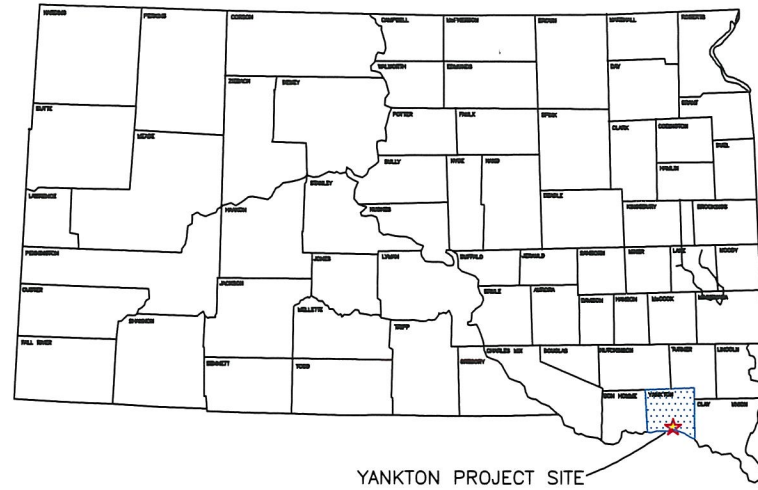


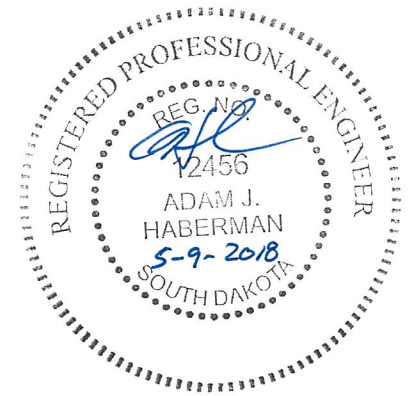
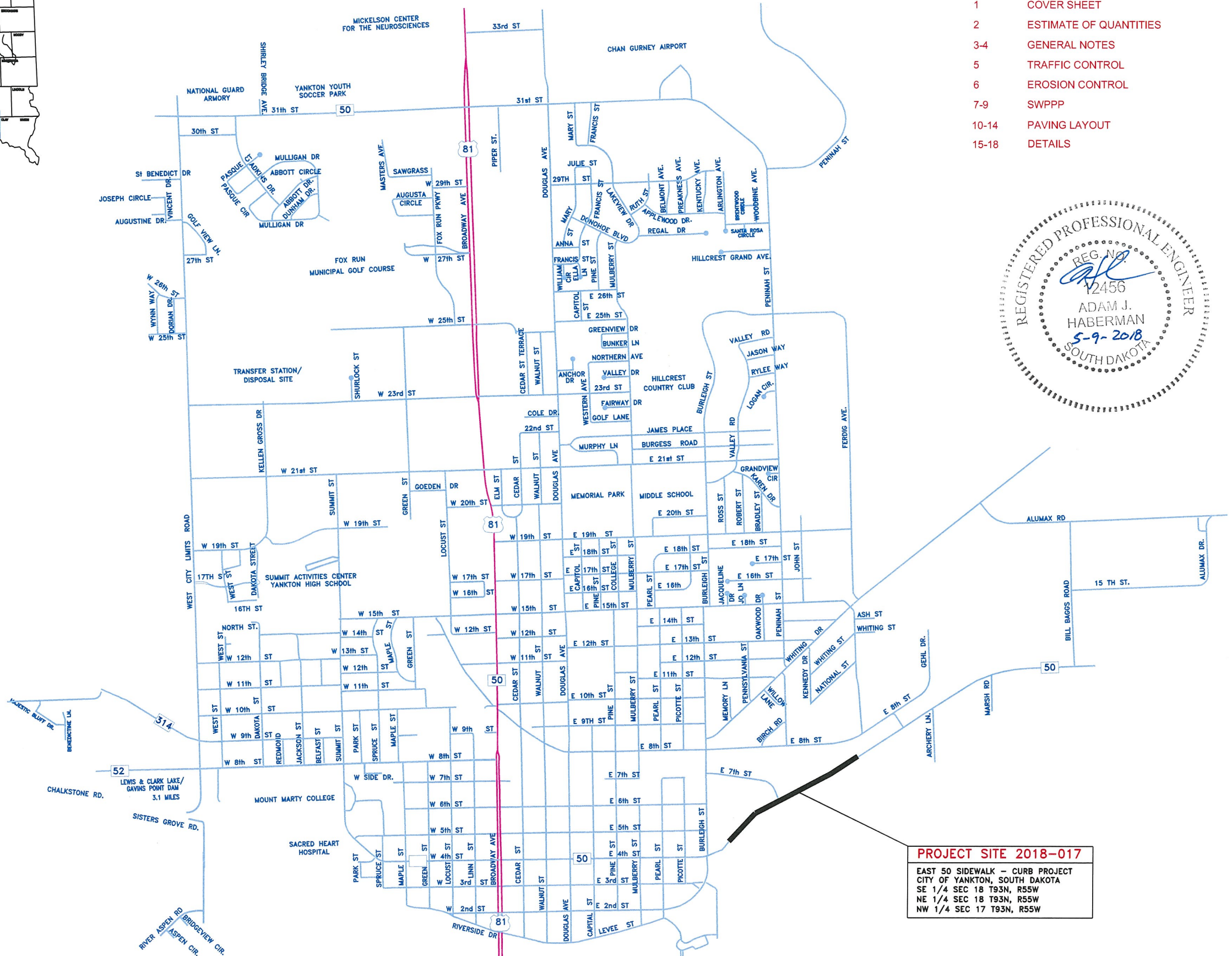
2018-017  
**EAST 50 SIDEWALK - CURB PROJECT**  
**PADDLEWHEEL DRIVE TO FERDID AVE.**

INDEX OF SHEETS

- 1 COVER SHEET
- 2 ESTIMATE OF QUANTITIES
- 3-4 GENERAL NOTES
- 5 TRAFFIC CONTROL
- 6 EROSION CONTROL
- 7-9 SWPPP
- 10-14 PAVING LAYOUT
- 15-18 DETAILS



YANKTON PROJECT SITE



**LEGEND**

- POWER POLE
- TELEPHONE BOX
- CURB INLET
- SANITARY SEWER MANHOLE
- STORM SEWER MANHOLE
- VALVE
- PROPOSED VALVE
- EXISTING FIRE HYDRANT
- PROPOSED FIRE HYDRANT
- PROPERTY LINE
- SANITARY SEWER
- STREET CENTERLINE
- CURB
- WATER
- BURIED CABLE TV
- BURIED GAS LINE
- BURIED ELECTRIC LINE
- BURIED TELEPHONE LINE
- EXISTING STORM SEWER
- WORK LIMITS - AS PER CROSS SECTIONS

**PROJECT SITE 2018-017**  
 EAST 50 SIDEWALK - CURB PROJECT  
 CITY OF YANKTON, SOUTH DAKOTA  
 SE 1/4 SEC 18 T93N, R55W  
 NE 1/4 SEC 18 T93N, R55W  
 NW 1/4 SEC 17 T93N, R55W

# ESTIMATE OF QUANTITIES

PROJECT	SHEET NO.	TOTAL SHEETS
2018-017	2	18
Quantities		5/8/2018

BID ITEM NUMBER                      ITEM                                      QUANTITY                                      UNIT

<b>Removals and Grading</b>			
1	Mobilization	1	LS
2	Saw Existing Concrete	80	LF
3	Saw Existing Asphalt	125	LF
4	Removal of Concrete Pavement	30	SY
5	Removal of Asphalt Pavement	50	SY
6	Unclassified Excavation (see note on sheet 3)	1	LS
7	Topsoil	1	LS
<b>Erosion Control</b>			
8	Seeding, Mulching, Fertilizer	1	LS
9	Silt Fence	250	LF
10	Inlet Sediment Control	7	EA
<b>Traffic Control</b>			
11	Traffic Control Lane Closure	1	LS
<b>Surfacing</b>			
12	6" Fillet Section	1713	SF
13	6" Approach P.C.C. Pavement	9828	SF
14	Concrete Curb and Gutter (B66)	941	LF
15	6"X12" Vertical Curb	1130	LF
16	6" Concrete Sidewalk	20162	SF
<b>Storm Sewer</b>			
17	18" 2'X3' Type B Inlet	1	EA
18	F&I 18" RCP Class 3 (round)	26	LF
19	Storm Sewer Pipe Bedding Material	26	LF
20	Core existing Inlet	1	EA
<b>Water Main</b>			
21	Relocate Fire Hydrant (See Note on this sheet)	2	EA
<b>Sanitary Sewer</b>			
22	Adjust MH Frame & Lid	1	EA

**TABLE OF INSTALL B66 CONCRETE CURB & GUTTER**

LOCATION	QUANTITY (LF)
50+16 87' RT. TO 52+63 - 79' RT.	232'
55+44 - 50' TO 46' RT.	4'
55+96.5 - 46' TO 50' RT.	4'
56+06.5 TO 56+27 - 60' RT.	21'
58+26 TO 59+28 - 60' RT.	103'
59+38 - 50' TO 46' RT.	4'
59+91 - 46' TO 50' RT.	4'
60+01 TO 60+39 - 60' RT.	39'
60+49 - 46' TO 50' RT.	4'
61+02 - 46' TO 50' RT.	4'
61+12 TO 61+99 - 60' RT.	88'
62+09 - 50' TO 46'	4'
62+63 - 46' TO 50'	4'
62+73 TO 64+04 - 60' RT.	132'
64+14 - 50' TO 46'	4'
64+70 - 46' TO 50'	4'
64+80 TO 64+88 - 60' RT.	8'
66+52 - 62.5' TO 46'	17'
67+01 - 46' TO 50'	4'
67+11 TO 67+26 - 60' RT.	16'
67+36 - 50' TO 46'	4'
67+88 - 46' TO 50'	4'
67+98 TO 68+44 - 60' RT.	46'
70+21 TO 71+24 - 60' RT.	103'
71+34 - 50' TO 46'	4'
71+87 - 46' TO 50'	4'
71+97 TO 72+49 - 60' RT.	52'
72+59 - 50' TO 46'	4'
72+96 - 46' TO 50'	4'
73+83.5 - 50' TO 46'	4'
74+16 - 46' TO 50'	4'
74+86 - 50' TO 46'	4'
75+19 - 46' TO 50'	4'
<b>TOTAL</b>	<b>941 (LF)</b>

**TABLE OF INSTALL 6"X12" VERTICAL CURB**

LOCATION	QUANTITY (LF)
52+63 - 81' RT. TO 55+34 - 62' RT.	261'
56+27 TO 58+26 - 62' RT.	200'
64+88 TO 66+52 - 62' RT.	165'
68+44 TO 70+21 - 62' RT.	178'
73+08 TO 73+73 - 62' RT.	66'
74+26 TO 74+76 - 62' RT.	50'
75+29 TO 77+39 - 62' RT.	210'
<b>TOTAL</b>	<b>1130' (LF)</b>

**TABLE OF RELOCATE FIRE HYDRANT (HYDRANTS TO BE MOVED 5' SE)**

LOCATION	QUANTITY (EA)
56+01 - 44' RT.	1
60+40 - 44' RT.	1
<b>TOTAL</b>	<b>2 (EA)</b>

**TABLE OF CONCRETE FILLET SECTION**

LOCATION	QUANTITY (SF)	RADIUS
50+01.5 TO 50+16 RT.	75	8'
55+34 TO 55+44 RT.	78	10'
55+96.5 TO 56+06.5 RT.	78	10'
59+28 TO 59+38 RT.	78	10'
59+91 TO 60+01 RT.	78	10'
60+39 TO 60+49 RT.	78	10'
61+02 TO 61+12 RT.	78	10'
61+99 TO 62+09 RT.	78	10'
62+63 TO 62+73 RT.	78	10'
64+04 TO 64+14 RT.	78	10'
64+70 TO 64+80 RT.	78	10'
67+01 TO 67+11 RT.	78	10'
67+26 TO 67+36 RT.	78	10'
67+88 TO 67+98 RT.	78	10'
71+24 TO 71+34 RT.	78	10'
71+87 TO 71+97 RT.	78	10'
72+49 TO 72+59 RT.	78	10'
72+96 TO 73+08 RT.	78	10'
73+73.5 TO 73+83.5 RT.	78	10'
74+16 TO 74+26 RT.	78	10'
74+76 TO 74+86 RT.	78	10'
75+19 TO 75+29 RT.	78	10'
<b>TOTAL</b>	<b>1713 (SF)</b>	

**TABLE OF 6" CONCRETE DRIVEWAY APPROACH PAVEMENT**

LOCATION	QUANTITY (SF)
49+54.5 TO 50+03.5 RT.	1320
55+46 TO 55+94 RT.	975
59+40.5 TO 59+88 RT.	972
60+52 TO 60+99.5 RT.	970
62+11 TO 62+60 RT.	838
64+16 TO 64+67 RT.	865
66+54 TO 66+98 RT.	755
67+39 TO 67+86 RT.	800
71+36 TO 71+85 RT.	829
72+62 TO 72+94 RT.	548
73+86 TO 74+14 RT.	470
74+88 TO 75+16 RT.	476
<b>TOTAL</b>	<b>9828 (SF)</b>

**TABLE OF 6" SIDEWALK PLACEMENT**

LOCATION	QUANTITY (SF)
46+87 TO 55+44 RT.	6800
55+96.5 TO 57+25 RT.	1034
57+31 TO 59+38.5 RT.	1636
59+91 TO 60+49 RT.	472
61+02 TO 62+09 RT.	865
62+63 TO 64+14 RT.	1208
64+69 TO 66+52 RT.	1430
67+00 TO 67+37 RT.	301
67+87 TO 71+34 RT.	2814
71+87 TO 72+49 RT.	583
72+96 TO 73+84 RT.	693
74+16 TO 74+86 RT.	558
75+18 TO 77+39 RT.	1768
<b>TOTAL</b>	<b>20162 (SF)</b>

# NOTES

PROJECT	SHEET NO.	TOTAL SHEETS
2018-017	3	18
Notes	5/8/2018	

## SPECIFICATIONS TO BE USED

City of Yankton Standard Specifications and the Standard Specifications for Roads and Bridges 2015 Edition and Required Provisions, Supplemental Specifications, and/or Special Provisions as included in the Proposal.

## UTILITIES

Location and protection of all underground utilities is the Contractors responsibility. The Contractor will be required to coordinate work with the utility companies. Existing utilities and service lines that coincide with proposed underground main locations are to be located in advance by the contractor such that proposed underground mains can be adjusted to avoid conflict.

Utility locations are coordinated by calling: 1-800-781-7474 (One Call)

## SEQUENCE OF OPERATIONS

The Contractor shall get an approved traffic control plan that is approved by the Engineer.

The Contractor will need to get an approved Traffic Control plan that coordinates the traffic on 4<sup>th</sup> Street and the Businesses along the project.

## REMOVAL OF EXISTING CONCRETE PAVEMENT

The concrete pavement shall be disposed of by the Contractor. Material to be taken to City facilities located @ 23<sup>rd</sup> & Kellen Gross Drive. Payment for concrete removal is included in the contract unit price per square yard for "Removal of Concrete Pavement". Payment shall be at the contract unit price per square yard, regardless of variations in thickness. Joints shall be sawed wherever existing concrete is to be connected to new construction.

When asphalt is laid over concrete pavement, removal of the asphalt surfacing shall be incidental to the unit price for "Removal of Concrete Pavement".

## REMOVAL OF EXISTING ASPHALT PAVEMENT

The asphalt concrete pavement shall be disposed of by the Contractor. Material to be taken to City facilities located @ 23<sup>rd</sup> & Kellen Gross Drive. Payment for asphalt mat removal is included in the contract unit price per square yard for "Removal of Asphalt Concrete". Payment shall be at the contract unit price per square yard, regardless of variations in thickness.

## GENERAL MAINTENANCE OF TRAFFIC

1. Storage of vehicles and equipment shall be as near the right-of-way as possible. Contractor's employees should mobilize at a location off the right-of-way and arrive at the work sites in a minimum number of vehicles necessary to perform the work. Indiscriminate driving and parking of vehicles within the right-of-way will not be permitted. Any damage to the vegetation, surfacing, embankment, delineators and existing signs resulting from such indiscriminate use shall be repaired and/or restored by the Contractor, at no expense to the City, and to the satisfaction of the Engineer.

2. The Contractor shall designate an employee whose responsibility is the maintenance of traffic, 24 hours a day and 7 days a week. The person so designated must have training and experience in the field of construction traffic control and be knowledgeable about the Manual on Uniform Traffic Control Devices (MUTCD). The cost of the traffic control person shall be incidental to the contract lump sum price for Traffic Control Miscellaneous. The employee selected must be approved by the Engineer. The name, phone number, and location of person(s) shall be provided to the county sheriff's department and the local police department. Road closure and barricading shall immediately be reported to the local police department by the Contractor. Local police department phone number 605-668-5210

3. Work activities during non-daylight hours are subject to prior approval.

4. The contractor shall maintain traffic control every day. The contractor shall have \$200.00 per day deducted from the contract for each day that traffic control is not maintained. If traffic control is not in place when the contractor begins work which requires traffic control, payment for bid item "Traffic Control" will be reduced by 50%.

5. The Contractor shall notify the City of Yankton Street Department prior to construction to enable the city forces to remove and salvage existing traffic control signs. City of Yankton Street Dept. number 605-668-5211

## WASTE DISPOSAL SITE

Contractor shall dispose of broken concrete and asphalt generated by this project at the city stockpile site located at 23rd and Kellen Gross Drive. No tipping fee will be assessed to Contractor for broken concrete and asphalt disposed of at this site Concrete and asphalt is to be kept separate from earth material during the removal process. Concrete and asphalt may be mixed.

Asphalt contaminated with soil during the removal process or concrete containing reinforcing steel or contaminated with soil must be disposed of at the Yankton rubble site, 23rd and Kellen Gross Drive. Disposal fees shall be the Contractors responsibility, and considered incidental to other pay items.

The Contractor will be required to use a state permitted solid waste disposal facility. The Contractor can obtain a list of permitted solid waste disposal facilities in the Yankton area or discuss proper disposal of construction and demolition debris by contacting Waste Management Program at 1-(605)-773-3153.

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

## UNCLASSIFIED EXCAVATION

Unclassified Excavation will be paid for on a lump sum basis. The bid item for "Unclassified Excavation" shall include removing the existing material to a depth of 8 inches below the new concrete surfaces. Estimated quantities in cubic yards are shown below. These estimates are based on the assumption of 3 inches of existing asphalt pavement, at existing driveways, to be removed separately.

Estimate of 550 cu yds. of removal on the sidewalk, driveways, fillets and curb sections. Excess material is to be hauled to City property located at 33rd and Douglas Ave. Topsoil removed can be stockpiled on site and placed along the new concrete.

## GENERAL NOTES

The Contractor will be required to raze, remove and dispose of all buildings and foundations, structures, fences, advertising signs, and other obstructions of which any portion are on the right-of-way or Temporary Easements except Utilities and those for which other provisions have been made for removal, in accordance with Section 110 of the Standard Specifications.

The removal and disposal of all buildings, foundations and other obstructions not removed under Incidental Work or on a unit basis shall be considered as subsidiary work to the other Contract Items and no separate payment will be made for their removal and disposal.

## "6" NONREINFORCED CONCRETE PAVEMENT

The Coarse Aggregate shall be Crushed Ledge Rock.

The fine aggregates may require screening as determined by the Engineer.

The concrete mix shall be Class A40 concrete paving mix when slip form construction is used and Class A45 when formed construction is used.

Portland Cement Concrete Pavement shall have a minimum cement content of 600 pounds per cubic yard and Class C Fly Ash will be excluded.

A construction joint shall be sawed whenever new concrete pavement is placed adjacent to existing concrete pavement.

There will be no direct payment for trimming of the Base Course for PCC pavement. The trimming will be considered incidental to the related items required for PCC pavement. Trimming shall be performed as required by Section 380.3c of the Standard Specifications.

## 6" CONCRETE SIDEWALK

Concrete sidewalk shall be constructed in accordance with Section 651 of Standard Specifications.

## BASE COURSE

**Base course material, two (2) inches thick, shall be placed beneath the concrete approach pavement, curb & gutter, 6" concrete fillets sections & concrete sidewalk. The contractor will furnish the base course material, and the cost shall be included in the bid items for concrete fillet sections, concrete approach pavement, concrete curb & gutter and concrete sidewalk.**

## ACCEPTANCE TESTING

The City will be responsible for taking the first acceptance test and a backup test if required. All subsequent tests required due to failures will be paid by the Contractor by deducting the cost from the pay request.

# NOTES

PROJECT	SHEET NO.	TOTAL SHEETS
2018-017	4	18
Notes	5/8/2018	

## SURFACING THICKNESS DIMENSIONS

Except as hereinafter set forth, plans square yards will be applied even though the thickness may vary from that shown on the plans.

At those locations where material must be placed to achieve a required elevation, plans square yards will not be varied to achieve the required elevation.

## CURING OF CONCRETE

Portland Cement Concrete Pavement, Concrete Curb & Gutter, Sidewalks, Valley Gutters, and Fillets shall be cured. All concrete shall be cured in accordance with section 380.3.P2 of the 2015 SDDOT Standard Specifications for Roads and Bridges except as modified in this note. All concrete shall be cured with a White Pigmented Linseed Oil Base Emulsion Compound when cured using the Impervious Membrane Method. Curing compound material shall be in accordance with section 821.1.D.

## AGGREGATE BASE COURSE

Aggregate Base Course will be supplied by the City of Yankton. Material can be obtained at City stockpile site located at 23rd and Kellen Gross Dr. This material is to be weighed before leaving landfill. The Contractor is to supply his own personnel and equipment to load trucks. Landfill hours are from 8am to 3:45pm. This material to be used under all newly placed concrete /asphalt and to maintain access to intersecting streets and driveways as needed. Unit price shall constitute full compensation for personnel and equipment to load, haul, and place material. Aggregate Base Course shall be compacted to 95% of standard proctor density.

## EROSION CONTROL - SILT FENCE NOTES

### 1. CONSTRUCTION

The work covered by this section consists of furnishing all labor and equipment and the performance of all operations in connection with the construction, maintenance and removal of the silt fence for the control of siltation on the project, complete and in accordance with the plans and standard plates. The Contractor shall be responsible for accomplishing the required construction work on this project in such a manner as to effectively minimize and control water pollution which might be caused by soil erosion from the project. It is intended that these features be maintained in appropriate functional condition from initial construction stages to final completion of the project.

After rainfall events, the Contractor shall take all necessary precautions to prevent silt from being carried away from the project site when water is being pumped out of any area where water is backed up on the project site

In addition to the details shown in the plans, other provisions for controlling erosion may be incorporated.

### 2. MATERIALS

#### A. Steel Fence Posts

The steel line posts for field fence shall have a cross section of one and one-half inches by one and one-half inches. The average weight shall be less than 1.33 pounds per linear foot. Paint for steel fence posts shall be the manufacturers standard paint finish.

#### B. Silt Fabric

The approved brands of engineering fabrics for silt fence are listed below:

Manufacturer/Distributor	Brand Name
Amoco Fabrics & Fibers Co.	Silt Stop

Carthag Mills

FX-325

Linq Industries Fabrics

GTF 400 EO

Mirafi Division of Nocolon

700 XG

Webtec, Inc.

Econofence with netting

### 3. BACKFILL

All compaction of backfill shall be accomplished with a mechanical tamper or pneumatic tamper. All compacting equipment shall be operated according to the manufacturers recommendations.

### 4. PAYMENT

Payment shall be based on the lineal foot of silt fence satisfactorily constructed and measured from outside of the end posts. The work completed in accordance with the plans and specifications at the applicable contract price in the bid schedule which price shall constitute full compensation for furnishing all materials, equipment, labor, and tools necessary for completion of the work. The unit price shall also include removing muck from behind the silt fence after rain events and removing the silt fence when it is no longer needed.

## OCCUPYING STATE ROW

Contractor shall comply to Traffic Control Standards under SD DOT Standard Specifications for Roads and Bridges, and as per the manual on Uniform Traffic Control Devices.

## INCIDENTAL WORK

All salvageable materials shall be taken out intact and stockpiled within the right-of-way to the satisfaction of the Engineer. The Contractor shall perform salvage operations in a manner that will prevent damage to the salvageable materials.

Salvable materials will be picked up by the City.

All concrete removed from the existing structures and other disposable material shall be disposed of in accordance with the Notes Regarding Waste Disposal Site

## INLET SEDIMENT CONTROL

Refer to Standard Plates 734.16 - Drop inlet sediment filters.

## DEWATERING AND EROSION CONTROL

Pumping required for the removal of surface water from the work area and/or depressions will be considered incidental to other pay items and not paid for separately. The Contractor shall be responsible for obtaining the required erosion control permits from the South Dakota Department of Environment and Natural Resources.

## SITE MAINTENANCE

The Contractor is to keep the project site properly maintained and graded to drain storm water. No standing water is permitted on site. A penalty of \$250/day will be assessed each day standing water is not removed from site. All regulations pertaining to Storm Water Pollution Prevention will be enforced. Direct discharge of storm water into the storm sewer system is not acceptable.

## SEEDING

All grass areas disturbed by construction are to be hydromulched. Lump sum price will be for all areas disturbed by Contractor. Price shall also include the cost for fertilizer and fiber mulch, refer to SD-DOT Standard Specs 2004 Edition section 730 and 731. The following will be provided, by the Contractor, for use on the project unless an alternate is approved by the Engineer.

The estimated amount of area to be seeded: 20000 sf

## SEED MIXTURE

## PURE LIVE SEED/ 1000 FT. SQ.

Kentucky Bluegrass 1 pound

Perennial Rye Grass 1 pound

Park Kentucky Bluegrass 1 pound

## FERTILIZER AND MULCHING

Fertilizer shall be a guaranteed analysis of 12-24-6. Rate applied shall be 3.2 lbs. per 1000 S.F. All areas shall be wood fiber mulched at a rate of 50 lbs./1000 S.F. with tackifier at a rate of 1.5lbs./1000 S.F. Method of payment will be incidental to the seeding lump sum bid price. Refer to SD-DOT Specs. 2015 Edition-section 731 and 732 for additional requirement for fertilizer and fiber mulch.

## SALVAGING, STOCKPILING, AND PLACING TOPSOIL

Existing vegetation shall be salvaged, incorporated and placed with the topsoil as far as practicable.

The areas to be covered with topsoil to a depth of +/- 3 inches comprise all newly graded areas. Material shall be free of rock and debris.

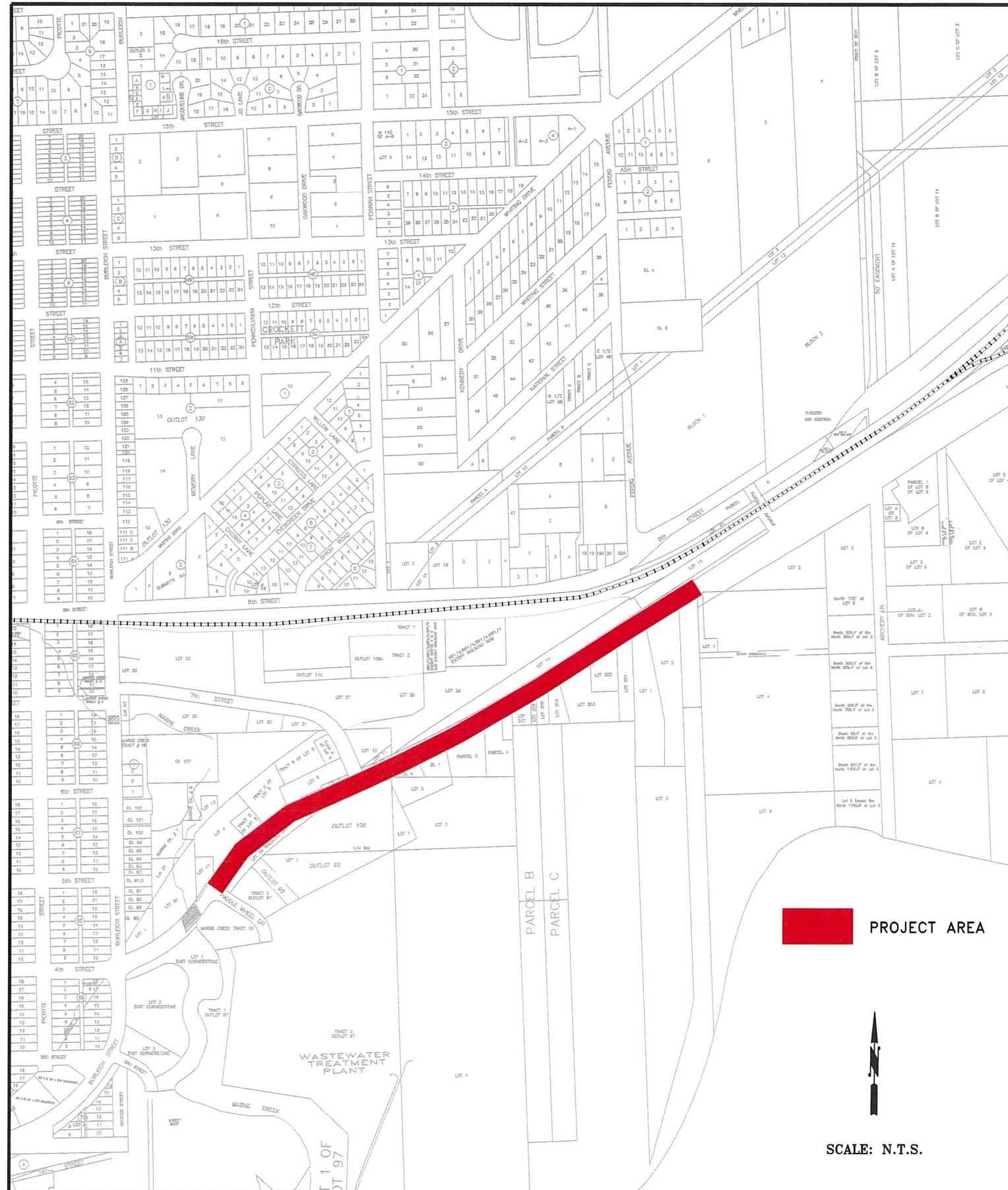
The estimated amounts of salvaged topsoil required to cover the designated areas to the specified depth are as follows:

Table of Topsoil 190 Cu.Yd.

## MANHOLE ADJUSTMENT

All costs for adjustment of the sewer manhole frame and lid to finished grade including removal and repair upper courses of brick or concrete, grouting, water-proofing and adjustment rings shall be incidental to the contract unit price per each for "Adjust Manhole".

All existing rims & covers will be replaced with Neenah R1733 frame and lid. The lids shall contain concealed pick holes and be equipped with a gasketed self-sealing type covers.



## TRAFFIC CONTROL (Typical Lane Closure)

TAPER FORMULA:  
 $L = S \times W$  FOR SPEEDS OF 45 OR MORE.  
 $L = WS^2/60$  FOR SPEEDS OF 40 OR LESS.

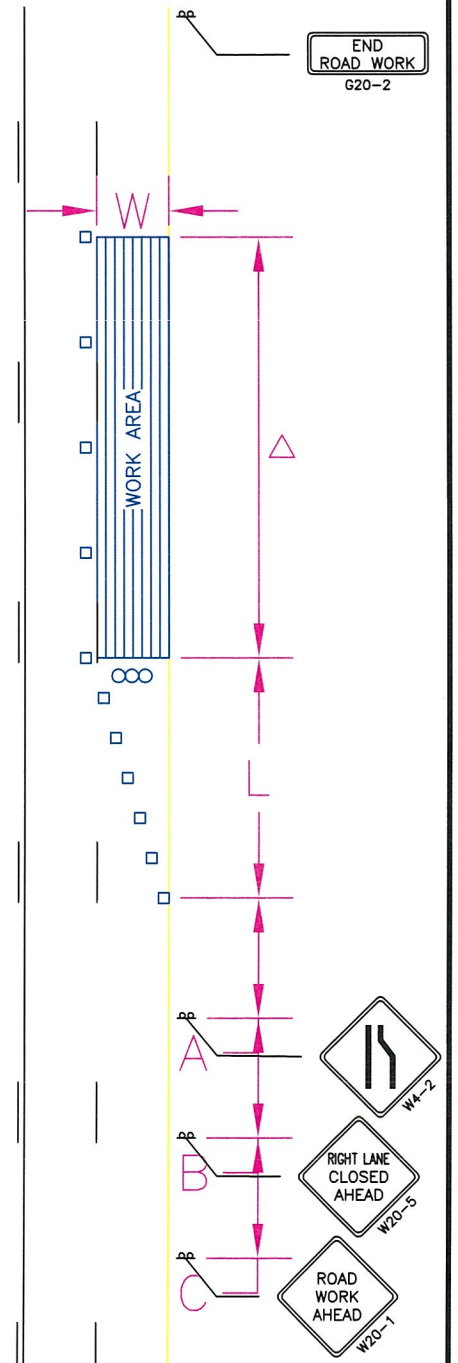
WHERE:  
 L = MINIMUM LENGTH OF TAPER  
 S = NUMERICAL VALUE OF POSTED SPEED LIMIT PRIOR TO WORK OR 85TH PERCENTILE SPEED.  
 W = WIDTH OF OFFSET.

- CHANNELIZING DEVICES
- ∞ ARROW PANEL
- △ SPACING BETWEEN DEVICES SHALL BE UP TO 2 TIMES THE NUMERICAL VALUE OF THE POSTED SPEED LIMIT PRIOR TO WORK.

NOTE:  
 THE MAXIMUM SPACING BETWEEN CHANNELIZING DEVICES IN A TAPER SHALL BE APPROXIMATELY EQUAL IN FEET TO THE SPEED LIMIT.

IF THE ROAD HAS AN AADT OF LESS THAN 20,000, THE CLOSURE IS NOT IN PLACE OVERNIGHT, AND THE SPEED IS LESS THAN 40 MPH, THE W20-5 SIGN IS OPTIONAL.

POSTED SPEED PRIOR TO WORK (M.P.H.)	SPACING OF ADVANCE WARNING SIGNS (FEET)			TAPER LENGTH (FEET) (L)
	(A)	(B)	(C)	
0 - 25	100 - 200			$\frac{W \cdot S^2}{60}$
30	120 - 240			$\frac{W \cdot S^2}{60}$
35	140 - 280			$\frac{W \cdot S^2}{60}$
40	160 - 320			$\frac{W \cdot S^2}{60}$
45	180 - 360			$W \cdot S$
50	200 - 400			$W \cdot S$
55	220 - 440			$W \cdot S$



REVISED: SEPTEMBER 2010

SPECIFICATION REFERENCE NO. 634



CITY OF SIOUX FALLS  
 ENGINEERING DIVISION  
 TYPICAL APPLICATION - CONSTRUCTION OPERATIONS  
 TYPICAL LANE CLOSURE

PLATE NUMBER 634.01

PROJECT	SHEET NO.	TOTAL SHEETS
2018-017	6	18
Erosion Control	5/8/2018	

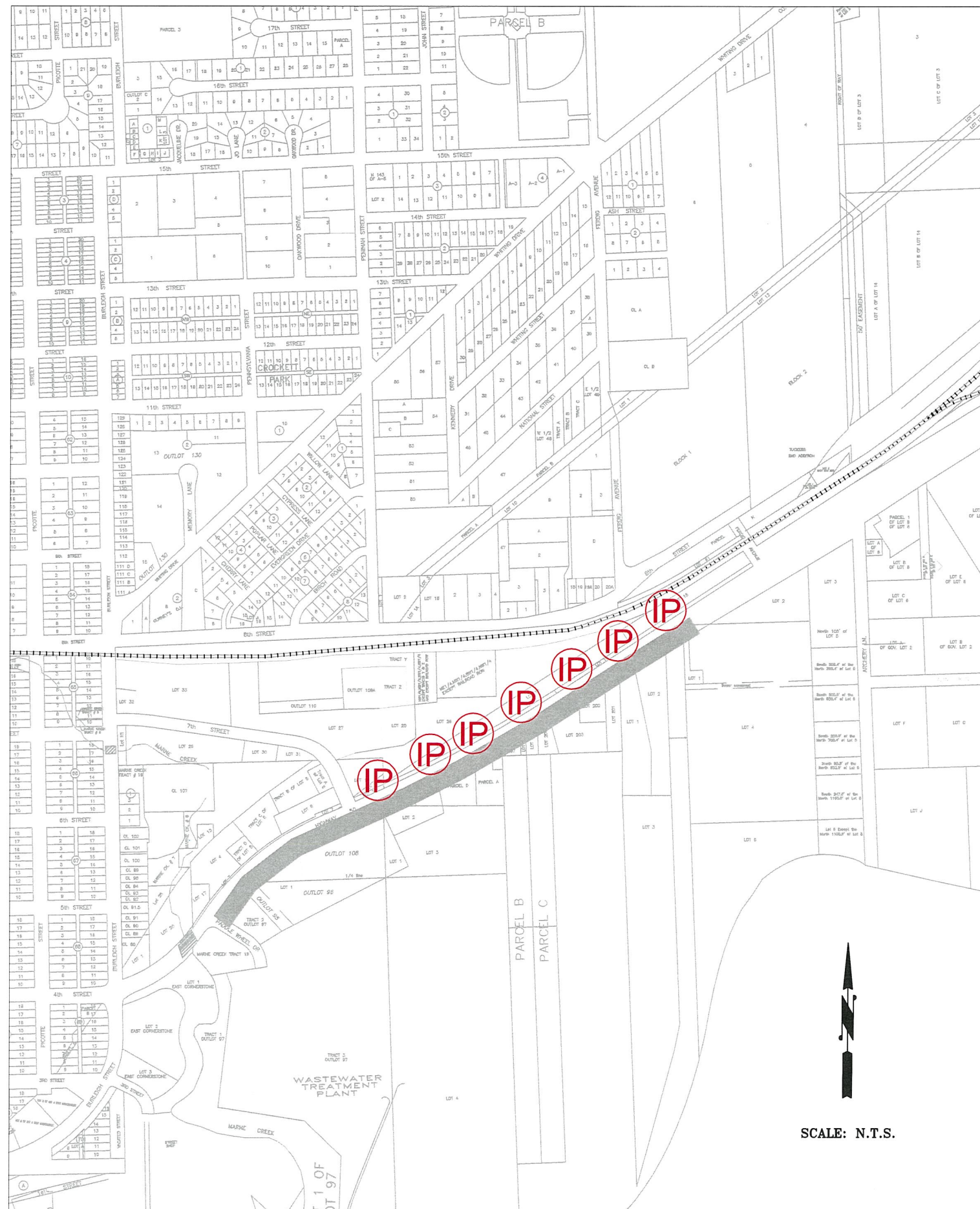
# EROSION CONTROL

## LEGEND

 INLET PROTECTION (TYPICAL) -SEE DETAIL SHEET 23

SILT FENCE IS INCLUDED IN QUANTITIES FOR USE AT THE DISCRETION OF THE ENGINEER.

 PROJECT AREA



# SWPPP

PROJECT	SHEET NO.	TOTAL SHEETS
2018-017	7	18
SWPPP	5/8/2018	

## STORM WATER POLLUTION PREVENTION PLAN

(The numbers right of the title headings are **reference numbers** to the **GENERAL PERMIT FOR STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES**)

### ❖ SITE DESCRIPTION (4.2 1)

- **Project Limits:** See Title Sheet (4.2 1.b)
- **Project Description:** See Title Sheet (4.2 1.a.)
- **Site Map(s):** See Title Sheet and Plans (4.2 1.f. (1)-(6))
- **Major Soil Disturbing Activities** (check all that apply)
  - Clearing and grubbing
  - Excavation/borrow
  - Grading and shaping
  - Filling
  - Cutting and filling
  - Other (describe):
- **Total Project Area** 2.3 acres (4.2 1.b.)
- **Total Area To Be Disturbed** 2.3 acres (4.2 1.b.)
- **Existing Vegetative Cover (%)**
- **Soil Properties:** AASHTO Soil Classification (4.2 1. d.)
- **Name of Receiving Water Body/Bodies** Missouri River (4.2 1.e.)

### ❖ ORDER OF CONSTRUCTION ACTIVITIES (4.2 1.c.)

(Stabilization measures shall be initiated as soon as possible, but in no case later than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased. Initiation of final or temporary stabilization may exceed the 14-day limit if earth disturbing activities will be resumed within 21 days.)

- **Special sequencing requirements** (see sheet).
- **Install stabilized construction entrance(s).**
- **Install perimeter protection where runoff sheets from the site.**
- **Install channel and ditch bottom protection.**
- **Clearing and grubbing.**
- **Remove and store topsoil.**
- **Stabilize disturbed areas.**
- **Install utilities, storm sewers, curb and gutter.**
- **Install inlet and culvert protection after completing storm drainage and other utility installations.**
- **Complete final grading.**
- **Complete final paving and sealing of concrete.**
- **Complete traffic control installation and protection devices.**
- **Reseed areas disturbed by removal activities.**

### ❖ EROSION AND SEDIMENT CONTROLS (4.2 2.a.(1)(a)-(f))

(Check all that apply)

- **Stabilization Practices (See Detail Plan Sheets)**
  - Temporary or Permanent Seeding
  - Sodding
  - Planting
  - Mulching (Straw or Cellulose Fiber)
  - Erosion Control Blankets or Mats
  - Vegetation Buffer Strips
  - Roughened Surface (e.g. tracking)
  - Gabions-Gabion Mattress
  - Other

### ➤ **Structural Temporary Erosion and Sediment Controls**

- Silt Fence
- Straw Bale Check
- Temporary Berm
- Temporary Slope Drain
- Straw Wattles or Rolls
- Diversion Channels/Swales
- Channel Liners (TRM)
- Stone Rip Rap Sheet
- Rock Check Dams
- Sediment Traps/Basins
- Inlet Protection
- Outlet Protection
- Surface Inlet Protection
- Curb Inlet Protection
- Stabilized Construction Entrances
- Other

### ➤ **Wetland Avoidance**

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

### ➤ **Storm Water Management (4.2 2.b., (1) and (2))**

Storm water management will be handled by temporary controls outlined in Section 3 above, and any permanent controls needed to meet permanent storm water management needs in the post construction period. Permanent controls will be shown on the plans and noted as permanent.

### ➤ **Other Storm Water Controls (4.2 2.c., (1) and (2))**

- **Waste Disposal**  
All liquid waste materials will be collected and stored in sealed metal containers approved by the project engineer. All trash and construction debris from the site will be deposited in the approved containers. Containers will be serviced as necessary, and the trash will be hauled to an approved disposal site or licensed landfill. All onsite personnel will be instructed in the proper procedures for waste disposal, and notices stating proper practices will be posted in the field office. The general contractor's representative responsible for the conduct of work on the site will be responsible for seeing waste disposal procedures are followed.
- **Hazardous Waste**  
All hazardous waste materials will be disposed of in a manner specified by local or state regulations or by the manufacturer. Site personnel will be instructed in these practices, and the individual designated as the contractor's on-site representative will be responsible for seeing that these practices are followed.
- **Sanitary Waste**  
Portable sanitary facilities will be provided on all construction sites. Sanitary waste will be collected from the portable units in a timely manner by a licensed waste management contractor or as required by any local regulations.

### ❖ Maintenance and Inspection (4.2 3. and 4.2 4.)

#### ➤ **Maintenance and Inspection Practices**

- Inspections will be conducted at least one time per week and after a storm event of 0.50 inches or greater.
- All controls will be maintained in good working order. Necessary repairs will be initiated within 24 hours of the site inspection report.

### ➤ **Maintenance and Inspection Practices(Continued)**

- Silt fence will be inspected for depth of sediment and for tears in order to ensure the fabric is securely attached to the posts and that the posts are well anchored. Sediment buildup will be removed from the silt fence when it reaches 1/3 of the height of the silt fence.
- Sediment basins and traps will be checked. Sediment will be removed when depth reaches approximately 50 percent of the structure's capacity, and at the conclusion of the construction.
- Check dams will be inspected for stability. Sediment will be removed when depth reaches 1/2 the height of the dam.
- All seeded areas will be checked for bare spots, washouts, and vigorous growth free of significant weed infestations.
- Inspection and maintenance reports will be prepared on form DOT 298 for each site inspection, this form will also be used to document changes to the SWPPP. A copy of the completed inspection form will be filed with the SWPPP documents.
- The SDDOT Project Engineer and contractor's site superintendent are responsible for inspections. Maintenance, repair activities are the responsibility of the contractor. The SDDOT Project Engineer will complete the inspection and maintenance reports and distribute copies per the distribution instructions on DOT 298.

### ❖ Non-Storm Water Discharges (3.0)

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

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

### ❖ Materials Inventory (4.2. 2.c.(2))

The following materials or substances are expected to be present on the site during the construction period. These materials will be handled as noted under the headings "EROSION AND SEDIMENT CONTROLS" and "SPILL PREVENTION" (check all that apply).

- Concrete and Portland Cement
- Detergents
- Paints
- Metals
- Bituminous Materials
- Petroleum Based Products
- Cleaning Solvents
- Wood
- Cure
- Texture
- Chemical Fertilizers
- Other

# SWPPP

PROJECT	SHEET NO.	TOTAL SHEETS
2018-017	8	18
SWPPP	5/8/2018	

## ❖ (4.2 2.c.(2))

### ➤ Material Management Spill Prevention

#### ▪ Housekeeping

- Only needed products will be stored on-site by the contractor.
- Except for bulk materials the contractor will store all materials under cover and in appropriate containers.
- Products must be stored in original containers and labeled.
- Material mixing will be conducted in accordance with the manufacturer's recommendations.
- When possible, all products will be completely used before properly disposing of the container off site.
- The manufacturer's directions for disposal of materials and containers will be followed.
- The contractor's site superintendent will inspect materials storage areas regularly to ensure proper use and disposal.
- Dust generated will be controlled in an environmentally safe manner.
- Vegetation areas not essential to the construction project will be preserved and maintained as noted on the plans.

#### ▪ Hazardous Materials

- Products will be kept in original containers unless the container is not resealable.
- Original labels and material safety data sheets will be retained in a safe place to relay important product information.
- If surplus product must be disposed of, manufacturer's label directions for disposal will be followed.
- Maintenance and repair of all equipment and vehicles involving oil changes, hydraulic system drain down, de-greasing operations, fuel tank drain down and removal, and other activities which may result in the accidental release of contaminants will be conducted on an impervious surface and under cover during wet weather to prevent the release of contaminants onto the ground.
- Wheel wash water will be collected and allowed to settle out suspended solids prior to discharge. Wheel wash water will not be discharged directly into any storm water system or storm water treatment system.
- Potential pH-modifying materials such as: bulk cement, cement kiln dust, fly ash, new concrete washings, concrete pumping, and mixer washout waters will be collected on site and managed to prevent contamination of storm water runoff.

### ➤ Product Specific Practices (6.8)

#### ▪ Petroleum Products

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

#### ▪ Fertilizers

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

### ➤ Product Specific Practices (6.8) (Continued)

#### ▪ Paints

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

#### ▪ Concrete Trucks

Contractors will provide designated truck washout areas on the site. These areas must be self contained and not connected to any storm water outlet of the site. Upon completion of construction washout areas will be properly stabilized.

### ➤ Spill Control Practices (4.2 2 c.(2))

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

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

### ➤ Spill Response (4.2 2 c.(2))

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

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

### ➤ Spill Response (4.2 2 c.(2)) (Continued)

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

## ❖ Spill Notification

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

- A reportable spill is a quantity of 25 gallons or more or any spill of oil which: 1) violates water quality standards, 2) produces a "sheen" on a surface water, or 3) causes a sludge or emulsion must be reported immediately to the National Response Center .
- Any spill of oil or hazardous substance to waters of the state must be reported immediately by telephone to the SD DENR.

## ❖ Construction Changes (4.4)

When changes are made to the construction project that will require alterations in the temporary erosion controls of the site, the Storm Water Pollution Prevention Plan (SWPPP) will be amended to provide appropriate protection to disturbed areas, all storm water structures, and adjacent waters. The SDDOT Project Engineer will modify the SWPPP plan (DOT 298) and drawings to reflect the needed changes. Copies of changes will be routed per DOT 298. Copies of forms and the SWPPP will be retained in a designated place for review over the course of the project.



# SWPPP

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SWPPP	5/8/2018	

## ❖ CERTIFICATIONS

### ➤ Certification of Compliance with Federal, State, and Local Regulations

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

### ➤ City of Yankton

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

\_\_\_\_\_  
Authorized Signature. (See the General Permit, Section 6.7.1.C.)

### ➤ Prime Contractor

This section is to be executed by the General Contractor after the award of the contract and at least 15 days prior to the beginning of construction. This section may be executed any time there is a change in the Prime Contractor of the project.

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

\_\_\_\_\_  
Authorized Signature. (See the General Permit, Section 6.7.1.a .or b.)

## ❖ CONTACT INFORMATION

### ➤ Contractor Information:

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

### ➤ City Project Engineer

- Name: Brad Moser
- Business Address: 416 Walnut Street
- Job Office Location
- City: Yankton State: SD Zip: 57078
- Office Phone: 605 668-5255 Field:            Cell:            Fax:

### ➤ SD DENR Contact Spill Reporting

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

### ➤ SD DENR Contact for Hazardous Materials.

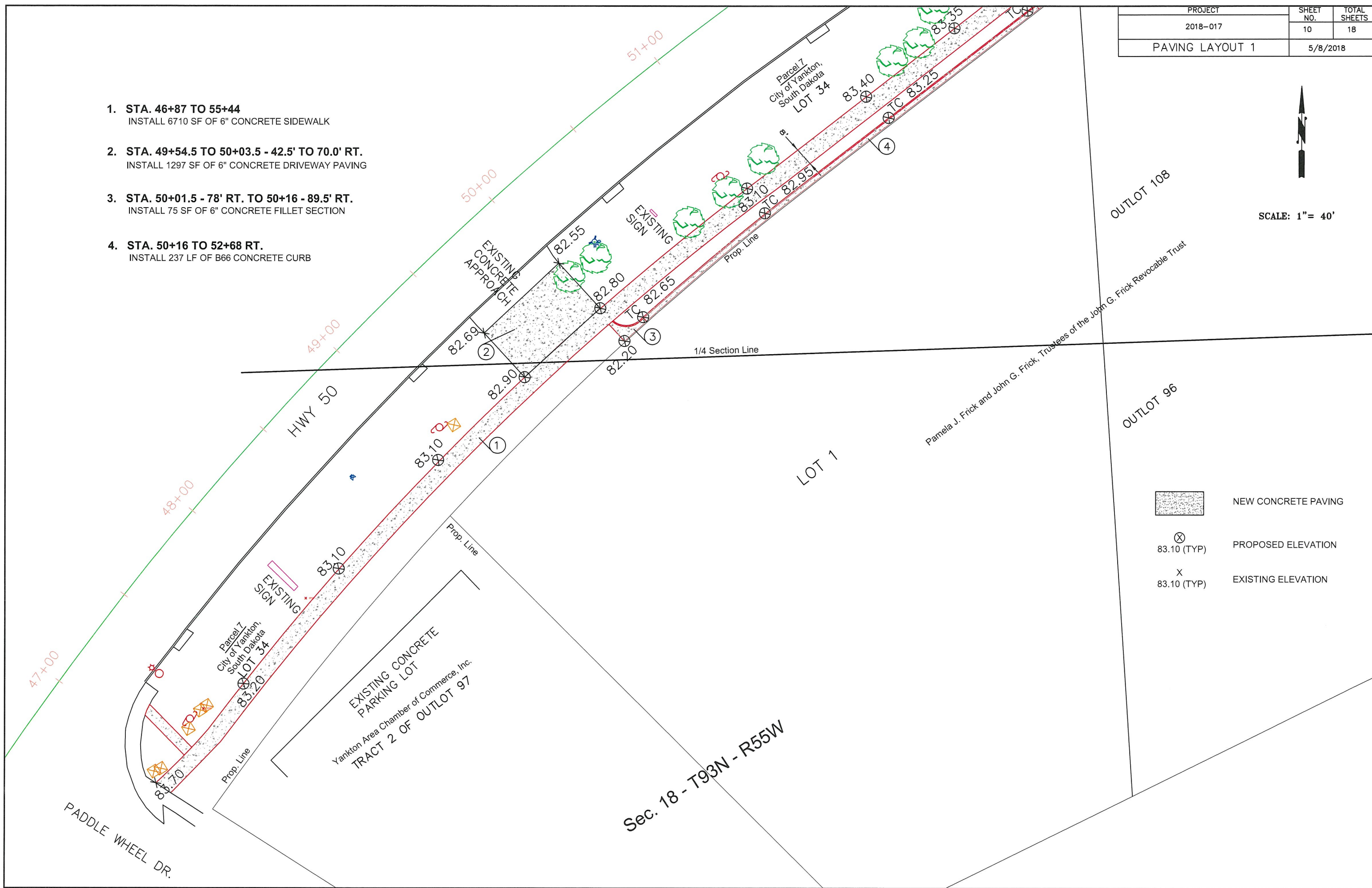
- (605) 773-3153




### ➤ National Response Center Hotline

- (800) 424-8802.

PROJECT	SHEET NO.	TOTAL SHEETS
2018-017	10	18
PAVING LAYOUT 1		5/8/2018

- STA. 46+87 TO 55+44**  
INSTALL 6710 SF OF 6" CONCRETE SIDEWALK
- STA. 49+54.5 TO 50+03.5 - 42.5' TO 70.0' RT.**  
INSTALL 1297 SF OF 6" CONCRETE DRIVEWAY PAVING
- STA. 50+01.5 - 78' RT. TO 50+16 - 89.5' RT.**  
INSTALL 75 SF OF 6" CONCRETE FILLET SECTION
- STA. 50+16 TO 52+68 RT.**  
INSTALL 237 LF OF B66 CONCRETE CURB



-  NEW CONCRETE PAVING
-  83.10 (TYP) PROPOSED ELEVATION
-  83.10 (TYP) EXISTING ELEVATION

OUTLOT 108  
 Pamela J. Frick and John G. Frick, Trustees of the John G. Frick Revocable Trust

OUTLOT 96

LOT 1

Sec. 18 - T93N - R55W

EXISTING CONCRETE  
 PARKING LOT  
 Yankton Area Chamber of Commerce, Inc.  
 TRACT 2 OF OUTLOT 97

Parcel 7  
 City of Yankton,  
 South Dakota  
 LOT 34

Parcel 7  
 City of Yankton,  
 South Dakota  
 LOT 34

PADDLE WHEEL DR.

HWY 50

EXISTING  
 CONCRETE  
 APPROACH

EXISTING  
 SIGN

1/4 Section Line

Prop. Line

Prop. Line

Prop. Line

82.69

82.55

82.80

82.90

82.20

83.70

83.70

83.40

83.25

83.10

83.10

83.20

83.70

51+00

50+00

49+00

48+00

47+00

82.90

82.80

83.70

83.70

83.40

83.25

83.10

83.10

83.20

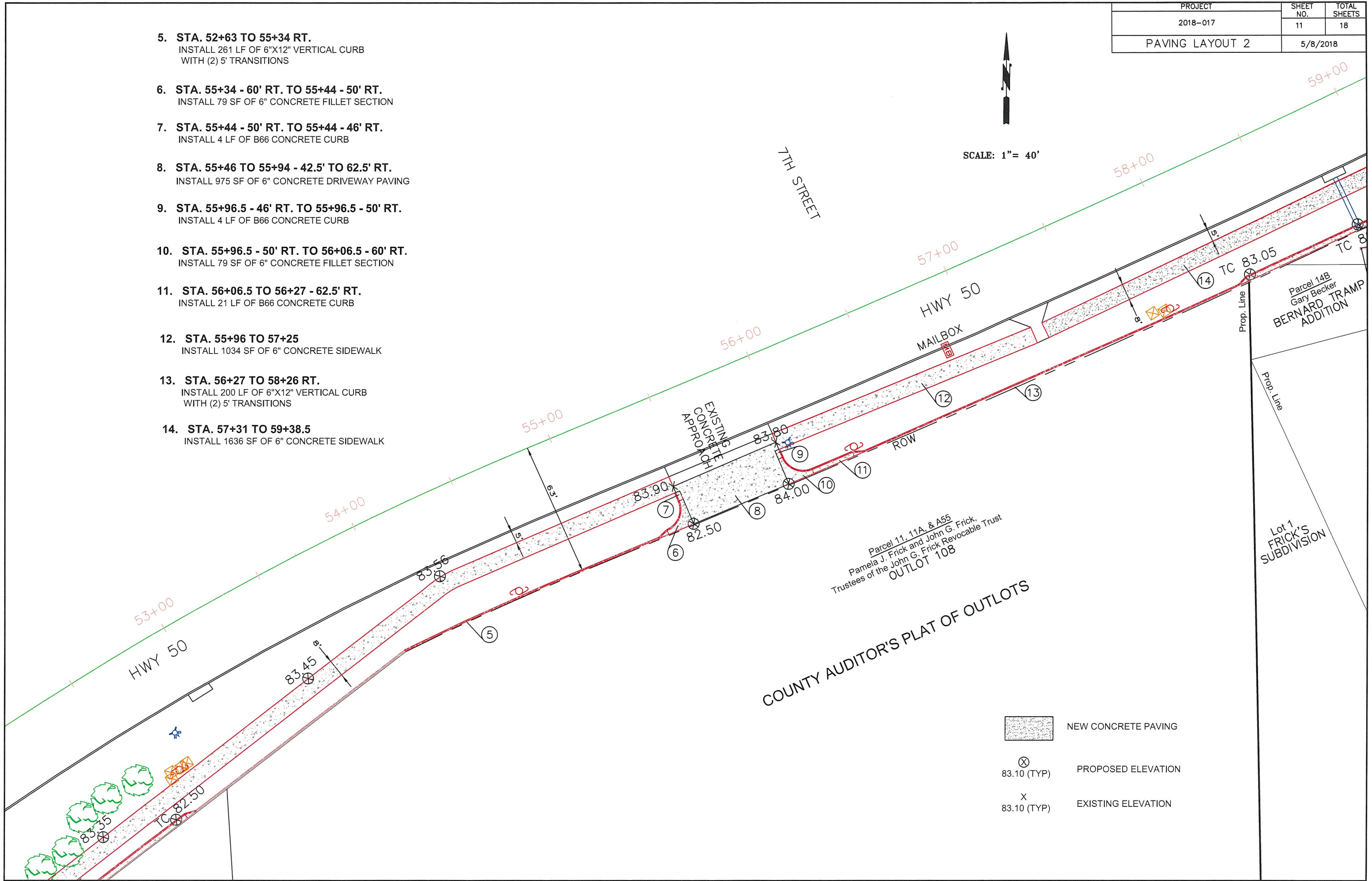
83.70




PROJECT	SHEET NO.	TOTAL SHEETS
2018-017	11	18
PAVING LAYOUT 2		5/8/2018



SCALE: 1" = 40'

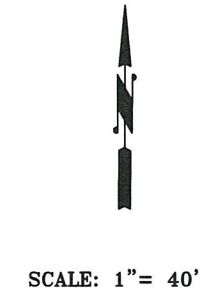
5. STA. 52+63 TO 55+34 RT.  
INSTALL 261 LF OF 6"X12" VERTICAL CURB  
WITH (2) 5' TRANSITIONS
6. STA. 55+34 - 60' RT. TO 55+44 - 50' RT.  
INSTALL 79 SF OF 6" CONCRETE FILLET SECTION
7. STA. 55+44 - 50' RT. TO 55+44 - 46' RT.  
INSTALL 4 LF OF B66 CONCRETE CURB
8. STA. 55+46 TO 55+94 - 42.5' TO 62.5' RT.  
INSTALL 975 SF OF 6" CONCRETE DRIVEWAY PAVING
9. STA. 55+96.5 - 46' RT. TO 55+96.5 - 50' RT.  
INSTALL 4 LF OF B66 CONCRETE CURB
10. STA. 55+96.5 - 50' RT. TO 56+06.5 - 60' RT.  
INSTALL 79 SF OF 6" CONCRETE FILLET SECTION
11. STA. 56+06.5 TO 56+27 - 62.5' RT.  
INSTALL 21 LF OF B66 CONCRETE CURB
12. STA. 55+96 TO 57+25  
INSTALL 1034 SF OF 6" CONCRETE SIDEWALK
13. STA. 56+27 TO 58+26 RT.  
INSTALL 200 LF OF 6"X12" VERTICAL CURB  
WITH (2) 5' TRANSITIONS
14. STA. 57+31 TO 59+38.5  
INSTALL 1636 SF OF 6" CONCRETE SIDEWALK



	NEW CONCRETE PAVING
	PROPOSED ELEVATION
	EXISTING ELEVATION

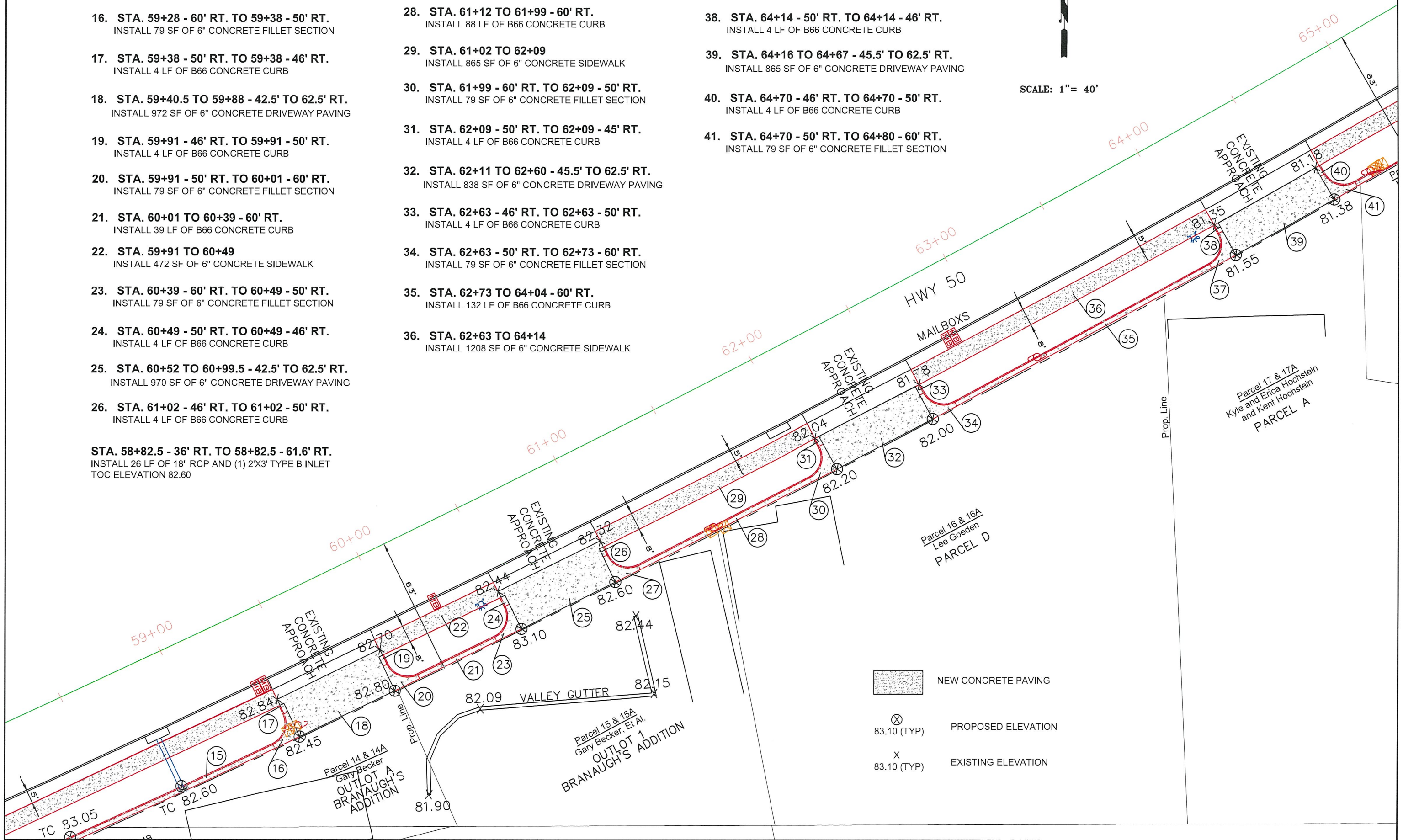
COUNTY AUDITOR'S PLAT OF OUTLOTS




PROJECT	SHEET NO.	TOTAL SHEETS
2018-017	12	18
PAVING LAYOUT 3		5/8/2018



- 15. STA. 58+26 TO 59+28 - 60' RT.  
INSTALL 104 LF OF B66 CONCRETE CURB
- 16. STA. 59+28 - 60' RT. TO 59+38 - 50' RT.  
INSTALL 79 SF OF 6" CONCRETE FILLET SECTION
- 17. STA. 59+38 - 50' RT. TO 59+38 - 46' RT.  
INSTALL 4 LF OF B66 CONCRETE CURB
- 18. STA. 59+40.5 TO 59+88 - 42.5' TO 62.5' RT.  
INSTALL 972 SF OF 6" CONCRETE DRIVEWAY PAVING
- 19. STA. 59+91 - 46' RT. TO 59+91 - 50' RT.  
INSTALL 4 LF OF B66 CONCRETE CURB
- 20. STA. 59+91 - 50' RT. TO 60+01 - 60' RT.  
INSTALL 79 SF OF 6" CONCRETE FILLET SECTION
- 21. STA. 60+01 TO 60+39 - 60' RT.  
INSTALL 39 LF OF B66 CONCRETE CURB
- 22. STA. 59+91 TO 60+49  
INSTALL 472 SF OF 6" CONCRETE SIDEWALK
- 23. STA. 60+39 - 60' RT. TO 60+49 - 50' RT.  
INSTALL 79 SF OF 6" CONCRETE FILLET SECTION
- 24. STA. 60+49 - 50' RT. TO 60+49 - 46' RT.  
INSTALL 4 LF OF B66 CONCRETE CURB
- 25. STA. 60+52 TO 60+99.5 - 42.5' TO 62.5' RT.  
INSTALL 970 SF OF 6" CONCRETE DRIVEWAY PAVING
- 26. STA. 61+02 - 46' RT. TO 61+02 - 50' RT.  
INSTALL 4 LF OF B66 CONCRETE CURB
- 27. STA. 61+02 - 50' RT. TO 61+12 - 60' RT.  
INSTALL 79 SF OF 6" CONCRETE FILLET SECTION
- 28. STA. 61+12 TO 61+99 - 60' RT.  
INSTALL 88 LF OF B66 CONCRETE CURB
- 29. STA. 61+02 TO 62+09  
INSTALL 865 SF OF 6" CONCRETE SIDEWALK
- 30. STA. 61+99 - 60' RT. TO 62+09 - 50' RT.  
INSTALL 79 SF OF 6" CONCRETE FILLET SECTION
- 31. STA. 62+09 - 50' RT. TO 62+09 - 45' RT.  
INSTALL 4 LF OF B66 CONCRETE CURB
- 32. STA. 62+11 TO 62+60 - 45.5' TO 62.5' RT.  
INSTALL 838 SF OF 6" CONCRETE DRIVEWAY PAVING
- 33. STA. 62+63 - 46' RT. TO 62+63 - 50' RT.  
INSTALL 4 LF OF B66 CONCRETE CURB
- 34. STA. 62+63 - 50' RT. TO 62+73 - 60' RT.  
INSTALL 79 SF OF 6" CONCRETE FILLET SECTION
- 35. STA. 62+73 TO 64+04 - 60' RT.  
INSTALL 132 LF OF B66 CONCRETE CURB
- 36. STA. 62+63 TO 64+14  
INSTALL 1208 SF OF 6" CONCRETE SIDEWALK
- 37. STA. 64+04 - 60' RT. TO 64+14 - 50' RT.  
INSTALL 79 SF OF 6" CONCRETE FILLET SECTION
- 38. STA. 64+14 - 50' RT. TO 64+14 - 46' RT.  
INSTALL 4 LF OF B66 CONCRETE CURB
- 39. STA. 64+16 TO 64+67 - 45.5' TO 62.5' RT.  
INSTALL 865 SF OF 6" CONCRETE DRIVEWAY PAVING
- 40. STA. 64+70 - 46' RT. TO 64+70 - 50' RT.  
INSTALL 4 LF OF B66 CONCRETE CURB
- 41. STA. 64+70 - 50' RT. TO 64+80 - 60' RT.  
INSTALL 79 SF OF 6" CONCRETE FILLET SECTION

STA. 58+82.5 - 36' RT. TO 58+82.5 - 61.6' RT.  
INSTALL 26 LF OF 18" RCP AND (1) 2'X3' TYPE B INLET  
TOC ELEVATION 82.60



-  NEW CONCRETE PAVING
-  83.10 (TYP) PROPOSED ELEVATION
-  83.10 (TYP) EXISTING ELEVATION

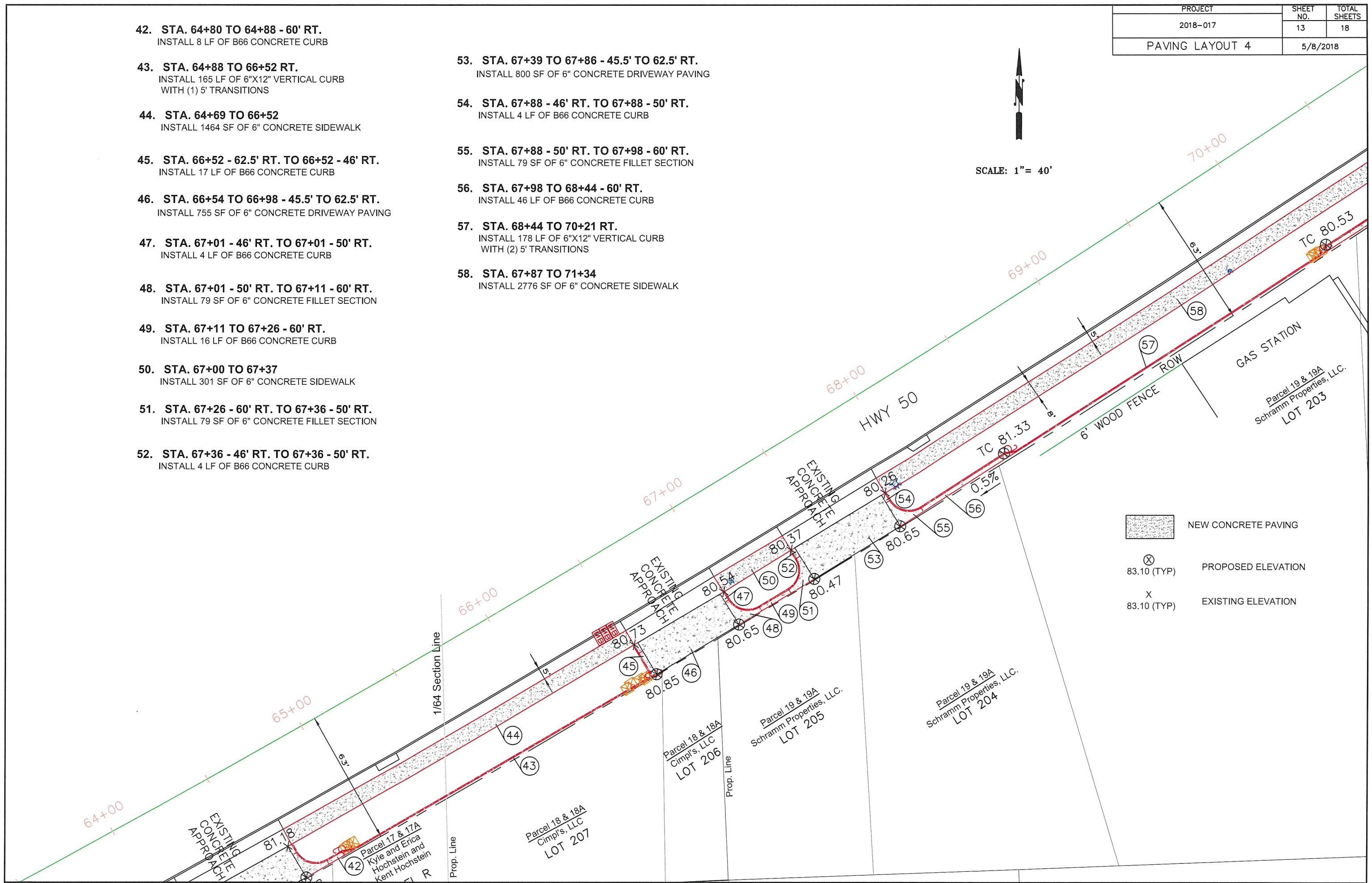
PROJECT	SHEET NO.	TOTAL SHEETS
2018-017	13	18
PAVING LAYOUT 4		5/8/2018



SCALE: 1" = 40'

- 42. STA. 64+80 TO 64+88 - 60' RT.  
INSTALL 8 LF OF B66 CONCRETE CURB
- 43. STA. 64+88 TO 66+52 RT.  
INSTALL 165 LF OF 6"X12" VERTICAL CURB  
WITH (1) 5' TRANSITIONS
- 44. STA. 64+69 TO 66+52  
INSTALL 1464 SF OF 6" CONCRETE SIDEWALK
- 45. STA. 66+52 - 62.5' RT. TO 66+52 - 46' RT.  
INSTALL 17 LF OF B66 CONCRETE CURB
- 46. STA. 66+54 TO 66+98 - 45.5' TO 62.5' RT.  
INSTALL 755 SF OF 6" CONCRETE DRIVEWAY PAVING
- 47. STA. 67+01 - 46' RT. TO 67+01 - 50' RT.  
INSTALL 4 LF OF B66 CONCRETE CURB
- 48. STA. 67+01 - 50' RT. TO 67+11 - 60' RT.  
INSTALL 79 SF OF 6" CONCRETE FILLET SECTION
- 49. STA. 67+11 TO 67+26 - 60' RT.  
INSTALL 16 LF OF B66 CONCRETE CURB
- 50. STA. 67+00 TO 67+37  
INSTALL 301 SF OF 6" CONCRETE SIDEWALK
- 51. STA. 67+26 - 60' RT. TO 67+36 - 50' RT.  
INSTALL 79 SF OF 6" CONCRETE FILLET SECTION
- 52. STA. 67+36 - 46' RT. TO 67+36 - 50' RT.  
INSTALL 4 LF OF B66 CONCRETE CURB

- 53. STA. 67+39 TO 67+86 - 45.5' TO 62.5' RT.  
INSTALL 800 SF OF 6" CONCRETE DRIVEWAY PAVING
- 54. STA. 67+88 - 46' RT. TO 67+88 - 50' RT.  
INSTALL 4 LF OF B66 CONCRETE CURB
- 55. STA. 67+88 - 50' RT. TO 67+98 - 60' RT.  
INSTALL 79 SF OF 6" CONCRETE FILLET SECTION
- 56. STA. 67+98 TO 68+44 - 60' RT.  
INSTALL 46 LF OF B66 CONCRETE CURB
- 57. STA. 68+44 TO 70+21 RT.  
INSTALL 178 LF OF 6"X12" VERTICAL CURB  
WITH (2) 5' TRANSITIONS
- 58. STA. 67+87 TO 71+34  
INSTALL 2776 SF OF 6" CONCRETE SIDEWALK

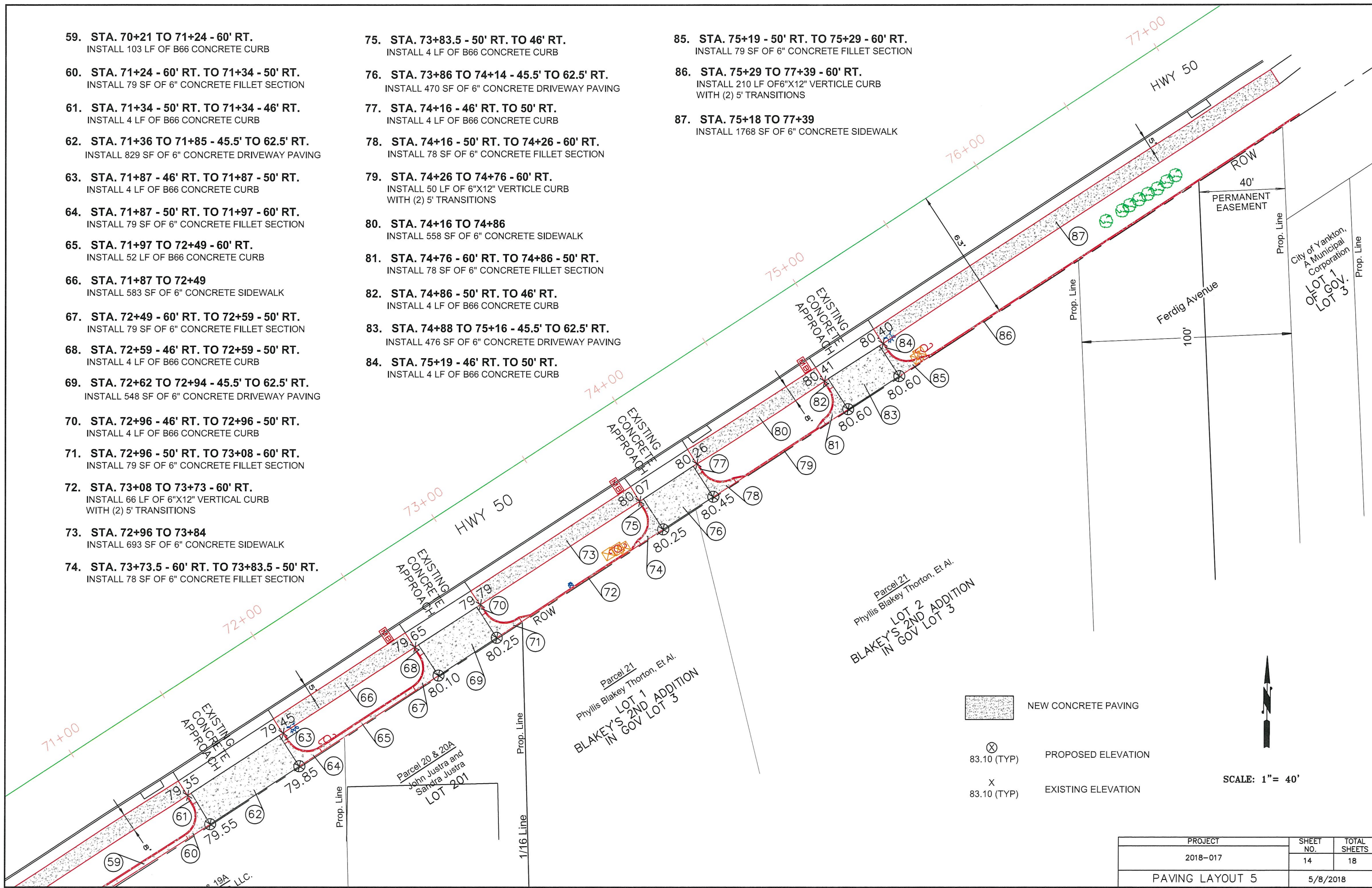



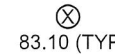
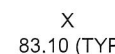
- NEW CONCRETE PAVING
- 83.10 (TYP) PROPOSED ELEVATION
- 83.10 (TYP) EXISTING ELEVATION

- 59. STA. 70+21 TO 71+24 - 60' RT.  
INSTALL 103 LF OF B66 CONCRETE CURB
- 60. STA. 71+24 - 60' RT. TO 71+34 - 50' RT.  
INSTALL 79 SF OF 6" CONCRETE FILLET SECTION
- 61. STA. 71+34 - 50' RT. TO 71+34 - 46' RT.  
INSTALL 4 LF OF B66 CONCRETE CURB
- 62. STA. 71+36 TO 71+85 - 45.5' TO 62.5' RT.  
INSTALL 829 SF OF 6" CONCRETE DRIVEWAY PAVING
- 63. STA. 71+87 - 46' RT. TO 71+87 - 50' RT.  
INSTALL 4 LF OF B66 CONCRETE CURB
- 64. STA. 71+87 - 50' RT. TO 71+97 - 60' RT.  
INSTALL 79 SF OF 6" CONCRETE FILLET SECTION
- 65. STA. 71+97 TO 72+49 - 60' RT.  
INSTALL 52 LF OF B66 CONCRETE CURB
- 66. STA. 71+87 TO 72+49  
INSTALL 583 SF OF 6" CONCRETE SIDEWALK
- 67. STA. 72+49 - 60' RT. TO 72+59 - 50' RT.  
INSTALL 79 SF OF 6" CONCRETE FILLET SECTION
- 68. STA. 72+59 - 46' RT. TO 72+59 - 50' RT.  
INSTALL 4 LF OF B66 CONCRETE CURB
- 69. STA. 72+62 TO 72+94 - 45.5' TO 62.5' RT.  
INSTALL 548 SF OF 6" CONCRETE DRIVEWAY PAVING
- 70. STA. 72+96 - 46' RT. TO 72+96 - 50' RT.  
INSTALL 4 LF OF B66 CONCRETE CURB
- 71. STA. 72+96 - 50' RT. TO 73+08 - 60' RT.  
INSTALL 79 SF OF 6" CONCRETE FILLET SECTION
- 72. STA. 73+08 TO 73+73 - 60' RT.  
INSTALL 66 LF OF 6"X12" VERTICAL CURB  
WITH (2) 5' TRANSITIONS
- 73. STA. 72+96 TO 73+84  
INSTALL 693 SF OF 6" CONCRETE SIDEWALK
- 74. STA. 73+73.5 - 60' RT. TO 73+83.5 - 50' RT.  
INSTALL 78 SF OF 6" CONCRETE FILLET SECTION

- 75. STA. 73+83.5 - 50' RT. TO 46' RT.  
INSTALL 4 LF OF B66 CONCRETE CURB
- 76. STA. 73+86 TO 74+14 - 45.5' TO 62.5' RT.  
INSTALL 470 SF OF 6" CONCRETE DRIVEWAY PAVING
- 77. STA. 74+16 - 46' RT. TO 50' RT.  
INSTALL 4 LF OF B66 CONCRETE CURB
- 78. STA. 74+16 - 50' RT. TO 74+26 - 60' RT.  
INSTALL 78 SF OF 6" CONCRETE FILLET SECTION
- 79. STA. 74+26 TO 74+76 - 60' RT.  
INSTALL 50 LF OF 6"X12" VERTICAL CURB  
WITH (2) 5' TRANSITIONS
- 80. STA. 74+16 TO 74+86  
INSTALL 558 SF OF 6" CONCRETE SIDEWALK
- 81. STA. 74+76 - 60' RT. TO 74+86 - 50' RT.  
INSTALL 78 SF OF 6" CONCRETE FILLET SECTION
- 82. STA. 74+86 - 50' RT. TO 46' RT.  
INSTALL 4 LF OF B66 CONCRETE CURB
- 83. STA. 74+88 TO 75+16 - 45.5' TO 62.5' RT.  
INSTALL 476 SF OF 6" CONCRETE DRIVEWAY PAVING
- 84. STA. 75+19 - 46' RT. TO 50' RT.  
INSTALL 4 LF OF B66 CONCRETE CURB

- 85. STA. 75+19 - 50' RT. TO 75+29 - 60' RT.  
INSTALL 79 SF OF 6" CONCRETE FILLET SECTION
- 86. STA. 75+29 TO 77+39 - 60' RT.  
INSTALL 210 LF OF 6"X12" VERTICAL CURB  
WITH (2) 5' TRANSITIONS
- 87. STA. 75+18 TO 77+39  
INSTALL 1768 SF OF 6" CONCRETE SIDEWALK



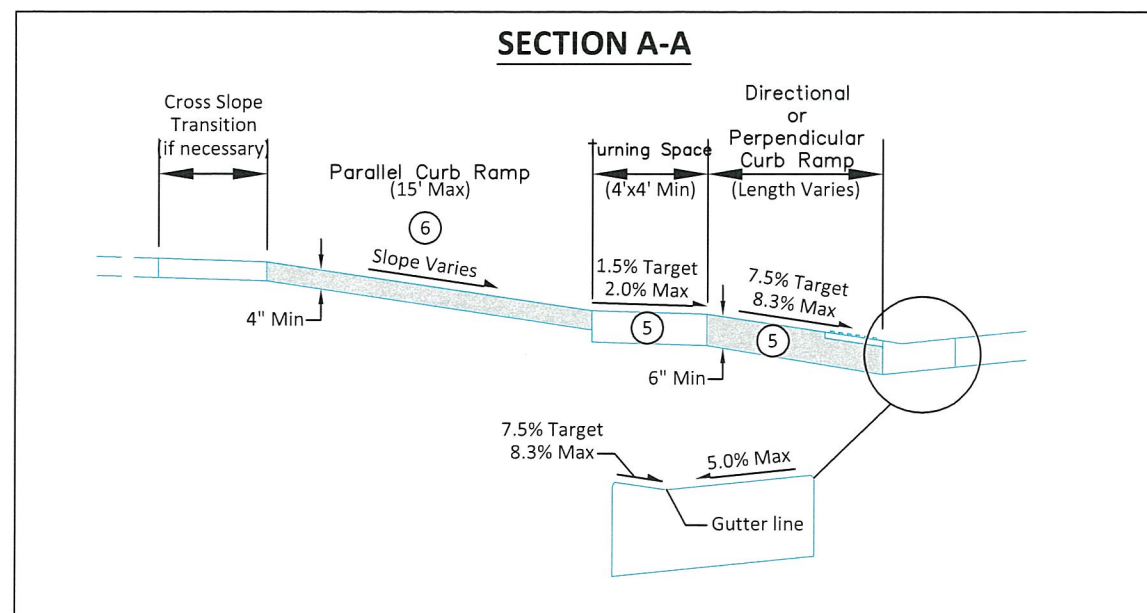
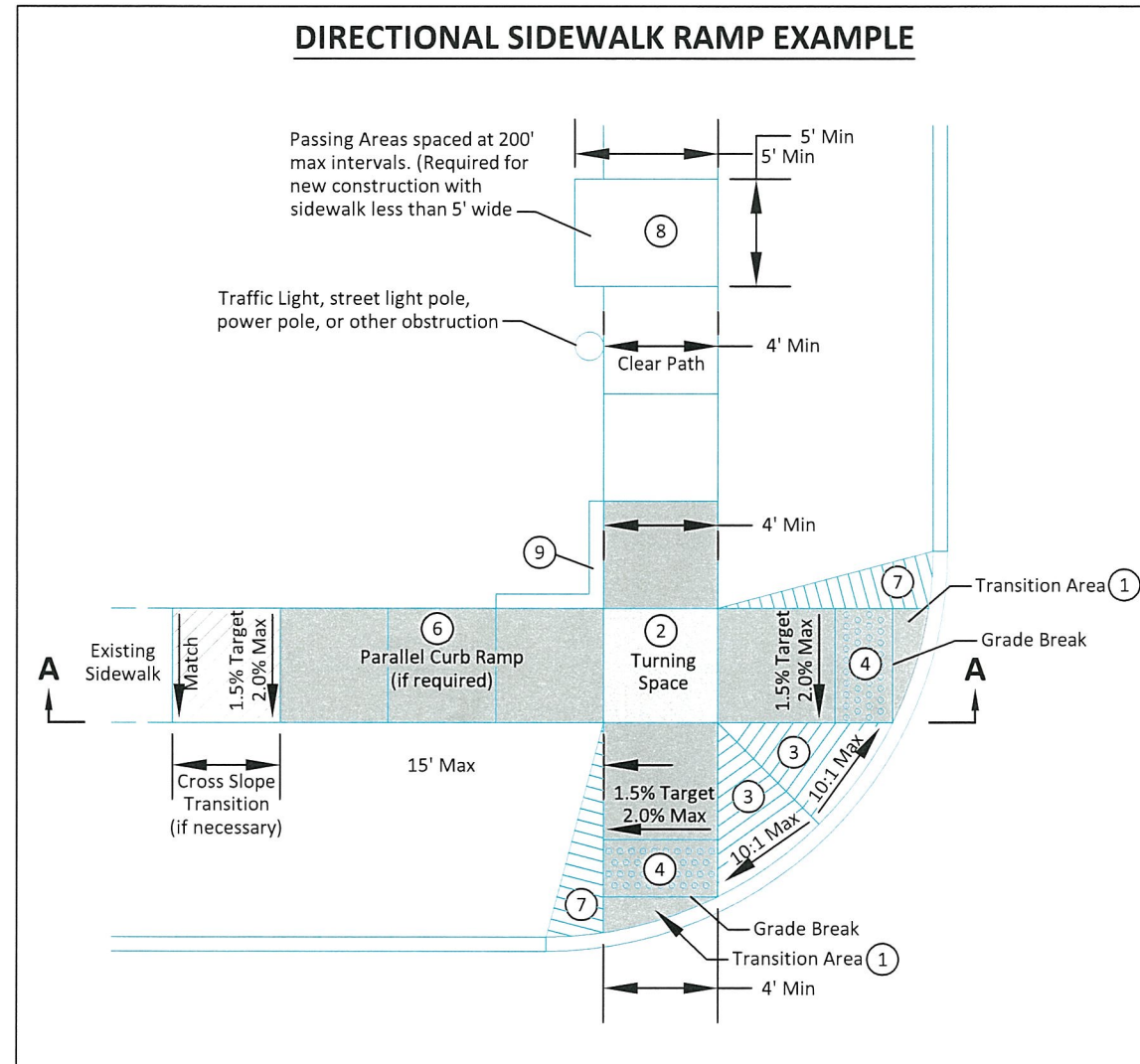
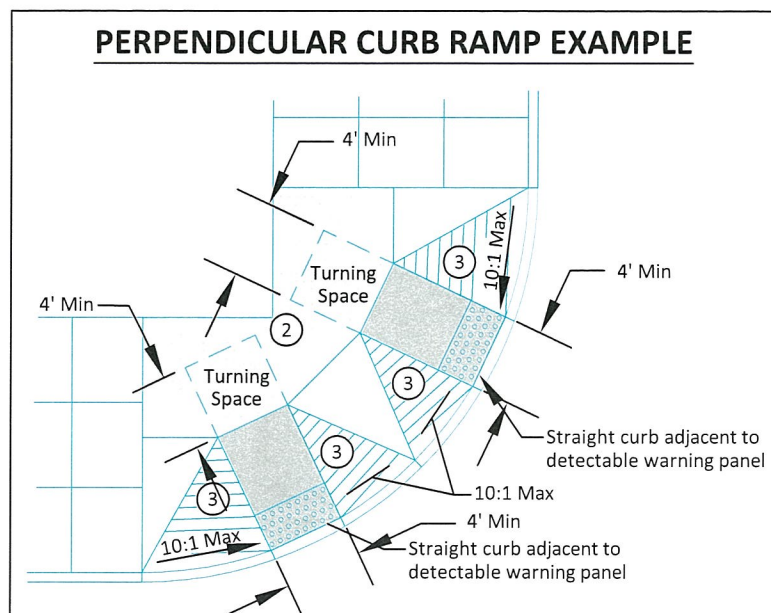
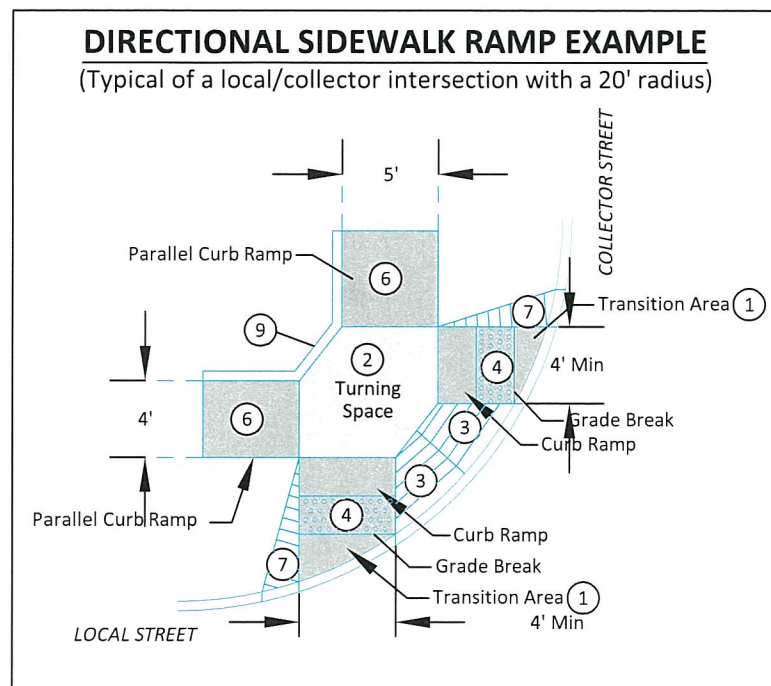
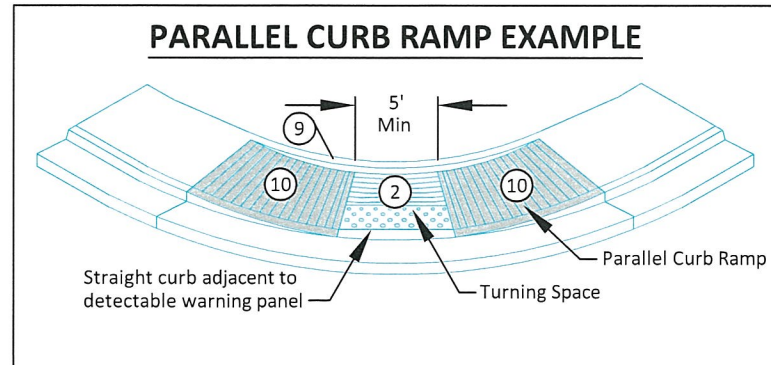
-  NEW CONCRETE PAVING
-  83.10 (TYP) PROPOSED ELEVATION
-  83.10 (TYP) EXISTING ELEVATION



SCALE: 1" = 40'

PROJECT	SHEET NO.	TOTAL SHEETS
2018-017	14	18
PAVING LAYOUT 5	5/8/2018	

PROJECT	SHEET NO.	TOTAL SHEETS
2018-017	15	18
SIDEWALK DETAIL	5/8/2018	



**NOTES:**


1. Transition from the the 2% maximum cross slope on the ramp and the pedestrian street crossing grade in this area. The maximum cross slope on the pedestrian street crossing (including the fillet or curb and gutter) is 2% on stop or yield controlled legs and 5% on uncontrolled or signalized legs.
2. Minimum 4 feet by 4 feet. Target cross slope of 1.5% with a maximum cross slope of 2.0% in any direction. Where the turning space is confined at the back of sidewalk (example: 6" curb or building), the turning space shall be 4 foot by 5 foot minimum. The 5 foot dimension shall be in the direction of the ramp run. The grade change between the turning space and the curb ramp must be perpendicular to the direction of travel.
3. Areas where the pedestrian circulation path crosses a curb ramp are considered flare sides. The maximum slope of the flare sides is 10%. Full curb height may not be able to be reestablished on flare slopes but as much curb height as possible should be reestablished.
4. Provide a minimum 2 foot width of detectable warning surfaces in the direction of pedestrian travel across the full width of the curb ramp or turning space, exclusive of curbs or flares. Orient domes in the direction of pedestrian travel unless otherwise stated in plans.
5. The concrete in the turning space, curb ramp, and flare slope areas shall be a minimum thickness of 6 inches.
6. If normal sidewalk elevation cannot be achieved with the perpendicular ramp between the street and turning space due to limited ramp length, provide a parallel ramp to make up the elevation difference between the turning space and the standard sidewalk. This parallel ramp shall not exceed 8.3% slope. However, the length of the ramp is not required to exceed 15 feet, regardless of slope. The minimum sidewalk thickness for the parallel ramp in this area is 4 inches.
7. Install a 2 foot taper when additional sidewalk will not be located adjacent to the curb ramp.
8. To accommodate the passing area requirement, sidewalks must be a minimum of 5 foot wide through the driveway approach. See plate 651.01 for additional information.
9. Depending on the conditions, a curb up to 6 inches high may need to be installed on the back of the turning space or adjoining sidewalk.
10. The slope of curb ramp and adjacent curb is designed at 7.5% or less but shall not be steeper than 8.3% unless otherwise specified in the plans. The curb ramp is not required to exceed 15 feet, regardless of slope. The cross slope target is 1.5% with a maximum cross slope of 2.0%.

**GENERAL NOTES:**

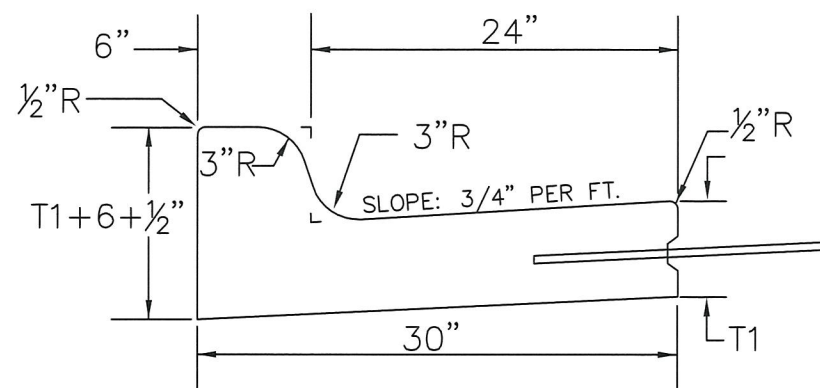
The turning space, curb ramp, and detectable warning panel area will be paid for at the contact unit price for the corresponding concrete sidewalk bid item.

The detectable warning panel shall be measured and paid for to the nearest square foot. Payment shall include all costs for materials, labor, and equipment necessary for the installation of the detectable warning panels.

Revised: December 2016

 <p>CITY OF SIOUX FALLS ENGINEERING DIVISION <b>ACCESSIBLE CURB RAMPS</b></p>	
<p>SPECIFICATION REFERENCE NO. 650</p>	<p>PLATE NUMBER 651.02</p>

PROJECT	SHEET NO.	TOTAL SHEETS
2018-017	16	18
DETAILS	5/8/2018	



30" CONCRETE CURB AND GUTTER  
N.T.S

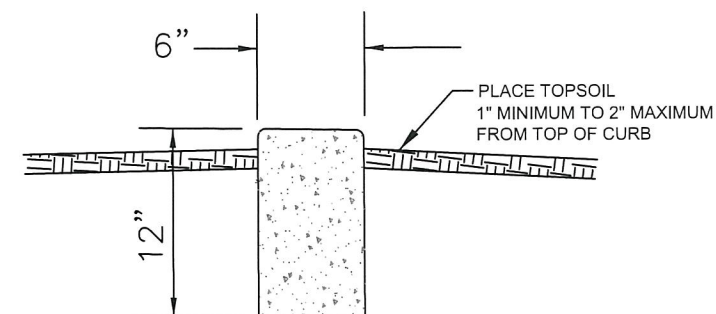
1/2" Preformed Expansion Joint Fillers shall be placed, Transversely in the Curb & Gutter as follows:

- (1) At each junction of Radius return Curb & Gutter and the Curb & Gutter which is parallel to the project centerline.
- (2) At each junction with existing Concrete Curb or Concrete Curb & Gutter
- (3) At each junction with existing sidewalk, to the depth of the sidewalk.
- (4) At a maximum of 195 L.F. apart, measured along the face of the Curb & Gutter.

1/2" Preformed Expansion Joint Filler shall be placed, Longitudinally, along the backface of the Curb, to the depth of the sidewalk, where such backface of Curb is adjacent to an existing Concrete Sidewalk.

Weakened Plane Joints shall be constructed at Approx. 10' intervals. The joints shall be constructed to a minimum depth of one inch by scoring with a tool which coincide with pavement joints leave the corners rounded and insure a free movement of the Concrete at the joint.

TYPE	T1 INCHES	CU. YD PER LIN. FT.
B66	6"	0.055
B67	7"	0.063
B68	8"	0.071
B68.5	8.5"	0.074
B69	9"	0.078
B69.5	9.5"	0.082
B610	10"	0.086
B610.5	10.5"	0.090
B611	11"	0.094
B611.5	11.5"	0.098
B612	12.0"	0.102



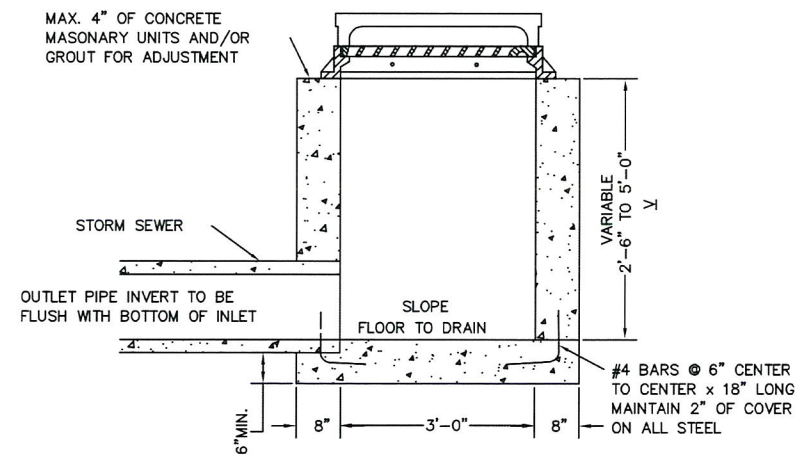
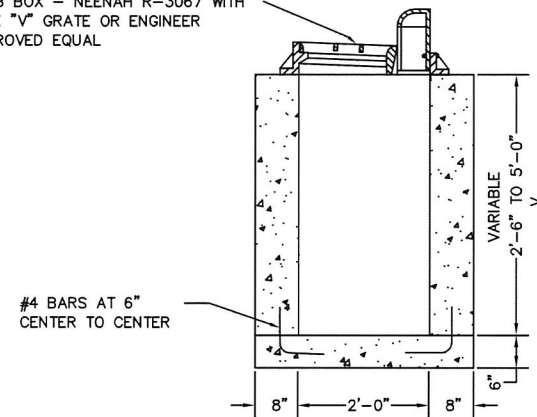
6"X12" VERTICAL CONCRETE CURB  
N.T.S



ESTIMATED QUANTITIES			
ITEM	UNIT	CONSTANT	VARIABLE
* CLASS M6 CONCRETE	CUYDS	0.27	0.32V
REINFORCEMENT-CONC. MASONRY	LBS	28	---

\* CONSTANT SHALL BE REDUCED FOR THE APPROPRIATE PIPE OR COMBINATION OF PIPES, THUS; 12" DIA.=-0.03 C.Y., 15" DIA.=-0.04 C.Y., 18" DIA.=-0.05 C.Y., 24" DIA.=-0.09 C.Y.

FRAME & GRATE WITH ADJUSTABLE CURB BOX - NEENAH R-3067 WITH TYPE "V" GRATE OR ENGINEER APPROVED EQUAL



REVISED: DECEMBER 1995

SPECIFICATION REFERENCE NO. 460

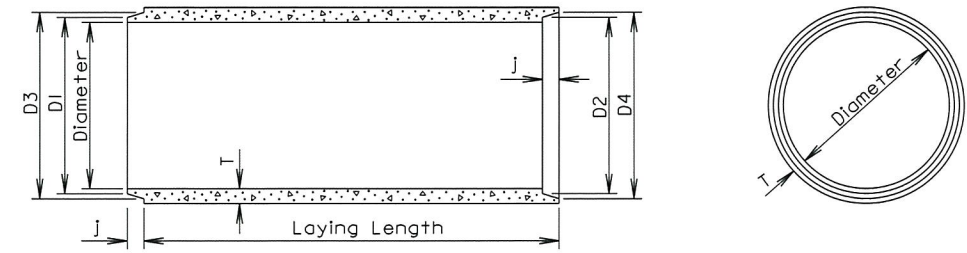


CITY OF SIOUX FALLS  
ENGINEERING DIVISION  
STANDARD STORM SEWER  
INLET TYPE BI

PLATE NUMBER 460.07

TOLERANCES IN DIMENSIONS

Diameter:  $\pm 1.5\%$  for 24" Dia. or less and  $\pm 1\%$  or  $\frac{3}{8}$ " whichever is more for 27" Dia. or greater.  
 Diameters at Joints:  $\pm 3/16$ " for 30" Dia. or less and  $\pm 1/4$ " for 36" or greater.  
 Length of joint (J):  $\pm 1/4$ ".  
 Wall thickness (T): not less than design T by more than 5% or  $\frac{3}{16}$ ", whichever is greater.  
 Laying length: shall not underrun by more than  $\frac{1}{2}$ ".



LONGITUDINAL SECTION

END VIEW

GENERAL NOTES:

Construction of R.C.P. shall conform to the requirements of Section 990 of the Standard Specifications for Roads and Bridges.

Not more than 2 four foot sections shall be permitted near the ends of any culvert. Four foot lengths shall be used only to secure the required length of culvert.

Diam. (in.)	Approx. Wt. /Ft. (lb.)	T (in.)	J (in.)	D1 (in.)	D2 (in.)	D3 (in.)	D4 (in.)
12	92	2	1 3/4	13 1/4	13 5/8	13 7/8	14 1/4
15	127	2 1/4	2	16 1/2	16 7/8	17 1/4	17 5/8
18	168	2 1/2	2 1/4	19 5/8	20	20 3/8	20 3/4
21	214	2 3/4	2 1/2	22 7/8	23 1/4	23 3/4	24 1/8
24	265	3	2 3/4	26	26 3/8	27	27 3/8
27	322	3 1/4	3	29 1/4	29 5/8	30 1/4	30 5/8
30	384	3 1/2	3 1/4	32 3/8	32 3/4	33 1/2	33 3/8
36	524	4	3 3/4	38 3/4	39 1/4	40	40 1/2
42	685	4 1/2	4	45 1/8	45 5/8	46 1/2	47
48	867	5	4 1/2	51 1/2	52	53	53 1/2
54	1070	5 1/2	4 1/2	57 7/8	58 3/8	59 3/8	59 7/8
60	1296	6	5	64 1/4	64 3/4	66	66 1/2
66	1542	6 1/2	5 1/2	70 5/8	71 1/8	72 1/2	73
72	1810	7	6	77	77 1/2	79	79 1/2
78	2098	7 1/2	6 1/2	83 3/8	83 3/8	85 5/8	86 1/8
84	2410	8	7	89 3/4	90 1/4	92 1/8	92 5/8
90	2740	8 1/2	7	95 3/4	96 1/4	98 1/8	98 5/8
96	2950	9	7	102 1/8	102 5/8	104 1/2	105
102	3075	9 1/2	7 1/2	109	109 1/2	111 1/2	112
108	3870	10	7 1/2	115 1/2	116	118	118 1/2

March 31, 2000

Published Date: 1st Qtr. 2012

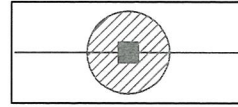
S  
D  
D  
O  
T

REINFORCED CONCRETE PIPE

PLATE NUMBER 450.01

Sheet 1 of 1

PROJECT	SHEET NO.	TOTAL SHEETS
2018-017	18	18
Silt Fence	5/8/2018	



### INLET PROTECTION

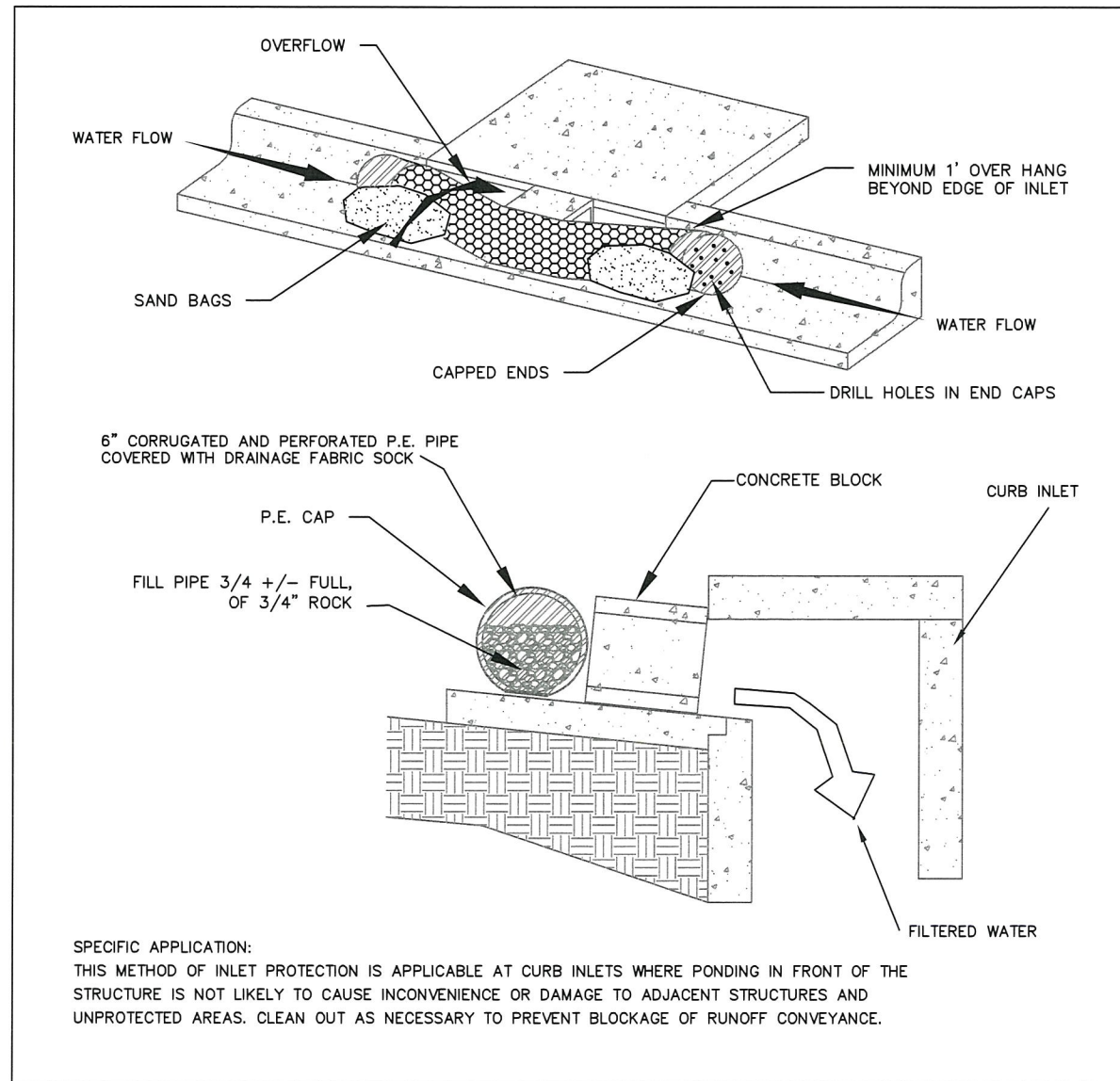


**DEFINITION:**

A SEDIMENT FILTER OR AN EXCAVATED IMPOUNDING AREA AROUND A STORM DRAIN DROP INLET OR CURB INLET. TO BE USED AT SUMP CONDITIONS.

**PURPOSES:**

TO REDUCE SEDIMENT FROM ENTERING STORM DRAINAGE SYSTEMS PRIOR TO PERMANENT STABILIZATION OF DISTURBED AREAS.



REVISED: NOVEMBER 2008

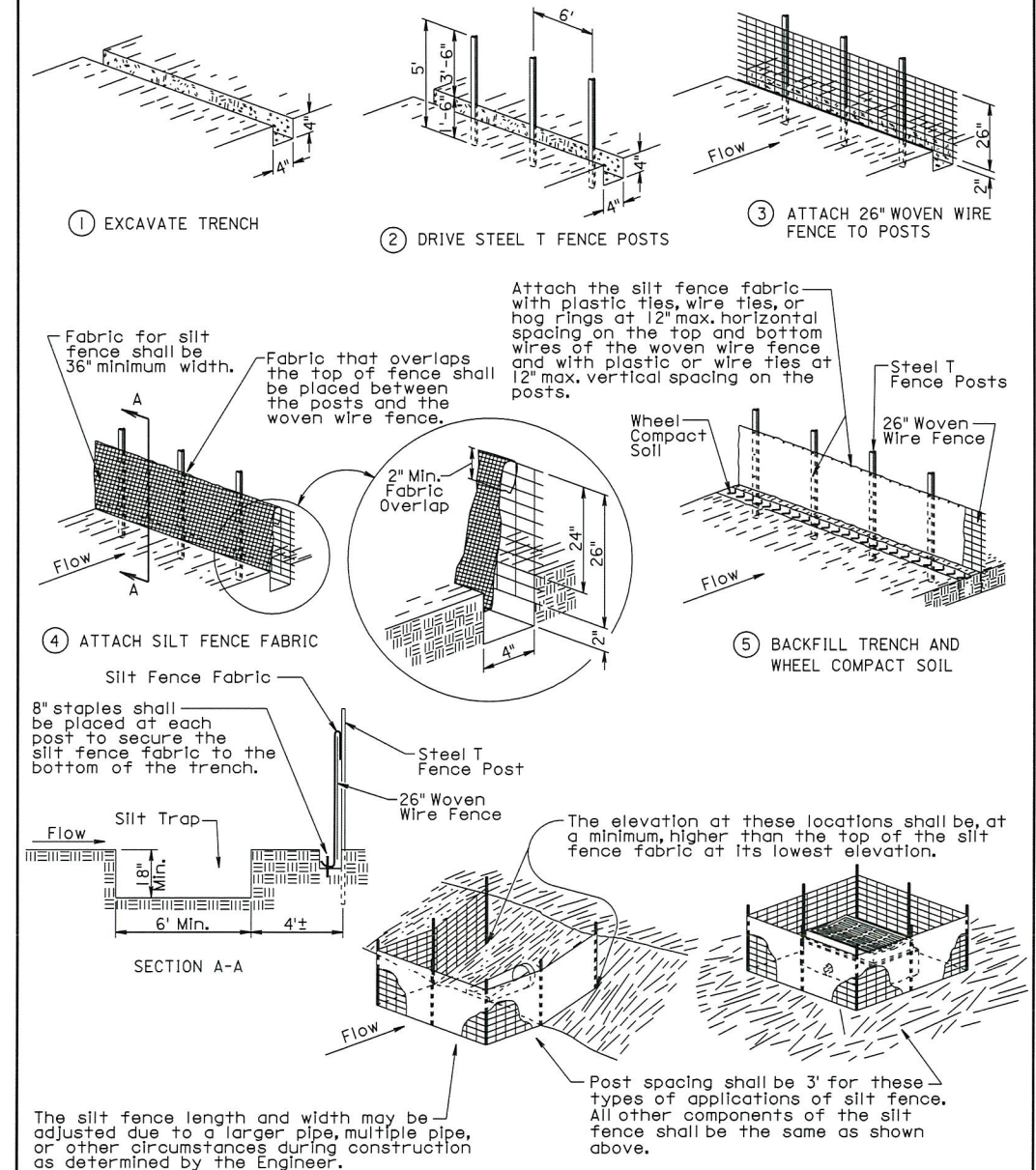
SPECIFICATION REFERENCE NO. 734



CITY OF SIOUX FALLS  
ENGINEERING DIVISION  
CORRUGATED PIPE AND FABRIC  
INLET PROTECTION - OVERFLOW

PLATE NUMBER 734.16

### MANUAL LOW FLOW SILT FENCE INSTALLATION



December 23, 2003

Published Date: 4th Qtr. 2007

SDOT

LOW FLOW SILT FENCE AND SILT TRAP

PLATE NUMBER 734.04

Sheet 1 of 2