

PROJECT MANAGER: STEPHEN MCGINLEY, P.E.
DESIGNER: ZAID AJLANI, P.E.

DISTRICT	COUNTY	CITY	ROUTE	SECTION	TOTAL SHEETS	
6-0	PHILADELPHIA	PHILADELPHIA	0000	CPD	29	
CITY OF PHILADELPHIA						
	REV NO	REVISIONS		DATE	BY	APPD

CITY LOG NO. 81304-01
CITY WOID NO. 1260677
PENNDOT LOG NO. P4361-03
ECMS NO. 81304

COMMONWEALTH OF PENNSYLVANIA



DEPARTMENT OF TRANSPORTATION

DRAWINGS

FOR

CONSTRUCTION

OF

CITY STREET: S CHRISTOPHER COLUMBUS BOULEVARD

IN PHILADELPHIA COUNTY

FROM STA. 211+98.95 TO STA. 222+06.58 LENGTH 1,007.63 FT. 0.191 MI.

AND

CITY STREET: S DELAWARE AVENUE

FROM STA. 112+84.92 TO STA. 138+08.85 LENGTH 2,523.93 FT. 0.478 MI.

AND

CITY STREET: PACKER AVENUE

FROM STA. 300+91.61 TO STA. 303+91.61 LENGTH 300.00 FT. 0.057 MI.

TOTAL CONSTRUCTION LENGTH 3564.25 FT. 0.675 MI.

PUC DOCUMENT NUMBERS: A-2024-3051279
A-2025-3053810

CERTIFIED CORRECT PLANS

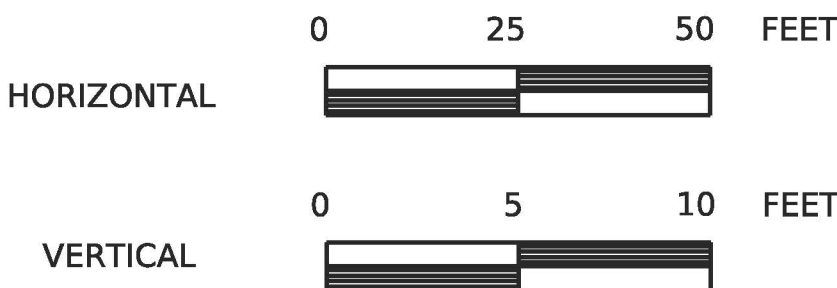
Arthur P. R...
.....
Professional Engineer
Approved by **Bureau of Technical Utility Services**

PA PUBLIC UTILITY COMMISSION

ATTEST *Matthew L. H...*
Secretary

A-2024-3051279

SCALE



THE BENCHMARK IS SET ON CONTROL POINT 1 AT 4.08 FEET.
CONVERSION FACTOR BETWEEN NAVD88 TO PHL DATUM FOR THIS PROJECT IS:
CITY DATUM = NAVD88 - (4.12 FEET)

S DELAWARE AVE DESIGN DESIGNATION

HIGHWAY CLASSICATION	- MAJOR COLLECTOR
DESIGN SPEED	- 25 MPH
PAVEMENT WIDTH	- 60'-72'
SHOULDER WIDTH	- 0'-17'

TRAFFIC DATA

CURRENT ADT (2026)	- 2,668
DESIGN YEAR ADT (2046)	- 5,107
DHV	- 1,125
D	- 67
T	- 47

S CHRISTOPHER COLUMBUS BLVD DESIGN DESIGNATION

HIGHWAY CLASSIFICATION	- PRINCIPAL ARTERIAL
DESIGN SPEED	- 35 MPH
PAVEMENT WIDTH	- 60'-69'
SHOULDER WIDTH	- 0'-7'

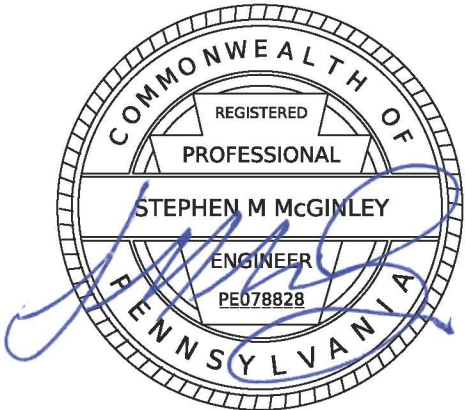
TRAFFIC DATA

CURRENT ADT (2026)	- 6,509
DESIGN YEAR ADT (2046)	- 12,460
DHV	- 1,380
D	- 71
T	- 31

ALSO INCLUDED:

SIGNING AND PAVEMENT MARKING PLAN	17 SHEETS
TRAFFIC SIGNAL PLAN	7 SHEETS
EROSION AND SEDIMENT POLLUTION CONTROL PLAN	7 SHEETS
TRAFFIC CONTROL PLAN	35 SHEETS
CROSS SECTIONS	16 SHEETS
WATER MAIN RELAY PLAN	8 SHEETS

PREPARED BY:
Kimley»»Horn



DATE: 9/11/2025

RECOMMENDED DATE: 9/12/2025
Janet Stoj
 DISTRICT EXECUTIVE

RECOMMENDED DATE: 09/12/2025
Christine Norris
DEPUTY SECRETARY

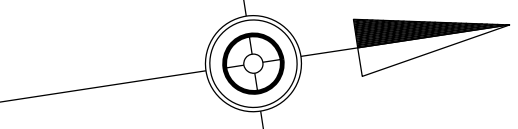
APPROVED DATE: 09/12/2025

 SECRETARY OF TRANSPORTATION

(ON BEHALF OF THE GOVERNOR
AS WELL AS THE SECRETARY)

DISTRICT	COUNTY	ROUTE	SECTION	SHEET	
6-0	PHILADELPHIA	0000	CPD	2 OF 29	
CITY OF PHILADELPHIA					
REV NO	REVISIONS		DATE	BY	APPD

COLUMBUS BLVD/PACKER AVE/DELAWARE AVE INTERS. IMP.
ECMS #81304 PENNDOT LOG #P4361-03 CITY LOG # 81304-01



LIST OF PROPERTY OWNERS

- ①

N/F PHILADELPHIA REGIONAL PORT AUTHORITY
- ②

N/F DOUGHERTY RECYCLING LLC
- ③

N/F REPUBLIC SERVICE INC, THOMAS REUTERS, INC
- ④

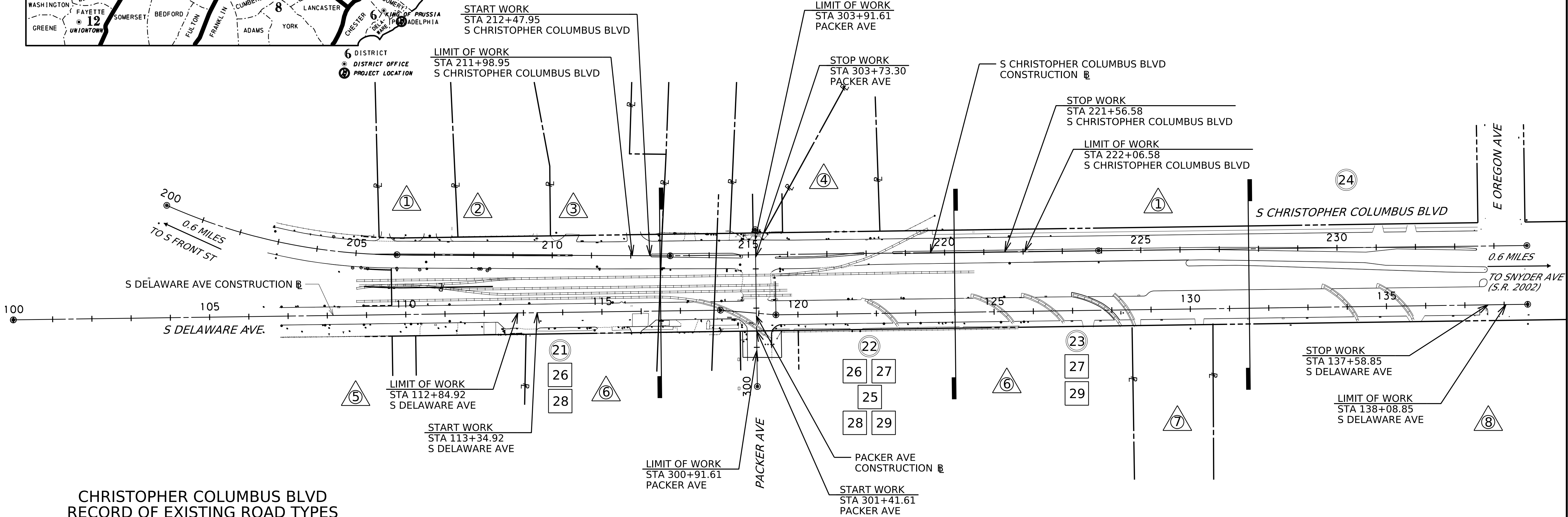
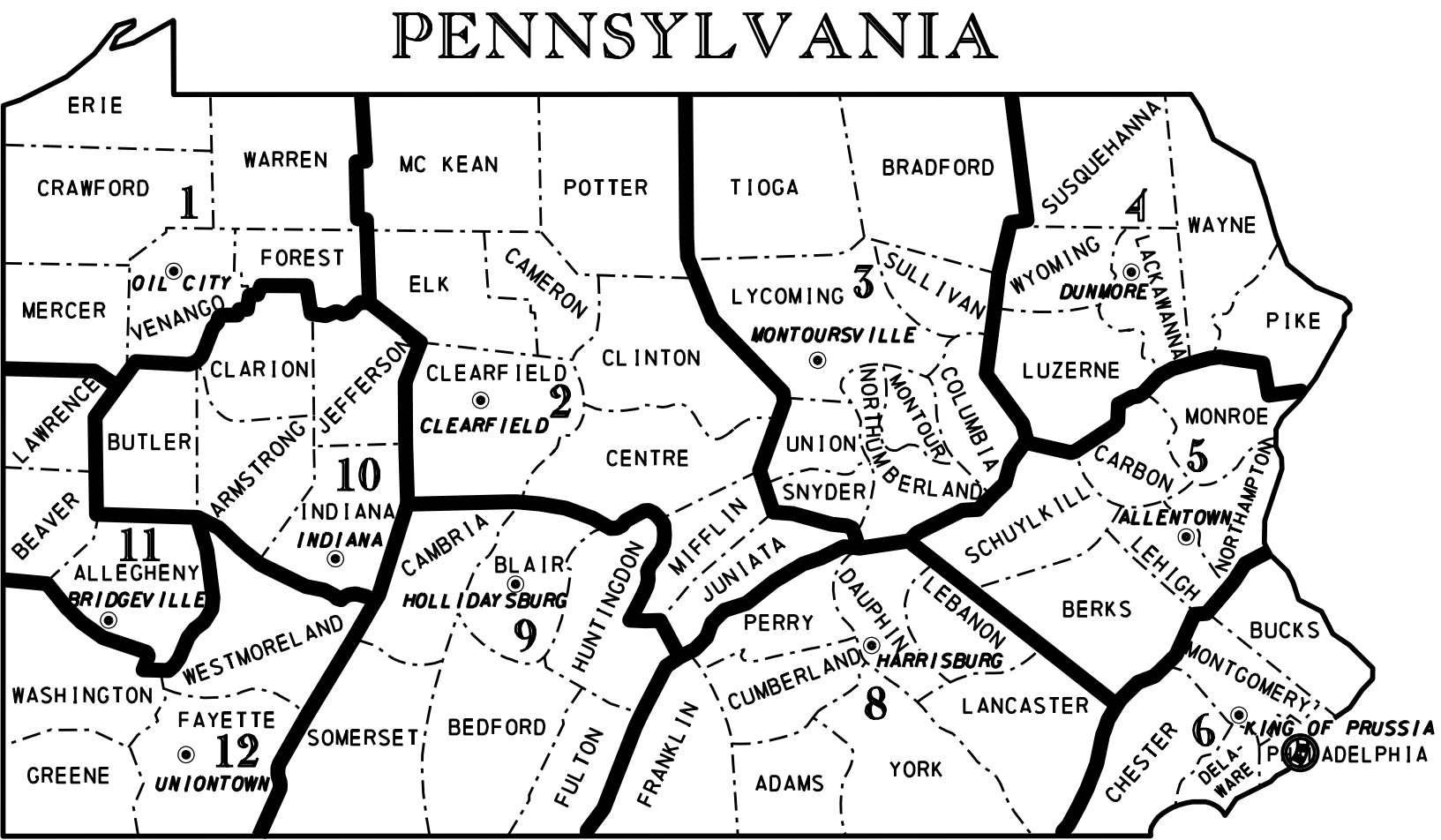
N/F ROYAL WHITE CEMENT REAL ESTATE INC
- ⑤

CITY OF PHILADELPHIA 43.97%, GENERAL STATE AUTHORITY 56.03%
- ⑥

N/F DELAWARE AVENUE ENTERPRISES
- ⑦

N/F ASHLAND INC
- ⑧

U S OF AMERICA



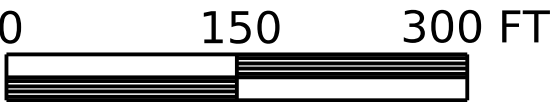
CHRISTOPHER COLUMBUS BLVD
RECORD OF EXISTING ROAD TYPES

NOTE: THE MATERIAL AND DEPTHS 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.

LIMITS OF WORK
THIS INFORMATION IS UNAVAILABLE BUT IS ASSUMED TO BE PLAIN CEMENT CONCRETE BASE WITH ASPHALT BINDER AND WEARING COURSES.

INDEX MAP

SCALE



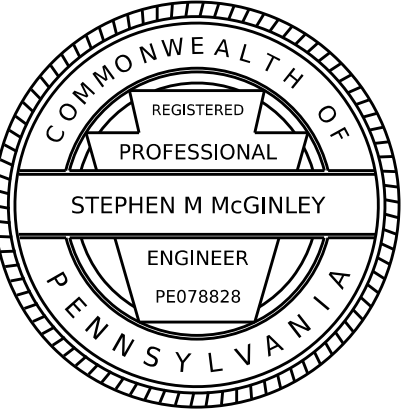
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LEGEND

- PLAN SHEET NUMBER
- PARCEL IDENTIFICATION NUMBER
- △

PARCEL IDENTIFICATION NUMBER - NO TAKE
- PROFILE SHEET NUMBER
- SHEET LIMIT



PLOTTED: 9/7/2005 7:08:02 PM

D-9012 CADD (02-90) REVISED (06-18)

LIST OF PUBLIC UTILITIES

PHILADELPHIA WATER DEPARTMENT
VINU VARGHESE
1101 MARKET STREET
2ND FLOOR, JEFFERSON TOWER
PHILADELPHIA, PA 19107-2994
(215) 685-6332

PHILADELPHIA GAS WORKS
MONICA LYV
800 WEST MONTGOMERY AVENUE
PLANNING SECTION-1800-4
PHILADELPHIA, PA 19122
(215) 684-6116

KEVIN DIEP
800 WEST MONTGOMERY AVENUE
PLANNING SECTION-1800-4
PHILADELPHIA, PA 19122
(215) 684-6235

PECO ENERGY COMPANY
LOUIS ROBINSON
2301 MARKET STREET
PHILADELPHIA, PA 19103
(215) 731-3283

CHARLES DETTLING
1050 WEST SWEDESFORD ROAD
BERWYN, PA 19312
(267) 533-0585

COMCAST CABLE COMMUNICATIONS MANAGEMENT, LLC
MIKE KIMBERLY
190 SHOEMAKER ROAD
POTTSTOWN, PA 19464
(610) 327-6395

VERIZON
JOHN ALESSANDRINI
7000 WESTON PKWY
CARY, NC 27513
(610) 337-6707

ANTHONY PORTOLESE
900 RACE STREET, 6TH FLOOR
PHILADELPHIA, PA 19107
(215) 589-0792

GENERAL NOTES

THE SURVEY WAS PREPARED IN ACCORDANCE WITH THE FOLLOWING SOURCES OF INFORMATION:

- THE LEGAL RIGHT-OF-WAY ON CHRISTOPHER COLUMBUS BLVD IS 250 FEET, FROM OREGON AVENUE TO PACKER AVENUE, BASED ON PHILADELPHIA CITY RECORDS, CITY PLAN NUMBER 34-S, AUTHORIZED BY ORDINANCE DATED NOVEMBER 11, 1989, CONFIRMED BY THE BOARD OF SURVEYORS, ON JULY 15, 1991.
- THE LEGAL RIGHT-OF-WAY ON DELAWARE AVENUE IS 250 FEET, FROM PACKER AVENUE TO PATTISON AVENUE, BASED ON PHILADELPHIA CITY RECORDS, CITY PLAN NUMBER 34-S, AUTHORIZED BY ORDINANCE DATED JUNE 13, 1978, CONFIRMED BY THE BOARD OF SURVEYORS, ON OCTOBER 2, 1978.
- 1914 CITY OF PHILADELPHIA ORDINANCE AGREEMENT BETWEEN THE PHILADELPHIA, BALTIMORE AND WASHINGTON RAILROAD CO., THE PENNSYLVANIA RAILROAD CO., THE SCHUYLKILL RIVER EAST SIDE RAILROAD CO., THE BALTIMORE AND OHIO RAILROAD CO. AND THE PHILADELPHIA BELT LINE.
- UNITED STATES RAILWAY ASSOCIATION FINAL SYSTEMS PLAN, VOLUME 1 (PARTS 1 AND 2) AND VOLUME 2 (PART 3), DATED JULY 26, 1975 FOR RESTRUCTURING RAILROADS IN THE NORTHEAST AND MIDWEST REGION PURSUANT TO THE REGIONAL RAIL REORGANIZATION ACT OF 1973.
- PENNSYLVANIA SYSTEM, PHILADELPHIA TERMINAL DIVISION, RIGHT-OF-WAY AD TRACK MAPS, PENNSYLVANIA RAILROAD, DELAWARE EXTENSION, DATED JUNE 30, 1918. OFFICE OF VALUATION ENGINEER, PHILADELPHIA, PA. NOTED AS LC 1143, VS 7001.
- PHILADELPHIA CITY PLAN P-50-014 2C423 (REVISION OF LINES AND GRADES OF CITY PLAN 34-S AND 41-S) AND PHILADELPHIA CITY PLAN P-51-004 2A399 (PLOTING UPON A PORTION OF CITY PLAN 41-S OF A RIGHT-OF-WAY FOR SEWER AND DRAINAGE PURPOSES). BOTH PLANS APPROVED BY THE BOARD OF SURVEYORS ON SEPTEMBER 21, 2020 AND OCTOBER 2, 2017 RESPECTIVELY.
- DEEDS OF RECORD WERE REFERENCED FROM THE PHILADELPHIA RECORDS DEPARTMENT - WHICH INCLUDE DOCUMENT NUMBERS; 40556514, 42672930, 44597876, 45112120, 47030963, 49126708, 50013381, 50511743, 50534414, 51233945, 51555460, 51746176, 51798472, 51959632, 52749700, 52749701, 52876897, 52985656, 53416061, 53563424, 53713131, 53713150, 53725875, 53754396, 54072836, AND 54075892.
- EXISTING FIELD CONDITIONS AS SURVEYED IN JULY OF 2024 AND MAY OF 2025.

THE BENCHMARK IS SET ON CONTROL POINT 1 AT 4.08 FEET. ALL SURVEYED ELEVATION VALUES SHOWN ARE IN NAVD88. THE CONVERSION FACTOR BETWEEN NAVD88 TO PHL DATUM FOR THIS PROJECT IS:
CITY DATUM = NAVD88 - (4.12 FEET)

THE DEPARTMENT RESERVES THE RIGHT TO ELIMINATE ANY OR ALL OF THIS WORK. DO NOT PERFORM WORK EXCEPT THAT WHICH IS WITHIN THE HIGHWAY RIGHT-OF-WAY UNTIL SO ORDERED IN WRITING BY THE ENGINEER.

ALL EXISTING DIMENSIONS AND ALL NEW PROPERTY DISTANCES (RESULTING FROM NEW CONSTRUCTION) ARE SHOWN TO PHILADELPHIA DISTRICT STANDARD MEASURE. 100.00 FEET (PHILADELPHIA DISTRICT STANDARD) = 100.20 FEET (US SURVEY FEET).

ALL PROJECT MEASUREMENTS ARE US STANDARD MEASUREMENTS. TO CONVERT TO CITY OF PHILADELPHIA DISTRICT STANDARD, A FACTOR OF 1.0020 IS TO BE USED. THAT IS 100.20 FEET US STANDARD EQUALS 100.00 FEET PHILADELPHIA DISTRICT STANDARD MEASUREMENT.

CONSTRUCT PROJECT IN ACCORDANCE WITH PUBLICATION 408/2020 SPECIFICATIONS.

THERE ARE NO NAVIGABLE STREAMS LOCATED IN THE PROJECT AREA.

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

DO NOT INTERFERE WITH THE OPERATION OF ANY FIRE HYDRANT, FIRE CALL BOX OR POLICE CALL BOX.

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. 20242903138 FOR CITY OF PHILADELPHIA. ADDITIONAL INFORMATION IS AVAILABLE AT [HTTP://WWW.PA1CALL.ORG/PA811/PUBLIC/](http://www.pa1call.org/pa811/public/).

THE CONTRACTOR IS REQUIRED TO NOTIFY THE DEPARTMENT AND SUBMIT AN ALLEGED VIOLATION REPORT (AVR) TO THE PA PUBLIC UTILITY COMMISSION THROUGH THE PA ONE CALL SYSTEM, [WWW.PA1CALL.ORG](http://www.pa1call.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).

CONTRACTOR MUST COMPLY WITH THE ENVIRONMENTAL COMMITMENTS AND MITIGATION FOR THIS PROJECT DESCRIBED IN THE ENVIRONMENTAL COMMITMENTS AND MITIGATION TRACKING SYSTEM (ECMTS) AND COMPLETE THE ECMTS SIGNATURE SHEET OF THIS CONTRACT.

HORIZONTAL & VERTICAL CONTROL, LINE AND GRADE STAKES FOR CURB, PAVING ETC. WILL BE FURNISHED BY THE 2ND SURVEY DISTRICT OF PHILADELPHIA. NOTE: THIS ITEM, ENGINEERING SERVICES, IS A PRE-DETERMINED AMOUNT TO BE ASCERTAINED BY THE SURVEYOR & REGULATOR AND TO BE INCLUDED IN THE CONTRACTOR'S BID.

CONTRACTOR MUST NOTIFY THE 2ND SURVEY DISTRICT A MINIMUM OF TWO (2) WEEKS PRIOR TO THE START OF WORK TO SCHEDULE A TIME FOR CURB STAKE LAYOUT SERVICES. CONTACT INFORMATION: 2ND DISTRICT - S.W. CORNER OF 11TH STREET & WHARTON STREET 19147, 2ND FLOOR, 215-685-1865.

IF THERE ARE ANY SIDEWALK MODIFICATIONS, THEN THE CONTRACTOR MUST MAINTAIN A 2-IN REVEAL FOR STREETLIGHT POLE FOUNDATIONS AT FINAL GRADE. IF THE 2-IN REVEAL CAN NOT BE MAINTAINED, THEN RESPECTIVE FOUNDATION IS TO BE RECONSTRUCTED BY THE CONTRACTOR. CONTACT STREET LIGHTING IMMEDIATELY.

THE HALF CIRCLED NUMBER INDICATES A SCALED DIMENSION:

+00
15'

DISTRICT	COUNTY	ROUTE	SECTION	SHEET	
6-0	PHILADELPHIA	0000	CPD	3 OF 29	
CITY OF PHILADELPHIA					
REV NO	REVISIONS		DATE	BY	APPD

COLUMBUS BLVD/PACKER AVE/DELAWARE AVE INTERS. IMP.
ECMS #81304 PENNDOT LOG #P4361-03 CITY LOG # 81304-01

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

RC-10M JUNE 1, 2010
RC-28M SEPTEMBER 1, 2023
RC-39M NOVEMBER 30, 2021
RC-45M FEBRUARY 19, 2021
RC-46M FEBRUARY 19, 2021
RC-64M FEBRUARY 19, 2021
RC-67M FEBRUARY 19, 2021
RC-72M FEBRUARY 8, 2019
TC-8600 JUNE 13, 2013
TC-8604 AUGUST 17, 2021
TC-8700C JUNE 13, 2013
TC-8701S JUNE 13, 2013
TC-8702B JUNE 13, 2013
TC-8716 FEBRUARY 21, 2024
TC-8717 JUNE 13, 2013
TC-8801 JANUARY 27, 2025
TC-8802 JUNE 20, 2023
TC-8803 JANUARY 27, 2025
TC-8804 JANUARY 27, 2025
TC-8805 JANUARY 27, 2025
TC-8806 JANUARY 27, 2025
TC-8807 JANUARY 27, 2025

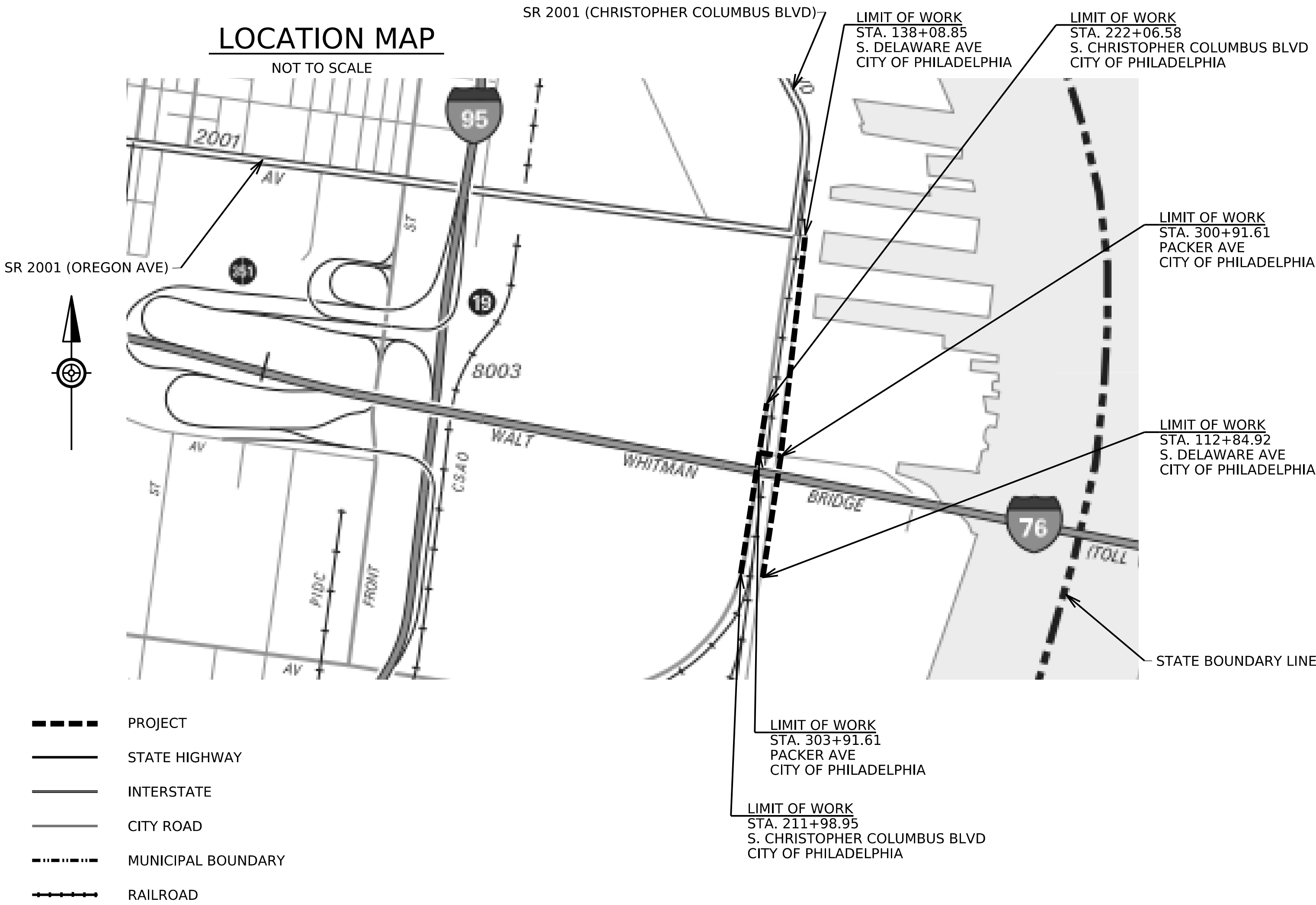
PA ONE CALL SYSTEM

LOCATION OF EXISTING UNDERGROUND UTILITIES ARE APPROXIMATE. OTHER UNDERGROUND UTILITIES MAY BE PRESENT WITHIN THE PROJECT AREA THAT ARE NOT SHOWN ON THE DRAWINGS. ACCURACY OR COMPLETENESS OF UTILITIES SHOWN ARE NOT GUARANTEED. THE CONTRACTOR SHALL VERIFY ALL EXISTING UNDERGROUND UTILITIES PRIOR TO THE START OF WORK. A PA ONE-CALL SERIAL NUMBER HAS BEEN OBTAINED FOR DESIGN PURPOSES ONLY.
PA ONE-CALL TOLL FREE TELEPHONE NO. 1-800-242-1776

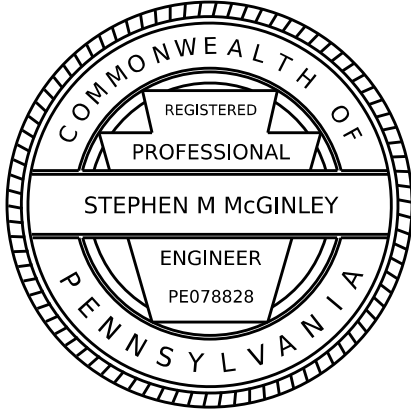
PHILADELPHIA COUNTY: SERIAL NO. 20242903138



CALL BEFORE YOU DIG!
PENNSYLVANIA LAW REQUIRES
(3) WORKING DAYS NOTICE FOR
CONSTRUCTION PHASE AND (10) WORKING
DAYS IN DESIGN STAGE - STOP CALL



OPERATOR: Lucas Signora
FILE NAME: c:\pw\khl\cd449495\EC05849_BORDER.dgn



PHILADELPHIA WATER DEPARTMENT (PWD) STANDARD NOTES

WATER MAIN NOTES:

1.

ALL WORK TO BE DONE IN ACCORDANCE WITH THE CITY OF PHILADELPHIA WATER DEPARTMENT “WATER MAIN STANDARD DETAILS & CORROSION CONTROL SPECIFICATIONS”.
2.

THE CONTRACTOR PERFORMING THE WATER & SEWER INSTALLATION MUST BE PREQUALIFIED BY PWD. CONTACT MR. VAHE HOVSEPIAN OF THE PROJECTS MANAGEMENT UNIT AT VAHE.HOVSEPIAN@PHILA.GOV
3.

THE APPROVED WORK MUST BE DONE IN THE PRESENCE OF A PWD INSPECTOR.
4.

THE CONTRACTOR PERFORMING THIS WORK IS TO NOTIFY THE PWD CONSTRUCTION DIVISION, 1101 MARKET STREET, 2ND FLOOR, PHONE (215) 685-6345, AT LEAST 7 DAYS IN ADVANCE FOR ASSIGNMENT OF AN INSPECTOR TO THE JOB. WATER SHUT-OFF TO BE REQUESTED BY THE INSPECTOR ONLY.
5.

THE CONTRACTOR MUST PROVIDE OFFICE SPACE FOR USE BY THE PWD INSPECTOR DURING CONSTRUCTION.
6.

A LIST OF ALL MATERIALS AND SUPPLIERS MUST BE SUBMITTED TO THE WATER DEPARTMENT CONSTRUCTION BRANCH FOR APPROVAL.
7.

APPROVAL OF THESE PLANS BY THE WATER DEPARTMENT IS STRICTLY LIMITED TO THE DESIGN OF DUCTILE IRON WATER MAINS 6 INCHES IN DIAMETER AND ABOVE SHOWN WITHIN THE LIMITS OF THE CITY OF PHILADELPHIA PUBLIC RIGHT OF WAY.
8.

CONTACT PWD-WATER TRANSPORT RECORDS, 1101 MARKET STREET, 2ND FLOOR, WTR@PHILA.GOV FOR ADDITIONAL APPROVALS AND PERMITS REQUIRED FOR ALL WATER SERVICES, METERS AND CONNECTIONS TO THE EXISTING AND/OR PROPOSED PWD FACILITIES.
9.

THE CONTRACTOR OR ENGINEER IS RESPONSIBLE FOR OBTAINING ALL ADDITIONAL PERMITS AND APPROVALS FROM ALL AFFECTED CITY AGENCIES AND UTILITIES.
10.

CORROSION CONTROL STUDY IS NECESSARY FOR ALL NEWLY CONSTRUCTED DUCTILE IRON PIPE LOCATED WITHIN A CORRIDOR WHERE THERE EXISTS NO WATER MAIN INFRASTRUCTURE. THE STUDY AND DESIGN, IF NECESSARY, MUST BE PERFORMED BY A PWD APPROVED CORROSION CONSULTANT. INSPECTION OF NEW CORROSION CONTROL SYSTEMS WILL BE PAID FOR BY THE DEVELOPER.
11.

WHEREVER EXISTING CORROSION CONTROL OF WATER MAINS IS DISTURBED, IT MUST BE RESTORED AND INSPECTED TO THE SATISFACTION OF THE PHILADELPHIA WATER DEPARTMENT.
12.

PRIOR TO OBTAINING A BUILDING PERMIT, THE CONTRACTOR IS REQUIRED TO OBTAIN PWD STORMWATER MANAGEMENT APPROVAL, AND SEWAGE FACILITIES PLANNING (ACT 537) APPROVAL.
13.

ANY CHANGE TO, OR DEVIATION FROM, THE FINAL APPROVED DESIGN PLANS DURING CONSTRUCTION MUST BE APPROVED BY THE ASSIGNED PWD-CONSTRUCTION DIVISION ENGINEER.
14.

PLACE AND COMPACT BACKFILL IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR EXCAVATION, REFILLING, GRADING, LANDSCAPING AND REPAVING.
15.

DISINFECT ALL NEW WATER MAINS IN ACCORDANCE WITH W-22 AND AWWA C651.
16.

TEST NEW WATER MAINS IN ACCORDANCE WITH AWWA C600, SECTION 4. TAKE ALL NECESSARY PRECAUTIONS TO PREVENT TEST PRESSURE FROM ENTERING ADJOINING DISTRIBUTION SYSTEM. TEST DISTRIBUTION MAINS AT 150 PSI FOR AT LEAST ONE HOUR. HYDROSTATIC TEST SHALL BE COMPLETED WITH NO MEASURABLE DROP IN PRESSURE. UPON A DROP IN PRESSURE, DETERMINE THE AMOUNT OF LEAKAGE BY MEASURING THE ADDITIONAL QUANTITY OF WATER THAT IS PUMPED INTO THE MAIN TO MAINTAIN PRESSURE WITHIN 5 PSI OF THE SPECIFIED TEST PRESSURE. WHERE THE MEASURED LEAKAGE EXCEEDS THE ESTABLISHED ALLOWABLE AMOUNTS THEN THE CONTRACTOR SHALL, AT HIS OWN EXPENSE, LOCATE AND MAKE APPROVED REPAIRS AS NECESSARY UNTIL THE LEAKAGE IS WITHIN THE SPECIFIED ALLOWANCE. REPAIR ALL VISIBLE LEAKS, REGARDLESS OF THE AMOUNT OF LEAKAGE.
17.

THE ABANDONED WATER MAIN VALVE FRAMES AND FIRE HYDRANTS SHALL BE REMOVED AND DELIVERED INTACT TO PHILADELPHIA WATER DEPARTMENT AT 29TH & CAMBRIA STREETS.
18.

FIRE HYDRANTS SHALL NOT BE CONSTRUCTED OR RELOCATED UNTIL SUCH EQUIPMENT AND LOCATIONS HAVE BEEN APPROVED BY THE WATER DEPARTMENT CONSTRUCTION DIVISION IN THE FIELD. THE CONSTRUCTION OR RELOCATION OF SUCH FACILITIES WITHOUT THE ABOVE APPROVAL WILL BE DONE AT THE RISK OF THE CONTRACTOR.
19.

ALL ACTIVE SERVICES ARE TO BE RECONNECTED TO THE NEW MAIN IN ACCORDANCE WITH THE PHILADELPHIA PLUMBING CODE.
20.

“D” PERMITS ARE REQUIRED FOR ALL EXISTING CONNECTIONS THAT ARE TO BE ABANDONED. PLEASE HAVE THE CONSULTANT CONTACT L&I WATER PERMIT ISSUANCE UNIT AT TEL. NO. (215) 686-2577/78.
21.

THE CONTRACTOR MUST PROVIDE AT MINIMUM TWO (2) WEEK’S NOTICE PRIOR TO PERFORMING ANY WORK NEAR A PWD TRANSMISSION MAIN. ANY WORK NEAR THE PWD WATER TRANSMISSION SYSTEM REQUIRES THAT A TRANSMISSION MAIN SHUTDOWN REQUEST FORM BE SUBMITTED TO LCSHUTDOWN@PHILA.GOV, AND THE WORK MUST BE COORDINATED WITH THE LOAD CONTROL OPERATIONS ENGINEER.
22.

EQUIPMENT USED IN CONSTRUCTION SHALL BE OF SUCH WEIGHT, SIZE AND CAPACITY TO EFFICIENTLY WORK WITHOUT CAUSING INSTABILITY OR DISPLACEMENT TO THE WATER MAIN. EXISTING CAST IRON WATER MAINS ARE PARTICULARLY SUSCEPTIBLE TO THE NEGATIVE IMPACTS OF ADJACENT CONSTRUCTION WORK. NO STORAGE OF MATERIALS OR SPOILS ARE TO BE STORED OVER THE WATER MAINS.
23.

THE FOLLOWING NOTES MAY BE REQUIRED. IF A HPFS HYDRANT IS TO BE ABANDONED: THE CONTRACTOR SHALL REMOVE THE HIGH PRESSURE FIRE HYDRANT, AND ABANDON THE HIGH PRESSURE FIRE SYSTEM HYDRANT VALVE MANHOLE AS SHOWN ON THE CONTRACT DRAWINGS. EXCAVATE AND EXPOSE THE ENTIRE HYDRANT ABOVE AND BELOW GRADE. CLOSE THE FIRE HYDRANT VALVE. SAWCUT THE STANDPIPE AND STEM 2 FEET BELOW STREET GRADE. TIE OFF THE STEM IN ITS CLOSED POSITION TO PREVENT THE CONCRETE GETTING INTO THE ELBOW. FILL THE REMAINING PORTION OF THE STANDPIPE WITH CONCRETE. THE HYDRANT REMOVED WILL BECOME THE PROPERTY OF THE CONTRACTOR WHO IS RESPONSIBLE FOR ITS DISPOSAL. BACKFILL THE TRENCH WITH SELECT GRANULAR MATERIAL - 2RC UP TO SUBGRADE ELEVATION. COMPACT THE TRENCH, AND RESTORE DISTURBED CONCRETE CURBING AND FOOTWAY PAVING.
24.

THE CONTRACTOR MUST PROVIDE AS-BUILT RECORD DRAWINGS PER PHILADELPHIA WATER DEPARTMENT WATER MAIN INFRASTRUCTURE AS-BUILT SURVEY & DRAFTING MANUAL REQUIREMENTS.

SEWER NOTES:

1.

ALL WORK TO BE DONE IN ACCORDANCE WITH THE CITY OF PHILADELPHIA WATER DEPARTMENT “STANDARD DETAILS & STANDARD SPECIFICATIONS FOR SEWERS”.
2.

THE CONTRACTOR PERFORMING THE WATER & SEWER INSTALLATION MUST BE PREQUALIFIED BY THE PHILADELPHIA WATER DEPARTMENT (PWD). CONTACT MR.VAHE HOVSEPIAN OF THE PROJECT MANAGEMENT UNIT AT VAHE.HOVSEPIAN@PHILA.GOV.
3.

THE APPROVED WORK MUST BE DONE IN THE PRESENCE OF A PWD INSPECTOR.
4.

THE CONTRACTOR PERFORMING THIS WORK IS TO NOTIFY THE PWD CONSTRUCTION DIVISION, 1101 MARKET STREET, 2ND FLOOR, PHONE (215) 685-6345, AT LEAST 7 DAYS IN ADVANCE FOR ASSIGNMENT OF AN INSPECTOR TO THE JOB.
5.

THE CONTRACTOR MUST PROVIDE OFFICE SPACE FOR USE BY THE PWD INSPECTOR DURING CONSTRUCTION.
6.

APPROVAL OF THESE PLANS BY THE WATER DEPARTMENT IS STRICTLY LIMITED TO THE DESIGN OF SEWERS 15-INCHES IN DIAMETER AND LARGER SHOWN WITHIN THE LIMITS OF THE CITY OF PHILADELPHIA PUBLIC RIGHT OF WAY. ADDITIONAL APPROVALS AND PERMITS ARE REQUIRED FOR ALL DRAINAGE CONNECTIONS TO THE EXISTING PWD FACILITIES.
7.

CONTACT PWD-WATER TRANSPORT RECORDS, 1101 MARKET STREET, 2ND FLOOR, WTR@PHILA.GOV, FOR ADDITIONAL APPROVALS AND PERMITS REQUIRED FOR ALL SEWER CONNECTIONS TO THE EXISTING AND/OR PROPOSED PWD FACILITIES.
8.

THE ELEVATION OF THE EXISTING SEWER AT THE CONNECTION POINT MUST BE FIELD-CHECKED BY THE CONTRACTOR IN THE PRESENCE OF A PWD INSPECTOR PRIOR TO CONSTRUCTING THE NEW SEWER.
9.

FIELD-FABRICATED WYE BRANCHES AND BENDS ARE NOT PERMITTED.
10.

A LIST OF ALL MATERIALS AND SUPPLIERS MUST BE SUBMITTED TO THE PWD CONSTRUCTION BRANCH FOR APPROVAL.
11.

THE CONTRACTOR OR ENGINEER IS RESPONSIBLE FOR OBTAINING ALL ADDITIONAL PERMITS AND APPROVALS FROM ALL AFFECTED CITY AGENCIES AND UTILITIES.
12.

PRIOR TO OBTAINING A BUILDING PERMIT, THE CONTRACTOR IS REQUIRED TO OBTAIN PWD STORMWATER MANAGEMENT APPROVAL, AND SEWAGE FACILITIES PLANNING (ACT 537) APPROVAL.
13.

ANY CHANGE TO, OR DEVIATION FROM, THE FINAL APPROVED DESIGN PLANS DURING CONSTRUCTION MUST BE APPROVED BY THE ASSIGNED PWD-CONSTRUCTION DIVISION ENGINEER AND BY THE PWD-DESIGN BRANCH PROJECT ENGINEER.
14.

PWD RESERVES THE RIGHT TO REQUEST ADDITIONAL BORINGS DURING CONSTRUCTION SHOULD THE SOIL EXCAVATED IN THAT AREA APPEAR TO BE UNSUITABLE.
15.

ALL SEWER WORK MUST BE PERFORMED IN TRENCHES. OPEN CUT OR BENCHING WILL NOT BE PERMITTED. OAK TIMBER SHORING MUST BE USED TO SUPPORT ADJACENT STRUCTURES AND UNDERGROUND UTILITIES, AND IN ACCORDANCE WITH OSHA STANDARDS CFR29, PART 1926-650 SUBPART – P EXCAVATIONS. ALTERNATIVE SHORING METHODS MUST BE APPROVED BY PWD-CONSTRUCTION DIVISION ENGINEER.
16.

ANY TRENCH WHERE THE CUT IS DEEPER THAN 10 FEET WILL REQUIRE A DETAILED SHORING PLAN PREPARED BY A REGISTERED PROFESSIONAL ENGINEER TO BE SUBMITTED TO PWD FOR APPROVAL BEFORE WORK CAN BEGIN.
17.

PLACE AND COMPACT BACKFILL IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR EXCAVATION, REFILLING, GRADING, LANDSCAPING AND REPAVING.
18.

MAINTAIN AND PROTECT EXISTING INLETS. SHOULD THE EXISTING INLETS BE IN ANY WAY DAMAGED DURING CONSTRUCTION, THESE SHOULD BE REPAIRED TO THE SATISFACTION OF THE PWD INSPECTOR OR REPLACED PER PWD STANDARDS.
19.

THE ABANDONED SEWER MANHOLE FRAMES AND COVERS, INLET GRATES, AND TRAPS SHALL BE REMOVED AND DELIVERED INTACT TO THE PWD SEWER MAINTENANCE YARD AT FOX STREET AND ABBOTTSFORD AVENUE.
20.

ALL ACTIVE DRAINAGE LATERALS TO BE RECONNECTED TO THE NEW SEWER.
21.

THE ABANDONED INLET LATERAL SHALL BE SEALED AT THE CONNECTION TO THE EXISTING SEWER WITH A DOUBLE RING OF BRICK MASONRY, AND THE INLET VOID BACKFILLED WITH SELECTED EARTH MATERIAL, TAMPED TO GRADE AND PAVED.
22.

THE THICKNESS OF THE EXISTING SEWER PIPE AND THE CHARACTERISTICS AND EXTENT OF THE PIPE CRADLES ARE UNKNOWN.
23.

ALL PIPES 15 INCHES AND LARGER IN DIAMETER TO BE ABANDONED MUST BE FILLED WITH CONTROLLED DENSITY FILL (FLOWABLE FILL – CLASS F FLY ASH SLURRY BACKFILL) WITH A COMPRESSIVE STRENGTH OF 75 PSI MAXIMUM, IN ACCORDANCE WITH THE PENNDOT SPECIFICATION PUBLICATION 408, 2001 OR LATEST REVISION FOR FLOWABLE BACKFILL, NON-STRUCTURAL.
24.

SEAL ENDS OF SEWERS TO BE ABANDONED WITH VITRIFIED PIPE STOPPERS AND OPEN ENDS OF STORM WATER CONDUITS WITH A 9” THICK BRICK BULKHEAD.
25.

ALL PRIVATE INLETS DIRECTLY CONNECTED TO THE SEWER MUST BE TRAPPED.
26.

WHEN MAKING CONNECTION TO EXISTING INLET LATERAL, CONTRACTOR IS TO VERIFY CONDITION OF EXISTING LATERAL PRIOR TO MAKING CONNECTION. IF EXISTING LATERAL IS FOUND TO BE IN POOR CONDITION, THE CONTRACTOR MUST CONSTRUCT A NEW 15" LATERAL PIPE TO THE EXISTING SEWER, AS APPROVED BY THE PWD INSPECTOR.
27.

THE CONTRACTOR MUST PROVIDE AS-BUILT RECORD DRAWINGS PER PHILADELPHIA WATER DEPARTMENT SEWER MAIN INFRASTRUCTURE AS-BUILT SURVEY & DRAFTING MANUAL REQUIREMENTS.

GREEN STORMWATER INFRASTRUCTURE NOTES:

1.

THE CONTRACTOR PERFORMING THE GREEN STORMWATER INFRASTRUCTURE INSTALLATION MUST BE PREQUALIFIED BY THE PHILADELPHIA WATER DEPARTMENT (PWD). CONTACT MR. MATTHEW FULMER OF THE PROJECTS MANAGEMENT UNIT AT MATTHEW.FULMER@PHILA.GOV
2.

THE APPROVED WORK MUST BE DONE IN THE PRESENCE OF A PWD INSPECTOR.
3.

THE CONTRACTOR PERFORMING THIS WORK IS TO NOTIFY THE PWD CONSTRUCTION DIVISION, 1101 MARKET STREET, 2ND FLOOR, PHONE (215) 685-6345, AT LEAST 7 DAYS IN ADVANCE FOR ASSIGNMENT OF AN INSPECTOR TO THE JOB.
4.

THE CONTRACTOR MUST PROVIDE OFFICE SPACE FOR USE BY THE PWD INSPECTOR DURING CONSTRUCTION.
5.

APPROVAL OF THESE PLANS BY THE WATER DEPARTMENT IS STRICTLY LIMITED TO THE DESIGN OF GREEN STORMWATER INFRASTRUCTURE SHOWN WITHIN THE LIMITS OF THE CITY OF PHILADELPHIA PUBLIC RIGHT OF WAY.
6.

CONTACT PWD-WATER TRANSPORT RECORDS, 1101 MARKET STREET, 2ND FLOOR, WTR@PHILA.GOV, FOR ADDITIONAL APPROVALS AND PERMITS REQUIRED FOR ALL SEWER CONNECTIONS TO EXISTING AND/OR PROPOSED PWD FACILITIES.
7.

FIELD-FABRICATED WYE BRANCHES AND BENDS ARE NOT PERMITTED.
8.

A LIST OF ALL MATERIALS AND SUPPLIERS MUST BE SUBMITTED TO THE PWD CONSTRUCTION BRANCH FOR APPROVAL.
9.

THE CONTRACTOR OR ENGINEER IS RESPONSIBLE FOR OBTAINING ALL ADDITIONAL PERMITS AND APPROVALS FROM ALL AFFECTED CITY AGENCIES AND UTILITIES.
10.

PRIOR TO OBTAINING A BUILDING PERMIT, THE CONTRACTOR IS REQUIRED TO OBTAIN PWD STORMWATER MANAGEMENT APPROVAL, AND SEWAGE FACILITIES PLANNING (ACT 537) APPROVAL.
11.

ANY CHANGE TO, OR DEVIATION FROM, THE FINAL APPROVED DESIGN PLANS DURING CONSTRUCTION MUST BE APPROVED BY THE ASSIGNED PWD-CONSTRUCTION DIVISION ENGINEER AND BY THE PWD DESIGN PROJECT ENGINEER.
12.

PWD RESERVES THE RIGHT TO REQUEST ADDITIONAL BORINGS DURING CONSTRUCTION SHOULD THE SOIL EXCAVATED IN THAT AREA APPEAR TO BE UNSUITABLE.
13.

ANY TRENCH WHERE THE CUT IS DEEPER THAN 10 FEET WILL REQUIRE A DETAILED SHORING PLAN PREPARED BY A REGISTERED PROFESSIONAL ENGINEER TO BE SUBMITTED TO PWD FOR APPROVAL BEFORE WORK CAN BEGIN.
14.

PLACE AND COMPACT BACKFILL IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR EXCAVATION, REFILLING, GRADING, LANDSCAPING AND REPAVING.
15.

ALL SIDEWALK AND CURBING TO BE REPLACED IN KIND ALONG FULL LIMITS OF CONSTRUCTION TO NEXT EXISTING JOINT OR AS DIRECTED BY PWD.
16.

MAINTAIN AND PROTECT EXISTING INLETS. SHOULD THE EXISTING INLETS BE IN ANY WAY DAMAGED DURING CONSTRUCTION, THESE SHOULD BE REPAIRED TO THE SATISFACTION OF THE PWD INSPECTOR OR REPLACED PER PWD STANDARDS, MANUAL REQUIREMENTS.
17.

CONTRACTOR MUST COMPLY WITH EROSION AND SEDIMENT CONTROL REQUIREMENTS DURING CONSTRUCTION. SEE PWD REGULATION 501.3 AND 600.4, PHILA CODE S. 13-603, AND 25 PA CODE CHAPTER 102.
18.

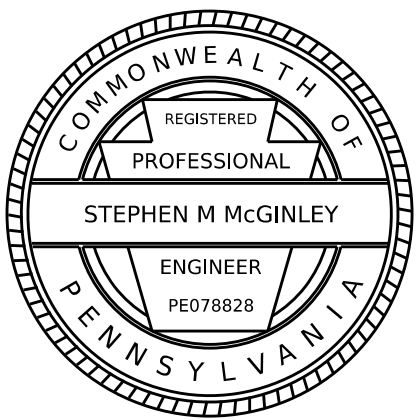
SUFFICIENT EROSION AND SEDIMENTATION CONTROL MEASURES WILL BE INSTALLED AND MAINTAINED BY THE CONTRACTOR AS TO PREVENT STANDING WATER OR SEDIMENTATION OF STORMWATER SYSTEMS. GREEN STORMWATER INFRASTRUCTURE SYSTEMS DETERMINED BY PWD TO BE INADEQUATELY PROTECTED AND THEREBY COMPROMISED WILL BE REPLACED TO THE EXTENT REQUIRED BY PWD (UP TO AND INCLUDING FULL REPLACEMENT) AT NO ADDITIONAL COST TO PWD.
19.

CONTRACTOR IS REQUIRED TO UNDERTAKE NECESSARY MEASURES TO PREVENT SEDIMENT FROM LEAVING THE WORK SITE, TO PREVENT EROSION CONDITIONS, AND TO SUPPRESS DUST ON THE SITE AND SURROUNDING AREAS. CONTRACTOR MUST COVER AND SURROUND STOCKPILES WITH EROSION CONTROL MEASURES TO ENSURE SEDIMENT DOES NOT MIGRATE INTO THE PUBLIC ROW OR ENTER THE PUBLIC SEWER. F CONTRACTOR IS HAND DIGGING OR EXCAVATING, CONTRACTOR MUST SWEEP WORK SITE AT THE END OF EACH WORK DAY. THE CITY MAY REQUIRE THE CONTRACTOR / OWNER TO CLEAN CITY-OWNED INLETS AND SYSTEMS AFFECTED BY NONCOMPLIANT OR FAILED E&S CONTROLS.
20.

CONTRACTOR MUST INSTALL INLET PROTECTION MEASURES AT ALL INLETS ADJACENT TO OR WITHIN THE WORK AREA. INLET PROTECTION MEASURES MUST BE INSPECTED DAILY TO ENSURE PROPER PLACEMENT, AND MAINTAINED, POSITIONED OR REPLACED AS NEEDED TO ENSURE PROPER FUNCTION AND TO PREVENT FLOODING. REFER TO PWD GUIDANCE FOR APPROPRIATE MATERIALS AND PROTECTION METHODS FOR OPEN-MOUTH INLETS, HIGHWAY GRATE INLETS, TRENCH DRAINS AND CURB-CUT INLETS.

DISTRICT	COUNTY	ROUTE	SECTION	SHEET	
6-0	PHILADELPHIA	0000	CPD	4 OF 29	
CITY OF PHILADELPHIA					
REV NO	REVISIONS		DATE	BY	APPD

COLUMBUS BLVD/PACKER AVE/DELAWARE AVE INTERS. IMP.
ECMS #81304 PENNDOT LOG #P4361-03 CITY LOG # 81304-01



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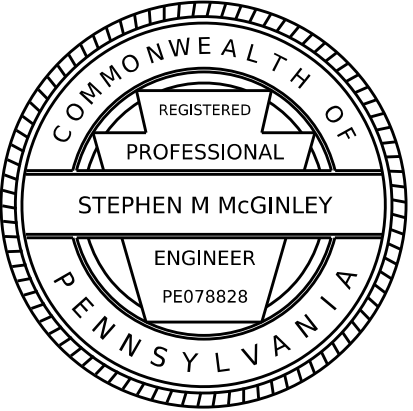
PHILADELPHIA WATER DEPARTMENT (PWD) STANDARD NOTES (CONT.)

GREEN STORMWATER INFRASTRUCTURE NOTES (CONTINUED):

21. CONTRACTOR MUST OBTAIN PERMISSION FROM THE STREETS DEPARTMENT TO STORE ANY MATERIALS ON THE STREET.
22. ORIFICE SHOULD NOT BE DRILLED PRIOR TO AUTHORIZATION BY PWD. PWD WILL REVIEW THE RESULTS OF THE DOUBLE RING INFILTRMETER TESTS CONDUCTED AFTER SMP EXCAVATION AND WILL CONFIRM ORIFICE DIMENSIONS.
23. EROSION CONTROL MATTING SHALL BE PLACED OVER ALL SOIL SURFACES NOT STABILIZED BY PLANTING.
24. THE CONTRACTOR MUST PROVIDE AS-BUILT RECORD DRAWINGS PER PHILADELPHIA WATER DEPARTMENT GREEN STORMWATER INFRASTRUCTURE AS-BUILT SURVEY & DRAFTING MANUAL REQUIREMENTS.

DISTRICT	COUNTY	ROUTE	SECTION	SHEET	
6-0	PHILADELPHIA	0000	CPD	5 OF 29	
CITY OF PHILADELPHIA					
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COLUMBUS BLVD/PACKER AVE/DELAWARE AVE INTERS. IMP.
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DISTRICT	COUNTY	ROUTE	SECTION	SHEET	
6-0	PHILADELPHIA	0000	CPD	6 OF 29	
CITY OF PHILADELPHIA					
REV NO	REVISIONS		DATE	BY	APPD

COLUMBUS BLVD/PACKER AVE/DELAWARE AVE INTERS. IMP.
ECMS #81304 PENNDOT LOG #P4361-03 CITY LOG # 81304-01

SUMMARY OF PROJECT COORDINATES

VERTICAL CONTROL BASED ON NORTH AMERICAN VERTICAL DATUM 1988 (NAVD 88)
HORIZONTAL CONTROL BASED ON PENNSYLVANIA STATE PLANE COORDINATE SYSTEM (SPCS 83) (SOUTH ZONE)

BASELINE	STATION	POINT	COORDINATES		BEARING
			NORTHING	EASTING	
S CHRISTOPHER COLUMBUS BLVD CONSTR 8	200+00.00	POT/PC	218481.3738	2700443.8160	N32°36'46"E
	203+06.63	PI	218739.6563	2700609.0766	
	206+04.42	PT	219042.6575	2700656.0997	N08°49'17"E
	213+00.75	PI	219730.7482	2700762.8852	
	234+84.10	POT	221893.2772	2701063.6827	N07°55'08"E

BASELINE	STATION	POINT	COORDINATES		BEARING
			NORTHING	EASTING	
S DELAWARE AVE CONSTR 8	100+00.00	POT	218051.2703	2700673.9950	N07°49'23"E
	118+02.05	PI	219836.5500	2700919.2770	
	119+43.89	PI	219974.5359	2700952.0997	N13°22'49"E
	138+60.02	POT	221872.9389	2701212.1529	N07°48'00"E

BASELINE	STATION	POINT	COORDINATES		BEARING
			NORTHING	EASTING	
PACKER AVE CONSTR 8	300+00.00	POT	219900.4341	2701125.7245	N82°10'39"W
	304+00.00	POT	219954.8764	2700729.4467	

- NOTE:
- FOUR DECIMAL PLACE COORDINATES ARE FOR COMPUTATIONAL PURPOSES ONLY.
 - DO NOT IMPLY PRECISION BEYOND TWO DECIMAL PLACES.
 - COORDINATES ESTABLISHED FROM COORDINATE GEOMETRY.

SUMMARY OF PROJECT CONTROL POINT COORDINATES

VERTICAL CONTROL BASED ON NORTH AMERICAN VERTICAL DATUM 1988 (NAVD 88) (GEOID12B)
HORIZONTAL CONTROL BASED ON PENNSYLVANIA STATE PLANE COORDINATE SYSTEM (SPCS 83) (SOUTH ZONE)

RTE	CONTROL POINT	STATION	OFFSET	COORDINATES		ELEVATION
				NORTH	EAST	
S DELAWARE AVE CONSTR 8	Δ CP1	120+88.83	35.80'LT	220122.9920	2700936.3040	8.20
	Δ CP2	118+05.89	22.52'LT	219845.4980	2700898.2590	8.16
S CHRISTOPHER COLUMBUS BLVD CONSTR 8	Δ CP3	212+55.35	0.52'LT	219685.9720	2700755.4140	9.64
	Δ CP4	207+94.17	0.33'LT	219230.2120	2700684.8740	9.63

EARTHWORK SUMMARY OF ENTIRE PROJECT

THE INFORMATION ON ESTIMATED AMOUNT 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*	CUBIC YARDS OF SELECT BORROW EXCAVATION, STRUCTURAL BACKFILL***	CUBIC YARDS OF SELECTED BORROW EXCAVATION COARSE AGGREGATE, NO. 8	CUBIC YARDS OF SELECTED BORROW EXCAVATION ROCK, CLASS R-3	CUBIC YARDS OF SELECTED BORROW EXCAVATION ROCK, CLASS R-6	CUBIC YARDS OF WASTE	
CLASS 1	CLASS 1B	CLASS 2	CLASS 3**	CLASS 4							
186	1511	--	--	--	67	--	--	--	--	1697	

- * INCLUDES ALL BORROW ITEMS
** -- CY PART OF LUMP SUM STRUCTURE ITEM
*** -- CY PART OF LUMP SUM STRUCTURE ITEM

LIST OF STATION EQUALITIES

S. CHRISTOPHER COLUMBUS BLVD STA 215+18.24 = PACKER AVE STA 303+36.00
S. DELAWARE AVE STA 118+93.87 = PACKER AVE STA 301+86.94

TABULATION OF OVERALL LENGTH

S. DELAWARE AVENUE
STA 112+84.92 TO STA 138+08.85 = 2523.93 LF = 0.478 MI

S. CHRISTOPER COLUMBUS BOULEVARD
STA 211+98.95 TO STA 222+06.58 = 1007.63 LF = 0.191 MI

PACKER AVENUE
STA 300+91.61 TO STA 303+91.61 = 300.00 LF = 0.057 MI

TOTAL = 3831.56 LF = 0.726 MI

TABULATION OF CONSTRUCTION LENGTH

S. DELAWARE AVENUE
STA 113+34.92 TO STA 137+58.85 = 2423.93 LF = 0.459 MI

S. CHRISTOPER COLUMBUS BOULEVARD
STA 212+47.95 TO STA 221+56.58 = 908.63 LF = 0.172 MI

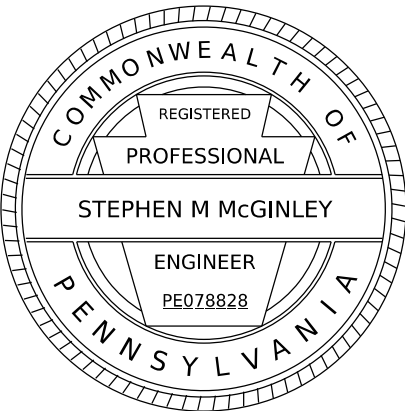
PACKER AVENUE
STA 301+41.61 TO STA 303+73.30 = 231.69 LF = 0.044 MI

GRAND TOTAL = 3564.25 LF = 0.675 MI

DRAINAGE SCHEDULE

IDENTIFIER	STATION	OFFSET	DESCRIPTION	TG ELEV.	INV. IN	INV. OUT
I-1	214+36	32.89' RT	OPEN MOUTH GRATE INLET AND BICYCLE SAFE GRATE	8.23'	--	15" VCP ELEV. = 1.56
I-2	215+80	5.88' RT	REPLACE EXIST. INLET WITH HIGHWAY GRATE INLET. TYPE 5 INLET BOX. REUSE EXIST. LATERAL	8.74'	--	15" VCP ELEV. = 4.06
I-3	215+95	35.86' RT	OPEN MOUTH GRATE INLET AND BICYCLE SAFE GRATE	8.26'	--	15" VCP ELEV. = 4.26
I-4	218+06	35.89' RT	OPEN MOUTH GRATE INLET AND BICYCLE SAFE GRATE	7.42'	--	15" VCP ELEV. = 3.42
I-5	117+87	19.96' LT	HIGHWAY GRATE INLET AND BICYCLE SAFE GRATE	7.88'	--	15" VCP ELEV. = 4.35
I-6	119+39	34.36' LT	HIGHWAY GRATE INLET AND BICYCLE SAFE GRATE	8.48'	--	15" VCP ELEV. = 4.48
I-7	115+27	17.99' LT	OPEN MOUTH INLET	7.69'	--	**
I-8	117+20	17.99' LT	OPEN MOUTH INLET	7.71'	--	**

** CONTRACTOR TO FIELD VERIFY SIZE AND INVERT ELEVATION OF EXIST. LATERAL AT PROPOSED CONNECTIONS PRIOR TO DISTURBANCE

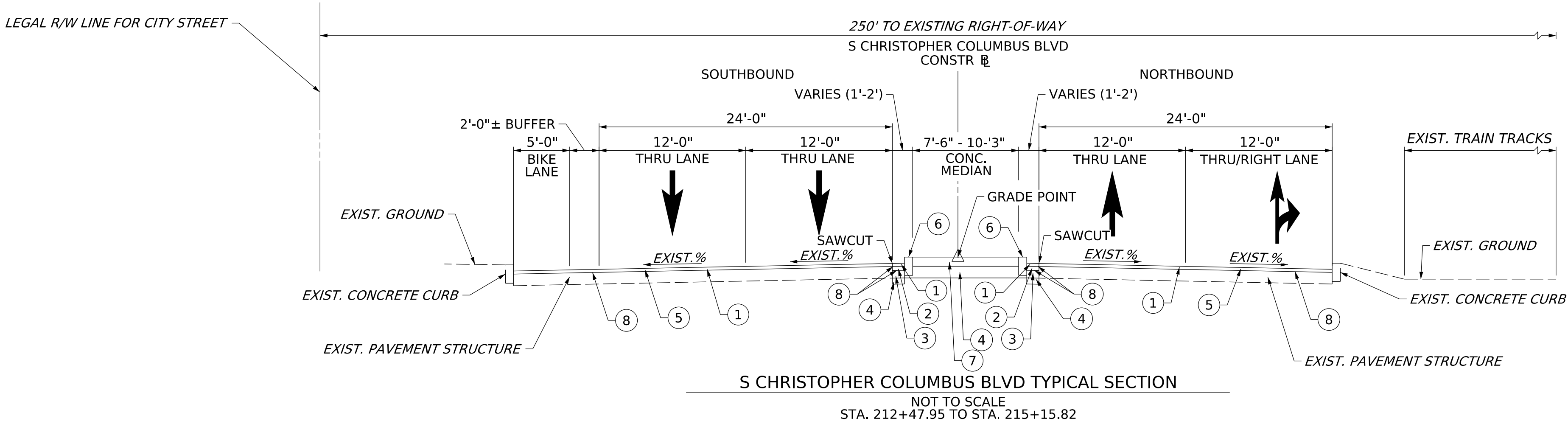


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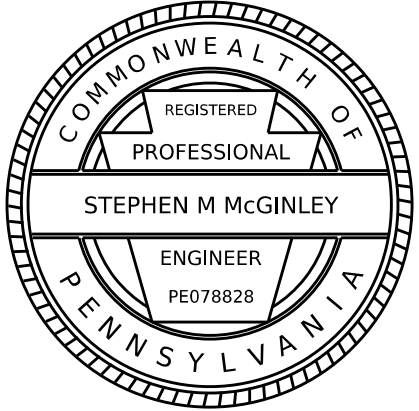
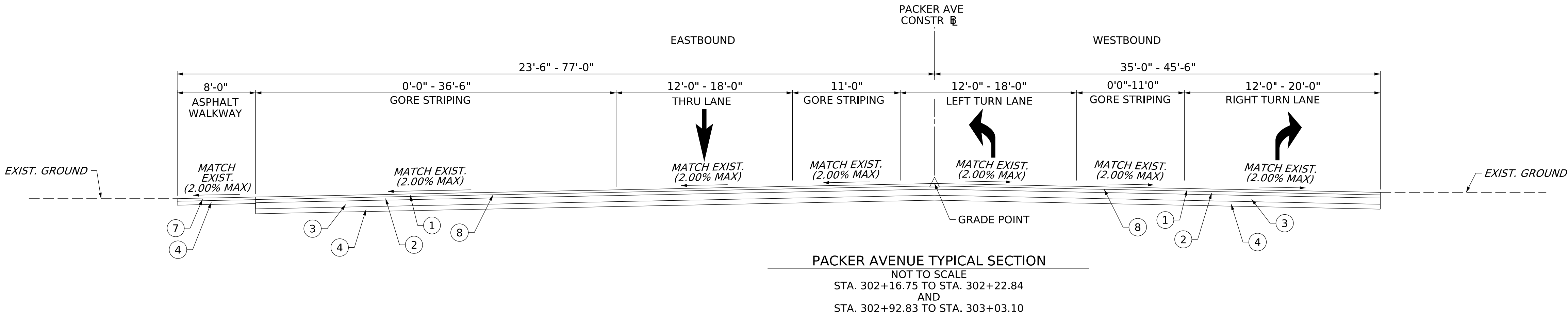
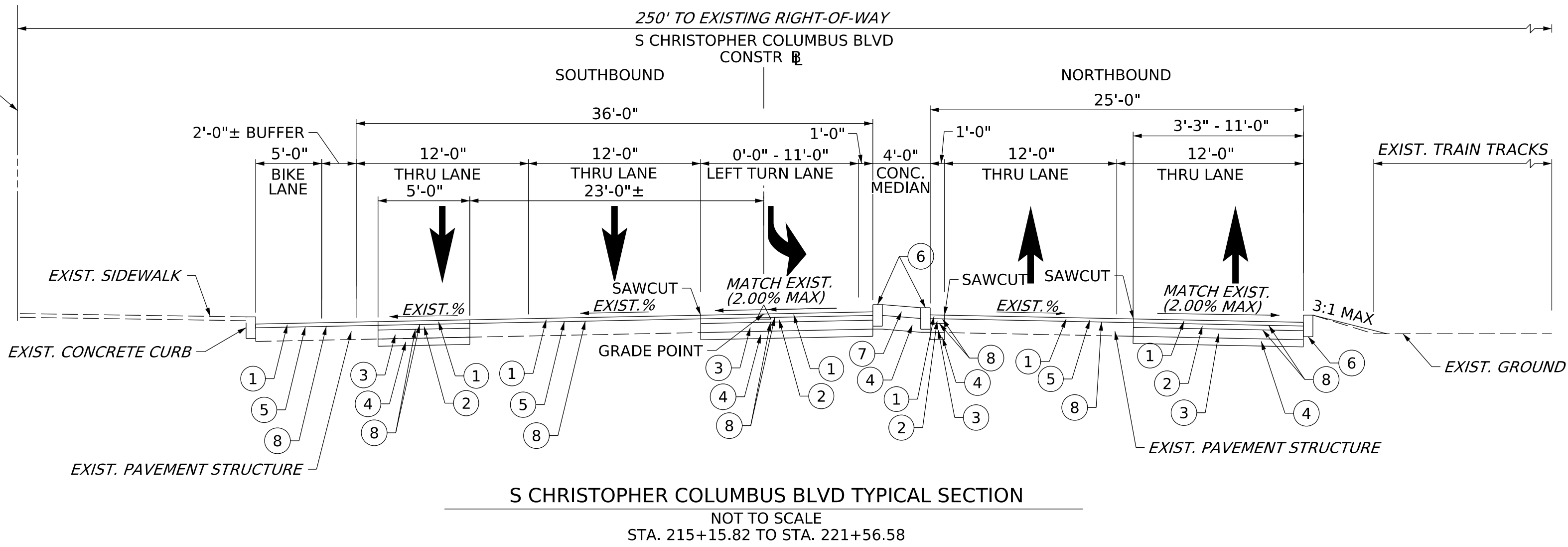
DISTRICT	COUNTY	ROUTE	SECTION	SHEET	
6-0	PHILADELPHIA	0000	CPD	7 OF 29	
CITY OF PHILADELPHIA					
REV NO	REVISIONS		DATE	BY	APPD

COLUMBUS BLVD/PACKER AVE/DELAWARE AVE INTERS. IMP.
ECMS #81304 PENNDOT LOG #P4361-03 CITY LOG # 81304-01



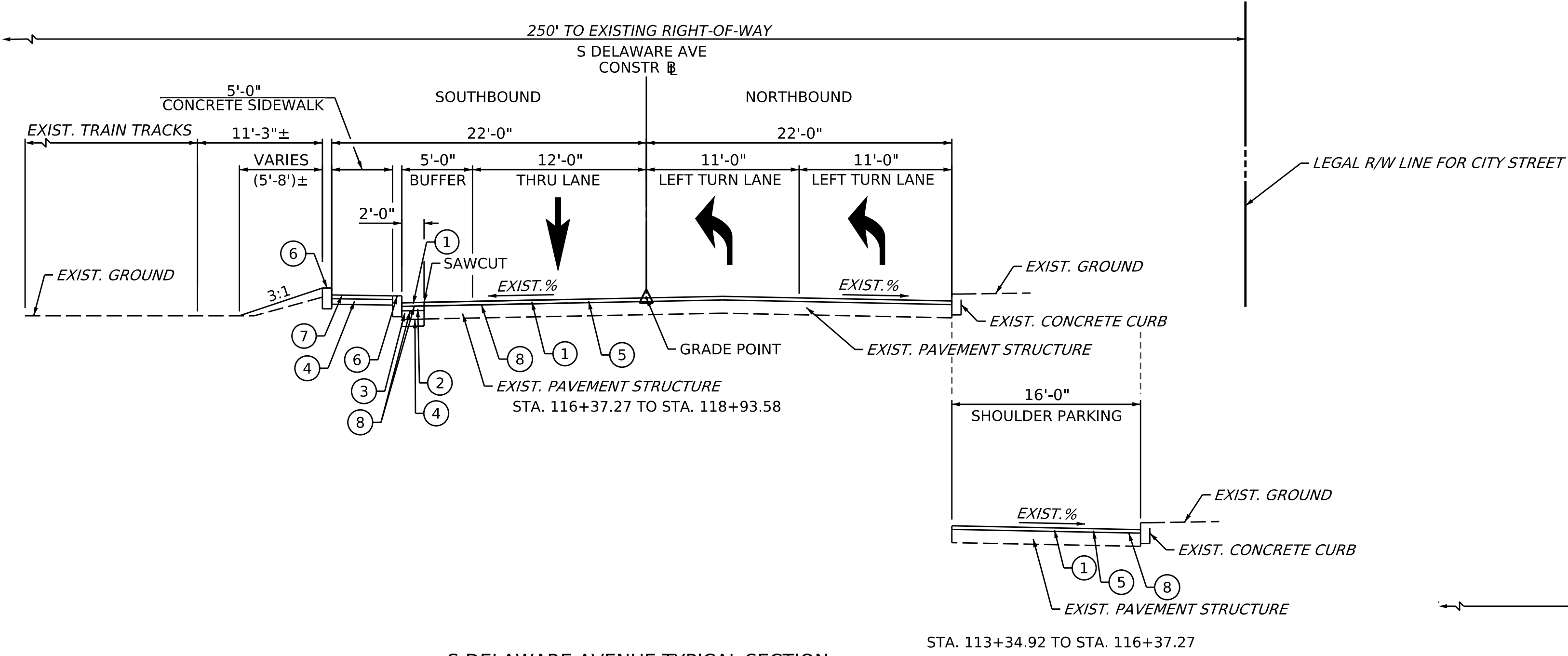
LEGEND

- ① SUPERPAVE ASPHALT MIXTURE DESIGN, WEARING COURSE, PG 64E-22, 10 TO < 30 MILLION ESALS, 9.5 MM MIX, 1.5" DEPTH, SRL-H
- ② SUPERPAVE ASPHALT MIXTURE DESIGN, BINDER COURSE, PG 64E-22, 10 TO < 30 MILLION ESALS, 19.0 MM MIX, 2.5" DEPTH
- ③ H.E.S. PLAIN CEMENT CONCRETE BASE COURSE, 10" DEPTH (MATCH EXISTING)
- ④ STONE SUBBASE ON GEOTEXTILE (NO. 2A), 6" MIN. DEPTH (MATCH ADJACENT LANE ELEVATION)
- ⑤ MILLING OF EXISTING PAVEMENT SURFACE, 1.5" DEPTH, MILLED MATERIAL RETAINED BY CONTRACTOR
- ⑥ PROPOSED 6" PLAIN CEMENT CONCRETE CURB
- ⑦ 4" CONCRETE SIDEWALK/MEDIAN
- ⑧ ASPHALT TACK COAT (NTT/CNTT)

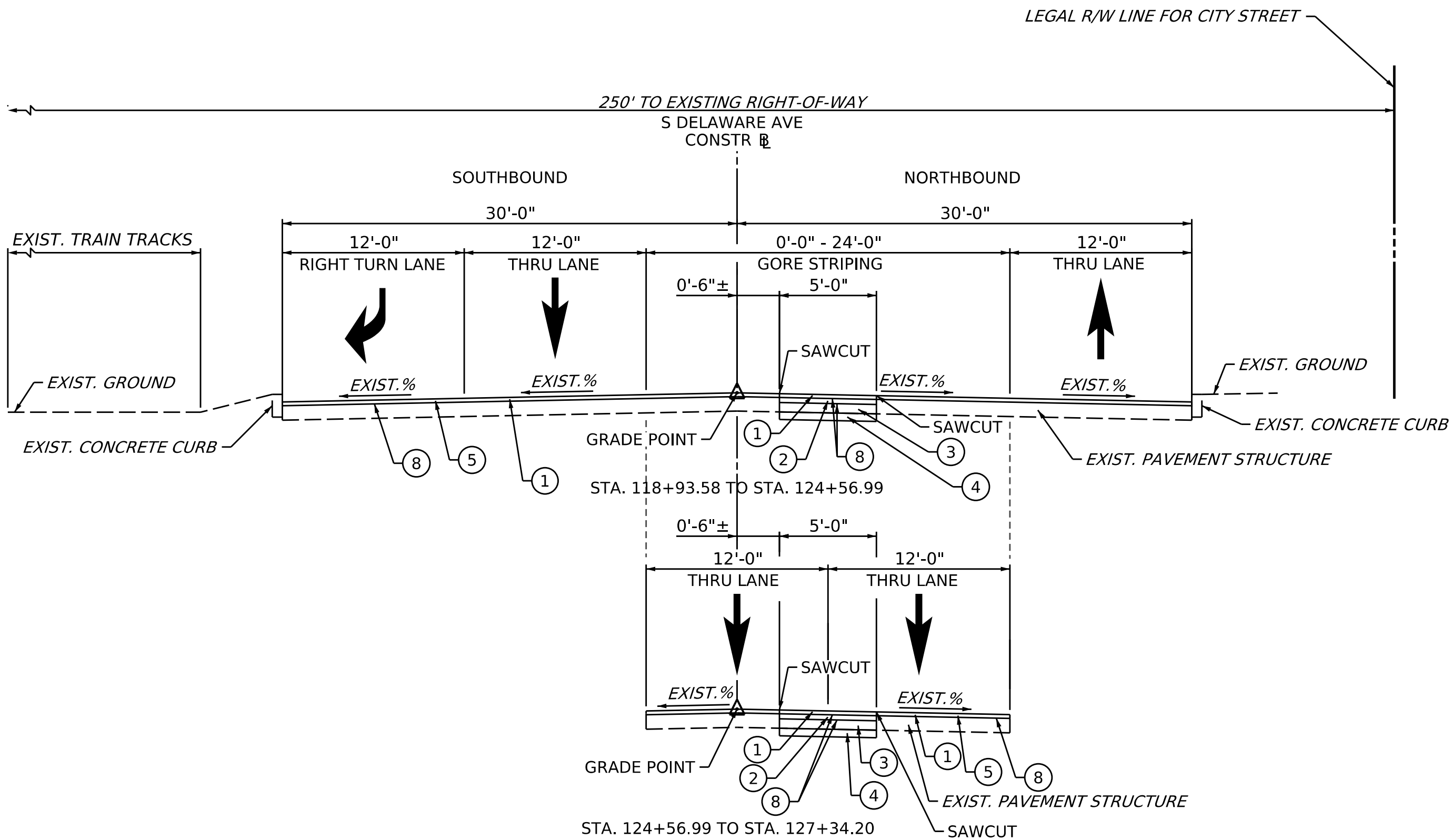


DISTRICT	COUNTY	ROUTE	SECTION	SHEET	
6-0	PHILADELPHIA	0000	CPD	8 OF 29	
CITY OF PHILADELPHIA					
REV NO	REVISIONS		DATE	BY	APPD

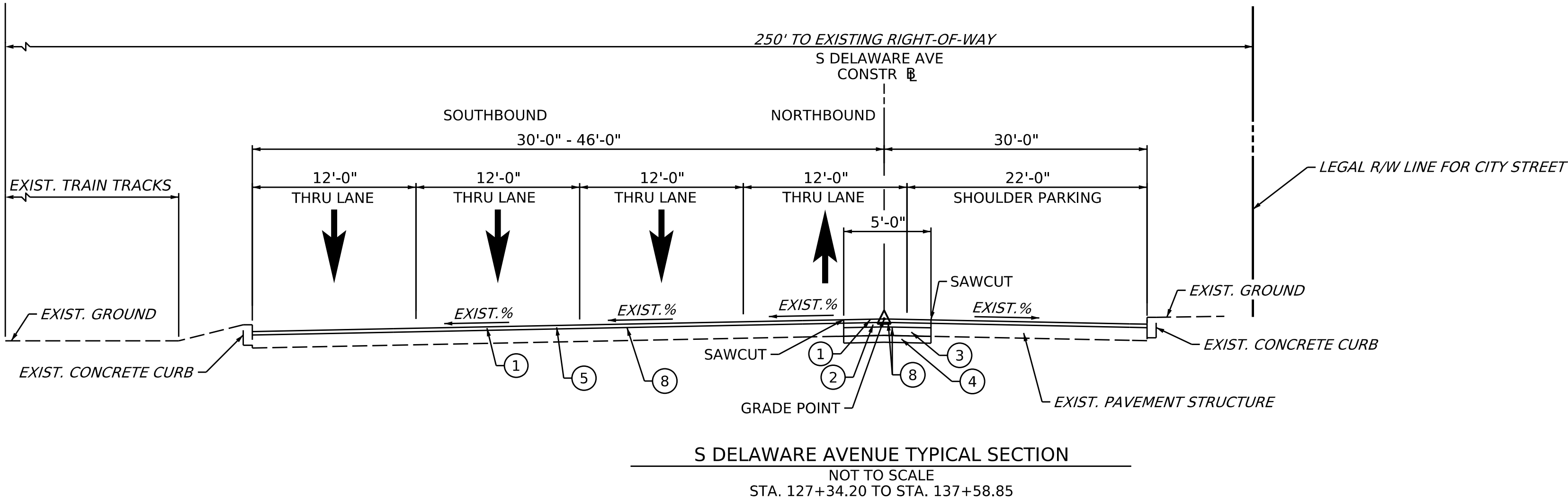
COLUMBUS BLVD/PACKER AVE/DELAWARE AVE INTERS. IMP.
ECMS #81304 PENNDOT LOG #P4361-03 CITY LOG # 81304-01



S DELAWARE AVENUE TYPICAL SECTION
NOT TO SCALE
STA. 113+34.92 TO STA. 118+93.58

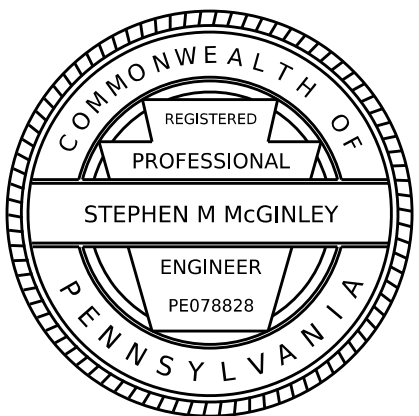


S DELAWARE AVENUE TYPICAL SECTION
NOT TO SCALE
STA. 118+93.58 TO STA. 127+34.20



S DELAWARE AVENUE TYPICAL SECTION
NOT TO SCALE
STA. 127+34.20 TO STA. 137+58.85

- LEGEND**
- ① SUPERPAVE ASPHALT MIXTURE DESIGN, WEARING COURSE, PG 64E-22, 10 TO < 30 MILLION ESALS, 9.5 MM MIX, 1.5" DEPTH, SRL-H
 - ② SUPERPAVE ASPHALT MIXTURE DESIGN, BINDER COURSE, PG 64E-22, 10 TO < 30 MILLION ESALS, 19.0 MM MIX, 2.5" DEPTH
 - ③ H.E.S. PLAIN CEMENT CONCRETE BASE COURSE, 10" DEPTH (MATCH EXISTING)
 - ④ STONE SUBBASE ON GEOTEXTILE (NO. 2A), 6" MIN. DEPTH (MATCH ADJACENT LANE ELEVATION)
 - ⑤ MILLING OF EXISTING PAVEMENT SURFACE, 1.5" DEPTH, MILLED MATERIAL RETAINED BY CONTRACTOR
 - ⑥ PROPOSED 6" PLAIN CEMENT CONCRETE CURB
 - ⑦ 4" CONCRETE SIDEWALK/MEDIAN
 - ⑧ ASPHALT TACK COAT (NTT/CNTT)

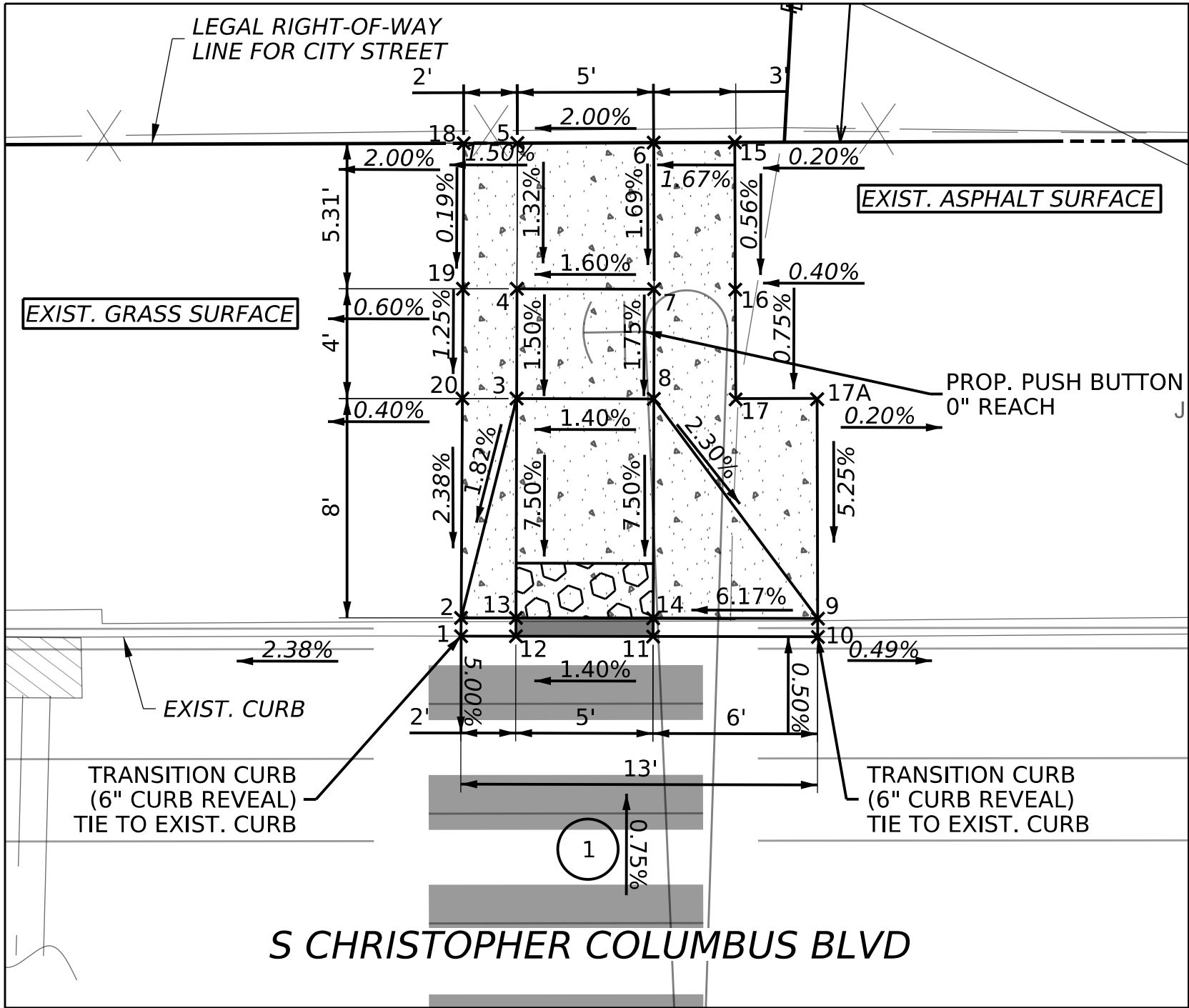


DISTRICT	COUNTY	ROUTE	SECTION	SHEET	
6-0	PHILADELPHIA	0000	CPD	9 OF 29	
CITY OF PHILADELPHIA					
REV NO	REVISIONS		DATE	BY	APPD

COLUMBUS BLVD/PACKER AVE/DELAWARE AVE INTERS. IMP.
ECMS #81304 PENNDOT LOG #P4361-03 CITY LOG # 81304-01

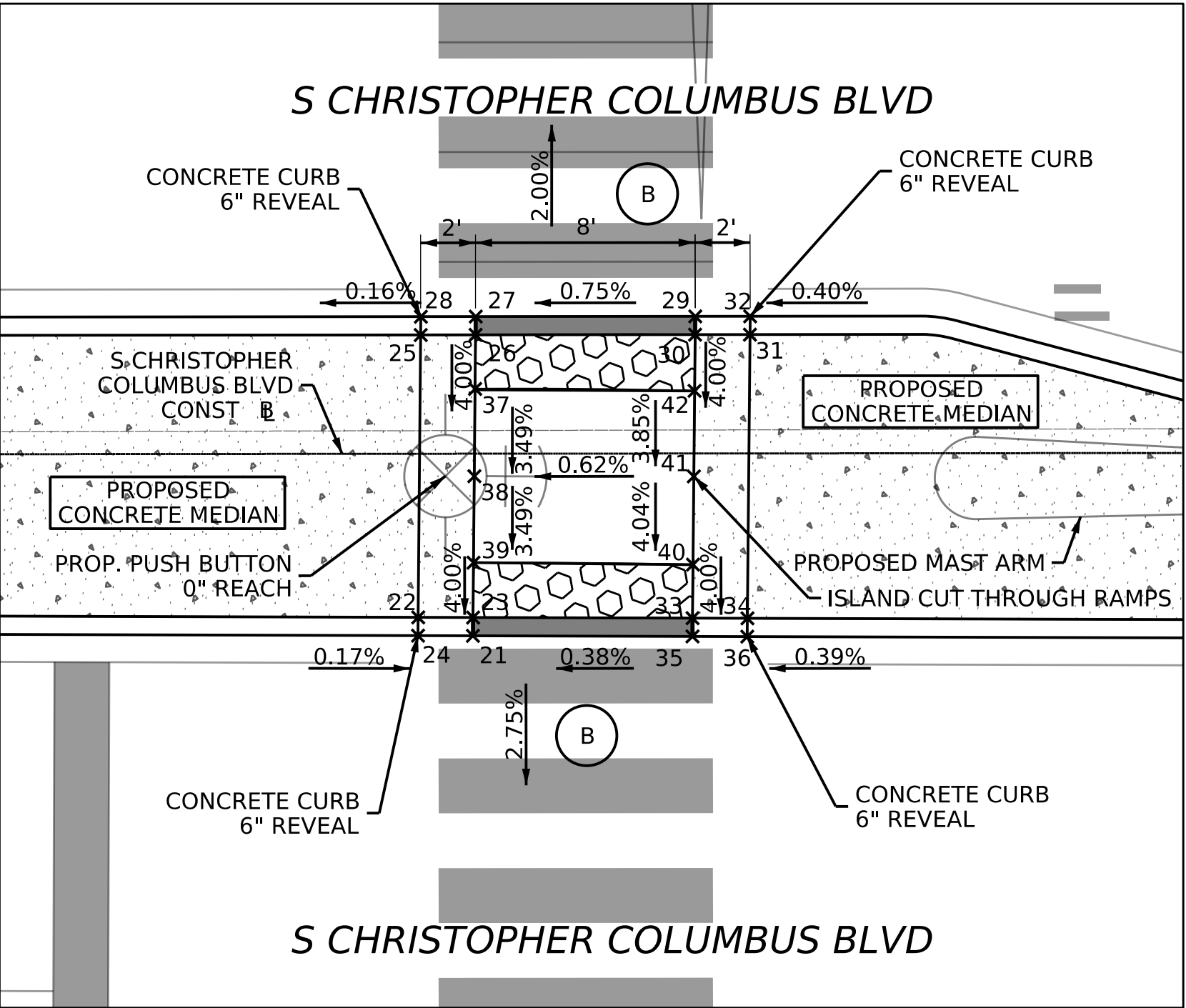
CURB RAMP GENERAL NOTES

- CONSTRUCTION IN ACCORDANCE WITH THE RC-67M STANDARD DETAILS.
- ELEVATIONS AND DIMENSIONS PROVIDED ARE FOR REFERENCE ONLY. FIELD VERIFY ALL RAMP SLOPES AND CONSTRUCT ACCORDING TO RC-67M UNLESS INDICATED TO BE TECHNICALLY INFEASIBLE.
- SOME RAMPS SLOPES HAVE BEEN DESIGNED LESS THAN THE MAXIMUM TO ALLOW FOR ADJUSTMENTS BASED ON ACTUAL FIELD CONDITIONS. CONSTRUCTED RAMP SLOPES MUST NOT EXCEED THE MAXIMUM SLOPES SPECIFIED IN RC-67M, UNLESS INDICATED TO BE TECHNICALLY INFEASIBLE.
- ADJUST ALL MANHOLE, JUNCTION BOX, AND UTILITY VALVE COVERS AS NECESSARY FOR CONSTRUCTION CURB RAMPS.
- CONTRACTOR NOT TO ENCROACH ONTO ADJACENT PROPERTY DURING CONSTRUCTION AT ANYTIME.



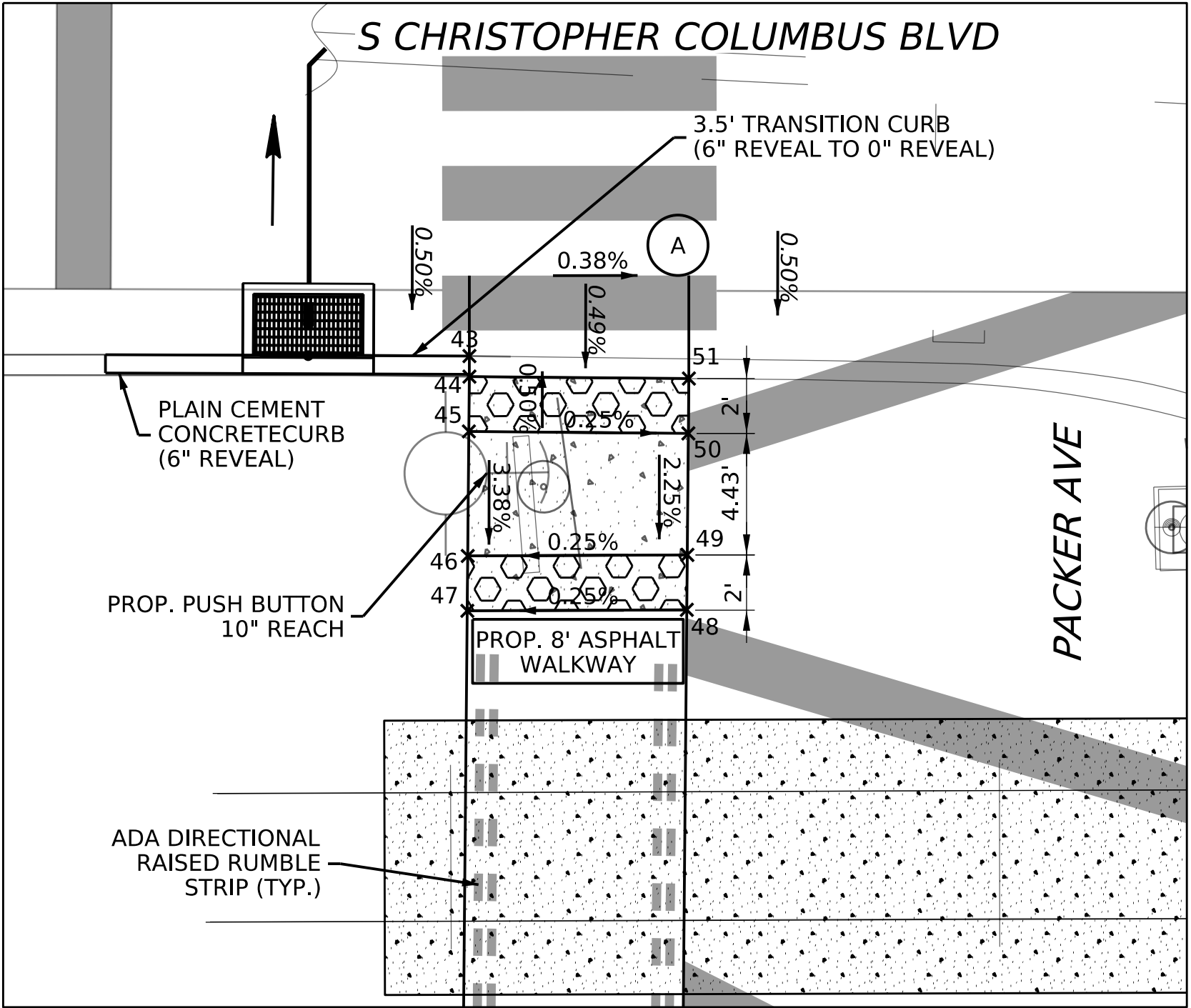
CURB RAMP DETAIL 1

SCALE 1" = 5'



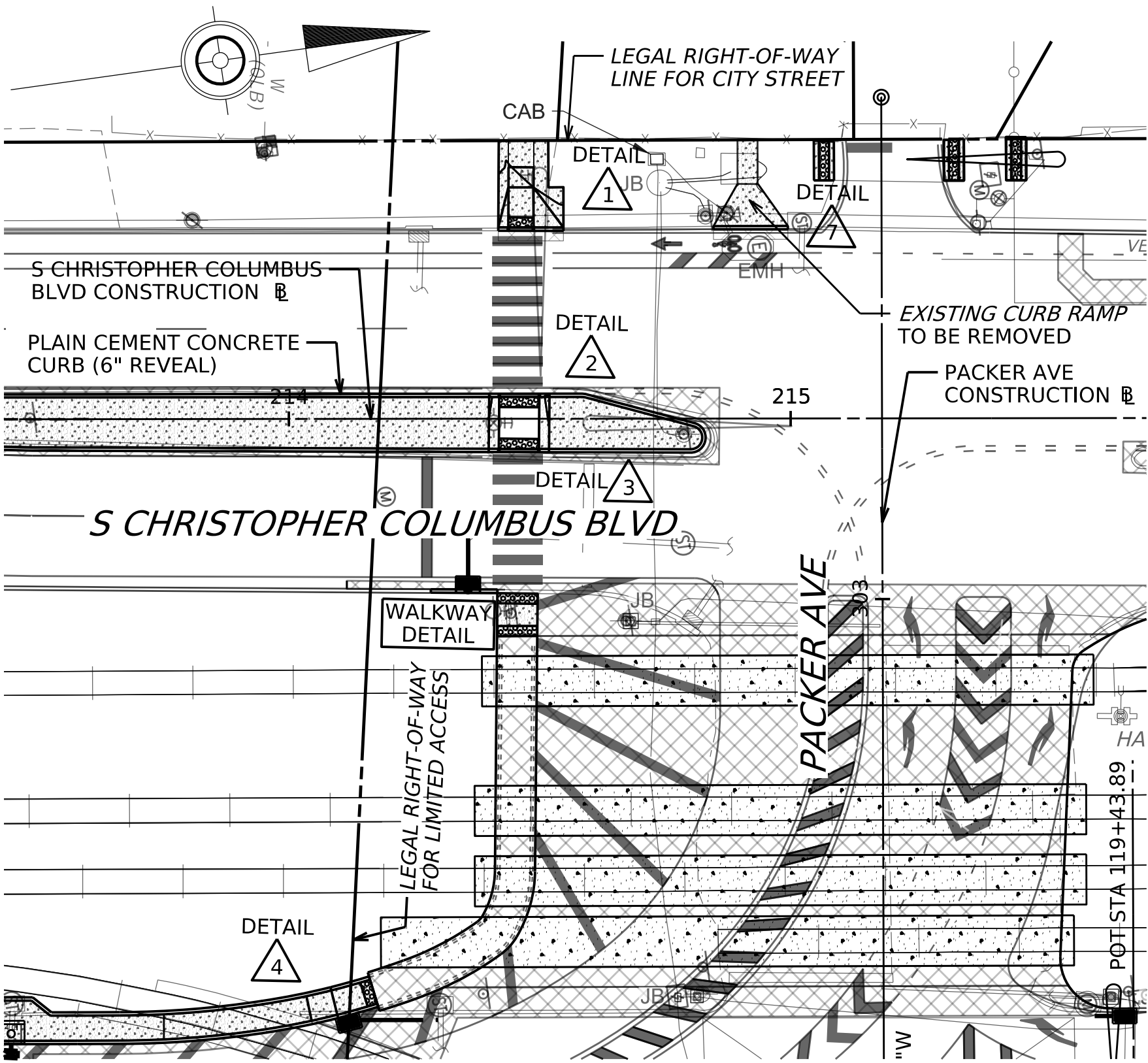
CURB RAMP DETAIL 2 & 3

SCALE 1" = 5'



WALKWAY DETAIL

SCALE 1" = 5'



SCALE

0 25 50 FEET

CURB RAMP TABLE 1 (S CHRISTOPHER COLUMBUS BLVD)

ID	STATION	OFFSET	ELEVATION	BASELINE
1	214+41.78	37.46' LT	8.28 BC 8.78 TC	S CHRISTOPHER COLUMBUS BLVD CONSTR
2	214+41.79	38.13' LT	8.78	
3	214+43.82	46.12' LT	8.93	
4	214+43.83	50.12' LT	8.99	
5	214+43.86	55.44' LT	9.06	
6	214+48.86	55.45' LT	9.16	
7	214+48.83	50.11' LT	9.07	
8	214+48.82	46.11' LT	9.00	
9	214+54.78	38.10' LT	9.01	
10	214+54.78	37.43' LT	8.27 BC 8.77 TC	
11	214+48.78	37.44' LT	8.40	
12	214+43.78	37.46' LT	8.33	
13	214+43.79	38.12' LT	8.33	
14	214+48.79	38.11' LT	8.40	
15	214+51.78	55.46' LT	9.21	
16	214+51.79	50.11' LT	9.18	
17	214+51.80	46.11' LT	9.15	
17A	214+54.78	46.12' LT	9.18	
18	214+41.90	55.43' LT	9.03	
19	214+41.87	50.14' LT	9.02	
20	214+41.84	46.14' LT	8.97	

LEGEND

- XX CURB RAMP TYPE
- FULL DEPTH RECONSTRUCTION
- DETECTABLE WARNING SURFACE, CAST IRON - 2' WIDTH
- DEPRESSED CURB

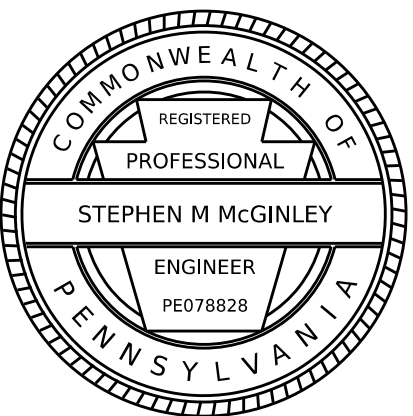
- BC BOTTOM OF CURB
- TC TOP OF CURB
- ME MATCH EXISTING

CURB RAMP TABLE 2&3 (S CHRISTOPHER COLUMBUS BLVD)

ID	STATION	OFFSET	ELEVATION	BASELINE
21	214+41.84	6.64' RT	8.28	S CHRISTOPHER COLUMBUS BLVD CONSTR
22	214+39.84	5.96' RT	8.77	
23	214+41.84	5.97' RT	8.28	
24	214+39.84	6.63' RT	8.27 BC 8.77 TC	
25	214+39.95	4.33' LT	9.15	
26	214+41.95	4.33' LT	8.66	
27	214+41.95	5.00' LT	8.66	
28	214+39.95	5.00' LT	8.65 BC 9.15 TC	
29	214+49.95	5.00' LT	8.72	
30	214+49.95	4.33' LT	8.72	
31	214+51.95	4.33' LT	9.24	
32	214+51.95	5.00' LT	8.74 BC 9.24 TC	
33	214+49.84	6.00' RT	8.31	
34	214+51.84	6.01' RT	8.82	
35	214+49.84	6.67' RT	8.31	
36	214+51.84	6.68' RT	8.32 BC 8.82 TC	
37	214+41.93	2.36' LT	8.58	
38	214+41.90	0.82' RT	8.47	
39	214+41.86	3.97' RT	8.36	
40	214+49.86	4.05' RT	8.39	
41	214+49.90	0.84' RT	8.52	
42	214+49.93	2.28' LT	8.64	

WALKWAY DETAIL TABLE (PACKER AVE)

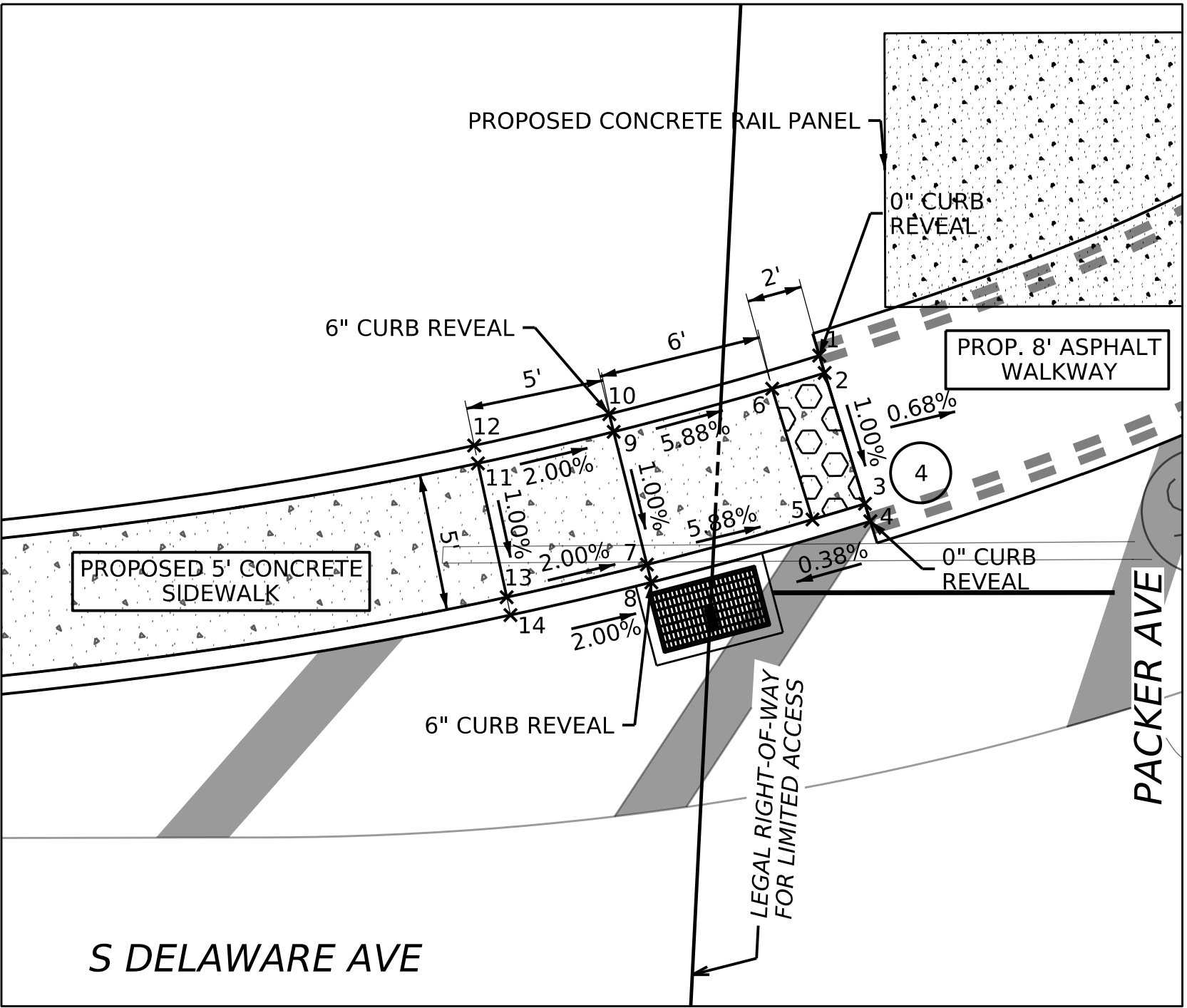
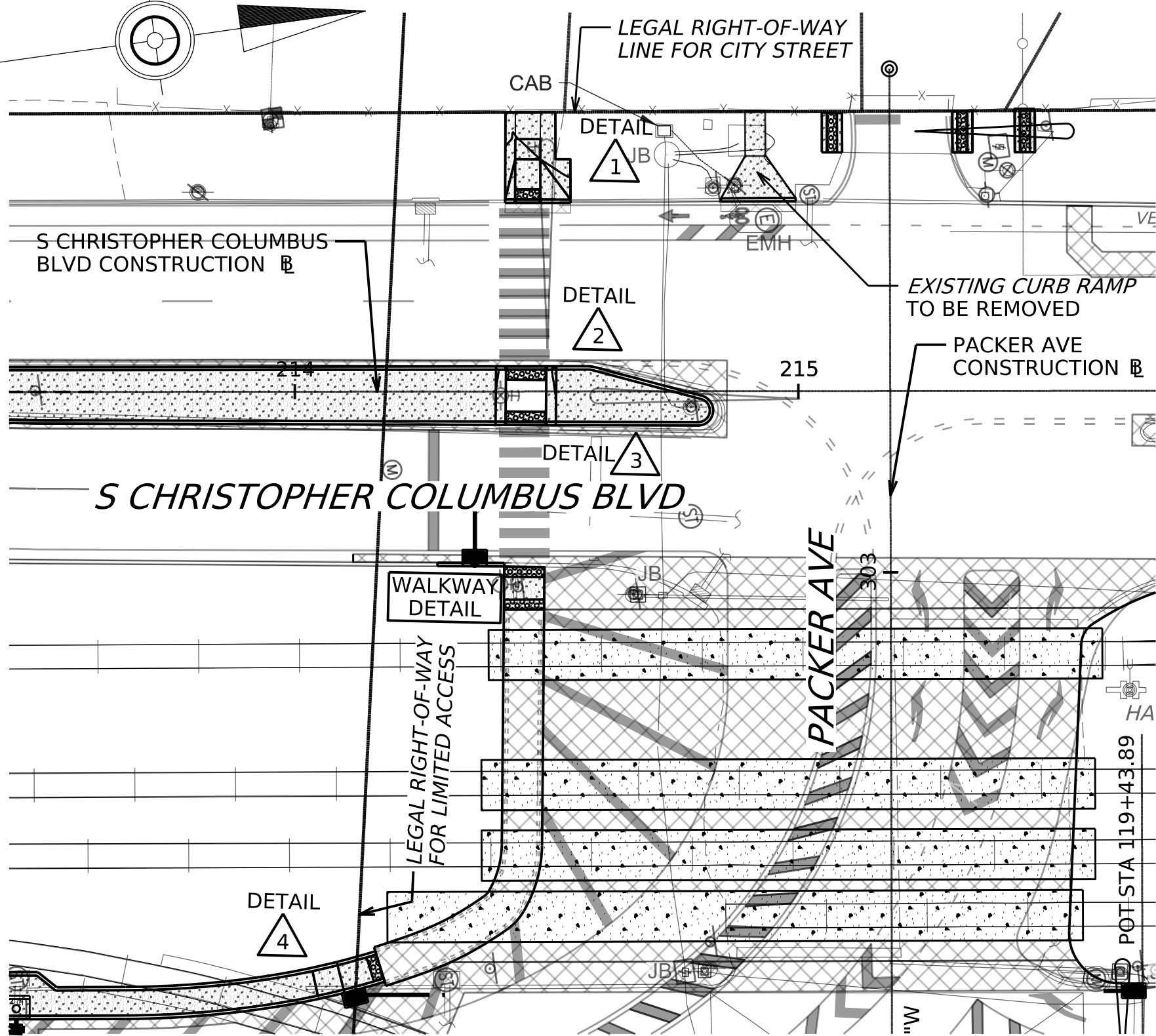
ID	STATION	OFFSET	ELEVATION	BASELINE
43	303+02.09	76.74' LT	8.17	PACKER AVE CONSTR
44	303+01.34	76.74' LT	8.17	
45	302+99.34	76.76' LT	8.18	
46	302+94.82	76.83' LT	8.03	
47	302+92.82	76.85' LT	7.97	
48	302+92.82	68.85' LT	7.99	
49	302+94.82	68.83' LT	8.05	
50	302+99.25	68.76' LT	8.15	
51	303+01.25	68.74' LT	8.14	



S CHRISTOPHER COLUMBUS BLVD CURB RAMP DETAILS

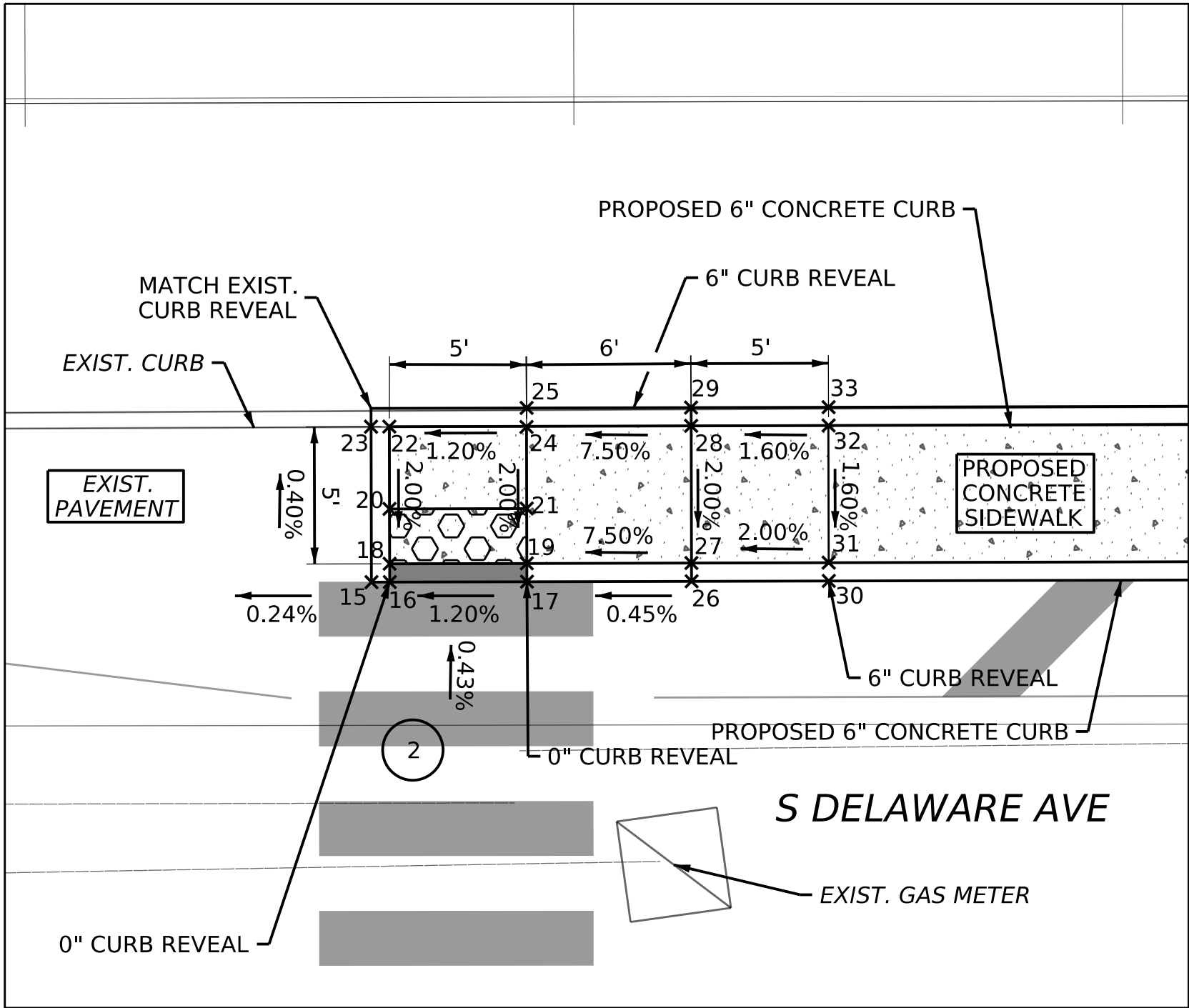
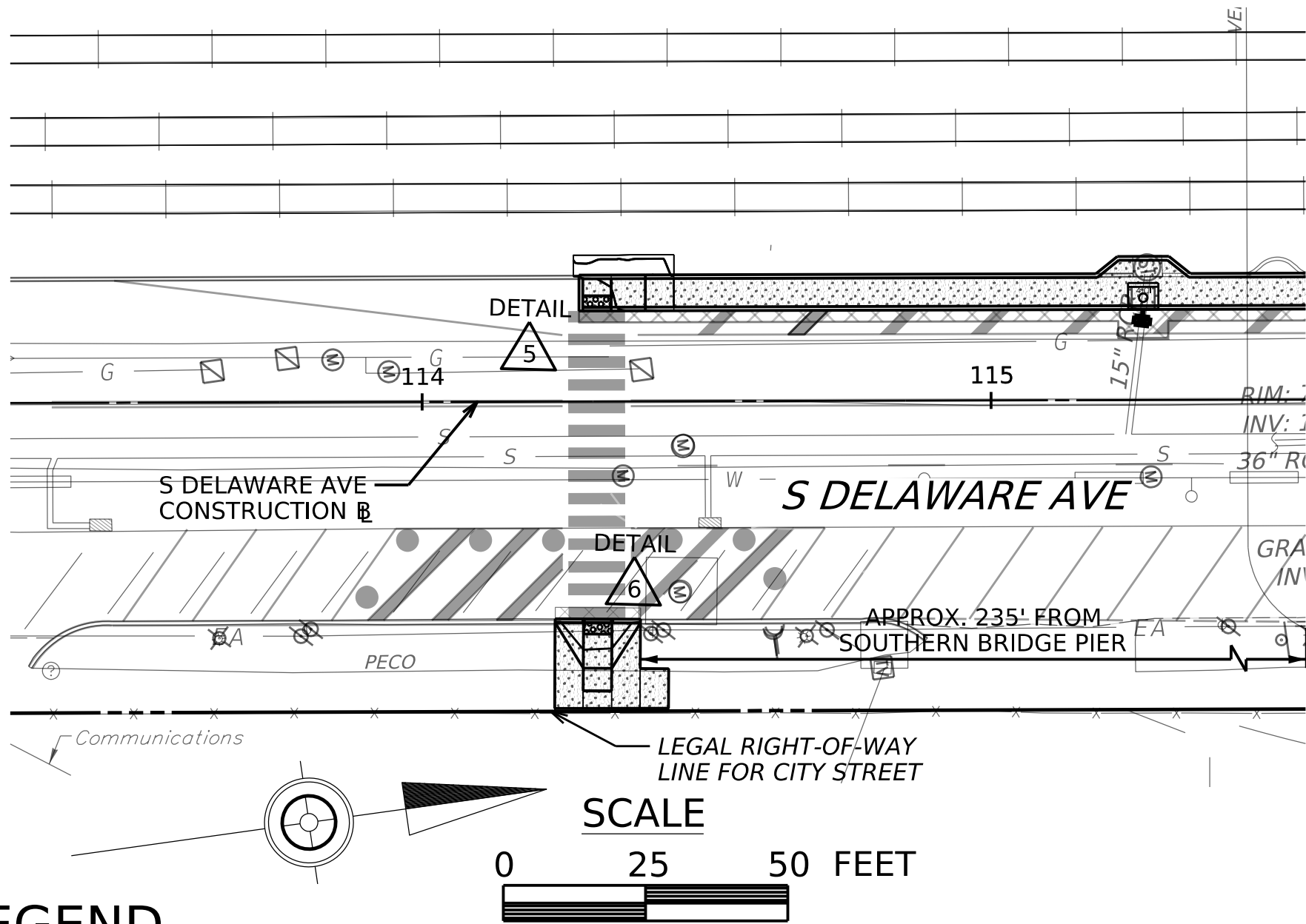
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D-9012 CADD (02-90) REVISED (06-18)



CURB RAMP DETAIL 4

SCALE 1" = 5'



CURB RAMP DETAIL 5

SCALE 1" = 5'

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	PHILADELPHIA	0000	CPD	10 OF 29
CITY OF PHILADELPHIA				
REV NO	REVISIONS		DATE	BY APPD

COLUMBUS BLVD/PACKER AVE/DELAWARE AVE INTERS. IMP.
ECMS #81304 PENNDOT LOG #P4361-03 CITY LOG # 81304-01

CURB RAMP TABLE 4 (S DELAWARE AVENUE)

ID	STATION	OFFSET	ELEVATION	BASELINE
1	117+90.88	29.22' LT	7.92	S DELAWARE AVE CONSTR
2	117+91.08	28.58' LT	7.92 BC 7.92 TC	
3	117+92.54	23.80' LT	7.87 BC 7.87 TC	
4	117+92.73	23.16' LT	7.87	
5	117+90.62	23.23' LT	7.99	
6	117+89.16	28.01' LT	8.04	
7	117+84.57	21.60' LT	8.34	
8	117+84.73	20.95' LT	7.84 BC 8.34 TC	
9	117+83.36	26.45' LT	8.39 BC 8.89 TC	
10	117+83.20	27.10' LT	8.89	
11	117+78.40	25.31' LT	8.49 BC 8.99 TC	
12	117+78.26	25.96' LT	8.99	
13	117+79.44	20.42' LT	8.44	
14	117+79.58	19.77' LT	7.94 BC 8.44 TC	

CURB RAMP TABLE 5 (S DELAWARE AVENUE)

ID	STATION	OFFSET	ELEVATION	BASELINE
15	114+27.63	15.91' LT	7.86	S DELAWARE AVE CONSTR
16	114+28.29	15.91' LT	7.87	
17	114+33.29	15.91' LT	7.93	
18	114+28.29	16.57' LT	7.87	
19	114+33.29	16.57' LT	7.87	
20	114+28.29	18.57' LT	7.91	
21	114+33.29	18.57' LT	7.97	
22	114+28.29	21.57' LT	7.97	
23	114+27.63	21.57' LT	7.84 BC/ME 8.34 TC/ME	
24	114+33.29	21.55' LT	8.03	
25	114+33.29	22.24' LT	8.53	
26	114+39.29	15.91' LT	7.96 BC 8.38 TC	
27	114+39.29	16.57' LT	8.38	
28	114+39.29	21.57' LT	8.48	
29	114+39.29	22.24' LT	8.98	
30	114+44.29	15.91' LT	7.98 BC 8.48 TC	
31	114+44.29	16.57' LT	8.48	
32	114+44.29	21.57' LT	8.56	
33	114+44.30	22.24' LT	9.06	

LEGEND

- XX

CURB RAMP TYPE
- FULL DEPTH RECONSTRUCTION
- DETECTABLE WARNING SURFACE, CAST IRON - 2' WIDTH
- DEPRESSED CURB
- BC

BOTTOM OF CURB
- TC

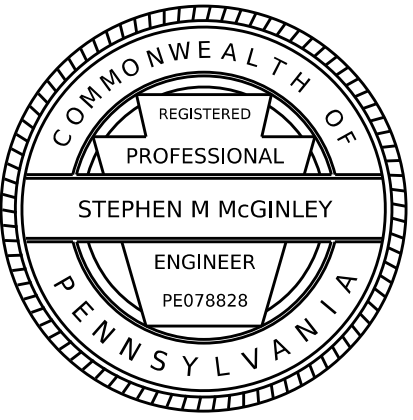
TOP OF CURB
- ME

MATCH EXISTING

CURB RAMP GENERAL NOTES

1. CONSTRUCTION IN ACCORDANCE WITH THE RC-67M STANDARD DETAILS.
2. ELEVATIONS AND DIMENSIONS PROVIDED ARE FOR REFERENCE ONLY. FIELD VERIFY ALL RAMP SLOPES AND CONSTRUCT ACCORDING TO RC-67M UNLESS INDICATED TO BE TECHNICALLY INFEASIBLE.
3. SOME RAMPS SLOPES HAVE BEEN DESIGNED LESS THAN THE MAXIMUM TO ALLOW FOR ADJUSTMENTS BASED ON ACTUAL FIELD CONDITIONS. CONSTRUCTED RAMP SLOPES MUST NOT EXCEED THE MAXIMUM SLOPES SPECIFIED IN RC-67M, UNLESS INDICATED TO BE TECHNICALLY INFEASIBLE.
4. ADJUST ALL MANHOLE, JUNCTION BOX, AND UTILITY VALVE COVERS AS NECESSARY FOR CONSTRUCTION CURB RAMPS.
5. CONTRACTOR NOT TO ENCROACH ONTO ADJACENT PROPERTY DURING CONSTRUCTION AT ANYTIME.

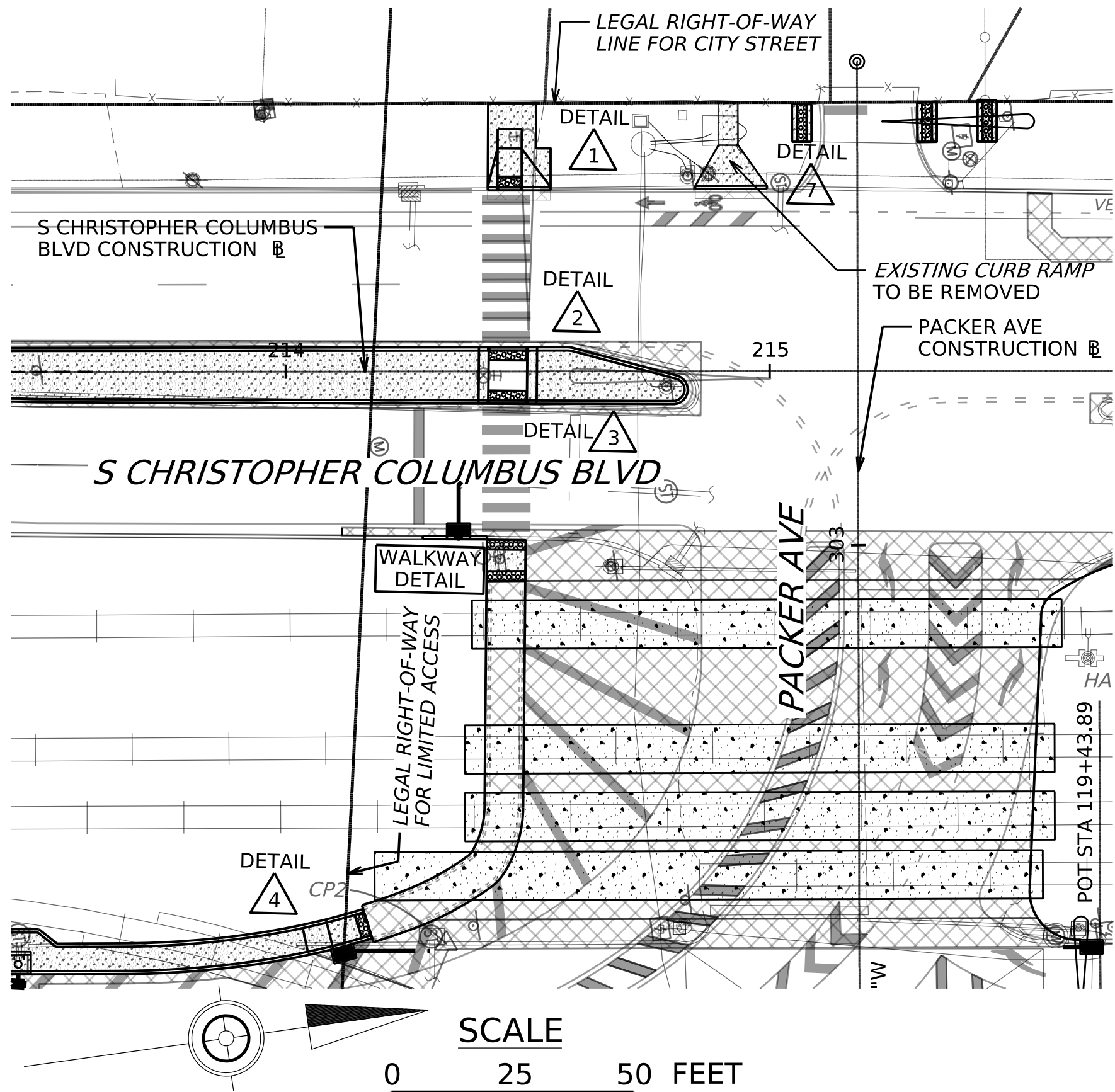
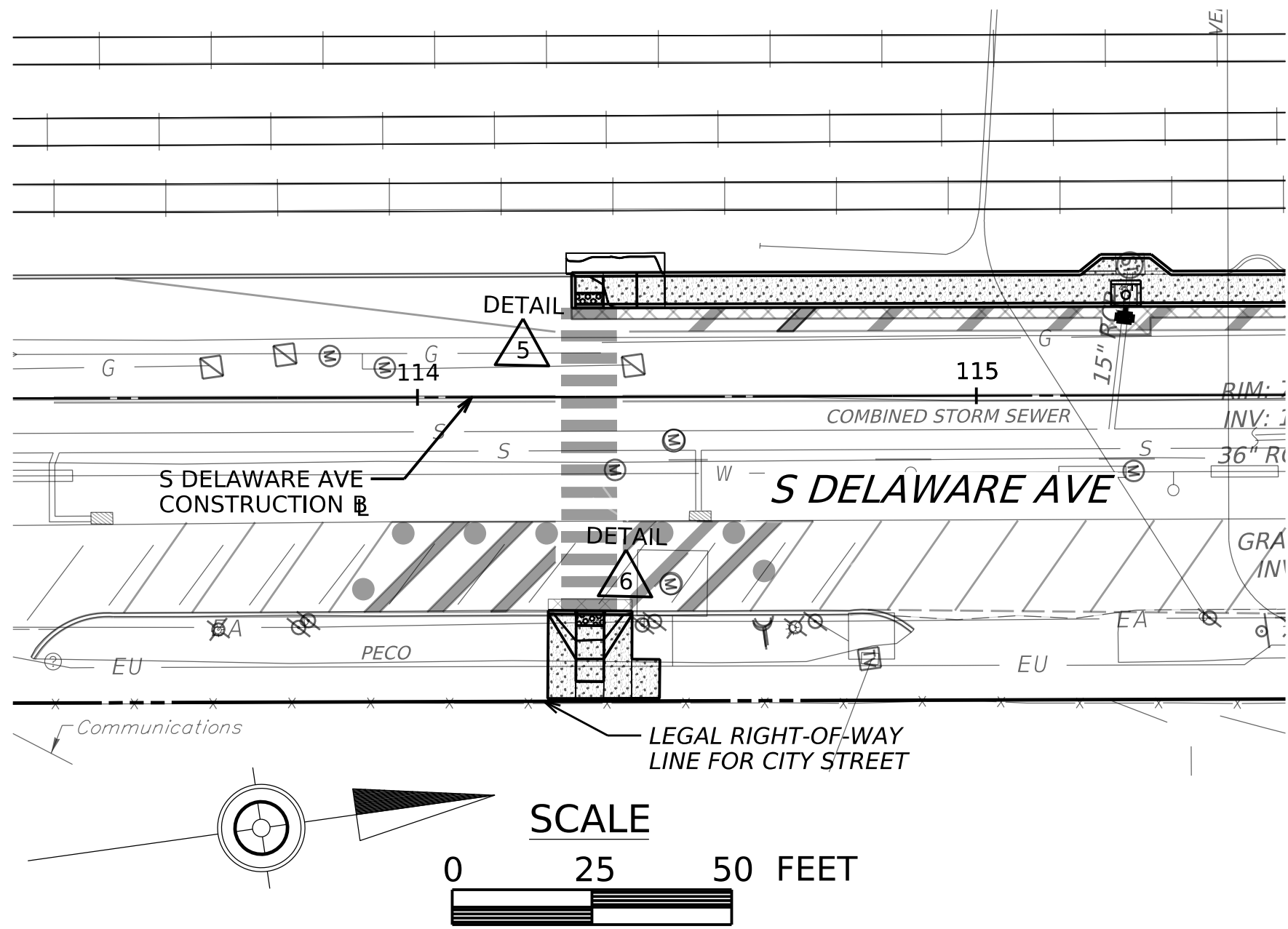
S DELAWARE AVE CURB RAMP DETAILS



OPERATOR: Lucas Signora
FILE NAME: c:\pw\k\h1\c0449495\E06849_BORDER.dgn

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D-9012 CADD (02-90) REVISED (06-18)



LEGEND

- XX

CURB RAMP TYPE
- FULL DEPTH RECONSTRUCTION
- DETECTABLE WARNING SURFACE, CAST IRON - 2' WIDTH
- DEPRESSED CURB
- BC

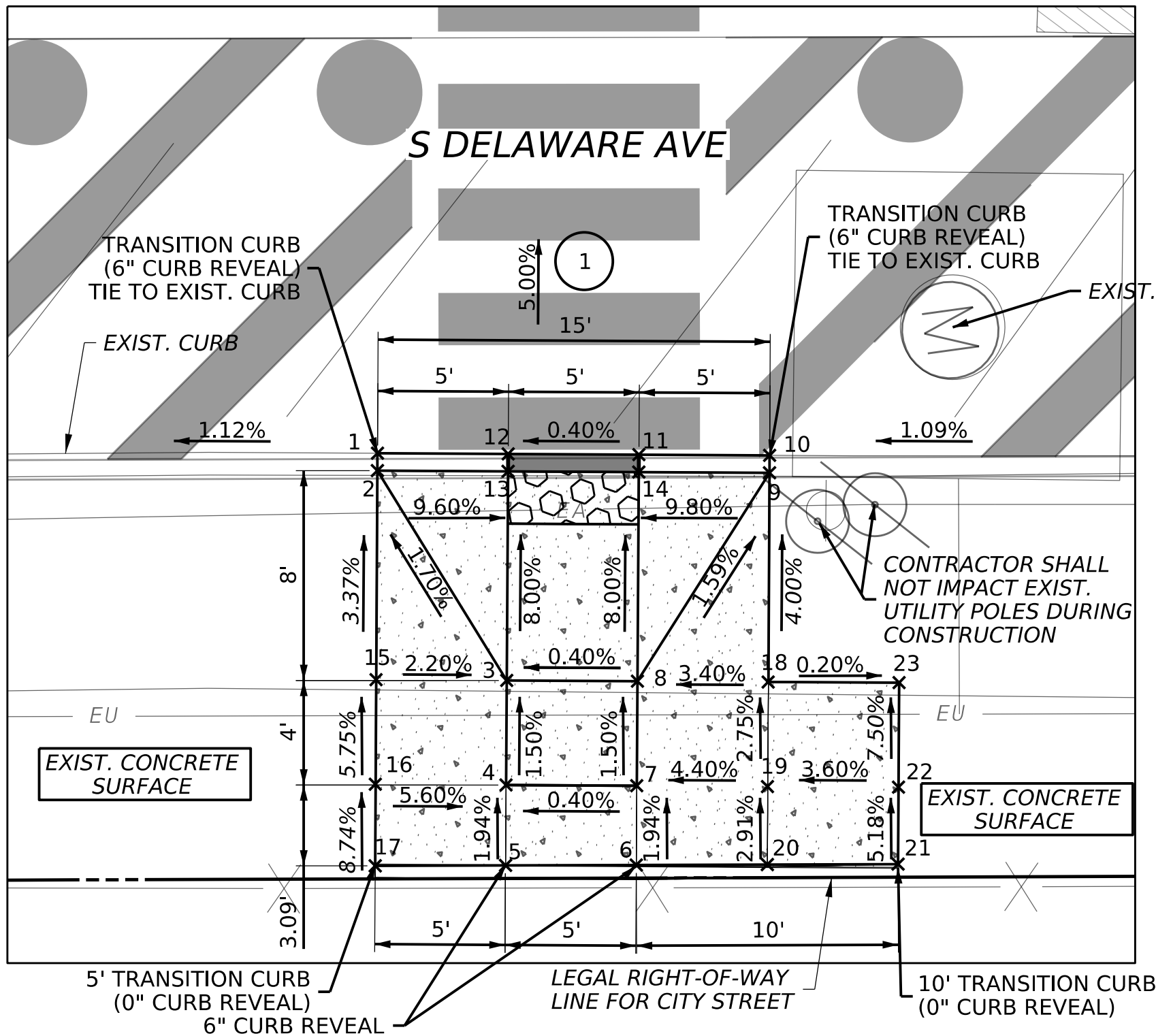
BOTTOM OF CURB
- TC

TOP OF CURB
- ME

MATCH EXISTING

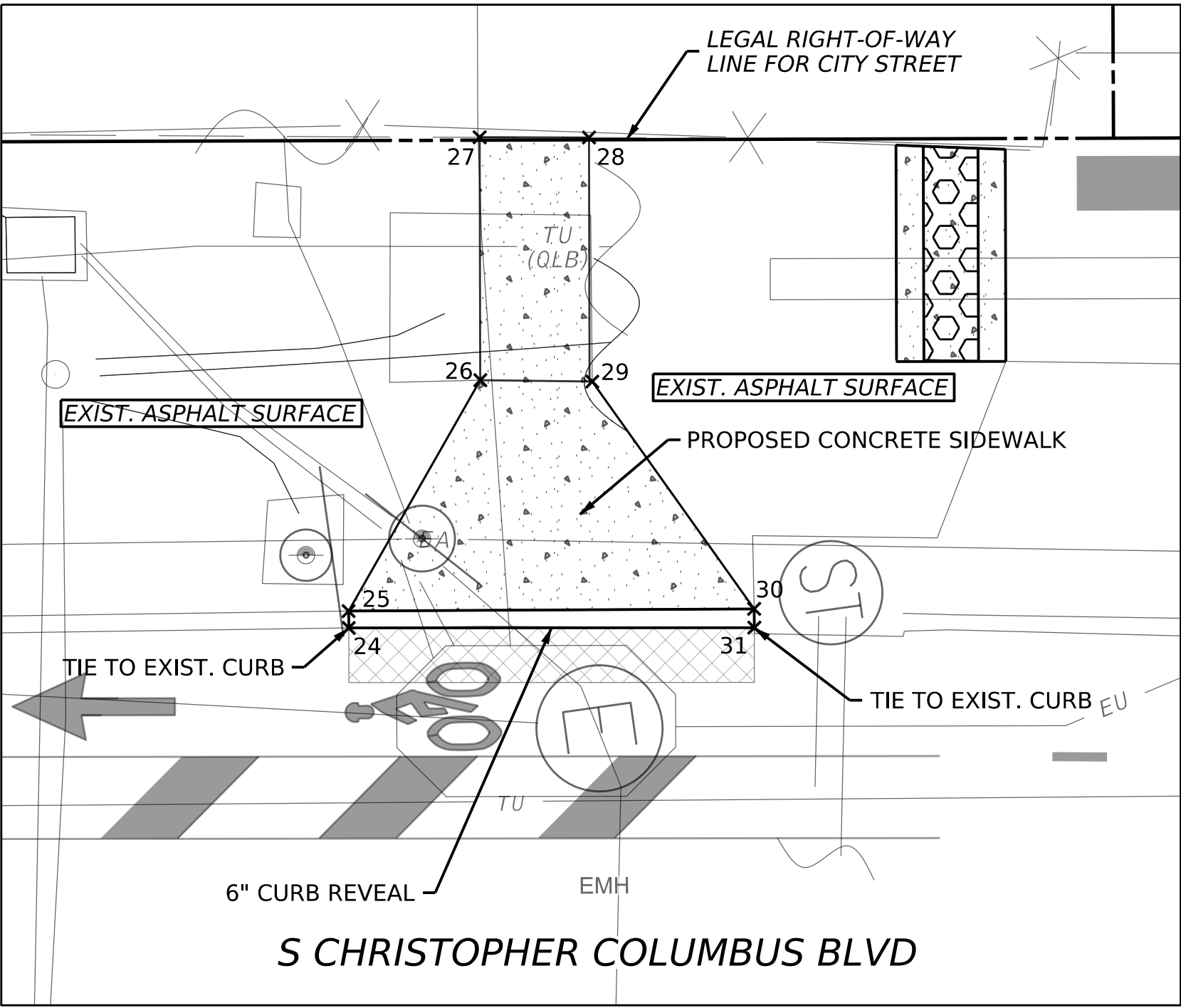
CURB RAMP GENERAL NOTES

1. CONSTRUCTION IN ACCORDANCE WITH THE RC-67M STANDARD DETAILS.
2. ELEVATIONS AND DIMENSIONS PROVIDED ARE FOR REFERENCE ONLY. FIELD VERIFY ALL RAMP SLOPES AND CONSTRUCT ACCORDING TO RC-67M UNLESS INDICATED TO BE TECHNICALLY INFEASIBLE.
3. SOME RAMPS SLOPES HAVE BEEN DESIGNED LESS THAN THE MAXIMUM TO ALLOW FOR ADJUSTMENTS BASED ON ACTUAL FIELD CONDITIONS. CONSTRUCTED RAMP SLOPES MUST NOT EXCEED THE MAXIMUM SLOPES SPECIFIED IN RC-67M, UNLESS INDICATED TO BE TECHNICALLY INFEASIBLE.
4. ADJUST ALL MANHOLE, JUNCTION BOX, AND UTILITY VALVE COVERS AS NECESSARY FOR CONSTRUCTION CURB RAMPS.
5. CONTRACTOR NOT TO ENCROACH ONTO ADJACENT PROPERTY DURING CONSTRUCTION AT ANYTIME.



CURB RAMP DETAIL 6

SCALE 1" = 5'



CURB RAMP DETAIL 7

SCALE 1" = 5'

DISTRICT	COUNTY	ROUTE	SECTION	SHEET	
6-0	PHILADELPHIA	0000	CPD	11 OF 29	
	CITY OF PHILADELPHIA				
REV NO	REVISIONS		DATE	BY	APPD

COLUMBUS BLVD/PACKER AVE/DELAWARE AVE INTERS. IMP.
ECMS #81304 PENNDOT LOG #P4361-03 CITY LOG # 81304-01

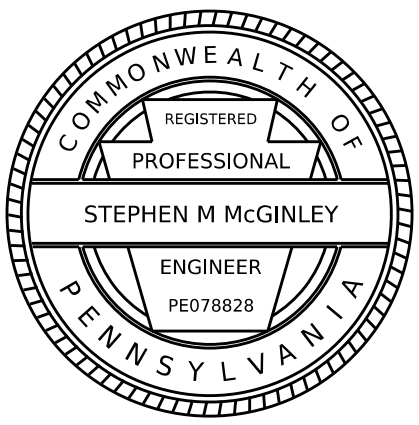
CURB RAMP TABLE 6 (S DELAWARE AVENUE)

ID	STATION	OFFSET	ELEVATION	BASELINE
1	114+23.30	38.20' RT	8.60 BC/ME 9.10 TC/ME	S DELAWARE AVE CONSTR
2	114+23.29	38.87' RT	9.10	
3	114+28.22	46.91' RT	9.26	
4	114+28.18	50.91' RT	9.32	
5	114+28.15	53.98' RT	9.38 BC 9.88 TC/ME	
6	114+33.15	54.03' RT	9.40 BC 9.90 TC/ME	
7	114+33.18	50.95' RT	9.34	
8	114+33.22	46.95' RT	9.28	
9	114+38.29	38.99' RT	9.13	
10	114+38.30	38.32' RT	8.66 BC/ME 9.13 TC/ME	
11	114+33.30	38.28' RT	8.64	
12	114+28.30	38.24' RT	8.62	
13	114+28.29	38.91' RT	8.62	
14	114+33.29	38.95' RT	8.64	
15	114+23.22	46.87' RT	9.37	
16	114+23.19	50.87' RT	9.60	
17	114+23.17	53.94' RT	9.87 BC/ME 9.87 TC/ME	
18	114+38.22	46.99' RT	9.45	
19	114+38.19	50.99' RT	9.56	
20	114+38.17	54.08' RT	9.65 BC 9.90 TC/ME	
21	114+43.17	54.12' RT	9.90 BC/ME 9.90 TC/ME	
22	114+43.19	51.03' RT	9.74	
23	114+43.22	47.03' RT	9.44	

CURB RAMP TABLE 7 (S CHRISTOPHER COLUMBUS BLVD)

ID	STATION	OFFSET	ELEVATION	BASELINE
24	214+84.66	37.70' LT	ME	S CHRISTOPHER COLUMBUS BLVD CONSTR
25	214+84.65	38.32' LT	ME	
26	214+89.48	46.76' LT	ME	
27	214+89.47	55.65' LT	ME	
28	214+93.47	55.63' LT	ME	
29	214+93.58	46.71' LT	ME	
31	214+99.49	38.38' LT	ME	
32	214+99.50	37.70' LT	ME	

S DELAWARE AVE CURB RAMP DETAILS



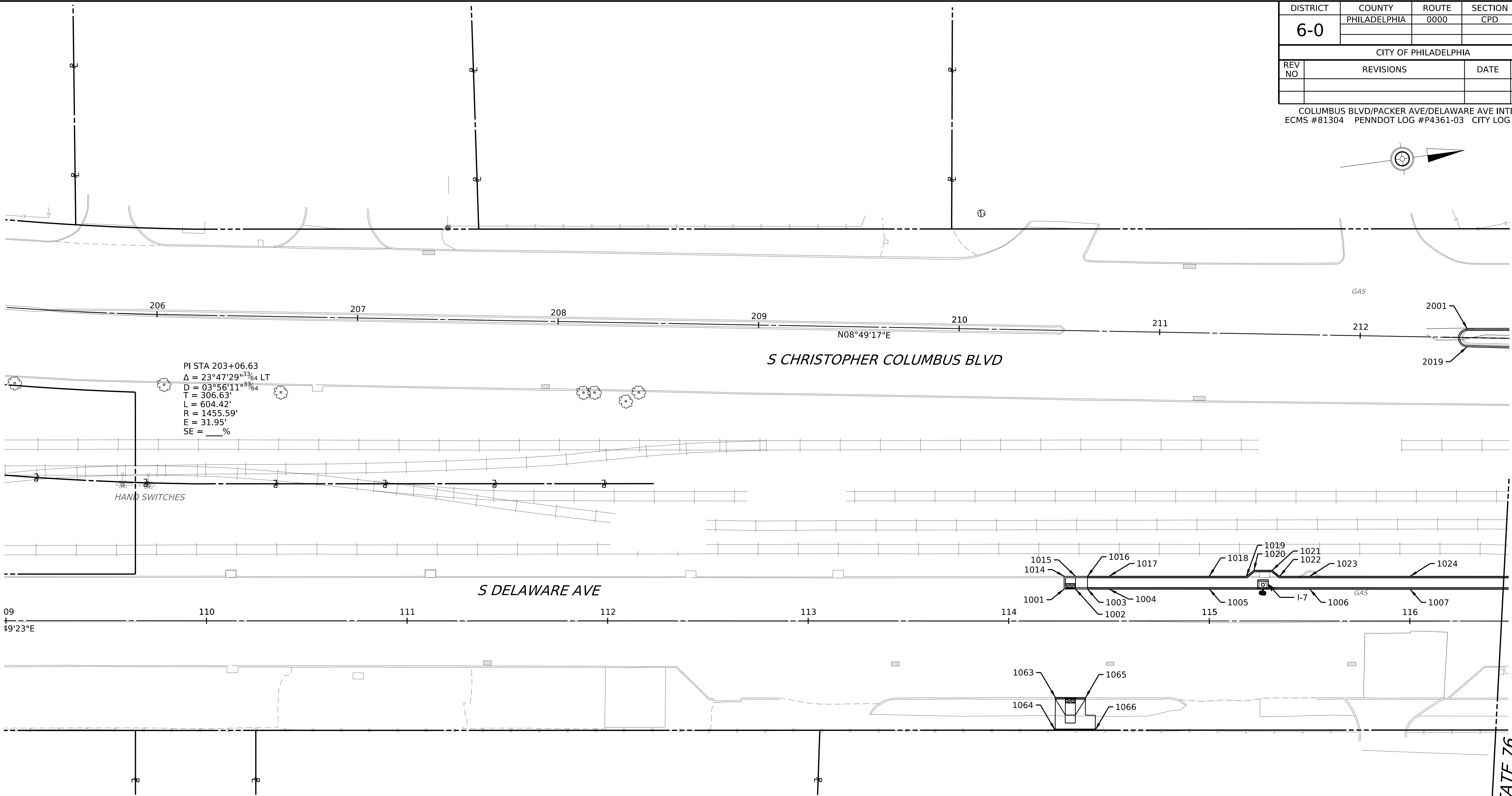
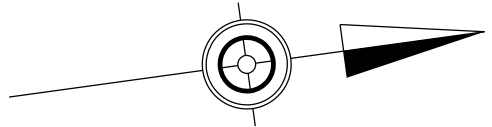
OPERATOR: Lucas Signora
FILE NAME: c:\pw\kh1\c044495\E056849_BORDER.dgn

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D-9012 CADD (02-90) REVISED (06-18)

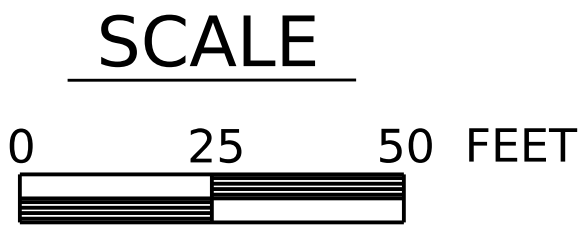
DISTRICT	COUNTY	ROUTE	SECTION	SHEET	
6-0	PHILADELPHIA	0000	CPD	12 OF 29	
	CITY OF PHILADELPHIA				
REV NO	REVISIONS		DATE	BY	APPD

COLUMBUS BLVD/PACKER AVE/DELAWARE AVE INTERS. IMP.
ECMS #81304 PENNDOT LOG #P4361-03 CITY LOG # 81304-01



LEGEND

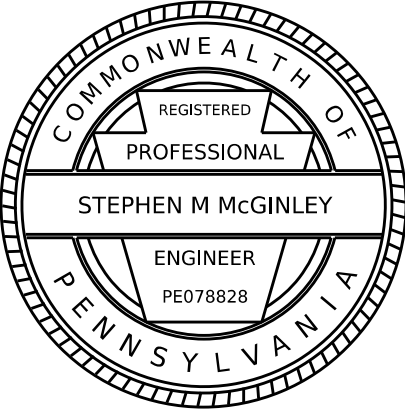
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|-------------|---|
| 1000 SERIES | REFER TO SOUTH DELAWARE AVENUE TABLE ON SHEET 16 |
| 2000 SERIES | REFER TO SOUTH CHRISTOPHER COLUMBUS BOULEVARD TABLE ON SHEET 16 |
| 3000 SERIES | REFER TO PACKER AVENUE TABLE ON SHEET 16 |



SPOT ELEVATION PLAN 1 OF 5

CONTINUED ON SHEET 13

INTERSTATE 76



PLOTTED: 9/7/2005 7:08:02 PM

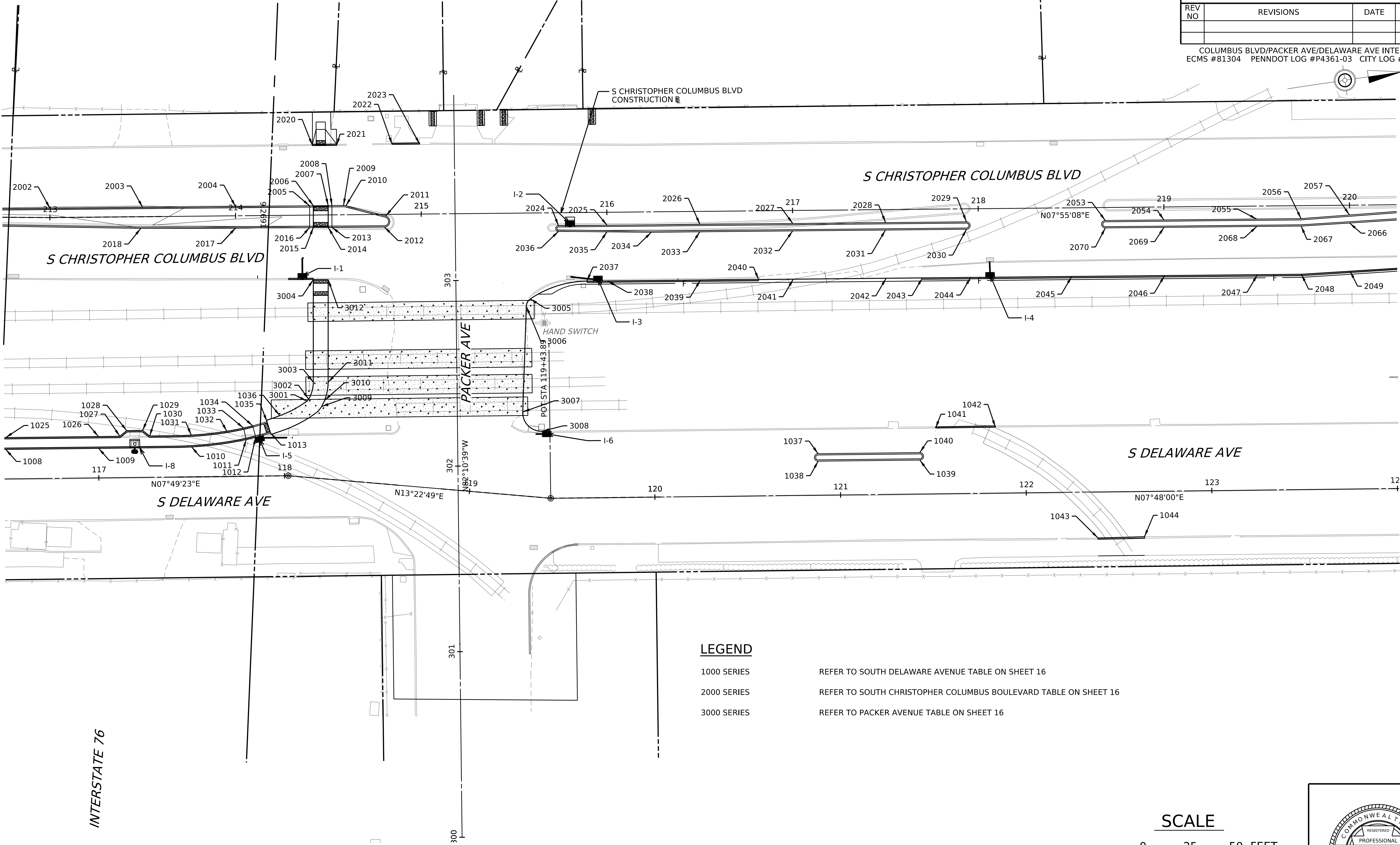
D-9012 CADD (02-90) REVISED (06-18)

DISTRICT	COUNTY	ROUTE	SECTION	SHEET	
6-0	PHILADELPHIA	0000	CPD	13 OF 29	
	CITY OF PHILADELPHIA				
REV NO	REVISIONS		DATE	BY	APPD

COLUMBUS BLVD/PACKER AVE/DELAWARE AVE INTERS. IMP.
ECMS #81304 PENNDOT LOG #P4361-03 CITY LOG # 81304-01

CONTINUED ON SHEET 12

CONTINUED ON SHEET 14



LEGEND

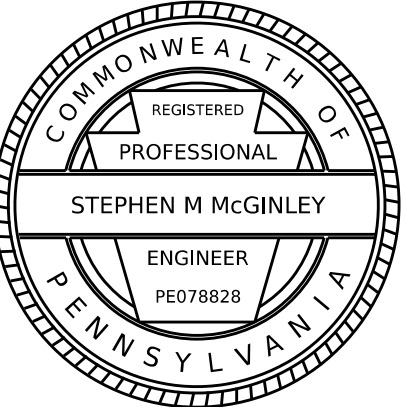
- 1000 SERIES
- 2000 SERIES
- 3000 SERIES

REFER TO SOUTH DELAWARE AVENUE TABLE ON SHEET 16
REFER TO SOUTH CHRISTOPHER COLUMBUS BOULEVARD TABLE ON SHEET 16
REFER TO PACKER AVENUE TABLE ON SHEET 16

SCALE



SPOT ELEVATION PLAN 2 OF 5



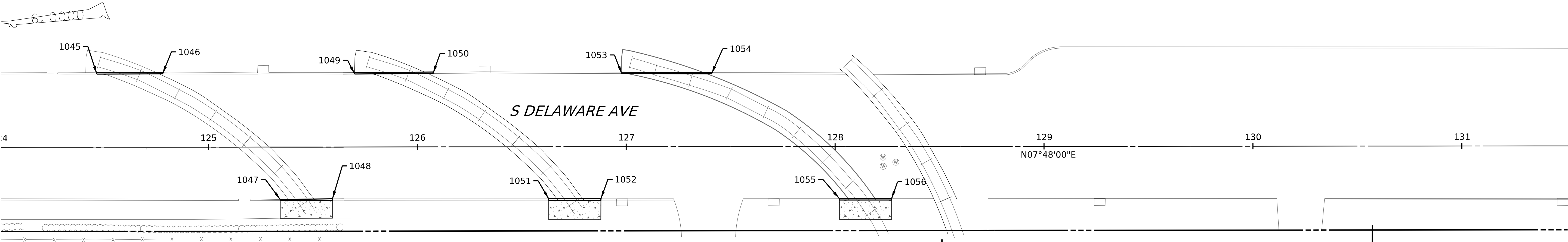
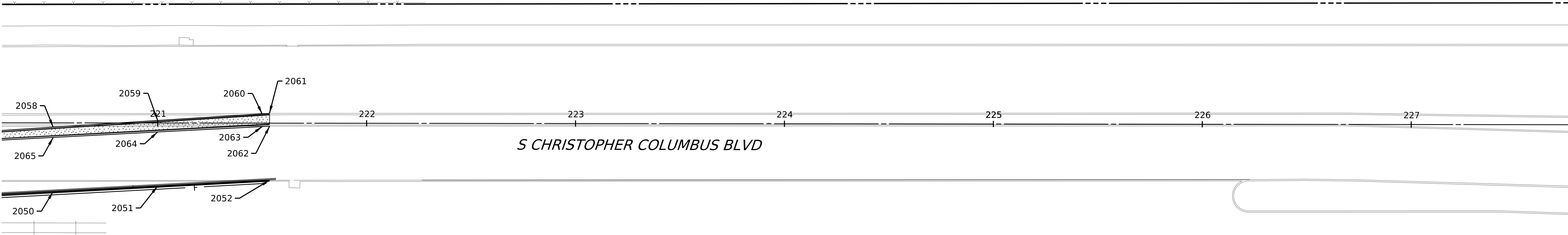
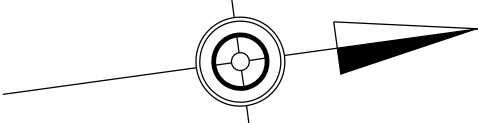
INTERSTATE 76

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D-9012 CADD (02-90) REVISED (06-18)

DISTRICT	COUNTY	ROUTE	SECTION	SHEET	
6-0	PHILADELPHIA	0000	CPD	14 OF 29	
CITY OF PHILADELPHIA					
REV NO	REVISIONS		DATE	BY	APPD

COLUMBUS BLVD/PACKER AVE/DELAWARE AVE INTERS. IMP.
ECMS #81304 PENNDOT LOG #P4361-03 CITY LOG # 81304-01



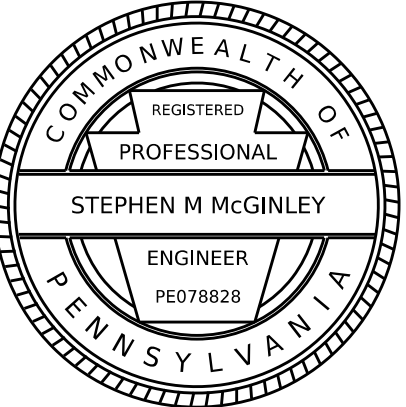
LEGEND

- | | |
|-------------|---|
| 1000 SERIES | REFER TO SOUTH DELAWARE AVENUE TABLE ON SHEET 16 |
| 2000 SERIES | REFER TO SOUTH CHRISTOPHER COLUMBUS BOULEVARD TABLE ON SHEET 16 |
| 3000 SERIES | REFER TO PACKER AVENUE TABLE ON SHEET 16 |

SCALE



SPOT ELEVATION PLAN 3 OF 5



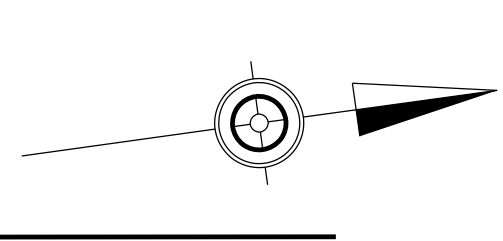
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CONTINUED ON SHEET 15

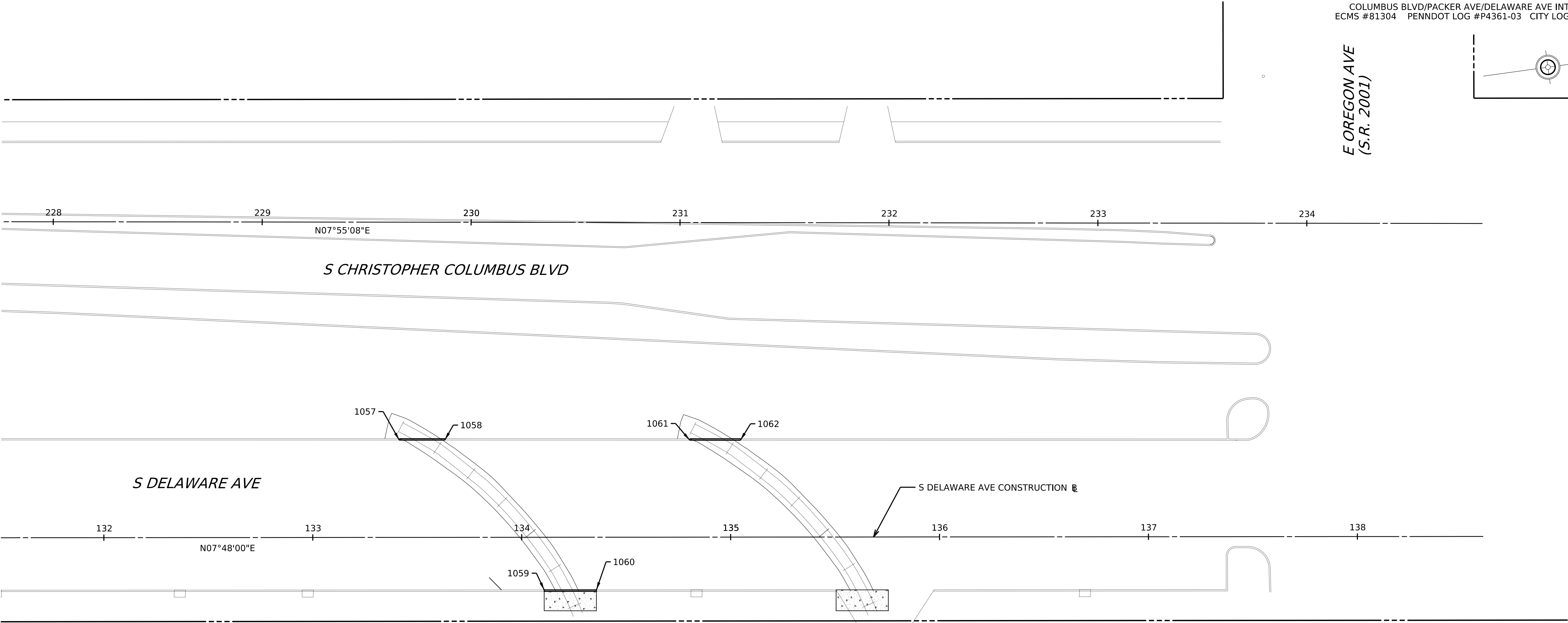
DISTRICT	COUNTY	ROUTE	SECTION	SHEET	
6-0	PHILADELPHIA	0000	CPD	15 OF 29	
CITY OF PHILADELPHIA					
REV NO	REVISIONS		DATE	BY	APPD

COLUMBUS BLVD/PACKER AVE/DELAWARE AVE INTERS. IMP.
ECMS #81304 PENNDOT LOG #P4361-03 CITY LOG # 81304-01

E OREGON AVE
(S.R. 2001)



CONTINUED ON SHEET 14



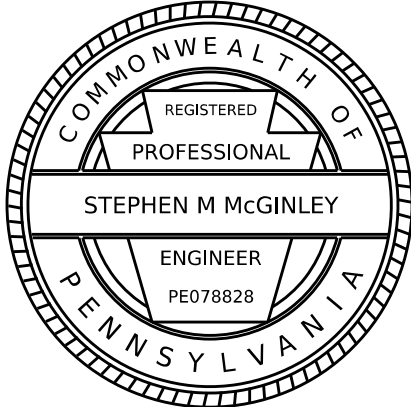
LEGEND

- | | |
|-------------|---|
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| 2000 SERIES | REFER TO SOUTH CHRISTOPHER COLUMBUS BOULEVARD TABLE ON SHEET 16 |
| 3000 SERIES | REFER TO PACKER AVENUE TABLE ON SHEET 16 |

SCALE



SPOT ELEVATION PLAN 4 OF 5



PLOTTED: 9/7/2005 7:08:02 PM

SOUTH DELAWARE AVENUE
 BASED ON PENNSYLVANIA STATE PLANE - SOUTH ZONE
 COORDINATE SYSTEM

Point #	STA	OFF	Easting	Northing	BC	TC	CURB HEIGHT
1001	114+27.63	13.91' LT	2700852.5557	219467.7770	7.86	7.86	FLUSH
1002	114+33.29	15.91' LT	2700853.3269	219473.3910	7.93	7.93	FLUSH
1003	114+39.29	15.91' LT	2700854.1435	219479.3351	7.96	8.38	6"
1004	114+50.00	15.90' LT	2700855.6005	219489.9407	7.98	8.48	6"
1005	115+00.00	15.90' LT	2700862.4071	219539.4874	7.83	8.33	6"
1006	115+50.00	15.90' LT	2700869.2228	219589.0998	7.72	8.22	6"
1007	116+00.00	15.90' LT	2700876.0332	219638.6741	7.80	8.30	6"
1008	116+50.00	15.90' LT	2700882.8252	219688.1142	8.52	9.02	6"
1009	117+00.00	15.90' LT	2700889.6346	219737.6815	7.93	8.43	6"
1010	117+50.00	16.13' LT	2700896.2328	219787.3063	7.82	8.32	6"
1011	117+79.60	19.77' LT	2700896.6354	219816.9790	7.94	8.44	6"
1012	117+84.73	20.95' LT	2700896.1541	219822.2347	7.84	8.34	6"
1013	117+92.73	23.16' LT	2700895.0629	219830.4683	7.87	7.87	FLUSH
1014	114+27.63	22.24' LT	2700846.2813	219468.6390	7.84	8.34	6"
1015	114+33.29	22.24' LT	2700847.0507	219474.2532	8.03	8.53	6"
1016	114+39.29	22.24' LT	2700847.8691	219480.1971	8.48	8.98	6"
1017	114+50.00	22.24' LT	2700849.3261	219490.8027	8.56	9.06	6"
1018	115+00.00	22.24' LT	2700856.1282	219540.3069	8.41	8.91	6"
1019	115+18.52	22.24' LT	2700858.6512	219558.6816	8.27	8.77	6"
1020	115.22.27	25.24' LT	2700856.1894	219562.8050	8.32	8.82	6"
1021	115+31.34	25.24' LT	2700857.4245	219571.7955	8.32	8.82	6"
1022	115+35.09	22.24' LT	2700860.9070	219575.1024	8.28	8.78	6"
1023	115+50.00	22.24' LT	2700862.9361	219589.8722	8.30	8.80	6"
1024	116+00.00	22.24' LT	2700869.7410	219639.4070	8.37	8.87	6"
1025	116+50.00	22.24' LT	2700876.5460	219688.9417	9.10	9.60	6"
1026	117+00.00	22.24' LT	2700883.3510	219738.4765	8.49	8.99	6"
1027	117+11.50	22.24' LT	2700884.9159	219749.8677	8.27	8.77	6"
1028	117+15.25	25.24' LT	2700882.4542	219753.9911	8.17	8.67	6"
1029	117+23.86	25.24' LT	2700883.6256	219762.5183	8.24	8.74	6"
1030	117+27.61	22.24' LT	2700887.1081	219765.8251	8.31	8.81	6"
1031	117+50.00	22.24' LT	2700889.9425	219788.0516	8.38	8.88	6"
1032	117+69.20	24.33' LT	2700890.6986	219807.3200	8.46	8.96	6"
1033	117+74.65	25.26' LT	2700890.3313	219816.5055	8.49	8.99	6"
1034	117+83.20	27.10' LT	2700889.8653	219821.5671	8.39	8.89	6"
1035	117+90.88	29.22' LT	2700888.8100	219829.4620	7.92	7.92	FLUSH
1036	117+97.79	32.40' LT	2700886.6007	219836.7412	8.06	8.06	FLUSH
1037	120+88.15	22.34' LT	2700949.5445	220120.4929	8.68	8.68	FLUSH
1038	120+88.14	18.34' LT	2700953.5071	220119.9466	8.33	8.83	6"
1039	121+42.95	18.29' LT	2700960.9936	220174.2437	7.79	8.29	6"
1040	121+42.96	22.29' LT	2700957.0311	220174.7901	8.14	8.64	6"
1041	121+51.64	35.47' LT	2700945.1540	220185.1850	M.E.	M.E.	M.E.
1042	121+83.77	35.54' LT	2700949.4480	220217.0535	M.E.	M.E.	M.E.
1043	122+38.43	24.86' RT	2701016.7065	220262.9834	M.E.	M.E.	M.E.
1044	122+63.43	24.46' RT	2701019.7049	220287.8030	M.E.	M.E.	M.E.
1045	124+46.68	35.07' LT	2700985.5966	220477.4358	M.E.	M.E.	M.E.
1046	124+78.17	35.12' LT	2700989.8191	220508.6456	M.E.	M.E.	M.E.
1047	125+34.41	25.16' RT	2701057.1717	220556.1777	M.E.	M.E.	M.E.
1048	125+59.41	24.84' RT	2701060.2450	220580.9909	M.E.	M.E.	M.E.
1049	125+70.06	34.99' LT	2701002.4179	220599.6682	M.E.	M.E.	M.E.
1050	126+07.61	35.20' LT	2701007.3002	220636.8970	M.E.	M.E.	M.E.
1051	126+62.90	24.93' RT	2701074.3800	220683.5121	M.E.	M.E.	M.E.
1052	126+87.90	24.94' RT	2701077.7826	220708.2795	M.E.	M.E.	M.E.
1053	126+97.93	35.08' LT	2701019.6831	220726.3672	M.E.	M.E.	M.E.
1054	127+40.91	34.91' LT	2701025.6867	220768.9201	M.E.	M.E.	M.E.
1055	128+02.04	24.94' RT	2701093.3174	220821.3551	M.E.	M.E.	M.E.
1056	128+27.04	24.99' RT	2701096.7201	220846.1225	M.E.	M.E.	M.E.
1057	133+41.50	46.58' LT	2701095.6212	221365.4941	M.E.	M.E.	M.E.
1058	133+63.30	46.56' LT	2701098.6046	221387.0881	M.E.	M.E.	M.E.
1059	134+10.81	25.22' RT	2701176.1683	221424.4146	M.E.	M.E.	M.E.
1060	134+35.81	25.23' RT	2701179.5710	221449.1820	M.E.	M.E.	M.E.
1061	134+80.51	46.42' LT	2701114.6450	221503.1898	M.E.	M.E.	M.E.
1062	135+04.78	46.40' LT	2701117.9672	221527.2360	M.E.	M.E.	M.E.
1063	114+23.30	38.20' RT	2700905.5693	219456.1203	8.60	9.10	6"
1064	114+23.17	53.94' RT	2700921.1894	219453.8393	9.87	9.87	FLUSH
1065	114+38.31	38.32' LT	2700907.7326	219470.9634	8.66	9.13	6"
1066	114+43.17	54.12' LT	2700923.9013	219473.6598	9.90	9.90	FLUSH

SOUTH CHRISTOPHER COLUMBUS BOULEVARD
 BASED ON PENNSYLVANIA STATE PLANE - SOUTH ZONE
 COORDINATE SYSTEM

Point #	STA	OFF	Easting	Northing	BC	TC	CURB HEIGHT
2001	212+53.28	4.25' LT	2700751.4250	219684.6280	8.93	9.43	6"
2002	213+00.00	4.99' LT	2700757.8438	219730.7747	9.01	9.51	6"
2003	213+50.00	5.00' LT	2700764.7214	219780.2200	9.06	9.56	6"
2004	214+00.00	5.00' LT	2700771.6099	219829.7432	8.83	9.33	6"
2005	214+39.79	5.00' LT	2700777.1143	219869.3164	8.65	9.15	6"
2006	214+41.95	5.00' LT	2700777.3898	219871.2974	8.66	8.66	FLUSH
2007	214+49.95	5.00' LT	2700778.4920	219879.2211	8.72	8.72	FLUSH
2008	214+51.96	5.00' LT	2700778.7676	219881.2026	8.74	9.24	6"
2009	214+58.21	5.00' LT	2700779.6295	219887.3987	8.68	9.18	6"
2010	214+59.50	4.83' LT	2700779.9765	219888.6570	8.67	9.17	6"
2011	214+80.85	0.89' RT	2700788.5814	219909.0091	8.45	8.95	6"
2012	214+80.06	6.79' RT	2700794.3143	219907.4158	8.34	8.84	6"
2013	214+51.84	6.68' RT	2700790.3156	219879.4779	8.32	8.82	6"
2014	214+49.84	6.67' RT	2700790.0323	219877.4981	8.31	8.31	FLUSH
2015	214+41.84	6.64' RT	2700788.8988	219869.5786	8.28	8.28	FLUSH
2016	214+39.84	6.63' RT	2700788.6154	219867.5988	8.27	8.77	6"
2017	214+00.00	6.47' RT	2700782.9710	219828.1629	9.00	9.50	6"
2018	213+48.89	6.27' RT	2700775.7288	219777.5637	8.81	9.31	6"
2019	212+53.37	4.62' RT	2700760.1877	219683.2263	8.66	9.16	6"
2020	214+41.78	37.46' LT	2700745.2082	219875.6012	8.28	8.78	M.E.
2021	214+54.78	37.43' LT	2700747.0344	219888.4733	8.27	8.77	M.E.
2022	214+84.66	37.70' LT	2700750.8809	219918.1028	7.95	8.45	M.E.
2023	214+99.49	38.38' LT	2700752.9278	219932.7964	7.69	8.19	M.E.
2024	215+73.86	7.00' RT	2700807.4477	220000.2906	8.72	9.22	6"
2025	216+00.00	7.00' RT	2700811.0561	220026.2324	8.60	9.10	6"
2026	216+50.00	7.00' RT	2700817.9444	220075.7549	8.39	8.89	6"
2027	217+00.00	7.00' RT	2700824.8327	220125.2767	8.00	8.50	6"
2028	217+50.00	7.00' RT	2700831.7211	220174.7999	7.97	8.47	6"
2029	217+93.58	7.00' RT	2700837.7185	220217.9168	7.94	8.44	6"
2030	217+93.58	11.00' RT	2700841.6803	220217.3658	7.84	8.34	6"
2031	217+50.00	11.00' RT	2700835.6695	220174.1519	7.92	8.42	6"
2032	217+00.00	11.00' RT	2700828.7811	220124.6290	8.00	8.50	6"
2033	216+50.00	11.00' RT	2700821.8923	220075.1069	8.35	8.85	6"
2034	216+23.83	11.00' RT	2700818.2939	220049.2331	8.52	9.02	6"
2035	216+00.00	10.53' RT	2700814.5318	220025.6520	8.65	9.15	6"
2036	215+73.83	10.00' RT	2700810.4150	219999.8476	8.63	9.13	6"
2037	215+88.94	37.00' RT	2700839.2395	220011.0961	9.21	9.71	6"
2038	216+00.00	37.00' RT	2700840.7631	220022.0498	8.35	8.85	6"
2039	216+50.00	37.00' RT	2700847.6575	220071.6301	8.07	8.57	6"
2040	216+81.36	37.00' RT	2700851.9719	220102.6330	7.91	8.41	6"
2041	217+00.00	37.00' RT	2700854.5469	220121.1458	7.82	7.82	FLUSH
2042	217+50.00	37.00' RT	2700861.4354	220170.6690	7.75	7.75	FLUSH
2043	217+69.60	37.00' RT	2700864.1282	220190.0287	7.69	8.19	6"
2044	217+95.58	37.00' RT	2700867.7080	220215.7648	7.61	8.11	6"
2045	218+50.00	37.00' RT	2700875.2054	220269.6659	7.46	7.96	6"
2046	219+00.00	37.00' RT	2700882.0938	220319.1891	7.36	7.86	6"
2047	219+50.00	37.00' RT	2700888.9822	220368.7124	7.13	7.63	6"
2048	219+73.77	37.00' RT	2700892.2569	220392.2550	7.08	7.58	6"
2049	220+00.00	35.60' RT	2700894.4805	220418.4289	7.06	7.56	6"
2050	220+50.00	32.92' RT	2700898.7189	220468.3208	6.50	7.00	6"
2051	221+00.00	30.25' RT	2700902.9574	220518.2126	6.68	7.18	6"
2052	221+53.51	27.38' RT	2700907.4932	220571.6052	6.01	6.51	6"
2053	218+68.37	7.00' RT	2700848.0224	220291.9953	7.87	8.37	6"
2054	219+00.00	7.00' RT	2700852.3730	220323.2727	8.39	8.89	6"
2055	219+50.00	7.00' RT	2700859.2614	220372.7959	7.94	8.44	6"
2056	219+73.83	7.00' RT	2700862.5511	220396.4467	7.69	8.19	6"
2057	220+00.00	5.30' RT	2700864.4613	220422.5540	7.47	7.97	6"
2058	220+50.00	2.04' RT	2700868.1237	220472.5260	7.82	8.32	6"
2059	221+00.00	1.22' LT	2700871.7861	220522.4979	7.16	7.66	6"
2060	221+50.00	4.47' LT	2700875.4485	220572.4699	6.74	7.24	6"
2061	221+53.49	4.70' LT	2700875.7112	220576.0090	6.69	7.19	M.E.
2062	221+53.57	1.45' RT	2700881.8122	220575.2442	6.62	7.12	M.E.
2063	221+50.00	1.64' RT	2700881.5112	220571.6266	6.64	7.14	6"
2064	221+00.00	4.30' RT	2700877.2526	220521.7376	6.91	7.41	6"
2065	220+50.00	6.95' RT	2700872.9939	220471.8486	6.96	7.46	6"
2066	220+00.00	9.61' RT	2700868.7352	220421.9596	7.10	7.60	6"
2067	219+73.83	11.00' RT	2700866.5130	220395.8956	7.19	7.69	6"
2068	219+50.00	11.00' RT	2700863.2233	220372.2449	7.28	7.78	6"
2069	219+00.00	11.00' RT	2700856.3348	220322.7216	7.50	8.00	6"
2070	218+68.37	11.00' RT	2700851.9843	220291.4442	7.60	8.10	6"

S & PMP - SIGNING AND PAVEMENT MARKING PLAN										TCP - TRAFFIC CONTROL PLAN										REVISION NO	REVISIONS	DATE	BY	DISTRICT	COUNTY		ROUTE	SECTION	SHEET	
TSP - TRAFFIC SIGNAL PLAN																								06	PHILADELPHIA		0000	CPD	17 OF 29	
PWD - WATER MAIN RELAY PLAN																														
◆ - SEE SPECIAL PROVISIONS																														
QUANTITY	ITEM NO	DESCRIPTION	DESIGN NO	FOR TAB SEE SHEET	QUANTITY	ITEM NO	DESCRIPTION	DESIGN NO	FOR TAB SEE SHEET	QUANTITY	ITEM NO	DESCRIPTION	DESIGN NO	FOR TAB SEE SHEET	QUANTITY	ITEM NO	DESCRIPTION	DESIGN NO	FOR TAB SEE SHEET	QUANTITY	ITEM NO	DESCRIPTION	DESIGN NO	FOR TAB SEE SHEET						
	UNIT					UNIT					UNIT					UNIT					UNIT					UNIT		UNIT		UNIT
1679	0203 0001 CY	CLASS 1 EXCAVATION		PWD, 19		0689 0003 LS	CPM SCHEDULE		NO TAB	57	0935 0001 SF	POST MOUNTED SIGNS, TYPE F		S & PMP	23	4960 0025 LF	12" WHITE HOT THERMOPLASTIC TRANSVERSE PAVEMENT MARKINGS MODIFIED	◆					S & PMP							
1511	0203 0003 CY	CLASS 1A EXCAVATION		19	1000	0690 0001 DOLLA	INTERNAL FACILITATION		NO TAB	377	0936 0200 SF	STRUCTURE MOUNTED FLAT SHEET ALUMINUM SIGNS		TSP , S & PMP	1685	4960 0026 LF	24" WHITE HOT THERMOPLASTIC TRANSVERSE PAVEMENT MARKINGS MODIFIED	◆					TCP , S & PMP							
10653	0203 0006 LF	SAW CUTTING		PWD, 19	172	0695 0002 SF	DETECTABLE WARNING SURFACE, CAST IRON		19	7	0937 0300 EACH	FLEXIBLE DELINEATOR POST, SURFACE-MOUNT TYPE SM-1, WHITE POST WITH WHITE SHEETING		S & PMP	188	4960 0036 LF	24" YELLOW HOT THERMOPLASTIC TRANSVERSE PAVEMENT MARKINGS MODIFIED	◆					S & PMP							
67	0205 0001 CY	COMMON BORROW EXCAVATION		19	2	0696 0629 EACH	TEMPORARY IMPACT ATTENUATING DEVICE, TYPE V (STANDARD) TEST LEVEL 2		TCP	2	0941 0001 EACH	RESET POST MOUNTED SIGNS, TYPE B		S & PMP	8	4960 0101 EACH	WHITE HOT THERMOPLASTIC LEGEND, "ONLY", 8' - 0" MODIFIED	◆					TCP , S & PMP							
3545	0212 0014 SY	GEOTEXTILE, CLASS 4, TYPE A		PWD, 19	1	0697 0600 EACH	RESET TEMPORARY IMPACT ATTENUATING DEVICE, TYPE V (STANDARD), TEST LEVEL 2		TCP	4	0945 0001 EACH	RESET POST MOUNTED SIGNS, TYPE F		S & PMP	1	4960 0102 EACH	WHITE HOT THERMOPLASTIC LEGEND, "STOP", 8' - 0" MODIFIED	◆					S & PMP							
3545	0301 0205 SY	H.E.S. PLAIN CEMENT CONCRETE BASE COURSE, 10" DEPTH		PWD, 19	7	0860 0000 EACH	INLET FILTER BAG FOR TYPE M INLET		20	1	4951 0140 EACH	TRAFFIC SIGNAL SUPPORT, 40' MAST ARM	◆		TSP	3	4960 0126 EACH	WHITE HOT THERMOPLASTIC LEGEND, "RR CROSSING", 6' - 6", 11' LANE WIDTH (INCLUDES "X", "RR", AND 2 TRANSVERSE BANDS) MODIFIED	◆				S & PMP							
3150	0350 0106 SY	SUBBASE 6" DEPTH (NO. 2A)		PWD, 19	43	0860 0002 EACH	INLET FILTER BAG FOR TYPE C INLET		20	1	4951 2120 EACH	TRAFFIC SIGNAL SUPPORT, 20' MAST ARM WITH LUMINAIRE ARM (30' MOUNTING HEIGHT)	◆		TSP	7	4960 0127 EACH	WHITE HOT THERMOPLASTIC LEGEND, "RR CROSSING", 6' - 6", 12' LANE WIDTH (INCLUDES "X", "RR", AND 2 TRANSVERSE BANDS) MODIFIED	◆				S & PMP							
23723	0413 0428 SY	SUPERPAVE ASPHALT MIXTURE DESIGN, WEARING COURSE, PG 64E-22, 10 TO < 30 MILLION ESALS, 9.5 MM MIX, 1 1/2" DEPTH, SRL-H		19	982	0867 0012 LF	COMPOST FILTER SOCK, 12" DIAMETER		20	1	4951 2130 EACH	TRAFFIC SIGNAL SUPPORT, 30' MAST ARM WITH LUMINAIRE ARM (30' MOUNTING HEIGHT)	◆		TSP	2	4960 0140 EACH	WHITE HOT THERMOPLASTIC PAVEMENT LEGEND, SLOW CURVE ARROW , LEFT (INCLUDES ARROW, THE WORD SLOW AND 2 TRANSVERSE BANDS) MODIFIED	◆				S & PMP							
614	0413 6037 TON	SUPERPAVE ASPHALT MIXTURE DESIGN, BINDER COURSE, PG 64S-22, < 0.3 MILLION ESALS, 19.0 MM MIX		TCP PWD		0901 0001 LS	MAINTENANCE AND PROTECTION OF TRAFFIC DURING CONSTRUCTION	◆		TCP	1	4951 2135 EACH	TRAFFIC SIGNAL SUPPORT, 35' MAST ARM WITH LUMINAIRE ARM (30' MOUNTING HEIGHT)	◆		TSP	4	4960 0222 EACH	WHITE HOT THERMOPLASTIC LEGEND, "RIGHT ARROW", 12' - 0" X 3' - 0" MODIFIED	◆			S & PMP							
3546	0413 6077 SY	SUPERPAVE ASPHALT MIXTURE DESIGN, BINDER COURSE, PG 64E-22, 10 TO < 30 MILLION ESALS, 19.0 MM MIX, 2 1/2" DEPTH		PWD, 19	6	0901 0202 EACH	FLOODLIGHTS			TCP	2	4951 2140 EACH	TRAFFIC SIGNAL SUPPORT, 40' MAST ARM WITH LUMINAIRE ARM (30' MOUNTING HEIGHT)	◆		TSP	6	4960 0224 EACH	WHITE HOT THERMOPLASTIC LEGEND, "LEFT ARROW", 12' - 0" X 3' - 0" MODIFIED	◆			TCP , S & PMP							
27509	0460 0003 SY	ASPHALT TACK COAT (NTT/CNTT)		19	25	0901 0232 DAY	ADDITIONAL WARNING LIGHTS, TYPE C			TCP	129	4954 0012 LF	2 INCH CONDUIT, STEEL, UNDER TRACKS	◆		TSP	12	4960 0257 LF	WHITE HOT THERMOPLASTIC LEGEND, "YIELD LINE", 24" X 36" TRIANGLE, (MIN 4 TRIANGLES PER LINE) MODIFIED	◆			S & PMP							
19936	0491 0012 SY	MILLING OF ASPHALT PAVEMENT SURFACE, 1 1/2" DEPTH, MILLED MATERIAL RETAINED BY CONTRACTOR		19	200	0901 0240 SF	ADDITIONAL TRAFFIC CONTROL SIGNS			TCP	129	4954 0013 LF	3 INCH CONDUIT, STEEL, UNDER TRACKS	◆		TSP	17	0962 1025 EACH	WHITE WATERBORNE PAVEMENT LEGEND, "ONLY", 8'-0"				TCP							
1	0605 2858 EACH	TYPE 5 INLET BOX, HEIGHT < /= 10'		20	50	0901 0242 EACH	ADDITIONAL TRAFFIC CONTROL DEVICES, DRUMS			TCP	121	0954 0151 LF	TRENCH AND BACKFILL, TYPE I			TSP	21	0962 1044 EACH	WHITE WATERBORNE PAVEMENT LEGEND, "BICYCLE WITH RIDER", 6'-0" X 3'-4"				TCP							
7	4605 4010 EACH	REMOVE EXISTING INLET		20	18998	0901 0320 LF	4" STANDARD PAVEMENT MARKINGS, PAINT & BEADS, YELLOW	◆		TCP	312	0954 0152 LF	TRENCH AND BACKFILL, TYPE II			TSP	21	0962 1059 EACH	WHITE WATERBORNE PAVEMENT LEGEND, "STRAIGHT ARROW", 6'-0" X 1'-8"				TCP							
6	0606 0050 SET	GRADE ADJUSTMENT OF EXISTING INLETS		20	100	0901 0321 LF	6" STANDARD PAVEMENT MARKINGS, PAINT & BEADS, YELLOW			TCP	315	0954 0153 LF	TRENCH AND BACKFILL, TYPE III			TSP	4	0962 1061 EACH	WHITE WATERBORNE PAVEMENT LEGEND, "RIGHT ARROW", 12'-0" X 3'-0"				TCP							
13	0606 0150 SET	GRADE ADJUSTMENT OF EXISTING MANHOLES		20	25025	0901 0330 LF	4" STANDARD PAVEMENT MARKINGS, PAINT & BEADS, WHITE			TCP	20	0954 0201 LF	SIGNAL CABLE, 14 AWG, 3 CONDUCTOR			TSP	23	0962 1062 EACH	WHITE WATERBORNE PAVEMENT LEGEND, "LEFT ARROW", 12'-0" X 3'-0"				TCP							
	0608 0001 LS	MOBILIZATION		NO TAB	698	0901 0331 LF	6" STANDARD PAVEMENT MARKINGS, PAINT & BEADS, WHITE			TCP	599	0954 0202 LF	SIGNAL CABLE, 14 AWG, 5 CONDUCTOR			TSP	44	0962 1069 EACH	WHITE WATERBORNE PAVEMENT LEGEND, SHARED LANE MARKING				TCP							
	0609 0003 LS	INSPECTOR'S FIELD OFFICE AND INSPECTION FACILITIES, TYPE B		NO TAB	1484	0901 0334 LF	24" STANDARD PAVEMENT MARKINGS, PAINT & BEADS, WHITE			TCP	199	0954 0203 LF	SIGNAL CABLE, 14 AWG, 7 CONDUCTOR			TSP	25739	0963 0004 LF	4" PAVEMENT MARKING REMOVAL				TCP							
	0609 0009 LS	EQUIPMENT PACKAGE		NO TAB	5	0901 0450 EACH	3-LINE CHANGEABLE MESSAGE SIGN WITH TELECOMMUNICATIONS	◆		TCP	129	0954 0500 LF	DIRECTIONAL BORING			TSP	660	4964 0002 LF	4" YELLOW EPOXY PAVEMENT MARKINGS MODIFIED	◆			S & PMP							
5	0618 0021 EACH	CONCRETE COLLAR FOR 15" PIPE EXTENSION		20	6	4910 2152 EACH	6-FOOT ALUMINUM BRACKET ARM, NPS BROWN	◆		TSP	12	4955 3208 EACH	VEHICULAR SIGNAL HEAD, THREE 12" SECTIONS MODIFIED	◆		TSP	606	4964 0005 LF	6" WHITE EPOXY PAVEMENT MARKINGS MODIFIED	◆			S & PMP							
698	0627 3020 LF	TEMPORARY BARRIER, TEST LEVEL 3, BARRIER DEFLECTION DISTANCE < /=2'		TCP	3345	4910 4114 LF	AWG 4 UNDERGROUND CABLE, COPPER, 1 CONDUCTOR, PECO SERVICE	◆		TSP	4	4955 3210 EACH	VEHICULAR SIGNAL HEAD, FIVE 12" SECTIONS MODIFIED	◆		TSP	384	4964 0026 LF	24" WHITE EPOXY TRANSVERSE PAVEMENT MARKINGS MODIFIED	◆			S & PMP							
100	0628 3020 LF	RESET TEMPORARY BARRIER, TEST LEVEL 3, BARRIER DEFLECTION DISTANCE < /=2'		TCP	644	4910 5055 LF	2" DIRECT BURIAL CONDUIT MODIFIED	◆		TSP	4	4955 3722 EACH	LED COUNTDOWN PEDESTRIAN SIGNAL HEAD, TYPE A MODIFIED	◆		TSP	COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL ENGINEER STEPHEN M. MCCOINLEY ENGINEER													
912	0676 0001 SY	CEMENT CONCRETE SIDEWALK		PWD, 19	736	4910 5059 LF	3" DIRECT BURIAL CONDUIT MODIFIED	◆		TSP	7336	4960 0002 LF	4" YELLOW HOT THERMOPLASTIC PAVEMENT MARKINGS MODIFIED	◆		TCP , S & PMP														
	0686 0010 LS	CONSTRUCTION SURVEYING, TYPE A		NO TAB	266	0931 0001 SF	POST MOUNTED SIGNS, TYPE B			S & PMP	15150	4960 0005 LF	6" WHITE HOT THERMOPLASTIC PAVEMENT MARKINGS MODIFIED	◆		TCP , S & PMP														
SHEET 1 OF 2										PROJECT ID: 7148										MPMS: 81304		ECMS: 81304		9/12/2025 7:53:53 AM						

S & PMP - SIGNING AND PAVEMENT MARKING PLAN										TCP - TRAFFIC CONTROL PLAN										REVISION NO	REVISIONS	DATE	BY	DISTRICT	COUNTY		ROUTE	SECTION	SHEET
TSP - TRAFFIC SIGNAL PLAN																								06	PHILADELPHIA		0000	CPD	18 OF 29
PWD - WATER MAIN RELAY PLAN																													
◆ - SEE SPECIAL PROVISIONS																													
QUANTITY	ITEM NO	DESCRIPTION	DESIGN NO	FOR TAB SEE SHEET	QUANTITY	ITEM NO	DESCRIPTION	DESIGN NO	FOR TAB SEE SHEET	QUANTITY	ITEM NO	DESCRIPTION	DESIGN NO	FOR TAB SEE SHEET	QUANTITY	ITEM NO	DESCRIPTION	DESIGN NO	FOR TAB SEE SHEET	QUANTITY	ITEM NO	DESCRIPTION	DESIGN NO	FOR TAB SEE SHEET					
	UNIT					UNIT					UNIT					UNIT					UNIT					UNIT		UNIT	
146	4964 0036 LF	24" YELLOW EPOXY TRANSVERSE PAVEMENT MARKINGS MODIFIED		S & PMP	100	9000 0024 TON	OFF-SITE DISPOSAL OF SOILS		NO TAB		9000 0118 LS	DEWATERING OF TRENCHES (W1008)		PWD	1	9000 3002 EACH	REMOVE FOUNDATION (CCTV)						S & PMP						
2	4964 0222 EACH	WHITE EPOXY LEGEND, "RIGHT ARROW", 12' - 0" X 3' - 0" MODIFIED		S & PMP	50000	9000 0025 DOLLA	HANDLING, ONSITE TREATMENT, AND OFFSITE DISPOSAL OF CONTAMINATED LIQUIDS		NO TAB	1	9000 0119 EACH	BORING AND JACKING INSTALLATION AT ACTIVE RAIL CROSSING NEAR PACKER AVENUE (CROSSING H-H) (W6150)		PWD	1	9000 3003 EACH	OVERHEAD SIGN AND CCTV SUPPORT, 30' MAST ARM						S & PMP						
2	4964 0224 EACH	WHITE EPOXY LEGEND, "LEFT ARROW", 12' - 0" X 3' - 0" MODIFIED		S & PMP	6	9000 0026 EACH	UTILITY TEST PIT		NO TAB	1	9000 0120 EACH	BORING AND JACKING INSTALLATION AT ACTIVE RAIL SIDING CROSSING NEAR OREGON AVE (CROSSING J-J) (W6151)		PWD	1	9000 3004 EACH	OVERHEAD SIGN SUPPORT, 40' MAST ARM						S & PMP						
3	4965 0118 EACH	WHITE PREFORMED THERMOPLASTIC LEGEND, "BICYCLE WITH RIDER", 8' - 0" X 4' - 0" MODIFIED		S & PMP	2	9000 0028 EACH	OPEN MOUTH INLET		20	1	9000 0121 EACH	BORING AND JACKING INSTALLATION AT ACTIVE RAIL SIDING CROSSING NEAR 2701 S. CHRISTOPHER COLUMBUS BLVD (CROSSING K-K) (W6152)		PWD	1	9000 3005 EACH	OVERHEAD SIGN SUPPORT, 50' MAST ARM						S & PMP						
1	4965 0119 EACH	WHITE PREFORMED THERMOPLASTIC LEGEND, "HANDICAP SYMBOL", 3' - 3" X 2' - 11" MODIFIED		S & PMP	5000	9000 0029 DOLLA	VEHICLE REMOVAL		NO TAB	3	9000 0122 EACH	3/4 INCH WATER SERVICE CONNECTION FROM WATER MAIN TO CURB STOP (W7201)		PWD	9	9000 3006 LF	YELLOW PEXCO CITY POST						S & PMP						
1	4965 0257 EACH	WHITE PREFORMED THERMOPLASTIC LEGEND, SHARED LANE MARKING MODIFIED		S & PMP	50	9000 0031 LF	PWD STORM PIPE		20	2	9000 0123 EACH	2 INCH WATER SERVICE CONNECTION FROM WATER MAIN TO CURB STOP (W7204)		PWD	172	9000 3007 EACH	ADA DIRECTIONAL RAISED RUMBLE STRIP						S & PMP						
3	4965 0429 EACH	WHITE PREFORMED THERMOPLASTIC LEGEND, "STRAIGHT ARROW", 6' - 0" X 1' - 8" MODIFIED		S & PMP	40	9000 0100 LF	3 INCH DI PIPE (W2003)		PWD	1	9000 0124 EACH	WATER SUPPLY CONNECTION FROM CURB STOP TO METER AT A FIXED PRICE OF \$1,500.00 (W7211)		PWD	1115	9000 4115 LF	AWG 6 UNDERGROUND CABLE, COPPER, 1 CONDUCTOR, PECO SERVICE						TSP						
19	0971 0001 EACH	REMOVE POST MOUNTED SIGNS, TYPE B		S & PMP	30	9000 0101 LF	4 INCH DI PIPE (W2004)		PWD	1	9000 0125 EACH	WATER PITCHER FILTER AT A FIXED PRICE OF \$200.00 (W7212)		PWD		9901 2005 LS	REIMBURSEMENT OF PHILADELPHIA POLICE DEPARTMENT OF HIGHWAY PATROL SERVICES						NO TAB						
22	0975 0001 EACH	REMOVE POST MOUNTED SIGNS, TYPE F		S & PMP		9000 0102 LS	MECHANICAL STREET SWEEPING (W0376)		PWD	72	9000 0126 LF	3/4 INCH COPPER SERVICE PIPE FROM WATER MAIN TO CURB STOP (W7351)		PWD	4	9920 0411 EACH	VIDEO DETECTION SYSTEM, CAMERA (DUAL VIDEO RADAR SYSTEM)						TSP						
1000	1999 0000 HOUR	TRAINEES FOR PROJECTS 100% STATE FUNDED		NO TAB	165	9000 0103 LF	6 INCH DI PIPE (W2006)		PWD	48	9000 0127 LF	2 INCH COPPER SERVICE PIPE FROM WATER MAIN TO CURB STOP (W7354)		PWD	1	9951 0160 EACH	ACQUISITION OF TRAFFIC SIGNAL SUPPORTS						TSP						
3220	9000 0000 LF	PLAIN CEMENT CONCRETE CURB, 6" HEIGHT CITY OF PHILADELPHIA		19	75	9000 0104 LF	8 INCH DI PIPE (W2008)		PWD	8	9000 0128 LF	3/4 INCH COPPER SUPPLY PIPE FROM CURB STOP TO METER (W7361)		PWD															
3	9000 0001 EACH	PWD STD. OPEN MOUTH GRATE INLET		20	1710	9000 0105 LF	12 INCH DI PIPE (W2012)		PWD	5	9000 0129 CY	EXPLORATORY EXCAVATION (W1011)		PWD															
3	9000 0002 EACH	PWD STD. HIGHWAY GRATE INLET		20	875	9000 0106 LF	16 INCH DI PIPE (W2016)		PWD	60	9000 0130 CY	FLOWBALE FILL (CONTROL DENSITY FILL) (W8198)		PWD															
2	9000 0004 EACH	PWD STD. SADDLE CONNECTION TO EXISTING SEWER		20	2	9000 0107 EACH	16" MECHANICAL COUPLINGS (W2816)		PWD	1598	9000 0230 LF	SIGNAL CABLE, 14 AWG, 30 CONDUCTOR		TSP															
1	9000 0005 EACH	EMERGENCY PREEMPTION SYSTEM, 5 APPROACHES		TSP	9	9000 0108 TON	DUCTILE IRON FITTINGS (W3004)		PWD	5	9000 0924 EACH	ACCESSIBLE PEDESTRIAN PUSH BUTTONS		TSP															
1	9000 0006 EACH	SIGNAL TESTING		TSP	2	9000 0109 EACH	4 INCH GATE VALVES (W5004)		PWD	8	9000 2110 EACH	COMPOSITE JUNCTION BOX, 12"x18"x12"		TSP															
1	9000 0007 EACH	STREET LIGHTING SERVICE DISCONNECT		TSP	9	9000 0110 EACH	6 INCH GATE VALVES (W5006)		PWD	1	9000 2112 EACH	COMPOSITE JUNCTION BOX, 39" OD X 24"		TSP															
6	9000 0008 EACH	STREET LIGHTING LUMINAIRE, LED		TSP	3	9000 0111 EACH	8 INCH GATE VALVES (W5008)		PWD	3	9000 2220 EACH	20' C-POST		TSP															
1	9000 0012 EACH	FIBER OPTIC ETHERNET COMMUNICATIONS APPLIANCE, 1G LAYER 2 SWITCH		TSP	5	9000 0112 EACH	12 INCH GATE VALVES (W5012)		PWD	1	9000 2225 EACH	TRAFFIC D-POLE (30')		TSP															
36	9000 0013 LF	FIBER OPTIC CABLE, 12 STRANDS		TSP	3	9000 0113 EACH	16 INCH VERTICAL GATE VALVE (W5016)		PWD	1	9000 2406 EACH	ATC STANDARD CONTROLLER ASSEMBLY, ATC RACK-MOUNT CABINET (46" H X 24" W X 20" D)		TSP															
	9000 0020 LS	WASTE MANAGEMENT PLANS		NO TAB	6	9000 0114 EACH	FIRE HYDRANTS WITH CENTER COMPRESSION LOCKS (W6101)		PWD	1	9000 2451 EACH	ATMS INTEGRATION AND SOFTWARE MODIFICATION		TSP															
	9000 0021 LS	HEALTH AND SAFETY PLAN		NO TAB	6	9000 0115 EACH	REMOVALS OF FIRE HYDRANTS (W6110)		PWD	36	9000 2521 LF	ELECTRICAL SERVICE WIRE, #6 AWG		TSP															
	9000 0022 LS	STOCKPILING OF SOLIDS		NO TAB	144	9000 0116 CY	CONCRETE ANCHORS (W6200)		PWD	1	9000 2601 EACH	REMOVAL OF TRAFFIC SIGNAL EQUIPMENT		TSP															
10	9000 0023 EACH	SOLID SAMPLING (LANDFILL CHARACTERIZATION)		NO TAB	5	9000 0117 EACH	SEWER VENT BOX (W8211)		PWD	1	9000 3001 EACH	RELOCATE CCTV CAMERA		S & PMP															

COMMONWEALTH OF PENNSYLVANIA

REGISTERED PROFESSIONAL ENGINEER

STEPHEN M MCGINLEY

SHEET 2 OF 2

PROJECT ID: 7148

MPMS: 81304

ECMS: 81304

9/12/2025 7:53:53 AM

TABULATION OF QUANTITIES

ROADWAY

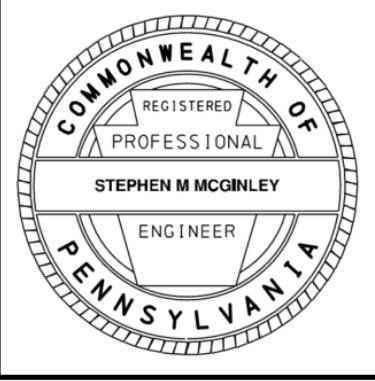
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TABULATION OF QUANTITIES

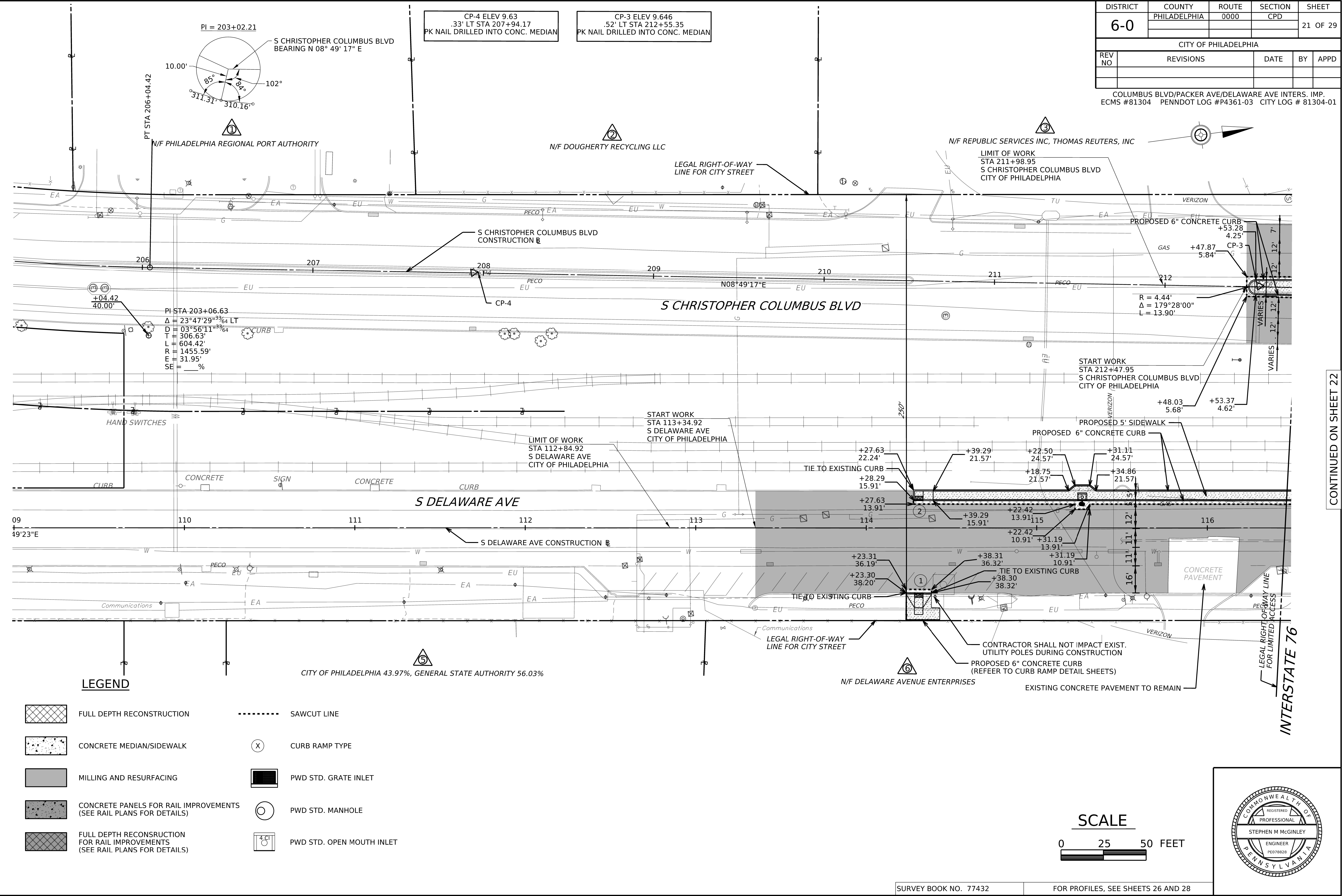
DRAINAGE AND EROSION AND SEDIMENT POLLUTION CONTROL

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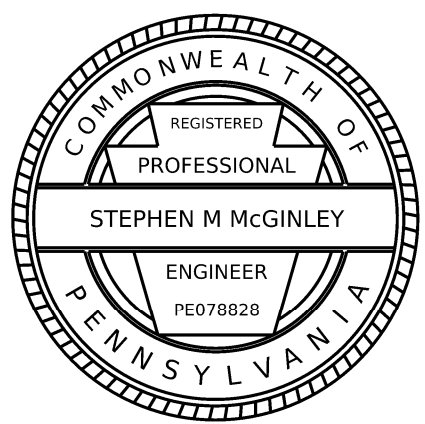
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DISTRICT	COUNTY	ROUTE	SECTION	SHEET
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CITY OF PHILADELPHIA				
REV NO	REVISIONS	DATE	BY	APPD
COLUMBUS BLVD/PACKER AVE/DELAWARE AVE INTERS. IMP. ECMS #81304 PENNDOT LOG #P4361-03 CITY LOG # 81304-01				

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INTERSTATE 76

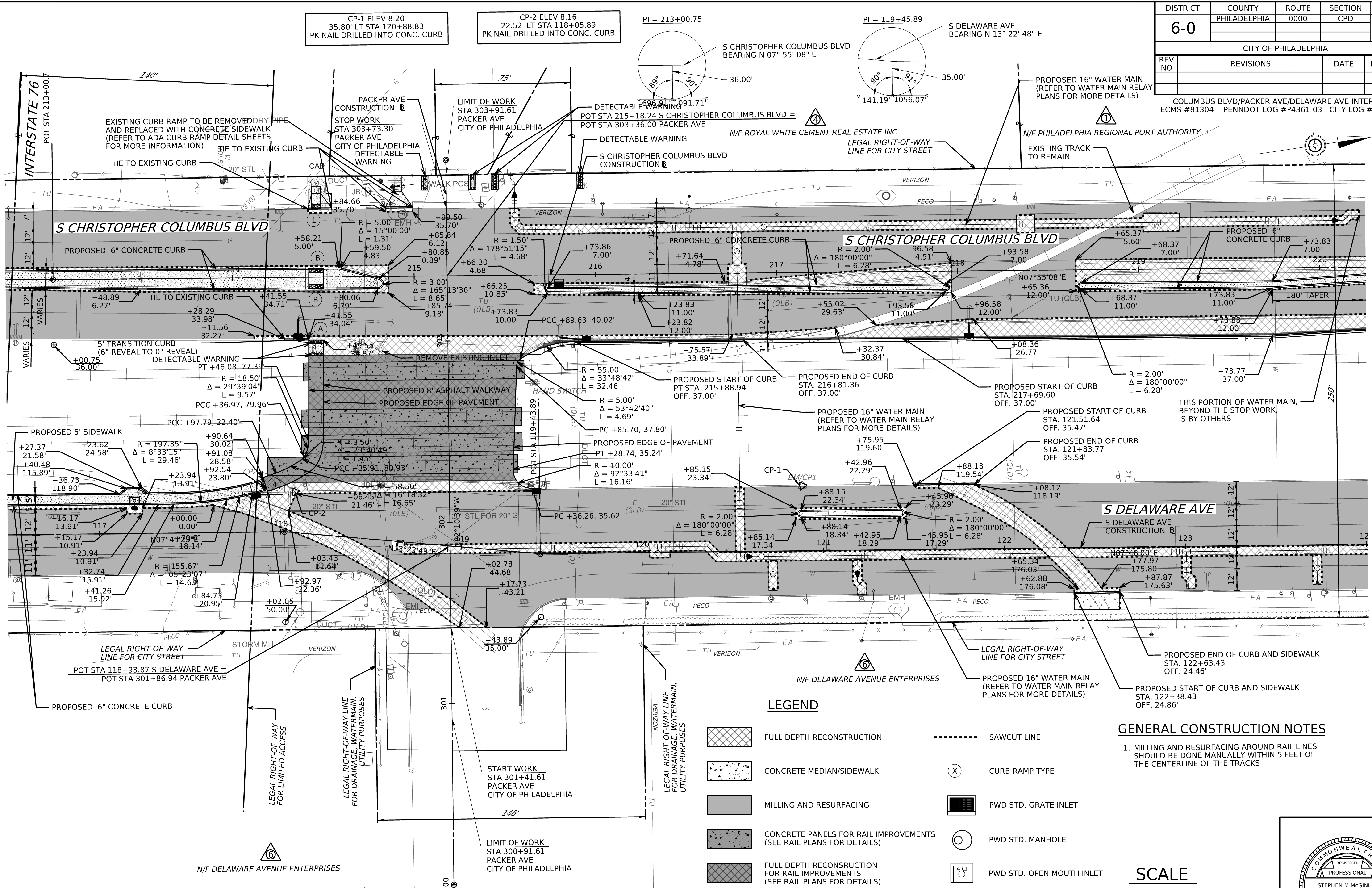


DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	PHILADELPHIA	0000	CPD	22 OF 29
CITY OF PHILADELPHIA				
REV NO	REVISIONS	DATE	BY	APPD

COLUMBUS BLVD/PACKER AVE/DELAWARE AVE INTERS. IMP.
ECMS #81304 PENNDOT LOG #P4361-03 CITY LOG # 81304-01

CONTINUED ON SHEET 21

CONTINUED ON SHEET 23



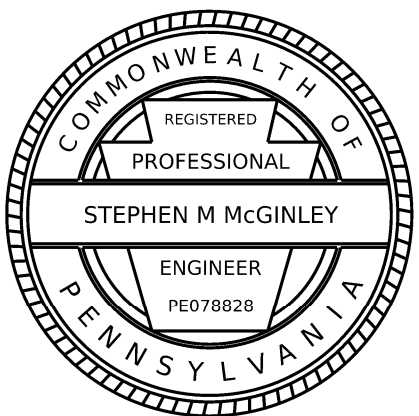
LEGEND

	FULL DEPTH RECONSTRUCTION		SAWCUT LINE
	CONCRETE MEDIAN/SIDEWALK		CURB RAMP TYPE
	MILLING AND RESURFACING		PWD STD. GRATE INLET
	CONCRETE PANELS FOR RAIL IMPROVEMENTS (SEE RAIL PLANS FOR DETAILS)		PWD STD. MANHOLE
	FULL DEPTH RECONSTRUCTION FOR RAIL IMPROVEMENTS (SEE RAIL PLANS FOR DETAILS)		PWD STD. OPEN MOUTH INLET

GENERAL CONSTRUCTION NOTES

- MILLING AND RESURFACING AROUND RAIL LINES SHOULD BE DONE MANUALLY WITHIN 5 FEET OF THE CENTERLINE OF THE TRACKS

SCALE



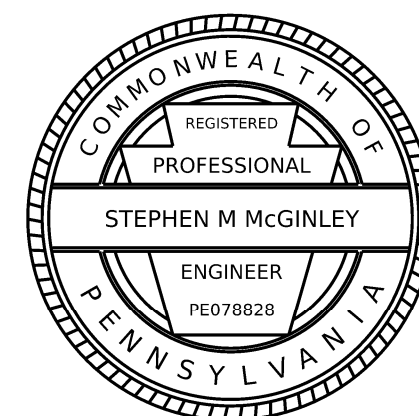
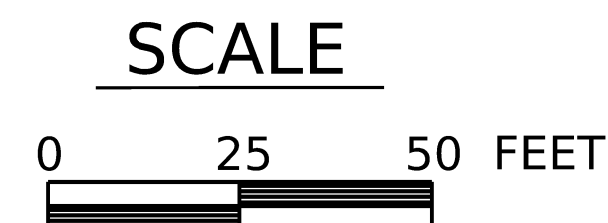
COLUMBUS BLVD/PACKER AVE/DELAWARE AVE INTERS. IMP.
ECMS #81304 PENNDOT LOG #P4361-03 CITY LOG # 81304-01



CONTINUED ON SHEET 24

	FULL DEPTH RECONSTRUCTION		SAWCUT LINE
	CONCRETE MEDIAN/SIDEWALK		CURB RAMP TYPE
	MILLING AND RESURFACING		PWD STD. GRATE INLET
	CONCRETE PANELS FOR RAIL IMPROVEMENTS (SEE RAIL PLANS FOR DETAILS)		PWD STD. MANHOLE
	FULL DEPTH RECONSTRUCTION FOR RAIL IMPROVEMENTS (SEE RAIL PLANS FOR DETAILS)		PWD STD. OPEN MOUTH INLET

1. MILLING AND RESURFACING AROUND RAIL LINES SHOULD BE DONE MANUALLY WITHIN 5 FEET OF THE CENTERLINE OF THE TRACKS



FOR PROFILES, SEE SHEETS 27 AND 29

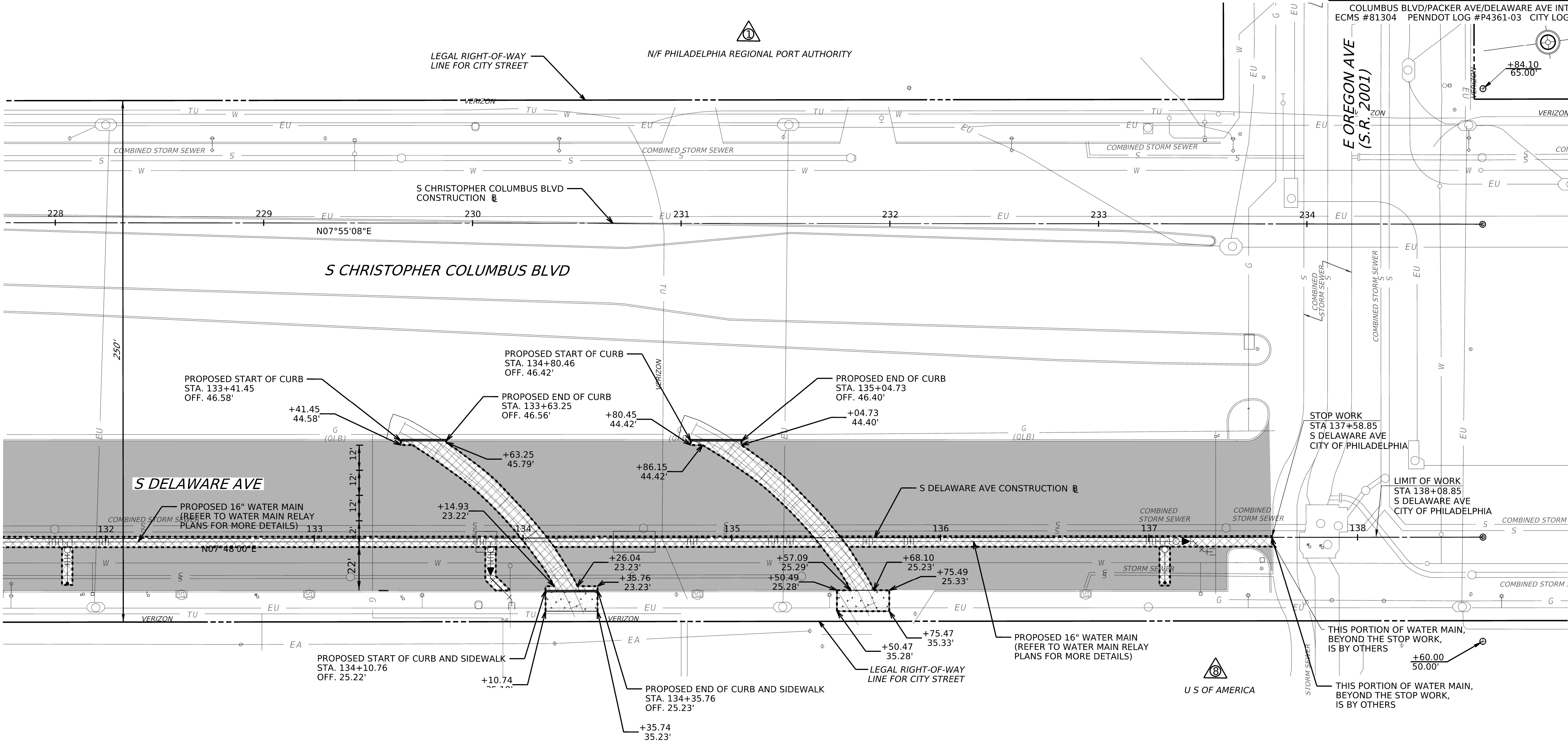
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D-9012 CADD (02-90) REVISED (06-18)

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CITY OF PHILADELPHIA					
REV NO	REVISIONS		DATE	BY	APPD

COLUMBUS BLVD/PACKER AVE/DELAWARE AVE INTERS. IMP.
ECMS #81304 PENNDOT LOG #P4361-03 CITY LOG # 81304-01

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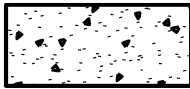


LEGEND



FULL DEPTH RECONSTRUCTION

----- SAWCUT LINE



CONCRETE MEDIAN/SIDEWALK



CURB RAMP TYPE



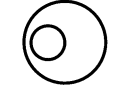
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PWD STD. GRATE INLET



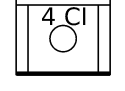
CONCRETE PANELS FOR RAIL IMPROVEMENTS
(SEE RAIL PLANS FOR DETAILS)



PWD STD. MANHOLE



FULL DEPTH RECONSTRUCTION
FOR RAIL IMPROVEMENTS
(SEE RAIL PLANS FOR DETAILS)

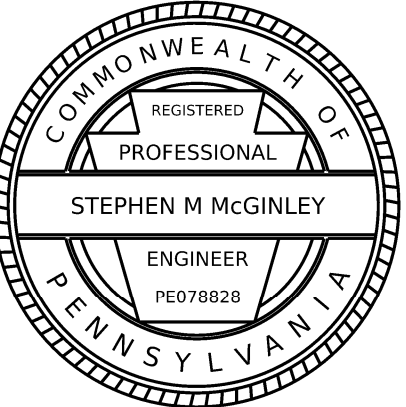


PWD STD. OPEN MOUTH INLET

GENERAL CONSTRUCTION NOTES

1. MILLING AND RESURFACING AROUND RAIL LINES
SHOULD BE DONE MANUALLY WITHIN 5 FEET OF
THE CENTERLINE OF THE TRACKS

SCALE



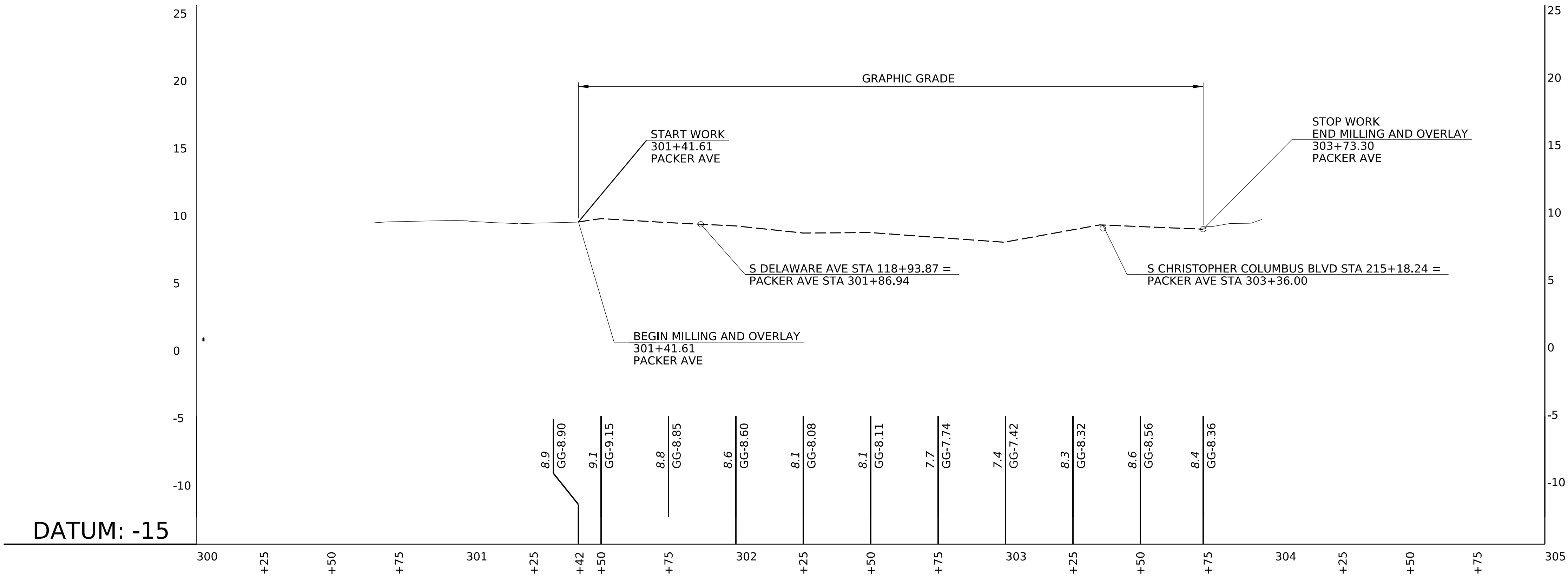
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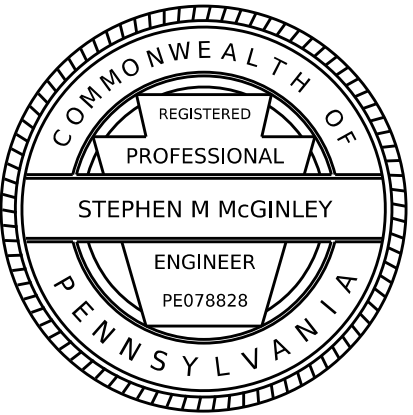
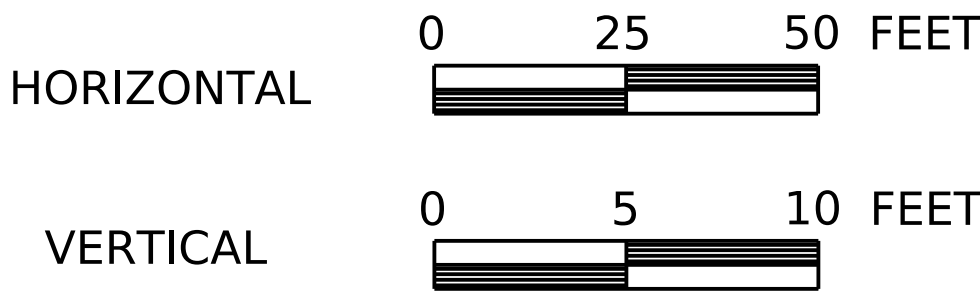
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6-0	PHILADELPHIA	0000	CPD	25 OF 29	
CITY OF PHILADELPHIA					
REV NO	REVISIONS		DATE	BY	APPD

COLUMBUS BLVD/PACKER AVE/DELAWARE AVE INTERS. IMP.
ECMS #81304 PENNDOT LOG #P4361-03 CITY LOG # 81304-01



PACKER AVE PROFILE

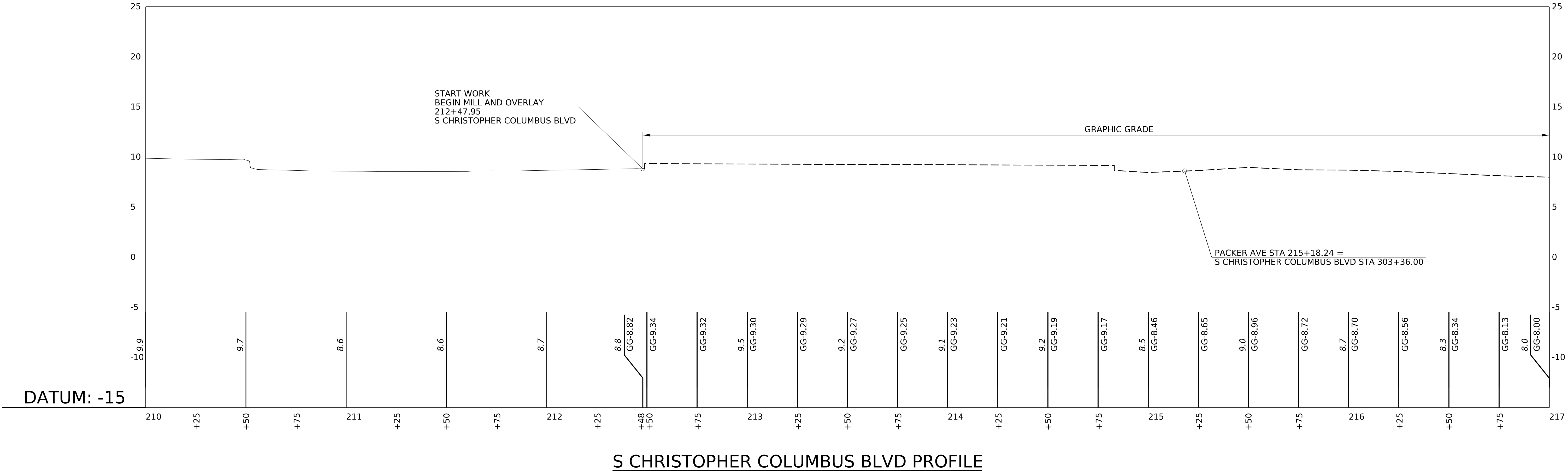
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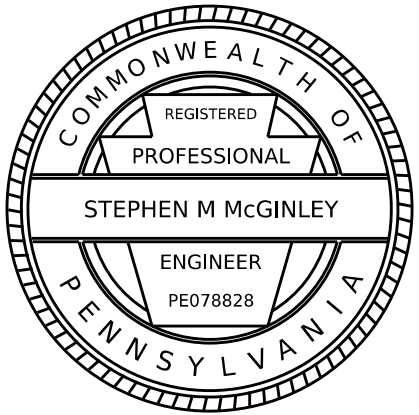
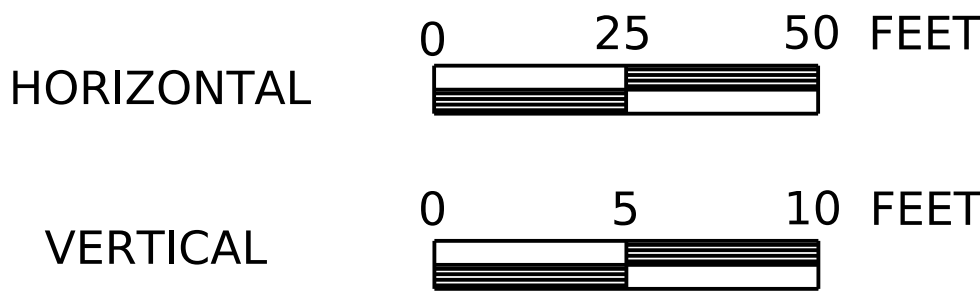
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DISTRICT	COUNTY	ROUTE	SECTION	SHEET	
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CITY OF PHILADELPHIA					
REV NO	REVISIONS		DATE	BY	APPD

COLUMBUS BLVD/PACKER AVE/DELAWARE AVE INTERS. IMP.
ECMS #81304 PENNDOT LOG #P4361-03 CITY LOG # 81304-01



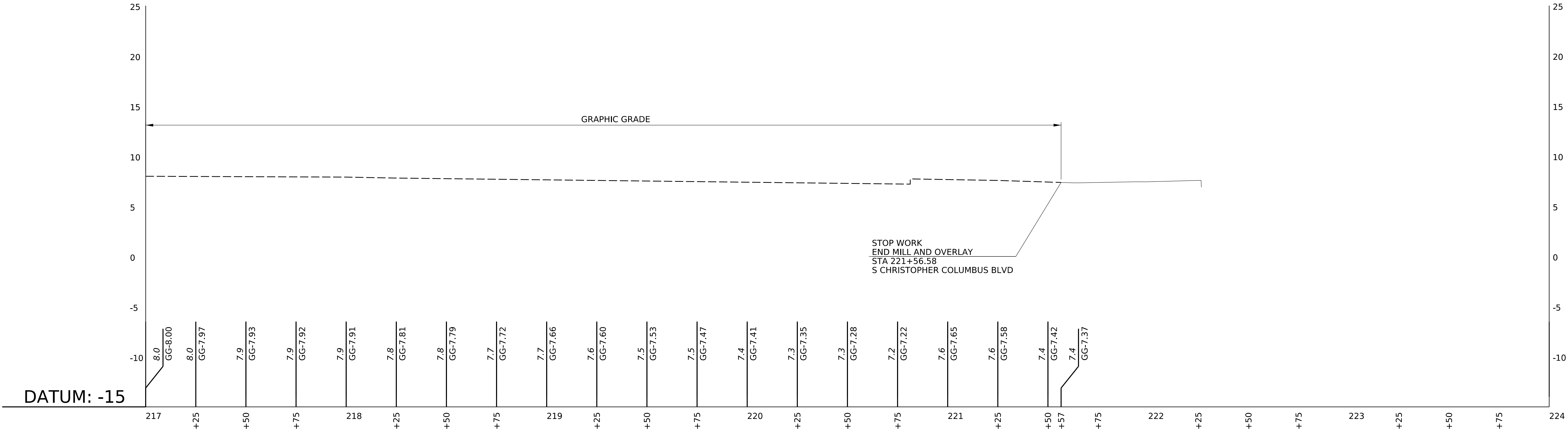
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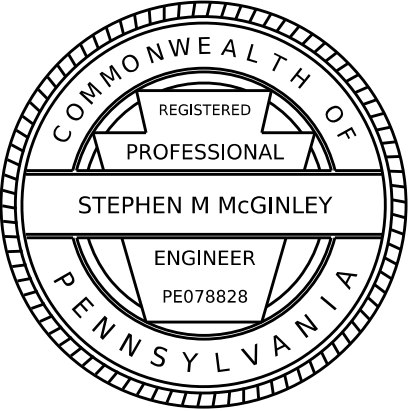
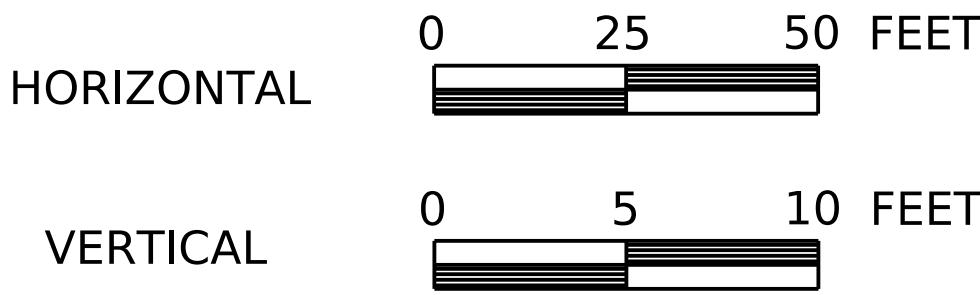
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CITY OF PHILADELPHIA					
REV NO	REVISIONS		DATE	BY	APPD

COLUMBUS BLVD/PACKER AVE/DELAWARE AVE INTERS. IMP.
ECMS #81304 PENNDOT LOG #P4361-03 CITY LOG # 81304-01



S CHRISTOPHER COLUMBUS BLVD PROFILE

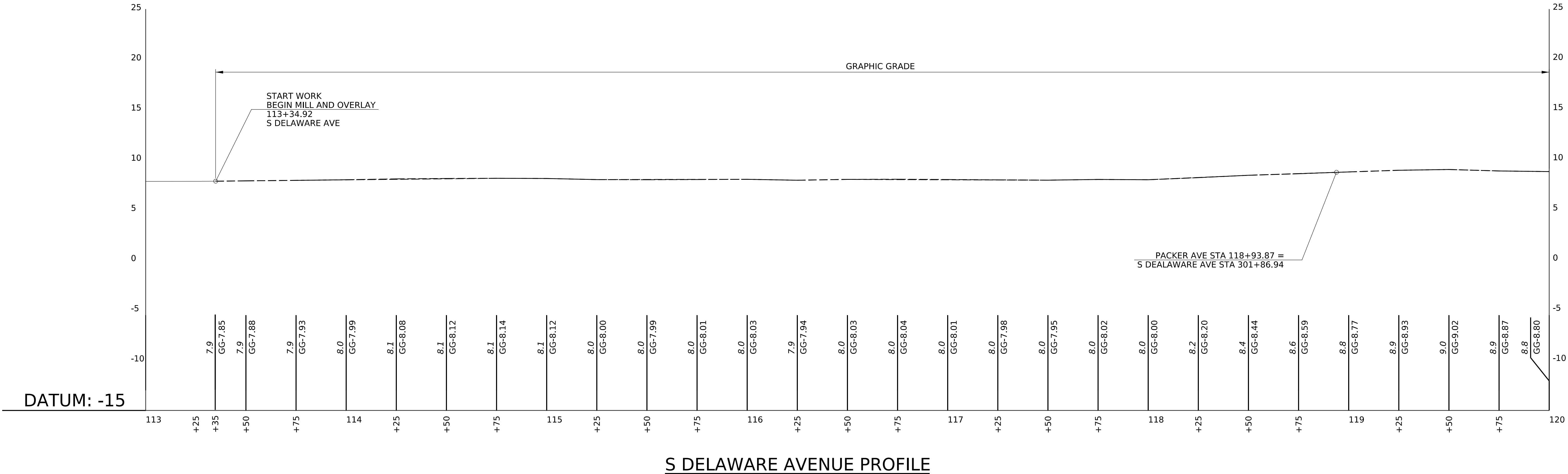
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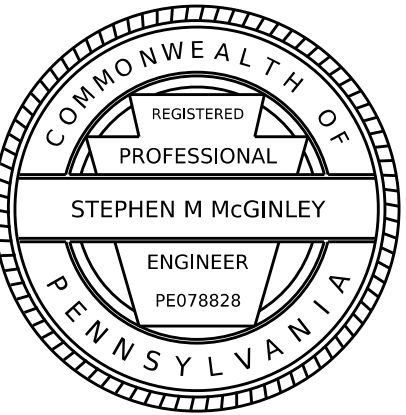
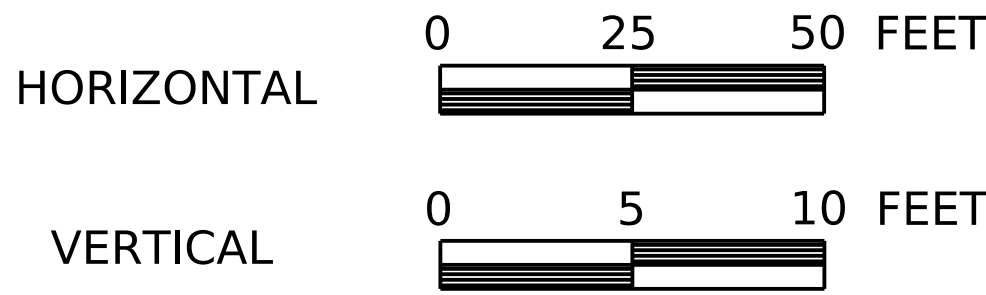
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CITY OF PHILADELPHIA					
REV NO	REVISIONS		DATE	BY	APPD

COLUMBUS BLVD/PACKER AVE/DELAWARE AVE INTERS. IMP.
ECMS #81304 PENNDOT LOG #P4361-03 CITY LOG # 81304-01



SCALE



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DISTRICT	COUNTY	ROUTE	SECTION	SHEET	
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CITY OF PHILADELPHIA					
REV NO	REVISIONS		DATE	BY	APPD

COLUMBUS BLVD/PACKER AVE/DELAWARE AVE INTERS. IMP.
ECMS #81304 PENNDOT LOG #P4361-03 CITY LOG # 81304-01



SCALE

