

FOR BIDDING PURPOSES ONLY

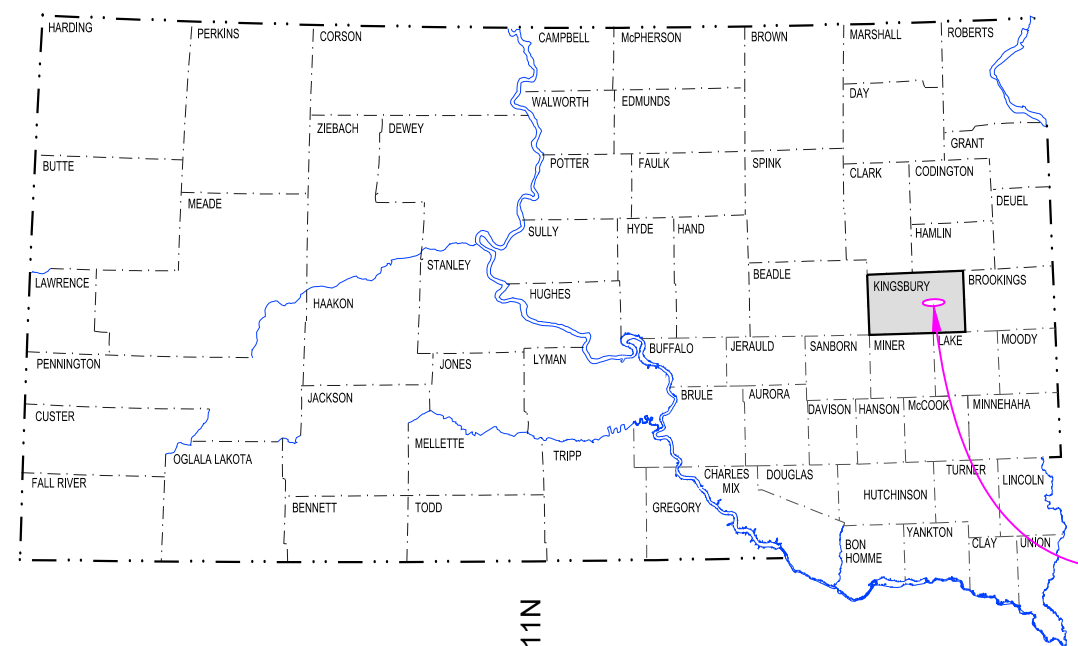
STATE OF SOUTH DAKOTA
DEPARTMENT OF TRANSPORTATION
PLANS FOR PROPOSED

PROJECT P TAPR(60)
US HIGHWAY 14
KINGSBURY COUNTY

SIDEWALK & SIGNALIZED CROSSING
PCN 09QP

INDEX OF SHEETS

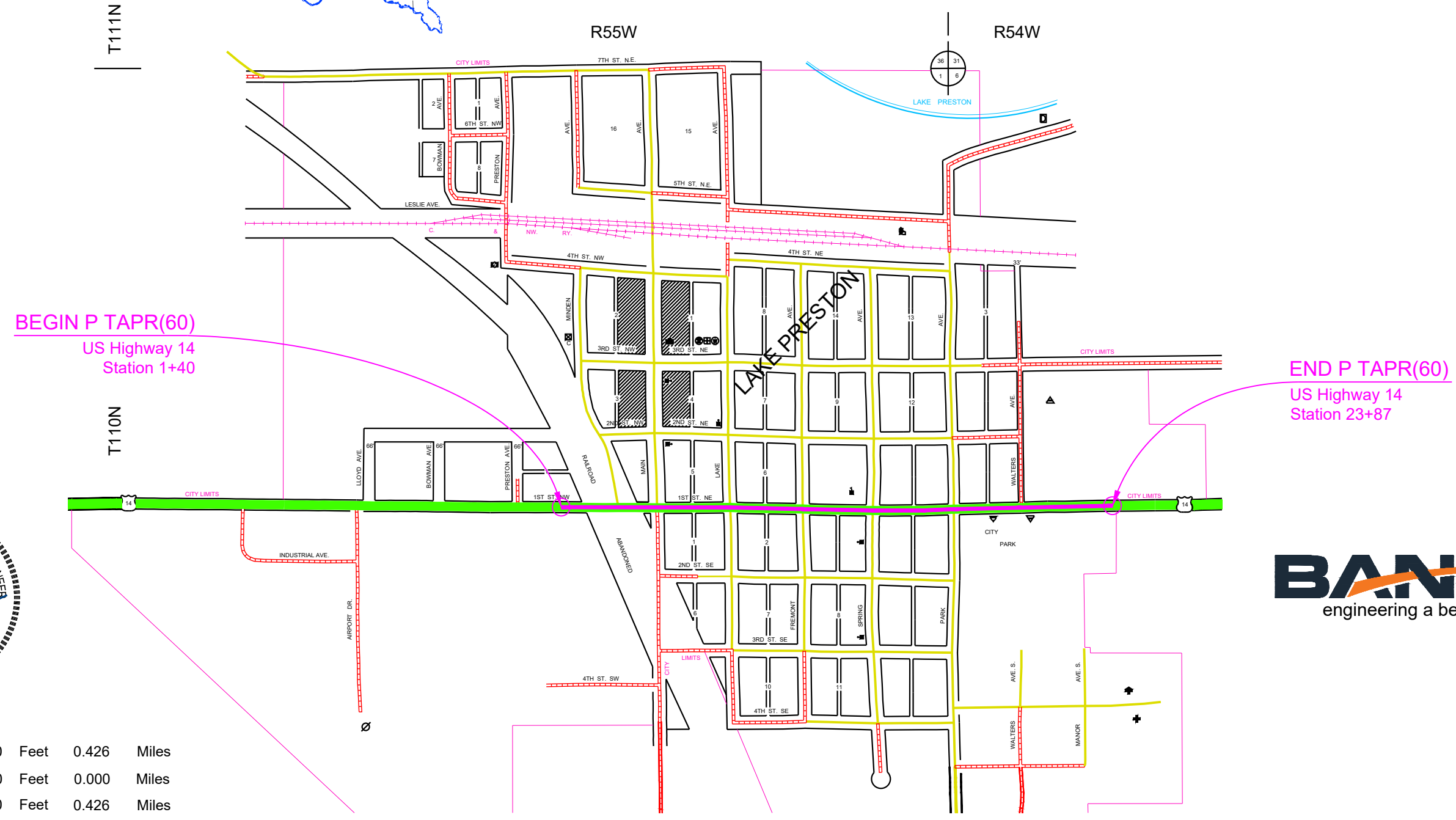
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PROJECT

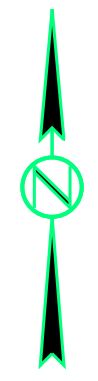
STORM WATER PERMIT
None required

DESIGN DESIGNATION
AADT (2025) 2386
AADT (2045) 3436
AADT T% 20.7%
V 30 mph



BEGIN P TAPR(60)
US Highway 14
Station 1+40

END P TAPR(60)
US Highway 14
Station 23+87



Gross Length	2,247.00	Feet	0.426	Miles
Length of Exceptions	0.00	Feet	0.000	Miles
Net Length	2,247.00	Feet	0.426	Miles

FOR BIDDING PURPOSES ONLY

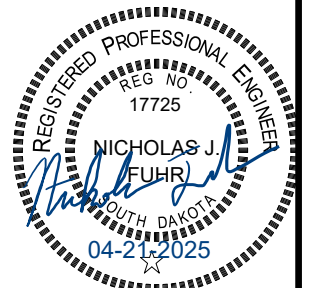
STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	P TAPR(60)	2	68

Rev 4/21/2026 NJF

Estimate of Quantities

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
009E3200	Construction Staking	Lump Sum	LS
009E3301	Engineer Directed Surveying/Staking	20.0	Hour
009E4100	Construction Schedule, Category I	Lump Sum	LS
100E0100	Clearing	Lump Sum	LS
110E0130	Remove Traffic Sign	16	Each
110E0300	Remove Concrete Curb and/or Gutter	903	Ft
110E1100	Remove Concrete Pavement	254.6	SqYd
110E1130	Remove Concrete Driveway Pavement	442.4	SqYd
110E1140	Remove Concrete Sidewalk	1,469.5	SqYd
110E1520	Remove Signal Equipment	Lump Sum	LS
110E7150	Remove Sign for Reset	5	Each
120E0010	Unclassified Excavation	792	CuYd
260E2010	Gravel Cushion	722.0	Ton
260E3500	Temporary Gravel Surfacing	50.0	Ton
380E3025	6" Reinforced PCC Driveway Pavement	206.0	SqYd
380E3525	6" Reinforced PCC Approach Pavement	628.4	SqYd
380E4050	8" PCC Fillet Section	274.2	SqYd
632E1320	2.0"x2.0" Perforated Tube Post	13.0	Ft
632E3203	Flat Aluminum Sign, Nonremovable Copy High Intensity	30.0	SqFt
632E3205	Flat Aluminum Sign, Nonremovable Copy Super/Very High Intensity	16.0	SqFt
632E3500	Reset Sign	5	Each
633E0030	Cold Applied Plastic Pavement Marking, 24"	88	Ft
633E5015	Grooving for Cold Applied Plastic Pavement Marking, 24"	88	Ft
634E0010	Flagging	20.0	Hour
634E0110	Traffic Control Signs	169.0	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
634E0575	Remove Pavement Marking, Area	352.0	SqFt
634E2015	Temporary Pedestrian Access Route	Lump Sum	LS
635E4010	1 Section Vehicle Signal Head	2	Each
635E5020	2' Diameter Footing	12.0	Ft
635E5301	Type 1 Electrical Junction Box	2	Each
635E5510	Signal Flasher Unit	2	Each
635E5980	Rectangular Rapid Flashing Beacon System	1	Each
635E6200	Miscellaneous, Electrical	Lump Sum	LS
635E8120	2" Rigid Conduit, Schedule 40	210	Ft
635E8220	2" Rigid Conduit, Schedule 80	70	Ft
635E9020	1/C #10 AWG Copper Wire	180	Ft
635E9502	2/C #14 AWG Copper Tray Cable, K2	90	Ft
635E9506	6/C #14 AWG Copper Tray Cable, K2	90	Ft
650E0080	Type B68 Concrete Curb and Gutter	152	Ft
650E4680	Type P8 Concrete Gutter	695	Ft

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
651E0160	6" Reinforced Concrete Sidewalk	20,736	SqFt
651E7000	Type 1 Detectable Warnings	479	SqFt
734E0010	Erosion Control	Lump Sum	LS
734E0845	Sediment Control at Inlet with Frame and Grate	22	Each
900E1310	Concrete Washout Facility	1	Each
900E5410	Modify Sprinkler System	Lump Sum	LS



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

If a Contractor needs access to state waters for extraction, the Contractor must obtain a water right, through the application of a Temporary Permit to Use Public Waters before work begins.

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

Action Taken/Required:

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

Temporary permit to use public waters for highway construction purposes application can be found on the SDDANR website:
<https://danr.sd.gov/OfficeOfWater/WaterRights/PermitForms/default.aspx>

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

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

COMMITMENT E: STORM WATER

Construction activities constitute less than 1 acre of disturbance.

Action Taken/Required:

At a minimum and regardless of project size, appropriate erosion and sediment control measures must be installed to control the discharge of pollutants from the construction site.

COMMITMENT H: WASTE DISPOSAL SITE

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

Action Taken/Required:

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

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

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

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

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

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

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

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 150 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 area.

Table of Section 4(f) Property

Station	Section 4(f) Property
19+00-23+87 R	Thorsnes Park
19+00-23+87 R	Lake Preston Tourist Park Historic District

The locations and boundaries of the site(s) are shown in the Grading Plans.

Action Taken/Required:

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

Pedestrian detours and access routes will be provided by the contractor and will be submitted for review and approval by the Project Engineer.

Access to Lake Preston Tourist Park Historic District shall always be maintained during construction activities via flagging operations and/or an approved detour.

Temporary construction fencing shall be installed along proposed construction limits prior to the start of construction activities to protect the existing 4(f) property and the public.

Appropriate signage shall be installed to alert users of Lake Preston Tourist Park Historic District of construction activities, access restrictions or closures, and to direct users to secondary access points.

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 shall be required to closely coordinate the construction schedule with SDDOT and SHPO prior to the start of construction activities.

The Contractor is not permitted to stage equipment or materials within Thorsnes Park or the Lake Preston Tourist Park Historic District. 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.

GRADING OPERATIONS

Excess excavation beyond that required to blend into adjacent grade will be transported and stockpiled north of the Prairie Ag Elevator grain storage (Approx. N205605.14, E2655506.05) at a city supplied site. Care will be taken to keep topsoil material separate from other spoils. All excess excavation will be transported to the site through Park Avenue, with particular care taken regarding reasonable speeds through the corridor. No separate payment will be made for haul and all costs associated will be incidental to the contract unit price per cubic yard of Unclassified Excavation.

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".

It will be noted that additional gravel cushion will be required to raise the grade in front of the City Pool entrance beyond the 4" depicted in the typical section. This additional quantity has been included in the estimated quantity.

UTILITIES

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

<p>City of Lake Preston Utility – Water, Sanitary, Storm 111 3rd St. NE Lake Preston, SD 57249 Phone: (605) 847-4140</p>	<p>Northwestern Energy Utility – Gas 1232 22nd Ave. S Brookings, SD 57006 Phone: (800) 245-6977</p>
<p>Kingbrook Rural Water Utility – Water 302 E Ash St. Arlington, SD 57212 Phone: (605) 983-5074</p>	<p>Otter Tail Power Company Utility – Electric PO Box 392 Milbank, SD 57252 Phone: (605) 862-6300</p>
<p>Ledcor Technical Services (LTS) Utility – Phone, Cable, Internet Suite 200 6405 Mira Mesa Blvd San Diego, CA 92121 Phone: (858) 527-6400</p>	<p>SDN Communications Utility – Phone, Cable, Internet 2900 W 10th St. Sioux Falls, SD 57104 Phone: (800) 247-1442</p>
<p>Lumen Technologies Utility – Phone, Cable, Internet 15 4th Ave. SW Aberdeen, SD 57401 Phone: (605) 339-5773</p>	<p>Valley FiberCom PO Box 107 209 Kasan Ave. Volga, SD 57071 Phone: (866) 453-4237</p>
<p>Mediacom Communications Utility – Phone, Cable, Internet 948 22nd Ave. S Brookings, SD 57006 Phone: (855) 633-4226</p>	

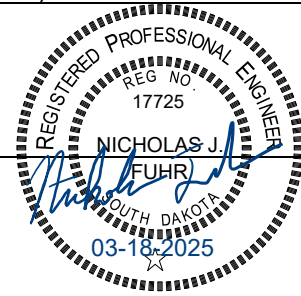


TABLE OF UNCLASSIFIED EXCAVATION

Station to	Station	Side	*General Excavation (CuYd)	*Topsoil Stripping (CuYd)	Unclassified Exc. (CuYd)
1+39	5+31	L	78	3	81
1+41	5+40	R	88	52	140
5+72	9+61	L	45	7	52
5+66	9+64	R	47	61	108
10+03	13+93	L	55	2	57
10+04	13+90	R	43	55	98
14+33	18+56	L	31	5	36
14+40	18+57	R	45	7	52
18+83	23+94	R	94	73	167
*Quantity included in Unclassified Excavation				Total	792

PROCEDURES FOR DETERMINING UNCLASSIFIED EXCAVATION QUANTITY

Plans quantity will be used for payment of the Unclassified Excavation quantity.

CLEARING

Work required under this bid item includes removing the stump near the proposed sidewalk at 18+30 – 39' Rt, as well as any other obstructions found during construction as directed by the Engineer. The Contractor will remove the stump and root base and backfill with topsoil. All labor, tools and materials required to complete the work is incidental to the lump sum price for "Clearing".

REMOVAL OF EXISTING CONCRETE PAVEMENT

Existing asphalt concrete and/or existing asphalt concrete patch work that was placed above the existing concrete pavement is included in the quantity for "Remove Concrete Pavement". The Contractor will dispose of the concrete pavement and asphalt concrete at a site approved by the Engineer.

Concrete removals inside of an existing fillet that are required to be removed for an ADA ramp opening will be paid for under the bid item "Remove Concrete Pavement". Any curb and gutter outside of the fillet that will be required to be removed will be paid for under the bid item "Remove Concrete Curb and Gutter". Concrete pavement removals proposed ADA ramp openings will be approved by the Engineer.

SEDIMENT CONTROL AT INLETS WITH FRAMES AND GRATES

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

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

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

sediment removal, and repairing Sediment Control at Inlet with Frame and Grate will be incidental to the contract unit price per each for "Sediment Control at Inlet with Frame and Grate".

The device will be installed in reinforced concrete drop inlets in accordance with the manufacturer's recommendations at locations immediately adjacent to construction activities.

Sediment collection devices will be:

A sediment control device as shown on Standard Plate 734.10. Filter fabric used for constructing the sediment control at inlets with frames and grates will be the same type of fabric that is used in high flow silt fence from the approved product list. The approved product list may be viewed at the following internet site:

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

SIDEWALK ADJACENT TO BUILDINGS

Expansion joint along the barrier wall and pool building will be recessed 5/8" and filled with Hot Poured Elastic Joint Sealer.

When placing sidewalk adjacent to buildings, the elevation of the new sidewalk may be either higher or lower than the existing sidewalk. This may require that modification be made to building exteriors such as: removal of siding, installation of flashing, installation of siding, or other necessary modifications. Building modifications will be approved by the Engineer. All costs associated with modifying the buildings for sidewalk placement will be incidental to the contract unit price per square foot for the corresponding concrete sidewalk contract item.

Sidewalk placed adjacent to building doorways should nearly match the doorway threshold and will have a maximum 1/4-inch vertical rise at the doorway threshold. A sidewalk turning space will be provided at building doorways in accordance with the plans. Sidewalk should ramp or slope down from the turning space to the typical sidewalk as specified in the plans. Additional sidewalk ramp or slope locations may be required. In the plans, the locations without ramps were assumed by the design Engineer as sites that slopes of less than 5 percent could be used from the turning space to the typical sidewalk. The limits of the ramp and steepened sidewalk shown in the plans may need to be adjusted to the actual doorway location and to meet sidewalk slope requirements as specified in the plans.

Sediment collection devices must not be installed more than three days before work begins. Sediment collection devices will be removed as soon as the work near the inlet has been completed.

PLUGGING BARRIER WALL DRAINAGE HOLES

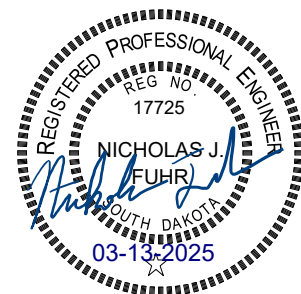
Existing drainage holes at the base of the concrete barrier wall along the city pool building will be filled with an approved non-shrink grout. Woven geotextile fabric will be placed against the filled holes prior to backfilling base course along the barrier wall to prevent loss of material in the event of loss of grout. All costs associated with cleaning and plugging the drainage holes will be incidental to the contract unit price per square foot for the corresponding concrete sidewalk contract item.

STEEL BAR INSERTION

The Contractor will insert the Steel Bars (No. 5 x 24 inch epoxy coated deformed tie bars) into drilled holes in the existing concrete pavement. Anchoring of the steel bars in the drilled holes will conform to the Specifications and Standard Plate 380.10.

The steel bars will be cut to the specified length by sawing or shearing and will be free from burring or other deformations.

Cost for the epoxy resin adhesive, steel bars, drilling of holes, inserting the steel bars into the drilled holes, and all other items incidental to the insertion of the steel bars shall be incidental to the corresponding fillet and curb and gutter bid items.



TYPE 1 DETECTABLE WARNINGS

Detectable warnings will be in compliance with the Americans with Disabilities Act regulations.

The detectable warnings will be installed according to the manufacturer's installation instructions.

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

The detectable warnings will be cast iron. Cast iron plates may be a natural patina (weathered steel).

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

<u>Type 1 Detectable Warnings</u>	
<u>Product</u>	<u>Manufacturer</u>
Detectable Warning Plate Cast Iron Plate	Neenah Foundry Company Neenah, WI 800-558-5075 http://www.neenahfoundry.com/
Detectable Warning Plate Cast Iron Plate	Deeter Foundry Lincoln, NE 800-234-7466 http://www.deeter.com/
Detectable Warning Plate Cast Iron Plate(No Coating)	East Jordan Iron Works, Inc. 301 Spring Street East Jordan, MI 49727 800-626-4653 http://www.ejiw.com
Iron Dome Cast Iron Detectable Warning Tile	ADA Solutions, Inc. 323 Andover Street Suite 3 Wilmington, MA 01887 800-372-0519 https://adatile.com
TufTile (wet-set) Cast Iron Replaceable Tile	TufTile 1200 Flex Court Lake Zurich, IL 60047 888-960-8897 http://www.tuftile.com/
Advantage Tactile Detectable Warning Cast Iron Plate	Advantage Tactile Systems, Inc. 241 Main Street, Suite 100 Buffalo, NY 14203 800-679-4022 https://advantagetactile.com/

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

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

<u>Type 1 Detectable Warnings (Radius)</u>	
<u>Product</u>	<u>Manufacturer</u>
Detectable Warning Plate Cast Iron Plate 15', 20' Radius	Neenah Foundry Company Neenah, WI 800-558-5075 http://www.neenahfoundry.com/
Detectable Warning Plate Cast Iron Plate (No Coating) 15', 20' Radius	East Jordan Iron Works, Inc. 301 Spring Street East Jordan, MI 49727 800-626-4653 http://www.ejiw.com
Iron Dome Cast Iron Detectable Warning Tile 15', 20' Radius	ADA Solutions, Inc. 323 Andover Street Suite 3 Wilmington, MA 01887 800-372-0519 https://adatile.com
Advantage Tactile Detectable Warning Cast Iron Plate 15'20' Radius	Advantage Tactile Systems, Inc. 241 Main Street, Suite 100 Buffalo, NY 14203 800-679-4022 https://advantagetactile.com/

SPRINKLER SYSTEMS

There may be locations along the project where sprinkler systems will be encountered during construction. The Contractor will repair any damaged sprinkler systems to the extent that the functionality of the sprinkler system is retained after the project is complete at no additional cost to the owner.

Where replacement is necessary, the existing system will be replaced with the appropriate materials. All costs associated with the repair and replacement of the sprinkler system shall be incidental to the contract lump sum price for "Modify Sprinkler System."

Locations where pedestrian facility improvements will take place and sprinkler systems have been verified include:

406 1st ST NE (17+00 to 18+50 L) – Approximately 5 sprinkler heads directly behind existing sidewalk to be adjusted to behind proposed sidewalk.

EROSION CONTROL

All areas of soil disturbed by construction will require erosion control. For informational purposes only, the estimated area requiring erosion control is **0.4 acres**. All costs for the erosion control work for furnishing, placing, and maintaining erosion control including equipment, labor, seeding, and mulching will be incidental to the contract lump sum price for "Erosion Control".

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	Fulfs, Fulfs II, Quill, Salty	1.4
Total:		7

Seeding will be installed by drilling in accordance with Section 730. If grading impacts are minor, hand broadcasting of seed may be necessary as approved by the Engineer.

Fiber mulch will be applied in a separate operation following permanent seeding. Care will be taken to keep the sidewalk clean.

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 3,000 pounds per acre.

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

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

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

CONCRETE WASHOUT

A concrete washout will be installed on the project site at a location approved by the Engineer if concrete trucks deliver concrete to the site. No washout area is necessary if all concrete trucks are going to wash out at approved site constructed by the concrete supplier.

The Concrete Washout provided will be from the approved products list. The approved product list may be viewed at the following internet site:

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



TABLE OF REMOVALS

Station to	Station	Side	Curb and Gutter (Ft)	Concrete Pavement* (SqYd)	Concrete Driveway (SqYd)	Concrete Sidewalk (SqYd)
1+39	5+31	L	368	38.5	170.3	247.4
1+41	5+40	R	188	40.1	170.7	32.8
5+72	9+61	L	39	28.9		236.4
5+66	9+64	R	60	21.6	51.2	32.1
10+03	13+93	L	16	30		268.2
10+04	13+90	R	60	13.6	40.2	21.5
14+33	18+56	L	69	27.4		171.7
14+40	18+57	R	83	30		243.4
18+83	23+94	R		14.5		206
Field Determined			20	10	10	10
Total			903	254.6	442.4	1469.5

*Removal of curb and gutter in concrete fillet included in "Remove Concrete Pavement" bid item

TABLE OF SURFACING

Station to	Station	Side	Type B68 Concrete C&G (Ft)	Type P8 Concrete C&G (Ft)	8" PCC Fillet Section (SqYd)	6" Reinforced PCC Approach Pavement (SqYd)	6" Reinforced PCC Driveway Pavement (SqYd)	6" Reinforced Concrete Sidewalk (SqFt)
1+39	5+31	L	142	226	38	198.9	117.3	1517
1+41	5+40	R		180	38.8	167.8	52.2	1459
5+72	9+61	L		36	30.1	32.6		2321
5+66	9+64	R		60	21.2	56.5	18.1	2197
10+03	13+93	L			34.5			2783
10+04	13+90	R		60	29.4	56.7	8.4	2092
14+33	18+56	L		51	32.5	40.7		1573
14+40	18+57	R		72	30.7	65.2		2195
18+83	23+94	R			14			4399
Field Determined			10	10	5	10	10	200
Total			152	695	274.2	628.4	206	20736

*Installation of curb and gutter in concrete fillet included in corresponding "Fillet" bid item

TABLE OF TRAFFIC CONTROL SIGNING

Sign Description	Code	SIZE	SQFT PER SIGN	QUANTITY	SQFT
ROAD WORK AHEAD	W20-1	48"x48"	16.0	4	64.0
SHOULDER WORK	W21-5	48"x48"	16.0	2	32.0
END ROAD WORK	G20-2	36"x18"	4.5	2	9.0
ONE LANE ROAD AHEAD	W20-4	48"x48"	16.0	2	32.0
FLAGGER (symbol)	W20-7	48"x48"	16.0	2	32.0
					169.0



TABLE OF REMOVE/RESET SIGNING

Existing Station	Existing Offset	Proposed Station	Proposed Offset	Description	Remove Sign for Reset (Each)	Reset Sign (Each)	Remove Traffic Sign (Each)	Notes
1+65	31' L			No Truck Parking			1	
5+13	31' R	4+94	31' R	School Crossing	1	1		Sign to be reset without beacon.
5+11	30' L			No Truck Parking			1	
5+97	28' R	5+97	33' R	MRM 388/No Truck Parking	1	1	1	Reset MRM. Remove No Truck Parking Sign.
5+98	30' L	5+98	32' L	Museum/No Truck Parking	1	1	1	Reset Museum. Remove No Truck Parking Sign.
6+89	31' R			School/Speed Limit 15/ When Children Are Present			1	Remove Existing Signing on luminaire pole.
9+34	31' R			School Crossing/Arrow			1	
10+27	31' L			School Crossing/Arrow			1	
10+29	27' R			No Truck Parking			1	
13+51	28' R			School Crossing/Arrow			1	
13+68	31' L			No Truck Parking			1	
14+64	30' R			30 Minute Truck Parking			1	
14+83	31' L			School Crossing/Arrow			1	Remove Existing Signing on luminaire pole.
16+86	31' L			School/Speed Limit 15/ When Children Are Present/ 30 Minute Truck Parking			1	
17+54	31' R			School Crossing/Arrow			1	Remove Existing Signing on luminaire pole.
18+29	30' R	18+29	31' R	Camping/Arrow/ No Truck Parking	1	1	1	Reset Camping/Arrow. Remove No Truck Parking.
18+30	30' L	18+17	32' L	School Crossing	1	1		Sign to be reset without beacon.
19+15	27' R			No Parking/Arrow			1	
				Total	5	5	16	

TABLE OF PERMANENT SIGNING

Sign Description	Code	Station	Offset	Width (in)	Height (in)	High Intensity Quantity (SqFt)	Super/Very High Intensity Quantity (SqFt)	2.0"x2.0" Perforated Tube Post (Ft)	Notes	
AHEAD	W16-9P	4+94	31' R	24	12	2.0			Mount under reset School Crossing sign	
SCHOOL SPEED LIMIT 15 WHEN FLASHING	S5-1	6+89	31' R	24	48		8.0		Mount on luminaire pole under new flashing beacon	
FINES HIGHER	R2-6P	6+89	31' R	24	18	3.0			Mount on luminaire pole under new flashing beacon	
SPEED LIMIT 35	R2-1	6+89	32' L	24	30	5.0				
END SCHOOL ZONE	S5-2	6+89	32' L	24	30	5.0		13.0	Mount on same post	
AHEAD	W16-9P	18+17	32' L	24	12	2.0			Mount under reset School Crossing sign	
SCHOOL SPEED LIMIT 15 WHEN FLASHING	S5-1	14+83	31' R	24	48		8.0		Mount on luminaire pole under new flashing beacon	
FINES HIGHER	R2-6P	14+83	31' R	24	18	3.0			Mount on luminaire pole under new flashing beacon	
SPEED LIMIT 35	R2-1	17+54	31' R	24	30	5.0				
END SCHOOL ZONE	S5-2	17+54	31' R	24	30	5.0			Mount on luminaire pole	
						Total:	30.0	16.0	13.0	



SEQUENCE OF OPERATIONS

The Contractor will submit a sequence of operations for approval two weeks prior to the preconstruction meeting. If changes to the sequence of operations are proposed during the project, these must be submitted for review a minimum of one week prior to potential implementation. Approval for changes to the sequence of operations will only be allowed when the proposed changes meet with the Department's intent for traffic control and sequencing of the work.

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.

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

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

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

Fixed location signing placed more than 4 calendar days prior to the start of construction will be covered or laid down until the time of construction. The covers must be approved by the Engineer prior to installation. The cost of materials, labor, and equipment necessary to complete this work will be incidental to other contract items. No separate payment will be made.

All fixed location signs, sign posts, and breakaway bases will be removed within 7 calendar days following pavement marking.

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.

Access can be achieved by utilizing the existing concrete sidewalk, temporary boardwalks, or flexible sidewalk mats.

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. Pedestrian traffic signal displays controlling a crosswalk that is closed will be covered or removed.

Type II Barricades and temporary pedestrian signing are incidental to the bid item for "Temporary Pedestrian Access Route".

TEMPORARY PEDESTRIAN SIDEWALK

Temporary pedestrian sidewalk will be a smooth, continuous, non-slip, hard surface. There should be no curbs or abrupt changes in grade or terrain that could cause tripping or be a barrier to wheelchair use.

Temporary pedestrian sidewalk will have a minimum width of 48 inches, with 60 inches recommended. The Contractor will try to provide boulevard sidewalk, whenever possible, for temporary pedestrian sidewalk that is 48 inches wide. Temporary pedestrian sidewalk less than 60 inches wide will provide for a 60-inch x 60-inch passing space at intervals not to exceed 200 feet. Temporary pedestrian sidewalk will have a maximum cross slope of 2%. The maximum grade will be 5% where the temporary pedestrian sidewalk does not follow the grade of the road.

All costs associated with installing and maintaining a temporary pedestrian access route, including temporary pedestrian sidewalk, will be incidental to the contract lump sum price for "Temporary Pedestrian Access Route".

TEMPORARY SIDEWALK, FLEXIBLE SIDEWALK

Temporary Sidewalk, Flexible Sidewalk (TSFS) will be as specified per the section Temporary Pedestrian Sidewalk requirements.

In addition, TSFS will require the following:

1. TSFS will be installed as per the manufacturer's installation recommendations or as approved by the Engineer.
2. If placed directly on existing ground, TSFS will meet all requirements for grade and cross slope as listed under Temporary Pedestrian Sidewalk.
3. If TSFS is placed directly on existing ground, in-place vegetation that is damaged or destroyed will be repaired or replaced back to its original condition by the Contractor at no cost to the State as approved by the Engineer.
4. TSFS will be used in conjunction with other traffic control and pedestrian traffic control items to best meet ADA compliance and as approved by the Engineer to best fit field conditions.

Temporary Sidewalk, Flexible Sidewalk mats can be utilized for those applications that require short duration use to maintain pedestrian pathways across streets or paths under partial construction. These crossings are considered to have a higher amount of maintenance than a typical long term temporary pedestrian access route. These crossings are typically utilized in an urban setting under partial width construction to facilitate frequent removal and resetting to accommodate utility and road work.

All costs associated with ground preparation, installing, maintaining, removing and resetting the temporary sidewalk, flexible sidewalk will be incidental to the contract lump sum price for "Temporary Pedestrian Access Route".

CONCRETE SIDEWALK

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

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

Reinforcement will be #4 steel bars with 30" longitudinal and transverse spacing. All costs for concrete and steel reinforcement will be included in the bid item "6" Reinforced Concrete Sidewalk."

GENERAL PERMANENT SIGNING

New sign installations will be staked in the field by the Contractor and checked by the Engineer. The Contractor will give the Engineer a minimum of one week to check staked locations prior to signpost installation. Lateral offset of signs will be as shown in the plans or as directed by the Engineer.

The Contractor will be responsible for contacting South Dakota One Call to locate the utilities at the staked sign installation locations.

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

The height of the post must not exceed the minimum height needed by more than 0.5 feet. Any portion that extends above the sign will be cut off. No separate payment will be made for cutting the post or for that length cut off.

Aluminum U-Channel stiffeners will be used on all signs 36 inches or greater in width and will conform to ASTM B221 Alloy 6063-T6 or 6061-T6. The U-Channel will be 2 inches in width and free of holes. The U-Channel stiffeners will also be used to connect various signs together so that an entire sign assembly can be erected on a single installation. Stiffeners may be fastened to signs by use of 1/4-inch diameter drive rivets.

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

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

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



STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	P TAPR(60)	11	68

TEMPORARY GRAVEL SURFACING

To provide interim access to existing homes and businesses, the Contractor will install temporary gravel access as instructed by the Engineer.

- At a minimum, the Contractor will provide a 10' wide gravel access road. The ends of the access will have a smooth transition onto the existing proposed pavements.
- Temporary gravel will be a minimum of 6" thick.
- The contractor will re-grade the access road as directed by the Engineer.
- All costs for furnishing, installing, maintaining, and removing of the temporary gravel road will be incidental to the contract unit price per ton for "Temporary Gravel Surfacing".
- The gravel material installed will be used to supplement final gravel approach tie-in locations. All costs to remove and reinstall will be incidental to the bid item "Temporary Gravel Surfacing".

REMOVE SIGN FOR RESET AND RESET SIGN

Signs that are scheduled for reset will be dismantled and reassembled to the extent needed by the Contractor to properly reset the sign. Signs will be handled with care so that the existing signs, posts, and bases are not damaged during the relocation process. The Contractor will replace and pay for any reset signs damaged in their care. The Contractor will remove and dispose of any existing posts for all reset signs that require use of new posts as shown in the Table of Permanent Signing.

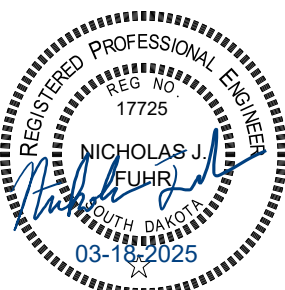
All costs for removing, dismantling, and disposing of any existing posts will be incidental to the contract unit price per each for "Remove Sign for Reset". All costs for resetting the existing signs will be incidental to the contract unit price per each for "Reset Sign". All quantities for Remove Sign for Reset and Reset Sign will be per assembly at the contract unit price per each.

NEW PERMANENT SIGNING

All signs will be manufactured in accordance with the sheeting manufacturer's recommendations utilizing a matched component system, including inks, electronic cuttable films, and protective overlay films.

All Flat Aluminum Signs, Nonremovable Copy High Intensity will have sheeting in conformance with the requirements of ASTM D4956 Type IV. All Flat Aluminum Signs, Nonremovable Copy Super/Very High Intensity will have sheeting in conformance with the requirements of ASTM D4956 Type XI.

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



SQUARE TUBE ANCHOR SLEEVE

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

COLD APPLIED PLASTIC PAVEMENT MARKING

All materials will be applied as per the manufacturer's recommendations.

Cold Applied Plastic Pavement Markings will be 3M Series 380 AW or an approved equal.

SAW CUTTING

All necessary saw cutting will be incidental to the corresponding removal bid item. It should be noted that existing curb and gutter is formed into the adjacent highway lane monolithically and will require saw cutting at 2.67' from the back of curb.

RECTANGULAR RAPID FLASHING BEACON SYSTEM

A Rectangular Rapid Flashing Beacon (RRFB) system will be in conformance with the current MUTCD and will consist of the following components:

- Individual RRFB displays as shown in the plans
- Pedestal Signal Pole with mounted Pedestrian Signal push buttons as shown in the plans
- W11-2 (pedestrian crossing) signs as shown in the plans
- W16-7P (diagonal arrow) plaques as shown in the plans
- R10-25 (push button) signs as shown in the plans
- All necessary electronic programming and flash units, hardware, and wiring to make the system operational

One RRFB system is necessary for each pedestrian crossing location shown in the plans.

The programmed flash time will be per the manufacturer's recommendations, per the plan view layout.

A small light directed at and visible to pedestrians in the crosswalk will be installed integral to the RRFB or push button, to give confirmation that each beacon is in operation.

All enclosures will be aluminum and comply with the requirements for NEMA 3R type.

All materials and installation costs necessary for the operation of each system will be incidental to the contract unit price per each for "Rectangular Rapid Flashing Beacon System".

PEDESTAL SIGNAL POLES

Pedestal signal poles may be aluminum. Aluminum poles will conform to the following requirements:

Aluminum will conform to ASTM B221, Alloy 6061, and Temper T6.

Poles will be round with a minimum outside pole diameter of 4 inches, and the pole assembly will have a square, cast aluminum base with aluminum access door. The base will conform to the breakaway requirements of NCHRP 350 or MASH. A grounding lug will be provided in the base.

The pole to base connection will be a threaded connection; threads will be 8 TPI, NPT. A collar (integral or non-integral) to prevent wind-induced loosening of pole will be provided. All bolt and connection threads will be coated with a commercially available anti-seize compound intended for use in aluminum-to-aluminum and steel-to-aluminum connections.

The pole finish will either be brushed satin or spun. The top of the pole will be sealed by the traffic signal head mounting hardware or by an aluminum cap.

Payment for aluminum poles will be incidental to Rectangular Rapid Flashing Beacon System.

ADVANCE WARNING SIGN FLASHING BEACON

The Contractor will install all material, including conduit, to the luminaire pole. The flashing amber beacon will be a 1 section vehicle signal head. All costs for materials and installing the flashing amber beacon to the luminaire pole will be incidental to the contract unit price per each for "1 Section Vehicle Signal Head."

SCHOOL SPEED ZONE FLASHING AMBER BEACON SYSTEM

The Contractor will install a single flashing amber beacon above each "School Speed Limit 15 When Flashing" sign on existing luminaire poles as depicted in the plans.

The flashing amber beacon system will include a signal flasher unit. The signal flasher unit will be equipped with a programmable timing relay with 8 programmable options, yearly/weekly/daily flash scheduling capabilities and daylight savings time settings. The signal flasher unit will be located on the luminaire pole. The contractor will make all necessary connections to make the flasher system operational.

All costs for cabinet and labor and materials required to make the flashing amber beacon system operational will be incidental to the contract unit price per each for "Signal Flasher Unit".

All costs for the removal of current posts and conduit down 1' below ground level connected to existing signal heads will be incidental to the contract lump sum price for "Remove Signal Equipment."

SUPPLYING AS BUILT PLANS

If the traffic signal systems are constructed differently than what is stated in the plans, the Contractor will supply as built plans to the Engineer. The as built plans may include conduit layouts, wiring diagrams, or other drawings depicting the changes from the original plans.

MISCELLANEOUS, ELECTRICAL

The Contractor will provide all necessary materials, labor, and equipment to install flashing beacon systems and make connection to the power source by conforming to local electrical building codes. Payment for all materials, labor, and equipment not specifically identified through other bid items shall be included in the lump sum cost for "Miscellaneous, Electrical."

POLE MOUNTED SIGNS

Signs that are mounted on luminaire will be attached with high strength stainless steel bands or galvanized pole clamps. Signs will be attached as recommended by the manufacturer. All sign mounting hardware will be stainless steel or galvanized steel. Pole mounted signs will be mounted a minimum of 7 ft above the ground. Mounting heights are measured to the bottom of the signs.

TABLE OF FOOTING DATA

Site Designation	Footing Diameter	*Footing Depth	**Spiral Diameter	**Spiral Length	Vertical Reinforcement
C1, C2	2' - 0"	6' - 0"	1' - 8"	44' - 3"	8-#7 x 5' - 6"

* Footing depth will be below ground level.

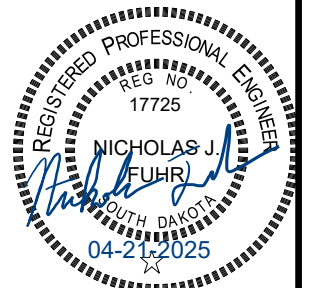
** The size of all spirals will be #3.

CONSTRUCTION STAKING

All staking including, but not limited to, all geometry of compliant sidewalk and curb ramps, approaches and approach pavement, ROW and easement identification, curb and gutter, signs, electrical conduit, footings, and any other miscellaneous items required to construct the project to the satisfaction of the Engineer will be included in the Lump Sum price for "Construction Staking"

ENGINEER DIRECTED SURVEYING/STAKING

A quantity of 20 hours of Engineer Directed Surveying/Staking has been included in the project for use by the Engineer for any quality assurance tasks they deem necessary beyond the scope of Construction Staking.



HORIZONTAL ALIGNMENT DATA

FOR BIDDING PURPOSES ONLY

BAI JOB # 24020.53

STATE OF
SOUTH
DAKOTA

PROJECT

P TAPR(60)

SHEET

13

TOTAL
SHEETS

68

Plotting Date: 03/13/2026

MAINLINE

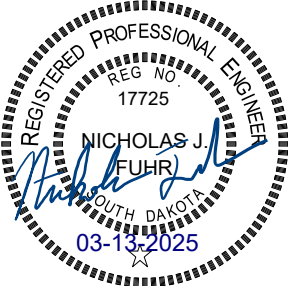
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		TL = 1867.19'	N 89° 41' 58" E		
PI	18+67.19			203544.486	2656078.922
		TL = 589.80'	N 87° 46' 11" E		
POE	24+56.99			203567.438	2656668.272

CONTROL DATA

HORIZONTAL AND VERTICAL CONTROL POINTS						
POINT	STATION	OFFSET	DESCRIPTION	NORTHING	EASTING	ELEVATION
CP 957	NO STATIONING		5/8" x 18" Rebar w/ Cap	203605.729	2653894.134	1723.46
CP 956	NO STATIONING		5/8" x 18" Rebar w/ Cap	203502.652	2654059.930	1722.94
CP 955	1+75.23	31.59' R	5/8" x 18" Rebar w/ Cap	203504.019	2654387.152	1721.72
CP 904	6+00.54	70.17' R	5/8" x 18" Rebar w/ Cap	203467.667	2654812.656	1718.92
CP 903	7+41.83	32.28' L	5/8" x 18" Rebar w/ Cap	203570.865	2654953.405	1719.06
CP 902	10+26.43	29.28' R	5/8" x 18" Rebar w/ Cap	203510.799	2655238.329	1719.10
CP 952	13+55.50	29.40' R	5/8" x 18" Rebar w/ Cap	203512.405	2655567.390	1718.01
CP 951	18+23.77	35.47' L	5/8" x 18" Rebar w/ Cap	203579.724	2656035.320	1718.59
CP 900 (BASE)	22+62.27	603.85' L	5/8" x 18" Rebar w/ Cap	204163.248	2656450.203	1721.55
CP 950	22+91.58	28.24' R	5/8" x 18" Rebar w/ Cap	203532.782	2656504.086	1720.20

The coordinates shown on this sheet are based on the South Dakota State Plane Coordinate System. South Dakota North 4001, NAD 83(2011); Epoch 2010; SF = 1.0

The elevations shown on this sheet are based on NAVD 88 (GEOID 18)



TYPICAL GRADING SECTION

FOR BIDDING PURPOSES ONLY

BAI JOB # 24020.53

STATE OF SOUTH DAKOTA

PROJECT

P TAPR(60)

SHEET

14

TOTAL SHEETS

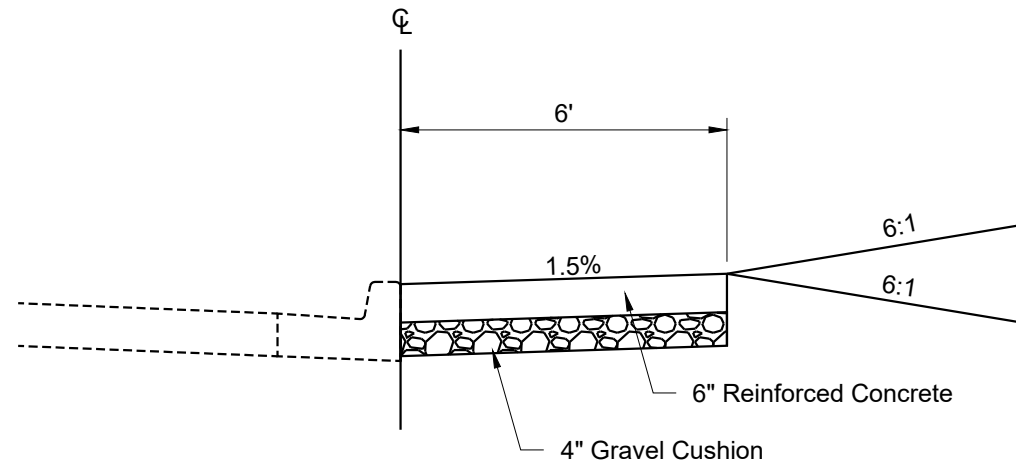
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Plotting Date:

03/18/2026

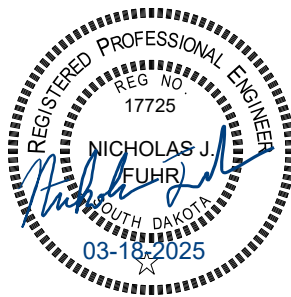
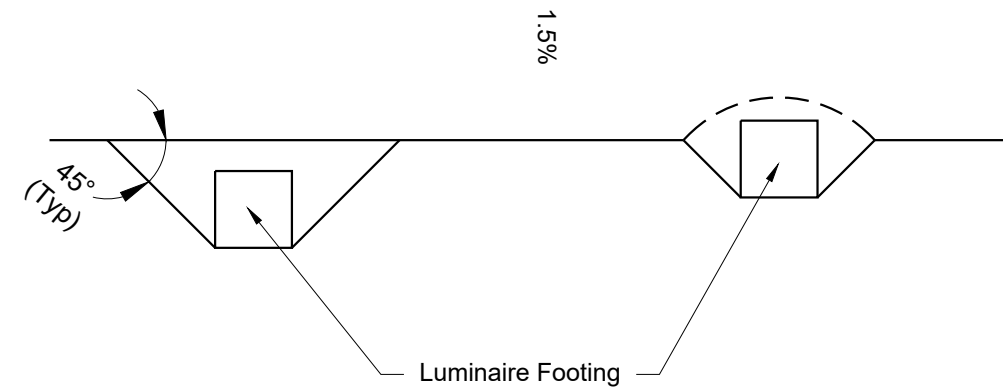
Rev 3/18/2026 NJF

Typical Proposed Curb-Back Sidewalk



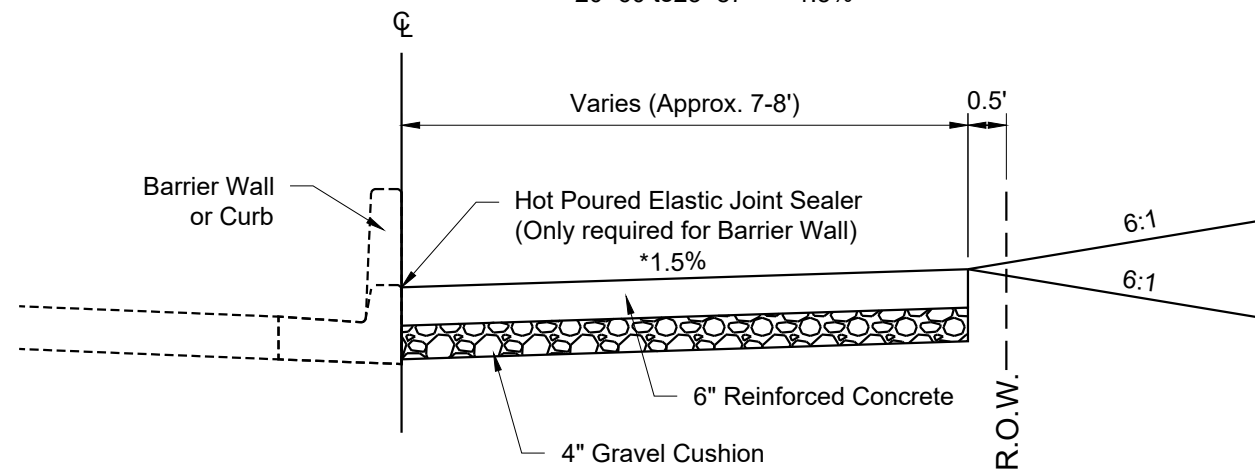
Luminaire Footing Adjacent Sidewalk Detail

Bump-outs to the back edges of luminaire pole footings will be installed for ease of maintenance/weeding. Any warping of the sidewalk surface will not be at the expense of accessibility standards and will be to the satisfaction of the Engineer.



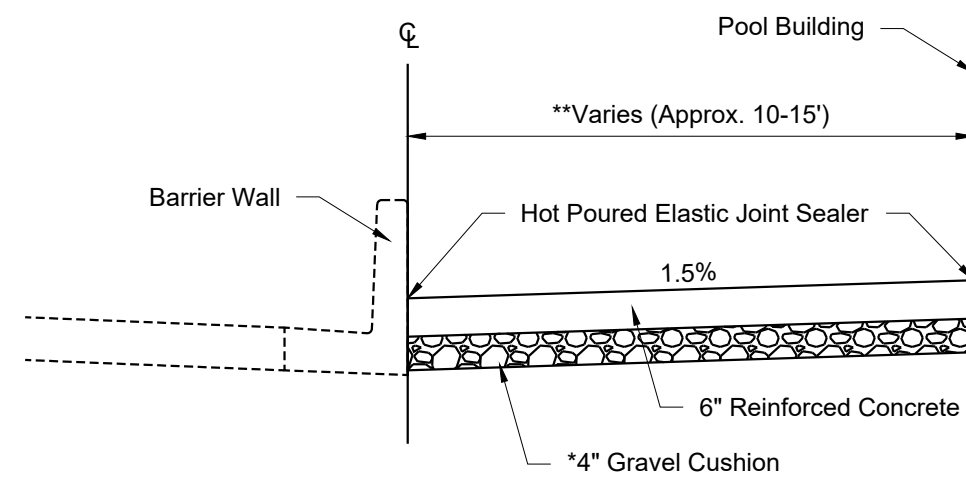
City Park Frontage

*20+50 to 20+60 - +1.5% to -1.5%
 *20+60 to 23+87 - -1.5%



All Hot Poured Elastic Joint Sealer will have the expansion joint recessed 5/8" to provide space for the sealer.

Pool Frontage



*Additional gravel cushion will be required to meet proposed surfacing elevations at the pool entrance.

LEGEND

FOR BIDDING PURPOSES ONLY

BAI JOB # 24020.53

STATE OF
SOUTH
DAKOTA

PROJECT

P TAPR(60)

SHEET

15

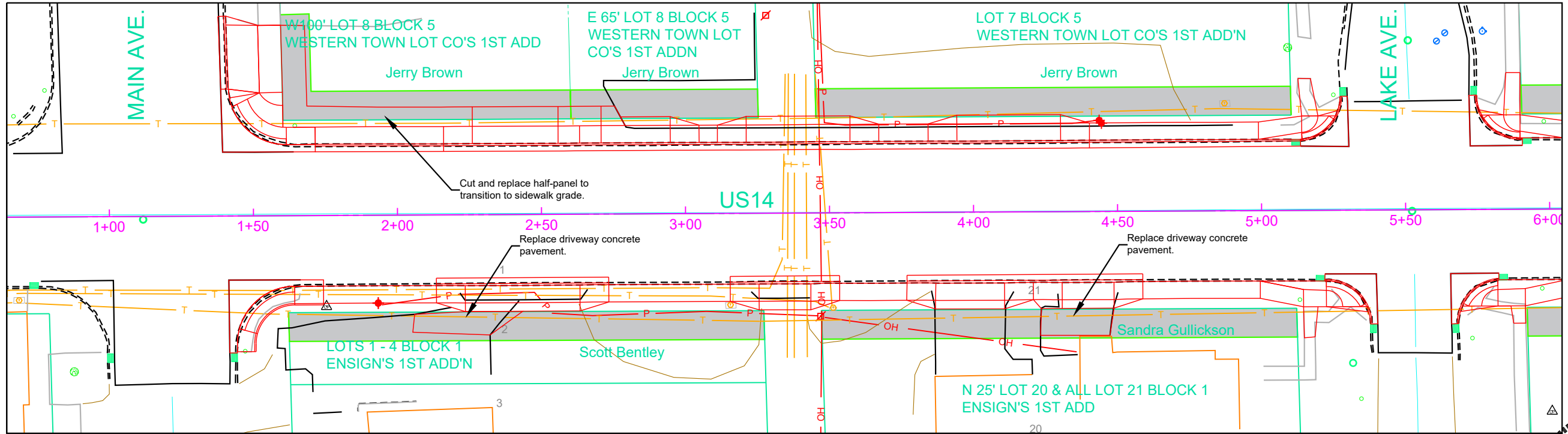
TOTAL
SHEETS

68

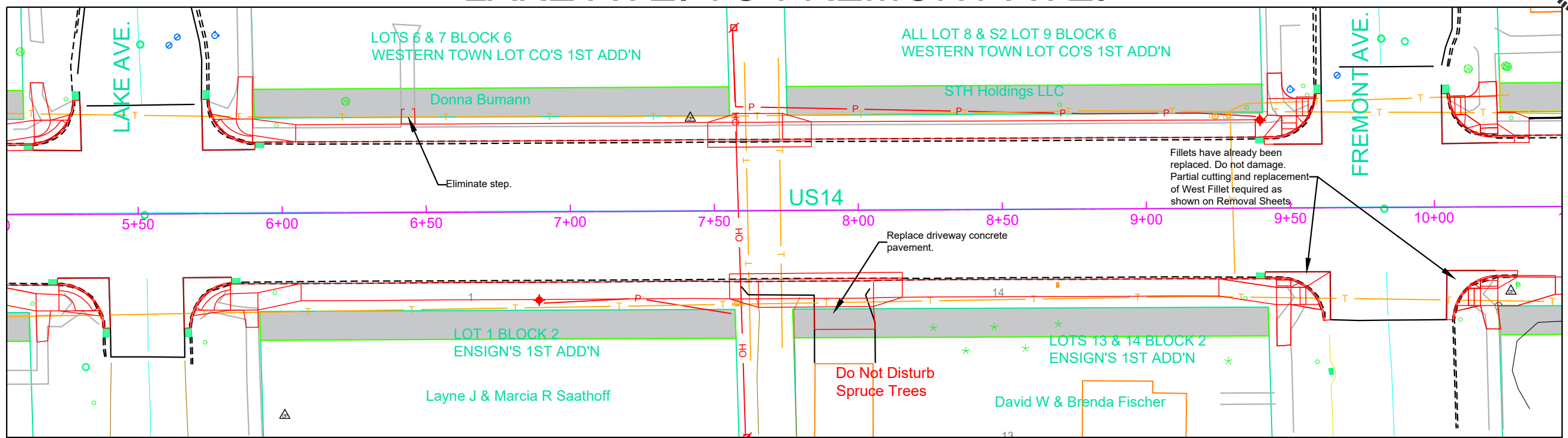
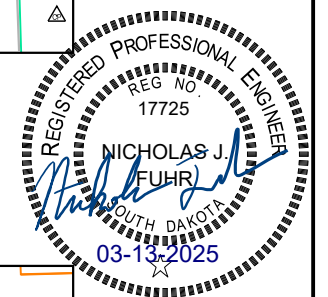
Plotting Date: 03/13/2026

Anchor		Mailbox		Subsurface Utility Exploration Test Hole		State and National Line	
Antenna		Manhole Electric		Telephone Fiber Optics		County Line	
Approach		Manhole Gas		Telephone Junction Box		Section Line	
Assumed Corner		Manhole Miscellaneous		Telephone Pole		Quarter Line	
Azimuth Marker		Manhole Sanitary Sewer		Television Cable Jct Box		Sixteenth Line	
BBQ Grill/ Fireplace		Manhole Storm Sewer		Television Tower		Property Line	
Bearing Tree		Manhole Telephone		Test Wells/Bore Holes		Construction Line	
Bench Mark		Manhole Water		Traffic Sign Double Face		ROW Line	
Box Culvert		Merry-Go-Round		Traffic Sign One Post		New ROW Line	
Bridge		Microwave Radio Tower		Traffic Sign Two Post		Cut and Fill Limits	
Brush/Hedge		Miscellaneous Line		Traffic Signal		Control of Access	
Buildings		Miscellaneous Property Corner		Trash Barrel		New Control of Access	
Bulk Tank		Miscellaneous Post		Tree Belt		Proposed ROW	
Cattle Guard		Overhang Or Encroachment		Tree Coniferous		(After Property Disposal)	
Cemetery		Overhead Utility Line		Tree Deciduous		Drainage Arrow	
Centerline		Parking Meter		Tree Stumps		Remove Concrete Pavement	
Cistern		Pedestrian Push Button Pole		Triangulation Station		Remove Concrete Driveway Pavement	
Clothes Line		Pipe With End Section		Underground Electric Line		Remove Asphalt Concrete Pavement	
Concrete Symbol		Pipe With Headwall		Underground Gas Line		Remove Concrete Sidewalk	
Control Point		Pipe Without End Section		Underground High Pressure Gas Line		Remove Concrete Median Pavement	
Creek Edge		Playground Slide		Underground Sanitary Sewer		Remove Concrete Curb and/or Gutter	
Curb/Gutter		Playground Swing		Underground Storm Sewer		Detectable Warning	
Curb		Power And Light Pole		Underground Tank		Pedestrian Push Button Pole	
Dam Grade/Dike/Levee		Power And Telephone Pole		Underground Telephone Line		and 30" x 48" Clear Space	
Deck Edge		Power Meter		Underground Television Cable		with 1.5% slope	
Ditch Block		Power Pole		Underground Water Line			
Doorway Threshold		Power Pole And Transformer		Water Fountain			
Drainage Profile		Power Tower Structure		Water Hydrant			
Drop Inlet		Propane Tank		Water Meter			
Edge Of Asphalt		Property Pipe		Water Tower			
Edge Of Concrete		Property Pipe With Cap		Water Valve			
Edge Of Gravel		Property Stone		Water Well			
Edge Of Other		Public Telephone		Weir Rock			
Edge Of Shoulder		Railroad Crossing Signal		Windmill			
Electric Transformer/Power Junction Box		Railroad Milepost Marker		Wingwall			
Fence Barbwire		Railroad Profile		Witness Corner			
Fence Chainlink		Railroad ROW Marker					
Fence Electric		Railroad Signs					
Fence Miscellaneous		Railroad Switch					
Fence Rock		Railroad Track					
Fence Snow		Railroad Trestle					
Fence Wood		Rebar					
Fence Woven		Rebar With Cap					
Fire Hydrant		Reference Mark					
Flag Pole		Retaining Wall					
Flower Bed		Riprap					
Gas Valve Or Meter		River Edge					
Gas Pump Island		Rock And Wire Baskets					
Grain Bin		Rockpiles					
Guardrail		Satellite Dish					
Gutter		Septic Tank					
Guy Pole		Shrub Tree					
Haystack		Sidewalk					
Highway ROW Marker		Sign Face					
Interstate Close Gate		Sign Post					
Iron Pin		Slough Or Marsh					
Irrigation Ditch		Spring					
Lake Edge		Stream Gauge					
Lawn Sprinkler		Street Marker					

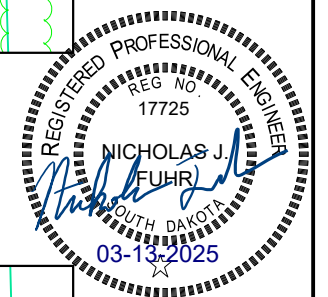
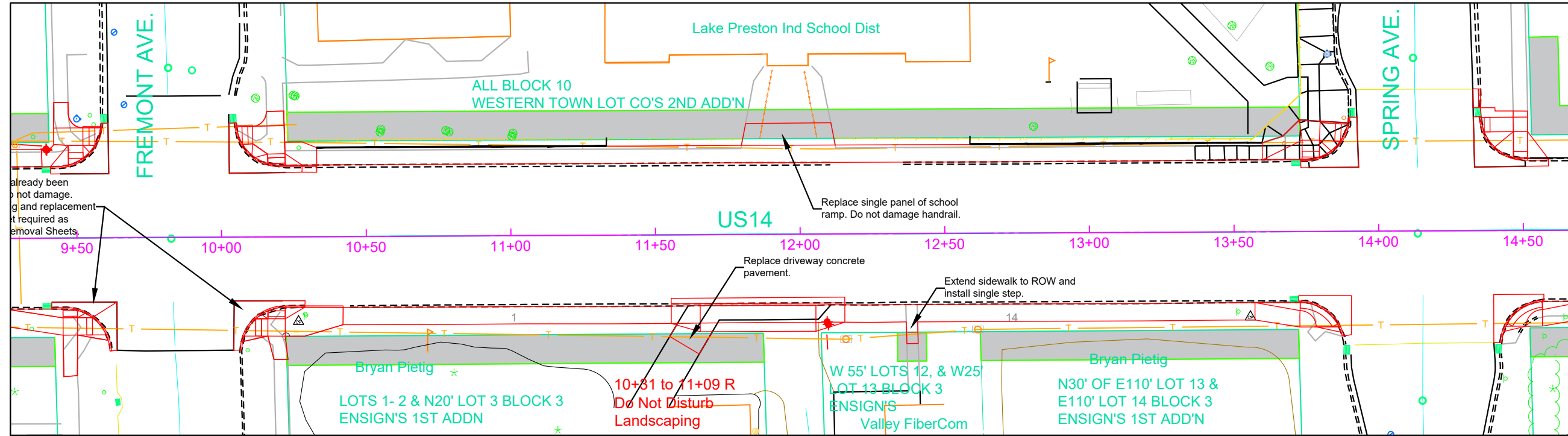
MAIN AVE. TO LAKE AVE.



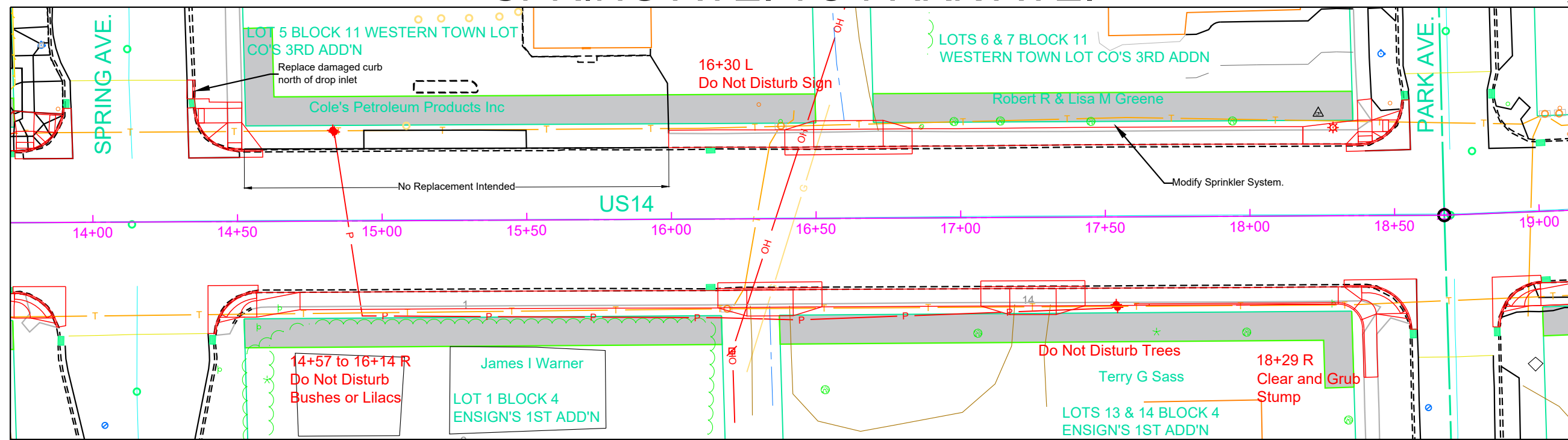
LAKE AVE. TO FREMONT AVE.



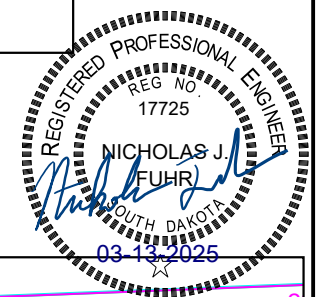
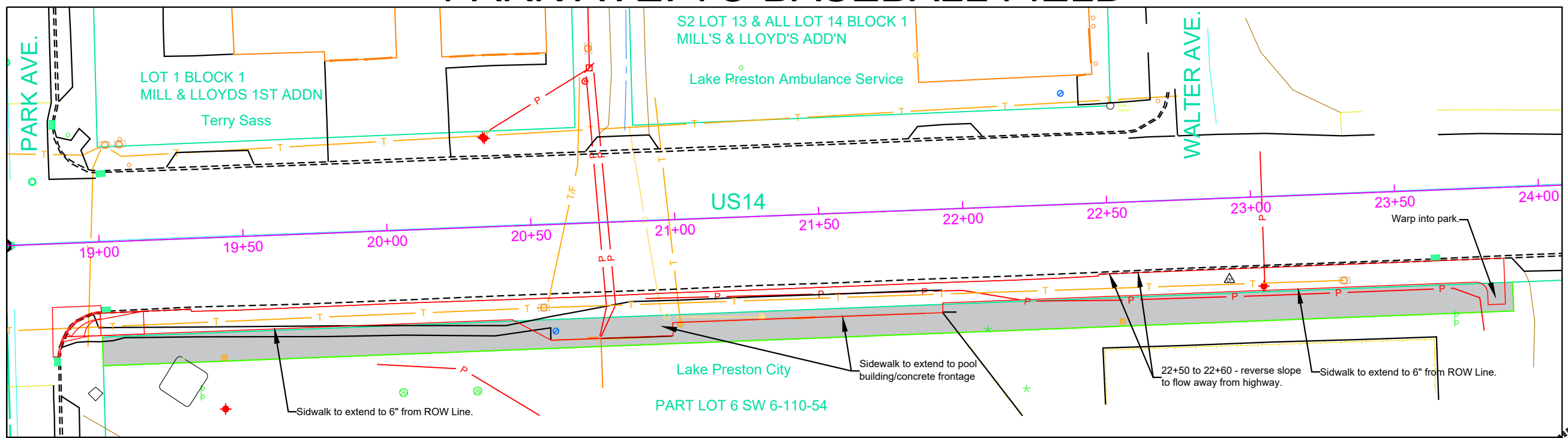
FREMONT AVE. TO SPRING AVE.



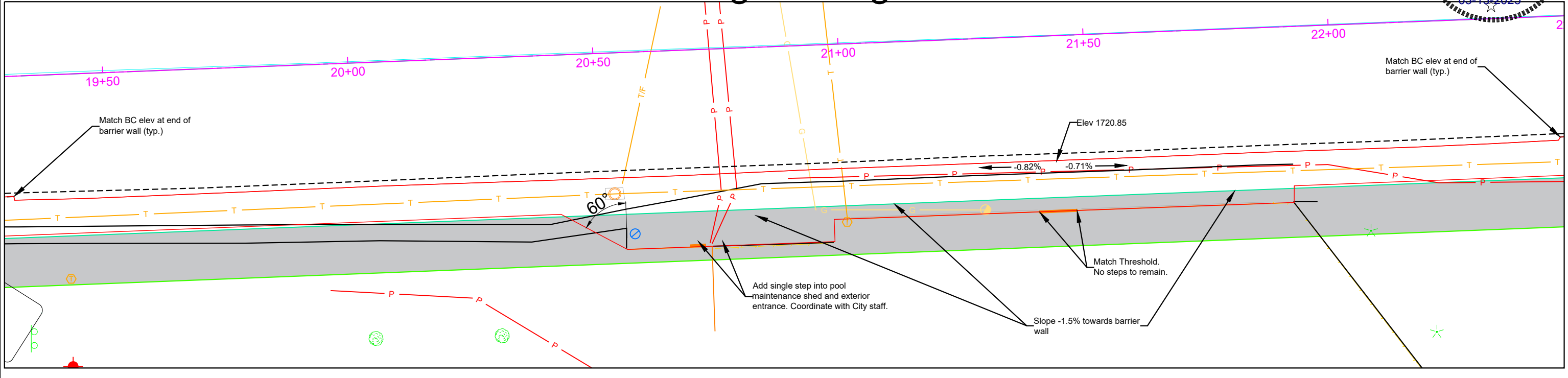
SPRING AVE. TO PARK AVE.



PARK AVE. TO BASEBALL FIELD



Pool Building Frontage Details



PAVEMENT REMOVAL LAYOUT

FOR BIDDING PURPOSES ONLY

BAI JOB # 24020.53

STATE OF
SOUTH
DAKOTA

PROJECT

P TAPR(60)

SHEET

19

TOTAL
SHEETS

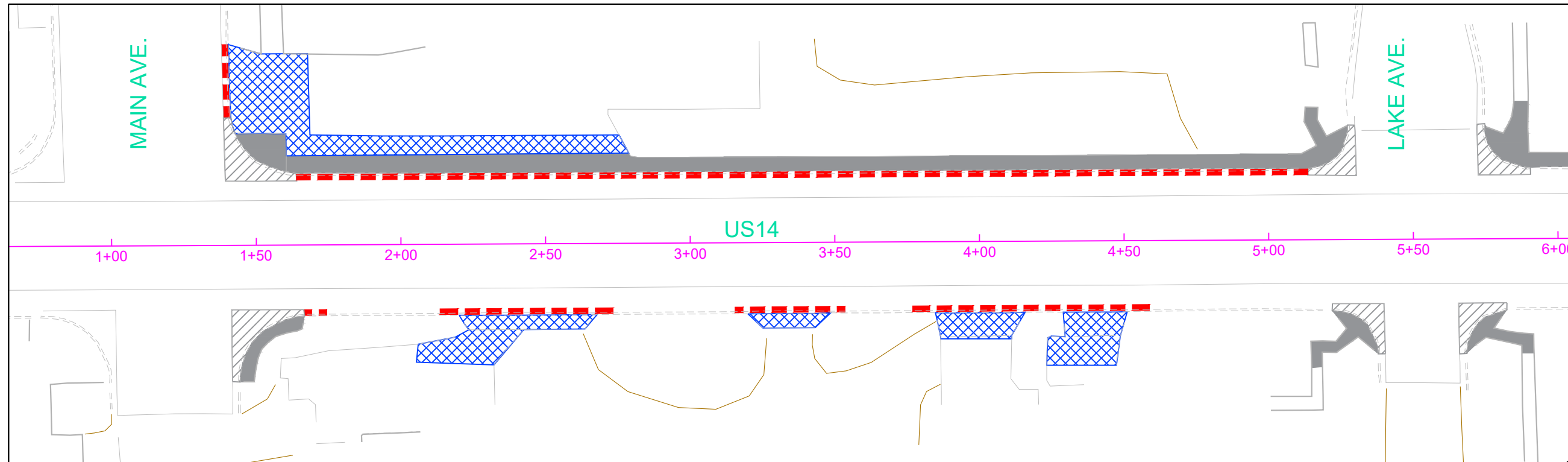
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Plotting Date:

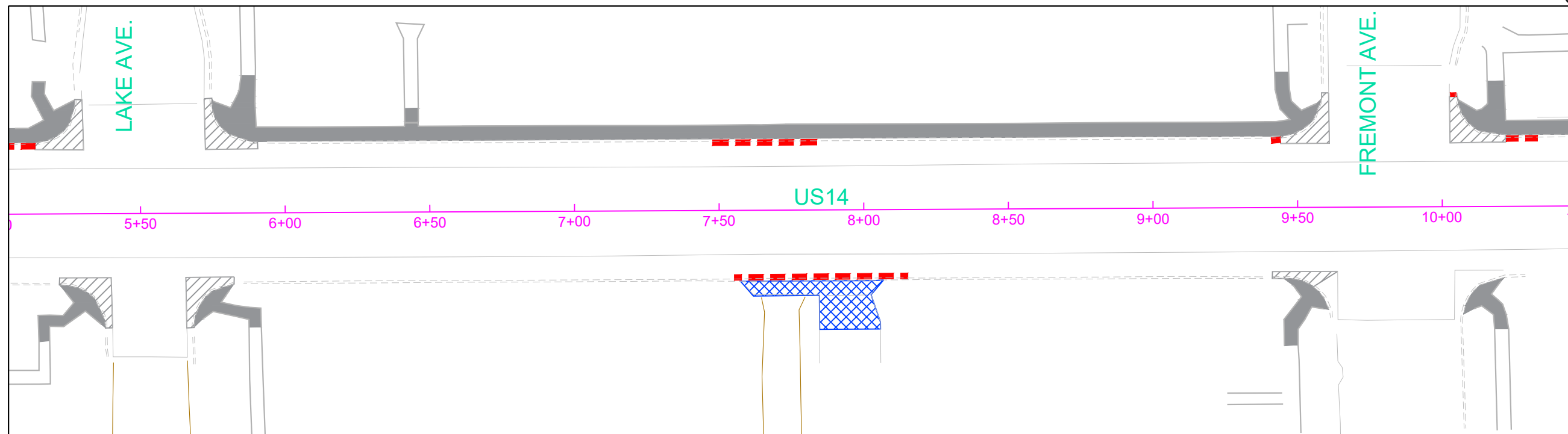
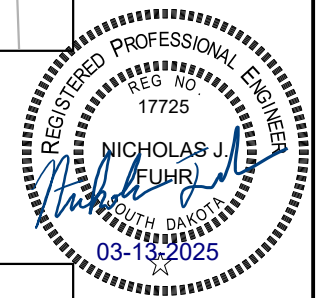
03/13/2026

Rev:

MAIN AVE. TO LAKE AVE.



LAKE AVE. TO FREMONT AVE.



PAVEMENT REMOVAL LAYOUT

FOR BIDDING PURPOSES ONLY

BAI JOB # 24020.53

STATE OF
SOUTH
DAKOTA

PROJECT

P TAPR(60)

SHEET

20

TOTAL
SHEETS

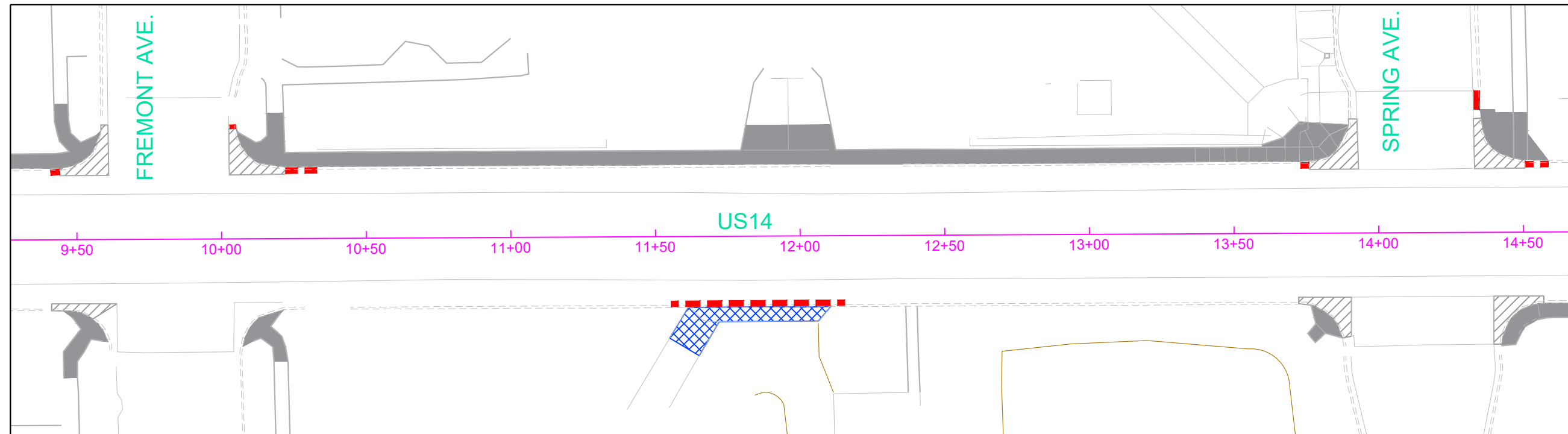
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Plotting Date:

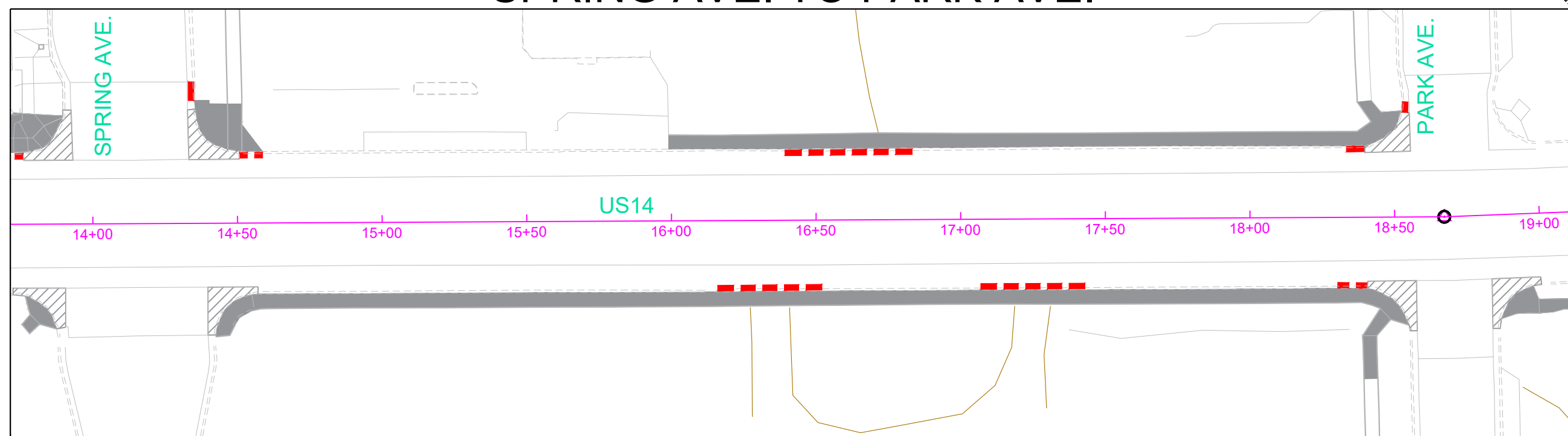
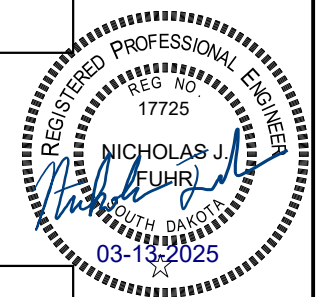
03/13/2026

Rev:

FREMONT AVE. TO SPRING AVE.



SPRING AVE. TO PARK AVE.



PAVEMENT REMOVAL LAYOUT

FOR BIDDING PURPOSES ONLY

BAI JOB # 24020.53

STATE OF
SOUTH
DAKOTA

PROJECT

P TAPR(60)

SHEET

21

TOTAL
SHEETS

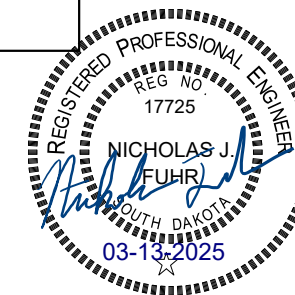
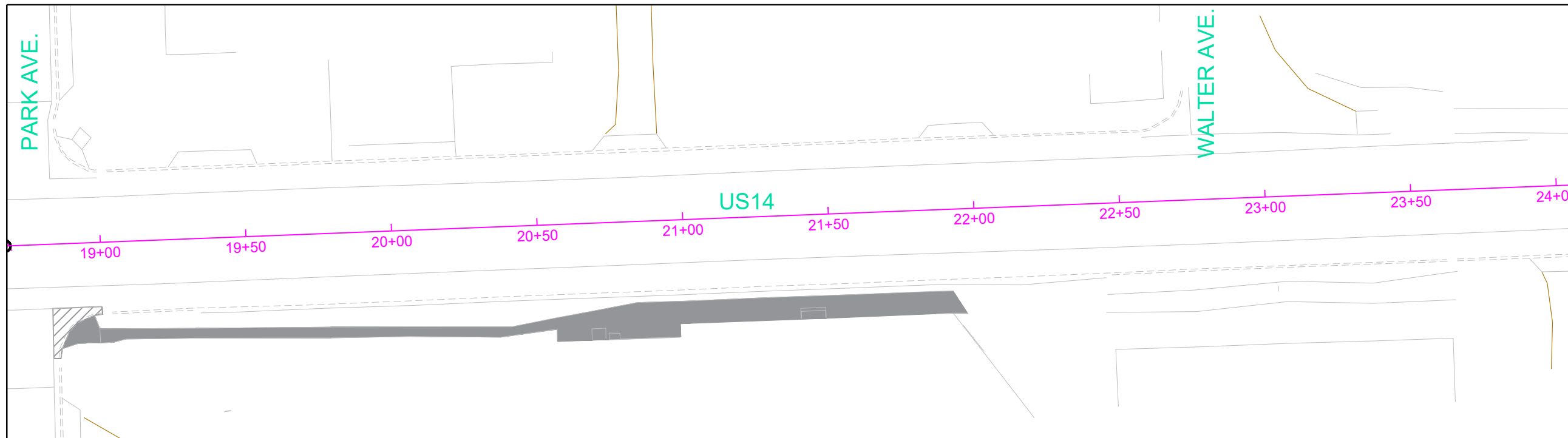
68

Plotting Date:

03/13/2026

Rev:

PARK AVE. TO BASEBALL FIELD



MAIN AVE. NORTH CURB RAMP DETAILS PROJECT BEGIN

FOR BIDDING PURPOSES ONLY

BAI JOB # 24020.53

STATE OF
SOUTH
DAKOTA

PROJECT

P TAPR(60)

SHEET

22

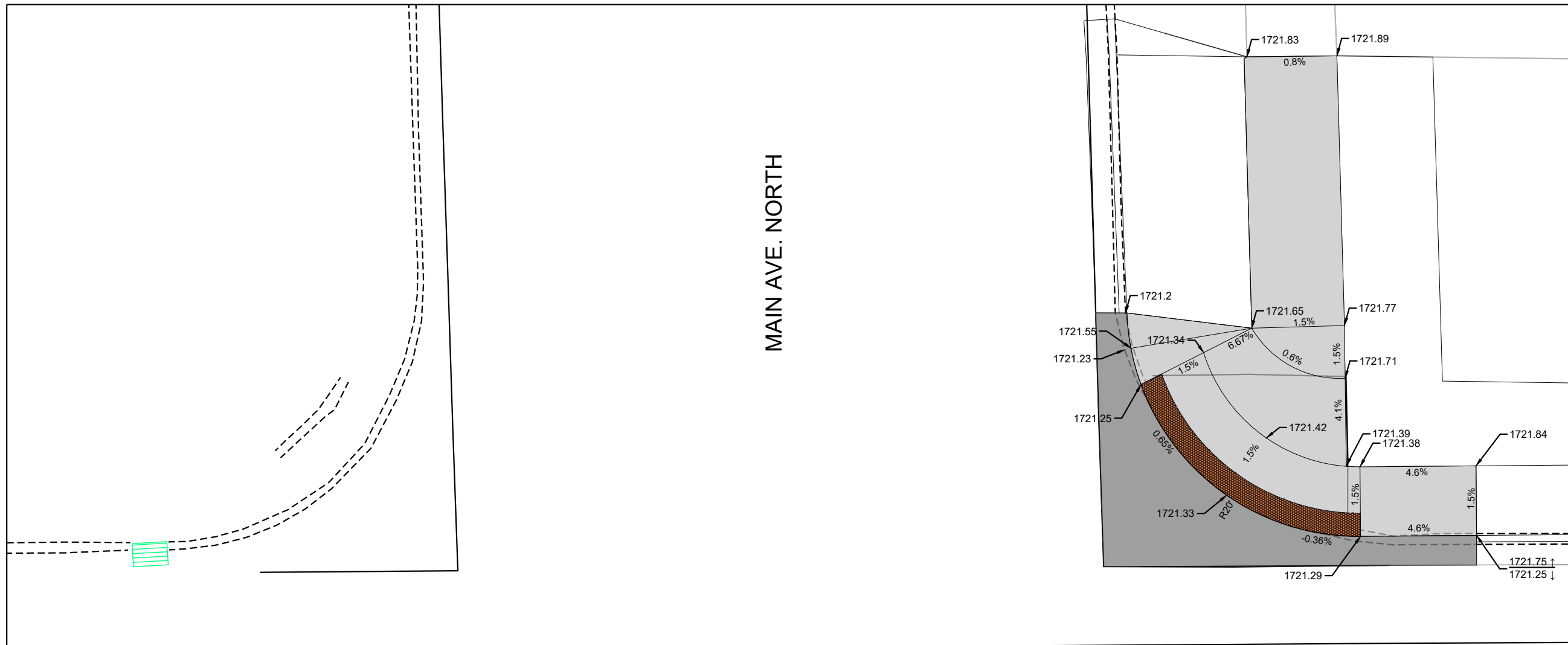
TOTAL
SHEETS

68

Plotting Date:

03/13/2026

Rev:



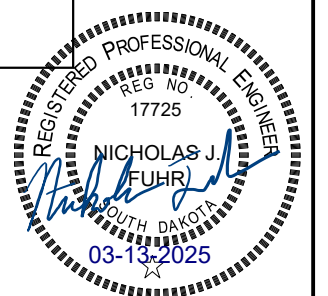
MAIN AVE. NORTH

US14

0+50

1+00

1+50



MAIN AVE. SOUTH CURB RAMP DETAILS

BAI JOB # 24020.53

STATE OF
SOUTH
DAKOTA

PROJECT

P TAPR(60)

SHEET

23

TOTAL
SHEETS

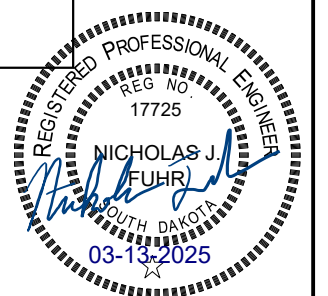
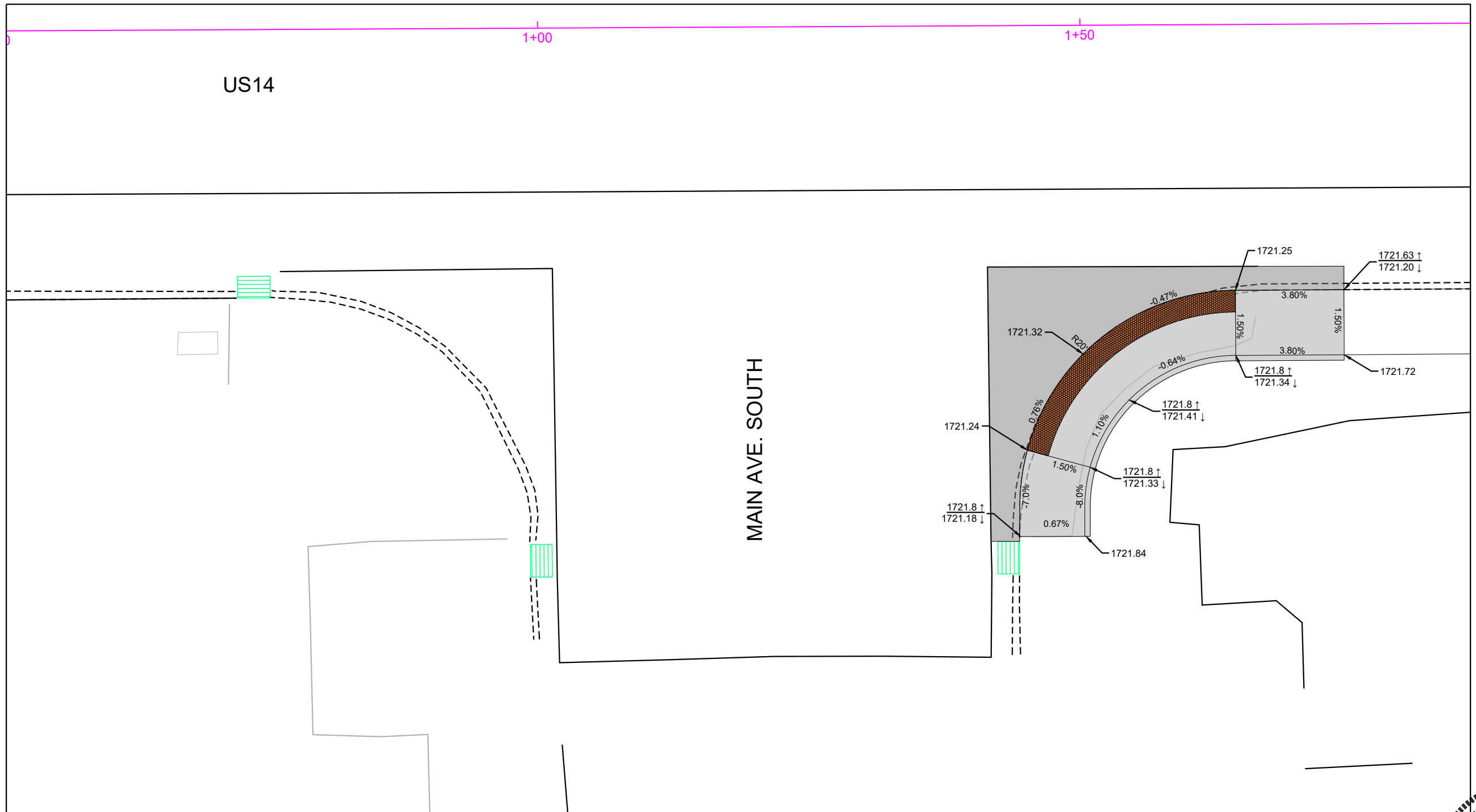
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Plotting Date:

03/13/2026

Rev:

FOR BIDDING PURPOSES ONLY



LAKE AVE. NORTH CURB RAMP DETAILS

FOR BIDDING PURPOSES ONLY

BAI JOB # 24020.53

STATE OF SOUTH DAKOTA

PROJECT

P TAPR(60)

SHEET

24

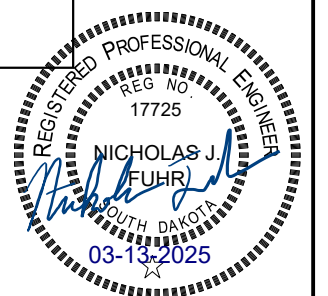
TOTAL SHEETS

68

Plotting Date:

03/13/2026

Rev:



LAKE AVE. SOUTH CURB RAMP DETAILS

FOR BIDDING PURPOSES ONLY

BAI JOB # 24020.53

STATE OF SOUTH DAKOTA

PROJECT

P TAPR(60)

SHEET

25

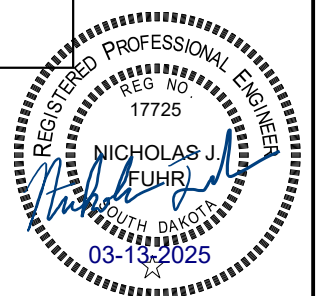
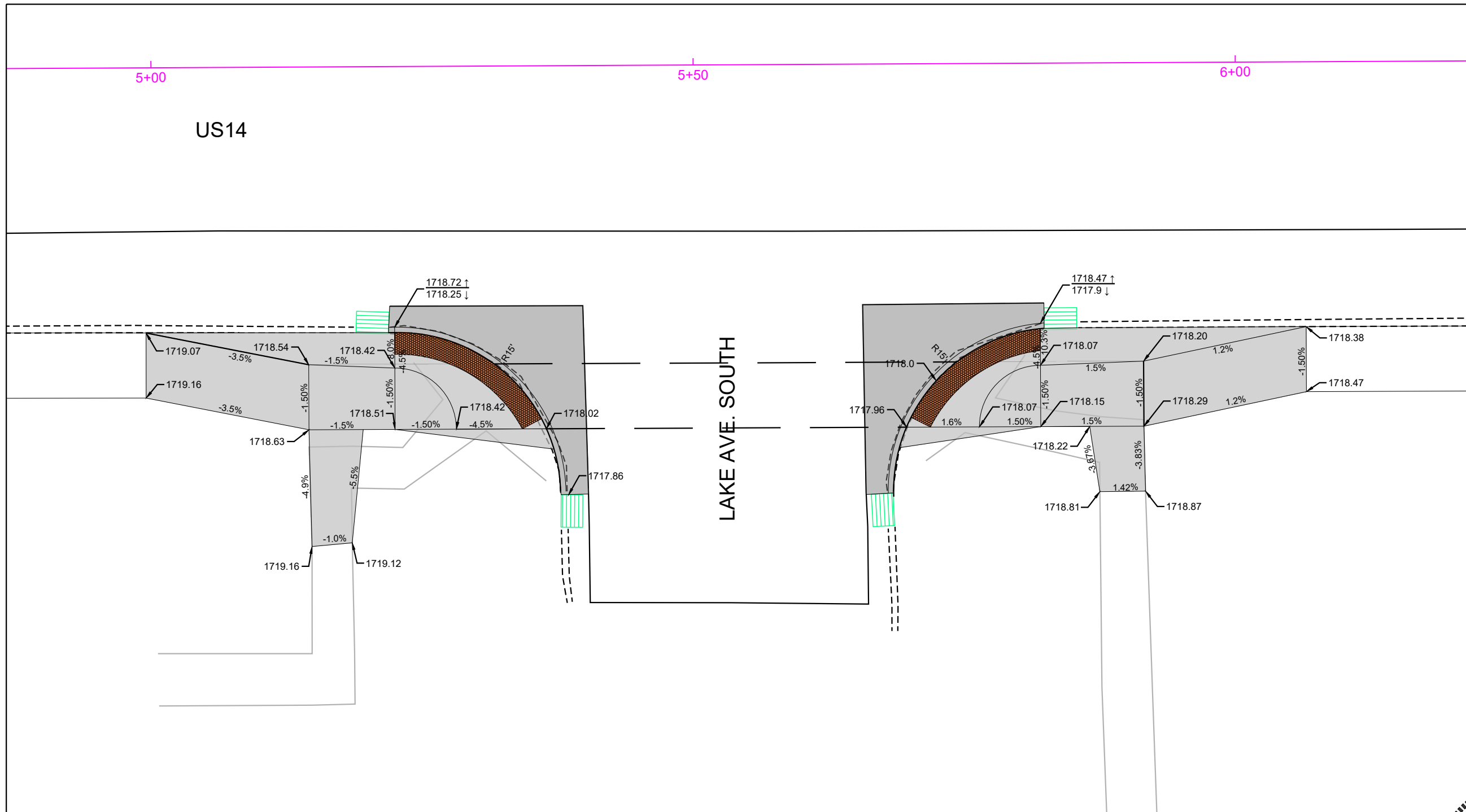
TOTAL SHEETS

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Plotting Date:

03/13/2026

Rev:



FREMONT AVE. NORTH CURB RAMP DETAILS

BAI JOB # 24020.53

STATE OF SOUTH DAKOTA

PROJECT

P TAPR(60)

SHEET

26

TOTAL SHEETS

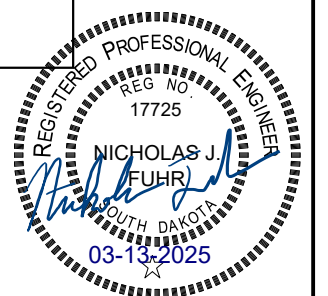
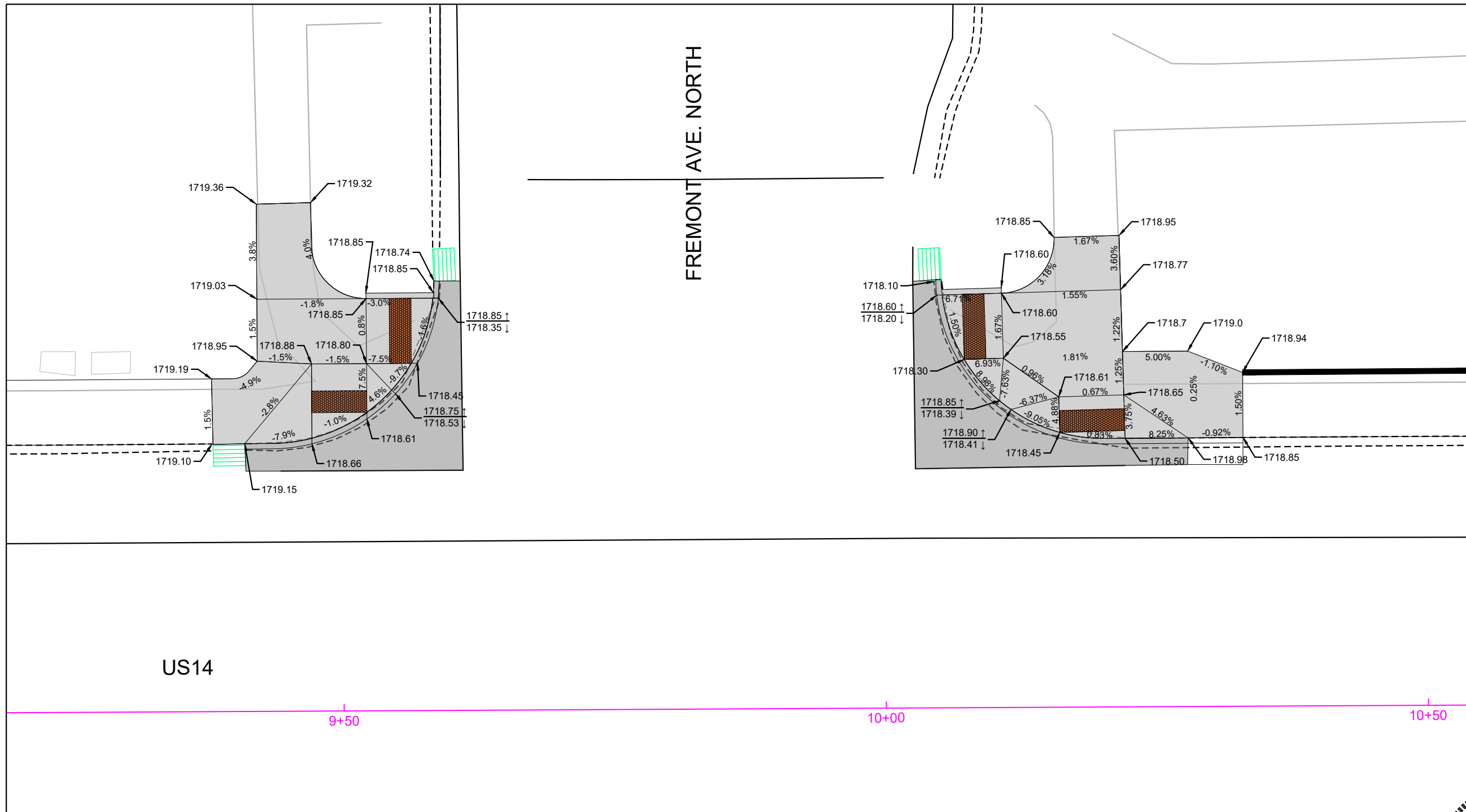
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FOR BIDDING PURPOSES ONLY

Plotting Date:

03/13/2026

Rev:



FREMONT AVE. SOUTH CURB RAMP DETAILS

FOR BIDDING PURPOSES ONLY

BAI JOB # 24020.53

STATE OF
SOUTH
DAKOTA

PROJECT

P TAPR(60)

SHEET

27

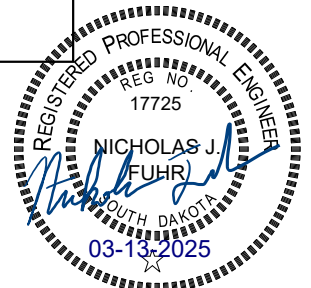
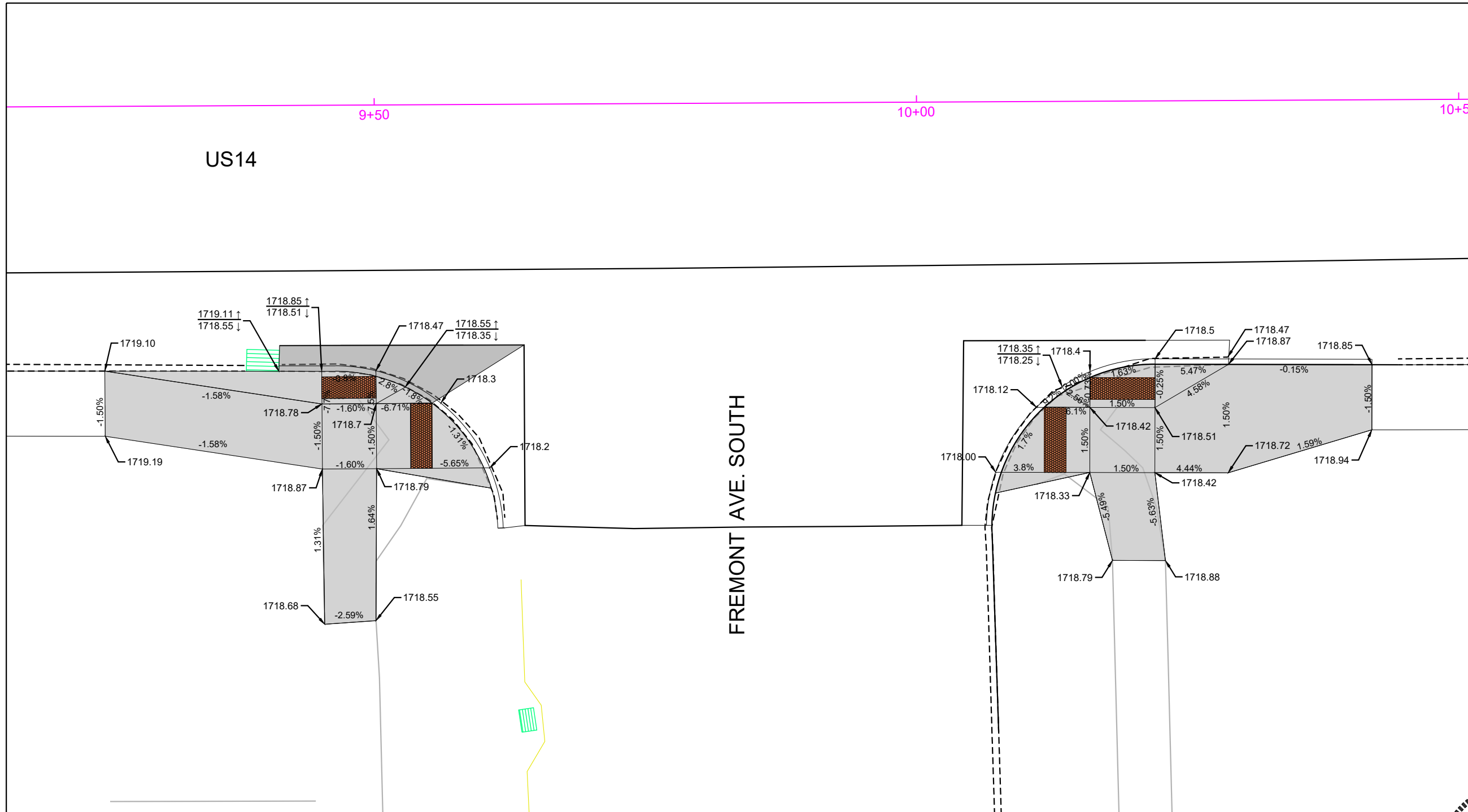
TOTAL
SHEETS

68

Plotting Date:

03/13/2026

Rev:



SPRING AVE. NORTH CURB RAMP DETAILS

FOR BIDDING PURPOSES ONLY

BAI JOB # 24020.53

STATE OF SOUTH DAKOTA

PROJECT

P TAPR(60)

SHEET

28

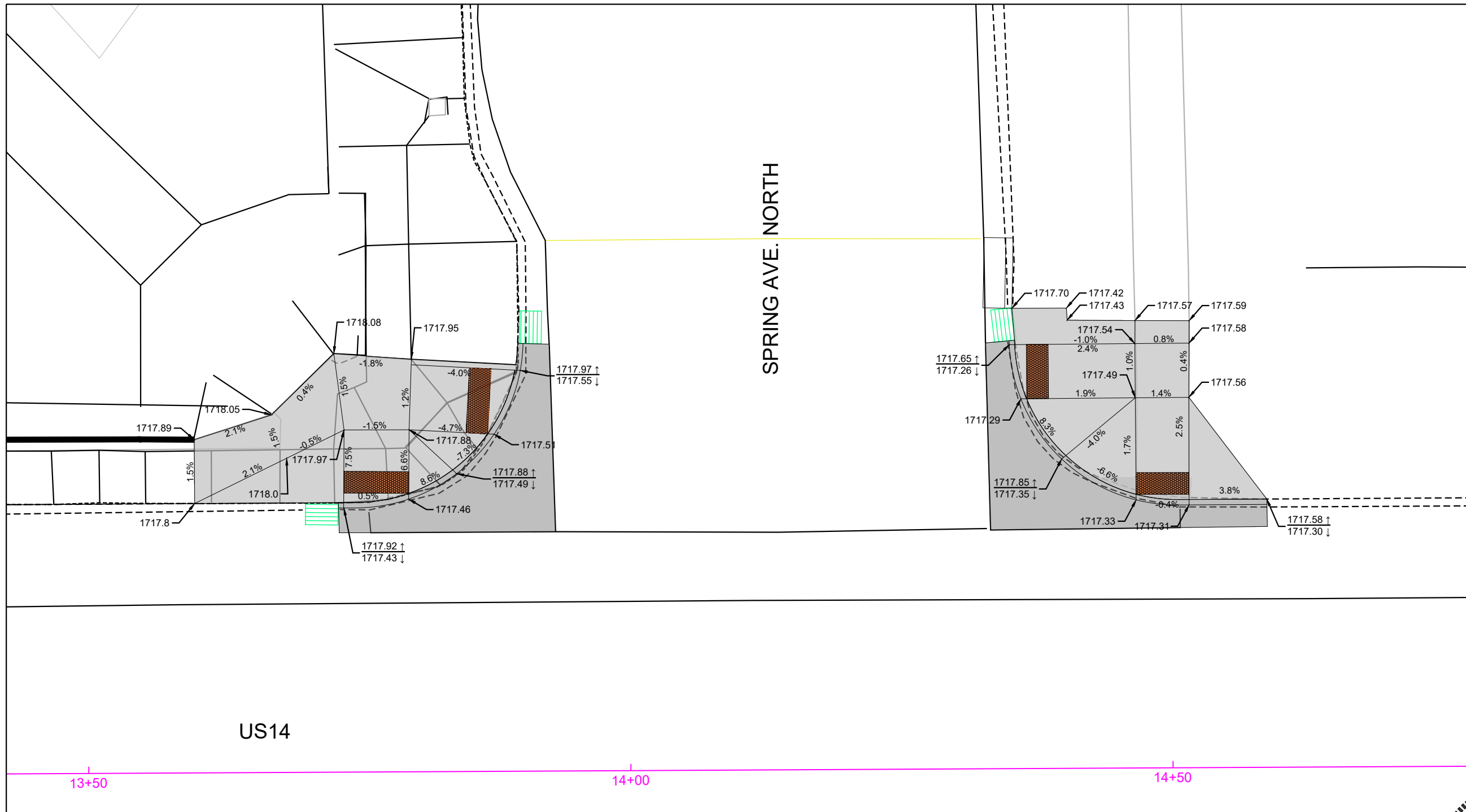
TOTAL SHEETS

68

Plotting Date:

03/13/2026

Rev:

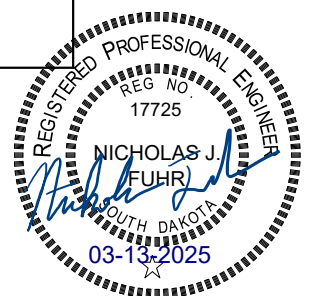


US14

13+50

14+00

14+50



SPRING AVE. SOUTH CURB RAMP DETAILS

BAI JOB # 24020.53

STATE OF
SOUTH
DAKOTA

PROJECT

P TAPR(60)

SHEET

29

TOTAL
SHEETS

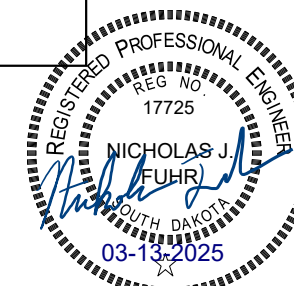
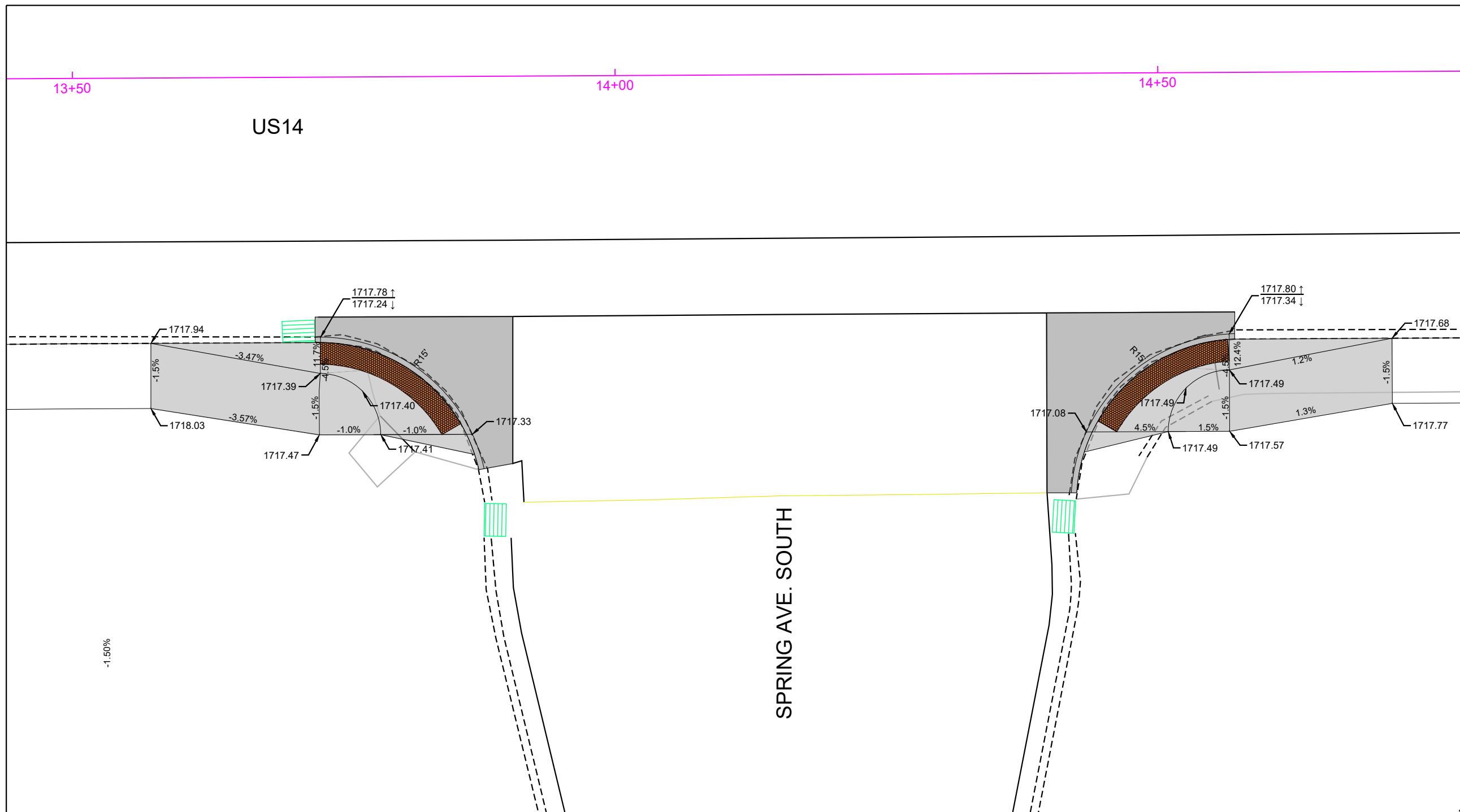
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Plotting Date:

03/13/2026

Rev:

FOR BIDDING PURPOSES ONLY



PARK AVE. NORTH CURB RAMP DETAILS

FOR BIDDING PURPOSES ONLY

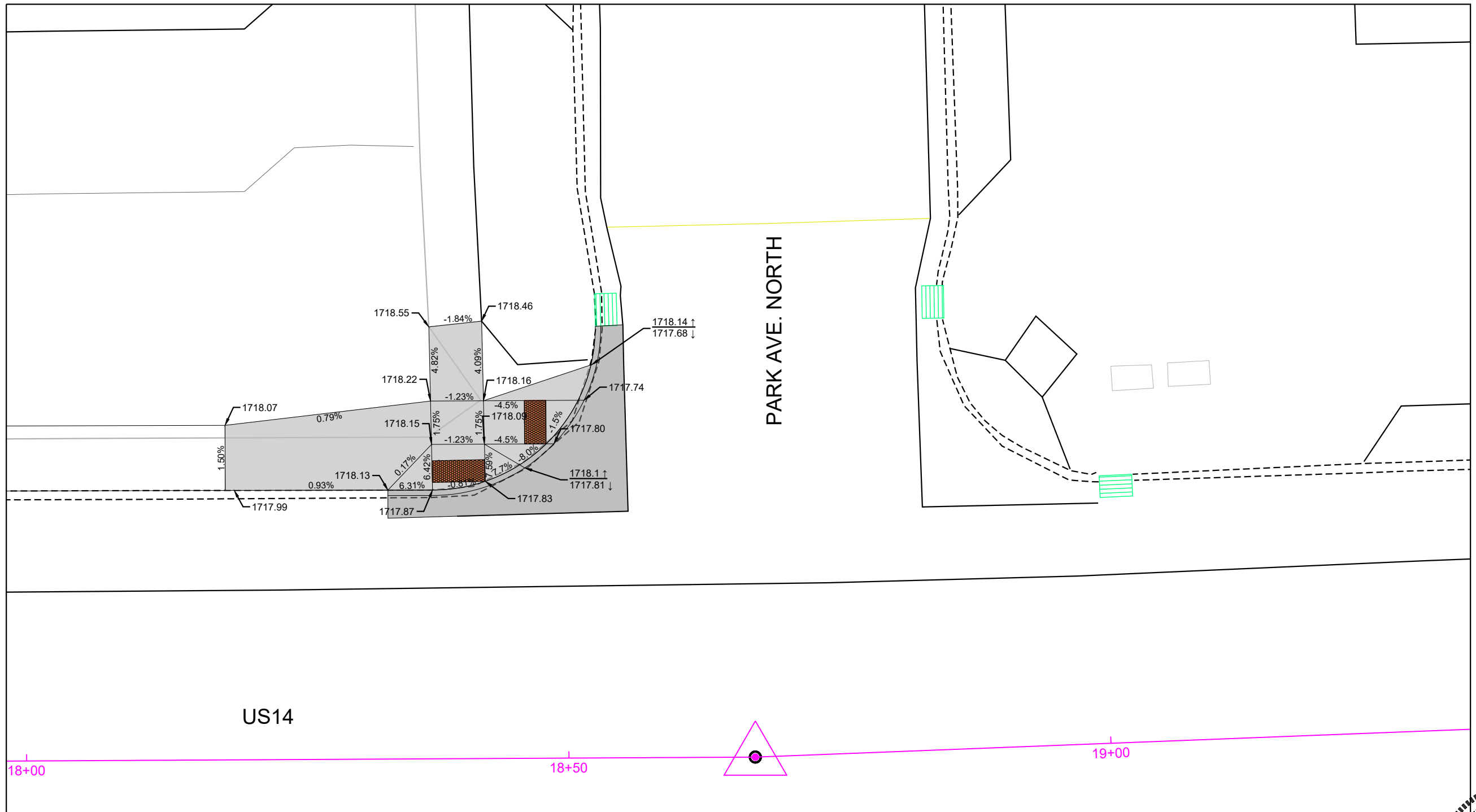
BAI JOB # 24020.53

STATE OF SOUTH DAKOTA

PROJECT
P TAPR(60)

SHEET	TOTAL SHEETS
30	68

Plotting Date: 03/13/2026 Rev:



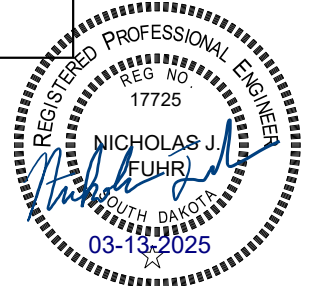
PARK AVE. NORTH

US14

18+00

18+50

19+00



PARK AVE. SOUTH CURB RAMP DETAILS

FOR BIDDING PURPOSES ONLY

BAI JOB # 24020.53

STATE OF SOUTH DAKOTA

PROJECT

P TAPR(60)

SHEET

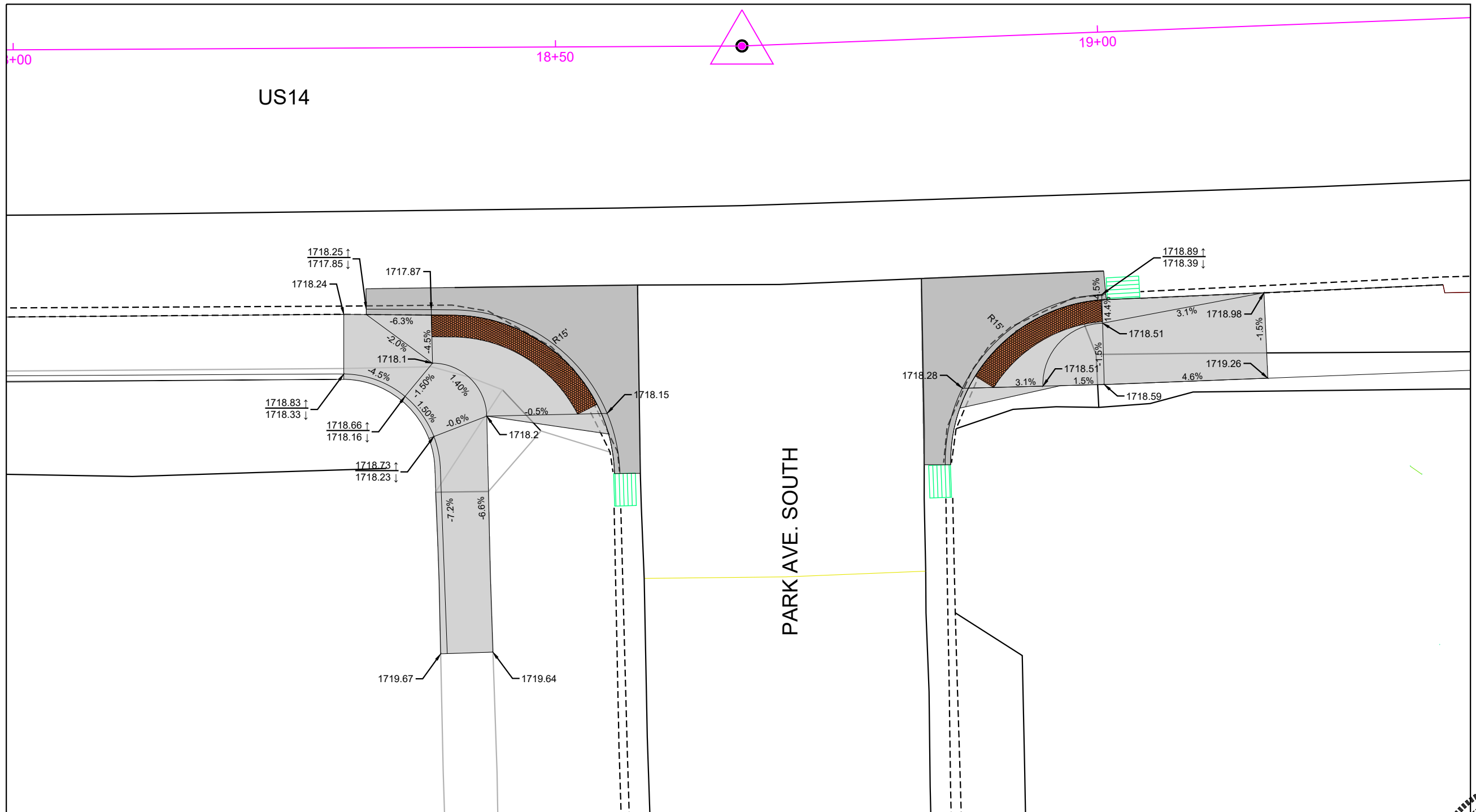
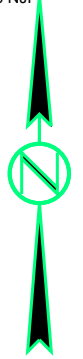
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TOTAL SHEETS

68

Plotting Date: 03/18/2026

Rev: 3/18/2026 NJF



BASEBALL FIELD SOUTH CURB RAMP DETAILS PROJECT END

FOR BIDDING PURPOSES ONLY

BAI JOB # 24020.53

STATE OF
SOUTH
DAKOTA

PROJECT

P TAPR(60)

SHEET

32

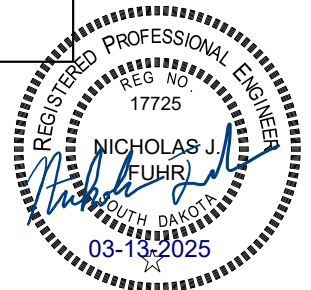
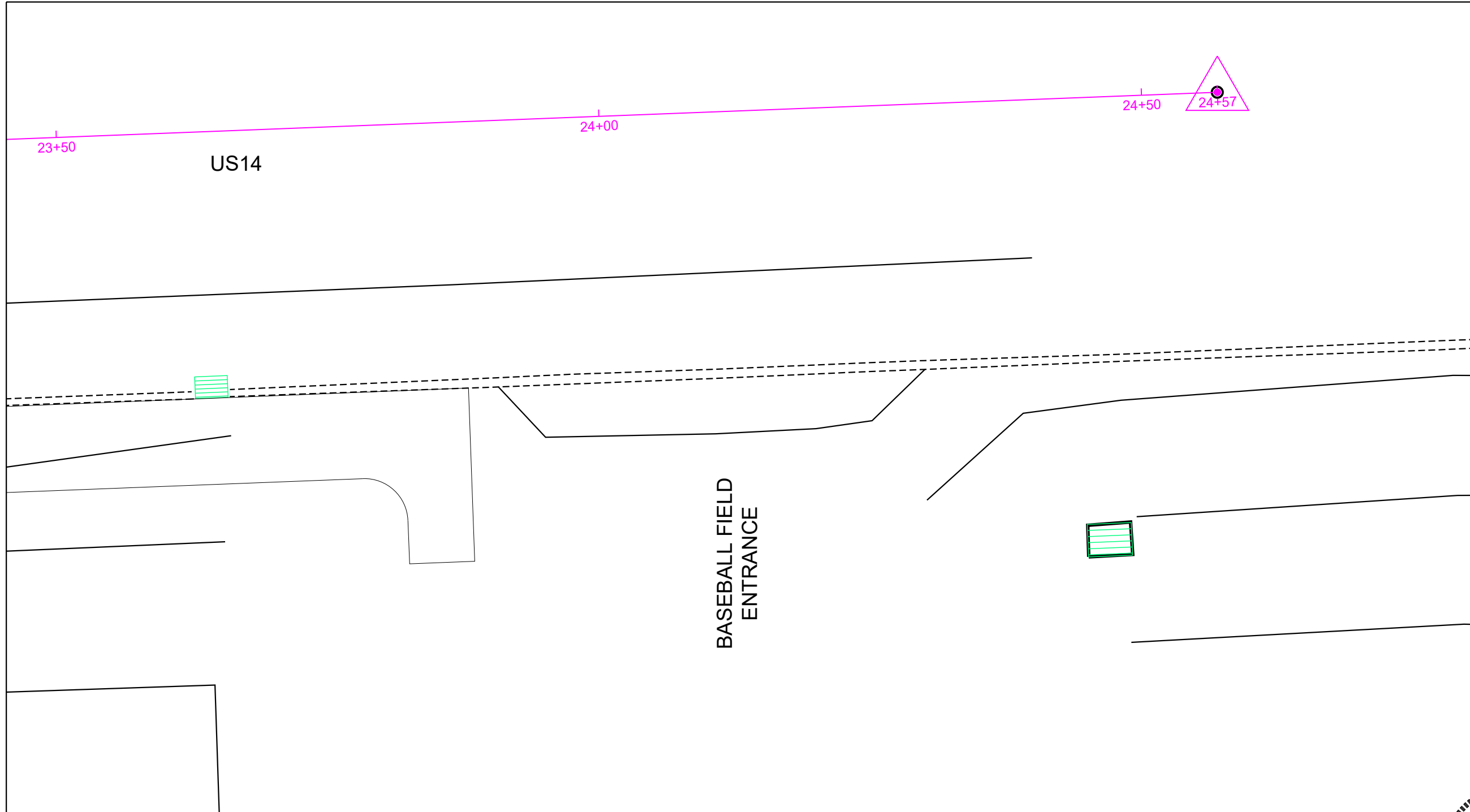
TOTAL
SHEETS

68

Plotting Date:

03/13/2026

Rev:

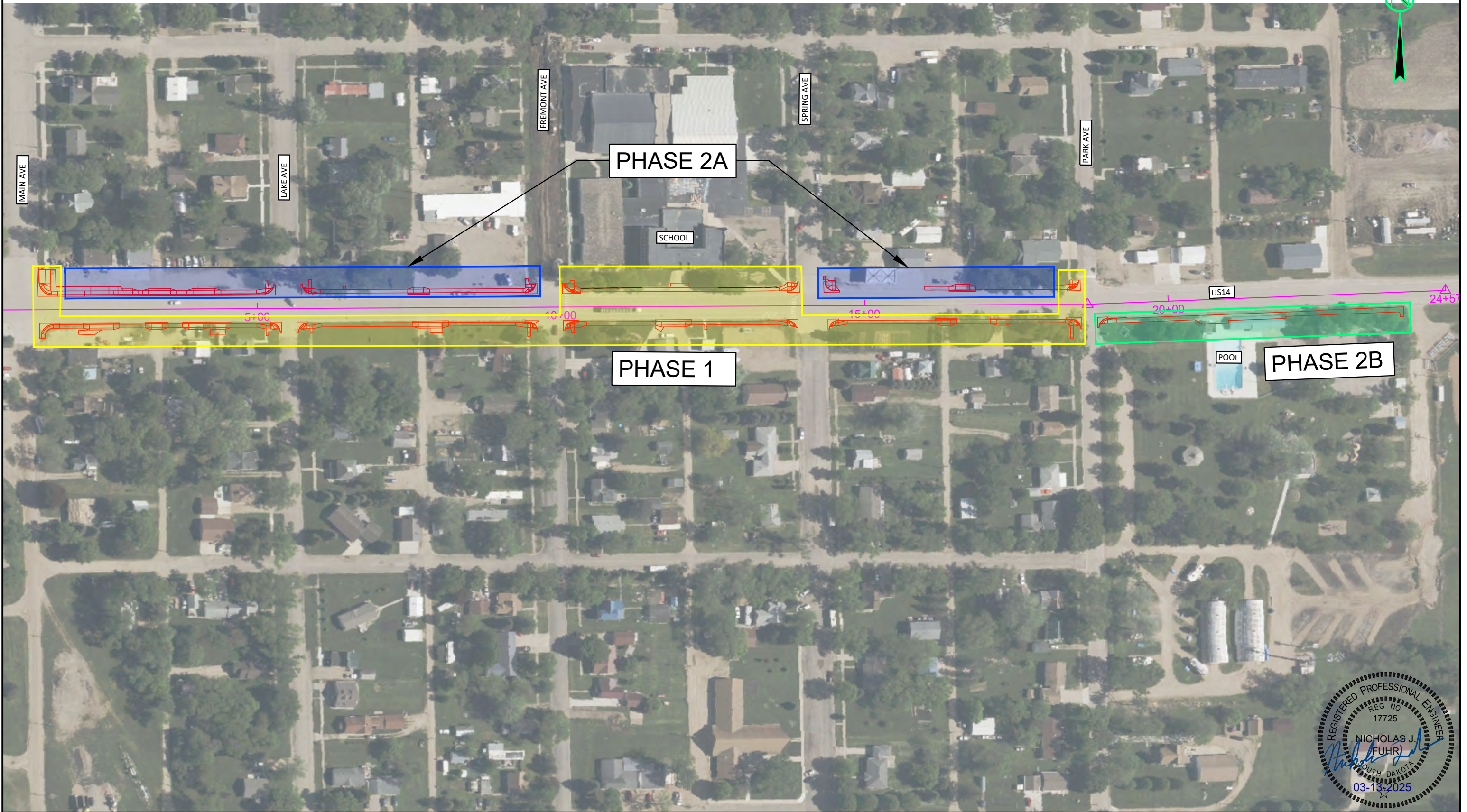


NOTES:
 PHASE 1: Sidewalk improvements, permanent pavement markings, RRFB installation. Completion August 15.
 PHASE 2A: Sidewalk improvements remaining north of US14. Completion October 15.
 PHASE 2B: Sidewalk improvements south of US14 in front of the pool. Work cannot begin until August 15 and completed by October 15.

*Completion of Phase 1 required prior to starting Phase 2A.

FOR BIDDING PURPOSES ONLY

BAI JOB # 24020.53	STATE OF SOUTH DAKOTA	PROJECT P TAPR(60)	SHEET 33	TOTAL SHEETS 68
Plotting Date: 03/13/2026		Rev:		



FOR BIDDING PURPOSES ONLY

BAI JOB # 24020.53

STATE OF SOUTH DAKOTA

PROJECT
P TAPR(60)

SHEET
34

TOTAL SHEETS
68

Plotting Date:

03/13/2026

Rev:

GENERAL TRAFFIC CONTROL



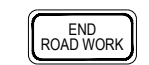
W20-1
48"x48"

(A)



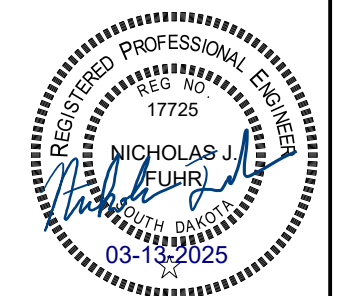
W21-5
48"x48"

(B)



G20-2
36"x18"

(C)



PAVEMENT MARKING LAYOUT

FOR BIDDING PURPOSES ONLY

BAI JOB # 24020.53

STATE OF SOUTH DAKOTA

PROJECT

P TAPR(60)

SHEET

35

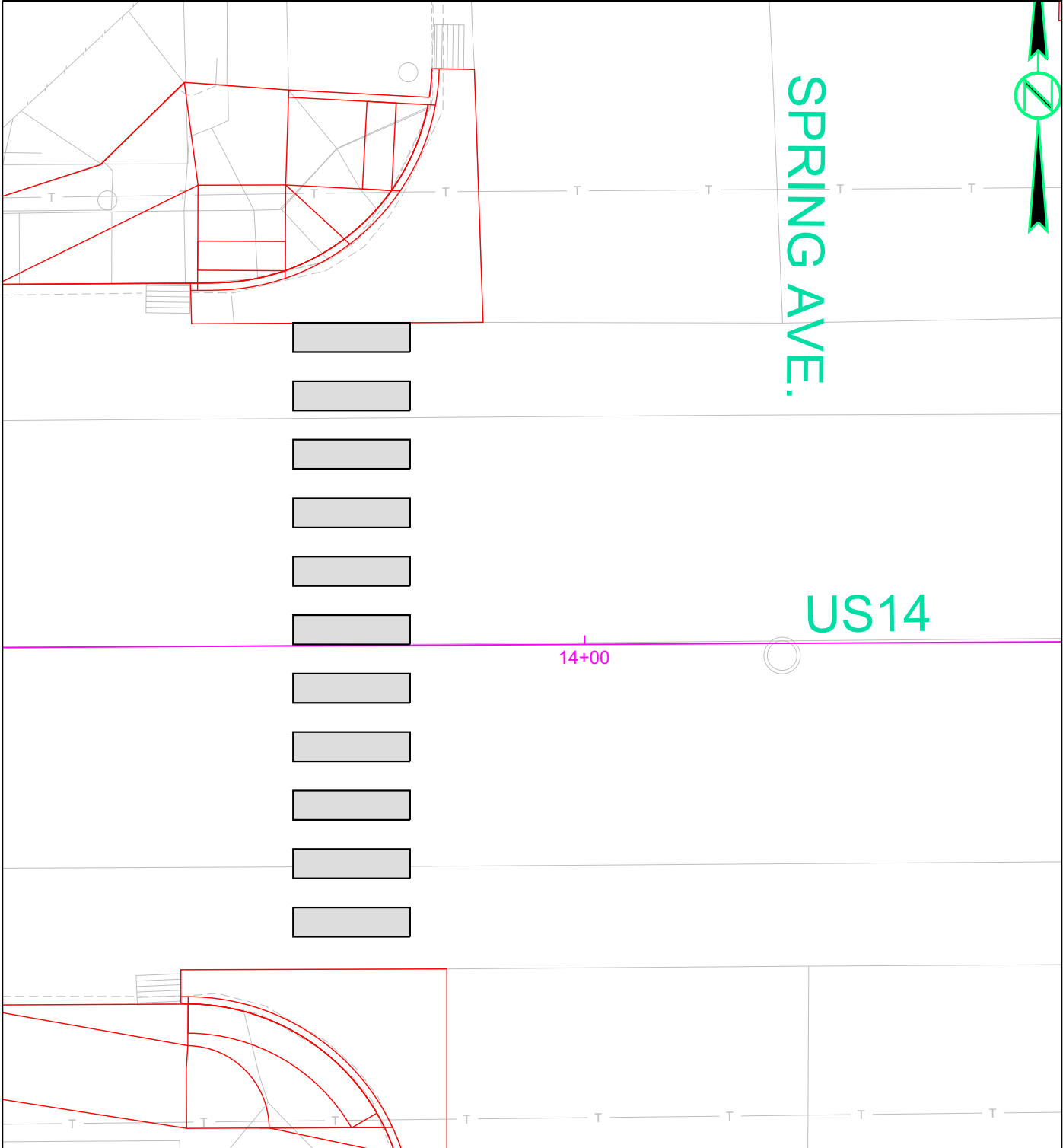
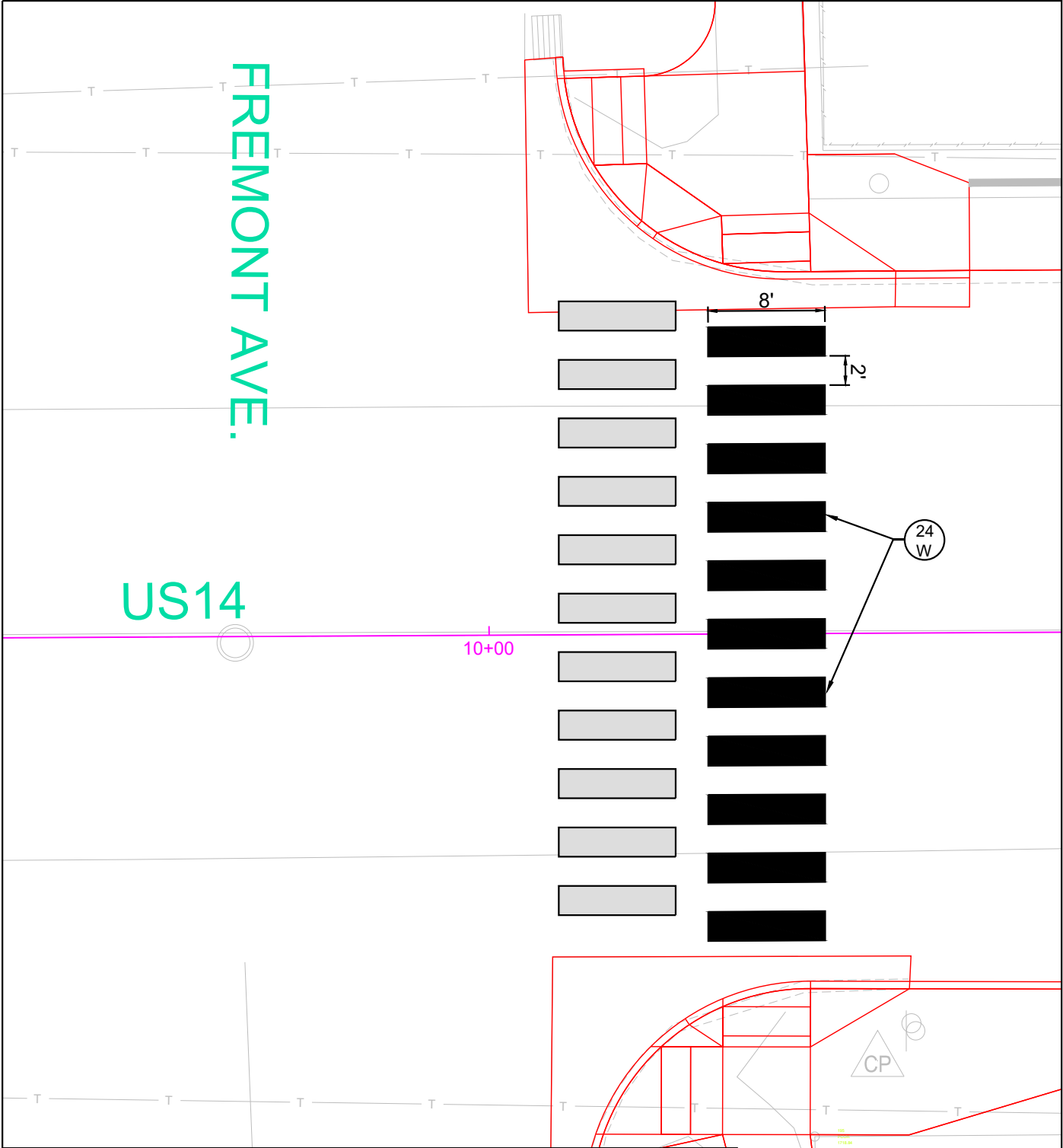
TOTAL SHEETS

68

Plotting Date:

03/13/2026

Rev:



FREMONT AVE.

SPRING AVE.

US14

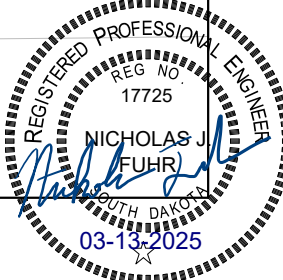
US14

10+00

14+00

PAVEMENT MARKING LEGEND

KEY	ITEM	EST QUANT	UNIT
(24 W)	Cold Applied Plastic Pavement Marking, 24" White	88	FT
■	Remove Pavement Marking, Area	352	SQFT



CONDUIT LAYOUT FOR BIDDING PURPOSES ONLY

BAI JOB # 24020.53

STATE OF SOUTH DAKOTA

PROJECT

P TAPR(60)

SHEET

36

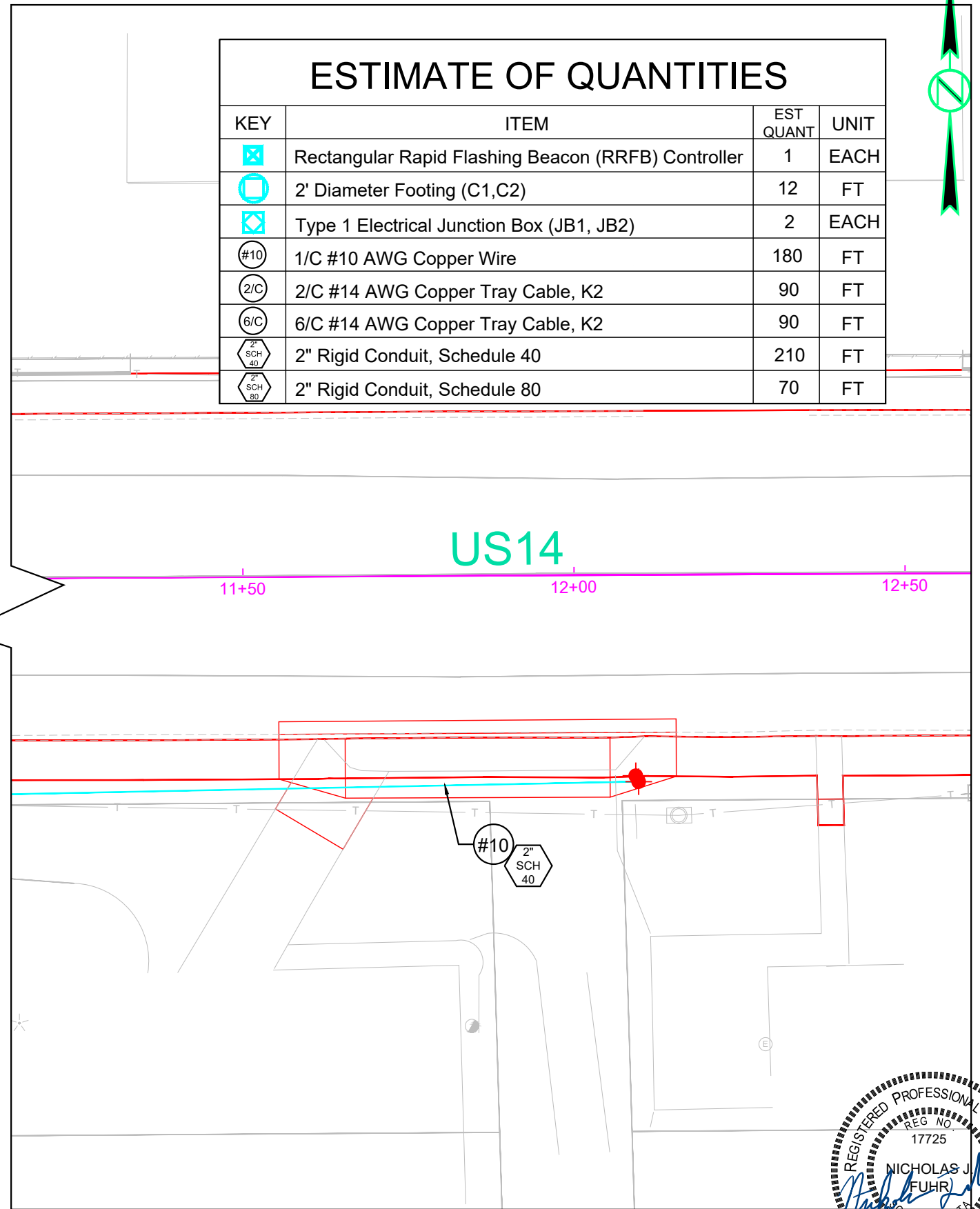
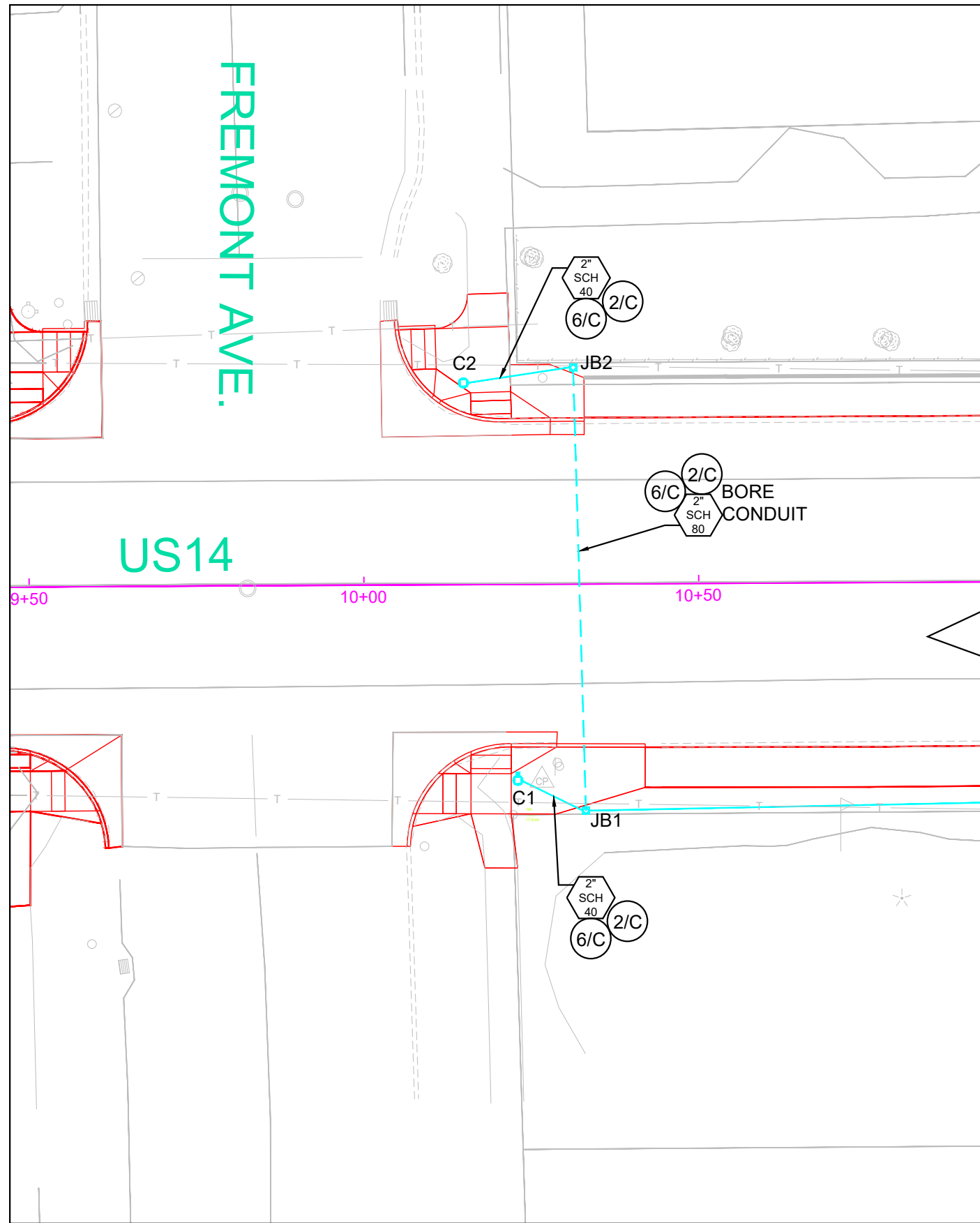
TOTAL SHEETS

68

Plotting Date:

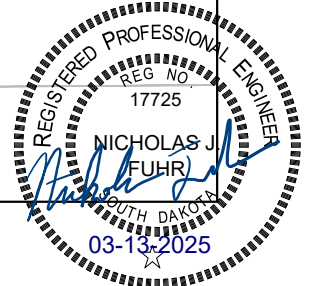
03/13/2026

Rev:



ESTIMATE OF QUANTITIES

KEY	ITEM	EST QUANT	UNIT
	Rectangular Rapid Flashing Beacon (RRFB) Controller	1	EACH
	2' Diameter Footing (C1,C2)	12	FT
	Type 1 Electrical Junction Box (JB1, JB2)	2	EACH
	1/C #10 AWG Copper Wire	180	FT
	2/C #14 AWG Copper Tray Cable, K2	90	FT
	6/C #14 AWG Copper Tray Cable, K2	90	FT
	2" Rigid Conduit, Schedule 40	210	FT
	2" Rigid Conduit, Schedule 80	70	FT



RECTANGULAR RAPID FLASHING BEACONS (RRFB) & SIGNS LAYOUT

FOR BIDDING PURPOSES ONLY

BAI JOB # 24020.53

STATE OF SOUTH DAKOTA

PROJECT

P TAPR(60)

SHEET

37

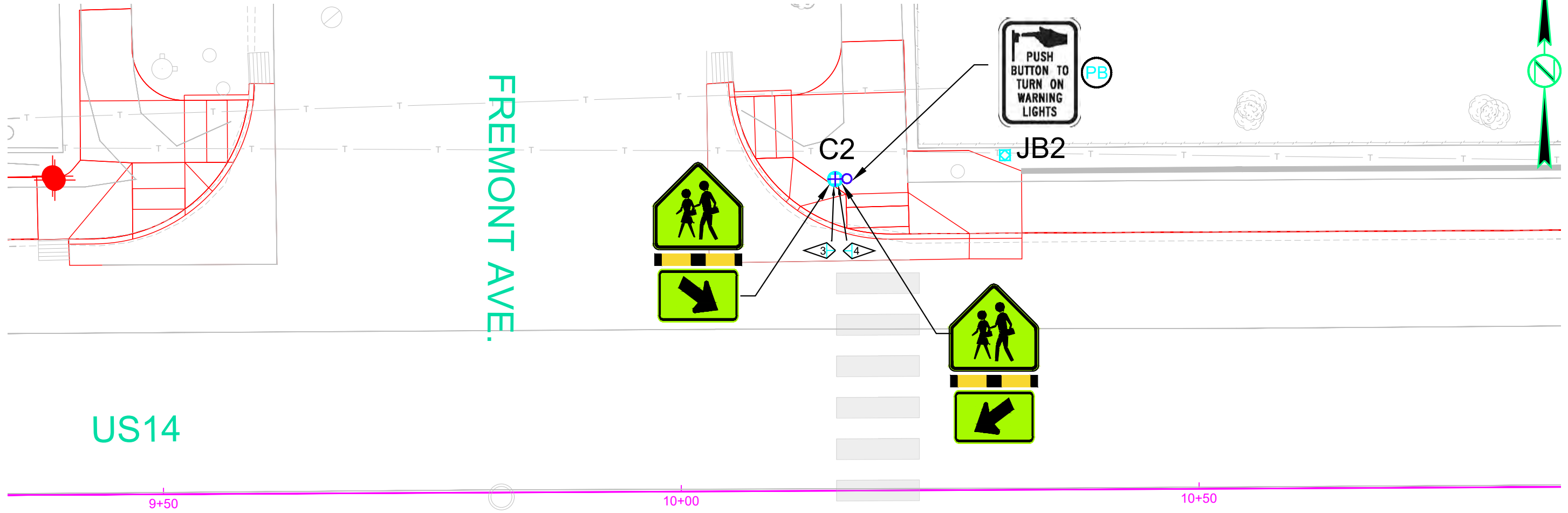
TOTAL SHEETS

68

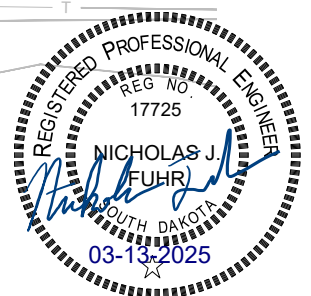
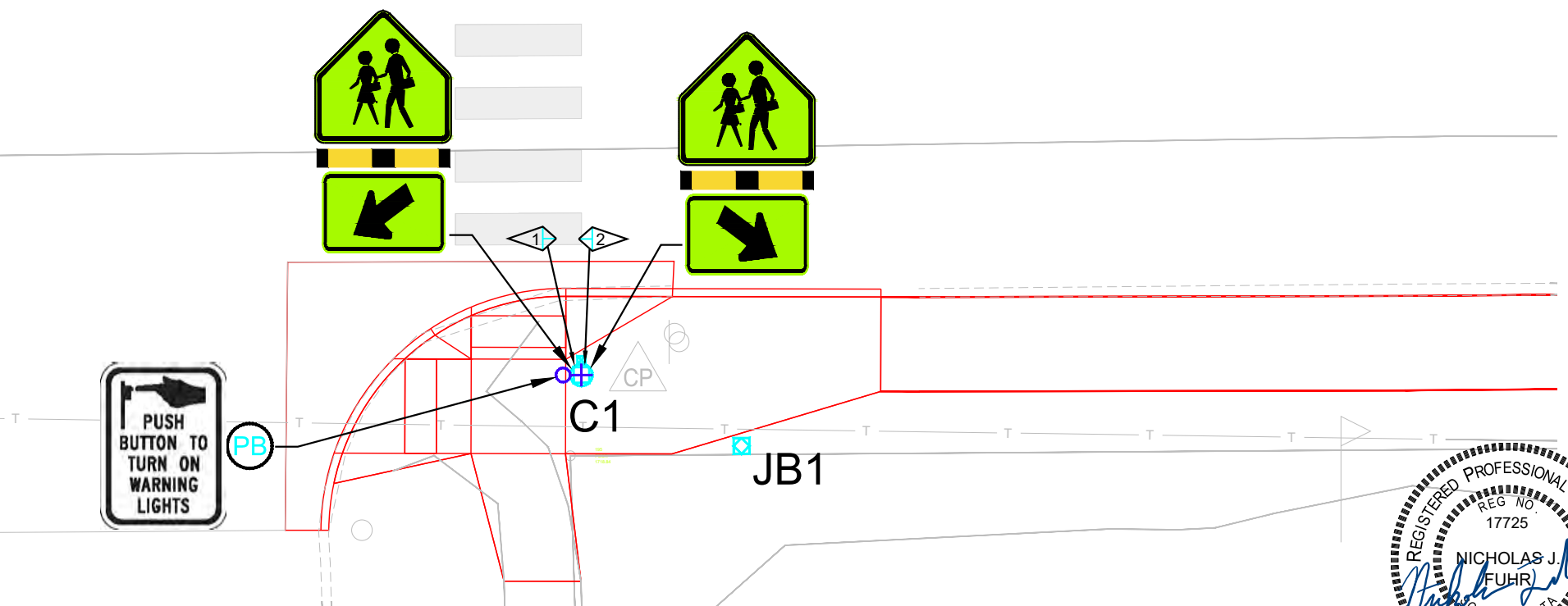
Plotting Date: 03/13/2026

Rev:

Rev:



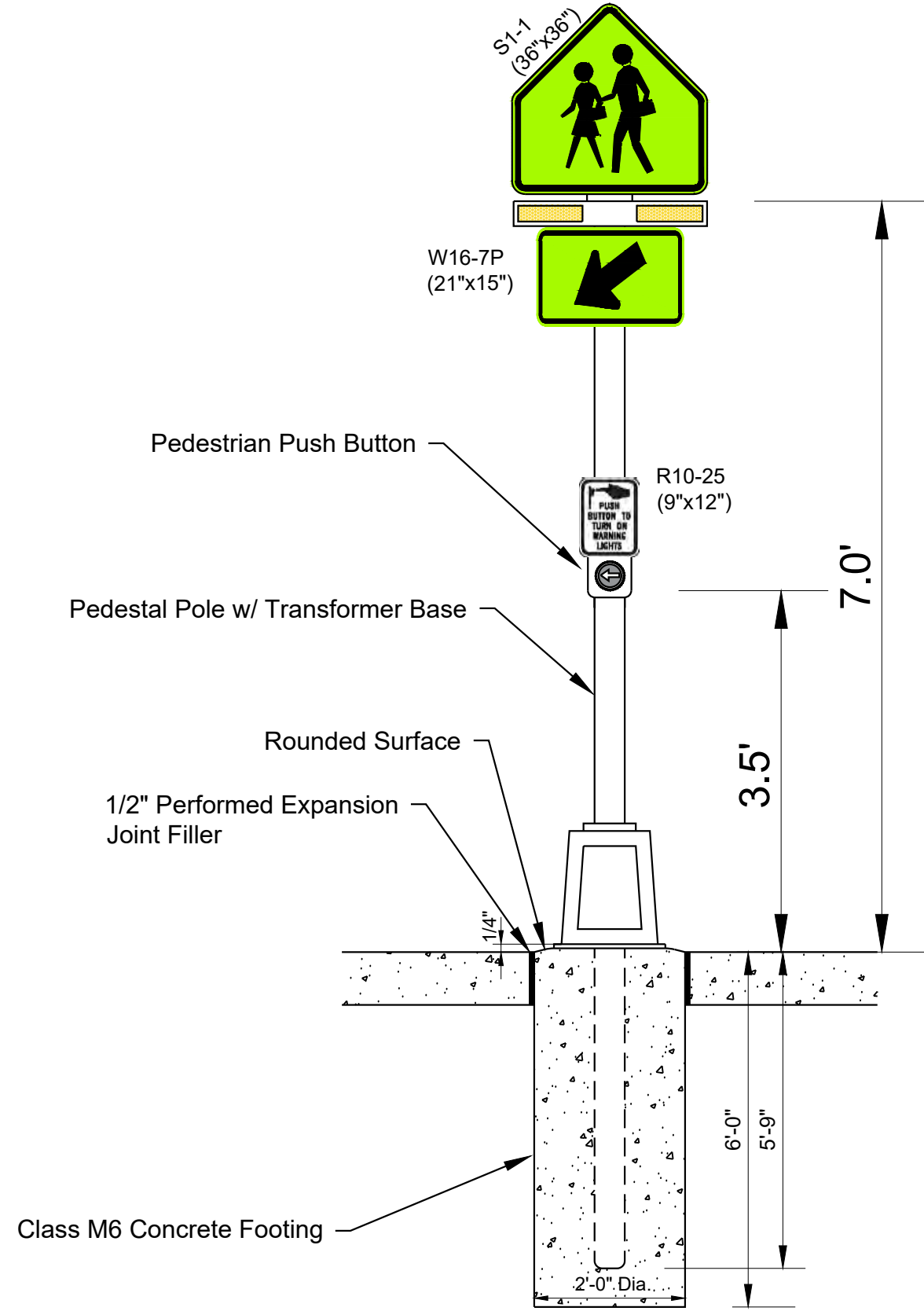
ESTIMATE OF QUANTITIES			
	ITEM	EST QUANT	UNIT
	Pedestal Signal Pole (C1,C2)	2	EACH
	Rectangular Rapid Flashing Beacon (1-4) Incidental to RRFB System	4	EACH
	Pedestrian Push Button Incidental to RRFB System	2	EACH
	Pedestrian Directional Sign W16-7pL/W16-7pR Fluorescent Yellow/Green) Incidental to RRFB System	4	EACH
	Pedestrian Sign S1-1 (Fluorescent Yellow/Green) Incidental to RRFB System	4	EACH
	Pedestrian Crossing Sign R10-25 Incidental to RRFB System	2	EACH



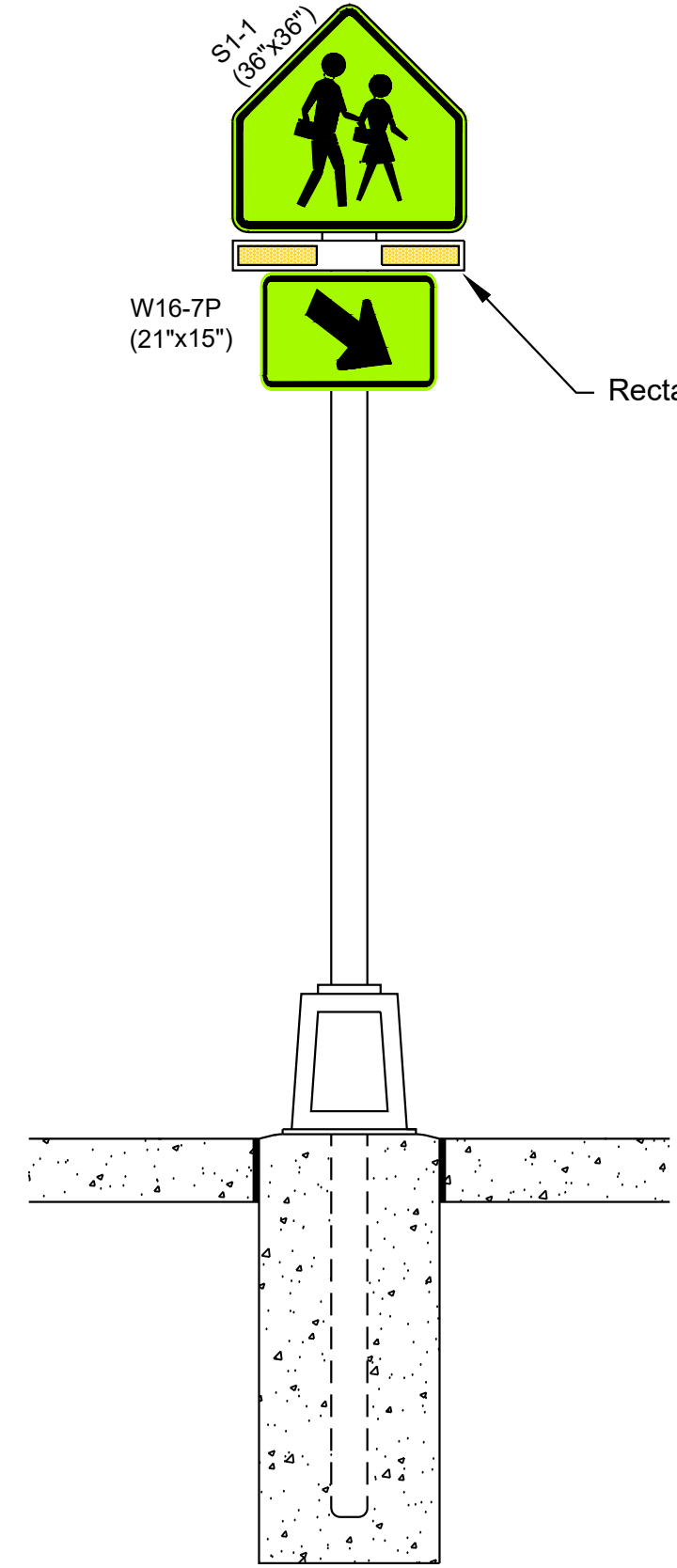
SPECIAL DETAIL

FOR BIDDING PURPOSES ONLY

RECTANGULAR RAPID FLASHING BEACONS & SIGNS



FRONT VIEW



BACK VIEW

Rectangular Rapid Flashing Beacon

Class M6 Concrete Footing

Pedestrian Push Button

Pedestal Pole w/ Transformer Base

Rounded Surface

1/2" Performed Expansion Joint Filler

W16-7P (21"x15")

S1-1 (36"x36")

R10-25 (9"x12")

W16-7P (21"x15")

S1-1 (36"x36")



SPECIAL SIGNING LAYOUT

FOR BIDDING PURPOSES ONLY

BAI JOB # 24020.53

STATE OF SOUTH DAKOTA

PROJECT

P TAPR(60)

SHEET

39

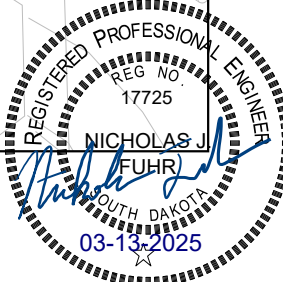
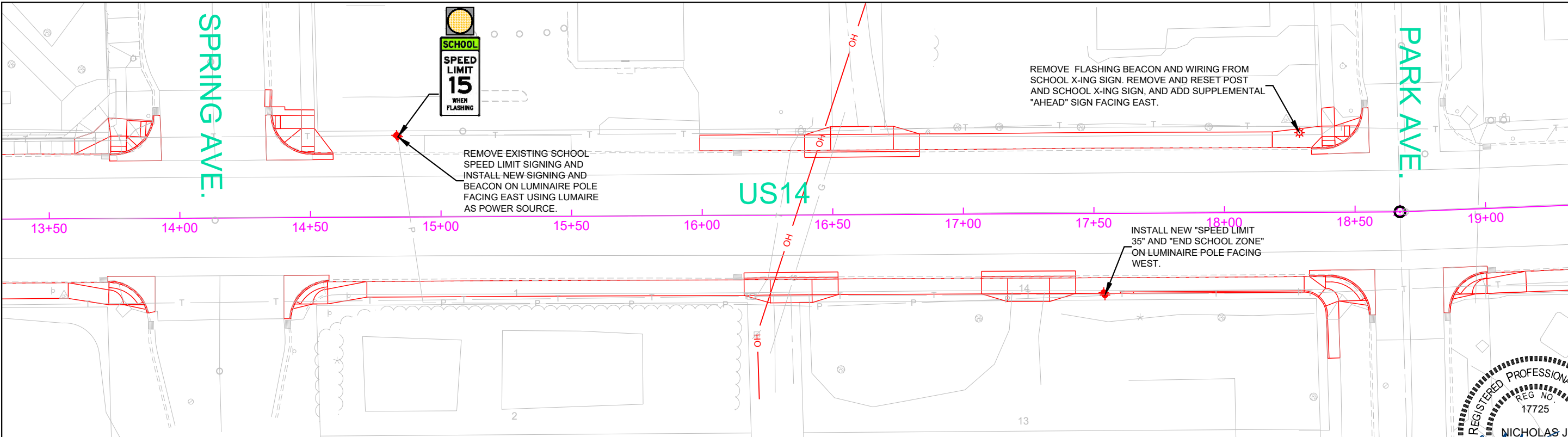
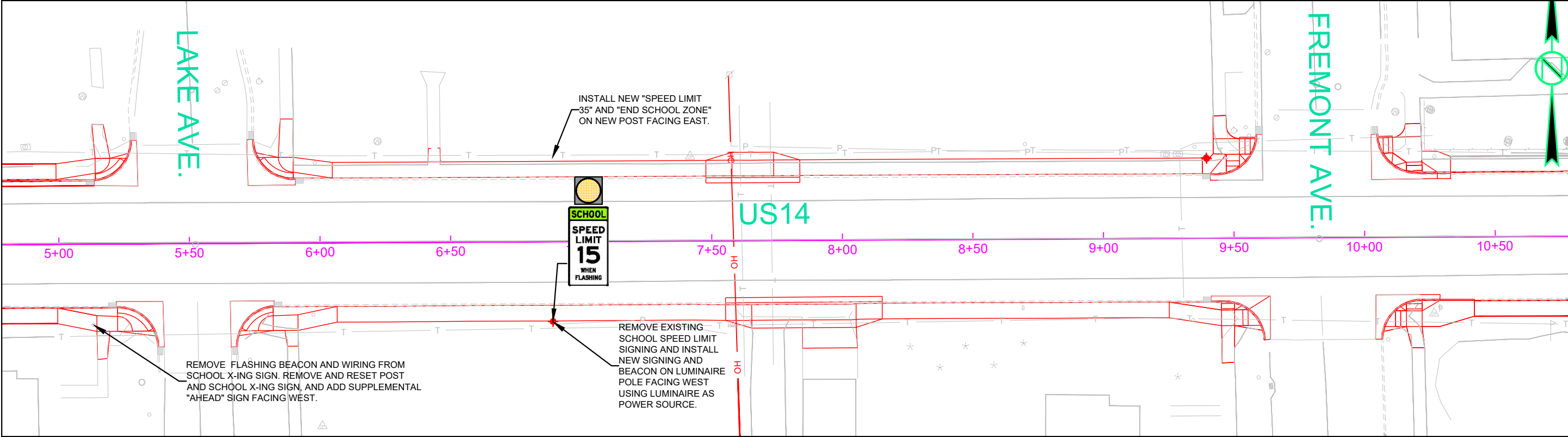
TOTAL SHEETS

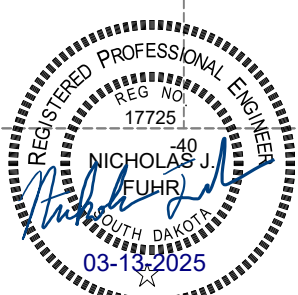
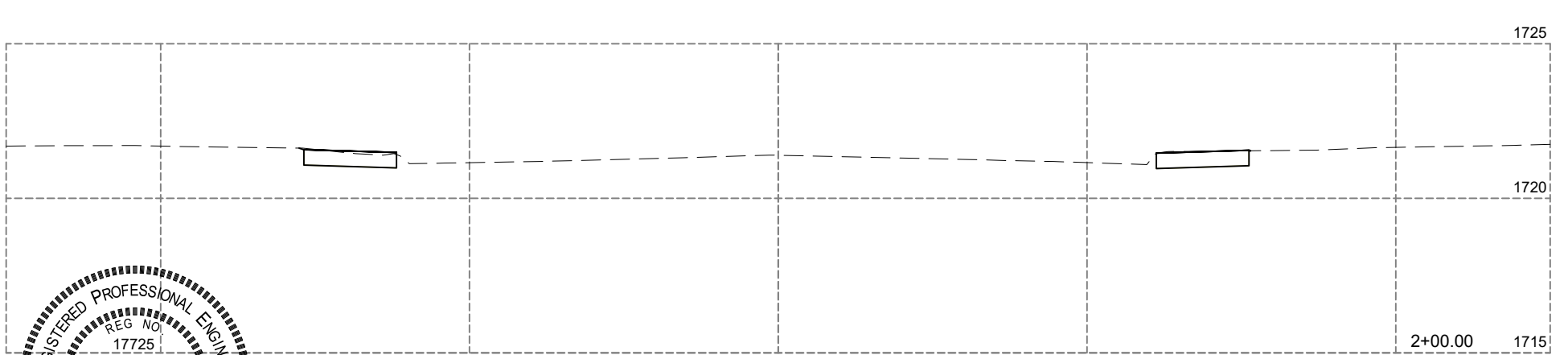
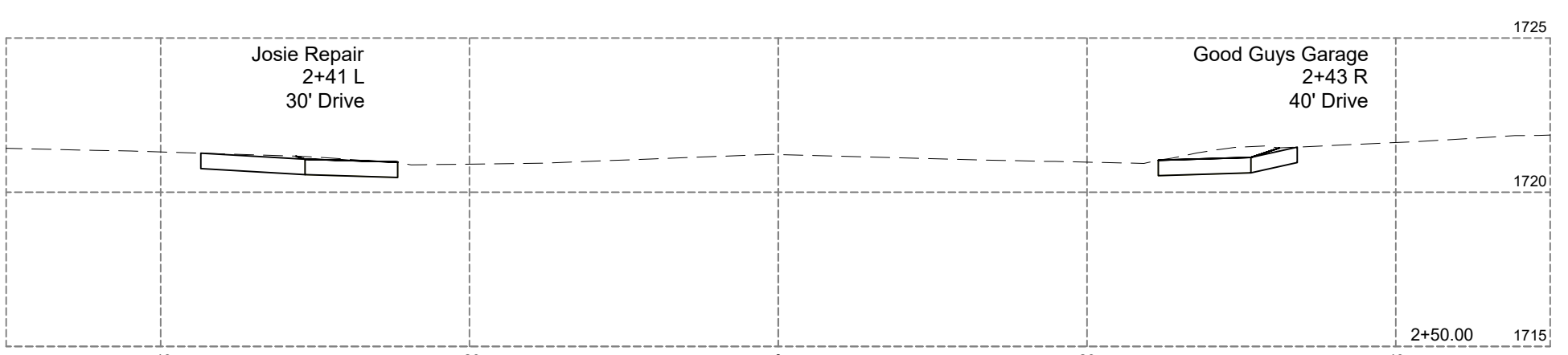
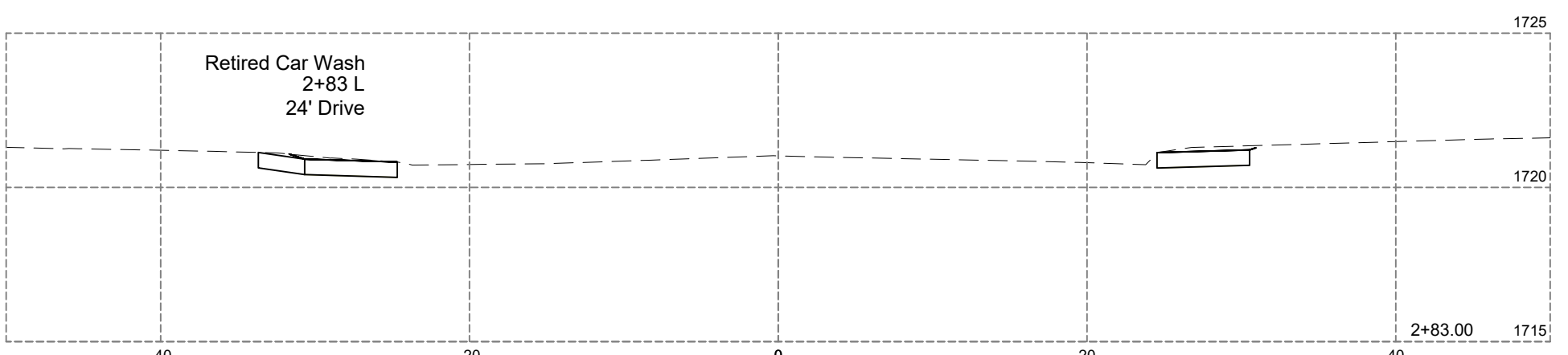
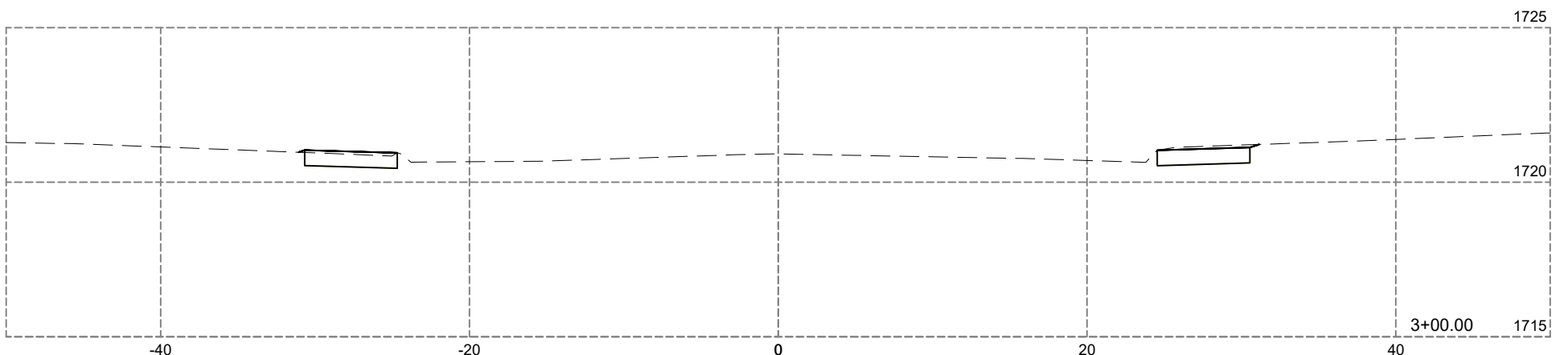
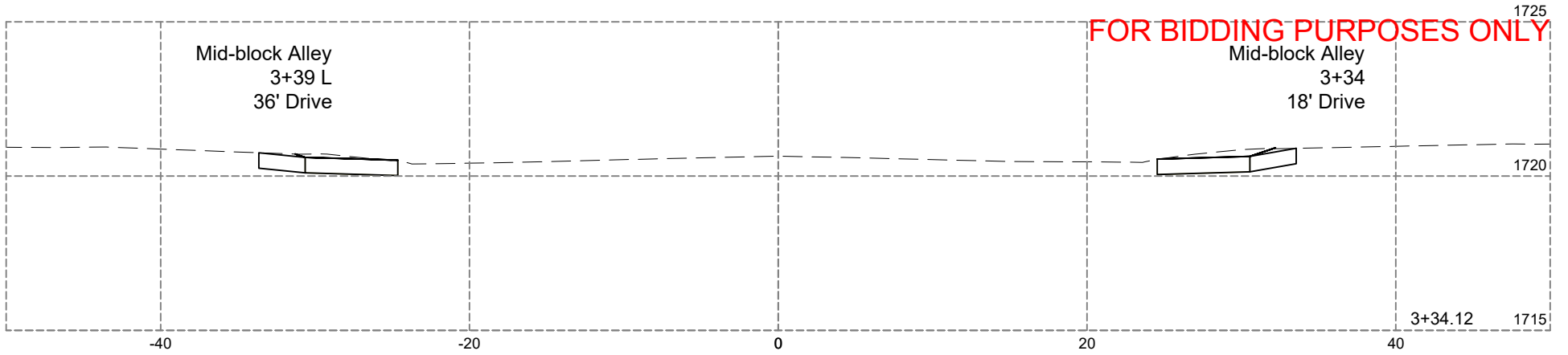
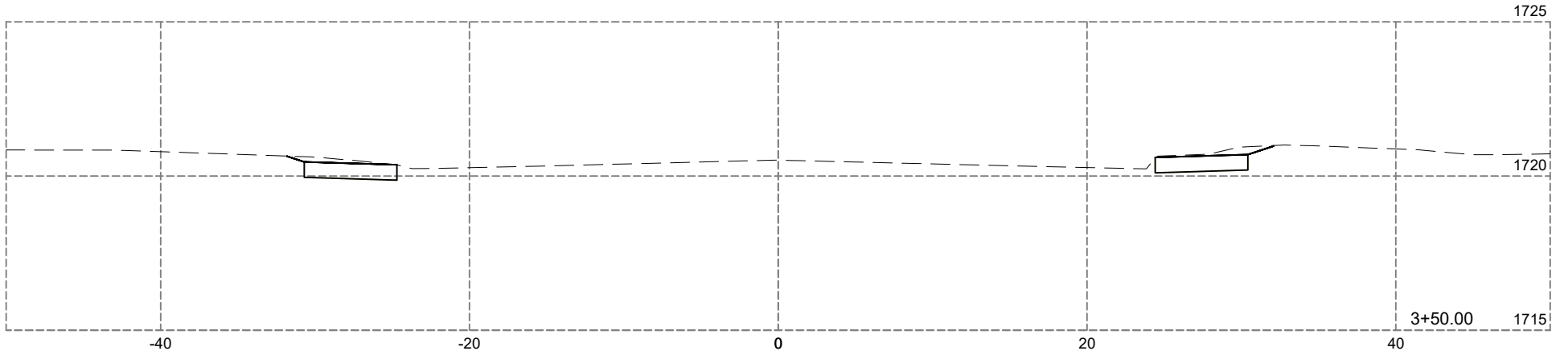
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Plotting Date:

03/13/2026

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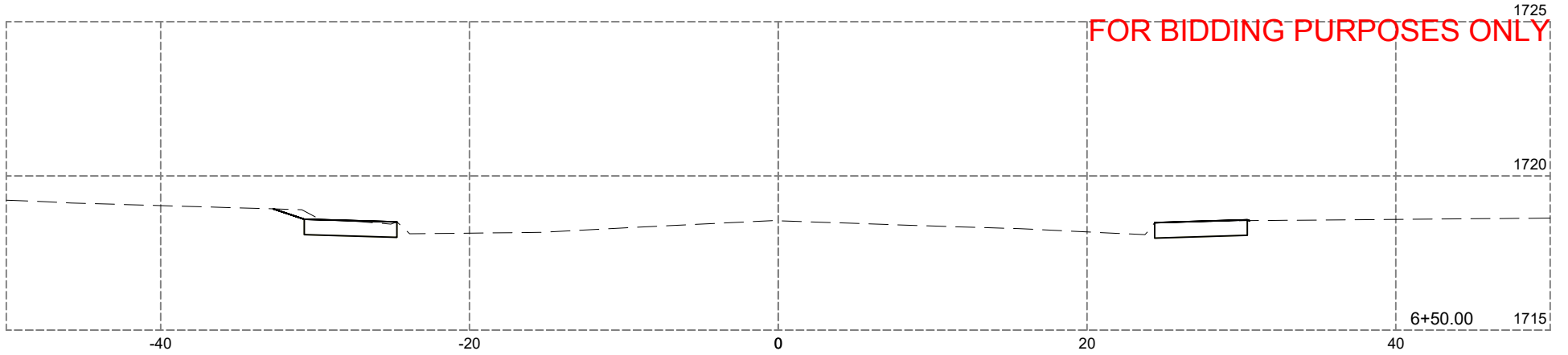
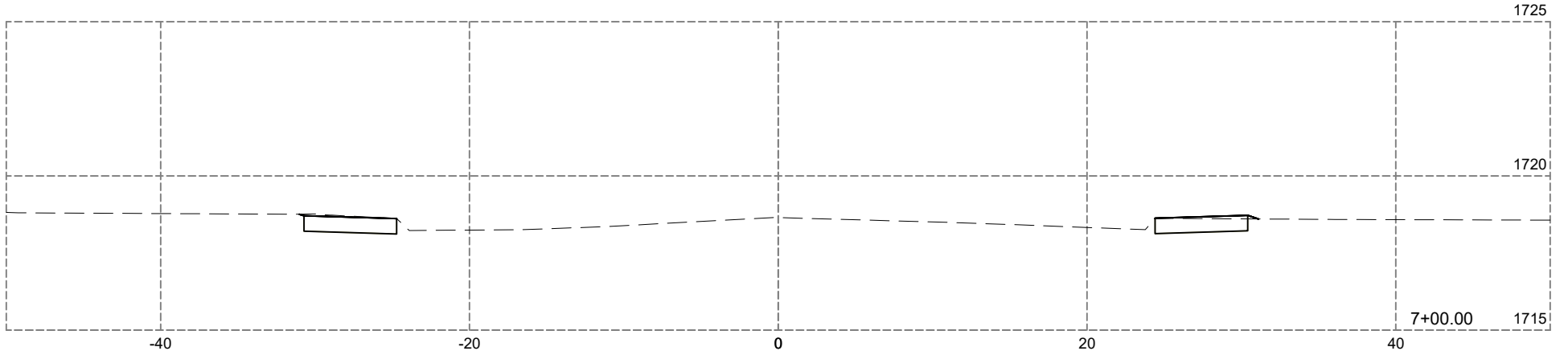




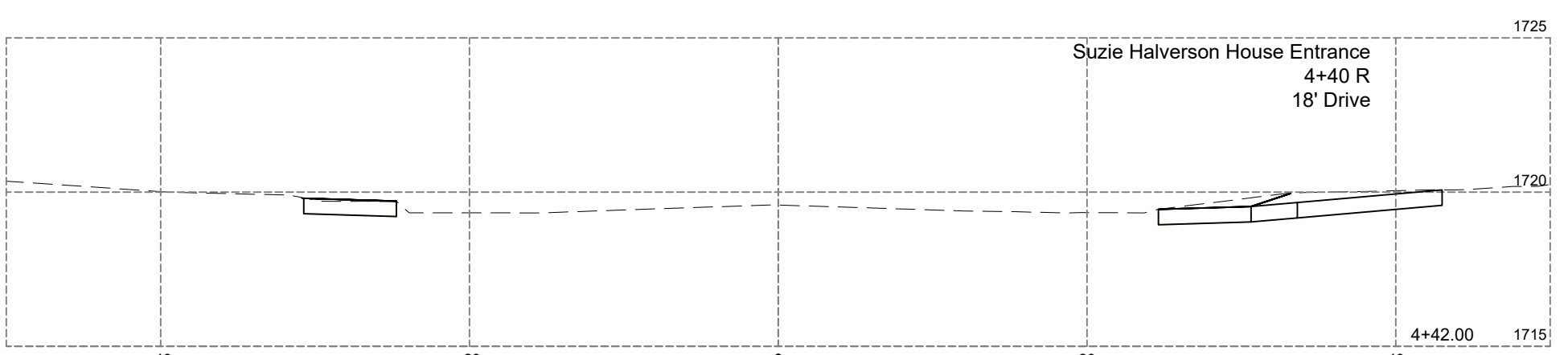
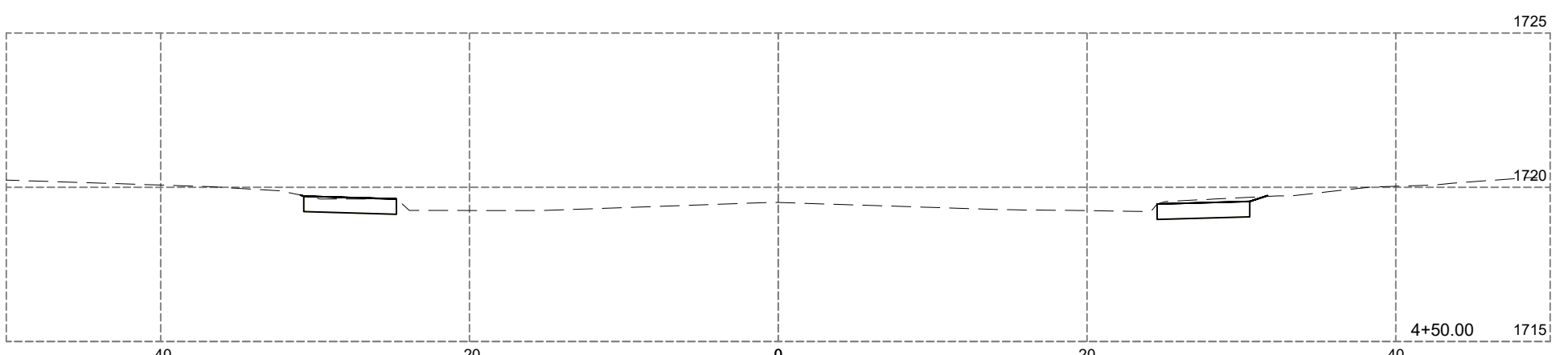
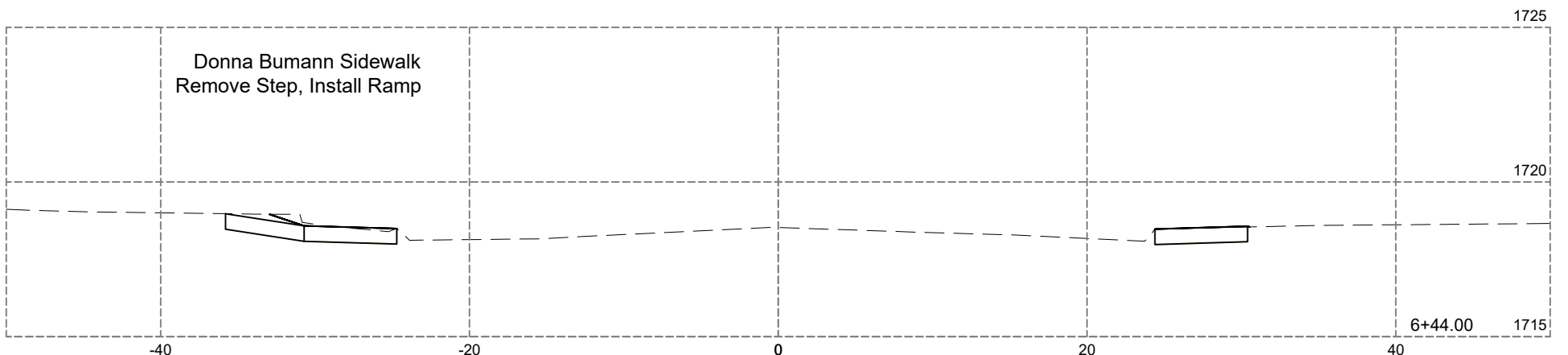
Plotting Date: 03/13/2026 Rev:

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	P TAPR(60)	40	68

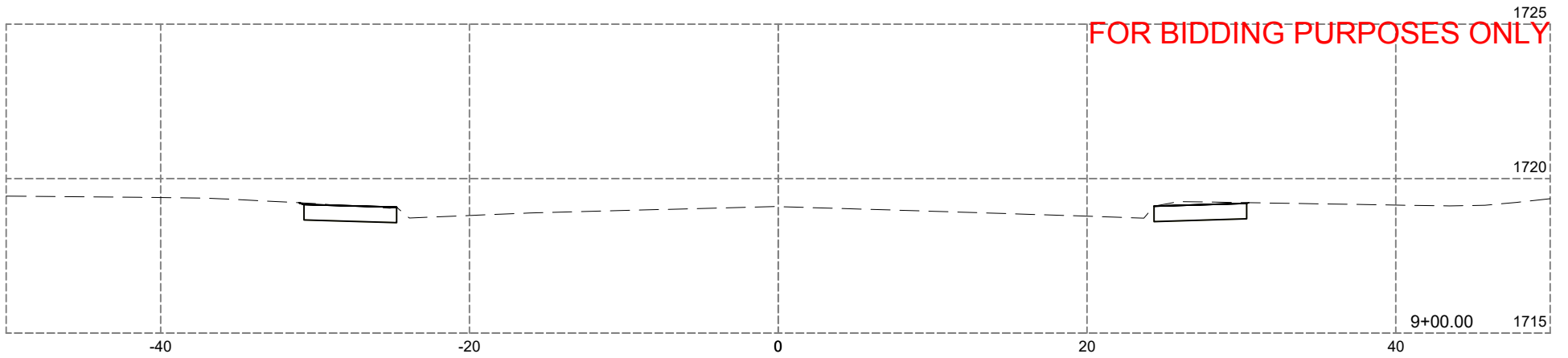
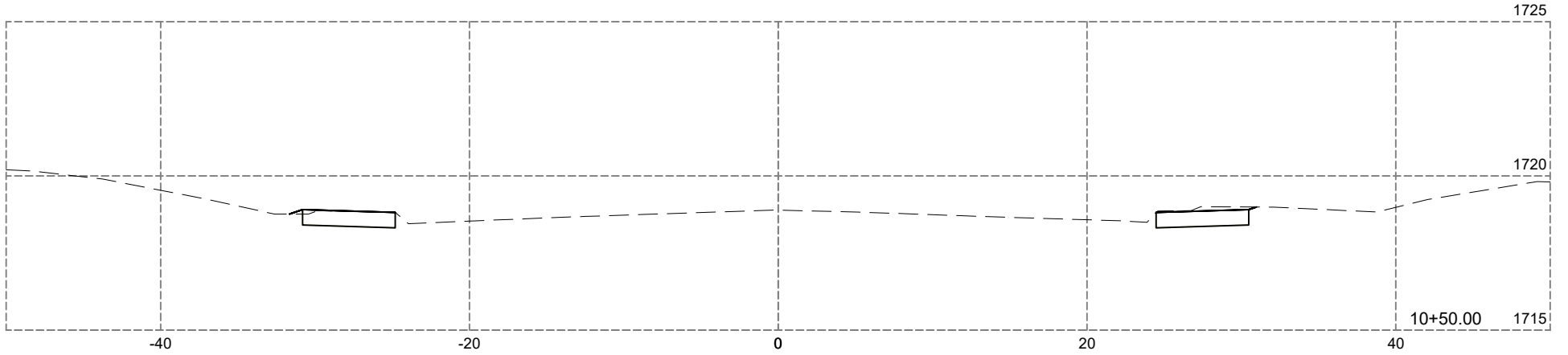
BAI JOB # 24020.53



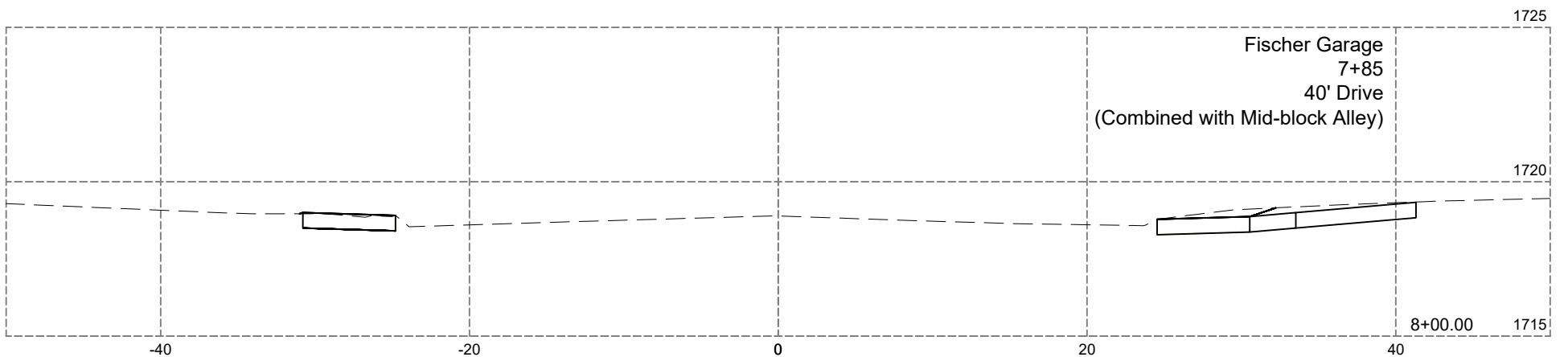
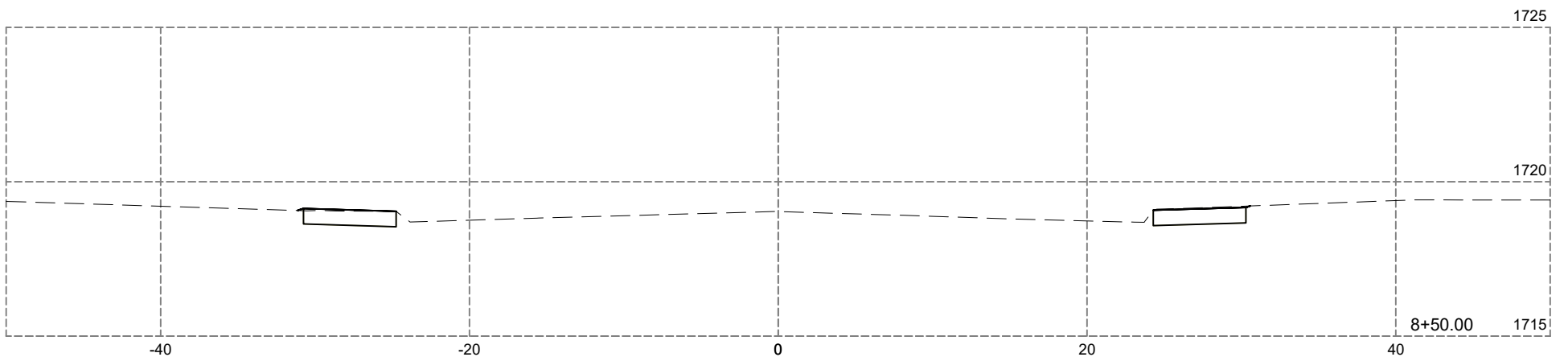
FOR BIDDING PURPOSES ONLY



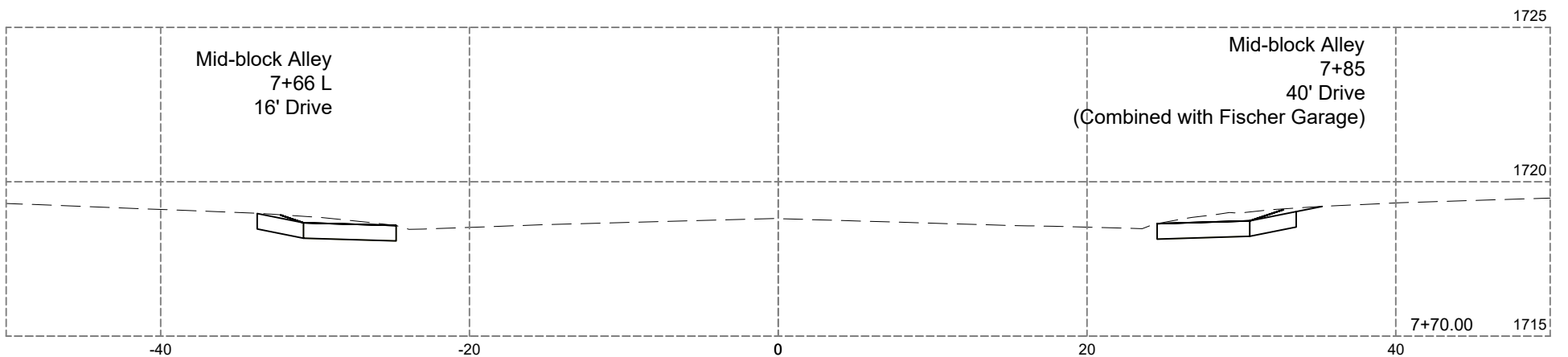
STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	P TAPR(60)	41	68



FOR BIDDING PURPOSES ONLY

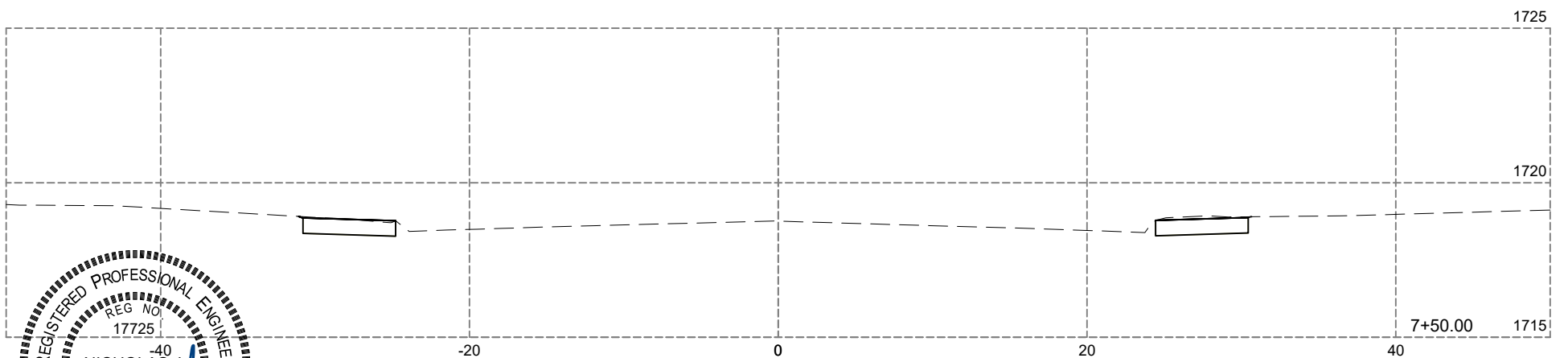


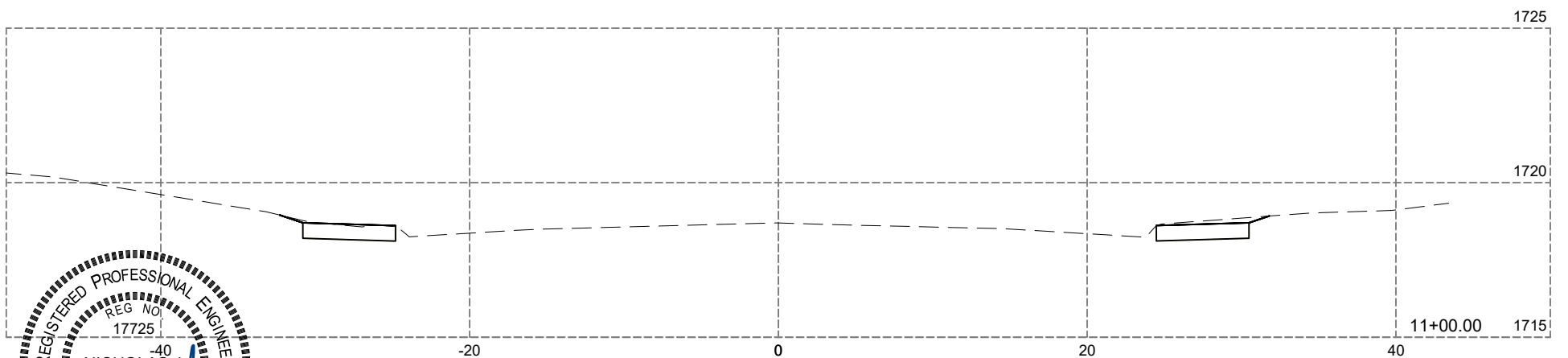
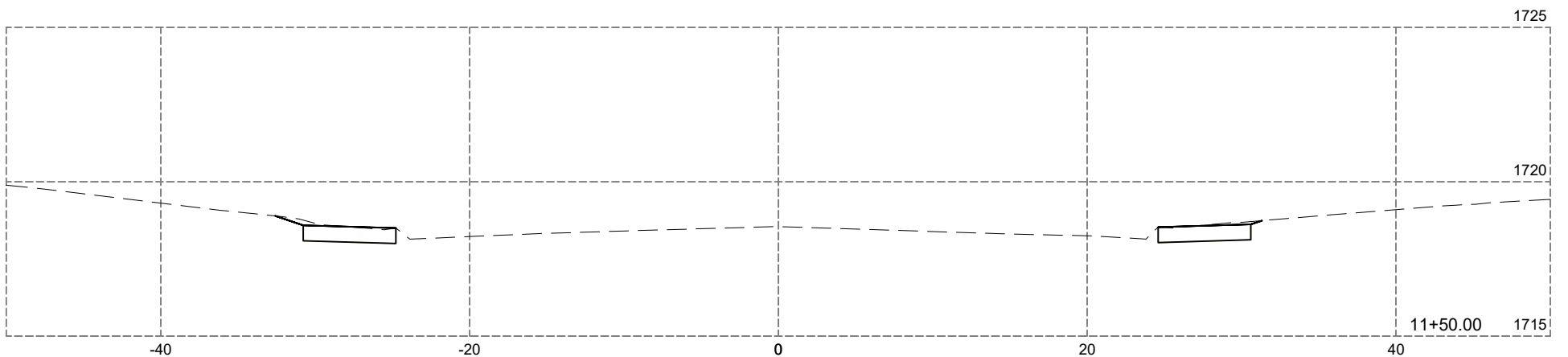
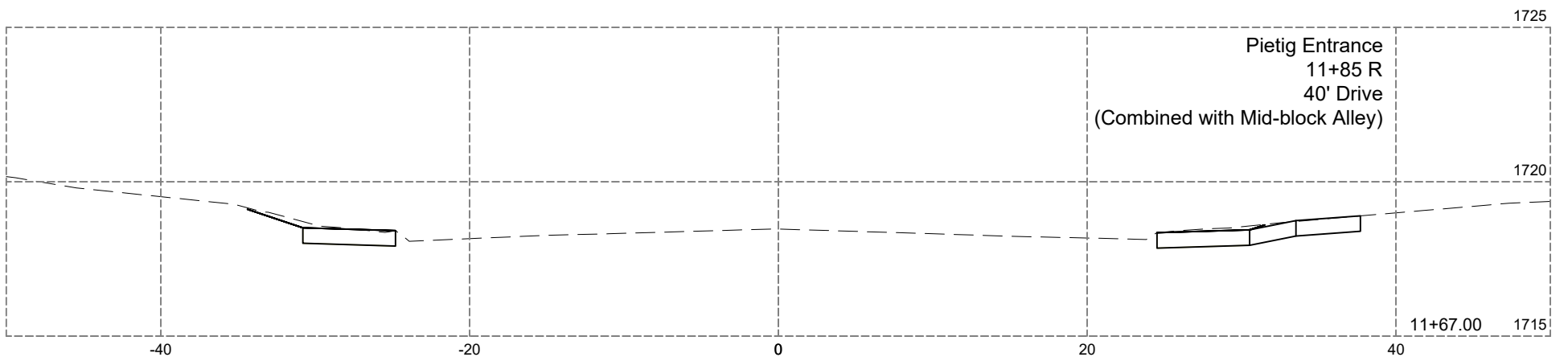
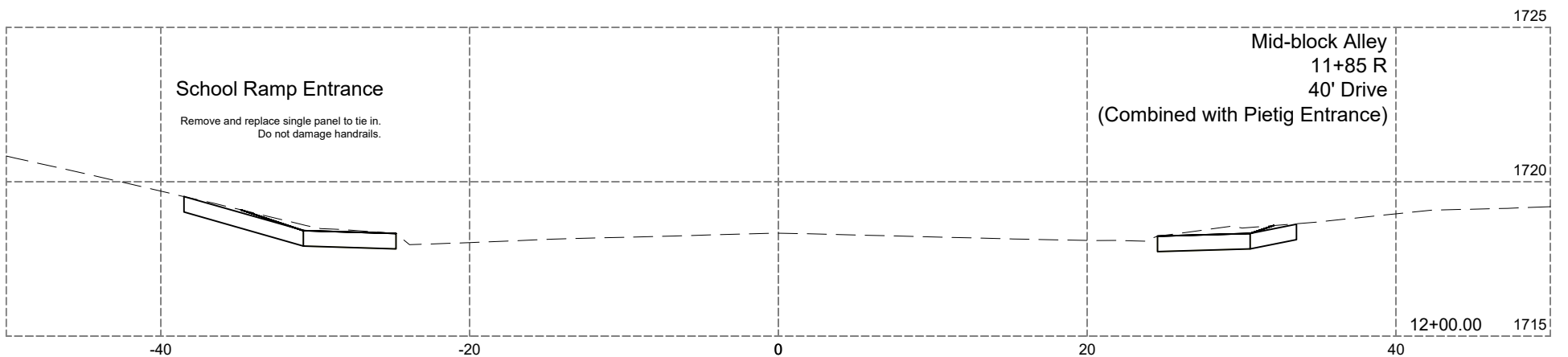
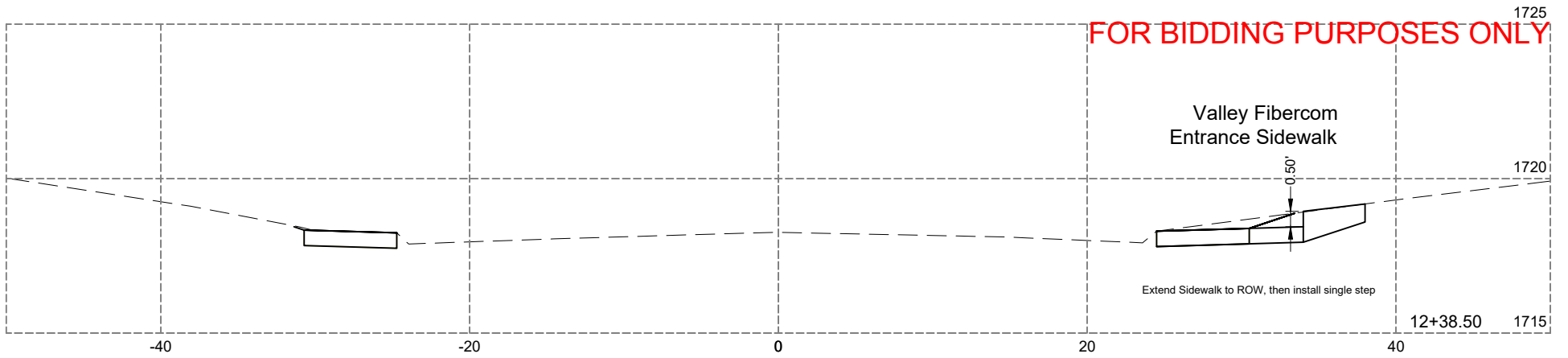
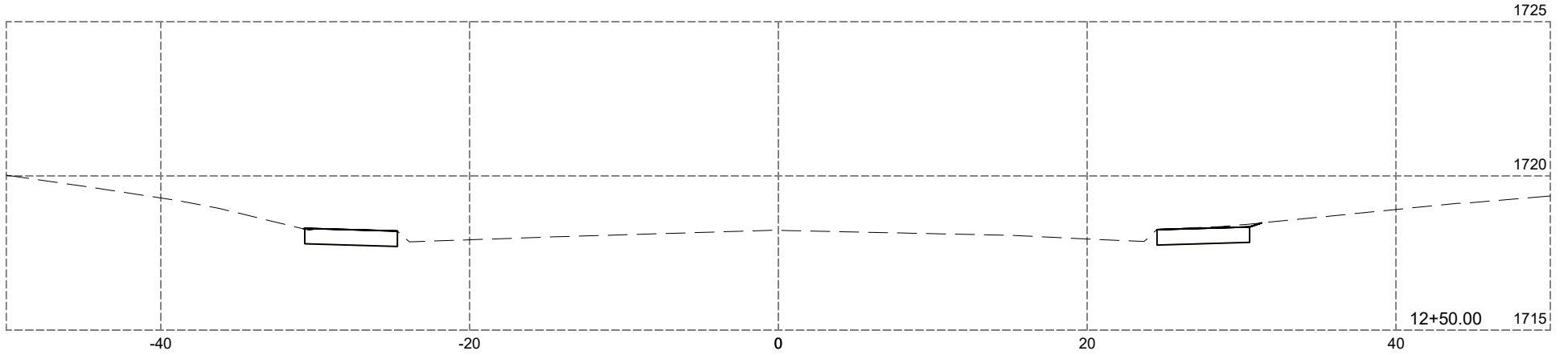
Fischer Garage
7+85
40' Drive
(Combined with Mid-block Alley)

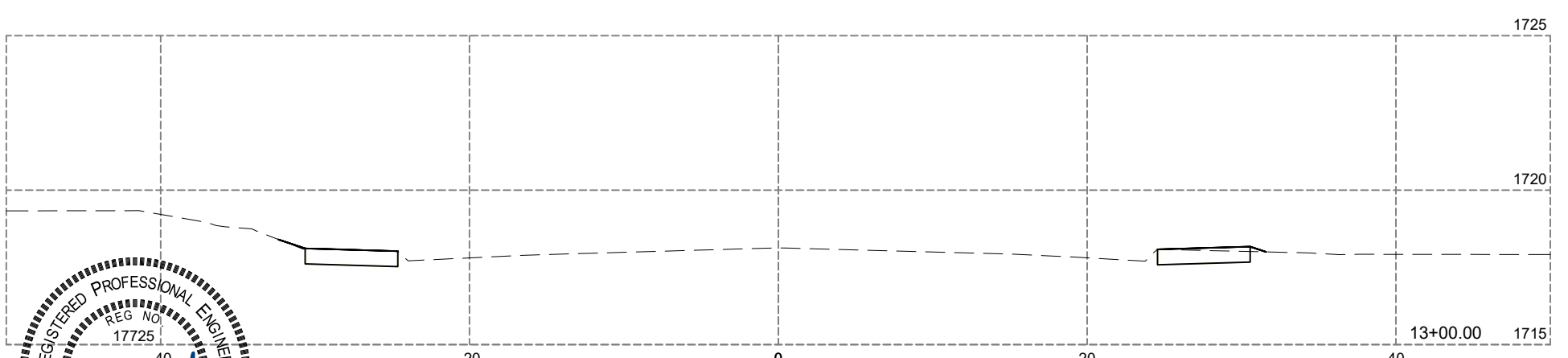
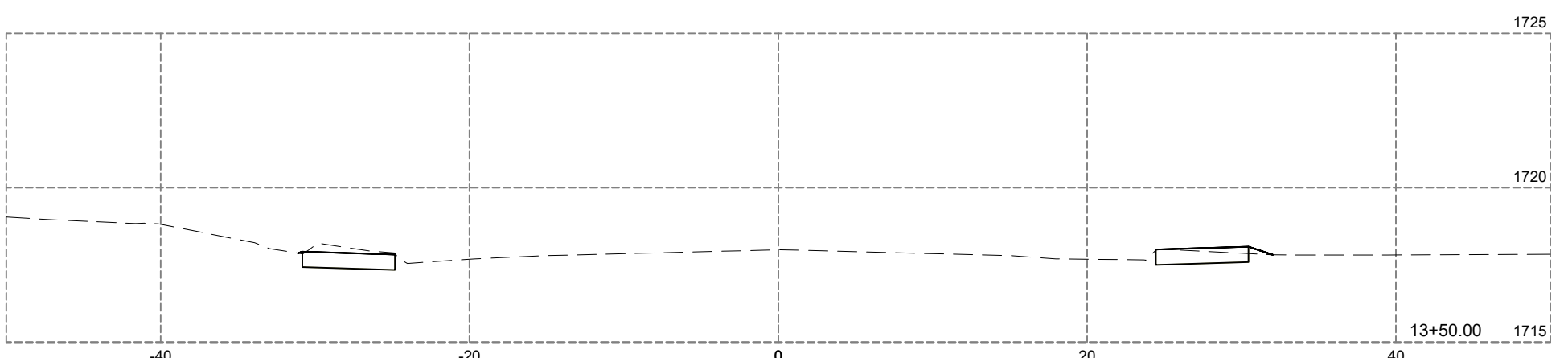
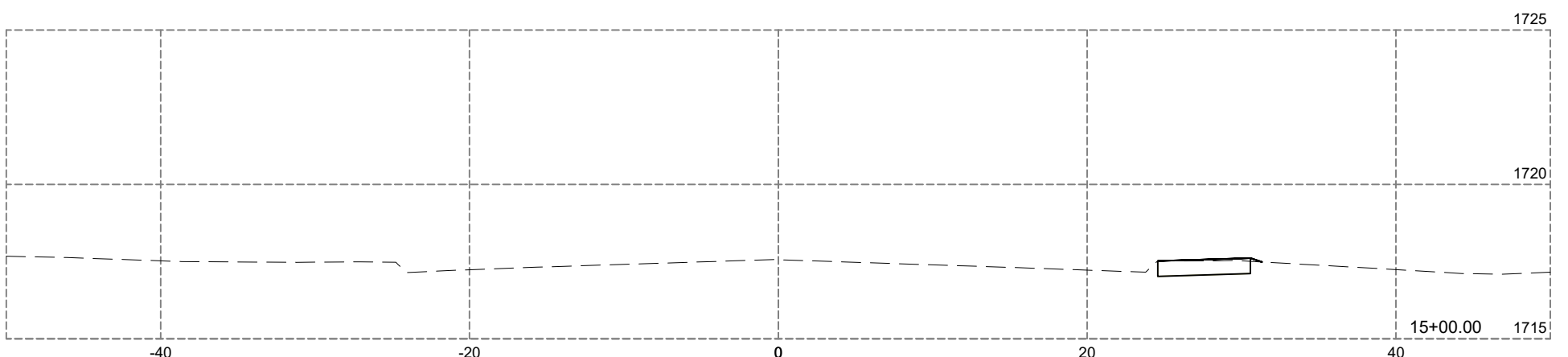
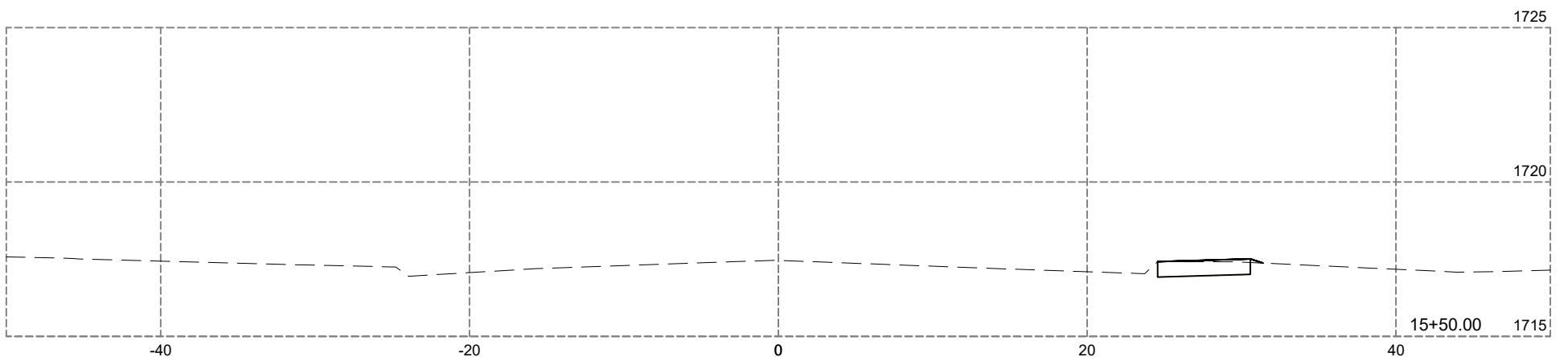
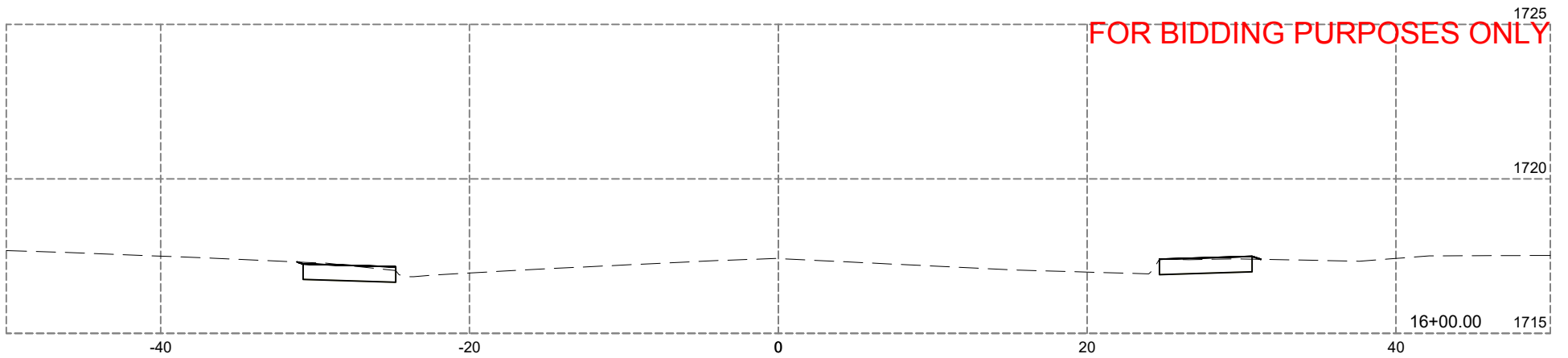
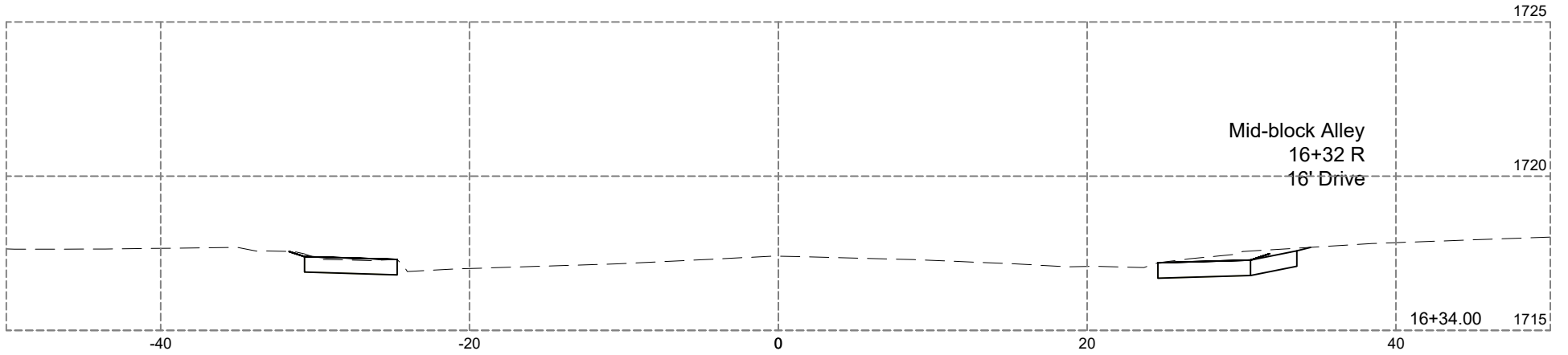


Mid-block Alley
7+66 L
16' Drive

Mid-block Alley
7+85
40' Drive
(Combined with Fischer Garage)



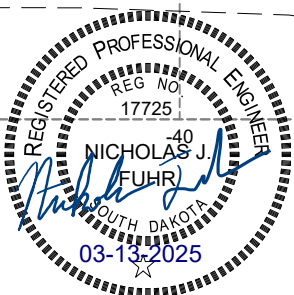
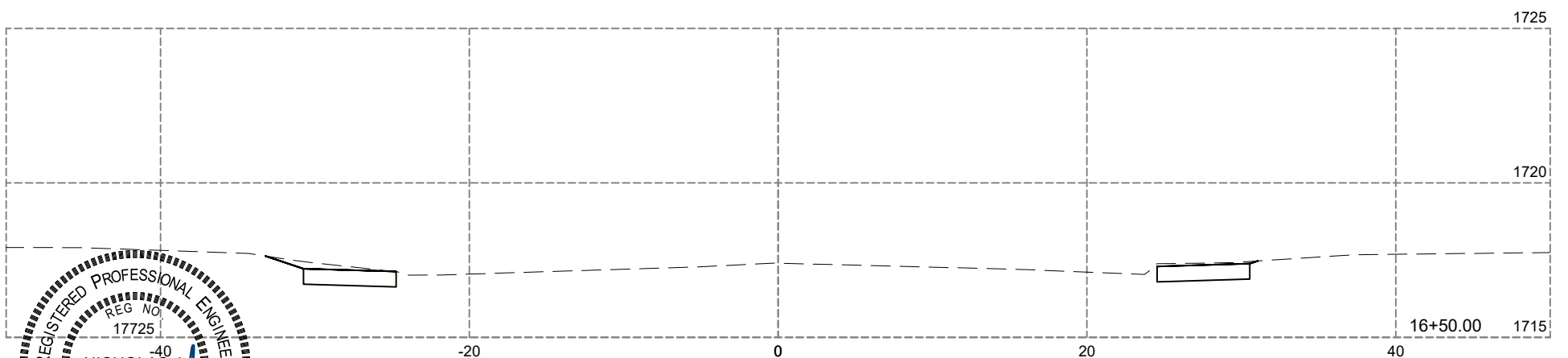
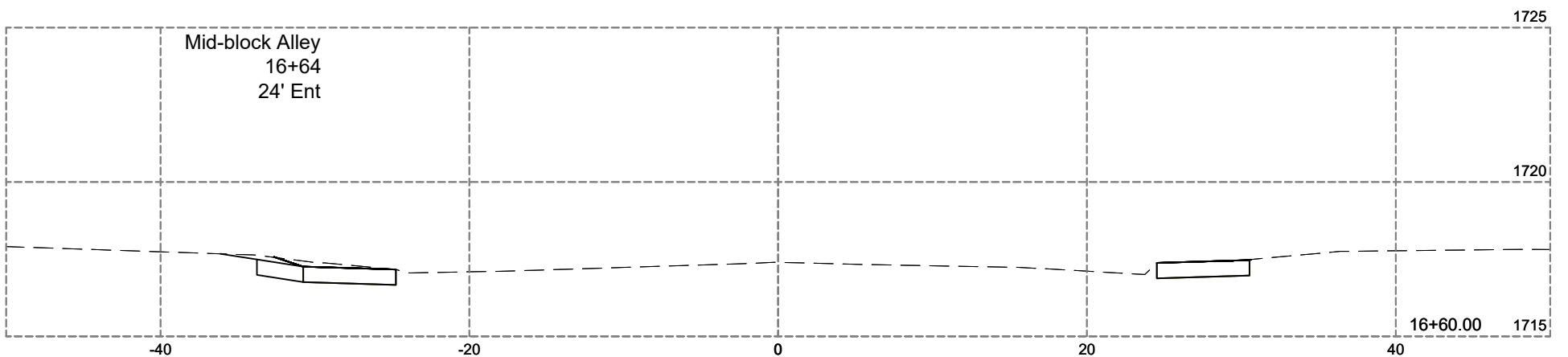
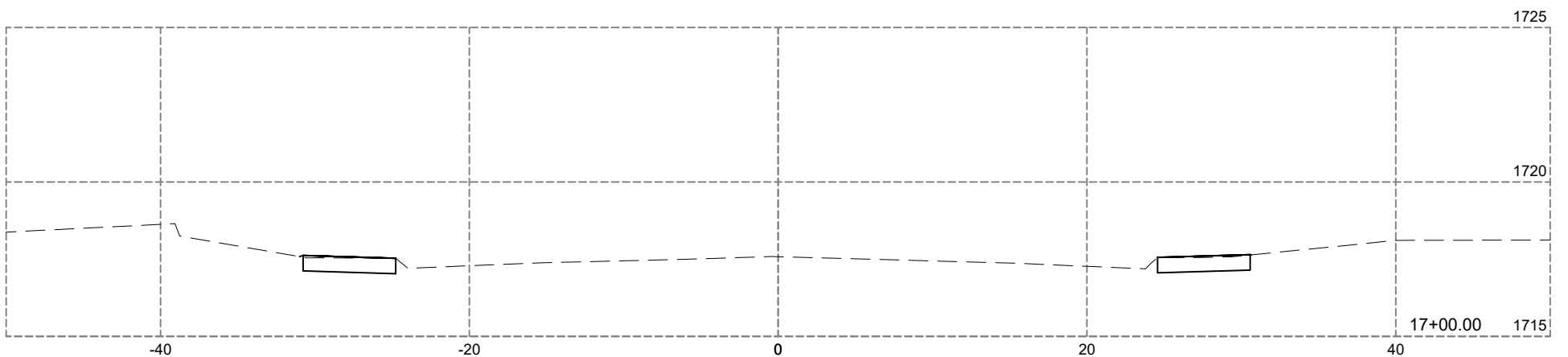
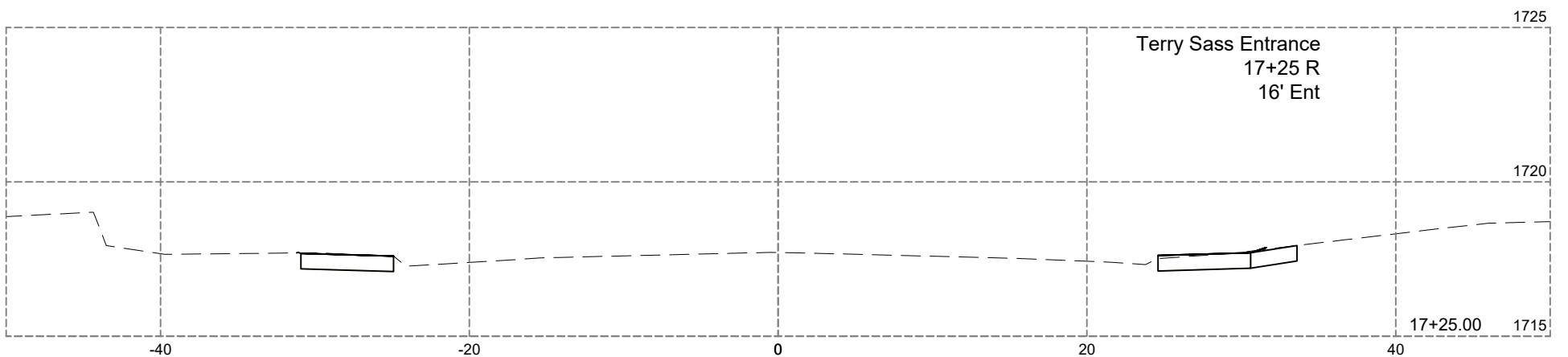
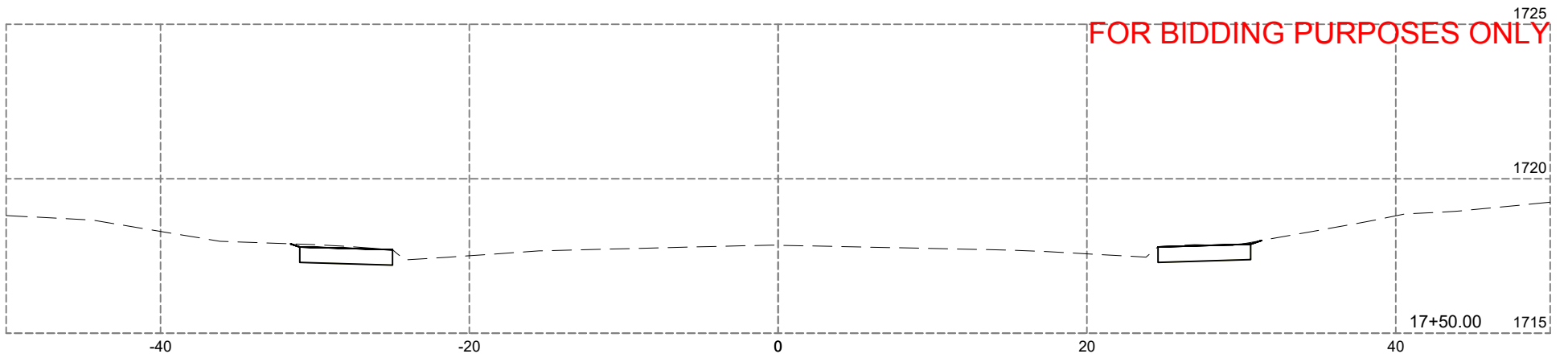
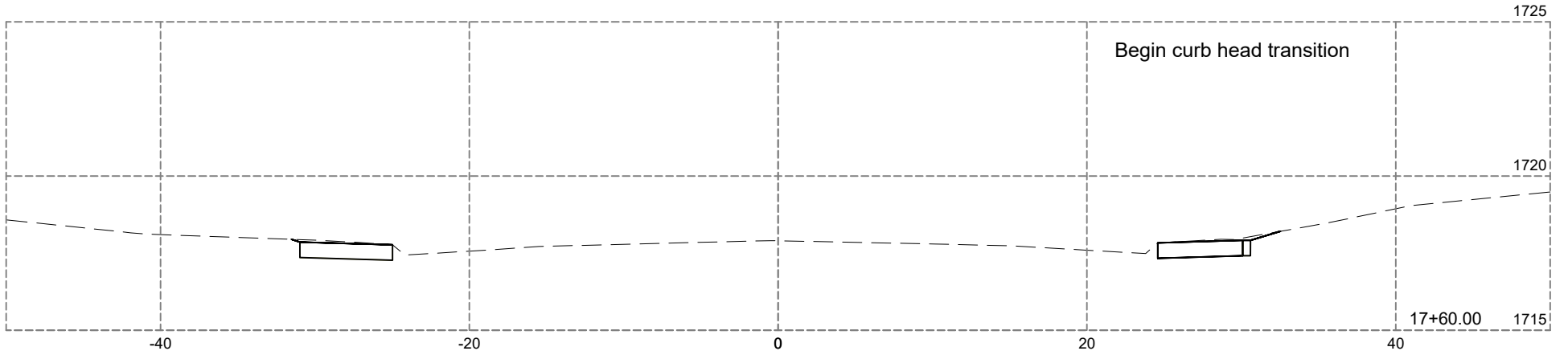


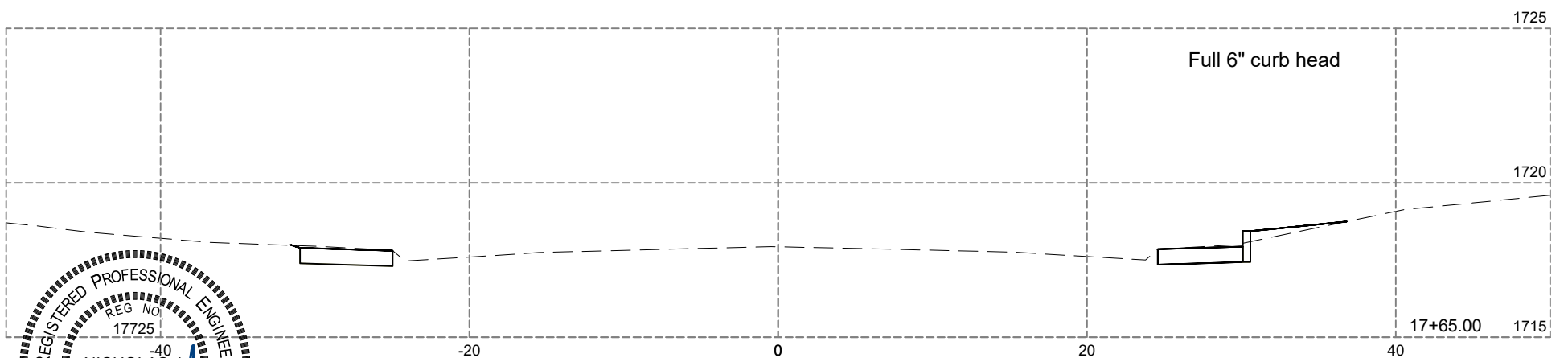
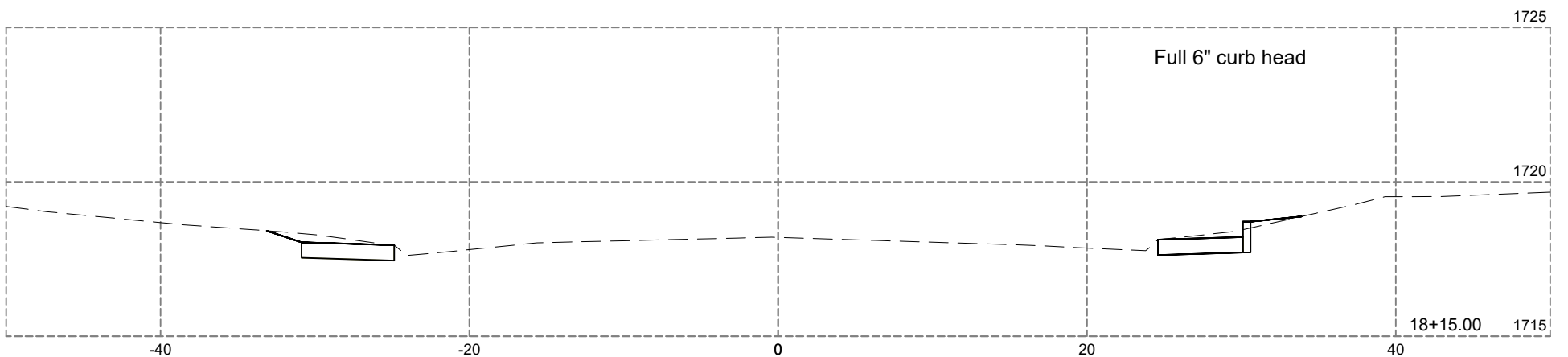
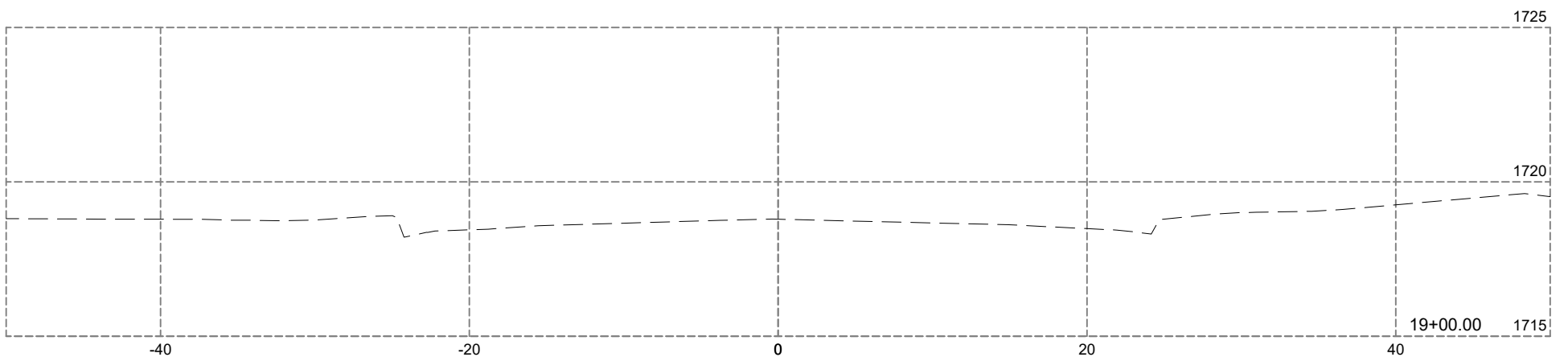
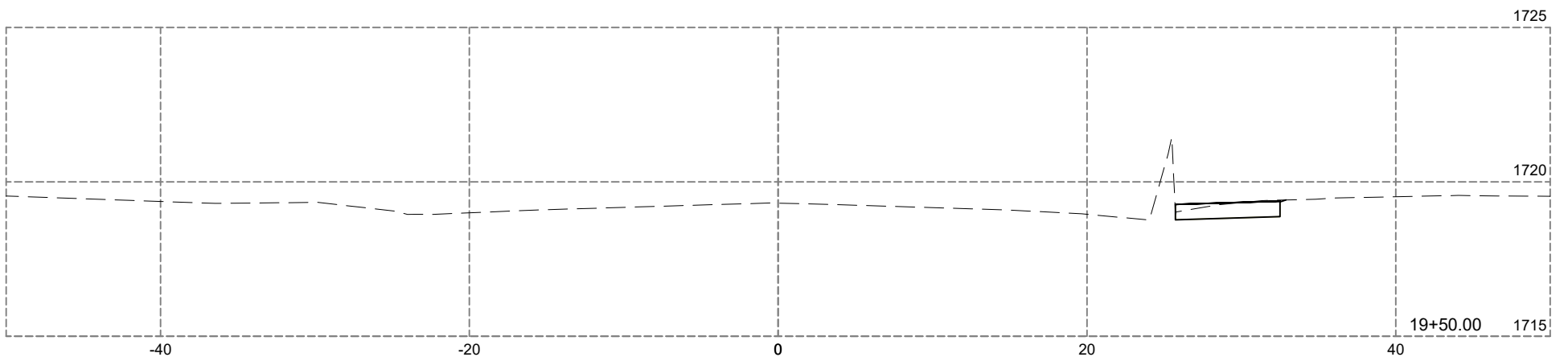
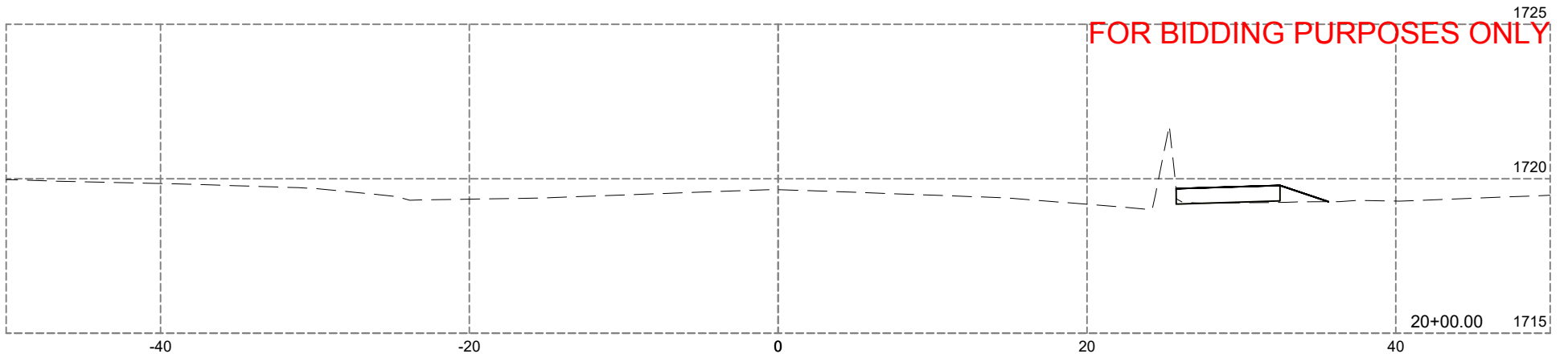
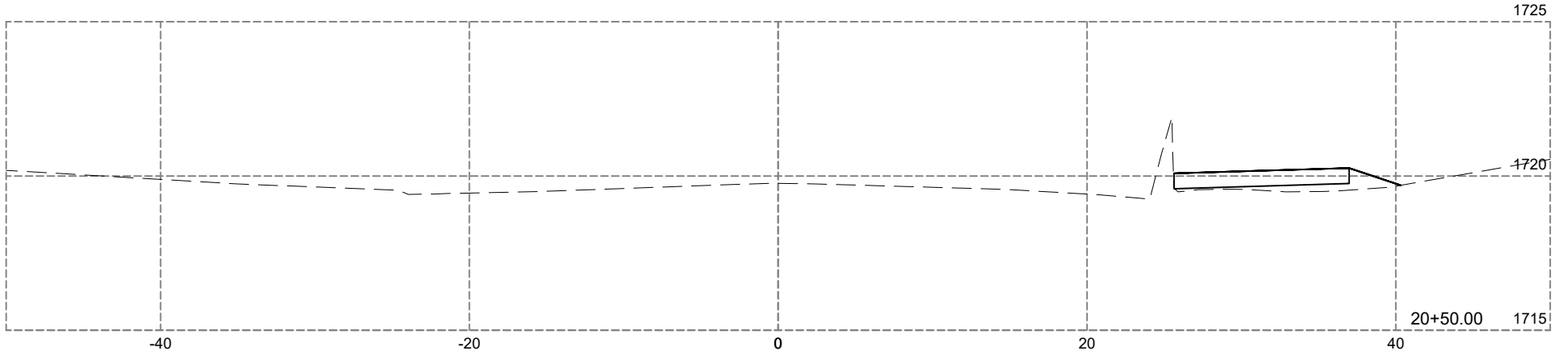


Plotting Date: 03/13/2026 Rev:

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	P TAPR(60)	44	68

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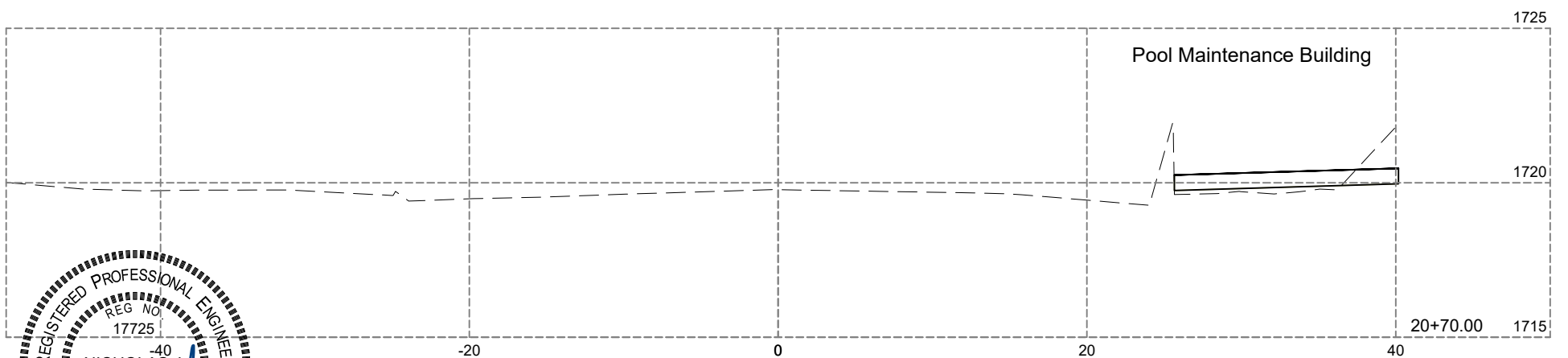
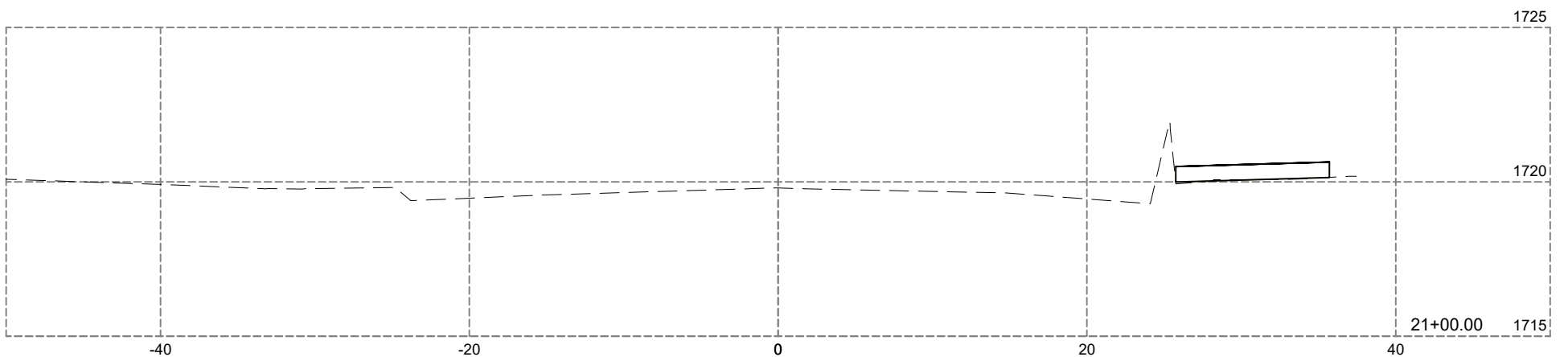
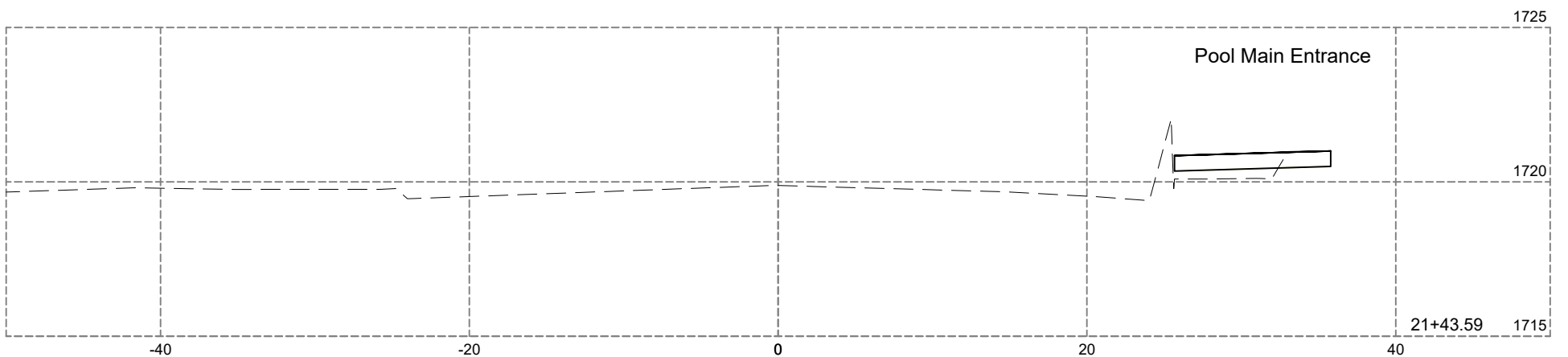
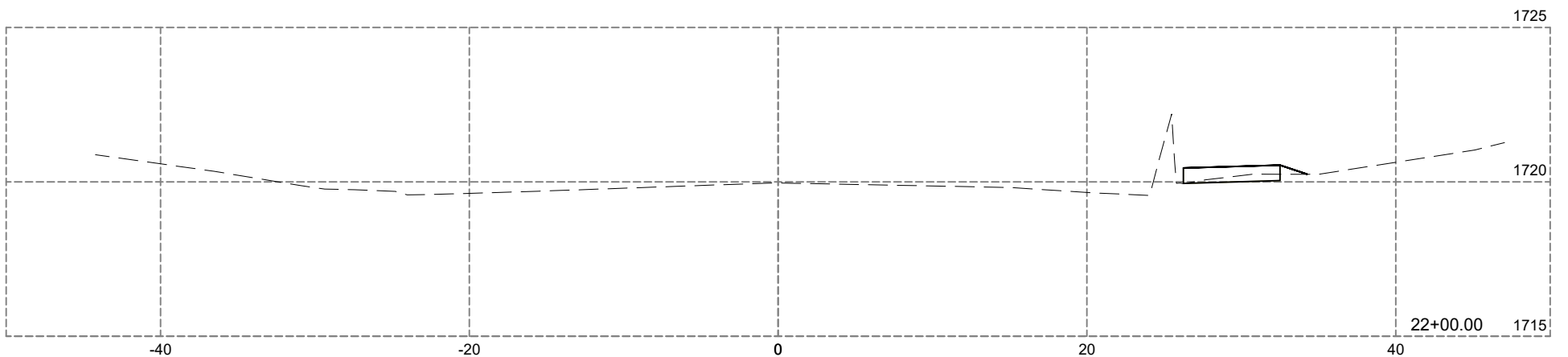
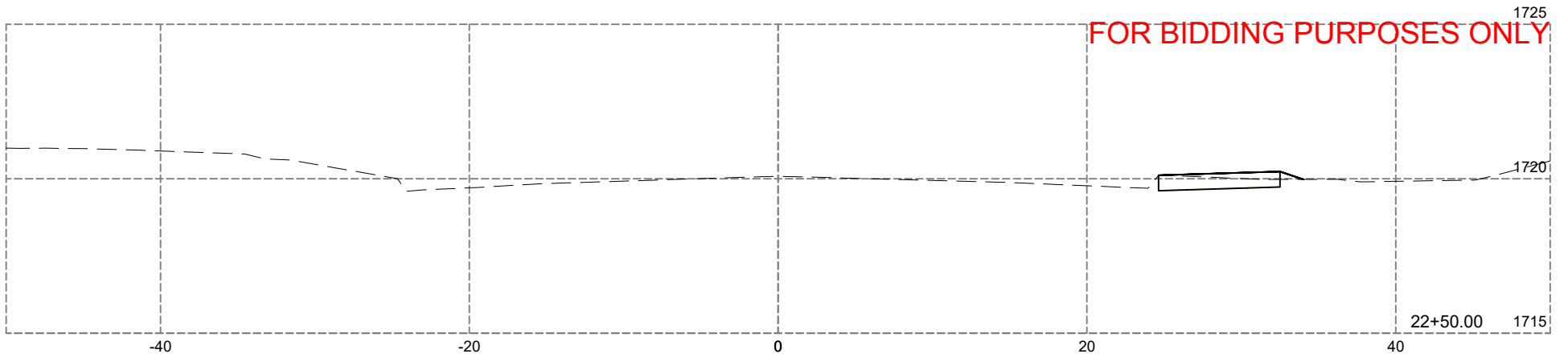
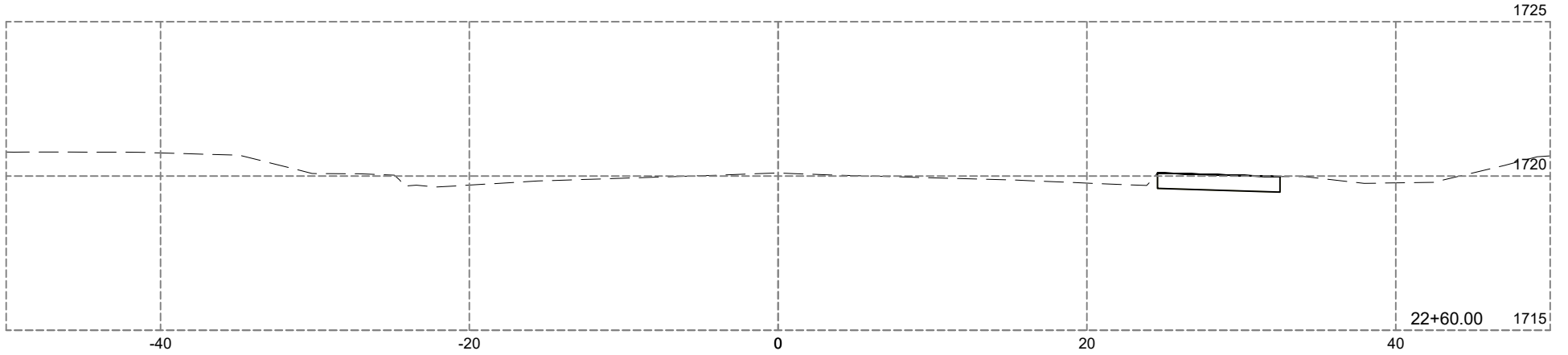




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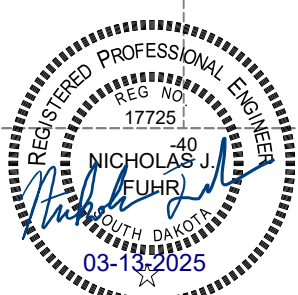
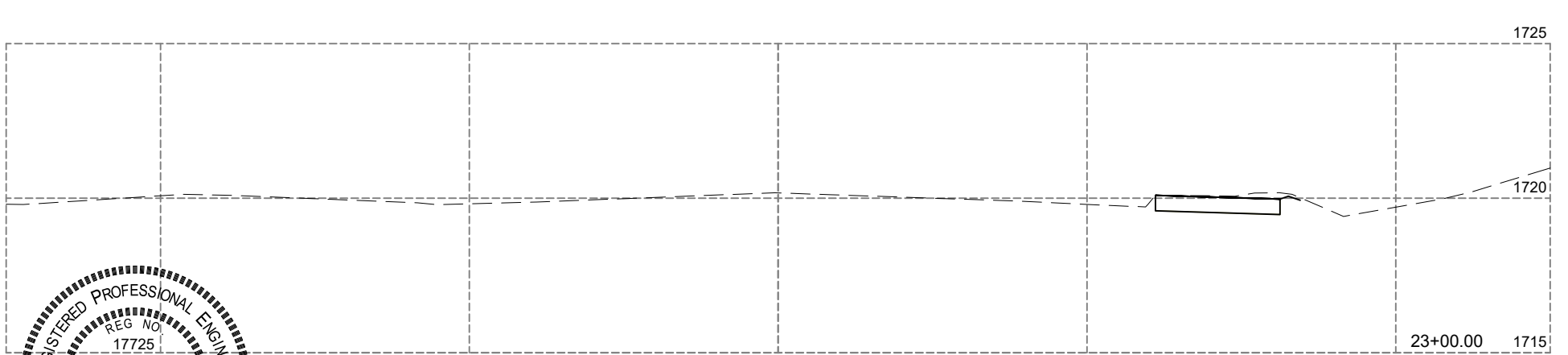
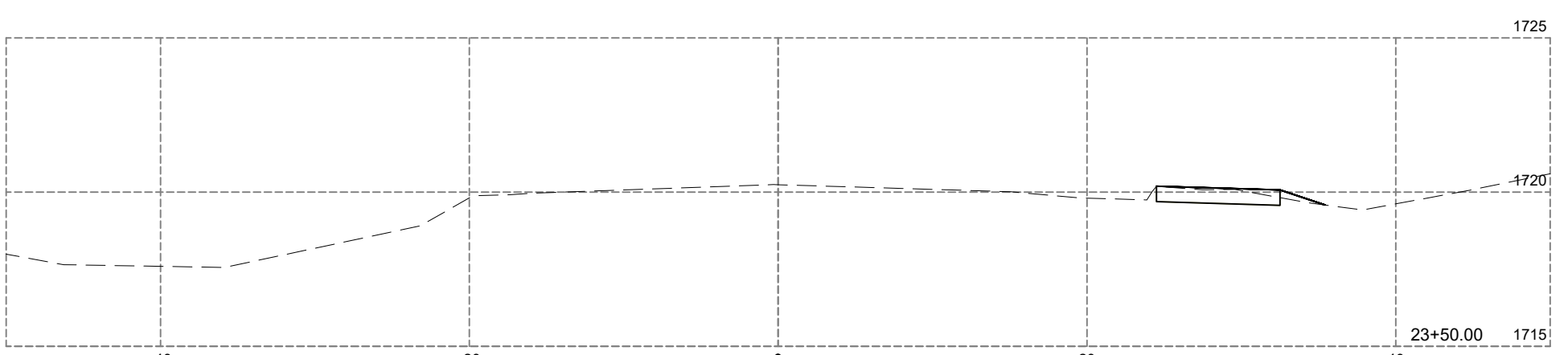
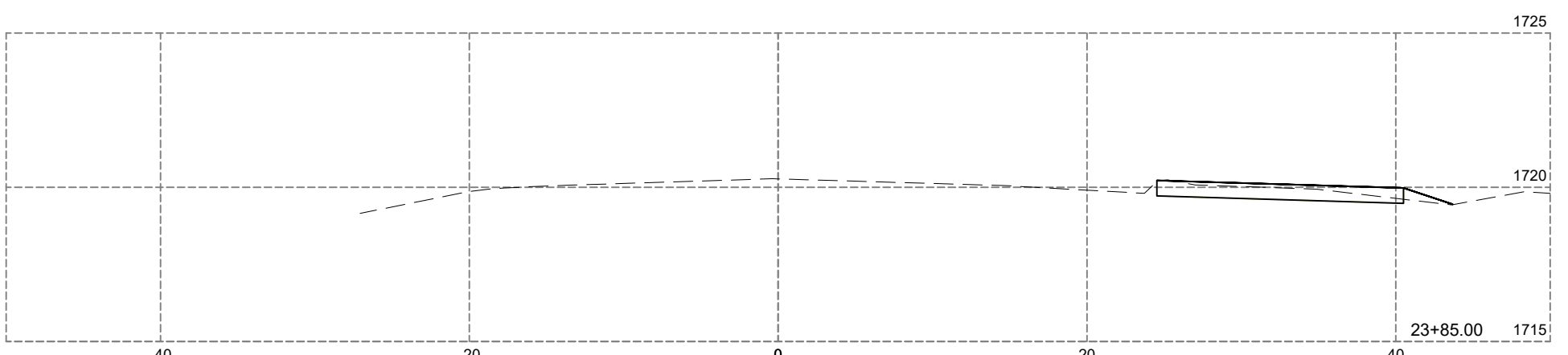
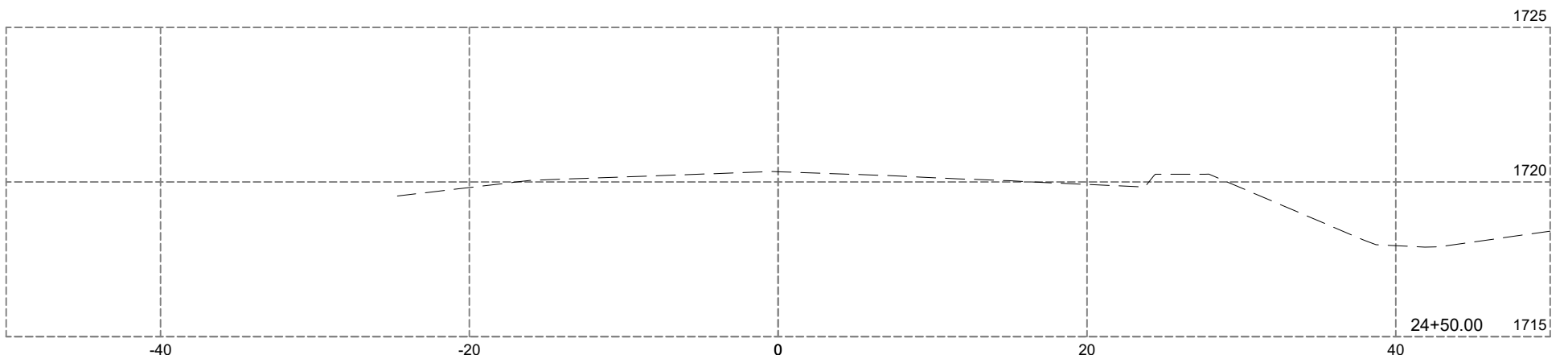
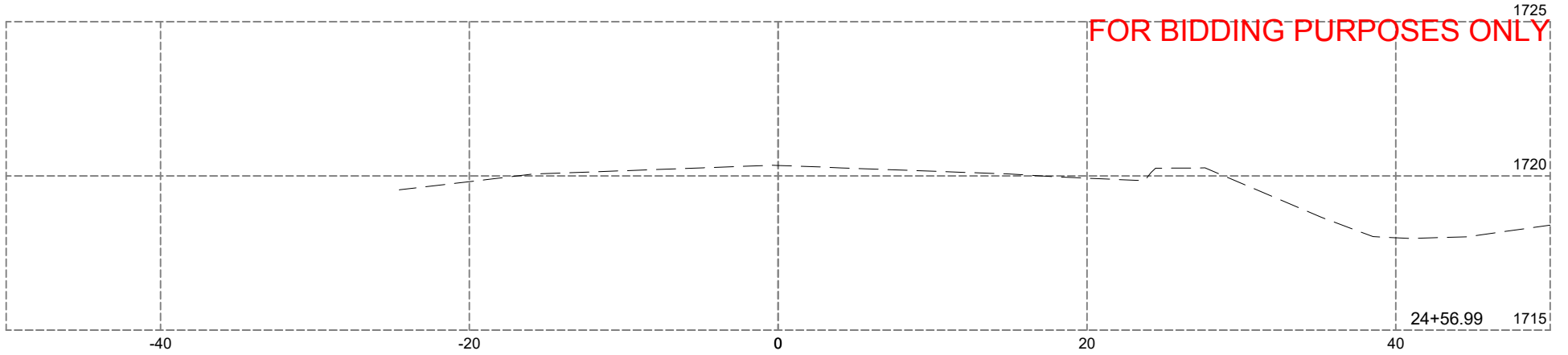
STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	P TAPR(60)	46	68

BAI JOB # 24020.53



STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	P TAPR(60)	47	68

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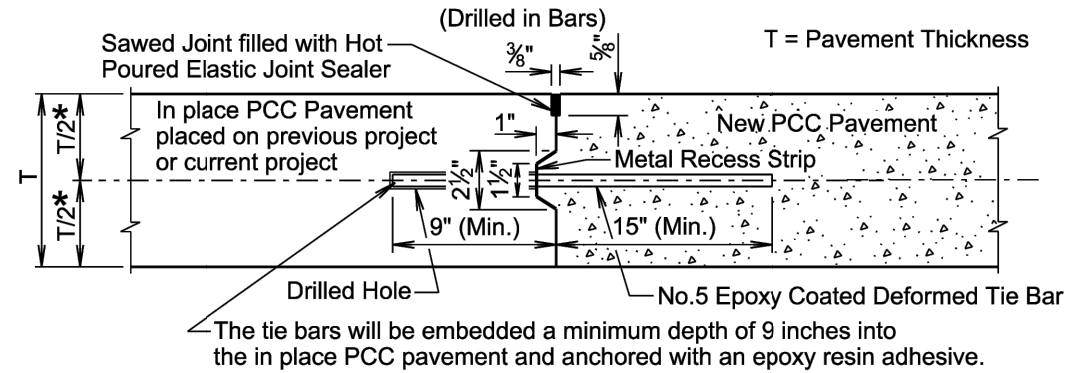


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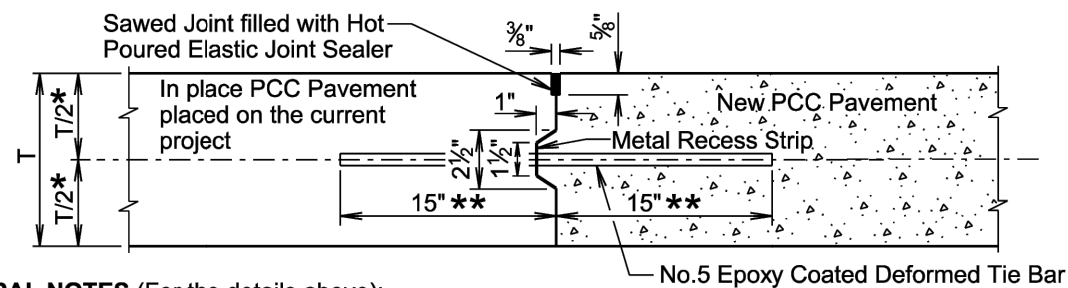
Plotting Date: 03/13/2026 Rev:

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	P TAPR(60)	48	68

LONGITUDINAL CONSTRUCTION JOINT WITH TIE BARS



LONGITUDINAL CONSTRUCTION JOINT WITH TIE BARS
(Inserted or Formed in Bars)



GENERAL NOTES (For the details above):

The epoxy coated deformed tie bars will be spaced in accordance with the following tables:

TIE BAR SPACING 48" MAXIMUM	
Transverse Contraction Joint Spacing	Number of Tie Bars
6.5' to 10'	2
10.5' to 14'	3
14.5' to 18'	4
18.5' to 22'	5

TIE BAR SPACING 30" MAXIMUM	
Transverse Contraction Joint Spacing	Number of Tie Bars
5' to 7'	2
7.5' to 9.5'	3
10' to 12'	4
12.5' to 14.5'	5
15' to 17'	6
17.5' to 19.5'	7
20' to 22'	8

The tie bars will be placed a minimum of 15 inches from transverse contraction joints.

The required number of tie bars as shown in the table will be uniformly spaced within each panel. The uniformly spaced tie bars will be spaced a maximum of 48 inches center to center for a female keyway and will be spaced a maximum of 30 inches center to center for a vertical face and male keyway. The maximum tie bar spacing will apply to tie bars within each panel.

The keyway illustrated in the above details depict a female keyway.

The keyway is optional and is not required. When concrete pavement is formed and a keyway is provided, a metal recess strip will be used. When concrete pavement is slip formed, a metal recess strip is not required.

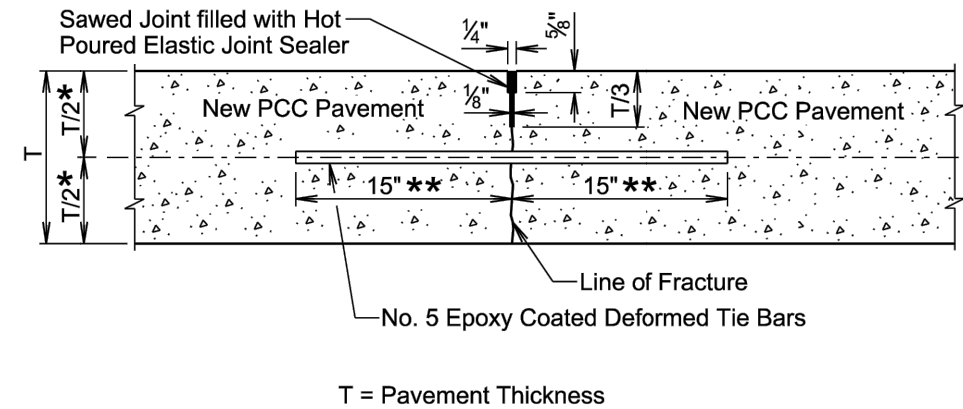
* The vertical placement tolerance for any part of the tie bar will be $\pm T/6$.

** The transverse placement (side shift) tolerance will be ± 3 inches when measured perpendicular to the longitudinal joint line.

November 19, 2022

Published Date: 2026	S D D O T	PCC PAVEMENT LONGITUDINAL JOINTS WITH TIE BARS	PLATE NUMBER 380.20
			Sheet 1 of 2

SAWED LONGITUDINAL JOINT WITH TIE BARS
(Poured Monolithically)



GENERAL NOTES (For the detail above):

The epoxy coated deformed tie bars will be spaced in accordance with the following table:

TIE BAR SPACING 48" MAXIMUM	
Transverse Contraction Joint Spacing	Number of Tie Bars
6.5' to 10'	2
10.5' to 14'	3
14.5' to 18'	4
18.5' to 22'	5

The tie bars will be placed a minimum of 15 inches from the transverse contraction joints.

The required number of tie bars as shown in the table will be uniformly spaced within each panel with a maximum space of 48 inches center to center. The maximum tie bar spacing will apply to tie bars within each panel.

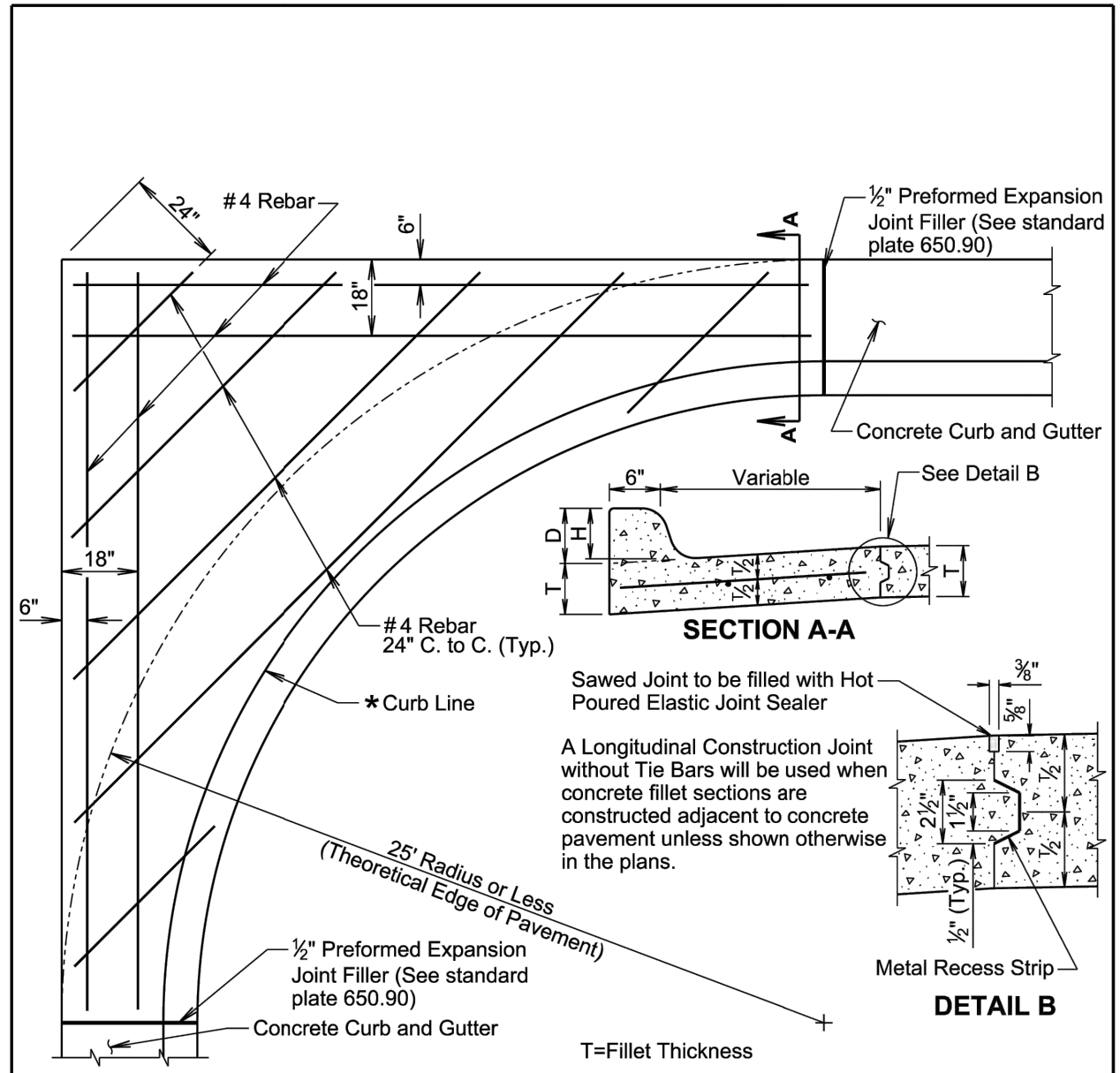
The first saw cut to control cracking will be a minimum of 1/3 the thickness of the pavement. Additional sawing for widening the saw cut to provide the width for the installation of the hot poured elastic joint sealer is necessary.

* The vertical placement tolerance for any part of the tie bar will be $\pm T/6$.

** The transverse placement (side shift) tolerance will be ± 3 inches when measured perpendicular to the longitudinal joint line.

November 19, 2022

Published Date: 2026	S D D O T	PCC PAVEMENT LONGITUDINAL JOINTS WITH TIE BARS	PLATE NUMBER 380.20
			Sheet 2 of 2



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

March 31, 2024

S D D O T	PCC FILLET SECTION WITH TYPE B CURB AND GUTTER	PLATE NUMBER 380.30	
		Sheet 1 of 2	Published Date: 2026

GENERAL NOTES:

- For fillets with irregular shapes or bump outs:
- 1) The 6" and 18" offset #4 rebar will be included on any side next to pavement or driveways (not along the Curb and Gutter).
 - 2) All remaining area will have #4 rebar spaced 24" center to center in a square pattern.

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

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

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

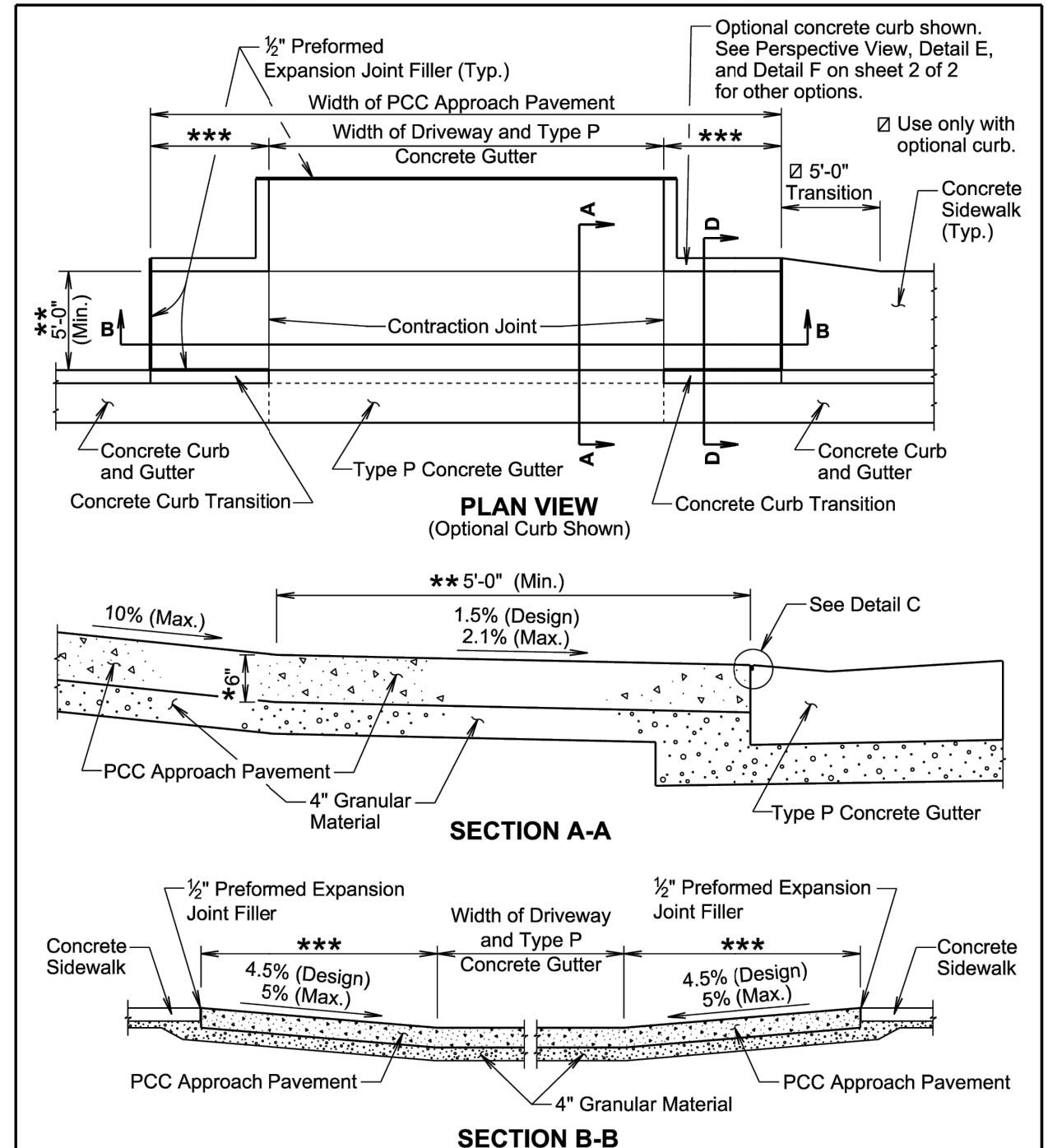
The concrete curb will be monolithic with the concrete fillet. No separate payment for this curb will be made as the curb is considered a part of the fillet.

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

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

March 31, 2024

S D D O T	PCC FILLET SECTION WITH TYPE B CURB AND GUTTER	PLATE NUMBER 380.30	
		Sheet 2 of 2	Published Date: 2026



* 8 inches at Commercial Approaches

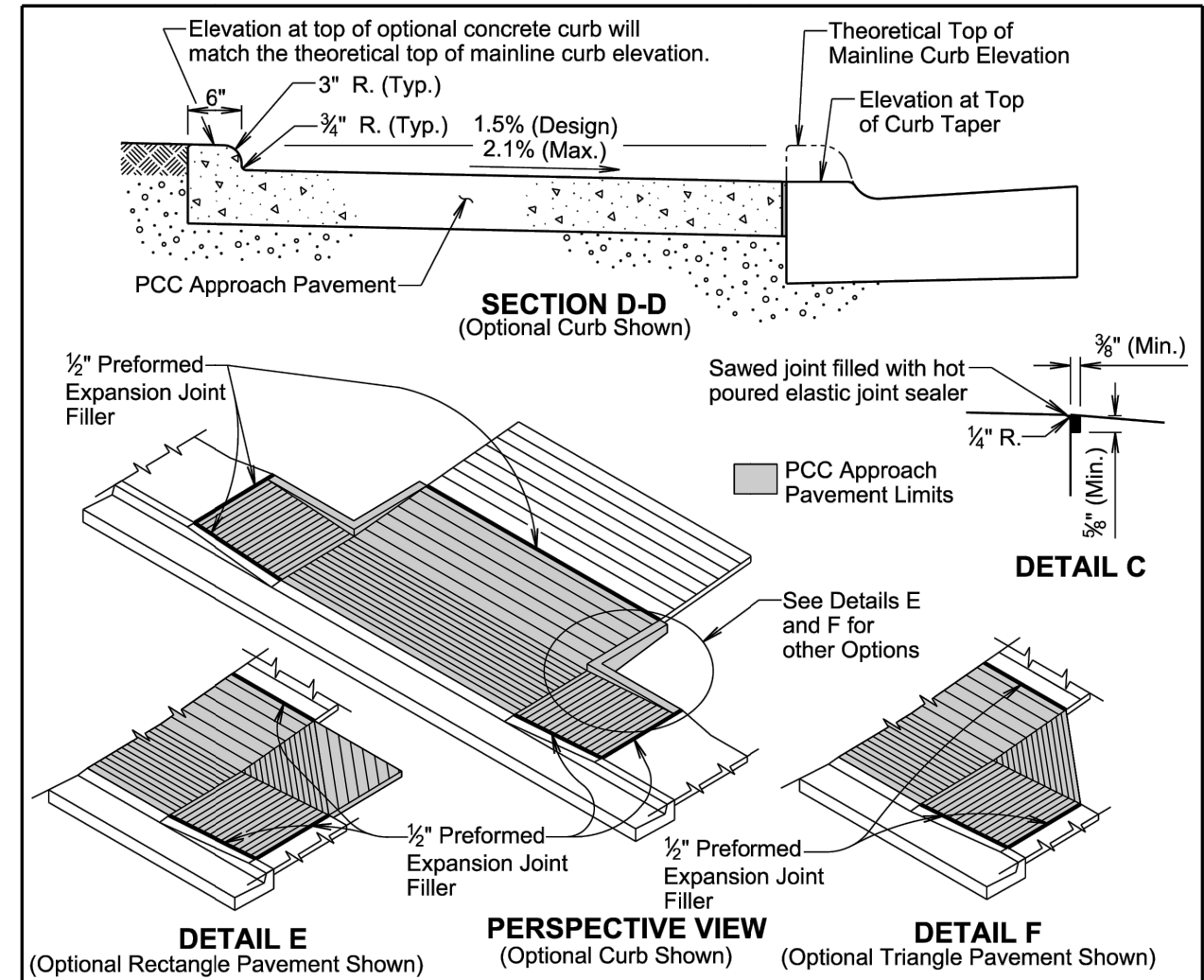
** Sidewalk width is 5 feet unless specified otherwise in the plans. The cross slope of the sidewalk is designed at 1.5% and will not be steeper than 2.1% unless specified otherwise in the plans.

*** The slope of the type B PCC approach pavement in these areas will match the slope of the concrete curb transition. The slope is designed at 4.5% and will not be steeper than 5% unless specified otherwise in the plans.

April 8, 2025

S D D O T	TYPE B PCC APPROACH PAVEMENT	PLATE NUMBER 380.41
		Sheet 1 of 2

Published Date: 2026



GENERAL NOTES:

Use the plan specified option for the pavement adjacent to the driveway and sidewalk. The options are shown above in the Perspective View, Detail E, and Detail F.

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

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

- One joint at the center of the approach for driveways 16 feet to 24 feet wide.
- Two joints spaced at equal intervals for driveways greater than 24 feet to 40 feet wide.

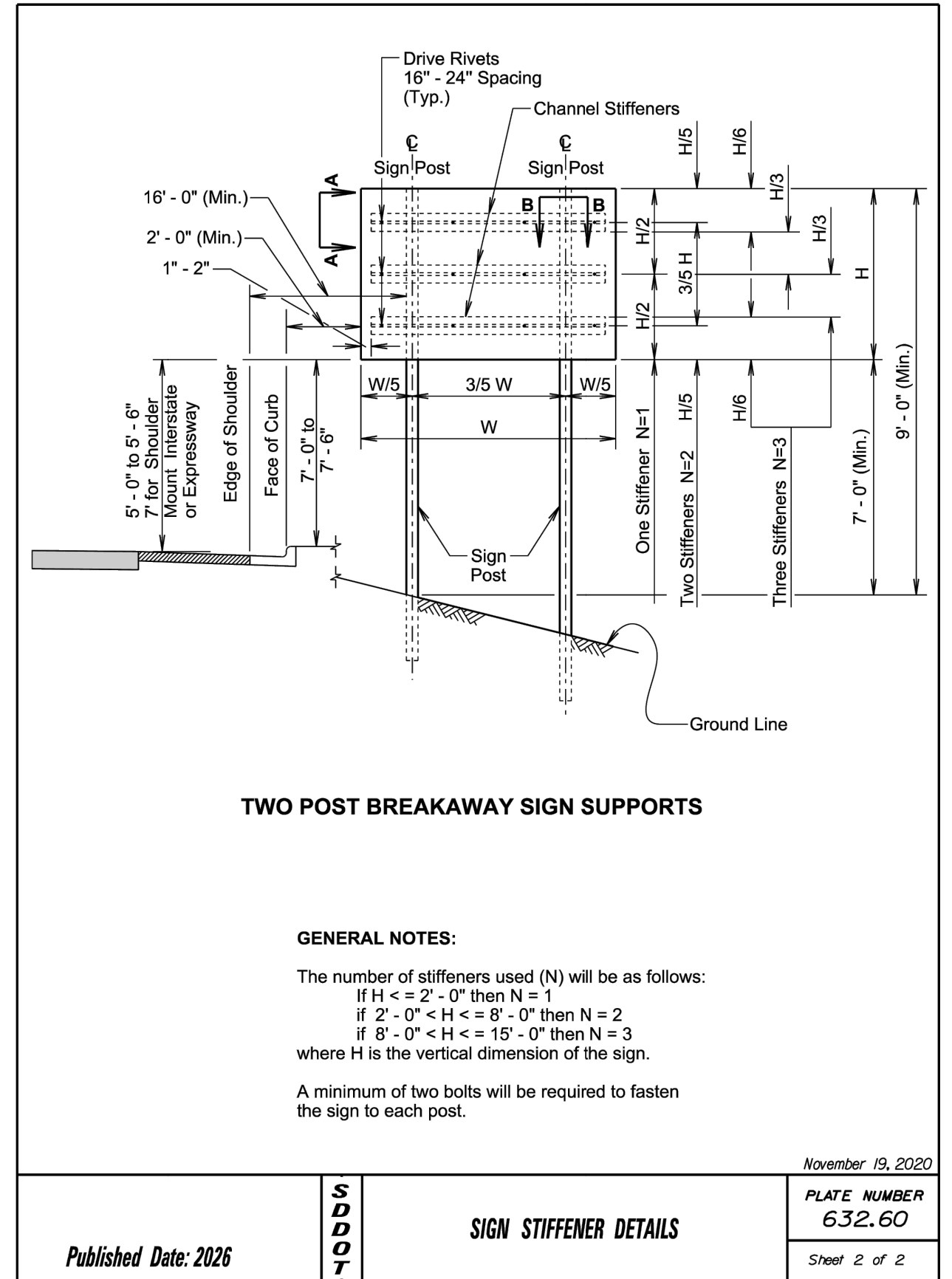
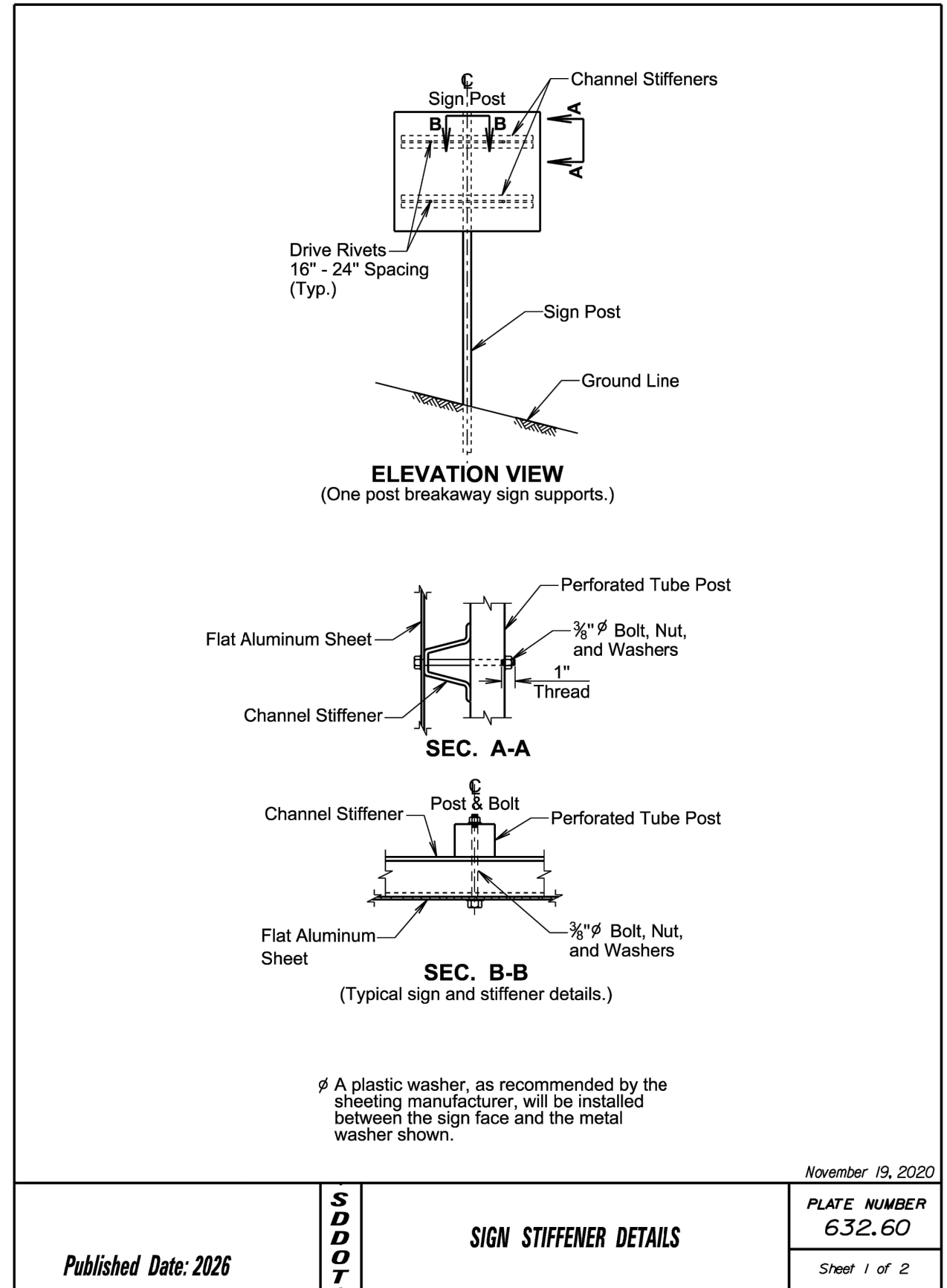
All costs for furnishing and placing the type B PCC approach pavement and constructing the expansion and contraction joints including labor, equipment, excavation, and materials including the earthen backfill and granular material will be incidental to the contract unit price per square yard for the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

April 8, 2025

S D D O T	TYPE B PCC APPROACH PAVEMENT	PLATE NUMBER 380.41
		Sheet 2 of 2

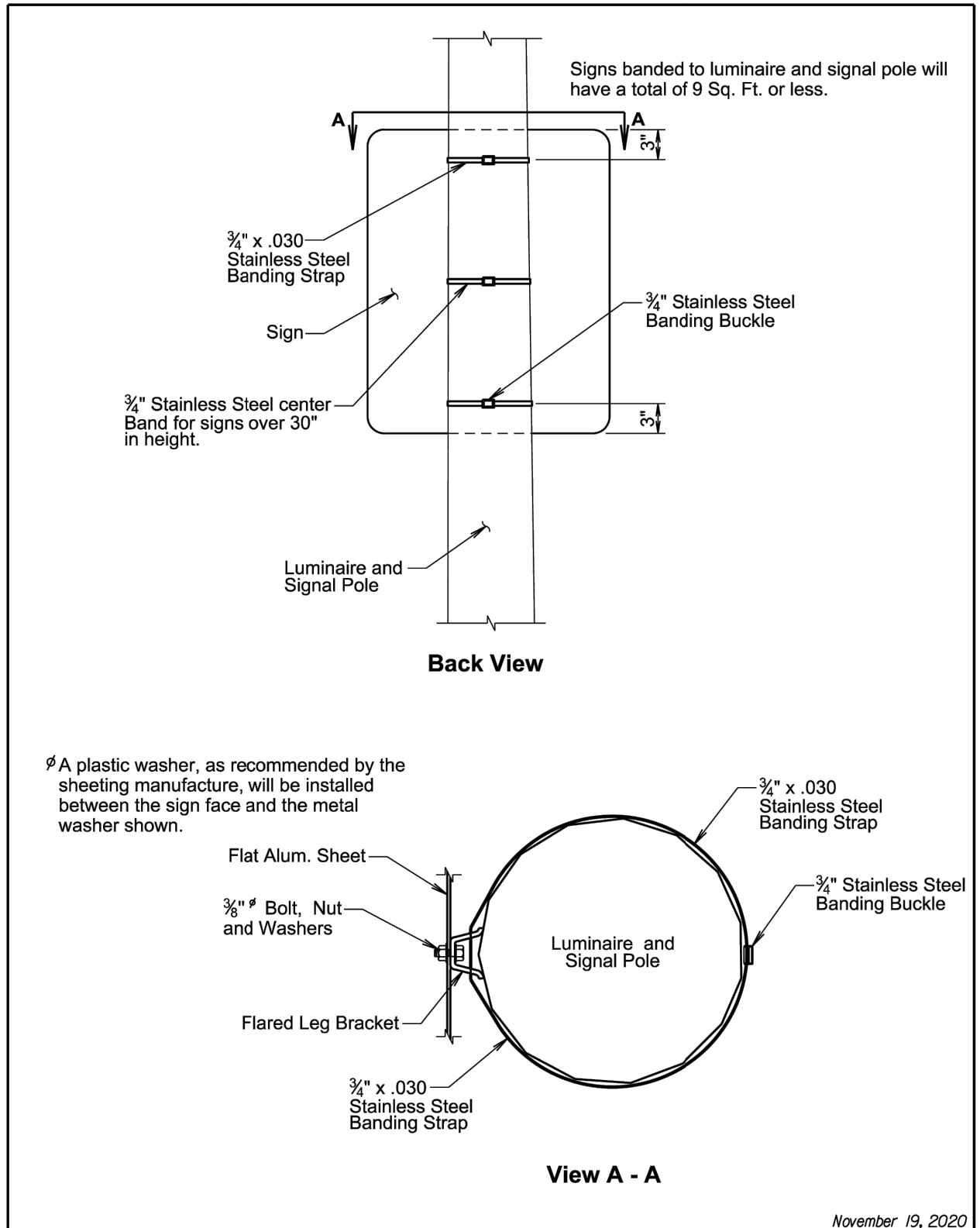
Published Date: 2026

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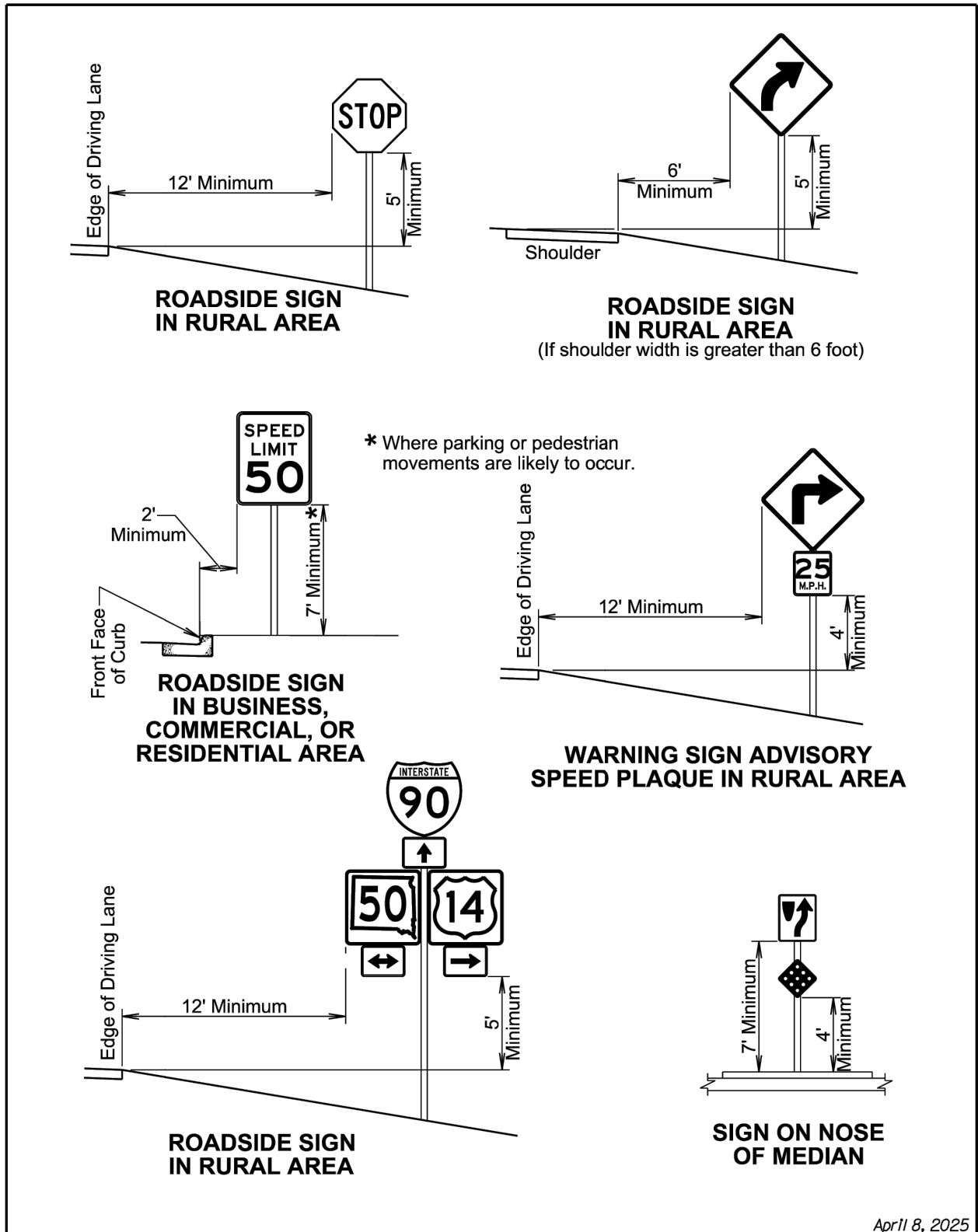


Published Date: 2026

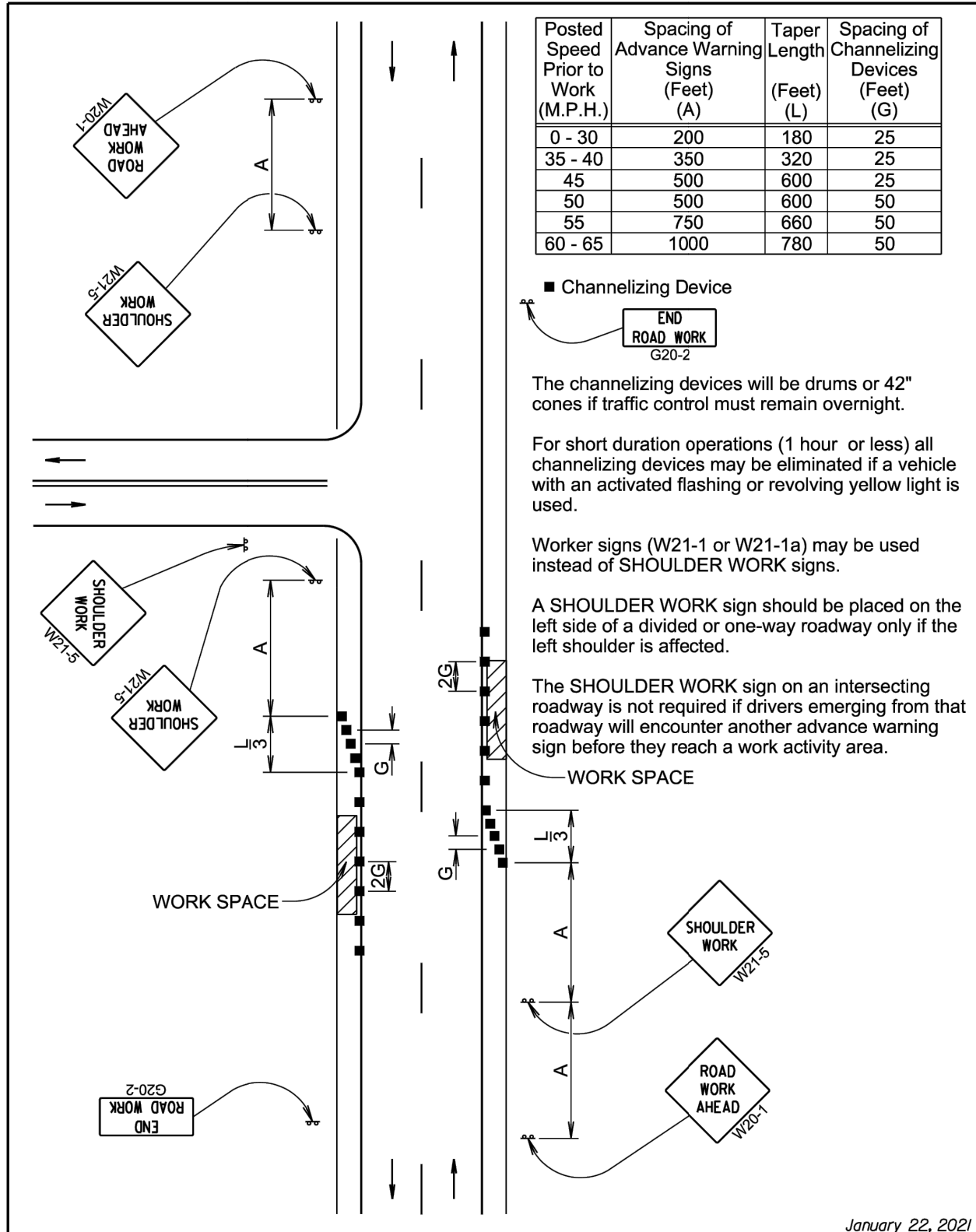
Published Date: 2026



S D D O T	BANDING SIGN TO LUMINAIRE AND SIGNAL POLE	November 19, 2020	PLATE NUMBER 632.80
Published Date: 2026			Sheet 1 of 1



S D D O T	OFFSETS FOR SIGN INSTALLATION	April 8, 2025	PLATE NUMBER 632.90
Published Date: 2026			Sheet 1 of 1



Posted Speed Prior to Work (M.P.H.)	Spacing of Advance Warning Signs (Feet) (A)	Taper Length (Feet) (L)	Spacing of Channelizing Devices (Feet) (G)
0 - 30	200	180	25
35 - 40	350	320	25
45	500	600	25
50	500	600	50
55	750	660	50
60 - 65	1000	780	50

■ Channelizing Device
 END ROAD WORK G20-2

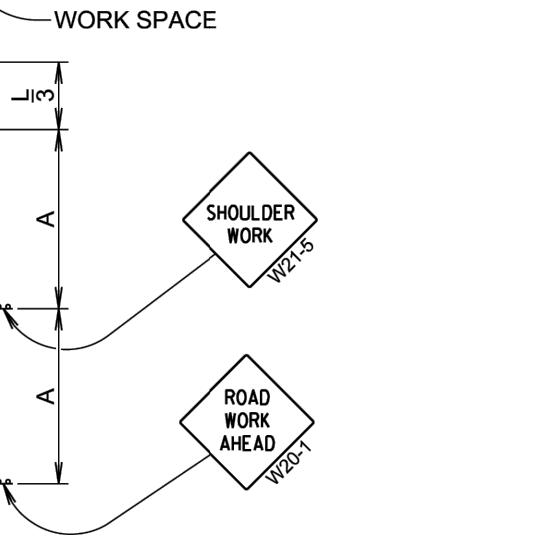
The channelizing devices will be drums or 42" cones if traffic control must remain overnight.

For short duration operations (1 hour or less) all channelizing devices may be eliminated if a vehicle with an activated flashing or revolving yellow light is used.

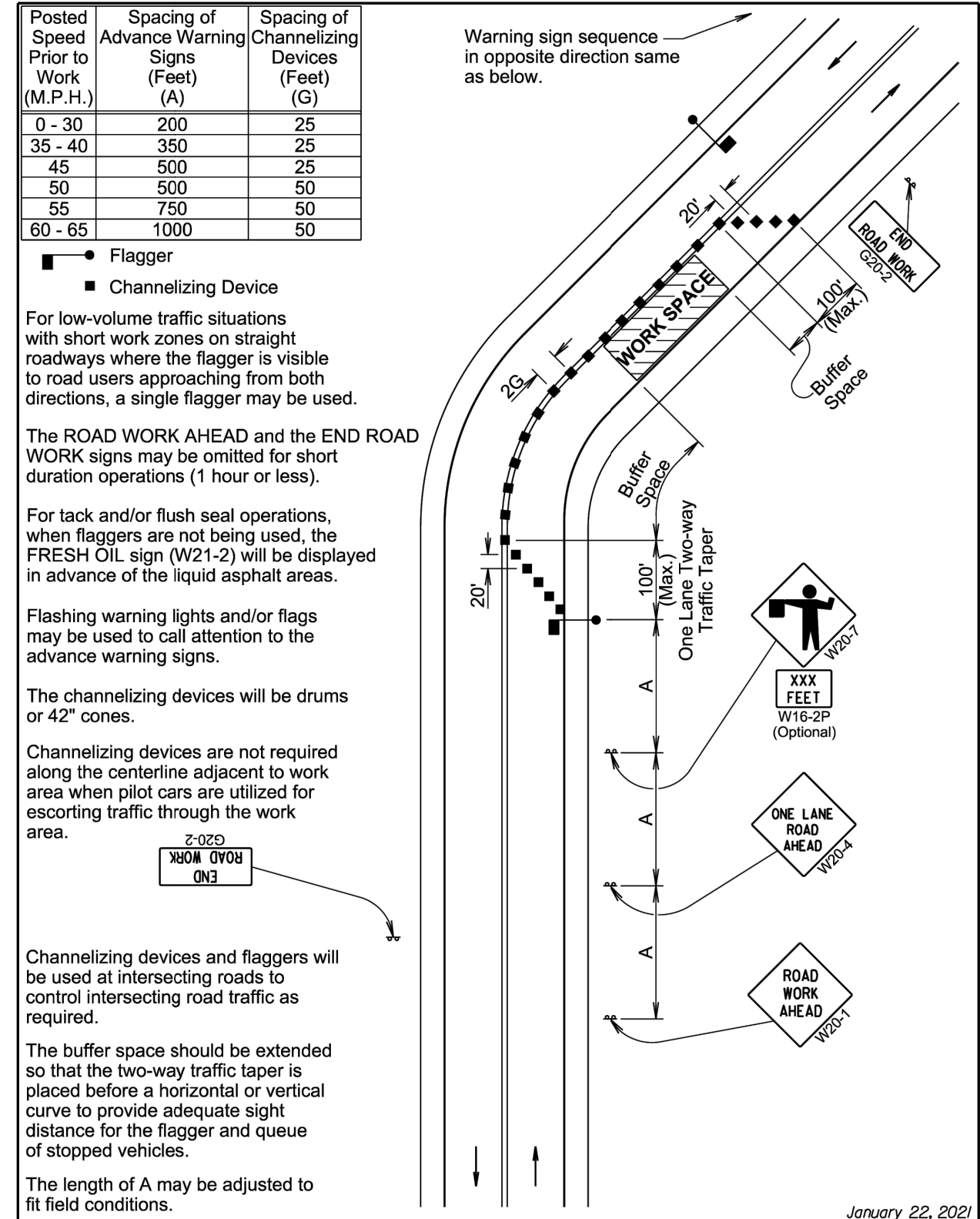
Worker signs (W21-1 or W21-1a) may be used instead of SHOULDER WORK signs.

A SHOULDER WORK sign should be placed on the left side of a divided or one-way roadway only if the left shoulder is affected.

The SHOULDER WORK sign on an intersecting roadway is not required if drivers emerging from that roadway will encounter another advance warning sign before they reach a work activity area.



January 22, 2021



Posted Speed Prior to Work (M.P.H.)	Spacing of Advance Warning Signs (Feet) (A)	Spacing of Channelizing Devices (Feet) (G)
0 - 30	200	25
35 - 40	350	25
45	500	25
50	500	50
55	750	50
60 - 65	1000	50

● Flagger
 ■ Channelizing Device

For low-volume traffic situations with short work zones on straight roadways where the flagger is visible to road users approaching from both directions, a single flagger may be used.

The ROAD WORK AHEAD and the END ROAD WORK signs may be omitted for short duration operations (1 hour or less).

For tack and/or flush seal operations, when flaggers are not being used, the FRESH OIL sign (W21-2) will be displayed in advance of the liquid asphalt areas.

Flashing warning lights and/or flags may be used to call attention to the advance warning signs.

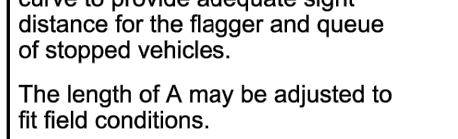
The channelizing devices will be drums or 42" cones.

Channelizing devices are not required along the centerline adjacent to work area when pilot cars are utilized for escorting traffic through the work area.

Channelizing devices and flaggers will be used at intersecting roads to control intersecting road traffic as required.

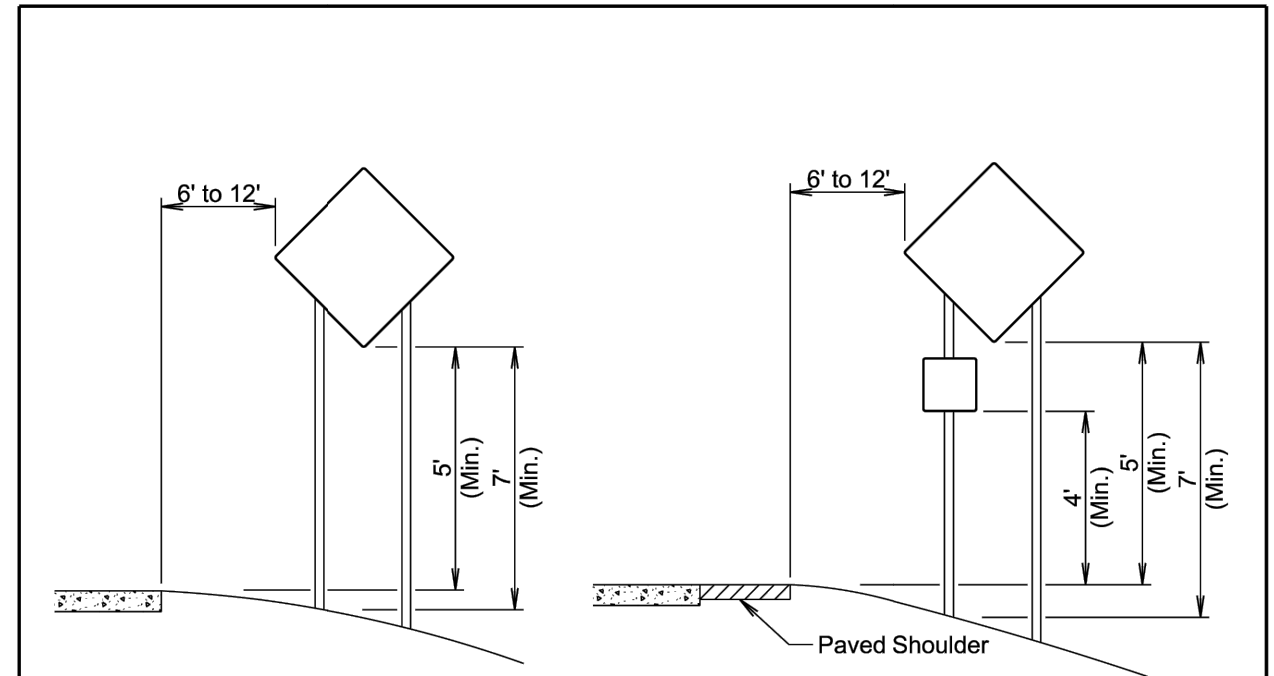
The buffer space should be extended so that the two-way traffic taper is placed before a horizontal or vertical curve to provide adequate sight distance for the flagger and queue of stopped vehicles.

The length of A may be adjusted to fit field conditions.



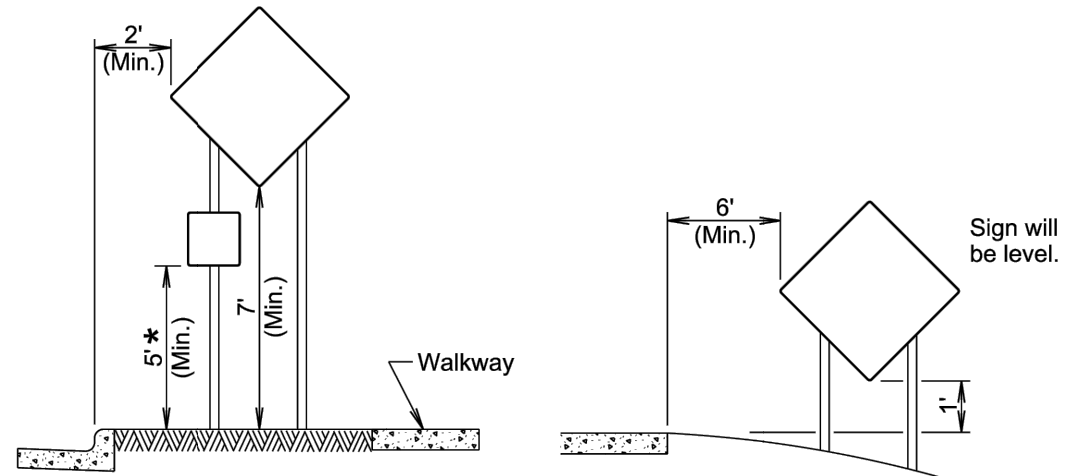
January 22, 2021

FOR BIDDING PURPOSES ONLY



RURAL DISTRICT

RURAL DISTRICT WITH SUPPLEMENTAL PLATE



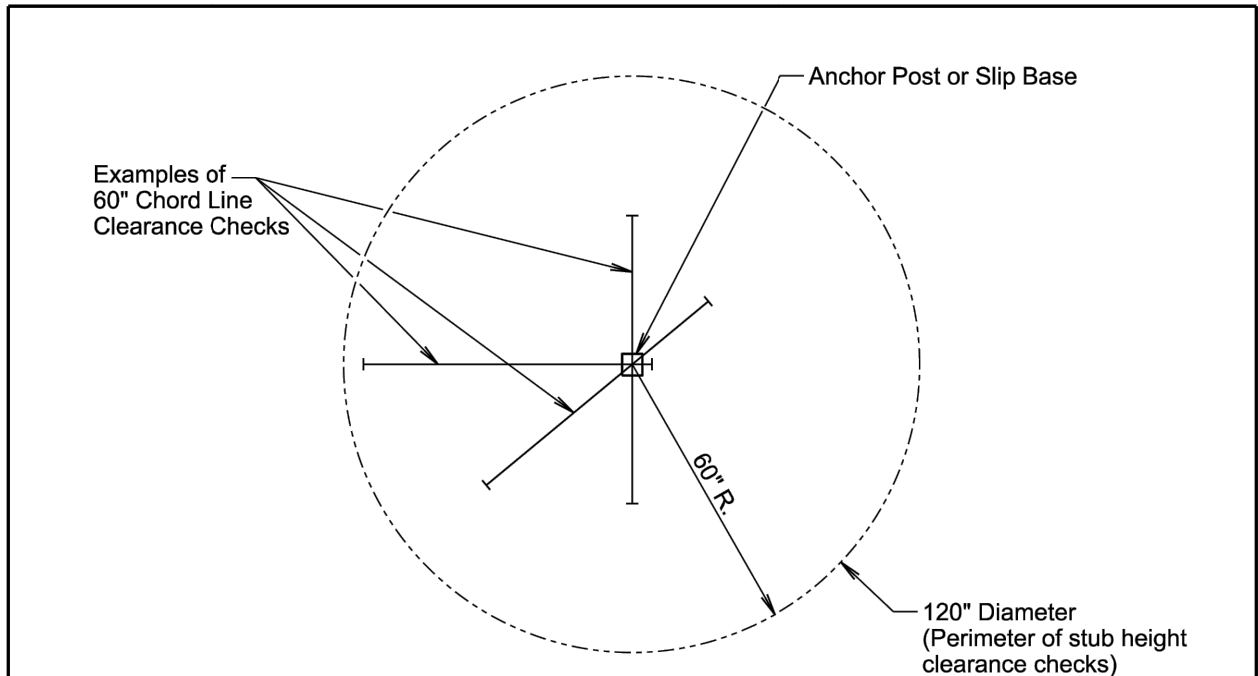
URBAN DISTRICT

RURAL DISTRICT 3 DAY MAXIMUM

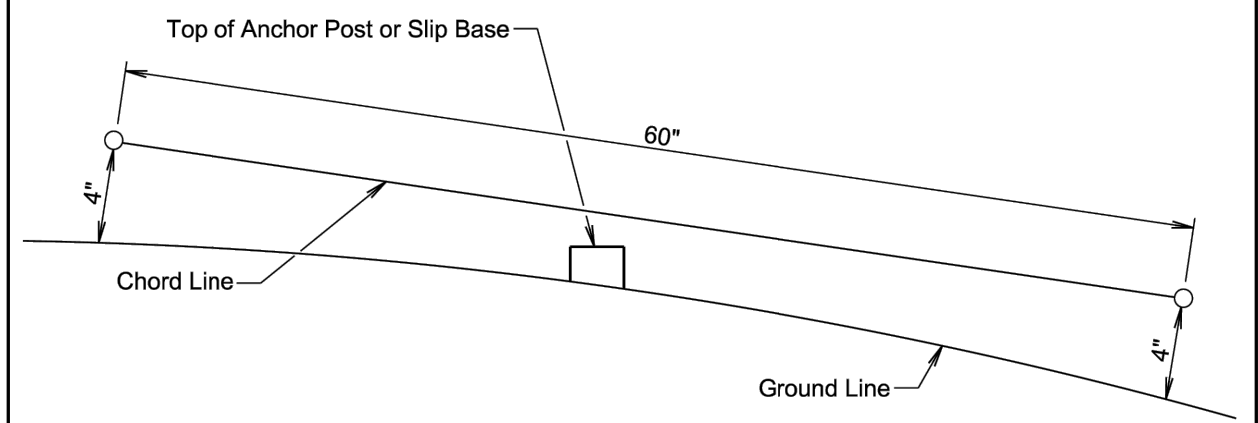
* If the bottom of supplemental plate is mounted lower than 7 feet above a pedestrian walkway, the supplemental plate should not project more than 4" into the pedestrian facility.

January 22, 2021

Published Date: 2026	S D D O T	CRASHWORTHY SIGN SUPPORTS (Typical Construction Signing)	PLATE NUMBER 634.85 Sheet 1 of 1
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PLAN VIEW
(Examples of stub height clearance checks)



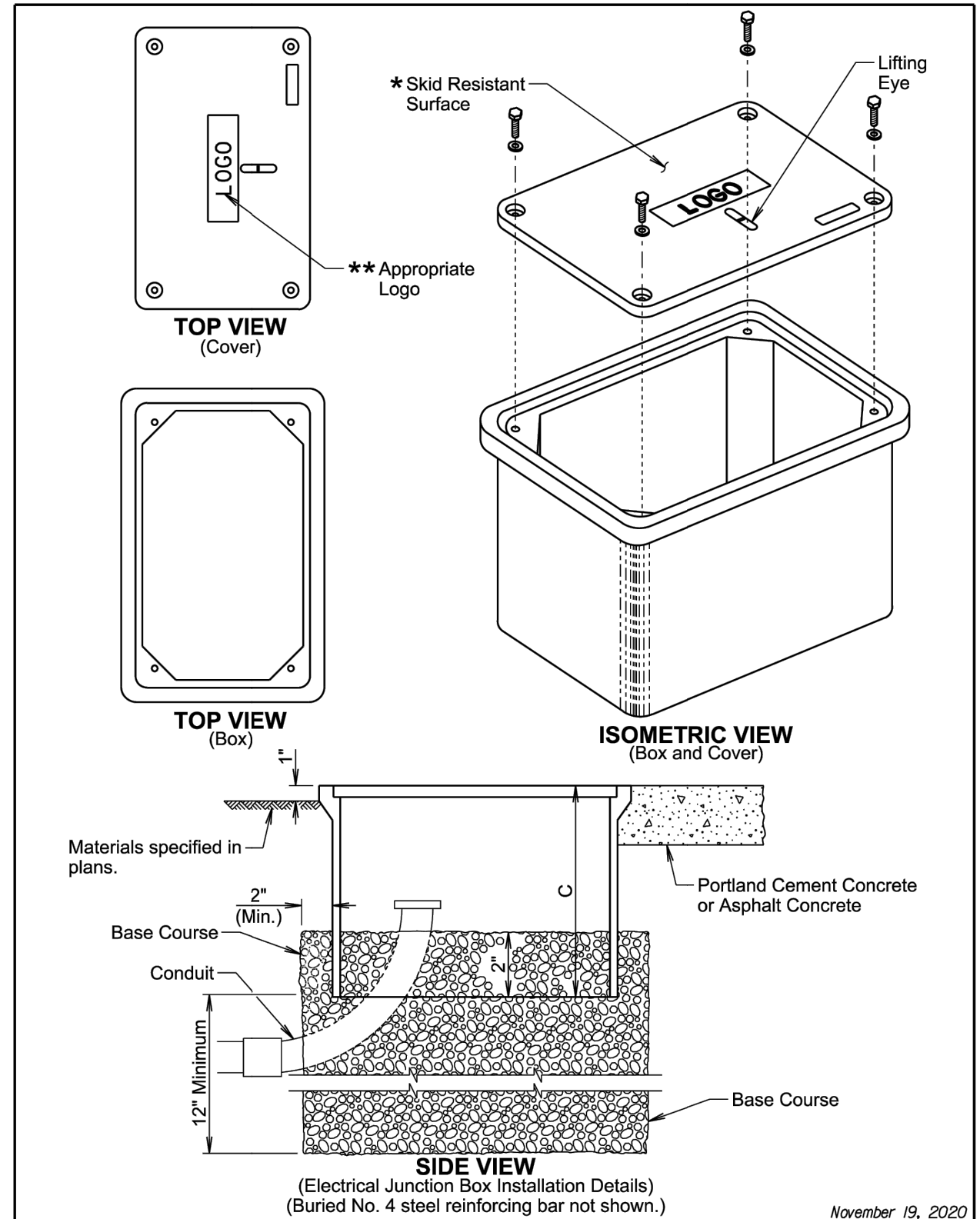
ELEVATION VIEW

GENERAL NOTES:

- The top of anchor posts and slip bases WILL NOT extend above a 60" chord line within a 120" diameter circle around the post with ends 4" above the ground.
- At locations where there is curb and gutter adjacent to the breakaway sign support, the stub height will be a maximum of 4" above the ground line at the localized area adjacent to the breakaway support stub.
- The 4" stub height clearance is not necessary for U-channel lap splices where the support is designed to yield (bend) at the base.

January 22, 2021

Published Date: 2026	S D D O T	BREAKAWAY SUPPORT STUB CLEARANCE	PLATE NUMBER 634.99 Sheet 1 of 1
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ELECTRICAL JUNCTION BOX			
TYPE	DESCRIPTION	APPROXIMATE COVER SIZE	MINIMUM DEPTH (C)
1	Open Bottom with Gasket	11"x18"	18"
2	Open Bottom with Gasket	13"x24"	18"
3	Open Bottom with Gasket	17"x30"	18"
3A	Open Bottom with Gasket	24"x36"***	24"
4	Open Bottom with Gasket	30"x48"***	24"

GENERAL NOTES:

The cover will be gasketed with a minimum of two stainless steel bolts and washers.
 The cover will have a lifting eye.

* The surface of the cover will have a minimum wet and dry coefficient of friction value of 0.5 as determined by ASTM F609.

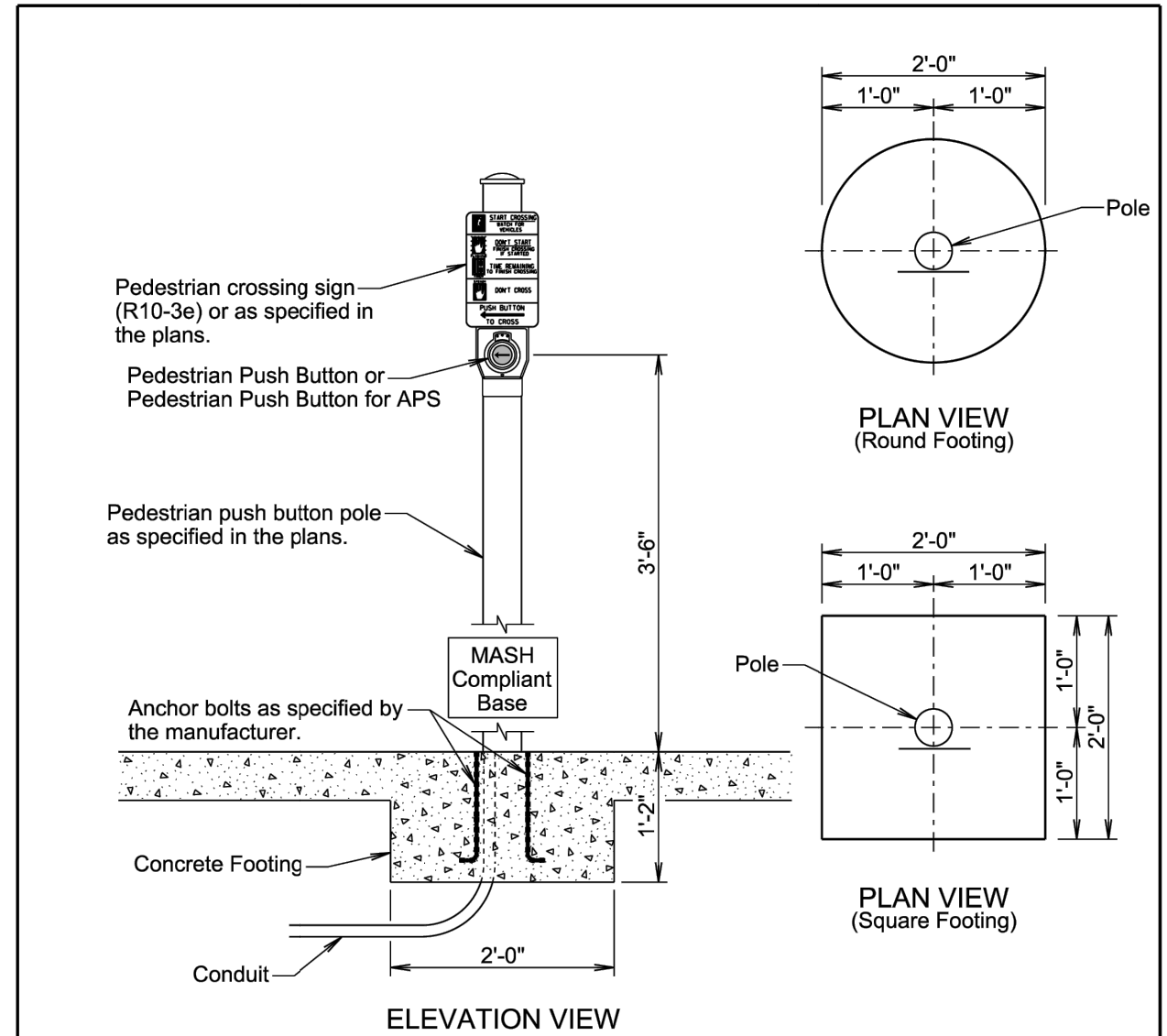
** The cover of the junction box will have the appropriate logo in one inch size letters and will be recessed. When the junction box contains cables or wires for a traffic signal then the logo will be "Signal". When the junction box contains lighting conductors then the logo will be "Lighting".

*** Two piece covers will be used for Type 3A and Type 4 junction boxes.

The electrical junction boxes will comply with the American National Standards Institute (ANSI)/Society of Cable Telecommunications Engineers (SCTE) 77 2007 Specification for Underground Enclosure Integrity. The loading requirement for all electrical junction boxes and covers will be Tier 22 of ANSI/SCTE 77 2007.

The electrical junction boxes will be UL listed.

For junction boxes located outside of pavement, a No. 4 steel reinforcing bar with a minimum length of 18" will be buried adjacent to the long side of the junction box. All costs associated with furnishing and placing the steel reinforcing bar will be incidental to the contract unit price per each for "Type _ Electrical Junction Box".



GENERAL NOTES:

The pedestrian push button pole will be as specified in the plans.

The Contractor will install either the round or the square concrete footing. For informational purpose, the quantity of concrete for one footing is 0.14 cubic yards for the round footing and 0.17 cubic yards for the square footing.

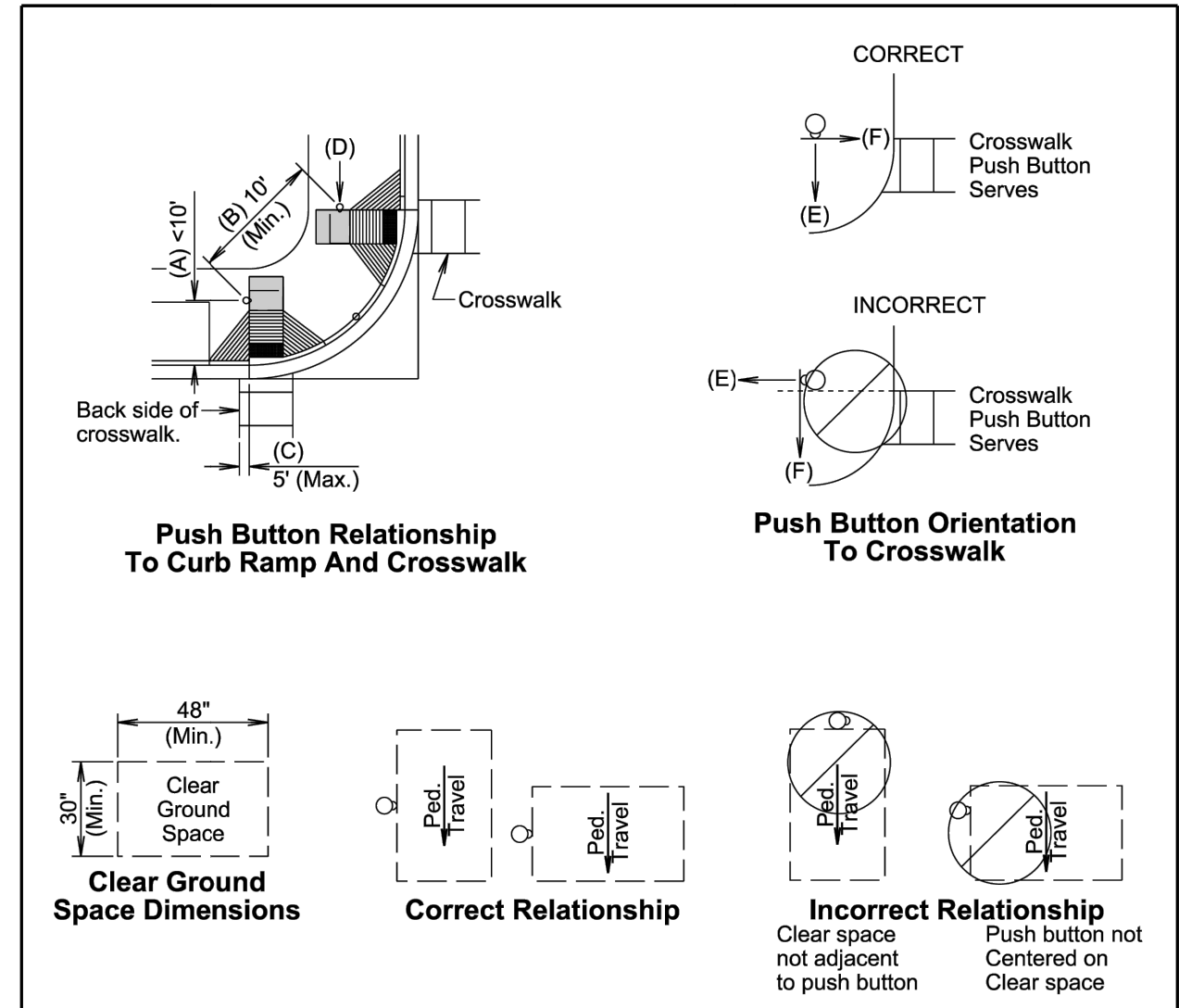
The concrete for the footing will be class M6 concrete.

All costs for furnishing and installing the concrete footing will be incidental to the contract unit price per square foot for the corresponding concrete sidewalk bid item.

All costs for furnishing and installing the pedestrian push button pole including labor, equipment, and materials including the pole, cap, and the conduit in the footing will be incidental to the contract unit price per each for "Pedestrian Push Button Pole".

April 8, 2025

Published Date: 2026	S D D O T	PEDESTRIAN PUSH BUTTON POLE	PLATE NUMBER 635.57
			Sheet 1 of 2



General Notes:

Pedestrian Push Buttons Location and Orientation Requirements:

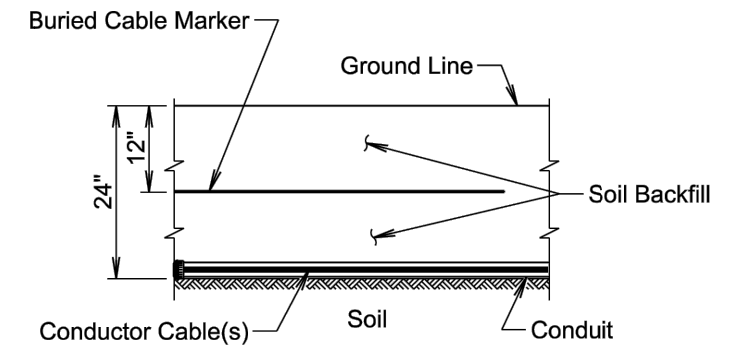
(A) Within 10 feet from the front face of curb.
 (B) Where two push buttons are provided, the push buttons should have at least 10 feet of separation from each other.
 (C) If two curb ramps are used, the push button should be within 5 feet of the backside of the crosswalk.
 (D) The push button should be mounted adjacent to a clear ground space (within 10 inches maximum reach). The clear ground space will be a least 30 inches x 48 inches and will slope no more than 2.1% in any direction. The push button will be centered on either side of the clear ground space (either the 30 inch or 48 inch side). The 30 inch x 48 inch clear ground space shouldn't touch the detectable warning panel.
 (E) The push button should face the edge of roadway.
 (F) The push button face should be parallel to the crosswalk being used.

The push button poles will not interfere with the minimum clear width of the Pedestrian Access Route.

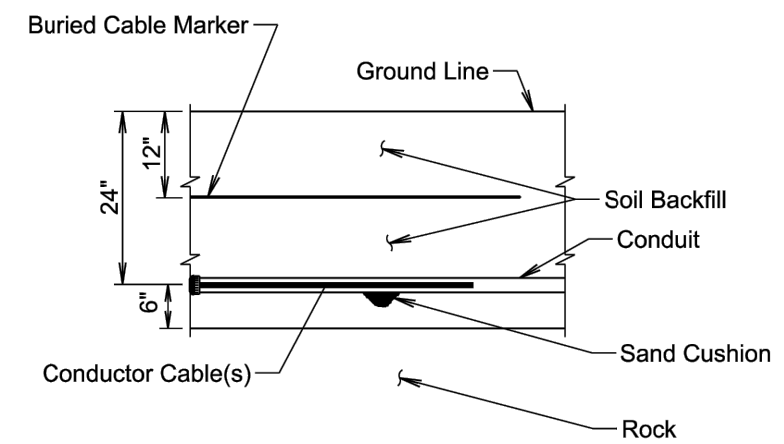
April 8, 2025

Published Date: 2026	S D D O T	PEDESTRIAN PUSH BUTTON POLE	PLATE NUMBER 635.57
			Sheet 2 of 2

FOR BIDDING PURPOSES ONLY



SECTION VIEW



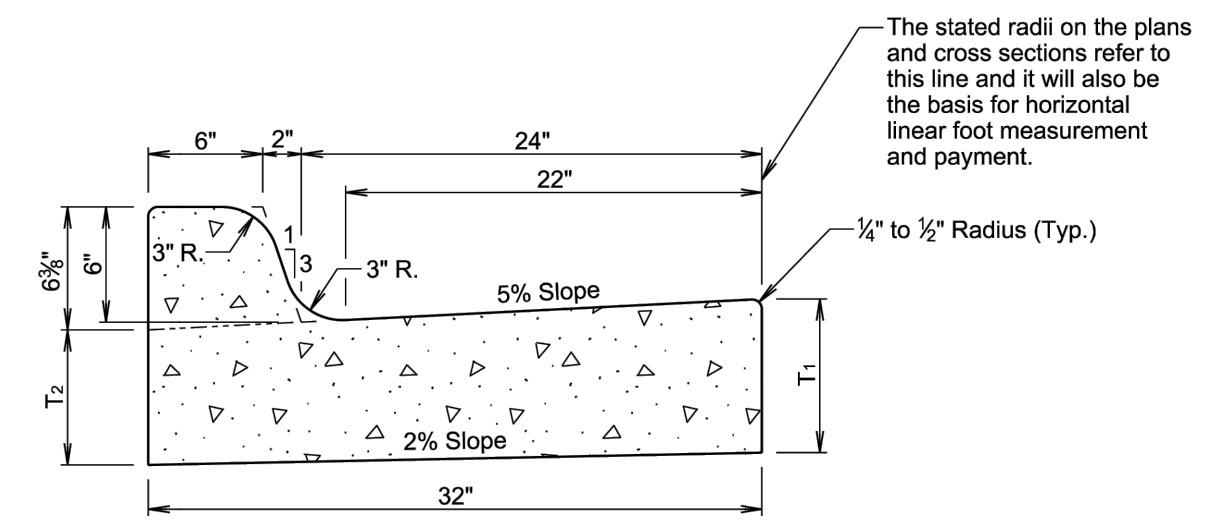
SECTION VIEW

GENERAL NOTE:

The Buried Cable Marker will be plastic, approximately 6" wide, and will be capable of sustaining a minimum of a 350% tolerance of elongation without tearing. The Buried Cable Marker will have a life expectancy approximately equal to that of the conductor(s) beneath it. A phrase indicating the presence of a buried electric circuit below will be printed in a contrasting color on the cable marker. The Buried Cable Marker will be subject to approval by the Engineer. All costs associated with furnishing and installing the Buried Cable Marker will be incidental to the contract unit price per foot for the bid item used for the electrical conductor.

November 19, 2022

Published Date: 2026	S D D O T	CONDUIT INSTALLATION	PLATE NUMBER 635.76
			Sheet 1 of 1



TYPE B CONCRETE CURB AND GUTTER

Type	T ₁ (Inches)	T ₂ (Inches)	Cu. Yd. Per Lin. Ft.	Lin. Ft. Per Cu. Yd.
B66	6	5 ¹ / ₁₆	0.057	17.7
B67	7	6 ¹ / ₁₆	0.065	15.4
B68	8	7 ¹ / ₁₆	0.073	13.7
B68.5	8.5	7 ⁹ / ₁₆	0.077	13.0
B69	9	8 ¹ / ₁₆	0.081	12.3
B69.5	9.5	8 ⁹ / ₁₆	0.085	11.7
B610	10	9 ¹ / ₁₆	0.090	11.2
B610.5	10.5	9 ⁹ / ₁₆	0.094	10.7
B611	11	10 ¹ / ₁₆	0.098	10.2
B611.5	11.5	10 ⁹ / ₁₆	0.102	9.8
B612	12	11 ¹ / ₁₆	0.106	9.4

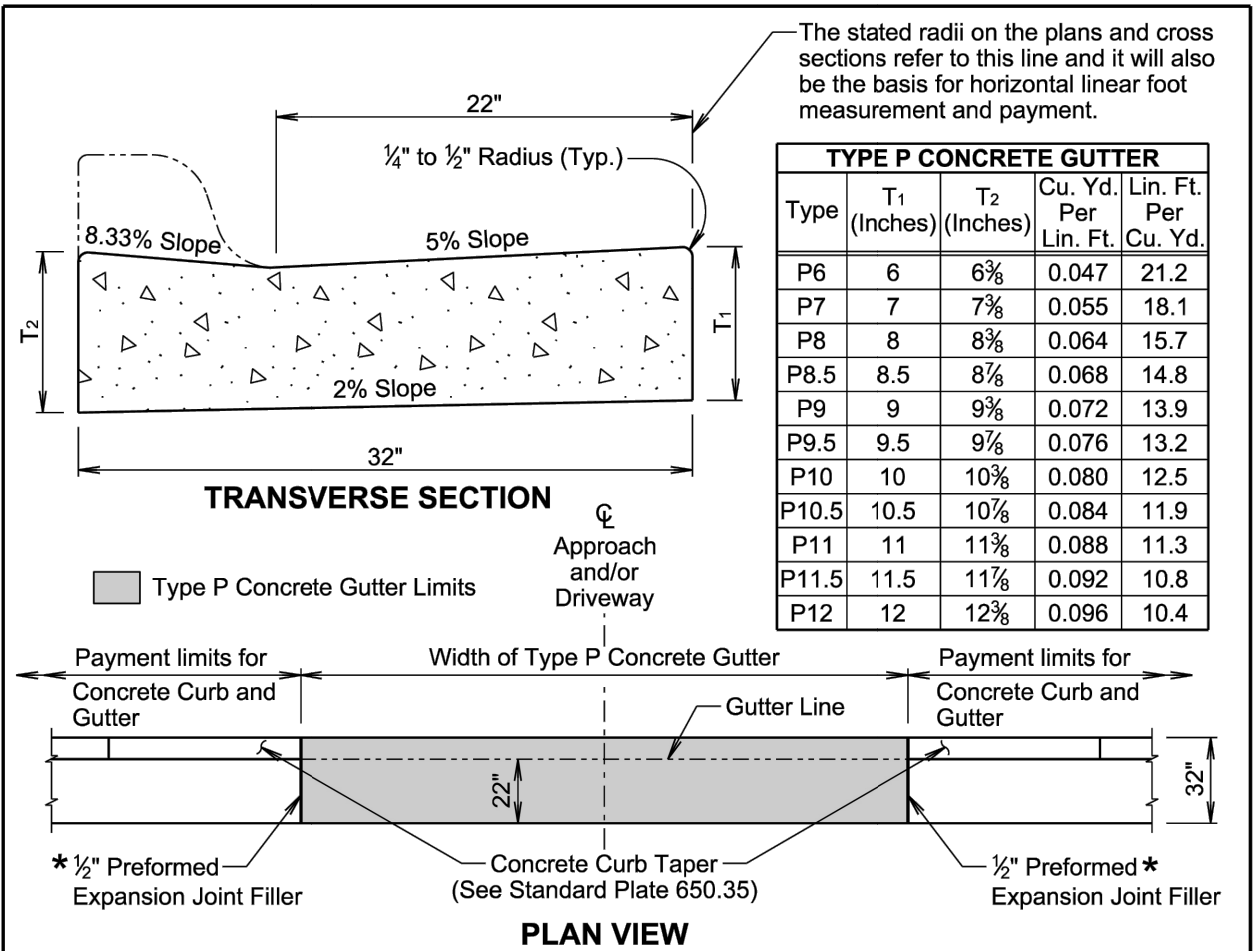
GENERAL NOTES:

When concrete curb and gutter longitudinally adjoins new concrete pavement, the method of attachment will be by one of the methods shown on standard plate 380.21.

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

January 22, 2023

Published Date: 2026	S D D O T	TYPE B CONCRETE CURB AND GUTTER	PLATE NUMBER 650.01
			Sheet 1 of 1



TYPE P CONCRETE GUTTER				
Type	T ₁ (Inches)	T ₂ (Inches)	Cu. Yd. Per Lin. Ft.	Lin. Ft. Per Cu. Yd.
P6	6	6 ³ / ₈	0.047	21.2
P7	7	7 ³ / ₈	0.055	18.1
P8	8	8 ³ / ₈	0.064	15.7
P8.5	8.5	8 ⁷ / ₈	0.068	14.8
P9	9	9 ³ / ₈	0.072	13.9
P9.5	9.5	9 ⁷ / ₈	0.076	13.2
P10	10	10 ³ / ₈	0.080	12.5
P10.5	10.5	10 ⁷ / ₈	0.084	11.9
P11	11	11 ³ / ₈	0.088	11.3
P11.5	11.5	11 ⁷ / ₈	0.092	10.8
P12	12	12 ³ / ₈	0.096	10.4

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

GENERAL NOTES:

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

When concrete gutter longitudinally adjoins new concrete pavement, the method of attachment will be by one of the methods shown on standard plate 380.21.

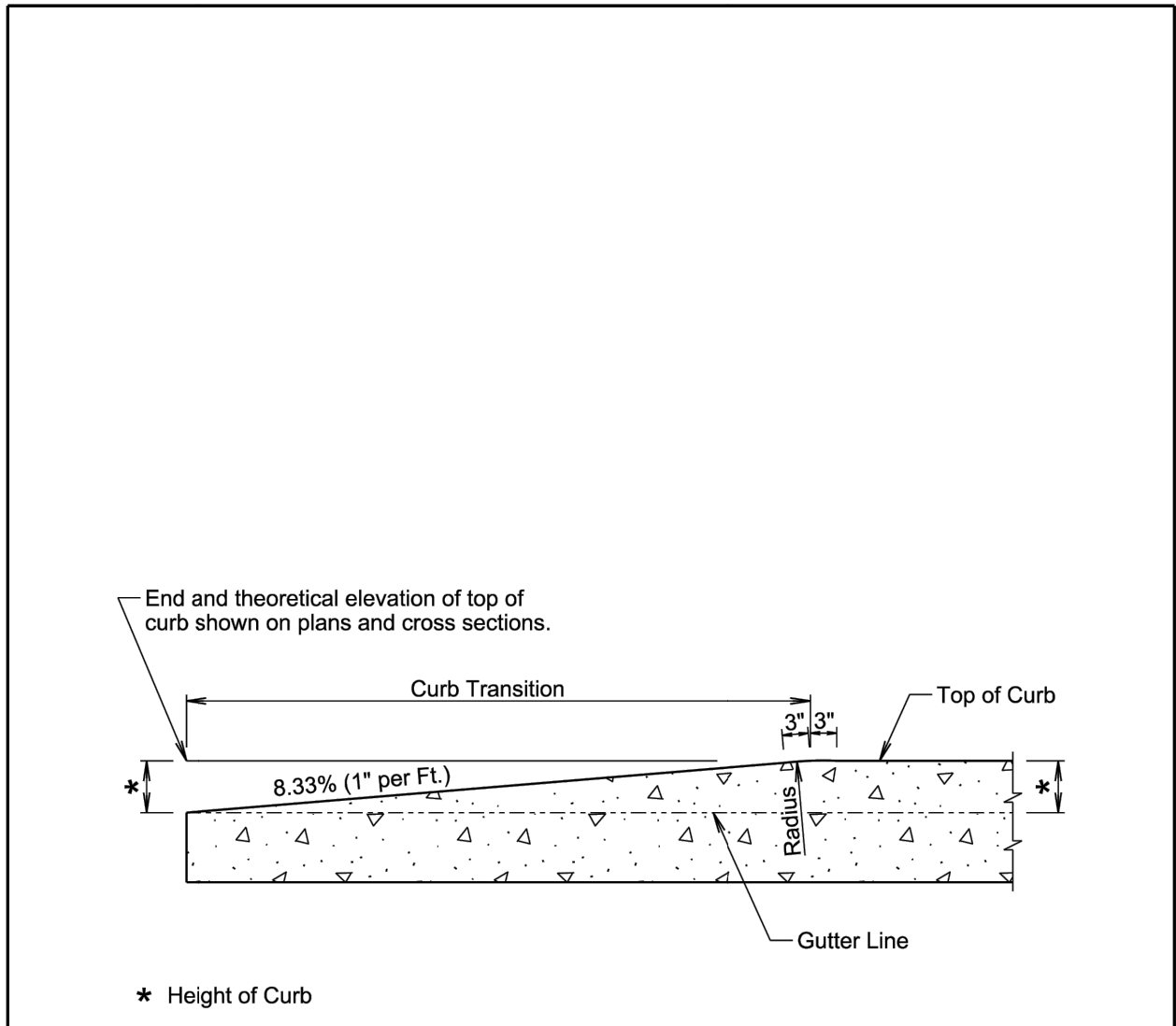
Transverse contraction joints will be constructed at 10-foot intervals in the concrete gutter except when concrete gutter is constructed adjacent to mainline PCC pavement. When concrete gutter is constructed adjacent to mainline PCC pavement, a transverse contraction joint will be constructed in the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

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

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

January 22, 2023

<i>Published Date: 2026</i>	S D D O T	TYPE P CONCRETE GUTTER	PLATE NUMBER 650.30	Sheet 1 of 1
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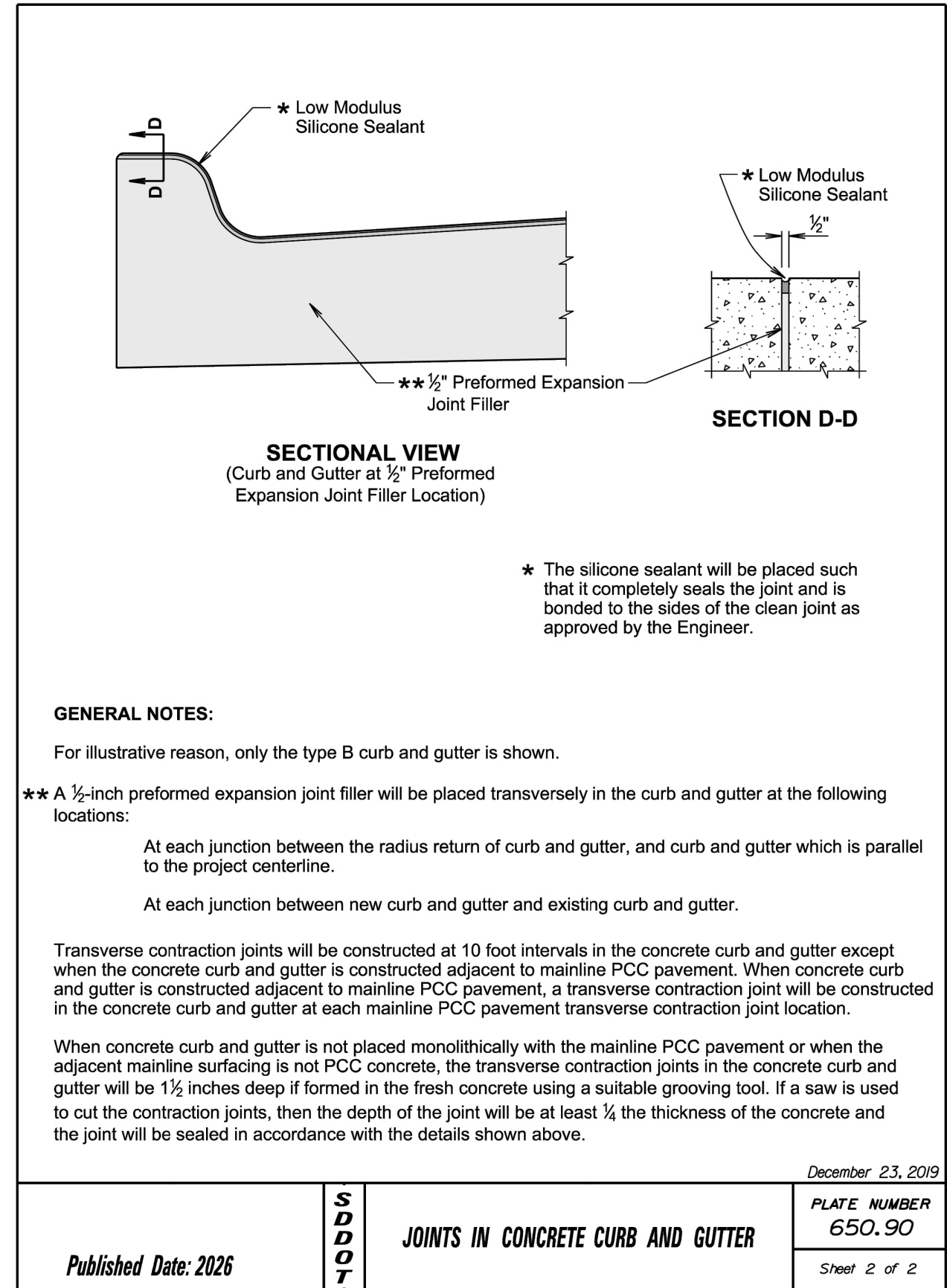
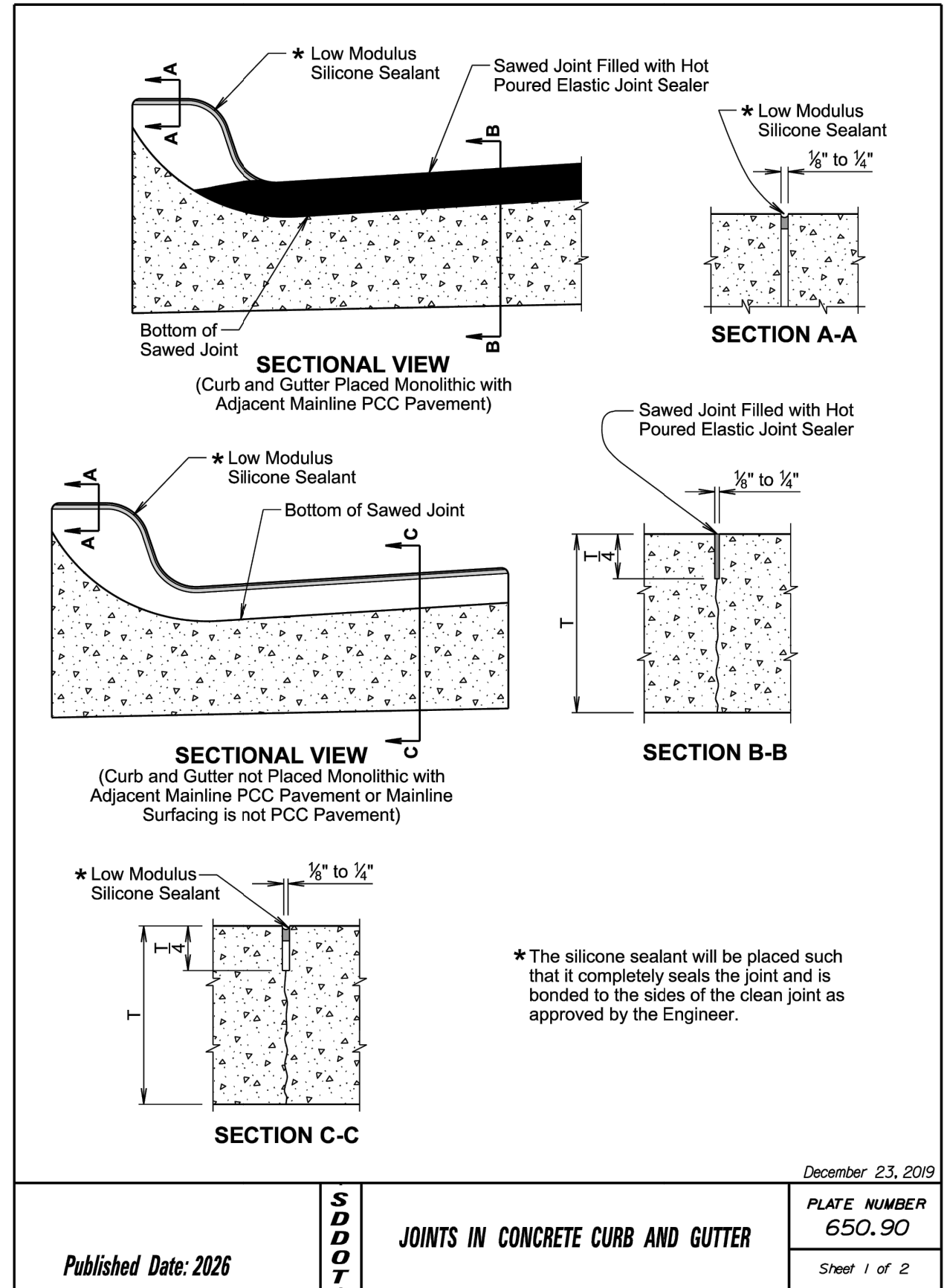


* Height of Curb

December 23, 2019

<i>Published Date: 2026</i>	S D D O T	CONCRETE CURB TAPER	PLATE NUMBER 650.35	Sheet 1 of 1
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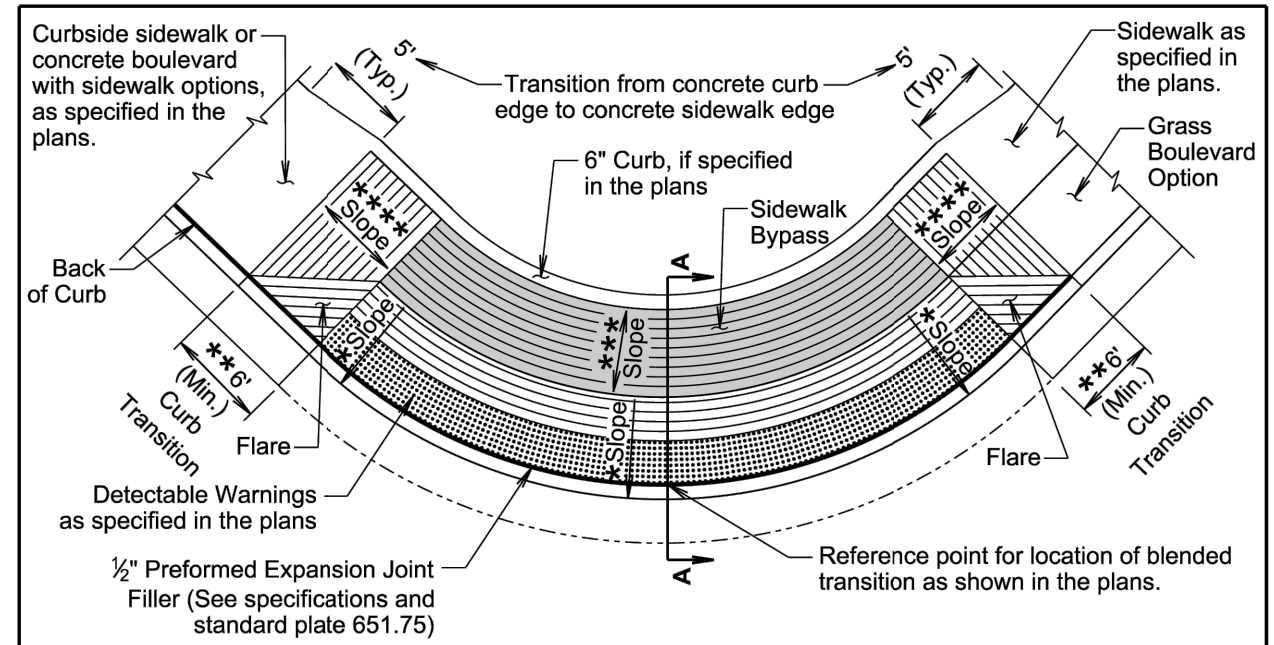
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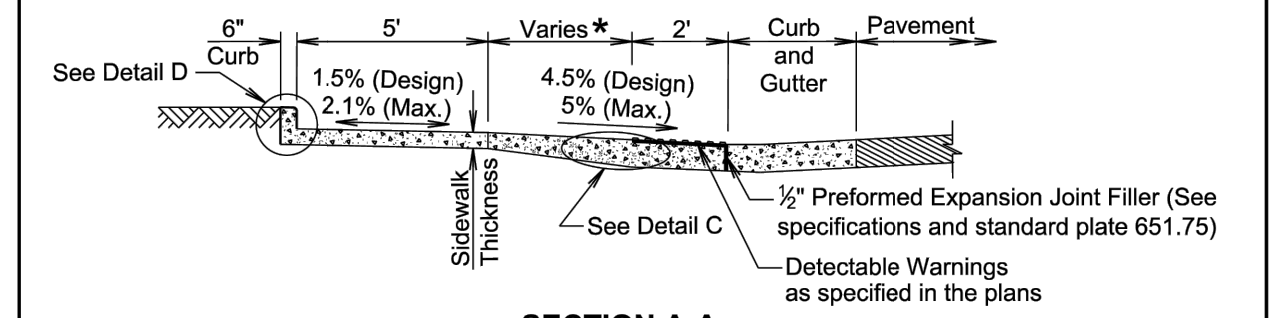
Published Date: 2026

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PLAN VIEW

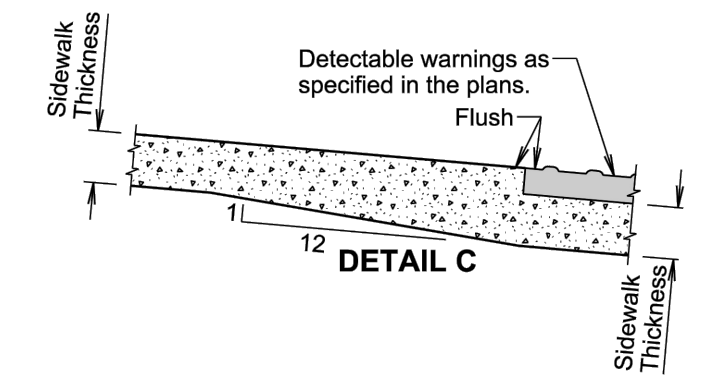


SECTION A-A

- * Blended transition slopes are designed at 4.5% unless stated otherwise in the plans. The blended transition may have a maximum slope of 5%.
- * The blended transition length dimension shown in the plans will be adjusted as necessary to meet all slope and length requirements based on the field geometrics.
 The cross slope of the blended transition will not be steeper than 2.1%. Plans are designed using a 1.5% slope unless stated otherwise in the plans.
- ** The curb transition will be a minimum of 6' long, a maximum of 10', long, and the curb transition slope will not be steeper than 10% unless stated otherwise in the plans. The curb transition length will be adjusted as necessary to meet slope and length requirements based on the field geometrics.
- *** The slope of the sidewalk bypass will not be steeper than 2.1% in any direction of pedestrian travel. Plans are designed using a 1.5% slope unless stated otherwise in the plans.
- **** The slope of the sidewalk in these areas will not be steeper than 5%. Plans are designed using a 4.5% slope unless stated otherwise in the plans.

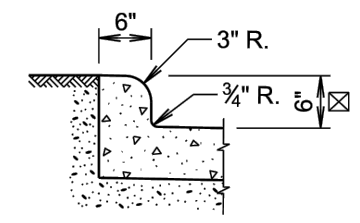
April 8, 2025

Published Date: 2026	S D D O T	BLENDED TRANSITION	PLATE NUMBER 651.05
			Sheet 1 of 3

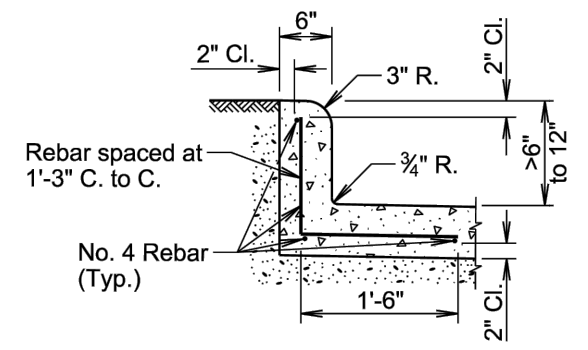


DETAIL C

☒ The curb height will be 6" unless stated otherwise in the plans.



DETAIL D



DETAIL D

(Use this detail when the curb height is greater than 6" and less than 12")

April 8, 2025

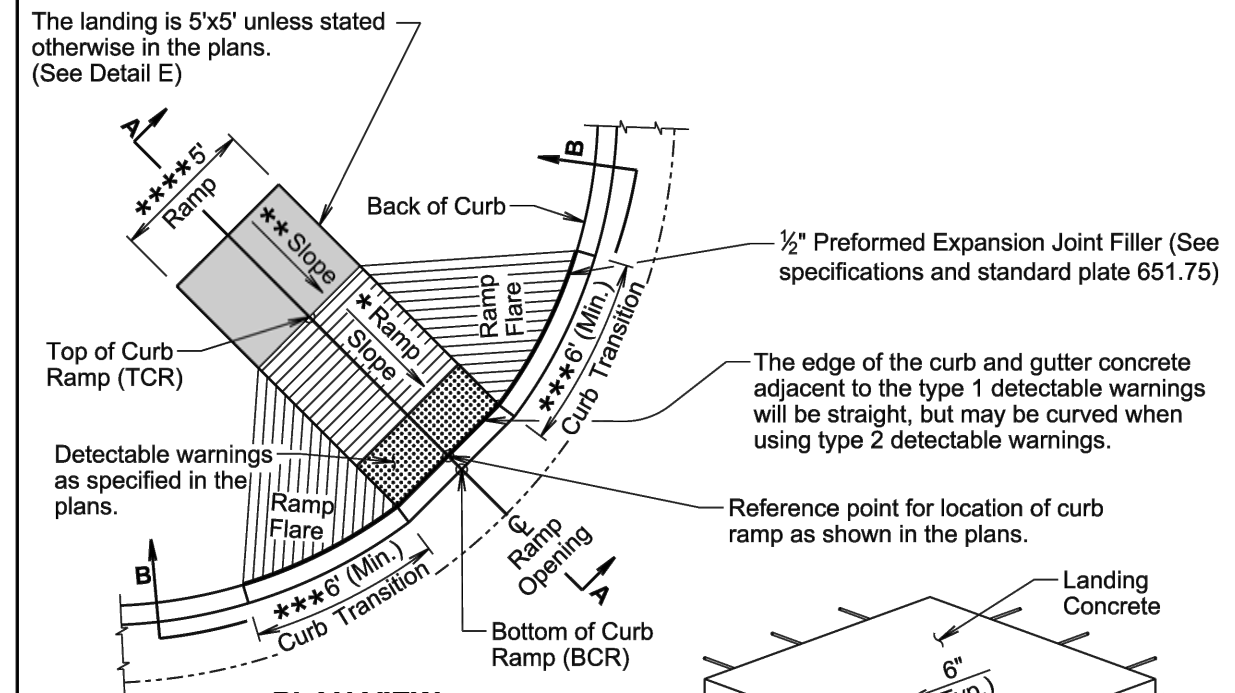
Published Date: 2026	S D D O T	BLENDED TRANSITION	PLATE NUMBER 651.05
			Sheet 2 of 3

GENERAL NOTES:

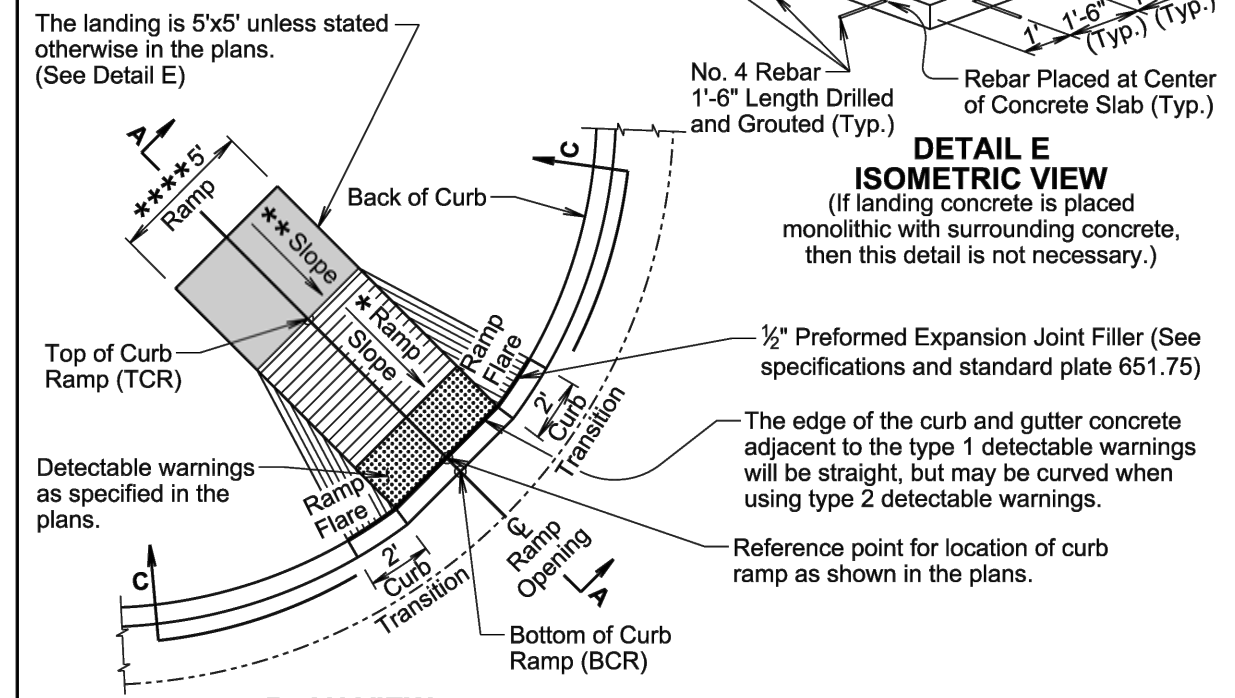
- The blended transition may be used with a PCC fillet section or curb and gutter.
- Sidewalk adjacent to the blended transition will be as shown in the plans.
- Care will be taken to ensure a uniform grade on the blended transition, free of sags and short grade changes.
- Surface texture of the blended transition will be obtained by coarse brooming transverse to the running slope of the blended transition.
- The normal gutter line profile will be maintained through the area of the blended transition opening.
- Joints will be sawed or tooled into the concrete adjacent to the detectable warnings to alleviate possible corner cracking.
- Care will be taken to ensure that the surface of the detectable warnings are clean and maintain a uniform color.
- The detectable warnings will be cut as necessary to fit the plan specified limits of the detectable warnings. Cost for cutting the detectable warnings will be incidental to the corresponding detectable warning contract item.
- When curb height is greater than 6" and less than 12", reinforcing steel is required in accordance with the detail on sheet 2 of 3. The reinforcing steel will conform to ASTM A615, Grade 60. Cost for furnishing and installing the reinforcing steel will be incidental to the contract unit price per square foot for the corresponding concrete sidewalk contract item.
- There will be no separate payment for blended transition. The blended transition will be measured and paid for at the contract unit price per square foot for the corresponding concrete sidewalk contract item. The square foot area of the detectable warnings and the curb along the short radius will be included in the measured and paid for quantity of sidewalk.
- The curb transitions and blended transition opening will be measured and paid for at the contract unit price per foot for the corresponding curb and gutter contract item when curb and gutter is used. The curb transitions and blended transition opening will be measured and paid for at the contract unit price per square yard for the corresponding PCC fillet section contract item when a PCC fillet section is used.
- Type 1 detectable warnings will be measured to the nearest square foot. All costs for furnishing and installing type 1 detectable warnings including labor, equipment, materials, and incidentals will be paid for at the contract unit price per square foot for "Type 1 Detectable Warnings".
- Type 2 detectable warnings will be measured to the nearest square foot. All costs for furnishing and installing type 2 detectable warnings including labor, equipment, and materials, including adhesive, necessary sealant or grout, and necessary grinding will be paid for at the contract unit price per square foot for "Type 2 Detectable Warnings".

April 8, 2025

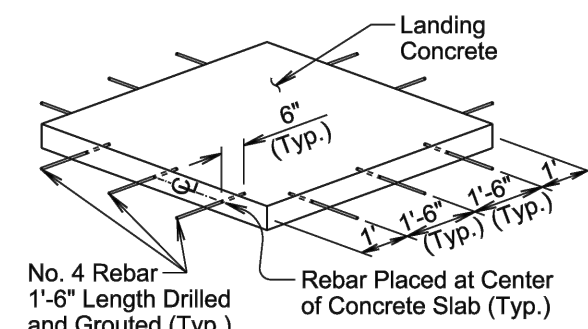
S D D O T	BLENDED TRANSITION	PLATE NUMBER 651.05	
		Sheet 3 of 3	Published Date: 2026



PLAN VIEW
(With 6'+ Curb Transition)



PLAN VIEW
(With 2' Curb Transition)



DETAIL E
ISOMETRIC VIEW

(If landing concrete is placed monolithic with surrounding concrete, then this detail is not necessary.)

April 8, 2025

S D D O T	TYPE 1 CURB RAMP (PERPENDICULAR CURB RAMP)	PLATE NUMBER 651.01	
		Sheet 1 of 3	Published Date: 2026

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

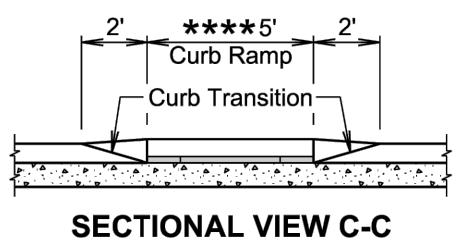
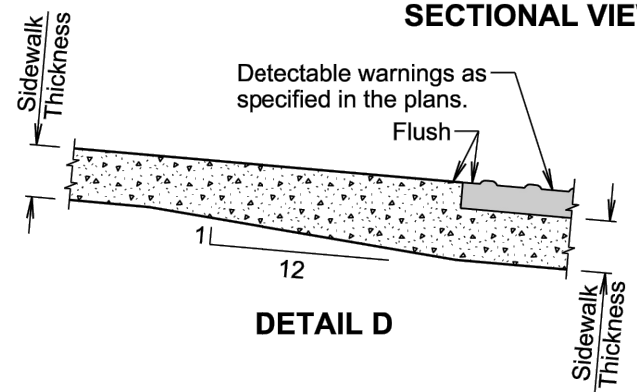
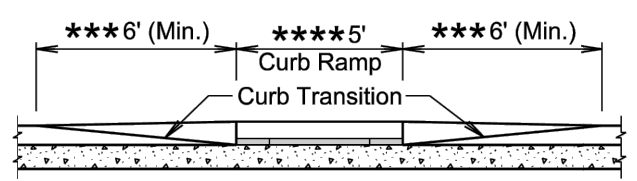
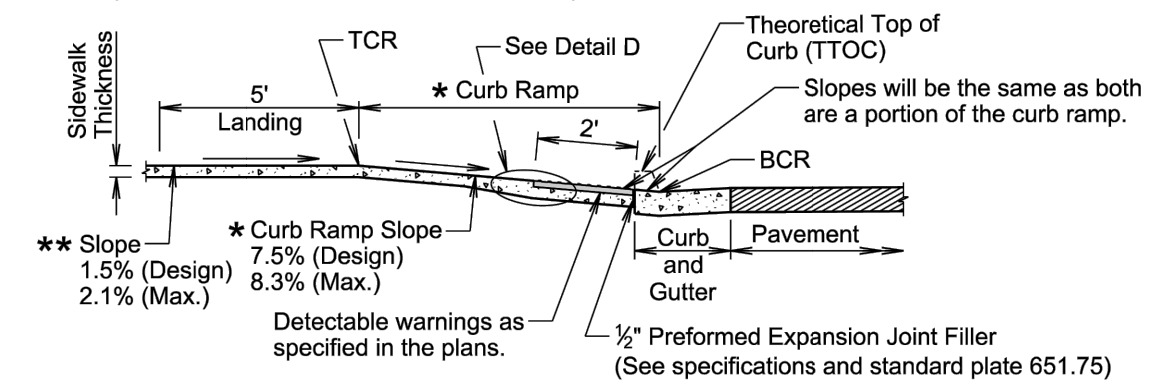
* The curb ramp length may be computed based on the intersection of a continuous 1.5% theoretical slope from theoretical top of curb (TTOC) with the curb ramp using a continuous 7.5% curb ramp slope. The elevation of point TCR will always be higher than the elevation of point TTOC unless specified otherwise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

The cross slope of the ramp will not be steeper than 2.1%. Plans are designed using a 1.5% slope unless stated otherwise in the plans.

** The slope in the landing will not be steeper than 2.1% in any direction of pedestrian travel. Plans are designed using a 1.5% slope unless stated otherwise in the plans.

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

**** The ramp width is 5' unless stated otherwise in the plans.



April 8, 2025

SDDOT	TYPE 1 CURB RAMP (PERPENDICULAR CURB RAMP)	PLATE NUMBER 651.01	
		Sheet 2 of 3	Published Date: 2026

GENERAL NOTES:

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

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

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

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

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

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

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

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

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

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

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

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

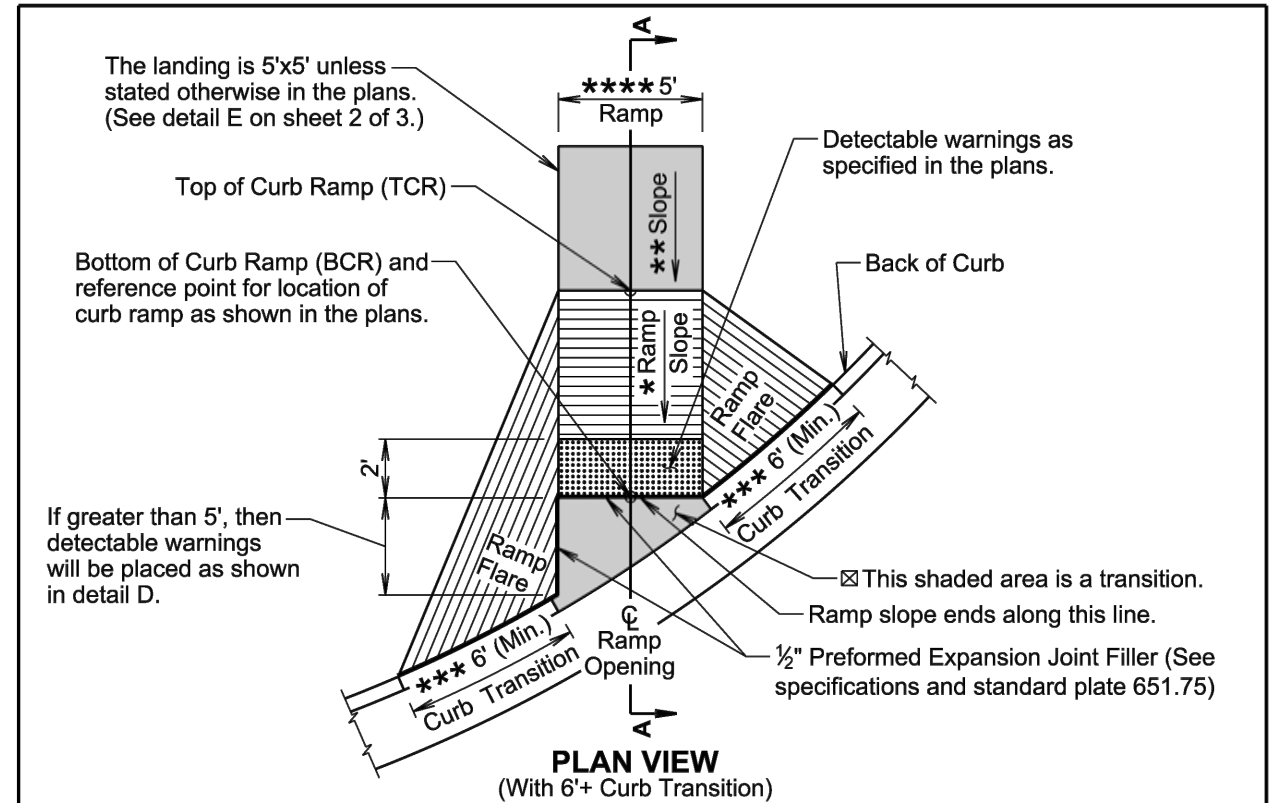
The curb transitions and ramp opening will be measured and paid for at the contract unit price per foot for the corresponding curb and gutter contract item when curb and gutter is used. The curb transitions and ramp opening will be measured and paid for at the contract unit price per square yard for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

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

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

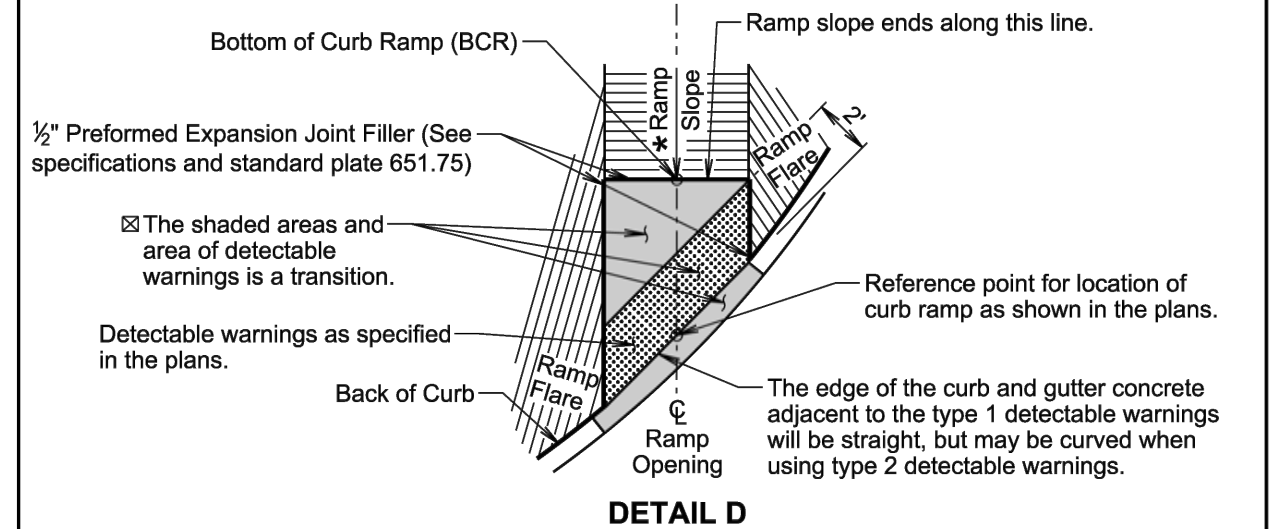
April 8, 2025

SDDOT	TYPE 1 CURB RAMP (PERPENDICULAR CURB RAMP)	PLATE NUMBER 651.01	
		Sheet 3 of 3	Published Date: 2026



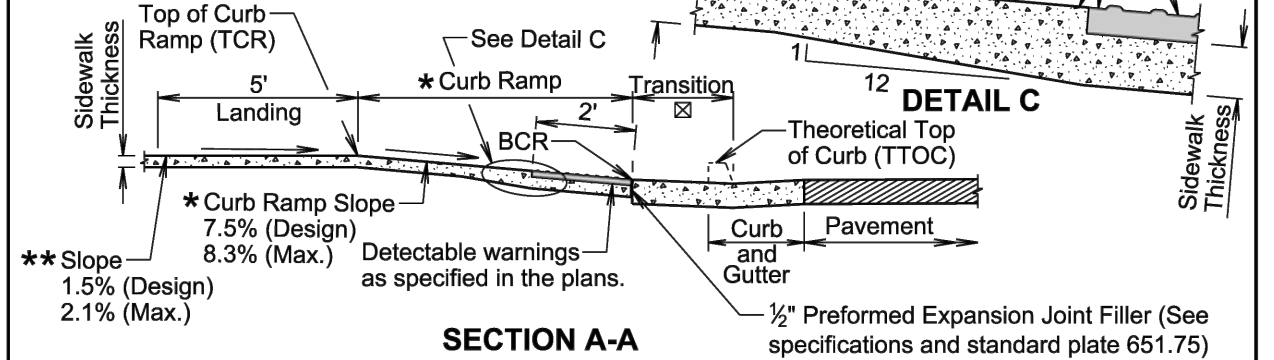
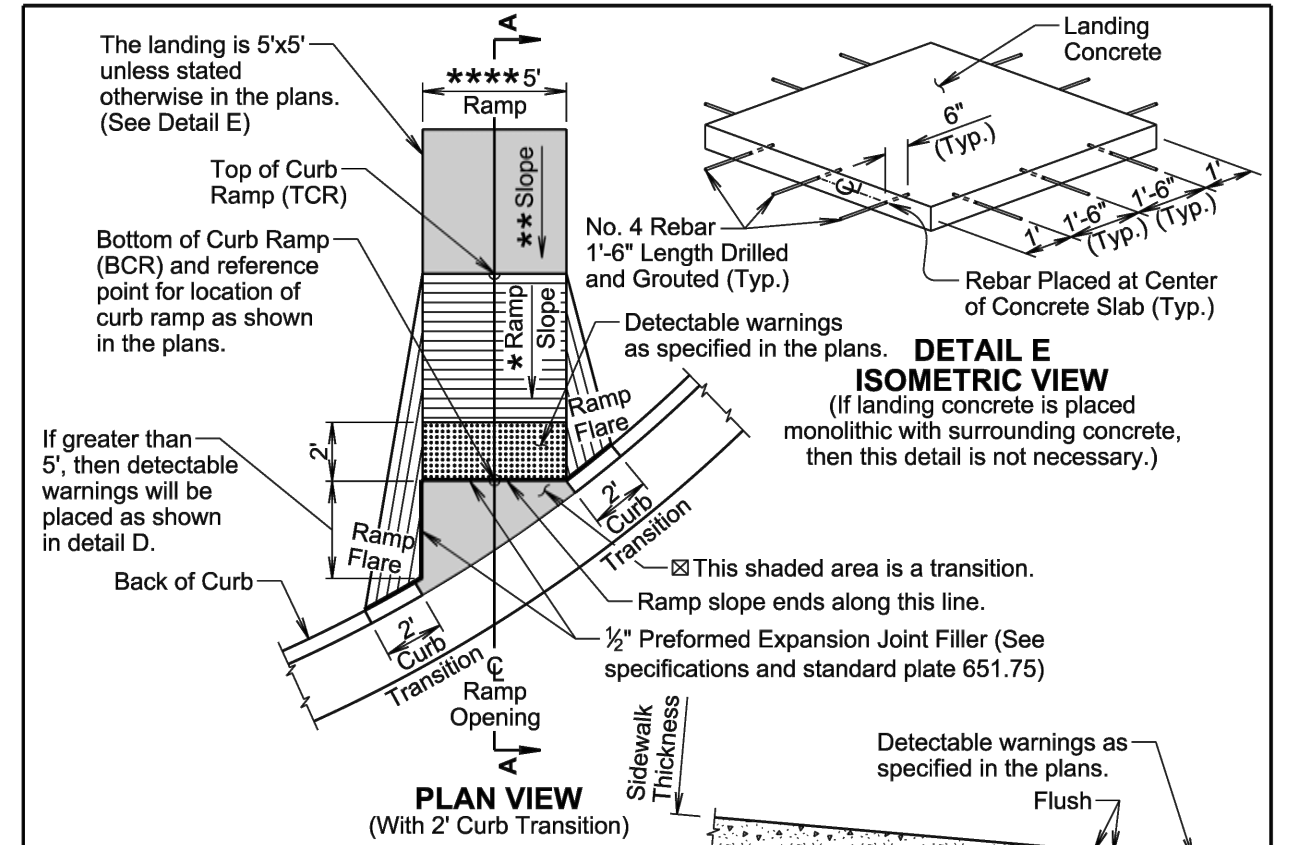
☒ The slope within the transition area will not be steeper than 5%. The concrete within the transition will be placed monolithic with the curb and gutter or fillet section concrete. The concrete thickness within the transition will be the same as the curb and gutter or fillet section concrete thickness.

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



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

* The elevation of point TCR will always be higher than the elevation of point TTOC unless specified otherwise in the plans. The curb ramp length dimension as shown in the plans will be adjusted as necessary to meet all slope and length requirements based on field geometrics.

The cross slope of the ramp will not be steeper than 2.1%. Plans are designed using a 1.5% slope unless stated otherwise in the plans.

** The slope in the landing will not be steeper than 2.1% in any direction of pedestrian travel. Plans are designed using a 1.5% slope unless stated otherwise in the plans.

**** The ramp width is 5' unless stated otherwise in the plans.

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GENERAL NOTES:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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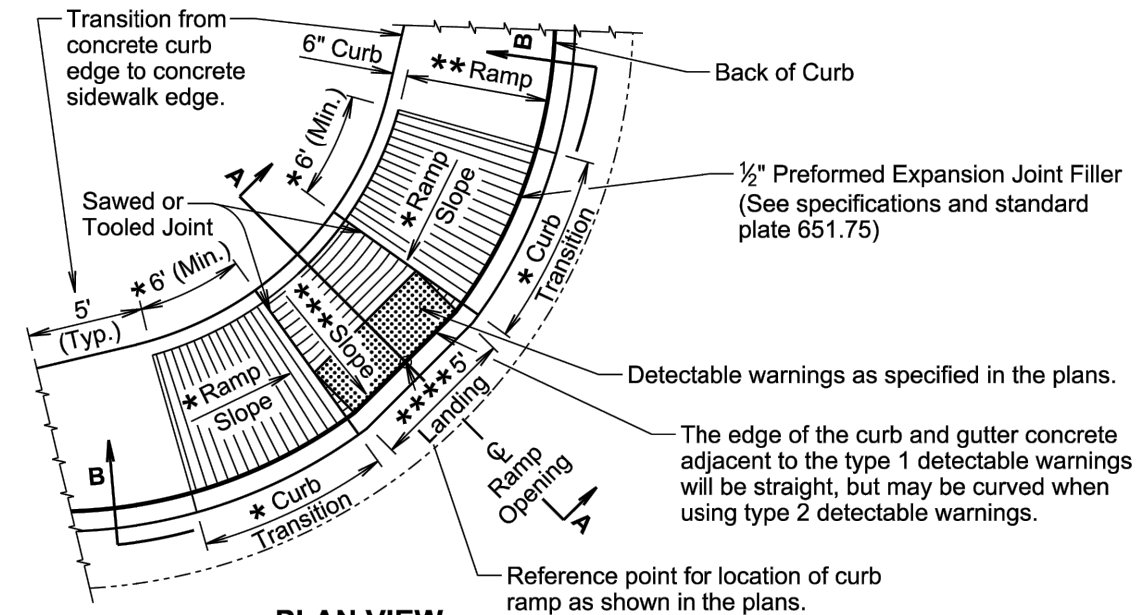
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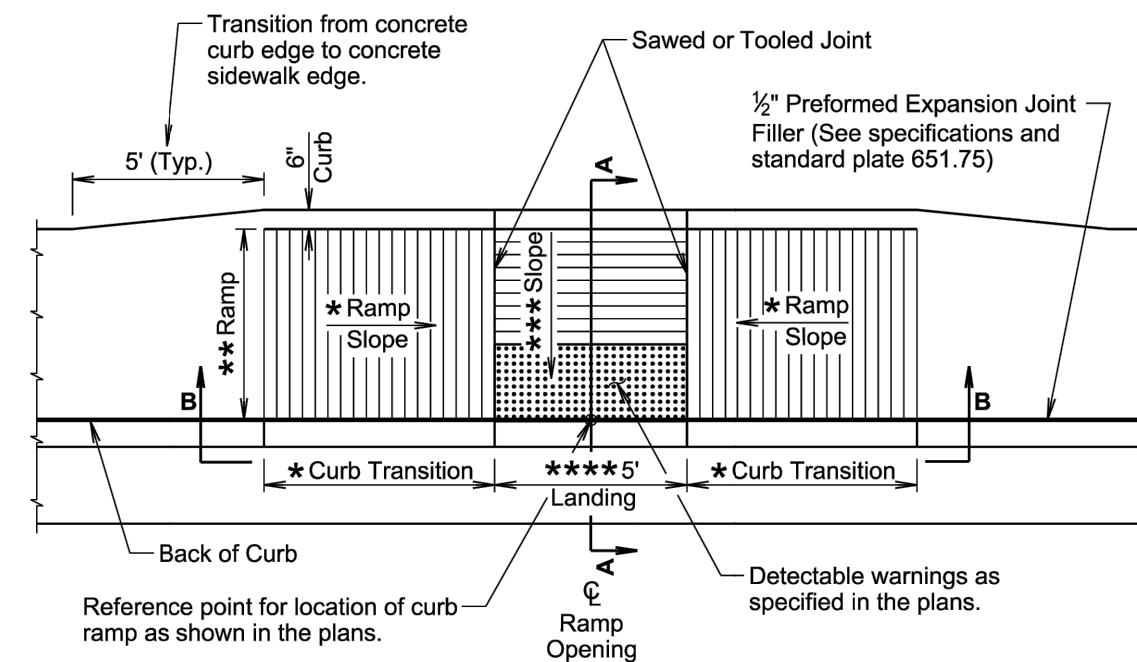
**TYPE 2 CURB RAMP
(DIRECTIONAL CURB RAMP)**

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651.02

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PLAN VIEW
(With Curved Curb and Gutter)



PLAN VIEW
(With Straight Curb and Gutter)

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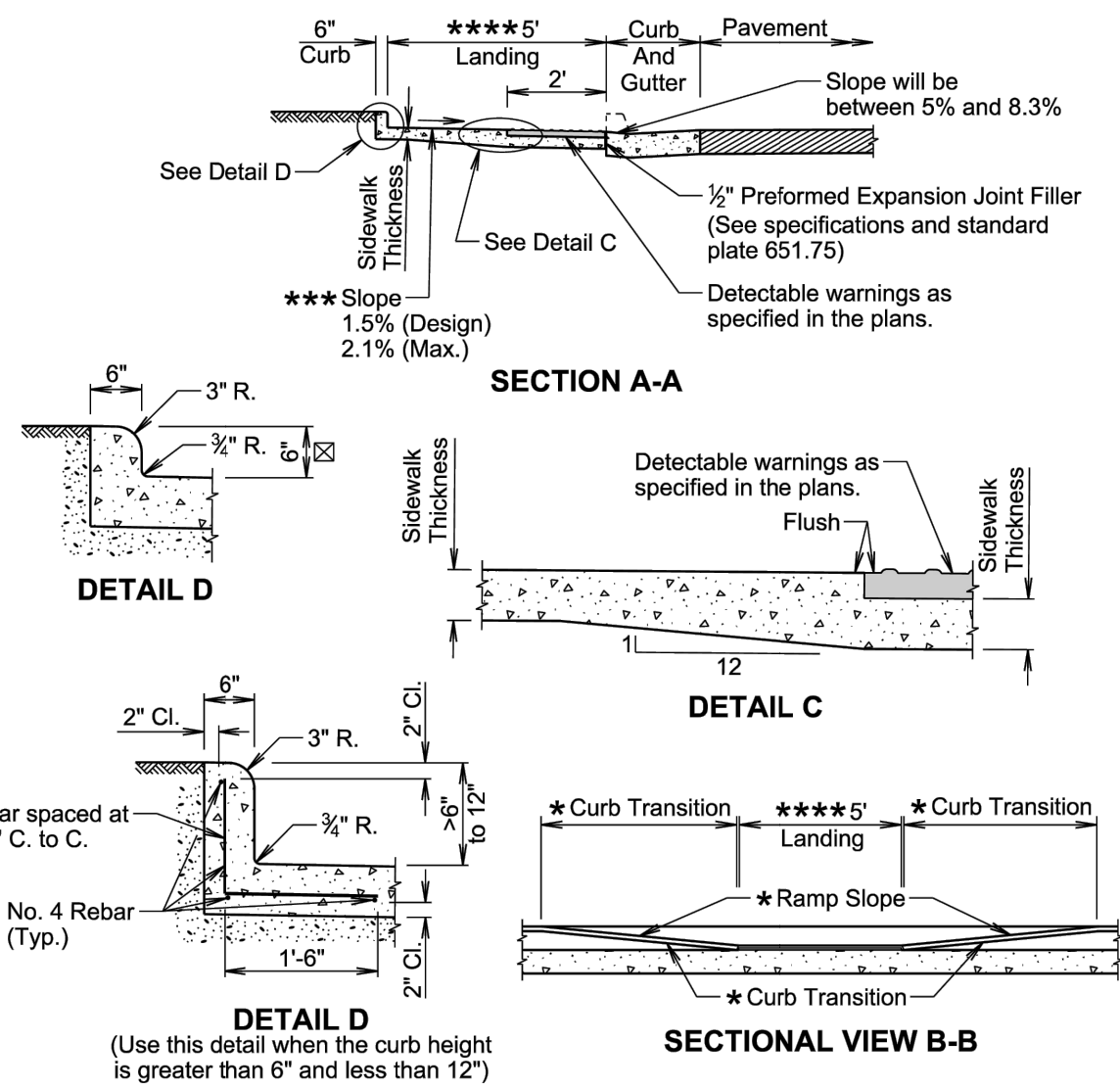
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**TYPE 3 CURB RAMP
(PARALLEL CURB RAMP)**

PLATE NUMBER
651.03

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- * The curb transition slope will match the curb ramp slope. Curb ramp slopes are designed at 7.5% unless stated otherwise in the plans. The curb ramp may have a maximum slope of 8.3% at any location of the curb ramp and will not exceed 15' in length unless stated otherwise in the plans. The curb transitions and curb ramp lengths will be adjusted as necessary to meet all slope and length requirements based on field geometrics.
- ** The cross slope of the ramp will not be steeper than 2.1% and the ramp width is 5' unless stated otherwise in the plans. Plans are designed using a 1.5% cross slope for the ramp unless stated otherwise in the plans.
- *** The slope in the landing will not be steeper than 2.1% in any direction of pedestrian travel. Plans are designed using a 1.5% slope unless stated otherwise in the plans.
- **** The landing is 5'x5' unless stated otherwise in the plans.
- ☒ The curb height will be 6" unless stated otherwise in the plans.



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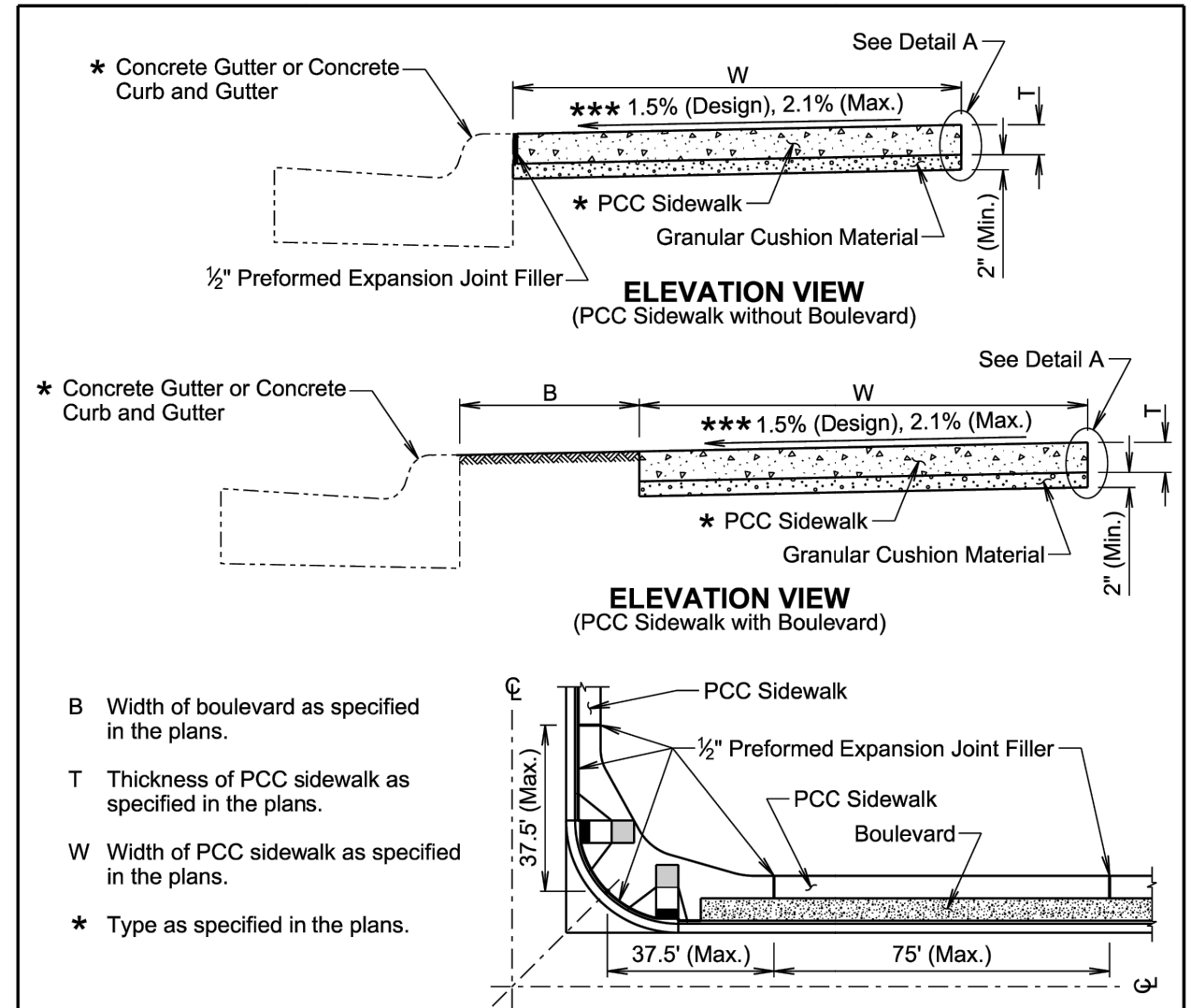
SDDOT	TYPE 3 CURB RAMP (PARALLEL CURB RAMP)	PLATE NUMBER 651.03	
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GENERAL NOTES:

- For illustrative purpose only, type 1 detectable warnings are shown in the drawings.
- For illustrative purpose only, a PCC fillet section is shown in one of the drawings. The curb ramp depicted on this standard plate may be used with a PCC fillet section or with curb and gutter.
- The curb ramp will be placed at the location stated in the plans.
- Sidewalk adjacent to the curb ramp will be as shown in the plans.
- * Care will be taken to ensure a uniform grade on the curb ramp, free of sags and short grade changes.
- Surface texture of the curb ramp will be obtained by coarse brooming transverse to the slope of the curb ramp.
- The normal gutter line profile will be maintained through the area of the ramp opening.
- Joints will be sawed or tooled into the concrete adjacent to the detectable warnings to alleviate possible corner cracking (see plan view for joint location).
- Care will be taken to ensure that the surface of the detectable warnings are clean and maintains a uniform color.
- The detectable warnings will be cut as necessary to fit the plan specified limits of the detectable warnings. Cost for cutting the detectable warnings will be incidental to the corresponding detectable warning contract item.
- When curb height is greater than 6" and less than 12", reinforcing steel is required in accordance with the detail on sheet 2 of 3. The reinforcing steel will conform to ASTM A615, Grade 60. Cost for furnishing and installing the reinforcing steel will be incidental to the contract unit price per square foot for the corresponding concrete sidewalk contract item.
- There will be no separate payment for curb ramps. The curb ramp will be measured and paid for at the contract unit price per square foot for the corresponding concrete sidewalk contract item. The square foot area of the detectable warnings and the curb along the short radius will be included in the measured and paid for quantity of sidewalk.
- The curb transitions and ramp opening will be measured and paid for at the contract unit price per foot for the corresponding curb and gutter contract item when curb and gutter is used. The curb transitions and ramp opening will be measured and paid for at the contract unit price per square yard for the corresponding PCC fillet section contract item when a PCC fillet section is used.
- Type 1 detectable warnings will be measured to the nearest square foot. All costs for furnishing and installing type 1 detectable warnings including labor, equipment, materials, and incidentals will be paid for at the contract unit price per square foot for "Type 1 Detectable Warnings".
- Type 2 detectable warnings will be measured to the nearest square foot. All costs for furnishing and installing type 2 detectable warnings including labor, equipment, and materials, including adhesive, necessary sealant or grout, and necessary grinding will be paid for at the contract unit price per square foot for "Type 2 Detectable Warnings".

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SDDOT	TYPE 3 CURB RAMP (PARALLEL CURB RAMP)	PLATE NUMBER 651.03	
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- B Width of boulevard as specified in the plans.
- T Thickness of PCC sidewalk as specified in the plans.
- W Width of PCC sidewalk as specified in the plans.
- * Type as specified in the plans.

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 2.1% unless specified otherwise in the plans.

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

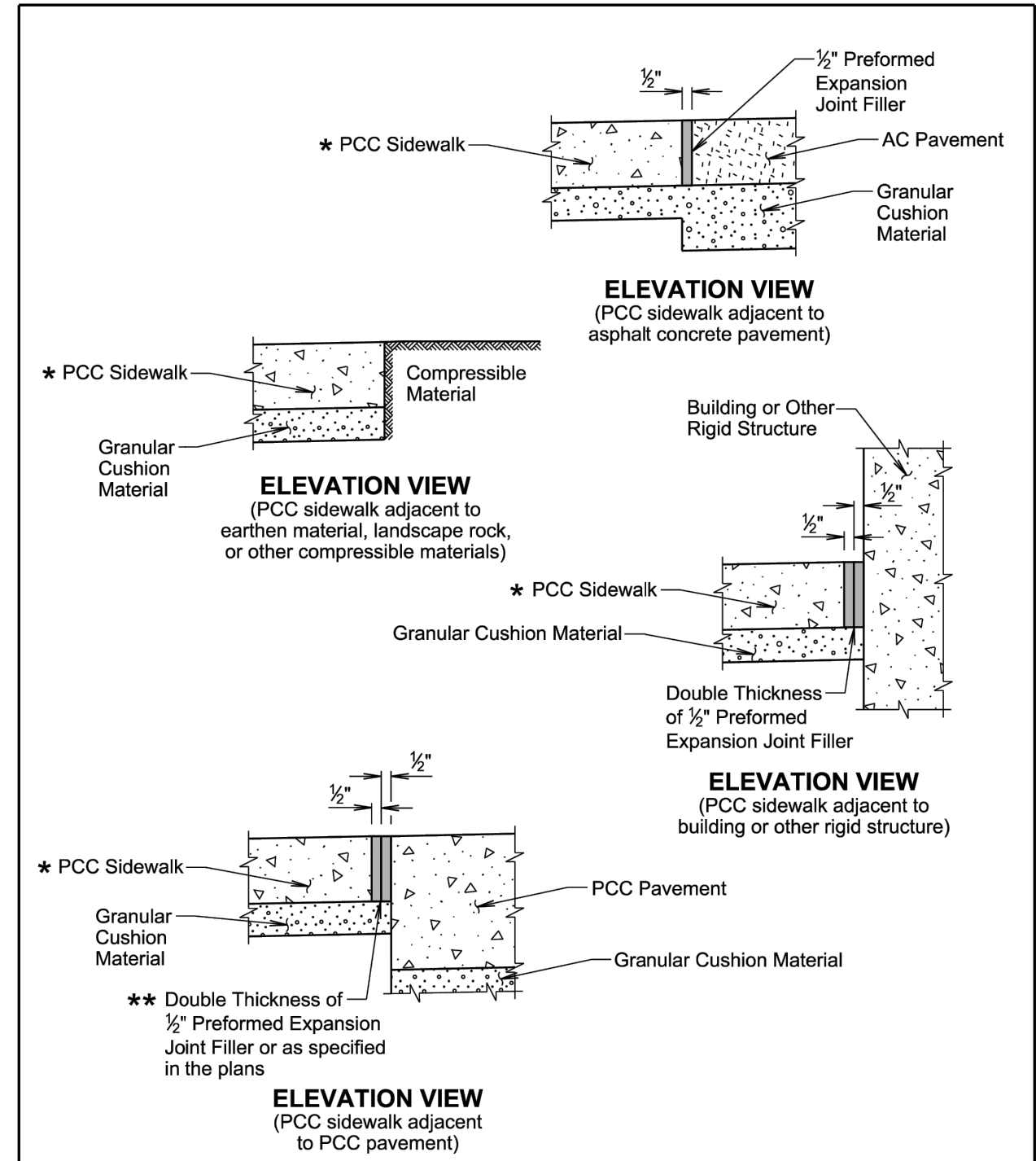
PCC sidewalk placed adjacent to intersection of roadways will have an expansion joint placed transversely a maximum of 37.5 feet from the intersection. See Plan View.

An expansion joint in the PCC sidewalk will consist of a 1/2 -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.

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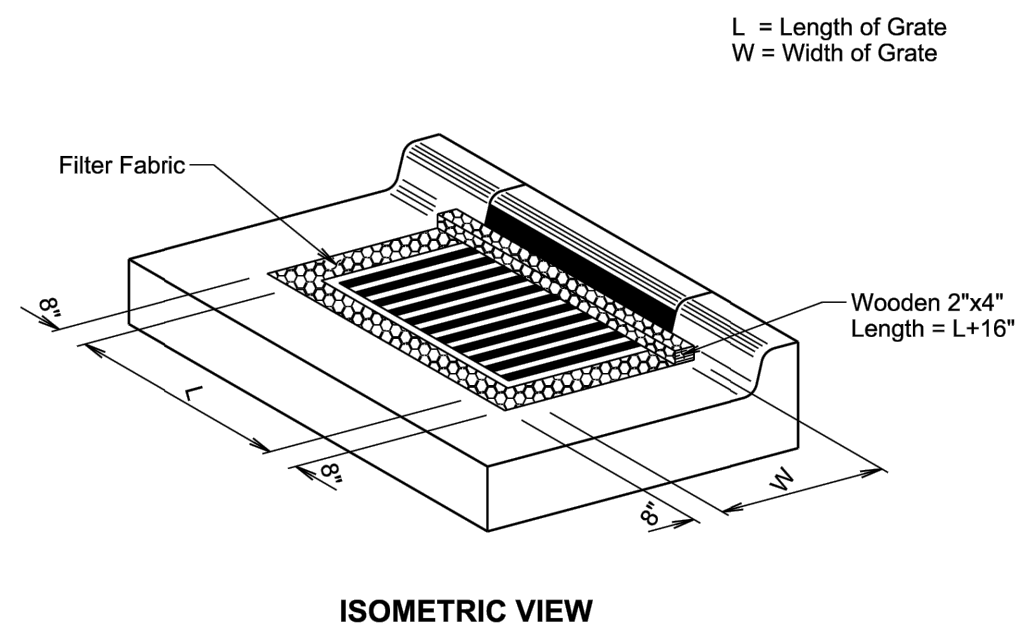
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			Sheet 1 of 2



** Double Thickness of 1/2" Preformed Expansion Joint Filler or as specified in the plans

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Published Date: 2026	S D D O T	PCC SIDEWALK	PLATE NUMBER 651.75
			Sheet 2 of 2



GENERAL NOTES:

- The grate and curb and gutter shown are for illustrative purposes only.
- The sediment control at inlet with frame and grate will be placed at locations stated in the plans or at locations determined by the Engineer.
- The filter fabric will be the type specified in the plans.
- The filter fabric will be placed in the inlet opening prior to placing the grate. Approximately 18 inches of excess filter fabric will be wrapped around the 2"x4" and stapled securely to the 2"x4" after the grate has been placed.
- 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 accumulated sediment and replacing torn filter fabric with new filter fabric.
- 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.
- All costs for furnishing, installing, inspecting, maintaining, removing, and replacing the sediment control device at the inlet including labor, equipment, and materials will be incidental to the contract unit price per each for "Sediment Control at Inlet with Frame and Grate".

February 14, 2020

Published Date: 2026	S D D O T	SEDIMENT CONTROL AT INLETS WITH FRAMES AND GRATES	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="font-size: 8px;">PLATE NUMBER</td> <td style="font-size: 12px; font-weight: bold;">734.10</td> </tr> <tr> <td style="font-size: 8px;">Sheet 1 of 1</td> <td></td> </tr> </table>	PLATE NUMBER	734.10	Sheet 1 of 1	
PLATE NUMBER	734.10						
Sheet 1 of 1							