A-2022-3033069

NORFOLK SOUTHERN

DRAWINGS FOR CONSTRUCTION OF BR0028818 BRIDGE PT344.91 WASHINGTON AVENUE

IN ALLEGHENY COUNTY

FROM STA 5+00.00 TO STA 10+50.00 LENGTH 376.00 FT 0.071 MI

HORIZONTAL
SCALE: 1"=25' 25' 0 25' 50'
DO NOT SCALE THIS DRAWING FOR DIMENSIONS NOT GIVEN

VERTICAL
SCALE: 1"=5' 5' 0 5' 10'
DO NOT SCALE THIS DRAWING FOR DIMENSIONS NOT GIVEN

PUC APPLICATION DOCKET NUMBER A-2022-3033069

CERTIFIED CORRECT PLANS
Will N. ... PE
Engineer
Approved by Bureau of Technical Utility Services
PA PUBLIC UTILITY COMMISSION
ATTEST
Secretary
Matthew L. Homsher

DESIGN DESIGNATION

HIGHWAY CLASSIFICATION	- MINOR COLLECTOR
HIGHWAY TYPOLOGY	- NEIGHBORHOOD COLLECTOR, TOWN/VILLAGE NEIGHBORHOOD
DESIGN SPEED	- 25 MPH
TRAVEL LANES	- 2 - 10'-0" LANES
SHOULDER	- 2 - 5'-0"
PARKING LANE	- 8'-0" LT AND RT

TRAFFIC DATA

CURRENT YEAR ADT	- 4000 (2024)
DESIGN YEAR ADT	- 4000 (2044)
DHV	- 400
D	- 55%
T	- 5%

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL ENGINEER CYNTHIA A. BARTUS PE040461E

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL ENGINEER STEPHEN J. KRAMER 039885-E

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL ENGINEER RICHARD M SCHOEDEL PE07529

Michael Baker INTERNATIONAL
AIRSIDE BUSINESS PARK
100 AIRSIDE DRIVE
MOON TOWNSHIP, PA 15108
Phone: (412) 269-6300

NORFOLK SOUTHERN RAILWAY COMPANY
ENGINEERING DEPARTMENT
PITTSBURGH
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

REV	BY	DATE	DESCRIPTION

DIVISION: SWISSVALE, PENNSYLVANIA
SUBJ: BR0028818 BRIDGE PT344.91 WASHINGTON AVENUE
TITLE SHEET

DSN JAH	PO No. D2122	WBS 1290818-0H77	SHEET POST PT-344.91		
DWN WRB	FILE No. BR0028818	DRAWING NUMBER PT-344.91 24 01			
CK CAB	DATE 6/12/2024				

CADD FILE: 01 NS_Washington_Ave_01.dgn

SHEET NO. 1 OF 34

LIST OF PUBLIC UTILITIES

LEGEND	UTILITY COMPANY	REPRESENTATIVE	EMAIL	TELEPHONE
FOU LUMEN	LUMEN (FORMERLY CENTURY LINK, LEVEL 3 AND/OR QWEST COMMUNICATIONS)	PAUL ERICKSON	paul.erickson@lumen.com	CELL: 717-443-9545 OFC: 717-516-7557
E E	DUQUESNE LIGHT COMPANY	JIM RUNATZ	jrunatz@duqlight.com	CELL: 412-855-9950 OFC: 412-393-6411
G G	PEOPLES GAS COMPANY (FORMERLY EQUITABLE GAS COMPANY)	GARY BAIRD	Gbaird@lsse.com	724-837-1057 X104
CTV CATV	COMCAST CABLE COMMUNICATIONS, INC	JERRY FREEMAN	Jerry_freeman@cable.comcast.com	412-999-0590
S/L	BOROUGH OF SWISSVALE	GREG BACHY	gbachy@swissvaleborough.com	412-271-0350
FOU T-CUBED	T CUBED (WILLIAMS TELECOM)	NEAL BROWN	Neal.Brown@nscorp.com	404-529-1349
T T	VERIZON PENNSYLVANIA, INC.	GARY REDONDO	Gary.Redondo@Verizon.com	412-237-2293
W W	WILKINSBURG PENN JOINT WATER AUTHORITY	BRIAN BIANCHI	bbianchi@wpjwa.com	412-473-3470

THE PA ONE CALL NOTIFICATIONS PERFORMED DURING PROJECT DEVELOPMENT ARE AS FOLLOWS:

PRELIMINARY DESIGN SERIAL NO 20222372774 ON OCTOBER 24, 2022 FOR BOROUGH OF SWISSVALE, ALLEGHENY COUNTY PENNSYLVANIA

FINAL DESIGN SERIAL NO _____ ON _____ FOR BOROUGH OF SWISSVALE, ALLEGHENY COUNTY PENNSYLVANIA

RECORD OF EXISTING TYPES OF ROADWAY PAVEMENT

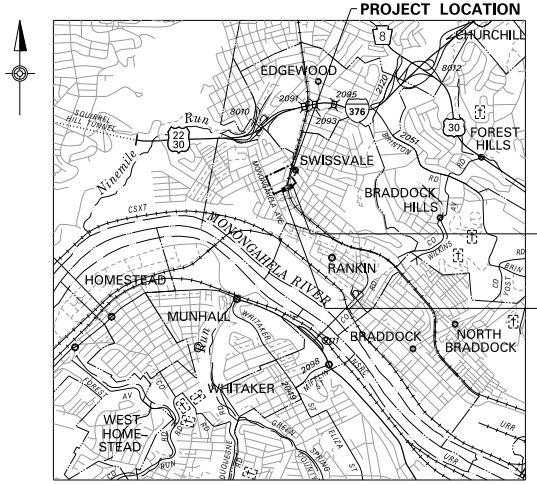
WASHINGTON AVENUE

LIMITS OF WORK STA 5+00.00 — 50' 4" ASPHALT ON 4" BRICK

LIMITS OF WORK STA 10+50.00 — 50' 4" ASPHALT ON 4" BRICK

NOTE:
THE DEPTHS OF MATERIAL SHOWN ARE FOR DESIGN PURPOSES ONLY. ANY RISK OF UNANTICIPATED COSTS ASSOCIATED WITH DIFFERENCES BETWEEN THE LISTED DEPTHS AND THE ACTUAL DEPTHS SHALL BE ACCEPTED BY THE CONTRACTOR.

PROJECT LOCATION



LIMIT OF WORK
STA 10+50.00
WASHINGTON AVENUE
BOROUGH OF SWISSVALE
ALLEGHENY COUNTY

LIMIT OF WORK
STA 5+00.00
WASHINGTON AVENUE
BOROUGH OF SWISSVALE
ALLEGHENY COUNTY

LOCATION MAP

SCALE
0 0.25 0.5 MILE

LEGEND
- STATE HIGHWAY
- CITY/BOROUGH STREET
- RAILROAD
- PROJECT
- DETOUR ROUTE
- 376 INTERSTATE ROUTE
- 30 US TRAFFIC ROUTE
- 837 PA TRAFFIC ROUTE

TABULATION OF OVERALL LENGTH

STA 5+00.00 TO STA 10+50.00 = 550.00 FT = 0.104 MI

TABULATION OF CONSTRUCTION LENGTH

STA 5+75.00 TO STA 9+51.00 = 376.00 FT = 0.071 MI

LIST OF STATION EQUALITIES

NONE

DETAILS, OTHER THAN THOSE INDICATED, ARE ON THE FOLLOWING PENNDOT STANDARD DRAWINGS:

RC-10M	JUN 1, 2010	TC-8600	JUN 13, 2013
RC-11M	JUN 1, 2010	TC-8700C	JUN 13, 2013
RC-12M	NOV 1, 2022	TC-8702B	JUN 13, 2013
RC-13M	JUN 1, 2010	TC-8716	JUN 13, 2013
RC-15M	NOV 1, 2022	TC-8717	JUN 13, 2013
RC-20M	NOV 1, 2022		
RC-23M	FEB 8, 2019	BC-701M	NOV 23, 2022
RC-24M	FEB 19, 2021	BC-721M	FEB 19, 2021
RC-27M	NOV 30, 2021	BC-722M	FEB 19, 2021
RC-28M	SEP 1, 2023	BC-726M	JAN 31, 2019
RC-30M	FEB 27, 2023	BC-732M	NOV 23, 2022
RC-58M	SEP 1, 2023	BC-734M	FEB 19, 2021
RC-64M	FEB 19, 2021	BC-735M	SEP 30, 2016
RC-65M	DEC 17, 2019	BC-736M	NOV 23, 2022
RC-67M	FEB 19, 2021	BC-751M	JAN 31, 2019
RC-70M	FEB 8, 2019	BC-752M	NOV 23, 2022
RC-72M	FEB 8, 2019	BC-753M	JAN 31, 2019
RC-77M	DEC 17, 2019	BC-755M	JAN 31, 2019
RC-80M	NOV 1, 2022	BC-767M	NOV 23, 2022
RC-81M	JUN 1, 2010	BC-788M	NOV 23, 2022
RC-82M	JUN 1, 2010		
RC-84M	JUN 1, 2010		

TABULATION OF PROJECT COORDINATES

BASED ON THE PENNSYLVANIA STATE PLANE COORDINATE SYSTEM (SOUTH ZONE 3702)

ROUTE	STATION	POINT	COORDINATES NORTH	COORDINATES EAST	BEARING
WASHINGTON AVENUE SURVEY & CONSTR ℄	5+00.00	POT	403235.6096	1373303.2738	
	6+74.53	PC	403305.5718	1373463.1652	N 66°22'04" E
	6+87.37	PI	403310.7214	1373474.9341	
	7+00.22	PT	403315.9716	1373486.6585	N 65°52'37" E
	8+98.76	PC	403397.1123	1373667.8559	
	9+24.63	PI	403407.6888	1373691.4745	
	9+50.03	PT	403425.4042	1373710.3388	N 46°47'56" E
	10+50.00	POT	403493.8372	1373783.2100	
PALMER STREET SOUTH SURVEY & CONSTR ℄	20+00.00	POT	403107.6670	1373504.3372	
	20+99.95	PC	403206.3558	1373488.5310	N 09°05'58" W
	21+25.45	PI	403231.5366	1373484.4980	
	21+50.68	PT	403254.8995	1373474.2753	N 23°37'56" W
	22+01.55	POT	403301.5092	1373453.8807	
PALMER STREET NORTH SURVEY & CONSTR ℄	30+00.00	PC	403311.5313	1373476.6943	N 04°41'26" W
	31+00.17	PI	403411.3638	1373468.5031	
	32+00.00	PT	403511.3517	1373474.5073	N 03°26'11" E
WAVERLY STREET SURVEY & CONSTR ℄	50+00.00	POT	403183.7864	1373614.5784	
	50+30.88	PC	403213.9666	1373608.0235	N 12°15'14" W
	50+78.44	PI	403260.4387	1373597.9301	
	51+25.86	PCC	403307.8275	1373593.9513	N 04°47'58" W
	51+71.03	PI	403352.8378	1373590.1722	
	52+16.18	PCC	403397.9696	1373588.3506	N 02°18'41" W
	52+37.29	PI	403419.0566	1373587.4994	
	52+58.37	PT	403440.1451	1373588.3120	N 02°12'24" E
	53+00.00	POT	403481.7440	1373589.9149	

NOTE: FOUR (4) PLACE COORDINATES ARE USED FOR COMPUTATIONAL PURPOSES ONLY AND DO NOT IMPLY A PRECISION BEYOND TWO (2) PLACES.

GENERAL NOTES

THE LEGAL RIGHT-OF-WAY ON WASHINGTON AVENUE FROM STATION 5+00.00 TO STATION 10+50.00 IS 50 FEET IN WIDTH BASED ON DRAWING NO 58992 P.R.R. DIV., PGH DIV., LOCATION OF PROPOSED OVERHEAD CROSSING AT SWISSVALE, DATED 5-2-06 AND APPROVED BY SWISSVALE BOROUGH COUNCIL.

THE LEGAL RIGHT-OF-WAY ON PALMER STREET SOUTH FROM STATION 20+25.00 TO STATION 21+86.55 IS 35 FEET IN WIDTH BASED ON THE PALMER PLACE PLAN OF LOTS, RECORDED APRIL 29,1892 IN THE ALLEGHENY COUNTY RECORDER'S OFFICE IN PLAN BOOK VOLUME 12, PAGE 153.

THE LEGAL RIGHT-OF-WAY ON PALMER STREET NORTH FROM STATION 30+22.43 TO STATION 31+47.44 IS 35 FEET IN WIDTH BASED ON THE PALMER PLACE PLAN OF LOTS, RECORDED APRIL 29,1892 IN THE ALLEGHENY COUNTY RECORDER'S OFFICE IN PLAN BOOK VOLUME 12, PAGE 153.

THE LEGAL RIGHT-OF-WAY ON WAVERLY STREET FROM STATION 51+15.00 TO STATION 52+35.00 IS 37 FEET IN WIDTH BASED ON DEED BOOK 12206, PAGE 93, DATED SEPTEMBER 23, 2004 AND RECORDED SEPTEMBER 28, 2004 IN THE ALLEGHENY COUNTY RECORDER'S OFFICE IN INSTRUMENT NO 2004-33646.

SEED ALL SLOPES WITH SEEDING AND SOIL SUPPLEMENTS FORMULA B RESIDENTAL MIX, OR AS INDICATED ON THE PLAN.

ALL CURVE DATA IS BASED ON THE ARC DEFINITION UNLESS OTHERWISE NOTED.

THE HORIZONTAL CONTROL IS BASED ON NORTH AMERICAN DATUM OF 1983 (NAD83) PENNSYLVANIA STATE PLANE COORDINATE SYSTEM, PA SOUTH ZONE 3702. NO COMBINED SCALE FACTOR WAS USED FOR THIS PROJECT.

VERTICAL CONTROL IS BASED UPON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) (GEOID 12B).

CONSTRUCT PROJECT IN ACCORDANCE WITH PENNDOT PUBLICATION 408 SPECIFICATIONS, DATED 2020.

DO NOT INTERFERE WITH THE OPERATION OF ANY STREET LIGHT, TRAFFIC SIGNAL, FIRE HYDRANT, FIRE CALL BOX OR POLICE CALL BOX UNLESS APPROVED BY THE BOROUGH OF SWISSVALE.

THREE TO TEN WORKING DAYS PRIOR TO EXCAVATION BASED ON THE COMPLEXITY OF THE PROJECT, THE CONTRACTOR MUST CONTACT THE PA ONE CALL SYSTEM, INC., PHONE 1-800-242-1776 SERIAL NO. _____ BOROUGH OF SWISSVALE. ADDITIONAL INFORMATION IS AVAILABLE AT http://www.paicall.org/PA811/Public/.

THE CONTRACTOR IS REQUIRED TO NOTIFY THE BOROUGH OF SWISSVALE AND SUBMIT AN ALLEGED VIOLATION REPORT (AVP) TO THE PA PUBLIC UTILITY COMMISSION THROUGH THE PA ONE CALL SYSTEM, WWW.PAICALL.ORG, WITHIN TEN (10) BUSINESS DAYS AFTER A UTILITY LINE IS STRUCK, DAMAGED, OR PREVIOUS DAMAGE IS DISCOVERED AS REQUIRED BY PENNSYLVANIA'S UNDERGROUND UTILITY LINE PROTECTION LAW ACT 50 (P.L.852, NO. 287 AMENDED OCT. 30, 2017).

VERIFY DIMENSIONS AND ELEVATIONS OF EXISTING STRUCTURES IN THE FIELD PRIOR TO START OF CONSTRUCTION.

THE LOCATIONS OF UNDERGROUND UTILITIES SHOWN ON THE PLANS HAVE BEEN OBTAINED BY FIELD SURVEY AND SEARCHES OF AVAILABLE RECORDS. NORFOLK SOUTHERN RAILWAY COMPANY DOES NOT GUARANTEE THEIR ACCURACY OR COMPLETENESS.

TEMPORARY CONSTRUCTION EASEMENT. AN EASEMENT TO USE THE LAND AS NECESSARY DURING CONSTRUCTION OF THE PROJECT. THE EASEMENT IS REQUIRED ONLY UNTIL THE CONSTRUCTION OR WORK INDICATED BY THE PLAN IS COMPLETED, UNLESS SOONER RELINQUISHED IN WRITING BY THE BOROUGH OF SWISSVALE.

SHEET INDEX BLOCK

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COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — CYNTHIA A. BARTUS — ENGINEER/PEDMONTE

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NORFOLK SOUTHERN RAILWAY COMPANY
PITTSBURGH
ENGINEERING DIVISION
OFFICE OF THE CHIEF ENGINEER – DESIGN AND CONSTRUCTION – ATLANTA, GA.

REV	BY	DATE	DESCRIPTION

SWISSVALE, PENNSYLVANIA
BR00288818 BRIDGE PT344.91 WASHINGTON AVENUE
LOCATION MAP, GENERAL NOTES AND PROJECT COORDINATES

DSN	JAH	PID No.	D2122	LINE	1290818-0N477
DWN	WRB	FILE No.	BR00288818	DRAWING NUMBER	PT-344.91
CHK	CAB	DATE	6/12/2024		PT-344.91 24 02

CADD FILE: NS_Washington_Gen.dgn

GENERAL NOTES CONTINUED

AERIAL EASEMENT NOTES

1. WHERE AN AERIAL EASEMENT IS ACQUIRED, IT SHALL INCLUDE AN EASEMENT IN THE AIR FOR THE ACCOMMODATION OF THE ELEVATED HIGHWAY STRUCTURE UNLIMITED IN VERTICAL DIMENSION ABOVE THE STRUCTURE, A SURFACE EASEMENT UNLIMITED IN VERTICAL DIMENSION FOR THE ACCOMMODATION OF PIERS AND OTHER APPURTENANCES AND A TEMPORARY EASEMENT FOR CONSTRUCTION PURPOSES INCLUDING THE STORAGE OF MATERIALS DURING CONSTRUCTION FOR THE ENTIRE AREA. THE FOLLOWING LIMITATIONS SHALL BE IMPOSED ON THE PROPERTY BENEATH THE AREA AFFECTED BY THE AERIAL EASEMENT.

2. NO USE SHALL BE MADE OF THE PROPERTY WHICH SHALL ENDANGER THE STRUCTURE OR THE HEALTH, SAFETY OR WELFARE OF THE TRAVELING PUBLIC.

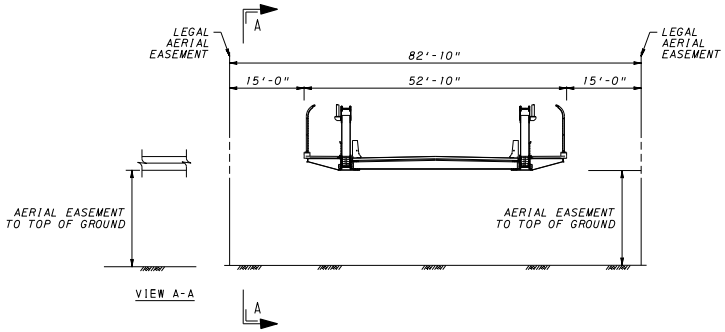
3. NO FLAMMABLE, EXPLOSIVE, DANGEROUS OR HAZARDOUS MATERIAL SHALL BE USED, PLACED OR STORED ON THE PROPERTY.

4. NO BUILDING OR OTHER FACILITY SHALL BE CONSTRUCTED ON THE PROPERTY WITHOUT PRIOR AUTHORITY OF THE DEPARTMENT OF TRANSPORTATION. IF AND WHEN SUCH AUTHORITY IS GRANTED, THE PLANS FOR THE BUILDING OR FACILITY AND CONSTRUCTION METHODS SHALL BE SUBJECT TO THE APPROVAL OF THE DEPARTMENT OF TRANSPORTATION.

5. NO INTERFERENCE SHALL BE MADE WITH THE RIGHT OF THE DEPARTMENT OF TRANSPORTATION TO ENTER UPON THE PROPERTY FOR THE PURPOSES OF INSPECTION, MAINTENANCE, REPAIR, PAINTING, RECONSTRUCTION OR ALTERATION OF THE STRUCTURE OR APPURTENANCES. MOVEABLE ITEMS MAY HAVE TO BE REMOVED BY THE OWNER DURING SOME OR ALL OF THE ABOVE OPERATIONS.

6. ANY SUBSTANTIAL CHANGE IN PROPERTY USE TO BE MADE SUBSEQUENT TO THE ACQUISITION OF THE EASEMENT SHALL BE SUBJECT TO THE APPROVAL OF THE DEPARTMENT OF TRANSPORTATION.

7. THE NOTES ON THIS DRAWING SHALL NOT BE CONSTRUED AS LIMITING OR INTERFERING IN ANY WAY WITH THE PRESENT AND FUTURE OPERATION, USE, MAINTENANCE, REPAIR, RENEWAL, CHANGE, ADDITION, BETTERMENT OR ALTERATION OF THE RAILROAD AND ITS SUPPORTING FACILITIES.



SKETCH SHOWING ESTATE TO BE ACQUIRED FOR A LIMITED AERIAL EASEMENT FROM STATION 6+92.19 TO STATION 7+98.09.

USE OF AIRSPACE BENEATH THE ESTABLISHED GRADE LINE OF THE HIGHWAY SHALL PROVIDE SUFFICIENT VERTICAL AND HORIZONTAL CLEARANCES FOR THE CONSTRUCTION, OPERATION, MAINTENANCE, VENTILATION AND SAFETY OF THE HIGHWAY FACILITY. THE ESTATE ACQUIRED ABOVE THE AERIAL EASEMENT LINE MAY BE ENTERED ON BY MOVING VEHICLES SUCH AS TRUCKS OR RAILROAD ROLLING STOCK.

THE HALF CIRCLED NUMBER INDICATES A SCALED DIMENSION.

THE FOLLOWING SYMBOL IS USED TO DEPICT THE SLOPE LIMITS

EARTHWORK SUMMARY ENTIRE PROJECT

THE INFORMATION ON ESTIMATED AMOUNTS OF EARTHWORK HAS BEEN USED IN THE PRELIMINARY ESTIMATE. DO NOT USE AS A WAIVER OF ANY PROVISIONS OF THE SPECIFICATIONS AND CONTRACTS.

CUBIC YARDS OF EXCAVATION				CUBIC YARDS OF COMPLETED EMBANKMENT	FOREIGN BORROW EXCAVATION	SELECTED BORROW EXCAVATION ROCK, CLASS R-4	SELECTED BORROW EXCAVATION, COARSE AGGREGATE, NO. 57 *	SELECTED BORROW EXCAVATION, COARSE AGGREGATE, NO. 2A *	STRUCTURE BACKFILL *	CUBIC YARDS OF WASTE
CLASS 1	CLASS 2	CLASS 3 *	CLASS 4							
872	---	154	---	103	50	34	205	405	154	923

* PART OF LUMP SUM STRUCTURE ITEM

REGISTERED PROFESSIONAL ENGINEER COMMONWEALTH OF PENNSYLVANIA
CYNTHIA A. BARTUS

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REV	BY	DATE	DESCRIPTION

SWISSVALE, PENNSYLVANIA

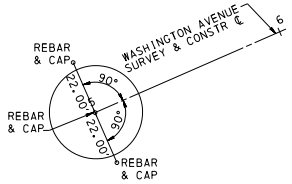
BR0028818 BRIDGE PT344.91 WASHINGTON AVENUE LOCATION MAP, GENERAL NOTES AND PROJECT COORDINATES

DSN	JAH	PD No.	D2122	PROJ	1290818-DN177
DWN	WRB	FILE No.	BR0028818		
CK	CAB	DATE	6/17/2024		

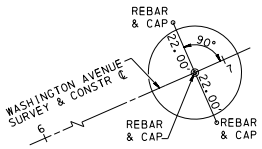
PROJ. FOOT PT-344.91

DRAWING NUMBER PT-344.91 24 03

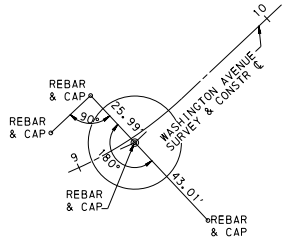
CADD FILE: BR_Washington_Gen.dgn



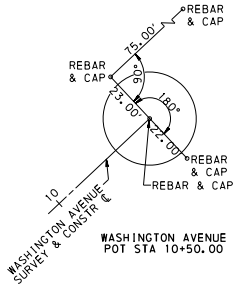
WASHINGTON AVENUE
POT STA 5+00.00



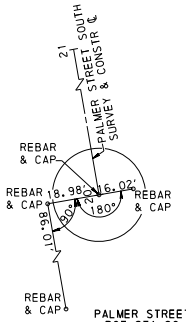
WASHINGTON AVENUE
PI STA 6+87.37



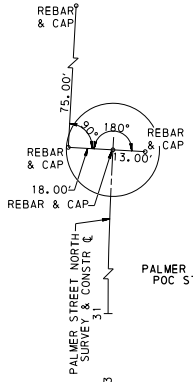
WASHINGTON AVENUE
PI STA 9+24.63



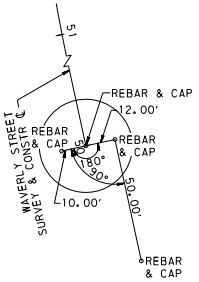
WASHINGTON AVENUE
POT STA 10+50.00



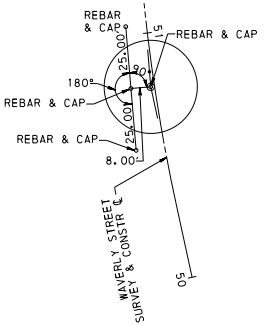
PALMER STREET SOUTH
POT STA 20+00.00



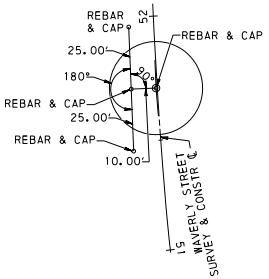
PALMER STREET NORTH
POC STA 31+94.33



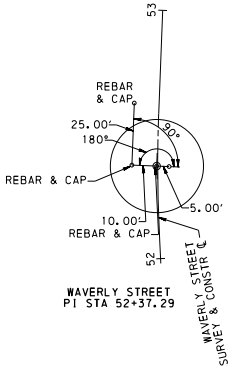
WAVERLY STREET
POT STA 50+00.00



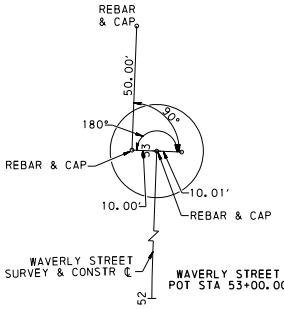
WAVERLY STREET
PI STA 50+78.44



WAVERLY STREET
PI STA 51+71.03



WAVERLY STREET
PI STA 52+37.29



WAVERLY STREET
POT STA 53+00.00

NOT TO SCALE

Michael Baker INTERNATIONAL
AIRSIDE BUSINESS PARK
100 AIRSIDE DRIVE
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Phone: (412) 269-6300

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL CYNTHIA A. BARTUS ENGINEER/PEDHOUSE

NORFOLK SOUTHERN RAILWAY COMPANY
PITTSBURGH
ENGINEERING DIVISION
OFFICE OF THE CHIEF ENGINEER – DESIGN AND CONSTRUCTION – ATLANTA, GA.

REV	BY	DATE	DESCRIPTION

DIVISION
SWISSVALE, PENNSYLVANIA
SUBJ BR0028818 BRIDGE PT344.91 WASHINGTON AVENUE REFERENCE CIRCLES

DSN JAH	PID No. D2122	WBS 1290818-0H77	MILE POST PT-344.91		
DWN WRB	FILE No. BR0028818	DRAWING NUMBER PT-344.91 24 04			
CHK CAB	DATE 6/12/2024				

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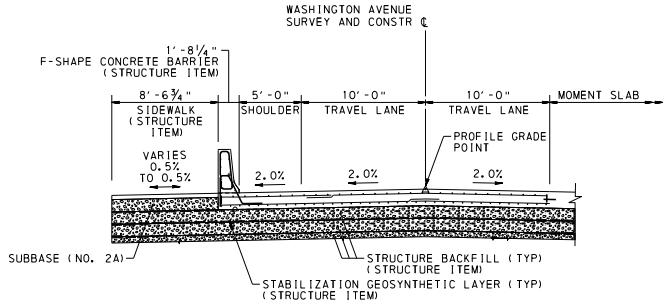
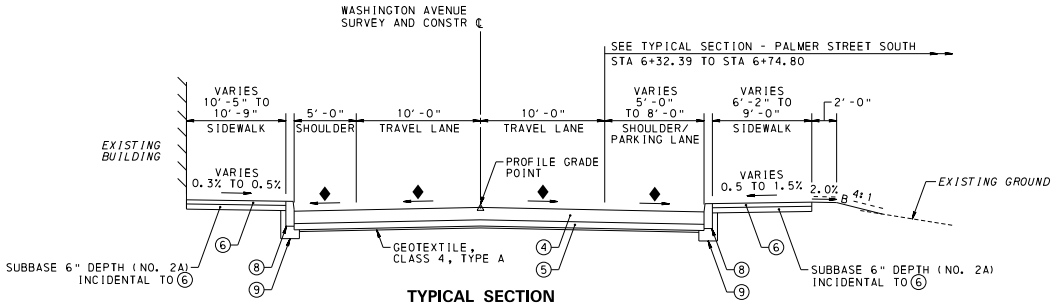
CADD FILE: NS_Washington_Ave_ref_circles.dgn



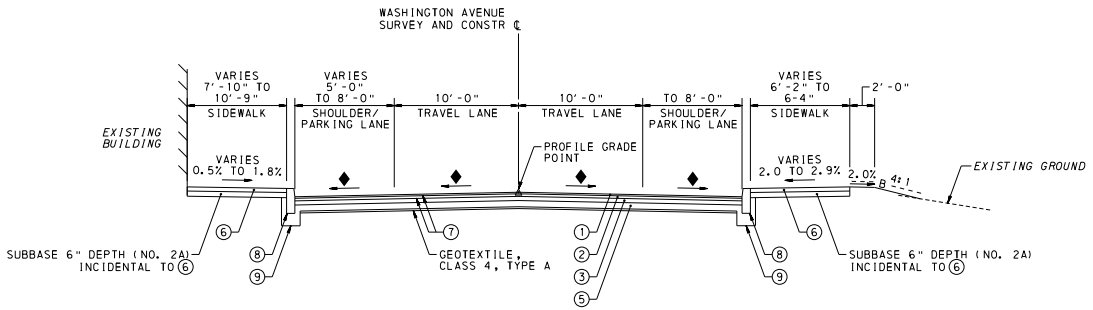
TYPICAL APPROACH SLAB SECTION

WASHINGTON AVENUE
STA 6+74.80 TO STA 6+99.80
NOT TO SCALE



TYPICAL SECTION

WASHINGTON AVENUE
STA 6+00.00 TO STA 6+74.80
NOT TO SCALE



TYPICAL SECTION

WASHINGTON AVENUE
STA 5+75.00 TO STA 6+00.00
NOT TO SCALE

LEGEND

① SUPERPAVE ASPHALT MIXTURE DESIGN, WEARING COURSE, PG 64S-22, 0.3 TO < 3 MILLION ESALs, 9.5 MM MIX, 1½" DEPTH, SRL-H

② SUPERPAVE ASPHALT MIXTURE DESIGN, BINDER COURSE, PG 64S-22, 0.3 TO < 3 MILLION ESALs, 19.0 MM MIX, 2½" DEPTH

③ SUPERPAVE ASPHALT MIXTURE DESIGN, BASE COURSE, PG 64S-22, 0.3 TO < 3 MILLION ESALs, 25.0 MM MIX, 4" DEPTH

④ PLAIN CEMENT CONCRETE PAVEMENT, 12" DEPTH

⑤ SUBBASE 6" DEPTH (NO. 2A)

⑥ CEMENT CONCRETE SIDEWALK

⑦ ASPHALT TACK COAT (NTT/CNTT)

⑧ PLAIN CEMENT CONCRETE CURB, 4" HEIGHT, INCLUDING REMOVAL OF EXISTING CURB

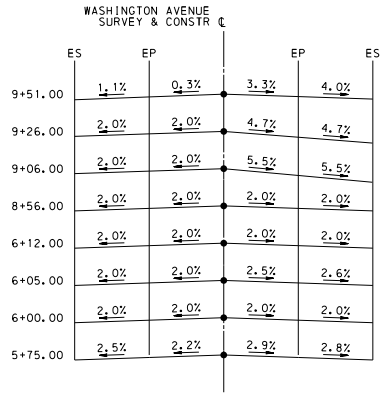
⑨ SUBGRADE DRAINS AND GEOTEXTILE, CLASS 1

APPLY SEPARATE LAYER OF ASPHALT TACK COAT (NTT/CNTT) FOR EACH PAVING COURSE, INCLUDING MULTIPLE LIFTS OF THE SAME MATERIAL

◆ FOR PAVEMENT CROSS SLOPES, SEE ROAD CROSS SLOPES DIAGRAM

SEEDING LEGEND

-- B ---- B -- SEEDING AND SOIL SUPPLEMENTS - FORMULA B RESIDENTIAL MIX, INCLUDING MULCH



ROAD CROSS SLOPES

CROSS SLOPE ROTATION POINT ●

REGISTERED PROFESSIONAL
CYNTHIA A. BARTUS
ENGINEER/ PENNSYLVANIA

Michael Baker INTERNATIONAL
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NORFOLK SOUTHERN

NORFOLK SOUTHERN RAILWAY COMPANY

ENGINEERING DIVISION
PITTSBURGH
OFFICE OF THE CHIEF ENGINEER – DESIGN AND CONSTRUCTION – ATLANTA, GA.

REV	BY	DATE	DESCRIPTION

LOCATION: SWISSVALE, PENNSYLVANIA

TITLE: BR0028818 BRIDGE PT344.91 WASHINGTON AVENUE
TYPICAL SECTIONS

DSN	JAH	PID No.	D2122	MW	1290818-0H77
DWN	WRB	FILE No.	BR0028818		
CHK	CAB	DATE	6/17/2024		

DIVISION PT-344.91

DRAWING NUMBER PT-344.91 24 05

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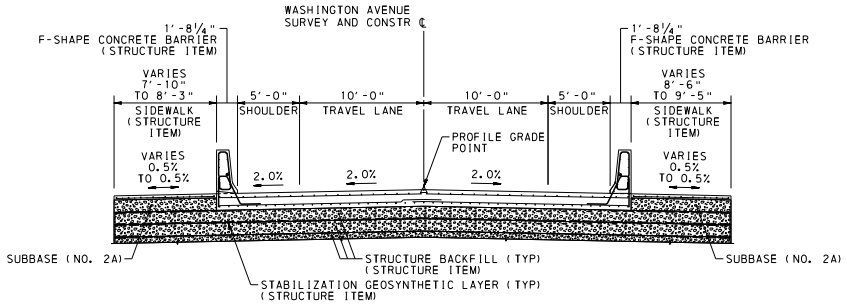
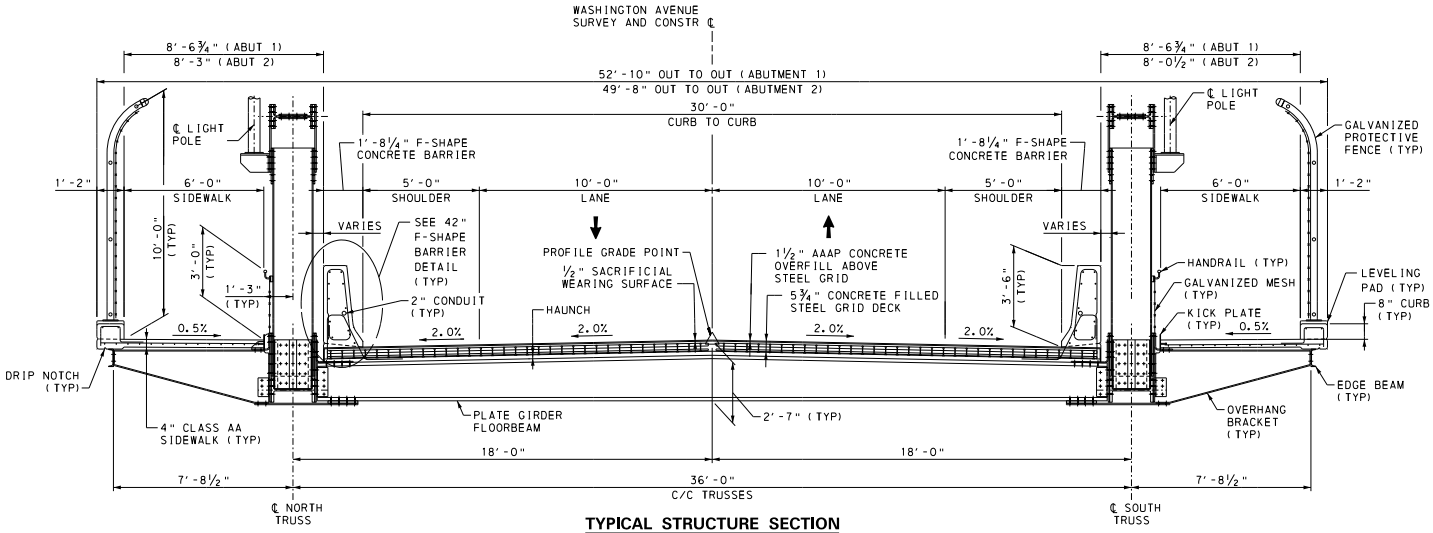


TYPICAL APPROACH SLAB SECTION

WASHINGTON AVENUE
STA 8+27.46 TO STA 8+52.46
NOT TO SCALE



TYPICAL STRUCTURE SECTION

WASHINGTON AVENUE
STA 6+99.80 TO STA 8+27.46
NOT TO SCALE

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL CYNTHIA A. BARTUS ENGINEER PEDM046781

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ENGINEERING DIVISION
PITTSBURGH
OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER – DESIGN AND CONSTRUCTION – ATLANTA, GA.

REV.	BY	DATE	DESCRIPTION

SWISSVALE, PENNSYLVANIA
BR0028818 BRIDGE PT344.91 WASHINGTON AVENUE
TYPICAL SECTIONS

DSN	JAH	PD No.	D2122	WR	1290818-OH77
DWN	WRB	FILE No.	BR0028818		
CK	CAB	DATE	6/17/2024		

DIST FOOT PT-344.91
DRAWING NUMBER PT-344.91 24 06

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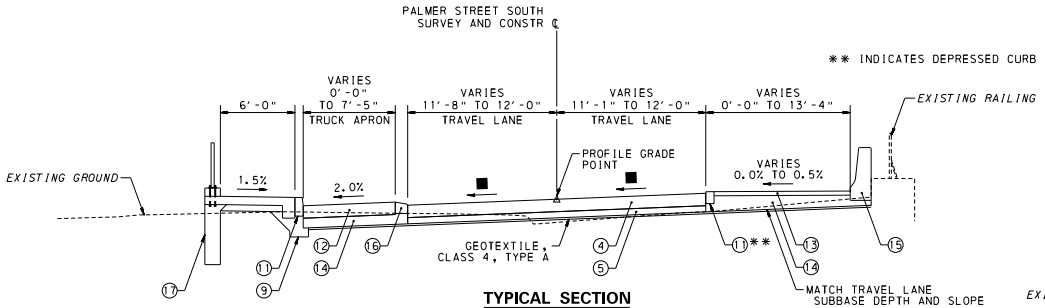
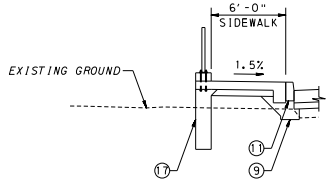


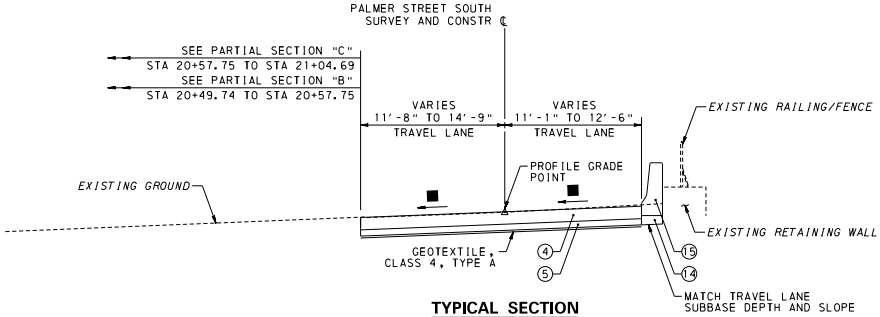
TYPICAL SECTION

PALMER STREET SOUTH
STA 21+04.69 TO STA 21+64.60
NOT TO SCALE



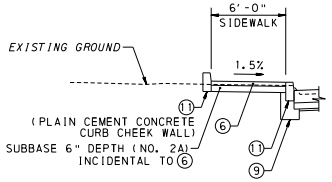
PARTIAL SECTION "C"

PALMER STREET SOUTH
STA 20+57.75 TO STA 21+04.69
NOT TO SCALE



TYPICAL SECTION

PALMER STREET SOUTH
STA 20+25.00 TO STA 21+04.69
NOT TO SCALE



PARTIAL SECTION "B"

PALMER STREET SOUTH
STA 20+49.74 TO STA 20+57.75
NOT TO SCALE

LEGEND

① SUPERPAVE ASPHALT MIXTURE DESIGN, WEARING COURSE, PG 64S-22, 0.3 TO < 3 MILLION ESALS, 9.5 MM MIX, 1½" DEPTH, SRL-H

② SUPERPAVE ASPHALT MIXTURE DESIGN, BINDER COURSE, PG 64S-22, 0.3 TO < 3 MILLION ESALS, 19.0 MM MIX, 2½" DEPTH

③ SUPERPAVE ASPHALT MIXTURE DESIGN, BASE COURSE, PG 64S-22, 0.3 TO < 3 MILLION ESALS, 25.0 MM MIX, 4" DEPTH

④ PLAIN CEMENT CONCRETE PAVEMENT, 12" DEPTH

⑤ SUBBASE 6" DEPTH (NO. 2A)

⑥ CEMENT CONCRETE SIDEWALK

⑦ ASPHALT TACK COAT (NTT/CNTT)

⑨ SUBGRADE DRAINS AND GEOTEXTILE, CLASS 1

⑩ PLAIN CEMENT CONCRETE CURB, 6" HEIGHT, INCLUDING REMOVAL OF EXISTING CURB

⑪ PLAIN CEMENT CONCRETE CURB, 8" HEIGHT

⑫ PLAIN CEMENT CONCRETE PAVEMENT, 12" DEPTH, INTEGRAL COLOR AND STAMPED FINISH (ITEM 4501-0036)

⑬ PLAIN CEMENT CONCRETE PAVEMENT, 4" DEPTH

⑭ SUBBASE (NO. 2A)

⑮ SINGLE FACE CONCRETE BARRIER, F-SHAPE, 42" HEIGHT, WITHOUT FILL

⑯ PLAIN CONCRETE MOUNTABLE CURB, ROUNDABOUT TRUCK APRON CURB

⑰ SIDEWALK MOMENT SLAB (ITEM 9000-0009)

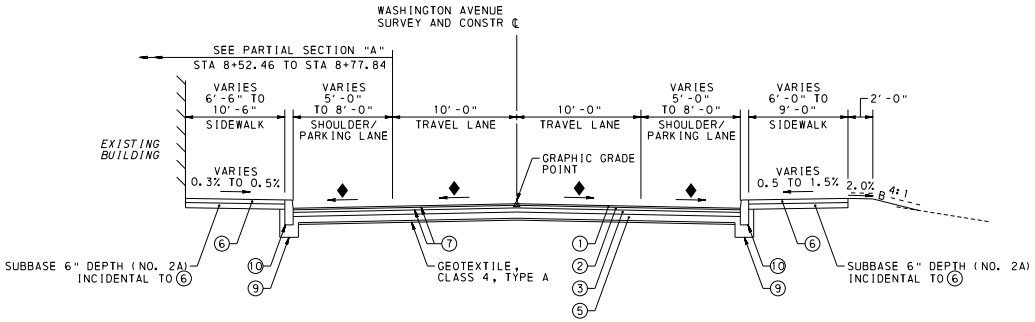
APPLY SEPARATE LAYER OF ASPHALT TACK COAT (NTT/CNTT) FOR EACH PAVING COURSE, INCLUDING MULTIPLE LIFTS OF THE SAME MATERIAL

◆ FOR PAVEMENT CROSS SLOPES, SEE ROAD CROSS SLOPES DIAGRAM SEE SHEET 5

■ FOR PAVEMENT CROSS SLOPES, SEE ROAD CROSS SLOPES DIAGRAM THIS SHEET

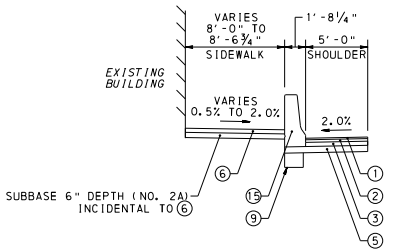
SEEDING LEGEND

-- B ---- B -- SEEDING AND SOIL SUPPLEMENTS - FORMULA B RESIDENTIAL MIX, INCLUDING MULCH



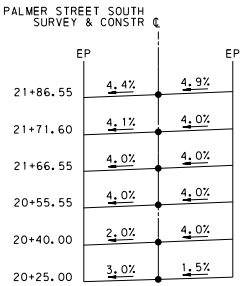
TYPICAL SECTION

WASHINGTON AVENUE
STA 8+52.46 TO STA 9+51.00
NOT TO SCALE



PARTIAL SECTION "A"

WASHINGTON AVENUE
STA 8+52.46 TO STA 8+76.84
NOT TO SCALE



ROAD CROSS SLOPES

CROSS SLOPE ROTATION POINT ●

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL CYNTHIA A. BARTUS ENGINEER PENNSYLVANIA

Michael Baker INTERNATIONAL
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NORFOLK SOUTHERN
NORFOLK SOUTHERN RAILWAY COMPANY
ENGINEERING DEPARTMENT
PITTSBURGH
OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER – DESIGN AND CONSTRUCTION – ATLANTA, GA.

REV	BY	DATE	DESCRIPTION

LOCATION: SWISSVALE, PENNSYLVANIA
TITLE: BR0028818 BRIDGE PT344.91 WASHINGTON AVENUE
TYPICAL SECTIONS

DSN	JAH	PID No.	D2122	WBS	1290818-0H77
DWN	WRB	FILE No.	BR0028818	MILE POST	PT-344.91
CHK	CAB	DATE	6/17/2024	DRAWING NUMBER	PT-344.91 24 07

CADD FILE: BR_Washington_Typical.dgn

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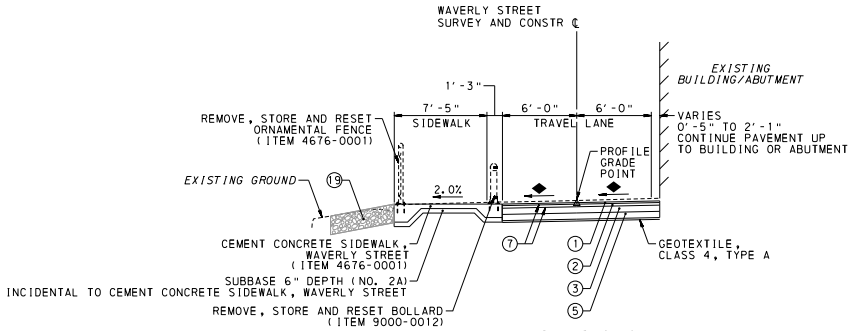
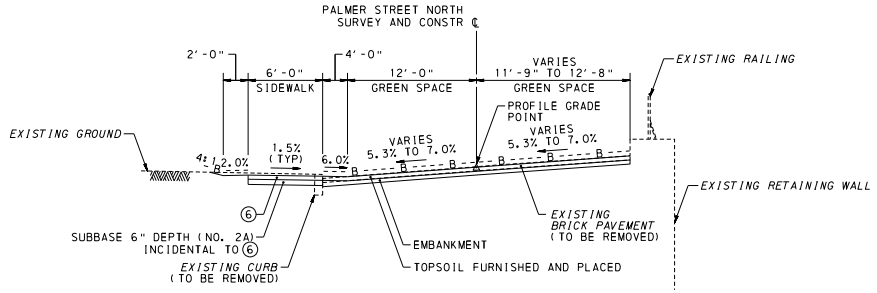


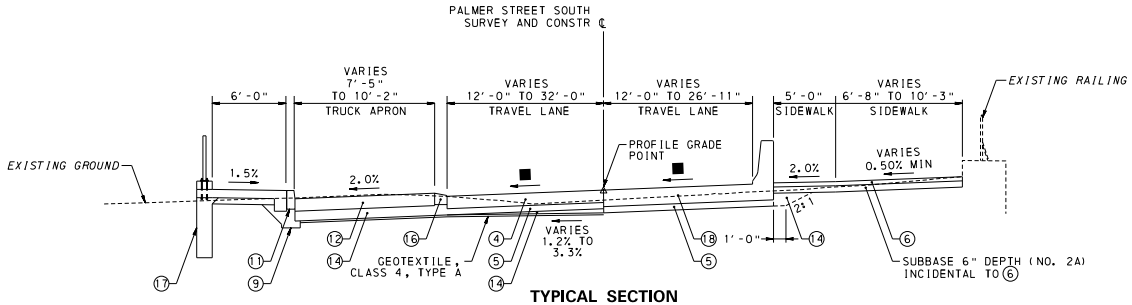
TYPICAL SECTION

WAVERLY STREET
STA 51+15.00 TO STA 52+35.00
NOT TO SCALE



TYPICAL SECTION

PALMER STREET NORTH
STA 30+22.43 TO STA 31+47.44
NOT TO SCALE



TYPICAL SECTION

PALMER STREET SOUTH
STA 21+64.60 TO STA 21+86.55
NOT TO SCALE

LEGEND

① SUPERPAVE ASPHALT MIXTURE DESIGN, WEARING COURSE, PG 64S-22, 0.3 TO < 3 MILLION ESALs, 9.5 MM MIX, 1½" DEPTH, SRL-H

② SUPERPAVE ASPHALT MIXTURE DESIGN, BINDER COURSE, PG 64S-22, 0.3 TO < 3 MILLION ESALs, 19.0 MM MIX, 2½" DEPTH

③ SUPERPAVE ASPHALT MIXTURE DESIGN, BASE COURSE, PG 64S-22, 0.3 TO < 3 MILLION ESALs, 25.0 MM MIX, 4" DEPTH

④ PLAIN CEMENT CONCRETE PAVEMENT, 12" DEPTH

⑤ SUBBASE 6" DEPTH (NO. 2A)

⑥ CEMENT CONCRETE SIDEWALK

⑦ ASPHALT TACK COAT (NTT/CNTT)

⑨ SUBGRADE DRAINS AND GEOTEXTILE, CLASS 1

⑪ PLAIN CEMENT CONCRETE CURB, 8" HEIGHT

⑫ PLAIN CEMENT CONCRETE PAVEMENT, 12" DEPTH, INTEGRAL COLOR AND STAMPED FINISH (ITEM 4501-0036)

⑭ SUBBASE (NO. 2A)

⑯ PLAIN CONCRETE MOUNTABLE CURB, ROUNDABOUT TRUCK APRON CURB

⑰ SIDEWALK MOMENT SLAB (ITEM 9000-0009)

⑱ BARRIER MOMENT SLAB (ITEM 9000-0010)

⑲ SELECTED BORROW EXCAVATION ROCK, CLASS R-4

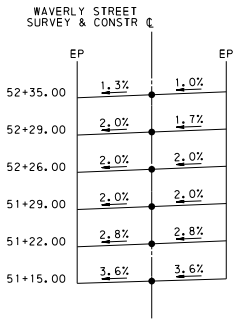
APPLY SEPARATE LAYER OF ASPHALT TACK COAT (NTT/CNTT) FOR EACH PAVING COURSE, INCLUDING MULTIPLE LIFTS OF THE SAME MATERIAL

■ FOR PAVEMENT CROSS SLOPES, SEE ROAD CROSS SLOPES DIAGRAM SEE SHEET 7

◆ FOR PAVEMENT CROSS SLOPES, SEE ROAD CROSS SLOPES DIAGRAM SEE THIS SHEET

SEEDING LEGEND

-- B ---- B -- SEEDING AND SOIL SUPPLEMENTS - FORMULA B RESIDENTIAL MIX, INCLUDING MULCH



ROAD CROSS SLOPES

CROSS SLOPE ROTATION POINT ●

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL CYNTHIA A. BARTUS ENGINEER PENNSYLVANIA

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NORFOLK SOUTHERN RAILWAY COMPANY
PITTSBURGH
ENGINEERING DIVISION
OFFICE OF THE CHIEF ENGINEER – DESIGN AND CONSTRUCTION – ATLANTA, GA.

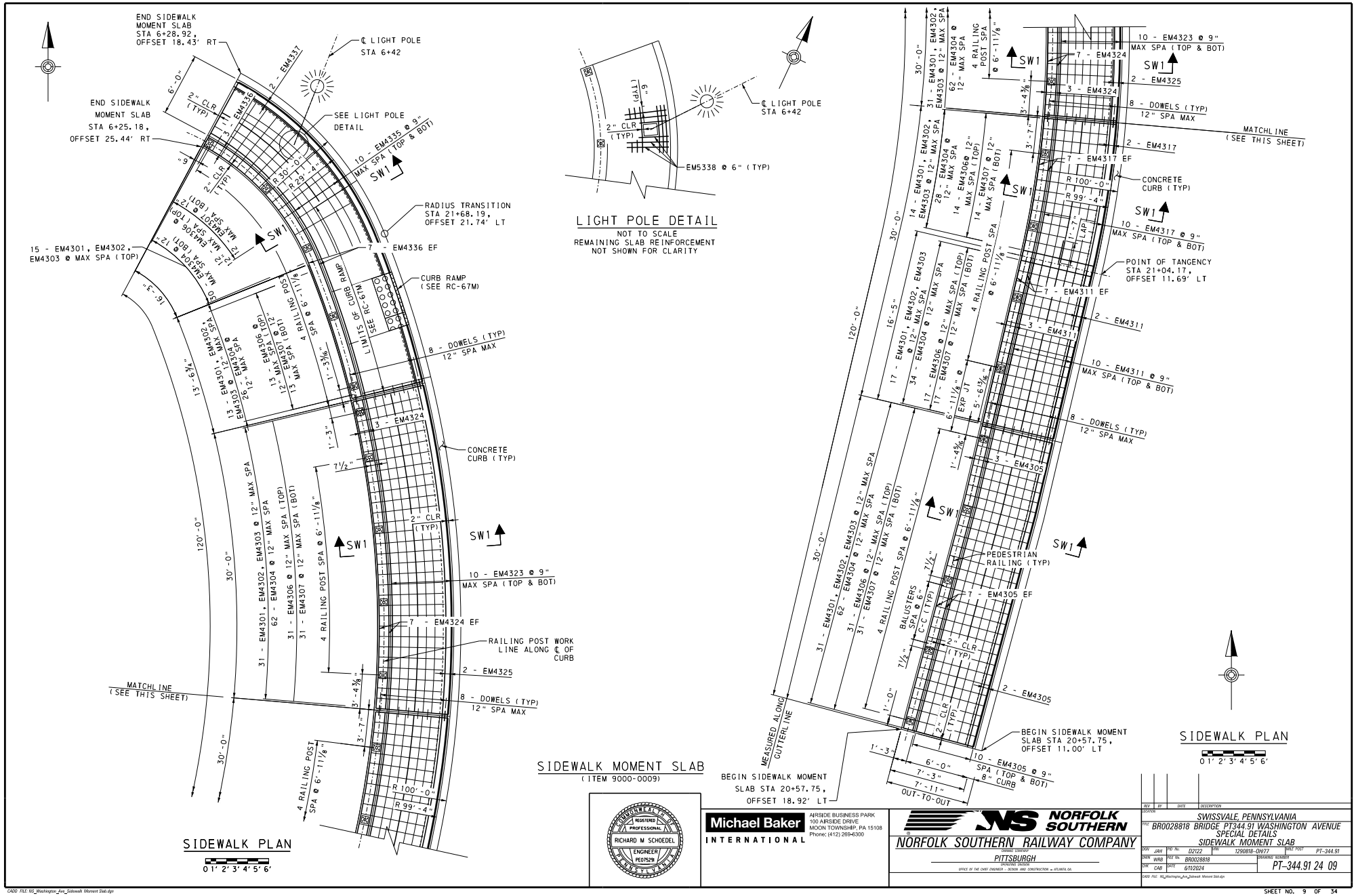
REV	BY	DATE	DESCRIPTION

LOCATION: SWISSVALE, PENNSYLVANIA
PROJ: BR0028818 BRIDGE PT344.91 WASHINGTON AVENUE
TYPICAL SECTIONS

DSN	JAH	PID No.	D2122	WBS	1290818-0H77
DRN	WRB	FILE No.	BR0028818	DRAWING NUMBER	
CHK	CAB	DATE	6/12/2024		PT-344.91 24 08

DWG FILE: 90_Washington_Typical.dgn

DIST PROJECT PT-344.91



REGISTERED PROFESSIONAL ENGINEER
RICHARD M SCHOEDEL
PE075278
COMMONWEALTH OF PENNSYLVANIA

Michael Baker INTERNATIONAL
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NORFOLK SOUTHERN
NORFOLK SOUTHERN RAILWAY COMPANY
PITTSBURGH
ENGINEERING DIVISION
OFFICE OF THE CHIEF ENGINEER – DESIGN AND CONSTRUCTION – ATLANTA, GA.

REV.	BY	DATE	DESCRIPTION

SWISSVALE, PENNSYLVANIA
BR0028818 BRIDGE PT344.91 WASHINGTON AVENUE
SPECIAL DETAILS
SIDEWALK MOMENT SLAB

DSN	JAH	PID No.	D2122	LINE	1290818-0N177
DWN	WRB	FILE No.	BR0028818		
CHK	CAB	DATE	6/12/2024		

SPEC FOOT PT-344.91
DRAWING NUMBER PT-344.91 24 09

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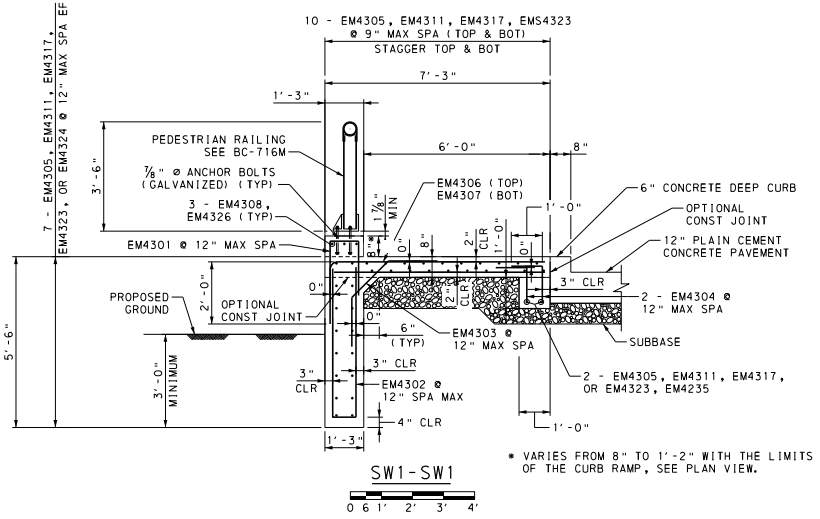

SIDEWALK MOMENT SLAB

(ITEM 9000-0009)

REGISTERED PROFESSIONAL ENGINEER
RICHARD M SCHOEDEL
PE075278
COMMONWEALTH OF PENNSYLVANIA

Michael Baker INTERNATIONAL

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NORFOLK SOUTHERN

NORFOLK SOUTHERN RAILWAY COMPANY

ENGINEERING DEPARTMENT

PITTSBURGH

OPERATING DIVISION

OFFICE OF THE CHIEF ENGINEER – DESIGN AND CONSTRUCTION – ATLANTA, GA.

REV.	BY	DATE	DESCRIPTION

SWISSVALE, PENNSYLVANIA

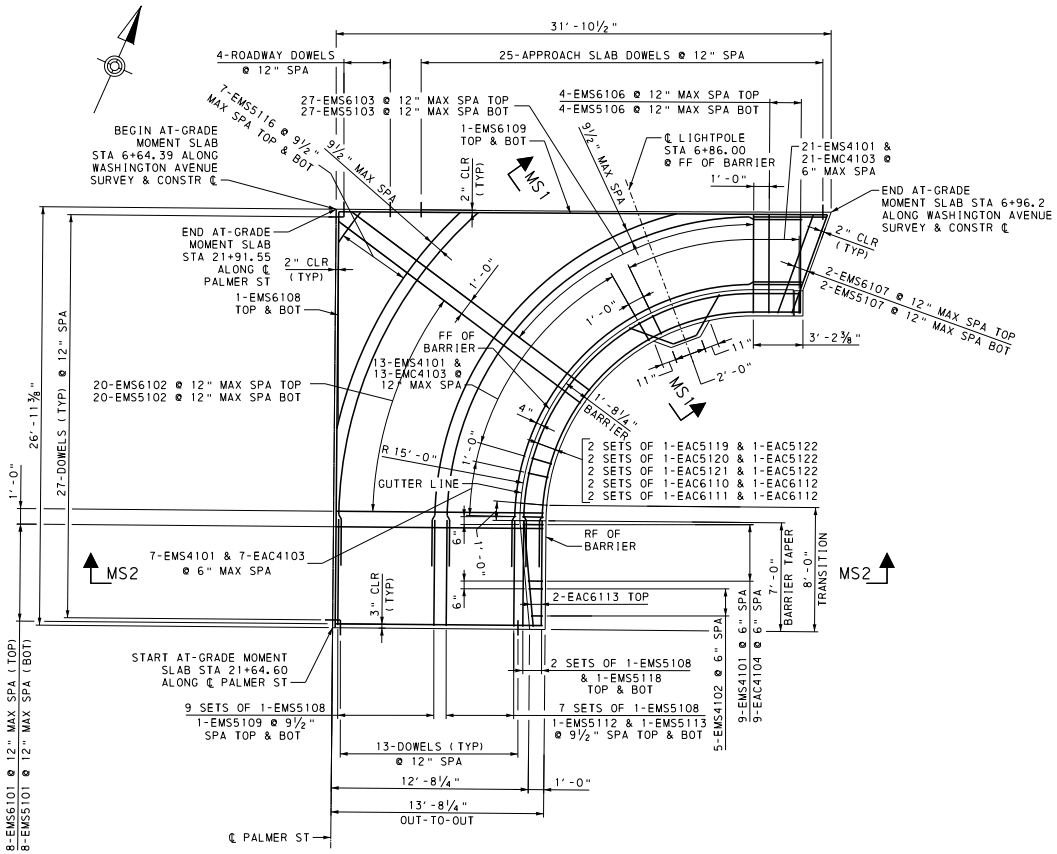
PROJ BR0028818 BRIDGE PT344.91 WASHINGTON AVENUE
SPECIAL DETAILS
SIDEWALK MOMENT SLAB

DSN	JAH	PID No.	D2122	PROJ NO.	1290818-0N177
DWN	WRB	FILE No.	BR0028818		
CHK	CAB	DATE	6/12/2024		

RAILROAD FOOT PT-344.91

DRAWING NUMBER PT-344.91 24 10

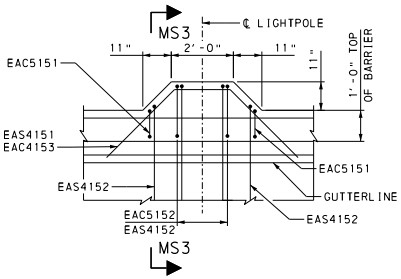
CADD FILE: NS_Washington_Ave_Sidewalk Moment Slab.dgn



ABUTMENT 1 MOMENT SLAB PLAN

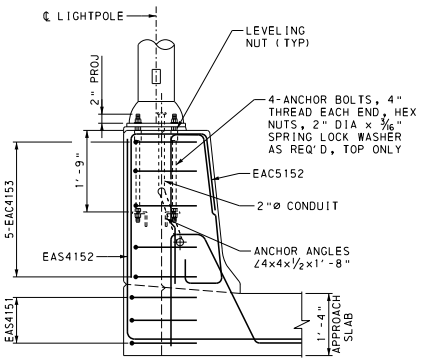
0 1' 2' 3' 4' 5' 6'

(ITEM 9000-0010)



STANDARD LIGHTPOLE BLISTER

0 6" 1' 2' 3' 4'



BARRIER DETAIL MS3-MS3

0 6 1' 2'

TYPICAL LAP LENGTHS:

3'-0" - #5 BARS
3'-7" - #5 BARS

RICHARD M SCHOEDEL
REGISTERED PROFESSIONAL ENGINEER PE075278 COMMONWEALTH OF PENNSYLVANIA

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PITTSBURGH
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OFFICE OF THE CHIEF ENGINEER – DESIGN AND CONSTRUCTION – ATLANTA, GA.

REV	BY	DATE	DESCRIPTION

LOCATION: SWISSVALE, PENNSYLVANIA

TITLE: BR0028818 BRIDGE PT344.91 WASHINGTON AVENUE SPECIAL DETAILS ABUTMENT 1 MOMENT SLAB

DSN	JAH	PID No.	D2122	LINE	1290818-0N177	SHEET POST	PT-344.91
DWN	WRB	FILE No.	BR0028818	DRAWING NUMBER	PT-344.91 24 11		
CHK	CAB	DATE	6/12/2024				

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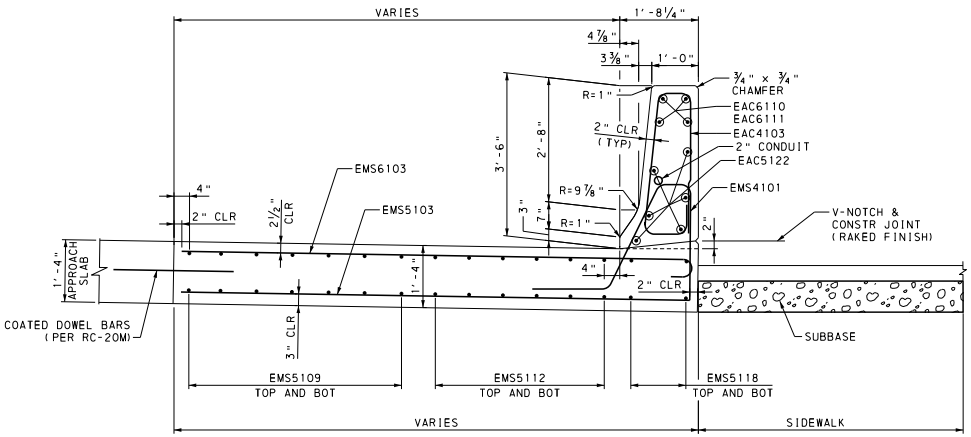
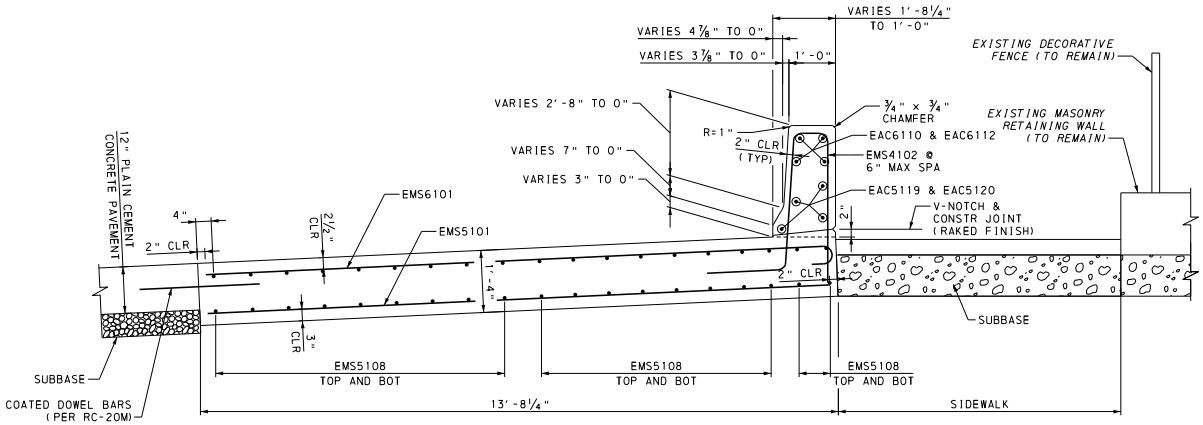


MOMENT SLAB SECTION MS1-MS1

0 6 1' 2'



MOMENT SLAB SECTION MS2-MS2

0 6 1' 2'

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
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ENGINEER
PE075278

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NORFOLK SOUTHERN RAILWAY COMPANY

ENGINEERING DEPARTMENT

PITTSBURGH

OPERATING DIVISION

OFFICE OF THE CHIEF ENGINEER – DESIGN AND CONSTRUCTION – ATLANTA, GA.

REV.	BY	DATE	DESCRIPTION

DESIGN

SWISSVALE, PENNSYLVANIA

PROJ BR0028818 BRIDGE PT344.91 WASHINGTON AVENUE
SPECIAL DETAILS
MOMENT SLAB

DSN	JAH	PID No.	D2122	WBS	1290818-0N177	SHEET POST	PT-344.91
DWN	WRB	FILE No.	BR0028818	DRAWING NUMBER	PT-344.91 24 12		
CHK	CAB	DATE	6/12/2024				

CADD FILE: RC_Washington_Ave_Barrier Moment Slab.dgn

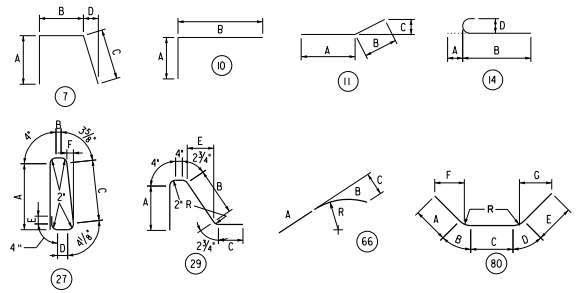
CADD FILE: NS_Washington_Ave_Barrier Moment Slab.dgn

MOMENT SLAB REINFORCEMENT BAR SCHEDULE

MARK	SIZE	NUMBER	LENGTH	TYPE	A	B	C	D	E	R	REMARKS
EMS4101	4	50	8'-5 ½"	29	2'-3"	2'-5 ¾"	1'-6"		1'-1 ¼"		
EMS4102	4	5	4'-10 ⅜" TO 6'-7 ⅜"	29	1'-1 ¾" TO 2'-0 ¼"	11 ⅞" TO 1'-10 ⅜"	1'-6"		1 ¼" TO 2 ⅝"		VARY EA BY 2 ⅝" VARY EA B BY 2 ⅝" VARY EA E BY ⅜"-
EMS4103	4	41	8'-0 ⅛"	27	2'-9 ½"	3 ⅜"	2'-7 ¾"	6 ¾"	5"		F-3 ⅜"-
EMS4104	4	9	2'-3 ¾" TO 6'-1 ⅝"	27	7 ½" TO 2'-5 ¼"	3 ½"	7 ½" TO 2'-5 ⅜"	4 ¼" TO 6 ½"	5"		F-¾" TO 3 ⅛"
EMS5101	5	8	13'-4"	STR							
EMS5102	5	20	13'-4" TO 19'-6"	STR							VARY EA BY 3 ⅜"+
EMS5103	5	27	6'-4" TO 19'-2"	STR							VARY EA BY 5 ⅛"
EMS5106	5	4	6'-4"	STR							
EMS5107	5	2	6'-9"	STR							
EMS5108	5	36	6'-10"	STR							
EMS5109	5	18	25'-4" TO 30'-1"	STR							VARY EA SET OF 9 BY 7 ⅛" BEND IN FIELD
EMS5112	5	14	30'-0" TO 36'-10"	STR							VARY EA SET OF 7 BY 1'-1 ⅝" BEND IN FIELD
EMS5113	5	14	3'-2" TO 5'-0"	STR							VARY EA SET OF 7 BY 3 ⅝"+
EMS5116	5	14	2'-5" TO 16'-3"	STR							VARY EA SET OF 7 BY 2'-3 ⅝"+ BEND INFIELD
EMS5118	5	4	27'-3" TO 29'-2"	STR							VARY EA SET OF 2 BY 1'-11" BEND IN FIELD
EAC5119	5	2	9'-0"	STR							BEND IN FIELD
EAC5120	5	2	7'-6"	STR							BEND IN FIELD
EAC5121	5	2	5'-9"	STR							BEND IN FIELD
EAC5122	5	6	26'-2"	STR							BEND IN FIELD
EMS6101	6	8	14'-0"	14	8"	13'-4"					
EMS6102	6	20	14'-0" TO 20'-2"	14	8"	13'-4" TO 19'-6"					VARY EA B BY 3 ⅞"+
EMS6103	6	27	7'-0" TO 19'-10"	14	8"	6'-4" TO 19'-2"					VARY EA B BY 5 ⅞"+
EMS6106	6	4	7'-0"	14	8"	6'-4"					
EMS6107	6	2	7'-5"	14	8"	6'-9"					
EMS6108	6	2	26'-7"	STR							
EMS6109	6	2	31'-8"	STR							
EAC6110	6	2	23'-4"	66	1'-2"	22'-2"	14'-9"			14'-2"	
EAC6111	6	2	22'-5"	66	3"	22'-2"	14'-9"			14'-2"	
EAC6112	6	4	6'-8"	66	3'-1"	3'-7"	3 ½"			14'-2"	
EAC6113	6	2	10'-8"	11	3'-7"	7'-1"	3'-2"				
		56									1 ¼" DIAMETER x 18" TRANSFER COATED DOWELS PER PUB 408 SECTION 705.3

LIGHTPOLE BLISTER REINFORCEMENT BAR SCHEDULE

MARK	SIZE	NUMBER	LENGTH	TYPE	A	B	C	D	E	R	REMARKS
EAS4151	4	4	5'-11"	80	4'-0"	2"	1'-7"	2"	2'-0"		
EAS4152	4	6	7'-10"	10	4'-0"	4'-0"					
EAC4153	4	5	5'-11"	80	4'-0"	2"	1'-7"	2"	2'-0"		
EAC5151	5	2	4'-6 ½"	7	5'-0"	4 ½"	1'-6"				
EAC5152	5	4	5'-1 ½"	7	5'-0"	11 ½"	1'-6"				



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OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER – DESIGN AND CONSTRUCTION – ATLANTA, GA.

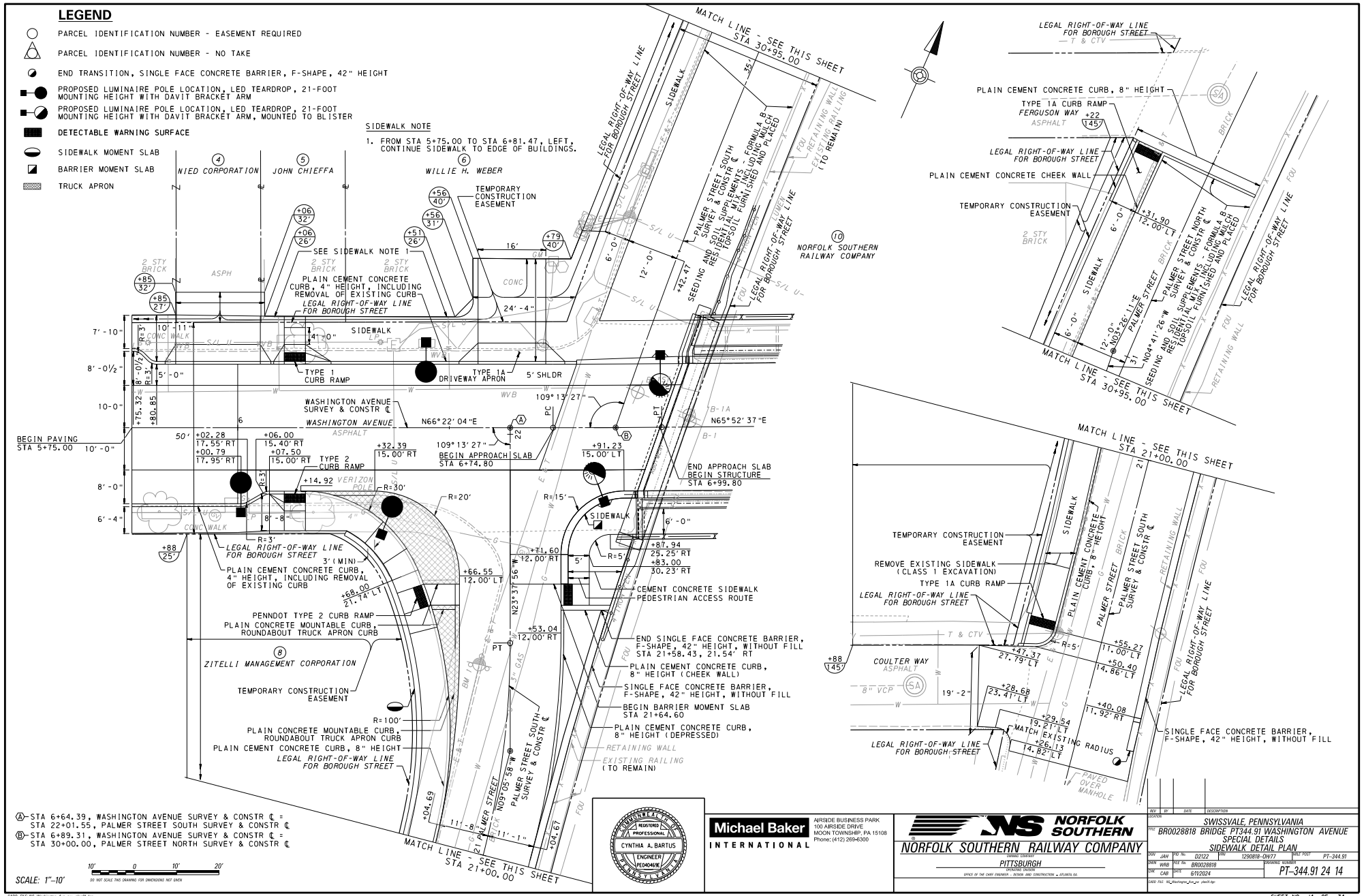
REV	BY	DATE	DESCRIPTION

LOCATION: SWISSVALE, PENNSYLVANIA

TITLE: BR0028818 BRIDGE PT344.91 WASHINGTON AVENUE SPECIAL DETAILS MOMENT SLAB

DSN	JAH	PID No.	D2122	WBS	1290818-0N477	SHEET POST	PT-344.91
DWN	WRB	FILE No.	BR0028818	DRAWING NUMBER	PT-344.91 24 13		
CHK	CAB	DATE	6/17/2024				

CADD FILE: NS_Washington_Ave_Barrier Moment Slab.dgn


LEGEND
PARCEL IDENTIFICATION NUMBER - EASEMENT REQUIRED
PARCEL IDENTIFICATION NUMBER - NO TAKE
END TRANSITION, SINGLE FACE CONCRETE BARRIER, F-SHAPE, 42" HEIGHT
PROPOSED LUMINAIRE POLE LOCATION, LED TEARDROP, 21-FOOT MOUNTING HEIGHT WITH DAVIT BRACKET ARM
PROPOSED LUMINAIRE POLE LOCATION, LED TEARDROP, 21-FOOT MOUNTING HEIGHT WITH DAVIT BRACKET ARM, MOUNTED TO BLISTER
DETECTABLE WARNING SURFACE
SIDEWALK MOMENT SLAB
BARRIER MOMENT SLAB
TRUCK APRON
SIDEWALK NOTE
1. FROM STA 5+75.00 TO STA 6+81.47, LEFT, CONTINUE SIDEWALK TO EDGE OF BUILDINGS.
MATCH LINE - SEE THIS SHEET STA 30+95.00
MATCH LINE - SEE THIS SHEET STA 21+00.00
NIED CORPORATION
JOHN CHIEFFA
WILLIE H. WEBER
NORFOLK SOUTHERN RAILWAY COMPANY
ZITELLI MANAGEMENT CORPORATION
LEGAL RIGHT-OF-WAY LINE FOR BOROUGH STREET
SIDEWALK
TEMPORARY CONSTRUCTION EASEMENT
SEE SIDEWALK NOTE 1
PLAIN CEMENT CONCRETE CURB, 4" HEIGHT, INCLUDING REMOVAL OF EXISTING CURB
TYPE 1 CURB RAMP
TYPE 1A DRIVEWAY APPRAON
5' SHLDR
WASHINGTON AVENUE SURVEY & CONSTR ℄
WASHINGTON AVENUE
ASPHALT
BEGIN PAVING STA 5+75.00
TYPE 2 CURB RAMP
BEGIN APPROACH SLAB STA 6+74.80
END APPROACH SLAB BEGIN STRUCTURE STA 6+99.80
VERIZON POLE
PENNDOT TYPE 2 CURB RAMP
PLAIN CONCRETE MOUNTABLE CURB, ROUNDABOUT TRUCK APRON CURB
PLAIN CEMENT CONCRETE CURB, 4" HEIGHT, INCLUDING REMOVAL OF EXISTING CURB
CEMENT CONCRETE SIDEWALK PEDESTRIAN ACCESS ROUTE
END SINGLE FACE CONCRETE BARRIER, F-SHAPE, 42" HEIGHT, WITHOUT FILL STA 21+58.43, 21.54' RT
PLAIN CEMENT CONCRETE CURB, 8" HEIGHT (CHEEK WALL)
SINGLE FACE CONCRETE BARRIER, F-SHAPE, 42" HEIGHT, WITHOUT FILL
BEGIN BARRIER MOMENT SLAB STA 21+64.60
PLAIN CEMENT CONCRETE CURB, 8" HEIGHT (DEPRESSED)
RETAINING WALL
EXISTING RAILING (TO REMAIN)
PALMER STREET SOUTH SURVEY & CONSTR ℄
PALMER STREET NORTH SURVEY & CONSTR ℄
SEEDING AND SOIL SUPPLEMENTS INCLUDING FORMULA B, RESIDENTIAL MIX, TOPSOIL FURNISHED AND PLACED
PLAIN CEMENT CONCRETE CURB, 8" HEIGHT
TYPE 1A CURB RAMP FERGUSON WAY
PLAIN CEMENT CONCRETE CHEEK WALL
REMOVE EXISTING SIDEWALK (CLASS 1 EXCAVATION)
COULTER WAY
Ⓐ STA 6+64.39, WASHINGTON AVENUE SURVEY & CONSTR ℄ = STA 22+01.55, PALMER STREET SOUTH SURVEY & CONSTR ℄
Ⓑ STA 6+89.31, WASHINGTON AVENUE SURVEY & CONSTR ℄ = STA 30+00.00, PALMER STREET NORTH SURVEY & CONSTR ℄
SCALE: 1"–10'
10' 0 10' 20'
DO NOT SCALE THIS DRAWING FOR DIMENSIONS NOT GIVEN
CYNTHIA A. BARTUS
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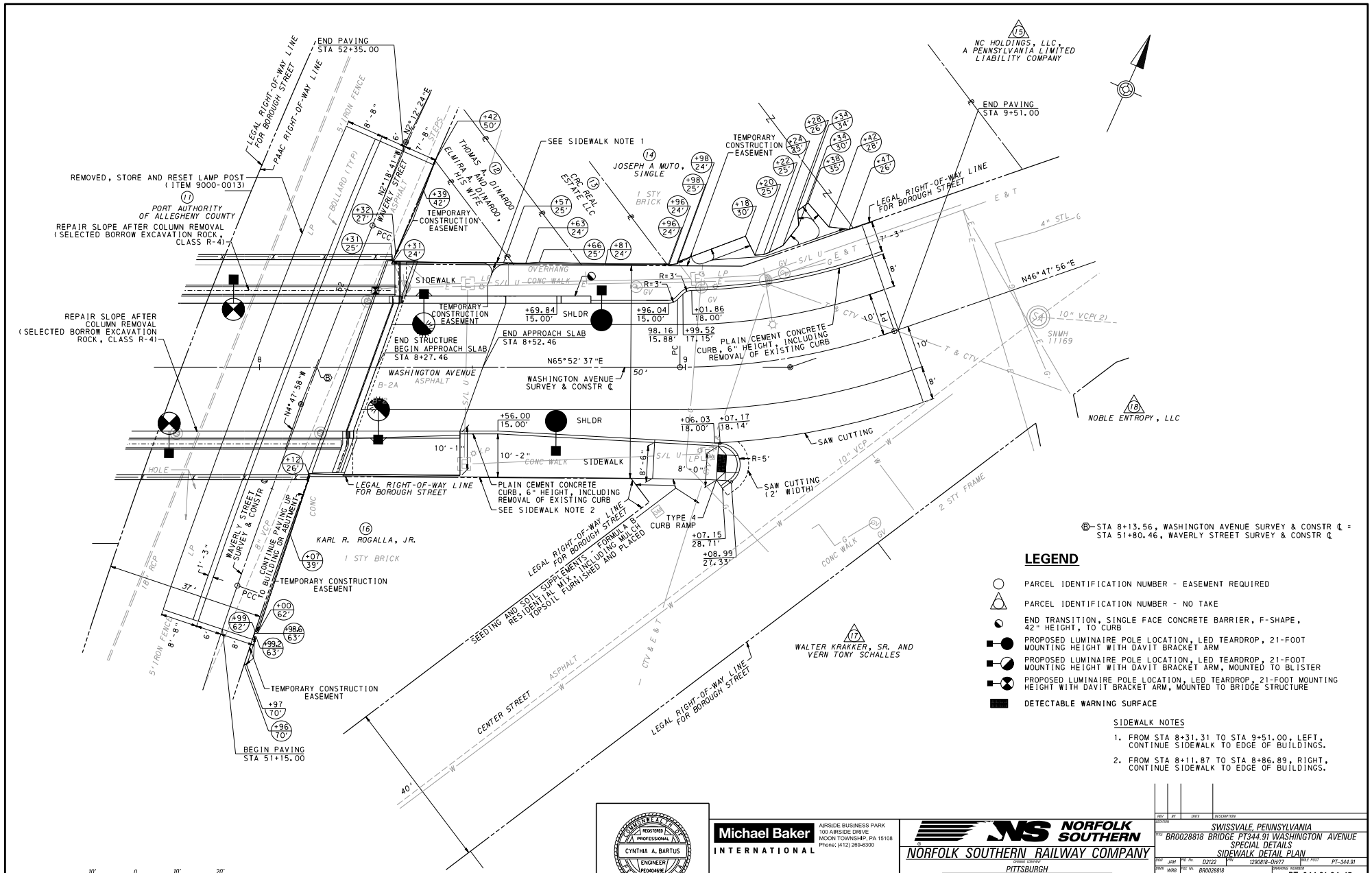
OFFICE OF THE CHIEF ENGINEER – DESIGN AND CONSTRUCTION – ATLANTA, GA.
SWISSVALE, PENNSYLVANIA
BR0028818 BRIDGE PT344.91 WASHINGTON AVENUE SPECIAL DETAILS
SIDEWALK DETAIL PLAN
DRAWING NUMBER
PT-344.91 24 14
6/17/2024
CADD FILE: NS_Washington_Ave_sw plan01.dgn
SHEET NO. 14 OF 34



Ⓑ—STA 8+13.56, WASHINGTON AVENUE SURVEY & CONSTR ℄ = STA 51+80.46, WAVERLY STREET SURVEY & CONSTR ℄

LEGEND

- PARCEL IDENTIFICATION NUMBER - EASEMENT REQUIRED
- PARCEL IDENTIFICATION NUMBER - NO TAKE
- END TRANSITION, SINGLE FACE CONCRETE BARRIER, F-SHAPE, 42" HEIGHT, TO CURB
- PROPOSED LUMINAIRE POLE LOCATION, LED TEARDROP, 21-FOOT MOUNTING HEIGHT WITH DAVIT BRACKET ARM
- PROPOSED LUMINAIRE POLE LOCATION, LED TEARDROP, 21-FOOT MOUNTING HEIGHT WITH DAVIT BRACKET ARM, MOUNTED TO BLISTER
- PROPOSED LUMINAIRE POLE LOCATION, LED TEARDROP, 21-FOOT MOUNTING HEIGHT WITH DAVIT BRACKET ARM, MOUNTED TO BRIDGE STRUCTURE
- DETECTABLE WARNING SURFACE

SIDEWALK NOTES

1. FROM STA 8+31.31 TO STA 9+51.00, LEFT, CONTINUE SIDEWALK TO EDGE OF BUILDINGS.
2. FROM STA 8+11.87 TO STA 8+86.89, RIGHT, CONTINUE SIDEWALK TO EDGE OF BUILDINGS.

SCALE: 1"=10'

10' 0 10' 20'

DO NOT SCALE THIS DRAWING FOR DIMENSIONS NOT SHOWN

CADD FILE: NS_Washington_Ave_sw plan02.dgn

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL CYNTHIA A. BARTUS ENGINEER PEGNO49781

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ENGINEERING DIVISION
PITTSBURGH
OFFICE OF THE CHIEF ENGINEER – DESIGN AND CONSTRUCTION – ATLANTA, GA.

REV	BY	DATE	DESCRIPTION

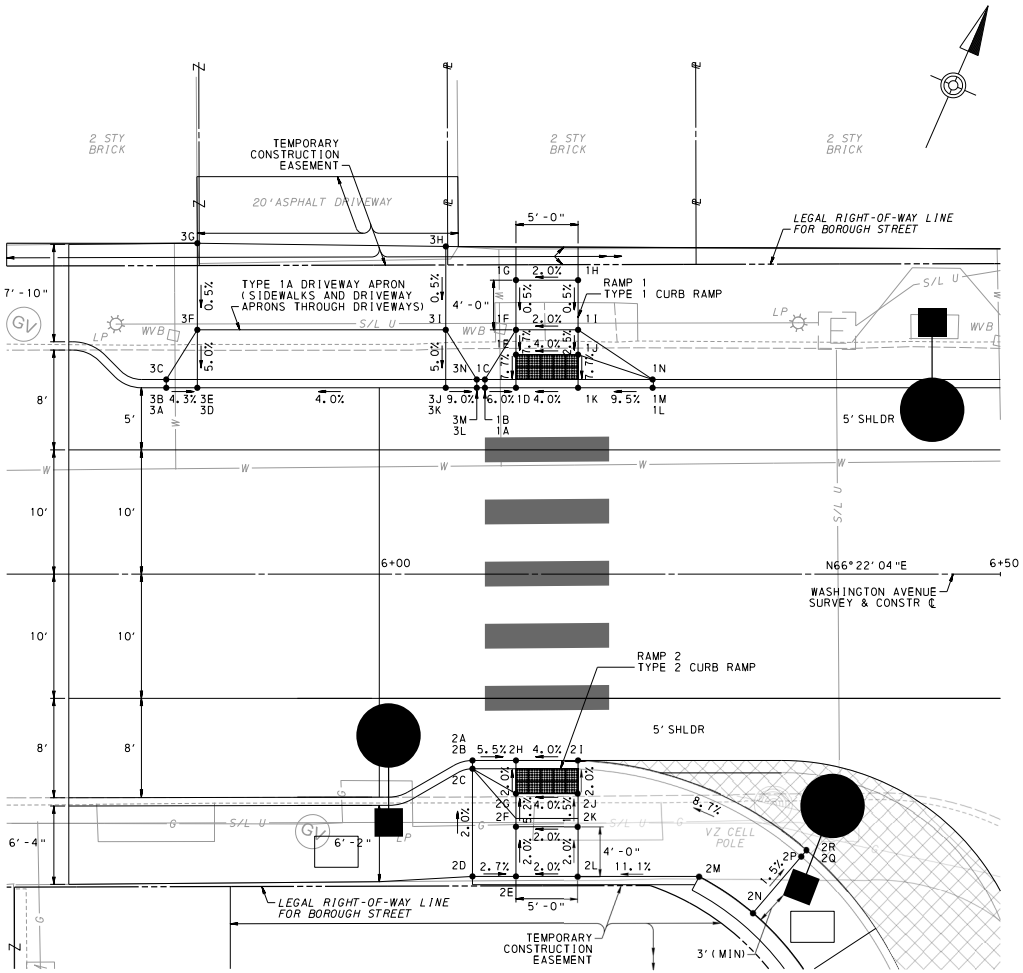
LOCATION: SWISSVALE, PENNSYLVANIA

TITLE: BR00288818 BRIDGE PT344.91 WASHINGTON AVENUE SPECIAL DETAILS
SIDEWALK DETAIL PLAN

DSN	JAH	PID No.	D2122	LINE	1290818-ON177	SALT POINT	PT-344.91
DRN	WRB	FILE No.	BR00288818	DRAWING NUMBER			
CHK	CAB	DATE	6/17/2024		PT-344.91 24 15		

CADD FILE: BC_Washington_Ave_sw plan02.dgn

SHEET NO. 15 OF 34



RAMP	POINT	POINT TYPE	STATION	OFFSET (FT)	ELEVATION (FT)	COORDINATES NORTH	COORDINATES EAST	REMARKS
RAMP 1 TYPE 1 CURB RAMP	1A	EOP	6+08.50	15.00 LT	939.38	403292.8455	1373396.6617	
	1B	TFC	6+08.50	15.03 LT	939.63	403292.8742	1373396.6492	3" CURB REVEAL
	1C	TBC	6+08.50	15.67 LT	939.71	403293.4563	1373396.3945	
	1D	EOP	6+11.00	15.00 LT	939.47	403293.8477	1373398.9521	
	1E	RSS	6+11.00	17.67 LT	939.68	403296.2907	1373397.8831	
	1F	FTS	6+11.00	19.67 LT	939.83	403298.1230	1373397.0813	
	1G	BTS	6+11.00	23.67 LT	939.85	403301.7875	1373395.4778	
	1H	BTS	6+16.00	23.67 LT	939.95	403303.7919	1373400.0586	
	1I	FTS	6+16.00	19.67 LT	939.93	403300.1273	1373401.6620	
	1J	RSS	6+16.00	17.67 LT	939.88	403298.2951	1373402.4637	
	1K	EOP	6+16.00	15.00 LT	939.67	403295.8520	1373403.5327	
	1L	EOP	6+22.00	15.00 LT	939.91	403298.2572	1373409.0296	
	1M	TFC	6+22.00	15.04 LT	940.24	403298.2954	1373409.0129	
	1N	TBC	6+22.00	15.67 LT	940.25	403298.8680	1373408.7623	

RAMP	POINT	POINT TYPE	STATION	OFFSET (FT)	ELEVATION (FT)	COORDINATES NORTH	COORDINATES EAST	REMARKS
RAMP 2 TYPE 1 CURB RAMP	2A	EOP	6+07.50	15.00 RT	939.34	403264.9600	1373407.7718	
	2B	TFC	6+07.50	15.04 RT	939.67	403264.9219	1373407.7885	
	2C	TBC	6+07.50	15.67 RT	939.68	403264.3493	1373408.0390	
	2D	RSS	6+07.50	24.33 RT	939.85	403256.4094	1373411.5132	BEGIN CHEEK WALL
	2E	BTS	6+11.00	24.33 RT	939.76	403257.8131	1373414.7194	
	2F	FTS	6+11.00	19.67 RT	939.67	403262.0878	1373412.8490	
	2G	RSS	6+11.00	17.67 RT	939.53	403263.9195	1373412.0475	
	2H	EOP	6+11.00	15.00 RT	939.47	403266.3631	1373410.9782	
	2I	EOP	6+16.00	15.00 RT	939.67	403268.3674	1373415.5589	
	2J	RSS	6+16.00	17.67 RT	939.73	403265.9244	1373416.6279	
	2K	RSS	6+16.00	19.67 RT	939.77	403264.0921	1373417.4296	
	2L	FTS	6+16.00	24.33 RT	939.86	403259.8169	1373419.3003	
	2M	BTS	6+25.76	24.33 RT	940.94	403263.7275	1373428.2381	END CHEEK WALL
	2N	RSS	6+30.09	27.27 RT	941.52	403262.7756	1373433.3838	
	2P	TBC	6+33.99	22.71 RT	941.43	403268.5163	1373435.1287	
	2Q	TFC	6+34.37	22.27 RT	941.42	403269.0745	1373435.2984	
	2R	EOP	6+34.42	22.20 RT	940.75	403269.1542	1373435.3226	

APRON	POINT	POINT TYPE	STATION	OFFSET (FT)	ELEVATION (FT)	COORDINATES NORTH	COORDINATES EAST	REMARKS
TYPE 1A DRIVEWAY APRON	3A	EOP	5+82.85	15.00 LT	938.35	403282.5619	1373373.1596	
	3B	TFC	5+82.85	15.04 LT	938.68	403282.6001	1373373.1429	
	3C	TBC	5+82.85	15.67 LT	938.69	403283.1727	1373372.8924	
	3D	EOP	5+85.35	15.00 LT	938.45	403283.5641	1373375.4499	
	3E	TFC	5+85.35	15.02 LT	938.58	403283.5784	1373375.4437	DEPRESSED CURB FOR DRIVEWAY
	3F	BDA	5+85.35	19.67 LT	938.81	403287.8402	1373373.5810	
	3G	EDW	5+85.35	26.63 LT	938.84	403294.2242	1373370.7913	
	3H	EDW	6+05.35	26.38 LT	939.64	403302.0090	1373389.2156	
	3I	BDA	6+05.35	19.67 LT	939.61	403295.8575	1373391.9037	
	3J	TFC	6+05.35	15.02 LT	939.38	403291.5957	1373393.7664	DEPRESSED CURB FOR DRIVEWAY
	3K	EOP	6+05.35	15.00 LT	939.25	403291.5814	1373393.7727	
	3L	EOP	6+07.85	15.00 LT	939.35	403292.5836	1373396.0630	
	3M	TFC	6+07.85	15.03 LT	939.60	403292.6122	1373396.0505	3" CURB REVEAL
	3N	TBC	6+07.85	15.67 LT	939.61	403293.1943	1373395.7958	

LEGEND

BDA	BACK OF DRIVEWAY APRON
BTS	BACK OF TURNING SPACE
EOP	EDGE OF PAVEMENT
EPW	EDGE OF DRIVEWAY
FTS	FRONT OF TURNING SPACE
RSS	RAMP SLOPED SURFACE
TBC	TOP BACK OF CURB
TFC	TOP FACE OF CURB

DETECTABLE WARNING SURFACE
CROSSWALK
PROPOSED LIGHTING

SCALE: 1"=5'

5' 0 5' 10'
DO NOT SCALE THIS DRAWING FOR DIMENSIONS NOT SHOWN

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL CYNTHIA A. BARTUS ENGINEER/TECHNICIAN

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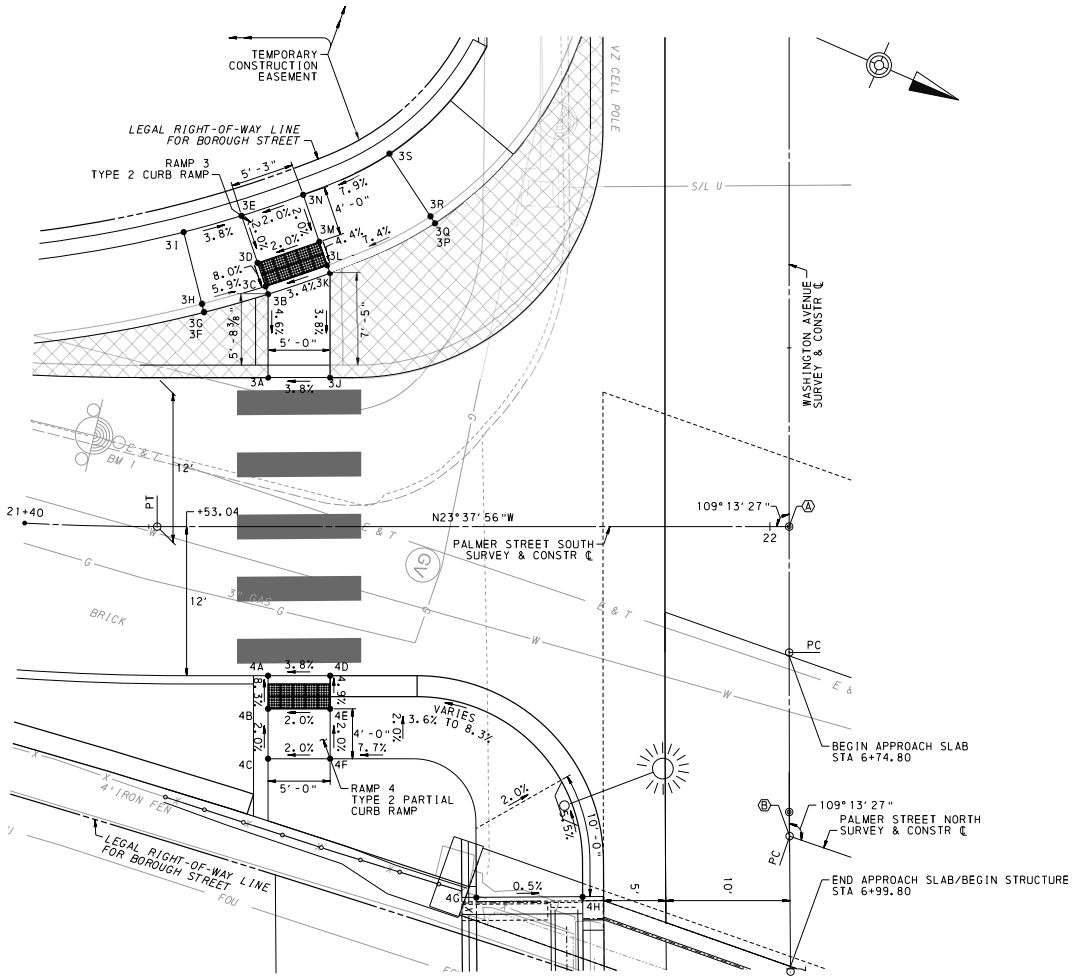
REV	BY	DATE	DESCRIPTION

LOCATION: SWISSVALE, PENNSYLVANIA
TITLE: BR0028818 BRIDGE PT344.91 WASHINGTON AVENUE SPECIAL DETAILS CURB RAMPS

DSN	JAH	PD No.	D2122	WIN	1290818-0N177	MILE POST	PT-344.91
DWN	WRB	FILE No.	BR0028818	DRAWING NUMBER			
CHK	CAB	DATE	6/12/2024		PT-344.91 24 16		

CADD FILE: NS_Washington_Ave_ADA Curb Ramps A.dgn

CADD FILE: NS_Washington_Ave_ADA Curb Ramps A.dgn



RAMP	POINT	POINT TYPE	STATION	OFFSET (FT)	ELEVATION (FT)	COORDINATES NORTH	COORDINATES EAST
RAMP 2 TYPE 1 CURB RAMP	3A	EOP	21+59.60	12.00 LT	940.62	403258.2641	1373459.7046
	3B	EOP	21+59.60	18.71 LT	940.93	403255.5751	1373453.5593
	3C	TBC	21+59.40	19.34 LT	940.98	403255.1373	1373453.0566
	3D	RSS	21+58.76	21.23 LT	941.14	403253.7888	1373451.5829
	3E	RSS	21+57.46	25.02 LT	941.22	403251.0879	1373448.6312
	3F	EOP	21+54.44	17.25 LT	940.62	403251.4363	1373456.9593
	3G	TFC	21+54.42	17.33 LT	941.29	403251.3852	1373456.8935
	3H	TBC	21+54.28	17.90 LT	941.30	403251.0270	1373456.4330
	3I	RSS	21+52.80	23.71 LT	941.39	403247.3433	1373451.6970
	3J	EOP	21+64.60	12.00 LT	940.81	403262.8448	1373457.7003
	3K	EOP	21+64.60	20.41 LT	941.13	403259.4735	1373449.9955
	3L	TBC	21+64.37	21.03 LT	941.16	403259.0105	1373449.5165
	3M	RSS	21+63.72	22.93 LT	941.25	403257.6601	1373448.0406
	3N	RSS	21+62.43	26.71 LT	941.33	403254.9593	1373445.0889
	3P	EOP	21+73.04	24.41 LT	941.17	403265.6019	1373442.9446
	3Q	TFC	21+72.99	24.48 LT	941.83	403265.5320	1373442.8992
	3R	TBC	21+72.67	24.97 LT	941.84	403265.0429	1373442.5813
	3S	RSS	21+69.38	29.98 LT	941.93	403260.0120	1373439.3115

APRON	POINT	POINT TYPE	STATION	OFFSET (FT)	ELEVATION (FT)	COORDINATES NORTH	COORDINATES EAST
TYPE 1A DRIVEWAY APRON	4A	EOP	21+59.60	12.00 RT	941.58	403267.8849	1373481.6919
	4B	RSS	21+59.60	14.67 RT	941.80	403268.9538	1373484.1349
	4C	RSS	21+59.60	18.67 RT	941.88	403270.5573	1373487.7995
	4D	EOP	21+64.60	12.00 RT	941.77	403272.4655	1373479.6876
	4E	RSS	21+64.60	14.67 RT	941.90	403273.5345	1373482.1306
	4F	RSS	21+64.60	18.67 RT	941.98	403275.1380	1373485.7951
	4G	RSS	21+76.37	29.84 RT	943.58	403290.3983	1373491.3178
	4H	RSS	21+84.92	29.79 RT	943.54	403298.2116	1373487.8382

LEGEND

BDA	BACK OF DRIVEWAY APRON
BTS	BACK OF TURNING SPACE
EOP	EDGE OF PAVEMENT
EPW	EDGE OF DRIVEWAY
FTS	FRONT OF TURNING SPACE
RSS	RAMP SLOPED SURFACE
TBC	TOP BACK OF CURB
TFC	TOP FACE OF CURB
	DETECTABLE WARNING SURFACE
	CROSSWALK

SCALE: 1"=5'

5' 0 5' 10'

DO NOT SCALE THIS DRAWING FOR DIMENSIONS NOT SHOWN

Ⓐ- STA 6+64.39, WASHINGTON AVENUE SURVEY & CONSTR ℄ = STA 22+01.55, PALMER STREET SOUTH SURVEY & CONSTR ℄

Ⓑ- STA 6+89.31, WASHINGTON AVENUE SURVEY & CONSTR ℄ = STA 30+00.00, PALMER STREET NORTH SURVEY & CONSTR ℄

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL CYNTHIA A. BARTUS ENGINEER/PEDIMAKER

Michael Baker INTERNATIONAL
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100 AIRSIDE DRIVE
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NORFOLK SOUTHERN RAILWAY COMPANY
ENGINEERING DEPARTMENT
PITTSBURGH
OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER – DESIGN AND CONSTRUCTION – ATLANTA, GA.

REV	BY	DATE	DESCRIPTION

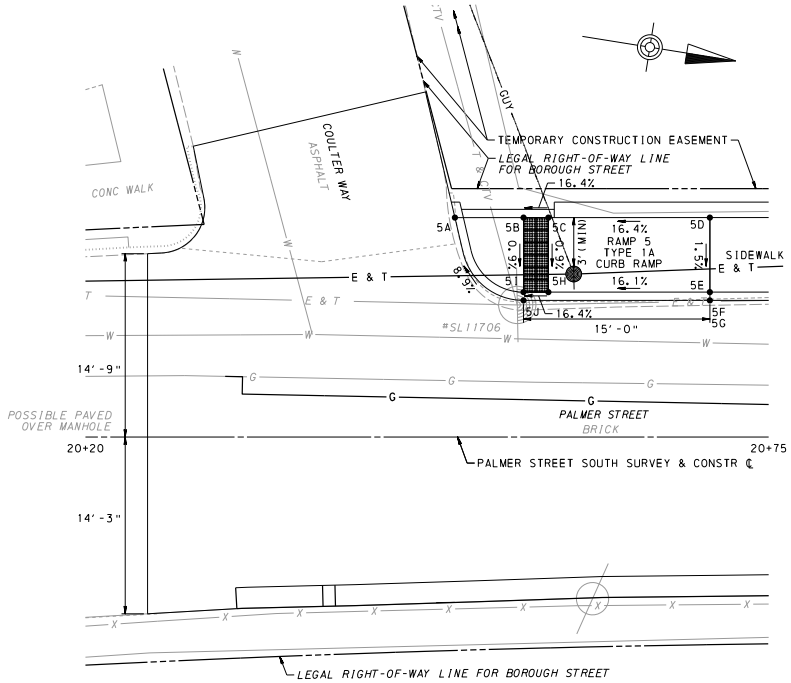
LOCATION: SWISSVALE, PENNSYLVANIA

TITLE: BR0028818 BRIDGE PT344.91 WASHINGTON AVENUE SPECIAL DETAILS CURB RAMPS

DSN JAH	PO No. D2122	WBS 1290818-0N177	SHEET POST PT-344.91
DWN WRB	FILE No. BR0028818		DRAWING NUMBER PT-344.91 24 17
CK CAB	DATE 6/12/2024		

CADD FILE: BS_Washington_Ave_ADA Curb Ramps E.dgn

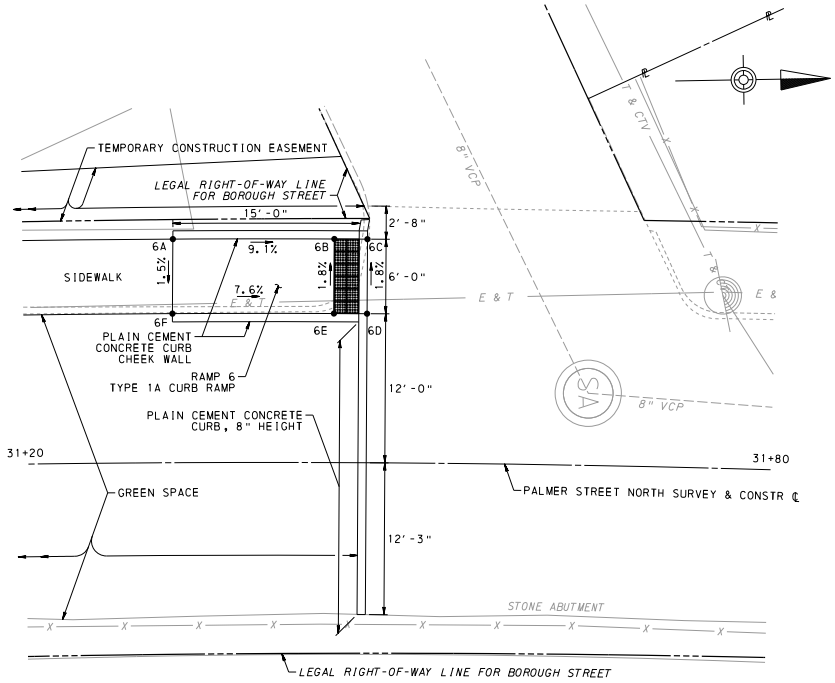
CADD FILE: NS_Washington_Ave_ADA Curb Ramps E.dgn



RAMP 5 – TYPE 1A CURB RAMP

PALMER STREET
STA 20+49.74 TO STA 20+70.27, LEFT

RAMP	POINT	POINT TYPE	STATION	OFFSET (FT)	ELEVATION (FT)	COORDINATES NORTH	COORDINATES EAST
RAMP 5 TYPE 1A CURB RAMP	5A	EOP	20+49.74	17.67 LT	928.19	403153.9885	1373479.0265
	5B	RSS	20+55.27	17.67 LT	929.10	403159.4438	1373478.1527
	5C	RSS	20+57.27	17.67 LT	929.43	403161.4186	1373477.8364
	5D	RSS	20+70.27	17.67 LT	931.56	403174.2550	1373475.7805
	5E	RSS	20+70.27	11.67 LT	931.47	403175.2039	1373481.7050
	5F	TFC	20+70.27	11.08 LT	931.47	403175.2962	1373482.2810
	5G	EOP	20+70.27	11.00 LT	930.80	403175.3093	1373482.3633
	5H	RSS	20+57.27	11.67 LT	929.37	403162.3675	1373483.7609
	5I	RSS	20+55.27	11.67 LT	929.05	403160.3927	1373484.0772
	5J	EOP	20+55.27	11.00 LT	929.04	403160.4981	1373484.7355



RAMP 6 – TYPE 1A CURB RAMP

PALMER STREET
STA 31+31.90 TO STA 31+47.44, LEFT

RAMP	POINT	POINT TYPE	STATION	OFFSET (FT)	ELEVATION (FT)	COORDINATES NORTH	COORDINATES EAST
RAMP 6 TYPE 1A CURB RAMP	6A	RSS	31+31.97	18.00 LT	936.37	403443.5845	1373454.0702
	6B	RSS	31+44.81	17.99 LT	935.19	403456.5828	1373454.2942
	6C	EOP	31+47.44	18.00 LT	934.95	403459.2491	1373454.3401
	6D	EOP	31+47.44	12.00 LT	935.06	403459.1129	1373460.3389
	6E	RSS	31+44.80	11.99 LT	935.30	403456.4467	1373460.2930
	6F	RSS	31+31.91	12.00 LT	936.28	403443.4483	1373460.0690

LEGEND

EOP	EDGE OF PAVEMENT
RSS	RAMP SLOPED SURFACE
TFC	TOP FACE OF CURB
▦	DETECTABLE WARNING SURFACE

SCALE: 1"=5'

5' 0 5' 10'
DO NOT SCALE THIS DRAWING FOR DIMENSIONS NOT GIVEN

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL CYNTHIA A. BARTUS ENGINEER PEO046656

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100 AIRSIDE DRIVE
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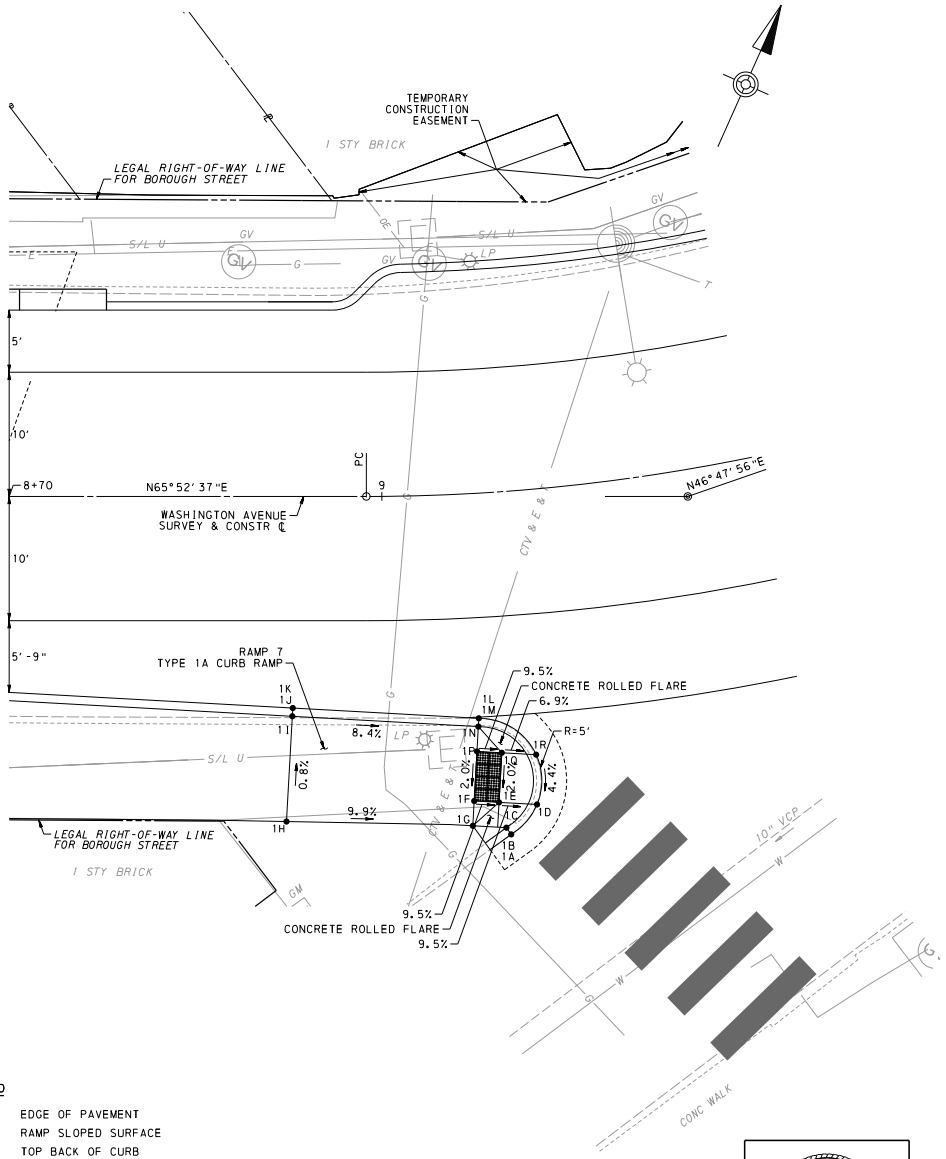
NORFOLK SOUTHERN RAILWAY COMPANY
ENGINEERING DEPARTMENT
PITTSBURGH
OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER – DESIGN AND CONSTRUCTION – ATLANTA, GA.

REV	BY	DATE	DESCRIPTION
000000			

SWISSVALE, PENNSYLVANIA
BR0028818 BRIDGE PT344.91 WASHINGTON AVENUE
SPECIAL DETAILS
CURB RAMPS

DSN JAH PD No. D2122 WBS 1290818-0N477 SHEET POST PT-344.91
DWN WRB FILE No. BR0028818 DRAWING NUMBER PT-344.91 24 18
CHK CAB DATE 6/12/2024
CADD FILE: BC_Washington_Ave_ADA Curb Ramps C.dgn



RAMP	POINT	POINT TYPE	STATION	OFFSET (FT)	ELEVATION (FT)	COORDINATES	
						NORTH	EAST
RAMP 3 TYPE 1A CURB RAMP	1A	EOP	9+08.65	27.58 RT	936.58	403377.0500	1373689.6183
	1B	TFC	9+08.62	27.51 RT	937.25	403377.0918	1373689.5462
	1C	TBC	9+08.35	27.01 RT	937.26	403377.3844	1373689.0415
	1D	EOP	9+10.56	25.32 RT	936.85	403380.0947	1373690.5273
	1E	BTS	9+07.95	24.95 RT	937.14	403379.0003	1373687.6679
	1F	RSS	9+06.24	24.73 RT	937.33	403378.2853	1373685.8000
	1G	RSS	9+06.06	26.72 RT	937.29	403376.4173	1373686.5150
	1H	RSS	8+92.32	26.17 RT	938.78	403370.5999	1373672.6805
	1I	TBC	8+92.79	17.69 RT	938.71	403378.5278	1373669.6459
	1J	TFC	8+92.83	17.07 RT	938.70	403379.1106	1373669.4229
	1K	EOP	8+92.83	17.03 RT	938.37	403379.1494	1373669.4078
	1L	EOP	9+06.86	18.10 RT	937.46	403384.5116	1373683.4168
	1M	TFC	9+06.86	18.10 RT	937.46	403384.5116	1373683.4168
	1N	TBC	9+06.80	18.76 RT	937.45	403383.8890	1373683.6551
	1P	RSS	9+06.61	20.75 RT	937.41	403382.0210	1373684.3701
	1Q	RSS	9+08.36	20.97 RT	937.22	403382.7360	1373686.2380
	1R	EOP	9+10.77	21.32 RT	937.03	403383.7260	1373688.8245

LEGEND

EOP	EDGE OF PAVEMENT
RSS	RAMP SLOPED SURFACE
TBC	TOP BACK OF CURB
TFC	TOP FACE OF CURB
	DETECTABLE WARNING SURFACE
	CROSSWALK

SCALE: 1"=5'

5' 0 5' 10'

DO NOT SCALE THIS DRAWING FOR DIMENSIONS NOT GIVEN

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL CYNTHIA A. BARTUS ENGINEER PENNSYLVANIA

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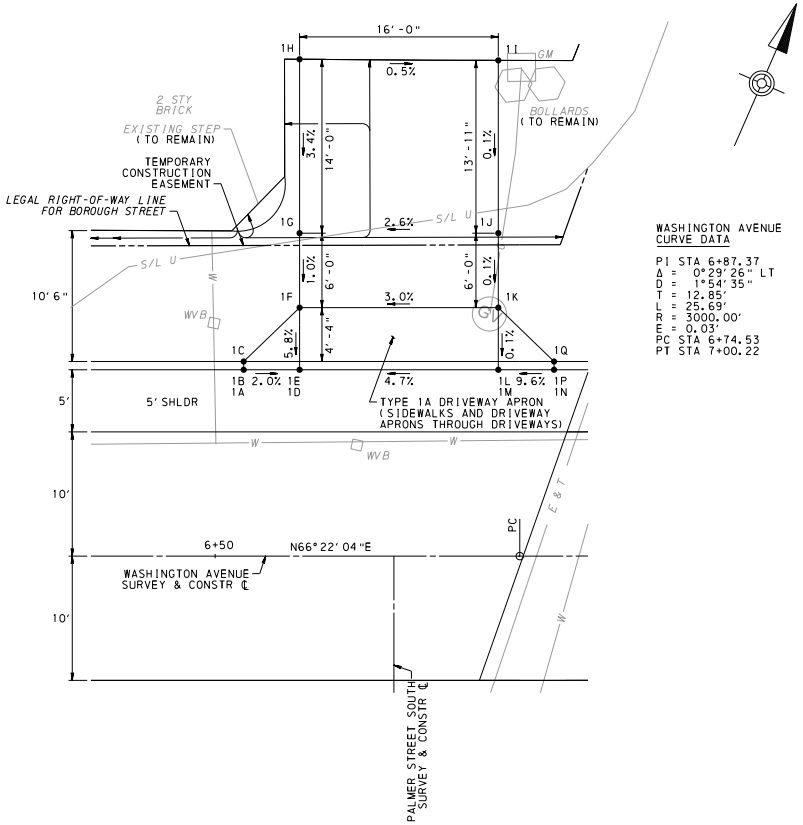
ENGINEERING DEPARTMENT
PITTSBURGH
OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER – DESIGN AND CONSTRUCTION – ATLANTA, GA.

REV	BY	DATE	DESCRIPTION

LOCATION: SWISSVALE, PENNSYLVANIA
TITLE: BR0028818 BRIDGE PT344.91 WASHINGTON AVENUE SPECIAL DETAILS CURB RAMPS

DSN JAH	PO No. D2122	WBS 1290818-0N177	SHT PT-344.91		
DWN WRB	FILE No. BR0028818		DRAWING NUMBER PT-344.91 24 19		
CHK CAB	DATE 6/7/2024				

CADD FILE: NS_Washington_Ave_ADA Curb Ramps B.dgn



WASHINGTON AVENUE
CURVE DATA

PI STA 6+87.37
Δ = 0°29'26" LT
D = 1°54'35"
T = 12.85'
L = 25.69'
R = 3000.00'
E = 0.03'
PC STA 6+74.53
PT STA 7+00.22

DRIVEWAY	POINT	POINT TYPE	STATION	OFFSET (FT)	ELEVATION (FT)	COORDINATES	
						NORTH	EAST
DRIVEWAY TYPE 1A DRIVEWAY APRON	1A	EOP	6+52.30	15.00	941.18	403310.4034	1373436.7885
	1B	TFC	6+52.30	15.04	941.60	403310.4416	1373436.7718
	1C	TBC	6+52.30	15.67	941.60	403311.0142	1373436.5213
	1D	EOP	6+56.80	15.00	941.38	403312.2073	1373440.9111
	1E	TFC	6+56.80	15.02	941.51	403312.2217	1373440.9049
	1F	BDA	6+56.80	20.00	941.79	403316.7880	1373438.9068
	1G	EDW	6+56.80	26.00	941.85	403322.2849	1373436.5016
	1H	EDW	6+56.80	40.00	942.33	403335.1114	1373430.8892
	1I	EDW	6+72.80	39.91	942.29	403341.4433	1373445.5833
	1J	EDW	6+72.80	26.00	942.27	403328.6987	1373451.1598
	1K	BDA	6+72.80	20.00	942.27	403323.2019	1373453.5650
	1L	TFC	6+72.80	15.02	942.26	403318.6355	1373455.5630
	1M	EOP	6+72.80	15.00	942.14	403318.6212	1373455.5693
	1N	EOP	6+77.30	15.00	942.36	403320.4207	1373459.6787
	1P	TFC	6+77.30	15.04	942.69	403320.4589	1373459.6620
	1Q	TBC	6+77.30	15.67	942.69	403321.0312	1373459.4109

LEGEND

BDA	BACK OF DRIVEWAY APRON
EDW	EDGE OF DRIVEWAY
EOP	EDGE OF PAVEMENT
TBC	TOP BACK OF CURB
TFC	TOP FACE OF CURB
	DETECTABLE WARNING SURFACE

SCALE: 1"=5'

5' 0 5' 10'
DO NOT SCALE THIS DRAWING FOR DIMENSIONS NOT GIVEN

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL CYNTHIA A. BARTUS ENGINEER PENNSYLVANIA

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PITTSBURGH
ENGINEERING DIVISION
OFFICE OF THE CHIEF ENGINEER – DESIGN AND CONSTRUCTION – ATLANTA, GA.

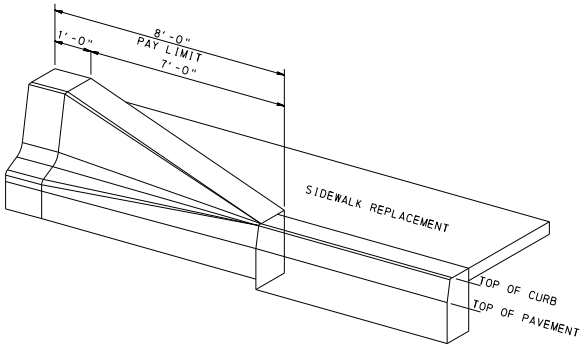
REV	BY	DATE	DESCRIPTION

SWISSVALE, PENNSYLVANIA
BR0028818 BRIDGE PT344.91 WASHINGTON AVENUE
SPECIAL DETAILS
DRIVEWAY APRON

DSN	JAH	PD No.	D2122	WO	1290818-DW77
DWN	WRB	FILE No.	BR0028818		
CHK	CAB	DATE	6/12/2024		

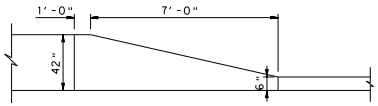
DRAWING NUMBER
PT-344.91 24 20

CADD FILE: BS_Washington_Ave_Driveway.dgn



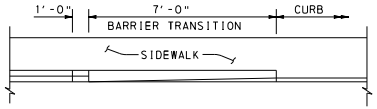
ISOMETRIC VIEW

NOT TO SCALE



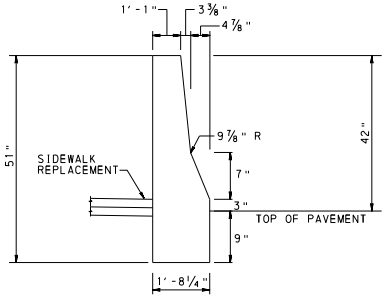
ELEVATION

NOT TO SCALE



PLAN

NOT TO SCALE



CROSS SECTION

NOT TO SCALE

END TRANSITION, SINGLE FACE CONCRETE BARRIER, F-SHAPE, 42" HEIGHT, TO CURB

NOT TO SCALE
STA 8+69.84 TO STA 8+77.84 LT
(ITEM 4623-0432)

PROVIDE END TRANSITION MEETING THE REQUIREMENTS OF PUBLICATION 408, SECTION 623.

PROVIDE PLATES MEETING THE REQUIREMENTS OF PUBLICATION 408 SPECIFICATIONS, SECTION 1105.02(a)2. GALVANIZE PLATES AS SPECIFIED IN PUBLICATION 408 SPECIFICATIONS, SECTION 1105.02(s) OR COAT AS SPECIFIED IN SECTION 605.2(a). ALTERNATE CONNECTIONS MAY BE USED AS APPROVED BY THE BUREAU OF DESIGN.

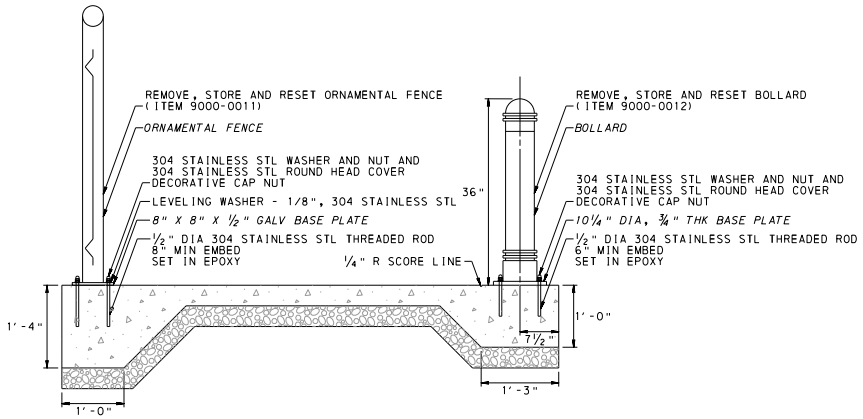
FOR CAST-IN-PLACE OR SLIP-FORM CONSTRUCTION, USE PREMOLDED JOINT MATERIAL AT ALL CONSTRUCTION JOINTS.

COMPACT NO. 2A MATERIAL IN ACCORDANCE WITH PUBLICATION 408, SECTION 350. A LAYER 1" THICK OF NON-SHRINK MORTAR MAY BE USED ON TOP OF THE SUBBASE MATERIAL FOR LEVELING PURPOSES.

ROUND OR CHAMFER ALL EDGES WITH A RADIUS OF 1" EXCEPT AS SHOWN.

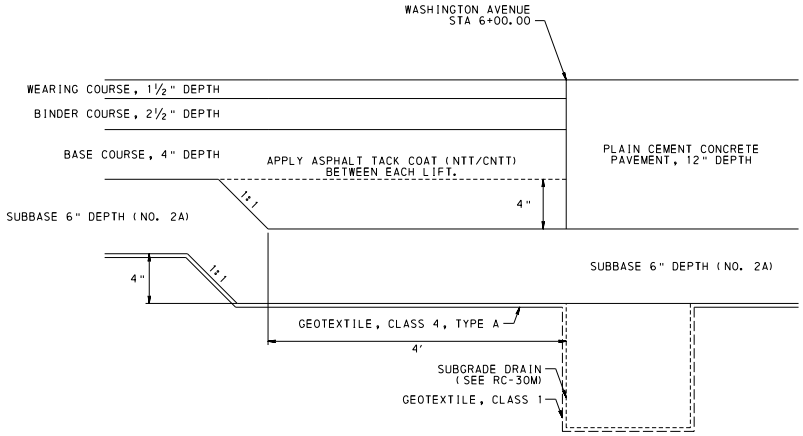
PROVIDE REINFORCEMENT MEETING THE REQUIREMENTS OF PUBLICATION 408, SECTION 709 AND FABRICATE REINFORCEMENT BARS ACCORDING TO PENNDOT BRIDGE CONSTRUCTION STANDARD, BC-736M.

INSTALL BARRIER TRANSITION WITH THE VERTICAL CENTERLINE TO NOT BE OUT OF PLUMB BY MORE THAN ¼".



CEMENT CONCRETE SIDEWALK, WAVERLY STREET

NOT TO SCALE
STA 51+15.00 TO STA 52+35.00 LT
(ITEM 4676-0001)



TRANSITION FROM ASPHALT TO CONCRETE PAVEMENT DETAIL

NOT TO SCALE
NO PAY ITEM

REGISTERED PROFESSIONAL
CYNTHIA A. BARTUS
ENGINEER
COMMONWEALTH OF PENNSYLVANIA

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NORFOLK SOUTHERN RAILWAY COMPANY

PITTSBURGH
ENGINEERING DIVISION
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

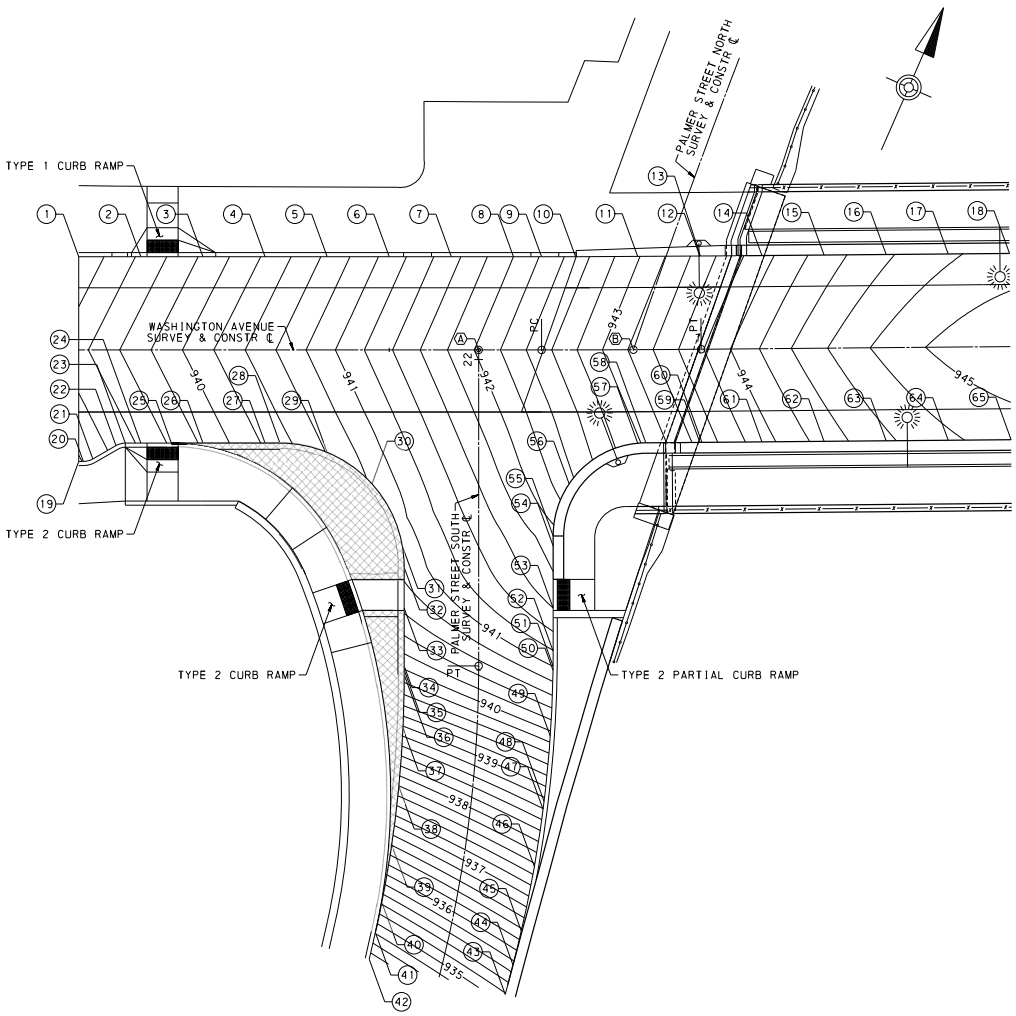
REV	BY	DATE	DESCRIPTION

LOCATION: SWISSVALE, PENNSYLVANIA
TITLE: BR0028818 BRIDGE PT344.91 WASHINGTON AVENUE
SPECIAL DETAILS

DSN	JAH	PID No.	D2122	WBS	1290818-0H77
DWN	WRB	FILE No.	BR0028818		
CHK	CAB	DATE	6/12/2024		

MILE POST: PT-344.91
DRAWING NUMBER: PT-344.91 24 21

CADD FILE: NS_Washington_Ave_det24.dgn



WASHINGTON STREET AND PALMER STREET SOUTH INTERSECTION

BASED ON PENNSYLVANIA STATE PLANE COORDINATE SYSTEM (SPCS 83), PA SOUTH ZONE

ROUTE	POINT	STATION	OFFSET (FT)	ELEVATION (FT)	COORDINATES NORTH	COORDINATES EAST
WASHINGTON AVENUE	1	6+00.00	15.00 LT	939.04	403289.4382	1373388.8745
WASHINGTON AVENUE	2	6+10.00	15.00 LT	939.43	403293.4468	1373398.0359
WASHINGTON AVENUE	3	6+20.00	15.00 LT	939.83	403297.4555	1373407.1973
WASHINGTON AVENUE	4	6+30.00	15.00 LT	940.23	403301.4642	1373416.3587
WASHINGTON AVENUE	5	6+40.00	15.00 LT	940.64	403305.4728	1373425.5200
WASHINGTON AVENUE	6	6+50.00	15.00 LT	941.08	403309.4815	1373434.6814
WASHINGTON AVENUE	7	6+60.00	15.00 LT	941.53	403313.4901	1373443.8428
WASHINGTON AVENUE	8	6+70.00	15.00 LT	942.00	403317.4988	1373453.0041
WASHINGTON AVENUE	9	6+74.53	15.00 LT	942.22	403319.3138	1373457.1522
WASHINGTON AVENUE	10	6+80.03	15.00 LT	942.49	403321.5120	1373462.1635
WASHINGTON AVENUE	11	6+90.08	15.00 LT	942.98	403325.5529	1373471.3109
WASHINGTON AVENUE	12	7+00.13	15.00 LT	943.47	403329.6243	1373480.4448
WASHINGTON AVENUE	13	7+00.22	15.00 LT	943.48	403329.6617	1373480.5281
WASHINGTON AVENUE	14	7+10.13	15.00 LT	943.92	403333.7114	1373489.5717
WASHINGTON AVENUE	15	7+20.13	15.00 LT	944.29	403337.7985	1373498.6987
WASHINGTON AVENUE	16	7+30.13	15.00 LT	944.57	403341.8856	1373507.8258
WASHINGTON AVENUE	17	7+40.13	15.00 LT	944.77	403345.9728	1373516.9528
WASHINGTON AVENUE	18	7+50.00	15.00 LT	944.88	403350.0065	1373525.9607
WASHINGTON AVENUE	19	6+00.00	17.95 RT	938.98	403259.2497	1373402.0839
WASHINGTON AVENUE	20	6+00.76	17.95 RT	939.01	403259.5543	1373402.7763
WASHINGTON AVENUE	21	6+02.27	17.56 RT	939.08	403260.5235	1373404.0050
WASHINGTON AVENUE	22	6+06.00	15.40 RT	939.27	403263.9905	1373406.5587
WASHINGTON AVENUE	23	6+07.50	15.00 RT	939.34	403264.9600	1373407.7718
WASHINGTON AVENUE	24	6+10.00	15.00 RT	939.43	403265.9622	1373410.0621
WASHINGTON AVENUE	25	6+14.92	15.00 RT	939.63	403267.9358	1373414.5725
WASHINGTON AVENUE	26	6+20.00	15.00 RT	939.83	403269.9709	1373419.2234
WASHINGTON AVENUE	27	6+30.00	15.00 RT	940.23	403273.9797	1373428.3848
WASHINGTON AVENUE	28	6+32.39	15.00 RT	940.33	403274.9391	1373430.5775
WASHINGTON AVENUE	29	6+40.00	16.50 RT	940.61	403276.6108	1373438.1487
PALMER STREET SOUTH	30	21+80.00	17.20 LT	940.82	403274.8704	1373446.7659
PALMER STREET SOUTH	31	21+70.00	12.30 LT	940.88	403267.6723	1373455.2608
PALMER STREET SOUTH	32	21+66.55	12.00 LT	940.85	403264.6334	1373456.9174
PALMER STREET SOUTH	33	21+60.00	12.00 LT	940.64	403258.6311	1373459.5440
PALMER STREET SOUTH	34	21+50.68	12.00 LT	940.05	403250.0892	1373463.2816
PALMER STREET SOUTH	35	21+50.00	12.00 LT	939.99	403249.5069	1373463.5364
PALMER STREET SOUTH	36	21+49.19	11.99 LT	939.92	403248.8066	1373463.8428
PALMER STREET SOUTH	37	21+40.00	11.93 LT	938.96	403240.8167	1373467.1224
PALMER STREET SOUTH	38	21+30.00	11.86 LT	937.79	403231.9552	1373470.2720
PALMER STREET SOUTH	39	21+20.00	11.79 LT	936.61	403222.9441	1373472.9754
PALMER STREET SOUTH	40	21+10.00	11.72 LT	935.44	403213.8055	1373475.2254
PALMER STREET SOUTH	41	21+04.69	11.69 LT	934.82	403208.9054	1373476.2343
PALMER STREET SOUTH	42	21+00.00	11.60 LT	934.27	403204.5707	1373477.0669
PALMER STREET SOUTH	43	21+00.00	11.01 RT	935.18	403208.1534	1373499.3979
PALMER STREET SOUTH	44	21+04.67	11.08 RT	935.73	403213.0182	1373498.6266
PALMER STREET SOUTH	45	21+09.95	11.22 RT	936.35	403218.5142	1373497.6765
PALMER STREET SOUTH	46	21+20.00	11.45 RT	937.54	403228.8994	1373495.4450
PALMER STREET SOUTH	47	21+28.81	11.64 RT	938.59	403237.9045	1373493.0342
PALMER STREET SOUTH	48	21+30.00	11.66 RT	938.73	403239.1097	1373492.6777
PALMER STREET SOUTH	49	21+40.00	11.83 RT	939.91	403249.1679	1373489.3713
PALMER STREET SOUTH	50	21+50.00	11.98 RT	940.95	403259.0439	1373485.5344
PALMER STREET SOUTH	51	21+50.68	11.99 RT	941.01	403259.7043	1373485.2561
PALMER STREET SOUTH	52	21+53.04	12.00 RT	941.19	403261.8769	1373484.3207
PALMER STREET SOUTH	53	21+60.00	12.00 RT	941.60	403268.2519	1373481.5313
PALMER STREET SOUTH	54	21+70.00	12.00 RT	941.88	403277.4132	1373477.5226
PALMER STREET SOUTH	55	21+71.60	12.00 RT	941.91	403278.8785	1373476.8815
PALMER STREET SOUTH	56	21+80.00	14.57 RT	942.34	403287.6014	1373475.8706
WASHINGTON AVENUE	57	6+89.92	15.06 RT	942.98	403298.0152	1373483.3601
WASHINGTON AVENUE	58	6+91.23	15.00 RT	943.04	403298.5999	1373484.5342
WASHINGTON AVENUE	59	6+99.87	15.00 RT	943.46	403302.1392	1373492.4711
WASHINGTON AVENUE	60	7+00.22	15.00 RT	943.48	403302.2815	1373492.7890
WASHINGTON AVENUE	61	7+09.87	15.00 RT	943.91	403306.2263	1373501.5981
WASHINGTON AVENUE	62	7+19.87	15.00 RT	944.28	403310.3134	1373510.7252
WASHINGTON AVENUE	63	7+29.87	15.00 RT	944.56	403314.4005	1373519.8522
WASHINGTON AVENUE	64	7+39.87	15.00 RT	944.76	403318.4876	1373528.9792
WASHINGTON AVENUE	65	7+50.00	15.00 RT	944.88	403322.6264	1373538.2216

NOTES

1. CONTOURS ARE SHOWN AT 0.20 FT CONTOUR INTERVALS.
2. FOUR (4) PLACE COORDINATES ARE USED FOR COMPUTATIONAL PURPOSES ONLY AND DO IMPLY A PRECISION BEYOND TWO (2) PLACES.

LEGEND

- DETECTABLE WARNING SURFACE
- TRUCK APRON
- PROPOSED HIGHWAY LIGHTING

Ⓐ STA 6+64.39, WASHINGTON AVENUE SURVEY & CONSTR ℄ = STA 22+01.55, PALMER STREET SOUTH SURVEY & CONSTR ℄

Ⓑ STA 6+89.31, WASHINGTON AVENUE SURVEY & CONSTR ℄ = STA 30+00.00, PALMER STREET NORTH SURVEY & CONSTR ℄

SCALE: 1"=5'

5' 0 5' 10'

DO NOT SCALE THIS DRAWING FOR DIMENSIONS NOT SHOWN

FOR PROFILE, SEE SHEETS 32 & 33

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL CYNTHIA A. BARTUS ENGINEER/PEDAGOGUE

Michael Baker INTERNATIONAL
AIRSIDE BUSINESS PARK
100 AIRSIDE DRIVE
MOON TOWNSHIP, PA 15108
Phone: (412) 269-6300

NORFOLK SOUTHERN
NORFOLK SOUTHERN RAILWAY COMPANY
PITTSBURGH
ENGINEERING DIVISION
OFFICE OF THE CHIEF ENGINEER – DESIGN AND CONSTRUCTION – ATLANTA, GA.

REV	BY	DATE	DESCRIPTION

SWISSVALE, PENNSYLVANIA
BR0028818 BRIDGE PT344.91 WASHINGTON AVENUE INTERSECTION DETAIL
WASHINGTON AVENUE AND PALMER STREET SOUTH

DSGN JAH | REV NO. D2122 | ENG 1290818-ON177 | SHEET POST PT-344.91
DRWN WHB | PROJ NO. BR0028818 | DRAWING NUMBER PT-344.91 24 22
CHK CAB | DATE 6/12/2024
CADD FILE: NS_Washington_Ave_Intersection Detail.dgn

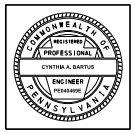
S & PMP - SIGNING AND PAVEMENT MARKING PLAN
LP - HIGHWAY LIGHTING PLAN
TCP - TRAFFIC CONTROL PLAN
♦ - SEE SPECIAL PROVISIONS

SUMMARY

STR - STRUCTURE PLAN

REVISION NO	REVISIONS	DATE	BY	DISTRICT	COUNTY	ROUTE	SECTION	SHEET
				11	ALLEGHENY	WASHINGTON AV		23 OF 34
				SWISSVALE				

QUANTITY	ITEM NO / UNIT	DESCRIPTION	DESIGN NO	FOR TAB SEE SHEET
X	0201 0001 / LS	CLEARING AND GRUBBING		NO TAB
872	0203 0001 / CY	CLASS 1 EXCAVATION		24-29
254	0203 0006 / LF	SAW CUTTING		24-29
50	0205 0100 / CY	FOREIGN BORROW EXCAVATION		24-29
34	0205 0264 / CY	SELECTED BORROW EXCAVATION ROCK, CLASS R-4		24-29
462	0212 0001 / LF	GEOTEXTILE, CLASS 1		24-29
1417	0212 0014 / SY	GEOTEXTILE, CLASS 4, TYPE A		24-29
1000	0213 0002 / DOLLA	TEMPORARY PROJECT AIR POLLUTION CONTROL		NO TAB
643	0313 0422 / SY	SUPERPAVE ASPHALT MIXTURE DESIGN, BASE COURSE, PG 64S-22, 0.3 TO < 3 MILLION ESALS, 25.0 MM MIX, 4" DEPTH		24-29
4	0313 0437 / TON	SUPERPAVE ASPHALT MIXTURE DESIGN, BASE COURSE, PG 64S-22, 0.3 TO < 3 MILLION ESALS, 25.0 MM MIX		24-29
1382	0350 0106 / SY	SUBBASE 6" DEPTH (NO. 2A)		24-29
44	0350 0121 / TON	SUBBASE (NO. 2A)		24-29
643	0413 0245 / SY	SUPERPAVE ASPHALT MIXTURE DESIGN, WEARING COURSE, PG 64S-22, 0.3 TO < 3 MILLION ESALS, 9.5 MM MIX, 1 1/2" DEPTH, SRL-H		24-29
643	0413 6045 / SY	SUPERPAVE ASPHALT MIXTURE DESIGN, BINDER COURSE, PG 64S-22, 0.3 TO < 3 MILLION ESALS, 19.0 MM MIX, 2 1/2" DEPTH		24-29
1287	0460 0003 / SY	ASPHALT TACK COAT (NTT/CNTT)		24-29
20	0501 0020 / SY	PLAIN CEMENT CONCRETE PAVEMENT, 4" DEPTH		24-29
683	0501 0036 / SY	PLAIN CEMENT CONCRETE PAVEMENT, 12" DEPTH		24-29
31	4501 0036 / SY	PLAIN CEMENT CONCRETE PAVEMENT, 12" DEPTH, INTEGRAL COLOR AND STAMPED FINISH ♦		24-29
734	0503 0001 / SY	PROTECTIVE COATING FOR CEMENT CONCRETE PAVEMENTS AND SHOULDERS		24-29
X	0608 0001 / LS	MOBILIZATION		NO TAB
X	0609 0004 / LS	INSPECTOR'S FIELD OFFICE AND INSPECTION FACILITIES, TYPE C		NO TAB
X	0609 0009 / LS	EQUIPMENT PACKAGE ♦		NO TAB
462	0612 0001 / LF	SUBGRADE DRAINS		24-29
142	0623 0412 / LF	SINGLE FACE CONCRETE BARRIER, F-SHAPE, 42" HEIGHT, WITHOUT FILL		24-29
1	0623 0432 / EACH	END TRANSITION, SINGLE FACE CONCRETE BARRIER, F-SHAPE, 42" HEIGHT		24-29
1	4623 0432 / EACH	END TRANSITION, SINGLE FACE CONCRETE BARRIER, F-SHAPE, 42" HEIGHT, TO CURB ♦		24-29
223	0630 0025 / LF	PLAIN CEMENT CONCRETE CURB, 4" HEIGHT, INCLUDING REMOVAL OF EXISTING CURB		24-29
69	0630 0035 / LF	PLAIN CEMENT CONCRETE CURB, 6" HEIGHT, INCLUDING REMOVAL OF EXISTING CURB		24-29
326	0630 0041 / LF	PLAIN CEMENT CONCRETE CURB, 8" HEIGHT		24-29
122	0633 0230 / LF	PLAIN CONCRETE MOUNTABLE CURB, ROUNDABOUT TRUCK APRON CURB		24-29
565	0676 0001 / SY	CEMENT CONCRETE SIDEWALK		24-29
116	4676 0001 / SY	CEMENT CONCRETE SIDEWALK, WAVERLY STREET ♦		24-29
70	0676 0003 / SY	SIDEWALKS AND DRIVEWAY APRONS THROUGH DRIVEWAYS		24-29
X	0686 0020 / LS	CONSTRUCTION SURVEYING, TYPE B		NO TAB
X	0686 0050 / LS	CONSTRUCTION SURVEYING, TYPE D		NO TAB
X	0688 0020 / LS	MICROCOMPUTER, TYPE C		NO TAB
X	0689 0005 / LS	CPM SCHEDULE, WITH UPDATES		NO TAB
EITHER 73	0695 0002 / SF	DETECTABLE WARNING SURFACE, CAST IRON	1	24-29
OR 73	0695 0003 / SF	DETECTABLE WARNING SURFACE, POLYMER CONCRETE	1	24-29
OR 73	0695 0004 / SF	DETECTABLE WARNING SURFACE, POLYMER COMPOSITE	1	24-29
38	0802 0001 / CY	TOPSOIL FURNISHED AND PLACED		24-29
55	0804 0025 / LB	SEEDING AND SOIL SUPPLEMENTS - FORMULA B RESIDENTIAL MIX, INCLUDING MULCH		30
32	0804 0043 / LB	SEEDING - FORMULA T TEMPORARY GRASS MIX		30
5000	0845 0001 / DOLLA	UNFORESEEN WATER POLLUTION CONTROL		NO TAB
279	0867 0012 / LF	COMPOST FILTER SOCK, 12" DIAMETER		30
X	0901 0001 / LS	MAINTENANCE AND PROTECTION OF TRAFFIC DURING CONSTRUCTION		TCP
50	0901 0231 / DAY	ADDITIONAL WARNING LIGHTS, TYPE B		TCP
150	0901 0240 / SF	ADDITIONAL TRAFFIC CONTROL SIGNS		TCP
3400	0910 4116 / LF	AWG 8 UNDERGROUND CABLE, COPPER, 1 CONDUCTOR		LP
300	0910 6000 / LF	TRENCH		LP
X	0910 7210 / LS	TESTING OF ENTIRE LIGHTING SYSTEM		LP
80	0931 0003 / SF	POST MOUNTED SIGNS, TYPE B, STEEL SQUARE POST		S & PMP
30	0935 0001 / SF	POST MOUNTED SIGNS, TYPE F		S & PMP
2	0941 0001 / EACH	RESET POST MOUNTED SIGNS, TYPE B		S & PMP
1	0945 0001 / EACH	RESET POST MOUNTED SIGNS, TYPE F		S & PMP
150	0960 0021 / LF	24" WHITE HOT THERMOPLASTIC PAVEMENT MARKINGS		S & PMP
2	0971 0001 / EACH	REMOVE POST MOUNTED SIGNS, TYPE B		S & PMP
1	0975 0001 / EACH	REMOVE POST MOUNTED SIGNS, TYPE F		S & PMP
X	5018 0048 / LS	REMOVAL OF PORTION OF EXISTING BRIDGE ♦		STR
EITHER	8130 0001 / LS	BRIDGE STRUCTURE, AS DESIGNED ♦	2	STR
AND 1300	1001 0259 / LB	4X4 EPOXY COATED DEFORMED WWF W4 X W4	2	STR
AND 49500	1002 0052 / LB	REINFORCEMENT BARS, EPOXY COATED	2	STR
OR	8100 0001 / LS	STEEL BRIDGE STRUCTURE ♦	2	STR
2	9000 0001 / EACH	LAMINATED NEOPRENE BEARINGS WITH SLIDING SURFACES ♦		STR
6	9000 0002 / EACH	INSTALLATION OF MAINTENANCE WEEPHOLES ♦		STR
X	9000 0003 / LS	PRE AND POST CONSTRUCTION SURVEY ♦		STR
2	9000 0008 / EACH	REMOVE PARKING METER ♦		24-29
X	9000 0009 / LS	SIDEWALK MOMENT SLAB ♦		24-29
X	9000 0010 / LS	ABUTMENT 1 MOMENT SLAB ♦		24-29
X	9000 0011 / LS	REMOVE, STORE AND RESET ORNAMENTAL FENCE ♦		24-29
X	9000 0012 / LS	REMOVE, STORE AND RESET BOLLARD ♦		24-29
X	9000 0013 / LS	REMOVE, STORE AND RESET LAMP POST ♦		24-29
5	9000 0014 / EACH	POLE FOUNDATION, TYPE FC SPECIAL ♦		LP
13	9000 0015 / EACH	LED TEARDROP LUMINAIRE ♦		LP
5	9000 0016 / EACH	DECORATIVE LIGHTING POLE ♦		LP
4	9000 0017 / EACH	DECORATIVE LIGHTING POLE, BARRIER MOUNTED ♦		LP
4	9000 0018 / EACH	DECORATIVE LIGHTING POLE, BRIDGE STRUCTURE MOUNTED ♦		LP
300	9000 0019 / LF	2" DIRECT BURIAL CONDUIT (CONCRETE ENCASED) ♦		LP
X	9000 0020 / LS	REMOVE EXISTING LIGHTING ♦		LP
1	9000 0021 / EACH	POWER SUPPLY MODIFICATION ♦		LP
3	9000 0022 / EACH	JUNCTION BOXES J.B.-1, MODIFIED ♦		LP
X	9000 0025 / LS	PRIVATE ELECTRIC SERVICE ADJUSTMENTS ♦		NO TAB
X	9000 0029 / LS	WASTE MANAGEMENT MOBILIZATION AND DEMOBILIZATION ♦		NO TAB
2	9000 0030 / EACH	SOLIDS SAMPLING FOR WASTE DISPOSAL ♦		NO TAB
363	9000 0031 / TON	DISPOSAL OF REGULATED FILL AND RESIDUAL WASTE ♦		NO TAB
400	9000 0040 / LF	CONSTRUCTION FENCE ♦		TCP



PROJECT ID: 5610
MPMS:
ECMS:
6/11/2024 4:12:33 PM

TABULATION OF QUANTITIES

ROADWAY

REVISION NO	REVISIONS	DATE	BY	DISTRICT	COUNTY	ROUTE	SECTION	SHEET
				11	ALLEGHENY	WASHINGTON AV		24 OF 34
				SWISSVALE				

CLASS 1 EXCAVATION	SAW CUTTING	FOREIGN BORROW EXCAVATION	SELECTED BORROW EXCAVATION ROCK, CLASS R-4	GEOTEXTILE, CLASS 1	GEOTEXTILE, CLASS 4, TYPE A	SUPERPAVE ASPHALT MIXTURE DESIGN, BASE COURSE, PG 64S-22, 0.3 TO < 3 MILLION ESALS, 25.0 MM MIX, 4" DEPTH	SUPERPAVE ASPHALT MIXTURE DESIGN, BASE COURSE, PG 64S-22, 0.3 TO < 3 MILLION ESALS, 25.0 MM MIX	SUBBASE 6" DEPTH (NO. 2A)	SUBBASE (NO. 2A)	SUPERPAVE ASPHALT MIXTURE DESIGN, WEARING COURSE, PG 64S-22, 0.3 TO < 3 MILLION ESALS, 9.5 MM MIX, 1 1/2" DEPTH, SRL-H	SUPERPAVE ASPHALT MIXTURE DESIGN, BINDER COURSE, PG 64S-22, 0.3 TO < 3 MILLION ESALS, 19.0 MM MIX, 2 1/2" DEPTH	ASPHALT TACK COAT (NTT/CNTT)	PLAIN CEMENT CONCRETE PAVEMENT, 4" DEPTH	PLAIN CEMENT CONCRETE PAVEMENT, 12" DEPTH	PLAIN CEMENT CONCRETE PAVEMENT, 12" DEPTH, INTEGRAL COLOR AND STAMPED FINISH	PROTECTIVE COATING FOR CEMENT CONCRETE PAVEMENTS AND SHOULDERS	SUBGRADE DRAINS	SINGLE FACE CONCRETE BARRIER, F-SHAPE, 42" HEIGHT, WITHOUT FILL	END TRANSITION, SINGLE FACE CONCRETE BARRIER, F-SHAPE, 42" HEIGHT	END TRANSITION, SINGLE FACE CONCRETE BARRIER, F-SHAPE, 42" HEIGHT, TO CURB	PLAIN CEMENT CONCRETE CURB, 4" HEIGHT, INCLUDING REMOVAL OF EXISTING CURB	PLAIN CEMENT CONCRETE CURB, 6" HEIGHT, INCLUDING REMOVAL OF EXISTING CURB	PLAIN CEMENT CONCRETE CURB, 8" HEIGHT	PLAIN CONCRETE MOUNTABLE CURB, ROUNDABOUT TRUCK APRON CURB	CEMENT CONCRETE SIDEWALK	CEMENT CONCRETE SIDEWALK, WAVERLY STREET	REMARKS	SIDE	STATIONS
0203 0001 CY	0203 0006 LF	0205 0100 CY	0205 0264 CY	0212 0001 LF	0212 0014 SY	0313 0422 SY	0313 0437 TON	0350 0106 SY	0350 0121 TON	0413 0245 SY	0413 0445 SY	0460 0003 SY	0501 0020 SY	0501 0036 SY	4501 0036 SY	0503 0001 SY	0612 0001 LF	0623 0412 LF	0623 0432 EACH	4623 0432 EACH	0630 0025 LF	0630 0035 LF	0630 0041 LF	0633 0230 LF	0676 0001 SY	4676 0001 SY	ITEM NUMBER UNIT		
																											WASHINGTON AVENUE		
454																												LT / RT	5+75.00 to 9+51.00
	36																										SAWCUT	LT / RT	5+75.00 to 5+75.00
					93	93		93		93	93	186															ASPHALT PAVEMENT	LT / RT	5+75.00 to 6+00.00
																									23			RT	5+75.00 to 6+00.00
																									11			LT	5+75.00 to 6+07.50
				41													41				41							RT	5+75.00 to 6+14.92
				90													90				106							LT	5+75.00 to 6+80.12
																											20'W X 11'L	LT	5+82.85 to 6+07.85
							4																				PAVEMENT TRANSITION	LT / RT	5+95.67 to 6+00.00
				33													33										PAVEMENT TRANSITION	LT / RT	6+00.00
					247			247						247		247												PLAIN CEMENT CONCRETE PAVEMENT	LT / RT	6+00.00 to 6+80.12
																									61			LT	6+05.35 to 6+56.80
																												LT	6+11.00 to 6+16.00
																												RT	6+11.00 to 6+16.00
																							18				CHEEK WALL	RT	6+16.60 to 6+34.91
																											16'W X 24'L	LT	6+52.30 to 6+77.30
																									33			LT	6+72.80 to 7+08.04
																									90			RT	8+19.21 to 9+10.46
																									103			LT	8+34.24 to 9+51.00
					18	18		18		18	18	36																LT / RT	8+47.09 to 8+57.84
				60													60				76							RT	8+47.09 to 9+11.04
																		12		1								LT	8+57.84 to 8+76.84
					133	133		133		133	133	266																LT / RT	8+57.84 to 8+96.04
				72													72					69						LT	8+76.84 to 9+51.00
					39	39		39		39	39	78																LT / RT	8+96.04 to 9+06.03
					3	3		3		3	3	7															SAWCUTTING AREA	RT	9+06.03 to 9+12.78
					180	180		180		180	180	360																LT / RT	9+06.03 to 9+51.00

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL CYNTHIA A. BARTUS ENGINEER PENNSYLVANIA

PROJECT ID: 5610 MPMS: ECMS: 6/9/2024 7:47:18 PM

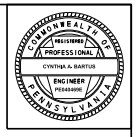
TABULATION OF QUANTITIES

ROADWAY

(+) SEE SUMMARY SHEET FOR COMPLETE ITEM NUMBERS

REVISION NO	REVISIONS	DATE	BY	DISTRICT	COUNTY	ROUTE	SECTION	SHEET
				11	ALLEGHENY	WASHINGTON AV		25 OF 34
				SWISSVALE				

SIDEWALKS AND DRIVEWAY APRONS THROUGH DRIVEWAYS	DWS DESIGN NO. 1	TOPSOIL FURNISHED AND PLACED	REMOVE PARKING METER	SIDEWALK MOMENT SLAB	ABUTMENT 1 MOMENT SLAB	REMOVE, STORE AND RESET ORNAMENTAL FENCE	REMOVE, STORE AND RESET BOLLARD	REMOVE, STORE AND RESET LAMP POST	EMBANKMENT (FOR INFORMATION ONLY)	REMARKS	SIDE	STATIONS
0676 0003 SY	0695 (+) SF	0802 0001 CY	9000 0008 EACH	9000 0009 LS	9000 0010 LS	9000 0011 LS	9000 0012 LS	9000 0013 LS	CY	ITEM NUMBER UNIT		
										WASHINGTON AVENUE		
									3		LT / RT	5+75.00 to 9+51.00
										SAWCUT	LT / RT	5+75.00 to 5+75.00
										ASPHALT PAVEMENT	LT / RT	5+75.00 to 6+00.00
											RT	5+75.00 to 6+00.00
											LT	5+75.00 to 6+07.50
											RT	5+75.00 to 6+14.92
											LT	5+75.00 to 6+80.12
25										20'W X 11'L	LT	5+82.85 to 6+07.85
										PAVEMENT TRANSITION	LT / RT	5+95.67 to 6+00.00
										PAVEMENT TRANSITION	LT / RT	6+00.00
										PLAIN CEMENT CONCRETE PAVEMENT	LT / RT	6+00.00 to 6+80.12
											LT	6+05.35 to 6+56.80
	10										LT	6+11.00 to 6+16.00
	10										RT	6+11.00 to 6+16.00
										CHEEK WALL	RT	6+16.60 to 6+34.91
45										16'W X 24'L	LT	6+52.30 to 6+77.30
											LT	6+72.80 to 7+08.04
											RT	8+19.21 to 9+10.46
											LT	8+34.24 to 9+51.00
											LT / RT	8+47.09 to 8+57.84
		2									RT	8+47.09 to 9+11.04
			1								LT	8+57.84 to 8+76.84
											LT / RT	8+57.84 to 8+96.04
			1								LT	8+76.84 to 9+51.00
											LT / RT	8+96.04 to 9+06.03
										SAWCUTTING AREA	RT	9+06.03 to 9+12.78
											LT / RT	9+06.03 to 9+51.00



PROJECT ID: 5610 MPMS: ECMS: 6/9/2024 7:47:18 PM

TABULATION OF QUANTITIES

ROADWAY

REVISION NO	REVISIONS	DATE	BY	DISTRICT	COUNTY	ROUTE	SECTION	SHEET
				11	ALLEGHENY	WASHINGTON AV		26 OF 34
				SWISSVALE				

CLASS 1 EXCAVATION	SAW CUTTING	FOREIGN BORROW EXCAVATION	SELECTED BORROW EXCAVATION ROCK, CLASS R-4	GEOTEXTILE, CLASS 1	GEOTEXTILE, CLASS 4, TYPE A	SUPERPAVE ASPHALT MIXTURE DESIGN, BASE COURSE, PG 64S-22, 0.3 TO < 3 MILLION ESALS, 25.0 MM MIX, 4" DEPTH	SUPERPAVE ASPHALT MIXTURE DESIGN, BASE COURSE, PG 64S-22, 0.3 TO < 3 MILLION ESALS, 25.0 MM MIX	SUBBASE 6" DEPTH (NO. 2A)	SUBBASE (NO. 2A)	SUPERPAVE ASPHALT MIXTURE DESIGN, WEARING COURSE, PG 64S-22, 0.3 TO < 3 MILLION ESALS, 9.5 MM MIX, 1 1/2" DEPTH, SRL-H	SUPERPAVE ASPHALT MIXTURE DESIGN, BINDER COURSE, PG 64S-22, 0.3 TO < 3 MILLION ESALS, 19.0 MM MIX, 2 1/2" DEPTH	ASPHALT TACK COAT (NTT/CNTT)	PLAIN CEMENT CONCRETE PAVEMENT, 4" DEPTH	PLAIN CEMENT CONCRETE PAVEMENT, 12" DEPTH	PLAIN CEMENT CONCRETE PAVEMENT, 12" DEPTH, INTEGRAL COLOR AND STAMPED FINISH	PROTECTIVE COATING FOR CEMENT CONCRETE PAVEMENTS AND SHOULDERS	SUBGRADE DRAINS	SINGLE FACE CONCRETE BARRIER, F-SHAPE, 42" HEIGHT, WITHOUT FILL	END TRANSITION, SINGLE FACE CONCRETE BARRIER, F-SHAPE, 42" HEIGHT	END TRANSITION, SINGLE FACE CONCRETE BARRIER, F-SHAPE, 42" HEIGHT, TO CURB	PLAIN CEMENT CONCRETE CURB, 4" HEIGHT, INCLUDING REMOVAL OF EXISTING CURB	PLAIN CEMENT CONCRETE CURB, 6" HEIGHT, INCLUDING REMOVAL OF EXISTING CURB	PLAIN CEMENT CONCRETE CURB, 8" HEIGHT	PLAIN CONCRETE MOUNTABLE CURB, ROUNDABOUT TRUCK APRON CURB	CEMENT CONCRETE SIDEWALK	CEMENT CONCRETE SIDEWALK, WAVERLY STREET	REMARKS	SIDE	STATIONS
0203 0001 CY	0203 0006 LF	0205 0100 CY	0205 0264 CY	0212 0001 LF	0212 0014 SY	0313 0422 SY	0313 0437 TON	0350 0106 SY	0350 0121 TON	0413 0245 SY	0413 0445 SY	0460 0003 SY	0501 0020 SY	0501 0036 SY	4501 0036 SY	0503 0001 SY	0612 0001 LF	0623 0412 LF	0623 0432 EACH	4623 0432 EACH	0630 0025 LF	0630 0025 LF	0630 0041 LF	0633 0230 LF	0676 0001 SY	4676 0001 SY	ITEM NUMBER UNIT		
																												RT	9+06.24 to 9+08.36
	62																										SAWCUT	RT	9+07.89 to 9+51.00
	36																										SAWCUT	LT / RT	9+51.00 to 9+51.00
																											WAVERLY STREET		
129																												LT / RT	51+15.00 to 52+35.00
	14																										SAWCUT	LT / RT	51+15.00 to 51+15.00
																										116		LT	51+15.00 to 52+35.00
																												LT / RT	51+15.00 to 52+35.00
					177	177		177		177	177	354															ASPHALT PAVEMENT	LT / RT	51+15.00 to 52+35.00
			34																								SLOPE RESTORATION FOR PIER REMOVAL	LT	51+40.00 to 52+05.00
	14																											LT / RT	52+35.00 to 52+35.00
																											PALMER STREET SOUTH		
215																												LT / RT	20+49.75 to 21+86.55
	60																										SAWCUT	LT / RT	20+25.00 to 20+47.37
					432			432						432		432												PLAIN CEMENT CONCRETE PAVEMENT	LT / RT	20+25.00 to 21+86.55
																			1									RT	20+33.09 to 20+40.08
																		130										RT	20+40.08 to 21+58.43
				166													166						166					LT	20+49.75 to 21+86.55
																							8				CHEEK WALL	LT	20+50.27 to 20+57.74
																									105			LT	20+50.42 to 21+85.88
																												LT	20+55.27 to 20+57.27
																												LT	20+57.77 to 21+77.22
									13				20			20							55					RT	21+04.67 to 21+58.43
																								108				LT	21+04.69 to 21+86.55
					7				4						7	7												LT	21+26.65 to 21+58.60
																												LT	21+58.76 to 21+64.37
																							12				CHEEK WALL	RT	21+59.60
					4				2					4		4									14			TRUCK APRON	LT	21+59.60 to 21+64.60

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL CYNTHIA A. BARTUS ENGINEER PENDING

PROJECT ID: 5610 MPMS: ECMS: 6/9/2024 7:47:18 PM

TABULATION OF QUANTITIES

ROADWAY

(+) SEE SUMMARY SHEET FOR COMPLETE ITEM NUMBERS

REVISION NO	REVISIONS	DATE	BY	DISTRICT	COUNTY	ROUTE	SECTION	SHEET
				11	ALLEGHENY	WASHINGTON AV		27 OF 34
				SWISSVALE				

SIDEWALKS AND DRIVEWAY APRONS THROUGH DRIVEWAYS	DWS DESIGN NO. 1	TOPSOIL FURNISHED AND PLACED	REMOVE PARKING METER	SIDEWALK MOMENT SLAB	ABUTMENT 1 MOMENT SLAB	REMOVE, STORE AND RESET ORNAMENTAL FENCE	REMOVE, STORE AND RESET BOLLARD	REMOVE, STORE AND RESET LAMP POST	EMBANKMENT (FOR INFORMATION ONLY)	REMARKS	SIDE	STATIONS
0676 0003 SY	0695 (+) SF	0802 0001 CY	9000 0008 EACH	9000 0009 LS	9000 0010 LS	9000 0011 LS	9000 0012 LS	9000 0013 LS	CY	ITEM NUMBER UNIT		
8											RT	9+06.24 to 9+08.36
										SAWCUT	RT	9+07.89 to 9+51.00
										SAWCUT	LT / RT	9+51.00 to 9+51.00
										WAVERLY STREET		
											LT / RT	51+15.00 to 52+35.00
										SAWCUT	LT / RT	51+15.00 to 51+15.00
											LT	51+15.00 to 52+35.00
						X	X	X			LT / RT	51+15.00 to 52+35.00
										ASPHALT PAVEMENT	LT / RT	51+15.00 to 52+35.00
										SLOPE RESTORATION FOR PIER REMOVAL	LT	51+40.00 to 52+05.00
											LT / RT	52+35.00 to 52+35.00
										PALMER STREET SOUTH		
											LT / RT	20+49.75 to 21+86.55
										SAWCUT	LT / RT	20+25.00 to 20+47.37
										PLAIN CEMENT CONCRETE PAVEMENT	LT / RT	20+25.00 to 21+86.55
											RT	20+33.09 to 20+40.08
											RT	20+40.08 to 21+58.43
									82		LT	20+49.75 to 21+86.55
										CHEEK WALL	LT	20+50.27 to 20+57.74
											LT	20+50.42 to 21+85.88
	12										LT	20+55.27 to 20+57.27
				X							LT	20+57.77 to 21+77.22
											RT	21+04.67 to 21+58.43
											LT	21+04.69 to 21+86.55
											LT	21+26.65 to 21+58.60
	11										LT	21+58.76 to 21+64.37
										CHEEK WALL	RT	21+59.60
										TRUCK APRON	LT	21+59.60 to 21+64.60

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — CYNTHIA A. BARTUS — ENGINEER

PROJECT ID: 5610 MPMS: ECMS: 6/9/2024 7:47:18 PM

TABULATION OF QUANTITIES

ROADWAY

REVISION NO	REVISIONS	DATE	BY	DISTRICT	COUNTY	ROUTE	SECTION	SHEET
				11	ALLEGHENY	WASHINGTON AV		28 OF 34
				SWISSVALE				

CLASS 1 EXCAVATION 0203 0001 CY	SAW CUTTING 0203 0006 LF	FOREIGN BORROW EXCAVATION 0205 0100 CY	SELECTED BORROW EXCAVATION ROCK, CLASS R-4 0205 0264 CY	GEOTEXTILE, CLASS 1 0212 0001 LF	GEOTEXTILE, CLASS 4, TYPE A 0212 0014 SY	SUPERPAVE ASPHALT MIXTURE DESIGN, BASE COURSE, PG 64S-22, 0.3 TO < 3 MILLION ESALS, 25.0 MM MIX, 4" DEPTH 0313 0422 SY	SUPERPAVE ASPHALT MIXTURE DESIGN, BASE COURSE, PG 64S-22, 0.3 TO < 3 MILLION ESALS, 25.0 MM MIX 0313 0437 TON	SUBBASE 6" DEPTH (NO. 2A) 0350 0106 SY	SUBBASE (NO. 2A) 0350 0121 TON	SUPERPAVE ASPHALT MIXTURE DESIGN, WEARING COURSE, PG 64S-22, 0.3 TO < 3 MILLION ESALS, 9.5 MM MIX, 1 1/2" DEPTH, SRL-H 0413 0245 SY	SUPERPAVE ASPHALT MIXTURE DESIGN, BINDER COURSE, PG 64S-22, 0.3 TO < 3 MILLION ESALS, 19.0 MM MIX, 2 1/2" DEPTH 0413 0645 SY	ASPHALT TACK COAT (NTT/CNTT) 0460 0003 SY	PLAIN CEMENT CONCRETE PAVEMENT, 4" DEPTH 0501 0020 SY	PLAIN CEMENT CONCRETE PAVEMENT, 12" DEPTH 0501 0036 SY	PLAIN CEMENT CONCRETE PAVEMENT, 12" DEPTH, INTEGRAL COLOR AND STAMPED FINISH 4501 0036 SY	PROTECTIVE COATING FOR CEMENT CONCRETE PAVEMENTS AND SHOULDERS 0503 0001 SY	SUBGRADE DRAINS 0612 0001 LF	SINGLE FACE CONCRETE BARRIER, F-SHAPE, 42" HEIGHT, WITHOUT FILL 0623 0412 LF	END TRANSITION, SINGLE FACE CONCRETE BARRIER, F-SHAPE, 42" HEIGHT 0623 0432 EACH	END TRANSITION, SINGLE FACE CONCRETE BARRIER, F-SHAPE, 42" HEIGHT, TO CURB 4623 0432 EACH	PLAIN CEMENT CONCRETE CURB, 4" HEIGHT, INCLUDING REMOVAL OF EXISTING CURB 0630 0025 LF	PLAIN CEMENT CONCRETE CURB, 6" HEIGHT, INCLUDING REMOVAL OF EXISTING CURB 0630 0035 LF	PLAIN CEMENT CONCRETE CURB, 8" HEIGHT 0630 0041 LF	PLAIN CONCRETE MOUNTABLE CURB, ROUNDABOUT TRUCK APRON CURB 0633 0230 LF	CEMENT CONCRETE SIDEWALK 0676 0001 SY	CEMENT CONCRETE SIDEWALK, WAVERLY STREET 4676 0001 SY	REMARKS ITEM NUMBER UNIT	SIDE	STATIONS
																							5						RT	21+59.60 to 21+64.60
																									36				RT	21+59.60 to 21+84.93
									12																			TO DRAIN BARRIER MOMENT SLAB SUBBASE	LT	21+64.60 to 21+86.55
																													RT	21+64.60 to 21+86.55
					60			60																					BARRIER MOMENT SLAB	RT	21+64.60 to 21+86.55
					24				13						24	24													LT	21+65.60 to 21+86.55
																												PALMER STREET NORTH		
74		50																							103				LT	30+18.20 to 31+46.78
																							15					CHEEK WALL	LT	31+31.97 to 31+46.78
																							15					CHEEKWALL	LT	31+31.97 to 31+46.78
																													LT	31+44.80 to 31+46.78
	32																												LT / RT	31+47.44 to 31+47.44
																							32						LT / RT	31+47.44 to 31+47.44
872	254	50	34	462	1417	643	4	1382	44	643	643	1287	20	683	31	734	462	142	1	1	223	69	326	122	565	116	TOTALS			

PROJECT ID: 5610 MPMS: ECMS: 6/9/2024 7:47:18 PM

TABULATION OF QUANTITIES

ROADWAY

(+) SEE SUMMARY SHEET FOR COMPLETE ITEM NUMBERS

REVISION NO	REVISIONS	DATE	BY	DISTRICT	COUNTY	ROUTE	SECTION	SHEET
				11	ALLEGHENY	WASHINGTON AV		29 OF 34
				SWISSVALE				

SIDEWALKS AND DRIVEWAY APRONS THROUGH DRIVEWAYS	DWS DESIGN NO. 1	TOPSOIL FURNISHED AND PLACED	REMOVE PARKING METER	SIDEWALK MOMENT SLAB	ABUTMENT 1 MOMENT SLAB	REMOVE, STORE AND RESET ORNAMENTAL FENCE	REMOVE, STORE AND RESET BOLLARD	REMOVE, STORE AND RESET LAMP POST	EMBANKMENT (FOR INFORMATION ONLY)	REMARKS	SIDE	STATIONS
0676 0003 SY	0695 (+) SF	0802 0001 CY	9000 0008 EACH	9000 0009 LS	9000 0010 LS	9000 0011 LS	9000 0012 LS	9000 0013 LS	CY	ITEM NUMBER UNIT		
	10										RT	21+59.60 to 21+64.60
											RT	21+59.60 to 21+84.93
										TO DRAIN BARRIER MOMENT SLAB SUBBASE	LT	21+64.60 to 21+86.55
					X						RT	21+64.60 to 21+86.55
										BARRIER MOMENT SLAB	RT	21+64.60 to 21+86.55
											LT	21+65.60 to 21+86.55
										PALMER STREET NORTH		
		36							18		LT	30+18.20 to 31+46.78
										CHEEK WALL	LT	31+31.97 to 31+46.78
										CHEEKWALL	LT	31+31.97 to 31+46.78
	12										LT	31+44.80 to 31+46.78
											LT / RT	31+47.44 to 31+47.44
											LT / RT	31+47.44 to 31+47.44
70	73	38	2	---	---	---	---	---	103	TOTALS		

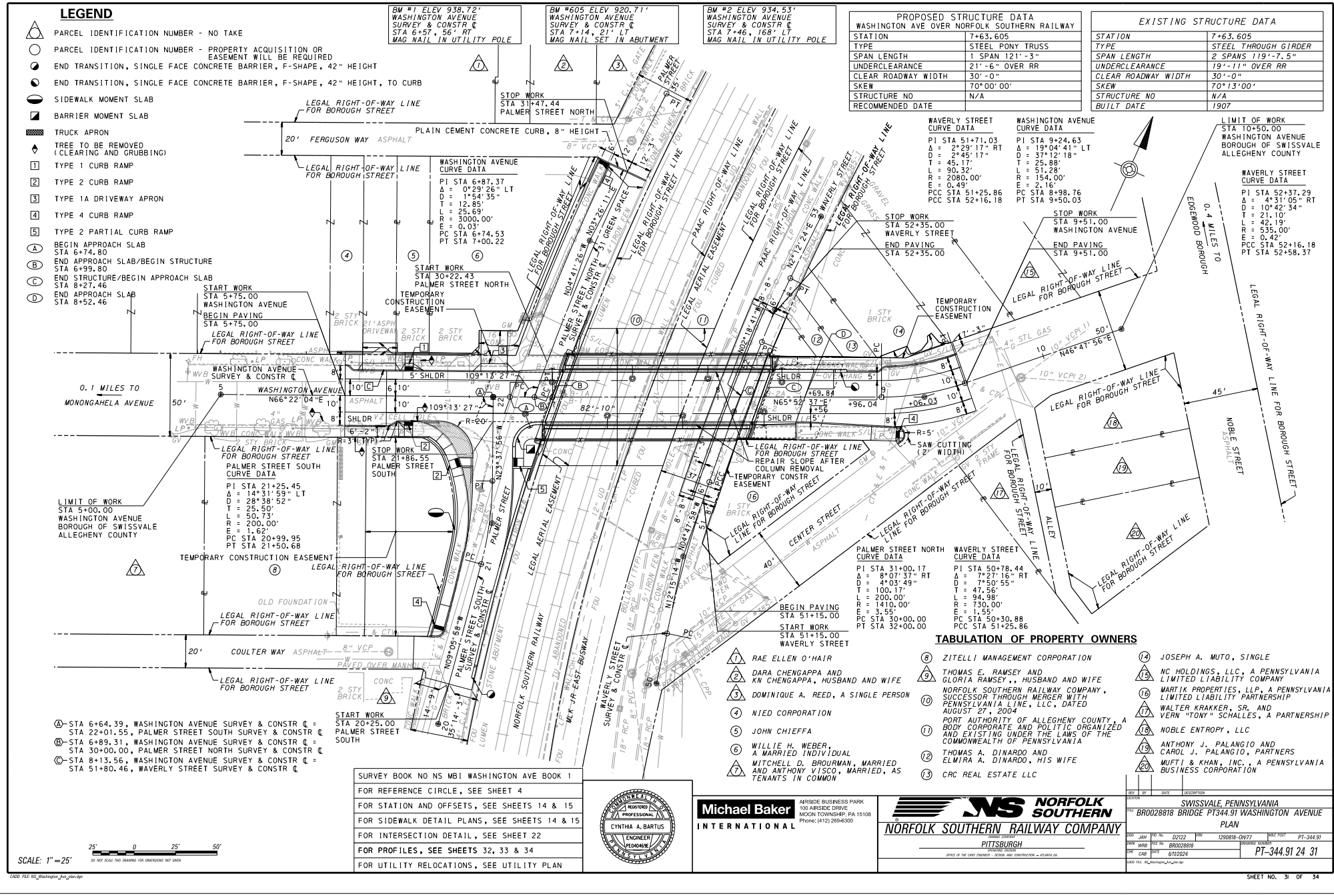
COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL CYNTHIA A. BARTUS ENGINEER PENNSYLVANIA

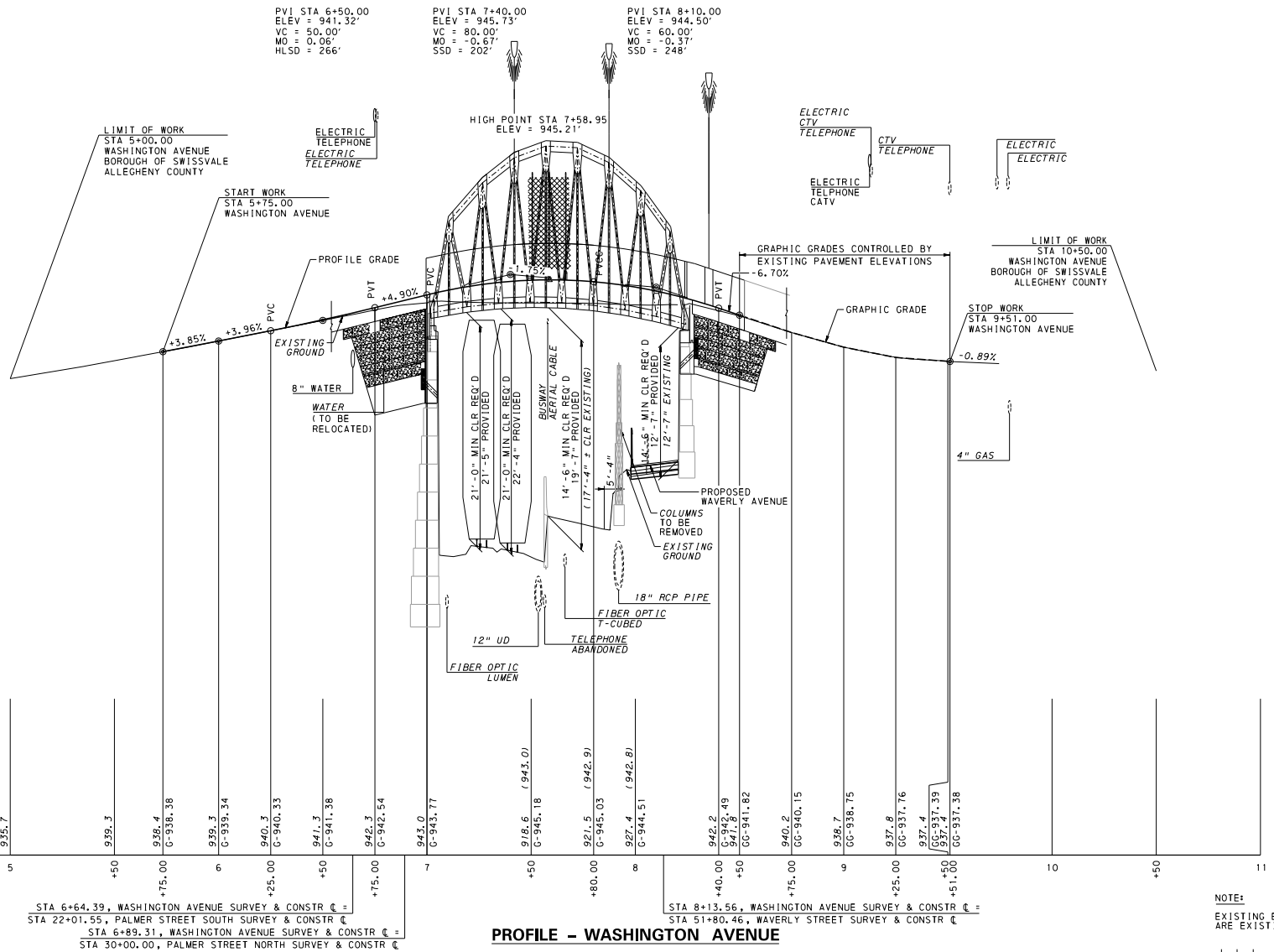
PROJECT ID: 5610 MPMS: ECMS: 6/9/2024 7:47:18 PM

TABULATION OF QUANTITIES
EROSION AND SEDIMENT POLLUTION CONTROL

REVISION NO	REVISIONS	DATE	BY	DISTRICT	COUNTY	ROUTE	SECTION	SHEET
				11	ALLEGHENY	WASHINGTON AV		30 OF 34
				SWISSVALE				

| SEEDING AND SOIL SUPPLEMENTS - FORMULA B RESIDENTIAL MIX, INCLUDING MULCH | SEEDING - FORMULA T TEMPORARY GRASS MIX | COMPOST FILTER SOCK, 12" DIAMETER | | | |


LEGEND
PARCEL IDENTIFICATION NUMBER - NO TAKE
PARCEL IDENTIFICATION NUMBER - PROPERTY ACQUISITION OR EASEMENT WILL BE REQUIRED
END TRANSITION, SINGLE FACE CONCRETE BARRIER, F-SHAPE, 42" HEIGHT
END TRANSITION, SINGLE FACE CONCRETE BARRIER, F-SHAPE, 42" HEIGHT, TO CURB
SIDEWALK MOMENT SLAB
BARRIER MOMENT SLAB
TRUCK APRON
TREE TO BE REMOVED (CLEARING AND GRUBBING)
1 TYPE 1 CURB RAMP
2 TYPE 2 CURB RAMP
3 TYPE 1A DRIVEWAY APRON
4 TYPE 4 CURB RAMP
5 TYPE 2 PARTIAL CURB RAMP
A BEGIN APPROACH SLAB STA 6+74.80
B END APPROACH SLAB/BEGIN STRUCTURE STA 6+99.80
C END STRUCTURE/BEGIN APPROACH SLAB STA 8+27.46
D END APPROACH SLAB STA 8+52.46
BM #1 ELEV 938.72' WASHINGTON AVENUE SURVEY & CONSTR ℄ STA 6+57, 56' RT MAG NAIL IN UTILITY POLE
BM #605 ELEV 920.71' WASHINGTON AVENUE SURVEY & CONSTR ℄ STA 7+14, 21' LT MAG NAIL SET IN ABUTMENT
BM #2 ELEV 934.53' WASHINGTON AVENUE SURVEY & CONSTR ℄ STA 7+46, 168' LT MAG NAIL IN UTILITY POLE
PROPOSED STRUCTURE DATA
WASHINGTON AVE OVER NORFOLK SOUTHERN RAILWAY
STATION 7+63.605
TYPE STEEL PONY TRUSS
SPAN LENGTH 1 SPAN 121'-3"
UNDERCLEARANCE 21'-6" OVER RR
CLEAR ROADWAY WIDTH 30'-0"
SKEW 70°00'00"
STRUCTURE NO N/A
RECOMMENDED DATE
EXISTING STRUCTURE DATA
STATION 7+63.605
TYPE STEEL THROUGH GIRDER
SPAN LENGTH 2 SPANS 119'-7.5"
UNDERCLEARANCE 19'-11" OVER RR
CLEAR ROADWAY WIDTH 30'-0"
SKEW 70°13'00"
STRUCTURE NO N/A
BUILT DATE 1907
LEGAL RIGHT-OF-WAY LINE FOR BOROUGH STREET
20' FERGUSON WAY ASPHALT
PLAIN CEMENT CONCRETE CURB, 8" HEIGHT
STOP WORK STA 31+47.44 PALMER STREET NORTH
WASHINGTON AVENUE CURVE DATA
PI STA 6+87.37
Δ = 0°29'26" LT
D = 1°54'35"
T = 12.85'
L = 25.69'
R = 3000.00'
E = 0.03'
PC STA 6+74.53
PT STA 7+00.22
START WORK STA 30+22.43 PALMER STREET NORTH
TEMPORARY CONSTRUCTION EASEMENT
START WORK STA 5+75.00 WASHINGTON AVENUE
BEGIN PAVING STA 5+75.00
WASHINGTON AVENUE SURVEY & CONSTR ℄
WASHINGTON AVENUE N66°22'04"E
0.1 MILES TO MONONGAHELA AVENUE
5' SHLDR 109°13'27"
82'-10"
R=20'
R=3' (TYP)
STOP WORK STA 21+86.55 PALMER STREET SOUTH
PALMER STREET SOUTH CURVE DATA
PI STA 21+25.45
Δ = 14°31'59" LT
D = 28°38'52"
T = 25.50'
L = 50.73'
R = 200.00'
E = 1.62'
PC STA 20+99.95
PT STA 21+50.68
LIMIT OF WORK STA 5+00.00 WASHINGTON AVENUE BOROUGH OF SWISSVALE ALLEGHENY COUNTY
TEMPORARY CONSTRUCTION EASEMENT
PALMER STREET SURVEY & CONSTR ℄ N09°05'58"W
PALMER STREET SOUTH ℄ N23°37'56"W
NORFOLK SOUTHERN RAILWAY
WCK JR EAST BUSWAY
WAVERLY STREET SURVEY & CONSTR ℄
LEGAL AERIAL EASEMENT
PAAC RIGHT-OF-WAY LINE
ABANDONED
OLD FOUNDATION
20' COULTER WAY ASPHALT
8" VCP
PAVED OVER MANHOLE
START WORK STA 20+25.00 PALMER STREET SOUTH
Ⓐ STA 6+64.39, WASHINGTON AVENUE SURVEY & CONSTR ℄ = STA 22+01.55, PALMER STREET SOUTH SURVEY & CONSTR ℄
Ⓑ STA 6+89.31, WASHINGTON AVENUE SURVEY & CONSTR ℄ = STA 30+00.00, PALMER STREET NORTH SURVEY & CONSTR ℄
Ⓒ STA 8+13.56, WASHINGTON AVENUE SURVEY & CONSTR ℄ = STA 51+80.46, WAVERLY STREET SURVEY & CONSTR ℄
SURVEY BOOK NO NS MBI WASHINGTON AVE BOOK 1
FOR REFERENCE CIRCLE, SEE SHEET 4
FOR STATION AND OFFSETS, SEE SHEETS 14 & 15
FOR SIDEWALK DETAIL PLANS, SEE SHEETS 14 & 15
FOR INTERSECTION DETAIL, SEE SHEET 22
FOR PROFILES, SEE SHEETS 32, 33 & 34
FOR UTILITY RELOCATIONS, SEE UTILITY PLAN
WAVERLY STREET CURVE DATA
PI STA 51+71.03
Δ = 2°29'17" RT
D = 2°45'17"
T = 45.17'
L = 90.32'
R = 2080.00'
E = 0.49'
PCC STA 51+25.86
PCC STA 52+16.18
WASHINGTON AVENUE CURVE DATA
PI STA 9+24.63
Δ = 19°04'41" LT
D = 37°12'18"
T = 25.88'
L = 51.28'
R = 154.00'
E = 2.16'
PC STA 8+98.76
PT STA 9+50.03
STOP WORK STA 52+35.00 WAVERLY STREET
END PAVING STA 52+35.00
STOP WORK STA 9+51.00 WASHINGTON AVENUE
END PAVING STA 9+51.00
LIMIT OF WORK STA 10+50.00 WASHINGTON AVENUE BOROUGH OF SWISSVALE ALLEGHENY COUNTY
WAVERLY STREET CURVE DATA
PI STA 52+37.29
Δ = 4°31'05" RT
D = 10°42'34"
T = 21.10'
L = 42.19'
R = 535.00'
E = 0.42'
PCC STA 52+16.18
PT STA 52+58.37
0.4 MILES TO EDGEWOOD BOROUGH
TEMPORARY CONSTRUCTION EASEMENT
N46°47'56"E
N65°52'37"E
SAW CUTTING (2" WIDTH)
REPAIR SLOPE AFTER COLUMN REMOVAL
TEMPORARY CONSTR EASEMENT
CENTER STREET
ALLEY
NOBLE STREET
PALMER STREET NORTH CURVE DATA
PI STA 31+00.17
Δ = 8°07'37" RT
D = 4°03'49"
T = 100.17'
L = 200.00'
R = 1410.00'
E = 3.55'
PC STA 30+00.00
PT STA 32+00.00
WAVERLY STREET CURVE DATA
PI STA 50+78.44
Δ = 7°27'16" RT
D = 7°50'55"
T = 47.56'
L = 94.98'
R = 730.00'
E = 1.55'
PC STA 50+30.88
PCC STA 51+25.86
BEGIN PAVING STA 51+15.00
START WORK STA 51+15.00 WAVERLY STREET
TABULATION OF PROPERTY OWNERS
1 RAE ELLEN O'HAIR
2 DARA CHENGAPPA AND KN CHENGAPPA, HUSBAND AND WIFE
3 DOMINIQUE A. REED, A SINGLE PERSON
4 NIED CORPORATION
5 JOHN CHIEFFA
6 WILLIE H. WEBER, A MARRIED INDIVIDUAL
7 MITCHELL D. BROURMAN, MARRIED AND ANTHONY VISCO, MARRIED, AS TENANTS IN COMMON
8 ZITELLI MANAGEMENT CORPORATION
9 THOMAS E. RAMSEY AND GLORIA RAMSEY,, HUSBAND AND WIFE
10 NORFOLK SOUTHERN RAILWAY COMPANY, SUCCESSOR THROUGH MERGER WITH PENNSYLVANIA LINE, LLC, DATED AUGUST 27, 2004
11 PORT AUTHORITY OF ALLEGHENY COUNTY, A BODY CORPORATE AND POLITIC ORGANIZED AND EXISTING UNDER THE LAWS OF THE COMMONWEALTH OF PENNSYLVANIA
12 THOMAS A. DINARDO AND ELMIRA A. DINARDO, HIS WIFE
13 CRC REAL ESTATE LLC
14 JOSEPH A. MUTO, SINGLE
15 NC HOLDINGS, LLC, A PENNSYLVANIA LIMITED LIABILITY COMPANY
16 MARTIK PROPERTIES, LLP, A PENNSYLVANIA LIMITED LIABILITY PARTNERSHIP
17 WALTER KRAKKER, SR. AND VERN "TONY" SCHALLES, A PARTNERSHIP
18 NOBLE ENTROPY, LLC
19 ANTHONY J. PALANGIO AND CAROL J. PALANGIO, PARTNERS
20 MUFTI & KHAN, INC., A PENNSYLVANIA BUSINESS CORPORATION
SCALE: 1"=25'
25' 0 25' 50'
DO NOT SCALE THIS DRAWING FOR DIMENSIONS NOT GIVEN
COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL CYNTHIA A. BARTUS ENGINEER PENGINEER
Michael Baker INTERNATIONAL
AIRSIDE BUSINESS PARK 100 AIRSIDE DRIVE MOON TOWNSHIP, PA 15108 Phone: (412) 269-6300
NORFOLK SOUTHERN
NORFOLK SOUTHERN RAILWAY COMPANY
PITTSBURGH
OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER – DESIGN AND CONSTRUCTION – ATLANTA, GA.
REV BY DATE DESCRIPTION
DESIGN SWISSVALE, PENNSYLVANIA
PROJ BR00028818 BRIDGE PT344.91 WASHINGTON AVENUE
PLAN
DSN JAH PID No. D2122 PRN 1290818-0H77 SHEET POST PT-344.91
DWN WRB FILE No. BR00028818 DRAWING NUMBER
CHK CAB DATE 6/17/2024 PT-344.91 24 31
CADD FILE: BR_Washington_Ave_plan.dgn
CADD FILE: NS_Washington_Ave_plan.dgn
SHEET NO. 31 OF 34



PROFILE – WASHINGTON AVENUE

NOTE:

EXISTING ELEVATIONS SHOWN IN PARENTHESIS ARE EXISTING DECK ELEVATIONS.

HORIZONTAL
SCALE: 1"=25'
25' 0 25' 50'
DO NOT SCALE THIS DRAWING FOR DIMENSIONS NOT GIVEN

VERTICAL
SCALE: 1"=5'
5' 0 5' 10'
DO NOT SCALE THIS DRAWING FOR DIMENSIONS NOT GIVEN

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
CYNTHIA A. BARTUS
ENGINEER
PENDING

SURVEY BOOK NO NS MBI WASHINGTON AVE BOOK 1

FOR PLAN, SEE SHEET 31

Michael Baker INTERNATIONAL
AIRSIDE BUSINESS PARK
100 AIRSIDE DRIVE
MOON TOWNSHIP, PA 15108
Phone: (412) 269-6300

NORFOLK SOUTHERN RAILWAY COMPANY
ENGINEERING DEPARTMENT
PITTSBURGH
ENGINEERING DIVISION
OFFICE OF THE CHIEF ENGINEER – DESIGN AND CONSTRUCTION – ATLANTA, GA.

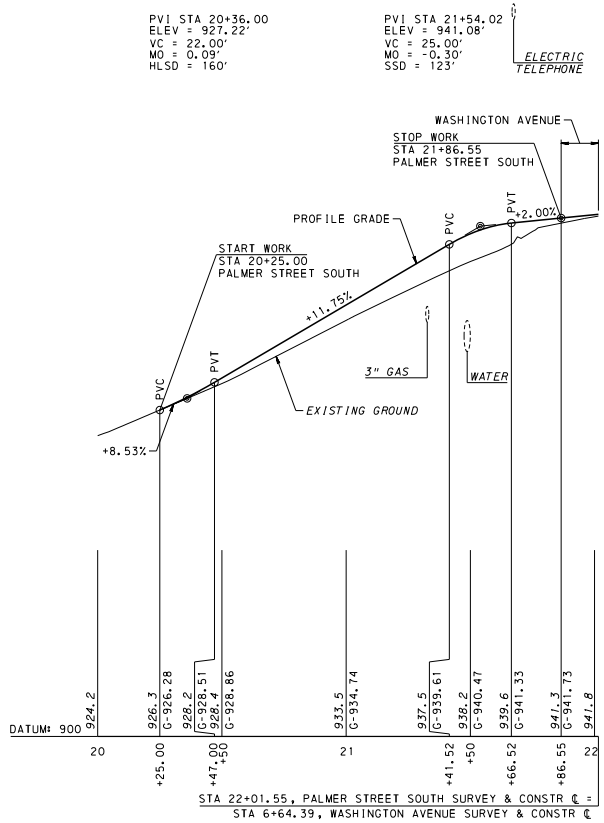
REV.	BY	DATE	DESCRIPTION
000000			

SWISSVALE, PENNSYLVANIA
BRIDGE BR0028818 BRIDGE PT344.91 WASHINGTON AVENUE
PROFILE – WASHINGTON AVENUE

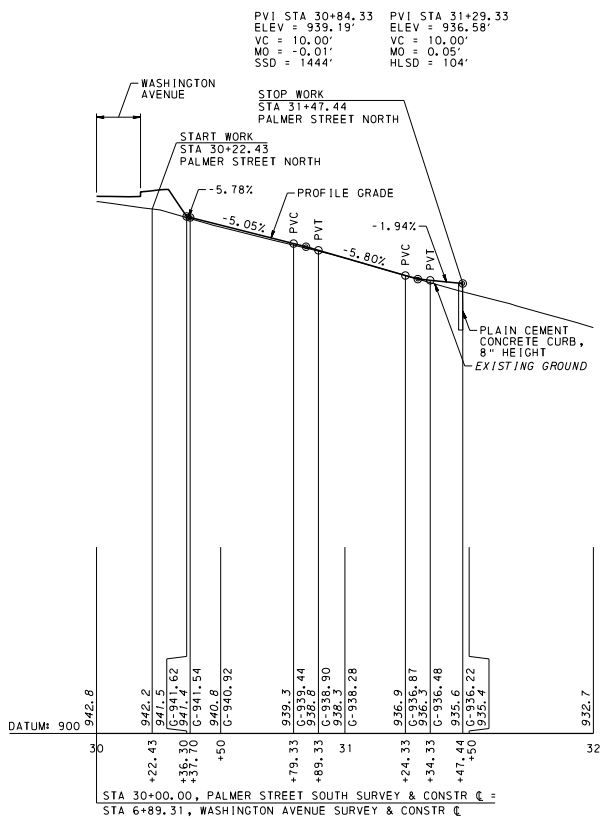
DSN	JAH	PID No.	D2122	WBS	1290818-0H77
DWN	WRB	FILE No.	BR0028818		
CHK	CAB	DATE	6/12/2024		

MILE POST PT-344.91
DRAWING NUMBER PT-344.91 24 32

CADD FILE: NS_Washington_Ave_profile plot.dgn



PROFILE – PALMER STREET SOUTH



PROFILE – PALMER STREET NORTH

HORIZONTAL
SCALE: 1"=25'
25' 0 25' 50'
DO NOT SCALE THIS DRAWING FOR DIMENSIONS NOT GIVEN

VERTICAL
SCALE: 1"=5'
5' 0 5' 10'
DO NOT SCALE THIS DRAWING FOR DIMENSIONS NOT GIVEN

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL CYNTHIA A. BARTUS ENGINEER PEO040616E

SURVEY BOOK NO NS MBI WASHINGTON AVE BOOK 1

FOR PLAN, SEE SHEET 31

Michael Baker INTERNATIONAL
AIRSIDE BUSINESS PARK
100 AIRSIDE DRIVE
MOON TOWNSHIP, PA 15108
Phone: (412) 269-6300

NORFOLK SOUTHERN RAILWAY COMPANY
PITTSBURGH
OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER – DESIGN AND CONSTRUCTION – ATLANTA, GA.

REV	BY	DATE	DESCRIPTION

SWISSVALE, PENNSYLVANIA
BR0028818 BRIDGE PT344.91 WASHINGTON AVENUE
PROFILE – PALMER STREET

DSN	JAH	PID No.	D2122	WW	1290818-0H77
DWN	WRB	FILE No.	BR0028818		
CK	CAB	DATE	6/12/2024		

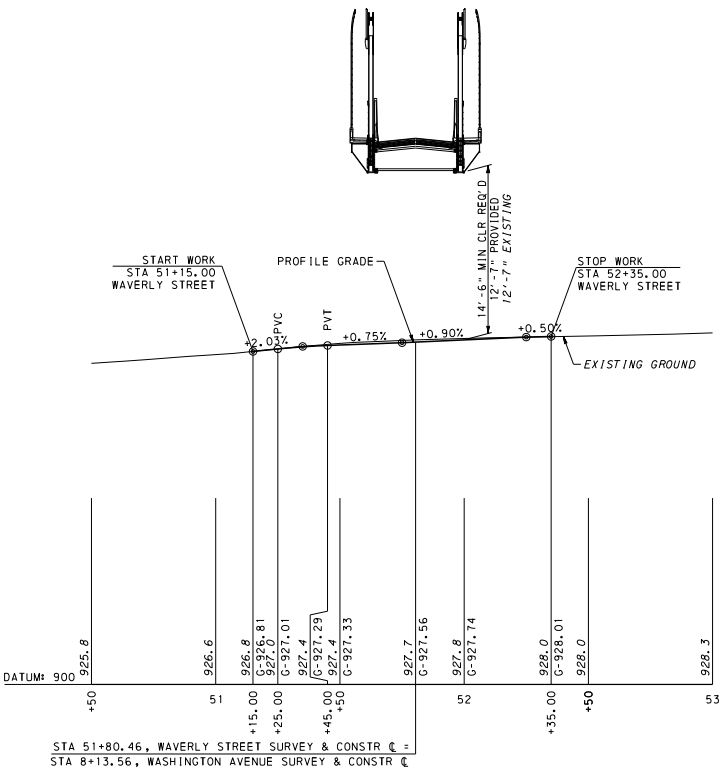
SCALE FOOT PT-344.91
DRAWING NUMBER PT-344.91 24 33

CADD FILE: NS_Washington_Ave_profile plot.dgn

PVI STA 51+35.00
ELEV = 927.21'
VC = 20.00'
MO = -0.03'
SSD = 853'
K = 15.62

PVI STA 51+75.00
ELEV = 927.51'
NO CURVE

PVI STA 52+25.00
ELEV = 927.96'
NO CURVE



STA 51+80.46, WAVERLY STREET SURVEY & CONSTR ℄ =
STA 8+13.56, WASHINGTON AVENUE SURVEY & CONSTR ℄

PROFILE – WAVERLY STREET

HORIZONTAL
SCALE: 1"=25'
25' 0 25' 50'
DO NOT SCALE THIS DRAWING FOR DIMENSIONS NOT GIVEN

VERTICAL
SCALE: 1"=5'
5' 0 5' 10'
DO NOT SCALE THIS DRAWING FOR DIMENSIONS NOT GIVEN

CADD FILE: NS_Washington_Ave_profile plot.dgn

SURVEY BOOK NO NS MBI WASHINGTON AVE BOOK 1

FOR PLAN, SEE SHEET 31

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL CYNTHIA A. BARTUS ENGINEER PENNSYLVANIA

Michael Baker INTERNATIONAL
AIRSIDE BUSINESS PARK
100 AIRSIDE DRIVE
MOON TOWNSHIP, PA 15108
Phone: (412) 269-6300

NORFOLK SOUTHERN RAILWAY COMPANY
ENGINEERING DEPARTMENT
PITTSBURGH
OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER – DESIGN AND CONSTRUCTION – ATLANTA, GA.

REV	BY	DATE	DESCRIPTION
000000			

SWISSVALE, PENNSYLVANIA
BRIDGE BR0028818 BRIDGE PT344.91 WASHINGTON AVENUE
PROFILE – WAVERLY STREET

DSN	JAH	PID No.	D2122	WBS	1290818-0H77
DWN	WRB	FILE No.	BR0028818		
CHK	CAB	DATE	6/12/2024		

MILE POST PT-344.91
DRAWING NUMBER PT-344.91 24 34

CADD FILE: NS_Washington_Ave_profile plot.dgn

NORFOLK SOUTHERN

CROSS SECTIONS

BOROUGH OF SWISSVALE, ALLEGHENY COUNTY
WASHINGTON AVENUE

PITTSBURGH SUBDIVISION VERTICAL CLEARANCE PROJECT

STA 5+00.00 TO STA 10+50.00 (LIMITS OF WORK)

SHEET NO	ROUTE	STATIONING
2 – 11	WASHINGTON AVENUE	5+75.00 TO 9+51.00
12 – 15	PALMER STREET SOUTH	20+25.00 TO 21+75.00
16 – 18	PALMER STREET NORTH	30+50.00 TO 31+25.00
19 – 22	WAVERLY STREET	51+15.00 TO 52+35.00

ABBREVIATIONS

EP - EDGE OF PAVEMENT
ES - EDGE OF SHOULDER
EG - EDGE OF GROUND LINE
GL - GROUND LINE

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL CYNTHIA A. BARTUS ENGINEER PE040436E

Michael Baker INTERNATIONAL
AIRSIDE BUSINESS PARK
100 AIRSIDE DRIVE
MOON TOWNSHIP, PA 15108
Phone: (412) 269-6300

NORFOLK SOUTHERN RAILWAY COMPANY
OWNING COMPANY
PITTSBURGH
OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER – DESIGN AND CONSTRUCTION – ATLANTA, GA.

REV	BY	DATE	REVISION DESCRIPTION

LOCATION: SWISSVALE, PENNSYLVANIA
TITLE: WASHINGTON AVENUE CROSS SECTION TITLE SHEET

DSN	JAH	PROJ. No.	D2122	REV	I230818-DH77
DWN	WHB	PLT No.	BR0028818	DRAWING NUMBER	PT-344.91 24 01
CHK	CAB	DATE	6/10/2024		

CADD FILE: Washington Avenue Cross Section Title.dgn

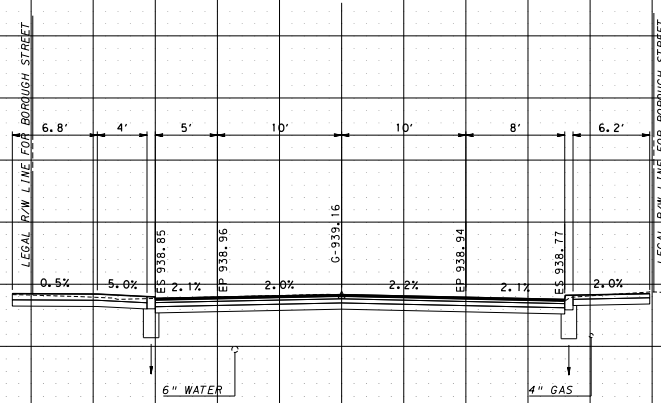
SHEET NO. 1 OF 22

6/10/2024
6:15:03 AM
Washington Avenue Cross Section Title.dgn

CROSS SECTIONS

COUNTY	ROUTE	SHEET NO
ALLEGHENY	WASHINGTON AVENUE	2 OF 22

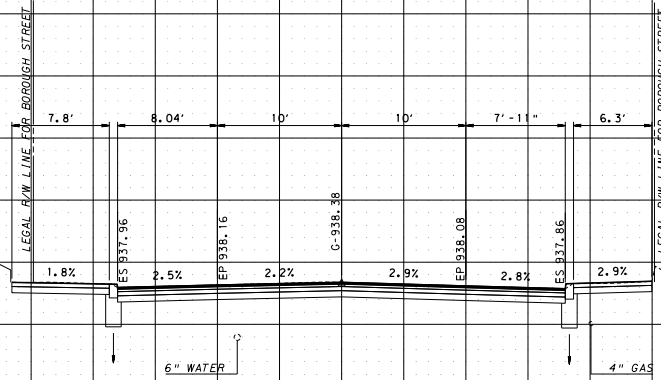
WASHINGTON AVENUE
SURVEY & CONSTR ℄



STOP SUPERPAVE ASPHALT PAVEMENT
BEGIN PLAIN CEMENT CONCRETE PAVEMENT, 12" DEPTH
STA 6+00.00

PRELIMINARY	
C-53	F-0
FINAL	
C-	F-
TC-	TF-

DRIVEWAY 5+95.35



END SHOULDER TAPER
STA 5+80.85, 15.00' LEFT

BEGIN SHOULDER TAPER
STA 5+75.32, 18.04' LEFT

BEGIN CROSS SLOPE TRANSITION
STA 5+75.00, LEFT
2.2% (MATCH EXISTING)

PRELIMINARY	
C-56	F-0
FINAL	
C-	F-
TC-	TF-

BEGIN CROSS SLOPE TRANSITION
STA 5+75.00, RIGHT
2.9% (MATCH EXISTING)

BEGIN PAVING
STA 5+75.00

START WORK
STA 5+75.00
WASHINGTON AVENUE

5+75

LIMIT OF WORK
STA 5+00.00
WASHINGTON AVENUE
BOROUGH OF SWISSVALE
ALLEGHENY COUNTY

Application No.
Route No. WASHINGTON AVENUE
Original Plotted By JAH
Original Checked By CAB
Template By JAH
Area By JAH
Finals Plotted By
Finals Checked By
Area By
Area Checked By

PLOTTED: 6/10/2024

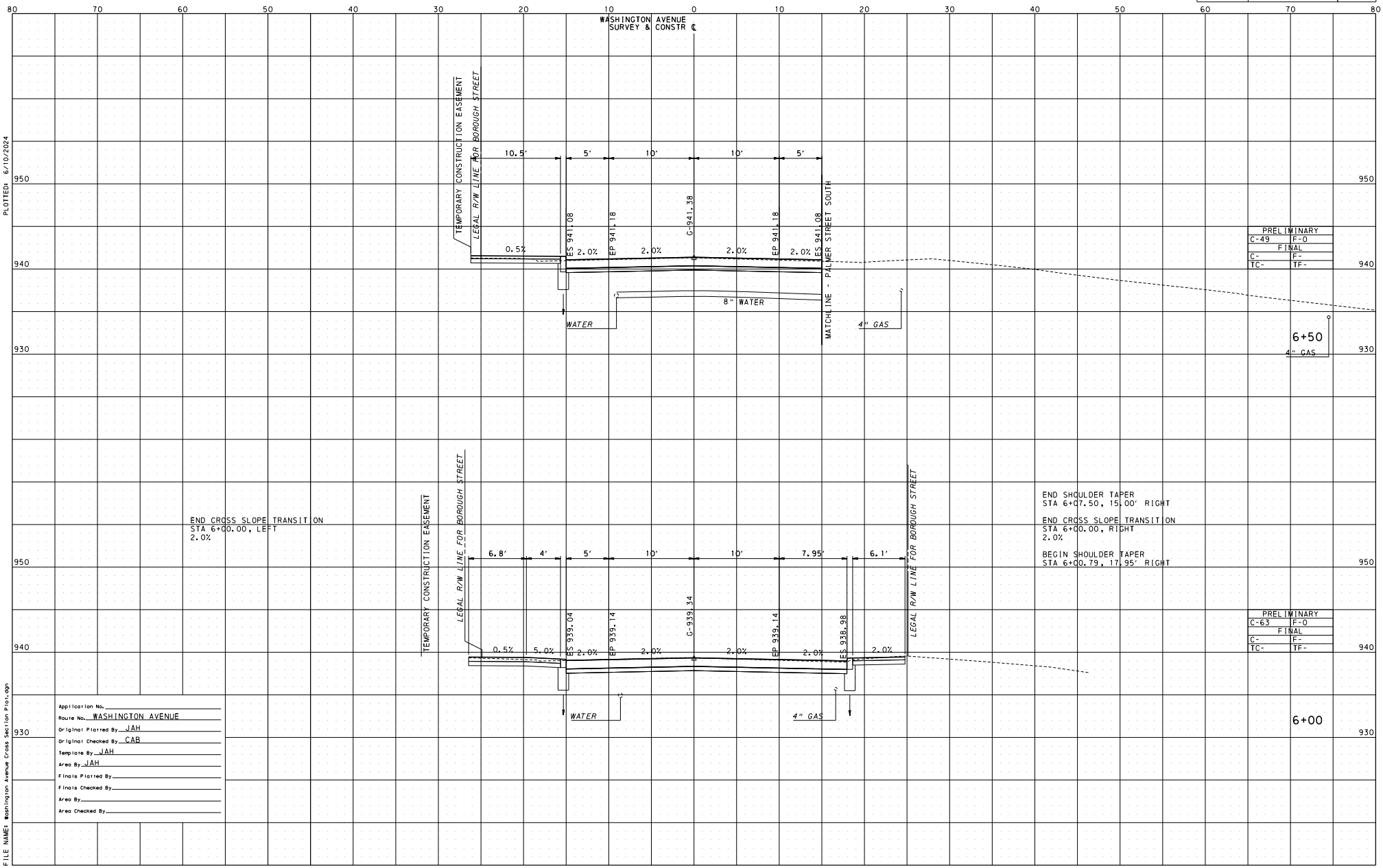
FILE NAME: Washington Avenue Cross Section Plot.dgn

SCALE: 1 INCH = 5 FEET

CROSS SECTIONS

COUNTY	ROUTE	SHEET NO
ALLEGHENY	WASHINGTON AVENUE	3 OF 22

WASHINGTON AVENUE
SURVEY & CONSTR ℄



Application No.
Route No. WASHINGTON AVENUE
Original Plotted By JAH
Original Checked By CAB
Template By JAH
Area By JAH
Finals Plotted By
Finals Checked By
Area By
Area Checked By

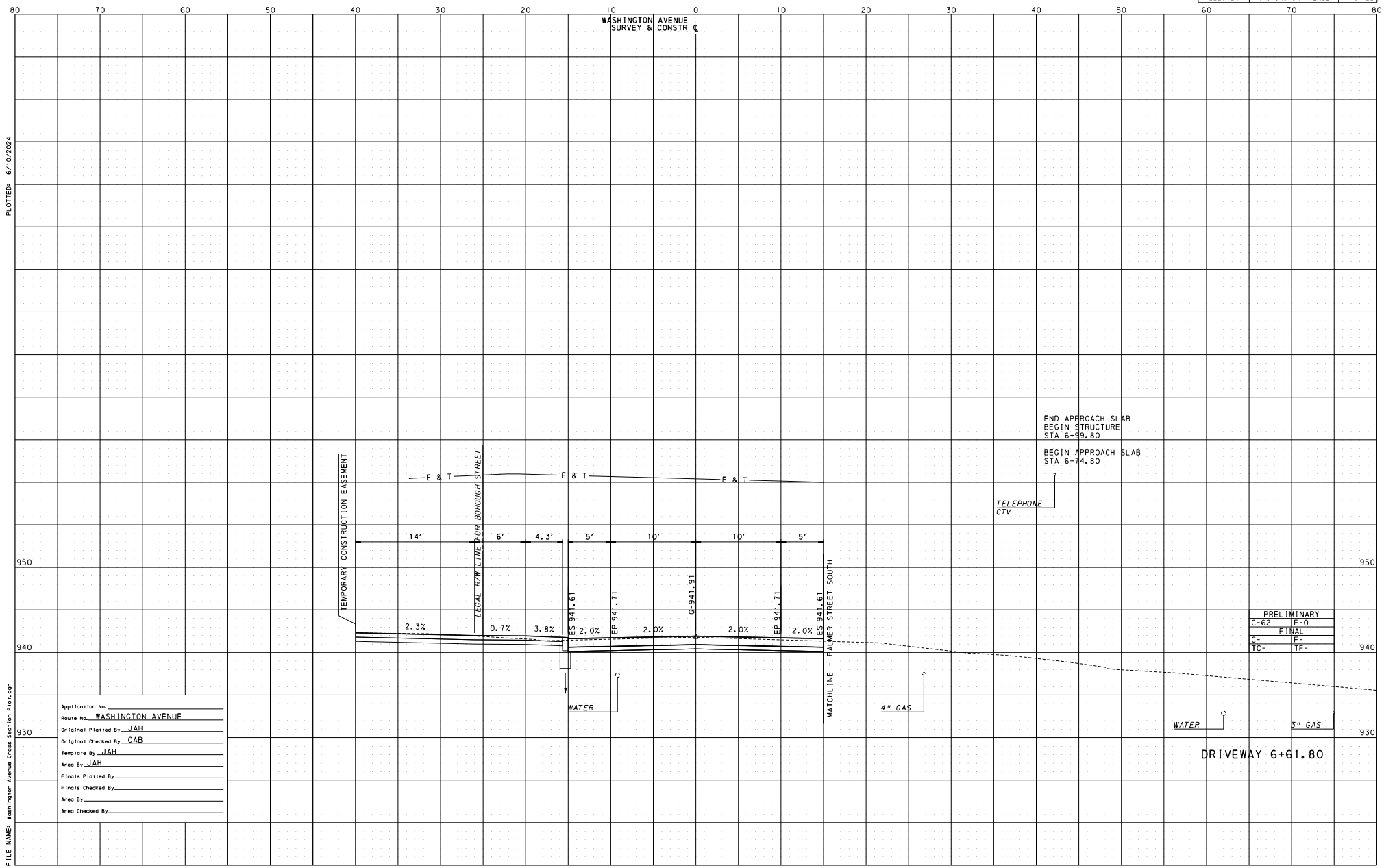
PLOTTED: 6/10/2024

FILE NAME: Washington Avenue Cross Section Plan.dgn

SCALE: 1 INCH = 5 FEET

CROSS SECTIONS

COUNTY	ROUTE	SHEET NO
ALLEGHENY	WASHINGTON AVENUE	4 OF 22



Application No.
Route No. WASHINGTON AVENUE
Original Plotted By JAH
Original Checked By CAB
Template By JAH
Area By JAH
Finals Plotted By
Finals Checked By
Area By
Area Checked By

PLOTTED: 6/10/2024

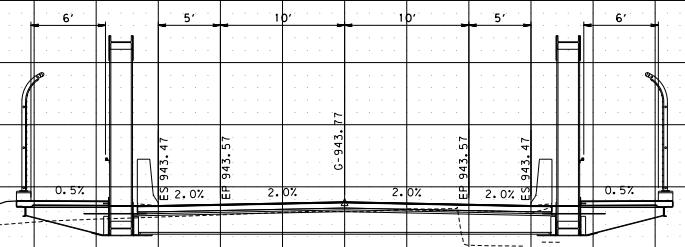
FILE NAME: Washington Avenue Cross Section Plot.dgn

SCALE: 1 INCH = 5 FEET

CROSS SECTIONS

COUNTY	ROUTE	SHEET NO
ALLEGHENY	WASHINGTON AVENUE	5 OF 22

WASHINGTON AVENUE
SURVEY & CONSTR ℄



PALMER STREET NORTH

4" OF TOPSOIL

LEGAL AERIAL EASEMENT

FIBER OPTIC

7+00

PRELIMINARY	
C-0	F-0
FINAL	
C-	F-
TC-	TF-

Application No.
Route No. WASHINGTON AVENUE
Original Plotted By JAH
Original Checked By CAB
Template By JAH
Area By JAH
Finals Plotted By
Finals Checked By
Area By
Area Checked By

PLOTTED: 6/10/2024

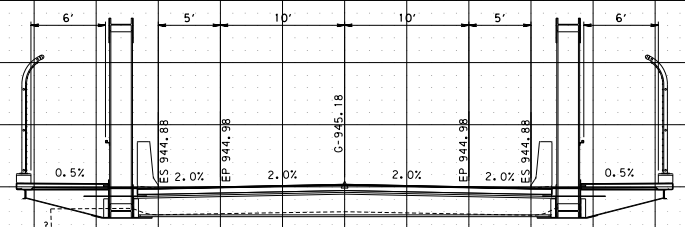
FILE NAME: Washington Avenue Cross Section Plan.dgn

SCALE: 1 INCH = 5 FEET

CROSS SECTIONS

COUNTY	ROUTE	SHEET NO
ALLEGHENY	WASHINGTON AVENUE	6 OF 22

WASHINGTON AVENUE
SURVEY & CONSTR ℄



ELECTRIC
(TO BE REMOVED)

LEGAL AERIAL EASEMENT

LEGAL AERIAL EASEMENT

PRELIMINARY	
C-0	F-0
FINAL	
C-	F-
TC-	TF-

7+50

Application No.
Route No. WASHINGTON AVENUE
Original Plotted By JAH
Original Checked By CAB
Template By JAH
Area By JAH
Finals Plotted By
Finals Checked By
Area By
Area Checked By

PLOTTED: 6/10/2024

FILE NAME: Washington Avenue Cross Section Plot.dgn

SCALE: 1 INCH = 5 FEET

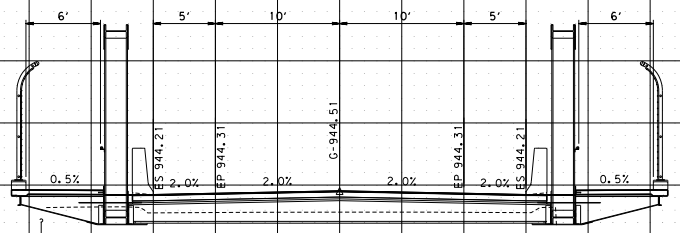
CROSS SECTIONS

COUNTY	ROUTE	SHEET NO
ALLEGHENY	WASHINGTON AVENUE	7 OF 22

WASHINGTON AVENUE
SURVEY & CONSTR ℄

END APPROACH SLAB
STA 8+52.46

END STRUCTURE
BEGIN APPROACH SLAB
STA 8+27.46



ELECTRIC
(TO BE REMOVED)

PRELIMINARY	
C-0	F-0
FINAL	
C-	F-
TC-	TF-

8+00

Application No.
Route No. WASHINGTON AVENUE
Original Plotted By JAH
Original Checked By CAB
Template By JAH
Area By JAH
Finals Plotted By
Finals Checked By
Area By
Area Checked By

PLOTTED: 6/10/2024

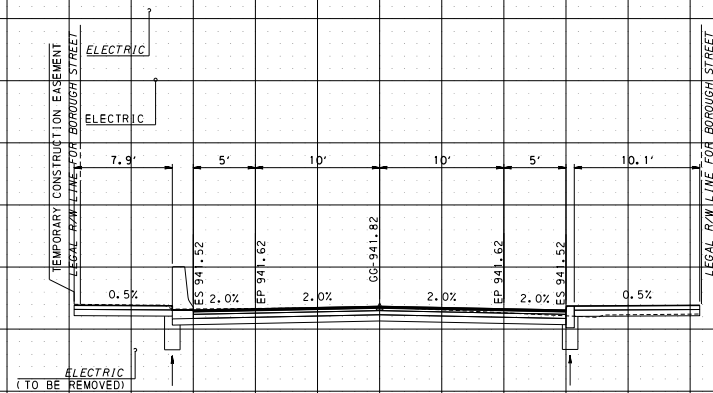
FILE NAME: Washington Avenue Cross Section Plan.dgn

SCALE: 1 INCH = 5 FEET

CROSS SECTIONS

COUNTY	ROUTE	SHEET NO
ALLEGHENY	WASHINGTON AVENUE	8 OF 22

WASHINGTON AVENUE
SURVEY & CONSTR ℄



BEGIN CROSS SLOPE TRANSITION
STA 8+56.00, RIGHT
2.0%

BEGIN SHOULDER TAPER
STA 8+56.00, 15.00' RIGHT

PRELIMINARY	
C-41	F-0
FINAL	
C-	F-
TC-	TF-

8+50

PLOTTED: 6/10/2024

FILE NAME: Washington Avenue Cross Section Plan.dgn

Application No.	
Route No.	WASHINGTON AVENUE
Original Plotted By	JAH
Original Checked By	CAB
Template By	JAH
Area By	JAH
Finals Plotted By	
Finals Checked By	
Area By	
Area Checked By	

SCALE: 1 INCH = 5 FEET

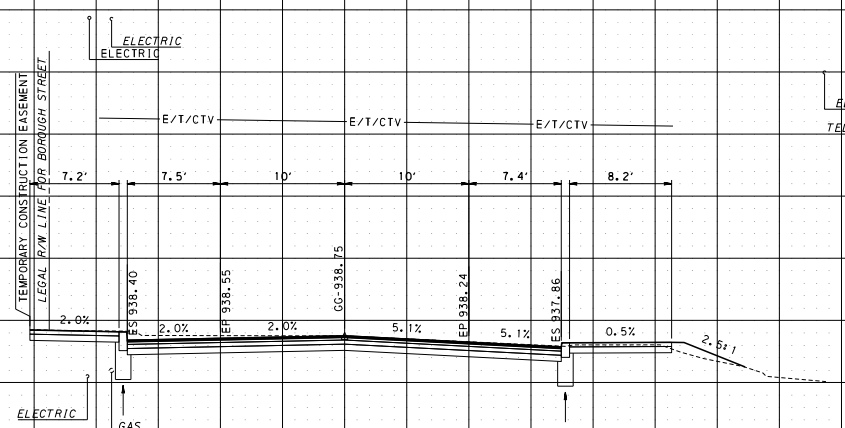
CROSS SECTIONS

COUNTY	ROUTE	SHEET NO
ALLEGHENY	WASHINGTON AVENUE	9 OF 22

PLOTTED: 6/10/2024

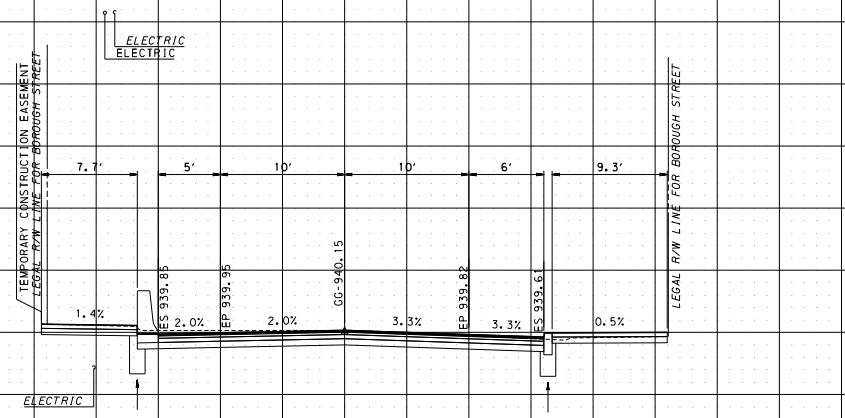
FILE NAME: Washington Avenue Cross Section Plan.dgn

WASHINGTON AVENUE
SURVEY & CONSTR ℄



PRELIMINARY	
C-58	F-3
FINAL	
C-	F-
TC-	TF-

9+00



PRELIMINARY	
C-50	F-0
FINAL	
C-	F-
TC-	TF-

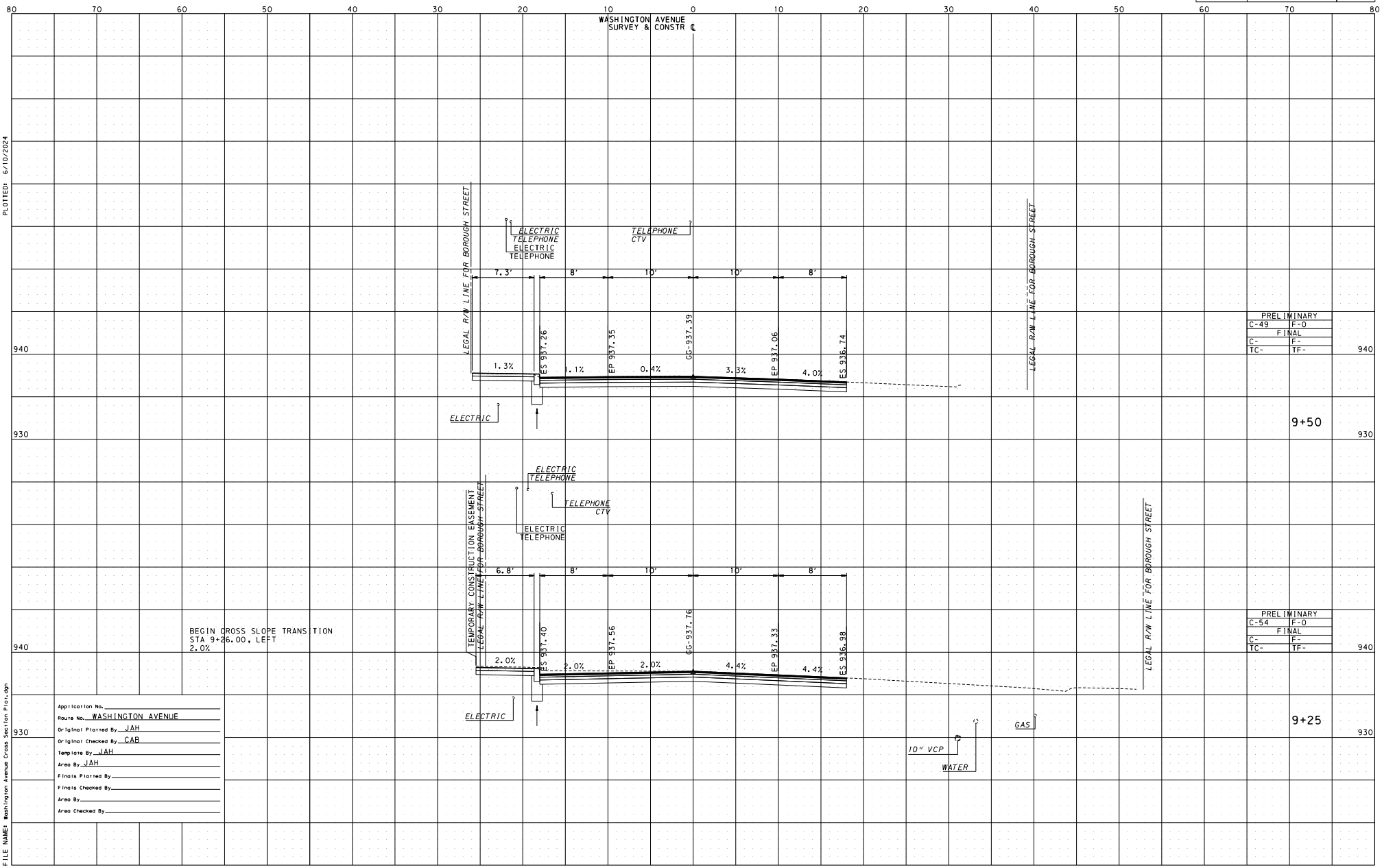
8+75

Application No.	
Route No.	WASHINGTON AVENUE
Original Plotted By	JAH
Original Checked By	CAB
Template By	JAH
Area By	JAH
Finals Plotted By	
Finals Checked By	
Area By	
Area Checked By	

SCALE: 1 INCH = 5 FEET

CROSS SECTIONS

COUNTY	ROUTE	SHEET NO
ALLEGHENY	WASHINGTON AVENUE	10 OF 22



Application No.
Route No. WASHINGTON AVENUE
Original Plotted By JAH
Original Checked By CAB
Template By JAH
Area By JAH
Finals Plotted By
Finals Checked By
Area By
Area Checked By

PLOTTED: 6/10/2024

FILE NAME: Washington Avenue Cross Section Plan.dgn

SCALE: 1 INCH = 5 FEET

CROSS SECTIONS

COUNTY	ROUTE	SHEET NO
ALLEGHENY	WASHINGTON AVENUE	11 OF 22

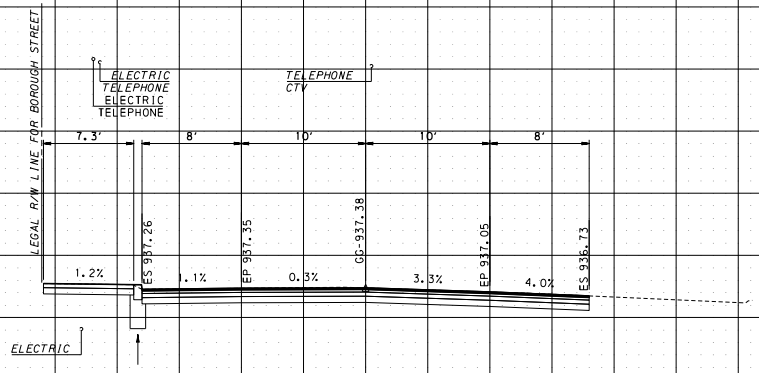
WASHINGTON AVENUE
SURVEY & CONSTR ℄

LIMIT OF WORK
STA 10+50.00
WASHINGTON AVENUE
BOROUGH OF SWISSVALE
ALLEGHENY COUNTY

STOP WORK
STA 9+51.00
WASHINGTON AVENUE

END PAVING
STA 9+51.00

END MATCH EXISTING CROSS SLOPE
STA 9+51.00, RIGHT



END CROSS SLOPE TRANSITION
STA 9+51.00, LEFT
0.3% (MATCH EXISTING)

PRELIMINARY	
C-49	F-0
FINAL	
C-	F-
TC-	TF-

940

930

9+51

Application No.
Route No. WASHINGTON AVENUE
Original Plotted By JAH
Original Checked By CAB
Template By JAH
Area By JAH
Finals Plotted By
Finals Checked By
Area By
Area Checked By

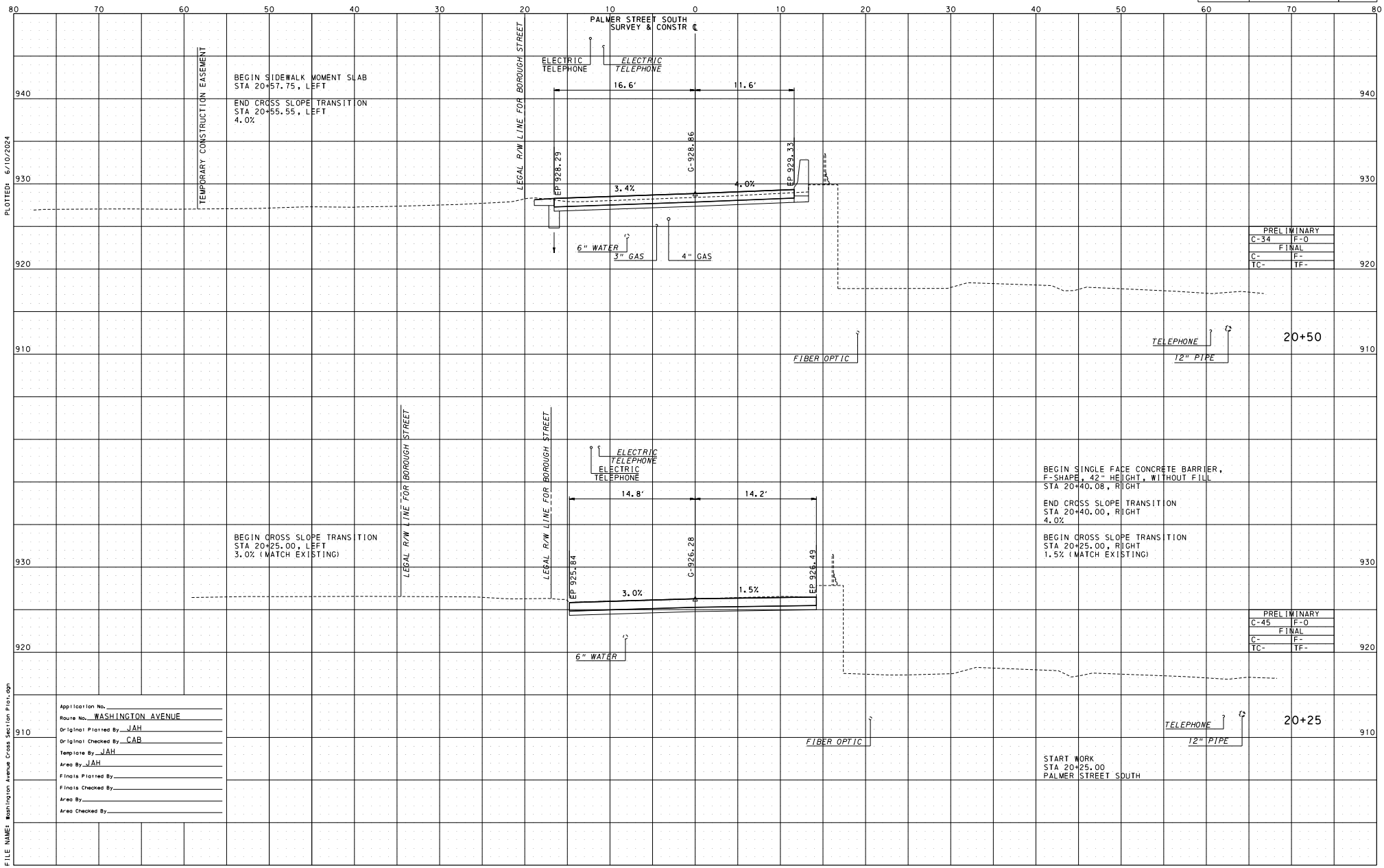
PLOTTED: 6/10/2024

FILE NAME: Washington Avenue Cross Section Plot.dgn

SCALE: 1 INCH = 5 FEET

CROSS SECTIONS

COUNTY	ROUTE	SHEET NO
ALLEGHENY	WASHINGTON AVENUE	12 OF 22



PLOTTED: 6/10/2024

FILE NAME: Washington Avenue Cross Section Plan.dgn

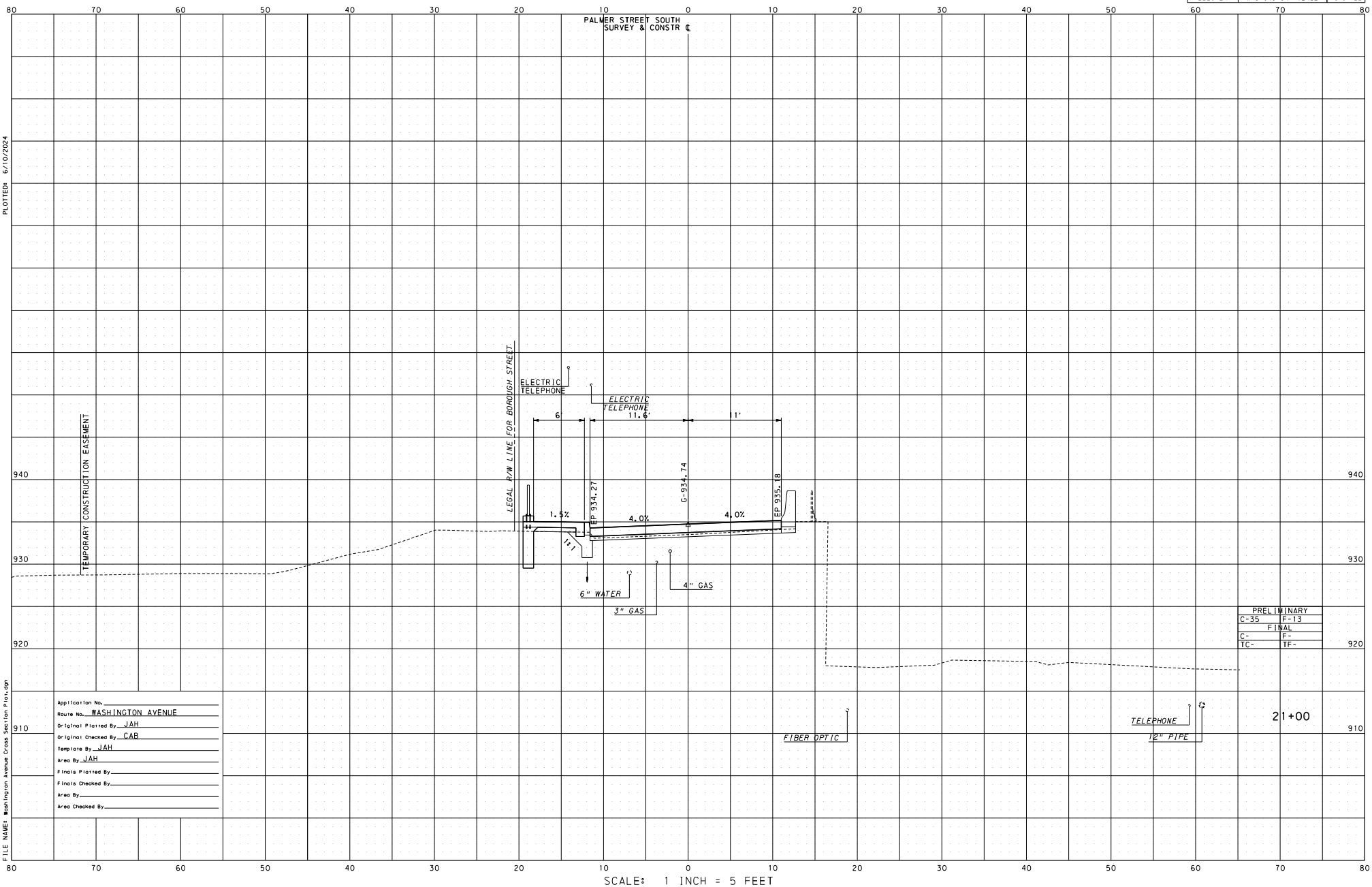
Application No.	
Route No.	WASHINGTON AVENUE
Original Plotted By	JAH
Original Checked By	CAB
Template By	JAH
Area By	JAH
Finals Plotted By	
Finals Checked By	
Area By	
Area Checked By	

SCALE: 1 INCH = 5 FEET

CROSS SECTIONS

COUNTY	ROUTE	SHEET NO
ALLEGHENY	WASHINGTON AVENUE	13 OF 22

PALMER STREET SOUTH
SURVEY & CONSTR ℄



PRELIMINARY	
C-35	F-13
FINAL	
C-	F-
TC-	TF-

21+00

Application No.
Route No. WASHINGTON AVENUE
Original Plotted By JAH
Original Checked By CAB
Template By JAH
Area By JAH
Finals Plotted By
Finals Checked By
Area By
Area Checked By

PLOTTED: 6/10/2024

FILE NAME: Washington Avenue Cross Section Plot.dgn

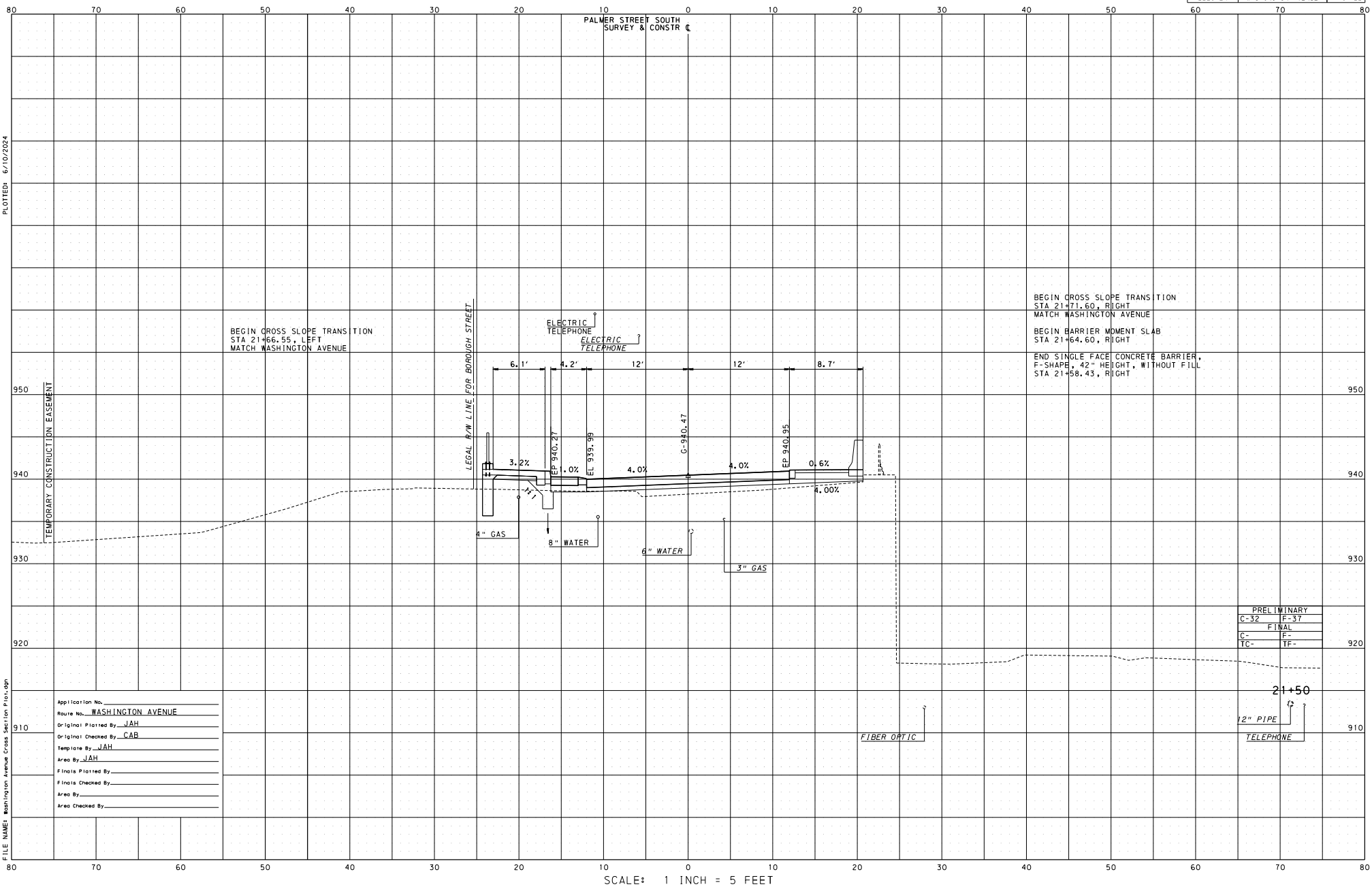
80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80

SCALE: 1 INCH = 5 FEET

CROSS SECTIONS

COUNTY	ROUTE	SHEET NO
ALLEGHENY	WASHINGTON AVENUE	14 OF 22

PALMER STREET SOUTH
SURVEY & CONSTR ℄



PRELIMINARY	
C-32	F-37
FINAL	
C-	F-
TC-	TF-

Application No.
Route No. WASHINGTON AVENUE
Original Plotted By JAH
Original Checked By CAB
Template By JAH
Area By JAH
Finals Plotted By
Finals Checked By
Area By
Area Checked By

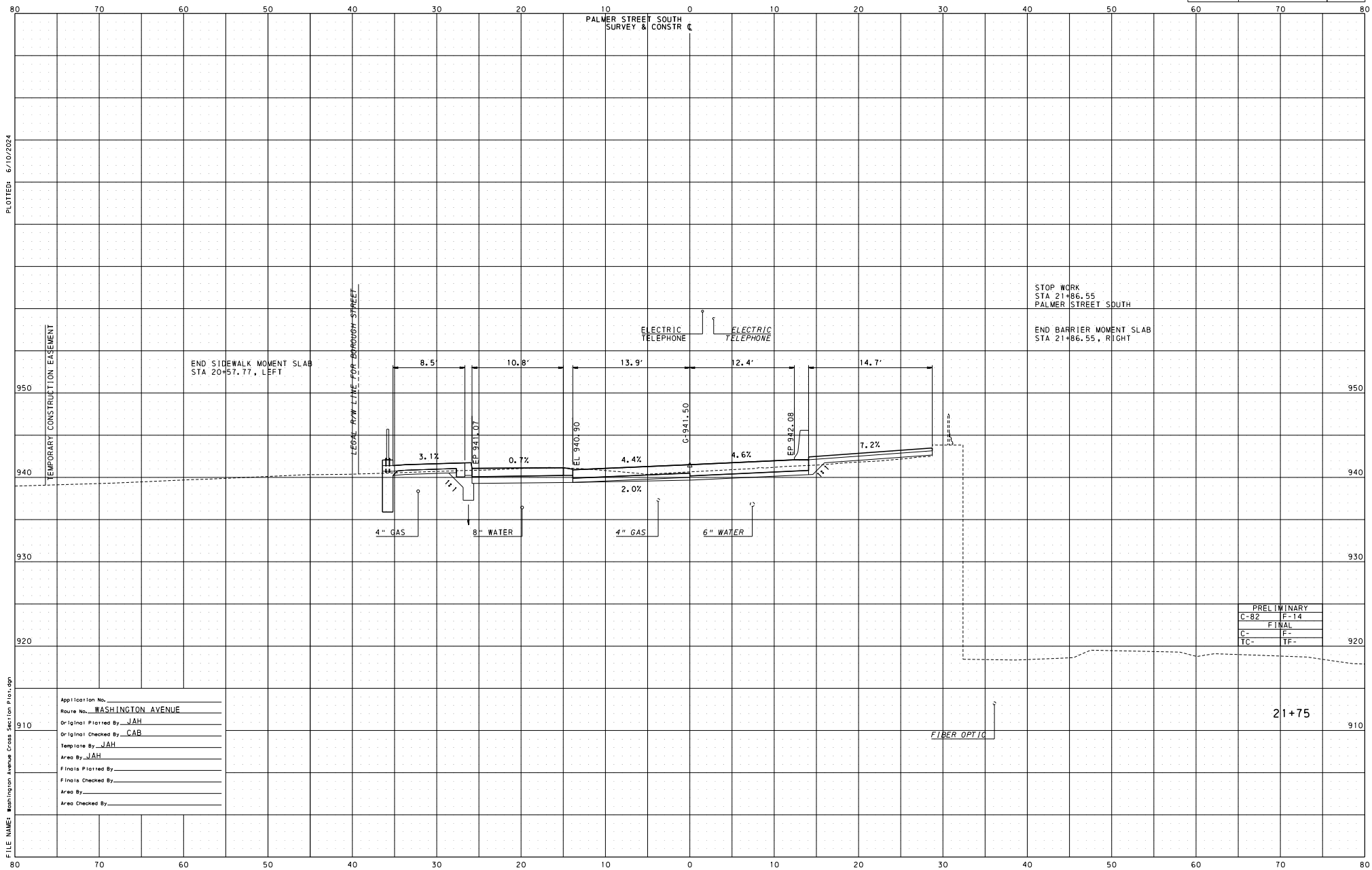
PLOTTED: 6/10/2024

FILE NAME: Washington Avenue Cross Section Plot.dgn

SCALE: 1 INCH = 5 FEET

CROSS SECTIONS

COUNTY	ROUTE	SHEET NO
ALLEGHENY	WASHINGTON AVENUE	15 OF 22



PRELIMINARY	
C-82	F-14
FINAL	
C-	F-
TC-	TF-

21+75

Application No.
Route No. WASHINGTON AVENUE
Original Plotted By JAH
Original Checked By CAB
Template By JAH
Area By JAH
Finals Plotted By
Finals Checked By
Area By
Area Checked By

PLOTTED: 6/10/2024

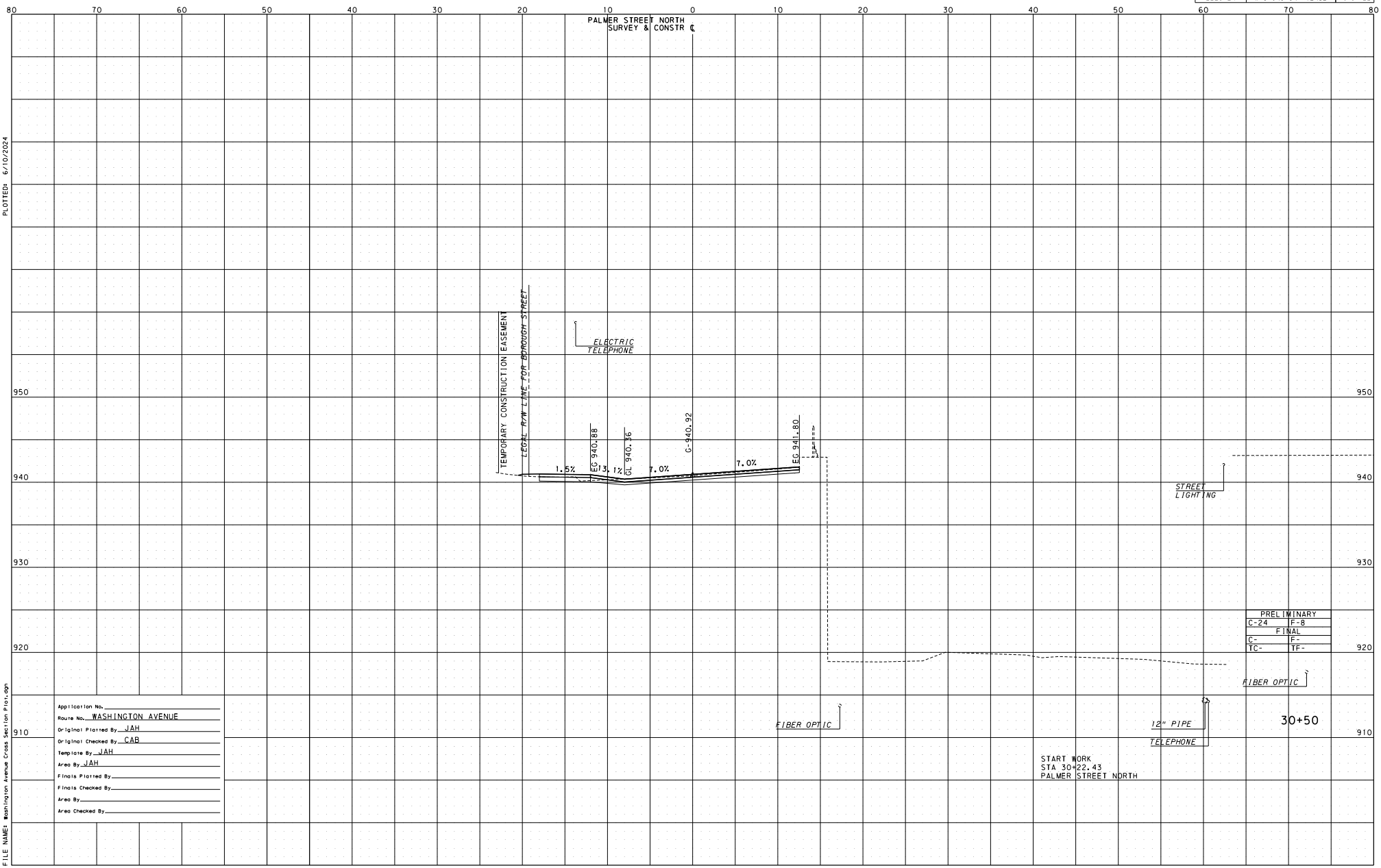
FILE NAME: Washington Avenue Cross Section Plot.dgn

SCALE: 1 INCH = 5 FEET

CROSS SECTIONS

COUNTY	ROUTE	SHEET NO
ALLEGHENY	WASHINGTON AVENUE	16 OF 22

PALMER STREET NORTH
SURVEY & CONSTR ℄



PRELIMINARY	
C-24	F-8
FINAL	
C-	F-
TC-	TF-

Application No.
Route No. WASHINGTON AVENUE
Original Plotted By JAH
Original Checked By CAB
Template By JAH
Area By JAH
Finals Plotted By
Finals Checked By
Area By
Area Checked By

PLOTTED: 6/10/2024

FILE NAME: Washington Avenue Cross Section Plot.dgn

SCALE: 1 INCH = 5 FEET

CROSS SECTIONS

COUNTY	ROUTE	SHEET NO
ALLEGHENY	WASHINGTON AVENUE	17 OF 22

PALMER STREET NORTH
SURVEY & CONSTR ℄

TEMPORARY CONSTRUCTION EASEMENT
LEGAL R/W LINE FOR BOROUGH STREET

ELECTRIC
TELEPHONE

EG 937.96
GL 937.72
G-938.28
EG 939.14

1.5%
6.0%
7.0%
7.0%

FIBER OPTIC
TELEPHONE
12" PIPE

31+00

PRELIMINARY	
C-25	F-6
FINAL	
C-	F-
TC-	TF-

950
940
930
920
910

Application No.
Route No. WASHINGTON AVENUE
Original Plotted By JAH
Original Checked By CAB
Template By JAH
Area By JAH
Finals Plotted By
Finals Checked By
Area By
Area Checked By

PLOTTED: 6/10/2024

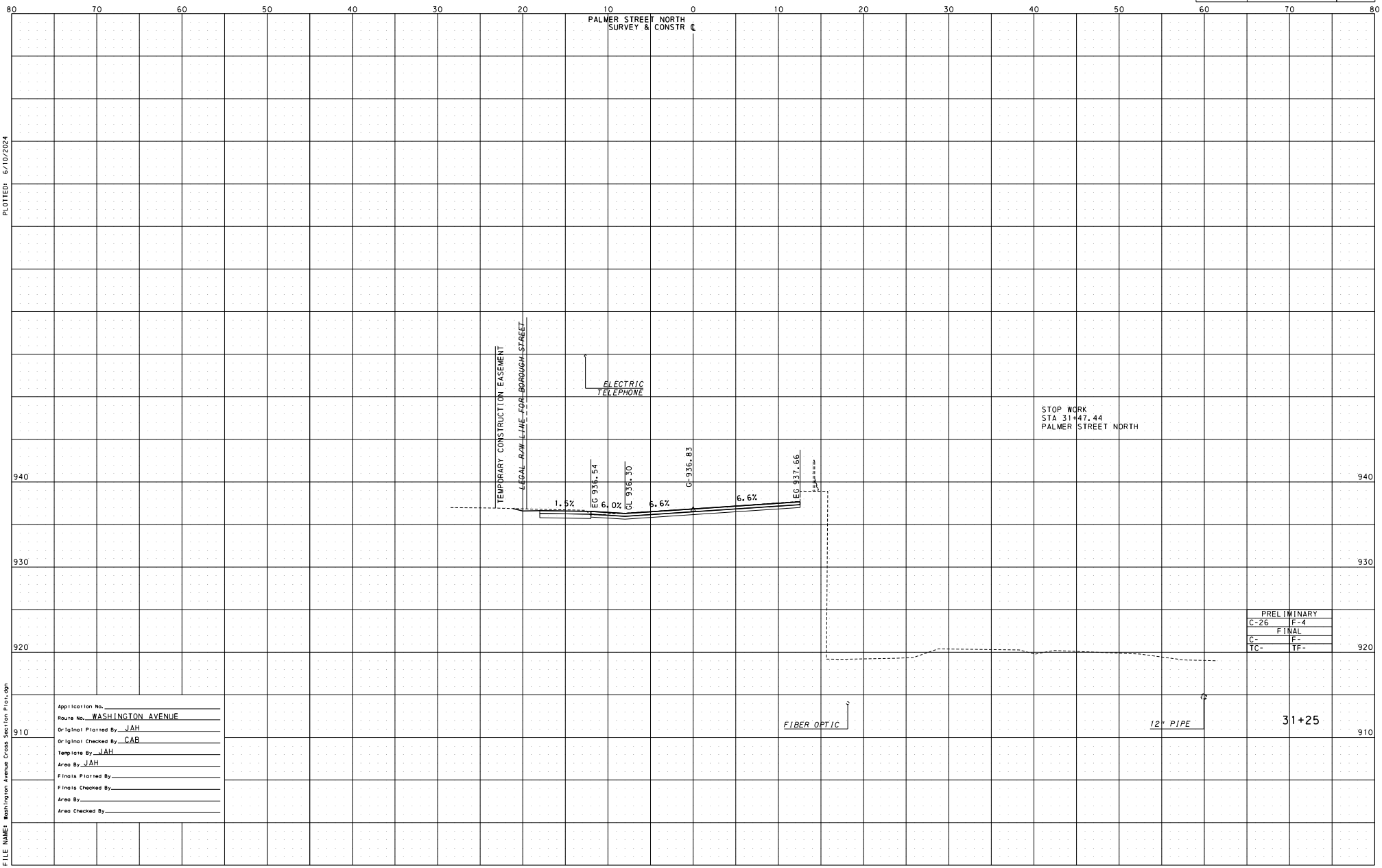
FILE NAME: Washington Avenue Cross Section Plan.dgn

SCALE: 1 INCH = 5 FEET

CROSS SECTIONS

COUNTY	ROUTE	SHEET NO
ALLEGHENY	WASHINGTON AVENUE	18 OF 22

PLOTTED: 6/10/2024

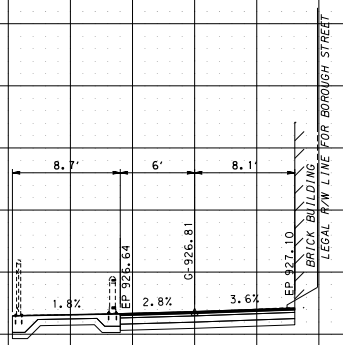


CROSS SECTIONS

COUNTY	ROUTE	SHEET NO
ALLEGHENY	WASHINGTON AVENUE	19 OF 22

80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80

WAVERLY STREET
SURVEY & CONSTR ℄



END CROSS SLOPE TRANSITION
STA 51+22.00, LEFT
2.0%

930

BEGIN CROSS SLOPE TRANSITION
STA 51+15.00, LEFT
2.8% (MATCH EXISTING)

920

END CROSS SLOPE TRANSITION
STA 51+29.00, RIGHT
2.0%

930

PRELIMINARY	
C-29	F-0
FINAL	
C-	F-
TC-	TF-

920

BEGIN CROSS SLOPE TRANSITION
STA 51+15.00, RIGHT
3.6% (MATCH EXISTING)

BEGIN PAVING
STA 51+15.00

START WORK
STA 51+15.00
WAVERLY STREET

51+15

910

910

Application No.
Route No. WASHINGTON AVENUE
Original Plotted By JAH
Original Checked By CAB
Template By JAH
Area By JAH
Finals Plotted By
Finals Checked By
Area By
Area Checked By

PLOTTED: 6/10/2024

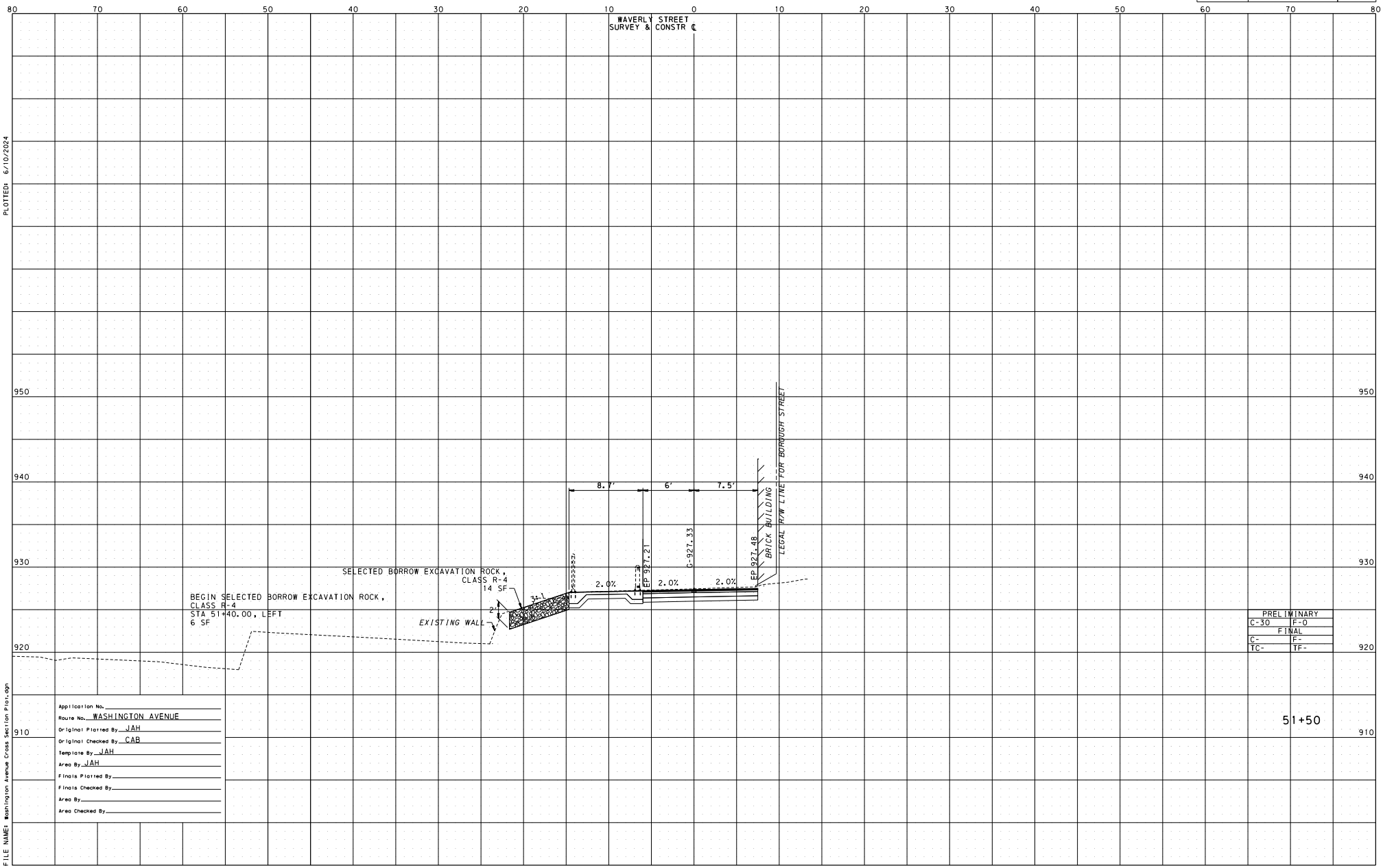
FILE NAME: Washington Avenue Cross Section Plan.dgn

80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80

SCALE: 1 INCH = 5 FEET

CROSS SECTIONS

COUNTY	ROUTE	SHEET NO
ALLEGHENY	WASHINGTON AVENUE	20 OF 22



PRELIMINARY	
C-30	F-0
FINAL	
C-	F-
TC-	TF-

51+50

Application No.
Route No. WASHINGTON AVENUE
Original Plotted By JAH
Original Checked By CAB
Template By JAH
Area By JAH
Finals Plotted By
Finals Checked By
Area By
Area Checked By

PLOTTED: 6/10/2024

FILE NAME: Washington Avenue Cross Section Plot.dgn

SCALE: 1 INCH = 5 FEET

CROSS SECTIONS

COUNTY	ROUTE	SHEET NO
ALLEGHENY	WASHINGTON AVENUE	21 OF 22

WAVERLY STREET
SURVEY & CONSTR ℄

END SELECTED BORROW EXCAVATION ROCK,
CLASS R-4
STA 52+05.00, LEFT
8 SF

BEGIN CROSS SLOPE TRANSITION
STA 52+29.00, LEFT
2.0%

BEGIN CROSS SLOPE TRANSITION
STA 52+26.00, RIGHT
2.0%

8.7'
6'
6.3'

EXISTING ABUTMENT

G-927.74
EP 927.62
EP 927.86

SELECTED BORROW EXCAVATION ROCK,
CLASS R-4
14 SF

3:1
2:1
2.0%
2.0%
2.0%

EXISTING WALL

950
940
930
920
910

PRELIMINARY	
C-28	F-0
FINAL	
C-	F-
TC-	TF-

52+00

Application No.
Route No. WASHINGTON AVENUE
Original Plotted By JAH
Original Checked By CAB
Template By JAH
Area By JAH
Finals Plotted By
Finals Checked By
Area By
Area Checked By

PLOTTED: 6/10/2024

FILE NAME: Washington Avenue Cross Section Plot.dgn

SCALE: 1 INCH = 5 FEET

CROSS SECTIONS

COUNTY	ROUTE	SHEET NO
ALLEGHENY	WASHINGTON AVENUE	22 OF 22

80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80

WAVERLY STREET
SURVEY & CONSTR ℄

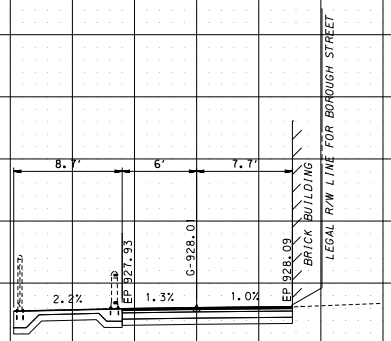
950 940 930 920 910

END CROSS SLOPE TRANSITION
STA 52+35.00, LEFT
1.3% (MATCH EXISTING)

STOP WORK
STA 52+35.00
WAVERLY STREET

END CROSS SLOPE TRANSITION
STA 52+35.00, RIGHT
1.0% (MATCH EXISTING)

END PAVING
STA 52+35.00



PRELIMINARY	
C-29	F-0
FINAL	
C-	F-
TC-	TF-

52+35

Application No.
Route No. WASHINGTON AVENUE
Original Plotted By JAH
Original Checked By CAB
Template By JAH
Area By JAH
Finals Plotted By
Finals Checked By
Area By
Area Checked By

PLOTTED: 6/10/2024

FILE NAME: Washington Avenue Cross Section Plan.dgn

SCALE: 1 INCH = 5 FEET

TABULATION OF LIGHTING QUANTITIES

SHEET 1 OF 1

		AWG 8 UNDERGROUND CABLE, COPPER, 1 CONDUCTOR 0910 4116 LF		TRENCH 0910 6000 LF		TESTING OF ENTIRE LIGHTING SYSTEM 0910 7210 LS		POLE FOUNDATION, TYPE FC SPECIAL 9000 0014 EACH		LED TEARDROP LUMINAIRE 9000 0015 EACH		DECORATIVE LIGHTING POLE (1) 9000 0016 EACH		DECORATIVE LIGHTING POLE, BARRIER MOUNTED (1) 9000 0017 EACH		DECORATIVE LIGHTING POLE, BRIDGE STRUCTURE MOUNTED (1) 9000 0018 EACH		2" DIRECT BURIAL CONDUIT (CONCRETE ENCASED) (1) 9000 0019 EACH		REMOVE EXISTING LIGHTING (1) 9000 0020 LS		POWER SUPPLY MODIFICATION 9000 0021 LS		JUNCTION BOXES J.B.-1, MODIFIED (1) 9000 0022 EACH		POLE IDENTIFICATION	LUMINAIRE TYPE (IES DISTRIBUTION)		REMARKS ITEM NUMBER UNIT	SIDE	STATION	ROUTE
								1		1		1														L-1	II		DECORATIVE POLE	RT	6+01	WASHINGTON AVE
																								1				JUNCTION BOX	RT	5+96	WASHINGTON AVE
								1		1		1														L-2	II		DECORATIVE POLE	LT	6+45	WASHINGTON AVE
								1		1		1														L-3	II		DECORATIVE POLE	RT	6+42	WASHINGTON AVE
										1				1												L-4	II		DECORATIVE POLE	LT	7+00	WASHINGTON AVE
																								1				JUNCTION BOX	LT	6+78	WASHINGTON AVE
																								1				JUNCTION BOX	RT	6+56	WASHINGTON AVE
																								1				JUNCTION BOX	RT	6+85	WASHINGTON AVE
										1				1												L-5	II		DECORATIVE POLE	RT	6+89	WASHINGTON AVE
										1						1										L-6	II		DECORATIVE POLE	LT	7+48	WASHINGTON AVE
										1						1										L-7	II		DECORATIVE POLE	RT	7+33	WASHINGTON AVE
										1						1										L-8	II		DECORATIVE POLE	LT	7+94	WASHINGTON AVE
										1						1										L-9	II		DECORATIVE POLE	RT	7+79	WASHINGTON AVE
										1				1												L-10	II		DECORATIVE POLE	LT	8+39	WASHINGTON AVE
										1				1												L-11	II		DECORATIVE POLE	RT	8+28	WASHINGTON AVE
								1		1		1														L-12	II		DECORATIVE POLE	LT	8+80	WASHINGTON AVE
								1		1		1														L-13	II		DECORATIVE POLE	RT	8+70	WASHINGTON AVE
		3400		300														300											ENTIRE PROJECT			
		3400		300		X		5		13		5		4		4		300		X		X		4					TOTALS			

LEGEND

(1) SEE SPECIAL PROVISION.

COMMONWEALTH OF PENNSYLVANIA PROFESSIONAL ENGINEER ERIC D RIDINGS No PE084034

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NORFOLK SOUTHERN RAILWAY COMPANY

PITTSBURGH
OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER – DESIGN AND CONSTRUCTION – ATLANTA, GA.

REV	BY	DATE	DESCRIPTION

LOCATION: SWISSVALE, PENNSYLVANIA

TITLE: BR0028818 BRIDGE PT344.91 WASHINGTON AVENUE ELECTRICAL QUANTITIES

DSN	JMC	PID No.	D2122	WBS	1290818-0H77
DRN	CEK	FILE No.	BR0028818	DRAWING NUMBER	PT-344.91 23 01
CHK	EDR	DATE	6/7/2024		

SCALE: NOT PROJECT — SHEET PT-344.91

CADD FILE: NS_Washington_Ave_Electrical_Sheets.dgn

GENERAL NOTES

1. CONSTRUCTION DETAILS NOT SHOWN ON THE DRAWINGS ARE TO CONFORM TO PA DEPARTMENT OF TRANSPORTATION STANDARD DRAWINGS.

RC-80M DATED NOV. 1, 2022
RC-84M DATED JUNE 1, 2010
BC-721M DATED FEB. 19, 2021

2. THE STANDARD SPECIFICATIONS FOR THIS PROJECT ARE PA DEPARTMENT OF TRANSPORTATION SPECIFICATIONS PUBLICATION 408/2020, AND ALL OF ITS SUPPLEMENTS AND SPECIAL PROVISIONS.

3. COORDINATE REMOVAL OF EXISTING LIGHTING WITH BOROUGH OF SWISSVALE REPRESENTATIVE. SOME OF THE LIGHT POLE FOUNDATIONS WILL NEED TO BE REPLACED WITH A JUNCTION BOX (JB-1) TO PROVIDE CONTINUATION OF EXISTING LIGHTING CIRCUIT THAT SERVES LIGHTING OUTSIDE OF THE PROJECT LIMITS. LUMINAIRES, LAMPS, ARMS, AND POLES SHALL BE REMOVED UNDAMAGED AND STORED ON SITE & LOADED ONTO BOROUGH VEHICLES, AS DIRECTED.

4. PROVIDE INDIVIDUAL FUSING FOR ALL LUMINAIRES AND RECEPTACLES.

5. PROVIDE A SEPARATE EQUIPMENT GROUNDING CONDUCTOR WITH ALL CIRCUITS. DO NOT CONNECT THE NEUTRAL TO GROUND EXCEPT AT SERVICE POINT. CONNECT THE EQUIPMENT GROUNDING CONDUCTOR TO GROUND AT EACH POLE. PROVIDE WITH SAME INSULATION AND SIZE AS THE CIRCUIT CONDUCTORS.

6. PROVIDE WATERTIGHT, SUBMERSIBLE, PREMOLDED, DISCONNECTABLE CONNECTOR KITS FOR ALL SPLICES.

7. PROVIDE CONCRETE JUNCTION BOXES, AS SPECIFIED IN PUBLICATION 408/2020, SECTION 1101.10(a) 1ST BULLET. PROVIDE POSITIVE DRAINAGE.

8. THE CONTRACTOR SHALL WORK IN STRICT COORDINATION WITH LOCAL UTILITY COMPANIES TO DETERMINE THE EXACT LOCATION OF ALL EXISTING UNDERGROUND AND OVERHEAD UTILITY LINES PRIOR TO COMMENCEMENT OF THIS WORK. ALL DAMAGES INCURRED TO EXISTING UTILITIES WILL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT NO ADDITIONAL PAYMENT.

9. DO NOT SCALE DRAWINGS. UTILITY LOCATIONS ARE BASED ON EXISTING MAPPING INFORMATION. EXISTING UTILITY ELEVATIONS. ARE APPROXIMATE AND ARE BASED ON THE BEST INFORMATION AVAILABLE. VERIFY UTILITY LOCATIONS AND ELEVATIONS PRIOR TO CONSTRUCTION OF POLE FOUNDATIONS.

10. SATISFACTORILY PLACE AND TEST ALL GROUND RODS AND GROUND WIRE AT ALL POLE FOUNDATIONS NECESSARY TO ATTAIN A MAXIMUM RESISTANCE TO EARTH OF 25 OHMS. INSTALL ADDITIONAL GROUND RODS UNTIL THIS REQUIREMENT IS MET, AT NO ADDITIONAL PAYMENT. ENSURE THAT ALL TEST RESULTS ARE RECORDED ON PENNSYLVANIA DEPARTMENT OF TRANSPORTATION FORM CS-4225A AND SUBMITTED FOR APPROVAL.

11. CONDUITS UNDER ROADWAY MUST BE A MINIMUM OF 30 INCHES BELOW SUBBASE.

12. MAINTAIN EXISTING LIGHTING SYSTEM UNTIL NEW SYSTEM IS OPERATIONAL. PROVIDE ANY TEMPORARY POWER OR CONNECTIONS THAT MAY BE REQUIRED TO MAINTAIN THE EXISTING LIGHTING SYSTEM DURING CONSTRUCTION.

13. LIGHTING CONDUIT LOCATIONS SHOWN ON DRAWINGS ARE FOR IDENTIFICATION ONLY AND INTENDED TO BE SCHEMATIC. CONDUITS SHALL BE PLACED IN TRENCH DIRECTLY BEHIND CURB AND WITH TRAFFIC CONDUITS WHERE POSSIBLE.

14. THREE WORKING DAYS PRIOR TO EXCAVATION, THE CONTRACTOR MUST CONTACT THE PENNSYLVANIA ONE CALL SYSTEM. PA ONE CALL TELEPHONE NUMBER IS 1-800-242-1776.

15. PER ACT 187, MAINTAIN A MINIMUM OF EIGHTEEN (18) INCHES CLEAR FROM ALL UNDERGROUND UTILITIES.

16. PROVIDE INTEGRAL PHOTOCONTROL FOR ALL LUMINAIRES.

17. INSTALL LIGHT POLES WITH SETBACK OF 2 FEET FROM FACE OF THE SIDEWALK TO FACE OF THE POLE.

18. CONDUIT IN STRUCTURE AND FITTINGS ARE PAID FOR UNDER BRIDGE STRUCTURE ITEMS. ALL OTHER BRIDGE LIGHTING ITEMS ARE PAID FOR UNDER THE LIGHTING ITEMS.

19. PROVIDE CONDUIT EXPANSION/DEFLECTION FITTINGS AT BRIDGE JOINTS. ALL FITTINGS AND RELATED HARDWARE ARE INCIDENTAL TO CONDUIT INSTALLATION.

20. FOR DEMOLITION OF EXISTING MUNICIPAL STREET LIGHTING POLES REFER TO UTILITY DRAWINGS AND SPECIAL PROVISION 9000-0020 FOR ADDITIONAL INFORMATION.

LEGEND

- PROPOSED LUMINAIRE POLE LOCATION, LED TEARDROP, 5139 LUMENS, TYPE II DISTRIBUTION, 21-FOOT MOUNTING HEIGHT WITH DAVIT BRACKET ARM
- EXISTING POLE LOCATION, LED TEARDROP, 21-FOOT MOUNTING HEIGHT WITH DAVIT BRACKET ARM
- PROPOSED LUMINAIRE POLE LOCATION, LED TEARDROP, 5139 LUMENS, TYPE II DISTRIBUTION 21-FOOT MOUNTING HEIGHT WITH DAVIT BRACKET ARM, MOUNTED TO BLISTER
- PROPOSED LUMINAIRE POLE LOCATION, LED TEARDROP, 5139 LUMENS, TYPE II DISTRIBUTION, 21-FOOT MOUNTING HEIGHT WITH DAVIT BRACKET ARM, MOUNTED TO BRIDGE STRUCTURE
- EXISTING UTILITY POLE WITH HPS LUMINAIRE
- 2" DIRECT BURIAL CONDUIT, SCH 40 PVC, CONCRETE ENCASED
- 2" GALVANIZED RIGID STEEL CONDUIT, IN STRUCTURE
- EXISTING UTILITY POLE

ABBREVIATIONS

DBC	DIRECT BURIAL CONDUIT
GRD	GROUND
GRS	GALVANIZED RIGID STEEL
JB	JUNCTION BOX
LED	LIGHT EMITTING DIODE
LTG	LIGHTING
LT	LEFT
N	NEUTRAL
RT	RIGHT
TYP	TYPICAL

LUMINAIRE IDENTIFICATION

LP-1
LUMINAIRE NUMBER

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — ERIC D RIDINGS — ENGINEER — No. PE084424

Michael Baker INTERNATIONAL
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NORFOLK SOUTHERN RAILWAY COMPANY
ENGINEERING DIVISION
PITTSBURGH
OFFICE OF THE CHIEF ENGINEER – DESIGN AND CONSTRUCTION – ATLANTA, GA.

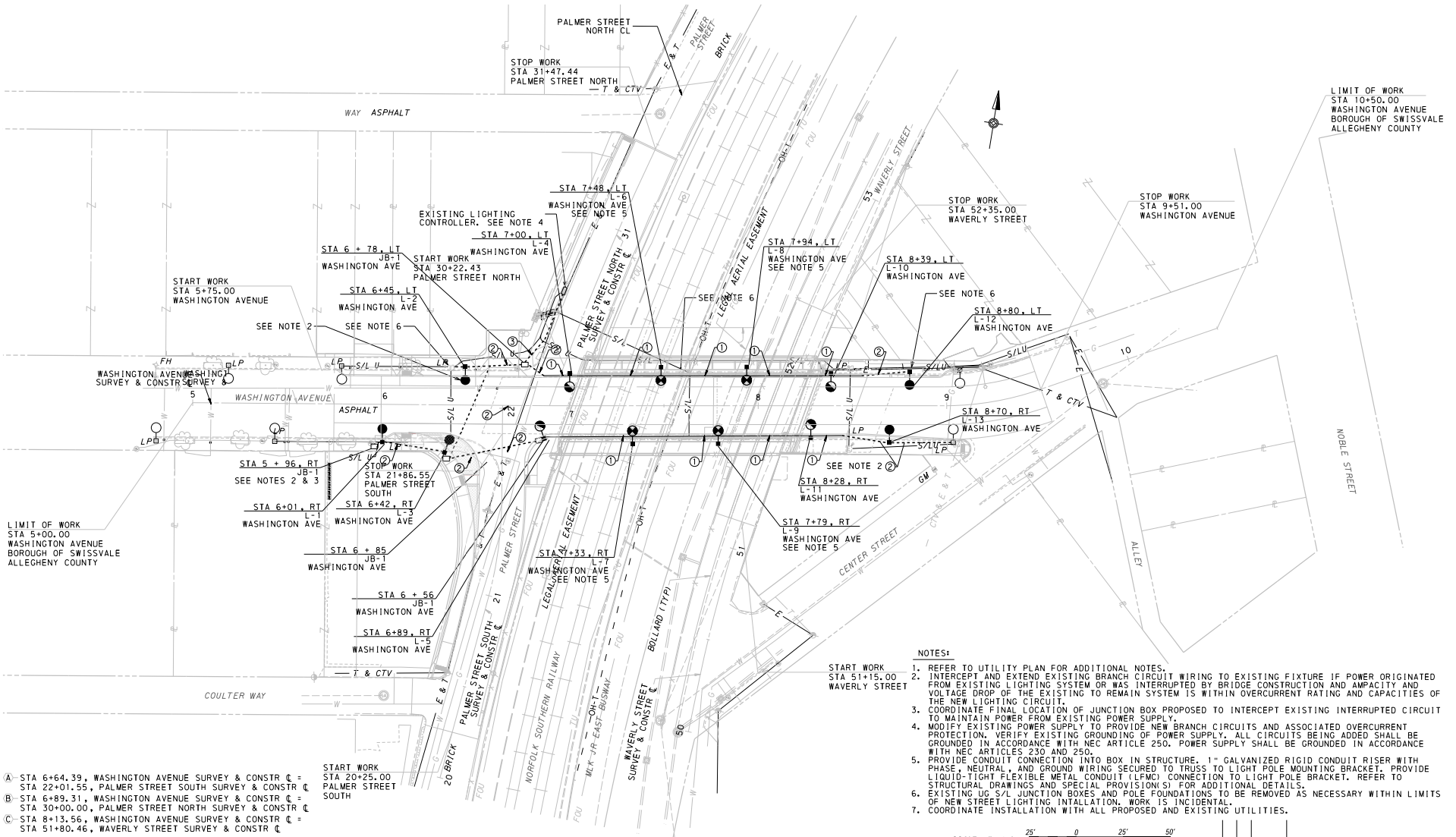
REV.	BY	DATE	DESCRIPTION

LOCATION: SWISSVALE, PENNSYLVANIA
TITLE: BR0028818 BRIDGE PT344.91 WASHINGTON AVENUE ELECTRICAL NOTES

DSN	JMC	PID No.	D2122	WBS	1290818-0H77
DWN	CSK	FILE No.	BR0028818	DRAWING NUMBER	PT-344.91 23 02
CHK	EDR	DATE	6/7/2024		

DATE FOOT: PT-344.91 02

CADD FILE: NS_Washington_Ave_Electrical_Sheets.dgn



NOTES:

1. REFER TO UTILITY PLAN FOR ADDITIONAL NOTES.
2. INTERCEPT AND EXTEND EXISTING BRANCH CIRCUIT WIRING TO EXISTING FIXTURE IF POWER ORIGINATED FROM EXISTING LIGHTING SYSTEM OR WAS INTERRUPTED BY BRIDGE CONSTRUCTION AND AMPACITY AND VOLTAGE DROP OF THE EXISTING TO REMAIN SYSTEM IS WITHIN OVERCURRENT RATING AND CAPACITIES OF THE NEW LIGHTING CIRCUIT.
3. COORDINATE FINAL LOCATION OF JUNCTION BOX PROPOSED TO INTERCEPT EXISTING INTERRUPTED CIRCUIT TO MAINTAIN POWER FROM EXISTING POWER SUPPLY.
4. MODIFY EXISTING POWER SUPPLY TO PROVIDE NEW BRANCH CIRCUITS AND ASSOCIATED OVERCURRENT PROTECTION. VERIFY EXISTING GROUNDING OF POWER SUPPLY. ALL CIRCUITS BEING ADDED SHALL BE GROUNDED IN ACCORDANCE WITH NEC ARTICLE 250. POWER SUPPLY SHALL BE GROUNDED IN ACCORDANCE WITH NEC ARTICLES 230 AND 250.
5. PROVIDE CONDUIT CONNECTION INTO BOX IN STRUCTURE. 1" GALVANIZED RIGID CONDUIT RISER WITH PHASE, NEUTRAL, AND GROUND WIRING SECURED TO TRUSS TO LIGHT POLE MOUNTING BRACKET. PROVIDE LIQUID-TIGHT FLEXIBLE METAL CONDUIT (LFMC) CONNECTION TO LIGHT POLE BRACKET. REFER TO STRUCTURAL DRAWINGS AND SPECIAL PROVISION(S) FOR ADDITIONAL DETAILS.
6. EXISTING UG S/L JUNCTION BOXES AND POLE FOUNDATIONS TO BE REMOVED AS NECESSARY WITHIN LIMITS OF NEW STREET LIGHTING INTALLATION. WORK IS INCIDENTAL.
7. COORDINATE INSTALLATION WITH ALL PROPOSED AND EXISTING UTILITIES.

Ⓐ STA 6+64.39, WASHINGTON AVENUE SURVEY & CONSTR ℄ = STA 22+01.55, PALMER STREET SOUTH SURVEY & CONSTR ℄
Ⓑ STA 6+89.31, WASHINGTON AVENUE SURVEY & CONSTR ℄ = STA 30+00.00, PALMER STREET NORTH SURVEY & CONSTR ℄
Ⓒ STA 8+13.56, WASHINGTON AVENUE SURVEY & CONSTR ℄ = STA 51+80.46, WAVERLY STREET SURVEY & CONSTR ℄

CABLE SCHEDULE:
① 3 #8 AWG & 1 #8 AWG GND IN STRUCTURE
② 3 #8 AWG & 1 #8 AWG GND IN 2" SCH 40 PVC CONDUIT, UNDERGROUND, ENCASED IN CONCRETE
③ 6 #8 AWG & 2 #2 AWG GND IN 2" SCH 40 PVC CONDUIT, UNDERGROUND, ENCASED IN CONCRETE

SCALE: 1"=25'

25' 0 25' 50'

DO NOT SCALE THIS DRAWING FOR DIMENSIONS NOT GIVEN

REVISED 90% SUBMISSION

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NORFOLK SOUTHERN

NORFOLK SOUTHERN RAILWAY COMPANY

PITTSBURGH
ENGINEERING DIVISION
OFFICE OF THE CHIEF ENGINEER – DESIGN AND CONSTRUCTION – ATLANTA, GA.

REV	BY	DATE	DESCRIPTION

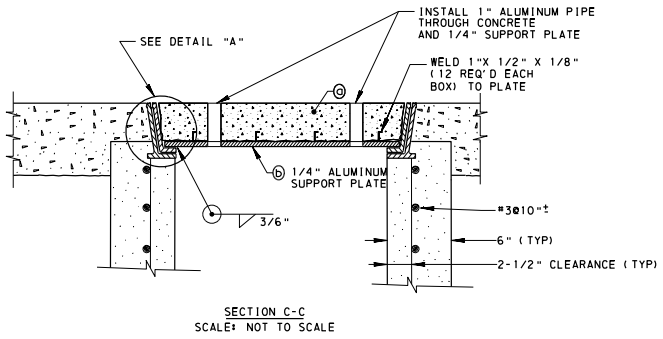
LOCATION: SWISSVALE, PENNSYLVANIA

TITLE: BR0028818 BRIDGE PT344.91 WASHINGTON AVENUE LIGHTING PLAN SHEET

DSN JMC	PO No. D2122	WBS 1290818-0H77	SALE POST PT-344.91
DWN CSK	FILE No. BR0028818	DRAWING NUMBER PT-344.91 23 03	
CH EDB	DATE 6/7/2024		

CADD FILE: NS_Washington_Ave_Lighting_plan.dgn

CADD FILE: NS_Washington_Ave_Lighting_plan.dgn

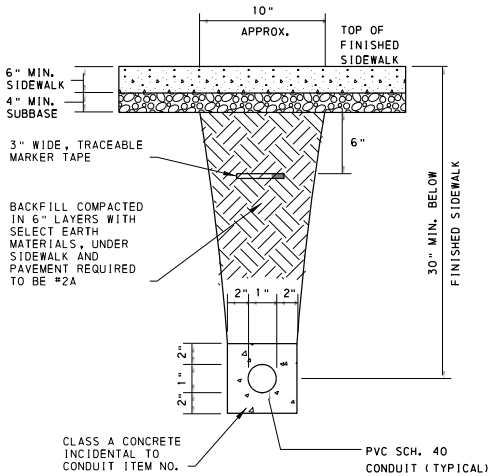


SECTION C-C
SCALE: NOT TO SCALE

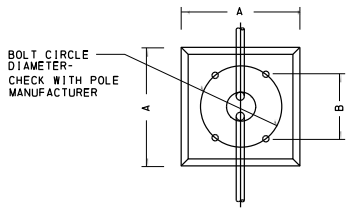
CONCRETE JUNCTION BOXES J.B.-1 MODIFIED

ⓐ CONCRETE, CLASS P
ⓑ ALUMINUM PLATE

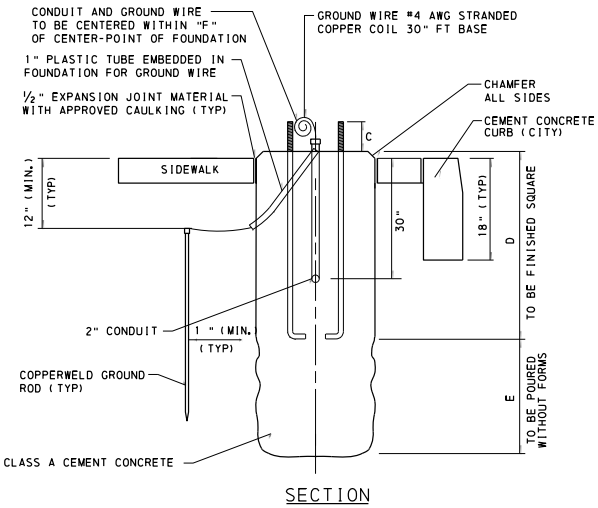
SEE DETAIL "A", THIS SHEET, FOR JUNCTION BOX SUPPORTING FRAME DIMENSIONS.



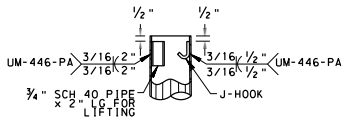
CONDUIT TRENCH UNDER SIDEWALK
SCALE: NOT TO SCALE



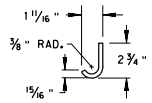
PLAN
NOT TO SCALE



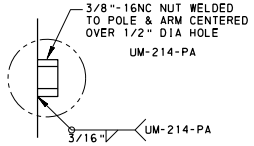
SECTION



TOP OF POLE DETAIL
ORIENTATION OF PIPE & J-HOOK AS REQUIRED
SCALE: NOT TO SCALE

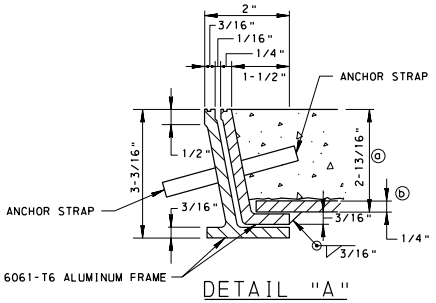


J-HOOK DETAIL
⅜" DIAMETER
SCALE: NOT TO SCALE

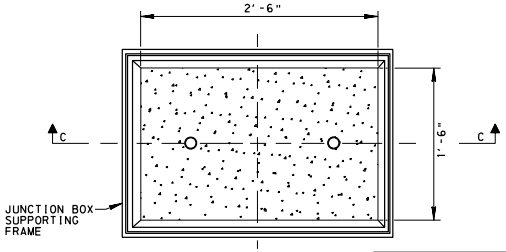


NUT WELDMENT DETAIL
(WELD TO POLE & LUMINAIRE ARM FOR SCROLL ATTACHMENT)
SCALE: NOT TO SCALE

POLE FOUNDATION
SCALE: NOT TO SCALE



DETAIL "A"



PLAN
SCALE: NOT TO SCALE

JUNCTION BOX SUPPORTING FRAME

SCALE: NOT TO SCALE

FOUNDATION TYPE	ANCHOR BOLT TYPE	FOUNDATION DIMENSIONS						CAISSON REINFORCEMENT				GROUND ROD	
		A	B	C	D	E	F	VERTICAL		TIE RODS		DIA.	LGTH.
								SIZE	REQ'D	SIZE	SPAC'G		
TYPE 1	AB-4	24"	8½"	6"	3'-6"	3'-0"	6"x6"	N/A	N/A	N/A	N/A	⅝"	7'-0"

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COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL ERIC D RIDINGS ENGINEER No PE084251

NORFOLK SOUTHERN RAILWAY COMPANY
ENGINEERING DIVISION
PITTSBURGH
OFFICE OF THE CHIEF ENGINEER – DESIGN AND CONSTRUCTION – ATLANTA, GA.

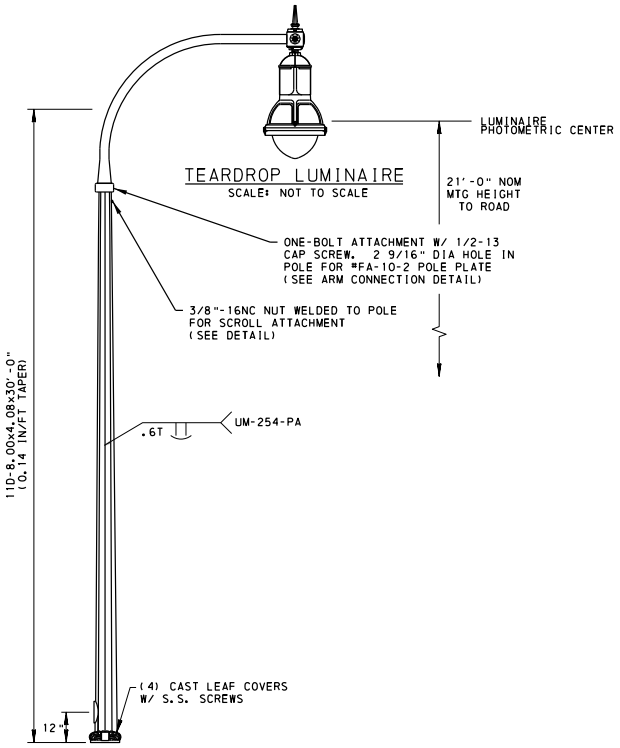
NORFOLK SOUTHERN

REV.	BY	DATE	DESCRIPTION

DIVISION
SWISSVALE, PENNSYLVANIA
TITLE
BR0028818 BRIDGE PT344.91 WASHINGTON AVENUE
ELECTRICAL DETAILS

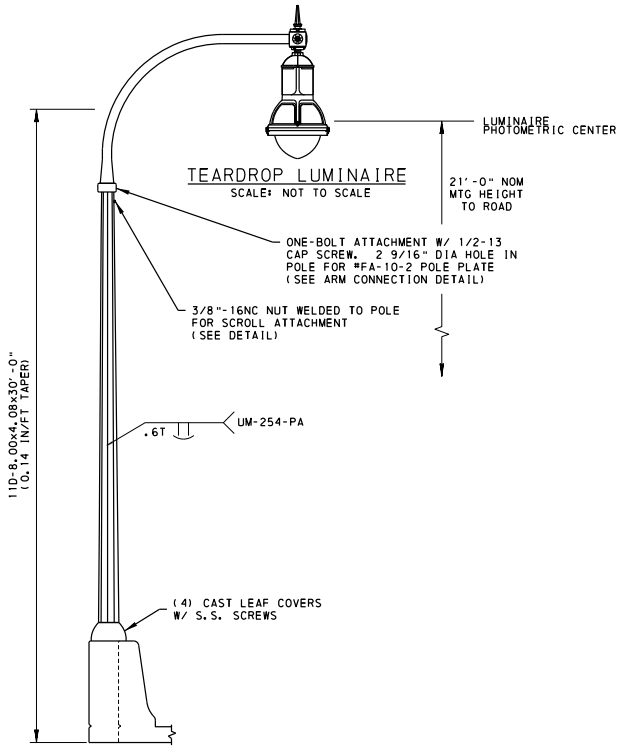
DSN	JMC	PID No.	D2122	WBS	1290818-0H77	UNIT FOOT	PT-344.91
DWN	CSK	FILE No.	BR0028818	DRAWING NUMBER			
CHK	EDR	DATE	6/7/2024		PT-344.91 23 04		

CADD FILE: NS_Washington_Ave_Electrical_Sheets.dgn



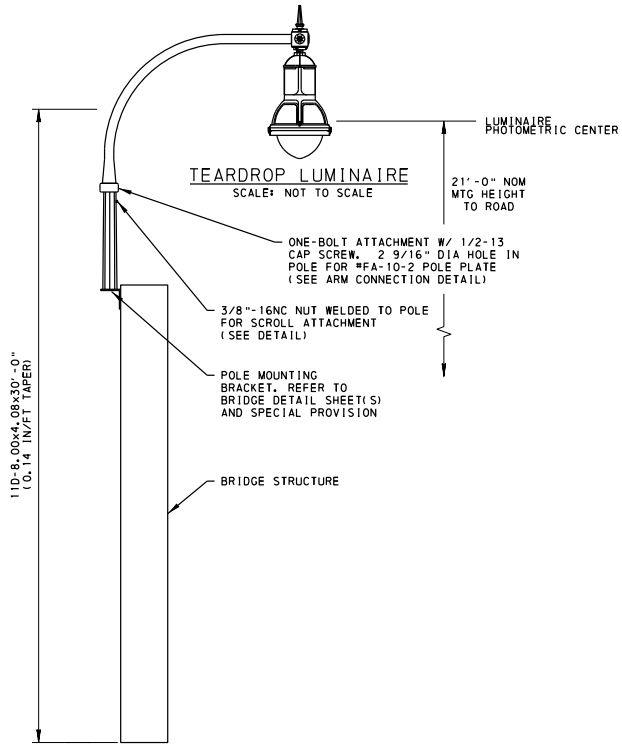
ORNAMENTAL LIGHTING POLE AND DAVIT BRACKET ARM, 21 FT MOUNTING HEIGHT

SCALE: NOT TO SCALE



ORNAMENTAL LIGHTING POLE AND DAVIT BRACKET ARM, 21 FT MOUNTING HEIGHT MOUNTED TO BARRIER

SCALE: NOT TO SCALE



ORNAMENTAL LIGHTING POLE AND DAVIT BRACKET ARM, 21 FT MOUNTING HEIGHT MOUNTED TO BRIDGE STRUCTURE

SCALE: NOT TO SCALE

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL ERIC D RIDINGS ENGINEER 1ST PENNSYLVANIA

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ENGINEERING DEPARTMENT
PITTSBURGH
OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER – DESIGN AND CONSTRUCTION – ATLANTA, GA.

REV	BY	DATE	DESCRIPTION

LOCATION: SWISSVALE, PENNSYLVANIA

TITLE: BR0028818 BRIDGE PT344.91 WASHINGTON AVENUE ELECTRICAL DETAILS

DSN	JMC	PID No.	D2122	WBS	1290818-0H77	MILE POST	PT-344.91
DWN	CEK	FILE No.	BR0028818	DRAWING NUMBER			
CHK	EDR	DATE	6/7/2024		PT-344.91 23 05		

CADD FILE: NS_Washington_Ave_Electrical_Sheets.dgn

NORFOLK SOUTHERN

PITTSBURGH SUBDIVISION VERTICAL CLEARANCE PROJECT

WASHINGTON AVENUE BRIDGE

IN ALLEGHENY COUNTY

FROM STA 5+00.00 TO STA 10+50.00 LENGTH 376.00 FT 0.071 MI

HORIZONTAL

SCALE: 1"=25'

VERTICAL

SCALE: 1"=5'

DESIGN DESIGNATION

HIGHWAY CLASSIFICATION	- MINOR COLLECTOR
HIGHWAY TYPOLOGY	- NEIGHBORHOOD COLLECTOR, TOWN/VILLAGE NEIGHBORHOOD
DESIGN SPEED	- 25 MPH
TRAVEL LANES	- 2 - 10'-0" LANES
SHOULDER	- 2 - 5'-0"
PARKING LANE	- 8'-0" LT AND RT

TRAFFIC DATA

CURRENT YEAR ADT	- 4000 (2023)
DESIGN YEAR ADT	- 4000 (2043)
DHV	- 400
D	- 50%
T	- 5%

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL STEPHEN J. KRAMER ENGINEER 039985-E

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NORFOLK SOUTHERN RAILWAY COMPANY

ENGINEERING DIVISION

PITTSBURGH

OFFICE OF THE CHIEF ENGINEER – DESIGN AND CONSTRUCTION – ATLANTA, GA.

REV.	BY	DATE	DESCRIPTION

DIVISION

SWISSVALE, PENNSYLVANIA

TITLE BR0028818 BRIDGE PT344.91 WASHINGTON AVENUE EROSION AND SEDIMENTATION POLLUTION CONTROL PLAN TITLE SHEET

DSN	JAH	PO No.	D2122	WO	1290818-0N177
DWN	RDL	FILE No.	BR0028818		
CK	SJK	DATE	6/6/2024		

SCALE NOT

PT-344.91

DRAWING NUMBER

PT-344.91 24 1

CADD FILE: NS_Washington_Ave_E&S_TP.dgn

SHEET NO. 1 OF 4

A. SOIL CONDITIONS AND LIMITATIONS:

THERE IS ONLY ONE SOIL TYPE FOR THE PROJECT AREA. THE SOIL TYPE WAS OBTAINED FROM THE USE OF THE SOIL SURVEY OF ALLEGHENY COUNTY. THE ONLY SOIL AT THE PROJECT SITE IS LISTED AS URBAN SOILS (UB). URBAN SOIL IS NOT LISTED AS A HYDRIC SOIL.

THE URBAN SOILS PRESENT AT THE SITE EXHIBIT SANDY-LIKE TEXTURES WITH A GRAVEL BASE. THE SITE HAS AN OVERALL SLOPE LESS THAN 5%. THE SOILS EXHIBIT INDUSTRIAL-LIKE SOILS WHICH IS TYPICAL OF URBAN SOILS.

THIS SOIL UNIT CONSISTS OF AREAS WHERE MORE THAN 85 PERCENT OF THE SURFACE HAS BEEN ALTERED OR DISTURBED PREVIOUSLY. THE SOIL ON THIS PARTICULAR SITE HAS BEEN PREVIOUSLY DISTURBED FOR RELATED RAILROAD ACTIVITIES THROUGH THE YEARS. EXAMINATION AND IDENTIFICATION OF SOILS OR SPECIFIC MATERIALS IN THIS UNIT ARE IMPRACTICAL. THERE ARE NO LISTED SOIL LIMITATIONS FOR THIS SOIL TYPE DUE TO THE EXTENSIVE FORMER DISTURBANCES. THERE IS LITTLE TO NO TOPSOIL PRESENT ON THE PROJECT SITE, CONSIDERING THE PREVIOUS DISTURBANCES AND RAILROAD ACTIVITIES.

THE PROJECT PROPOSES TO IMPLEMENT EFFECTIVE EROSION CONTROLS, CONTROL THE EARTHMOVING ACTIVITIES, USE SOIL AMENDMENTS FOR SEEDING AND MULCHING AND LIMIT THE EXPOSED AREAS TO OFFSET ANY SOIL LIMITATIONS FOR THE PROJECT'S URBAN SOIL.

THERE ARE NO KNOWN GEOLOGIC FORMATIONS, NATURAL OR OTHERWISE, THAT WOULD HAVE A POTENTIAL TO CAUSE POLLUTION AT THIS PARTICULAR PROJECT SITE. GEOTECHNICAL WORK HAS BEEN CONDUCTED AT THE SITE AND CAN CONFIRM THESE FINDINGS.

B. PRESENCE OF STREAMS, WETLANDS, AND 100 YR. FLOODPLAINS (NO IMPACTS)

THERE ARE NO STREAM CHANNELS, WETLANDS, FLOODWAYS, OR FLOODPLAINS WITHIN THE PROJECT BOUNDARIES. THE PROJECT EVENTUALLY DRAINS TO THE MONONGAHELA RIVER

C. IMPACTS OUTSIDE THE PROJECT BOUNDARY

THE VOLUME AND RATE OF RUNOFF FROM THE PROJECT AREA WILL REMAIN THE SAME, SINCE THE PROPOSED PROJECT WILL IMPLEMENT THE EXACT SAME TYPE OF DRAINAGE FACILITIES.

THE OFF-SITE WATERS, OR CONTRIBUTING WATERSHED WILL BE CONVEYED THROUGH THE SITE AND NO DIRECT OUTFALL IS PROPOSED TO THE RECEIVING WATERSHED TO CAUSE ANY IMPACT OUTSIDE THE PROJECT BOUNDARY.

D. BORROW AND WASTE AREAS

IF AN OFF-SITE WASTE AREA IS CHOSEN FOR THIS PROJECT, THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING THE WASTE AREA IN ACCORDANCE WITH THE PROJECT GENERAL REQUIREMENTS AND MAINTENANCE PROGRAM.

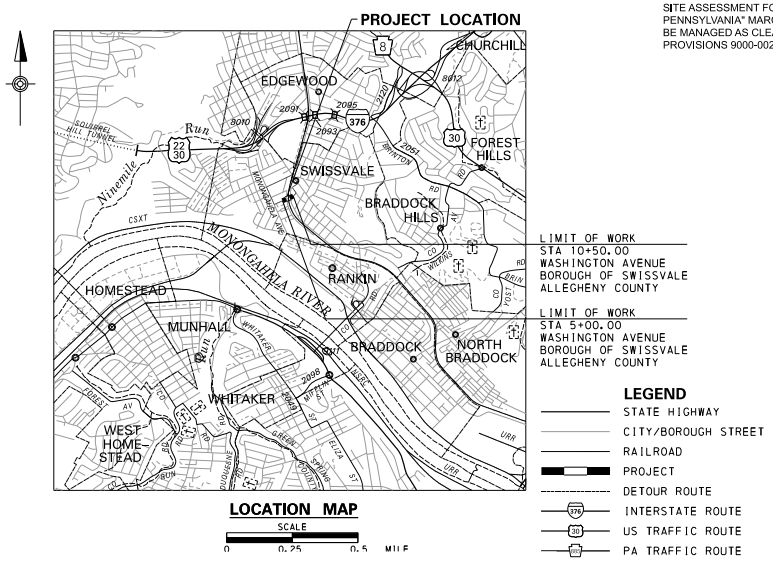
E. OFFSITE DRAINAGE AREA

THE OFF-SITE DRAINAGE AREAS WILL REMAIN THE SAME. THERE IS VERY LITTLE CONTRIBUTING TO THIS SITE, AS IT IS NEARLY LEVEL. THERE WILL BE NO CHANGE IN THE CONTRIBUTING AREA OR CHANGES WITHIN THE PROJECTS RUNOFF.

THE DRAINAGE AREAS ABOVE THE SITE WILL BE MAINTAINED AND NOT IMPACTED AND THE OFF-SITE DRAINAGE BELOW THE SITE SHOULD SEE NO APPRECIABLE DIFFERENCE. THERE IS NO DIRECT DISCHARGE PROPOSED.

THE PROJECT'S PROPOSED IMPROVEMENTS WILL NOT CAUSE THERMAL IMPACTS TO THE RECEIVING STORM SYSTEM.

THE PROJECT WILL MITIGATE FOR ANY AREA OF ADDITIONAL RUNOFF, ADDRESS POTENTIAL THERMAL IMPACTS, IMPROVE WATER QUALITY, AND ALLEVIATE WATER QUANTITY EFFECTS.



LOCATION MAP

SCALE

0 0.25 0.5 MILE

F. TOTAL PROJECT AREA

THE TOTAL PROJECT AREA IS 0.15 ACRES. THE TOTAL DISTURBED AREA IS 0.15 ACRES.

G. SPECIFIC DETAILS FOR THE PROJECT

THIS PROJECT INVOLVES EXISTING RAILROAD BRIDGE REHABILITATION AND REPAIR WORK AND MINOR APPROACH ROADWAY WORK.

H. MAJOR WATERSHED AREAS AND DRAINAGE SYSTEMS - CH. 93 WQ INFORMATION

THIS PROJECT IS LOCATED WITHIN THE OHIO RIVER WATERSHED. THE CHAPTER 93, PENNSYLVANIA CODE, TITLE 25, WATER CLASSIFICATION IS LISTED AS WWF\ – WARM WATER FISHERIES. THE PROJECT WILL NOT IMPACT MONONGAHELA RIVER. ON-SITE DRAINAGE WILL BE MAINTAINED. CONTRIBUTING DRAINAGE WILL REMAIN THE SAME AND NOT BE CHANGED.

THERE ARE NO KNOWN OR CURRENT LIMITATIONS FOR THIS WATERSHED OR THE PROJECT'S WATERCOURSE LISTED IN CHAPTER 93, TITLE 25 OF THE PENNSYLVANIA CODE. THE WATER QUALITY OF MONONGAHELARIVER WILL NOT BE IMPACTED AND WILL BE PROTECTED.

I. TEMPORARY EROSION CONTROLS PROPOSED FOR THE PROJECT

TEMPORARY EROSION CONTROLS GENERALLY WILL GENERALLY CONSIST OF 12" COMPOST FILTER SOCK, AND SEEDING AND MULCHING.

TEMPORARY EROSION CONTROLS WILL BE INSTALLED PRIOR TO DISTURBANCE IN THE AREAS CONTRIBUTING TO THEM, THEY WILL BE LOCATED OUTSIDE THE WORK AREAS, AND AVOID BEING PREMATURELY REMOVED.

TEMPORARY EROSION CONTROLS WILL BE INSPECTED ON A WEEKLY BASIS AND AFTER EVERY RUNOFF EVENT UNTIL ALL OF THE CONTRIBUTING AREA IS PERMANENTLY STABILIZED.

TEMPORARY EROSION CONTROLS MAY NOT BE REMOVED UNTIL THE AREA CONTRIBUTING TO THEM ACHIEVES PERMANENT STABILIZATION AS DEFINED AS AT LEAST A MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED SURFACE EROSION AND SUBSURFACE CHARACTERISTICS SUFFICIENT TO RESIST SLIDING AND OTHER MOVEMENTS.

J. PERMANENT EROSION CONTROL MEASURES

PERMANENT EROSION CONTROLS GENERALLY CONSIST OF THE BRIDGE STRUCTURE, ROADWAY SURFACE, AND PERMANENT SEEDING AND MULCHING

K. WASTE MATERIAL RECYCLING

PROPER MECHANISMS WILL BE IMPLEMENTED TO INSURE THAT ANY CONCRETE WASH WATER, SANITARY WASTES, OR EXCESS CONSTRUCTION MATERIAL WILL BE PROPERLY HANDLED AND DISPOSED OF ACCORDING TO THE MUNICIPAL AND COUNTY WASTE MANAGEMENT PLAN AND IN ACCORDANCE WITH THE SOLID WASTE MANAGEMENT ACT OF JUNE 22, 1985, AS AMENDED ON JULY 18, 1995. THE CONTRACTOR IS REQUIRED TO CONTACT THE LOCAL MUNICIPALITY(S) TO INVESTIGATE AND PARTICIPATE UNDER THEIR SPECIFIC REQUIREMENTS FOR A RECYCLING PROGRAM.

ALL BUILDING MATERIALS AND WASTES MUST BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT PA. CODE 260.1 ET SEQ., 271.1, AND 287.1 ET SEQ. NO BUILDING MATERIALS OR WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THE SITE

ENVIRONMENTAL DUE DILIGENCE WAS PERFORMED AND IS DOCUMENTED IN THE REPORT "PHASE 1 ENVIRONMENTAL SITE ASSESSMENT FOR THE WASHINGTON AVE, BRIDGE VERTICAL CLARENCE PROJECT, SWISSVALE, ALLEGHENY COUNTY, PENNSYLVANIA" MARCH 2020. BASED ON THE DUE DILIGENCE CONCRETE, BRICK, MASONRY THAT IS REMOVED SHOULD BE MANAGED AS CLEAN FILL. HISTORIC/SUBBASE SHOULD BE MANAGED AS RESIDUAL WASTE, COMPLY WITH SPECIAL PROVISIONS 9000-0029 TO 9000-0031.

L. RECYCLING/DISPOSAL OF CONSTRUCTION WASTE MATERIALS

IT IS THE CONTRACTOR'S RESPONSIBILITY FOR PERFORMING ENVIRONMENTAL DUE DILIGENCE AND THE DETERMINATION OF CLEAN FILL FOR ALL IMPORTED FILL MATERIAL.

CLEAN FILL IS DEFINED AS: UNCONTAMINATED, NON-WATER SOLUBLE, NON-DECOMPOSABLE, INERT, SOLID MATERIAL. THE TERM INCLUDES SOIL, ROCK, STONE, DREDGED MATERIAL, USED ASPHALT, AND BRICK, BLOCK OR CONCRETE FROM CONSTRUCTION AND DEMOLITION ACTIVITIES THAT IS SEPARATE FROM OTHER WASTE AND IS RECOGNIZABLE AS SUCH. THE TERM DOES NOT INCLUDE MATERIALS PLACED IN OR ON THE WATERS OF THE COMMONWEALTH UNLESS OTHERWISE AUTHORIZED. (THE TERM "USED ASPHALT" DOES NOT INCLUDE MILLED ASPHALT OR ASPHALT THAT HAS BEEN PROCESSED FOR RE-USE.).

ALL BUILDING MATERIALS AND WASTES MUST BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., 271.1, AND 287.1 ET SEQ. NO BUILDING MATERIALS OR WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THE SITE.

M. EROSION CONTROL GENERAL NOTES:

1) ALL EARTH DISTURBANCES, INCLUDING CLEARING AND GRUBBING AS WELL AS CUTS AND FILLS SHALL BE DONE IN ACCORDANCE WITH THE E&S PLAN. A COPY OF THE EROSION & SEDIMENT CONTROL PLAN MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES.

2) AT LEAST THREE (3) DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES SHALL NOTIFY THE PENNSYLVANIA ONE CALL SYSTEM INCORPORATED AT 8-1-1 OR 1- 800-242-1776 FOR THE LOCATION OF EXISTING UNDERGROUND UTILITIES.

3) ALL EARTHMOVING ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE EROSION CONTROL SEQUENCE. THE CONTRACTOR IS REQUIRED TO LIMIT THE AMOUNT OF DISTURBANCE AS WORK IS BEING CONDUCTED.

4) IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE CONTRACTOR IS REQUIRED TO IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO ELIMINATE THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION AND NOTIFY THE ACCD.

5) AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENTATION CONTROLS MUST BE REMOVED. AREA DISTURBED DURING THE REMOVAL OF THE CONTROLS MUST BE STABILIZED IMMEDIATELY. PERMANENT STABILIZATION SHOULD BE DEFINED AS " A MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED SURFACE EROSION AND SUBSURFACE CHARACTERISTICS SUFFICIENT TO RESULT SLIDING AND OTHER MOVEMENTS.

6) UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND OR CONTRACTOR SHALL TO REMOVE THE BMPS.

7) IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE FOR A PERIOD OF 4 DAYS, THE CONTRACTOR SHALL TEMPORARILY STABILIZE THE DISTURBED AREAS. DURING NON-GERMINATING PERIODS, MULCH MUST BE APPLIED AT THE SPECIFIED RATES. DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE RE-DISTURBED WITHIN 1 YEAR MUST BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY VEGETATIVE STABILIZATION SPECIFICATIONS. DISTURBED AREAS WHICH ARE AT FINAL GRADE OR WHICH WILL NOT BE RE-DISTURBED WITHIN 1 YEAR MUST BE STABILIZED IN ACCORDANCE WITH THE PERMANENT VEGETATIVE STABILIZATION SPECIFICATIONS.

8) UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENT CONTROL BMPS MUST BE MAINTAINED PROPERLY. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT CONTROL BMPS AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, RE-GRADING, RESEEDING, RE-MULCHING AND RE-NETTING MUST BE PERFORMED IMMEDIATELY. IF EROSION AND SEDIMENT CONTROL BMPS FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPS, OR MODIFICATIONS OF THOSE INSTALLED WILL BE REQUIRED.

9) ANY SEDIMENT REMOVED FROM BMPS DURING CONSTRUCTION WILL BE RETURNED TO UPLAND AREAS ON SITE AND IMMEDIATELY SEEDED AND MULCHED.

10) ALL BUILDING MATERIALS AND WASTES MUST BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT PA. CODE 260.1 ET SEQ., 271.1, AND 287.1 ET SEQ. NO BUILDING MATERIALS OR WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THE SITE.

11) ALL OFF-SITE WASTE AND BORROW AREAS MUST HAVE AN E&S PLAN APPROVED BY THE ACCD.

12) IF USED, TOPSOIL STOCKPILE HEIGHTS SHALL NOT EXCEED 35 FEET. STOCKPILE SIDE SLOPES MUST BE 2:1 OR FLATTER. FOR THIS PROJECT THE TEMPORARY STOCKPILE AREA WILL ALSO HAVE PERIMETER SILT FENCING.

13) ALL FILL MATERIALS SHALL BE COMPACTED, FREE OF FROZEN PARTICLES, BRUSH, ROOTS, SOD OR OTHER FOREIGN OBJECTS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY FILLS.

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL STEPHEN J. KRAMER ENGINEER 079985-E

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NORFOLK SOUTHERN

NORFOLK SOUTHERN RAILWAY COMPANY

PITTSBURGH
ENGINEERING DIVISION
OFFICE OF THE CHIEF ENGINEER – DESIGN AND CONSTRUCTION – ATLANTA, GA.

REV.	BY	DATE	DESCRIPTION

SWISSVALE, PENNSYLVANIA

BR0028818 BRIDGE PT344.91 WASHINGTON AVENUE EROSION CONTROL AND SEDIMENTATION GENERAL NOTES & MAINTENANCE PROGRAM

DSN	JAH	PROJ. NO.	D2122	WBS	1290818-0N177
DWN	BDL	PROJ. NO.	BR0028818	DRAWING NUMBER	PT-344.91 24 2
CHK	SJK	DATE	6/6/2024		

CADD FILE: NS_Washington_Ave_E&S_gen.dgn

CADD FILE: NS_Washington_Ave_E&S_gen.dgn

N. EROSION CONTROL SEQUENCE

1. AT LEAST THREE (3) DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, THE CONTRACTOR IS REQUIRED TO NOTIFY THE PENNSYLVANIA ONE CALL SYSTEM, INC. AT 8-1-1 OR 1-800-242-1776 FOR THE LOCATION OF EXISTING UNDERGROUND UTILITIES.

2. ALL WORK FOR THE PROJECT MUST BE CONDUCTED IN ACCORDANCE WITH THE TRAFFIC CONTROL PLAN FOR THE PROJECT.

3. ALL TEMPORARY EROSION CONTROLS MUST BE INSTALLED AND FUNCTIONAL PRIOR TO EARTHMOVING. THESE TEMPORARY EROSION CONTROLS MUST BE REMOVED WHEN THE DISTURBANCE FOR THE PROJECT ACHIEVES PERMANENT STABILIZATION.

EROSION CONTROL SEQUENCE:

STEP 1 : INSTALL COMPOST FILTER SOCK AT THE LOCATIONS SHOWN ON THE E&SPC PLANS IN ACCORDANCE WITH THE DETAILS PROVIDED.

STEP 2: CONDUCT WORK FOR THE PROJECT IN ACCORDANCE WITH THE DESIGN PLANS.

STEP 3: APPLY PERMANENT SEEDING AND MULCHING TO ALL DISTURBED AREAS.

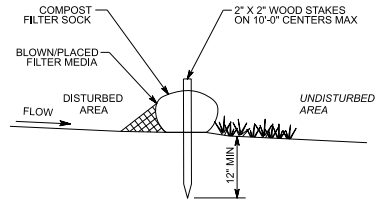
STEP 4: WHEN WORK IS COMPLETED AND THE DISTURBANCE HAS ACHIEVED PERMANENT STABILIZATION, REMOVE THE COMPOST FILTER SOCK AND DISPOSE OF OFF-SITE.

P. MAINTENANCE PROGRAM FOR TEMPORARY BMPS

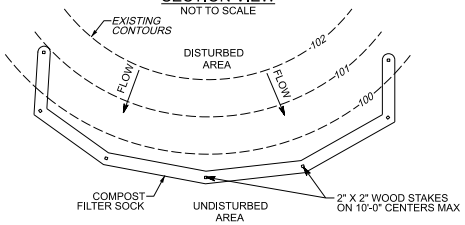
1. COMPOST FILTER SOCK, 12" DIAMETER
   - COMPOST FILTER SOCK SHALL BE BIODEGRADABLE AND PHOTODEGRADABLE.
   - COMPOST FILTER SOCK SHALL BE INSTALLED AT EXISTING LEVEL GRADE BEYOND THE TOE OF DISTURBANCE.
   - COMPOST FILTER SOCK SHALL NOT TO BE USED IN AREAS OF CONCENTRATED FLOWS.
   - ACCUMULATED SILT AND SEDIMENT SHALL BE REMOVED WHERE THE ACCUMULATIONS REACH ½ THE ABOVE GROUND HEIGHT OF THE SOCK.
   - ALL ACCUMULATED SILT AND SEDIMENTS SHALL BE REMOVED ARE TO BE MIXED WITH THE STOCKPILED MATERIAL AND REDISTRIBUTED.
   - ANY SECTION OF SOCK WHICH HAS BEEN UNDERMINED OR TOPPED SHALL BE IMMEDIATELY REPAIRED AND RE-POSITIONED.
   - WOODEN STAKES SHALL BE STAKED A MAXIMUM OF 10-FEET APART.
   - COMPOST FILTER SOCK SHALL BE INSPECTED WEEKLY AND AFTER EVERY RUNOFF EVENT.
   - ALL REQUIRED MAINTENANCE OR REPAIR SHOULD BE DONE IMMEDIATELY.
5. SEEDING AND MULCHING INFORMATION:
   - TEMPORARY SEEDING WILL BE FORMULA T TEMPORARY GRASS MIX INCLUDING MULCH (0804-0043) AT 6,0 LBS PER 1000 SQUARE YARDS.
   - LIME APPLIED AT 1 TON/ ACRE OF GROUND LIMESTONE. FERTILIZER APPLIED AT 500 POUNDS PER ACRE (100 POUNDS OF N, 200 POUNDS OF P205 AND 200 POUNDS OF K20).
   - STRAW MULCH APPLIED AFTER SEEDING AT 3 TONS PER ACRE OR 1,240 POUNDS PER 1000 SQUARE YARDS.
   - PERMANENT SEEDING WILL BE FORMULA B RESIDENTIAL MIX, INCLUDING MULCH (0804-0025) AT 42,0 LBS PER 1000 SQUARE YARDS.

Q. INSPECTION SCHEDULE FOR EROSION CONTROLS

ALL EROSION CONTROLS AND BEST MANAGEMENT PRACTICES WILL BE INSPECTED WEEKLY AND IN ADDITION AFTER EVERY RUNOFF EVENT. ALL DEFECTS FOUND WILL BE REPAIRED IMMEDIATELY.



SECTION VIEW
NOT TO SCALE



PLAN VIEW
NOT TO SCALE

COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING GRADE. BOTH ENDS OF THE SOCK SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN SOCK ALIGNMENT. MAXIMUM SLOPE HEIGHT ABOVE ANY SOCK SHALL NOT EXCEED THE ALLOWABLE LIMITS.

TRAFFIC SHALL NOT BE PERMITTED TO CROSS FILTER SOCKS.

ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES ½ THE ABOVE GROUND HEIGHT OF THE SOCK AND DISPOSED IN THE MANNER DESCRIBED ESLEWHERE IN THE PLAN.

SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION.

BIODEGRADABLE FILTER SOCK SHALL BE REPLACED AFTER 6 MONTHS; PHOTODEGRADABLE SOCKS AFTER ONE YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURURER'S RECOMMENDATIONS.

UPON STABILIZATION OF THE AREA TRIBUTARY TO THE SOCK, STAKES SHALL BE REMOVED. THE SOCK MAY BE LEFT IN PLACE AND VEGETATED OR REMOVED. IN THE LATTER CASE, THE MESH SHALL BE CUT OPEN AND THE MULCH SPREAD AS A SOIL SUPPLEMENT.

COMPOST FILTER SOCK, 12-INCH DIAMETER
NOT TO SCALE
ITEM NO. 0867-0012

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
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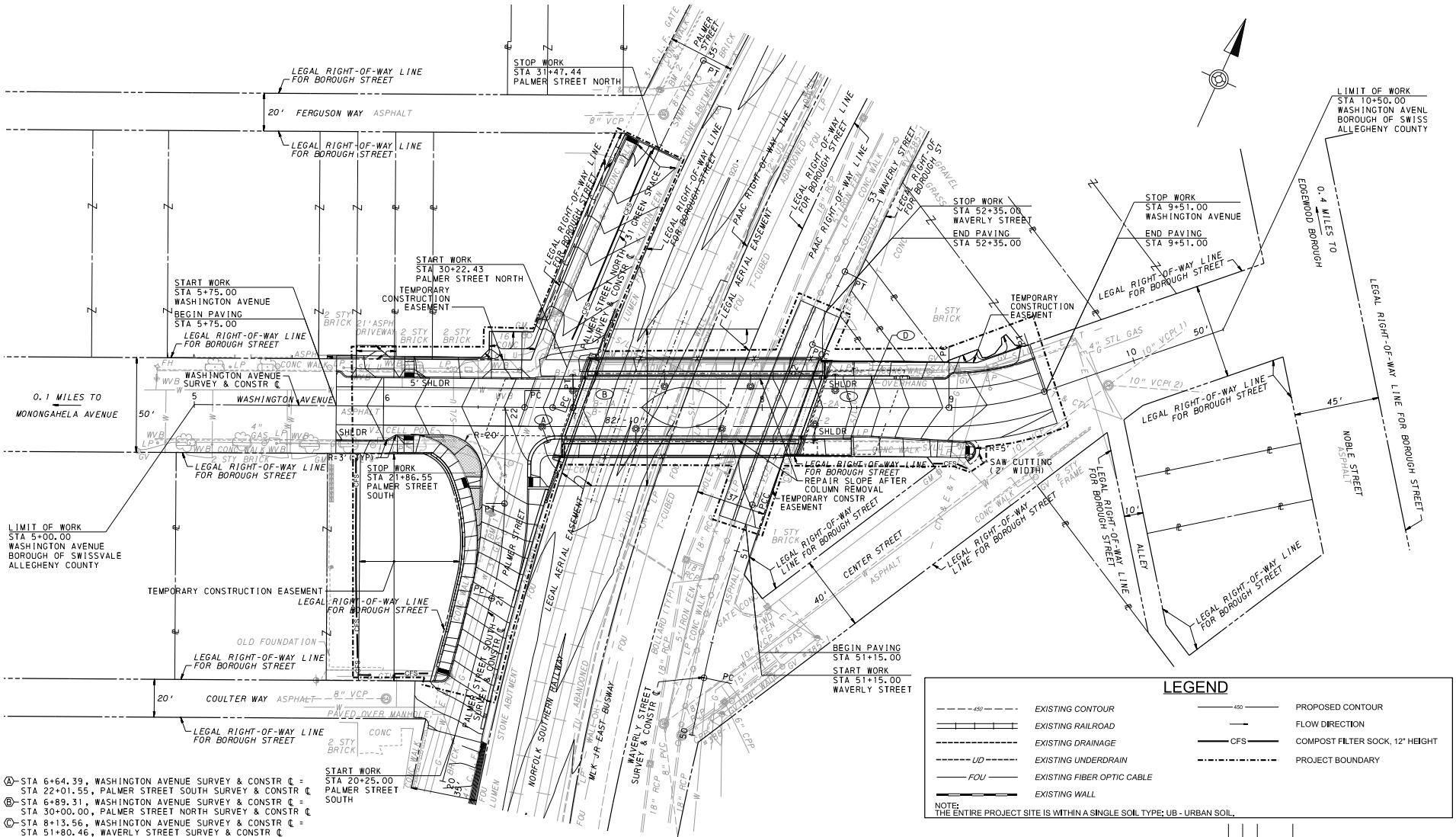
NORFOLK SOUTHERN RAILWAY COMPANY
PROJECT LOCATION
PITTSBURGH
OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER – DESIGN AND CONSTRUCTION – ATLANTA, GA.

REV	BY	DATE	DESCRIPTION

SWISSVALE, PENNSYLVANIA
BR0028818 BRIDGE PT344.91 WASHINGTON AVENUE
EROSION CONTROL AND SEDIMENTATION
MAINTENANCE PROGRAM & CONSTRUCTION SEQUENCE

DSN	JAH	PROJ. NO.	D2122	WO	1290818-ON477
DWN	RDL	PROJ. NO.	BR0028818	DRAWING NUMBER	PT-344.91
CHK	SJK	DATE	6/6/2024		PT-344.91 24 3

CADD FILE: NS_Washington_Ave_E&S_gen.dgn



LEGEND

EXISTING CONTOUR	PROPOSED CONTOUR
EXISTING RAILROAD	FLOW DIRECTION
EXISTING DRAINAGE	COMPOST FILTER SOCK, 12" HEIGHT
EXISTING UNDERDRAIN	PROJECT BOUNDARY
EXISTING FIBER OPTIC CABLE	
EXISTING WALL	

NOTE:
THE ENTIRE PROJECT SITE IS WITHIN A SINGLE SOIL TYPE; UB - URBAN SOIL.

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL STEPHEN J. KRAMER ENGINEER 039985-E

Michael Baker INTERNATIONAL
AIRSIDE BUSINESS PARK
100 AIRSIDE DRIVE
MOON TOWNSHIP, PA 15108
Phone: (412) 269-6300

NORFOLK SOUTHERN RAILWAY COMPANY
PITTSBURGH
ENGINEERING DIVISION
OFFICE OF THE CHIEF ENGINEER – DESIGN AND CONSTRUCTION – ATLANTA, GA.

REV	BY	DATE	DESCRIPTION

DESIGN: SWISSVALE, PENNSYLVANIA
TITLE: BR0028818 BRIDGE PT344.91 WASHINGTON AVENUE EROSION CONTROL AND SEDIMENTATION POLLUTION CONTROL PLAN

DSN	JAH	PID No.	D2122	WBS	1290818-0N477
DWN	BDL	FILE No.	BR0028818	DRAWING NUMBER	PT-344.91
CHK	SJK	DATE	6/6/2024		PT-344.91 24 4

CADD FILE: NS_Washington_Ave_E&S_plan.dgn

CADD FILE: NS_Washington_Ave_E&S_plan.dgn

GENERAL NOTES

THIS WORK CONSISTS OF THE MAINTENANCE OF TRAFFIC AND THE PROTECTION OF THE TRAVELING PUBLIC APPROACHING THE CONSTRUCTION AREA AND WITHIN THE LIMITS OF CONSTRUCTION.

FURNISH, ERECT, PLACE AND MAINTAIN TRAFFIC CONTROL SIGNS AND DEVICES AND MAINTAIN TRAFFIC DURING HOURS OF CONSTRUCTION AND AT ALL OTHER TIMES IN ACCORDANCE WITH THE METHODS INDICATED ON THESE DRAWINGS AND,

1. THE SPECIAL PROVISIONS OF THE CONTRACT.
2. PA CODE, TITLE 67, CHAPTER 212, OFFICIAL TRAFFIC CONTROL DEVICES, (MARCH 2006).
3. PDT PUBLICATION 213, TEMPORARY TRAFFIC CONTROL GUIDELINES, (APRIL 2022).
4. PDT PUBLICATION 35, APPROVED CONSTRUCTION MATERIALS (BULLETIN 15), (CURRENT REVISION).
5. PDT PUBLICATION 408/2020, SPECIFICATIONS, LATEST EDITION AND SUPPLEMENTS THERETO.
6. PDT PUBLICATION 236, HANDBOOK OF APPROVED SIGNS, (NOVEMBER 2013).
7. PDT PUBLICATION 111, DATED AUGUST 2021. TRAFFIC CONTROL - PAVEMENT MARKINGS AND SIGNING STANDARDS, TC-8600 AND TC-8700 SERIES.
8. MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), (2009 EDITION) AND ALL APPLICABLE SUPPLEMENTS.

IMMEDIATELY UPON COMPLETION OF THE WORK, REMOVE SIGNS AND DEVICES. FOR TYPE "B" AND TYPE "C" MOUNTED SIGNS REMOVE POSTS COMPLETELY. THE BOROUGH OF SWISSVALE WILL REMOVE ANY TRAFFIC CONTROL DEVICES ERECTED BY BOROUGH OF SWISSVALE FORCES.

THE TRAFFIC CONTROL PLAN DOES NOT RELIEVE THE CONTRACTOR OF ITS RESPONSIBILITY AS SPECIFIED IN SECTION 901.3(a) OF PENNDOT PUBLICATION 408.

SIGN LOCATIONS MAY BE ADJUSTED SLIGHTLY TO FIT FIELD CONDITIONS.

ALL SIGNS AND DEVICES SHALL BE NEW AT THE BEGINNING OF THE PROJECT AND MAINTAINED IN NEW CONDITION AND TO THE PROJECT ENGINEER OR REPRESENTATIVE SATISFACTION THROUGHOUT THE DURATION OF THE PROJECT.

THESE PLANS HAVE BEEN REVIEWED AND ARE IN COMPLIANCE WITH STANDARDS PRESCRIBED IN CHAPTER 212 OF THE 67 PA. CODE AS CURRENTLY AMENDED.

NOTE THAT THIS APPROVAL DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY FOR THE PROTECTION OF THE PUBLIC AND THE CONSTRUCTION PERSONNEL. THE STANDARDS PRESCRIBED ARE MINIMUM AND ADDITIONAL PROTECTION MAY BE NECESSARY IF PROBLEMS ARE ENCOUNTERED DURING THE TERM OF THE CONTRACT. CONSTANTLY REVIEW THIS PLAN FOR ADEQUACY AND RECOMMEND CHANGES FOR THE PROJECT REPRESENTATIVES APPROVAL WHEN INADEQUACIES ARE DISCOVERED.

THE CONTRACTOR HAS THE OPTION TO SUBMIT ALTERNATE TRAFFIC CONTROL PLANS FOR CONSIDERATION. THESE PLANS SHALL BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE COMMONWEALTH OF PENNSYLVANIA AND SHALL BE CONSISTANT WITH STANDARD DESIGN PRACTICES. THE INSPECTOR IN CHARGE WILL ALLOW NO CONSTRUCTION ACTIVITY UNTIL THE CONTRACTOR'S ALTERNATE PLANS ARE APPROVED IN WRITING BY THE THE PROJECT REPRESENTATIVE. MODIFICATIONS TO THE APPROVED MPT PLAN THAT MAY BECOME NECESSARY SHALL ALSO BE APPROVED BY THE PROJECT REPRESENTATIVE.

THE CONTRACTOR SHALL HAVE A SUFFICIENT AMOUNT OF THE FOLLOWING SIGNS AVAILABLE IN CASE THEIR USE BECOMES NECESSARY: W3-4 "BE PREPARED TO STOP" AND W20-7 "FLAGGER SYMBOL". THESE SIGNS ARE NOT INTENDED TO BE PART OF THE REQUIRED NORMAL TRAFFIC CONTROL OR A SUPPLEMENT THERETO.

REPORT ALL TRAFFIC INCIDENTS TO THE PROJECTS REPRESENTATIVE BY COPY OF THE TRAFFIC ACCIDENT REPORT FROM THE PA STATE POLICE AND LOCAL POLICE.

THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE PA ONE-CALL SYSTEM, INC. AT 1-800-242-1776 AT LEAST THREE (3) WORKING DAYS PRIOR TO DIGGING. PA ONE-CALL SHOULD BE CONTACTED BEFORE ANY SIGN POST ANCHOR IS DRIVEN INTO THE GROUND FOR ANY TEMPORARY AND/OR PERMANENT SIGNING.

NO CHANGES MAY OCCUR TO ANY PARTS OF THIS PLAN WITHOUT THE DIRECT APPROVAL OF THE PROJECT REPRESENTATIVE.

THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL AND PROPER STORAGE OF ALL UNNECESSARY EXISTING TRAFFIC REGULATORY SIGNS WITHIN THE PROJECT LIMITS. THESE SIGNS WILL REMAIN THE PROPERTY OF THE OWNER. THE CONTRACTOR IS RESPONSIBLE FOR REINSTALLING THE APPLICABLE SIGNS AT THE END OF THE PROJECT AS PER THE PROJECT REPRESENTATIVE.

ALL TRAFFIC CONTROL DEVICES SHALL BE IN PLACE AND INSPECTED BY THE PROJECT ENGINEER OR REPRESENTATIVE PRIOR TO THE START OF CONSTRUCTION.

ALL SIGNS NOT IN USE SHALL BE EITHER COMPLETELY COVERED OR REMOVED FROM SIGHT. DO NOT PLACE TAPE ON THE FACE OF ANY SIGN.

THE CONTRACTOR SHALL COORDINATE ALL CONSTRUCTION ACTIVITIES WITH IN THE VICINITY OF THE BUSWAY WITH PITH THE PITTSBURGH REGIONAL TRANSIT.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PERFORMING DAILY INSPECTIONS, INCLUDING WEEKENDS AND HOLIDAYS, WITH SOME INSPECTIONS AT NIGHT, OF THE TRAFFIC CONTROL DEVICE INSTALLATIONS ON THE PROJECT, INCLUDING ALL TEMPORARY SIGNING. ALL SIGNS AND DEVICES NOT CONFORMING TO BOROUGH OF SWISSVALE STANDARDS SHALL BE IMMEDIATELY REPAIREDOR REPLACED. THE INSPECTOR-IN-CHARGE SHALL BE ADVISED OF THE INSPECTION SCHEDULE AND GIVENTHE OPPORTUNITY TO ACCOMPANY THE INSPECTOR.

THE INSPECTOR-IN-CHARGE SHALL PROVIDE OFF-DUTY UNIFORMED BOROUGH OF SWISSVALE POLICE OFFICERS TO ASSIST IN TRAFFIC CONTROL, AS DIRECTED.

LOCATIONS FOR THE CONTRACTOR'S ACCESS WILL BE APPROVED IN THE FIELD BY THE INSPECTOR-IN-CHARGE. ACCESS POINTS SHALL INCLUDE A FLAGGER FOR THE ENTIRE TIME THAT THE ACCESS IS BEING USED BY THE CONTRACTOR (TO CONTROL TRAFFIC FROM ENTERING WORK AREA) AS DETERMINED BY THE PROJECT ENGINEER OR REPRESENTATIVE.

CONTRACTOR MUST PLAN AND MAINTAIN ACCESS FOR EMERGENCY PERSONNEL AND VEHICLES WITHIN THE LIMITS OF THE WORK ZONE.

THE TRAFFIC CONTROL DEVICES SHOWN DO NOT NECESSARILY DEPICT THE ACTUAL NUMBER OF DEVICES REQUIRED.

COORDINATE WITH BOROUGH OF SWISSVALE POLICE TO PROHIBIT PARKING.

MAINTAIN ACCESS TO ALL DRIVEWAYS AND BUILDING ENTRANCES AT ALL TIMES.

DETAILS, OTHER THAN THOSE INDICATED, ARE ON THE FOLLOWING STANDARD DRAWINGS:

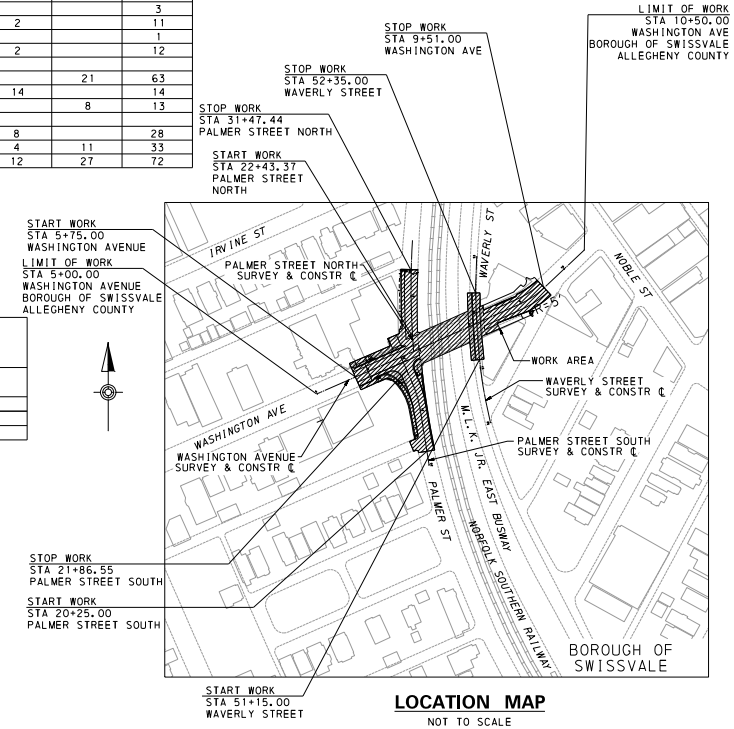
TC-8700C	JUNE 13, 2013
TC-8702B	JUNE 13, 2013
TC-8716	JUNE 13, 2013
TC-8717	JUNE 13, 2013

TABULATION OF TRAFFIC CONTROL ITEMS IN MAINTENANCE AND PROTECTION OF TRAFFIC DURING CONSTRUCTION, LUMP SUM, ITEM NO 0901-0001 (FOR INFORMATION ONLY)

SIGN CODE	SIGN MESSAGE OR DESCRIPTION	SIZE OR UNIT	WASHINGTON AVENUE DETOUR	PALMER DETOUR	PEDESTRIAN DETOUR	MINIMUM QUANTITY
M4-8A	END DETOUR	24"X18"	3	2		5
M4-9BR	PEDESTRIAN DETOUR, RIGHT	30"X24"			10	10
M4-9BL	PEDESTRIAN DETOUR, LEFT	30"X24"			9	9
M4-9BS	PEDESTRIAN DETOUR, STRAIGHT	30"X24"			8	8
M4-9L	DETOUR SIGN, LEFT	30"X24"	9	2		11
M4-9R	DETOUR SIGN, RIGHT	30"X24"	5	2		7
M4-9S	DETOUR SIGN, STRAIGHT	30"X24"	4	2		6
M4-10L	DETOUR ARROW SIGN, LEFT	48"X18"	2			2
M4-9SL	DETOUR ARROW SIGN, LEFT ADVANCE	30"x24"	9	4		13
M4-9SR	DETOUR ARROW SIGN, RIGHT ADVANCE	30"x24"	5	2		7
M4-9-1BL	DETOUR ARROW SIGN,	30"X24"	1			1
M4-9-1AL	DETOUR ARROW SIGN,	30"x24"	1			1
R9-9	SIDEWALK CLOSED	24"x12"			7	7
R9-11AL	SIDEWALK CLOSED (ARROW) CROSS HERE	24"x12"			2	2
R9-11AR	SIDEWALK CLOSED (ARROW) CROSS HERE	24"x12"			2	2
R11-2-1	BRIDGE CLOSED	48"x30"	4			4
R11-2	ROAD CLOSED	48"x30"	2	4		6
R11-4	ROAD CLOSED TO THRU TRAFFIC	60"x30"	3			3
W20-2	ADVANCE DETOUR SIGN	36"x36"	9	2		11
W20-3	ADVANCE ROAD CLOSED SIGN	36"x36"	1			1
W30-1-6	DISTANCE (AHEAD) (PANEL)	20"x6"	10	2		12
SS-1	WASHINGTON AVENUE	36"x18"	42		21	63
SS-2	PALMER STREET	24"x18"		14		14
SS-3	WAVERLY STREET	30"x18"	5		8	13
	TYPE B LIGHTS	EACH	20	8		28
	TYPE III BARRICADES	EACH	18	4	11	33
	SIGN SUPPORT	EACH	33	12	27	72

PAYABLE ITEMS

ITEM NUMBER	DESCRIPTION	UNIT	QUANTITY
0901-0001	MAINTENANCE AND PROTECTION OF TRAFFIC DURING CONSTRUCTION	LS	1
0901-0231	ADDITIONAL WARNING LIGHTS, TYPE B	DAY	50
0901-0240	ADDITIONAL TRAFFIC CONTROL SIGNS	SF	150
9000-0040	CONSTRUCTION FENCE	LF	400



LOCATION MAP

NOT TO SCALE

SEQUENCE OF OPERATIONS

1. SETUP DETOURS AS OUTLINED IN THE TRAFFIC CONTROL PLAN.
2. CONSTRUCT BRIDGE AND ROADWAY IMPROVEMENTS.
3. REMOVE DETOUR AND RETURN WASHINGTON AVENUE TO NORMAL TRAFFIC FLOW UPON COMPLETION OF CONSTRUCTION.

PLANS PREPARED BY
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Michael Baker INTERNATIONAL
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NORFOLK SOUTHERN RAILWAY COMPANY
PITTSBURGH
ENGINEERING DIVISION
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

REV.	BY	DATE	DESCRIPTION

SWISSVALE, PENNSYLVANIA
BRIDGE BR0028818 BRIDGE PT344.91 WASHINGTON AVENUE AND WAVERLY STREET
TITLE SHEET, LOCATION MAP, QUANTITIES, AND GENERAL NOTES

DSN	JPS	PROJ No.	D2122	DWG	1290818-GN177
DWN	AS	FILE No.	BR0028818		
CHK	FC	DATE	6/5/2024		

DWG TYPE: PT-344.91
DRAWING NUMBER: PT-344.91 24 2

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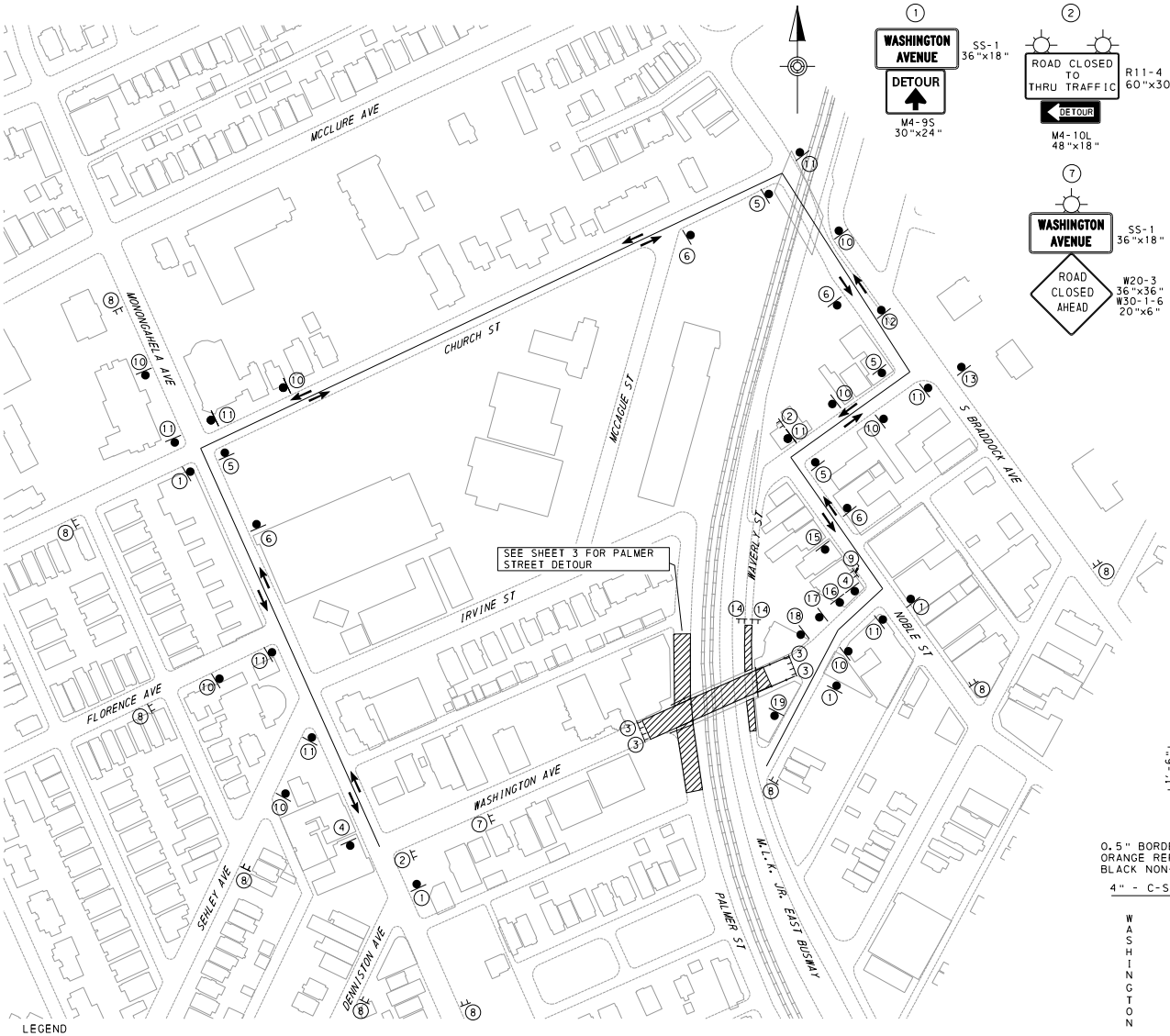

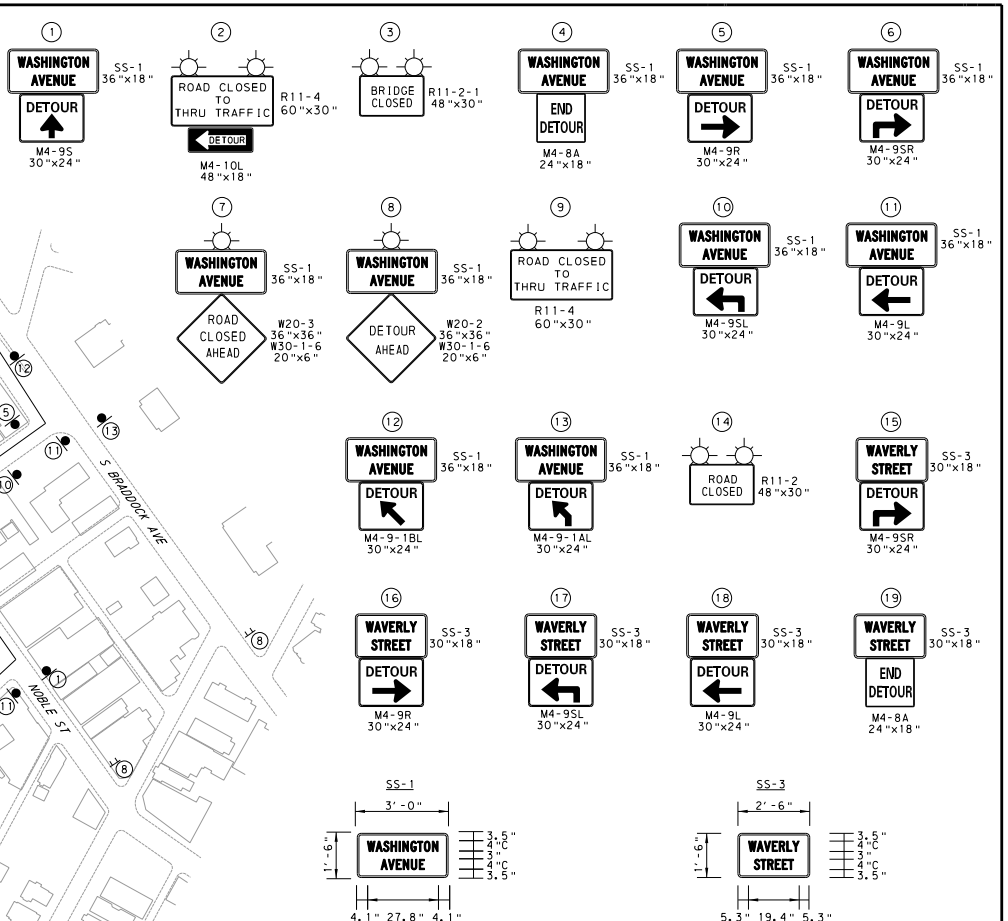

SS-1

0.5" BORDER WITH 1" RADIUS ON CORNERS
ORANGE REFLECTORIZED BACKGROUND
BLACK NON-REFLECTORIZED LEGEND AND BORDERS

4" - C-SERIES		4" - C-SERIES	
	4.1		9.8
W	3.2	A	2.7
A	3.2	V	3.1
S	3.0	E	2.7
H	3.0	N	3.0
I	1.4	U	3.0
N	3.0	E	2.0
G	2.9		9.7
T	2.7		36.0
O	3.2		
N	2.2		
	4.1		
	36.0		

SS-3

0.5" BORDER WITH 1" RADIUS ON CORNERS
ORANGE REFLECTORIZED BACKGROUND
BLACK NON-REFLECTORIZED LEGEND AND BORDERS

4" - C-SERIES		4" - C-SERIES	
	5.3		7.1
W	3.2	S	2.9
A	2.7	T	2.7
V	3.1	R	3.0
E	2.7	E	2.7
R	3.0	E	2.5
L	2.2	T	2.0
Y	2.5		7.1
	5.3		30.0
	30.0		

LEGEND

- DETOUR ROUTE
- TYPE B LIGHT
- TRAFFIC FLOW
- (A) SIGN LOCATION (TYPE B POST)
- (A) TYPE III BARRICADE
- WORK AREA
- CONSTRUCTION FENCE

NOT TO SCALE

PLANS PREPARED BY
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NORFOLK SOUTHERN RAILWAY COMPANY
PITTSBURGH
OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER – DESIGN AND CONSTRUCTION – ATLANTA, GA.

REV.	BY	DATE	DESCRIPTION

LOCATION: SWISSVALE, PENNSYLVANIA
PROJ: BR0028818 BRIDGE PT344.91 WASHINGTON AVENUE AND WAVERLY STREET
DETOUR

DSN	JPS	PID No.	D2122	MN	1290818-0N177
DRAWN	AS	FILE No.	BR0028818		
CHK	PVC	DATE	6/5/2024		

DIST PT-344.91
DRAWING NUMBER PT-344.91 24 2

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LEGEND

- DETOUR ROUTE
- TYPE B LIGHT
- TRAFFIC FLOW
- (A) SIGN LOCATION (TYPE B POST)
- (A) TYPE III BARRICADE
- WORK AREA
- CONSTRUCTION FENCE

NOT TO SCALE

① PALMER STREET — SS-2 24"x18" / DETOUR — M4-9S 30"x24"

② ROAD CLOSED — R11-2 48"x30"

③ PALMER STREET — SS-2 24"x18" / END DETOUR — M4-8A 24"x18"

④ PALMER STREET — SS-2 24"x18" / DETOUR — M4-9R 30"x24"

⑤ PALMER STREET — SS-2 24"x18" / DETOUR — M4-9L 30"x24"

⑥ PALMER STREET — SS-2 24"x18" / DETOUR — M4-9SR 30"x24"

⑦ PALMER STREET — SS-2 24"x18" / DETOUR — M4-9SL 30"x24"

⑧ PALMER STREET — SS-2 24"x18" / DETOUR AHEAD — W20-2 36"x36" W30-1-6 20"x6"

SS-2
2'-0"
1'-6"
PALMER STREET
3.5" 4"C 3" 4"C 3.5"
4.1" 13.6" 4.1"

0.5" BORDER WITH 1" RADIUS ON CORNERS
ORANGE REFLECTORIZED BACKGROUND
BLACK NON-REFLECTORIZED LEGEND AND BORDERS

4" - C-SERIES	
	3.4
P	2.9
A	3.2
L	2.7
M	3.4
E	2.7
R	2.2
	3.5
	24.0

4" - C-SERIES	
	4.1
S	2.9
T	2.7
R	3.0
E	2.7
E	2.5
T	2.0
	4.1
	24.0

PLANS PREPARED BY
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NORFOLK SOUTHERN
NORFOLK SOUTHERN RAILWAY COMPANY
PITTSBURGH
OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER – DESIGN AND CONSTRUCTION – ATLANTA, GA.

REV	BY	DATE	DESCRIPTION

DIVISION
SWISSVALE, PENNSYLVANIA
TITLE
BR0028818 BRIDGE PT344.91 WASHINGTON AVENUE AND WAVERLY STREET
PALMER STREET DETOUR

DSN	JPS	PID No.	D2122	WO	1290818-ON77
DWN	AS	FILE No.	BR0028818	DRAWING NUMBER	PT-344.91 24 2
CHK	FVC	DATE	6/5/2024		

SCALE: 1/2" = 1 FOOT
PT-344.91

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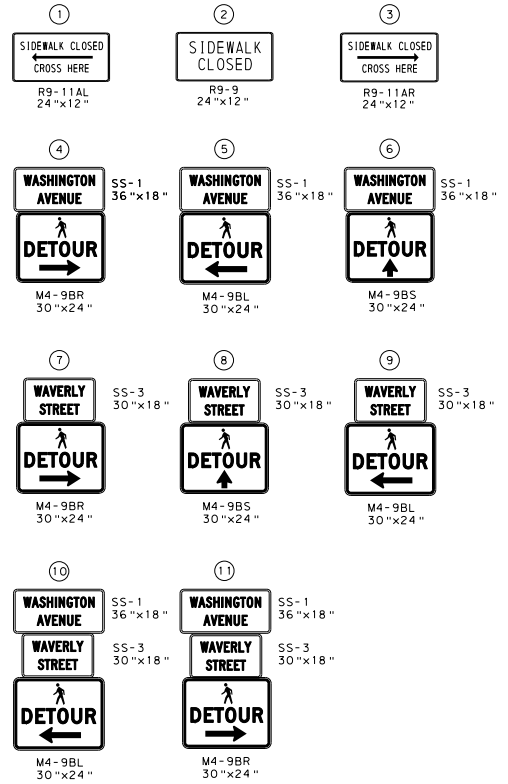

LEGEND

- DETOUR ROUTE
- TYPE B LIGHT
- TRAFFIC FLOW
- (A) SIGN LOCATION (TYPE B POST)
- (A) TYPE III BARRICADE
- WORK AREA
- CONSTRUCTION FENCE

NOT TO SCALE

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NORFOLK SOUTHERN RAILWAY COMPANY
PITTSBURGH
ENGINEERING DIVISION
OFFICE OF THE CHIEF ENGINEER – DESIGN AND CONSTRUCTION – ATLANTA, GA.

REV.	BY	DATE	DESCRIPTION

LOCATION: SWISSVALE, PENNSYLVANIA
TITLE: BR0028818 BRIDGE PT344.91 WASHINGTON AVENUE AND WAVERLY STREET
PEDESTRIAN DETOUR

DSN	JPS	PID No.	D2122	DWG	1290818-GN177
DRAWN	AS	FILE No.	BR0028818	DRAWING NUMBER	PT-344.91 24 2
CHK	FVC	DATE	6/5/2024		

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SHEET NO. 4 OF 4

CADD FILE: Washington_Ave_Detour Pedestrian.dgn

NORFOLK SOUTHERN

DRAWINGS AUTHORIZING ACQUISITION
OF
RIGHT-OF-WAY
FOR
BR0028818 BRIDGE PT344.91
WASHINGTON AVENUE

IN ALLEGHENY **COUNTY**

FROM STA 5+70.00 TO STA 9+47.34 LENGTH 357.84 FT 0.068 MI

THE PUBLIC UTILITY COMMISSION SHALL APPROPRIATE PROPERTY IN APPLICATION DOCKET NO A-2022-3033069 BETWEEN STATION 5+00 AND STATION 10+50 PURSUANT TO THE PROVISIONS OF SECTION 2702(b) OF THE ACT OF JULY 1, 1978, P.L. 598, NO. 116 (66 P.S. 2702).

THIS PLAN PREPARED PURSUANT TO SECTION 2003(e) OF THE ADMINISTRATIVE CODE, AS AMENDED, 71 P.S. SECTION 513(e), AND SECTION 302(b)(3) OF THE EMINENT DOMAIN CODE, 26 Pa. C.S., SECTION 302(b)(3).

HORIZONTAL
SCALE: 1"=25' 25' 0 25' 50'
DO NOT SCALE THIS DRAWING FOR DIMENSIONS. NOT GIVEN

VERTICAL
SCALE: 1"=5' 5' 0 5' 10'
DO NOT SCALE THIS DRAWING FOR DIMENSIONS. NOT GIVEN

DESIGN DESIGNATION

HIGHWAY CLASSIFICATION	- MINOR COLLECTOR
HIGHWAY TYPOLOGY	- NEIGHBORHOOD COLLECTOR, TOWN/VILLAGE NEIGHBORHOOD
DESIGN SPEED	- 25 MPH
TRAVEL LANES	- 2 - 10'-0" LANES
SHOULDER	- 2 - 5'-0"
PARKING LANE	- 8'-0" LT AND RT

TRAFFIC DATA

CURRENT YEAR ADT	- 4000 (2024)
DESIGN YEAR ADT	- 4000 (2044)
DHV	- 400
D	- 55%
T	- 5%

RECORDED IN THE OFFICE FOR THE DEPARTMENT OF REAL ESTATE IN

ALLEGHENY COUNTY, PA

IN _____ BOOK ___ PAGE ___

WITNESS MY HAND AND SEAL OF OFFICE

_____ DATE

_____ RECORDER

BOROUGH OF SWISSVALE

RECOMMENDED BY	DATE	APPROVED BY	DATE
_____ ENGINEER	_____	_____ SWISSVALE BOROUGH COUNCIL	_____

RECOMMENDED BY _____ DATE _____

PUBLIC WORKS DIRECTOR

PLANS PREPARED BY:

Michael Baker INTERNATIONAL
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100 AIRSIDE DRIVE
MOON TOWNSHIP, PA 15108
PHONE: (412) 269-6300
MBAKERINTL.COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL RALPH WILLIAM GROMLEY LAND SURVEYOR NO. SU073481 PENNSYLVANIA

_____ LAND SURVEYOR DATE

REGISTERED PROFESSIONAL LAND SURVEYOR

PLANS PREPARED BY:

Michael Baker INTERNATIONAL
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100 AIRSIDE DRIVE
MOON TOWNSHIP, PA 15108
PHONE: (412) 269-6300
MBAKERINTL.COMCOMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL CYDNEY JILL SEDLAR ENGINEER No. 070741 PENNSYLVANIA

_____ ENGINEER DATE

REGISTERED PROFESSIONAL ENGINEER

NORFOLK SOUTHERN RAILWAY COMPANY
PITTSBURGH
OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER – DESIGN AND CONSTRUCTION – ATLANTA, GA.

REV	BY	DATE	DESCRIPTION

SWISSVALE, PENNSYLVANIA
BR0028818 BRIDGE PT344.91 WASHINGTON AVENUE
TITLE SHEET

DSN JAH	PRJ No. D2122	DRN 1290818-OH77	SHEET POST PT-344.91
DWN WRB	SUZ No. BR0028818	DRAWING NUMBER	PT-344.91 24 01
CHK CAB	DATE 6/10/2024		

CADD FILE: N:\NS_Workspace_Pa_PA\...dgn

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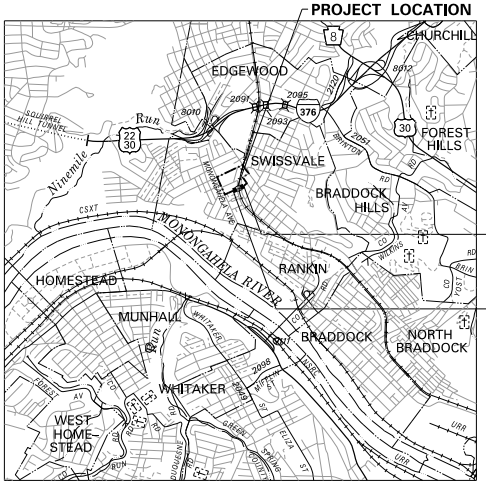
LIST OF PUBLIC UTILITIES

LEGEND	UTILITY COMPANY	REPRESENTATIVE	EMAIL	TELEPHONE
FOU LUMEN	LUMEN (FORMERLY CENTURY LINK, LEVEL 3 AND/OR QWEST COMMUNICATIONS)	PAUL ERICKSON	paul.erickson@lumen.com	CELL: 717-443-9545 OFC: 717-516-7557
E E	DUQUESNE LIGHT COMPANY	JIM RUNATZ	jrunatz@duqlight.com	CELL: 412-855-9950 OFC: 412-393-6411
G G	PEOPLES GAS COMPANY (FORMERLY EQUITABLE GAS COMPANY)	GARY BAIRD	Gbaird@lsse.com	724-837-1057 X104
CTV CATV	COMCAST CABLE COMMUNICATIONS, INC	JERRY FREEMAN	Jerry_freeman@cable.comcast.com	412-999-0590
S/L	BOROUGH OF SWISSVALE	GREG BACHY	gbachy@swissvaleborough.com	412-271-0350
FOU T-CUBED	T CUBED (WILLIAMS TELECOM)	NEAL BROWN	Neal.Brown@nscorp.com	404-529-1349
T T	VERIZON PENNSYLVANIA, INC.	GARY REDONDO	Gary.Redondo@Verizon.com	412-237-2293
W W	WILKINSBURG PENN JOINT WATER AUTHORITY	BRIAN BIANCHI	bbianchi@wpjwa.com	412-473-3470

THE PA ONE CALL NOTIFICATIONS PERFORMED DURING PROJECT DEVELOPMENT ARE AS FOLLOWS:

PRELIMINARY DESIGN SERIAL NO 20222372774 ON OCTOBER 24, 2022 FOR BOROUGH OF SWISSVALE, ALLEGHENY COUNTY PENNSYLVANIA

PROJECT LOCATION



LOCATION MAP

0 0.25 0.5 MILE

LEGEND

- STATE HIGHWAY
- CITY/BOROUGH STREET
- RAILROAD
- PROJECT
- DETOUR ROUTE
- INTERSTATE ROUTE
- US TRAFFIC ROUTE
- PA TRAFFIC ROUTE

TABULATION OF OVERALL LENGTH

WASHINGTON AVENUE STA 5+70.00 TO STA 9+47.34 = 377.34 FT = 0.071 MI

TABULATION OF AUTHORIZATION LENGTH

WASHINGTON AVENUE STA 5+70.00 TO STA 8+11.76 = 241.76 FT = 0.046 MI
WASHINGTON AVENUE STA 8+31.26 TO STA 9+47.34 = 116.08 FT = 0.022 MI
TOTAL = 357.84 FT = 0.068 MI

LIST OF STATION EQUALITIES

NONE

TABULATION OF REQUIRED RIGHT-OF-WAY BREAK POINT COORDINATES

BASED ON PENNSYLVANIA STATE PLANE COORDINATE SYSTEM (SPCS 83)(SOUTH ZONE)

ROUTE	STATION	OFFSET	COORDINATES	
			NORTH	EAST
WASHINGTON AVENUE SURVEY & R/W ℄	* 6+22	* 25' RT	403261.4673	1373424.9103
	* 6+34	* 37' RT	403255.6343	1373441.2270
	* 6+39	* 92' RT	403207.2235	1373467.4777
	* 6+26	* 145' RT	403153.3570	1373476.7645

NOTE: FOUR (4) PLACE COORDINATES ARE USED FOR COMPUTATIONAL PURPOSES ONLY AND DO NOT IMPLY A PRECISION BEYOND TWO (2) PLACES.
* SCALED DIMENSION

TABULATION OF PROJECT COORDINATES

BASED ON THE PENNSYLVANIA STATE PLANE COORDINATE SYSTEM (SOUTH ZONE 3702)

ROUTE	STATION	POINT	COORDINATES		BEARING
			NORTH	EAST	
WASHINGTON AVENUE SURVEY & R/W ℄	5+00.00	POT	403235.6096	1373303.2738	N 66°22'04" E
	6+74.53	PC	403305.5718	1373463.1652	
	6+87.37	PI	403310.7214	1373474.9341	N 65°52'37" E
	7+00.22	PT	403315.9716	1373486.6585	
	8+98.76	PC	403397.1123	1373667.8559	N 46°47'56" E
	9+24.63	PI	403407.6888	1373691.4745	
	9+50.03	PT	403425.4042	1373710.3388	
	10+50.00	POT	403493.8372	1373783.2100	
PALMER STREET SOUTH SURVEY ℄	20+00.00	POT	403107.6670	1373504.3372	N 9°05'58" W
	20+99.95	PC	403206.3558	1373488.5310	
	21+25.45	PI	403231.5366	1373484.4980	N 23°37'56" W
	21+50.68	PT	403254.8995	1373474.2753	
	22+01.55	POT	403301.5092	1373453.8807	
PALMER STREET NORTH SURVEY ℄	30+00.00	PC	403311.5313	1373476.6943	N 4°41'26" W
	31+00.17	PI	403411.3638	1373468.5031	
	32+00.00	PT	403511.3517	1373474.5073	N 3°26'11" E
WAVERLY STREET SURVEY ℄	50+00.00	POT	403183.7864	1373614.5784	N 12°15'14" W
	50+30.88	PC	403213.9666	1373608.0235	
	50+78.44	PI	403260.4387	1373597.9301	N 4°47'58" W
	51+25.86	PCC	403307.8275	1373593.9513	
	51+71.03	PI	403352.8378	1373590.1722	N 2°18'41" W
	52+16.18	PCC	403397.9696	1373588.3506	
	52+37.29	PI	403419.0566	1373587.4994	N 2°12'24" E
	52+58.37	PT	403440.1451	1373588.3120	
	53+00.00	POT	403481.7440	1373589.9149	

NOTE: FOUR (4) PLACE COORDINATES ARE USED FOR COMPUTATIONAL PURPOSES ONLY AND DO NOT IMPLY A PRECISION BEYOND TWO (2) PLACES.

GENERAL NOTES

THE LEGAL RIGHT-OF-WAY ON WASHINGTON AVENUE FROM STATION 5+70.00 TO STATION 9+47.34 IS 50 FEET IN WIDTH BASED ON DRAWING NO 58992 P.R.R. DIV., PGH DIV., LOCATION OF PROPOSED OVERHEAD CROSSING AT SWISSVALE, DATED 5-2-06 AND APPROVED BY SWISSVALE BOROUGH COUNCIL.

THE LEGAL RIGHT-OF-WAY ON PALMER STREET SOUTH FROM STATION 20+25.00 TO STATION 21+86.55 IS 35 FEET IN WIDTH BASED ON THE PALMER PLACE PLAN OF LOTS, RECORDED APRIL 29,1892 IN THE ALLEGHENY COUNTY RECORDER'S OFFICE IN PLAN BOOK VOLUME 12, PAGE 153.

THE LEGAL RIGHT-OF-WAY ON PALMER STREET NORTH FROM STATION 30+22.43 TO STATION 31+47.44 IS 35 FEET IN WIDTH BASED ON THE PALMER PLACE PLAN OF LOTS, RECORDED APRIL 29,1892 IN THE ALLEGHENY COUNTY RECORDER'S OFFICE IN PLAN BOOK VOLUME 12, PAGE 153.

THE LEGAL RIGHT-OF-WAY ON WAVERLY STREET FROM STATION 51+15.00 TO STATION 52+35.00 IS 37 FEET IN WIDTH BASED ON DEED BOOK 12206, PAGE 93, DATED SEPTEMBER 23, 2004 AND RECORDED SEPTEMBER 28, 2004 IN THE ALLEGHENY COUNTY RECORDER'S OFFICE IN INSTRUMENT NO 2004-33646.

THE LEGAL RIGHT-OF-WAY ON COULTER WAY IS 20 FEET IN WIDTH BASED ON THE PALMER PLACE PLAN OF LOTS, RECORDED APRIL 29,1892 IN THE ALLEGHENY COUNTY RECORDER'S OFFICE IN PLAN BOOK VOLUME 12, PAGE 153.

THE LEGAL RIGHT-OF-WAY ON FERGUSON WAY IS 20 FEET IN WIDTH BASED ON THE PALMER PLACE PLAN OF LOTS, RECORDED APRIL 29,1892 IN THE ALLEGHENY COUNTY RECORDER'S OFFICE IN PLAN BOOK VOLUME 12, PAGE 153.

THE LEGAL RIGHT-OF-WAY ON CENTER STREET IS 40 FEET IN WIDTH BASED ON THE R.L. AND SARAH J. MILLER'S PLAN OF LOTS, RECORDED OCTOBER 9, 1896 IN THE ALLEGHENY COUNTY RECORDER'S OFFICE IN PLAN BOOK VOLUME 16, PAGE 41.

THE LEGAL RIGHT-OF-WAY ON NOBLE STREET IS 40 FEET IN WIDTH BASED ON THE R.L. AND SARAH J. MILLER'S PLAN OF LOTS, RECORDED OCTOBER 9, 1896 IN THE ALLEGHENY COUNTY RECORDER'S OFFICE IN PLAN BOOK VOLUME 16, PAGE 41.

THE LEGAL RIGHT-OF-WAY ON ALLEY IS 10 FEET IN WIDTH BASED ON DEED BOOK 7866, PAGE 133, RECORDED SEPTEMBER 9, 1988 IN THE ALLEGHENY COUNTY RECORDER'S OFFICE, DEED BOOK 9099, PAGE 597, RECORDED NOVEMBER 19,1993 IN THE ALLEGHENY COUNTY RECORDER'S OFFICE, DEED BOOK 15968, PAGE 430, RECORDED SEPTEMBER 9, 1988 IN THE ALLEGHENY COUNTY RECORDER'S OFFICE, AND DEED BOOK 176110, PAGE 449, RECORDED MAY 9, 2019 IN THE ALLEGHENY COUNTY RECORDER'S OFFICE

ALL REQUIRED RIGHT-OF-WAY FOR THIS PROJECT SHALL BE ACQUIRED IN FEE SIMPLE UNLESS OTHERWISE NOTED. AREAS, IF ANY, NOT TO BE ACQUIRED IN FEE SIMPLE SHALL BE ACQUIRED IN THE LESSER ESTATE OR INTEREST NOTED ON THE PLAN SHEET.

PRIVATE PROPERTY LINES ARE PLOTTED FROM THE DEED OF RECORD, RECORDED SUBDIVISION OR LOT PLANS, EXISTING TOPOGRAPHICAL FEATURES AND LIMITED FIELD DATA. PRIVATE PROPERTY LINES WERE NOT SURVEYED BY THE PROFESSIONAL LAND SURVEYOR RESPONSIBLE FOR THE PROJECT.

THE FILING OF THIS PLAN IS NOT A CONDEMNATION OF THE PROPERTIES DESIGNATED THEREIN AND DOES NOT IN ANY MANNER WHATSOEVER RESTRICT THE USE OR DISPOSAL THEREOF. AUTHORIZATION TO CONDEMN UNDER THIS PLAN EXTENDS FOR ONLY ONE YEAR FROM THE DATE OF THE BOROUGH'S SIGNATURE INITIALLY AUTHORIZING ACQUISITION OR SUBSEQUENTLY REVISING THE PLAN OR REAUTHORIZING ACQUISITION THEREUNDER.

SIDEWALKS SHALL BE INCLUDED AS AN ITEM OF CONSTRUCTION.

THERE ARE NO NAVIGABLE STREAMS WITHIN THE PROJECT LIMITS.

ALL CURVE DATA IS BASED ON THE ARC DEFINITION UNLESS OTHERWISE NOTED.

THE HORIZONTAL CONTROL IS BASED ON NORTH AMERICAN DATUM OF 1983 (NAD83) PENNSYLVANIA STATE PLANE COORDINATE SYSTEM, PA SOUTH ZONE 3702. NO COMBINED SCALE FACTOR WAS USED FOR THIS PROJECT.

VERTICAL CONTROL IS BASED UPON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) (GEOID 12B).

TEMPORARY CONSTRUCTION EASEMENT. AN EASEMENT TO USE THE LAND AS NECESSARY DURING CONSTRUCTION OF THE PROJECT. THE EASEMENT IS REQUIRED ONLY UNTIL THE CONSTRUCTION OR WORK INDICATED BY THE PLAN IS COMPLETED, UNLESS SOONER RELINQUISHED IN WRITING BY THE BOROUGH OF SWISSVALE.

REQUIRED RIGHT-OF-WAY FOR LOCAL ROADS OR STREETS IS ACQUIRED FOR THE BENEFIT OF THE APPLICABLE MUNICIPALITY IN THE SAME ESTATE OR INTEREST AS DESIGNATED HEREIN FOR REQUIRED RIGHT-OF-WAY FOR STATE HIGHWAY PURPOSES, ALONG WITH A TEMPORARY CONSTRUCTION EASEMENT FOR THE BENEFIT AND USE OF THE NORFOLK SOUTHERN RAILWAY COMPANY. TITLE SHALL VEST IN THE APPLICABLE LOCAL MUNICIPALITY UPON ACQUISITION AND MAINTENANCE RESPONSIBILITY SHALL TRANSFER UPON THE COMPLETION OF CONSTRUCTION.

SHEET INDEX BLOCK

DESCRIPTION	SHEET
TITLE SHEET	1
LOCATION MAP, GENERAL NOTES AND PROJECT COORDINATES	2 TO 3
REFERENCE CIRCLES	4
TYPICAL SECTIONS	5 TO 8
PLAN SHEET	9
PROFILE SHEETS	10 TO 12
RIGHT-OF-WAY CLAIM BLOCKS	13 TO 14

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL RALPH WILLIAM GROMLEY LAND SURVEYOR NO. SU075368 PENNSYLVANIA
REG PROF LAND SURVEYOR

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL CYDNEY JILL SEDLAR ENGINEER No. 070761 PENNSYLVANIA
REG PROF ENGINEER

NORFOLK SOUTHERN
NORFOLK SOUTHERN RAILWAY COMPANY
PITTSBURGH
ENGINEERING DIVISION
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

REV.	BY	DATE	DESCRIPTION

DIVISION
SWISSVALE, PENNSYLVANIA
SUBJECT
BR0028818 BRIDGE PT344.91 WASHINGTON AVENUE LOCATION MAP, GENERAL NOTES AND PROJECT COORDINATES
ENGINEERING CONTRACT | PROJECT | PROJECT ROUTE
DSN JAH | PO No. D2122 | 1290818-0N477 | PT-344.91
DWN WRB | FILE No. BR0028818 | DRAWING NUMBER
CHK CAB | DATE 6/10/2024 | PT-344.91 24 02
CADD FILE: NS_Washington_RW_Gen.dgn

CADD FILE: NS_Washington_RW_Gen.dgn

GENERAL NOTES CONTINUED

AERIAL EASEMENT NOTES

1. WHERE AN AERIAL EASEMENT IS ACQUIRED, IT SHALL INCLUDE AN EASEMENT IN THE AIR FOR THE ACCOMMODATION OF THE ELEVATED HIGHWAY STRUCTURE UNLIMITED IN VERTICAL DIMENSION ABOVE THE STRUCTURE, A SURFACE EASEMENT UNLIMITED IN VERTICAL DIMENSION FOR THE ACCOMMODATION OF PIERS AND OTHER APPURTENANCES AND A TEMPORARY EASEMENT FOR CONSTRUCTION PURPOSES INCLUDING THE STORAGE OF MATERIALS DURING CONSTRUCTION FOR THE ENTIRE AREA. THE FOLLOWING LIMITATIONS SHALL BE IMPOSED ON THE PROPERTY BENEATH THE AREA AFFECTED BY THE AERIAL EASEMENT.

2. NO USE SHALL BE MADE OF THE PROPERTY WHICH SHALL ENDANGER THE STRUCTURE OR THE HEALTH, SAFETY OR WELFARE OF THE TRAVELING PUBLIC.

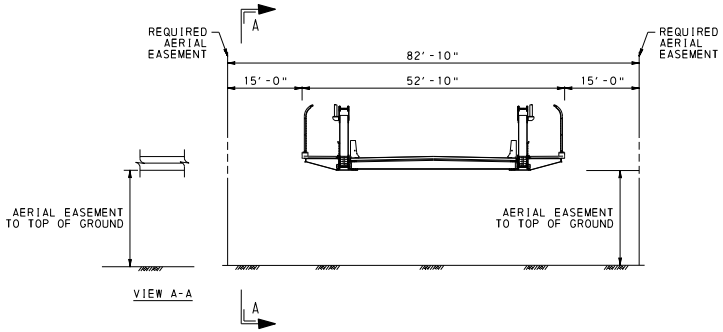
3. NO FLAMMABLE, EXPLOSIVE, DANGEROUS OR HAZARDOUS MATERIAL SHALL BE USED, PLACED OR STORED ON THE PROPERTY.

4. NO BUILDING OR OTHER FACILITY SHALL BE CONSTRUCTED ON THE PROPERTY WITHOUT PRIOR AUTHORITY OF THE DEPARTMENT OF TRANSPORTATION. IF AND WHEN SUCH AUTHORITY IS GRANTED, THE PLANS FOR THE BUILDING OR FACILITY AND CONSTRUCTION METHODS SHALL BE SUBJECT TO THE APPROVAL OF THE DEPARTMENT OF TRANSPORTATION.

5. NO INTERFERENCE SHALL BE MADE WITH THE RIGHT OF THE DEPARTMENT OF TRANSPORTATION TO ENTER UPON THE PROPERTY FOR THE PURPOSES OF INSPECTION, MAINTENANCE, REPAIR, PAINTING, RECONSTRUCTION OR ALTERATION OF THE STRUCTURE OR APPURTENANCES. MOVEABLE ITEMS MAY HAVE TO BE REMOVED BY THE OWNER DURING SOME OR ALL OF THE ABOVE OPERATIONS.

6. ANY SUBSTANTIAL CHANGE IN PROPERTY USE TO BE MADE SUBSEQUENT TO THE ACQUISITION OF THE EASEMENT SHALL BE SUBJECT TO THE APPROVAL OF THE DEPARTMENT OF TRANSPORTATION.

7. THE NOTES ON THIS DRAWING SHALL NOT BE CONSTRUED AS LIMITING OR INTERFERING IN ANY WAY WITH THE PRESENT AND FUTURE OPERATION, USE, MAINTENANCE, REPAIR, RENEWAL, CHANGE, ADDITION, BETTERMENT OR ALTERATION OF THE RAILROAD AND ITS SUPPORTING FACILITIES.



SKETCH SHOWING ESTATE TO BE ACQUIRED FOR A LIMITED AERIAL EASEMENT FROM STATION 6+92.19 TO STATION 7+98.09.

USE OF AIRSPACE BENEATH THE ESTABLISHED GRADE LINE OF THE HIGHWAY SHALL PROVIDE SUFFICIENT VERTICAL AND HORIZONTAL CLEARANCES FOR THE CONSTRUCTION, OPERATION, MAINTENANCE, VENTILATION AND SAFETY OF THE HIGHWAY FACILITY. THE ESTATE ACQUIRED ABOVE THE AERIAL EASEMENT LINE MAY BE ENTERED ON BY MOVING VEHICLES SUCH AS TRUCKS OR RAILROAD ROLLING STOCK.

THE AREA WITHIN THE AERIAL EASEMENT BENEATH THE BRIDGE STRUCTURE SHALL BE AVAILABLE TO THE BOROUGH, ITS QUALIFIED EMPLOYEES AND CONTRACTORS IN ORDER TO INSPECT AND MAINTAIN THE STRUCTURE UPON CONTACTING THE RAILROAD AND ESTABLISHING PROPER PROTECTION FOR THE WORK IN ACCORDANCE WITH THE USUAL AND CUSTOMARY PROCEDURES THAT THE RAILROAD HAS ESTABLISHED FOR SUCH PROTECTION.

THE HALF CIRCLED NUMBER INDICATES A SCALED DIMENSION. +85 / 50'

THE FOLLOWING SYMBOL IS USED TO DEPICT THE SLOPE LIMITS

REG PROF LAND SURVEYOR

REG PROF ENGINEER

NORFOLK SOUTHERN RAILWAY COMPANY

PITTSBURGH
ENGINEERING DIVISION
OFFICE OF THE CHIEF ENGINEER – DESIGN AND CONSTRUCTION – ATLANTA, GA.

REV	BY	DATE	DESCRIPTION

SWISSVALE, PENNSYLVANIA

BR0028818 BRIDGE PT344.91 WASHINGTON AVENUE LOCATION MAP, GENERAL NOTES AND PROJECT COORDINATES

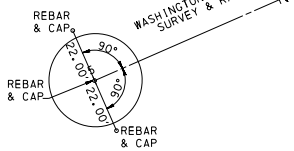
DSN	JAH	PID No.	D2122	PROJ	1290818-0N477
DWN	WRB	FILE No.	BR0028818		
CHK	CAB	DATE	6/10/2024		

DIVISION CODE / MILE POST: PT-344.91

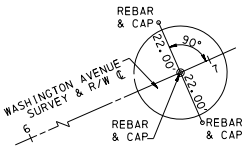
DRAWING NUMBER: PT-344.91 24 03

CADD FILE: NS_Washington_RW_Gen.dgn

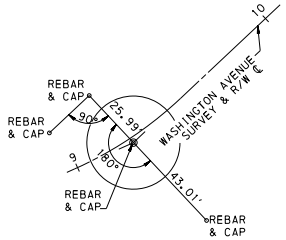
CADD FILE: NS_Washington_RW_Gen.dgn



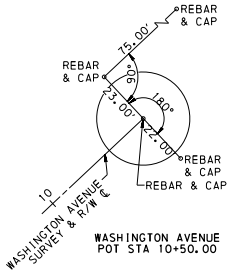
WASHINGTON AVENUE
POT STA 5+00.00



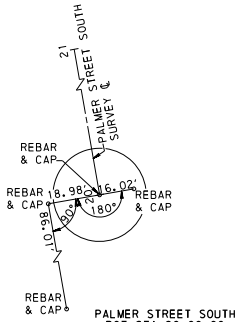
WASHINGTON AVENUE
PI STA 6+87.37



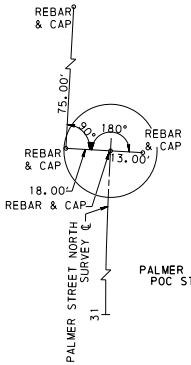
WASHINGTON AVENUE
PI STA 9+24.63



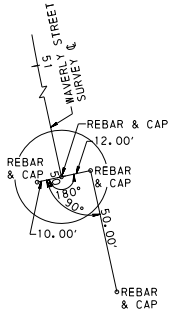
WASHINGTON AVENUE
POT STA 10+50.00



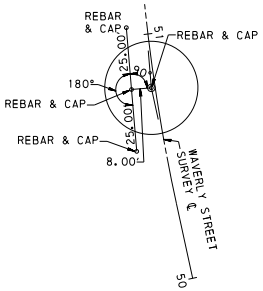
PALMER STREET SOUTH
POT STA 20+00.00



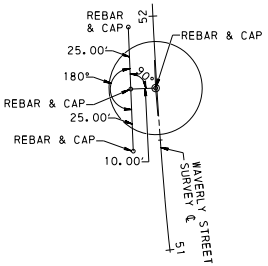
PALMER STREET NORTH
POC STA 31+94.33



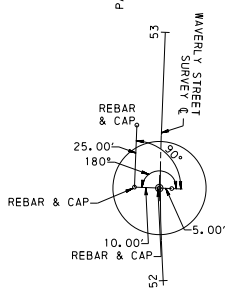
WAVERLY STREET
POT STA 50+00.00



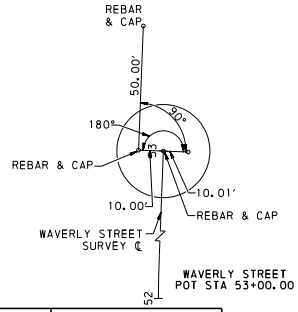
WAVERLY STREET
PI STA 50+78.44



WAVERLY STREET
PI STA 51+71.03



WAVERLY STREET
PI STA 52+37.29



WAVERLY STREET
POT STA 53+00.00

NOT TO SCALE

REGISTERED PROFESSIONAL
RALPH WILLIAM GROMLEY
LAND SURVEYOR NO. SU075338
COMMONWEALTH OF PENNSYLVANIA
REG PROF LAND SURVEYOR

REGISTERED PROFESSIONAL
CYDNEY JILL SEDLAR
ENGINEER No. 070016
COMMONWEALTH OF PENNSYLVANIA
REG PROF ENGINEER

NORFOLK SOUTHERN
NORFOLK SOUTHERN RAILWAY COMPANY
ENGINEERING DEPARTMENT
PITTSBURGH
OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER – DESIGN AND CONSTRUCTION – ATLANTA, GA.

REV	BY	DATE	DESCRIPTION

SWISSVALE, PENNSYLVANIA
BR0028818 BRIDGE PT344.91 WASHINGTON AVENUE
REFERENCE CIRCLES

DSN JAH	PO No. D2122	WBS 1290818-0H77	SHEET POST PT-344.91		
DWN WRB	FILE No. BR0028818	DRAWING NUMBER PT-344.91 24 04			
CHK CAB	DATE 6/10/2024				

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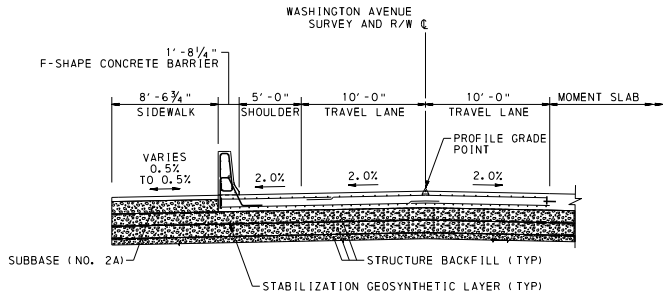
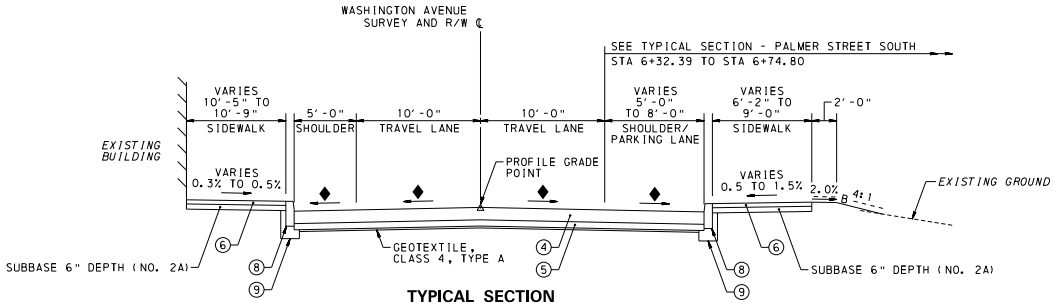


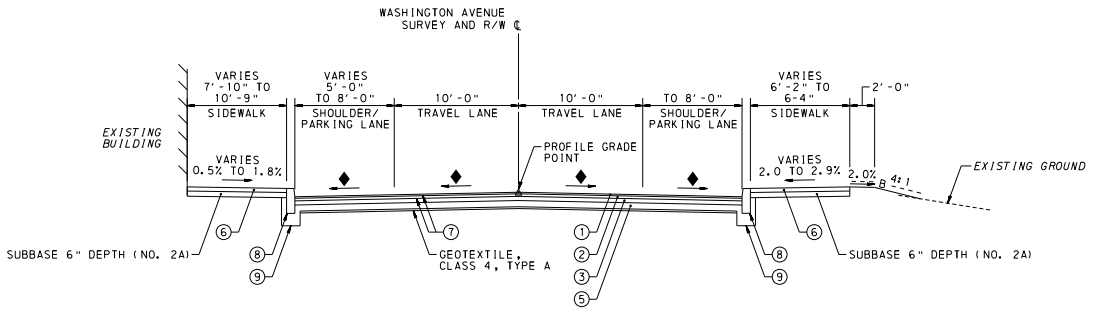
TYPICAL APPROACH SLAB SECTION

WASHINGTON AVENUE
STA 6+74.80 TO STA 6+99.80
NOT TO SCALE



TYPICAL SECTION

WASHINGTON AVENUE
STA 6+00.00 TO STA 6+74.80
NOT TO SCALE



TYPICAL SECTION

WASHINGTON AVENUE
STA 5+75.00 TO STA 6+00.00
NOT TO SCALE

LEGEND

1. SUPERPAVE ASPHALT MIXTURE DESIGN, WEARING COURSE, PG 64S-22, 0.3 TO < 3 MILLION ESALS, 9.5 MM MIX, 1½" DEPTH, SRL-H
2. SUPERPAVE ASPHALT MIXTURE DESIGN, BINDER COURSE, PG 64S-22, 0.3 TO < 3 MILLION ESALS, 19.0 MM MIX, 2½" DEPTH
3. SUPERPAVE ASPHALT MIXTURE DESIGN, BASE COURSE, PG 64S-22, 0.3 TO < 3 MILLION ESALs, 25.0 MM MIX, 4" DEPTH
4. PLAIN CEMENT CONCRETE PAVEMENT, 12" DEPTH
5. SUBBASE 6" DEPTH (NO. 2A)
6. CEMENT CONCRETE SIDEWALK
7. ASPHALT TACK COAT (NTT/CNTT)
8. PLAIN CEMENT CONCRETE CURB, 4" HEIGHT, INCLUDING REMOVAL OF EXISTING CURB
9. SUBGRADE DRAINS AND GEOTEXTILE, CLASS 1

APPLY SEPARATE LAYER OF ASPHALT TACK COAT (NTT/CNTT) FOR EACH PAVING COURSE, INCLUDING MULTIPLE LIFTS OF THE SAME MATERIAL

◆ CROSS SLOPES VARY

SEEDING LEGEND

-- B ---- B -- SEEDING AND SOIL SUPPLEMENTS - FORMULA B RESIDENTIAL MIX, INCLUDING MULCH

REG PROF LAND SURVEYOR

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — RALPH WILLIAM GROMLEY — LAND SURVEYOR NO. SU075338

REG PROF ENGINEER

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — CYDNEY JILL SEDLAR — ENGINEER NO. 070016

NORFOLK SOUTHERN

NORFOLK SOUTHERN RAILWAY COMPANY

ENGINEERING DEPARTMENT
PITTSBURGH
ENGINEERING DIVISION
OFFICE OF THE CHIEF ENGINEER – DESIGN AND CONSTRUCTION – ATLANTA, GA.

REV.	BY	DATE	DESCRIPTION

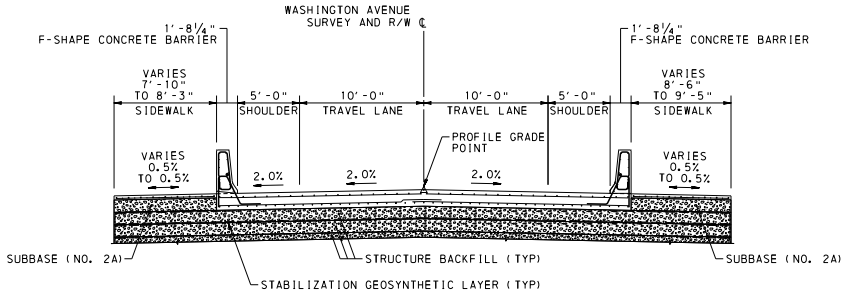
DIVISION: SWISSVALE, PENNSYLVANIA
SUBJ: BR0028818 BRIDGE PT344.91 WASHINGTON AVENUE
TYPICAL SECTIONS

DSN	JAH	PO No.	D2122	WW	1290818-0H77
DWN	WRB	FILE No.	BR0028818		
CHK	CAB	DATE	6/10/2024		

DRAWING NUMBER: PT-344.91 24 05

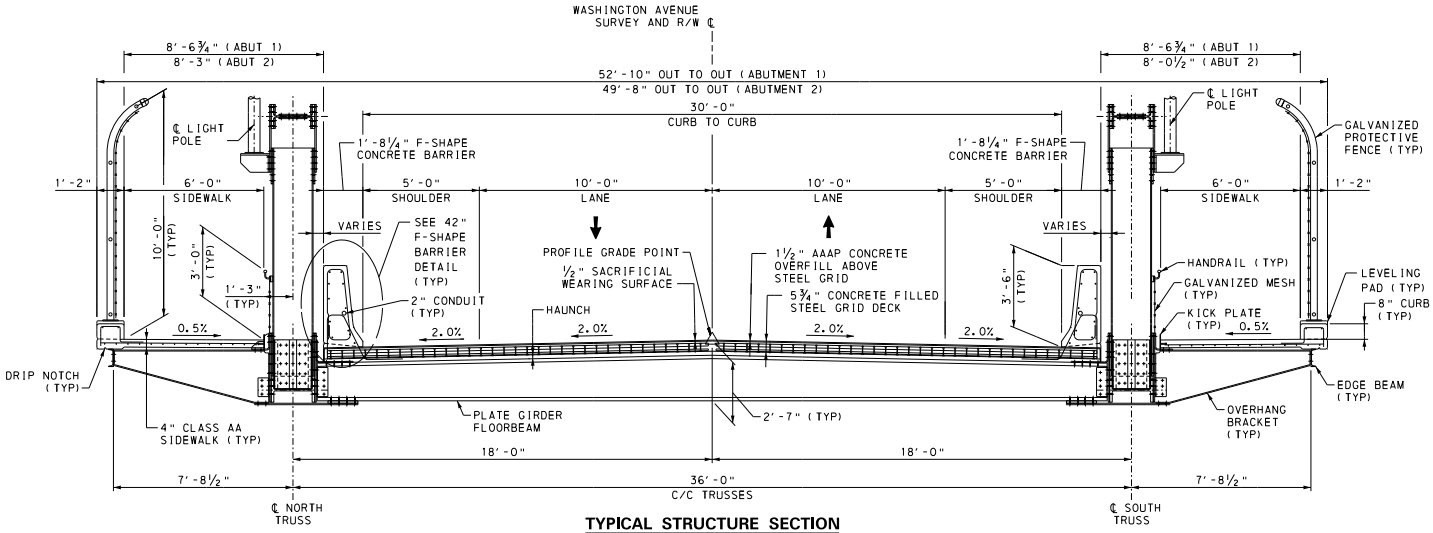
CADD FILE: NS_Washington_Ave_RW_Typical.dgn

CADD FILE: NS_Washington_Ave_RW_Typical.dgn



TYPICAL APPROACH SLAB SECTION

WASHINGTON AVENUE
STA 8+27.46 TO STA 8+52.46
NOT TO SCALE



TYPICAL STRUCTURE SECTION

WASHINGTON AVENUE
STA 6+99.80 TO STA 8+27.46
NOT TO SCALE

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — RALPH WILLIAM GROMLEY — LAND SURVEYOR NO. SU075338 — PENNSYLVANIA

REG PROF LAND SURVEYOR

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — CYDNEY JILL SEDLAR — ENGINEER No. 070016 — PENNSYLVANIA

REG PROF ENGINEER

NORFOLK SOUTHERN

NORFOLK SOUTHERN RAILWAY COMPANY

ENGINEERING DEPARTMENT
PITTSBURGH
OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER – DESIGN AND CONSTRUCTION – ATLANTA, GA.

REV	BY	DATE	DESCRIPTION

LOCATION: SWISSVALE, PENNSYLVANIA

TITLE: BR0028818 BRIDGE PT344.91 WASHINGTON AVENUE
TYPICAL SECTIONS

DSN	JAH	PO No.	D2122	WW	1290818-OH77
DWN	WRB	FILE No.	BR0028818	DRAWING NUMBER	PT-344.91
CHK	CAB	DATE	6/18/2024		

SCALE: FULL SIZE | DRAWING NUMBER: PT-344.91 24 06

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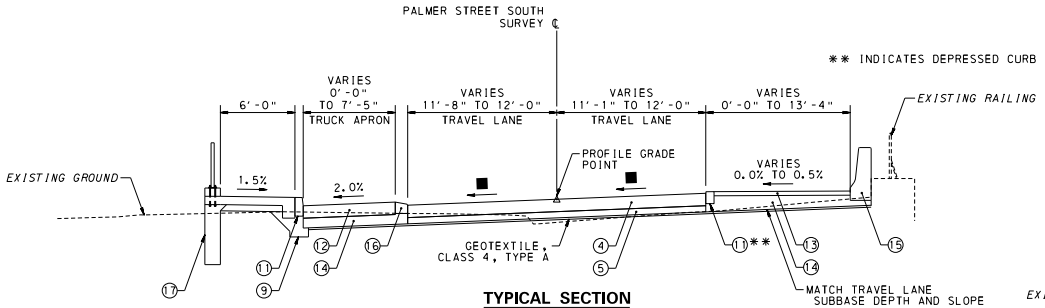
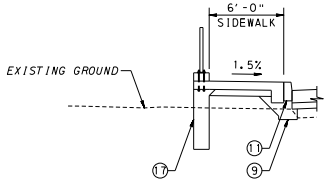
CADD FILE: NS_Washington_Ave_RW_Typical.dgn



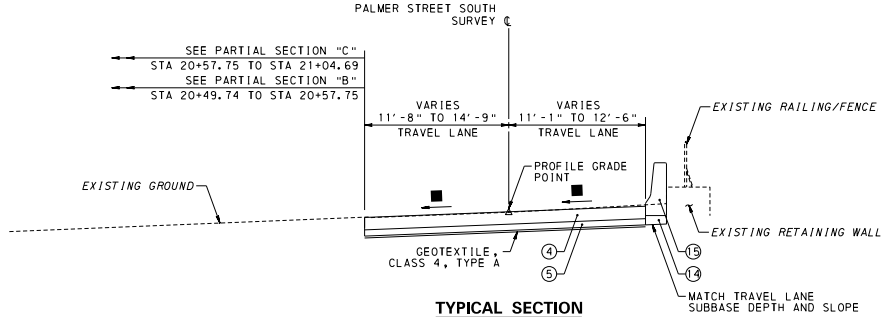
TYPICAL SECTION

PALMER STREET SOUTH
STA 21+04.69 TO STA 21+64.60
NOT TO SCALE



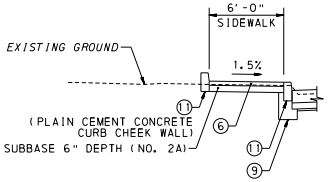
PARTIAL SECTION "C"

PALMER STREET SOUTH
STA 20+57.75 TO STA 21+04.69
NOT TO SCALE



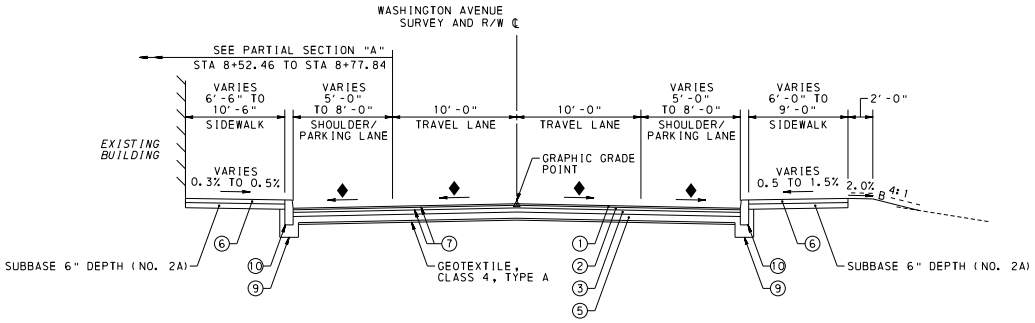
TYPICAL SECTION

PALMER STREET SOUTH
STA 20+25.00 TO STA 21+04.69
NOT TO SCALE



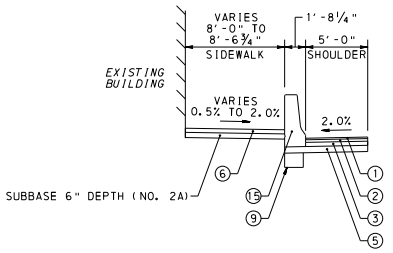
PARTIAL SECTION "B"

PALMER STREET SOUTH
STA 20+49.74 TO STA 20+57.75
NOT TO SCALE



TYPICAL SECTION

WASHINGTON AVENUE
STA 8+52.46 TO STA 9+51.00
NOT TO SCALE



PARTIAL SECTION "A"

WASHINGTON AVENUE
STA 8+52.46 TO STA 8+76.84
NOT TO SCALE

LEGEND

1. SUPERPAVE ASPHALT MIXTURE DESIGN, WEARING COURSE, PG 64S-22, 0.3 TO < 3 MILLION ESALS, 9.5 MM MIX, 1½" DEPTH, SRL-H
2. SUPERPAVE ASPHALT MIXTURE DESIGN, BINDER COURSE, PG 64S-22, 0.3 TO < 3 MILLION ESALS, 19.0 MM MIX, 2½" DEPTH
3. SUPERPAVE ASPHALT MIXTURE DESIGN, BASE COURSE, PG 64S-22, 0.3 TO < 3 MILLION ESALs, 25.0 MM MIX, 4" DEPTH
4. PLAIN CEMENT CONCRETE PAVEMENT, 12" DEPTH
5. SUBBASE 6" DEPTH (NO. 2A)
6. CEMENT CONCRETE SIDEWALK
7. ASPHALT TACK COAT (NTT/CNTT)
9. SUBGRADE DRAINS AND GEOTEXTILE, CLASS 1
10. PLAIN CEMENT CONCRETE CURB, 6" HEIGHT, INCLUDING REMOVAL OF EXISTING CURB
11. PLAIN CEMENT CONCRETE CURB, 8" HEIGHT
12. PLAIN CEMENT CONCRETE PAVEMENT, 12" DEPTH, INTEGRAL COLOR AND STAMPED FINISH
13. PLAIN CEMENT CONCRETE PAVEMENT, 4" DEPTH
14. SUBBASE (NO. 2A)
15. SINGLE FACE CONCRETE BARRIER, F-SHAPE, 42" HEIGHT, WITHOUT FILL
16. PLAIN CONCRETE MOUNTABLE CURB, ROUNDABOUT TRUCK APRON CURB
17. SIDEWALK MOMENT SLAB

APPLY SEPARATE LAYER OF ASPHALT TACK COAT (NTT/CNTT) FOR EACH PAVING COURSE, INCLUDING MULTIPLE LIFTS OF THE SAME MATERIAL

◆ CROSS SLOPES VARY

■ CROSS SLOPES VARY

SEEDING LEGEND

-- B ---- B -- SEEDING AND SOIL SUPPLEMENTS - FORMULA B RESIDENTIAL MIX, INCLUDING MULCH

REGISTERED PROFESSIONAL
RALPH WILLIAM GROMLEY
LAND SURVEYOR NO. SU075338
COMMONWEALTH OF PENNSYLVANIA
REG PROF LAND SURVEYOR

REGISTERED PROFESSIONAL
CYDNEY JILL SEDLAR
ENGINEER No. 070016
COMMONWEALTH OF PENNSYLVANIA
REG PROF ENGINEER

NORFOLK SOUTHERN

NORFOLK SOUTHERN RAILWAY COMPANY

PITTSBURGH
ENGINEERING DIVISION
OFFICE OF THE CHIEF ENGINEER – DESIGN AND CONSTRUCTION – ATLANTA, GA.

REV	BY	DATE	DESCRIPTION

DIVISION: SWISSVALE, PENNSYLVANIA
TITLE: BR0028818 BRIDGE PT344.91 WASHINGTON AVENUE
TYPICAL SECTIONS

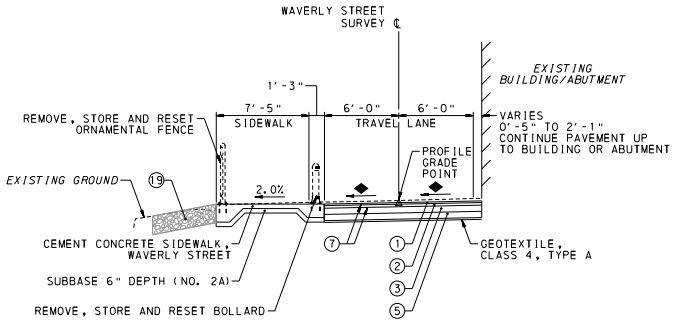
DSN	JAH	PID No.	D2122	WBS	1290818-0H77
DWN	WRB	FILE No.	BR0028818	DRAWING NUMBER	PT-344.91
CHK	CAB	DATE	6/10/2024		

DALE POST: PT-344.91

CADD FILE: NS_Washington_Ave_RW_Typical.dgn

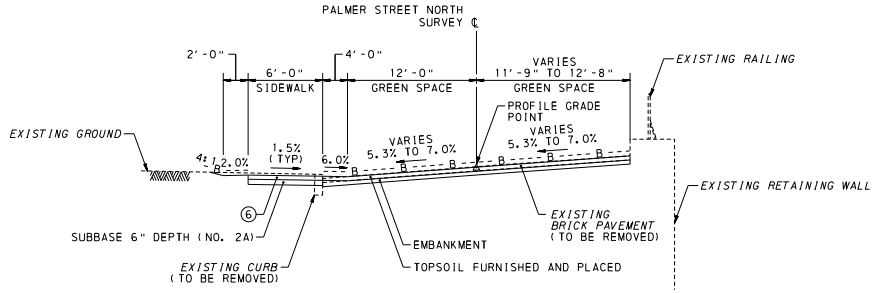
PT-344.91 24 07

CADD FILE: NS_Washington_Ave_RW_Typical.dgn



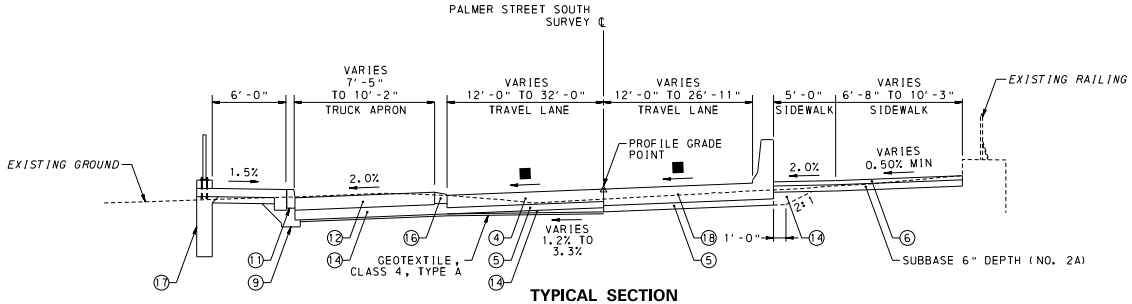
TYPICAL SECTION

WAVERLY STREET
STA 51+15.00 TO STA 52+35.00
NOT TO SCALE



TYPICAL SECTION

PALMER STREET NORTH
STA 30+22.43 TO STA 31+47.44
NOT TO SCALE



TYPICAL SECTION

PALMER STREET SOUTH
STA 21+64.60 TO STA 21+86.55
NOT TO SCALE

LEGEND

(1) SUPERPAVE ASPHALT MIXTURE DESIGN, WEARING COURSE, PG 64S-22, 0.3 TO < 3 MILLION ESALS, 9.5 MM MIX, 1½" DEPTH, SRL-H

(2) SUPERPAVE ASPHALT MIXTURE DESIGN, BINDER COURSE, PG 64S-22, 0.3 TO < 3 MILLION ESALS, 19.0 MM MIX, 2½" DEPTH

(3) SUPERPAVE ASPHALT MIXTURE DESIGN, BASE COURSE, PG 64S-22, 0.3 TO < 3 MILLION ESALs, 25.0 MM MIX, 4" DEPTH

(4) PLAIN CEMENT CONCRETE PAVEMENT, 12" DEPTH

(5) SUBBASE 6" DEPTH (NO. 2A)

(6) CEMENT CONCRETE SIDEWALK

(7) ASPHALT TACK COAT (NTT/CNTT)

(9) SUBGRADE DRAINS AND GEOTEXTILE, CLASS 1

(11) PLAIN CEMENT CONCRETE CURB, 8" HEIGHT

(12) PLAIN CEMENT CONCRETE PAVEMENT, 12" DEPTH, INTEGRAL COLOR AND STAMPED FINISH

(14) SUBBASE (NO. 2A)

(16) PLAIN CONCRETE MOUNTABLE CURB, ROUNDABOUT TRUCK APRON CURB

(17) SIDEWALK MOMENT SLAB

(18) BARRIER MOMENT SLAB

(19) SELECTED BORROW EXCAVATION ROCK, CLASS R-4

APPLY SEPARATE LAYER OF ASPHALT TACK COAT (NTT/CNTT) FOR EACH PAVING COURSE, INCLUDING MULTIPLE LIFTS OF THE SAME MATERIAL

■ CROSS SLOPES VARY

◆ CROSS SLOPES VARY

SEEDING LEGEND

-- B ---- B -- SEEDING AND SOIL SUPPLEMENTS - FORMULA B RESIDENTIAL MIX, INCLUDING MULCH

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL RALPH WILLIAM GROMLEY LAND SURVEYOR NO. SU075338

REG PROF LAND SURVEYOR

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL CYDNEY JILL SEDLAR ENGINEER No. 070016

REG PROF ENGINEER

NORFOLK SOUTHERN

NORFOLK SOUTHERN RAILWAY COMPANY

PITTSBURGH
ENGINEERING DIVISION
OFFICE OF THE CHIEF ENGINEER – DESIGN AND CONSTRUCTION – ATLANTA, GA.

REV	BY	DATE	DESCRIPTION

LOCATION: SWISSVALE, PENNSYLVANIA

TITLE: BR0028818 BRIDGE PT344.91 WASHINGTON AVENUE
TYPICAL SECTIONS

DSN	JAH	PID No.	D2122	WR	1290818-0H77
DRAWN	WRB	FILE No.	BR0028818	DRAWING NUMBER	PT-344.91 24 08
CHK	CAB	DATE	6/10/2024		

SCALE: NOT TO SCALE

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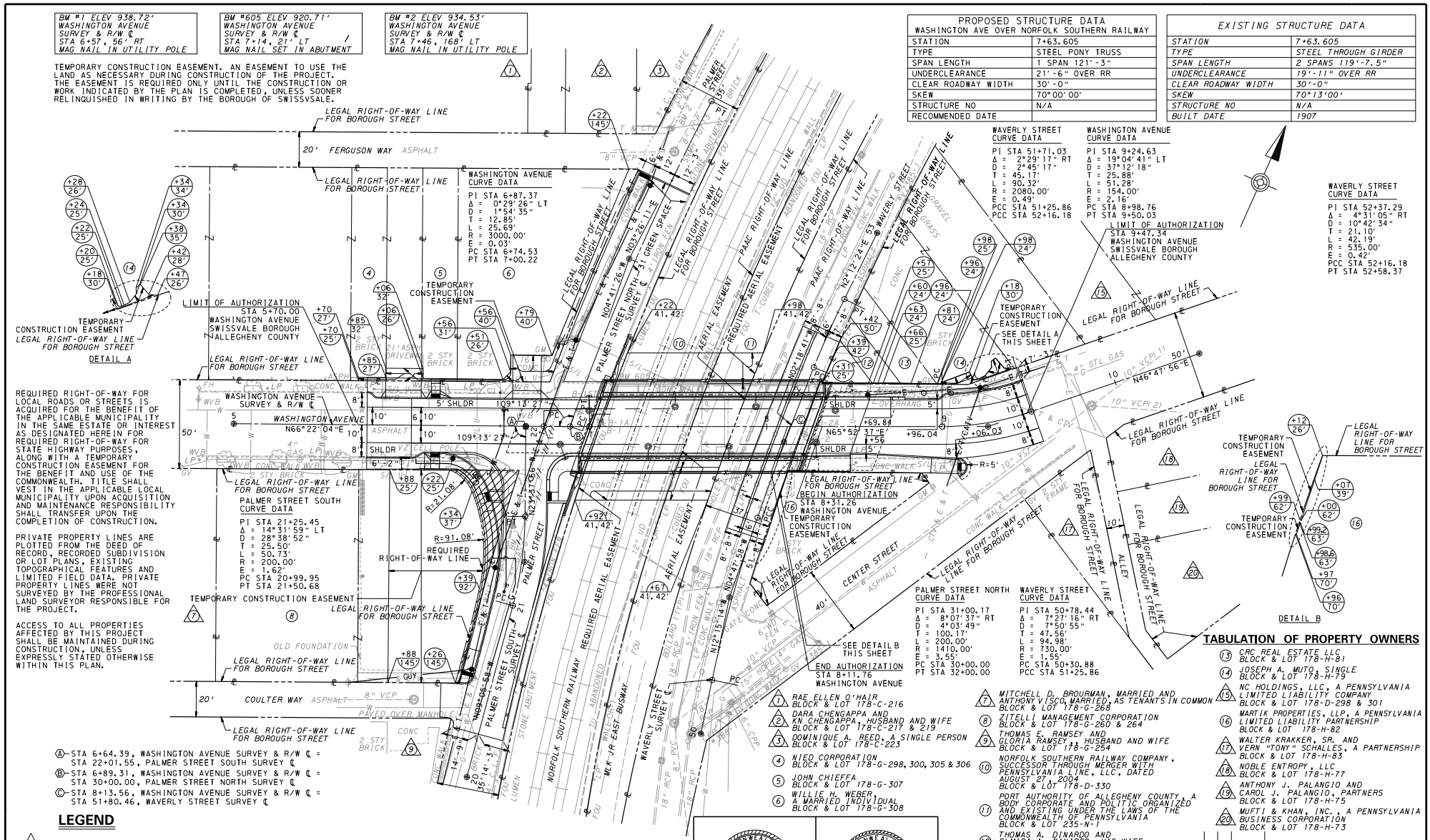
CADD FILE: NS_Washington_Ave_RW_Typical.dgn



TABULATION OF PROPERTY OWNERS

13 CRC REAL ESTATE LLC
BLOCK & LOT 178-H-81

14 JOSEPH A. MUTO, SINGLE
BLOCK & LOT 178-H-79

15 NC HOLDINGS, LLC, A PENNSYLVANIA LIMITED LIABILITY COMPANY
BLOCK & LOT 178-D-298 & 301

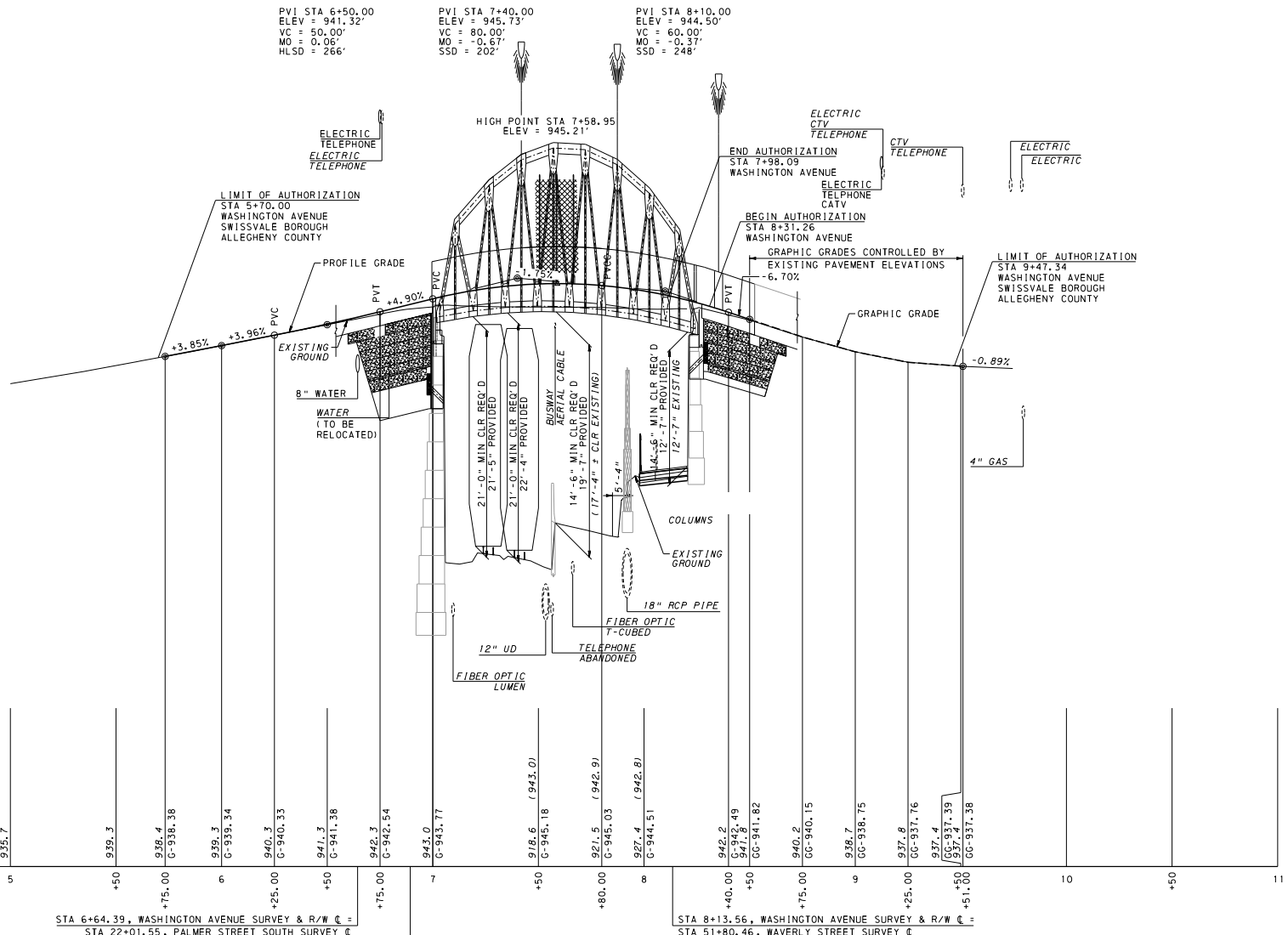
16 MARTIK PROPERTIES, LLP, A PENNSYLVANIA LIMITED LIABILITY PARTNERSHIP
BLOCK & LOT 178-H-82

17 WALTER KRAKKER, SR. AND VERN "TONY" SCHALLES, A PARTNERSHIP
BLOCK & LOT 178-H-83

18 NOBLE ENTROPY, LLC
BLOCK & LOT 178-H-77

19 ANTHONY J. PALANGIO AND CAROL J. PALANGIO, PARTNERS
BLOCK & LOT 178-H-75

20 MUFTI & KHAN, INC., A PENNSYLVANIA BUSINESS CORPORATION
BLOCK & LOT 178-H-73



PROFILE – WASHINGTON AVENUE

HORIZONTAL
SCALE: 1"=25'
25' 0 25' 50'
DO NOT SCALE THIS DRAWING FOR DIMENSIONS NOT GIVEN

VERTICAL
SCALE: 1"=5'
5' 0 5' 10'
DO NOT SCALE THIS DRAWING FOR DIMENSIONS NOT GIVEN

SURVEY BOOK NO NS MBI WASHINGTON AVE BOOK 1

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL
RALPH WILLIAM GROMLEY
LAND SURVEYOR NO. SU075338
REG PROF LAND SURVEYOR

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL
CYDNEY JILL SEDLAR
ENGINEER No. 070016
REG PROF ENGINEER

FOR PLAN, SEE SHEET 9

NORFOLK SOUTHERN
NORFOLK SOUTHERN RAILWAY COMPANY
PITTSBURGH
ENGINEERING DIVISION
OFFICE OF THE CHIEF ENGINEER – DESIGN AND CONSTRUCTION – ATLANTA, GA.

REV	BY	DATE	DESCRIPTION

DIVISION
SWISSVALE, PENNSYLVANIA
PROJ BR0028818 BRIDGE PT344.91 WASHINGTON AVENUE
PROFILE – WASHINGTON AVENUE

DSN	JAH	PO No.	D2122	WR	1290818-OH77
DWN	WRB	FILE No.	BR0028818		
CHK	CAB	DATE	6/10/2024		

MILE POST PT-344.91
DRAWING NUMBER PT-344.91 24 10

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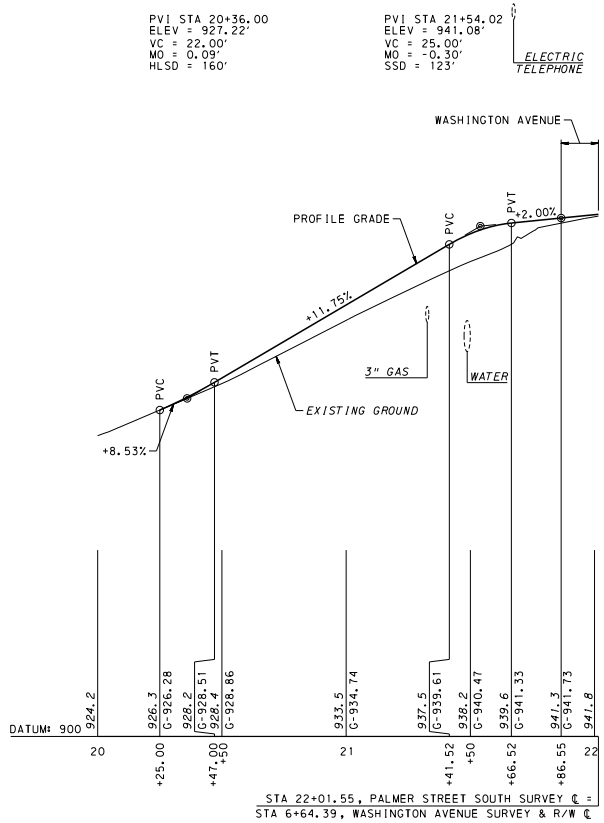
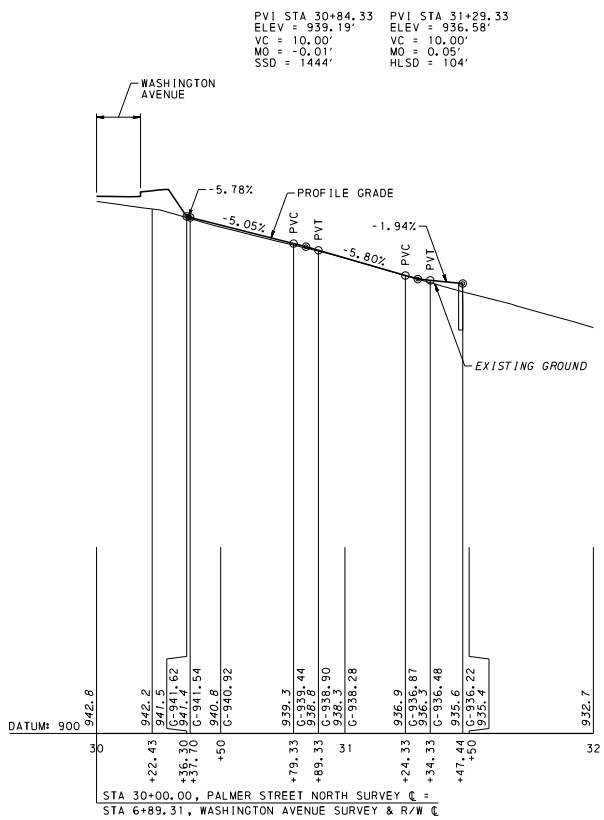


PROFILE – PALMER STREET SOUTH



PROFILE – PALMER STREET NORTH

HORIZONTAL
SCALE: 1"=25'
25' 0 25' 50'
DO NOT SCALE THIS DRAWING FOR DIMENSIONS NOT GIVEN

VERTICAL
SCALE: 1"=5'
5' 0 5' 10'
DO NOT SCALE THIS DRAWING FOR DIMENSIONS NOT GIVEN

SURVEY BOOK NO NS MBI WASHINGTON AVE BOOK 1

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL RALPH WILLIAM GROMLEY LAND SURVEYOR NO. SU075338
REG PROF LAND SURVEYOR

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL CYDNEY JILL SEDLAR ENGINEER No. 070016
REG PROF ENGINEER

FOR PLAN, SEE SHEET 9

NORFOLK SOUTHERN
NORFOLK SOUTHERN RAILWAY COMPANY
ENGINEERING DEPARTMENT
PITTSBURGH
OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER – DESIGN AND CONSTRUCTION – ATLANTA, GA.

REV	BY	DATE	DESCRIPTION

SWISSVALE, PENNSYLVANIA
PROJ BR0028818 BRIDGE PT344.91 WASHINGTON AVENUE
PROFILE – PALMER STREET

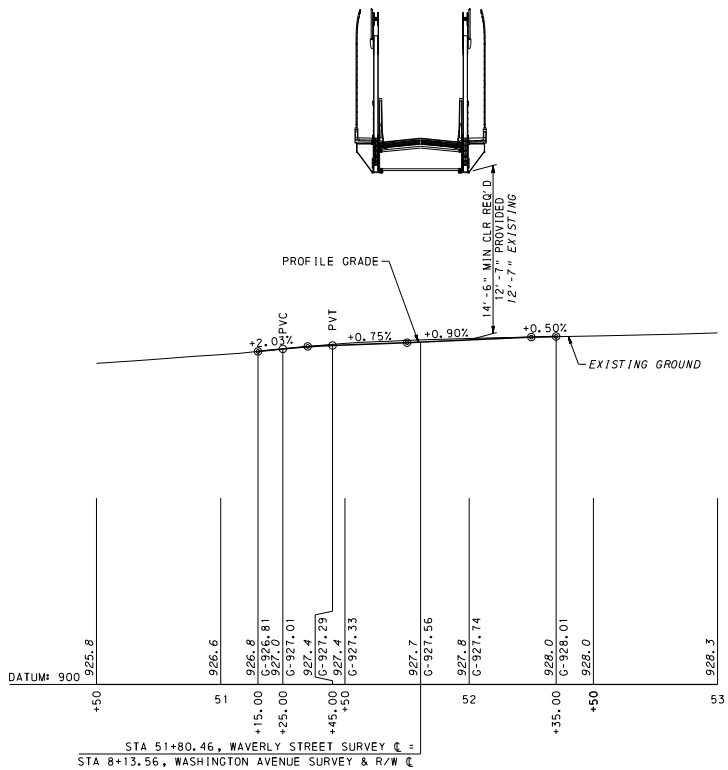
DSN JAH	PO No. D2122	HW 1290818-0H77	SCALE FOOT PT-344.91		
DWN WRB	FILE No. BR0028818	DRAWING NUMBER PT-344.91 24 11			
CHK CAB	DATE 6/10/2024				

CADD FILE: NS_Washington_Ave_ROW_profile.dgn

PVI STA 51+35.00
ELEV = 927.21'
VC = 20.00'
MO = -0.03'
SSD = 853'
K = 15.62

PVI STA 51+75.00
ELEV = 927.51'
NO CURVE

PVI STA 52+25.00
ELEV = 927.96'
NO CURVE



STA 51+80.46, WAVERLY STREET SURVEY ℄ =
STA 8+13.56, WASHINGTON AVENUE SURVEY & R/W ℄

PROFILE – WAVERLY STREET

HORIZONTAL
SCALE: 1"=25'
25' 0 25' 50'
DO NOT SCALE THIS DRAWING FOR DIMENSIONS NOT GIVEN

VERTICAL
SCALE: 1"=5'
5' 0 5' 10'
DO NOT SCALE THIS DRAWING FOR DIMENSIONS NOT GIVEN

SURVEY BOOK NO NS MBI WASHINGTON AVE BOOK 1

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL RALPH WILLIAM GROMLEY LAND SURVEYOR NO. SU075338
REG PROF LAND SURVEYOR

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL CYDNEY JILL SEDLAR ENGINEER No. 070016
REG PROF ENGINEER

FOR PLAN, SEE SHEET 9

NORFOLK SOUTHERN RAILWAY COMPANY
ENGINEERING DEPARTMENT
PITTSBURGH
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REV	BY	DATE	DESCRIPTION

DIVISION
SWISSVALE, PENNSYLVANIA
TITLE
BR0028818 BRIDGE PT344.91 WASHINGTON AVENUE
PROFILE – WAVERLY STREET

DSN	JAH	PO No.	D2122	WW	1290818-OH77
DWN	WRB	FILE No.	BR0028818		
CHK	CAB	DATE	6/10/2024		

MILE POST PT-344.91
DRAWING NUMBER PT-344.91 24 12

CADD FILE: NS_Washington_Ave_ROW_profile.dgn

RIGHT-OF-WAY CLAIM INFORMATION
BOROUGH OF SWISSVALE

ROUTE WASHINGTON AVENUE SECTION --- BOROUGH OF SWISSVALE, ALLEGHENY COUNTY
PARCEL NO. 4 SHEET NO. 9 CLAIM NO.
PROPERTY OWNER(S) NIED CORPORATION

GRANTOR(S) THOMAS L. NIED AND/OR MARGARET C. NIED, TRUSTEES OF THE THOMAS L. NIED TRUST OF 1990 UNDER AGREEMENT DATED APRIL 27, 1990

TAX PARCEL NO.	
	0178-G-00298-0000-00
	0178-G-00300-0000-00
	0178-G-00305-0000-00
	0178-G-00306-0000-00
DEED BOOK	9472
PAGE	370
DATE OF DEED	06/06/1995
DATE OF RECORD	06/07/1995
CONSIDERATION	$329,762.50
TAX STAMPS	$3,297.63

AREAS	SF
DEED	---
CALCULATED	24,000
ADVERSES	---
LEGAL R/W	---
EFFECTIVE	24,000
TOTAL REQ'D R/W	---
TOTAL RESIDUE	24,000
RESIDUE LT	24,000
RESIDUE RT	---

REQUIRED AREA	SF
TEMP CONSTR EASEMENT	172

VERIFICATION DATE 6/10/2024
DRAWN BY MBI
SCALE AS SHOWN

RIGHT-OF-WAY CLAIM INFORMATION
BOROUGH OF SWISSVALE

ROUTE WASHINGTON AVENUE SECTION --- BOROUGH OF SWISSVALE, ALLEGHENY COUNTY
PARCEL NO. 5 SHEET NO. 9 CLAIM NO.
PROPERTY OWNER(S) JOHN CHIEFFA

GRANTOR(S) ROSARIO J. GRANA AND SUSAN M. GRANA, HUSBAND AND WIFE

TAX PARCEL NO.	0178-G-00307-0000-00
DEED BOOK	15833
PAGE	248
DATE OF DEED	12/09/2014
DATE OF RECORD	12/19/2014
CONSIDERATION	$63,000.00
TAX STAMPS	$1,260.00

AREAS	SF
DEED	---
CALCULATED	2,400
ADVERSES	---
LEGAL R/W	---
EFFECTIVE	2,400
TOTAL REQ'D R/W	---
TOTAL RESIDUE	2,400
RESIDUE LT	2,400
RESIDUE RT	---

REQUIRED AREA	SF
TEMP CONSTR EASEMENT	33

VERIFICATION DATE 6/10/2024
DRAWN BY MBI
SCALE AS SHOWN

RIGHT-OF-WAY CLAIM INFORMATION
BOROUGH OF SWISSVALE

ROUTE WASHINGTON AVENUE SECTION --- BOROUGH OF SWISSVALE, ALLEGHENY COUNTY
PARCEL NO. 6 SHEET NO. 9 CLAIM NO.
PROPERTY OWNER(S) WILLIE H. WEBER, A MARRIED INDIVIDUAL

GRANTOR(S) JOHNNA CARIK, AS EXECUTOR OF THE ESTATE OF GERALD WEBER, DECEASED

TAX PARCEL NO.	0178-G-00308-0000-00
DEED BOOK	19510
PAGE	454
DATE OF DEED	11/29/2023
DATE OF RECORD	12/01/2023
CONSIDERATION	$0.00
TAX STAMPS	EXEMPT

AREAS	SF
DEED	---
CALCULATED	9100
ADVERSES	---
LEGAL R/W	---
EFFECTIVE	9100
TOTAL REQ'D R/W	---
TOTAL RESIDUE	9100
RESIDUE LT	9100
RESIDUE RT	---

REQUIRED AREA	SF
TEMP CONSTR EASEMENT	855

VERIFICATION DATE 6/10/2024
DRAWN BY MBI
SCALE AS SHOWN

RIGHT-OF-WAY CLAIM INFORMATION
BOROUGH OF SWISSVALE

ROUTE WASHINGTON AVENUE SECTION --- BOROUGH OF SWISSVALE, ALLEGHENY COUNTY
PARCEL NO. 8 SHEET NO. 9 CLAIM NO.
PROPERTY OWNER(S) ZITELLI MANAGEMENT CORPORATION

GRANTOR(S) JOHN F. ZITELLI, AN INDIVIDUAL

TAX PARCEL NO.	0178-G-00260-0000-00
	0178-G-00264-0000-00
DEED BOOK	18664
PAGE	352
DATE OF DEED	08/30/2021
DATE OF RECORD	11/01/2021
CONSIDERATION	$1.00
TAX STAMPS	EXEMPT

AREAS	SF
DEED	---
CALCULATED	18,320
ADVERSES	---
LEGAL R/W	---
EFFECTIVE	18,320
TOTAL REQ'D R/W	967
TOTAL RESIDUE	17,363
RESIDUE LT	---
RESIDUE RT	17,363

REQUIRED AREA	SF
RIGHT OF WAY	967
TEMP CONSTR EASEMENT	5,703

VERIFICATION DATE 6/10/2024
DRAWN BY MBI
SCALE AS SHOWN

RIGHT-OF-WAY CLAIM INFORMATION
BOROUGH OF SWISSVALE

ROUTE WASHINGTON AVENUE SECTION --- BOROUGH OF SWISSVALE, ALLEGHENY COUNTY
PARCEL NO. 10 SHEET NO. 9 CLAIM NO.
PROPERTY OWNER(S) NORFOLK SOUTHERN RAILWAY COMPANY, SUCCESSOR THROUGH MERGER WITH PENNSYLVANIA LINES, LLC, DATED AUGUST 27, 2004
GRANTOR(S) CONSOLIDATED RAIL CORPORATION, A PENNSYLVANIA CORPORATION

TAX PARCEL NO.	0178-D-00330-0000-00
DEED BOOK	10588
PAGE	096
DATE OF DEED	05/19/1999
DATE OF RECORD	08/18/1999
CONSIDERATION	$11,661,624.00
TAX STAMPS	$132,240.40

AREAS	AC/SF
DEED	**
CALCULATED	---
ADVERSES	---
LEGAL R/W	---
EFFECTIVE	**
TOTAL REQ'D R/W	---
TOTAL RESIDUE	**
RESIDUE LT	**
RESIDUE RT	**

REQUIRED AREA	AC/SF
REQUIRED AERIAL EASEMENT	0.098/4,261

VERIFICATION DATE 6/10/2024
DRAWN BY MBI
SCALE AS SHOWN

** TOO INNUMERABLE TO CALCULATE

RIGHT-OF-WAY CLAIM INFORMATION
BOROUGH OF SWISSVALE

ROUTE WASHINGTON AVENUE SECTION --- BOROUGH OF SWISSVALE, ALLEGHENY COUNTY
PARCEL NO. 11 SHEET NO. 9 CLAIM NO.
PROPERTY OWNER(S) PORT AUTHORITY OF ALLEGHENY COUNTY, A BODY CORPORATE AND POLITIC ORGANIZED AND EXISTING UNDER THE LAWS OF THE COMMONWEALTH OF PENNSYLVANIA
GRANTOR(S) NORFOLK SOUTHERN RAILWAY COMPANY, A VIRGINIA CORPORATION

TAX PARCEL NO.	***
DEED BOOK	12206
PAGE	93
DATE OF DEED	09/23/2004
DATE OF RECORD	09/28/2004
CONSIDERATION	$7,500,000.00
TAX STAMPS	EXEMPT

AREAS	AC
DEED	11.110
CALCULATED	---
ADVERSES	---
LEGAL R/W	---
EFFECTIVE	11.110
TOTAL REQ'D R/W	---
TOTAL RESIDUE	11.110
RESIDUE LT	11.110
RESIDUE RT	---

REQUIRED AREA	AC/SF
REQUIRED AERIAL EASEMENT	0.020/864

VERIFICATION DATE 6/10/2024
DRAWN BY MBI
SCALE AS SHOWN

*** TAX PARCEL NO.

0235-N-00001-0000-00	0176-D-00058-0000-00	0176-M-00138-0000-00
0176-D-00043-0000-00	0176-D-00059-0000-00	0176-M-00190-0000-00
0176-D-00044-0000-00	0176-D-00061-0000-00	0176-S-00155-0000-00
0176-D-00057-0000-00	0176-D-00062-0000-00	

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ALL REQUIRED RIGHT-OF-WAY FOR THIS PROJECT SHALL BE ACQUIRED IN FEE SIMPLE UNLESS OTHERWISE NOTED. AREAS, IF ANY, NOT TO BE ACQUIRED IN FEE SIMPLE SHALL BE ACQUIRED IN THE LESSER ESTATE OR INTEREST NOTED ON THE PLAN SHEET.

THIS RIGHT-OF-WAY CLAIM INFORMATION IS NOT TO BE SUBSTITUTED FOR A BOUNDARY SURVEY.

TEMPORARY CONSTRUCTION EASEMENT. AN EASEMENT TO USE THE LAND AS NECESSARY DURING CONSTRUCTION OF THE PROJECT. THE EASEMENT IS REQUIRED ONLY UNTIL THE CONSTRUCTION OR WORK INDICATED BY THE PLAN IS COMPLETED, UNLESS SOONER RELINQUISHED IN WRITING BY THE DEPARTMENT.

FOR AERIAL EASEMENT NOTES, SEE SHEET 3

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL RALPH WILLIAM GROMLEY LAND SURVEYOR NO. SU075368
REG PROF LAND SURVEYOR

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL CYDNEY JILL SEDLAR ENGINEER No. 070016
REG PROF ENGINEER

NORFOLK SOUTHERN
NORFOLK SOUTHERN RAILWAY COMPANY
PITTSBURGH
ENGINEERING DIVISION
OFFICE OF THE CHIEF ENGINEER – DESIGN AND CONSTRUCTION – ATLANTA, GA.

REV	BY	DATE	DESCRIPTION

DESIGN SWISSVALE, PENNSYLVANIA
TITLE BR0028818 BRIDGE PT344.91 WASHINGTON AVENUE
RIGHT-OF-WAY CLAIM BLOCKS

DSN JAH	PID No. D2122	HW 1290818-0H77	SHEET POST PT-344.91
DRN WHB	FILE No. BR0028818	DRAWING NUMBER PT-344.91 24 13	
CHK CAB	DATE 6/12/2024		

CADD FILE: N:_Washington_Ave_ROW_Claim Blocks.dgn

RIGHT-OF-WAY CLAIM INFORMATION
BOROUGH OF SWISSVALE

ROUTE WASHINGTON AVENUE SECTION --- BOROUGH OF SWISSVALE, ALLEGHENY COUNTY
PARCEL NO. 13 SHEET NO. 9 CLAIM NO.
PROPERTY OWNER(S) CRC REAL ESTATE LLC

GRANTOR(S) ELIZABETH M. BAZZONE AND MICHAEL L. BAZZONE, JR., HER HUSBAND

TAX PARCEL		AREAS	SF	REQUIRED AREA	SF
NO.	0178-H-00081-0000-00	DEED	—	TEMP CONSTR EASEMENT	8
DEED BOOK	15047	CALCULATED	933		
PAGE	117	ADVERSES	—		
DATE OF DEED	08/23/2012	LEGAL R/W	—		
DATE OF RECORD	10/23/2012	EFFECTIVE	933	VERIFICATION DATE	6/10/2024
CONSIDERATION	$30,000.00	TOTAL REQ'D R/W	—	DRAWN BY	MBI
TAX STAMPS	$600.00	TOTAL RESIDUE	933		
		RESIDUE LT	933	SCALE AS SHOWN	
		RESIDUE RT	—		

RIGHT-OF-WAY CLAIM INFORMATION
BOROUGH OF SWISSVALE

ROUTE WASHINGTON AVENUE SECTION --- BOROUGH OF SWISSVALE, ALLEGHENY COUNTY
PARCEL NO. 14 SHEET NO. 9 CLAIM NO.
PROPERTY OWNER(S) JOSEPH A MUTO, SINGLE

GRANTOR(S) PAUL SHELHAMMER AND KATHLEEN SHELHAMMER, HUSBAND AND WIFE

TAX PARCEL		AREAS	SF	REQUIRED AREA	SF
NO.	0178-H-00079-0000-00	DEED	—	TEMP CONSTR EASEMENT	148
DEED BOOK	11652	CALCULATED	8,581		
PAGE	529	ADVERSES	—		
DATE OF DEED	05/19/2003	LEGAL R/W	—		
DATE OF RECORD	05/22/2003	EFFECTIVE	8,581		
CONSIDERATION	$66,000.00	TOTAL REQ'D R/W	—	VERIFICATION DATE	6/10/2024
TAX STAMPS	EXEMPT	TOTAL RESIDUE	8,581	DRAWN BY	MBI
		RESIDUE LT	8,581		
		RESIDUE RT	—	SCALE AS SHOWN	

RIGHT-OF-WAY CLAIM INFORMATION
BOROUGH OF SWISSVALE

ROUTE WASHINGTON AVENUE SECTION --- BOROUGH OF SWISSVALE, ALLEGHENY COUNTY
PARCEL NO. 12 SHEET NO. 9 CLAIM NO.
PROPERTY OWNER(S) THOMAS A. DINARDO AND ELMIRA A. DINARDO, HIS WIFE

GRANTOR(S) (A) FRANK R. BENDINELLI AND MAE BENDINELLI, HIS WIFE
GRANTOR(S) (B) JOHN R. CONNOLLY, UNMARRIED

TAX PARCEL (A)		AREAS	SF	REQUIRED AREA	SF
NO.	0178-H-00080-0000-00	DEED	—	TEMP CONSTR EASEMENT	26
DEED BOOK	6247	CALCULATED	844		
PAGE	520	ADVERSES	—		
DATE OF DEED	04/28/1980	LEGAL R/W	—		
DATE OF RECORD	05/02/1980	EFFECTIVE	844	VERIFICATION DATE	6/10/2024
CONSIDERATION	$5,000.00	TOTAL REQ'D R/W	—	DRAWN BY	MBI
TAX STAMPS	$50.00	TOTAL RESIDUE	844		
		RESIDUE LT	844	SCALE AS SHOWN	
		RESIDUE RT	—		

TAX PARCEL (B)	
NO.	0178-H-00080-000A-00
DEED BOOK	3913
PAGE	739
DATE OF DEED	10/11/1961
DATE OF RECORD	10/11/1961
CONSIDERATION	$6,000.00
TAX STAMPS	CANCELLED

RIGHT-OF-WAY CLAIM INFORMATION
BOROUGH OF SWISSVALE

ROUTE WASHINGTON AVENUE SECTION --- BOROUGH OF SWISSVALE, ALLEGHENY COUNTY
PARCEL NO. 16 SHEET NO. 9 CLAIM NO.
PROPERTY OWNER(S) MARTIK PROPERTIES, LLP, A PENNSYLVANIA LIMITED LIABILITY PARTNERSHIP
GRANTOR(S) KARL R. ROGALLA, JR., MARRIED

TAX PARCEL		AREAS	SF	REQUIRED AREA	SF
NO.	0178-H-00082-0000-00	DEED	—	TEMP CONSTR EASEMENT	23
DEED BOOK	19591	CALCULATED	3,700		
PAGE	584	ADVERSES	—		
DATE OF DEED	03/01/2024	LEGAL R/W	—		
DATE OF RECORD	03/05/2024	EFFECTIVE	3,700		
CONSIDERATION	$450,000.00	TOTAL REQ'D R/W	—	VERIFICATION DATE	6/10/2024
TAX STAMPS	$4,500.00	TOTAL RESIDUE	3,700	DRAWN BY	MBI
		RESIDUE LT	—		
		RESIDUE RT	3,700	SCALE AS SHOWN	

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COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — RALPH WILLIAM GROMLEY — LAND SURVEYOR NO. SU075361
REG PROF LAND SURVEYOR

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — CYDNEY JILL SEDLAR — ENGINEER No. 070016
REG PROF ENGINEER

NORFOLK SOUTHERN RAILWAY COMPANY
PITTSBURGH
ENGINEERING DIVISION
OFFICE OF THE CHIEF ENGINEER – DESIGN AND CONSTRUCTION – ATLANTA, GA.

REV	BY	DATE	DESCRIPTION

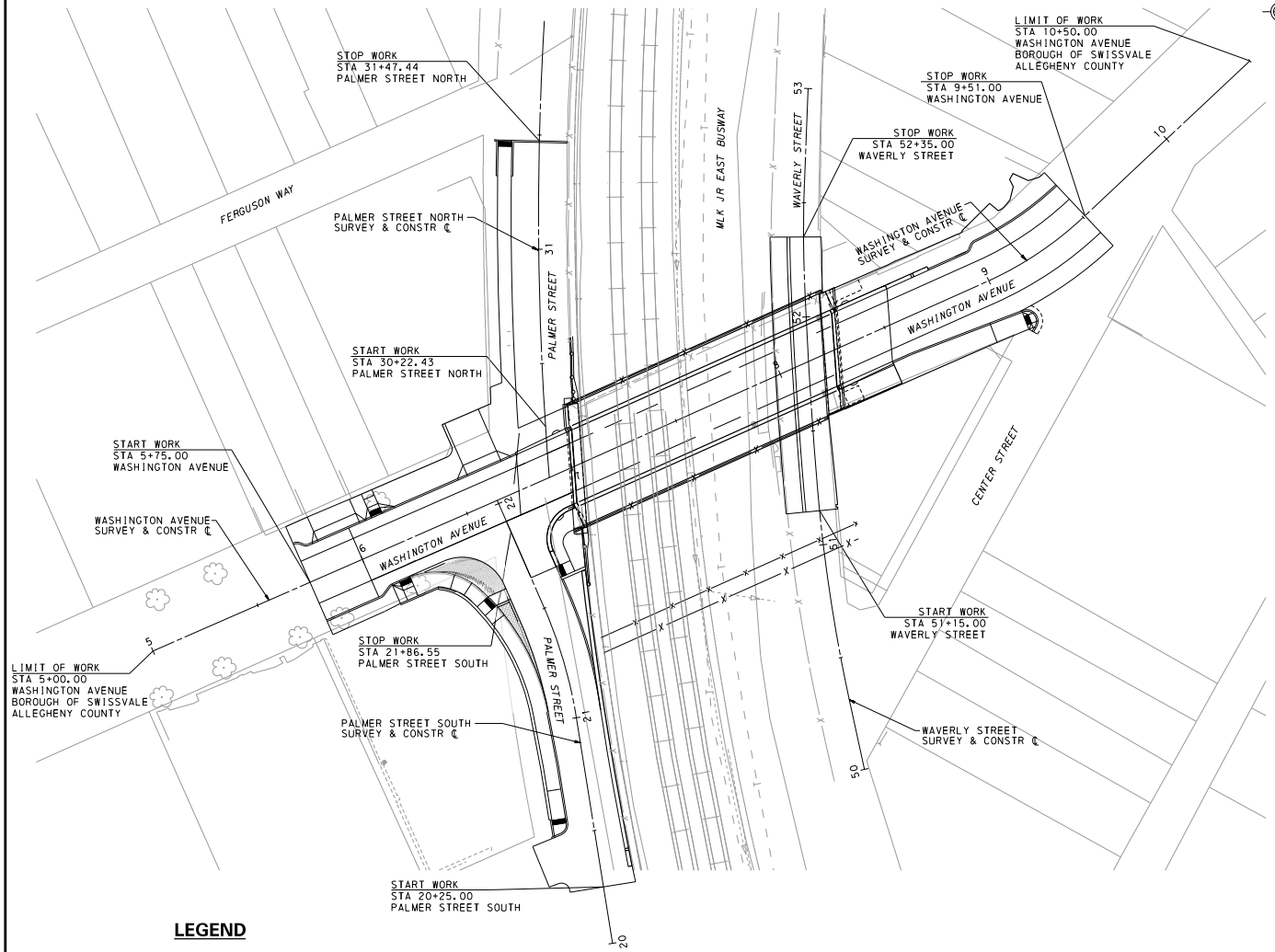
SWISSVALE, PENNSYLVANIA
BRIDGE BR0028818 BRIDGE PT344.91 WASHINGTON AVENUE
RIGHT-OF-WAY CLAIM BLOCKS

DSN	JAH	PID No.	D2122	WW	1290818-0H77	MILE POST	PT-344.91
DWN	WRB	FILE No.	BR0028818	DRAWING NUMBER			
CHK	CAB	DATE	6/12/2024		PT-344.91 24 14		

CADD FILE: NS_Washington_Ave_ROW_Claim Blocks.dgn

CADD FILE: NS_Washington_Ave_ROW_Claim Blocks.dgn

SIGNING AND PAVEMENT MARKING PLAN



LEGEND

W/24" -- WHITE PAVEMENT MARKING/WIDTH (INCHES)

-- EXISTING SIGN LOCATION

-- PROPOSED SIGN LOCATION

-- EXISTING SIGN TO REMAIN

-- EXISTING SIGN TO BE REMOVED

-- NEW SIGN INSTALLATION

INDEX MAP

SCALE

0 25 50 FEET

GENERAL NOTES

THIS WORK CONSISTS OF THE REMOVAL, FURNISHING, AND REPLACEMENT OF PAVEMENT MARKINGS; AND THE FURNISHING AND CONSTRUCTION OF NEW POST MOUNTED SIGNS.

THIS WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE FOLLOWING PENNSYLVANIA DEPARTMENT OF TRANSPORTATION PUBLICATIONS:

PENNDOT PUBLICATION 111, DATED AUGUST 2021, TRAFFIC CONTROL-PAVEMENT MARKINGS AND SIGNING STANDARDS. TC-8600 AND TC-8700 SERIES.

PENNDOT PUBLICATION 212, OFFICIAL TRAFFIC CONTROL DEVICES. (MARCH 2006)

PENNDOT PUBLICATION 35, APPROVED CONSTRUCTION MATERIALS (BULLETIN 15).

PENNDOT PUBLICATION 46, TRAFFIC ENGINEERING MANUAL.

PENNDOT PUBLICATION 408/2020, SPECIFICATIONS.

PENNDOT PUBLICATION 236, HANDBOOK OF APPROVED SIGNS, (NOVEMBER 2013).

THE SPECIAL PROVISIONS OF THE CONTRACT.

THE STANDARD DRAWINGS LISTED ON THE CONSTRUCTION PLAN.

MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), (2009 EDITION) AND ALL APPLICABLE SUPPLEMENTS.

THIS PROJECT HAS BEEN DESIGNED UNDER STANDARDS ESTABLISHED IN THE FEDERAL HIGHWAY ADMINISTRATION MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, DATED 2009 AND ALL APPLICABLE SUPPLEMENTS.

CONSTRUCTION DETAILS OTHER THAN THOSE SHOWN ON THESE DRAWINGS SHALL CONFORM TO THE FOLLOWING STANDARD DRAWINGS:

TC-8600 (13 SHEETS)	JUNE 13, 2013
TC-8702B (9 SHEETS)	JUNE 13, 2013

PAVEMENT MARKING NOTES

INSTALL PAVEMENT MARKINGS IN ACCORDANCE WITH THE DETAILS IN THESE DRAWINGS AND THE FEDERAL HIGHWAY ADMINISTRATION, "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES," LATEST EDITION, OR AS DIRECTED BY THE PROJECT REPRESENTATIVE.

APPLY ALL PAVEMENT MARKINGS AT THE WIDTH INDICATED.

IN AREAS OF NEW CONSTRUCTION, PROVIDE HOT THERMOPLASTIC PAVEMENT MARKINGS.

FOR PLACEMENT OF LEGENDS, STOP BARS AND CROSSWALK LINES USE HOT THERMOPLASTIC PAVEMENT MARKINGS.

REFER TO MANUFACTURER'S RECOMMENDATIONS REGARDING SPECIFIC APPLICATION REQUIREMENTS.

ALL CROSSWALKS ARE TO BE A MINIMUM OF 10' WIDE.

SIGNING NOTES

FOR NAMES, ADDRESSES AND LOCATIONS OF UTILITY FACILITIES, SEE ROADWAY CONSTRUCTION PLANS.

REMOVE ALL EXISTING WARNING, REGULATORY, AND INFORMATIONAL SIGNING WITHIN THE PROJECT LIMITS UNLESS OTHERWISE NOTED OR AS DIRECTED. EXISTING SECONDARY SIGNING CONSISTS OF ALL POST, POLE, AND STRUCTURE MOUNTED SIGNS. THE COST OF REMOVAL OF WARNING, REGULATORY, AND INFORMATIONAL SIGNING IS CONSIDERED INCIDENTAL TO THE PROJECT.

NUMBER OF POSTS ON POST MOUNTED SIGNS TO BE DETERMINED AS PER PENNDOT PUBLICATION 111.

SIGNS AND SIGN MOUNTING ARE NOT TO SCALE.

SHEET INDEX BLOCK

DESCRIPTION	SHEET
TITLE SHEET, INDEX MAP, SHEET INDEX BLOCK AND GENERAL NOTES	1
ITEM TABULATION AND QUANTITIES	2
GENERAL PLAN	3

PLANS PREPARED BY
MICHAEL BAKER INTERNATIONAL
MOON TOWNSHIP, PA

Michael Baker INTERNATIONAL
AIRSIDE BUSINESS PARK
100 AIRSIDE DRIVE
MOON TOWNSHIP, PA 15108
Phone: (412) 269-6300

NORFOLK SOUTHERN RAILWAY COMPANY
PITTSBURGH
OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER – DESIGN AND CONSTRUCTION – ATLANTA, GA

REV	BY	DATE	DESCRIPTION

LOCATION: SWISSVALE, PENNSYLVANIA

TITLE: BR0028818 BRIDGE PT344.91 WASHINGTON AVENUE AND WAVERLY STREET
TITLE SHEET, INDEX MAP, SHEET INDEX BLOCK AND GENERAL NOTES

DSN	JPS	PROJ No.	D2122	DIV	1290818-OH77
DWN	AS	PROJ No.	BR0028818		
CHK	FVC	DATE	9/5/2024		

LINE OF RAIL: PITTSBURGH DIVISION
MILEPOST: PT-344.91
DRAWING NUMBER: PT-344.91 24 1

CADD FILE: NS_Washington_Ave_Title

ITEM NO 0931-0003
POST MOUNTED SIGNS, TYPE B, STEEL SQUARE POST

DESIGNATION	SIZE WxH (IN x IN)	QUANTITY	SQ FEET EACH	TOTAL SQ FEET	REMARKS
R1-1	30"x30"	2	5.20	10.40	
R6-1L	36"x12"	3	3.00	9.00	
R10-15L	30"x30"	1	6.25	6.25	
R8-3	12"x12"	2	1.00	2.00	
OM-3L	12"x36"	2	3.00	6.00	
OM-3R	12"x36"	1	3.00	3.00	
W11-2	30"x30"	4	6.25	25.00	
W12-2	36"x36"	2	9.00	18.00	
			TOTAL	79.65	

ITEM NO 0935-0001
POST MOUNTED SIGNS, TYPE F

DESIGNATION	SIZE WxH (IN x IN)	QUANTITY	SQ FEET EACH	TOTAL SQ FEET	REMARKS
D3-1	24"x6"	1	1.00	1.00	
D3-1	42"x6"	2	1.75	1.75	
R3-1	24"x24"	1	4.00	4.00	
R7-201AP	12"x6"	2	0.50	1.00	
R8-3A	24"x24"	1	4.00	4.00	
R12-1-2	24"x12"	2	2.00	4.00	
W4-4P	30"x15"	1	3.13	3.13	
W16-103P	24"x18"	1	3.00	3.00	
W16-7P	24"x12"	4	2.00	8.00	
			TOTAL	29.88	

TABULATION OF PAVEMENT MARKINGS

LOCATION	24" WHITE HOT THERMOPLASTIC PAVEMENT MARKINGS
ITEM NUMBER	0960 0021
UNIT	LF
ROUTE	
WASHINGTON AVENUE	50
CENTER STREET	50
PALMER STREET	50
TOTAL	150

MISCELLANEOUS POST MOUNTED SIGN ITEMS

ITEM NUMBER	DESCRIPTION	UNIT	TOTAL QUANTITY	REMARKS
0941-0001	RESET POST MOUNTED SIGNS, TYPE B	EACH	2	
0945-0001	RESET POST MOUNTED SIGNS, TYPE F	EACH	1	
0971-0001	REMOVE POST MOUNTED SIGNS, TYPE B	EACH	2	
0975-0001	REMOVE POST MOUNTED SIGNS, TYPE F	EACH	1	

PLANS PREPARED BY
MICHAEL BAKER INTERNATIONAL
MOON TOWNSHIP, PA

FRANK VINCENT CIPPEL — PROFESSIONAL ENGINEER — COMMONWEALTH OF PENNSYLVANIA

Michael Baker INTERNATIONAL

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NORFOLK SOUTHERN

NORFOLK SOUTHERN RAILWAY COMPANY

PITTSBURGH
ENGINEERING DIVISION
OFFICE OF THE CHIEF ENGINEER – DESIGN AND CONSTRUCTION – ATLANTA, GA.

REV.	BY	DATE	DESCRIPTION

LOCATION: SWISSVALE, PENNSYLVANIA

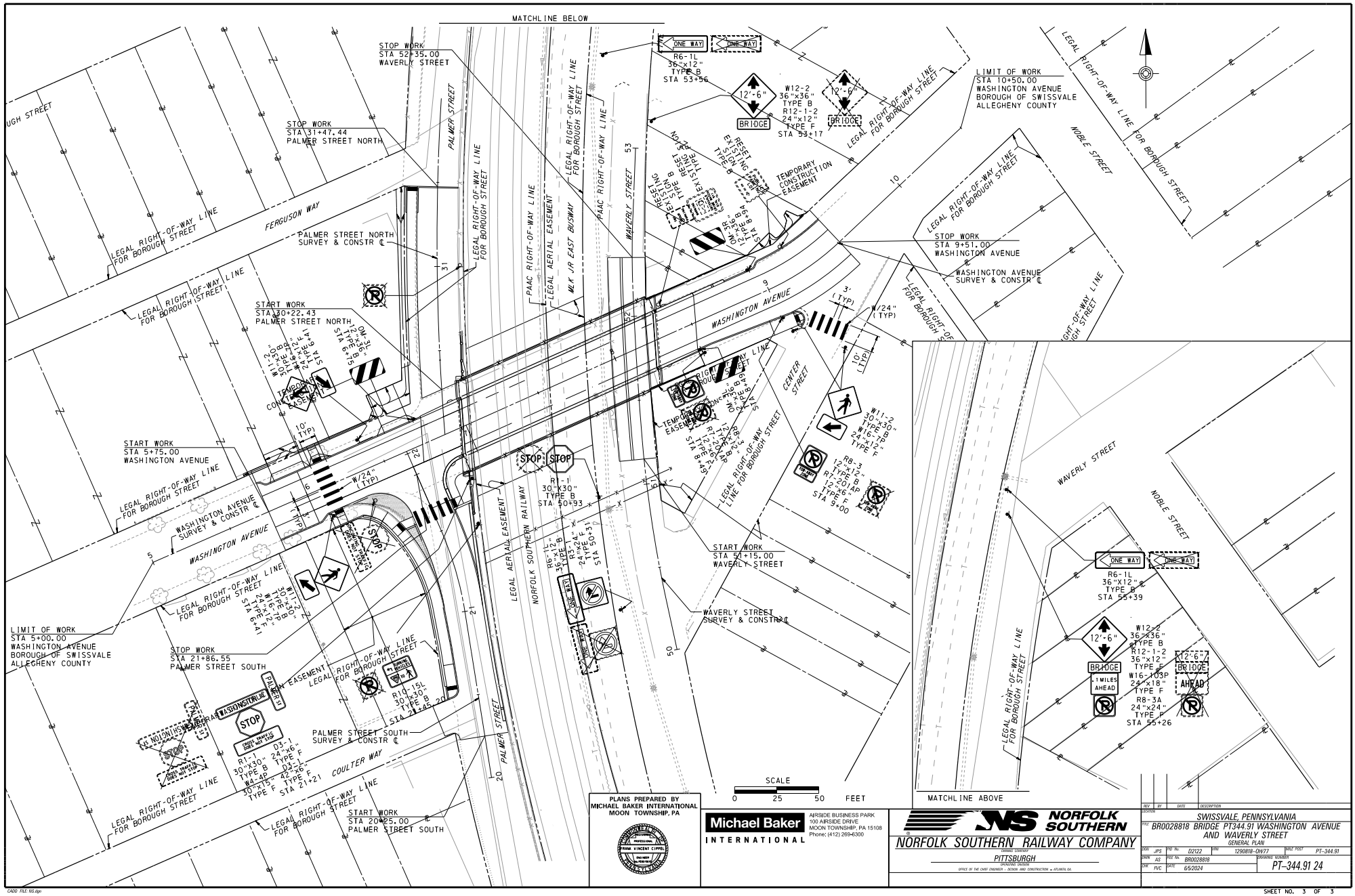
TITLE: BR0028818 BRIDGE PT344.91 WASHINGTON AVENUE AND WAVERLY STREET
ITEM TABULATION AND QUANTITIES

DSN	JPS	PID No.	D2122	DIV.	1290818-0N177
DWN	JPS	FILE No.	BR0028818		
CHK	TVC	DATE	6/5/2024		

DIVISION: PITTSBURGH DIVISION
MILE POST: PT-344.91
DRAWING NUMBER: PT-344.91 24

pw_fhc_QTY.dgn

CADD FILE: NS_Washington_Ave_QTY.dgn



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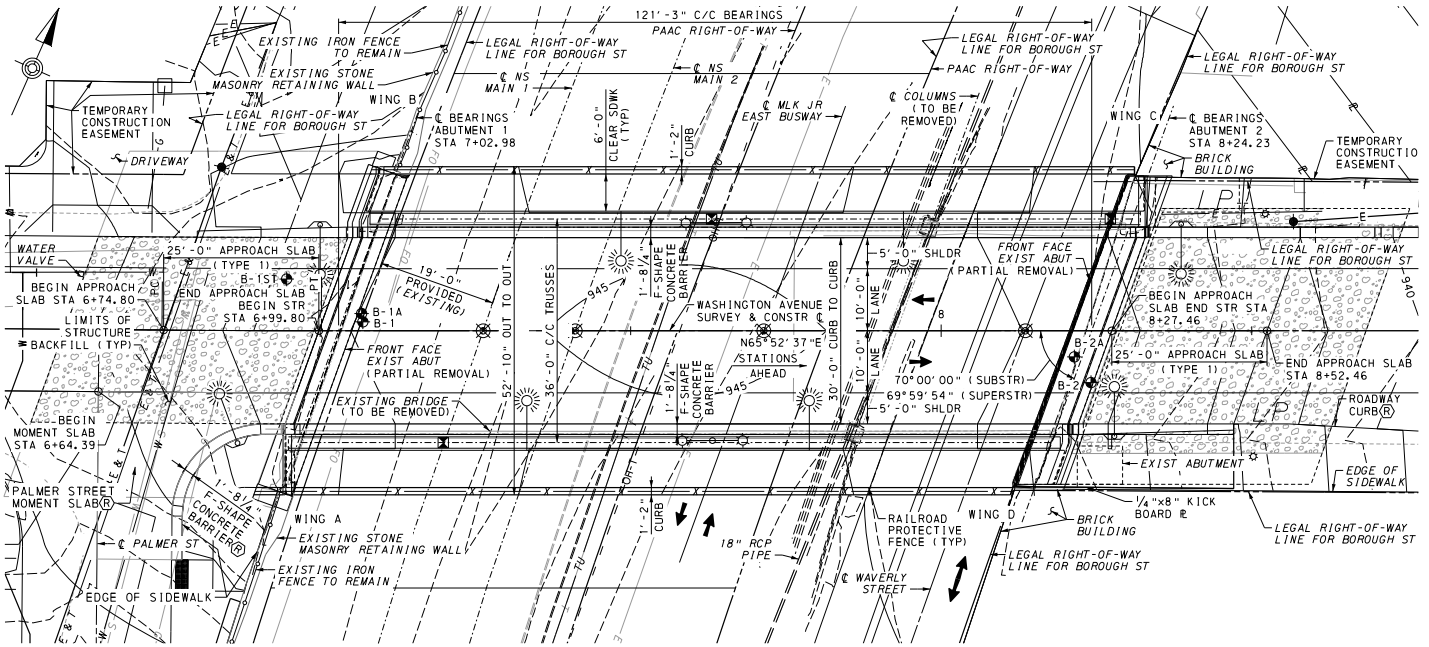
REV.	BY	DATE	DESCRIPTION

SWISSVALE, PENNSYLVANIA
BR0028818 BRIDGE PT344.91 WASHINGTON AVENUE AND WAVERLY STREET
GENERAL PLAN

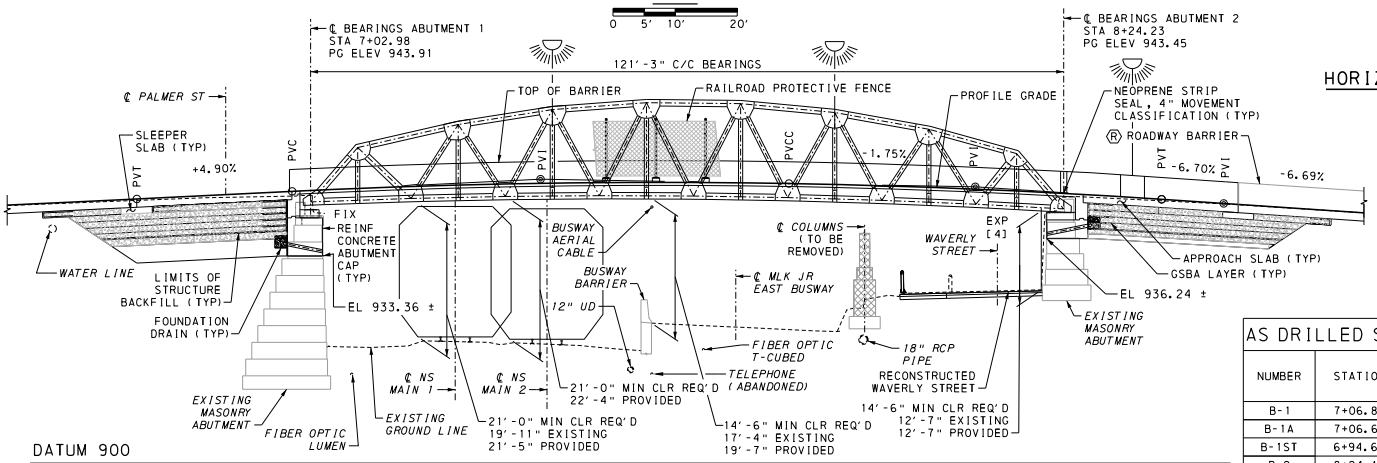
DSN	JPS	PID No.	D2122	MN	1290818-0N177	SALE POST	PT-344.91
DWN	AS	FILE No.	BR0028818	DRAWING NUMBER			
CHK	FVC	DATE	6/5/2024		PT-344.91 24		

CADD FILE: NS.dgn



PLAN

0 5' 10' 20'



DATUM 900

ELEVATION

0 5' 10' 20'

WASHINGTON AVE VERTICAL CURVE DATA

+4.90% ○ -1.75%		-1.75% ○ -6.70%	
PVI STA	= 7+40.00	PVI STA	= 8+10.00
PVI ELEV	= 945.73'	PVI ELEV	= 944.50
VC	= 80.00'	VC	= 60.00'
MO	= -0.67'	MO	= -0.37'

HORIZONTAL CURVE DATA

PI STA = 6+87.37
△ = 0°29'26" LT
D = 1°54'35"
T = 12.85'
L = 25.69'
R = 3000.00'
E = 0.03'

AS DRILLED STRUCTURE BORINGS

NUMBER	STATION	OFFSET	TOP OF HOLE ELEV
B-1	7+06.88	1.43' LT	943.17
B-1A	7+06.68	2.77' LT	943.13
B-1ST	6+94.60	8.33' LT	942.72
B-2	8+24.12	8.34' RT	942.78
B-2A	8+21.44	4.21' RT	942.87

CLASSIFICATION OF EARTHWORK FOR STRUCTURES	RC-11M	06/01/2010
BACKFILL AT STRUCTURES	RC-12M	11/01/2022
GEOSYNTHETIC STABILIZED BRIDGE APPROACH	RC-15M	11/01/2022
CONCRETE PAVEMENT JOINTS	RC-20M	11/01/2022
PROTECTIVE FENCE	BC-701M	11/23/2022
ELECTRICAL DETAILS	BC-721M	02/19/2021
LIGHTING POLE ANCHORAGE	BC-722M	02/19/2021
STEEL GRID REINFORCED CONCRETE BRIDGE DECK FOR BEAM BRIDGES	BC-726M	01/31/2019
PERMANENT METAL DECK FORMS	BC-732M	11/23/2022
ANCHOR SYSTEMS	BC-734M	02/19/2021
WALL CONSTRUCTION AND EXPANSION JOINT DETAILS	BC-735M	09/30/2016
REINFORCEMENT BAR FABRICATION DETAILS	BC-736M	11/23/2022
BRIDGE DRAINAGE	BC-751M	01/31/2019
CONCRETE DECK SLAB DETAILS	BC-752M	11/23/2022
STEEL GIRDER DETAILS	BC-753M	01/31/2019
BEARINGS	BC-756M	01/31/2019
NEOPRENE STRIP SEAL DAM FOR PRESTRESSED CONCRETE & STEEL I-BEAM BRIDGES	BC-767M	11/23/2022
TYPICAL WATERPROOFING AND EXPANSION DETAILS	BC-788M	11/23/2022
DESCRIPTION	DWG. NO.	APP. DATE

SUPPLEMENTAL DRAWINGS

NOTES:

1. FOR EXISTING BRIDGE INFORMATION, SEE GENERAL NOTES.
2. SEE TRUSS DETAILS AND APPROACH SLAB PLAN VIEWS FOR LIGHT POLE LOCATIONS.
3. SEE BARRIER AND SIDEWALK PLAN (SHEET 48) FOR JUNCTION BOX LOCATIONS.

WASHINGTON AVENUE POINTS OF INTERSECTION:

- ⊗ WASHINGTON AVENUE ℄ STA 7+26.25 & ℄ NS MAIN 1
- ⊗ WASHINGTON AVENUE ℄ STA 7+41.08 & ℄ NS MAIN 2
- ⊗ WASHINGTON AVENUE ℄ STA 7+71.44 & ℄ MLK JR EAST BUSWAY
- ⊗ WASHINGTON AVENUE ℄ STA 8+13.56 & ℄ WAVERLY STREET

REFERENCES:

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2. INDEX OF DRAWINGS	02
3. LOAD RATINGS	03

LEGEND:

- LIGHT POLE
- ℞ ROADWAY ITEM
- POINT OF MINIMUM VERTICAL CLEARANCE
- GSBA GEOSYNTHETIC STABILIZED BRIDGE APPROACH
- PVC POINT OF VERTICAL CURVATURE
- PVI POINT OF VERTICAL INTERSECTION
- PVCC POINT OF VERTICAL COMPOUND CURVE
- PVT POINT OF VERTICAL TANGENCY
- EXP EXPANSION DISC BEARINGS
- FIX FIXED DISC BEARINGS
- TRAFFIC DIRECTION
- [4] JOINT MOVEMENT DESIGNATION
- STRUCTURE BORING
- —G— EQUITABLE GAS LINE
- —W— PWSA WATER LINE
- —FO— FIBER OPTICS
- —FOU— UNDERGROUND FIBER OPTICS
- —E— ELECTRIC LINE
- —S— SEWER LINE
- —T— TELEPHONE LINE
- PIPE
- PROPOSED CONTOURS
- EXISTING CONTOURS
- TO BE REMOVED AS INDICATED
- SUBBASE
- STRUCTURE BACKFILL

REGISTERED PROFESSIONAL ENGINEER MATTHIAS STEIN PE095784 COMMONWEALTH OF PENNSYLVANIA

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OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

REV.	BY	DATE	DESCRIPTION

LOCATION: SWISSVALE, PENNSYLVANIA
TITLE: WASHINGTON AVENUE GENERAL PLAN AND ELEVATION

DSN MEM | PROJ NO. D2122 | VAN 1290818-OH77 | MILE POST PT-344.91
DWN EBENKTS | FILE NO. BR0028818 | DRAWING NUMBER PT-344.91 24 01
CHK RMS | DATE 08/16/2023

SHEET NO. 01 OF 58

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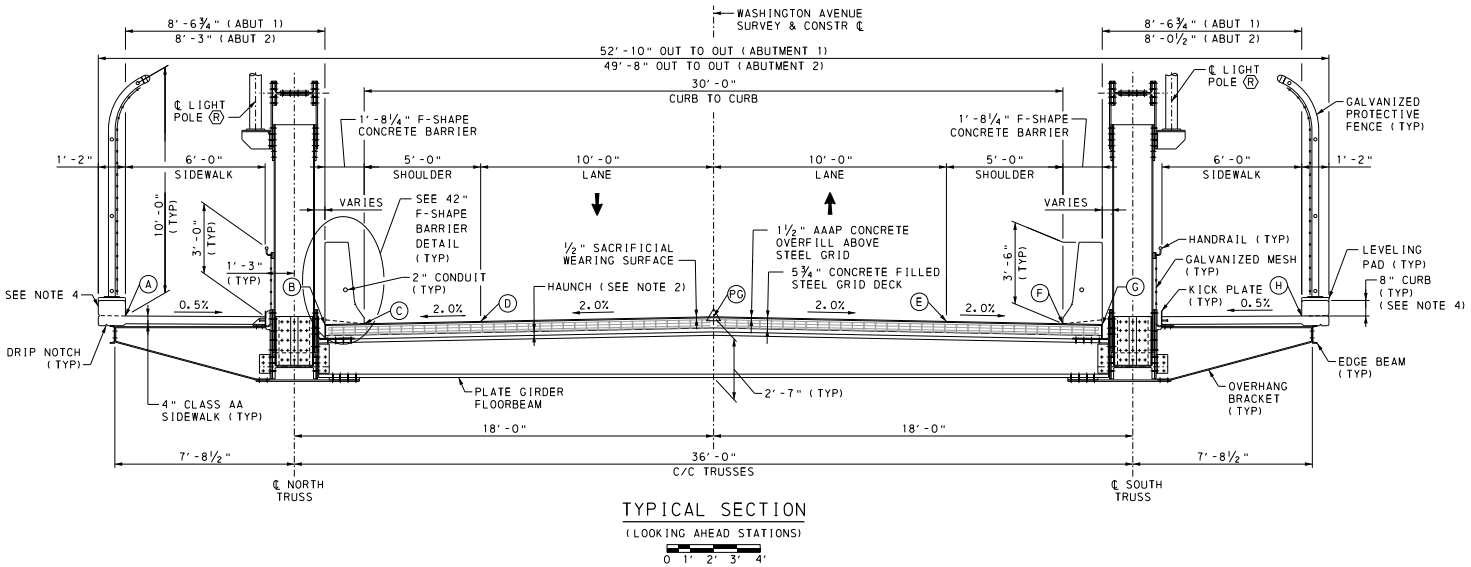

TYPICAL SECTION

(LOOKING AHEAD STATIONS)

0 1′ 2′ 3′ 4′

TOP OF DECK STATIONS AND ELEVATIONS AT BREAKPOINTS

POINTS OF INTEREST	STATION	A	B	C	D	PG	E	F	G	H
CL BRG RIGHT	6+96.43	943.68	943.26	943.29	943.39	943.59	943.39	943.29	943.26	943.68
	7+00.00	943.85	943.44	943.47	943.57	943.77	943.57	943.47	943.44	943.85
CL BRG CENTER	7+02.98	944.00	943.58	943.61	943.71	943.91	943.71	943.61	943.58	944.00
CL BRG LEFT	7+09.53	944.28	943.87	943.90	944.00	944.20	944.00	943.90	943.87	944.28
	7+10.00	944.30	943.88	943.92	944.02	944.22	944.02	943.92	943.88	944.30
0.1	7+15.11	944.50	944.08	944.12	944.22	944.42	944.22	944.12	944.08	944.50
	7+20.00	944.67	944.25	944.28	944.38	944.58	944.38	944.28	944.25	944.67
0.2	7+27.23	944.88	944.46	944.50	944.60	944.80	944.60	944.50	944.46	944.88
	7+30.00	944.95	944.53	944.57	944.67	944.87	944.67	944.57	944.53	944.95
0.3	7+39.36	945.14	944.72	944.75	944.85	945.05	944.85	944.75	944.72	945.14
	7+40.00	945.15	944.73	944.77	944.87	945.07	944.87	944.77	944.73	945.15
	7+50.00	945.27	944.85	944.88	944.98	945.18	944.98	944.88	944.85	945.27
0.4	7+51.48	945.28	944.86	944.89	944.99	945.19	944.99	944.89	944.86	945.28
	7+60.00	945.30	944.88	944.91	945.01	945.21	945.01	944.91	944.88	945.30
0.5	7+63.61	945.29	944.87	944.91	945.01	945.21	945.01	944.91	944.87	945.29
	7+70.00	945.25	944.83	944.86	944.96	945.16	944.96	944.86	944.83	945.25
0.6	7+75.73	945.18	944.76	944.80	944.90	945.10	944.90	944.80	944.76	945.18
	7+80.00	945.11	944.69	944.73	944.83	945.03	944.83	944.73	944.69	945.11
0.7	7+87.86	944.95	944.53	944.56	944.66	944.86	944.66	944.56	944.53	944.95
	7+90.00	944.89	944.48	944.51	944.61	944.81	944.61	944.51	944.48	944.89
0.8	7+99.98	944.60	944.18	944.21	944.31	944.51	944.31	944.21	944.18	944.60
	8+00.00	944.59	944.18	944.21	944.31	944.51	944.31	944.21	944.18	944.59
	8+10.00	944.21	943.80	943.83	943.93	944.13	943.93	943.83	943.80	944.21
0.9	8+12.11	944.12	943.70	943.74	943.84	944.04	943.84	943.74	943.70	944.12
CL BRG RIGHT	8+17.68	943.86	943.45	943.48	943.58	943.78	943.58	943.48	943.45	943.86
CL BRG CENTER/1.0	8+24.23	943.53	943.11	943.14	943.24	943.44	943.24	943.14	943.11	943.53
CL BRG LEFT	8+30.78	943.16	942.74	942.77	942.87	943.07	942.87	942.77	942.74	943.16

NOTES:

1. FOR MATERIAL PROPERTIES, REFER TO THE GENERAL NOTES.
2. THE HAUNCH IS 1.75" THICK AT FLOORBEAMS FB4, FB7, FB10, FB13, FB16, FB19, FB22, AND FB25. THE THICKNESS VARIES AT ALL OTHER FLOORBEAM LOCATIONS DUE TO TRUSS GEOMETRY. SEE THE SIDEWALK EDGE BEAM SHEET FOR FLOORBEAM DESIGNATION.
3. LIGHT POLES ARE LOCATED AT PANEL POINT 5 AND 5′ ONLY.
4. SIDEWALK CURBS SHOWN AT ABUTMENT 1. NO SIDEWALK CURBS AT ABUTMENT 2.

REFERENCES:

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REV	BY	DATE	DESCRIPTION

LOCATION: SWISSVALE, PENNSYLVANIA

TITLE: WASHINGTON AVENUE
TYPICAL SECTION & INDEX OF DRAWINGS

DSN MEM	PROJ NO. D2122	WBS 1290818-OH/77	SHEET POST PT-344.91		
DWN REMARKS	FILE NO. BR0028818	DRAWING NUMBER PT-344.91 24 02			
CHK MS	DATE 08/16/2023				

SHEET NO. 02 OF 58

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BRIDGE LOAD RATING WITH FUTURE WEARING SURFACE (LRFD)

ADTT: 30 (2023); 34 (2044)

TOP CHORD AND END POSTS		W SECTION					
		H20	HS20	ML-80	P-82	PHL-93	TK-527
INVENTORY RATING (IR)	LOCATION	NU7-NU7'	NU7-NU7'	NU7-NU7'	-	NU7-NU7'	NU7-NU7'
	LIMIT STATE	STR-I	STR-I	STR-I	-	STR-I	STR-I
	RATING FACTOR	2.07	1.86	3.02	-	1.69	2.91
OPERATING RATING (OR)	LOCATION	NU7-NU7'	NU7-NU7'	NU7-NU7'	NU5-NU7	NU7-NU7'	NU7-NU7'
	LIMIT STATE	STR-II	STR-II	STR-II	STR-II	STR-IA	STR-II
	RATING FACTOR	2.68	2.41	3.91	1.75	2.19	3.77
BOTTOM CHORD		W21X166					
		H20	HS20	ML-80	P-82	PHL-93	TK-527
INVENTORY RATING (IR)	LOCATION	NL8-NL6'	NL6'-NL4'	NL8-NL6'	-	NL6'-NL4'	NL6'-NL4'
	LIMIT STATE	STR-I	STR-I	STR-I	-	STR-I	STR-I
	RATING FACTOR	3.38	3.14	4.73	-	2.85	4.65
OPERATING RATING (OR)	LOCATION	NL8-NL6'	NL6'-NL4'	NL8-NL6'	NL6'-NL4'	NL6'-NL4'	NL6'-NL4'
	LIMIT STATE	STR-II	STR-II	STR-II	STR-II	STR-IA	STR-II
	RATING FACTOR	4.38	4.07	6.13	2.85	3.69	6.03
VERTICALS		W21X55					
		H20	HS20	ML-80	P-82	PHL-93	TK-527
INVENTORY RATING (IR)	LOCATION	NL1-NU1	NL1-NU1	NL1-NU1	-	NL1-NU1	NL1-NU1
	LIMIT STATE	STR-I	STR-I	STR-I	-	STR-I	STR-I
	RATING FACTOR	5.92	6.49	7.69	-	4.66	8.80
OPERATING RATING (OR)	LOCATION	NL1-NU1	NL1-NU1	NL1-NU1	NL1-NU1	NL1-NU1	NL1-NU1
	LIMIT STATE	STR-II	STR-II	STR-II	STR-II	STR-IA	STR-II
	RATING FACTOR	7.67	8.42	9.97	5.74	6.04	11.41
DIAGONALS		W SECTION					
		H20	HS20	ML-80	P-82	PHL-93	TK-527
INVENTORY RATING (IR)	LOCATION	NU3'-NL2'	NU3'-NL2'	NU3'-NL2'	-	NU3'-NL2'	NU3'-NL2'
	LIMIT STATE	STR-I	STR-I	STR-I	-	STR-I	STR-I
	RATING FACTOR	2.48	2.18	3.49	-	2.03	3.32
OPERATING RATING (OR)	LOCATION	NU3'-NL2'	NU3'-NL2'	NU3'-NL2'	NU3'-NL2'	NU3'-NL2'	NU3'-NL2'
	LIMIT STATE	STR-II	STR-II	STR-II	STR-II	STR-IA	STR-II
	RATING FACTOR	3.22	2.83	4.52	1.95	2.64	4.30
FLOORBEAMS		PLATE GIRDER					
		H20	HS20	ML-80	P-82	PHL-93	TK-527
INVENTORY RATING (IR)	LOCATION	36 FT	36 FT	36 FT	-	36 FT	36 FT
	LIMIT STATE	STR-I	STR-I	STR-I	-	STR-I	STR-I
	RATING FACTOR	2.60S	2.60S	4.04S	-	2.60S	4.04S
OPERATING RATING (OR)	LOCATION	36 FT	36 FT	36 FT	36 FT	36 FT	36 FT
	LIMIT STATE	STR-II	STR-II	STR-II	STR-II	STR-IA	STR-II
	RATING FACTOR	3.37S	3.37S	5.24S	4.43S	3.37S	5.24S

BRIDGE LOAD RATING WITHOUT FUTURE WEARING SURFACE (LRFD)

ADTT: 30 (2023); 34 (2044)

TOP CHORD AND END POSTS		W SECTION					
		H20	HS20	ML-80	P-82	PHL-93	TK-527
INVENTORY RATING (IR)	LOCATION	NU7-NU7'	NU7-NU7'	NU7-NU7'	-	NU7-NU7'	NU7-NU7'
	LIMIT STATE	STR-I	STR-I	STR-I	-	STR-I	STR-I
	RATING FACTOR	2.29	2.06	3.34	-	1.87	3.22
OPERATING RATING (OR)	LOCATION	NU7-NU7'	NU7-NU7'	NU7-NU7'	NU5-NU7	NU7-NU7'	NU7-NU7'
	LIMIT STATE	STR-II	STR-II	STR-II	STR-II	STR-IA	STR-II
	RATING FACTOR	2.97	2.67	4.33	1.93	2.42	4.18
BOTTOM CHORD		W21X166					
		H20	HS20	ML-80	P-82	PHL-93	TK-527
INVENTORY RATING (IR)	LOCATION	NL8-NL6'	NL6'-NL4'	NL8-NL6'	-	NL6'-NL4'	NL6'-NL4'
	LIMIT STATE	STR-I	STR-I	STR-I	-	STR-I	STR-I
	RATING FACTOR	3.58	3.32	5.00	-	3.02	4.93
OPERATING RATING (OR)	LOCATION	NL8-NL6'	NL6'-NL4'	NL8-NL6'	NL6'-NL4'	NL6'-NL4'	NL6'-NL4'
	LIMIT STATE	STR-II	STR-II	STR-II	STR-II	STR-IA	STR-II
	RATING FACTOR	4.63	4.31	6.49	3.01	3.91	6.39
VERTICALS		W21X55					
		H20	HS20	ML-80	P-82	PHL-93	TK-527
INVENTORY RATING (IR)	LOCATION	NL1-NU1	NL1-NU1	NL1-NU1	-	NL1-NU1	NL1-NU1
	LIMIT STATE	STR-I	STR-I	STR-I	-	STR-I	STR-I
	RATING FACTOR	5.98	6.57	7.78	-	4.71	8.90
OPERATING RATING (OR)	LOCATION	NL1-NU1	NL1-NU1	NL1-NU1	NL1-NU1	NL1-NU1	NL1-NU1
	LIMIT STATE	STR-II	STR-II	STR-II	STR-II	STR-IA	STR-II
	RATING FACTOR	7.75	8.51	10.08	5.80	6.11	11.54
DIAGONALS		W SECTION					
		H20	HS20	ML-80	P-82	PHL-93	TK-527
INVENTORY RATING (IR)	LOCATION	NU3'-NL2'	NU3'-NL2'	NU3'-NL2'	-	NU3'-NL2'	NU3'-NL2'
	LIMIT STATE	STR-I	STR-I	STR-I	-	STR-I	STR-I
	RATING FACTOR	2.67	2.34	3.75	-	2.19	3.57
OPERATING RATING (OR)	LOCATION	NU3'-NL2'	NU3'-NL2'	NU3'-NL2'	NU3'-NL2'	NU3'-NL2'	NU3'-NL2'
	LIMIT STATE	STR-II	STR-II	STR-II	STR-II	STR-IA	STR-II
	RATING FACTOR	3.46	3.04	4.86	2.10	2.84	4.63
FLOORBEAMS		PLATE GIRDER					
		H20	HS20	ML-80	P-82	PHL-93	TK-527
INVENTORY RATING (IR)	LOCATION	36 FT	36 FT	36 FT	-	36 FT	36 FT
	LIMIT STATE	STR-I	STR-I	STR-I	-	STR-I	STR-I
	RATING FACTOR	2.64S	2.64S	4.10S	-	2.64S	4.10S
OPERATING RATING (OR)	LOCATION	36 FT	36 FT	36 FT	36 FT	36 FT	36 FT
	LIMIT STATE	STR-II	STR-II	STR-II	STR-II	STR-IA	STR-II
	RATING FACTOR	3.42S	3.42S	5.32S	4.50S	3.42S	5.32S

NOTES:

1. BRIDGE LOAD RATINGS BASED ON THE LRFD METHOD.
2. FUTURE WEARING SURFACE (FWS) OF 30 LBS PER SQUARE FOOT.
3. NOTES: "M", "S", AND "SM" DENOTE THAT MOMENT, SHEAR, AND SHEAR/MOMENT INTERACTION CONTROL THE RATING FACTOR, RESPECTIVELY.
4. FOR FLOORBEAMS, DISTRIBUTION FACTORS ARE NOT USED TO DETERMINE THE LIVE LOAD EFFECTS. THE VEHICULAR LOADS ARE MOVED TRANSVERSELY ACROSS THE FLOORBEAM TO OBTAIN THE MAXIMUM EFFECTS.

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REV.	BY	DATE	DESCRIPTION

LOCATION: SWISSVALE, PENNSYLVANIA
TITLE: WASHINGTON AVENUE
RATING TABLES WITH & WITHOUT FWS

DSN MEM | ROW NO. D2122 | VAN 1290818-OH77 | WBS POST PT-344.91
DWN MEM | FILE NO. BR0028818 | DRAWING NUMBER PT-344.91 24 03
CHK CGF | DATE 08/16/2023

SHEET NO. 03 OF 58

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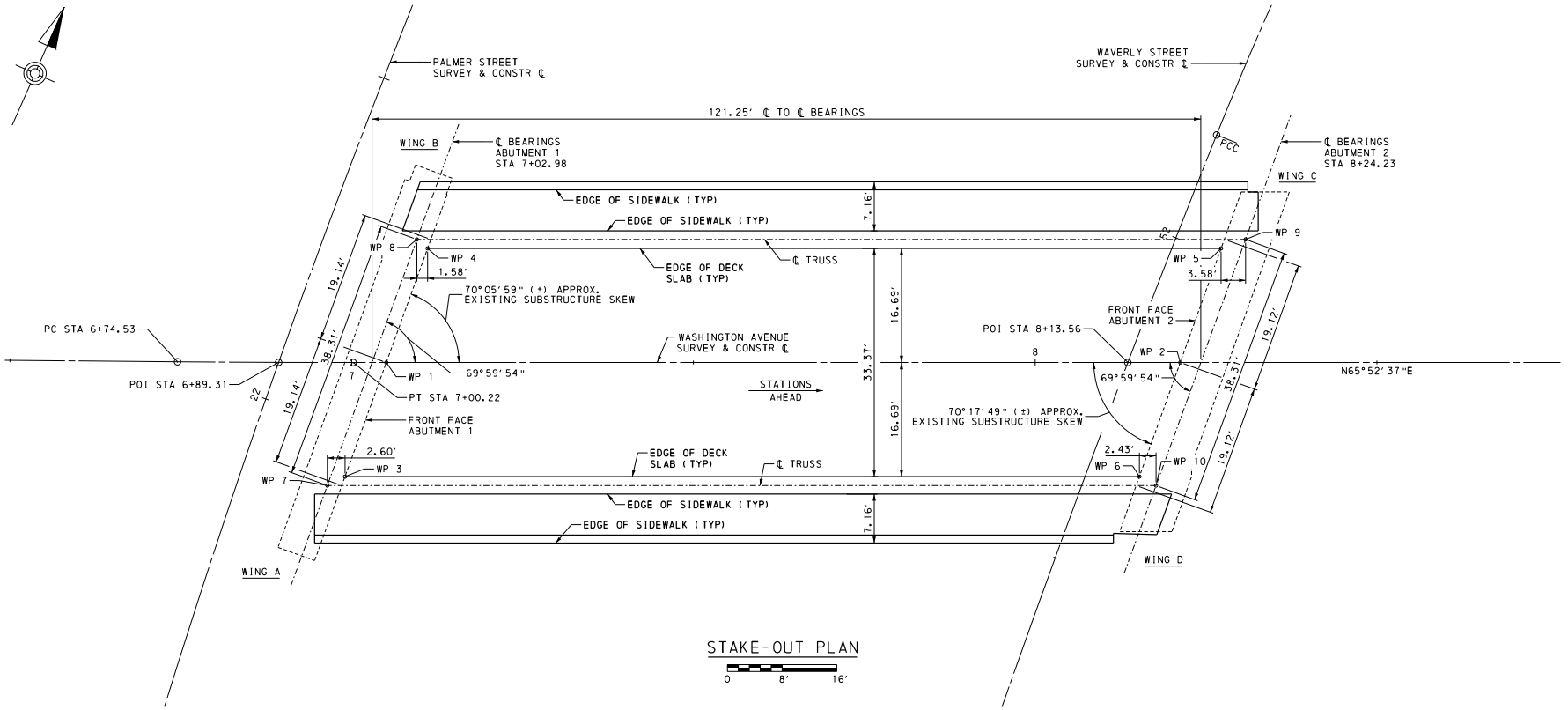

STAKE-OUT PLAN

0 8′ 16′

STAKE-OUT PLAN WORK POINTS

WORK POINT	STATION	OFFSET (FT)	COORDINATES	
			NORTHING (FT)	EASTING (FT)
WP 1	7+05.07	0.00	403317.9527	1373491.0827
WP 2	8+21.22	0.00	403365.4255	1373597.0952
WP 3	6+99.03	16.69 RT	403300.2537	1373492.3895
WP 4	7+11.11	16.69 LT	403335.6518	1373489.7759
WP 5	8+27.20	16.69 LT	403383.0980	1373595.7292
WP 6	8+15.25	16.69 RT	403347.7529	1373598.4611
WP 7	6+96.43	18.00 RT	403297.9939	1373490.5546
WP 8	7+09.53	18.00 LT	403336.2052	1373487.8001
WP 9	8+30.78	18.00 LT	403385.7596	1373598.4614
WP 10	8+17.68	18.00 RT	403347.5484	1373601.2158

CLOSURE DISTANCE

WORK POINT	DISTANCE (FT)
WP 3 TO WP 5	132.45
WP 4 TO WP 6	109.36

LEGEND:

WP WORK POINT
POI POINT OF INTERSECTION

NOTES:

1. PROJECT COORDINATES BASED ON PENNSYLVANIA STATE PLANE COORDINATE SYSTEM (SPSC NAD83, PA SOUTH ZONE 3702).
2. OFFSET IS MEASURED PERPENDICULAR TO SURVEY AND CONSTR ℄ WASHINGTON AVE, LOOKING AHEAD STATIONS.
3. FOUR (4) PLACE COORDINATES ARE USED FOR COMPUTATIONAL PURPOSES ONLY AND DO NOT IMPLY A PRECISION BEYOND TWO (2) DECIMAL POINTS.

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LOCATION: SWISSVALE, PENNSYLVANIA
TITLE: WASHINGTON AVENUE STAKEOUT PLAN

DSN LTS	PROJ NO. D2122	WBS 1290818-OH/77	MILE POST PT-344.91		
DWN LTS	FILE NO. BR0028818	DRAWING NUMBER PT-344.91 24 04			
CHK MS	DATE 08/16/2023				

SHEET NO. 04 OF 58

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GENERAL NOTES

DESIGN SPECIFICATIONS:

AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS 8TH EDITION 2017, AND AS SUPPLEMENTED BY PENNDOT DESIGN MANUAL, PART 4, STRUCTURES, DECEMBER 2019 EDITION (INCLUDING LATEST REVISIONS).

LIVE LOAD DISTRIBUTION TO TRUSSES IS BASED UPON 3-DIMENSIONAL FINITE ELEMENT ANALYSIS.

LIVE LOAD DISTRIBUTION TO FLOORBEAMS IS BASED UPON DM-4 DISTRIBUTION FACTORS.

DESIGN IS IN ACCORDANCE WITH THE LRFD METHOD.

DESIGN LIVE LOADS:

PHL-93 OR P-82 (204 KIP PERMIT LOAD).

FATIGUE DESIGN IS BASED ON THE FOLLOWING:
STEEL STRUCTURE: ADTT 19 (2044) (ONE-DIRECTIONAL)

DEAD LOADS:

INCLUDES A SURFACE AREA DENSITY OF 0.030 KSF FOR FUTURE WEARING SURFACE ON THE DECK SLAB.

INCLUDES A SURFACE AREA DENSITY OF 0.015 KSF FOR PERMANENT METAL DECK FORMS WHICH TAKES INTO ACCOUNT THE WEIGHT OF THE FORM, PLUS THE WEIGHT OF THE CONCRETE IN THE VALLEYS OF THE FORMS FOR THE SIDEWALK SLAB.

GENERAL:

PROVIDE MATERIALS AND PERFORM WORK IN ACCORDANCE WITH SPECIFICATIONS PUBLICATION 408/2020, CHANGE NO. 8, ANSI/AASHTO/AWS D1.5/D1.5M: 2015 BRIDGE WELDING CODE, AND THE CONTRACT SPECIAL PROVISIONS (USE AASHTO/AWS D1.1/D1.1M: 2008 FOR WELDING NOT COVERED IN AASHTO/AWS D1.5/D1.5M: 2008) AND CONTRACT SPECIAL PROVISIONS.

STATIONS AND ELEVATIONS ARE GIVEN IN FEET UNLESS OTHERWISE NOTED.

ALL DIMENSIONS SHOWN ARE HORIZONTAL, EXCEPT AS NOTED.

SUPERSTRUCTURE DIMENSIONS SHOWN ARE FOR A NORMAL TEMPERATURE OF 68 DEGREES F.

SITE CLASS IS NOT CLASS E.

PLACE ABUTMENT BACKWALLS UP TO A CONSTRUCTION JOINT BELOW THE LEVEL OF THE BOTTOM OF THE DECK SLAB PRIOR TO CONSTRUCTION OF THE DECK.

PLACE CHEEKWALL AND BACKWALL CONCRETE AFTER TRUSSES ARE SET IN POSITION.

DO NOT USE ADHESIVE ANCHORS IN TENSION APPLICATION FOR PERMANENT INSTALLATIONS.

DO NOT USE ADHESIVE ANCHORS IN A SUSTAINED TENSION APPLICATION FOR TEMPORARY INSTALLATIONS, INCLUDING DURING CONSTRUCTION.

AN ACI CERTIFIED ANCHOR INSTALLER IS REQUIRED FOR THE INSTALLATION OF ADHESIVE ANCHORS FOR TEMPORARY INSTALLATIONS, INCLUDING DURING CONSTRUCTION OF ABUTMENT AND WINGWALL CAPS. ANY ADDITIONAL LOCATIONS MUST BE APPROVED BY THE ENGINEER.

CONCRETE:

PROVIDE 2 INCHES CONCRETE COVER ON REINFORCEMENT BARS, EXCEPT AS NOTED.

USE CLASS AAAP CEMENT CONCRETE IN THE CONCRETE IN THE GRID DECK AND OVERFILL FOR THE GRID DECK.

USE CLASS AA CEMENT CONCRETE IN BARRIERS.

USE CLASS AA CEMENT CONCRETE IN SIDEWALKS, SLEEPER SLABS, TYPE 1 APPROACH SLABS, ABUTMENT BACKWALLS AND CHEEKWALLS.

USE CLASS A CONCRETE IN ABUTMENTS.

SUBSTITUTE A HIGHER CLASS CONCRETE FOR A LOWER CLASS CONCRETE AT NO ADDITIONAL COST TO THE RAILROAD, IF APPROVED BY THE RAILROAD'S REPRESENTATIVE.

PREPARE BEARING AREAS AS SPECIFIED IN PUBLICATION 408, SECTION 1001.3(K)9.

PROVIDE A MINIMUM WIDTH OF 2 ½" AT 68 DEGREES F FOR STRIP SEAL INSTALLATIONS UNLESS OTHERWISE INDICATED.

ALTERNATE DECK PLACEMENT SEQUENCES ARE NOT PERMITTED.

USE EITHER PERMANENT METAL FORMS OR REMOVABLE FORMS TO CONSTRUCT THE SIDEWALK SLAB.

GRID DECK SLAB THICKNESS INCLUDES A ½ INCH INTEGRAL WEARING SURFACE, WHICH IS CONSTRUCTED AS PART OF THE CONCRETE OVERFILL FOR THE GRID DECK.

RAKE-FINISH ALL HORIZONTAL CONSTRUCTION JOINTS, EXCEPT AS INDICATED.

TEXTURIZE DECK AND APPROACH SLABS WITH LONGITUDINAL SAWED GROOVES.

DO NOT USE PRECAST BARRIERS AND DO NOT SLIP FORM BARRIERS.

PLACE CONCRETE IN THE BARRIERS IN THREE LIFTS WITH THE FIRST BEING 8 INCHES IN HEIGHT.

CHAMFER EXPOSED CONCRETE EDGES ¾ INCH BY ¾ INCH, EXCEPT AS NOTED.

PROVIDE A MAXIMUM SPACING OF 10 FT FOR MODIFIED DEFLECTION JOINTS ACROSS THE FULL LENGTH OF BRIDGE BARRIERS. SEAL DOWN THE REAR FACE OF MODIFIED DEFLECTION JOINTS WITH SILICONE JOINT SEALANT IN ADDITION TO THE FRONT FACE AND TOP AS SHOWN ON THE BARRIER DETAILS SHEET AND BC-752M. SEE THE BARRIER DETAILS SHEET IN BC-752M FOR ADDITIONAL NOTES AND DETAILS.

ALONG THE GUTTERLINES, DO NOT ATTACH BARRIER FORMS TO THE NEWLY PLACED CONCRETE DECK WITHIN THE WATER TABLE AREA (OUTSIDE OF THE BARRIER FORM).

APPLY PROTECTIVE COATING FOR REINFORCED CONCRETE SURFACES (PENETRATING SEALERS), IN ACCORDANCE WITH SECTION 1019, TO THE EXPOSED CONCRETE ROADWAY SURFACES, BARRIER FACES AND DOWN TO THE SIDEWALK DRIP NOTCH ON THE SUPERSTRUCTURE. LIMITS OF THE APPROACH SLAB INCLUDE THE EXPOSED ROADWAY SURFACES INCLUDING THE OUTSIDE EXPOSED SURFACE TO THE GROUND LINE, ABUTMENTS, AND WINGS.

PROVIDE EPOXY BONDING COMPOUND IN ACCORDANCE WITH PUBLICATION 408, SECTIONS 706.1 AND 1001.3(M).

SET ANCHOR BOLTS TO TEMPLATE OR IN PREFORMED HOLES. DO NOT DRILL UNLESS SPECIFICALLY INDICATED ON PLANS. FILL THE PREFORMED HOLES WITH NON-SHRINK GROUT. FILL THE CLEARANCE BETWEEN ANCHOR BOLTS AND HOLES IN MASONRY PLATES WITH APPROVED NON-HARDENING CAULKING COMPOUND CONFORMING TO PUBLICATION 408, SECTION 705.7.

REINFORCEMENT:

PROVIDE GRADE 60 REINFORCING STEEL BARS THAT MEET THE REQUIREMENTS OF ASTM A615, A996, OR A706. DO NOT WELD GRADE 60 REINFORCING STEEL BARS UNLESS SPECIFIED. DO NOT USE RAIL STEEL ASTM A996 REINFORCEMENT BARS IN BRIDGE PIERS, ABUTMENTS, FOOTINGS, PILES, BARRIERS OR WHERE BENDING OR WELDING OF THE REINFORCEMENT BARS IS INDICATED.

USE EPOXY-COATED REINFORCEMENT BARS IN ALL COMPONENTS.

SUBSTITUTE GALVANIZED REINFORCEMENT BARS FOR EPOXY COATED REINFORCEMENT BARS AT NO ADDITIONAL COST TO THE RAILROAD.

WELDING OF REINFORCEMENT BARS DURING FABRICATION OR CONSTRUCTION IS NOT PERMITTED UNLESS SPECIFIED.

WELDED DEFORMED WIRE REINFORCEMENT SHALL CONFORM TO ASTM A884 GRADE 75 AND SHALL BE PROVIDED IN SHEET FORM. REINFORCEMENT SHEETS SHALL BE MANUFACTURED WITH OVERHANG LENGTHS SUFFICIENT TO ACHIEVE A LAP SPLICE LENGTH EQUAL TO THE GREATER OF 12 INCHES OR THE LAP SPLICE DIMENSION SHOWN IN THE REBAR SCHEDULE FOR BAR OR EQUAL (OR GREATER) DIAMETER AND GRADE, UNLESS OTHERWISE NOTED. SHEETS AND ASSOCIATED LAP REGIONS SHALL BE INSTALLED COPLANAR SO AS TO NOT "STACK".

EPOXY COAT WELDED WIRE REINFORCEMENT IN ACCORDANCE WITH ASTM A884.

PROVIDE MINIMUM EMBEDMENT AND SPLICE LENGTHS IN ACCORDANCE WITH STANDARD DRAWING BC-736M, UNLESS OTHERWISE INDICATED.

REPAIR THE EPOXY COATING AS PER PUB 408 SECTION 1002.

STEEL NOTES:

PROVIDE STRUCTURAL STEEL CONFORMING TO AASHTO M270/M270M GRADE 50W (ASTM A709/A709M GRADE 50W) EXCEPT WHEN NOTED OTHERWISE.

COMPLETELY PREASSEMBLE EACH TRUSS LINE USING PROGRESSIVE ASSEMBLY IN ACCORDANCE WITH 1105.03(g). INCLUDE AS A MINIMUM THE END FLOORBEAM IN THE ASSEMBLY.

FABRICATE ALL MEMBERS OR MEMBER COMPONENTS DESIGNATED AS NONREDUNDANT STEEL TENSION MEMBERS (NSTM) TO CONFORM TO THE REQUIREMENTS OF DESIGN MANUAL, PART 4, SECTION 6, ARTICLE D6.6.2, AND AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, ARTICLE 6.6.2, AND PUBLICATION 408, SECTIONS 1105.02(a)5 AND 1105.03(m)9. MEET THE BASE METAL CHARPY V-NOTCH (CVN) REQUIREMENTS FOR ZONE 2.

DETAIL AND FABRICATE THE STEEL SUPERSTRUCTURE FOR STEEL DEAD LOAD FIT (SDLF).

DO NOT PROVIDE INTERMEDIATE TRUSS MEMBER SPLICES UNLESS SPECIFIED BY THE CONTRACT DRAWINGS.

DO NOT WELD TO THE TRUSS UNLESS NOTED ON THE DRAWINGS.

PERFORM CHARPY V-NOTCH (CVN) TESTS AS SPECIFIED IN PUBLICATION 408, SECTION 1105.02(a)5.

DO NOT USE FORM SUPPORT SYSTEMS THAT WILL CAUSE UNACCEPTABLE OVERSTRESS OR DEFORMATION TO PERMANENT BRIDGE MEMBERS.

ALL FASTENERS ARE ⅞ INCH DIAMETER AASHTO F3125 (ASTM A325), TYPE 1 BOLTS. MECHANICALLY GALVANIZE HIGH STRENGTH BOLTS IN ACCORDANCE WITH AASHTO M298 (ASTM B695) CLASS 50. PERFORM TENSION TEST OF GALVANIZED NUTS AND WASHERS USING THE SAME PROCESS AS THE BOLTS.

PROVIDE A CLASS B SLIP COEFFICIENT FOR THE CONTACT AREA OF BOLTED PARTS.

EXCLUDE BOLT THREADS FROM SHEAR PLANES UNLESS OTHERWISE NOTED. WHERE FEASIBLE PLACE BOLTS SO THAT THE THREADED ENDS ARE PROTECTED FROM THE WEATHER.

PROVIDE SWEDGE ANCHOR BOLTS CONFORMING TO ASTM F1554 WITH SWEDGES PRESSED (STAMPED) OR ROLLED IN. "ALL-THREAD" BOLTS ARE NOT PERMITTED.

THE COST TO FURNISH AND INSTALL ALL NUTS, BOLTS AND WASHERS IS INCIDENTAL TO THE FABRICATED STRUCTURAL STEEL ITEM.

USE THE TURN-OF-THE-NUT METHOD FOR BOLTED CONNECTIONS. AFTER OBTAINING SNUG FIT CONDITION, MARK WITH A STRAIGHT LINE ALL BOLTS, NUTS AND PLATES TO MONITOR ALL ROTATIONS ON BOLTS AND NUTS RELATIVE TO THE PLATES.

PROVIDE WELDED STUD SHEAR CONNECTORS MANUFACTURED FROM STEEL CONFORMING TO ASTM A108. INSTALL SHEAR CONNECTORS IN THE FIELD AFTER INSTALLATION OF THE DECK FORMS.

PROVIDE A FINISH COAT MATCHING FEDERAL COLOR NUMBER AMS-STD 26306. PROVIDE PAINT CHIPS TO THE RAILROAD REPRESENTATIVE FOR REVIEW AND APPROVAL PRIOR TO PERFORMING THE PAINTING OPERATIONS.

PROVIDE BRIDGE GRID DECK STEEL BARS AND SHAPES MANUFACTURED FROM STEEL CONFORMING TO AASHTO M270 GRADE 50 (ASTM A709 GRADE 50).

WELDING NOTES:

MAKE TACK WELDS WITH THE SAME TYPE OF ELECTRODE AND INCORPORATE IN THE FINAL WELD. NO OTHER TACK WELDING IS PERMITTED.

DO NOT MAKE WELDS BY MANUAL SHIELDED METAL ARC PROCESS FOR FLOORBEAM AND SIDEWALK BRACKET WELDS, SUCH AS FLANGE-TO-WEB WELDS OR FOR SHOP SPLICES OF WEBS AND FLANGES.

DO NOT WELD WHEN SURFACES PREPARED FOR WELDING ARE MOIST OR EXPOSED TO RAIN, SNOW, OR WIND, OR WHEN WELDERS ARE EXPOSED TO INCLEMENT CONDITIONS THAT WILL ADVERSELY AFFECT THE QUALITY OF THE WORK.

DO NOT WELD OR BURN WHEN THE TEMPERATURE IS BELOW 0 DEGREES FAHRENHEIT. PREHEAT AND MAINTAIN THE TEMPERATURE OF THE METAL TO AT LEAST 70 DEGREES FAHRENHEIT WHEN THE TEMPERATURE OF THE METAL IS BETWEEN 0 DEGREES FAHRENHEIT AND 32 DEGREES FAHRENHEIT DURING WELDING OR BURNING.

PREHEAT THE STEEL TO THE SPECIFIED MINIMUM TEMPERATURE FOR A DISTANCE EQUAL TO THE THICKNESS OF THE PART BEING WELDED, BUT NOT LESS THAN 3 INCHES IN ALL DIRECTIONS FROM THE POINT OF WELDING.

REMOVE ANY MOISTURE PRESENT AT POINT OF WELD BY APPLICATION OF HEAT. PROVIDE WINDBREAKS FOR PROTECTION FROM DIRECT WIND.

THOROUGHLY CLEAN ALL PORTIONS OF NEW SURFACES TO RECEIVE WELDS OF ALL FOREIGN MATTER, FOR A DISTANCE OF 2 INCHES FROM EACH SIDE OF THE OUTSIDE LINES OF WELD PRIOR TO PLACING WELD.

TEST COMPLETED WELDS USING VISUAL AND NONDESTRUCTIVE METHODS IN ACCORDANCE WITH AASHTO/AWS.D1.5M/D1.5 BRIDGE WELDING CODE CHAPTER 6.

FIELD WELDING, EXCEPT FOR THE SHEAR CONNECTORS, GRID DECK, AND STAY-IN-PLACE FORMS, IS NOT PERMITTED UNLESS APPROVED BY THE RAILROAD REPRESENTATIVE.

DO NOT WELD PERMANENT METAL DECK FORMS OR OTHER ATTACHMENTS TO SIDEWALK BRACKET TOP FLANGES IN TENSION AREAS. (TENSION AREAS OF TOP FLANGES ARE DESIGNATED ON THE PLANS). THREADED STUDS FOR THE SUPPORT OF THE OVERHANG DECK FORMING BRACKET ARE PERMITTED PROVIDING THE THREADED STUD IS ATTACHED WITH THE SAME WELDING PROCESSING AS THE SHEAR STUDS.

REFERENCES:

1. GENERAL NOTES - 2

SHEET:

06

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OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

REV.	BY	DATE	DESCRIPTION

LOCATION: SWISSVALE, PENNSYLVANIA
TITLE: WASHINGTON AVENUE
GENERAL NOTES - 1

DSN: RMS	PROJ NO: D2122	MN: 1290818-OH/77	MILE POST: PT-344.91		
DWN: KTS	FILE NO: BR0028818	DRAWING NUMBER: PT-344.91 24 05			
CHK: RMS	DATE: 08/16/2023				

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GENERAL NOTES (CONT'D):

EXISTING BRIDGE NOTES:

DISPOSE OF ALL EXISTING CONCRETE REMOVED FROM THE STRUCTURE, OFF SITE, TO THE SATISFACTION OF THE RAILROAD REPRESENTATIVE.

REMOVE THE PORTION OF THE EXISTING BRIDGE IN ACCORDANCE WITH THE SPECIAL PROVISIONS. REMOVE THE PIER TO THE LIMITS SHOWN.

TESTING WAS NOT PERFORMED ON THE EXISTING BRIDGE STRUCTURAL MEMBERS BUT MEMBERS ARE ASSUMED TO CONTAIN LEAD PAINT AND OTHER TOXIC MATERIALS (SUCH AS CADMIUM, CHROMIUM, ARSENIC, ETC.)

DO NOT CONSIDER ANY OF THE DATA ON THE EXISTING BRIDGE SUPPLIED IN THE ORIGINAL DESIGN DRAWINGS OR MADE AVAILABLE TO YOU BY THE RAILROAD OR ITS AUTHORIZED AGENTS AS POSITIVE REPRESENTATIONS OF ANY OF THE CONDITIONS THAT YOU WILL ENCOUNTER IN THE FIELD.

THE INFORMATION SHOWN ON THE PLANS FOR THE EXISTING BRIDGE IS NOT PART OF THE PLANS, PROPOSAL, OR CONTRACT AND IS NOT CONSIDERED A BASIS FOR COMPUTATION OF THE UNIT PRICES USED FOR BIDDING PURPOSES. THERE IS NO EXPRESSED OR IMPLIED AGREEMENT THAT INFORMATION IS CORRECTLY SHOWN. THE BIDDER IS NOT TO RELY ON THIS INFORMATION, BUT IS TO ASSUME THE POSSIBILITY THAT CONDITIONS AFFECTING THE COST AND/OR QUANTITIES OF WORK TO BE PERFORMED MAY DIFFER FROM THOSE INDICATED.

VERIFY ALL DIMENSIONS AND GEOMETRY OF THE EXISTING STRUCTURE IN THE FIELD AS NECESSARY FOR PROPER FIT OF THE PROPOSED CONSTRUCTION.

BIDDERS ARE ADVISED TO FIELD-VERIFY INFORMATION PRESENTED. THE DATA SHOWN HEREIN IS NOT A PART OF THE PLANS, PROPOSAL, OR CONTRACT, AND IS NOT CONSIDERED AS A BASIS FOR COMPUTATION FOR ANY PURPOSE.

EXISTING DRAWINGS:

ORIGINAL PLANS, 10 SHEETS, DATED 02/27/1907
REHAB PLANS, 6 SHEETS, 03/04/1949

ERECTION:

CONTRACTOR IS RESPONSIBLE FOR TEMPORARY BRACING OF THE TRUSSES AND FLOORBEAMS.

MAINTAIN THE STABILITY OF THE STRUCTURE DURING ALL STAGES OF CONSTRUCTION.

IN ACCORDANCE WITH PUBLICATION 408 SECTION 1050.3(c)3, SUBMIT AN ERECTION PLAN SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE COMMONWEALTH OF PENNSYLVANIA FOR REVIEW AND APPROVAL. DO NOT ERECT ANY STEEL UNTIL THE ERECTION PLAN IS APPROVED.

THE CONTRACTOR IS TO MAINTAIN STABILITY OF PARTIAL MEMBERS AND COMPLETE MEMBERS DURING ERECTION, UNTIL ALL MEMBERS ARE IN-PLACE AND BOLTS ARE PROPERLY INSTALLED. THE CONTRACTOR IS TO EVALUATE ERECTION LOADS INCLUDING SELF WEIGHT OF THE STEEL MEMBERS, WIND LOADING AND CONSTRUCTION LIVE LOAD EFFECTS FOR STABILITY, STRESSES AND DEFLECTIONS ON THE STEEL MEMBERS DURING ANY STAGE OF ERECTION AND DURING THE CONCRETE PLACEMENT.

SUBMIT DESIGNS FOR TEMPORARY BENTS, GUY WIRES AND ALL OTHER SUPPORT SYSTEMS REQUIRED FOR ERECTION TO THE RAILROAD REPRESENTATIVE FOR REVIEW AND APPROVAL.

DESIGN AND ERECT ALL FALSE WORK IN ACCORDANCE WITH PUBLICATION 408 SECTION 1050.3(c)2.

THE COST FOR FALSEWORK, TEMPORARY BENTS, WIND BRACING AND ALL OTHER TEMPORARY SUPPORT SYSTEMS REQUIRED DURING ANY STAGES OF CONSTRUCTION IS INCIDENTAL TO THE FABRICATED STRUCTURAL STEEL ITEM.

INSTALLATION OF DROPPED-OBJECT PREVENTATIVE SHIELDING IS REQUIRED TO PROTECT RAILROAD TRACKS FROM FALLEN DEBRIS.

APPROACH SLAB:

CONSTRUCT BRIDGE APPROACH SLABS AFTER THE DECK IS CONSTRUCTED.

PLACE CONCRETE IN ONE CONTINUOUS OPERATION UNLESS OTHERWISE INDICATED OR DIRECTED.

USE DECK FINISHING MACHINE TO PLACE THE APPROACH SLABS. VIBRATORY SCREED MACHINES ARE NOT PERMITTED.

TRANSVERSE CONSTRUCTION JOINTS ARE NOT PERMITTED IN THE APPROACH SLAB OR SLEEPER SLAB, UNLESS OTHERWISE INDICATED.

FOUNDATION NOTES:

CLASS 3 EXCAVATION IS UNSUITABLE FOR USE AS EMBANKMENT MATERIAL.

BLASTING IS NOT PERMITTED FOR FOUNDATION EXCAVATION.

THE CONTRACTOR IS RESPONSIBLE FOR THE STABILITY OF ALL EMBANKMENTS AND EXCAVATED SLOPES. DIVERT ALL SURFACE RUNOFF AWAY FROM EMBANKMENTS IN THE CONSTRUCTION AND EXCAVATIONS IN ACCORDANCE WITH PUBLICATION 408, SECTION 206, AND OSHA REQUIREMENTS AS APPROPRIATE.

THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING SUFFICIENT DEWATERING SO THAT THE EXCAVATIONS ARE DRY ENOUGH TO BE INSPECTED BY THE RAILROAD REPRESENTATIVE.

PLACE AND COMPACT STRUCTURAL BACKFILL IN ACCORDANCE WITH PUBLICATION 408 AND STANDARD DRAWING RC-12M AND RC-15M.

UTILITY NOTES:

COORDINATE, LOCATE, AND CONDUCT ALL WORK RELATED TO PUBLIC AND PRIVATE UTILITIES IN ACCORDANCE WITH PUBLICATION 408, SECTIONS 105.06 AND 107.12.

COORDINATE THE REQUIREMENTS FOR PROTECTION AND/OR RELOCATION OF UTILITIES WITH THE UTILITY OWNER PRIOR TO STARTING WORK. SEE SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION.

VERIFY AND LOCATE ALL EXISTING UTILITIES PRIOR TO STARTING WORK. CONDUCT OPERATIONS IN A MANNER WHICH ENSURES THAT THE UTILITIES ARE NOT DISRUPTED OR ENDANGERED AND ASSUME FULL RESPONSIBILITY FOR ANY DAMAGE TO UTILITIES DURING CONSTRUCTION. THE RAILROAD DOES NOT ASSUME RESPONSIBILITY FOR REIMBURSEMENT, PARTICIPATION IN DESIGN AND/OR REVISIONS OR LIABILITY FOR ACCURACY OF TYPE, SIZE AND LOCATION OF ANY UTILITY.

PRIOR TO ANY EXCAVATION OR DEMOLITION WORK, CONTACT THE PA ONE CALL SYSTEM, INC. AT 1-800-242-1776 AND COMPLY WITH THE PROVISIONS OF PA ACT 287 OF 1994 AS AMENDED BY ACT 187 OF 1996. IDENTIFY ALL OVERHEAD LINES AND NOTIFY AND COMPLY WITH THE APPLICABLE UTILITY OWNER'S CLEARANCE REQUIREMENTS.

RAILROAD NOTES:

REFER TO THE PUBLIC PROJECTS MANUAL FOR OUTAGE LIMITATIONS.

THE CONTRACTOR SHALL PROVIDE OPEN ACCESS ALONG THE NORFOLK SOUTHERN MAINTENANCE WAY THROUGHOUT CONSTRUCTION.

DO NOT REDUCE EXISTING CLEARANCES WITHOUT WRITTEN PERMISSION FROM NORFOLK SOUTHERN CORPORATION.

TEMPORARY RAILROAD CLEARANCES:
13'-0" HORIZONTAL FROM ℄ TANGENT TRACK

ALL WORK TO BE PERFORMED ON, OVER, UNDER, OR ADJACENT TO THE RAILROAD RIGHT-OF-WAY SHALL COMPLY WITH THE NORFOLK SOUTHERN RAILWAY COMPANY ("RAILROAD", "NSR" OR "NS") PUBLIC PROJECTS MANUAL (APPENDIX E, SPECIAL PROVISIONS FOR THE PROTECTION OF RAILWAY INTERESTS, AND APPENDIX H1, OVERHEAD GRADE SEPARATION DESIGN CRITERIA). WHEN IN CONFLICT WITH OTHER PROJECT SPECIFICATIONS, THE MOST STRINGENT ONE SHALL APPLY.

"ONE CALL" SERVICES DO NOT LOCATE BURIED RAILROAD SIGNAL AND COMMUNICATIONS LINES. THE CONTRACTOR SHALL CONTACT THE RAILROAD'S REPRESENTATIVE 2 DAYS IN ADVANCE OF WORK AT THOSE PLACES WHERE EXCAVATION, PILE DRIVING, OR HEAVY LOADS MAY DAMAGE THE RAILROAD'S UNDERGROUND FACILITIES. UPON REQUEST FROM THE CONTRACTOR, RAILROAD PERSONNEL WILL LOCATE AND PAINT MARK OR FLAG THE RAILROAD'S UNDERGROUND FACILITIES. THE CONTRACTOR SHALL AVOID EXCAVATION OR OTHER DISTURBANCE OF THESE FACILITIES. IF DISTURBANCE OR EXCAVATION IS REQUIRED NEAR A BURIED RAILROAD FACILITY, THE CONTRACTOR SHALL COORDINATE WITH THE RAILROAD TO HAVE THE FACILITY PARTIALLY EXPOSED MANUALLY WITH CAREFUL HAND EXCAVATION. THE FACILITY SHALL BE PROTECTED BY THE CONTRACTOR DURING THE COURSE OF THE DISTURBANCE UNDER THE SUPERVISION AND DIRECTION OF THE RAILROAD'S REPRESENTATIVE. (SEE NS PUBLIC PROJECTS MANUAL, APPENDIX E, SECTION 3.D).

THE CONTRACTOR SHALL NOT COMMENCE ANY WORK ON RAILROAD RIGHTS-OF-WAY UNTIL HE HAS COMPLIED WITH THE CONDITIONS PRESENTED ON NS PUBLIC PROJECTS MANUAL (SEE APPENDIX E, NORFOLK SOUTHERN - SPECIAL PROVISIONS FOR PROTECTION OF RAILWAY INTERESTS).

THE CONTRACTOR SHALL SO ARRANGE AND CONDUCT HIS WORK THAT THERE WILL BE NO INTERFERENCE WITH RAILROAD'S OPERATIONS. WHENEVER WORK IS LIABLE TO AFFECT THE OPERATIONS OR SAFETY OF TRAINS, THE METHODS OF DOING SUCH WORK SHALL FIRST BE SUBMITTED TO THE RAILROAD ENGINEER FOR APPROVAL, BUT SUCH APPROVAL SHALL NOT RELIEVE THE CONTRACTOR FROM ANY LIABILITY.

THE RAILROAD WILL BE PROVIDED AS-BUILT DRAWINGS SHOWING THE ACTUAL CLEARANCES AS CONSTRUCTED. DEPTH, SIZE, AND LOCATION OF ALL FOUNDATION COMPONENTS SHALL BE SHOWN ON THE DRAWINGS. (SEE NS PUBLIC PROJECTS MANUAL, APPENDIX H1, SECTION 8A)

FOR PROJECTS REQUIRING MORE THAN 30 CONSECUTIVE DAYS OF FLAGGING, CONTRACTOR SHALL PROVIDE THE FLAGMAN A SMALL WORK AREA WITH A DESK/COUNTER AND CHAIR WITHIN THE FIELD/SITE TRAILER, INCLUDING THE USE OF BATHROOM FACILITIES, WHERE THE FLAGMAN CAN CHECK IN/OUT WITH THE PROJECT, AS WELL AS TO THE FLAGMAN'S HOME TERMINAL. THE WORK AREA SHOULD PROVIDE ACCESS TO TWO (2) ELECTRICAL OUTLETS FOR RECHARGING RADIO(S), AND A LAPTOP COMPUTER; AND HAVE THE ABILITY TO PRINT OFF NEEDED DOCUMENTATION AND ORDERS AS NEEDED AT THE FIELD/SITE. THIS SHOULD AID IN MAXIMIZING THE FLAGMAN'S TIME AND EFFICIENCY ON THE PROJECT.

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REFERENCES:
1. GENERAL NOTES - 1

SHEET:
05

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NORFOLK SOUTHERN
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OWNING COMPANY
PITTSBURGH
OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA

REV	BY	DATE	DESCRIPTION

LOCATION: SWISSVALE, PENNSYLVANIA
TITLE: WASHINGTON AVENUE
GENERAL NOTES - 2

DSN	RMS	ROAD NO.	D2122	MM	1290818-OH/77
DWN	KTS	FILE NO.	BR0028818	MILE POST	PT-344.91
CHK	RMS	DATE	08/16/2023	DRAWING NUMBER	PT-344.91 24 06

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ALTERNATE STRUCTURE ITEMS

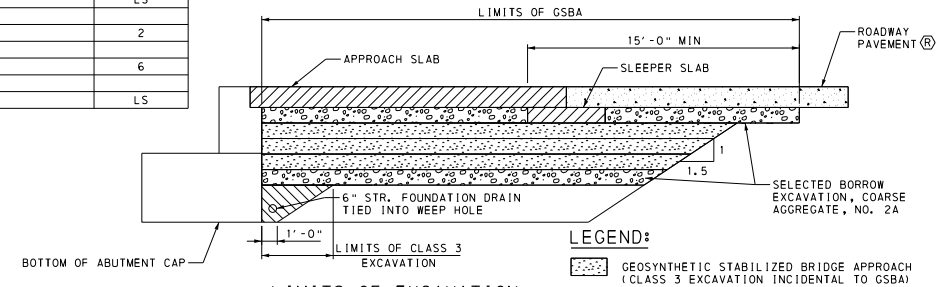
ITEM NO	ITEM		TOTAL
8130-0001	BRIDGE STRUCTURE, AS DESIGNED	(2)	LS
8100-0001	STEEL BRIDGE STRUCTURE	(2)	LS

APPROXIMATE QUANTITIES - BRIDGE STRUCTURE, AS DESIGNED

ITEM NO	ITEM		UNIT	ABUT 1	ABUT 2	SUPER-STRUCTURE	WEST APPROACH SLAB	EAST APPROACH SLAB	TOTAL
8130-0001	BRIDGE STRUCTURE, AS DESIGNED	(1)(2)	LS						LS
(1)	CLASS 3 EXCAVATION		CY	150	4				154
(1)	STRUCTURAL BACKFILL		CY	150	4				154
(1)	SELECTED BORROW EXCAVATION, COARSE AGGREGATE, NO. 2A		CY	175	230				405
(1)	SELECTED BORROW EXCAVATION, COARSE AGGREGATE, NO. 57		CY	90	115				205
(1)	GEOTEXTILE, CLASS 4, TYPE C STABILIZATION LAYER (GSBA)		SY	650	885				1535
(1)	GEOTEXTILE, CLASS 4, TYPE A SEPARATION LAYER (GSBA)		SY	315	420				735
(1)	6" STRUCTURE FOUNDATION DRAIN		LF	60	65				125
(1)	MEMBRANE WATERPROOFING		SY	51	26				77
(1)	JUNCTION BOX, JB-25		EA			4			4
(1)	2 INCH CONDUIT IN STRUCTURE		LF			331			331
(1)	LIGHTING POLE ANCHORAGE		EA			4	1	1	2
(1)	CLASS AA CEMENT CONCRETE	(4)(10)	CY	23	17	80	42	60	222
(1)	CLASS A CEMENT CONCRETE	(5)	CY	82	42				124
(1)	MECHANICAL TEXTURING WITH LONGITUDINAL SAWED GROOVES		SY			426	70	84	580
(1)	DOWEL HOLES, 32" DEPTH		EACH	120	108				228
(1)	RAILROAD PROTECTIVE FENCE		LF			256			256
(1)	PROTECTIVE COATING FOR REINFORCED CONCRETE SURFACES (PENETRATING SEALERS, BRIDGE SUPERSTRUCTURE)		SY			938	88	136	1162
(1)	PROTECTIVE COATING FOR REINFORCED CONCRETE SURFACES (PENETRATING SEALERS, BRIDGE SUBSTRUCTURE)		SY	120	90				210
(1)	NEOPRENE STRIP SEAL DAM, (4" MOVEMENT)		LF			114			114
(1)	FABRICATED STRUCTURAL STEEL	(3)	LB			376,115			376,115
(1)	SHEAR CONNECTORS	(7)	EACH			2,076			2076
(1)	SHEAR CONNECTORS	(8)	EACH			640			640
(1)	HIGH LOAD MULTI-ROTATIONAL BEARINGS - GUIDED EXPANSION	(11)	EACH	2					2
(1)	HIGH LOAD MULTI-ROTATIONAL BEARINGS - NON-GUIDED EXPANSION	(11)	EACH		2				2
(1)	CONCRETE FILLED GRID DECK	(2)(6)	SY			475			475
1001-0259	4X4 EPOXY COATED DEFORMED WWF W4 X W4	(9)	LB			1,300			1300
AND									
1002-0052	REINFORCEMENT BARS, EPOXY COATED	(9)	LB	13,000	10,000	7,000	9,000	10,500	49,500
5018-0048	REMOVAL OF PORTION OF EXISTING BRIDGE	(2)	LS						LS
9000-0001	LAMINATED NEOPRENE BEARINGS WITH SLIDING SURFACES	(2)	EACH	1	1				2
9000-0002	INSTALLATION OF MAINTAINABLE WEEPHOLES	(2)	EACH	3	3				6
9000-0003	PRE AND POST CONSTRUCTION SURVEY	(2)	LS			1			LS

REFERENCES:
1. GENERAL NOTES

SHEET:
05 - 06



LIMITS OF EXCAVATION
(NOT TO SCALE)

LEGEND:
- GEOSYNTHETIC STABILIZED BRIDGE APPROACH (CLASS 3 EXCAVATION INCIDENTAL TO GSBA)
- APPROACH/SLEEPER SLAB
- CLASS 3 EXCAVATION
- SELECTED BORROW
- ROADWAY PAVEMENT (R)

LEGEND:

(1) ITEMS IN BRIDGE LUMP SUM ITEM 8130-0001 GIVEN FOR INFORMATION ONLY.

(2) SEE THE CONTRACT SPECIAL PROVISIONS.

(3) HIGH STRENGTH BOLTS, NUTS AND WASHERS ARE INCIDENTAL TO THE FABRICATED STRUCTURAL STEEL.

(4) INCLUDES CLASS AA CONCRETE IN SIDEWALKS, BARRIERS, ABUTMENT BACKWALLS, CHEEKWALLS, SLEEPER SLABS, AND APPROACH SLABS. INCLUDES APPROXIMATELY 5 CY OF CONCRETE IN THE VALLEY OF THE SIDEWALK SIP FORMS.

(5) INCLUDES CLASS A CEMENT CONCRETE IN ABUTMENT CAPS AND PEDESTALS.

(6) CONCRETE IN THE HAUNCHES AND AAAP CONCRETE OVERFILL IS INCIDENTAL TO THE GRID DECK.

(7) REFERS TO 7/8" DIAMETER SHEAR CONNECTORS.

(8) REFERS TO 1/2" DIAMETER SHEAR CONNECTORS.

(9) FOR THE AS DESIGNED STRUCTURE, INCLUDE IN THE BRIDGE BID ITEMS. FOR ALTERNATE DESIGNS INCLUDE IN THE BRIDGE STRUCTURE LUMP SUM.

(10) FOR BRIDGE BARRIERS.

(11) INCLUDES SOLE PLATES AND MASONRY PLATES.

(12) FOR WIND LOCKS.

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REV	BY	DATE	DESCRIPTION

LOCATION: SWISSVALE, PENNSYLVANIA
TITLE: WASHINGTON AVENUE QUANTITIES

DSN	MEM	PROJ NO.	D2122	VAN	1290818-OH/77	MILE POST	PT-344.91
DWN	EBM	FILE NO.	BR0028818	DRAWING NUMBER	PT-344.91 24 07		
CHK	DMT	DATE	08/16/2023				

SHEET NO. 07 OF 58

6/07/2024 4:39:54 PM
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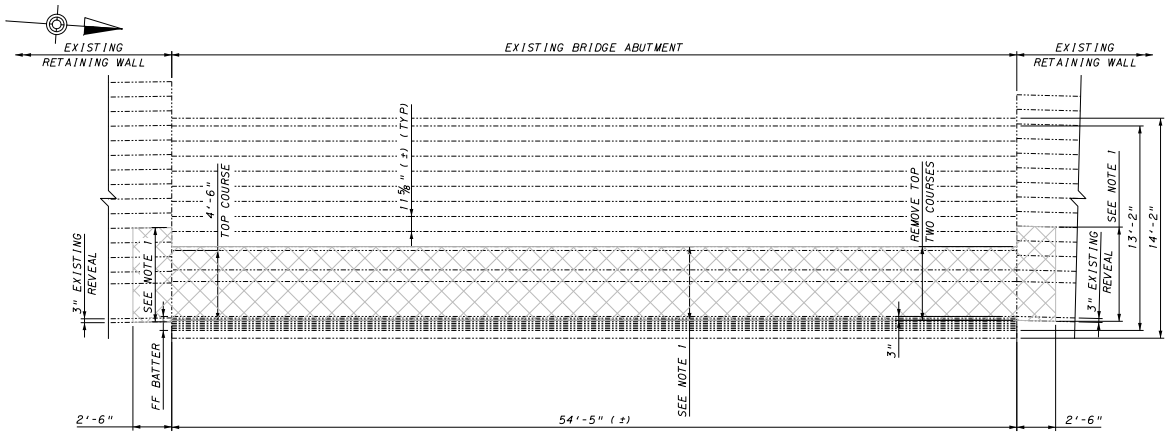
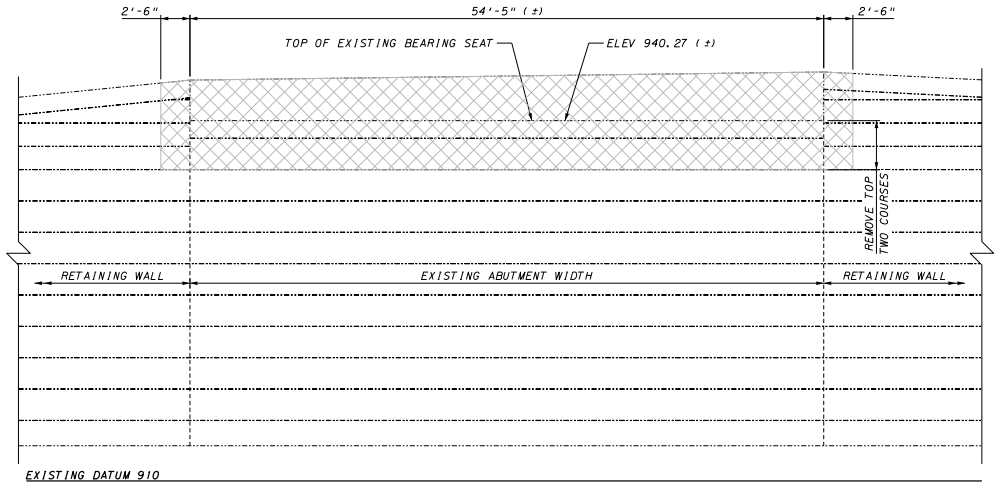


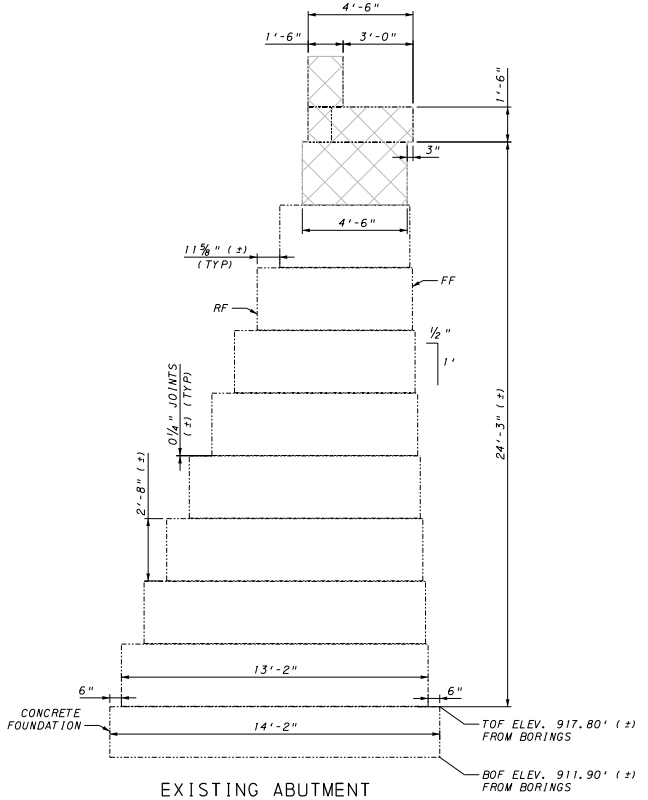
EXISTING ABUTMENT
PLAN VIEW - REMOVAL

0 1' 2' 3' 4' 5' 6'



EXISTING ABUTMENT &
RETAINING WALL ELEVATION

0 5' 10'



EXISTING ABUTMENT
SECTION - REMOVAL

0 1' 2' 3' 4'

LEGEND:

LIMITS OF REMOVAL

FF FRONT FACE
RF REAR FACE

NOTES:

1. VERIFY IN FIELD DEPTH AND WIDTH OF STONE MASONRY COURSES. REMOVE STONE MASONRY COURSES WITHIN RETAINING WALL LIMITS TO EQUAL REMOVAL DEPTH OF ABUTMENT.
2. WORK WITH REPRESENTATIVE TO DEFINE LIMITS OF REMOVAL IN FIELD BASED ON AS-BUILT CONDITIONS.

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REV.	BY	DATE	DESCRIPTION

LOCATION: SWISSVALE, PENNSYLVANIA
TITLE: WASHINGTON AVENUE
ABUTMENT 1 REMOVAL

DSN LTS.	PROJ NO. D2122	DWN 1290818-OH77	WBS/PEP PT-344.91
DWN LTS.	FILE NO. BR0028818	DRAWING NUMBER PT-344.91 24 08	
CHK RMS/MS	DATE 08/16/2023		

SHEET NO. 08 OF 58

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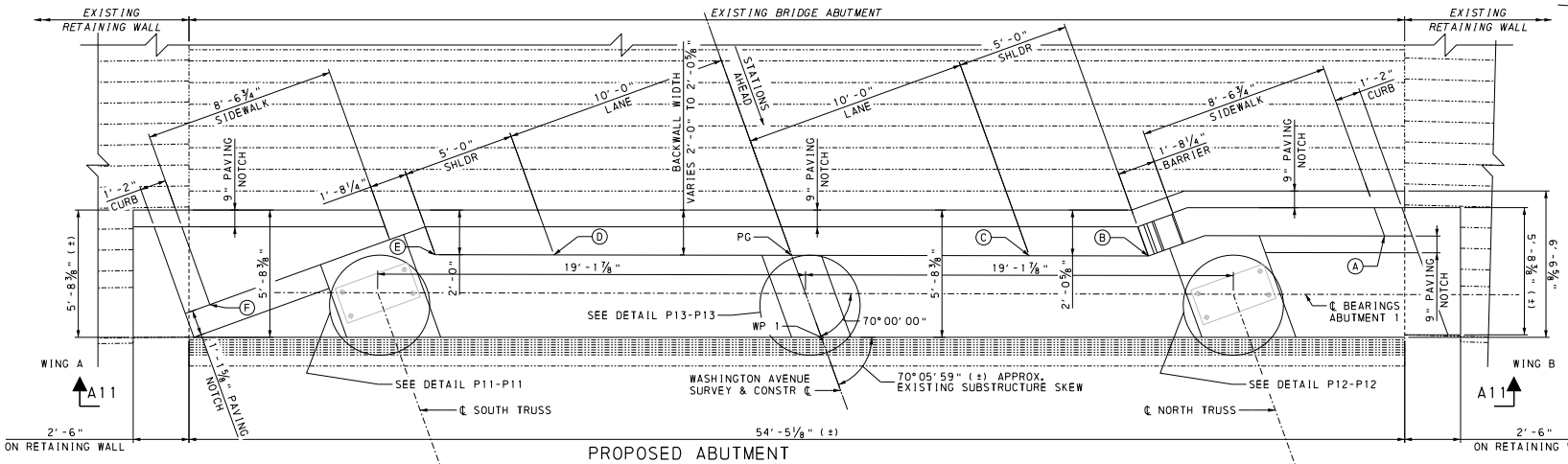
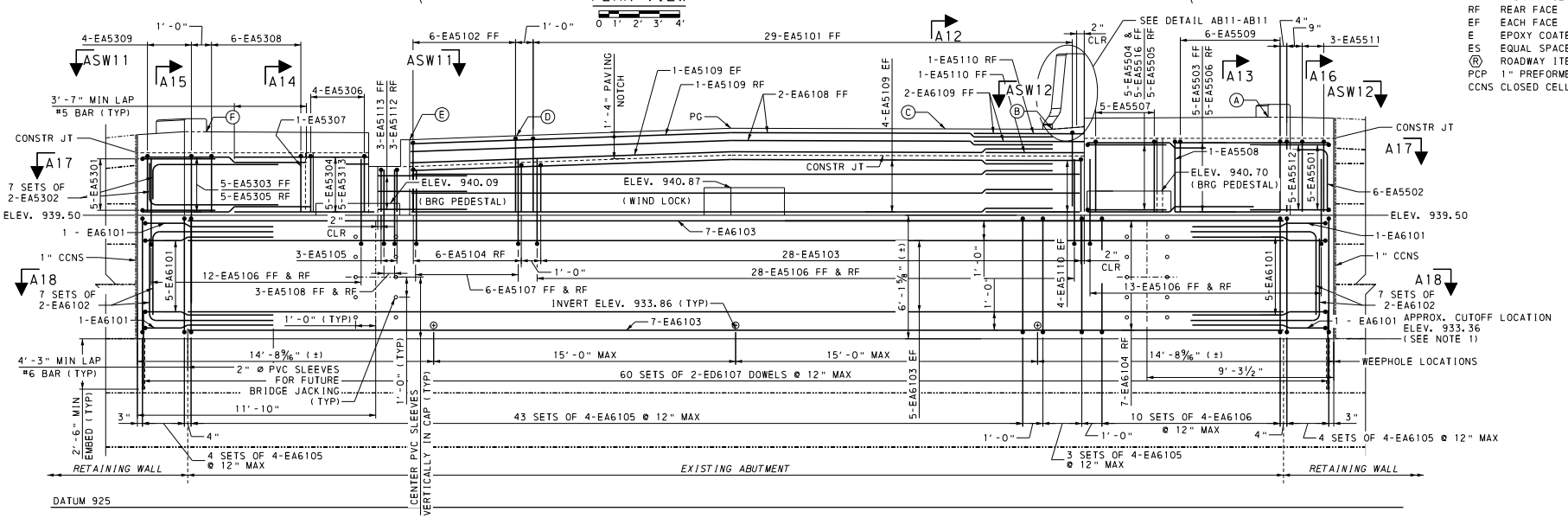


PROPOSED ABUTMENT PLAN VIEW

0 1' 2' 3' 4'



ABUTMENT ELEVATION SECTION A11-A11

0 1' 2' 3' 4'

NOTES:

1. APPROXIMATE ABUTMENT CUTOFF LOCATION GIVEN. REMOVE STONE MASONRY COURSES AND MORTAR TO NEXT CLOSEST FULL STONE MASONRY COURSE.
2. REINFORCEMENT BARS LOCATED IN THE SIDEWALK ARE NOT SHOWN FOR CLARITY.

BACKWALL ELEVATIONS @ FRONT FACE

LOCATION	STATION	ELEVATION
A	7+09.37	944.27
B	7+06.63	943.77
C	7+04.80	943.79
PG	7+01.16	943.82
D	6+97.52	943.45
E	6+95.71	943.26
F	6+94.38	943.58

REFERENCES:

	SHEET:
1. SUPPLEMENTAL DRAWINGS	01
2. TYPICAL SECTION & INDEX OF DRAWINGS	02
3. GENERAL NOTES	05 - 06
4. ABUTMENT 1 DETAILS - 1	10
5. ABUTMENT 1 DETAILS - 2	11
6. ABUTMENT 1 DETAILS - 3	12
7. ABUTMENT REINFORCEMENT BAR SCHEDULE	18
8. TRUSS FRAMING AND WORK POINT ELEVATIONS	20
9. DETAIL AB11-AB11, P11-P11, P12-P12 & P13-P13	12

LEGEND:

FF FRONT FACE
RF REAR FACE
EF EACH FACE
E EPOXY COATED BARS
ES EQUAL SPACE
Ⓡ ROADWAY ITEM
PCP 1" PREFORMED CELLULAR POLYSTYRENE
CCNS CLOSED CELL NEOPRENE SPONGE

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REV.	BY	DATE	DESCRIPTION

LOCATION: SWISSVALE, PENNSYLVANIA
TITLE: WASHINGTON AVENUE ABUTMENT 1 PLAN & ELEVATION

DSN LTS	PROJ NO. D2122	WBS 1290818-OH/77	SHEET POST PT-344.91		
DWN LTS	FILE NO. BR0028818	DRAWING NUMBER PT-344.91 24 09			
CHK RMS/MS	DATE 08/16/2023				

SHEET NO. 09 OF 58

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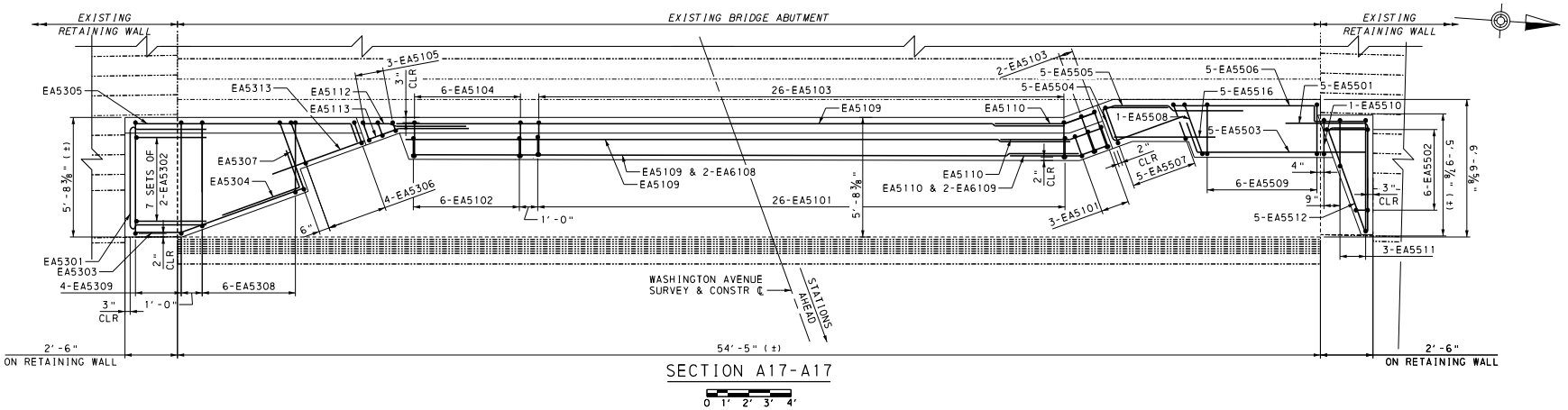

SECTION A17-A17

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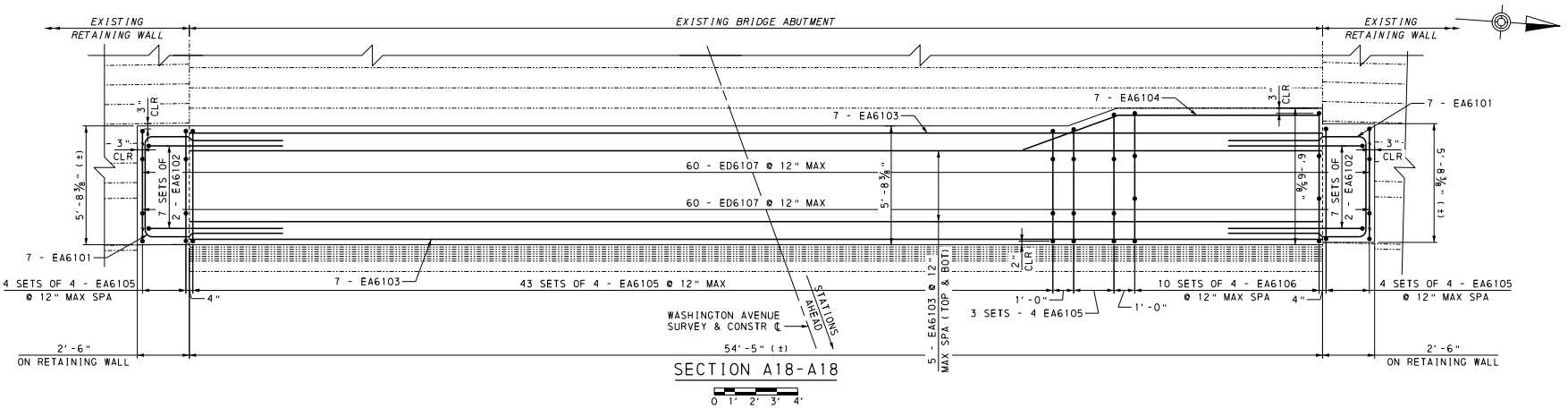

SECTION A18-A18

0 1' 2' 3' 4'

LEGEND:

FF	FRONT FACE
RF	REAR FACE
EF	EACH FACE
E	EPOXY COATED BARS
ES	EQUAL SPACE
Ⓡ	ROADWAY ITEM
PCP	1" PREFORMED CELLULAR POLYSTYRENE

REFERENCES:

	SHEET:
1. SUPPLEMENTAL DRAWINGS	01
2. INDEX OF DRAWINGS	02
3. GENERAL NOTES	05-06
4. ABUTMENT 1 PLAN & ELEVATION	09
5. ABUTMENT 1 DETAILS - 2	11
6. ABUTMENT 1 DETAILS - 3	12
7. ABUTMENT REINFORCEMENT BAR SCHEDULE	18
8. TRUSS WORK POINT ELEVATIONS	19

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REV.	BY	DATE	DESCRIPTION

LOCATION: SWISSVALE, PENNSYLVANIA
TITLE: WASHINGTON AVENUE ABUTMENT 1 DETAILS - 1

DSN LTS	PROJ NO. D2122	DRN 1290818-OH77	MILE POST PT-344.91		
DWN LTS	FILE NO. BR0028818	DRAWING NUMBER PT-344.91 24 10			
CHK RMS/MS	DATE 08/16/2023				

SHEET NO. 10 OF 58

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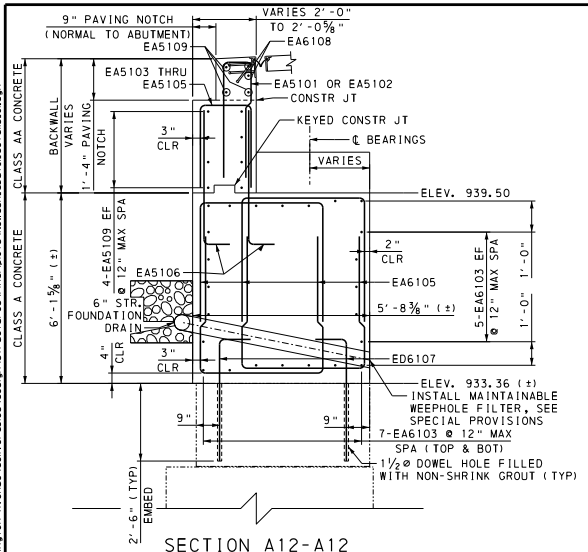

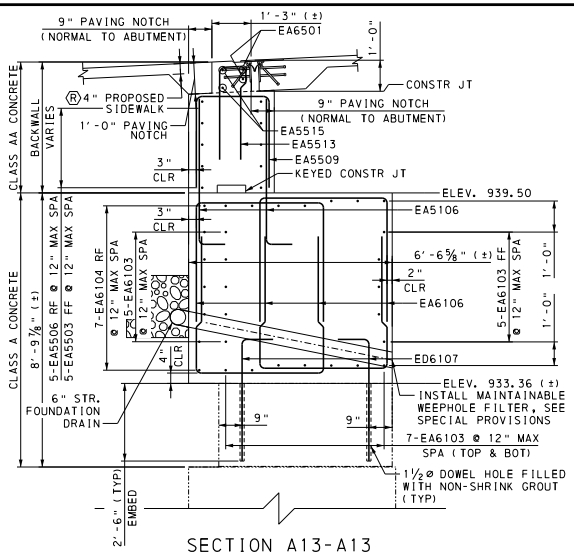

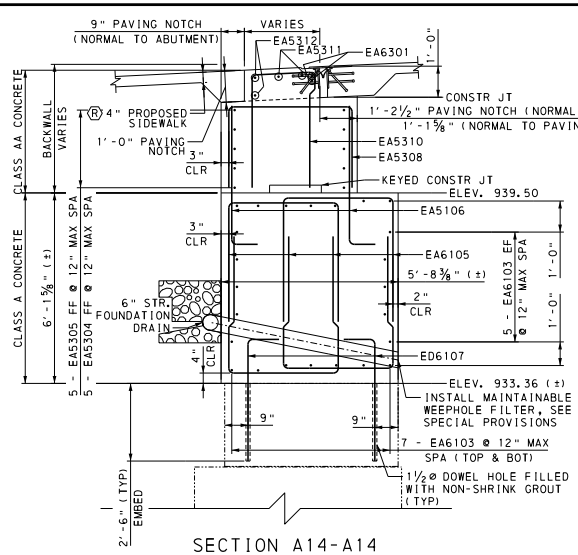

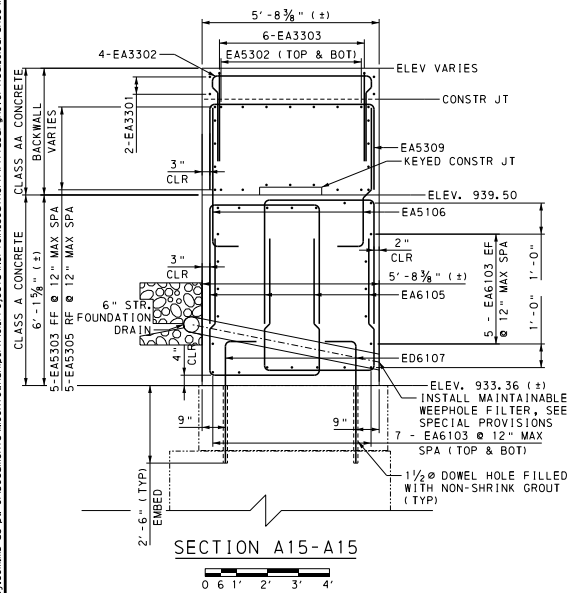

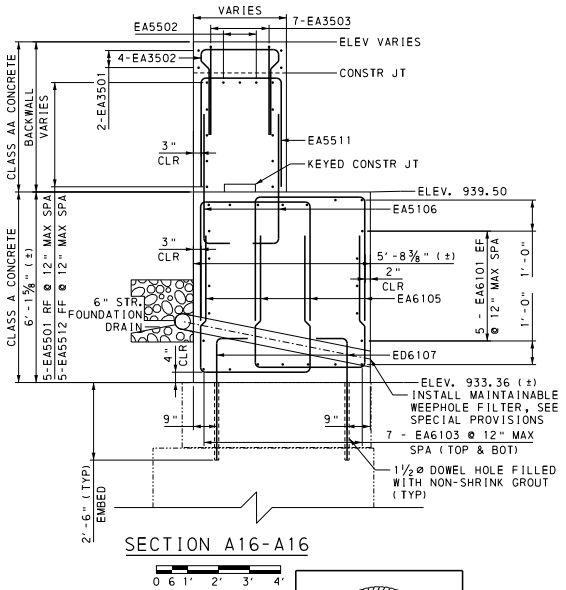

LEGEND:

FF	FRONT FACE
RF	REAR FACE
EF	EACH FACE
E	EPOXY COATED BARS
ES	EQUAL SPACE
Ⓡ	ROADWAY ITEM

REFERENCES:

	SHEET:
1. SUPPLEMENTAL DRAWINGS	01
2. TYPICAL SECTION & INDEX OF DRAWINGS	02
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4. ABUTMENT 1 PLAN & ELEVATION	09
5. ABUTMENT 1 DETAILS - 1	10
6. ABUTMENT 1 DETAILS - 3	12
7. ABUTMENT REINFORCEMENT BAR SCHEDULE	18
8. TRUSS FRAMING AND WORK POINT GEOMETRY	20

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REV.	BY	DATE	DESCRIPTION

LOCATION: SWISSVALE, PENNSYLVANIA
TITLE: WASHINGTON AVENUE
ABUTMENT 1 DETAILS - 2

DSN LTS | PROJ NO. D2122 | VAN 1290818-OH/77 | WBS/PDP PT-344.91
DWN LTS | FILE NO. BR0028818 | DRAWING NUMBER PT-344.91 24 11
CHK RMS/MS | DATE 08/16/2023

SHEET NO. 11 OF 58

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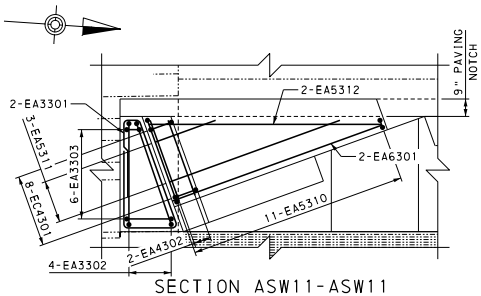

SECTION ASW11-ASW11

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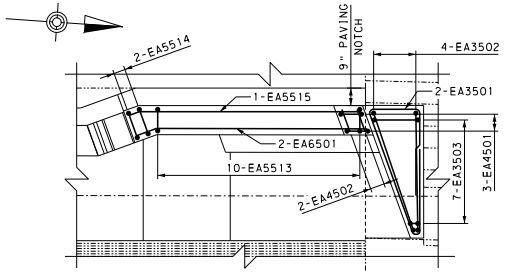

SECTION ASW12-ASW12

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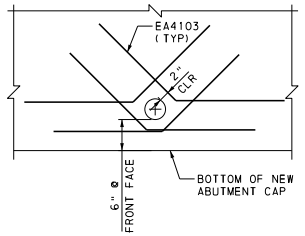
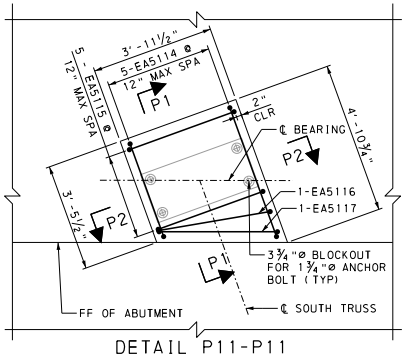


WEEPHOLE REINFORCEMENT

(NOT TO SCALE)



DETAIL P11-P11

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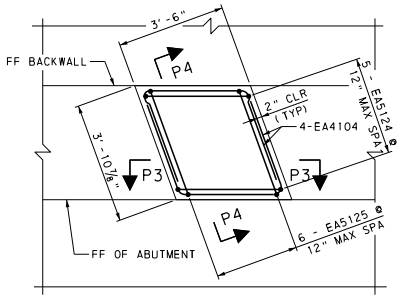

DETAIL P13-P13

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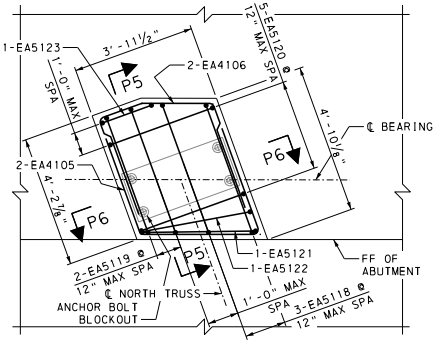

DETAIL P12-P12

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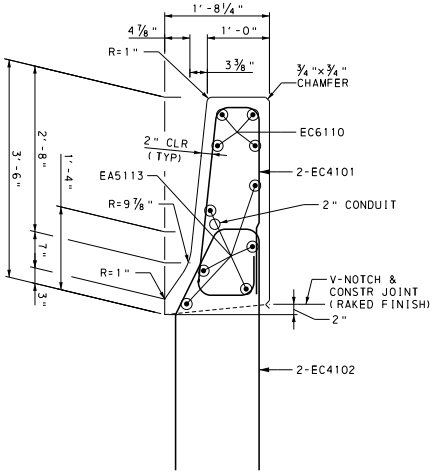
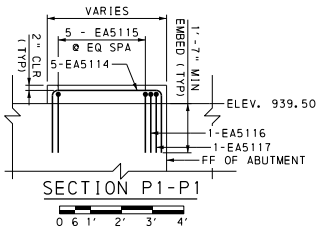


DETAIL AB11-AB11

0 3 6 9 1' 2'



SECTION P1-P1

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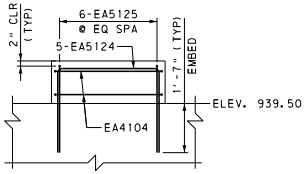

SECTION P3-P3

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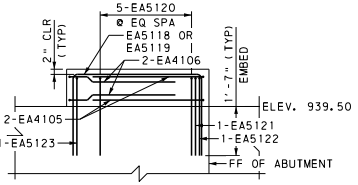

SECTION P5-P5

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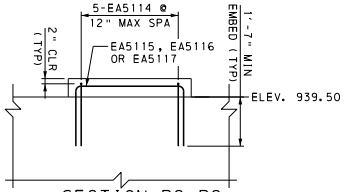

SECTION P2-P2

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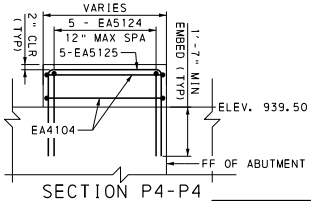
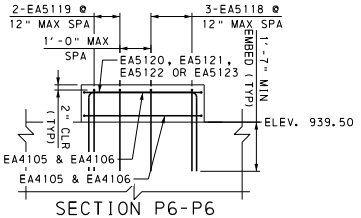


SECTION P4-P4

0 6 1' 2' 3' 4'



SECTION P6-P6

0 6 1' 2' 3' 4'

LEGEND:

FF	FRONT FACE
RF	REAR FACE
EF	EACH FACE
E	EPOXY COATED BARS
ES	EQUAL SPACE
Ⓡ	ROADWAY ITEM

REFERENCES:

	SHEET:
1. SUPPLEMENTAL DRAWINGS	01
2. INDEX OF DRAWINGS	02
3. GENERAL NOTES	05 - 06
4. ABUTMENT 1 PLAN & ELEVATION	09
5. ABUTMENT 1 DETAILS - 1	10
6. ABUTMENT 1 DETAILS - 2	11
7. ABUTMENT REINFORCEMENT BAR SCHEDULE	18
8. TRUSS WORK POINT ELEVATIONS	19
9. BEARING LOCATION PLAN AND NOTES	40
10. BEARING DETAILS - 1	41
11. CENTER BEARING DETAILS	43

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
MATTHIAS STEIN
ENGINEER
PE095784

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REV.	BY	DATE	DESCRIPTION

LOCATION: SWISSVALE, PENNSYLVANIA

TITLE: WASHINGTON AVENUE
ABUTMENT 1 DETAILS - 3

DSN	LTS	PROJ NO.	D2122	MAP	1290818-OH/77
DWN	LTS	FILE NO.	BR0028818	MILE POST	PT-344.91
CHK	RMS	DATE	08/16/2023	DRAWING NUMBER	PT-344.91 24 12

SHEET NO. 12 OF 58

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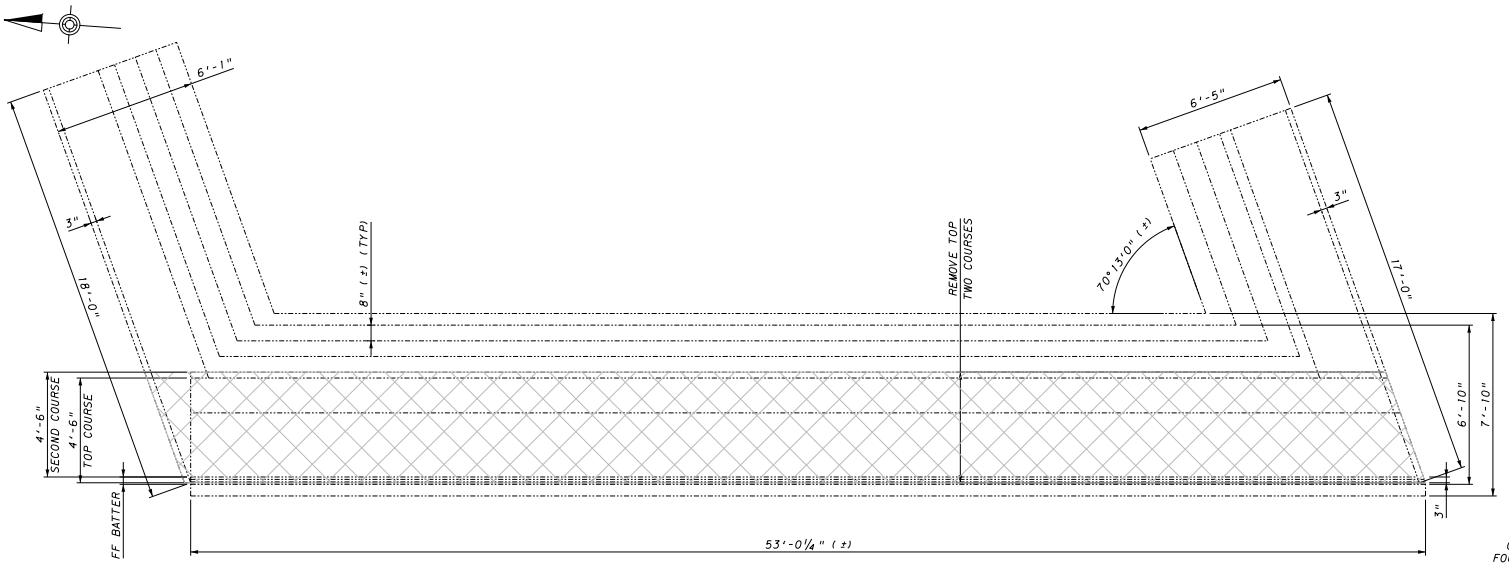
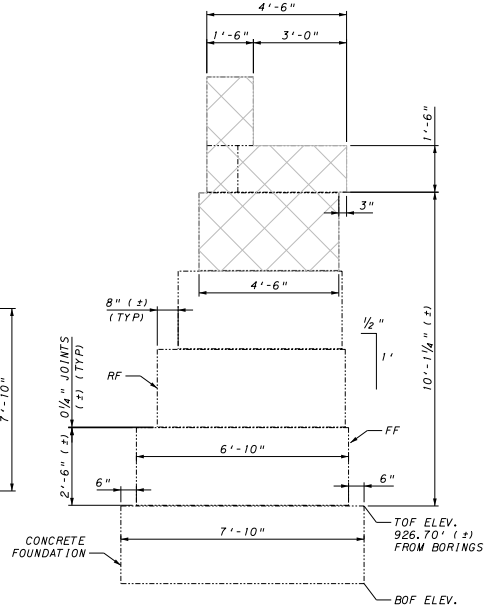


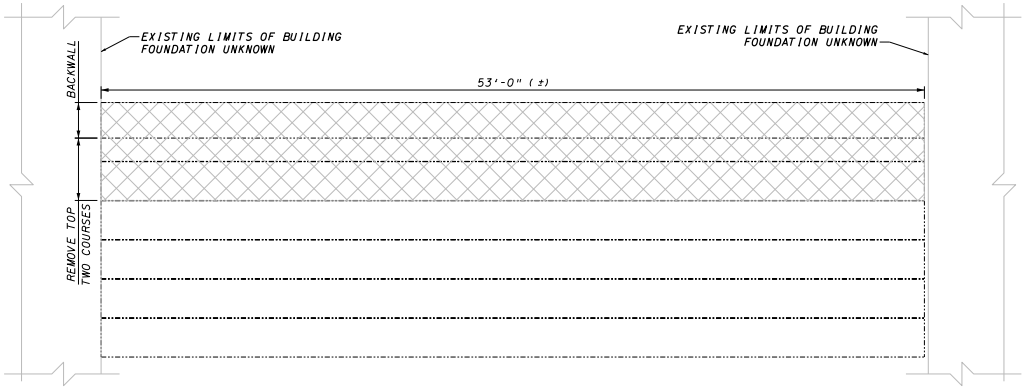
EXISTING ABUTMENT
PLAN VIEW - REMOVAL

0 1' 2' 3' 4'



EXISTING ABUTMENT
SECTION - REMOVAL

0 6 1' 2' 3' 4'



EXISTING ABUTMENT ELEVATION

0 1' 2' 3' 4' 5' 6'

LEGEND:

LIMITS OF REMOVAL

FF FRONT FACE
RF FRONT FACE

NOTES:

1. VERIFY IN FIELD DEPTH AND WIDTH OF STONE MASONRY COURSES.
2. WORK WITH REPRESENTATIVE TO DEFINE LIMITS OF REMOVAL IN FIELD BASED ON AS-BUILT CONDITIONS.

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL MATTHIAS STEIN ENGINEER PE095784

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REV.	BY	DATE	DESCRIPTION

LOCATION: SWISSVALE, PENNSYLVANIA
TITLE: WASHINGTON AVENUE
ABUTMENT 2 REMOVAL

DSN	LTS.	PROJ NO.	D2122	VAN	1290818-OH77	MILE POST	PT-344.91
DWN	LTS.	FILE NO.	BR0028818	DRAWING NUMBER	PT-344.91 24 13		
CHK	RMS/MS	DATE	08/16/2023				

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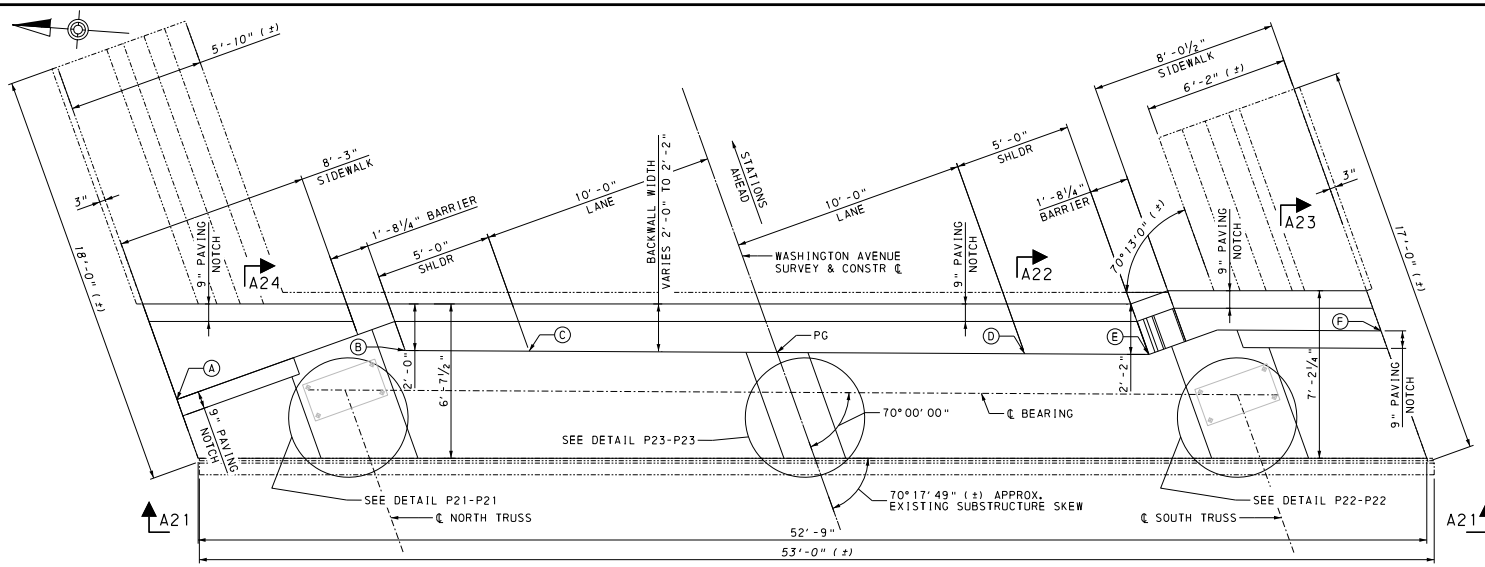


PROPOSED ABUTMENT
PLAN VIEW
0 1' 2' 3' 4'

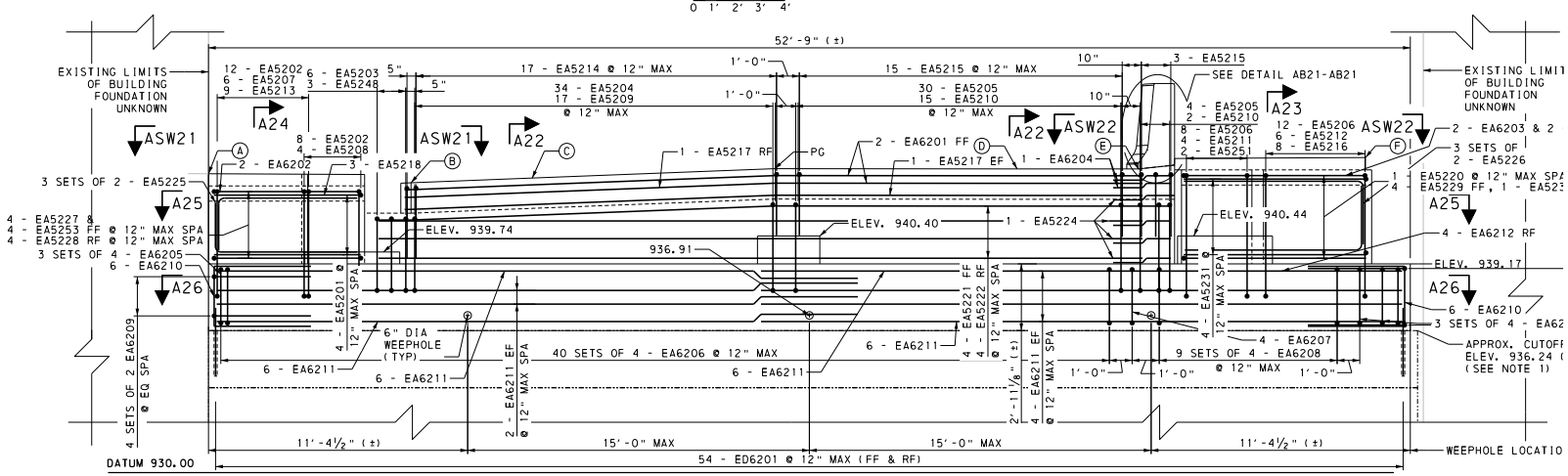
BACKWALL ELEVATIONS @ FRONT FACE		
LOCATION	STATION	ELEVATION
A	8+32.84	943.03
B	8+31.51	942.73
C	8+29.69	942.94
PG	8+26.05	943.35
D	8+22.41	943.34
E	8+20.59	943.34
F	8+18.18	943.84

LEGEND:

FF	FRONT FACE
RF	REAR FACE
EF	EACH FACE
E	EPOXY COATED BARS
ES	EQUAL SPACE
Ⓡ	ROADWAY ITEM
PCP	PREFORMED CELLULAR POLYSTYRENE

REFERENCES:

	SHEET:
1. SUPPLEMENTAL DRAWINGS	01
2. TYPICAL SECTION & INDEX OF DRAWINGS	02
3. GENERAL NOTES	05-06
4. DETAILS AB21-AB21, P21-P21, P22-P22, & P23-P23	17
5. ABUTMENT 2 DETAILS - 1	15
6. ABUTMENT 2 DETAILS - 2	16
7. ABUTMENT 2 DETAILS - 3	17
8. ABUTMENT 2 REINFORCEMENT BAR SCHEDULE	19
9. TRUSS FRAMING AND WORK POINT GEOMETRY	20



ABUTMENT ELEVATION
SECTION A21-A21
0 1' 2' 3' 4'

NOTES:

1. APPROXIMATE ABUTMENT CUTOFF LOCATION GIVEN. REMOVE STONE MASONRY COURSES AND MORTER TO NEXT CLOSEST FULL STONE MASONRY COURSE.
2. REINFORCEMENT BARS LOCATED IN THE SIDEWALK ARE NOT SHOWN FOR CLARITY.

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REV.	BY	DATE	DESCRIPTION

LOCATION: SWISSVALE, PENNSYLVANIA
TITLE: WASHINGTON AVENUE
ABUTMENT 2 PLAN & ELEVATION

DSN LTS	PROJ NO. D2122	WBS 1290818-OH/77	SHEET POST PT-344.91		
DWN EMT/MAM	FILE NO. BR0028818		DRAWING NUMBER PT-344.91 24 14		
CHK LTS/RMS	DATE 08/16/2023				

SHEET NO. 14 OF 58

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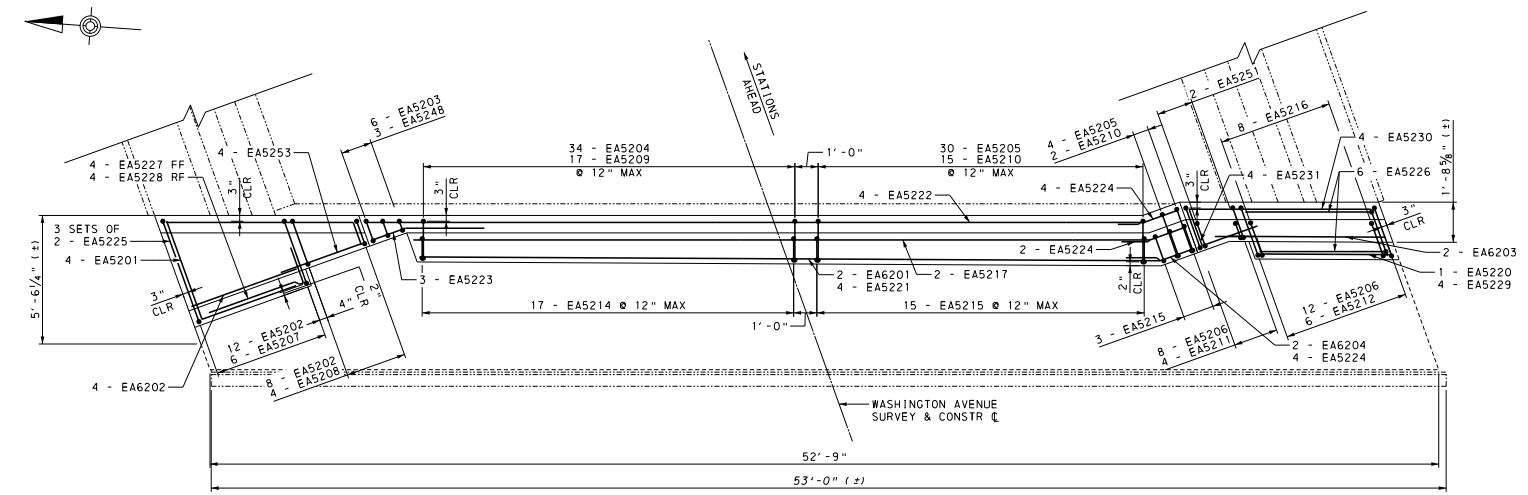
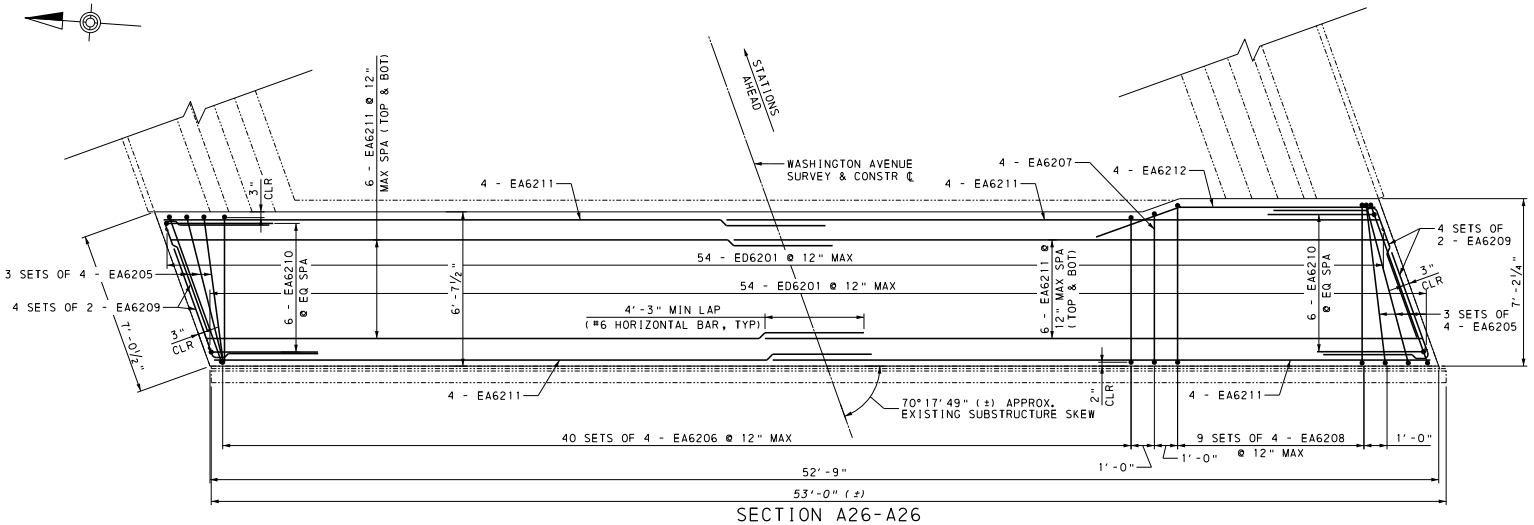


SECTION A25-A25

0 1' 2' 3' 4'



SECTION A26-A26

0 1' 2' 3' 4'

NOTE:

1. 3'-11" MIN LAP (#5 HORIZONTAL BAR, TYP)

LEGEND:

FF	FRONT FACE
RF	REAR FACE
EF	EACH FACE
E	EPOXY COATED BARS
ES	EQUAL SPACE
Ⓡ	ROADWAY ITEM
PCP	PREFORMED CELLULAR POLYSTYRENE

REFERENCES:

	SHEET:
1. SUPPLEMENTAL DRAWINGS	01
2. INDEX OF DRAWINGS	02
3. GENERAL NOTES	05-06
4. ABUTMENT 2 PLAN & ELEVATION	14
5. ABUTMENT 2 DETAILS - 2	16
6. ABUTMENT 2 DETAILS - 3	17
7. ABUTMENT REINFORCEMENT BAR SCHEDULE	18
8. TRUSS WORK POINT ELEVATIONS	19

NOTES:

1. APPROXIMATE ABUTMENT CUTOFF LOCATION GIVEN. REMOVE STONE MASONRY COURSES AND MORTER TO NEXT CLOSEST FULL STONE MASONRY COURSE.

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REV	BY	DATE	DESCRIPTION

LOCATION: SWISSVALE, PENNSYLVANIA

TITLE: WASHINGTON AVENUE
ABUTMENT 2 DETAILS - 1

DSN	LTS	PROJ NO.	D2122	MN	1290818-OH/77
DWN	DMIT/MAM	FILE NO.	BR0028818		
CHK	LTS/RMS	DATE	08/16/2023		

DRAWING NUMBER: PT-344.91 24 15

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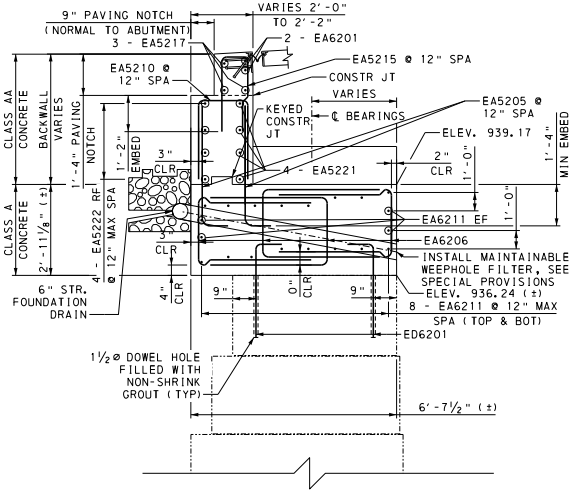
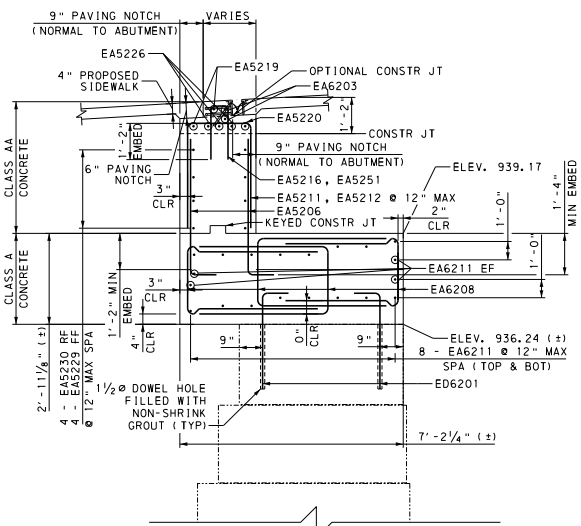


SECTION A22-A22

0 6 1' 2' 3' 4'



SECTION A23-A23

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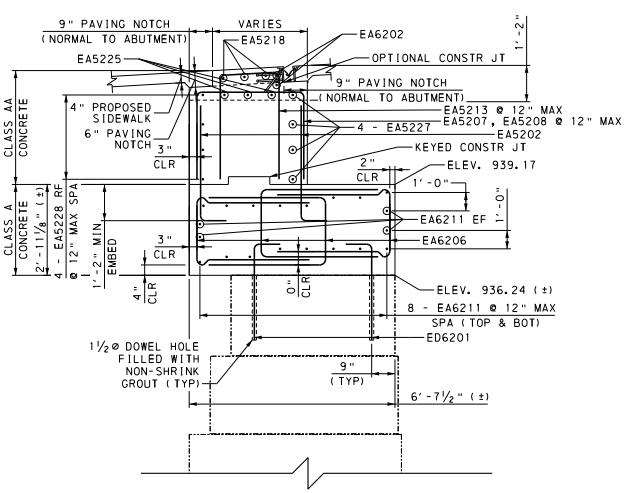

SECTION A24-A24

0 6 1' 2' 3' 4'

NOTE:

1. GSBA NOT SHOWN FOR CLARITY

LEGEND:

FF	FRONT FACE
RF	REAR FACE
EF	EACH FACE
E	EPOXY COATED BARS
ES	EQUAL SPACE
Ⓡ	ROADWAY ITEM

REFERENCES:

	SHEET:
1. SUPPLEMENTAL DRAWINGS	01
2. INDEX OF DRAWINGS	02
3. GENERAL NOTES	05-06
4. ABUTMENT 2 PLAN & ELEVATION	14
5. ABUTMENT 2 DETAILS - 1	15
6. ABUTMENT 2 DETAILS - 3	17
7. ABUTMENT REINFORCEMENT BAR SCHEDULE	18
8. TRUSS WORK POINT ELEVATIONS	19

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REV.	BY	DATE	DESCRIPTION

LOCATION: SWISSVALE, PENNSYLVANIA
TITLE: WASHINGTON AVENUE
ABUTMENT 2 DETAILS - 2

DSN: LTS	PROJ NO: D2122	DWN: 1290818-OH77	WBS/PEP: PT-344.91
DWN: RMM/LTS	FILE NO: BR0028818	DRAWING NUMBER: PT-344.91 24 16
CHK: RMM/LTS	DATE: 08/16/2023	

SHEET NO. 16 OF 58

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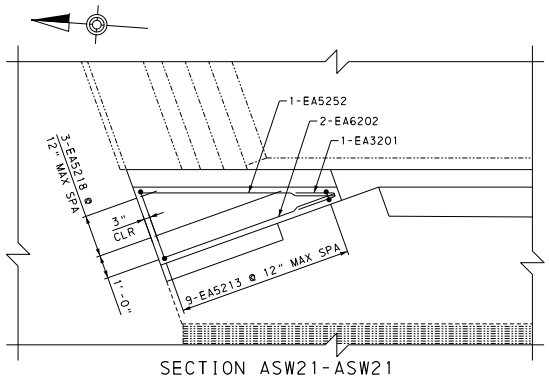

SECTION ASW21-ASW21

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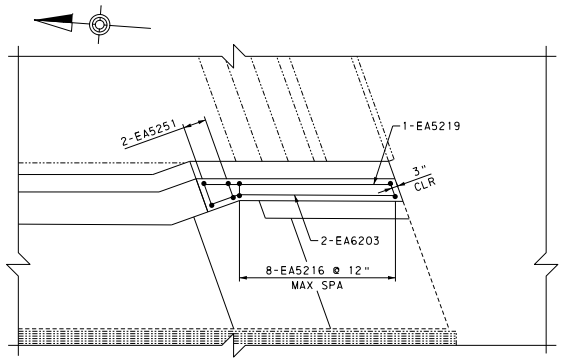
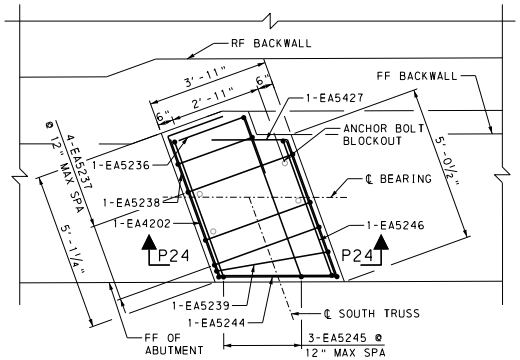


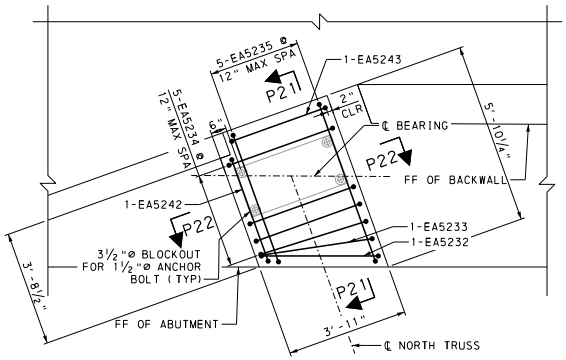
SECTION ASW22-ASW22

0 1' 2' 3' 4'



DETAIL P22-P22

0 6 1' 2' 3' 4'



DETAIL P21-P21

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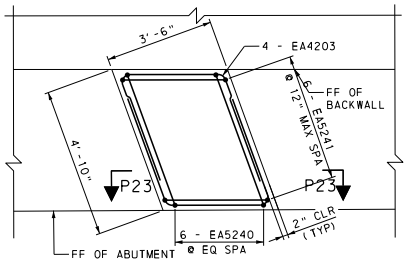

DETAIL P23-P23

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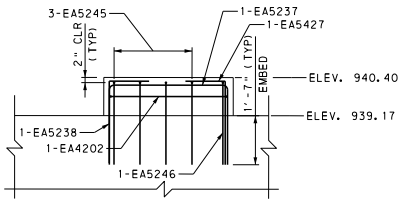

SECTION P24-P24

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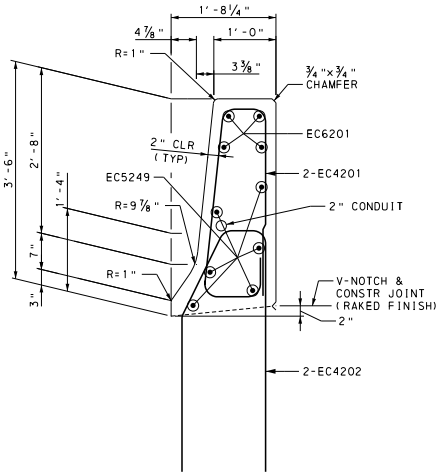
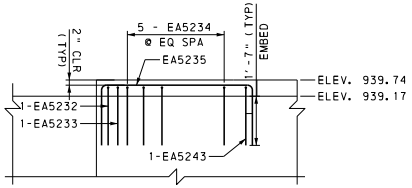


DETAIL AB21-AB21

0 3 6 9 1' 2'



SECTION P21-P21

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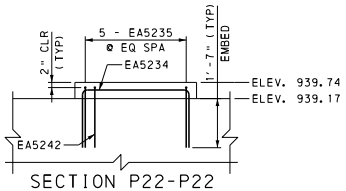

SECTION P22-P22

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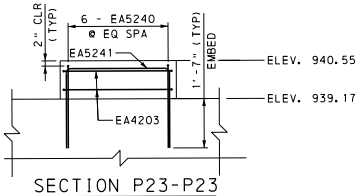

SECTION P23-P23

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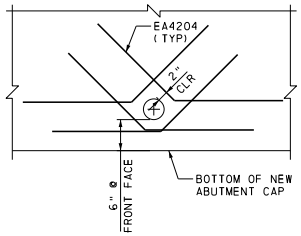

WEEPHOLE REINFORCEMENT

(NOT TO SCALE)

REFERENCES:

	SHEET:
1. SUPPLEMENTAL DRAWINGS	01
2. INDEX OF DRAWINGS	02
3. GENERAL NOTES	05-06
4. ABUTMENT 2 PLAN & ELEVATION	14
5. ABUTMENT 2 DETAILS - 1	15
6. ABUTMENT 2 DETAILS - 2	16
7. ABUTMENT REINFORCEMENT BAR SCHEDULE	18
8. TRUSS WORK POINT ELEVATIONS	19

LEGEND:

FF	FRONT FACE
RF	REAR FACE
EF	EACH FACE
E	EPOXY COATED BARS
ES	EQUAL SPACE

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL MATTHIAS STEIN ENGINEER PE095784

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REV.	BY	DATE	DESCRIPTION

LOCATION: SWISSVALE, PENNSYLVANIA

TITLE: WASHINGTON AVENUE
ABUTMENT 2 DETAILS - 3

DSN LTS	PROJ NO. D2122	WBS 1290818-OH/77	MILE POST PT-344.91		
DWN MAM	FILE NO. BR0028818	DRAWING NUMBER PT-344.91 24 17			
CHK LTS/RMS	DATE 08/16/2023				

SHEET NO. 17 OF 58

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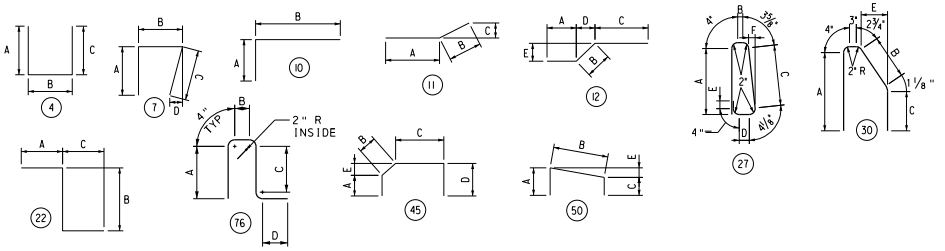
ABUTMENT 1 REINFORCEMENT BAR SCHEDULE

MARK	SIZE	NUMBER	LENGTH	TYPE	A	B	C	D	E	REMARKS
EC4101	4	2	6' - 8 3/8"	27	2' - 9 1/2"	3 3/8"	2' - 7 3/4"	6 3/4"	5"	F = 3 3/8"
EC4102	4	2	8' - 5"	30	3' - 8"	1' - 4 3/8"	2' - 5 3/4"		8 5/8"	
EA4103	4	24	3' - 6"	11	1' - 9"	1' - 9"	1' - 3"			
EA4104	4	4	10' - 3"	50	3' - 6"	3' - 3"	3' - 6"		1' - 4"	
EA4105	4	2	10' - 10"	50	3' - 6"	3' - 10"	3' - 6"		1' - 4"	
EA4106	4	4	8' - 7"	50	3' - 2"	2' - 3"	3' - 2"		9"	
EA5101	5	29	8' - 2"	4	3' - 8"	10"	3' - 8"			
EA5102	5	6	8' - 0"	4	3' - 7"	10"	3' - 7"			
EA5103	5	29	6' - 1"	4	2' - 3"	1' - 7"	2' - 3"			
EA5104	5	6	6' - 3"	4	2' - 4"	1' - 7"	2' - 4"			
EA5105	5	3	4' - 8" TO 5' - 0"	4	2' - 1"	6" TO 10"	2' - 1"			VARY EA B BY 2"
EA5106	5	106	5' - 0"	10	10"	4' - 2"				
EA5107	5	12	4' - 7" TO 5' - 0"	10	10"	3' - 9" TO 4' - 2"				VARY EA B BY 1"
EA5108	5	6	4' - 7"	10	10"	3' - 9"				
EA5109	5	11	31' - 10"	STR						
EA5110	5	11	5' - 0"	11	3' - 6"	1' - 6"	6"			
EA5111	5		BAR MARK NOT USED							
EA5112	5	3	5' - 0"	STR						
EA5113	5	3	4' - 10"	11	3' - 4"	1' - 6"	6"			
EA5114	5	5	7' - 6" TO 8' - 8 1/2"	4	2' - 2"	3' - 2" TO 4' - 4 1/2"	2' - 2"			VARY EA B BY 3 5/8"
EA5115	5	5	7' - 11"	4	2' - 2"	3' - 7"	2' - 2"			
EA5116	5	1	8' - 0"	4	2' - 2"	3' - 8"	2' - 2"			
EA5117	5	1	8' - 1"	4	2' - 2"	3' - 9"	2' - 2"			
EA5118	5	3	9' - 10"	4	2' - 9"	4' - 4"	2' - 9"			
EA5119	5	2	9' - 5" TO 9' - 9"	4	2' - 9"	3' - 11" TO 4' - 3"	2' - 9"			VARY EA B BY 4"
EA5120	5	5	9' - 0"	4	2' - 9"	3' - 6"	2' - 9"			
EA5121	5	1	9' - 2"	4	2' - 9"	3' - 8"	2' - 9"			
EA5122	5	1	9' - 1"	4	2' - 9"	3' - 7"	2' - 9"			
EA5123	5	1	7' - 3"	4	2' - 9"	1' - 9"	2' - 9"			
EA5124	5	5	9' - 1"	4	2' - 11"	3' - 3"	2' - 11"			
EA5125	5	6	9' - 4"	4	2' - 11"	3' - 6"	2' - 11"			
EA6101	6	14	13' - 9 3/8"	4	4' - 3"	5' - 3 3/8"	4' - 3"			
EA6102	6	28	9' - 9"	10	5' - 6"	4' - 3"				
EA6103	6	24	54' - 5"	STR						
EA6104	6	7	14' - 7"	11	9' - 7"	5' - 0"	1' - 8 1/2"			
EA6105	6	216	13' - 8"	4	4' - 10"	4' - 0"	4' - 10"			
EA6106	6	40	13' - 9"	4	4' - 10"	4' - 1"	4' - 10"			
ED6107	6	120	4' - 11"	10	1' - 0"	3' - 11"				DOWELS
EA6108	6	2	31' - 10"	STR						
EA6109	6	2	5' - 6"	11	4' - 0"	1' - 6"	6"			
EC6110	6	4	1' - 0"	STR						
EA3301	3	2	15' - 0"	STR						BEND IN FIELD
EA3302	3	4	10' - 9"	STR						BEND IN FIELD
EA3303	3	6	8' - 0"	STR						BEND IN FIELD
EC4301	4	8	3' - 10"	76	1' - 4"	6"	6"	1' - 6"		
EC4302	4	2	3' - 4" TO 3' - 7"	STR						VARY EA BAR BY 3"
EA5301	5	5	11' - 0"	4	2' - 3"	5' - 2"	3' - 7"			
EA5302	5	14	6' - 2"	10	2' - 7"	3' - 7"				
EA5303	5	5	8' - 7"	11	6' - 2"	2' - 5"	9"			
EA5304	5	5	6' - 1"	10	2' - 7"	3' - 6"				
EA5305	5	5	11' - 8"	11	10' - 8"	1' - 0"	10 1/2"			
EA5306	5	4	6' - 4" TO 7' - 4 3/4"	4	2' - 8"	1' - 0" TO 2' - 0 3/4"	2' - 8"			VARY EA B BY 4 1/4"
EA5307	5	1	8' - 8 1/2"	4	2' - 8"	3' - 4 1/2"	2' - 8"			
EA5308	5	6	8' - 7 5/8" TO 10' - 3"	4	2' - 8"	3' - 3 5/8" TO 4' - 11"	2' - 8"			VARY EA B BY 3 7/8"
EA5309	5	4	10' - 7"	4	2' - 8"	5' - 3"	2' - 8"			
EA5310	5	11	6' - 3 1/4" TO 9' - 8 1/2"	4	3' - 0"	3 1/4" TO 3' - 8 1/2"	3' - 0"			VARY EA B BY 4 1/8"
EA5311	5	3	2' - 9" TO 7' - 9"	STR						VARY EA BAR BY 30"
EA5312	5	1	10' - 0"	STR						
EA5313	5	5	6' - 1"	STR						

ABUTMENT 1 REINFORCEMENT BAR SCHEDULE CONT

MARK	SIZE	NUMBER	LENGTH	TYPE	A	B	C	D	E	REMARKS
EA6301	6	2	9' - 6 1/2"	STR						
EA3501	3	2	16' - 0"	STR						BEND IN FIELD
EA3502	3	4	11' - 6"	STR						BEND IN FIELD
EA3503	3	7	8' - 0"	STR						BEND IN FIELD
EC4501	4	3	3' - 10"	76	1' - 4"	6"	6"	1' - 6"		
EC4502	4	2	1' - 0"	STR						
EA5501	5	5	8' - 10"	10	3' - 7"	5' - 3"				
EA5502	5	6	8' - 4 7/8" TO 9' - 11"	4	3' - 11"	6 7/8" TO 2' - 1"	3' - 11"			VARY EA B BY 3 5/8"
EA5503	5	5	10' - 1"	11	8' - 0"	2' - 1"	1' - 11 1/2"			
EA5504	5	5	8' - 9"	7	3' - 6"	1' - 9"	3' - 6"	1' - 3"		
EA5505	5	5	6' - 9"	10	6' - 2"	7"	3"			
EA5506	5	5	10' - 0"	22	6' - 10"	9"	2' - 5"			
EA5507	5	5	8' - 8 1/4"	4	3' - 6"	1' - 8 1/4"	3' - 6"			
EA5508	5	1	9' - 6"	4	3' - 6"	2' - 6"	3' - 6"			
EA5509	5	6	9' - 4"	4	3' - 6"	2' - 4"	3' - 6"			
EA5510	5	1	8' - 8"	4	3' - 6"	1' - 8"	3' - 6"			
EA5511	5	3	9' - 3" TO 12' - 3"	4	3' - 6"	2' - 3" TO 5' - 3"	3' - 6"			VARY EA B BY 1' - 6"
EA5512	5	5	7' - 2"	11	2' - 0"	5' - 2"	2' - 0"			
EA5513	5	10	6' - 11"	4	3' - 0"	11"	3' - 0"			
EA5514	5	2	7' - 1"	4	3' - 0"	1' - 1"	3' - 0"			
EA5515	5	2	9' - 11 1/2"	11	9' - 6"	5 1/2"	2"			
EA5516	5	5	6' - 6"	STR						
EA6501	6	2	9' - 11 3/8"	11	9' - 0"	11"	3 3/4"			



REINFORCEMENT NOTES:

1. FOR REINFORCEMENT BAR FABRICATION DETAILS, REFER TO STANDARD DRAWING BC-736M.
2. NUMBERS IN CIRCLES DENOTE TYPES.
3. "D" DIMENSION ON 180° HOOKS TO BE SHOWN ONLY WHERE NECESSARY TO RESTRICT HOOK SIZE, OTHERWISE STANDARD HOOKS ARE TO BE USED.
4. ALL DIMENSIONS ARE OUT TO OUT OF BAR EXCEPT "A" ON STANDARD 135° AND 180° HOOKS, AND "R" WHICH IS TO THE INSIDE OF THE BAR.
5. "E" PREFIX DENOTES EPOXY COATED BARS.

REFERENCES:

	SHEET:
1. SUPPLEMENTAL DRAWINGS	01
2. TYPICAL SECTION & INDEX OF DRAWINGS	02
3. GENERAL NOTES	05 - 06
4. ABUTMENT 1 PLAN & ELEVATION	09
5. ABUTMENT 1 DETAILS - 1	10
6. ABUTMENT 1 DETAILS - 2	11
7. ABUTMENT 1 DETAILS - 3	12
8. ABUTMENT 2 PLAN & ELEVATION	14
9. ABUTMENT 2 DETAILS - 1	15
10. ABUTMENT 2 DETAILS - 2	16
11. ABUTMENT 2 DETAILS - 3	17

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL MATTHIAS STEIN ENGINEER PE095784

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PITTSBURGH
OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

REV.	BY	DATE	DESCRIPTION

LOCATION: SWISSVALE, PENNSYLVANIA
TITLE: WASHINGTON AVENUE
ABUTMENT 1 REINFORCEMENT BAR SCHEDULE

DSN	LTS.	PROJ NO.	D2122	MAN	1290818-OH/77	MILE POST	PT-344.91
DWN	LTS.	FILE NO.	BR0028818	DRAWING NUMBER	PT-344.91 24 18		
CHK	MS	DATE	08/16/2023				

SHEET NO. 18 OF 58

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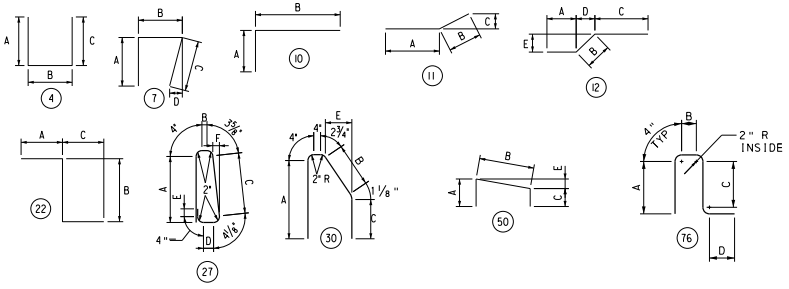
pw:\\WD-us-pw.bentley.commb-us-pw\Documents\MoonTownship_PA\04_Projects\Norfolk_Southern\Pittsburgh_Vertical_Clearance\NS_Washington_Avenue\deliverables\design\structures\Final\plots\NSWash_abut_reinf_bar_sched_04.dgn

ABUTMENT 2 REINFORCEMENT BAR SCHEDULE

MARK	SIZE	NUMBER	LENGTH	TYPE	A	B	C	D	E	REMARKS
EA4202	4	1	17'-10"	50	6'-4"	5'-2"	6'-4"		1'-3"	
EA4203	4	4	12'-1"	50	4'-5"	3'-3"	4'-5"		1'-4"	
EA4204	4	24	3'-6"	11	1'-9"	1'-9"	1'-3"			
EC4201	4	2	6'-8 3/8"	27	2'-9 1/2"	3 3/8"	2'-7 3/4"	6 3/4"	5"	F = 3 3/8"
EC4202	4	2	8'-5"	30	3'-8"	1'-4 3/8"	2'-5 3/4"		8 5/8"	
EA5201	5	4	9'-8"	10	4'-8"	5'-0"				
EA5202	5	20	4'-7"	10	10"	3'-9"				
EA5203	5	6	4'-0" TO 4'-8"	4	4" TO 1'-0"	3'-8"				
EA5204	5	34	5'-4" TO 6'-0"	10	10"	4'-6" TO 5'-2"				VARY EA B BY 7/16"
EA5205	5	34	6'-0"	10	10"	5'-2"				
EA5206	5	20	6'-3"	10	10"	5'-5"				
EA5207	5	6	11'-7" TO 13'-7"	4	4'-5"	2'-9" TO 4'-9"	4'-5"			VARY EA B BY 4 3/4"
EA5208	5	4	9'-10" TO 10'-10"	4	4'-5"	1'-0" TO 2'-0"	4'-5"			VARY EA B BY 3"
EA5209	5	17	5'-7" TO 6'-7"	4	2'-0" TO 2'-6"	1'-7"	2'-0" TO 2'-6"			VARY EA A & C BY 3/8"
EA5210	5	17	6'-7"	4	2'-6"	1'-7"	2'-6"			
EA5211	5	4	7'-10 1/2" TO 8'-4"	4	3'-3"	1'-4 1/2" TO	3'-3"			VARY EA B BY 1 13/16"
EA5212	5	6	8'-6 1/2"	4	3'-3"	2'-0 1/2"	3'-3"			
EA5213	5	9	6'-6" TO 9'-2"	4	3'-0"	6" TO 3'-2"	3'-0"			VARY EA B BY 4 1/16"
EA5214	5	17	5'-6"	4	2'-4"	10"	2'-4"			
EA5215	5	18	5'-6"	4	2'-4"	10"	2'-4"			
EA5216	5	8	6'-7"	4	3'-0"	7"	3'-0"			
EA5217	5	3	31'-9"	STR						
EA5218	5	3	9" TO 5'-9"	STR						VARY EA BAR BY 2'-6"
EA5219	5	2	8'-1 1/2"	STR						
EA5220	5	1	5'-10"	STR						
EA5221	5	4	31'-9"	STR						
EA5222	5	4	33'-6"	STR						
EA5223	5	3	5'-1"	11	3'-7"	1'-6"	6 1/2"			
EA5224	5	10	5'-1"	11	3'-7"	1'-6"	5 1/2"			
EA5225	5	6	7'-5"	10	2'-5"	5'-0"				SPLAYED BARS
EA5226	5	6	9'-7"	10	3'-9"	5'-10"				
EA5227	5	4	7'-6"	10	4'-10"	2'-8"				
EA5228	5	4	9'-3"	11	8'-4"	11"	5"			
EA5229	5	4	8'-2"	12	5'-9"	10"	1'-7"	3 3/16"	9"	
EA5230	5	4	8'-2"	STR						
EA5231	5	4	4'-5"	10	1'-10"	2'-7"				
EA3201	3	1	4'-0"	STR						BEND IN FIELD

ABUTMENT 2 REINFORCEMENT BAR SCHEDULE CONT

MARK	SIZE	NUMBER	LENGTH	TYPE	A	B	C	D	E	REMARKS
EA5232	5	1	7'-10"	4	2'-0"	3'-10"	2'-0"			
EA5233	5	1	7'-8"	4	2'-0"	3'-8"	2'-0"			
EA5234	5	4	7'-7"	4	2'-0"	3'-7"	2'-0"			
EA5235	5	5	8'-4" TO 9'-5"	4	2'-0"	4'-4" TO 5'-5"	2'-0"			VARY EA B BY 3 1/4"
EA5236	5	1	4'-6"	10	2'-6"	2'-0"				
EA5237	5	4	8'-11"	4	2'-8"	3'-7"	2'-8"			
EA5238	5	1	6'-6"	10	1'-9"	4'-9"				
EA5239	5	1	9'-4"	4	2'-10"	3'-8"	2'-10"			
EA5240	5	6	10'-2"	4	2'-10"	4'-6"	2'-10"			
EA5241	5	6	9'-0"	4	2'-10"	3'-4"	2'-10"			
EA5242	5	1	7'-4 1/2"	4	2'-0"	3'-4 1/2"	2'-0"			
EA5243	5	1	7'-0"	4	2'-0"	3'-0"	2'-0"			
EA5244	5	1	9'-6"	4	2'-10"	3'-10"	2'-10"			
EA5245	5	3	10'-5"	4	2'-10"	4'-9"	2'-10"			
EA5246	5	1	10'-4 1/4"	4	2'-10"	4'-8 1/4"	2'-10"			
EA5247	5	1	7'-1 1/2"	11	4'-8 1/4"	2'-5 1/4"	2'-3 3/4"			
EA5248	5	3	6'-8 1/8" TO 7'-2 1/8"	4	3'-1 3/4"	4 5/8" TO 10 5/8"	3'-1 3/4"			VARY EA B BY 2 7/8"
EC5249	5	5	1'-0"	STR						
EA5251	5	2	6'-9" TO 7'-1"	4	3'-0"	9" TO 1'-1"	3'-0"			VARY EA B BY 4"
EA5252	5	1	8'-5"	STR						
EA5253	5	4	5'-6"	STR						
EA6201	6	2	31'-9"	STR						
EA6202	6	2	7'-11"	STR						
EA6203	6	2	8'-2"	11	6'-10"	1'-4"	5 3/8"			
EA6204	6	2	5'-9"	11	4'-3"	1'-6"	5 1/2"			
EA6205	6	24	11'-4"	4	4'-5"	2'-6"	4'-5"			
EA6206	6	160	10'-10"	4	4'-2"	2'-6"	4'-2"			
EA6207	6	4	11'-0"	4	4'-3"	2'-6"	4'-3"			
EA6208	6	36	11'-6"	4	4'-6"	2'-6"	4'-6"			
EA6209	6	16	9'-5"	11	4'-5"	5'-0"				
EA6210	6	12	6'-10"	4	4'-3"	2'-7"	4'-3"			
EA6211	6	40	28'-3"	STR						
EA6212	6	4	12'-3"	11	8'-6"	3'-9"				
EC6201	6	4	1'-0"	STR						
ED6201	6	108	3'-10"	10	10"	3'-0"				DOWELS



REINFORCEMENT NOTES:

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2. NUMBERS IN CIRCLES DENOTE TYPES.
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5. "E" PREFIX DENOTES EPOXY COATED BARS.

REFERENCES:

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1. SUPPLEMENTAL DRAWINGS	01
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REV	BY	DATE	DESCRIPTION

LOCATION: SWISSVALE, PENNSYLVANIA
TITLE: WASHINGTON AVENUE
ABUTMENT 2 REINFORCEMENT BAR SCHEDULE

DSN	LTS	PROJ NO	D2122	WBS	1290818-OH/77
DWN	LTS/MAM	FILE NO	BR0028818	MILE POST	PT-344.91
CHK	MS/RMS	DATE	08/16/2023	DRAWING NUMBER	PT-344.91 24 19

SHEET NO. 19 OF 58

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pw:\\WD-us-pwdentley.commb-us-pw-01\Documents\MoonTownship.PA\DocProjects\Norfolk_Southern\Pittsburgh_Vertical_Clearance\NS_Washington_Avenue\deliverables\design\structures\Final\plots\NSWash_abut_reinf_bar_sched_02.dgn

STATION	DESCRIPTION	SOUTH TRUSS (RIGHT TRUSS)				PROFILE ELEVATION	NORTH TRUSS (LEFT TRUSS)			
		TOP CHORD		BOTTOM CHORD			BOTTOM CHORD		TOP CHORD	
		WP	ELEVATION	WP	ELEVATION		WP	ELEVATION	WP	ELEVATION
6+96.43	ABUT 1 CL ST	SL0	941.46			943.59				
7+02.98	ABUT 1 PG					943.91				
7+04.01		SL1	941.81	SU1	950.31	943.94				
7+09.53						944.20	NL0	942.07		
7+10.56	ABUT 1 CL NT	SL2	942.11			944.24				
7+17.11						944.50	NL1	942.33	NU1	950.83
7+18.14		SL3	942.37	SU3	954.12	944.52				
7+25.71		SL4	942.62			944.76	NL2	942.62		
7+33.29		SL5	942.79	SU5	956.70	944.94	NL3	942.79	NU3	954.54
7+40.87		SL6	942.95			945.08	NL4	942.95		
7+48.45		SL7	943.01	SU7	958.01	945.17	NL5	943.01	NU5	956.93
7+56.03		SL8	943.08			945.21	NL6	943.08		
7+63.61		SL7'	943.05	SU7'	958.05	945.21	NL7	943.05	NU7	958.05
7+71.18		SL6'	943.02			945.15	NL8	943.02		
7+78.76		SL5'	942.89	SU5'	956.81	945.05	NL7'	942.89	NU7'	957.89
7+86.34		SL4'	942.77			944.90	NL6'	942.77		
7+93.92		SL3'	942.55	SU3'	954.30	944.70	NL5'	942.55	NU5'	956.46
8+01.50		SL2'	942.33			944.46	NL4'	942.33		
8+09.07		SL1'	941.97	SU1'	950.47	944.17	NL3'	942.01	NU3'	953.76
8+10.10						944.15				
8+16.65						943.83	NL2'	941.70		
8+17.68	ABUT 2 CL ST	SL0'	941.65			943.78				
8+23.20						943.47	NL1'	941.35	NU1'	949.85
8+24.23	ABUT 2 PG					943.44				
8+30.78	ABUT 2 CL NT					943.07	NL0'	940.94		

TRUSS DEFLECTION

	NORTH TRUSS					SOUTH TRUSS				
	WP	STEEL DL (IN)	CONCRETE DL (IN)	SUPERIMPOSED DL (IN)	TOTAL (IN)	WP	STEEL DL (IN)	CONCRETE DL (IN)	SUPERIMPOSED DL (IN)	TOTAL (IN)
BOTTOM CHORD	NL0	0.00	0.00	0.00	0.00	SL0	0.00	0.00	0.00	0.00
	NL1	0.10	0.14	0.05	0.30	SL1	0.10	0.13	0.05	0.29
	NL2	0.20	0.27	0.10	0.57	SL2	0.17	0.23	0.09	0.49
	NL3	0.28	0.38	0.14	0.80	SL3	0.25	0.34	0.13	0.73
	NL4	0.34	0.46	0.17	0.97	SL4	0.32	0.43	0.16	0.91
	NL5	0.39	0.53	0.20	1.12	SL5	0.37	0.50	0.19	1.07
	NL6	0.42	0.57	0.21	1.20	SL6	0.41	0.55	0.21	1.17
	NL7	0.44	0.60	0.22	1.26	SL7	0.43	0.59	0.22	1.24
	NL8	0.44	0.60	0.23	1.26	SL8	0.44	0.60	0.22	1.26
	NL7'	0.43	0.59	0.22	1.24	SL7'	0.44	0.59	0.22	1.26
	NL6'	0.41	0.55	0.21	1.17	SL6'	0.42	0.57	0.21	1.20
	NL5'	0.37	0.50	0.19	1.07	SL5'	0.39	0.53	0.20	1.11
	NL4'	0.32	0.43	0.16	0.91	SL4'	0.34	0.46	0.17	0.97
	NL3'	0.25	0.34	0.13	0.73	SL3'	0.28	0.38	0.14	0.80
	NL2'	0.17	0.23	0.09	0.49	SL2'	0.20	0.27	0.10	0.57
	NL1'	0.10	0.13	0.05	0.29	SL1'	0.10	0.14	0.05	0.30
	NL0'	0.00	0.00	0.00	0.00	SL0'	0.00	0.00	0.00	0.00
TOP CHORD	NU1	0.10	0.14	0.05	0.29	SU1	0.10	0.13	0.05	0.28
	NU3	0.28	0.38	0.14	0.80	SU3	0.25	0.34	0.13	0.72
	NU5	0.39	0.52	0.20	1.10	SU5	0.37	0.50	0.19	1.05
	NU7	0.44	0.59	0.22	1.25	SU7	0.43	0.58	0.22	1.23
	NU7'	0.43	0.58	0.22	1.23	SU7'	0.44	0.59	0.22	1.24
	NU5'	0.37	0.50	0.19	1.06	SU5'	0.39	0.52	0.19	1.10
	NU3'	0.25	0.34	0.13	0.72	SU3'	0.28	0.38	0.14	0.79
	NU1'	0.10	0.13	0.05	0.28	SU1'	0.10	0.14	0.05	0.29

NOTES:

1. FOR DISTANCES BETWEEN PANEL POINTS AND TRUSS MEMBER SIZES, SEE TRUSS ELEVATION SHEET.
2. STEEL DEFLECTIONS INCLUDE LOADING FROM THE TRUSSES, FLOORBEAMS, AND SIDEWALK FRAMING.
3. CONCRETE DEFLECTIONS INCLUDE LOADING FROM THE GRID DECK, HAUNCH, AND SIDEWALK CONCRETE LOADING.
4. SUPERIMPOSED DEFLECTIONS INCLUDE LOADING FROM THE BARRIER AND FENCE.
5. DEFLECTIONS WERE OBTAINED FROM A 3D FINITE ELEMENT MODEL ASSUMING ABUTMENT 1 FIXED AND ABUTMENT 2 EXPANSION. POSITIVE DEFLECTIONS ARE DOWNWARD.

REFERENCES:

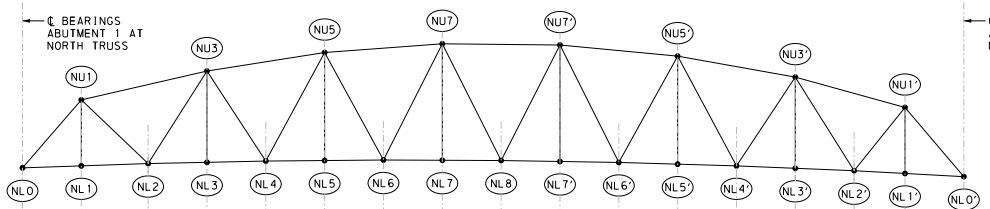
	SHEET:
1. SUPPLEMENTAL DRAWINGS	01
2. TYPICAL SECTION & INDEX OF DRAWINGS	02
3. STAKEOUT PLAN	04
4. GENERAL NOTES	05 - 06
5. TRUSS ELEVATION	21
6. FLOOR SYSTEM FRAMING	22
7. TRUSS LOADING AND TRUSS REACTIONS	26
8. TRUSS STRESS SHEET	27

LEGEND:

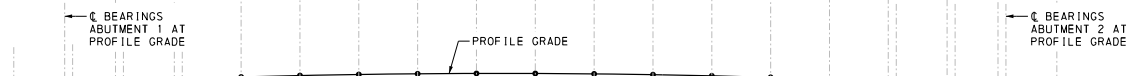
PG PROFILE GRADE

(NL7) NORTH LOWER CHORD PANEL POINT

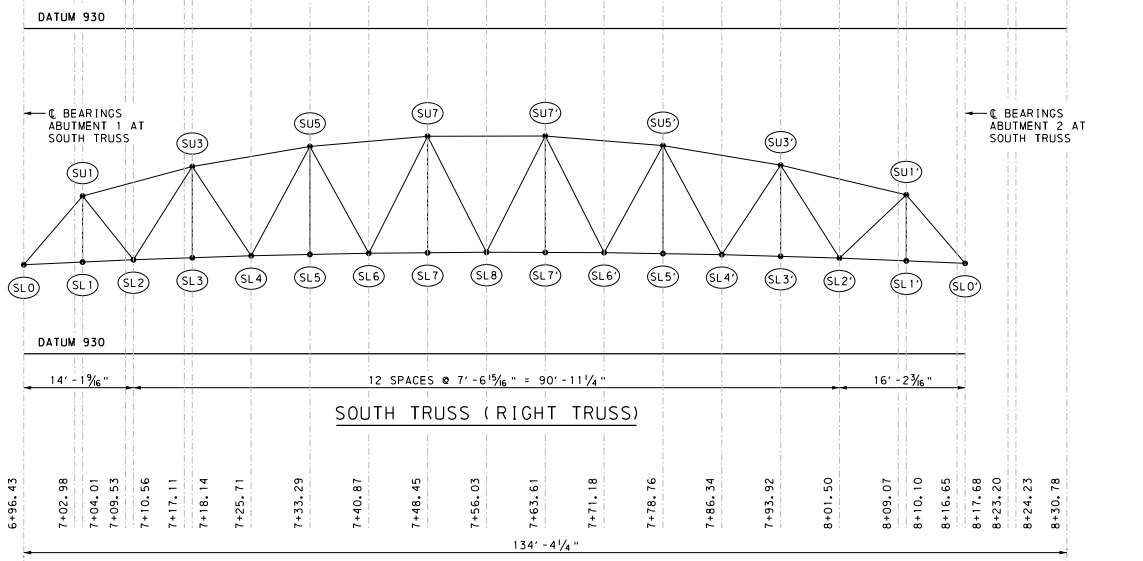
(SU5') SOUTH UPPER CHORD PANEL POINT



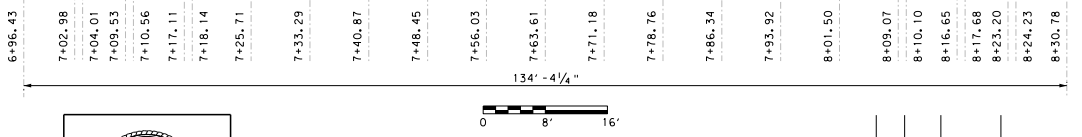
NORTH TRUSS (LEFT TRUSS)



PROFILE GRADE



SOUTH TRUSS (RIGHT TRUSS)



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OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

REV.	BY	DATE	DESCRIPTION

LOCATION: SWISSVALE, PENNSYLVANIA

TITLE: WASHINGTON AVENUE
TRUSS FRAMING AND WORK POINT GEOMETRY

DSN	MEM	PROJ NO.	D2122	WBS	1290818-OH/77	MILE POST	PT-344.91
DWN	KTS	FILE NO.	BR0028818	DRAWING NUMBER	PT-344.91 24 20		
CHK	MS	DATE	08/16/2023				

SHEET NO. 20 OF 58

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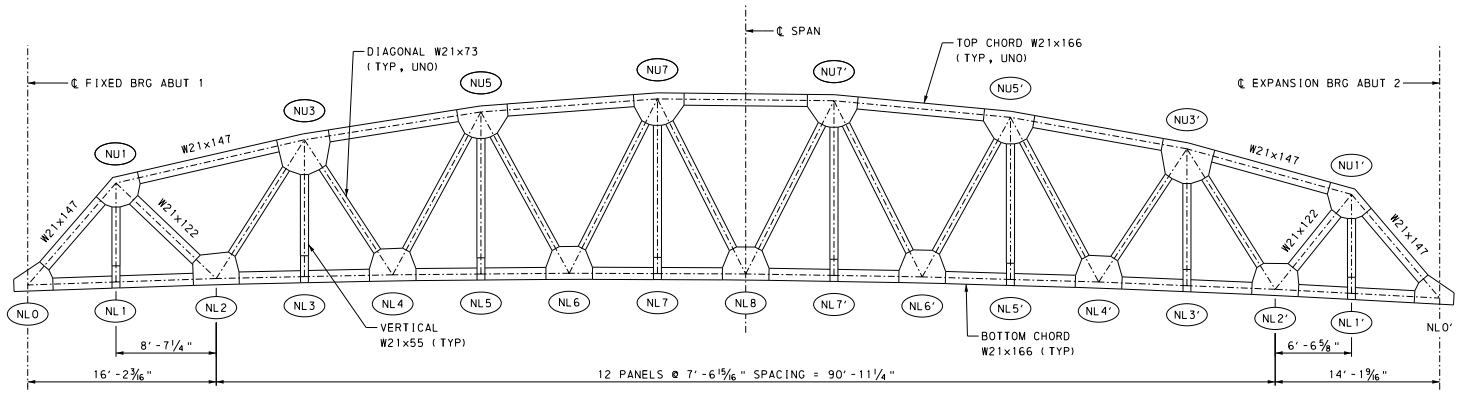

ELEVATION - NORTH TRUSS

(NORTH TRUSS SHOWN - SOUTH SIMILAR)

0 5' 10'

NORTH TRUSS TABLE OF MEMBER LENGTHS (FEET)

TOP CHORD AND END POSTS	MEMBER				NL0-NU1	NU1-NU3	NU3-NU5	NU5-NU7	NU7-NU7'	NU7'-NU5'	NU5'-NU3'	NU3'-NU1'	NU1'-NL0'					
	WP-WP LENGTH				11.583	16.601	15.344	15.198	15.157	15.224	15.395	14.663	11.694					
BOTTOM CHORD	MEMBER	NL0-NL1	NL1-NL2	NL2-NL3	NL3-NL4	NL4-NL5	NL5-NL6	NL6-NL7	NL7-NL8	NL8-NL7'	NL7'-NL6'	NL6'-NL5'	NL5'-NL4'	NL4'-NL3'	NL3'-NL2'	NL2'-NL1'	NL1'-NL0'	
	WP-WP LENGTH	7.583	8.609	7.580	7.580	7.578	7.578	7.578	7.578	7.579	7.579	7.581	7.581	7.585	7.585	6.561	7.589	
VERTICALS	MEMBER					NU1-NL1	NU3-NL3	NU5-NL5	NU7-NL7	NU7'-NL7'	NU5'-NL5'	NU3'-NL3'	NU1'-NL1'					
	WP-WP LENGTH					8.500	11.750	13.917	15.000	15.000	13.917	11.750	8.500					
DIAGONALS	MEMBER		NU1-NL2	NL2-NU3	NU3-NL4	NL4-NU5	NU5-NL6	NL6-NU7	NU7-NL8	NL8-NU7'	NU7'-NL6'	NL6'-NU5'	NU5'-NL4'	NL4'-NU3'	NU3'-NL2'	NL2'-NU1'		
	WP-WP LENGTH		11.889	14.118	13.846	15.904	15.788	16.779	16.832	16.692	16.919	15.654	16.039	13.719	14.247	10.456		

SOUTH TRUSS TABLE OF MEMBER LENGTHS (FEET)

TOP CHORD AND END POSTS	MEMBER				SL0-SU1	SU1-SU3	SU3-SU5	SU5-SU7	SU7-SU7'	SU7'-SU5'	SU5'-SU3'	SU3'-SU1'	SU1'-SL0'					
	WP-WP LENGTH				11.649	14.634	15.375	15.213	15.156	15.207	15.363	16.629	11.627					
BOTTOM CHORD	MEMBER	SL0-SL1	SL1-SL2	SL2-SL3	SL3-SL4	SL4-SL5	SL5-SL6	SL6-SL7	SL7-SL8	SL8-SL7'	SL7'-SL6'	SL6'-SL5'	SL5'-SL4'	SL4'-SL3'	SL3'-SL2'	SL2'-SL1'	SL1'-SL0'	
	WP-WP LENGTH	7.586	6.559	7.582	7.582	7.580	7.580	7.578	7.578	7.578	7.578	7.579	7.579	7.581	7.581	8.612	7.585	
VERTICALS	MEMBER					SU1-SL1	SU3-SL3	SU5-SL5	SU7-SL7	SU7'-SL7'	SU5'-SL5'	SU3'-SL3'	SU1'-SL1'					
	WP-WP LENGTH					8.500	11.750	13.917	15.000	15.000	13.917	11.750	8.500					
DIAGONALS	MEMBER		SU1-SL2	SL2-SU3	SU3-SL4	SL4-SU5	SU5-SL6	SL6-SU7	SU7-SL8	SL8-SU7'	SU7'-SL6'	SL6'-SU5'	SU5'-SL4'	SL4'-SU3'	SU3'-SL2'	SL2'-SU1'		
	WP-WP LENGTH		10.497	14.199	13.766	15.988	15.704	16.865	16.747	16.779	16.832	15.735	15.958	13.798	14.167	11.844		

NOTES:

1. MEMBER LENGTHS TAKEN FROM WORKPOINT TO WORKPOINT WITHOUT CAMBER, MITER, OR TEMPERATURE CORRECTIONS ALONG THE CENTERLINE OF THE MEMBER. VARIATION IN MEMBER LENGTH DUE TO ROADWAY VERTICAL CURVATURE IS INCLUDED.

REFERENCES:

	SHEET:
1. SUPPLEMENTAL DRAWINGS	01
2. TYPICAL SECTION & INDEX OF DRAWINGS	02
3. GENERAL NOTES	05 - 06
4. TRUSS FRAMING & WORK POINT GEOMETRY	20
5. FLOOR SYSTEM FRAMING	22
6. TRUSS LOADING AND TRUSS REACTIONS	26
7. TRUSS STRESS SHEET	27

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL MATTHIAS STEIN ENGINEER PE095784

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REV.	BY	DATE	DESCRIPTION

LOCATION: SWISSVALE, PENNSYLVANIA
TITLE: WASHINGTON AVENUE TRUSS ELEVATION

DSN MEM	PROJ NO. D2122	WBS 1290818-OH/77	MILE POST PT-344.91		
DWN KTS	FILE NO. BR0028818	DRAWING NUMBER PT-344.91 24 21			
CHK CGF	DATE 08/16/2023				

SHEET NO. 21 OF 58

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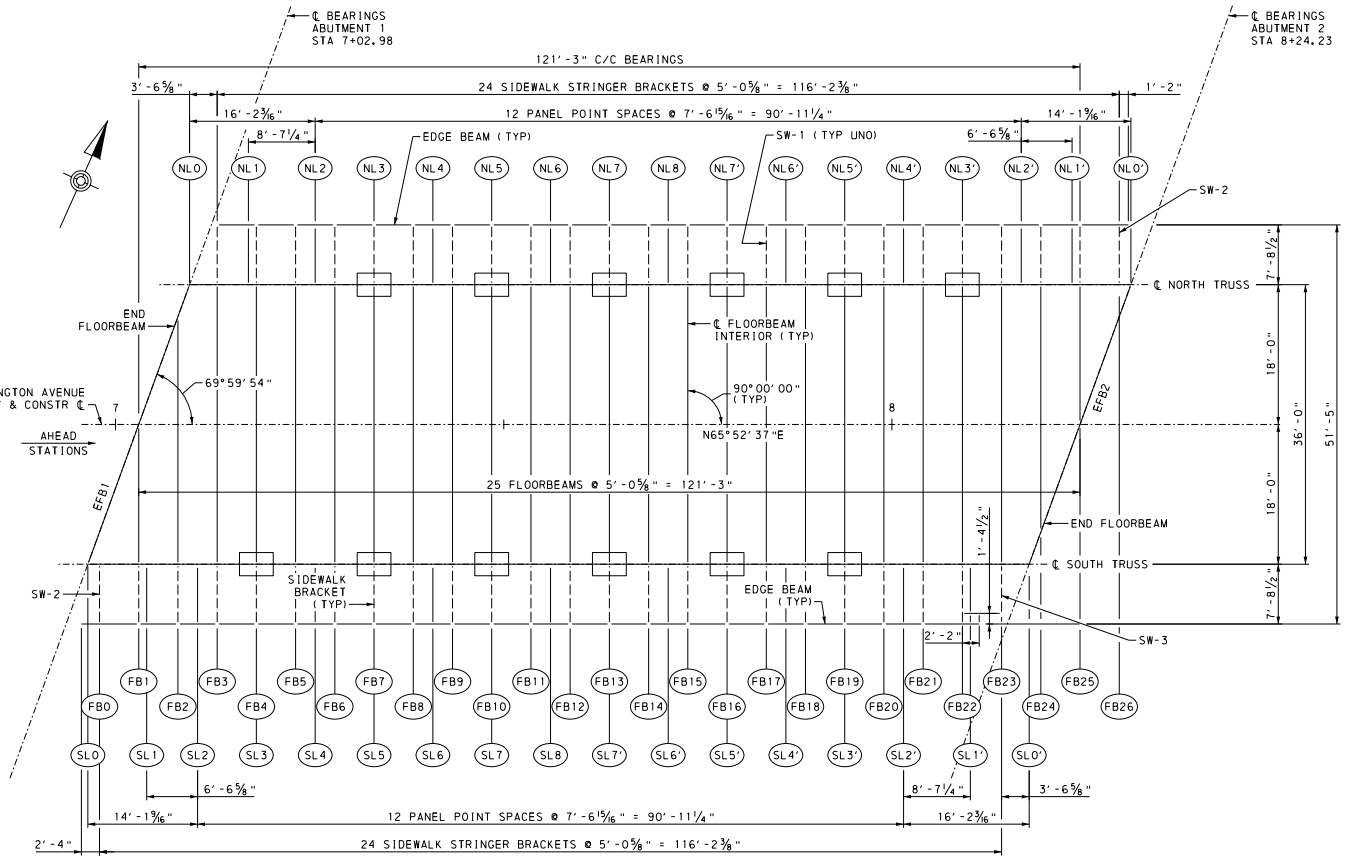

FLOOR SYSTEM FRAMING PLAN

0 8' 16'

LEGEND:

- (NL6) NORTH LOWER CHORD PANEL POINT
- (SL6) SOUTH LOWER CHORD PANEL POINT
- (FB6) FLOORBEAM
- ☐ LOCATIONS WHERE 4 BOLTS ARE REQUIRED IN THE FLOORBEAM WEB AT THE TRUSS CONNECTION. SEE NOTE 3.

SW-1 SIDEWALK BRACKET DESIGNATION (1, 2, OR 3)

NOTES:

1. NO FLOORBEAM IS PRESENT AT THE FB0 AND FB26 LOCATIONS. THESE LOCATIONS ARE INDICATED PURELY FOR PLACING THE END SIDEWALK BRACKETS.
2. THE CONTRACTOR IS RESPONSIBLE FOR TEMPORARILY BRACING THE TRUSS AND FLOORSYSTEM.
3. NOTED ARE LOCATIONS WHERE 4 BOLTS ARE REQUIRED IN THE FLOORBEAM WEB AT THE TRUSS CONNECTION. SEE INTERIOR FLOORBEAM DETAILS SHEET FOR MORE INFORMATION.

REFERENCES:

	SHEET:
1. GENERAL PLAN AND ELEVATION	01
2. SUPPLEMENTAL DRAWINGS	01
3. TYPICAL SECTION & INDEX OF DRAWINGS	02
4. STAKEOUT PLAN	04
5. GENERAL NOTES	05 - 06
6. TRUSS FRAMING AND WORK POINT GEOMETRY	20
7. TRUSS ELEVATION	21
8. INTERIOR FLOORBEAM DETAILS	23
9. END FLOORBEAM DETAILS - 1	24
10. END FLOORBEAM DETAILS - 2	25
11. SIDEWALK EDGE BEAM	39
12. DECK PLAN	44
13. BARRIER AND SIDEWALK PLAN	48
14. ERECTION DETAILS - 1	54
15. ERECTION DETAILS - 2	55

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REV	BY	DATE	DESCRIPTION

LOCATION: SWISSVALE, PENNSYLVANIA
TITLE: WASHINGTON AVENUE FLOOR SYSTEM FRAMING

DSN MEM	PROJ NO. D2122	VAN 1290818-OH/77	WBS/PEP PT-344.91
DWN EBM	FILE NO. BR0028818		DRAWING NUMBER PT-344.91 24 22
CHK MS	DATE 08/16/2023		

SHEET NO. 22 OF 58

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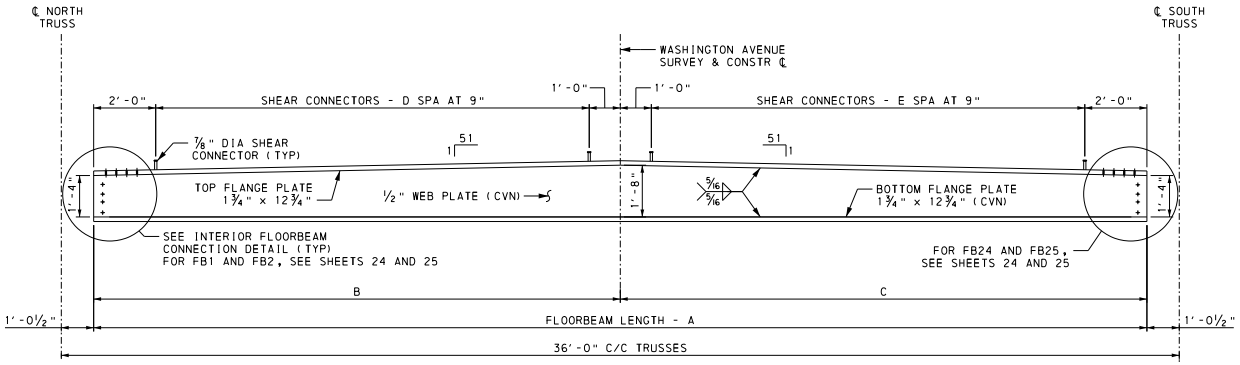
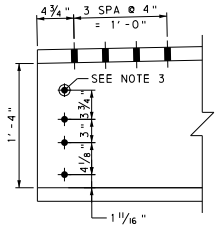


FLOORBEAM ELEVATION

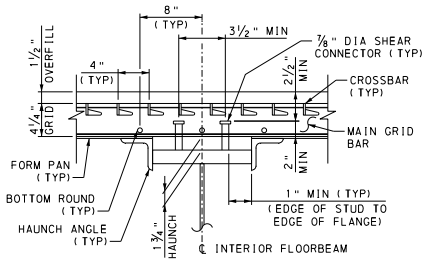
(LOOKING AHEAD STATIONS)

0 6 1' 2' 3' 4'



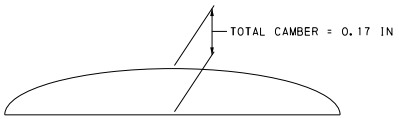
INTERIOR FLOORBEAM CONNECTION DETAIL

0 3 6 9 1'



DECK CONNECTION DETAIL

0 3 6 9 1'



INTERIOR FLOORBEAM CAMBER

INTERIOR FLOORBEAM CAMBER	
TYPE OF CAMBER	CAMBER (IN)
STEEL DL	0.06
CONCRETE DL	0.10
SUPERIMPOSED DL	0.01
TOTAL DL	0.17

NOTES:

1. LOCATE AND WELD SHEAR STUDS IN FIELD TO MISS ALL GRID BARS.
2. SHEAR STUD SPACING MAY BE ADJUSTED TO MISS GRID COMPONENTS, BUT DO NOT ELIMINATE STUDS.
3. THE TOP BOLT HOLE THROUGH THE INTERIOR FLOORBEAM WEB IS ONLY PRESENT AT CONNECTIONS TO TRUSS VERTICAL MEMBERS. THERE ARE FIVE INTERIOR FLOORBEAMS WHERE THIS OCCURS AT BOTH ENDS AND TWO INTERIOR FLOORBEAMS WHERE IT OCCURS AT ONE END ONLY. SEE THE FLOOR SYSTEM FRAMING SHEET FOR MORE INFORMATION.
4. B/C-DIMENSION APPLIES TO BOTTOM FLANGE. OVERALL TOP FLANGE LENGTH IS SIMILAR, BUT PLATE THICKNESS IS REDUCED TO 1". WEB PLATE IS SHORTER. REFER TO DETAIL "FB1 CONNECTION DETAIL" ON SHEET 25.
5. B/C-DIMENSION APPLIES TO WEB PLATE. TOP AND BOTTOM FLANGE PLATES ARE SHORTER, AND TOP FLANGE PLATE THICKNESS IS REDUCED TO 1". REFER TO DETAIL "FB2 CONNECTION DETAIL" ON SHEET 25.

LEGEND:

CVN CHARPY V-NOTCH

REFERENCES:

REFERENCES:	SHEET:
1. SUPPLEMENTAL DRAWINGS	01
2. INDEX OF DRAWINGS	02
3. GENERAL NOTES	05 - 06
4. TRUSS FRAMING AND WORK POINT GEOMETRY	20
5. FLOOR SYSTEM FRAMING	22
6. END FLOORBEAM DETAILS	24 - 25
7. ERECTION DETAILS	54 - 55

FLOORBEAM DIMENSIONS

FLOORBEAM	A	B	C	D	E
FB1	15.65	---	15.65 (SEE NOTE 4)	---	19
FB2	30.61	13.65 (SEE NOTE 5)	16.96	15	19
FB3 - FB23	33.92	16.96	16.96	19	19
FB24	30.61	16.96	13.65 (SEE NOTE 5)	19	15
FB25	15.65	15.65 (SEE NOTE 4)	---	19	---

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REV	BY	DATE	DESCRIPTION

LOCATION: SWISSVALE, PENNSYLVANIA

TITLE: WASHINGTON AVENUE
INTERIOR FLOORBEAM DETAILS

DSN	MEM	PROJ NO.	D2122	WBS	1290818-OH/77	MILE POST	PT-344.91
DWN	KTS	FILE NO.	BR0028818	DRAWING NUMBER	PT-344.91 24 23		
CHK	MS	DATE	08/16/2023				

SHEET NO. 23 OF 58

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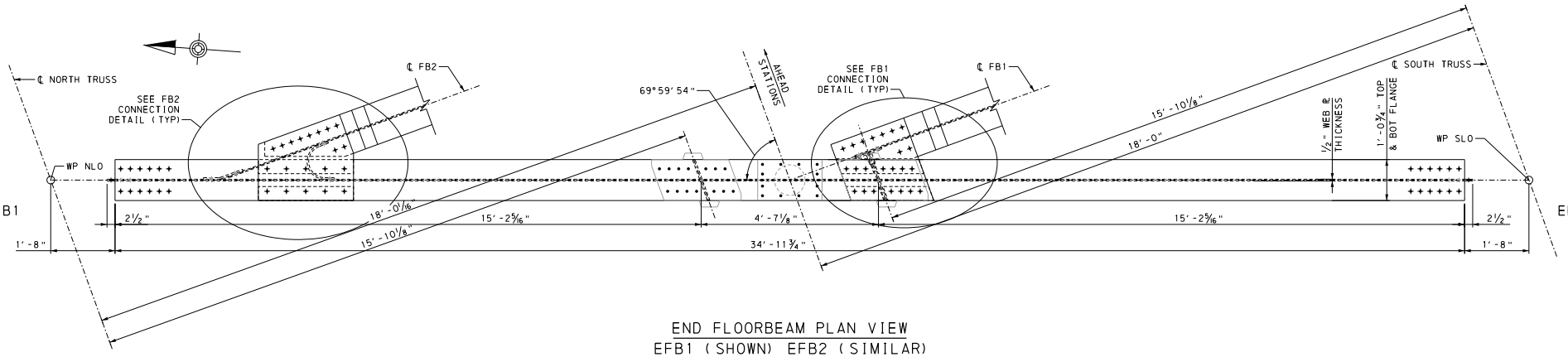
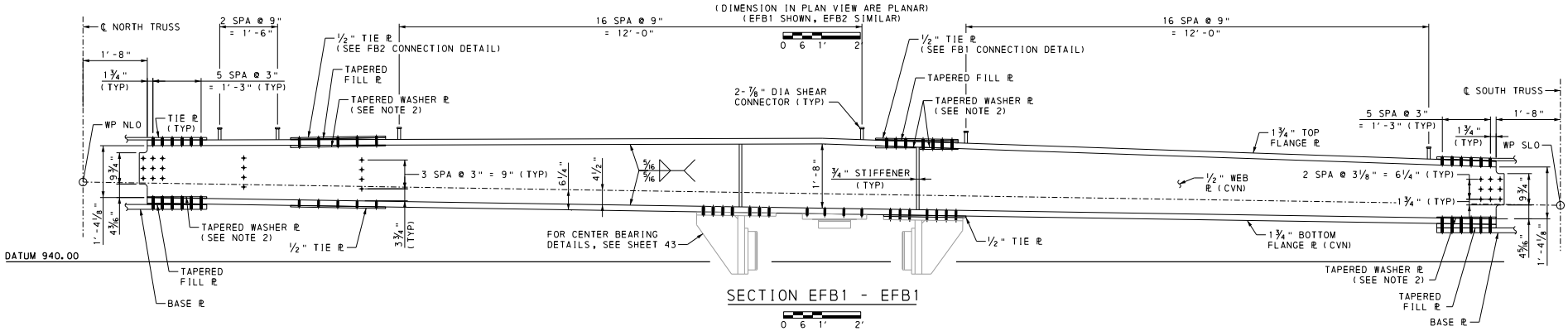


END FLOORBEAM PLAN VIEW
EFB1 (SHOWN) EFB2 (SIMILAR)

(DIMENSION IN PLAN VIEW ARE PLANAR)
(EFB1 SHOWN, EFB2 SIMILAR)



SECTION EFB1 - EFB1

0 6 1' 2'

REFERENCES:

	SHEET:
1. SUPPLEMENTAL DRAWINGS	01
2. TYPICAL SECTION & INDEX OF DRAWINGS	02
3. GENERAL NOTES	05 - 06
4. TRUSS FRAMING AND WORK POINT GEOMETRY	20
5. FLOOR SYSTEM FRAMING	22
6. INTERIOR FLOORBEAM DETAILS	23
7. END FLOORBEAM DETAILS - 2	25
8. JOINT NLO	28 - 29
9. JOINT SLO	37 - 38
10. CENTER BEARING DETAILS	43
11. ERECTION DETAILS	54 - 55

NOTES:

1. SEE THE INTERIOR FLOORBEAM DETAILS SHEET FOR SHEAR CONNECTOR SPACING ALONG THE TOP FLANGE.
2. FABRICATOR MAY SUBSTITUTE TAPERED WASHER PLATE WITH INDIVIDUAL BEVELED WASHERS.

LEGEND:

WP	WORK POINT
FB	FLOORBEAM
EFB	END FLOORBEAM
CVN	CHARPY V-NOTCH
NLO	NORTH TRUSS LOWER PANEL POINT
SLO	SOUTH TRUSS LOWER PANEL POINT

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REV.	BY	DATE	DESCRIPTION

LOCATION: SWISSVALE, PENNSYLVANIA
TITLE: WASHINGTON AVENUE
END FLOORBEAM DETAILS - 1

DSN	MS	PROJ NO.	D2122	WBS	1290818-OH/77
DWN	KTS	FILE NO.	BR0028818		
CHK	MS	DATE	08/16/2023		

WBS POST: PT-344.91
DRAWING NUMBER: PT-344.91 24 24

SHEET NO. 24 OF 58

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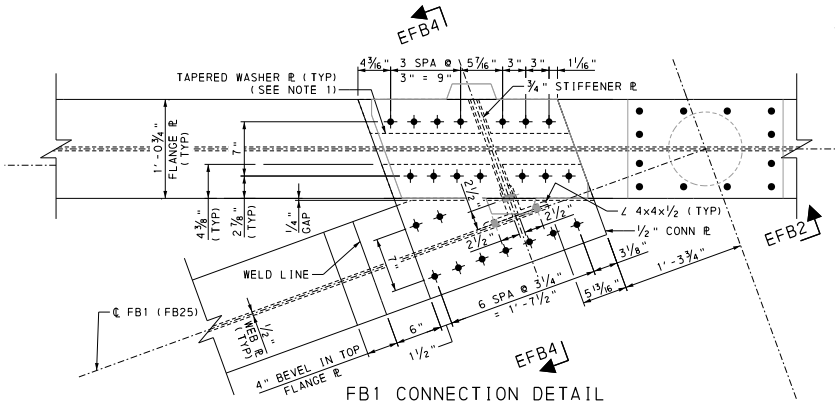
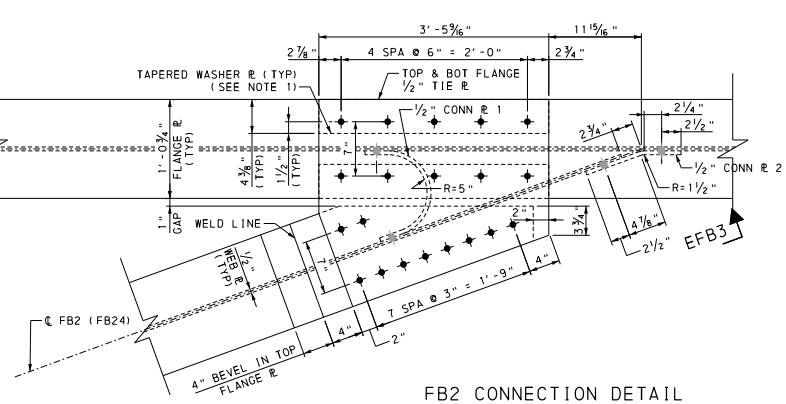


FB1 CONNECTION DETAIL

EFB1 AT ABUTMENT 1 (SHOWN) EFB2 AT ABUTMENT 2 (SIMILAR)

0 3 6 9 1'

(DIMENSIONS IN PLAN VIEW ARE PLANAR)
(TOP PLATE SHOWN, BOTTOM PLATE SIMILAR)

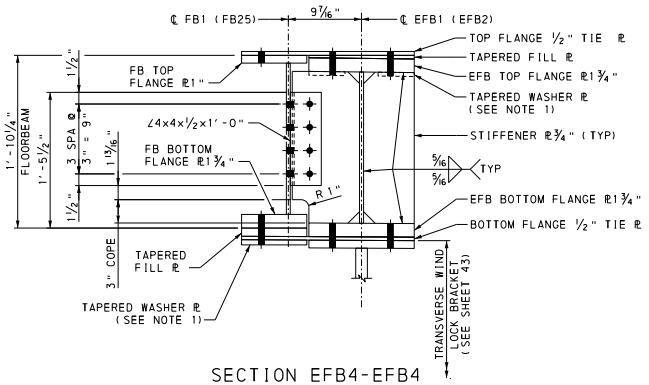


FB2 CONNECTION DETAIL

EFB1 AT ABUTMENT 1 (SHOWN) EFB2 AT ABUTMENT 2 (SIMILAR)

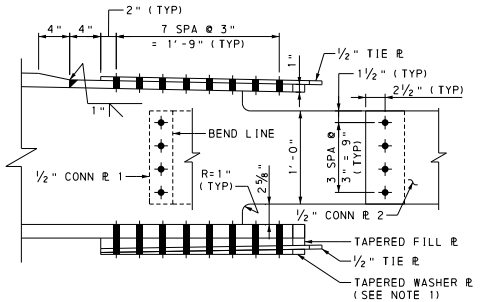
0 3 6 9 1'

(DIMENSIONS IN PLAN VIEW ARE PLANAR)
(TOP PLATE SHOWN, BOTTOM PLATE SIMILAR)



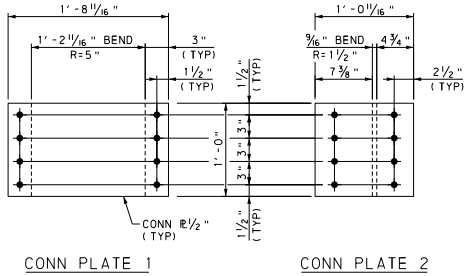
SECTION EFB4-EFB4

0 3 6 9 1'



SECTION EFB3-EFB3

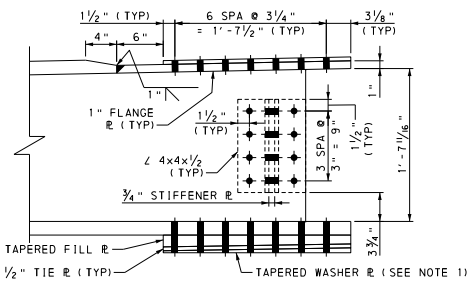
0 3 6 9 1'



CONNECTION PLATE DETAIL

(PLATES SHOWN DEVELOPED)

0 3 6 9 1'



SECTION EFB2-EFB2

0 3 6 9 1'

NOTES:

1. FABRICATOR MAY SUBSTITUTE TAPERED WASHER PLATE WITH INDIVIDUAL BEVELED WASHERS.

LEGEND:

WP	WORK POINT
FB	FLOORBEAM
EFB	END FLOORBEAM
CVN	CHARPY V-NOTCH

REFERENCES:

	SHEET:
1. SUPPLEMENTAL DRAWINGS	01
2. TYPICAL SECTION & INDEX OF DRAWINGS	02
3. GENERAL NOTES	05 - 06
4. TRUSS FRAMING AND WORK POINT GEOMETRY	20
5. FLOOR SYSTEM FRAMING	22
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7. END FLOORBEAM DETAILS - 1	24
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COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL MATTHIAS STEIN ENGINEER PE095784

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NORFOLK SOUTHERN

NORFOLK SOUTHERN RAILWAY CO.
OWNING COMPANY
PITTSBURGH
OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

REV.	BY	DATE	DESCRIPTION

LOCATION: SWISSVALE, PENNSYLVANIA

TITLE: WASHINGTON AVENUE
END FLOORBEAM DETAILS - 2

DSN: MS	PROJ NO: D2122	WBS: 1290818-OH/77	WBS POST: PT-344.91
DWN: KTS	FILE NO: BR0028818	DRAWING NUMBER: PT-344.91 24 25
CHK: MS	DATE: 08/16/2023	

SHEET NO. 25 OF 58

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pw:\\NS-us.pwnet.key.com\b-us-pw-01\Documents\MoonTownship_PA\01_Projects\Norfolk_Southern\Pittsburgh_Vertical_Clearance\NS_Washington Avenue\deliverables\design\structures\Final\plots\NSWash_end_floorbeam_details_02.dgn

NORTH TRUSS PANEL DEAD LOADS (KIPS PER TRUSS)

TOP CHORD	PANEL POINT		NU1		NU3		NU5		NU7		NU7′		NU5′		NU3′		NU1′	
	TRUSS	-	3.03	-	3.84	-	4.07	-	4.16	-	4.16	-	4.08	-	3.70	-	2.81	-
BOTTOM CHORD	PANEL POINT	NL0	NL1	NL2	NL3	NL4	NL5	NL6	NL7	NL8	NL7′	NL6′	NL5′	NL4′	NL3′	NL2′	NL1′	NL0′
	TRUSS	1.48	1.58	2.58	1.58	2.34	1.64	2.45	1.67	2.48	1.67	2.45	1.64	2.34	1.58	2.33	1.41	1.49
	FLOOR STEEL (NOTE 2)	1.71	5.13	6.84	3.42	6.84	3.42	6.84	3.42	6.84	3.42	6.84	3.42	6.84	3.42	6.84	3.42	0.32
	DECK (NOTE 3)	12.14	14.92	14.92	13.81	14.21	13.81	14.21	13.81	14.21	13.81	14.21	13.81	14.21	13.61	13.30	11.84	4.96
	BARRIERS (NOTE 4)	5.91	5.91	5.53	5.53	5.53	5.53	5.53	5.53	5.53	5.53	5.53	5.53	5.53	5.53	5.16	5.16	4.81
	FWS (NOTE 5)	1.29	4.12	3.86	3.86	3.86	3.86	3.86	3.86	3.86	3.86	3.86	3.86	3.86	3.86	3.59	3.59	1.05
	SUB-TOTAL	22.52	31.65	33.73	28.20	32.77	28.26	32.88	28.29	32.91	28.29	32.88	28.26	32.78	28.00	31.22	25.42	12.64
	TOTAL PANEL LOADS	22.52	31.65	33.73	28.20	32.77	28.26	32.88	28.29	32.91	28.29	32.88	28.26	32.78	28.00	31.22	25.42	12.64

SOUTH TRUSS PANEL DEAD LOADS (KIPS PER TRUSS)

TOP CHORD	PANEL POINT		SU1		SU3		SU5		SU7		SU7′		SU5′		SU3′		SU1′	
	TRUSS	-	2.81	-	3.70	-	4.08	-	4.16	-	4.16	-	4.08	-	3.84	-	3.03	-
BOTTOM CHORD	PANEL POINT	SL0	SL1	SL2	SL3	SL4	SL5	SL6	SL7	SL8	SL7′	SL6′	SL5′	SL4′	SL3′	SL2′	SL1′	SL0′
	TRUSS	1.49	1.41	2.33	1.90	2.34	1.64	2.45	1.67	2.48	1.67	2.45	1.64	2.34	1.58	2.58	1.58	1.48
	FLOOR STEEL (NOTE 2)	0.32	3.42	6.84	3.42	6.84	3.42	6.84	3.42	6.84	3.42	6.84	3.42	6.84	3.42	6.84	5.13	1.71
	DECK (NOTE 3)	4.96	11.84	13.30	13.61	14.21	13.81	14.21	13.81	14.21	13.81	14.21	13.81	14.21	13.81	14.92	14.92	12.14
	BARRIERS (NOTE 4)	4.81	5.16	5.16	5.53	5.53	5.53	5.53	5.53	5.53	5.53	5.53	5.53	5.53	5.53	5.53	5.91	5.91
	FWS (NOTE 5)	1.05	3.59	3.59	3.86	3.86	3.86	3.86	3.86	3.86	3.86	3.86	3.86	3.86	3.86	3.86	4.12	1.29
	SUB-TOTAL	12.63	25.42	31.22	28.32	32.77	28.26	32.88	28.29	32.91	28.29	32.88	28.26	32.77	28.20	33.72	31.65	22.53
	TOTAL PANEL LOADS	12.63	25.42	31.22	28.32	32.77	28.26	32.88	28.29	32.91	28.29	32.88	28.26	32.77	28.20	33.72	31.65	22.53

NORTH TRUSS SERVICE REACTIONS (KIPS)

	VERTICAL						TRANSVERSE				LONGITUDINAL				
	DL (MIN)	DL (MAX)	LL + I	WIND	WIND ON LL	OVERTURNING WIND	WIND	WIND ON LL	FRICTION	EQ	WIND	WIND ON LL	FRICTION	BRAKING	EQ
L0 (FIX)	280	310	165	6	±2	±2	0	0	12.6	105	38	4 +/-	0	18	105
L0′ (EXP)	260	290	140	7	±2	±2	0	0	12.6	0	0	0	13	0	0

SOUTH TRUSS SERVICE REACTIONS (KIPS)

	VERTICAL						TRANSVERSE				LONGITUDINAL				
	DL (MIN)	DL (MAX)	LL + I	WIND	WIND ON LL	OVERTURNING WIND	WIND	WIND ON LL	FRICTION	EQ	WIND	WIND ON LL	FRICTION	BRAKING	EQ
L0 (FIX)	260	290	140	-9	±2	±2	0	0	12.6	105	50	-5 +/-	0	18	105
L0′ (EXP)	280	310	155	-6	±2	±2	0	0	12.6	0	0	0	13	0	0

NOTES:

1. EARTHQUAKE TRANSVERSE LOADS ARE RESISTED AT THE BEARINGS AT THE CENTER OF THE END FLOORBEAM.
2. FLOOR STEEL INCLUDES FLOORBEAMS AND SIDEWALK FRAMING.
3. DECK INCLUDES FILLED GRID DECK PLUS 1½" OVERFILL.
4. BARRIER LOAD INCLUDES WEIGHT OF PA 42" F-SHAPE BARRIER AT 650 LB/FT AND FENCE WEIGHT AT 80 LB/FT.
5. FUTURE WEARING SURFACE LOAD OF 30 PSF APPLIED TO FULL DECK WIDTH.

REFERENCES:

	SHEET:
1. TRUSS FRAMING AND WORKPOINT GEOMETRY	20
2. TRUSS ELEVATION	21
3. TRUSS MEMBER LENGTHS	21

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — MATTHIAS STEIN — ENGINEER — PE095784

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OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

REV	BY	DATE	DESCRIPTION

LOCATION: SWISSVALE, PENNSYLVANIA
TITLE: WASHINGTON AVENUE
TRUSS LOADING AND TRUSS REACTIONS

DSN MEM	PROJ NO. D2122	WBS 1290818-OH/77	SHEET POST PT-344.91
DWN KTS	FILE NO. BR0028818		DRAWING NUMBER PT-344.91 24 26
CHK CGF	DATE 08/16/2023		

SHEET NO. 26 OF 58

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MAIN TRUSS MEMBER STRESS TABLE

	MEMBER	UNFACTORED AXIAL MEMBER FORCES									CONTROLLING FACTORED LOAD				SECTION DESCRIPTION/PROPERTIES																FATIGUE STRESS RANGE		MEMBER AXIAL CAPACITY (KIPS)	PERF RATIO	FRACTURE CRITICAL	MEMBER
		DL1 (KIPS)	DL2 (KIPS)	DW (KIPS)	TOTAL DEAD LOAD (KIPS)	PHL-93 LIVE LOAD + IMPACT (KIPS)	P-82 LIVE LOAD + IMPACT (KIPS)	WIND LOAD (KIPS)	WIND ON LL (KIPS)	FATIGUE LL RANGE (KIPS)	LOAD GROUP	AXIAL (KIPS)	MOMENT X-X (KIP-FT)	MOMENT Y-Y (KIP-FT)	MEMBER LENGTH	SECTION	Ag (IN^2)	Aeff (IN^2)	An (IN^2)	rx (IN)	ry (IN)	KL/rx	KL/ry	Fcr (KSI)	Sx (IN^3)	Sy (IN^3)	Mnx (KIP-FT)	Mny (KIP-FT)	Fex (KSI)	Fey (KSI)	ALLOW (KSI)	ACTUAL (KSI)				
BOTTOM CHORD	L0 - L1	191	36	26	253	135	174	35/-19	1/-3	47	STR-I	557.0	122.0	143.0	7.58	W21X166	48.80	48.80	38.60	9.36	2.99	-	-	-	380.00	70.00	1800	437.5	-	-	16	1	1706	0.63	NSTM	L0 - L1
	L1 - L2	189	30	22	241	125	161	32/-14	1/-2	47	STR-I	525.0	108.0	-150.0	8.61	W21X166	48.80	48.80	37.83	9.36	2.99	-	-	-	380.00	70.00	1800	437.5	-	-	16	1	1706	0.63	NSTM	L1 - L2
	L2 - L3	364	56	41	461	195	256	26/-12	1/-2	60	STR-II	927.0	102.0	-150.0	7.58	W21X166	48.80	48.80	37.83	9.36	2.99	-	-	-	380.00	70.00	1800	437.5	-	-	16	1	1706	0.85	NSTM	L2 - L3
	L3 - L4	362	46	35	443	187	237	23/-13	1/-2	58	STR-I	887.0	92.0	-130.0	7.58	W21X166	48.80	48.80	37.83	9.36	2.99	-	-	-	380.00	70.00	1800	437.5	-	-	16	1	1706	0.79	NSTM	L3 - L4
	L4 - L5	422	55	41	518	200	257	20/-15	2/-2	61	STR-I	1006.0	92.0	-130.0	7.58	W21X166	48.80	48.80	37.83	9.36	2.99	-	-	-	380.00	70.00	1800	437.5	-	-	16	1	1706	0.85	NSTM	L4 - L5
	L5 - L6	421	50	37	508	196	242	19/-15	2/-2	58	STR-I	985.0	86.0	-131.0	7.58	W21X166	48.80	48.80	37.83	9.36	2.99	-	-	-	380.00	70.00	1800	437.5	-	-	16	1	1706	0.78	NSTM	L5 - L6
	L6 - L7	443	53	39	535	199	245	18/-15	2/-2	61	STR-I	1024.0	84.0	-131.0	7.58	W21X166	48.80	48.80	37.83	9.36	2.99	-	-	-	380.00	70.00	1800	437.5	-	-	16	1	1706	0.87	NSTM	L6 - L7
	L7 - L8	442	51	38	531	200	242	18/-14	2/-2	60	STR-I	1023.0	77.0	-131.0	7.58	W21X166	48.80	48.80	37.83	9.36	2.99	-	-	-	380.00	70.00	1800	437.5	-	-	16	1	1706	0.86	NSTM	L7 - L8
	L8 - L7'	438	51	38	527	203	245	17/-13	2/-2	61	STR-I	1022.0	81.0	-131.0	7.58	W21X166	48.80	48.80	37.83	9.36	2.99	-	-	-	380.00	70.00	1800	437.5	-	-	16	1	1706	0.86	NSTM	L8 - L7'
	L7' - L6'	438	54	40	532	206	258	17/-11	2/-2	64	STR-I	1032.0	83.0	-131.0	7.58	W21X166	48.80	48.80	37.83	9.36	2.99	-	-	-	380.00	70.00	1800	437.5	-	-	16	1	1706	0.87	NSTM	L7' - L6'
	L6' - L5'	407	50	37	494	204	256	15/-9	2/-1	64	STR-I	984.0	90.0	-131.0	7.58	W21X166	48.80	48.80	37.83	9.36	2.99	-	-	-	380.00	70.00	1800	437.5	-	-	16	1	1706	0.84	NSTM	L6' - L5'
	L5' - L4'	408	57	42	507	213	276	17/-5	2/-1	67	STR-II	1017.0	91.0	-132.0	7.58	W21X166	48.80	48.80	37.83	9.36	2.99	-	-	-	380.00	70.00	1800	437.5	-	-	16	1	1706	0.86	NSTM	L5' - L4'
	L4' - L3'	334	46	33	413	192	246	23/-2	2/0	61	STR-I	861.0	101.0	-132.0	7.58	W21X166	48.80	48.80	37.83	9.36	2.99	-	-	-	380.00	70.00	1800	437.5	-	-	16	1	1706	0.78	NSTM	L4' - L3'
	L3' - L2'	336	56	40	432	202	269	31/4	2/0	65	STR-II	914.0	106.0	-129.0	7.58	W21X166	48.80	48.80	37.83	9.36	2.99	-	-	-	380.00	70.00	1800	437.5	-	-	16	1	1706	0.80	NSTM	L3' - L2'
	L2' - L1'	181	30	20	231	110	145	38/4	3/0	42	STR-II	490.0	99.0	-129.0	6.56	W21X166	48.80	48.80	37.83	9.36	2.99	-	-	-	380.00	70.00	1800	437.5	-	-	16	1	1706	0.56	NSTM	L2' - L1'
	L1' - L0'	182	37	25	244	122	159	45/4	3/0	40	STR-II	526.0	80.0	58.0	7.59	W21X166	48.80	48.80	38.60	9.36	2.99	-	-	-	380.00	70.00	1800	437.5	-	-	16	1	1706	0.42	NSTM	L1' - L0'
TOP CHORD AND END POSTS	L0 - U1	-284	-59	-43	-386	-204	-270	3/-2	1/-1	66	STR-II	-860.0	-77.0	0.0	11.58	W21X147	43.20	37.40	31.88	9.17	2.95	33.65	47.12	133.39	329.00	60.10	1456	-	261.00	133.39	16	2	-1754	0.53	-	L0 - U1
	U1 - U3	-317	-66	-48	-431	-230	-303	5/-4	1/-1	74	STR-II	-960.0	-47.0	10.0	16.60	W21X147	43.20	48.80	35.79	9.17	2.95	48.23	67.53	63.49	329.00	60.10	1349	-	124.22	63.49	16	2	-1476	0.68	-	U1 - U3
	U3 - U5	-413	-86	-63	-562	-299	-391	7/-6	2/-2	95	STR-II	-1247.0	-48.0	12.0	15.34	W21X166	48.80	48.80	35.79	9.36	2.99	43.67	61.58	75.81	380.00	70.00	1612	-	150.44	75.81	16	2	-1759	0.73	-	U3 - U5
	U5 - U7	-449	-93	-68	-610	-325	-417	8/-7	2/-2	102	STR-I	-1350.0	-45.0	12.0	15.20	W21X166	48.80	48.80	35.79	9.36	2.99	43.25	60.99	76.96	380.00	70.00	1614	-	152.71	76.96	16	2	-1766	0.79	-	U5 - U7
	U7 - U7'	-456	-95	-69	-620	-330	-412	8/-8	2/-2	101	STR-I	-1371.0	-41.0	11.0	15.16	W21X166	48.80	48.80	35.79	9.36	2.99	43.14	60.83	77.36	380.00	70.00	1615	-	153.51	77.36	16	2	-1769	0.80	-	U7' - U7'
	U7' - U5'	-440	-92	-67	-599	-319	-411	8/-8	2/-2	100	STR-I	-1324.0	-36.0	12.0	15.22	W21X166	48.80	48.80	35.79	9.36	2.99	43.33	61.10	76.97	380.00	70.00	1614	-	152.73	76.97	16	2	-1766	0.77	-	U7' - U5'
	U5' - U3'	-393	-82	-59	-534	-286	-375	8/-8	2/-2	91	STR-II	-1189.0	42.0	12.0	15.39	W21X166	48.80	48.80	35.79	9.36	2.99	43.82	61.79	75.81	380.00	70.00	1612	-	150.44	75.81	16	2	-1759	0.69	-	U5' - U3'
	U3' - U1'	-286	-60	-43	-389	-207	-273	7/-7	2/-1	67	STR-II	-865.0	60.0	10.0	14.66	W21X147	43.20	48.80	35.79	9.17	2.95	42.60	59.64	82.28	329.00	60.10	1391	-	161.00	82.28	16	2	-1591	0.56	-	U3' - U1'
	U1' - L0'	-274	-58	-40	-372	-194	-254	9/-8	2/-2	62	STR-II	-820.0	119.0	0.0	11.69	W21X147	43.20	37.40	31.88	9.17	2.95	33.97	47.57	133.39	329.00	60.10	1456	-	261.00	133.39	16	1	-1754	0.48	-	U1' - L0'
DIAGONALS	U1 - L2	171	36	26	233	133	179	3/-4	1/-1	49	STR-II	539.0	33.0	0.0	11.89	W21X122	35.90	30.83	28.70	9.09	2.92	15.69	48.86	115.86	273.00	49.20	1175	-	1122.75	115.86	16	1	1269	0.44	NSTM	U1 - L2
	L2 - U3	-104	-21	-16	-141	-96	-130	2/-2	0	44	STR-II	-357.0	-28.0	0.0	14.12	W21X73	21.50	21.50	18.73	8.64	1.81	19.61	93.60	33.31	151.00	17.00	533	-	758.94	33.31	16	2	828	0.69	NSTM	L2 - U3
	U3 - L4	78	16	12	106	84	114	2/-2	0	40	STR-II	290.0	23.0	0.0	13.85	W21X73	21.50	21.50	18.73	8.64	1.81	19.23	91.80	33.31	151.00	17.00	533	-	759.00	33.31	16	2	828	0.38	NSTM	U3 - L4
	L4 - U5	-41	-9	-6	-56	-69	-94	2/-2	0	41	STR-II	-199.0	-25.0	0.0	15.90	W21X73	21.50	21.50	18.73	8.64	1.81	22.09	105.44	25.93	151.00	17.00	498	-	590.90	25.93	16	2	828	0.47	NSTM	L4 - U5
	U5 - L6	40	8	6	54	73	98	2/-2	0	40	STR-II	202.0	21.0	0.0	15.79	W21X73	21.50	21.50	18.73	8.64	1.81	21.93	104.67	25.93	151.00	17.00	498	-	590.90	25.93	16	2	828	0.28	NSTM	U5 - L6
	L6 - U7	-6	-1	-1	-8	68	81	2/-2	0	41	STR-II	-120.0	-24.0	0.0	16.78	W21X73	21.50	21.50	18.73	8.64	1.81	23.31	111.25	23.05	151.00	17.00	480	-	525.33	23.05	16	2	828	0.33	NSTM	L6 - U7
	U7 - L8	12	3	2	17	68	88	2/-2	0	41	STR-I	140.0	22.0	0.0	16.83	W21X73	21.50	21.50	18.73	8.64	1.81	23.38	111.60	23.06	151.00	17.00	480	-	525.39	23.06	16	2	828	0.23	NSTM	U7 - L8
	L8 - U7'	21	4	3	28	71	93	2/-2	0	41	STR-II	163.0	-25.0	0.0	16.69	W21X73	21.50	21.50	18.73	8.64	1.81	23.18	110.67	23.05	151.00	17.00	480	-	525.33	23.05	16	2	828	0.20	NSTM	L8 - U7'
	U7' - L6'	-17	-3	-3	-23	64	-84	2/-2	0	41	STR-II	-144.0	24.0	0.0	16.92	W21X73	21.50	21.50	18.73	8.64	1.81	23.50	112.17	23.06	151.00	17.00	480	-	525.39	23.06	16	2	828	0.36	NSTM	U7' - L6'
	L6' - U5'	51	10	8	69	77	103	2/-2	0	40	STR-II	228.0	-27.0	0.0	15.65	W21X73	21.50	21.50	18.73	8.64	1.81	21.74	103.78	25.93	151.00	17.00	498	-	590.87	25.93	16	2	828	0.28	NSTM	L6' - U5'
	U5' - L4'	-54	-11	-8	-73	-74	-100	2/-2	0	41	STR-II	-230.0	27.0	0.0	16.04	W21X73	21.50	21.50	18.73	8.64	1.81	22.28	106.34	25.93	151.00	17.00	498	-	590.90	25.93	16	2	828	0.51	NSTM	U5' - L4'
	L4' - U3'	92	19	14	125	90	122	2/-2	0	41	STR-II	325.0	-30.0	0.0	13.72	W21X73	21.50	21.50	18.73	8.64	1.81	19.05	90.95	33.31	151.00	17.00	533	-	759.00	33.31	16	2	828	0.40	NSTM	L4' - U3'
	U3' - L2'	-113	-23	-18	-154	-98	-133	1/-2	0	43	STR-II	-376.0	44.0	0.0	14.25	W21X73	21.50	21.50	18.73	8.64	1.81	19.79	94.45	33.31	151.00	17.00	533	-	759.00	33.31	16	2	828	0.70	NSTM	U3' - L2'
	L2' - U1'	158	33	24	215	122	163	3/-1	1/-1	44	STR-II	494.0	-49.0	0.0	10.46	W21X122	35.90	30.83	28.70	9.09	2.92	13.80	42.97	147.14	273.00	49.20	1201	-	1425.91	147.14	16	1	1269	0.40	NSTM	L2' - U1'
VERTICALS	L1 - U1	27	6	4	37	71	75	1/-2	0	22	STR-I	173.0	12.0	0.0	8.50	W21X55	16.20	15.29	14.24	8.40	1.73	12.14	58.96	82.34	110.00	11.80	458	-	1941.14	82.34	16	1	630	0.30	NSTM	L1 - U1
	L3 - U3	22	5	4	31	66	69	1/0	0	21	STR-I	155.0	-86.0	0.0	11.75	W21X55	16.20	15.29	14.24	8.40	1.73	16.79	81.50	43.09	110.00	11.80	407	-	1015.82	43.09	16	1	630	0.43	NSTM	L3 - U3
	L5 - U5	24	6	4	34	65	69	1/-1	0	20	STR-I	157.0	-75.0	0.0	13.92	W21X55	16.20	15.29	14.24	8.40	1.73	19.88	96.53	30.72	110.00	11.80	373	-	724.14	30.72	16	1	630	0.43	NSTM	L5 - U5
	L7 - U7	24	6	4	34	65	68	1/-1	0	20	STR-I	156.0	-73.0	0.0	15.00	W21X55	16.20	15.29	14.24	8.40	1.73	21.43	104.05	26.44	110.00	11.80	356	-	623.32	26.44	16	1	630	0.43	NSTM	L7 - U7
	L7' - U7'	24	6	4	34	65	68	1/-1	0	20	STR-I	156.0	-74.0	0.0	15.00	W21X55	16.20	15.29	14.24	8.40	1.73	21.43	104.05	26.44	110.00	11.80	356	-	623.32	26.44	16	1	630	0.43	NSTM	L7' - U7'
	L5' - U5'	23	6	4	33	65	69	1/-1	0	20	STR-I	156.0	78.0	0.0	13.92	W21X55	16.20	15.29	14.24	8.40	1.73	19.88	96.53	30.72	110.00	11.80	373	-	724.14	30.72	16	1	630	0.43	NSTM	L5' - U5'
	L3' - U3'	23	5	4	32	66	69	0/0	0	21	STR-I	156.0	97.0	0.0	11.75	W21X55	16.20	15.29	14.24	8.40	1.73	16.79	81.50	43.09	110.00	11.80	407	-	1015.82	43.09	16	1	630	0.46	NSTM	L3' - U3'
	L1' - U1'	13	4	1	18	40	38	3/-4	0/-1	17	STR-I	93.0	12.0	0.0	8.50	W21X55	16.20	15.29	14.24	8.40	1.73	12.14	58.96	82.34	110.00	11.80	458	-	1941.14	82.34	16	1	630	0.15	NSTM	L1' - U1'

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 5 AND 6.

2. FORCES SHOWN IN THE TABLE ARE FROM A 3D FINITE ELEMENT MODEL. CONTROLLING LOADS ARE MAXIMUM BY LOAD TYPE AND ARE NOT CONCURRENT. THE LOAD GROUP CORRESPONDS TO THE MAXIMUM AXIAL LOAD. LOADS ARE ENVELOPED FOR BOTH TRUSSES.

3. (+) AXIAL TENSION (-) AXIAL COMPRESSION
   NSTM - NONREDUNDANT STEEL TENSION MEMBER

   DL1 INCLUDES STEEL AND DECK WITH OVERFILL
   DL2 INCLUDES BARRIER AND SIDEWALK BRACKET
   DW INCLUDES FUTURE WEARING SURFACE

   LOAD FACTORS AND COMBINATIONS ARE IN ACCORDANCE WITH AASHTO "LRFD BRIDGE DESIGN SPECIFICATIONS 8TH EDITION 2017" AND PENNDOT "DESIGN MANUAL PART 4, DECEMBER 2019 EDITION"

   MOMENT X-X IS THE FACTORED MOMENT ABOUT THE X AXIS OF THE MEMBER (OUT OF PLANE BENDING OF TRUSS)
   MRX IS BENDING CAPACITY ABOUT X AXIS OF MEMBER
   MOMENT Y-Y IS THE FACTORED MOMENT ABOUT THE Y AXIS OF THE MEMBER (IN PLANE BENDING OF TRUSS)
   MRY IS BENDING CAPACITY ABOUT Y AXIS OF MEMBER

   Fcr - CRITICAL COMPRESSIVE BUCKLING STRESS
   Fex - EULER BUCKLING STRESS ABOUT X AXIS
   Fey - EULER BUCKLING STRESS ABOUT Y AXIS

   Rx - RADIUS OF GYRATION ABOUT THE X AXIS (GROSS SECTION)
   Ry - RADIUS OF GYRATION ABOUT THE Y AXIS (GROSS SECTION)

   Sx - SECTION MODULUS ABOUT THE X AXIS (GROSS SECTION)
   Sy - SECTION MODULUS ABOUT THE Y AXIS (GROSS SECTION)
   Ag - GROSS AREA
   Aeff - EFFECTIVE AREA OF THE CROSS SECTION
   An - NET AREA

   EFFECTIVE AREA OF THE CROSS SECTION COMPUTED IN ACCORDANCE WITH SECTION 6.9.4.2.2A OF AASHTO "LRFD BRIDGE DESIGN SPECIFICATIONS 8TH EDITION 2017"

   MEMBER AXIAL CAPACITY COMPUTED IN ACCORDANCE WITH AASHTO SECTION 6.9 FOR COMPRESSION MEMBERS AND SECTION 6.8 FOR TENSION MEMBERS.

   PERF RATIO - GOVERNING LOAD COMBINATION INTERACTION RATIO COMPUTED IN ACCORDANCE WITH SECTIONS 6.8.2.3 AND 6.9.6.3 OF AASHTO.

4. FLOORBEAMS FRAME INTO TRUSS AT PANEL POINTS AND ALSO BETWEEN PANEL POINTS. SEE FRAMING PLAN ON SHEET 21.

5. ALL GUSSET PLATES AND CONNECTION PLATES CONNECTING MAIN TRUSS MEMBERS IDENTIFIED AS NONREDUNDANT STEEL TENSION MEMBERS (NSTM) ARE ALSO NSTM UNLESS NOTED OTHERWISE. NSTM GUSSET PLATES AND CONNECTION PLATES MUST CONFORM TO CVN REQUIREMENTS IN THE GENERAL NOTES.

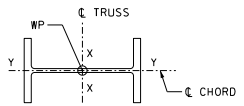
6. KL/r IS BASED ON LENGTH, L, BETWEEN THE CENTERLINE OF JOINTS AND RADIUS OF GYRATION ABOUT THE APPROPRIATE AXIS. K FACTOR OF 2.22 USED FOR TOP CHORD MEMBERS FROM THE BUCKLING ANALYSIS.

7. TRUSS MEMBERS CHECKED FOR THE FATIGUE DETAIL CATEGORIES 2.1 AND 2.2.

8. Fy = 50 KSI AND Fu = 65 KSI FOR ALL TRUSS MEMBER MATERIAL.

9. THE STEEL TRUSS HAS CENTRAL SYMMETRY IN PLAN VIEW. LENGTHS, PERFORMANCE RATIOS, AND FORCES SHOWN ARE FOR THE NORTH TRUSS AND ARE MIRRORED FOR THE SOUTH TRUSS (EX. NORTH TRUSS L1-U1 FORCES ARE EQUAL TO SOUTH TRUSS U1'-L1' FORCES) AND VARY SLIGHTLY.

10. THE PERFORMANCE RATIOS FOR THE BOTTOM CHORD MEMBERS ARE CALCULATED BASED OFF AXIAL LOAD AND WEAK AXIS MOMENT. THESE LOADS ARE INCREASED BY A FACTOR OF 1.10 FROM THE VALUES SHOWN IN THE TABLE IN ORDER TO ACCOUNT FOR REDUCED DECK STIFFNESS AND THEREFORE INCREASED FORCES IN THE BOTTOM CHORD.



TRUSS MEMBER
(NOT TO SCALE)

REFERENCES:

	SHEET:
1. SUPPLEMENTAL DRAWINGS	01
2. TYPICAL SECTION & INDEX OF DRAWINGS	02
3. GENERAL NOTES	05 - 06
4. TRUSS FRAMING AND WORK POINT GEOMETRY	20
5. TRUSS ELEVATION	21
6. FLOOR SYSTEM FRAMING	22
7. TRUSS LOADING AND TRUSS REACTIONS	26

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REV.	BY	DATE	DESCRIPTION

LOCATION: SWISSVALE, PENNSYLVANIA
TITLE: WASHINGTON AVENUE
TRUSS STRESS SHEET

DSN	MEM	PROJ NO.	D2122	MN	1290816-OH/77
DWN	KTS	FILE NO.	BR0028818		
CHK	CGP	DATE	08/16/2023		

BRIDGE POST: PT-344.91
DRAWING NUMBER: PT-344.91 24 27

SHEET NO. 27 OF 58

6/07/2024 4:43:00 PM
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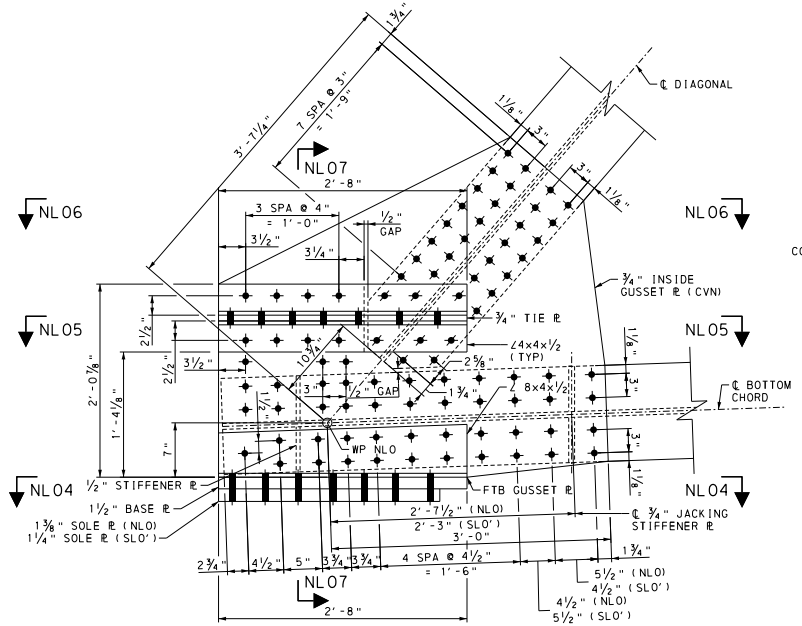
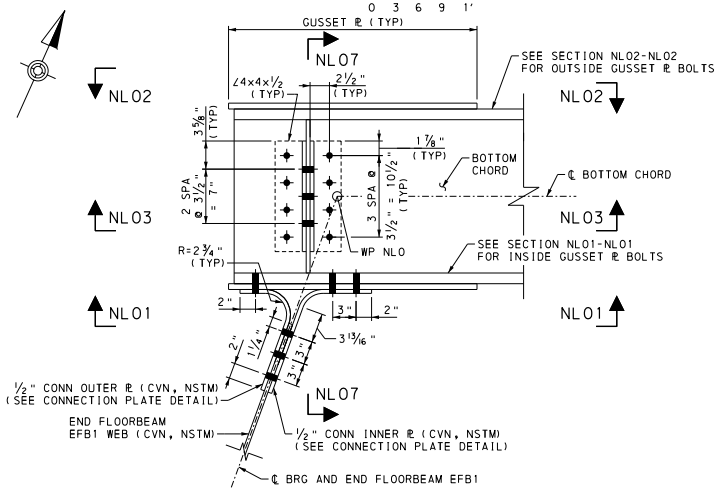


SECTION NL01-NL01 - INSIDE GUSSET PLATE
NL0 (SHOWN) SLO' (SIMILAR)

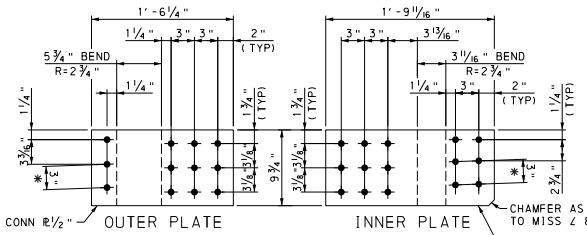
(LOOKING OUTSIDE FROM BRIDGE ℄)

0 3 6 9 1'



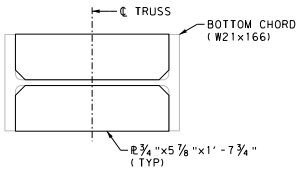
SECTION NL05-NL05 - END FLOORBEAM TO NL0 CONNECTION
NL0 (SHOWN) SLO' (SIMILAR)

0 3 6 9 1'



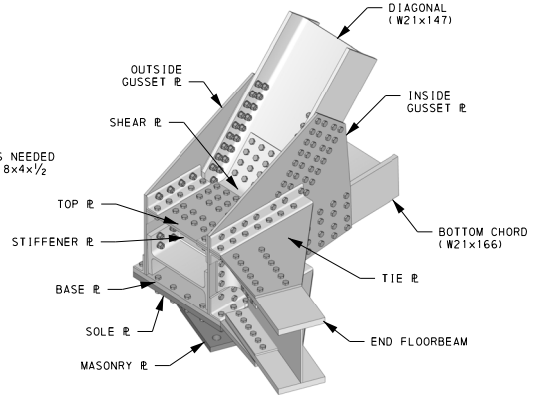
CONNECTION PLATE DETAIL

0 3 6 9 1'



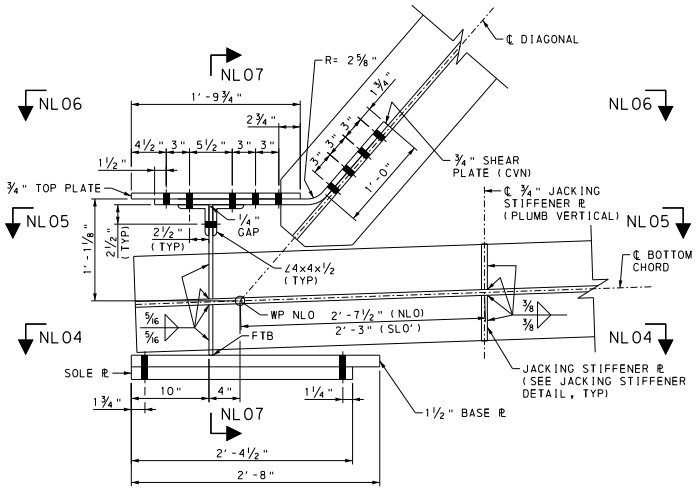
JACKING STIFFENER DETAIL

0 3 6 9 1'



NL0 ISOMETRIC VIEW - 1
NL0 (SHOWN) SLO' (SIMILAR)

(NOT TO SCALE)



SECTION NL03-NL03 - TRUSS CENTERLINE VIEW
NL0 (SHOWN) SLO' (SIMILAR)

(LOOKING OUTSIDE FROM TRUSS ℄)

0 3 6 9 1'

NOTES:

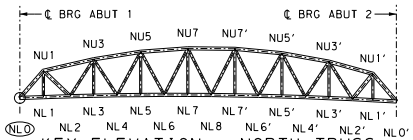
1. FOR CVN REQUIREMENTS AND REDUNDANCY FOR MEMBERS SEE SHEET 27.

REFERENCES:

		SHEET:
1.	SUPPLEMENTAL DRAWINGS	01
2.	TYPICAL SECTION & INDEX OF DRAWINGS	02
3.	GENERAL NOTES	05 - 06
4.	TRUSS FRAMING AND WORK POINT GEOMETRY	20
5.	TRUSS ELEVATION	21
6.	FLOOR SYSTEM FRAMING	22
7.	END FLOORBEAM DETAILS - 1	24
8.	END FLOORBEAM DETAILS - 2	25
9.	BEARING LOCATION PLAN AND NOTES	40
10.	BEARING DETAILS - 1	41

LEGEND:

WP	WORK POINT
FTB	FIT TO BEAR
CVN	CHARPY V-NOTCH
NSTM	NONREDUNDANT STEEL TENSION MEMBER
*	DIMENSIONS ALONG BOTTOM CHORD



KEY ELEVATION - NORTH TRUSS
(SOUTH TRUSS SIMILAR)

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OWNING COMPANY
PITTSBURGH
OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

REV.	BY	DATE	DESCRIPTION

LOCATION: SWISSVALE, PENNSYLVANIA
TITLE: WASHINGTON AVENUE
JOINT NL0 - 1

DSN MS	PROJ NO. D2122	WBS 1290818-OH77	MILE POST PT-344.91		
DWN KTS	FILE NO. BR0028818	DRAWING NUMBER PT-344.91 24 28			
CHK MS	DATE 08/16/2023				

SHEET NO. 28 OF 58

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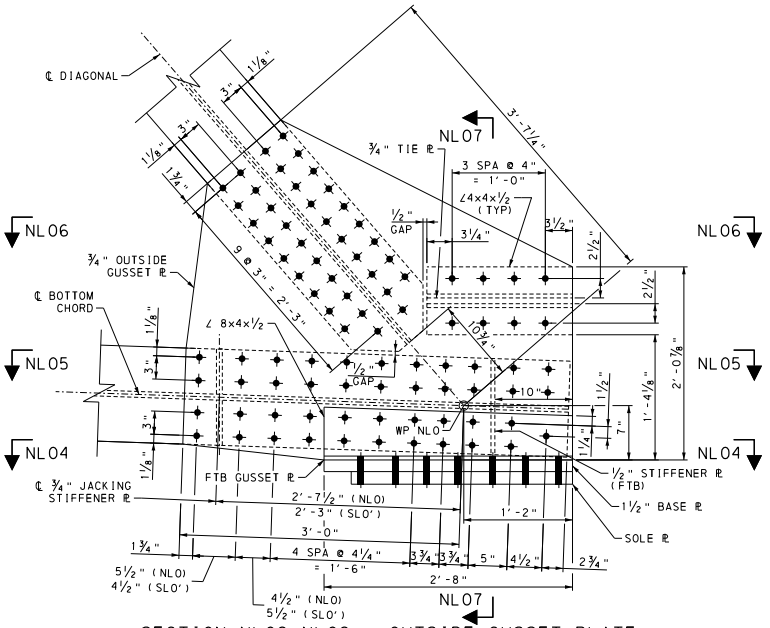
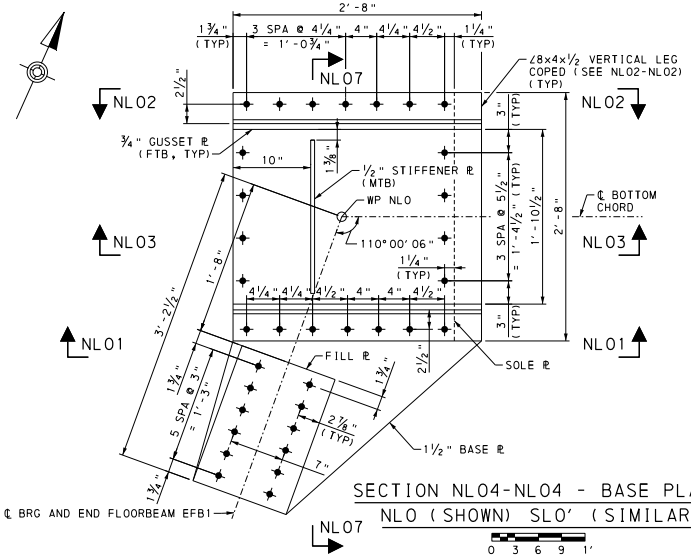


SECTION NL02-NL02 - OUTSIDE GUSSET PLATE

NLO (SHOWN) SLO' (SIMILAR)

(LOOKING INSIDE FROM NORTH SIDE OF BRIDGE)

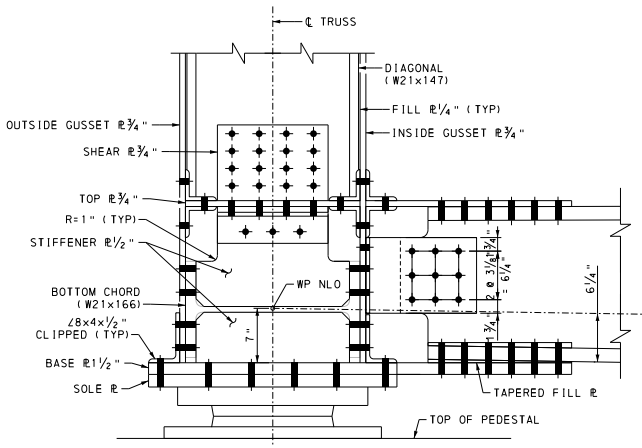
0 3 6 9 1'



SECTION NL04-NL04 - BASE PLATE

NLO (SHOWN) SLO' (SIMILAR)

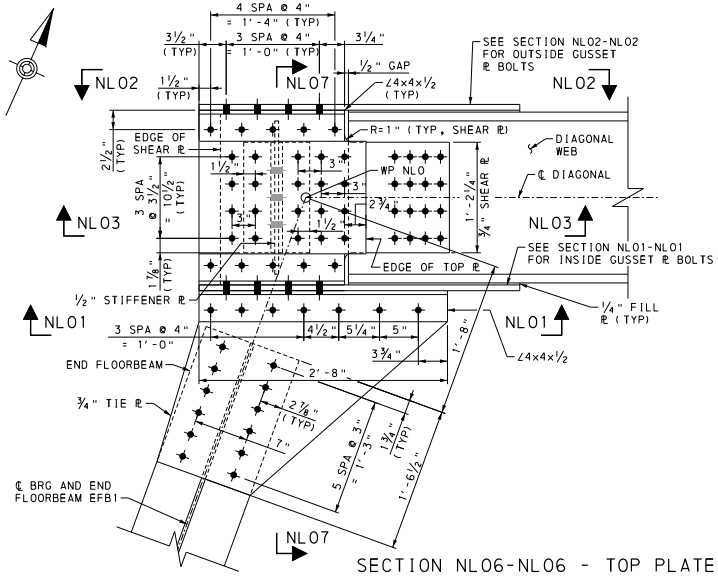
0 3 6 9 1'



SECTION NL07-NL07

NLO (SHOWN) SLO' (SIMILAR)

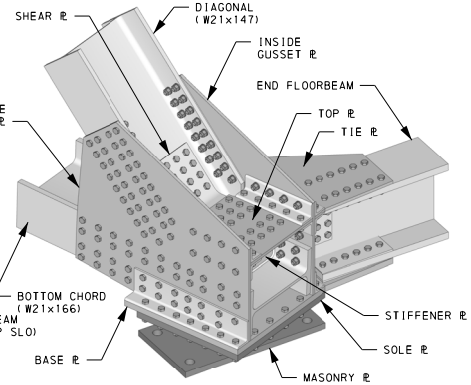
0 3 6 9 1'



SECTION NL06-NL06 - TOP PLATE

NLO (SHOWN) SLO' (SIMILAR)

0 3 6 9 1'



NLO ISOMETRIC VIEW - 2

NLO (SHOWN) SLO' (SIMILAR)

(NOT TO SCALE)

NOTES:

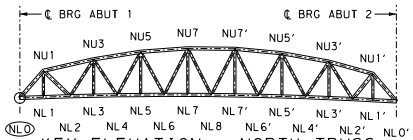
1. FOR CVN REQUIREMENTS AND REDUNDANCY FOR MEMBERS SEE SHEET 27.

REFERENCES:

	SHEET:
1. SUPPLEMENTAL DRAWINGS	01
2. TYPICAL SECTION & INDEX OF DRAWINGS	02
3. GENERAL NOTES	05 - 06
4. TRUSS FRAMING AND WORK POINT GEOMETRY	20
5. TRUSS ELEVATION	21
6. FLOOR SYSTEM FRAMING	22
7. END FLOORBEAM DETAILS - 1	24
8. END FLOORBEAM DETAILS - 2	25
9. BEARING LOCATION PLAN AND NOTES	40
10. BEARING DETAILS - 1	41

LEGEND:

WP	WORK POINT
FTB	FIT TO BEAR
CVN	CHARPY V-NOTCH
NSTM	NONREDUNDANT STEEL TENSION MEMBER



KEY ELEVATION - NORTH TRUSS

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REGISTERED PROFESSIONAL ENGINEER MATTHIAS STEIN PE039784 COMMONWEALTH OF PENNSYLVANIA

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NORFOLK SOUTHERN RAILWAY CO.

OWNING COMPANY

PITTSBURGH

OPERATING DIVISION

OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

REV.	BY	DATE	DESCRIPTION

LOCATION: SWISSVALE, PENNSYLVANIA

TITLE: WASHINGTON AVENUE
JOINT NLO - 2

DSN	MS	PROJ NO.	D2122	WBS	1290818-OH/77
DWN	KTS	FILE NO.	BR0028818		
CK	MS	DATE	08/16/2023		

MILE POST: PT-344.91

DRAWING NUMBER: PT-344.91 24 29

SHEET NO. 29 OF 58

6/07/2024 4:43:37 PM
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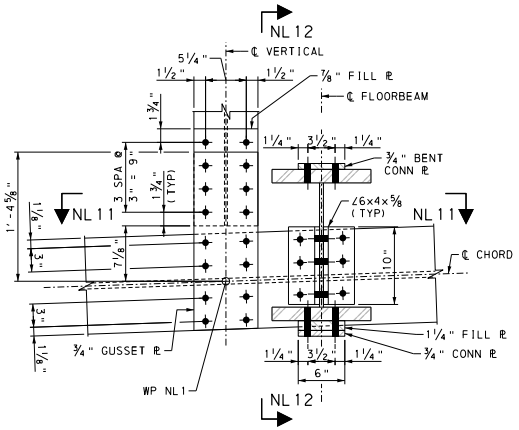
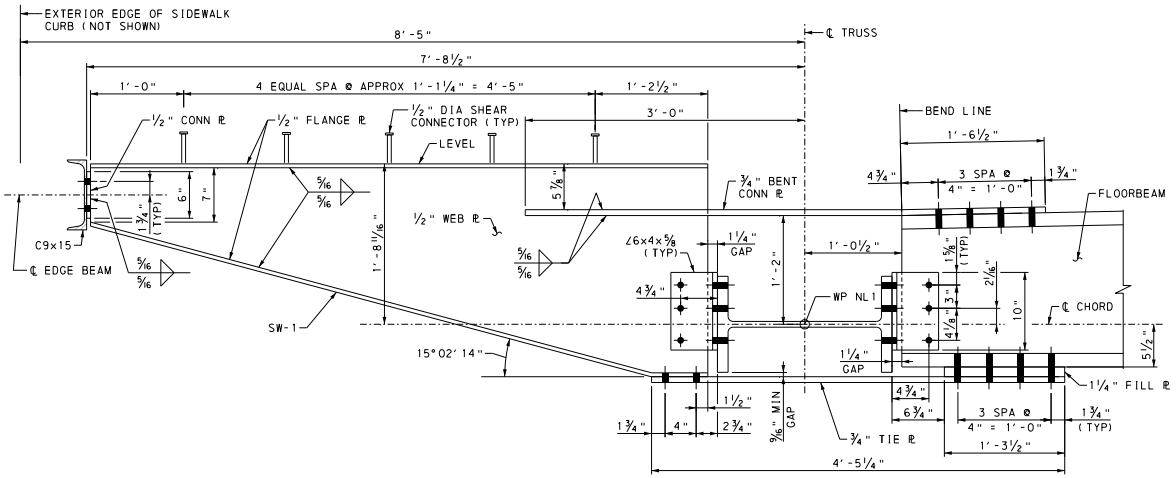


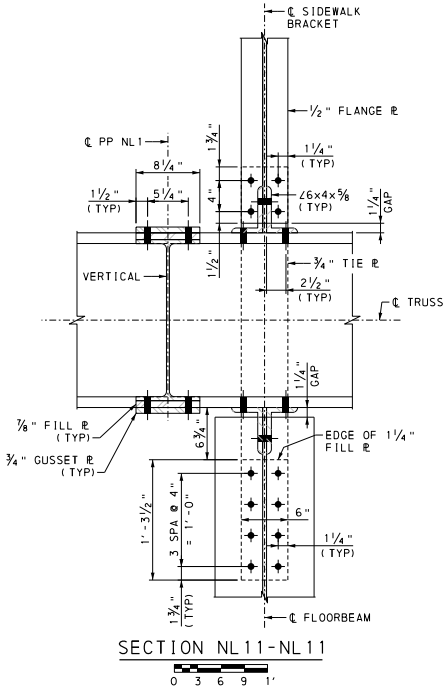
ELEVATION @ NL1 (SHOWN)
NL1', SL1, SL1' (SIMILAR)

0 3 6 9 1'



SECTION NL12-NL12

0 3 6 9 1'



SECTION NL11-NL11

0 3 6 9 1'

NOTES:

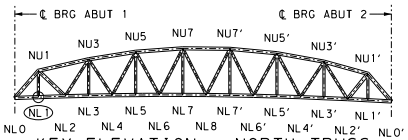
1. FOR CVN REQUIREMENTS AND REDUNDANCY FOR MEMBERS SEE SHEET 27.
2. HOLES IN GUSSET PLATE TO BE DRILLED NOT PUNCHED.

REFERENCES:

		SHEET:
1.	SUPPLEMENTAL DRAWINGS	01
2.	INDEX OF DRAWINGS	02
3.	GENERAL NOTES	05 - 06
4.	TRUSS FRAMING AND WORK POINT GEOMETRY	20
5.	INTERIOR FLOORBEAM CONNECTION DETAILS	23
6.	SIDEWALK DETAILS	45-46

LEGEND:

WP	WORK POINT
CVN	CHARPY V-NOTCH
NSTM	NONREDUNDANT STEEL TENSION MEMBER
SW-1	SIDEWALK BRACKET 1



KEY ELEVATION - NORTH TRUSS
(SOUTH TRUSS SIMILAR)

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
MATTHIAS STEIN
ENGINEER
PE095784

Michael Baker
INTERNATIONAL
AIRSIDE BUSINESS PARK
100 AIRSIDE DRIVE
MOON TOWNSHIP, PA 15108
PHONE: (412) 269-6300

NORFOLK SOUTHERN
NORFOLK SOUTHERN RAILWAY CO.
OWNING COMPANY
PITTSBURGH
OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

REV.	BY	DATE	DESCRIPTION

LOCATION: SWISSVALE, PENNSYLVANIA
TITLE: WASHINGTON AVENUE JOINT NL1

DGN MEM	PROJ NO. D2122	VAN 1290818-OH/77	MILE POST PT-344.91		
DWN KTS	FILE NO. BR0028818	DRAWING NUMBER PT-344.91 24 30			
CHK MS	DATE 08/16/2023				

SHEET NO. 30 OF 58

6/07/2024 4:43:27 PM
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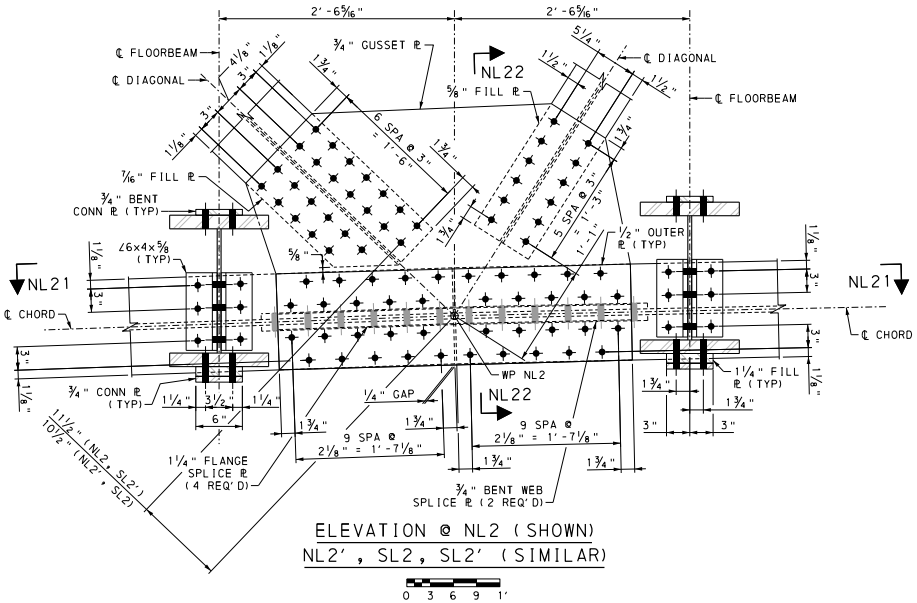
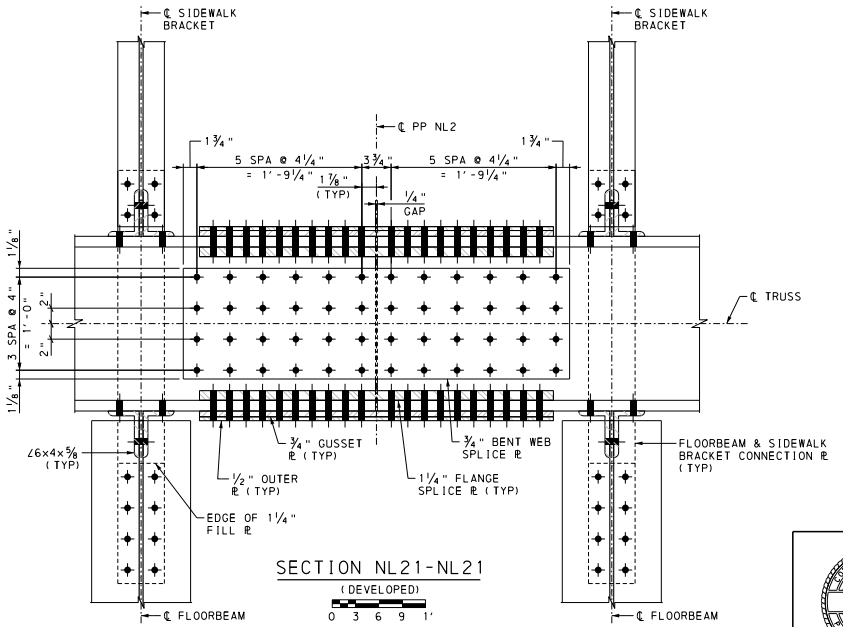


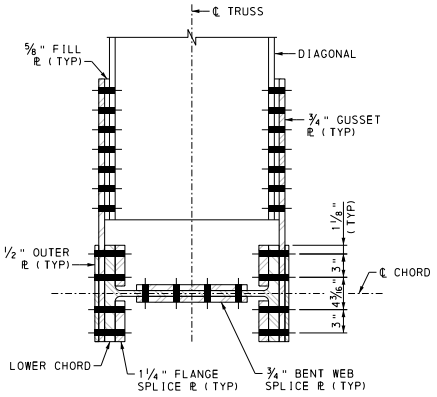
ELEVATION @ NL2 (SHOWN)
NL2', SL2, SL2' (SIMILAR)

0 3 6 9 1'



SECTION NL21-NL21
(DEVELOPED)

0 3 6 9 1'



SECTION NL22-NL22

0 3 6 9 1'

NOTES:

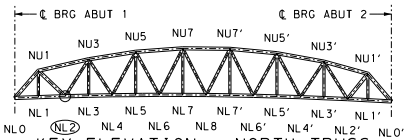
1. FOR CVN REQUIREMENTS AND REDUNDANCY FOR MEMBERS SEE SHEET 27.

REFERENCES:

	SHEET:
1. SUPPLEMENTAL DRAWINGS	01
2. INDEX OF DRAWINGS	02
3. GENERAL NOTES	05 - 06
4. TRUSS FRAMING AND WORK POINT GEOMETRY	20
5. INTERIOR FLOORBEAM DETAILS	23
6. SIDEWALK DETAILS	45-46

LEGEND:

WP	WORK POINT
PP	PANEL POINT
CVN	CHARPY V-NOTCH
NSTM	NONREDUNDANT STEEL TENSION MEMBER



KEY ELEVATION - NORTH TRUSS
(SOUTH TRUSS SIMILAR)

REGISTERED PROFESSIONAL ENGINEER MATTHIAS STEIN PE095784 COMMONWEALTH OF PENNSYLVANIA

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OPERATING DIVISION
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REV.	BY	DATE	DESCRIPTION

LOCATION: SWISSVALE, PENNSYLVANIA
TITLE: WASHINGTON AVENUE JOINT NL2

DSN MEM	PROJ NO. D2122	VAN 1290818-OH/77	MILE POST PT-344.91
DWN KTS	FILE NO. BR0028818	DRAWING NUMBER PT-344.91 24 31	
CHK MS	DATE 08/16/2023		

SHEET NO. 31 OF 58

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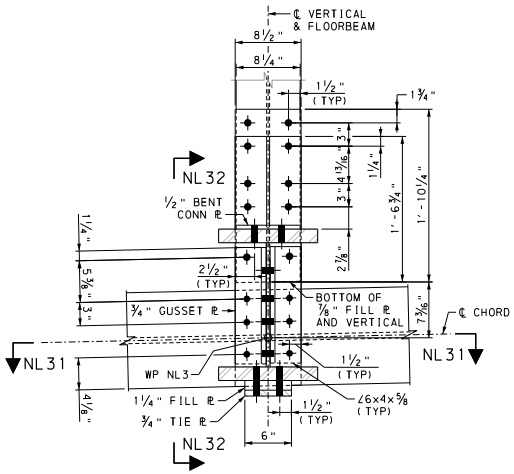
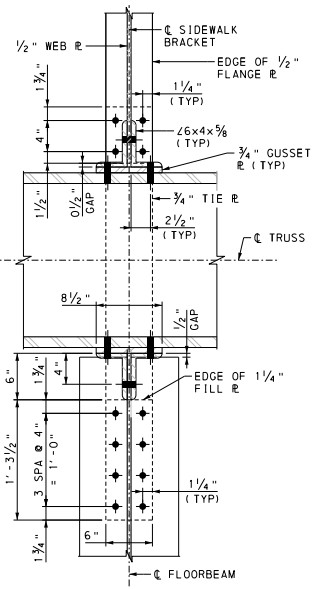


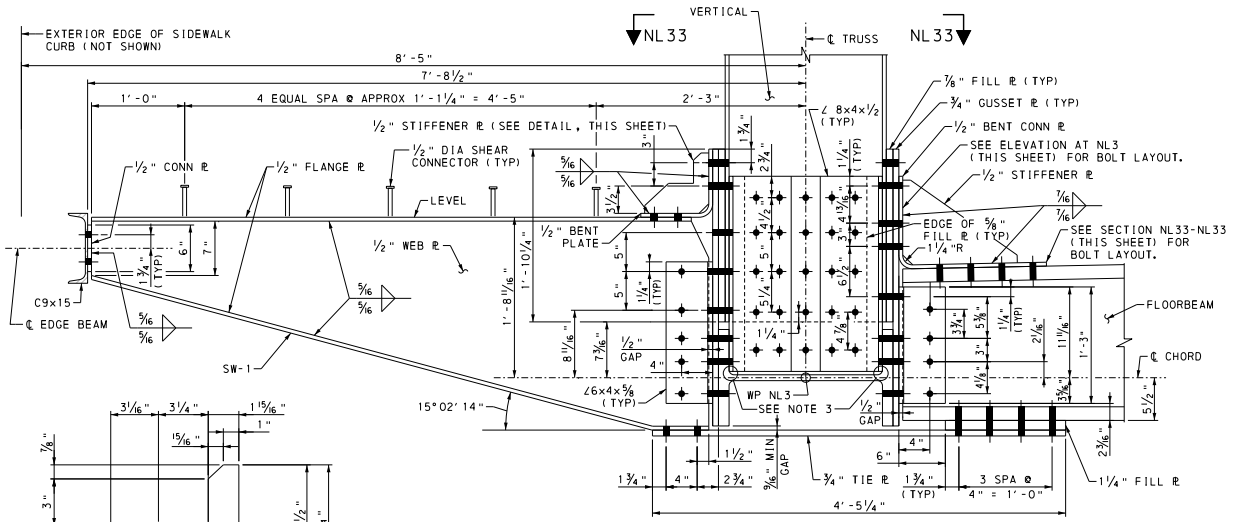
ELEVATION @ NL3 (SHOWN)
NL5, NL7, NL7', NL5',
NL3', SL3, SL5, SL7,
SL7', SL5', SL3' (SIMILAR)

0 3 6 9 1'



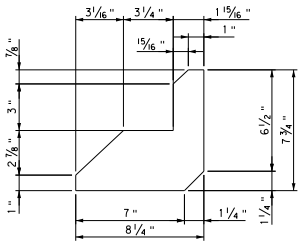
SECTION NL31-NL31

0 3 6 9 1'



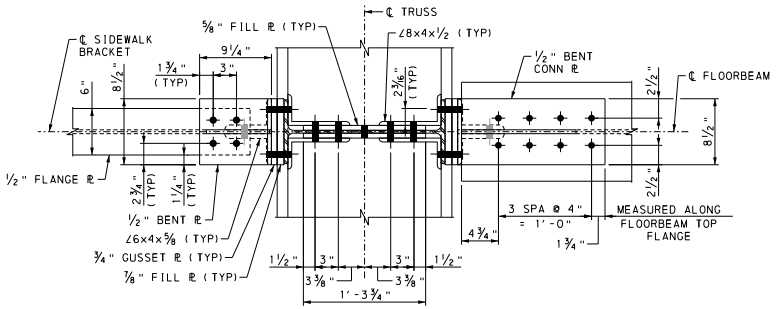
SECTION NL32-NL32

0 3 6 9 1'



½" STIFFENER PLATE DETAIL

0 1 2 3 6 9 1'



SECTION NL33-NL33

0 3 6 9 1'

NOTES:

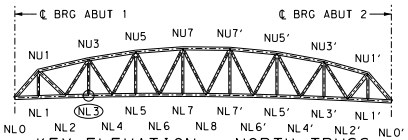
1. FOR CVN REQUIREMENTS AND REDUNDANCY FOR MEMBERS SEE SHEET 27.
2. HOLES IN GUSSET PLATES TO BE DRILLED NOT PUNCHED.
3. TO PREVENT RIDING THE FILLET OF THE BOTTOM CHORD MEMBER, WHERE APPLICABLE GRIND TO FIT THE BOTTOM EDGE OF INTERNAL CONNECTION ANGLE L8x4x½

REFERENCES:

	SHEET:
1. SUPPLEMENTAL DRAWINGS	01
2. INDEX OF DRAWINGS	02
3. GENERAL NOTES	05 - 06
4. TRUSS FRAMING AND WORK POINT GEOMETRY	20
5. INTERIOR FLOORBEAM DETAILS	23
6. SIDEWALK DETAILS	45 - 46

LEGEND:

WP	WORK POINT
CVN	CHARPY V-NOTCH
NSTM	NONREDUNDANT STEEL TENSION MEMBER
SW-1	SIDEWALK BRACKET 1



KEY ELEVATION - NORTH TRUSS
(SOUTH TRUSS SIMILAR)

REGISTERED PROFESSIONAL
MATTHIAS STEIN
ENGINEER
PE095784
COMMONWEALTH OF PENNSYLVANIA

Michael Baker
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OWNING COMPANY
PITTSBURGH
OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

REV	BY	DATE	DESCRIPTION

LOCATION: SWISSVALE, PENNSYLVANIA
TITLE: WASHINGTON AVENUE
JOINT NL3

DSN: MEM	PROJ NO: D2122	WBS: 1290818-OH77	MILE POST: PT-344.91		
DWN: KTS	FILE NO: BR0028818	DRAWING NUMBER: PT-344.91 24 32			
CHK: MS	DATE: 08/16/2023				

SHEET NO. 32 OF 58

6/07/2024 4:43:41 PM
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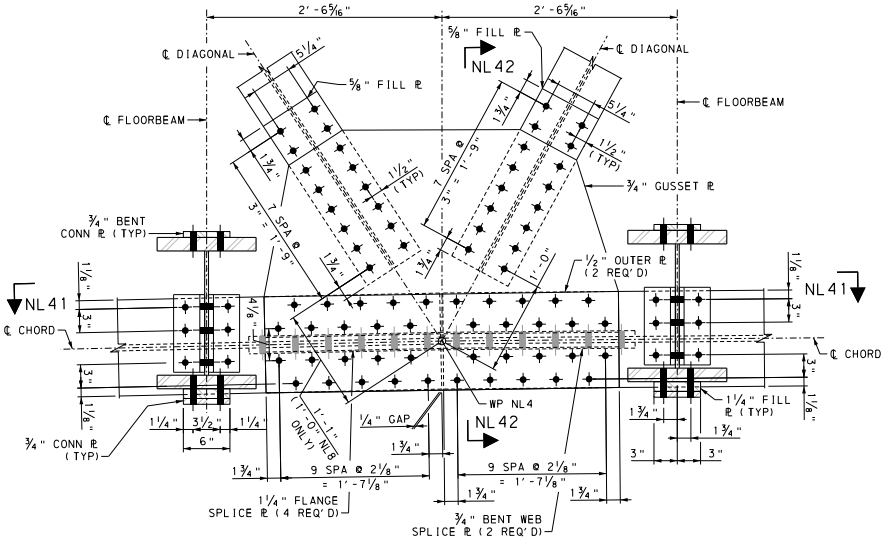
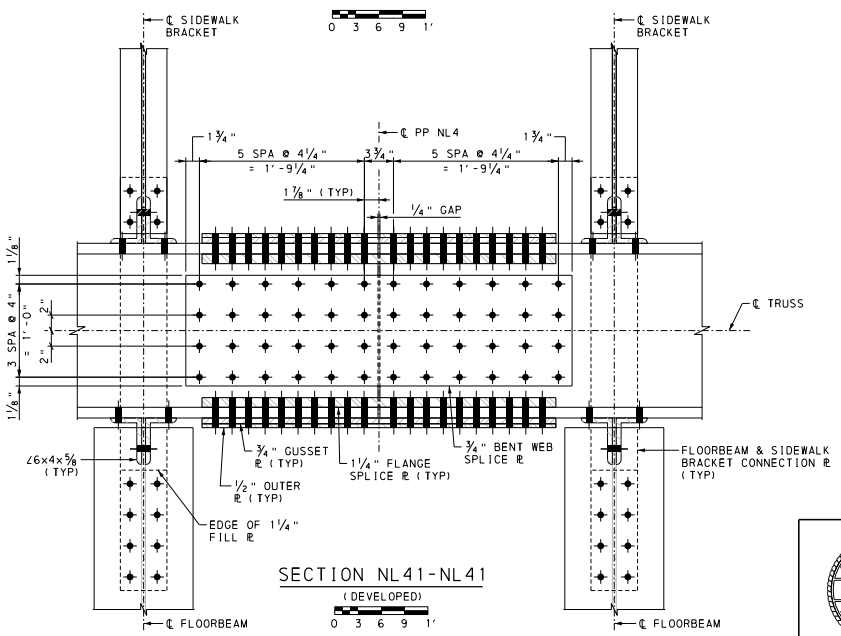
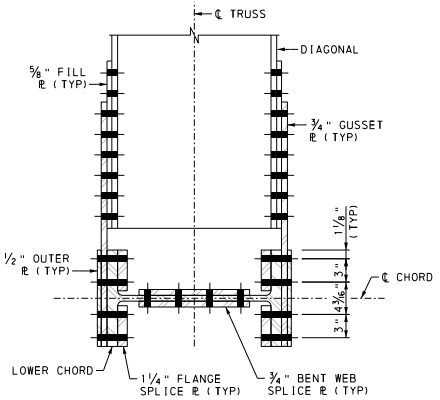


ELEVATION @ NL4 (SHOWN)
NL6, NL8, NL6', NL4', SL4, SL6
SL8, SL6', SL4' (SIMILAR)



SECTION NL41-NL41
(DEVELOPED)



SECTION NL42-NL42

NOTES:

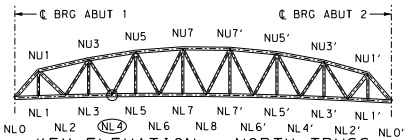
1. FOR CVN REQUIREMENTS AND REDUNDANCY FOR MEMBERS SEE SHEET 27.

REFERENCES:

	SHEET:
1. SUPPLEMENTAL DRAWINGS	01
2. INDEX OF DRAWINGS	02
3. GENERAL NOTES	05 - 06
4. TRUSS FRAMING AND WORK POINT GEOMETRY	20
5. INTERIOR FLOORBEAM DETAILS	23
6. SIDEWALK DETAILS	45-46

LEGEND:

WP	WORK POINT
PP	PANEL POINT
CVN	CHARPY V-NOTCH
NSTM	NONREDUNDANT STEEL TENSION MEMBER



KEY ELEVATION - NORTH TRUSS
(SOUTH TRUSS SIMILAR)

REGISTERED PROFESSIONAL ENGINEER MATTHIAS STEIN PE095784

Michael Baker INTERNATIONAL
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OWNING COMPANY
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OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

REV.	BY	DATE	DESCRIPTION

LOCATION: SWISSVALE, PENNSYLVANIA
TITLE: WASHINGTON AVENUE JOINT NL4

DSN MEM	PROJ NO. D2122	VAN 1290818-OH/77	MILE POST PT-344.91		
DWN KTS	FILE NO. BR0028818	DRAWING NUMBER PT-344.91 24 33			
CHK MS	DATE 08/16/2023				

SHEET NO. 33 OF 58

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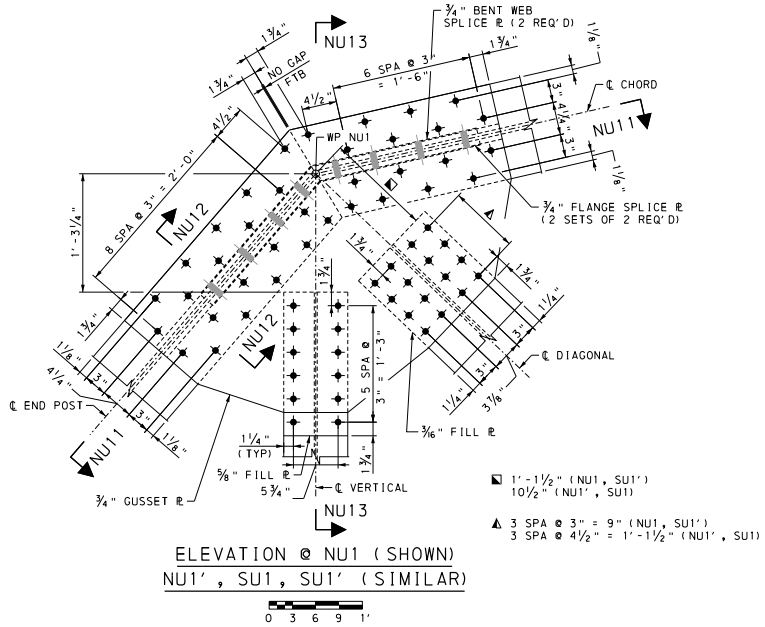
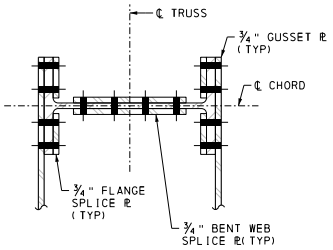


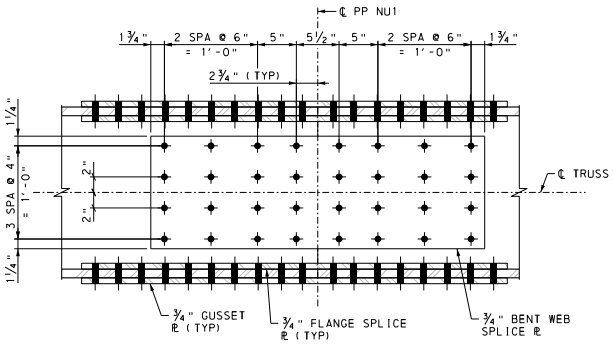
ELEVATION @ NU1 (SHOWN)
NU1', SU1, SU1' (SIMILAR)

0 3 6 9 1'



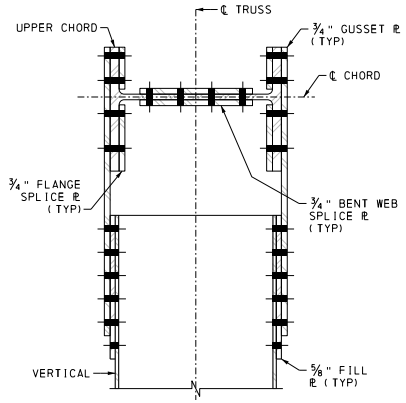
SECTION NU12-NU12

0 3 6 9 1'



SECTION NU11-NU11
(DEVELOPED)

0 3 6 9 1'



SECTION NU13-NU13

0 3 6 9 1'

NOTES:

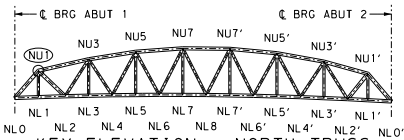
1. FOR CVN REQUIREMENTS AND REDUNDANCY FOR MEMBERS SEE SHEET 27.

REFERENCES:

	SHEET:
1. SUPPLEMENTAL DRAWINGS	01
2. INDEX OF DRAWINGS	02
3. GENERAL NOTES	05 - 06
4. TRUSS FRAMING AND WORK POINT GEOMETRY	20

LEGEND:

WP	WORK POINT
PP	PANEL POINT
FTB	FIT TO BEAR
CVN	CHARPY V-NOTCH
NSTM	NONREDUNDANT STEEL TENSION MEMBER



KEY ELEVATION - NORTH TRUSS
(SOUTH TRUSS SIMILAR)

REGISTERED PROFESSIONAL ENGINEER
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PE095784
COMMONWEALTH OF PENNSYLVANIA

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PITTSBURGH
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OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

REV.	BY	DATE	DESCRIPTION

LOCATION: SWISSVALE, PENNSYLVANIA
TITLE: WASHINGTON AVENUE JOINT NU1

DSN: MEM	PROJ NO: D2122	MN: 1290818-OH/77	MILE POST: PT-344.91
DWN: KTS	FILE NO: BR0028818	DRAWING NUMBER: PT-344.91 24 34
CHK: MS	DATE: 08/16/2023	

SHEET NO. 34 OF 58

6/07/2024 4:43:57 PM
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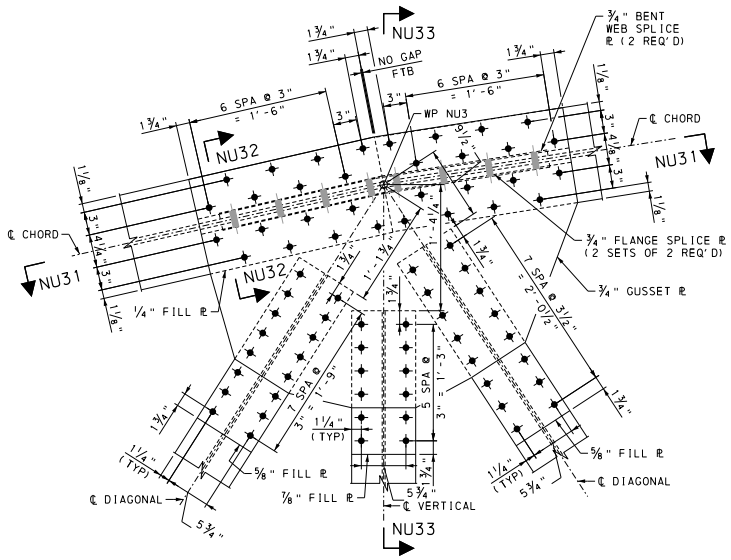
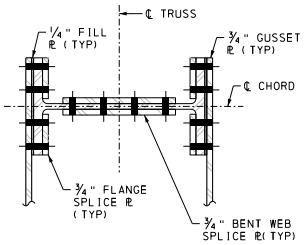


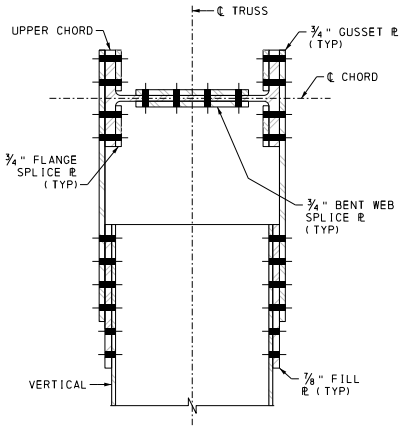
ELEVATION @ NU3 (SHOWN)
NU3′, SU3, SU3′ (SIMILAR)

0 3 6 9 1′



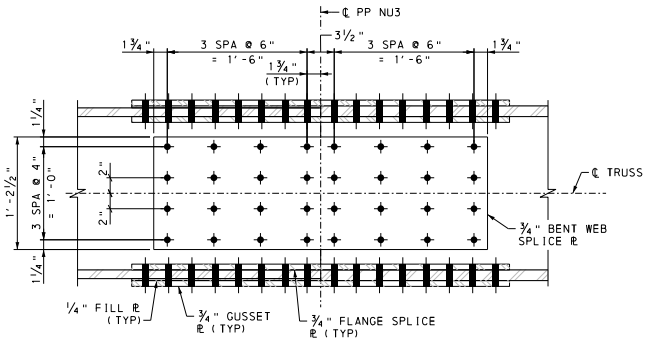
SECTION NU32-NU32

0 3 6 9 1′



SECTION NU33-NU33

0 3 6 9 1′



SECTION NU31-NU31
(DEVELOPED)

0 3 6 9 1′

NOTES:

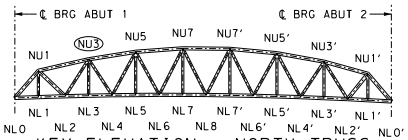
1. FOR CVN REQUIREMENTS AND REDUNDANCY FOR MEMBERS SEE SHEET 27.

REFERENCES:

	SHEET:
1. SUPPLEMENTAL DRAWINGS	01
2. INDEX OF DRAWINGS	02
3. GENERAL NOTES	05 - 06
4. TRUSS FRAMING AND WORK POINT GEOMETRY	20

LEGEND:

WP	WORK POINT
PP	PANEL POINT
FTB	FIT TO BEAR
CVN	CHARPY V-NOTCH
NSTM	NONREDUNDANT STEEL TENSION MEMBER



KEY ELEVATION - NORTH TRUSS
(SOUTH TRUSS SIMILAR)

REGISTERED PROFESSIONAL ENGINEER MATTHIAS STEIN PE095784 COMMONWEALTH OF PENNSYLVANIA

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PITTSBURGH
OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

REV	BY	DATE	DESCRIPTION

LOCATION: SWISSVALE, PENNSYLVANIA
TITLE: WASHINGTON AVENUE JOINT NU3

DSN MEM	ROD NO. D2122	WIN 1290818-OH/77	MILE POST PT-344.91		
DWN KTS	FILE NO. BR0028818	DRAWING NUMBER PT-344.91 24 35			
CHK MS	DATE 08/16/2023				

SHEET NO. 35 OF 58

6/07/2024 4:44:05 PM
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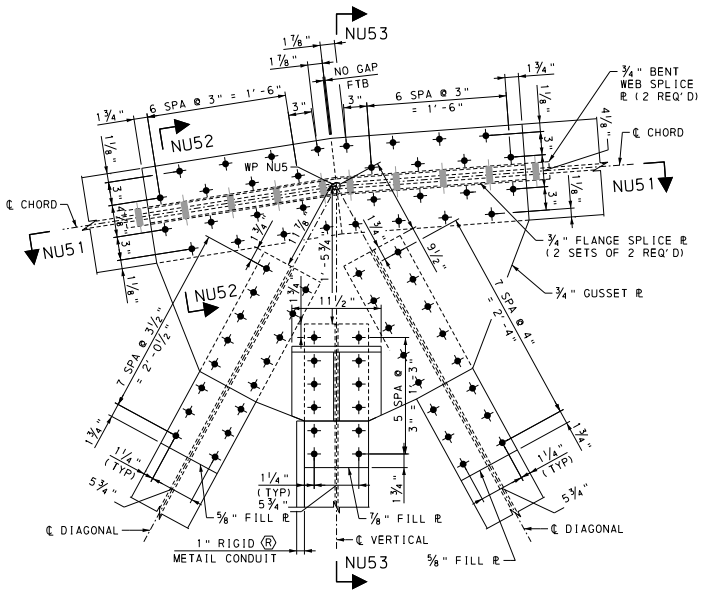
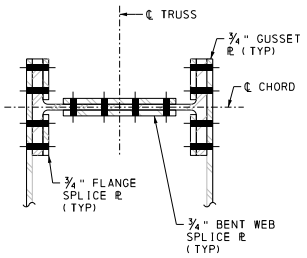


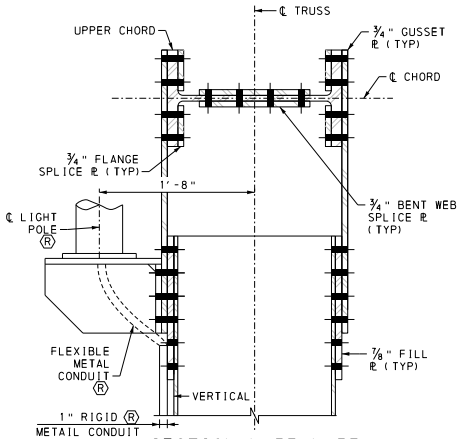
ELEVATION @ NU5 (SHOWN)
NU7, NU7', NU5', SU5, SU7
SU7', SU5' (SIMILAR)

0 3 6 9 1'



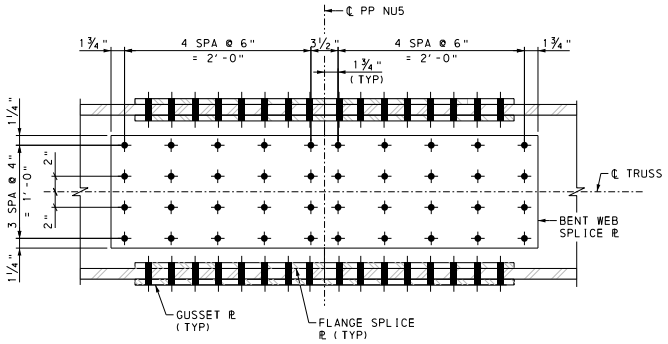
SECTION NU52-NU52

0 3 6 9 1'



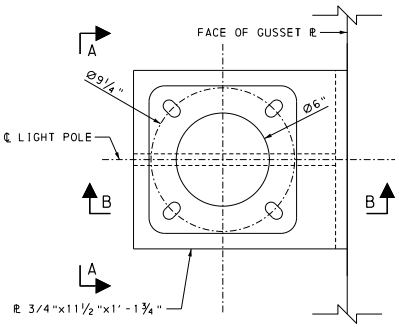
SECTION NU53-NU53

0 3 6 9 1'



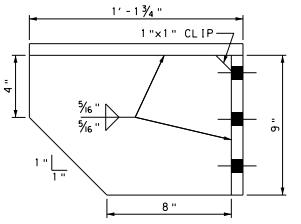
SECTION NU51-NU51
(DEVELOPED)

0 3 6 9 1'



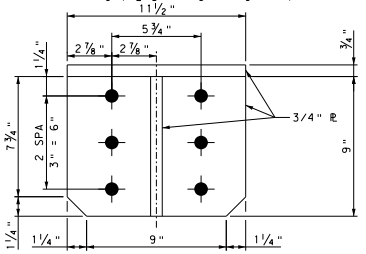
LIGHT POLE SUPPORT

0 1 2 3 6 9 1'



SECTION B-B

0 1 2 3 6 9 1'



SECTION A-A

0 1 2 3 6 9 1'

NOTES:

1. FOR CVN REQUIREMENTS AND REDUNDANCY FOR MEMBERS SEE SHEET 27.

REFERENCES:

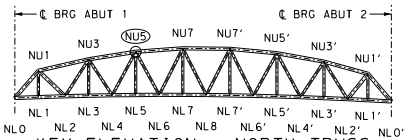
1. SUPPLEMENTAL DRAWINGS
2. INDEX OF DRAWINGS
3. GENERAL NOTES
4. TRUSS FRAMING AND WORK POINT GEOMETRY

SHEET:

01
02
05 - 06
20

LEGEND:

WP	WORK POINT
PP	PANEL POINT
FTB	FIT TO BEAR
CVN	CHARPY V-NOTCH
NSTM	NONREDUNDANT STEEL TENSION MEMBER
Ⓡ	ROADWAY ITEM



KEY ELEVATION - NORTH TRUSS
(SOUTH TRUSS SIMILAR)

REGISTERED PROFESSIONAL
MATTHIAS STEIN
ENGINEER
PE095784
COMMONWEALTH OF PENNSYLVANIA

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NORFOLK SOUTHERN
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OWNING COMPANY
PITTSBURGH
OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

REV.	BY	DATE	DESCRIPTION

LOCATION: SWISSVALE, PENNSYLVANIA
TITLE: WASHINGTON AVENUE JOINT NU5

DSN MEM	PROJ NO. D2122	WIN 1290818-OH77	MILE POST PT-344.91		
DWN KTS	FILE NO. BR0028818	DRAWING NUMBER PT-344.91 24 36			
CHK MS	DATE 08/16/2023				

SHEET NO. 36 OF 58

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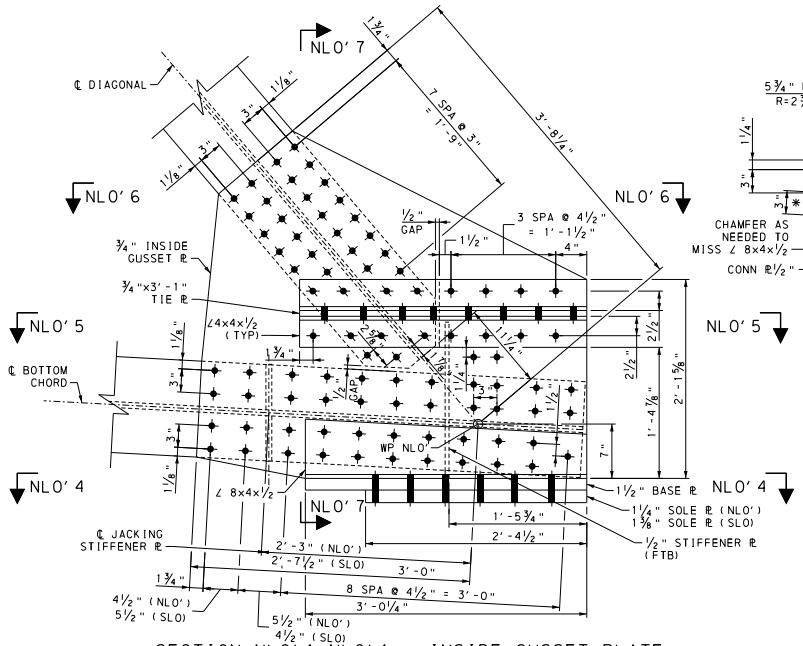
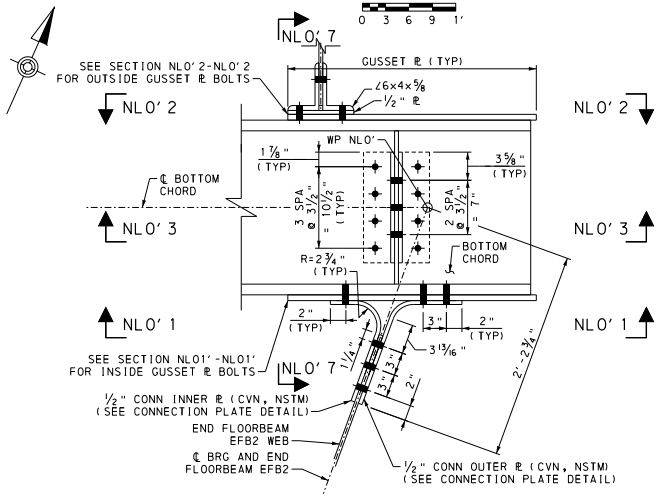


SECTION NL0' 1-NL0' 1 - INSIDE GUSSET PLATE
NL0' (SHOWN) SLO (SIMILAR)

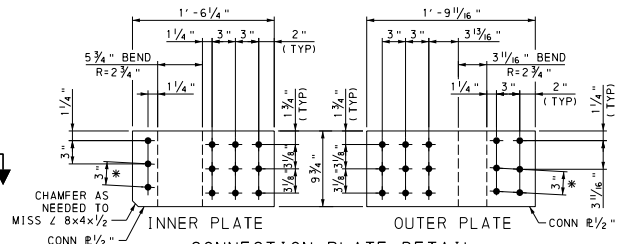
(LOOKING OUTSIDE FROM BRIDGE ℄)

0 3 6 9 1'



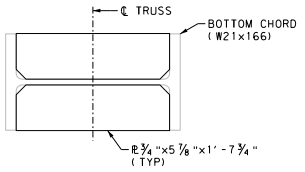
SECTION NL0' 5-NL0' 5 - END FLOORBEAM TO NL0' CONNECTION
NL0' (SHOWN) SLO (SIMILAR)

0 3 6 9 1'



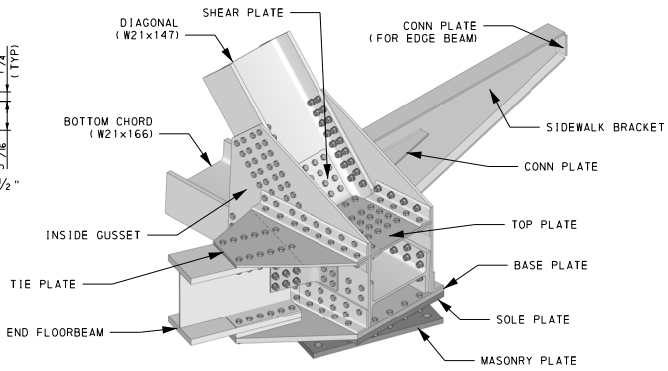
CONNECTION PLATE DETAIL

0 3 6 9 1'

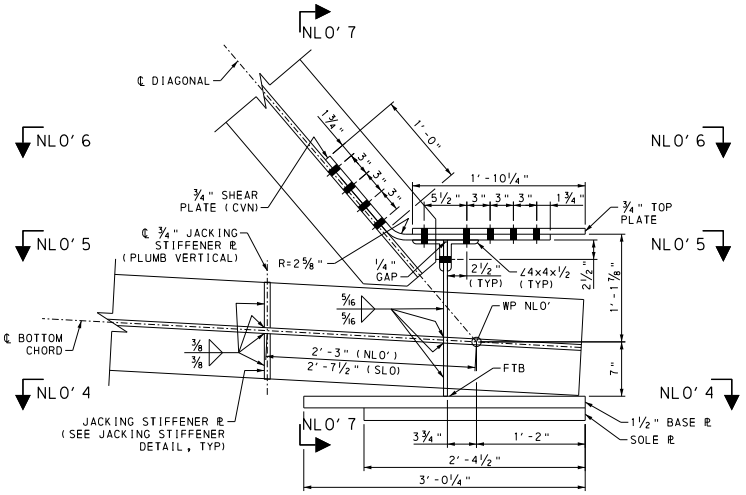


JACKING STIFFENER DETAIL

0 3 6 9 1'



NL0' ISOMETRIC VIEW - 1
NL0' (SHOWN) SLO (SIMILAR)



SECTION NL0' 3-NL0' 3 - TRUSS CENTERLINE VIEW
NL0' (SHOWN) SLO (SIMILAR)

(LOOKING OUTSIDE FROM TRUSS ℄)

0 3 6 9 1'

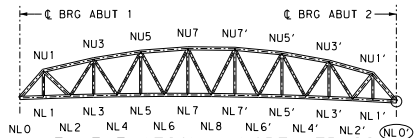
NOTES:
1. FOR CVN REQUIREMENTS AND REDUNDANCY FOR MEMBERS SEE SHEET 27.

REFERENCES:

	SHEET:
1. SUPPLEMENTAL DRAWINGS	01
2. TYPICAL SECTION & INDEX OF DRAWINGS	02
3. GENERAL NOTES	05 - 06
4. TRUSS FRAMING AND WORK POINT GEOMETRY	20
5. TRUSS ELEVATION	21
6. FLOOR SYSTEM FRAMING	22
7. END FLOORBEAM DETAILS - 1	24
8. END FLOORBEAM DETAILS - 2	25
9. BEARING LOCATION PLAN AND NOTES	40
10. BEARING DETAILS - 2	42

LEGEND:

WP	WORK POINT
FTB	FIT TO BEAR
CVN	CHARPY V-NOTCH
NSTM	NONREDUNDANT STEEL TENSION MEMBER
*	DIMENSION ALONG BOTTOM CHORD



KEY ELEVATION - NORTH TRUSS
(SOUTH TRUSS SIMILAR)

REGISTERED PROFESSIONAL ENGINEER MATTHIAS STEIN PE095784 COMMONWEALTH OF PENNSYLVANIA

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OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

REV.	BY	DATE	DESCRIPTION

LOCATION: SWISSVALE, PENNSYLVANIA
TITLE: WASHINGTON AVENUE JOINT NL0' - 1

DSN MS	PROJ NO. D2122	VAN 1290818-OH/77	MILE POST PT-344.91		
DWN KTS	FILE NO. BR0028818	DRAWING NUMBER PT-344.91 24 37			
CHK MS	DATE 08/16/2023				

SHEET NO. 37 OF 58

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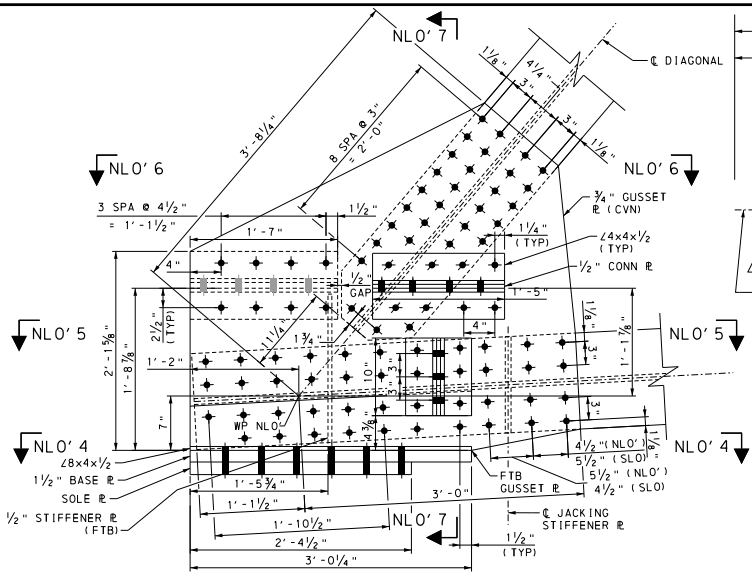
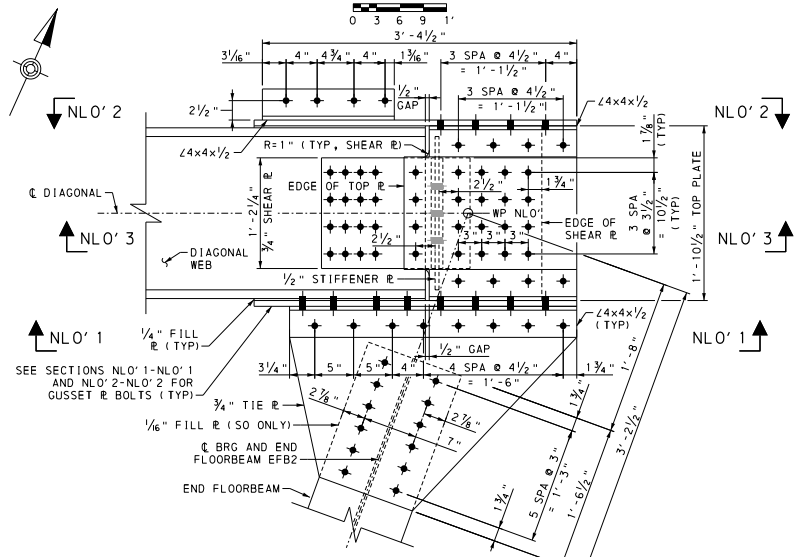


SECTION NLO' 2-NLO' 2 - OUTSIDE GUSSET PLATE

NLO' (SHOWN) SLO (SIMILAR)

(LOOKING INSIDE FROM NORTH SIDE OF BRIDGE)

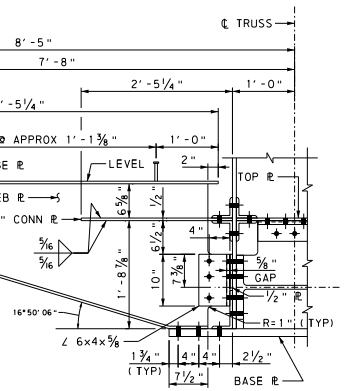
0 3 6 9 1'



SECTION NLO' 6-NLO' 6 - TOP PLATE

NLO' (SHOWN) SLO (SIMILAR)

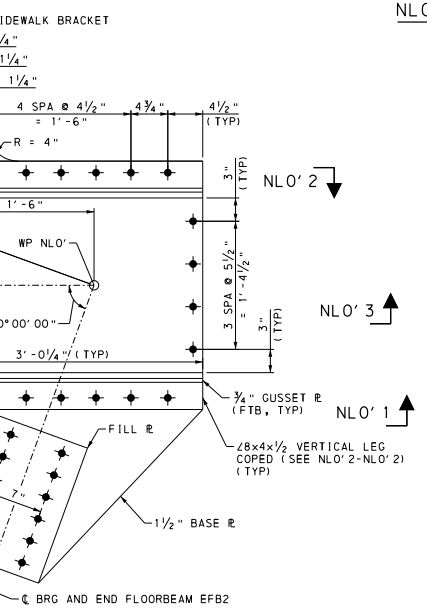
0 3 6 9 1'



SECTION NLO' 7-NLO' 7 - SIDEWALK BRACKET

NLO' (SHOWN) SLO (SIMILAR)

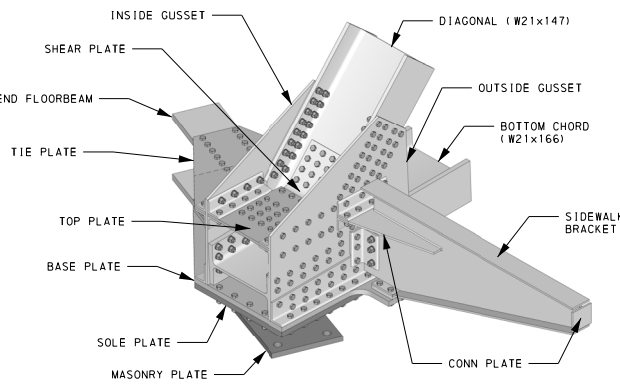
0 3 6 9 1' 2'



SECTION NLO' 4-NLO' 4 - BASE PLATE

NLO' (SHOWN) SLO (SIMILAR)

0 3 6 9 1'



NLO' ISOMETRIC VIEW - 2

NLO' (SHOWN) SLO (SIMILAR)

NOTES:

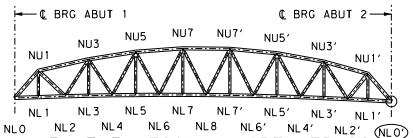
1. FOR CVN REQUIREMENTS AND REDUNDANCY FOR MEMBERS SEE SHEET 27.

REFERENCES:

	SHEET:
1. SUPPLEMENTAL DRAWINGS	01
2. TYPICAL SECTION & INDEX OF DRAWINGS	02
3. GENERAL NOTES	05 - 06
4. TRUSS FRAMING AND WORK POINT GEOMETRY	20
5. TRUSS ELEVATION	21
6. FLOOR SYSTEM FRAMING	22
7. END FLOORBEAM DETAILS - 1	24
8. END FLOORBEAM DETAILS - 2	25
9. BEARING LOCATION PLAN AND NOTES	40
10. BEARING DETAILS - 2	42

LEGEND:

WP	WORK POINT
FTB	FIT TO BEAR
CVN	CHARPY V-NOTCH
NSTM	NONREDUNDANT STEEL TENSION MEMBER
SW-2	SIDEWALK BRACKET 2



KEY ELEVATION - NORTH TRUSS

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REGISTERED PROFESSIONAL ENGINEER MATTHIAS STEIN PE095784 COMMONWEALTH OF PENNSYLVANIA

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PITTSBURGH

OPERATING DIVISION

OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

REV.	BY	DATE	DESCRIPTION

LOCATION: SWISSVALE, PENNSYLVANIA

TITLE: WASHINGTON AVENUE JOINT NLO' - 2

DSN MS	PROJ NO. D2122	VAN 1290818-OH/77	MILE POST PT-344.91		
DWN KTS	FILE NO. BR0028818	DRAWING NUMBER PT-344.91 24 38			
CHK MS	DATE 08/16/2023				

SHEET NO. 38 OF 58

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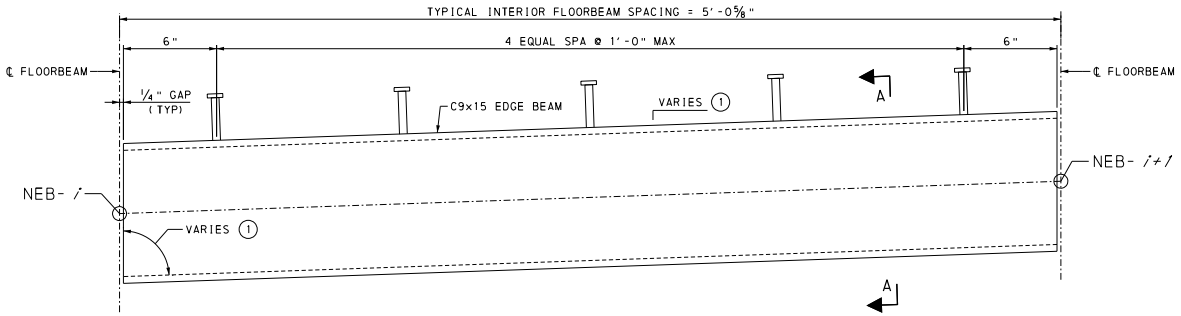
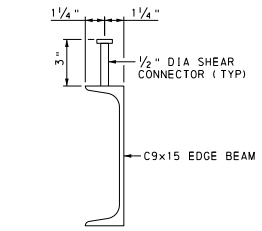


TYPICAL INTERIOR SIDEWALK EDGE BEAM

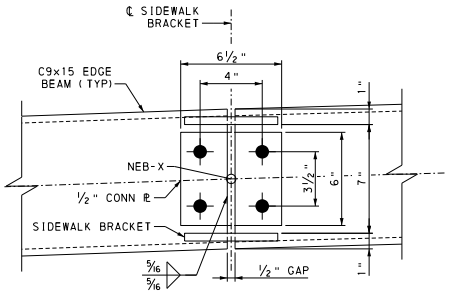
NORTH EDGE BEAM (SHOWN) SOUTH EDGE BEAM (SIMILAR)

0 1 2 3 6 9 1'



SECTION A-A

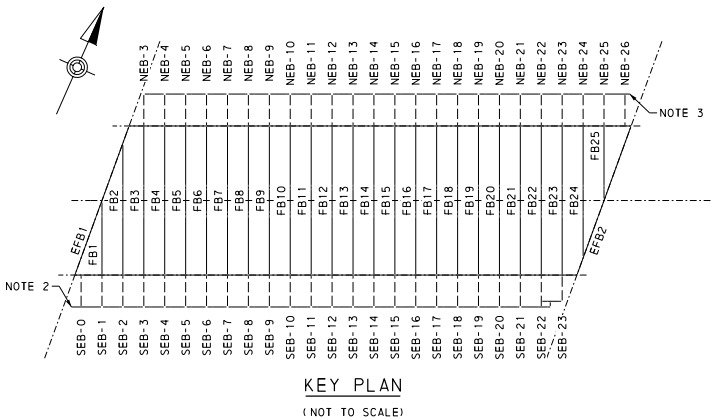
0 1 2 3 6 9 1'



ELEVATION @ EDGE BEAM CONNECTION TO SIDEWALK BRACKET

NORTH EDGE BEAM (SHOWN) SOUTH EDGE BEAM (SIMILAR)

0 1 2 3 6 9 1'



KEY PLAN

(NOT TO SCALE)

STATION	DESCRIPTION	PROFILE ELEVATION	SOUTH EDGE BEAM WP	SOUTH EDGE BEAM ELEVATION	NORTH EDGE BEAM WP	NORTH EDGE BEAM ELEVATION
6+97.93	FB0 (NOTE 1)	943.668	SEB-0	942.897	---	---
7+02.98	FB1	943.912	SEB-1	943.141	---	---
7+08.03	FB2	944.137	SEB-2	943.365	---	---
7+13.08	FB3	944.340	SEB-3	943.569	NEB-3	943.569
7+18.14	FB4	944.522	SEB-4	943.751	NEB-4	943.751
7+23.19	FB5	944.683	SEB-5	943.911	NEB-5	943.911
7+28.24	FB6	944.822	SEB-6	944.051	NEB-6	944.051
7+33.29	FB7	944.941	SEB-7	944.169	NEB-7	944.169
7+38.34	FB8	945.038	SEB-8	944.266	NEB-8	944.266
7+43.40	FB9	945.114	SEB-9	944.342	NEB-9	944.342
7+48.45	FB10	945.168	SEB-10	944.397	NEB-10	944.397
7+53.50	FB11	945.202	SEB-11	944.430	NEB-11	944.430
7+58.55	FB12	945.214	SEB-12	944.443	NEB-12	944.443
7+63.61	FB13	945.205	SEB-13	944.434	NEB-13	944.434
7+68.66	FB14	945.175	SEB-14	944.404	NEB-14	944.404
7+73.71	FB15	945.124	SEB-15	944.352	NEB-15	944.352
7+78.76	FB16	945.051	SEB-16	944.280	NEB-16	944.280
7+83.81	FB17	944.952	SEB-17	944.181	NEB-17	944.181
7+88.87	FB18	944.837	SEB-18	944.066	NEB-18	944.066
7+93.92	FB19	944.702	SEB-19	943.930	NEB-19	943.930
7+98.97	FB20	944.545	SEB-20	943.773	NEB-20	943.773
8+04.02	FB21	944.367	SEB-21	943.595	NEB-21	943.595
8+09.07	FB22	944.168	SEB-22	943.396	NEB-22	943.396
8+14.13	FB23	943.947	SEB-23	943.176	NEB-23	943.176
8+19.18	FB24	943.706	---	---	NEB-24	942.935
8+24.23	FB25	943.444	---	---	NEB-25	942.673
8+29.28	FB26 (NOTE 1)	943.161	---	---	NEB-26	942.389

NOTES:

1. NO FLOORBEAM IS PRESENT AT THE FB0 AND FB26 LOCATIONS. THESE LOCATIONS ARE INDICATED PURELY FOR PLACING THE END SIDEWALK BRACKETS. SEE SHEET 37 AND SHEET 38.
2. EDGEBEAM AT SLO EXTEND PAST SIDEWALK BRACKET SEB-0. REFER TO FLOOR FRAMING SYSTEM, SHEET 22.
3. EDGEBEAM AT NLO' EXTEND PAST SIDEWALK BRACKET NEB-26. REFER TO FLOOR FRAMING SYSTEM, SHEET 22.

REFERENCES:

	SHEET:
1. TYPICAL SECTION AND INDEX OF DRAWINGS	02
2. TRUSS FRAMING AND WORK POINT GEOMETRY	20
3. TRUSS ELEVATION	21
4. FLOOR SYSTEM FRAMING	22
5. JOINTS NLO' AND SLO	37 - 38
6. SIDEWALK DETAILS	46 - 47

LEGEND:

1. EACH EDGE BEAM TO BE CUT AT UNIQUE ANGLES AND SLOPES TO ACHIEVE SIDEWALK PROFILE

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL MATTHIAS STEIN ENGINEER PE095784

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OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

REV.	BY	DATE	DESCRIPTION

LOCATION: SWISSVALE, PENNSYLVANIA

TITLE: WASHINGTON AVENUE SIDEWALK EDGE BEAM

DSN AHW	PROJ NO. D2122	WBS 1290818-OH/77	MILE POST PT-344.91
DWN KTS	FILE NO. BR0028818	DRAWING NUMBER PT-344.91 24 39	
CHK MS	DATE 08/16/2023		

SHEET NO. 39 OF 58

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GENERAL NOTES:

1. PROVIDE MATERIALS AND WORKMANSHIP IN ACCORDANCE WITH SPECIFICATIONS, PUBLICATION 408/2020, ANSI/AASHTO/AWS/D1.5 BRIDGE WELDING CODE AND CONTRACT SPECIAL PROVISIONS.

2. MARK CENTERLINE OF GUIDED AND NON-GUIDED DISC BEARINGS ON THE SIDES OF MASONRY PLATE AND SOLE PLATE. THE CENTERLINE IDENTIFICATION MARKS WILL BE USEFUL TO LOCATE OFFSET DISTANCES IN THE FIELD. USE INDELIBLE INK TO PLACE ALL MARKS.

3. MARK EACH BEARING WITH THE NAME OF THE MANUFACTURER, TYPE OR MODEL NUMBER, INSTALLATION LOCATION, AND DATE OF MANUFACTURE. PLACE THE NAME OF THE MANUFACTURER AND TYPE OR MODEL NUMBER IN A PERMANENT MANNER AND LOCATION SO THAT IT IS VISIBLE AFTER ERECTION.

4. ENSURE ALL BEARING SURFACES, INCLUDING THE BEARING SEAT, ARE LEVEL PRIOR TO INSTALLATION OF DISC BEARINGS IN ACCORDANCE WITH PUBLICATION 408.

5. FABRICATION TOLERANCES SHALL BE IN ACCORDANCE WITH PENNDOT PUBLICATION 408 SECTION 1111.03.

6. CONTRACTOR SHALL DESIGN DISC BEARINGS AND SHALL SUBMIT SIGNED AND SEALED CALCULATIONS AND SHOP DRAWINGS (BY A PROFESSIONAL ENGINEER REGISTERED IN THE COMMONWEALTH OF PENNSYLVANIA) OF REQUIRED DISC BEARING DIMENSIONS TO THE ENGINEER FOR REVIEW. DESIGN SHALL INCLUDE PENNDOT CONSTRUCTION TOLERANCES FOR DISC BEARINGS.

7. SET MASONRY PLATES SO THEY WILL BE CENTERED WITH THE SOLE PLATES AND BEARING PLATES AT 68 DEGREES F AND UNDER FULL DEAD LOAD. MAKE ADJUSTMENT FOR THE DIFFERENCE IN TEMPERATURE, FROM 68 DEGREES F, AT TIME OF ERECTION. COMPENSATE FOR THE CHANGE IN LENGTH OF THE BOTTOM FLANGE DUE TO THE LATER ADDITION OF DEAD LOADS.

8. THE SOLE PLATE AND MASONRY PLATES ARE INCLUDED IN THE BEARING ITEM COST.

MATERIALS:

1. ALL STEEL SHALL BE OF DOMESTIC ORIGIN, AASHTO M270/M270M (ASTM A709/A709M), GRADE 50.

2. ALL STAINLESS STEEL SHALL BE 12 GAUGE, ASTM A240 TYPE 304, AND HAVE A No. 8 BRIGHT MIRROR FINISH.

3. DISC SHALL MEET THE APPLICABLE MATERIAL REQUIREMENTS OF THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, DIVISION II, SECTION 18.4.8.1. THE TOP AND BOTTOM SURFACES OF THE DISC SHALL BE ROUGHENED.

4. PTFE SHEET SHALL BE UNFILLED, DIMPLED, LUBRICATED, AND SHALL MEET THE APPLICABLE MATERIAL REQUIREMENTS OF PENNDOT PUBLICATION 408. ALL PTFE SHALL BE ETCHED ON ONE SIDE PRIOR TO BONDING. A UNIFORM LAYER OF CHEMGRIP OR APPROVED EQUAL ADHESIVE SHALL BE APPLIED FOR EFFECTIVE BONDING.

5. ANCHOR BOLTS, NUTS AND WASHERS SHALL BE ASTM F1554 GRADE 55, ASTM A563/A563M GRADE DH, AND ASTM F436/F436M, TYPE 1 RESPECTIVELY.

6. SHEAR PINS SHALL BE ASTM A193 GRADE B7, UNLESS NOTED OTHERWISE.

7. BEDDING MATERIAL SHALL BE SUPPLIED IN ACCORDANCE WITH PUBLICATION 408 SECTION 1113.03(h).

COATINGS:

1. ALL MILL SCALE SHALL BE REMOVED FROM STEEL PLATES VIA ABRASIVE BLASTING IN ACCORDANCE WITH SSPC-SP10. THE PLATE SURFACES ABOVE AND BELOW THE DISC SHALL BE ABRASIVE BLASTED TO A NEAR WHITE CONDITION AS DEFINED IN SSPC-SP10. THE BLAST PROFILE SHALL BE JAGGED RATHER THAN "PEENED".

2. PAINT ALL EXPOSED STEEL SURFACES IN ACCORDANCE WITH PENNDOT PUBLICATION 408, SECTION 1060. THE FOLLOWING AREAS ARE NOT TO BE PAINTED:
   - AREAS DIRECTLY ABOVE AND BELOW THE DISC.
   - ALL STAINLESS STEEL AND PTFE SURFACES.
   - SHEAR PINS AND SHEAR PIN HOLES.

3. THE FOLLOWING AREAS ARE TO RECEIVE PRIME COAT ONLY:
   - TOP OF SOLE PLATE.
   - BOTTOM OF MASONRY PLATE.

4. FULLY THREADED ANCHOR BOLTS, HEAVY HEX NUTS, AND HARDENED WASHERS SHALL BE HOT-DIP GALVANIZED BY A METHOD CONFORMING TO ASTM A153.

WELDING:

1. ALL WELDING SHALL BE PERFORMED IN ACCORDANCE WITH THE 2015 ANSI/AASHTO/AWS D1.5: BRIDGE WELDING CODE.

2. WELDING TO BEARING PLATES AFTER ASSEMBLY IS PERMITTED PROVIDED WELDING PROCEDURES RESTRICT THE MAXIMUM TEMPERATURE IN THE AREAS OF THE DISC AND PTFE TO NO MORE THAN 225° F AS DETERMINED BY USE OF TEMPERATURE INDICATING WAX PENCILS. PROTECTIVE MATERIAL SHALL BE PLACED OVER THE BEARING ASSEMBLY TO PROTECT AGAINST SPARKS AND FLASH.

3. AFTER WELDING IS COMPLETE, EXPOSED STEEL SHALL BE TOUCHED UP IN ACCORDANCE WITH THE BRIDGE PAINT SYSTEM.

SHIPPING AND HANDLING:

1. PTFE AND STAINLESS STEEL SHALL BE PROTECTED FROM DAMAGE, AIRBORNE DEBRIS AND CONTAMINANTS AT ALL TIMES. THESE SURFACES SHALL BE INSPECTED FOR SUCH DAMAGE AND DEBRIS PRIOR TO FINAL ASSEMBLY AND INSTALLATION.

2. COMPLETED BEARINGS SHALL BE INDIVIDUALLY STEEL BANDED IN THE UPRIGHT POSITION. STEEL BANDS SHALL PREVENT SEPARATION OF UPPER AND LOWER BEARING COMPONENTS AND SHALL NOT BE REMOVED PRIOR TO INSTALLATION.

3. BEARING ASSEMBLIES SHALL BE HANDLED BY THEIR BOTTOM SURFACES ONLY, AND SHALL NOT BE LIFTED BY THEIR TOPS, SIDES AND/OR SHIPPING BANDS.

4. BEARINGS SHALL BE STORED IN A CLEAN, DRY AND UPRIGHT POSITION.

5. AT NO TIME PRIOR TO THE COMPLETION OF THE PROJECT MAY ANY BEARING BE DISASSEMBLED WITHOUT AUTHORIZATION FROM THE BEARING MANUFACTURER.

TESTING:

1. BEARINGS SHALL BE TESTED IN ACCORDANCE WITH PUBLICATION 408, SECTION 1111.03(e).

2. TESTING SHALL BE CONDUCTED AT A TESTING FACILITY WITH PRIOR EXPERIENCE TESTING BEARINGS OF THIS TYPE.

MATERIAL DESIGN PARAMETERS:

1. ALLOWABLE PRESSURE IN POLYURETHANE DISC: 5000 PSI

2. ALLOWABLE PRESSURE IN PTFE: 4500 PSI

3. COEFFICIENT OF FRICTION BETWEEN PTFE AND STAINLESS STEEL: 0.04

4. DISC BEARING HARDNESS: 60 DUROMETER

ANCHOR BOLT INSTALLATION:

1. IF ANCHOR BOLTS ARE INSTALLED BEFORE THE MASONRY PLATE INSTALLATION, USE ANCHOR BOLT DETAIL 1 SHOWN ON THIS SHEET. THE USE OF A BLOCKOUT FORM IS OPTIONAL.

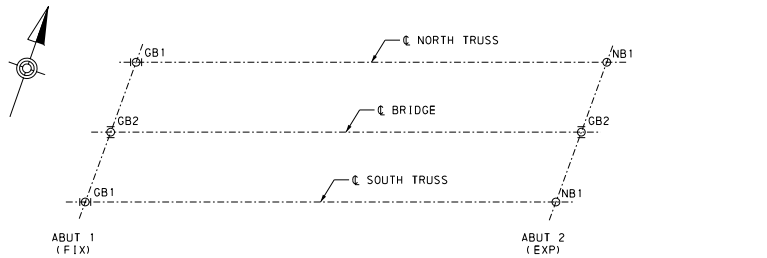
2. IF ANCHOR BOLTS ARE INSTALLED AFTER THE BEARINGS ARE INSTALLED, USE ANCHOR BOLT DETAIL 2 SHOWN ON THIS SHEET.

3. IF BLOCKOUTS ARE USED, REMOVE BLOCKOUT FORM AND DEBRIS FROM HOLE PRIOR TO GROUTING. INSTALL NON-SHRINK GROUT IN ACCORDANCE WITH PUBLICATION 408 SECTION 1001. DO NOT GROUT UNTIL ALL TRUSS MEMBERS ARE PROPERLY ALIGNED.

4. PREVENT WATER FROM ACCUMULATING IN THE PREFORMED ANCHOR BOLT HOLES OR STANDARD PIPE AND ENSURE THE HOLES ARE COMPLETELY FILLED WITH GROUT.

REFERENCES: SHEET:

1. BEARING DETAILS - 1	41
2. BEARING DETAILS - 2	42
3. CENTER BEARING DETAILS	43

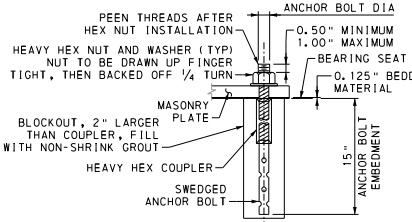


NOTES:
GB1 AND NB1 AND SIMILAR DESIGNATIONS REPRESENT BEARING TYPES AS USED IN DESIGN TABLES FOR BEARINGS.

LEGEND:
- ○ GUIDED EXPANSION LONGITUDINALLY
- |○| GUIDED EXPANSION TRANSVERSELY
- ○ NON-GUIDED EXPANSION

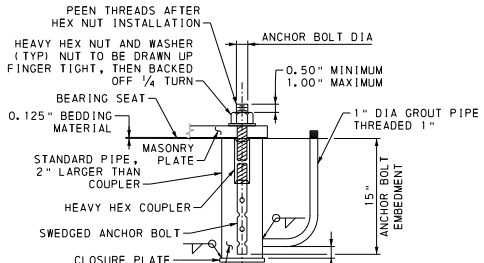
BEARING LAYOUT SCHEMATIC

(NOT TO SCALE)



ANCHOR BOLT DETAIL 1

(NOT TO SCALE)



ANCHOR BOLT DETAIL 2

(NOT TO SCALE)

BEARING DESIGN LOADS

LOCATION	BEARING TYPE	LOAD COMBINATION	FACTORED LOADS (KIPS)										FACTORED ROTATION (RADIANS)
			VERTICAL						HORIZONTAL				
			DL		LL+I		FROM HORIZ. LOADS		TRANSVERSE		LONGITUDINAL		
			MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	
ABUTMENT 1	GUIDED TRANSVERSELY	SERVICE I	260	315	-6	165	-5	5	0	0	-38	38	0.002
		EXTREME EVENT I	260	315	0	0	0	0	0	0	-105	105	0.000
ABUTMENT 2	NON-GUIDED	SERVICE I	260	315	-5	155	-5	5	0	0	-13	13	0.002
		EXTREME EVENT I	260	315	0	0	0	0	0	0	-13	13	0.000

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OWNING COMPANY
PITTSBURGH
OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

REV.	BY	DATE	DESCRIPTION

LOCATION: SWISSVALE, PENNSYLVANIA
TITLE: WASHINGTON AVENUE
BEARING LOCATION PLAN AND NOTES

DSN MEM	PROJ NO. D2122	WBS 1290818-OH/77	MILE POST PT-344.91		
DWN KTS	FILE NO. BR0028818	DRAWING NUMBER PT-344.91 24 40			
CHK RAS	DATE 08/16/2023				

SHEET NO. 40 OF 58

6/07/2024 4:44:46 PM
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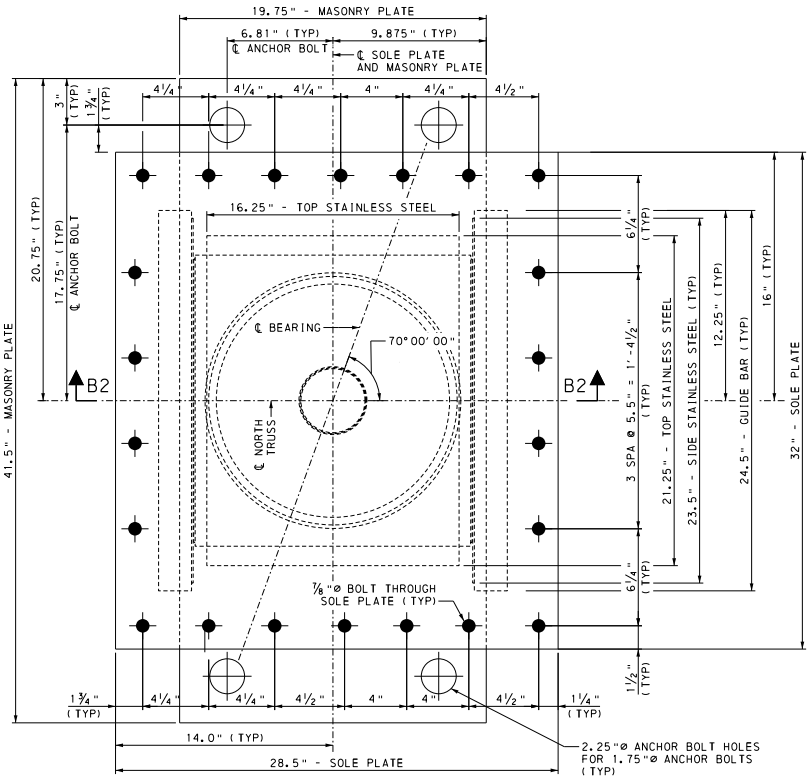
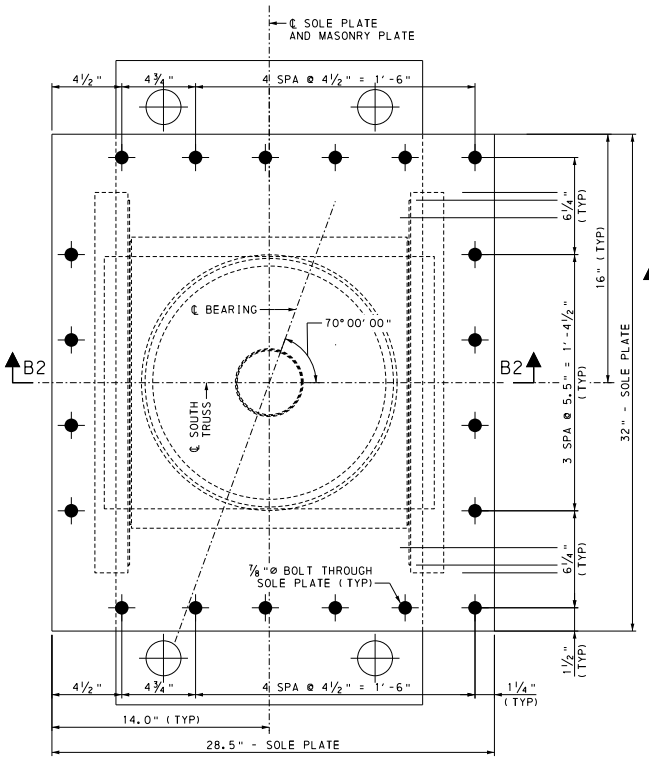


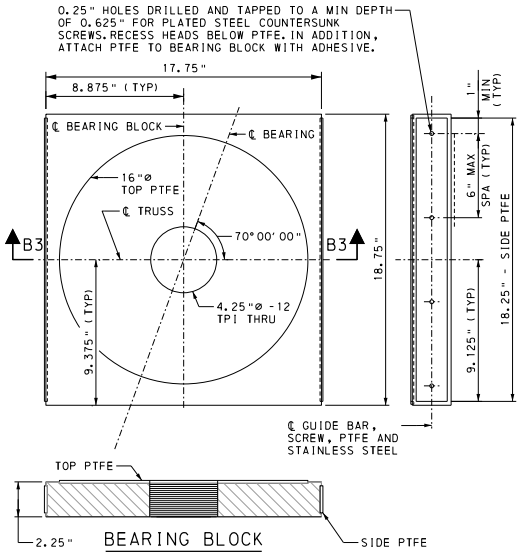
GUIDED BEARING PLAN (GB1 @ NLO)

(NOT TO SCALE)



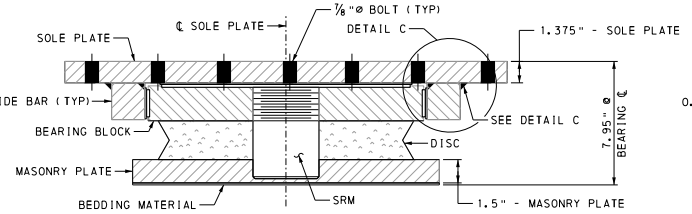
GUIDED BEARING PLAN (GB1 @ SLO)

(NOT TO SCALE)



BEARING BLOCK SECTION B3-B3

(NOT TO SCALE)



SECTION B2-B2

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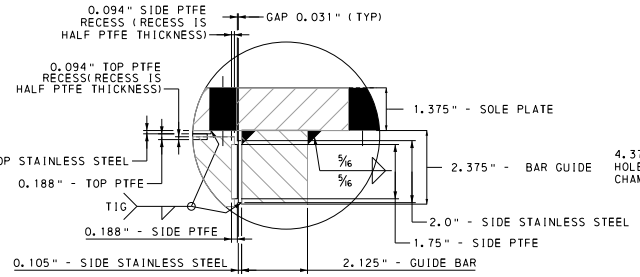
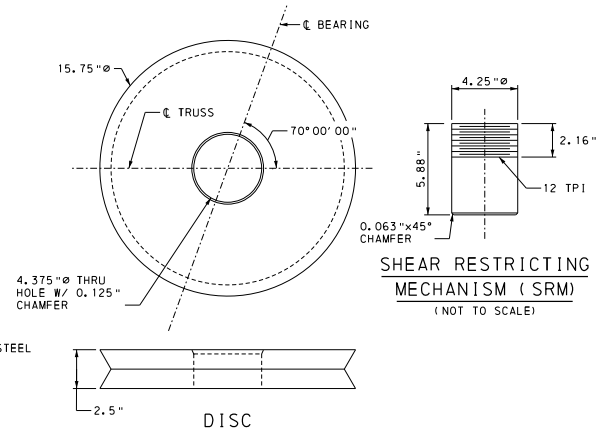


DETAIL C

(NOT TO SCALE)



SHEAR RESTRICTING MECHANISM (SRM)

(NOT TO SCALE)

DISC

(NOT TO SCALE)

NOTES:

1. ALL BEARING DIMENSIONS ARE IN INCHES, UNLESS NOTED OTHERWISE.
2. BEARING HEIGHT SHOWN IS THE UNLOADED HEIGHT. IT INCLUDES ⅛" OF BEDDING MATERIAL.

REFERENCES:

	SHEET:
1. DISC BEARING NOTES	40
2. ANCHOR BOLT DETAILS	40
3. JOINT NLO - 1	28
4. JOINT NLO - 2	29

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PITTSBURGH

OPERATING DIVISION

OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

REV	BY	DATE	DESCRIPTION

LOCATION: SWISSVALE, PENNSYLVANIA

TITLE: WASHINGTON AVENUE BEARING DETAILS - 1

DSN	MEM	PROJ NO.	D2122	WBS	1290818-OH/77
DWN	KTS	FILE NO.	BR0028818		
CHK	RAS	DATE	08/16/2023		

MILE POST: PT-344.91

DRAWING NUMBER: PT-344.91 24 41

SHEET NO. 41 OF 58

6/07/2024 4:44:53 PM
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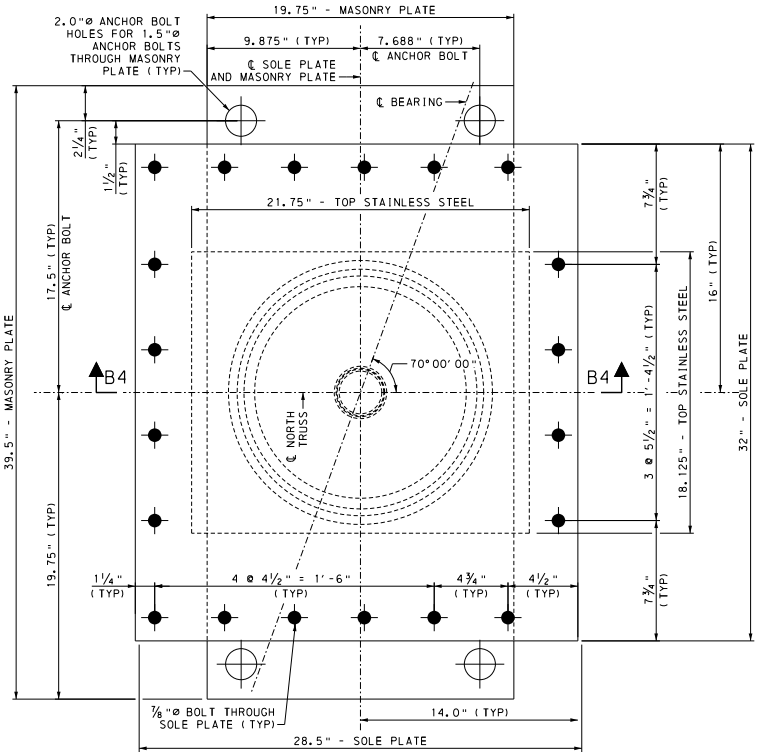
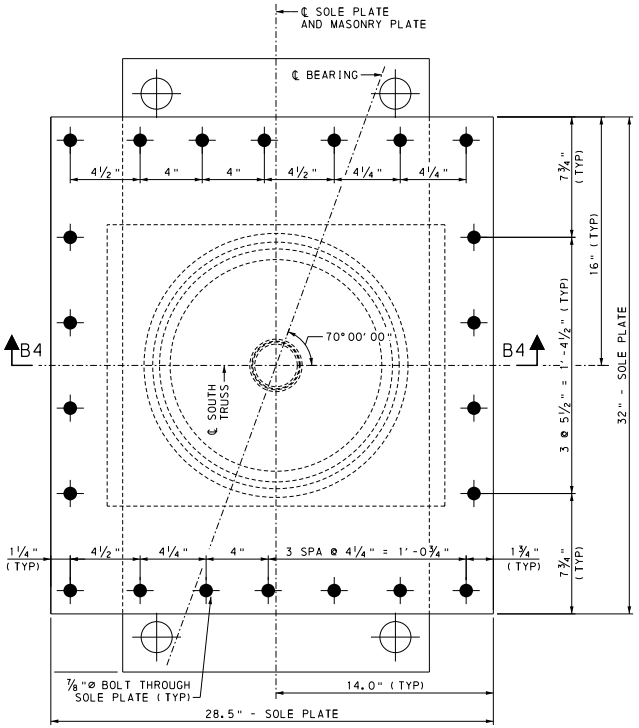


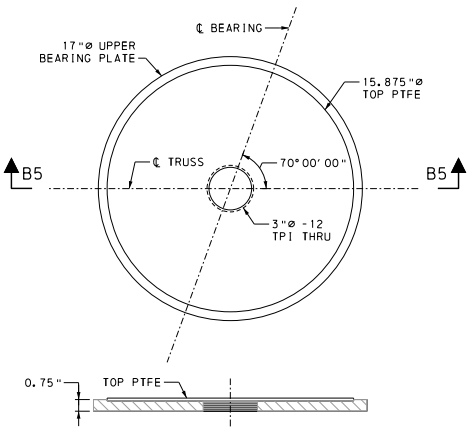
NON-GUIDED BEARING PLAN (NB1 @ NL0')

(NOT TO SCALE)



NON-GUIDED BEARING PLAN (NB1 @ SL0)

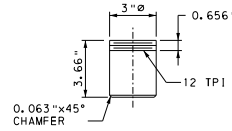
(NOT TO SCALE)



UPPER BEARING PLATE

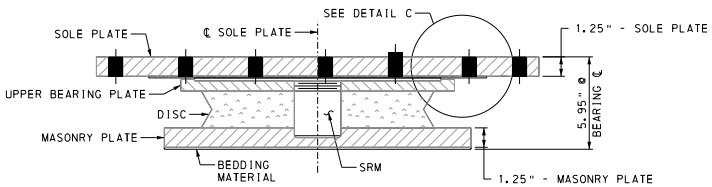
SECTION B5-B5

(NOT TO SCALE)



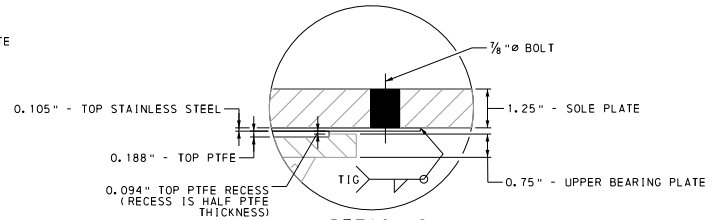
SHEAR RESTRICTING MECHANISM (SRM)

(NOT TO SCALE)



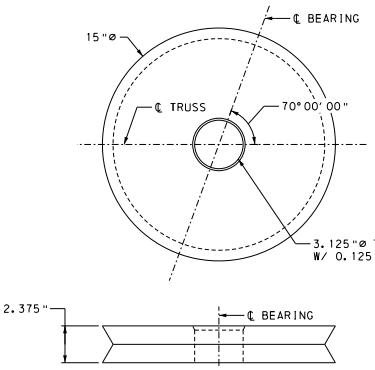
SECTION B4-B4

(NOT TO SCALE)



DETAIL C

(NOT TO SCALE)



DISC

(NOT TO SCALE)

NOTES:

1. ALL BEARING DIMENSIONS ARE IN INCHES UNLESS NOTED OTHERWISE.
2. BEARING HEIGHT SHOWN IS THE UNLOADED HEIGHT. IT INCLUDES ⅛" OF BEDDING MATERIAL.

REFERENCES:

1. DISC BEARING NOTES	39
2. ANCHOR BOLT DETAILS	39
3. JOINT NL0' - 1	37
4. JOINT NL0' - 2	38

SHEET:

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39
37
38

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OPERATING DIVISION

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REV	BY	DATE	DESCRIPTION

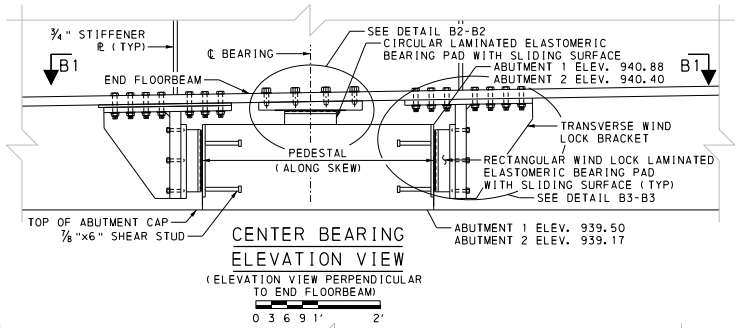
LOCATION: SWISSVALE, PENNSYLVANIA

TITLE: WASHINGTON AVENUE BEARING DETAILS - 2

DSN MEM	PROJ NO. D2122	WBS 1290818-OH/77	MILE POST PT-344.91
DWN KTS	FILE NO. BR0028818		DRAWING NUMBER PT-344.91 24 42
CHK RAS	DATE 08/16/2023		

SHEET NO. 42 OF 58

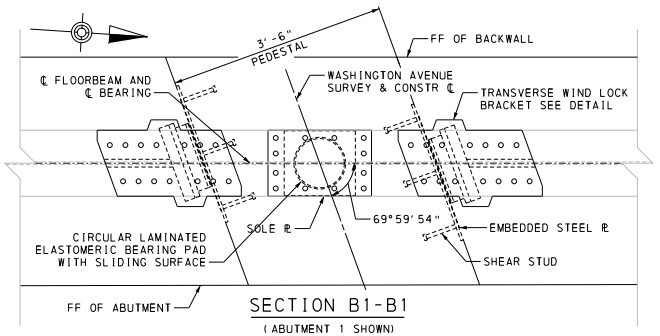
6/07/2024 4:45:00 PM
pw:\\WD-us-pw.bentley.commb-us-pw-01\Documents\Moon Township, PA\DL-Projects\Norfolk Southern\Pittsburgh_Vertical_Clearance\NS_Washington Avenue\deliverables\design\structures\Final\plots\NSWash_disc_bearing_details_02.dgn



CENTER BEARING ELEVATION VIEW

(ELEVATION VIEW PERPENDICULAR TO END FLOORBEAM)

0 3 6 9 1' 2'



SECTION B1-B1

(ABUTMENT 1 SHOWN)
(ABUTMENT 2 SIMILAR)

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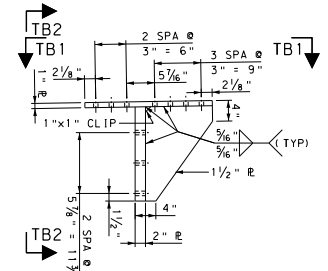
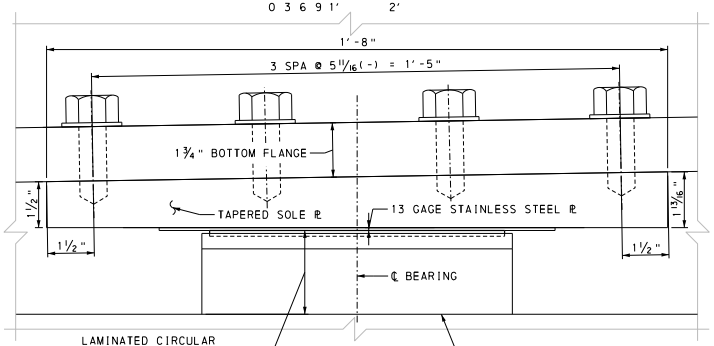


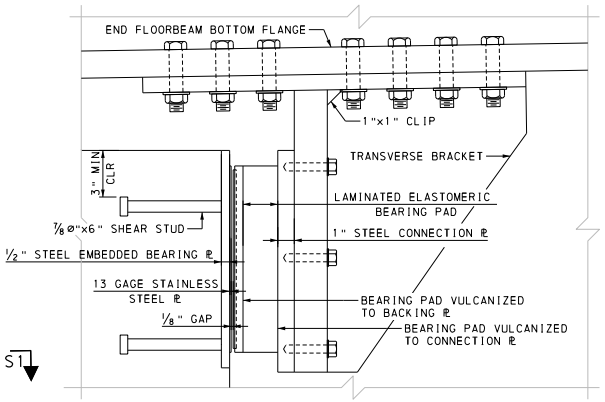
TRANSVERSE WIND LOCK BRACKET

0 3 6 9 1' 2'



DETAIL B2-B2

(NOT TO SCALE)



DETAIL B3-B3

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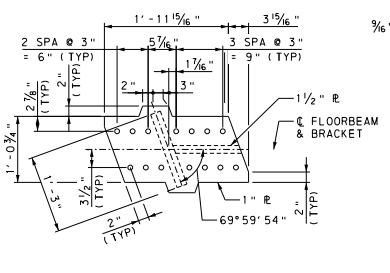

SECTION TB1-TB1

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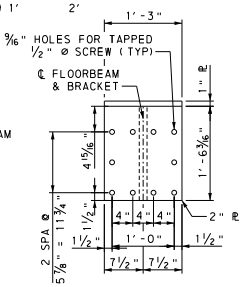

SECTION TB2-TB2

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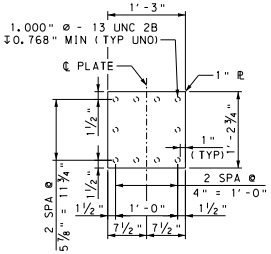
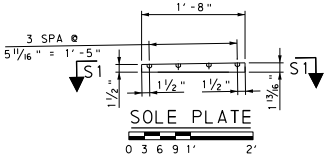


CONNECTION PLATE

0 3 6 9 1' 2'



SOLE PLATE

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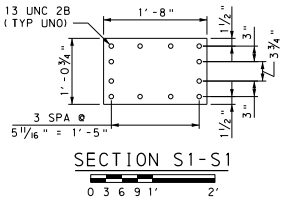

SECTION S1-S1

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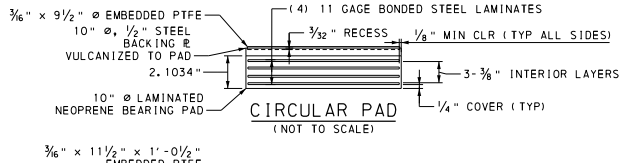
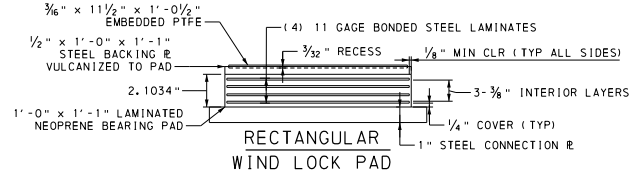


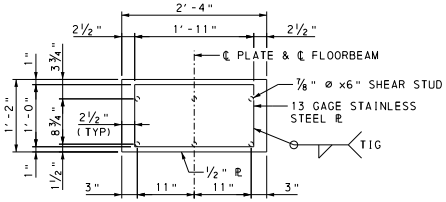
CIRCULAR PAD

(NOT TO SCALE)



RECTANGULAR WIND LOCK PAD

(NOT TO SCALE)



EMBEDDED BEARING PLATE

0 3 6 9 1' 2'

NOTES:

1. FOR ADDITIONAL BEARING DETAILS AND NOTES, SEE STANDARD DRAWING BC-755M AND BC-756M.
2. CONSTRUCTION TOLERANCE ABOUT TRANSVERSE AXIS OF PAD: CIRCULAR PAD = 0.005 RADIANS
   RECTANGULAR WIND LOCK PAD = 0.003 RADIANS
3. CONSTRUCTION TOLERANCE ABOUT LONGITUDINAL AXIS OF PAD : CIRCULAR PAD = 0.005 RADIANS
   RECTANGULAR WIND LOCK PAD = 0.003 RADIANS
4. FABRICATOR MAY NOT USE CONTRACT DRAWINGS TO FABRICATE ELASTOMERIC BEARING PADS, SUBMIT SHOP DRAWINGS.
5. THE CENTER CIRCULAR BEARING IS DESIGNED FOR A DEAD LOAD OF 22 KIPS AND A LIVE LOAD INCLUDING IMPACT OF 100 KIPS.
6. THE RECTANGULAR WIND LOCK BEARINGS ARE DESIGNED FOR AN EXTREME EVENT LOADING OF 260 KIPS AND A ROTATION OF 0.008 RADIANS.

REFERENCES:

	SHEET:
1. SUPPLEMENTAL DRAWINGS	01
2. TYPICAL SECTION & INDEX OF DRAWINGS	02
3. GENERAL NOTES	05 - 06
4. END FLOORBEAM DETAILS - 1	24
5. END FLOORBEAM DETAILS - 2	25
6. BEARING LOCATION PLAN AND NOTES	40

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL MATTHIAS STEIN ENGINEER PE095784

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OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

REV.	BY	DATE	DESCRIPTION

LOCATION: SWISSVALE, PENNSYLVANIA

TITLE: WASHINGTON AVENUE CENTER BEARING DETAILS

DSN LTS. PROJ NO. D2122 WBS 1290818-OH/77 SHEET POST PT-344.91
DWN LTS. FILE NO. BR0028818 DRAWING NUMBER PT-344.91 24 43
CHK RMS. DATE 08/16/2023

SHEET NO. 43 OF 58

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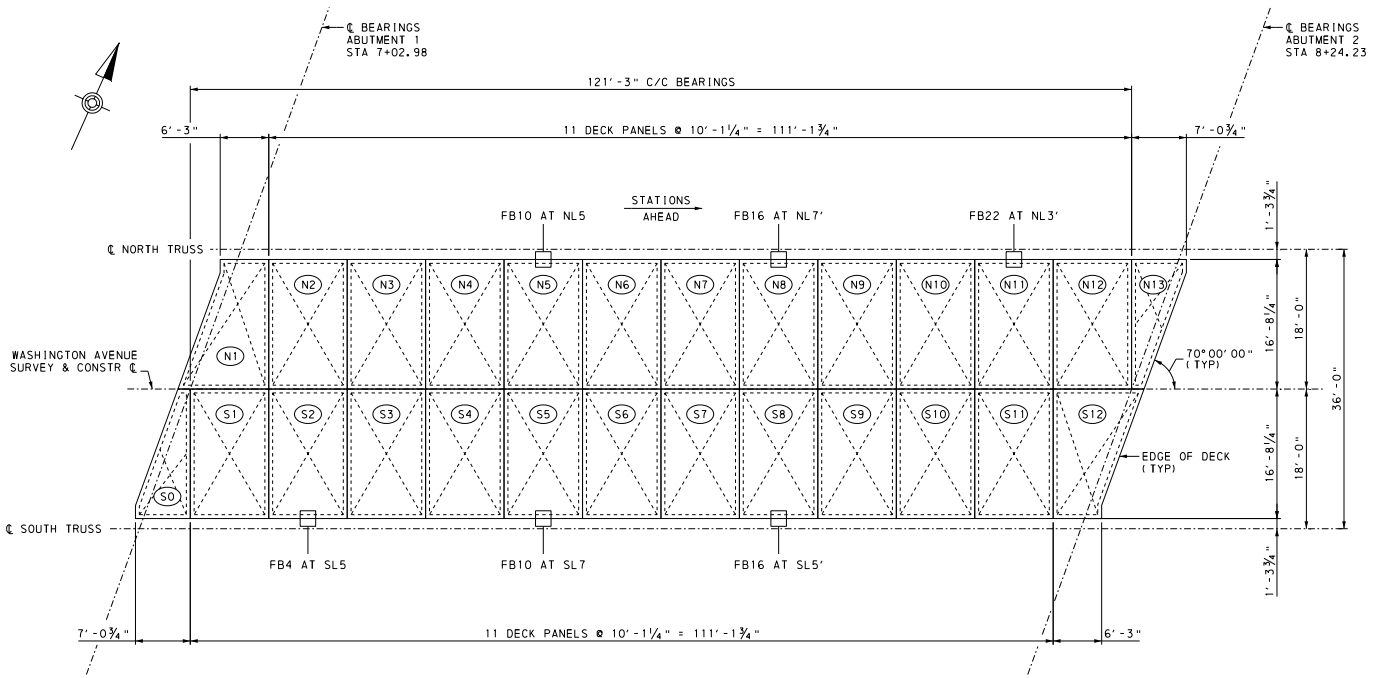
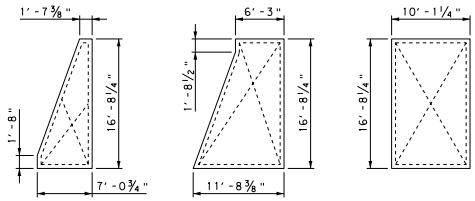


GRID DECK PANEL PLAN

0 8' 16'



DECK PANEL DETAILS

0 8' 16'

LEGEND:

- DECK PANEL
- (N13) DECK PANEL DESIGNATION
- NOTCH IN DECK PANEL FOR STIFFENER

NOTES:

1. SIDEWALK BRACKETS AND FLOORBEAMS NOT SHOWN FOR CLARITY.
2. PANELS REQUIRE NOTCHING IN 6 LOCATIONS AS SHOWN TO MAKE ROOM FOR STIFFENERS (ALSO REFER TO SECTION NL32-NL32 ON SHEET 32)

REFERENCES:

	SHEET:
1. SUPPLEMENTAL DRAWINGS	01
2. TYPICAL SECTION & INDEX OF DRAWINGS	02
3. STAKEOUT PLAN	04
4. GENERAL NOTES	05 - 06
5. FLOOR SYSTEM FRAMING	22
6. DECK DETAILS	45
7. BARRIER AND SIDEWALK PLAN	48
8. ERECTION DETAILS - 1	54
9. ERECTION DETAILS - 2	55

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OWNING COMPANY
PITTSBURGH
OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

REV.	BY	DATE	DESCRIPTION

LOCATION: SWISSVALE, PENNSYLVANIA
TITLE: WASHINGTON AVENUE DECK PLAN

DSN KTS	PROJ NO. D2122	WBS 1290818-OH/77	MILE POST PT-344.91		
DWN KTS	FILE NO. BR0028818	DRAWING NUMBER PT-344.91 24 44			
CHK RMS/MS	DATE 08/16/2023				

SHEET NO. 44 OF 58

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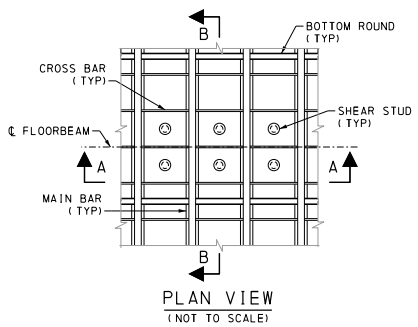
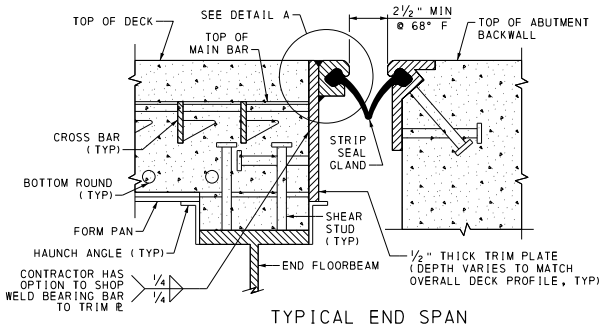


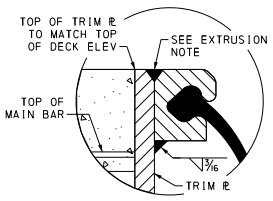
PLAN VIEW

(NOT TO SCALE)



TYPICAL END SPAN EXPANSION JOINT DETAIL

(NOT TO SCALE)



DETAIL A

(NOT TO SCALE)

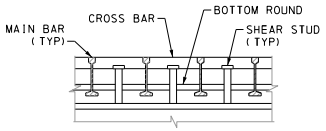
EXTRUSION NOTE:
ONE PIECE EXTRUSION IN LIEU OF TWO PIECE MEMBER (EXTRUSION AND PLATE COMBINATION) IS PERMITTED. WELD IN ACCORDANCE WITH AASHTO/AWS D1.5M SPECIFICATIONS.

GRID DECK NOTES:

1. PROVIDE 1½" CONCRETE COVER ABOVE THE STEEL GRID DECK.
2. THREADED BOLTS TO BE UNCOATED A307M STEEL.
3. OMIT CONCRETE FORM PAN OVER SUPPORT MEMBERS.
4. SUPPORT PLATES TO BE SHOP OR FIELD INSTALLED UNDER CROSS BARS AS SHOWN IN THREADED BOLT ELEVATION DETAIL, OR UNDER MAIN GRID BARS WHERE APPLICABLE.
5. INSERT SPLICE BARS THROUGH THE SLOTS IN THE GRID I-BEAMS THROUGH WHICH CROSS BARS ARE PLACED, OR THROUGH SEPARATE PUNCHED SLOTS.
6. TACK WELDING THREADED STUD TO SUPPORTS IS PERMITTED TO ENABLE LEVELING OF PANELS. GRID OR SUPPORT MECHANISMS MAY BE TACK WELDED INTERMITTENTLY TO PREVENT MOVEMENT DURING THE CONCRETE POURING OPERATION
7. ALTERNATE DECK ELEVATION OR HAUNCH FORMING METHODS MAY BE SUBMITTED BY THE CONTRACTOR FOR REVIEW AND APPROVAL.

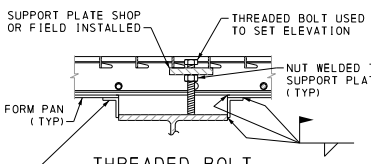
REFERENCES:

	SHEET:
1. SUPPLEMENTAL DRAWINGS	01
2. TYPICAL SECTION & INDEX OF DRAWINGS	02
3. GENERAL NOTES	05 - 06
4. FLOOR SYSTEM FRAMING	22
5. DECK PLAN	44

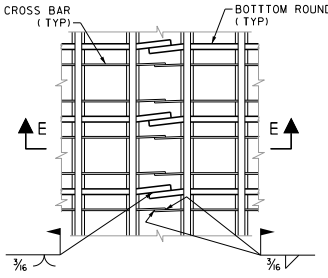


SECTION A-A

(NOT TO SCALE)

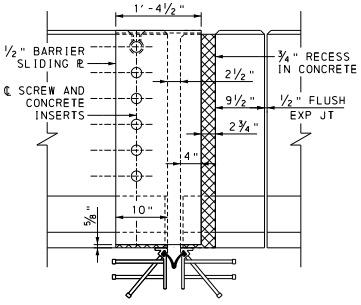


THREADED BOLT



CROSS BAR OVERLAP PLAN

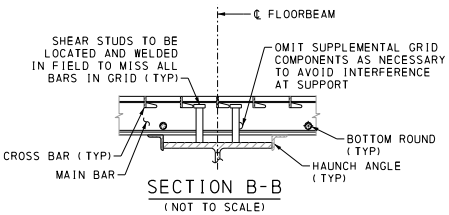
(NOT TO SCALE)



BARRIER SLIDING PLATE - 1

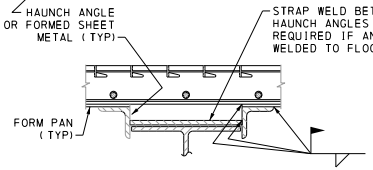
(NLO CORNER SHOWN, SLO' SIMILAR)

0 3 6 9 1' 2'



SECTION B-B

(NOT TO SCALE)

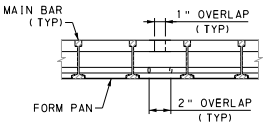


FORMED ANGLE - STRAP WELD

ELEVATION OPTIONS

(NOT TO SCALE)

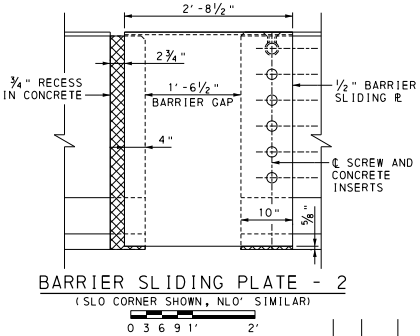
(SHEAR STUD CONNECTORS NOT SHOWN FOR CLARITY)



SECTION E-E

SPLICE BETWEEN PANELS

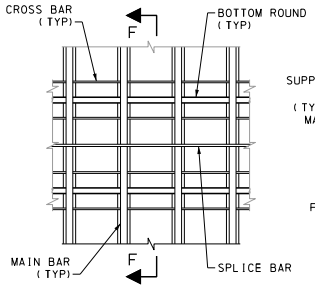
(NOT TO SCALE)



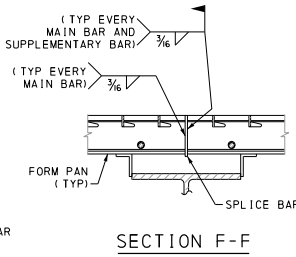
BARRIER SLIDING PLATE - 2

(SLO CORNER SHOWN, NLO' SIMILAR)

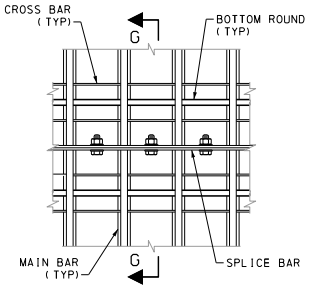
0 3 6 9 1' 2'



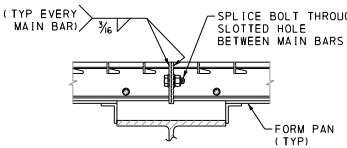
SPLICE BAR PLAN VIEW



SECTION F-F



BOLTED PLAN VIEW



SECTION G-G

MAIN BAR SPLICE AT PANEL ENDS

(NOT TO SCALE)

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NORFOLK SOUTHERN

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OWNING COMPANY

PITTSBURGH

OPERATING DIVISION

OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

REV.	BY	DATE	DESCRIPTION

LOCATION: SWISSVALE, PENNSYLVANIA

TITLE: WASHINGTON AVENUE DECK DETAILS

DSN KTS | PROJ NO. D2122 | DRN 1290818-OH77 | MILE POST PT-344.91

CHK KTS | FILE NO. BR0028818 | DRAWING NUMBER PT-344.91 24 45

SUP RMS | DATE 08/16/2023

SHEET NO. 45 OF 58

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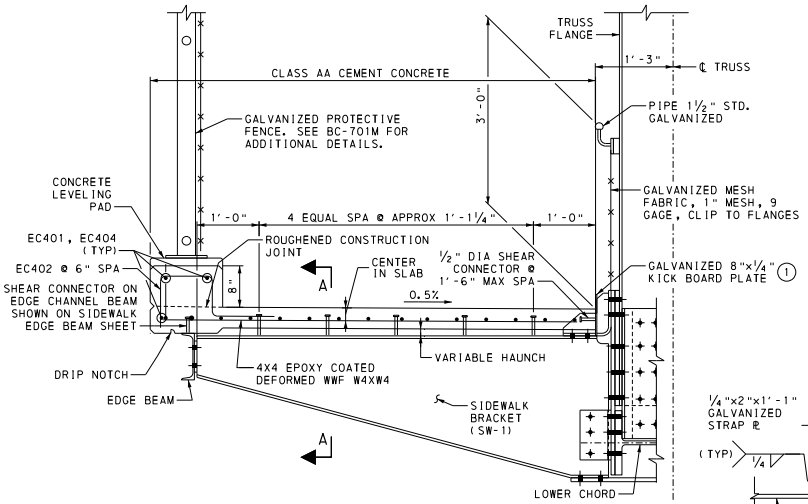
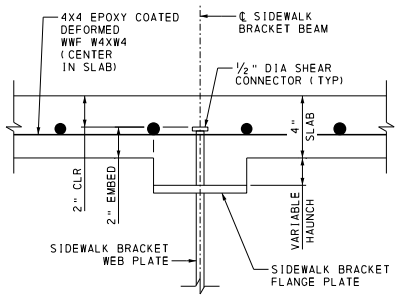


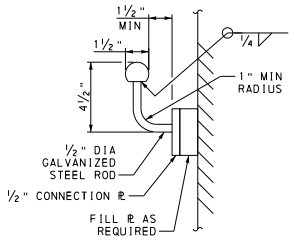
SIDEWALK TYPICAL SLAB SECTION

0 3 6 9 1' 2'



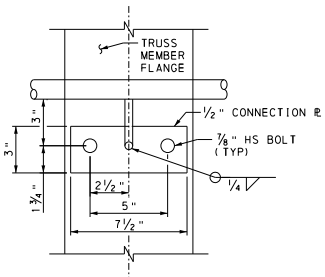
SECTION A-A

0 1 2 3 6 9 1'



TYPICAL HANDRAIL ATTACHMENT

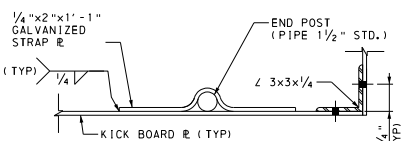
0 1 2 3 6 9 1'



TYPICAL HANDRAIL CONNECTION

(TYP @ EACH TRUSS VERTICAL AND DIAGONAL)
(VERTICAL SHOWN, DIAGONAL SIMILAR)

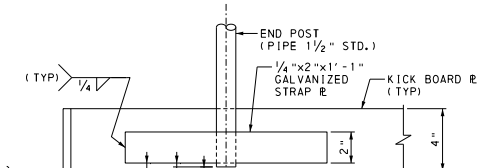
0 1 2 3 6 9 1'



END POST CONNECTION PLAN

(END POST ADJACENT TO BARRIER SHOWN, END POST ADJACENT TO TRUSS SIMILAR)

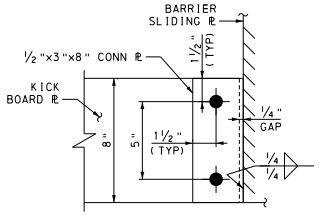
0 1 2 3 6 9 1'



END POST CONNECTION ELEVATION

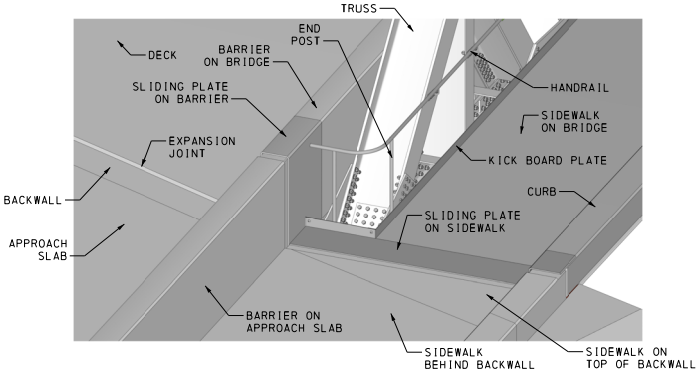
(END POST ADJACENT TO BARRIER SHOWN, END POST ADJACENT TO TRUSS SIMILAR)

0 1 2 3 6 9 1'



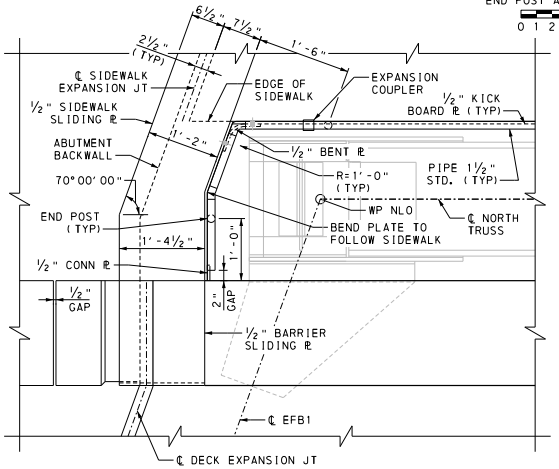
KICK BOARD PL END CONNECTION

0 1 2 3 6 9 1'



SIDEWALK ISOMETRIC

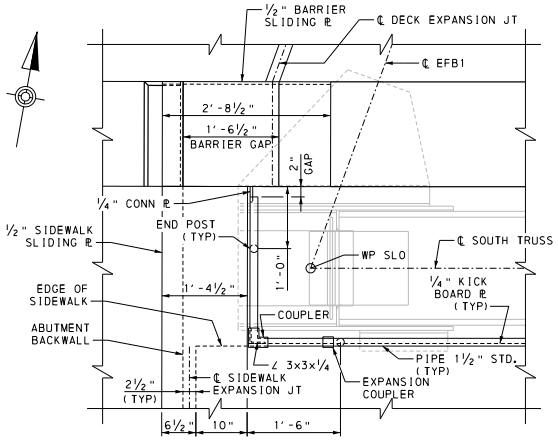
(NOT TO SCALE)



SIDEWALK CORNER PLAN - 1

(NLO CORNER SHOWN, SLO' SIMILAR)

0 3 6 9 1' 2'



SIDEWALK CORNER PLAN - 2

(SLO CORNER SHOWN, NLO' SIMILAR)

0 3 6 9 1' 2'

NOTES:

1. ISOMETRIC VIEW IS FOR SPATIALLY LOCATING BRIDGE COMPONENTS ONLY. DETAILS MAY DEVIATE.

LEGEND:

(1) KICK BOARD PLATE TO BE INSTALLED WITH STAY IN PLACE FORMS FOR SIDEWALK. PLATE SHALL NOT BE FASTENED TO BRACKET. STUDS FROM KICK BOARD TO SIDEWALK WILL PROVIDE FINAL CONNECTION.

REFERENCES:

1. SUPPLEMENTAL DRAWINGS	01
2. TYPICAL SECTION & INDEX OF DRAWINGS	02
3. GENERAL NOTES	05 - 06
4. TRUSS FRAMING AND WORK POINT GEOMETRY	20
5. TRUSS ELEVATION	21
6. FLOOR SYSTEM FRAMING	22
7. SIDEWALK EDGE BEAM	39
8. SIDEWALK DETAILS - 2	46
9. BARRIER AND SIDEWALK PLAN	48

SHEET:

01
02
05 - 06
20
21
22
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46
48

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OPERATING DIVISION
PITTSBURGH
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

REV	BY	DATE	DESCRIPTION

LOCATION: SWISSVALE, PENNSYLVANIA
TITLE: WASHINGTON AVENUE
SIDEWALK DETAILS - 1

DSN	MS	PROJ NO.	D2122	MN	1290818-OH/77
DWN	KTS	FILE NO.	BR0028818		
CK	MS	DATE	08/16/2023		

MILE POST: PT-344.91
DRAWING NUMBER: PT-344.91 24 46

SHEET NO. 46 OF 58

6/07/2024 4:45:29 PM
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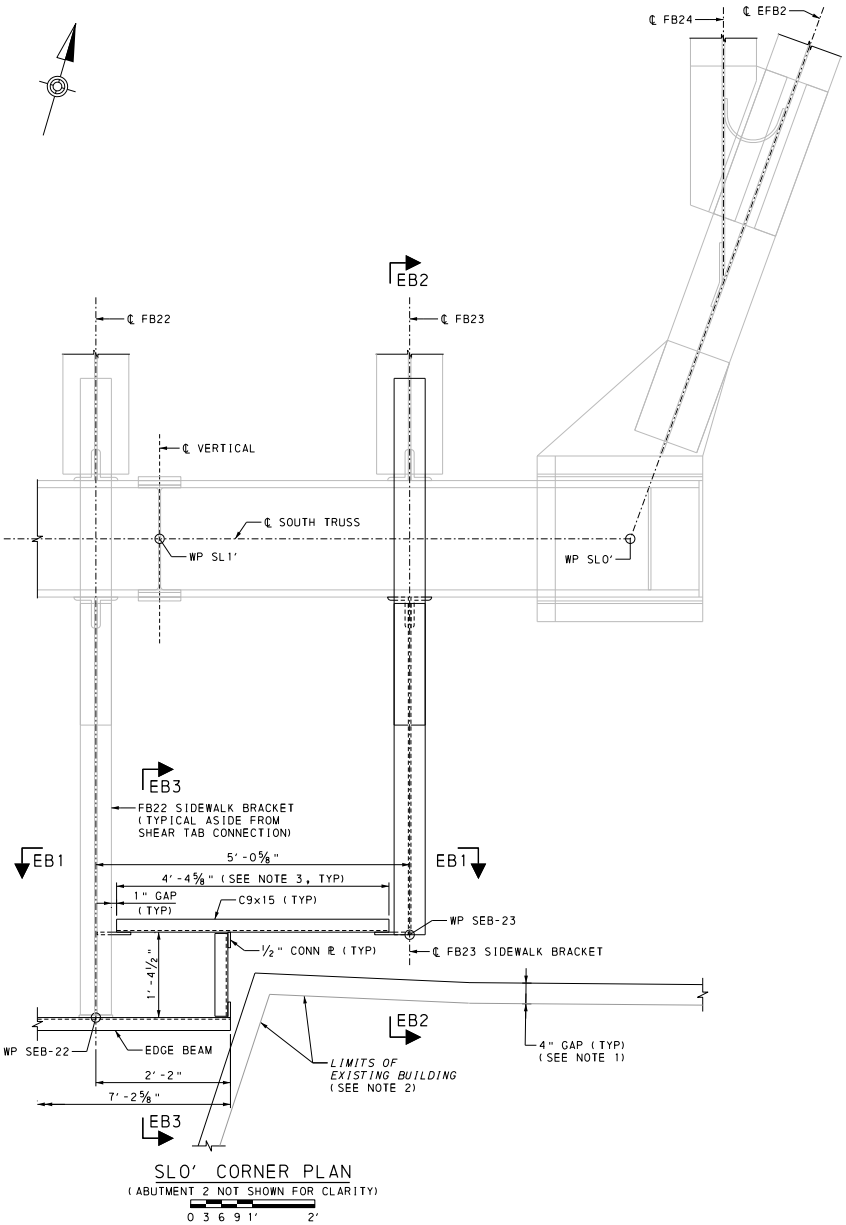
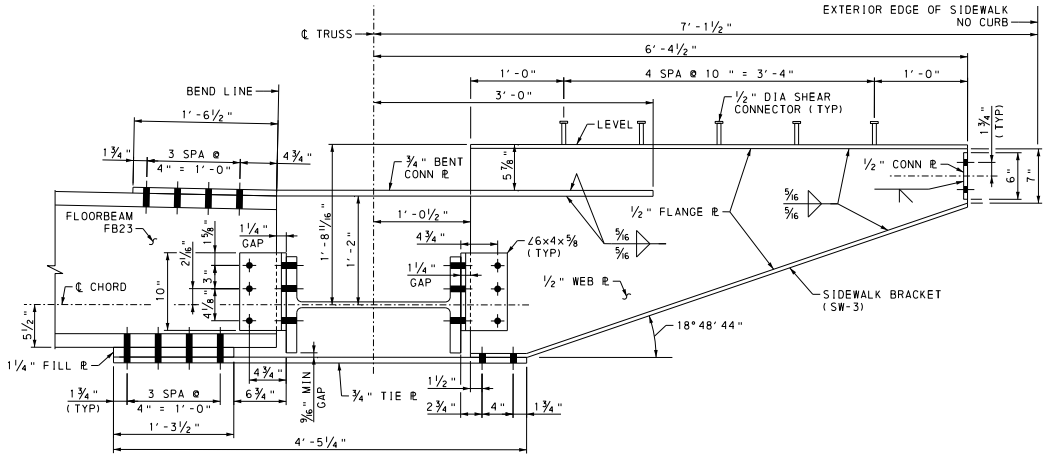


SLO' CORNER PLAN

(ABUTMENT 2 NOT SHOWN FOR CLARITY)

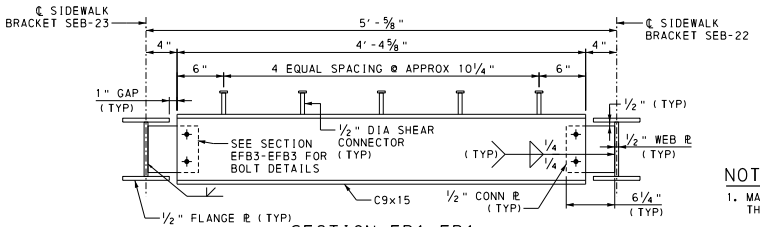
0 3 6 9 1' 2'



SECTION EB2-EB2

(BUILDING NOT SHOWN FOR CLARITY)

0 3 6 9 1'



SECTION EB1-EB1

(BUILDING NOT SHOWN FOR CLARITY)

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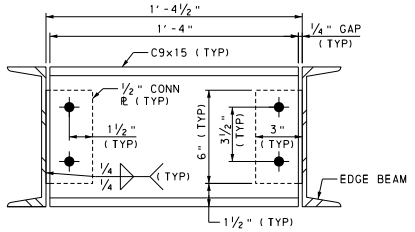

SECTION EB3-EB3

(BUILDING NOT SHOWN FOR CLARITY)

0 1 2 3 6 9 1'

NOTES:

1. MAINTAIN A 4" MINIMUM GAP FROM THE LIMITS OF THE EXISTING BUILDING. FILL WITH CCNS.
2. OUTSIDE PERIMETER OF THE EXISTING BUILDING TO BE FIELD VERIFIED.
3. BRACKET AND CHANNEL DIMENSIONS AND LOCATIONS TO BE ADJUSTED AS NEEDED BASED ON FIELD VERIFICATION.

REFERENCES:

	SHEET:
1. SUPPLEMENTAL DRAWINGS	01
2. TYPICAL SECTION & INDEX OF DRAWINGS	02
3. GENERAL NOTES	05 - 06
4. TRUSS FRAMING AND WORK POINT GEOMETRY	20
5. TRUSS ELEVATION	21
6. FLOOR SYSTEM FRAMING	22
7. SIDEWALK EDGE BEAM	39
8. SIDEWALK DETAILS - 1	46
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LEGEND:

WP WORK POINT
SW-3 SIDEWALK BRACKET 3

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REGISTERED PROFESSIONAL
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NORFOLK SOUTHERN

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OWNING COMPANY

PITTSBURGH

OPERATING DIVISION

OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

REV.	BY	DATE	DESCRIPTION

LOCATION: SWISSVALE, PENNSYLVANIA

TITLE: WASHINGTON AVENUE
SIDEWALK DETAILS - 2

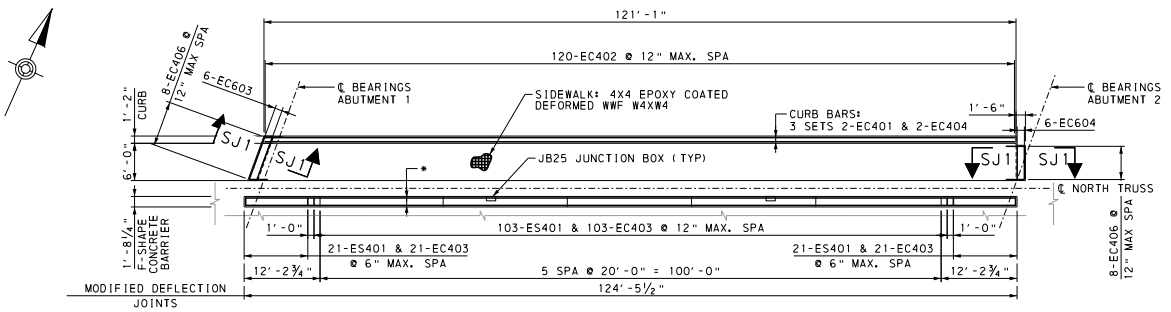
DSN	MS	PROJ NO.	D2122	WBS	1290818-OH/77
DWN	KTS	FILE NO.	BR0028818		
CHK	MS	DATE	08/16/2023		

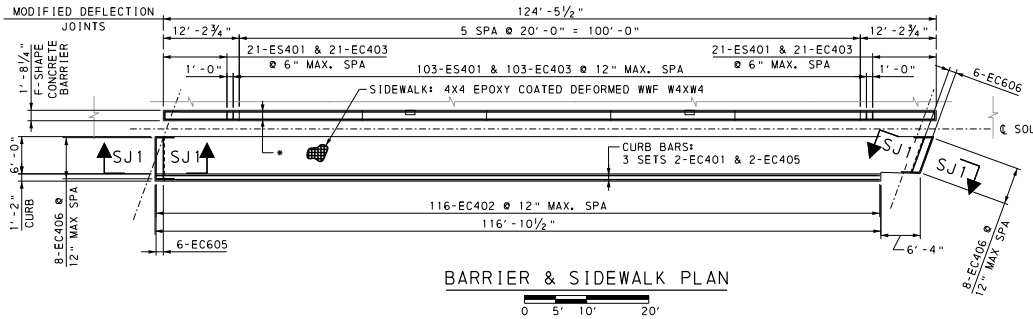
MILE POST: PT-344.91

DRAWING NUMBER: PT-344.91 24 47

SHEET NO. 47 OF 58

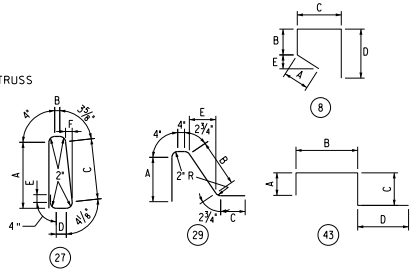
6/07/2024 5:48:59 PM
pw:\\NS-us-pa.bentley.commb-us-pw-01\Documents\MoonTownship_PA\0_Projects\Norfolk_Southern\Pittsburgh_Vertical_Clearance\NS_Washington Avenue\deliverables\design\structures\Final\plots\NSWash_sidewalk_details_02.dgn

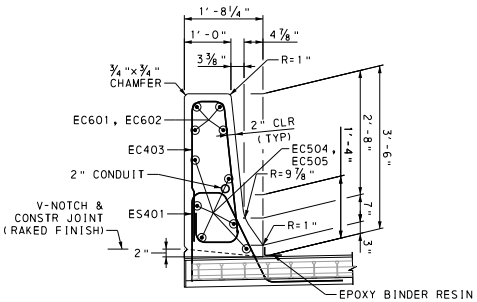




BARRIER & SIDEWALK PLAN

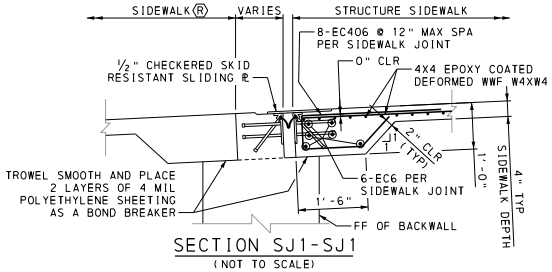
0 5' 10' 20'





TYPICAL 42" F-SHAPE BARRIER SECTION

0 6 1' 2'



SECTION SJ1-SJ1

(NOT TO SCALE)

MINIMUM LAP LENGTHS:

BARRIER BARS:
#5 BARS - 3'-7"
#6 BARS - 4'-4"

SIDEWALK AND CURB BARS:
#4 BARS - 2'-6"

LEGEND:

E EPOXY COATED BARS

* BARRIER BARS:
4 SETS 2-EC601 & 1-EC602
6 SETS 2-EC503 & 1-EC504

NOTES:

1. ALL BAR SPACINGS INDICATED ARE MAXIMUMS CENTER TO CENTER OF BARS.

JUNCTION BOX STATIONS

NORTH TRUSS
7+48.45
7+93.92

SOUTH TRUSS
7+33.29
7+78.76

REFERENCES:

REFERENCES:	SHEET:
1. SUPPLEMENTAL DRAWINGS	01
2. TYPICAL SECTION & INDEX OF DRAWINGS	02
3. GENERAL NOTES	05 - 06
4. FLOOR SYSTEM FRAMING	22
5. DECK PLAN	44
6. DECK DETAILS	45
7. SIDEWALK DETAILS	45-46

BARRIER AND SIDEWALK REINFORCEMENT BAR SCHEDULE

MARK	SIZE	NUMBER	LENGTH	TYPE	A	B	C	D	E	R	REMARKS
EC401	4	12	40'-0"	STR							
EC402	4	240	3'-6"	43	10"	10"	10"	1'-0"			
EC403	4	290	8'-0⅛"	27	2'-9½"	3⅜"	2'-7¾"	6¾"	5"		F = 3⅜"
EC404	4	6	25'-0"	STR							
ES401	4	290	5'-10¾"	29	1'-6¾"	1'-8¾"	1'-6"		9⅛"		
EC405	4	6	23'-0"	STR							
EC406	4	32	5'-10"	8	11"	1'-3"	8"	3'-0"	8"		
EC504	5	24	60'-0"	STR							
EC505	5	12	11'-4"	STR							
EC601	6	16	60'-0"	STR							
EC602	6	8	11'-4"	STR							
EC603	6	6	7'-3"	STR							
EC604	6	6	5'-4"	STR							
EC605	6	6	6'-10"	STR							
EC606	6	6	5'-10"	STR							

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL MATTHIAS STEIN ENGINEER PE095784

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NORFOLK SOUTHERN RAILWAY CO.
OWNING COMPANY
PITTSBURGH
OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

REV.	BY	DATE	DESCRIPTION

LOCATION: SWISSVALE, PENNSYLVANIA

TITLE: WASHINGTON AVENUE
BARRIER AND SIDEWALK PLAN

DSN KTS/RWB	RD NO. D2122	WN 1290818-OH/77	MILE POST PT-344.91		
DWN KTS	FILE NO. BR0028818		DRAWING NUMBER PT-344.91 24 48		
CHK MS	DATE 08/16/2023				

SHEET NO. 48 OF 58

6/07/2024 4:45:43 PM
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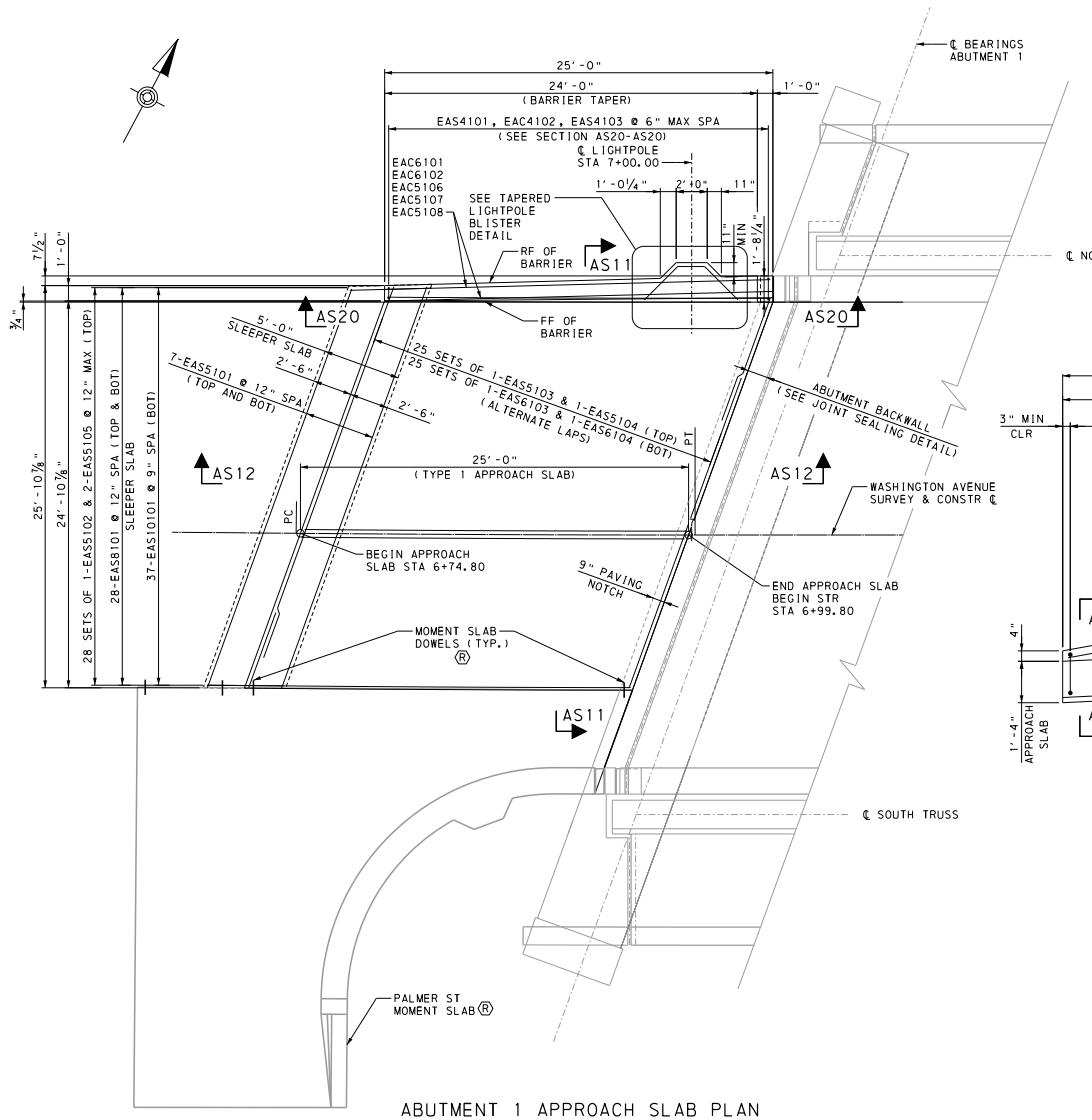
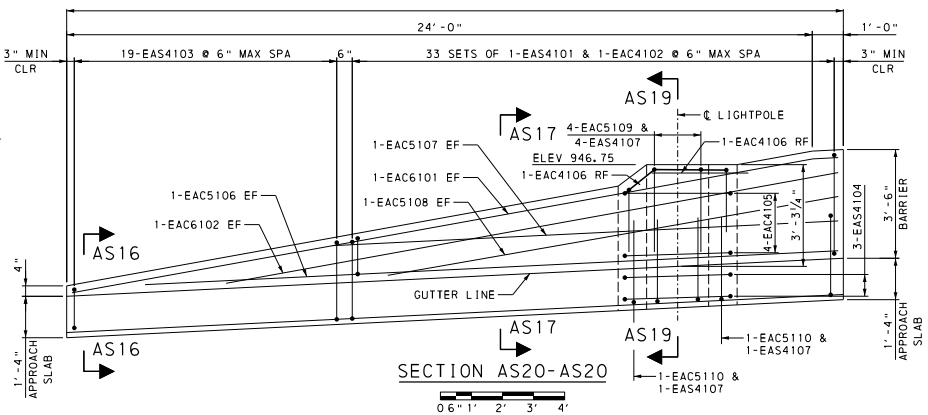


ABUTMENT 1 APPROACH SLAB PLAN

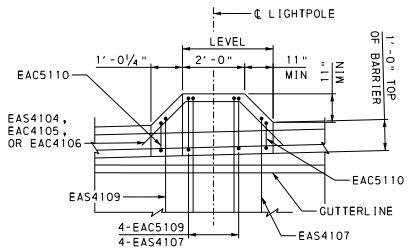
0 1' 2' 3' 4' 5' 6'

APPROACH SLAB 1 GEOMETRY						
POINTS OF INTEREST	STATION	B	C	D	PG	E
BEGIN APPROACH SLAB 1 RIGHT CURB	6+69.34	941.94	941.97	942.07	942.27	942.07
	6+70.00	941.97	942.00	942.10	942.30	942.10
BEGIN APPROACH SLAB 1 CENTER	6+74.80	942.20	942.24	942.34	942.54	942.34
	6+80.00	942.46	942.49	942.59	942.79	942.59
BEGIN APPROACH SLAB 1 LEFT CURB	6+80.26	942.47	942.50	942.60	942.80	942.60
	6+90.00	942.95	942.98	943.08	943.28	943.08
END APPROACH SLAB 1 RIGHT CURB	6+94.34	943.16	943.19	943.29	943.49	943.29
END APPROACH SLAB 1 CENTER	6+99.80	943.43	943.46	943.56	943.76	943.56
	7+00.00	943.44	943.47	943.57	943.77	943.57
END APPROACH SLAB 1 LEFT CURB	7+05.26	943.68	943.72	943.82	944.02	943.82



SECTION AS20-AS20

0 6" 1' 2' 3' 4'



TAPERED LIGHTPOLE BLISTER

0 6" 1' 2' 3' 4'

REFERENCES:

	SHEET:
1. SUPPLEMENTAL DRAWINGS	01
2. TYPICAL SECTION & INDEX OF DRAWINGS	02
3. GENERAL NOTES	05 - 06
4. ABUTMENT 1 APPROACH SLAB - 2	50

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL MATTHIAS STEIN ENGINEER PE095784

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OWNING COMPANY

PITTSBURGH

OPERATING DIVISION

OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

REV.	BY	DATE	DESCRIPTION

LOCATION: SWISSVALE, PENNSYLVANIA

TITLE: WASHINGTON AVENUE
ABUTMENT 1 APPROACH SLAB - 1

DSN	KTS	PROJ NO.	D2122	WBS	1290818-OH/77
DWN	ZRS	FILE NO.	BR0028818		
CHK	LTS	DATE	08/16/2023		

SHEET POST: PT-344.91

DRAWING NUMBER: PT-344.91 24 49

SHEET NO. 49 OF 58

6/07/2024 4:45:50 PM
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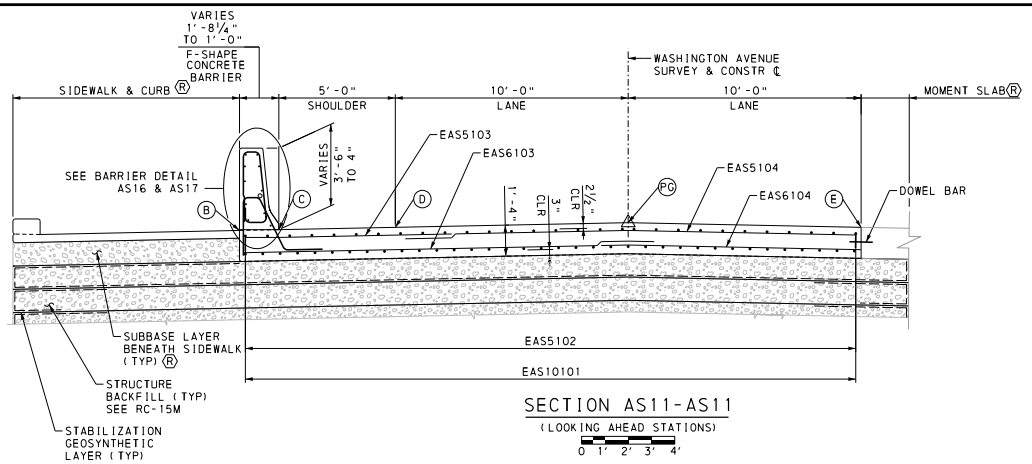
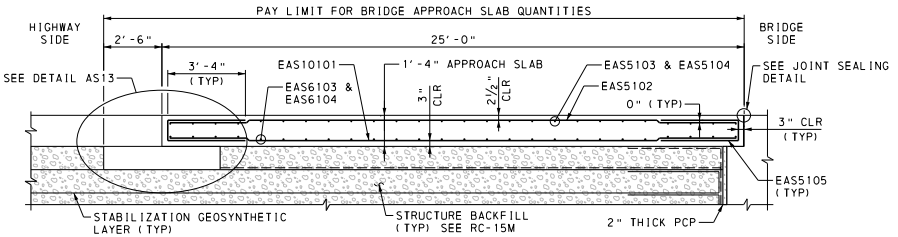


SECTION AS11-AS11

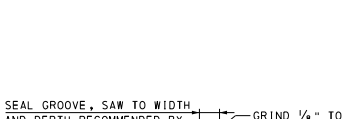
(LOOKING AHEAD STATIONS)

0 1' 2' 3' 4'



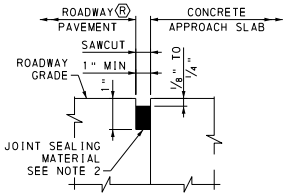
SECTION AS12-AS12

0 1' 2' 3' 4'



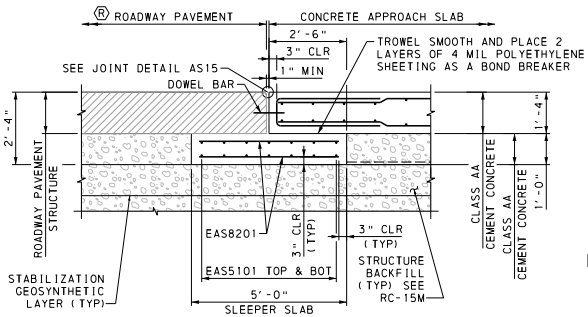
JOINT SEALING DETAIL

(NOT TO SCALE)



JOINT DETAIL AS15

(NOT TO SCALE)



DETAIL AS13

0 6" 1' 2'

LEGEND:

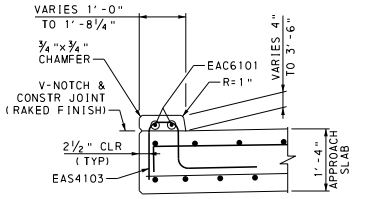
PCP PREFORMED CELLULAR POLYSTYRENE

NOTES:

1. CONDUITS ARE REQUIRED IN EACH BARRIER TO PROVIDE POWER TO LIGHT POLES ON THE BRIDGE. REFER TO THE LIGHTING PLANS AND BC-721M SHEET 1 FOR FURTHER DETAILS.
2. MAKE THE TOP OF THE JOINT SEAL MATERIAL FROM ⅛" TO ¼" BELOW THE SURFACE OF THE PAVEMENT. USE HEAT RESISTANT JOINT BACKING MATERIAL FOR HOT POURED JOINTS. JOINT BACKER ROD SHOULD BE 25% TO 35% LARGER THAN THE JOINT WIDTH OPENING AT THE TIME OF SEALANT INSTALLATION.

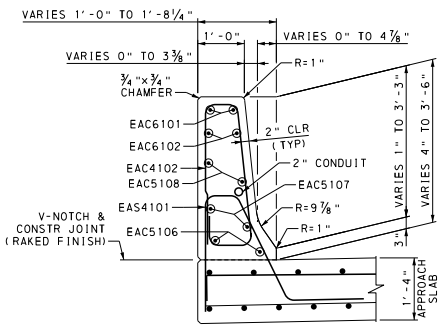
REFERENCES:

	SHEET:
1. SUPPLEMENTAL DRAWINGS	01
2. TYPICAL SECTION & INDEX OF DRAWINGS	02
3. GENERAL NOTES	05 - 06
4. ABUTMENT 1 APPROACH SLAB - 1	49



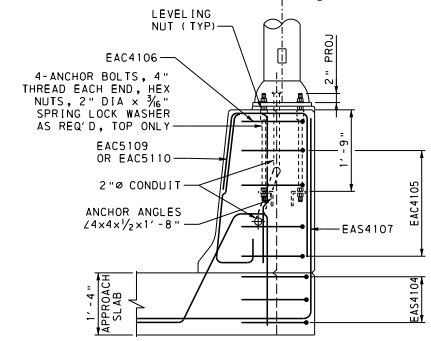
BARRIER DETAIL AS16-AS16

0 6 1' 2'



BARRIER DETAIL AS17-AS17

0 6 1' 2'



BARRIER DETAIL AS19-AS19

0 6 1' 2'

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COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL MATTHIAS STEIN ENGINEER PE095784

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OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

REV.	BY	DATE	DESCRIPTION

LOCATION: SWISSVALE, PENNSYLVANIA

TITLE: WASHINGTON AVENUE
ABUTMENT 1 APPROACH SLAB - 2

DSN KTS	PROJ NO. D2122	WBS 1290818-OH/77	WBS POST PT-344.91		
DWN ZRS	FILE NO. BR0028818		DRAWING NUMBER PT-344.91 24 50		
CHK LTS	DATE 08/16/2023				

SHEET NO. 50 OF 58

6/07/2024 4:45:56 PM
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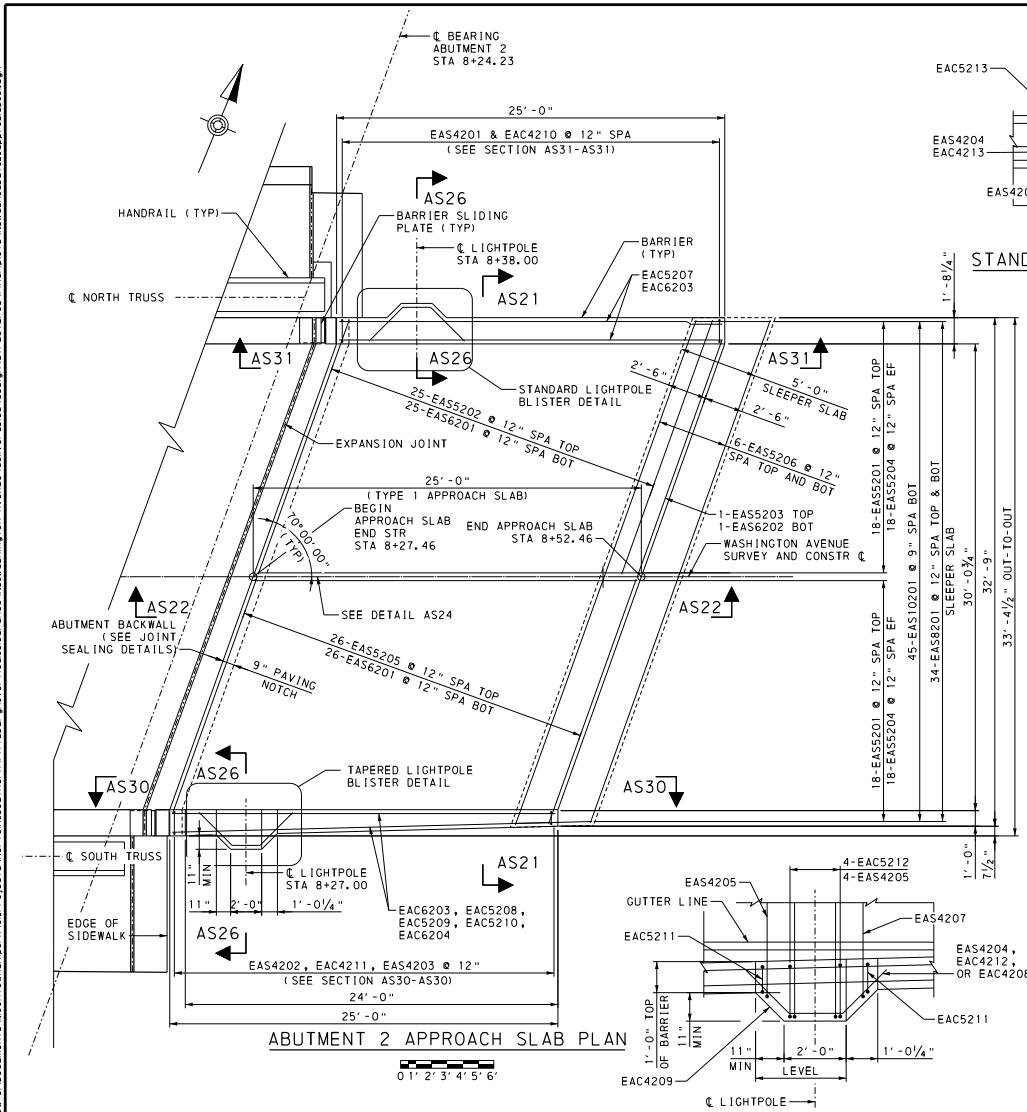
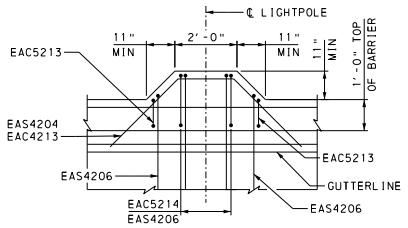


ABUTMENT 2 APPROACH SLAB PLAN

0 1' 2' 3' 4' 5' 6'

TAPERED LIGHTPOLE BLISTER

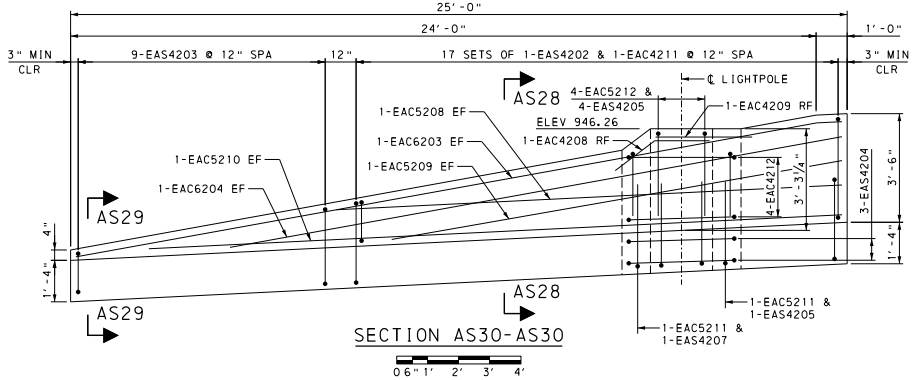
0 6" 1' 2' 3' 4'



STANDARD LIGHTPOLE BLISTER

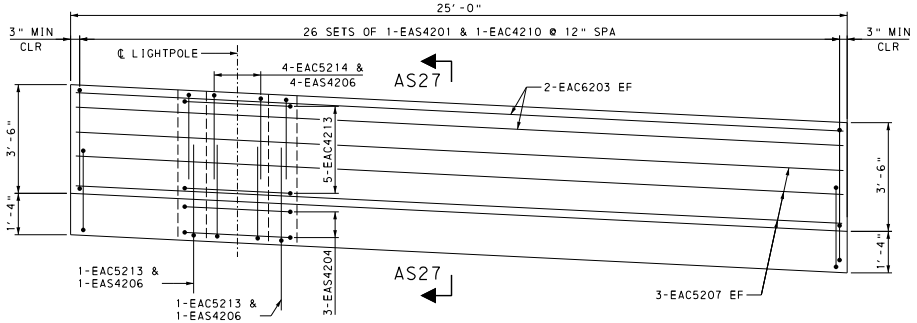
0 6" 1' 2' 3' 4'

APPROACH SLAB 2 GEOMETRY								
POINTS OF INTEREST	STATION	B	C	D	PG	E	F	G
BEGIN APPROACH SLAB 2 RIGHT	8+22.00	943.23	943.26	943.36	943.56	943.36	943.26	943.23
BEGIN APPROACH SLAB 2 CENTER	8+27.46	942.93	942.97	943.07	943.27	943.07	942.97	942.93
	8+30.00	942.79	942.82	942.92	943.12	942.92	942.82	942.79
BEGIN APPROACH SLAB 2 LEFT	8+32.92	942.61	942.64	942.74	942.94	942.74	942.64	942.61
	8+40.00	942.16	942.19	942.29	942.49	942.29	942.19	942.16
END APPROACH SLAB 2 RIGHT	8+47.00	941.69	941.72	941.82	942.02	941.82	941.72	941.69
	8+50.00	941.49	941.52	941.62	941.82	941.62	941.52	941.49
END APPROACH SLAB 2 CENTER	8+52.46	941.32	941.36	941.46	941.66	941.46	941.36	941.32
END APPROACH SLAB 2 LEFT	8+57.92	940.96	940.99	941.09	941.29	941.09	940.99	940.96



SECTION AS30-AS30

0 6" 1' 2' 3' 4'



SECTION AS31-AS31

0 6" 1' 2' 3' 4'

REFERENCES:

	SHEET:
1. SUPPLEMENTAL DRAWINGS	01
2. TYPICAL SECTION & INDEX OF DRAWINGS	02
3. GENERAL NOTES	05 - 06
4. ABUTMENT 2 APPROACH SLAB - 2	52

COMMONWEALTH OF PENNSYLVANIA
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OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

REV.	BY	DATE	DESCRIPTION

LOCATION: SWISSVALE, PENNSYLVANIA
TITLE: WASHINGTON AVENUE
ABUTMENT 2 APPROACH SLAB - 1

DSN	KTS	PROJ NO.	D2122	VAN	1290818-OH/77
DWN	KTS	FILE NO.	BR0028818		
CHK	MS	DATE	08/16/2023		

WBS POST: PT-344.91
DRAWING NUMBER: PT-344.91 24 51

SHEET NO. 51 OF 58

6/07/2024 4:46:04 PM
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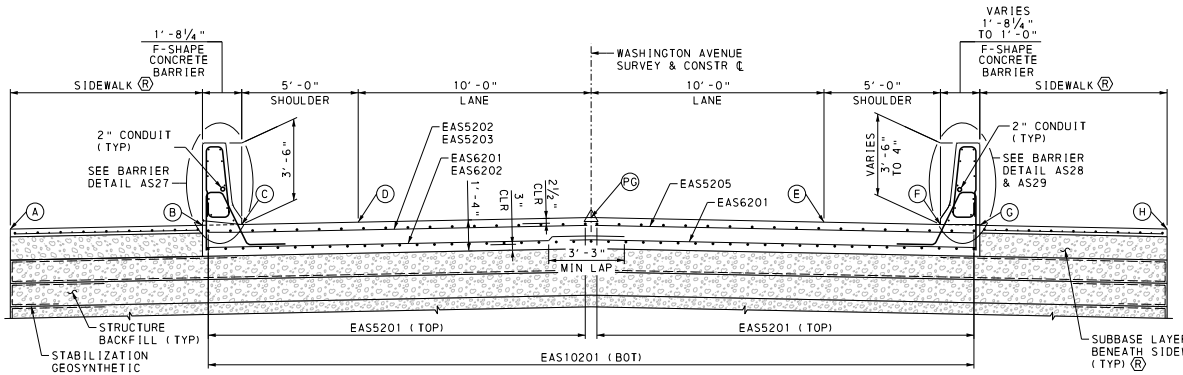
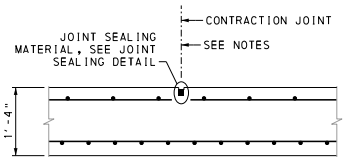


SECTION AS21-AS21

(SHOWN AT END APPROACH SLAB)
(LOOKING AHEAD STATIONS)

0 1' 2' 3' 4'

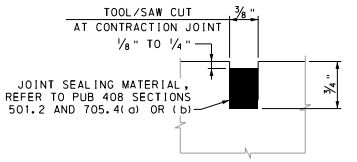


NOTES:

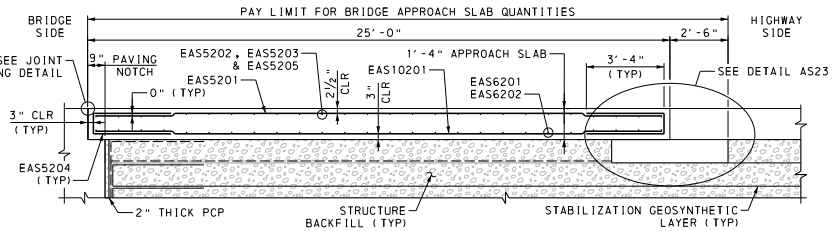
1. TOP REINFORCEMENT NOT CONTINUOUS THRU JOINT.
2. BOTTOM REINFORCEMENT CONTINUOUS THRU JOINT.

DETAIL AS24 - CONTRACTION JOINT

(NOT TO SCALE)

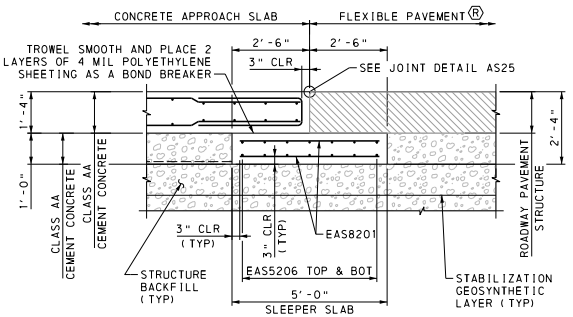


JOINT SEALING DETAIL



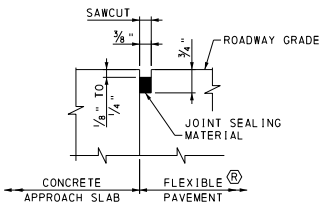
SECTION AS22-AS22

0 1' 2' 3' 4'



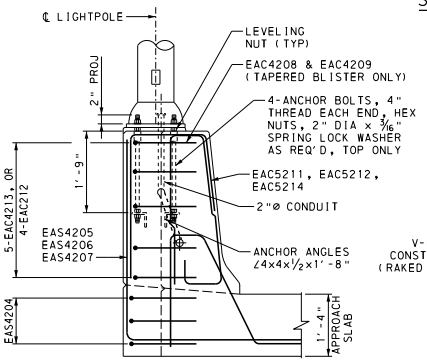
DETAIL AS23

0 6" 1' 2' 3' 4'



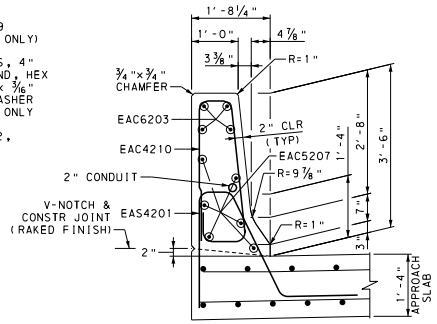
JOINT DETAIL AS25

(NOT TO SCALE)



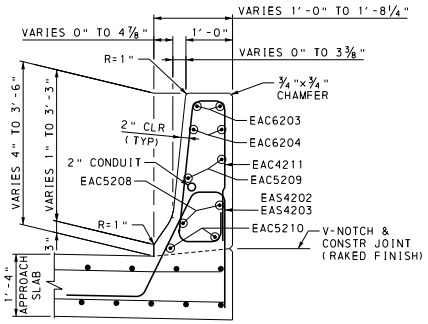
BARRIER DETAIL AS26-AS26

0 6" 1' 2'



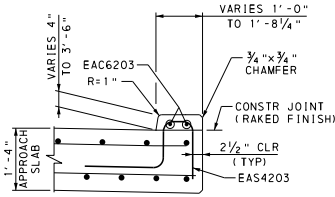
BARRIER DETAIL AS27-AS27

0 6" 1' 2'



BARRIER DETAIL AS28-AS28

0 6" 1' 2'



BARRIER DETAIL AS29-AS29

0 6" 1' 2'

NOTES:

1. CONDUITS ARE REQUIRED IN EACH BARRIER TO PROVIDE POWER TO LIGHT POLES ON THE BRIDGE. REFER TO THE LIGHTING PLANS AND BC-721M SHEET 1 FOR FURTHER DETAILS.

REFERENCES:

	SHEET:
1. SUPPLEMENTAL DRAWINGS	01
2. TYPICAL SECTION & INDEX OF DRAWINGS	02
3. GENERAL NOTES	05 - 06
4. ABUTMENT 2 APPROACH SLAB - 1	51

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
MATTHIAS STEIN
ENGINEER
PE095784

Michael Baker
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OWNING COMPANY
PITTSBURGH
OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

REV.	BY	DATE	DESCRIPTION

LOCATION: SWISSVALE, PENNSYLVANIA
TITLE: WASHINGTON AVENUE
ABUTMENT 2 APPROACH SLAB - 2

DSN	KTS	PROJ NO.	D2122	WBS	1290818-OH/77
DWN	KTS	FILE NO.	BR0028818	DRAWING NUMBER	PT-344.91
CHK	MS	DATE	08/16/2023		PT-344.91 24 52

SHEET NO. 52 OF 58

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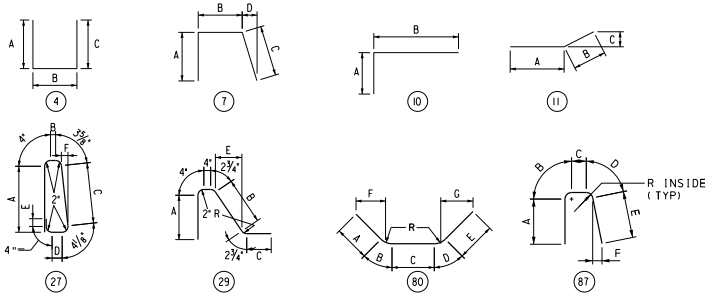
ABUTMENT 1 APPROACH SLAB REINFORCEMENT BAR SCHEDULE

MARK	SIZE	NUMBER	LENGTH	TYPE	A	B	C	D	E	R	REMARKS
EAS4101	4	33	7'-4 1/2" TO 8'-0 1/2"	29	2'-3 ½"	2'-5 3/4"	1'-6"		5" TO 1'-1"		VARY EA E BY 1/4"
EAC4102	4	33	4'-0 ⅝" TO 8'-0 ⅝"	27	10" TO 2'-10"	3 ⅜"	7 ¾" TO 2'-7 ¾"	6 ¾"	5"		F = 0'-3 ⅜" VARY EA A & C BY ¾"
EAS4103	4	19	4'-9 ¼" TO 7'-0 ¼"	29	1'-1" TO 2'-2 ½"	1'-1" TO 2'-2 ½"	1'-6"		0" TO 5"		VARY EA A & C BY ¾" VARY EA E BY ¼" (+)
EAS4104	4	3	5'-11"	80	2'-0"	2"	1'-7"	2"	2'-0"	2"	F = 1'-5" G = 1'-5"
EAC4105	4	4	5'-11"	80	2'-0"	2"	1'-7"	2"	2'-0"	2"	F = 1'-5" G = 1'-5"
EAC4106	4	2	3'-7"	11	2'-0"	1'-7"	11½"				
EAC4107	4	6	8'-0"	10	4'-0"	4'-0"					
EAS5101	5	14	27'-2"	STR							
EAS5102	5	28	24'-6"	STR							
EAS5103	5	25	12'-7"	10	10"	11'-9"					
EAS5104	5	25	20'-10"	10	10"	20'-0"					
EAS5105	5	56	7'-6 ½"	4	3'-4"	10 ½"	3'-4"				
EAC5106	5	2	24'-0"	STR							
EAC5107	5	2	13'-9"	STR							
EAC5108	5	2	14'-9"	STR							
EAC5109	5	4	6'-2 ⅝"	87	3'-0"	5 ½"	11½"	3 ⅝"	1'-6"	2"	F = 0'-3"
EAC5110	5	2	5'-7 ⅝"	87	3'-0"	5 ½"	4 ½"	3 ⅝"	1'-6"	2"	F = 0'-3"
EAC6101	6	2	25'-0"	11	24'-3"	9"	2"				
EAC6102	6	2	20'-0"	STR							
EAS6103	6	25	12'-0"	STR							
EAS6104	6	25	20'-0"	STR							
EAS8101	8	56	4'-6"	STR							
EAS10101	10	37	24'-6"	STR							

ABUTMENT 2 APPROACH SLAB REINFORCEMENT BAR SCHEDULE

MARK	SIZE	NUMBER	LENGTH	TYPE	A	B	C	D	E	R	REMARKS
EAS4201	4	26	7'-1½"	29	2'-3 ½"	2'-2 ¾"	1'-6"		11¾"		
EAS4202	4	17	7'-1½"	29	2'-3 ½"	2'-2 ¾"	1'-6"		11¾"		
EAS4203	4	9	4'-11¼" TO 6'-11¼"	29	1'-2" TO 2'-2"	1'-2" TO 2'-2"	1'-6"		½" TO 6"		
EAS4204	4	6	5'-11"	80	2'-0"	2"	1'-7"	2"	2'-0"		
EAS4205	4	4	7'-10"	10	3'-10"	4'-0"					
EAS4206	4	6	7'-10"	10	3'-10"	4'-0"					
EAS4207	4	1	7'-10"	10	3'-10"	4'-0"					
EAC4208	4	1	3'-7"	11	2'-0"	1'-7"	1'-5"				
EAC4209	4	1	3'-7"	11	2'-0"	1'-7"	1'-5"				
EAC4210	4	26	8'-0 ⅛"	27	2'-9 ½"	3 ⅜"	2'-7 ¾"	6 ¾"	5"		F = 3 ⅜"
EAC4211	4	17	2'-10 ⅛" TO 6'-10 ⅛"	27	10 ½" TO 2'-9 ½"	3 ⅜"	8 ½" TO 2'-9 ½"	6 ¾"	5"		F = 0" TO 3 ⅜"
EAC4212	4	4	5'-11"	80	2'-0"	2"	1'-7"	2"	2'-0"		
EAC4213	4	5	5'-11"	80	2'-0"	2"	1'-7"	2"	2'-0"		
EAS5201	5	36	24'-6"	STR							
EAS5202	5	25	17'-0"	STR							
EAS5203	5	1	15'-6 ½"	STR							
EAS5204	5	72	7'-6 ½"	4	3'-4"	10 ½"	3'-4"				
EAS5205	5	26	16'-7" TO 17'-3"	STR							
EAS5206	5	12	34'-6"	STR							
EAC5207	5	6	24'-8"	STR							
EAC5208	5	2	16'-4"	STR							
EAC5209	5	2	14'-9"	STR							
EAC5210	5	2	22'-4"	STR							
EAC5211	5	2	3'-10 ½"	7	2'-0"	4 ½"	1'-6"				
EAC5212	5	4	5'-1½"	7	2'-8"	11½"	1'-6"				
EAC5213	5	2	4'-6 ½"	7	2'-8"	4 ½"	1'-6"				
EAC5214	5	4	5'-1½"	7	2'-8"	11½"	1'-6"				
EAS6201	6	25	19'-2"	STR							
EAS6202	6	1	32'-5 ¾"	STR							
EAC6203	6	6	24'-8"	STR							
EAC6204	6	2	20'-0"	STR							
EAS8201	8	68	4'-6"	STR							
EAS10201	10	45	24'-6"	STR							



REINFORCEMENT NOTES:

1. FOR REINFORCEMENT BAR FABRICATION DETAILS, REFER TO STANDARD DRAWING BC-736M.
2. NUMBERS IN CIRCLES DENOTE TYPES.
3. "D" DIMENSION ON 180° HOOKS TO BE SHOWN ONLY WHERE NECESSARY TO RESTRICT HOOK SIZE, OTHERWISE STANDARD HOOKS ARE TO BE USED.
4. ALL DIMENSIONS ARE OUT TO OUT OF BAR EXCEPT "A" ON STANDARD 135° AND 180° HOOKS, AND "R" WHICH IS TO THE INSIDE OF THE BAR.
5. "E" PREFIX DENOTES EPOXY COATED BARS.

REFERENCES:

	SHEET:
1. SUPPLEMENTAL DRAWINGS	01
2. TYPICAL SECTION & INDEX OF DRAWINGS	02
3. GENERAL NOTES	05 - 06
4. ABUTMENT 1 APPROACH SLAB	49 - 50
5. ABUTMENT 2 APPROACH SLAB	51 - 52

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL MATTHIAS STEIN ENGINEER PE095784

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OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

REV.	BY	DATE	DESCRIPTION

LOCATION: SWISSVALE, PENNSYLVANIA
TITLE: WASHINGTON AVENUE
APPROACH SLAB REINFORCEMENT BAR SCHEDULE

DSN LTS | PROJ NO. D2122 | VAN 1290818-OH/77 | WBS/PEP PT-344.91
DWN ZRS | FILE NO. BR0028818 | DRAWING NUMBER PT-344.91 24 53
CHK RMM/LTS | DATE 08/16/2023

SHEET NO. 53 OF 58

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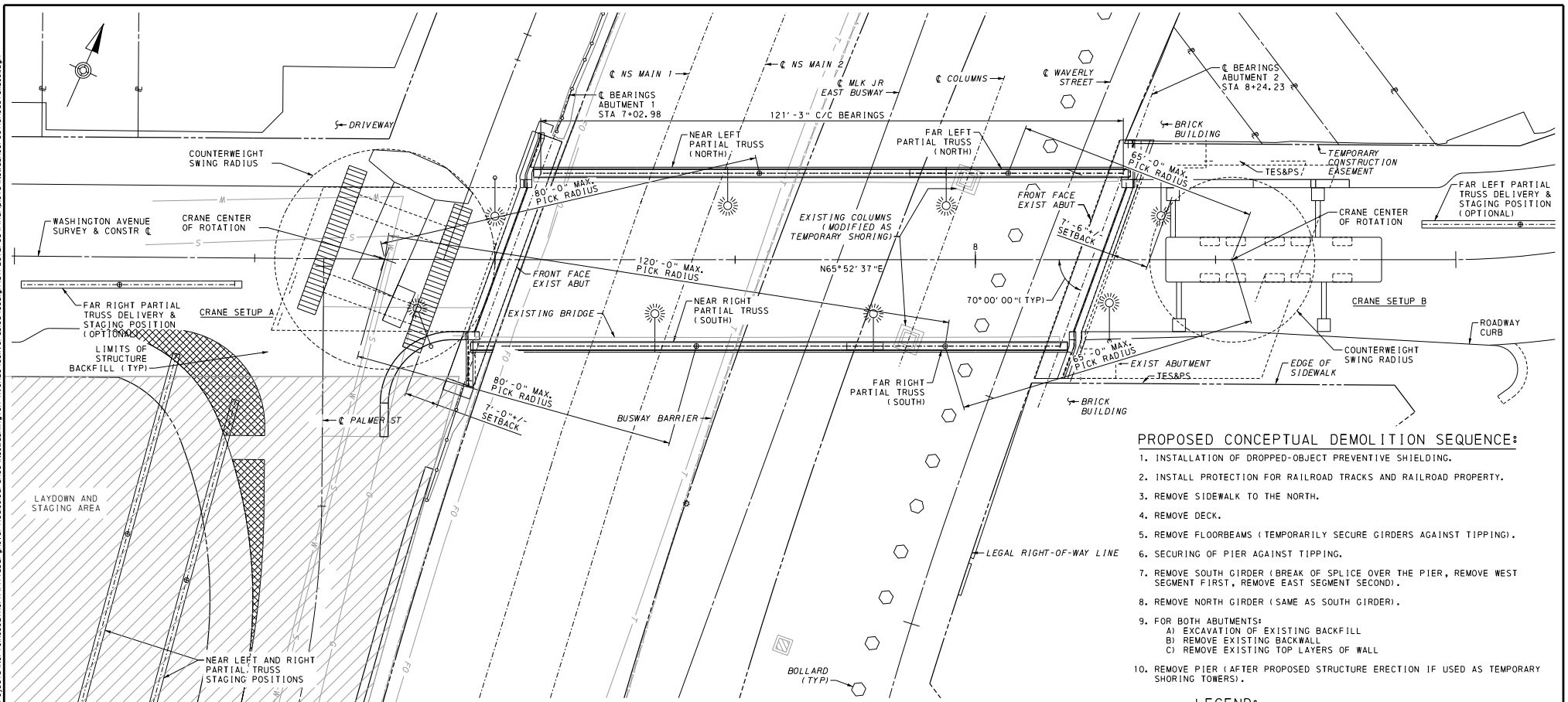

ERECTION PLAN

0 5' 10' 20'

NOTES:

1. THE ERECTION PLAN SHOWN IS CONCEPTUAL ONLY. THE CONTRACTOR MUST SUBMIT A DESIGN AND DETAILED PROCEDURE PREPARED BY A PROFESSIONAL ENGINEER REGISTERED IN THE COMMONWEALTH OF PENNSYLVANIA FOR REVIEW. DO NOT BEGIN DEMOLITION OR ERECTION UNTIL THE PROCEDURE HAS BEEN APPROVED AND ACCEPTED BY NORFOLK SOUTHERN RAILWAY AND PITTSBURGH REGIONAL TRANSIT.
2. LIFTING EQUIPMENT AND CONNECTIONS SHALL HAVE CAPACITY FOR 150% OF THE LIFTED LOAD. THE FACTOR OF SAFETY PROVIDED BY THE MANUFACTURER IN THE LIFTING CAPACITY DATA SHALL NOT BE CONSIDERED IN THE 150% REQUIREMENT.
3. SITE FEATURES AND UTILITIES NOT SHOWN IN THIS PLAN ARE TO BE VERIFIED BY THE CONTRACTOR PRIOR TO PERFORMING THE BRIDGE DEMOLITION.
4. COMPLY WITH ALL REQUIREMENTS NOTED IN THE NORFOLK SOUTHERN SPECIAL PROVISIONS FOR PROTECTION OF RAILWAY INTERESTS.
5. FOR DEMOLITION, ERECTION, AND HOISTING REQUIREMENTS REFER TO THE NORFOLK SOUTHERN PUBLIC IMPROVEMENT PROJECTS MANUAL APPENDIX E - NORFOLK SOUTHERN'S SPECIAL PROVISIONS FOR PROTECTION OF RAILWAY INTERESTS, SECTION 5 - CONSTRUCTION PROCEDURES.

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL MATTHIAS STEIN ENGINEER PE095784

NOTES (CONT):

6. NOMINAL GROUND BEARING PRESSURE INDUCED BY ANY CONSTRUCTION EQUIPMENT SHALL NOT EXCEED 250 LB/SQ.FT, WHICH DOES NOT RELIEVE THE CONTRACTOR'S RESPONSIBILITY TO PERFORM STABILITY ANALYSIS OF THE EXISTING SUBSTRUCTURE ELEMENTS (INCLUDING RETAINING WALLS AT LAYDOWN AREA) FOR ALL ERECTION STAGES.

SCOPE OF SUPERSTRUCTURE REPLACEMENT:

1. REMOVAL OF EXISTING SUPERSTRUCTURE.
2. REMOVAL OF TOP OF EXISTING ABUTMENTS.
3. CONSTRUCTION OF NEW ABUTMENT CAPS, BEAM SEATS AND BACKWALL AND SET NEW BEARINGS.
4. CONSTRUCTION OF NEW SUPERSTRUCTURE.
5. CONSTRUCTION OF APPROACH SLAB, SIDEWALK, AND RAILROAD PROTECTIVE FENCE.

PROPOSED CONCEPTUAL DEMOLITION SEQUENCE:

1. INSTALLATION OF DROPPED-OBJECT PREVENTIVE SHIELDING.
2. INSTALL PROTECTION FOR RAILROAD TRACKS AND RAILROAD PROPERTY.
3. REMOVE SIDEWALK TO THE NORTH.
4. REMOVE DECK.
5. REMOVE FLOORBEAMS (TEMPORARILY SECURE GIRDERS AGAINST TIPPING).
6. SECURING OF PIER AGAINST TIPPING.
7. REMOVE SOUTH GIRDER (BREAK OF SPLICE OVER THE PIER, REMOVE WEST SEGMENT FIRST, REMOVE EAST SEGMENT SECOND).
8. REMOVE NORTH GIRDER (SAME AS SOUTH GIRDER).
9. FOR BOTH ABUTMENTS:
   A) EXCAVATION OF EXISTING BACKFILL
   B) REMOVE EXISTING BACKWALL
   C) REMOVE EXISTING TOP LAYERS OF WALL
10. REMOVE PIER (AFTER PROPOSED STRUCTURE ERECTION IF USED AS TEMPORARY SHORING TOWERS).

LEGEND:

TES&PS — TEMPORARY EXCAVATION SUPPORT AND PROTECTION SYSTEM

LIEBHERR LR1300 CRAWLER CRANE (OR EQUIVALENT)

LIEBHERR LTM 1160-5.2 ALL-TERRAIN CRANE (OR EQUIVALENT)

LAYDOWN AND STAGING AREA

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OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

REV	BY	DATE	DESCRIPTION

LOCATION: SWISSVALE, PENNSYLVANIA

TITLE: WASHINGTON AVENUE ERECTION DETAILS - 1

DSN: NCS	PROJ NO: D2122	DWN: 1290818-OH77	MILE POST: PT-344.91
DWN: NCS	FILE NO: BR0028818	DRAWING NUMBER: PT-344.91 24 54	
CHK: CGF	DATE: 08/16/2023		

SHEET NO. 54 OF 58

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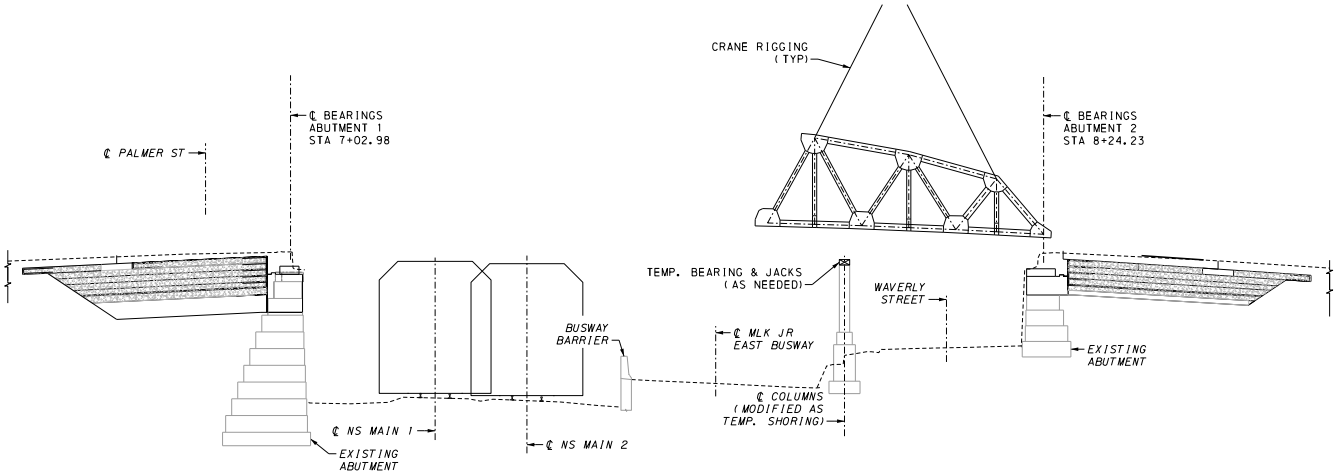


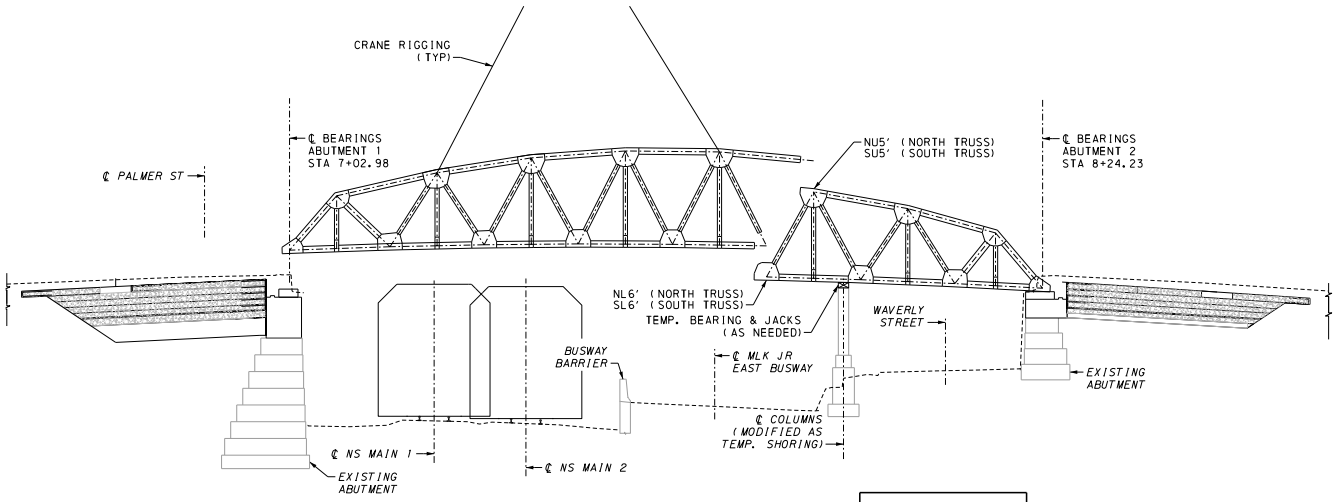
DATUM 900

ELEVATION

0 5' 10' 20'

ERECTION STAGE 1:

1. UPON COMPLETION OF THE EXISTING SUPERSTRUCTURE REMOVAL, THE EXISTING COLUMNS MAY BE MODIFIED TO ACT AS A TEMPORARY SHORING TOWER FOR PARTIAL TRUSS ERECTION.
2. SUBMIT CALCULATIONS FOR SHORING TOWER MODIFICATIONS, THAT INCLUDE MEMBER SECTION LOSS, PREPARED BY A PROFESSIONAL ENGINEER LICENSED IN THE COMMONWEALTH OF PENNSYLVANIA.
3. CONSTRUCT PROPOSED NEAR AND FAR ABUTMENTS AND INSTALL PERMANENT BEARINGS.
4. INSTALL TEMPORARY BEARINGS AT TEMPORARY SHORING TOWER LOCATION.
5. DELIVER AND ERECT PARTIAL FAR LEFT TRUSS (NORTH) WITH ASSIST CRANE LOCATED AT THE FAR APPROACH. PROVIDE TEMPORARY BRACING AS REQUIRED TO ENSURE STABILITY WHEN LIFTING AND ON TEMPORARY SUPPORTS. RELEASE ASSIST CRANE AFTER TRUSS IS STABILIZED.
6. DELIVER AND ERECT PARTIAL FAR RIGHT TRUSS (SOUTH) WITH PRIMARY CRANE LOCATED AT THE NEAR APPROACH.
7. ERECT FLOORBEAMS AND OTHER FLOOR SYSTEM COMPONENTS TO PROVIDE FULL STABILITY OF PARTIALLY ASSEMBLED TRUSS PRIOR TO ERECTION STAGE 2.



DATUM 900

ELEVATION

0 5' 10' 20'

ERECTION STAGE 2:

1. COMPLETE ON-SITE ASSEMBLY OF PARTIAL NEAR LEFT (NORTH) AND PARTIAL NEAR RIGHT (SOUTH) TRUSSES.
2. ERECT PARTIAL NEAR LEFT TRUSS (NORTH) WITH PRIMARY CRANE LOCATED AT THE NEAR APPROACH. MAKE UP GUSSET PLATE CONNECTIONS AT NU5' AND NL6'. PROVIDE TEMPORARY BRACING AS REQUIRED TO ENSURE STABILITY WHEN LIFTING AND ON TEMPORARY SUPPORTS. RELEASE PRIMARY CRANE AFTER TRUSS IS STABILIZED.
3. ERECT PARTIAL NEAR RIGHT TRUSS (SOUTH) WITH PRIMARY CRANE LOCATED AT THE NEAR APPROACH. MAKE UP GUSSET PLATE CONNECTIONS AT SU5' AND SL6'. PROVIDE TEMPORARY BRACING AS REQUIRED TO ENSURE STABILITY WHEN LIFTING AND ON TEMPORARY SUPPORTS. RELEASE ASSIST CRANE AFTER TRUSS IS STABILIZED.
4. ERECT REMAINING FLOORBEAMS AND OTHER FLOOR SYSTEM COMPONENTS.

NOTES:

1. THIS IS A CONCEPTUAL ERECTION PLAN. THE CONTRACTOR IS RESPONSIBLE FOR DEVELOPING A FINAL ERECTION PLAN BASED ON THE AVAILABLE EQUIPMENT NEEDED TO ERECT THE BRIDGE. THE CONTRACTOR IS RESPONSIBLE FOR THE STABILITY OF ALL ASSEMBLED COMPONENTS DURING ALL CONSTRUCTION STAGES.
2. THE CONTRACTOR IS RESPONSIBLE FOR DESIGNING AND INSTALLING GROUND PROTECTION OF ALL UNDERGROUND UTILITIES FROM ALL EQUIPMENT LOADING.
3. ALL ERECTION PLANS MUST BE COORDINATED, REVIWED, AND APPROVED BY NORFOLK SOUTHERN RAILWAY AND PITTSBURGH REGIONAL TRANSIT.

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL MATTHIAS STEIN ENGINEER PE095784

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REV	BY	DATE	DESCRIPTION

LOCATION: SWISSVALE, PENNSYLVANIA
TITLE: WASHINGTON AVENUE ERECTION DETAILS - 2

DSN NCS	PROJ NO. D2122	VAN 1290818-OH77	MILE POST PT-344.91
DWN NCS	FILE NO. BR0028818	DRAWING NUMBER PT-344.91 24 55	
CHK CGF	DATE 08/16/2023		

SHEET NO. 55 OF 58

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SUBSTRUCTURE UNIT: LOG 1 OF 1

BORING NUMBER:	BORING LOCATION	START: 08/09/2022 9:00 AM	HAMMER:
B-1	STATION: 7+06.9 OFFSET: 1.4 FT. LT.	FINISH: 08/09/2022 2:00 PM	EFFICIENCY: 0.6 ERa

DRILLING METHOD AND EQUIPMENT:	SIZE OF CORE:	VERTICAL SCALE:	TOP OF BORING ELEVATION:
DOUBLE TUBE WIRE LINE-HQ, HAMMER-NO RECORD, ACKER SOIL MAX TRACK RIG	2.500 IN.	0 FT. [redacted] 5 FT.	943.2 FT.

DRILLING INSPECTOR: ANNA ABLAK
DRILLER & DRILLING COMPANY: ALEX KOZEL
PENNSYLVANIA DRILLING COMPANY

▽ 0 HR. READING - ELAPSED TIME: NR - NR
▼ 24 HR. READING - ELAPSED TIME: NR - NR

ELEV.	GRAPHIC	MATERIAL DESCRIPTION	AASHTO / USCS	SAMPLE DEPTH	SAMPLE NO.	BLOW COUNT / PP/T TSF / N 60 / %RQD	REC (ft.)	REC (%)	RQD % / Soil/Rock Rec. % / SPT (N60)
		BITUMINOUS CONCRETE. 0.3'/El. 942.9			PC-1		1.1	44	
		BRICK. 0.6'/El. 942.6							
		VOID. 1.0'/El. 942.2							
		STEEL BEAM, Boring terminated due the presence of steel beam. 2.5'/El. 940.7							

SUBSTRUCTURE UNIT: LOG 1 OF 1

BORING NUMBER:	BORING LOCATION	START: 08/09/2022 3:00 PM	HAMMER: SAFETY
B-1A	STATION: 7+06.7 OFFSET: 2.8 FT. LT.	FINISH: 08/10/2022 1:19 PM	EFFICIENCY: 0.6 ERa

DRILLING METHOD AND EQUIPMENT:	SIZE OF CORE:	VERTICAL SCALE:	TOP OF BORING ELEVATION:
DOUBLE TUBE WIRE LINE-HQ, SAFETY, ACKER SOIL MAX TRACK RIG	2.500 IN.	0 FT. [redacted] 5 FT.	943.1 FT.

DRILLING INSPECTOR: ANNA ABLAK
DRILLER & DRILLING COMPANY: ALEX KOZEL
PENNSYLVANIA DRILLING COMPANY

▽ 0 HR. READING - ELAPSED TIME: El. 920.4 ft. - 0.0 hr.
▼ 24 HR. READING - ELAPSED TIME: El. 913.3 ft. - 19.5 hr.

ELEV.	GRAPHIC	MATERIAL DESCRIPTION	AASHTO / USCS	SAMPLE DEPTH	SAMPLE NO. **	BLOW COUNT / PP/T TSF / N 60 / %RQD	REC (ft.)	REC (%)	RQD % / Soil/Rock Rec. % / SPT (N60)
940		BITUMINOUS CONCRETE. 0.3'/El. 942.8		2.5	PC-1		0.6	24	
		BRICK. 0.6'/El. 942.5		4.0	R-1		1.5	100	
		VOID, with some loose gravel and debris. 2.0'/El. 941.1			R-2		4.5	100	
935		CEMENT CONCRETE, river rock aggregate, agreggate is fine to coarse, no reinforcement encountered. 2.5'/El. 940.6		8.5					
		MASONRY, tan to gray, coarse grained, medium hard to hard, Sandstone mosonry abutment. Joint between sandstone block filled with 0.1 to 0.2' thick concrete at 4.5', 6.1', 7.5', 8.8', 10.1', 12.7', 13.6', 15.3', 17.1', 19.2', 21.1', and 23.4'. 25.3'/El. 917.8		13.5	R-3		5.0	100	
930					R-4		4.8	96	
925				18.5	R-5		4.8	96	
		CEMENT CONCRETE, river rock aggregate, agreggate is fine to coarse, no reinforcement encountered. Abutment Footing. 31.2'/El. 911.9		23.5	R-6		5.0	100	
920 ▽				28.5	R-7		3.0	67	
915 ▼		SILT, some Clay, some fine to coarse Sand, medium to very stiff, moist, homogeneous, low plastic fines, tan and gray, lacustrine. 36.0'/El. 907.1	A-4 / CL-ML	33.0		4-4-7	11	0.7	47
				34.5	S-2	2-3-5	8	0.0	0
910		Fine to coarse SAND, little Silt, little Clay, little fine Gravel, medium dense, moist, homogeneous, non-plastic, gray, lacustrine. 41.0'/El. 902.1	A-2-4 / SM	36.0		7-12-11	23	1.5	100
				37.5		5-10-10	20	1.2	80
				39.0	S-5	7-7-7	14	0.0	0
905		CLAY, little fine to coarse Sand, little Silt, stiff to very stiff, moist to wet, homogeneous, medium plastic fines, gray, lacustrine. 42.0'/El. 901.1	A-6 / CL a-2-4 / sm	40.5		8-7-9	16	1.0	67
				42.0	S-7	9-20-39	59	1.2	80
		Fine to coarse SAND, some Silt, little fine to coarse Gravel, very dense, moist to wet, homogeneous, non-plastic, gray, residuum. 43.7'/El. 899.4		43.5	S-8	50/2"	>50	0.2	100
900									

**SAMPLE NO. shading indicates lab testing performed.

REFERENCES:

	SHEET:
1. GENERAL PLAN AND ELEVATION	01
2. INDEX OF DRAWINGS	02
3. GENERAL NOTES	05 - 06
4. STRUCTURE BORING LOG - 2	57
5. STRUCTURE BORING LOG - 3	58

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL MATTHIAS STEIN ENGINEER PE095784

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OWNING COMPANY
PITTSBURGH
OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

REV.	BY	DATE	DESCRIPTION

LOCATION: SWISSVALE, PENNSYLVANIA
TITLE: WASHINGTON AVENUE
STRUCTURE BORING LOG - 1

DSN SED	PROJ NO. D2122	WBS 1290818-OH/77	WBS POST PT-344.91
DWN KTS	FILE NO. BR0028818	DRAWING NUMBER PT-344.91 24 56	
CHK SED	DATE 08/16/2023		

SHEET NO. 56 OF 58

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pw:\\WD-us-pa.bentley.commb-us-pw01\Documents\MoonTownship_PA\01_Projects\Norfolk_Southern\Pittsburgh_Vertical_Clearance\NS_Washington Avenue\deliverables\design\structures\Final\plots\NSWash_boring_log_01.dgn

SUBSTRUCTURE UNIT: LOG 1 OF 1

BORING NUMBER:	BORING LOCATION	START: 08/11/2022 8:50 AM	HAMMER:
B-1ST	STATION: 6+94.6 OFFSET: 8.3 FT. LT.	FINISH: 08/11/2022 10:00 AM	EFFICIENCY: 0.6 ERa

DRILLING METHOD AND EQUIPMENT:	SIZE OF CORE:	VERTICAL SCALE:	TOP OF BORING ELEVATION:
DOUBLE TUBE WIRE LINE-HQ, HAMMER-NO RECORD, ACKER SOIL MAX TRACK RIG	2.500 IN.	0 FT. [redacted] 5 FT.	942.7 FT.

DRILLING INSPECTOR: ANNA ABLAK
DRILLER & DRILLING COMPANY: ALEX KOZEL
PENNSYLVANIA DRILLING COMPANY

▽ 0 HR. READING – ELAPSED TIME: NR – NR
▼ 24 HR. READING – ELAPSED TIME: NR – NR

ELEV.	GRAPHIC	MATERIAL DESCRIPTION	AASHTO/ USCS	SAMPLE DEPTH	SAMPLE NO. **	BLOW COUNT / PP/T TSF / N 60 / %RQD	REC (ft.)	REC (%)	RQD % / Soil/Rock Rec. % / SPT (N60)
940		Fine to coarse SAND, some Silt, little fine to coarse Gravel, dry to moist, heterogeneous, poorly graded, sub-angular, non-plastic, dark gray, fill.							
935			a-2-4 / sm		A-1				
930									
925									
920									
915									
		31.0'/El. 911.7							
910		CLAY and fine to coarse SAND, little Silt, trace fine Gravel, moist, homogeneous, low plastic fines, tan and gray, lacustrine.	A-4 / CL-ML	31.0		2.25	2.0	100	
		33.0'/El. 909.7							

**SAMPLE NO. shading indicates lab testing performed.

SUBSTRUCTURE UNIT: LOG 1 OF 1

BORING NUMBER:	BORING LOCATION	START: 08/08/2022 9:00 AM	HAMMER:
B-2	STATION: 8+24.1 OFFSET: 8.3 FT. RT.	FINISH: 08/08/2022 11:30 AM	EFFICIENCY: 0.6 ERa

DRILLING METHOD AND EQUIPMENT:	SIZE OF CORE:	VERTICAL SCALE:	TOP OF BORING ELEVATION:
DOUBLE TUBE WIRE LINE-HQ, HAMMER-NO RECORD, ACKER SOIL MAX TRACK RIG	2.500 IN.	0 FT. [redacted] 5 FT.	942.8 FT.

DRILLING INSPECTOR: ANNA ABLAK
DRILLER & DRILLING COMPANY: ALEX KOZEL
PENNSYLVANIA DRILLING COMPANY

▽ 0 HR. READING – ELAPSED TIME: NR – NR
▼ 24 HR. READING – ELAPSED TIME: NR – NR

ELEV.	GRAPHIC	MATERIAL DESCRIPTION	AASHTO/ USCS	SAMPLE DEPTH	SAMPLE NO.	BLOW COUNT / PP/T TSF / N 60 / %RQD	REC (ft.)	REC (%)	RQD % / Soil/Rock Rec. % / SPT (N60)
940		BITUMINOUS CONCRETE. 0.2'/El. 942.6							
		Gravel and sand Subbase; dark brown to black. 0.5'/El. 942.3	a-4 / gm	2.5	PC-1		0.5	20	
		Fine to coarse GRAVEL, some Silt, little fine to coarse Sand, dry, heterogeneous, poorly graded, angular, non-plastic, dark brown to black, fill. Boring terminated at 5.5'; abutment was not encountered. Offset to B-2A to sample through abutment. 5.5'/El. 937.3			A-1				

REFERENCES:

1. GENERAL PLAN AND ELEVATION
2. INDEX OF DRAWINGS
3. GENERAL NOTES
4. STRUCTURE BORING LOG - 1
5. STRUCTURE BORING LOG - 3

SHEET:

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02
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COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
MATTHIAS STEIN
ENGINEER
PE095784

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OWNING COMPANY
PITTSBURGH
OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

REV.	BY	DATE	DESCRIPTION

LOCATION: SWISSVALE, PENNSYLVANIA
TITLE: WASHINGTON AVENUE
STRUCTURE BORING LOG - 2

DSN SED	PROJ NO. D2122	VAN 1290818-OH/77	MILE POST PT-344.91
DWN KTS	FILE NO. BR0028818		DRAWING NUMBER PT-344.91 24 57
CHK SED	DATE 08/16/2023		

SHEET NO. 57 OF 58

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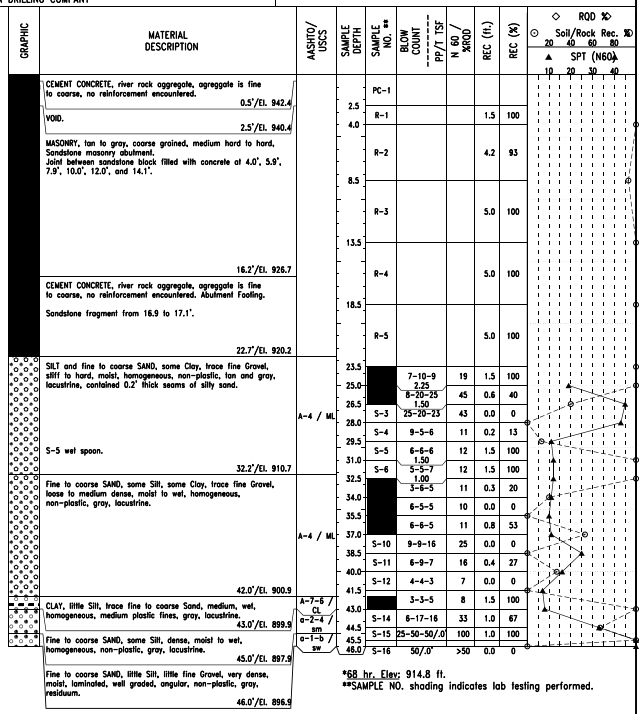
SUBSTRUCTURE UNIT: LOG 1 OF 1

BORING NUMBER	BORING LOCATION	START: 08/08/2022 11:50 AM	HAMMER: SAFETY
B-2A	STATION: 8+21.4 OFFSET: 4.2 FT. RT.	FINISH: 08/08/2022 3:50 PM	EFFICIENCY: 0.6 ERa

DRILLING METHOD AND EQUIPMENT:	SIZE OF CORE:	VERTICAL SCALE:	TOP OF BORING ELEVATION:
DOUBLE TUBE WIRE LINE-HQ, SAFETY, ACKER SOIL MAX TRACK RIG	2.500 IN.	0 FT. 5 FT.	942.9 FT.

DRILLING INSPECTOR: ANNA ABLAK
DRILLER & DRILLING COMPANY: ALEX KOZEL
PENNSYLVANIA DRILLING COMPANY

▽ 0 HR. READING - ELAPSED TIME: El. 926.2 ft. - 0.0 hr. ▽ =
▼ 24 HR. READING - ELAPSED TIME: El. 916.7 ft. - 17.3 hr.



*68 hr. Elev: 914.8 ft.
**SAMPLE NO. shading indicates lab testing performed.

LABORATORY TEST SUMMARY - SOILS

BORING NUMBER	STATION & OFFSET	SAMPLE #	TEST DEPTH (FT.)	NATURAL MOISTURE %	% GRAIN SIZE DISTRIBUTION (AASHTO) GRAVEL %	SAND %	COARSE SAND %	FINE SAND %	FINES %	SILT %	CLAY %	CLASSIFICATION AASHTO	USCS	S.G.	PLASTICITY PARAMETERS LIQUID LIMIT	PLASTIC LIMIT	P. I.	SHEAR STRENGTH C (TSF)	ϕ (DEG.)	C' (TSF)	ϕ' (DEG)	TEST METHOD
B-1A	7+06.7 2.77 ft. LT.	PC-1	33.0 to 34.5	18.3					79.4			A-4	CL-ML		23	16	7					
B-1A	7+06.7 2.77 ft. LT.	R-3 to 4	36.0 to 39.0	14.9					32.4			A-2-4	SM									
B-1A	7+06.7 2.77 ft. LT.	R-6	41.0 to 42.0	26.9					83.2			A-6	CL		40	24	16					
B-1ST	6+94.6 8.33 ft. LT.	A-1	31.0 to 33.0	16.4					54.4			A-4	CL-ML		27	20	7	0.089	29.9			DIR. SHR.
B-2A	8+21.4 4.21 ft. RT.	R-1 to 2	23.5 to 26.5	15.2					56.4			A-4	ML									
B-2A	8+21.4 4.21 ft. RT.	S-7 to 9	32.5 to 37.0	20.7					51.4			A-4	ML									
B-2A	8+21.4 4.21 ft. RT.	S-13	42.0 to 43.0	32.2					90.3			A-7-6	CL		45	25	20					

LABORATORY TEST SUMMARY - ROCK CORE

BORING NUMBER	STATION & OFFSET	SAMPLE #	TEST DEPTH (FT.)	TEST	STRENGTH	JAR SLAKE TEST PERFORMED?	SLAKE DURABILITY INDEX & TYPE	ROCK RECOVERY %	RQD %	BEDROCK LITHOLOGY	STRATIGRAPHIC UNIT
B-1A	7+06.7 2.77 ft. LT.	R-2	8.1 to 8.5	UNCONFINED COMPRESSIVE TEST	5081.0 PSI / 365.8 TSF	NO		100		MASONRY	
B-1A	7+06.7 2.77 ft. LT.	R-5	23.0 to 23.4	UNCONFINED COMPRESSIVE TEST	4506.0 PSI / 324.4 TSF	NO		96		MASONRY	
B-2A	8+21.4 4.21 ft. RT.	R-1	3.6 to 4.0	UNCONFINED COMPRESSIVE TEST	3588.0 PSI / 258.3 TSF	NO		100		MASONRY	
B-2A	8+21.4 4.21 ft. RT.	R-4	13.5 to 13.9	UNCONFINED COMPRESSIVE TEST	5337.0 PSI / 384.3 TSF	NO		100		MASONRY	

REFERENCES:

	SHEET:
1. GENERAL PLAN AND ELEVATION	01
2. INDEX OF DRAWINGS	02
3. GENERAL NOTES	05 - 06
4. STRUCTURE BORING LOG - 1	56
5. STRUCTURE BORING LOG - 2	57

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL MATTHIAS STEIN ENGINEER PE095784

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PITTSBURGH
OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

REV.	BY	DATE	DESCRIPTION

LOCATION: SWISSVALE, PENNSYLVANIA
TITLE: WASHINGTON AVENUE
STRUCTURE BORING LOG - 3

DSN SED	PROJ NO. D2122	VAN 1290818-OH/77	WBS POST PT-344.91
DWN KTS	FILE NO. BR0028818	DRAWING NUMBER PT-344.91 24 58	
CHK SED	DATE 08/16/2023		

SHEET NO. 58 OF 58

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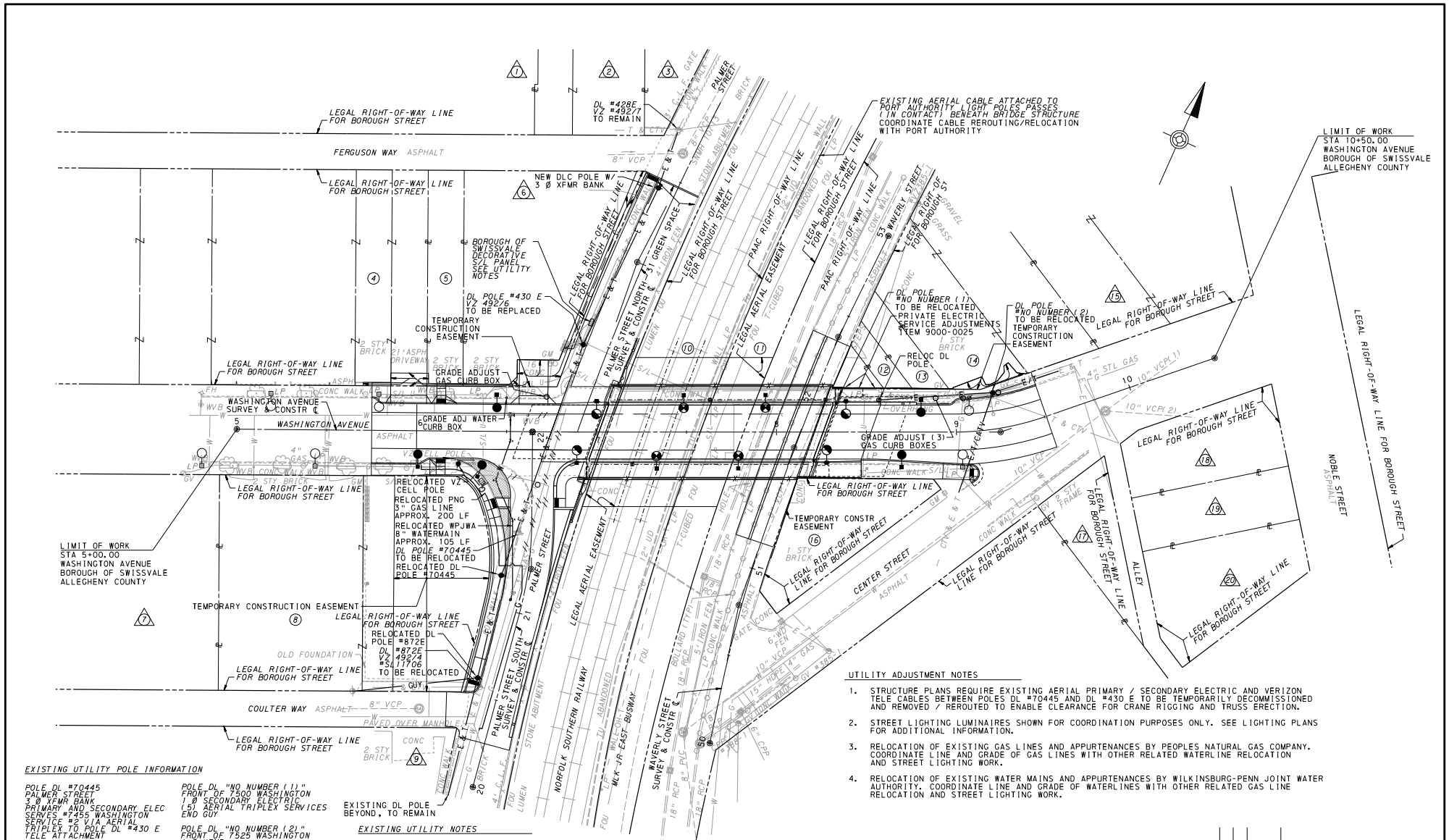

EXISTING UTILITY POLE INFORMATION

POLE DL #70445
PALMER STREET
3 Ø XFMR BANK
PRIMARY AND SECONDARY ELEC SERVES #7455 WASHINGTON
SERVICE #2 VIA AERIAL TRIPLEX TO POLE DL #430 E
TELE ATTACHMENT

POLE DL #430 E
VZ #492/6
PALMER STREET
1 Ø XFMR
PRIMARY AND SECONDARY ELEC SERVES #7455 WASHINGTON
SERVICE #1 IS 1 Ø AERIAL
SERVICE #2 IS 3 Ø AERIAL TRIPLEX FROM DL #70445
TELE ATTACHMENT

POLE DL "NO NUMBER (1)"
FRONT OF 7500 WASHINGTON
1 Ø SECONDARY ELECTRIC
(5) AERIAL TRIPLEX SERVICES
END GUY

POLE DL "NO NUMBER (2)"
FRONT OF 7525 WASHINGTON
1 Ø XFMR
PRIMARY ELECTRIC
1 Ø AND 3 Ø SECONDARY ELECTRIC
TELE AND CATV ATTACHMENTS
S/L #20119
SIDEWALK GUY

BOROUGH OF SWISSVALE
DECORATIVE S/L PANEL
METER DL #INF0741665S0
120/240V 3W

EXISTING UTILITY NOTES

1. EXISTING SWISSVALE BOROUGH OWNED DECORATIVE STREET LIGHTING (S/L) IS BELIEVED TO ORIGINATE IN A METERED PANEL LOCATED ON PALMER STREET.
2. THE CONTRACTOR SHALL FIELD VERIFY PRIOR TO CONSTRUCTION AND DETERMINE CONNECTIVITY OF THE S/L CIRCUITS ON EACH SIDE OF THE BRIDGE.
3. A 2" PVC CONDUIT SLEEVED IN 5" RGS CONDUIT IS BELIEVED TO CONNECT DECORATIVE STREET LIGHTING ON EACH SIDE OF THE BRIDGE.
4. TWO EXISTING CONVENTIONAL STREET LIGHTS ON BRIDGE STRUCTURE ARE POWERED FROM A FEED ON POLE DL #430 E.

UTILITY ADJUSTMENT NOTES

1. STRUCTURE PLANS REQUIRE EXISTING AERIAL PRIMARY / SECONDARY ELECTRIC AND VERIZON TELE CABLES BETWEEN POLES DL #70445 AND DL #430 E TO BE TEMPORARILY DECOMMISSIONED AND REMOVED / REROUTED TO ENABLE CLEARANCE FOR CRANE RIGGING AND TRUSS ERECTION.
2. STREET LIGHTING LUMINAIRES SHOWN FOR COORDINATION PURPOSES ONLY. SEE LIGHTING PLANS FOR ADDITIONAL INFORMATION.
3. RELOCATION OF EXISTING GAS LINES AND APPURTENANCES BY PEOPLES NATURAL GAS COMPANY. COORDINATE LINE AND GRADE OF GAS LINES WITH OTHER RELATED WATERLINE RELOCATION AND STREET LIGHTING WORK.
4. RELOCATION OF EXISTING WATER MAINS AND APPURTENANCES BY WILKINSBURG-PENN JOINT WATER AUTHORITY. COORDINATE LINE AND GRADE OF WATERLINES WITH OTHER RELATED GAS LINE RELOCATION AND STREET LIGHTING WORK.

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL BRADLEY G. DUDA ENGINEER PE045706 REGISTERED PROFESSIONAL ENGINEER

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REV	BY	DATE	DESCRIPTION
0			

SWISSVALE, PENNSYLVANIA
BR00288818 BRIDGE PT344.91 WASHINGTON AVENUE UTILITY PLAN

DSN BGD	PD No. D2122	WBS 1290818-0H77	SHEET POST PT-344.91		
DRN BGD	FILE No. BR00288818		DRAWING NUMBER PT-344.91 23 0		
CHK	DATE 6/7/2024				

CADD FILE: BR_Washington_Ave_Utility_plan.dgn

CADD FILE: NS_Washington_Ave_utility_plan.dgn

SHEET NO. 1 OF 1