Bench Mark: Chisel "X" on chain bolt of fire hydrant in front of 555 W. Harrison St. Elev. 594.46.

Existing Structure: None

The existing Ramp WS bridge will be closed and traffic will be detoured during construction. Traffic on I-290 and I-90/94 will be maintained with stage construction.

No Salvage.

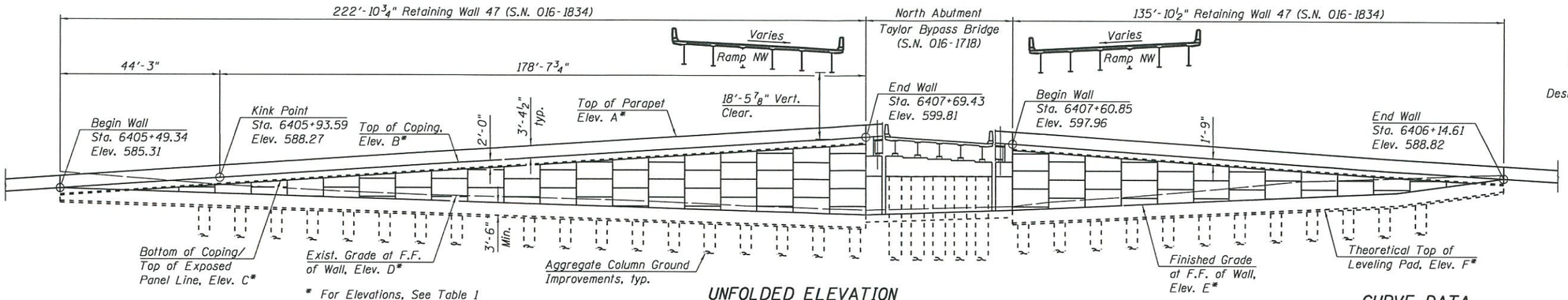
NOTES:

1. Wall offsets are measured from the ℄ of Taylor St. Bypass Ramp to the front face of precast panels.
2. F.F. denotes Front Face.
3. B.F. denotes Back Face.
4. Aggregate columns must be spaced to avoid interference with existing utilities to remain, proposed utilities to be installed, and proposed abutment foundation.
5. All proposed drainage structure locations along I-90/94 are conceptual at this stage and are subject to refinement during final design.

HIGHWAY CLASSIFICATION

SB I-90/94 Taylor St. Bypass Ramp
Functional Class: Interstate
ADT: NA (2012); 8,000 (2040)
ADTT: NA (2012); 240 (2040)
DHV: 590 (2040)
Design Speed: 25 m.p.h.
Posted Speed: 25 m.p.h.
One-Way Traffic
Directional Distribution: 100%

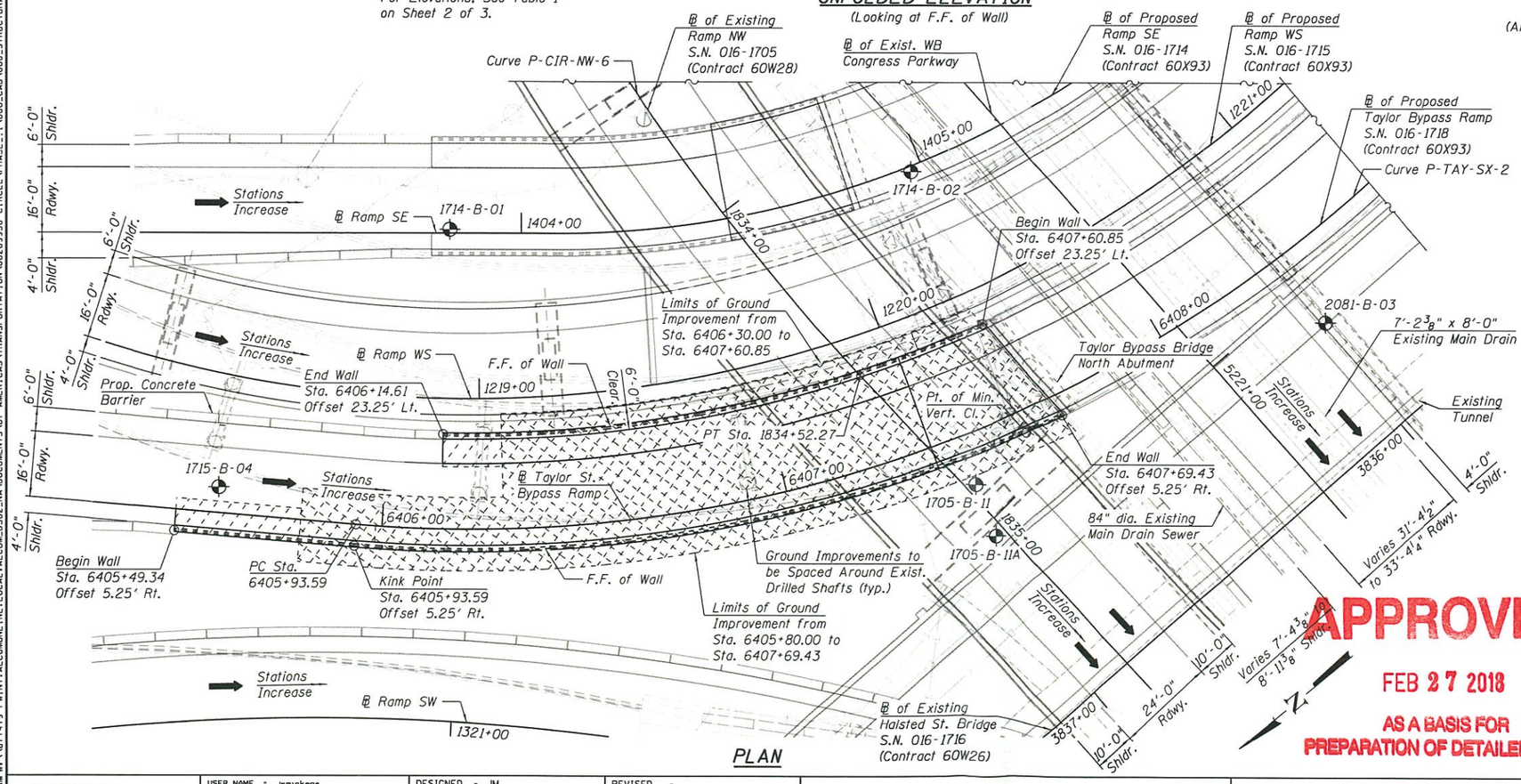
Ramp NW
Functional Class: Interstate
ADT: 32,500 (2012); 39,000 (2040)
ADTT: 2,600 (2012); 2,730 (2040)
DHV: 2,790 (2040)
Design Speed: 35 m.p.h.
Posted Speed: 35 m.p.h.
One-Way Traffic
Directional Distribution: 100%



* For Elevations, See Table 1 on Sheet 2 of 3.

UNFOLDED ELEVATION

(Looking at F.F. of Wall)



PLAN

CURVE DATA

(Along ℄ Taylor St. Bypass Ramp)

P-TAY-SX-2
P.I. Sta. = 6408+06.27
Δ = 65° 55' 10" (LT)
D = 17° 28' 06"
R = 328.00'
T = 212.68'
L = 377.37'
E = 62.92'
e = 5.00%
T.R. = NA
S.E. Run = 108'
P.C. Sta. = 6405+93.59
P.T. Sta. = 6409+70.96

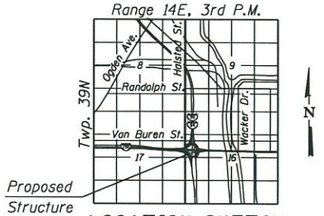
CURVE DATA

(Ramp NW)

P-CIR-NW-6
P.I. Sta. = 1831+44.22
Δ = 88° 30' 25" (LT)
D = 10° 36' 37"
R = 540.00'
T = 526.11'
L = 834.16'
E = 213.92'
e = 5.4%
T.R. = NA
S.E. Run = 66'
P.C. Sta. = 1826+18.11
P.T. Sta. = 1834+52.27

LEGEND

- Electric — E —
- Fiber Optic — FO —
- Exist. Storm Sewer
- Light Pole
- Soil Boring
- Limits of Soil Reinforcement
- Limits of Soil Reinforcement With Ground Improvements



LOCATION SKETCH

DESIGN SPECIFICATIONS

2014 AASHTO LRFD Bridge Design Specifications 7th Edition with 2015 and 2016 Interim Specifications

DESIGN STRESSES

FIELD UNITS

f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)

PRECAST UNITS

f'c = 4,500 psi

APPROVED
FEB 27 2018
AS A BASIS FOR
PREPARATION OF DETAILED PLANS

GENERAL PLAN
RETAINING WALL 47 ALONG
F.A.I 94 (SB I-90/94 TAYLOR ST. BYPASS RAMP)
SECTION 2014-013 R&B-R
COOK COUNTY
STATION 6405+49.34 TO STATION 6407+69.43
STRUCTURE NO. 016-1834

USER NAME = jrmickens	DESIGNED - JM	REVISED -	
	CHECKED - WJC	REVISED -	
PLOT SCALE = 32.00 ' / in.	DRAWN - JM	REVISED -	
PLOT DATE = 1/3/2018	CHECKED - WJC	REVISED -	

TranSystems

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET NO. 1 OF 3 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013 R&B-R	COOK	3	1
		CONTRACT NO. 60X93		
	ILLINOIS FED. AID PROJECT			

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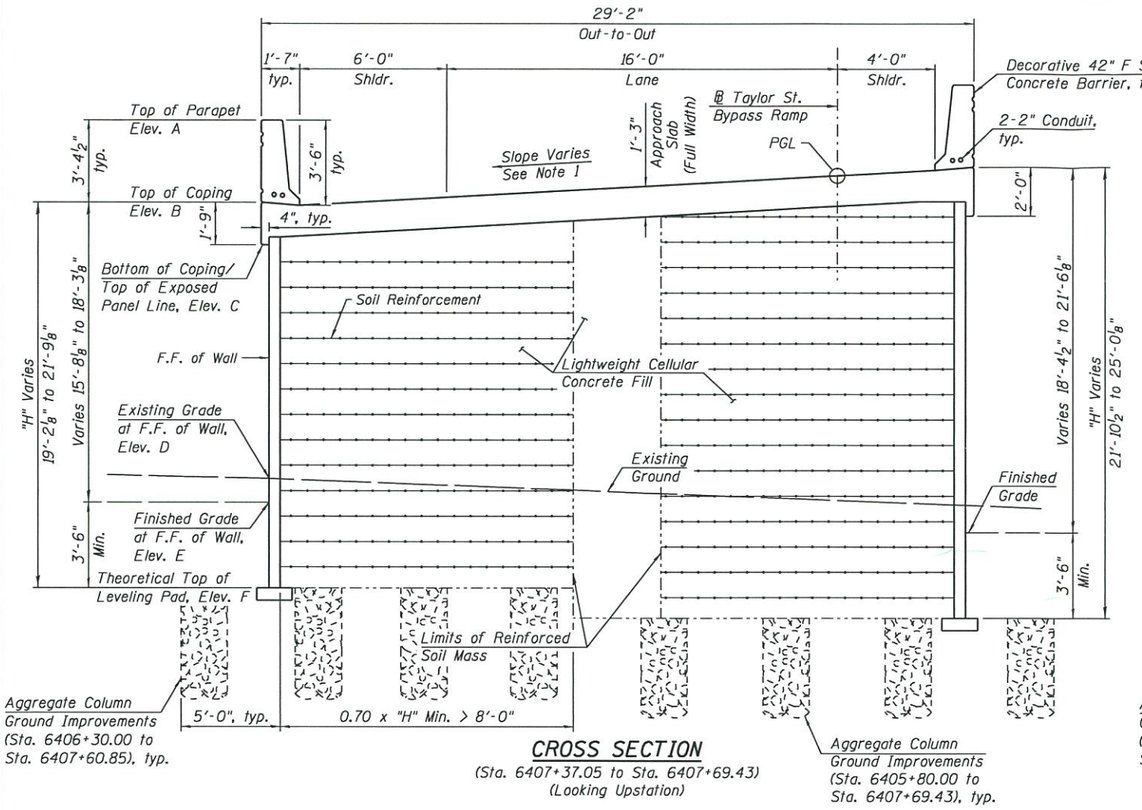
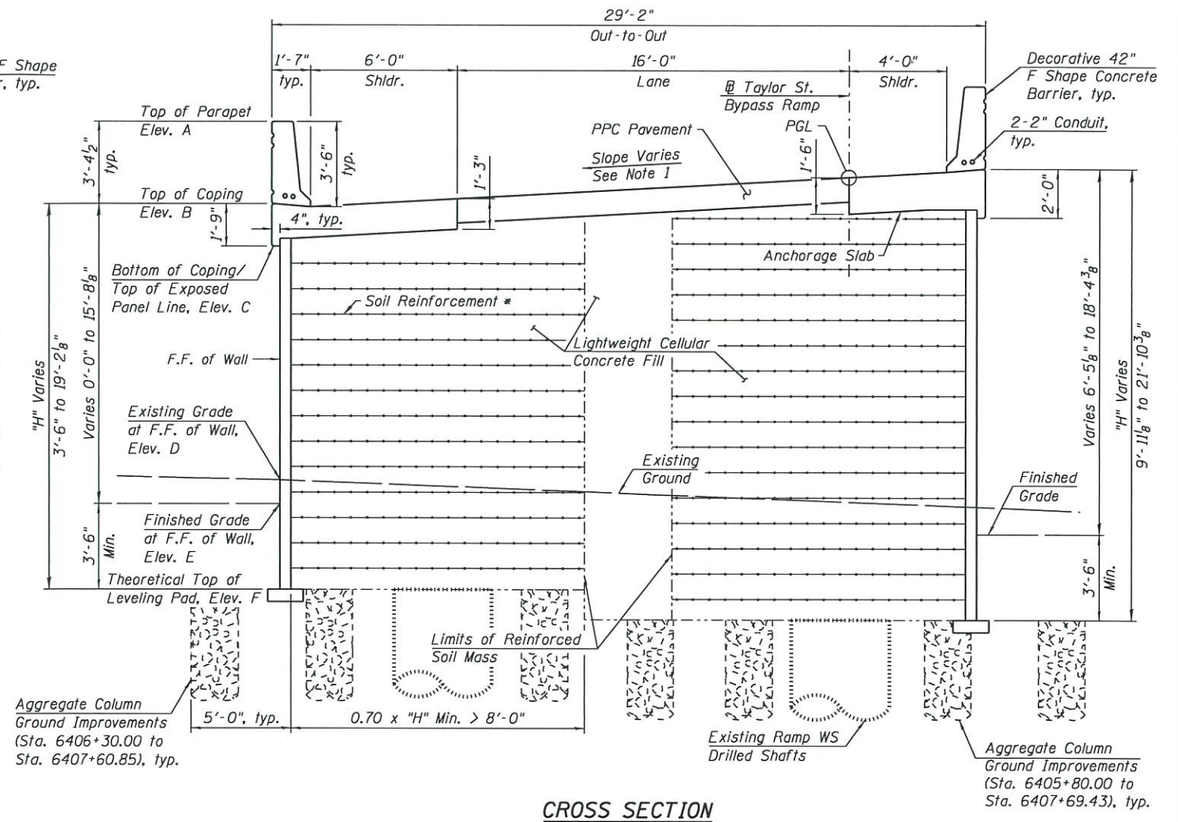


CROSS SECTION

(Sta. 6407+37.05 to Sta. 6407+69.43)
(Looking Upstation)



CROSS SECTION

(Sta. 6406+14.61 to Sta. 6407+37.05)
(Looking Upstation)

* The M.S.E. Wall supplier's internal stability design shall account for the anchorage slab's bearing pressure surcharge of 1.0 ksf and horizontal sliding force of 0.83 kips/ft of wall.

TABLE 1 - WALL ELEVATIONS

Station	Offset	Elevation A	Elevation B	Elevation C	Elevation D	Elevation E	Elevation F
6405+49.34	5.25' Rt.	588.68	585.31	583.31	589.78	585.31	581.81
6405+75.00	5.25' Rt.	590.40	587.02	585.02	587.77	584.50	581.00
6405+93.59	5.25' Rt.	591.64	588.27	586.27	586.31	583.92	580.42
6406+14.61	5.25' Rt.	593.05	589.67	587.67	585.19	583.25	579.75
6406+25.00	5.25' Rt.	593.74	590.37	588.37	584.61	582.92	579.42
6406+50.00	5.25' Rt.	595.42	592.04	590.04	583.61	582.12	578.62
6406+75.00	5.25' Rt.	597.05	593.67	591.67	583.02	581.32	577.82
6407+00.00	5.25' Rt.	598.67	595.30	593.30	582.36	580.53	577.03
6407+25.00	5.25' Rt.	600.30	596.92	594.92	581.36	579.73	576.23
6407+37.05	5.25' Rt.	601.08	597.71	595.71	580.68	579.34	575.84
6407+50.00	5.25' Rt.	601.92	598.55	596.55	580.28	578.93	575.43
6407+69.43	5.25' Rt.	603.19	599.81	597.81	579.62	578.31	574.81
6407+60.85	23.25' Lt.	601.33	597.96	596.21	580.71	579.69	576.19
6407+50.00	23.25' Lt.	600.62	597.25	595.50	581.94	580.17	576.67
6407+37.06	23.25' Lt.	599.78	596.41	594.66	582.82	580.73	577.23
6407+25.00	23.25' Lt.	599.00	595.62	593.87	583.53	581.26	577.76
6407+00.00	23.25' Lt.	597.37	594.00	592.25	585.60	582.35	578.85
6406+75.00	23.25' Lt.	595.75	592.37	590.62	587.87	583.45	579.95
6406+50.00	23.25' Lt.	594.14	590.76	589.01	588.64	584.54	581.04
6406+46.27	23.25' Lt.	593.94	590.56	588.81	588.76	584.70	581.20
6406+25.00	23.25' Lt.	592.77	589.39	587.64	589.62	587.47	583.97
6406+14.61	23.25' Lt.	592.20	588.82	587.07	589.88	588.82	585.32

Elevation A- Top of Parapet
Elevation B- Top of Coping
Elevation C- Bottom of Coping / Top of Exposed Panel Line
Elevation D- Existing Grade at F.F. of Wall
Elevation E- Finished Grade at F.F. of Wall
Elevation F- Theoretical Top of Leveling Pad

NOTES:

1. Direction of slope referenced from right edge of pavement.
   Slope Transition (0.00% to -5.00%) Sta. 6405+43.92 to Sta. 6406+51.92
   Constant Cross Slope (-5.00%) Sta. 6406+51.92 to Sta. 6409+32.86

APPROVED
FEB 27 2018
AS A BASIS FOR
PREPARATION OF DETAILED PLANS

CROSS SECTIONS & DETAILS I
RETAINING WALL 47 ALONG
F.A.I. 94 (SB I-90/94 TAYLOR ST. BYPASS RAMP)
SECTION 2014-013 R&B-R
COOK COUNTY
STATION 6405+49.34 TO STATION 6407+69.43
STRUCTURE NO. 016-1834

USER NAME = jrmickens	DESIGNED - JM	REVISED -	
	CHECKED - WJC	REVISED -	
PLOT SCALE = 6.0000 '/ in.	DRAWN - JM	REVISED -	
PLOT DATE = 1/3/2018	CHECKED - WJC	REVISED -	

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET NO. 2 OF 3 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013 R&B-R	COOK	3	2
		CONTRACT NO. 60X93		
ILLINOIS	FED. AID PROJECT			

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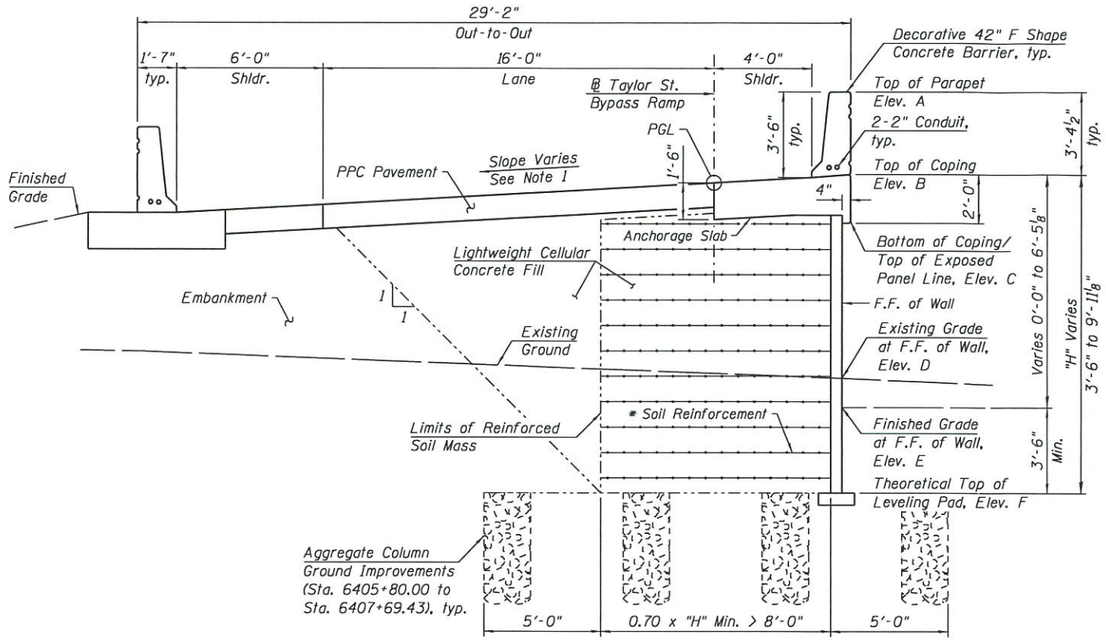
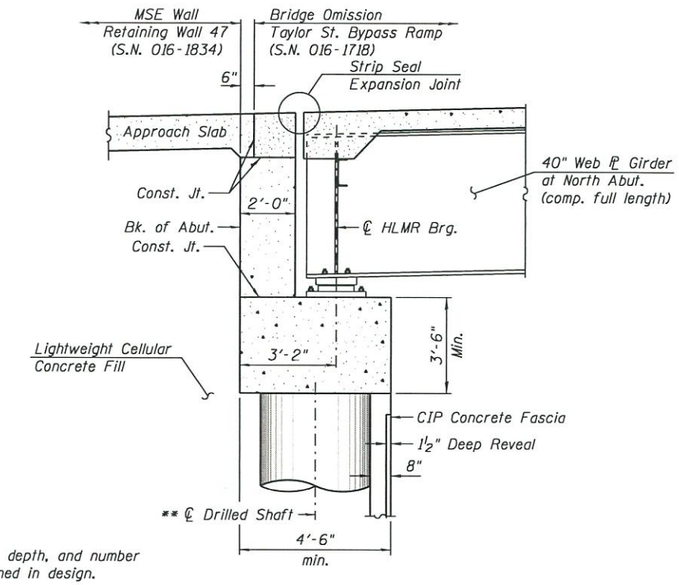


CROSS SECTION

(Sta. 6405+49.34 to Sta. 6406+14.61)
(Looking Upstation)

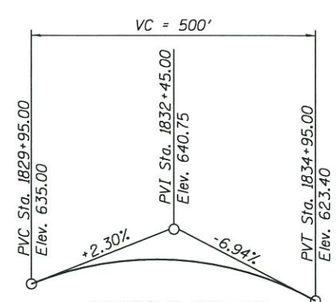
* The M.S.E. Wall supplier's internal stability design shall account for the anchorage slab's bearing pressure surcharge of 1.0 ksf and horizontal sliding force of 0.83 kips/ft of wall.



** Size, spacing, depth, and number to be determined in design.

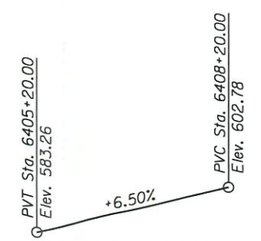
SECTION THRU ABUTMENT

(Horiz. Dim. @ Rt. L's)



PROFILE GRADE

(Along ℙ Ramp NW)



PROFILE GRADE

(Along ℙ Taylor St. Bypass Ramp)

APPROVED
FEB 27 2018
AS A BASIS FOR PREPARATION OF DETAILED PLANS

NOTES:

1. Direction of slope referenced from right edge of pavement.
   Slope Transition (0.00% to -5.00%) Sta. 6405+43.92 to Sta. 6406+51.92
   Constant Cross Slope (-5.00%) Sta. 6406+51.92 to Sta. 6409+32.86

CROSS SECTION & DETAILS II
RETAINING WALL 47 ALONG
F.A.I. 94 (SB I-90/94 TAYLOR ST. BYPASS RAMP)
SECTION 2014-013 R&B-R
COOK COUNTY
STATION 6405+49.34 TO STATION 6407+69.43
STRUCTURE NO. 016-1834

TranSystems	USER NAME = jrmickens	DESIGNED - JM	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION		F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS / SHEET NO.
		CHECKED - WJC	REVISED -			90/94/290	2014-013 R&B-R	COOK	3 / 3
	PLOT SCALE = 6.0000 ' / in.	DRAWN - JM	REVISED -					CONTRACT NO.	60X93
	PLOT DATE = 1/3/2018	CHECKED - WJC	REVISED -		SHEET NO. 3 OF 3 SHEETS			ILLINOIS FED. AID PROJECT	

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