

901

Design

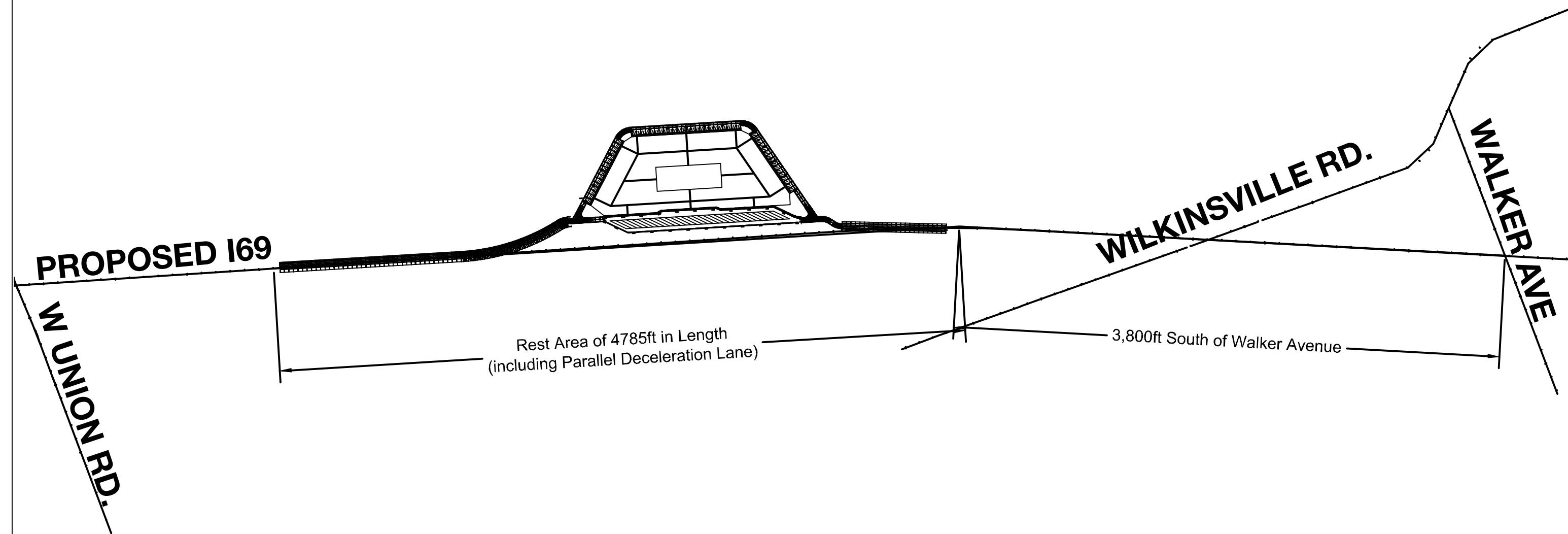
901 DESIGN, INCOPORATED
3720 Alumni Avenue,
Memphis TN, 38111
Tel: (901) 978-9000
Email: 901design@memphis.edu

Project

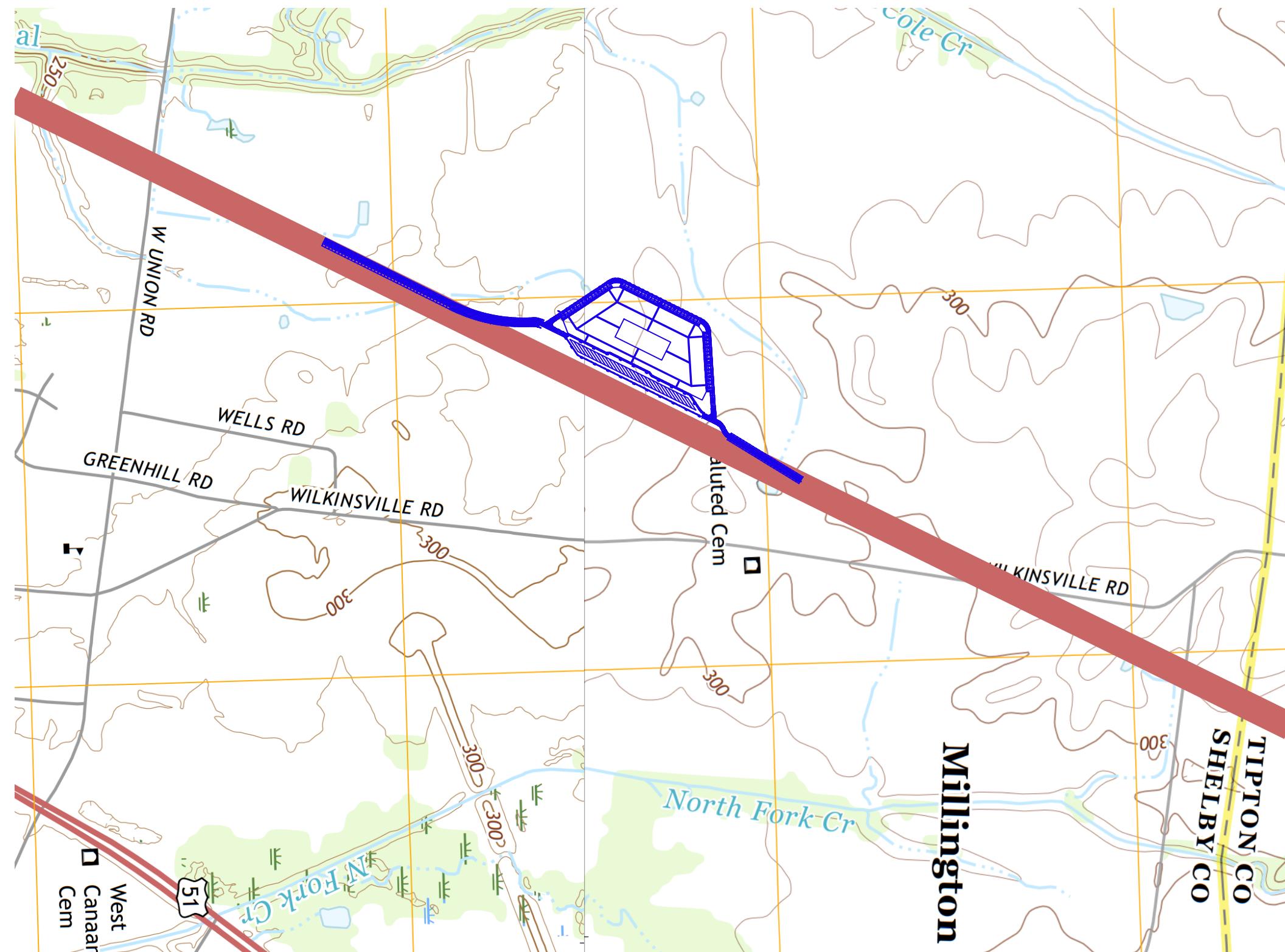
REST AREA ADJACENT TO PROPOSED I69

List of Drawings

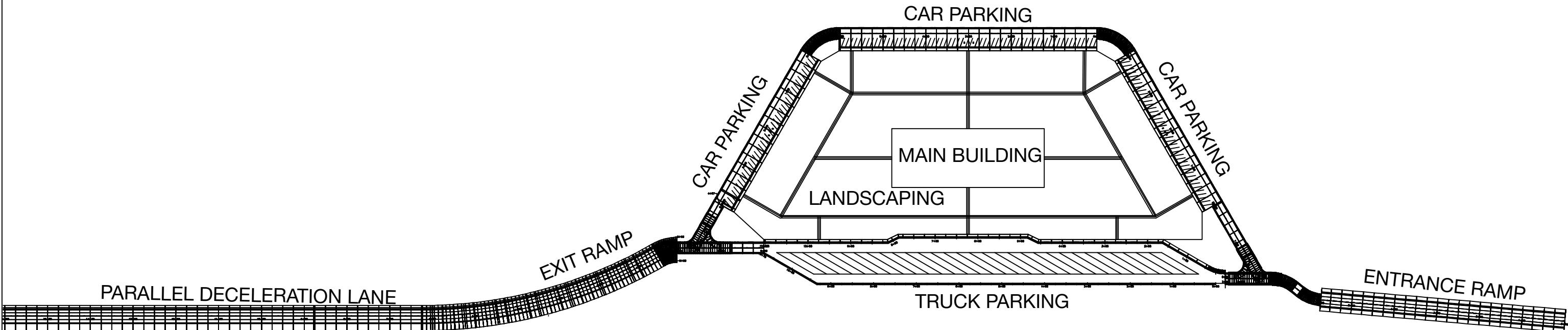
- | | |
|--|--------------------------------|
| S.1 Project Location | S.D.1 Road Alignment 1 |
| S.2 Initial Site Topography | S.D.2 Road Alignment 2 |
| S.3 Overall Site Layout | S.D.3 Entrance Ramp |
| S.A.1 Plumbing Plan | S.D.4 Entrance Ramp Details |
| S.A.2 RSF System | S.D.5 Exit Ramp 1 |
| S.A.3 Overall Layout | S.D.6 Exit Ramp 1 Details |
| S.B.1 Front View | S.D.7 Exit Ramp 2 |
| S.B.2 Side View | S.D.8 Exit Ramp 2 Details |
| S.B.3 Back View | S.D.9 Exit Ramp 3 |
| S.B.4 Complete Frame | S.D.10 Exit Ramp 3 Details |
| S.B.5 Roof System | S.D.11 Car Parking |
| S.B.6 Truss | S.D.12 Truck Parking |
| S.B.7 Truss to Column | S.D.13 Inner Roadways |
| S.B.8 Roof Connections | S.D.14 Other Details 1 |
| S.B.9 Floorplan | S.D.15 Accessible Parking |
| S.C.1 Foundation Plan View | S.D.16 Road Signage 1 |
| S.C.2 Welded Wire Reinforcement Plan View | S.D.17 Road Signage 2 |
| S.C.3 Long Direction Beam and Slab Detail | S.D.18 Other Details 2 |
| S.C.4 Short Direction Beam and Slab Detail | S.D.19 Perpendicular Curb Ramp |
| | S.D.20 Smart Park Facilities |
| | S.E.1 Drainage Plan View |
| | S.E.2 Retention Detail |
| | S.E.3 Ditch Detail |
| | S.E.4 Pipe and Inlet Detail |
| | S.E.5 Storm Water Connection |



Local Engineering Firm 901 Design 901 DESIGN, INCOPORATED 3720 Alumni Avenue, Memphis TN, 38111 Tel: (901) 978-9000 Email: 901design@memphis.edu	Lead Engineer	Huan Ngo	REST AREA ADJACENT TO PROPOSED I69 Drawing Title PROJECT LOCATION	File Name	S.1. Project Location
	Designed by	901 DESIGN		Drawing No.	S.1
	Drawn by	Huan Ngo		Paper Size	11" x 17"
	Checked by	901 DESIGN		Issued Date	11/28/2018

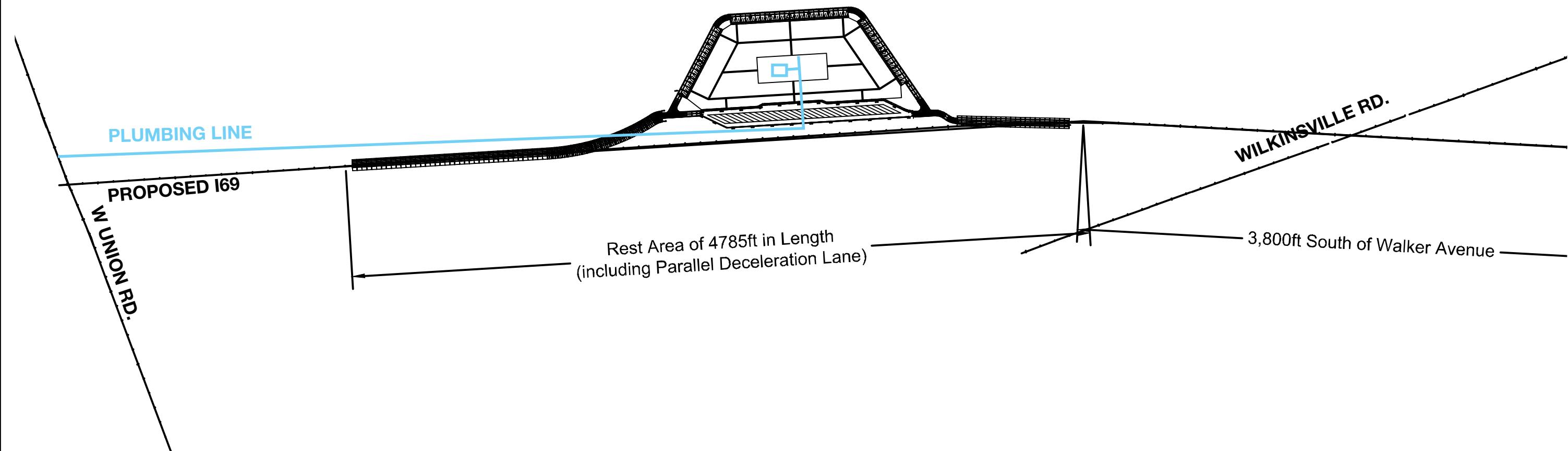


Local Engineering Firm 901 Design 901 DESIGN, INCOPORATED 3720 Alumni Avenue, Memphis TN, 38111 Tel: (901) 978-9000 Email: 901design@memphis.edu	Lead Engineer	Huan Ngo	Project REST AREA ADJACENT TO PROPOSED I69 Drawing Title INITIAL SITE TOPOGRAPHY	File Name	S.2 Initial Site Topography
	Designed by	901 DESIGN		Drawing No.	S.2
	Drawn by	Huan Ngo		Paper Size	11" x 17"
	Checked by	901 DESIGN		Issued Date	11/28/2018

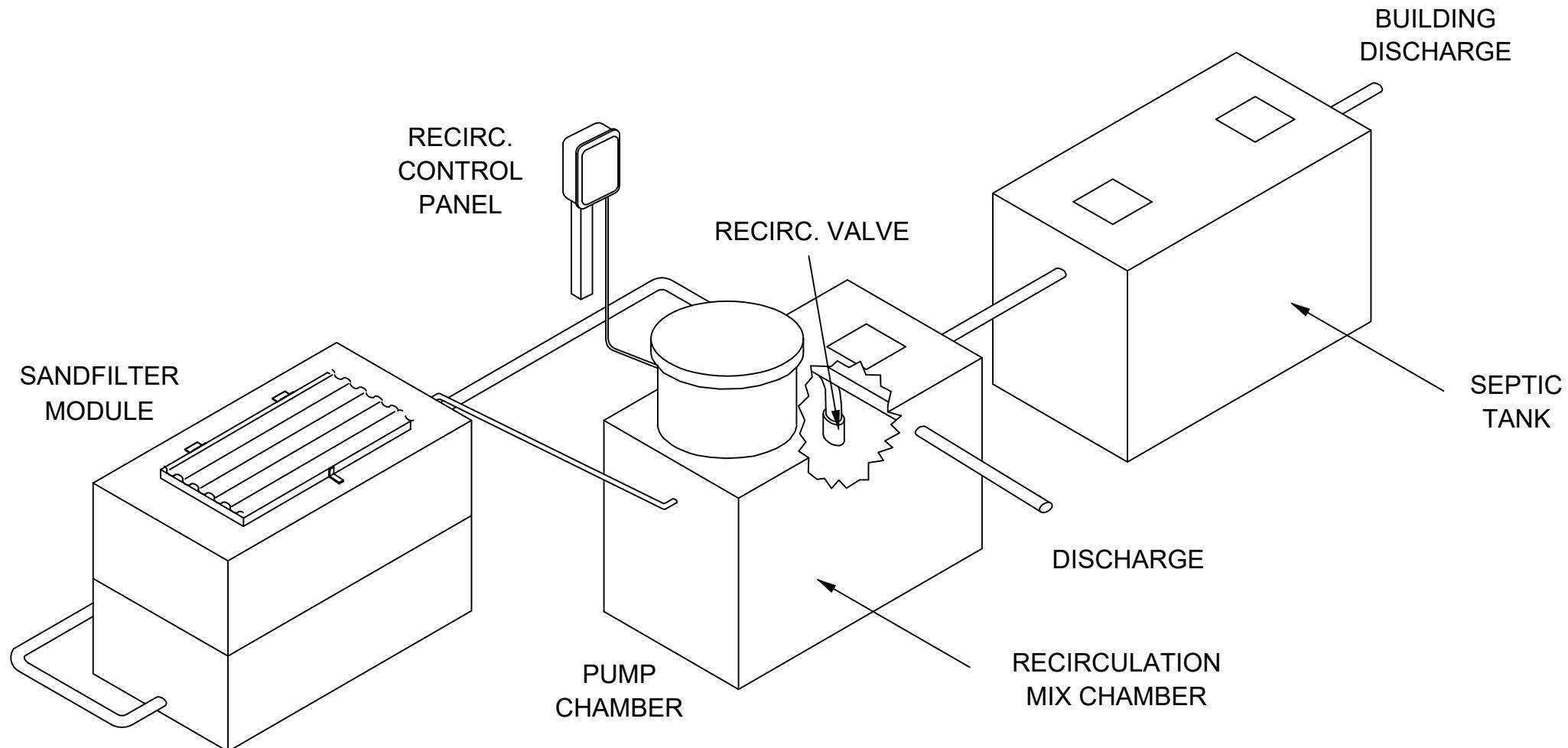


*NOTE: DETAIL DIMENSION AND ALIGNMENT ARE SHOWN IN THE S.D TRANSPORTATION SET OF DRAWINGS

<p>Local Engineering Firm 901 Design 901 DESIGN, INCOPORATED 3720 Alumni Avenue, Memphis TN, 38111 Tel: (901) 978-9000 Email: 901design@memphis.edu</p>	Lead Engineer	Huan Ngo	<p>Project REST AREA ADJACENT TO PROPOSED I69 Drawing Title OVERALL LAYOUT</p>	File Name	S.3 Overall Layout
	Designed by	901 DESIGN		Drawing No.	S.3
	Drawn by	Huan Ngo		Paper Size	11" x 17"
	Checked by	901 DESIGN		Issued Date	11/28/2018



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	Designed by	901 DESIGN		Drawing No.	S.A.1
	Drawn by	Huan Ngo		Paper Size	11" x 17"
	Checked by	901 DESIGN		Issued Date	11/28/2018

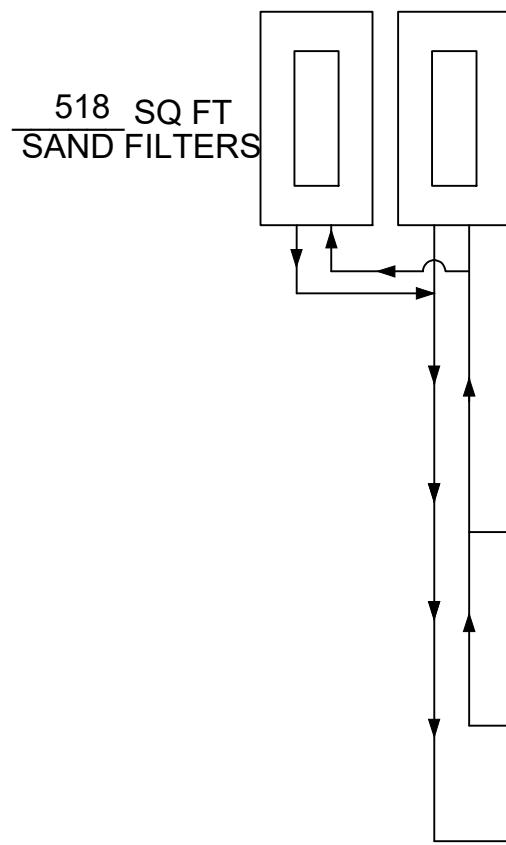


RECIRCULATING SAND FILTER SYSTEM

SCOPE: HOUSEHOLD SEWAGE WILL FLOW BY GRAVITY THROUGH A TREATMENT UNIT, TYPICALLY A SEPTIC TANK, TO THE SANDFILTER FEED TANK. FROM THE SANDFILTER FEED TANK THE EFFLUENT IS PUMPED TO THE SANDFILTER WHERE, AFTER TREATMENT, IT FLOWS BY GRAVITY TO A RECIRC VALVE WHERE ALL OF THE EFFLUENT WILL BE SENT BACK TO THE RECIRCULATION TANK AND THE OVERFLOW TO DISPOSAL. IF SURFACE DISCHARGE, CHLORINATE THE EFFLUENT AND FLOW BY GRAVITY THROUGH A SERIES OF CHLORINE CONTACT CHAMBERS. THE FINAL CONTACT CHAMBER WILL ALSO ACT AS A SAMPLE MODULE. FROM THE CONTACT CHAMBERS THE EFFLUENT WILL FLOW BY GRAVITY TO A DISCHARGE POINT.

Local Engineering Firm	
 901 Design	901 DESIGN, INCOPORATED 3720 Alumni Avenue, Memphis TN, 38111 Tel: (901) 978-9000 Email: 901design@memphis.edu
General Director Huan Ngo	
Lead Engineer	Huan Ngo
Designed by	Mark Rippy
Drawn by	Mark Rippy
Checked by	Huan Ngo
Project	
REST AREA ADJACENT TO PROPOSED I69	
Drawing Title	
RSF SYSTEM	
File Name	S.A.2 RSF SYSTEM
Drawing No.	S.A.2
Paper Size	11" x 17"
Issued Date	11/28/18

TWO
SAND FILTER MODULES
NOT TO SCALE

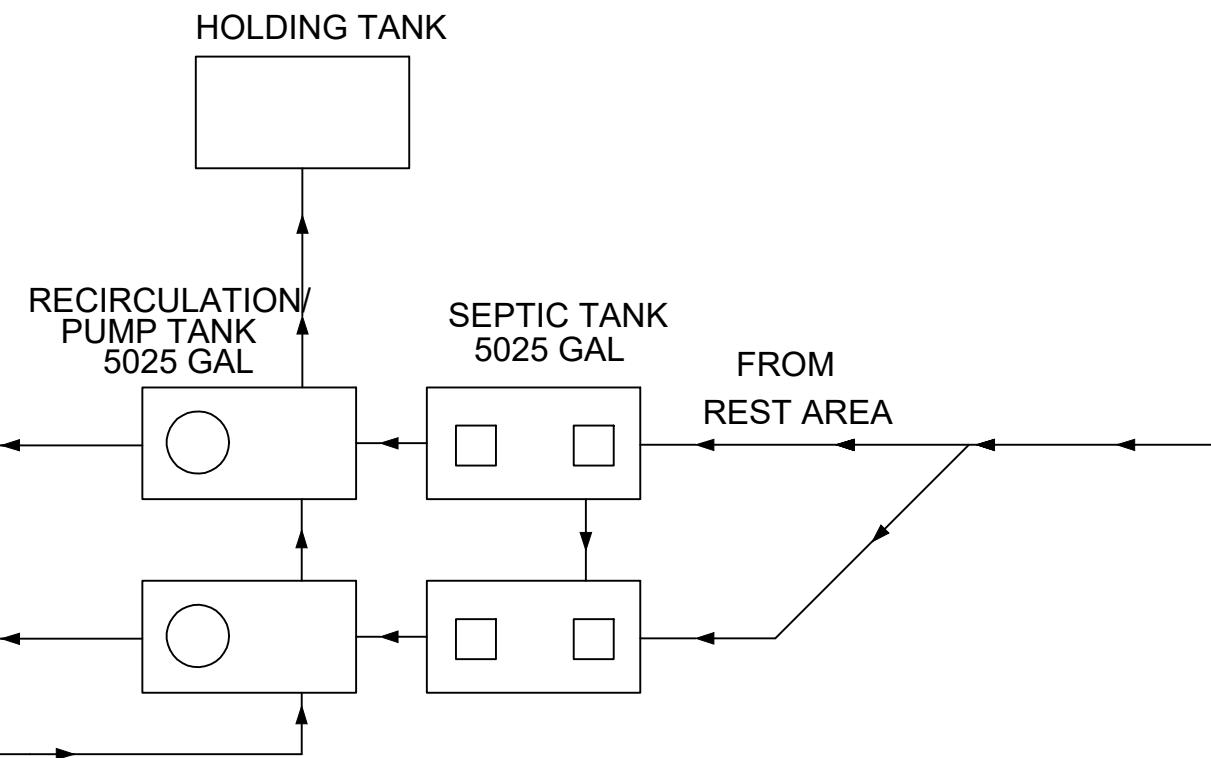


TANK information:

2-5025 GALLON SEPTIC TANKS, 2-5025 GALLON

SANDFILTER DOSE TANKS, 2-518 SQ. FT.

SANDFILTER TANK. INSTALL TANKS TO AVOID SWALES
OR LOW LYING AREAS!



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General Director
Huan Ngo

Lead Engineer Huan Ngo

Designed by Mark Rippy

Drawn by Mark Rippy

Checked by Huan Ngo

Project

**REST AREA ADJACENT
TO PROPOSED I69**

Drawing Title

OVERALL LAYOUT

File Name S.A.3 Overall Layout

Drawing No. S.A.3

Paper Size 11" x 17" Issued Date 11/28/18



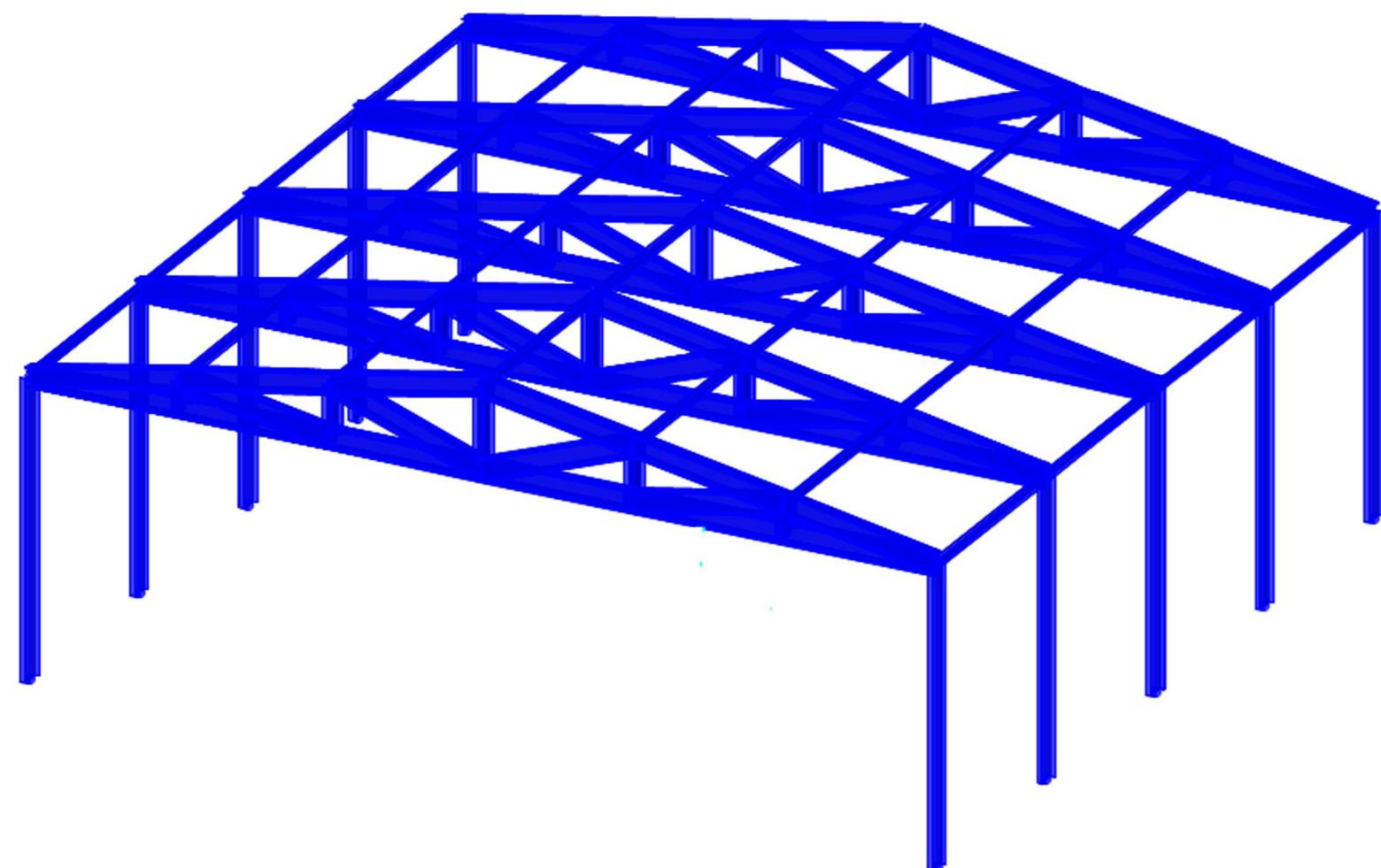
Local Engineering Firm	
 901 Design	901 DESIGN, INCOPORATED 3720 Alumni Avenue, Memphis TN, 38111 Tel: (901) 978-9000 Email: 901design@memphis.edu
<hr/>	
Lead Engineer	Steve Thusius
Designed by	Steve Thusius
Drawn by	Steve Thusius
Checked by	Mark Rippy
<hr/>	
Project	
REST AREA ADJACENT TO PROPOSED I69	
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Drawing Title	FRONT VIEW
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File Name	S.B.1 Front View
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Drawing No.	S.B.1
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Paper Size	11' x 17"
	Issued Date
	11/28/18



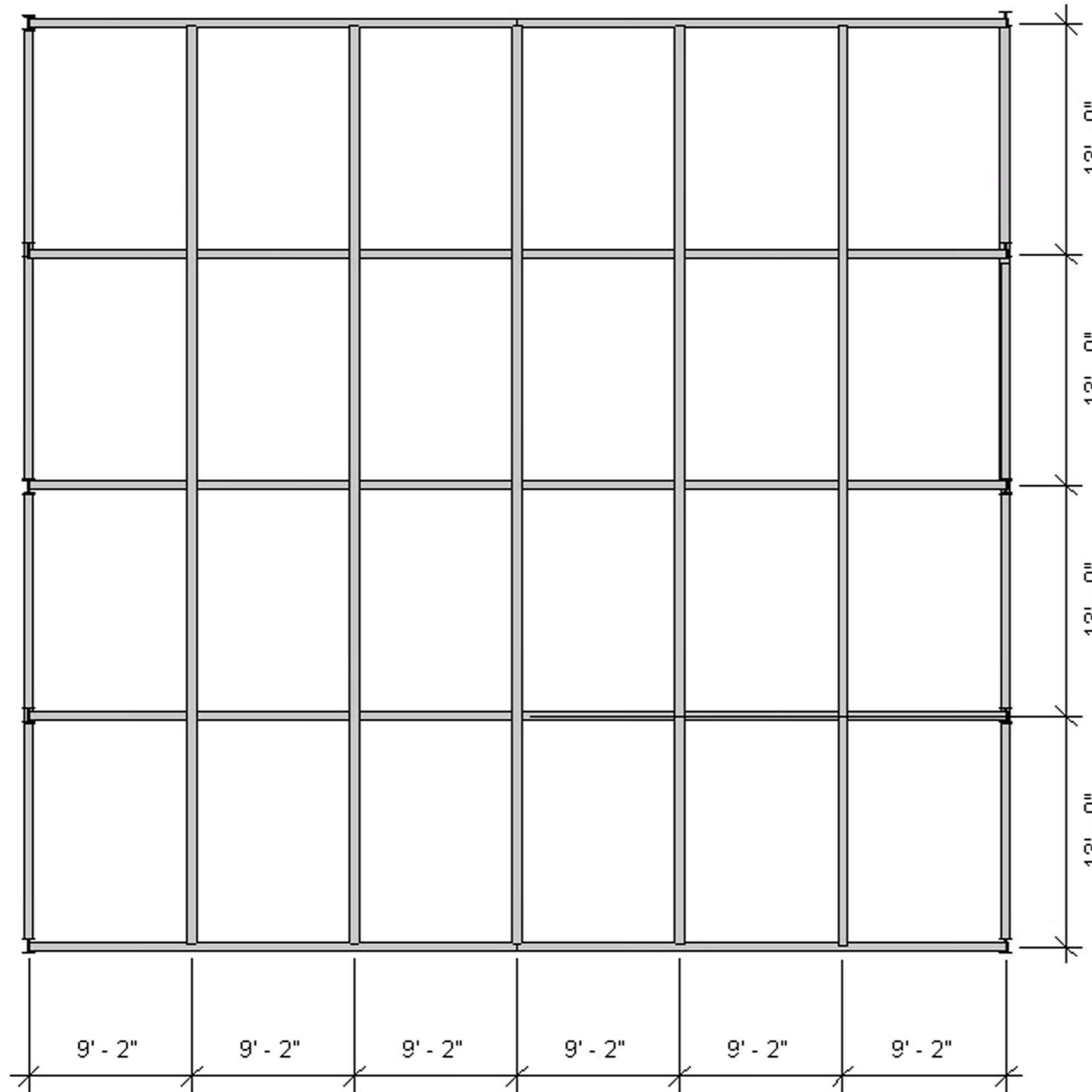
Local Engineering Firm	
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<hr/>	
Lead Engineer	Steve Thusius
Designed by	Steve Thusius
Drawn by	Steve Thusius
Checked by	Mark Rippy
<hr/>	
Project	
REST AREA ADJACENT TO PROPOSED I69	
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Drawing Title SIDE VIEW	
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File Name	S.B.2 Side View
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Drawing No.	S.B.2
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Paper Size	11' x 17"
	Issued Date
	11/28/18



Local Engineering Firm		
	901 DESIGN, INCOPORATED 3720 Alumni Avenue, Memphis TN, 38111 Tel: (901) 978-9000 Email: 901design@memphis.edu	
<hr/>		
Lead Engineer	Steve Thusius	
Designed by	Steve Thusius	
Drawn by	Steve Thusius	
Checked by	Mark Rippy	
<hr/>		
Project		
REST AREA ADJACENT TO PROPOSED I69		
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Drawing Title	BACK VIEW	
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File Name	S.B.3 Back View	
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Drawing No.	S.B.3	
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Paper Size	11' x 17"	
Paper Size	Issued Date	11/28/18

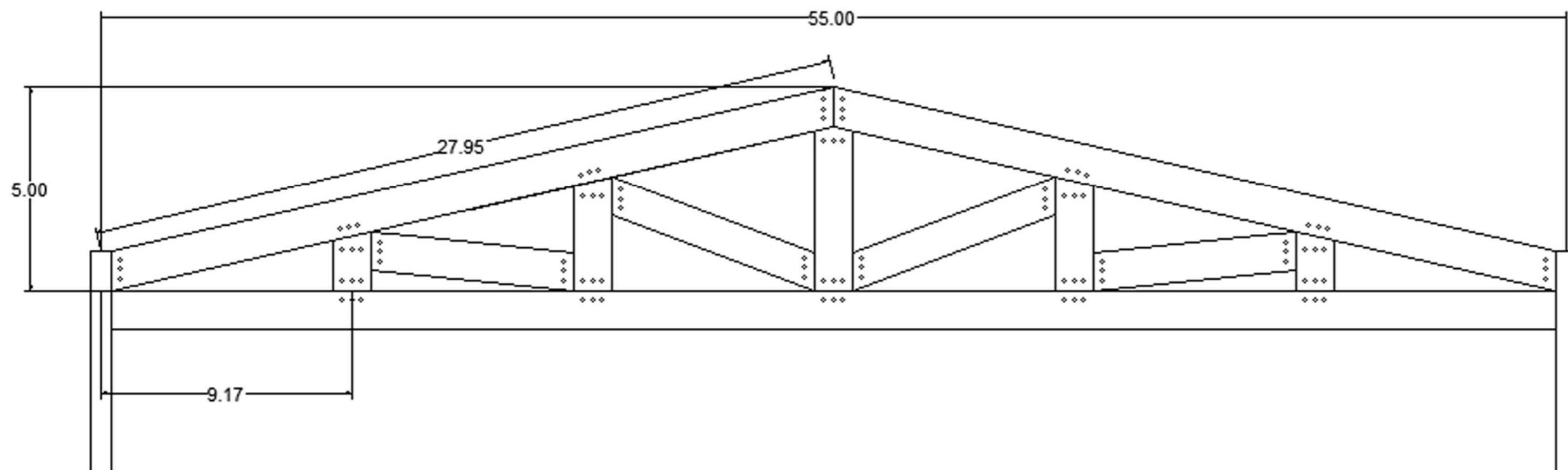


Local Engineering Firm	
 901 Design	901 DESIGN, INCOPORATED 3720 Alumni Avenue, Memphis TN, 38111 Tel: (901) 978-9000 Email: 901design@memphis.edu
<hr/>	
Lead Engineer	Steve Thusius
Designed by	Steve Thusius
Drawn by	Steve Thusius
Checked by	Mark Rippy
<hr/>	
Project	
REST AREA ADJACENT TO PROPOSED I69	
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Drawing Title	COMPLETE FRAME
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File Name	S.B.4 Complete Frame
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Drawing No.	S.B.4
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Paper Size	11' x 17"
	Issued Date
	11/28/18



Front of Building

Local Engineering Firm	
 901	901 DESIGN, INCOPORATED 3720 Alumni Avenue, Memphis TN, 38111 Tel: (901) 978-9000 Email: 901design@memphis.edu
Design	
Lead Engineer	Steve Thusius
Designed by	Steve Thusius
Drawn by	Steve Thusius
Checked by	Mark Rippy
Project	
REST AREA ADJACENT TO PROPOSED I69	
Drawing Title	
ROOF SYSTEM	
File Name	S.B.5 Roof System
Drawing No.	S.B.5
Paper Size	11' x 17"
	Issued Date
	11/28/18



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Lead Engineer	Steve Thusius
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Designed by	Steve Thusius
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Drawn by	Steve Thusius
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Checked by	Mark Rippy
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Project

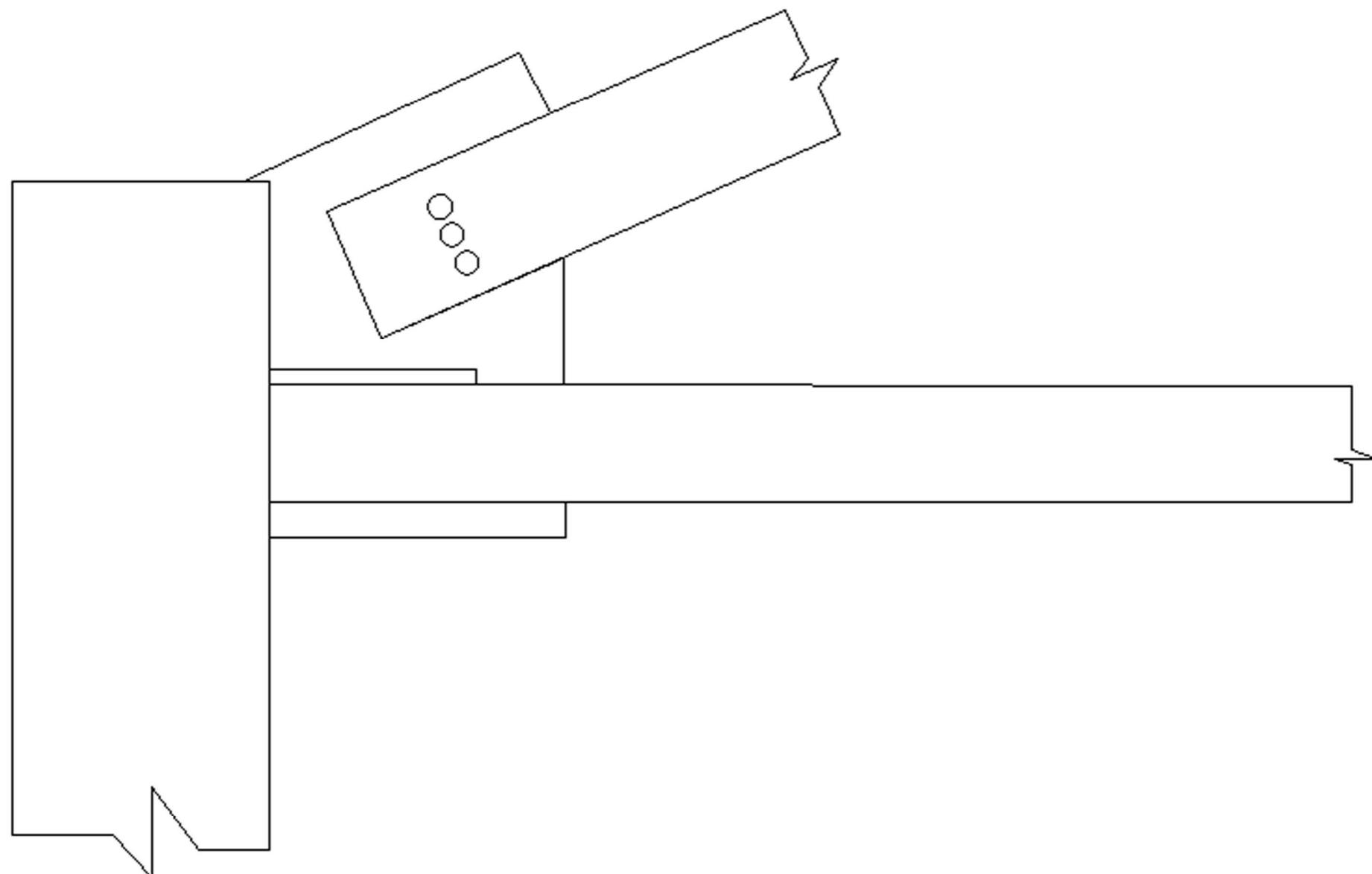
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Drawing Title	TRUSS
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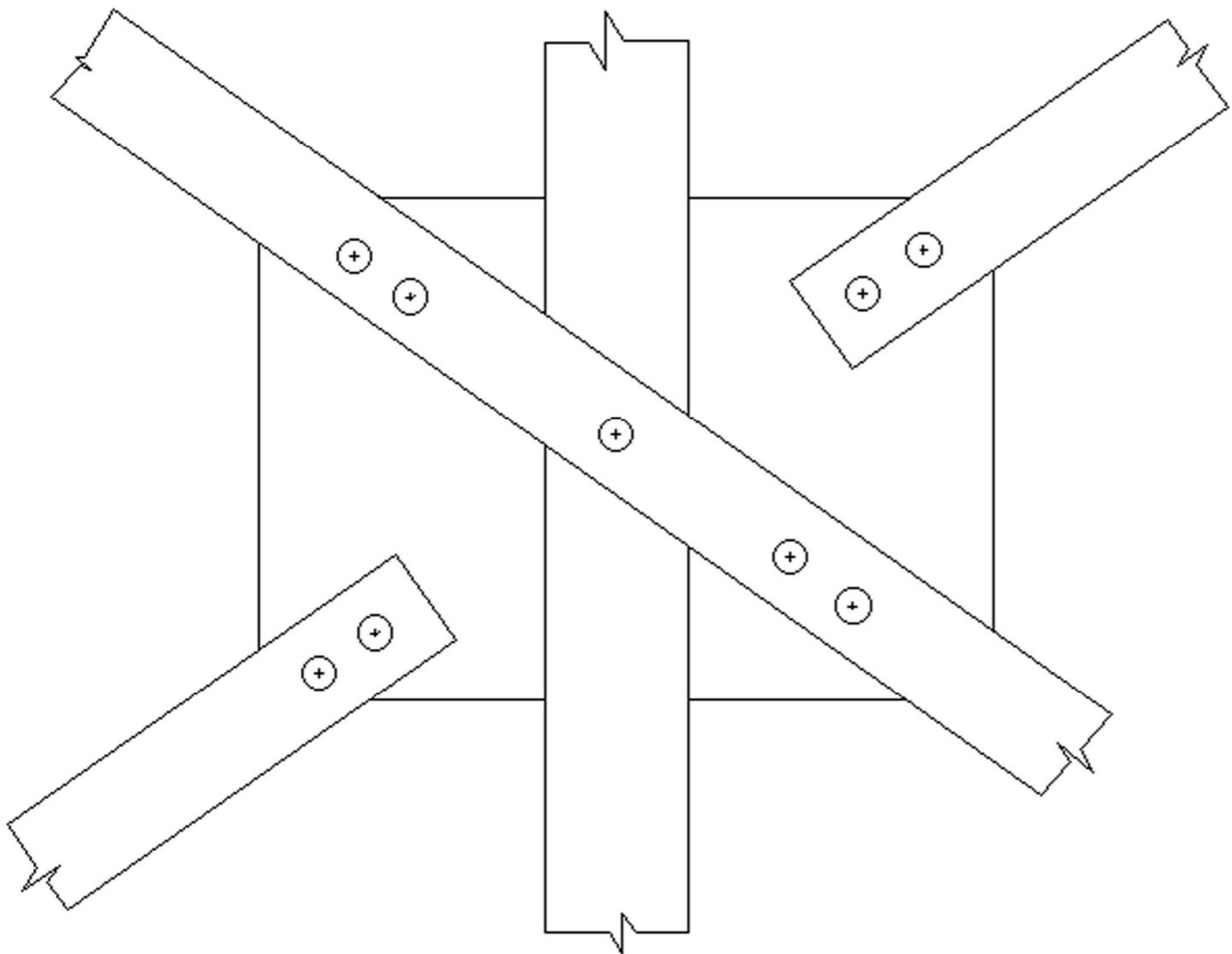
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Drawing No.	S.B.6
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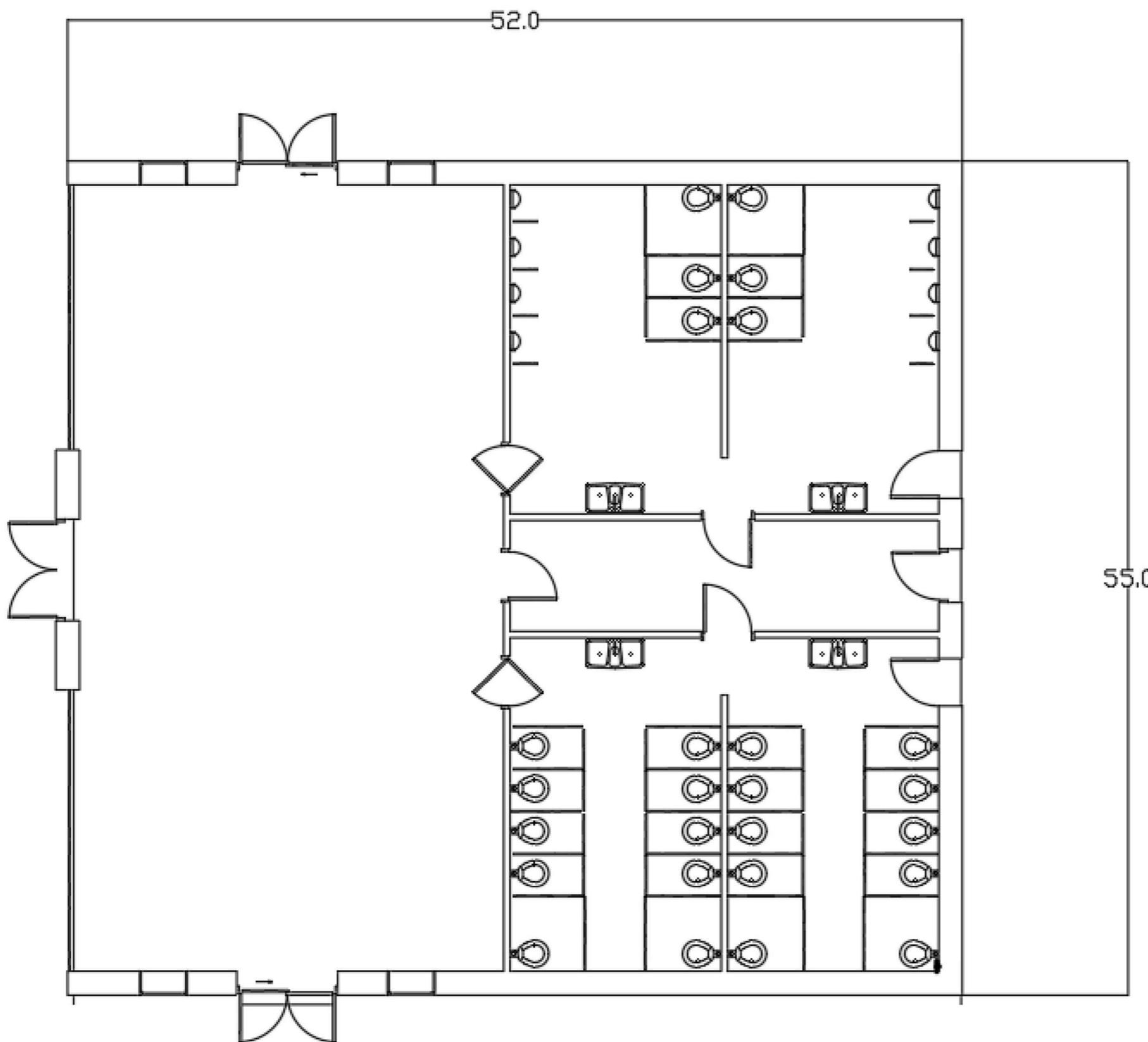
Paper Size	11' x 17"	Issued Date	11/28/18
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Local Engineering Firm	
 901 Design	901 DESIGN, INCOPORATED 3720 Alumni Avenue, Memphis TN, 38111 Tel: (901) 978-9000 Email: 901design@memphis.edu
<hr/>	
Lead Engineer	Steve Thusius
Designed by	Steve Thusius
Drawn by	Steve Thusius
Checked by	Mark Rippy
<hr/>	
Project	
REST AREA ADJACENT TO PROPOSED I69	
<hr/>	
Drawing Title	TRUSS TO COLUMN
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File Name	S.B.7 Truss to Column
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Drawing No.	S.B.7
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Paper Size	11' x 17"
	Issued Date
	11/28/18



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 901 Design	901 DESIGN, INCOPORATED 3720 Alumni Avenue, Memphis TN, 38111 Tel: (901) 978-9000 Email: 901design@memphis.edu
Project	
Lead Engineer	Steve Thusius
Designed by	Steve Thusius
Drawn by	Steve Thusius
Checked by	Mark Rippy
REST AREA ADJACENT TO PROPOSED I69	
Drawing Title ROOF CONNECTIONS	
File Name	S.B.8 Roof Connections
Drawing No.	S.B.8
Paper Size	11' x 17"
	Issued Date 11/28/18



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Email: 901design@memphis.edu

Lead Engineer | Steve Thusius

Designed by | Steve Thusius

Drawn by | Steve Thusius

Checked by | Mark Rippy

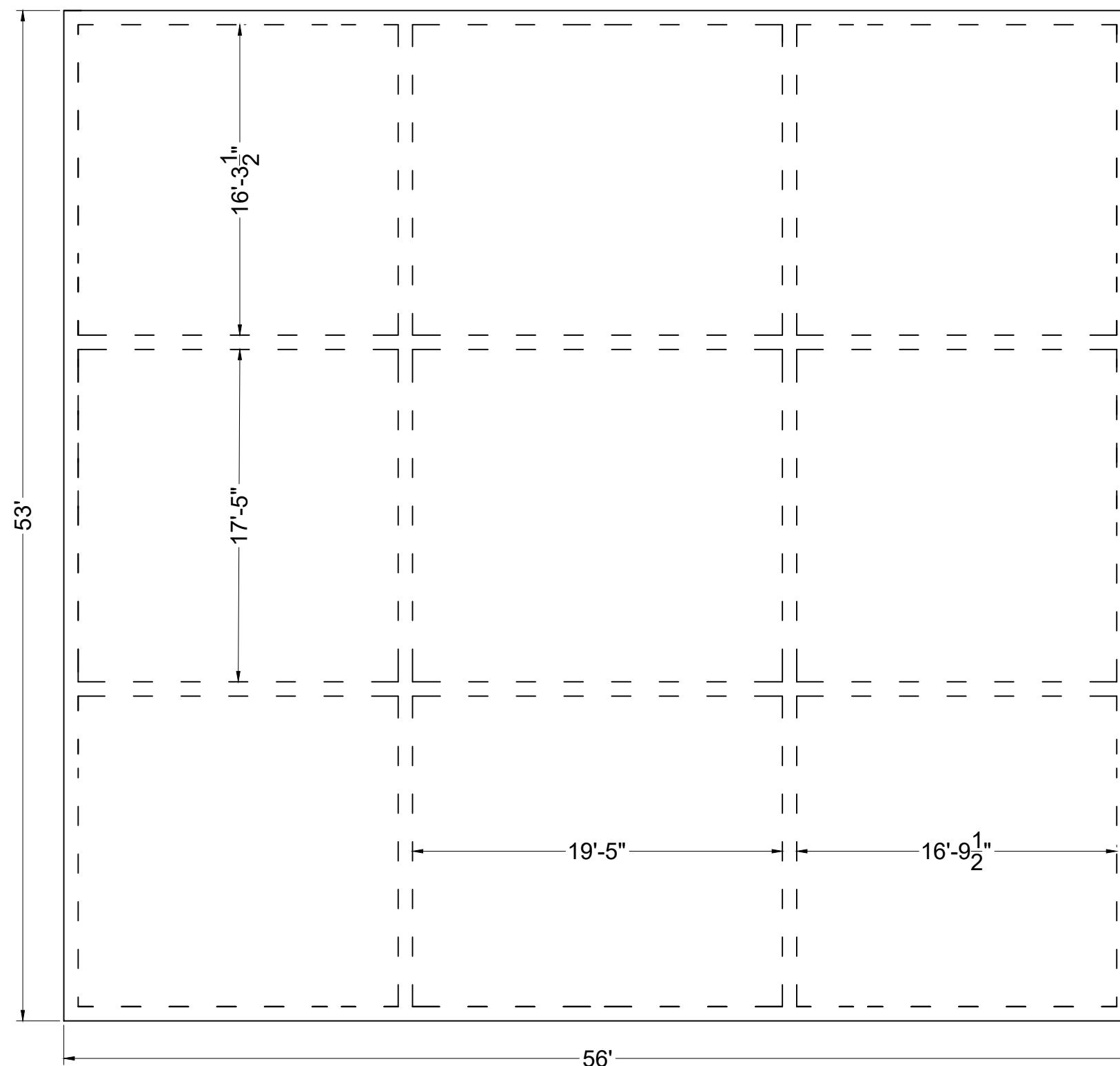
Project
**REST AREA ADJACENT
TO PROPOSED I69**

Drawing Title | **Floorplan**

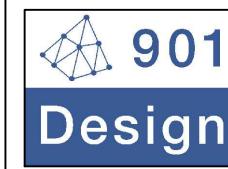
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Drawing No. | **S.B.9**

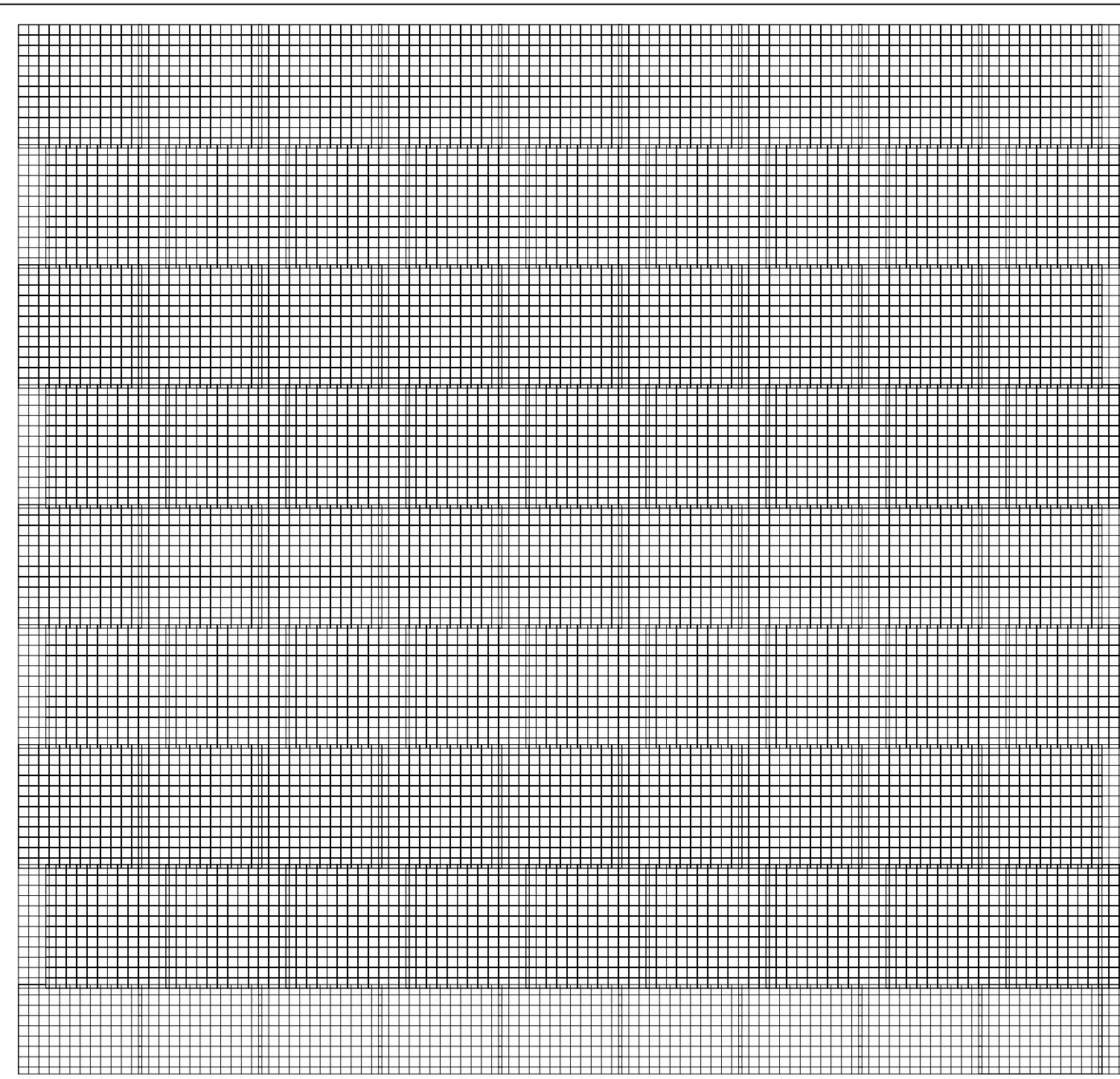
Paper Size | 11' x 17" | Issued Date | 11/28/18



Foundation Plan View

Local Engineering Firm	
	901 DESIGN, INCOPORATED 3720 Alumni Avenue, Memphis TN, 38111 Tel: (901) 978-9000 Email: 901design@memphis.edu
General Director	
Huan Ngo	
Lead Engineer	Huan Ngo
Designed by	Kendall Brown
Drawn by	Kendall Brown
Checked by	Mark Rippy
Project	
REST AREA ADJACENT TO PROPOSED I69	
Drawing Title	
FOUNDATION PLAN VIEW	
File Name	S.C.1 Foundation Plan View
Drawing No.	S.C.1
Paper Size	11" x 17"
Issued Date	11/28/18

6'x6' W5 Welded
Wire Reinforcing



Welded Wire Reinforcement Details

Local Engineering Firm



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General Director
Huan Ngo

Lead Engineer Huan Ngo

Designed by Kendall Brown

Drawn by Kendall Brown

Checked by Mark Rippy

Project

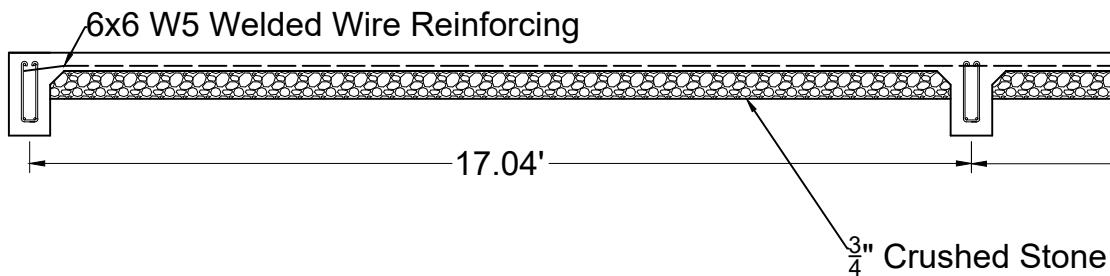
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TO PROPOSED I69**

Drawing Title
WELDED WIRE REINFORCEMENT

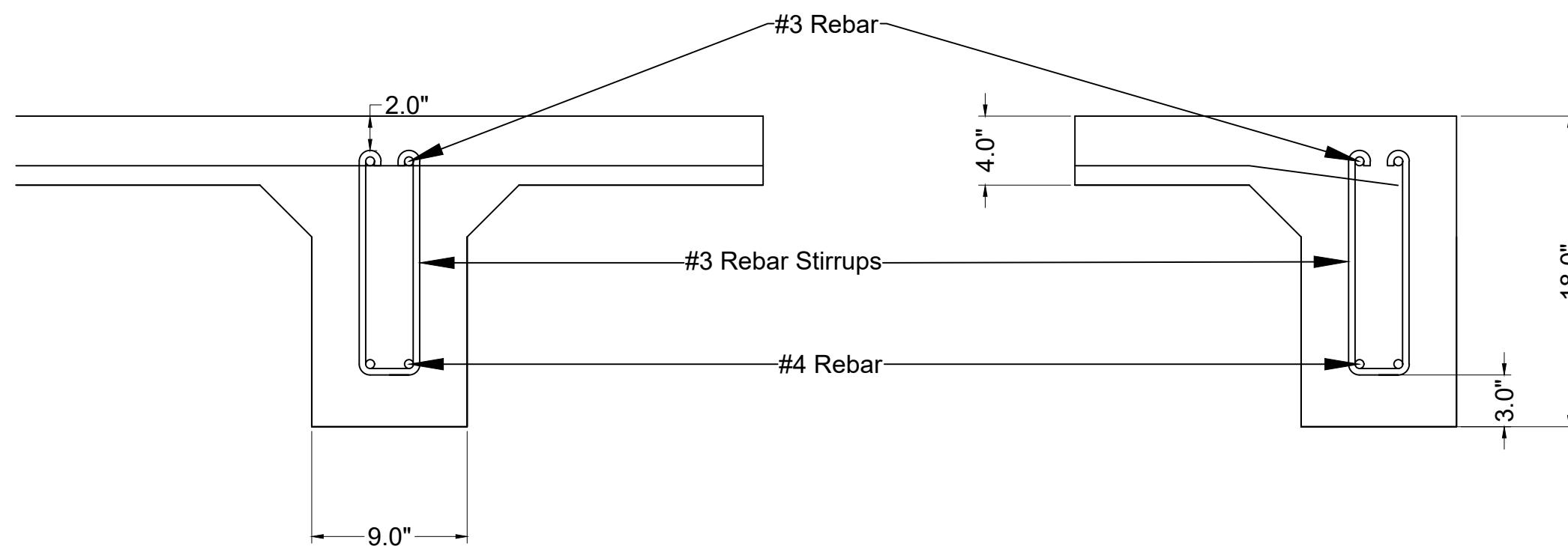
File Name S.C.2 Welded Wire Reinforcement

Drawing No. S.C.2

Paper Size 11" x 17" Issued Date 11/28/18



Long Direction Beam and Slab



Long Direction Beam and Slab Detail

Local Engineering Firm



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General Director
Huan Ngo

Lead Engineer	Huan Ngo
---------------	----------

Designed by	Kendall Brown
-------------	---------------

Drawn by	Kendall Brown
----------	---------------

Checked by	Mark Rippy
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Project

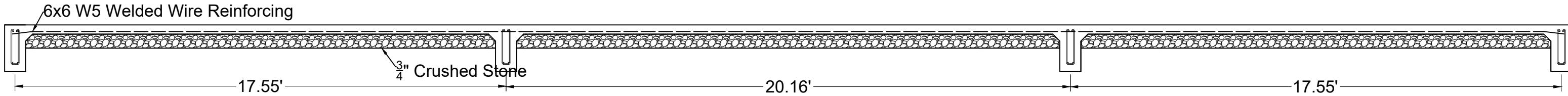
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TO PROPOSED I69**

Drawing Title
LONG DIRECTION BEAM & SLAB

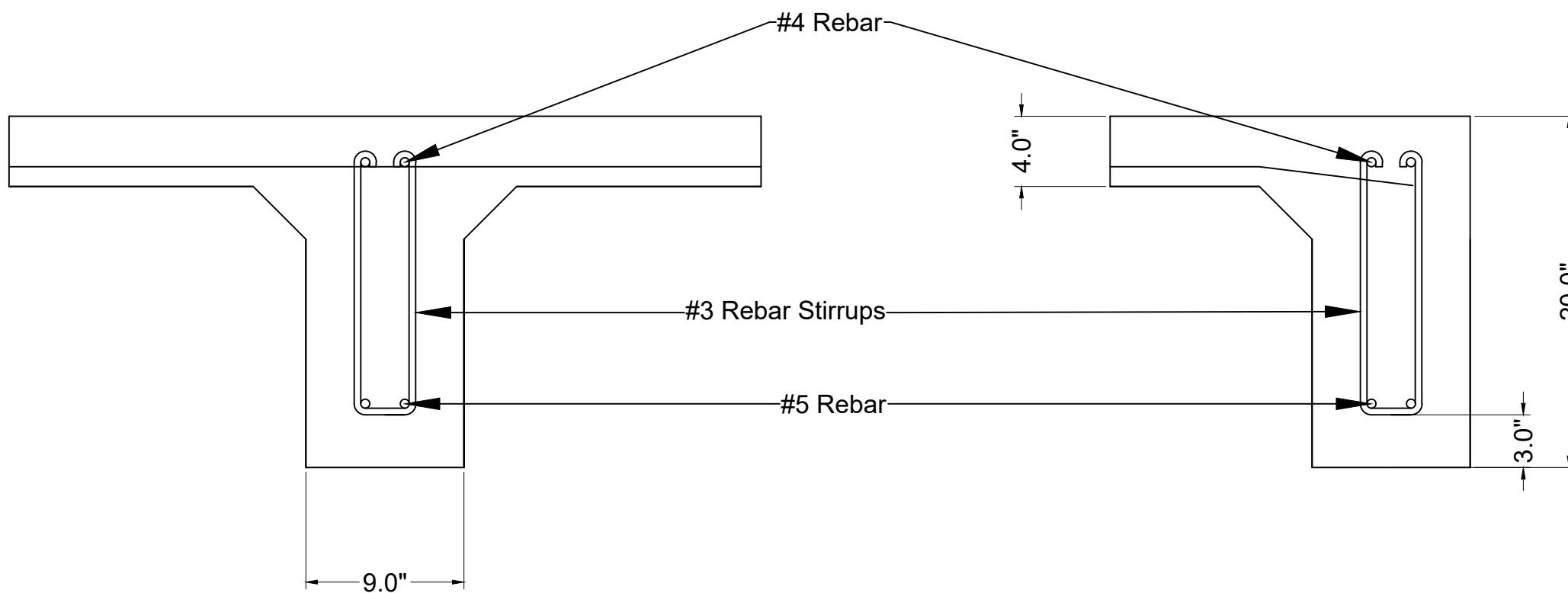
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Drawing No.	S.C.3	
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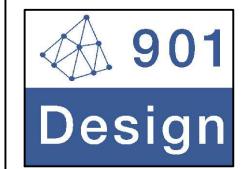
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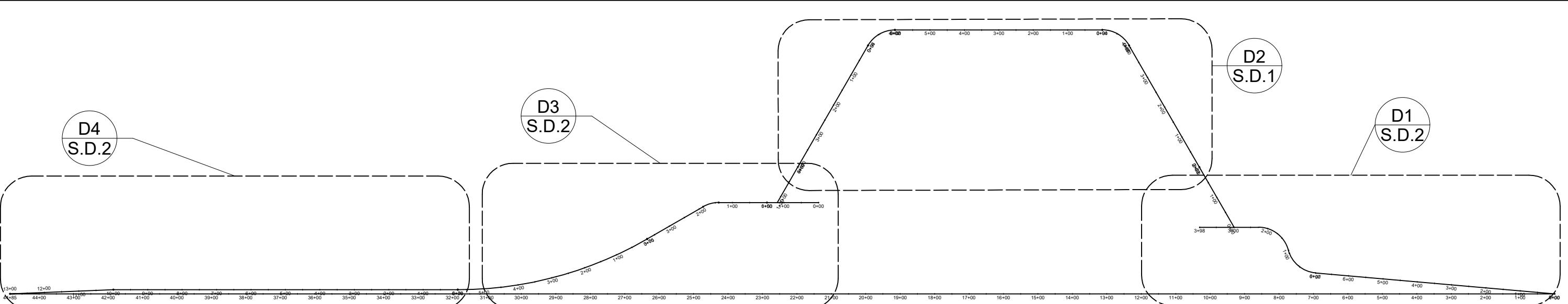


Short Direction Beam and Slab Detail



Long Direction Beam and Slab Detail

Local Engineering Firm	
	901 DESIGN, INCOPORATED 3720 Alumni Avenue, Memphis TN, 38111 Tel: (901) 978-9000 Email: 901design@memphis.edu
General Director	
Huan Ngo	
Lead Engineer	Huan Ngo
Designed by	Kendall Brown
Drawn by	Kendall Brown
Checked by	Mark Rippy
Project	
REST AREA ADJACENT TO PROPOSED I69	
Drawing Title	
SHORT DIRECTION BEAM & SLAB	
File Name	S.C.4 Short Direction Beam & Slab
Drawing No.	S.C.4
Paper Size	11" x 17"
Issued Date	11/28/18



Overall Alignment Parking Layout

Scale 1 to 3500

Local Engineering Firm



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General Director
Huan Ngo

Lead Engineer Huan Ngo

Designed by Huan Ngo

Drawn by Huan Ngo

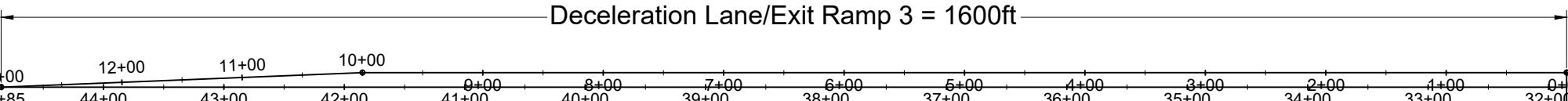
Checked by Steve Thesuis

Project

REST AREA ADJACENT TO PROPOSED I69

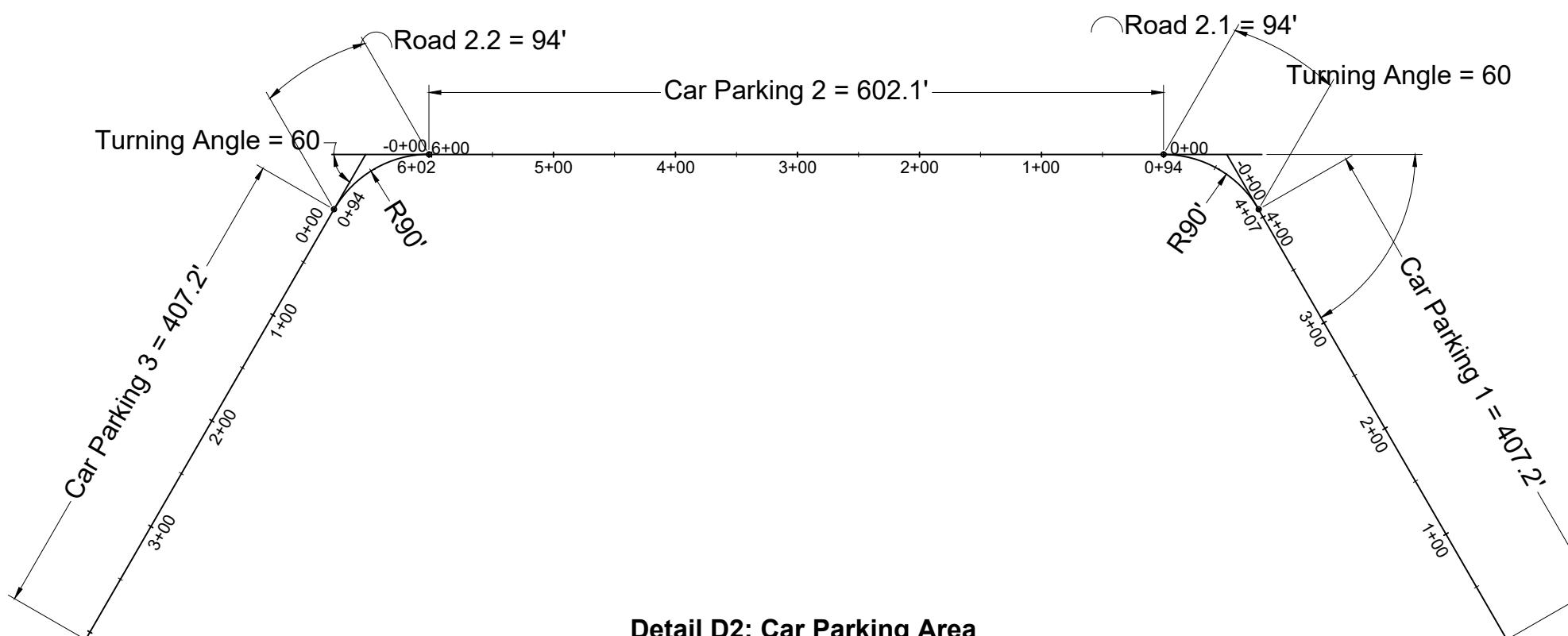
Drawing Title

ROAD ALIGNMENT 1



Detail D4: Exit Ramp 3

Scale 1 to 1500



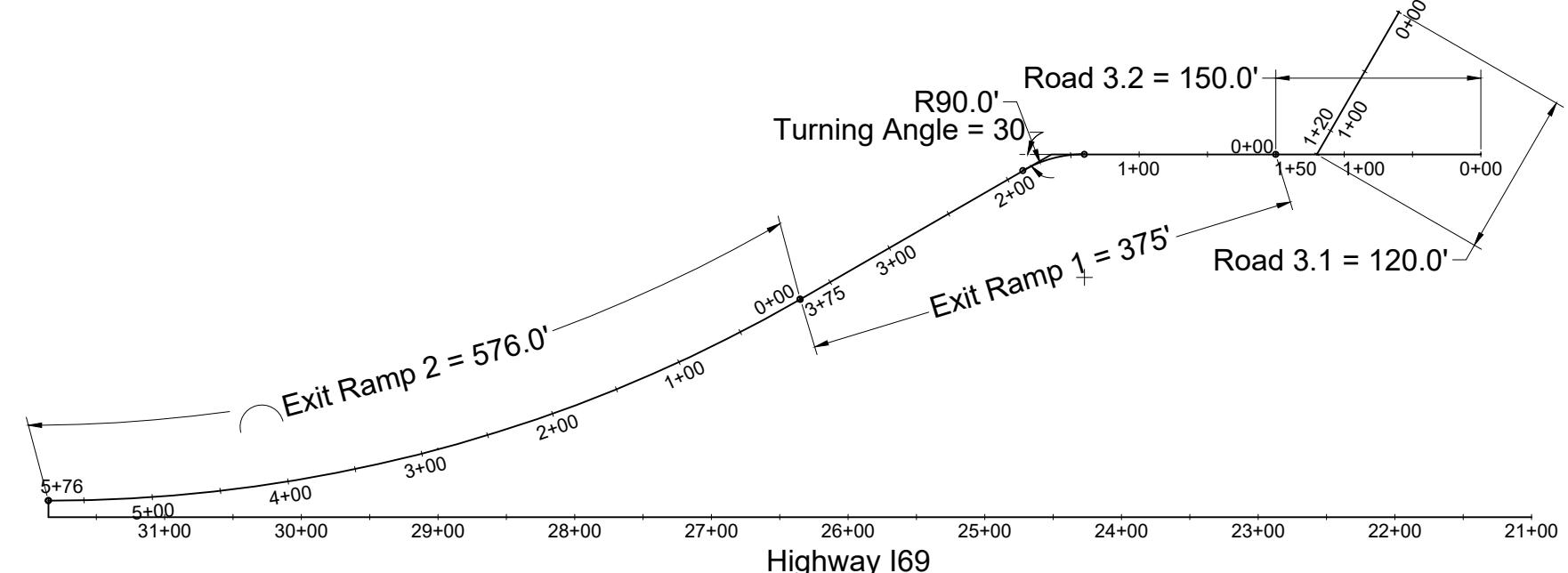
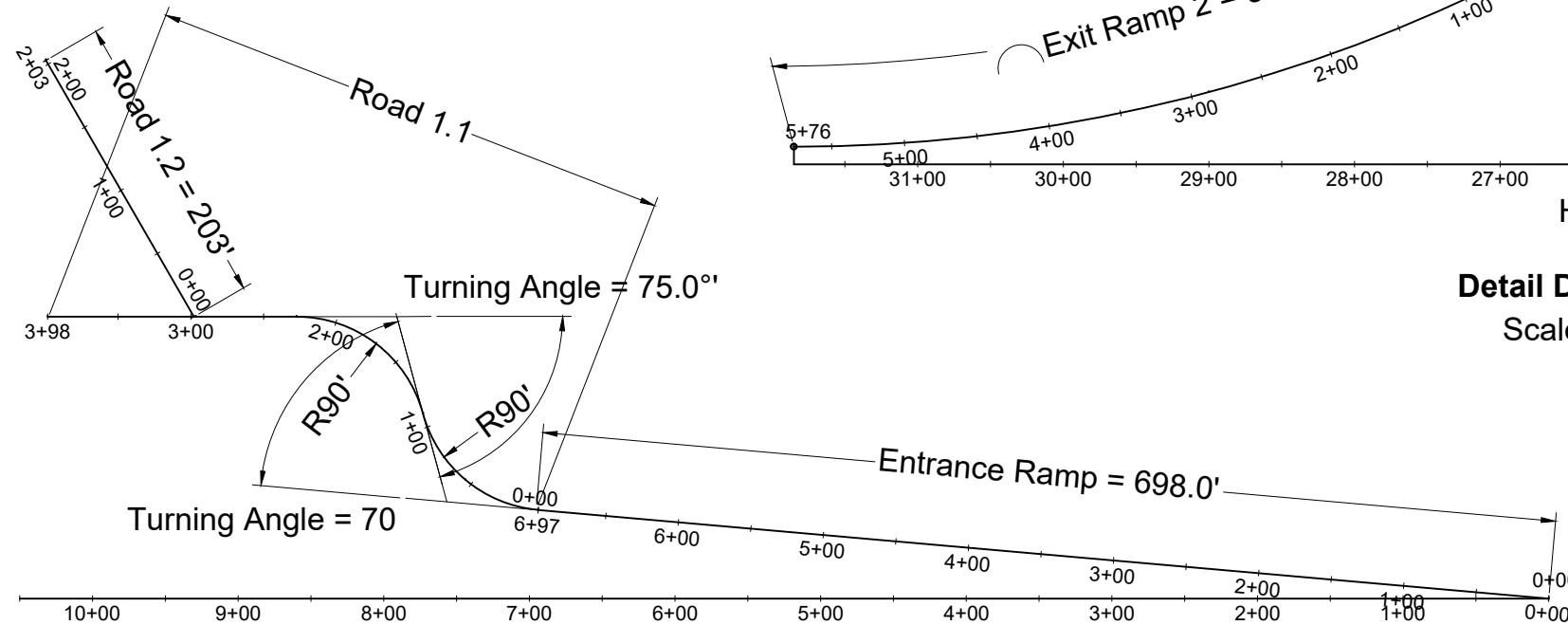
Detail D2: Car Parking Area

Scale 1 to 1500

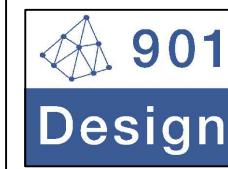
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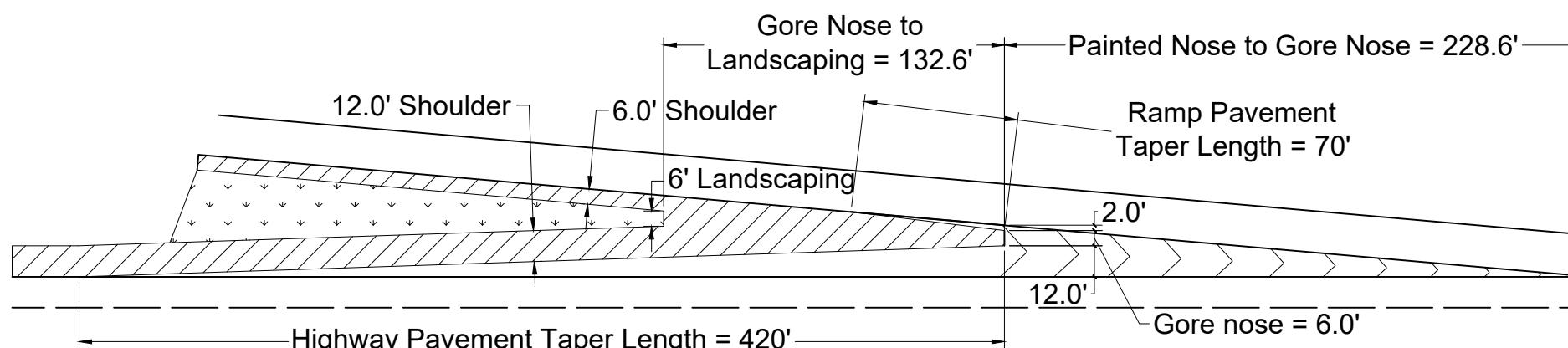
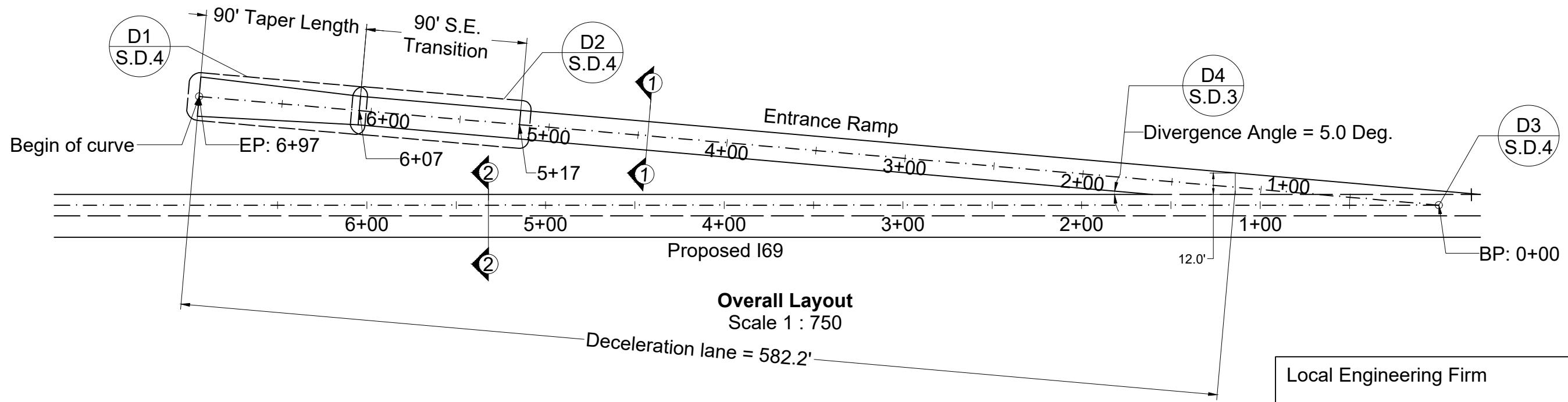
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Paper Size 11" x 17" Issued Date 11/28/18

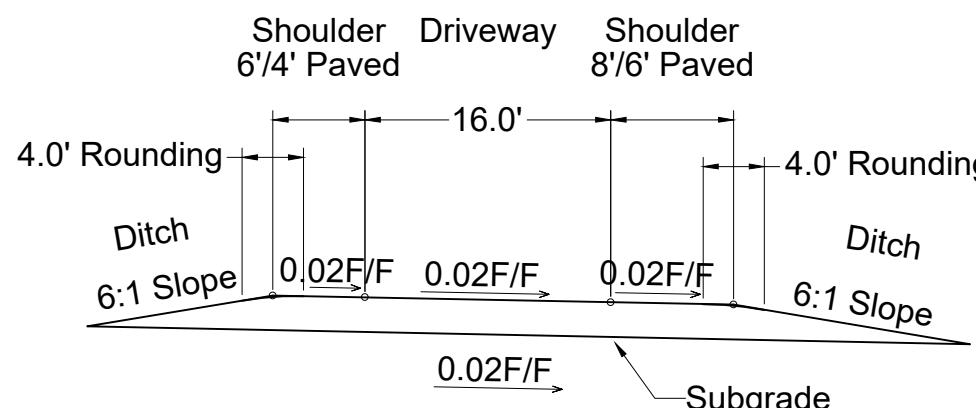


List of Sheets		
Elements	Overall Layout	Detailing
Entrance Ramp	S.D.3	S.D.4
Exit Ramp 1	S.D.5	S.D.6
Exit Ramp 2	S.D.7	S.D.8
Exit Ramp 3	S.D.9	S.D.10
Car Parking	S.D.11	S.D.14, S.D.19
Truck Parking	S.D.12	S.D.14
Inner Roadway	S.D.13	S.D.14
Road Signage	S.D.16; S.D.17	S.D.18

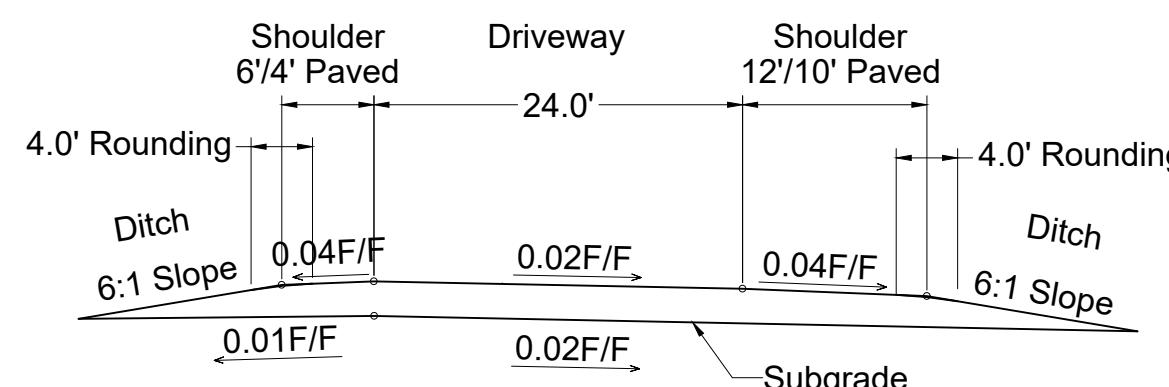
Local Engineering Firm	
	901 DESIGN, INCOPORATED 3720 Alumni Avenue, Memphis TN, 38111 Tel: (901) 978-9000 Email: 901design@memphis.edu
General Director Huan Ngo	
Lead Engineer	Huan Ngo
Designed by	Huan Ngo
Drawn by	Huan Ngo
Checked by	Steve Thesuis
Project REST AREA ADJACENT TO PROPOSED I69	
Drawing Title ROAD ALIGNMENT 2	
File Name	S.D.2 Road Alignment 2
Drawing No.	S.D.2
Paper Size	11" x 17"
Issued Date	11/28/18



Details D4: Gore Detail
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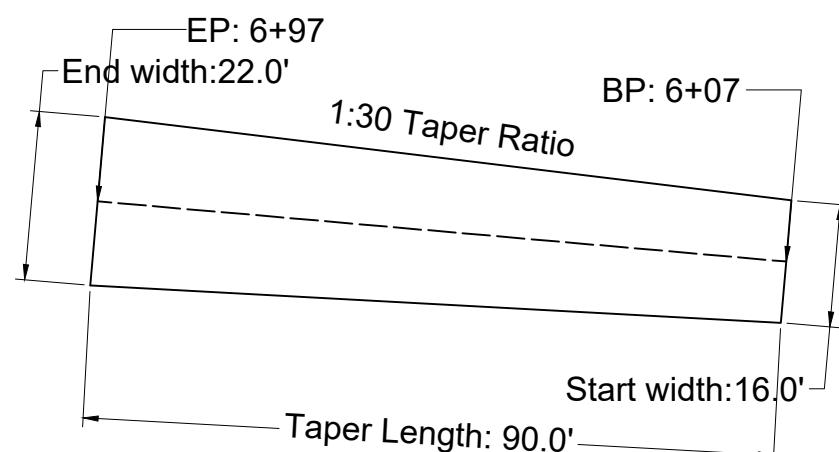


Cross Section 1-1: Entrance Ramp
Scale 1 to 150

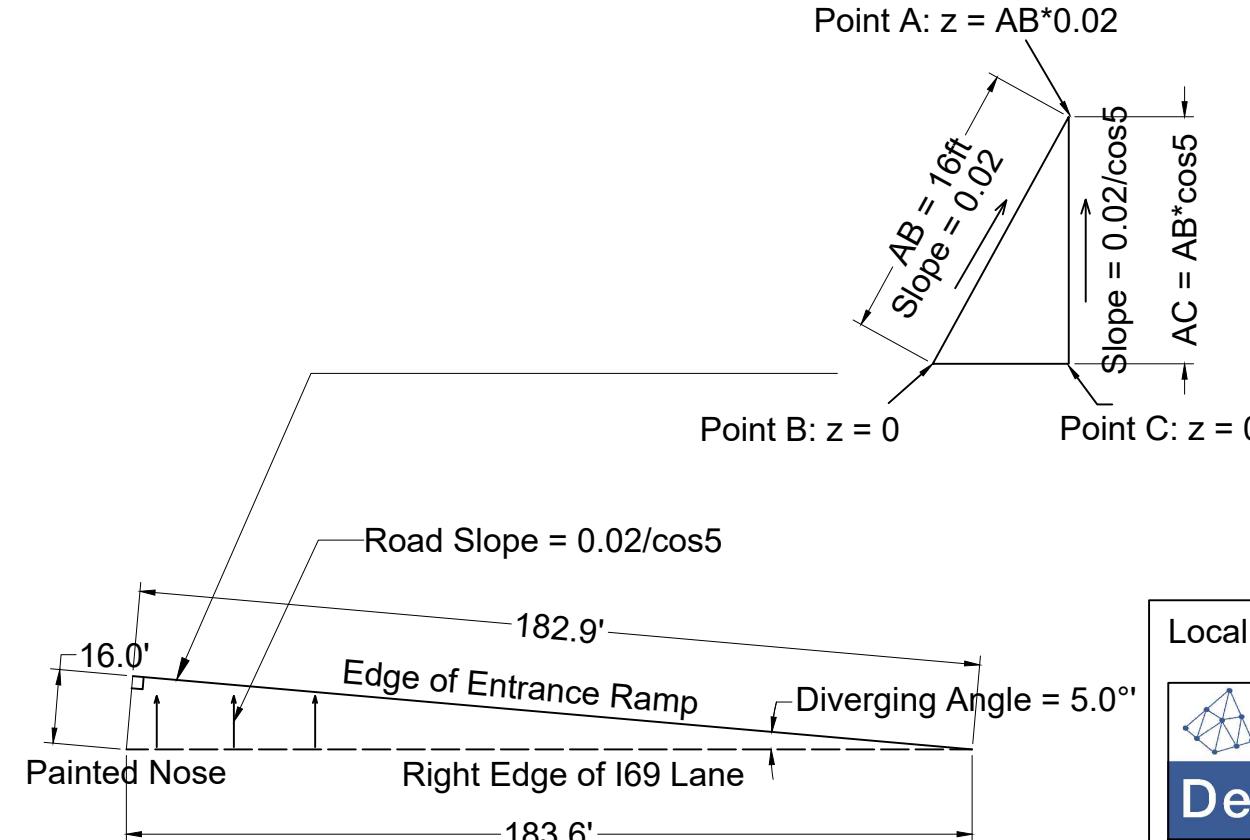


Cross Section 2-2: Interstate 69
Scale 1 to 150

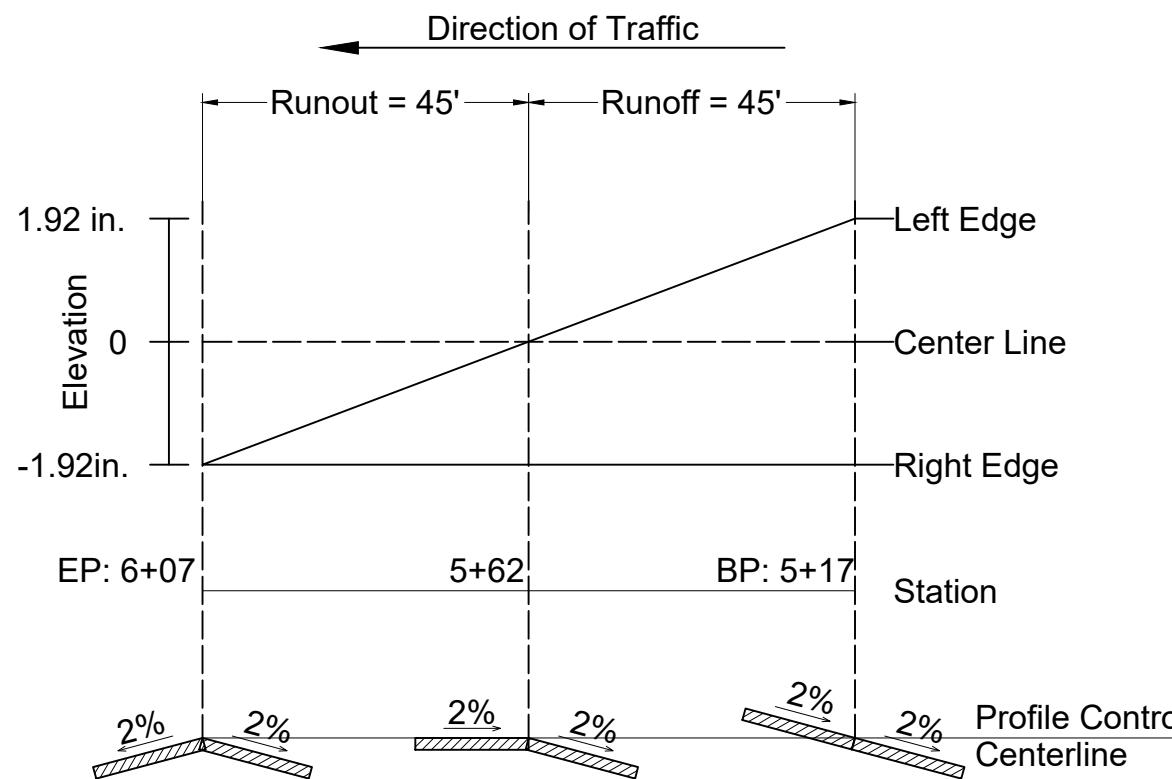
Local Engineering Firm	
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Lead Engineer	Huan Ngo
Designed by	Huan Ngo
Drawn by	Huan Ngo
Checked by	Steve Thesuis
Project	
REST AREA ADJACENT TO PROPOSED I69	
Drawing Title	
ENTRANCE RAMP	
File Name	S.D.3 Entrance Ramp
Drawing No.	S.D.3
Paper Size	11" x 17"
Issued Date	11/28/18



Detail D2: Widening Section
Scale 1 to 300



Detail D3: Diverging Area
Scale 1 to 500



Detail D1: Superelevation Profile
Scale 1 to 300

Local Engineering Firm	
	901 DESIGN, INCOPORATED 3720 Alumni Avenue, Memphis TN, 38111 Tel: (901) 978-9000 Email: 901design@memphis.edu

General Director
Huan Ngo

Lead Engineer	Huan Ngo
---------------	----------

Designed by	Huan Ngo
-------------	----------

Drawn by	Huan Ngo
----------	----------

Checked by	Steve Thesuis
------------	---------------

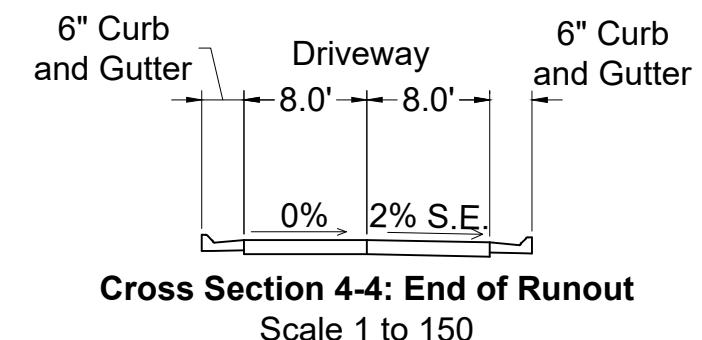
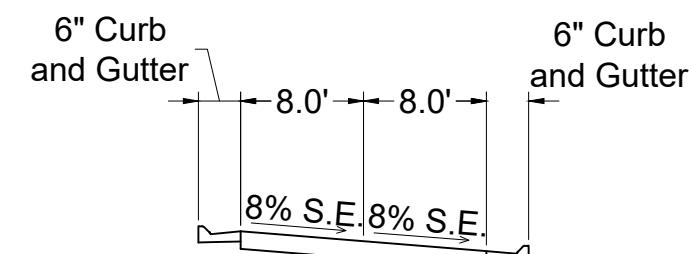
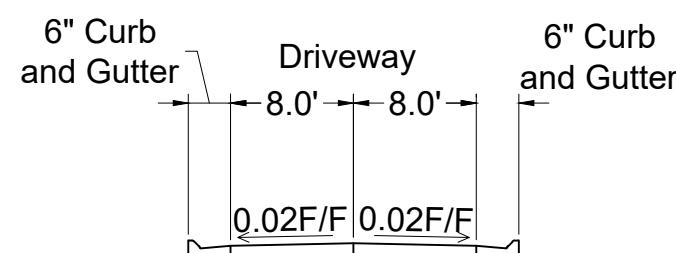
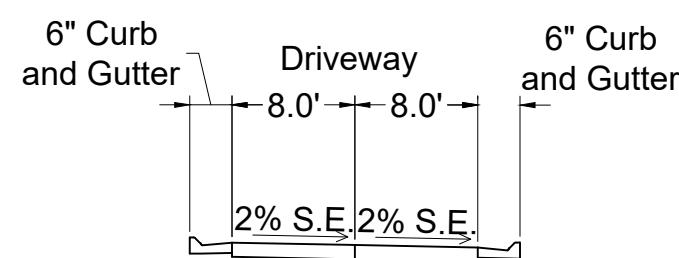
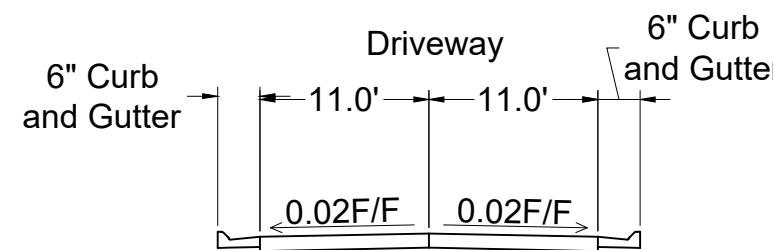
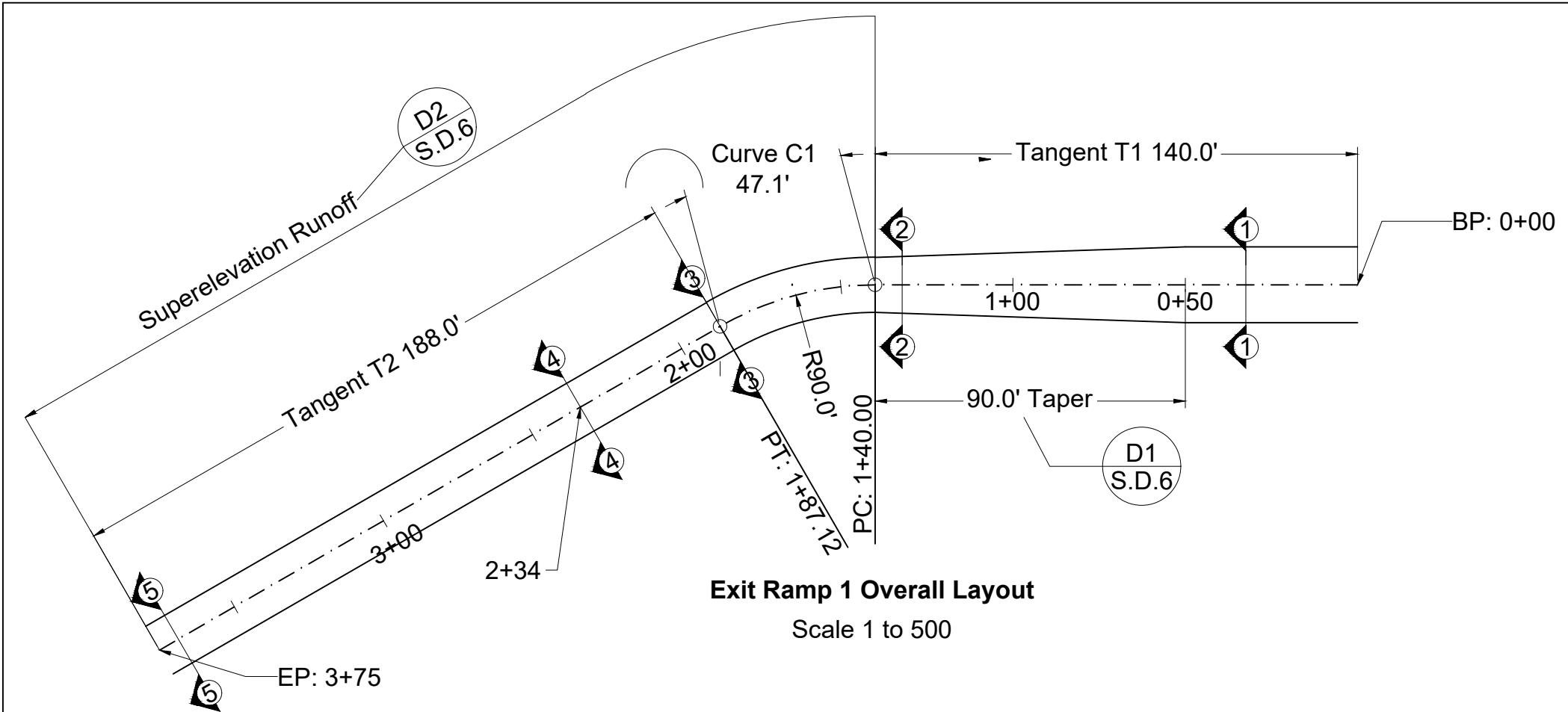
Project
**REST AREA ADJACENT
TO PROPOSED I69**

Drawing Title
ENTRANCE RAMP DETAILS

File Name	S.D.4 Entrance Ramp Details
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Drawing No.	S.D.4
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Paper Size	11" x 17"	Issued Date	11/28/18
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General Director
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Lead Engineer Huan Ngo

Designed by Huan Ngo

Drawn by Huan Ngo

Checked by Steve Thesuis

Project

REST AREA ADJACENT TO PROPOSED I69

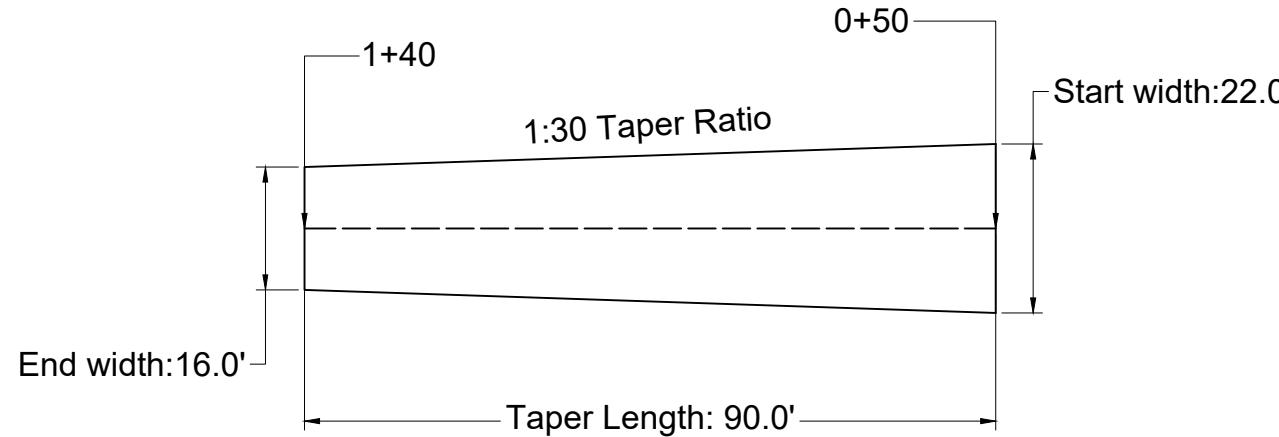
Drawing Title

EXIT RAMP 1

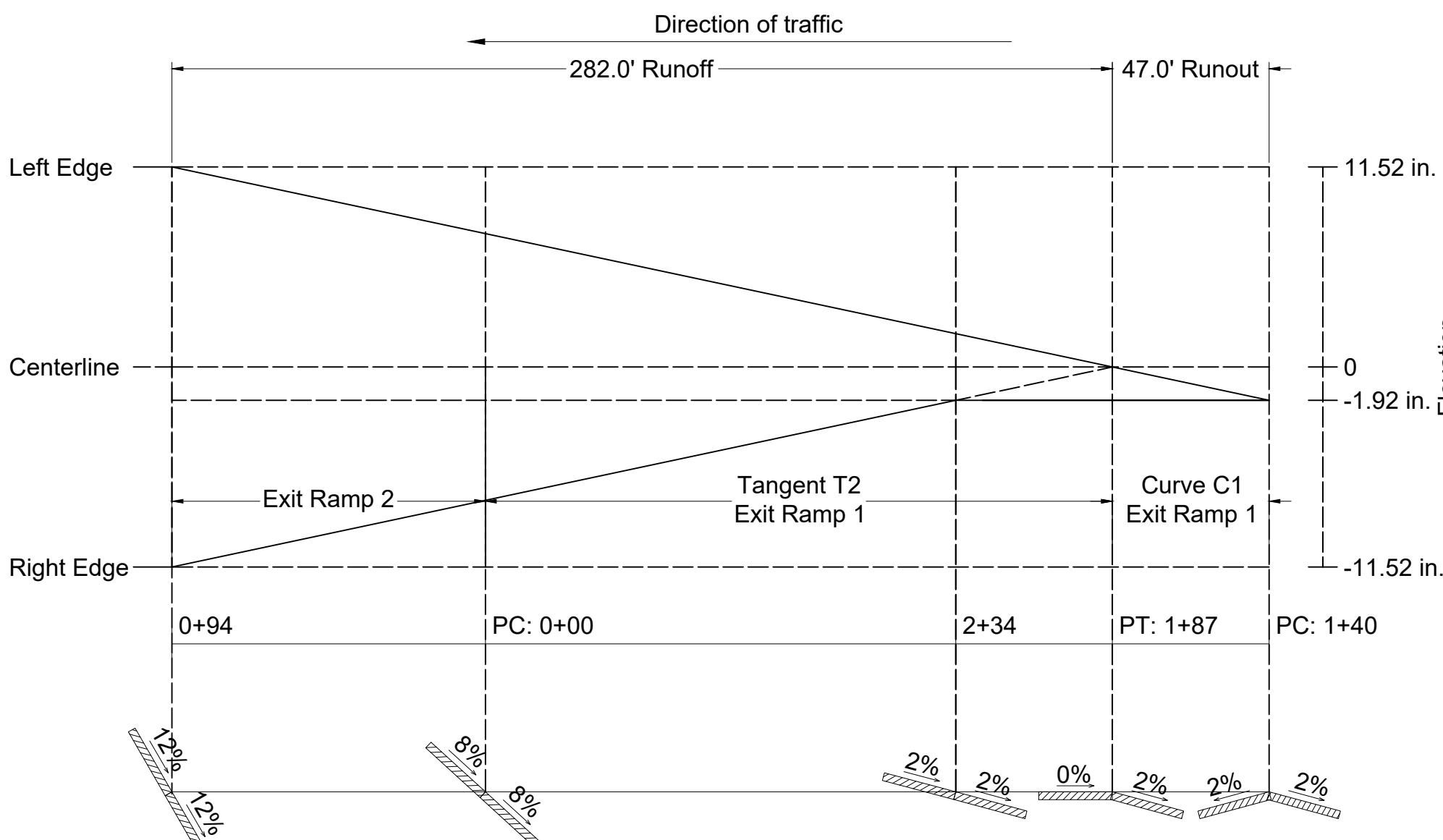
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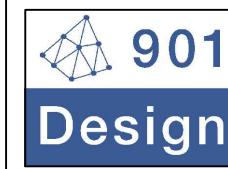
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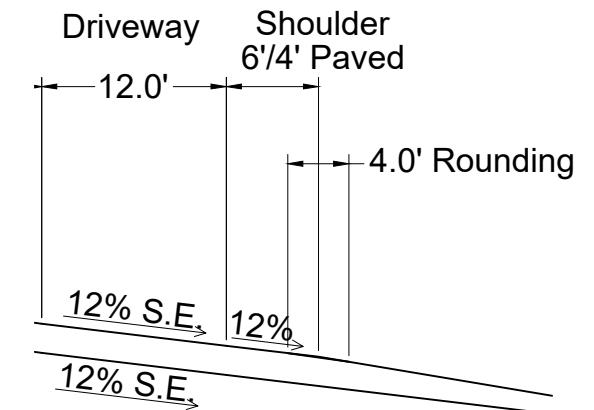
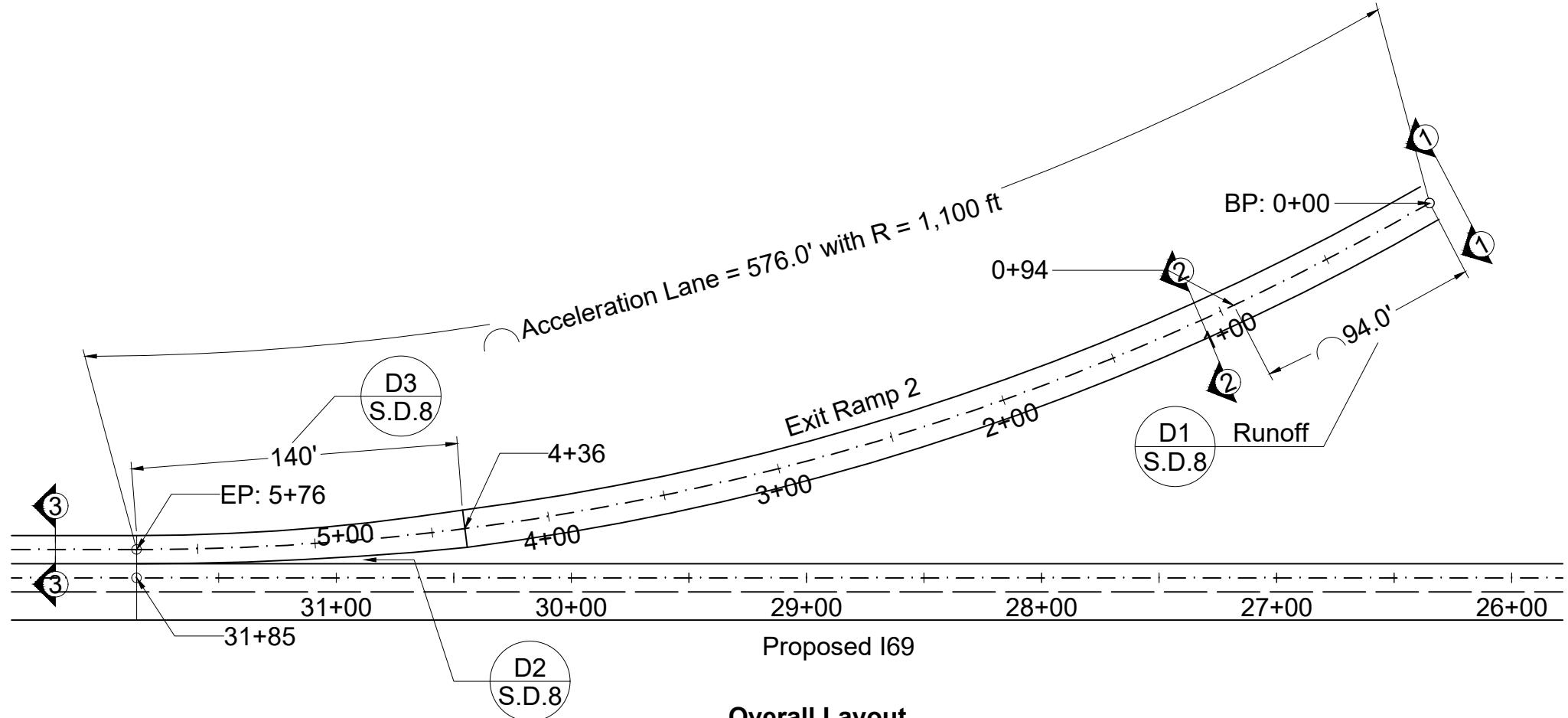


Detail D1: Tapering Section
Scale 1 to 300



Detail D2: Superelevation Profile
Scale 1 to 500

Local Engineering Firm	
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General Director Huan Ngo	
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Checked by	Steve Thesuis
Project REST AREA ADJACENT TO PROPOSED I69	
Drawing Title EXIT RAMP 1 DETAILS	
File Name	S.D.6 Exit Ramp 1 Details
Drawing No.	S.D.6
Paper Size	11" x 17"
Issued Date	11/28/18



Cross Section 3-3: Acceleration Lane
Scale 1 to 150

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Drawn by Huan Ngo

Checked by Steve Thesuis

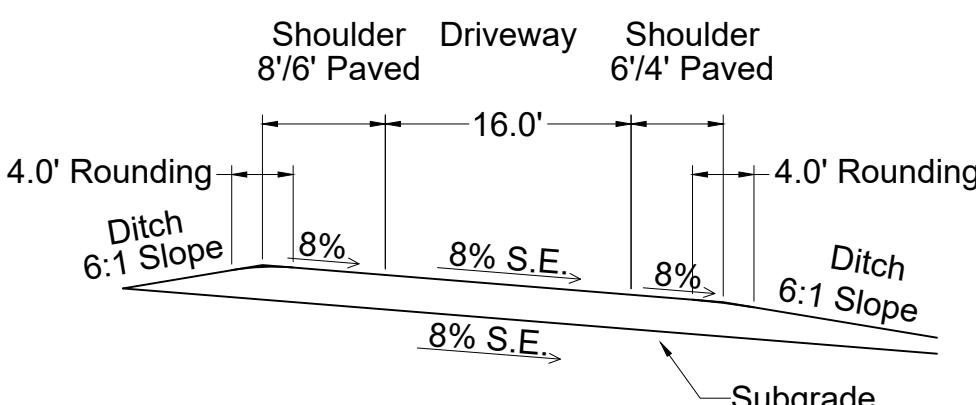
Project
**REST AREA ADJACENT
TO PROPOSED I69**

Drawing Title
EXIT RAMP 2

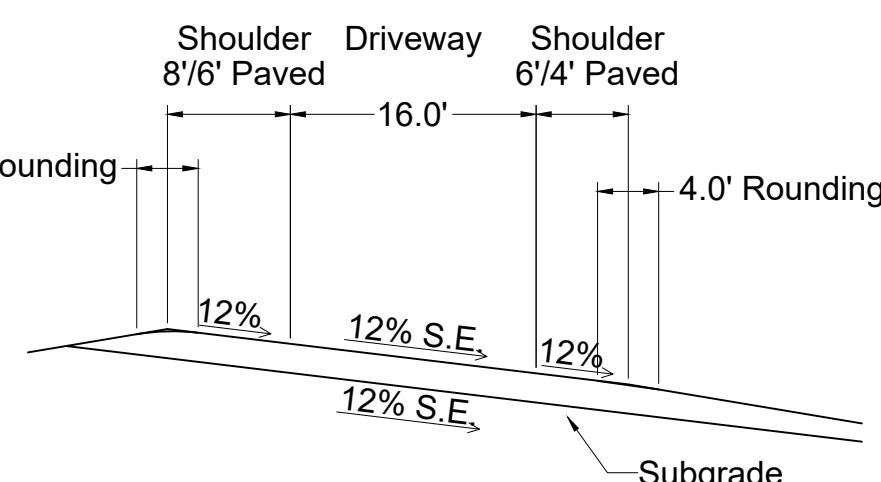
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Drawing No. S.D.7

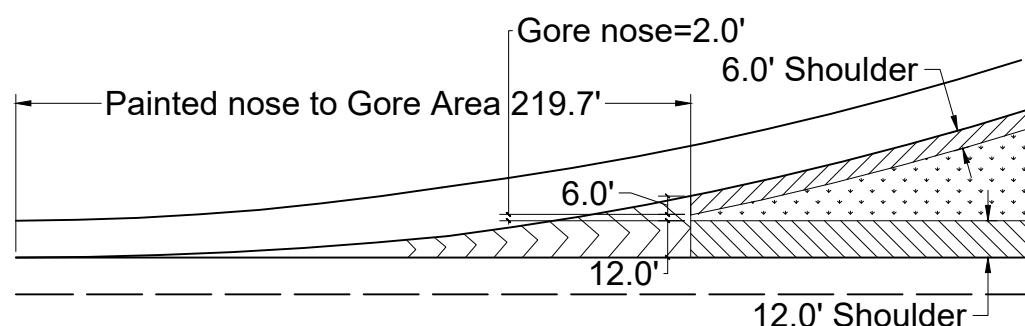
Paper Size 11" x 17" Issued Date 11/28/18



Cross Section 1-1: Superelevation at P.C.
Scale 1 to 150

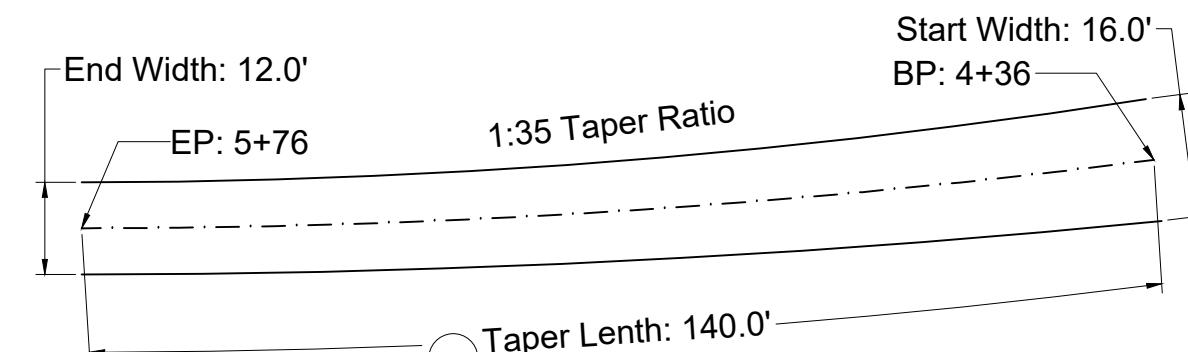


Cross Section 2-2: Fully Superelevated Exit Ramp
Scale 1 to 150



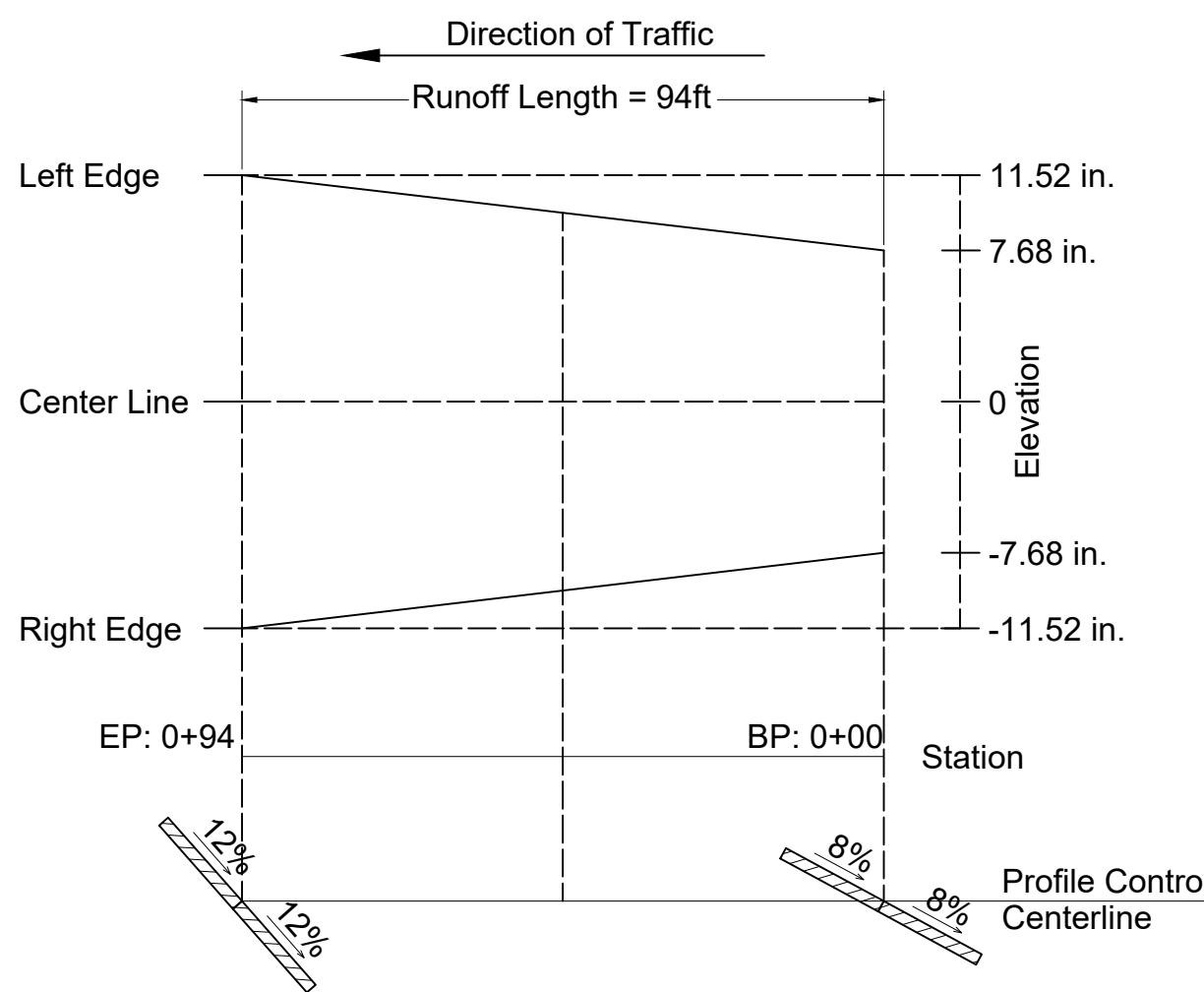
Details D2: Gore Detail

Scale 1 : 750



Detail D3: Tapering Section

Scale 1 to 300



Detail D1: Superelevation Profile

Scale 1 to 300

Local Engineering Firm



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Lead Engineer	Huan Ngo
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Designed by	Huan Ngo
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Drawn by	Huan Ngo
----------	----------

Checked by	Steve Thesuis
------------	---------------

Project

**REST AREA ADJACENT
TO PROPOSED I69**

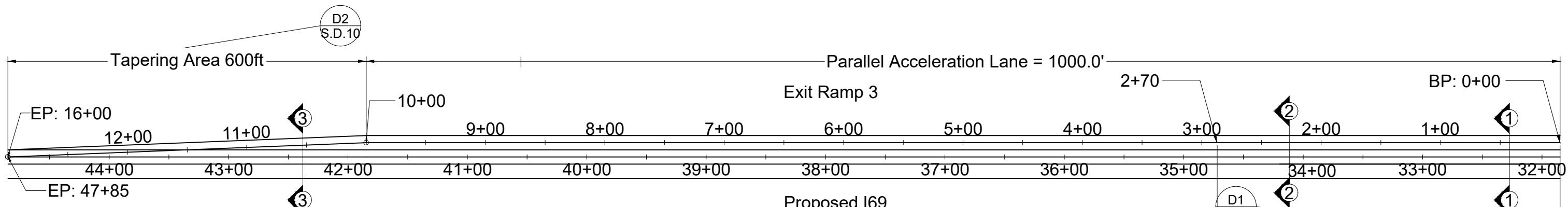
Drawing Title

EXIT RAMP 2 DETAILS

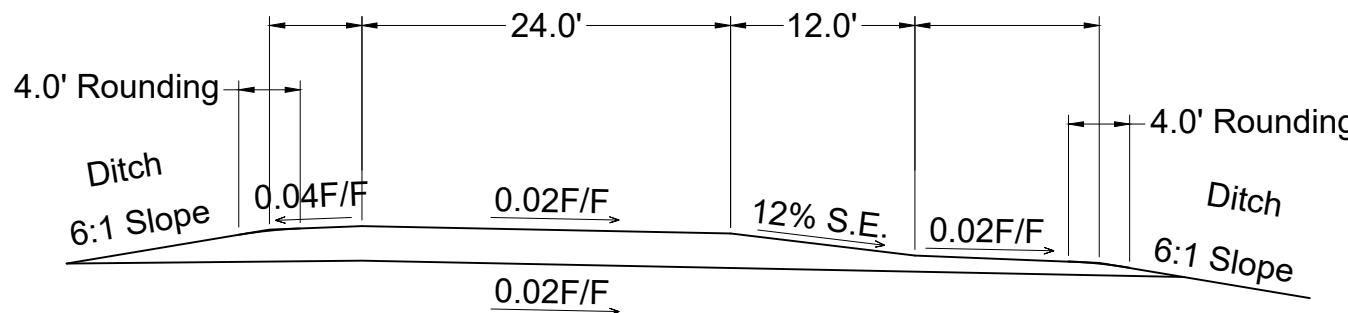
File Name	S.D.8 Exit Ramp 2 Details
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Drawing No.	S.D.8
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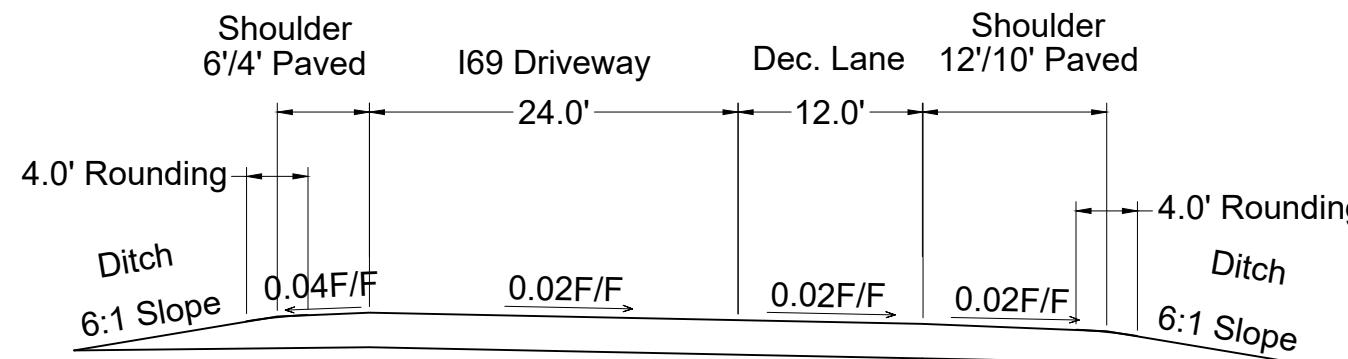
Paper Size	11" x 17"	Issued Date	11/28/18
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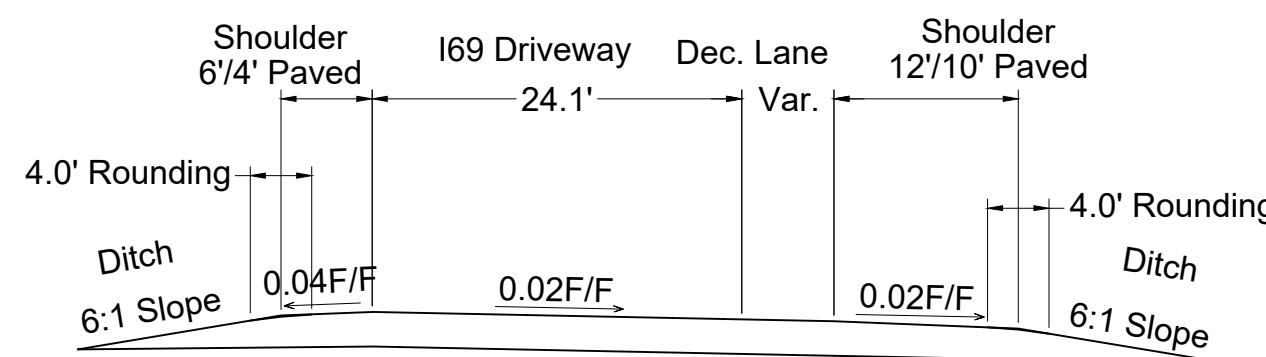
Proposed I69
EXIT RAMP 3
Scale 1 to 1000



Cross Section 1-1: Superelevated in Acceleration Lane
Scale 1 to 150



Cross Section 2-2: Normal Slope
Scale 1 to 150



Cross Section 3-3: Ending of Acceleration Lane
Scale 1 to 150

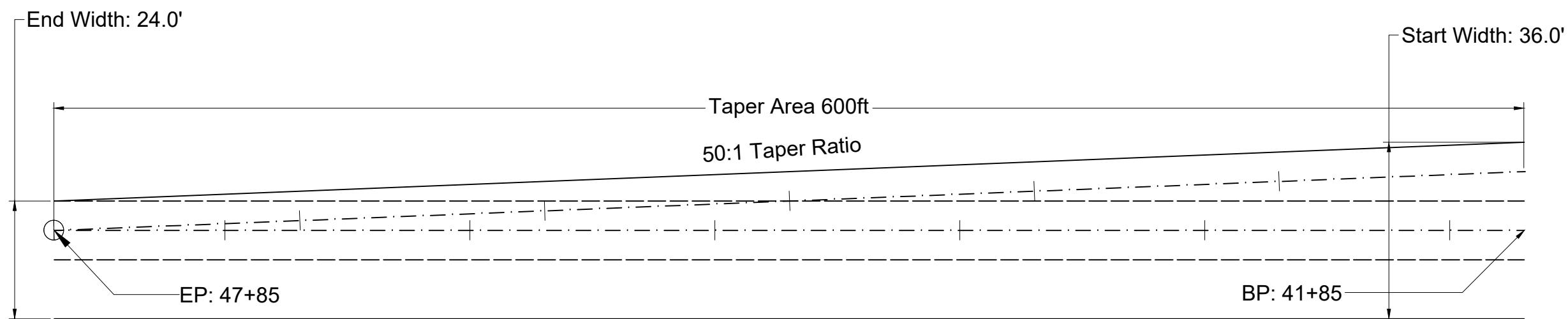
Local Engineering Firm	
	901 DESIGN, INCOPORATED 3720 Alumni Avenue, Memphis TN, 38111 Tel: (901) 978-9000 Email: 901design@memphis.edu

General Director Huan Ngo	
Lead Engineer	Huan Ngo
Designed by	Huan Ngo
Drawn by	Huan Ngo
Checked by	Steve Thesuis

Project REST AREA ADJACENT TO PROPOSED I69	
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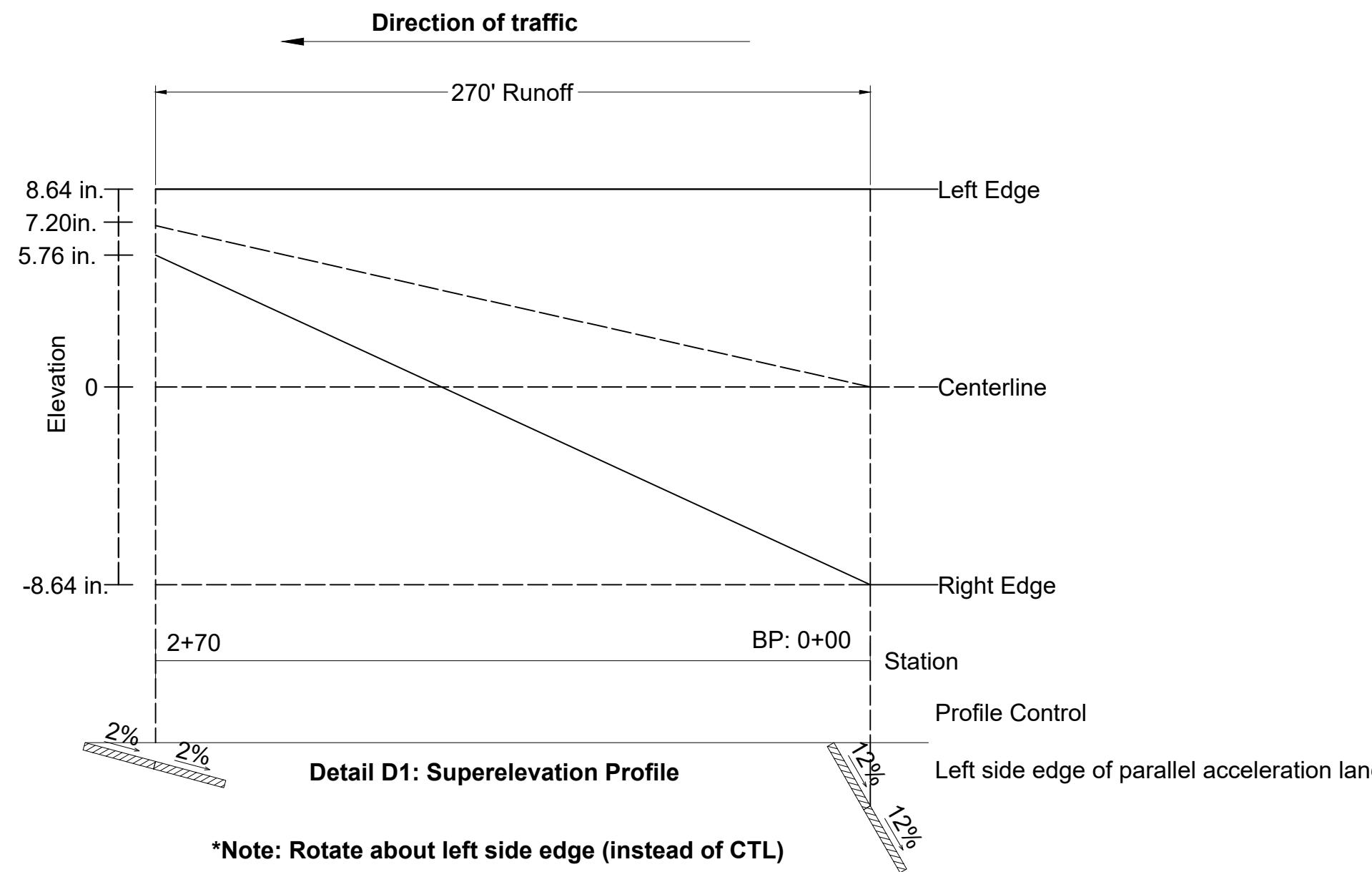
Drawing Title EXIT RAMP 3	
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File Name	S.D.9 Exit Ramp 3
Drawing No.	S.D.9
Paper Size	11" x 17"
Issued Date	11/28/18



Detail D2: Tapering Section

Scale 1 to 300



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Checked by | Steve Thesuis

Project

**REST AREA ADJACENT
TO PROPOSED I69**

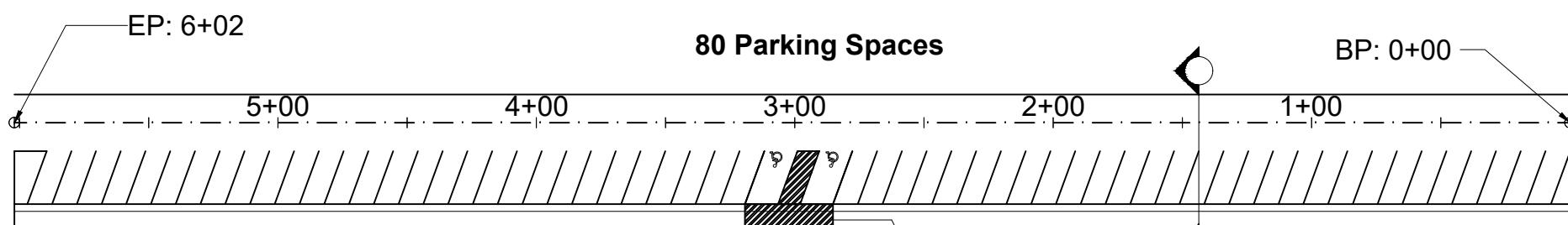
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EXIT RAMP 3 DETAILS

File Name | S.D.10 Exit Ramp 3

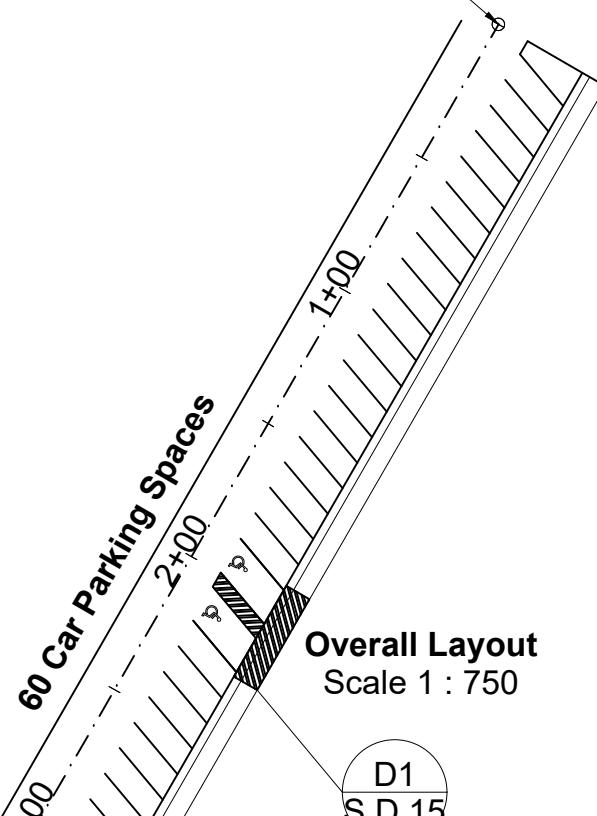
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Paper Size | 11" x 17" | Issued Date | 11/28/18



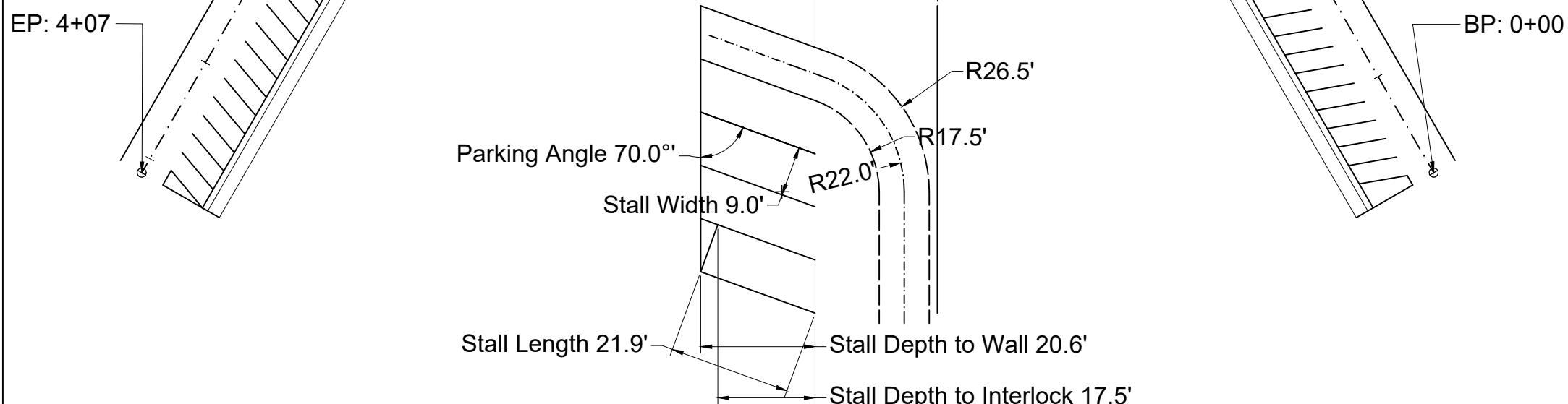
Overall Layout
Scale 1 : 750

BP: 0+00



Overall Layout
Scale 1 : 750

D1 S.D.15



Car Parking Stall Dimension

Scale 1 to 300

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REST AREA ADJACENT TO PROPOSED I69

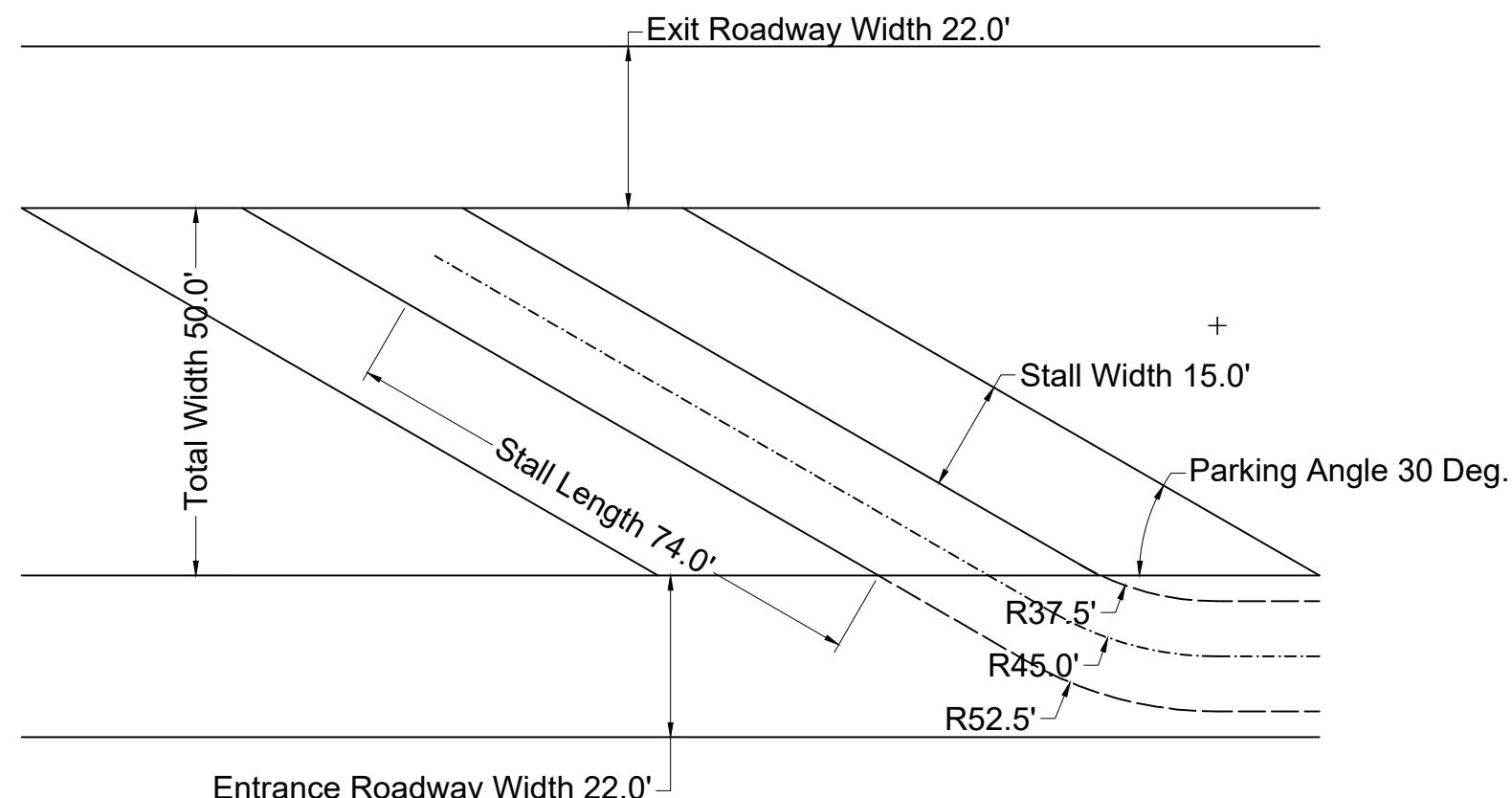
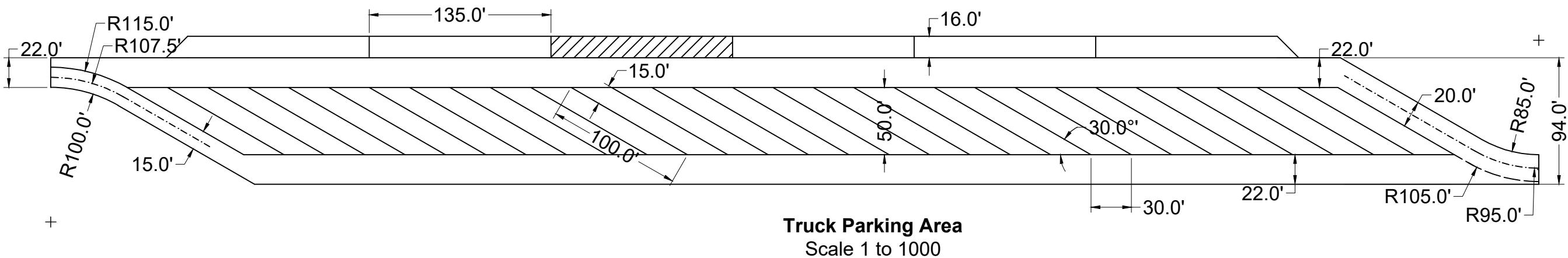
Drawing Title

Car Parking

File Name S.D.11 Car Parking

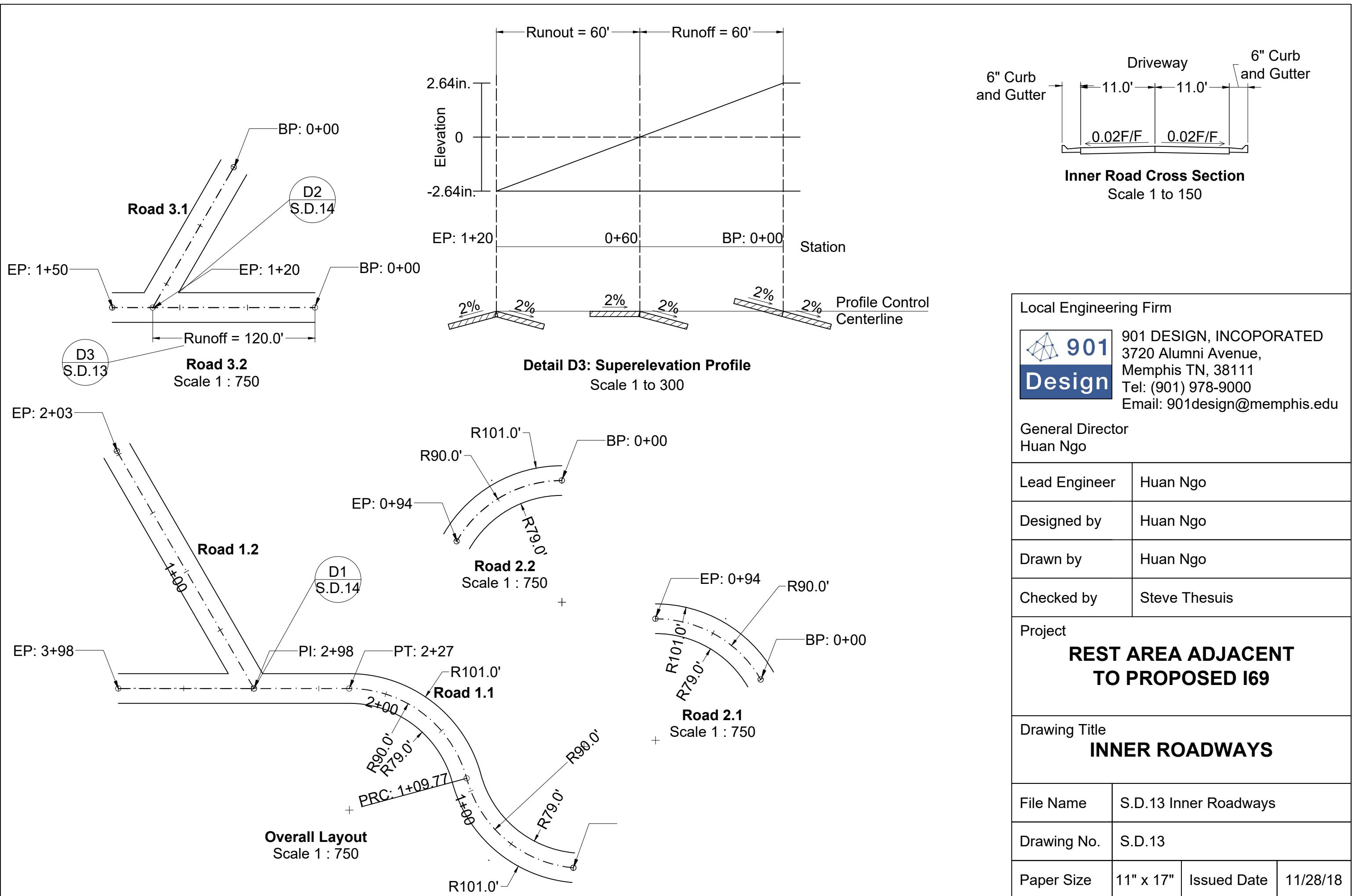
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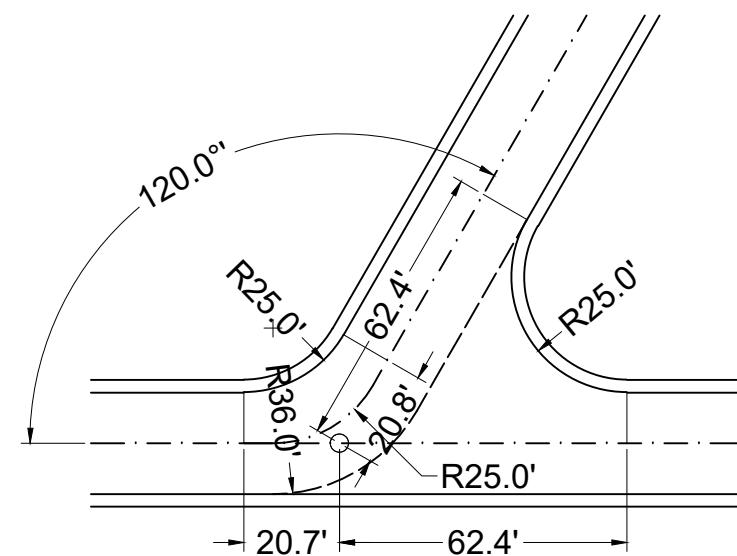
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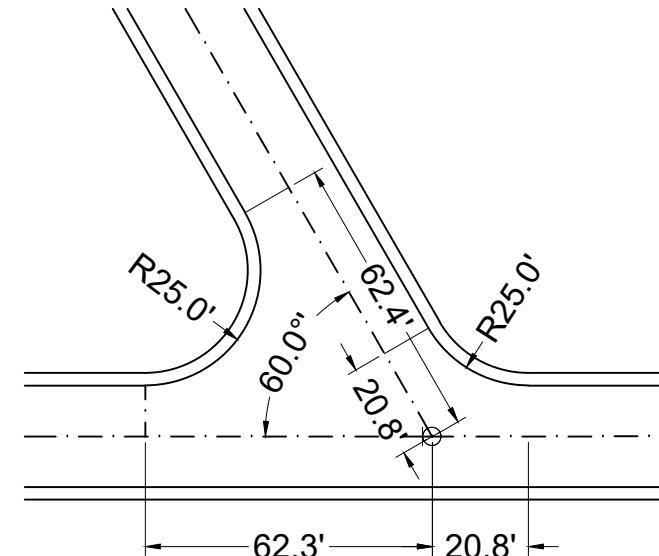
Truck Parking Stall
Scale 1 to 300

Local Engineering Firm	
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General Director Huan Ngo	
Lead Engineer	Huan Ngo
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Drawn by	Huan Ngo
Checked by	Steve Thesuis
Project	
REST AREA ADJACENT TO PROPOSED I69	
Drawing Title	
TRUCK PARKING	
File Name	S.D.12 Truck Parking
Drawing No.	S.D.12
Paper Size	11" x 17"
Issued Date	11/28/18

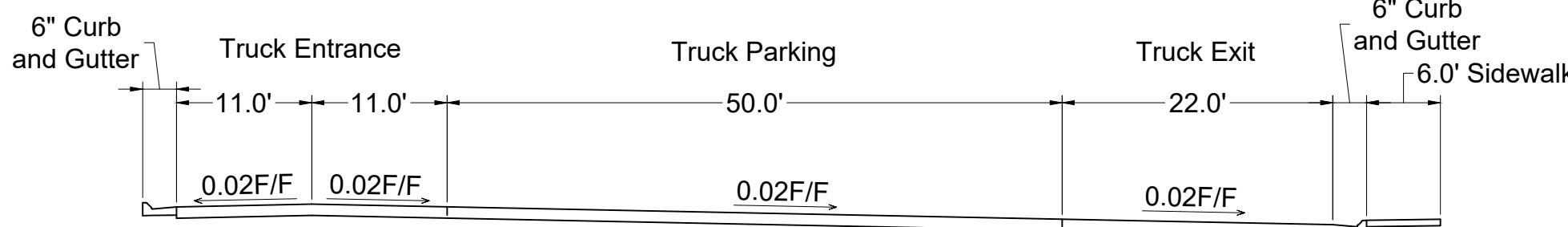




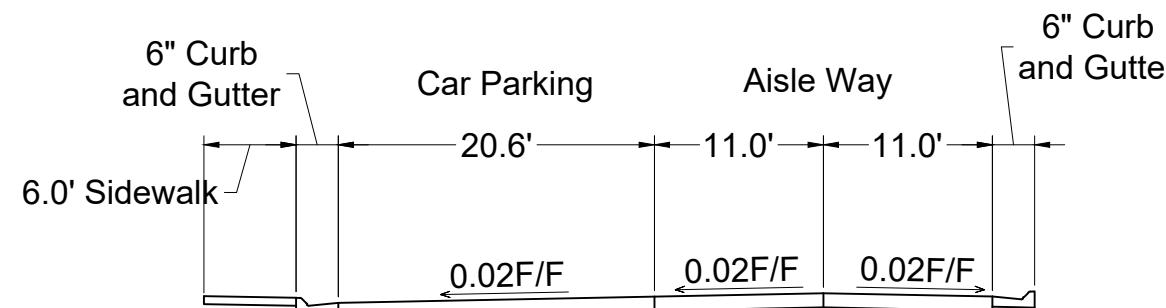
Detail D2: Intersection between Road 3.1 and 3.2
Scale 1 to 500



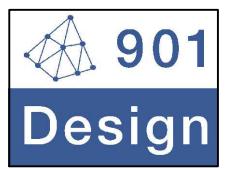
Detail D1: Intersection between Road 1.1 and 1.2
Scale 1 to 500



Cross Section of Truck Parking Area
Scale 1 to 150



Cross Section of Car Parking Area
Scale 1 to 150

Local Engineering Firm
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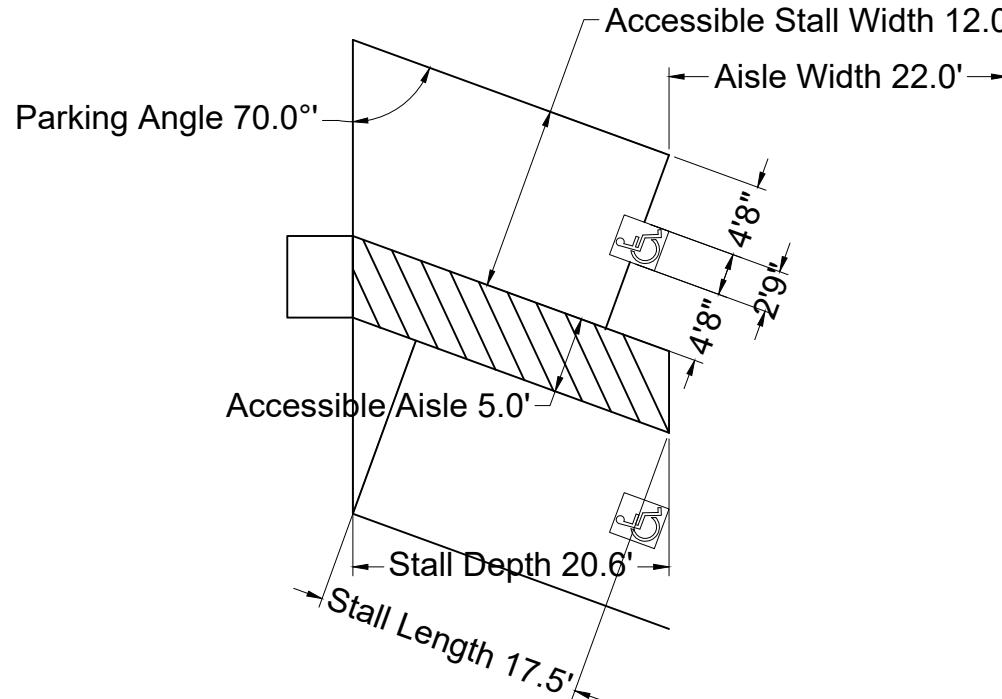
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**REST AREA ADJACENT
TO PROPOSED I69**

Drawing Title
OTHER DETAILS 1

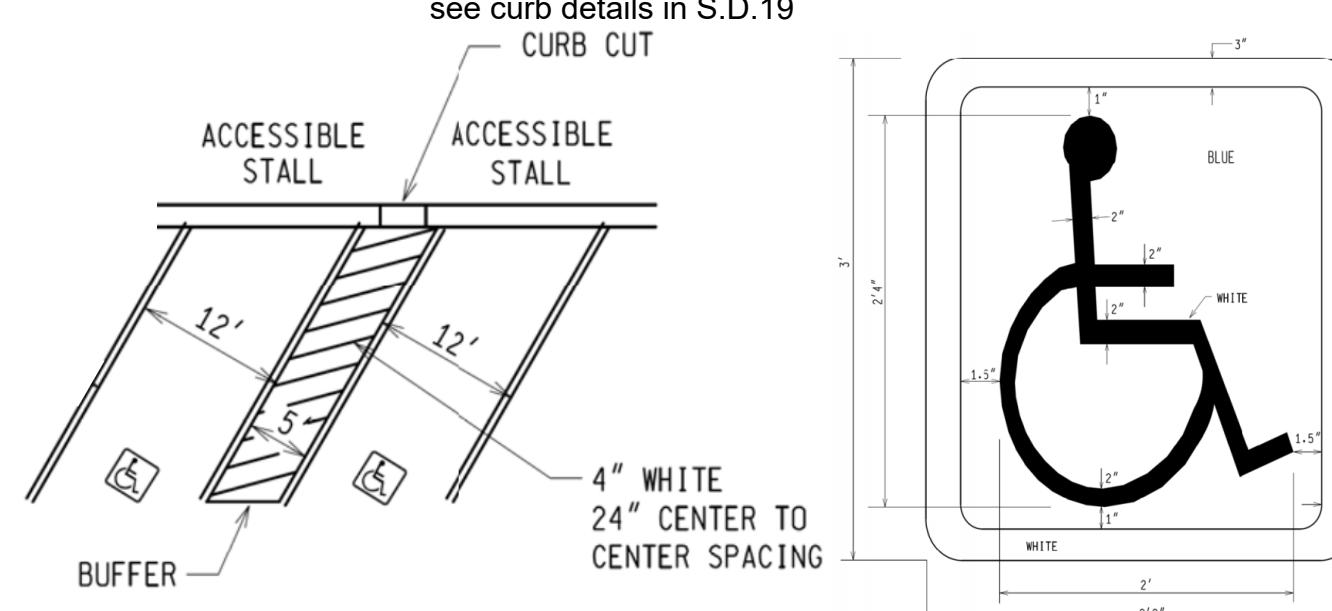
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Drawing No.	S.D.14	
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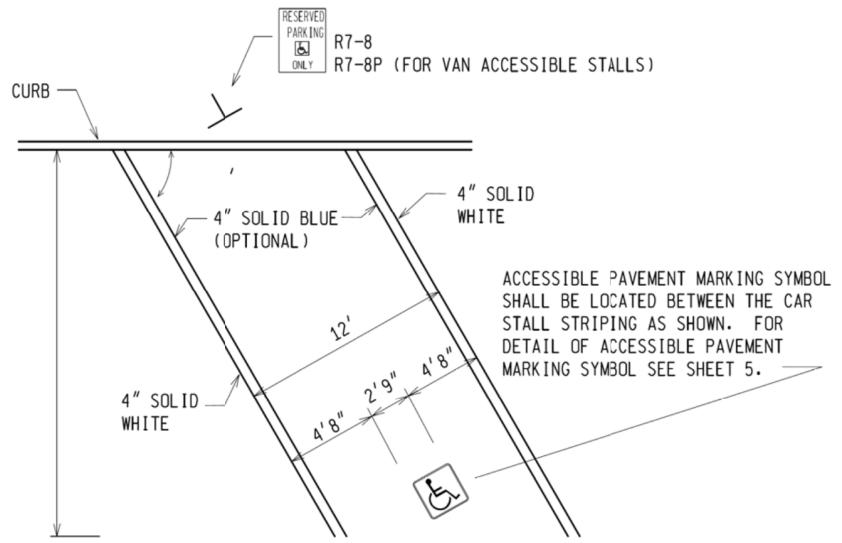
Paper Size	11" x 17"	Issued Date	11/28/18
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Pair of 2 car accessible parking



Pair of 1 car and 1 van accessible parking
Scale 1 to 150



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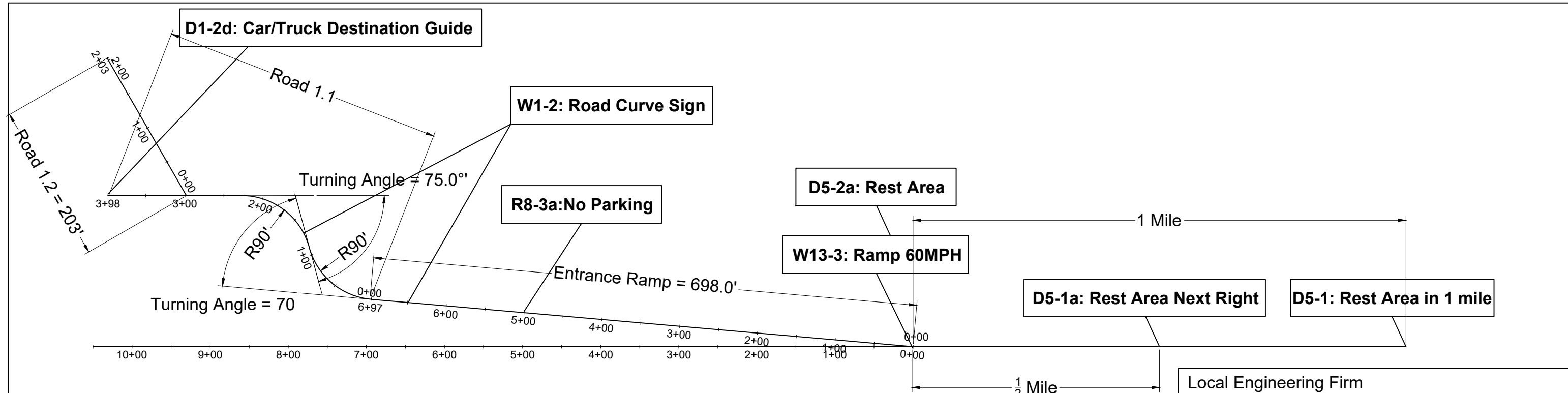
REST AREA ADJACENT TO PROPOSED I69

Drawing Title
ACCESSIBLE PARKING

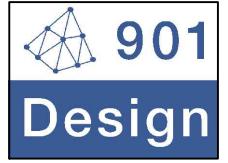
File Name S.D. 15 Accessible Parking

Drawing No. S.D.15

Paper Size 11" x 17" | Issued Date 11/28/18



Detail D1: Entrance Ramp
Scale 1 to 1500

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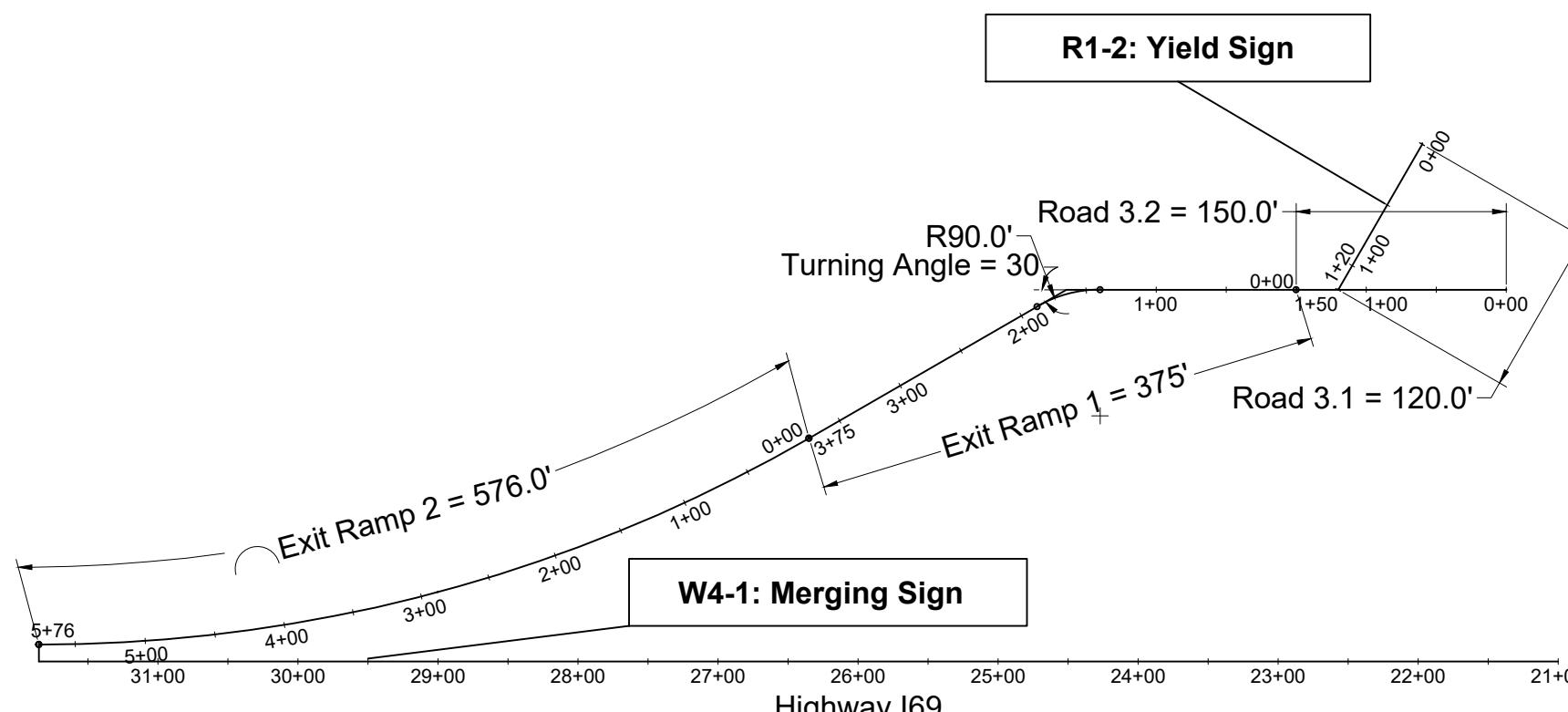
Project
**REST AREA ADJACENT
TO PROPOSED I69**

Drawing Title
ROAD SIGNAGE 1

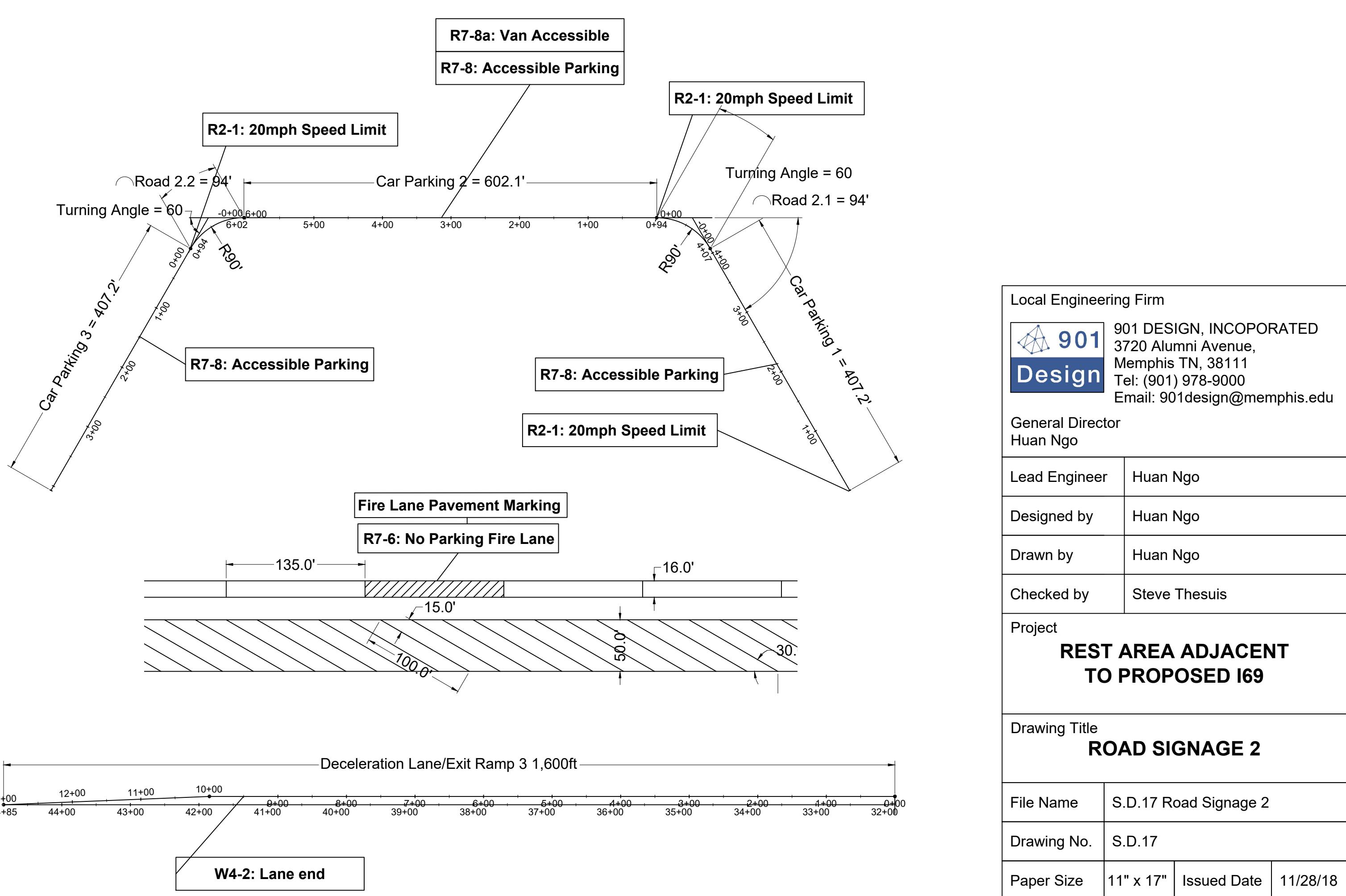
File Name S.D.16 Road Signage 1

Drawing No. S.D.16

Paper Size 11" x 17" Issued Date 11/28/18



Detail D3: Exit Ramp
Scale 1 to 1500





R8-3a



D5-1a



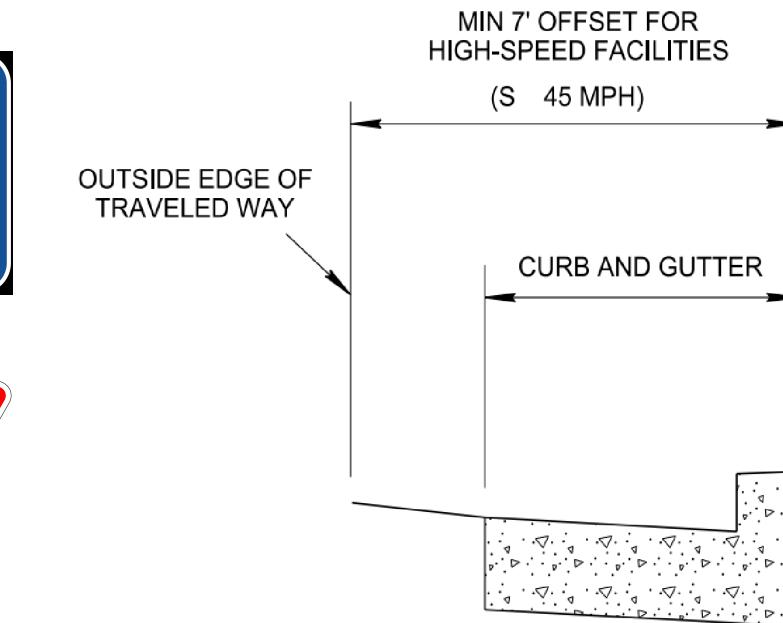
W13-2



W4-1



D5-2a



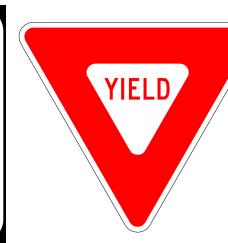
W1-2



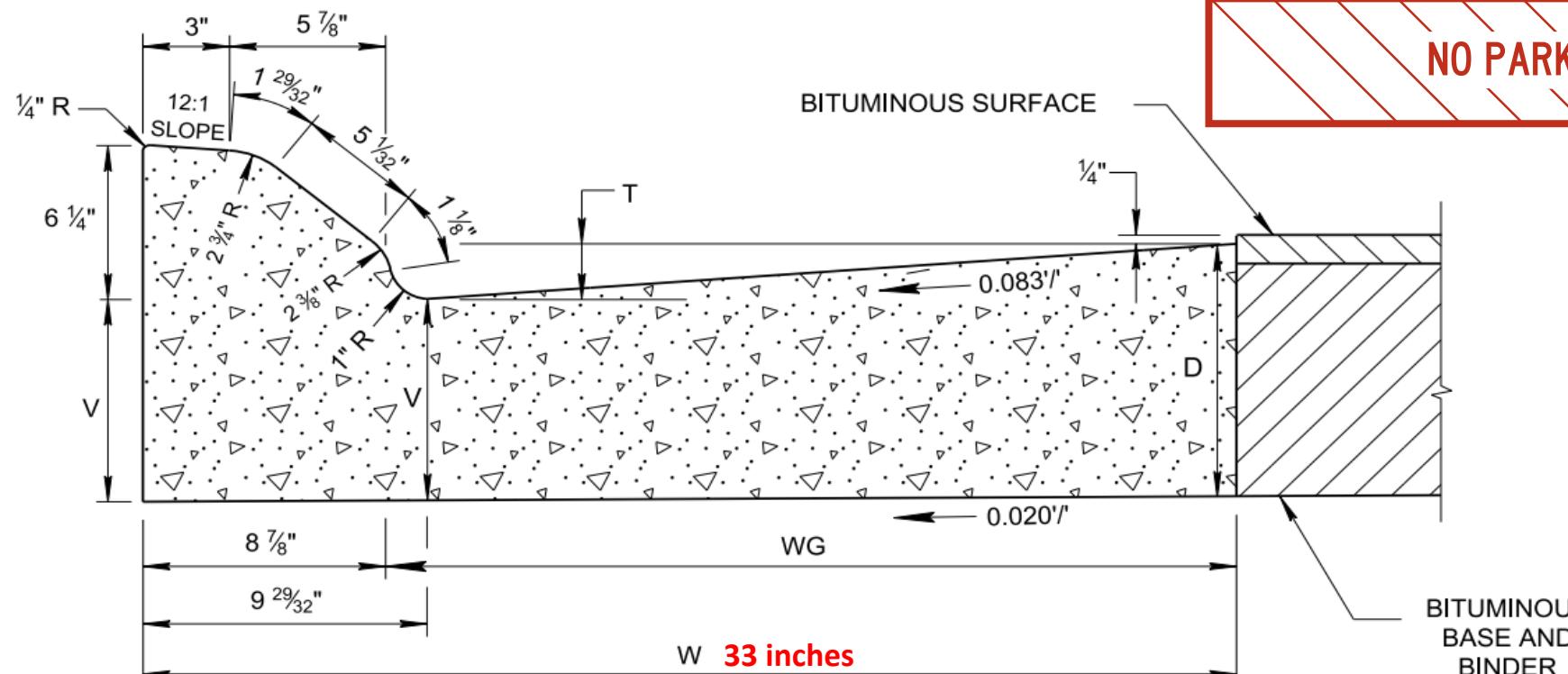
D5-1



D1-2



R1-2

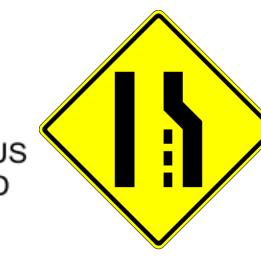


6" SLOPING CONCRETE COMBINED CURB AND GUTTER



R7-6

R2-1



W4-2

R7-8

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Lead Engineer	Huan Ngo
Designed by	Huan Ngo
Drawn by	Huan Ngo
Checked by	Steve Thesuis
Project	REST AREA ADJACENT TO PROPOSED I69

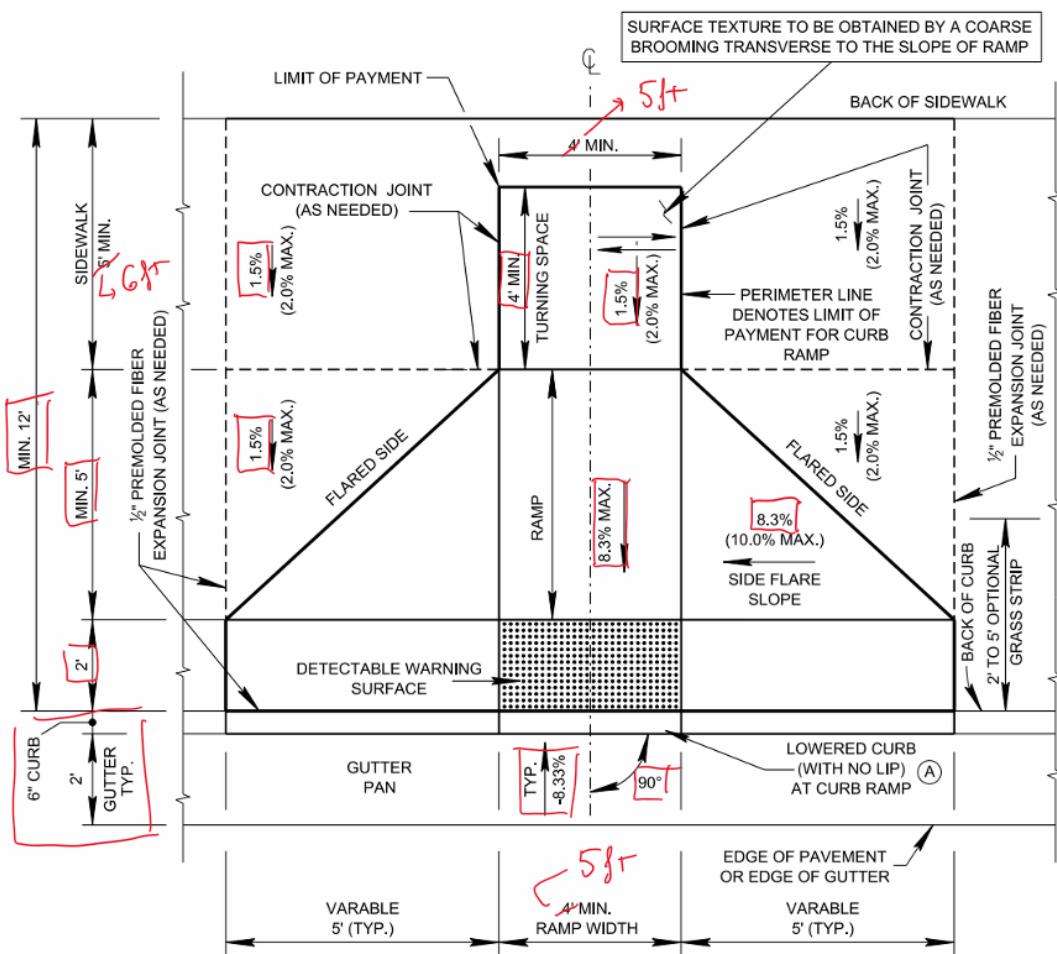
Other Details 2	
File Name	S.D.18 Other Details 2
Drawing No.	S.D.18
Paper Size	11" x 17"
Issued Date	11/28/18

6" SLOPING CONCRETE COMBINED CURB AND GUTTER TABLE					
TYPE	TOTAL WIDTH (W) IN INCHES	WIDTH OF GUTTER (WG) IN INCHES	VERTICAL DROP (T) IN INCHES	VERTICAL DEPTH (D) OF GUTTER	VERTICAL DEPTH (V) OF GUTTER AT FLOW LINE
6-33	33	24 1/8	2	AS NOTED	D - 1.52"
6-39	39	30 1/8	2 1/2	ON TYPICAL X-SECTIONS	D - 1.90"
6-45	45	36 1/8	3		D - 2.28"

VERTICAL DEPTH (V) MUST ALWAYS EXCEED SIX (6) INCHES.

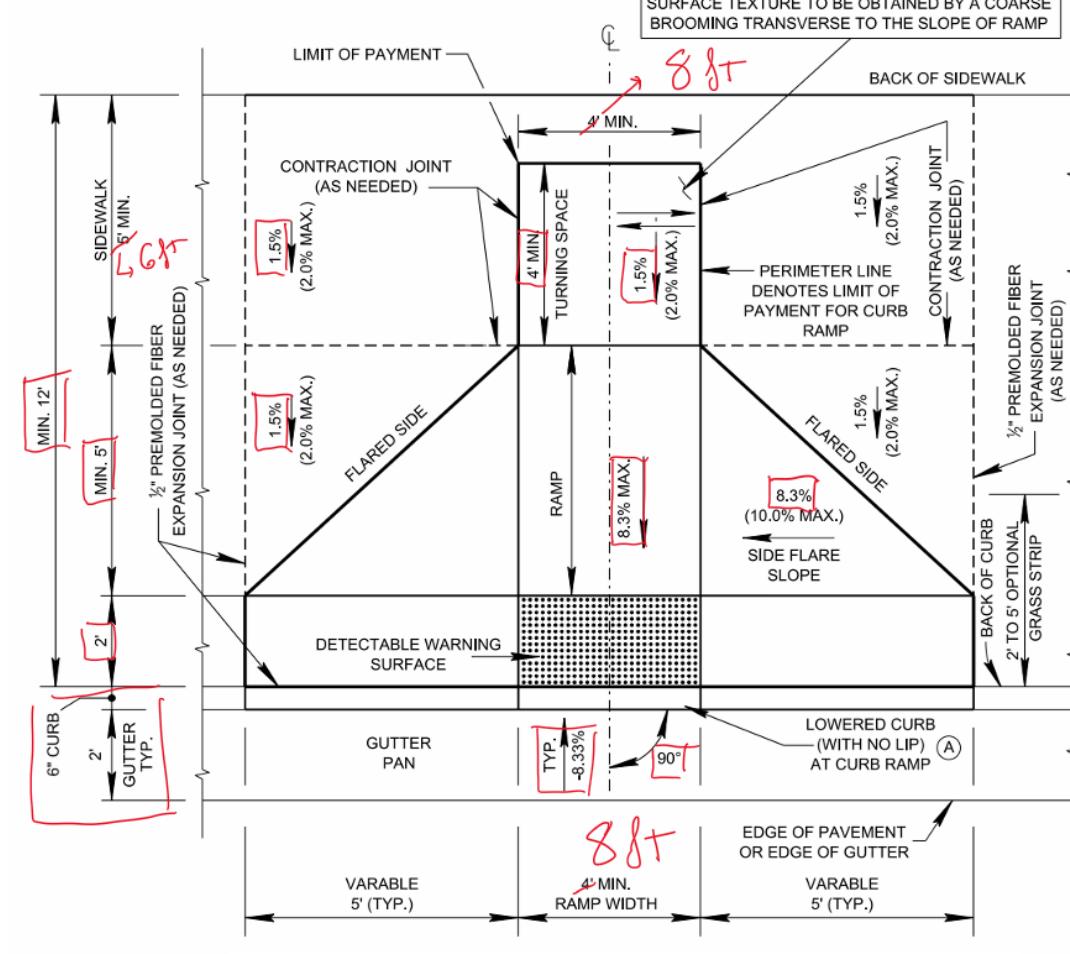


R7-8a



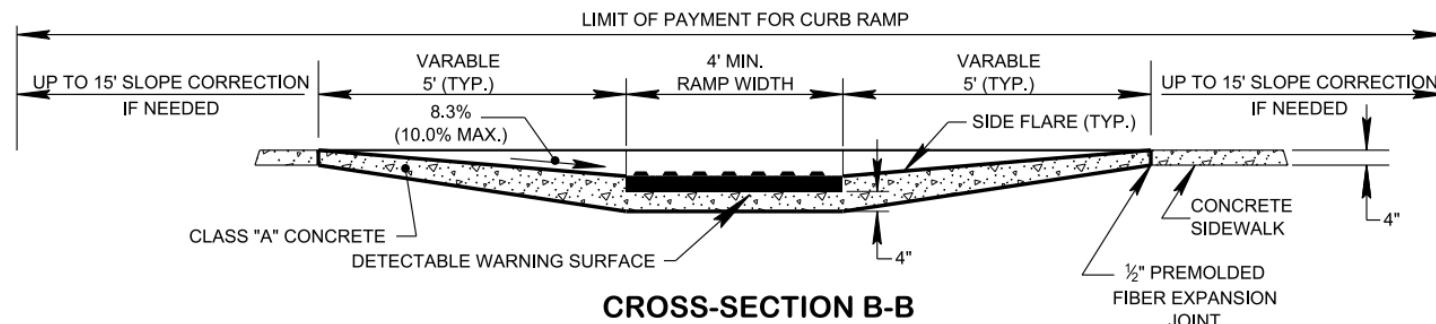
5ft Perpendicular Curb Ramp for Car Accessible

PLAN VIEW

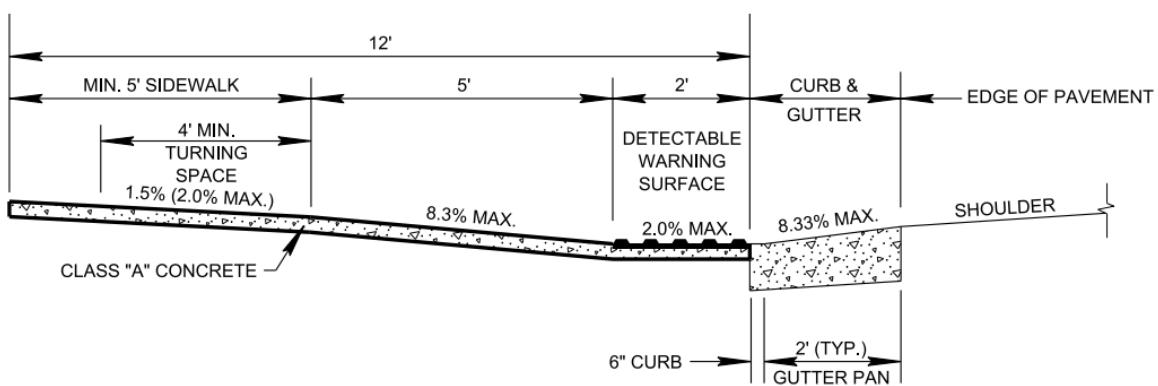


8ft Perpendicular Curb Ramp for Van Accessible

PLAN VIEW

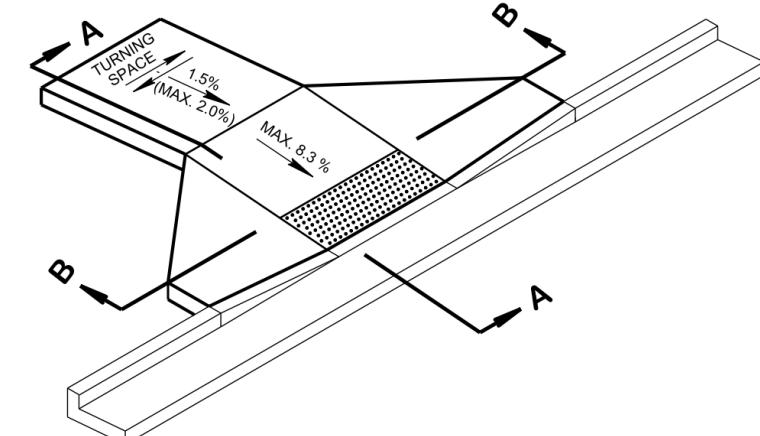


CROSS-SECTION B-B



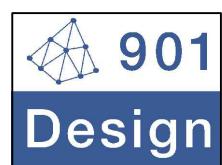
CROSS SECTION A-A

(SHOWN 30" CURB AND GUTTER TRANSITION)
AT LOCATIONS WHERE THE GUTTER PAN DOES NOT EXIST AND 2 FEET OF FLAT SURFACE MAY BE ELIMINATED.
THE ALGEBRAIC DIFFERENCE IN GRADE AT THE CURB RAMP/STREET INTERFACE SHALL NOT EXCEED 11%.



**ISOMETRIC VIEW
CURB RAMP WITH GUTTER DETAIL**

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Drawn by Huan Ngo

Checked by Steve Thesuis

Project

**REST AREA ADJACENT
TO PROPOSED I69**

Drawing Title

PERPENDICULAR CURB RAMP

File Name	S.D.19 Perpendicular Curb Ramp
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Drawing No.	S.D.19
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Paper Size	11" x 17"	Issued Date	11/28/18
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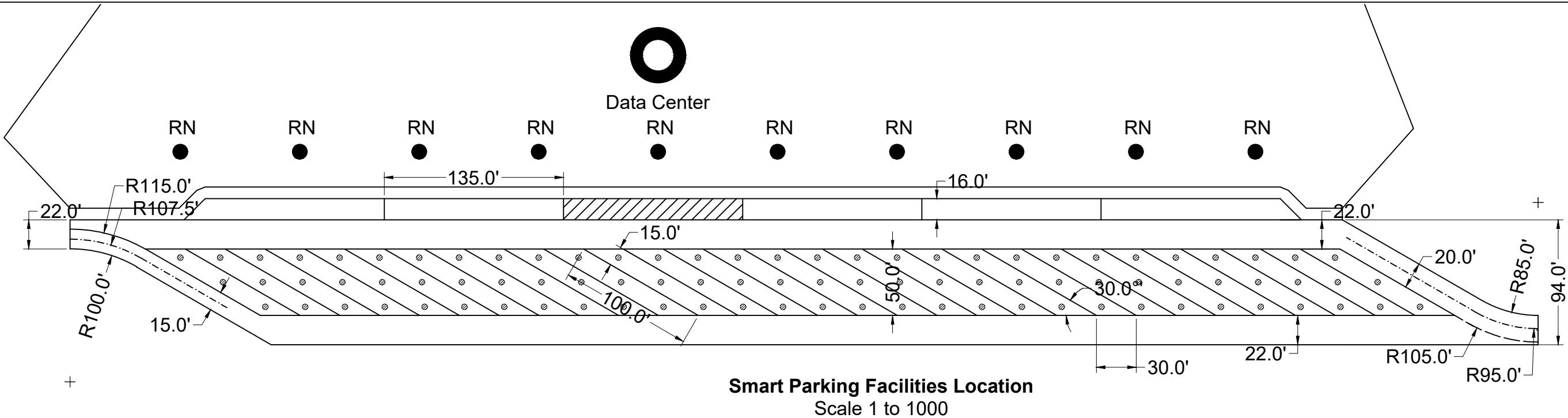


Figure 1. Sensor installation (images by Gorm Tuxen)



Figure 2. Relay node and data collector installation (images by Gorm Tuxen)

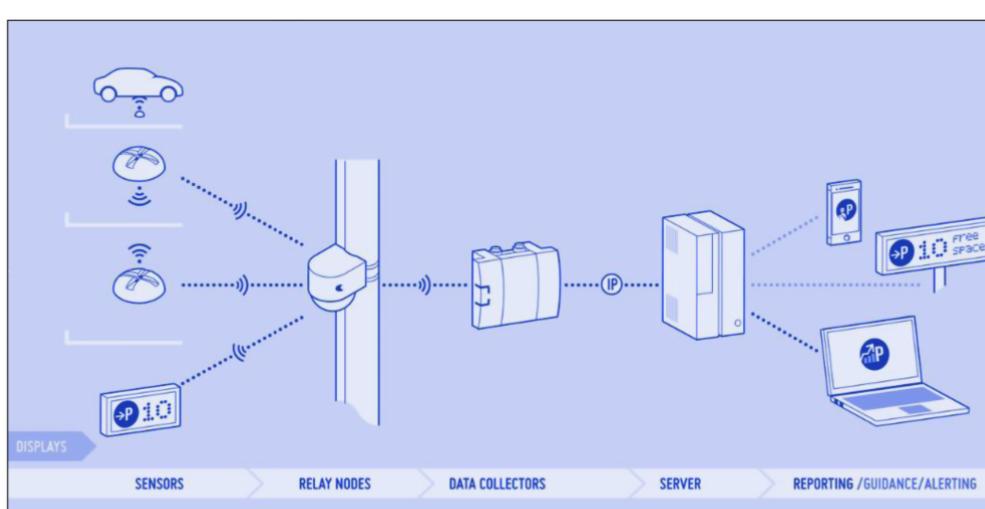


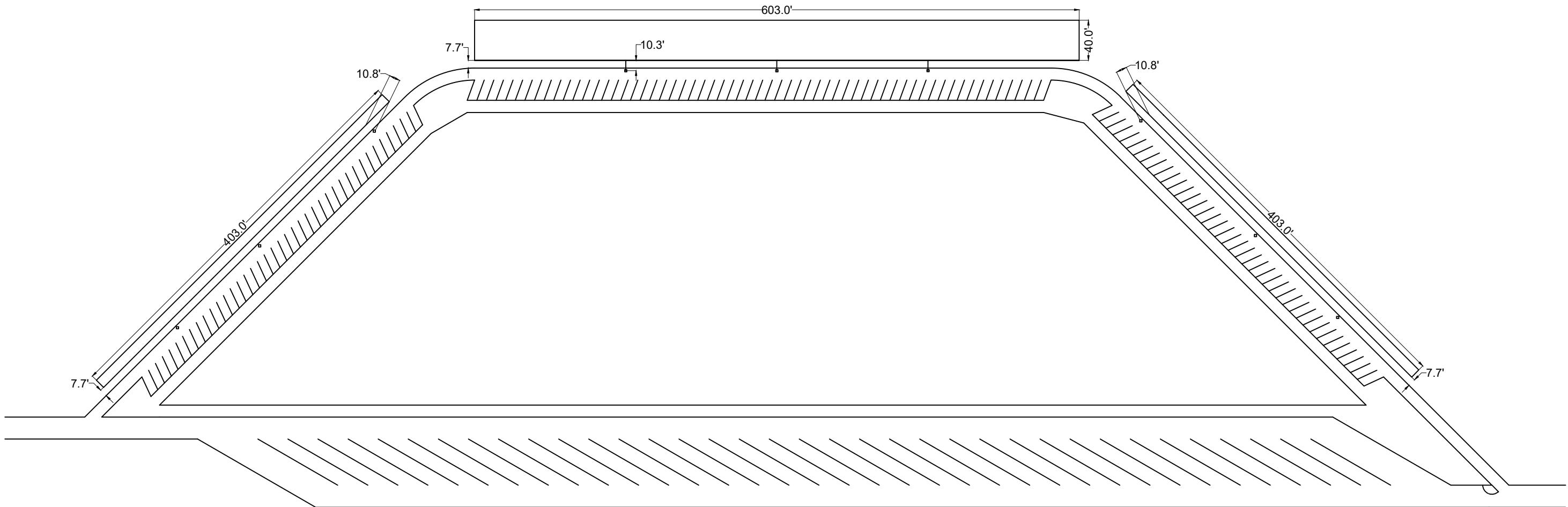
Figure 3. System components and hardware description (reprinted from NEDAP Identification Systems 2014a, with permission)

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Project
**REST AREA ADJACENT
TO PROPOSED I69**

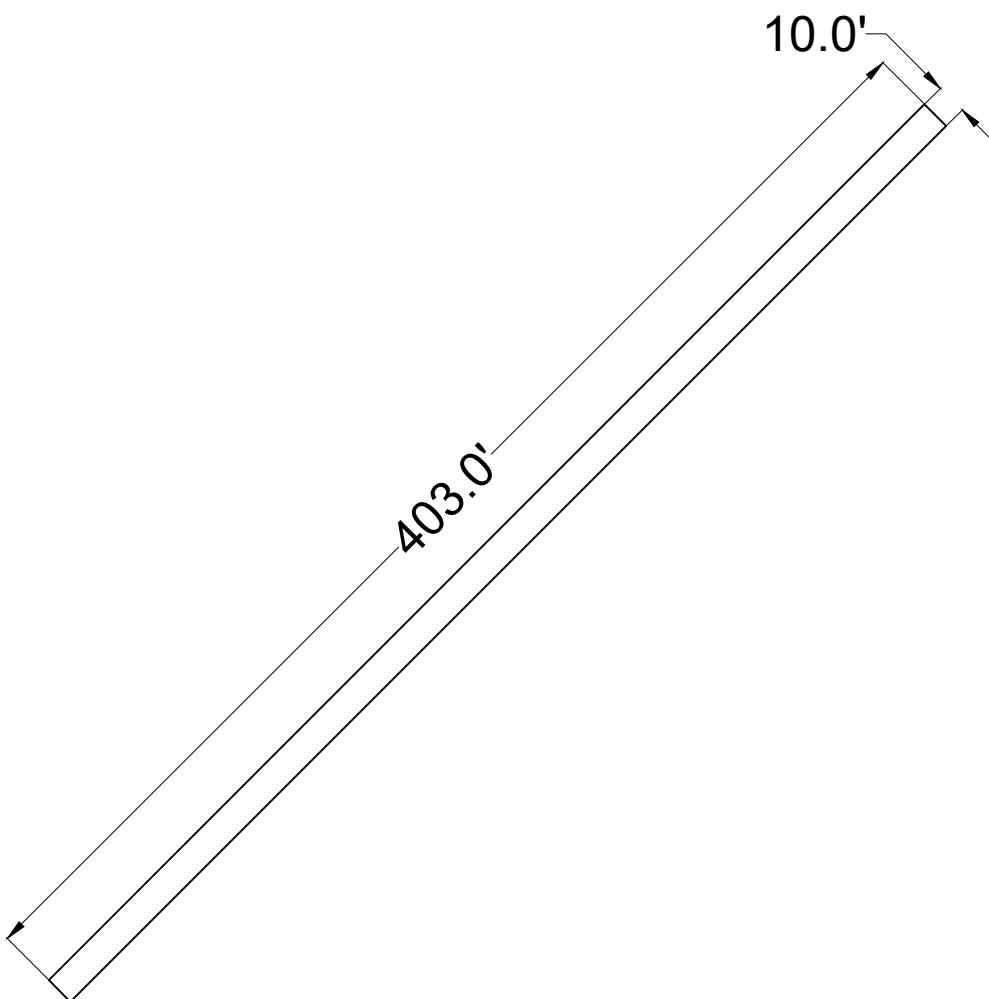
Drawing Title
SMART PARK FACILITIES

File Name	S.D.20 Smart Park Facilities		
Drawing No.	S.D.20		
Paper Size	11" x 17"	Issued Date	11/28/18

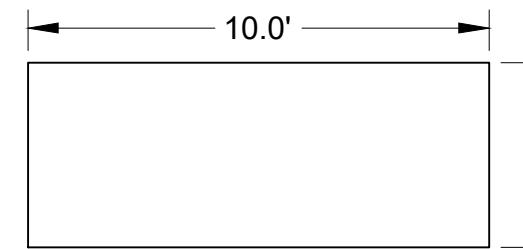


Not To Scale

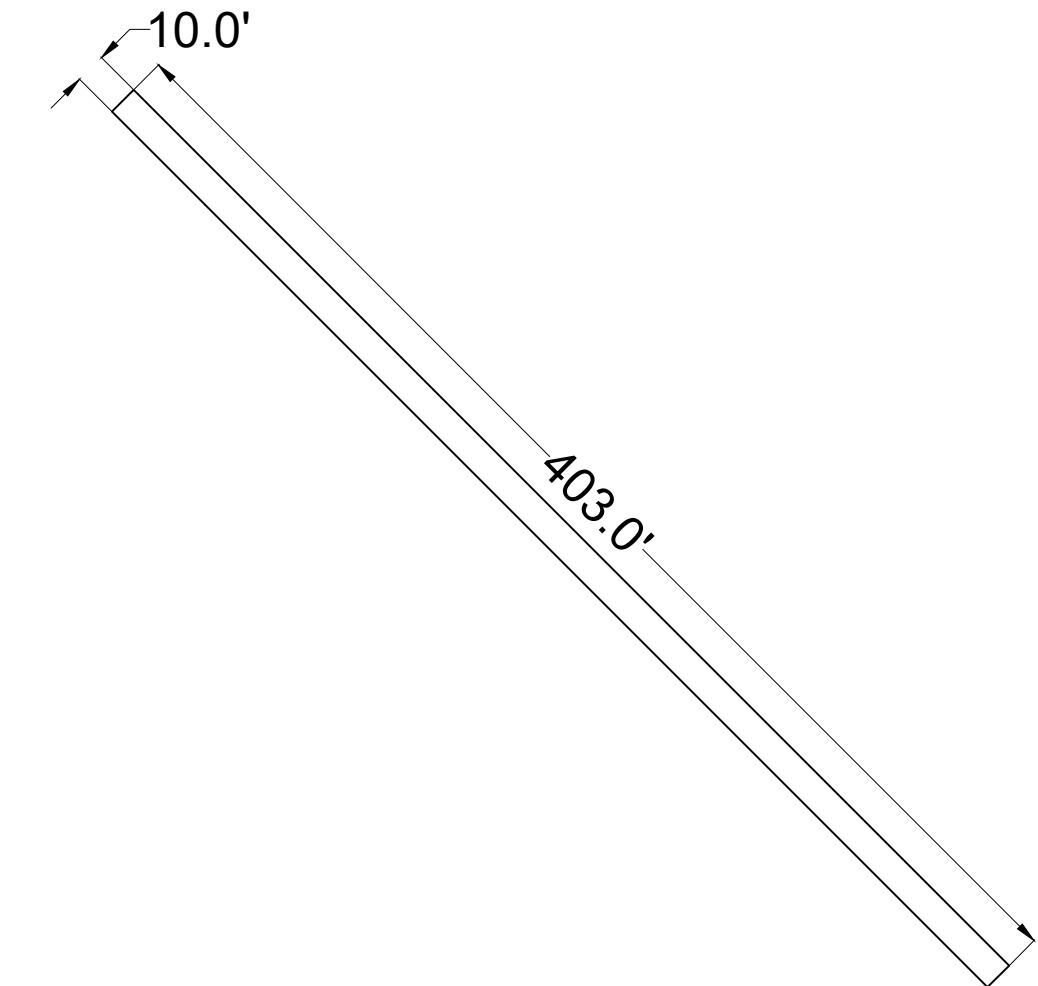
Local Engineering Firm  901 DESIGN, INCOPORATED 3720 Alumni Avenue, Memphis TN, 38111 Tel: (901) 978-9000 Email: 901design@memphis.edu	Lead Engineer	Huan Ngo	Project REST AREA ADJACENT TO PROPOSED I69 Drawing Title Drainage Plan View	File Name	S.E.1 Drainage Plan View
	Designed by	Jana Moss		Drawing No.	S.E.1
	Drawn by	Jana Moss		Paper Size	11" x 17"
	Checked by	901 DESIGN		Issued Date	11/28/2018
General Director Huan Ngo					



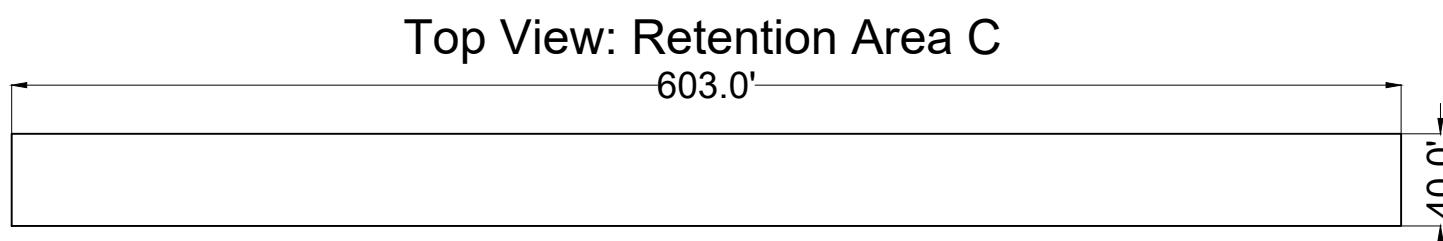
Top View: Retention Area A
Scale 1:750



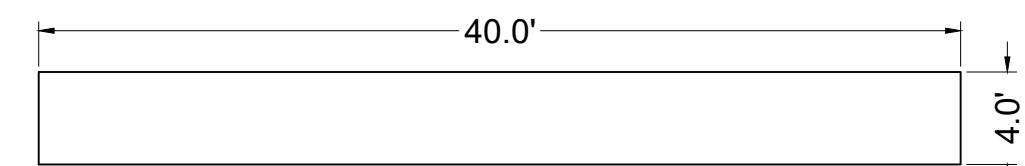
Cross Section: Areas A & B
Scale 1:50



Top View: Retention Area A
Scale 1:750

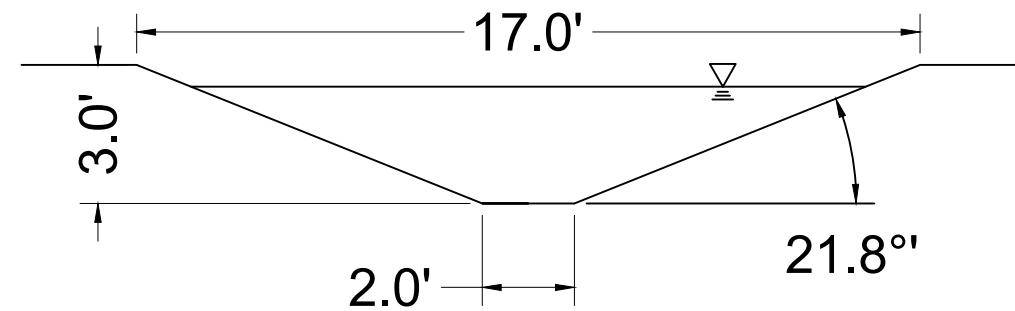


Scale 1:1000



Cross Section: Area C
Scale 1:100

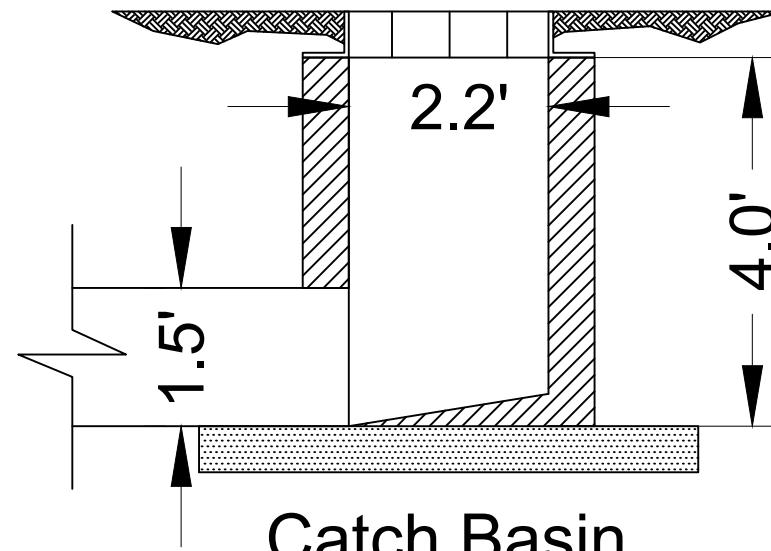
Local Engineering Firm 901 Design 901 DESIGN, INCOPORATED 3720 Alumni Avenue, Memphis TN, 38111 Tel: (901) 978-9000 Email: 901design@memphis.edu	Lead Engineer	Huan Ngo	Project REST AREA ADJACENT TO PROPOSED I69 Drawing Title Retention Detail	File Name	S.E.2 Retention Detail
	Designed by	Jana Moss		Drawing No.	S.E.2
	Drawn by	Jana Moss		Paper Size	11" x 17"
	Checked by	901 DESIGN		Issued Date	11/28/2018



Trapezoidal Ditch Design	
Depth (ft)	3
Area (sqft)	28.5000
Length (ft)	4000
Top Width (ft)	17
Hydraulic Depth (ft)	1.7000
Wetted Perimeter (ft)	18.2000
Hydraulic Radius (ft)	1.6000

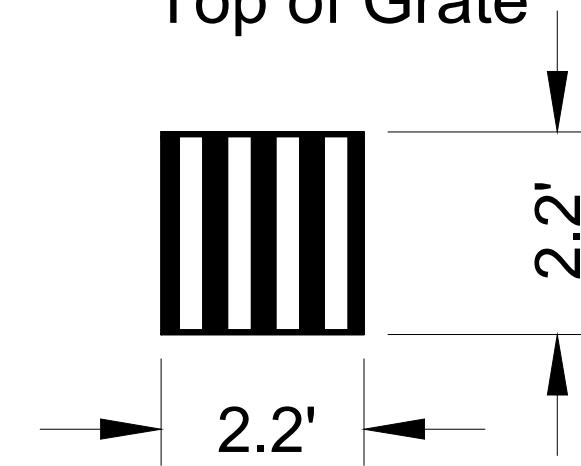
Local Engineering Firm  901 DESIGN, INCOPORATED 3720 Alumni Avenue, Memphis TN, 38111 Tel: (901) 978-9000 Email: 901design@memphis.edu	Lead Engineer	Huan Ngo	Project REST AREA ADJACENT TO PROPOSED I69 Drawing Title Ditch Detail	File Name	S.E.3 Ditch Detail
	Designed by	Jana Moss		Drawing No.	S.E.3
	Drawn by	Jana Moss		Paper Size	11" x 17"
	Checked by	901 DESIGN		Issued Date	11/28/2018
General Director Huan Ngo					

Ground Level



Catch Basin

Top of Grate



Scale 1:25

Local Engineering Firm 901 Design 901 DESIGN, INCOPORATED 3720 Alumni Avenue, Memphis TN, 38111 Tel: (901) 978-9000 Email: 901design@memphis.edu	Lead Engineer	Huan Ngo	Project REST AREA ADJACENT TO PROPOSED I69 Drawing Title Pipe Inlet Detail	File Name	S.E.4 Pipe Inlet Detail
	Designed by	901 DESIGN		Drawing No.	S.E.4
	Drawn by	Jana Moss		Paper Size	11" x 17"
	Checked by	901 DESIGN		Issued Date	11/28/2018