

LOCATION MAP

LATITUDE: 41°28'27" LONGITUDE: 81°39'35"

SCALE IN MILES



PORTION TO BE IMPROVED

INTERSTATE HIGHWAY	—————
FEDERAL ROUTES	—————
STATE ROUTES	—————
COUNTY & TOWNSHIP ROADS	—————
OTHER ROADS	—————

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

**CUY-77-13.80 (CCG6B)
BUILDABLE UNIT 2**

CITY OF CLEVELAND
CUYAHOGA COUNTY



INDEX OF SHEETS:

TITLE SHEET	1
SCHEMATIC PLAN	2-3
GEOMETRIC PLAN	4-5
TYPICAL SECTIONS	6-10
GENERAL NOTES	11-15
MAINTENANCE OF TRAFFIC PLAN AND PROFILE	16-74
I.R.-77	75-80
RAMP J5	81-85
RAMP J6	86-87
CROSS SECTIONS	
I.R.-77	88-113
RAMP J5	114-136
RAMP J6	137-143
SUPERELEVATION TABLES	144-146
INTERCHANGE DETAILS	147-150
MEDIAN BARRIER DETAILS	150A
MEDIAN EXCAVATION DETAILS	150B
GRADING PLAN	150C-150D
UNDERDRAIN DETAILS	151-155
TRAFFIC CONTROL PLAN	156-165
SIGN ELEVATION DETAIL	166
LIGHTING	167-170

DESIGN DESIGNATION

	I.R. 77 NORTH OF BROADWAY	I.R. 77 SOUTH OF BROADWAY	RAMP J5 & J6	FRONTAGE ROAD	BROADWAY AVENUE
CURRENT ADT (2017)	32,770	54,050	21,280	2,340	18,170
DESIGN YEAR ADT (2037)	41,220	63,300	22,080	2,300	18,410
DESIGN HOURLY VOLUME AM/PM (2037)	2,340/4,970	4,900/6,470	2,560/1,500	110/310	1,580/1,160
DIRECTIONAL DISTRIBUTION AM/PM	55%/61%	57%/60%	N/A	N/A	62%/65%
TRUCKS (24 HOUR B&C)	8%	8%	7%	37%	6%
DESIGN SPEED	60	60	50 (J5), 35 (J6)	40	35
LEGAL SPEED	50	60	N/A	35	35
DESIGN FUNCTIONAL CLASSIFICATION:	URBAN INTERSTATE	URBAN INTERSTATE	DIRECTIONAL RAMP	DIRECTIONAL RAMP	URBAN PRINCIPAL ARTERIAL
NHS PROJECT	YES	YES	YES	YES	YES

DESIGN EXCEPTIONS

NONE

UNDERGROUND UTILITIES
CONTACT BOTH SERVICES TWO WORKING DAYS BEFORE YOU DIG.

OHIO Utilities Protection SERVICE
Call Before You Dig
1-800-362-2764
(Non-members must be called directly)

OIL & GAS PRODUCERS UNDERGROUND PROTECTION SERVICE
1-800-925-0988

PLAN PREPARED BY:



ENGINEERS SEAL:
FOR LIGHTING

MARK J. HUNTER
E-56376
REGISTERED PROFESSIONAL ENGINEER

SIGNED: *Mark J. Hunter*
DATE: 7/5/2017

ENGINEERS SEAL:
FOR ENTIRE PLAN SET EXCEPT LIGHTING

JASON THOMAS WISE
E-72224
REGISTERED PROFESSIONAL ENGINEER

SIGNED: *Jason Thomas Wise*
DATE: 1/24/2018

STANDARD CONSTRUCTION DRAWINGS								SUPPLEMENTAL SPECIFICATIONS	SPECIAL PROVISIONS
BP-2.1	7/17/15	RM-1.1	7/18/14	HL-50.11	1/16/15	TC-12.30	1/20/17	800	7/15/16
BP-2.2	7/18/08	RM-4.2	4/18/14	HL-60.11	7/21/17	TC-21.10	7/21/17	821	4/20/12
BP-5.1	7/19/13	RM-4.3	7/18/14			TC-21.20	7/21/17	832	1/17/14
BP-6.1	7/19/13	RM-4.4	7/21/17	MT-95.30	7/21/17	TC-41.20	10/18/13	875	1/17/14
BP-9.1	7/21/17	RM-4.5	7/21/17	MT-95.50	7/21/17	TC-41.30	10/18/13	884	12/31/12
		RM-5.1	7/18/14	MT-98.29	1/20/17	TC-41.40	10/18/13	921	4/20/12
F-1.1	7/19/13			MT-99.30	7/21/17	TC-42.20	10/18/13		
F-3.1	7/19/13	PCB-91	1/18/13	MT-101.70	1/17/14	TC-52.10	10/18/13		
				MT-101.75	7/15/16	TC-52.20	7/21/17		
MGS-1.1	7/21/17	HL-10.11	7/21/17	MT-101.90	7/21/17	TC-61.10	1/17/14		
MGS-2.1	7/19/13	HL-10.12	1/20/17	MT-102.10	1/20/17	TC-64.10	1/20/17		
MGS-3.1	7/21/17	HL-10.13	1/20/17	MT-102.20	7/18/14	TC-65.10	1/17/14		
MGS-3.2	1/18/13	HL-20.11	4/21/17	MT-102.30	10/16/15	TC-65.11	7/21/17		
MGS-4.2	7/19/13	HL-30.11	7/21/17	MT-103.10	1/20/17	TC-72.20	7/15/16		
MGS-4.3	1/18/13	HL-30.21	1/17/14	MT-104.10	10/16/15				
		HL-30.22	1/17/14	MT-105.10	7/19/13				

PROJECT DESCRIPTION

RECONFIGURING OF RAMPS FROM I.R. 490 E.B. & W.B. TO I.R. 77 S.B. TO PROVIDE STANDARD LANE WIDTH AND MERGE DISTANCES. MAINLINE LANES OF I.R. 77 S.B. ADJACENT TO THE RAMP WORK SHALL BE RESURFACED.

PROJECT EARTH DISTURBED AREA: N/A ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA: N/A ACRES
NOTICE OF INTENT EARTH DISTURBED AREA: N/A ACRES
(SEE BU-6 FOR PROJECT EARTH DISTURBED AREA)

LIMITED ACCESS

THIS IMPROVEMENT IS ESPECIALLY DESIGNED FOR THROUGH TRAFFIC AND HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY OR FREEWAY BY ACTION OF THE DIRECTOR IN ACCORDANCE WITH THE PROVISIONS OF SECTION 5511.02 OF THE OHIO REVISED CODE.

2016 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING CHANGES LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND THAT DETOURS WILL BE PROVIDED AS INDICATED ON SHEETS 22 TO 32

APPROVED _____
DATE _____ DISTRICT DEPUTY DIRECTOR

APPROVED _____
DATE _____ DIRECTOR, DEPARTMENT OF TRANSPORTATION

RELEASED FOR CONSTRUCTION

BU02_2018.01.26_CCG6B.BU2.RFC Plans_FC24

01/29/2018 Brian.Link

BU2 - I.R.-77 AND RAMPS

NO.	DATE	DESCRIPTION
1	8/11/17	SEE SHEETS: 6, 35, 45, 49, 76-77, 89-98, 123-124, 144, 147-148, 151-155
2	9/22/17	SEE SHEETS: 8, 10, 20, 27A, 29A, 34, 34A, 41, 49, 54-58, 62-63, 68-71, 79, 80, 82, 150A, 150B, 157-159, 162A, 163-164
3	12/7/17	SEE SHEETS: 6,7,10,56,103-104,118-119,131-134
4	1/24/18	SEE SHEETS: 49, 102-107, 150C, 150D
		ISSUE RECORD

P:\82388_CCG6B\Design\Roadway\Sheets\82388_GT2001_FC.dgn Sheet 1/29/2018 11:19:51AM mlufes

FEDERAL PROJECT NO. E131(492)

PID NO. 82388

CONSTRUCTION PROJECT NO. 173001

RAILROAD INVOLVEMENT NONE

CUY-77-13.80

1/170



0 50 100 200
HORIZONTAL
SCALE IN FEET

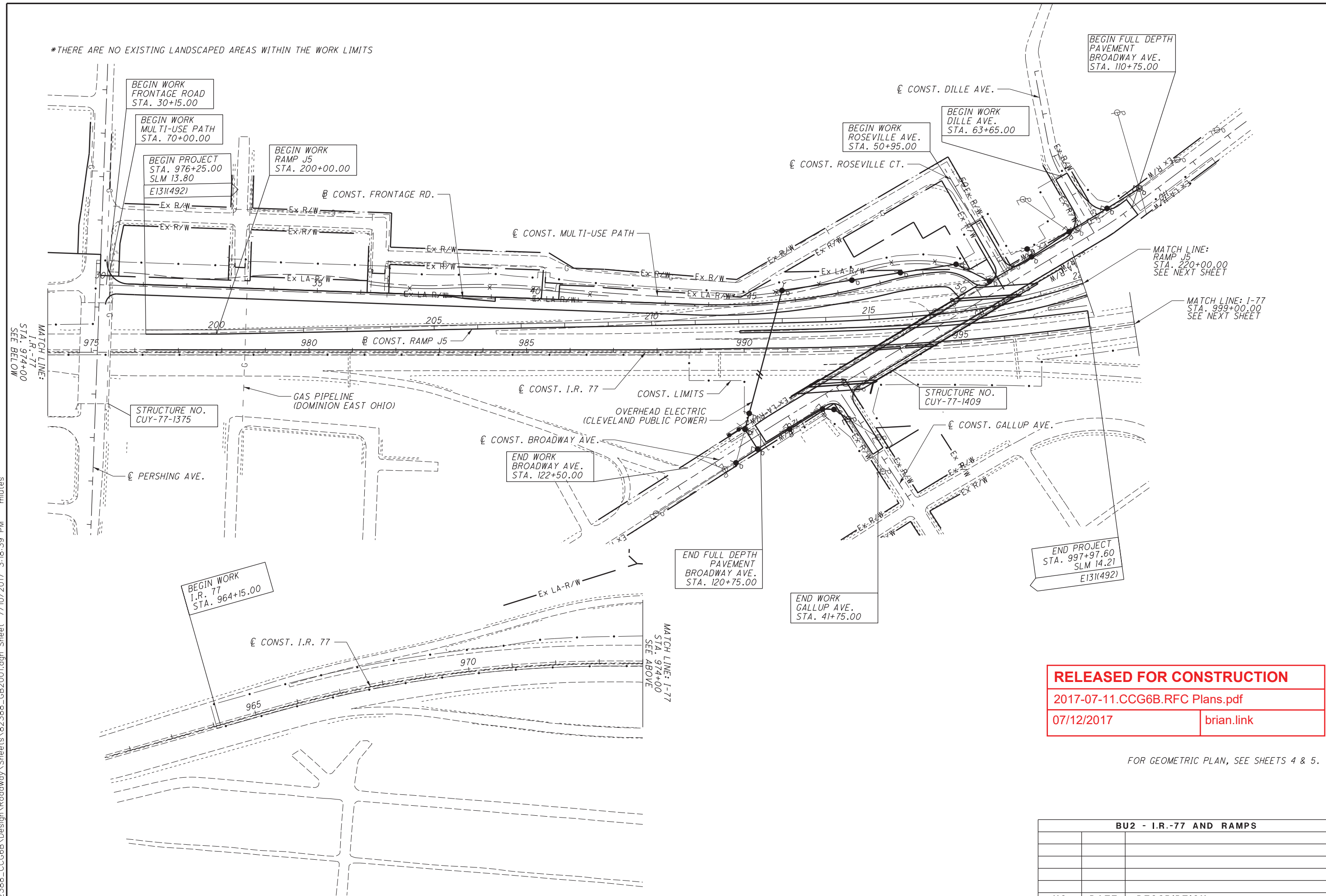
CALCULATED
M.L.L.
CHECKED
SWC

SCHEMATIC PLAN

CUY-77-13.80

2
170

*THERE ARE NO EXISTING LANDSCAPED AREAS WITHIN THE WORK LIMITS



RELEASED FOR CONSTRUCTION
2017-07-11.CCG6B.RFC Plans.pdf
07/12/2017 brian.link

FOR GEOMETRIC PLAN, SEE SHEETS 4 & 5.

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION

ISSUE RECORD

P:\B2388_CCG6B\Design\Roadway\Sheets\B2388_CB2001.dgn Sheet 7/10/2017 3:18:39 PM mlutes

*THERE ARE NO EXISTING LANDSCAPED AREAS WITHIN THE WORK LIMITS

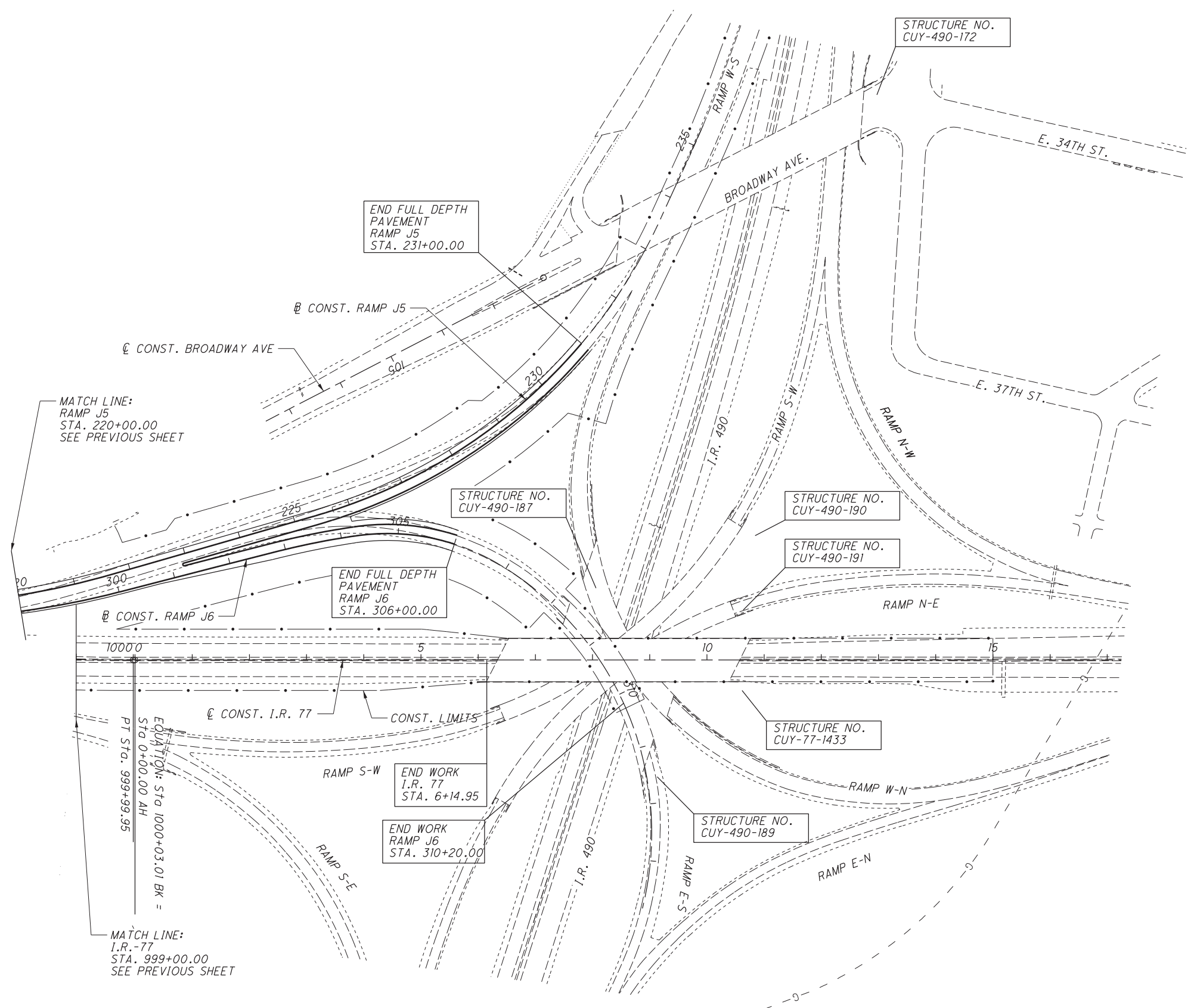


CALCULATED
M.L.L.
CHECKED
S.W.C.

SCHEMATIC PLAN

CUY-77-13.80

3
170



RELEASED FOR CONSTRUCTION
 2017-07-11.CCG6B.RFC Plans.pdf
 07/12/2017 brian.link

FOR GEOMETRIC PLAN, SEE SHEETS 4 & 5.

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION
ISSUE RECORD		

P:\B2388_CCG6B\Design\Roadway\Sheets\B2388_CB2002.dgn Sheet 7/10/2017 3:18:40 PM mlutes



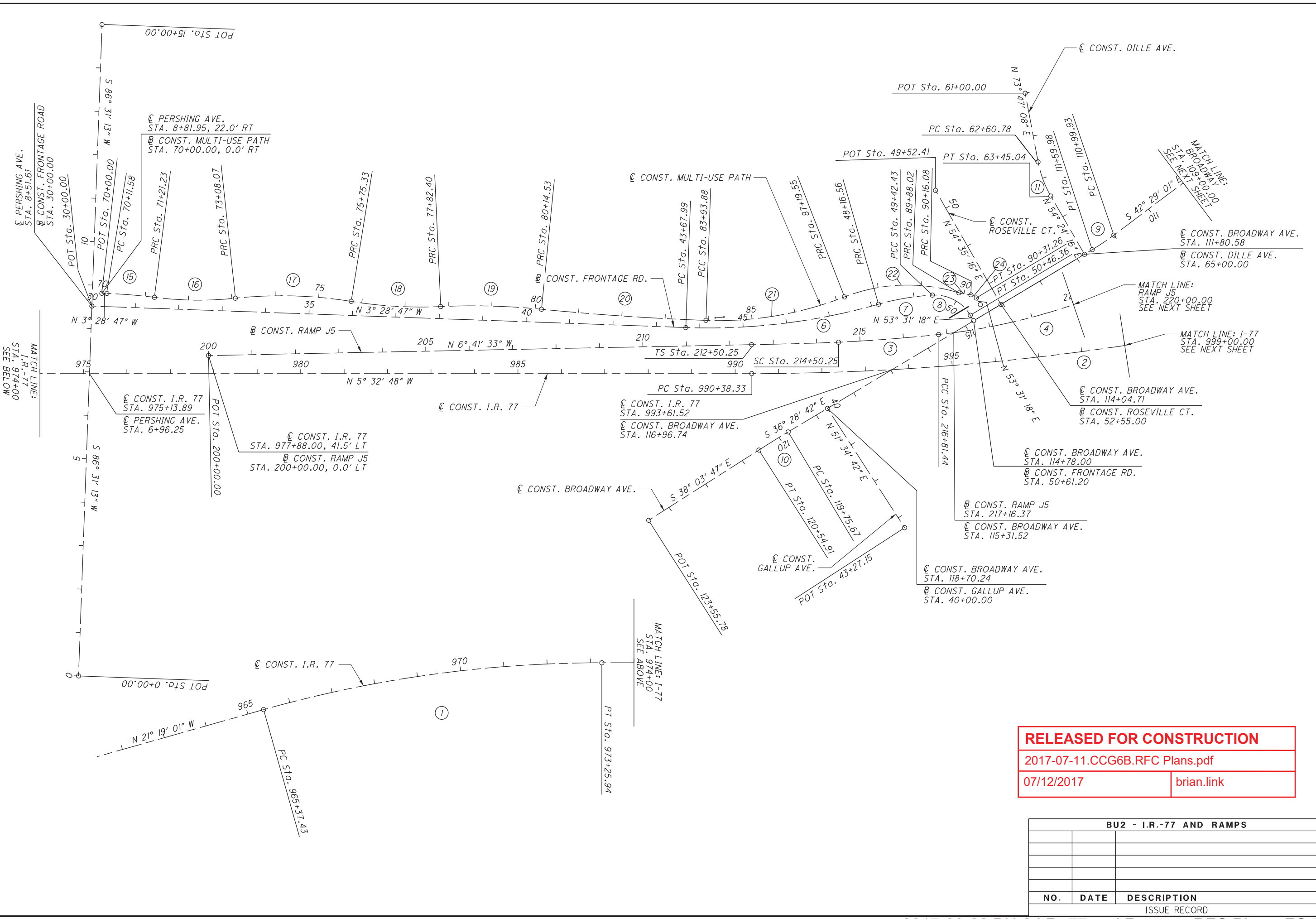
CALCULATED
SWC
CHECKED
MLL

GEOMETRIC PLAN

CUY-77-13.80

4
170

P:\B2388_CCG6B\Design\Roadway\Sheets\B2388_CB2003.dgn Sheet 7/10/2017 3:18:42 PM mlutes



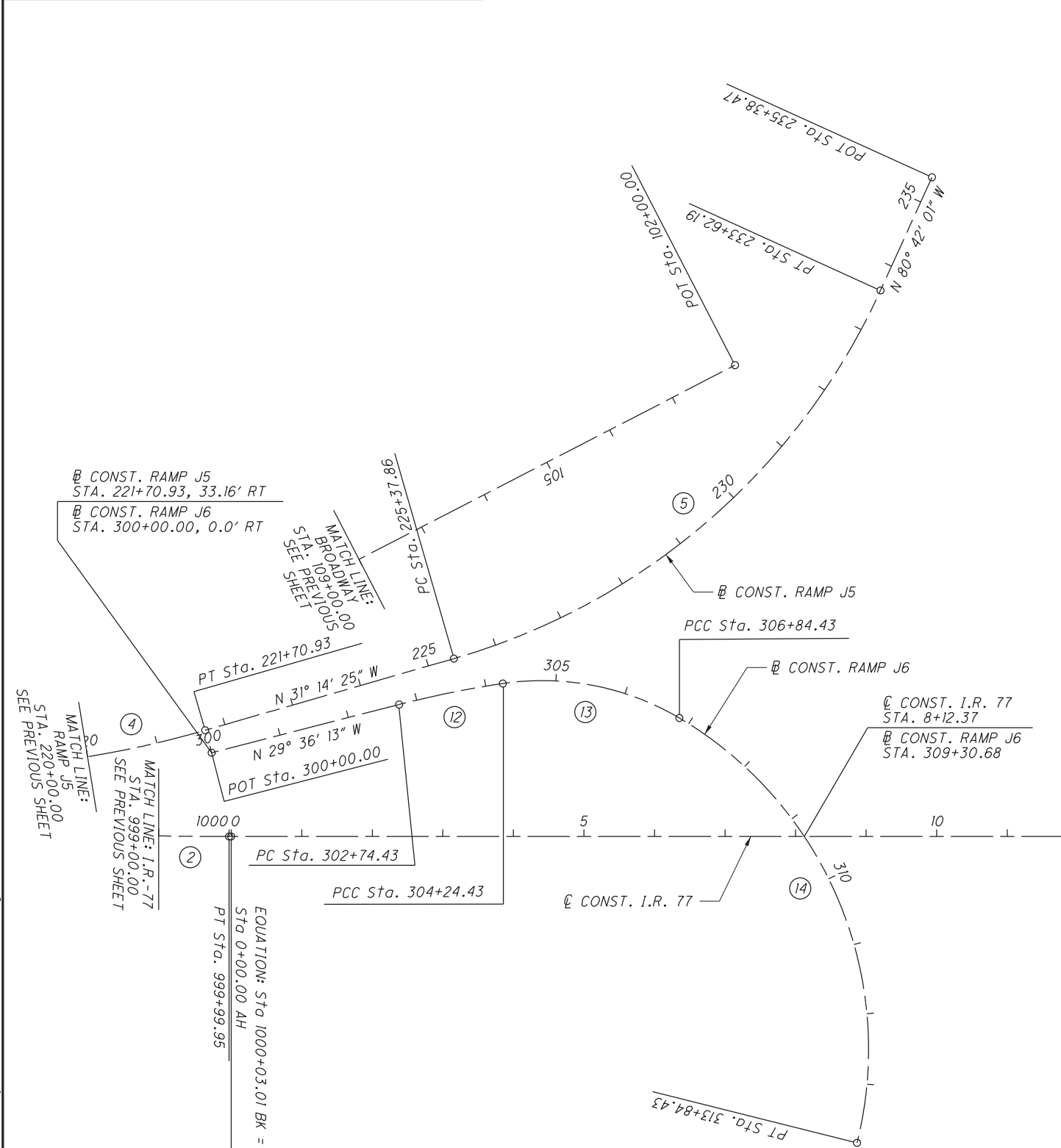
RELEASED FOR CONSTRUCTION
 2017-07-11.CCG6B.RFC Plans.pdf
 07/12/2017 brian.link

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION

ISSUE RECORD

* RATE WAS BASED ON ORIGINAL CONSTRUCTION PLANS

NO.	DATE	DESCRIPTION
ISSUE RECORD		



<p>① I.R. 77 P.I.Sta. 969+34.19 Δ = 15° 46' 13" (RT) Dc = 2° 00' 00" R = 2,864.79' T = 396.76' L = 788.51' E = 27.34' C = 786.02' C.B. = N 13° 25' 55" W emax = 0.065*</p>	<p>② I.R. 77 P.I.Sta. 995+20.27 Δ = 9° 36' 59" (LT) Dc = 1° 00' 00" R = 5,729.58' T = 481.94' L = 961.63' E = 20.23' C = 960.50' C.B. = N 10° 21' 18" W emax = 0.027</p>	<p>③ RAMP J5 P.I.Sta. 215+65.88 T.S. 212+50.25 S.C. 214+50.25 P.C.C 216+81.44 Δ = 3° 28' 04" (LT) Dc = 1° 30' 00" R = 3,819.72' Ls = 200.00' fs = 1° 30' 00" LT = 133.34' ST = 66.67' L = 231.19' E = 1.75' C = 231.15' C.B. = N 9° 55' 35" W emax = 0.028</p>	<p>④ RAMP J5 P.I.Sta. 219+28.60 Δ = 19° 34' 48" (LT) Dc = 4° 00' 00" R = 1,432.39' T = 247.16' L = 489.50' E = 21.17' C = 487.12' C.B. = N 21° 27' 01" W emax = 0.052</p>	<p>⑤ RAMP J5 P.I.Sta. 229+77.68 Δ = 49° 27' 36" (LT) Dc = 6° 00' 00" R = 954.93' T = 439.83' L = 824.33' E = 96.42' C = 798.98' C.B. = N 55° 58' 13" W emax = 0.059</p>
<p>⑥ FRONTAGE RD. P.I.Sta. 45+94.13 Δ = 17° 56' 34" (LT) Dc = 4° 00' 00" R = 1,432.39' T = 226.13' L = 448.57' E = 17.74' C = 446.74' C.B. = N 12° 27' 04" W emax = NC</p>	<p>⑦ FRONTAGE RD. P.I.Sta. 48+79.75 Δ = 12° 35' 12" (RT) Dc = 10° 00' 00" R = 572.96' T = 63.19' L = 125.87' E = 3.47' C = 125.61' C.B. = N 15° 07' 45" W emax = 0.027</p>	<p>⑧ FRONTAGE RD. P.I.Sta. 50+00.21 Δ = 62° 21' 27" (RT) Dc = 59° 59' 44" R = 95.50' T = 57.79' L = 103.94' E = 16.12' C = 98.88' C.B. = N 22° 20' 35" E emax = NC</p>	<p>⑨ BROADWAY AVE. P.I.Sta. 111+29.98 Δ = 6° 00' 19" (RT) Dc = 10° 00' 00" R = 572.96' T = 30.05' L = 60.05' E = 0.79' C = 60.02' C.B. = S 39° 28' 51" E emax = NC</p>	<p>⑩ BROADWAY AVE. P.I.Sta. 120+15.29 Δ = 1° 35' 06" (LT) Dc = 2° 00' 00" R = 2,864.79' T = 39.63' L = 79.25' E = 0.27' C = 79.24' C.B. = S 37° 16' 15" E emax = NC</p>
<p>⑪ DILLE AVE. P.I.Sta. 63+03.32 Δ = 19° 22' 52" (LT) Dc = 23° 00' 00" R = 249.11' T = 42.54' L = 84.27' E = 3.61' C = 83.86' C.B. = N 64° 05' 42" E emax = NC</p>	<p>⑫ RAMP J6 P.I.Sta. 303+49.50 Δ = 6° 00' 00" (RT) Dc = 4° 00' 00" R = 1,432.39' T = 75.07' L = 150.00' E = 1.97' C = 149.93' C.B. = N 26° 36' 13" W emax = 0.034</p>	<p>⑬ RAMP J6 P.I.Sta. 305+59.69 Δ = 39° 00' 00" (RT) Dc = 15° 00' 00" R = 381.97' T = 135.26' L = 260.00' E = 23.24' C = 255.01' C.B. = N 4° 06' 13" W emax = 0.060</p>	<p>⑭ RAMP J6 P.I.Sta. 310+91.90 Δ = 73° 30' 00" (RT) Dc = 10° 30' 00" R = 545.67' T = 407.47' L = 700.00' E = 135.35' C = 652.98' C.B. = N 52° 08' 47" E emax = 0.054</p>	<p>⑮ MULTI-USE PATH P.I.Sta. 70+66.44 Δ = 5° 14' 08" (RT) Dc = 4° 46' 29" R = 1,200.00' T = 54.86' L = 109.65' E = 1.25' C = 109.61' C.B. = N 0° 51' 43" W emax = NC</p>
<p>⑯ MULTI-USE PATH P.I.Sta. 72+15.08 Δ = 13° 22' 55" (LT) Dc = 7° 09' 43" R = 800.00' T = 93.85' L = 186.85' E = 5.49' C = 186.42' C.B. = N 4° 56' 07" W emax = NC</p>	<p>⑰ MULTI-USE PATH P.I.Sta. 74+42.50 Δ = 15° 18' 46" (RT) Dc = 5° 43' 46" R = 1,000.00' T = 134.43' L = 267.26' E = 9.00' C = 266.46' C.B. = N 3° 58' 12" W emax = NC</p>	<p>⑱ MULTI-USE PATH P.I.Sta. 76+79.24 Δ = 11° 51' 52" (LT) Dc = 5° 43' 46" R = 1,000.00' T = 103.91' L = 207.07' E = 5.38' C = 206.70' C.B. = N 2° 14' 45" W emax = NC</p>	<p>⑲ MULTI-USE PATH P.I.Sta. 78+98.67 Δ = 8° 18' 45" (RT) Dc = 3° 34' 52" R = 1,600.00' T = 116.27' L = 232.13' E = 4.22' C = 231.92' C.B. = N 4° 01' 18" W emax = NC</p>	
<p>⑳ MULTI-USE PATH P.I.Sta. 82+04.27 Δ = 3° 37' 21" (LT) Dc = 0° 57' 18" R = 6,000.00' T = 189.74' L = 379.35' E = 3.00' C = 379.29' C.B. = N 1° 40' 37" W emax = NC</p>	<p>㉑ MULTI-USE PATH P.I.Sta. 85+59.00 Δ = 23° 19' 26" (LT) Dc = 7° 09' 43" R = 800.00' T = 139.51' L = 325.66' E = 16.86' C = 323.42' C.B. = N 15° 09' 00" W emax = NC</p>	<p>㉒ MULTI-USE PATH P.I.Sta. 88+59.06 Δ = 38° 27' 22" (RT) Dc = 14° 19' 26" R = 400.00' T = 139.51' L = 268.47' E = 23.63' C = 263.46' C.B. = N 7° 35' 02" W emax = NC</p>	<p>㉓ MULTI-USE PATH P.I.Sta. 90+21.12 Δ = 16° 04' 46" (LT) Dc = 57° 17' 45" R = 100.00' T = 14.12' L = 28.06' E = 0.99' C = 27.97' C.B. = N 3° 36' 16" E emax = NC</p>	<p>㉔ MULTI-USE PATH P.I.Sta. 90+24.39 Δ = 57° 57' 25" (RT) Dc = 381° 58' 19" R = 15.00' T = 8.31' L = 15.17' E = 2.15' C = 14.53' C.B. = N 24° 32' 36" E emax = NC</p>

RELEASED FOR CONSTRUCTION
 2017-07-11.CCG6B.RFC Plans.pdf
 07/12/2017 brian.link



CALCULATED SWC CHECKED MLL

GEOMETRIC PLAN

CUY - 77 - 13.80

P:\B2388_CCG6B\Design\Roadway\Sheets\B2388_CB2004.dgn Sheet 7/10/2017 3:18:43 PM mlutes

PROPOSED LEGEND:

- 1 **MAINLINE COMPOSITE FULL-DEPTH (I.R.-77)**
 ITEM 442 - 1.5" ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (446), PG76-22M, AS PER PLAN
 ITEM 407 - NON-TRACKING TACK COAT
 ITEM 442 - 1.75" ASPHALT CONCRETE INTERMEDIATE COURSE, 19 MM, TYPE A (446)
 ITEM 407 - TACK COAT, 702.13
 ITEM 452 - 12" NON-REINFORCED CONCRETE PAVEMENT, CLASS OCI
 ITEM 304 - 6" AGGREGATE BASE
- 2 **MAINLINE RESURFACING (I.R.-77)**
 ITEM 442 - 1.5" ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (446), PG76-22M, AS PER PLAN
 ITEM 407 - NON-TRACKING TACK COAT
 ITEM 442 - 1.75" ASPHALT CONCRETE INTERMEDIATE COURSE, 19 MM, TYPE A (446)
 ITEM 407 - NON-TRACKING TACK (OR ITEM 407 - TACK COAT, 702.13, IF BRICK OR CONCRETE)
 ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE (T=3.25")
- 3 **RAMPS (J5 & J6)**
 ITEM 442 - 1.5" ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (446), PG76-22M, AS PER PLAN
 ITEM 407 - NON-TRACKING TACK COAT
 ITEM 442 - 1.75" ASPHALT CONCRETE INTERMEDIATE COURSE, 19 MM, TYPE A (446)
 ITEM 407 - ITEM 407 - TACK COAT, 702.13
 ITEM 452 - 10" NON-REINFORCED CONCRETE PAVEMENT, CLASS OCI
 ITEM 304 - 6" AGGREGATE BASE
- 4 **FRONTAGE RD.**
 ITEM 452 - 11" NON-REINFORCED CONCRETE PAVEMENT, CLASS OCI
 ITEM 304 - 6" AGGREGATE BASE
- 5 **CITY STREETS (BROADWAY AVE., GALLUP AVE., ROSEVILLE CT., DILLE AVE.)**
 ITEM 441 - 1.25" ASPHALT CONCRETE SURFACE COURSE, TYPE 1 (448), PG70-22M, AS PER PLAN A
 ITEM 407 - TACK COAT
 ITEM 441 - 1.75" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2 (448)
 ITEM 407 - TACK COAT, 702.13
 ITEM 305 - 9" CONCRETE BASE, AS PER PLAN
 ITEM 304 - 6" AGGREGATE BASE, AS PER PLAN
- 6 **MULTI-USE PATH (MUP)**
 ITEM 441 - 1.25" ASPHALT CONCRETE SURFACE COURSE, TYPE 1 (448), PG64-22, AS PER PLAN B
 ITEM 407 - TACK COAT
 ITEM 441 - 1.75" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2 (448)
 ITEM 407 - TACK COAT (SEE NOTE 1)
 ITEM 301 - 3" ASPHALT CONCRETE BASE, PG64-22 (SEE NOTE 1)
 ITEM 304 - 6" AGGREGATE BASE, AS PER PLAN
- 7 ITEM 609 - CURB, TYPE 6
- 8 ITEM 622 - CONCRETE BARRIER, SINGLE SLOPE, TYPE D
- 9 ITEM 252 - FULL DEPTH PAVEMENT SAWING
- 10 ITEM 608 - 6" CONCRETE WALK
- 11A ITEM 659 - SEEDING AND MULCHING, CLASS 1
- 11B ITEM 659 - SEEDING AND MULCHING, CLASS 2
- 11C ITEM 659 - SEEDING AND MULCHING, CLASS 3C
- 12 ITEM 607 - FENCE, TYPE CLT
- 13A ITEM 605 - 6" SHALLOW PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC, 19" DEEP
- 13B ITEM 605 - 6" DEEP PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC, AS PER PLAN

- 13C ITEM 605 - 6" BASE PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC, 18" DEEP
- 14 ITEM 606 - GUARDRAIL, TYPE MGS
- 15 ITEM 622 - CONCRETE BARRIER, SINGLE SLOPE, TYPE D, 50" HEIGHT, WITH MOMENT SLAB, AS PER PLAN
- 16 ITEM 304 - 2.5" AGGREGATE BASE, AS PER PLAN
- 17 ITEM 609 - CURB, TYPE 2A
- 18 ITEM 622 - CONCRETE BARRIER, SINGLE SLOPE, TYPE D, AS PER PLAN (50" HEIGHT)
- 19 ITEM 204 - SUBGRADE COMPACTION
- 20 ITEM 206 - CEMENT STABILIZED SUBGRADE, 14 INCHES DEEP
- 21 ITEM 204 - EXCAVATION OF SUBGRADE, 30"
ITEM 304 - AGGREGATE BASE, 30"
- 22 ITEM 204 - PROOF ROLLING
- FULL DEPTH SHOULDER REPLACEMENT**
 ITEM 442 - 1.5" ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (446), PG76-22M
 ITEM 407 - NON-TRACKING TACK COAT
 ITEM 442 - 1.75" ASPHALT CONCRETE INTERMEDIATE COURSE, 19 MM, TYPE A (446)
 ITEM 407 - NON-TRACKING TACK COAT
 ITEM 301 - 9" ASPHALT CONCRETE BASE, PG64-22
 ITEM 304 - 6" AGGREGATE BASE
- 23 **BROADWAY AVE. APPROACH SLABS**
 ITEM 526 - REINFORCED CONCRETE APPROACH SLABS WITH OA/QC (T=17"), AS PER PLAN*
 ITEM 304 - 6" AGGREGATE BASE
- 24 ITEM 526 - REINFORCED CONCRETE APPROACH SLABS WITH OA/QC (T=17"), AS PER PLAN*
ITEM 304 - 6" AGGREGATE BASE
- 25 ITEM 607 - FENCE, TYPE CLT, AS PER PLAN
- 26 ITEM 659 - TOPSOIL (T=4")
- 27 ITEM 609 - CURB, TYPE 4-C
- 28 ITEM 607 - FENCE. MISC.: WOOD FENCE
- 29 ITEM 203 - EMBANKMENT, 30"
ITEM 204 - EXCAVATION OF SUBGRADE, 30"
- 30 ITEM 441 - 3" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, UNDER GUARDRAIL, (448), PG64-22, AS PER PLAN

NOTES:

1. ADDITIONAL 3" PAVEMENT LAYER OF ITEM 301 - ASPHALT CONCRETE BASE, PG64-22 SHALL BE INSTALLED ON THE MULTI-USE PATH FROM STA. 84+16 TO STA. 90+16, TO ACCOMMODATE CPP MAINTENANCE VEHICLES.

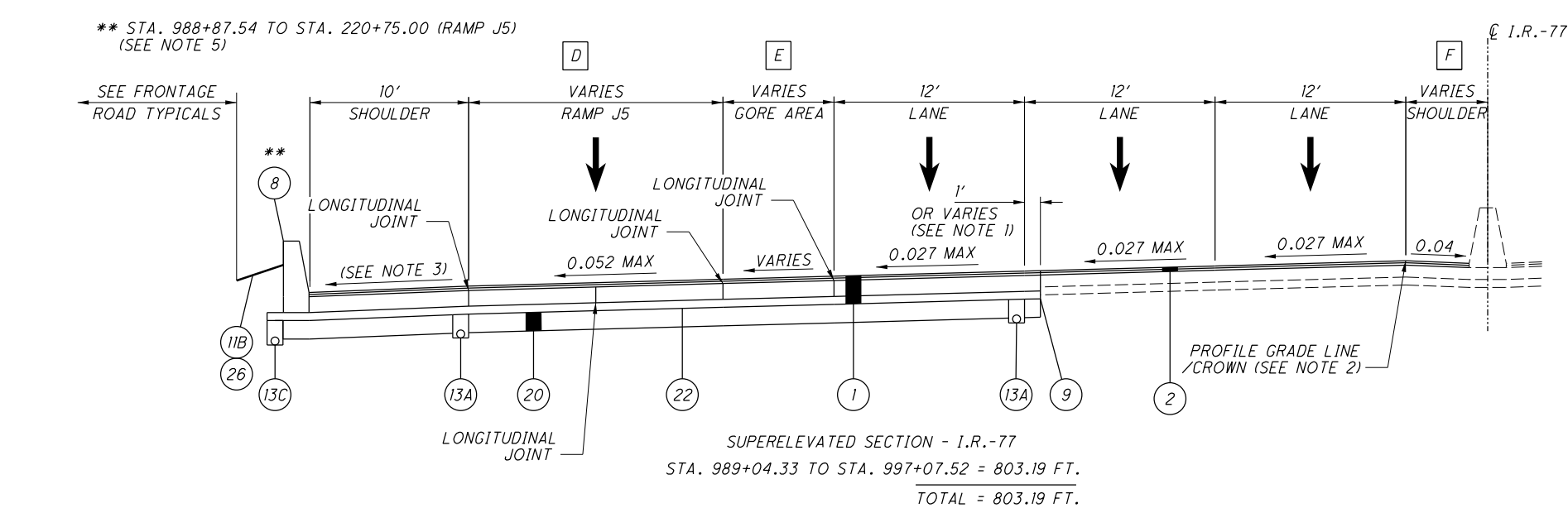
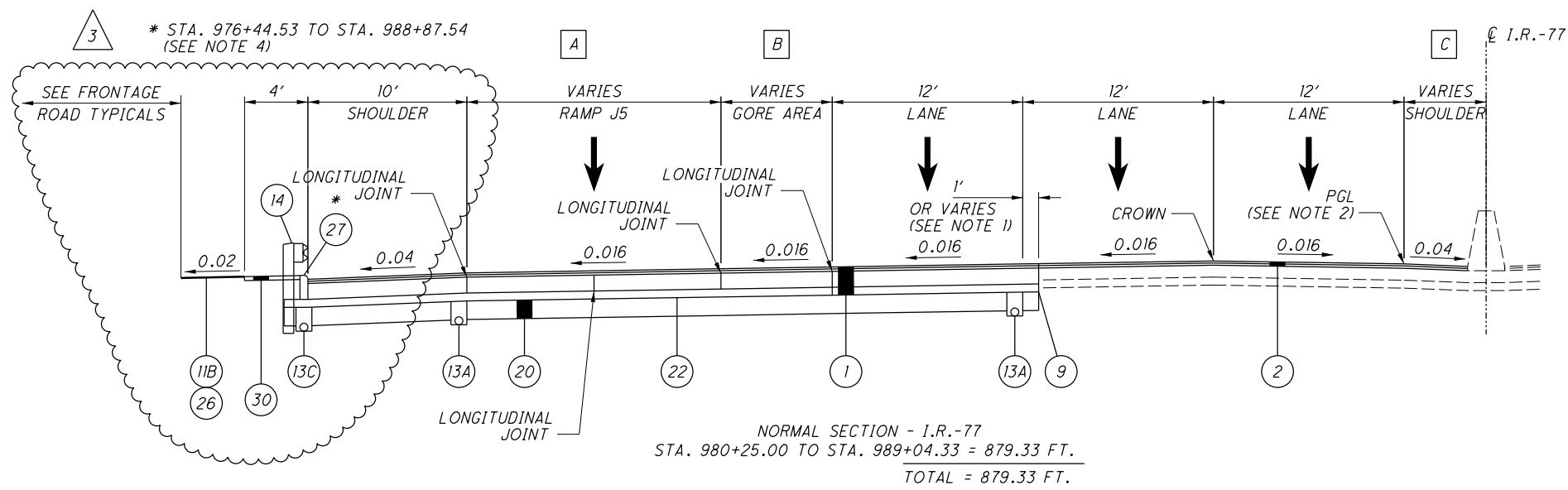
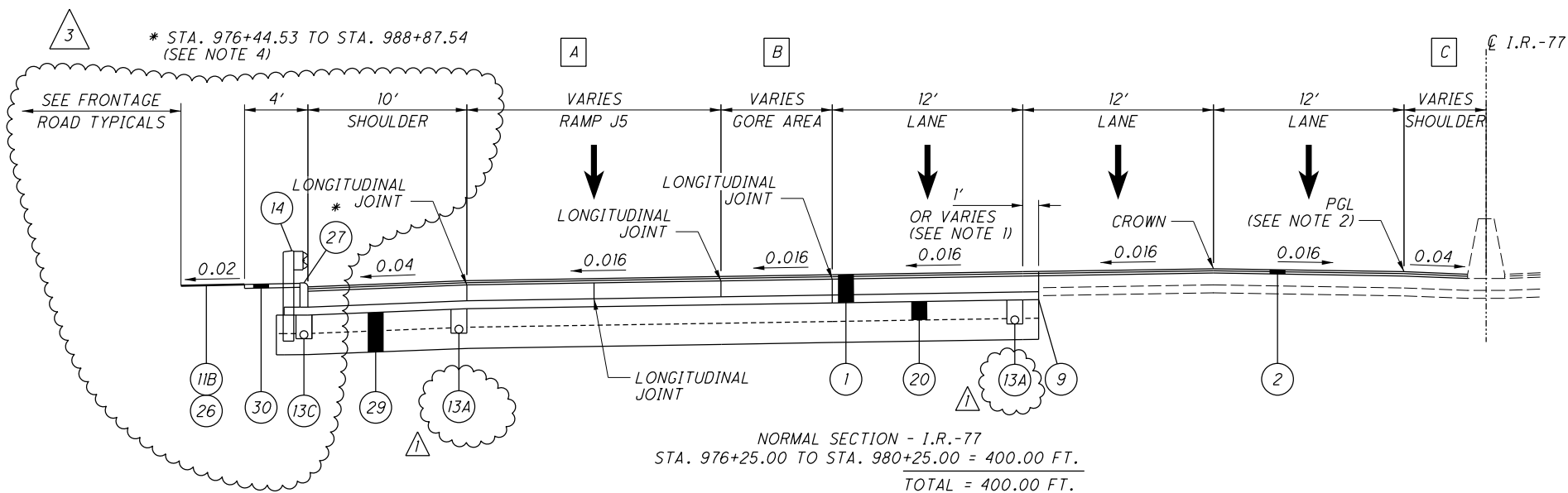
RELEASED FOR CONSTRUCTION
 BU02_2017.12.7_CCG6B.BU2.RFC Plans_FC19.pd
 01/09/2018 Brian.Link

* CONCRETE MIX AND CONCRETE SEALANT SHALL BE PER THE CITY OF CLEVELAND STANDARDS.

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION
1	8/3/17	CHANGED ITEM "13B" DESCRIPTION
3	12/7/17	ADDED ITEM "30"

P:\82388_CCG6B\Design\Roadway\Sheets\82388_GY2001.dgn Sheet 1/5/2018 2:36:55 PM mlutes

P:\82388_CCG6B\Design\Roadway\Sheets\82388_GY2002.dgn Sheet 1/5/2018 2:36:56 PM milutes



- A 0' - STA. 976+25.00 TO STA. 977+88.00
 0' TO 16' - STA. 977+88.00 TO STA. 985+88.00
 16' - STA. 985+88.00 TO STA. 989+04.33
- B 0' - STA. 976+25.00 TO STA. 985+88.00
 0' TO 4.6' - STA. 985+88.00 TO STA. 989+04.33
- C 5.5' - STA. 976+25.00 TO STA. 987+98.33
 5.5' TO 7.25' - STA. 987+98.33 TO STA. 989+04.33
- D 16' - STA. 989+04.33 TO STA. 992+40.38
 16' TO 25.7'± - STA. 992+40.38 TO STA. 997+07.52
- E 4.6' TO 23'± - STA. 989+04.33 TO STA. 997+07.92
- F 7.25' TO 9.5' - STA. 989+04.33 TO STA. 990+38.33
 9.5' - STA. 990+38.33 TO STA. 997+07.52

- NOTES:**
1. SAW CUTS SHALL BE AS SHOWN OR AT EDGE OF EXISTING FULL-DEPTH PAVEMENT ON MAINLINE I.R.-77, WHICH EVER IS CLOSER TO I.R.-77 CENTERLINE.
 2. PROFILE GRADE LINE (PGL) FOLLOWS EDGE OF PAVEMENT.
 3. SLOPE SHALL BE 0.04 OR AT THE RATE OF THE SUPER, IF GREATER.
 4. SEE CURBED SHOULDER DETAIL, ON SHEET 10.
 5. SEE EDGE COURSE DETAIL - BARRIER, ON SHEET 10.

RELEASED FOR CONSTRUCTION

BU02_2017.12.7_CCG6B.BU2.RFC Plans_FC19.pd

01/09/2018 Brian.Link

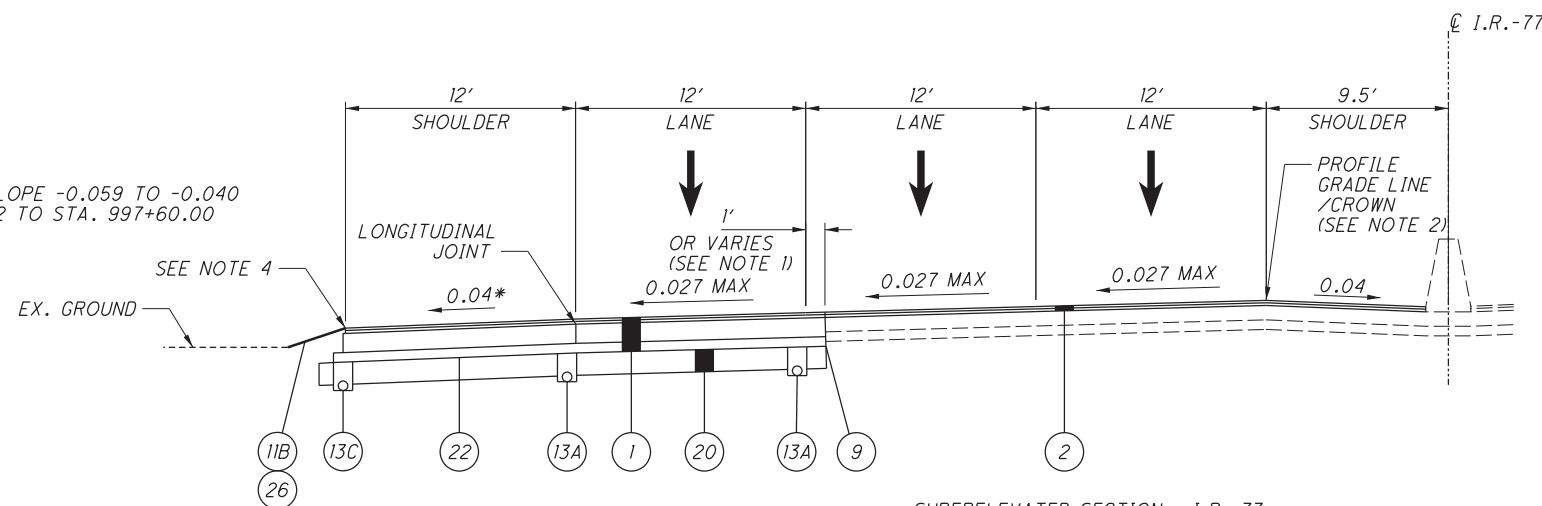
BU2 - I.R.-77 AND RAMPS		
3	12/7/17	ADDED ITEM "30" TO THE TYPICAL SECTIONS
NO.	DATE	DESCRIPTION
ISSUE RECORD		

TYPICAL SECTIONS

CUY-77-13.80

P:\82388_CCG6B\Design\Roadway\Sheets\82388_GY2003.dgn Sheet 9/22/2017 1:46:24 PM mltues

* TRANSITION CROSS SLOPE -0.059 TO -0.040 FROM STA. 997+07.42 TO STA. 997+60.00

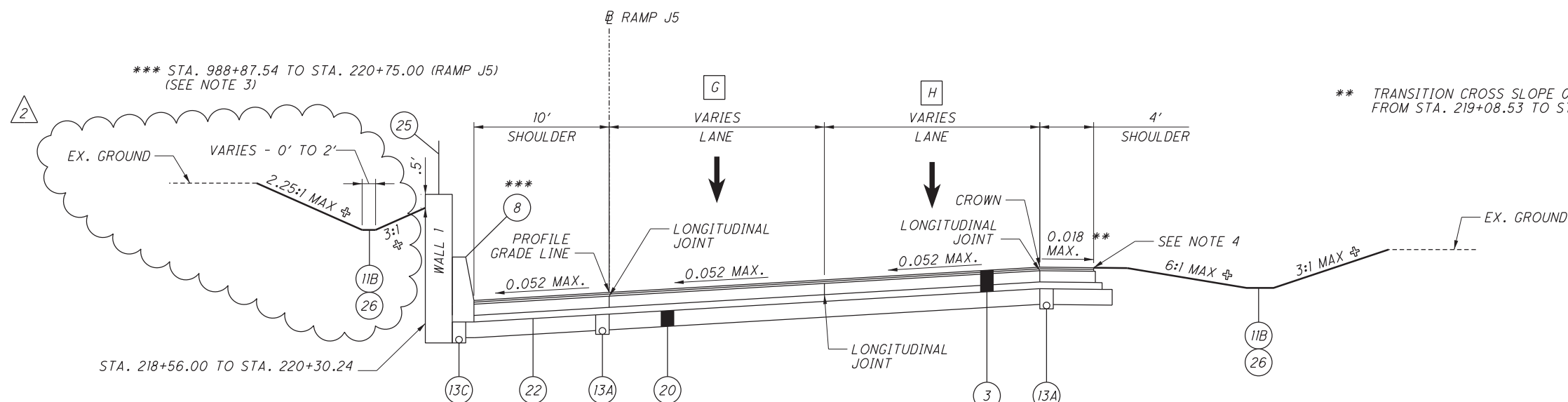


SUPERELEVATED SECTION - I.R.-77
STA. 997+07.52 TO STA. 997+97.60 = 90.08 FT.
TOTAL = 90.08 FT.

- G 12'-10" TO 15'-2" - STA. 219+07.40 TO STA. 220+75.00
- H 12'-10" TO 15'-2" - STA. 219+07.40 TO STA. 220+75.00

NOTES:

1. SAW CUTS SHALL BE AS SHOWN OR AT EDGE OF EXISTING FULL-DEPTH PAVEMENT ON MAINLINE I.R.-77, WHICH EVER IS CLOSER TO I.R.-77 CENTERLINE.
2. PROFILE GRADE LINE (PGL) FOLLOWS EDGE OF PAVEMENT.
3. SEE EDGE COURSE DETAIL - BARRIER, ON SHEET 10.
4. SEE EDGE COURSE DETAIL, ON SHEET 10.

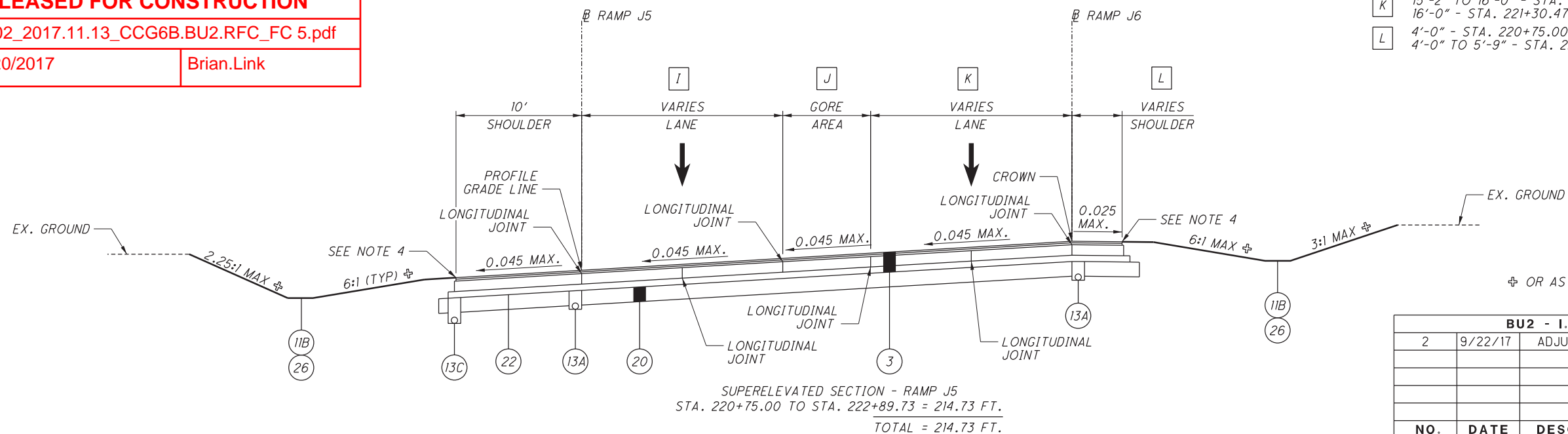


SUPERELEVATED SECTION - RAMP J5
STA. 219+07.40 TO STA. 220+75.00 = 167.60 FT.
TOTAL = 167.60 FT.

** TRANSITION CROSS SLOPE 0.073 TO -0.018 FROM STA. 219+08.53 TO STA. 219+90.00

- I 15'-2" TO 16'-0" - STA. 220+75.00 TO STA. 221+30.47
- J 0'-0" - STA. 220+75.00 TO STA. 221+30.47
- K 15'-2" TO 16'-0" - STA. 220+75.00 TO STA. 221+30.47
- L 4'-0" - STA. 220+75.00 TO STA. 222+45.22
- 4'-0" TO 5'-9" - STA. 222+45.22 TO STA. 222+89.73

RELEASED FOR CONSTRUCTION	
BU02_2017.11.13_CCG6B.BU2.RFC_FC 5.pdf	
11/20/2017	Brian.Link



SUPERELEVATED SECTION - RAMP J5
STA. 220+75.00 TO STA. 222+89.73 = 214.73 FT.
TOTAL = 214.73 FT.

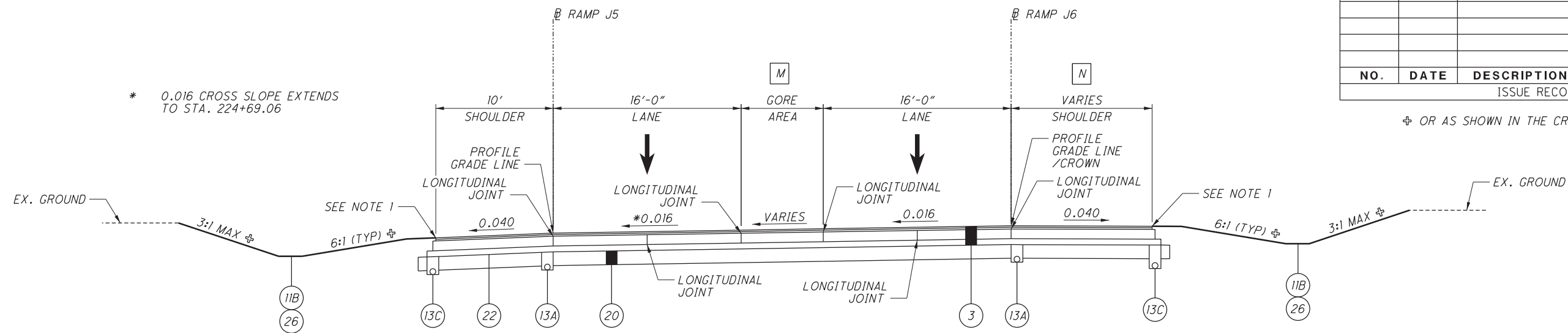
OR AS SHOWN IN THE CROSS SECTIONS

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION
2	9/22/17	ADJUSTED DITCH WIDTH BEHIND WALL 1
ISSUE RECORD		

TYPICAL SECTIONS

CUY-77-13.80

NO.	DATE	DESCRIPTION
ISSUE RECORD		



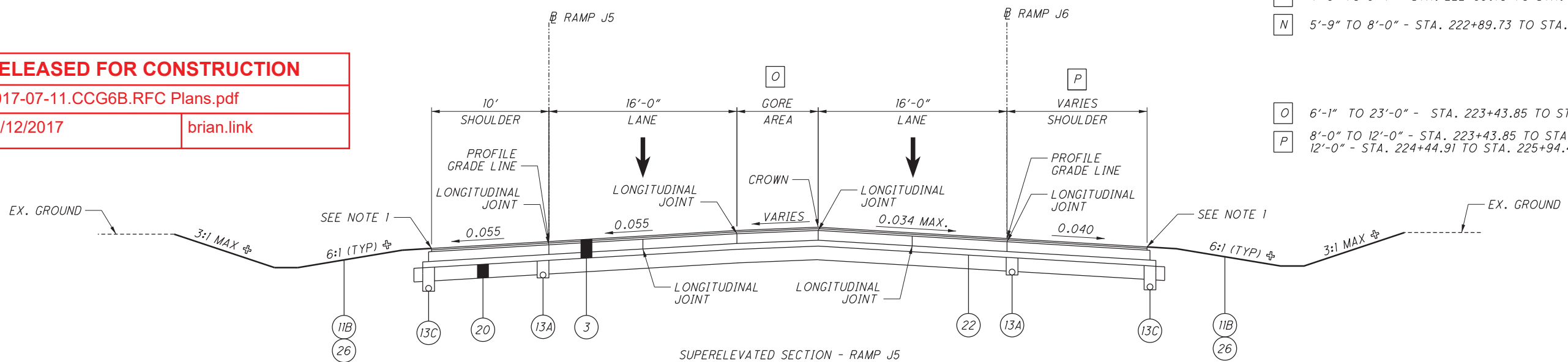
OR AS SHOWN IN THE CROSS SECTIONS

NOTES:
1. SEE EDGE COURSE DETAIL, ON SHEET 10.

NORMAL SECTION - RAMP J5
STA. 222+89.73 TO STA. 223+43.85 = 54.12 FT.
TOTAL = 54.12 FT.

- M 4'-6" TO 6'-1" - STA. 222+89.73 TO STA. 223+43.85
- N 5'-9" TO 8'-0" - STA. 222+89.73 TO STA. 223+43.85

RELEASED FOR CONSTRUCTION
2017-07-11.CCG6B.RFC Plans.pdf
07/12/2017 brian.link

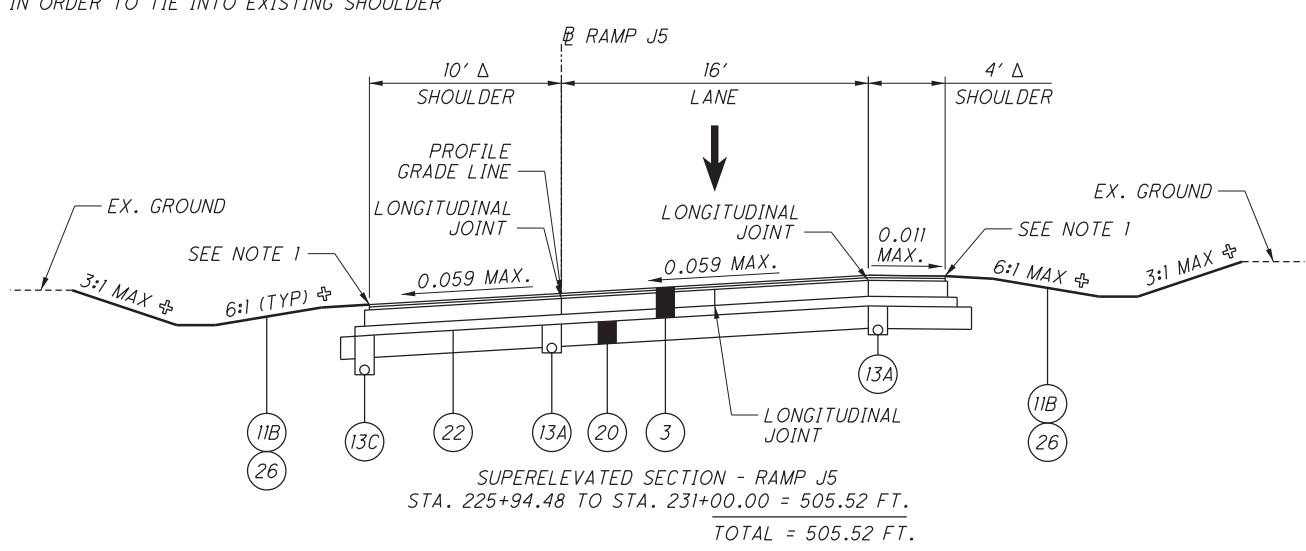


- O 6'-1" TO 23'-0" - STA. 223+43.85 TO STA. 225+94.48
- P 8'-0" TO 12'-0" - STA. 223+43.85 TO STA. 224+44.91
- 12'-0" - STA. 224+44.91 TO STA. 225+94.48

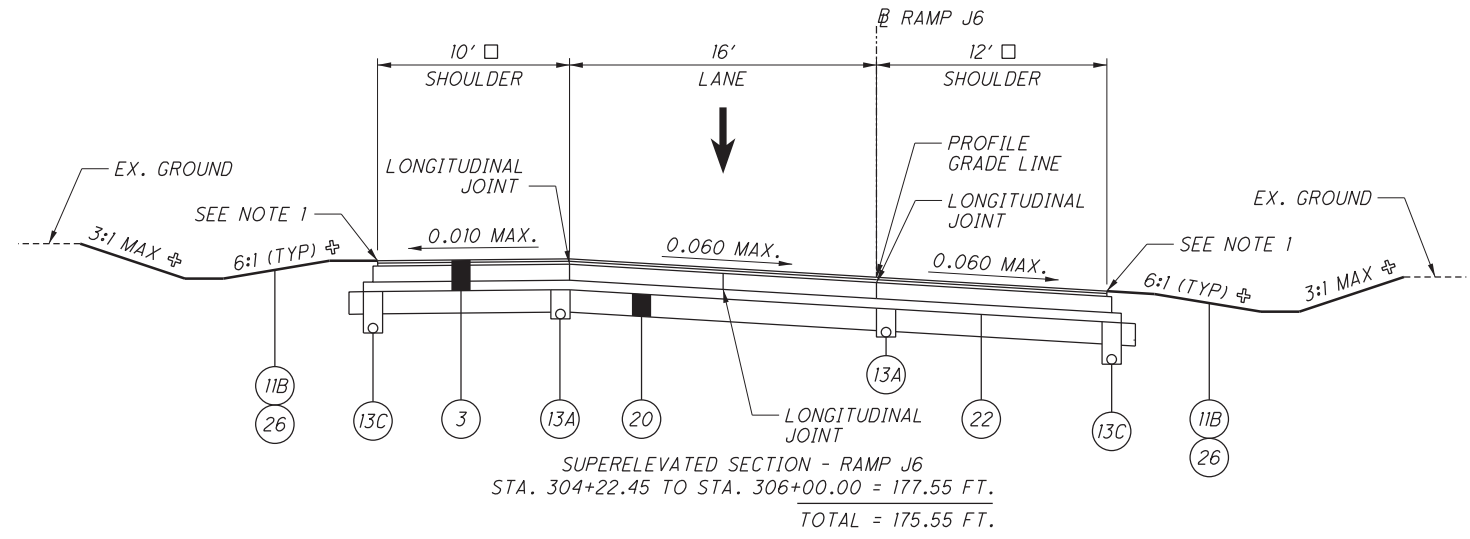
SUPERELEVATED SECTION - RAMP J5
STA. 223+43.85 TO STA. 225+94.48 = 250.63 FT.
TOTAL = 250.63 FT.

SHOULDER WIDTHS VARY FROM STA. 305+75.00 TO STA. 306+00.00, IN ORDER TO TIE INTO EXISTING SHOULDER

SHOULDER WIDTHS VARY FROM STA. 230+75.00 TO STA. 231+00.00, IN ORDER TO TIE INTO EXISTING SHOULDER



SUPERELEVATED SECTION - RAMP J5
STA. 225+94.48 TO STA. 231+00.00 = 505.52 FT.
TOTAL = 505.52 FT.



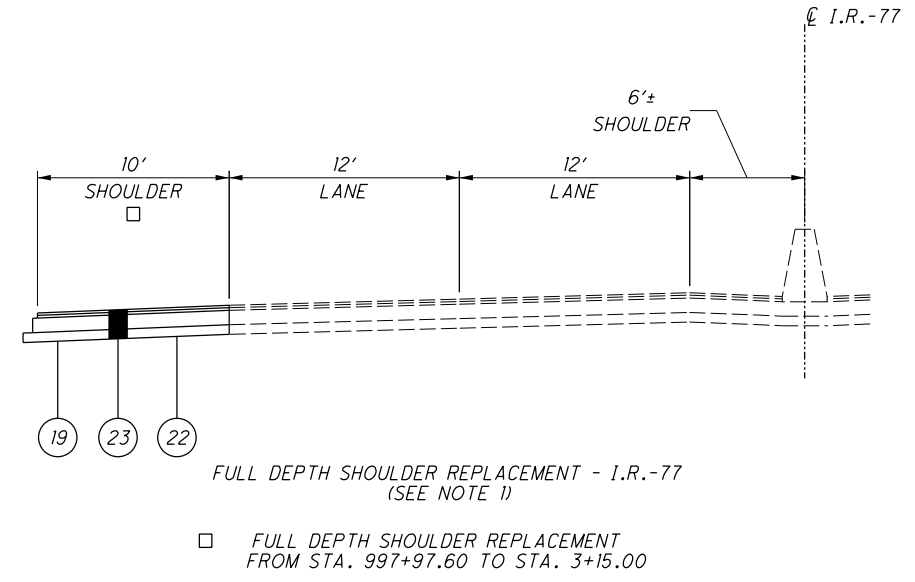
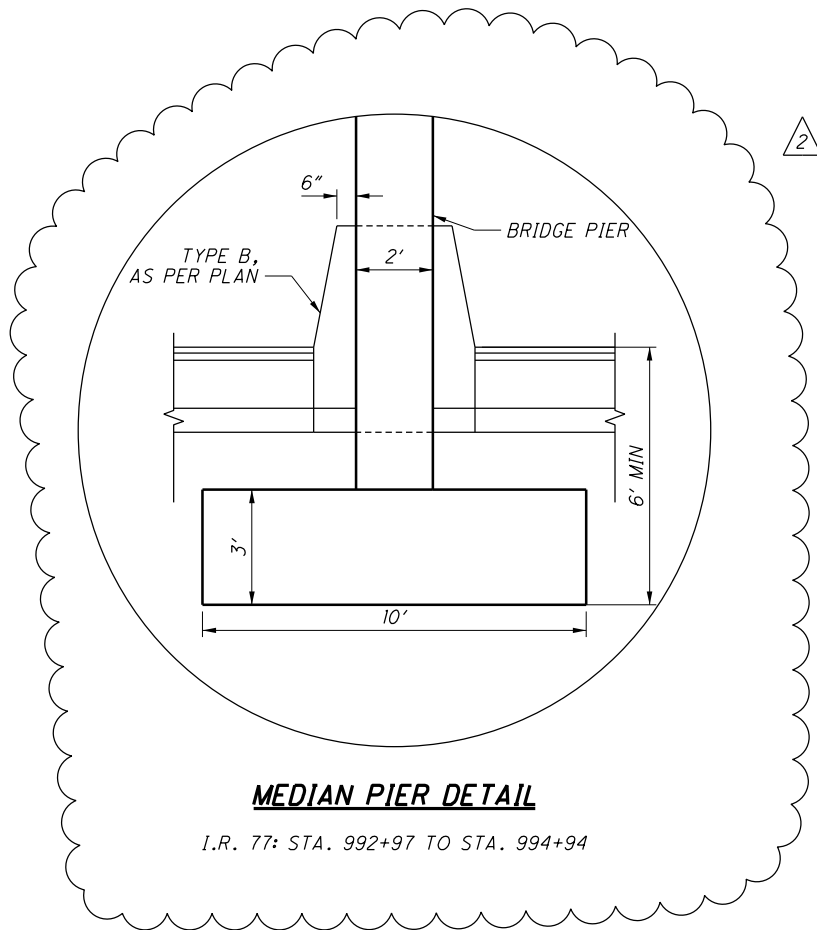
SUPERELEVATED SECTION - RAMP J6
STA. 304+22.45 TO STA. 306+00.00 = 177.55 FT.
TOTAL = 177.55 FT.

TYPICAL SECTIONS

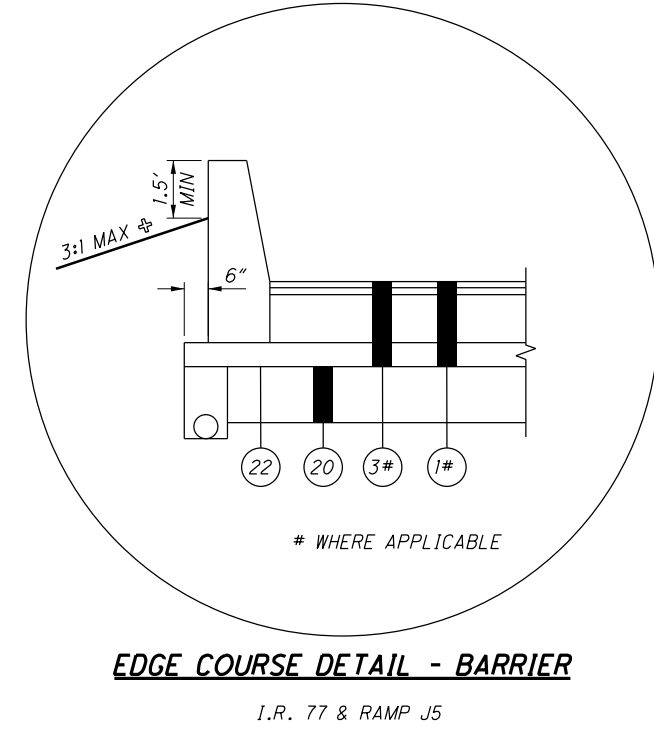
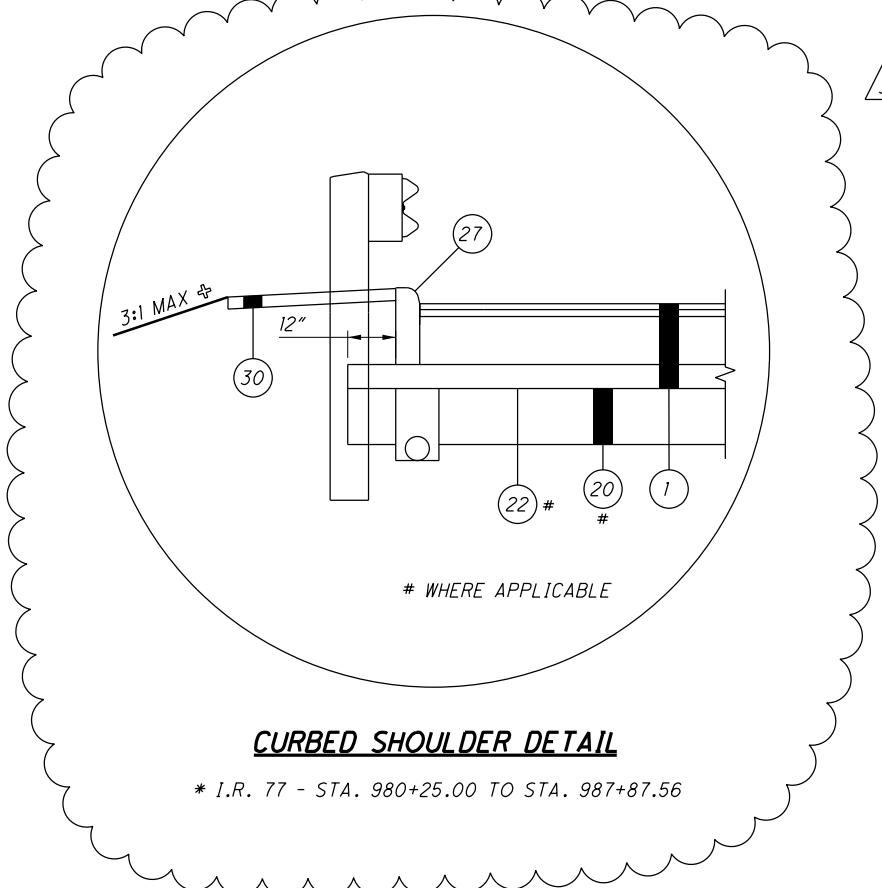
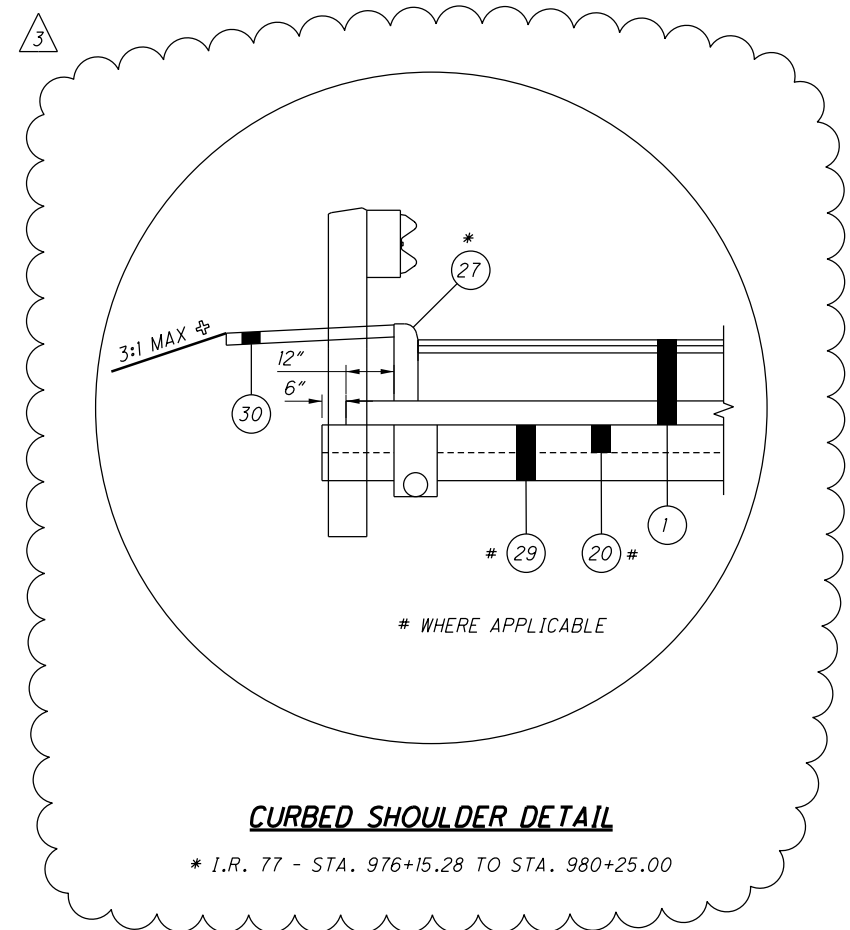
CUY-77-13.80

P:\82388_CCG6B\Design\Roadway\Sheets\82388_GY2004.dgn Sheet 7/10/2017 3:18:48 PM mlutes

P:\82388_CCG6B\Design\Roadway\Sheets\82388_GY2005.dgn Sheet 1/5/2018 2:36:57 PM mltutes

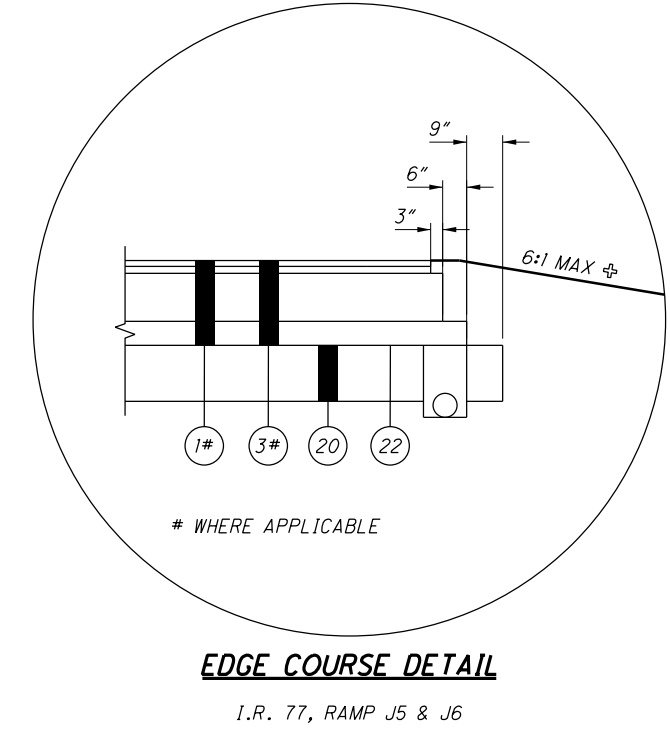


RELEASED FOR CONSTRUCTION
BU02_2017.12.7_CCG6B.BU2.RFC Plans_FC19.pd
01/09/2018 Brian.Link



NOTES:
1. SHOULDER REPLACEMENT TO BE PERFORMED PRIOR TO PHASE 2 OF MOT. SEE THE STAGE 1 - PHASE 2 NOTE, ON SHEET 20.

⊕ OR AS SHOWN IN THE CROSS SECTIONS



BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION
2	9/22/17	ADDED MEDIAN BARRIER DETAIL
3	12/7/17	ADDED ITEM "30" TO SHOULDER DETAILS
ISSUE RECORD		

TYPICAL SECTIONS

CUY-77-13.80

10
170

ROUNDING

THE ROUNDING AT SLOPE BREAKPOINTS SHOWN ON THE TYPICAL SECTIONS APPLIES TO ALL CROSS-SECTIONS EVEN THOUGH OTHERWISE SHOWN.

UTILITIES

LISTED BELOW ARE ALL UTILITIES LOCATED WITHIN THE PROJECT CONSTRUCTION LIMITS TOGETHER WITH THEIR RESPECTIVE OWNERS:

DOMINION EAST OHIO GAS
ATTN: AARON CONANT
320 SPRINGSIDE DRIVE
SUITE 320
AKRON, OH 44333
PHONE: (330) 664-2641
EMAIL: DANIEL.A.EVANS@DOM.COM

CLEVELAND PUBLIC POWER (CPP)
ATTN: CHRIS HIRZEL
1300 LAKESIDE AVENUE, ROOM 152
CLEVELAND, OH 44114
PHONE: (216) 664-3922
EMAIL: CHIRZEL@CPP.ORG

CEI THE ILLUMINATING COMPANY (OVERHEAD FACILITIES)
ATTN: TED RADER
6896 MILLER ROAD
BRECKSVILLE, OH 44141
PHONE: (440) 546-8738
FAX: (440) 546-8773
EMAIL: RADERT@FIRSTENERGYCORP.COM

CEI THE ILLUMINATING COMPANY (UNDERGROUND FACILITIES)
ATTN: DEAN CHATFIELD
6896 MILLER ROAD
BRECKSVILLE, OH44141
PHONE: (440) 717-6846
EMAIL: DMCHATFIELD@FIRSTENERGYCORP.COM

VERIZON
ATTN: AL GUEST
120 RAVINE STREET
AKRON, OH 44303
PHONE: (330) 253-8267
EMAIL: ALLAN.GUEST@VERIZON.COM

AT&T
ATTN: JAMES JANIS
13630 LORAIN AVE, 2ND FLOOR
CLEVELAND, OH 44111
PHONE: (216) 476-6142
EMAIL: PJ8191@ATT.COM

WINDSTREAM
ATTN: CHERYL SCOTT
205 S. HAMB DEN ST.
CHARDON, OH 44024
PHONE: (440) 285-5528
EMAIL: CHERYL.SCOTT@WINDSTREAM.COM

TIME WARNER CABLE/CHARTER COMMUNICATIONS
ATTN: PAUL SILVESTRO
8179 DOW CIRCLE
STRONGSVILLE, OH 44136
PHONE: (216) 575-8016
EMAIL: PAUL.SILVESTRO@TWCABLE.COM

NORTHEAST OHIO REGIONAL SEWER DISTRICT (NEORS)
ATTN: MARY MACIEJOWSKI
3900 EUCLID AVENUE
CLEVELAND, OH 44115
PHONE: (330) 926-2407
PHONE: (216) 881-6600 EX. 6466
EMAIL: MACIEJOWSKIM@NEORS.ORG

CITY OF CLEVELAND, DIVISION OF WATER POLLUTION CONTROL (WPC)
ATTN: ELIE RAMY
12302 KIRBY AVENUE
CLEVELAND, OH 44108
PHONE: (216) 664-2756
EMAIL: ERAMY@CLEVELANDWPC.COM

CITY OF CLEVELAND, DIVISION OF WATER (CWD)
ATTN: FRED ROBERTS
1201 LAKESIDE AVENUE
CLEVELAND, OH 44113
PHONE: (216) 664-2444 EX. 5440
EMAIL: FRED.ROBERTS@CLEVELANDWATER.COM

CITY OF CLEVELAND, DIVISION OF TRAFFIC ENGINEERING
ATTN: RICH TUTIE
4150 E. 49TH STREET, BUILDING #4
CLEVELAND, OH 44105
PHONE: (216) 857-7032
EMAIL: RTUTIE@CITY.CLEVELAND.OH.US

ODOT DISTRICT 12
ATTN: ANTHONY TOTH
5500 TRANSPORTATION BLVD.
GARFIELD HEIGHTS, OH 44125
PHONE: (216) 584-2220
EMAIL: ANTHONY.TOTH@DOT.OHIO.GOV

LIGHTTOWER
ATTN: EDWARD DALY
15565 NEO PARKWAY
GARFIELD HEIGHTS, OH 44128
PHONE: (585) 397-5988
EMAIL: EDALY@LIGHTTOWER.COM

LEVEL 3
ATTN: DOUG HOLLOWAY
4000 CHESTER AVE.
CLEVELAND, OH 44103
PHONE: (440) 906-6284
EMAIL: DOUG.HOLLOWAY@LEVEL3.COM

ZAYO
ATTN: SCOTT HEINLEN
4199 KINROSS LAKES PARKWAY, SUITE 10
RICHFIELD, OH 44286
PHONE: (740) 501-6921
EMAIL: SCOTT.HEINLEN@ZAYO.COM

CITY OF CLEVELAND COUNCIL
ATTN: ANTHONY BRANCATELLI
601 LAKESIDE AVENUE, ROOM 220
CLEVELAND, OH 44114
PHONE: (216) 664-4233
EMAIL: ABRANCATELLI@CLEVELANDCITYCOUNCIL.ORG

ASBESTOS ON BRIDGE

AN ASBESTOS SURVEY OF THE BROADWAY AVENUE BRIDGE (SFN 1806661) WAS CONDUCTED BY A CERTIFIED ASBESTOS HAZARD EVALUATION SPECIALIST. THE SURVEY DETERMINED THAT NO ASBESTOS IS PRESENT ON THE BRIDGE STRUCTURES.

A COPY OF THE OHIO ENVIRONMENTAL PROTECTION AGENCY (OEPA) NOTIFICATION OF DEMOLITION AND RENOVATION FORMS, PARTIALLY COMPLETED AND SIGNED BY THE BRIDGE OWNER, WILL BE PROVIDED TO THE SUCCESSFUL BIDDER. THE DBT SHALL COMPLETE THE FORM AND SUBMIT IT TO:

CLEVELAND DEPARTMENT OF PUBLIC HEALTH,
DIVISION OF AIR QUALITY
75 ERIEVIEW PLAZA, 2ND FLOOR
CLEVELAND, OH 44114
ATTN: GEORGE BAKER
EMAIL: GBAKER@CITY.CLEVELAND.OH.US
PHONE: (216) 664-4010
FAX: (216) 420-8047

AT LEAST TEN (10) WORKING DAYS PRIOR TO THE START OF ANY DEMOLITION AND/OR REHABILITATION, THE DBT SHALL PROVIDE A COPY OF THE COMPLETED FORM TO THE ENGINEER.

INFORMATION REQUIRED ON THE FORM WILL INCLUDE:

- 1) THE CONTRACTOR'S NAME AND ADDRESS
- 2) THE SCHEDULED DATES FOR THE START AND COMPLETION OF THE BRIDGE REMOVAL
- 3) A DESCRIPTION OF THE PLANNED DEMOLITION WORK AND THE METHOD(S) TO BE USED.

A COPY OF THE OEPA FORM IS AVAILABLE FOR INSPECTION AT THE ODOT DISTRICT 12 OFFICE, 5500 TRANSPORTATION BLVD., GARFIELD HEIGHTS, OH 44125.

THE DBT SHALL FURNISH ALL FEES, LABOR, AND MATERIAL NECESSARY TO COMPLETE AND SUBMIT THE OEPA NOTIFICATION FORM.

ASBESTOS IN BUILDINGS

AN ASBESTOS SURVEY OF THE BUILDINGS WAS CONDUCTED BY A CERTIFIED ASBESTOS HAZARD EVALUATION SPECIALIST. THE SURVEY DETERMINED THAT ASBESTOS IS PRESENT IN THE BUILDINGS.

A COPY OF THE OHIO ENVIRONMENTAL PROTECTION AGENCY (OEPA) NOTIFICATION OF DEMOLITION AND RENOVATION FORMS, PARTIALLY COMPLETED AND SIGNED BY THE BRIDGE OWNER, WILL BE PROVIDED TO THE SUCCESSFUL BIDDER (AVAILABLE IN EV-05). THE DBT SHALL COMPLETE THE FORM AND SUBMIT IT TO:

CLEVELAND DEPARTMENT OF PUBLIC HEALTH,
DIVISION OF AIR QUALITY
75 ERIEVIEW PLAZA, 2ND FLOOR
CLEVELAND, OH 44114
ATTN: GEORGE BAKER
EMAIL: GBAKER@CITY.CLEVELAND.OH.US
PHONE: (216) 664-4010
FAX: (216) 420-8047

AT LEAST TEN (10) WORKING DAYS PRIOR TO THE START OF ANY DEMOLITION AND/OR REHABILITATION, THE DBT SHALL PROVIDE A COPY OF THE COMPLETED FORM TO THE ENGINEER.

INFORMATION REQUIRED ON THE FORM WILL INCLUDE:

- 1) THE CONTRACTOR'S NAME AND ADDRESS
- 2) THE SCHEDULED DATES FOR THE START AND COMPLETION OF THE BRIDGE REMOVAL
- 3) A DESCRIPTION OF THE PLANNED DEMOLITION WORK AND THE METHOD(S) TO BE USED.

A COPY OF THE OEPA FORM IS AVAILABLE FOR INSPECTION AT THE ODOT DISTRICT 12 OFFICE, 5500 TRANSPORTATION BLVD., GARFIELD HEIGHTS, OH 44125.

THE DBT SHALL FURNISH ALL FEES, LABOR, AND MATERIAL NECESSARY TO COMPLETE AND SUBMIT THE OEPA NOTIFICATION FORM.

CONSTRUCTION NOISE

ACTIVITIES AND LAND USE ADJACENT TO THIS PROJECT MAY BE AFFECTED BY CONSTRUCTION NOISE. IN ORDER TO MINIMIZE ANY ADVERSE CONSTRUCTION NOISE IMPACTS, ONLY OPERATE POWER-OPERATED CONSTRUCTION-TYPE DEVICES BETWEEN THE HOURS LISTED BELOW:

DAYS	HOURS
MONDAY - FRIDAY	7:00 A.M. TO 9:00 P.M.
SATURDAY	7:00 A.M. TO 11:00 P.M.
SUNDAY	7:00 A.M. TO 9:00 P.M.

THE FOLLOWING CONDITIONS SHALL APPLY TO THE APPROVED CITY OF CLEVELAND NOISE ORDINANCE (CCO 605.10):

1. THE CITY OF CLEVELAND AND RESPECTIVE COUNCIL PERSON(S) SHALL BE NOTIFIED AT THE MINIMUM TWO WEEKS IN ADVANCE OF ACTUAL START DATE AND COMPLETION OF PROJECT.
2. THE CITY OF CLEVELAND AND RESPECTIVE COUNCIL PERSON(S) SHALL BE NOTIFIED 72 HOURS IN ADVANCE OF ANY WORK SCHEDULE CHANGES RELATIVE TO THE HOURS/DAYS OF OPERATION.
3. THE CITY OF CLEVELAND AND RESPECTIVE COUNCIL PERSON(S) SHALL BE NOTIFIED 72 HOURS IN ADVANCE IF ANY OTHER HEAVY EQUIPMENT IS UTILIZED OTHER THAN THOSE LISTED IN THE ORIGINAL REQUEST DATED 09/02/15.

PUBLIC NOTIFICATION

TO ENSURE THE PUBLIC IS NOTIFIED OF CONSTRUCTION ACTIVITIES, THE DBT WILL ADVISE THE PROJECT ENGINEER A MINIMUM OF FOURTEEN (14) DAYS PRIOR TO THE START OF PROJECT CONSTRUCTION ACTIVITIES. THE PROJECT ENGINEER WILL FORWARD THIS INFORMATION TO THE ODOT DISTRICT 12 PUBLIC INFORMATION OFFICER (PIO). THE PIO WILL, IN TURN, NOTIFY THE PUBLIC, THE LOCAL EMERGENCY SERVICES, AFFECTED SCHOOLS AND BUSINESSES AND OTHER IMPACTED LOCAL PUBLIC AGENCIES A MINIMUM OF FOURTEEN (14) DAYS PRIOR TO THE START OF PROJECT CONSTRUCTION ACTIVITIES VIA MEDIA SOURCES.

P:\B2388_CCG6B\Design\Roadway\Sheets\82388_CN2001.dgn Sheet 7/10/2017 3:18:50 PM mlutes

RELEASED FOR CONSTRUCTION
2017-07-11.CCG6B.RFC Plans.pdf
07/12/2017 brian.link

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION

PROJECT COORDINATION

THROUGHOUT THE CUY-77-13.80 (CCG6B) PROJECT THE DBT SHALL COORDINATE WORK WITH THE OTHER PROJECTS LISTED BELOW:

1. CUY-77-14.35, PID 13567, CCG6A.
2. CUY-490/10-2.09/19.28, PID 96833, OC SECTION 3, DESIGN BUILD PROJECT.

DESIGN SPECIFICATIONS - CITY OF CLEVELAND

FOR PORTIONS OF WORK TO BE MAINTAINED BY THE CITY OF CLEVELAND, ALL WORK SHALL BE IN COMPLIANCE WITH ALL APPLICABLE CITY OF CLEVELAND MANUALS AND GUIDELINES, INCLUDING BUT NOT LIMITED TO APPENDIX GN-01 (CITY OF CLEVELAND DESIGN SPECIFICATIONS), APPENDIX GN-02 (CITY OF CLEVELAND STANDARD DRAWINGS), APPENDIX DR-01 (CITY OF CLEVELAND DRAINAGE PROVISIONS), AND APPENDIX TC-03 (CITY STREET LIGHTING SPECIFICATIONS) AS SHOWN IN THE PROJECT CONTRACT DOCUMENTS.

FENCE REMOVAL AND TEMPORARY FENCING

THE CONTRACTOR SHALL REMOVE THE EXISTING FENCE IMPACTED BY CONSTRUCTION ACTIVITIES. WHERE EXISTING FENCE IS REMOVED FROM PARCEL 31 AND 42, THE CONTRACTOR SHALL ERECT TEMPORARY FENCE TO SECURE THE LOTS. THE EXISTING FENCE SHALL MATCH THE HEIGHT OF THE EXISTING FENCE, INCLUDING GATES, IF ANY, TO SECURE THE PROPERTY UNTIL SUBSTANTIAL COMPLETION OR UNTIL THE PROPERTY OWNER REPLACES THE TEMPORARY FENCE WITH PERMANENT FENCING. IF TEMPORARY FENCING IS REMOVED PRIOR TO SUBSTANTIAL COMPLETION, THE CONTRACTOR SHALL PROVIDE ODOT A WRITTEN NOTICE FROM THE PROPERTY OWNER GRANTING PERMISSION TO REMOVE THE FENCE.

FENCE, TYPE CLT, AS PER PLAN

THE DBT SHALL FURNISH AND INSTALL TYPE CLT FENCE AS PER C&MS 607 AND ODOT SCD F-1.1 WITH THE FOLLOWING REVISIONS:

1. FABRIC SHALL CONSIST OF A 2-INCH DIAMOND MESH USING 0.148-INCH DIAMETER (9 GAUGE) WIRE CONFORMING TO ASTM F668 CLASS 2A OR 2B EXCEPT AS NOTED. THE PVC COATING SHALL BE BLACK IN COLOR CLOSELY APPROACHING FEDERAL STANDARD COLOR NO. 595B-27038. SELVAGES SHALL BE KNUCKLED AT BOTH ENDS. HANDLE ALL PVC COATED FABRIC WITH CARE. IF THE PVC COATING IS DAMAGED, REPLACE THE DAMAGED PORTION AT NO COST TO THE DEPARTMENT.
2. FABRIC TIES AND HOG RINGS SHALL BE 0.148-INCH CORE DIAMETER GALVANIZED PVC COATED STEEL WIRE CONFORMING TO ASTM A478. TO CONNECT THE FABRIC TO THE LINE POSTS, SUPPLY ONE FABRIC TIE FOR EACH ONE FOOT OF FABRIC HEIGHT. CONNECT THE FABRIC TO THE TENSION WIRE USING HOG RINGS 2-3 INCHES ON EACH SIDE OF THE POSTS AND AT SPACING NOT TO EXCEED 12 INCHES BETWEEN POSTS. THE PVC COATING SHALL BE THE SAME AS THAT FOR THE STEEL FABRIC.
3. ALL POSTS, RAILS, RODS, CAPS, AND ANY OTHER VISIBLE HARDWARE SHALL BE GALVANIZED AND COATED BLACK TO MATCH THE FABRIC.

STREET NAME SIGNS

REMOVE EXISTING AND CONSTRUCT NEW STREET NAME SIGNS FOR ALL INTERSECTIONS PER CITY OF CLEVELAND STREET NAME SIGN STANDARDS (APPENDIX TC-05).

6" DEEP PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC, AS PER PLAN

IN AREAS OF UNDERCUT, UNDERDRAINS WILL BE PLACED AT A DEPTH OF 6" BELOW THE BOTTOM OF THE UNDERCUT. SEE TYPICAL SECTIONS FOR UNDERCUT DEPTH

RELEASED FOR CONSTRUCTION

2017-07-11.CCG6B.RFC Plans.pdf

07/12/2017	brian.link
------------	------------

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION

ISSUE RECORD

ITEM 614, MAINTAINING TRAFFIC

THIS ITEM SHALL CONSIST OF MAINTENANCE OF TRAFFIC ON EXISTING ROADWAYS AND RAMPS IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, CURRENT EDITION, LATEST REVISION, THE SPECIFICATIONS, AND THE FOLLOWING:

1. IR-77
 - A. A MINIMUM OF TWO (2) ELEVEN FOOT LANES OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES ON IR 77 BY USE OF THE EXISTING PAVEMENT, THE COMPLETED PAVEMENT, ITEM 615 PAVEMENT FOR MAINTAINING TRAFFIC, AND ITEM 615 ROADS FOR PAVEMENT FOR MAINTAINING TRAFFIC.
 - B. THE DBT SHALL COMPLETE CONSTRUCTION OF THE BROADWAY BRIDGE PIER IN THE MEDIAN OF IR-77 AND REMOVE ANY WORKZONE FROM THE MEDIAN BY AUGUST 10, 2018 TO ALLOW CUY-77-14.35 (CCG6A) BRIDGE REPLACEMENT CONTRACTOR FULL ACCESS TO TEMPORARILY CONFIGURED LANES ON IR-77
 - C. A TOTAL OF FIFTEEN (15) WEEKEND FULL CLOSURES OF IR-77 ARE PERMITTED. THESE CLOSURES MAY BE SEPERATED SO THAT THE NORTHBOUND AND SOUTHBOUND CLOSURES OCCUR ON SEPERATE WEEKENDS. THE NORTHBOUND AND SOUTHBOUND DETOURS SHALL BE DETOURED AS SHOWN ON SHEETS 22 TO 28.
 - D. FULL-CLOSURES MAY NOT OCCUR DURING SPECIAL EVENTS AS DEFINED BY A CALENDER MAINTAINED BY THE ODOT PUBLIC INFORMATION OFFICER (PIO) OFFICER OR DURING ADJACENT CLOSURES. ODOT PROJECT ENGINEER SHALL APPROVE FULL CLOSURE SCHEDULE.
 - E. WEEKEND CLOSURES SHALL START NO EARLIER THAN 8:00PM ON FRIDAY AND BE OPEN TO TRAFFIC BY 6:00AM MONDAY, ALL TIMES LOCAL. WEEKEND CLOSURE TIMES SHALL BE APPROVED BY THE ODOT PROJECT ENGINEER.
 - F. WHEN FULL CLOSURES ARE IMPLEMENTED, THE DBT SHALL FURNISH ONE PORTABLE CHANGEABLE MESSAGE SIGN (PCMS), FROM ODOT'S PRE-APPROVED LIST, 1.5 TO 2 MILES IN ADVANCE OF EACH INTERSTATE APPROACH TO THE CLOSURE (IR-77NB, IR-480EB, IR-480WB, IR-77SB, IR-490EB, AND IR-490WB). THE PCMS SHALL BE PLACED AT LEAST ONE DAY IN ADVANCE TO PROVIDE NOTICE OF THE CLOSURE AND SHALL REMAIN IN SERVICE DURING THE CLOSURE. PCMS LOCATIONS ARE SHOWN ON SHEETS 22 TO 32.
 - G. LANE CLOSURE AND FULL-CLOSURE TIMES SHALL BE ADJUSTED FOR SPECIAL EVENTS THAT HAVE A SEATING CAPACITY OF 10,000 OR GREATER IN THE DOWNTOWN CLEVELAND AREA. THE DBT SHALL NOT CLOSE A LANE(S) IN THE INBOUND DIRECTION 2 HOURS BEFORE AN EVENT AND IN THE OUTBOUND DIRECTION 2 HOURS AFTER AN EVENT ENDS.

2. RAMPS J5/J6
 - A. A MINIMUM OF ONE ELEVEN (11) FOOT LANE OF TRAFFIC SHALL BE MAINTAINED AT ALL TIMES ON THE IR 490 E.B. RAMP TO IR 77 S.B. (RAMP J5) AND THE IR 490 W.B. RAMP TO IR 77 S.B. (RAMP J6), EXCEPT FOR A PERIOD NOT TO EXCEED 60 CONSECUTIVE CALENDER DAYS, WHEN RAMP J6 MAY BE CLOSED AND THROUGH TRAFFIC MAY BE DETOURED AS SHOWN ON SHEETS 30 TO 32.

THIS SHALL BE DONE BY USE OF THE EXISTING PAVEMENT, THE COMPLETED PAVEMENT, ITEM 615 PAVEMENT FOR MAINTAINING TRAFFIC, AND ITEM 615 ROADS FOR MAINTAINING TRAFFIC.

A DISINCENTIVE SHALL BE ASSESSED IN THE AMOUNT OF \$2,600 FOR EACH CALENDAR DAY THE ROADWAY REMAINS CLOSED TO TRAFFIC BEYOND THE SPECIFIED LIMIT.

PERMITTED LANE CLOSURES

LANE CLOSURES ON IR 77 SHALL ONLY BE IMPLEMENTED AT THE TIMES LISTED ON THE ODOT DISTRICT 12 PERMITTED LANE CLOSURE WEBSITE. NOTES LISTED HERE SHALL ALSO APPLY TO THIS CONTRACT. THE WEBSITE IS LOCATED AT:

HTTP://WWW.DOT.STATE.OH.US/DISTRICTS/D12/HIGHWAYMANAGEMENT/PAGES/PERMITTEDLANECLOSURES.ASPX

THE PERMITTED CLOSURE TIMES LISTED ON THE WEBSITE, 14 CALENDER DAYS PRIOR TO THE BID LETTING DATE, SHALL BE IN EFFECT FOR THIS PROJECT.

ANY ROAD NOT LISTED IN THE PERMITTED LANE CLOSURE SCHEDULE SHALL NOT HAVE ANY LANE CLOSURES WEEKDAYS FROM 6:30 AM TO 9:00 AM AND 3:00 PM TO 6:30 PM. NO TIME RESTRICTIONS WILL BE ASSIGNED ON WEEKEND SINGLE LANE CLOSURES FOR THESE ROADS.

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE IN THE AMOUNT OF \$2,500 FOR EACH HOUR THE PERMITTED LANE CLOSURE IS VIOLATED.

3. NO WORK SHALL BE PERFORMED AND ALL EXISTING LANES SHALL BE OPEN TO TRAFFIC DURING THE FOLLOWING DESIGNATED HOLIDAYS OR EVENTS:

CHRISTMAS	FOURTH OF JULY
NEW YEARS	LABOR DAY
MEMORIAL DAY	THANKSGIVING
(OTHER HOLIDAY OR EVENT)	

THE PERIOD OF TIME THAT THE LANES ARE TO BE OPEN DEPENDS ON THE DAY OF THE WEEK ON WHICH THE HOLIDAY OR EVENT FALLS. THE FOLLOWING SCHEDULE SHALL BE USED TO DETERMINE THIS PERIOD:

DAY OF HOLIDAY OR EVENT	TIME ALL LANES MUST BE OPEN TO TRAFFIC
SUNDAY	12:00N FRIDAY THROUGH 6:00 AM MONDAY
MONDAY	12:00N FRIDAY THROUGH 6:00 AM TUESDAY
TUESDAY	12:00N MONDAY THROUGH 6:00 AM WEDNESDAY
WEDNESDAY	12:00N TUESDAY THROUGH 6:00 AM THURSDAY
THURSDAY	12:00N WEDNESDAY THROUGH 6:00 AM FRIDAY
THURSDAY (THANKSGIVING ONLY)	6:00 AM WEDNESDAY THROUGH 6:00 AM MONDAY
FRIDAY	12:00N THURSDAY THROUGH 6:00 AM MONDAY
SATURDAY	12:00N FRIDAY THROUGH 6:00 AM MONDAY

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE IN THE AMOUNT OF \$75 FOR EACH MINUTE THE ABOVE DESCRIBED LANE CLOSURE RESTRICTIONS ARE VIOLATED.

4. ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH C&MS 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

NOTICE OF CLOSURE

NOTICE OF CLOSURE SIGNS (W20-H13), SHALL BE ERECTED BY THE CONTRACTOR PRIOR TO THE SCHEDULED ROAD OR RAMP CLOSURE IN ACCORDANCE WITH THE NOTICE OF CLOSURE TIME TABLE BELOW.

THE SIGNS SHALL BE ERECTED ON THE RIGHT-HAND SIDE OF THE ROAD/RAMP FACING TRAFFIC. THEY SHALL BE PLACED SO AS NOT TO INTERFERE WITH THE VISIBILITY OF ANY OTHER TRAFFIC CONTROL SIGNS. ON ROADWAYS, THEY SHOULD BE ERECTED AT OR NEAR THE POINT OF CLOSURE. THE SIGNS MAY BE ERECTED ANYWHERE ON RAMPS AS LONG AS THEY ARE VISIBLE TO THE MOTORISTS USING THE RAMP. ON ENTRANCE RAMPS, THE SIGN SHALL BE ERECTED WELL IN ADVANCE OF THE MERGE AREA TO AVOID DISTRACTING MOTORISTS.

NOTICE OF CLOSURE SIGN TIME TABLE:

DURATION OF CLOSURE	SIGN DISPLAYED TO PUBLIC
>= 2 WEEKS	14 CALENDER DAYS PRIOR TO CLOSURE
> 12 HOURS & < 2 WEEKS	7 CALENDER DAYS PRIOR TO CLOSURE
< 12 HOURS	2 CALENDER DAYS PRIOR TO CLOSURE

THE SIGN SHALL DISPLAY THE DATE OF THE CLOSURE IN MM-DD FORMAT AND THE NUMBER OF DAYS OF THE CLOSURE. THE LAST LINE OF THE W20-H13 SIGN LISTS A PHONE NUMBER WHICH A MOTORIST MAY CALL FOR ADDITIONAL INFORMATION. THIS IS TO BE A SPECIFIC OFFICE WITHIN THE DISTRICT RATHER THAN THE GENERAL SWITCHBOARD NUMBER.

OVERNIGHT TRENCH CLOSING

THE BASE WIDENING SHALL BE COMPLETED TO A DEPTH OF NO MORE THAN 1.5 INCHES BELOW THE EXISTING PAVEMENT BY THE END OF EACH WORK DAY. NO TRENCH SHALL BE LEFT OPEN OVERNIGHT EXCEPT FOR A SHORT LENGTH (25 FEET OR LESS) OF A WORK SECTION AT THE END OF THE TRENCH. IN CASE WORK MUST BE SUSPENDED BECAUSE OF INCLEMENT WEATHER OR OTHER REASONS, THE TRENCH FOR THE UN-COMPLETED BASE WIDENING SHALL BE BACK-FILLED AT THE DIRECTION OF THE ENGINEER.

TRENCH FOR WIDENING

TRENCH EXCAVATION FOR BASE WIDENING SHALL BE ONLY ON ONE SIDE OF THE PAVEMENT AT A TIME. THE OPEN TRENCH SHALL BE ADEQUATELY MAINTAINED AND PROTECTED WITH DRUMS OR BARRICADES AT ALL TIMES. PLACEMENT OF PROPOSED SUB-BASE AND BASE MATERIAL SHALL FOLLOW AS CLOSELY AS POSSIBLE BEHIND EXCAVATION OPERATIONS. THE LENGTH OF WIDENING TRENCH WHICH IS OPEN AT ANY ONE TIME SHALL BE HELD TO A MINIMUM AND SHALL AT ALL TIMES BE SUBJECT TO APPROVAL OF THE ENGINEER.

DUST CONTROL

THE CONTRACTOR SHALL FURNISH AND APPLY WATER FOR DUST CONTROL AS DIRECTED BY THE ENGINEER.

EARTHWORK FOR MAINTAINING TRAFFIC

WHEN UNDERCUTS ARE NECESSARY FOR MAINLINE PAVEMENT OR EMBANKMENT CONSTRUCTION, EVALUATE THE NEED FOR TEMPORARY ROAD UNDERCUTS IF WITHIN A CLOSE PROXIMITY TO THE MAINLINE UNDERCUTS. A GEOTECHNICAL EVALUATION SHOULD BE CONSIDERED TO DETERMINE IF THE EXISTING SOIL CONDITIONS ARE ADEQUATE TO SUPPORT THE TEMPORARY ROAD. ADDITIONAL SOIL BORINGS ALONG THE TEMPORARY ROAD ARE NOT NORMALLY REQUIRED.

FLOODLIGHTING

FLOODLIGHTING OF THE WORK SITE FOR OPERATIONS CONDUCTED DURING NIGHTTIME PERIODS SHALL BE ACCOMPLISHED SO THAT THE LIGHTS DO NOT CAUSE GLARE TO THE DRIVERS ON THE ROADWAY. TO ENSURE THE ADEQUACY OF THE FLOODLIGHT PLACEMENT, THE CONTRACTOR AND THE ENGINEER SHALL DRIVE THROUGH THE WORK SITE EACH NIGHT WHEN THE LIGHTING IS IN PLACE AND OPERATIVE PRIOR TO COMMENCING ANY WORK. IF GLARE IS DETECTED, THE LIGHT PLACEMENT AND SHIELDING SHALL BE ADJUSTED TO THE SATISFACTION OF THE ENGINEER BEFORE WORK PROCEEDS.

ITEM 614, WORK ZONE IMPACT ATTENUATOR FOR 24" WIDE HAZARDS (UNIDIRECTIONAL OR BIDIRECTIONAL)

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING A NON-GATING IMPACT ATTENUATOR. FURNISH AN IMPACT ATTENUATOR FROM THE OFFICE OF ROADWAY ENGINEERING'S APPROVED LIST FOR WORK ZONE IMPACT ATTENUATORS, FROM THE ROADWAY STANDARDS WEB PAGE FOR ROADWAY STANDARDS WEB PAGE.

INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

THE CONTRACTOR SHALL REPAIR OR REPLACE A DAMAGED UNIT WITHIN 24 HOURS OF A DAMAGING IMPACT.

WHEN BIDIRECTIONAL DESIGNS ARE SPECIFIED, THE CONTRACTOR SHALL SUPPLY APPROPRIATE TRANSITIONS.

WHEN GATING IMPACT ATTENUATORS ARE DESIRED, THE CONTRACTOR SHALL SUBMIT DOCUMENTATION TO THE ENGINEER FOR ACCEPTANCE.

THE COST FOR THE ADDITIONAL BARRIER REQUIRED FOR A GATING IMPACT ATTENUATOR SHALL BE INCLUDED IN THE COST OF THE GATING IMPACT ATTENUATOR.

RELEASED FOR CONSTRUCTION	
2017-07-11.CCG6B.RFC Plans.pdf	
07/12/2017	brian.link

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION
		ISSUE RECORD

ITEM 614, WORK ZONE IMPACT ATTENUATOR, FOR HAZARDS OVER 24" AND LESS THAN 36" WIDE, (UNIDIRECTIONAL OR BIDIRECTIONAL)

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING A NON-GATING IMPACT ATTENUATOR. FURNISH AN IMPACT ATTENUATOR FROM THE OFFICE OF ROADWAY ENGINEERING APPROVED LIST FOR WORK ZONE IMPACT ATTENUATORS, FROM THE ROADWAY STANDARDS WEB PAGE FOR ROADWAY STANDARDS APPROVED PRODUCTS.

INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

THE CONTRACTOR SHALL REPAIR OR REPLACE A DAMAGED UNIT WITHIN 24 HOURS OF A DAMAGING IMPACT.

WHEN BIDIRECTIONAL DESIGNS ARE SPECIFIED, THE CONTRACTOR SHALL SUPPLY APPROPRIATE TRANSITIONS.

WORK-SITE TRAFFIC SUPERVISOR

SUBJECT TO APPROVAL OF THE ENGINEER, THE CONTRACTOR SHALL EMPLOY AND IDENTIFY (SOMEONE OTHER THAN THE SUPERINTENDENT) A CERTIFIED WORK-SITE TRAFFIC SUPERVISOR (WTS) BEFORE STARTING WORK IN THE FIELD. THE WTS SHALL BE CERTIFIED FROM ONE OF THE FOLLOWING ORGANIZATIONS:

- AMERICAN TRAFFIC SAFETY SERVICE ASSOCIATION (ATSSA), PHONE NUMBER 1-800-272-8772, CERTIFIED TRAFFIC CONTROL SUPERVISOR (TCS).
- NATIONAL HIGHWAY INSTITUTE, DESIGN AND OPERATION OF WORK ZONE TRAFFIC CONTROL, PHONE NUMBER 1-703-235-0500.
- THE OHIO CONTRACTORS ASSOCIATION, TRAFFIC CONTROL SUPERVISOR (OCA/TCS) WORK ZONE CLASS, ONLY IF TAKEN AFTER MAY 5, 2004, PHONE NUMBER 1-800-229-1388.
- OHIO LABORERS TRAINING, TRAFFIC CONTROL SUPERVISORS CLASS, PHONE NUMBER 1-740-599-7915.

A COPY OF EACH WTSS CERTIFICATION AND 24-HOUR CONTACT INFORMATION SHALL BE PROVIDED TO THE ENGINEER AT THE PRE-CONSTRUCTION CONFERENCE. IF THE DESIGNATED WTS WILL NOT BE AVAILABLE FULL TIME (24/7), THE CONTRACTOR MAY DESIGNATE AN ALTERNATE WTS TO BE AVAILABLE WHEN THE PRIMARY IS OFF DUTY. EACH WTS SHALL HAVE A WTS CERTIFICATION CONTAINING THE DATE OF ISSUE AND SHALL BE FROM ANY OF THE APPROVED ORGANIZATIONS. AT THE TIME OF THE PRE-CONSTRUCTION, THE WTS CERTIFICATION DATE OF ISSUE SHALL BE WITHIN 5 YEARS PRIOR TO THE ORIGINAL COMPLETION DATE OF THE PROJECT.

THE WTS POSITION HAS THE RESPONSIBILITY OF MONITORING TRAFFIC CONTROL DEFICIENCIES FOR THE ENTIRE WORK ZONE. THE DUTIES OF THE WTS ARE AS FOLLOWS:

- BE AVAILABLE ON A 24-HOUR PER DAY BASIS, AND BE ABLE TO BE ON SITE FOR ALL EMERGENCY TRAFFIC CONTROL NEEDS WITHIN ONE HOUR OF NOTIFICATION BY POLICE OR PROJECT STAFF AND BE PREPARED TO EFFECT CORRECTIVE MEASURES IMMEDIATELY ON EXISTING WORK ZONE TRAFFIC CONTROL DEVICES.
- ATTEND PRE-CONSTRUCTION MEETING AND ALL PROJECT MEETINGS WHERE TRAFFIC CONTROL MANAGEMENT IS DISCUSSED.

- BE AVAILABLE FOR MEETINGS OR DISCUSSIONS WITH THE ENGINEER UPON REQUEST OR WITHIN 36 HOURS.
- COORDINATE A TRAFFIC INCIDENT MANAGEMENT MEETING EACH YEAR BEFORE CONSTRUCTION WORK BEGINS WITH ODOT AND THE SAFETY FORCES THAT WILL RESPOND TO INCIDENTS ON THE PROJECT. ITEMS TO BE DISCUSSED WILL BE THE:
 - TRAFFIC INCIDENT MANAGEMENT PLAN (TIMP);
 - EMERGENCY RESPONSE AND NOTIFICATION;
 - PROJECT WORK/PHASING CONCERNS (E.G., RAMP CLOSURES); AND
 - RESPONDERS CONCERNS.
- BE AWARE OF, AND COORDINATE IF NECESSARY, ALL TRAFFIC CONTROL OPERATIONS, INCLUDING THOSE OF SUBCONTRACTORS AND SUPPLIERS.
- COORDINATE PROJECT ACTIVITIES WITH ALL LAW ENFORCEMENT OFFICERS (LEOS). A WTS SHALL ALSO BE THE MAIN CONTACT PERSON WITH THE LEOS WHILE THEY ARE ON THE PROJECT.
- COORDINATE MEETINGS WITH ODOT PERSONNEL, LEOS AND OTHER APPLICABLE ENTITIES BEFORE EACH PLAN PHASE SWITCH TO DISCUSS WORK ZONE TRAFFIC CONTROL.
- ENSURE COMPLIANCE WITH THE CONTRACT DOCUMENTS FOR SIGNS, BARRICADES, TEMPORARY CONCRETE BARRIER, PAVEMENT MARKINGS, PORTABLE MESSAGE SIGNS, AND OTHER TRAFFIC CONTROL DEVICES ON A DAILY BASIS; AND FACILITATE ANY CORRECTIVE ACTION NECESSARY.
- NOTIFY THE CONTRACTOR OF THE NEED FOR CLEANING AND MAINTENANCE OF ALL TRAFFIC CONTROL DEVICES, INCLUDING THE COVERING AND REMOVAL OF INAPPLICABLE SIGNS.
- INSPECT, EVALUATE, PROPOSE NECESSARY MODIFICATIONS TO, AND DOCUMENT THE EFFECTIVENESS OF, THE TRAFFIC CONTROL DEVICES AND/OR TRAFFIC OPERATIONS ON A DAILY BASIS (7 DAYS A WEEK). IN ADDITION, A WEEKLY NIGHT INSPECTION OF THE WORK ZONE SETUP FOR DAYTIME WORK OPERATIONS; AND ONE DAYTIME INSPECTION PER WEEK FOR NIGHTTIME PROJECTS. THIS SHALL INCLUDE (BUT NOT BE LIMITED TO) DOCUMENTATION ON THE FOLLOWING PROJECT EVENTS:
 - INITIAL TRAFFIC CONTROL SETUP (DAY AND NIGHT REVIEW).
 - DAILY TRAFFIC CONTROL SETUP AND REMOVAL.
 - WHEN CONSTRUCTION STAGING CAUSES A CHANGE IN THE TRAFFIC CONTROL SETUP.
 - CRASH OCCURRENCES WITHIN THE CONSTRUCTION AREA.
 - REMOVAL OF TRAFFIC CONTROL DEVICES AT THE END OF A PHASE OR PROJECT.
 - ALL OTHER EMERGENCY TRAFFIC CONTROL NEEDS.

- COMPLETE THE DEPARTMENT APPROVED LONG TERM INSPECTION FORM (ICA-D-8) AFTER EACH INSPECTION AS REQUIRED IN #10 AND SUBMIT IT TO THE ENGINEER THE FOLLOWING WORK DAY. THESE REPORTS SHALL INCLUDE A CHECKLIST OF ALL TRAFFIC CONTROL MAINTENANCE ITEMS TO BE REVIEWED. A COPY OF THE FORM WILL BE PROVIDED AT THE PRE-CONSTRUCTION MEETING. ANY DEFICIENCIES OBSERVED SHALL BE NOTED, ALONG WITH RECOMMENDED CORRECTIVE ACTIONS AND THE DATES BY WHICH SUCH CORRECTIONS WERE, OR WILL BE, COMPLETED. A COPY OF THIS DOCUMENT CAN BE FOUND IN THE CURRENT REVISION OF THE DEPARTMENT OF TRANSPORTATION CONSTRUCTION INSPECTION FORMS MANUAL.
 - VERIFY THAT ALL FLAGGING OPERATIONS ARE BEING CONDUCTED PER THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
 - HAVE COPIES OF THE ODOT TEMPORARY TRAFFIC CONTROL MANUAL AND APPLICABLE STANDARDS AND SPECIFICATIONS INCLUDED IN THE CONTRACT DOCUMENTS AVAILABLE AT ALL TIMES ON THE PROJECT.
 - IDENTIFY AND CONTACT ALL POSSIBLE RESPONSE PERSONNEL; PRE-PLAN AND KEEP AN UPDATED ROSTER WITH PHONE NUMBERS:
 - FEDERAL, STATE, AND LOCAL TRANSPORTATION AGENCIES (TRAFFIC MANAGEMENT CENTER);
 - REGIONAL, COUNTY OR LOCAL 911 DISPATCH; AND
 - TOWING AND RECOVERY PROVIDERS.
 - COMPLY WITH THE PROVISIONS OF OMUTCD CHAPTER 6I, CONTROL OF TRAFFIC THROUGH TRAFFIC INCIDENT MANAGEMENT AREAS.
 - PROPOSE A RESPONSE/ACTION PLAN TO:
 - ESTABLISH ALTERNATE ROUTE PLANS PER THE PROVIDED ODOT PLAYBOOK;
 - REMOVE TRAFFIC DEMAND FROM IMPACTED ROADWAY(S);
 - DIVERT TRAFFIC TO ROUTES THAT CAN ACCOMMODATE DEMANDS;
 - DETOUR TRAFFIC AWAY FROM SENSITIVE AREAS (SUCH AS SCHOOLS, HOSPITALS, ETC.);
 - DISCUSS METHODS OF DETERMINING A STAGING AREA FOR RESPONDERS WITHIN OR NEAR THE CONSTRUCTION ZONE; AND
 - DISCUSS METHODS OF DEVELOPING INGRESS AND EGRESS SITES WITHIN THE CONSTRUCTION ZONE.
- THE RESPONSE/ACTION PLAN SHALL BE SUBMITTED TO ODOT.

- PERFORM, AT A MINIMUM, THE FOLLOWING FUNCTIONS IN INCIDENT DETECTION AND VERIFICATION:
 - CALL 911/ NOTIFY TRAFFIC MANAGEMENT CENTER AND PROVIDE THE FOLLOWING:
 - DIRECTION OF TRAVEL.
 - NUMBER AND TYPE OF VEHICLES INVOLVED.
 - ESTIMATED EXTENT OF DAMAGE OR INJURY.
 - ESTIMATED NUMBER OF PATIENTS INVOLVED.
 - ANY POTENTIAL HAZARDOUS CONDITIONS.
 - THE PLACARD NUMBER ON ANY HAZARDOUS MATERIALS PLACARD FROM A SAFE DISTANCE.
 - INITIATE TRAFFIC MANAGEMENT / PROVIDE TRAFFIC CONTROL.
 - ASSIST MOTORIST WITH DISABLED VEHICLES.
 - RECOMMEND ROADWAY REPAIR NEEDS.
 - PROVIDE REPAIR RESOURCES.
- ATTEND POST-INCIDENT DEBRIEFINGS IF REQUIRED.

THE DEPARTMENT WILL DEDUCT \$500 PER DAY FOR THE WTS FOR ANY DAY ON WHICH THE CONTRACTOR FAILS TO PERFORM THE DUTIES SET FORTH ABOVE. SHOULD THE CONTRACTOR'S FAILURE TO PERFORM ANY OF THE DUTIES DESCRIBED ABOVE RESULT IN A MAINTENANCE OF TRAFFIC SAFETY ISSUE, THE DEPARTMENT WILL DEDUCT THE AMOUNT LISTED ABOVE FOR ITEM 614 MAINTENANCE OF TRAFFIC FROM THE CONTRACTOR'S NEXT SCHEDULED ESTIMATE.

IF THREE OR MORE FAILURES TO PERFORM THE DUTIES SET FORTH ABOVE OCCUR, THE WTS SHALL BE IMMEDIATELY REMOVED FROM THE WORK IN ACCORDANCE WITH C&M 108.05.

PAVEMENT REPAIRS AS DIRECTED

ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIRS (T=3) HAS BEEN PROVIDED TO BE USED AS DIRECTED BY THE ENGINEER TO MAINTAIN PAVEMENT DURING CONSTRUCTION. PAYMENT FOR THIS WORK WILL BE ON A UNIT COST BASIS AND AN ESTIMATED QUANTITY HAS BEEN PROVIDED IN THE PROPOSAL.

ITEM 255 - FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT HAS BEEN PROVIDED TO BE USED AS DIRECTED BY THE ENGINEER TO MAINTAIN PAVEMENT DURING CONSTRUCTION. PAYMENT FOR THIS WORK WILL BE ON A UNIT COST BASIS AND AN ESTIMATED QUANTITY HAS BEEN PROVIDED IN THE PROPOSAL. PAVEMENT BUILDUP SHALL MATCH PROPOSED COMPOSITE FULL-DEPTH BUILDUP. SURFACE AND INTERMEDIATE COURSE FOR MOT AS-DIRECTED FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT ARE PAID UNDER ITEM 251 ABOVE.

RELEASED FOR CONSTRUCTION
2017-07-11.CCG6B.RFC Plans.pdf
07/12/2017 brian.link

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION

ISSUE RECORD

P:\B2388_CCG6B\Design\MOT\Sheets\B2388_MN2002.dgn_Sheet 7/10/2017 3:18:57 PM mlutes

DELINEATION OF PORTABLE AND PERMANENT BARRIER

BARRIER REFLECTORS AND OBJECT MARKERS SHALL BE INSTALLED ON ALL PORTABLE BARRIER (PB) USED FOR TRAFFIC CONTROL AND ON PERMANENT CONCRETE BARRIER (INCLUDING BRIDGE PARAPETS) LOCATED WITHIN 5 FEET OF THE EDGE OF THE ADJACENT TRAVEL LANE.

BARRIER REFLECTORS SHALL CONFORM TO C&MS 626, EXCEPT THAT THE SPACING SHALL BE AS PER TRAFFIC SCD MT-101.70. OBJECT MARKERS AND THEIR INSTALLATION SHALL CONFORM TO C&MS 614.03 AND SCD MT-101.70. WHEN THE PB CONTAINS GLARE SCREEN, ONE SET OF THREE VERTICAL STRIPES OF SHEETING SHALL BE CONSIDERED EQUIVALENT TO AN OBJECT MARKER, ONE-WAY.

INCREASED BARRIER DELINEATION, AS SPECIFIED HEREIN, SHALL BE INSTALLED ON ALL PB AND CONCRETE PERMANENT BARRIER LOCATED WITHIN 5 FEET OF THE EDGE OF THE TRAVELED LANE ALONG TAPERS AND TRANSITION AREAS AND ALONG CURVES (OUTSIDE ONLY) WITH DEGREE OF CURVATURE GREATER THAN OR EQUAL TO 3 DEGREES.

THE INCREASED BARRIER DELINEATION SHALL CONSIST OF EITHER DELINEATION PANELS OR THE TRIPLE STACKING OF WORK ZONE BARRIER REFLECTORS.

DELINEATION PANELS SHALL CONSIST OF PANELS OF DELINEATION, APPROXIMATELY 34 INCHES LONG AND 6 INCHES WIDE AND SHALL BE "CRIMPED." PANELS SHALL BE INSTALLED AND SPACED PER TRAFFIC SCD MT-101.70.

TRIPLE-STACKED BARRIER REFLECTORS SHALL CONSIST OF ALIGNING THREE BARRIER REFLECTORS VERTICALLY, AT LOCATIONS WHERE A SINGLE BARRIER REFLECTOR WOULD BE OTHERWISE ATTACHED. THERE SHALL BE NO OPEN SPACE BETWEEN THE ADJACENT BARRIER REFLECTORS. THE TRIPLE-STACKED BARRIER REFLECTORS SHALL CONFORM TO C&MS 626, EXCEPT THAT THEY SHALL BE SPACED AND ALIGNED PER TRAFFIC SCD MT-101.70.

ALONG RUNS OF INCREASED BARRIER DELINEATION WHERE THIS ITEM IS PROVIDED, THE QUANTITY SHALL BE MEASURED AS THE ENTIRE LENGTH OF THE RUN OF INCREASED BARRIER DELINEATION, INCLUDING THE SPACES BETWEEN THE INDIVIDUAL DELINEATION PANELS OR STACKS OF BARRIER REFLECTORS.

DELINEATION OF TEMPORARY AND PERMANENT GUARDRAIL

BARRIER REFLECTORS SHALL BE INSTALLED ON ALL TEMPORARY GUARDRAIL USED FOR TRAFFIC CONTROL AND ON ALL PERMANENT GUARDRAIL LOCATED WITHIN 5 FEET OF THE EDGE OF THE ADJACENT TRAVEL LANE. BARRIER REFLECTORS SHALL CONFORM TO C&MS 626.

OBJECT MARKERS SHALL BE INSTALLED ON ALL TEMPORARY AND PERMANENT GUARDRAIL LOCATED WITHIN 5 FEET OF THE EDGE OF THE ADJACENT TRAVEL LANE. GUARDRAIL-MOUNTING OF OBJECT MARKERS SHALL BE MADE BY INSTALLING THE OBJECT MARKERS ON THE EXTENSION BLOCKS RATHER THAN DIRECTLY ONTO THE GUARDRAIL ITSELF. OBJECT MARKERS SHALL CONFORM TO C&MS 614.03 AND THE SPACING SHALL BE APPROXIMATELY 50 FEET.

ITEM 614 - LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE DURING CONSTRUCTION OPERATIONS

USE OF LAW ENFORCEMENT OFFICERS (LEOS) BY CONTRACTORS OTHER THAN THE USES SPECIFIED BELOW WILL NOT BE PERMITTED AT PROJECT COST. LEOS SHOULD NOT BE USED WHERE THE Omutcd INTENDS THAT FLAGGERS BE USED.

IN ADDITION TO THE REQUIREMENTS OF C&MS 614 AND THE Omutcd, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHALL BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS:

DURING THE ENTIRE ADVANCE PREPARATION AND CLOSURE SEQUENCE WHERE COMPLETE BLOCKAGE OF TRAFFIC IS REQUIRED.

DURING A TRAFFIC SIGNAL INSTALLATION WHEN IMPACTING THE NORMAL FUNCTION OF THE SIGNAL OR THE FLOW OF TRAFFIC OR WHEN TRAFFIC NEEDS TO BE DIRECTED THROUGH AN ENERGIZED TRAFFIC SIGNAL CONTRARY TO THE SIGNAL DISPLAY (E.G., DIRECTING MOTORISTS THROUGH A RED LIGHT).

IN ADDITION TO THE REQUIREMENT OF C&MS 614 AND THE Omutcd, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHOULD BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS AS APPROVED BY THE ENGINEER:

FOR LANE CLOSURES: DURING INITIAL SET-UP PERIODS, TEAR DOWN PERIODS, SUBSTANTIAL SHIFTS OF A CLOSURE POINT OR WHEN NEW LANE CLOSURE ARRANGEMENTS ARE INITIATED FOR LONG-TERM LANE CLOSURES/SHIFTS (FOR THE FIRST AND LAST DAY OF MAJOR CHANGES IN TRAFFIC CONTROL SETUP).

IN GENERAL, LEOS SHOULD BE POSITIONED IN ADVANCE OF AND ON THE SAME SIDE AS THE LANE RESTRICTION OR AT THE POINT OF ROAD CLOSURE, AND TO MANUALLY CONTROL TRAFFIC MOVEMENTS THROUGH SIGNALIZED INTERSECTIONS IN WORK ZONES.

LEOS SHOULD NOT FORGO THEIR TRAFFIC CONTROL RESPONSIBILITIES TO APPREHEND MOTORISTS FOR ROUTINE TRAFFIC VIOLATIONS. HOWEVER, IF A MOTORIST'S ACTIONS ARE CONSIDERED TO BE RECKLESS, THEN PURSUIT OF THE MOTORIST IS APPROPRIATE.

THE LEOS WORK AT THE DIRECTION OF THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR SECURING THE SERVICES OF THE LEOS WITH THE APPROPRIATE AGENCIES AND COMMUNICATING THE INTENTIONS OF THE PLANS WITH RESPECT TO DUTIES OF THE LEOS. THE ENGINEER SHALL HAVE FINAL CONTROL OVER THE LEOS' DUTIES AND PLACEMENT, AND WILL RESOLVE ANY ISSUES THAT MAY ARISE BETWEEN THE TWO PARTIES.

THE LEO SHALL REPORT IN TO THE CONTRACTOR PRIOR TO THE START OF THE SHIFT, IN ORDER TO RECEIVE INSTRUCTIONS REGARDING SPECIFIC WORK ASSIGNMENTS DURING HIS/HER SHIFT. THE LEO IS EXPECTED TO STAY AT THE PROJECT SITE FOR THE ENTIRE DURATION OF HIS/HER SHIFT. THE LEO SHALL REPORT TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT. ONCE THE LEO HAS COMPLETED THE DUTIES DESCRIBED ABOVE AND STILL HAS TIME REMAINING ON HIS/HER SHIFT, THE LEO MAY BE ASKED TO PATROL THROUGH THE WORK ZONE (WITH FLASHING LIGHTS OFF) OR BE PLACED AT A LOCATION TO DETER MOTORISTS FROM SPEEDING. SHOULD IT BE NECESSARY TO LEAVE THE PROJECT SITE, THE LEO SHALL NOTIFY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE THE LEO WITH A TWO-WAY COMMUNICATION DEVICE WHICH SHALL BE RETURNED TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT.

MOT PHASE CHANGES: NOTIFICATION & COORDINATION REQUIREMENTS

AT LEAST FOURTEEN (14) DAYS PRIOR TO ANY CONSTRUCTION ACTIVITIES, THE DBT WILL ADVISE THE DISTRICT PUBLIC INFORMATION OFFICER AND THE PROJECT ENGINEER OF THE ANTICIPATED START DATE OF ANY CONSTRUCTION ACTIVITIES, INCLUDING BUT NOT LIMITED TO THE PLACING OF WORK ZONE SIGNS. THE NOTIFICATION WILL ALSO INCLUDE THE PROJECT NUMBER, PID, NAME AND PHONE NUMBER OF THE DBT POINT OF CONTACT AS WELL AS THE ANTICIPATED IMPACT ON TRAFFIC. THE DBT WILL IMMEDIATELY INFORM THE PI OFFICER AND THE PROJECT ENGINEER OF ANY AND ALL DELAYS AND/OR CHANGES REGARDING THE CONSTRUCTION INITIATION DATE.

THROUGHOUT THE DURATION OF THE PROJECT, THE DBT WILL NOTIFY THE PROJECT ENGINEER AND THE OTHERS LISTED IN THIS SECTION IN WRITING OF ALL TRAFFIC RESTRICTIONS AND UPCOMING MAINTENANCE OF TRAFFIC CHANGES. THE DBT WILL ENSURE THE WRITTEN NOTIFICATION IS SUBMITTED IN A TIMELY MANNER TO ALLOW THE PROJECT ENGINEER TO MEET THE REQUIRED TIME FRAMES SET FORTH IN THE TABLE BELOW. THIS NOTIFICATION WILL BE RECEIVED BY THE PROJECT ENGINEER PRIOR TO THE PHYSICAL SETUP OF ANY APPLICABLE SIGNS OR MESSAGE BOARDS.

INFORMATION WILL INCLUDE BUT IS NOT LIMITED TO ALL CONSTRUCTION ACTIVITIES THAT IMPACT OR INTERFERE WITH TRAFFIC AND WILL LIST THE SPECIFIC LOCATION, TYPE OF WORK, ROAD STATUS, DATE AND TIME OF RESTRICTION, DURATION OF RESTRICTION, NUMBER OF LANES MAINTAINED, DETOUR ROUTES IF APPLICABLE, AND ANY OTHER INFORMATION REQUESTED BY THE PROJECT ENGINEER AND THE DISTRICT 12 COMMUNICATIONS OFFICE. A SUMMARY OF THE NOTIFICATION TIME FRAME REQUIREMENTS FOR CLOSURES AND RESTRICTIONS IS PROVIDED IN THE NOTIFICATION TIME FRAME TABLE BELOW.

ITEM	DURATION OF CLOSURE	NOTIFICATION TIME FRAME
RAMP & ROAD CLOSURE	>= 2 WEEKS	14 BUSINESS DAYS PRIOR TO CLOSURE
	> 12 HOURS & < 2 WEEKS	7 BUSINESS DAYS PRIOR TO CLOSURE
	< 12 HOURS	2 BUSINESS DAYS PRIOR TO CLOSURE
LANE CLOSURE/ RESTRICTION	>= 2 WEEKS	7 BUSINESS DAYS PRIOR TO CLOSURE
	< 2 WEEKS	2 BUSINESS DAYS PRIOR TO CLOSURE

ANY UNFORESEEN CONDITIONS NOT SPECIFIED IN THE PLANS REQUIRING TRAFFIC RESTRICTIONS WILL ALSO BE REPORTED TO THE PROJECT ENGINEER, THE DISTRICT 12 COMMUNICATIONS OFFICE USING THE NOTIFICATION TIME FRAME TABLE.

THE DBT WILL BE RESPONSIBLE FOR NOTIFYING ALL LOCAL, COUNTY, STATE AND FEDERAL EMERGENCY SERVICES, SCHOOL DISTRICTS, GCRTA AND ADJACENT RESIDENTS AND BUSINESSES OF UPCOMING ROAD AND RAMP CLOSURES. ADVANCE NOTIFICATION WILL OCCUR NO LATER THAN FOURTEEN (14) DAYS PRIOR TO CLOSING THE ROAD. IF, SUBSEQUENT TO THE ADVANCE NOTIFICATION, THE START DATE IS CHANGED, THEN A NEW SEVEN (7) DAY NOTIFICATION WILL BE REQUIRED. THE ROAD/RAMP CANNOT BE CLOSED UNLESS PRIOR NOTIFICATION HAS BEEN ACCOMPLISHED. THE SAME PARTIES WILL BE NOTIFIED WHEN THE CLOSURE HAS CONCLUDED AND THE ROAD IS BACK OPEN TO TRAFFIC. NOTIFICATION OF CLOSURES SHALL BE COORDINATED WITH THE PUBLIC INFORMATION OFFICERS, AMANDA MCFARLAND, PI OFFICER, (216) 584-2005, D12.PUBLIC.INFORMATION@DOT.OHIO.GOV

RELEASED FOR CONSTRUCTION
 2017-07-11.CCG6B.RFC Plans.pdf
 07/12/2017 brian.link

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION

ISSUE RECORD

ITEM 614, REPLACEMENT DRUM

DRUMS FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH THE REQUIREMENTS OF THE PLANS, SPECIFICATIONS AND PROPOSAL WHICH BECOME DAMAGED BY TRAFFIC FOR REASONS BEYOND THE CONTROL OF THE CONTRACTOR SHALL BE REPLACED IN KIND WHEN ORDERED BY THE ENGINEER. REPLACEMENT DRUMS SHALL BE NEW.

ITEM 614, REPLACEMENT SIGN

FLATSHEET SIGNS FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH THE REQUIREMENTS OF THE PLANS, SPECIFICATIONS AND PROPOSAL WHICH BECOME DAMAGED BY TRAFFIC FOR REASONS BEYOND THE CONTROL OF THE CONTRACTOR SHALL BE REPLACED IN KIND WHEN ORDERED BY THE ENGINEER. REPLACEMENT SIGNS SHALL BE NEW. OTHER MATERIALS MAY BE IN USED, BUT GOOD, CONDITION SUBJECT TO APPROVAL BY THE ENGINEER.

WORK ZONE INCREASED PENALTIES SIGN (R11-H5A)

R11-H5A-48 SIGNS SHALL BE FURNISHED, ERECTED, AND MAINTAINED IN GOOD CONDITION AND/OR REPLACED AS NECESSARY AND SUBSEQUENTLY REMOVED BY THE CONTRACTOR. SIGNS SHALL BE MOUNTED AT THE APPROPRIATE OFFSETS AND ELEVATIONS AS PRESCRIBED BY THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. THEY SHALL BE MAINTAINED ON SUPPORTS MEETING CURRENT SAFETY CRITERIA.

THE SIGNS MAY BE ERECTED OR UNCOVERED NO MORE THAN FOUR HOURS BEFORE THE ACTUAL START OF WORK. THE SIGNS SHALL BE REMOVED OR COVERED NO LATER THAN FOUR HOURS FOLLOWING RESTORATION OF ALL LANES TO TRAFFIC WITH NO RESTRICTIONS, OR SOONER AS DIRECTED BY THE ENGINEER. TEMPORARY SIGN COVERING AND UNCOVERING DUE TO TEMPORARY LANE RESTORATIONS SHALL BE GUIDED BY THE FOUR-HOUR LIMITATIONS STATED ABOVE. SUCH LANE RESTORATIONS SHOULD BE EXPECTED TO REMAIN IN EFFECT FOR 30 OR MORE CONSECUTIVE CALENDAR DAYS, SUCH AS DURING WINTER SHUTDOWNS.

THE SIGNS ON THE MAINLINE SHALL BE DUAL MOUNTED UNLESS NOT PHYSICALLY POSSIBLE. THE FIRST SIGN SHALL BE PLACED BETWEEN THE ROAD WORK AHEAD (W20-I)SIGN AND THE NEXT SIGN IN THE SEQUENCE. SIGNS SHALL BE ERECTED ON EACH ENTRANCE RAMP AND EVERY 2 MILES THROUGH THE CONSTRUCTION WORK LIMITS. SIGNS ON THE MAINLINE SHALL BE R11-H5A-48. SIGNS USED ON THE RAMPS SHALL BE R11-H5A-24. R11-H5A-24 SIGNS MAY BE USED IN THE MEDIAN IN LIEU OF R11-H5A-48 SIGNS IF IT IS NOT PHYSICALLY POSSIBLE TO PROVIDE R11-H5A-48 SIGNS IN THE MEDIAN.

THE CONTRACTOR MAY USE SIGNS AND SUPPORTS IN USED, BUT GOOD, CONDITION PROVIDED THE SIGNS MEET CURRENT ODOT SPECIFICATIONS. SIGN FACES SHALL BE RETROREFLECTORIZED WITH TYPE G SHEETING COMPLYING WITH THE REQUIREMENTS OF C&MS 730.19.

WORK ZONE INCREASED PENALTIES SIGNS AND SUPPORTS WILL BE MEASURED AS THE NUMBER OF SIGN INSTALLATIONS, INCLUDING THE SIGN AND NECESSARY SUPPORTS. IF A SIGN AND SUPPORT COMBINATION IS REMOVED AND RE-ERECTED AT ANOTHER LOCATION AS DIRECTED BY THE ENGINEER, IT SHALL BE CONSIDERED ANOTHER UNIT.

WORK ZONE INCREASED PENALTIES SIGNS WILL BE PLACED AT THE LOCATIONS SHOWN IN THE PLANS.

ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGNS, AS PER PLAN

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN AND REMOVE, WHEN NO LONGER NEEDED, A CHANGEABLE MESSAGE SIGN. THE SIGN SHALL BE OF A TYPE SHOWN ON A LIST OF APPROVED PCMS UNITS AVAILABLE ON THE (OFFICE OF MATERIALS MANAGEMENT WEB PAGE). THE LIST CONTAINS CLASS A AND B UNITS WITH MINIMUM LEGIBILITY DISTANCES OF 800 FEET AND 650 FEET, RESPECTIVELY.

THE DBT WILL PROVIDE, INSTALL, AND MAINTAIN AT LEAST FOUR (4) PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) ON SITE FOR USE DURING CONSTRUCTION. TWO (2) PCMS SHALL BE CLASS B. CLASS A PCMS WILL BE USED ON FREEWAYS. THE CLASS A SIGNS WILL BE ON THE DEPARTMENTS APPROVAL LIST AT:

[HTTP://WWW.DOT.STATE.OH.US/DIVISIONS/CONSTRUCTIONMGT/MATERIALS/PAGES/PORTABLECHANGEABLE.ASPX.](http://www.dot.state.oh.us/divisions/constructionmgt/materials/pages/portablechangeable.aspx)

EACH SIGN SHALL BE TRAILER-MOUNTED AND EQUIPPED WITH A FUNCTIONAL DIMMING MECHANISM, TO DIM THE SIGN DURING DARKNESS, AND A TAMPER AND VANDAL PROOF ENCLOSURE. EACH SIGN SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ON-SITE PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT. THE SIGN SHALL ALSO BE CAPABLE OF BEING POWERED BY AN ELECTRICAL SERVICE DROP FROM A LOCAL UTILITY COMPANY. THE PCMS SHALL BE DELINEATED IN ACCORDANCE WITH C&MS 614.03.

PLACEMENT, OPERATION, MAINTENANCE AND ALL ACTIVATION OF THE SIGNS BY THE CONTRACTOR SHALL BE AS DIRECTED BY THE ENGINEER. THE PCMS SHALL BE LOCATED IN A HIGHLY VISIBLE POSITION YET PROTECTED FROM TRAFFIC. THE CONTRACTOR SHALL, AT THE DIRECTION OF THE ENGINEER, RELOCATE THE PCMS TO IMPROVE VISIBILITY OR ACCOMMODATE CHANGED CONDITIONS. WHEN NOT IN USE, THE PCMS SHALL BE TURNED OFF. ADDITIONALLY, WHEN NOT IN USE FOR EXTENDED PERIODS OF TIME, THE PCMS SHALL BE TURNED AWAY FROM ALL TRAFFIC.

THE ENGINEER SHALL BE PROVIDED ACCESS TO EACH SIGN UNIT AND SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ODOT PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT, AND TO REVISE SIGN MESSAGES, IF NECESSARY.

ALL MESSAGES TO BE DISPLAYED ON THE SIGN WILL BE PROVIDED BY THE ENGINEER. A LIST OF ALL REQUIRED PRE-PROGRAMMED MESSAGES WILL BE GIVEN TO THE CONTRACTOR AT THE PROJECT PRE-CONSTRUCTION CONFERENCE. THE SIGN SHALL HAVE THE CAPABILITY TO STORE UP TO 99 MESSAGES. MESSAGE MEMORY OR PRE-PROGRAMMED DISPLAYS SHALL NOT BE LOST AS A RESULT OF POWER FAILURES TO THE ON-BOARD COMPUTER. THE SIGN LEGEND SHALL BE CAPABLE OF BEING CHANGED IN THE FIELD. THREE-LINE PRESENTATION FORMATS WITH UP TO SIX MESSAGE PHASES SHALL BE SUPPORTED. PCMS FORMAT SHALL PERMIT THE COMPLETE MESSAGE FOR EACH PHASE TO BE READ AT LEAST TWICE. THE PCMS SHALL CONTAIN AN ACCURATE CLOCK AND PROGRAMMING LOGIC WHICH WILL ALLOW THE SIGN TO BE ACTIVATED, DEACTIVATED OR MESSAGES CHANGED AUTOMATICALLY AT DIFFERENT TIMES OF THE DAY FOR DIFFERENT DAYS OF THE WEEK.

THE PCMS UNIT SHALL BE MAINTAINED IN GOOD WORKING ORDER BY THE CONTRACTOR IN ACCORDANCE WITH THE PROVISIONS OF C&MS 614.07. THE CONTRACTOR SHALL, PRIOR TO ACTIVATING THE UNIT, MAKE ARRANGEMENTS, WITH AN AUTHORIZED SERVICE AGENT FOR THE PCMS, TO ASSURE PROMPT SERVICE IN THE EVENT OF FAILURE. ANY FAILURE SHALL NOT RESULT IN THE SIGN BEING OUT OF SERVICE FOR MORE THAN 12 HOURS, INCLUDING WEEKENDS. FAILURE TO COMPLY MAY RESULT IN AN ORDER TO STOP WORK AND OPEN ALL TRAFFIC LANES AND/OR IN THE DEPARTMENT TAKING APPROPRIATE ACTION TO SAFELY CONTROL TRAFFIC. THE ENTIRE COST TO CONTROL TRAFFIC, ACCRUED BY THE DEPARTMENT DUE TO THE CONTRACTOR'S NONCOMPLIANCE, WILL BE DEDUCTED FROM MONEYS DUE, OR TO BECOME DUE THE CONTRACTOR ON HIS CONTRACT.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR 24-HOUR-PER-DAY OPERATION AND MAINTENANCE OF THESE SIGNS ON THE PROJECT FOR THE DURATION OF THE PHASES WHEN THE PLAN REQUIRES THEIR USE.

ITEM 614 - WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN

WORK ZONE RAISED PAVEMENT MARKERS, AS PER PLAN, AND THEIR INSTALLATION SHALL CONFORM TO C&MS 614 OR C&MS 621 AS SPECIFIED HEREIN.

RAISED PAVEMENT MARKERS IN USE DURING THE SNOW-PLOWING SEASON SHALL CONFORM TO 621.

RAISED PAVEMENT MARKERS IN USE DURING THE NON-SNOW-PLOW SEASON SHALL CONFORM TO EITHER 614 OR TO 621.

THE SNOW-PLOWING SEASON SHALL RUN FROM OCTOBER 15 THROUGH APRIL 1.

IF PROJECT DELAYS, NOT THE FAULT OF ODOT, CAUSE THE WORK TO EXTEND INTO THE SNOW-PLOWING SEASON, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING WORK ZONE RAISED PAVEMENT MARKERS (WZRPMS) CONFORMING TO C&MS 614, WITH RAISED PAVEMENT MARKERS CONFORMING TO 621, AS DETERMINED BY THE ENGINEER, AT THE CONTRACTOR'S EXPENSE.

THIS ITEM SHALL INCLUDE PURCHASE, INSTALLATION AND REMOVAL OF ITEM 614 WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN, INCLUDING FILLING OF ANY DEPRESSIONS CREATED IN THE PAVEMENT AS PER C&MS 621.08.

ITEM 614 - WORK ZONE RAISED PAVEMENT MARKERS ON CONCRETE SURFACES

RAISED PAVEMENT MARKERS IN WORK ZONES, INSTALLED ON TO CONCRETE SURFACES, SHALL BE ITEM 614 WORK ZONE RAISED PAVEMENT MARKERS. WZRPMS ARE INTENDED FOR USE ONLY DURING THE NON-SNOW-PLOWING SEASON. WZRPMS SHALL NOT BE PROVIDED DURING THE SNOW-PLOWING SEASON.

THE SNOW-PLOWING SEASON SHALL RUN FROM OCTOBER 15 THROUGH APRIL 1.

WHERE A TEMPORARY ALIGNMENT WILL REMAIN IN USE THROUGH THE WINTER, THE WZRPMS SHALL BE REMOVED PRIOR TO THE BEGINNING OF THE SNOW-PLOWING SEASON AND REPLACED APPROXIMATELY APRIL 1, OR AS OTHERWISE DETERMINED BY THE ENGINEER.

THIS ITEM SHALL INCLUDE PURCHASE, INSTALLATION AND REMOVAL OF ITEM 614 WORK ZONE RAISED PAVEMENT MARKERS.

ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC, AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF ITEM 615, THE CONTRACTOR SHALL CONSTRUCT THE TEMPORARY PAVEMENT SHOWN ON SHEETS 45 AND 46.

THIS PAVEMENT SHALL BE CONSTRUCTED PRIOR TO THE START OF PHASE 2 AND SHALL REMAIN IN PLACE FOR THE DURATION OF PHASES 2 & 3. THE PAVEMENT SHALL BE CONSTRUCTED TO THE ELEVATIONS AND WIDTHS SHOWN ON THE SHEET REFERENCED ABOVE.

FOR ADDITIONAL TEMPORARY PAVEMENT DETAILS AND TYPICAL SECTIONS, SEE SHEET 37.

ONCE PHASE 2 AND PHASE 3 HAVE BEEN COMPLETED, THE CONTRACTOR SHALL REMOVE THE TEMPORARY PAVEMENT AND RESTORE THE PROPOSED PAVEMENT TO THE INTERMEDIATE COURSE LEVEL. GRADING WILL ALSO BE CONSTRUCTED TO THE FINAL BUILD CONDITION AS SHOWN IN THE CROSS-SECTIONS.

FOR INTERCHANGE DETAILS, SEE SHEETS 149 TO 150.

FOR I.R. 77 AND RAMP J5 AND RAMP J6 CROSS-SECTIONS SEE SHEETS 88 TO 143.

RELEASED FOR CONSTRUCTION	
2017-07-11.CCG6B.RFC Plans.pdf	
07/12/2017	brian.link

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION
		ISSUE RECORD

STAGE 1 - PHASE 1 (SEE SHEETS 38 TO 44)

PRIOR TO THE START OF PROPOSED PHASE 1 CONSTRUCTION, PLACE ALL TEMPORARY TRAFFIC CONTROL DEVICES, TEMPORARY PAVEMENT, AND TEMPORARY PAVEMENT MARKINGS REQUIRED FOR PHASE 1 OPERATIONS.

THE CONTRACTOR SHALL CLOSE THE I.R. 490 WESTBOUND RAMP TO I.R. 77 SOUTHBOUND (RAMP J6) FOR A MAXIMUM DURATION OF 60 DAYS. A DISINCENTIVE SHALL BE ASSESSED IN THE AMOUNT OF \$2,600 PER DAY FOR EACH DAY THE ROADWAY REMAINS CLOSED BEYOND THE SPECIFIED LIMIT.

RAMP J6 SHALL BE DETOURED AS SHOWN ON SHEETS 30 TO 32.

SHIFT SOUTHBOUND I.R. 77 TRAFFIC TOWARDS THE EXISTING INSIDE SHOULDER. THE SHIFTING OF TRAFFIC SHALL BE IN ACCORDANCE WITH THE STANDARD CONSTRUCTION DRAWINGS AND AS SHOWN IN THE PLANS. SHIFT RAMP J5 TRAFFIC TO THE EXISTING OUTSIDE SHOULDER. THIS SHIFT SHALL BE 2' OFF THE EXISTING SHOULDER UNLESS OTHERWISE SHOWN IN THE PLANS. RAMP TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH THE STANDARD CONSTRUCTION DRAWINGS AND AS SHOWN IN THE PLANS.

THE CONTRACTOR SHALL CONSTRUCT ALL OF PROPOSED RAMP J6, THE PROPOSED INSIDE PORTION OF RAMP J5, AND THE PROPOSED PORTIONS OF I.R. 77, AS SHOWN IN THE PLANS.

STAGE 1 - PHASE 2 (SEE SHEETS 45 TO 53)

PRIOR TO THE START OF PROPOSED PHASE 2 CONSTRUCTION, PLACE ALL TEMPORARY TRAFFIC CONTROL DEVICES, TEMPORARY PAVEMENT, AND TEMPORARY PAVEMENT MARKINGS REQUIRED FOR PHASE 2 OPERATIONS.

SHIFT NORTHBOUND AND SOUTHBOUND I.R. 77 TRAFFIC TOWARDS THE EXISTING OUTSIDE SHOULDER. THIS SHIFT WILL REQUIRE FULL DEPTH SHOULDER REPLACEMENT ALONG THE EXISTING OUTSIDE SOUTHBOUND SHOULDER FROM STATION 997+97.60 TO STATION 3+15.00, WHICH SHALL BE COMPLETED BEFORE THE START OF THIS PHASE. THE SHIFTING OF TRAFFIC SHALL BE IN ACCORDANCE WITH THE STANDARD CONSTRUCTION DRAWINGS AND AS SHOWN IN THE PLANS. RAMP J5 SHALL BE SHIFTED TO THE INSIDE SHOULDER, RAMP J6 SHALL BE SHIFTED TO THE OUTSIDE SHOULDER. THIS SHIFT WILL REQUIRE TEMPORARY PAVEMENT ALONG THE BEGINNING OF RAMP J5, ALONG RAMP J5 & J6, AND I.R.-77 GORE AREA. RAMP TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH THE STANDARD CONSTRUCTION DRAWINGS AND AS SHOWN IN THE PLANS.

FOR CROSSOVER DETAILS SEE SHEETS 45 AND 46.

THIS PAVEMENT SHALL BE CONSTRUCTED PRIOR TO THE START OF PHASE 2 AND SHALL REMAIN IN PLACE FOR THE DURATION OF PHASES 2 & 3. THE PAVEMENT SHALL BE CONSTRUCTED TO THE ELEVATIONS AND WIDTHS SHOWN ON THE SHEET REFERENCED ABOVE.

FOR ADDITIONAL TEMPORARY PAVEMENT DETAILS AND TYPICAL SECTIONS, SEE SHEET 37.

ONCE PHASE 2 AND PHASE 3 HAVE BEEN COMPLETED, THE CONTRACTOR SHALL REMOVE THE TEMPORARY PAVEMENT AND RESTORE THE PROPOSED PAVEMENT TO THE INTERMEDIATE COURSE LEVEL. GRADING WILL ALSO BE CONSTRUCTED TO THE FINAL BUILD CONDITION AS SHOWN IN THE CROSS-SECTIONS.

THE SHOULDER BUILD-UP FOR THE REHABILITATION IS SHOWN ON THE TOP TYPICAL SECTION, ON SHEET 10.

THE CONTRACTOR SHALL CONSTRUCT THE MEDIAN BARRIER FOR I.R. 77 FROM STATION 992+17 TO STATION 995+14, PORTIONS OF THE BROADWAY AVENUE BRIDGE, AS SHOWN IN BU-5, AND THE PROPOSED OUTSIDE PORTION OF RAMP J5, AS SHOWN IN THE PLANS.

STAGE 1 - PHASE 3 (SEE SHEETS 54 TO 60)

PRIOR TO THE START OF PROPOSED PHASE 3 CONSTRUCTION, PLACE ALL TEMPORARY TRAFFIC CONTROL DEVICES, TEMPORARY PAVEMENT, AND TEMPORARY PAVEMENT MARKINGS REQUIRED FOR PHASE 3 OPERATIONS.

SHIFT SOUTHBOUND TRAFFIC TOWARDS THE EXISTING INSIDE SHOULDER AND SHIFT NORTHBOUND TRAFFIC TOWARDS THE EXISTING OUTSIDE SHOULDER, AS SHOWN IN THE PLANS. THE SHIFTING OF TRAFFIC SHALL BE IN ACCORDANCE WITH THE STANDARD CONSTRUCTION DRAWINGS AND AS SHOWN IN THE PLANS. SHIFT RAMP J5 TRAFFIC TO THE PROPOSED INSIDE SHOULDER. THIS SHIFT WILL REQUIRE TEMPORARY PAVEMENT ALONG THE BEGINNING OF RAMP J5, ALONG RAMP J5 & J6, AND I.R.-77 GORE AREA, THAT WAS PREVIOUSLY INSTALLED FOR PHASE 2. RAMP TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH THE STANDARD CONSTRUCTION DRAWINGS AND AS SHOWN IN THE PLANS.

THE CONTRACTOR SHALL INSTALL THE TEMPORARY SHORING TOWERS AS SHOWN ON SHEET 56. UPON REMOVAL OF THE SHORING TOWERS, THE CONTRACTOR SHALL REPAIR ANY DAMAGED PAVEMENT FROM STA. 990+53 (I.R. 77) TO STA. 994+16 (I.R. 77) NORTHBOUND AND FROM STA. 993+00 (I.R. 77) TO STA. 220+00 (RAMP J5) SOUTHBOUND. THESE REPAIRS SHALL BE COMPLETED UPON COMPLETION OF PHASE 3 BUT BEFORE THE RESURFACING OF CCG6A. PROPOSED PAVEMENT SHALL NOT BE CONSTRUCTED UNTIL THE TOWERS HAVE BEEN REMOVED.

THE CONTRACTOR SHALL SAW CUT AND REMOVE PORTIONS OF THE PROPOSED PAVEMENT IN ORDER TO INSTALL THE TRENCH DRAINS, AS DETAILED IN BU-6.

THE CONTRACTOR SHALL CONSTRUCT THE REMAINING PORTIONS OF RAMP J5 AND THE PROPOSED OUTSIDE SHOULDER OF I.R. 77, AS SHOWN IN THE PLANS.

STAGE 1 - PHASE 4 (SEE SHEETS 61 TO 67)

PRIOR TO THE START OF PROPOSED PHASE 4 CONSTRUCTION, PLACE ALL TEMPORARY TRAFFIC CONTROL DEVICES, TEMPORARY PAVEMENT, AND TEMPORARY PAVEMENT MARKINGS REQUIRED FOR PHASE 4 OPERATIONS.

SHIFT SOUTHBOUND TRAFFIC TOWARDS THE EXISTING INSIDE SHOULDER, AS SHOWN IN THE PLANS. THE SHIFTING OF TRAFFIC SHALL BE IN ACCORDANCE WITH THE STANDARD CONSTRUCTION DRAWINGS AND AS SHOWN IN THE PLANS.

SHIFT RAMP J5 & J6 TRAFFIC TO THE PROPOSED OUTSIDE SHOULDER. THIS SHIFT WILL REQUIRE TEMPORARY PAVEMENT FROM STA. 971+73 TO STA. 981+62 ALONG THE OUTSIDE OF I.R. 77. RAMP TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH THE STANDARD CONSTRUCTION DRAWINGS AND AS SHOWN IN THE PLANS.

THE CONTRACTOR SHALL UTILIZE THE PROPOSED CONCRETE BARRIER AND GUARDRAIL FROM STATION 211+00 TO STA. 221+73, IN ORDER TO PROTECT TRAFFIC.

THE CONTRACTOR SHALL CONSTRUCT THE REMAINING PROPOSED INSIDE PORTION OF I.R.-77, AS SHOWN IN THE PLANS.

SHIFT RAMP J5 TRAFFIC TO THE PROPOSED INSIDE SHOULDER, AS SHOWN IN THE PLANS. SHIFT RAMP J6 TO THE PROPOSED OUTSIDE SHOULDER, AS SHOWN IN THE PLANS. RAMP TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH THE STANDARD CONSTRUCTION DRAWINGS AND AS SHOWN IN THE PLANS.

THE CONTRACTOR SHALL CONSTRUCT THE CASTINGS AND REMAINING PORTIONS OF THE DRAINAGE STRUCTURES LOCATED AT STATIONS 976+90 (D001), 977+58 (D002), & 978+46 (D003), RESPECTIVELY, AS SHOWN IN BU-6.

THE CONTRACTOR SHALL REMOVE ALL TEMPORARY PAVEMENT ALONG THE OUTSIDE OF SOUTHBOUND 77 AND INSTALL THE PERMANENT CURB, GUARDRAIL, AND GRADING FROM STA. 976+25 (I.R.-77) TO STA. 211+00 (RAMP J5).

STAGE 1 - PHASE 5 (SHEETS 68 TO 74)

PRIOR TO THE START OF PROPOSED PHASE 5 CONSTRUCTION, PLACE ALL TEMPORARY TRAFFIC CONTROL DEVICES, TEMPORARY PAVEMENT, AND TEMPORARY PAVEMENT MARKINGS REQUIRED FOR PHASE 5 OPERATIONS.

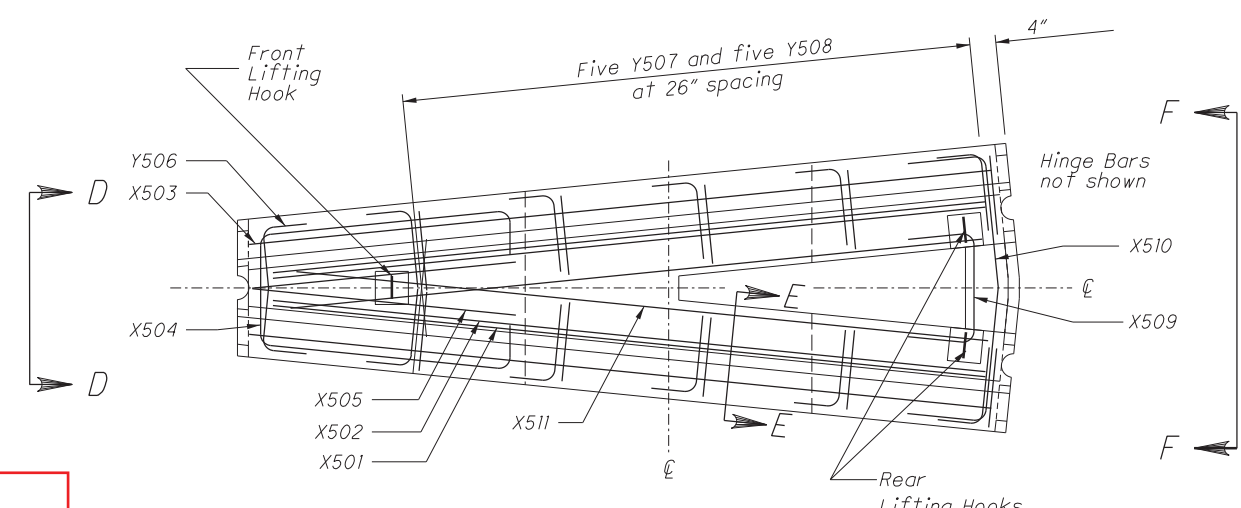
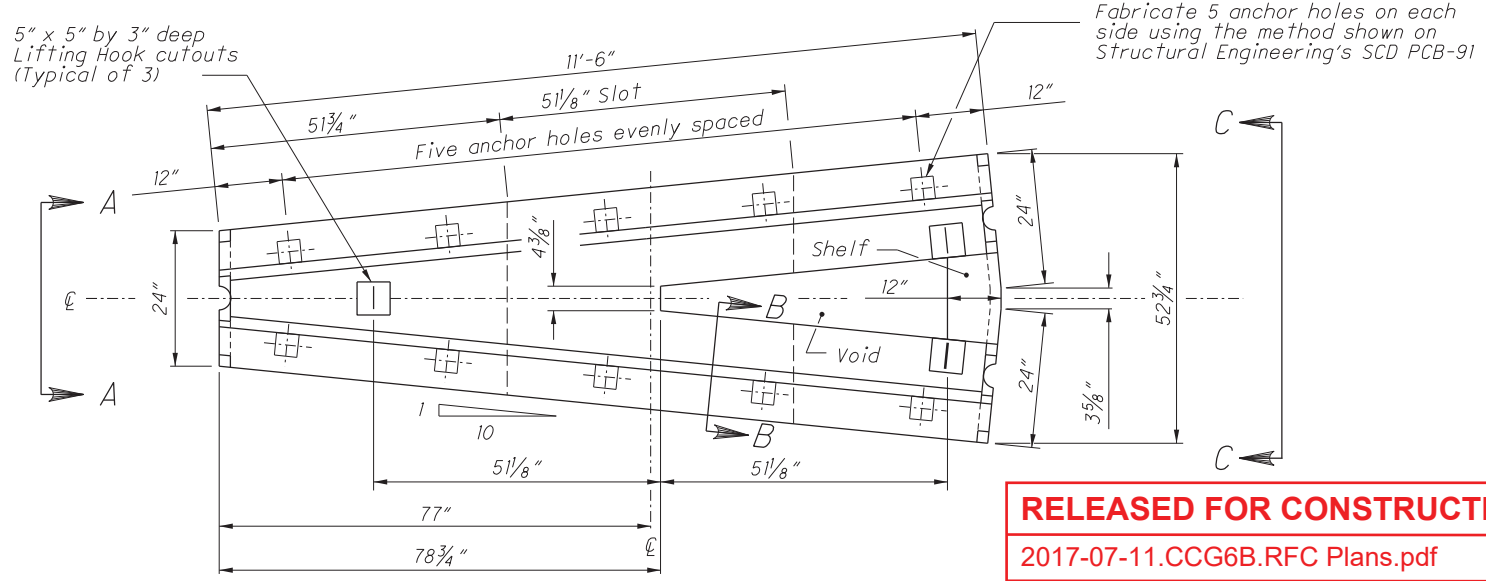
SOUTHBOUND TRAFFIC WILL REMAIN IN THE SAME CONFIGURATION AS SHOWN IN PHASE 4.



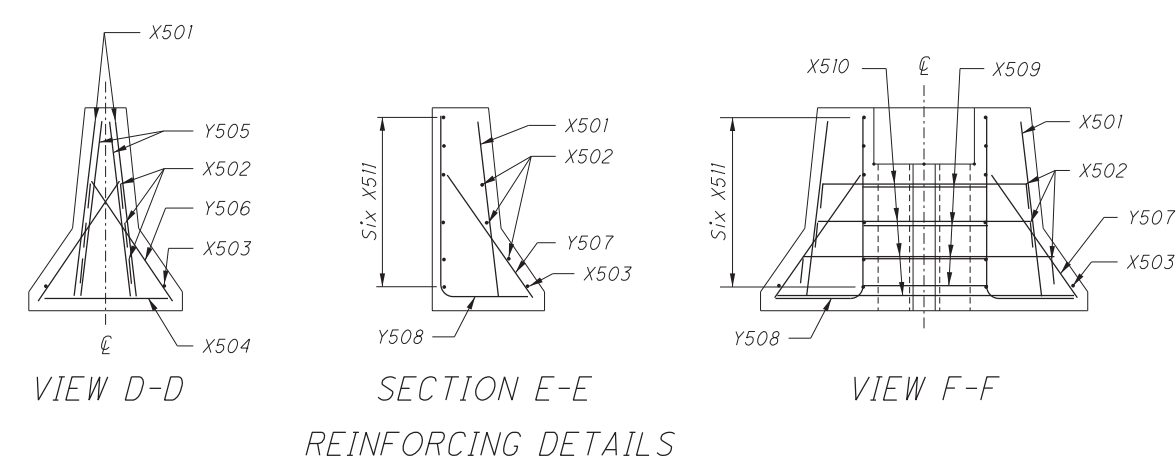
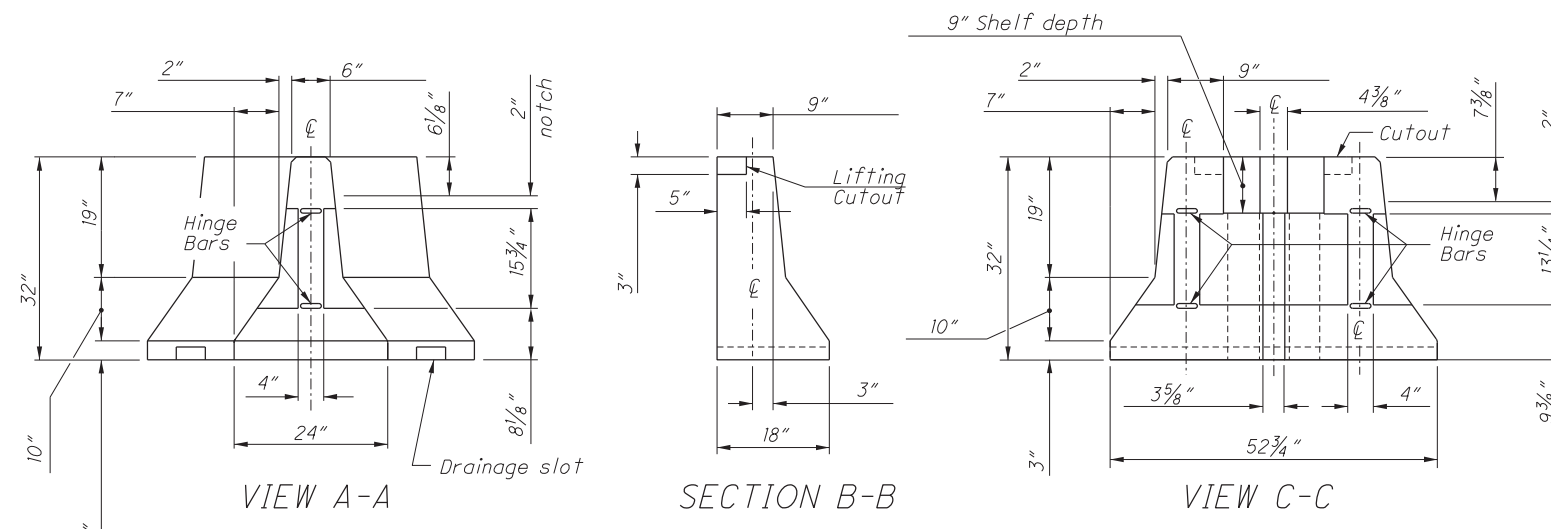
P:\B2388_CCG6B\Design\MOT\Sheets\B2388_MN2005.dgn Sheet 10/2/2017 9:31:43 AM mlutes

RELEASED FOR CONSTRUCTION
 BU02_2017.11.13_CCG6B.BU2.RFC_FC 5.pdf
 11/20/2017 Brian.Link

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION
2	9/22/17	ADDED DESCRIPTION OF PHASE 3 N.B. SHIFT
ISSUE RECORD		



RELEASED FOR CONSTRUCTION
 2017-07-11.CCG6B.RFC Plans.pdf
 07/12/2017 brian.link



NOTES

GENERAL: This barrier segment is used to split one run of portable concrete barrier into dual runs. Attach directly to ODOT's 32" PCB; however, other approved barrier shapes may be connected to this segment by the use of an appropriate transition unit. Attach at least one standard PCB segment in between this "Y" and an Impact Attenuator. Its field application is shown in MOT plans and on MT standard drawings. Do not use this barrier in an unanchored configuration next to bridge deck edges or similar dropoffs, anchor according to method shown on PCBDD or other approved method.

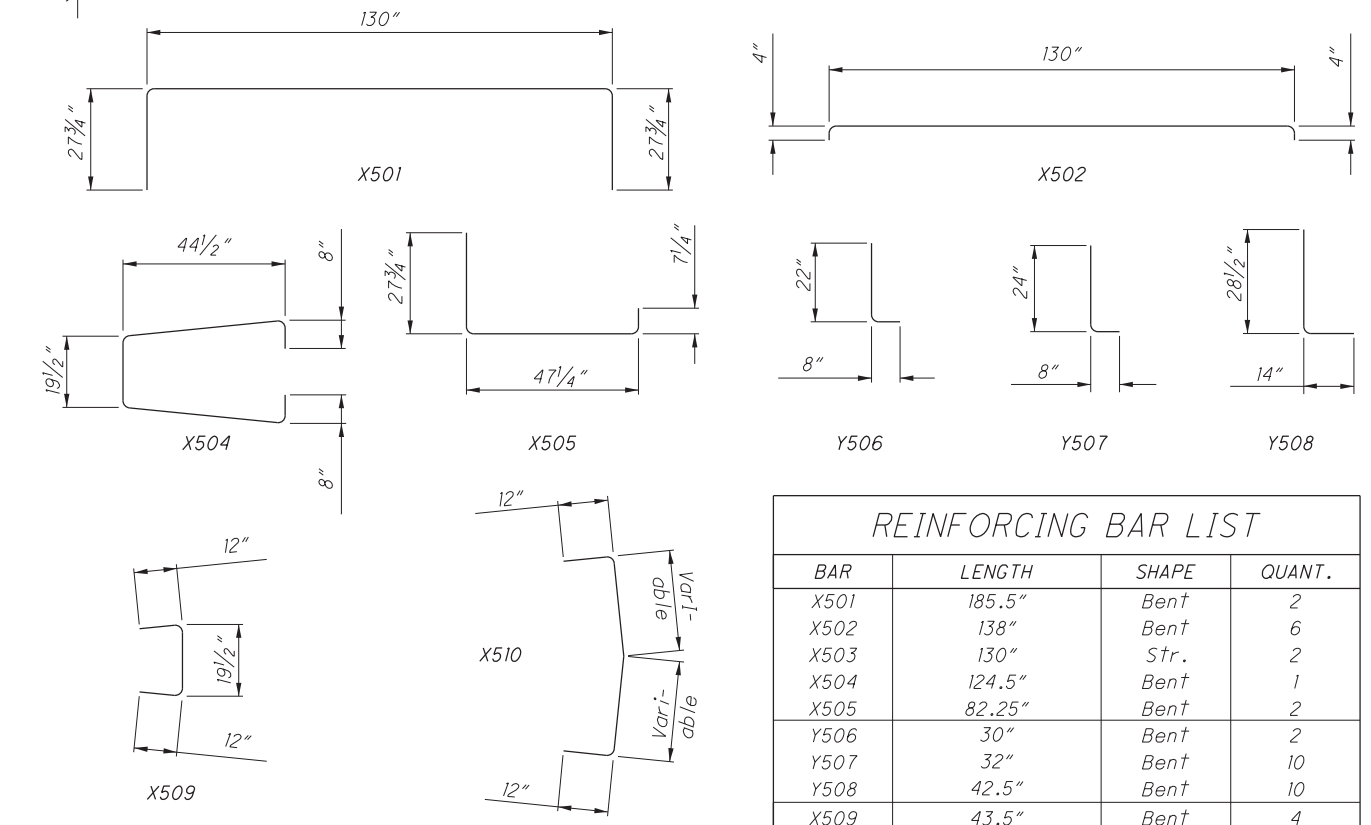
BARRIER DETAILS: Use SCD RM-4.2 for details not shown here, including the geometry of this pin and loop segment matches in every way the design of the end connections shown on the HINGED CONNECTION and JOINT CONNECTION Details (the alternate J-J Hooks connection design is permitted). Additionally, barrier edges may be radiused or chamfered as per the LEGEND Note, barrier is to be permanently marked as mentioned in the MARKINGS Note, and delineate as per the REFLECTORIZATON Note.

MATERIAL SPECIFICATIONS: The minimum design strength of the concrete is 4,000 psi and meets the requirements of CMS 499. For reinforcing steel, use ASTM A615 Grade 60 black steel and provide 2" min. rebar cover. Material specifications for the Hinge and Reinforcing Bars, as well as the Connecting Hardware may be found on SCD RM-4.2. For additional material specifications not shown here, see SCD RM-4.2 and CMS 622.

HANDLING: The fabricator is responsible for the design of a lifting system for handling segments. As a minimum, use three lifting points at the locations suggested in the Plan views, and design with a lifting factor of safety of 4. Any protrusions from the lifting hook design is not to affect the crash worthiness of the barrier. The calculations shall be signed, sealed and dated by a Registered Engineer and include these calculations with the Manufacturing Drawings required by Supplement 1073.12. Refer to Part 5 of the PCI Handbook. Approximate segment weight is 8,500 lbs [3850 kg].

PAYMENT: Payment will be made under Item 622 - Portable Barrier, "Y" Connector, Each, and will include all forms, materials and labor to cast this segment.

ALTERNATE METHOD: Contractors may choose to use a wide Impact Attenuator in lieu of the concrete "Y" alternate. The chosen unit will be a Type 2 or 3 Impact Attenuator matching the product previously called for on the project plans at the expected installation location.



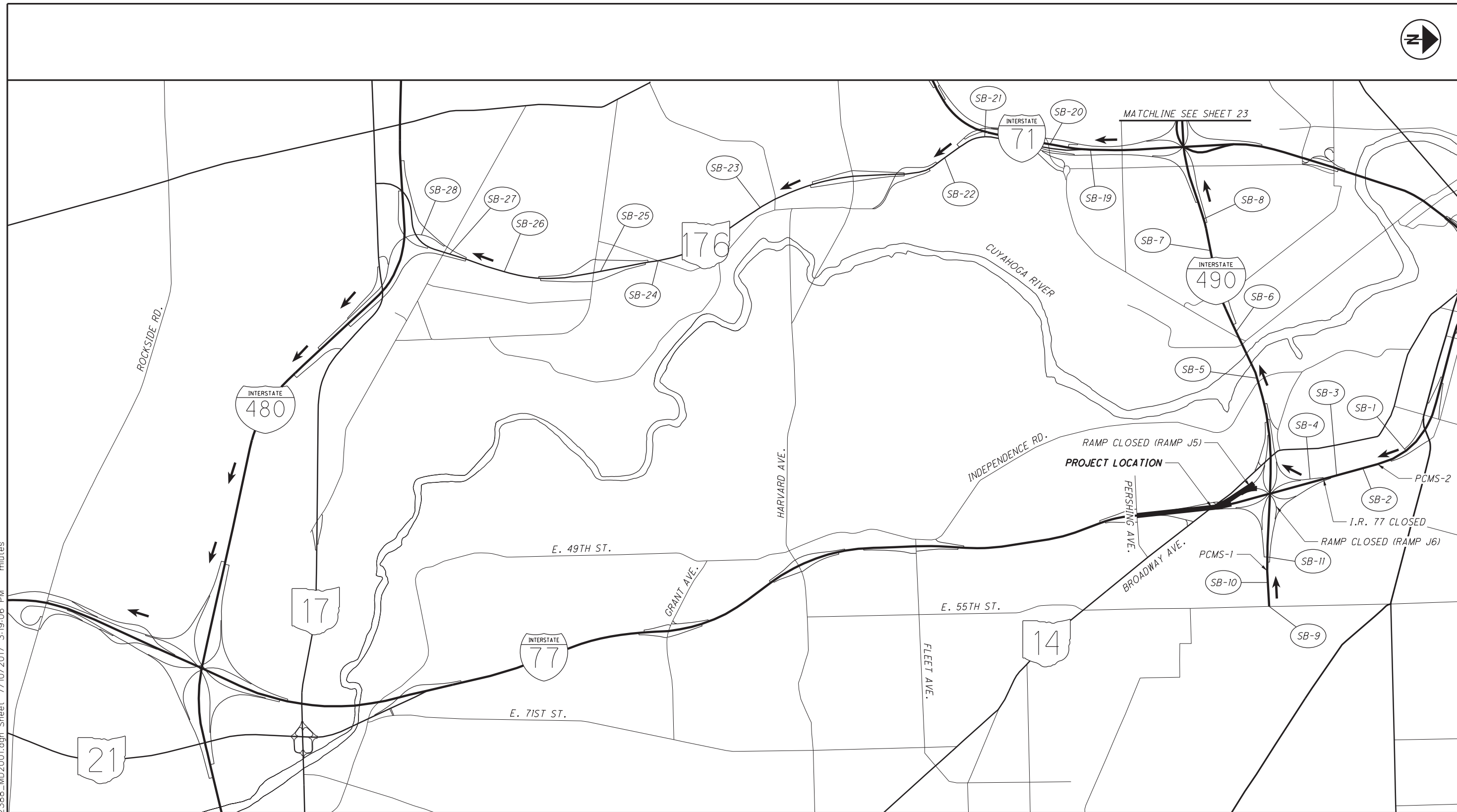
REINFORCING BAR LIST			
BAR	LENGTH	SHAPE	QUANT.
X501	185.5"	Bent	2
X502	138"	Bent	6
X503	130"	Str.	2
X504	124.5"	Bent	1
X505	82.25"	Bent	2
Y506	30"	Bent	2
Y507	32"	Bent	10
Y508	42.5"	Bent	10
X509	43.5"	Bent	4
X510	Varies	Bent	4
X511	124"	Str.	12

BENDING DIAGRAMS

P:\82388_CCG6B\Design\MOT\Sheets\MM2001.dgn Sheet 7/10/2017 3:19:05 PM mlutes



CALCULATED
MLL
CHECKED
SWC



I.R. 77 SOUTHBOUND - DETOUR PLAN

CUY-77-13.80

LEGEND:

- DIRECTION OF TRAVEL
- M4-1A-36
- M3-3-36
- I-5
- MI-1-36-2

NOTES:

1. CLOSE I.R. 77 PER STANDARD CONSTRUCTION DRAWING MT-99.50.
2. CLOSE RAMPS PER STANDARD CONSTRUCTION DRAWING MT-98.29.

PORTABLE CHANGEABLE MESSAGE SIGNS RECOMMENDED MESSAGES		
ALTERNATE ROUTE		
	FLASH 1	FLASH 2
PCMS-1	I.R. 77 SB CLOSED	USE I.R. 490 WEST
PCMS-2	I.R. 77 SB CLOSED	USE I.R. 490 WEST

RELEASED FOR CONSTRUCTION
 2017-07-11.CCG6B.RFC Plans.pdf
 07/12/2017 brian.link

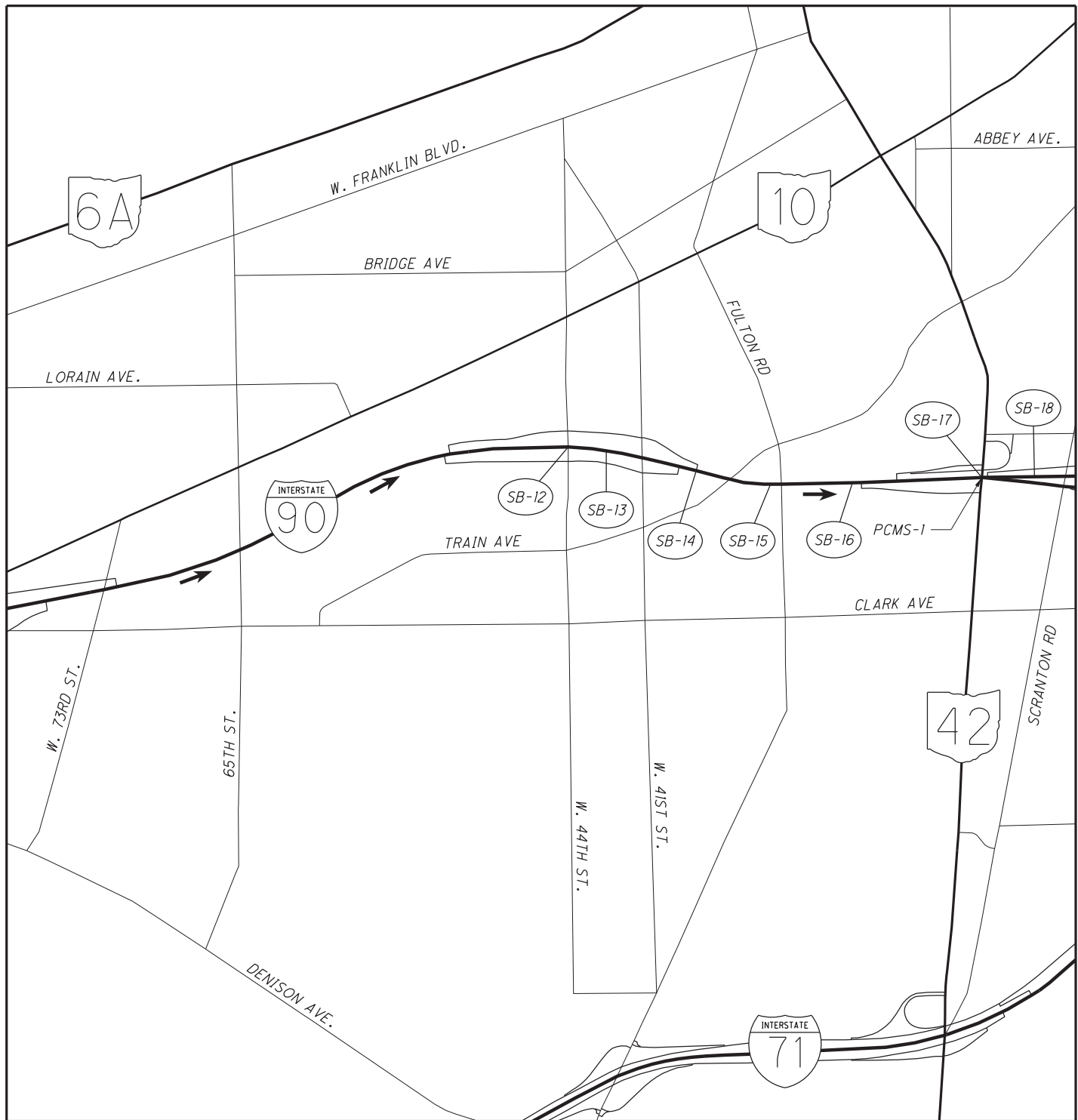
BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION

ISSUE RECORD

P:\B2388_CCG6B\Design\MOT\Sheets\B2388_MD2001.dgn Sheet 7/10/2017 3:19:06 PM mlutes



CALCULATED	MLL
	CHECKED
	SWC



MATCHLINE SEE SHEET 22

P:\82388_CCG6B\Design\DOT\Sheets\82388_MD2002.dgn_Sheet_7/10/2017_3:19:08_PM_milutes

LEGEND:

→ DIRECTION OF TRAVEL

	M4-1A-36
	M3-3*36
	M1-1-36-2

NOTES:

1. CLOSE I.R. 77 PER STANDARD CONSTRUCTION DRAWING MT-99.50.
2. CLOSE RAMPS PER STANDARD CONSTRUCTION DRAWING MT-98.29.

PORTABLE CHANGEABLE MESSAGE SIGNS RECOMMENDED MESSAGES		
ALTERNATE ROUTE		
	FLASH 1	FLASH 2
PCMS-1	I.R. 77 SB CLOSED	USE I.R. 71 SOUTH

RELEASED FOR CONSTRUCTION
2017-07-11.CCG6B.RFC Plans.pdf
07/12/2017 brian.link

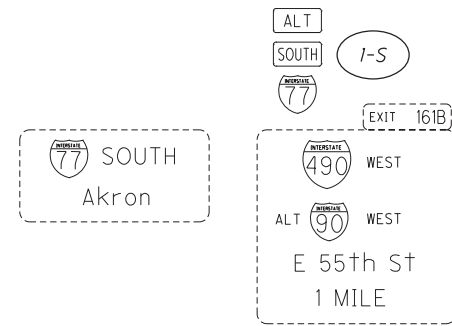
BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION
ISSUE RECORD		

I.R. 77 SOUTHBOUND - DETOUR PLAN

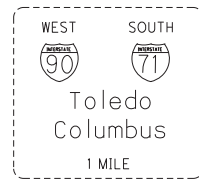
CUY-77-13.80

23
170

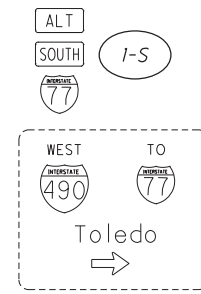
P:\82388_CCG6B\Design\MOT\Sheets\82388_MD2003.dgn Sheet 7/10/2017 3:19:09 PM milutes



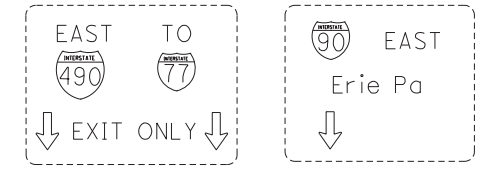
SB-1



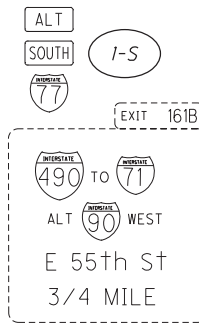
SB-5



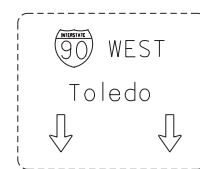
SB-9



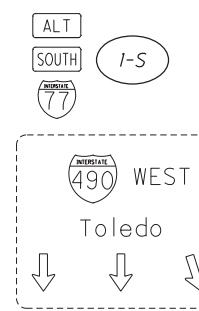
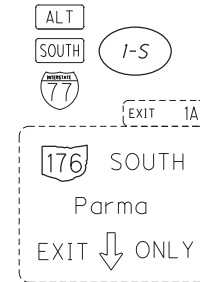
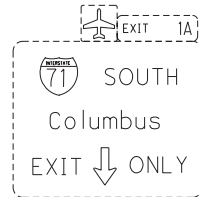
SB-13



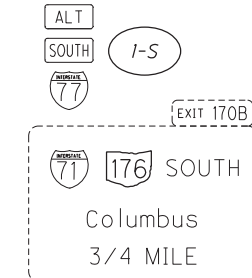
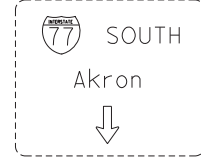
SB-2



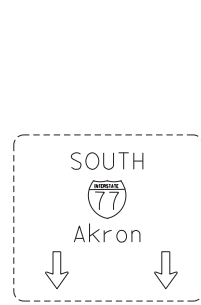
SB-6



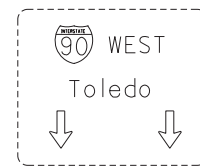
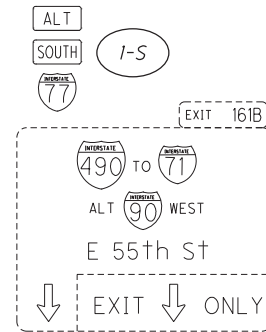
SB-10



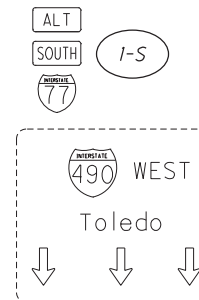
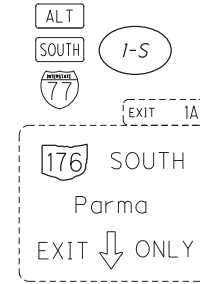
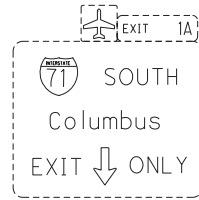
SB-14



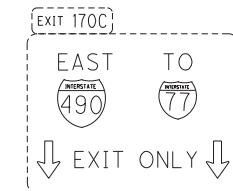
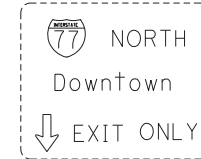
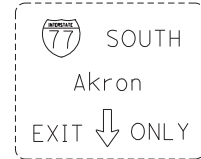
SB-3



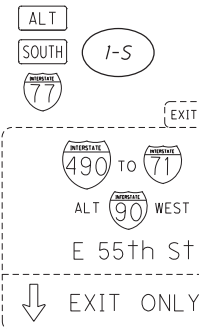
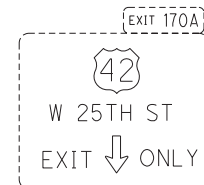
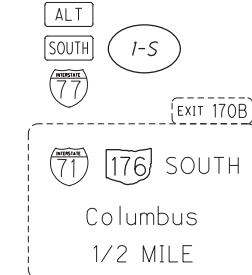
SB-7



SB-11



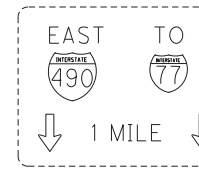
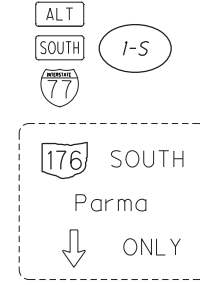
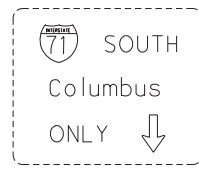
SB-15



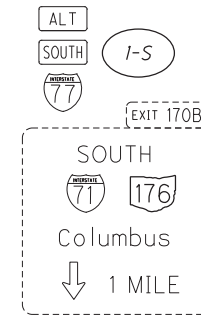
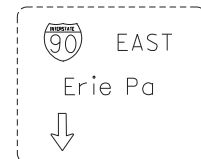
SB-4



SB-8

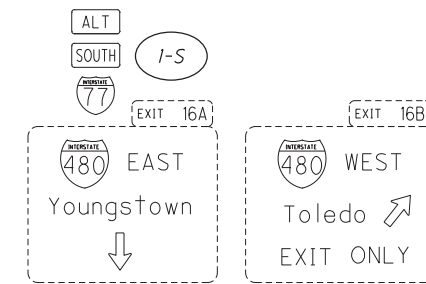
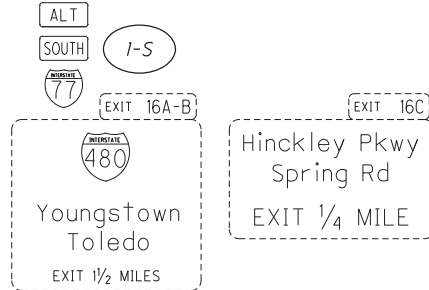
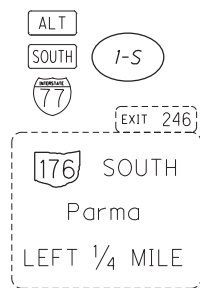
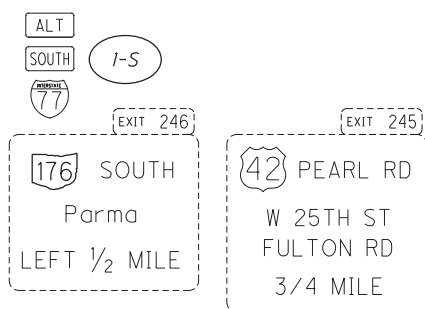
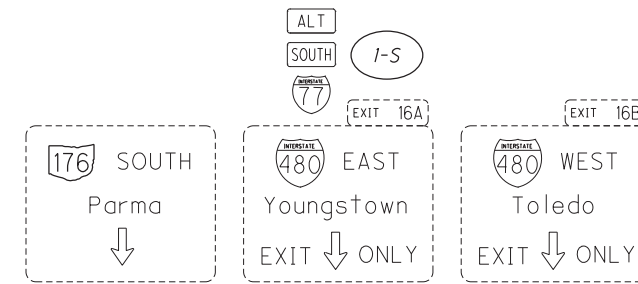
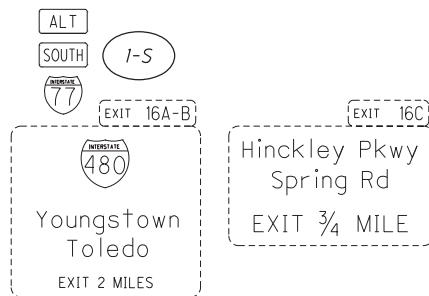
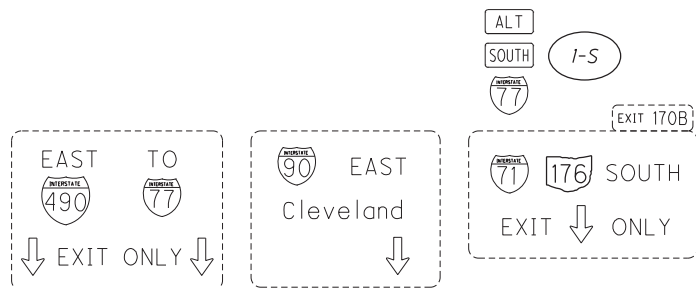
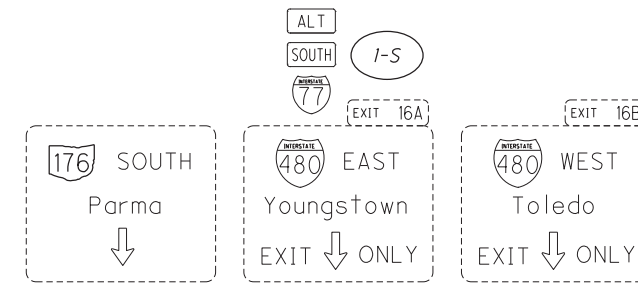
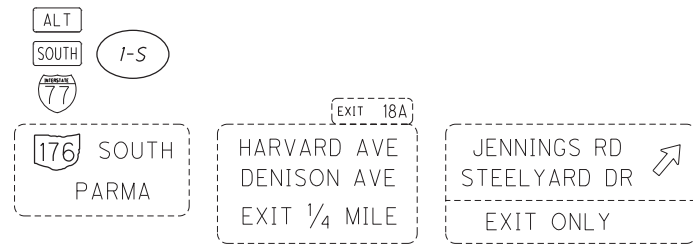
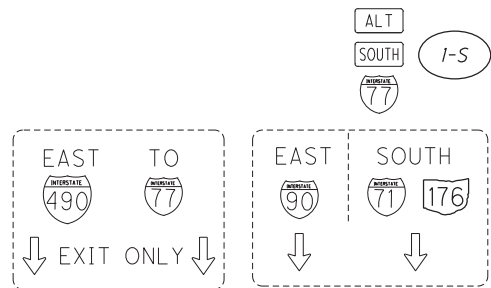
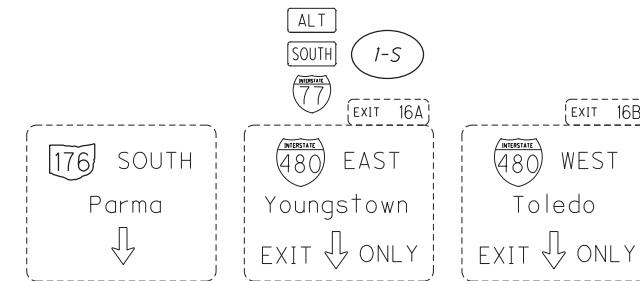
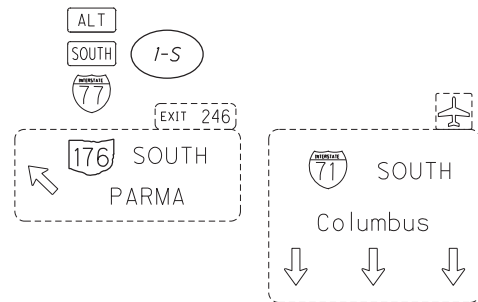
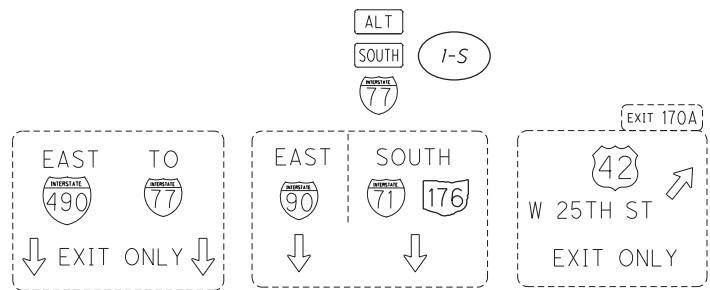


SB-12



RELEASED FOR CONSTRUCTION
2017-07-11.CCG6B.RFC Plans.pdf
07/12/2017 brian.link

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION



RELEASED FOR CONSTRUCTION

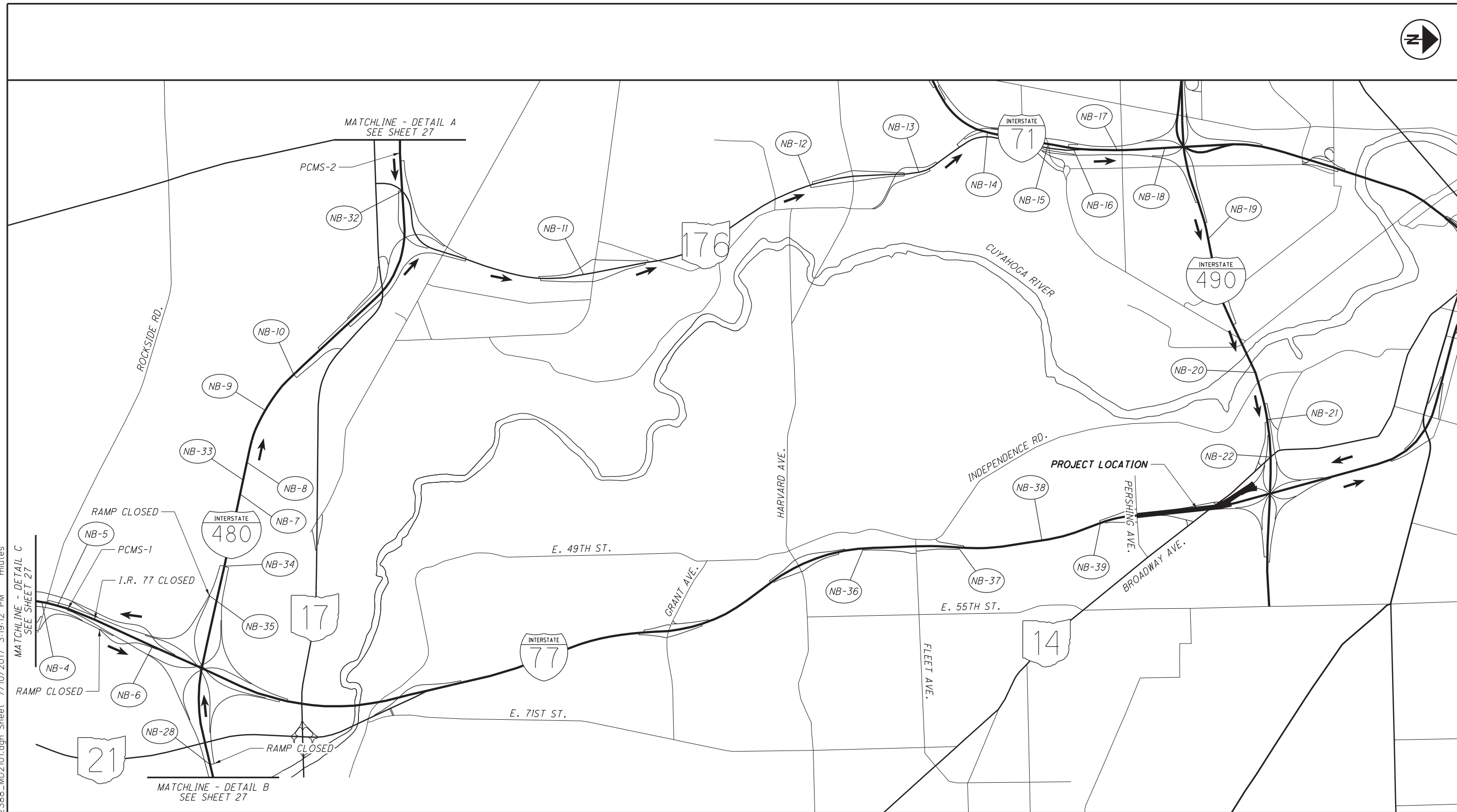
2017-07-11.CCG6B.RFC Plans.pdf

07/12/2017

brian.link

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION

ISSUE RECORD



I.R. 77 NORTHBOUND - DETOUR PLAN

CUY-77-13.80

P:\B2388_CCG6B\Design\MOT\Sheets\B2388_MD2101.dgn Sheet 7/10/2017 3:19:12 PM mlutes

LEGEND:

→ DIRECTION OF TRAVEL

ALT M4-1A-36

NORTH M3-1-36

I-N

INTERSTATE 77 MI-1-36-2

- NOTES:**
1. CLOSE I.R. 77 PER STANDARD CONSTRUCTION DRAWING MT-99.50.
 2. CLOSE RAMPS PER STANDARD CONSTRUCTION DRAWING MT-98.29.

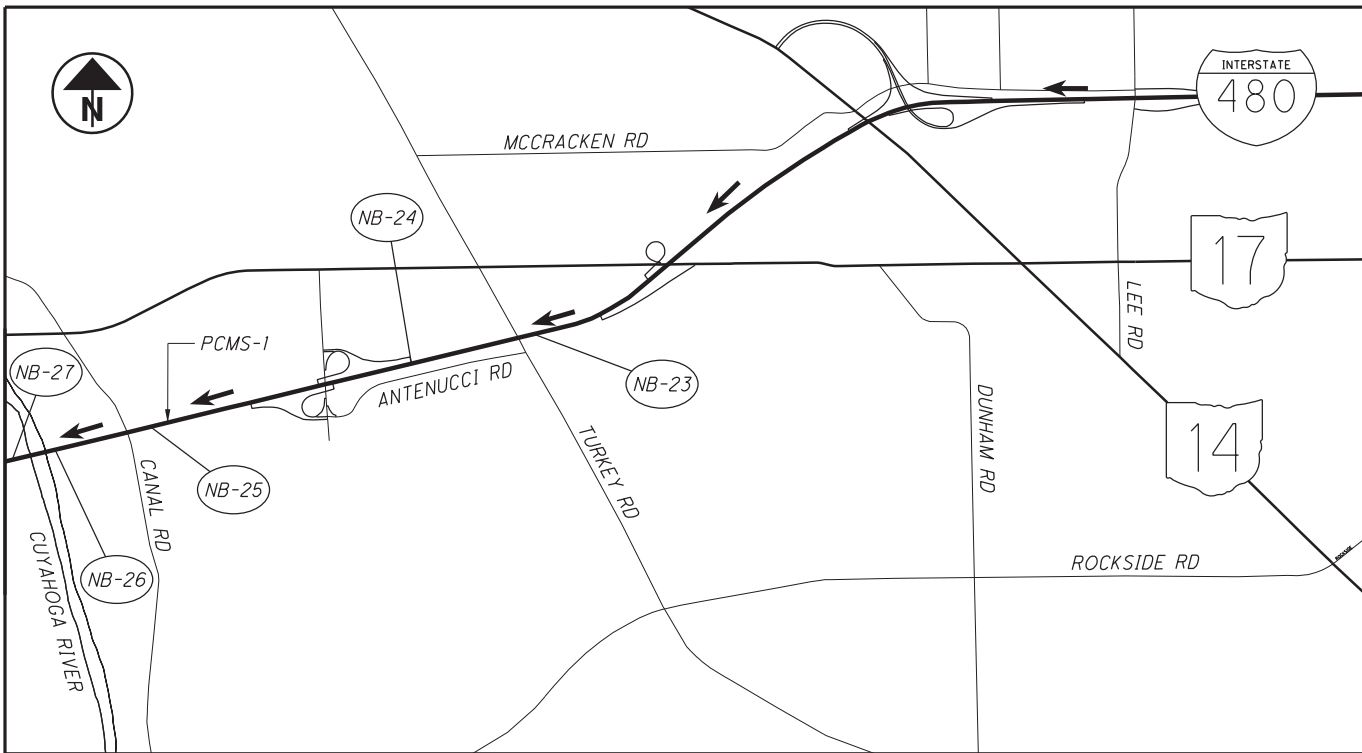
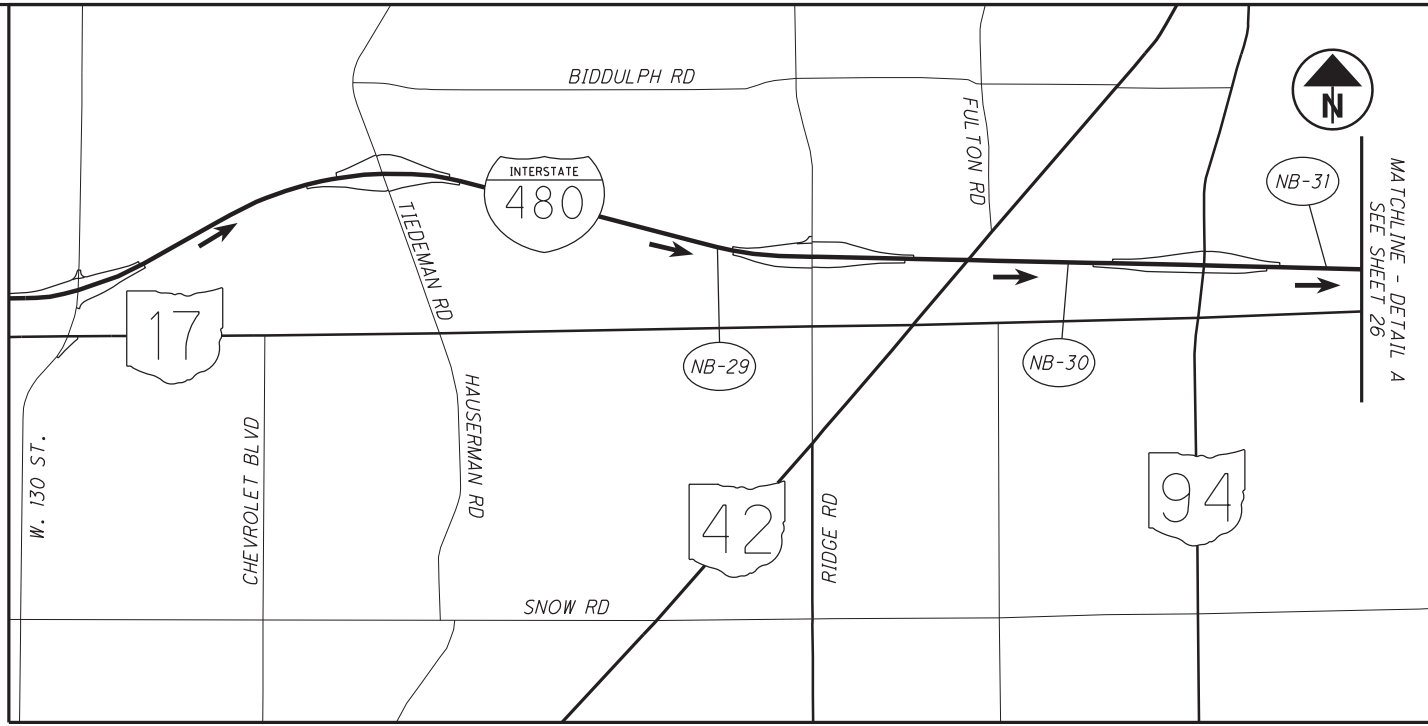
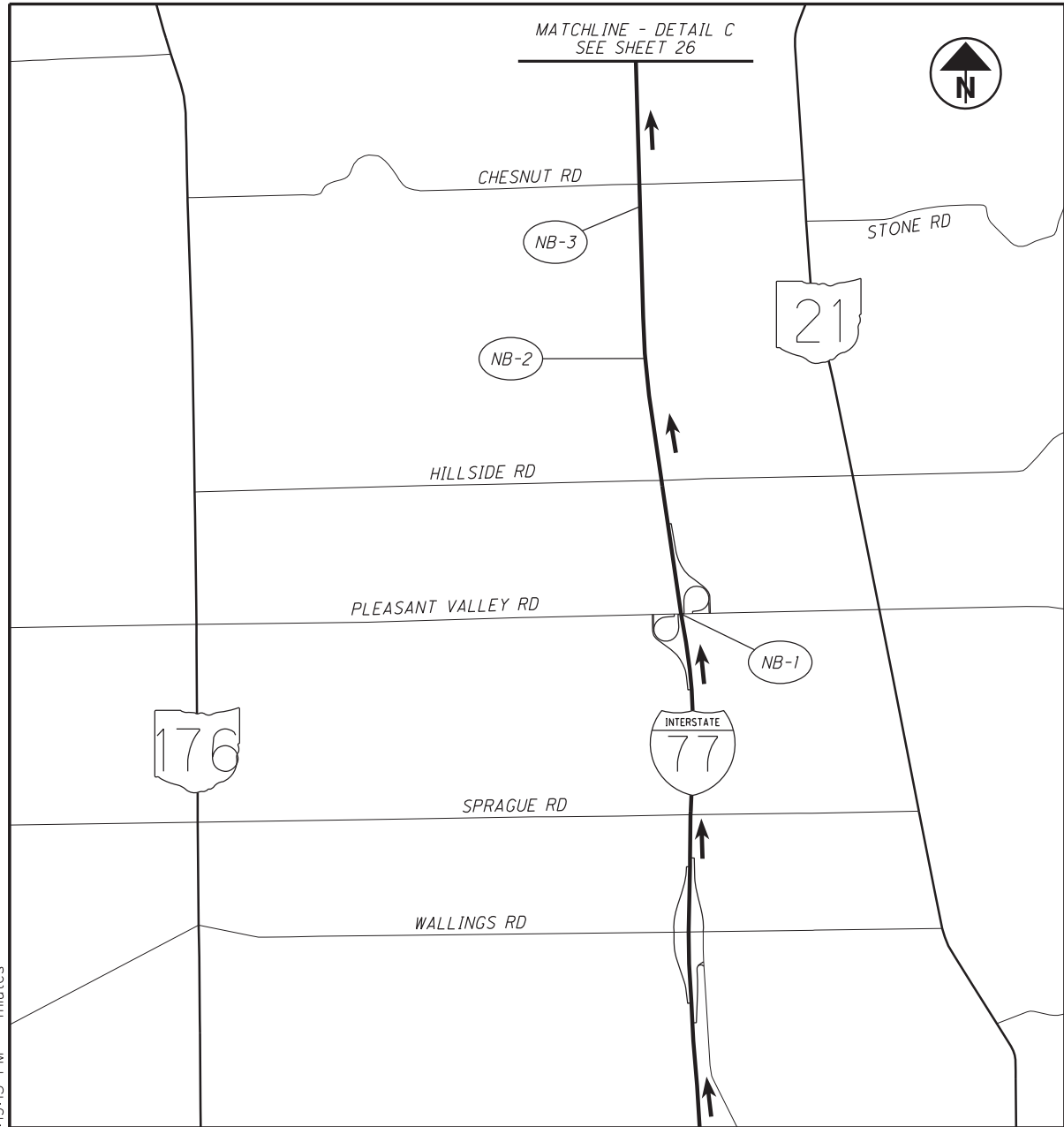
PORTABLE CHANGEABLE MESSAGE SIGNS RECOMMENDED MESSAGES		
ALTERNATE ROUTE		
	FLASH 1	FLASH 2
PCMS-1	I.R. 77 NB CLOSED	USE I.R. 480 WEST
PCMS-2	I.R. 77 NB CLOSED	USE S.R. 176 NORTH

RELEASED FOR CONSTRUCTION

2017-07-11.CCG6B.RFC Plans.pdf

07/12/2017 brian.link

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION



LEGEND:

➔ DIRECTION OF TRAVEL

- ALT M4-1A-36
- NORTH M3-1-36
- INTERSTATE 77 M1-1-36-2

NOTES:

1. CLOSE I.R. 77 PER STANDARD CONSTRUCTION DRAWING MT-99.50.
2. CLOSE RAMPS PER STANDARD CONSTRUCTION DRAWING MT-98.29.

PORTABLE CHANGEABLE MESSAGE SIGNS RECOMMENDED MESSAGES		
ALTERNATE ROUTE		
	FLASH 1	FLASH 2
PCMS-1	I.R. 77 NB CLOSED	USE I.R. 480 WEST

RELEASED FOR CONSTRUCTION
2017-07-11.CCG6B.RFC Plans.pdf
07/12/2017 brian.link

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION

P:\82388_CCG6B\Design\MOT\Sheets\82388_MD2102.dgn DETOUR2 10/12/2017 8:45:08 AM mlutes

2

LEGEND:

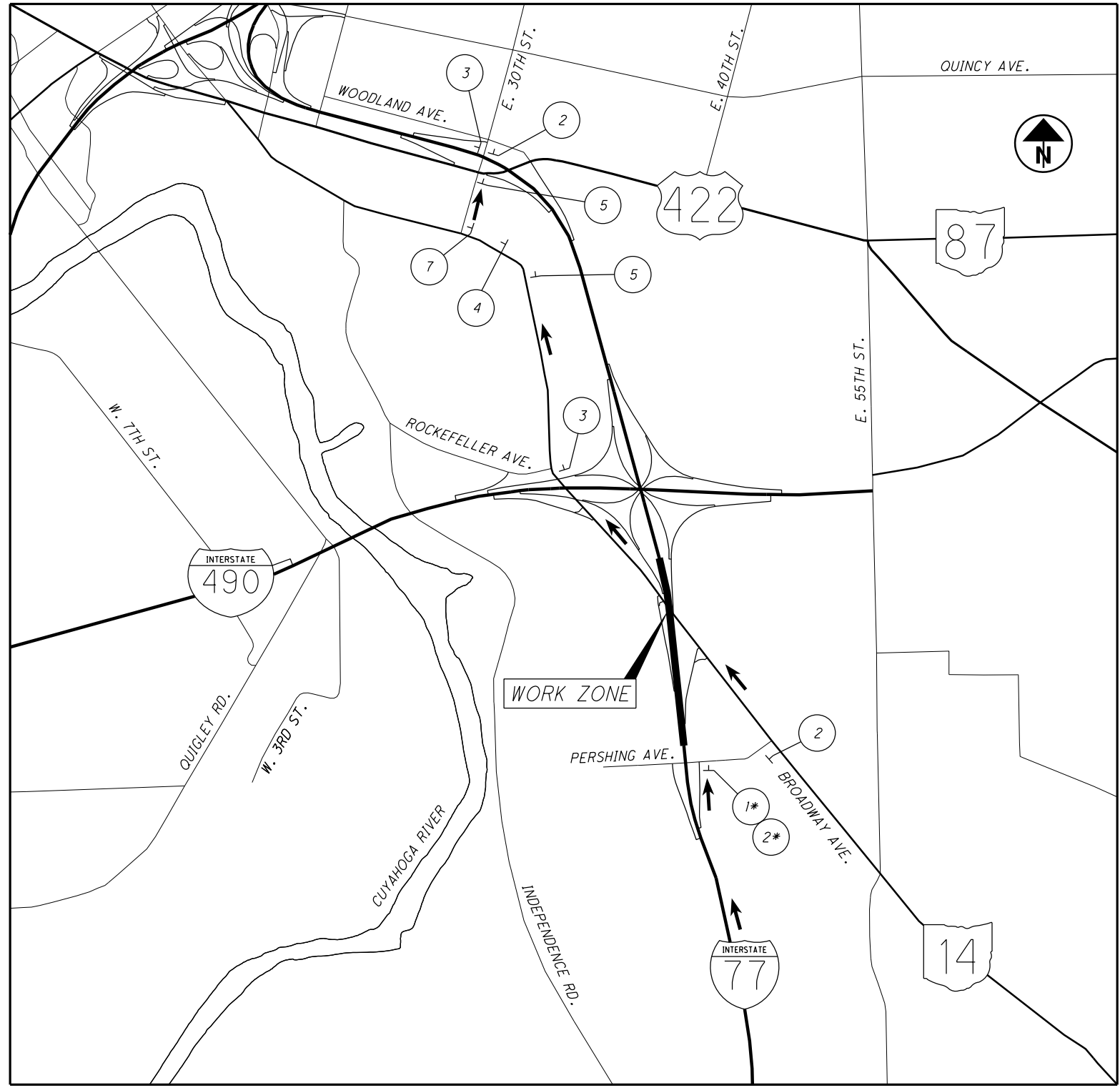
1	2	3	4
NORTH M3-1-24 INTERSTATE 77 MI-1-24-2	NORTH M3-1-24 INTERSTATE 77 MI-1-24-2	NORTH M3-1-24 INTERSTATE 77 MI-1-24-2	NORTH M3-1-24 INTERSTATE 77 MI-1-24-2
DETOUR → M4-9R-30	DETOUR ← M4-9L-30	DETOUR ↑ M4-9C-30	DETOUR ↘ M4-9-30
5	6	7	
NORTH M3-1-24 INTERSTATE 77 MI-1-24-2	NORTH M3-1-24 INTERSTATE 77 MI-1-24-2	TO INTERSTATE 77 →	
DETOUR ↙ M4-9-30	DETOUR → M4-9R-30		

NOTES:

1. DETOUR SIGNING LOCATIONS SHALL BE PER OMUTCD AND ROAD CLOSURES SHALL BE PER MT-101.60.
2. DETOUR SIGNS SHALL BE UNCOVERED AND VISIBLE TO TRAFFIC ONLY WHEN THE ROAD CLOSURE IS IN EFFECT.
3. COVER ALL CONFLICTING SIGNING PRIOR TO THE CLOSURE.

*THE CONTRACTOR SHALL PLACE THE APPROPRIATE DETOUR SIGN BASED ON THE CLOSURE OF BROADWAY AVENUE AND THE CONSTRUCTION OF FRONTAGE ROAD.

→ DIRECTION OF TRAVEL
T SINGLE POST SIGN



RELEASED FOR CONSTRUCTION

BU02_2017.11.13_CCG6B.BU2.RFC_FC 5.pdf

11/20/2017 Brian.Link

BU2 - I.R.-77 AND RAMPS		
2	9/22/17	
NO.	DATE	DESCRIPTION
ISSUE RECORD		

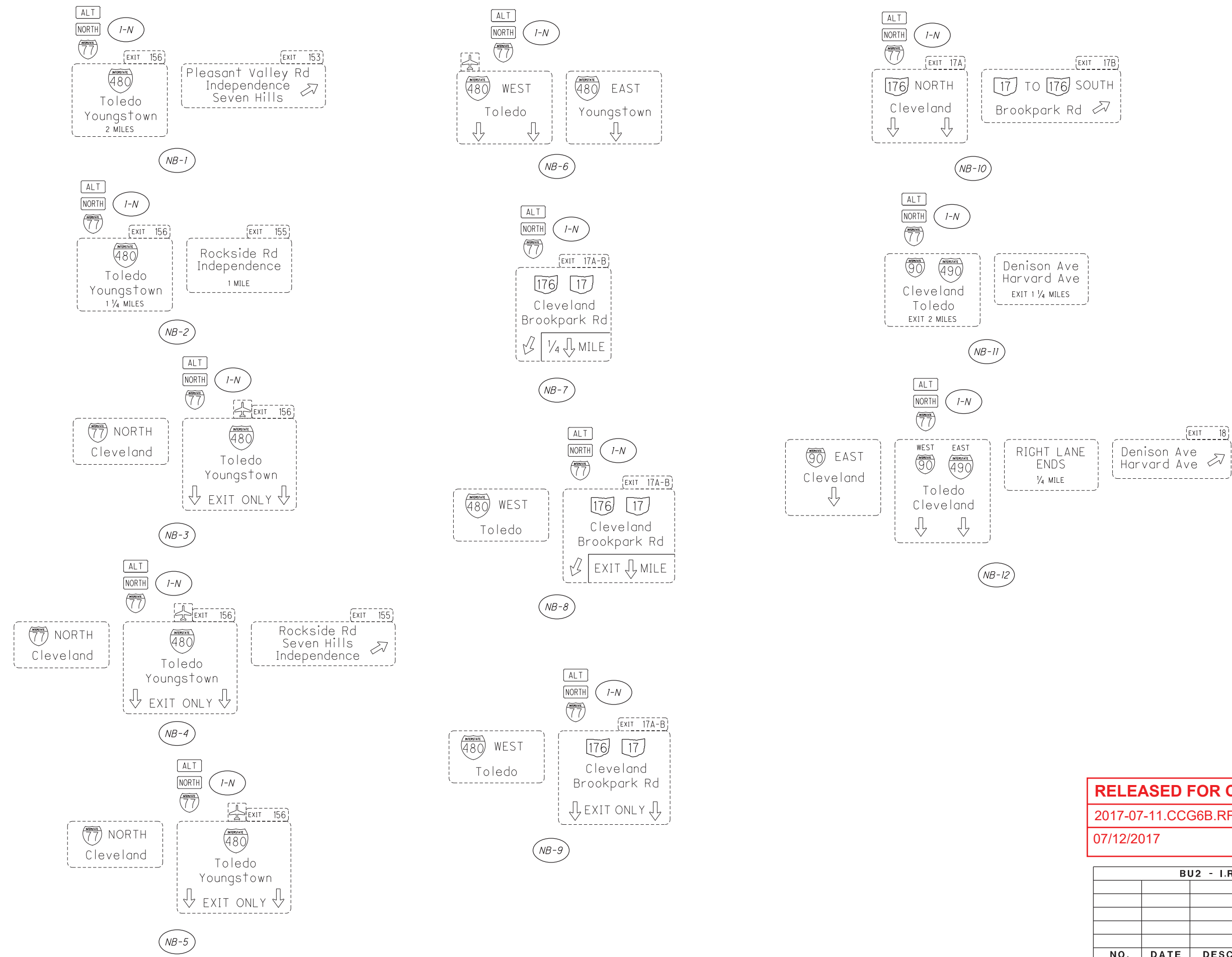
CALCULATED
MLL
CHECKED
SWC

I.R. 77 NORTHBOUND - DETOUR PLAN

CUY-77-13.80

28
170

P:\82388_CCG6B\Design\MOT\Sheets\82388_MD2103.dgn Sheet 7/10/2017 3:19:14 PM mlutes



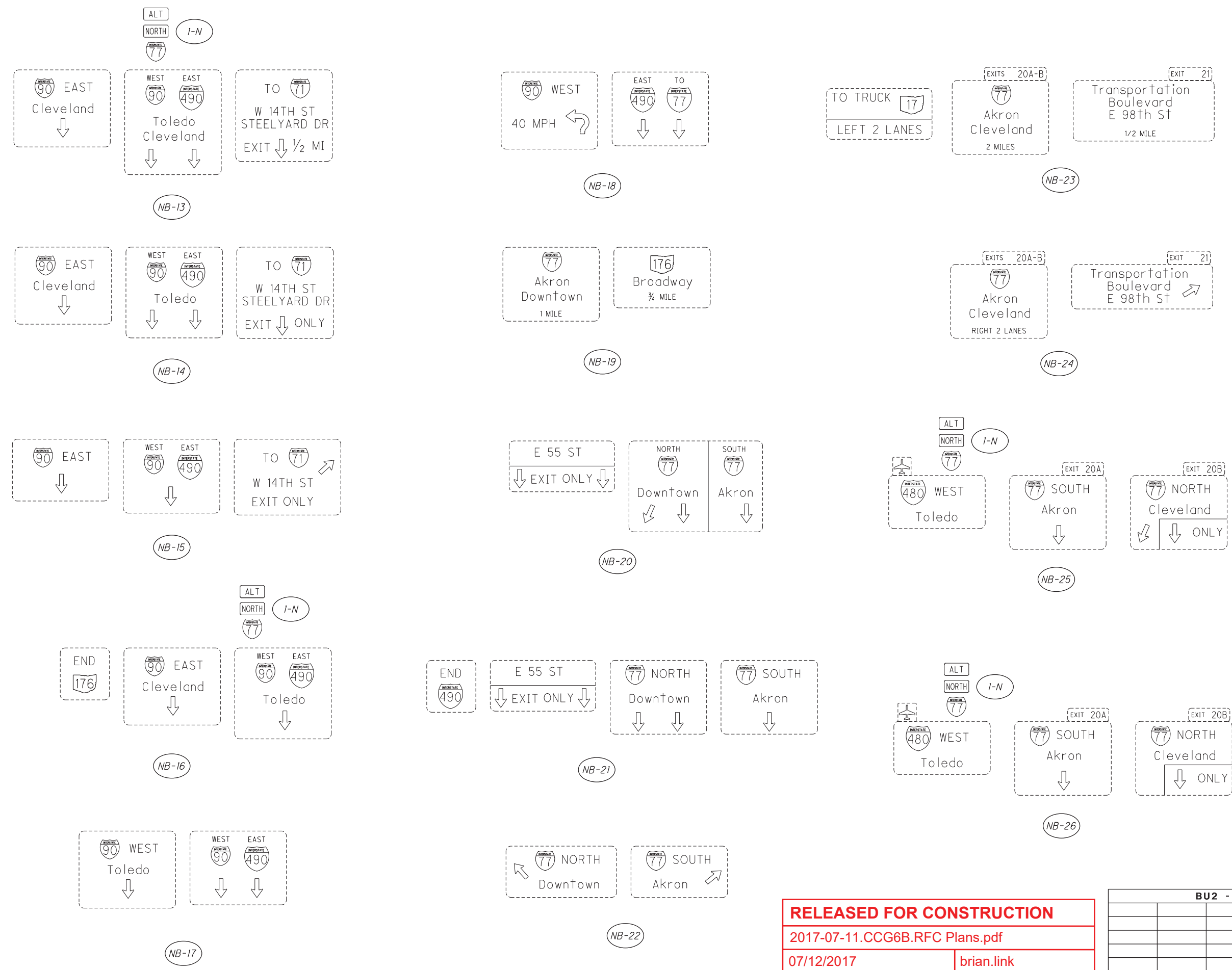
RELEASED FOR CONSTRUCTION
 2017-07-11.CCG6B.RFC Plans.pdf
 07/12/2017 brian.link

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION

I.R. 77 NORTHBOUND - DETOUR PLAN

CUY-77-13.80

P:\B2388_CCG6B\Design\MOT\Sheets\MD2104.dgn Sheet 7/10/2017 3:19:16 PM mlutes



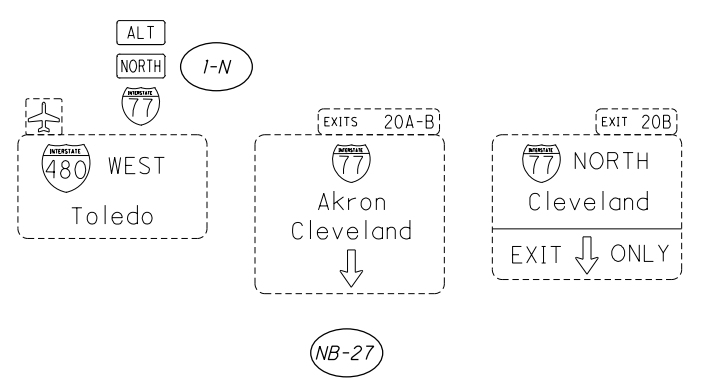
RELEASED FOR CONSTRUCTION
2017-07-11.CCG6B.RFC Plans.pdf
07/12/2017 brian.link

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION

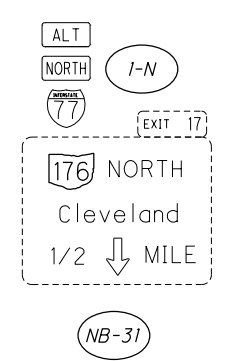
ISSUE RECORD

I.R. 77 NORTHBOUND - DETOUR PLAN

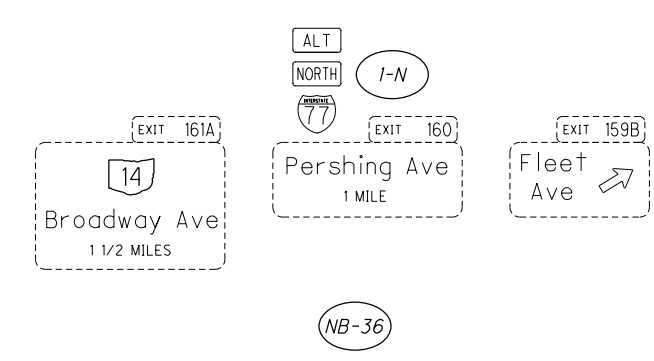
CUY-77-13.80



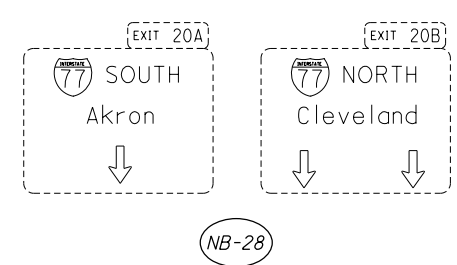
NB-27



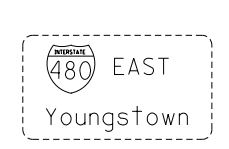
NB-31



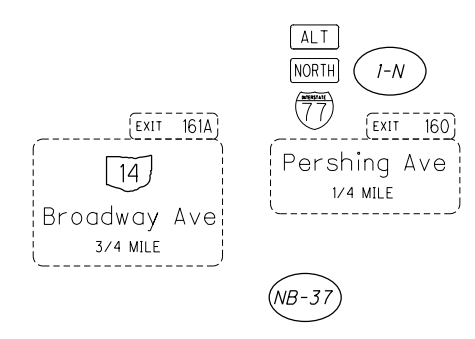
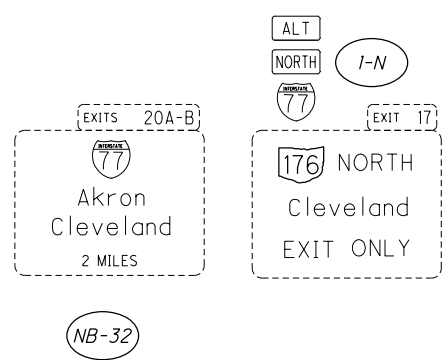
NB-36



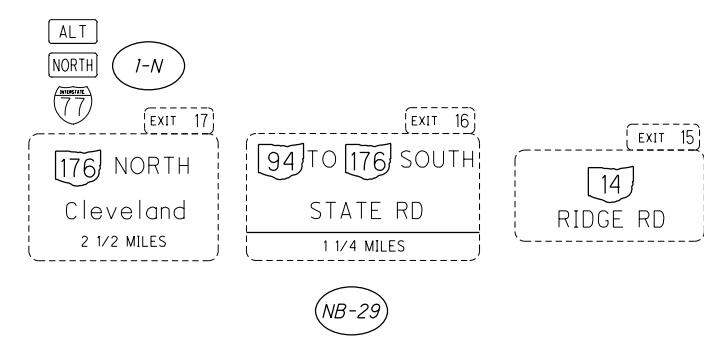
NB-28



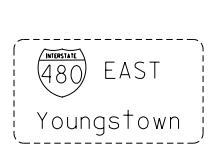
NB-32



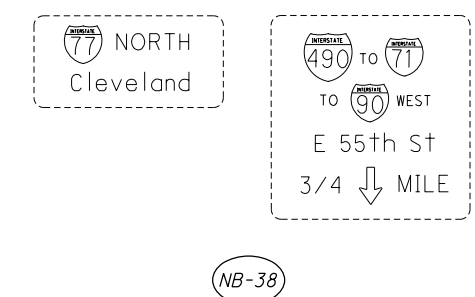
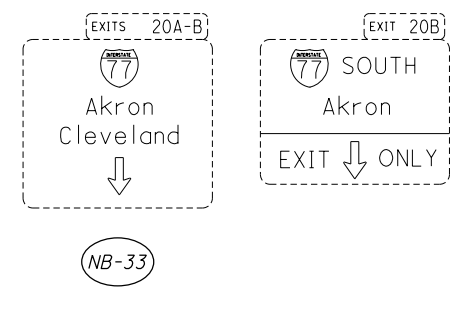
NB-37



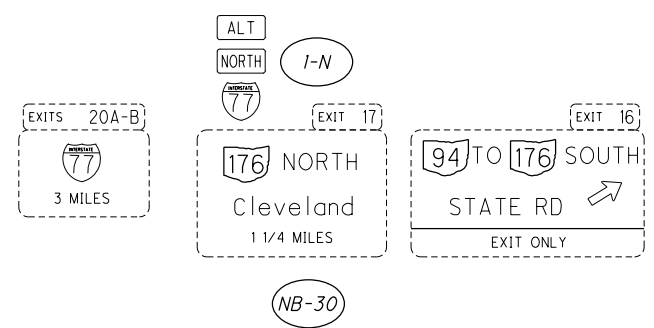
NB-29



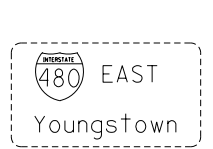
NB-33



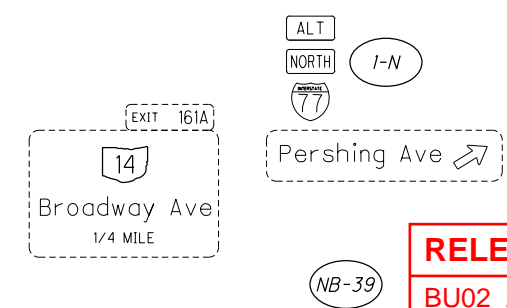
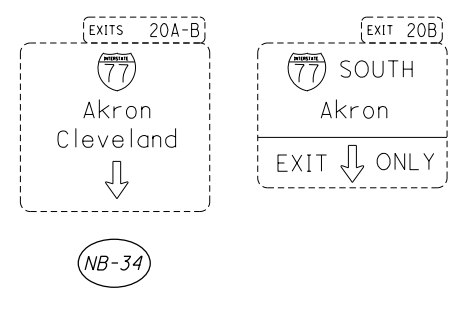
NB-38



NB-30

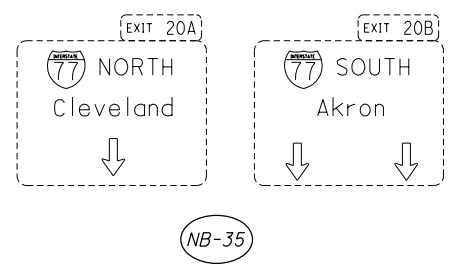


NB-34



NB-39

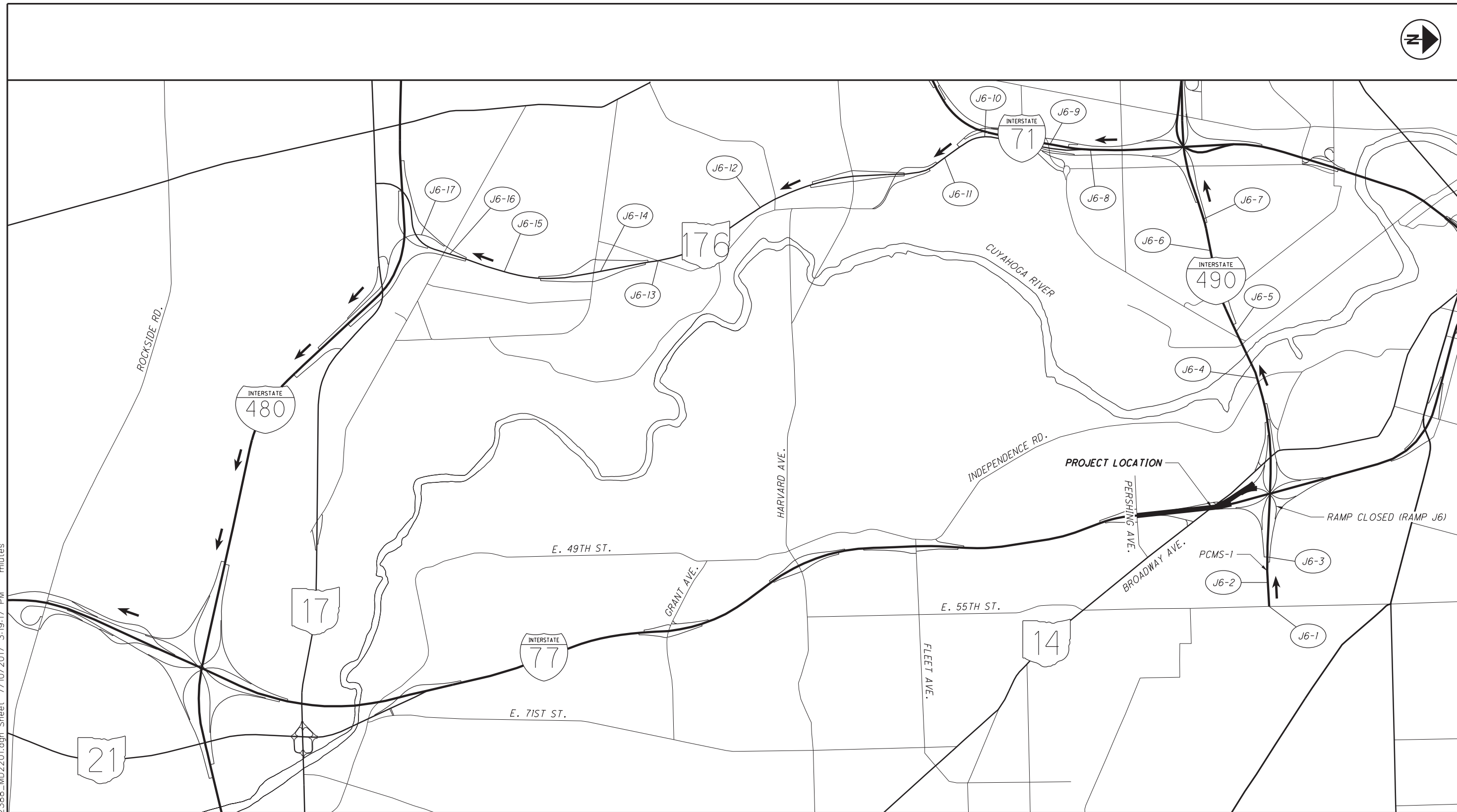
RELEASED FOR CONSTRUCTION
 BU02_2017.11.13_CCG6B.BU2.RFC_FC 5.pdf
 11/20/2017 Brian.Link



NB-35

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION
ISSUE RECORD		

CALCULATED
MLL
CHECKED
SWC



RAMP J6 - DETOUR PLAN





CUY-77-13.80

30
170

P:\82388_CCG6B\Design\MOT\Sheets\82388_MD2201.dgn Sheet 7/10/2017 3:19:17 PM mlutes

LEGEND:

➔ DIRECTION OF TRAVEL

-  M4-1A-36
-  M3-3-36
-  I-R
-  M1-1-36-2

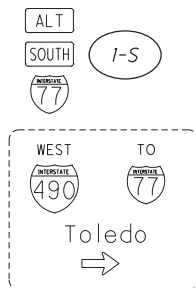
NOTES:

1. CLOSE RAMP PER STANDARD CONSTRUCTION DRAWING MT-98.29.

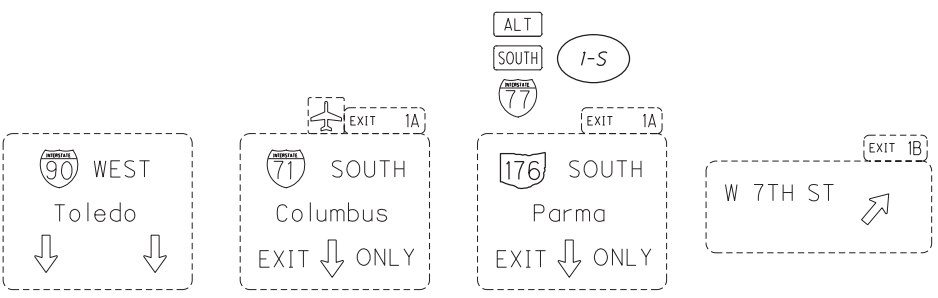
PORTABLE CHANGEABLE MESSAGE SIGNS RECOMMENDED MESSAGES		
ALTERNATE ROUTE		
	FLASH 1	FLASH 2
PCMS-1	I.R. 77 SB CLOSED	USE I.R. 490 WEST

RELEASED FOR CONSTRUCTION
 2017-07-11.CCG6B.RFC Plans.pdf
 07/12/2017 brian.link

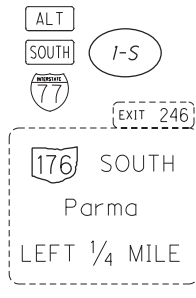
BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION



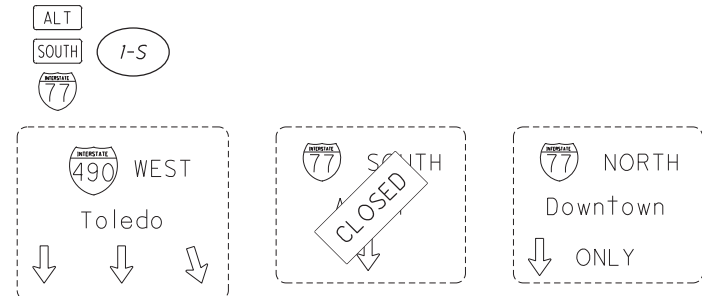
J6-1



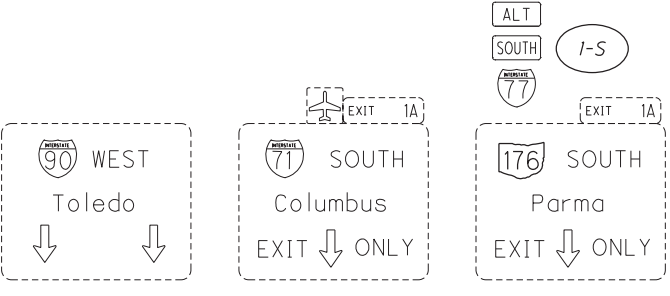
J6-5



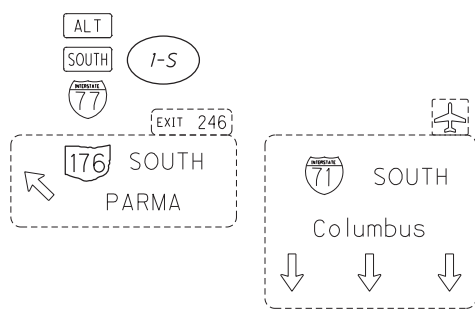
J6-9



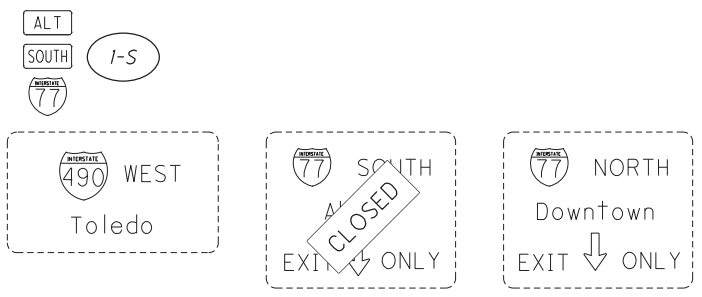
J6-2



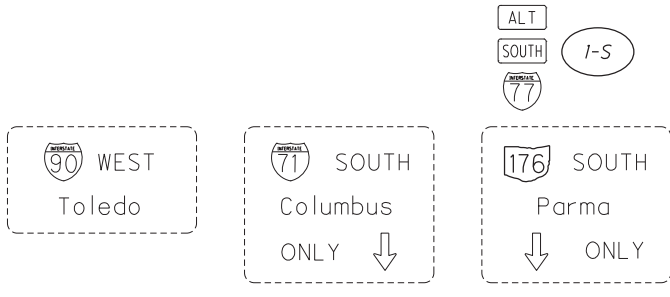
J6-6



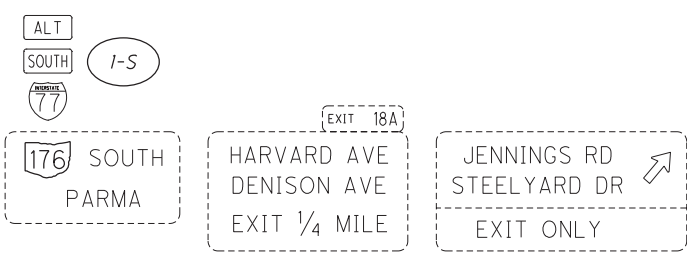
J6-10



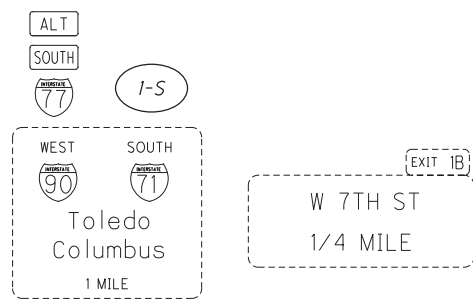
J6-3



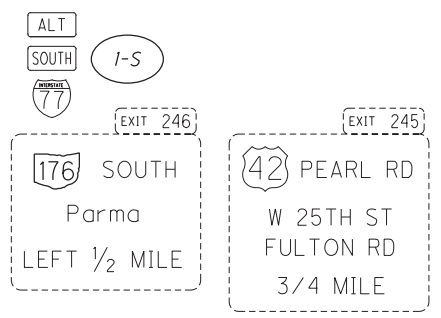
J6-7



J6-11



J6-4

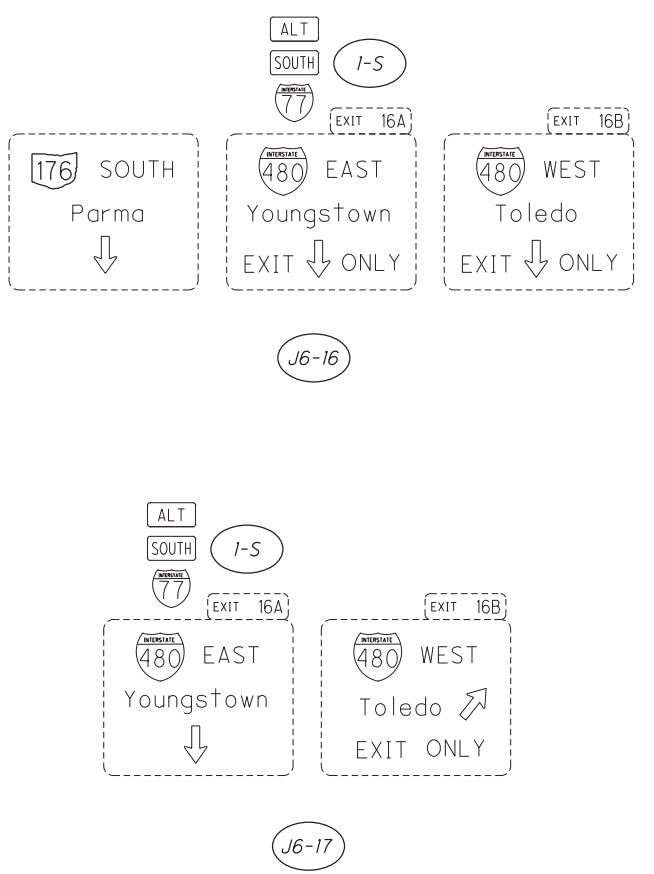
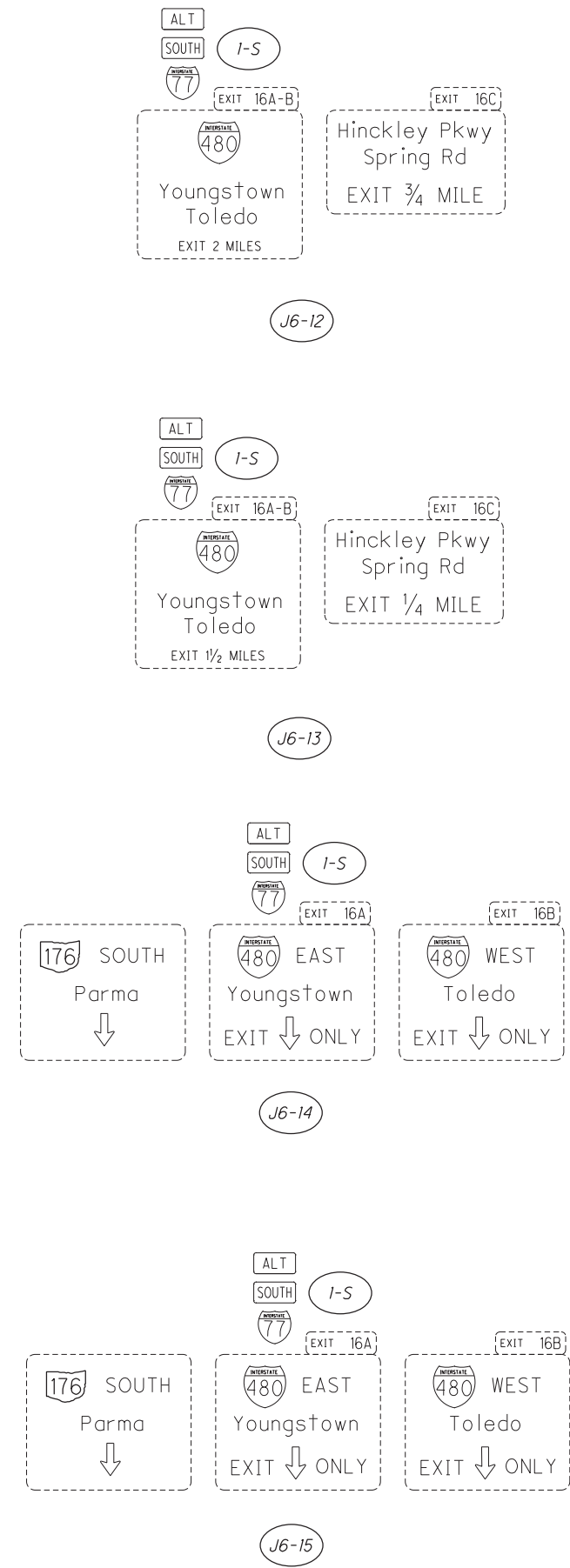


J6-8

RELEASED FOR CONSTRUCTION
 2017-07-11.CCG6B.RFC Plans.pdf
 07/12/2017 brian.link

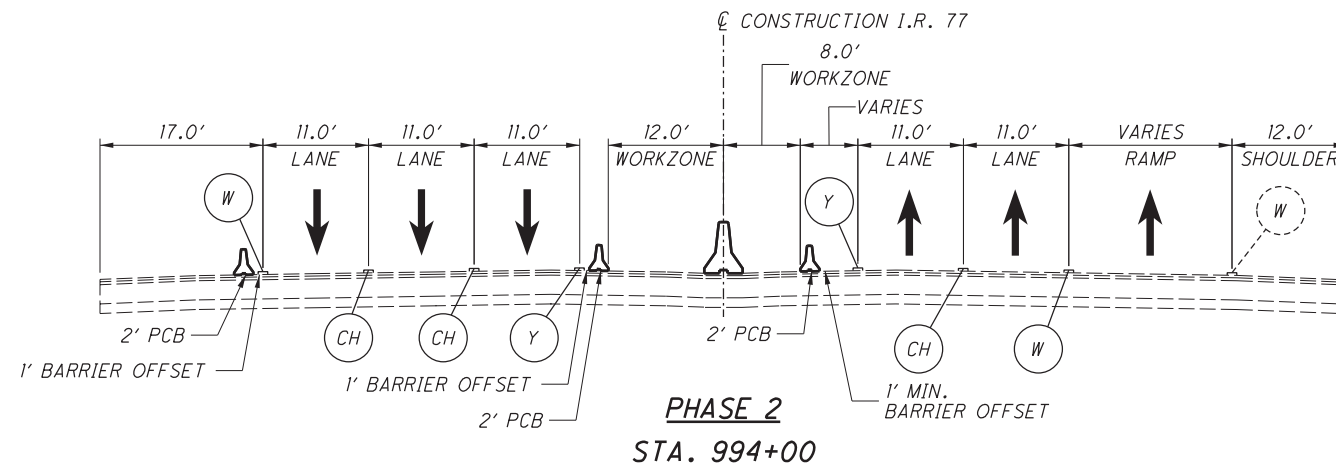
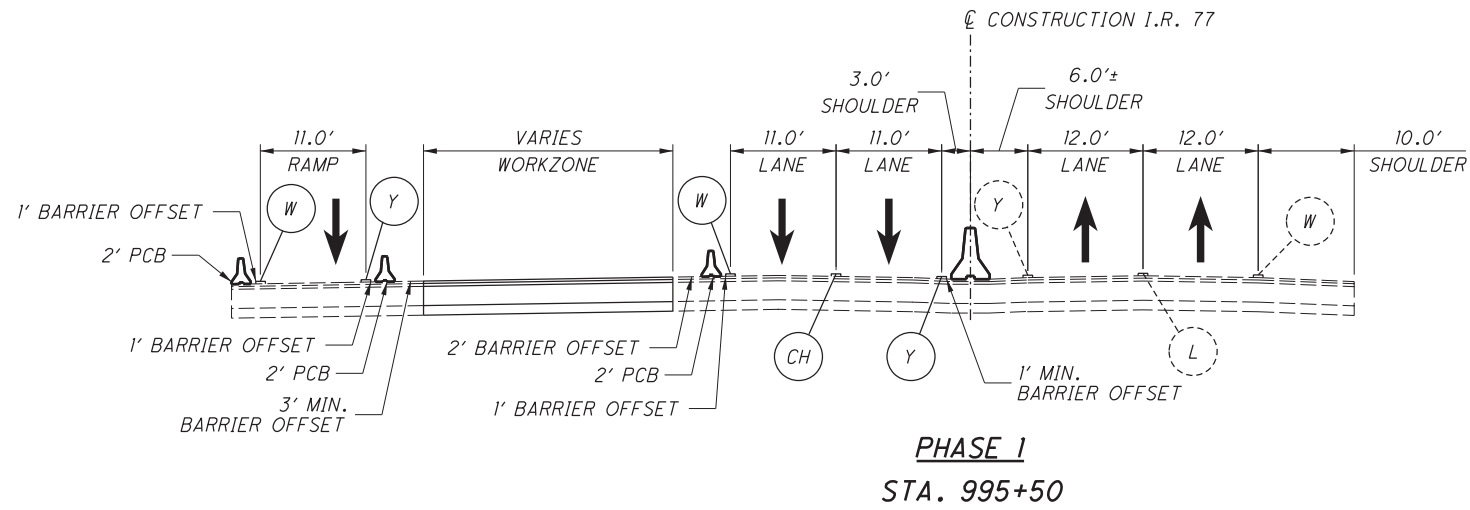
BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION

P:\B2388_CCG6B\Design\MOT\Sheets\82388_MD2203.dgn_Sheet 7/10/2017 3:19:26 PM mlutes



RELEASED FOR CONSTRUCTION
 2017-07-11.CCG6B.RFC Plans.pdf
 07/12/2017 brian.link

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION

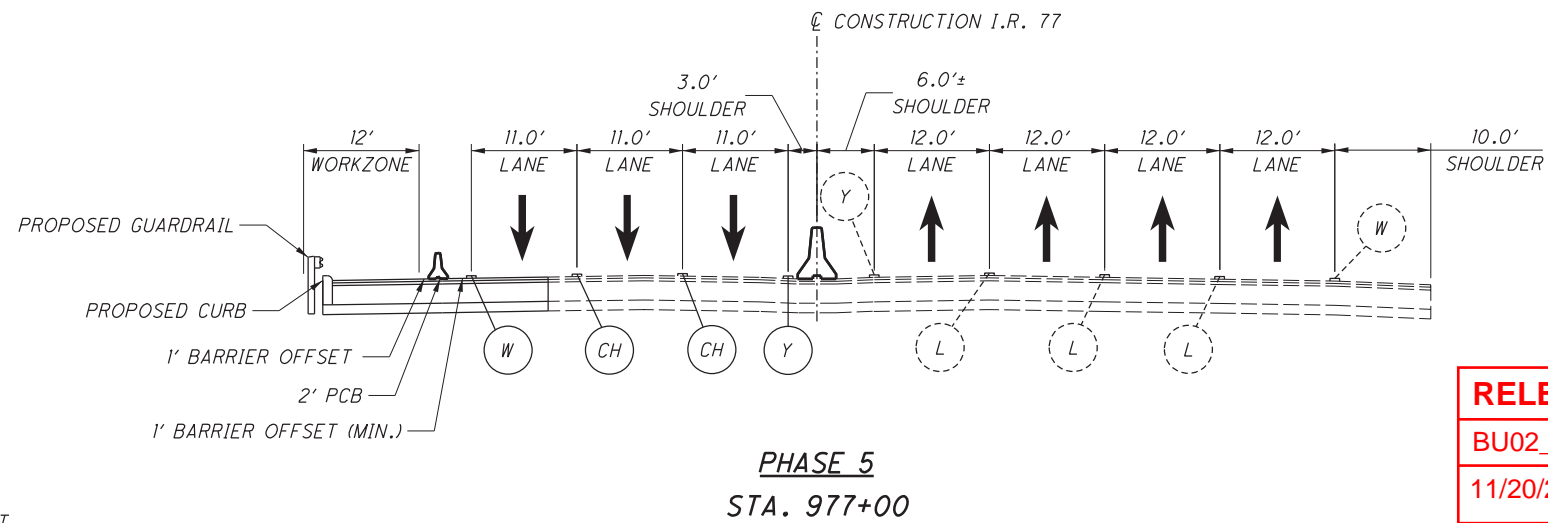
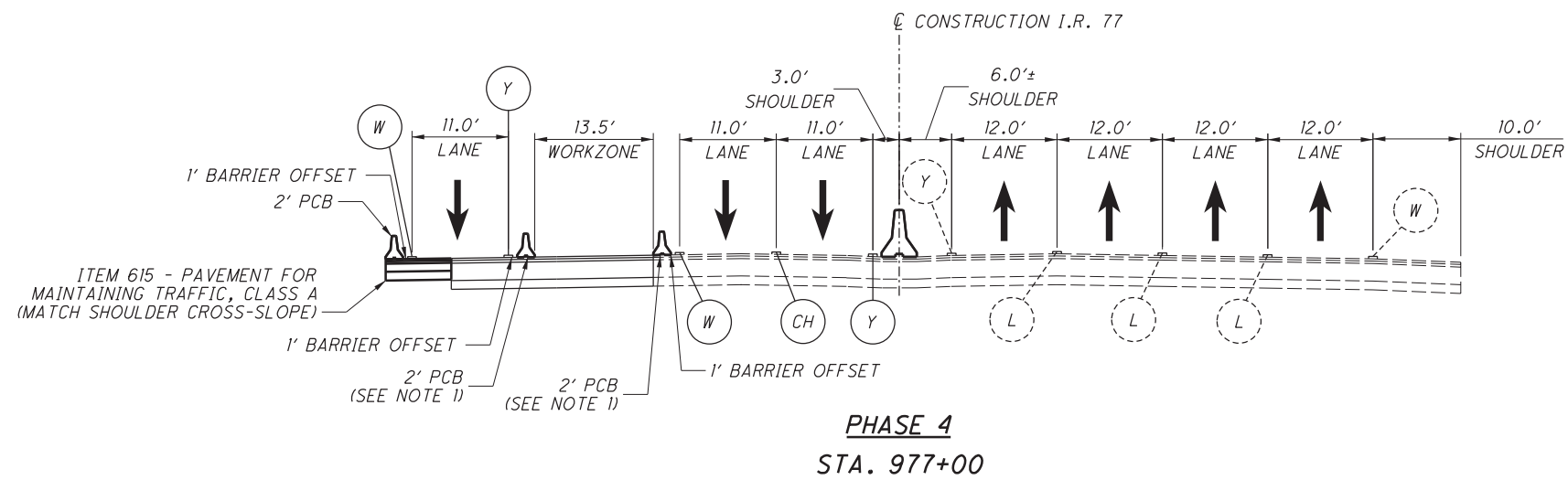
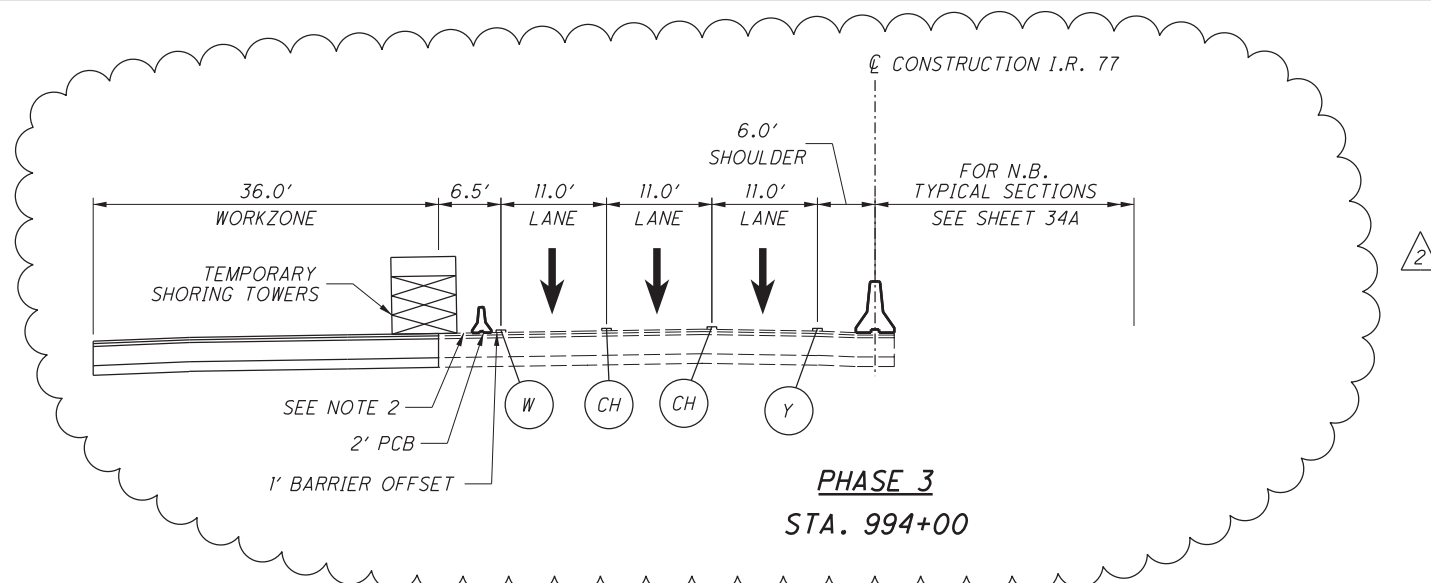


LEGEND:

- ITEM 614 - WORK ZONE EDGE LINE, WHITE, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE EDGE LINE, YELLOW, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE DOTTED LINE, CLASS 1, 642 PAINT

RELEASED FOR CONSTRUCTION
2017-07-11.CCG6B.RFC Plans.pdf
07/12/2017 brian.link

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION
ISSUE RECORD		



LEGEND:

- (W) ITEM 614 - WORK ZONE EDGE LINE, WHITE, CLASS 1, 642 PAINT
- (Y) ITEM 614 - WORK ZONE EDGE LINE, YELLOW, CLASS 1, 642 PAINT
- (CH) ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS 1, 642 PAINT
- (D) ITEM 614 - WORK ZONE DOTTED LINE, CLASS 1, 642 PAINT

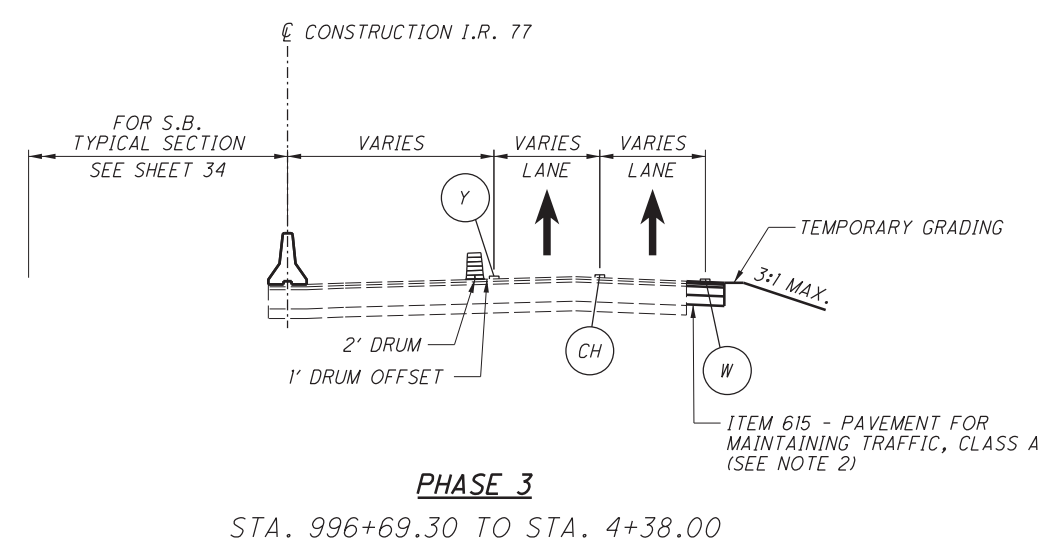
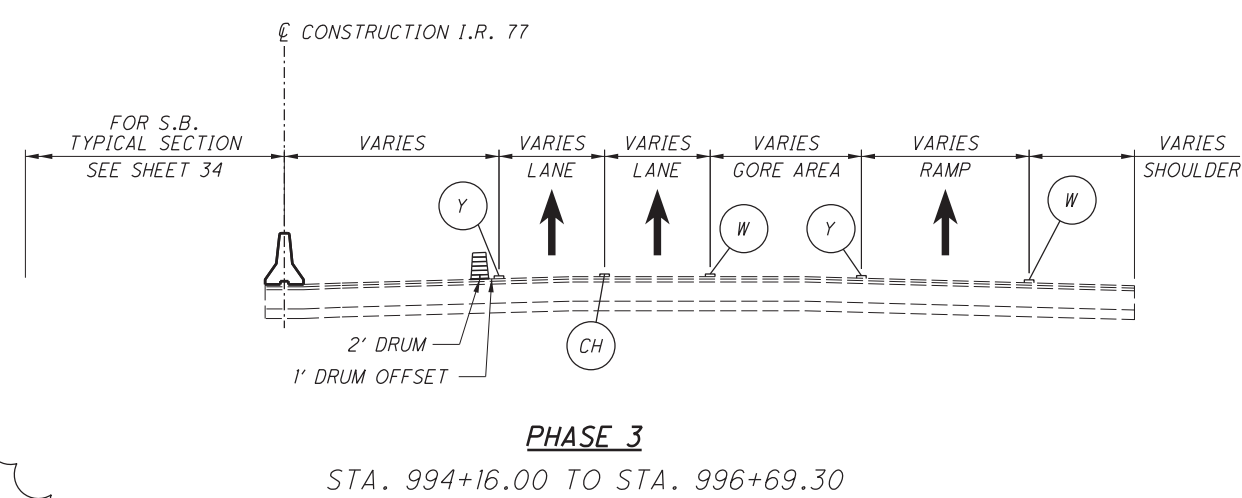
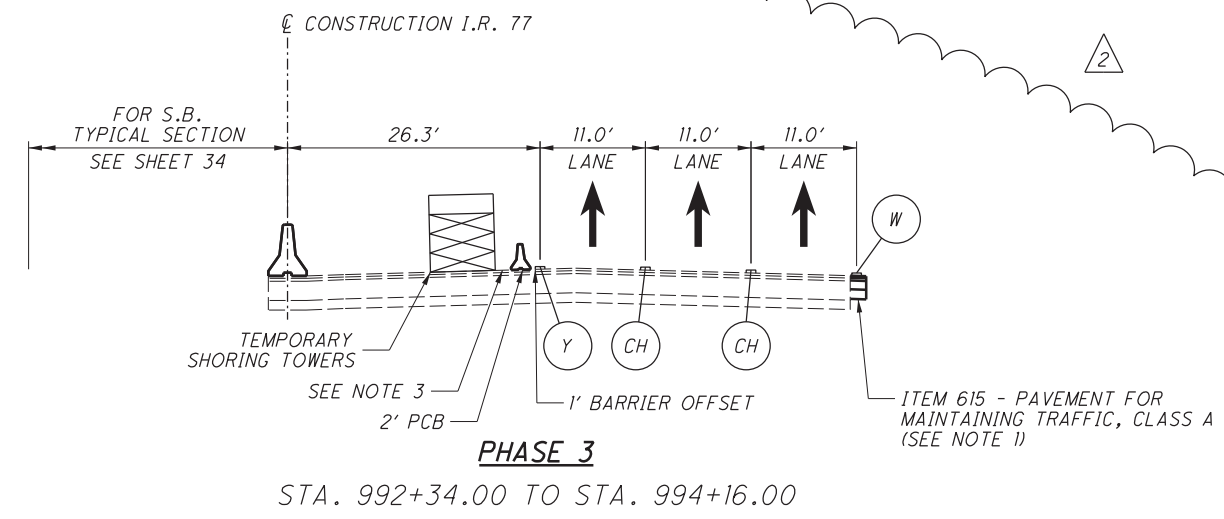
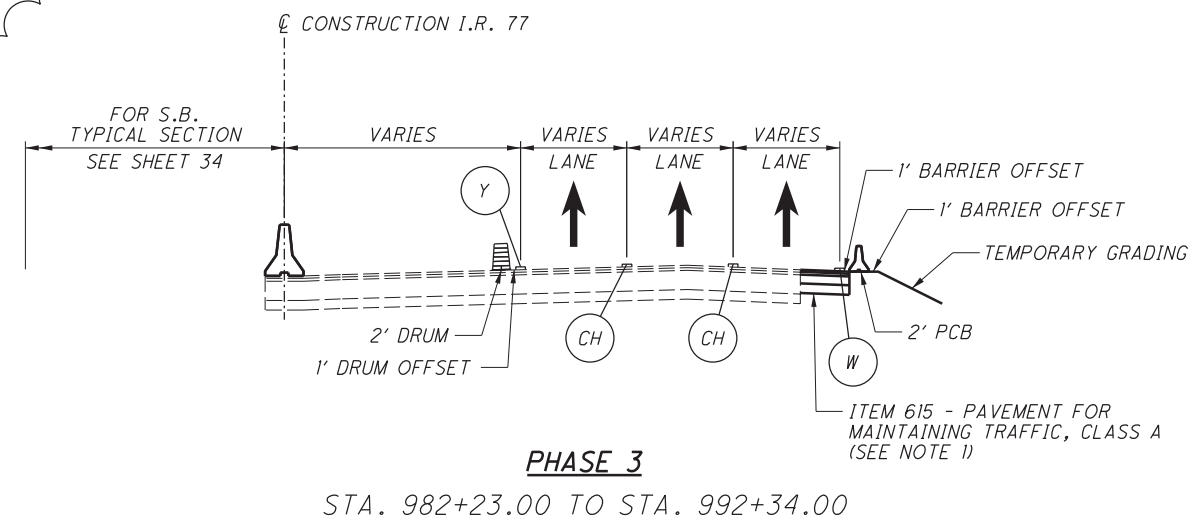
NOTES:

1. BARRIER OFFSET FOLLOWS PROPOSED SAW CUT LINE SHOWN ON SHEETS 7 TO 8.
2. TEMPORARY SHORING SHALL BE PLACED A MINIMUM OF 1'-7" FROM THE TOE OF THE PCB.

RELEASED FOR CONSTRUCTION
BU02_2017.11.13_CCG6B.BU2.RFC_FC 5.pdf
11/20/2017 Brian.Link

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION
2	9/22/17	ADDED MOT N.B. SHIFT TYPICAL SECTIONS
ISSUE RECORD		

P:\B2388_CCG6B\Design\MOT\Sheets\B2388_MY2002.dgn_Sheet2 9/26/2017 9:28:24 AM mlutes



NOTES:

1. TEMPORARY PAVEMENT FROM STA. 988+35.65 TO STA. 993+37.53 SHALL MATCH THE EXISTING SHOULDER CROSS SLOPE.
2. TEMPORARY PAVEMENT FROM STA. 996+69.30 TO STA. 999+66.67 SHALL TRANSITION FROM THE EXISTING GORE CROSS SLOPE TO THE EXISTING SHOULDER CROSS SLOPE OVER A MINIMUM OF 60'.
3. TEMPORARY SHORING SHALL BE PLACED A MINIMUM OF 1-7" FROM THE TOE OF THE PCB.

LEGEND:

- (W) ITEM 614 - WORK ZONE EDGE LINE, WHITE, CLASS I, 642 PAINT
- (Y) ITEM 614 - WORK ZONE EDGE LINE, YELLOW, CLASS I, 642 PAINT
- (CH) ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS I, 642 PAINT

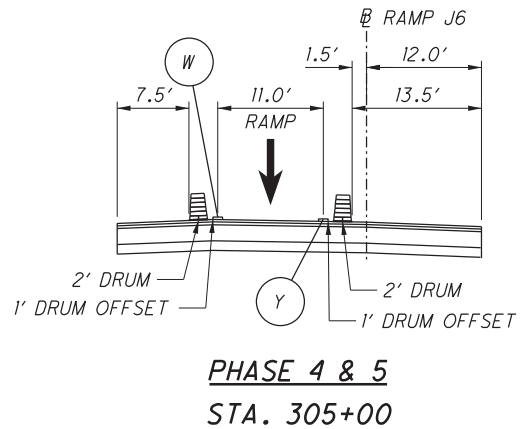
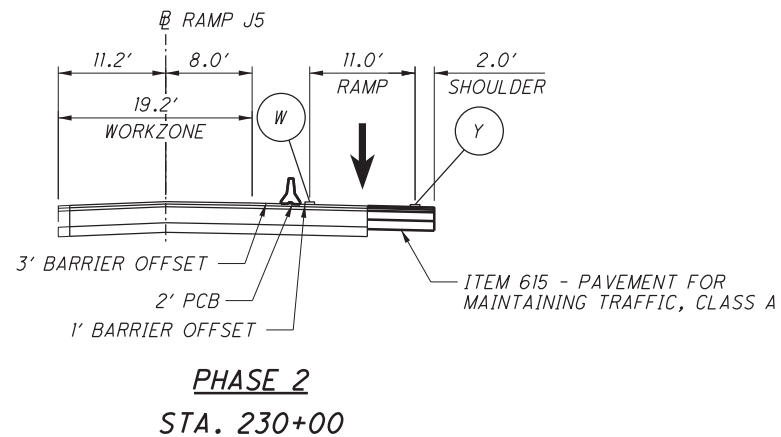
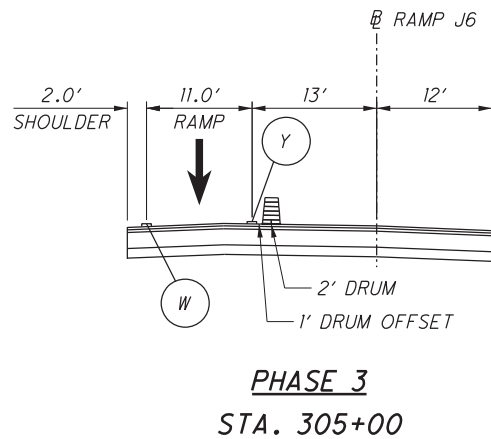
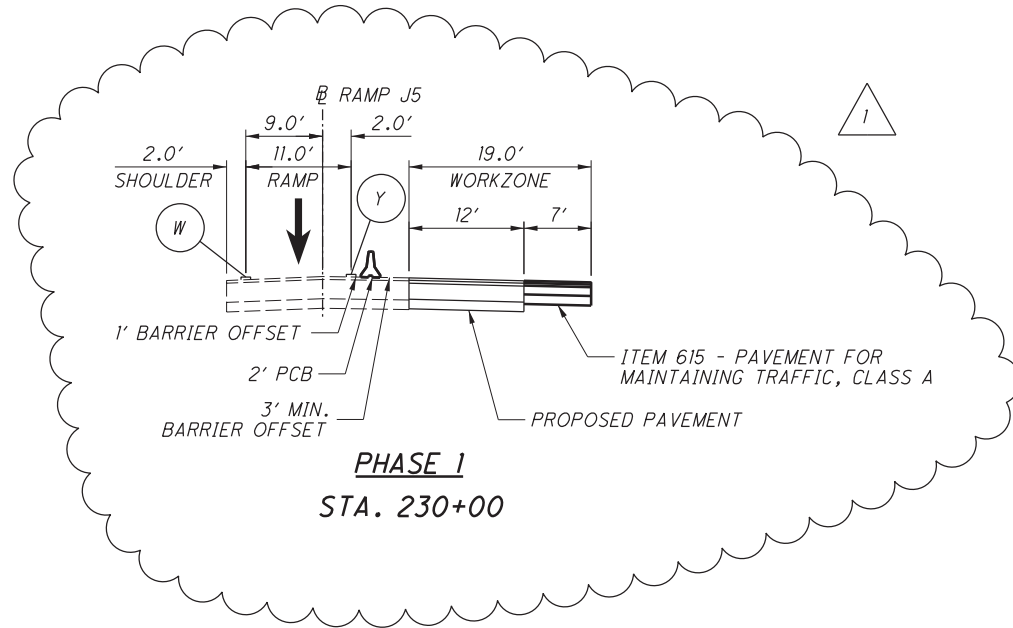
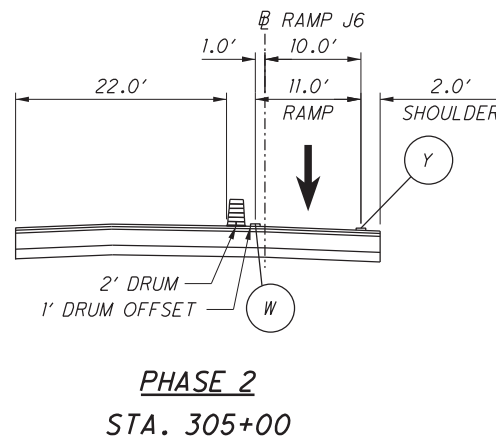
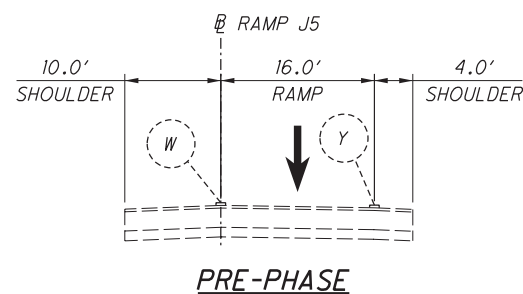
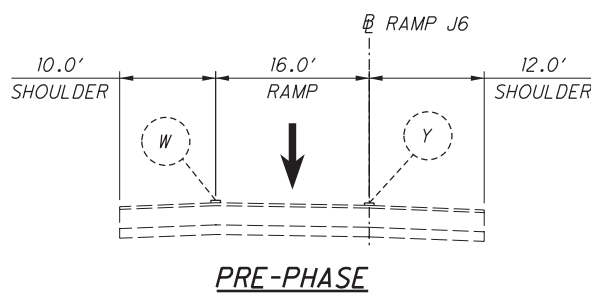
RELEASED FOR CONSTRUCTION
 BU02_2017.11.13_CCG6B.BU2.RFC_FC 5.pdf
 11/20/2017 Brian.Link

BU2 - I.R.-77 AND RAMPS		
2	9/22/17	ADDED MOT N.B. SHIFT TYPICAL SECTIONS
NO.	DATE	DESCRIPTION
ISSUE RECORD		

MAINTENANCE OF TRAFFIC - TYPICAL SECTIONS (I.R. 77)

CUY-77-13.80

 34A
 170



RELEASED FOR CONSTRUCTION

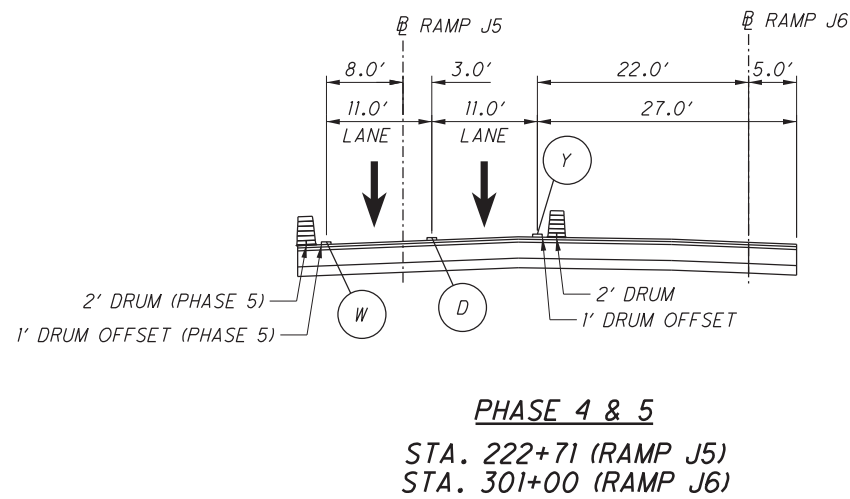
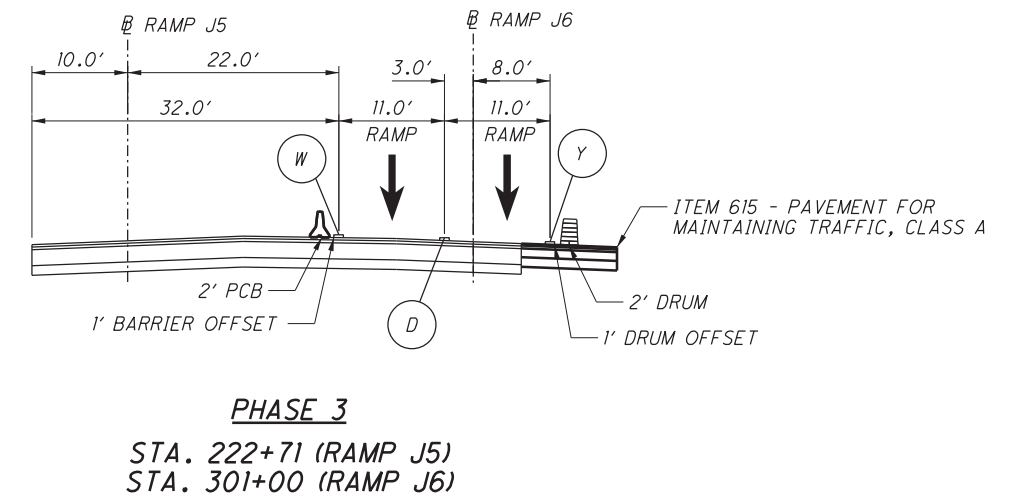
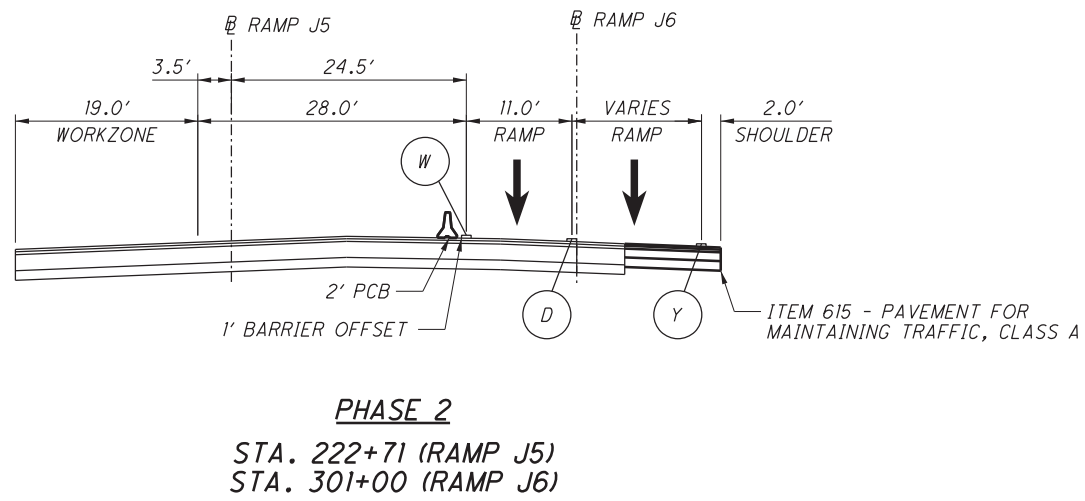
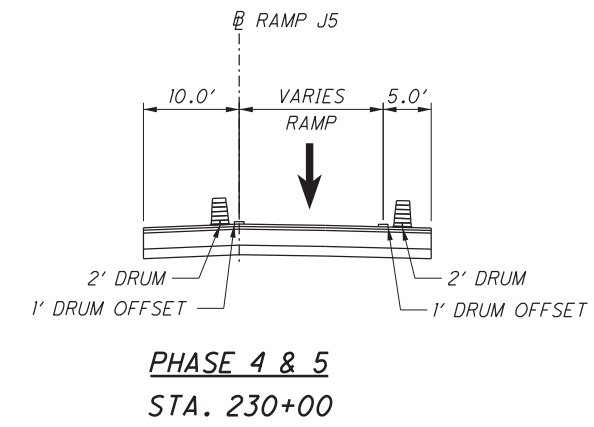
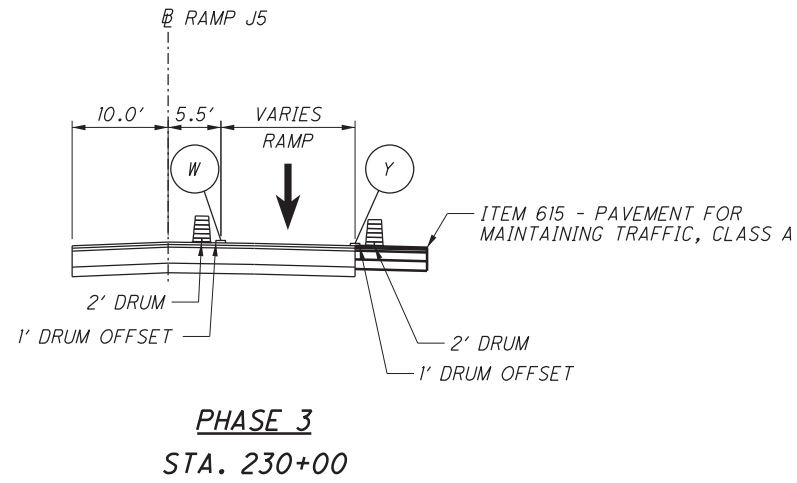
2017-08-07.CCG6B.BU2.RFC Plans_FC 2.pdf

03/01/2017	brian.link
------------	------------

- LEGEND:**
- (W) ITEM 614 - WORK ZONE EDGE LINE, WHITE, CLASS 1, 642 PAINT
 - (Y) ITEM 614 - WORK ZONE EDGE LINE, YELLOW, CLASS 1, 642 PAINT
 - (CH) ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS 1, 642 PAINT
 - (D) ITEM 614 - WORK ZONE DOTTED LINE, CLASS 1, 642 PAINT

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION
1	8/3/17	ADDED DIMENSIONS AND OFFSETS FOR TEMPORARY PAVEMENT
ISSUE RECORD		

P:\B2388_CCG6B\Design\MOT\Sheets\B2388_MY2003.dgn Sheet 8/4/2017 2:08:13 PM mlutes

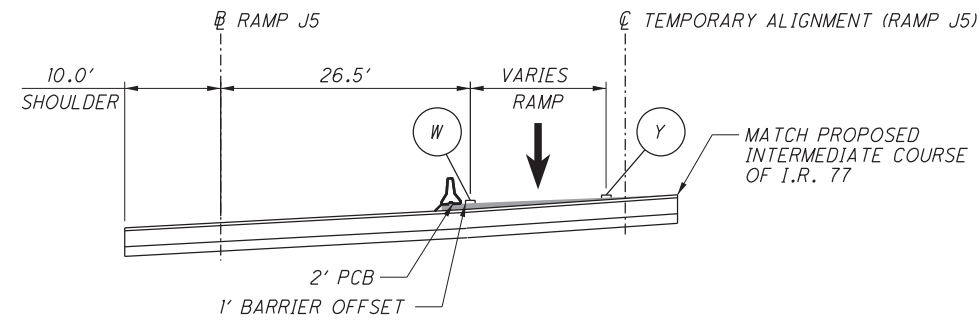


LEGEND:

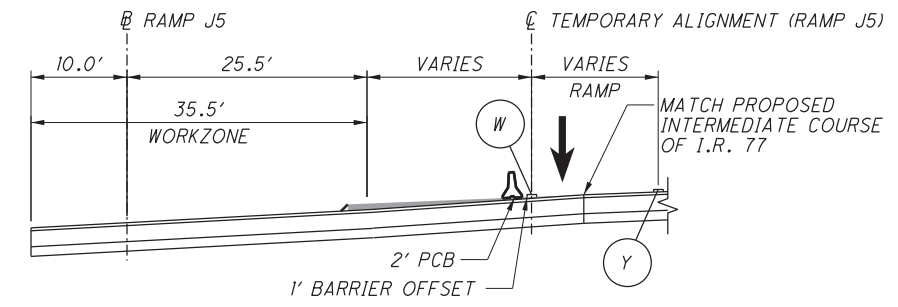
- (W) ITEM 614 - WORK ZONE EDGE LINE, WHITE, CLASS 1, 642 PAINT
- (Y) ITEM 614 - WORK ZONE EDGE LINE, YELLOW, CLASS 1, 642 PAINT
- (CH) ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS 1, 642 PAINT
- (D) ITEM 614 - WORK ZONE DOTTED LINE, CLASS 1, 642 PAINT

RELEASED FOR CONSTRUCTION
2017-07-11.CCG6B.RFC Plans.pdf
07/12/2017 brian.link

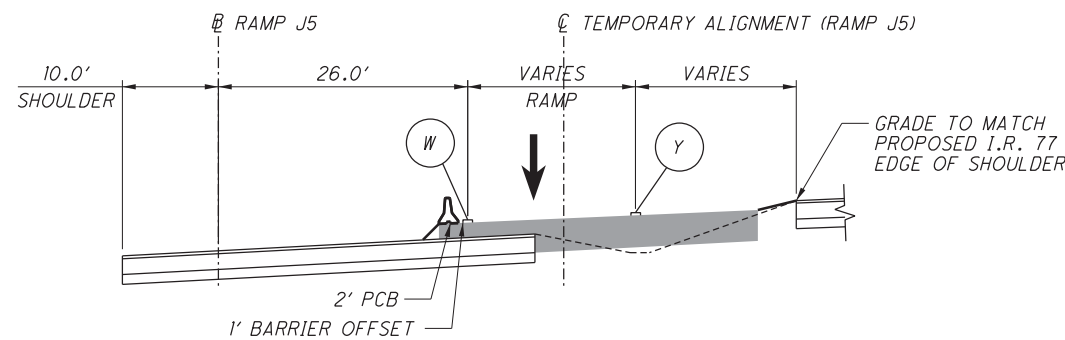
BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION



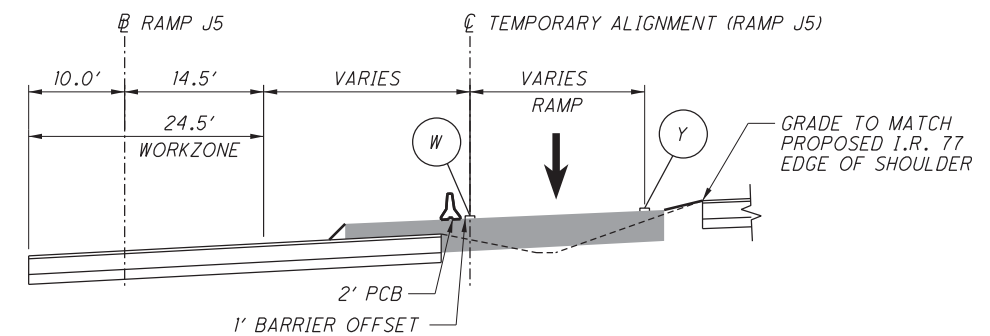
PHASE 2
STA. 101+50 TEMPORARY ALIGNMENT (RAMP J5)
STA. 219+00 (RAMP J5)



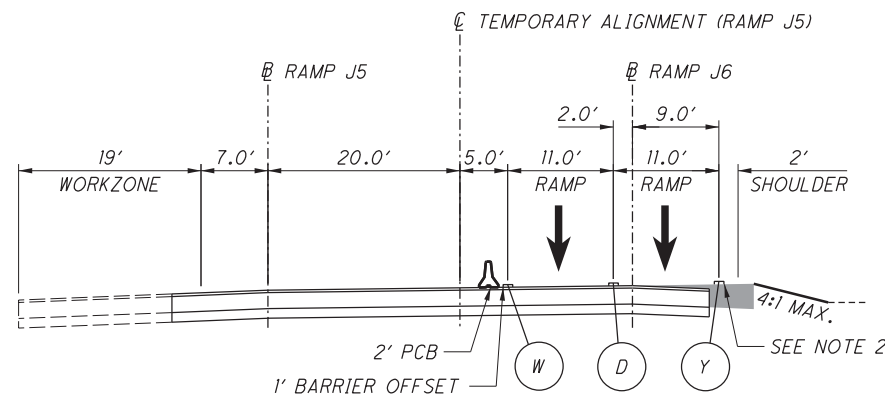
PHASE 3
STA. 101+50 TEMPORARY ALIGNMENT (RAMP J5)
STA. 219+00 (RAMP J5)



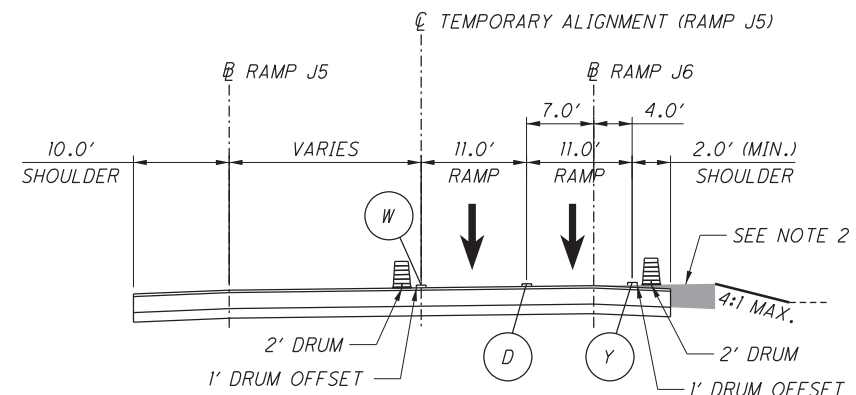
PHASE 2
STA. 102+75 TEMPORARY ALIGNMENT (RAMP J5)
STA. 220+20 (RAMP J5)



PHASE 3
STA. 102+75 TEMPORARY ALIGNMENT (RAMP J5)
STA. 220+20 (RAMP J5)



PHASE 2
STA. 106+00 TEMPORARY ALIGNMENT (RAMP J5)
STA. 223+42 (RAMP J5)



PHASE 3
STA. 106+00 TEMPORARY ALIGNMENT (RAMP J5)
STA. 223+42 (RAMP J5)

LEGEND:

- (W) ITEM 614 - WORK ZONE EDGE LINE, WHITE, CLASS 1, 642 PAINT
- (Y) ITEM 614 - WORK ZONE EDGE LINE, YELLOW, CLASS 1, 642 PAINT
- (D) ITEM 614 - WORK ZONE DOTTED LINE, CLASS 1, 642 PAINT
- [SHADING] ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC, AS PER PLAN









NOTES:







1. FOR TEMPORARY PAVEMENT DETAILS, SEE SHEET 45
2. CROSS SLOPE SHALL MATCH THE CROSS SLOPE OF THE PROPOSED ROADWAY

RELEASED FOR CONSTRUCTION
2017-07-11.CCG6B.RFC Plans.pdf
07/12/2017 brian.link

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION
ISSUE RECORD		

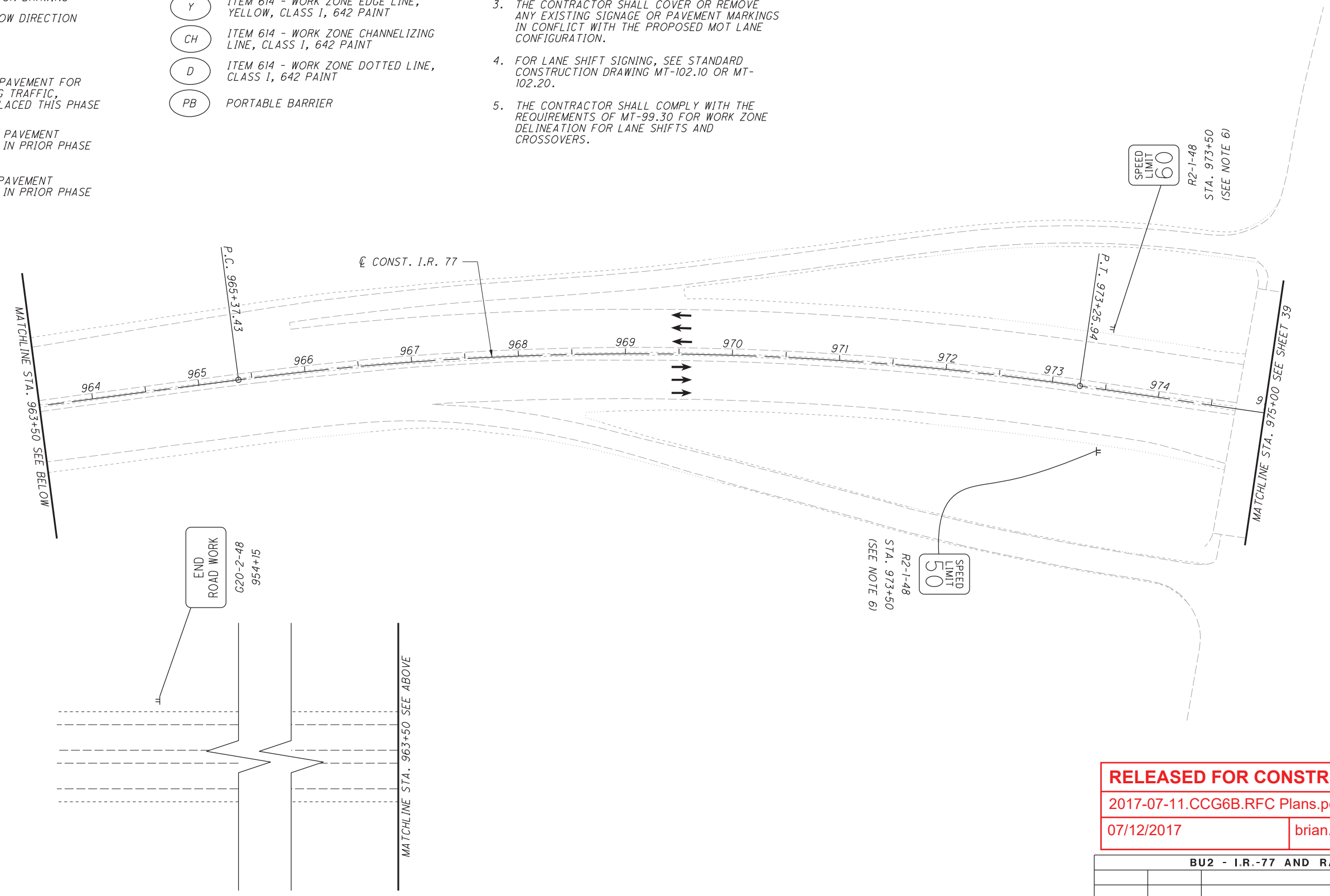
LEGEND:

-  ITEM 622 - PORTABLE BARRIER
-  ITEM 614 - WORK ZONE IMPACT ATTENUATOR
-  DRUMS - SPACED PER STANDARD CONSTRUCTION DRAWING
-  TRAFFIC FLOW DIRECTION
-  WORK ZONE
-  ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, PLACED THIS PHASE
-  TEMPORARY PAVEMENT COMPLETED IN PRIOR PHASE
-  PROPOSED PAVEMENT COMPLETED IN PRIOR PHASE

-  ITEM 614 - WORK ZONE LANE LINE, CLASS 1, 642 PAINT
-  ITEM 614 - WORK ZONE EDGE LINE, WHITE, CLASS 1, 642 PAINT
-  ITEM 614 - WORK ZONE EDGE LINE, YELLOW, CLASS 1, 642 PAINT
-  ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS 1, 642 PAINT
-  ITEM 614 - WORK ZONE DOTTED LINE, CLASS 1, 642 PAINT
-  PORTABLE BARRIER

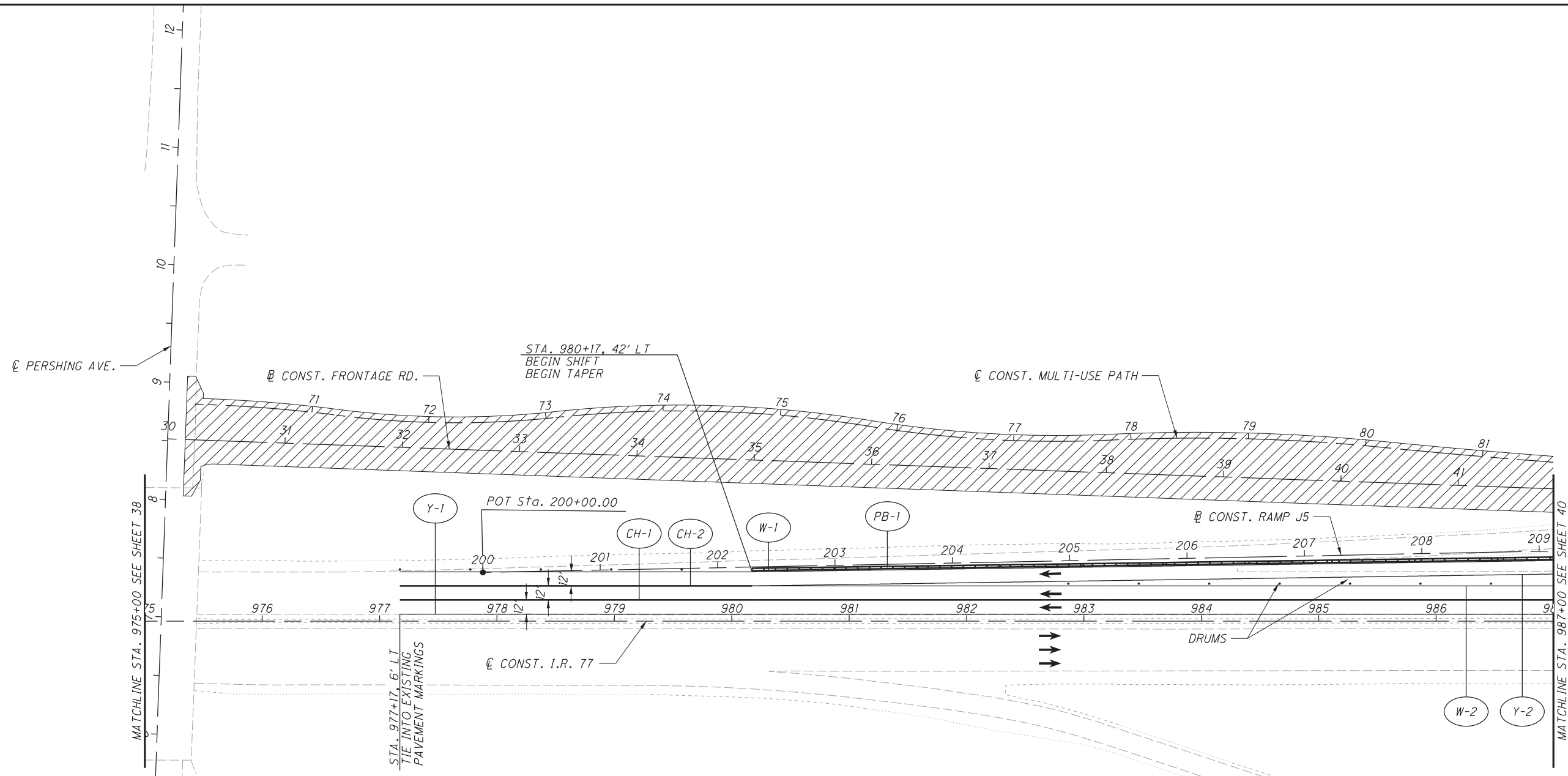
NOTES:

1. FOR SEQUENCE OF CONSTRUCTION NOTES, SEE SHEET 20
2. FOR MOT TYPICAL SECTIONS, SEE SHEETS 33 TO 37
3. THE CONTRACTOR SHALL COVER OR REMOVE ANY EXISTING SIGNAGE OR PAVEMENT MARKINGS IN CONFLICT WITH THE PROPOSED MOT LANE CONFIGURATION.
4. FOR LANE SHIFT SIGNING, SEE STANDARD CONSTRUCTION DRAWING MT-102.10 OR MT-102.20.
5. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF MT-99.30 FOR WORK ZONE DELINEATION FOR LANE SHIFTS AND CROSSOVERS.
6. SIGNS SHALL BE INSTALLED NO LATER THAN AUGUST 1, 2017.



RELEASED FOR CONSTRUCTION
2017-07-11.CCG6B.RFC Plans.pdf
07/12/2017 brian.link

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION



LEGEND:

- ITEM 622 - PORTABLE BARRIER
- ITEM 614 - WORK ZONE IMPACT ATTENUATOR
- DRUMS - SPACED PER STANDARD CONSTRUCTION DRAWING
- TRAFFIC FLOW DIRECTION
- WORK ZONE
- ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, PLACED THIS PHASE
- TEMPORARY PAVEMENT COMPLETED IN PRIOR PHASE
- PROPOSED PAVEMENT COMPLETED IN PRIOR PHASE

- ITEM 614 - WORK ZONE LANE LINE, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE EDGE LINE, WHITE, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE EDGE LINE, YELLOW, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE DOTTED LINE, CLASS 1, 642 PAINT
- PORTABLE BARRIER

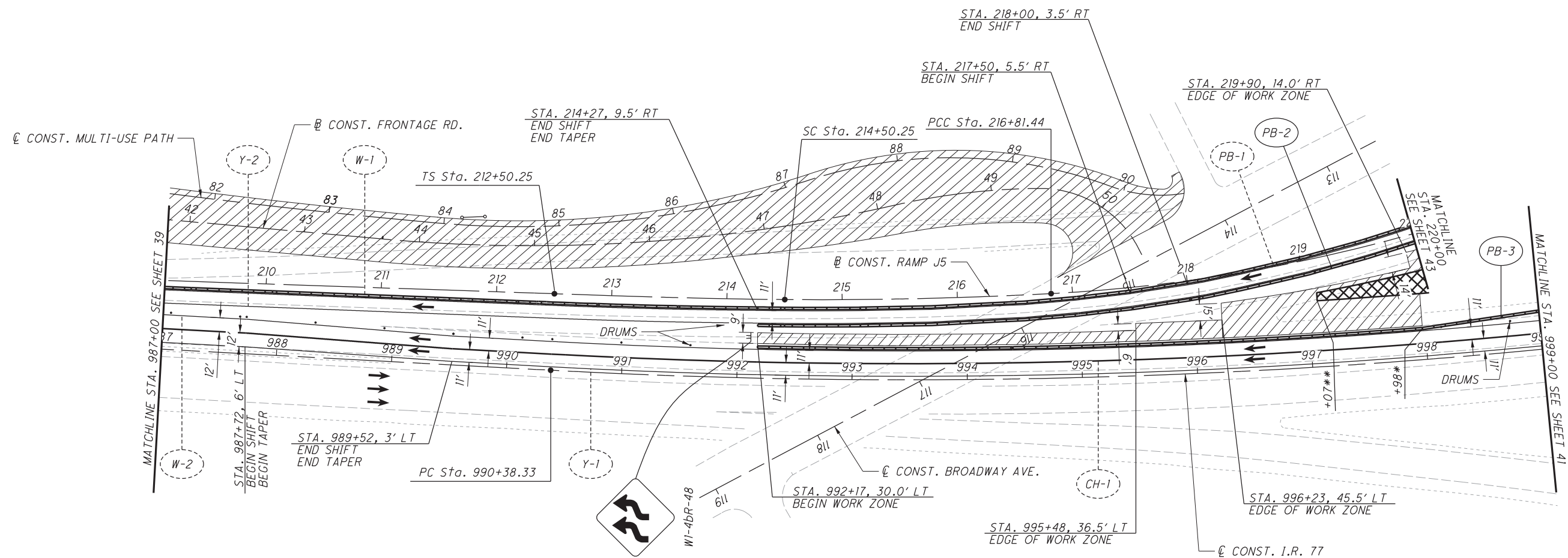
NOTES:

1. FOR SEQUENCE OF CONSTRUCTION NOTES, SEE SHEET 20
2. FOR MOT TYPICAL SECTIONS, SEE SHEETS 33 TO 37
3. THE CONTRACTOR SHALL COVER OR REMOVE ANY EXISTING SIGNAGE OR PAVEMENT MARKINGS IN CONFLICT WITH THE PROPOSED MOT LANE CONFIGURATION.
4. FOR LANE SHIFT SIGNING, SEE STANDARD CONSTRUCTION DRAWING MT-102.10 OR MT-102.20.
5. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF MT-99.30 FOR WORK ZONE DELINEATION FOR LANE SHIFTS AND CROSSOVERS.









RELEASED FOR CONSTRUCTION
2017-07-11.CCG6B.RFC Plans.pdf
07/12/2017 brian.link







BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION

P:\B2388_CCG6B\Design\MOT\Sheets\B2388_MP2102.dgn Sheet 7/10/2017 3:19:41 PM mlutes



LEGEND:

-  ITEM 622 - PORTABLE BARRIER
-  ITEM 614 - WORK ZONE IMPACT ATTENUATOR
-  DRUMS - SPACED PER STANDARD CONSTRUCTION DRAWING
-  TRAFFIC FLOW DIRECTION
-  WORK ZONE
-  ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, PLACED THIS PHASE
-  TEMPORARY PAVEMENT COMPLETED IN PRIOR PHASE
-  PROPOSED PAVEMENT COMPLETED IN PRIOR PHASE

-  ITEM 614 - WORK ZONE LANE LINE, CLASS 1, 642 PAINT
-  ITEM 614 - WORK ZONE EDGE LINE, WHITE, CLASS 1, 642 PAINT
-  ITEM 614 - WORK ZONE EDGE LINE, YELLOW, CLASS 1, 642 PAINT
-  ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS 1, 642 PAINT
-  ITEM 614 - WORK ZONE DOTTED LINE, CLASS 1, 642 PAINT
-  PORTABLE BARRIER

NOTES:

1. FOR SEQUENCE OF CONSTRUCTION NOTES, SEE SHEET 20
2. FOR MOT TYPICAL SECTIONS, SEE SHEETS 33 TO 37
3. THE CONTRACTOR SHALL COVER OR REMOVE ANY EXISTING SIGNAGE OR PAVEMENT MARKINGS IN CONFLICT WITH THE PROPOSED MOT LANE CONFIGURATION.
4. FOR LANE SHIFT SIGNING, SEE STANDARD CONSTRUCTION DRAWING MT-102.10 OR MT-102.20.
5. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF MT-99.30 FOR WORK ZONE DELINEATION FOR LANE SHIFTS AND CROSSOVERS.

RELEASED FOR CONSTRUCTION
 2017-07-11.CCG6B.RFC Plans.pdf
 07/12/2017 brian.link

* REFERENCES I.R. 77 STATIONING
 ** REFERENCES RAMP J5

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION

ISSUE RECORD

P:\B2388_CCG6B\Design\MOT\Sheets\B2388_MP2103.dgn Sheet 7/10/2017 3:19:42 PM mlutes

P:\B2388_CCG6B\Design\MOT\Sheets\B2388_MP2104.dgn Sheet 9/22/2017 1:46:32 PM milutes

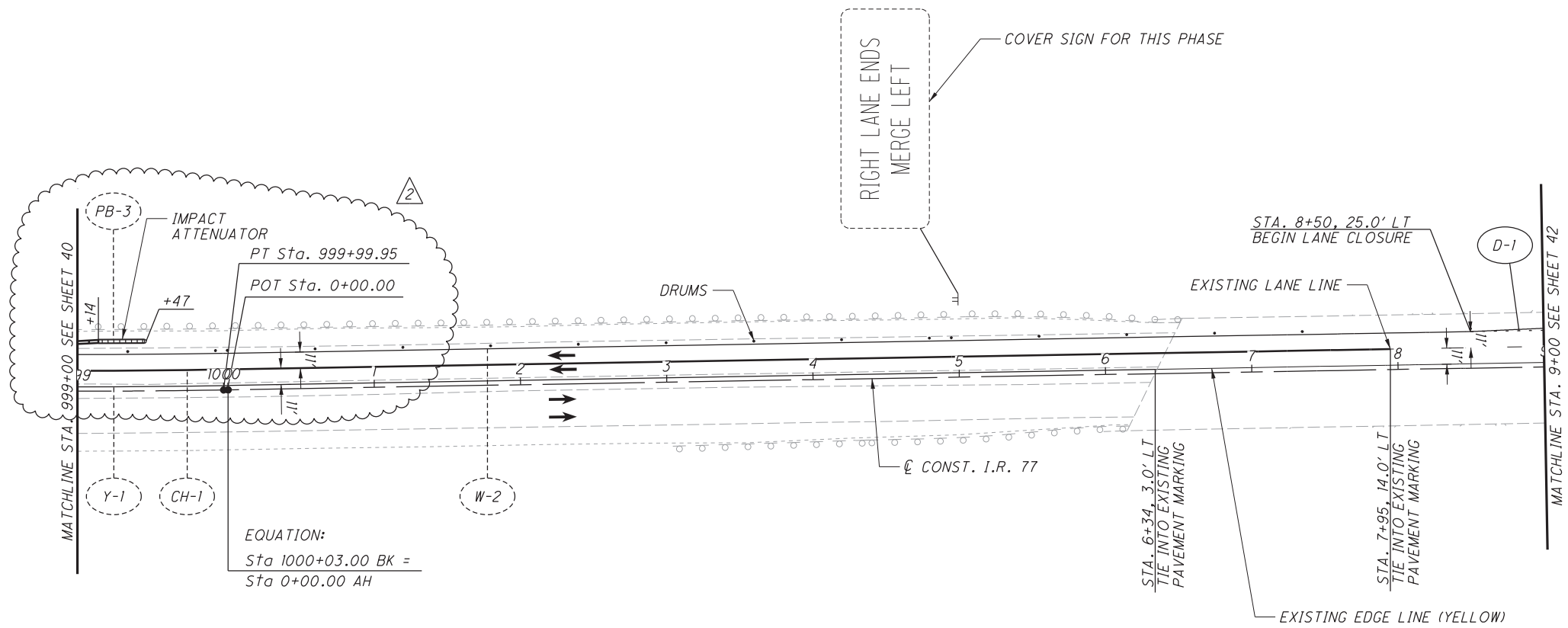
CALCULATED
MLL
CHECKED
SWC

0 50 100
HORIZONTAL
SCALE IN FEET

MAINTENANCE OF TRAFFIC - PHASE 1
I.R. 77 - STA. 999+00 TO STA. 9+00

CUY-77-13.80

41
170



EQUATION:
Sta 1000+03.00 BK =
Sta 0+00.00 AH

LEGEND:

- ITEM 622 - PORTABLE BARRIER
- ITEM 614 - WORK ZONE IMPACT ATTENUATOR
- DRUMS - SPACED PER STANDARD CONSTRUCTION DRAWING
- TRAFFIC FLOW DIRECTION
- WORK ZONE
- ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, PLACED THIS PHASE
- TEMPORARY PAVEMENT COMPLETED IN PRIOR PHASE
- PROPOSED PAVEMENT COMPLETED IN PRIOR PHASE

- ITEM 614 - WORK ZONE LANE LINE, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE EDGE LINE, WHITE, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE EDGE LINE, YELLOW, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE DOTTED LINE, CLASS 1, 642 PAINT
- PORTABLE BARRIER

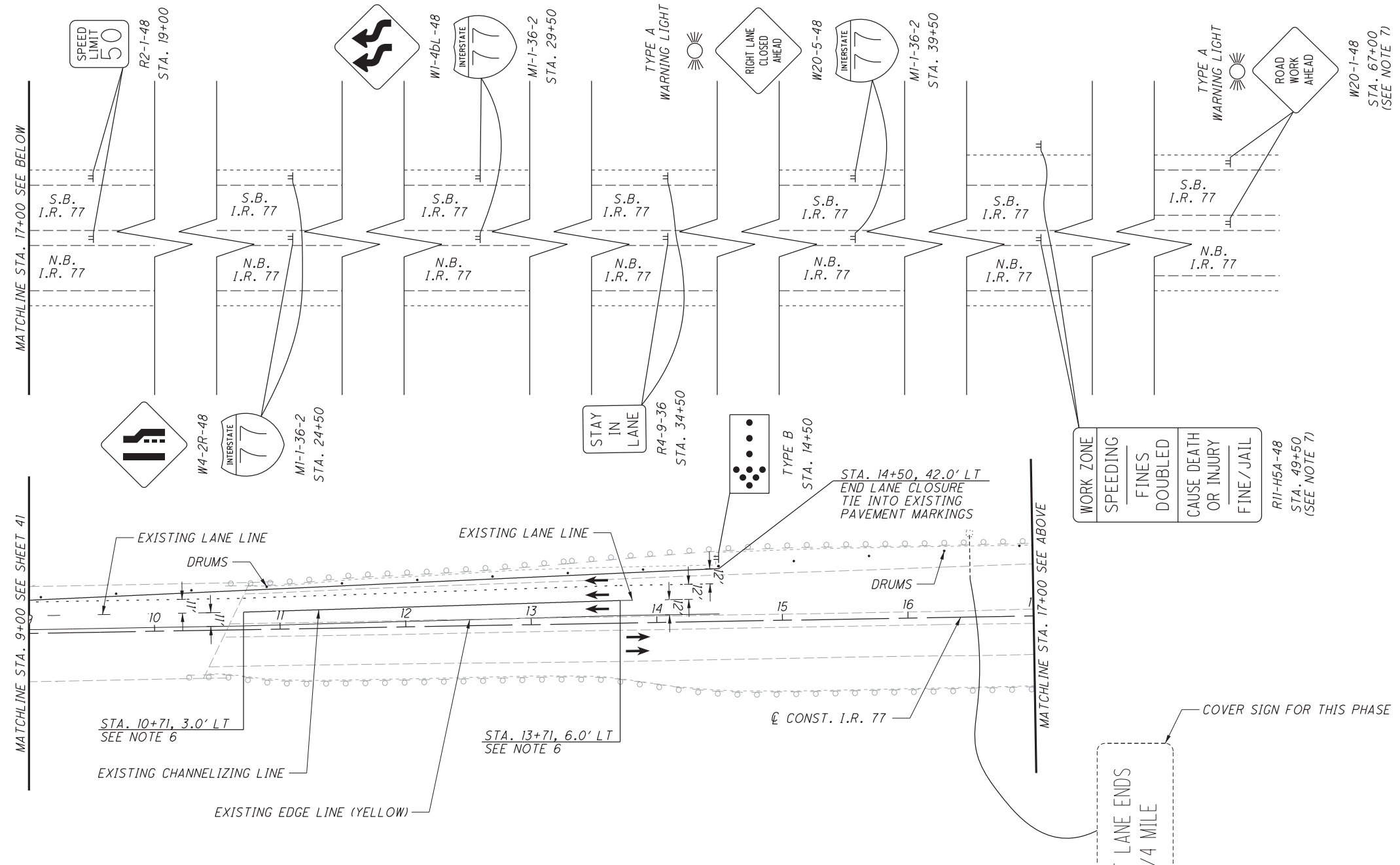
NOTES:

1. FOR SEQUENCE OF CONSTRUCTION NOTES, SEE SHEET 20
2. FOR MOT TYPICAL SECTIONS, SEE SHEETS 33 TO 37
3. THE CONTRACTOR SHALL COVER OR REMOVE ANY EXISTING SIGNAGE OR PAVEMENT MARKINGS IN CONFLICT WITH THE PROPOSED MOT LANE CONFIGURATION.
4. FOR LANE SHIFT SIGNING, SEE STANDARD CONSTRUCTION DRAWING MT-102.10 OR MT-102.20.
5. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF MT-99.30 FOR WORK ZONE DELINEATION FOR LANE SHIFTS AND CROSSOVERS.

RELEASED FOR CONSTRUCTION
BU02_2017.11.13_CCG6B.BU2.RFC_FC 5.pdf
11/20/2017 Brian.Link

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION
2	9/22/17	SHORTEN PCB TAPER FOR CONSTRUCTION ACCESS
ISSUE RECORD		

P:\B2388_CCG6B\Design\MOT\Sheets\B2388_MP2105.dgn Sheet 7/10/2017 3:19:45 PM mlutes



- ITEM 622 - PORTABLE BARRIER
- ITEM 614 - WORK ZONE IMPACT ATTENUATOR
- DRUMS - SPACED PER STANDARD CONSTRUCTION DRAWING
- TRAFFIC FLOW DIRECTION
- WORK ZONE
- ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, PLACED THIS PHASE
- TEMPORARY PAVEMENT COMPLETED IN PRIOR PHASE
- PROPOSED PAVEMENT COMPLETED IN PRIOR PHASE

- ITEM 614 - WORK ZONE LANE LINE, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE EDGE LINE, WHITE, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE EDGE LINE, YELLOW, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE DOTTED LINE, CLASS 1, 642 PAINT
- PORTABLE BARRIER

NOTES:

1. FOR SEQUENCE OF CONSTRUCTION NOTES, SEE SHEET 20
2. FOR MOT TYPICAL SECTIONS, SEE SHEETS 33 TO 37
3. THE CONTRACTOR SHALL COVER OR REMOVE ANY EXISTING SIGNAGE OR PAVEMENT MARKINGS IN CONFLICT WITH THE PROPOSED MOT LANE CONFIGURATION.
4. FOR LANE SHIFT SIGNING, SEE STANDARD CONSTRUCTION DRAWING MT-102.10 OR MT-102.20.
5. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF MT-99.30 FOR WORK ZONE DELINEATION FOR LANE SHIFTS AND CROSSOVERS.
6. THE CONTRACTOR SHALL UTILIZE THE EXISTING SHIFT & TAPER SHOWN WITHIN THE APPROXIMATE STATION RANGE.
7. SIGNS TO BE PLACED ALONG THE ORANGE AVENUE ENTRANCE RAMP ARE LISTED BELOW. SIGN STATIONING REFERENCES I.R. 77 AND THESE SIGNS SHALL BE PLACED ON BOTH SIDES OF THE RAMP.
R11-H5A-48 - STA. 48+00
W20-1-48 - STA. 51+00

RELEASED FOR CONSTRUCTION
 2017-07-11.CCG6B.RFC Plans.pdf
 07/12/2017 brian.link

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION
ISSUE RECORD		



**MAINTENANCE OF TRAFFIC - PHASE 1
RAMP J5 - STA. 9+00 TO END WORK**

CUY-77-13.80

42
170



CALCULATED
M.L.L.
CHECKED
S.W.C.

MAINTENANCE OF TRAFFIC - PHASE 1
RAMP J5 - STA. 222+00 TO STA. 232+00

CUY-77-13.80

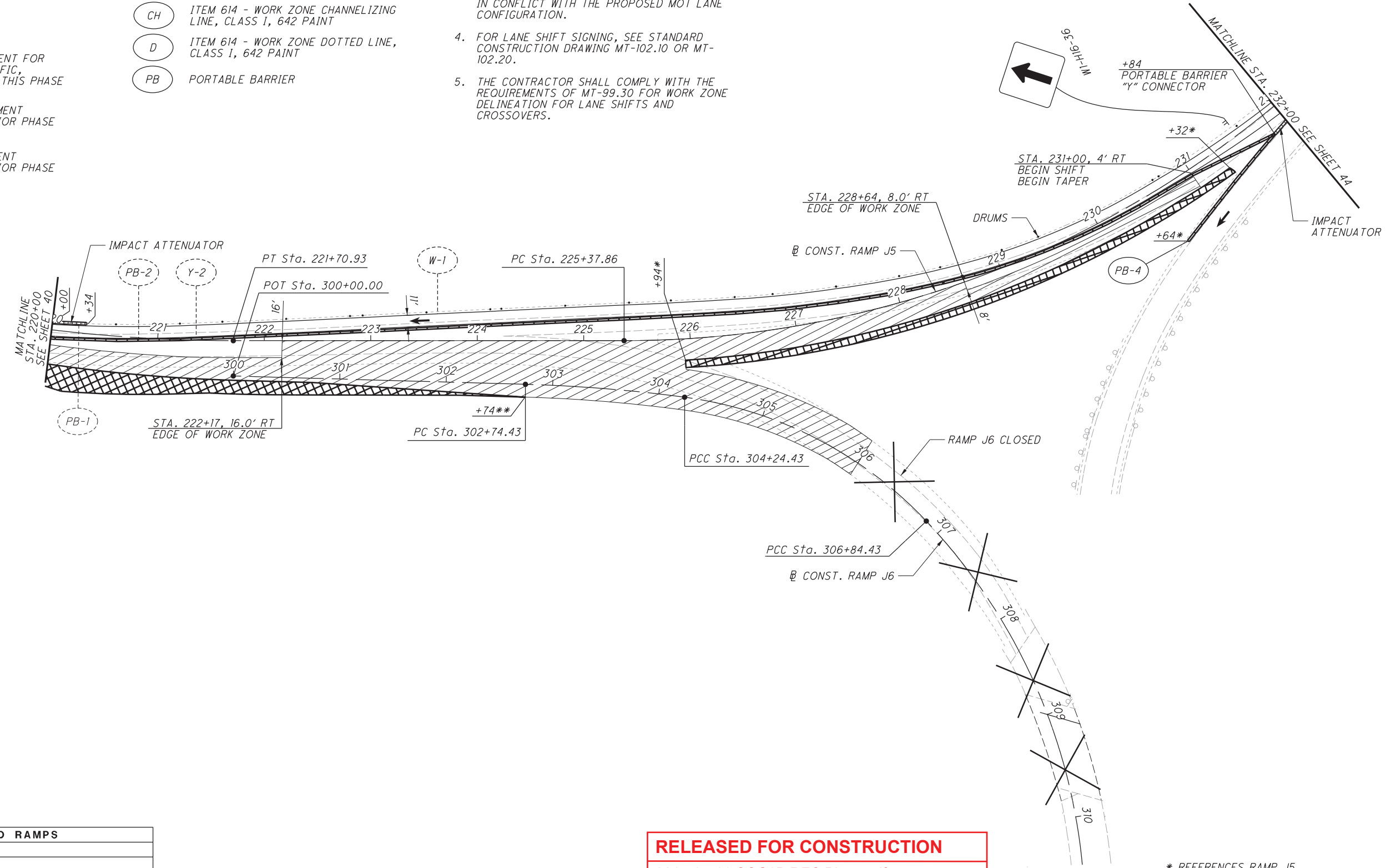
LEGEND:

- ITEM 622 - PORTABLE BARRIER
- ITEM 614 - WORK ZONE IMPACT ATTENUATOR
- DRUMS - SPACED PER STANDARD CONSTRUCTION DRAWING
- TRAFFIC FLOW DIRECTION
- WORK ZONE
- ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, PLACED THIS PHASE
- TEMPORARY PAVEMENT COMPLETED IN PRIOR PHASE
- PROPOSED PAVEMENT COMPLETED IN PRIOR PHASE

- ITEM 614 - WORK ZONE LANE LINE, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE EDGE LINE, WHITE, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE EDGE LINE, YELLOW, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE DOTTED LINE, CLASS 1, 642 PAINT
- PORTABLE BARRIER

NOTES:

1. FOR SEQUENCE OF CONSTRUCTION NOTES, SEE SHEET 20
2. FOR MOT TYPICAL SECTIONS, SEE SHEETS 33 TO 37
3. THE CONTRACTOR SHALL COVER OR REMOVE ANY EXISTING SIGNAGE OR PAVEMENT MARKINGS IN CONFLICT WITH THE PROPOSED MOT LANE CONFIGURATION.
4. FOR LANE SHIFT SIGNING, SEE STANDARD CONSTRUCTION DRAWING MT-102.10 OR MT-102.20.
5. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF MT-99.30 FOR WORK ZONE DELINEATION FOR LANE SHIFTS AND CROSSOVERS.
6. FOR PORTABLE BARRIER "Y" CONNECTION SEE PLAN INSERT SHEET, ON SHEET 21
7. FOR RAMP J6 DETOUR, SEE SHEETS 30 TO 32



P:\82388_CCG6B\Design\MOT\Sheets\82388_MP2106.dgn Sheet 7/10/2017 3:19:46 PM mlutes

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION

ISSUE RECORD

RELEASED FOR CONSTRUCTION
 2017-07-11.CCG6B.RFC Plans.pdf
 07/12/2017 brian.link

* REFERENCES RAMP J5
 ** REFERENCES RAMP J6











CALCULATED
M.L.L.
CHECKED
S.W.C.







**MAINTENANCE OF TRAFFIC - PHASE 1
RAMP J5 - STA. 232+00 TO END WORK**

CUY-77-13.80

44
170

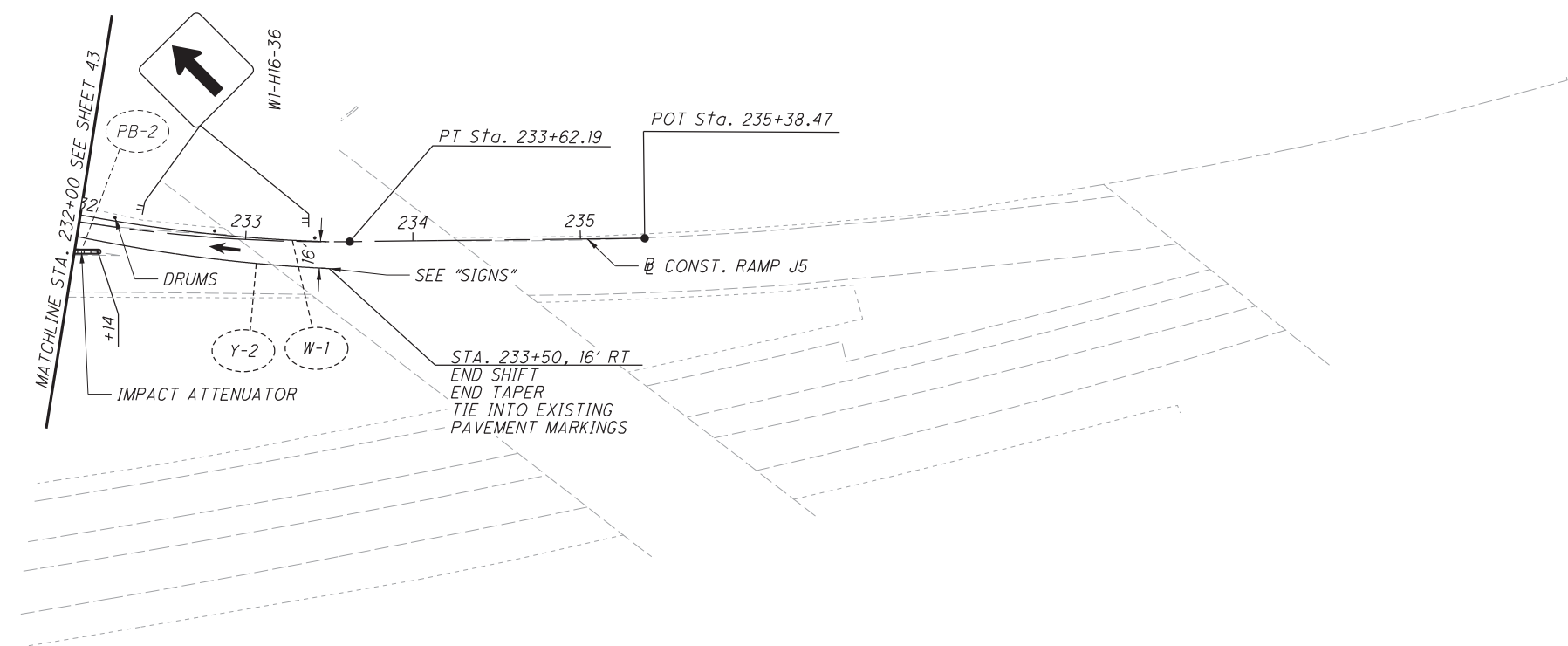
LEGEND:

-  ITEM 622 - PORTABLE BARRIER
-  ITEM 614 - WORK ZONE IMPACT ATTENUATOR
-  DRUMS - SPACED PER STANDARD CONSTRUCTION DRAWING
-  TRAFFIC FLOW DIRECTION
-  WORK ZONE
-  ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, PLACED THIS PHASE
-  TEMPORARY PAVEMENT COMPLETED IN PRIOR PHASE
-  PROPOSED PAVEMENT COMPLETED IN PRIOR PHASE


-  ITEM 614 - WORK ZONE LANE LINE, CLASS 1, 642 PAINT
-  ITEM 614 - WORK ZONE EDGE LINE, WHITE, CLASS 1, 642 PAINT
-  ITEM 614 - WORK ZONE EDGE LINE, YELLOW, CLASS 1, 642 PAINT
-  ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS 1, 642 PAINT
-  ITEM 614 - WORK ZONE DOTTED LINE, CLASS 1, 642 PAINT
-  PORTABLE BARRIER


NOTES:


1. FOR SEQUENCE OF CONSTRUCTION NOTES, SEE SHEET 20
2. FOR MOT TYPICAL SECTIONS, SEE SHEETS 33 TO 37
3. THE CONTRACTOR SHALL COVER OR REMOVE ANY EXISTING SIGNAGE OR PAVEMENT MARKINGS IN CONFLICT WITH THE PROPOSED MOT LANE CONFIGURATION.
4. FOR LANE SHIFT SIGNING, SEE STANDARD CONSTRUCTION DRAWING MT-102.10 OR MT-102.20.
5. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF MT-99.30 FOR WORK ZONE DELINEATION FOR LANE SHIFTS AND CROSSOVERS.




SIGNS:


 W1-4R-36


 W13-IP-24


 R11-H5A-48


 W20-1-48

THESE SIGNS SHALL PLACED ALONG RAMP J5 & I.R. 490 AND SPACED PER STANDARD CONSTRUCTION DRAWINGS MT-95.50 & MT-104.10.

RELEASED FOR CONSTRUCTION

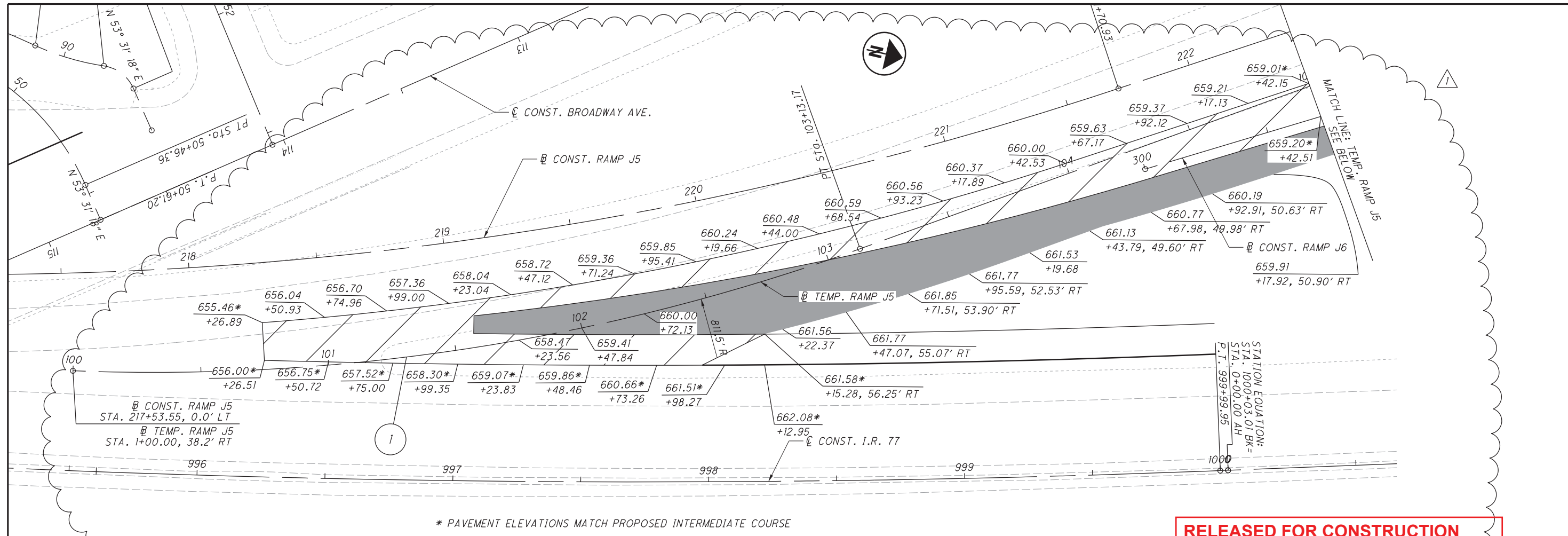
2017-07-11.CCG6B.RFC Plans.pdf

07/12/2017 brian.link

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION
ISSUE RECORD		

P:\B2388_CCG6B\Design\MOT\Sheets\MP2107.dgn Sheet 7/10/2017 3:19:47 PM mlutes

P:\82388_CCG6B\Design\MOT\Sheets\82388_MH2201.dgn Sheet 8/4/2017 2:08:15 PM mlutes



* PAVEMENT ELEVATIONS MATCH PROPOSED INTERMEDIATE COURSE

RELEASED FOR CONSTRUCTION
 2017-08-07.CCG6B.BU2.RFC Plans_FC 2.pdf
 03/01/2017 brian.link

LEGEND

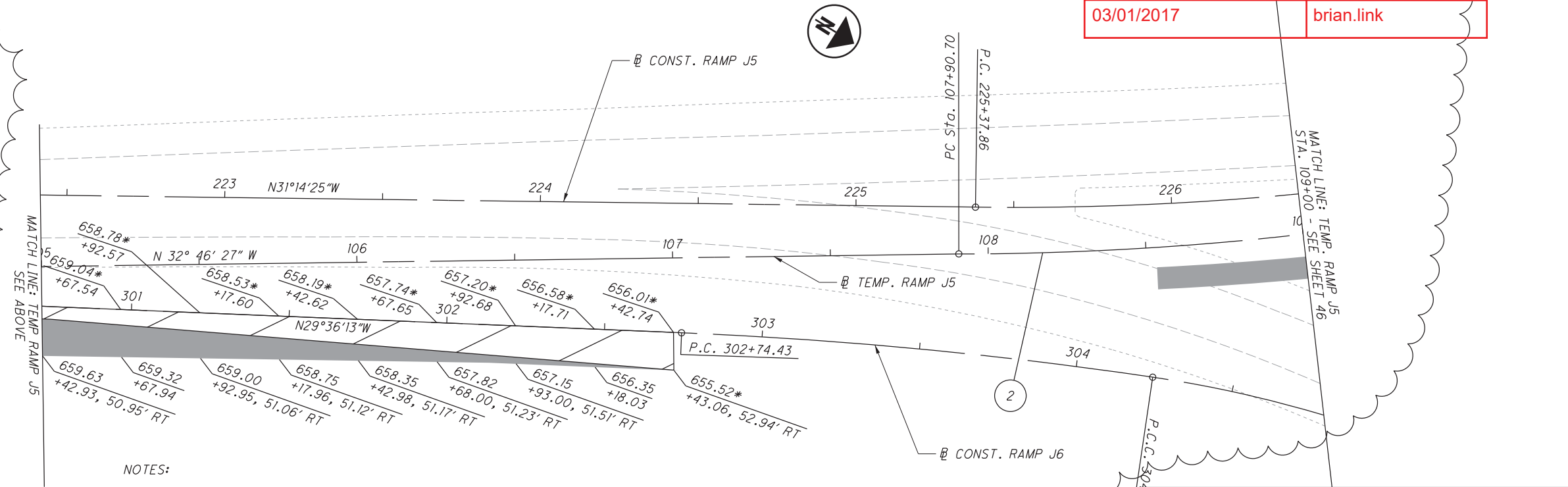
TEMPORARY PAVEMENT OVER PROPOSED COMPLETED PAVEMENT

TEMPORARY PAVEMENT

CURVE DATA

1

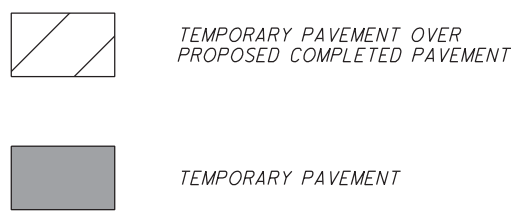
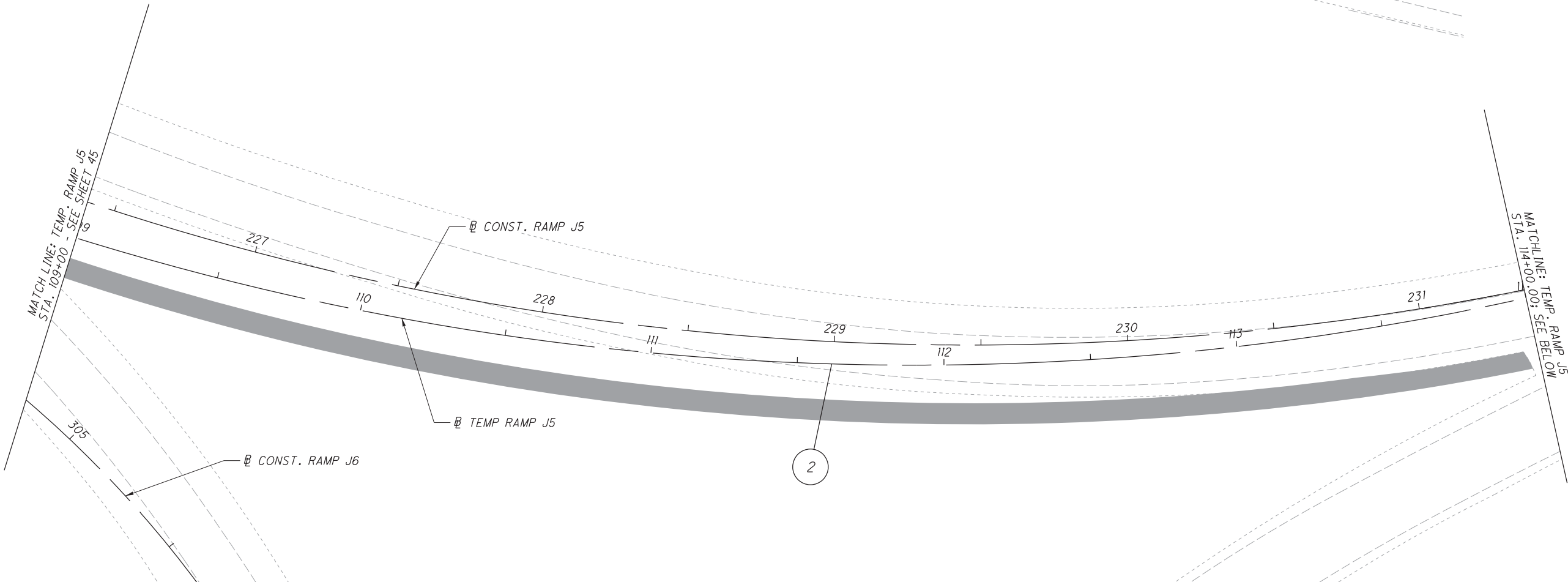
P.I. Sta. 101+58.56
 $\Delta = 22^\circ 06' 38''$ (LT)
 $D_c = 7^\circ 03' 37''$
 $R = 811.52'$
 $T = 158.56'$
 $L = 313.17'$
 $E = 15.34'$
 $C = 311.23'$
 $C.B. = N 21^\circ 43' 08'' W$



- NOTES:**
1. ALL TEMPORARY PAVEMENT IN THE GORE AREA OF I.R. 77 AND RAMP J5 MUST BE COMPLETE PRIOR TO THE BEGIN OF PHASE 2 CONSTRUCTION.
 2. CENTERLINE OF TEMP. RAMP J5 IS ALONG THE PHASE 3 OUTSIDE EDGE LINE OF THE RAMP J5 LANE.
 3. FOR MOT CROSSOVER TYPICAL SECTIONS SEE, SHEET 37

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION
1	8/3/17	ADDED DIMENSIONS AND OFFSETS FOR TEMPORARY PAVEMENT
ISSUE RECORD		

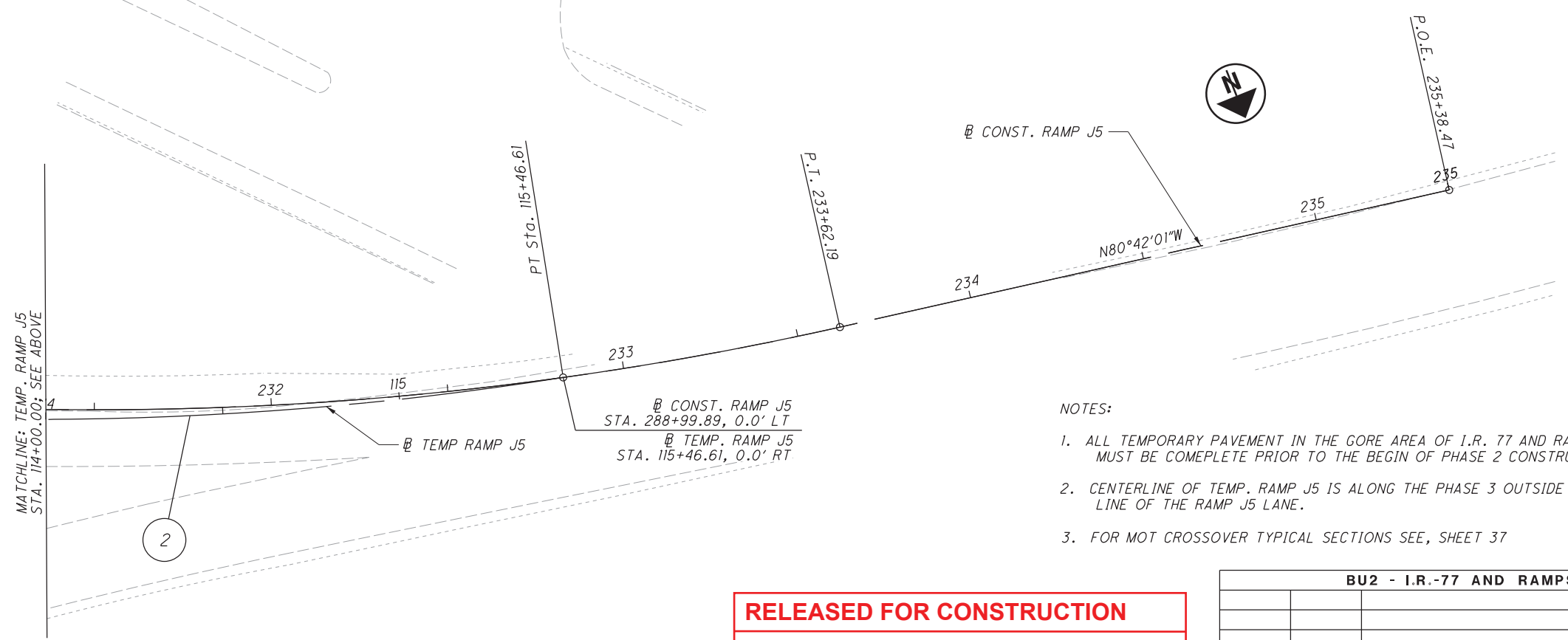
P:\82388_CCG6B\Design\MOT\Sheets\82388_MH2201.dgn Sheet 2 7/10/2017 3:19:49 PM mlutes



LEGEND

CURVE DATA

②
 P.I. Sta. 111+89.37
 $\Delta = 45^\circ 00' 29''$ (LT)
 $D_c = 5^\circ 57' 15''$
 $R = 962.29'$
 $T = 398.67'$
 $L = 755.91'$
 $E = 79.32'$
 $C = 736.63'$
 $C.B. = N 54^\circ 30' 27'' W$



- NOTES:**
1. ALL TEMPORARY PAVEMENT IN THE GORE AREA OF I.R. 77 AND RAMP J5 MUST BE COMPLETE PRIOR TO THE BEGIN OF PHASE 2 CONSTRUCTION.
 2. CENTERLINE OF TEMP. RAMP J5 IS ALONG THE PHASE 3 OUTSIDE EDGE LINE OF THE RAMP J5 LANE.
 3. FOR MOT CROSSOVER TYPICAL SECTIONS SEE, SHEET 37

RELEASED FOR CONSTRUCTION

2017-07-11.CCG6B.RFC Plans.pdf

07/12/2017 brian.link

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION
ISSUE RECORD		

CROSSOVER DETAIL PHASE 2 AND 3

CUY-77-13.80



46
170



CALCULATED MLL CHECKED SWC

**MAINTENANCE OF TRAFFIC - PHASE 2
I.R. 77 - BEGIN WORK TO STA. 975+00**

CUY-77-13.80

47
170

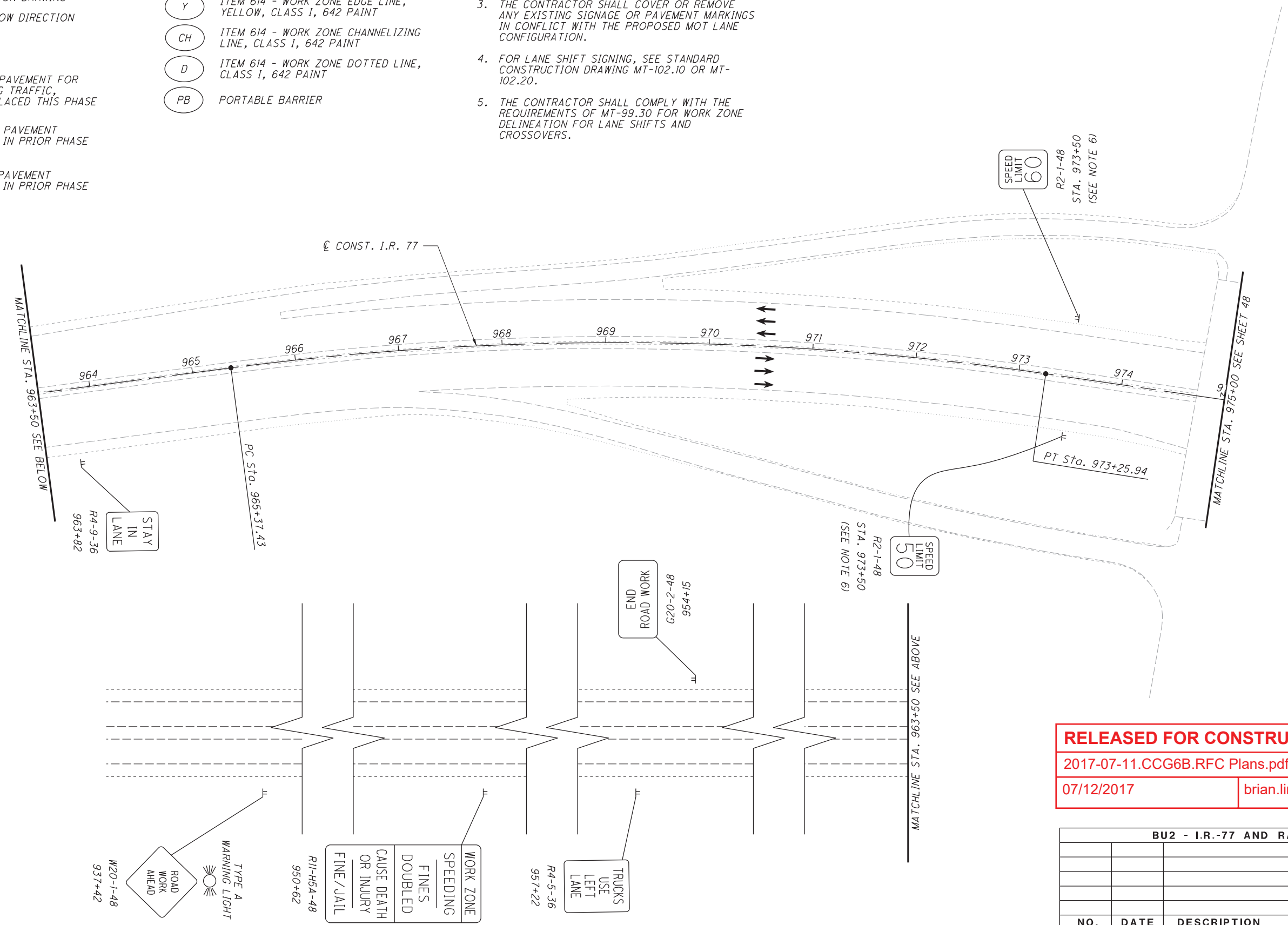
LEGEND:

- ITEM 622 - PORTABLE BARRIER
- ITEM 614 - WORK ZONE IMPACT ATTENUATOR
- DRUMS - SPACED PER STANDARD CONSTRUCTION DRAWING
- TRAFFIC FLOW DIRECTION
- WORK ZONE
- ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, PLACED THIS PHASE
- TEMPORARY PAVEMENT COMPLETED IN PRIOR PHASE
- PROPOSED PAVEMENT COMPLETED IN PRIOR PHASE

- ITEM 614 - WORK ZONE LANE LINE, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE EDGE LINE, WHITE, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE EDGE LINE, YELLOW, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE DOTTED LINE, CLASS 1, 642 PAINT
- PORTABLE BARRIER

NOTES:

1. FOR SEQUENCE OF CONSTRUCTION NOTES, SEE SHEET 20
2. FOR MOT TYPICAL SECTIONS, SEE SHEETS 33 TO 37
3. THE CONTRACTOR SHALL COVER OR REMOVE ANY EXISTING SIGNAGE OR PAVEMENT MARKINGS IN CONFLICT WITH THE PROPOSED MOT LANE CONFIGURATION.
4. FOR LANE SHIFT SIGNING, SEE STANDARD CONSTRUCTION DRAWING MT-102.10 OR MT-102.20.
5. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF MT-99.30 FOR WORK ZONE DELINEATION FOR LANE SHIFTS AND CROSSOVERS.
6. SIGNS SHALL BE INSTALLED NO LATER THAN AUGUST 1, 2017



RELEASED FOR CONSTRUCTION

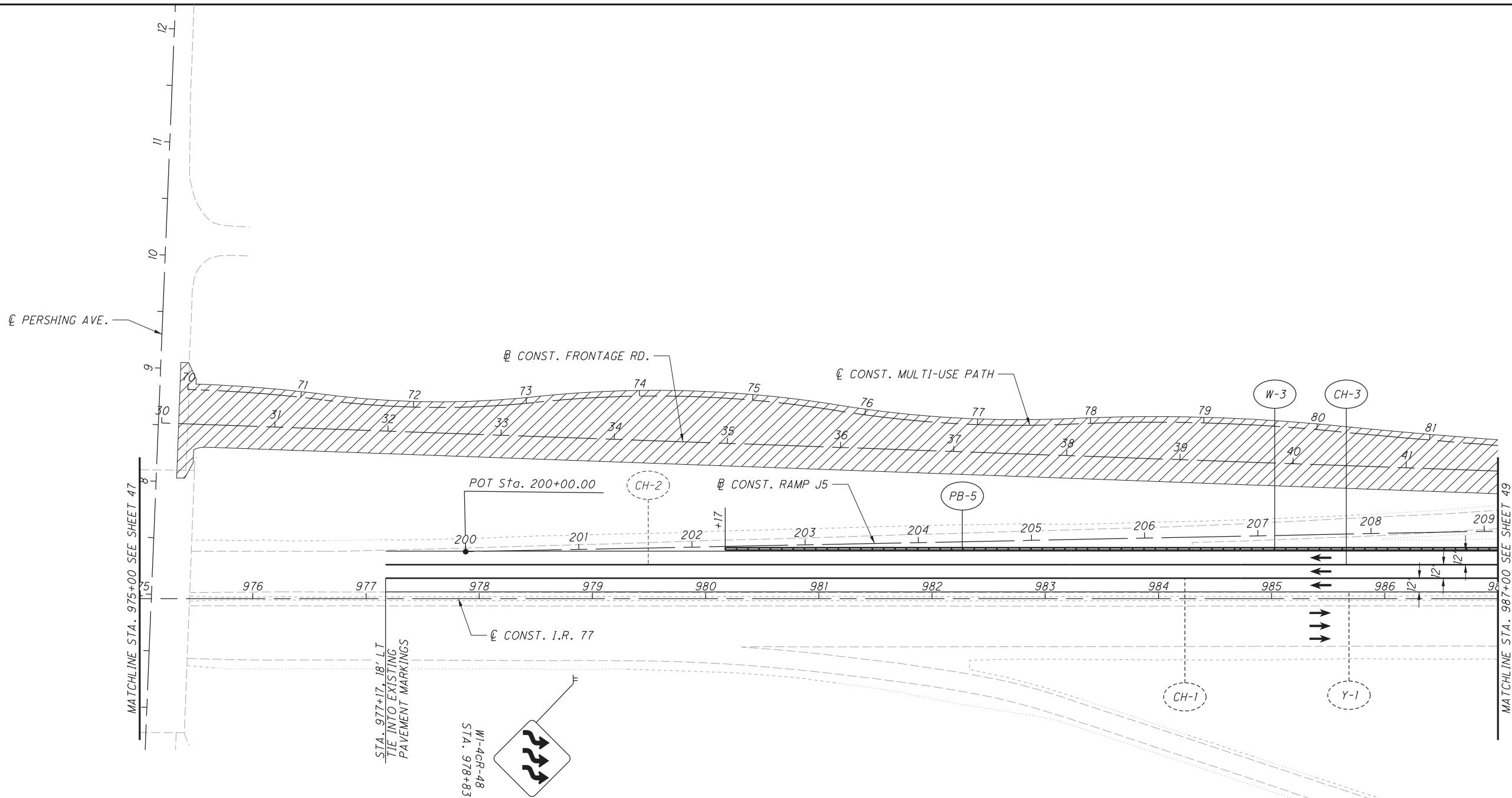
2017-07-11.CCG6B.RFC Plans.pdf

07/12/2017 [brian.link](#)

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION

ISSUE RECORD

P:\B2388_CCG6B\Design\MOT\Sheets\B2388_MP2202.dgn Sheet 7/10/2017 3:19:53 PM mlutes



LEGEND:

- ITEM 622 - PORTABLE BARRIER
- ITEM 614 - WORK ZONE IMPACT ATTENUATOR
- DRUMS - SPACED PER STANDARD CONSTRUCTION DRAWING
- TRAFFIC FLOW DIRECTION
- WORK ZONE
- ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, PLACED THIS PHASE
- TEMPORARY PAVEMENT COMPLETED IN PRIOR PHASE
- PROPOSED PAVEMENT COMPLETED IN PRIOR PHASE

- ITEM 614 - WORK ZONE LANE LINE, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE EDGE LINE, WHITE, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE EDGE LINE, YELLOW, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE DOTTED LINE, CLASS 1, 642 PAINT
- PORTABLE BARRIER

NOTES:

1. FOR SEQUENCE OF CONSTRUCTION NOTES, SEE SHEET 20
2. FOR MOT TYPICAL SECTIONS, SEE SHEETS 33 TO 37
3. THE CONTRACTOR SHALL COVER OR REMOVE ANY EXISTING SIGNAGE OR PAVEMENT MARKINGS IN CONFLICT WITH THE PROPOSED MOT LANE CONFIGURATION.
4. FOR LANE SHIFT SIGNING, SEE STANDARD CONSTRUCTION DRAWING MT-102.10 OR MT-102.20.
5. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF MT-99.30 FOR WORK ZONE DELINEATION FOR LANE SHIFTS AND CROSSOVERS.

RELEASED FOR CONSTRUCTION

2017-07-11.CCG6B.RFC Plans.pdf

07/12/2017 brian.link

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION
ISSUE RECORD		

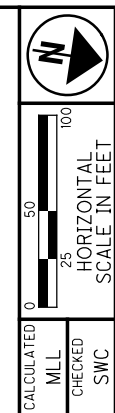
MAINTENANCE OF TRAFFIC - PHASE 2
I.R. 77 - STA. 975+00 TO STA. 987+00

0 50 100
HORIZONTAL SCALE IN FEET

CALCULATED
MLL
CHECKED
SWC

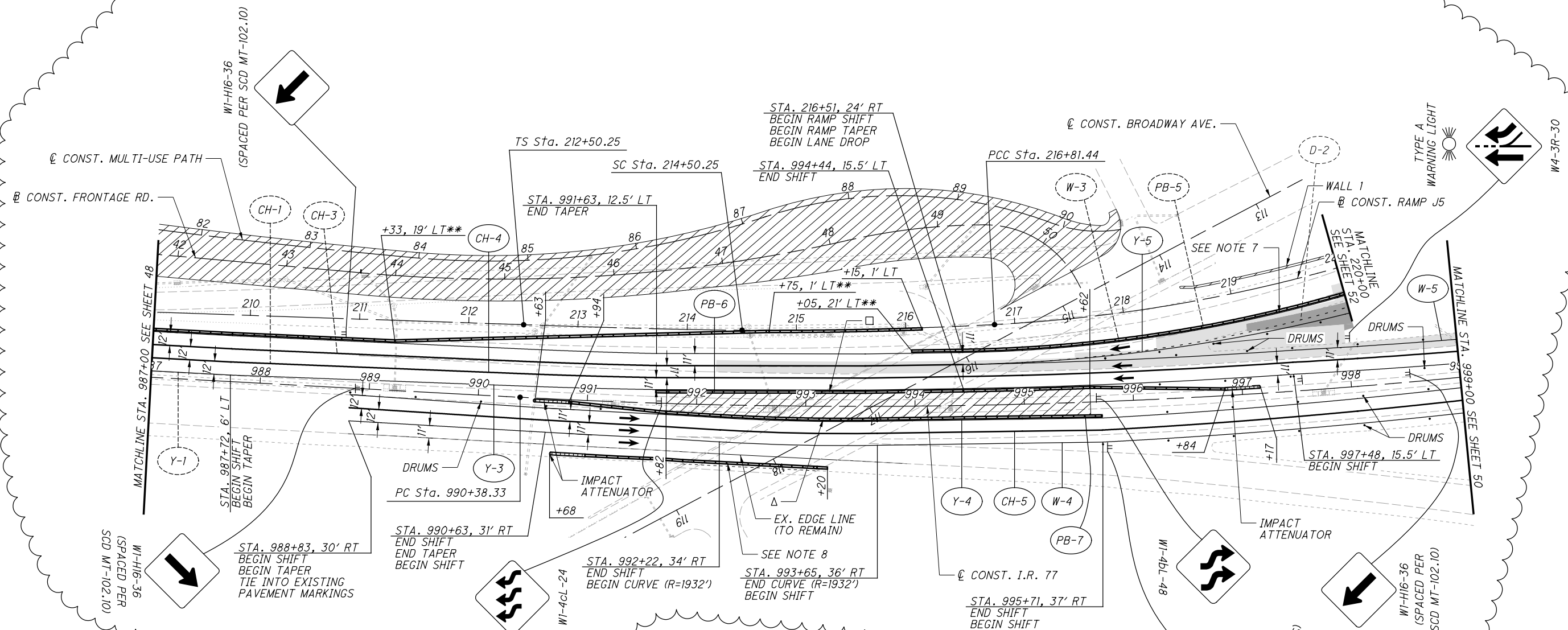
CUY-77-13.80

48
170



△ PORTABLE CONCRETE BARRIER SHALL BE ANCHORED FROM STA. 990+63 (RT) TO STA. 995+71 (RT). PROVIDE SIX ANCHORS PER BARRIER SEGMENT. BOLTS SHALL BE EMBEDDED A MINIMUM OF 6.5" INTO CONCRETE PAVEMENT AND SHALL BE GALVANIZED.

□ PORTABLE CONCRETE BARRIER SHALL BE ANCHORED FROM STA. 991+62 (LT) TO STA. 997+17 (LT). PROVIDE SIX ANCHORS PER BARRIER SEGMENT. BOLTS SHALL BE EMBEDDED A MINIMUM OF 6.5" INTO CONCRETE PAVEMENT AND SHALL BE GALVANIZED.



LEGEND:

- ITEM 622 - PORTABLE BARRIER
- ITEM 614 - WORK ZONE IMPACT ATTENUATOR
- DRUMS - SPACED PER STANDARD CONSTRUCTION DRAWING
- TRAFFIC FLOW DIRECTION
- WORK ZONE
- ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, PLACED THIS PHASE
- TEMPORARY PAVEMENT COMPLETED IN PRIOR PHASE
- PROPOSED PAVEMENT COMPLETED IN PRIOR PHASE

- ITEM 614 - WORK ZONE LANE LINE, CLASS I, 642 PAINT
- ITEM 614 - WORK ZONE EDGE LINE, WHITE, CLASS I, 642 PAINT
- ITEM 614 - WORK ZONE EDGE LINE, YELLOW, CLASS I, 642 PAINT
- ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS I, 642 PAINT
- ITEM 614 - WORK ZONE DOTTED LINE, CLASS I, 642 PAINT
- PORTABLE BARRIER

NOTES:

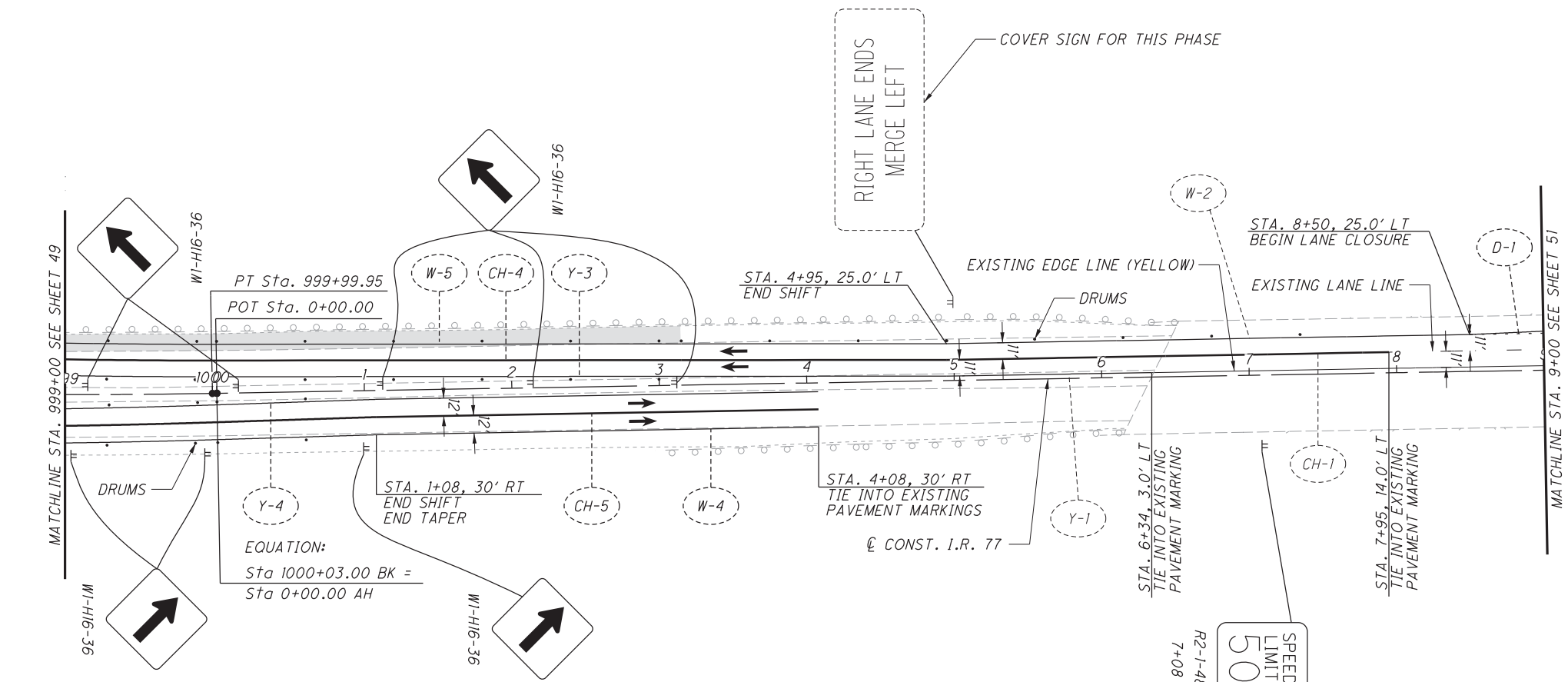
1. FOR SEQUENCE OF CONSTRUCTION NOTES, SEE SHEET 20
2. FOR MOT TYPICAL SECTIONS, SEE SHEETS 33 TO 37
3. THE CONTRACTOR SHALL COVER OR REMOVE ANY EXISTING SIGNAGE OR PAVEMENT MARKINGS IN CONFLICT WITH THE PROPOSED MOT LANE CONFIGURATION.
4. FOR LANE SHIFT SIGNING, SEE STANDARD CONSTRUCTION DRAWING MT-102.10 OR MT-102.20.
5. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF MT-99.30 FOR WORK ZONE DELINEATION FOR LANE SHIFTS AND CROSSOVERS.
6. FOR TEMPORARY PAVEMENT DETAILS SEE SHEET 45
7. MINIMUM RADIUS OF OUTSIDE EDGE LINE SHALL BE 1328'.
8. PCB SHALL BE PLACED 2.0' OFF OF EXISTING EDGE OF SHOULDER

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION
1	8/3/17	ADDED PCB TAPER ALONG RAMP J5
2	9/22/17	ADJUSTED WALL 1 PLAN VIEW ADJUSTED DOTTED LINE TAPER ADJUSTED I.A. LOCATION FOR CONSTRUCTION ACCESS ADJUSTED WORK ZONE AND PCB LOCATION
4	1/24/18	ADDED PCB ALONG NORTHBOUND I.R. 77
ISSUE RECORD		

MAINTENANCE OF TRAFFIC - PHASE 2
I.R. 77 - STA. 987+00 TO STA. 999+00

CUY-77-13.80

49
170



LEGEND:

- ITEM 622 - PORTABLE BARRIER
- ITEM 614 - WORK ZONE IMPACT ATTENUATOR
- DRUMS - SPACED PER STANDARD CONSTRUCTION DRAWING
- TRAFFIC FLOW DIRECTION
- WORK ZONE
- ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, PLACED THIS PHASE
- TEMPORARY PAVEMENT COMPLETED IN PRIOR PHASE
- PROPOSED PAVEMENT COMPLETED IN PRIOR PHASE

- ITEM 614 - WORK ZONE LANE LINE, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE EDGE LINE, WHITE, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE EDGE LINE, YELLOW, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE DOTTED LINE, CLASS 1, 642 PAINT
- PORTABLE BARRIER

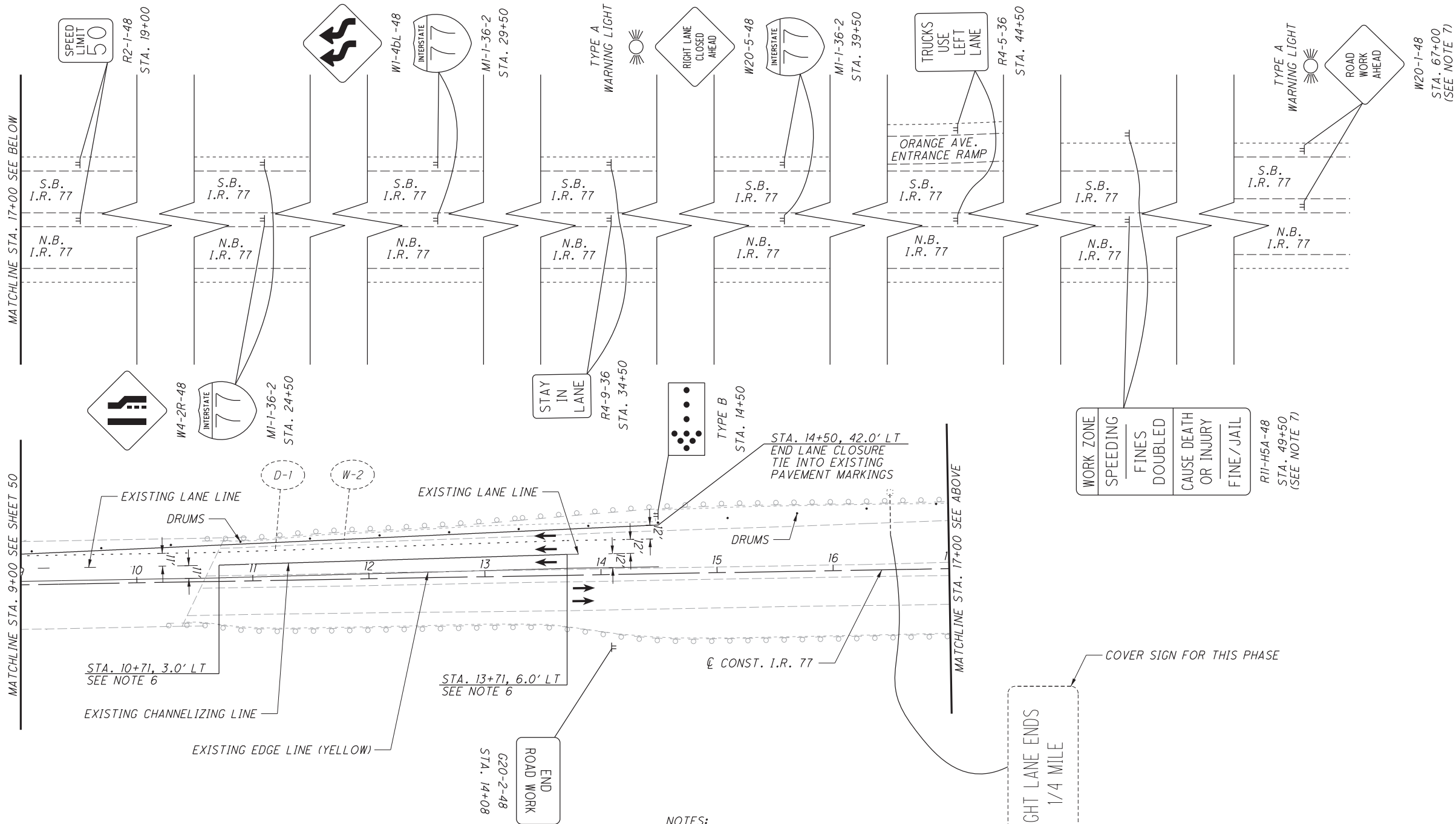
NOTES:

1. FOR SEQUENCE OF CONSTRUCTION NOTES, SEE SHEET 20
2. FOR MOT TYPICAL SECTIONS, SEE SHEETS 33 TO 37
3. THE CONTRACTOR SHALL COVER OR REMOVE ANY EXISTING SIGNAGE OR PAVEMENT MARKINGS IN CONFLICT WITH THE PROPOSED MOT LANE CONFIGURATION.
4. FOR LANE SHIFT SIGNING, SEE STANDARD CONSTRUCTION DRAWING MT-102.10 OR MT-102.20.
5. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF MT-99.30 FOR WORK ZONE DELINEATION FOR LANE SHIFTS AND CROSSOVERS.

RELEASED FOR CONSTRUCTION
2017-07-11.CCG6B.RFC Plans.pdf
07/12/2017 brian.link

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION

P:\82388_CCG6B\Design\MOT\Sheets\B2388_MP2205.dgn_Sheet_7/10/2017 3:19:57 PM mlutes



LEGEND:

- ITEM 622 - PORTABLE BARRIER
- ITEM 614 - WORK ZONE IMPACT ATTENUATOR
- DRUMS - SPACED PER STANDARD CONSTRUCTION DRAWING
- TRAFFIC FLOW DIRECTION
- WORK ZONE
- ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, PLACED THIS PHASE
- TEMPORARY PAVEMENT COMPLETED IN PRIOR PHASE
- PROPOSED PAVEMENT COMPLETED IN PRIOR PHASE
- ITEM 614 - WORK ZONE LANE LINE, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE EDGE LINE, WHITE, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE EDGE LINE, YELLOW, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE DOTTED LINE, CLASS 1, 642 PAINT
- PORTABLE BARRIER

NOTES:

1. FOR SEQUENCE OF CONSTRUCTION NOTES, SEE SHEET 20
2. FOR MOT TYPICAL SECTIONS, SEE SHEETS 33 TO 37
3. THE CONTRACTOR SHALL COVER OR REMOVE ANY EXISTING SIGNAGE OR PAVEMENT MARKINGS IN CONFLICT WITH THE PROPOSED MOT LANE CONFIGURATION.
4. FOR LANE SHIFT SIGNING, SEE STANDARD CONSTRUCTION DRAWING MT-102.10 OR MT-102.20.
5. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF MT-99.30 FOR WORK ZONE DELINEATION FOR LANE SHIFTS AND CROSSOVERS.
6. THE CONTRACTOR SHALL UTILIZE THE EXISTING SHIFT & TAPER SHOWN WITHIN THE APPROXIMATE STATION RANGE.
7. SIGNS TO BE PLACED ALONG THE ORANGE AVENUE ENTRANCE RAMP ARE LISTED BELOW. SIGN STATIONING REFERENCES I.R. 77 AND THESE SIGNS SHALL BE PLACED ON BOTH SIDES OF THE RAMP.
R11-H5A-48 - STA. 48+00
W20-1-48 - STA. 51+00

RELEASED FOR CONSTRUCTION

2017-07-11.CCG6B.RFC Plans.pdf

07/12/2017 brian.link

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION
ISSUE RECORD		

CALCULATED MLL CHECKED SWC

0 50 100

HORIZONTAL SCALE IN FEET

MAINTENANCE OF TRAFFIC - PHASE 2

I.R. 77 - STA. 9+00 TO END WORK

CUY-77-13.80

51
170

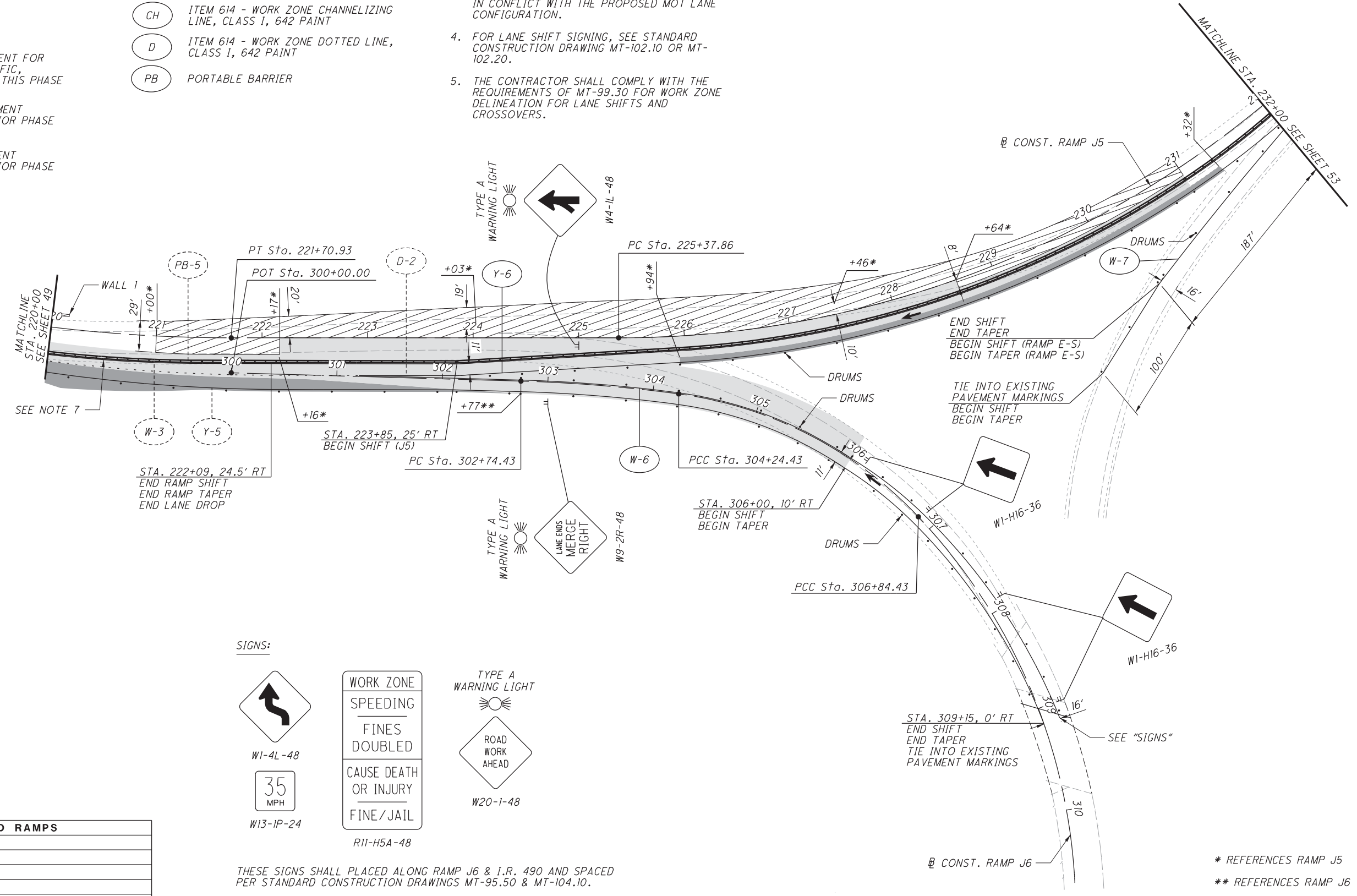
LEGEND:

- ITEM 622 - PORTABLE BARRIER
- ITEM 614 - WORK ZONE IMPACT ATTENUATOR
- DRUMS - SPACED PER STANDARD CONSTRUCTION DRAWING
- TRAFFIC FLOW DIRECTION
- WORK ZONE
- ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, PLACED THIS PHASE
- TEMPORARY PAVEMENT COMPLETED IN PRIOR PHASE
- PROPOSED PAVEMENT COMPLETED IN PRIOR PHASE

- ITEM 614 - WORK ZONE LANE LINE, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE EDGE LINE, WHITE, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE EDGE LINE, YELLOW, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE DOTTED LINE, CLASS 1, 642 PAINT
- PORTABLE BARRIER

NOTES:

1. FOR SEQUENCE OF CONSTRUCTION NOTES, SEE SHEET 20
2. FOR MOT TYPICAL SECTIONS, SEE SHEETS 33 TO 37
3. THE CONTRACTOR SHALL COVER OR REMOVE ANY EXISTING SIGNAGE OR PAVEMENT MARKINGS IN CONFLICT WITH THE PROPOSED MOT LANE CONFIGURATION.
4. FOR LANE SHIFT SIGNING, SEE STANDARD CONSTRUCTION DRAWING MT-102.10 OR MT-102.20.
5. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF MT-99.30 FOR WORK ZONE DELINEATION FOR LANE SHIFTS AND CROSSOVERS.
6. FOR TEMPORARY PAVEMENT DETAILS SEE SHEET 45
7. MINIMUM RADIUS OF OUTSIDE EDGE LINE SHALL BE 1328'.



SIGNS:

- W1-4L-48
- W13-1P-24
- R11-H5A-48
- W20-1-48

THESE SIGNS SHALL PLACED ALONG RAMP J6 & I.R. 490 AND SPACED PER STANDARD CONSTRUCTION DRAWINGS MT-95.50 & MT-104.10.

P:\82388_CCG6B\Design\MOT\Sheets\82388_MP2206.dgn_Sheet 7/10/2017 3:19:58 PM mlutes

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION



CALCULATED
M.L.L.
CHECKED
S.W.C.

**MAINTENANCE OF TRAFFIC - PHASE 2
RAMP J5 - STA. 232+00 TO END WORK**

CUY-77-13.80

53
170

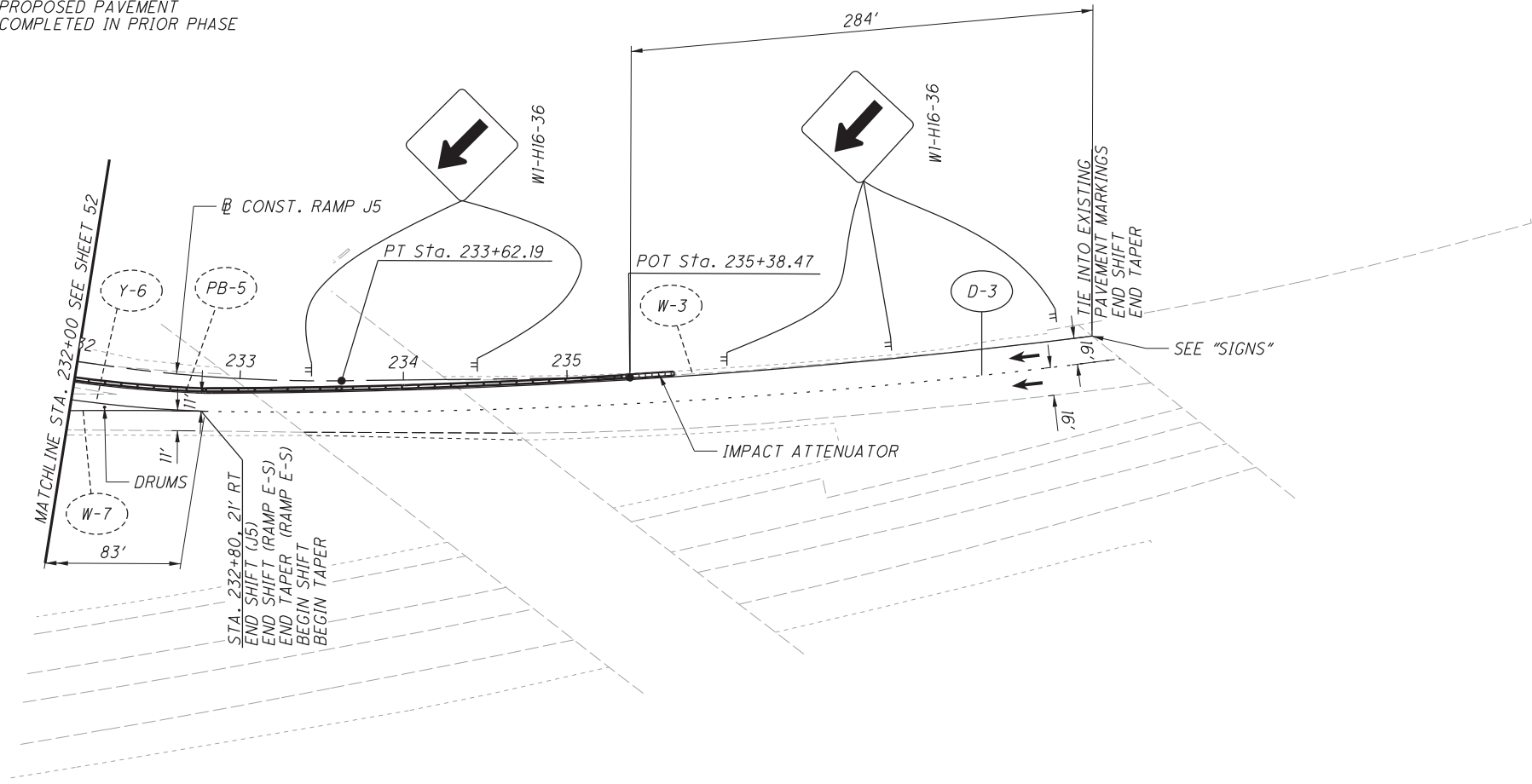
LEGEND:

- ITEM 622 - PORTABLE BARRIER
- ITEM 614 - WORK ZONE IMPACT ATTENUATOR
- DRUMS - SPACED PER STANDARD CONSTRUCTION DRAWING
- TRAFFIC FLOW DIRECTION
- WORK ZONE
- ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, PLACED THIS PHASE
- TEMPORARY PAVEMENT COMPLETED IN PRIOR PHASE
- PROPOSED PAVEMENT COMPLETED IN PRIOR PHASE

- ITEM 614 - WORK ZONE LANE LINE, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE EDGE LINE, WHITE, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE EDGE LINE, YELLOW, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE DOTTED LINE, CLASS 1, 642 PAINT
- PORTABLE BARRIER

NOTES:

1. FOR SEQUENCE OF CONSTRUCTION NOTES, SEE SHEET 20
2. FOR MOT TYPICAL SECTIONS, SEE SHEETS 33 TO 37
3. THE CONTRACTOR SHALL COVER OR REMOVE ANY EXISTING SIGNAGE OR PAVEMENT MARKINGS IN CONFLICT WITH THE PROPOSED MOT LANE CONFIGURATION.
4. FOR LANE SHIFT SIGNING, SEE STANDARD CONSTRUCTION DRAWING MT-102.10 OR MT-102.20.
5. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF MT-99.30 FOR WORK ZONE DELINEATION FOR LANE SHIFTS AND CROSSOVERS.



SIGNS:

W1-4L-48

W13-1P-24

R11-H5A-48

W20-1-48

TYPE A WARNING LIGHT

THESE SIGNS SHALL BE PLACED ALONG RAMP J5 & I.R. 490 AND SPACED PER STANDARD CONSTRUCTION DRAWINGS MT-95.50 & MT-104.10.

RELEASED FOR CONSTRUCTION

2017-07-11.CCG6B.RFC Plans.pdf

07/12/2017 brian.link

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION

ISSUE RECORD

P:\B2388_CCG6B\Design\MOT\Sheets\B2388_MP2207.dgn_Sheet 7/10/2017 3:20:00 PM mlutes



CALCULATED
M.L.L.
CHECKED
S.W.C.

MAINTENANCE OF TRAFFIC - PHASE 3
I.R. 77 - BEGIN WORK TO STA. 975+00

CUY-77-13.80

54
170

2

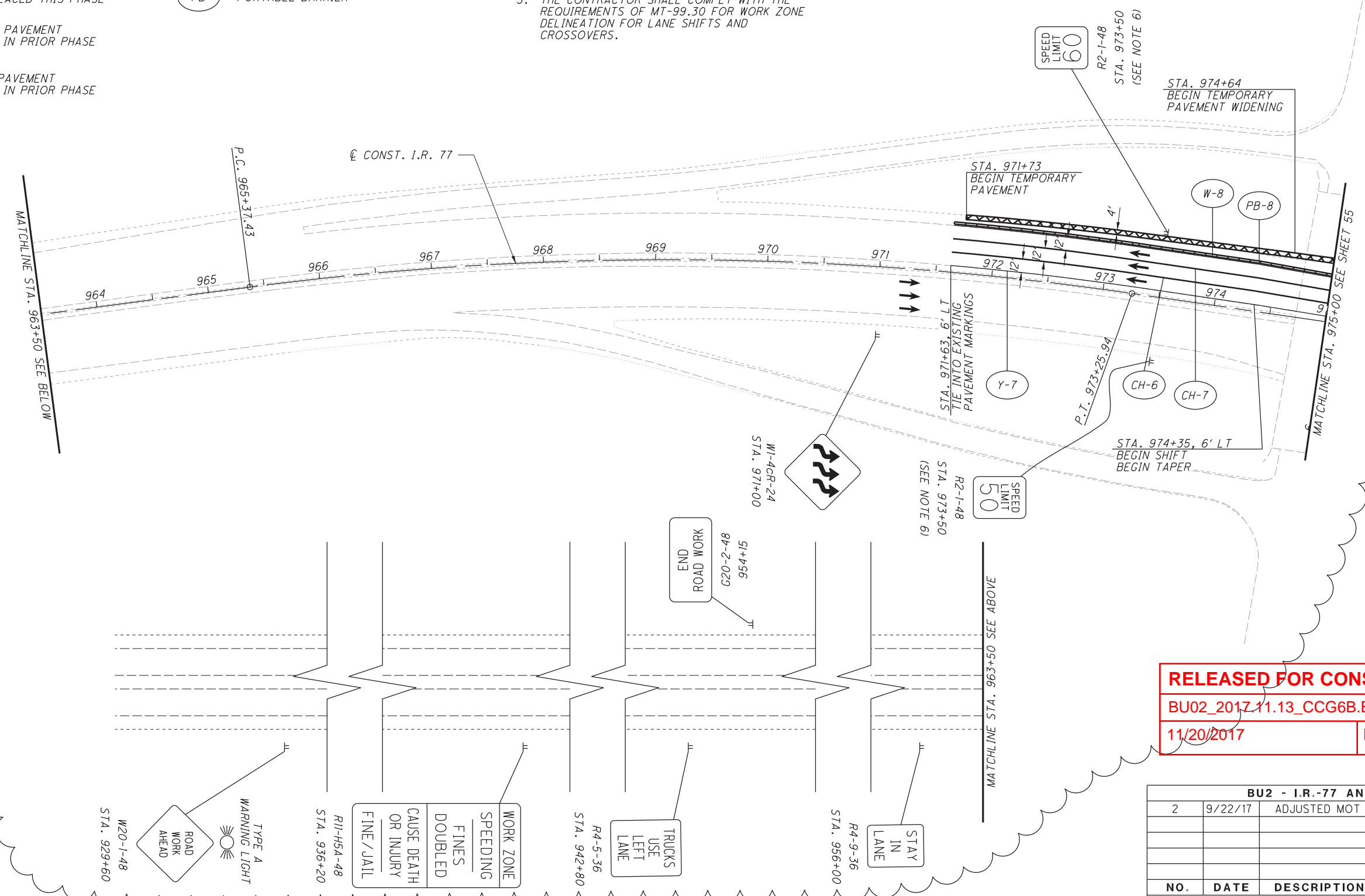
LEGEND:

- ITEM 622 - PORTABLE BARRIER
- ITEM 614 - WORK ZONE IMPACT ATTENUATOR
- DRUMS - SPACED PER STANDARD CONSTRUCTION DRAWING
- TRAFFIC FLOW DIRECTION
- WORK ZONE
- ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, PLACED THIS PHASE
- TEMPORARY PAVEMENT COMPLETED IN PRIOR PHASE
- PROPOSED PAVEMENT COMPLETED IN PRIOR PHASE

- ITEM 614 - WORK ZONE LANE LINE, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE EDGE LINE, WHITE, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE EDGE LINE, YELLOW, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE DOTTED LINE, CLASS 1, 642 PAINT
- PORTABLE BARRIER

NOTES:

1. FOR SEQUENCE OF CONSTRUCTION NOTES, SEE SHEET 20
2. FOR MOT TYPICAL SECTIONS, SEE SHEETS 33 TO 37
3. THE CONTRACTOR SHALL COVER OR REMOVE ANY EXISTING SIGNAGE OR PAVEMENT MARKINGS IN CONFLICT WITH THE PROPOSED MOT LANE CONFIGURATION.
4. FOR LANE SHIFT SIGNING, SEE STANDARD CONSTRUCTION DRAWING MT-102.10 OR MT-102.20.
5. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF MT-99.30 FOR WORK ZONE DELINEATION FOR LANE SHIFTS AND CROSSOVERS.
6. SIGNS SHALL BE INSTALLED NO LATER THAN AUGUST 1, 2017.



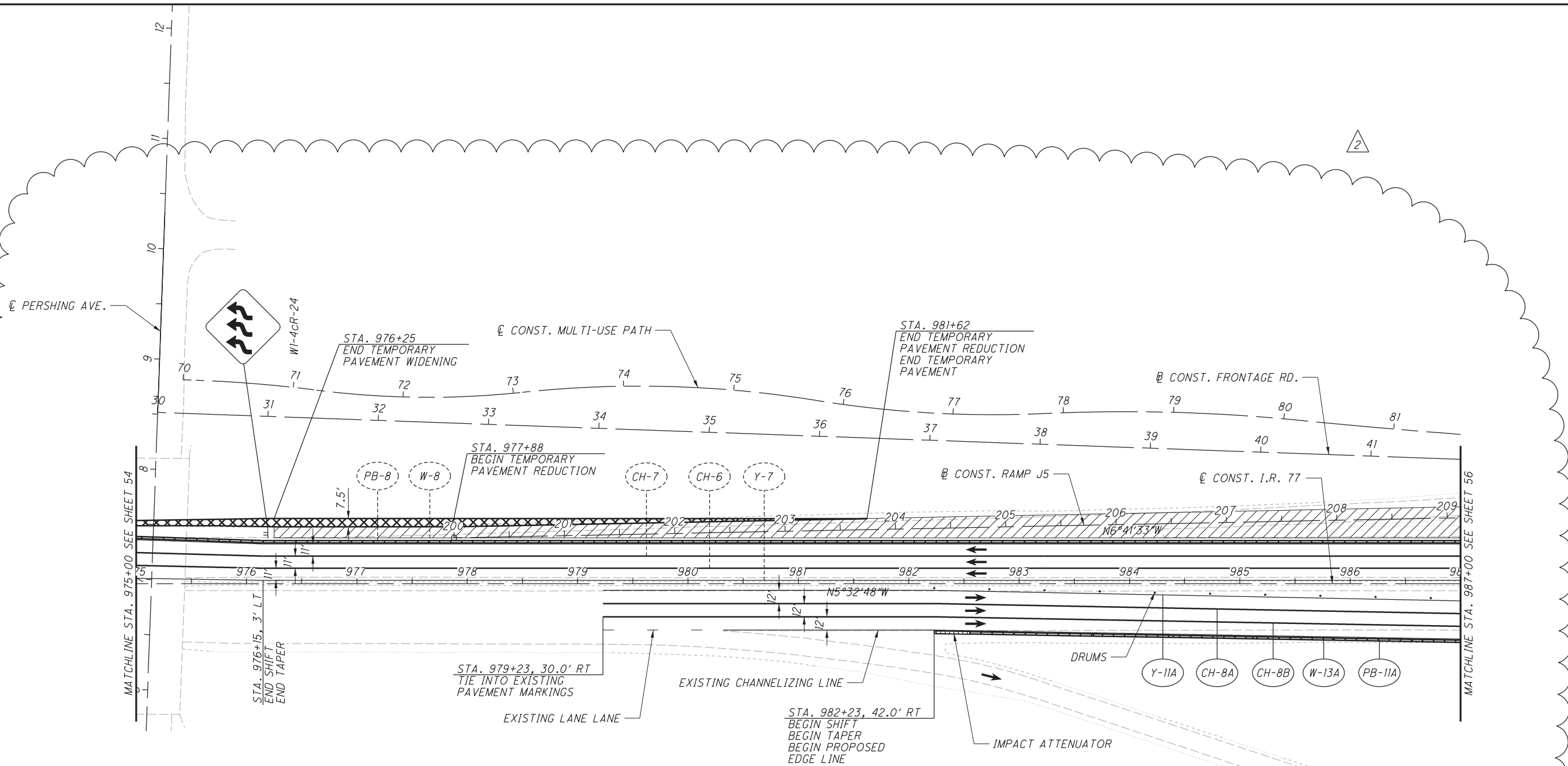
RELEASED FOR CONSTRUCTION

BU02_2017.11.13_CCG6B.BU2.RFC_FC 5.pdf

11/20/2017 Brian.Link

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION
2	9/22/17	ADJUSTED MOT PHASE 3 N.B. SHIFT
ISSUE RECORD		

P:\82388_CCG6B\Design\MOT\Sheets\82388_MP2301.dgn Sheet 9/22/2017 1:46:35 PM milutes



LEGEND:

- ITEM 622 - PORTABLE BARRIER
- ITEM 614 - WORK ZONE IMPACT ATTENUATOR
- DRUMS - SPACED PER STANDARD CONSTRUCTION DRAWING
- TRAFFIC FLOW DIRECTION
- WORK ZONE
- ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, PLACED THIS PHASE
- TEMPORARY PAVEMENT COMPLETED IN PRIOR PHASE
- PROPOSED PAVEMENT COMPLETED IN PRIOR PHASE

- ITEM 614 - WORK ZONE LANE LINE, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE EDGE LINE, WHITE, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE EDGE LINE, YELLOW, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE DOTTED LINE, CLASS 1, 642 PAINT
- PORTABLE BARRIER

NOTES:

1. FOR SEQUENCE OF CONSTRUCTION NOTES, SEE SHEET 20
2. FOR MOT TYPICAL SECTIONS, SEE SHEETS 33 TO 37
3. THE CONTRACTOR SHALL COVER OR REMOVE ANY EXISTING SIGNAGE OR PAVEMENT MARKINGS IN CONFLICT WITH THE PROPOSED MOT LANE CONFIGURATION.
4. FOR LANE SHIFT SIGNING, SEE STANDARD CONSTRUCTION DRAWING MT-102.10 OR MT-102.20.
5. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF MT-99.30 FOR WORK ZONE DELINEATION FOR LANE SHIFTS AND CROSSOVERS.

RELEASED FOR CONSTRUCTION

BU02_2017.11.13_CCG6B.BU2.RFC_FC 5.pdf

11/20/2017 Brian Link

* REFERENCES I.R. 77 STATIONING
** REFERENCES RAMP J5

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION
2	9/22/17	ADJUSTED MOT PHASE 3 N.B. SHIFT
ISSUE RECORD		

P:\B2388_CCG6B\Design\MOT\Sheets\B2388_MP2302.dgn Sheet 9/22/2017 1:46:36 PM mlutes

NOTES:

- FOR SEQUENCE OF CONSTRUCTION NOTES, SEE SHEET 20
- FOR MOT TYPICAL SECTIONS, SEE SHEETS 33 TO 37
- THE CONTRACTOR SHALL COVER OR REMOVE ANY EXISTING SIGNAGE OR PAVEMENT MARKINGS IN CONFLICT WITH THE PROPOSED MOT LANE CONFIGURATION.
- FOR LANE SHIFT SIGNING, SEE STANDARD CONSTRUCTION DRAWING MT-102.10 OR MT-102.20.
- THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF MT-99.30 FOR WORK ZONE DELINEATION FOR LANE SHIFTS AND CROSSOVERS.
- TEMPORARY SHORING TOWERS PLACED THIS PHASE. PAVEMENT SHALL NOT BE CONSTRUCTED UNTIL SHORING TOWERS HAVE BEEN REMOVED.
- FOR TEMPORARY ALIGNMENT & TEMPORARY PAVEMENT DETAILS SEE SHEET 45
- MINIMUM RADIUS OF OUTSIDE EDGE LINE SHALL BE 811.5'.
- DURING THIS PHASE, THE CONTRACTOR SHALL SAW CUT AND REMOVE PORTIONS OF THE PROPOSED PAVEMENT IN ORDER TO INSTALL THE TRENCH DRAINS, AS DETAILED IN BU-6.

RELEASED FOR CONSTRUCTION

BU02_2017.12.7_CCG6B.BU2.RFC Plans_FC19.pd

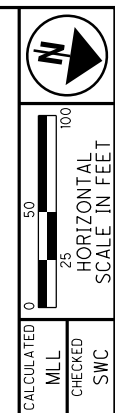
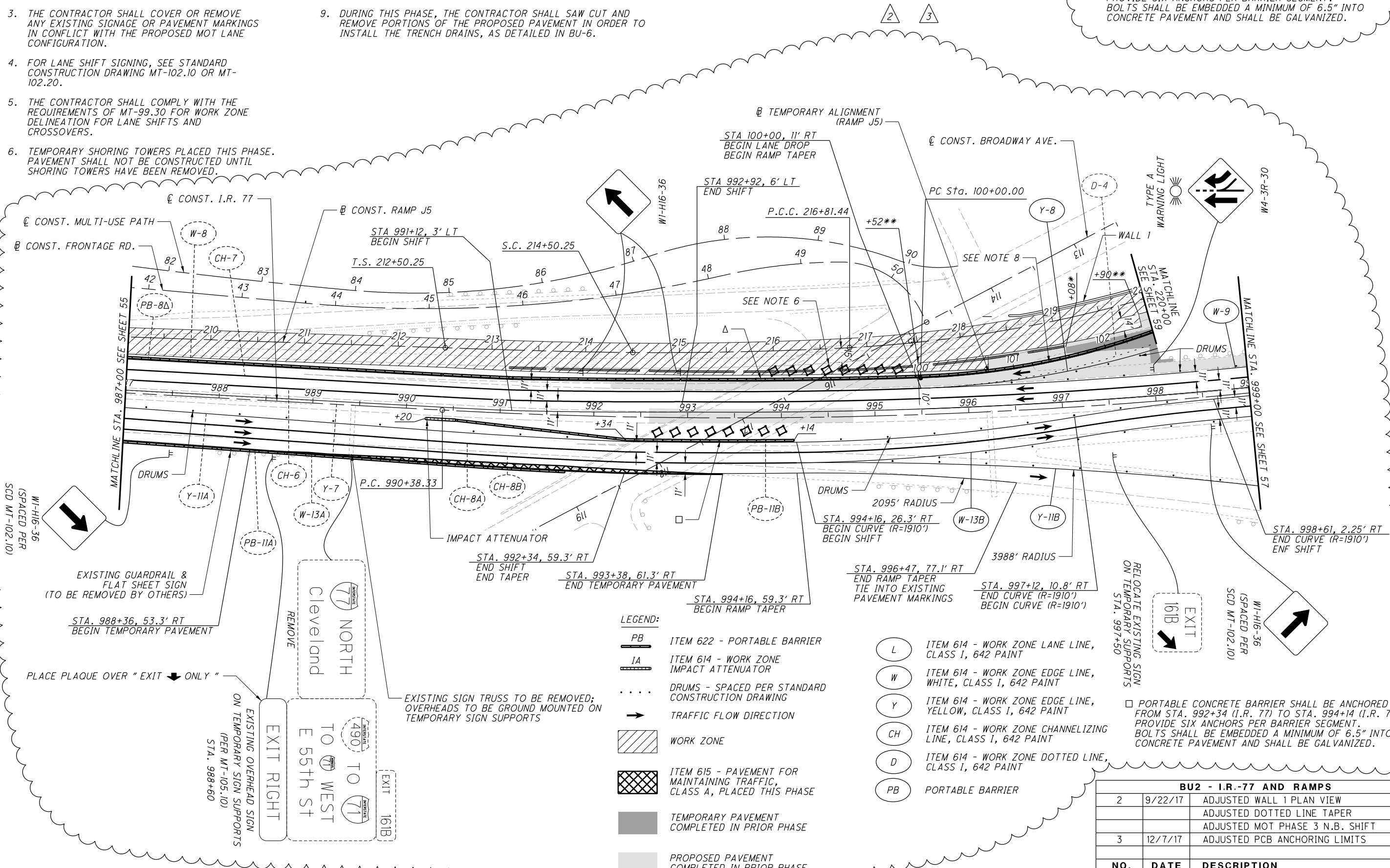
01/09/2018

Brian.Link

* REFERENCES I.R. 77 STATIONING

** REFERENCES RAMP J5

△ PORTABLE CONCRETE BARRIER SHALL BE ANCHORED FROM STA. 993+76 (I.R. 77) TO STA. 995+76 (I.R. 77) PROVIDE SIX ANCHORS PER BARRIER SEGMENT. BOLTS SHALL BE EMBEDDED A MINIMUM OF 6.5" INTO CONCRETE PAVEMENT AND SHALL BE GALVANIZED.



MAINTENANCE OF TRAFFIC - PHASE 3
I.R. 77 - STA. 987+00 TO STA. 999+00

CUY-77-13.80

56
170

- LEGEND:**
- ITEM 622 - PORTABLE BARRIER
 - ITEM 614 - WORK ZONE IMPACT ATTENUATOR
 - DRUMS - SPACED PER STANDARD CONSTRUCTION DRAWING
 - TRAFFIC FLOW DIRECTION
 - WORK ZONE
 - ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, PLACED THIS PHASE
 - TEMPORARY PAVEMENT COMPLETED IN PRIOR PHASE
 - PROPOSED PAVEMENT COMPLETED IN PRIOR PHASE









- ITEM 614 - WORK ZONE LANE LINE, CLASS I, 642 PAINT
- ITEM 614 - WORK ZONE EDGE LINE, WHITE, CLASS I, 642 PAINT
- ITEM 614 - WORK ZONE EDGE LINE, YELLOW, CLASS I, 642 PAINT
- ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS I, 642 PAINT
- ITEM 614 - WORK ZONE DOTTED LINE, CLASS I, 642 PAINT
- PORTABLE BARRIER







□ PORTABLE CONCRETE BARRIER SHALL BE ANCHORED FROM STA. 992+34 (I.R. 77) TO STA. 994+14 (I.R. 77) PROVIDE SIX ANCHORS PER BARRIER SEGMENT. BOLTS SHALL BE EMBEDDED A MINIMUM OF 6.5" INTO CONCRETE PAVEMENT AND SHALL BE GALVANIZED.

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION
2	9/22/17	ADJUSTED WALL 1 PLAN VIEW
		ADJUSTED DOTTED LINE TAPER
		ADJUSTED MOT PHASE 3 N.B. SHIFT
3	12/7/17	ADJUSTED PCB ANCHORING LIMITS
ISSUE RECORD		

P:\82388_CCG6B\Design\MOT_Sheets\82388_MP2303.dgn_Sheet 1/5/2018 2:37:04 PM miles

LEGEND:


-  ITEM 622 - PORTABLE BARRIER
-  ITEM 614 - WORK ZONE IMPACT ATTENUATOR
-  DRUMS - SPACED PER STANDARD CONSTRUCTION DRAWING
-  TRAFFIC FLOW DIRECTION
-  WORK ZONE
-  ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, PLACED THIS PHASE
-  TEMPORARY PAVEMENT COMPLETED IN PRIOR PHASE
-  PROPOSED PAVEMENT COMPLETED IN PRIOR PHASE

-  ITEM 614 - WORK ZONE LANE LINE, CLASS 1, 642 PAINT
-  ITEM 614 - WORK ZONE EDGE LINE, WHITE, CLASS 1, 642 PAINT
-  ITEM 614 - WORK ZONE EDGE LINE, YELLOW, CLASS 1, 642 PAINT
-  ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS 1, 642 PAINT
-  ITEM 614 - WORK ZONE DOTTED LINE, CLASS 1, 642 PAINT
-  PORTABLE BARRIER

NOTES:

1. FOR SEQUENCE OF CONSTRUCTION NOTES, SEE SHEET 20
2. FOR MOT TYPICAL SECTIONS, SEE SHEETS 33 TO 37
3. THE CONTRACTOR SHALL COVER OR REMOVE ANY EXISTING SIGNAGE OR PAVEMENT MARKINGS IN CONFLICT WITH THE PROPOSED MOT LANE CONFIGURATION.
4. FOR LANE SHIFT SIGNING, SEE STANDARD CONSTRUCTION DRAWING MT-102.10 OR MT-102.20.
5. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF MT-99.30 FOR WORK ZONE DELINEATION FOR LANE SHIFTS AND CROSSOVERS.

N



0 50 100
HORIZONTAL SCALE IN FEET

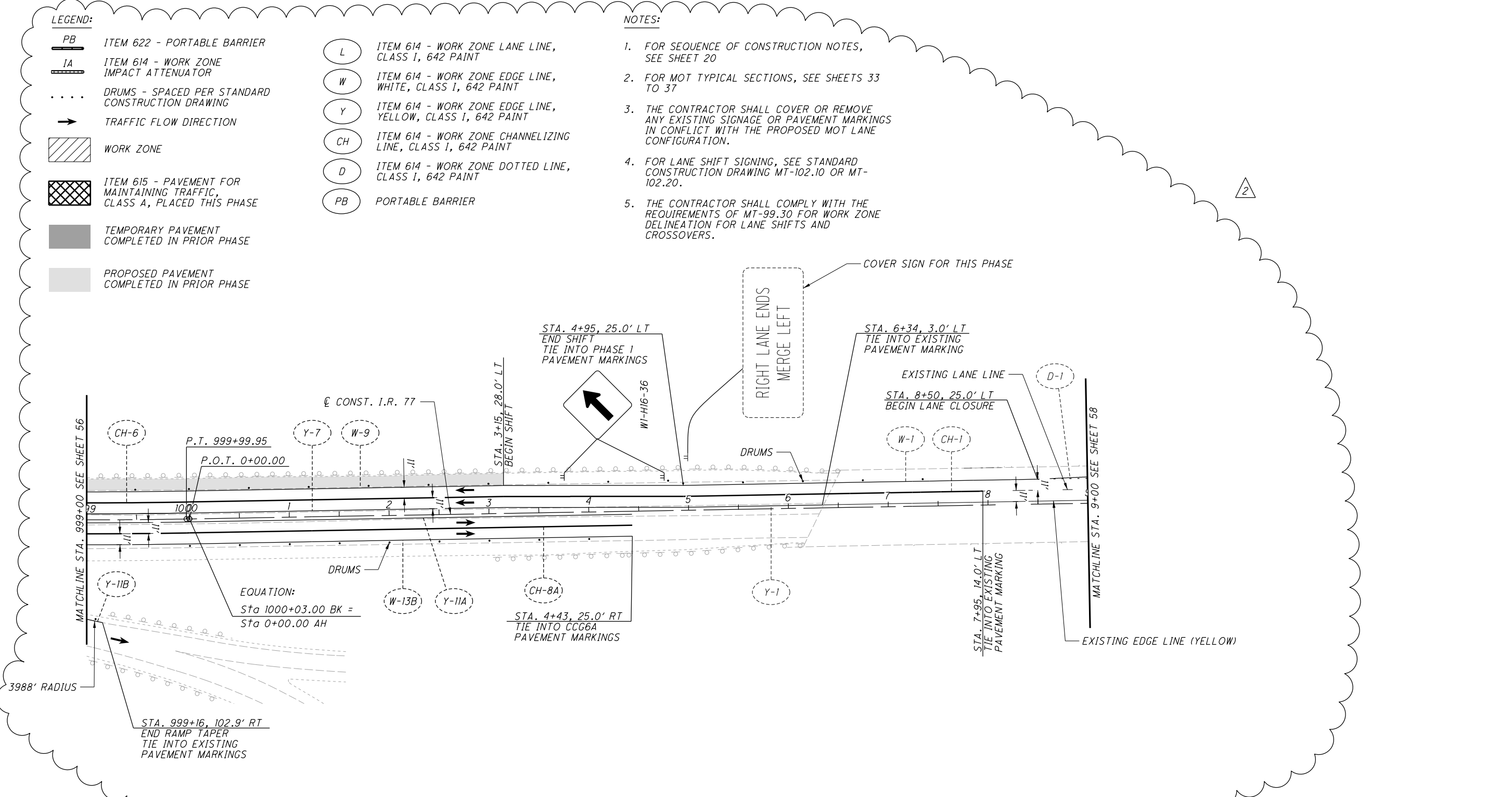
CALCULATED	MLL	CHECKED	SWC
------------	-----	---------	-----

MAINTENANCE OF TRAFFIC - PHASE 3
I.R. 77 - STA. 999+00 TO STA. 9+00

CUY-77-13.80

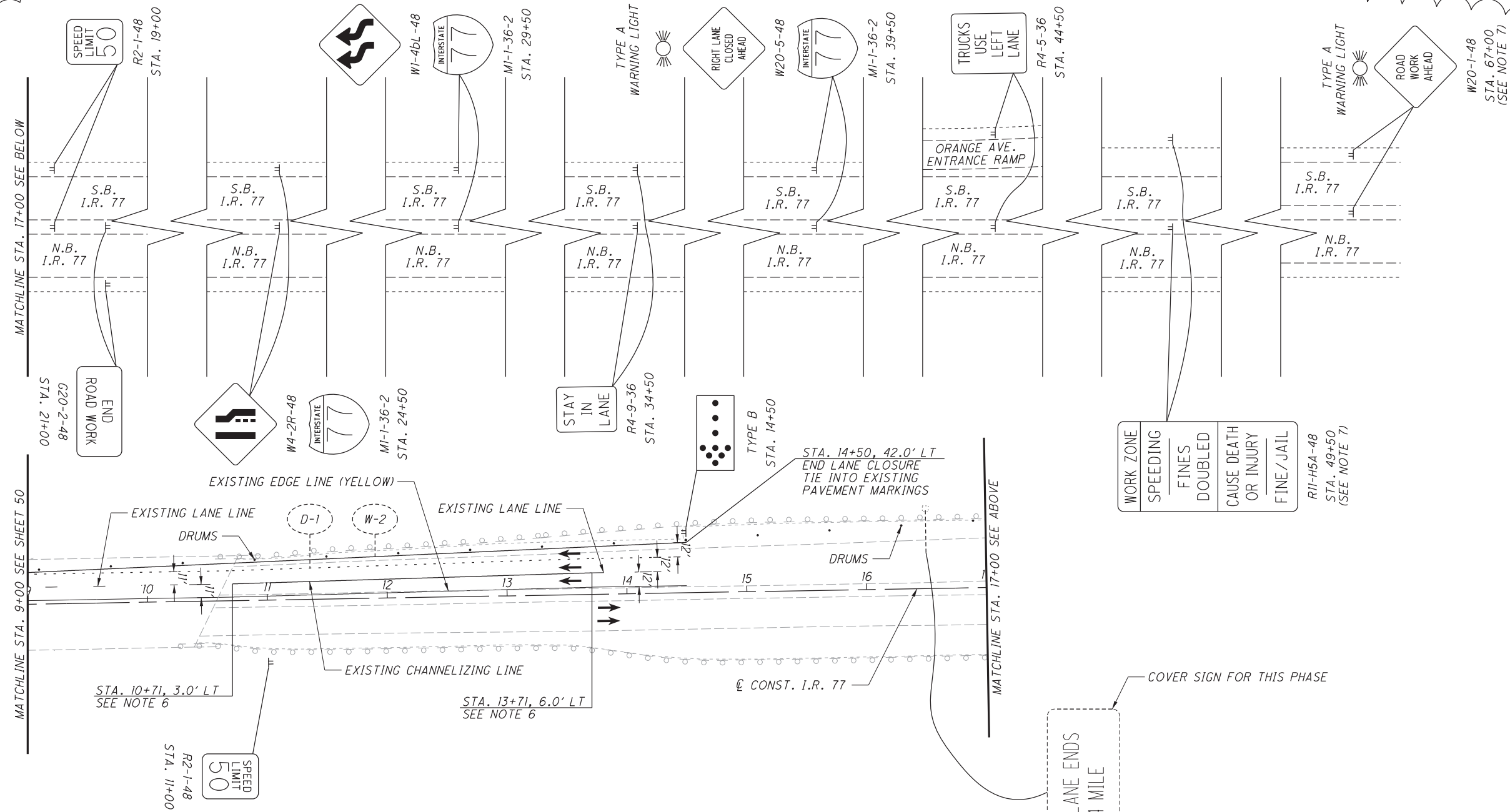
57
170

P:\B2388_CCG6B\Design\MOT\Sheets\B2388_MP2304.dgn Sheet 10/20/2017 8:13:36 AM mlutes



RELEASED FOR CONSTRUCTION
BU02_2017.11.13_CCG6B.BU2.RFC_FC 5.pdf
11/20/2017 Brian.Link

BU2 - I.R.-77 AND RAMPS		
2	9/22/17	ADJUSTED MOT PHASE 3 N.B. SHIFT
NO.	DATE	DESCRIPTION
ISSUE RECORD		



LEGEND:

- ITEM 622 - PORTABLE BARRIER
- ITEM 614 - WORK ZONE IMPACT ATTENUATOR
- DRUMS - SPACED PER STANDARD CONSTRUCTION DRAWING
- TRAFFIC FLOW DIRECTION
- WORK ZONE
- ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, PLACED THIS PHASE
- TEMPORARY PAVEMENT COMPLETED IN PRIOR PHASE
- PROPOSED PAVEMENT COMPLETED IN PRIOR PHASE
- ITEM 614 - WORK ZONE LANE LINE, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE EDGE LINE, WHITE, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE EDGE LINE, YELLOW, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE DOTTED LINE, CLASS 1, 642 PAINT
- PORTABLE BARRIER

NOTES:

1. FOR SEQUENCE OF CONSTRUCTION NOTES, SEE SHEET 20
2. FOR MOT TYPICAL SECTIONS, SEE SHEETS 33 TO 37
3. THE CONTRACTOR SHALL COVER OR REMOVE ANY EXISTING SIGNAGE OR PAVEMENT MARKINGS IN CONFLICT WITH THE PROPOSED MOT LANE CONFIGURATION.
4. FOR LANE SHIFT SIGNING, SEE STANDARD CONSTRUCTION DRAWING MT-102.10 OR MT-102.20.
5. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF MT-99.30 FOR WORK ZONE DELINEATION FOR LANE SHIFTS AND CROSSOVERS.
6. THE CONTRACTOR SHALL UTILIZE THE EXISTING SHIFT & TAPER SHOWN WITHIN THE APPROXIMATE STATION RANGE.
7. SIGNS TO BE PLACED ALONG THE ORANGE AVENUE ENTRANCE RAMP ARE LISTED BELOW. SIGN STATIONING REFERENCES I.R. 77 AND THESE SIGNS SHALL BE PLACED ON BOTH SIDES OF THE RAMP.
 R11-H5A-48 - STA. 48+00
 W20-1-48 - STA. 51+00

RELEASED FOR CONSTRUCTION

BU02_2017.11.13_CCG6B.BU2.RFC_FC 5.pdf

11/20/2017 Brian.Link

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION
2	9/22/17	ADJUSTED MOT PHASE 3 N.B. SHIFT
ISSUE RECORD		



CALCULATED MLL CHECKED SWC

**MAINTENANCE OF TRAFFIC - PHASE 3
RAMP J5 - STA. 222+00 STA. 232+00**

CUY-77-13.80

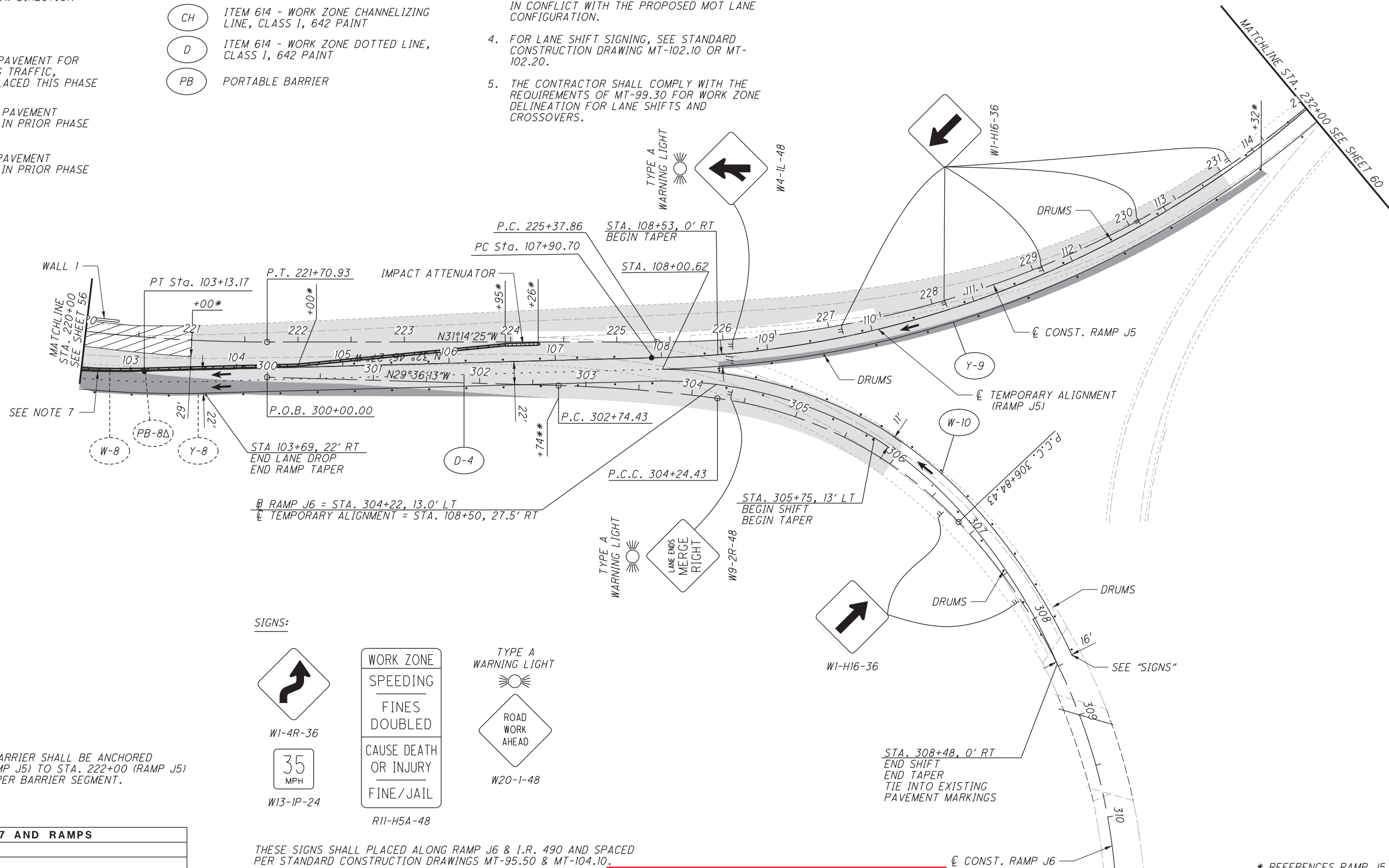
LEGEND:

- ITEM 622 - PORTABLE BARRIER
- ITEM 614 - WORK ZONE IMPACT ATTENUATOR
- DRUMS - SPACED PER STANDARD CONSTRUCTION DRAWING
- TRAFFIC FLOW DIRECTION
- WORK ZONE
- ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, PLACED THIS PHASE
- TEMPORARY PAVEMENT COMPLETED IN PRIOR PHASE
- PROPOSED PAVEMENT COMPLETED IN PRIOR PHASE

- ITEM 614 - WORK ZONE LANE LINE, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE EDGE LINE, WHITE, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE EDGE LINE, YELLOW, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE DOTTED LINE, CLASS 1, 642 PAINT
- PORTABLE BARRIER

NOTES:

1. FOR SEQUENCE OF CONSTRUCTION NOTES, SEE SHEET 20
2. FOR MOT TYPICAL SECTIONS, SEE SHEETS 33 TO 37
3. THE CONTRACTOR SHALL COVER OR REMOVE ANY EXISTING SIGNAGE OR PAVEMENT MARKINGS IN CONFLICT WITH THE PROPOSED MOT LANE CONFIGURATION.
4. FOR LANE SHIFT SIGNING, SEE STANDARD CONSTRUCTION DRAWING MT-102.10 OR MT-102.20.
5. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF MT-99.30 FOR WORK ZONE DELINEATION FOR LANE SHIFTS AND CROSSOVERS.
6. FOR TEMPORARY PAVEMENT & TEMPORARY ALIGNMENT DETAILS SEE SHEET 45
7. MINIMUM RADIUS OF OUTSIDE EDGE LINE SHALL BE 811.5'.



SIGNS:

- W1-4R-36
- W13-1P-24
- R11-H5A-48
- TYPE A WARNING LIGHT
- ROAD WORK AHEAD
- W20-1-48

THESE SIGNS SHALL BE PLACED ALONG RAMP J6 & I.R. 490 AND SPACED PER STANDARD CONSTRUCTION DRAWINGS MT-95.50 & MT-104.10.

△ PORTABLE CONCRETE BARRIER SHALL BE ANCHORED FROM STA. 220+00 (RAMP J5) TO STA. 222+00 (RAMP J5) PROVIDE SIX ANCHORS PER BARRIER SEGMENT.

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION

ISSUE RECORD

RELEASED FOR CONSTRUCTION

2017-07-11.CCG6B.RFC Plans.pdf

07/12/2017 brian.link

* REFERENCES RAMP J5
** REFERENCES RAMP J6

P:\82388_CCG6B\Design\MOT\Sheets\82388_MP2306.dgn_Sheet 7/10/2017 3:20:14 PM mlutes



CALCULATED
M.L.L.
CHECKED
S.W.C.

**MAINTENANCE OF TRAFFIC - PHASE 3
RAMP J5 - STA. 232+00 TO END WORK**

CUY-77-13.80

60
170

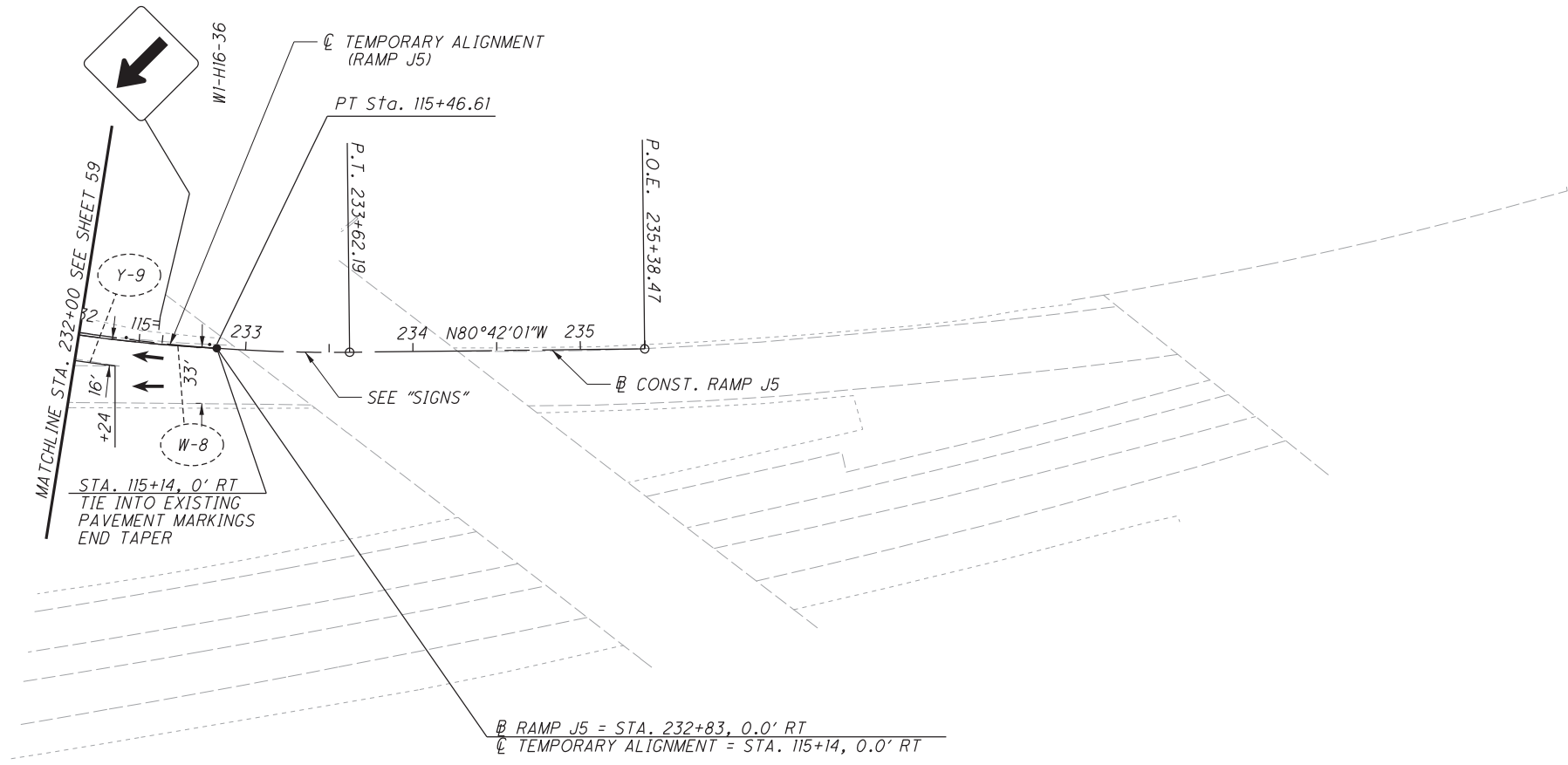
LEGEND:

- ITEM 622 - PORTABLE BARRIER
- ITEM 614 - WORK ZONE IMPACT ATTENUATOR
- DRUMS - SPACED PER STANDARD CONSTRUCTION DRAWING
- TRAFFIC FLOW DIRECTION
- WORK ZONE
- ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, PLACED THIS PHASE
- TEMPORARY PAVEMENT COMPLETED IN PRIOR PHASE
- PROPOSED PAVEMENT COMPLETED IN PRIOR PHASE

- ITEM 614 - WORK ZONE LANE LINE, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE EDGE LINE, WHITE, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE EDGE LINE, YELLOW, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE DOTTED LINE, CLASS 1, 642 PAINT
- PORTABLE BARRIER

NOTES:

1. FOR SEQUENCE OF CONSTRUCTION NOTES, SEE SHEET 20
2. FOR MOT TYPICAL SECTIONS, SEE SHEETS 33 TO 37
3. THE CONTRACTOR SHALL COVER OR REMOVE ANY EXISTING SIGNAGE OR PAVEMENT MARKINGS IN CONFLICT WITH THE PROPOSED MOT LANE CONFIGURATION.
4. FOR LANE SHIFT SIGNING, SEE STANDARD CONSTRUCTION DRAWING MT-102.10 OR MT-102.20.
5. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF MT-99.30 FOR WORK ZONE DELINEATION FOR LANE SHIFTS AND CROSSOVERS.
6. FOR TEMPORARY ALIGNMENT DETAILS SEE SHEET 45



SIGNS:

W1-4L-48

W13-IP-24

R11-H5A-48

WORK ZONE
SPEEDING
FINES DOUBLED
CAUSE DEATH OR INJURY
FINE/JAIL

TYPE A
WARNING LIGHT

ROAD WORK AHEAD
W20-1-48

THESE SIGNS SHALL BE PLACED ALONG RAMP J5 & I.R. 490 AND SPACED PER STANDARD CONSTRUCTION DRAWINGS MT-95.50 & MT-104.10.

RELEASED FOR CONSTRUCTION

2017-07-11.CCG6B.RFC Plans.pdf

07/12/2017 brian.link

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION

ISSUE RECORD



CALCULATED MLL CHECKED SWC

MAINTENANCE OF TRAFFIC - PHASE 4
I.R. 77 - BEGIN WORK TO STA. 975+00

CUY-77-13.80

61
170

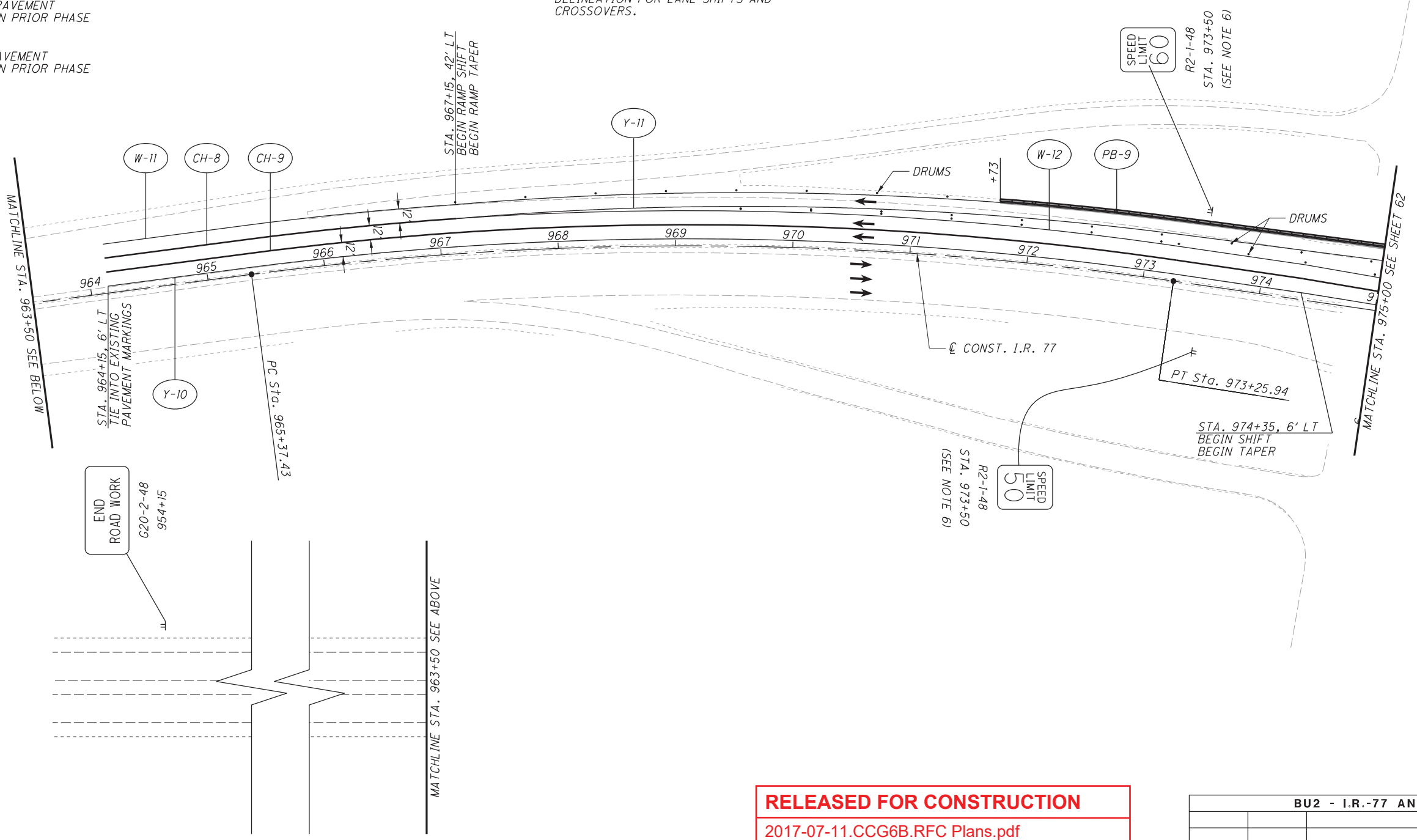
LEGEND:

- ITEM 622 - PORTABLE BARRIER
- ITEM 614 - WORK ZONE IMPACT ATTENUATOR
- DRUMS - SPACED PER STANDARD CONSTRUCTION DRAWING
- TRAFFIC FLOW DIRECTION
- WORK ZONE
- ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, PLACED THIS PHASE
- TEMPORARY PAVEMENT COMPLETED IN PRIOR PHASE
- PROPOSED PAVEMENT COMPLETED IN PRIOR PHASE

- ITEM 614 - WORK ZONE LANE LINE, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE EDGE LINE, WHITE, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE EDGE LINE, YELLOW, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE DOTTED LINE, CLASS 1, 642 PAINT
- PORTABLE BARRIER

NOTES:

1. FOR SEQUENCE OF CONSTRUCTION NOTES, SEE SHEET 20
2. FOR MOT TYPICAL SECTIONS, SEE SHEETS 33 TO 37
3. THE CONTRACTOR SHALL COVER OR REMOVE ANY EXISTING SIGNAGE OR PAVEMENT MARKINGS IN CONFLICT WITH THE PROPOSED MOT LANE CONFIGURATION.
4. FOR LANE SHIFT SIGNING, SEE STANDARD CONSTRUCTION DRAWING MT-102.10 OR MT-102.20.
5. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF MT-99.30 FOR WORK ZONE DELINEATION FOR LANE SHIFTS AND CROSSOVERS.
6. SIGNS SHALL BE INSTALLED NO LATER THAN AUGUST 1, 2017.



END ROAD WORK
G20-2-48
954+15

RELEASED FOR CONSTRUCTION
2017-07-11.CCG6B.RFC Plans.pdf
07/12/2017 brian.link

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION
ISSUE RECORD		

P:\B2388_CCG6B\Design\MOT\Sheets\B2388_MP2401.dgn Sheet 7/10/2017 3:20:16 PM milutes

BU2 - I.R.-77 AND RAMPS		
2	9/22/17	ADDED CALLOUT FOR RAMP J5 ALIGNMENT
NO.	DATE	DESCRIPTION
ISSUE RECORD		

RELEASED FOR CONSTRUCTION

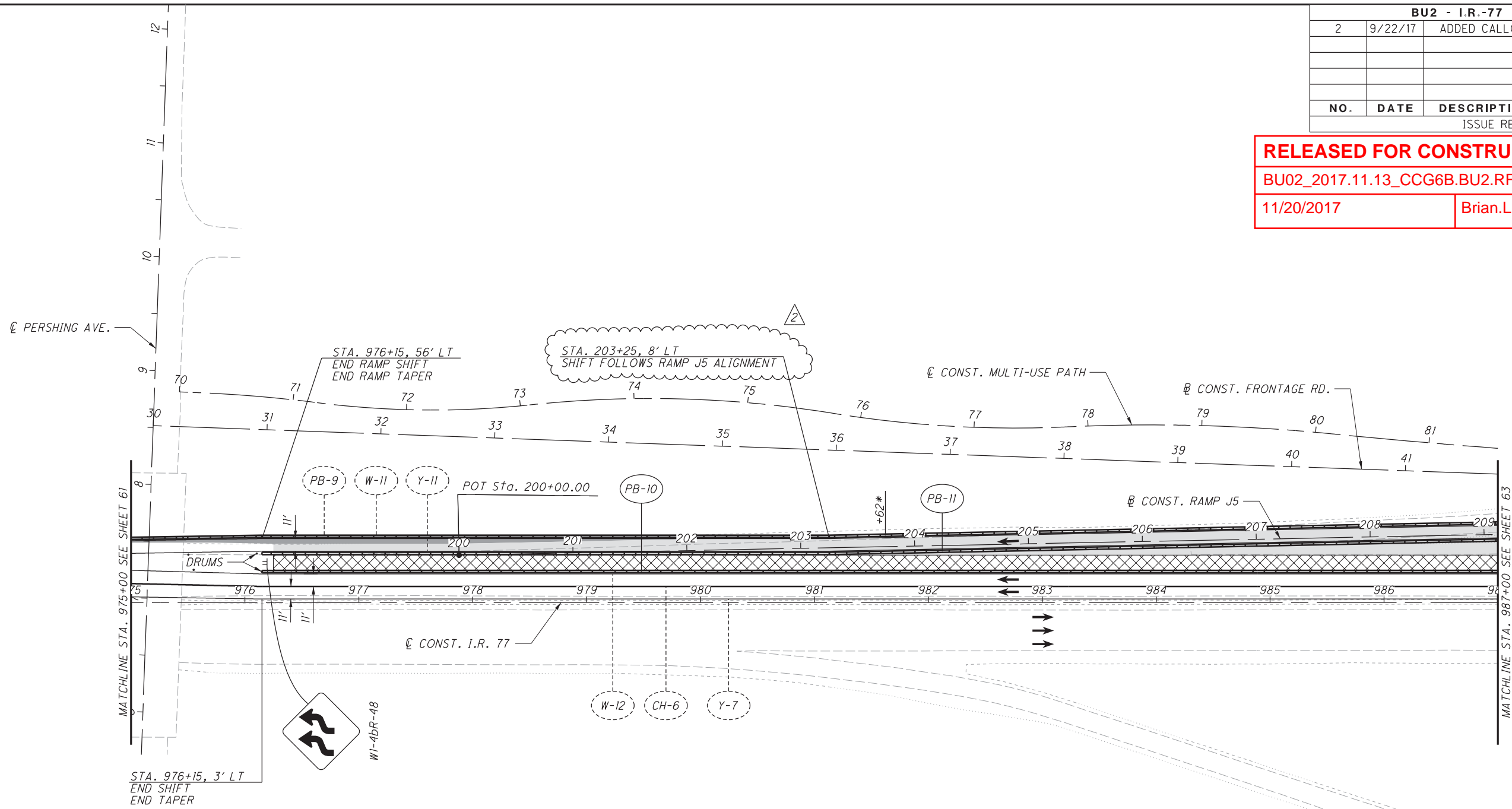
BU02_2017.11.13_CCG6B.BU2.RFC_FC 5.pdf

11/20/2017 Brian.Link

N

0 25 50 100
HORIZONTAL
SCALE IN FEET

CALCULATED
M.L.L.
CHECKED
S.W.C.



LEGEND:

- ITEM 622 - PORTABLE BARRIER
- ITEM 614 - WORK ZONE IMPACT ATTENUATOR
- DRUMS - SPACED PER STANDARD CONSTRUCTION DRAWING
- TRAFFIC FLOW DIRECTION
- WORK ZONE
- ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, PLACED THIS PHASE
- TEMPORARY PAVEMENT COMPLETED IN PRIOR PHASE
- PROPOSED PAVEMENT COMPLETED IN PRIOR PHASE

- ITEM 614 - WORK ZONE LANE LINE, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE EDGE LINE, WHITE, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE EDGE LINE, YELLOW, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE DOTTED LINE, CLASS 1, 642 PAINT
- PORTABLE BARRIER

NOTES:

1. FOR SEQUENCE OF CONSTRUCTION NOTES, SEE SHEET 20
2. FOR MOT TYPICAL SECTIONS, SEE SHEETS 33 TO 37
3. THE CONTRACTOR SHALL COVER OR REMOVE ANY EXISTING SIGNAGE OR PAVEMENT MARKINGS IN CONFLICT WITH THE PROPOSED MOT LANE CONFIGURATION.
4. FOR LANE SHIFT SIGNING, SEE STANDARD CONSTRUCTION DRAWING MT-102.10 OR MT-102.20.
5. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF MT-99.30 FOR WORK ZONE DELINEATION FOR LANE SHIFTS AND CROSSOVERS.

* REFERENCES I.R. 77 STATIONING
** REFERENCES RAMP J5

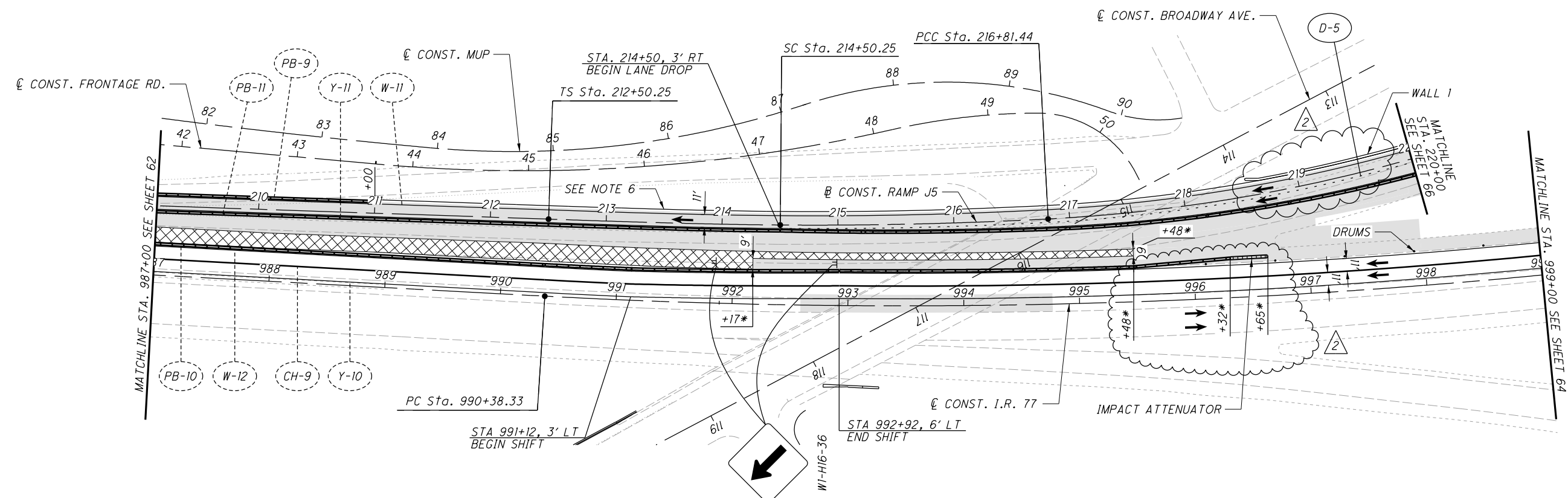
MAINTENANCE OF TRAFFIC - PHASE 4
 I.R. 77 - STA. 975+00 TO STA. 987+00

CUY-77-13.80









62
170







P:\B2388_CCG6B\Design\MOT\Sheets\B2388_MP2402.dgn Sheet 9/22/2017 1:46:43 PM mlutes

RELEASED FOR CONSTRUCTION
 BU02_2017.11.13_CCG6B.BU2.RFC_FC 5.pdf
 11/20/2017 Brian.Link



LEGEND:

-  ITEM 622 - PORTABLE BARRIER
-  ITEM 614 - WORK ZONE IMPACT ATTENUATOR
-  DRUMS - SPACED PER STANDARD CONSTRUCTION DRAWING
-  TRAFFIC FLOW DIRECTION
-  WORK ZONE
-  ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, PLACED THIS PHASE
-  TEMPORARY PAVEMENT COMPLETED IN PRIOR PHASE
-  PROPOSED PAVEMENT COMPLETED IN PRIOR PHASE

-  ITEM 614 - WORK ZONE LANE LINE, CLASS 1, 642 PAINT
-  ITEM 614 - WORK ZONE EDGE LINE, WHITE, CLASS 1, 642 PAINT
-  ITEM 614 - WORK ZONE EDGE LINE, YELLOW, CLASS 1, 642 PAINT
-  ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS 1, 642 PAINT
-  ITEM 614 - WORK ZONE DOTTED LINE, CLASS 1, 642 PAINT
-  PORTABLE BARRIER

NOTES:

1. FOR SEQUENCE OF CONSTRUCTION NOTES, SEE SHEET 20
2. FOR MOT TYPICAL SECTIONS, SEE SHEETS 33 TO 37
3. THE CONTRACTOR SHALL COVER OR REMOVE ANY EXISTING SIGNAGE OR PAVEMENT MARKINGS IN CONFLICT WITH THE PROPOSED MOT LANE CONFIGURATION.
4. FOR LANE SHIFT SIGNING, SEE STANDARD CONSTRUCTION DRAWING MT-102.10 OR MT-102.20.
5. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF MT-99.30 FOR WORK ZONE DELINEATION FOR LANE SHIFTS AND CROSSOVERS.
6. CONTRACTOR SHALL UTILIZE PROPOSED CONCRETE BARRIER FROM STA. 211+00 TO STA. 220+00, IN ORDER TO PROTECT TRAFFIC.
FOR CONCRETE BARRIER AND GUARDRAIL DETAILS, SEE SHEET 82.

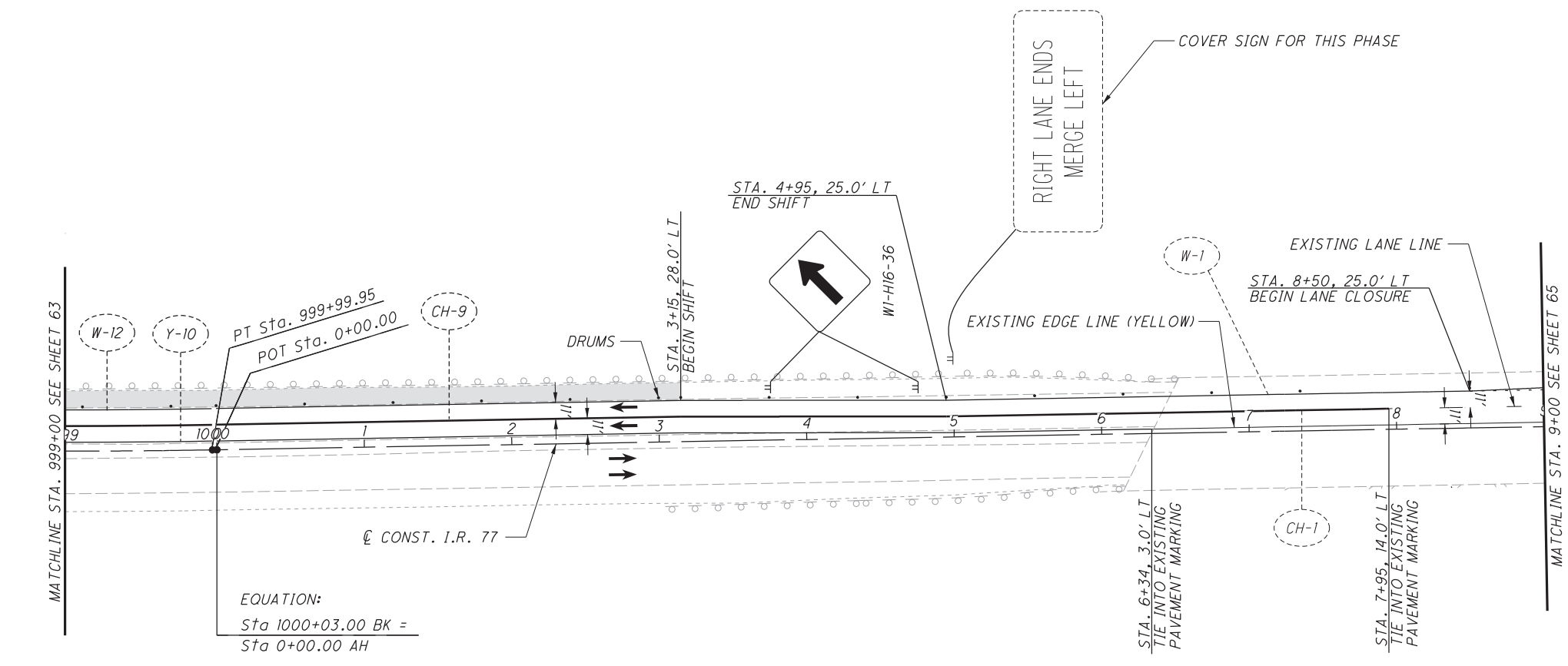
* REFERENCES I.R. 77 STATIONING
 ** REFERENCES RAMP J5

BU2 - I.R.-77 AND RAMPS		
2	9/22/17	ADJUSTED WALL 1 PLAN VIEW
		SHORTEN PCB TAPER FOR CONSTRUCTION ACCESS
NO.	DATE	DESCRIPTION
		ISSUE RECORD

MAINTENANCE OF TRAFFIC - PHASE 4
I.R. 77 - STA.987+00 TO STA. 999+00

CUY-77-13.80

P:\B2388_CCG6B\Design\MOT\Sheets\B2388_MP2403.dgn_Sheet 11/17/2017 9:10:17 AM mlutes



EQUATION:
Sta 1000+03.00 BK =
Sta 0+00.00 AH

LEGEND:

- ITEM 622 - PORTABLE BARRIER
- ITEM 614 - WORK ZONE IMPACT ATTENUATOR
- DRUMS - SPACED PER STANDARD CONSTRUCTION DRAWING
- TRAFFIC FLOW DIRECTION
- WORK ZONE
- ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, PLACED THIS PHASE
- TEMPORARY PAVEMENT COMPLETED IN PRIOR PHASE
- PROPOSED PAVEMENT COMPLETED IN PRIOR PHASE

- ITEM 614 - WORK ZONE LANE LINE, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE EDGE LINE, WHITE, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE EDGE LINE, YELLOW, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE DOTTED LINE, CLASS 1, 642 PAINT
- PORTABLE BARRIER

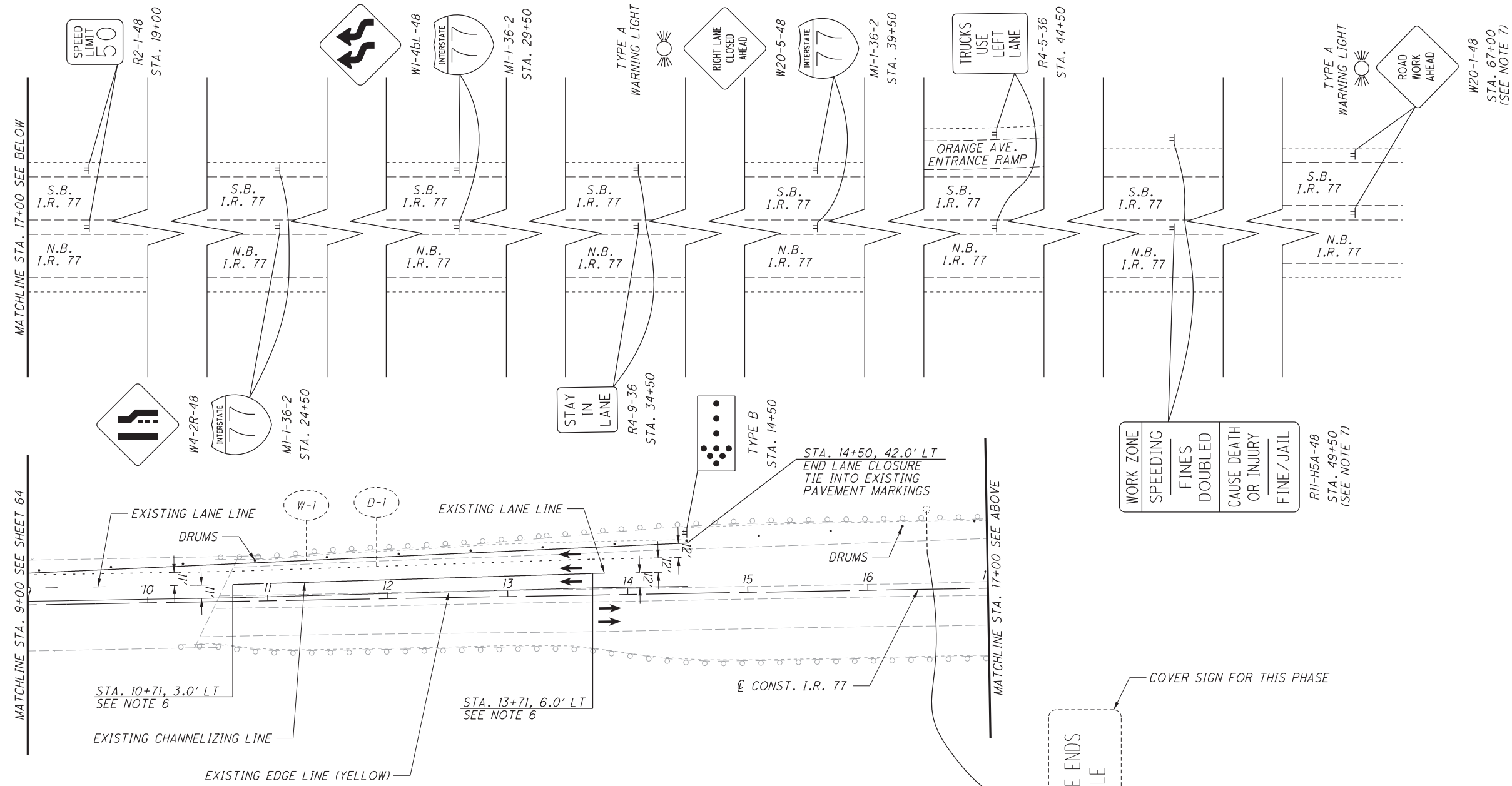
NOTES:

1. FOR SEQUENCE OF CONSTRUCTION NOTES, SEE SHEET 20
2. FOR MOT TYPICAL SECTIONS, SEE SHEETS 33 TO 37
3. THE CONTRACTOR SHALL COVER OR REMOVE ANY EXISTING SIGNAGE OR PAVEMENT MARKINGS IN CONFLICT WITH THE PROPOSED MOT LANE CONFIGURATION.
4. FOR LANE SHIFT SIGNING, SEE STANDARD CONSTRUCTION DRAWING MT-102.10 OR MT-102.20.
5. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF MT-99.30 FOR WORK ZONE DELINEATION FOR LANE SHIFTS AND CROSSOVERS.

RELEASED FOR CONSTRUCTION
2017-07-11.CCG6B.RFC Plans.pdf
07/12/2017 brian.link

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION

P:\B2388_CCG6B\Design\MOT\Sheets\B2388_MP2405.dgn_Sheet_7/10/2017 3:20:21 PM mlutes



LEGEND:

- ITEM 622 - PORTABLE BARRIER
- ITEM 614 - WORK ZONE IMPACT ATTENUATOR
- DRUMS - SPACED PER STANDARD CONSTRUCTION DRAWING
- TRAFFIC FLOW DIRECTION
- WORK ZONE
- ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, PLACED THIS PHASE
- TEMPORARY PAVEMENT COMPLETED IN PRIOR PHASE
- PROPOSED PAVEMENT COMPLETED IN PRIOR PHASE

- ITEM 614 - WORK ZONE LANE LINE, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE EDGE LINE, WHITE, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE EDGE LINE, YELLOW, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE DOTTED LINE, CLASS 1, 642 PAINT
- PORTABLE BARRIER

NOTES:

1. FOR SEQUENCE OF CONSTRUCTION NOTES, SEE SHEET 20
2. FOR MOT TYPICAL SECTIONS, SEE SHEETS 33 TO 37
3. THE CONTRACTOR SHALL COVER OR REMOVE ANY EXISTING SIGNAGE OR PAVEMENT MARKINGS IN CONFLICT WITH THE PROPOSED MOT LANE CONFIGURATION.
4. FOR LANE SHIFT SIGNING, SEE STANDARD CONSTRUCTION DRAWING MT-102.10 OR MT-102.20.
5. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF MT-99.30 FOR WORK ZONE DELINEATION FOR LANE SHIFTS AND CROSSOVERS.
6. THE CONTRACTOR SHALL UTILIZE THE EXISTING SHIFT & TAPER SHOWN WITHIN THE APPROXIMATE STATION RANGE.
7. SIGNS TO BE PLACED ALONG THE ORANGE AVENUE ENTRANCE RAMP ARE LISTED BELOW. SIGN STATIONING REFERENCES I.R. 77 AND THESE SIGNS SHALL BE PLACED ON BOTH SIDES OF THE RAMP.
R11-H5A-48 - STA. 48+00
W20-1-48 - STA. 51+00

RELEASED FOR CONSTRUCTION
2017-07-11.CCG6B.RFC Plans.pdf
07/12/2017 brian.link

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION
ISSUE RECORD		

MAINTENANCE OF TRAFFIC - PHASE 4
I.R. 77 - STA. 9+00 TO END WORK

CUY-77-13.80

65
170

CALCULATED
M.L.L.
CHECKED
S.W.C.

0 50 100
HORIZONTAL
SCALE IN FEET



CALCULATED
M.L.L.
CHECKED
S.W.C.

MAINTENANCE OF TRAFFIC - PHASE 4
RAMP J5 - STA. 220+00 TO 232+00

CUY-77-13.80

66
170

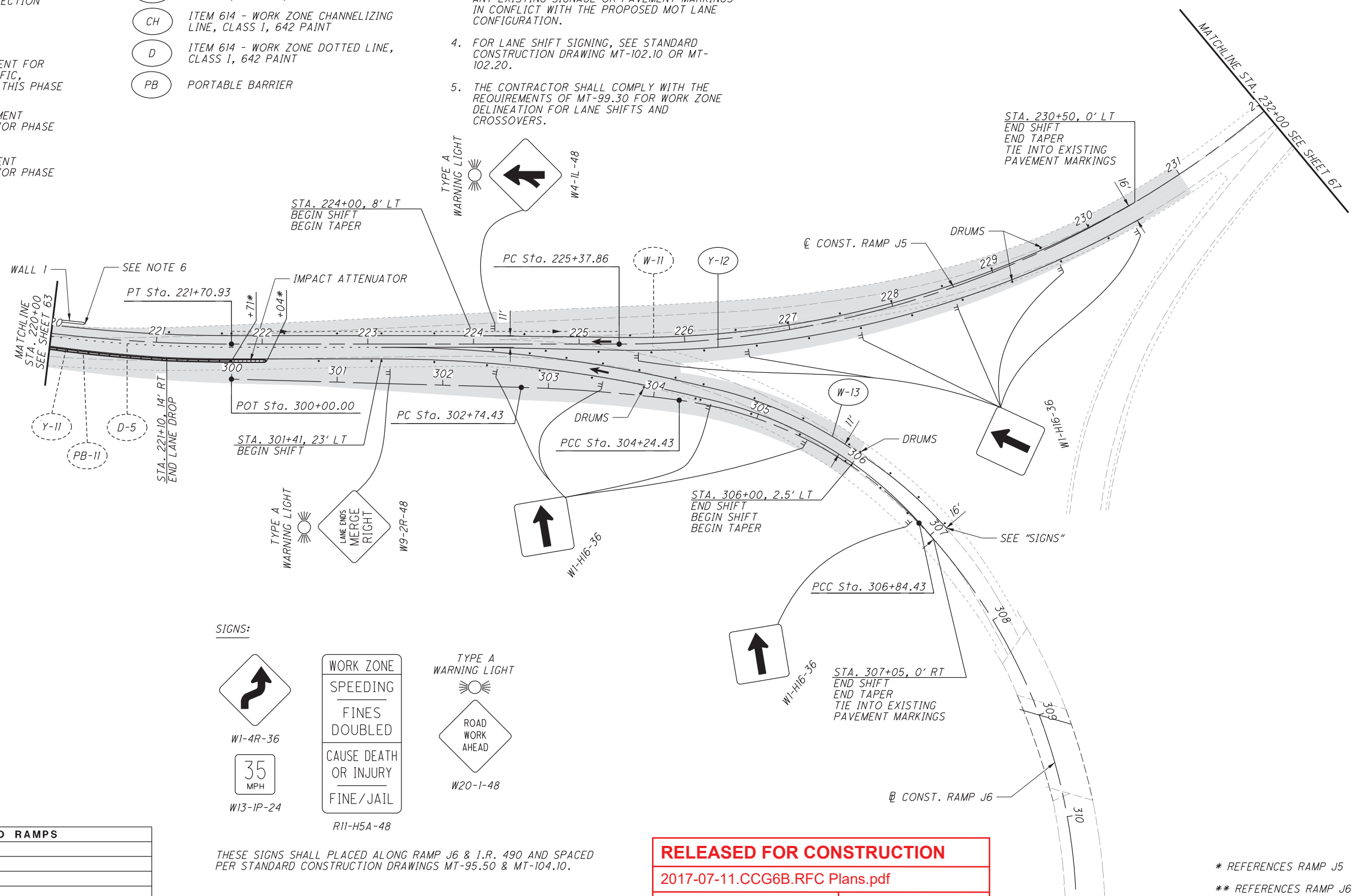
LEGEND:

- ITEM 622 - PORTABLE BARRIER
- ITEM 614 - WORK ZONE IMPACT ATTENUATOR
- DRUMS - SPACED PER STANDARD CONSTRUCTION DRAWING
- TRAFFIC FLOW DIRECTION
- WORK ZONE
- ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, PLACED THIS PHASE
- TEMPORARY PAVEMENT COMPLETED IN PRIOR PHASE
- PROPOSED PAVEMENT COMPLETED IN PRIOR PHASE

- ITEM 614 - WORK ZONE LANE LINE, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE EDGE LINE, WHITE, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE EDGE LINE, YELLOW, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE DOTTED LINE, CLASS 1, 642 PAINT
- PORTABLE BARRIER

NOTES:

1. FOR SEQUENCE OF CONSTRUCTION NOTES, SEE SHEET 20
2. FOR MOT TYPICAL SECTIONS, SEE SHEETS 33 TO 37
3. THE CONTRACTOR SHALL COVER OR REMOVE ANY EXISTING SIGNAGE OR PAVEMENT MARKINGS IN CONFLICT WITH THE PROPOSED MOT LANE CONFIGURATION.
4. FOR LANE SHIFT SIGNING, SEE STANDARD CONSTRUCTION DRAWING MT-102.10 OR MT-102.20.
5. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF MT-99.30 FOR WORK ZONE DELINEATION FOR LANE SHIFTS AND CROSSOVERS.
6. CONTRACTOR SHALL UTILIZE PROPOSED CONCRETE BARRIER & GUARDRAIL FROM STA. 220+00 TO STA. 221+73, IN ORDER TO PROTECT TRAFFIC.
FOR CONCRETE BARRIER AND GUARDRAIL DETAILS, SEE SHEET 83



SIGNS:

- W1-4R-36
- W13-1P-24
- R11-H5A-48
- TYPE A WARNING LIGHT
- ROAD WORK AHEAD W20-1-48

THESE SIGNS SHALL BE PLACED ALONG RAMP J6 & I.R. 490 AND SPACED PER STANDARD CONSTRUCTION DRAWINGS MT-95.50 & MT-104.10.

RELEASED FOR CONSTRUCTION
 2017-07-11.CCG6B.RFC Plans.pdf
 07/12/2017 brian.link

* REFERENCES RAMP J5
 ** REFERENCES RAMP J6

P:\82388_CCG6B\Design\MOT\Sheets\MP2406.dgn_Sheet_7/10/2017 3:20:22 PM mlutes

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION

ISSUE RECORD











CALCULATED
M.L.L.
CHECKED
S.W.C.







**MAINTENANCE OF TRAFFIC - PHASE 4
RAMP J5 - STA. 232+00 TO END WORK**

CUY-77-13.80

67
170

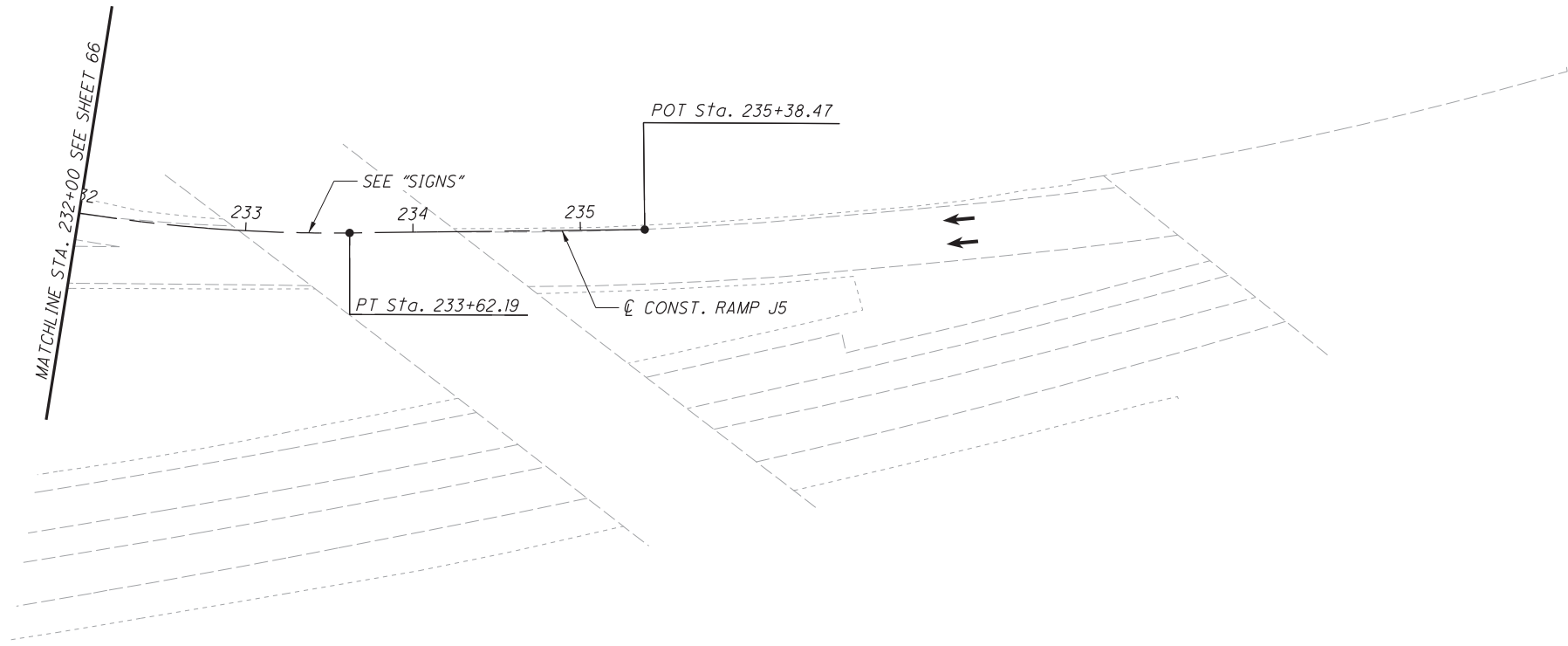
LEGEND:

-  ITEM 622 - PORTABLE BARRIER
-  ITEM 614 - WORK ZONE IMPACT ATTENUATOR
-  DRUMS - SPACED PER STANDARD CONSTRUCTION DRAWING
-  TRAFFIC FLOW DIRECTION
-  WORK ZONE
-  ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, PLACED THIS PHASE
-  TEMPORARY PAVEMENT COMPLETED IN PRIOR PHASE
-  PROPOSED PAVEMENT COMPLETED IN PRIOR PHASE

-  ITEM 614 - WORK ZONE LANE LINE, CLASS 1, 642 PAINT
-  ITEM 614 - WORK ZONE EDGE LINE, WHITE, CLASS 1, 642 PAINT
-  ITEM 614 - WORK ZONE EDGE LINE, YELLOW, CLASS 1, 642 PAINT
-  ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS 1, 642 PAINT
-  ITEM 614 - WORK ZONE DOTTED LINE, CLASS 1, 642 PAINT
-  PORTABLE BARRIER

NOTES:

1. FOR SEQUENCE OF CONSTRUCTION NOTES, SEE SHEET 20
2. FOR MOT TYPICAL SECTIONS, SEE SHEETS 33 TO 37
3. THE CONTRACTOR SHALL COVER OR REMOVE ANY EXISTING SIGNAGE OR PAVEMENT MARKINGS IN CONFLICT WITH THE PROPOSED MOT LANE CONFIGURATION.
4. FOR LANE SHIFT SIGNING, SEE STANDARD CONSTRUCTION DRAWING MT-102.10 OR MT-102.20.
5. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF MT-99.30 FOR WORK ZONE DELINEATION FOR LANE SHIFTS AND CROSSOVERS.



SIGNS:

THESE SIGNS SHALL PLACED ALONG RAMP J6 & I.R. 490 AND SPACED PER STANDARD CONSTRUCTION DRAWINGS MT-95.50 & MT-104.10.

RELEASED FOR CONSTRUCTION
 2017-07-11.CCG6B.RFC Plans.pdf
 07/12/2017 brian.link

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION
ISSUE RECORD		

P:\B2388_CCG6B\Design\MOT\Sheets\B2388_MP2407.dgn Sheet 7/10/2017 3:20:23 PM mlutes

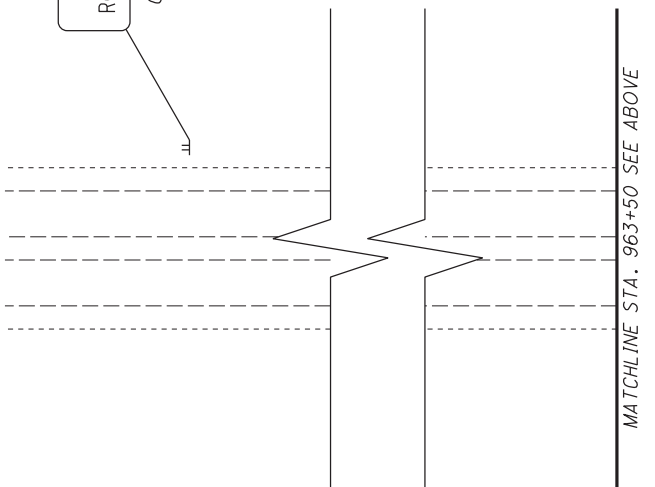
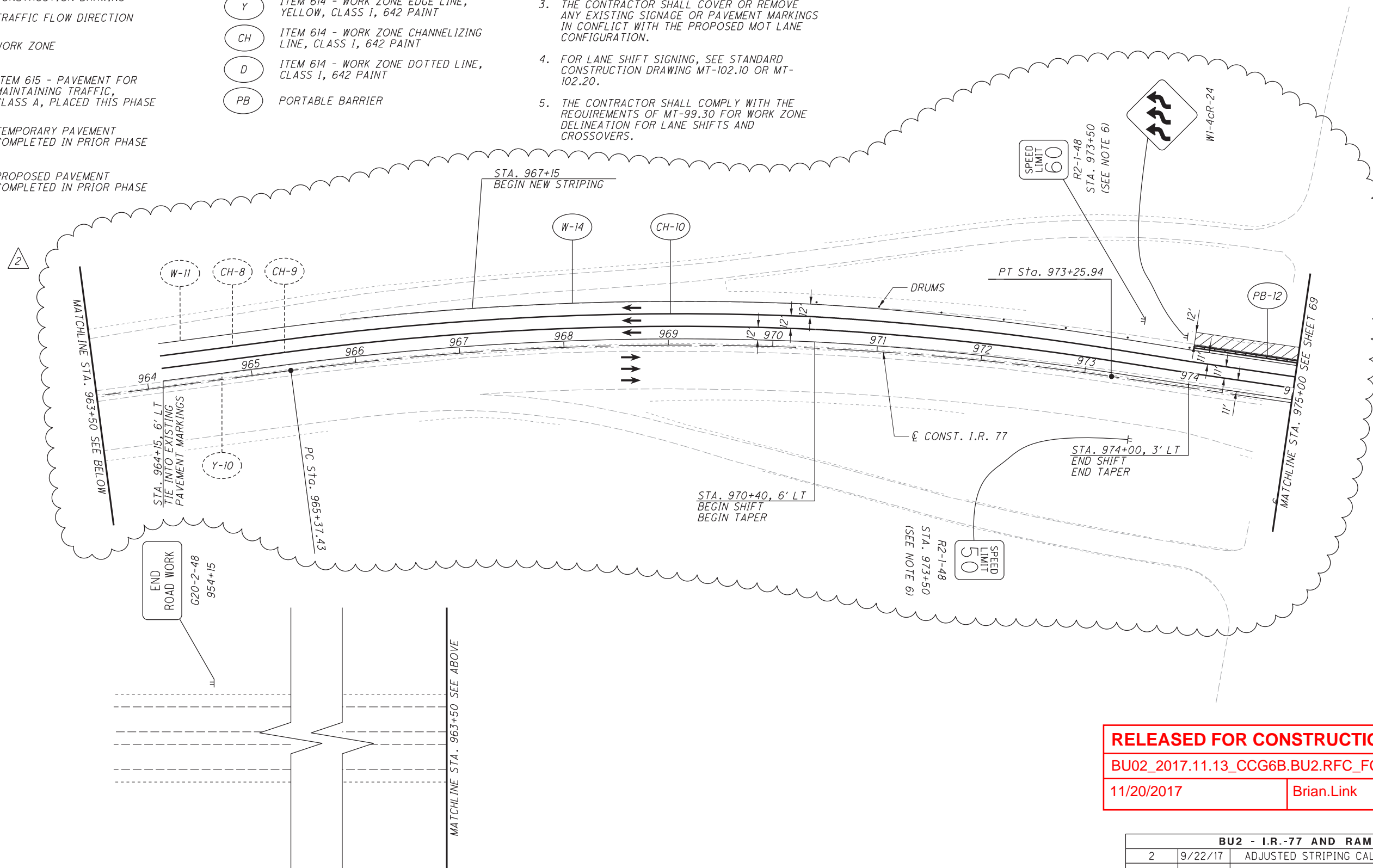
LEGEND:

- ITEM 622 - PORTABLE BARRIER
- ITEM 614 - WORK ZONE IMPACT ATTENUATOR
- DRUMS - SPACED PER STANDARD CONSTRUCTION DRAWING
- TRAFFIC FLOW DIRECTION
- WORK ZONE
- ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, PLACED THIS PHASE
- TEMPORARY PAVEMENT COMPLETED IN PRIOR PHASE
- PROPOSED PAVEMENT COMPLETED IN PRIOR PHASE

- ITEM 614 - WORK ZONE LANE LINE, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE EDGE LINE, WHITE, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE EDGE LINE, YELLOW, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE DOTTED LINE, CLASS 1, 642 PAINT
- PORTABLE BARRIER

NOTES:

1. FOR SEQUENCE OF CONSTRUCTION NOTES, SEE SHEET 20
2. FOR MOT TYPICAL SECTIONS, SEE SHEETS 33 TO 37
3. THE CONTRACTOR SHALL COVER OR REMOVE ANY EXISTING SIGNAGE OR PAVEMENT MARKINGS IN CONFLICT WITH THE PROPOSED MOT LANE CONFIGURATION.
4. FOR LANE SHIFT SIGNING, SEE STANDARD CONSTRUCTION DRAWING MT-102.10 OR MT-102.20.
5. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF MT-99.30 FOR WORK ZONE DELINEATION FOR LANE SHIFTS AND CROSSOVERS.
6. SIGNS SHALL BE INSTALLED NO LATER THAN AUGUST 1, 2017.



**MAINTENANCE OF TRAFFIC - PHASE 5
I.R. 77 - BEGIN WORK TO STA. 975+00**

CUY-77-13.80

RELEASED FOR CONSTRUCTION

BU02_2017.11.13_CCG6B.BU2.RFC_FC 5.pdf

11/20/2017 Brian.Link

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION
2	9/22/17	ADJUSTED STRIPING CALLOUTS
ISSUE RECORD		

68
170

BU2 - I.R.-77 AND RAMPS		
2	9/22/17	ADJUSTED STRIPING CALLOUTS
NO.	DATE	DESCRIPTION
ISSUE RECORD		

N

0 25 50 100
HORIZONTAL
SCALE IN FEET

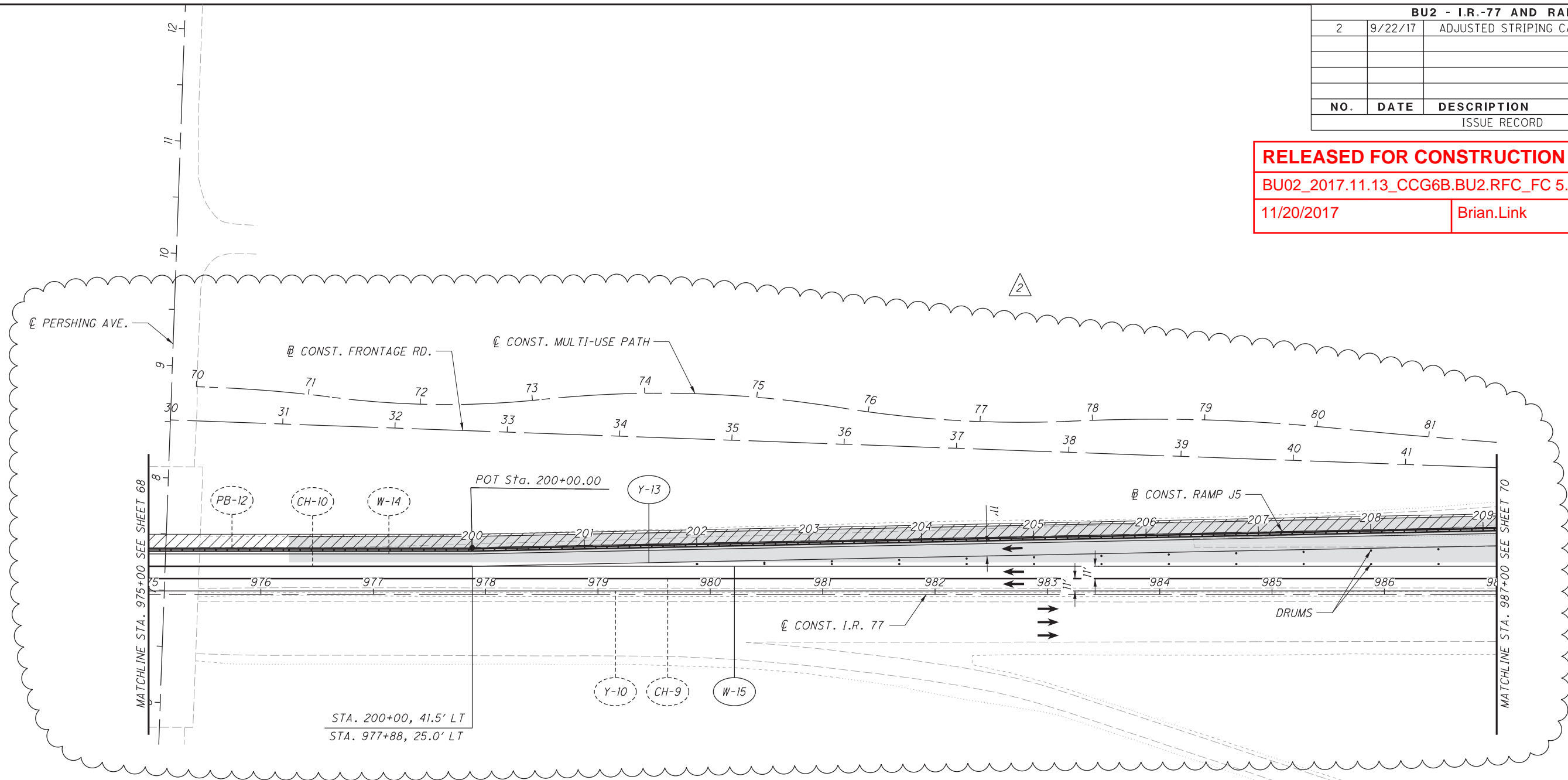
CALCULATED
M.L.L.

CHECKED
S.W.C.

RELEASED FOR CONSTRUCTION

BU02_2017.11.13_CCG6B.BU2.RFC_FC 5.pdf

11/20/2017 Brian.Link



LEGEND:

- ITEM 622 - PORTABLE BARRIER
- ITEM 614 - WORK ZONE IMPACT ATTENUATOR
- DRUMS - SPACED PER STANDARD CONSTRUCTION DRAWING
- TRAFFIC FLOW DIRECTION
- WORK ZONE
- ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, PLACED THIS PHASE
- TEMPORARY PAVEMENT COMPLETED IN PRIOR PHASE
- PROPOSED PAVEMENT COMPLETED IN PRIOR PHASE

- ITEM 614 - WORK ZONE LANE LINE, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE EDGE LINE, WHITE, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE EDGE LINE, YELLOW, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE DOTTED LINE, CLASS 1, 642 PAINT
- PORTABLE BARRIER

NOTES:

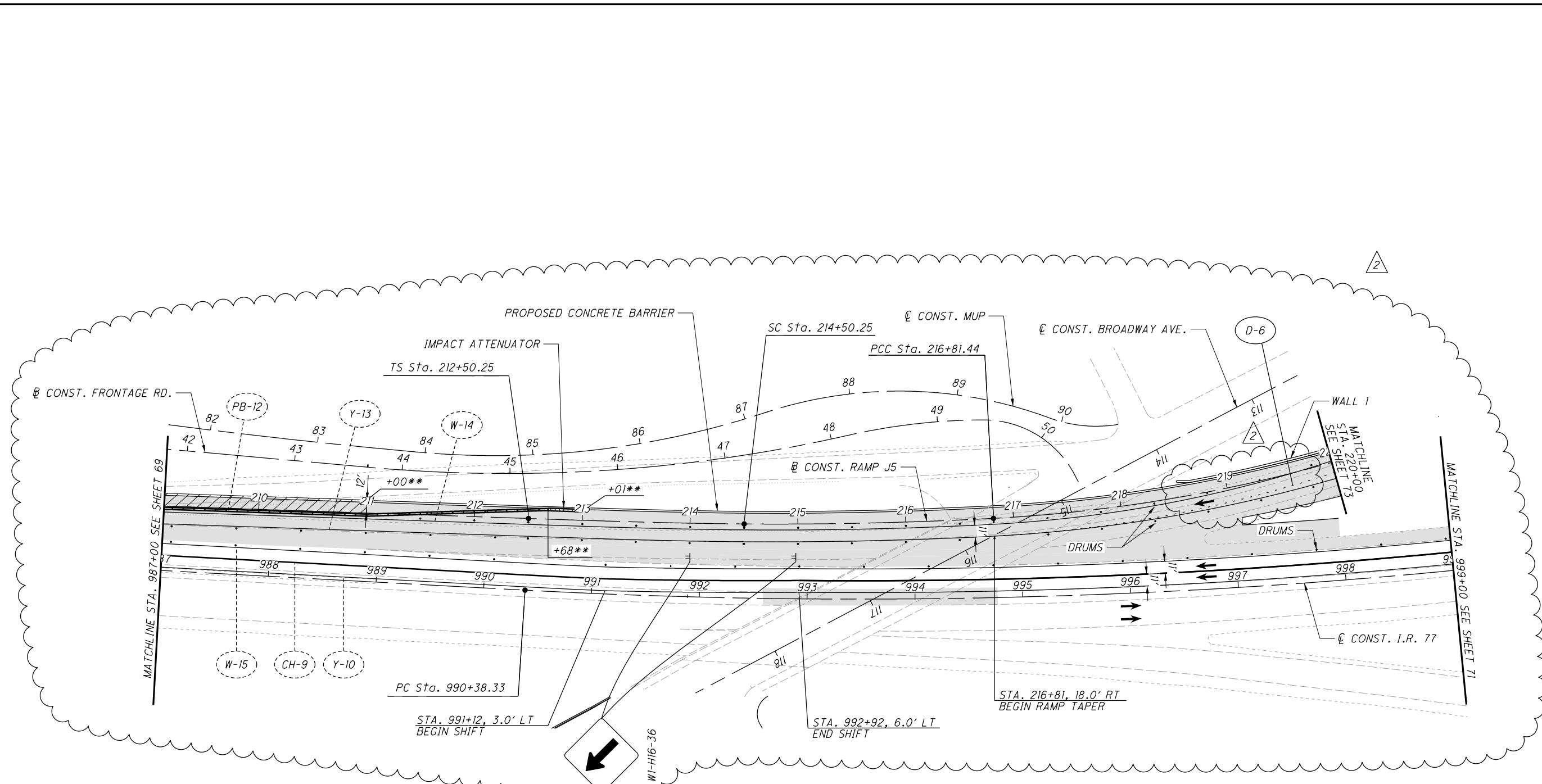
1. FOR SEQUENCE OF CONSTRUCTION NOTES, SEE SHEET 20
2. FOR MOT TYPICAL SECTIONS, SEE SHEETS 33 TO 37
3. THE CONTRACTOR SHALL COVER OR REMOVE ANY EXISTING SIGNAGE OR PAVEMENT MARKINGS IN CONFLICT WITH THE PROPOSED MOT LANE CONFIGURATION.
4. FOR LANE SHIFT SIGNING, SEE STANDARD CONSTRUCTION DRAWING MT-102.10 OR MT-102.20.
5. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF MT-99.30 FOR WORK ZONE DELINEATION FOR LANE SHIFTS AND CROSSOVERS.

* REFERENCES I.R. 77 STATIONING
** REFERENCES RAMP J5









MAINTENANCE OF TRAFFIC - PHASE 5
I.R. 77 - STA. 975+00 TO STA. 987+00







CUY-77-13.80

P:\B2388_CCG6B\Design\MOT\Sheets\B2388_MP2502.dgn Sheet 9/22/2017 1:46:47 PM mlfutes



LEGEND:

-  ITEM 622 - PORTABLE BARRIER
-  ITEM 614 - WORK ZONE IMPACT ATTENUATOR
-  DRUMS - SPACED PER STANDARD CONSTRUCTION DRAWING
-  TRAFFIC FLOW DIRECTION
-  WORK ZONE
-  ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, PLACED THIS PHASE
-  TEMPORARY PAVEMENT COMPLETED IN PRIOR PHASE
-  PROPOSED PAVEMENT COMPLETED IN PRIOR PHASE

-  ITEM 614 - WORK ZONE LANE LINE, CLASS 1, 642 PAINT
-  ITEM 614 - WORK ZONE EDGE LINE, WHITE, CLASS 1, 642 PAINT
-  ITEM 614 - WORK ZONE EDGE LINE, YELLOW, CLASS 1, 642 PAINT
-  ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS 1, 642 PAINT
-  ITEM 614 - WORK ZONE DOTTED LINE, CLASS 1, 642 PAINT
-  PORTABLE BARRIER

NOTES:

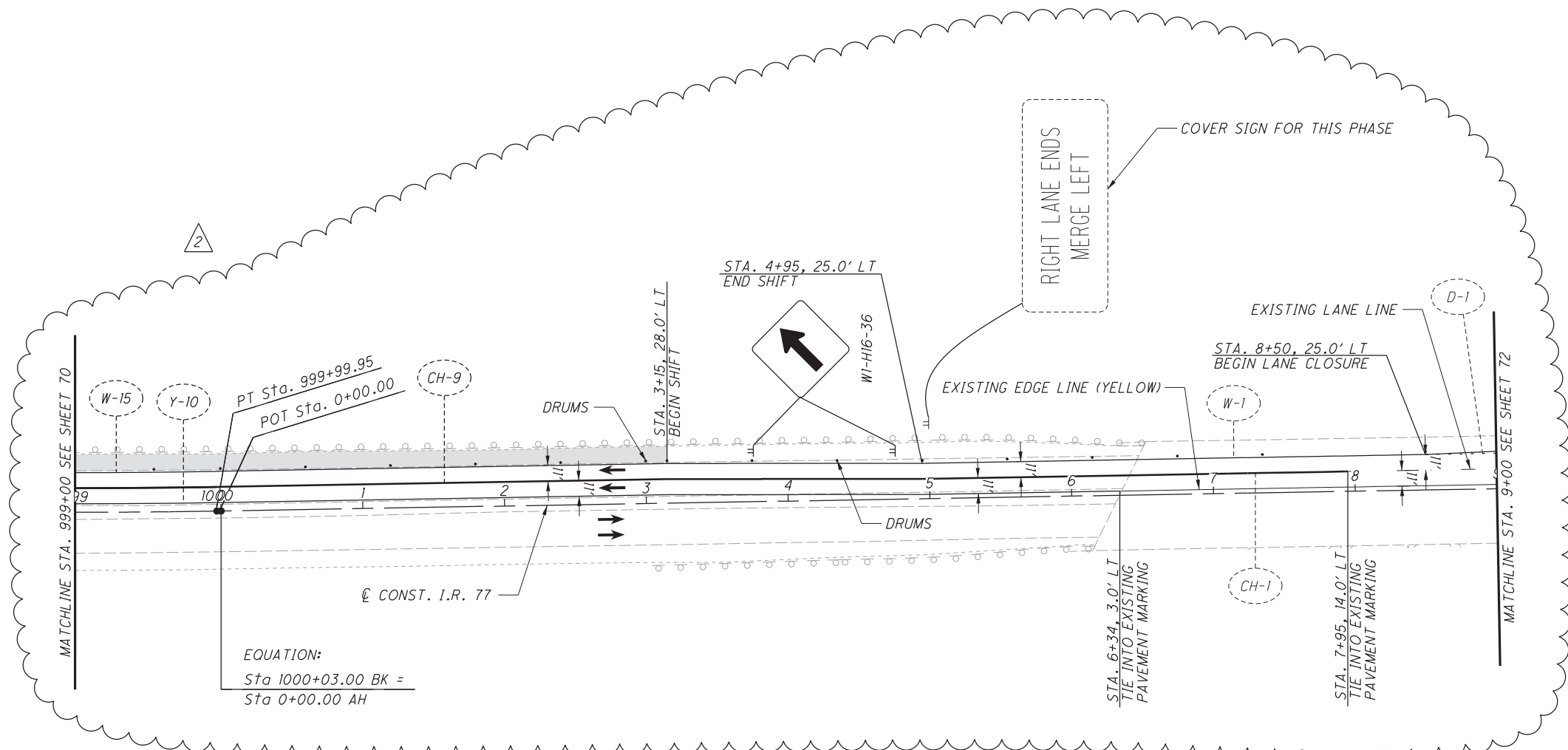
1. FOR SEQUENCE OF CONSTRUCTION NOTES, SEE SHEET 20
2. FOR MOT TYPICAL SECTIONS, SEE SHEETS 33 TO 37
3. THE CONTRACTOR SHALL COVER OR REMOVE ANY EXISTING SIGNAGE OR PAVEMENT MARKINGS IN CONFLICT WITH THE PROPOSED MOT LANE CONFIGURATION.
4. FOR LANE SHIFT SIGNING, SEE STANDARD CONSTRUCTION DRAWING MT-102.10 OR MT-102.20.
5. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF MT-99.30 FOR WORK ZONE DELINEATION FOR LANE SHIFTS AND CROSSOVERS.

RELEASED FOR CONSTRUCTION
 BU02_2017.11.13_CCG6B.BU2.RFC_FC 5.pdf
 11/20/2017 Brian.Link

* REFERENCES I.R. 77 STATIONING
 ** REFERENCES RAMP J5









BU2 - I.R.-77 AND RAMPS		
2	9/22/17	ADJUSTED STRIPING CALLOUTS
NO.	DATE	DESCRIPTION
ISSUE RECORD		







P:\B2388_CCG6B\Design\MOT\Sheets\B2388_MP2503.dgn_Sheet_11/17/2017 9:10:19 AM mlutes



EQUATION:
 $Sta\ 1000+03.00\ BK =$
 $Sta\ 0+00.00\ AH$

LEGEND:

-  ITEM 622 - PORTABLE BARRIER
-  ITEM 614 - WORK ZONE IMPACT ATTENUATOR
-  DRUMS - SPACED PER STANDARD CONSTRUCTION DRAWING
-  TRAFFIC FLOW DIRECTION
-  WORK ZONE
-  ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, PLACED THIS PHASE
-  TEMPORARY PAVEMENT COMPLETED IN PRIOR PHASE
-  PROPOSED PAVEMENT COMPLETED IN PRIOR PHASE

-  ITEM 614 - WORK ZONE LANE LINE, CLASS 1, 642 PAINT
-  ITEM 614 - WORK ZONE EDGE LINE, WHITE, CLASS 1, 642 PAINT
-  ITEM 614 - WORK ZONE EDGE LINE, YELLOW, CLASS 1, 642 PAINT
-  ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS 1, 642 PAINT
-  ITEM 614 - WORK ZONE DOTTED LINE, CLASS 1, 642 PAINT
-  PORTABLE BARRIER

NOTES:

1. FOR SEQUENCE OF CONSTRUCTION NOTES, SEE SHEET 20
2. FOR MOT TYPICAL SECTIONS, SEE SHEETS 33 TO 37
3. THE CONTRACTOR SHALL COVER OR REMOVE ANY EXISTING SIGNAGE OR PAVEMENT MARKINGS IN CONFLICT WITH THE PROPOSED MOT LANE CONFIGURATION.
4. FOR LANE SHIFT SIGNING, SEE STANDARD CONSTRUCTION DRAWING MT-102.10 OR MT-102.20.
5. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF MT-99.30 FOR WORK ZONE DELINEATION FOR LANE SHIFTS AND CROSSOVERS.

RELEASED FOR CONSTRUCTION
 BU02_2017.11.13_CCG6B.BU2.RFC_FC 5.pdf
 11/20/2017 Brian.Link

BU2 - I.R.-77 AND RAMPS		
2	9/22/17	ADJUSTED STRIPING CALLOUTS
NO.	DATE	DESCRIPTION
ISSUE RECORD		



CALCULATED MLL CHECKED SWC

**MAINTENANCE OF TRAFFIC - PHASE 5
RAMP J5 - STA. 220+00 TO STA. 232+00**

CUY-77-13.80

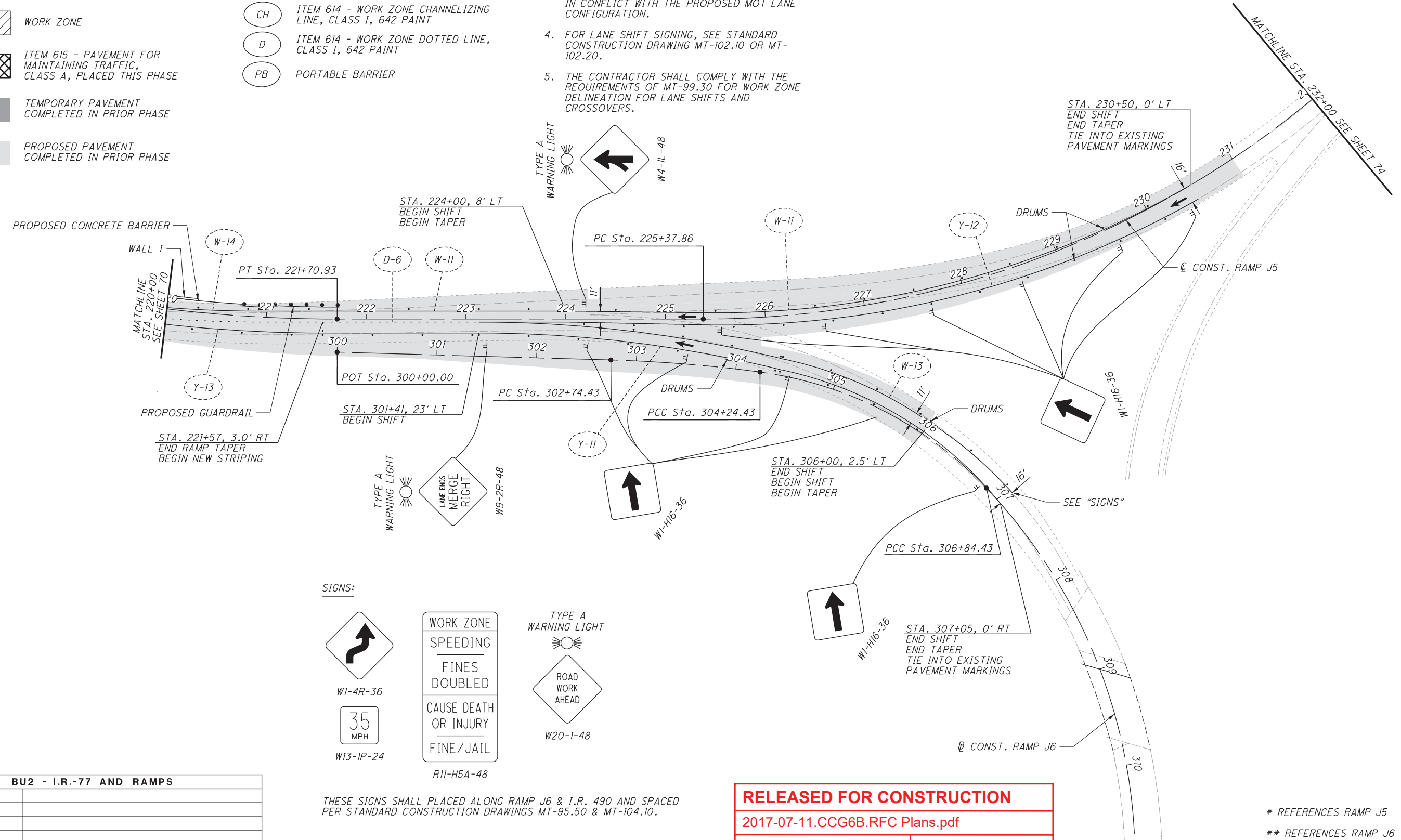
LEGEND:

- ITEM 622 - PORTABLE BARRIER
- ITEM 614 - WORK ZONE IMPACT ATTENUATOR
- DRUMS - SPACED PER STANDARD CONSTRUCTION DRAWING
- TRAFFIC FLOW DIRECTION
- WORK ZONE
- ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, PLACED THIS PHASE
- TEMPORARY PAVEMENT COMPLETED IN PRIOR PHASE
- PROPOSED PAVEMENT COMPLETED IN PRIOR PHASE

- ITEM 614 - WORK ZONE LANE LINE, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE EDGE LINE, WHITE, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE EDGE LINE, YELLOW, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE DOTTED LINE, CLASS 1, 642 PAINT
- PORTABLE BARRIER

NOTES:

1. FOR SEQUENCE OF CONSTRUCTION NOTES, SEE SHEET 20
2. FOR MOT TYPICAL SECTIONS, SEE SHEETS 33 TO 37
3. THE CONTRACTOR SHALL COVER OR REMOVE ANY EXISTING SIGNAGE OR PAVEMENT MARKINGS IN CONFLICT WITH THE PROPOSED MOT LANE CONFIGURATION.
4. FOR LANE SHIFT SIGNING, SEE STANDARD CONSTRUCTION DRAWING MT-102.10 OR MT-102.20.
5. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF MT-99.30 FOR WORK ZONE DELINEATION FOR LANE SHIFTS AND CROSSOVERS.



SIGNS:

- W1-4R-36
- W13-IP-24
- R11-H5A-48
- TYPE A WARNING LIGHT
- ROAD WORK AHEAD W20-1-48

THESE SIGNS SHALL BE PLACED ALONG RAMP J6 & I.R. 490 AND SPACED PER STANDARD CONSTRUCTION DRAWINGS MT-95.50 & MT-104.10.

RELEASED FOR CONSTRUCTION

2017-07-11.CCG6B.RFC Plans.pdf

07/12/2017 brian.link

* REFERENCES RAMP J5
** REFERENCES RAMP J6

P:\82388_CCG6B\Design\MOT\Sheets\82388_MP2506.dgn_Sheet 7/10/2017 3:20:35 PM m\lutes

BU2 - I.R.-77 AND RAMPS

NO.	DATE	DESCRIPTION

ISSUE RECORD



CALCULATED
M.L.L.
CHECKED
S.W.C.

MAINTENANCE OF TRAFFIC - PHASE 5
RAMP J5 - STA. 232+00 TO END WORK

CUY-77-13.80

74
170

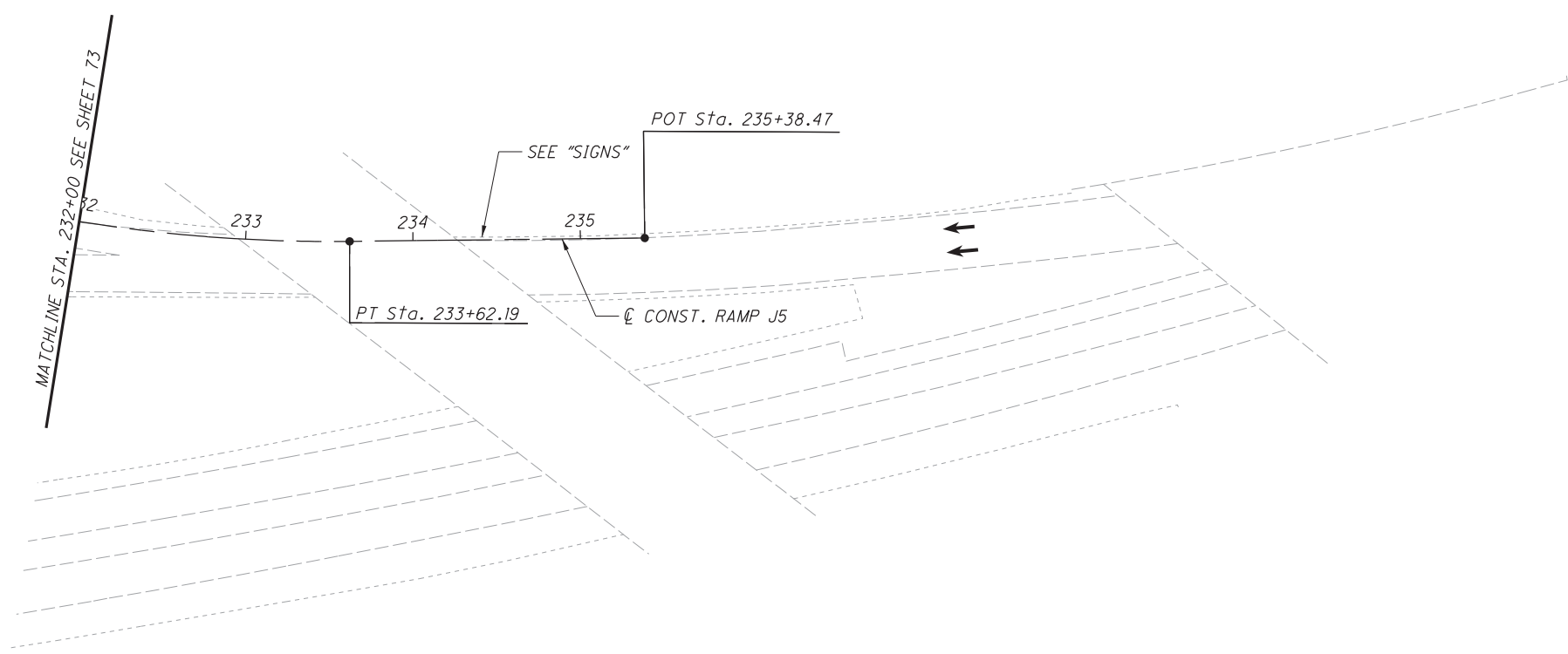
LEGEND:

- ITEM 622 - PORTABLE BARRIER
- ITEM 614 - WORK ZONE IMPACT ATTENUATOR
- DRUMS - SPACED PER STANDARD CONSTRUCTION DRAWING
- TRAFFIC FLOW DIRECTION
- WORK ZONE
- ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, PLACED THIS PHASE
- TEMPORARY PAVEMENT COMPLETED IN PRIOR PHASE
- PROPOSED PAVEMENT COMPLETED IN PRIOR PHASE

- ITEM 614 - WORK ZONE LANE LINE, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE EDGE LINE, WHITE, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE EDGE LINE, YELLOW, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE DOTTED LINE, CLASS 1, 642 PAINT
- PORTABLE BARRIER

NOTES:

1. FOR SEQUENCE OF CONSTRUCTION NOTES, SEE SHEET 20
2. FOR MOT TYPICAL SECTIONS, SEE SHEETS 33 TO 37
3. THE CONTRACTOR SHALL COVER OR REMOVE ANY EXISTING SIGNAGE OR PAVEMENT MARKINGS IN CONFLICT WITH THE PROPOSED MOT LANE CONFIGURATION.
4. FOR LANE SHIFT SIGNING, SEE STANDARD CONSTRUCTION DRAWING MT-102.10 OR MT-102.20.
5. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF MT-99.30 FOR WORK ZONE DELINEATION FOR LANE SHIFTS AND CROSSOVERS.



SIGNS:

W1-4R-36

W13-1P-24

R11-H5A-48

W20-1-48

THESE SIGNS SHALL PLACED ALONG RAMP J6 & I.R. 490 AND SPACED PER STANDARD CONSTRUCTION DRAWINGS MT-95.50 & MT-104.10.

RELEASED FOR CONSTRUCTION

2017-07-11.CCG6B.RFC Plans.pdf

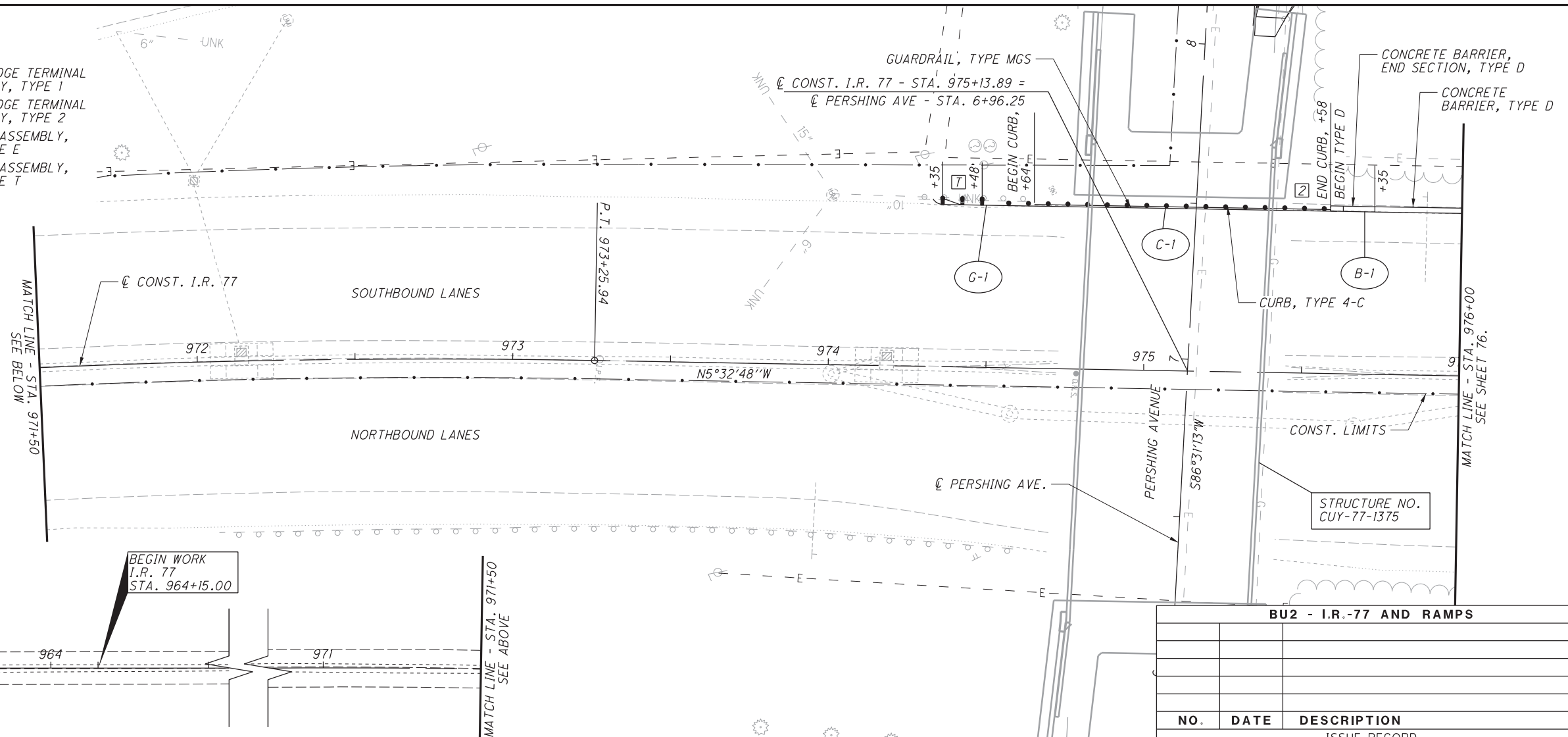
07/12/2017 brian.link

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION

P:\B2388_CCG6B\Design\MOT\Sheets\B2388_MP2507.dgn Sheet 7/10/2017 3:20:36 PM mlutes

LEGEND

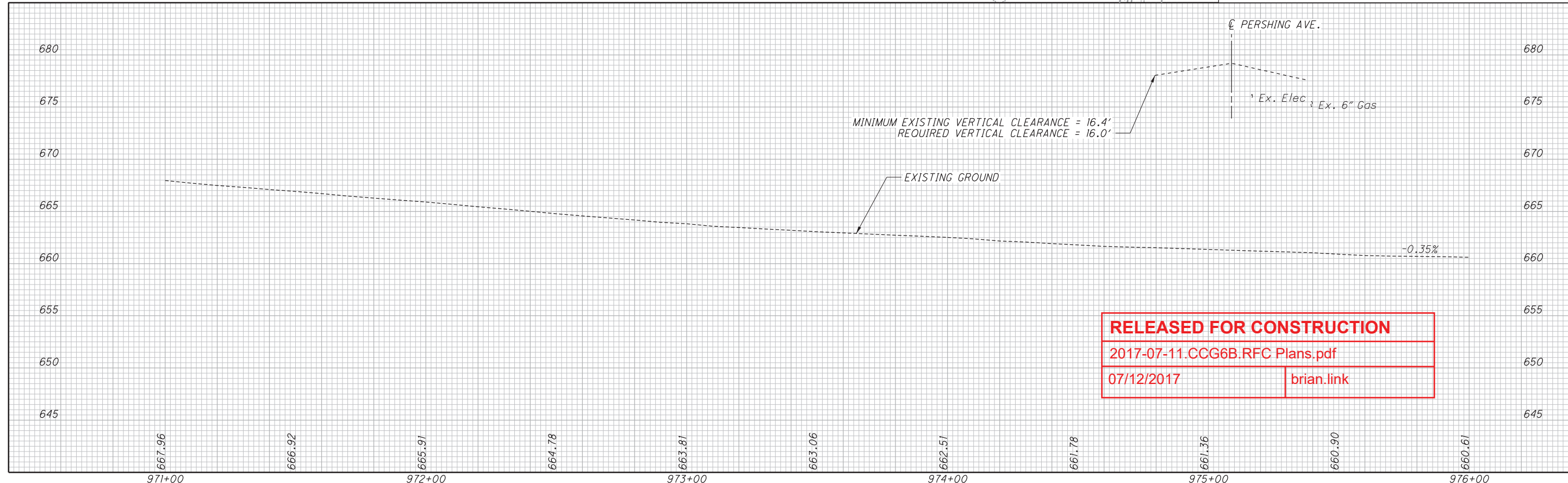
- (B) - CONCRETE BARRIER
- (C) - CURB
- (G) - GUARDRAIL
- [1] MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1
- [2] MGS BRIDGE TERMINAL ASSEMBLY, TYPE 2
- [E] ANCHOR ASSEMBLY, MGS TYPE E
- [T] ANCHOR ASSEMBLY, MGS TYPE T



BEGIN WORK
I.R. 77
STA. 964+15.00

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION

ISSUE RECORD



RELEASED FOR CONSTRUCTION
 2017-07-11.CCG6B.RFC Plans.pdf
 07/12/2017 brian.link



CALCULATED SWC
 CHECKED MLL

PLAN AND PROFILE - I.R. 77
STA. 971+50.00 TO STA. 976+00.00

CUY-77-13.80

75
170

P:\82388_CCG6B\Design\Roadway\Sheets\82388_CP2001.dgn Sheet 7/10/2017 3:20:48 PM mlutes

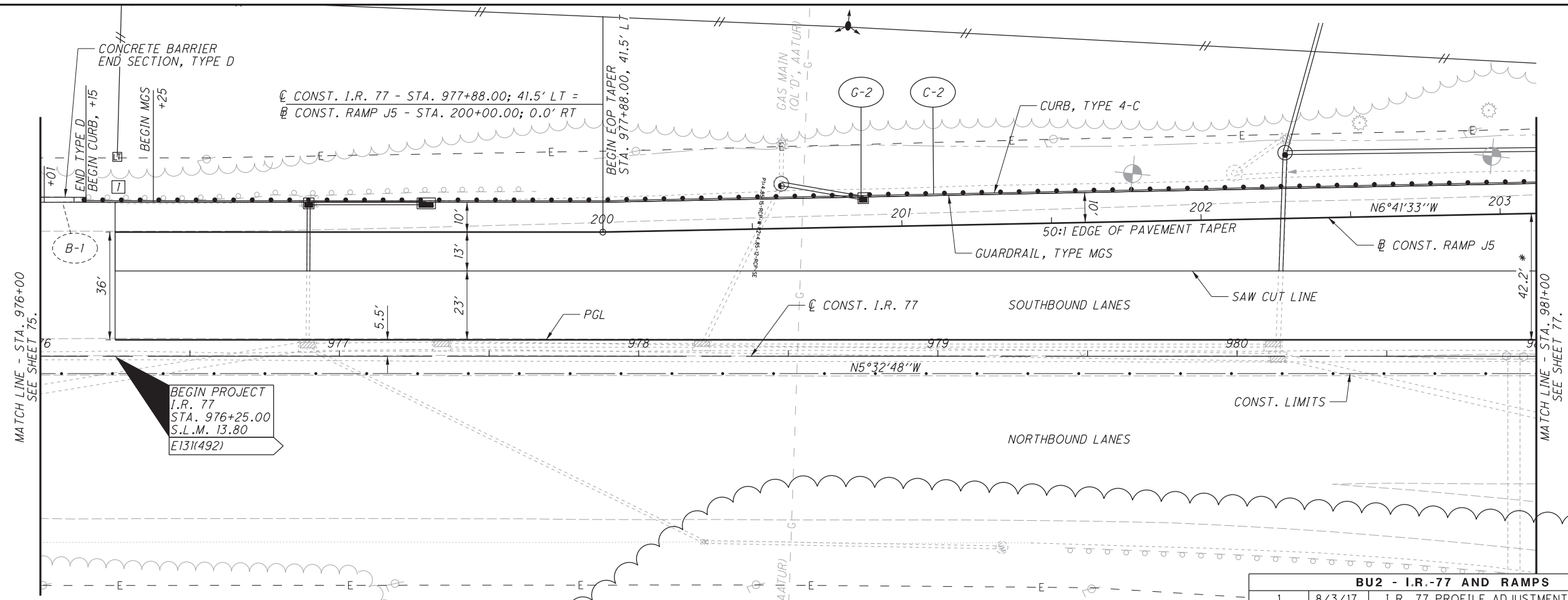


CALCULATED SWC CHECKED MLL

PLAN AND PROFILE - I.R. 77
STA. 976+00.00 TO STA. 981+00.00

CUY-77-13.80

76
170

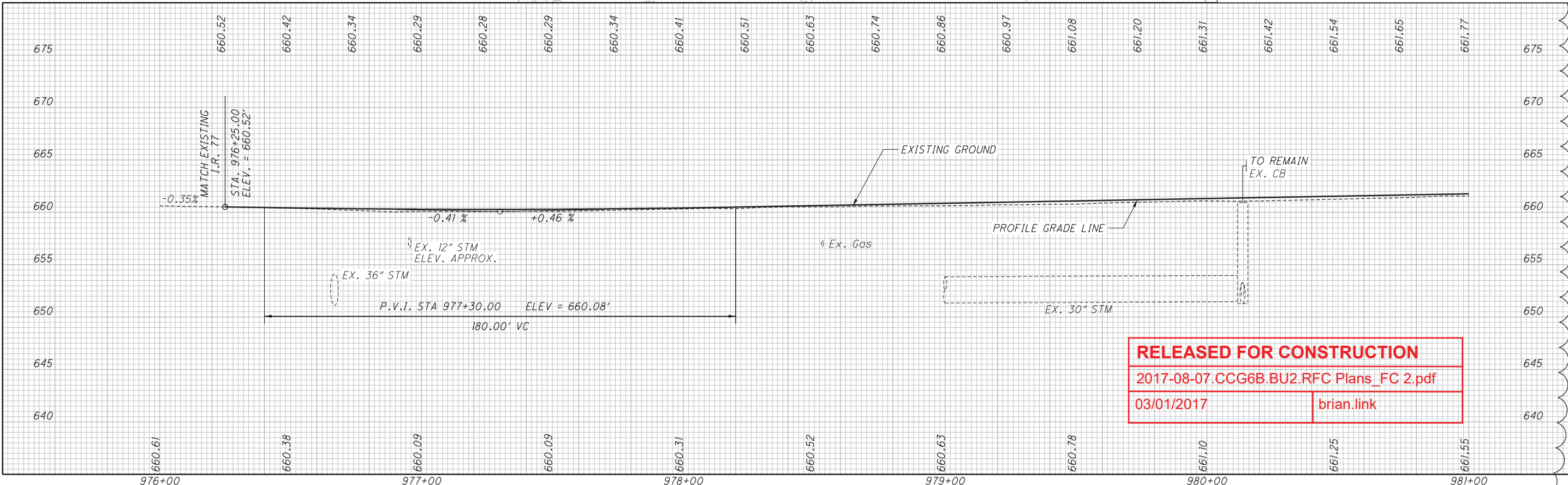


BEGIN PROJECT I.R. 77 STA. 976+25.00 S.L.M. 13.80 E131(492)

FOR INTERCHANGE DETAILS SEE SHEET 147 - 150
FOR LEGEND, SEE SHEET 75.

* DIMENSIONS ARE MEASURED PERPENDICULAR TO THE CENTERLINE OF I.R. 77 AT THE MATCHLINE.

BU2 - I.R.-77 AND RAMPS		
1	8/3/17	I.R. 77 PROFILE ADJUSTMENT
NO.	DATE	DESCRIPTION
ISSUE RECORD		



RELEASED FOR CONSTRUCTION
 2017-08-07.CCG6B.BU2.RFC Plans_FC 2.pdf
 03/01/2017 brian.link

P:\82388_CCG6B\Design\Roadway\Sheets\82388_GP2002.dgn Sheet 8/10/2017 3:14:38 PM scorcoran

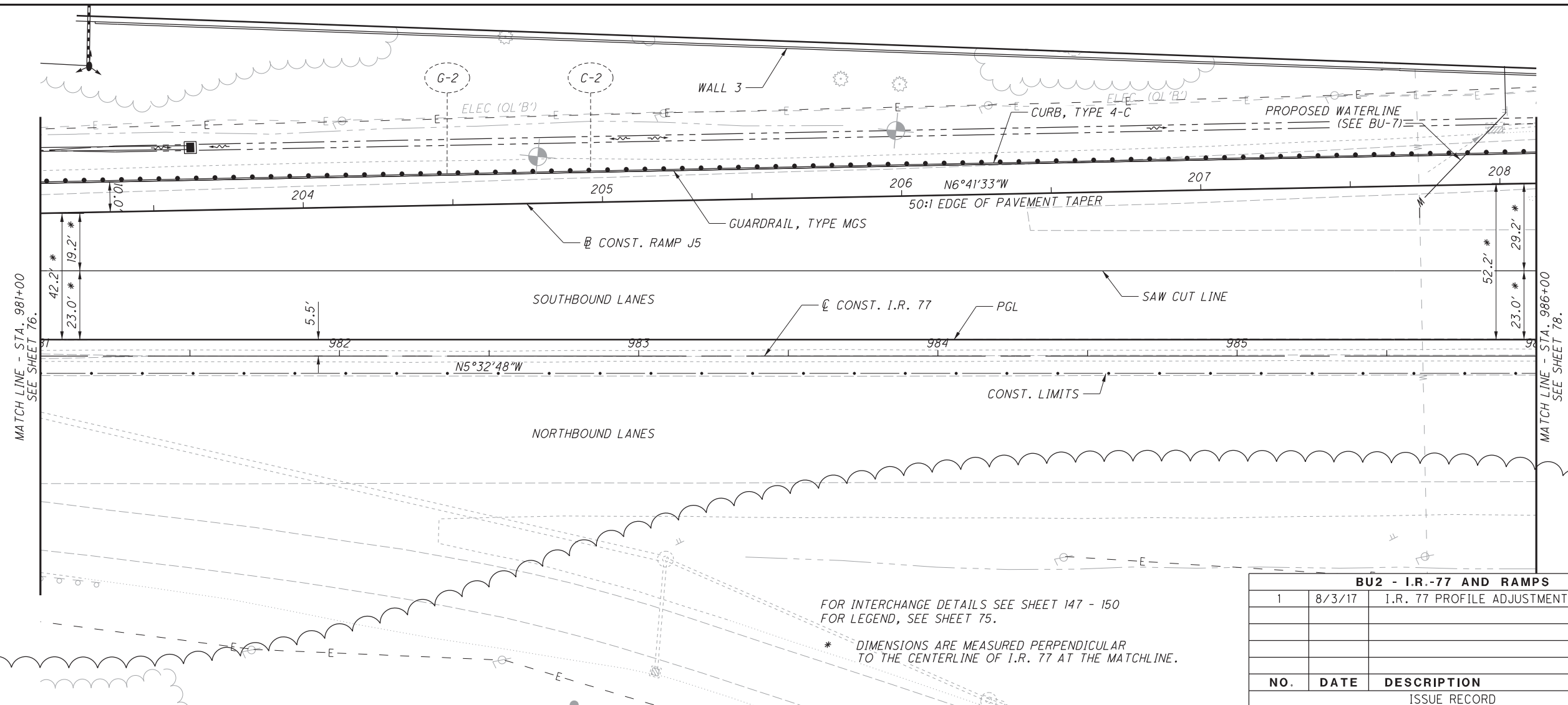


CALCULATED SWC CHECKED MLL

PLAN AND PROFILE - I.R. 77
STA. 981+00.00 TO STA. 986+00.00

CUY-77-13.80

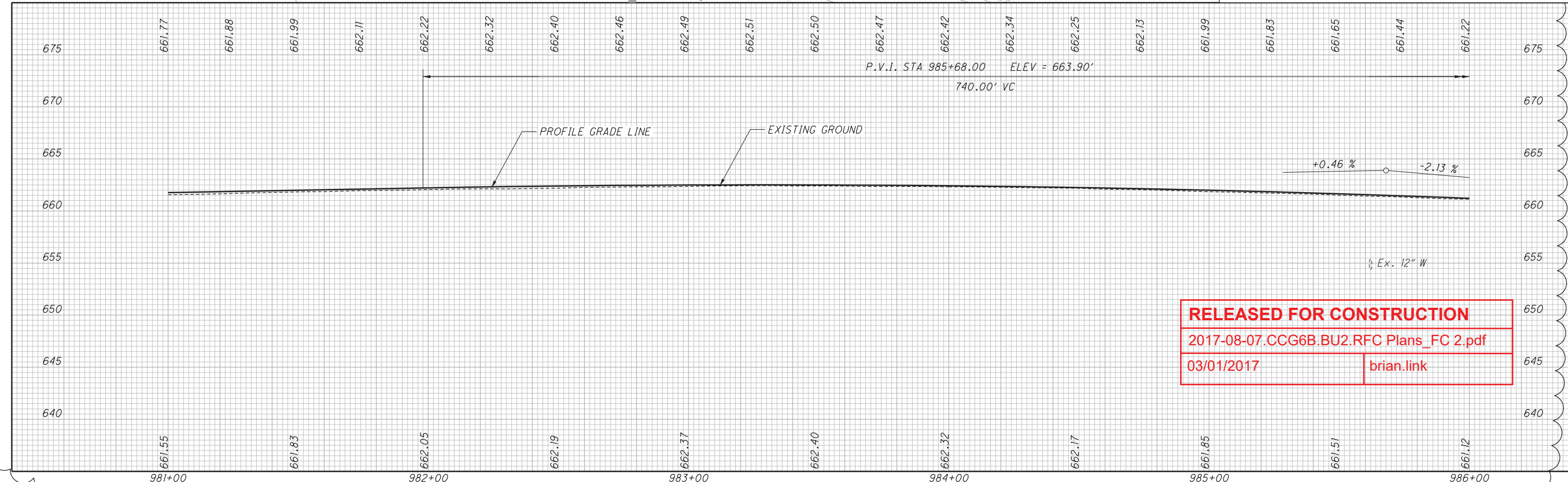
77
170



FOR INTERCHANGE DETAILS SEE SHEET 147 - 150
FOR LEGEND, SEE SHEET 75.

* DIMENSIONS ARE MEASURED PERPENDICULAR
TO THE CENTERLINE OF I.R. 77 AT THE MATCHLINE.

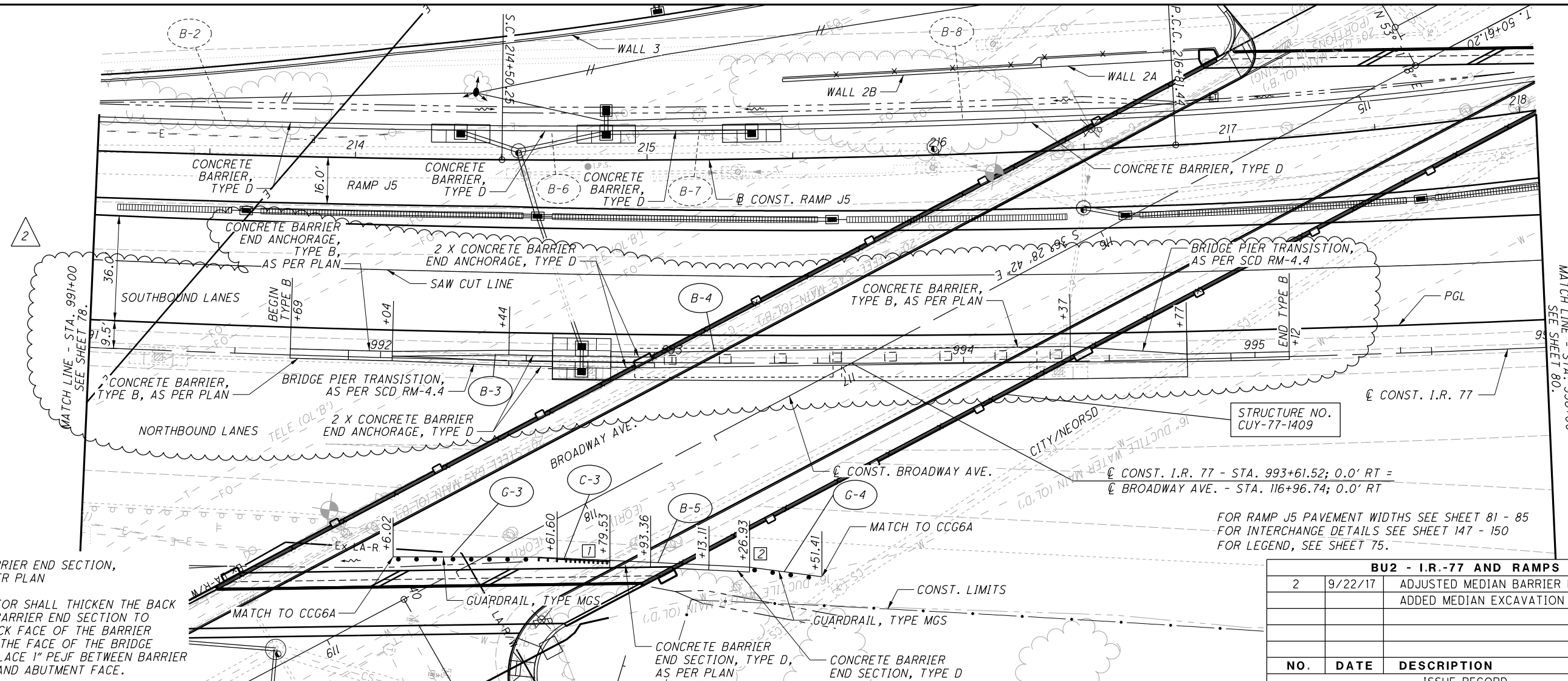
BU2 - I.R.-77 AND RAMPS		
1	8/3/17	I.R. 77 PROFILE ADJUSTMENT
NO.	DATE	DESCRIPTION
ISSUE RECORD		



RELEASED FOR CONSTRUCTION
 2017-08-07.CCG6B.BU2.RFC Plans_FC 2.pdf
 03/01/2017 brian.link

P:\82-368_CCG6B\Design\Roadway\Sheets\82368_CP2003.dgn Sheet 8/10/2017 3:14:41 PM scbrcoran

P:\82388_CCG6B\Design\Roadway\Sheets\82388_CP2005.dgn Sheet 11/14/2017 7:48:27 AM milites

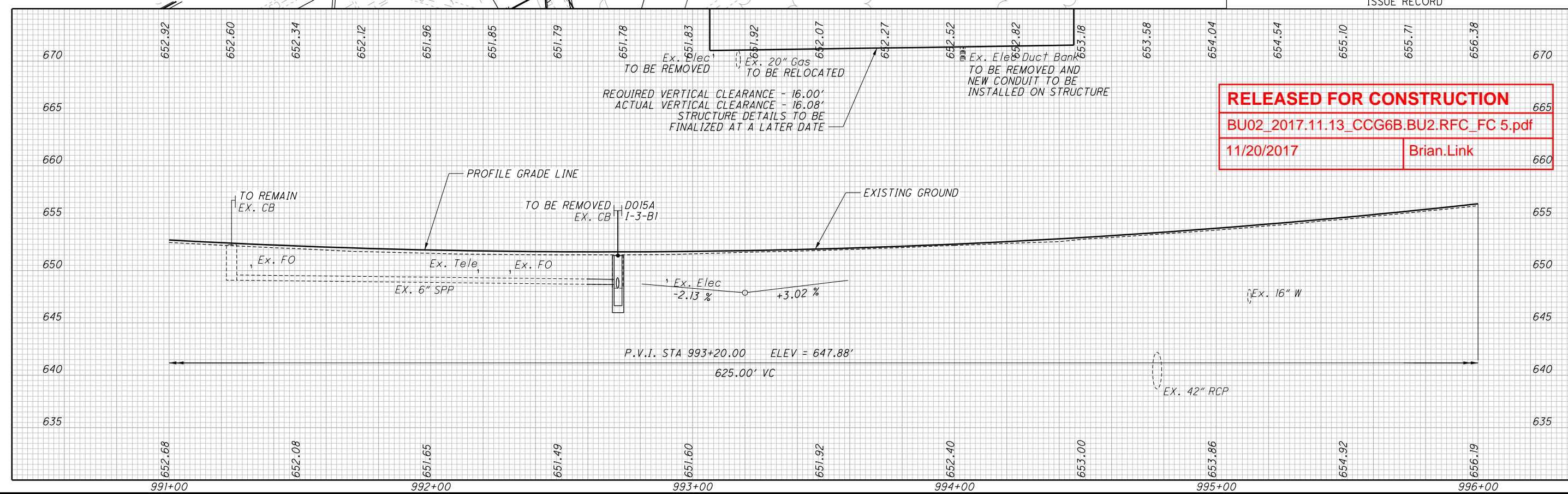


CONCRETE BARRIER END SECTION, TYPE D, AS PER PLAN

THE CONTRACTOR SHALL THICKEN THE BACK SIDE OF THE BARRIER END SECTION TO PLACE THE BACK FACE OF THE BARRIER ADJACENT TO THE FACE OF THE BRIDGE ABUTMENT. PLACE 1" PEJF BETWEEN BARRIER END SECTION AND ABUTMENT FACE.

FOR RAMP J5 PAVEMENT WIDTHS SEE SHEET 81 - 85
 FOR INTERCHANGE DETAILS SEE SHEET 147 - 150
 FOR LEGEND, SEE SHEET 75.

BU2 - I.R.-77 AND RAMPS		
2	9/22/17	ADJUSTED MEDIAN BARRIER DETAILS ADDED MEDIAN EXCAVATION DETAILS
NO.	DATE	DESCRIPTION
ISSUE RECORD		



RELEASED FOR CONSTRUCTION

BU02_2017.11.13_CCG6B.BU2.RFC_FC 5.pdf

11/20/2017 Brian.Link

CALCULATED	SWC	CHECKED	MLL
------------	-----	---------	-----

PLAN AND PROFILE - I.R. 77

STA. 991+00.00 TO STA. 996+00.00

CUY-77-13.80

79
170

2	9/22/17	ADJUSTED WALL 1 PLAN VIEW
ISSUE RECORD		
NO.	DATE	DESCRIPTION

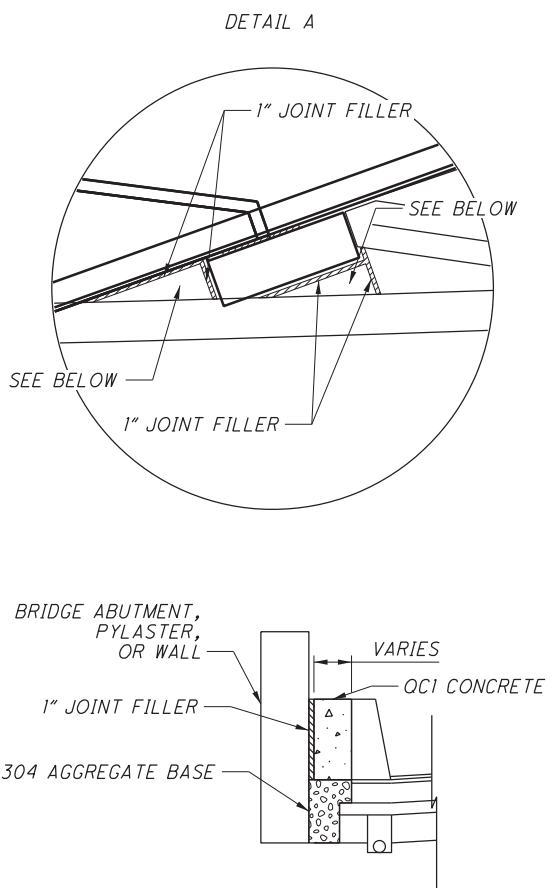
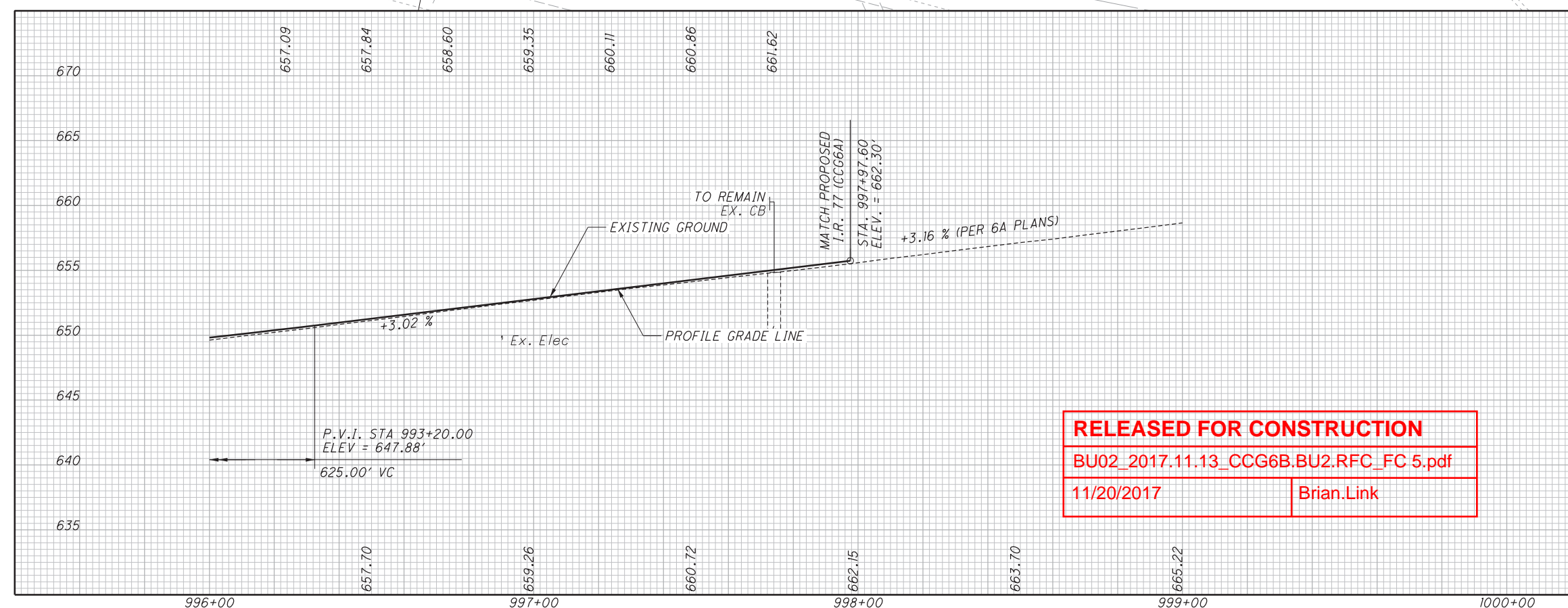
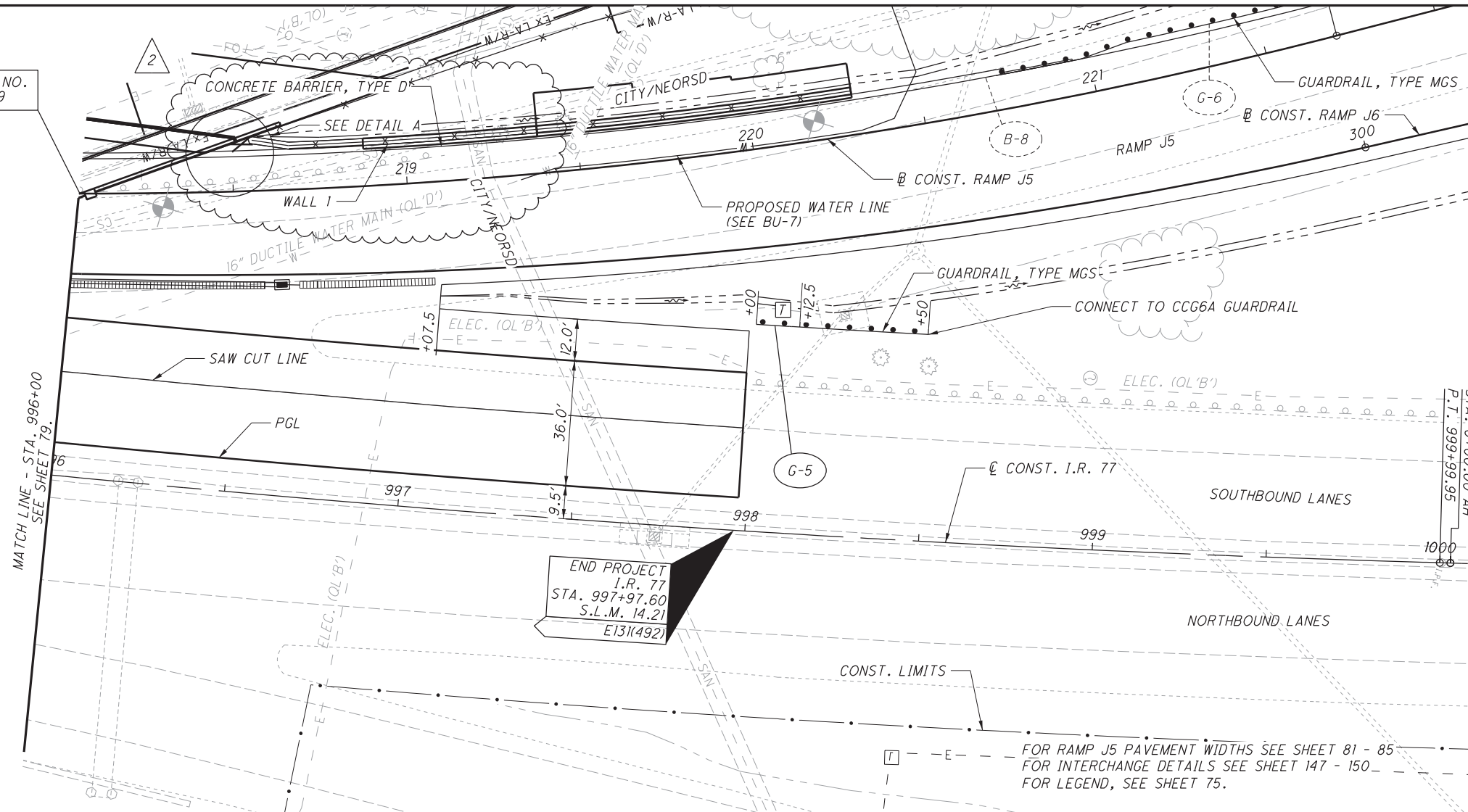


CALCULATED SWC CHECKED MLL

PLAN AND PROFILE - I.R. 77
STA. 996+00.00 TO END WORK

CUY-77-13.80

80
170



RELEASED FOR CONSTRUCTION
 BU02_2017.11.13_CCG6B.BU2.RFC_FC 5.pdf
 11/20/2017 Brian.Link

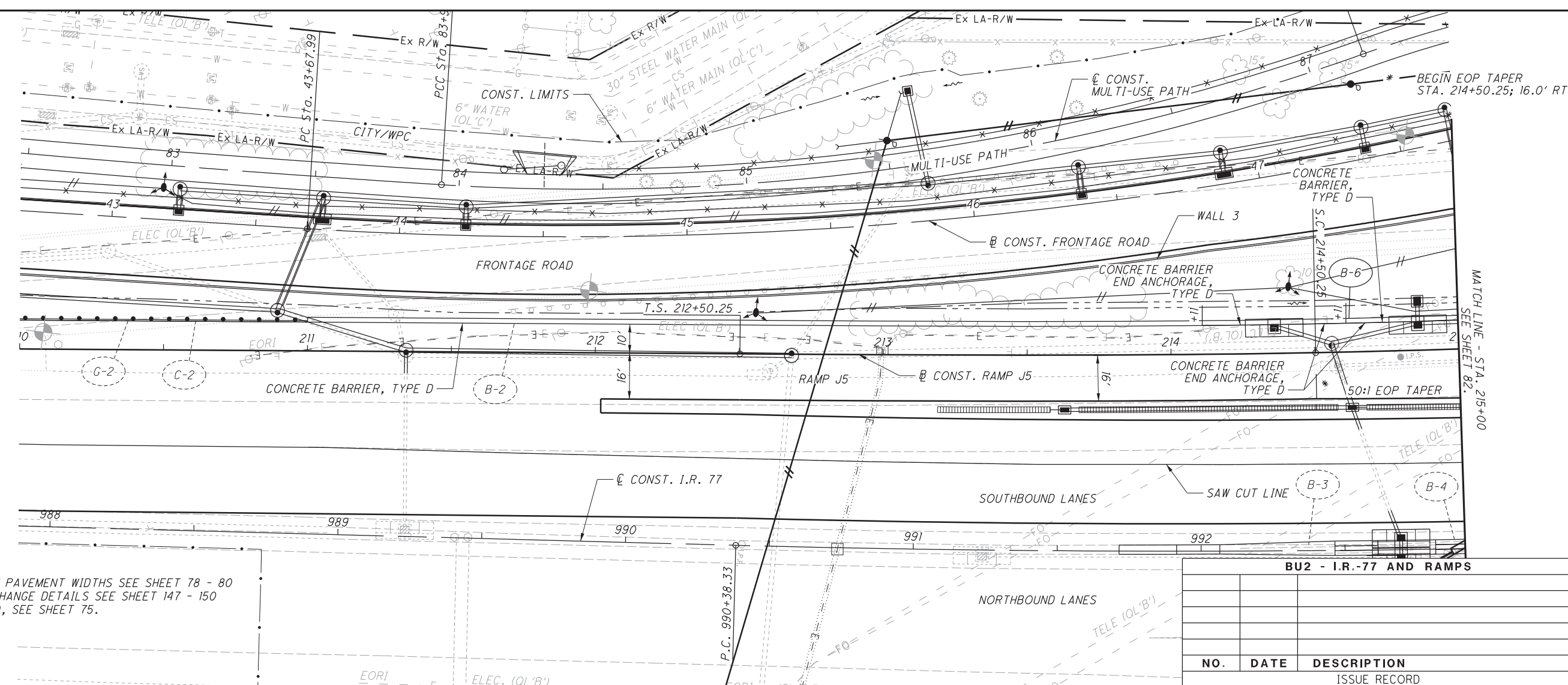
P:\82388_CCG6B\Design\Roadway\Sheets\82388_CP2006.dgn Sheet 9/22/2017 1:47:00 PM mlutes



CALCULATED SWC CHECKED MLL

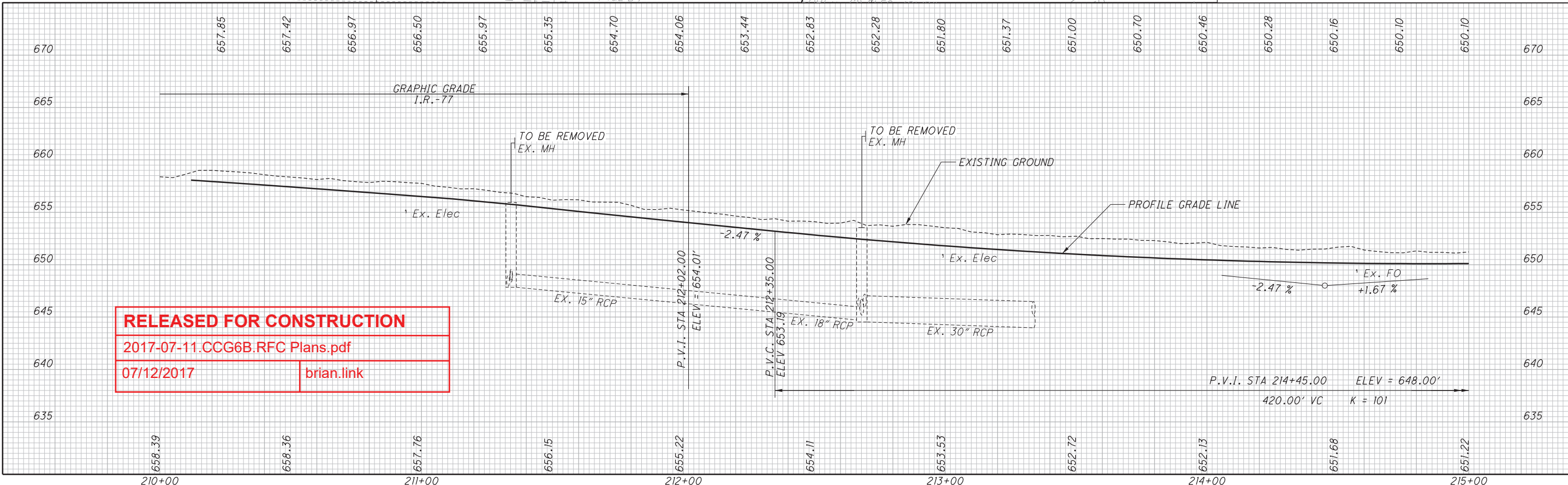
**PLAN AND PROFILE - RAMP J5
STA. 210+00.00 TO STA. 215+00.00**

CUY-77-13.80



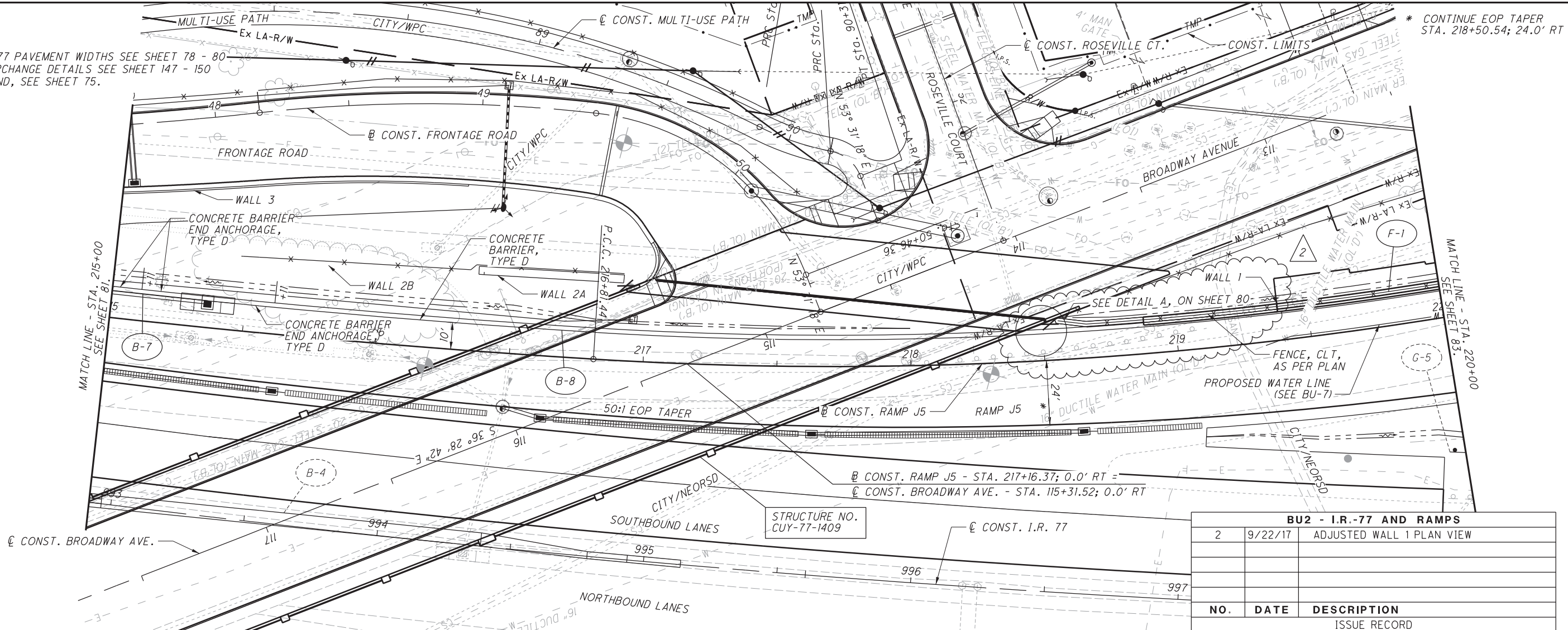
FOR I.R. 77 PAVEMENT WIDTHS SEE SHEET 78 - 80
 FOR INTERCHANGE DETAILS SEE SHEET 147 - 150
 FOR LEGEND, SEE SHEET 75.

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION

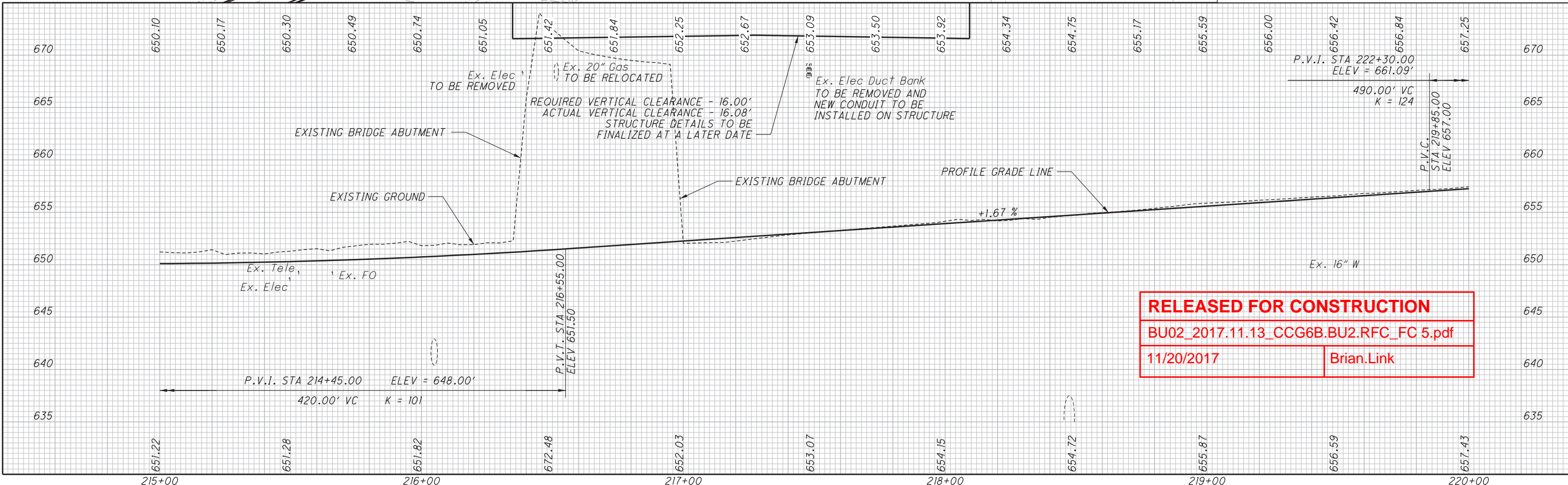


RELEASED FOR CONSTRUCTION
 2017-07-11.CCG6B.RFC Plans.pdf
 07/12/2017 brian.link

FOR I.R. 77 PAVEMENT WIDTHS SEE SHEET 78 - 80
 FOR INTERCHANGE DETAILS SEE SHEET 147 - 150
 FOR LEGEND, SEE SHEET 75.



BU2 - I.R.-77 AND RAMPS		
2	9/22/17	ADJUSTED WALL 1 PLAN VIEW
NO.	DATE	DESCRIPTION
ISSUE RECORD		



RELEASED FOR CONSTRUCTION
 BU02_2017.11.13_CCG6B.BU2.RFC_FC 5.pdf
 11/20/2017 Brian.Link



PLAN AND PROFILE - RAMP J5
 STA. 215+00.00 TO STA. 220+00.00

CUY-77-13.80

82
170

P:\82388_CCG6B\Design\Roadway\Sheets\82388_CP2102.dgn Sheet 9/22/2017 1:47:04 PM mlutes

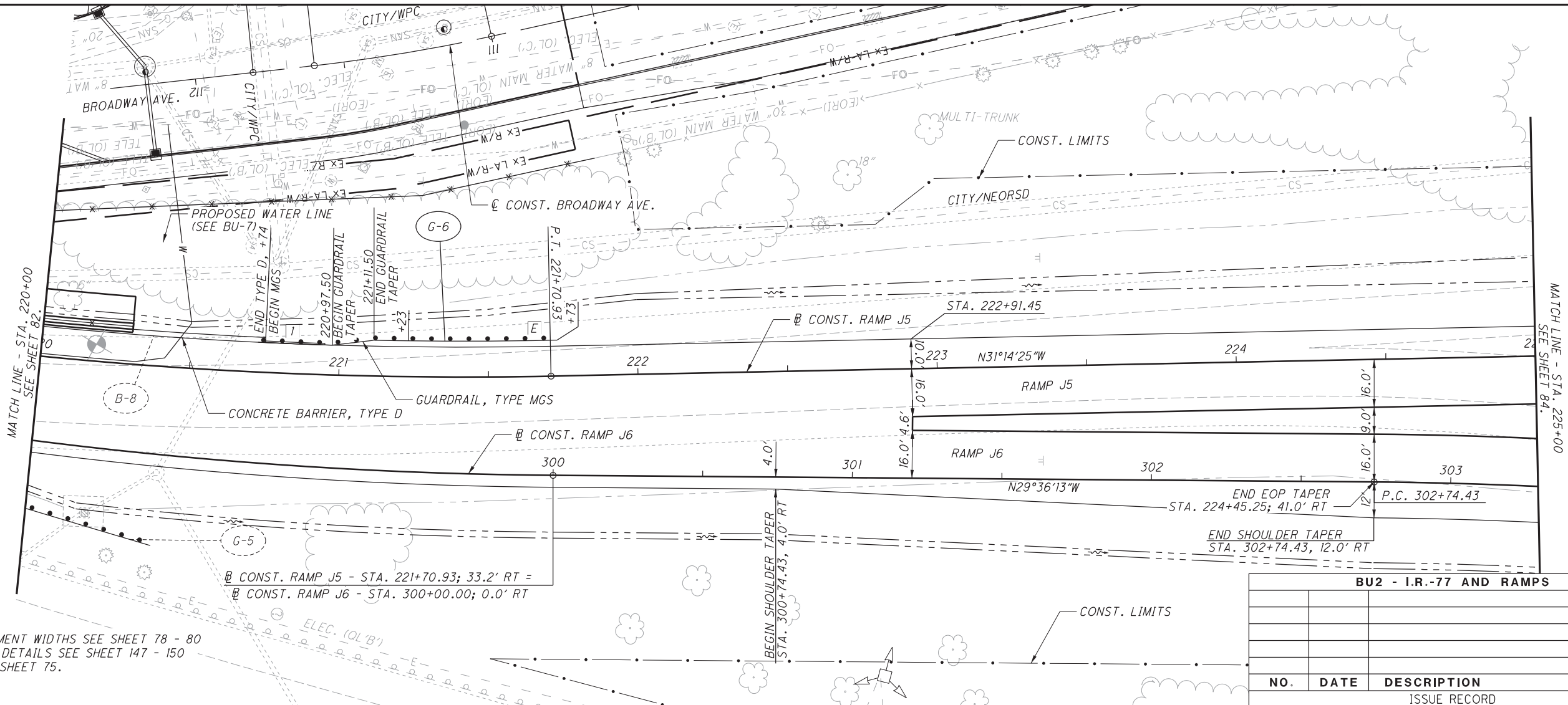


CALCULATED SWC CHECKED MLL

**PLAN AND PROFILE - RAMP J5
STA. 220+00.00 TO STA. 225+00.00**

CUY-77-13.80

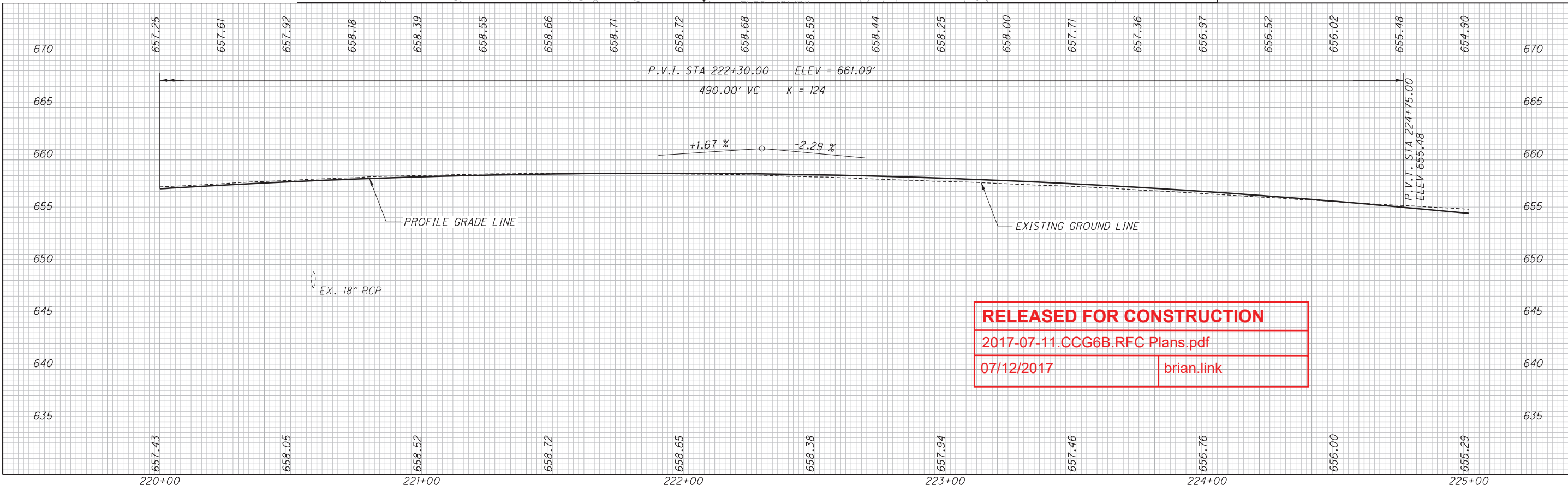
83
170



BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION

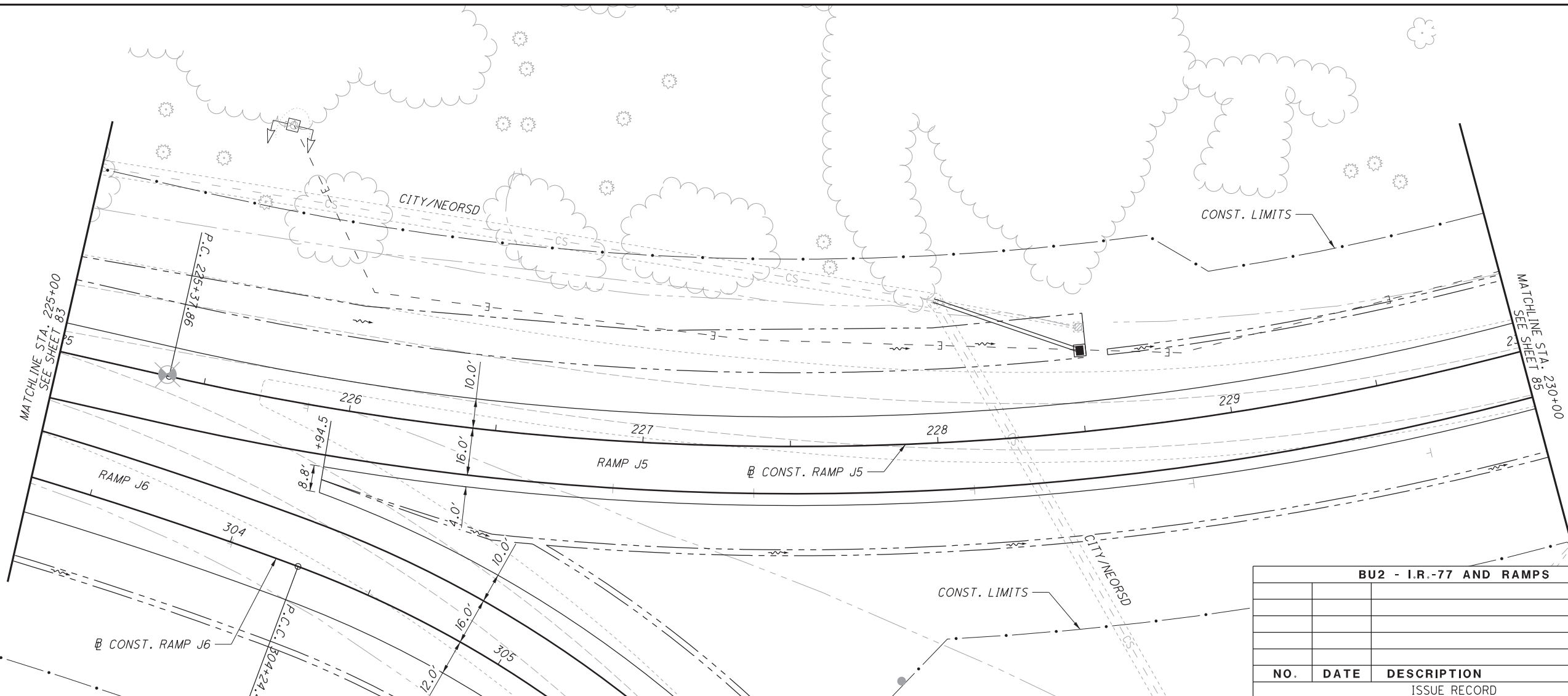
ISSUE RECORD

FOR I.R. 77 PAVEMENT WIDTHS SEE SHEET 78 - 80
FOR INTERCHANGE DETAILS SEE SHEET 147 - 150
FOR LEGEND, SEE SHEET 75.

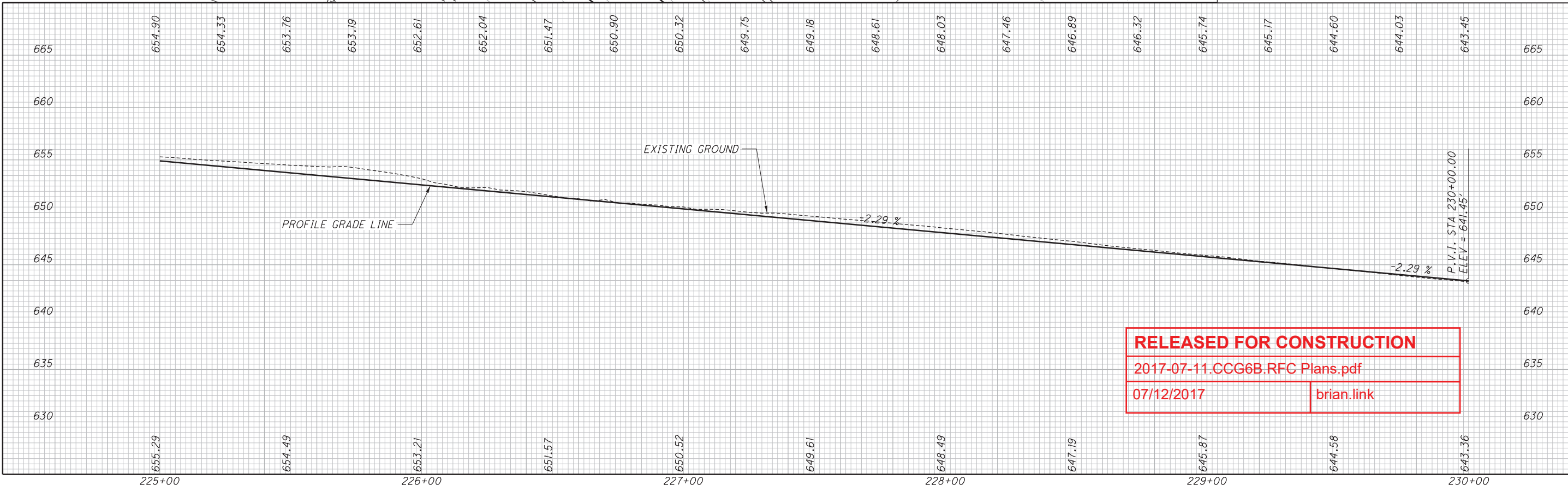


RELEASED FOR CONSTRUCTION
 2017-07-11.CCG6B.RFC Plans.pdf
 07/12/2017 brian.link

P:\82388_CCG6B\Design\Roadway\Sheets\82388_GP2103.dgn Sheet 7/10/2017 3:21:13 PM mlutes



BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION



RELEASED FOR CONSTRUCTION
 2017-07-11.CCG6B.RFC Plans.pdf
 07/12/2017 brian.link

CALCULATED: SWC
 CHECKED: MLL

0 10 20 40
 HORIZONTAL SCALE IN FEET

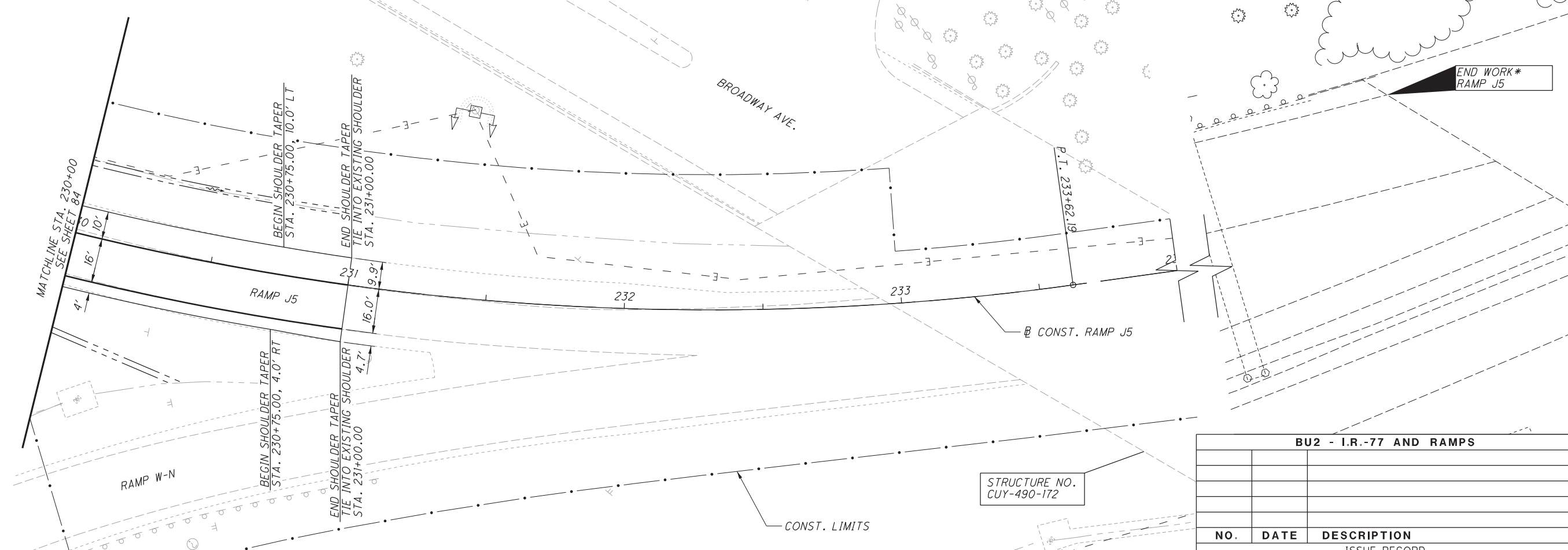
**PLAN AND PROFILE - RAMP J5
 STA. 225+00.00 TO STA. 230+00.00**

CUY-77-13.80

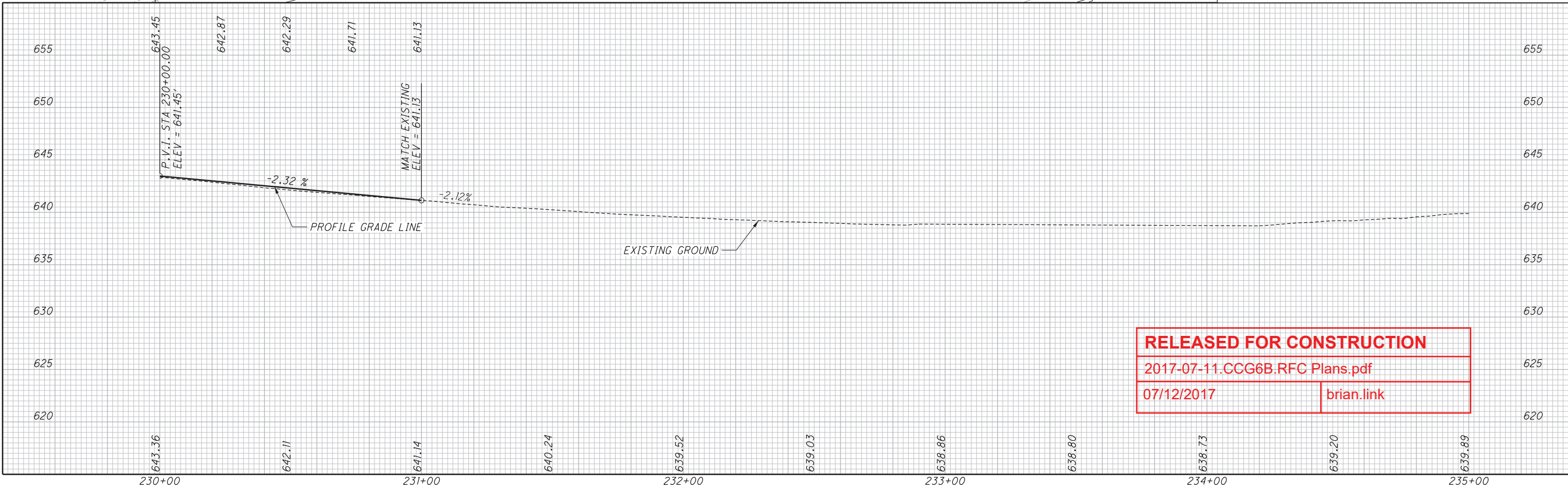
*END WORK SHALL BE 284' ALONG I.R. 490
STARTING FROM STATION 235+38.47.
SEE SHEET 52.

CALCULATED
SWC
CHECKED
MLL

0 20 40
HORIZONTAL
SCALE IN FEET



BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION
ISSUE RECORD		



RELEASED FOR CONSTRUCTION
2017-07-11.CCG6B.RFC Plans.pdf
07/12/2017 brian.link

PLAN AND PROFILE - RAMP J5
STA. 230+00.00 TO STA. 235+00.00

CUY-77-13.80

85
170

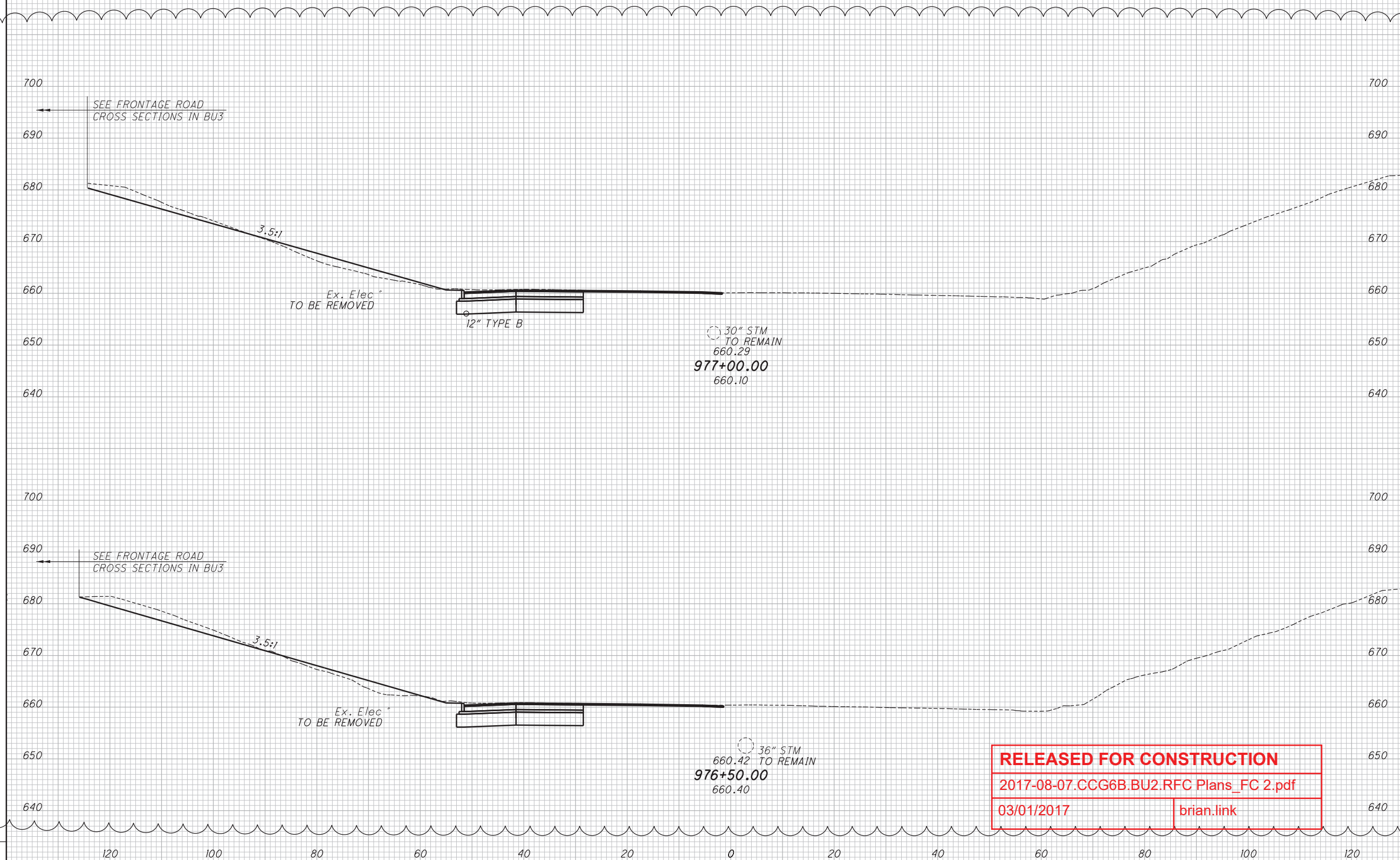
P:\82388_CCG6B\Design\Roadway\Sheets\82388_CP2105.dgn Sheet 7/10/2017 3:21:18 PM mlutes

P:\82388\CC6B\Design\Roadway\Sheets\82388_XS1101.dgn XS_SHEET_temporary_model_name_2 8/4/2017 2:08:34 PM mlutes

SEEDING	
END WIDTH	SO. YDS.

BU2 - I.R.-77 AND RAMPS		
1	8/3/17	I.R. 77 PROFILE ADJUSTMENT
NO.	DATE	DESCRIPTION
ISSUE RECORD		

END AREA		VOLUME		CALCULATED	DWB	CHECKED	MLL
CUT	FILL	CUT	FILL				
CROSS SECTIONS - I.R. 77							
STA. 976+50.00 TO STA. 977+00.00							
CUY-77-13.80							
89 170							



RELEASED FOR CONSTRUCTION

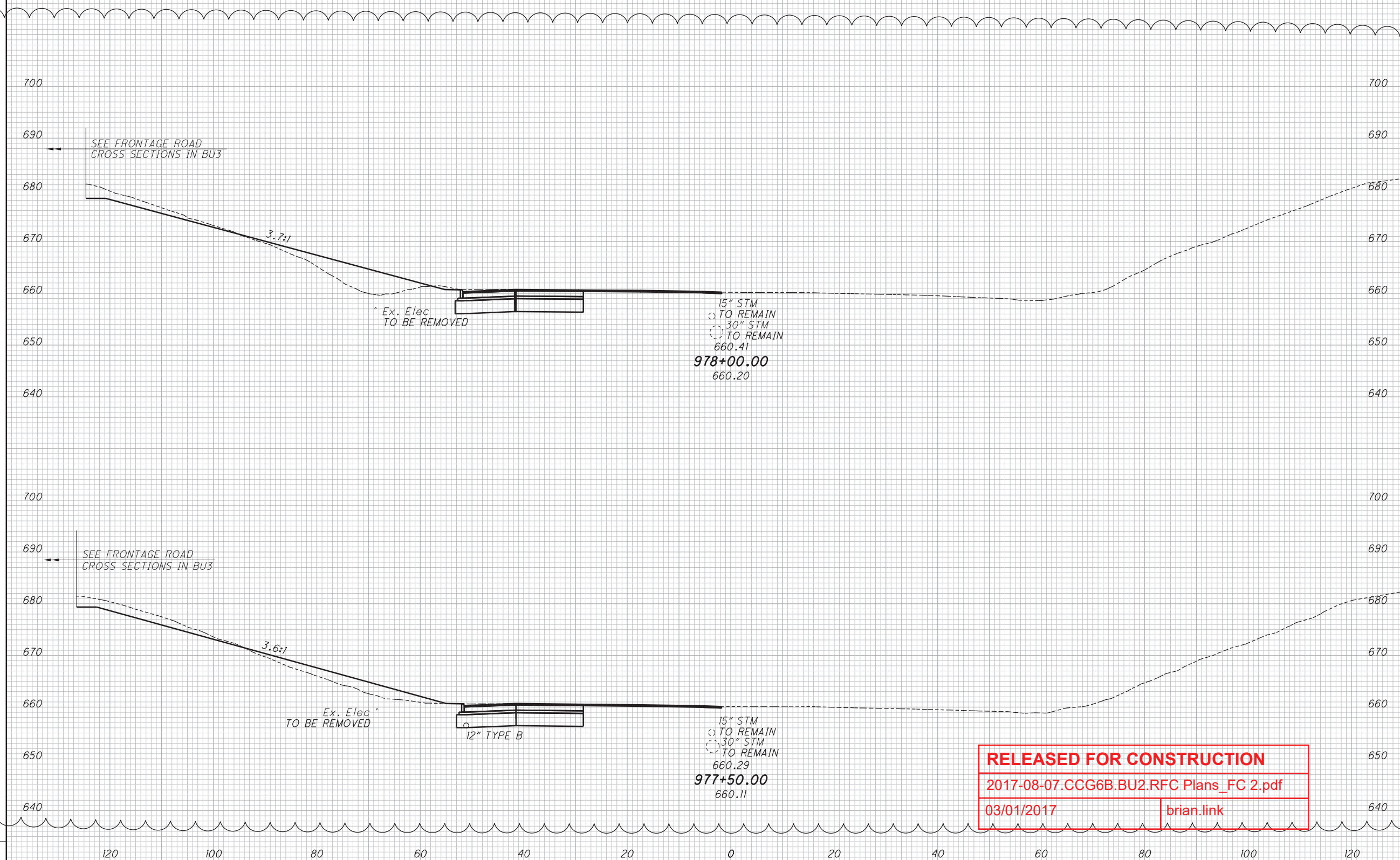
2017-08-07.CCG6B.BU2.RFC Plans_FC 2.pdf

03/01/2017 brian.link

P:\82388_CCG6B\Design\Roadway\Sheets\82388_XS1101.dgn XS_SHEET_temporary_model_name_3 8/4/2017 2:08:34 PM mlutes

BU2 - I.R.-77 AND RAMPS		
1	8/3/17	I.R. 77 PROFILE ADJUSTMENT
NO.	DATE	DESCRIPTION
		ISSUE RECORD

END AREA		VOLUME		CALCULATED	DWB	CHECKED	MLL
CUT	FILL	CUT	FILL				
CROSS SECTIONS - I.R. 77							
STA. 977+50.00 TO STA. 978+00.00							
CUY-77-13.80							
90 170							

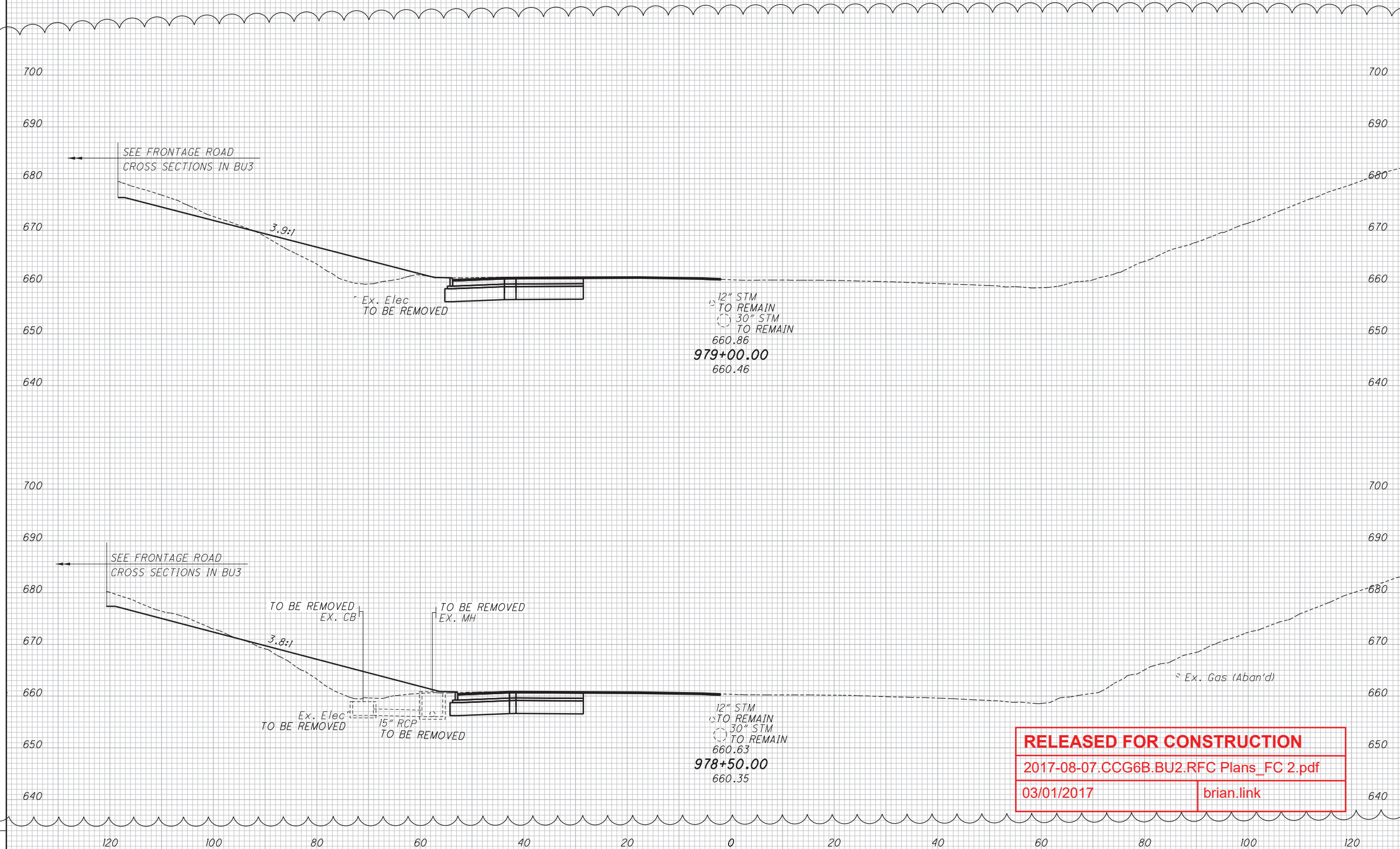


RELEASED FOR CONSTRUCTION
 2017-08-07.CCG6B.BU2.RFC Plans_FC 2.pdf
 03/01/2017 brian.link

P:\82388_CCG6B\Design\Roadway\Sheets\82388_XS1101.dgn XS_SHEET_temporary_model_name_4 8/4/2017 2:08:35 PM mlutes

BU2 - I.R.-77 AND RAMPS		
1	8/3/17	I.R. 77 PROFILE ADJUSTMENT
NO.	DATE	DESCRIPTION
ISSUE RECORD		

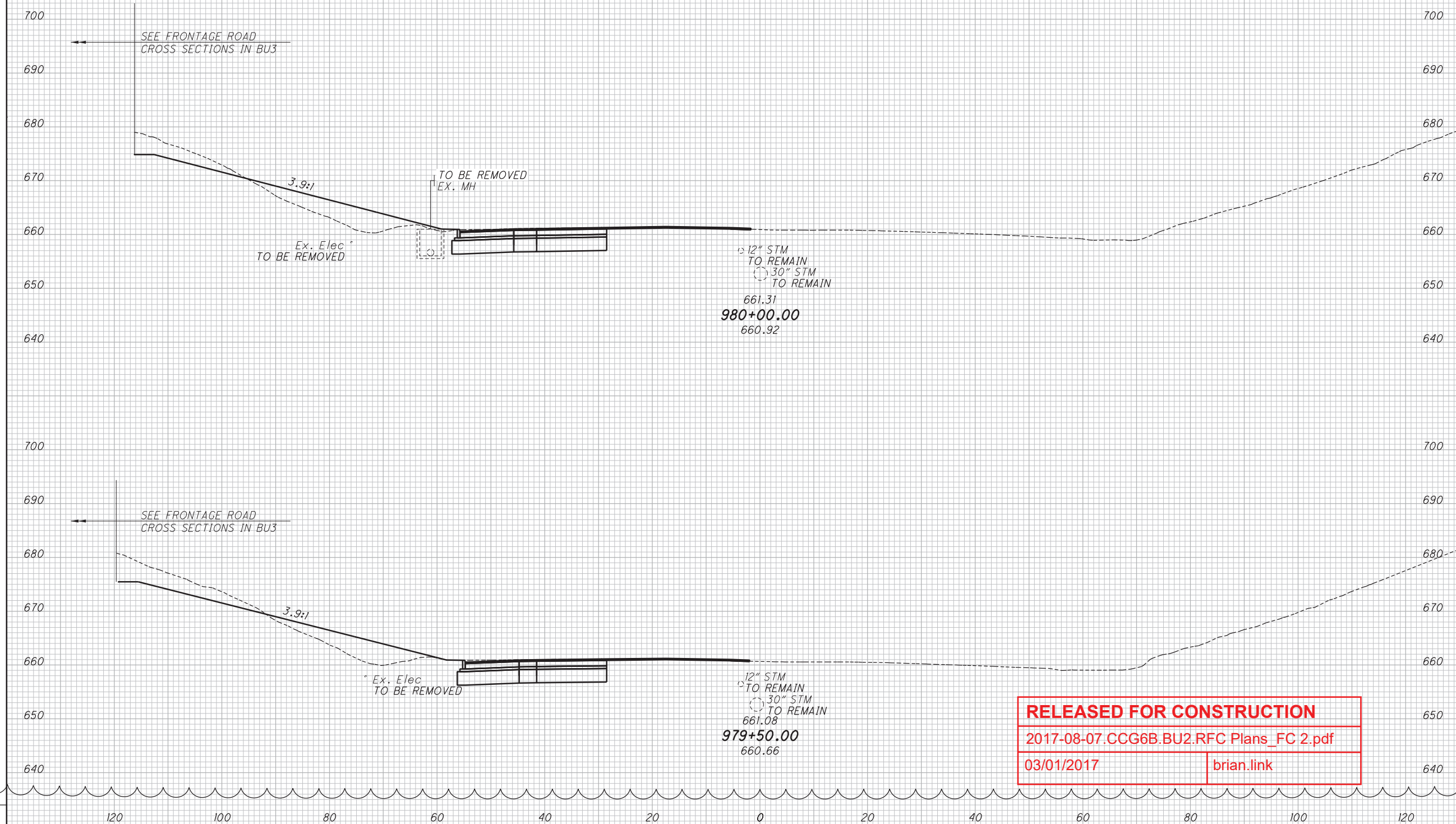
END AREA		VOLUME		CALCULATED	DWB	CHECKED	MLL
CUT	FILL	CUT	FILL				
CROSS SECTIONS - I.R. 77							
STA. 978+50.00 TO STA. 979+00.00							
CUY-77-13.80							
91 170							



P:\82388_CCG66\Design\Roadway\Sheets\82388_XS1101.dgn XS_SHEET_temporary_model_name_5 8/4/2017 2:08:35 PM mlutes

BU2 - I.R.-77 AND RAMPS		
1	8/3/17	I.R. 77 PROFILE ADJUSTMENT
NO.	DATE	DESCRIPTION
ISSUE RECORD		

END AREA		VOLUME		CALCULATED	DWB	CHECKED	MLL
CUT	FILL	CUT	FILL				
CROSS SECTIONS - I.R. 77							
STA. 979+50.00 TO STA. 980+00.00							
CUY-77-13.80							
92 170							

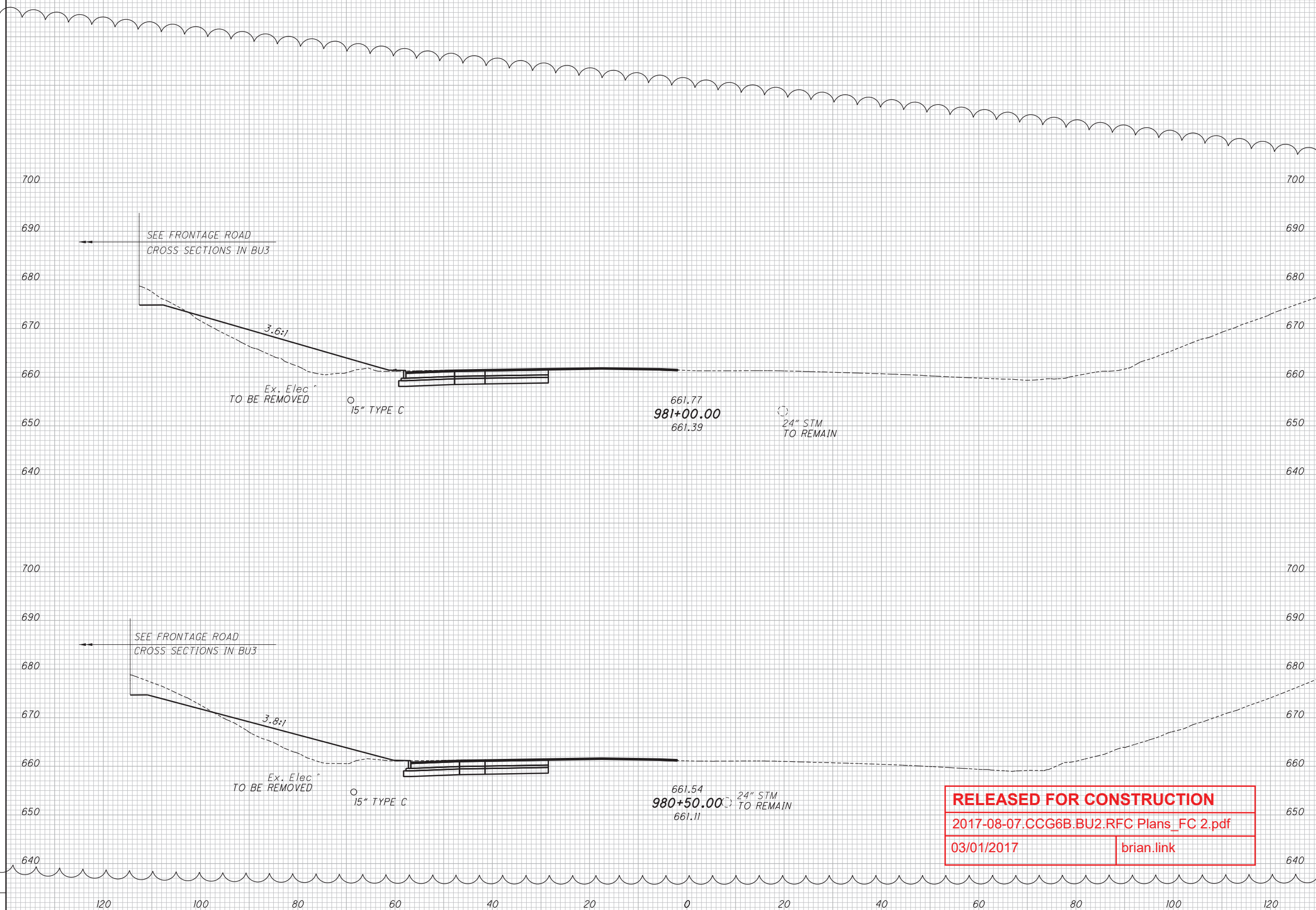


RELEASED FOR CONSTRUCTION
 2017-08-07.CCG66.BU2.RFC Plans_FC 2.pdf
 03/01/2017 brian.link

P:\82388_CCG6B\Design\Roadway\Sheets\82388_XS1101.dgn XS_SHEET_temporary_model_name_6 8/4/2017 2:08:35 PM milutes

BU2 - I.R.-77 AND RAMPS		
1	8/3/17	I.R. 77 PROFILE ADJUSTMENT
NO.	DATE	DESCRIPTION
ISSUE RECORD		

END AREA		VOLUME		CALCULATED	DWB	CHECKED	MLL
CUT	FILL	CUT	FILL				
CROSS SECTIONS - I.R. 77							
STA. 980+50.00 TO STA. 981+00.00							
CUY-77-13.80							
93 170							

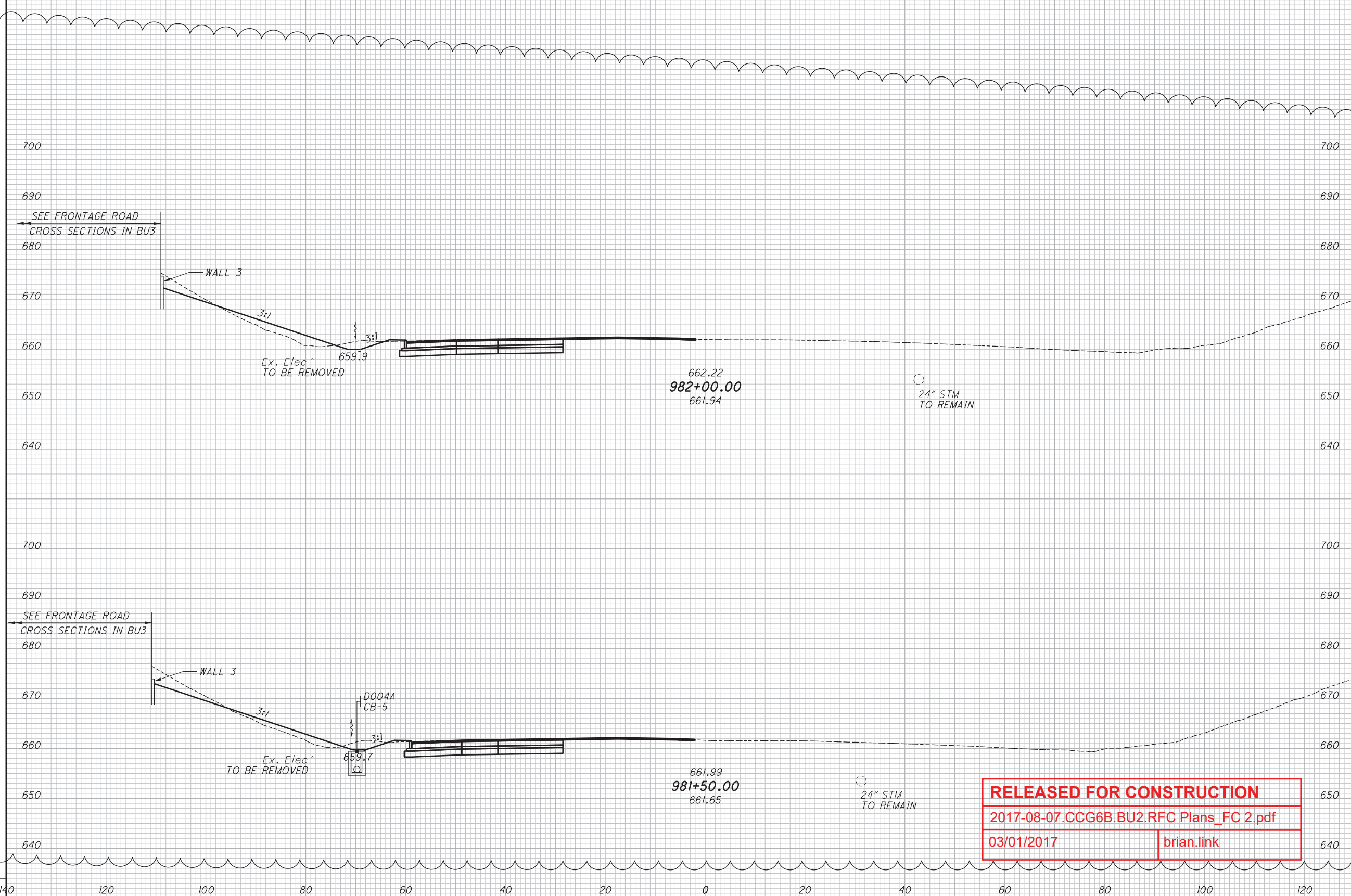


RELEASED FOR CONSTRUCTION
 2017-08-07.CCG6B.BU2.RFC Plans_FC 2.pdf
 03/01/2017 brian.link

P:\82388_CCG6B\Design\Roadway\Sheets\82388_XS1101.dgn XS_SHEET_temporary_model_name_7 8/4/2017 2:08:36 PM milutes

BU2 - I.R.-77 AND RAMPS		
1	8/3/17	I.R. 77 PROFILE ADJUSTMENT
NO.	DATE	DESCRIPTION
ISSUE RECORD		

END AREA		VOLUME		CALCULATED	DWB	CHECKED	MLL
CUT	FILL	CUT	FILL				
CROSS SECTIONS - I.R. 77							
STA. 981+50.00 TO STA. 982+00.00							
CUY-77-13.80							
94 170							



RELEASED FOR CONSTRUCTION
 2017-08-07.CCG6B.BU2.RFC Plans_FC 2.pdf
 03/01/2017 brian.link

SEEDING
END SO.
WIDTH YDS.

BU2 - I.R.-77 AND RAMPS		
1	8/3/17	I.R. 77 PROFILE ADJUSTMENT
NO.	DATE	DESCRIPTION
ISSUE RECORD		

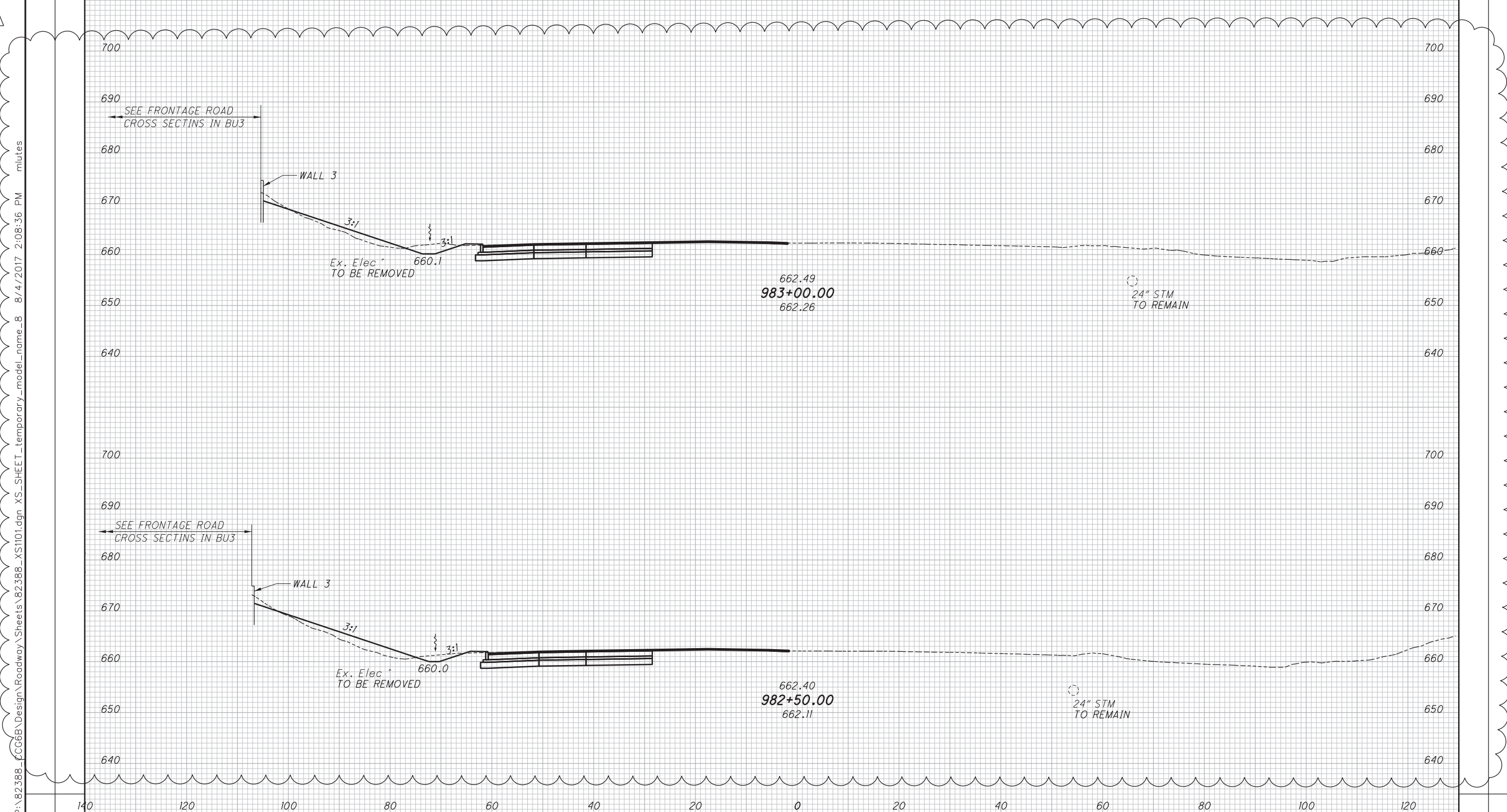
END AREA		VOLUME	
CUT	FILL	CUT	FILL

RELEASED FOR CONSTRUCTION
 2017-08-07.CCG6B.BU2.RFC Plans_FC 2.pdf
 03/01/2017 brian.link

CROSS SECTIONS - I.R. 77
 STA. 982+50.00 TO STA. 983+00.00

CUY-77-13.80

95
170

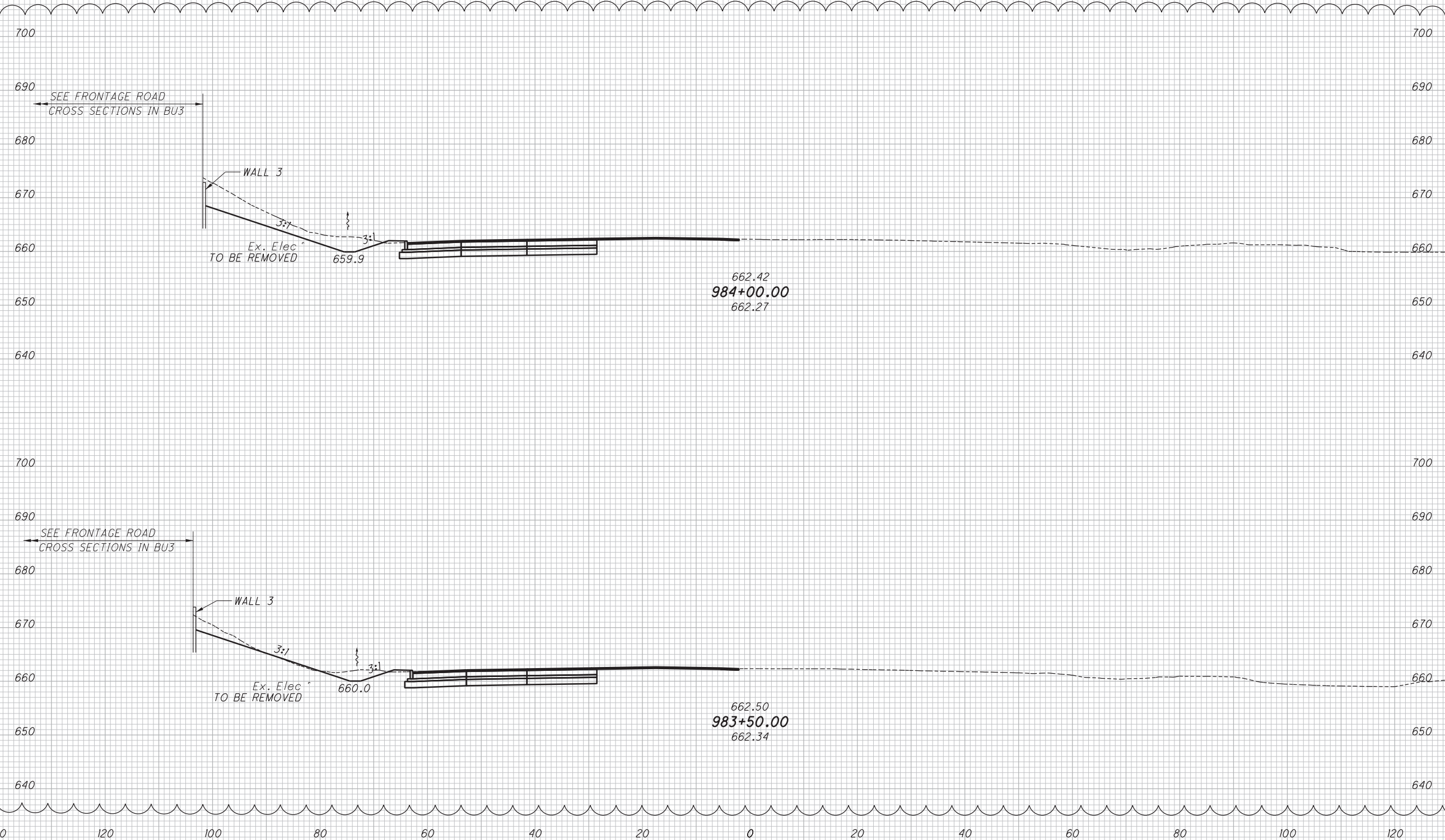


P:\82388_CCG6B\Design\Roadway\Sheets\82388_XS1101.dgn XS_SHEET_temporary_model_name_8 8/4/2017 2:08:36 PM mlutes

P:\82388_CCG66B\Design\Roadway\Sheets\82388_XS1101.dgn XS_SHEET_temporary_model_name_9 8/4/2017 2:08:36 PM milutes

BU2 - I.R.-77 AND RAMPS			END AREA		VOLUME	
NO.	DATE	DESCRIPTION	CUT	FILL	CUT	FILL
1	8/3/17	I.R. 77 PROFILE ADJUSTMENT				
ISSUE RECORD						

RELEASED FOR CONSTRUCTION
 2017-08-07.CCG6B.BU2.RFC Plans_FC 2.pdf
 03/01/2017 brian.link



CROSS SECTIONS - I.R. 77
 STA. 983+50.00 TO STA. 984+00.00

CUY-77-13.80

96
170

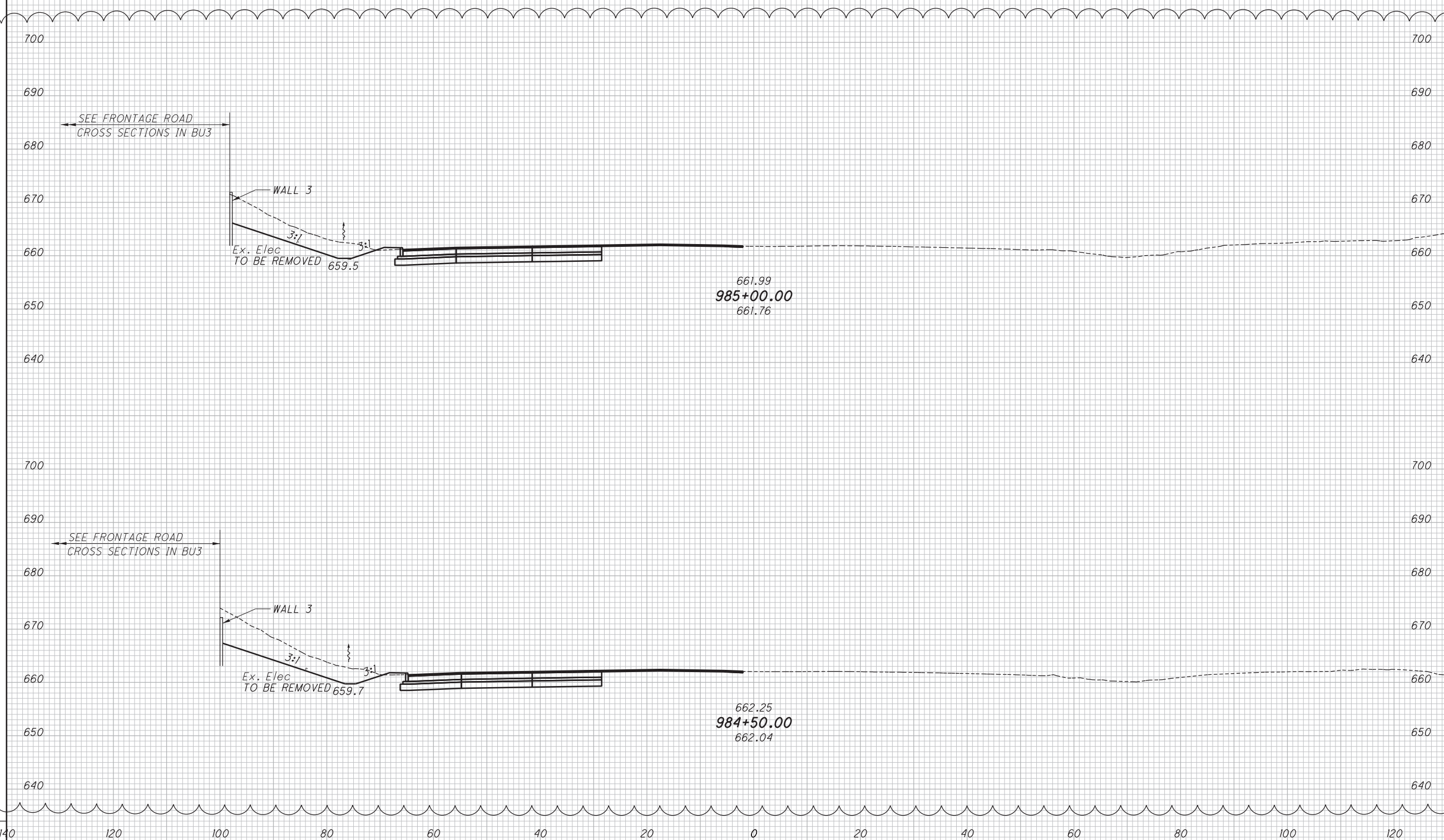
P:\82388_CCG6B\Design\Roadway\Sheets\82388_XS1101.dgn XS_SHEET_temporary_model_name_10 8/4/2017 2:08:37 PM mlutes

SEEDING	
END WIDTH	SO. YDS.

BU2 - I.R.-77 AND RAMPS		
1	8/3/17	I.R. 77 PROFILE ADJUSTMENT
NO.	DATE	DESCRIPTION
ISSUE RECORD		

END AREA		VOLUME		CALCULATED	DWB	CHECKED	MLL
CUT	FILL	CUT	FILL				

RELEASED FOR CONSTRUCTION
 2017-08-07.CCG6B.BU2.RFC Plans_FC 2.pdf
 03/01/2017 brian.link



CROSS SECTIONS - I.R. 77
 STA. 984+50.00 TO STA. 985+00.00

CUY-77-13.80

97
170

SEEDING
END SO.
WIDTH YDS.

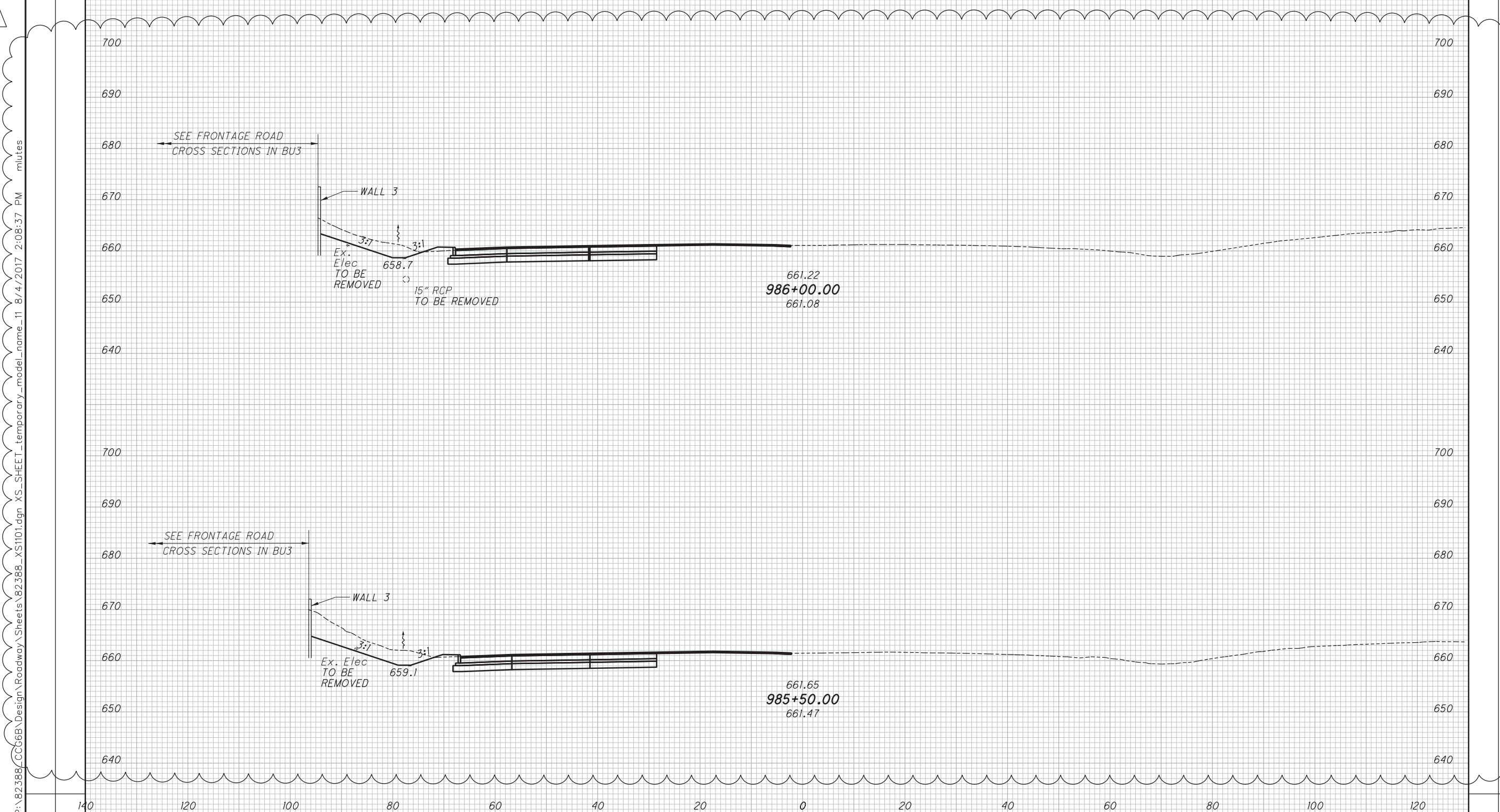
BU2 - I.R.-77 AND RAMPS			END AREA		VOLUME	
NO.	DATE	DESCRIPTION	CUT	FILL	CUT	FILL
1	8/3/17	I.R. 77 PROFILE ADJUSTMENT				
ISSUE RECORD						

RELEASED FOR CONSTRUCTION
 2017-08-07.CCG6B.BU2.RFC Plans_FC 2.pdf
 03/01/2017 brian.link

CROSS SECTIONS - I.R. 77
 STA. 985+50.00 TO STA. 986+00.00

CUY-77-13.80

98
170



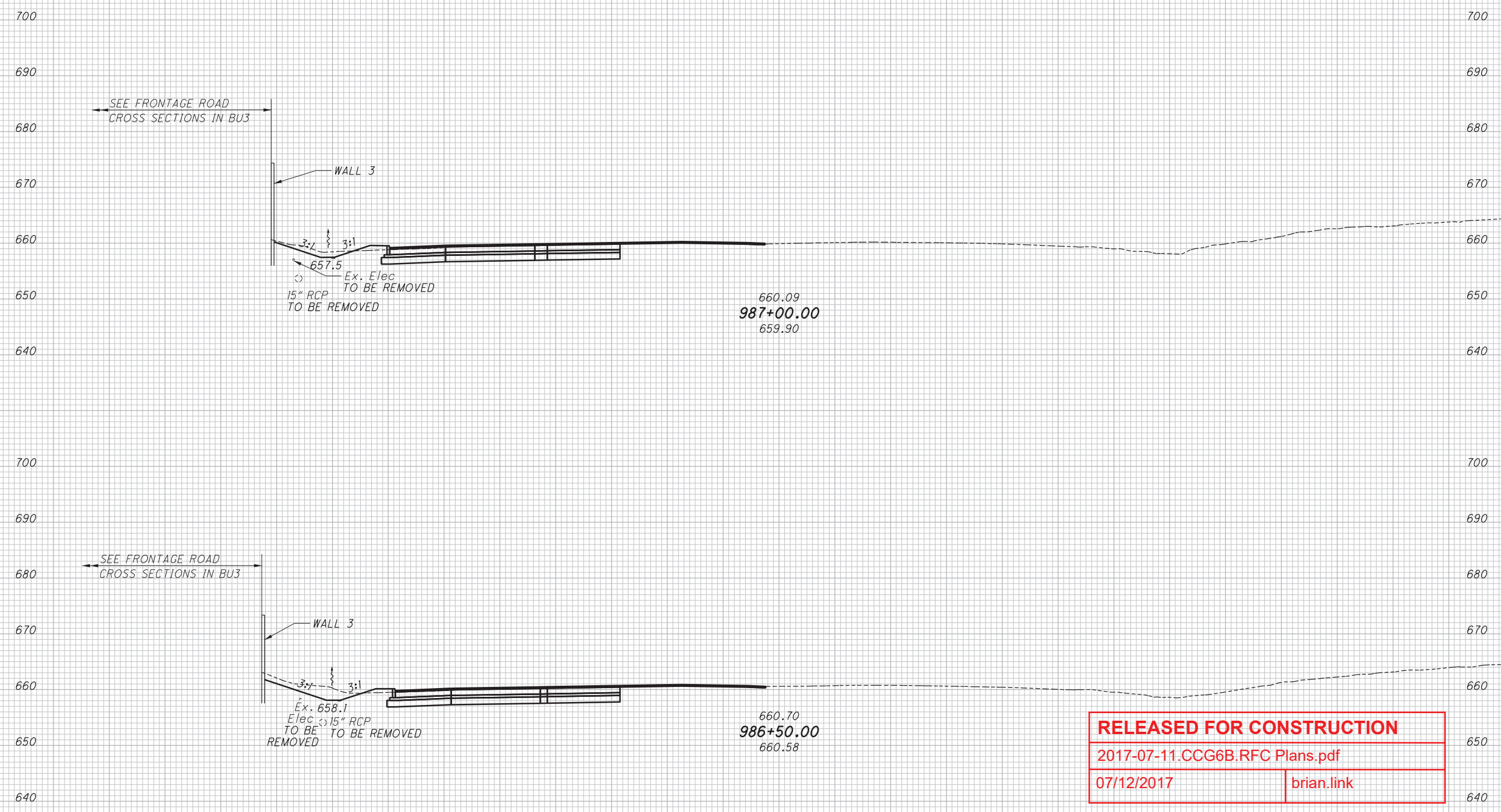
P:\82388\CCG6B\Design\Roadway\Sheets\82388_XS1101.dgn XS_SHEET_temporary_model_name_11 8/4/2017 2:08:37 PM mlutes

SEEDING
 END SO.
 WIDTH YDS.
 140
 120
 100
 80
 60
 40
 20
 0
 20
 40
 60
 80
 100
 120
 P:\82388_CCG6B\Design\Roadway\Sheets\82388_XS1101.dgn XS_SHEET_temporary_model_name_12 7/10/2017 3:21:29 PM mlutes

BU2 - I.R.-77 AND RAMPS

NO.	DATE	DESCRIPTION	END AREA		VOLUME		CALCULATED DWB	CHECKED MLL
			CUT	FILL	CUT	FILL		

NO.	DATE	DESCRIPTION
		ISSUE RECORD



CROSS SECTIONS - I.R. 77
STA. 986+50.00 TO STA. 987+00.00

CUY-77-13.80

99
 170

P:\82388_CCG6B\Design\Roadway\Sheets\82388_XS1101.dgn XS_SHEET_temporary_model_name_13 7/10/2017 3:21:29 PM mltues

SEEDING
END SO.
WIDTH YDS.

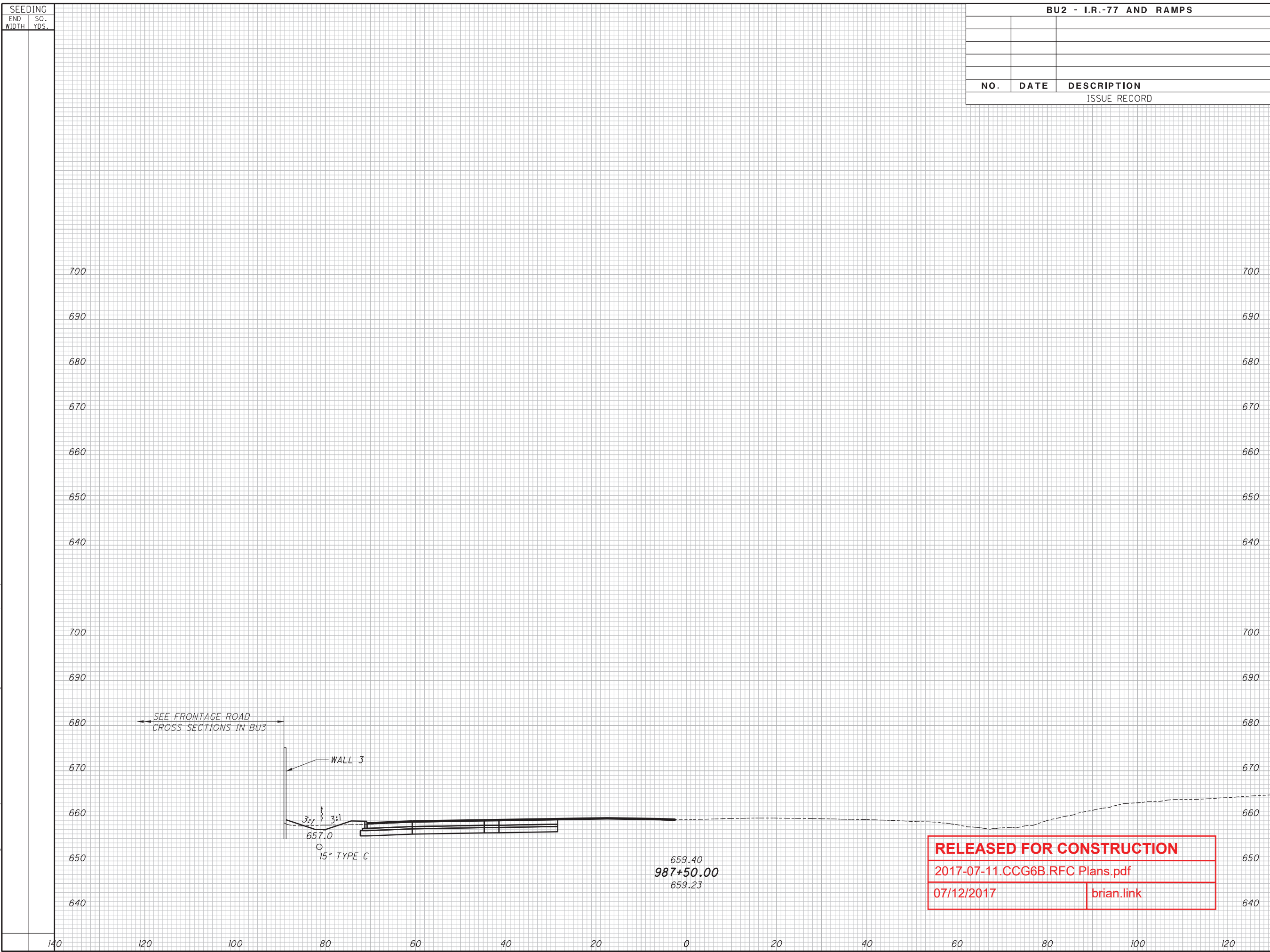
BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION
		ISSUE RECORD

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CROSS SECTIONS - I.R. 77
STA. 987+50.00

CUY-77-13.80

100
170



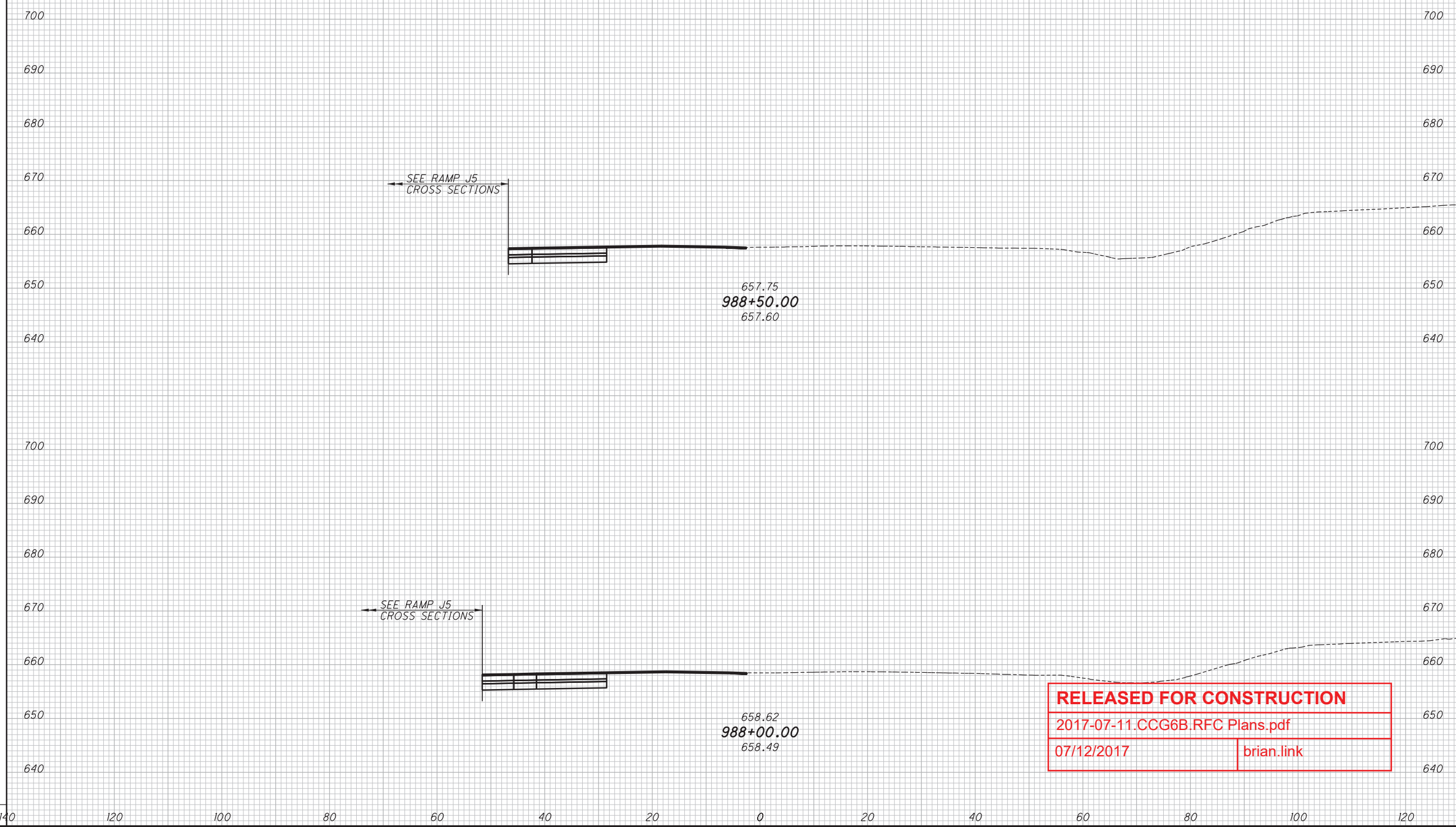
RELEASED FOR CONSTRUCTION
2017-07-11.CCG6B.RFC Plans.pdf
07/12/2017 brian.link

P:\82388_CCG6B\Design\Roadway\Sheets\82388_XS1101.dgn XS_SHEET_temporary_model_name_14 7/10/2017 3:21:29 PM mlutes

SEEDING	
END WIDTH	SO. YDS.

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION
		ISSUE RECORD

END AREA		VOLUME		CALCULATED	DWB	CHECKED	MLL
CUT	FILL	CUT	FILL				



RELEASED FOR CONSTRUCTION
 2017-07-11.CCG6B.RFC Plans.pdf
 07/12/2017 brian.link

CROSS SECTIONS - I.R. 77
STA. 988+00.00 TO STA. 988+50.00

CUY-77-13.80

101
170

SEEDING
END SO.
WIDTH YDS.

BU2 - I.R.-77 AND RAMPS		
4	1/24/18	UPDATED GRADING
NO.	DATE	DESCRIPTION
ISSUE RECORD		

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED
DWB
CHECKED
MLL

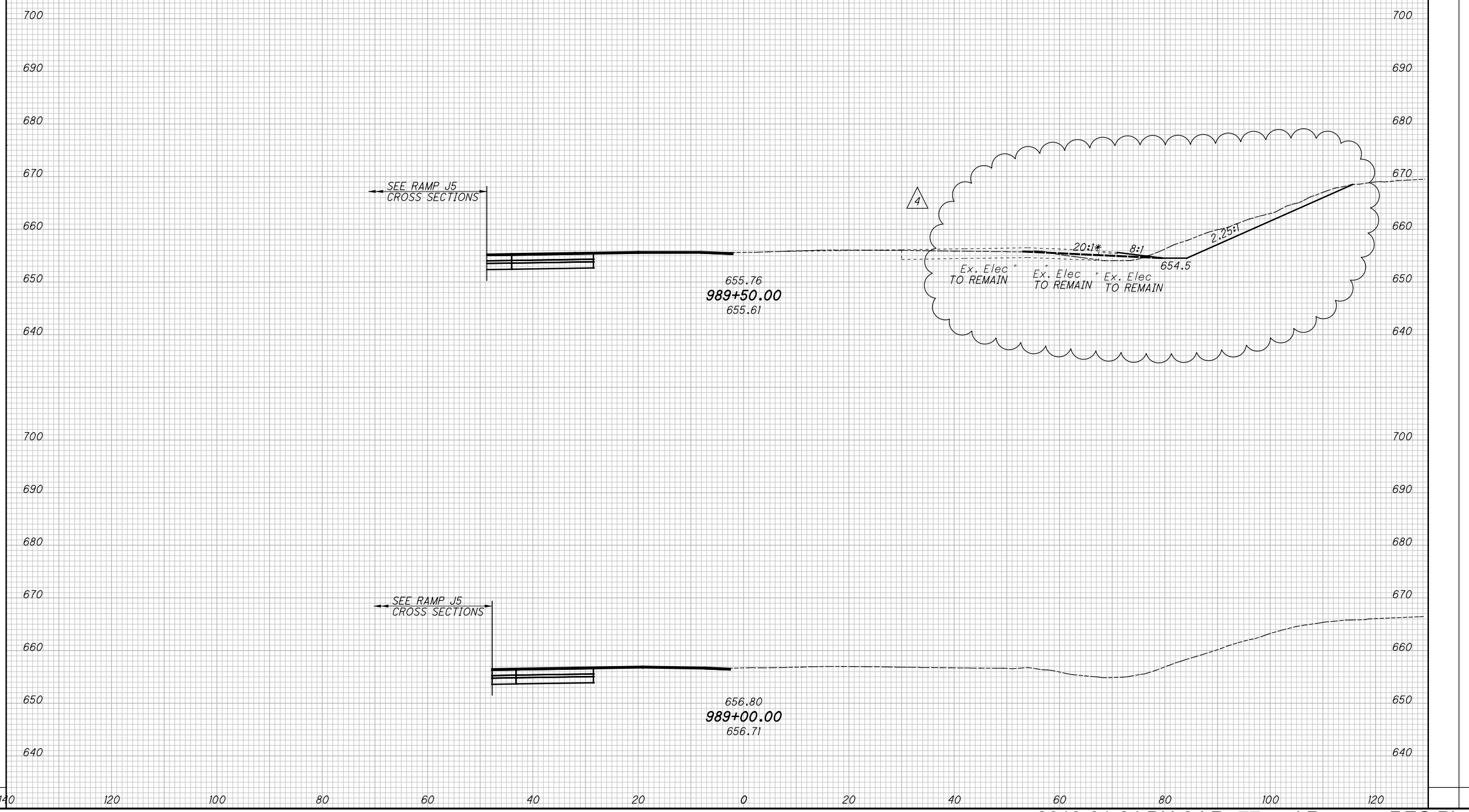
* TEMPORARY SLOPE AND DITCH

RELEASED FOR CONSTRUCTION

BU02_2018.01.26_CCG6B.BU2.RFC Plans_FC24.p

01/29/2018 Brian.Link

P:\82388_CCG6B\Design\Roadway\Sheets\82388_XS1101.dgn XS_SHEET_temporary_model_name_15 1/25/2018 3:45:14 PM scorcoran



CROSS SECTIONS - I.R. 77
STA. 989+00.00 TO STA. 989+50.00

CUY-77-13.80

102
170

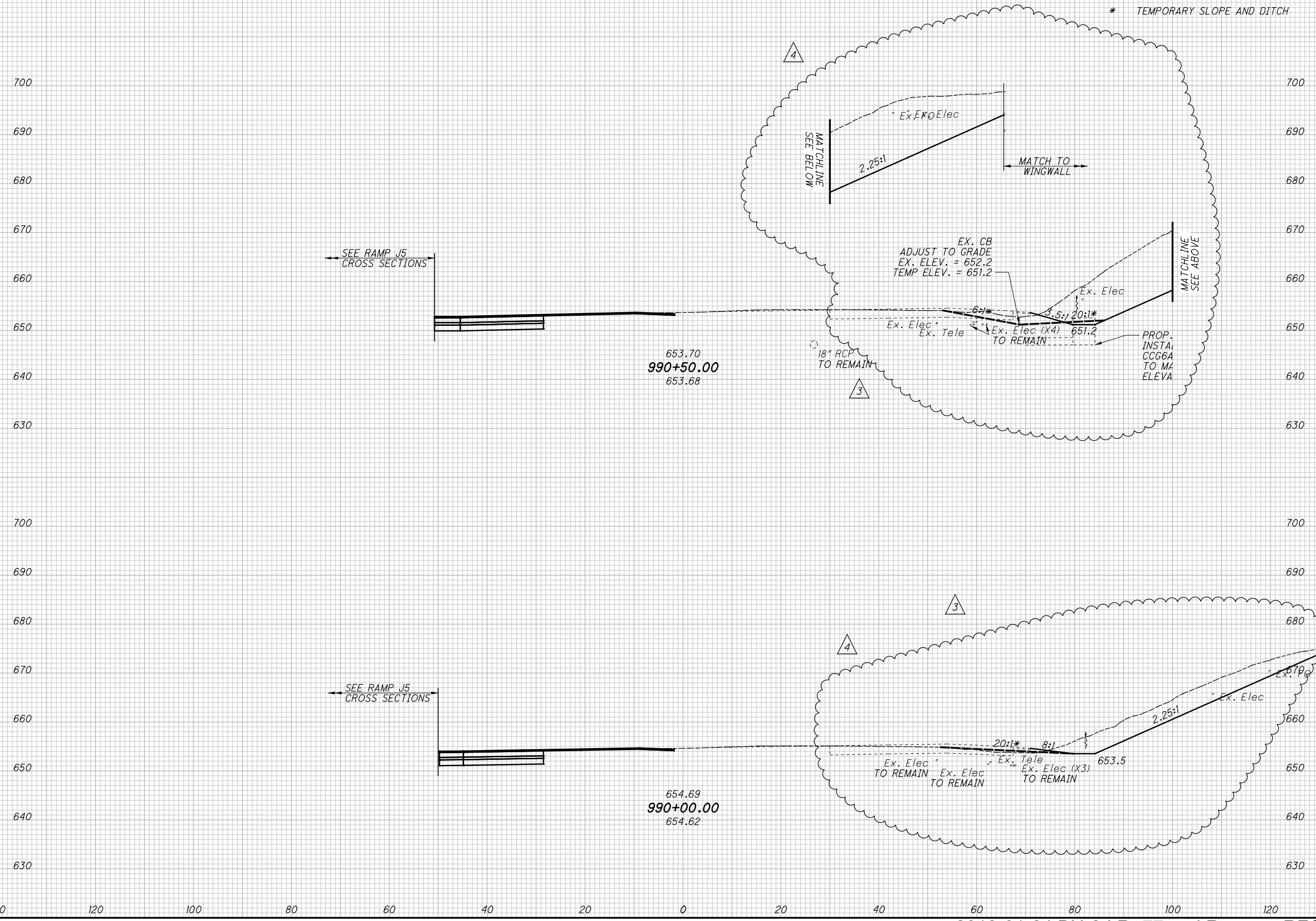
P:\B2388_CCG6B\Design\Roadway\Sheets\B2388_XS1101.dgn XS_SHEET_temporary_model_name_16 1/25/2018 3:45:15 PM scorcoran

SEEDING	
END WIDTH	SO. YDS.
140	
120	
100	
80	
60	
40	
20	
0	
20	
40	
60	
80	
100	
120	

RELEASED FOR CONSTRUCTION
 BU02_2018.01.26_CCG6B.BU2.RFC Plans_FC24.p
 01/29/2018 Brian.Link

BU2 - I.R.-77 AND RAMPS		
3	12/7/17	CHANGED SLOPES TO 2.25:1
4	1/24/18	UPDATED GRADING
NO.	DATE	DESCRIPTION
ISSUE RECORD		

END AREA		VOLUME		CALCULATED	DWB	CHECKED	MLL
CUT	FILL	CUT	FILL				
CROSS SECTIONS - I.R. 77 STA. 990+00.00 TO STA. 990+50.00							
CUI-77-13.80							
103 170							



P:\82388_CCG6B\Design\Roadway\Sheets\82388_XS1101.dgn XS_SHEET_temporary_model_name_17 1/25/2018 3:45:15 PM scorcoran

SEEDING

END WIDTH	SO. YDS.
140	
120	
100	
80	
60	
40	
20	
0	
20	
40	
60	
80	
100	
120	

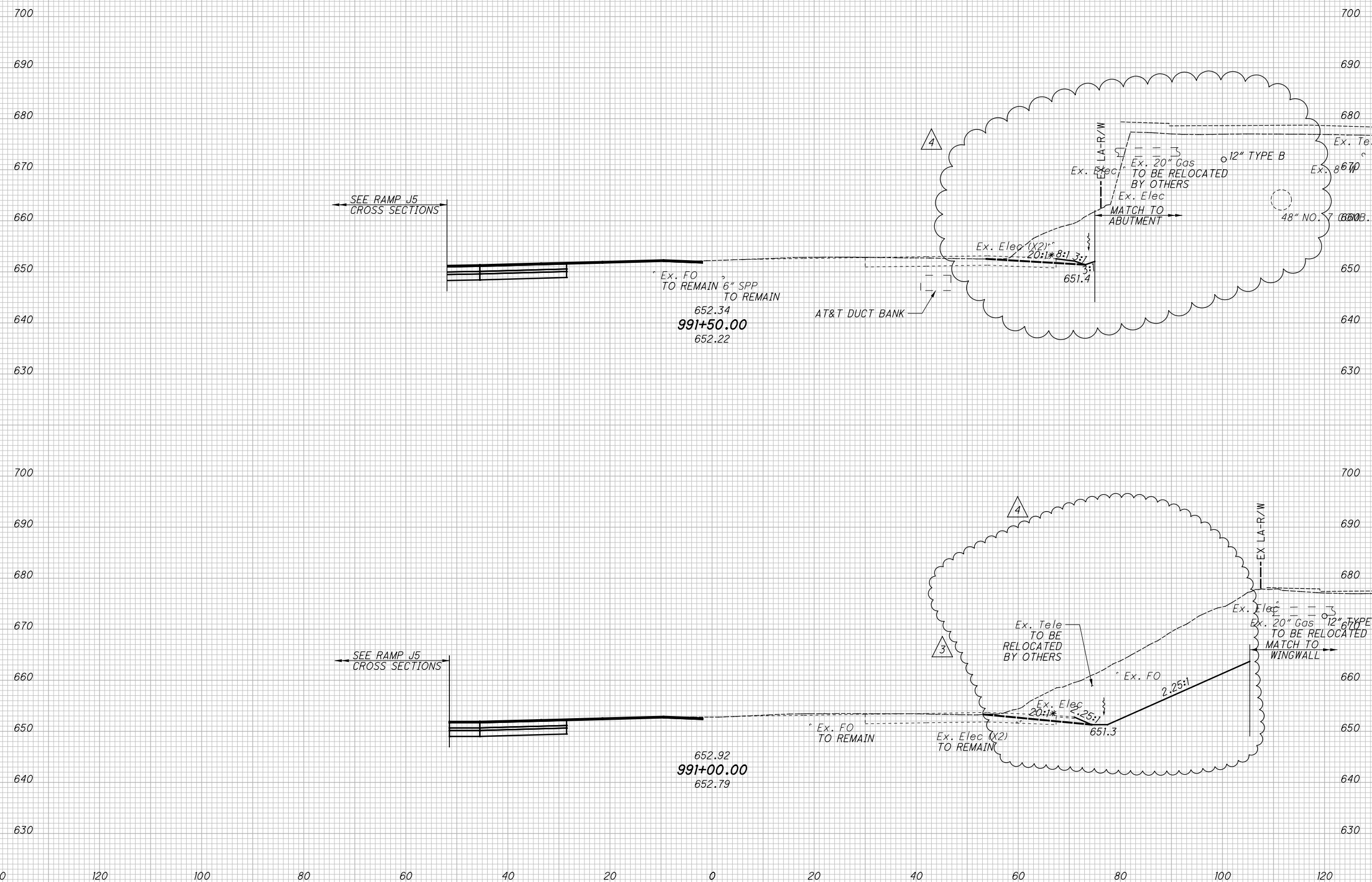
RELEASED FOR CONSTRUCTION

BU02_2018.01.26_CCG6B.BU2.RFC Plans_FC24.p
01/29/2018 Brian.Link

BU2 - I.R.-77 AND RAMPS		
3	12/7/17	CHANGED SLOPES TO 2.25:1
4	1/24/18	UPDATED GRADING
ISSUE RECORD		
NO.	DATE	DESCRIPTION

END AREA		VOLUME		CALCULATED	CHECKED	MLL
CUT	FILL	CUT	FILL	DWB	CHECKED	MLL

* TEMPORARY SLOPE AND DITCH



**CROSS SECTIONS - I.R. 77
STA. 991+00.00 TO STA. 991+50.00**

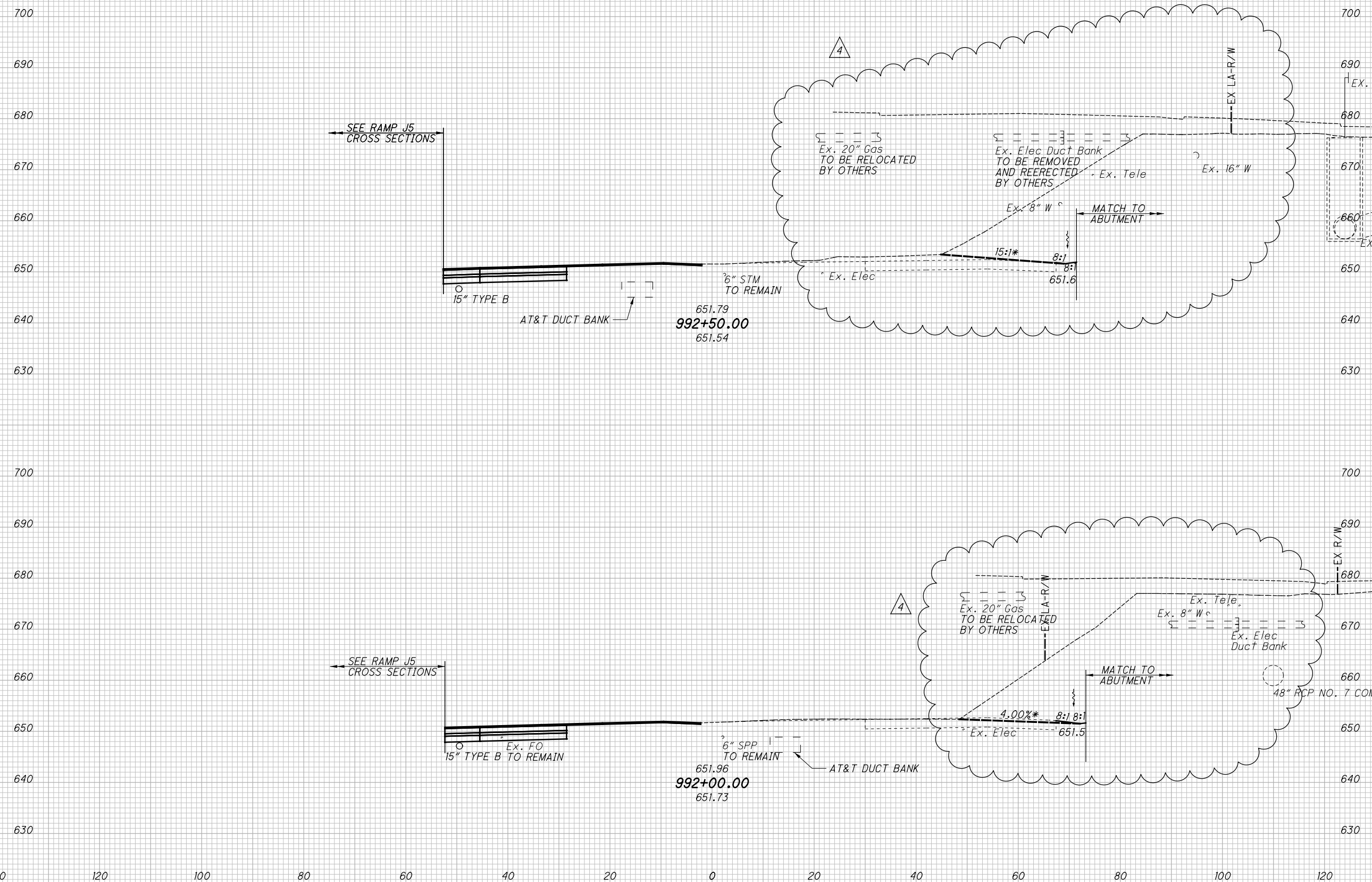
CUY - 77 - 13.80

104
170

RELEASED FOR CONSTRUCTION
 BU02_2018.01.26_CCG6B.BU2.RFC Plans_FC24.p
 01/29/2018 Brian.Link

BU2 - I.R.-77 AND RAMPS		
4	1/24/18	UPDATED GRADING
ISSUE RECORD		
* TEMPORARY SLOPE AND DITCH		

END AREA		VOLUME		CALCULATED	DWB	CHECKED	MLL
CUT	FILL	CUT	FILL				



CROSS SECTIONS - I.R. 77
 STA. 992+00.00 TO STA. 992+50.00

CUY-77-13.80

105
170

P:\82388_CCG6B\Design\Roadway\Sheets\82388_XS1101.dgn XS_SHEET_temporary_model_name_18 1/25/2018 3:45:15 PM scorcoran

RELEASED FOR CONSTRUCTION
 BU02_2018.01.26_CCG6B.BU2.RFC Plans_FC24.p
 01/29/2018 Brian.Link

BU2 - I.R.-77 AND RAMPS		
4	1/24/18	UPDATED GRADING
ISSUE RECORD		
* TEMPORARY SLOPE AND DITCH		

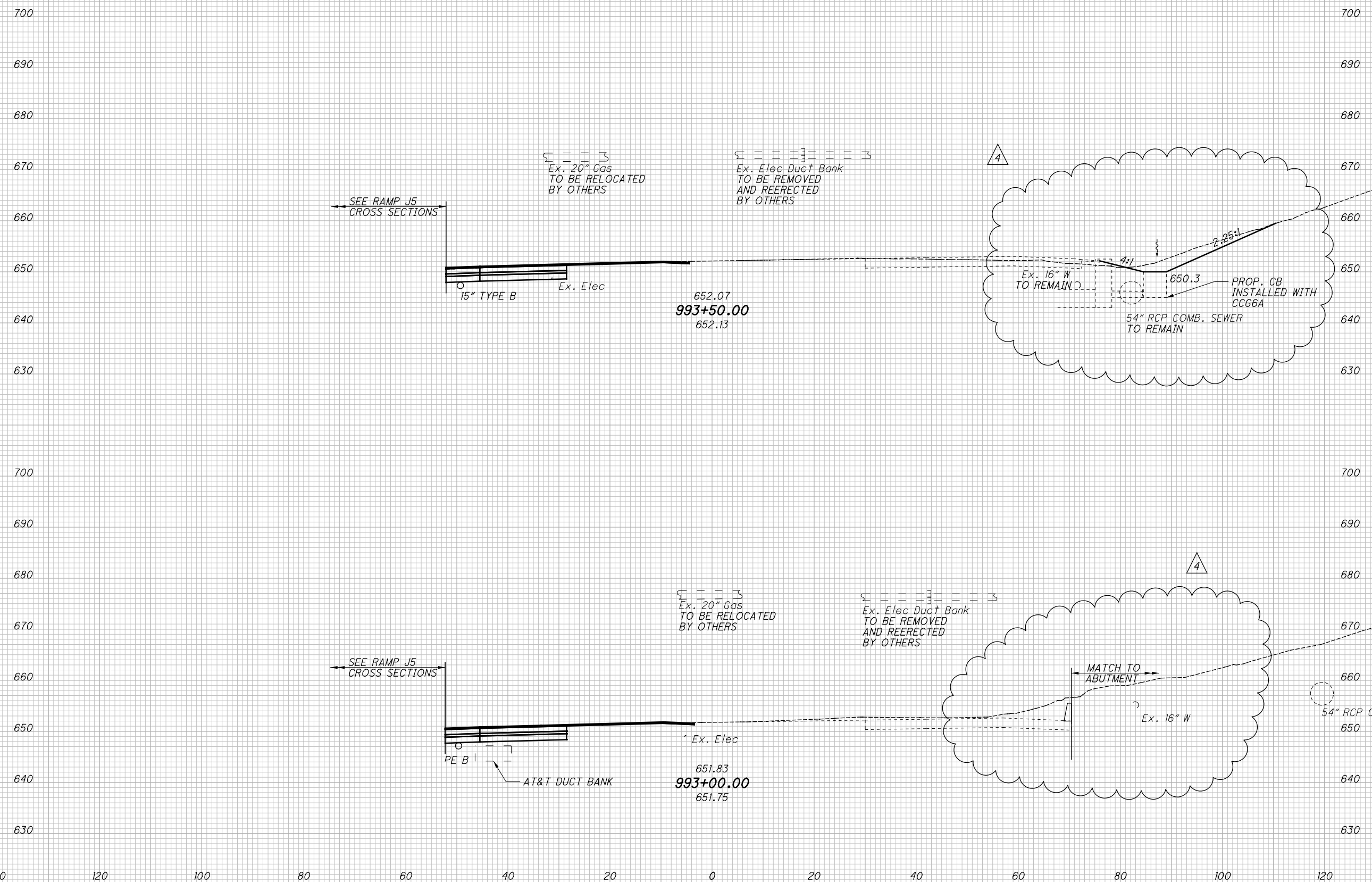
END AREA		VOLUME	
CUT	FILL	CUT	FILL

CROSS SECTIONS - I.R. 77
 STA. 993+00.00 TO STA. 993+50.00

CUY-77-13.80

106
170

SEEDING
 END WIDTH SO. YDS.
 140 120 100 80 60 40 20 0 20 40 60 80 100 120



P:\82388_CCG6B\Design\Roadway\Sheets\82388_XS1101.dgn XS_SHEET_temporary_model_name_19 1/25/2018 3:45:16 PM scorcoran

P:\82388_CCG6B\Design\Roadway\Sheets\82388_XS1101.dgn XS_SHEET_temporary_model_name_20 1/25/2018 3:45:16 PM scorcoran

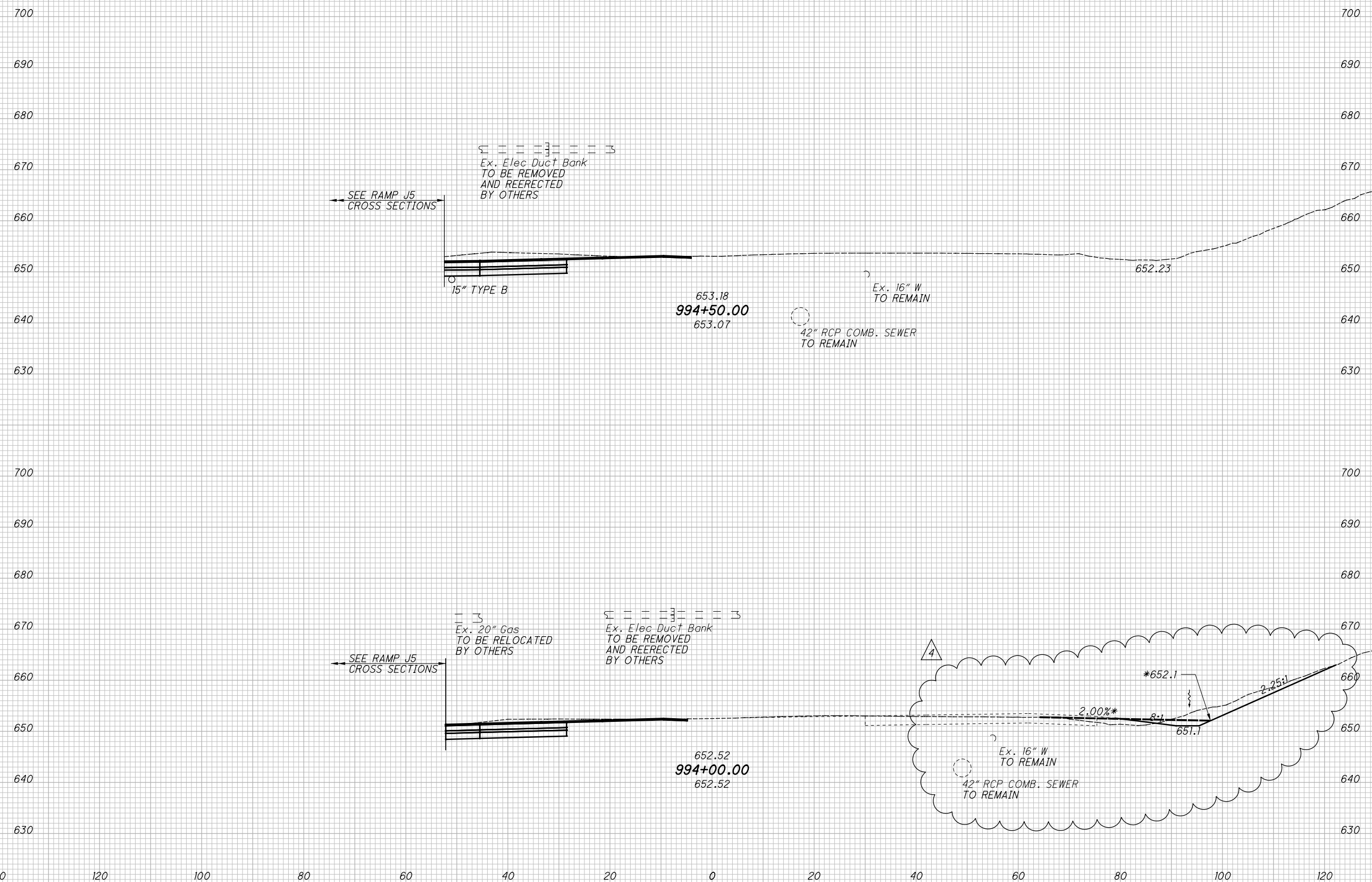
SEEDING	
END WIDTH	SO. YDS.
140	
120	
100	
80	
60	
40	
20	
0	
20	
40	
60	
80	
100	
120	

RELEASED FOR CONSTRUCTION
 BU02_2018.01.26_CCG6B.BU2.RFC Plans_FC24.p
 01/29/2018 Brian.Link

BU2 - I.R.-77 AND RAMPS		
4	1/24/18	UPDATED GRADING
ISSUE RECORD		

END AREA		VOLUME		CALCULATED		
CUT	FILL	CUT	FILL	DWB	CHECKED	MLL

* TEMPORARY SLOPE AND DITCH

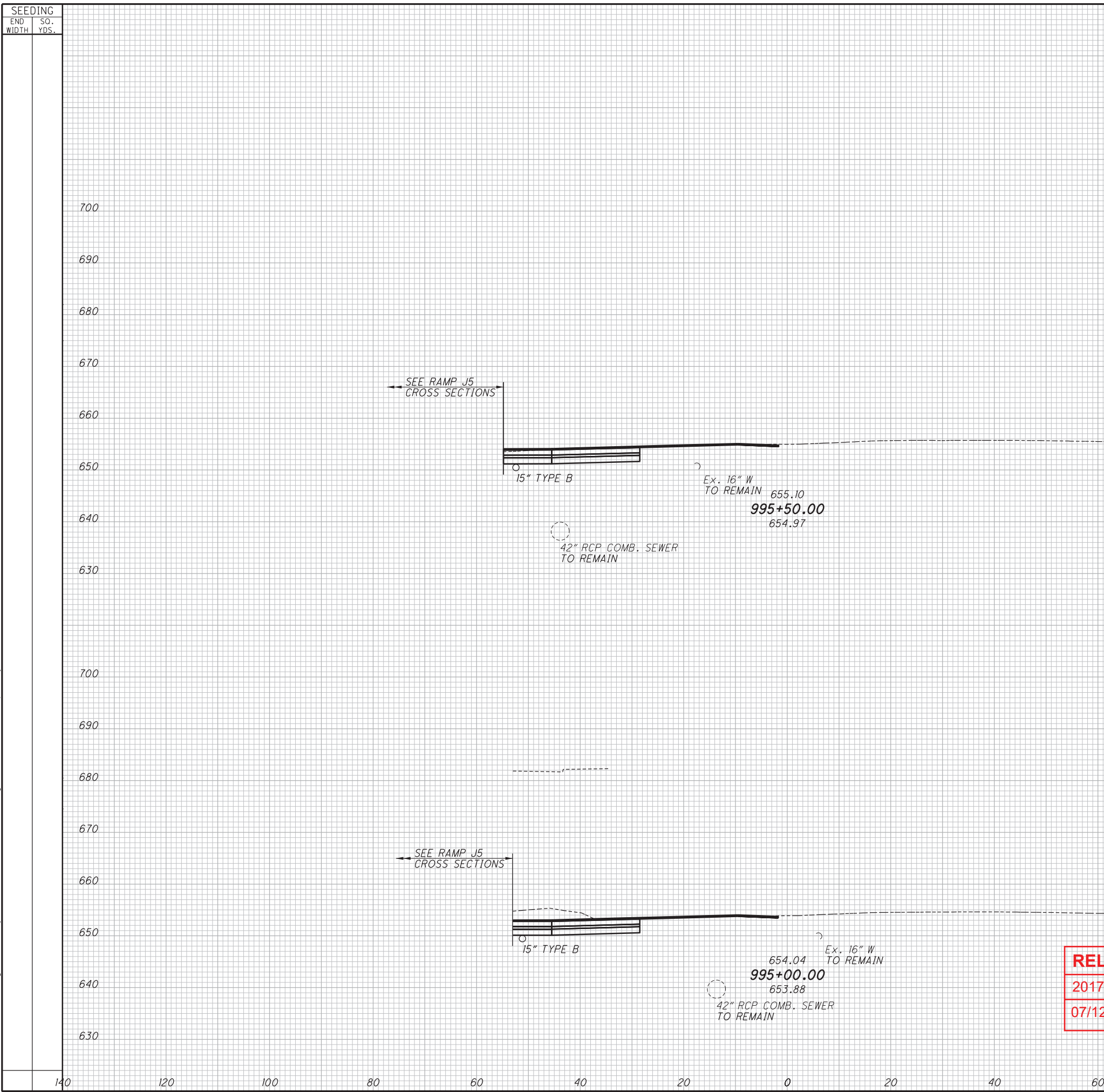


CROSS SECTIONS - I.R. 77
 STA. 994+00.00 TO STA. 994+50.00

CUY-77-13.80

107
170

P:\82388_CCG6B\Design\Roadway\Sheets\82388_XS1101.dgn XS_SHEET_temporary_model_name_21 7/10/2017 3:21:32 PM mlutes



BU2 - I.R.-77 AND RAMPS			END AREA		VOLUME		CALCULATED	DWB	CHECKED	MLL
NO.	DATE	DESCRIPTION	CUT	FILL	CUT	FILL				
ISSUE RECORD										

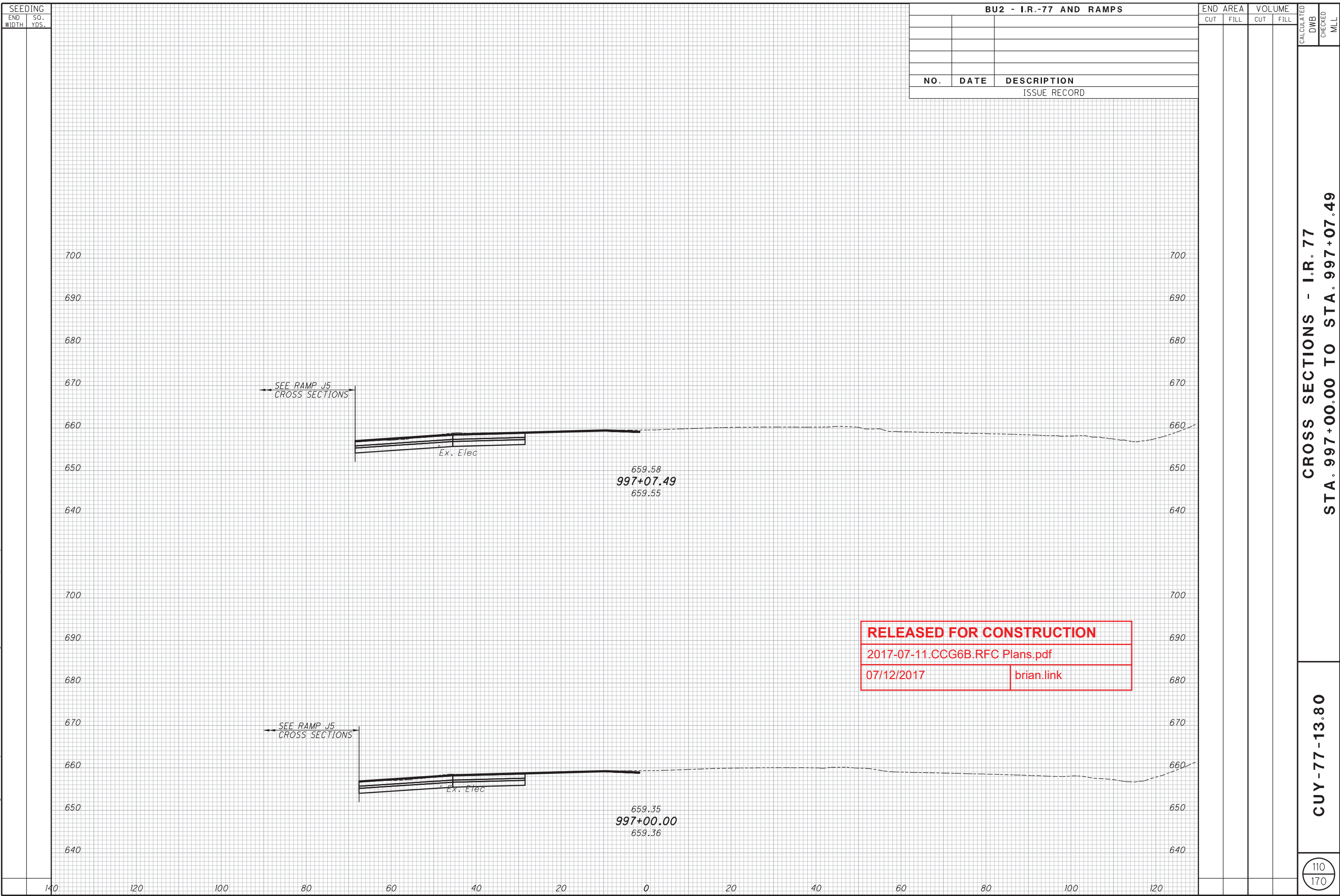
RELEASED FOR CONSTRUCTION
 2017-07-11.CCG6B.RFC Plans.pdf
 07/12/2017 brian.link

CROSS SECTIONS - I.R. 77
STA. 995+00.00 TO STA. 995+50.00

CUY - 77 - 13.80

108
170

P:\82388_CCG6B\Design\Roadway\Sheets\82388_XS1101.dgn XS_SHEET_temporary_model_name_23 7/10/2017 3:21:33 PM mlutes



BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION
ISSUE RECORD		

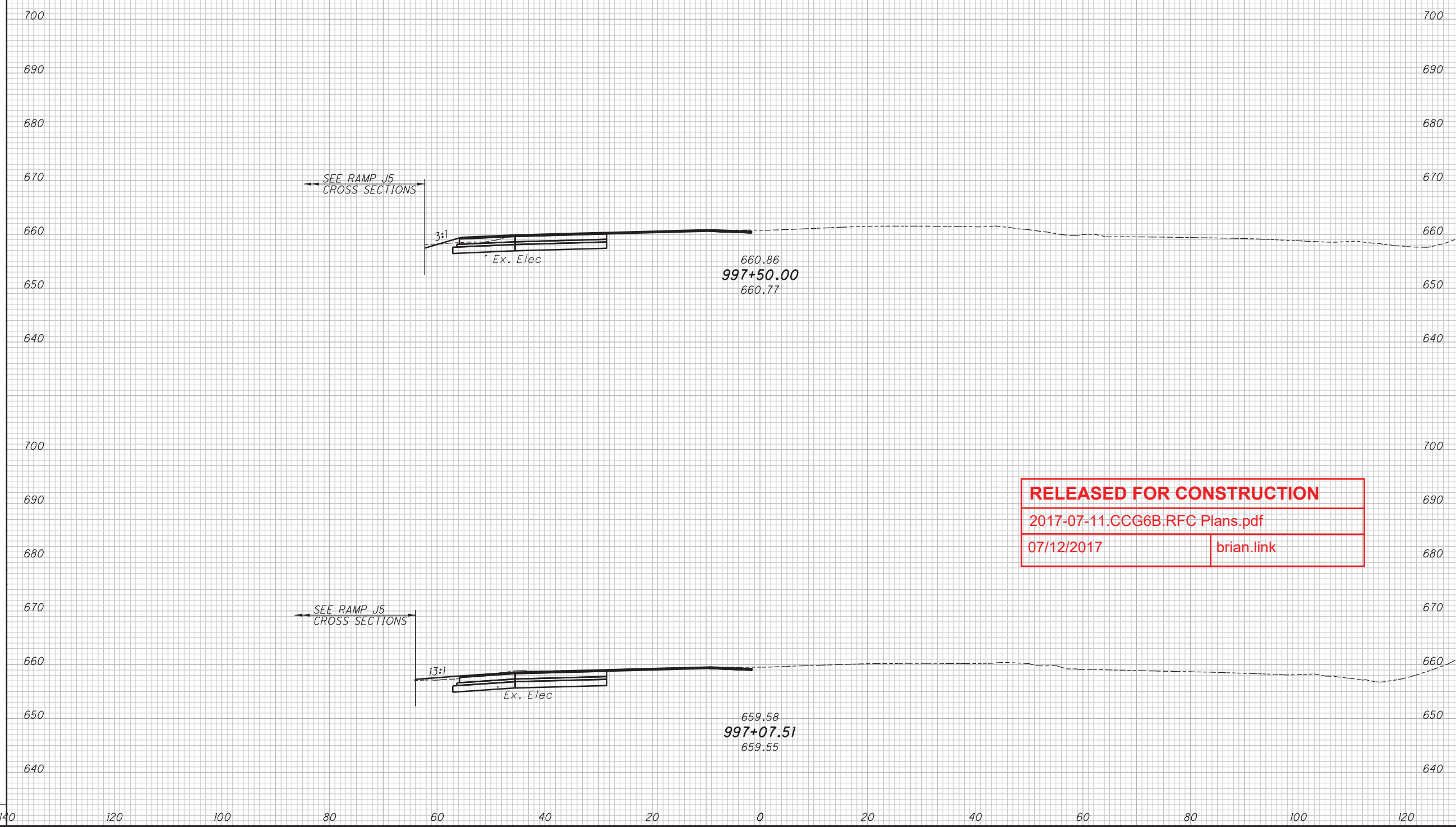
END AREA		VOLUME		CALCULATED	CHECKED	MLL
CUT	FILL	CUT	FILL			
CROSS SECTIONS - I.R. 77						
STA. 997+00.00 TO STA. 997+07.49						
CUY-77-13.80						
110 170						

P:\82388_CCG6B\Design\Roadway\Sheets\82388_XS1101.dgn XS_SHEET_temporary_model_name_24 7/10/2017 3:21:33 PM mlutes

SEEDING
END SO.
WIDTH YDS.

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION
ISSUE RECORD		

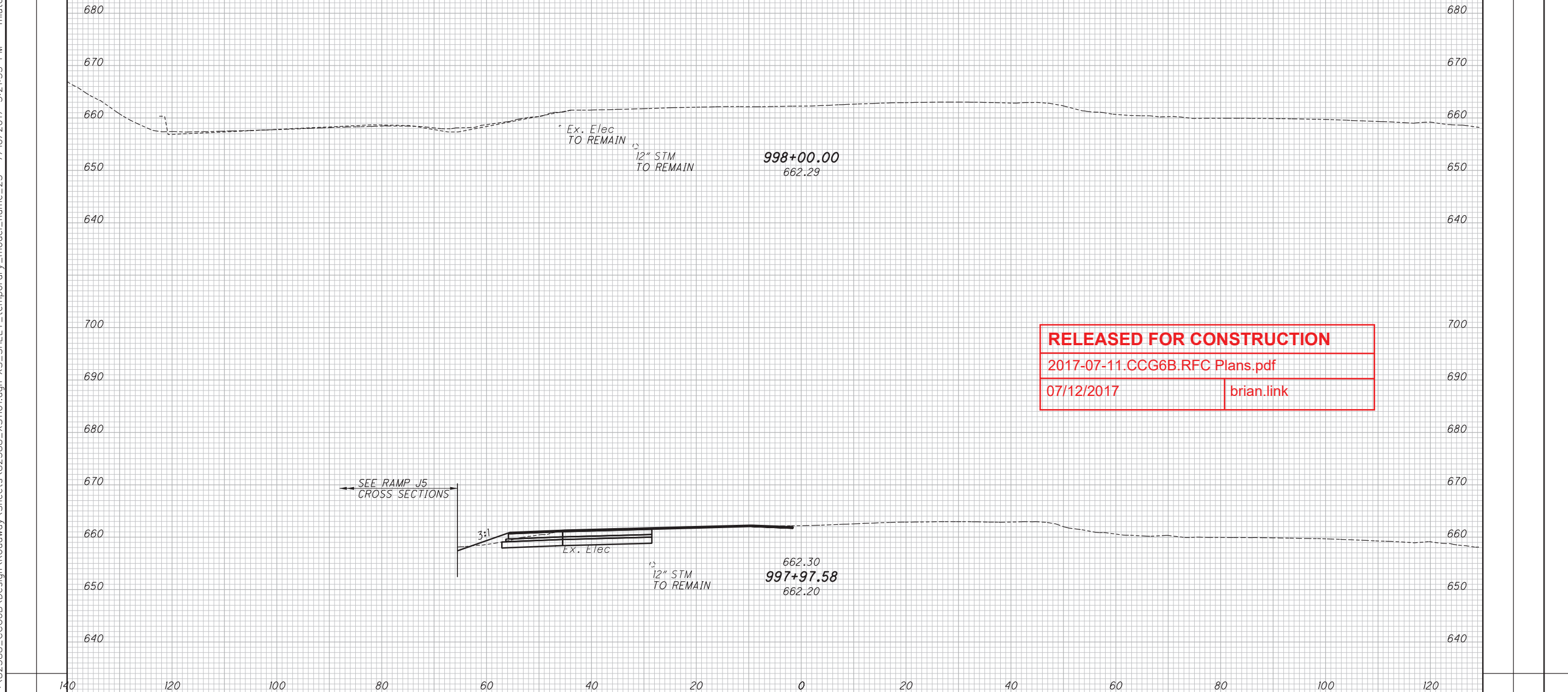
END AREA		VOLUME		CALCULATED DWB CHECKED MLL		
CUT	FILL	CUT	FILL			
				CROSS SECTIONS - I.R. 77 STA. 997+07.51 TO STA. 997+50.00		
				CUY-77-13.80		
				<table border="1"> <tr> <td>111</td> </tr> <tr> <td>170</td> </tr> </table>	111	170
111						
170						



P:\82388_CCG6B\Design\Roadway\Sheets\82388_XS1101.dgn XS_SHEET_temporary_model_name_25 7/10/2017 3:21:33 PM mltus

SEEDING
END SO.
WIDTH YDS.

BU2 - I.R.-77 AND RAMPS			END AREA		VOLUME		CALCULATED DWB	CHECKED MLL
NO.	DATE	DESCRIPTION	CUT	FILL	CUT	FILL		
		ISSUE RECORD						



**CROSS SECTIONS - I.R. 77
STA. 997+97.58 TO STA. 998+00.00**

CUY-77-13.80

112
170

P:\82388_CCG6B\Design\Roadway\Sheets\82388_XS1101.dgn XS_SHEET_temporary_model_name_26 7/10/2017 3:21:34 PM mutes

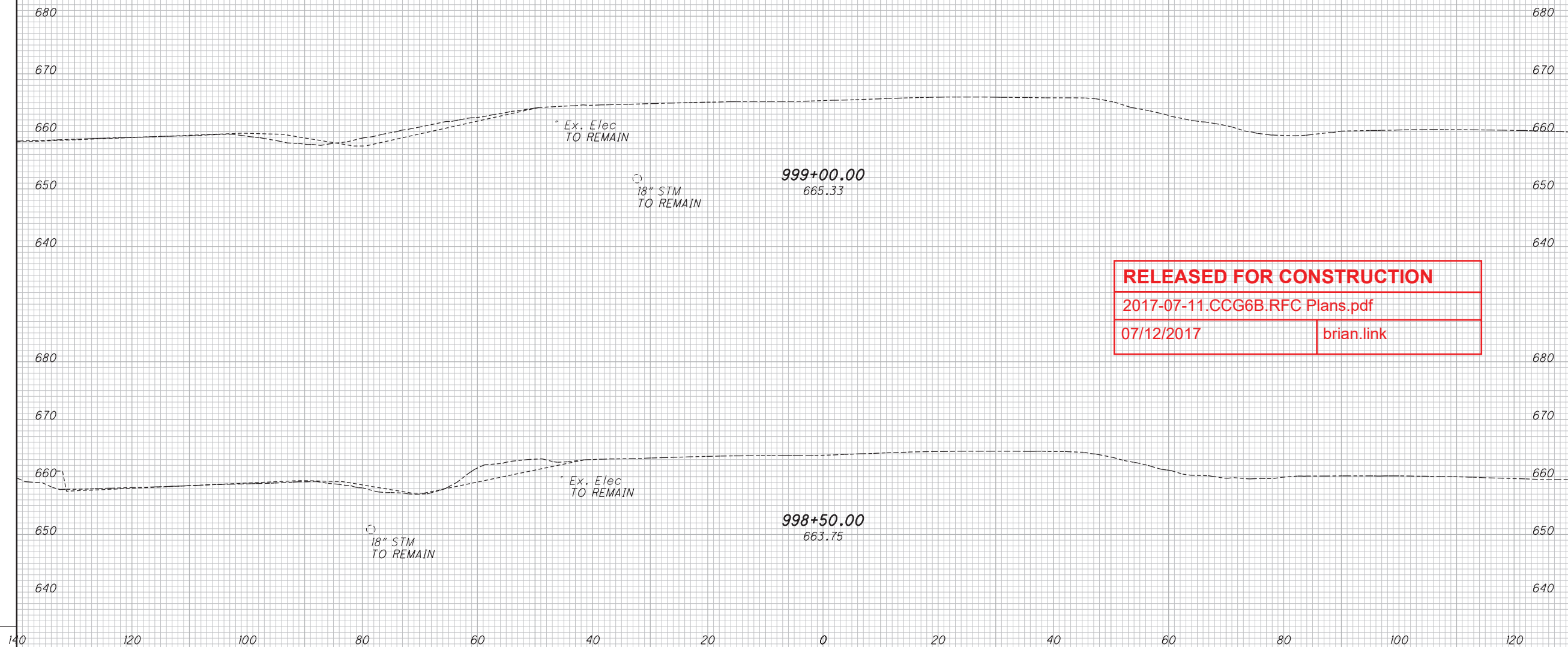
SEEDING
END SO.
WIDTH YDS.

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION
		ISSUE RECORD

END AREA
CUT FILL

VOLUME
CUT FILL

CALCULATED
DWB
CHECKED
MLL



RELEASED FOR CONSTRUCTION
 2017-07-11.CCG6B.RFC Plans.pdf
 07/12/2017 brian.link

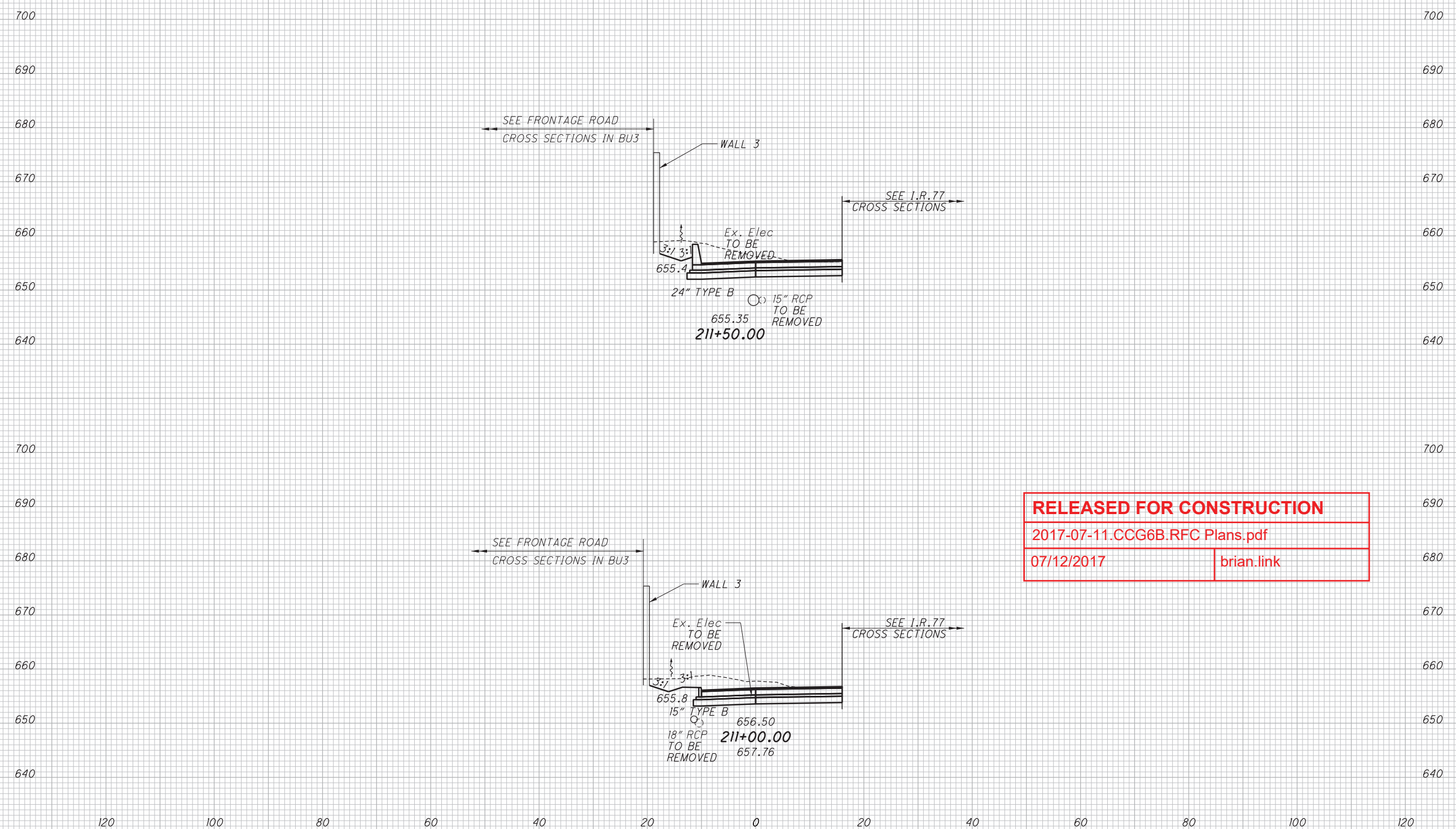
CROSS SECTIONS - I.R. 77
STA. 998+50.00 TO STA. 999+00.00

CUY-77-13.80

113
170

SEEDING
END SO.
WIDTH YDS.
P:\82388_CCG6B\Design\Roadway\Sheets\82388_XS1102.dgn XS_SHEET_temporary_model_name_2 7/10/2017 3:21:36 PM mlutes

BU2 - I.R.-77 AND RAMPS			END AREA		VOLUME		CALCULATED	DWB	CHECKED	MLL
NO.	DATE	DESCRIPTION	CUT	FILL	CUT	FILL				
ISSUE RECORD										



RELEASED FOR CONSTRUCTION
 2017-07-11.CCG6B.RFC Plans.pdf
 07/12/2017 brian.link

CROSS SECTIONS - RAMP J5
 STA. 211+00.00 TO STA. 211+50.00

CUY-77-13.80

115
170

SEEDING
END WIDTH SO. YDS.
700
690
680
670
660
650
640
630
700
690
680
670
660
650
640
630

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION
		ISSUE RECORD

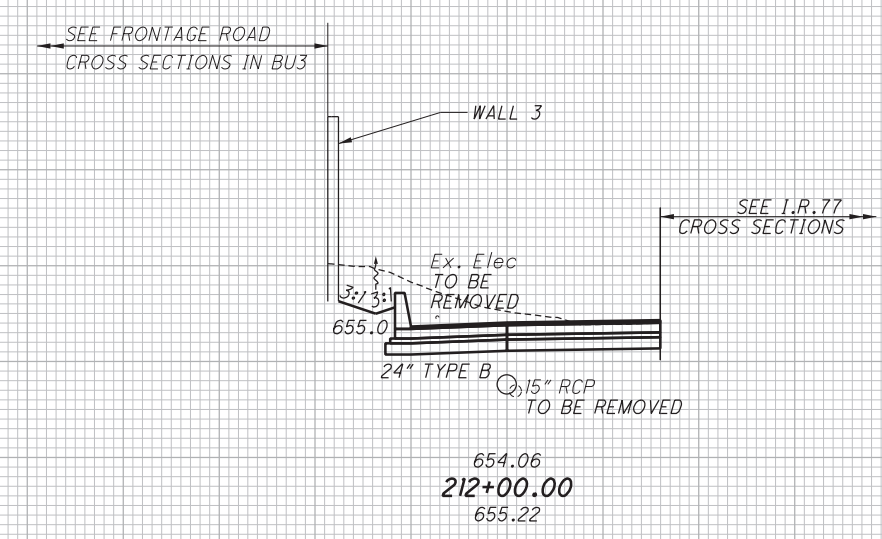
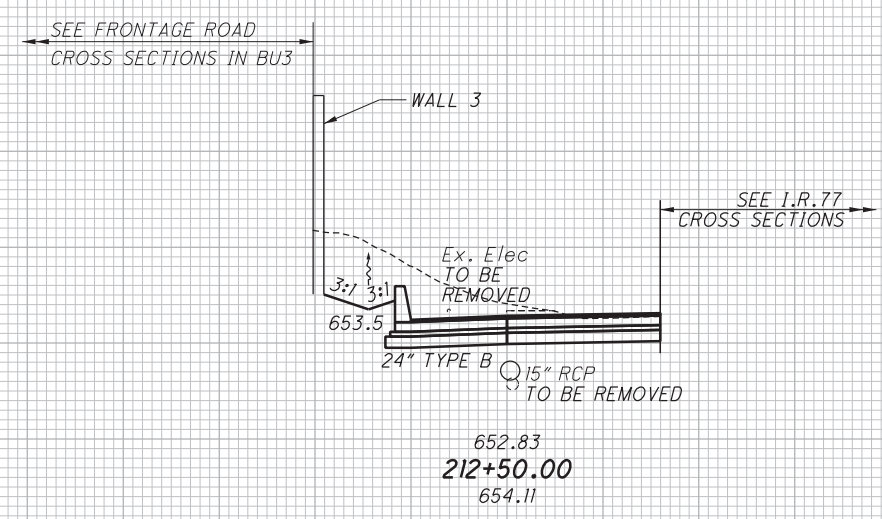
END AREA		VOLUME		CALCULATED DWB	CHECKED MLL
CUT	FILL	CUT	FILL		

CROSS SECTIONS - RAMP J5
STA. 212+00.00 TO STA. 212+50.00

CUY-77-13.80

116
170

120 100 80 60 40 20 0 20 40 60 80 100 120



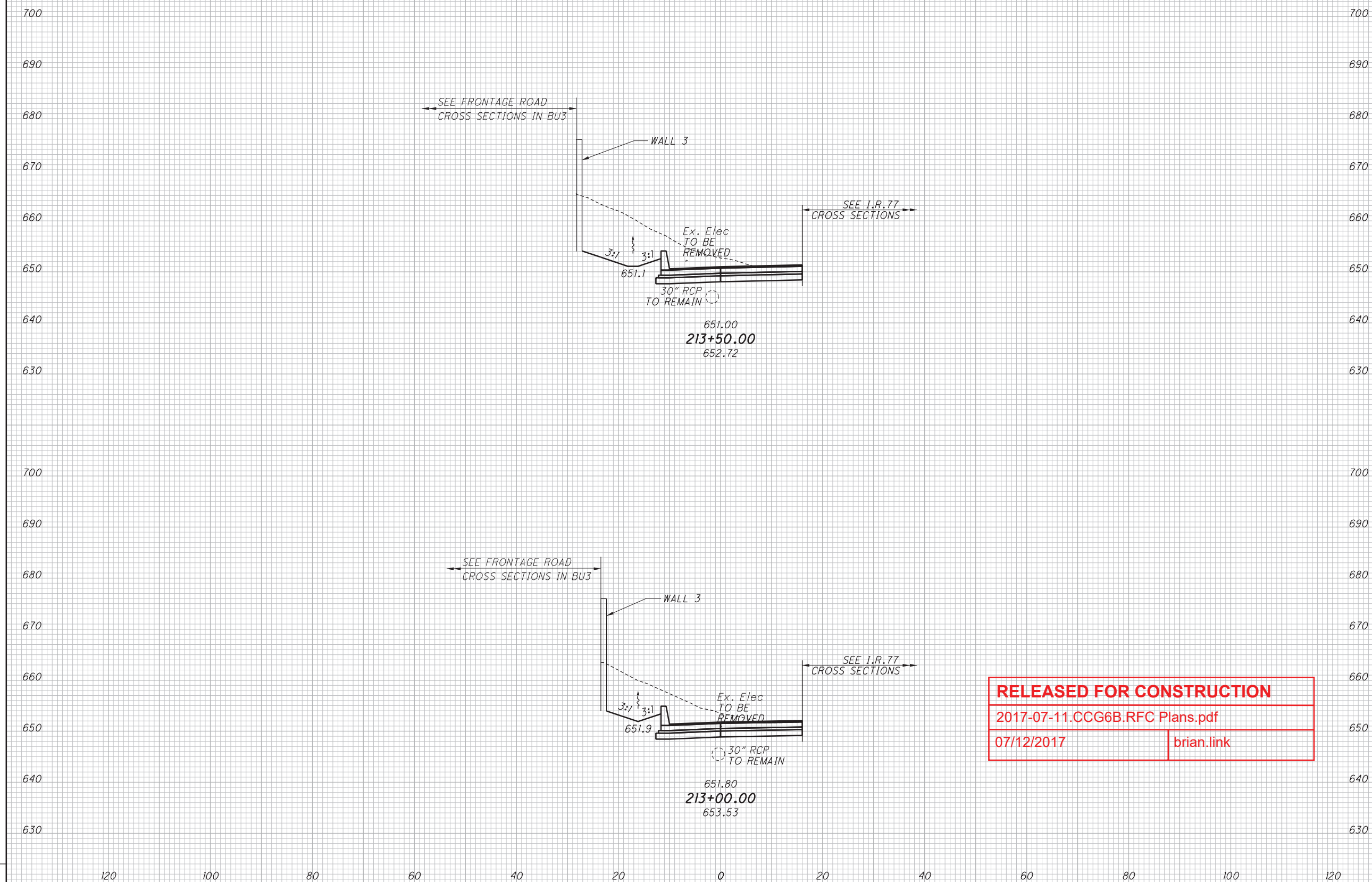
RELEASED FOR CONSTRUCTION
2017-07-11.CCG6B.RFC Plans.pdf
07/12/2017 brian.link

P:\82388_CCG6B\Design\Roadway\Sheets\82388_XS1102.dgn XS_SHEET_temporary_model_name_3 7/10/2017 3:21:37 PM mutes

SEEDING
END WIDTH SO. YDS.
7/10/2017 3:21:37 PM mlutes

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION
		ISSUE RECORD

END AREA	VOLUME	CALCULATED	DWB	CHECKED	MLL
CROSS SECTIONS - RAMP J5					
STA. 213+00.00 TO STA. 213+50.00					
CUY-77-13.80					
117 170					



RELEASED FOR CONSTRUCTION
 2017-07-11.CCG6B.RFC Plans.pdf
 07/12/2017 brian.link

P:\82388_CCG6B\Design\Roadway\Sheets\82388_XS1102.dgn XS_SHEET_temporary_model_name_5 1/5/2018 2:37:09 PM mlutes

SEEDING
END SO.
WIDTH YDS.

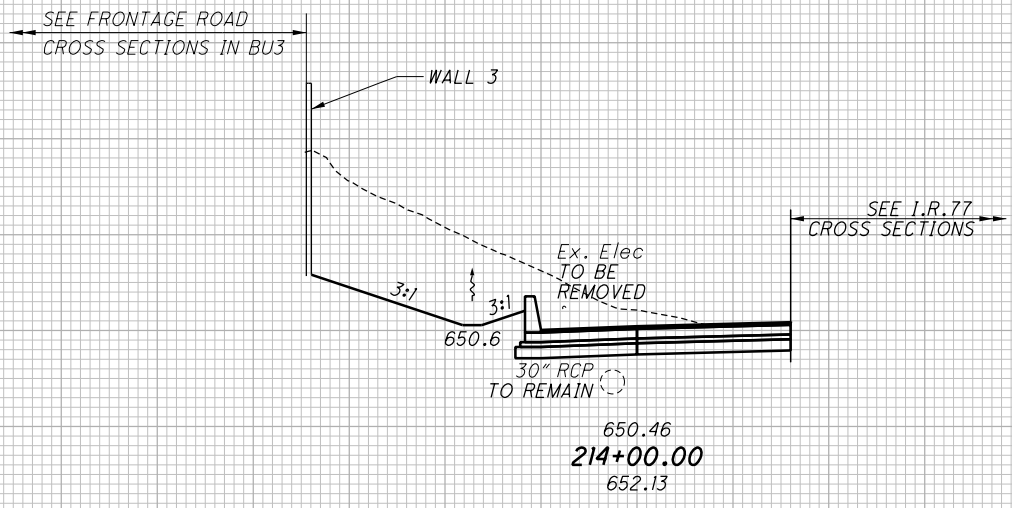
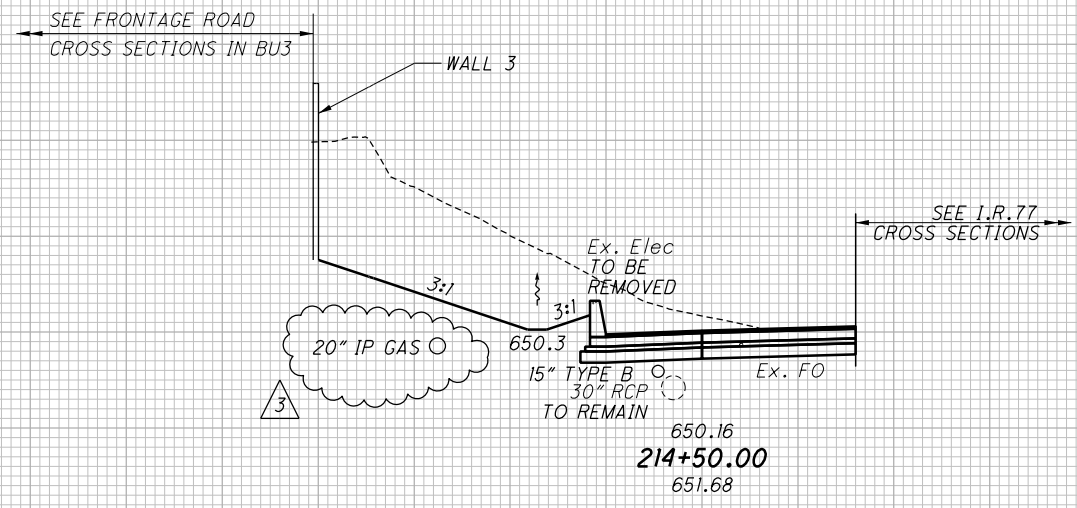
BU2 - I.R.-77 AND RAMPS		
3	12/7/17	ADDED PROP. GAS
NO.	DATE	DESCRIPTION
		ISSUE RECORD

END AREA		VOLUME		CALCULATED DWB	CHECKED MLL
CUT	FILL	CUT	FILL		

RELEASED FOR CONSTRUCTION
 BU02_2017.12.7_CCG6B.BU2.RFC Plans_FC19.pd
 01/09/2018 Brian.Link

700
690
680
670
660
650
640
630
700
690
680
670
660
650
640
630

700
690
680
670
660
650
640
630
700
690
680
670
660
650
640
630



120 100 80 60 40 20 0 20 40 60 80 100 120

CROSS SECTIONS - RAMP J5
 STA. 214+00.00 TO STA. 214+50.00

CUY-77-13.80

118
170

P:\82388_CCG6B\Design\Roadway\Sheets\82388_XS1102.dgn XS_SHEET_temporary_model_name_6 1/5/2018 2:37:10 PM mlutes

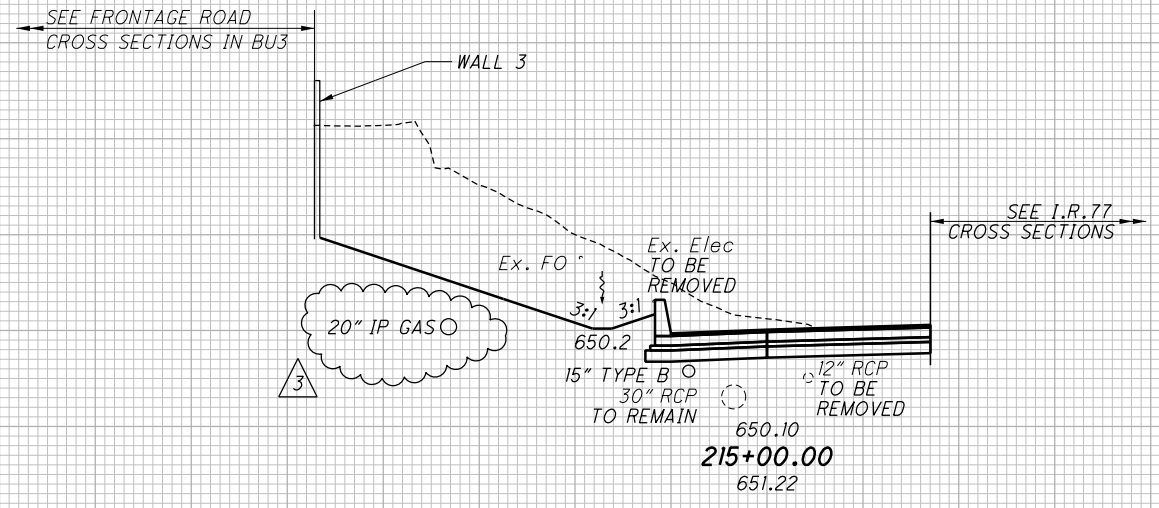
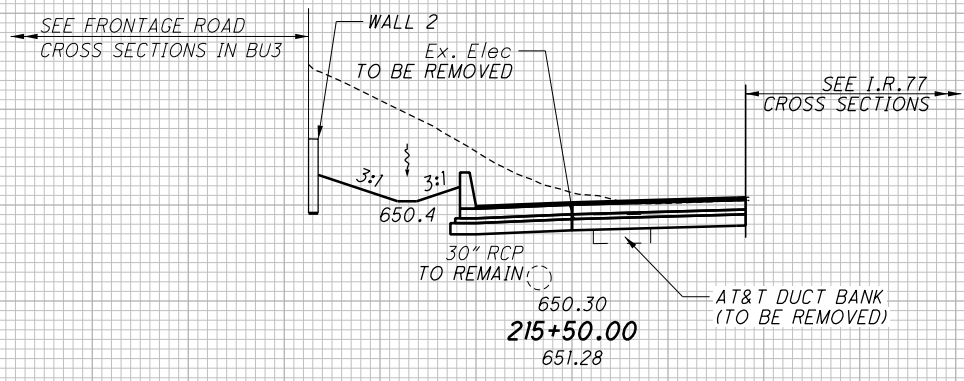
SEEDING
END SO.
WIDTH YDS.

BU2 - I.R.-77 AND RAMPS		
3	12/7/17	ADDED PROP. GAS
NO.	DATE	DESCRIPTION
ISSUE RECORD		

END AREA		VOLUME		CALCULATED	DWB	CHECKED	MLL
CUT	FILL	CUT	FILL				

RELEASED FOR CONSTRUCTION
 BU02_2017.12.7_CCG6B.BU2.RFC Plans_FC1970d
 01/09/2018 Brian.Link

700
690
680
670
660
650
640
630
700
690
680
670
660
650
640
630



120 100 80 60 40 20 0 20 40 60 80 100 120

CROSS SECTIONS - RAMP J5
 STA. 215+00.00 TO STA. 215+50.00

CUY-77-13.80

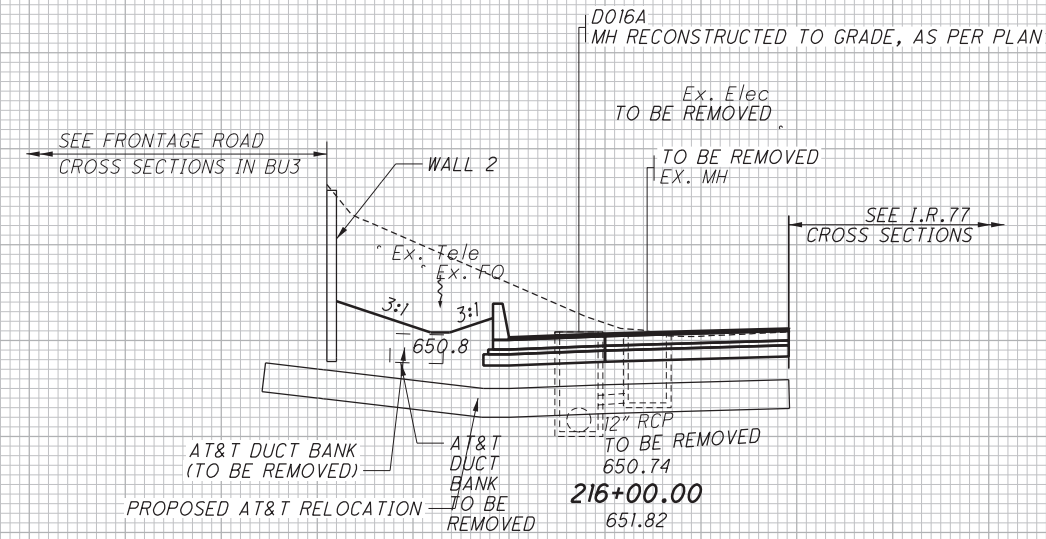
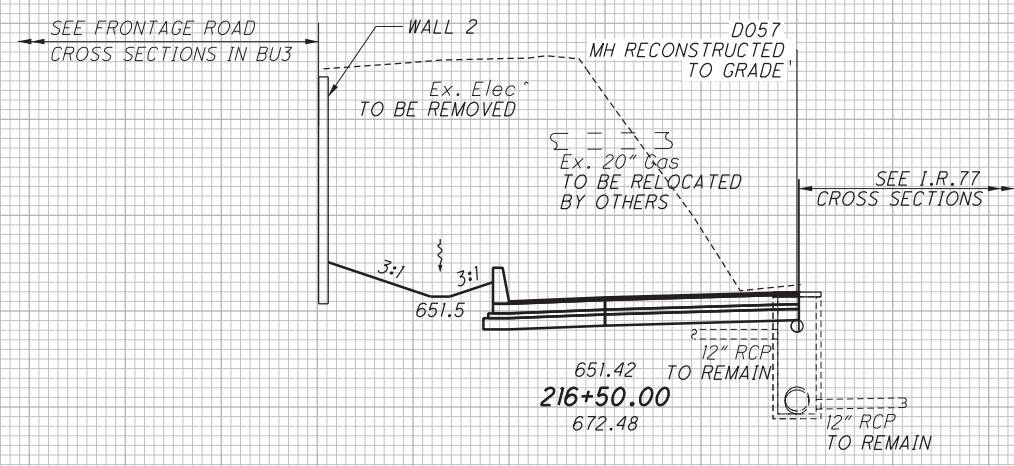
119
170

P:\82388_CCG6B\Design\Roadway\Sheets\82388_XS1102.dgn XS_SHEET_temporary_model_name_7 7/10/2017 3:21:38 PM mlutes

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION

END	AREA	VOLUME		CALCULATED	DWB	CHECKED	MLL
		CUT	FILL				
700							
690							
680							
670							
660							
650							
640							
630							
700							
690							
680							
670							
660							
650							
640							
630							
140							

700
690
680
670
660
650
640
630
700
690
680
670
660
650
640
630



RELEASED FOR CONSTRUCTION
 2017-07-11.CCG6B.RFC Plans.pdf
 07/12/2017 brian.link

CROSS SECTIONS - RAMP J5
STA. 216+00.00 TO STA. 216+50.00

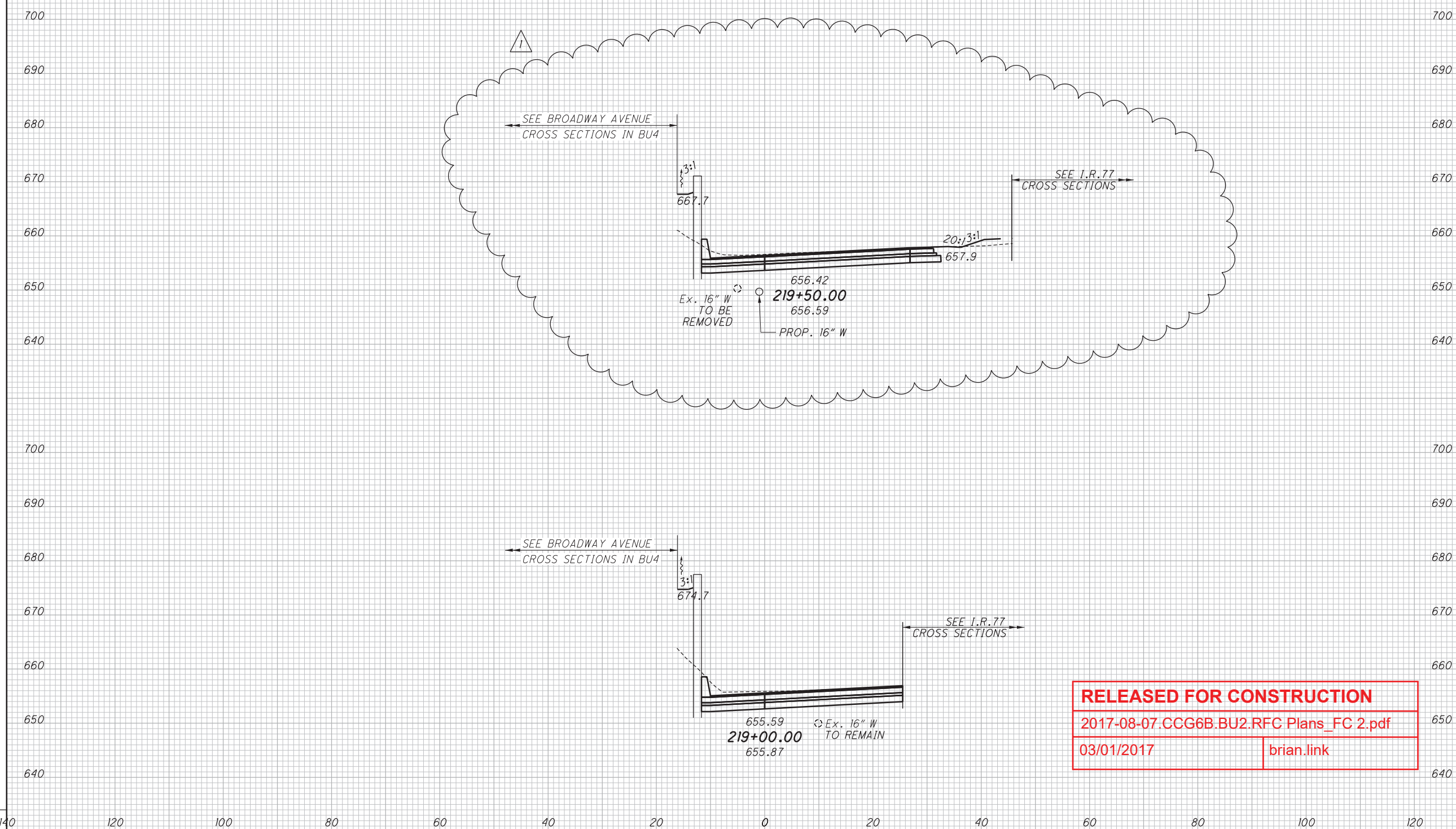
CUY-77-13.80

120
170

P:\82388_CCG6B\Design\Roadway\Sheets\82388_XS1102.dgn XS_SHEET_temporary_model_name_10 8/4/2017 2:08:39 PM mlutes

BU2 - I.R.-77 AND RAMPS		
1	8/3/17	ADJUSTED I.R. 77 & RAMP J5 GORE AREA DITCH AND GRADING
NO.	DATE	DESCRIPTION
ISSUE RECORD		

END AREA		VOLUME		CALCULATED	DWB	CHECKED	MLL
CUT	FILL	CUT	FILL				
CROSS SECTIONS - RAMP J5							
STA. 219+00.00 TO STA. 219+50.00							
CUY-77-13.80							
123 170							



RELEASED FOR CONSTRUCTION
 2017-08-07.CCG6B.BU2.RFC Plans_FC 2.pdf
 03/01/2017 brian.link

P:\82388_CCG6B\Design\Roadway\Sheets\82388_XS1102.dgn XS_SHEET_temporary_model_name_11 8/4/2017 2:08:39 PM mlutes

SEEDING
END SO.
WIDTH YDS.

BU2 - I.R.-77 AND RAMPS		
1	8/3/17	ADJUSTED I.R. 77 & RAMP J5 GORE AREA DITCH AND GRADING
NO.	DATE	DESCRIPTION
ISSUE RECORD		

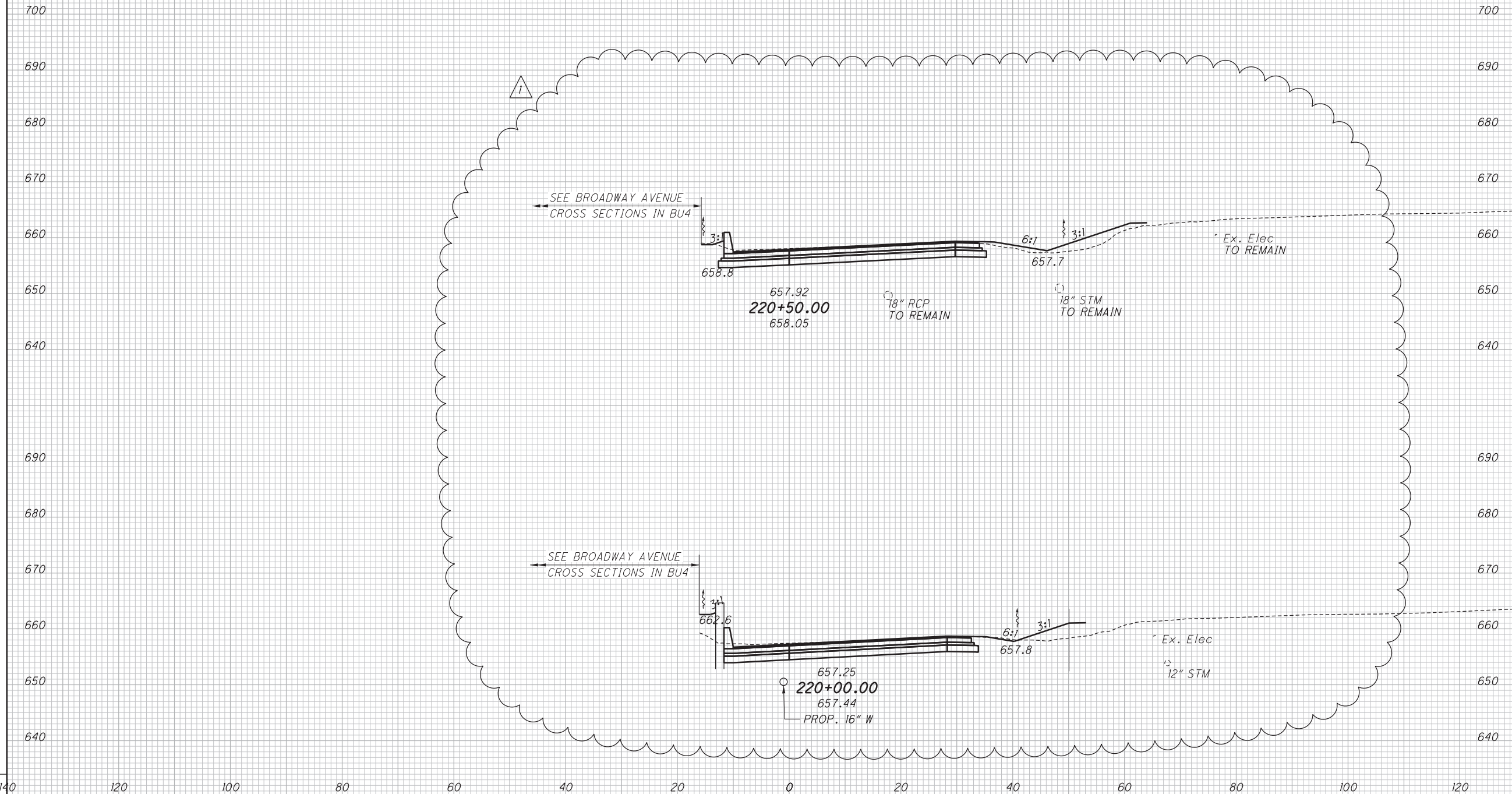
END AREA		VOLUME	
CUT	FILL	CUT	FILL

RELEASED FOR CONSTRUCTION
 2017-08-07.CCG6B.BU2.RFC Plans_FC 2.pdf
 03/01/2017 brian.link

CROSS SECTIONS - RAMP J5
 STA. 220+00.00 TO STA. 220+50.00

CUY-77-13.80

124
170

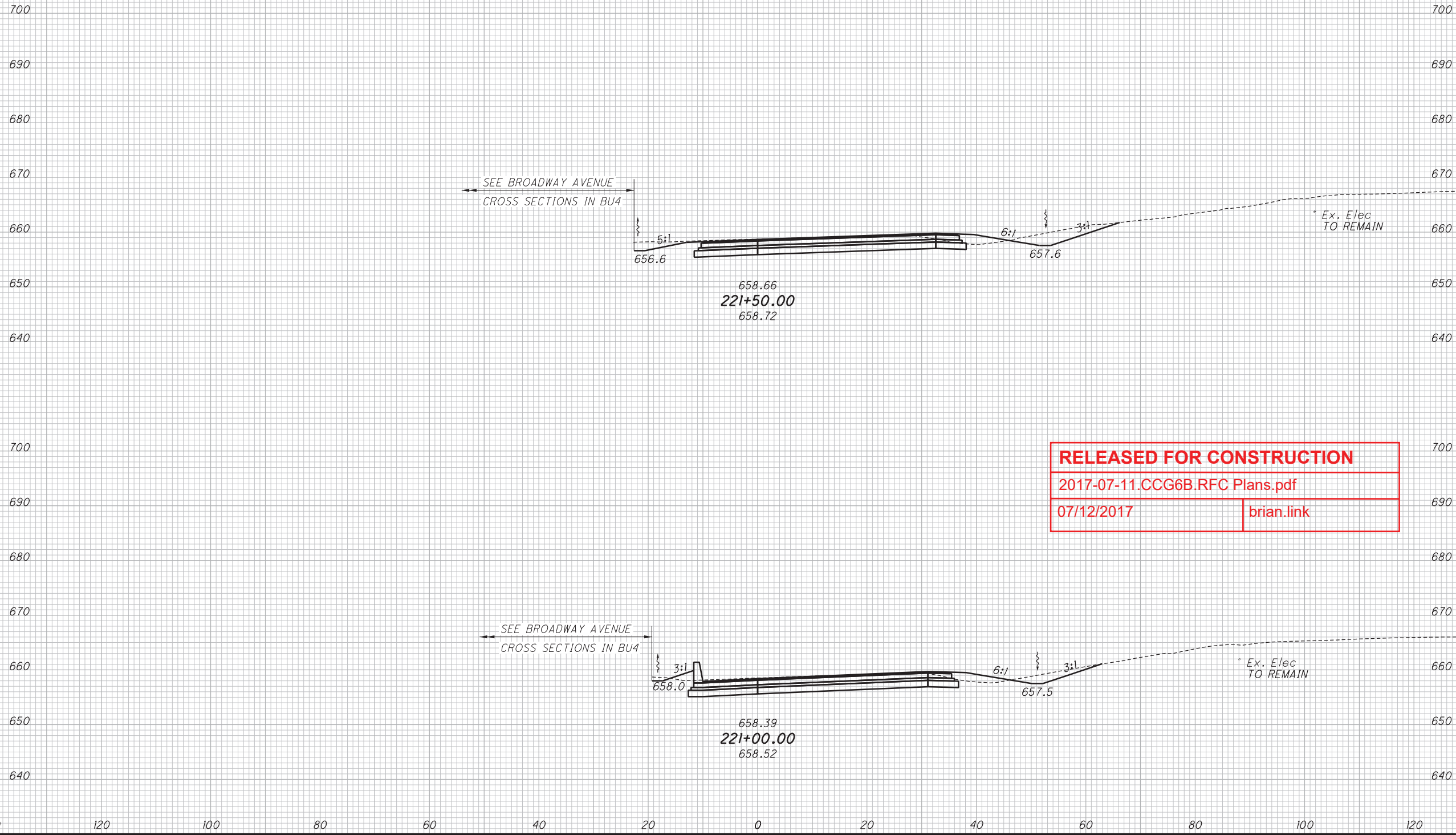


P:\82388_CCG6B\Design\Roadway\Sheets\82388_XS1102.dgn XS_SHEET_temporary_model_name_12 7/10/2017 3:21:39 PM mlutes

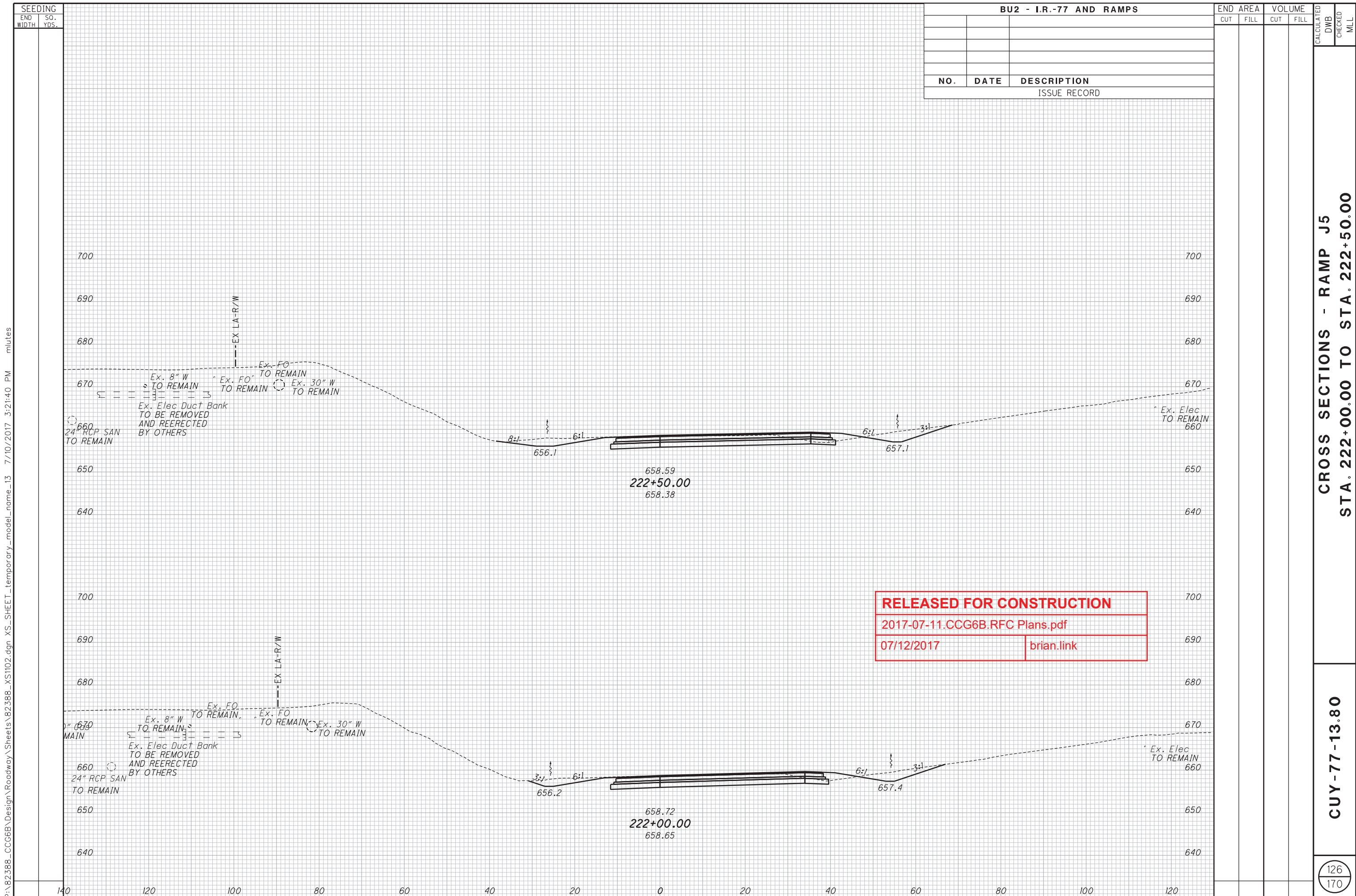
SEEDING
END SO.
WIDTH YDS.

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION
		ISSUE RECORD

END AREA		VOLUME		CALCULATED DWB	CHECKED MLL
CUT	FILL	CUT	FILL		
CROSS SECTIONS - RAMP J5					
STA. 221+00.00 TO STA. 221+50.00					
CUY-77-13.80					
125 170					



RELEASED FOR CONSTRUCTION
 2017-07-11.CCG6B.RFC Plans.pdf
 07/12/2017 brian.link



SEEDING	END SO.	
	WIDTH	YDS.

BU2 - I.R.-77 AND RAMPS		
END AREA		VOLUME
CUT	FILL	CUT FILL
NO.	DATE	DESCRIPTION
		ISSUE RECORD

CALCULATED	CHECKED
DWB	MLL

**CROSS SECTIONS - RAMP J5
STA. 222+00.00 TO STA. 222+50.00**

CUY - 77 - 13.80

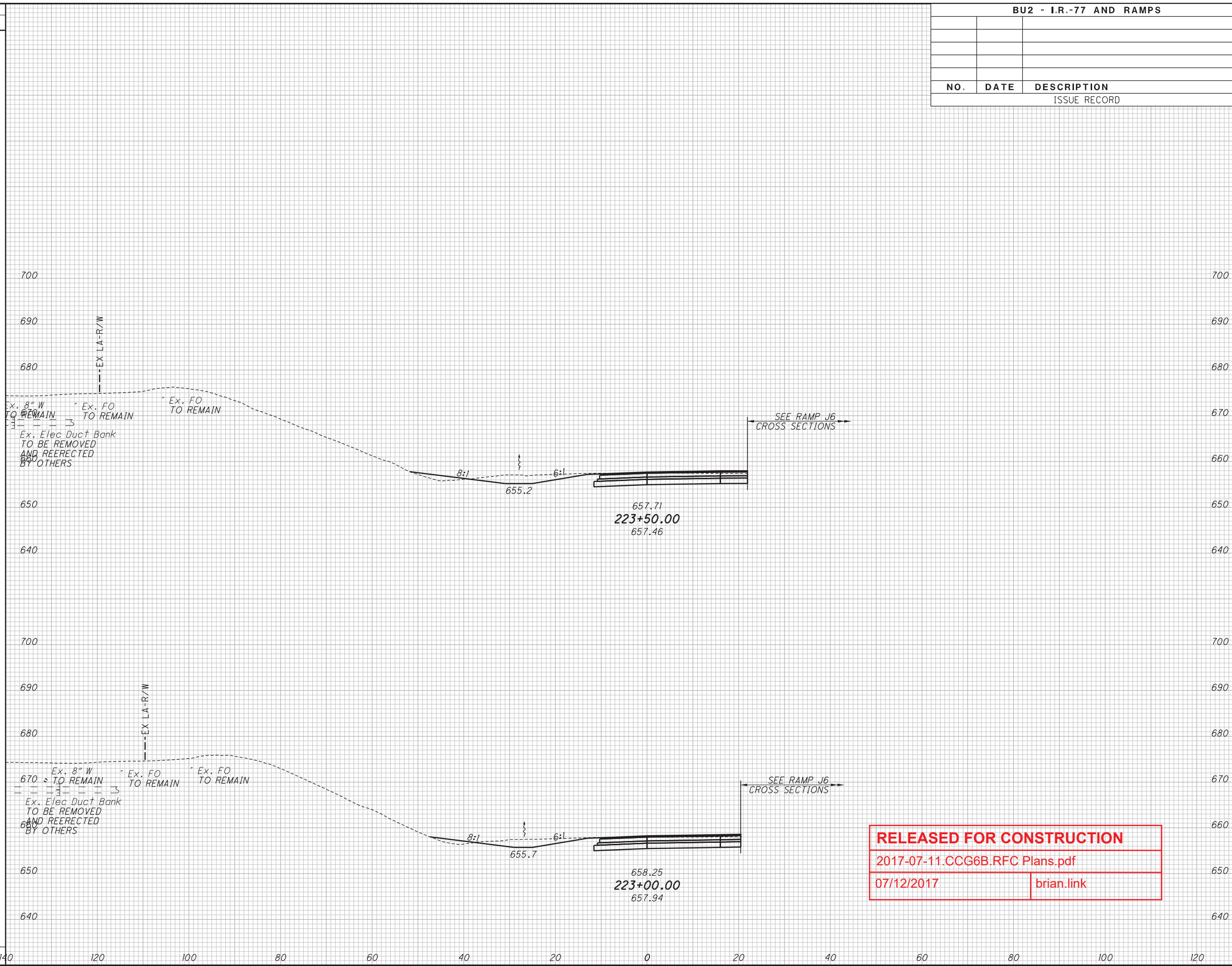
126
170

RELEASED FOR CONSTRUCTION
 2017-07-11.CCG6B.RFC Plans.pdf
 07/12/2017 brian.link

P:\82388_CCG6B\Design\Roadway\Sheets\82388_XS1102.dgn XS_SHEET_temporary_model_name_13 7/10/2017 3:21:40 PM mltues

P:\82388_CCG6B\Design\Roadway\Sheets\82388_XS1102.dgn XS_SHEET_temporary_model_name_14 7/10/2017 3:21:40 PM milutes

SEEDING	
END WIDTH	SO. YDS.
140	
120	
100	
80	
60	
40	
20	
0	
20	
40	
60	
80	
100	
120	



BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION
		ISSUE RECORD

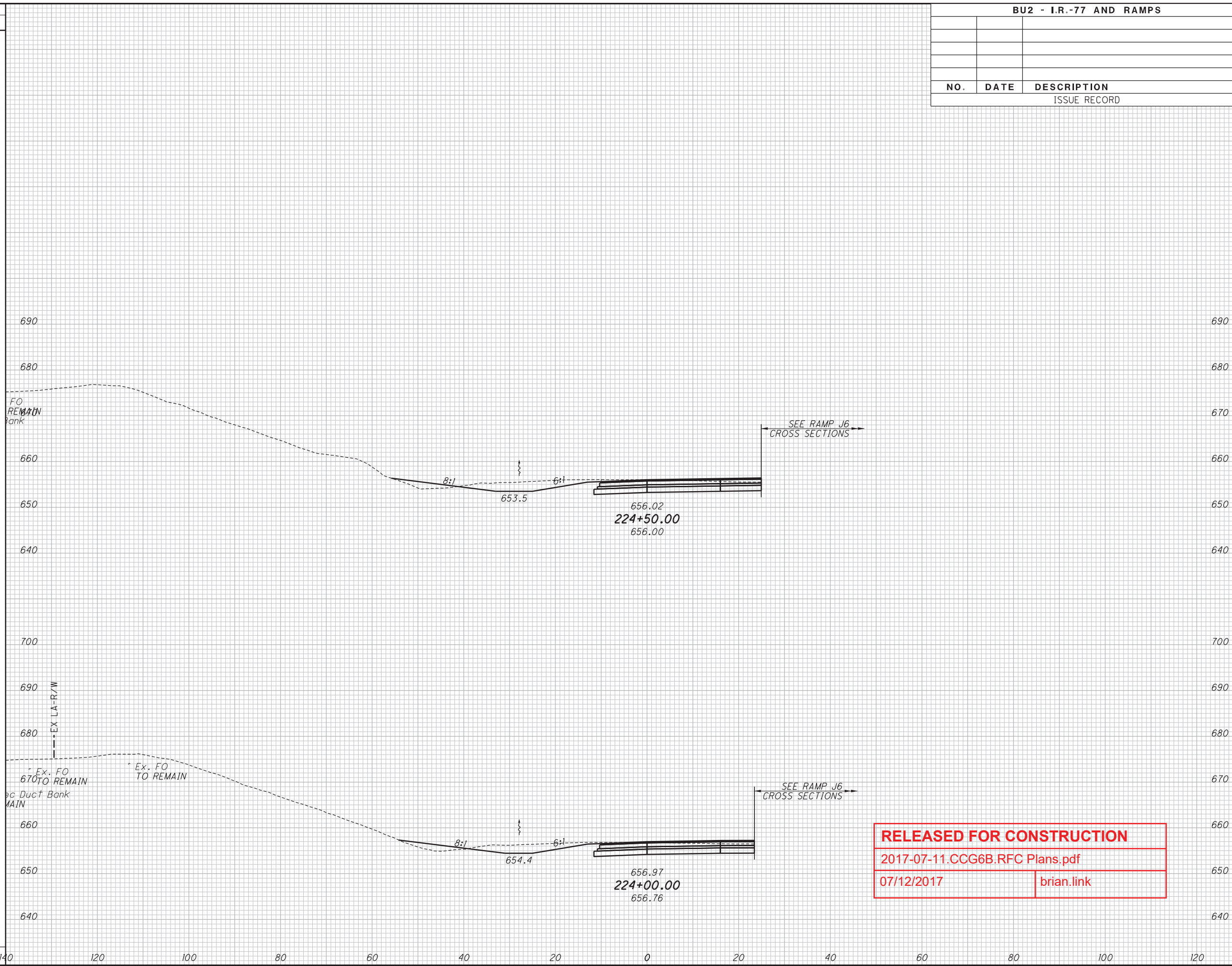
END AREA		VOLUME		CALCULATED	CHECKED	MLL
CUT	FILL	CUT	FILL			

CROSS SECTIONS - RAMP J5
STA. 223+00.00 TO STA. 223+50.00
CUY-77-13.80
127 170

RELEASED FOR CONSTRUCTION
 2017-07-11.CCG6B.RFC Plans.pdf
 07/12/2017 brian.link

P:\82388_CCG6B\Design\Roadway\Sheets\82388_XS1102.dgn XS_SHEET_temporary_model_name_15 7/10/2017 3:21:40 PM mlutes

SEEDING	
END WIDTH	SO. YDS.



BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION
		ISSUE RECORD

END AREA	VOLUME		CALCULATED
	CUT	FILL	
			CHECKED
			MLL

CROSS SECTIONS - RAMP J5
STA. 224+00.00 TO STA. 224+50.00

CUY -77 -13.80

RELEASED FOR CONSTRUCTION
2017-07-11.CCG6B.RFC Plans.pdf
07/12/2017 brian.link

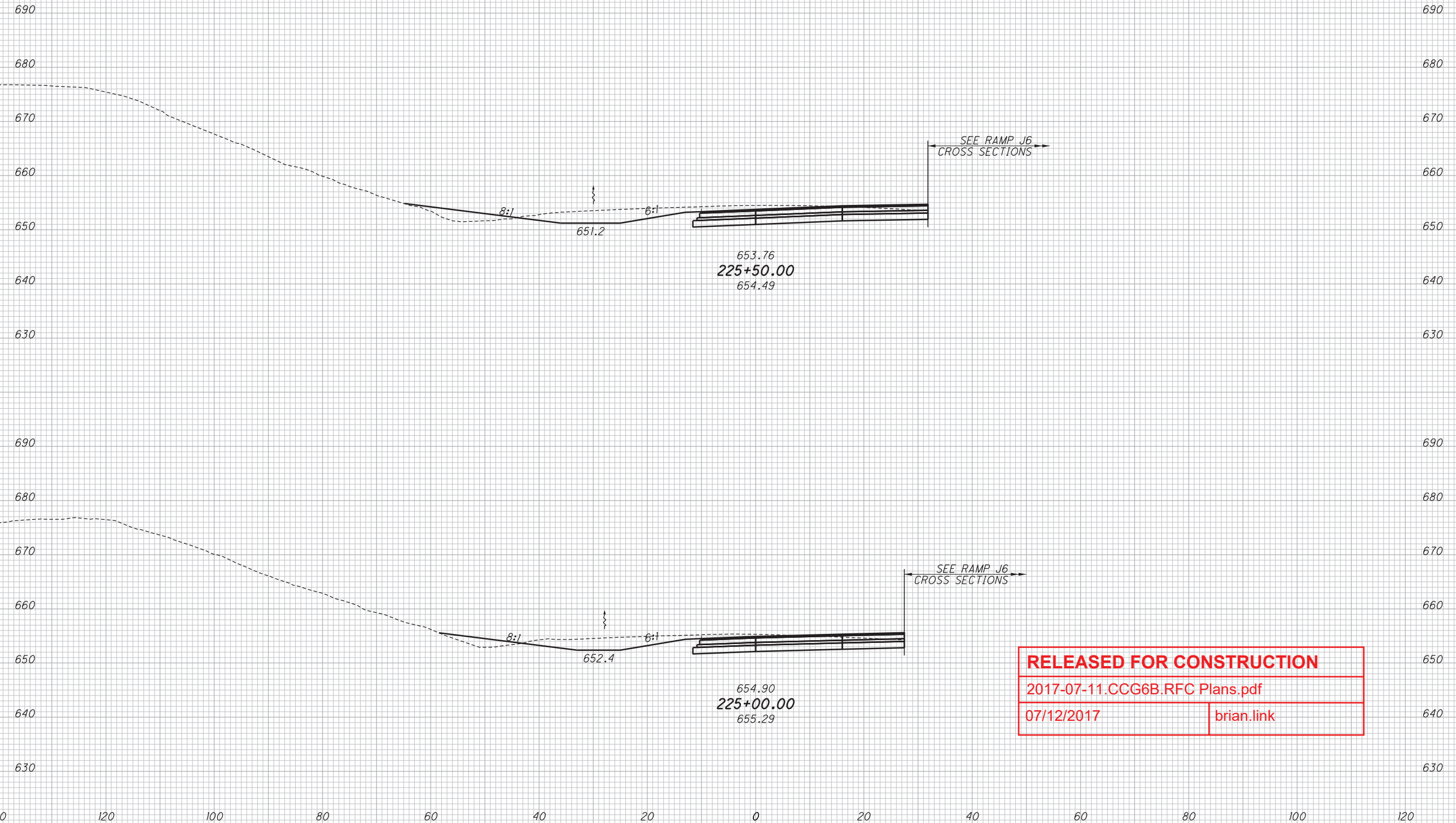
128
170

P:\82388_CCG6B\Design\Roadway\Sheets\82388_XS1102.dgn XS_SHEET_temporary_model_name_16 7/10/2017 3:21:40 PM mlutes

SEEDING
END SO.
WIDTH YDS.

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION
		ISSUE RECORD

END AREA
CUT FILL
VOLUME
CUT FILL
CALCULATED
DWB
CHECKED
MLL



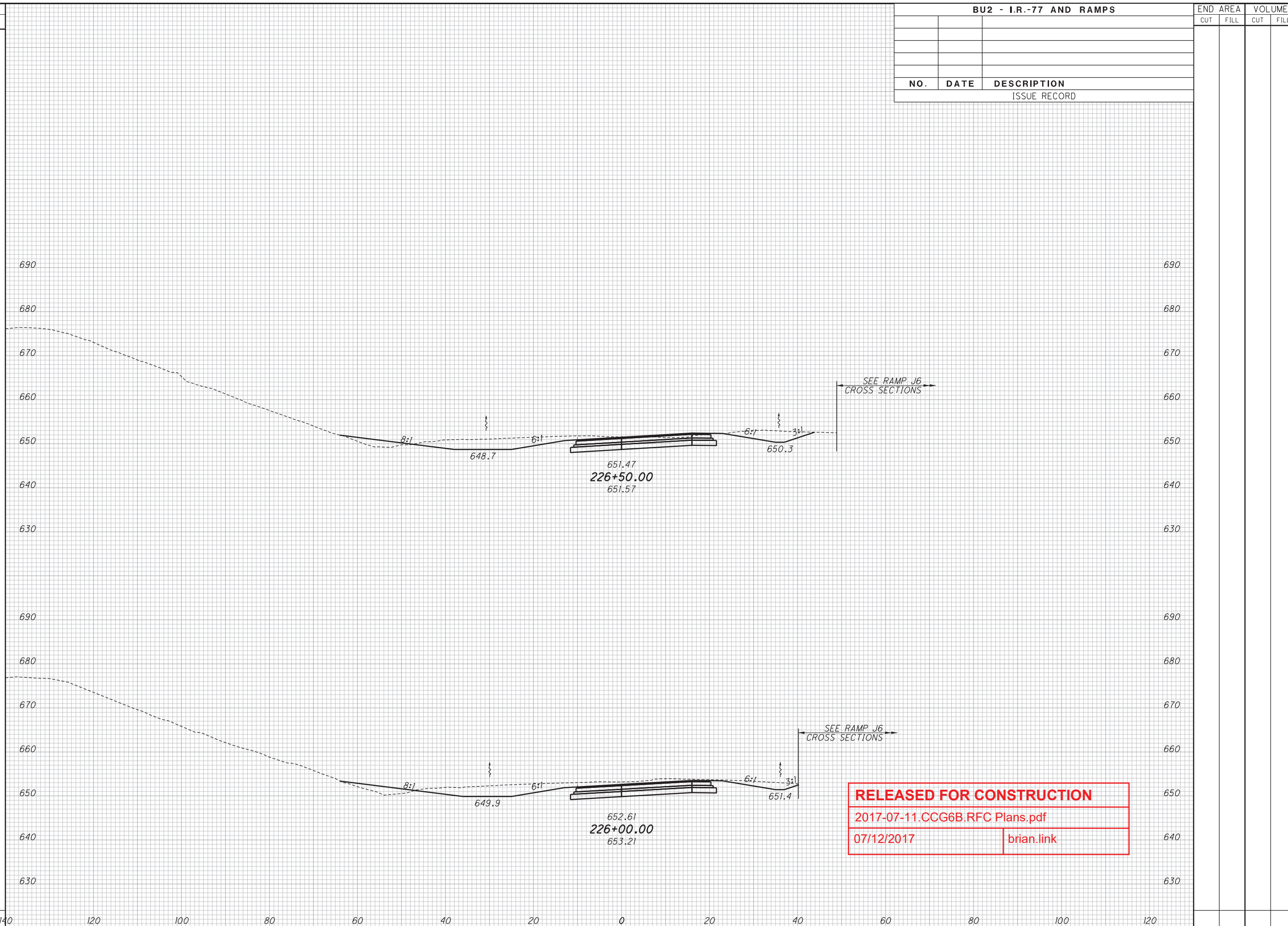
RELEASED FOR CONSTRUCTION
2017-07-11.CCG6B.RFC Plans.pdf
07/12/2017 brian.link

CROSS SECTIONS - RAMP J5
STA. 225+00.00 TO STA. 225+50.00

CUY-77-13.80

129
170

P:\82388_CCG6B\Design\Roadway\Sheets\82388_XS1102.dgn XS_SHEET_temporary_model_name_17 7/10/2017 3:21:41 PM mldates



RELEASED FOR CONSTRUCTION

2017-07-11.CCG6B.RFC Plans.pdf

07/12/2017 brian.link

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION
		ISSUE RECORD

SEEDING		END AREA		VOLUME		CALCULATED DWB	CHECKED MLL
END WIDTH	SO. YDS.	CUT	FILL	CUT	FILL		

CROSS SECTIONS - RAMP J5
 STA. 226+00.00 TO STA. 226+50.00

CUY-77-13.80

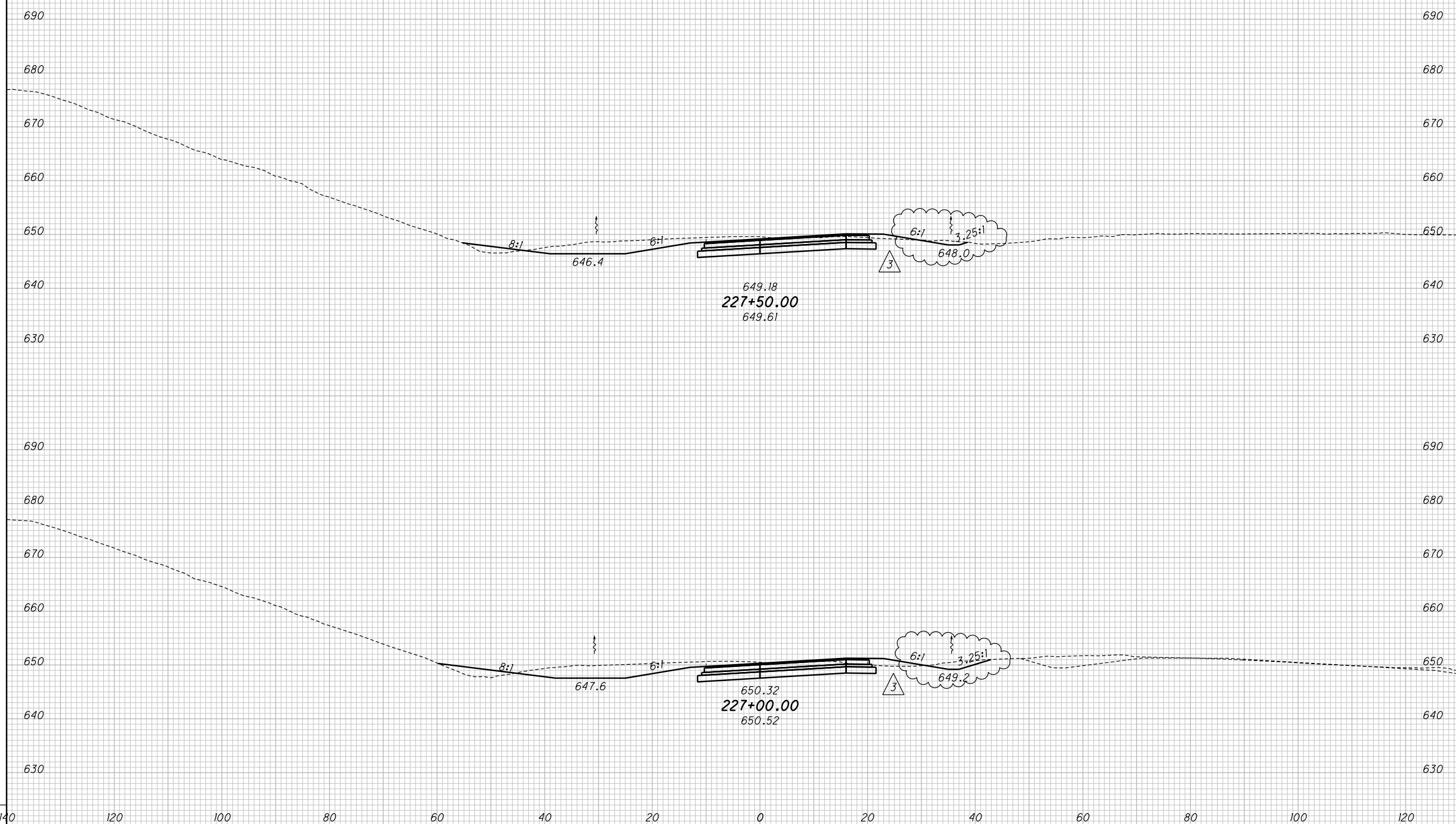
130
170

SEEDING
END WIDTH SO. YDS.
140 120 100 80 60 40 20 0 20 40 60 80 100 120

BU2 - I.R.-77 AND RAMPS		
3	12/7/17	MODIFIED SLOPES
NO.	DATE	DESCRIPTION
		ISSUE RECORD

END AREA		VOLUME		CALCULATED	DWB	CHECKED	MLL
CUT	FILL	CUT	FILL				

RELEASED FOR CONSTRUCTION
 BU02_2017.12.7_CCG6B.BU2.RFC Plans_FC19.pd
 01/09/2018 Brian.Link



CROSS SECTIONS - RAMP J5
 STA. 227+00.00 TO STA. 227+50.00

CUY-77-13.80

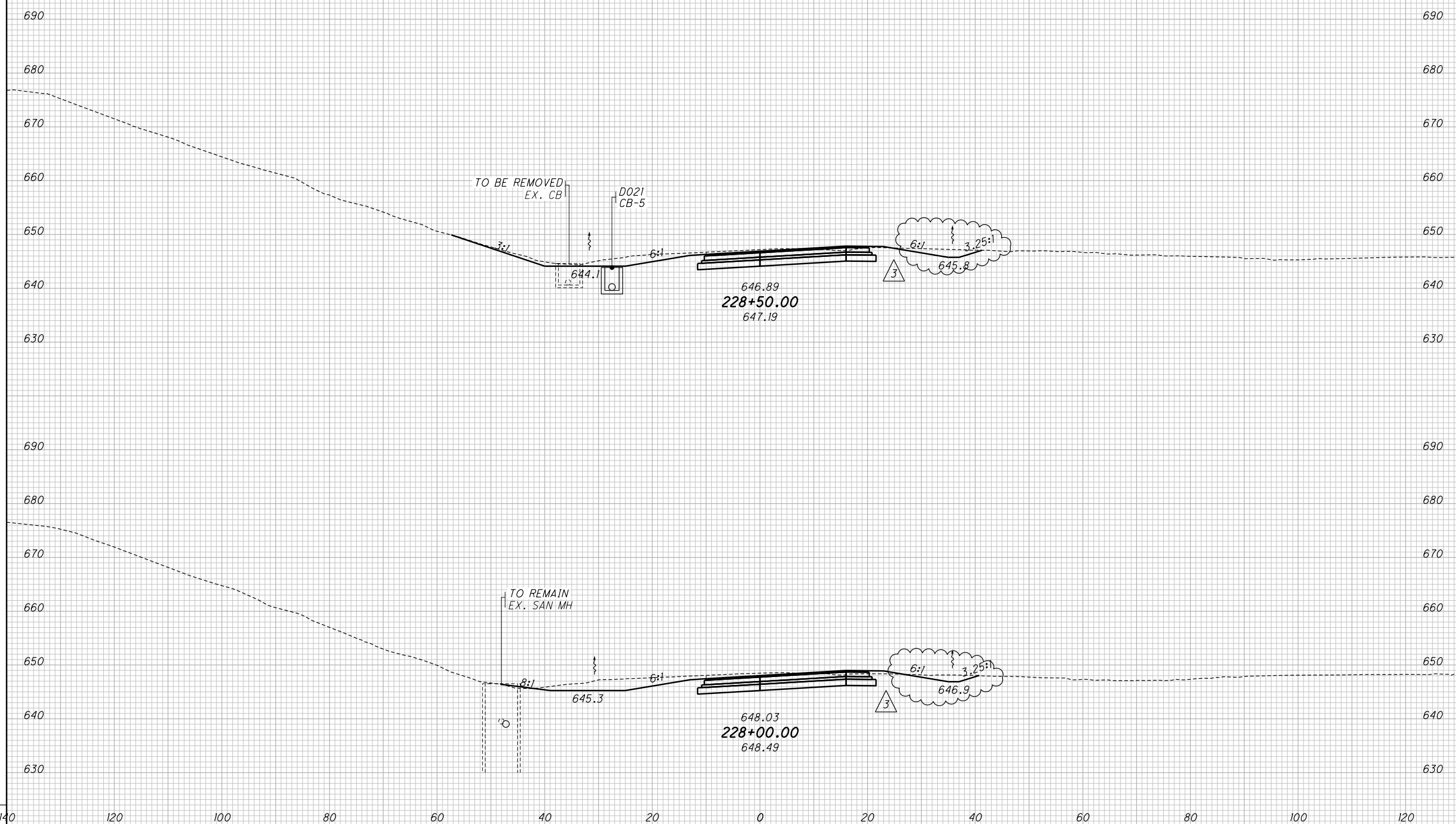
131
170

P:\82388_CCG6B\Design\Roadway\Sheets\82388_XS1102.dgn XS_SHEET_temporary_model_name_19 1/5/2018 2:37:10 PM miles

BU2 - I.R.-77 AND RAMPS		
3	12/7/17	MODIFIED SLOPES
NO.	DATE	DESCRIPTION
		ISSUE RECORD

END AREA	VOLUME	CALCULATED	CHECKED						
				CUT	FILL	CUT	FILL	DWB	MLL

RELEASED FOR CONSTRUCTION
 BU02_2017.12.7_CCG6B.BU2.RFC Plans_FC19.pd
 01/09/2018 Brian.Link



CROSS SECTIONS - RAMP J5
 STA. 228+00.00 TO STA. 228+50.00

CUY-77-13.80

132
170

P:\82388_CCG6B\Design\Roadway\Sheets\82388_XS1102.dgn XS_SHEET_temporary_model_name_20 1/5/2018 2:37:11 PM m\utes

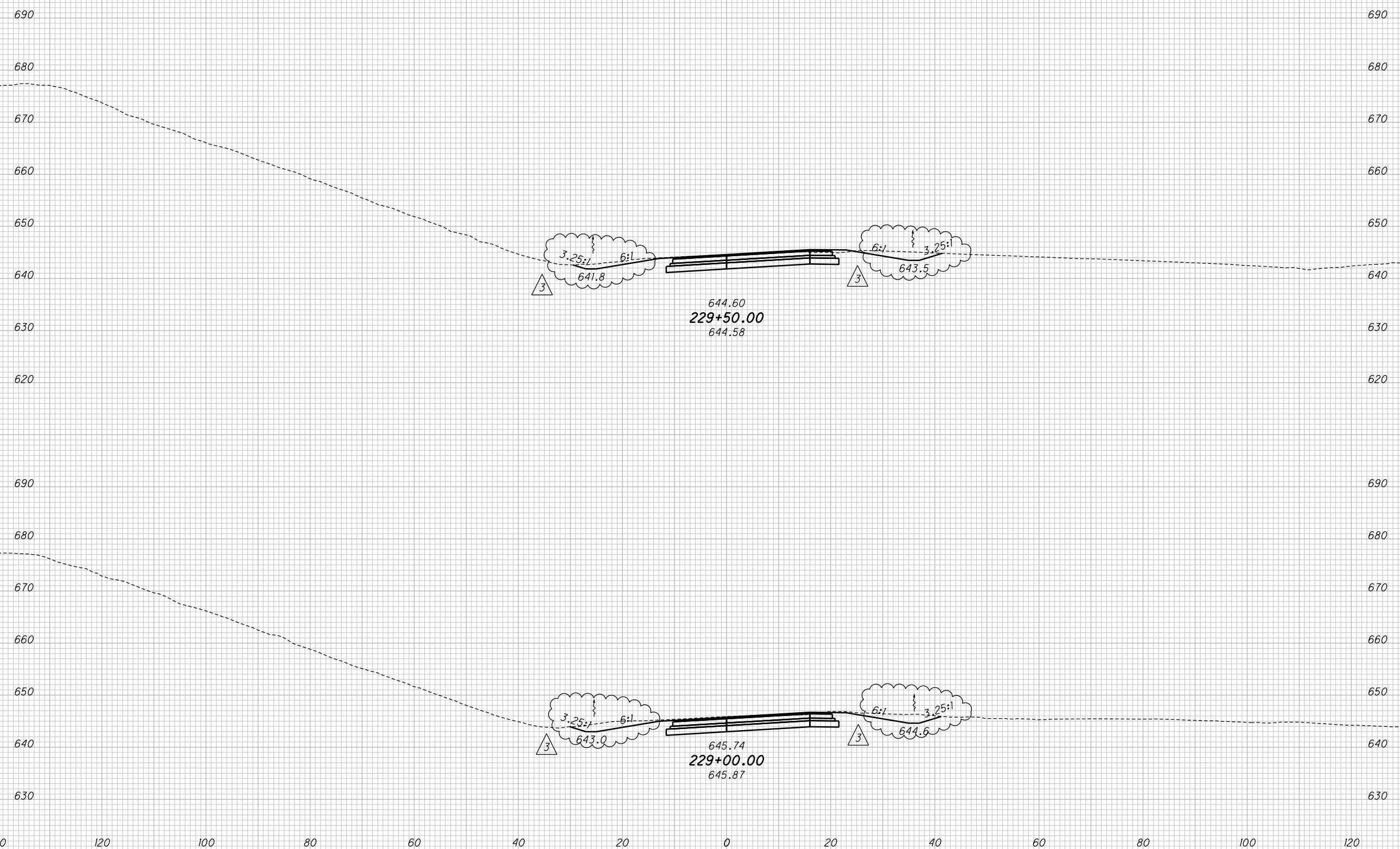
BU2 - I.R.-77 AND RAMPS		
3	12/7/17	MODIFIED SLOPES
NO.	DATE	DESCRIPTION
ISSUE RECORD		

END AREA		VOLUME		CALCULATED	CHECKED
CUT	FILL	CUT	FILL		
CROSS SECTIONS - RAMP J5 STA. 229+00.00 TO STA. 229+50.00					
CUY-77-13.80					
133 170					

RELEASED FOR CONSTRUCTION

BU02_2017.12.7_CCG6B.BU2.RFC Plans_FC19.pd

01/09/2018 Brian.Link



P:\82388_CCG6B\Design\Roadway\Sheets\82388_XS1102.dgn XS_SHEET_temporary_model_name_21 1/5/2018 2:37:11 PM m'lutes

BU2 - I.R.-77 AND RAMPS		
3	12/7/17	MODIFIED SLOPE
NO.	DATE	DESCRIPTION
ISSUE RECORD		

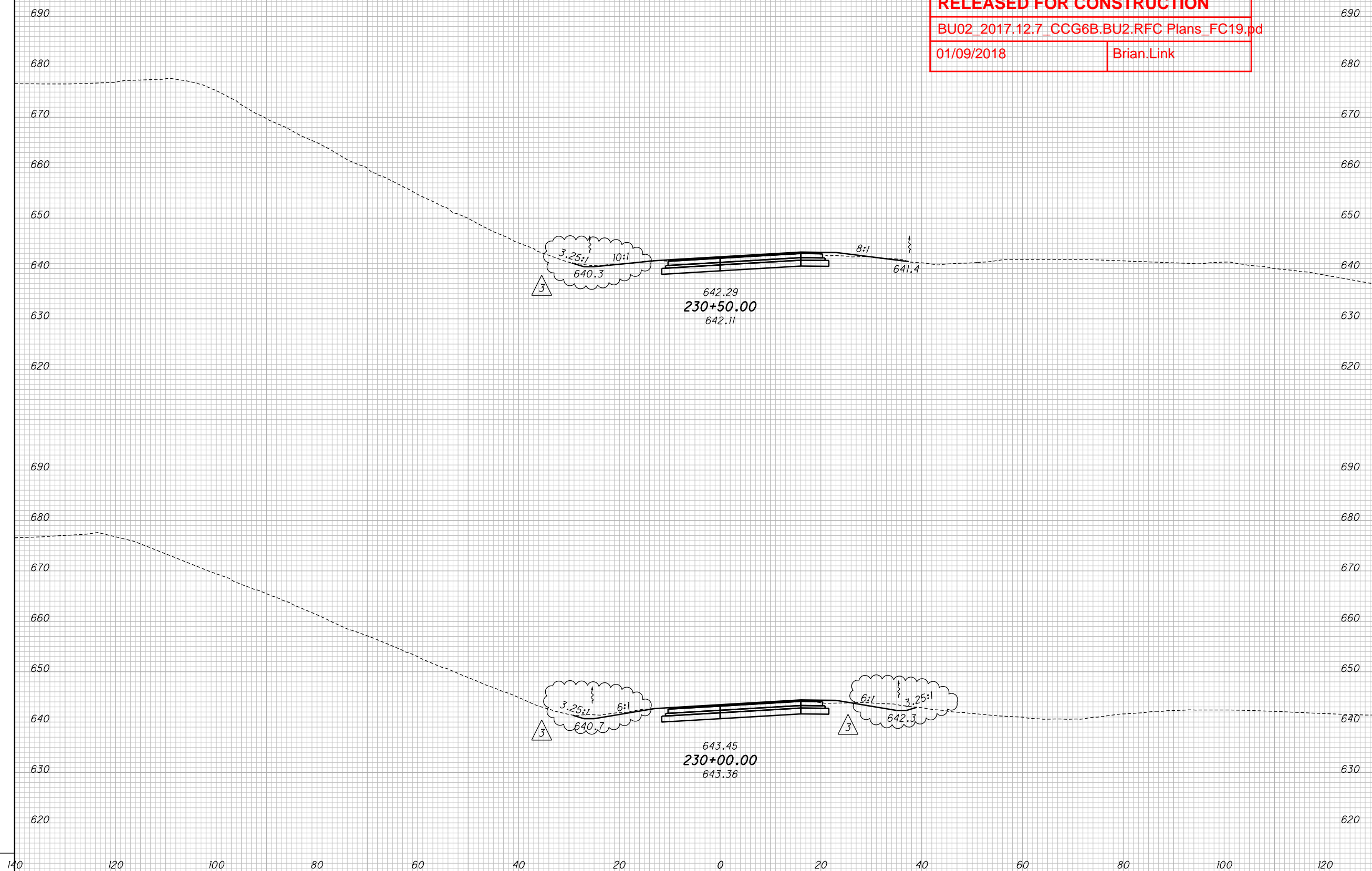
END AREA		VOLUME		CALCULATED DWB	CHECKED MLL
CUT	FILL	CUT	FILL		

RELEASED FOR CONSTRUCTION
 BU02_2017.12.7_CCG6B.BU2.RFC Plans_FC19.pd
 01/09/2018 Brian.Link

**CROSS SECTIONS - RAMP J5
 STA. 230+00.00 TO STA. 230+50.00**

CUY-77-13.80

134
 170



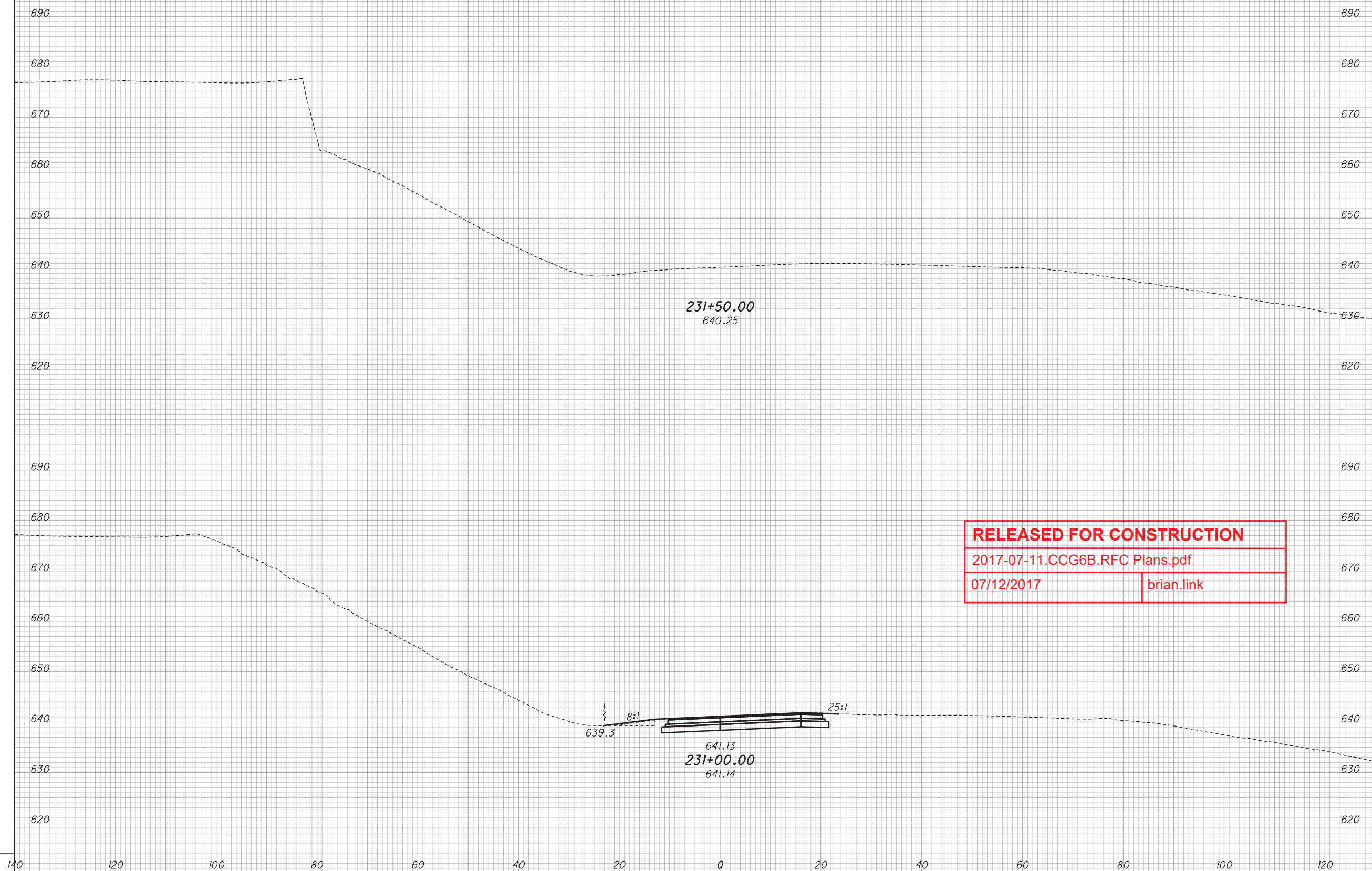
SEEDING	
END WIDTH	SO. YDS.

BU2 - I.R.-77 AND RAMPS

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED	CHECKED
DWB	MLL

NO.	DATE	DESCRIPTION
ISSUE RECORD		



CROSS SECTIONS - RAMP J5
STA. 231+00.00 TO STA. 231+50.00

CUY - 77 - 13.80

135
170

P:\82388_CCG6B\Design\Roadway\Sheets\82388_XS1102.dgn XS_SHEET_temporary_model_name_23 7/10/2017 3:21:46 PM mlutes

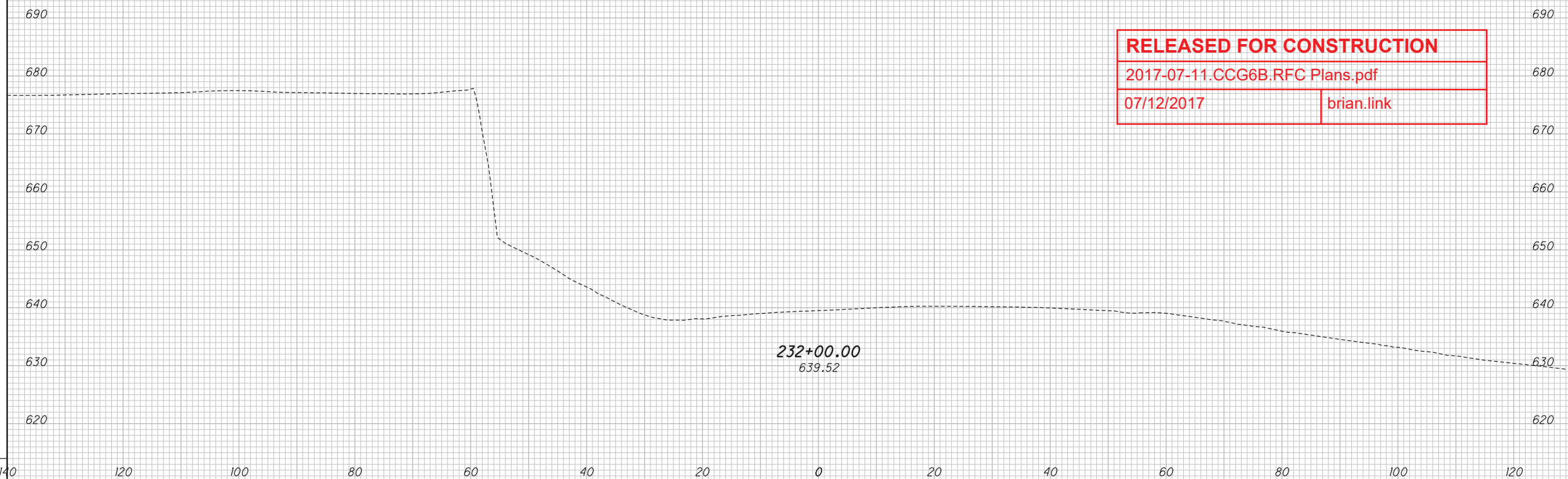
BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION
		ISSUE RECORD

SEEDING		END AREA		VOLUME		CALCULATED DWB	CHECKED MLL
END WIDTH	SO. YDS.	CUT	FILL	CUT	FILL		

CROSS SECTIONS - RAMP J5
STA. 232+00.00

CUY - 77 - 13.80

(136 / 170)



P:\B2388_CCG6B\Design\Roadway\Sheets\B2388_XS1103.dgn XS_SHEET_temporary_model_name_1 7/10/2017 3:21:47 PM mlutes

SEEDING	
END WIDTH	SO. YDS.

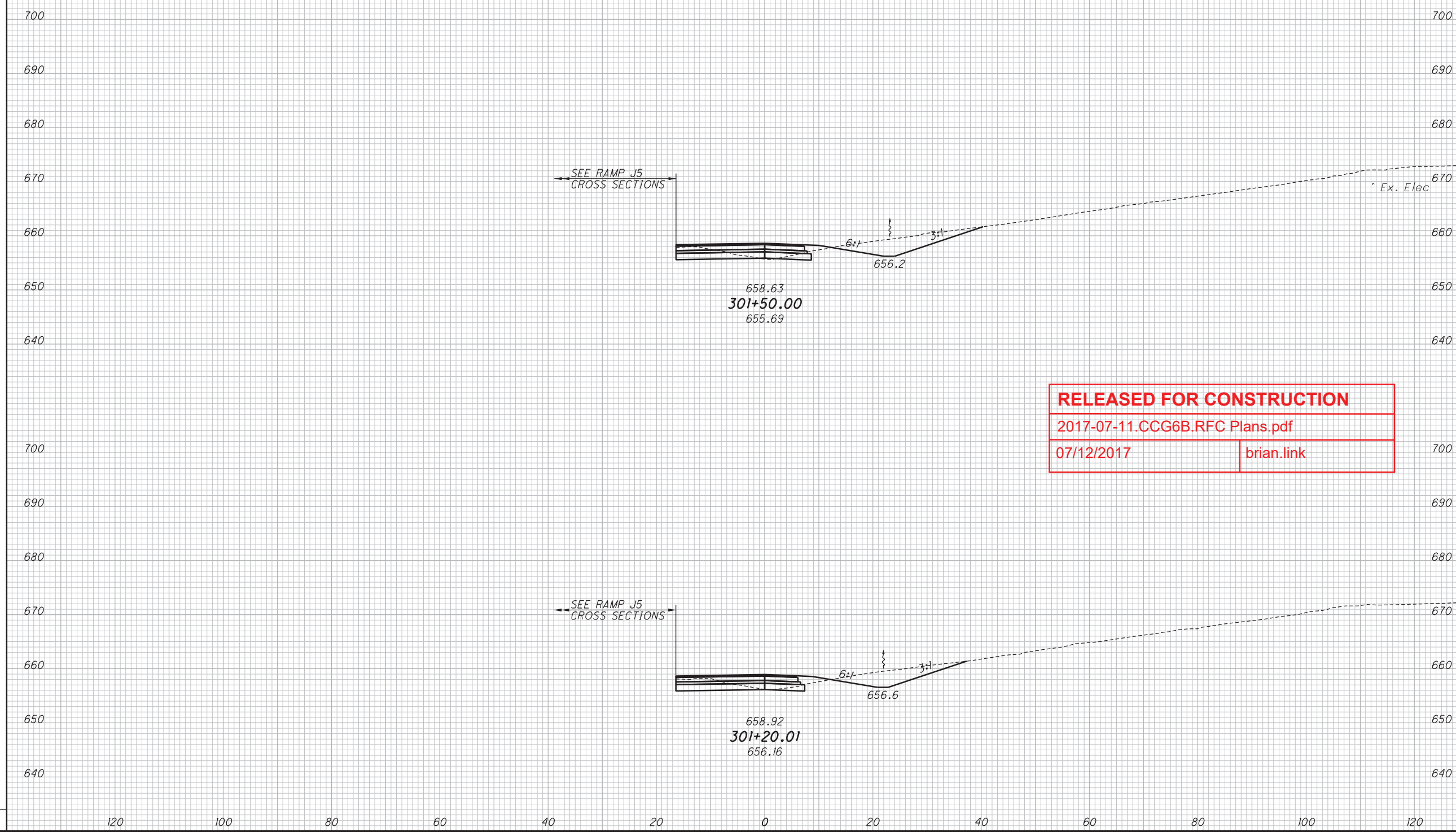
BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION

ISSUE RECORD

END AREA	VOLUME	CALCULATED	
		DWB	MLL
CUT	FILL	CUT	FILL

CROSS SECTIONS - RAMP J6
STA. 301+20.01 TO STA. 301+50.00

CUY - 77 - 13.80

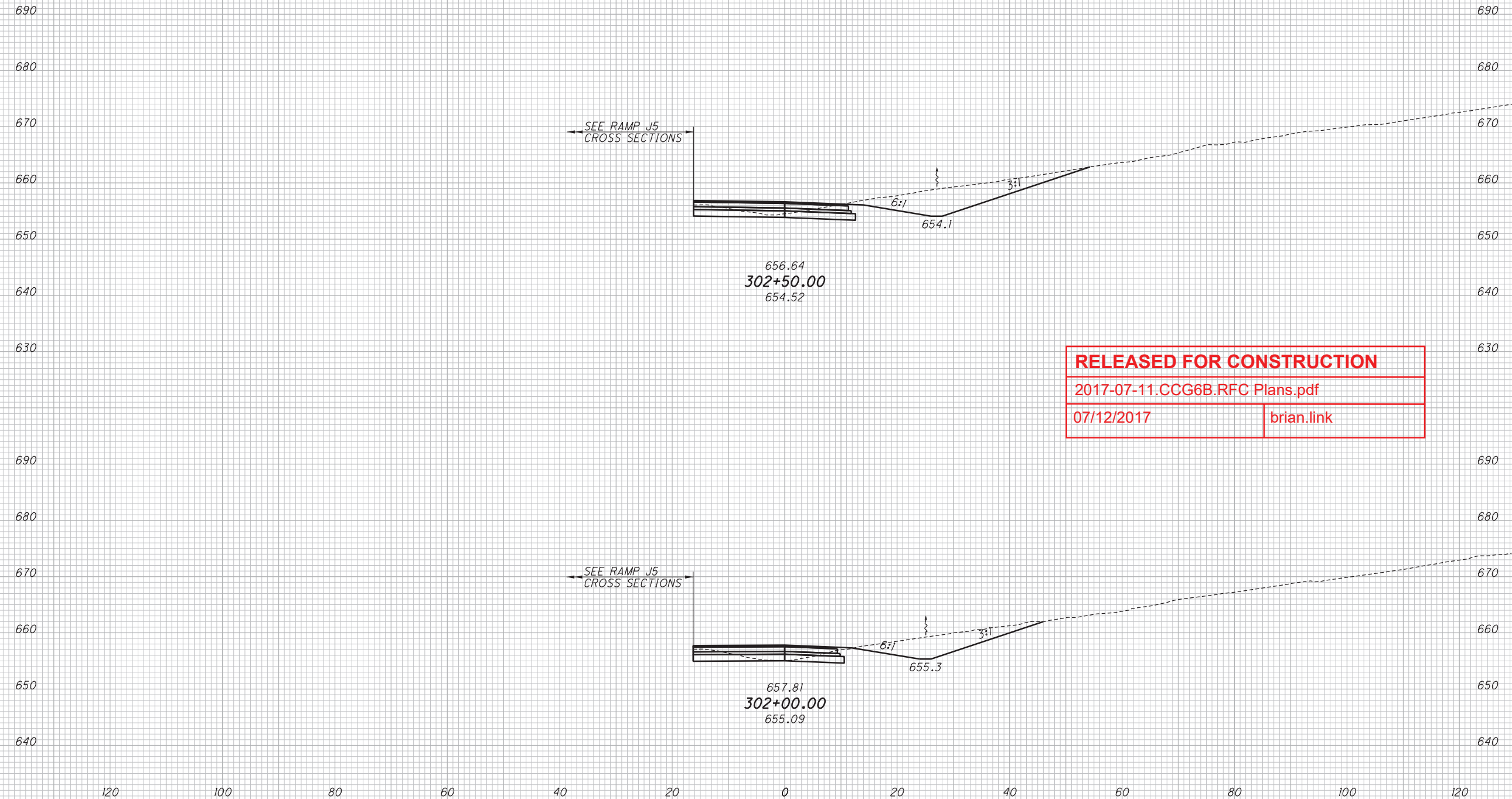


RELEASED FOR CONSTRUCTION
 2017-07-11.CCG6B.RFC Plans.pdf
 07/12/2017 brian.link

(137
170)

P:\82388_CCG6B\Design\Roadway\Sheets\82388_XS1103.dgn XS_SHEET_temporary_model_name_2 7/10/2017 3:21:47 PM mltues

BU2 - I.R.-77 AND RAMPS			END AREA		VOLUME		CALCULATED	
NO.	DATE	DESCRIPTION	CUT	FILL	CUT	FILL	DWB	MLL
		ISSUE RECORD						



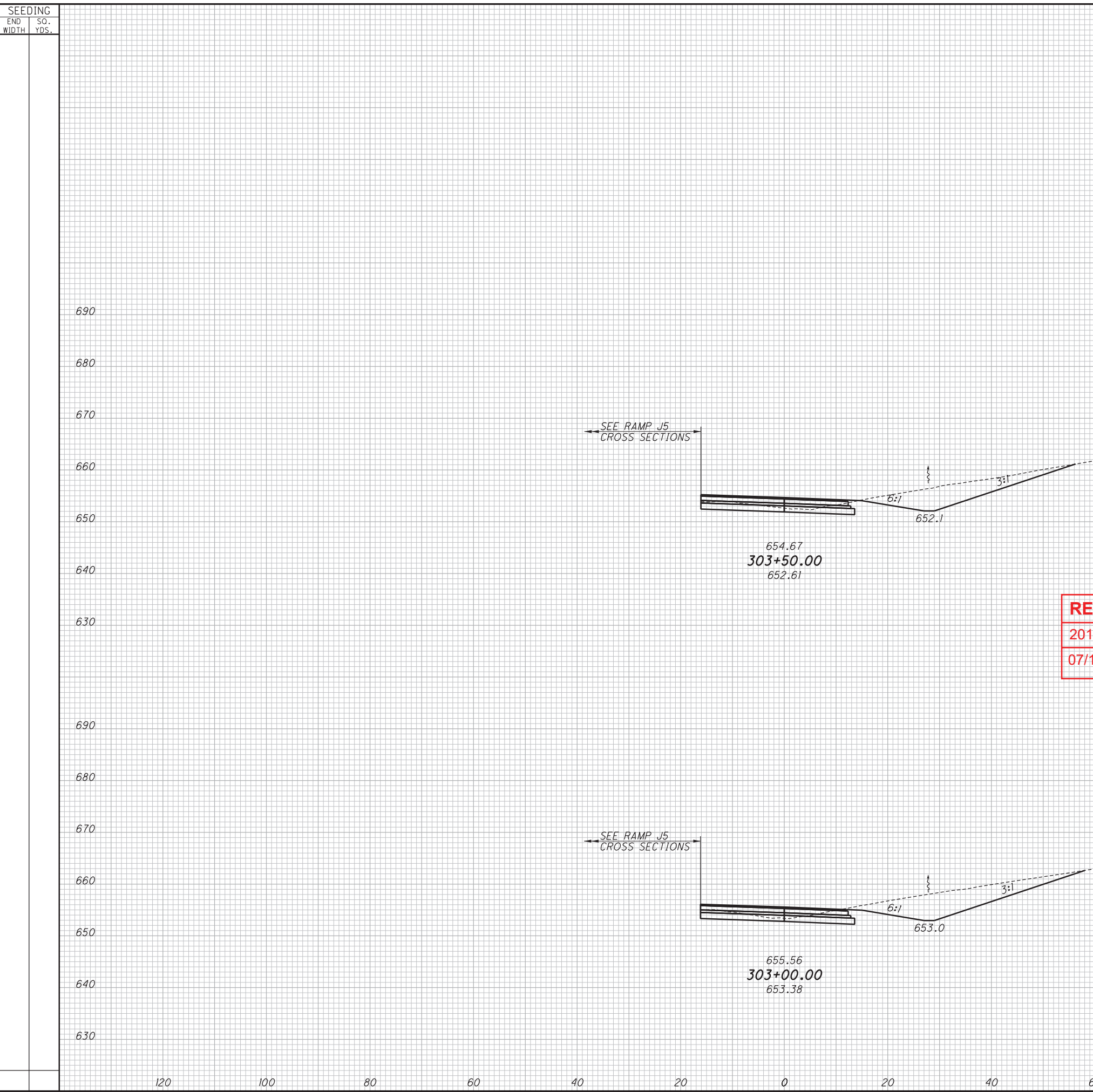
RELEASED FOR CONSTRUCTION
 2017-07-11.CCG6B.RFC Plans.pdf
 07/12/2017 brian.link

CROSS SECTIONS - RAMP J6
 STA. 302+00.00 TO STA. 302+50.00

CUY-77-13.80

138
170

P:\82388_CCG6B\Design\Roadway\Sheets\82388_XS1103.dgn XS_SHEET_temporary_model_name_3 7/10/2017 3:21:47 PM mlutes



BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION
ISSUE RECORD		

SEEDING		END AREA		VOLUME		CALCULATED	
END WIDTH	SO. YDS.	CUT	FILL	CUT	FILL	DWB	MLL

CROSS SECTIONS - RAMP J6
STA. 303+00.00 TO STA. 303+50.00

CUY-77-13.80

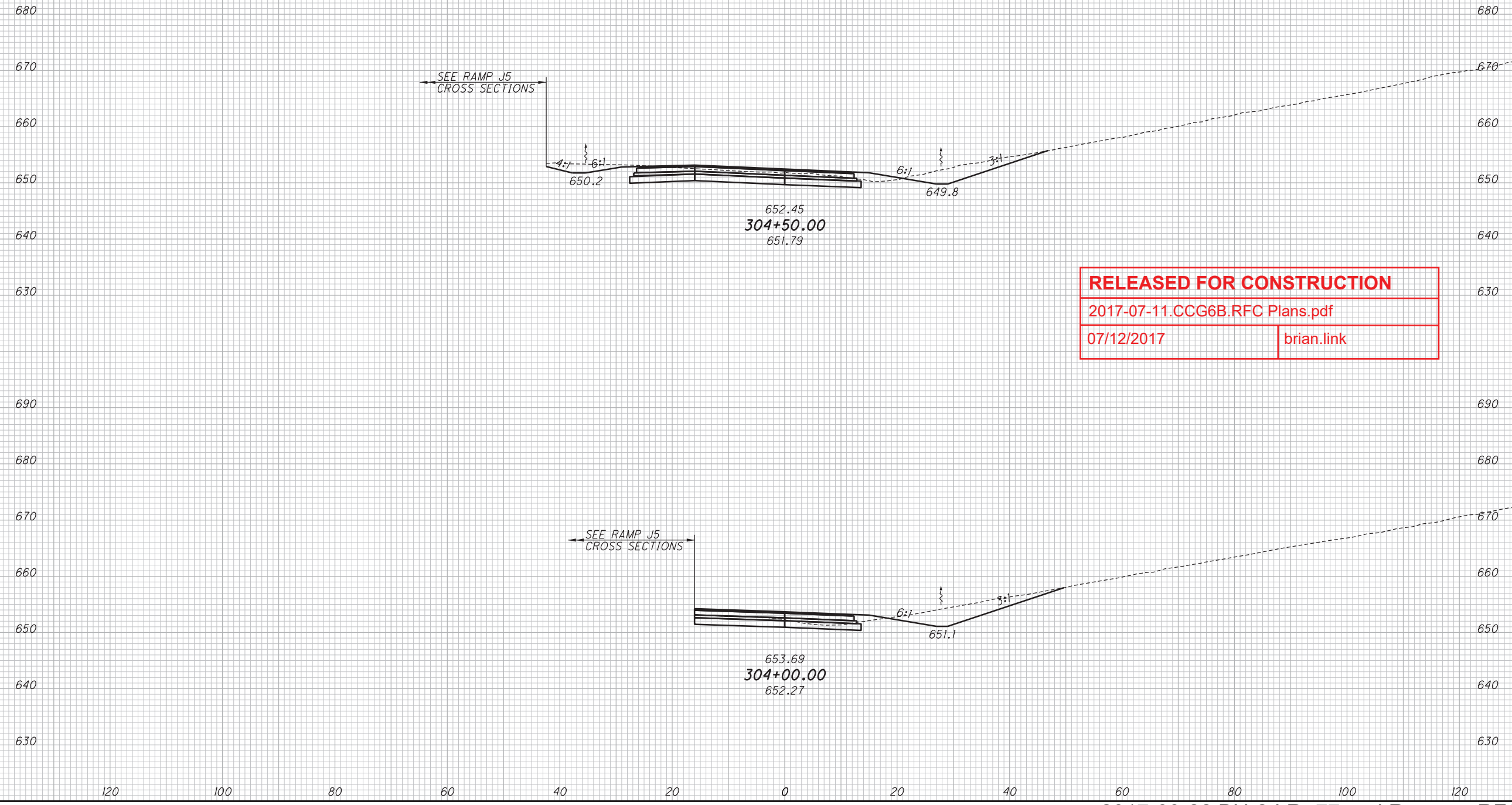
RELEASED FOR CONSTRUCTION
 2017-07-11.CCG6B.RFC Plans.pdf
 07/12/2017 brian.link

SEEDING
END SO.
WIDTH YDS.
P:\82388_CCG6B\Design\Roadway\Sheets\82388_XS1103.dgn XS_SHEET_temporary_model_name_4 7/10/2017 3:21:48 PM mltues

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED	CHECKED
DWB	MLL



RELEASED FOR CONSTRUCTION
2017-07-11.CCG6B.RFC Plans.pdf
07/12/2017 brian.link

**CROSS SECTIONS - RAMP J6
STA. 304+00.00 TO STA. 304+50.00**

CUY-77-13.80

140
170

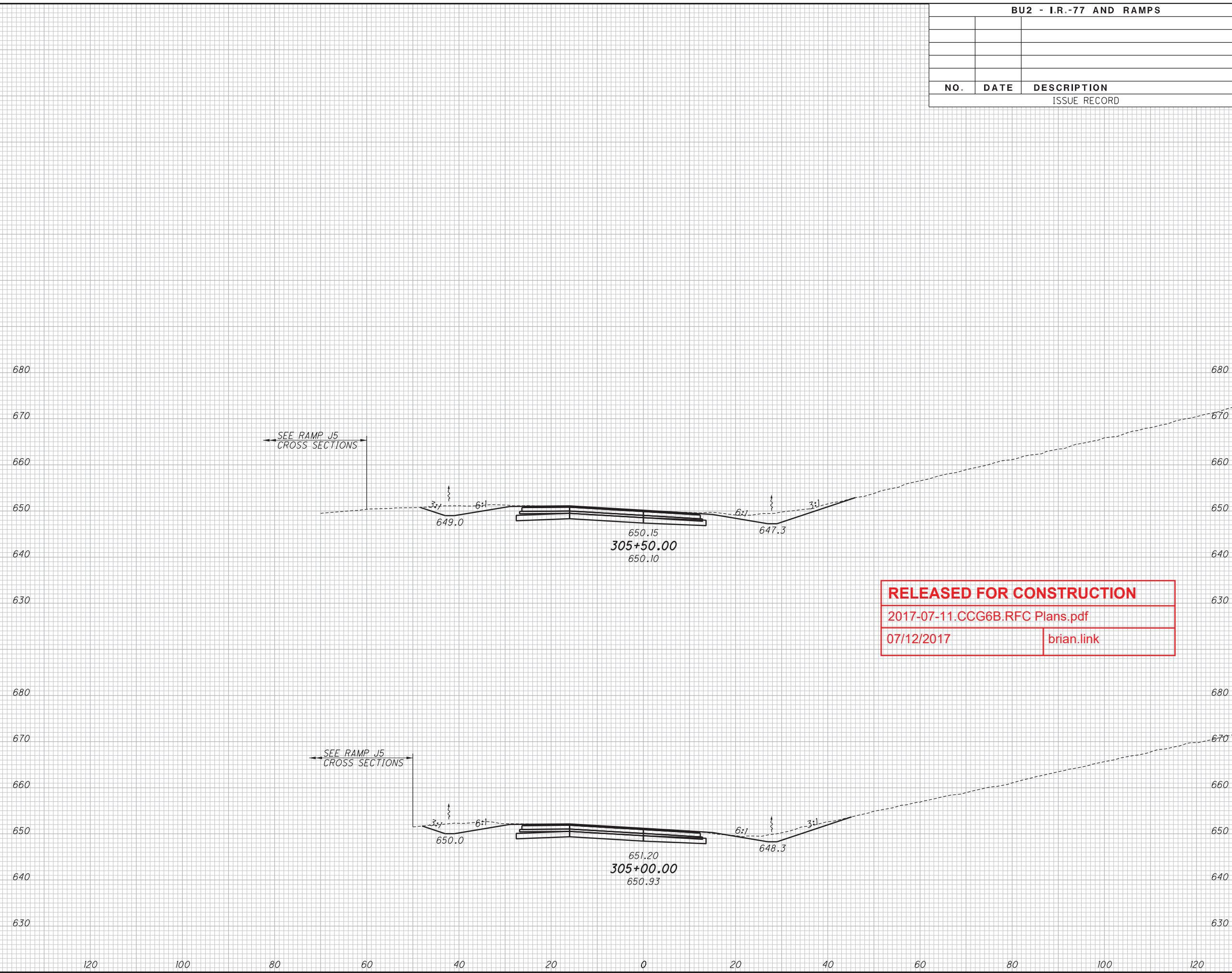
P:\82388_CCG6B\Design\Roadway\Sheets\82388_XS1103.dgn XS_SHEET_temporary_model_name_5 7/10/2017 3:21:48 PM mlfes

SEEDING	
END WIDTH	SO. YDS.

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION
ISSUE RECORD		

END AREA	VOLUME	CALCULATED	CHECKED		
				CUT	FILL

CROSS SECTIONS - RAMP J6 STA. 305+00.00 TO STA. 305+50.00
CUY-77-13.80
(141/170)

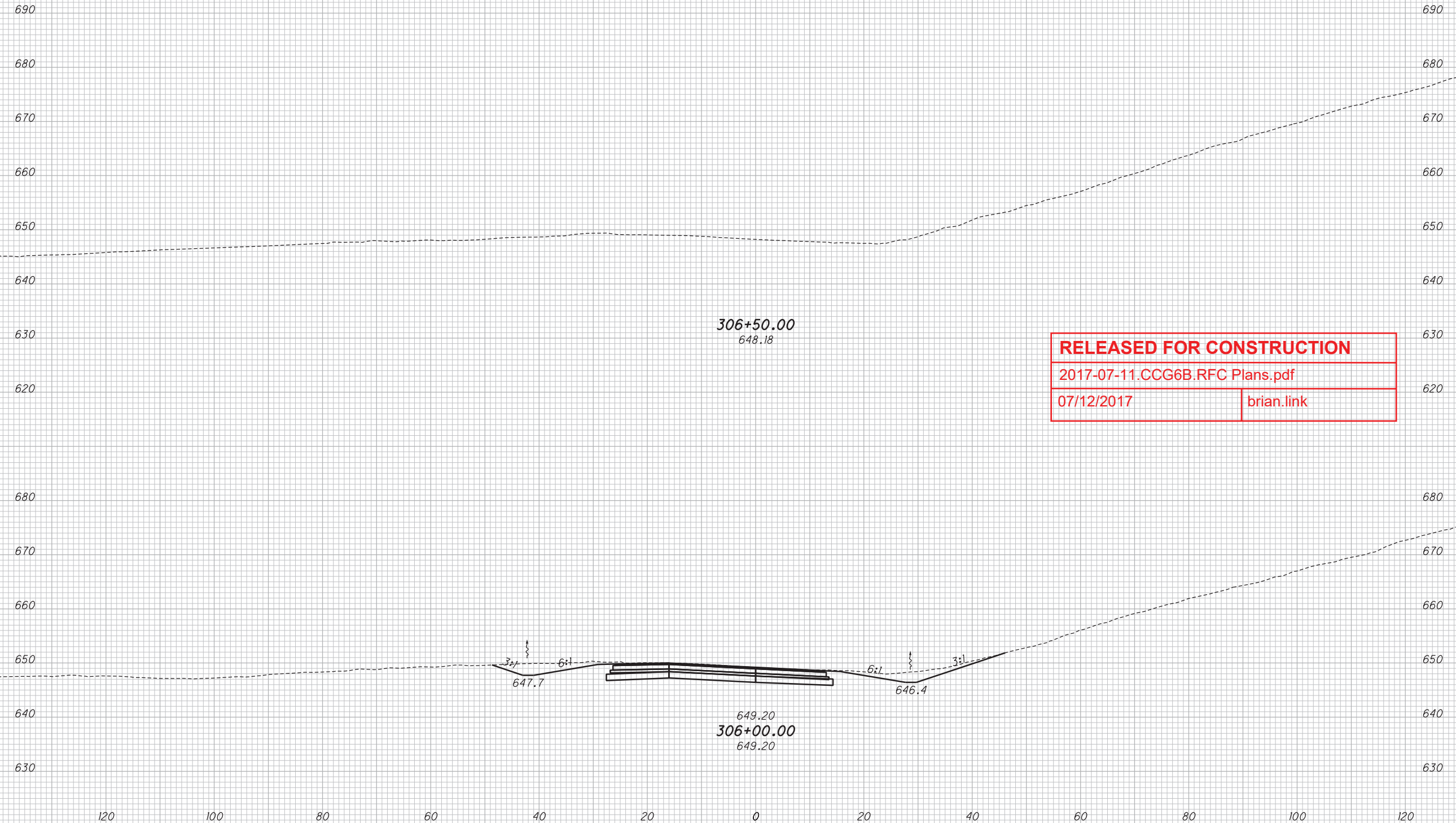


P:\82388_CCG6B\Design\Roadway\Sheets\82388_XS1103.dgn XS_SHEET_temporary_model_name_6 7/10/2017 3:21:48 PM mltues

SEEDING
END SO.
WIDTH YDS.

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION
		ISSUE RECORD

END AREA		VOLUME	
CUT	FILL	CUT	FILL



RELEASED FOR CONSTRUCTION
 2017-07-11.CCG6B.RFC Plans.pdf
 07/12/2017 brian.link

CROSS SECTIONS - RAMP J6
STA. 306+00.00 TO STA. 306+50.00

CUY-77-13.80

142
170

SUPERELEVATION TABLE - I.R. 77

INITIAL CROSS SLOPE TRANSITION

Dc = 2°00'00"

REMARKS	OUTSIDE EDGE					CROWN LINE					INSIDE EDGE PROFILE GRADE		STATION	INSIDE EDGE PROFILE GRADE		CROWN LINE					OUTSIDE EDGE					REMARKS
	ELEVATION	TRANSITION RATE	ELEVATION CORRECTION	CROSS SLOPE	WIDTH	ELEVATION	TRANSITION RATE	ELEVATION CORRECTION	CROSS SLOPE	WIDTH	PROFILE GRADE ELEVATION	OFFSET		ELEVATION	OFFSET	ELEVATION	TRANSITION RATE	ELEVATION CORRECTION	CROSS SLOPE	WIDTH	ELEVATION	TRANSITION RATE	ELEVATION CORRECTION	CROSS SLOPE	WIDTH	
MATCH EX	660.99	222	--	0.0136	24.00	660.69	222	--	0.0142	12.00	660.52	5.50	976+25.00													
	660.85	222	0.2400	0.0100	24.00	660.61	222	0.1920	0.0160	12.00	660.42	5.50	976+50.00													
	660.77	222	0.2356	0.0098	24.00	660.53	222	0.1920	0.0160	12.00	660.34	5.50	976+75.00													
	660.72	222	0.2356	0.0098	24.00	660.48	222	0.1920	0.0160	12.00	660.29	5.50	977+00.00													
	660.68	222	0.2040	0.0085	24.00	660.47	222	0.1920	0.0160	12.00	660.28	5.50	977+25.00													
	660.69	222	0.2040	0.0085	24.00	660.48	222	0.1920	0.0160	12.00	660.29	5.50	977+50.00													
	660.70	222	0.1680	0.0070	24.00	660.53	222	0.1920	0.0160	12.00	660.34	5.50	977+75.00													
	660.75	222	0.1454	0.0060	24.24	660.60	222	0.1920	0.0160	12.00	660.41	5.50	978+00.00													
	660.79	222	0.0855	0.0035	24.74	660.70	222	0.1920	0.0160	12.00	660.51	5.50	978+25.00													
	660.82	222	0.0000	0.0000	25.24	660.82	222	0.1920	0.0160	12.00	660.63	5.50	978+50.00													
	660.75	222	-0.1802	-0.0070	25.74	660.93	222	0.1920	0.0160	12.00	660.74	5.50	978+75.00													
	660.79	222	-0.2624	-0.0100	26.24	661.05	222	0.1920	0.0160	12.00	660.86	5.50	979+00.00													
	660.83	222	-0.3343	-0.0125	26.74	661.16	222	0.1920	0.0160	12.00	660.97	5.50	979+25.00													
	660.86	222	-0.4086	-0.0150	27.24	661.27	222	0.1920	0.0160	12.00	661.08	5.50	979+50.00													
N.C.	660.95	222	-0.4438	-0.0160	27.74	661.39	222	0.1920	0.0160	12.00	661.20	5.50	979+75.00													

P.I. STA. 995+20.27 (CURVE 2)

Dc = 1°00'00"

REMARKS	OUTSIDE EDGE					CROWN LINE					INSIDE EDGE PROFILE GRADE		STATION	INSIDE EDGE PROFILE GRADE		CROWN LINE					OUTSIDE EDGE					REMARKS
	ELEVATION	TRANSITION RATE	ELEVATION CORRECTION	CROSS SLOPE	WIDTH	ELEVATION	TRANSITION RATE	ELEVATION CORRECTION	CROSS SLOPE	WIDTH	PROFILE GRADE ELEVATION	OFFSET		ELEVATION	OFFSET	ELEVATION	TRANSITION RATE	ELEVATION CORRECTION	CROSS SLOPE	WIDTH	ELEVATION	TRANSITION RATE	ELEVATION CORRECTION	CROSS SLOPE	WIDTH	
N.C.	656.19	222	-0.7130	-0.0160	44.56	656.90	222	0.1920	0.0160	12.00	656.71	7.27	989+04.33													
	655.67	222	-0.7141	-0.0160	44.63	656.39	222	0.0989	0.0082	12.00	656.29	7.61	989+25.00													
1/2 FLAT	655.10	222	-0.7152	-0.0160	44.70	655.82	222	0.0000	0.0000	12.00	655.82	7.98	989+46.95													
	655.03	222	-0.7154	-0.0160	44.71	655.75	222	-0.0137	-0.0011	12.00	655.76	8.03	989+50.00													
	654.39	222	-0.7168	-0.0160	44.80	655.10	222	-0.1263	-0.0105	12.00	655.23	8.44	989+75.00													
R.C.	654.01	222	-0.7174	-0.0160	44.84	654.73	222	-0.1920	-0.0160	12.00	654.92	8.69	989+89.57													
	654.07	222	-0.4153	-0.0173	24.00	654.48	222	-0.2076	-0.0173	12.00	654.69	8.86	990+00.00													
	653.43	222	-0.4904	-0.0204	24.00	653.92	222	-0.2452	-0.0204	12.00	654.17	9.28	990+25.00													
P.C.	653.12	222	-0.5304	-0.0221	24.00	653.65	222	-0.2652	-0.0221	12.00	653.92	9.50	990+38.33													
	652.85	222	-0.5655	-0.0236	24.00	653.42	222	-0.2827	-0.0236	12.00	653.70	9.50	990+50.00													
	652.32	222	-0.6405	-0.0267	24.00	652.96	222	-0.3202	-0.0267	12.00	653.28	9.50	990+75.00													
F.S.	652.27	222	-0.6480	-0.0270	24.00	652.92	222	-0.3240	-0.0270	12.00	653.24	9.50	990+77.49													

FULL SUPERELEVATION

RELEASED FOR CONSTRUCTION
 2017-08-07.CCG6B.BU2.RFC Plans_FC 2.pdf
 03/01/2017 brian.link

BU2 - I.R.-77 AND RAMPS		
1	8/3/17	I.R. 77 PROFILE ADJUSTMENT
NO.	DATE	DESCRIPTION
ISSUE RECORD		

CALCULATED
SWC
CHECKED
MJC

SUPERELEVATION TABLE - I.R. 77

CUY-77-13.80

144
170

P:\B2388_CCG6B\Design\Roadway\Sheets\B2388_CE2001.dgn Sheet 8/4/2017 2:08:40 PM mlutes

SUPERELEVATION TABLE - RAMP J5

P.I. STA. 215+65.88 (CURVE 3)

Dc = 1°30'00"

LEFT SIDE					CENTERLINE CONTROL		RIGHT SIDE					REMARKS
EDGE ELEVATION	TRANSITION RATE	ELEVATION CORRECTION	CROSS SLOPE	WIDTH	STATION	PROFILE GRADE	WIDTH	CROSS SLOPE	ELEVATION CORRECTION	TRANSITION RATE	EDGE ELEVATION	
SEE INTERCHANGE DETAILS												
					212+50.25	652.83	16.00	0.0160	0.26	1045	653.09	
					212+75.00	652.28	16.00	0.0175	0.28	1045	652.56	
					213+00.00	651.80	16.00	0.0190	0.3	1045	652.10	
					213+25.00	651.37	16.00	0.0205	0.33	1045	651.70	
					213+50.00	651.00	16.00	0.0220	0.35	1045	651.35	
					213+75.00	650.70	16.00	0.0235	0.38	1045	651.08	
					214+00.00	650.46	16.00	0.0250	0.4	1045	650.86	
					214+25.00	650.28	16.00	0.0265	0.42	1045	650.70	
					214+50.00	650.16	16.00	0.0279	0.45	1045	650.61	
					214+50.25	650.16	16.00	0.0280	0.45	1045	650.61	S.C./ F.S.

FULL SUPERELEVATION

P.I. STA. 219+28.60 (CURVE 4)

Dc = 4°00'00"

LEFT SIDE					CENTERLINE CONTROL		RIGHT SIDE					REMARKS
EDGE ELEVATION	TRANSITION RATE	ELEVATION CORRECTION	CROSS SLOPE	WIDTH	STATION	PROFILE GRADE	WIDTH	CROSS SLOPE	ELEVATION CORRECTION	TRANSITION RATE	EDGE ELEVATION	
FULL SUPERELEVATION												
					216+81.44	651.95	20.62	0.0280	0.58	200	652.53	P.C.C.
					217+00.00	652.25	20.99	0.0316	0.66	200	652.91	
					217+25.00	652.67	21.49	0.0364	0.78	200	653.45	
					217+50.00	653.09	21.99	0.0412	0.91	200	654.00	
					217+75.00	653.50	22.50	0.0460	1.03	200	654.53	
					218+00.00	653.92	23.00	0.0508	1.17	200	655.09	
					218+06.24	654.03	23.22	0.0520	1.21	200	655.24	F.S.
FULL SUPERELEVATION												
					220+26.93	657.63	28.99	0.0520	1.51	200	659.14	F.S.
					220+50.00	657.92	29.70	0.0488	1.45	200	659.37	
					220+75.00	658.18	30.42	0.0454	1.38	200	659.56	
					221+00.00	658.39	31.14	0.0420	1.31	200	659.70	
					221+25.00	658.55	31.85	0.0386	1.23	200	659.78	
					221+50.00	658.66	32.56	0.0351	1.14	200	659.80	
					221+70.93	658.71	33.16	0.0323	1.07	200	659.78	P.T.
					221+75.00	658.71	33.28	0.0317	1.06	200	659.77	
					222+00.00	658.72	33.99	0.0283	0.96	200	659.68	
					222+25.00	658.68	34.71	0.0249	0.86	200	659.54	
					222+50.00	658.59	35.42	0.0214	0.76	200	659.35	
					222+75.00	658.44	36.14	0.0180	0.65	200	659.09	
					222+89.73	658.33	36.55	0.0160	0.58	200	658.91	RC

SUPERELEVATION TABLE - RAMP J5

P.I. STA. 229+77.68 (CURVE 5)

Dc = 6°00'00"

LEFT SIDE					CENTERLINE CONTROL		RIGHT SIDE					REMARKS
EDGE ELEVATION	TRANSITION RATE	ELEVATION CORRECTION	CROSS SLOPE	WIDTH	STATION	PROFILE GRADE	WIDTH	CROSS SLOPE	ELEVATION CORRECTION	TRANSITION RATE	EDGE ELEVATION	
					224+69.06	655.61	16.00	0.0160	0.26	200	655.87	R.C.
					224+75.00	655.48	16.00	0.0179	0.29	200	655.77	
					225+00.00	654.90	16.00	0.0257	0.41	200	655.31	
					225+25.00	654.33	16.00	0.0335	0.54	200	654.87	
					225+37.86	654.04	16.00	0.0375	0.60	200	654.64	P.C.
					225+50.00	653.76	16.00	0.0413	0.66	200	654.42	
					225+75.00	653.19	16.00	0.0491	0.79	200	653.98	
					225+94.48	652.74	16.00	0.0552	0.88	200	653.62	
					226+00.00	652.61	16.00	0.0569	0.91	200	653.52	
					226+06.66	652.46	16.00	0.0590	0.94	200	653.40	F.S.
FULL SUPERELEVATION												
					230+51.36	642.28	16.00	0.0590	0.94	200	643.22	F.S.
					230+75.00	641.74	16.00	0.0516	0.83	200	642.57	
					231+00.00	641.14	16.00	0.0438	0.70	200	641.84	MATCH EX.

RELEASED FOR CONSTRUCTION
 2017-07-11.CCG6B.RFC Plans.pdf
 07/12/2017 brian.link

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION

ISSUE RECORD

SUPERELEVATION TABLE - RAMP J5

CUY-77-13.80

SUPERELEVATION TABLE - RAMP J6												
P.I. STA. 303+49.50 (CURVE 12)						Dc = 6°00'00"						
LEFT SIDE					CENTERLINE CONTROL		RIGHT SIDE					REMARKS
EDGE ELEVATION	TRANSITION RATE	ELEVATION CORRECTION	CROSS SLOPE	WIDTH	STATION	PROFILE GRADE	WIDTH	CROSS SLOPE	ELEVATION CORRECTION	TRANSITION RATE	EDGE ELEVATION	
SEE INTERCHANGE DETAILS												
658.06	161	-0.2560	-0.0160	16	301+71.90	658.32						N.C.
658.03	161	-0.2367	-0.0148	16	301+75.00	658.27						
657.73	161	-0.0815	-0.0051	16	302+00.00	657.81						
657.53	161	0.0000	0.0000	16	302+13.12	657.53						1/2 FLAT
657.32	161	0.0738	0.0046	16	302+25.00	657.25						
656.87	161	0.2291	0.0143	16	302+50.00	656.64						
656.80	161	0.2560	0.0160	16	302+54.34	656.54						R.C.
656.47	161	0.3808	0.0238	16	302+74.43	656.09						P.C.
656.46	161	0.3844	0.0240	16	302+75.00	656.08						
656.10	161	0.5397	0.0337	16	303+00.00	655.56						
656.09	161	0.5440	0.0340	16	303+00.70	655.55						F.S.
FULL SUPERELEVATION												
P.I. STA. 305+59.69 (CURVE 13)						Dc = 15°00'00"						
LEFT SIDE					CENTERLINE CONTROL		RIGHT SIDE					REMARKS
EDGE ELEVATION	TRANSITION RATE	ELEVATION CORRECTION	CROSS SLOPE	WIDTH	STATION	PROFILE GRADE	WIDTH	CROSS SLOPE	ELEVATION CORRECTION	TRANSITION RATE	EDGE ELEVATION	
FULL SUPERELEVATION												
653.65	161	0.5440	0.0340	16	304+24.43	653.11						PCC
653.65	161	0.5475	0.0342	16	304+25.00	653.10						
653.15	161	0.7028	0.0439	16	304+50.00	652.45						
652.66	161	0.8581	0.0536	16	304+75.00	651.80						
652.36	161	0.9600	0.0600	16	304+91.41	651.40						FS
FULL SUPERELEVATION												
650.67	161	0.9600	0.0600	16	305+74.24	649.71						FS
650.66	161	0.9553	0.0597	16	305+75.00	649.70						
650.00	161	0.8000	0.0500	16	306+00.00	649.20						MATCH EX

RELEASED FOR CONSTRUCTION
 2017-07-11.CCG6B.RFC Plans.pdf
 07/12/2017 brian.link

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION

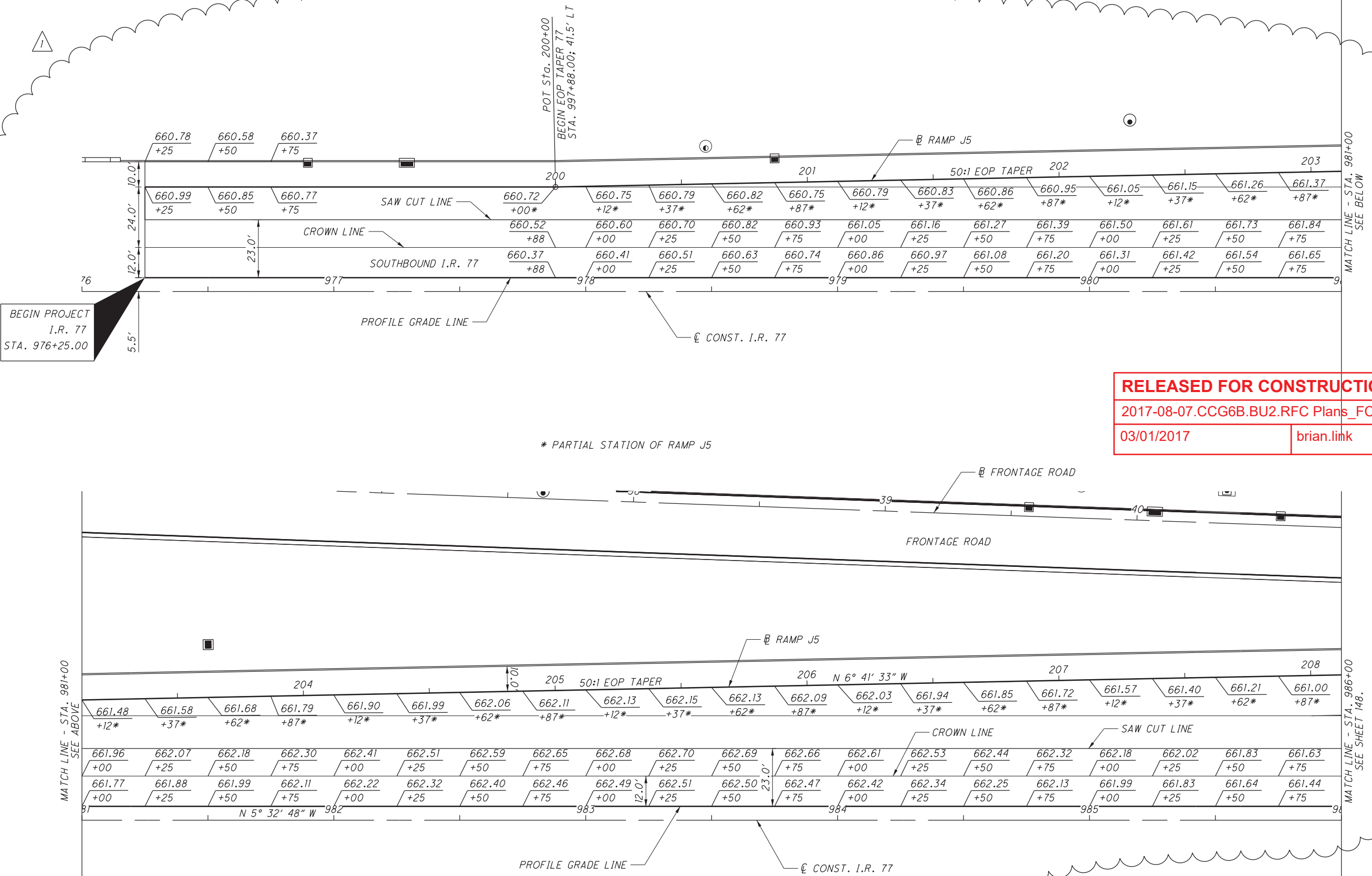


CALCULATED
SWC
CHECKED
MLL

INTERCHANGE DETAILS - I.R. 77
STA. 976+00.00 TO STA. 986+00.00

CUY-77-13.80

147
170



RELEASED FOR CONSTRUCTION
 2017-08-07.CCG6B.BU2.RFC Plans_FC 2.pdf
 03/01/2017 brian.link

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION
1	8/11/17	I.R. 77 PROFILE ADJUSTMENT
		ADJUSTED STATIONING TO REFERENCE
		RAMP J5
ISSUE RECORD		



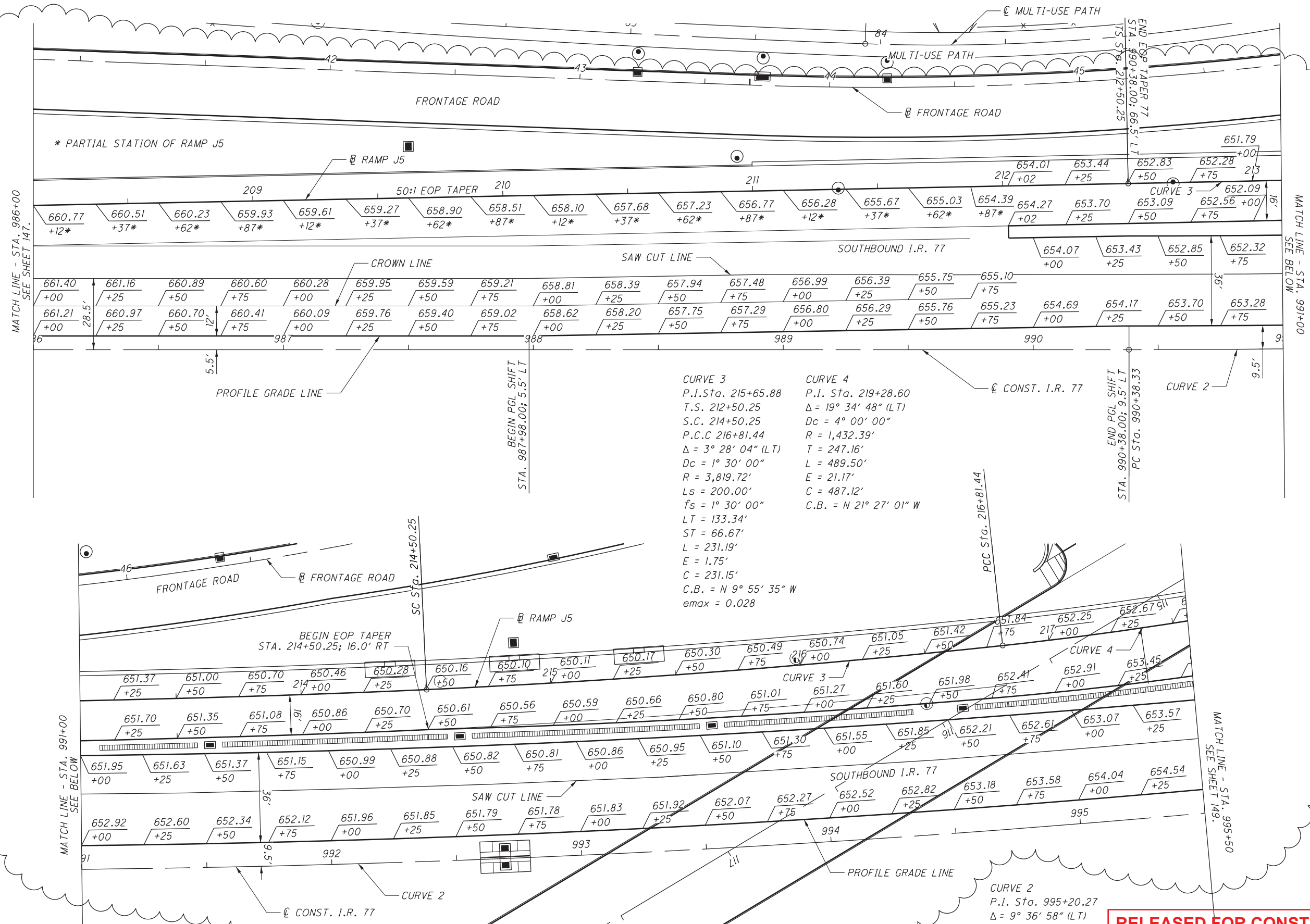
0 20 40
HORIZONTAL SCALE IN FEET

CALCULATED SWC CHECKED MLL

INTERCHANGE DETAILS - I.R. 77
STA. 986+00.00 TO STA. 995+50.00

CUY-77-13.80

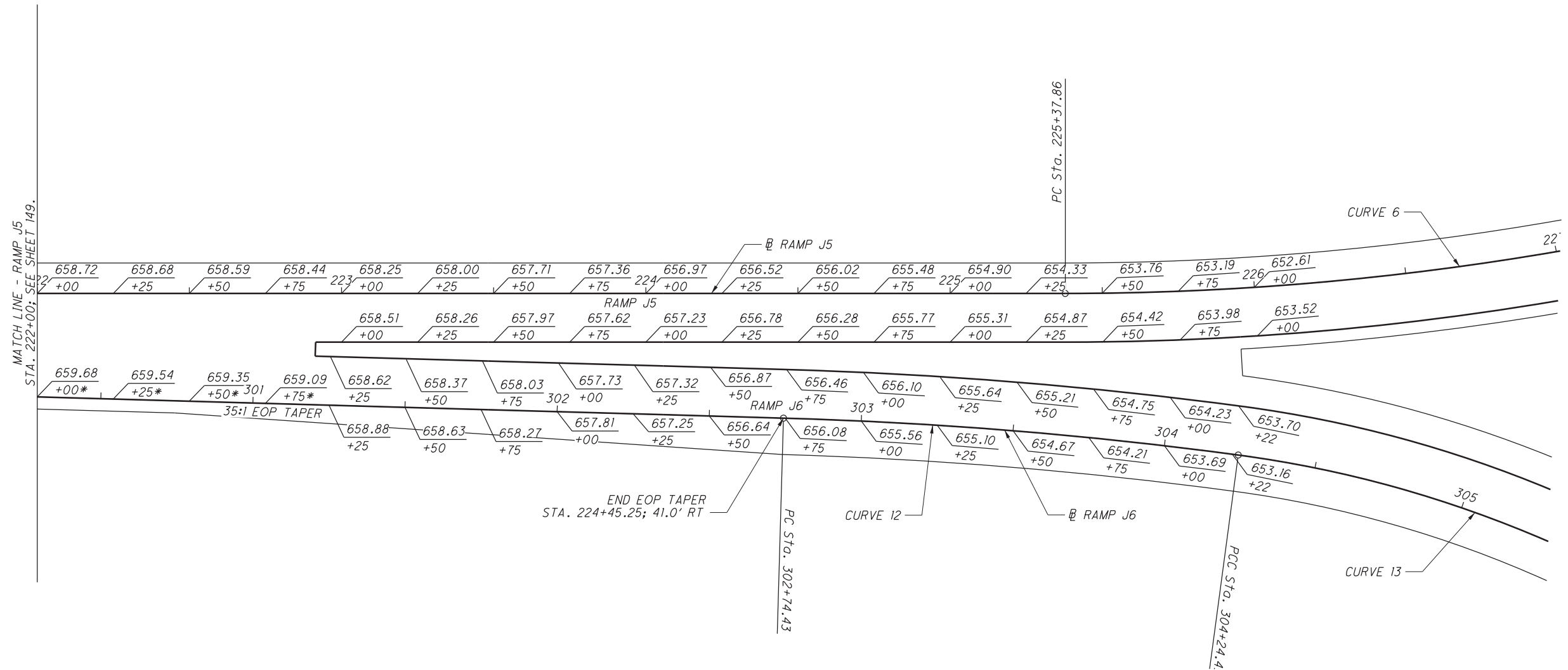
148
170



BU2 - I.R.-77 AND RAMPS		
1	8/11/17	ADJUSTED STATIONING TO REFERENCE RAMP J5
NO.	DATE	DESCRIPTION
ISSUE RECORD		

RELEASED FOR CONSTRUCTION
2017-08-07.CCG6B.BU2.RFC Plans_FC 2.pdf
03/01/2017 brian.link

P:\82388_CCG6B\Design\Roadway\Sheets\82388_C12002.dgn Sheet 8/11/2017 8:03:21 AM mlfutes



* PARTIAL STATION OF RAMP J5

RELEASED FOR CONSTRUCTION
 2017-07-11.CCG6B.RFC Plans.pdf
 07/12/2017 brian.link

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION

ISSUE RECORD

CALCULATED
SWC
CHECKED
MLL

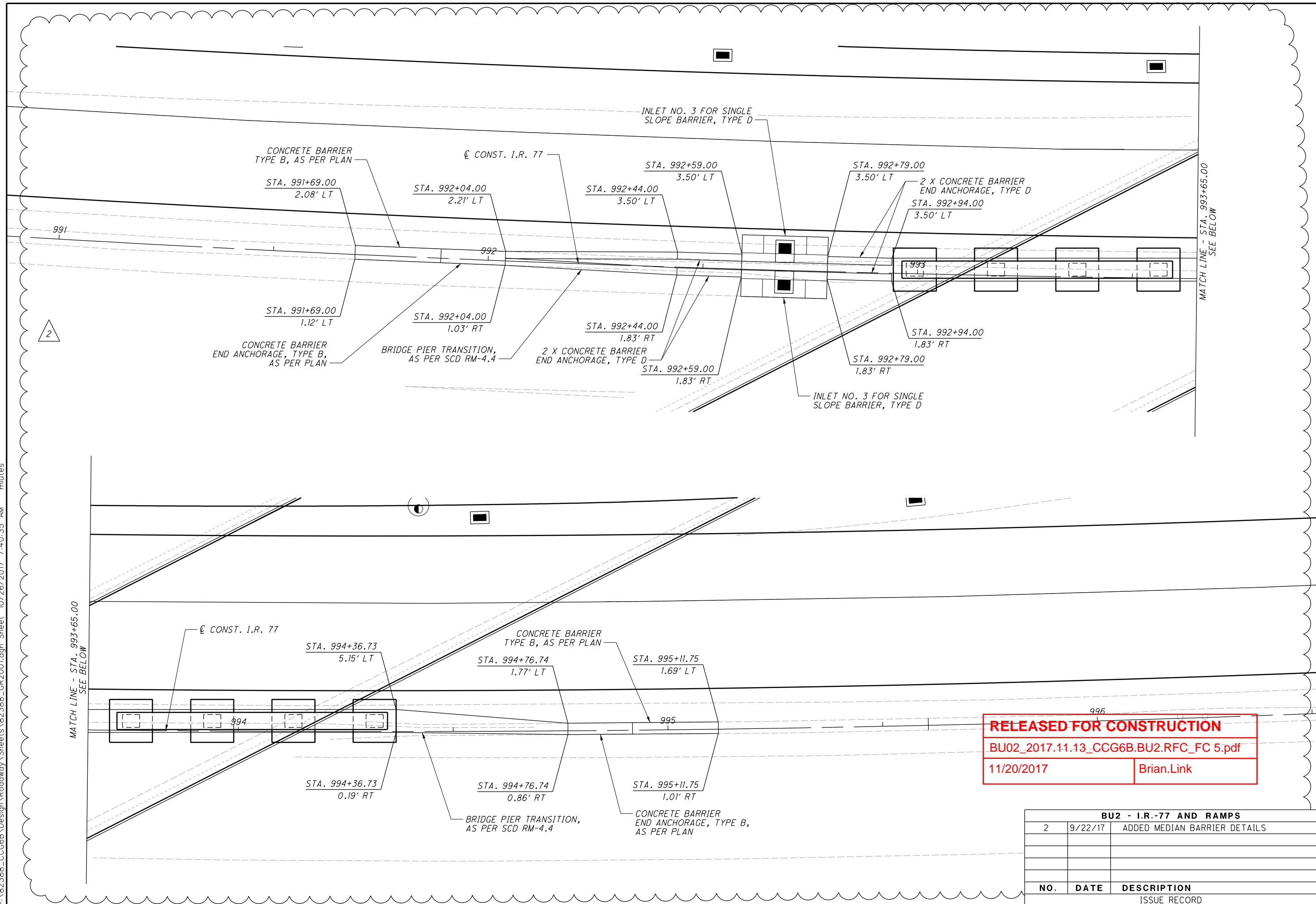
0 20 40
HORIZONTAL
SCALE IN FEET

INTERCHANGE DETAILS - RAMP J5
STA. 222+00.00 TO STA. 227+00.00

CUY-77-13.80

150
170

P:\82388_CCG6B\Design\Roadway\Sheets\82388_CR2001.dgn Sheet 10/26/2017 7:40:35 AM mlutes





 HORIZONTAL SCALE IN FEET
 CALCULATED SWC CHECKED XXX

MEDIAN BARRIER DETAILS
I.R. 77 - STA. 991+69.00 TO STA. 995+11.75

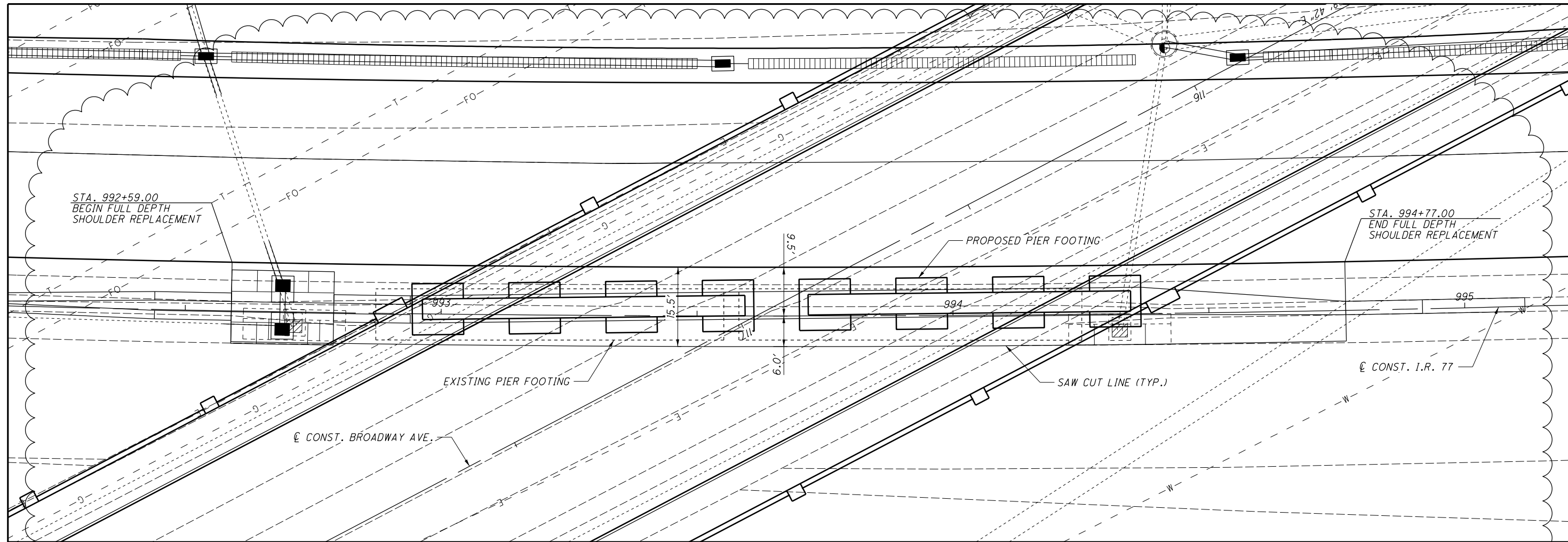
CUY-77-13.80

RELEASED FOR CONSTRUCTION
 BU02_2017.11.13_CCG6B.BU2.RFC_FC 5.pdf
 11/20/2017 Brian.Link

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION
2	9/22/17	ADDED MEDIAN BARRIER DETAILS
ISSUE RECORD		

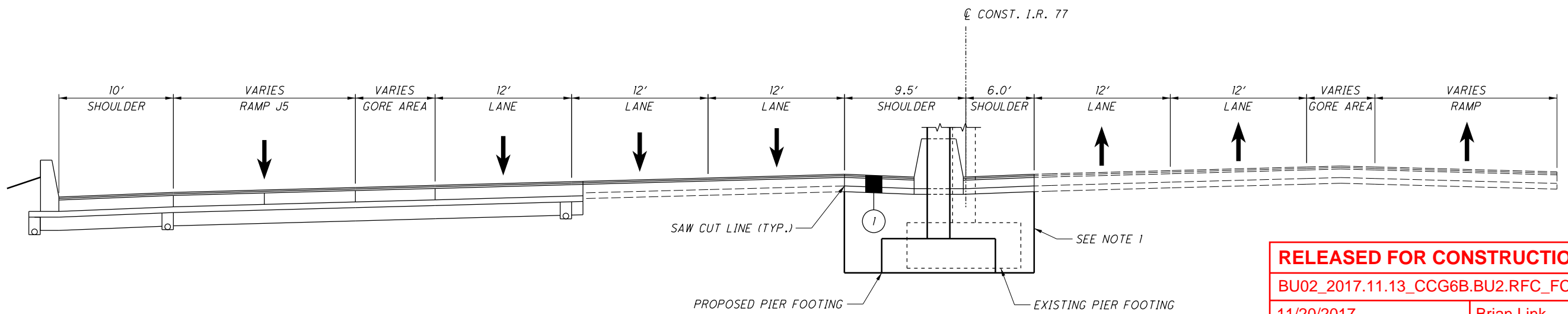
150A
170

P:\82388_CCG6B\Design\Roadway\Sheets\82388_CM2002.dgn Sheet 11/14/2017 12:57:12 PM mlutes




 HORIZONTAL SCALE IN FEET
 0 5 10 20
 CALCULATED MLL CHECKED SWC

MEDIAN EXCAVATION DETAILS
 I.R. 77 - STA. 992+59.00 TO STA. 994+77.00



MEDIAN EXCAVATION DETAIL
 STA. 992+59.00 TO STA. 994+77.00 = 218.00 FT.

PROPOSED LEGEND:

- ITEM 442 - 1.5" ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (446), PG76-22M, AS PER PLAN
- ITEM 407 - NON-TRACKING TACK COAT
- ITEM 442 - 1.75" ASPHALT CONCRETE INTERMEDIATE COURSE, 19 MM, TYPE A (446)
- ITEM 407 - TACK COAT, 702.13
- ITEM 452 - 12" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC1
- ITEM 304 - 6" AGGREGATE BASE
- ITEM 204 - SUBGRADE COMPACTION

RELEASED FOR CONSTRUCTION
 BU02_2017.11.13_CCG6B.BU2.RFC_FC 5.pdf
 11/20/2017 Brian.Link

NOTES:

- 1. EXCAVATION DEPTH VARIES, MAXIMUM DEPTH OF 9.0'

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION
2	9/22/17	ADDED MEDIAN EXCAVATION DETAILS
ISSUE RECORD		

CUY-77-13.80
 150B
 170

BU2 - I.R. 77 AND RAMPS

4	1/24/18	ADDED GRADING PLAN
NO.	DATE	DESCRIPTION
		ISSUE RECORD

RELEASED FOR CONSTRUCTION
 BU02_2018.01.26_CCG6B.BU2.RFC Plans_FC24.p
 01/29/2018 Brian.Link

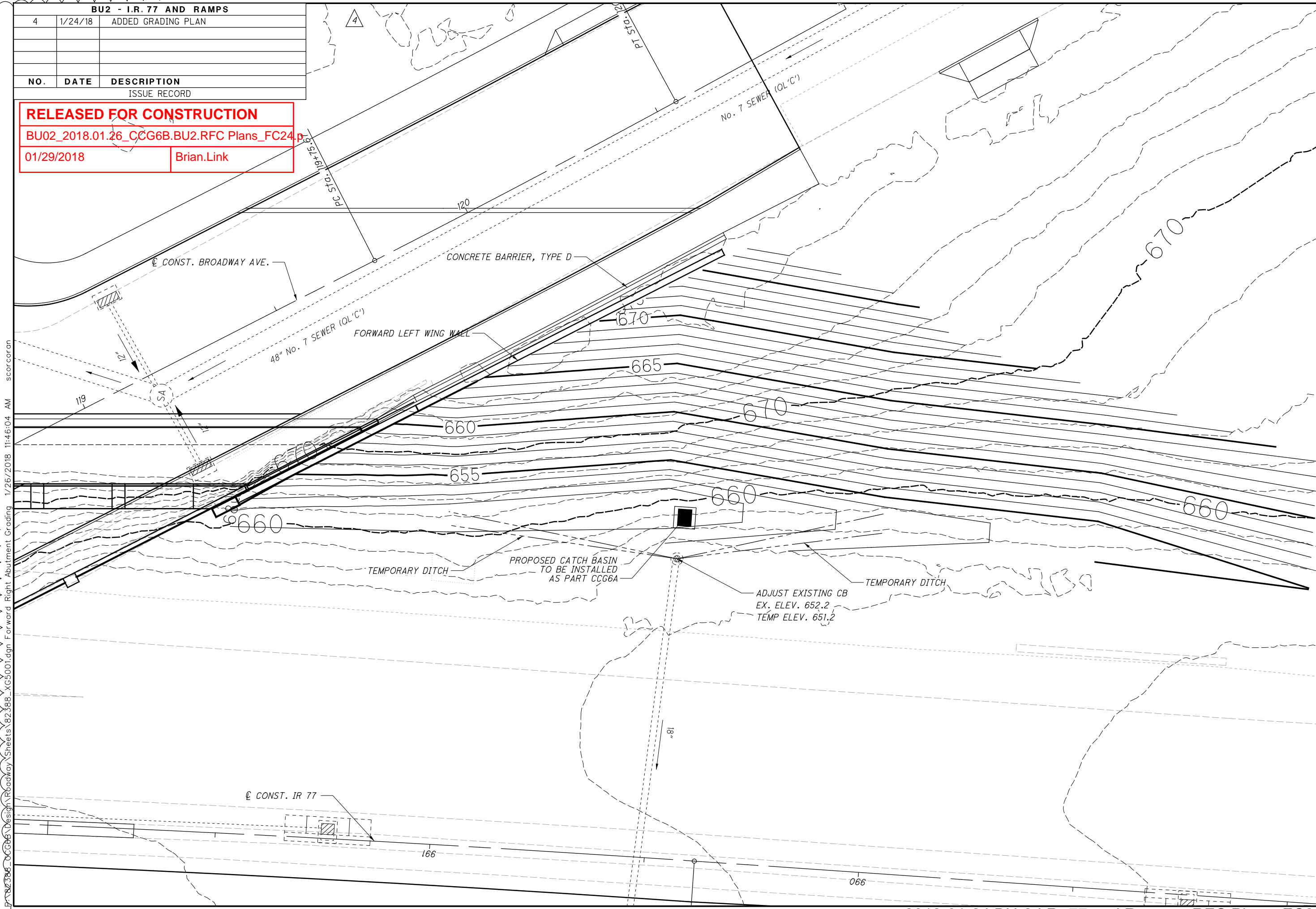


 CALCULATED SWC
 CHECKED JTJ

**GRADING PLAN
 FORWARD RIGHT ABUTMENT**

CUY - 77 - 13.80

150C
170

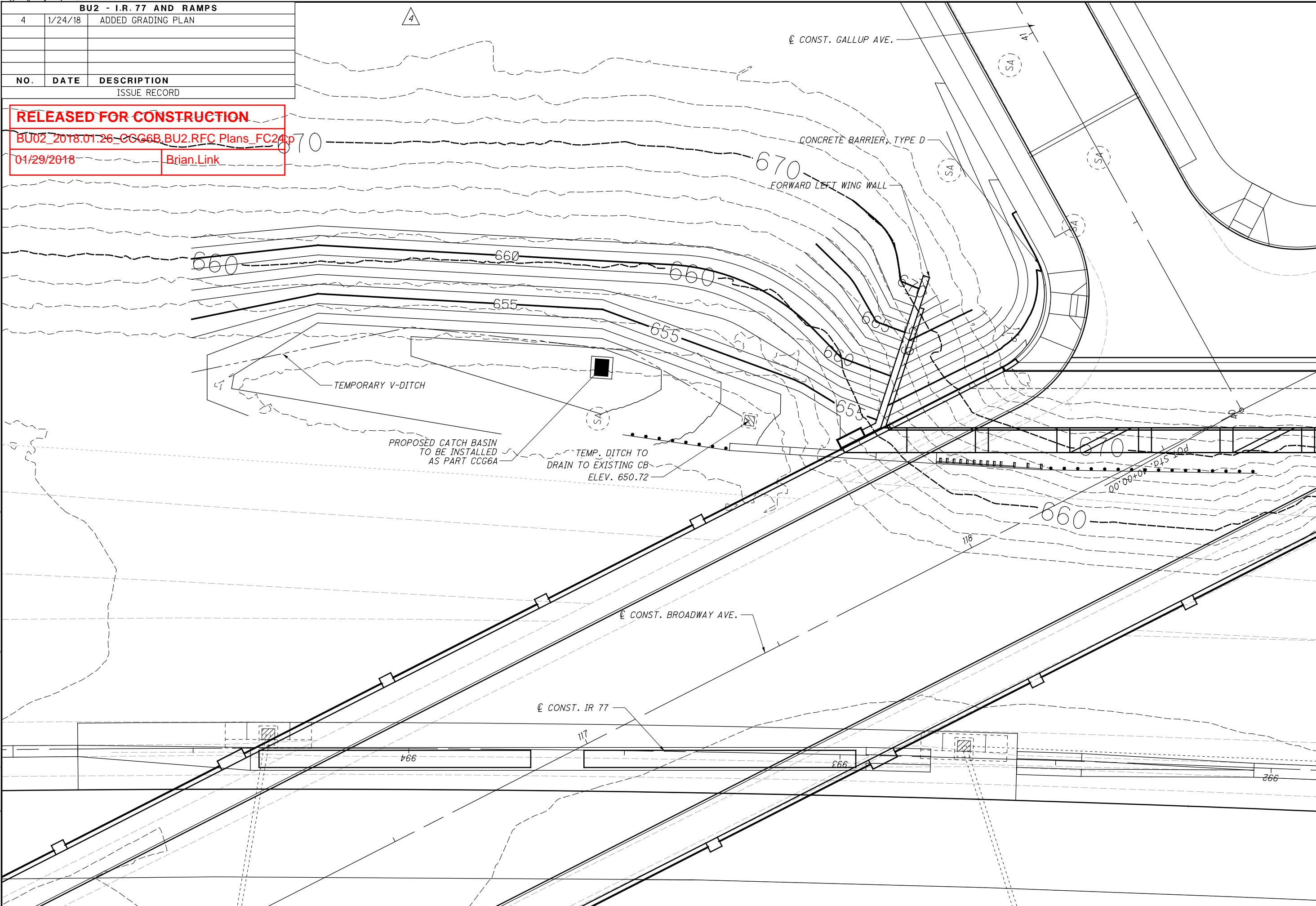


P:\82386\CCG6B\Design\Roadway\Sheets\82388_XG5001.dgn Forward Right Abutment Grading 1/26/2018 11:46:04 AM scorcoran

BU2 - I.R. 77 AND RAMPS		
4	1/24/18	ADDED GRADING PLAN
NO.	DATE	DESCRIPTION
		ISSUE RECORD

RELEASED FOR CONSTRUCTION
 BU02_2018.01.26_CCG6B.BU2.RFC.Plans_FC24.dwg
 01/29/2018 Brian.Link

s:\82388_CCG6B\Design\Roadway\Sheets\82388_XG5001.dgn Forward Left Abutment Grading 1/26/2018 11:37:35 AM scorcoran



CALCULATED SWC
 CHECKED JTJ
 HORIZONTAL SCALE IN FEET
 0 5 10 20

**GRADING PLAN
 FORWARD LEFT ABUTMENT**

CUY-77-13.80

150D
 170



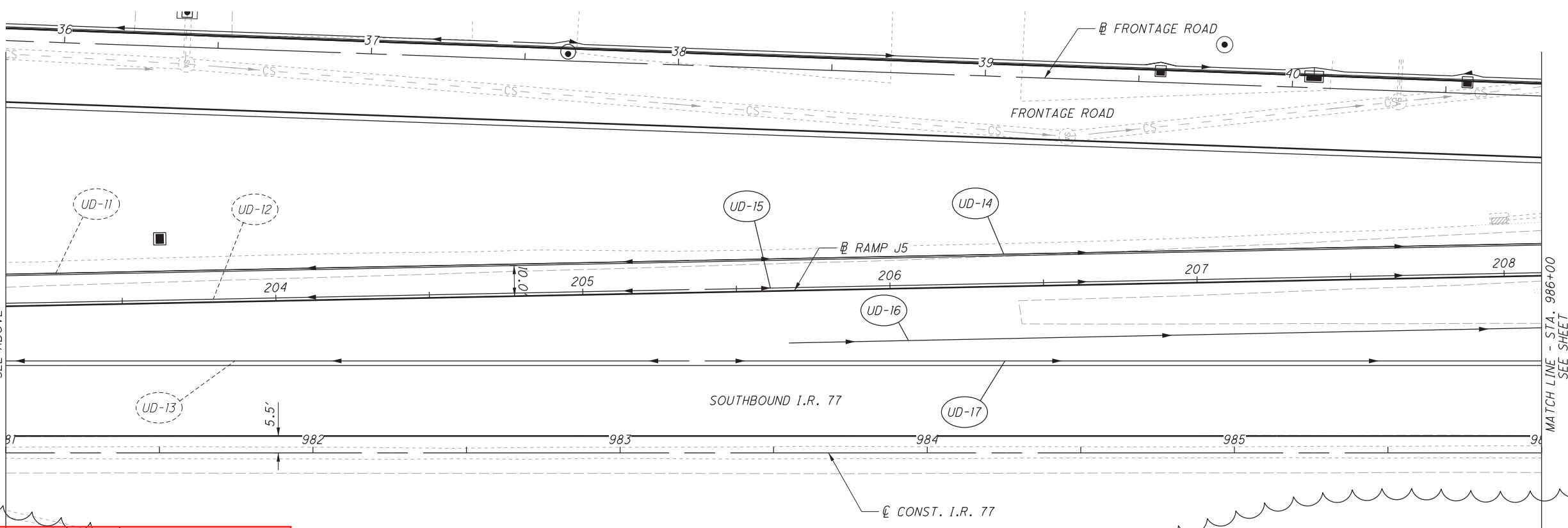
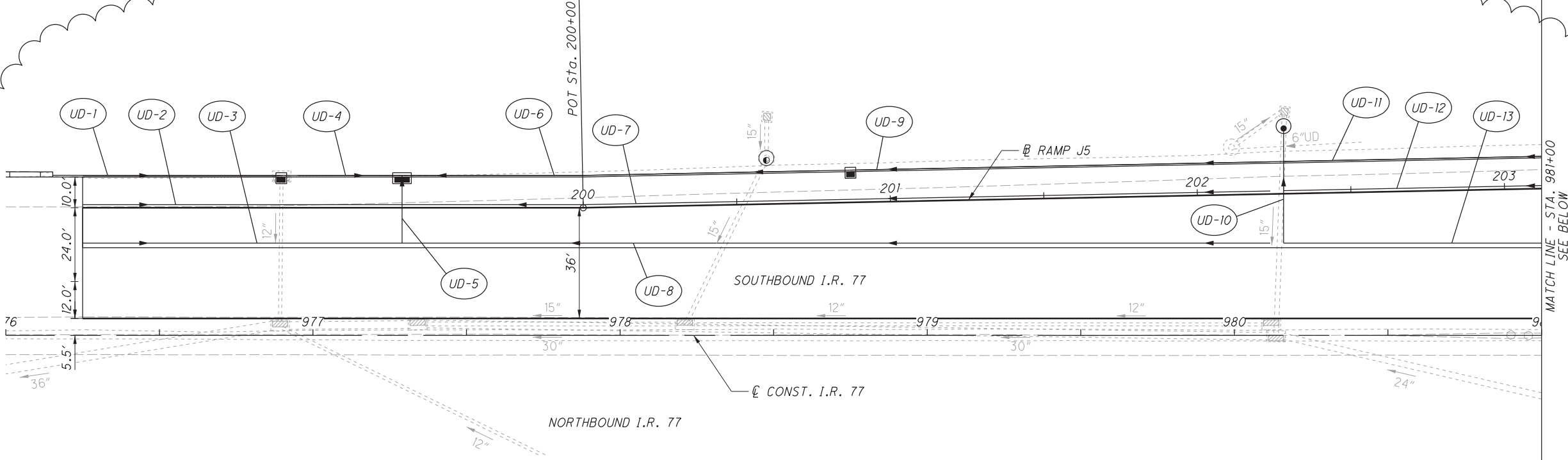
0 20 40
HORIZONTAL SCALE IN FEET

CALCULATED
SWC
CHECKED
MLL

UNDERDRAIN DETAILS - I.R. 77
STA. 976+00.00 TO STA. 986+00.00

CUY-77-13.80

151
170



RELEASED FOR CONSTRUCTION
2017-08-07.CCG6B.BU2.RFC Plans_FC 2.pdf
03/01/2017 brian.link

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION
1	8/3/17	ADJUSTED UNDERDRAIN CALLOUTS, ADDED TEMPORARY CONNECTIONS
ISSUE RECORD		

P:\82388_CCG6B\Design\Drainage\Sheets\82388_DM2001.dgn Sheet 8/11/2017 8:03:26 AM miles



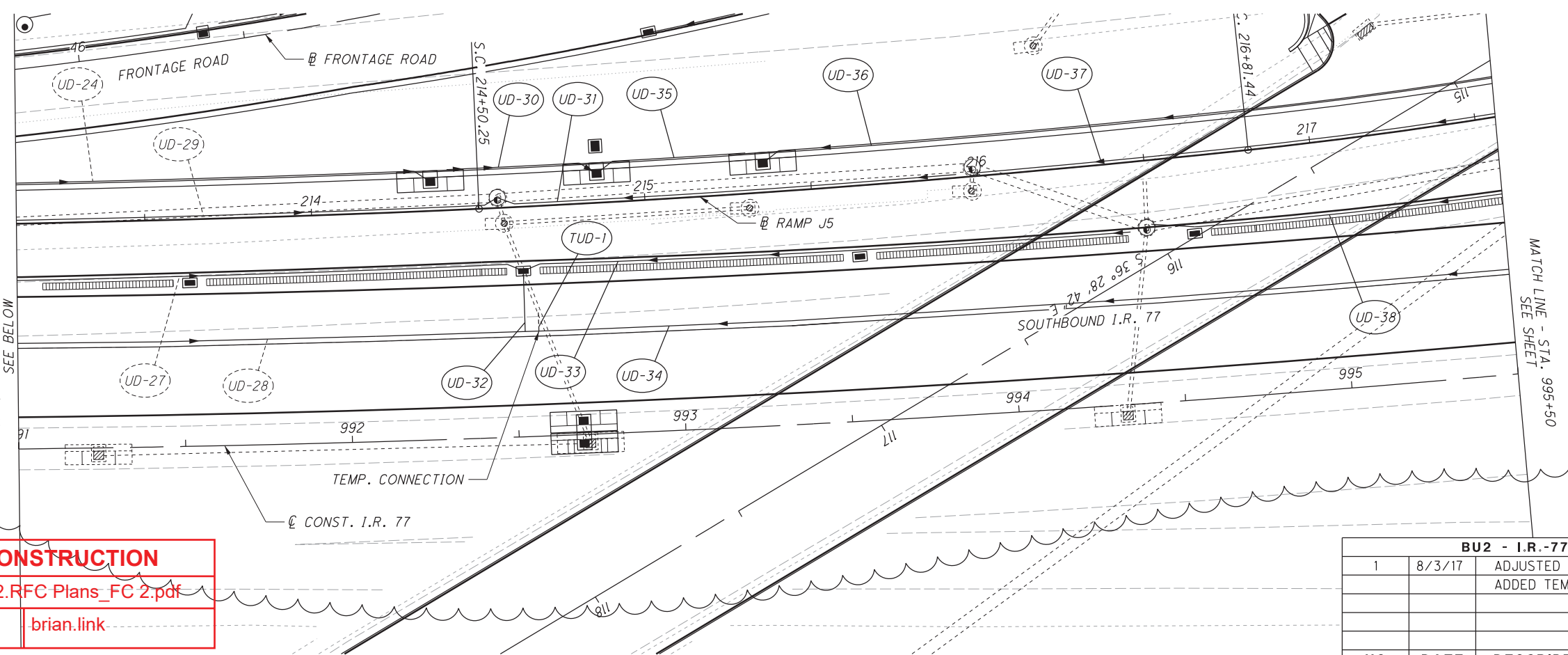
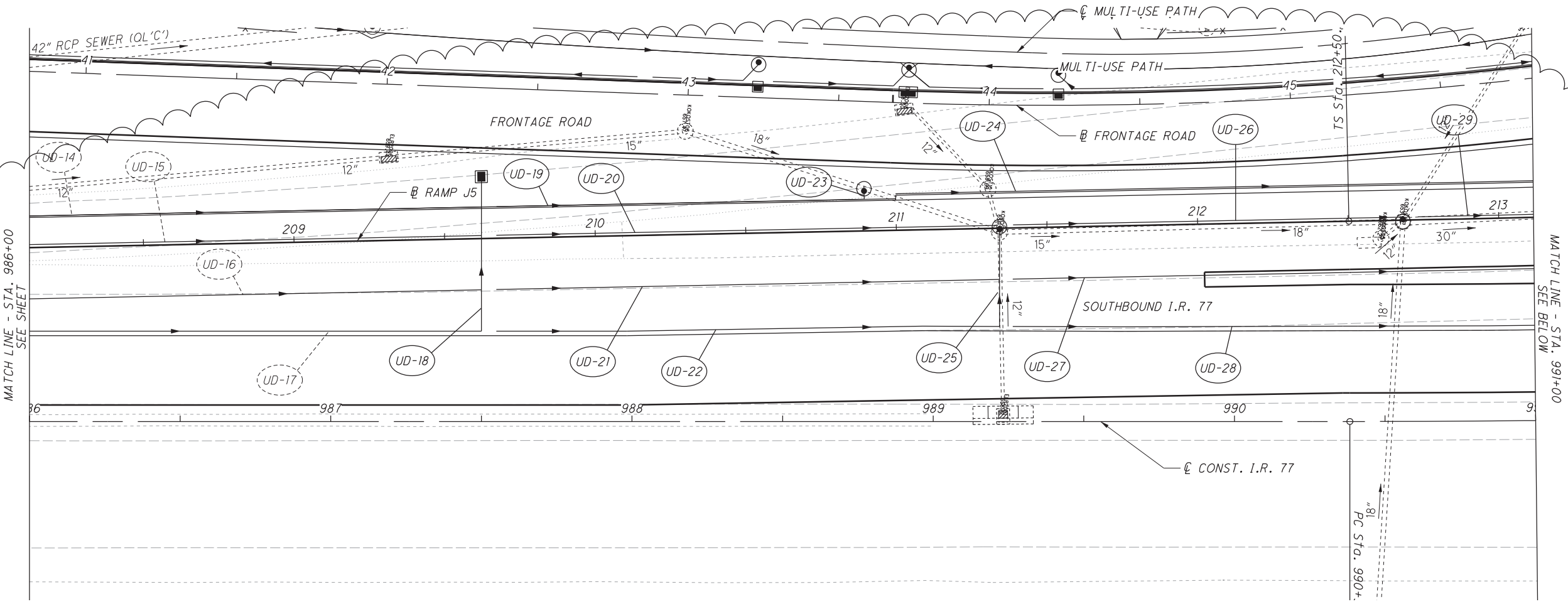
0 20 40
HORIZONTAL
SCALE IN FEET

CALCULATED
SWC
CHECKED
MLL

UNDERDRAIN DETAILS - I.R. 77
STA. 986+00.00 TO STA. 995+50.00

CUY-77-13.80

152
170



RELEASED FOR CONSTRUCTION
 2017-08-07.CCG6B.BU2.RFC Plans_FC 2.pdf
 03/01/2017 brian.link

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION
1	8/3/17	ADJUSTED UNDERDRAIN CALLOUTS, ADDED TEMPORARY CONNECTIONS
ISSUE RECORD		

P:\82388_CCG6B\Design\Drainage\Sheets\82388_DM2003.dgn Sheet 8/4/2017 2:08:51 PM mlutes

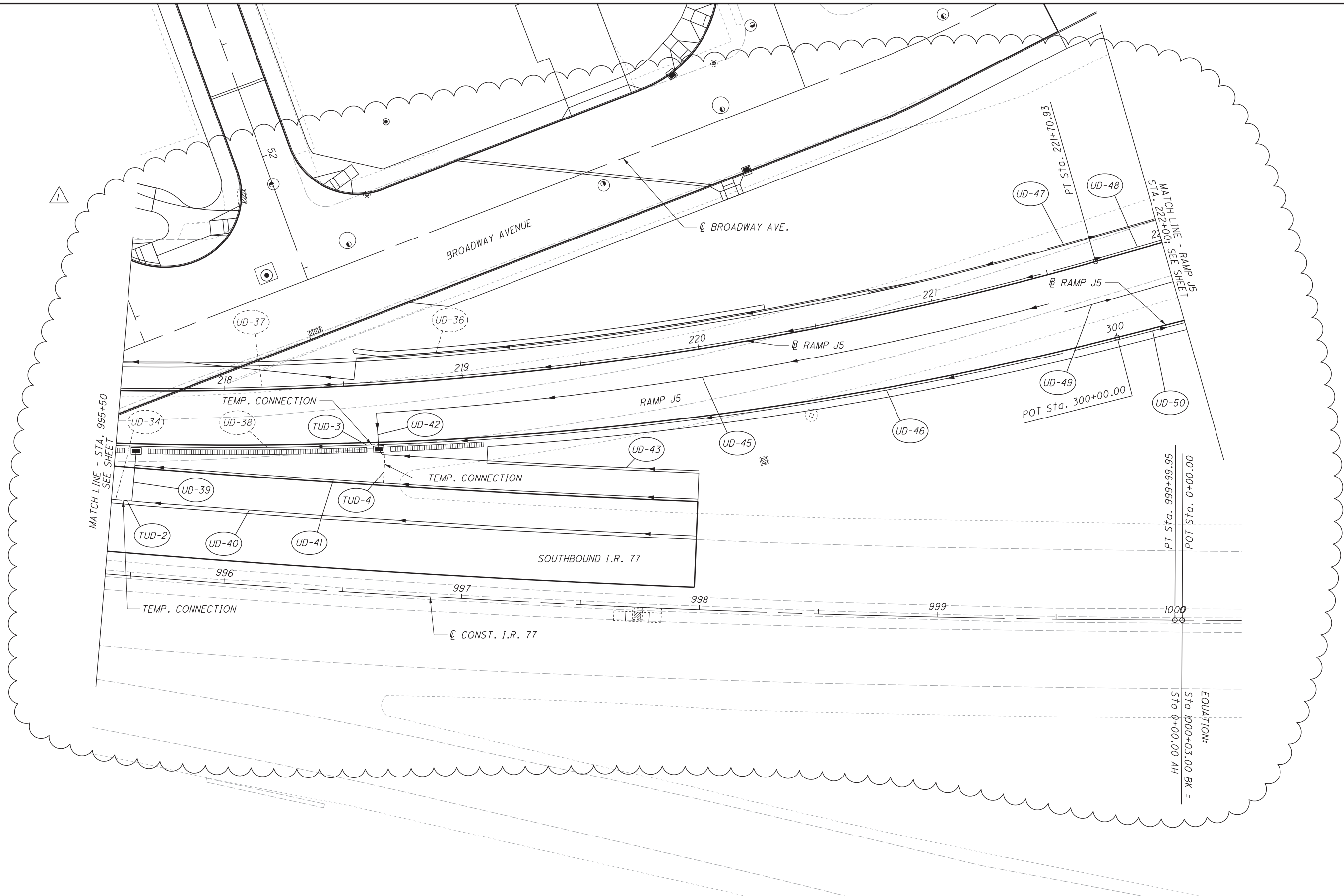
CALCULATED SWC CHECKED MLL

0 20 40
HORIZONTAL SCALE IN FEET

UNDERDRAIN DETAILS - I.R. 77
STA. 995+50.00 TO STA. 222+00.00

CUY-77-13.80

153
170



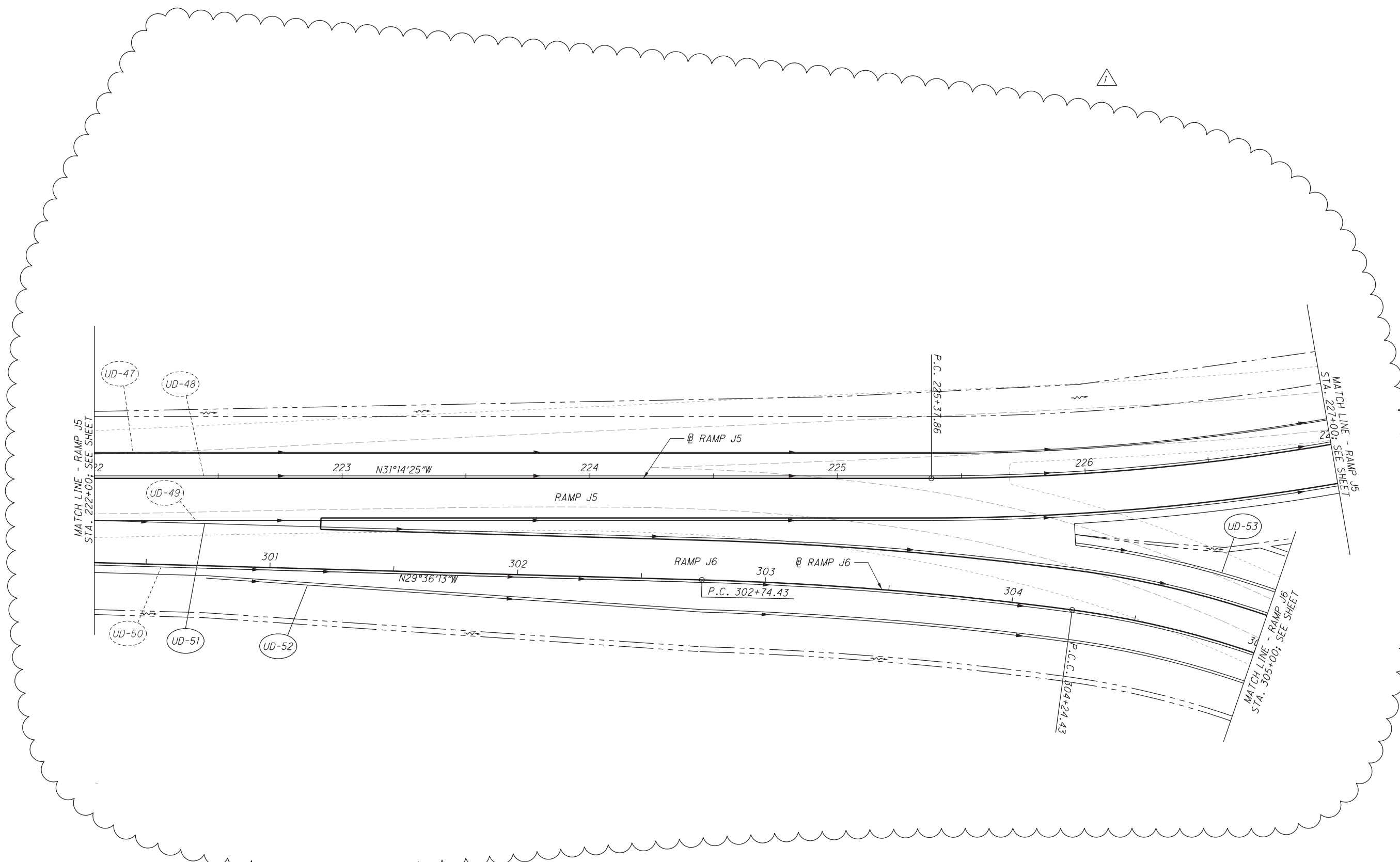
RELEASED FOR CONSTRUCTION
 2017-08-07.CCG6B.BU2.RFC Plans_FC 2.pdf
 03/01/2017 brian.link

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION
1	8/3/17	ADJUSTED UNDERDRAIN CALLOUTS, ADDED TEMPORARY CONNECTIONS
ISSUE RECORD		



0 20 40
HORIZONTAL
SCALE IN FEET

CALCULATED
SWC
CHECKED
MLL



UNDERDRAIN DETAILS - RAMP J5
STA. 222+00.00 TO STA. 227+00.00

CUY-77-13.80

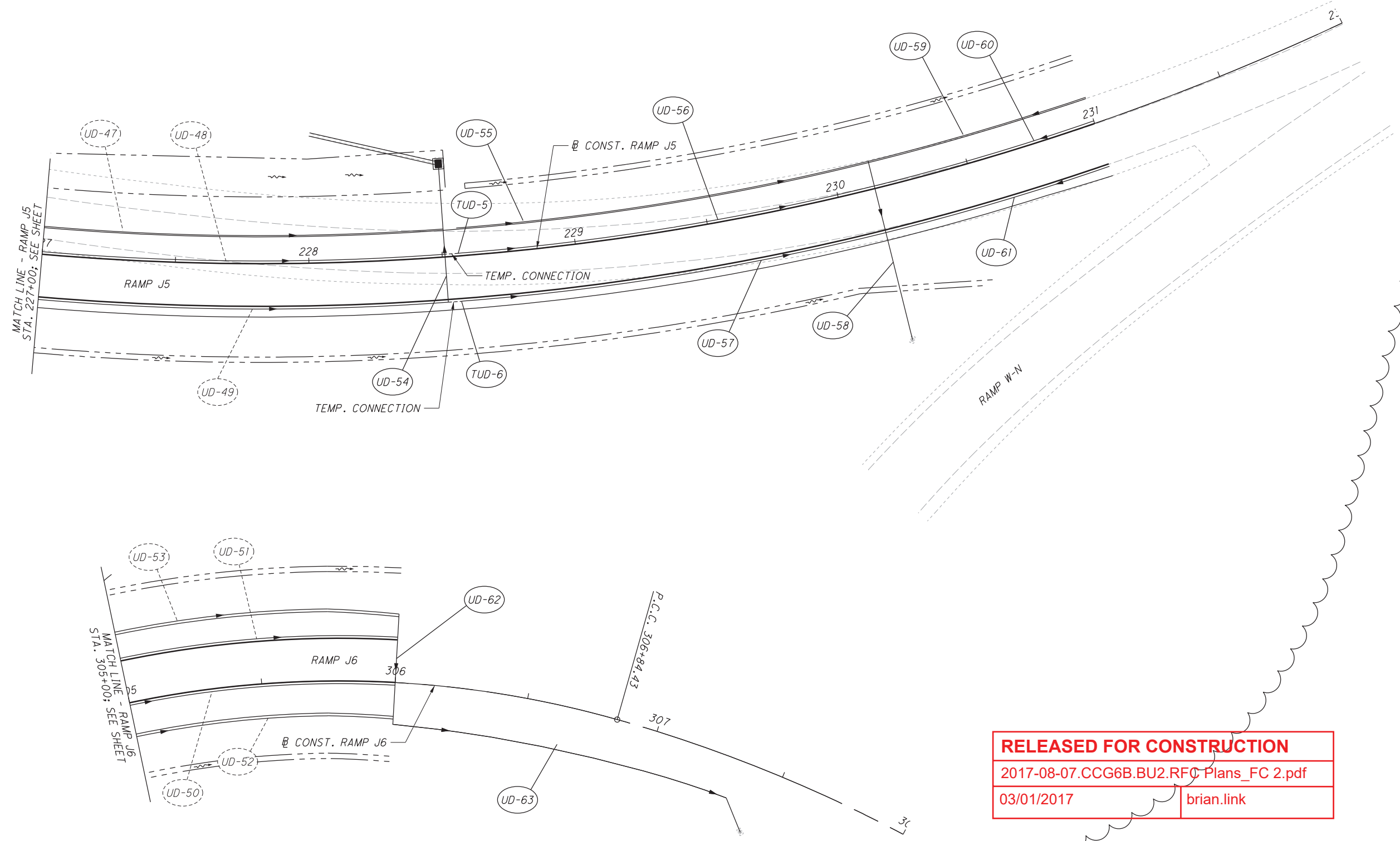
RELEASED FOR CONSTRUCTION
 2017-08-07.CCG6B.BU2.RFC Plans_FC 2.pdf
 03/01/2017 brian.link

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION
1	8/3/17	ADJUSTED UNDERDRAIN CALLOUTS, ADDED TEMPORARY CONNECTIONS
ISSUE RECORD		

154
170

P:\82388_CCG6B\Design\Drainage\Sheets\82388_DM2102.dgn Sheet 8/4/2017 2:08:54 PM mlutes

1



CALCULATED
SWC
CHECKED
MLL

0 20 40
HORIZONTAL
SCALE IN FEET

UNDERDRAIN DETAILS - RAMP J5 & J6
STA. 227+00.00 TO END WORK

CUY-77-13.80

155
170

RELEASED FOR CONSTRUCTION
2017-08-07.CCG6B.BU2.RFC Plans_FC 2.pdf
03/01/2017 brian.link

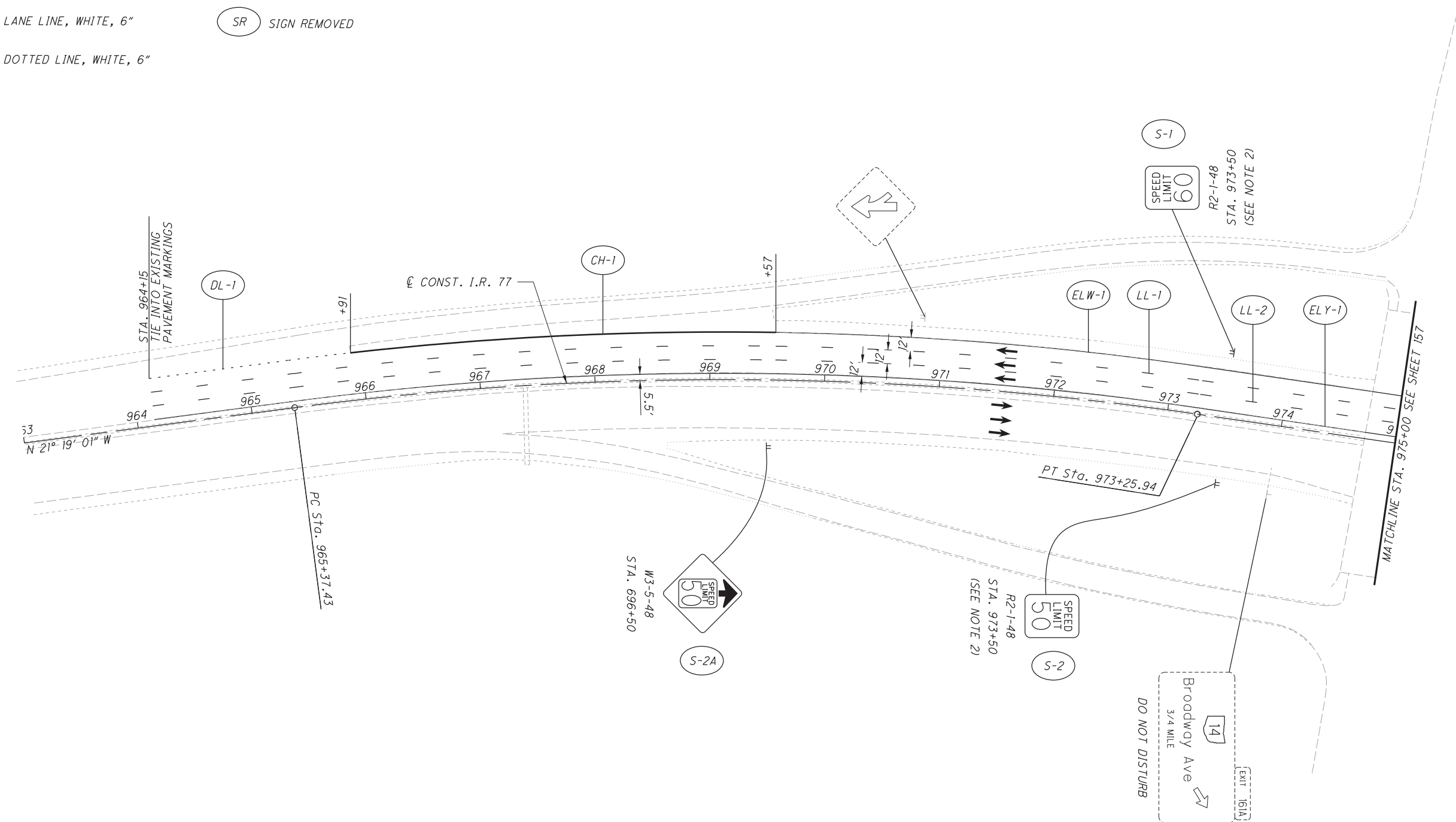
BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION
1	8/3/17	ADJUSTED UNDERDRAIN CALLOUTS, ADDED TEMPORARY CONNECTIONS
ISSUE RECORD		

LEGEND:

- | | | |
|---|--|----------------------------|
| (ELY) ITEM 646 - EDGE LINE, YELLOW, 6" | (CHV) ITEM 646 - CHEVRON MARKING, WHITE, 24" | (---) EX. SIGN TO REMAIN |
| (ELW) ITEM 646 - EDGE LINE, WHITE, 6" | (S) GROUND MOUNTED SIGN | (X) EX. SIGN TO BE REMOVED |
| (CH) ITEM 646 - CHANNELIZING LINE, WHITE, 12" | (OH) OVERHEAD MOUNTED SIGN | (□) PROPOSED SIGN |
| (LL) ITEM 646 - LANE LINE, WHITE, 6" | (SR) SIGN REMOVED | |
| (DL) ITEM 646 - DOTTED LINE, WHITE, 6" | | |

NOTES:

1. THE STRIPING AND SIGNING PLAN SHOWN SHALL BE IMPLEMENTED IF CUY-77-14.35 IS COMPLETE.
2. SIGNS SHALL BE INSTALLED NO LATER THAN AUGUST 1, 2017.



CALCULATED
M.L.L.
CHECKED
S.W.C.

0 50 100
HORIZONTAL SCALE IN FEET

TRAFFIC CONTROL PLAN
I.R. 77 - BEGIN WORK TO STA. 975+00

CUY-77-13.80

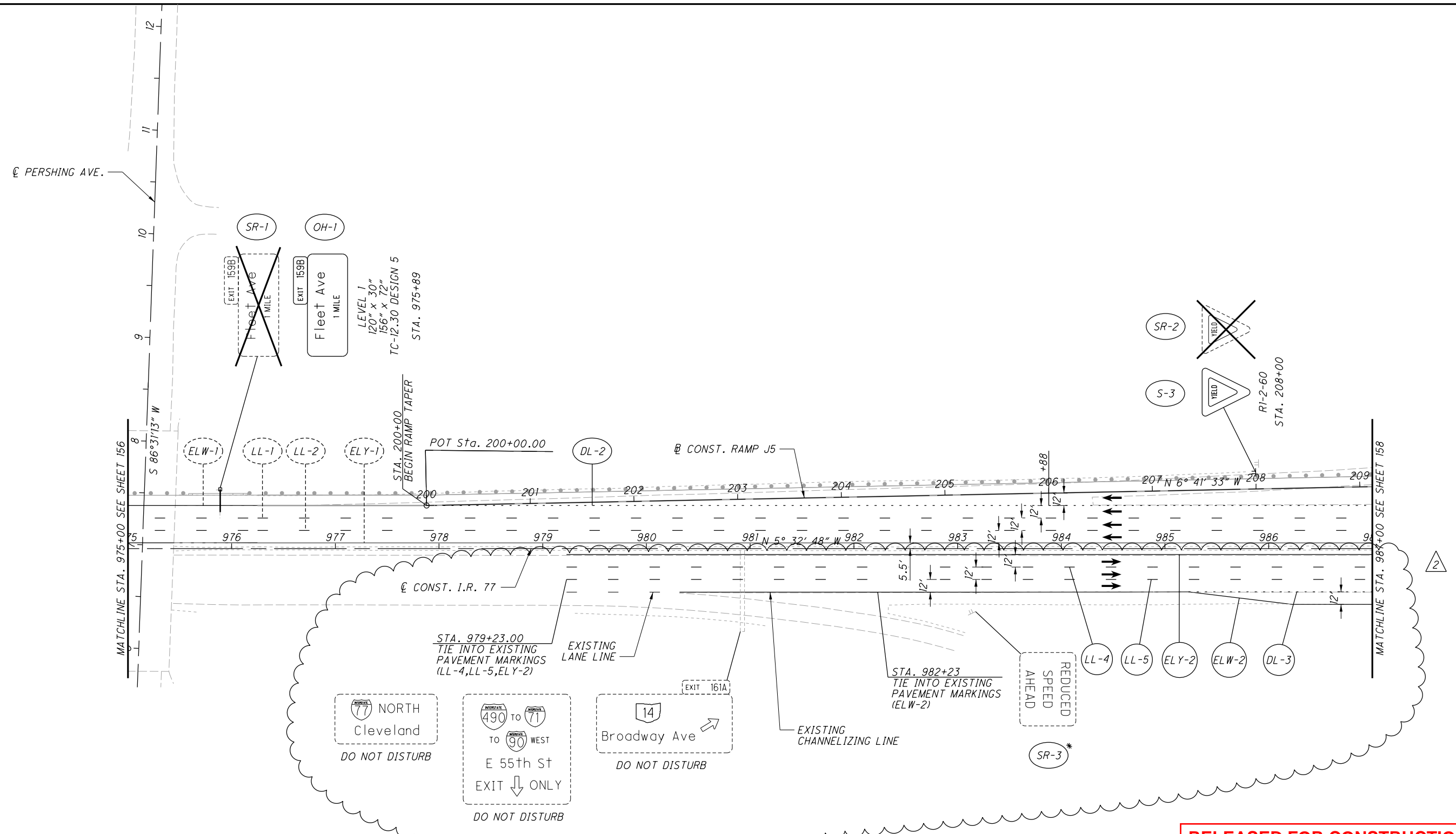
156
170

RELEASED FOR CONSTRUCTION
2017-07-11.CCG6B.RFC Plans.pdf
07/12/2017 brian.link

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION

ISSUE RECORD

P:\82388_CCG6B\Design\Traffic\Sheets\82388_IP2101.dgn Sheet 7/10/2017 3:22:14 PM milutes



LEGEND:

- | | | |
|---|--|----------------------------|
| (ELY) ITEM 646 - EDGE LINE, YELLOW, 6" | (CHV) ITEM 646 - CHEVRON MARKING, WHITE, 24" | (---) EX. SIGN TO REMAIN |
| (ELW) ITEM 646 - EDGE LINE, WHITE, 6" | (S) GROUND MOUNTED SIGN | (X) EX. SIGN TO BE REMOVED |
| (CH) ITEM 646 - CHANNELIZING LINE, WHITE, 12" | (OH) OVERHEAD MOUNTED SIGN | (□) PROPOSED SIGN |
| (LL) ITEM 646 - LANE LINE, WHITE, 6" | (SR) SIGN REMOVED | |
| (DL) ITEM 646 - DOTTED LINE, WHITE, 6" | | |

NOTES:

1. THE STRIPING AND SIGNING PLAN SHOWN SHALL BE IMPLEMENTED IF CUY-77-14.35 IS COMPLETE.
2. FOR SIGN ELEVATION DETAIL, SEE SHEET 166.

RELEASED FOR CONSTRUCTION
BU02_2017.11.13_CCG6B.BU2.RFC_FC 5.pdf
11/20/2017 Brian.Link

* WILL BE REMOVED ONCE S-1 AND S-2 SIGNS ARE RELOCATED

BU2 - I.R.-77 AND RAMPS		
2	9/22/17	ADJUSTED NB PAVEMENT MARKING LIMITS
NO.	DATE	DESCRIPTION
ISSUE RECORD		

P:\82388_CCG6B\Design\Traffic\Sheets\82388_IP2102.dgn_Sheet 11/16/2017 8:53:18 AM mlutes

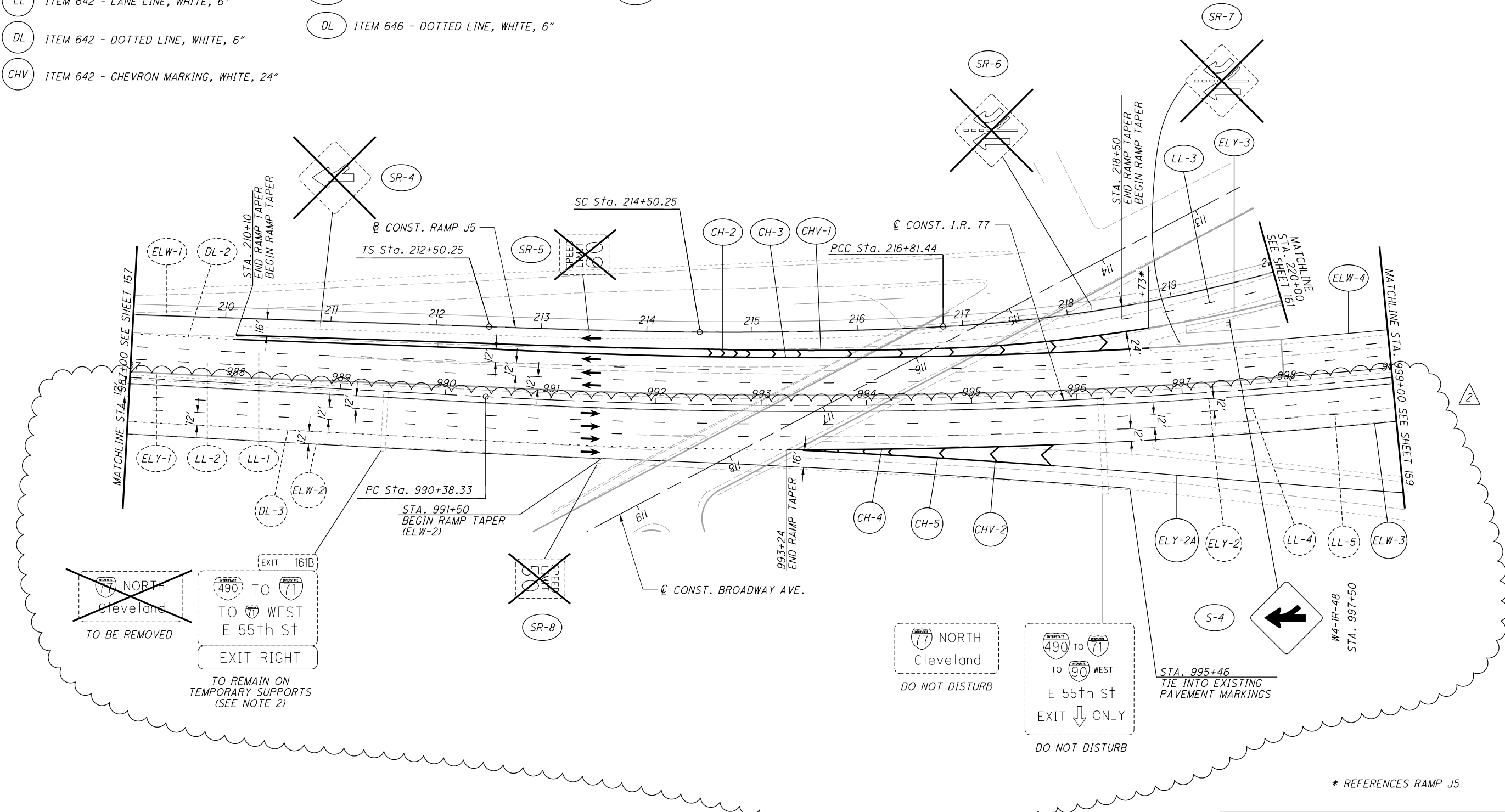
LEGEND:

- (ELY) ITEM 642 - EDGE LINE, YELLOW, 6"
- (ELW) ITEM 642 - EDGE LINE, WHITE, 6"
- (CL) ITEM 642 - CHANNELIZING LINE, WHITE, 12"
- (LL) ITEM 642 - LANE LINE, WHITE, 6"
- (DL) ITEM 642 - DOTTED LINE, WHITE, 6"
- (CHV) ITEM 642 - CHEVRON MARKING, WHITE, 24"
- (ELY) ITEM 646 - EDGE LINE, YELLOW, 6"
- (ELW) ITEM 646 - EDGE LINE, WHITE, 6"
- (CH) ITEM 646 - CHANNELIZING LINE, WHITE, 12"
- (LL) ITEM 646 - LANE LINE, WHITE, 6"
- (DL) ITEM 646 - DOTTED LINE, WHITE, 6"
- (CHV) ITEM 646 - CHEVRON MARKING, WHITE, 24"
- (CHV) ITEM 646 - CHEVRON MARKING, WHITE, 24"
- (S) GROUND MOUNTED SIGN
- (OH) OVERHEAD MOUNTED SIGN
- (SR) SIGN REMOVED

NOTES:

1. THE STRIPING AND SIGNING PLAN SHOWN SHALL BE IMPLEMENTED IF CUY-77-14.35 IS COMPLETE.
2. SIGN WILL REMAIN ON TEMPORARY SUPPORTS AS SHOWN ON SHEET 56 UNTIL NEW OVERHEAD SIGN TRUSS AND NEW OVERHEAD SIGNS ARE INSTALLED AS PART OF THE CCG6A PROJECT. CONTRACTOR SHALL REMOVE TEMPORARY SIGN AND SUPPORTS UPON ERRECTION OF PROPOSED SIGN AND SUPPORTS.

P:\82388_CCG6B\Design\Traffic\Sheets\82388_IP2103.dgn_Sheet_11/16/2017 8:53:19 AM milutes



CALCULATED MLL CHECKED SWC

0 50 100 HORIZONTAL SCALE IN FEET

TRAFFIC CONTROL PLAN
I.R. 77 - STA. 987+00 TO STA. 999+00

CUY-77-13.80

158
170

RELEASED FOR CONSTRUCTION

BU02_2017.11.13_CCG6B.BU2.RFC_FC 5.pdf

11/20/2017 Brian.Link

* REFERENCES RAMP J5

BU2 - I.R.-77 AND RAMPS		
2	9/22/17	ADJUSTED NB PAVEMENT MARKING LIMITS
NO.	DATE	DESCRIPTION
ISSUE RECORD		

LEGEND:

- | | | | |
|---|---|--|--------------------------------------|
| (ELY) ITEM 642 - EDGE LINE, YELLOW, 6" | (ELY) ITEM 646 - EDGE LINE, YELLOW, 6" | (CHV) ITEM 646 - CHEVRON MARKING, WHITE, 24" | [Dashed Box] EX. SIGN TO REMAIN |
| (ELW) ITEM 642 - EDGE LINE, WHITE, 6" | (ELW) ITEM 646 - EDGE LINE, WHITE, 6" | (S) GROUND MOUNTED SIGN | [Crossed Box] EX. SIGN TO BE REMOVED |
| (CL) ITEM 642 - CHANNELIZING LINE, WHITE, 12" | (CH) ITEM 646 - CHANNELIZING LINE, WHITE, 12" | (OH) OVERHEAD MOUNTED SIGN | [Empty Box] PROPOSED SIGN |
| (LL) ITEM 642 - LANE LINE, WHITE, 6" | (LL) ITEM 646 - LANE LINE, WHITE, 6" | (SR) SIGN REMOVED | |
| (DL) ITEM 642 - DOTTED LINE, WHITE, 6" | (DL) ITEM 646 - DOTTED LINE, WHITE, 6" | | |
| (CHV) ITEM 642 - CHEVRON MARKING, WHITE, 24" | | | |

NOTES:

- THE STRIPING AND SIGNING PLAN SHOWN SHALL BE IMPLEMENTED IF CUY-77-14.35 IS COMPLETE.

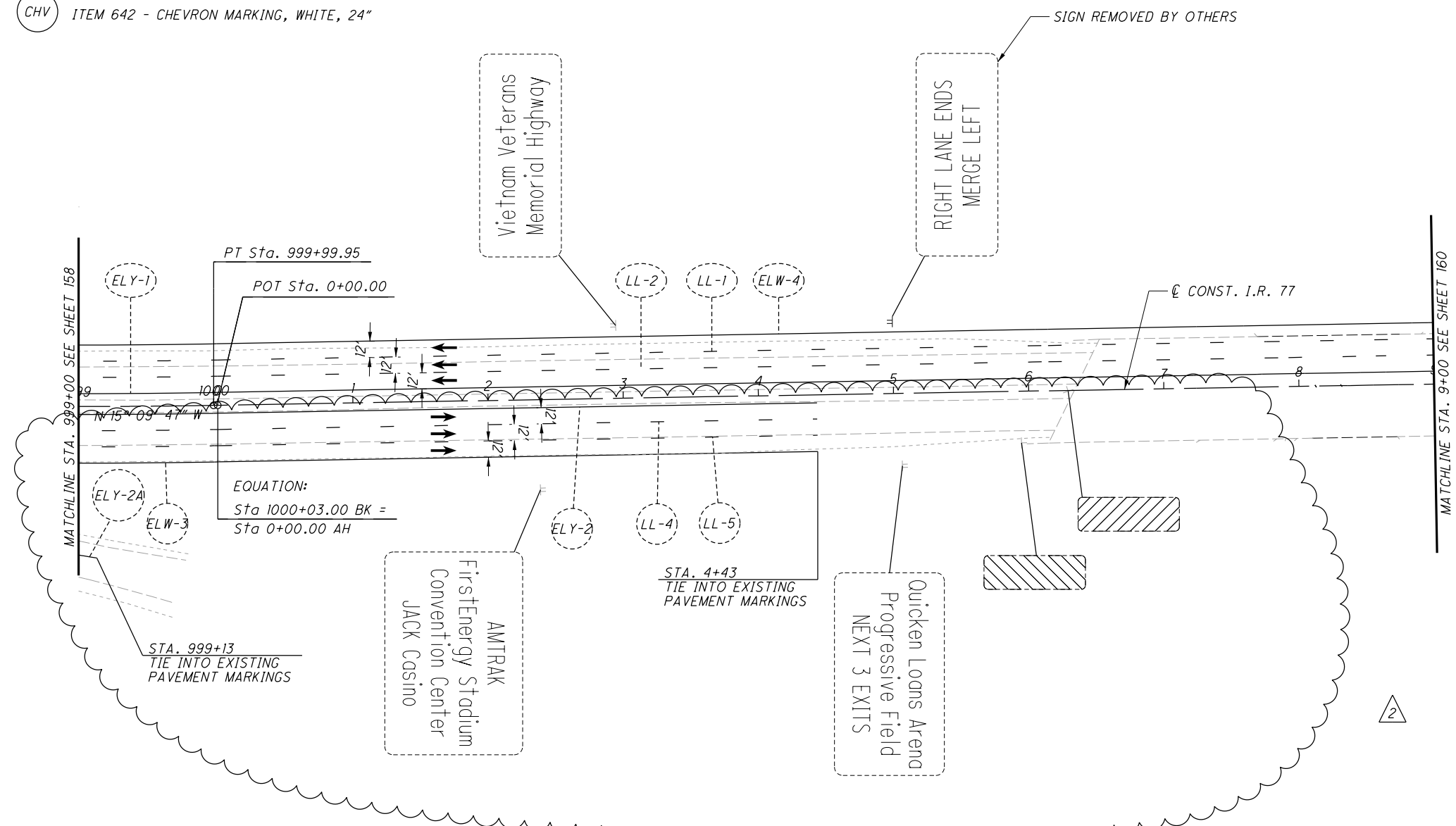
CALCULATED
M.L.L.
CHECKED
S.W.C.

0 50 100
HORIZONTAL
SCALE IN FEET

TRAFFIC CONTROL PLAN
I.R. 77 - STA. 999+00 TO STA. 9+00

CUY-77-13.80

159
170



RELEASED FOR CONSTRUCTION
 BU02_2017.11.13_CCG6B.BU2.RFC_FC 5.pdf
 11/20/2017 Brian.Link

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION
2	9/22/17	ADJUSTED NB PAVEMENT MARKING LIMITS
ISSUE RECORD		

P:\82388_CCG6B\Design\Traffic\Sheets\82388_IP2104.dgn_Sheet 11/16/2017 8:53:21 AM milutes

LEGEND:

- | | | |
|---|--|----------------------------|
| (ELY) ITEM 646 - EDGE LINE, YELLOW, 6" | (CHV) ITEM 646 - CHEVRON MARKING, WHITE, 24" | (---) EX. SIGN TO REMAIN |
| (ELW) ITEM 646 - EDGE LINE, WHITE, 6" | (S) GROUND MOUNTED SIGN | (X) EX. SIGN TO BE REMOVED |
| (CH) ITEM 646 - CHANNELIZING LINE, WHITE, 12" | (OH) OVERHEAD MOUNTED SIGN | (□) PROPOSED SIGN |
| (LL) ITEM 646 - LANE LINE, WHITE, 6" | (SR) SIGN REMOVED | |
| (DL) ITEM 646 - DOTTED LINE, WHITE, 6" | | |

NOTES:

- THE STRIPING AND SIGNING PLAN SHOWN SHALL BE IMPLEMENTED IF CUY-77-14.35 IS COMPLETE.

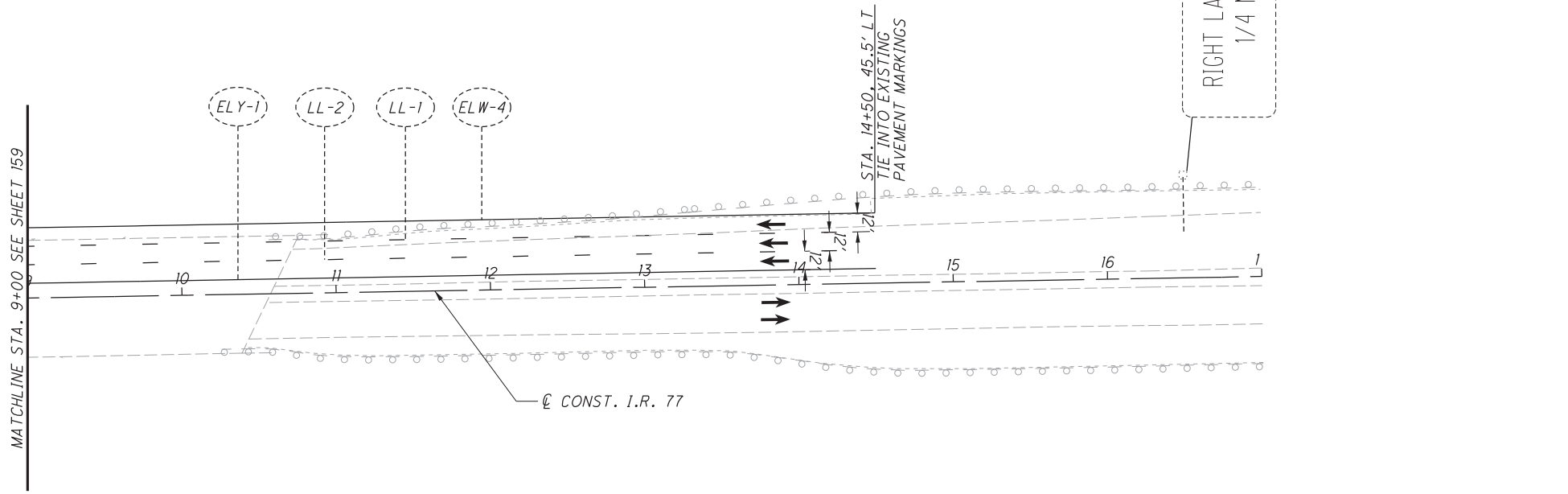
CALCULATED
M.L.L.
CHECKED
S.W.C.

0 50 100
HORIZONTAL
SCALE IN FEET

TRAFFIC CONTROL PLAN
I.R. 77 - STA. 9+00 TO END WORK

CUY-77-13.80

160
170



RELEASED FOR CONSTRUCTION
2017-07-11.CCG6B.RFC Plans.pdf
07/12/2017 brian.link

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION

ISSUE RECORD

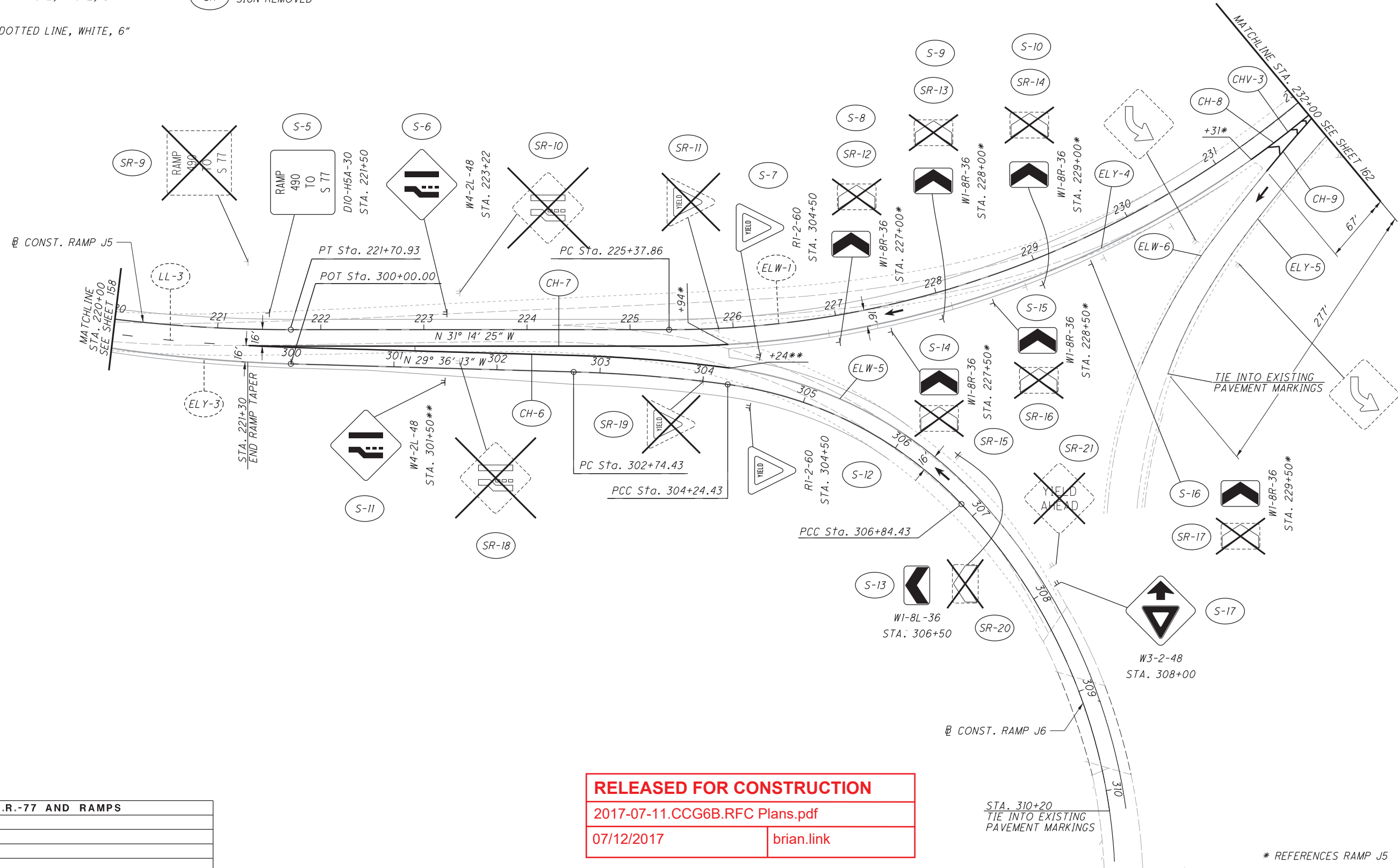
P:\82388_CCG6B\Design\Traffic\Sheets\82388_IP2105.dgn_Sheet_7/10/2017 3:22:18 PM mlutes

LEGEND:

- | | | |
|---|--|----------------------------|
| (ELY) ITEM 646 - EDGE LINE, YELLOW, 6" | (CHV) ITEM 646 - CHEVRON MARKING, WHITE, 24" | (---) EX. SIGN TO REMAIN |
| (ELW) ITEM 646 - EDGE LINE, WHITE, 6" | (S) GROUND MOUNTED SIGN | (X) EX. SIGN TO BE REMOVED |
| (CH) ITEM 646 - CHANNELIZING LINE, WHITE, 12" | (OH) OVERHEAD MOUNTED SIGN | (□) PROPOSED SIGN |
| (LL) ITEM 646 - LANE LINE, WHITE, 6" | (SR) SIGN REMOVED | |
| (DL) ITEM 646 - DOTTED LINE, WHITE, 6" | | |

NOTES:

- THE STRIPING AND SIGNING PLAN SHOWN SHALL BE IMPLEMENTED IF CUY-77-14.35 IS COMPLETE.



RELEASED FOR CONSTRUCTION
 2017-07-11.CCG6B.RFC Plans.pdf
 07/12/2017 brian.link

P:\82388_CCG6B\Design\Traffic\Sheets\82388_TP2106.dgn_Sheet 7/11/2017 11:14:42 AM scorcoran

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION
ISSUE RECORD		

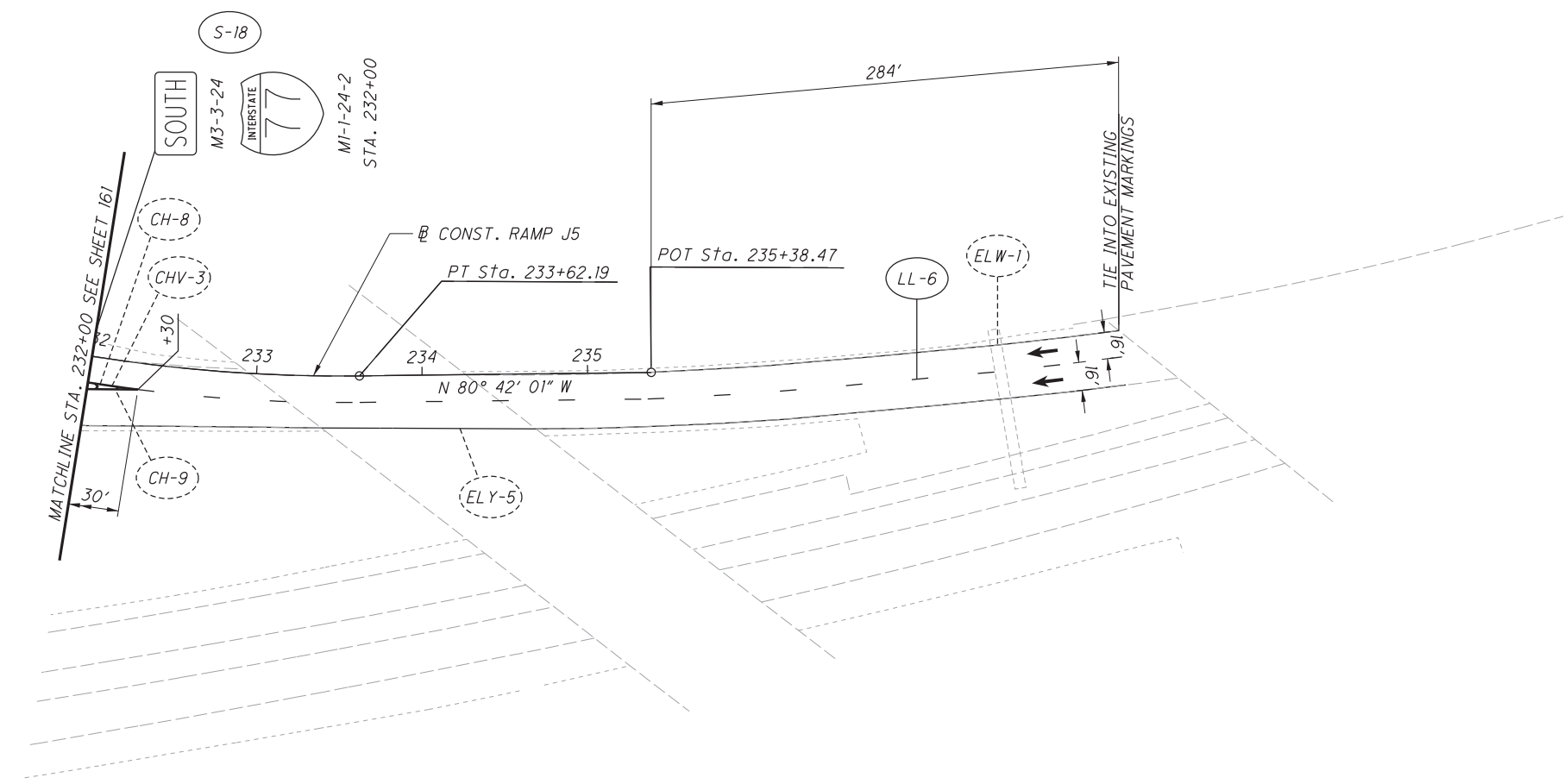
* REFERENCES RAMP J5
 ** REFERENCES RAMP J6

LEGEND:

- | | | |
|---|--|----------------------------|
| (ELY) ITEM 646 - EDGE LINE, YELLOW, 6" | (CHV) ITEM 646 - CHEVRON MARKING, WHITE, 24" | (---) EX. SIGN TO REMAIN |
| (ELW) ITEM 646 - EDGE LINE, WHITE, 6" | (S) GROUND MOUNTED SIGN | (X) EX. SIGN TO BE REMOVED |
| (CH) ITEM 646 - CHANNELIZING LINE, WHITE, 12" | (OH) OVERHEAD MOUNTED SIGN | (□) PROPOSED SIGN |
| (LL) ITEM 646 - LANE LINE, WHITE, 6" | (SR) SIGN REMOVED | |
| (DL) ITEM 646 - DOTTED LINE, WHITE, 6" | | |

NOTES:

1. THE STRIPING AND SIGNING PLAN SHOWN SHALL BE IMPLEMENTED IF CUY-77-14.35 IS COMPLETE.



CALCULATED
M.L.L.
CHECKED
S.W.C.

0 50 100
HORIZONTAL
SCALE IN FEET

TRAFFIC CONTROL PLAN
RAMP J5 - STA. 232+00 TO END WORK

CUY-77-13.80

RELEASED FOR CONSTRUCTION
2017-07-11.CCG6B.RFC Plans.pdf
07/12/2017 brian.link

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION

162
170

P:\82388_CCG6B\Design\Traffic\Sheets\82388_IP2107.dgn Sheet 7/10/2017 3:22:20 PM mlutes

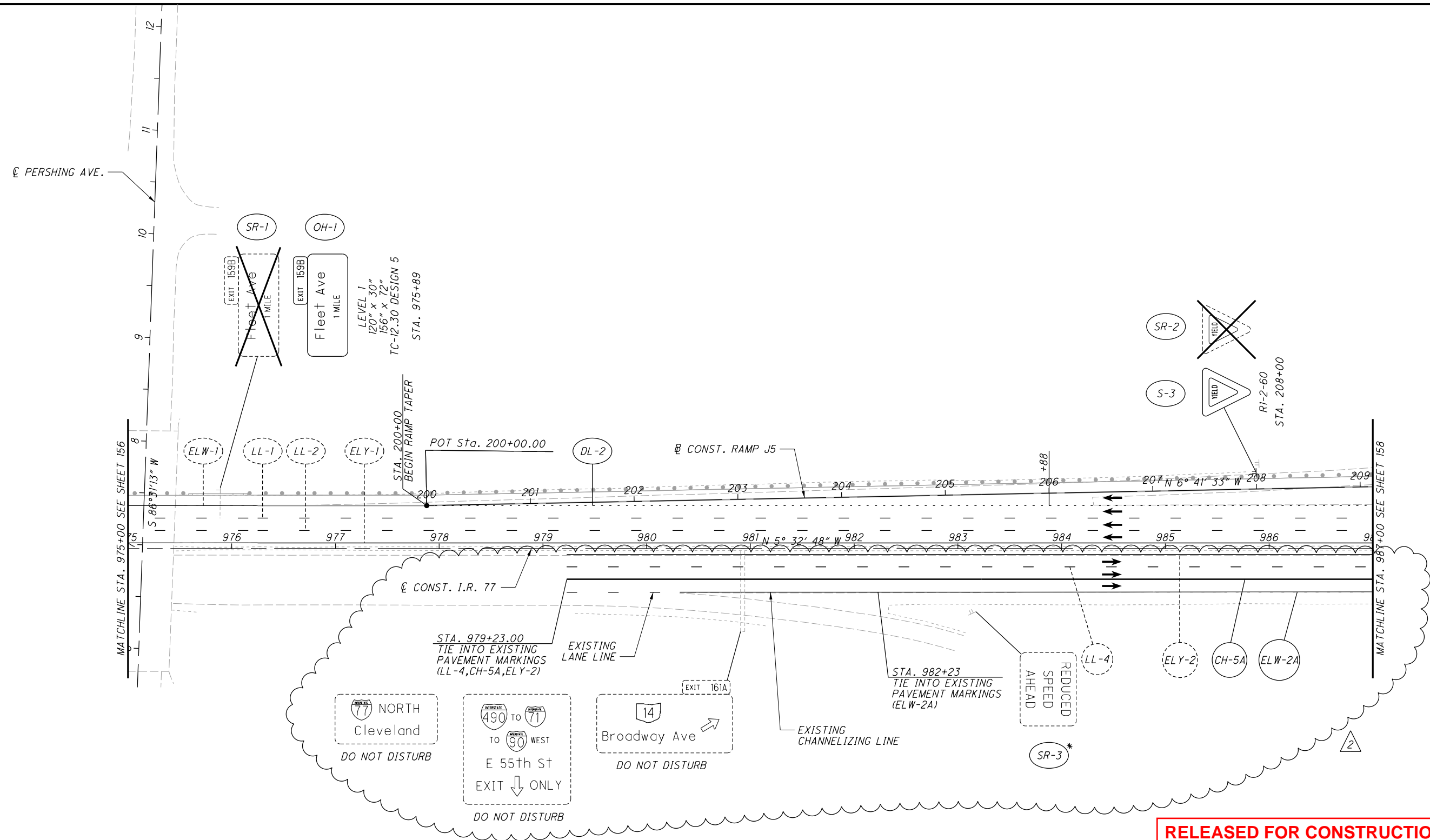


CALCULATED
MLL
CHECKED
SWC

TRAFFIC CONTROL PLAN
I.R. 77 - STA. 975+00 TO STA. 987+00

CUY-77-13.80

162A
170



LEGEND:

- ELY ITEM 646 - EDGE LINE, YELLOW, 6"
- ELW ITEM 646 - EDGE LINE, WHITE, 6"
- CH ITEM 646 - CHANNELIZING LINE, WHITE, 12"
- LL ITEM 646 - LANE LINE, WHITE, 6"
- DL ITEM 646 - DOTTED LINE, WHITE, 6"
- CHV ITEM 646 - CHEVRON MARKING, WHITE, 24"
- S GROUND MOUNTED SIGN
- OH OVERHEAD MOUNTED SIGN
- SR SIGN REMOVED
- EX. SIGN TO REMAIN
- EX. SIGN TO BE REMOVED
- PROPOSED SIGN

NOTES:

1. THE STRIPING AND SIGNING PLAN SHOWN SHALL BE IMPLEMENTED IF CUY-77-14.35 IS COMPLETE.
2. FOR SIGN ELEVATION DETAIL, SEE SHEET 166.

RELEASED FOR CONSTRUCTION

BU02_2017.11.13_CCG6B.BU2.RFC_FC 5.pdf

11/20/2017 Brian.Link

* WILL BE REMOVED ONCE S-1 AND S-2 SIGNS ARE RELOCATED

BU2 - I.R.-77 AND RAMPS		
2	9/22/17	ADJUSTED NB PAVEMENT MARKING LIMITS
NO.	DATE	DESCRIPTION
ISSUE RECORD		

P:\82388_CCG6B\Design\Traffic\Sheets\82388_IP2200.dgn Sheet 11/16/2017 8:53:22 AM milutes

LEGEND:

- (ELY) ITEM 642 - EDGE LINE, YELLOW, 6"
- (ELW) ITEM 642 - EDGE LINE, WHITE, 6"
- (CL) ITEM 642 - CHANNELIZING LINE, WHITE, 12"
- (LL) ITEM 642 - LANE LINE, WHITE, 6"
- (DL) ITEM 642 - DOTTED LINE, WHITE, 6"
- (CHV) ITEM 642 - CHEVRON MARKING, WHITE, 24"
- (ELY) ITEM 646 - EDGE LINE, YELLOW, 6"
- (ELW) ITEM 646 - EDGE LINE, WHITE, 6"
- (CH) ITEM 646 - CHANNELIZING LINE, WHITE, 12"
- (LL) ITEM 646 - LANE LINE, WHITE, 6"
- (DL) ITEM 646 - DOTTED LINE, WHITE, 6"
- (CHV) ITEM 646 - CHEVRON MARKING, WHITE, 24"
- (CHV) ITEM 646 - CHEVRON MARKING, WHITE, 24"
- (S) GROUND MOUNTED SIGN
- (OH) OVERHEAD MOUNTED SIGN
- (SR) SIGN REMOVED

NOTES:

- THE STRIPING AND SIGNING PLAN SHOWN SHALL BE IMPLEMENTED IF CUY-77-14.35 IS COMPLETE.
- SIGN WILL REMAIN ON TEMPORARY SUPPORTS AS SHOWN ON SHEET 56 UNTIL NEW OVERHEAD SIGN TRUSS AND NEW OVERHEAD SIGNS ARE INSTALLED AS PART OF THE CCG6A PROJECT. CONTRACTOR SHALL REMOVE TEMPORARY SIGN AND SUPPORTS UPON ERRECTION OF PROPOSED SIGN AND SUPPORTS.

N

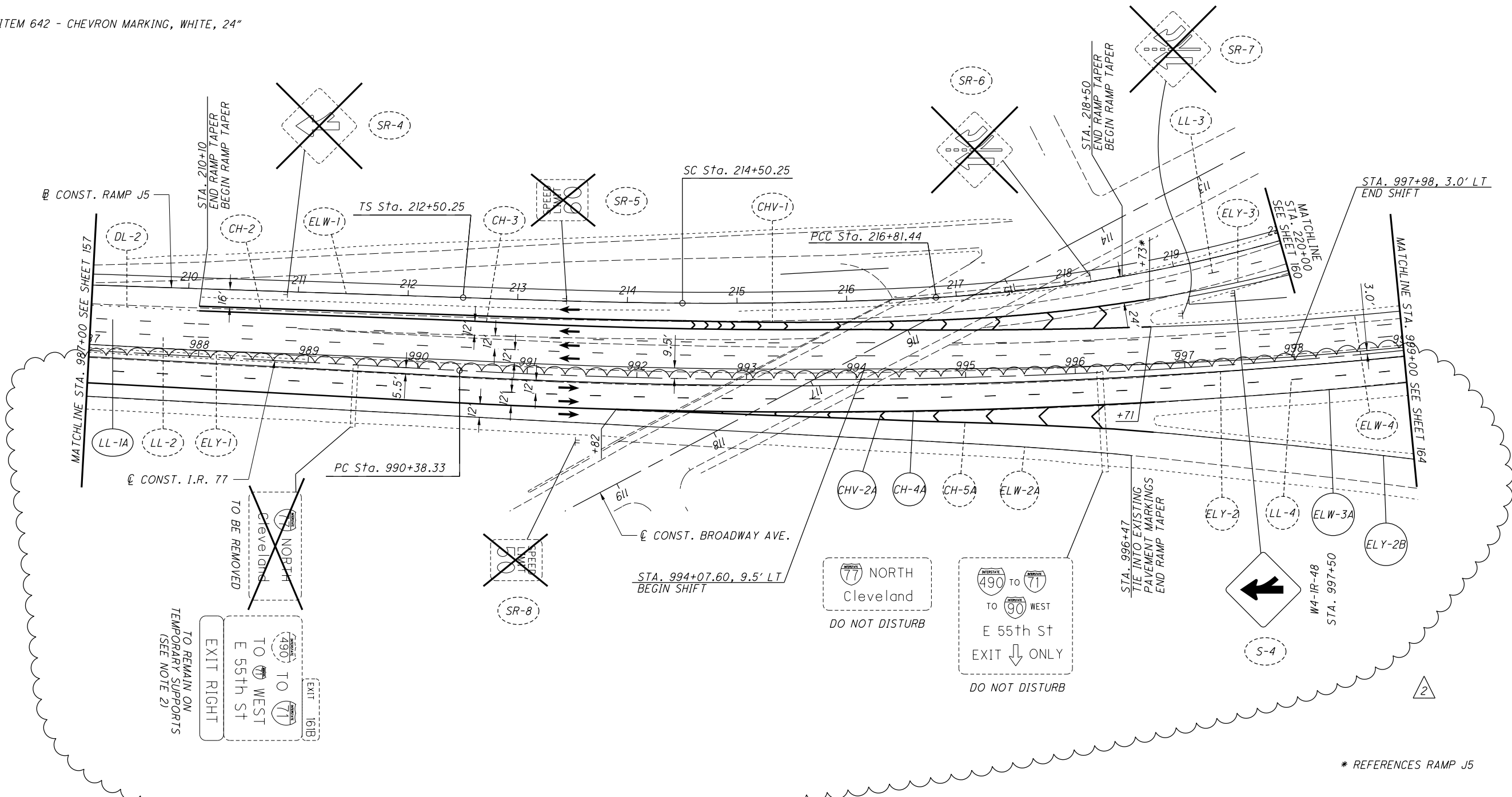
HORIZONTAL SCALE IN FEET

CALCULATED
M.L.L.
CHECKED
S.W.C.

TRAFFIC CONTROL PLAN - ALTERNATE
I.R. 77 - STA. 987+00 TO STA. 999+00

CUY-77-13.80

163
170



RELEASED FOR CONSTRUCTION
BU02_2017.11.13_CCG6B.BU2.RFC_FC 5.pdf
11/20/2017 Brian.Link

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION
2	9/22/17	ADJUSTED NB PAVEMENT MARKINGS LIMITS
ISSUE RECORD		

P:\82388_CCG6B\Design\Traffic\Sheets\82388_IP2201.dgn_Sheet 11/16/2017 8:53:23 AM mlutes

LEGEND:

- | | | | |
|---|---|--|--------------------------------------|
| (ELY) ITEM 642 - EDGE LINE, YELLOW, 6" | (ELY) ITEM 646 - EDGE LINE, YELLOW, 6" | (CHV) ITEM 646 - CHEVRON MARKING, WHITE, 24" | [Dashed Box] EX. SIGN TO REMAIN |
| (ELW) ITEM 642 - EDGE LINE, WHITE, 6" | (ELW) ITEM 646 - EDGE LINE, WHITE, 6" | (S) GROUND MOUNTED SIGN | [Crossed Box] EX. SIGN TO BE REMOVED |
| (CL) ITEM 642 - CHANNELIZING LINE, WHITE, 12" | (CH) ITEM 646 - CHANNELIZING LINE, WHITE, 12" | (OH) OVERHEAD MOUNTED SIGN | [Empty Box] PROPOSED SIGN |
| (LL) ITEM 642 - LANE LINE, WHITE, 6" | (LL) ITEM 646 - LANE LINE, WHITE, 6" | (SR) SIGN REMOVED | |
| (DL) ITEM 642 - DOTTED LINE, WHITE, 6" | (DL) ITEM 646 - DOTTED LINE, WHITE, 6" | | |
| (CHV) ITEM 642 - CHEVRON MARKING, WHITE, 24" | | | |

NOTES:

- THE STRIPING AND SIGNING PLAN SHOWN SHALL BE IMPLEMENTED IF CUY-77-14.35 IS COMPLETE.

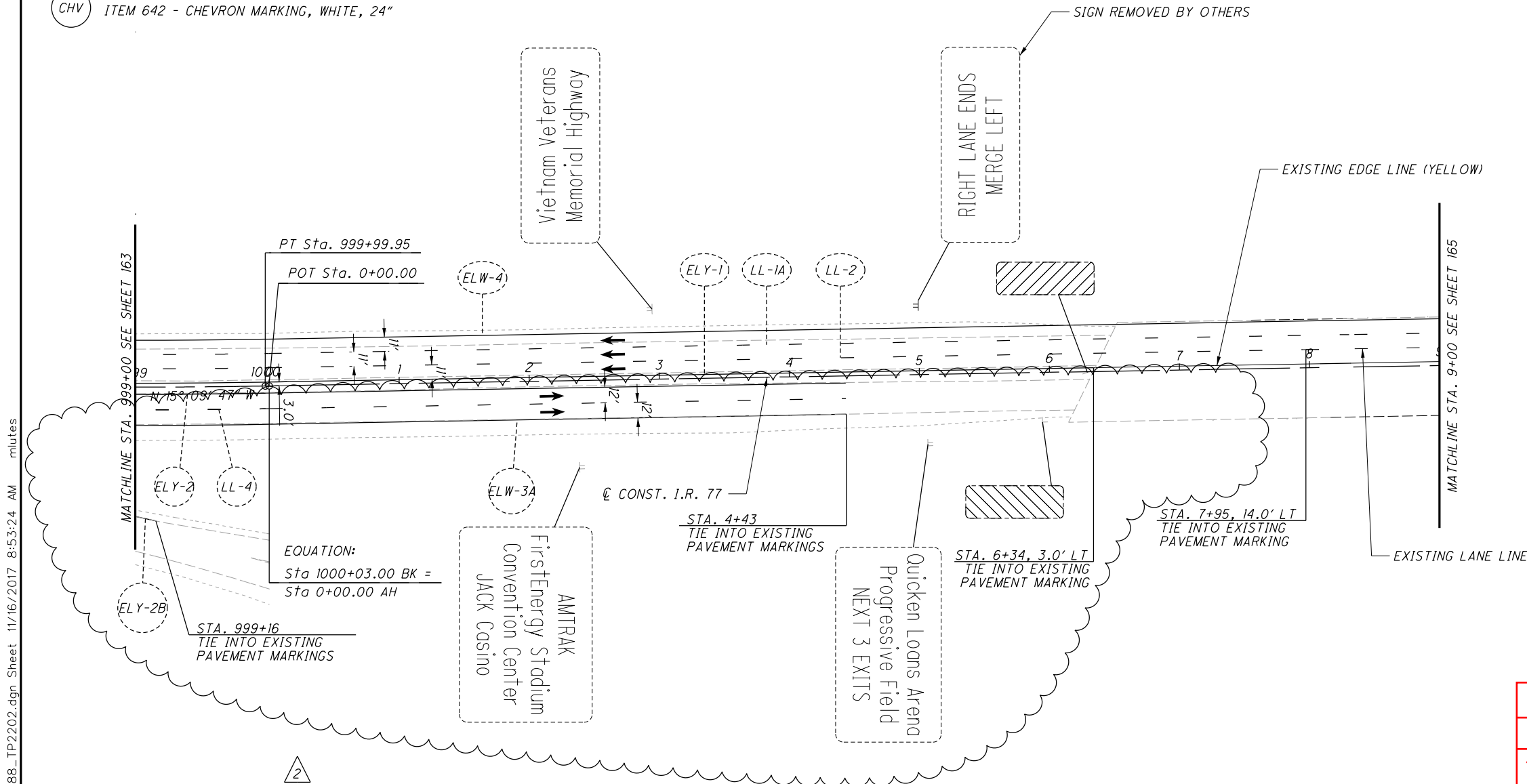
CALCULATED
M.L.L.
CHECKED
S.W.C.

0 50 100
HORIZONTAL
SCALE IN FEET

TRAFFIC CONTROL PLAN - ALTERNATE
I.R. 77 - STA. 999+00 TO STA. 9+00

CUY-77-13.80

164
170



RELEASED FOR CONSTRUCTION
 BU02_2017.11.13_CCG6B.BU2.RFC_FC 5.pdf
 11/20/2017 Brian.Link

* REFERENCES RAMP J5
 ** REFERENCES RAMP J6

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION
2	9/22/17	ADJUSTED NB PAVEMENT MARKING LIMITS
ISSUE RECORD		

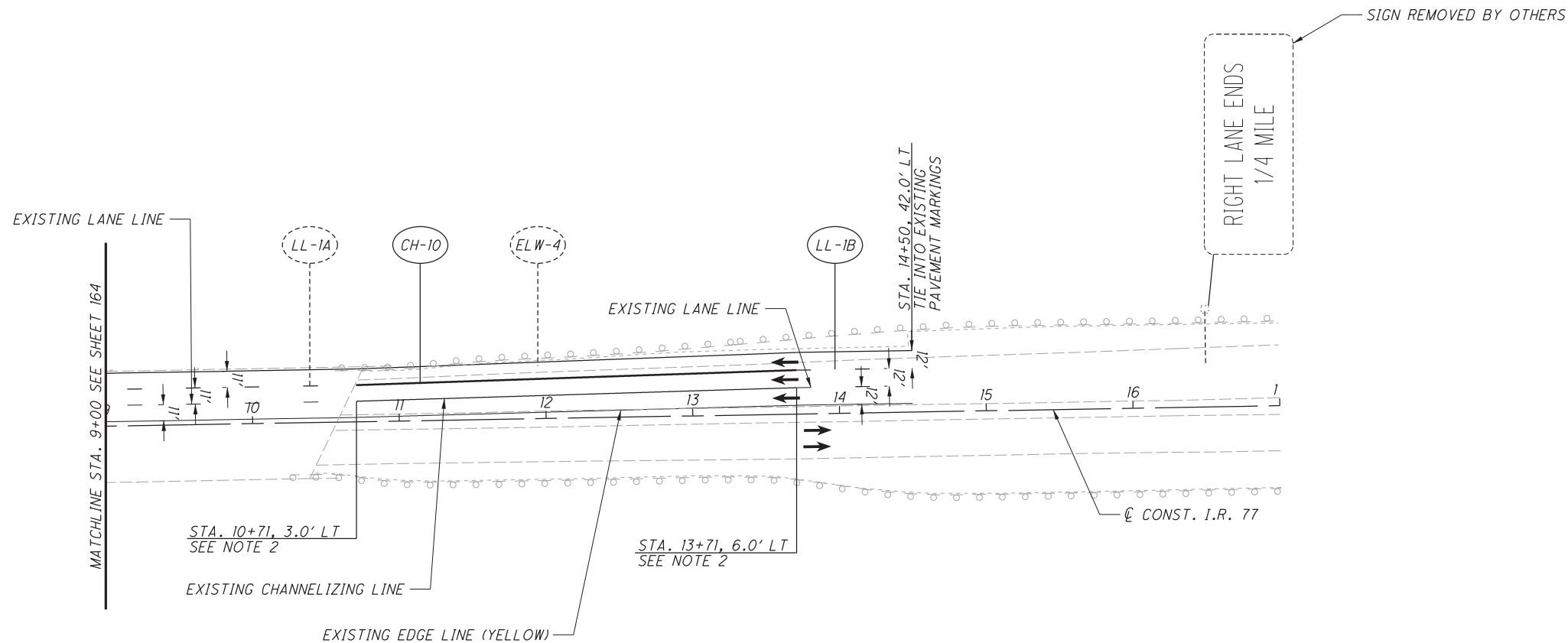
P:\82388_CCG6B\Design\Traffic\Sheets\82388_IP2202.dgn Sheet 11/16/2017 8:53:24 AM mlutes

LEGEND:

- | | | |
|---|--|----------------------------|
| (ELY) ITEM 646 - EDGE LINE, YELLOW, 6" | (CHV) ITEM 646 - CHEVRON MARKING, WHITE, 24" | (---) EX. SIGN TO REMAIN |
| (ELW) ITEM 646 - EDGE LINE, WHITE, 6" | (S) GROUND MOUNTED SIGN | (X) EX. SIGN TO BE REMOVED |
| (CH) ITEM 646 - CHANNELIZING LINE, WHITE, 12" | (OH) OVERHEAD MOUNTED SIGN | (□) PROPOSED SIGN |
| (LL) ITEM 646 - LANE LINE, WHITE, 6" | (SR) SIGN REMOVED | |
| (DL) ITEM 646 - DOTTED LINE, WHITE, 6" | | |

NOTES:

- THE STRIPING AND SIGNING PLAN SHOWN SHALL BE IMPLEMENTED IF CUY-77-14.35 IS COMPLETE.



CALCULATED
M.L.L.
CHECKED
S.W.C.

0 50 100
HORIZONTAL
SCALE IN FEET

TRAFFIC CONTROL PLAN - ALTERNATE
I.R. 77 - STA. 9+00 TO END WORK

RELEASED FOR CONSTRUCTION
2017-07-11.CCG6B.RFC Plans.pdf
07/12/2017 brian.link

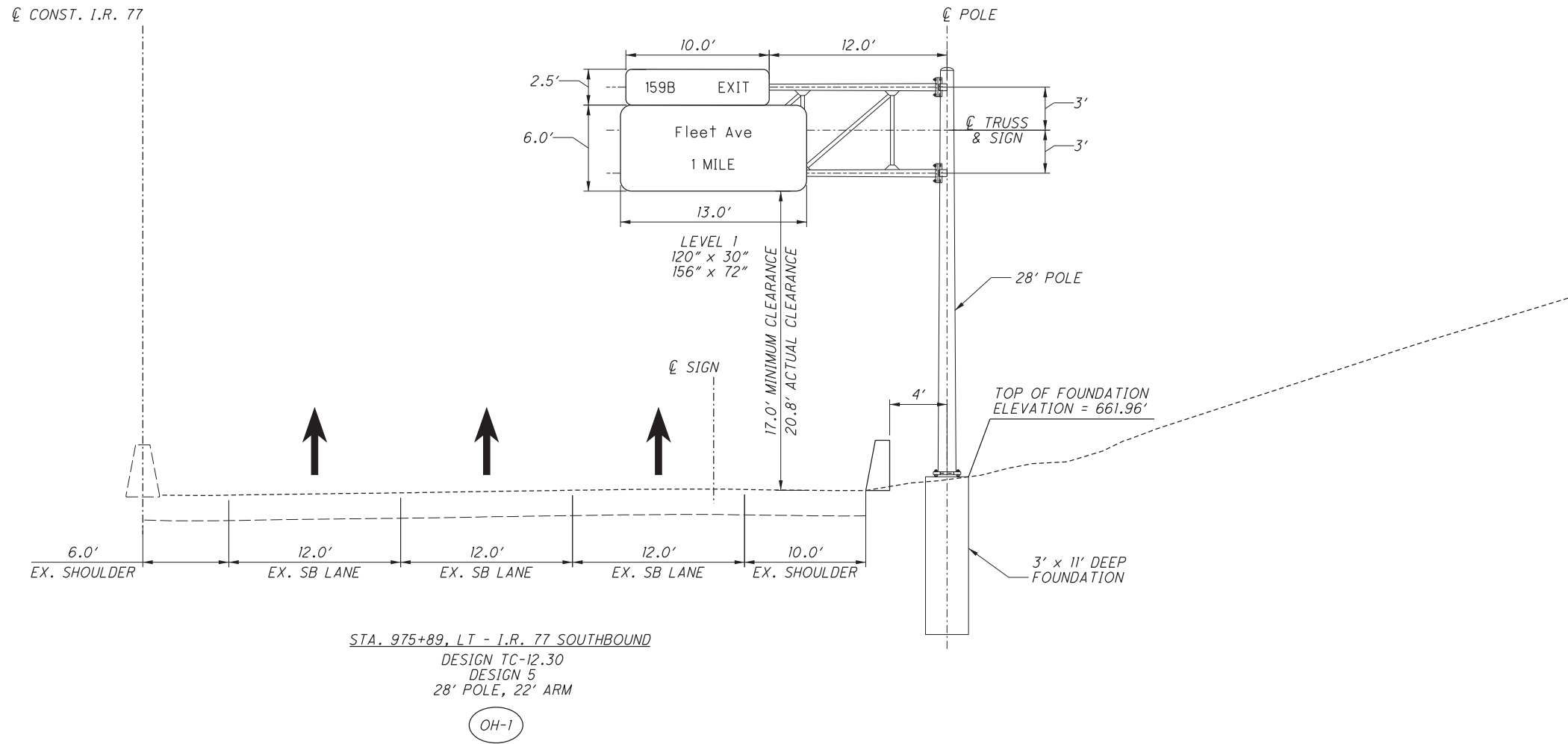
BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION

CUY-77-13.80

165
170

P:\82388_CCG6B\Design\Traffic\Sheets\82388_IP2203.dgn Sheet 7/10/2017 3:22:24 PM mlutes

P:\82388_CCG6B\Design\Traffic\Sheets\82388_IE2001.dgn Sheet 7/10/2017 3:22:24 PM mlutes



NOTES:

1. FOR PLAN VIEW LOCATION OF SIGN, SEE SHEET 157.

RELEASED FOR CONSTRUCTION
 2017-07-11.CCG6B.RFC Plans.pdf
 07/12/2017 brian.link

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION

ISSUE RECORD

CALCULATED
 MLL
 CHECKED
 SWC
 0 5 10
 2.5
 HORIZONTAL
 SCALE IN FEET

SIGN ELEVATION DETAIL
STA. 975+89

CUY-77-13.80

166
170

ITEM 625, LUMINAIRE, UNDERPASS, AS PER PLAN: LED, TYPE III

IN ADDITION TO THE REQUIREMENTS OF ODOT'S CONSTRUCTION AND MATERIALS SPECIFICATIONS, LUMINAIRES FOR UNDERPASS LIGHTING SHALL BE AS FOLLOWS:

IES DISTRIBUTION OF THE LUMINAIRE SHALL BE TYPE III. LUMINAIRES SHALL BE WALL-MOUNT, THE THRU-WIRING REQUIREMENT OF 725.11.F BEING WAIVED FOR THIS UNDERPASS APPLICATION; TOP-ENTRY SHALL BE THE WIRING METHOD USED, UNLESS SHOWN OTHERWISE IN THE PLAN DETAILS.

LUMINAIRE LED DRIVERS SHALL BE COMPATIBLE WITH 480VAC INPUT AS SHOWN IN THE PLANS, MODULAR, HAVE THE MANUFACTURER NAME AND PART NUMBER CLEARLY MARKED ON THE DRIVER ENCLOSURE, AND SHALL CARRY A MINIMUM 5-YEAR REPLACEMENT WARRANTY. EACH LUMINAIRE SHALL INCLUDE AN INTEGRAL LINE FUSE.

THE LED EMITTER ASSEMBLY SHALL CARRY A MINIMUM 5-YEAR REPLACEMENT WARRANTY, 10-YEAR STANDARD MANUFACTURER LIMITED WARRANTY. THE LUMINAIRE ENCLOSURE SHALL BE RATED IP65, MINIMUM, AS PER IEC 60529, AND SHALL CARRY A MINIMUM 5-YEAR REPLACEMENT WARRANTY WITH 10-YEAR STANDARD MANUFACTURER LIMITED WARRANTY.

A WRITTEN WARRANTY STATEMENT, SPARE PARTS LIST, AND MANUAL FROM THE LED SUPPLIER SHALL BE SUPPLIED TO THE ENGINEER BEFORE LUMINAIRES SHALL BE ACCEPTED BY ODOT.

SURGE PROTECTION SHALL BE 10KV/5KA MINIMUM, PER ANSI C62.41.2, AND THE MODULAR PACKAGE SHALL BE CLEARLY MARKED WITH THE MANUFACTURER AND PART NUMBER. COLOR TEMPERATURE SHALL BE 2250K +/- 25K TO CLOSELY MATCH THE EXISTING HIGH PRESSURE SODIUM LUMINAIRES.

HIGH VOLTAGE TEST

THE HIGH VOLTAGE TEST SHALL NOT BE PERFORMED ON ANY CIRCUITS CONSTRUCTED BY THIS PROJECT WHICH INCLUDE EXISTING DISTRIBUTION CABLE, SINCE THE TEST COULD DAMAGE THE PORTION OF THE COMPLETED CIRCUIT WHICH HAD BEEN IN SERVICE PRIOR TO THIS PROJECT.

625, SPECIAL, MAINTAIN EXISTING LIGHTING

EXISTING ROADWAYS WHICH ARE TO REMAIN OPEN TO TRAFFIC DURING CONSTRUCTION OF THIS PROJECT AND WHICH ARE LIGHTED SHALL HAVE THE LIGHTING MAINTAINED AS DESCRIBED HEREIN.

BEFORE ANY WORK IS STARTED IN THE IMMEDIATE VICINITY OF THE EXISTING LIGHTING CIRCUITS, REPRESENTATIVES OF ODOT, THE MAINTAINING AGENCY AND THE CONTRACTOR SHALL MAKE A VISUAL INSPECTION OF THE EXISTING ROADWAY LIGHTING CIRCUITS TO BE MAINTAINED. DURING THIS INSPECTION, A WRITTEN RECORD OF THE CONDITION OF EXISTING LIGHTING SHALL BE MADE BY ODOT'S REPRESENTATIVE. THIS WRITTEN REPORT SHALL NOTE INDIVIDUAL LUMINAIRES WHICH ARE NOT IN WORKING ORDER, INDIVIDUAL POLES WHICH ARE NOT STANDING, AND INDIVIDUAL CIRCUITS WHICH ARE NOT IN WORKING ORDER. THE COMPLETED REPORT SHALL BE SIGNED BY THE REPRESENTATIVES OF ODOT, THE MAINTAINING AGENCY AND THE CONTRACTOR.

IF, AS A RESULT OF THIS INSPECTION, IT IS DETERMINED THAT THE CONDITION OF THE EXISTING SYSTEM IS BELOW THAT REQUIRED FOR THE SAFETY OF THE TRAVELING PUBLIC, THEN THE MAINTAINING AGENCY SHALL MAKE THE REPAIRS NECESSARY TO RETURN THE SYSTEM TO AN ACCEPTABLE CONDITION. FOLLOWING THESE REPAIRS, THE SYSTEM SHALL AGAIN BE INSPECTED AND A REPORT SHALL BE MADE AND SIGNED AS OUTLINED HEREIN.

WHEN THE EXISTING SYSTEM IS IN AN ACCEPTABLE CONDITION, IT SHALL BE TURNED OVER TO THE CONTRACTOR WHO SHALL THEN BE REQUIRED TO MAINTAIN THE EXISTING LIGHTING TO THE CONDITION OUTLINED IN THIS REPORT WITH THE EXCEPTION OF KNOCKDOWNS DUE TO TRAFFIC ACCIDENTS.

REPLACEMENT OF KNOCKED DOWN UNITS SHALL BE DONE ONLY WHEN THE ENGINEER HAS DETERMINED THAT THE REPLACEMENT OF THE KNOCKED DOWN UNIT IS NECESSARY AND SHALL BE PAID SEPARATELY ON A UNIT BASIS.

BETTERMENTS SHALL BE COVERED IN ITEMS OF WORK PERTAINING TO THE CONSTRUCTION OF PERMANENT IMPROVEMENT.

WHEN THE SEQUENCE OF CONSTRUCTION ACTIVITIES REQUIRES, OR SHOULD THE CONTRACTOR DESIRE, THE REMOVAL OF THE EXISTING LIGHTING BEFORE THE NEW LIGHTING IS OPERATIONAL, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING TEMPORARY LIGHTING OF THIS PORTION OF THE ROADWAY.

PRIOR TO INSTALLING SUCH LIGHTING, THE CONTRACTOR SHALL PREPARE AND SUBMIT FOUR SETS OF THE TEMPORARY LIGHTING PLAN TO THE ENGINEER FOR REVIEW AND APPROVAL.

THIS PLAN SHALL SHOW LOCATIONS OF POLES, LENGTHS OF BRACKET ARMS, STYLES OF LUMINAIRES, MOUNTING HEIGHTS, WIRING METHODS AND OTHER PERTINENT INFORMATION. THE TEMPORARY LIGHTING SHALL PROVIDE AN AVERAGE INITIAL INTENSITY OF 0.9 FOOTCANDLES (13 LUX) WITH AN AVERAGE TO MINIMUM UNIFORMITY NOT TO EXCEED 3:1. MOUNTING HEIGHT OF TEMPORARY LUMINAIRES SHALL NOT BE LESS THAN 30 FEET (9 METERS), AND THE MINIMUM OVERHEAD CONDUCTOR CLEARANCE SHALL BE 20 FEET (6 METERS).

TEMPORARY OVERHEAD CONSTRUCTION SHALL NOT BE LESS THAN GRADE "A" FOR STRENGTH REQUIREMENTS AS DEFINED BY THE NATIONAL ELECTRIC SAFETY CODE. WOOD POLES WITH OVERHEAD WIRING MAY BE USED. HOWEVER, TEMPORARY LIGHTING SHALL MEET FEDERAL AND STATE SAFETY CRITERIA. IF BREAKAWAY POLES ARE USED TO MEET THESE CRITERIA, THEN UNDERGROUND WIRING SHALL BE USED. RECONDITIONED OR USED MATERIALS MAY BE FURNISHED FOR TEMPORARY LIGHTING.

ALL MATERIALS NECESSARY TO COMPLETE THE TEMPORARY LIGHTING SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR. WHEN NO LONGER NEEDED, THE TEMPORARY LIGHTING INSTALLATION SHALL BE REMOVED AND PROPERLY DISPOSED OF BY THE CONTRACTOR.

THE MAINTAINING AGENCY WILL PAY FOR ELECTRICAL ENERGY CONSUMED BY EXISTING POWER SERVICES AND BY PROPOSED PERMANENT POWER SERVICES AFTER ACCEPTANCE OF THE LIGHTING WORK. THE CONTRACTOR WILL PAY FOR ELECTRICAL ENERGY, INSTALLATION, REMOVAL AND MAINTENANCE OF ANY TEMPORARY POWER SERVICES.

GROUNDING AND BONDING

THE REQUIREMENTS OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS (C&MS) AND THE HL AND TC SERIES OF STANDARD CONSTRUCTION DRAWINGS ARE MODIFIED AS FOLLOWS:

1. ALL METALLIC PARTS CONTAINING ELECTRICAL CONDUCTORS SHALL BE PERMANENTLY JOINED TO FORM AN EFFECTIVE GROUND FAULT CURRENT PATH BACK TO THE GROUNDED CONDUCTOR IN THE POWER SERVICE DISCONNECT SWITCH.
 - A. PROVIDE AN EQUIPMENT GROUNDING CONDUCTOR IN METALLIC CONDUITS (725.04) IN ADDITION TO THE CONDUCTORS SPECIFIED AND BOND THE CONDUIT TO THIS GROUNDING CONDUCTOR.
2. CONDUITS.
 - A. THE 725.04 CONDUIT SHALL HAVE GROUNDING BUSHINGS INSTALLED AT ALL TERMINATION POINTS. THE BUSHING MATERIAL SHALL BE COMPATIBLE WITH GALVANIZED STEEL CONDUIT AND THE GROUNDING LUG MATERIAL SHALL BE COMPATIBLE FOR USE WITH COPPER WIRE. THREADED OR COMPRESSION TYPE BUSHINGS MAY BE USED.
 - B. THE 725.05 CONDUIT SHALL HAVE THE INSIDE AND OUTSIDE DIAMETERS OF THE CONDUIT DEBURRED AT ALL TERMINATION POINTS.
 - C. BOTH ENDS OF METALLIC CONDUIT SHALL BE BONDED TO THE EQUIPMENT GROUNDING CONDUCTOR.
 - D. METALLIC CONDUIT MAY BE BONDED TO METALLIC BOXES THROUGH THE USE OF CONDUIT FITTINGS UL APPROVED FOR THIS TYPE OF CONNECTION, WITH THE BOX BONDED TO THE EQUIPMENT GROUNDING CONDUCTOR.
3. WIRE FOR GROUNDING AND BONDING.
 - A. USE INSULATED, COPPER WIRE FOR THE EQUIPMENT GROUNDING CONDUCTOR. BONDING JUMPERS IN BOXES AND ENCLOSURES MAY BE BARE OR INSULATED COPPER WIRE. WIRE SIZE SHALL BE AS FOLLOWS:
 - I. USE 4 AWG BETWEEN THE POWER SERVICE AND SUPPORTS, POLES, PEDESTALS, CONTROLLER OR FLASHER CABINETS.
 - II. USE A MINIMUM 8 AWG BETWEEN LOOP DETECTOR PULL BOXES AND THE FIRST CONDUIT THAT REQUIRES A LARGER SIZE AS SPECIFIED IN 3.A.I ABOVE.
 - III. USE A MINIMUM 8 AWG BETWEEN THE "PREPARE TO STOP WHEN FLASHING" INSTALLATION (INCLUDING SUPPORT) AND THE FIRST CONDUIT THAT REQUIRES A LARGER SIZE AS SPECIFIED IN 3.A.I ABOVE.
 - IV. THE INSULATION SHALL BE GREEN OR GREEN WITH YELLOW STRIPE(S). FOR 4 AWG OR LARGER, INSULATION MAY ALSO BE BLACK WITH GREEN TAPE/LABELS INSTALLED AT ALL ACCESS POINTS.
 - B. IN A HIGHWAY LIGHTING SYSTEM, THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE THE SAME WIRE SIZE AS THE DUCT CABLE OR DISTRIBUTION CABLE CIRCUIT CONDUCTORS, WITH THE MINIMUM CONDUCTOR SIZE OF 4 AWG. BONDING JUMPERS WILL BE MINIMUM SIZE 4 AWG.
4. GROUND ROD.
 - A. A 3/4 INCH SCHEDULE 40 PVC CONDUIT WILL BE USED IN FOUNDATIONS AND CONCRETE WALLS FOR THE GROUNDING CONDUCTOR (GROUND WIRE) RACEWAY TO THE GROUND ROD. SHOULD METALLIC CONDUIT BE USED, BOTH ENDS OF THE CONDUIT SHALL BE BONDED TO THE GROUNDING CONDUCTOR.
 - B. THE TYPICAL GROUNDING CONDUCTOR (GROUND WIRE) SHALL BE 4 AWG INSULATED, COPPER.

RELEASED FOR CONSTRUCTION
2017-07-13.CCG6B.RFC Plans (Lighting).pdf
07/13/2017 brian.link

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION
ISSUE RECORD		

NOTES:
 1) INSTALL PROPOSED LOW MAST LIGHT POLES ON 10' DEEP FOUNDATION, PER HL-20.11. LOW MAST FIXTURE SHALL BE HOLOPHANE HMLD. TYPE V FIXTURES SHALL BE HMLD-09-4K-AH-G-AW. TYPE III FIXTURES SHALL BE HMLD-09-4K-AH-G-M.



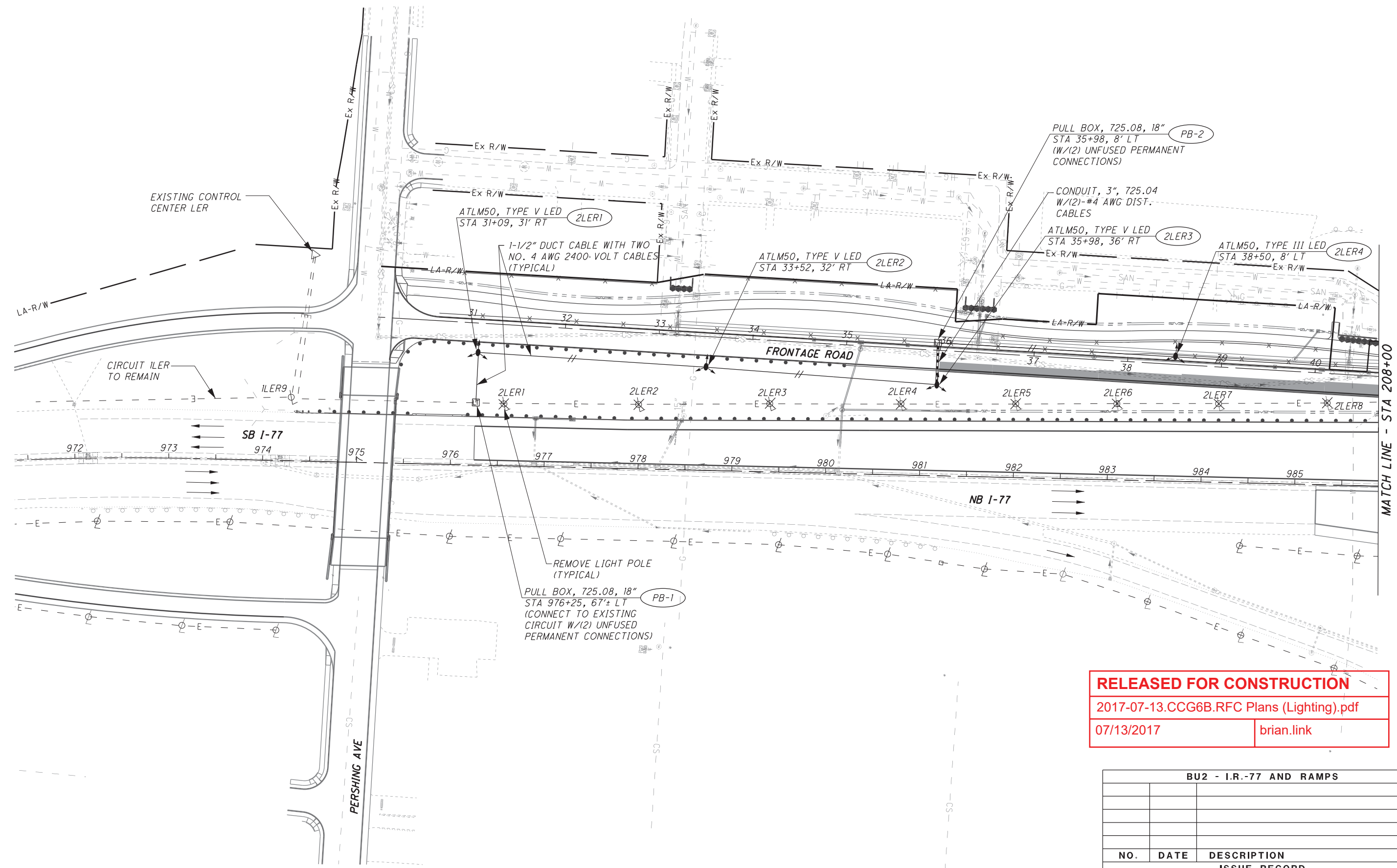
CALCULATED
 MJH
 CHECKED
 KAE

LIGHTING PLAN - I-77
 BEGIN PROJECT TO STA 208+00

CUY-77-13.80

168
170

P:\82388_CCG6B\Design\Lighting\Sheets\82388LP2001.dgn Sheet 7/13/2017 10:37:34 AM scorcoran



RELEASED FOR CONSTRUCTION
 2017-07-13.CCG6B.RFC Plans (Lighting).pdf
 07/13/2017 brian.link

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION
ISSUE RECORD		

NOTES:

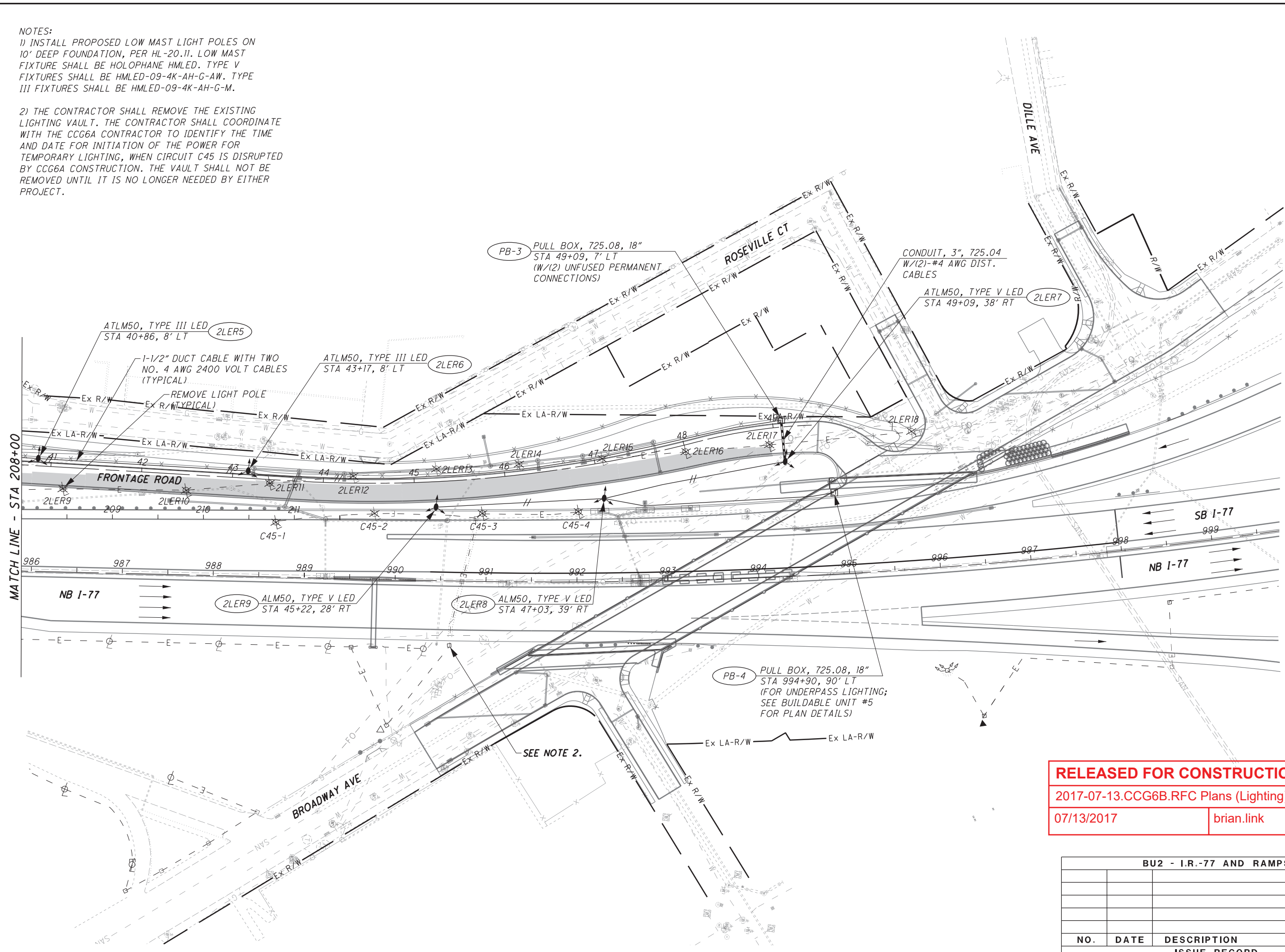
1) INSTALL PROPOSED LOW MAST LIGHT POLES ON 10' DEEP FOUNDATION, PER HL-20.11. LOW MAST FIXTURE SHALL BE HOLOPHANE HMLED. TYPE V FIXTURES SHALL BE HMLED-09-4K-AH-G-AW. TYPE III FIXTURES SHALL BE HMLED-09-4K-AH-G-M.

2) THE CONTRACTOR SHALL REMOVE THE EXISTING LIGHTING VAULT. THE CONTRACTOR SHALL COORDINATE WITH THE CCG6A CONTRACTOR TO IDENTIFY THE TIME AND DATE FOR INITIATION OF THE POWER FOR TEMPORARY LIGHTING, WHEN CIRCUIT C45 IS DISRUPTED BY CCG6A CONSTRUCTION. THE VAULT SHALL NOT BE REMOVED UNTIL IT IS NO LONGER NEEDED BY EITHER PROJECT.





 CALCULATED MJH
 CHECKED KAE



LIGHTING PLAN - I-77
 STA 208+00 TO END PROJECT

CUY-77-13.80

RELEASED FOR CONSTRUCTION

2017-07-13.CCG6B.RFC Plans (Lighting).pdf

07/13/2017 brian.link

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION
ISSUE RECORD		

169
170

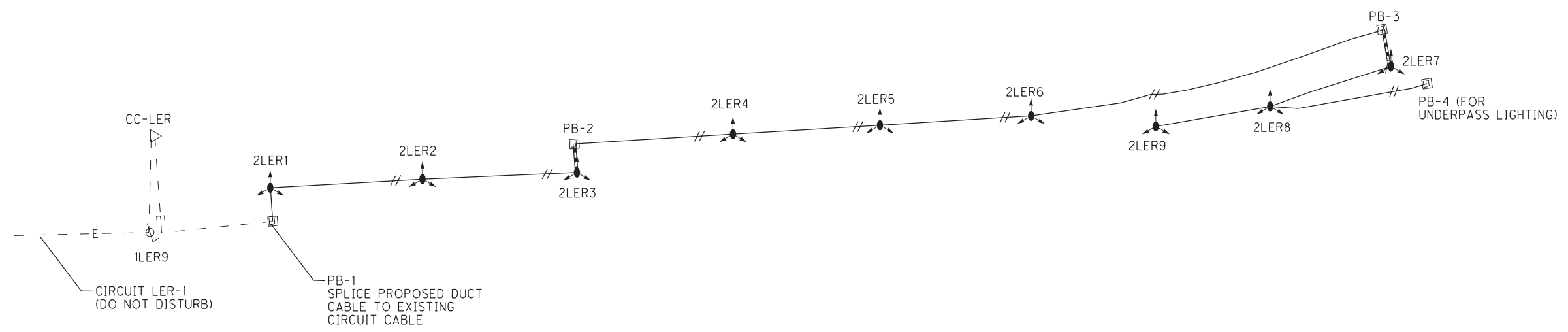
P:\82388_CCG6B\Design\Lighting\Sheets\82388LP2002.dgn Sheet 7/13/2017 10:37:38 AM scorcoran

CALCULATED
MJH
CHECKED
KAE

I-77 LIGHTING PLAN - CIRCUIT DIAGRAM

CUY-77-13.80

170
170



LEGEND

- ϕ EXISTING CONVENTIONAL LIGHT POLE
- LOW MAST LIGHT TOWER (ALL PROPOSED LOW MAST FIXTURES ARE 400W, LED)
- EXISTING LIGHTING CONTROL CENTER
- PULL BOX, 18"
- PROPOSED CONDUIT, 3"
- EXISTING LIGHTING CIRCUIT (TO REMAIN)
- PROPOSED DUCT CABLE, 2/C, #4 AWG

RELEASED FOR CONSTRUCTION
2017-07-13.CCG6B.RFC Plans (Lighting).pdf
07/13/2017 brian.link

BU2 - I.R.-77 AND RAMPS		
NO.	DATE	DESCRIPTION
ISSUE RECORD		

P:\B2388_CCG6B_Design\Lighting\Sheets\83838LD2001.dgn Sheet 7/13/2017 10:37:39 AM scorcoran