24' length including combination of grids and ramps required) | Pro-Tec Equipment, Inc. Charlotte, MI Phone: 1-800-292-1225 www.pro-tecequipment.com |
| Tracking Pad (12' width and 24' length (2 – 12'x12' pads) and 2 – 4'x4' turning flares) | Tracking Pads LLC Denver, CO Phone: 1-719-371-3791 www.trackingpads.com |
| FODS Trackout Control Mat (12' width and 5 mats to get a 35' length) | FODS, LLC Denver, CO Phone: 1-844-200-3637 getfods.com |
| DuraDeck and MegaDeck HD An adequate quantity is needed to prevent tires from becoming muddy (does not remove mud) | Signature Systems Group, LLC Flower Mound, TX Phone: 1-800-709-8151 www.duradeckmats.com |



SDDOT CONSTRUCTION ENTRANCE

If the SDDOT Construction Entrance is utilized, then the Contractor will install the SDDOT Construction Entrance in accordance with these notes and the detail drawings.

Pit run material will be obtained from a granular source and will conform to the following gradation:

| Sieve Size | Percent Passing |
|------------|-----------------|
| 6" | 100% |
| #4 | 0-60% |
| #200 | 0-20% |

The pit run material will be compacted to the satisfaction of the Engineer.

The aggregate for the granular material will conform to the following gradation requirements:

| Sieve Size | Percent Passing |
|------------|-----------------|
| 3" | 100% |
| 2 1/2" | 90-100% |
| 1 1/2" | 25-60% |
| 3/4" | 0-10% |
| 1/2" | 0-5% |

The granular material will be placed in 6" maximum lifts.

It is anticipated that the granular material will need to be periodically removed and replaced as it becomes inundated with mud and sediment.

The Reinforcement Fabric (MSE) will be in conformance with Section 831 of the Specifications. The Reinforcement Fabric (MSE) will be on the Approved Products List for this material or will be certified by the supplier to meet this specification prior to installation.

The Reinforcement Fabric (MSE) should be kept as taut as possible prior to placing.

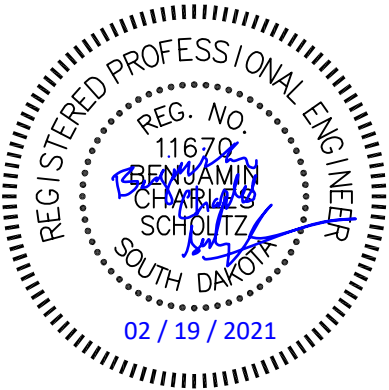
Equipment will not be allowed on the Reinforcement Fabric (MSE) until the first lift of granular material is in place.

All seams in the Reinforcement Fabric (MSE) will be overlapped at least 2' and shingled.

TABLE OF CONSTRUCTION STAKING

(See Special Provision for Contractor Staking)

| Roadway and Description | Begin Station | End Station | Number of Lanes | Length (Ft) | Grade Staking | | | Grade Staking Quantity (Mile) | Miscellaneous Staking Quantity (Mile) |
|-------------------------|------------------|----------------|--------------------|----------------|------------------|----------------|----------------------|-------------------------------------|---|
| | | | | | Length (Mile) | Lane Factor | Sets of Stakes | | |
| 10' Shared Use Path | 10+05 | 31+71.2 | 1 | 2,166.2 | 0.410 | 1 | 1 | 0.410 | 0.410 |
| 4' Sidewalk | 40+21.6 | 40+65.9 | 1 | 52.3 | 0.010 | 1 | 1 | 0.010 | 0.010 |
| 4' Sidewalk Loop | 50+17.8 | 50+33.8 | 1 | 28.5 | 0.005 | 1 | 1 | 0.005 | 0.005 |
| Totals: | | | | | | | | 0.425 | 0.425 |



STORMWATER POLLUTION PREVENTION PLAN CHECKLIST
*(The numbers left of the title headings are **reference numbers** to the **GENERAL PERMIT FOR STORM WATER DISCHARGES ASSOCIATED 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
 - ☒ Filling
 - ☐ Other (describe):
- **5.3 (3b): Total Project Area** 1.60 acres
- **5.3 (3b): Total Area to be Disturbed** 1.60 acres
- **5.3 (3c): Maximum Area Disturbed at One Time** 1.60 acres
- **5.3 (3d): Existing Vegetative Cover (%)** 100%
- **5.3 (3d): Description of Vegetative Cover** grass
- **5.3 (3e): Soil Properties:** AASHTO Soil or USDA-NRCS Soil Series Classification Silty Clay
- **5.3 (3f): Name of Receiving Water Body/Bodies** Big Sioux River via Beaver Creek
- **5.3 (3g): Location of Construction Support Activity Areas** on-site

5.3 (3h): ORDER OF CONSTRUCTION ACTIVITIES

- **Special sequencing requirements** (see sheet).
- The Contractor will enter the Estimated Start Date.**

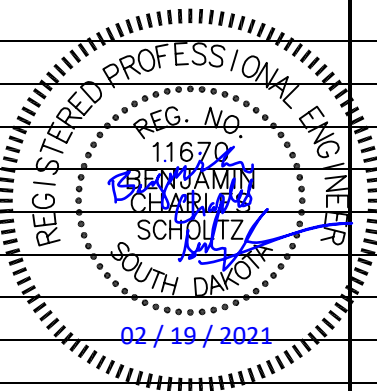
| Description | Estimated Start Date |
|---|----------------------|
| Install stabilized construction entrance(s). | |
| Install perimeter protection where runoff may exit site. | |
| Install perimeter protection around stockpiles. | |
| Install channel and ditch bottom protection. | |
| Clearing and grubbing. | |
| Remove and stockpile topsoil. | |
| Stabilize disturbed areas. | |
| Install utilities, storm sewers, curb and gutter. | |
| Install inlet and culvert protection after completing storm drainage and other utility installations. | |
| Final grading. | |
| Final paving. | |
| Removal of protection devices. | |
| Reseed areas disturbed by removal activities. | |

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 |
| <input type="checkbox"/> Natural Buffers (within 50 ft of Waters of State) | |
| <input checked="" type="checkbox"/> Silt Fence | |
| <input type="checkbox"/> Erosion Control Wattles | |
| <input type="checkbox"/> Temporary Berm / Windrow | |
| <input type="checkbox"/> Floating Silt Curtain | |
| <input checked="" type="checkbox"/> Stabilized Construction Entrances | |
| <input type="checkbox"/> Entrance/Exit Equipment Tire Wash | |
| <input type="checkbox"/> Other: | |

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



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| Dust Controls | |
|--|----------------------|
| Description | Estimated Start Date |
| <input type="checkbox"/> Tarps & Wind impervious fabrics | |
| <input type="checkbox"/> Watering | |
| <input type="checkbox"/> Stockpile location/orientation | |
| <input type="checkbox"/> Dust Control Chlorides | |
| <input type="checkbox"/> Other | |

| Dewatering BMPs | |
|--|----------------------|
| Description | Estimated Start Date |
| <input type="checkbox"/> Sediment Basins | |
| <input type="checkbox"/> Dewatering bags | |
| <input type="checkbox"/> Weir tanks | |
| <input type="checkbox"/> Temporary Diversion Channel | |
| <input type="checkbox"/> Other: | |

Stabilization Practices (See Detail Plan Sheets)

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

| Description | Estimated Start Date |
|---|----------------------|
| <input type="checkbox"/> Vegetation Buffer Strips | |
| <input checked="" type="checkbox"/> Temporary Seeding (Cover Crop Seeding) | |
| <input checked="" type="checkbox"/> Permanent Seeding | |
| <input type="checkbox"/> Sodding | |
| <input type="checkbox"/> Planting (Woody Vegetation for Soil Stabilization) | |
| <input type="checkbox"/> Mulching (Grass Hay or Straw) | |
| <input checked="" type="checkbox"/> Fiber Mulching (Wood Fiber Mulch) | |
| <input type="checkbox"/> Soil Stabilizer | |
| <input type="checkbox"/> Bonded Fiber Matrix | |
| <input type="checkbox"/> Fiber Reinforced Matrix | |
| <input type="checkbox"/> Erosion Control Blankets | |
| <input type="checkbox"/> Surface Roughening (e.g. tracking) | |
| <input type="checkbox"/> Other: | |

Wetland Avoidance

Will construction and/or erosion and sediment controls impinge on regulated wetlands? Yes ☐ No ☒ 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 1/2 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.

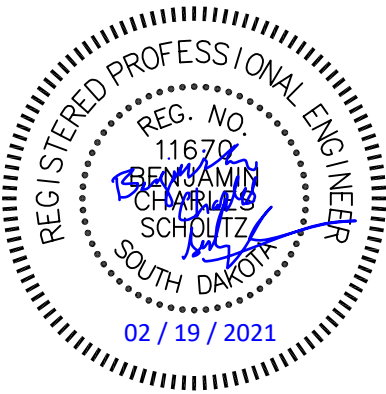
➤ **Spill Response**

- 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.

- 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 SDDENR.
- 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.



| | | | |
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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).

- ☒ Concrete and Portland Cement
- ☐ Detergents
- ☐ Paints
- ☐ Metals
- ☐ Bituminous Materials
- ☐ Petroleum Based Products
- ☐ Diesel Exhaust Fluid
- ☐ Cleaning Solvents
- ☐ Wood
- ☐ Cure
- ☐ Texture
- ☐ Chemical Fertilizers
- ☐ 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).

- ☐ Discharges 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.

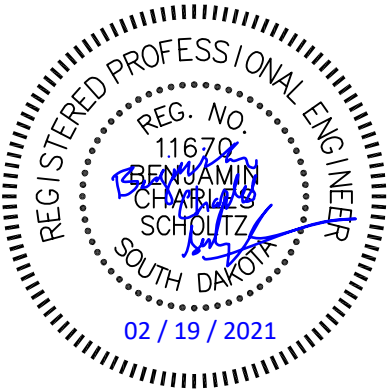
5.3 (11): INFEASIBILITY DOCUMENTATION

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 SDDENR 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 SDDENR 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 SDDENR 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 shall be sent to SDDENR within 14 days of the discharge.



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.

Joanne M. Hight

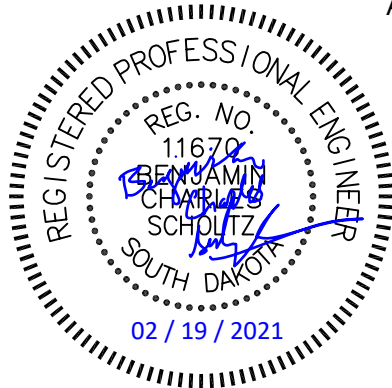
Authorized Signature (See the General Permit, Section 7.4 (1))

➤ 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.

Authorized Signature



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: _____
- Office Phone: _____ Field: _____
- Cell Phone: _____ Fax: _____

➤ SDDOT Project Engineer

- Name: _____
- Business Address: _____
- Job Office Location: _____
- City: _____ State: _____ Zip: _____
- Office Phone: _____ Field: _____
- Cell Phone: _____ Fax: _____

➤ SDDENR Contact Spill Reporting

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

➤ SDDENR Contact for Hazardous Materials.

- (605) 773-3153

➤ National Response Center Hotline

- (800) 424-8802.

➤ SDDENR Stormwater Contact Information

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

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, SDDENR, 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 site.
- 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.

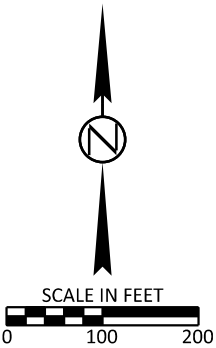
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FOR BIDDING PURPOSES ONLY

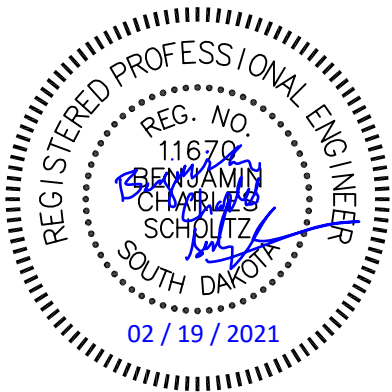
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| STATE OF SOUTH DAKOTA | PROJECT | SHEET | TOTAL SHEETS |
| | P TAPU(26) | 14 | 37 |

FILE: \$FILES\$
PLOTING DATE: \$DATES\$

REV DATE:
INITIAL:



CP114



BM102

CP2C

CP71

| HORIZONTAL AND VERTICAL CONTROL POINTS | | | | | | |
|--|----------------------|-------------------|---|------------|-------------|----------|
| POINT | STATION | OFFSET | DESCRIPTION | NORTHING | EASTING | ELEV |
| BM102 | 31+04.26 | 1349.83'R | Brass Cap Top of Lift Station Southwest Corner of Lagoons | 424195.481 | 2899671.880 | 1477.371 |
| CP2C | 11+59.23 | 507.02'L | Mag Nail in Street South of 5th and Main | 423829.281 | 2896968.824 | 1487.844 |
| CP71 | 10+43.66 | 187.71'L | Red CP Cap South Side of Maintenance Building Drive North End of Fence | 423512.869 | 2896933.401 | 1486.947 |
| CP101 | 25+60.99 40+65.86 | 32.66'R 6.07'L | Jon Heck Cap | 423385.793 | 2898409.967 | 1481.298 |
| CP114 | - | - | Jon Heck Cap | 424956.449 | 2898481.570 | 1477.283 |

The coordinates shown on this sheet are based on the South Dakota State Plane Coordinate System.
South Zone (NAD 83/96); Epoch 2010.00 Geoid 12B; SF = 0.9998448549 Vertical Datum: NAVD 88

CP101



FOR BIDDING PURPOSES ONLY

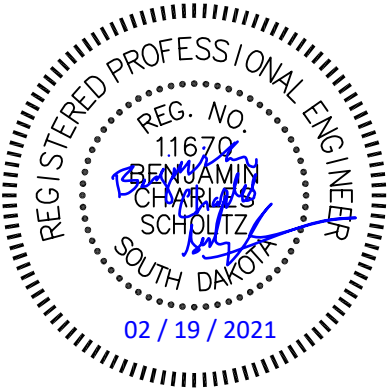
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| STATE OF SOUTH DAKOTA | PROJECT | SHEET | TOTAL SHEETS |
| | P TAPU(26) | 15 | 37 |
| FILE: \$FILES\$ PLOTING DATE: \$DATES\$ | | REV DATE: INITIAL: | |

| PROPOSED 10' SHARED USE PATH ALIGNMENT | | | | | |
|--|-----------|---------------|-------------------------|-------------|--------------|
| TYPE | STATION | | | NORTHING | EASTING |
| POB | 10+00.000 | | | 423352.0387 | 2896833.8994 |
| | | TL= 5.00' | S 62° 56' 18.63"E | | |
| PC | 10+05.000 | | | 423349.7640 | 2896838.3520 |
| PI | 10+72.169 | R= 257.50' | DELTA= 29° 14' 23.20"L | 423319.2056 | 2896898.1674 |
| PT | 11+36.410 | | | 423321.7587 | 2896965.2881 |
| | | TL= 61.051' | N 87° 49' 18.17"E | | |
| PI | 11+97.461 | | | 423324.0792 | 2897026.2952 |
| | | TL= 30.198' | N 81° 15' 32.82"E | | |
| PI | 12+27.659 | | | 423328.6682 | 2897056.1423 |
| | | TL= 1294.072' | N 87° 49' 18.169"E | | |
| PC | 25+21.731 | | | 423377.8547 | 2898349.2788 |
| PI | 25+56.929 | R= 35.00' | DELTA= 90° 19' 22.45"L | 423379.1926 | 2898384.4511 |
| PT | 25+76.906 | | | 423414.3568 | 2898382.9151 |
| | | TL= 356.268' | N 02° 30' 04.285"W | | |
| PC | 29+33.174 | | | 423770.2852 | 2898367.3675 |
| PI | 29+68.497 | R= 510.00' | DELTA= 07° 55' 26.73"L | 423805.5747 | 2898365.8260 |
| PT | 30+03.707 | | | 423840.3148 | 2898359.4342 |
| | | TL= 7.526' | N 10° 25' 31.017"W | | |
| PC | 30+11.233 | | | 423847.7164 | 2898358.0723 |
| PI | 30+50.824 | R= 705.00' | DELTA= 06° 25' 41.962"R | 423886.6533 | 2898350.9083 |
| PT | 30+90.331 | | | 423926.1474 | 2898348.1487 |
| | | TL= 1.864' | N 03° 59' 49.055"W | | |
| PC | 30+92.195 | | | 423928.0073 | 2898348.0188 |
| PI | 31+10.656 | R= 100.00' | DELTA= 20° 55' 08.043"L | 423946.4231 | 2898346.7320 |
| PT | 31+28.706 | | | 423963.1656 | 2898338.9547 |
| | | TL= 49.828' | N 24° 54' 57.098"W | | |
| POE | 31+78.534 | | | 424008.3560 | 2898317.9628 |

| PROPOSED 4' SIDEWALK FROM SHARED USE PATH TO EXISTING | | | | | |
|---|-----------|-------------|--------------------|-------------|--------------|
| TYPE | STATION | | | NORTHING | EASTING |
| POB | 40+00.000 | | | 423377.6647 | 2898344.2824 |
| | | TL= 35.680' | N 87° 49' 18.169"E | | |
| PI | 40+35.680 | | | 423379.0208 | 2898379.9363 |
| | | TL= 30.271' | N 88° 39' 47.808"E | | |
| PI | 40+65.951 | | | 423379.7270 | 2898410.1990 |
| | | TL= 14.424' | N 87° 35' 59.998"E | | |
| POE | 40+80.374 | | | 423380.3310 | 2898424.6100 |

| PROPOSED 4' SIDEWALK LOOP | | | | | |
|---------------------------|-----------|-------------|------------------------|-------------|--------------|
| TYPE | STATION | | | NORTHING | EASTING |
| POB | 50+00.000 | | | 423383.7230 | 2898409.9792 |
| | | TL= 6.109' | S 88° 39' 47.808"W | | |
| PC | 50+06.109 | | | 423383.5804 | 2898403.8717 |
| PI | 50+25.707 | R= 20.00' | DELTA= 88° 50' 07.91"R | 423383.1233 | 2898384.2794 |
| PT | 50+37.119 | | | 423402.7022 | 2898383.4242 |
| | | TL= 11.666' | N 02° 30' 04.285"W | | |
| POE | 50+48.784 | | | 423414.3568 | 2898382.9151 |



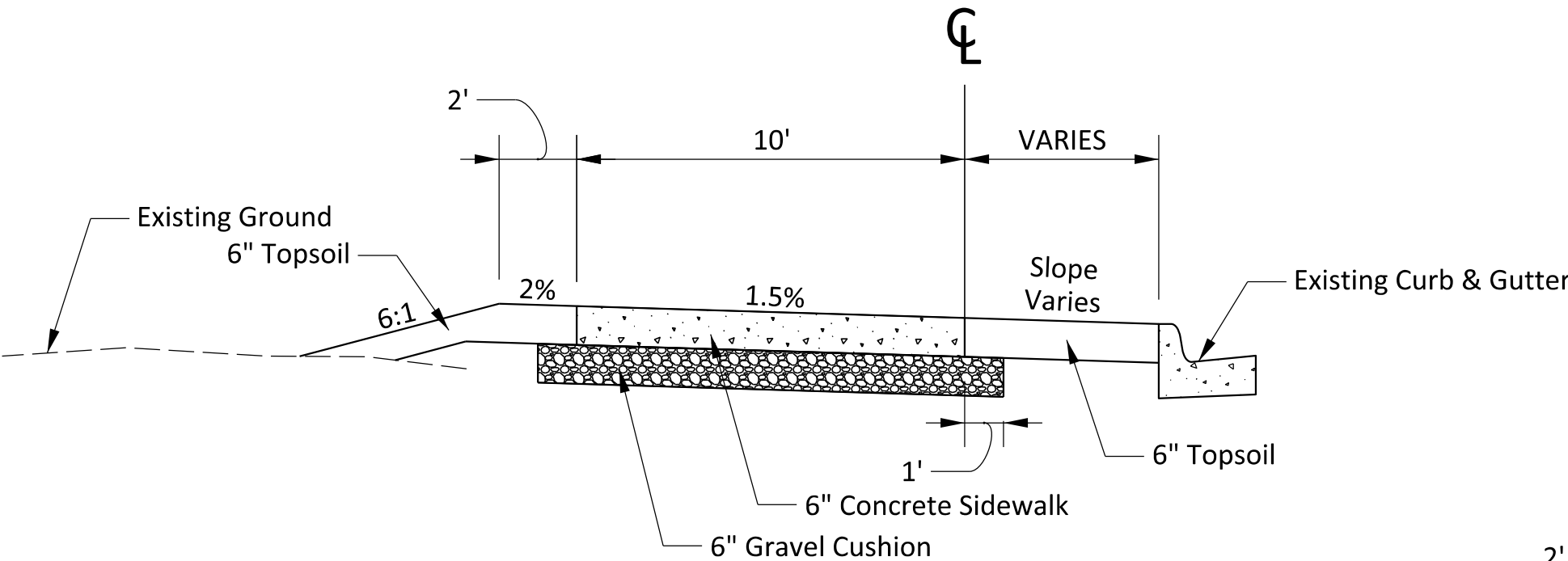
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| STATE OF SOUTH DAKOTA | PROJECT | SHEET | TOTAL SHEETS |
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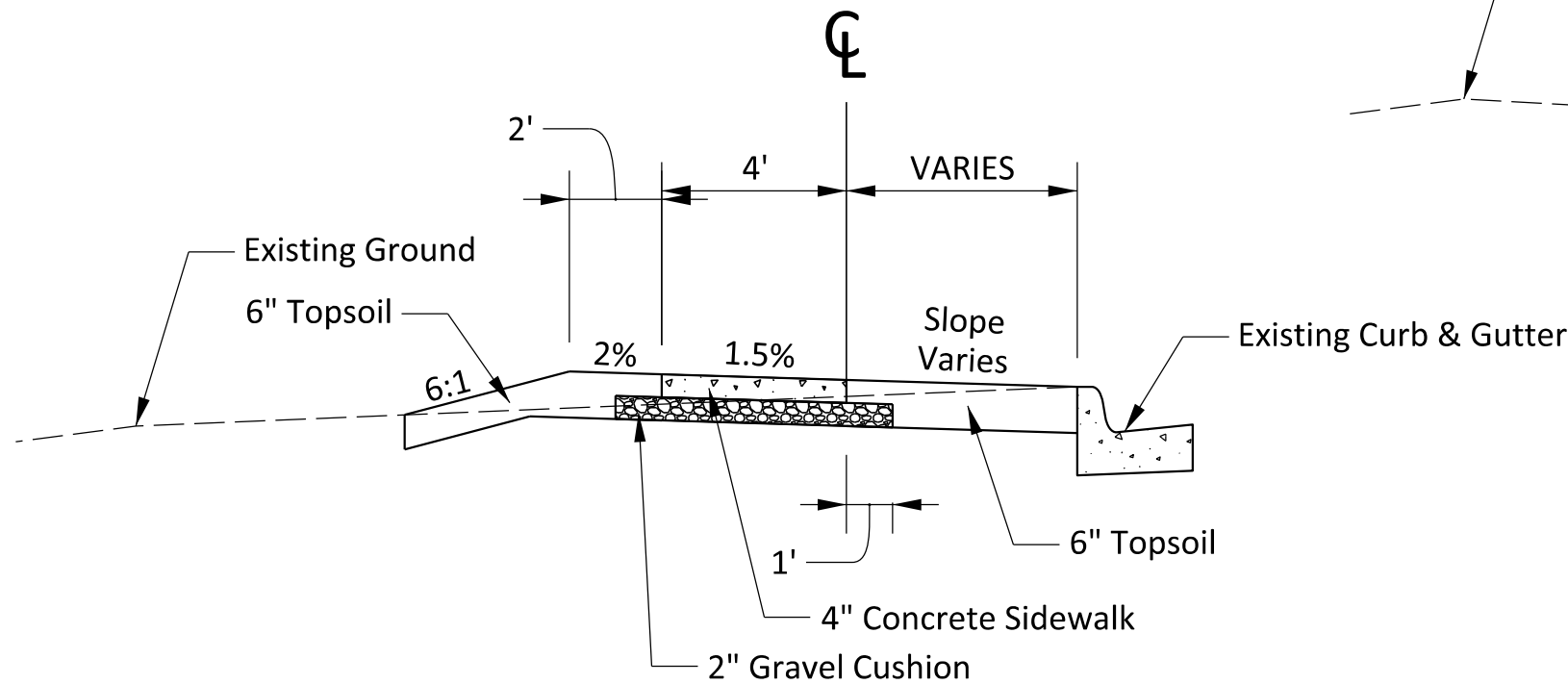
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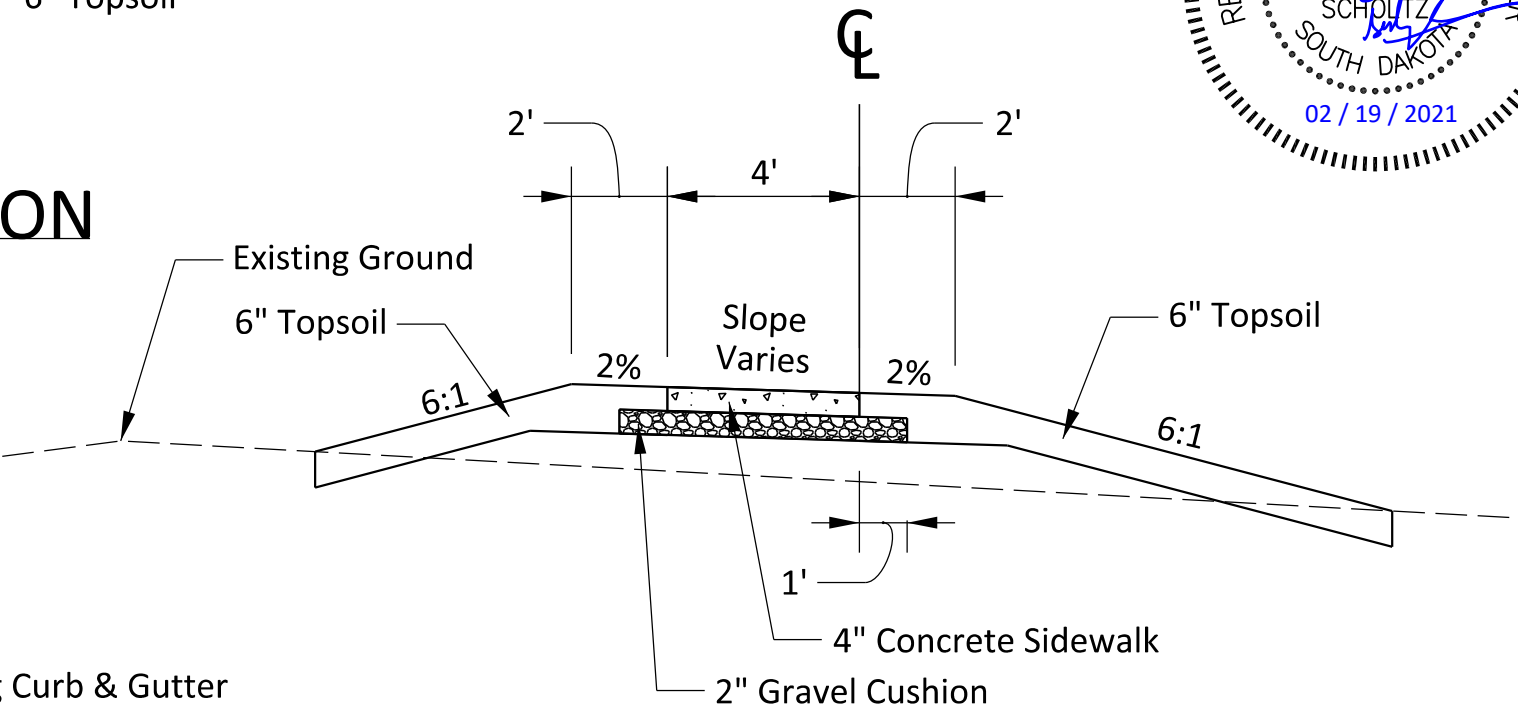
TYPICAL SECTIONS



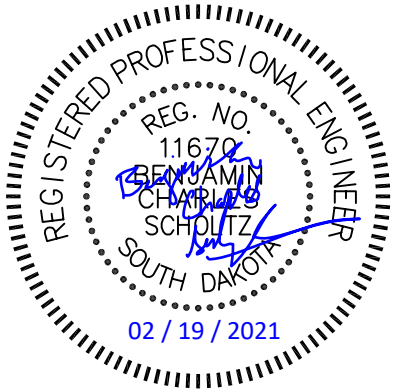
TYPICAL SHARED USE PATH SECTION
STA 10+05.0 TO 31+71.2



TYPICAL SIDEWALK SECTION
STA 40+21.6 TO 40+65.9



TYPICAL SIDEWALK SECTION
STA 50+17.8 TO 50+33.8



EXISTING TOPOGRAPHY SYMBOLOGY AND LEGEND

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| | | | |
|--|------------|-----------------------|-----------------|
| STATE OF SOUTH DAKOTA | PROJECT | SHEET | TOTAL SHEETS |
| | P TAPU(26) | 17 | 37 |
| FILE: \$FILES\$ PLOTING DATE: \$DATES\$ | | REV DATE: INITIAL: | |

| | |
|-----------------------------|--|
| Anchor | |
| Antenna | |
| Approach | |
| Assumed Corner | |
| Azimuth Marker | |
| BBQ Grill/ Fireplace | |
| Bearing Tree | |
| Bench Mark | |
| Box Culvert | |
| Bridge | |
| Brush | |
| Buildings | |
| Bulk Tank | |
| Cattle Guard | |
| Cemetery | |
| Centerline | |
| Cistern | |
| Clothes Line | |
| Commercial Sign Double Face | |
| Commercial Sign One Post | |
| Commercial Sign Overhead | |
| Commercial Sign Two Post | |
| Concrete Symbol | |
| Creek Edge | |
| Curb/Gutter | |
| Curb | |
| Dam Grade/Dike/Levee | |
| Deck Edge | |
| Ditch Block | |
| Doorway Threshold | |
| Drainage Profile | |
| Drop Inlet | |
| Edge Of Asphalt | |
| Edge Of Concrete | |
| Edge Of Gravel | |
| Edge Of Other | |
| Edge Of Shoulder | |
| Elec. Trans./Power Jct. Box | |
| Fence Barbwire | |
| Fence Chainlink | |
| Fence Electric | |
| Fence Misc. | |
| Fence Rock | |
| Fence Snow | |
| Fence Wood | |
| Fence Woven | |
| Fire Hydrant | |
| Flag Pole | |
| Flower Bed | |
| Gas Valve Or Meter | |
| Gas Pump Island | |
| Grain Bin | |
| Guardrail | |
| Guide Sign One Post | |
| Guide Sign Two Post | |
| Gutter | |
| Guy Pole | |
| Haystack | |

| | |
|----------------------------|--|
| Hedge | |
| Highway R.O.W. Marker | |
| Interstate Close Gate | |
| Iron Pin | |
| Irrigation Ditch | |
| Lake Edge | |
| Lawn Sprinkler | |
| Mailbox | |
| Manhole Electric | |
| Manhole Gas | |
| Manhole Misc | |
| Manhole Sanitary Sewer | |
| Manhole Storm Sewer | |
| Manhole Telephone | |
| Manhole Water | |
| Merry-Go-Round | |
| Microwave Radio Tower | |
| Misc. Line | |
| Misc. Property Corner | |
| Misc. Post | |
| Overhang Or Encroachment | |
| Overhead Utility Line | |
| Parking Meter | |
| Pipe With End Section | |
| Pipe With Headwall | |
| Pipe Without End Section | |
| Playground Slide | |
| Playground Swing | |
| Power And Light Pole | |
| Power And Telephone Pole | |
| Power Meter | |
| Power Pole | |
| Power Pole And Transformer | |
| Power Tower Structure | |
| Propane Tank | |
| Property Pipe | |
| Property Pipe With Cap | |
| Property Stone | |
| Public Telephone | |
| Railroad Crossing Signal | |
| Railroad Milepost Marker | |
| Railroad Profile | |
| Railroad R.O.W. Marker | |
| Railroad Signs | |
| Railroad Switch | |
| Railroad Track | |
| Railroad Trestle | |
| Rebar | |
| Rebar With Cap | |
| Reference Mark | |
| Regulatory Sign One Post | |
| Regulatory Sign Two Post | |
| Retaining Wall | |
| Riprap | |
| River Edge | |
| Rock And Wire Baskets | |
| Rockpiles | |
| Satellite Dish | |
| Septic Tank | |

| | |
|---|--|
| Shrub Tree | |
| Sidewalk | |
| Sign Face | |
| Sign Post | |
| Slough Or Marsh | |
| Spring | |
| Stream Gauge | |
| Street Marker | |
| Subsurface Utility Exploration Test Hole | |
| Telephone Fiber Optics | |
| Telephone Junction Box | |
| Telephone Pole | |
| Television Cable Jct Box | |
| Television Tower | |
| Test Wells/Bore Holes | |
| Traffic Signal | |
| Trash Barrel | |
| Tree Belt | |
| Tree Coniferous | |
| Tree Deciduous | |
| Tree Stumps | |
| Triangulation Station | |
| Underground Electric Line | |
| Underground Gas Line | |
| Underground High Pressure Gas Line | |
| Underground Sanitary Sewer | |
| Underground Storm Sewer | |
| Underground Tank | |
| Underground Telephone Line | |
| Underground Television Cable | |
| Underground Water Line | |
| Warning Sign One Post | |
| Warning Sign Two Post | |
| Water Fountain | |
| Water Hydrant | |
| Water Meter | |
| Water Tower | |
| Water Valve | |
| Water Well | |
| Weir Rock | |
| Windmill | |
| Wingwall | |
| Witness Corner | |
| State and National Line | |
| County Line | |
| Section Line | |
| Quarter Line | |
| Sixteenth Line | |
| Property Line | |
| Construction Line | |
| R. O. W. Line | |
| New R. O. W. Line | |
| Cut and Fill Limits | |
| Control of Access | |
| New Control of Access | |
| Proposed ROW (After Property Disposal) | |

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Erosion and Sediment Control Plan

| | | | |
|-----------------------------|------------|-------|-----------------|
| STATE OF SOUTH DAKOTA | PROJECT | SHEET | TOTAL SHEETS |
| | P TAPU(26) | 18 | 37 |

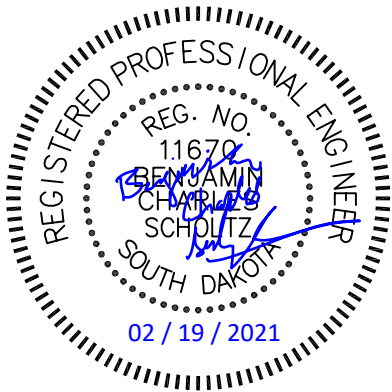
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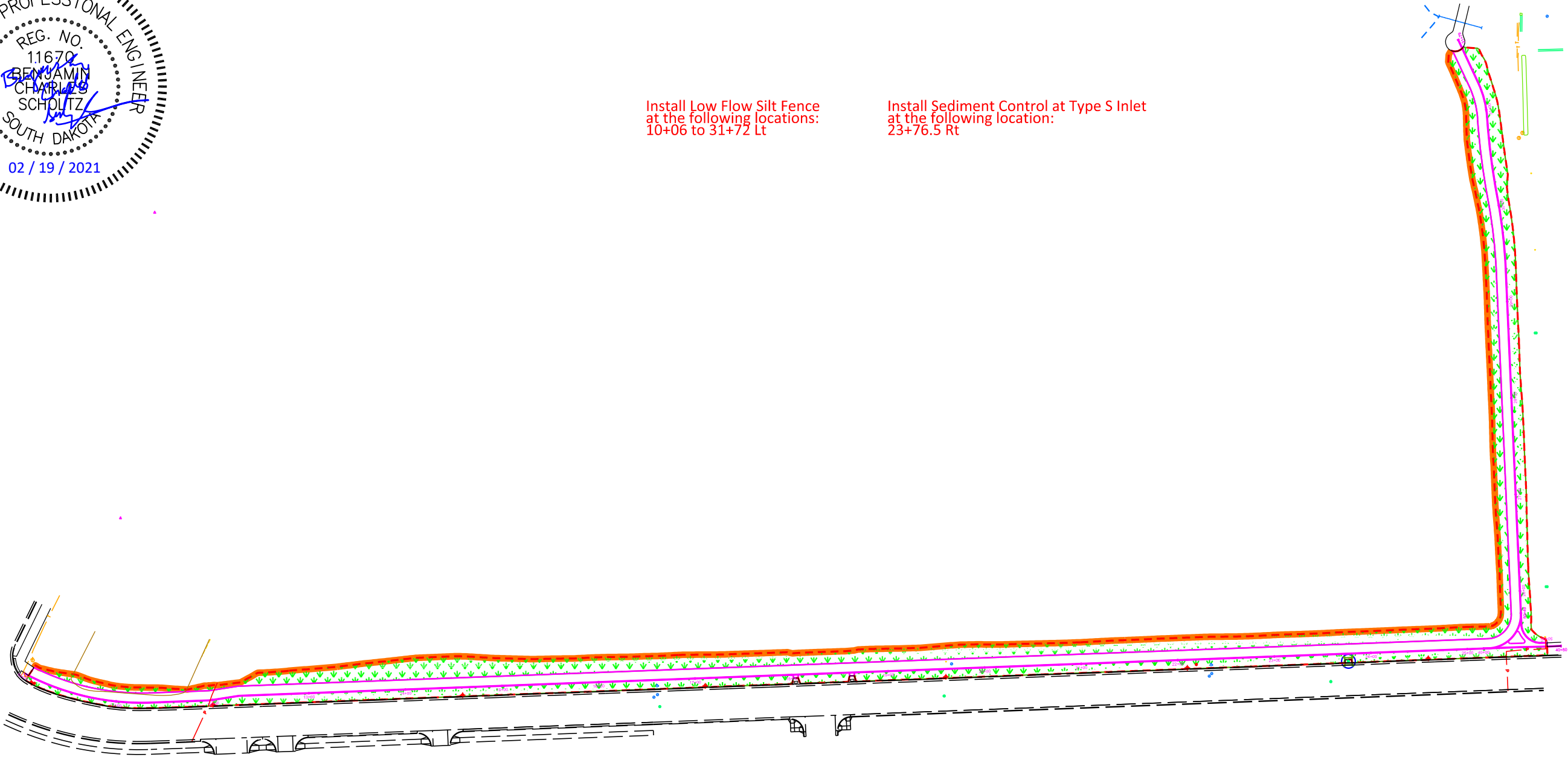
SCALE IN FEET

0 60 120



Install Low Flow Silt Fence
at the following locations:
10+06 to 31+72 Lt

Install Sediment Control at Type S Inlet
at the following location:
23+76.5 Rt

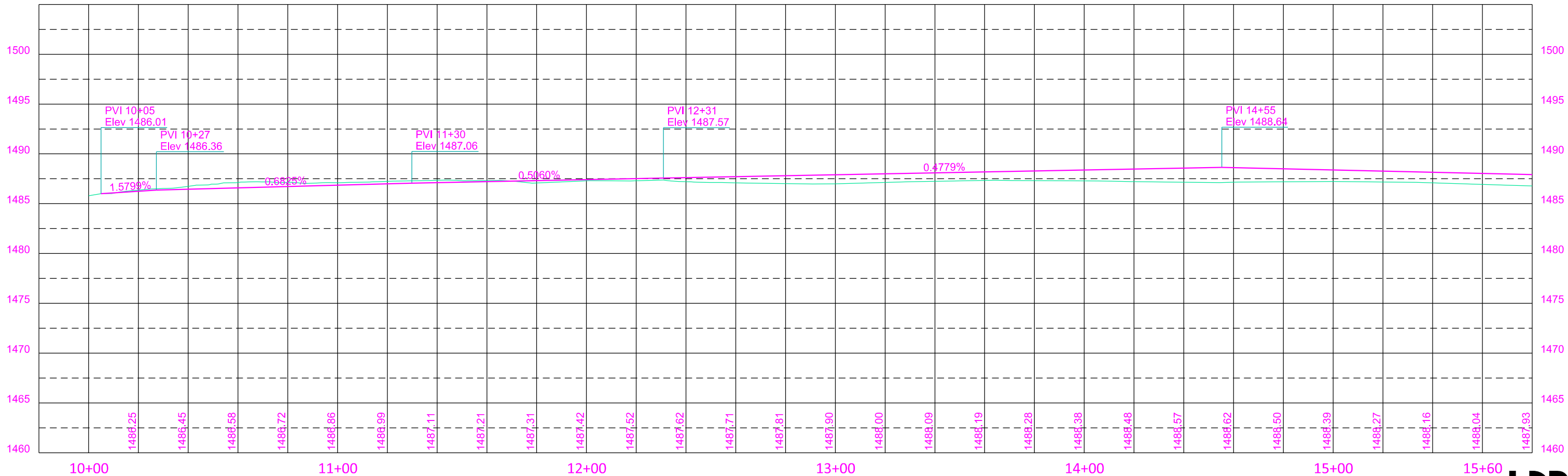
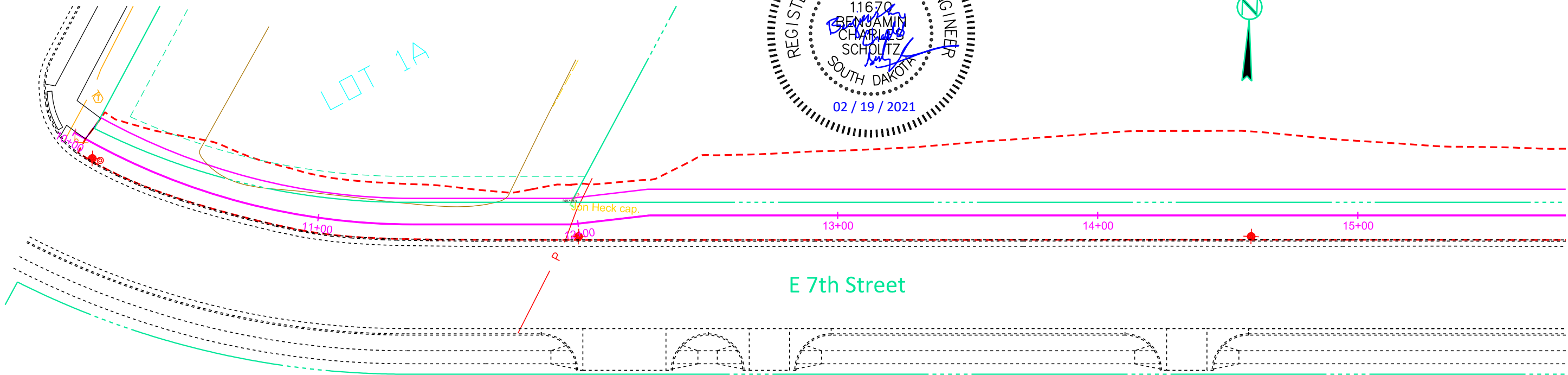
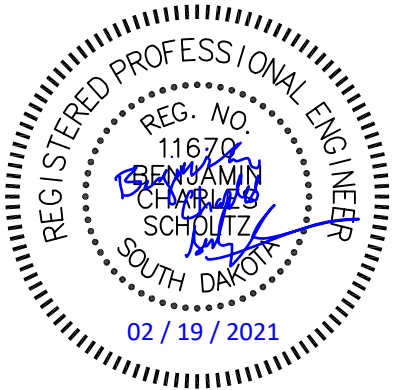


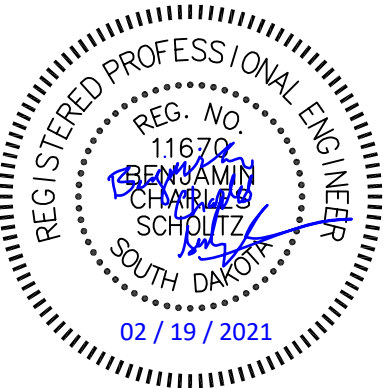
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| STATE OF SOUTH DAKOTA | PROJECT | SHEET | TOTAL SHEETS |
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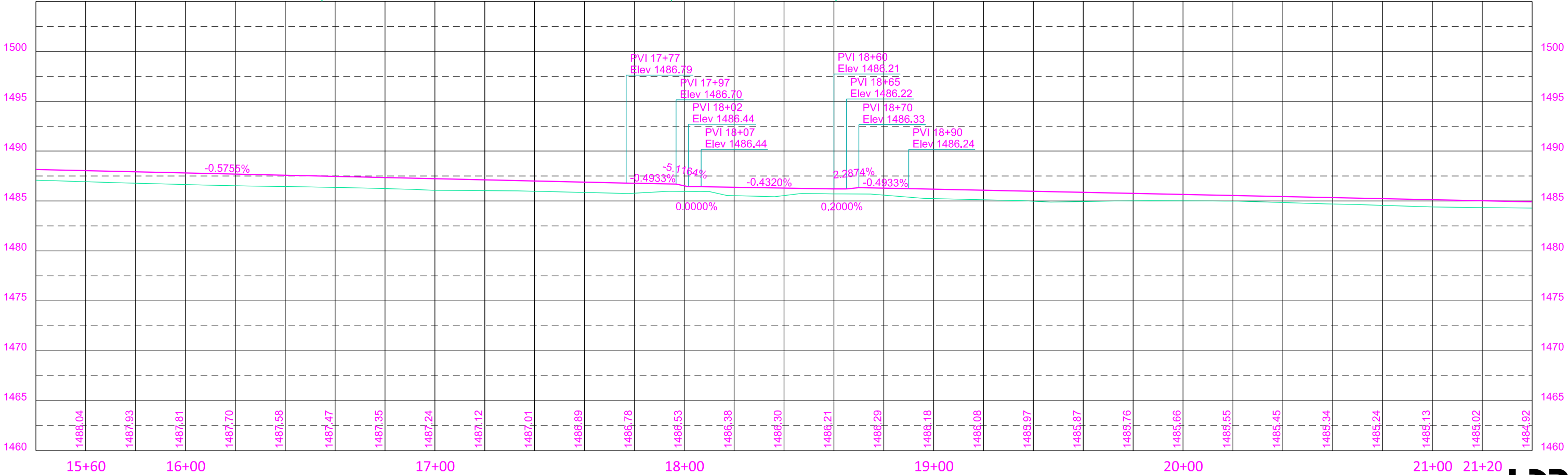
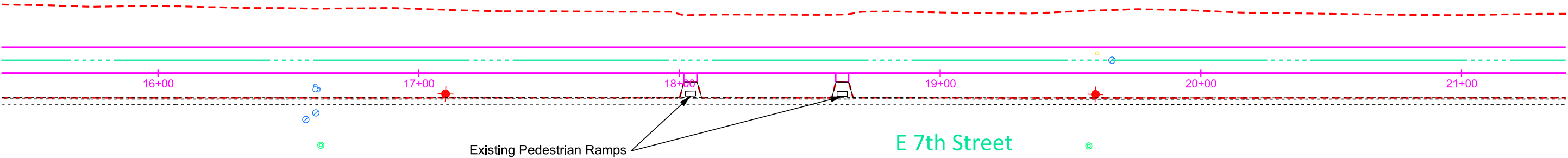


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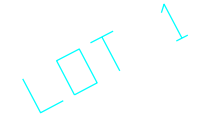
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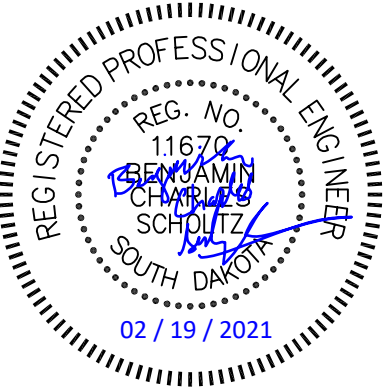


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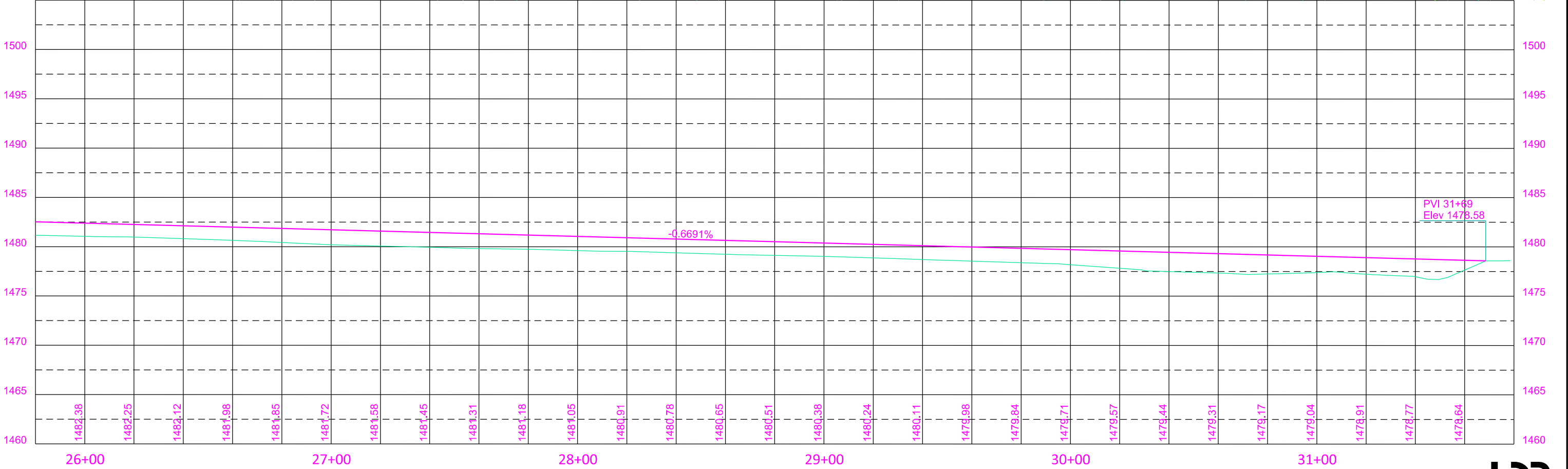
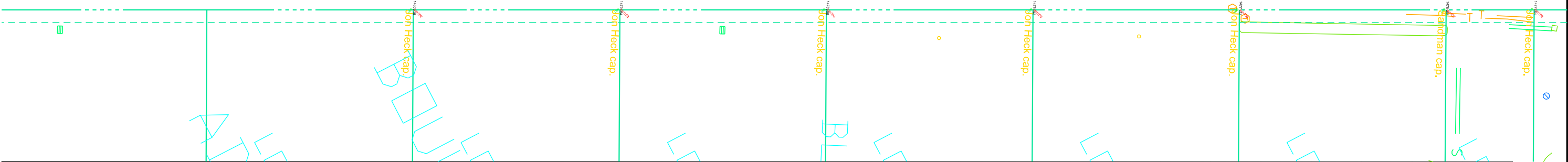
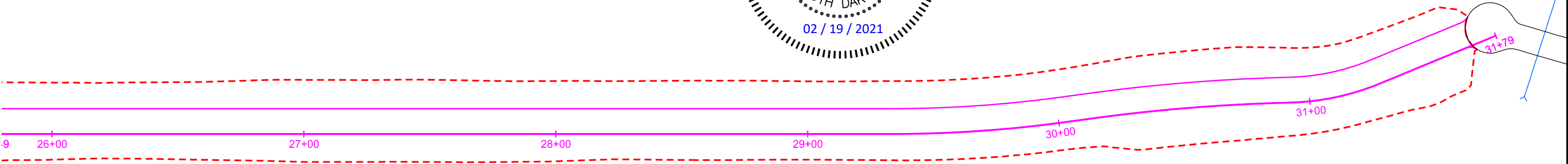
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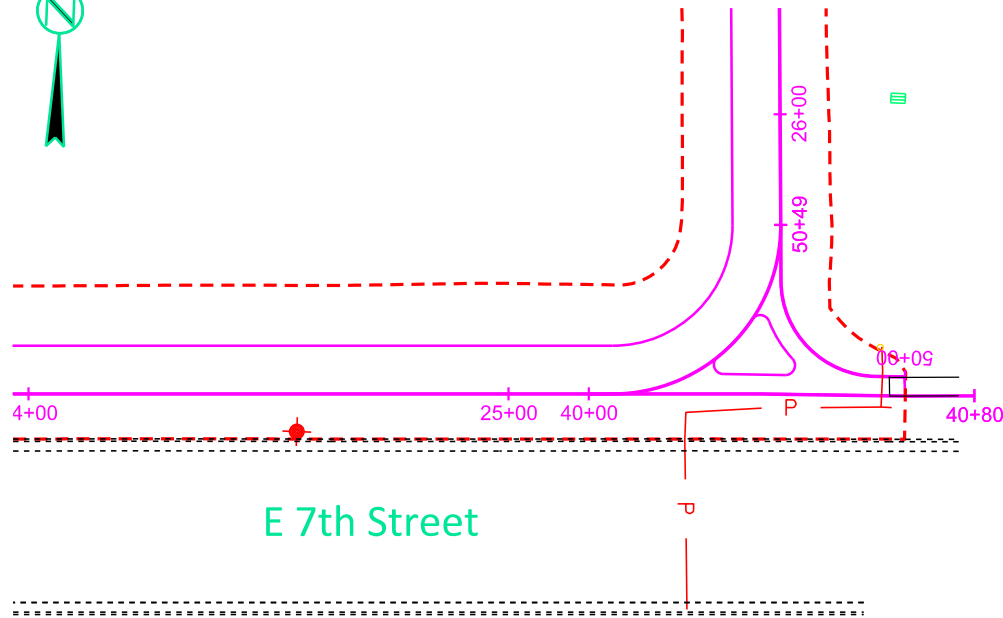


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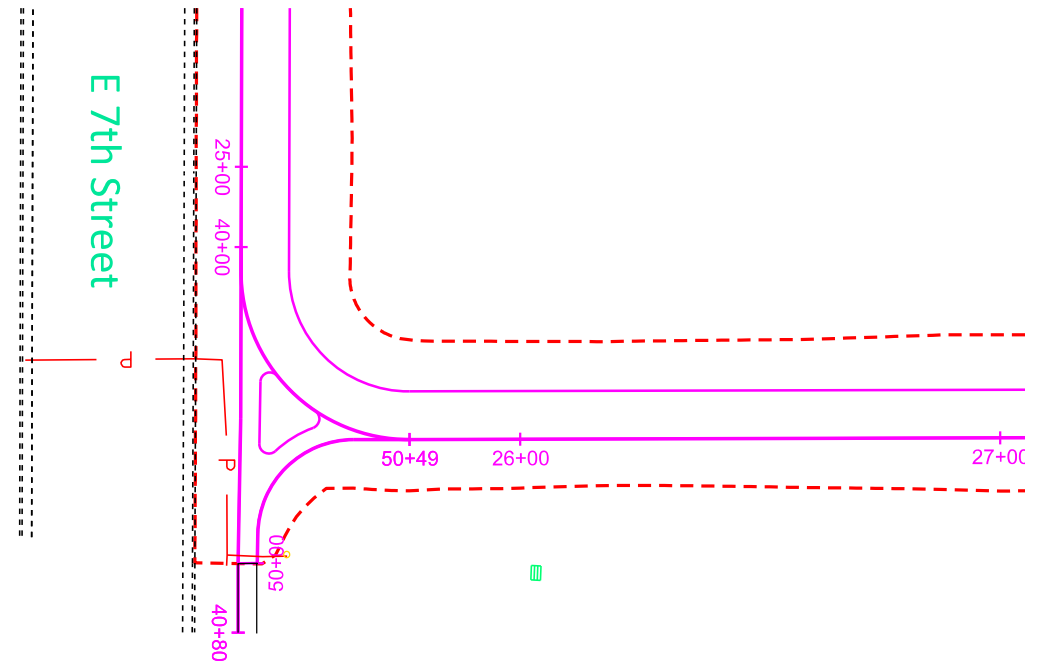
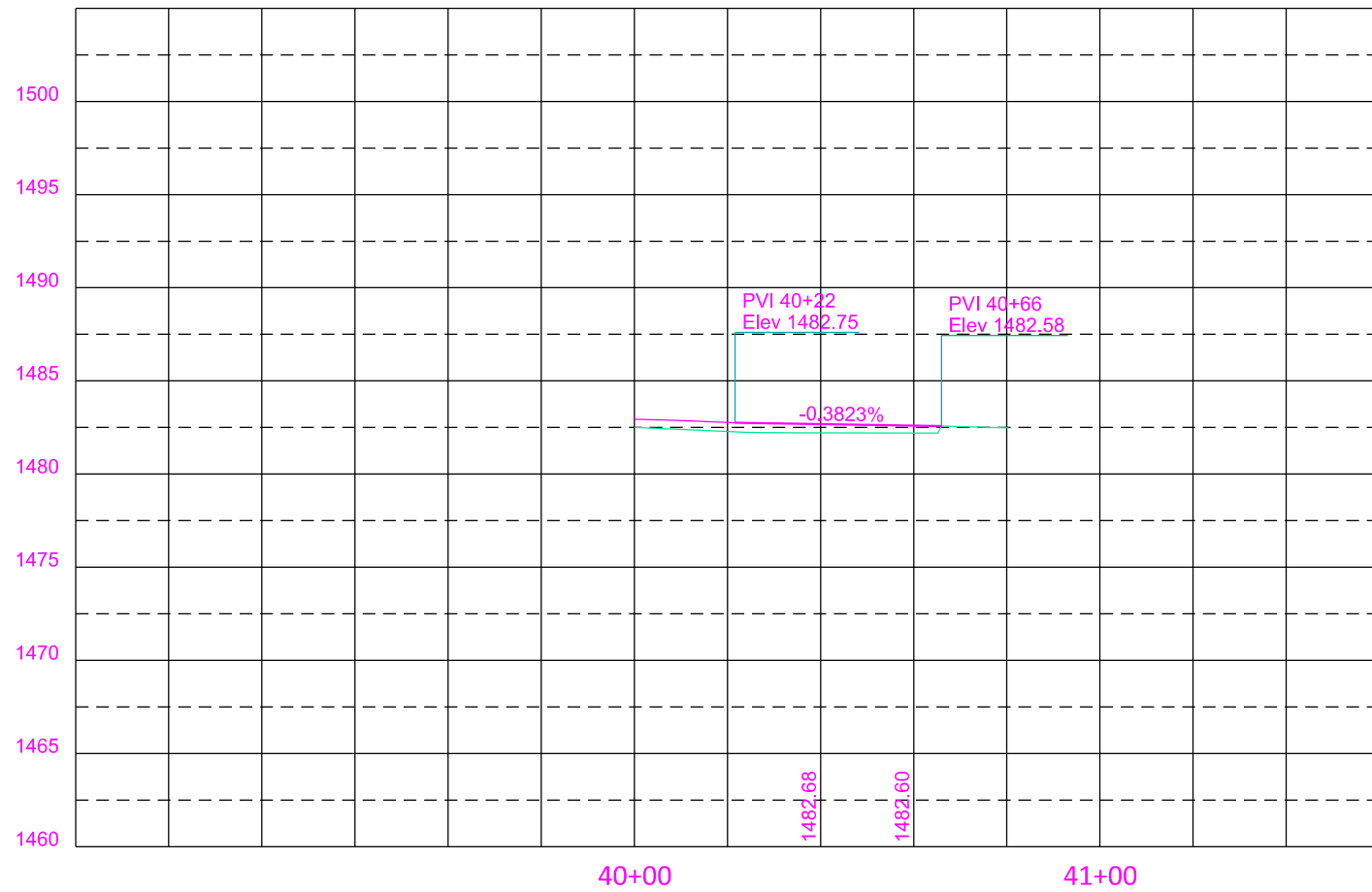
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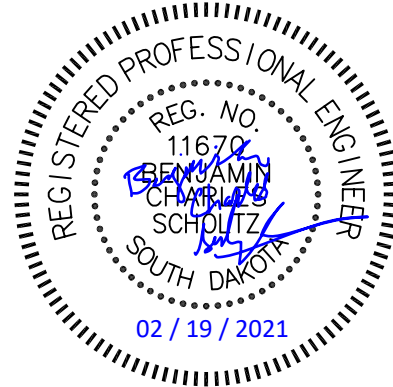
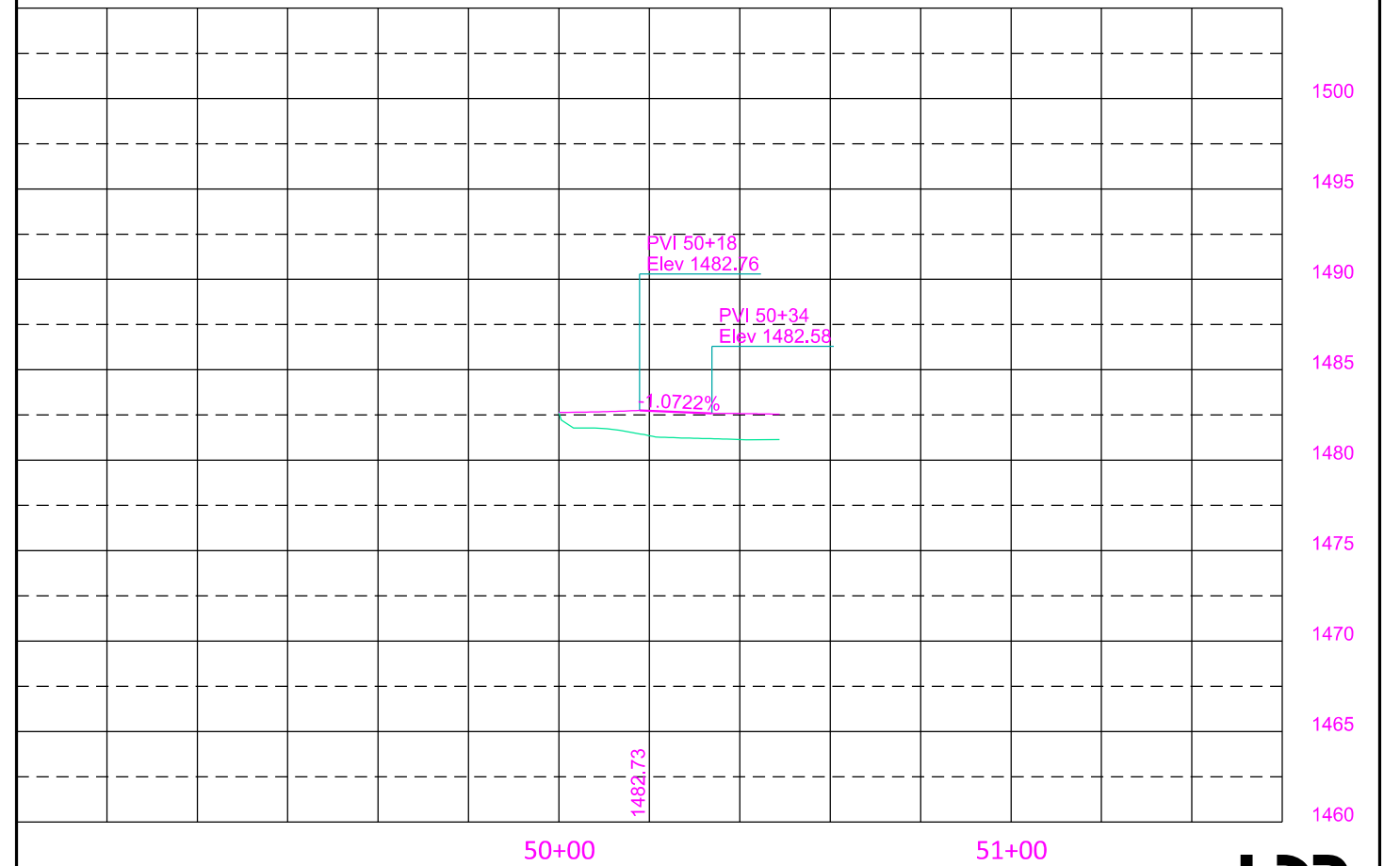




E 7th Street



E 7th Street



FOR BIDDING PURPOSES ONLY

| STATE OF SOUTH DAKOTA | PROJECT | SHEET | TOTAL SHEETS |
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| | P TAPU(26) | 23 | 37 |

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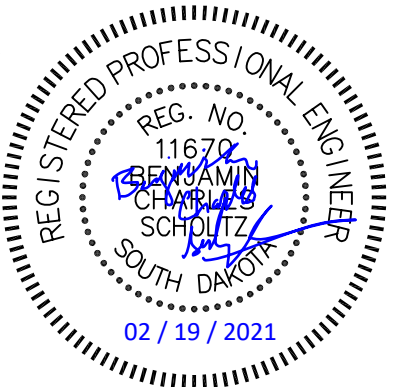
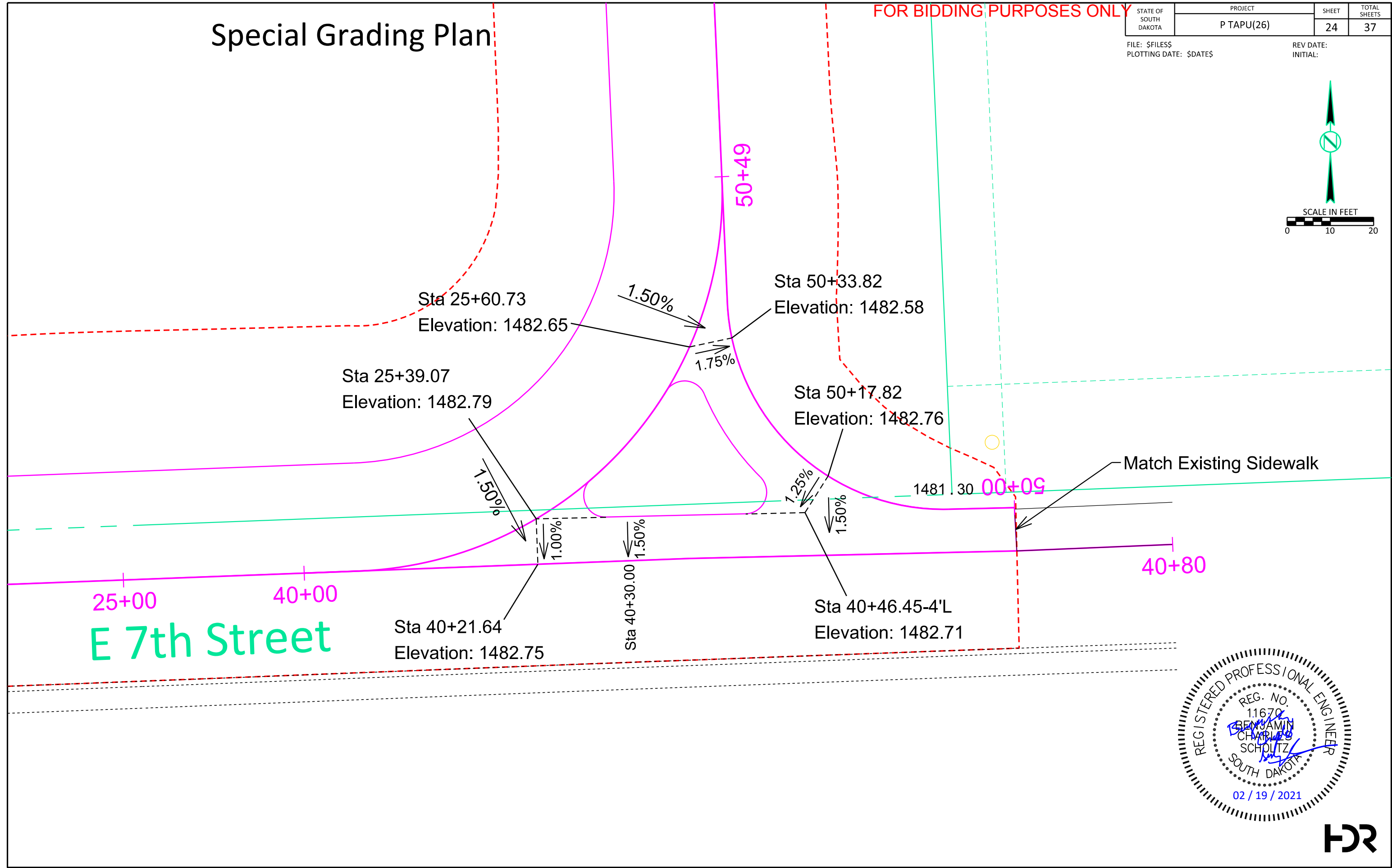
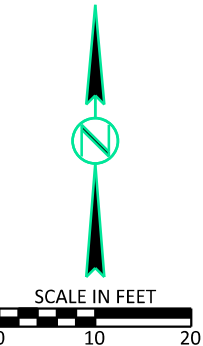
Special Grading Plan

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| STATE OF SOUTH DAKOTA | PROJECT | SHEET | TOTAL SHEETS |
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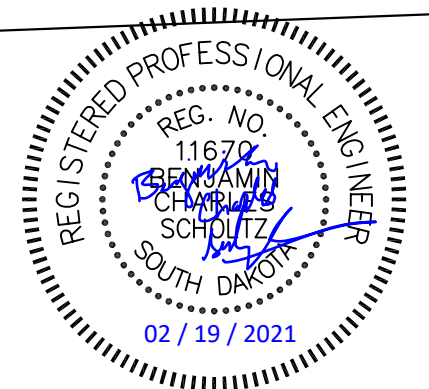
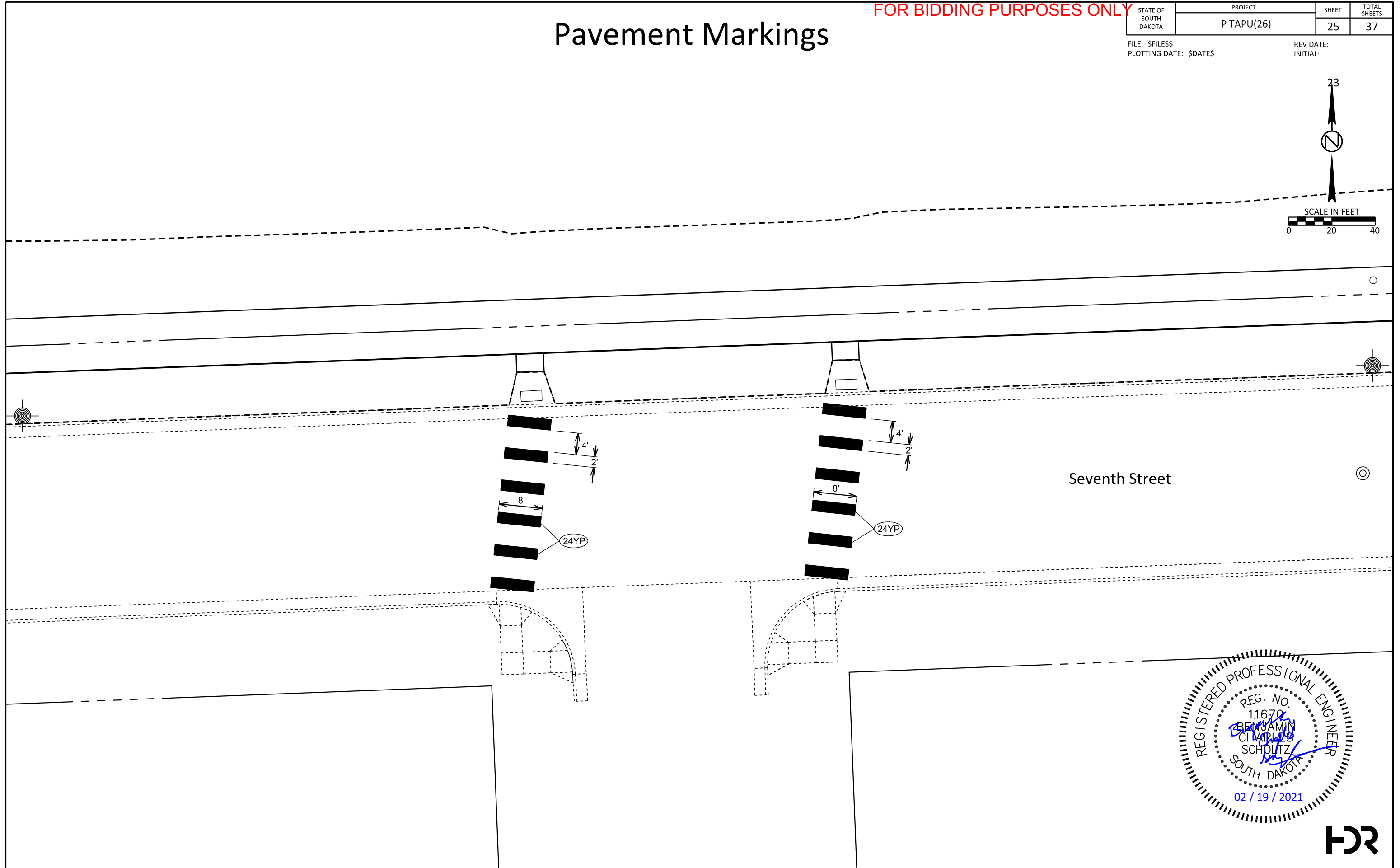
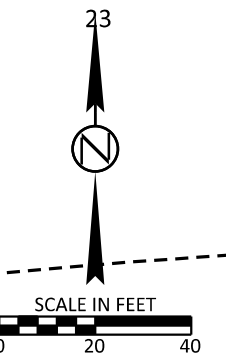
Pavement Markings

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| STATE OF SOUTH DAKOTA | PROJECT | SHEET | TOTAL SHEETS |
| | P TAPU(26) | 25 | 37 |

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INITIAL:



The signs illustrated are not required if the work space is behind a barrier, more than 2 feet behind the curb, or 15 feet or more from the edge of any roadway.

The signs illustrated shall be used where there are distracting situations; such as: vehicles parked on shoulder, vehicles accessing the work site via the highway, and equipment traveling on or crossing the roadway to perform work operations.

The ROAD WORK AHEAD sign may be replaced with other appropriate signs, such as the SHOULDER WORK sign. The SHOULDER WORK sign may be used for work adjacent to the shoulder.

* If the work space is on a divided highway, an advance warning sign should also be placed on the left side of the directional roadway.

For short term, short duration, or mobile operations, all signs and channelizing devices may be eliminated if a vehicle with an activated flashing or revolving yellow light is used.

| Posted Speed Prior to Work (M.P.H.) | Spacing of Advance Warning Signs (Feet) (A) |
|-------------------------------------|---|
| 0 - 30 | 200 |
| 35 - 40 | 350 |
| 45 - 50 | 500 |
| 55 | 750 |
| 60 - 80 | 1000 |

WORK SPACE

A

ROAD WORK AHEAD W20-1

(*)

(*)

Published Date: 1st Qtr. 2021

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GUIDES FOR TRAFFIC CONTROL DEVICES
WORK BEYOND THE SHOULDER

PLATE NUMBER
634.01

Sheet 1 Of 1

Apr 11 15, 2015

6' to 12'

5' Minimum

7' Minimum

RURAL DISTRICT

6' to 12'

4' Minimum

5' Minimum

7' Minimum

RURAL DISTRICT WITH
SUPPLEMENTAL PLATE

Paved Shoulder

2' Minimum

7' Minimum

5' Minimum *

Walkway

URBAN DISTRICT

6' Minimum

Sign shall be level.

RURAL DISTRICT
3 DAY MAXIMUM

(Not applicable to regulatory signs)

* If the bottom of supplemental plate is mounted lower than 7 feet above a pedestrian walkway, the supplemental plate should not project more than 4" into the pedestrian facility.

Published Date: 1st Qtr. 2021

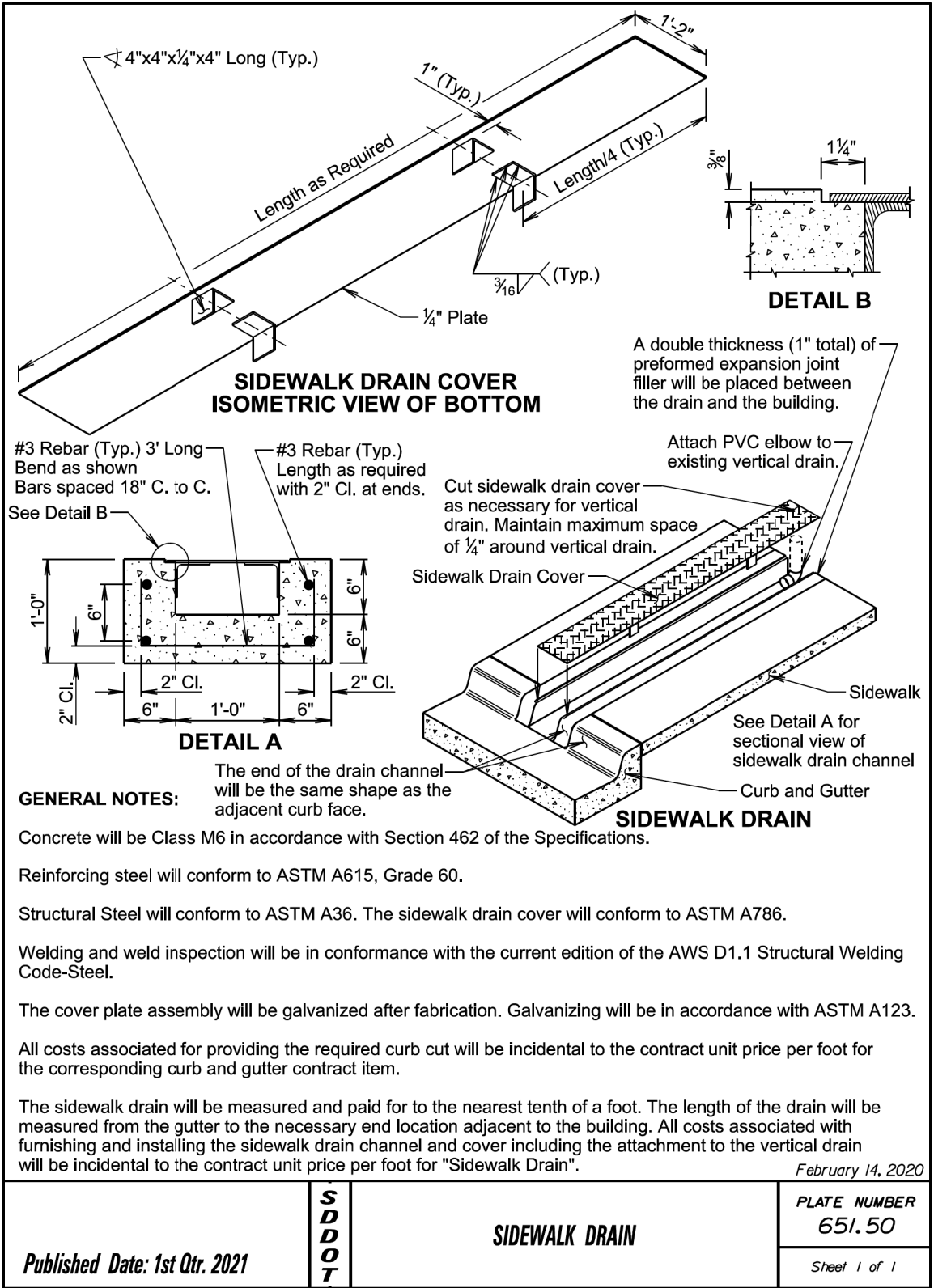
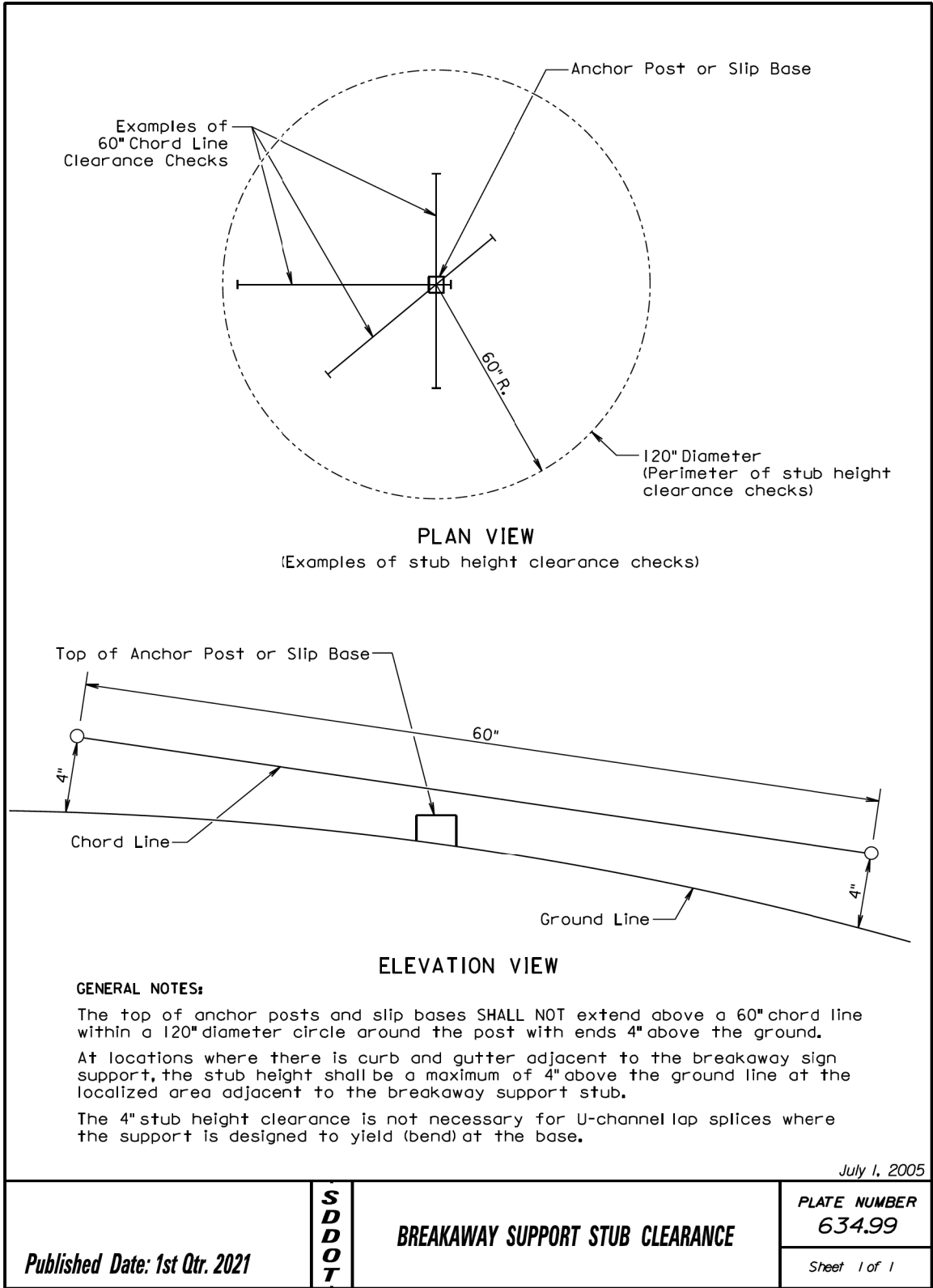
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CRASHWORTHY SIGN SUPPORTS
(Typical Construction Signing)

PLATE NUMBER
634.85

Sheet 1 of 1

September 22, 2014

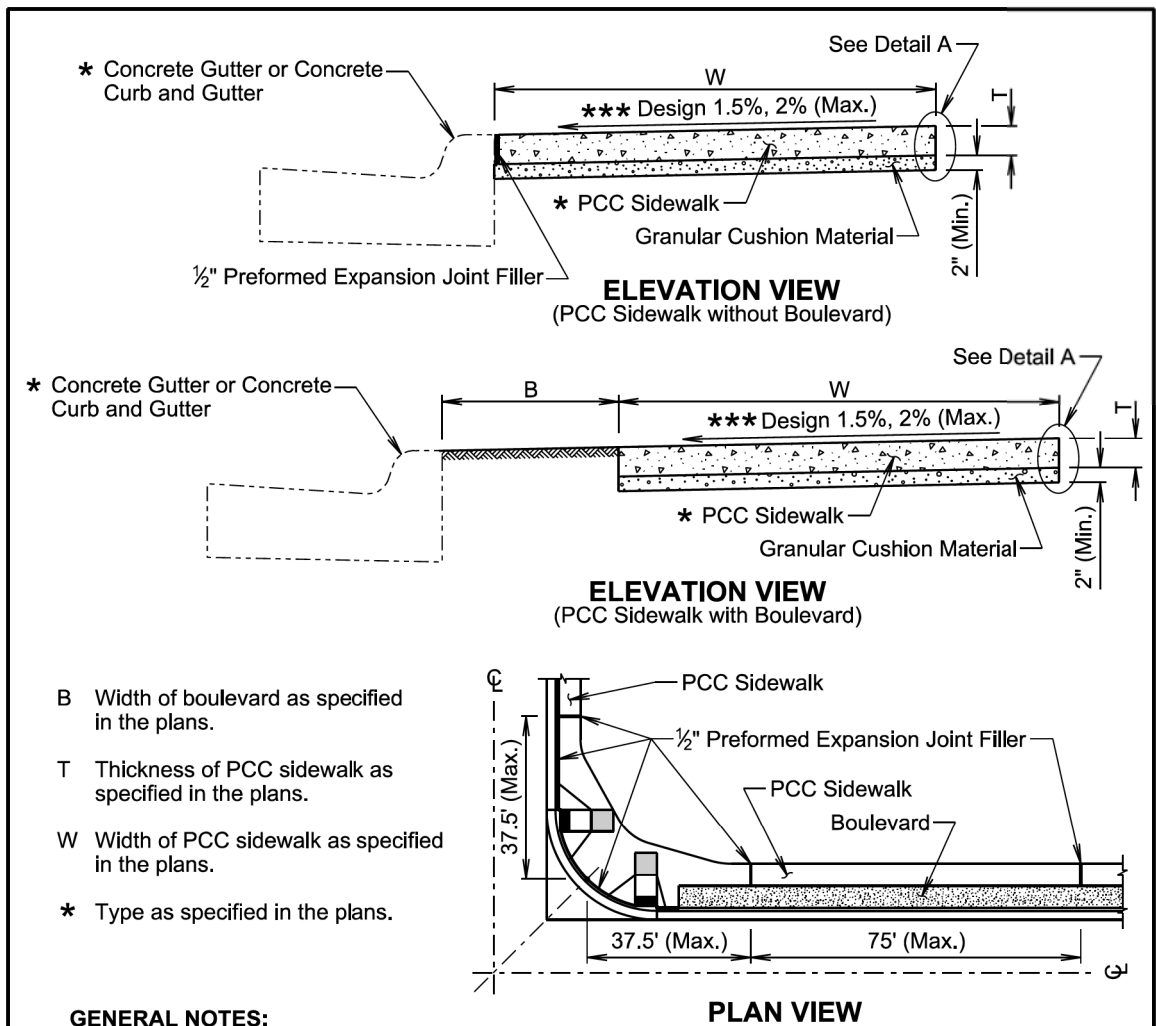


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| STATE OF SOUTH DAKOTA | PROJECT | SHEET | TOTAL SHEETS |
| | P TAPU(26) | 28 | 37 |

FILE: ...\\028_Standard Details 3.dgn
PLOTting DATE: 03-16-2021

REV DATE:
INITIAL:



GENERAL NOTES:

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.

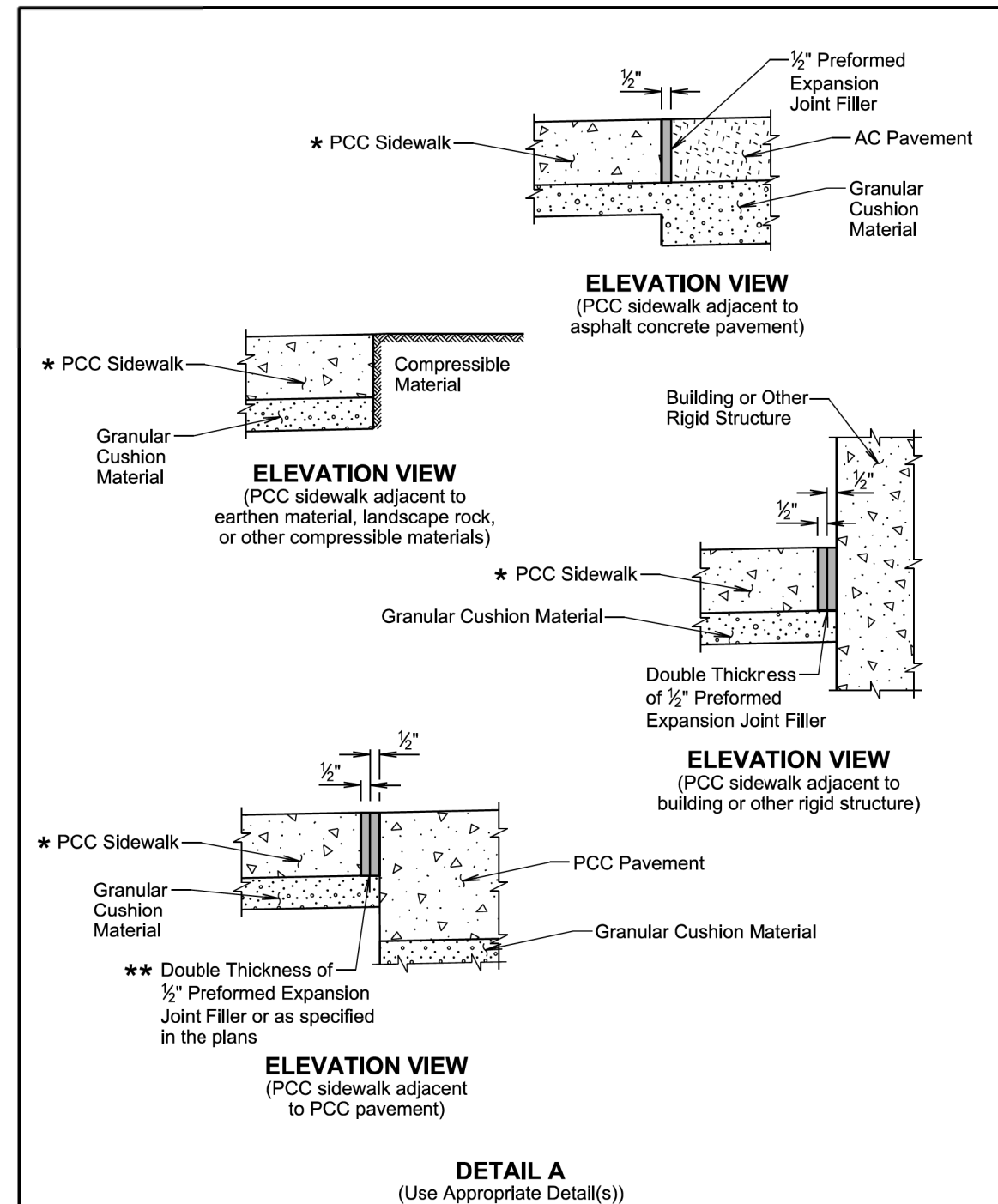
PCC sidewalk placed adjacent to intersection of roadways will have an expansion joint placed transversely a maximum of 37.5 feet from the intersection. See Plan View.

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

| | | | |
|-------------------------------|-----------------------|--------------|------------------------|
| Published Date: 1st Qtr. 2021 | S D D O T | PCC SIDEWALK | PLATE NUMBER 651.75 |
| | | | Sheet 1 of 2 |



February 14, 2020

| | | | |
|-------------------------------|-----------------------|--------------|------------------------|
| Published Date: 1st Qtr. 2021 | S D D O T | PCC SIDEWALK | PLATE NUMBER 651.75 |
| | | | Sheet 2 of 2 |

STANDARD PLATES

FOR BIDDING PURPOSES ONLY

| | | | |
|-----------------------------|------------|-------|-----------------|
| STATE OF SOUTH DAKOTA | PROJECT | SHEET | TOTAL SHEETS |
| | P TAPU(26) | 29 | 37 |

FILE: ...029_Standard Details 4.dgn
PLOTING DATE: 03-16-2021

REV DATE:
INITIAL:

MANUAL LOW FLOW SILT FENCE INSTALLATION

The diagram shows a five-step process for manual silt fence installation. Step 1: Excavate a trench 6 inches wide and 4 inches deep. Step 2: Drive steel T fence posts 5 feet apart. Step 3: Attach a 26-inch woven wire fence to the posts. Step 4: Attach silt fence fabric, overlapping it by 2 inches and securing it with 8-inch staples. Step 5: Backfill the trench and wheel compact soil. A detail view (A-A) shows the fabric being 36 inches wide, overlapping by 2 inches, and secured with staples. It also shows a silt trap with a 6-foot minimum length and a 4-foot width. The fabric is attached to the posts with plastic ties or hog rings at 12-inch intervals.

1 EXCAVATE TRENCH 2 DRIVE STEEL T FENCE POSTS 3 ATTACH 26" WOVEN WIRE FENCE TO POSTS

4 ATTACH SILT FENCE FABRIC 5 BACKFILL TRENCH AND WHEEL COMPACT SOIL

DETAIL B

SECTION A-A

February 14, 2020

| | | |
|-----------------------|--------------------------------------|-------------------------------|
| S D D O T | LOW FLOW SILT FENCE AND SILT TRAP | PLATE NUMBER 734.04 |
| | | Sheet 1 of 2 |
| | | Published Date: 1st Qtr. 2021 |

MACHINE SLICED LOW FLOW SILT FENCE INSTALLATION

The diagram shows a two-step process for machine-sliced silt fence installation. Step 1: Install silt fence fabric by machine slicing. A slicing blade (3/4 inch wide) cuts the fabric into strips 8 to 12 inches deep. Step 2: Wheel compact soil above the sliced fabric and then drive steel T fence posts. The fabric is attached to the posts with plastic ties or hog rings at 12-inch intervals. A detail view shows the fabric being 36 inches wide, overlapping by 2 inches, and secured with staples. It also shows a silt trap with a 6-foot minimum length and a 4-foot width. The fabric is attached to the posts with plastic ties or hog rings at 12-inch intervals.

1 INSTALL SILT FENCE FABRIC BY MACHINE SLICING METHOD. 2 WHEEL COMPACT SOIL ABOVE SLICED IN PORTION OF FABRIC AND THEN DRIVE STEEL T FENCE POSTS.

3 ATTACH 26" WOVEN WIRE FENCE TO POSTS AND ATTACH SILT FENCE FABRIC.

GENERAL NOTES:

A silt trap will be provided when specified by a plan note. All costs for constructing the silt trap will be incidental to the contract unit price per cubic yard for "Silt Trap".

If a trench can not be dug or the silt fence fabric can not be sliced in due to the type of earthen material (such as rock), then a row of 30 to 40 pound sandbags butted end to end will be provided on top of the extra length of silt fence fabric to prevent underflow.

February 14, 2020

| | | |
|-----------------------|--------------------------------------|-------------------------------|
| S D D O T | LOW FLOW SILT FENCE AND SILT TRAP | PLATE NUMBER 734.04 |
| | | Sheet 2 of 2 |
| | | Published Date: 1st Qtr. 2021 |

ISOMETRIC VIEW

GENERAL NOTES:

The type of sediment control device shown is for illustrative purposes only.

The type of sediment control device used will be one of the types as specified in the plans.

The sediment control device will be placed at the drop inlets according to the manufacturer's installation instructions.

The sediment control at inlet for type S reinforced concrete drop inlet will be placed at locations stated in the plans or at locations determined by the Engineer.

The Contractor and Engineer will inspect the sediment control device in accordance with the storm water permit. The Contractor will maintain the sediment control device by removing the device, removing accumulated sediment, and resetting the device.

The removed sediment will be placed at a location away from the drop inlet where the sediment will not be washed back into the drop inlet or other storm sewer system.

Payment for the "Sediment Control at Type S Drop Inlet" will be based on the minimum length required at the drop inlets. Some of the sediment control devices specified in the plans will have to be longer due to available length.

All costs for furnishing, installing, inspecting, maintaining, removing, and resetting the sediment control device at the drop inlet including labor, equipment, and materials will be incidental to the contract unit price per foot for "Sediment Control at Type S Reinforced Concrete Drop Inlet".

Published Date: 1st Qtr. 2021

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SEDIMENT CONTROL AT INLETS
FOR TYPE S REINFORCED CONCRETE
DROP INLETS

February 14, 2020

PLATE NUMBER
734.11

Sheet 1 of 1


Concrete Washout Facility

CWF

Notes:

- Concrete washout facility shall be installed prior to any concrete placement on site.
- A sign shall be installed adjacent to each washout facility to inform concrete equipment operators to utilize the CWF.
- The concrete washout facility shall be repaired and enlarged or cleaned out as necessary to maintain capacity for wasted concrete.
- When CWF are no longer required for the work, the hardened concrete and materials used to construct the CWF shall be removed and disposed of.
- When the concrete washout facility is removed, the holes, depressions or other ground disturbance shall be backfilled, repaired and stabilized.

Cross Sectional View

CITY OF SIOUX FALLS
PUBLIC WORKS
Providing a Better Quality of Life for You!

Concrete Washout Facility

Specification
Reference
No. 734

Plate
Number
734.28

Revised: December 2008

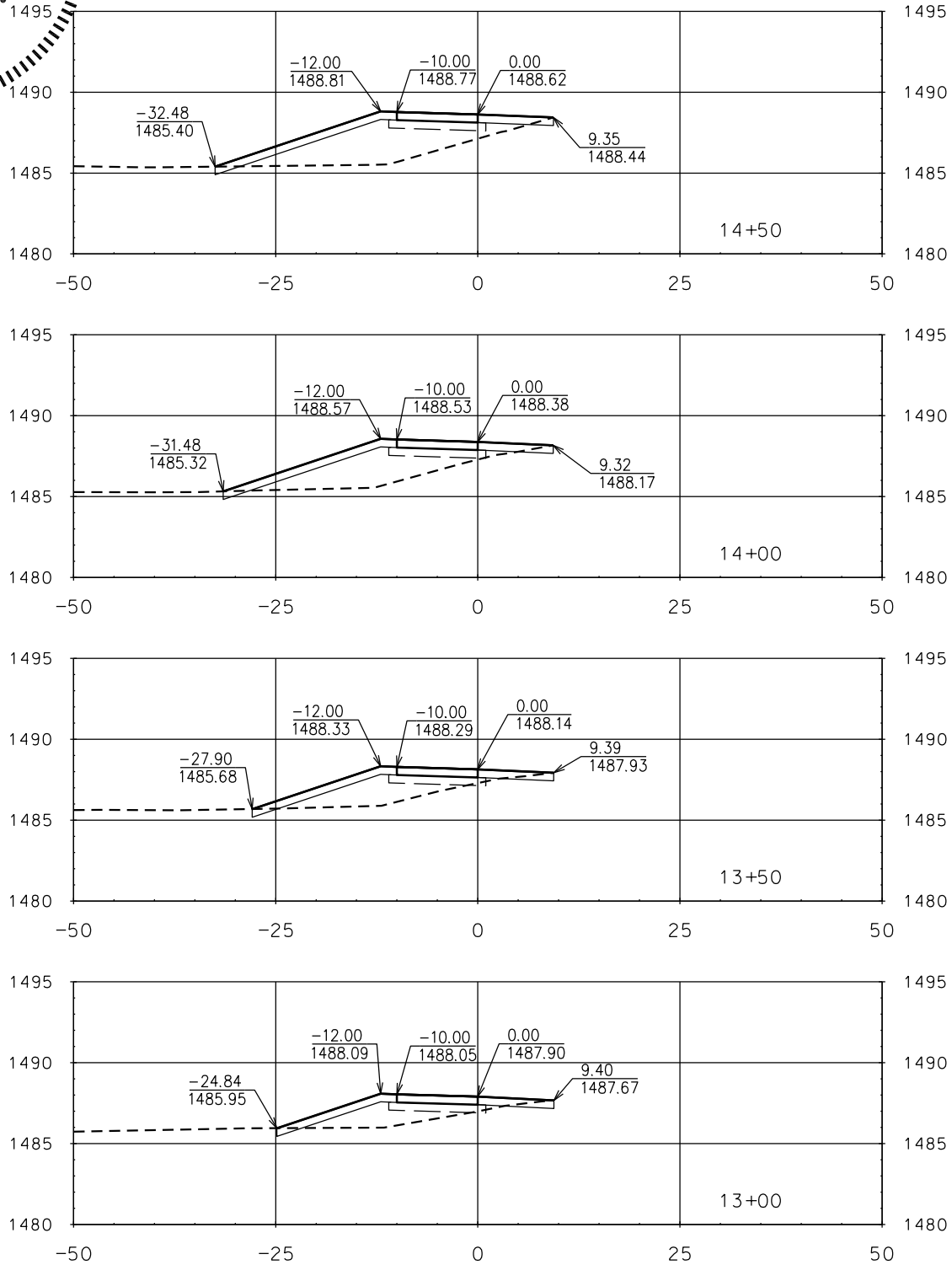
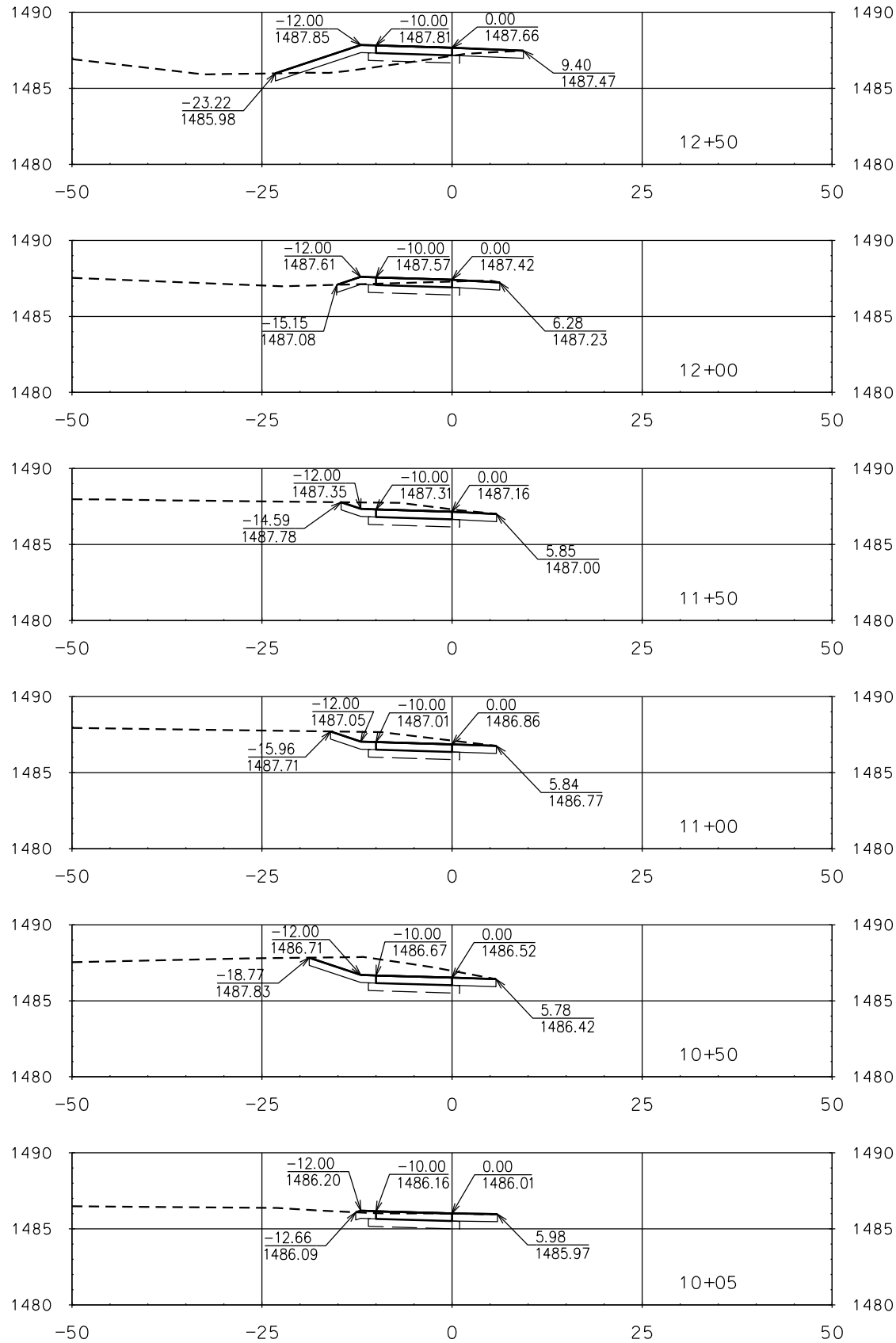
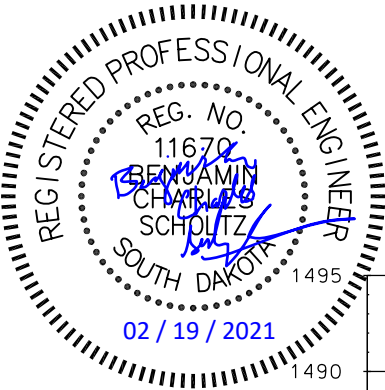


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| STATE OF SOUTH DAKOTA | PROJECT | SHEET | TOTAL SHEETS |
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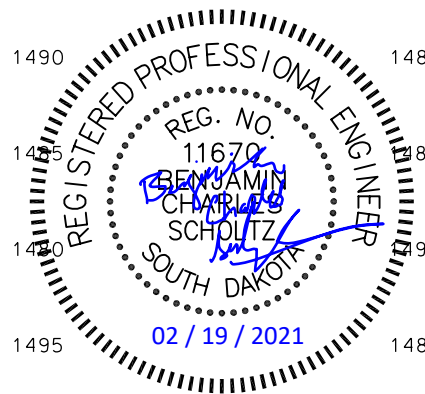
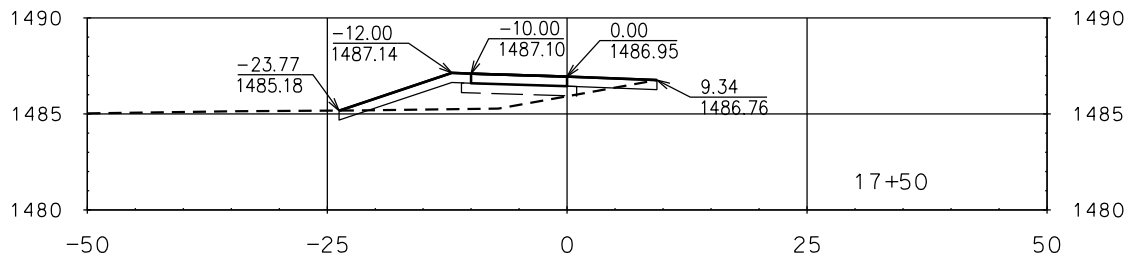
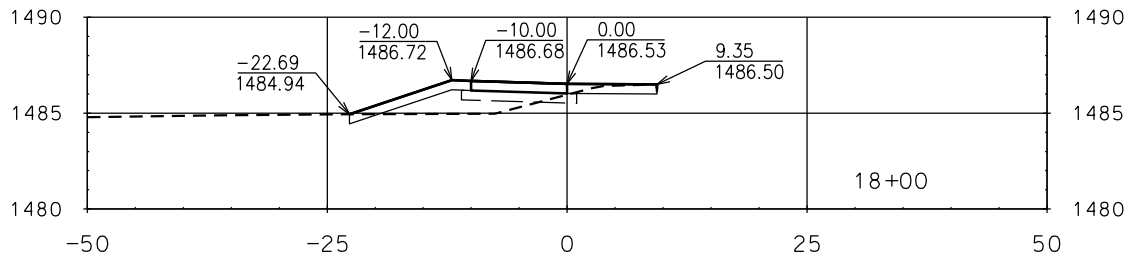
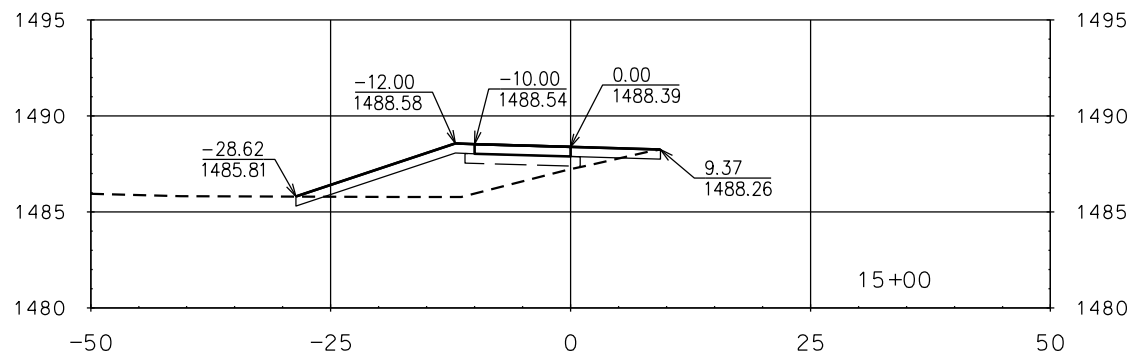
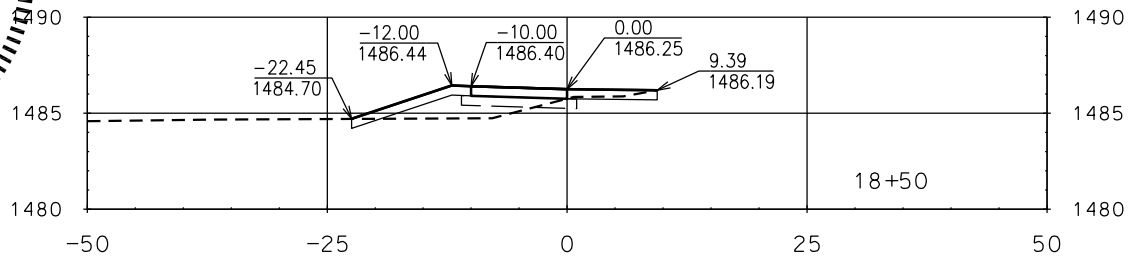
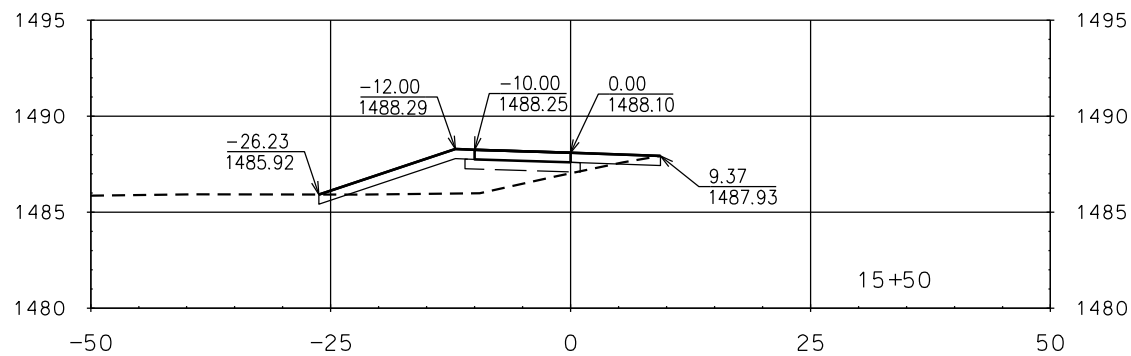
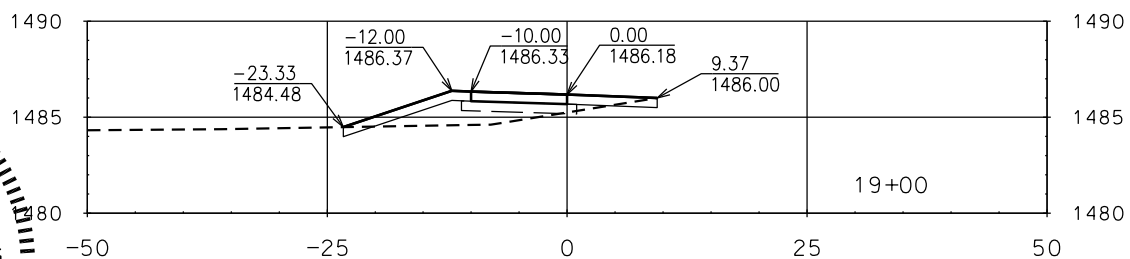
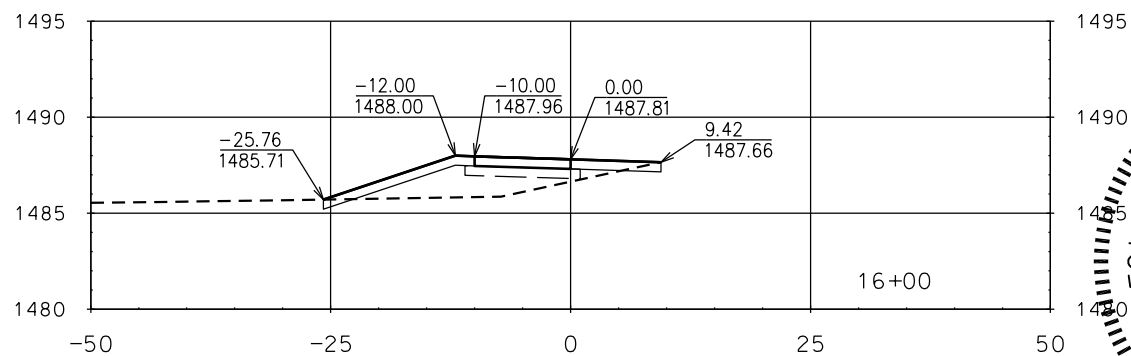
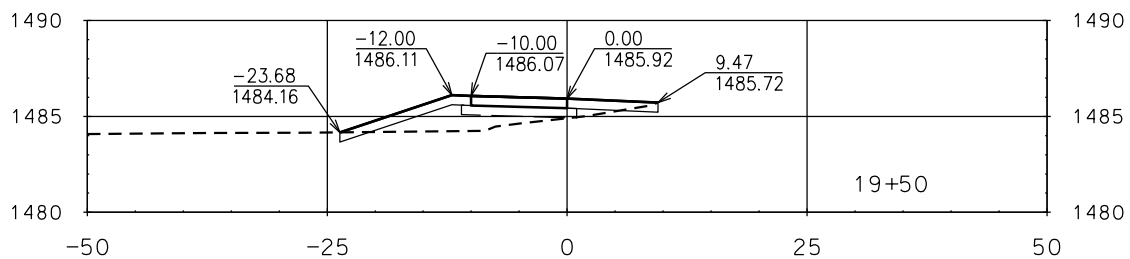
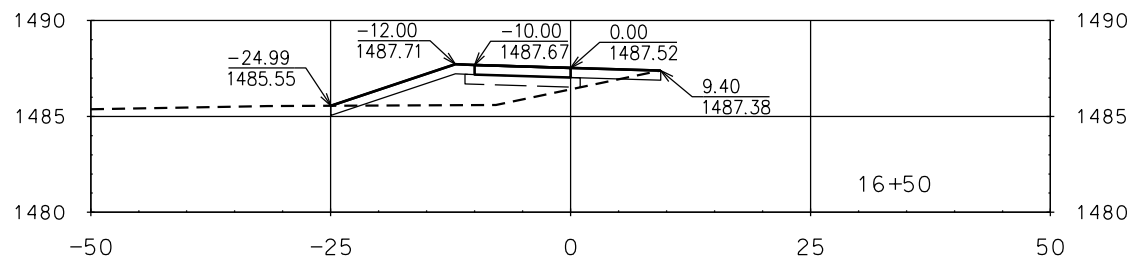
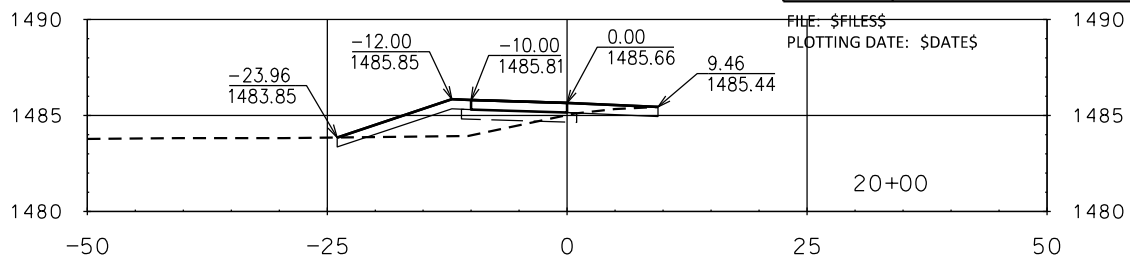
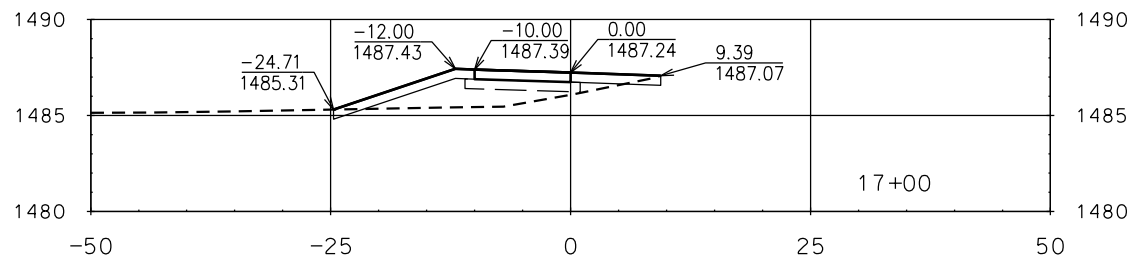


STA. 10+05 TO STA. 14+50



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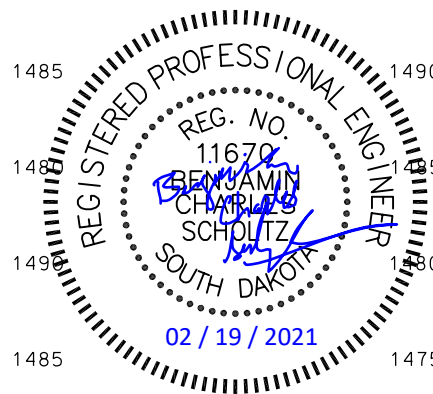
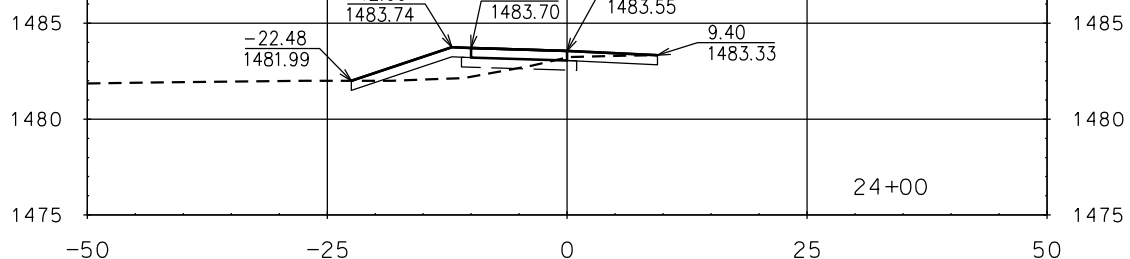
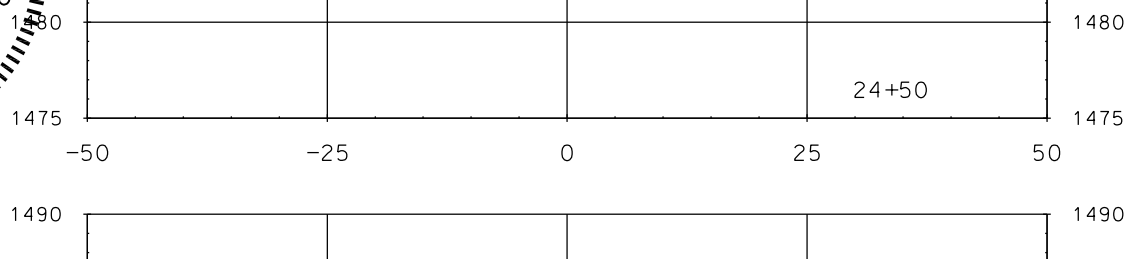
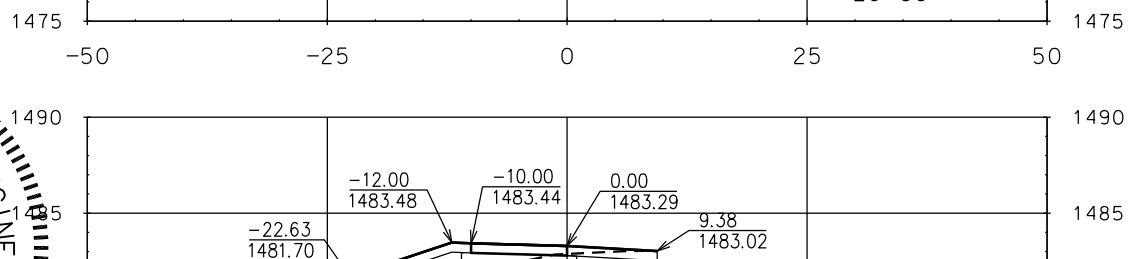
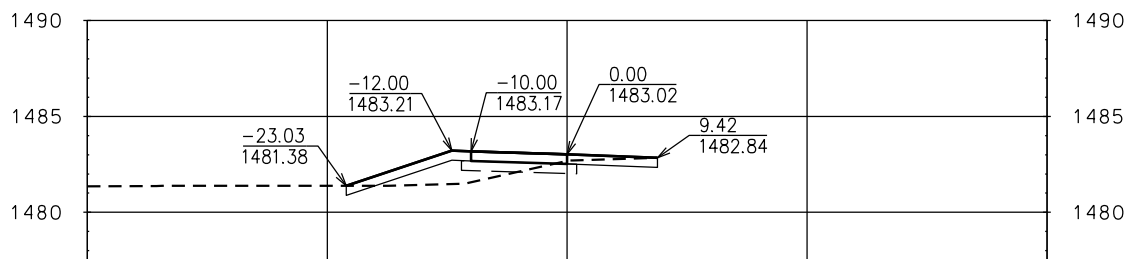
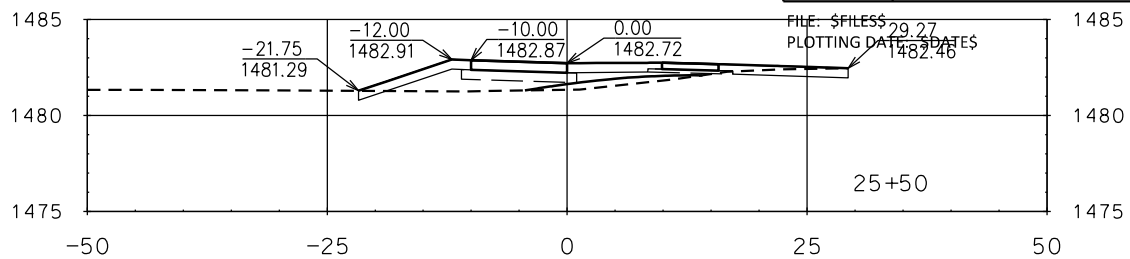
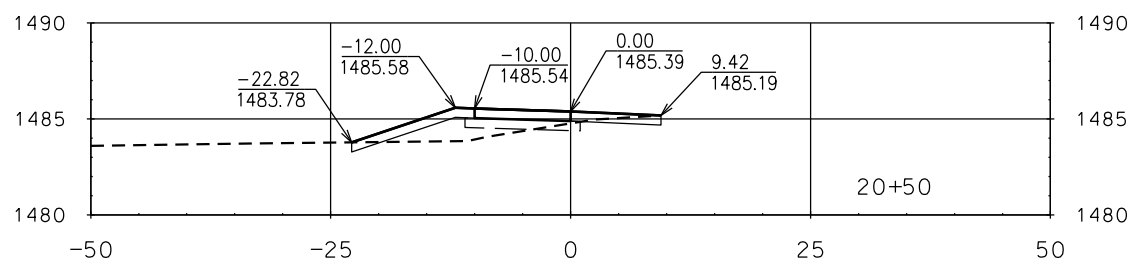
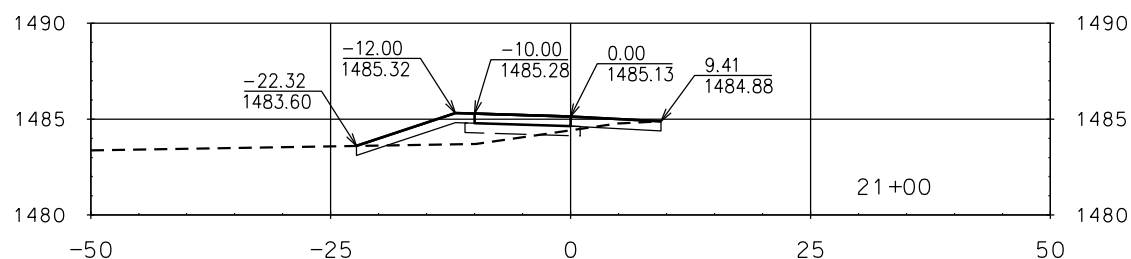
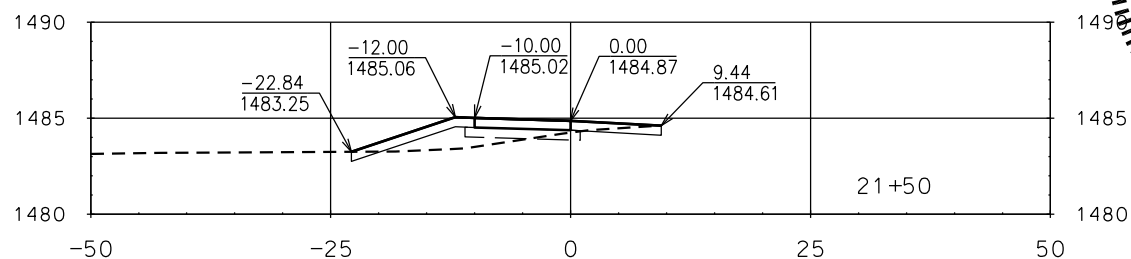
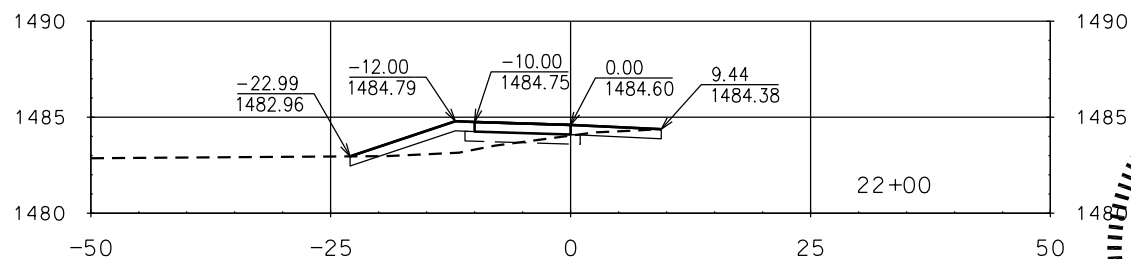
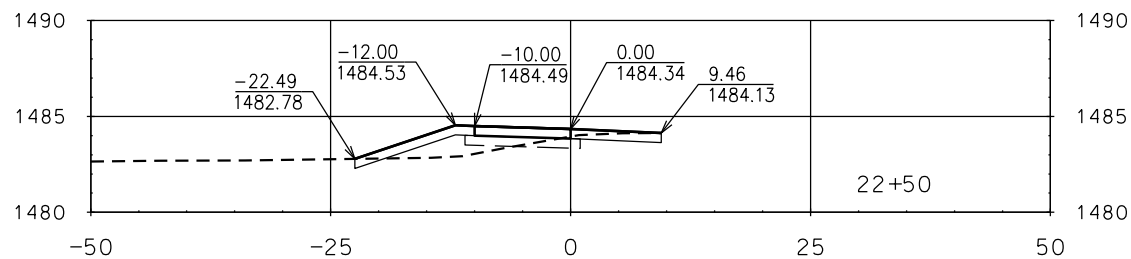
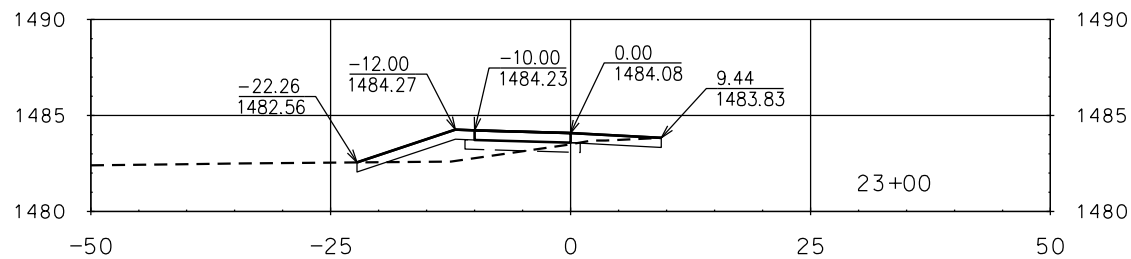


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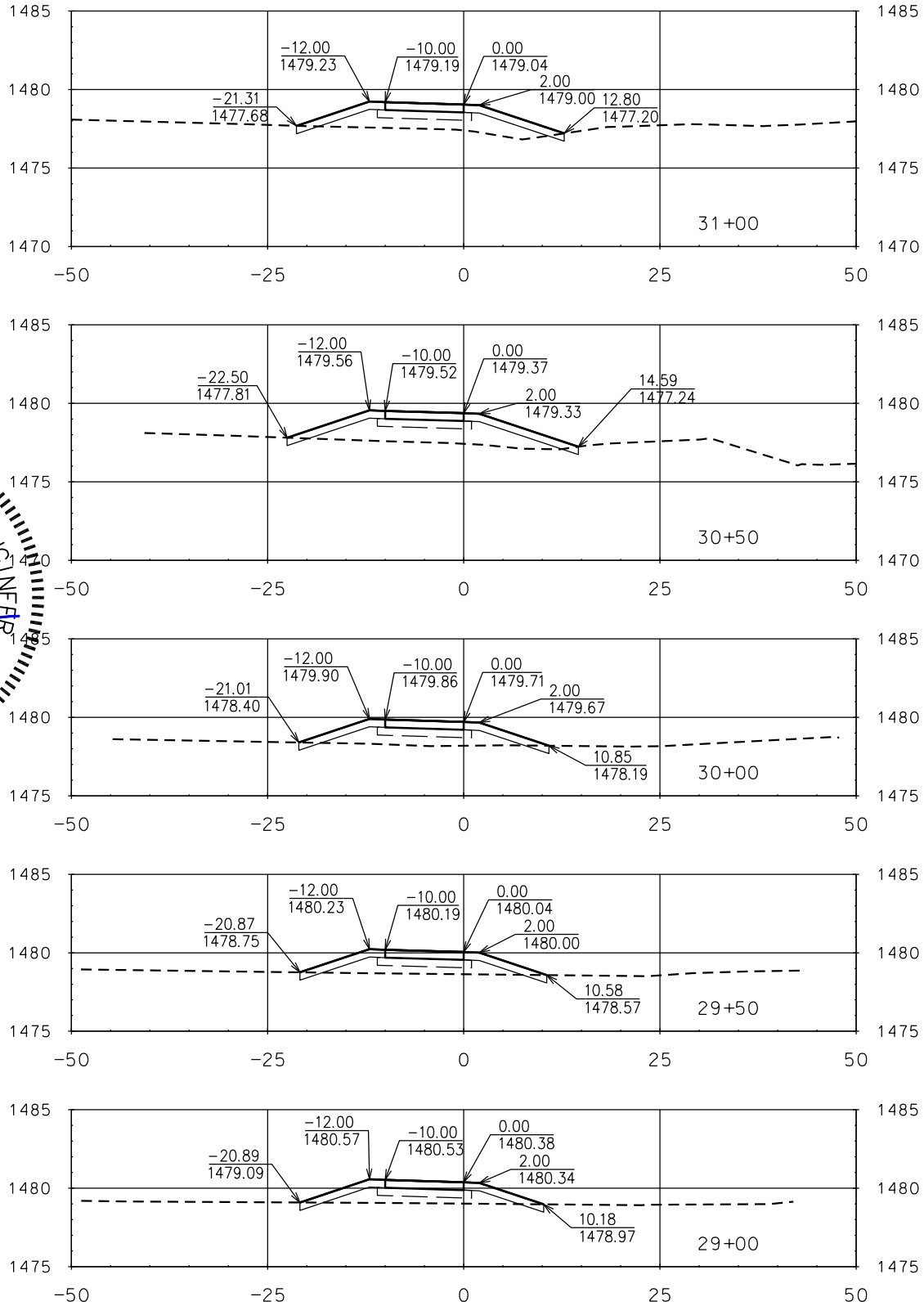
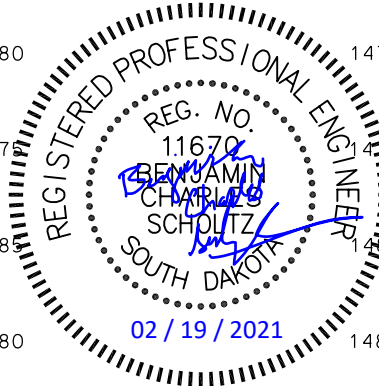
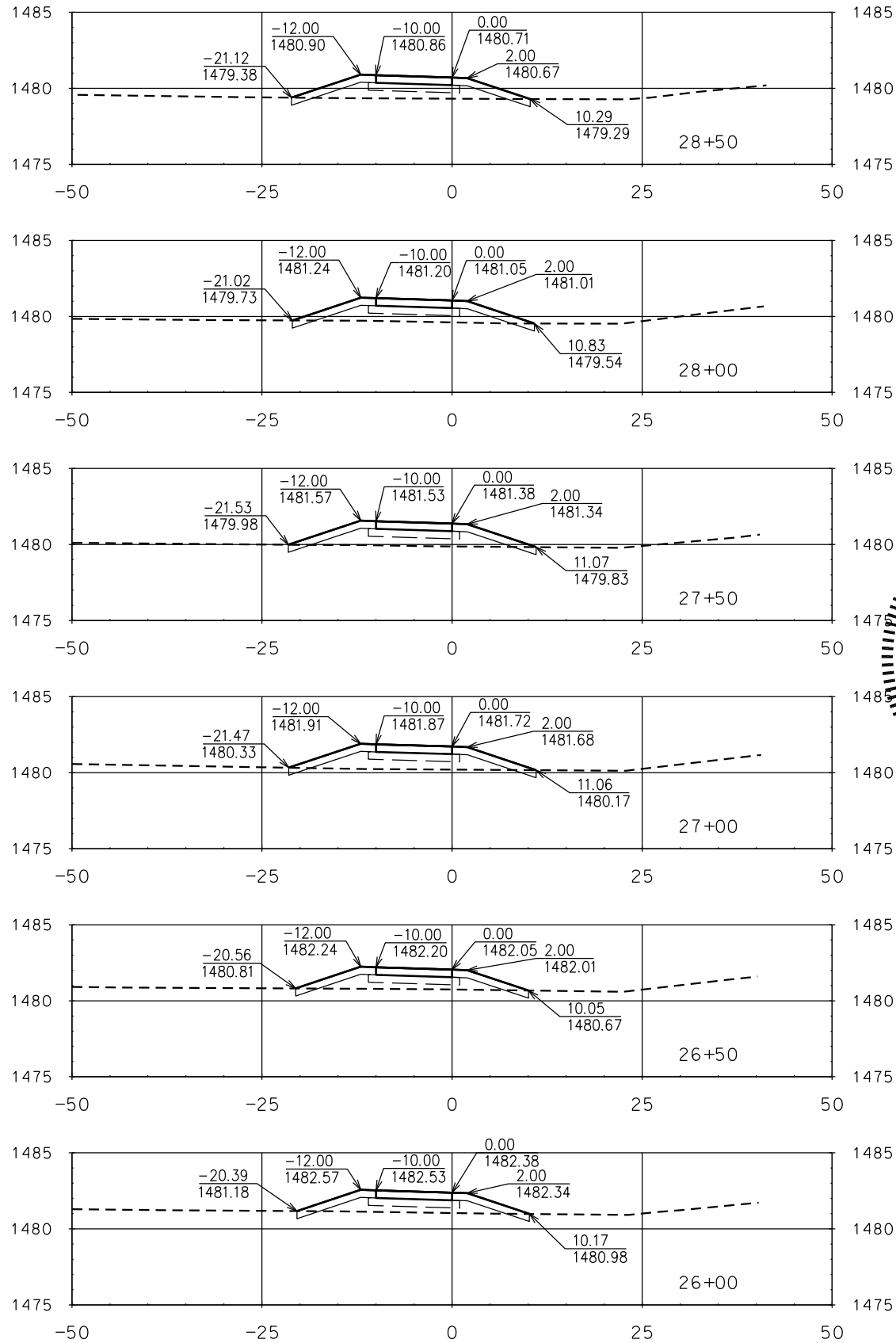


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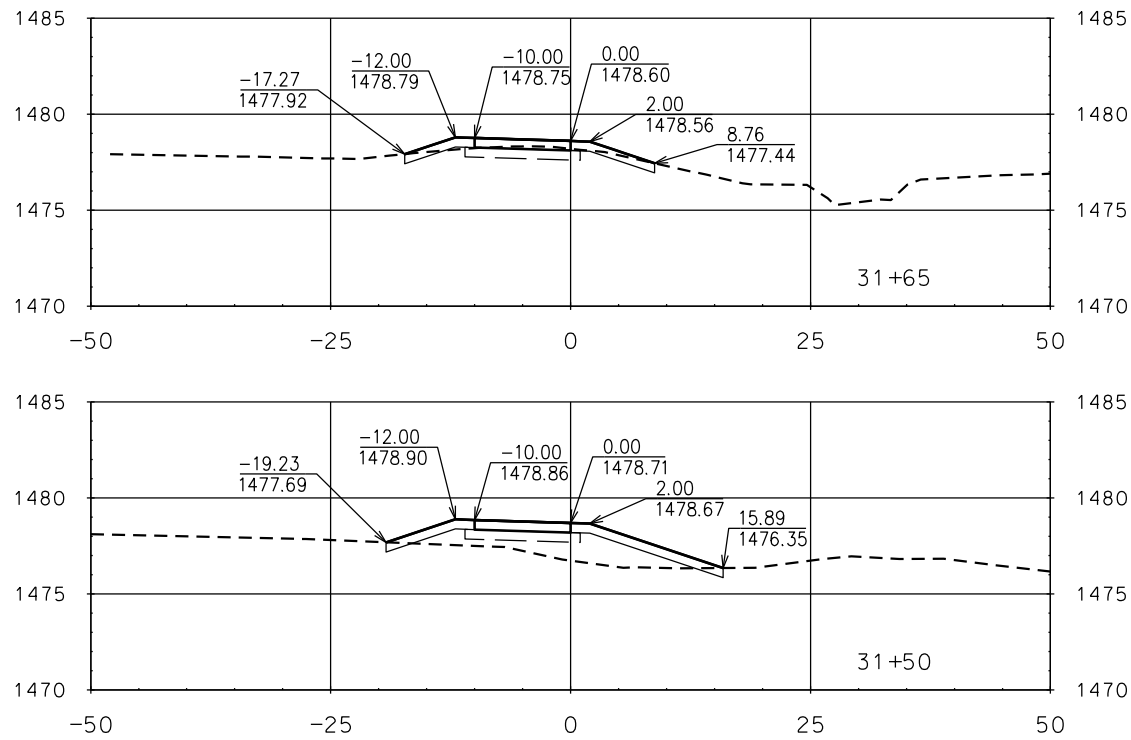


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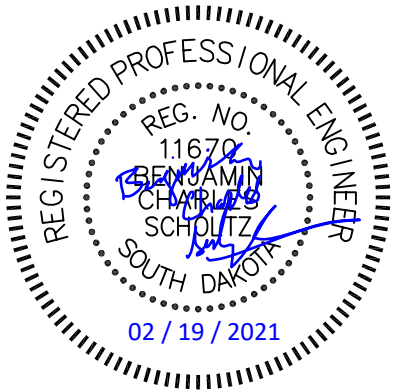
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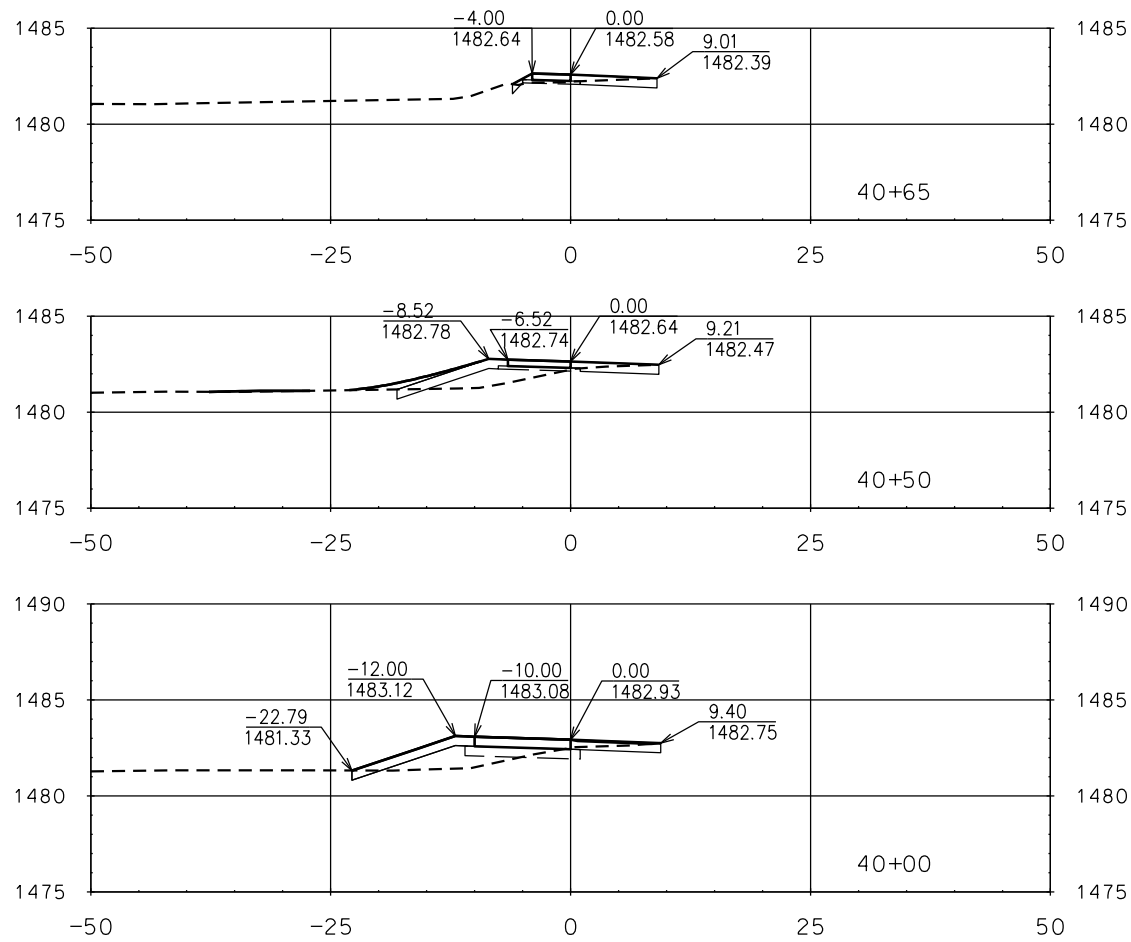


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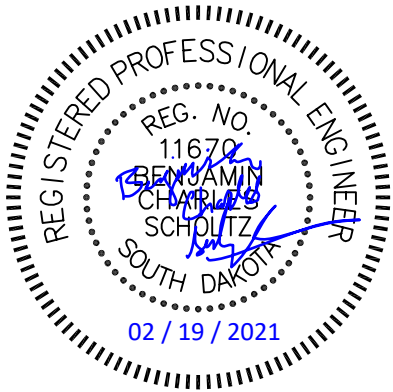
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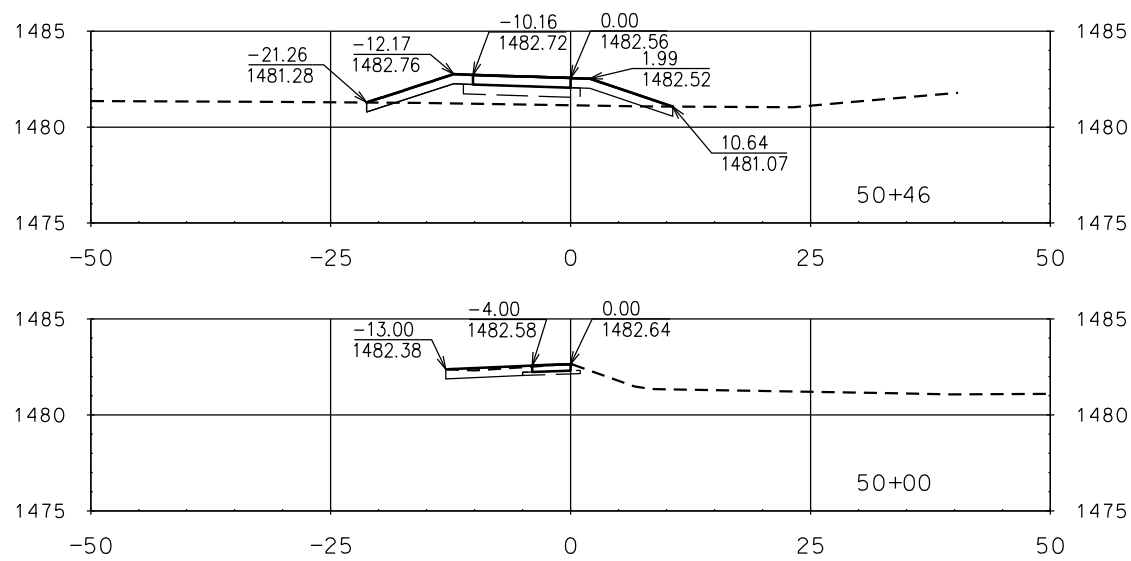


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