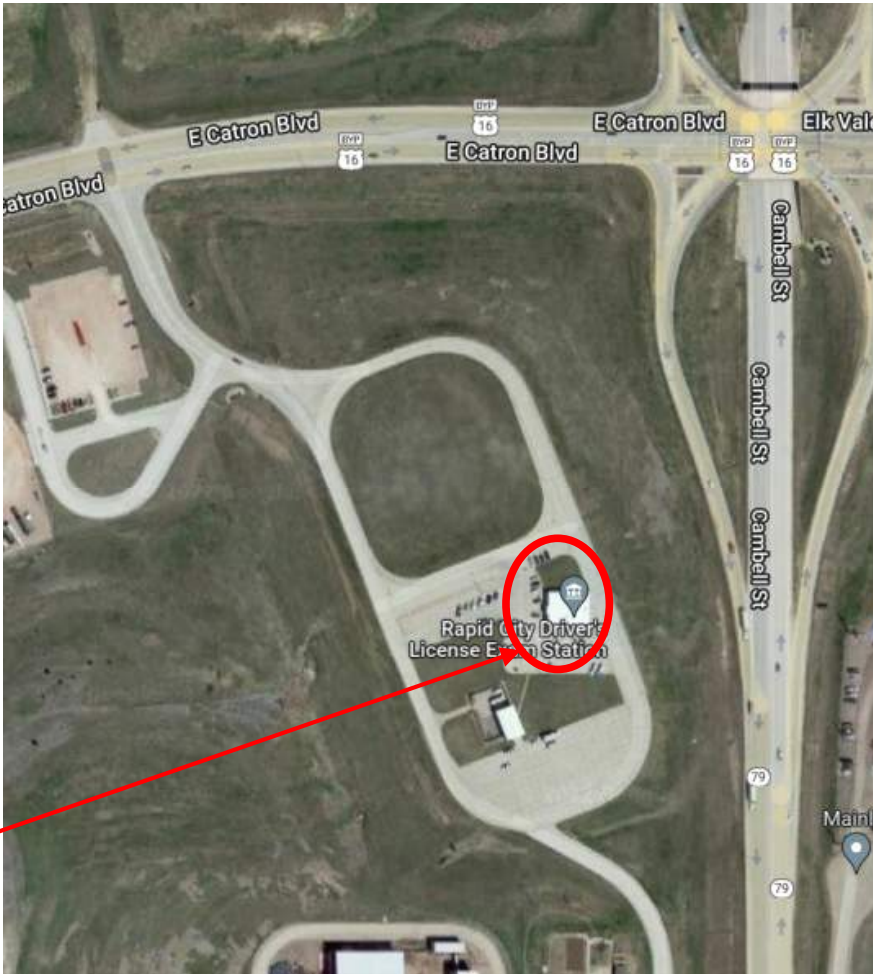
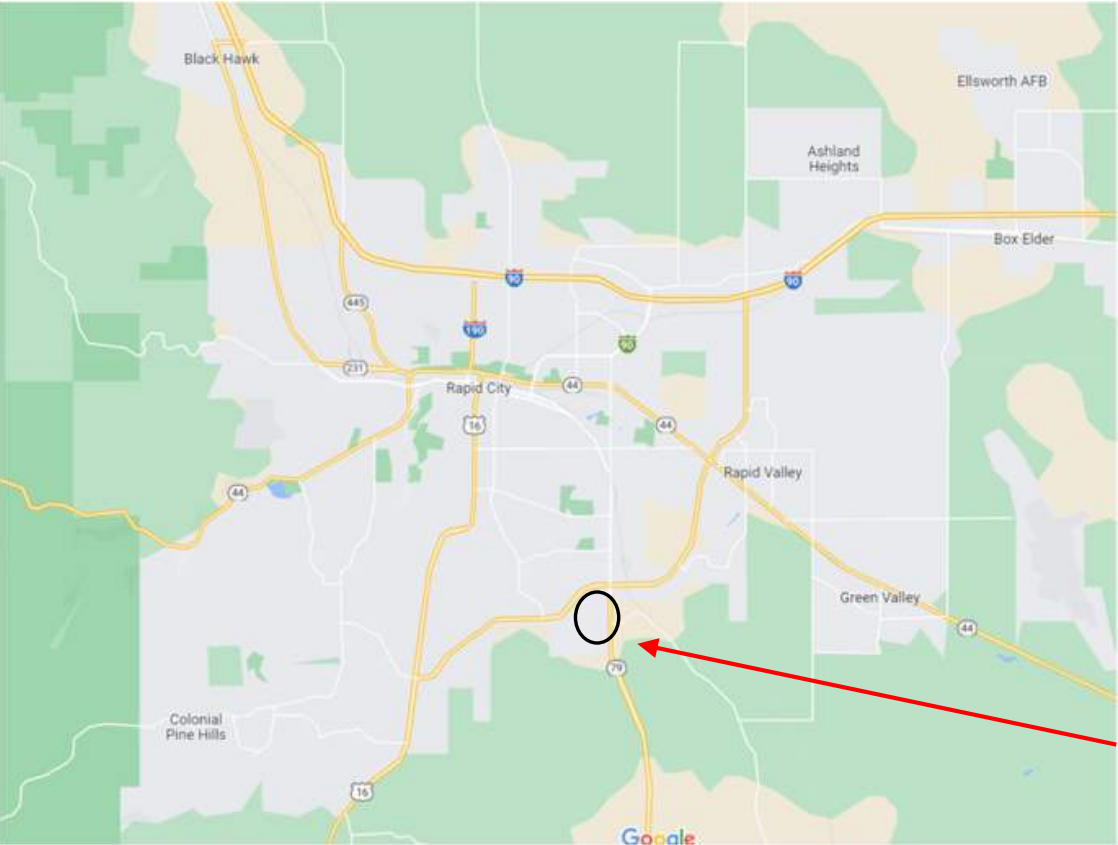
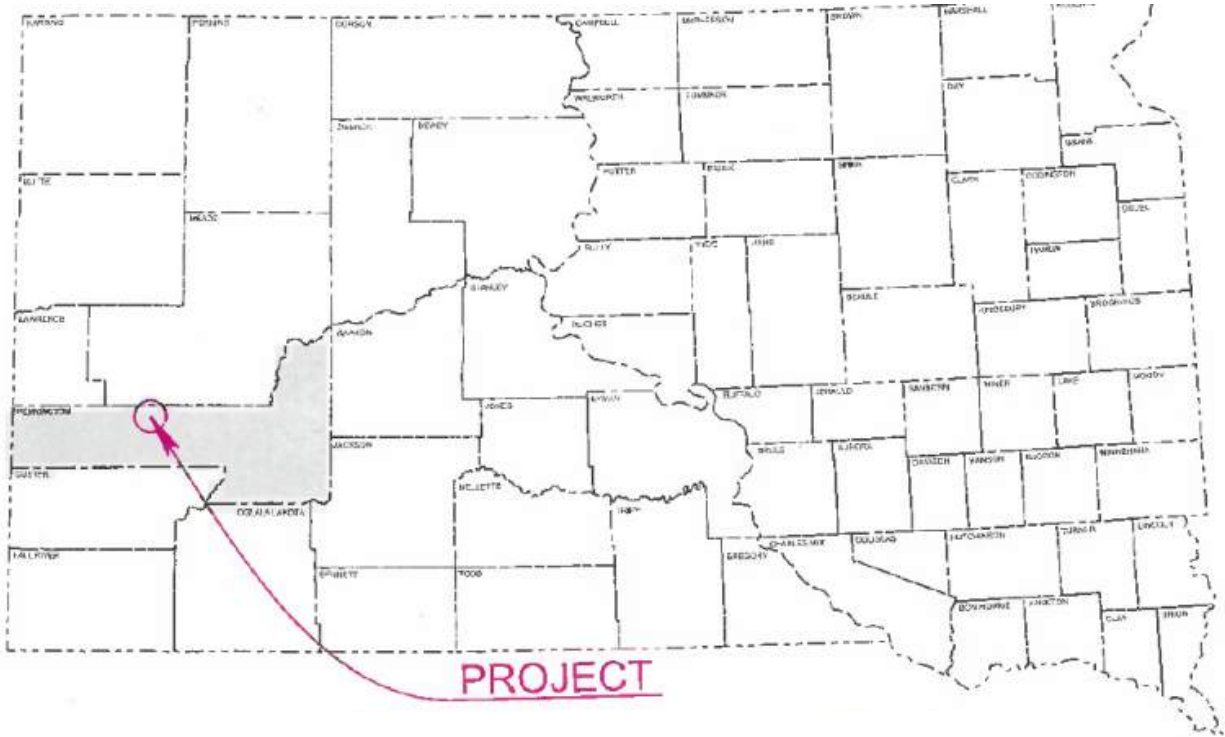


STATE OF SOUTH DAKOTA  
DEPARTMENT OF TRANSPORTATION  
PLANS FOR PROPOSED

PROJECT 410D411  
DRIVERS LICENSE OFFICE  
PENNINGTON COUNTY

ADA IMPROVEMENTS, CONCRETE REPAIR, SIDEWALK, C&G, & PAVEMENT MARKING



INDEX OF SHEETS	
1	Title Sheet
2-3	Notes
4	Quantities
5-7	Project Phasing
8-13	Removals
14-19	Installations
20-22	Wall Details
23-24	Pavement Marking
25-34	Standard Plates

## **SPECIFICATIONS**

For items not addressed in these documents, use 2015 Edition of South Dakota Department of Transportation Standard Specifications for Roads and Bridges.

## **SEQUENCE OF OPERATIONS**

Work will be completed in three phases as depicted in these plans.

The space between the two adjacent PCC pavement areas north of the west walk-in entrance is the travel path for Drivers License customers who are exiting the parking lot. A minimum of 20' of width will be maintained for customers' vehicles departing from the parking area during business hours. Business days and hours are Tuesday through Friday, 7 AM – 5:30 PM.

- Phase 1 – South building entrance, southeast parking lot, and northwest parking lot modifications. All concrete work and pedestrian railing will be completed prior to starting Phase 2 work.
- Phase 2 – West building entrance and northeast parking lot modification
  - Phase 2a – within 1 week after start of phase 2, complete C&G, sidewalk drain, and sidewalk at main entrance so that lobby foot traffic and mobility impaired can enter through main entrance.
  - Phase 2b- remaining work in Phase 2.
- Phase 3 – Removal and Installation of Pavement Marking
- Once work in Phase 2 begins, work shall be pursued continuously to completion.

## **TRAFFIC CONTROL AND CONTRACTOR STAGING AREAS**

The bid item Traffic Control Misc. will be full compensation for all temporary traffic control devices including signs, cones/barrels, and pedestrian safety fence.

### **WORK AREAS:**

- During phases 1 and 2, the work areas shall be separated from pedestrians via use of orange plastic safety fence.
- During phase 3, the work area shall be separated from the public by cones or barrels.

**STAGING AREAS:** During phases 1 and 2, the contractor's staging areas shall be separated from public via use of traffic control cones or barrels spaced no greater than 10' apart.

Temporary signing for ADA parking and customer access to the driver's license building shall be maintained as shown on Phase 2 sheet.

## **QUANTITIES TO BE PAID**

All bid items will be paid at the plan quantity amount, as shown in the ESTIMATE OF QUANTITIES, unless changes are ordered by the Engineer. The contractor is encouraged to visit the project site prior to bid to observe the character and quantity of work needed.

## **INCIDENTAL WORK**

Incidental work includes removal and disposal of all items not specifically addressed in these plans. They include, but are not limited to:

- Excavate as needed to perform all work. Slope soil away from newly placed concrete at slopes no greater than 4:1.
- Remove and disposed of excess soil for installation of new sidewalk. Retain and place enough topsoil to backfill against worksite.
- Seeding of any disturbed areas with a commercially available seed mixture suitable for lawns.
- Removal of walls, stairs, and railings from south stairway.
- Removal of parking blocks on west side of the building
- Removal of sidewalk drains
- Remove and Reset Sign in SE Parking Lot
- Remove Pavement Marking

## **REMOVAL OF EXISTING CONCRETE**

In all concrete removal, including curb and gutter, pavement, sidewalk, and stairs:

- Sawcut existing concrete full depth prior to removal.
- Dowel and epoxy new reinforcement prior to placing new concrete.

### **INSERT STEEL BAR IN PCC PAVEMENT**

Reinforcing bars will be installed as shown in standard plates, by drilling and epoxying the specified reinforcement into existing concrete. The cost to furnish and install reinforcing bars into the noted items will be included in the contract price for the associated concrete item. No separate payment will be made.

### **BASE COURSE**

Base course that will be under sidewalk will be 2" minimum depth. The cost of that base course is incidental to and will be included in the cost of the sidewalk for the purposes of bidding.

Base Course under PCC Pavement, C&G, and Special Type C Retaining Wall Footing will be paid for by the ton at the plan quantity. The quantity calculated is based on 6" depth, however, only a 5" minimum depth is required under those items. A separate quantity was included, as shown in the table, for the additional depth of base course between Sp. Type C Footing and sidewalk above it.

No testing of the base course is required. Compaction of the base course will be to the satisfaction of the engineer.

### **CONCRETE**

- Use Class M6 Concrete for all Portland Cement Concrete on the project. Type A spalls will be repaired with material specified in the Standard Specifications.
- Place 8" concrete for all new parking lot pavement
- Place 4" sidewalk
- Payment for concrete in the south ramp, wall, and stairs area is based on the following:
  - Sidewalk will be paid as shown on the Special Type C Retaining Wall Detail. The step on the east side of the ramp will also be paid as sidewalk.
  - Special Type C Retaining wall will be paid based on the exposed face of wall, plus the additional area for a height of 6" below the top of curb and gutter, as shown on the Special Type C Retaining Wall Detail.

### **TYPE 3 CURB RAMP**

No detectable warning panel is required.

### **REMOVAL OF EXISTING PAVEMENT MARKING**

Existing pavement marking is tape in grooved pavement. Removal of pavement marking will be completed in a manner that minimizes scarring on the existing pavement. Grinding will not be allowed. Pavement marking removal will be paid at the lump sum price bid.

### **NEW PAVEMENT MARKING**

New pavement marking materials will be pavement marking tape. Grooving will not be required. The plan shown quantity will be the amount paid.

### **REMOVE AND RESET MAILBOX**

Include the cost of new anchoring hardware in bid price.

### **STEEL PEDESTRIAN RAILING**

The railing to be installed on the south side of the building follows a ramp, landing area, and short stairs. There are horizontal and vertical bends at two locations along the railing. Verify that railing will match the new concrete prior to fabricating.

The handrail will include a mid-height horizontal rail as shown on Railing Installation sheet. The plan shown quantity will be the amount paid. No shop plans or certifications will be required on this project.

### **MISCELLANEOUS STAKING**

The price bid for Miscellaneous Staking will be full compensation for all survey and line control needed to ensure that the project is built in a workmanlike manner, and to ensure the parking lot drains properly after completion of construction.

### **WORK BY OTHERS**

Permanent ADA signing will be installed by DOT forces after completion of the work.

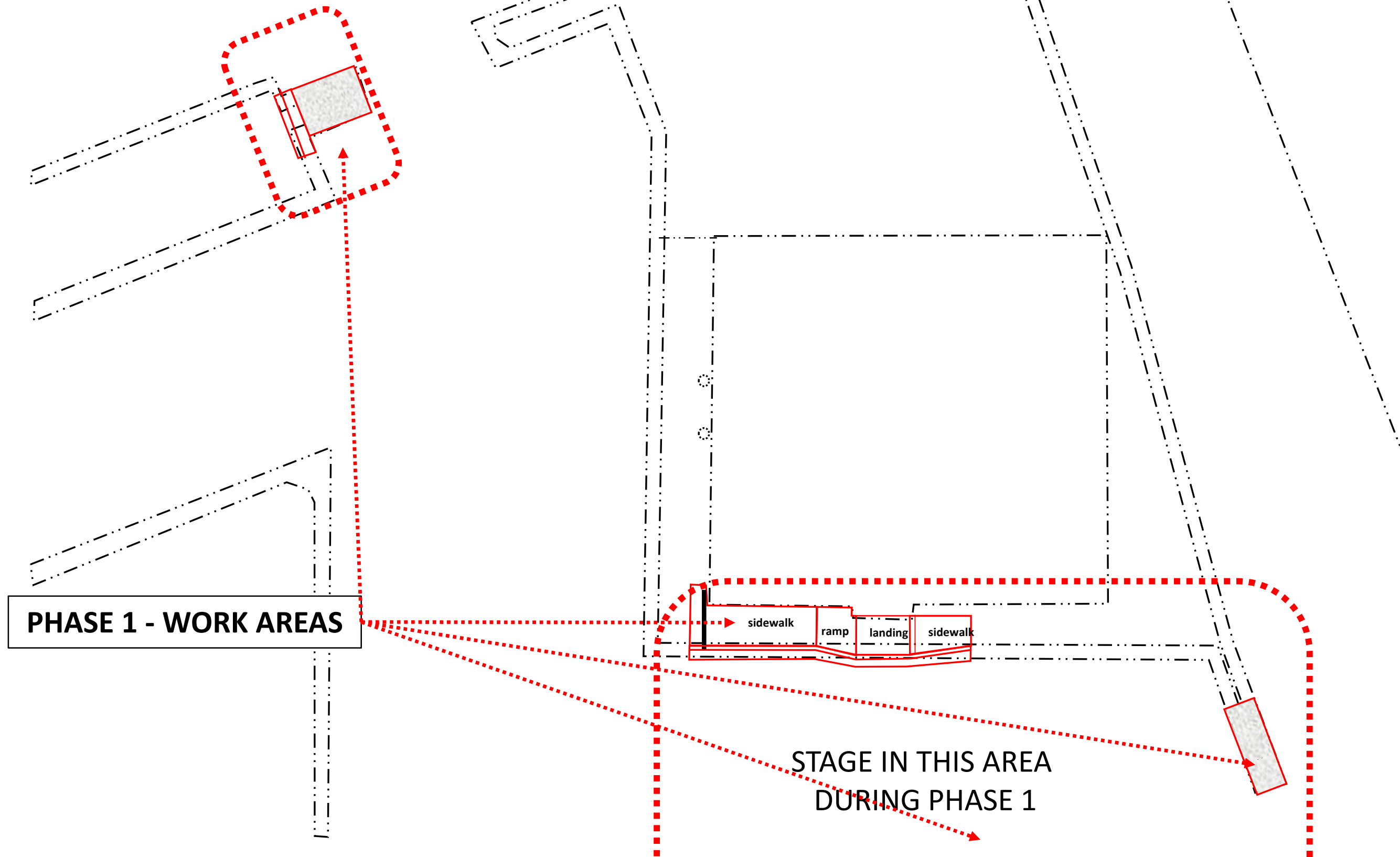
ESTIMATE OF QUANTITIES

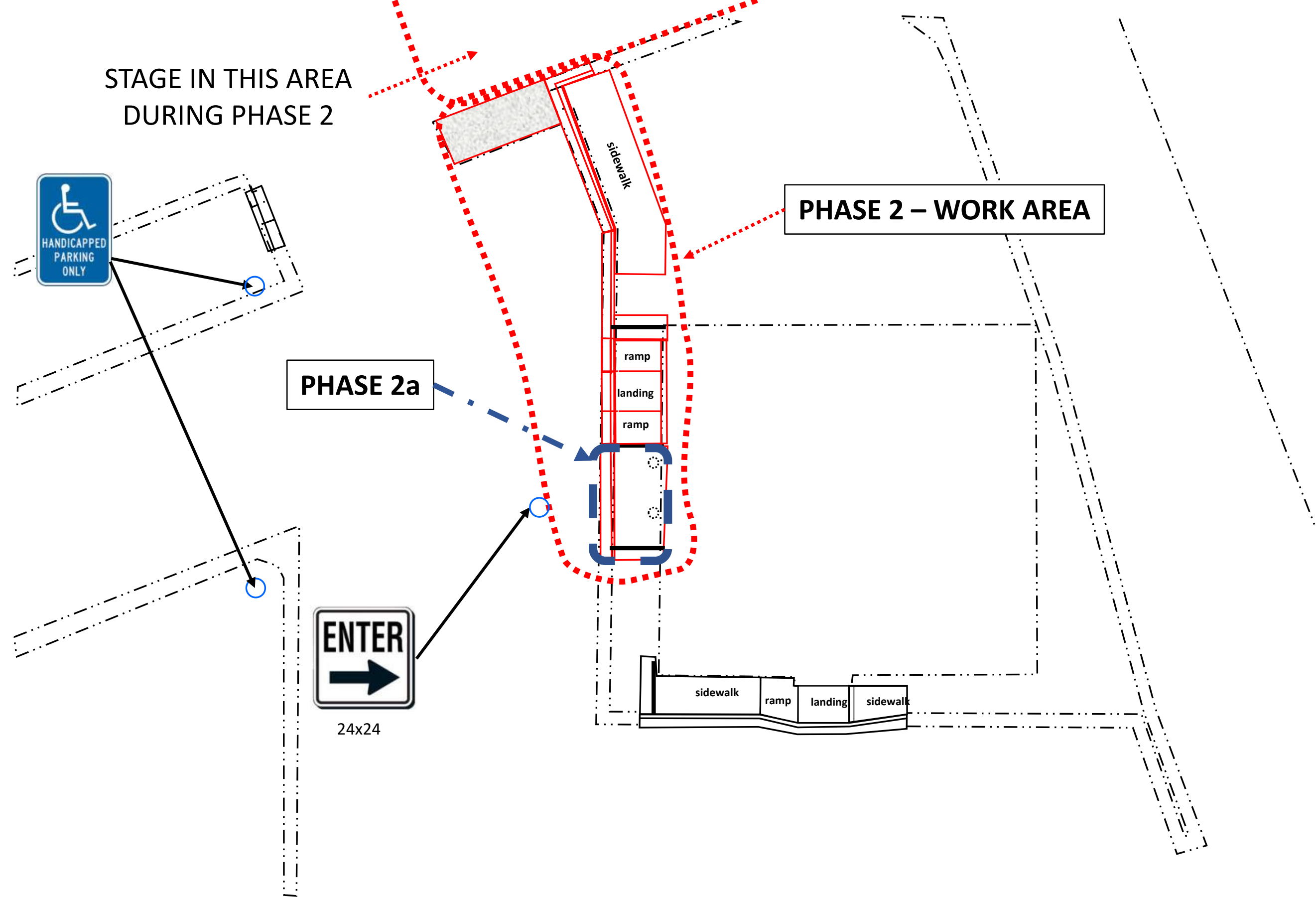
BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	Mobilization	1	LS
009E3260	Miscellaneous Staking	1	LS
110E0300	Remove Concrete Curb and/or Gutter	339	Ft
110E0420	Remove Drop Inlet Frame and Grate Assembly	1	Each
110E1100	Remove Concrete Pavement	2.8	SqYd
110E1140	Remove Concrete Sidewalk	101.4	SqYd
250E0010	Incidental Work	1	LS
260E1010	Base Course	41.1	Ton
380E0050	8" Nonreinforced PCC Pavement	72.3	SqYd
390E0200	Repair Type A Spall	12.0	SqFt
470E0040	Steel Pedestrian Railing	20.0	Ft
530E0310	Special Type C Concrete Retaining Wall	14	SqFt
633E0010	Cold Applied Plastic Pavement Marking, 4"	300	Ft
633E0025	Cold Applied Plastic Pavement Marking, 12"	180	Ft
633E0062	Cold Applied Plastic Pavement Marking, Symbol	4	Each
634E0120	Traffic Control, Miscellaneous	1	LS
650E0080	Type B68 Concrete Curb and Gutter	108	Ft
650E0380	Type BL68 Concrete Curb and Gutter	64	Ft
650E4680	Type P8 Concrete Gutter	5	Ft
651E0040	4" Concrete Sidewalk	1,293	SqFt
651E7000	Type 1 Detectable Warnings	10	SqFt
670E7000	Reset Drop Inlet Frame and Grate Assembly	1	Each
900E0022	Remove and Reset Mailbox	1	Each

C&G REMOVAL		SIDEWALK REMOVAL			
Location	Length	Location	Length	Width	Area(sqft)
NW Island	34.6	NW Island	9.0	3.7	33.3
NE Island	61.6	NE Island	9.0	3.7	33.3
West Side of Bldg	91.0	West Side of Bldg	56.3	9.1	512.3
South Side of Bldg	52.1	South Side of Bldg1	4.0	2.3	9.2
SE Islands	100.0	South Side of Bldg2	32.7	7.5	245.3
Total:	339.3	South Side of Bldg3	19.4	4.1	79.5
		Total:			912.9

B68 C&G		SIDEWALK				NONREINFORCED PCCP 8"				Base Course	
Location	Length	Location	Length	Width	Area(sqft)	Location	Length	Width	Area(sqyd)	Location	Length
NW Island	9.0	West Side of Bldg	97.3	9.1	885.4	NW Island	12.8	9.0	12.8	NW Island	4.7
West Side of Bldg	98.9	South Side of Bldg1	4.0	2.3	9.2	NE Island	23.0	9.0	23.0	NE Island	7.8
Total:	107.9	South Side of Bldg2	32.8	7.5	246.0	South of Building	22.0	1.5	3.7	SE Islands	6.5
		South Side of Bldg3	8.0	8.3	66.0	SE Islands	51.0	5.8	32.9	Under C&G	22.1
		South Side of Bldg4	8.8	5.5	48.4	Total:			72.3	Type C Ret. Wall	4.4
		South Side of Bldg4	8	4.75	38.0					Total:	41.1
		Total:			1293.0						
BL68 C&G		P8 GUTTER		TYPE A SPALL REPAIR							
Location	Length	Location	Length	Location	Area						
South Side of Bldg	52.1	West Side of Bdg	5.0	NW island	2.5						
SE Parking Lot	12.0			NE island	2						
Total:	64.1			West	4.5						
				South curb	1						
				South entrance	2						
				Total:	12						
SPEC. TYPE C RET. WALL											
Location	Area										
South Side of Building	14.4										







STAGE IN THIS AREA  
DURING PHASE 2

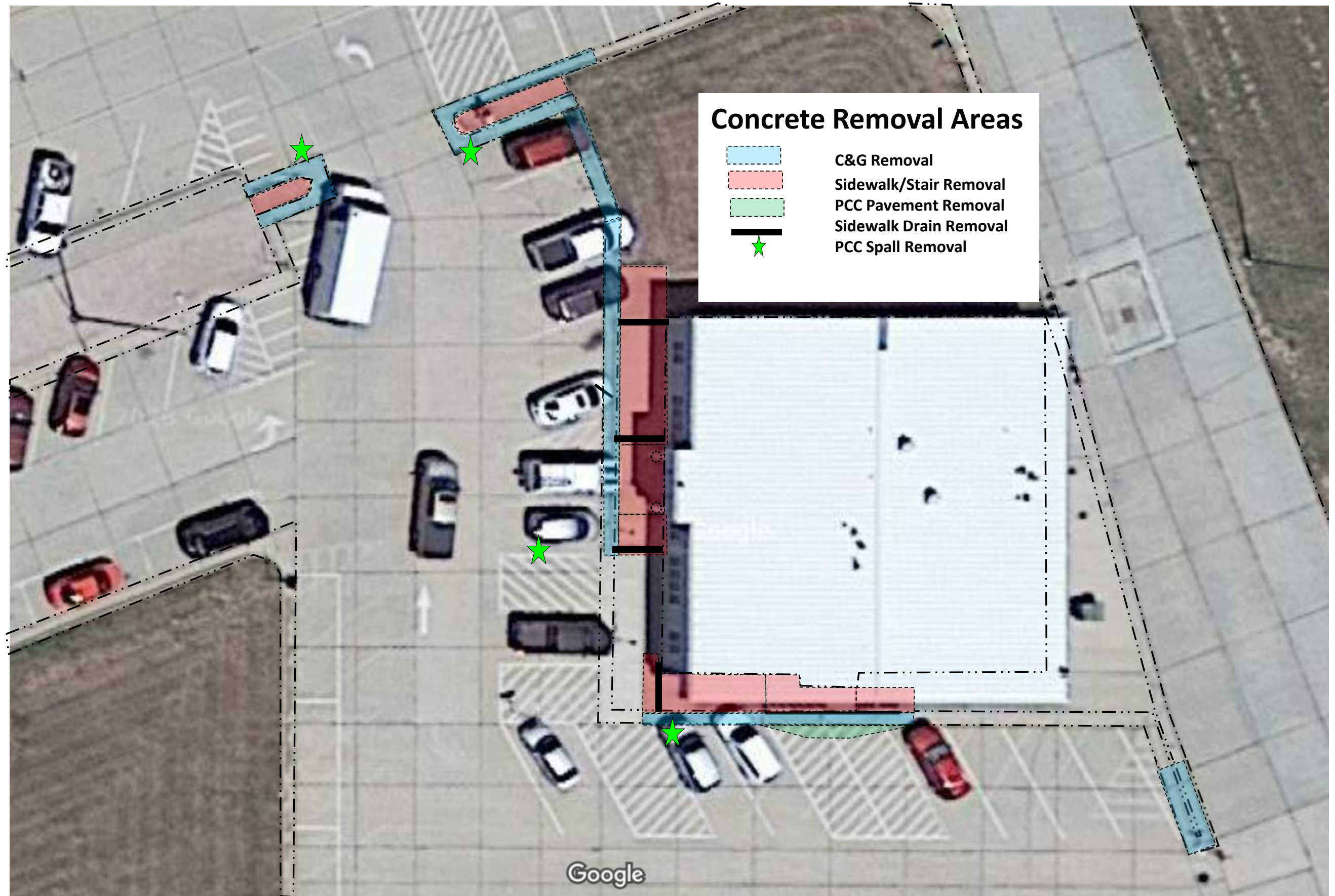


PHASE 2b

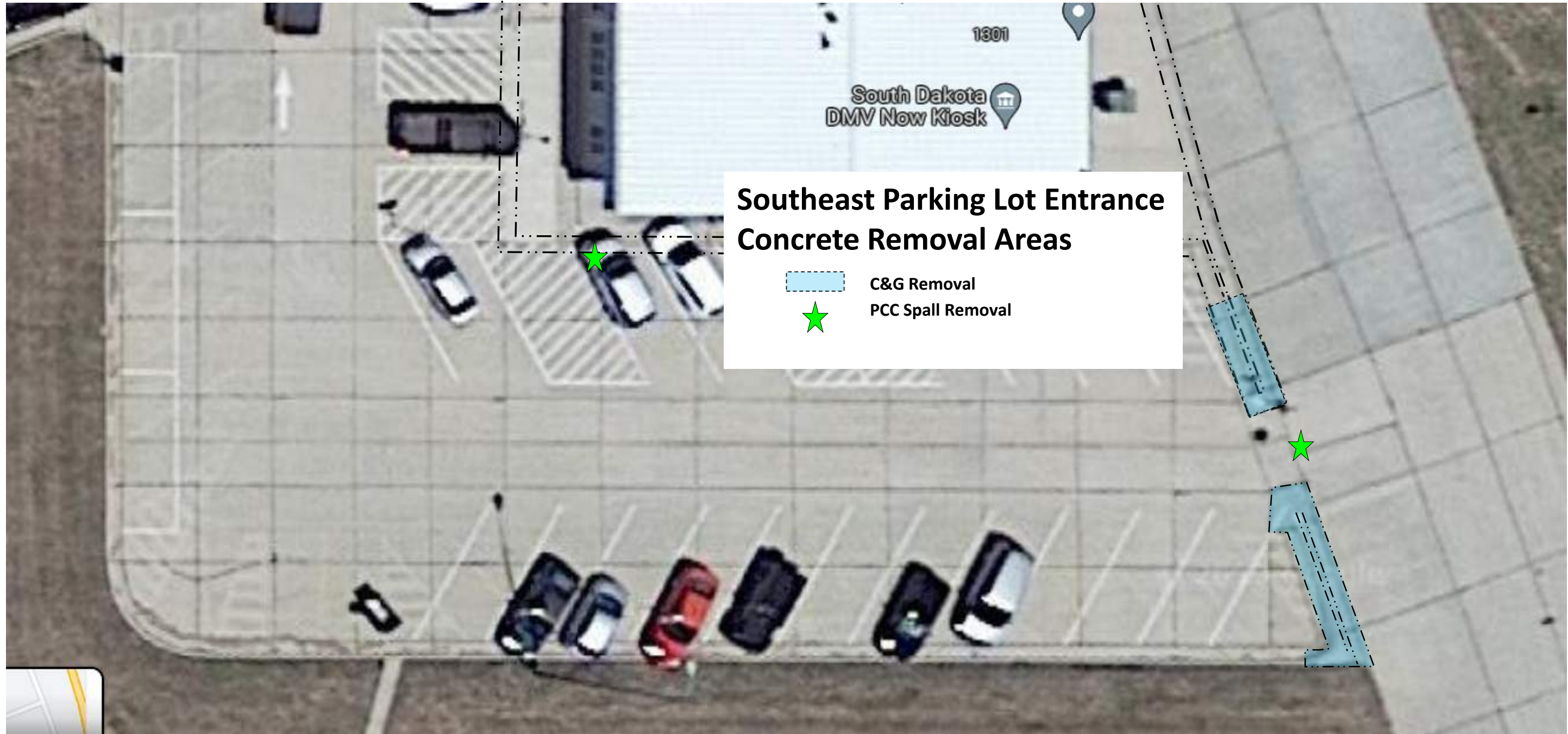
PHASE 2 – WORK AREA

ramp  
landing  
ramp

sidewalk ramp landing sidewalk

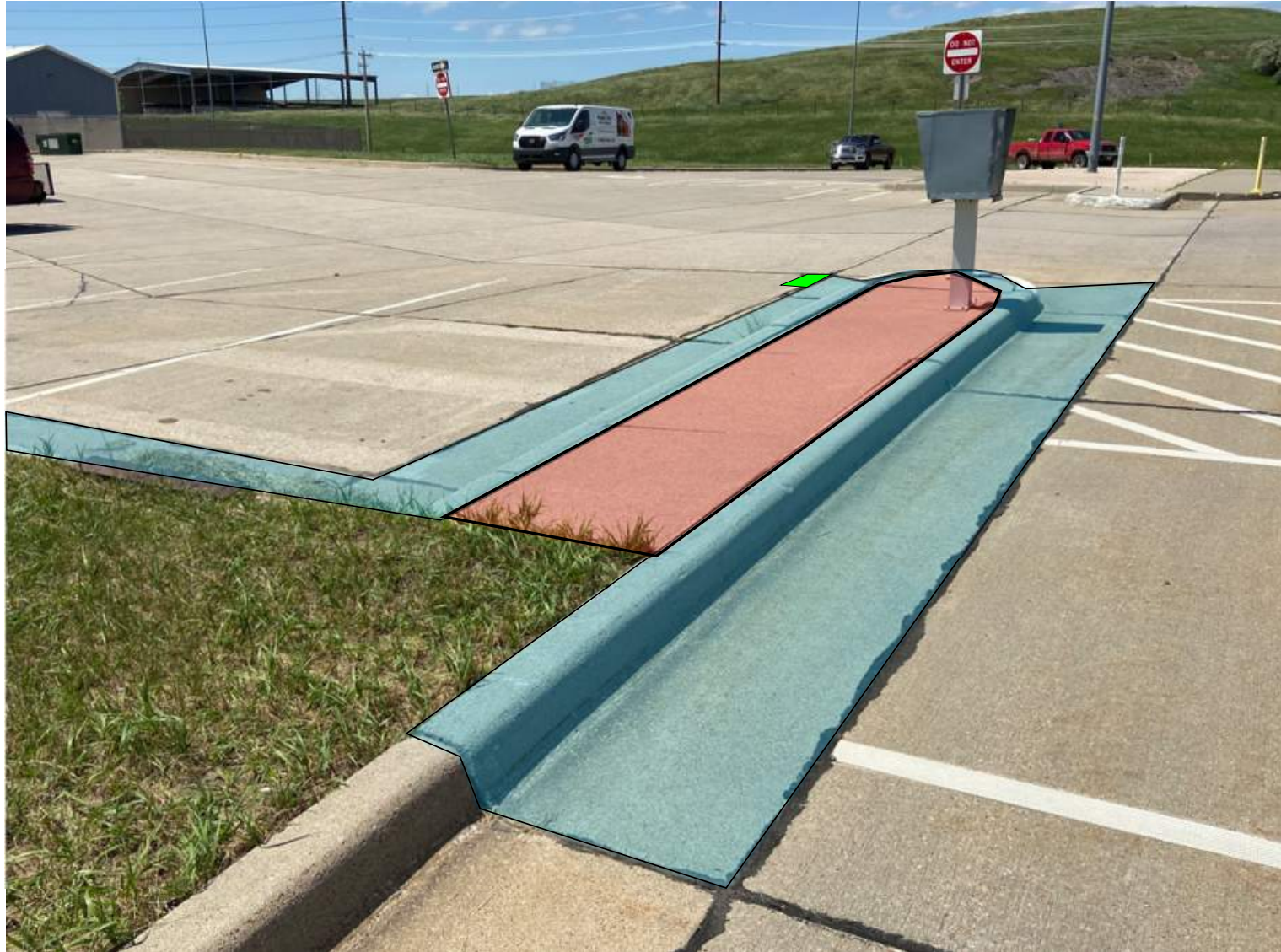








# Removals at North Exit





# Removals at West Entrance





# Removals at South Building Entrance

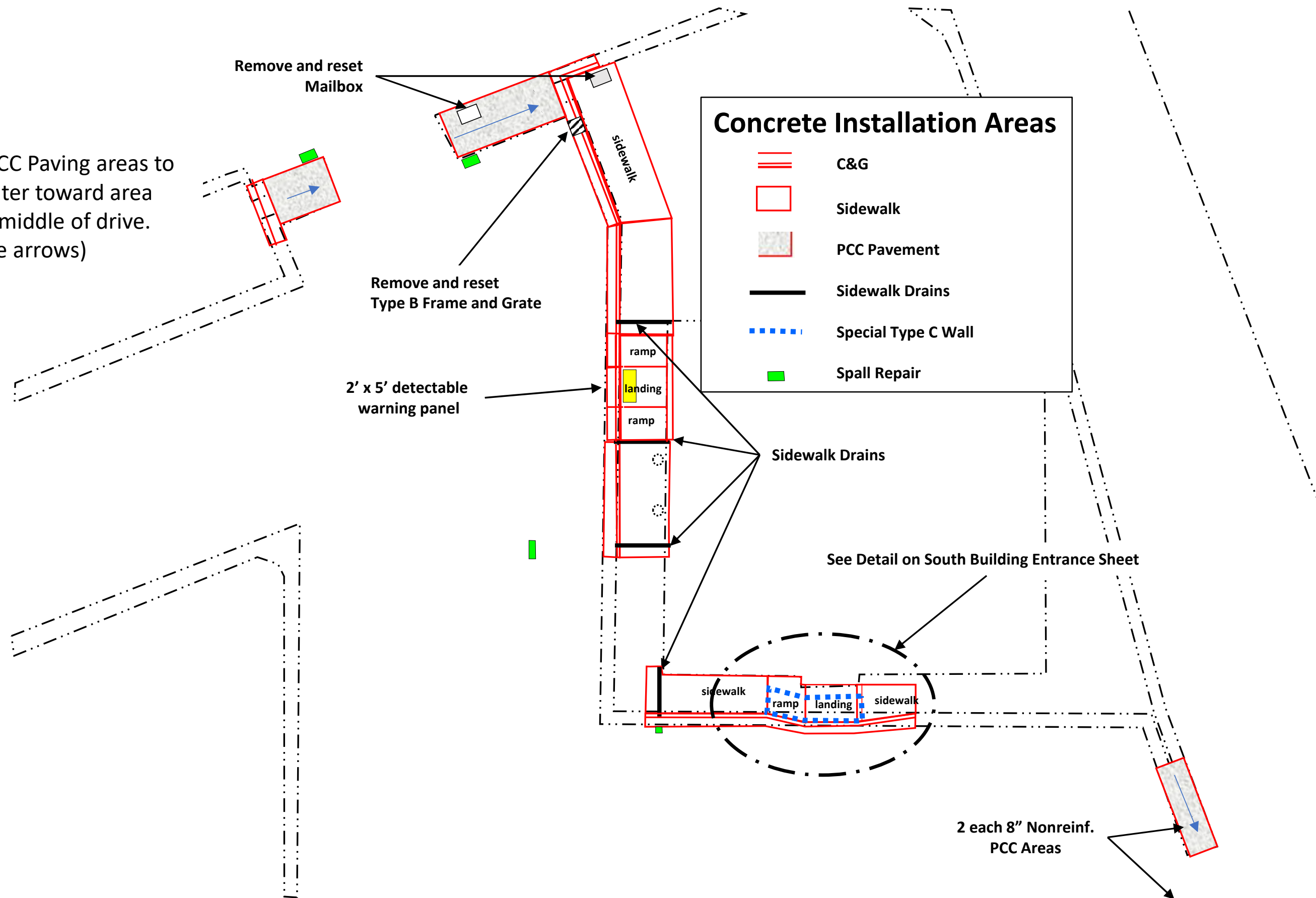




# Removals at Southeast Entrance



Shape PCC Paving areas to carry water toward area drain in middle of drive.  
(see blue arrows)



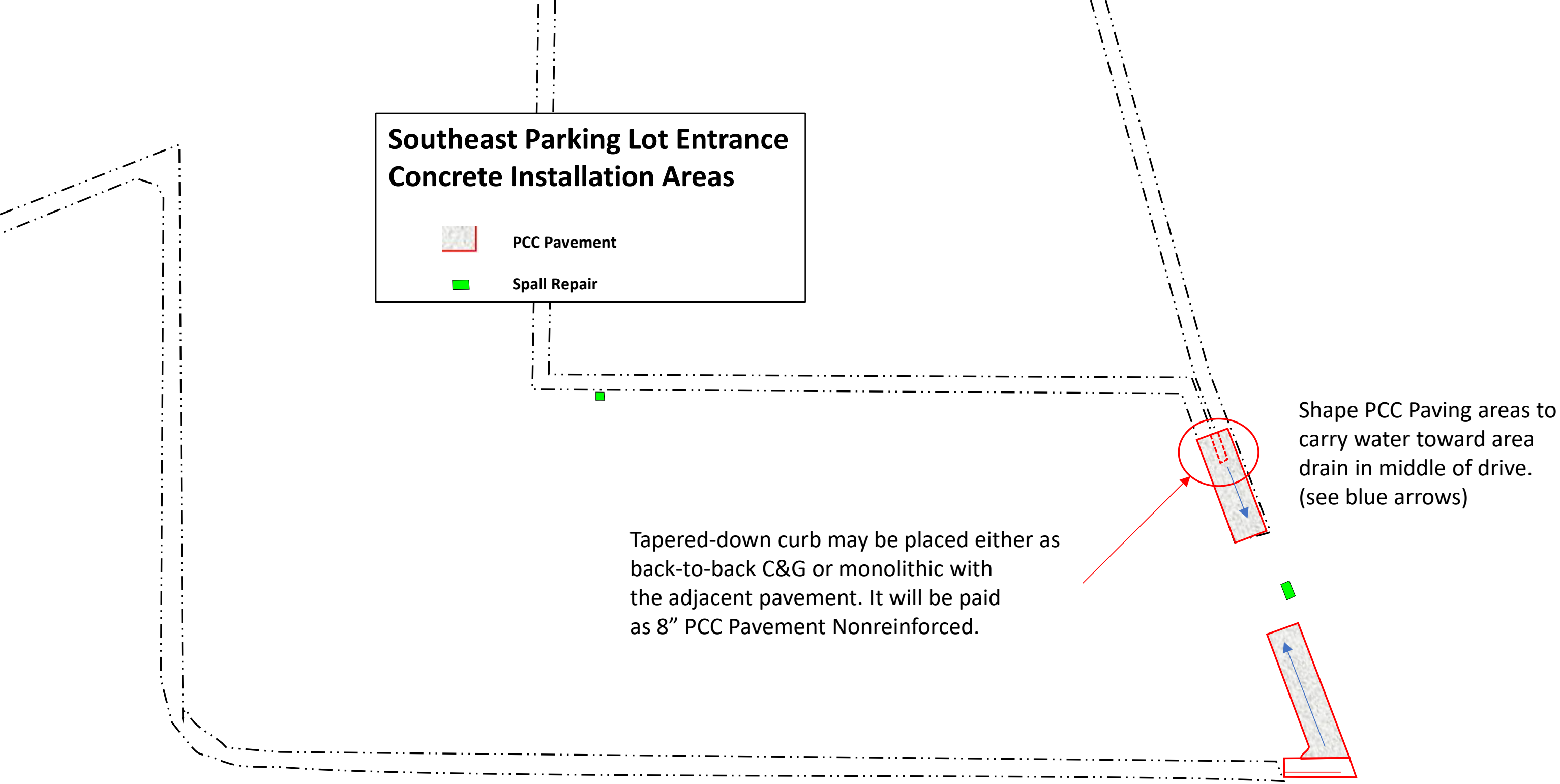
**Southeast Parking Lot Entrance  
Concrete Installation Areas**



PCC Pavement

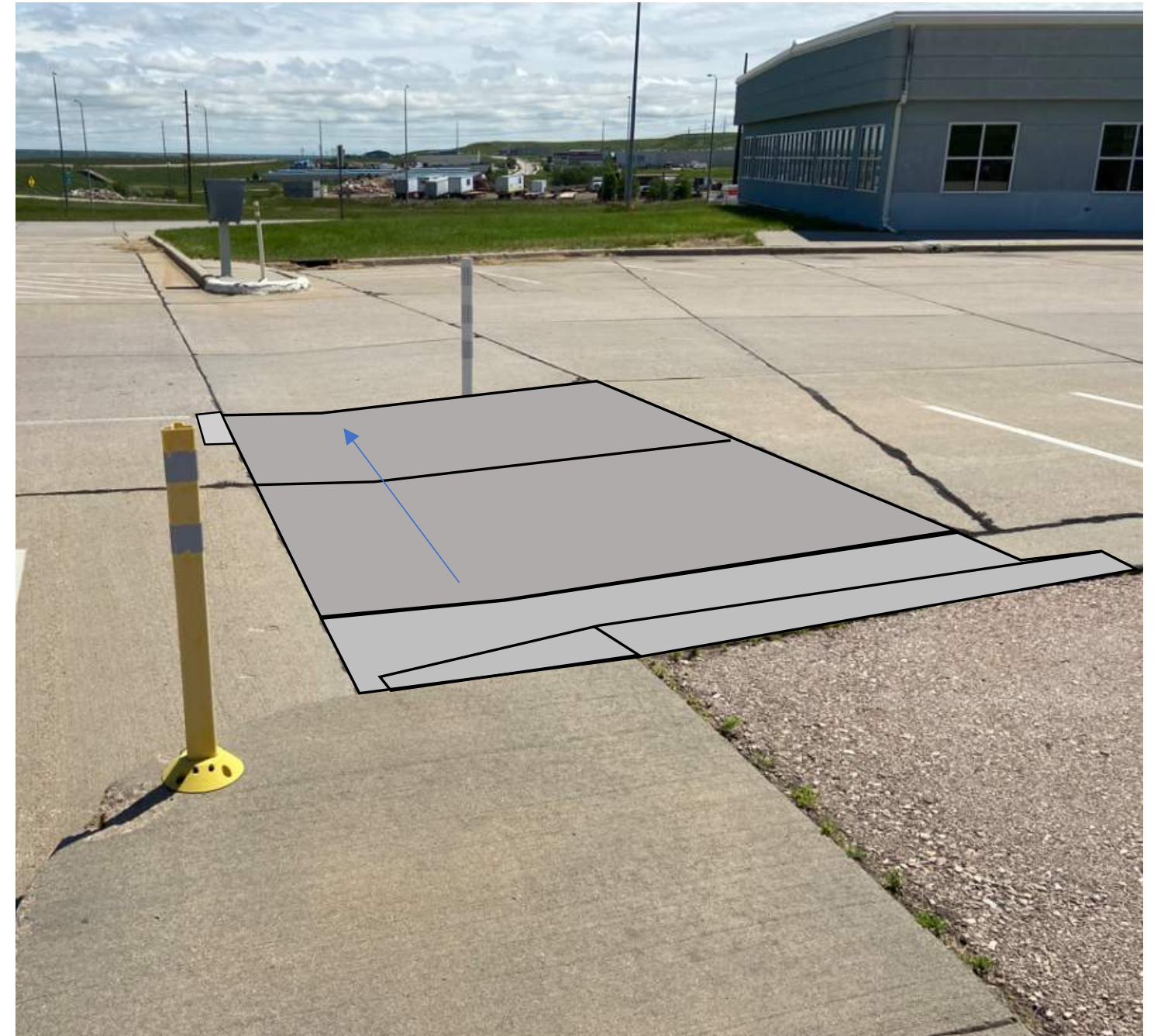
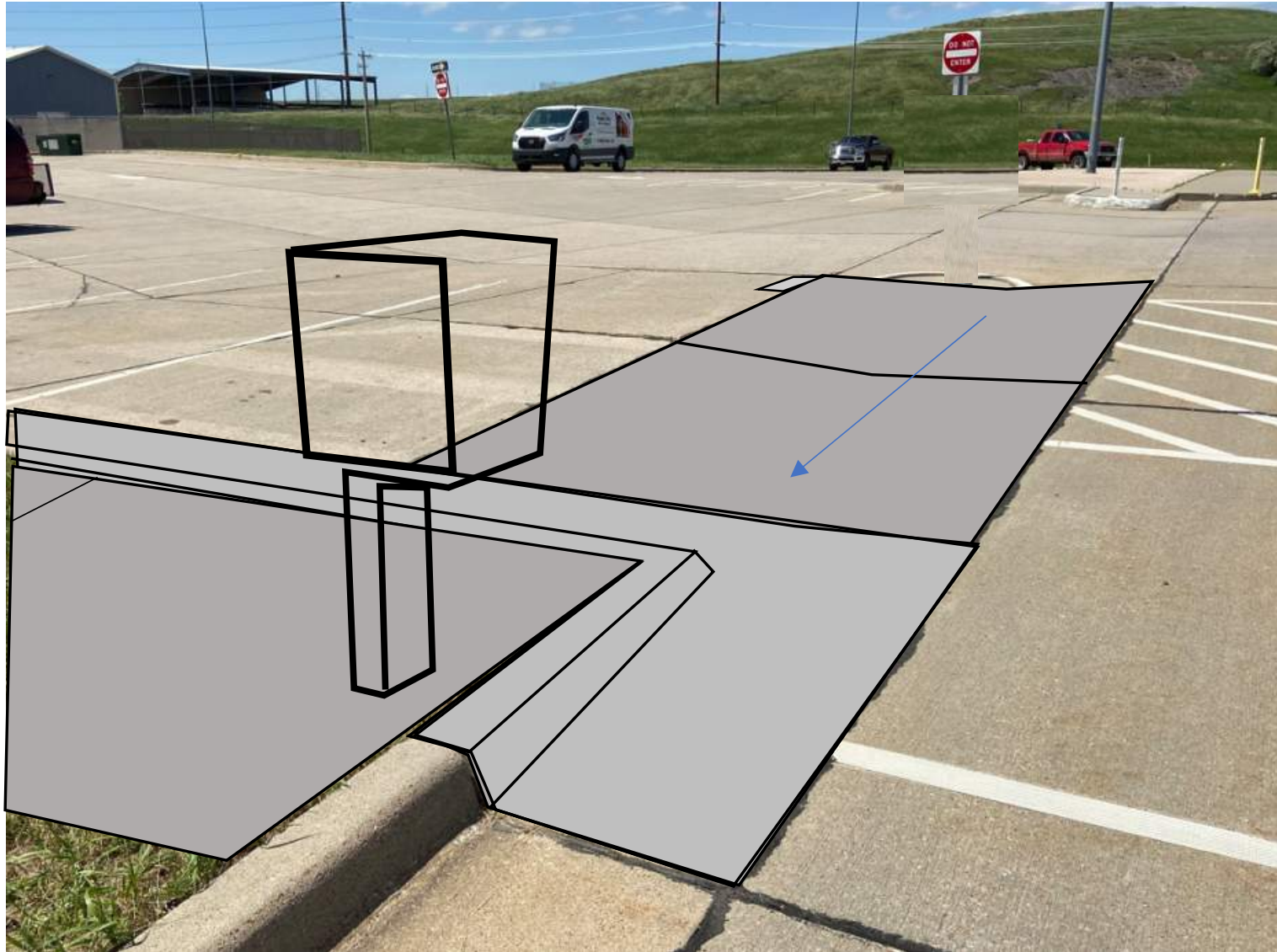


Spall Repair





# Installations at North Entrance





# Installations at West Entrance



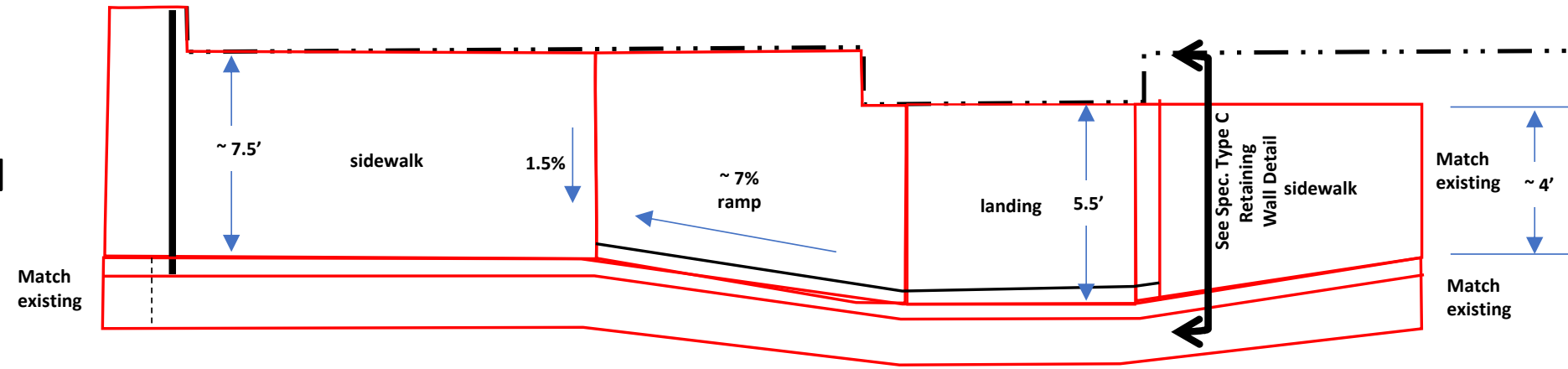


# Installations at Southeast Parking Lot Entrance

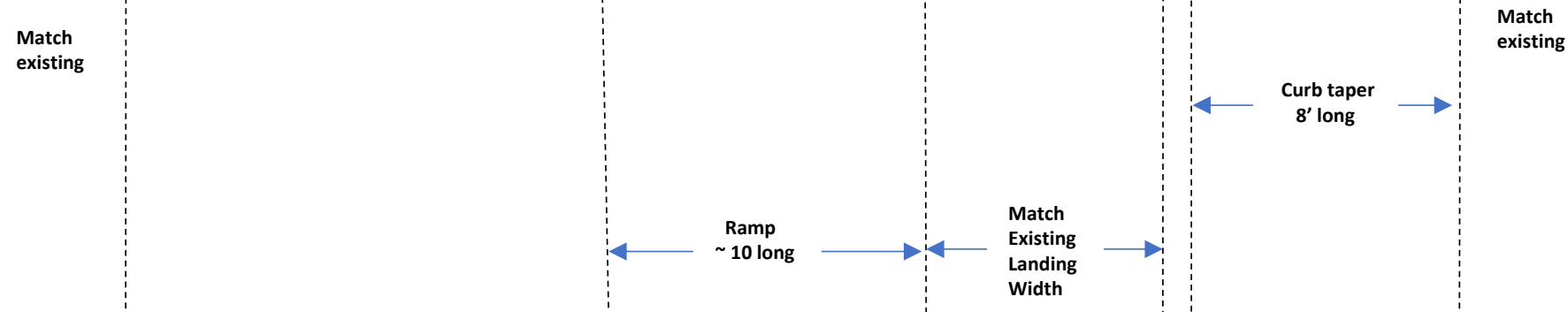
PCC w/ monolithic tapered-down curb section



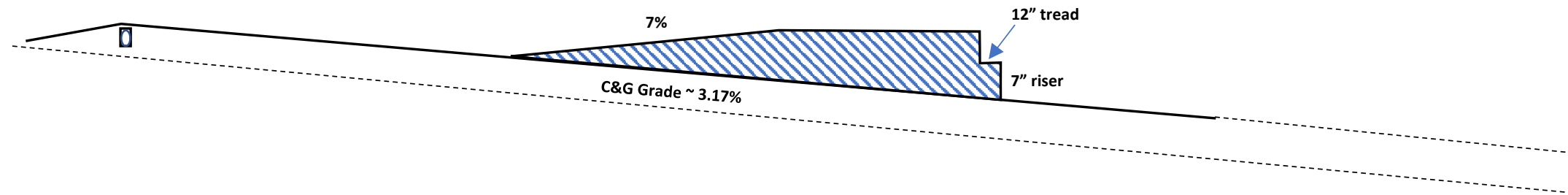
# PLAN



## SOUTH BUILDING ENTRANCE DETAILS



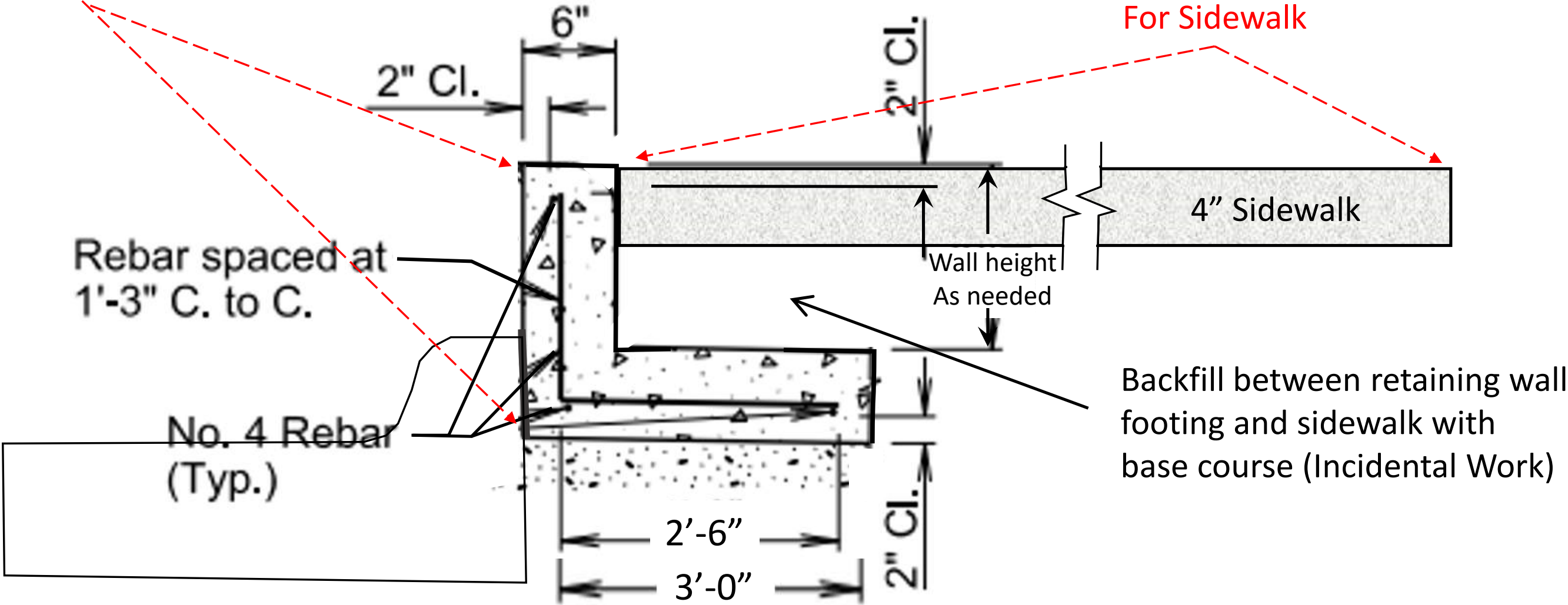
# PROFILE



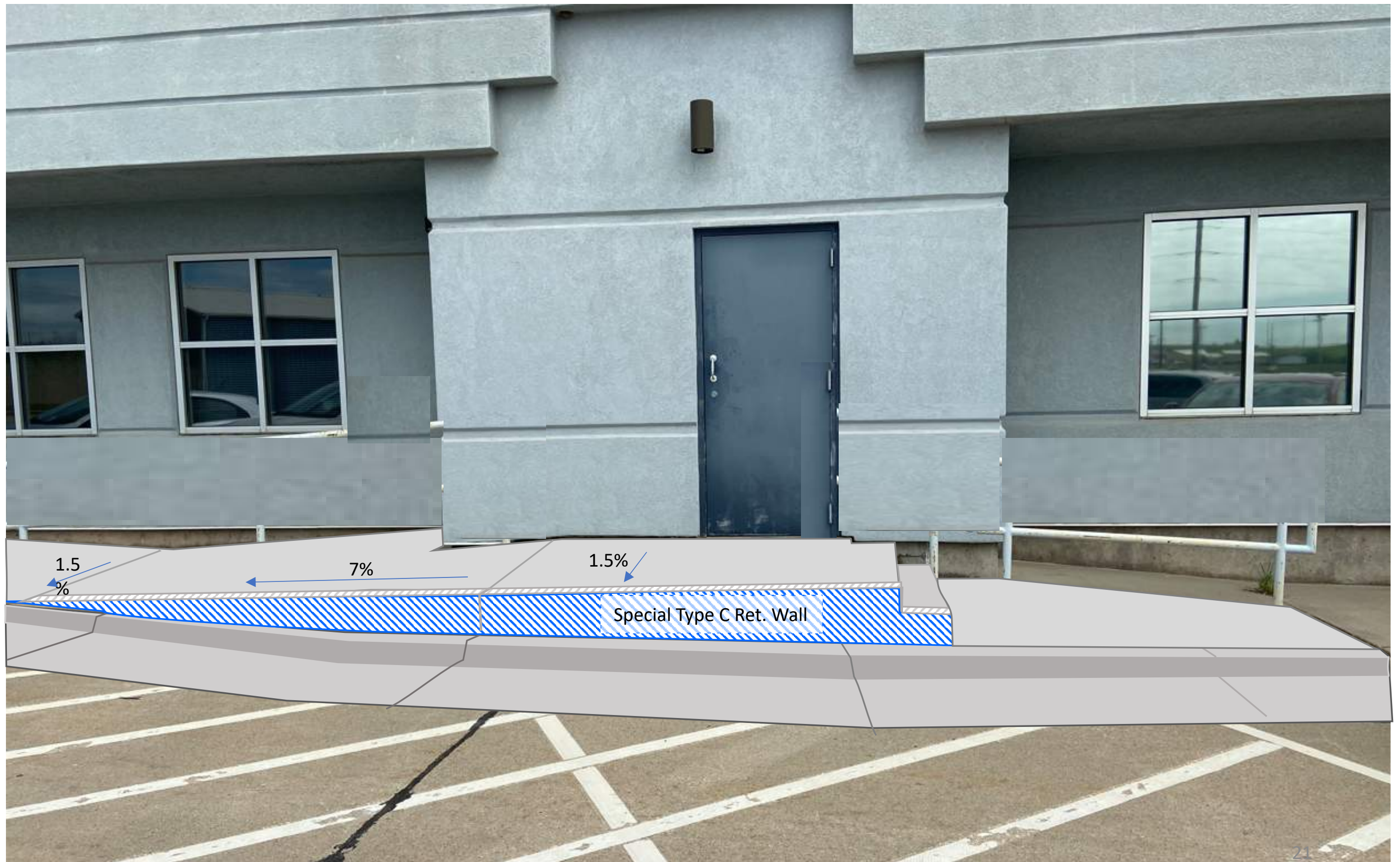
Special Type C Retaining Wall Details

Limits of payment  
For Retaining Wall

Limits of payment  
For Sidewalk





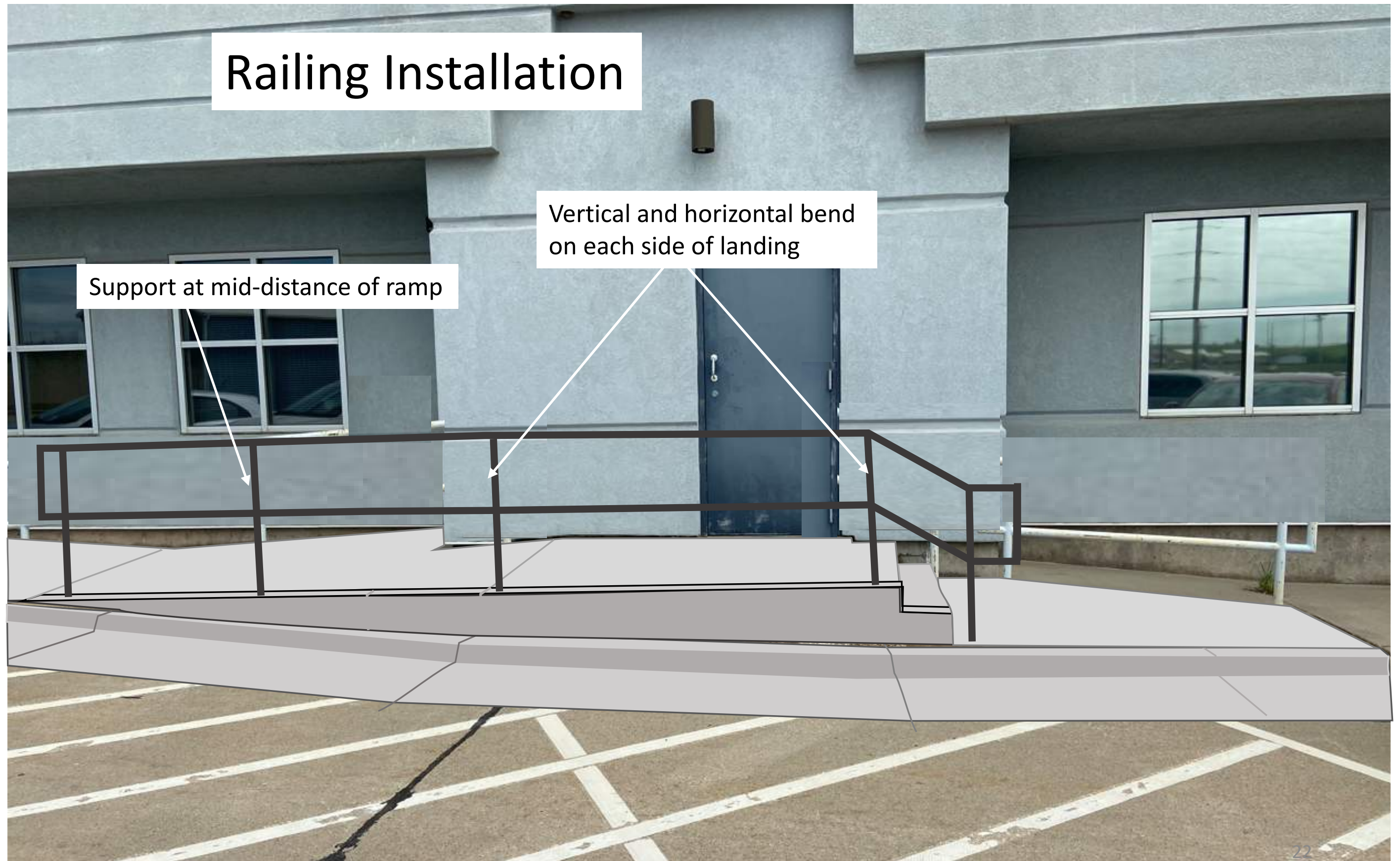




# Railing Installation

Support at mid-distance of ramp

Vertical and horizontal bend  
on each side of landing







**Pavement Marking  
Removal Areas**

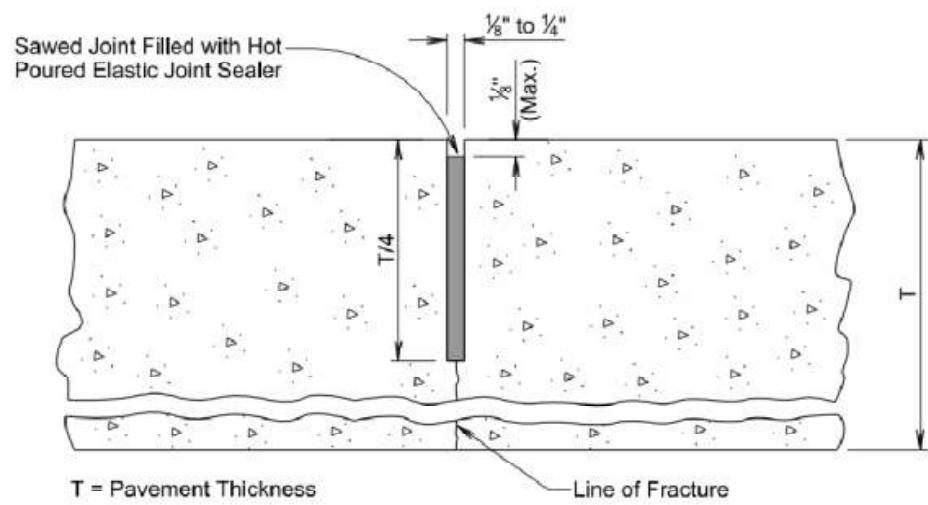
 Removal Areas

ramp  
landing  
ramp

sidewalk ramp landing sidewalk







#### GENERAL NOTES:

If an early entrance saw cut does not develop the full transverse crack, then the saw cut to control cracking will be a minimum  $\frac{1}{4}$  of the thickness of the pavement.

All hot poured elastic joint sealer material spilled on the surface of the concrete pavement will be removed as soon as the material has cooled. The extent of removal of material will be to the satisfaction of the Engineer. All costs for removal of the spilled joint sealer material will be borne by the Contractor.

November 19, 2022

Published Date: 2024	S D D O T	PCC PAVEMENT TRANSVERSE CONTRACTION JOINT WITH OR WITHOUT DOWEL BAR ASSEMBLY	PLATE NUMBER 380.12
			Sheet 1 of 1

The diagram illustrates a cross-section of a full depth saw cut repair. A horizontal dashed line represents the centerline of the pavement, with a total thickness labeled as  $T$  and split into two equal halves of  $T/2$ . A vertical line indicates the location of a 'Full Depth Saw Cut'. To the left of this cut is the 'In Place PCC Pavement', and to the right is the 'New PCC Pavement'. A 'Sawed joint filled with Hot Poured Elastic Joint Sealer' is shown at the interface. An 'Epoxy Coated Deformed Tie Bar' is embedded horizontally across the joint, with a diameter of  $3/8"$  and a length of  $5'$  on each side of the joint. The tie bar is positioned  $9"$  from the centerline in both the in-place and new pavement sections. A 'Drilled Hole' is shown in the in-place pavement, with a diameter of  $5/8"$ .

GENERAL NOTES:

See sheet 2 of 2 of this standard plate to determine if Detail A will be used.

No. 9 epoxy coated deformed tie bars will be used in 10 inch thickness and less PCC Pavement and No. 11 epoxy coated deformed tie bars will be used in 10.5 inch thickness and greater PCC Pavement. The tie bar spacing will be 18 inches center to center and will be a minimum of 3 inches and a maximum of 9 inches from the pavement edges.

The diagram illustrates a cross-section of a pavement joint. On the left is the 'In Place PCC Pavement' and on the right is the 'New PCC Pavement'. A 'Full Depth Saw Cut' is shown at the joint interface. An 'Epoxy Coated Plain Round Dowel Bar' is positioned horizontally across the joint, with 9-inch segments embedded into each pavement slab. A 'Drilled Hole' is shown in the new pavement, 9 inches from the joint. A 'Form Oiled or Greased End' is indicated at the right edge of the new pavement. The total thickness of the pavement is labeled as 'T' on the left, with 'T/2' indicating the depth of the dowel bar from the top and bottom surfaces. A note at the top right states: 'Transverse joint will be the same type used on new PCC pavement. See standard plates 380.12 or 380.13.'

GENERAL NOTES:

See sheet 2 of 2 of this standard plate to determine if Detail B will be used.

The epoxy coated plain round dowel bar size, number, and spacing will be the same as detailed on the corresponding dowel bar assembly standard plate (380.04, 380.05, 380.06, or 380.07). The epoxy coated plain round dowel bars will be a minimum of 3 inches and a maximum of 6 inches from the pavement edges.

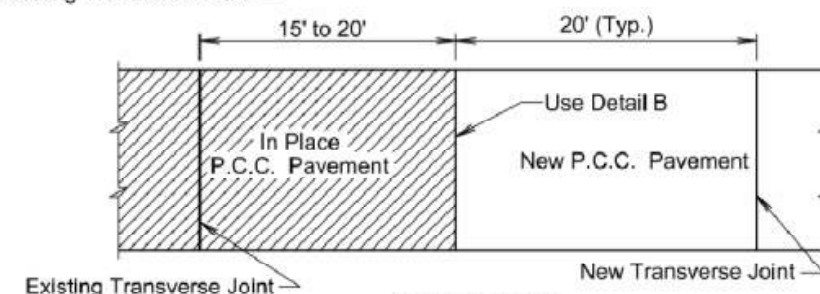
**Published Date:** 2024

**S  
D  
D  
O  
T**

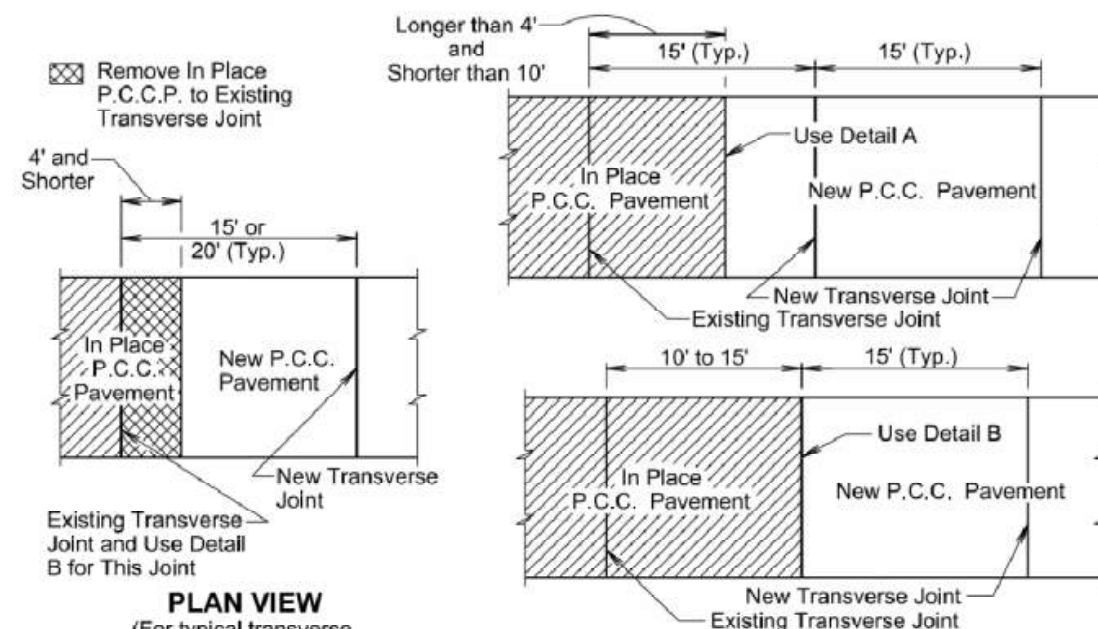
### PCC PAVEMENT TRANSVERSE CONSTRUCTION JOINTS WITH TIE BARS OR DOWEL BARS

PLATE NUMBER  
380.15

Sheet 1 of 2



(For typical transverse joint spacing of 20' on the current project)



(For typical transverse joint spacing of 15' or 20' on the current project)

(For typical transverse joint spacing  
of 15' on the current project)

**Published Date:** 2024

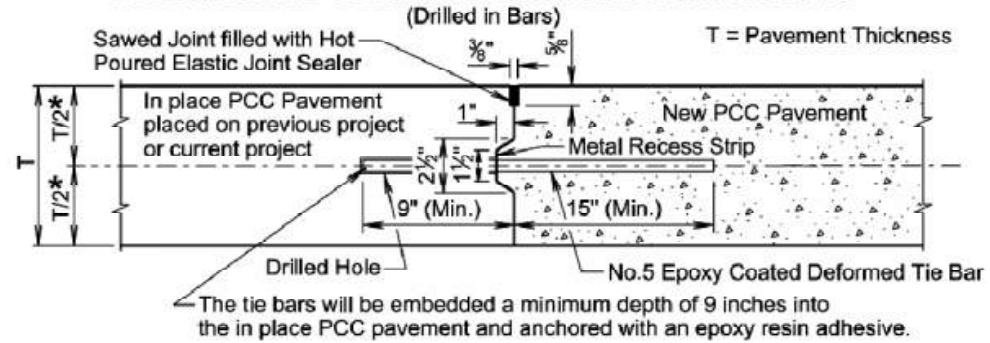
**S  
E  
D  
C  
T**

### PCC PAVEMENT TRANSVERSE CONSTRUCTION JOINTS WITH TIE BARS OR DOWEL BARS

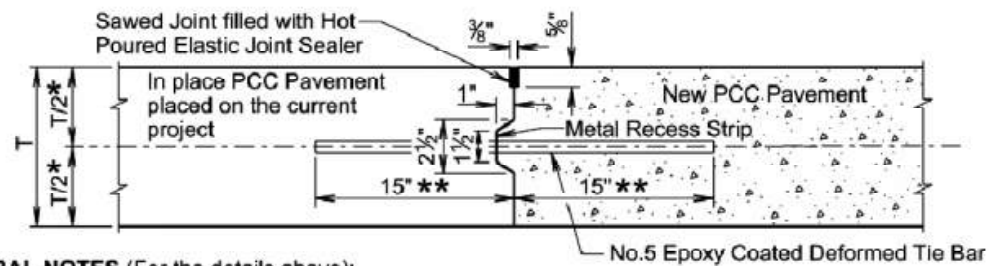
PLATE NUMBER  
380.15

Sheet 2 of 2

### 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.

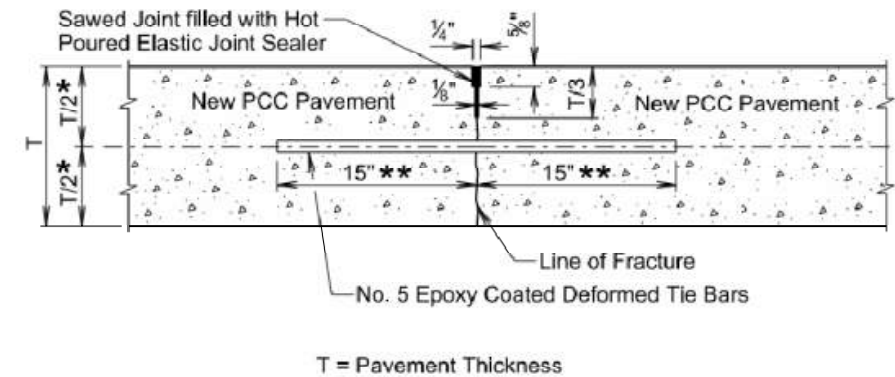
\* The vertical placement tolerance for any part of the tie bar will be  $\pm T/6$ .

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

November 19, 2022

Published Date: 2024	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.

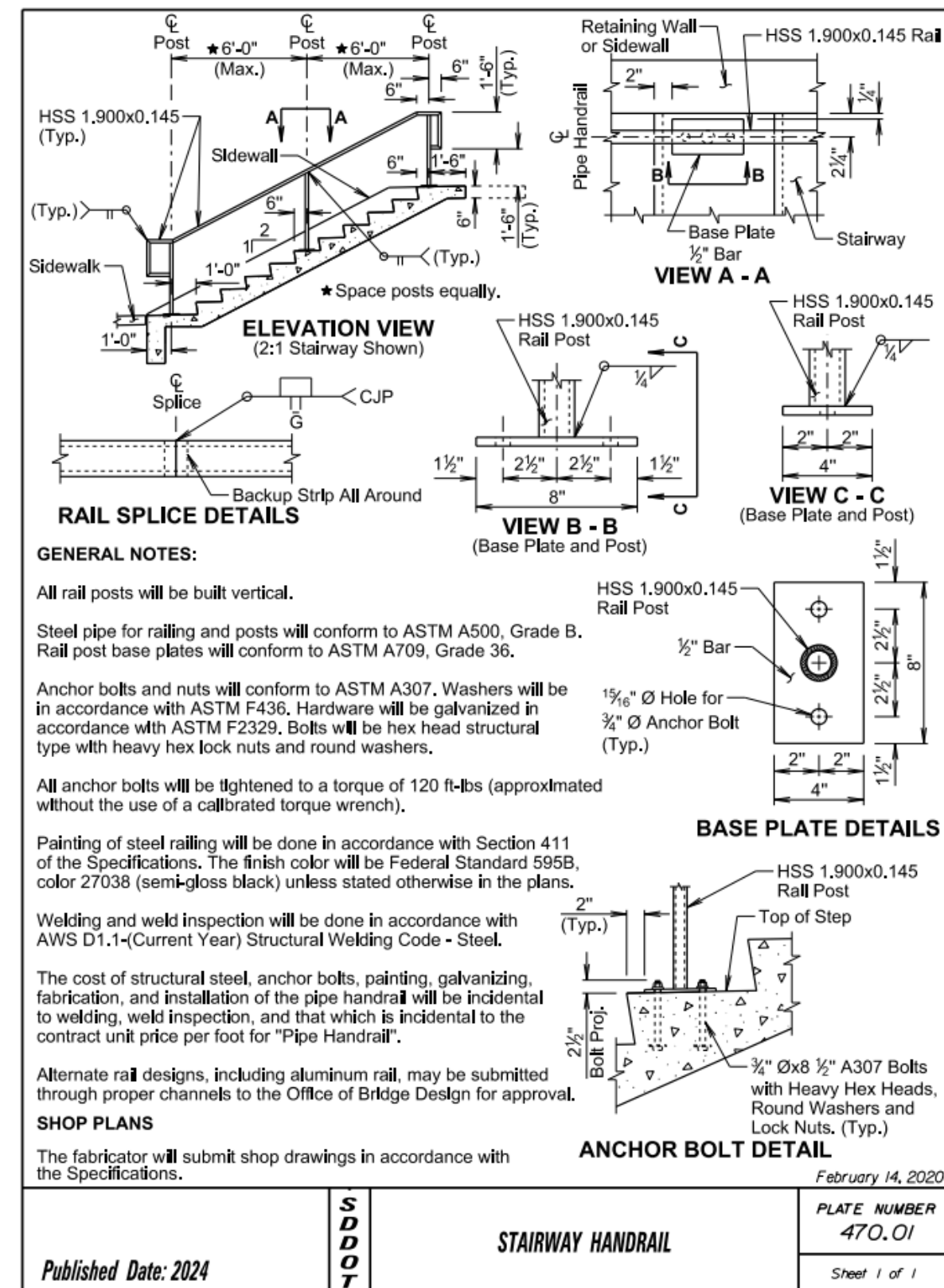
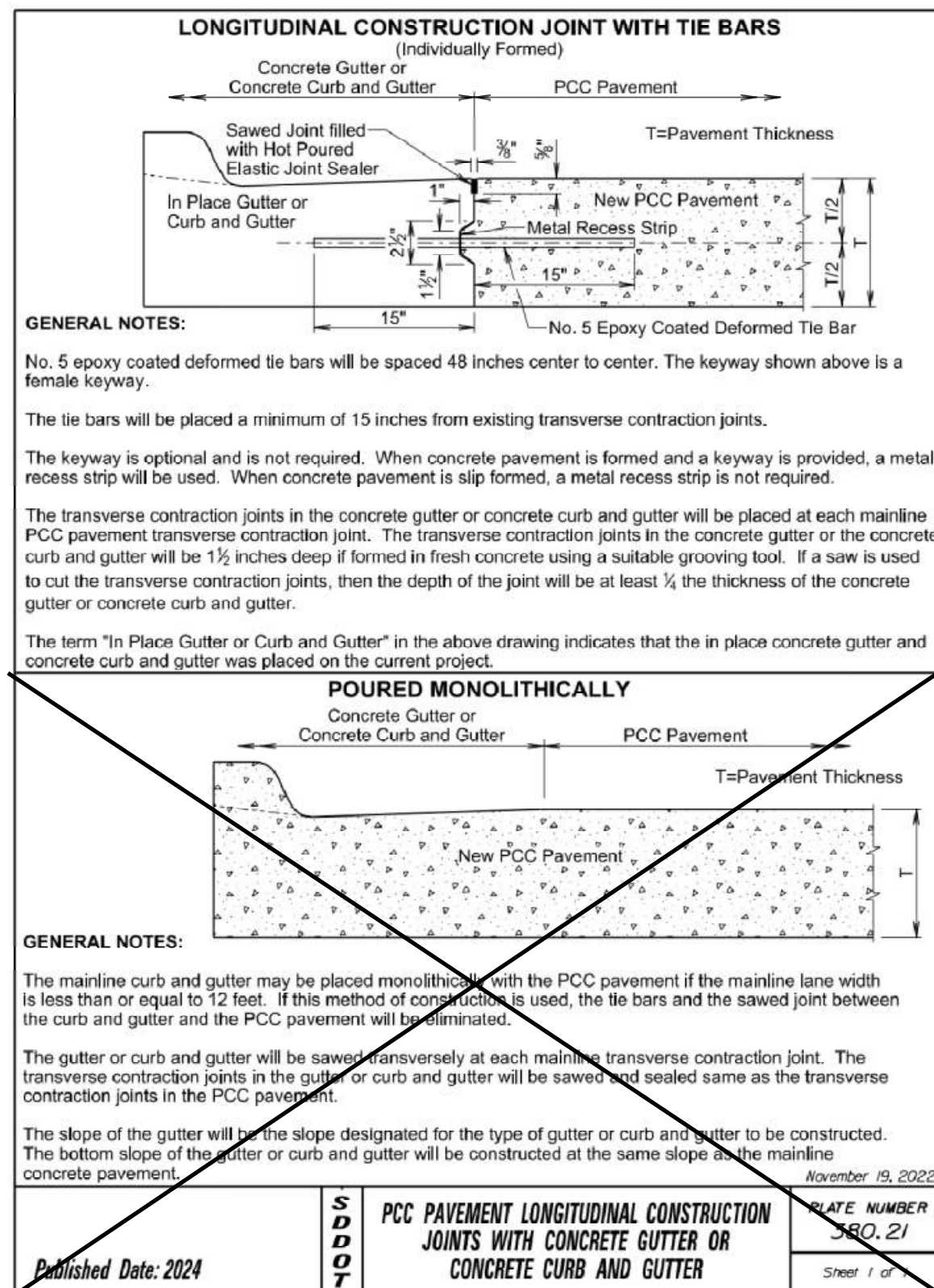
\* The vertical placement tolerance for any part of the tie bar will be  $\pm T/6$ .

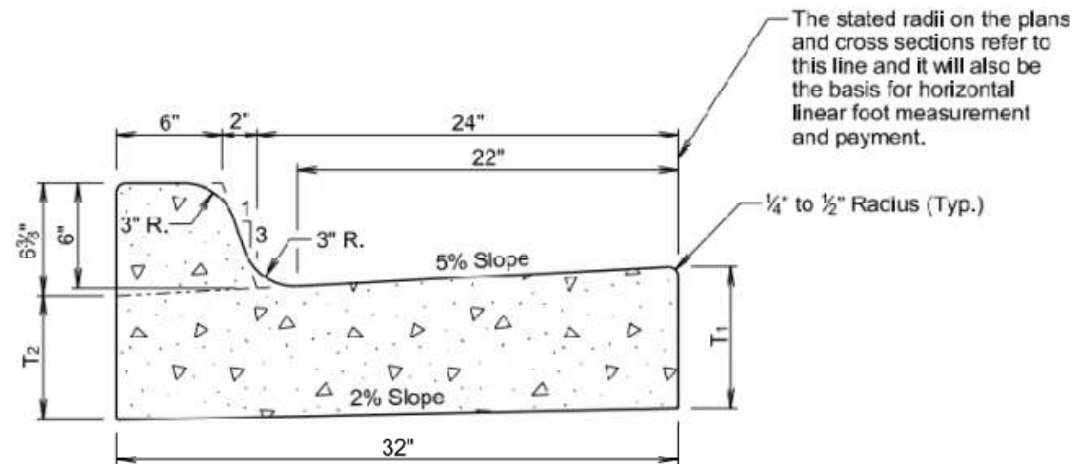
\*\* The transverse placement (side shift) tolerance will be  $\pm 3$  inches when measured perpendicular to the longitudinal joint line.

November 19, 2022

Published Date: 2024	S D D O T	PCC PAVEMENT LONGITUDINAL JOINTS WITH TIE BARS	PLATE NUMBER 380.20
			Sheet 2 of 2







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

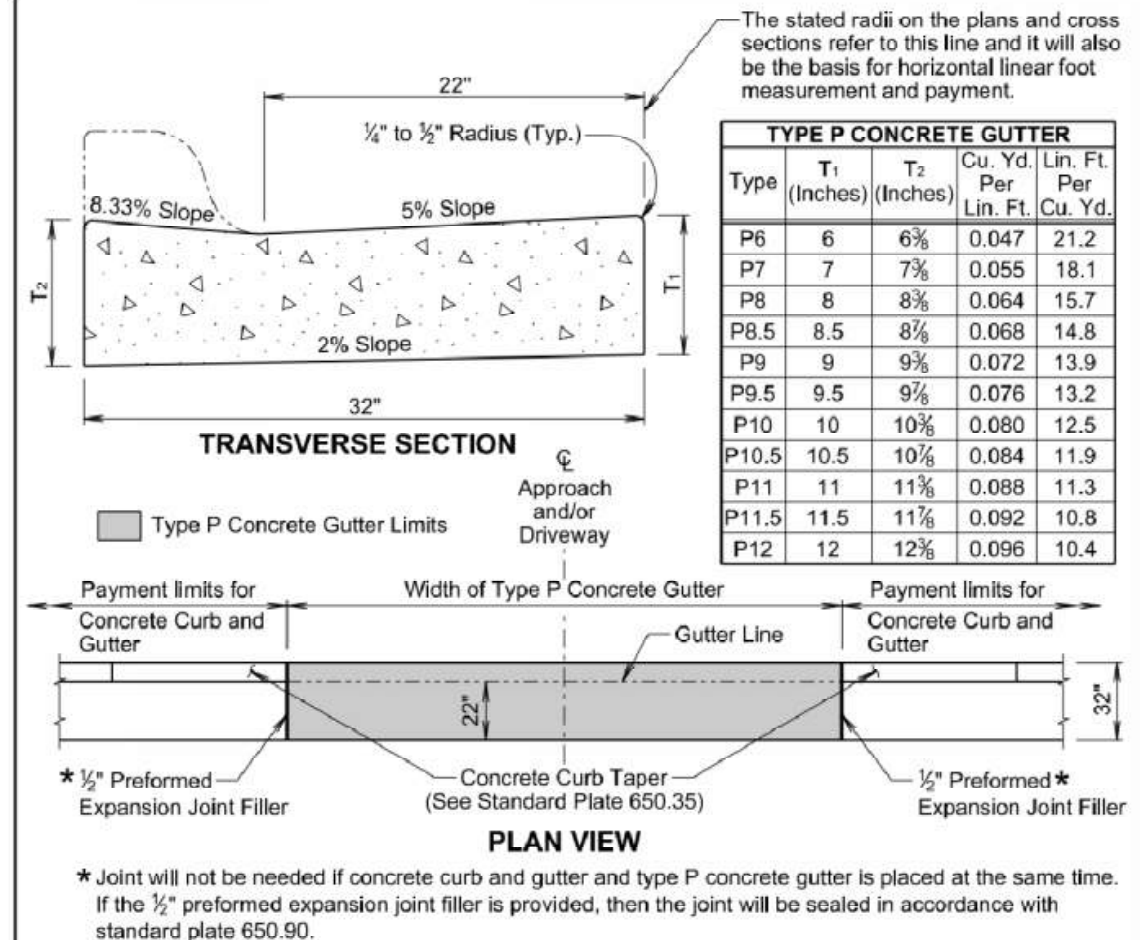
#### GENERAL NOTES:

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: 2024	S D D O T	TYPE B CONCRETE CURB AND GUTTER	PLATE NUMBER
			650.01
			Sheet 1 of 1



Type	T <sub>1</sub> (Inches)	T <sub>2</sub> (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

#### 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.

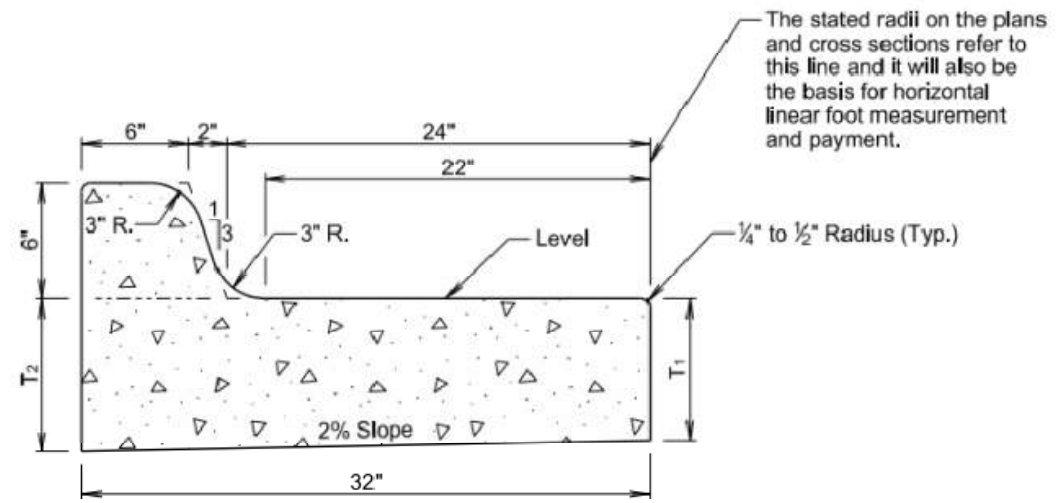
Transverse contraction joints will be constructed at 10-foot intervals in the concrete gutter except when concrete gutter is constructed adjacent to mainline PCC pavement. When concrete gutter is constructed adjacent to mainline PCC pavement, a transverse contraction joint will be constructed in the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

Published Date: 2024	S D D O T	TYPE P CONCRETE GUTTER	PLATE NUMBER
			650.30
			Sheet 1 of 1



TYPE BL CONCRETE CURB AND GUTTER				
Type	T <sub>1</sub> (Inches)	T <sub>2</sub> (Inches)	Cu. Yd. Per Lin. Ft.	Lin. Ft. Per Cu. Yd.
BL66	6	6 $\frac{5}{8}$	0.063	15.9
BL67	7	7 $\frac{5}{8}$	0.071	14.1
BL68	8	8 $\frac{5}{8}$	0.080	12.5
BL68.5	8.5	9 $\frac{1}{8}$	0.084	11.9
BL69	9	9 $\frac{5}{8}$	0.088	11.4
BL69.5	9.5	10 $\frac{1}{8}$	0.092	10.9
BL610	10	10 $\frac{5}{8}$	0.096	10.4
BL610.5	10.5	11 $\frac{1}{8}$	0.100	10.0
BL611	11	11 $\frac{5}{8}$	0.104	9.6
BL611.5	11.5	12 $\frac{1}{8}$	0.108	9.3
BL612	12	12 $\frac{5}{8}$	0.112	8.9

#### 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: 2024

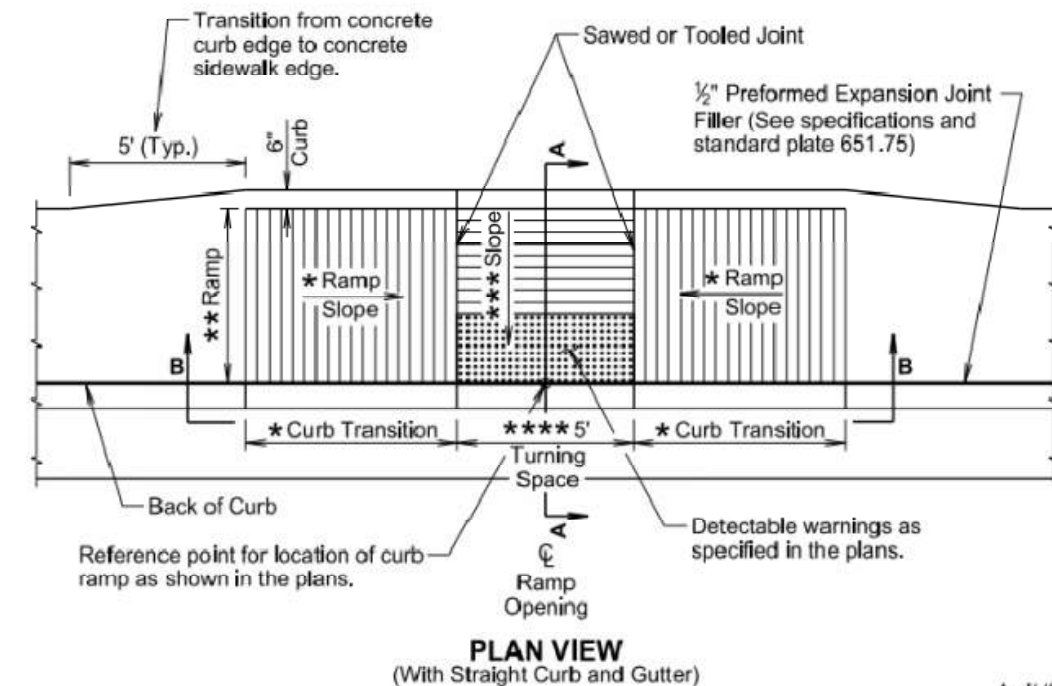
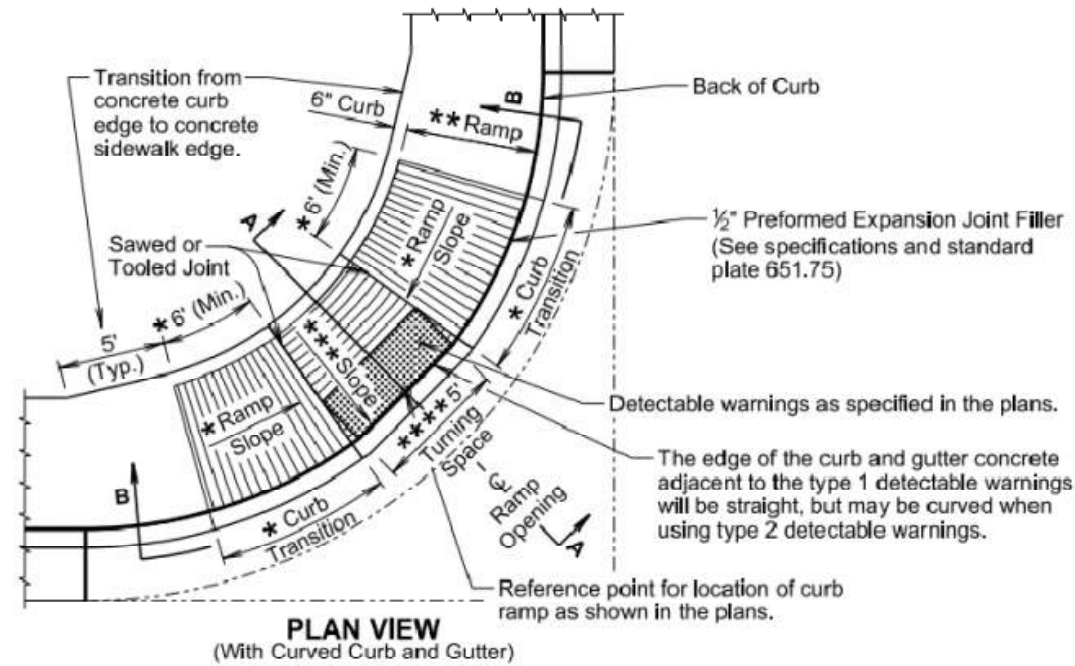
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**TYPE BL CONCRETE CURB AND GUTTER**

PLATE NUMBER  
**650.05**

Sheet 1 of 1





Published Date: 2024

SDOT

TYPE 3 CURB RAMP  
(PARALLEL CURB RAMP)

PLATE NUMBER  
651.03

Sheet 1 of 3

Apr 11 18, 2021

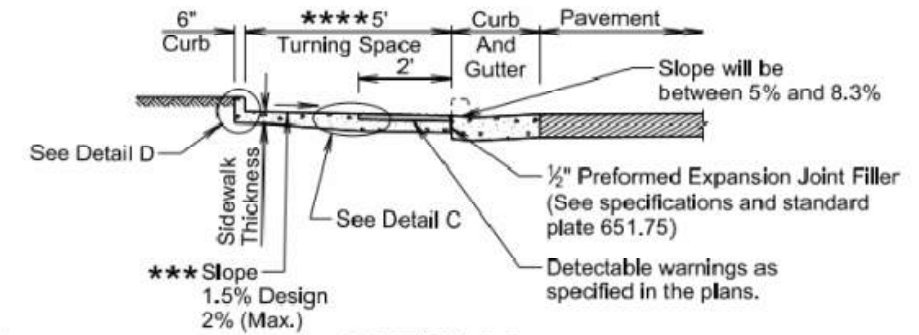
\* The curb transition slope will match the curb ramp slope. Curb ramp slopes are designed at 7.5% unless stated otherwise in the plans. The curb ramp may have a maximum slope of 8.3% at any location of the curb ramp and will not exceed 15' in length unless stated otherwise in the plans. The curb transitions and curb ramp lengths will be adjusted as necessary to meet all slope and length requirements based on field geometrics.

\*\* The cross slope of the ramp will not be steeper than 2% and the ramp width is 5' unless stated otherwise in the plans. Plans are designed using a 1.5% cross slope for the ramp unless stated otherwise in the plans.

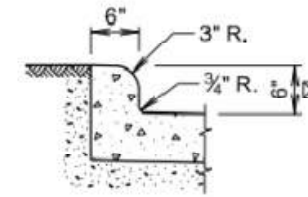
\*\*\* The slope in the turning space will not be steeper than 2% in any direction of pedestrian travel. Plans are designed using a 1.5% slope unless stated otherwise in the plans.

\*\*\*\* The turning space is 5'x5' unless stated otherwise in the plans.

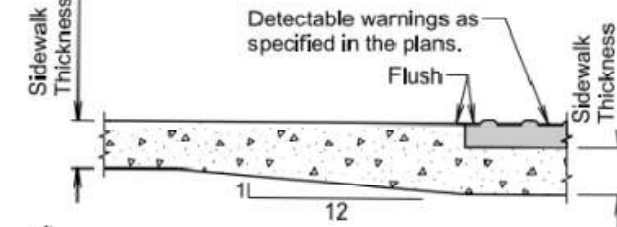
☑ The curb height will be 6" unless stated otherwise in the plans.



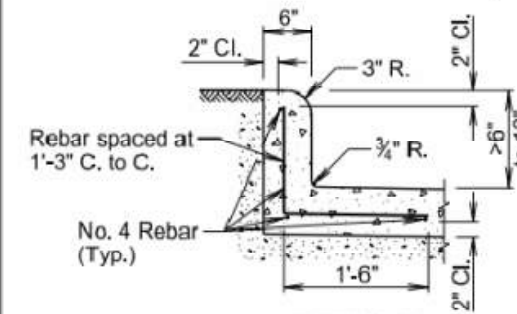
SECTION A-A



DETAIL D

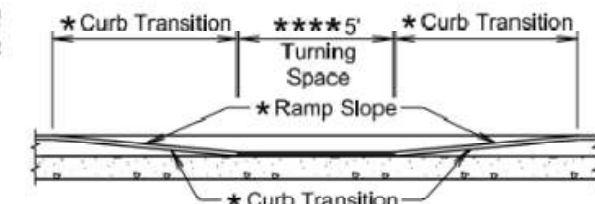


DETAIL C



DETAIL D

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



SECTIONAL VIEW B-B

Published Date: 2024

SDOT

TYPE 3 CURB RAMP  
(PARALLEL CURB RAMP)

PLATE NUMBER  
651.03

Sheet 2 of 3

Apr 11 18, 2021

**GENERAL NOTES:**

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

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

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

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

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

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

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

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

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

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

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

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

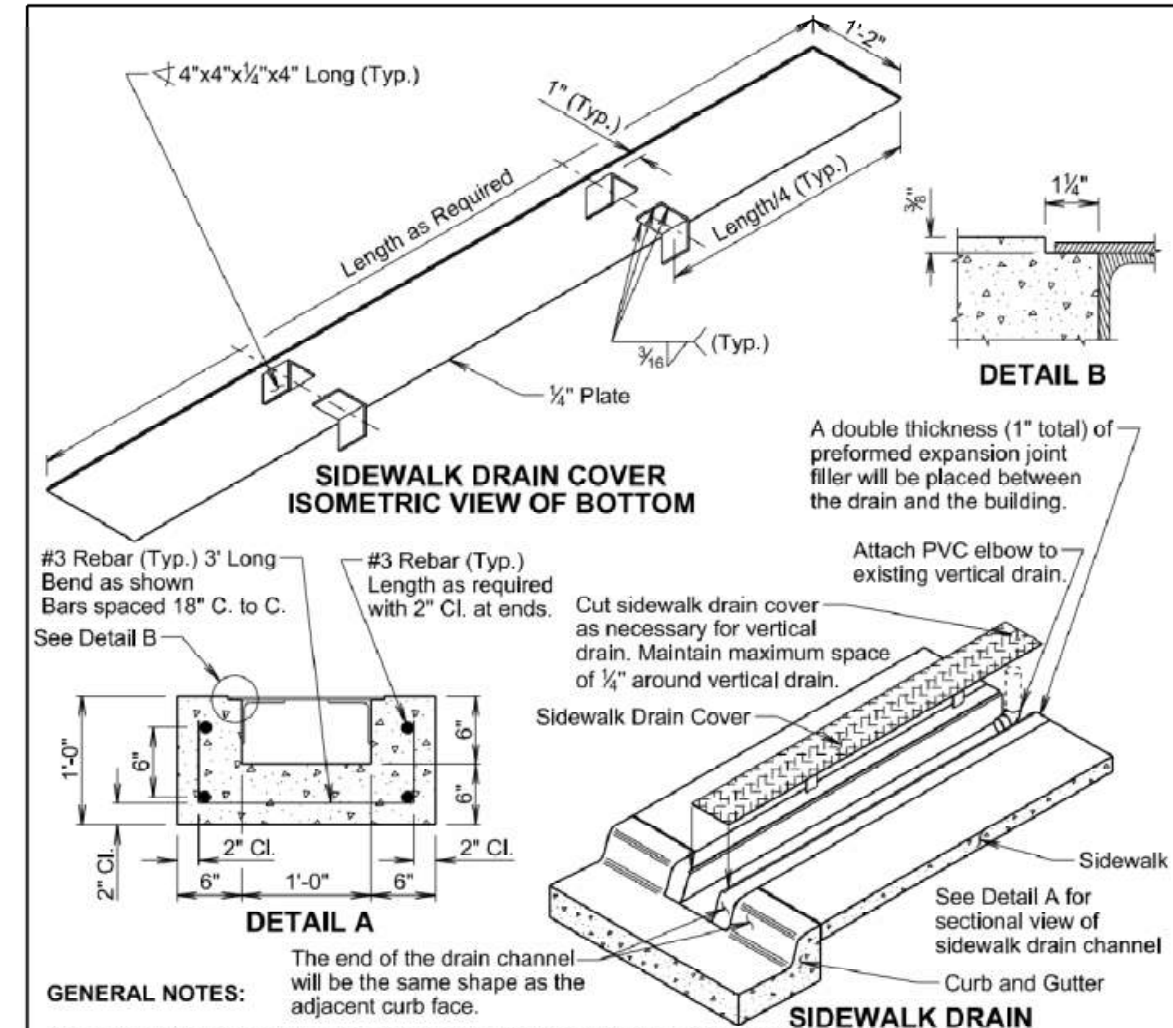
The curb transitions and ramp opening will be measured and paid for at the contract unit price per foot for the corresponding curb and gutter contract item when curb and gutter is used. The curb transitions and ramp opening will be measured and paid for at the contract unit price per square yard for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

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

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

April 18, 2021

Published Date: 2024	S D D O T	TYPE 3 CURB RAMP (PARALLEL CURB RAMP)	PLATE NUMBER
			651.03
			Sheet 3 of 3



**GENERAL NOTES:**

Concrete will be Class M6 in accordance with Section 462 of the Specifications.

Reinforcing steel will conform to ASTM A615, Grade 60.

Structural Steel will conform to ASTM A36. The sidewalk drain cover will conform to ASTM A786.

Welding and weld inspection will be in conformance with the current edition of the AWS D1.1 Structural Welding Code-Steel.

The cover plate assembly will be galvanized after fabrication. Galvanizing will be in accordance with ASTM A123.

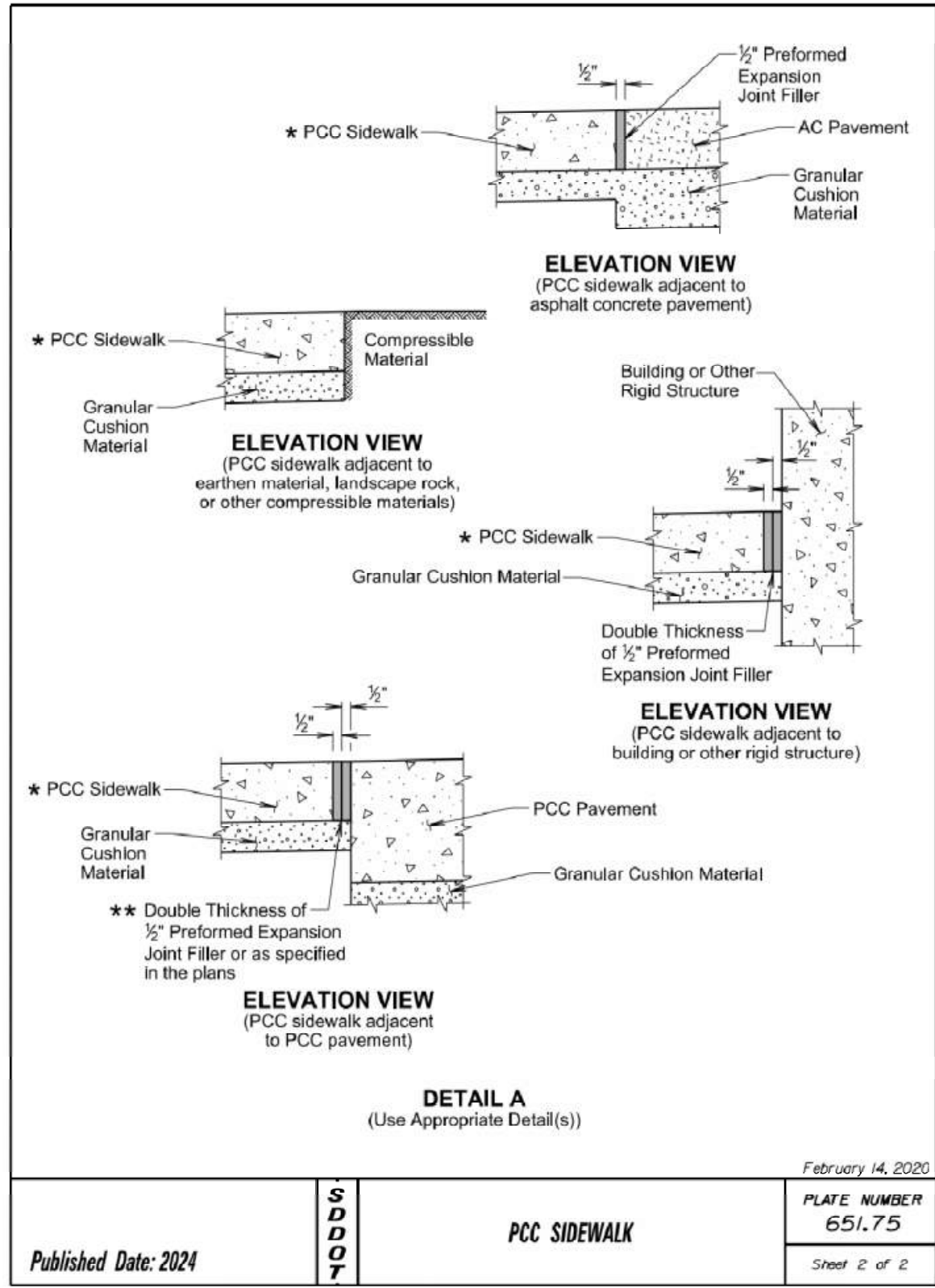
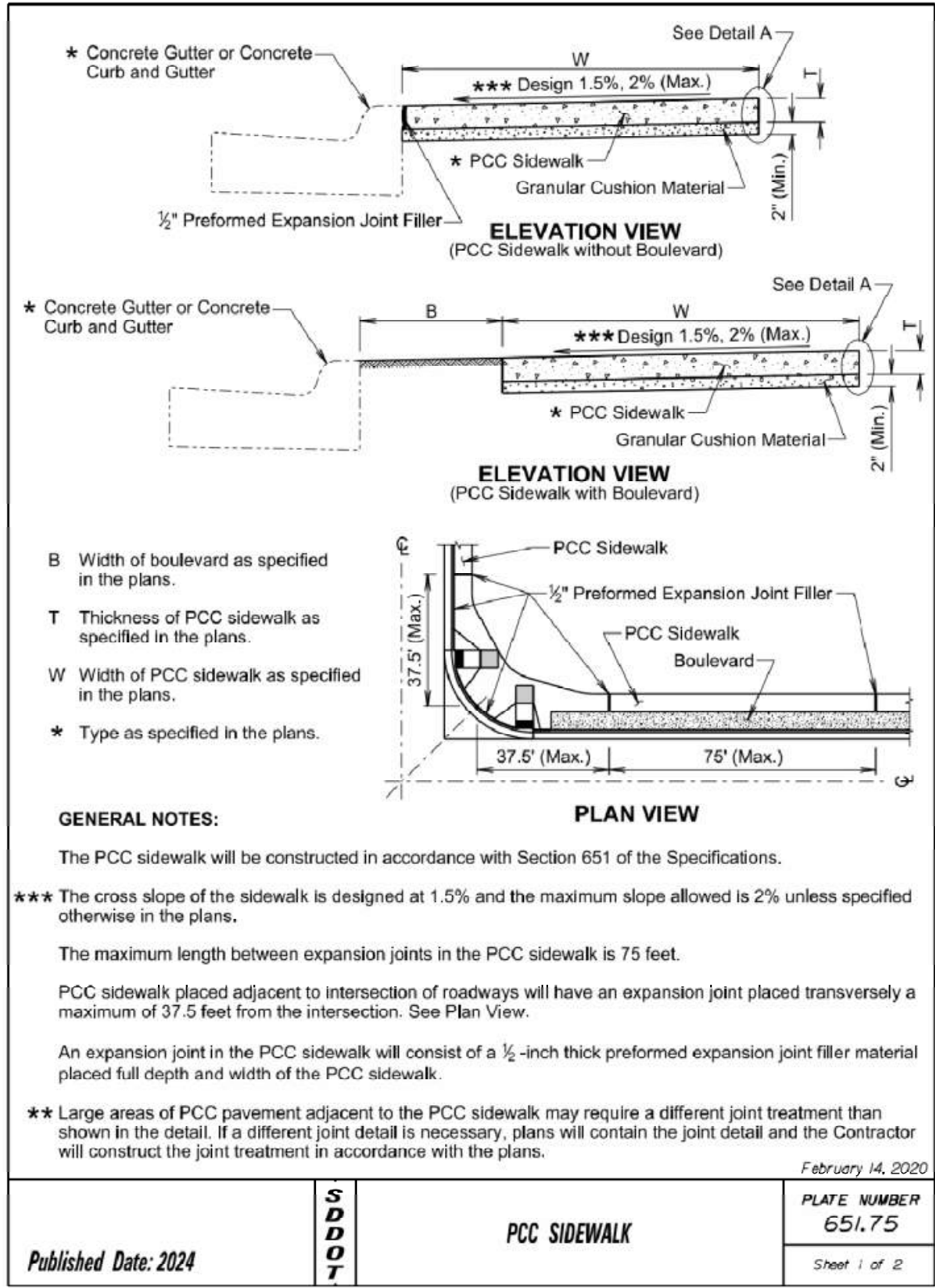
All costs associated for providing the required curb cut will be incidental to the contract unit price per foot for the corresponding curb and gutter contract item.

The sidewalk drain will be measured and paid for to the nearest tenth of a foot. The length of the drain will be measured from the gutter to the necessary end location adjacent to the building. All costs associated with furnishing and installing the sidewalk drain channel and cover including the attachment to the vertical drain will be incidental to the contract unit price per foot for "Sidewalk Drain".

February 14, 2020

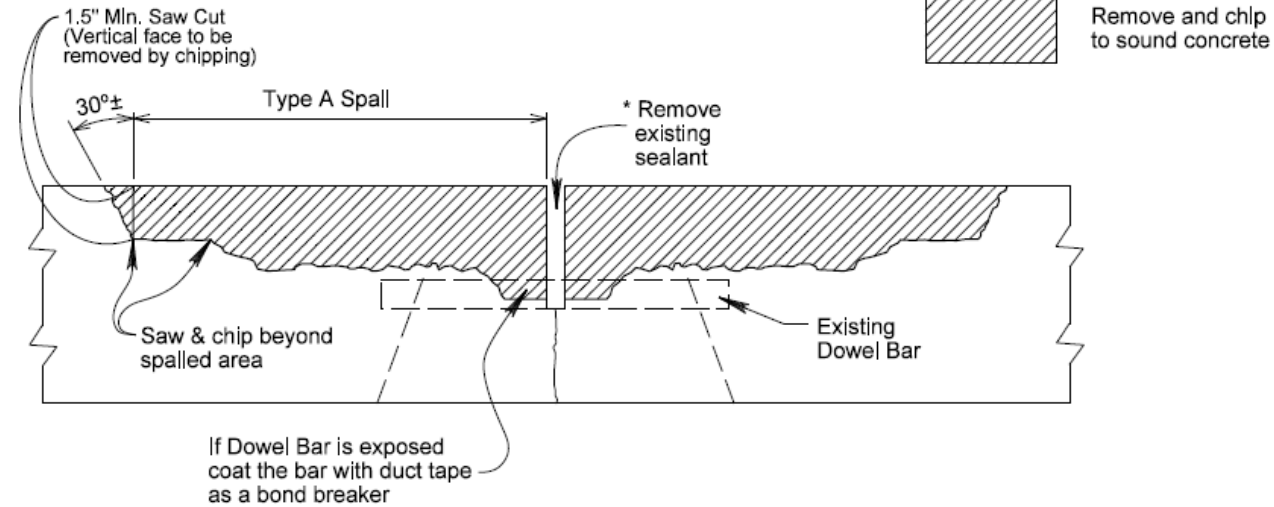
Published Date: 2024	S D D O T	SIDEWALK DRAIN	PLATE NUMBER
			651.50
			Sheet 1 of 1



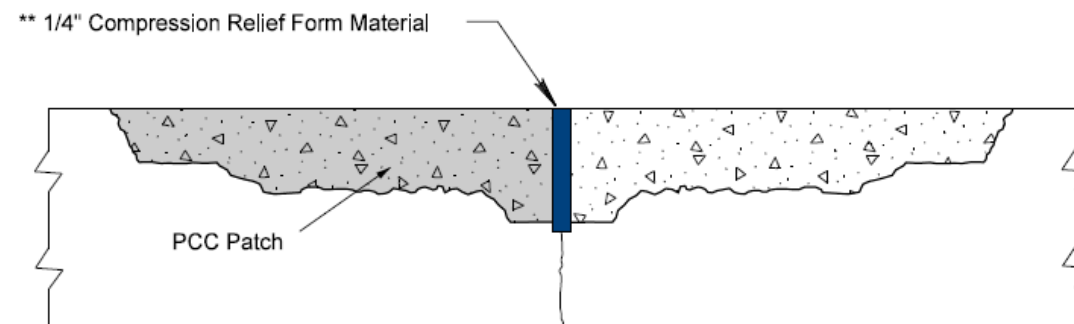


## REPAIR OF TYPE A SPALLS

### SPALL REMOVAL



### SPALL PATCH



\*\* Compression Relief Form Material shall be removed by sawing or other means approved by the Engineer. Spall repaired joints shall then be sealed with Hot Poured Elastic Joint Sealer.

## REPAIR OF TYPE A SPALLS

### SPALL PATCHES (PLAN VIEW)

