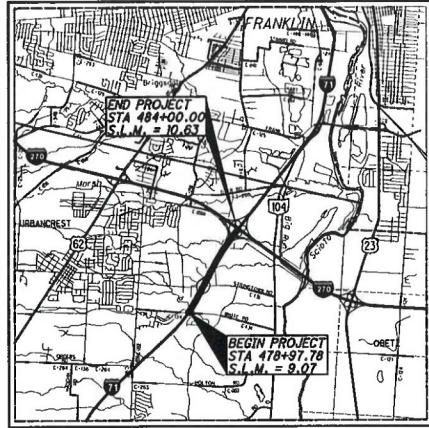


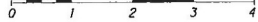
FRA-71-9.07
 200083 PID-92615
 Dist 6 3/12/2020



LOCATION MAP

LATITUDE: 39°53'06" LONGITUDE: 83°02'43"

SCALE IN MILES



PORTION TO BE IMPROVED	_____
INTERSTATE HIGHWAY	=====
FEDERAL ROUTES	=====
STATE ROUTES	=====
COUNTY & TOWNSHIP ROADS	-----
OTHER ROADS	-----

DESIGN DESIGNATION

CURRENT ADT (2019)	102,000
DESIGN YEAR ADT (2039)	112,000
DESIGN HOURLY VOLUME (2039)	11,000
DIRECTIONAL DISTRIBUTION	0.62
TRUCKS (24 HOUR B&C)	0.18
T _d	0.11
DESIGN SPEED	70 MPH
LEGAL SPEED	65 MPH
DESIGN FUNCTIONAL CLASSIFICATION: URBAN INTERSTATE	
NHS PROJECT	YES

DESIGN EXCEPTIONS

DESIGN FEATURES	APPROVED	SHEET NUMBERS
LANE WIDTH	02/12/2019	13

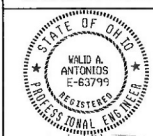
UNDERGROUND UTILITIES

Contact Two Working Days Before You Dig



OHIO811, 8-1-1, or 1-800-362-2764 (Non-members must be called directly)

ENGINEERS SEAL:



SIGNED: [Signature]
 DATE: 05-31-2019

STATE OF OHIO
 DEPARTMENT OF TRANSPORTATION

FRA-71-9.07

CITY OF COLUMBUS
 CITY OF GROVE CITY
 JACKSON TOWNSHIP
 FRANKLIN COUNTY

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PLAN PREPARED BY:



400 W. NATIONWIDE BLVD., SUITE 225, COLUMBUS, OH 43215

STANDARD CONSTRUCTION DRAWINGS										SUPPLEMENTAL SPECIFICATIONS		SPECIAL PROVISIONS	
BP-1.1	7/28/00	MCS-1.1	1/19/18	HL-30.22	1/17/14	MT-102.10	1/18/19	TC-52.20	7/20/18	800	10/18/19		
BP-2.1	7/17/15	MCS-2.1	1/19/18	HL-40.20	7/20/18	MT-102.30	10/16/15	TC-61.30	1/20/17	804	1/18/19		
BP-2.2	7/18/08	MCS-3.1	1/19/18	HL-60.11	7/21/17	MT-103.10	1/18/18	TC-65.10	1/17/14	808	1/18/19		
BP-2.5	7/19/13	MCS-3.2	1/18/13	HL-60.12	1/15/16	MT-104.10	10/16/15	TC-65.11	7/22/17	809	1/18/19		
BP-3.1	7/18/14	MCS-4.2	7/19/13	HL-60.21	7/20/18	MT-105.10	7/19/13	TC-71.10	1/18/18	821	4/20/12		
BP-5.1	7/20/18	MCS-4.3	1/18/13	HL-60.31	1/18/19	TC-7.65	7/20/18	TC-72.20	1/20/18	832	10/19/18		
BP-6.1	7/19/13	MCS-5.3	7/15/16	MT-95.30	4/19/19	TC-12.30	1/18/18	ITS-14.11	1/18/19				
BP-9.1	1/18/19	RM-4.3	7/18/14	MT-95.45	4/19/19	TC-21.10	7/21/17	ITS-14.50	7/20/18	875	1/18/19		
CB-2.3	1/15/16	RM-4.4	7/21/17	MT-98.10	1/20/17	TC-21.20	7/20/18	ITS-15.10	7/17/15	878	1/18/19		
CB-3.1	1/15/16	RM-4.5	7/21/17	MT-98.11	4/19/19	TC-21.50	7/15/16	ITS-18.00	1/18/19	902	12/31/12		
CB-3.3	1/15/16	RM-4.6	7/19/13	MT-98.20	4/19/19	TC-22.20	1/17/14	ITS-50.10	1/19/18	904	1/18/19		
CB-3.4	1/15/16	NBS-1-08	1/19/18	MT-98.21	7/18/14	TC-41.10	7/19/13	ITS-60.10	7/15/16	908	10/20/17		
HW-2.1	7/20/18	HL-10.11	7/20/18	MT-99.20	4/19/19	TC-41.15	10/18/13	ITS-76.10	1/18/19	921	4/20/12		
HW-2.2	7/20/18	HL-10.12	1/20/17	MT-101.60	1/20/17	TC-41.20	10/18/13						
I-2.1	1/15/16	HL-10.13	7/20/18	MT-101.70	7/20/18	TC-41.30	10/18/13						
MH-1.2	1/15/16	HL-20.11	4/21/17	MT-101.75	7/15/16	TC-42.20	10/18/13						
DM-1.1	7/21/17	HL-30.21	1/19/18	MT-101.90	7/21/17	TC-51.11	1/15/16						
DM-1.2	1/18/13	HL-30.11	7/18/15			TC-51.12	1/15/16						
DM-2.1	1/18/13	HL-30.21	1/17/14			TC-52.10	10/18/13						

PROJECT DESCRIPTION

THIS PROJECT CONSISTS OF THE RESURFACING AND FULL DEPTH WIDENING OF IR-71 NORTHBOUND IN ORDER TO EXTEND THE EXPRESS LANE FROM IR-270 TO SOUTH OF STRINGTOWN ROAD AND REMOVE THE NORTHBOUND WEAVE BETWEEN THE TWO INTERCHANGES. WORK INCLUDES RECONSTRUCTION OF RAMPS, ROADWAY, MEDIAN BARRIERS, DRAINAGE, LIGHTING, AND NOISEWALLS.

PROJECT EARTH DISTURBED AREA: 15.55 ACRES
 ESTIMATED CONTRACTOR EARTH DISTURBED AREA: 2.96 ACRES
 NOTICE OF INTENT EARTH DISTURBED AREA: 18.51 ACRES

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.

2019 SPECIFICATIONS

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

MAINTENANCE OF TRAFFIC ENDORSEMENT

I HEREBY APPROVED THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

APPROVED: [Signature]
 DATE 11/20/19 DISTRICT DEPUTY DIRECTOR

APPROVED: [Signature]
 DATE 12/1/19 DIRECTOR, DEPARTMENT OF TRANSPORTATION

FEDERAL PROJECT NO. E151(115)

PID NO. 92615

CONSTRUCTION PROJECT NO.

RAILROAD INVOLVEMENT NONE

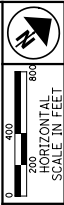
FRA-71-9.07

1/264

3478-E

Contract Proposal Available @
 www.contracts.dot.state.oh.us/home

HW-2.1



SCHEMATIC PLAN

FRA-71-9.07

CURVE DATA RAMP C

CURVE #3
 P.I. Sta. 434+99.72
 $\Delta = 38^\circ 15' 14"$ (RT)
 $Dc = 6^\circ 30' 00"$
 $R = 881.47'$
 $Ls = 200.00'$
 $\theta_s = 6^\circ 30' 00"$
 $LT = 133.42'$
 $ST = 66.75'$
 $Lc = 488.52'$
 $Ts = 403.26'$
 $Es = 52.51'$
 $\theta_{max} = 0.057$
 PC Sta. 431+90.97
 CS Sta. 436+79.49
 ST Sta. 438+79.49

CURVE DATA RAMP D

CURVE #4
 P.I. Sta. 486+85.14
 $\Delta = 2^\circ 46' 36"$ (LT)
 $Dc = 1^\circ 00' 00"$
 $R = 5,729.58'$
 $T = 138.86'$
 $L = 277.67'$
 $E = 1.68'$
 $\theta_{max} = 0.033$
 PC Sta. 485+46.28
 PRC Sta. 488+23.95

CURVE #5
 P.I. Sta. 490+86.62
 $\Delta = 2^\circ 16' 34"$ (RT)
 $Dc = 0^\circ 26' 00"$
 $R = 13,222.11'$
 $T = 262.68'$
 $L = 525.29'$
 $E = 2.61'$
 $\theta_{max} = 0.016$
 PC Sta. 488+23.95
 PCC Sta. 493+49.23

CURVE #6
 P.I. Sta. 494+99.15
 $\Delta = 22^\circ 12' 21"$ (RT)
 $Dc = 7^\circ 30' 00"$
 $R = 763.94'$
 $T = 149.92'$
 $L = 296.08'$
 $E = 14.57'$
 $\theta_{max} = 0.059$
 PC Sta. 493+49.23
 PT Sta. 496+45.31

CURVE DATA RAMP H

CURVE #7
 P.I. Sta. 459+82.16
 $\Delta = 8^\circ 52' 16"$ (RT)
 $Dc = 0^\circ 40' 00"$
 $R = 8,594.37'$
 $T = 666.66'$
 $L = 1,330.66'$
 $E = 25.82'$
 $\theta_{max} = 0.019$
 PC Sta. 453+15.50
 PCC Sta. 466+46.15

CURVE #8
 P.I. Sta. 467+96.62
 $\Delta = 8^\circ 00' 46"$ (RT)
 $Dc = 2^\circ 00' 00"$
 $R = 2,864.79'$
 $T = 150.46'$
 $L = 300.64'$
 $E = 26.70'$
 $\theta_{max} = 0.035$
 PC Sta. 466+46.15
 PCC Sta. 469+46.80

CURVE #9
 P.I. Sta. 472+81.45
 $\Delta = 18^\circ 15' 00"$ (RT)
 $Dc = 2^\circ 45' 00"$
 $R = 2,083.48'$
 $T = 334.65'$
 $L = 663.63'$
 $E = 26.70'$
 $\theta_{max} = 0.042$
 PC Sta. 469+46.80
 PCC Sta. 476+10.43

CURVE #10
 P.I. Sta. 478+29.80
 $\Delta = 22^\circ 43' 52"$ (RT)
 $Dc = 5^\circ 15' 00"$
 $R = 1,091.35'$
 $T = 219.37'$
 $L = 432.97'$
 $E = 21.83'$
 $\theta_{max} = 0.057$
 PC Sta. 476+10.43
 PCC Sta. 480+43.41

CURVE #11
 P.I. Sta. 481+21.97
 $\Delta = 7^\circ 03' 42"$ (RT)
 $Dc = 4^\circ 30' 00"$
 $R = 1,273.24'$
 $T = 78.56'$
 $L = 156.93'$
 $E = 2.42'$
 $\theta_{max} = X$
 PC Sta. 480+43.41
 PT Sta. 482+00.33

CURVE DATA RAMP J

CURVE #12
 P.I. Sta. 88+31.66
 $\Delta = 5^\circ 43' 37"$ (LT)
 $Dc = 1^\circ 00' 15"$
 $R = 5,705.58'$
 $T = 285.38'$
 $L = 570.29'$
 $E = 7.13'$
 $\theta_{max} = 0.033$
 PC Sta. 85+46.28
 PCC Sta. 91+16.57

CURVE #13
 P.I. Sta. 91+89.53
 $\Delta = 0^\circ 42' 06"$ (LT)
 $Dc = 0^\circ 28' 51"$
 $R = 11,916.51'$
 $T = 72.96'$
 $L = 145.92'$
 $E = 0.22'$
 $\theta_{max} = 0.018$
 PC Sta. 91+16.57
 PT Sta. 92+62.49

CURVE DATA RAMP K

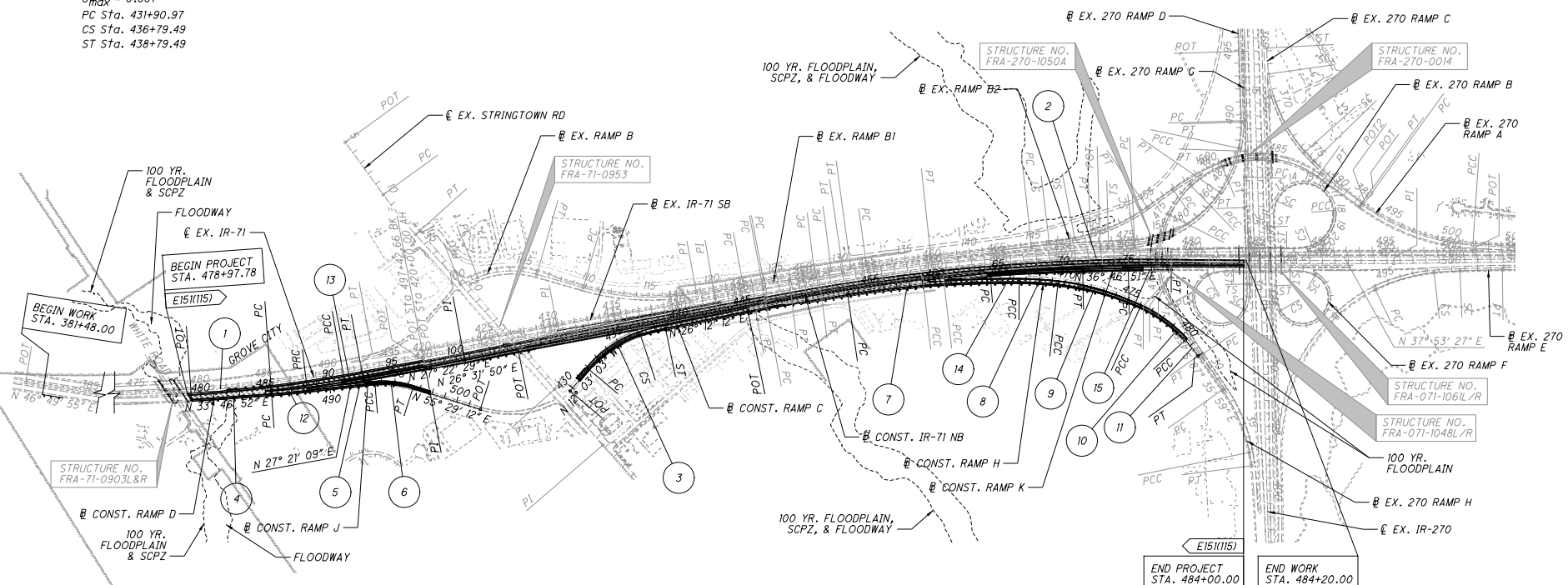
CURVE #14
 P.I. Sta. 67+92.03
 $\Delta = 3^\circ 34' 44"$ (RT)
 $Dc = 0^\circ 30' 00"$
 $R = 11,459.16'$
 $T = 358.00'$
 $L = 715.77'$
 $E = 5.59'$
 $\theta_{max} = NC$
 PC Sta. 64+34.03
 PT Sta. 71+49.79

CURVE #15
 P.I. Sta. 76+67.41
 $\Delta = 1^\circ 06' 35"$ (RT)
 $Dc = 0^\circ 20' 07"$
 $R = 17,088.74'$
 $T = 165.51'$
 $L = 331.02'$
 $E = 0.80'$
 $\theta_{max} = NC$
 PC Sta. 75+01.89
 PT Sta. 78+32.91

CURVE DATA EXISTING IR-71

CURVE #1
 P.I. Sta. 472+61.69
 $\Delta = 19^\circ 28' 45"$ (LT)
 $Dc = 0^\circ 29' 02"$
 $R = 11,843.51'$
 $T = 2,032.88'$
 $L = 4,026.53'$
 $E = 173.20'$
 $\theta_{max} = 0.018$
 PC Sta. 452+28.81
 PT Sta. 492+55.33

CURVE #2
 P.I. Sta. 462+63.86
 $\Delta = 10^\circ 32' 30"$ (RT)
 $Dc = 0^\circ 20' 00"$
 $R = 17,188.74'$
 $T = 1,585.73'$
 $L = 3,162.50'$
 $E = 72.99'$
 $\theta_{max} = NC$
 PC Sta. 446+78.13
 PC Sta. 587+51.41





PRIMARY PROJECT CONTROL INFORMATION				
POINT NUMBER	GRID COORDINATES U.S. SURVEY FEET		ORTHOMETRIC HEIGHT (ELEVATION)	DESCRIPTION
	NORTHING	EASTING		
CP1	681129.7378	1812102.8864	782.9300	CONCRETE MONUMENT WITH ALUMINUM DISK STAMPED "PRIMARY PROJECT CONTROL"
CP2	685958.4642	1815048.0823	771.1420	CONCRETE MONUMENT WITH ALUMINUM DISK STAMPED "PRIMARY PROJECT CONTROL"
CP3	690217.0867	1817896.8898	744.2770	CONCRETE MONUMENT WITH ALUMINUM DISK STAMPED "PRIMARY PROJECT CONTROL"
CP4	694584.2917	1821251.5763	705.7910	CONCRETE MONUMENT WITH ALUMINUM DISK STAMPED "PRIMARY PROJECT CONTROL"
CP5	692629.5737	1811828.3446	774.6350	CONCRETE MONUMENT WITH ALUMINUM DISK STAMPED "PRIMARY PROJECT CONTROL"
CP6	688262.8526	1818985.5178	715.6070	CONCRETE MONUMENT WITH ALUMINUM DISK STAMPED "PRIMARY PROJECT CONTROL"

...:\nortbound\92615_08101.dgn 5/29/2019 8:05:18 AM mswmht


SYMBOLS

PROPOSED CONVENTIONAL LIGHT POLE AND LUMINAIRE, AT20B40 (T-BASE)


 PROPOSED PULL BOX OR JUNCTION BOX OF TYPE AND SIZE NOTED ON THE PLANS.


 EXISTING POWER SERVICE

 QUANTITY REFERENCE NUMBER


 CODED NOTE REFERENCE

EX LIGHT POLE


 EXISTING TOWER LIGHT


 EXISTING LUMINAIRES, SUPPORT RING, TOWER AND FOUNDATION TO BE REMOVED.


 EXISTING LUMINAIRE, BRACKET ARM, POLE AND FOUNDATION TO BE REMOVED.

 PROPOSED GROUND MOUNTED 6-400 WATT HPS SYMMETRIC MEDIUM CUT-OFF HIGH MAST LUMINAIRES ON 100' LIGHT TOWER, ANCHOR BOLTS, AND FOUNDATION, PER HL-10.31, AND HL-20.21, WITH WIRING PER HL-60.21.

 CONDUIT JACKED OR DRILLED, 725.04, 3"

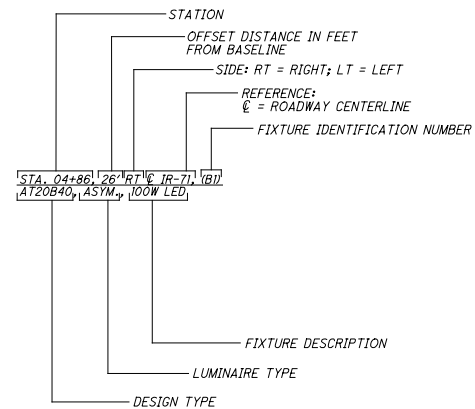
 EXISTING UTILITY POLE

 WOOD POLE FOR POWER SERVICE

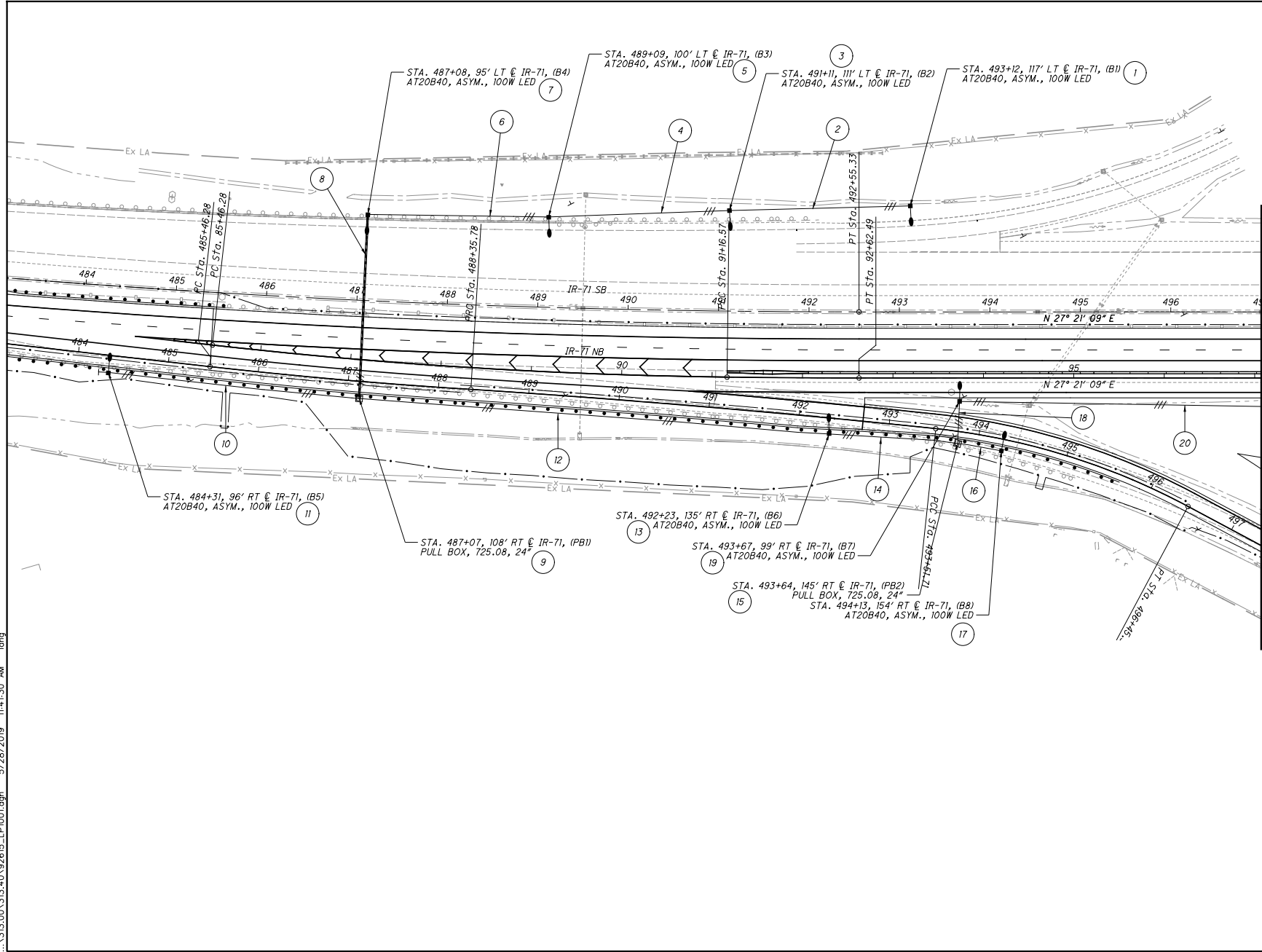
 DUCT CABLE (NO. AND SIZE AS INDICATED)

ABBREVIATIONS

#	NUMBER
AASHTO	AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS
AWG	AMERICAN WIRE GAUGE
BFG	BELOW FINISHED GRADE
C	CONDUIT
CONC	CONCRETE
DIA	DIAMETER
EX	EXISTING
IES	ILLUMINATING ENGINEERING SOCIETY
KV	KILOVOLT
5 KV	5000 VOLT
NEMA	NATIONAL ELECTRIC MANUFACTURERS ASSOCIATION
NO	NUMBER
PVC	POLYVINYL CHLORIDE
RGS	RIGID GALVANIZED STEEL
SQ	SQUARE
STA	STATION
TYP	TYPICAL
V	VOLT



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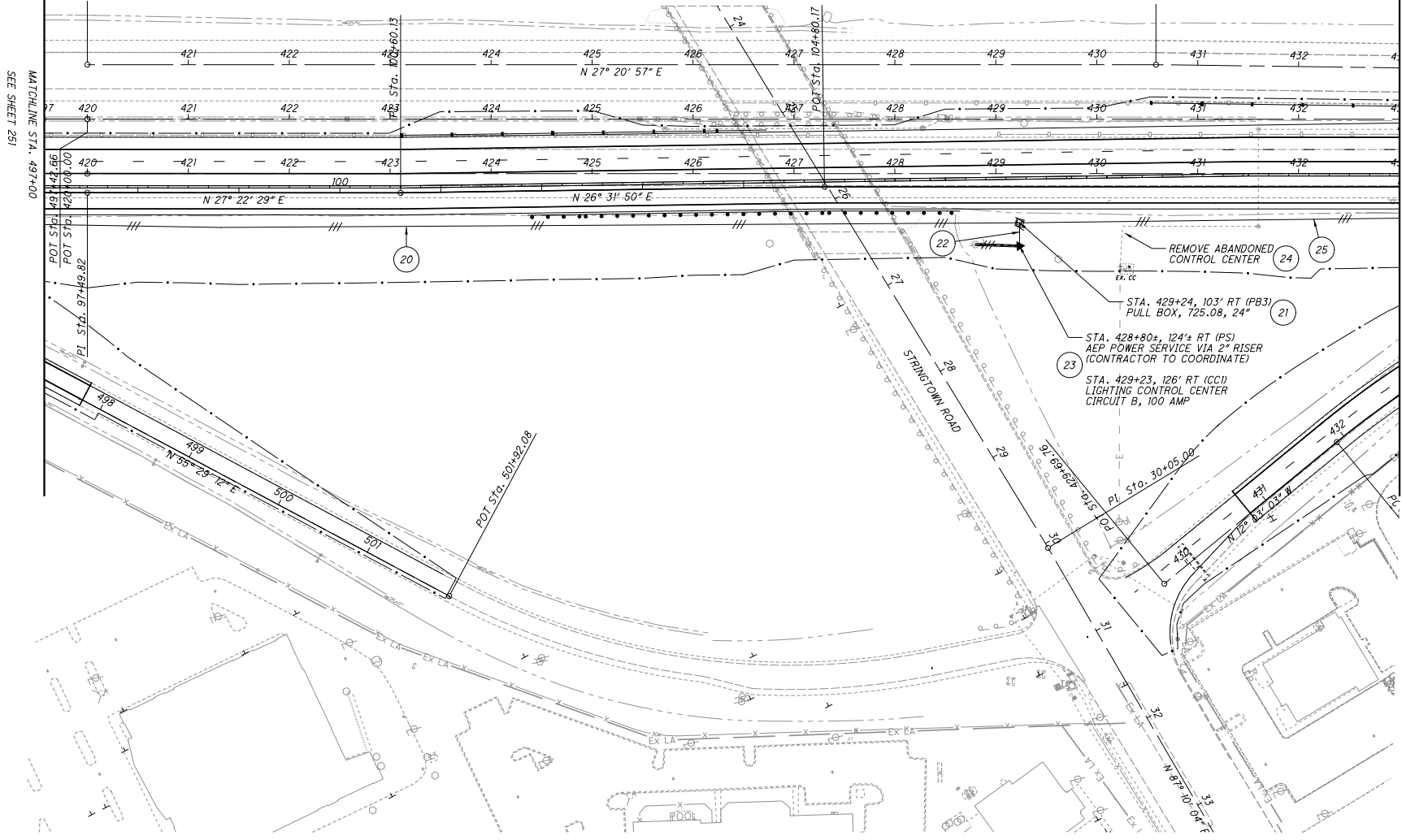
MATCHLINE STA. 497+00
SEE SHEET 252



CALCULATED
CHECKED

PARTIAL INTERCHANGE LIGHTING PLAN
IR-71 NB EXIT GORE TO STRINGTOWN ROAD

FRA-71-9.07



SEE SHEET 251

MATCHLINE STA. 497+00

MATCHLINE STA. 433+00

SEE SHEET 253

CALCULATED
CHECKED

0 50 100
HORIZONTAL
SCALE IN FEET

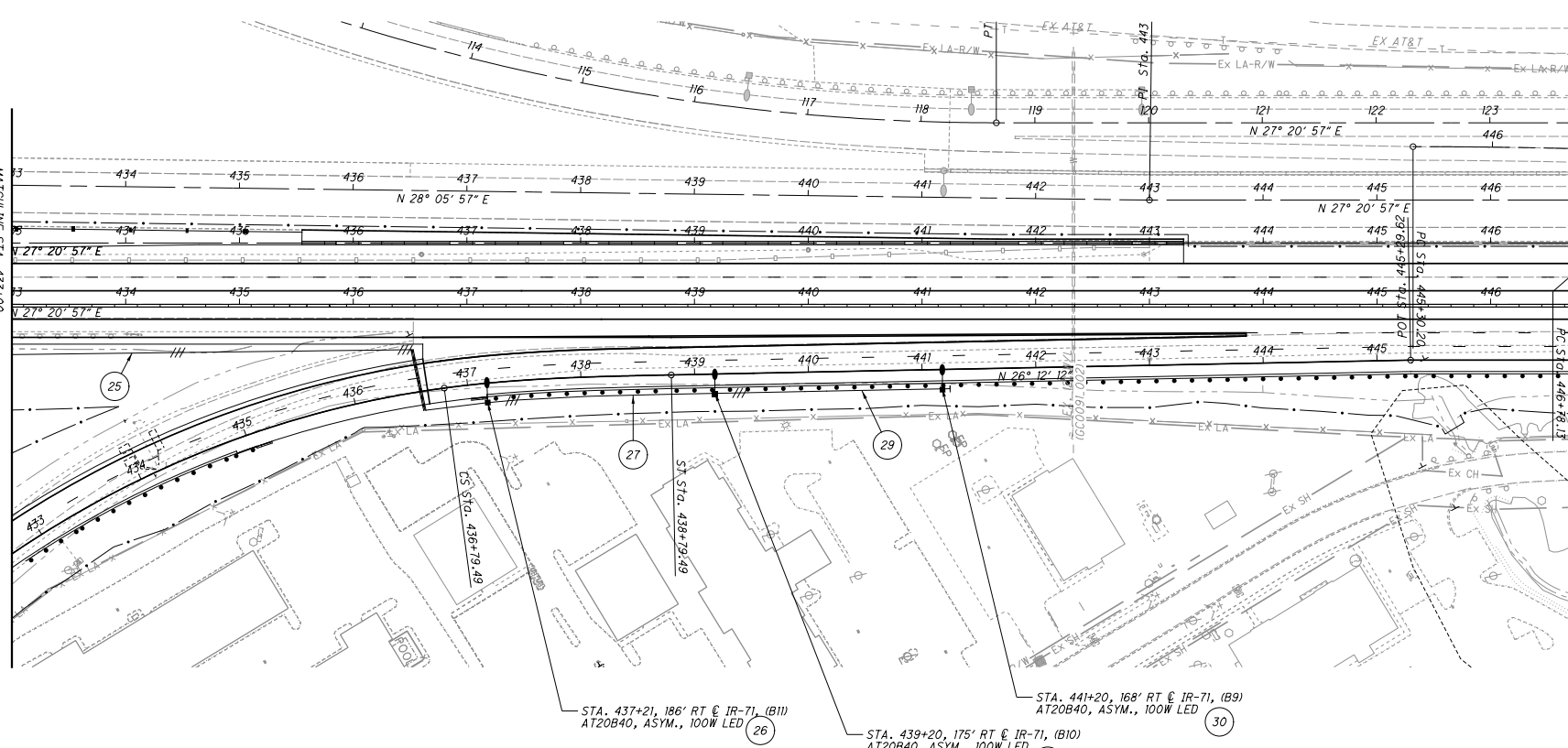
**PARTIAL INTERCHANGE LIGHTING PLAN
IR-71 NB EXIT TO IR-71 NB ENTRANCE**

FRA-71-9.07

252
264

...313.00\313-01-92615_LP1003.dgn 5/28/2019 11:41:36 AM long

MATCHLINE STA. 433+00
SEE SHEET 252



STA. 437+21, 186' RT @ IR-71, (B11)
AT20B40, ASYM., 100W LED (26)

STA. 439+20, 175' RT @ IR-71, (B10)
AT20B40, ASYM., 100W LED (28)

STA. 441+20, 168' RT @ IR-71, (B9)
AT20B40, ASYM., 100W LED (30)

CALCULATED
CHECKED

0 50 100
HORIZONTAL
SCALE IN FEET

PARTIAL INTERCHANGE LIGHTING PLAN
STRINGTOWN ROAD TO IR-71 NB

FRA-71-9.07

253
264