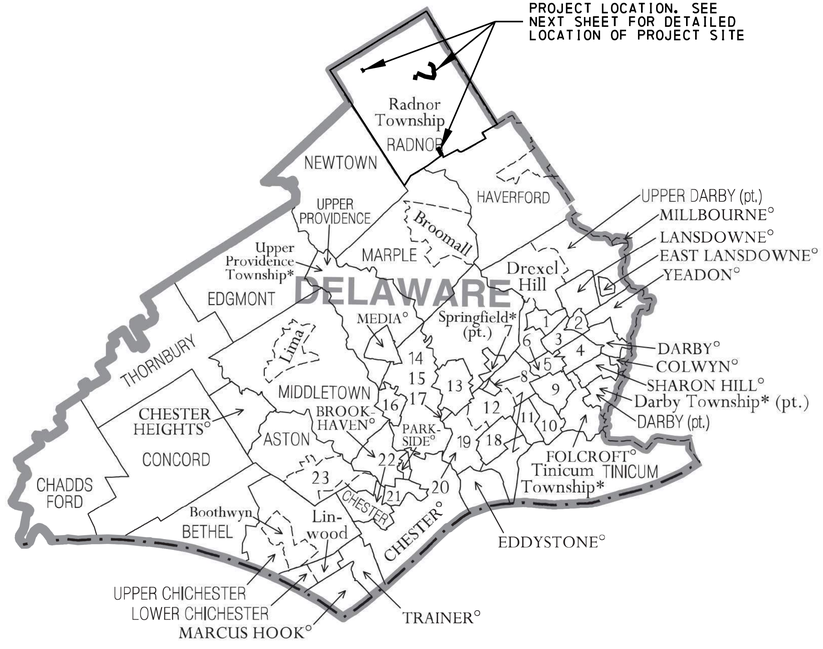
RADNOR TOWNSHIP TRAIL
DRAWINGS
FOR
NPDES PERMIT AND RADNOR TOWNSHIP STORMWATER MANAGEMENT PERMIT
POST CONSTRUCTION STORMWATER MANAGEMENT PLAN
FOR
RADNOR TOWNSHIP, DELAWARE COUNTY PA

INDEX OF SHEETS



DELAWARE COUNTY TOWNSHIP MAP

PLAN PREPARATION
DESIGNER: A.D. MARBLE

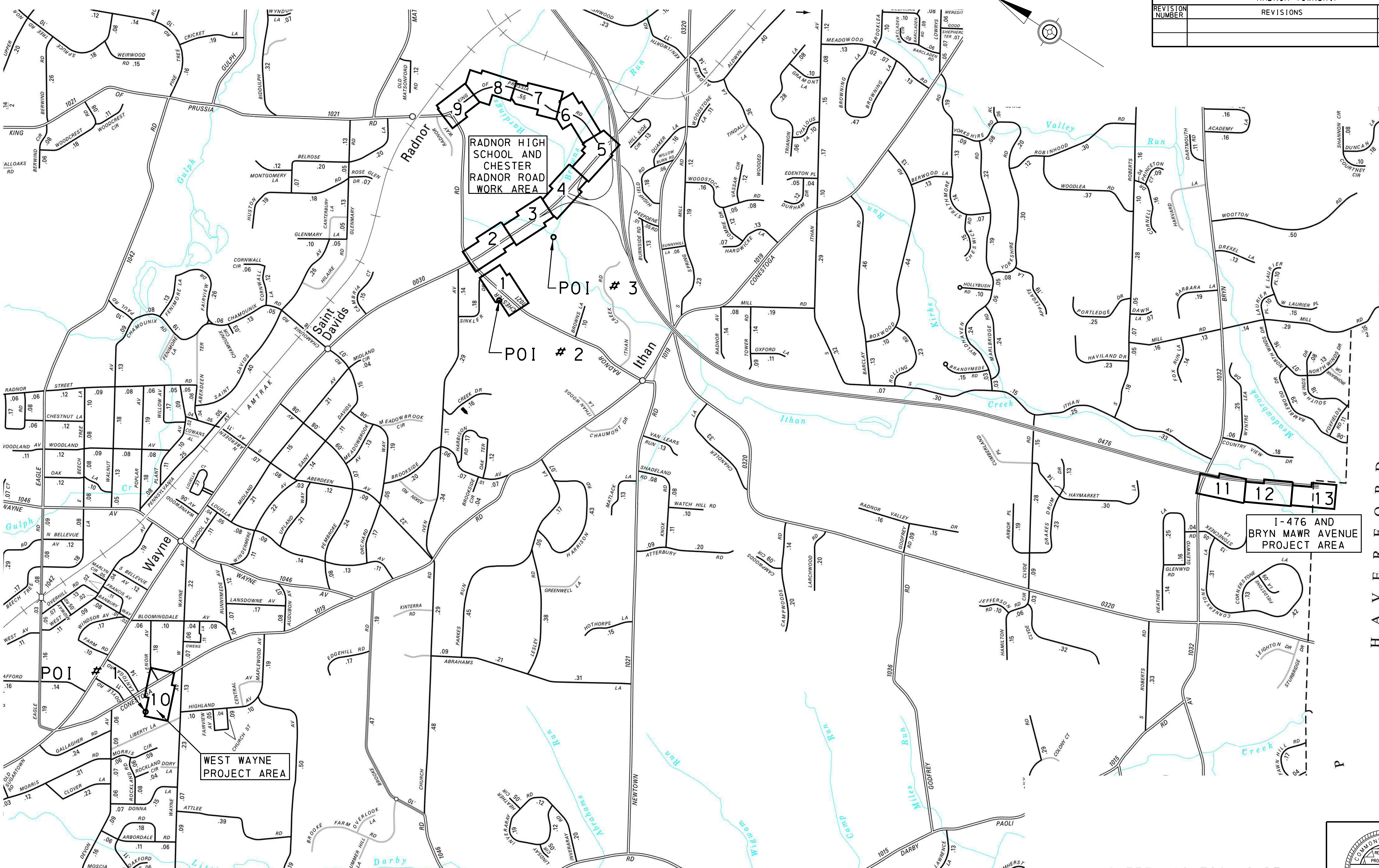
A.D. MARBLE
environmental·cultural·engineering
2200 RENAISSANCE BLVD.
SUITE 260
KING OF PRUSSIA, PA 19406
TEL: (484) 533-2500
FAX: (484) 533-2599
WWW.ADMARBLE.COM

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JENNI ERIN WOODWORTH
ENGINEER
Jenni Woodworth
11-12-2019

OWNER/APPLICANT:
RADNOR TOWNSHIP
301 IVEN AVENUE
WAYNE, PA 19087
CONTACT: STEPHEN NORCINI, PE
TOWNSHIP ENGINEER
PH: 610-688-5600

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	DELAWARE	0030	RRT	2 OF 53
RADNOR TOWNSHIP				

REVISION NUMBER	REVISIONS	DATE	BY



LEGEND

X	ESC SHEET LOCATION

SHEET LOCATION INDEX AND POI LOCATIONS

0 750 1500

SCALE IN FEET: 1"=750'

DWG IND-01 OF 01

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL JENNI ERIN WOODWORTH ENGINEER NO.PE073132

11-12-2019

DESIGN BY: EBD | CHECKED BY: JEW

PLOTTED: 10/9/2019 4:48:54 PM

A.D. MARBLE

FILE NAME: X:\Projects\P1585\CADD\Plan\PCSW\Sheet Index Plan 01.dgn

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	DELAWARE	0030	RRT	3 OF 53

RADNOR TOWNSHIP

REVISION NUMBER	REVISIONS	DATE	BY

LEGEND

375	EXISTING CONTOUR MAJOR
374	EXISTING CONTOUR MINOR
	EXISTING STREAM BOUNDARY
	EXISTING TREE
	UTILITY POLE, LIGHT POLE, SIGN
	EXISTING WOOD LINE
	EXISTING RIGHT-OF-WAY
℞	EXISTING PROPERTY LINE
	EXISTING WETLAND
S	EXISTING SANITARY SEWER
T	EXISTING UNDERGROUND TELEPHONE
E	EXISTING ELECTRIC LINE
W	EXISTING WATER LINE
G	EXISTING GAS LINE
C	EXISTING UNDERGROUND CONDUIT
X	EXISTING FENCE
	EXISTING GUIDERAIL
	SOIL BOUNDARY
GeB	SOIL TYPE
	100 YEAR FLOODPLAIN

EXISTING CONDITIONS PLAN

SCALE IN FEET: 1"=25'

DWG EX-01 OF 13

11-12-2019

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL JENNI ERIN WOODWORTH ENGINEER

DESIGN BY: EBD | CHECKED BY: JEW

A.D. MARBLE
FILE NAME: X:\Projects\P1585\CADD\Plan\ESPC\Existing Plan 01.dgn

PLOTTED: 10/9/2019 4:49:51 PM

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	DELAWARE	0030	RRT	4 OF 53
RADNOR TOWNSHIP				

REVISION NUMBER	REVISIONS	DATE	BY

RADNOR TOWNSHIP SCHOOL DISTRICT
PARCEL ID 36020123310
PUBLIC LAND USE ZONING

WoA

GeB

RADNOR CENTER RD.

411

EXISTING SIDEWALK

EXISTING DIRT HIKING PATH

LEGAL RIGHT OF WAY

E. LANCASTER AVE.
(S.R. 30) WESTBOUND

303 304 305 306 307 308 309 310

E. LANCASTER AVE.
(S.R. 30) EASTBOUND

345 346 348 350 352 354 356

410

RADNOR CENTER RD.

LEGAL RIGHT OF WAY

N/L LOUIE BREBIS
CLEMENTINE III &
PROVCO PARTNERS LLC
C/O
DBV 3759 PG 0479
PARCEL ID 36040256100

EXISTING SIDEWALK

409

354 353 352 351

LEGAL RIGHT OF WAY

N/L MICHAEL R. MATTERN &
PETER DO
DBV 2319 PG 1319
PARCEL ID 36040256500

408

MATCHLINE STATION 407+50 - SEE SHEET EX 1

MATCHLINE STATION 310+50 - SEE SHEET EX 3

GeB

GeC2

LEGEND

375	EXISTING CONTOUR MAJOR
374	EXISTING CONTOUR MINOR
	EXISTING STREAM BOUNDARY
	EXISTING TREE
	UTILITY POLE, LIGHT POLE, SIGN
	EXISTING WOOD LINE
	EXISTING RIGHT-OF-WAY
℄	EXISTING PROPERTY LINE
	EXISTING WETLAND
S	EXISTING SANITARY SEWER
T	EXISTING UNDERGROUND TELEPHONE
E	EXISTING ELECTRIC LINE
W	EXISTING WATER LINE
G	EXISTING GAS LINE
C	EXISTING UNDERGROUND CONDUIT
X	EXISTING FENCE
	EXISTING GUIDERAIL
	SOIL BOUNDARY
GeB	SOIL TYPE
	100 YEAR FLOODPLAIN

EXISTING CONDITIONS PLAN

0 25 50
SCALE IN FEET: 1"=25'

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JENNI ERIN WOODWORTH
ENGINEER

11-12-2019

DWG EX-02 OF 13

DESIGN BY: EBD | CHECKED BY: JEW

A.D. MARBLE
FILE NAME: X:\Projects\P1585\CADD\Plan\ESPC\Existing Plan 02.dgn

PLOTTED: 10/9/2019 4:49:52 PM

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	DELAWARE	0030	RRT	5 OF 53

RADNOR TOWNSHIP

REVISION NUMBER	REVISIONS	DATE	BY

LEGEND

- 375 EXISTING CONTOUR MAJOR
- 374 EXISTING CONTOUR MINOR
- EXISTING STREAM BOUNDARY
- EXISTING TREE
- UTILITY POLE, LIGHT POLE, SIGN
- EXISTING WOOD LINE
- EXISTING RIGHT-OF-WAY
- EXISTING PROPERTY LINE
- EXISTING WETLAND
- S EXISTING SANITARY SEWER
- T EXISTING UNDERGROUND TELEPHONE
- E EXISTING ELECTRIC LINE
- W EXISTING WATER LINE
- G EXISTING GAS LINE
- C EXISTING UNDERGROUND CONDUIT
- X EXISTING FENCE
- EXISTING GUIDERAIL
- SOIL BOUNDARY
- GeB SOIL TYPE
- 100 YEAR FLOODPLAIN

EXISTING CONDITIONS PLAN

SCALE IN FEET: 1"=25' (0, 25, 50)

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JENNI ERIN WOODWORTH
ENGINEER

DESIGN BY: EBD | CHECKED BY: JEW

DWG EX-03 OF 13

11-12-2019

PLOTTED: 10/9/2019 4:49:53 PM

FILE NAME: X:\Projects\P1585\CADD\Plan\ESPC\Existing Plan 03.dgn

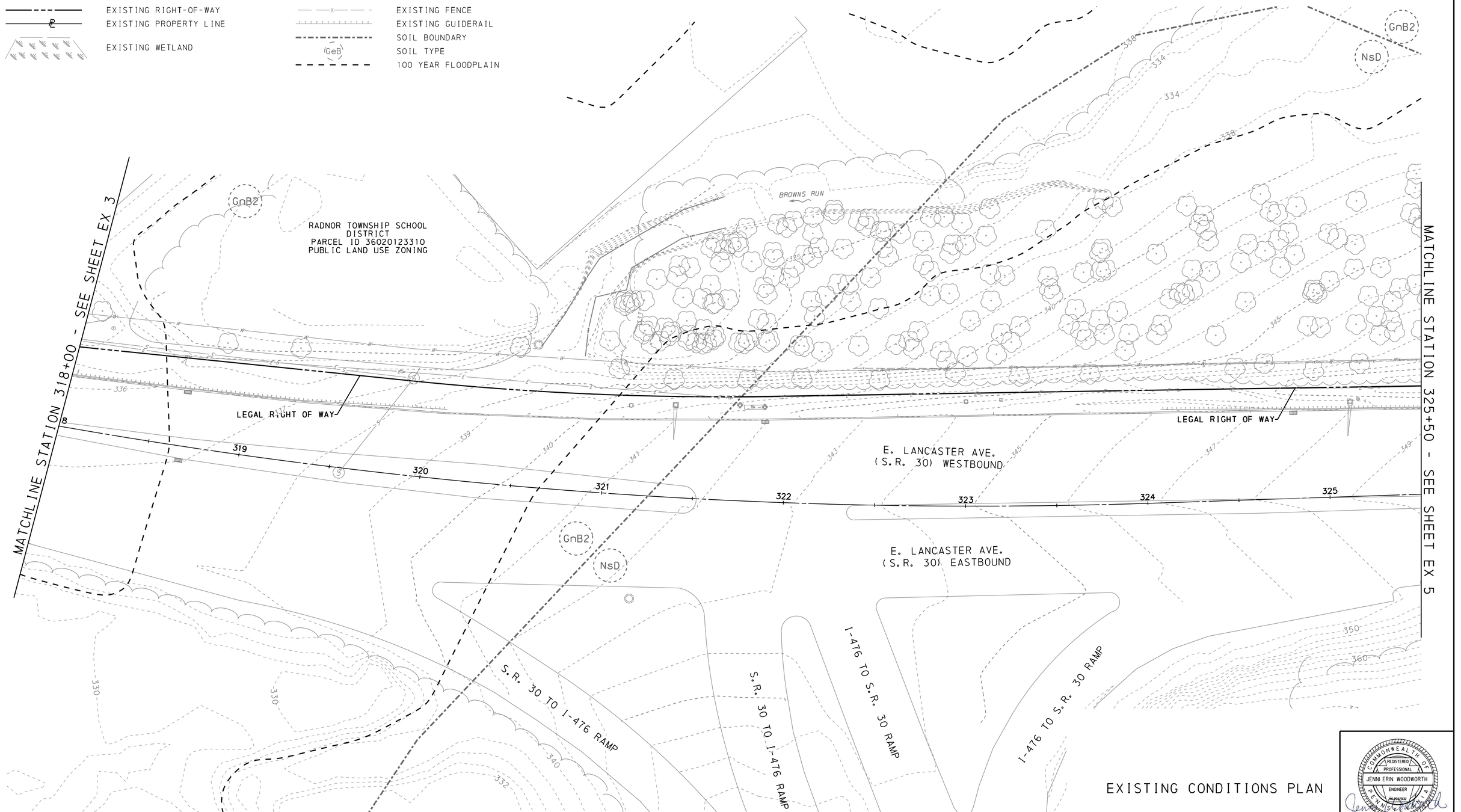
A.D. MARBLE

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	DELAWARE	0030	RRT	6 OF 53
RADNOR TOWNSHIP				

REVISION NUMBER	REVISIONS	DATE	BY

LEGEND

- EXISTING CONTOUR MAJOR
- EXISTING CONTOUR MINOR
- EXISTING STREAM BOUNDARY
- EXISTING TREE
- UTILITY POLE, LIGHT POLE, SIGN
- EXISTING WOOD LINE
- EXISTING RIGHT-OF-WAY
- EXISTING PROPERTY LINE
- EXISTING WETLAND
- EXISTING SANITARY SEWER
- EXISTING UNDERGROUND TELEPHONE
- EXISTING ELECTRIC LINE
- EXISTING WATER LINE
- EXISTING GAS LINE
- EXISTING UNDERGROUND CONDUIT
- EXISTING FENCE
- EXISTING GUIDERAIL
- SOIL BOUNDARY
- SOIL TYPE (GeB)
- 100 YEAR FLOODPLAIN



EXISTING CONDITIONS PLAN

SCALE IN FEET: 1"=25'

DESIGN BY: EBD | CHECKED BY: JEW

DWG EX-04 OF 13

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JENNI ERIN WOODWORTH
ENGINEER
AD.PE82332

11-12-2019

PLOTTED: 10/9/2019 4:49:53 PM

A.D. MARBLE

FILE NAME: X:\Projects\P1585\CADD\PlanYESPC\Existing Plan 04.dgn

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	DELAWARE	0030	RRT	7 OF 53
RADNOR TOWNSHIP				

REVISION NUMBER	REVISIONS	DATE	BY

EXISTING CONDITIONS PLAN

SCALE IN FEET: 1"=25' (0 25 50)

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JENNI ERIN WOODWORTH
ENGINEER

DESIGN BY: EBD | CHECKED BY: JEW

DWG EX-05 OF 13

11-12-2019

PLOTTED: 10/9/2019 4:49:54 PM

A.D. MARBLE
FILE NAME: X:\Projects\P1585\CADD\Plan\ESPC\Existing Plan 05.dgn

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	DELAWARE	0030	RRT	8 OF 53
RADNOR TOWNSHIP				

REVISION NUMBER	REVISIONS	DATE	BY

LEGEND

375	EXISTING CONTOUR MAJOR
374	EXISTING CONTOUR MINOR
	EXISTING STREAM BOUNDARY
	EXISTING TREE
	UTILITY POLE, LIGHT POLE, SIGN
	EXISTING WOOD LINE
	EXISTING RIGHT-OF-WAY
℄	EXISTING PROPERTY LINE
	EXISTING WETLAND
S	EXISTING SANITARY SEWER
T	EXISTING UNDERGROUND TELEPHONE
E	EXISTING ELECTRIC LINE
W	EXISTING WATER LINE
G	EXISTING GAS LINE
C	EXISTING UNDERGROUND CONDUIT
X	EXISTING FENCE
	EXISTING GUIDERAIL
	SOIL BOUNDARY
GeB	SOIL TYPE
	100 YEAR FLOODPLAIN

MATCHLINE STATION 504+00 - SEE SHEET EX 5

MATCHLINE STATION 511+50 - SEE SHEET EX 7

RADNOR TOWNSHIP SCHOOL DISTRICT
PARCEL ID 36020123310
PUBLIC LAND USE ZONING

BROWNS RUN

EXISTING SIDEWALK

LEGAL RIGHT OF WAY

504 505 506 507 508 509 510 511

KING OF PRUSSIA RD.

GnB2 Me

344 350 351 353 355 357 359 361 363 365 367 369 370 380 384 360

EXISTING CONDITIONS PLAN

0 25 50
SCALE IN FEET: 1"=25'

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JENNI ERIN WOODWORTH
ENGINEER
11-12-2019

DESIGN BY: EBD | CHECKED BY: JEW

DWG EX-06 OF 13

PLOTTED: 10/9/2019 4:49:55 PM
A.D. MARBLE
FILE NAME: X:\Projects\P1585\CADD\Plan\ESPC\Existing Plan 06.dgn

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	DELAWARE	0030	RRT	9 OF 53

RADNOR TOWNSHIP

REVISION NUMBER	REVISIONS	DATE	BY

LEGEND

- EXISTING CONTOUR MAJOR (375)
- EXISTING CONTOUR MINOR (374)
- EXISTING STREAM BOUNDARY
- EXISTING TREE
- UTILITY POLE, LIGHT POLE, SIGN
- EXISTING WOOD LINE
- EXISTING RIGHT-OF-WAY
- EXISTING PROPERTY LINE
- EXISTING WETLAND
- EXISTING SANITARY SEWER (S)
- EXISTING UNDERGROUND TELEPHONE (T)
- EXISTING ELECTRIC LINE (E)
- EXISTING WATER LINE (W)
- EXISTING GAS LINE (G)
- EXISTING UNDERGROUND CONDUIT (C)
- EXISTING FENCE (X)
- EXISTING GUIDERAIL
- SOIL BOUNDARY
- SOIL TYPE (GeB)
- 100 YEAR FLOODPLAIN

0 25 50
SCALE IN FEET: 1"=25'

EXISTING CONDITIONS PLAN

COMMONWEALTH OF PENNSYLVANIA · REGISTERED PROFESSIONAL ENGINEER · JENNI ERIN WOODWORTH

DWG EX-07 OF 13

11-12-2019

DESIGN BY: EBD | CHECKED BY: JEW

PLOTTED: 10/9/2019 4:49:55 PM

A.D. MARBLE
FILE NAME: X:\Projects\P1585\CADD\Plan\ESPC\Existing Plan 07.dgn

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	DELAWARE	0030	RRT	10 OF 53
RADNOR TOWNSHIP				

REVISION NUMBER	REVISIONS	DATE	BY

LEGEND

375	EXISTING CONTOUR MAJOR
374	EXISTING CONTOUR MINOR
	EXISTING STREAM BOUNDARY
	EXISTING TREE
	UTILITY POLE, LIGHT POLE, SIGN
	EXISTING WOOD LINE
	EXISTING RIGHT-OF-WAY
℄	EXISTING PROPERTY LINE
	EXISTING WETLAND
S	EXISTING SANITARY SEWER
T	EXISTING UNDERGROUND TELEPHONE
E	EXISTING ELECTRIC LINE
W	EXISTING WATER LINE
G	EXISTING GAS LINE
C	EXISTING UNDERGROUND CONDUIT
X	EXISTING FENCE
	EXISTING GUIDERAIL
	SOIL BOUNDARY
GeB	SOIL TYPE
	100 YEAR FLOODPLAIN

MATCHLINE STATION 519+50 - SEE SHEET EX 7

MATCHLINE STATION 526+50 - SEE SHEET EX 9

PROPERTY LINE IS APPROXIMATE

TRUSTEE OF UNIVERSITY OF PENNSYLVANIA
PARCEL ID 36020115800
PLANNED LABORATORY-OFFICE DISTRICT ZONING

PLANNED LABORATORY-OFFICE DISTRICT ZONING
PUBLIC LAND USE ZONING

RADNOR TOWNSHIP SCHOOL DISTRICT
PARCEL ID 36020123310
PUBLIC LAND USE ZONING

EXISTING SIDEWALK

HARDING'S RUN

LEGAL RIGHT OF WAY

KING OF PRUSSIA RD.

520 521 522 523 524 525 526

GnB2 Me Md

EXISTING CONDITIONS PLAN

0 25 50
SCALE IN FEET: 1"=25'

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JENNI ERIN WOODWORTH
ENGINEER
No. PE087332

11-12-2019

DESIGN BY: EBD | CHECKED BY: JEW

DWG EX-08 OF 13

PLOTTED: 10/9/2019 4:49:56 PM

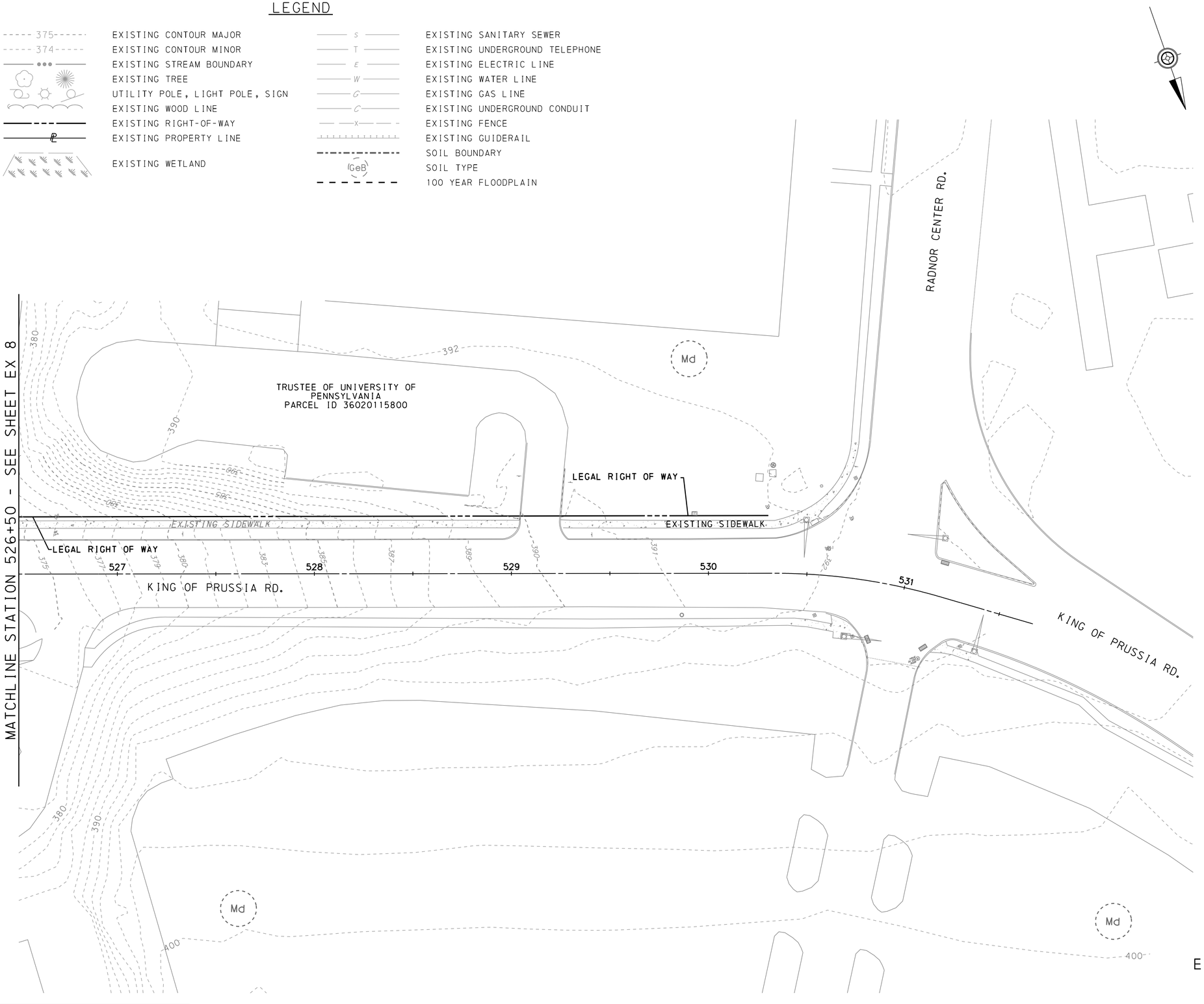
A.D. MARBLE
FILE NAME: X:\Projects\P1585\CADD\Plan\ESPC\Existing Plan 08.dgn

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	DELAWARE	0030	RRT	11 OF 53
RADNOR TOWNSHIP				

REVISION NUMBER	REVISIONS	DATE	BY

LEGEND

375	EXISTING CONTOUR MAJOR
374	EXISTING CONTOUR MINOR
	EXISTING STREAM BOUNDARY
	EXISTING TREE
	UTILITY POLE, LIGHT POLE, SIGN
	EXISTING WOOD LINE
	EXISTING RIGHT-OF-WAY
℄	EXISTING PROPERTY LINE
	EXISTING WETLAND
S	EXISTING SANITARY SEWER
T	EXISTING UNDERGROUND TELEPHONE
E	EXISTING ELECTRIC LINE
W	EXISTING WATER LINE
G	EXISTING GAS LINE
C	EXISTING UNDERGROUND CONDUIT
X	EXISTING FENCE
	EXISTING GUIDERAIL
	SOIL BOUNDARY
GeB	SOIL TYPE
	100 YEAR FLOODPLAIN



EXISTING CONDITIONS PLAN

0 25 50
SCALE IN FEET: 1"=25'

DWG EX-09 OF 13

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JENNI ERIN WOODWORTH
ENGINEER
No. PE082532

11-12-2019

DESIGN BY: EBD | CHECKED BY: JEW

A.D. MARBLE
FILE NAME: X:\Projects\P1585\CADD\Plan\ESPC\Existing Plan 09.dgn
PLOTTED: 10/9/2019 4:49:57 PM

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	DELAWARE	0030	RRT	12 OF 53
RADNOR TOWNSHIP				

REVISION NUMBER	REVISIONS	DATE	BY

LEGEND

375	EXISTING CONTOUR MAJOR
374	EXISTING CONTOUR MINOR
	EXISTING STREAM BOUNDARY
	EXISTING TREE
	UTILITY POLE, LIGHT POLE, SIGN
	EXISTING WOOD LINE
	EXISTING RIGHT-OF-WAY
℄	EXISTING PROPERTY LINE
	EXISTING WETLAND
S	EXISTING SANITARY SEWER
T	EXISTING UNDERGROUND TELEPHONE
E	EXISTING ELECTRIC LINE
W	EXISTING WATER LINE
G	EXISTING GAS LINE
C	EXISTING UNDERGROUND CONDUIT
X	EXISTING FENCE
	EXISTING GUIDERAIL
	SOIL BOUNDARY
GeB	SOIL TYPE
	100 YEAR FLOODPLAIN

CONESTOGA ROAD
LENOIR AVE.
LEGAL RIGHT-OF-WAY
EXISTING RAIL TRAIL
FRIENDS OF RADNOR TRAIL PARK PARKING LOT
PUBLIC LAND USE ZONING
R-4 RESIDENTIAL ZONING
GnB2
Md
N/L RADNOR TOWNSHIP DBV. 1517 PG 1594 CLOSURE 0.36' 36-12-514 PUBLIC LAND USE ZONING
N/L ROBERT M. HALLIGAN DBV. 2499 PG 1116 CLOSURE: 0.00 36-12-511
N/L ALBERT CONSTANTINE DBV 5711 PG 43 CLOSURE: 0.00 36-12-510 R-4 RESIDENTIAL ZONING
N/L FRANCIS W. & KRISTINE HEERY DBV 5910 PG 404 CLOSURE: 0.00 36-12-509
N/L 7 EAST STATE STREET LLC DBV 5000 PG 1032 CLOSURE: 0.00 36-12-504
N/L JONATHAN P AND ELIZABETH MAXFIELD W YATES DB 5136 PG 0352 36-12-505
N/L EADEH FAMILY LTD PARTNERSHIP DB 1739 PG 2011 36-12-502
N/L CARLA B BATES DB 5722 PG 1237 36-12-501
205
206
207
204
202

EXISTING CONDITIONS PLAN

0 25 50
SCALE IN FEET: 1"=25'

DESIGN BY: EBD | CHECKED BY: JEW

DWG EX-10 OF 13

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JENNI ERIN WOODWORTH
ENGINEER

11-12-2019

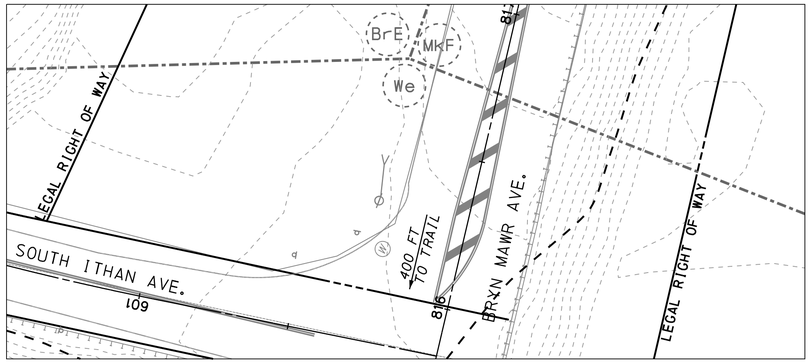
A.D. MARBLE
FILE NAME: X:\Projects\P1585\CADD\Plan\ESPC\Existing Plan 10.dgn
PLOTTED: 10/9/2019 4:49:58 PM

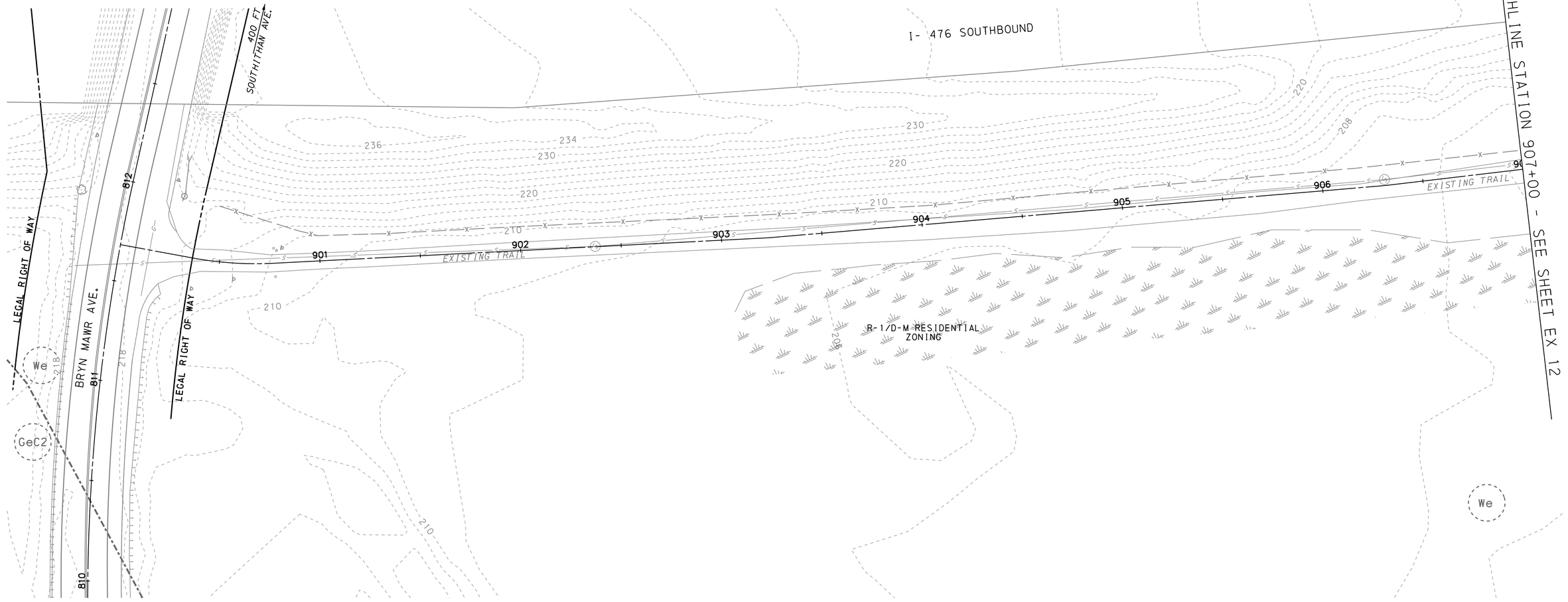
DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	DELAWARE	0030	RRT	13 OF 53
RADNOR TOWNSHIP				

REVISION NUMBER	REVISIONS	DATE	BY

LEGEND

- 375 — EXISTING CONTOUR MAJOR
- 374 — EXISTING CONTOUR MINOR
- EXISTING STREAM BOUNDARY
- EXISTING TREE
- UTILITY POLE, LIGHT POLE, SIGN
- EXISTING WOOD LINE
- EXISTING RIGHT-OF-WAY
- ℄ EXISTING PROPERTY LINE
- EXISTING WETLAND
- S — EXISTING SANITARY SEWER
- T — EXISTING UNDERGROUND TELEPHONE
- E — EXISTING ELECTRIC LINE
- W — EXISTING WATER LINE
- G — EXISTING GAS LINE
- C — EXISTING UNDERGROUND CONDUIT
- x — EXISTING FENCE
- EXISTING GUIDERAIL
- SOIL BOUNDARY
- (GeB) SOIL TYPE
- 100 YEAR FLOODPLAIN





EXISTING CONDITIONS PLAN

SCALE IN FEET: 1"=25'

DWG EX-11 OF 13

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JENNI ERIN WOODWORTH
ENGINEER

11-12-2019

DESIGN BY: EBD | CHECKED BY: JEW

PLOTTED: 10/9/2019 4:49:58 PM

A.D. MARBLE

FILE NAME: X:\Projects\P1585\CADD\Plan\ESPC\Existing Plan 11.dgn

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	DELAWARE	0030	RRT	14 OF 53
RADNOR TOWNSHIP				

REVISION NUMBER	REVISIONS	DATE	BY

LEGEND

375 EXISTING CONTOUR MAJOR	S EXISTING SANITARY SEWER
374 EXISTING CONTOUR MINOR	T EXISTING UNDERGROUND TELEPHONE
EXISTING STREAM BOUNDARY	E EXISTING ELECTRIC LINE
EXISTING TREE	W EXISTING WATER LINE
UTILITY POLE, LIGHT POLE, SIGN	G EXISTING GAS LINE
EXISTING WOOD LINE	C EXISTING UNDERGROUND CONDUIT
EXISTING RIGHT-OF-WAY	X EXISTING FENCE
℄ EXISTING PROPERTY LINE	EXISTING GUIDERAIL
EXISTING WETLAND	SOIL BOUNDARY
	(GeB) SOIL TYPE
	100 YEAR FLOODPLAIN

I- 476 NORTHBOUND

I- 476 SOUTHBOUND

MkF

MgC

We

210

204

202

200

198

ITHAN CREEK

907 908 909 910 911 912 913 914

EXISTING TRAIL

EXISTING TRAIL

MATCHLINE STATION 907+00 - SEE SHEET EX 11

MATCHLINE STATION 914+50 - SEE SHEET EX 13

R-1/D-M RESIDENTIAL ZONING

We

EXISTING CONDITIONS PLAN

0 25 50

SCALE IN FEET: 1"=25'

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JENNI ERIN WOODWORTH
ENGINEER
No. PE087332

11-12-2019

DESIGN BY: EBD | CHECKED BY: JEW

DWG EX-12 OF 13

PLOTTED: 10/9/2019 4:49:59 PM

A.D. MARBLE

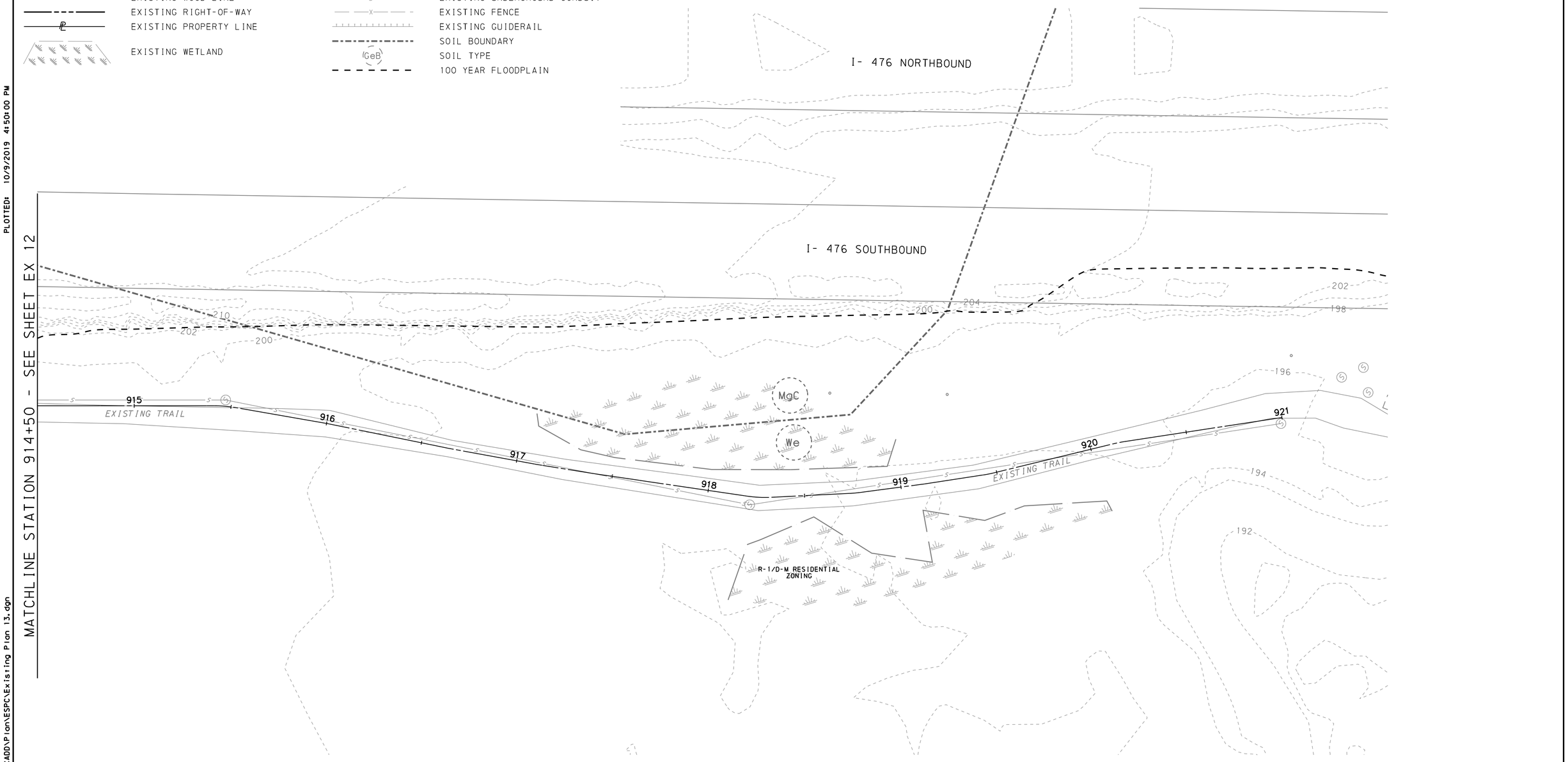
FILE NAME: X:\Projects\P1585\CADD\Plan\ESPC\Existing Plan 12.dgn

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	DELAWARE	0030	RRT	15 OF 53
RADNOR TOWNSHIP				

REVISION NUMBER	REVISIONS	DATE	BY

LEGEND

375 EXISTING CONTOUR MAJOR	S EXISTING SANITARY SEWER
374 EXISTING CONTOUR MINOR	T EXISTING UNDERGROUND TELEPHONE
EXISTING STREAM BOUNDARY	E EXISTING ELECTRIC LINE
EXISTING TREE	W EXISTING WATER LINE
UTILITY POLE, LIGHT POLE, SIGN	G EXISTING GAS LINE
EXISTING WOOD LINE	C EXISTING UNDERGROUND CONDUIT
EXISTING RIGHT-OF-WAY	X EXISTING FENCE
℄ EXISTING PROPERTY LINE	EXISTING GUIDERAIL
EXISTING WETLAND	SOIL BOUNDARY
(GeB)	SOIL TYPE
	100 YEAR FLOODPLAIN



EXISTING CONDITIONS PLAN

SCALE IN FEET: 1"=25' (0, 25, 50)

DWG EX-13 OF 13

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL ENGINEER
JENNI ERIN WOODWORTH
11-12-2019

DESIGN BY: EBD | CHECKED BY: JEW

PLOTTED: 10/9/2019 4:50:00 PM

A.D. MARBLE

FILE NAME: X:\Projects\P1585\CADD\Plan\ESPC\Existing Plan 13.dgn

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	DELAWARE	0030	RRT	16 OF 53
RADNOR TOWNSHIP				
REVISION NUMBER	REVISIONS		DATE	BY

LEGEND

- 375 EXISTING CONTOUR MAJOR
- 374 EXISTING CONTOUR MINOR
- 375 PROPOSED CONTOUR MAJOR
- 374 PROPOSED CONTOUR MINOR
- DRAINAGE AREA BOUNDARY
- PROPOSED TRAIL
- PROPOSED ROCK OUTLET PROTECTION
- EXISTING STREAM BOUNDARY
- EXISTING WETLAND
- EXISTING TREE
- UTILITY POLE, LIGHT POLE, SIGN
- EXISTING WOOD LINE
- EXISTING RIGHT-OF-WAY
- EXISTING PROPERTY LINE
- S EXISTING SANITARY SEWER
- T EXISTING UNDERGROUND TELEPHONE
- E EXISTING ELECTRIC LINE
- W EXISTING WATER LINE
- G EXISTING GAS LINE
- C EXISTING UNDERGROUND CONDUIT
- X EXISTING FENCE
- EXISTING GUIDERAIL
- SOIL BOUNDARY
- GeB SOIL TYPE
- LOD LIMIT OF DISTURBANCE NPDES PERMIT BOUNDARY
- 100 YEAR FLOODPLAIN
- PROPOSED CONCRETE SIDEWALK

NOTES:

1. NO STORMWATER MANAGEMENT FACILITIES THIS SHEET.

N/L RADNOR TOWNSHIP
DBV 0838 PG 2245
PARCEL ID 36040235510

N/L MICHAEL S. & KIMBERLY G. OLSAN
DBV 2452 PG 2289
PARCEL ID 36040257900

N/L CHRISTINE M. & JOHN C. KLINE
DBV 3240 PG 0319
PARCEL ID 36040255400

N/L GREGORY E. & EMMA DAILEY STATON
DBV 4937 PG 1741
PARCEL ID 36040255500

AVOID COMPACTION OUTSIDE OF TRAIL FOOTPRINT

PROPOSED RECREATIONAL TRAIL

LEGAL RIGHT-OF-WAY

RADNOR CHESTER RD.

RADNOR TRAIL

CHEW LANE

40.00' ROW

MATCHLINE STATION 407+50 - SEE SHEET SWM 2

POST CONSTRUCTION STORMWATER MANAGMENT PLAN

SCALE IN FEET: 1"=25'

DWG SWM-01 OF 25

11-12-2019

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JENNI ERIN WOODWORTH
ENGINEER

DESIGN BY: EBD | CHECKED BY: JEW

PLOTTED: 10/9/2019 4:50:05 PM

A.D. MARBLE

FILE NAME: X:\Projects\P1585\CADD\Plan\PCSW\SWM Plan 01.dgn

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	DELAWARE	0030	RRT	17 OF 53
RADNOR TOWNSHIP				

REVISION NUMBER	REVISIONS	DATE	BY

RADNOR TOWNSHIP SCHOOL DISTRICT
PARCEL ID 36020123310

STORMWATER MANAGEMENT FACILITY NO. 1
INFILTRATION TRENCH.

SWALE 1

SWALE 1 DRAINAGE AREA BOUNDARY LIMIT

SWALE 2

EXISTING DIRT HIKING PATH

PROPOSED RECREATIONAL TRAIL

LEGAL RIGHT OF WAY

LEGAL RIGHT OF WAY

E. LANCASTER AVE.
(S.R. 30) WESTBOUND

E. LANCASTER AVE.
(S.R. 30) EASTBOUND

RADNOR CENTER RD.

RADNOR CENTER RD.

LEGAL RIGHT OF WAY

N/L LOUIE BREBIS
CLEMENTINE III &
PROVCO PARTNERS LLC
C/O
DBV 3759 PG 0479
PARCEL ID 36040256100

N/L MICHAEL R. MATTERN &
PETER DO
DBV 2319 PG 1319
PARCEL ID 36040256500

LEGAL RIGHT OF WAY

MATCHLINE STATION 407+50 - SEE SHEET SWM 1

MATCHLINE STATION 310+50 - SEE SHEET SWM 3

WoA

GeB

GeC2

LOD

LEGEND

375	EXISTING CONTOUR MAJOR
374	EXISTING CONTOUR MINOR
375	PROPOSED CONTOUR MAJOR
374	PROPOSED CONTOUR MINOR
	DRAINAGE AREA BOUNDARY
	PROPOSED TRAIL
	PROPOSED ROCK OUTLET PROTECTION
	EXISTING STREAM BOUNDARY
	EXISTING WETLAND
	EXISTING TREE
	UTILITY POLE, LIGHT POLE, SIGN
	EXISTING WOOD LINE
	EXISTING RIGHT-OF-WAY
P	EXISTING PROPERTY LINE
S	EXISTING SANITARY SEWER
T	EXISTING UNDERGROUND TELEPHONE
E	EXISTING ELECTRIC LINE
W	EXISTING WATER LINE
G	EXISTING GAS LINE
C	EXISTING UNDERGROUND CONDUIT
X	EXISTING FENCE
	EXISTING GUIDERAIL
	SOIL BOUNDARY
GeB	SOIL TYPE
LOD	LIMIT OF DISTURBANCE NPDES PERMIT BOUNDARY
	100 YEAR FLOODPLAIN
	PROPOSED CONCRETE SIDEWALK

NOTES:

1. COMPACTION OF SOILS BENEATH THE INFILTRATION TRENCH TO BE AVOIDED DURING CLEARING, GRUBBING AND TREE REMOVAL OPERATION.

POST CONSTRUCTION STORMWATER MANAGMENT PLAN

SCALE IN FEET: 1"=25'

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JENNI ERIN WOODWORTH
ENGINEER

11-12-2019

DESIGN BY: EBD | CHECKED BY: JEW

DWG SWM-02 OF 25

PLOTTED: 10/9/2019 4:50:06 PM

A.D. MARBLE

FILE NAME: X:\Projects\P1585\CADD\Plan\PCSW\SWM Plan 02.dgn

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	DELAWARE	0030	RRT	18 OF 53
RADNOR TOWNSHIP				

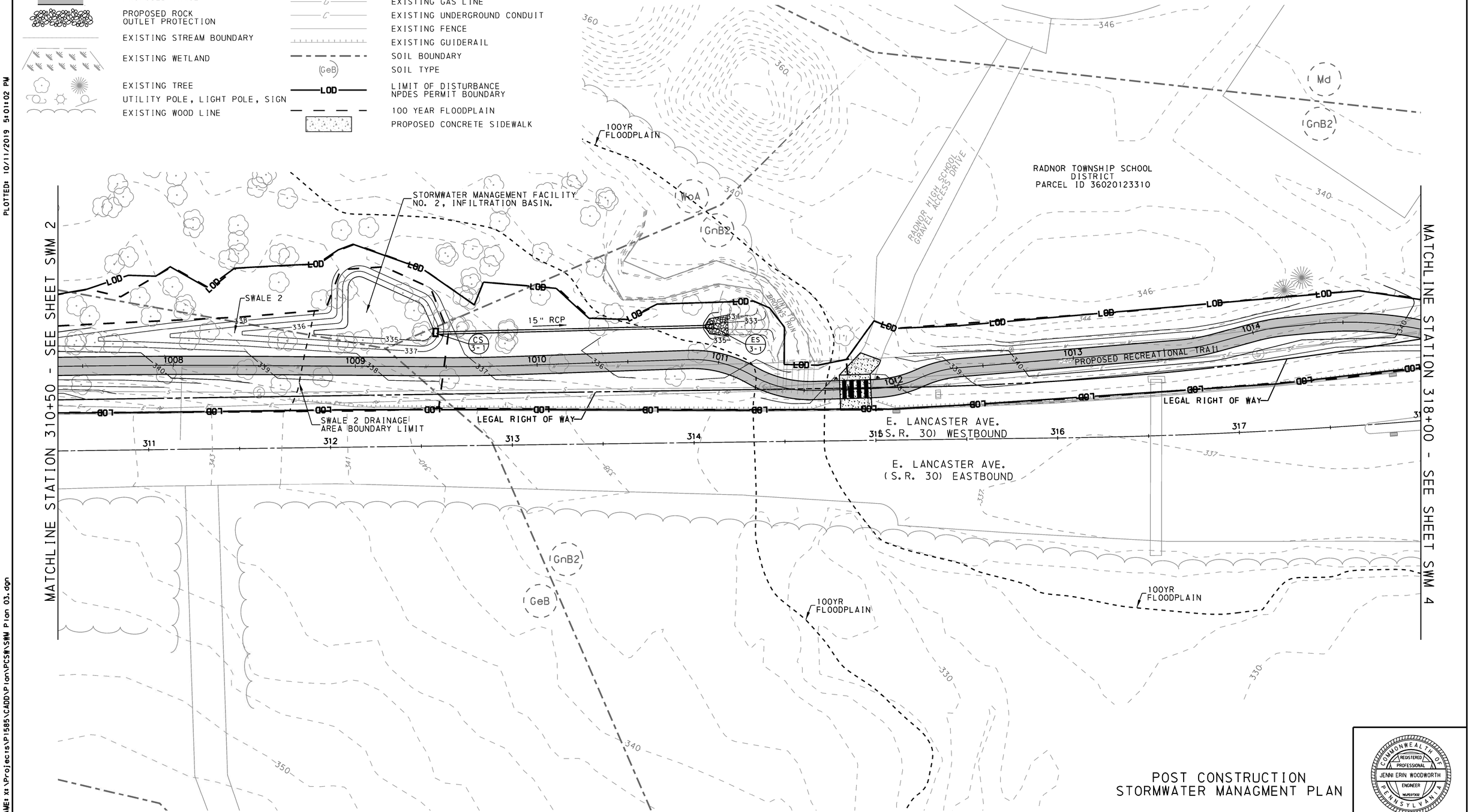
REVISION NUMBER	REVISIONS	DATE	BY

LEGEND

- EXISTING CONTOUR MAJOR
- EXISTING CONTOUR MINOR
- PROPOSED CONTOUR MAJOR
- PROPOSED CONTOUR MINOR
- DRAINAGE AREA BOUNDARY
- PROPOSED TRAIL
- PROPOSED ROCK OUTLET PROTECTION
- EXISTING STREAM BOUNDARY
- EXISTING WETLAND
- EXISTING TREE
- UTILITY POLE, LIGHT POLE, SIGN
- EXISTING WOOD LINE
- EXISTING RIGHT-OF-WAY
- EXISTING PROPERTY LINE
- EXISTING SANITARY SEWER
- EXISTING UNDERGROUND TELEPHONE
- EXISTING ELECTRIC LINE
- EXISTING WATER LINE
- EXISTING GAS LINE
- EXISTING UNDERGROUND CONDUIT
- EXISTING FENCE
- EXISTING GUIDERAIL
- SOIL BOUNDARY
- SOIL TYPE
- LIMIT OF DISTURBANCE NPDES PERMIT BOUNDARY
- 100 YEAR FLOODPLAIN
- PROPOSED CONCRETE SIDEWALK

NOTES:

1. COMPACTION OF SOILS BENEATH THE INFILTRATION BASIN TO BE AVOIDED DURING CLEARING, GRUBBING AND TREE REMOVAL OPERATION.



POST CONSTRUCTION STORMWATER MANAGMENT PLAN

SCALE IN FEET: 1"=25'

DWG SWM-03 OF 25

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL ENGINEER — JENNI ERIN WOODWORTH — 11-12-2019

DESIGN BY: EBD | CHECKED BY: JEW

PLOTTED: 10/11/2019 5:01:02 PM

A.D. MARBLE

FILE NAME: x:\Projects\P1585\CADD\Plan\PCSWM\SWM Plan 03.dgn

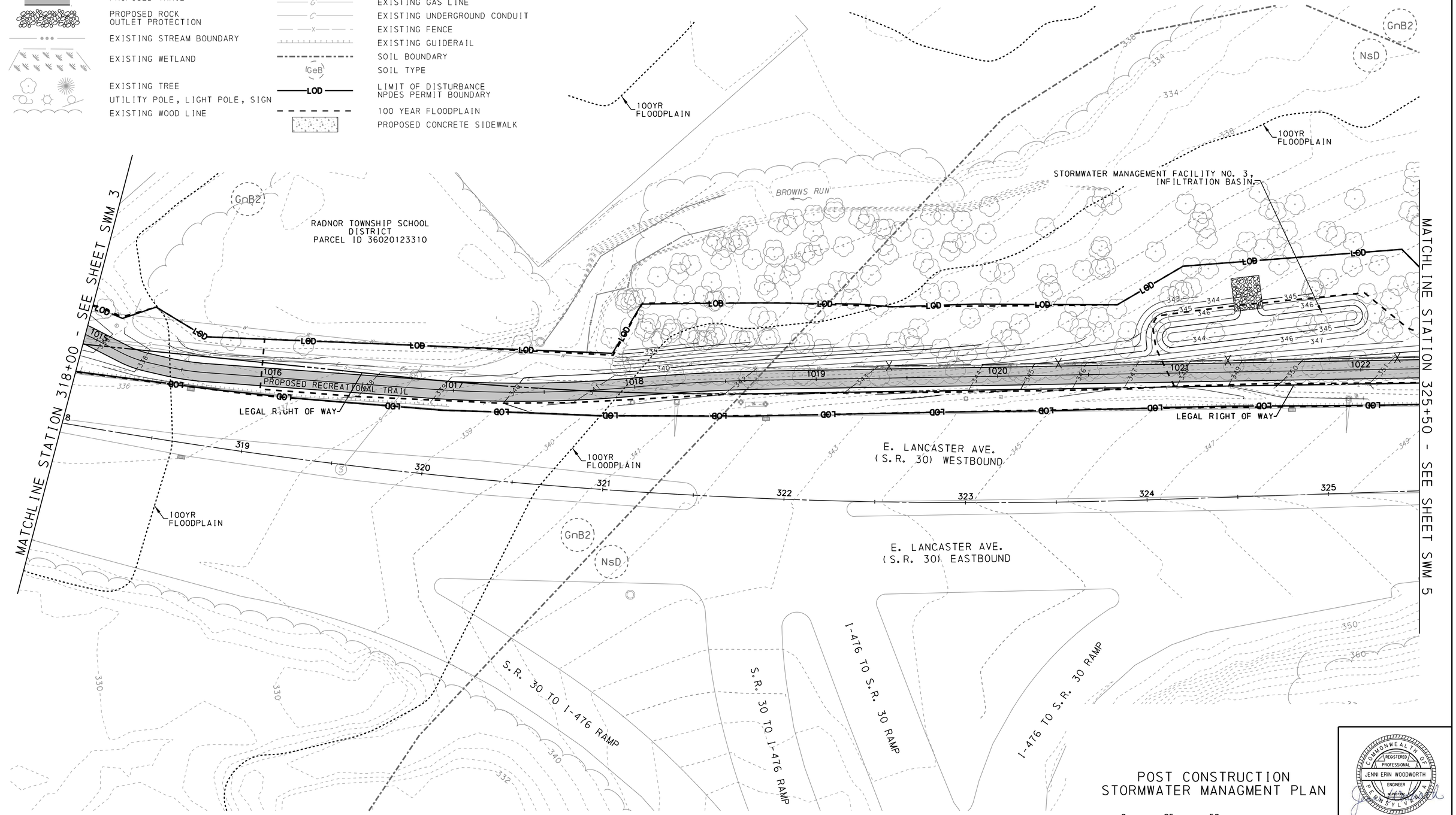
DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	DELAWARE	0030	RRT	19 OF 53
RADNOR TOWNSHIP				
REVISION NUMBER	REVISIONS		DATE	BY

LEGEND

375 EXISTING CONTOUR MAJOR	EXISTING RIGHT-OF-WAY
374 EXISTING CONTOUR MINOR	EXISTING PROPERTY LINE
375 PROPOSED CONTOUR MAJOR	S EXISTING SANITARY SEWER
374 PROPOSED CONTOUR MINOR	T EXISTING UNDERGROUND TELEPHONE
DRAINAGE AREA BOUNDARY	E EXISTING ELECTRIC LINE
PROPOSED TRAIL	W EXISTING WATER LINE
PROPOSED ROCK OUTLET PROTECTION	G EXISTING GAS LINE
	C EXISTING UNDERGROUND CONDUIT
EXISTING STREAM BOUNDARY	X EXISTING FENCE
	EXISTING GUIDERAIL
EXISTING WETLAND	SOIL BOUNDARY
	GeB SOIL TYPE
EXISTING TREE	LOD LIMIT OF DISTURBANCE NPDES PERMIT BOUNDARY
UTILITY POLE, LIGHT POLE, SIGN	100 YEAR FLOODPLAIN
EXISTING WOOD LINE	PROPOSED CONCRETE SIDEWALK

NOTES:

1. COMPACTION OF SOILS BENEATH THE INFILTRATION BASIN TO BE AVOIDED DURING CLEARING, GRUBBING AND TREE REMOVAL OPERATION.



POST CONSTRUCTION STORMWATER MANAGMENT PLAN

SCALE IN FEET: 1"=25' (0, 25, 50)

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — JENNI ERIN WOODWORTH — ENGINEER

11-12-2019

DESIGN BY: EBD | CHECKED BY: JEW

DWG SWM-04 OF 25

PLOTTED: 10/9/2019 4:50:07 PM

A.D. MARBLE

FILE NAME: X:\Projects\P1585\CADD\Plan\PCSW\SWM Plan 04.dgn

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	DELAWARE	0030	RRT	20 OF 53
RADNOR TOWNSHIP				

REVISION NUMBER	REVISIONS	DATE	BY

LEGEND

- EXISTING CONTOUR MAJOR
- EXISTING CONTOUR MINOR
- PROPOSED CONTOUR MAJOR
- PROPOSED CONTOUR MINOR
- DRAINAGE AREA BOUNDARY
- PROPOSED TRAIL
- PROPOSED ROCK OUTLET PROTECTION
- EXISTING STREAM BOUNDARY
- EXISTING WETLAND
- EXISTING TREE
- UTILITY POLE, LIGHT POLE, SIGN
- EXISTING WOOD LINE
- EXISTING RIGHT-OF-WAY
- EXISTING PROPERTY LINE
- EXISTING SANITARY SEWER
- EXISTING UNDERGROUND TELEPHONE
- EXISTING ELECTRIC LINE
- EXISTING WATER LINE
- EXISTING GAS LINE
- EXISTING UNDERGROUND CONDUIT
- EXISTING FENCE
- EXISTING GUIDERAIL
- SOIL BOUNDARY
- SOIL TYPE (GeB)
- LIMIT OF DISTURBANCE / NPDES PERMIT BOUNDARY (LOD)
- 100 YEAR FLOODPLAIN
- PROPOSED CONCRETE SIDEWALK

MATCHLINE STATION 504+00 - SEE SHEET SWM 6

MATCHLINE STATION 325+50 - SEE SHEET SWM 4

RADNOR TOWNSHIP SCHOOL DISTRICT
PARCEL ID 36020123310

100YR FLOODPLAIN

RADNOR HIGH SCHOOL ATHLETIC FIELD

STORMWATER MANAGEMENT FACILITY NO. 4
INFILTRATION BERM.

PROPOSED RECREATIONAL TRAIL

LEGAL RIGHT OF WAY

E. LANCASTER AVE.
(S.R. 30) WESTBOUND

E. LANCASTER AVE.
(S.R. 30) EASTBOUND

KING OF PRUSSIA RD.

I-476 TO S.R. 30 RAMP

NOTES:

1. COMPACTION OF SOILS BENEATH THE INFILTRATION BERM TO BE AVOIDED DURING CLEARING, GRUBBING AND TREE REMOVAL OPERATION.

POST CONSTRUCTION
STORMWATER MANAGMENT PLAN

SCALE IN FEET: 1"=25'

DESIGN BY: EBD | CHECKED BY: JEW

DWG SWM-05 OF 25

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JENNI ERIN WOODWORTH
ENGINEER

11-12-2019

PLOTTED: 10/9/2019 4:50:08 PM

A.D. MARBLE
FILE NAME: X:\Projects\P1585\CADD\Plan\PCSW\SWM Plan 05.dgn

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	DELAWARE	0030	RRT	21 OF 53
RADNOR TOWNSHIP				

REVISION NUMBER	REVISIONS	DATE	BY

LEGEND

375 EXISTING CONTOUR MAJOR	EXISTING RIGHT-OF-WAY
374 EXISTING CONTOUR MINOR	EXISTING PROPERTY LINE
375 PROPOSED CONTOUR MAJOR	S EXISTING SANITARY SEWER
374 PROPOSED CONTOUR MINOR	T EXISTING UNDERGROUND TELEPHONE
DRAINAGE AREA BOUNDARY	E EXISTING ELECTRIC LINE
PROPOSED TRAIL	W EXISTING WATER LINE
PROPOSED ROCK OUTLET PROTECTION	G EXISTING GAS LINE
EXISTING STREAM BOUNDARY	C EXISTING UNDERGROUND CONDUIT
EXISTING WETLAND	X EXISTING FENCE
EXISTING TREE	EXISTING GUIDERAIL
UTILITY POLE, LIGHT POLE, SIGN	SOIL BOUNDARY
EXISTING WOOD LINE	GeB SOIL TYPE
	LOD LIMIT OF DISTURBANCE NPDES PERMIT BOUNDARY
	100 YEAR FLOODPLAIN
	PROPOSED CONCRETE SIDEWALK

NOTES:

1. NO SWM FACILITIES THIS SHEET.

MATCHLINE STATION 504+00 - SEE SHEET SWM 5

MATCHLINE STATION 511+50 - SEE SHEET SWM 7

RADNOR TOWNSHIP SCHOOL DISTRICT
PARCEL ID 36020123310

BROWNS RUN

LEGAL RIGHT OF WAY

PROPOSED RECREATIONAL TRAIL

KING OF PRUSSIA RD.

100YR FLOODPLAIN

GnB2 Me

POST CONSTRUCTION
STORMWATER MANAGMENT PLAN

0 25 50
SCALE IN FEET: 1"=25'

DESIGN BY: EBD | CHECKED BY: JEW

DWG SWM-06 OF 25

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JENNI ERIN WOODWORTH
ENGINEER

11-12-2019

PLOTTED: 10/9/2019 4:50:09 PM
A.D. MARBLE
FILE NAME: X:\Projects\P1585\CADD\Plan\PCSW\SWM Plan 06.dgn

NOTES:

1. NO SWM FACILITIES THIS SHEET.

LEGEND

375	EXISTING CONTOUR MAJOR		EXISTING RIGHT-OF-WAY
374	EXISTING CONTOUR MINOR	℄	EXISTING PROPERTY LINE
375	PROPOSED CONTOUR MAJOR	S	EXISTING SANITARY SEWER
374	PROPOSED CONTOUR MINOR	T	EXISTING UNDERGROUND TELEPHONE
	DRAINAGE AREA BOUNDARY	E	EXISTING ELECTRIC LINE
	PROPOSED TRAIL	W	EXISTING WATER LINE
	PROPOSED ROCK OUTLET PROTECTION	G	EXISTING GAS LINE
	EXISTING STREAM BOUNDARY	C	EXISTING UNDERGROUND CONDUIT
	EXISTING WETLAND	X	EXISTING FENCE
	EXISTING TREE		EXISTING GUIDERAIL
	UTILITY POLE, LIGHT POLE, SIGN	GeB	SOIL BOUNDARY / SOIL TYPE
	EXISTING WOOD LINE	LOD	LIMIT OF DISTURBANCE NPDES PERMIT BOUNDARY
			100 YEAR FLOODPLAIN
			PROPOSED CONCRETE SIDEWALK

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	DELAWARE	0030	RRT	22 OF 53

RADNOR TOWNSHIP

REVISION NUMBER	REVISIONS	DATE	BY

MATCHLINE STATION 511+50 - SEE SHEET SWM 6

MATCHLINE STATION 519+50 - SEE SHEET SWM 8

RAIDER RD.

KING OF PRUSSIA RD.

LEGAL RIGHT OF WAY

PROPOSED RECREATIONAL TRAIL

RADNOR TOWNSHIP SCHOOL DISTRICT
PARCEL ID 36020123310

POST CONSTRUCTION
STORMWATER MANAGMENT PLAN

SCALE IN FEET: 1"=25'

DESIGN BY: EBD | CHECKED BY: JEW

DWG SWM-07 OF 25

11-12-2019

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JENNI ERIN WOODWORTH
ENGINEER

PLOTTED: 10/9/2019 4:50:10 PM

A.D. MARBLE

FILE NAME: X:\Projects\P1585\CADD\Plan\PCSW\SWM Plan 07.dgn

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	DELAWARE	0030	RRT	23 OF 53
RADNOR TOWNSHIP				
REVISION NUMBER	REVISIONS		DATE	BY

LEGEND

375	EXISTING CONTOUR MAJOR
374	EXISTING CONTOUR MINOR
375	PROPOSED CONTOUR MAJOR
374	PROPOSED CONTOUR MINOR
	DRAINAGE AREA BOUNDARY
	PROPOSED TRAIL
	PROPOSED ROCK OUTLET PROTECTION
	EXISTING STREAM BOUNDARY
	EXISTING WETLAND
	EXISTING TREE
	UTILITY POLE, LIGHT POLE, SIGN
	EXISTING WOOD LINE
	EXISTING RIGHT-OF-WAY
PL	EXISTING PROPERTY LINE
S	EXISTING SANITARY SEWER
T	EXISTING UNDERGROUND TELEPHONE
E	EXISTING ELECTRIC LINE
W	EXISTING WATER LINE
G	EXISTING GAS LINE
C	EXISTING UNDERGROUND CONDUIT
X	EXISTING FENCE
	EXISTING GUIDERAIL
	SOIL BOUNDARY
GeB	SOIL TYPE
LOD	LIMIT OF DISTURBANCE NPDES PERMIT BOUNDARY
	100 YEAR FLOODPLAIN
	PROPOSED CONCRETE SIDEWALK

NOTES:

1. NO SWM FACILITIES THIS SHEET.

MATCHLINE STATION 519+50 - SEE SHEET SWM 7

MATCHLINE STATION 526+50 - SEE SHEET SWM 9

TRUSTEE OF UNIVERSITY OF PENNSYLVANIA
PARCEL ID 36020115800

RADNOR TOWNSHIP SCHOOL DISTRICT
PARCEL ID 36020123310

KING OF PRUSSIA RD.

LEGAL RIGHT OF WAY

HARDINGS RUN

GnB2 Me Md

POST CONSTRUCTION STORMWATER MANAGMENT PLAN

0 25 50
SCALE IN FEET: 1"=25'

DWG SWM-08 OF 25

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JENNI ERIN WOODWORTH
ENGINEER

11-12-2019

DESIGN BY: EBD | CHECKED BY: JEW

PLOTTED: 10/9/2019 4:50:11 PM
A.D. MARBLE
FILE NAME: X:\Projects\P1585\CADD\Plan\PCSM\SWM Plan 08.dgn

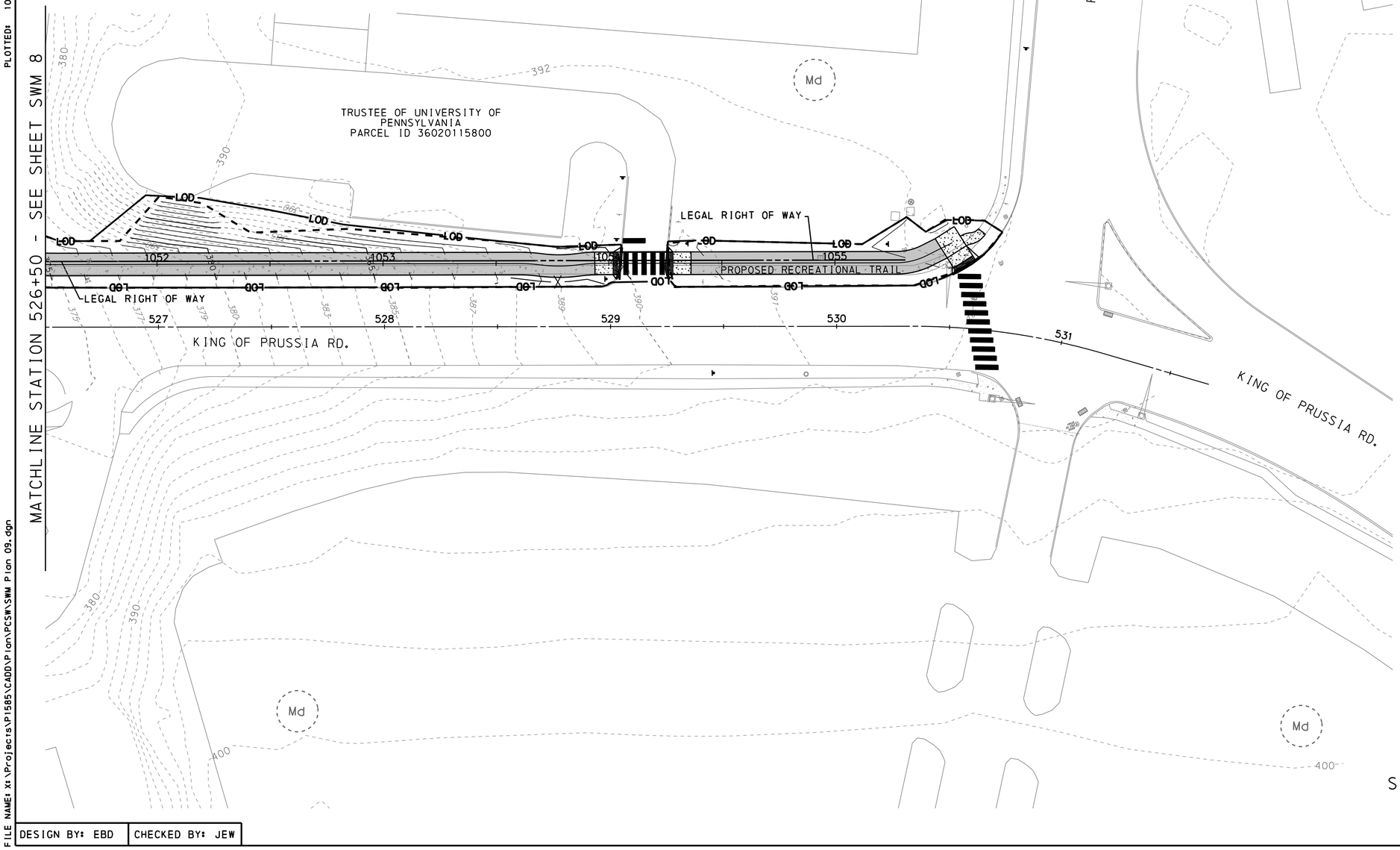
DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	DELAWARE	0030	RRT	24 OF 53
RADNOR TOWNSHIP				
REVISION NUMBER	REVISIONS		DATE	BY

LEGEND

375 EXISTING CONTOUR MAJOR	EXISTING RIGHT-OF-WAY
374 EXISTING CONTOUR MINOR	EXISTING PROPERTY LINE
375 PROPOSED CONTOUR MAJOR	S EXISTING SANITARY SEWER
374 PROPOSED CONTOUR MINOR	T EXISTING UNDERGROUND TELEPHONE
DRAINAGE AREA BOUNDARY	E EXISTING ELECTRIC LINE
PROPOSED TRAIL	W EXISTING WATER LINE
PROPOSED ROCK OUTLET PROTECTION	G EXISTING GAS LINE
EXISTING STREAM BOUNDARY	C EXISTING UNDERGROUND CONDUIT
EXISTING WETLAND	X EXISTING FENCE
EXISTING TREE	EXISTING GUIDERAIL
UTILITY POLE, LIGHT POLE, SIGN	SOIL BOUNDARY
EXISTING WOOD LINE	GeB SOIL TYPE
	LOD LIMIT OF DISTURBANCE NPDES PERMIT BOUNDARY
	100 YEAR FLOODPLAIN
	PROPOSED CONCRETE SIDEWALK

NOTES:

1. NO SWM FACILITIES THIS SHEET.



POST CONSTRUCTION STORMWATER MANAGMENT PLAN

SCALE IN FEET: 1"=25' (0, 25, 50)

DWG SWM-09 OF 25

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JENNI ERIN WOODWORTH
ENGINEER

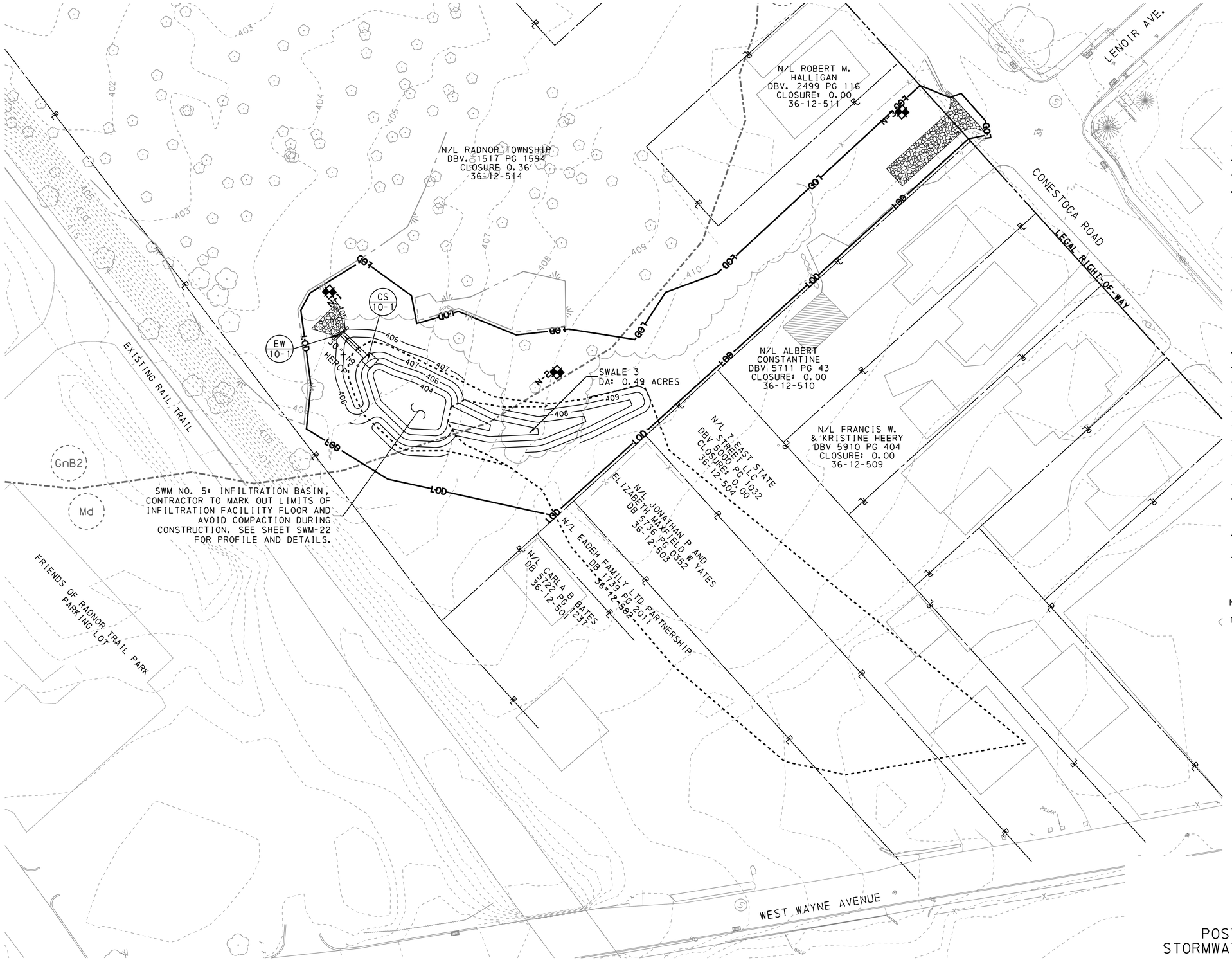
11-12-2019

DESIGN BY: EBD | CHECKED BY: JEW

A.D. MARBLE
FILE NAME: X:\Projects\P1585\CADD\Plan\PCSW\SWM Plan 09.dgn
PLOTTED: 10/9/2019 4:50:11 PM

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	DELAWARE	0030	RRT	25 OF 53
RADNOR TOWNSHIP				

REVISION NUMBER	REVISIONS	DATE	BY



LEGEND

- 375 — EXISTING CONTOUR MAJOR
- 374 — EXISTING CONTOUR MINOR
- 375 — PROPOSED CONTOUR MAJOR
- 374 — PROPOSED CONTOUR MINOR
- DRAINAGE AREA BOUNDARY
- PROPOSED TRAIL
- PROPOSED ROCK OUTLET PROTECTION
- EXISTING STREAM BOUNDARY
- EXISTING WETLAND
- EXISTING TREE
- UTILITY POLE, LIGHT POLE, SIGN
- EXISTING WOOD LINE
- EXISTING RIGHT-OF-WAY
- EXISTING PROPERTY LINE
- S — EXISTING SANITARY SEWER
- T — EXISTING UNDERGROUND TELEPHONE
- E — EXISTING ELECTRIC LINE
- W — EXISTING WATER LINE
- G — EXISTING GAS LINE
- C — EXISTING UNDERGROUND CONDUIT
- X — EXISTING FENCE
- EXISTING GUIDERAIL
- SOIL BOUNDARY
- GeB — SOIL TYPE
- LOD — LIMIT OF DISTURBANCE NPDES PERMIT BOUNDARY
- 100 YEAR FLOODPLAIN
- PROPOSED CONCRETE SIDEWALK

NOTES:

1. COMPACTION OF SOILS BENEATH THE INFILTRATION BASIN TO BE AVOIDED DURING CLEARING, GRUBBING AND TREE REMOVAL OPERATION.

POST CONSTRUCTION STORMWATER MANAGMENT PLAN

SCALE IN FEET: 1"=25'

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — JENNI ERIN WOODWORTH — ENGINEER — 06-11-2020

DESIGN BY: EBD | CHECKED BY: JEW

DWG SWM-10 OF 25

A.D. MARBLE

FILE NAME: \\Adm-file01\cadd\Projects\P1585\CADD\Plan\PCSM\Redline\SWM Plan 10-Redline.dgn

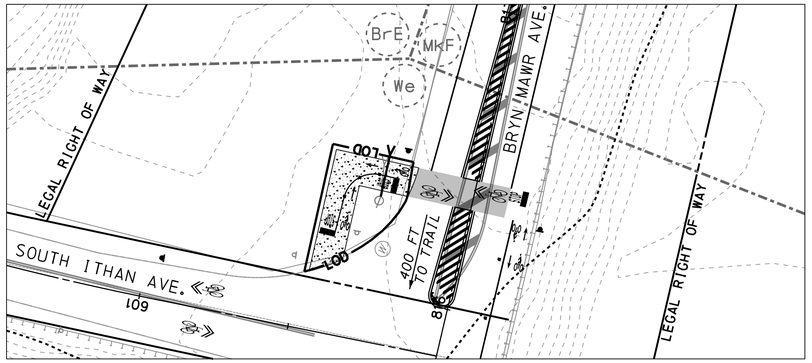
PLOTTED: 6/30/2020 3:47:46 PM

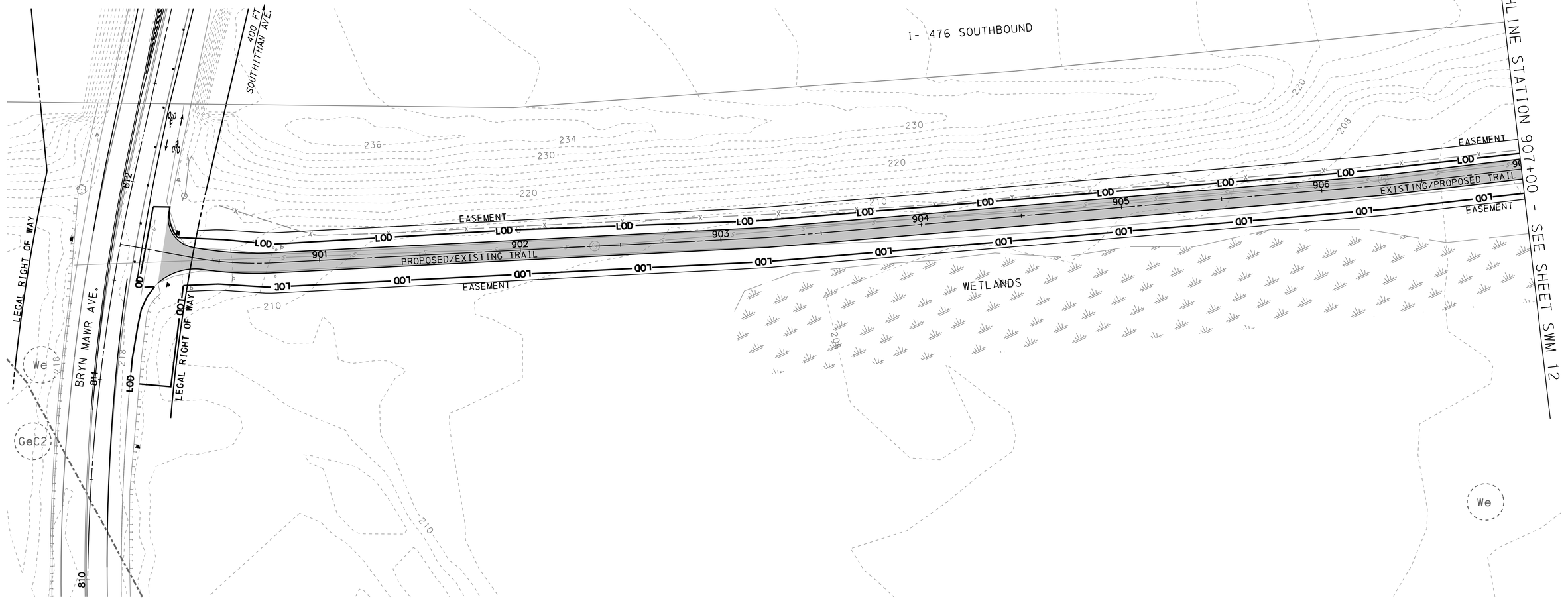
DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	DELAWARE	0030	RRT	26 OF 53
RADNOR TOWNSHIP				

REVISION NUMBER	REVISIONS	DATE	BY

LEGEND

375	EXISTING CONTOUR MAJOR
374	EXISTING CONTOUR MINOR
375	PROPOSED CONTOUR MAJOR
374	PROPOSED CONTOUR MINOR
	DRAINAGE AREA BOUNDARY
	PROPOSED TRAIL
	PROPOSED ROCK OUTLET PROTECTION
	EXISTING STREAM BOUNDARY
	EXISTING WETLAND
	EXISTING TREE
	UTILITY POLE, LIGHT POLE, SIGN
	EXISTING WOOD LINE
	EXISTING RIGHT-OF-WAY
P	EXISTING PROPERTY LINE
S	EXISTING SANITARY SEWER
T	EXISTING UNDERGROUND TELEPHONE
E	EXISTING ELECTRIC LINE
W	EXISTING WATER LINE
G	EXISTING GAS LINE
C	EXISTING UNDERGROUND CONDUIT
X	EXISTING FENCE
	EXISTING GUIDERAIL
	SOIL BOUNDARY
GeB	SOIL TYPE
LOD	LIMIT OF DISTURBANCE NPDES PERMIT BOUNDARY
	100 YEAR FLOODPLAIN
	PROPOSED CONCRETE SIDEWALK





NOTES:

1. NO SWM FACILITY THIS SHEET.

POST CONSTRUCTION
STORMWATER MANAGMENT PLAN

0 25 50
SCALE IN FEET: 1"=25'

DWG SWM-11 OF 25

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JENNI ERIN WOODWORTH
ENGINEER

11-12-2019

DESIGN BY: EBD | CHECKED BY: JEW

PLOTTED: 10/9/2019 4:50:14 PM
A.D. MARBLE
FILE NAME: X:\Projects\P1585\CADD\Plan\PCSW\SWM Plan 11.dgn

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	DELAWARE	0030	RRT	27 OF 53
RADNOR TOWNSHIP				

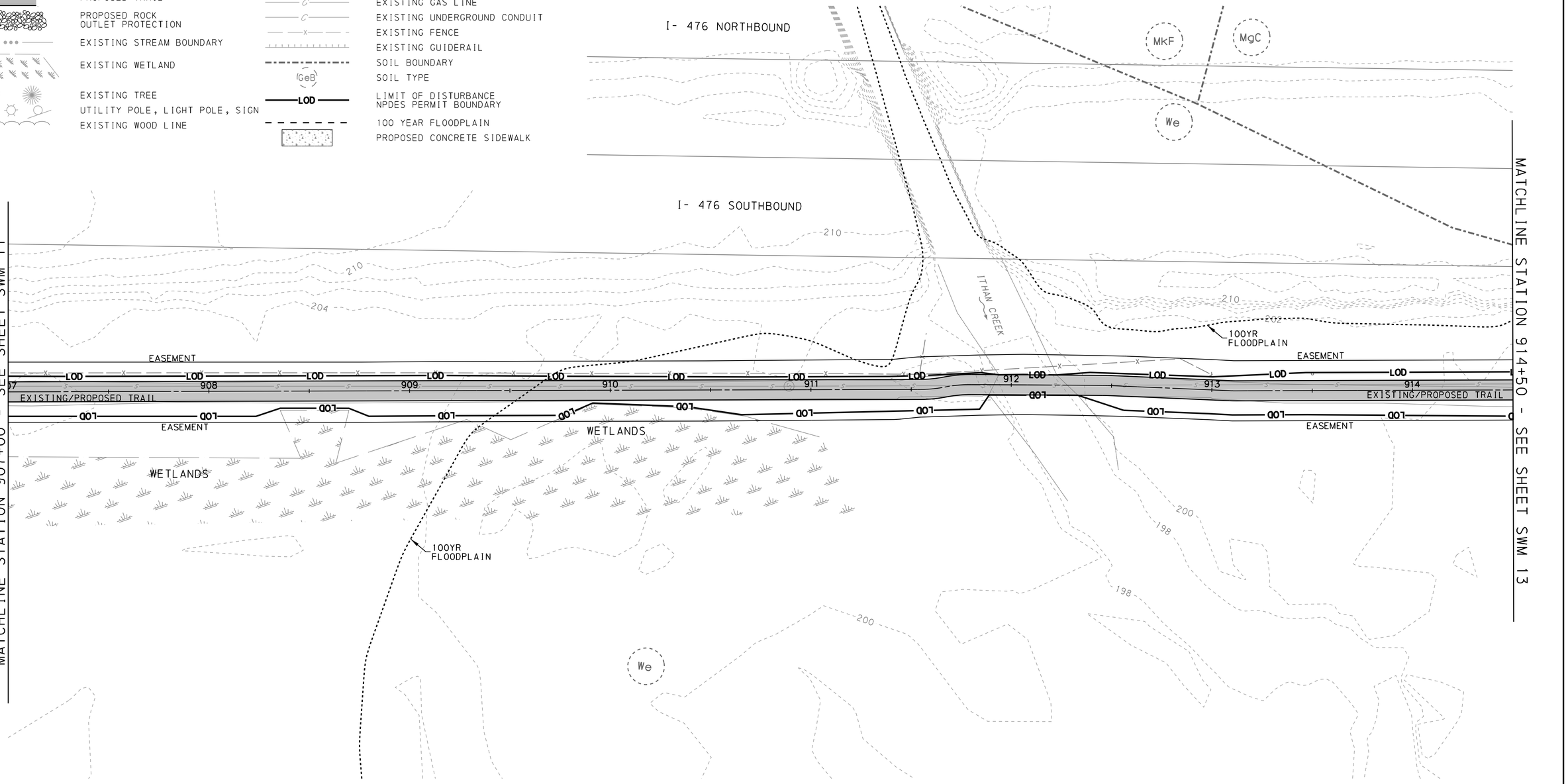
REVISION NUMBER	REVISIONS	DATE	BY

LEGEND

- 375 — EXISTING CONTOUR MAJOR
- 374 — EXISTING CONTOUR MINOR
- 375 — PROPOSED CONTOUR MAJOR
- 374 — PROPOSED CONTOUR MINOR
- DRAINAGE AREA BOUNDARY
- PROPOSED TRAIL
- PROPOSED ROCK OUTLET PROTECTION
- EXISTING STREAM BOUNDARY
- EXISTING WETLAND
- EXISTING TREE
- UTILITY POLE, LIGHT POLE, SIGN
- EXISTING WOOD LINE
- EXISTING RIGHT-OF-WAY
- EXISTING PROPERTY LINE
- S — EXISTING SANITARY SEWER
- T — EXISTING UNDERGROUND TELEPHONE
- E — EXISTING ELECTRIC LINE
- W — EXISTING WATER LINE
- G — EXISTING GAS LINE
- C — EXISTING UNDERGROUND CONDUIT
- X — EXISTING FENCE
- EXISTING GUIDERAIL
- SOIL BOUNDARY
- GeB — SOIL TYPE
- LOD — LIMIT OF DISTURBANCE NPDES PERMIT BOUNDARY
- 100 YEAR FLOODPLAIN
- PROPOSED CONCRETE SIDEWALK

NOTES:

1. NO SWM FACILITY THIS SHEET.



POST CONSTRUCTION
STORMWATER MANAGMENT PLAN

SCALE IN FEET: 1"=25' (0, 25, 50)

DESIGN BY: EBD | CHECKED BY: JEW

DWG SWM-12 OF 25

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — JENNI ERIN WOODWORTH — ENGINEER — 11-12-2019

PLOTTED: 10/9/2019 4:50:15 PM

A.D. MARBLE

FILE NAME: X:\Projects\P1585\CADD\Plan\PCSW\SWM Plan 12.dgn

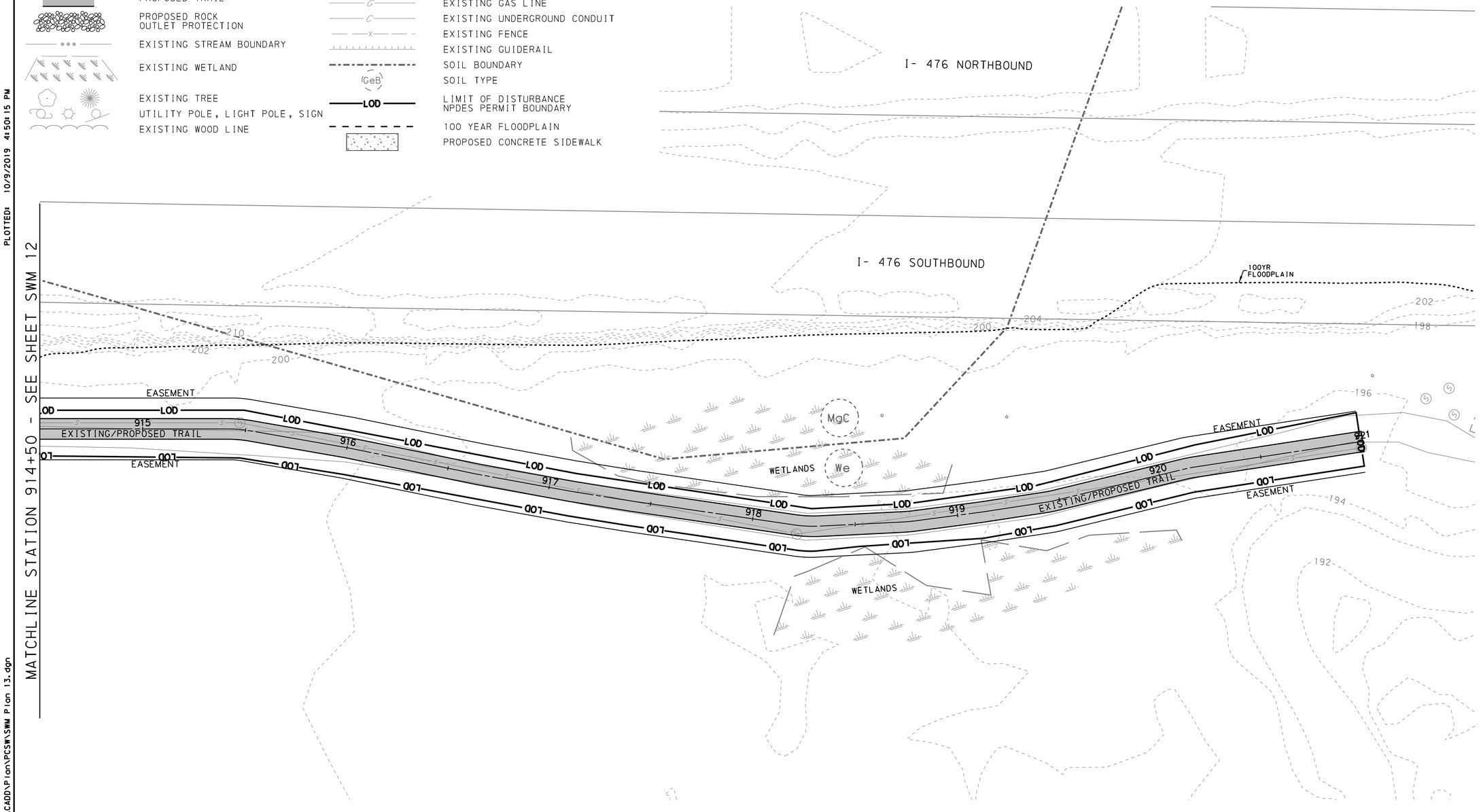
DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	DELAWARE	0030	RRT	28 OF 53
RADNOR TOWNSHIP				
REVISION NUMBER	REVISIONS		DATE	BY

LEGEND

375 EXISTING CONTOUR MAJOR	EXISTING RIGHT-OF-WAY
374 EXISTING CONTOUR MINOR	EXISTING PROPERTY LINE
375 PROPOSED CONTOUR MAJOR	S EXISTING SANITARY SEWER
374 PROPOSED CONTOUR MINOR	T EXISTING UNDERGROUND TELEPHONE
DRAINAGE AREA BOUNDARY	E EXISTING ELECTRIC LINE
PROPOSED TRAIL	W EXISTING WATER LINE
PROPOSED ROCK OUTLET PROTECTION	G EXISTING GAS LINE
	C EXISTING UNDERGROUND CONDUIT
EXISTING STREAM BOUNDARY	X EXISTING FENCE
	EXISTING GUIDERAIL
EXISTING WETLAND	SOIL BOUNDARY
IGeB	SOIL TYPE
EXISTING TREE	LOD LIMIT OF DISTURBANCE NPDES PERMIT BOUNDARY
UTILITY POLE, LIGHT POLE, SIGN	100 YEAR FLOODPLAIN
EXISTING WOOD LINE	PROPOSED CONCRETE SIDEWALK

NOTES:

1. NO SWM FACILITIES THIS SHEET.



POST CONSTRUCTION
STORMWATER MANAGMENT PLAN

SCALE IN FEET: 1"=25' (0, 25, 50)

DWG SWM-13 OF 25

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JENNI ERIN WOODWORTH
ENGINEER

11-12-2019

DESIGN BY: EBD | CHECKED BY: JEW

PLOTTED: 10/9/2019 4:50:15 PM

A.D. MARBLE
FILE NAME: X:\Projects\P1585\CADD\Plan\PCSM\SWM Plan 13.dgn

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	DELAWARE	0030	RRT	29 OF 53
RADNOR TOWNSHIP				

REVISION NUMBER	REVISIONS	DATE	BY

SWM NO. 1: BASELINE COORDINATE TABLE			
CURVE	STATION	NORTHING	EASTING
POB-1	0+00.00	266313.05	2636112.87
PC-1	0+26.29	266288.36	2636121.92
PT-1	0+37.65	266280.10	2636129.31
PC-2	1+25.38	266240.95	2636207.82
PT-2	1+27.65	266239.98	2636209.88
PC-3	1+53.93	266229.34	2636233.90
PT-3	1+56.71	266228.28	2636236.47
PC-4	1+83.24	266218.90	2636261.29
PT-4	1+85.04	266218.29	2636262.99
PC-5	2+12.43	266209.54	2636288.94
PT-5	2+14.20	266208.94	2636290.60
PC-6	2+42.06	266199.11	2636316.68
PT-6	2+42.67	266198.90	2636317.24
PC-7	2+54.52	266194.58	2636328.28
PT-7	2+59.48	266192.55	2636332.80
PC-8	3+12.40	266168.49	2636379.94
PT-8	3+14.62	266167.53	2636381.94
PC-9	3+86.70	266137.65	2636447.53
PT-9	3+87.30	266137.40	2636448.08
POE-1	5+10.93	266084.79	2636559.95

CURVE RADIUS LIST

CURVE 1: RADIUS = 15.00'
CURVE 2: RADIUS = 50.00'
CURVE 3: RADIUS = 50.00'
CURVE 4: RADIUS = 50.00'
CURVE 5: RADIUS = 50.00'
CURVE 6: RADIUS = 50.00'
CURVE 7: RADIUS = 50.00'
CURVE 8: RADIUS = 50.00'
CURVE 9: RADIUS = 50.00'

LEGEND

- EXISTING CONTOUR MAJOR
- EXISTING CONTOUR MINOR
- PROPOSED CONTOUR MAJOR
- PROPOSED CONTOUR MINOR
- PROPOSED ROCK OUTLET PROTECTION
- EXISTING STREAM BOUNDARY
- EXISTING WETLAND BOUNDARY
- EXISTING TREE
- UTILITY POLE, LIGHT POLE, SIGN
- EXISTING RIGHT-OF-WAY
- EXISTING SANITARY SEWER
- EXISTING UNDERGROUND TELEPHONE
- EXISTING ELECTRIC LINE
- EXISTING WATER LINE
- EXISTING FENCE
- EXISTING GUIDERAIL

SWM NO. 1 PROFILE BASELINE

SWALE 1

PERMANENT EASEMENT

RADNOR TOWNSHIP SCHOOL DISTRICT
PARCEL ID 36020123310

SWM NO. 1:
INFILTRATION TRENCH
SEE SHEET SWM-15 FOR
PROFILE AND DETAILS.

FIVE ROWS OF 220 LF
12" PEROFRATED HDPE
UNDERGROUND STORAGE
PIPES

CLEANOUT ON EACH
ROW PER MANUFACTURERS
SPECIFICATIONS

RIPRAP LINED
SPILLWAY

PROPOSED RECREATIONAL TRAIL

LEGAL RIGHT-OF-WAY

E. LANCASTER AVE.
(S.R. 30) WESTBOUND

E. LANCASTER AVE.
(S.R. 30) EASTBOUND

NOTES:

1. COMPACTION OF SOILS BENEATH THE INFILTRATION TRENCH TO BE AVOIDED DURING CLEARING, GRUBBING AND TREE REMOVAL OPERATION.

POST CONSTRUCTION STORMWATER MANAGMENT PLAN DETAILS

SCALE IN FEET: 1"=15'

DESIGN BY: EBD | CHECKED BY: JEW

DWG SWM-14 OF 25

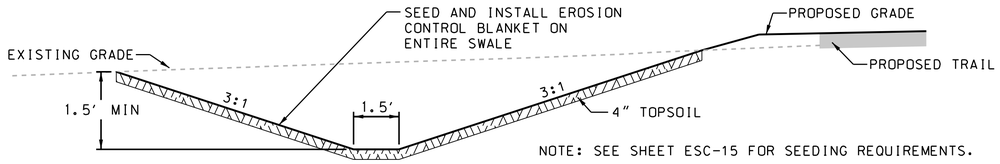
COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JENNI ERIN WOODWORTH
ENGINEER

11-12-2019

PLOTTED: 10/9/2019 4:50:19 PM
A.D. MARBLE
FILE NAME: X:\Projects\P1585\CADD\Plan\PCSW\PCSW Details 01.dgn

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	DELAWARE	0030	RRT	30 OF 53
RADNOR TOWNSHIP				

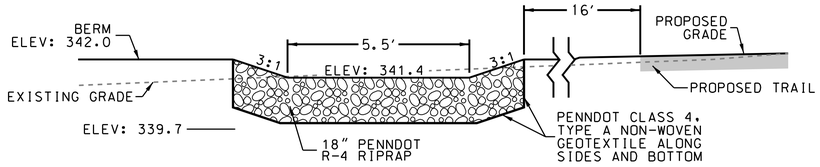
REVISION NUMBER	REVISIONS	DATE	BY



NOTE: SEE SHEET ESC-15 FOR SEEDING REQUIREMENTS.

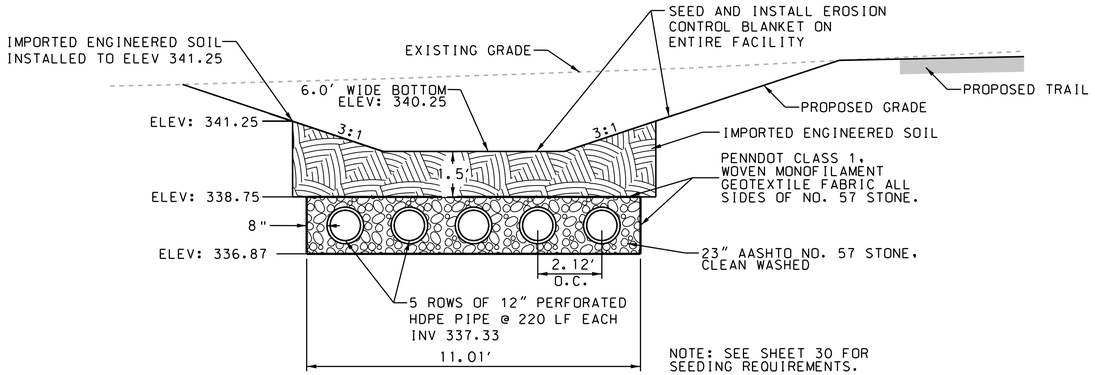
SWM FACILITY NO. 1 INFLOW SWALE, SWALE NO. 1 SECTION

NOT TO SCALE



SWM FACILITY NO. 1 SPILLWAY DETAIL 1

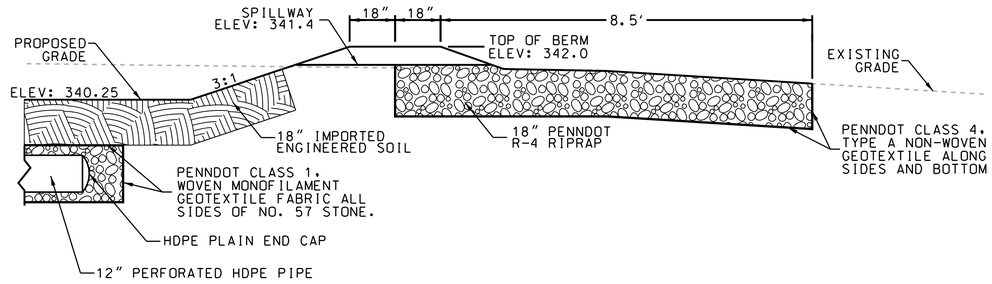
NOT TO SCALE



NOTE: SEE SHEET 30 FOR SEEDING REQUIREMENTS.

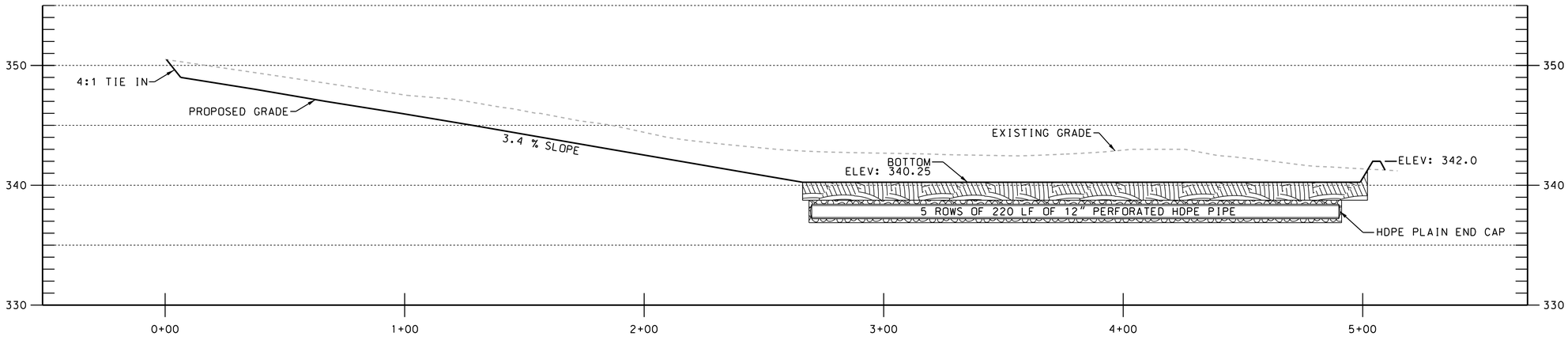
SWM FACILITY NO. 1 TYPICAL SECTION

NOT TO SCALE



SWM FACILITY NO. 1 SPILLWAY DETAIL 2

NOT TO SCALE



SWM FACILITY NO. 1 PROFILE

HORIZONTAL SCALE: 1"=25'
VERTICAL SCALE 1"= 5'

POST CONSTRUCTION STORMWATER MANAGMENT PLAN DETAILS

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JENNI ERIN WOODWORTH
ENGINEER

11-12-2019

DESIGN BY: EBD | CHECKED BY: JEW

DWG SWM-15 OF 25

PLOTTED: 10/9/2019 4:50:20 PM

A.D. MARBLE

FILE NAME: X:\Projects\P1585\CADD\Plan\PCSW\PCSW Details 02.dgn

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	DELAWARE	0030	RRT	31 OF 53
RADNOR TOWNSHIP				
REVISION NUMBER	REVISIONS		DATE	BY

LEGEND

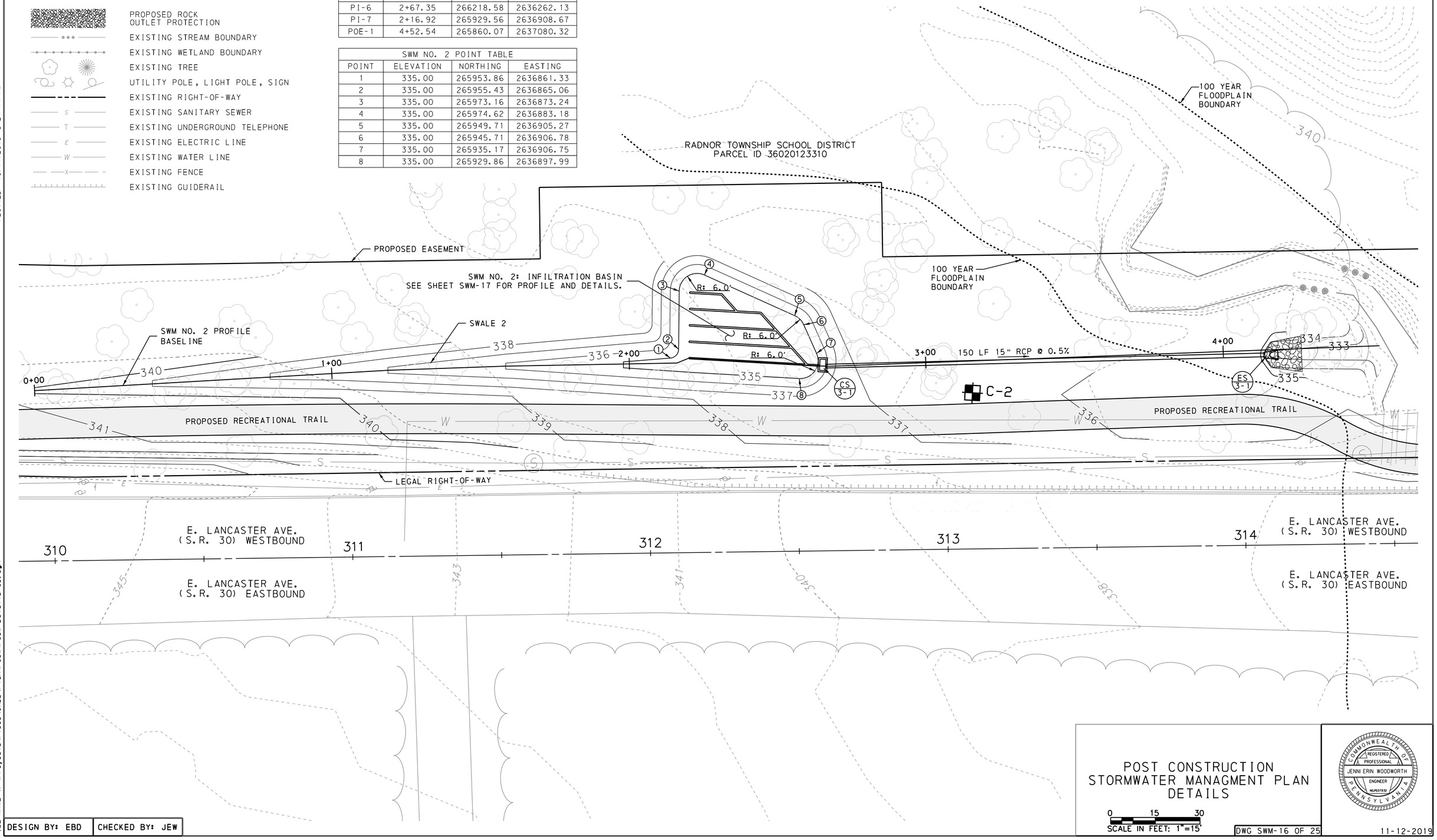
- 375 — EXISTING CONTOUR MAJOR
- 374 — EXISTING CONTOUR MINOR
- 375 — PROPOSED CONTOUR MAJOR
- 374 — PROPOSED CONTOUR MINOR
- PROPOSED ROCK OUTLET PROTECTION
- EXISTING STREAM BOUNDARY
- EXISTING WETLAND BOUNDARY
- EXISTING TREE
- UTILITY POLE, LIGHT POLE, SIGN
- EXISTING RIGHT-OF-WAY
- S — EXISTING SANITARY SEWER
- T — EXISTING UNDERGROUND TELEPHONE
- E — EXISTING ELECTRIC LINE
- W — EXISTING WATER LINE
- X — EXISTING FENCE
- EXISTING GUIDERAIL

SWM NO. 2: BASELINE COORDINATE TABLE			
POINT	STATION	NORTHING	EASTING
POB-1	0+00.00	266031.35	2636662.01
PI-1	1+18.88	265988.97	2636773.08
PI-2	1+58.46	265974.05	2636809.74
PI-3	2+15.99	265951.43	2636862.64
PI-4	2+20.35	265951.30	2636866.99
PI-5	2+64.35	265930.92	2636906.00
PI-6	2+67.35	266218.58	2636262.13
PI-7	2+16.92	265929.56	2636908.67
POE-1	4+52.54	265860.07	2637080.32

SWM NO. 2 POINT TABLE			
POINT	ELEVATION	NORTHING	EASTING
1	335.00	265953.86	2636861.33
2	335.00	265955.43	2636865.06
3	335.00	265973.16	2636873.24
4	335.00	265974.62	2636883.18
5	335.00	265949.71	2636905.27
6	335.00	265945.71	2636906.78
7	335.00	265935.17	2636906.75
8	335.00	265929.86	2636897.99

NOTES:

1. COMPACTION OF SOILS BENEATH THE INFILTRATION BASIN TO BE AVOIDED DURING CLEARING, GRUBBING AND TREE REMOVAL OPERATION.



POST CONSTRUCTION STORMWATER MANAGMENT PLAN DETAILS

SCALE IN FEET: 1"=15' (0, 15, 30)

DWG SWM-16 OF 25

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL ENGINEER — JENNI ERIN WOODWORTH — 082907532

11-12-2019

DESIGN BY: EBD | CHECKED BY: JEW

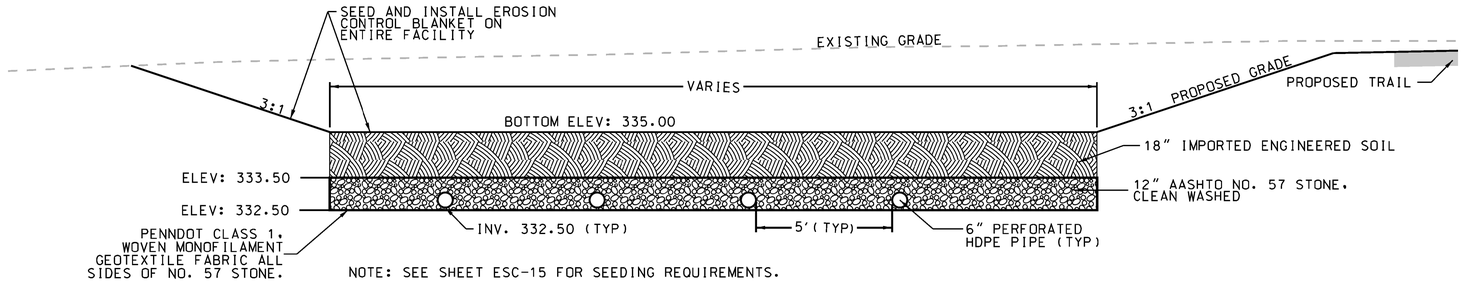
PLOTTED: 10/11/2019 5:24:14 PM

A.D. MARBLE

FILE NAME: X:\Projects\P1585\CADD\Plan\PCSW\PCSW Details 03.dgn

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	DELAWARE	0030	RRT	32 OF 53
RADNOR TOWNSHIP				

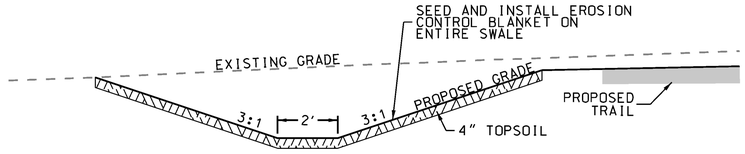
REVISION NUMBER	REVISIONS	DATE	BY
1	ADDENDUM 1	10/28/20	EBD
2	ADDENDUM 2	11/02/20	EBD



NOTE: SEE SHEET ESC-15 FOR SEEDING REQUIREMENTS.

SWM FACILITY NO. 2 TYPICAL SECTION

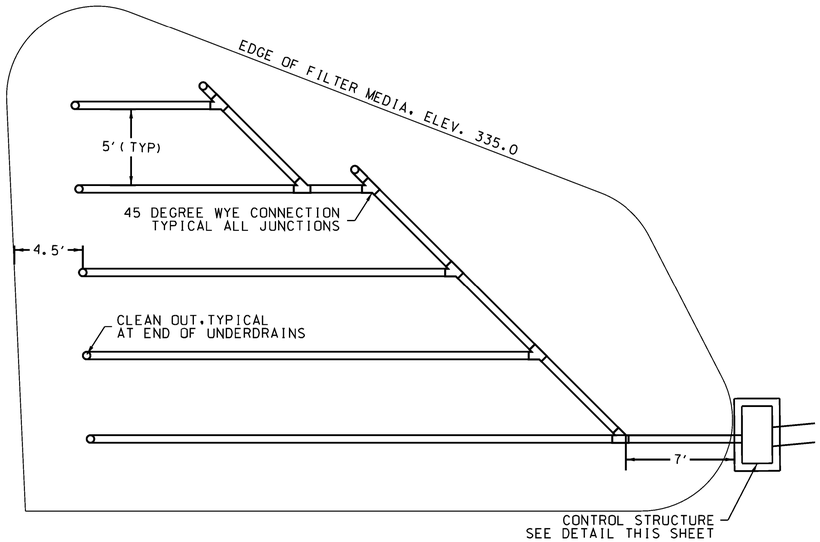
NOT TO SCALE



NOTE: SEE SHEET 30 FOR SEEDING REQUIREMENTS.

SWM FACILITY NO. 2 INFLOW SWALE, SWALE NO. 2 SECTION

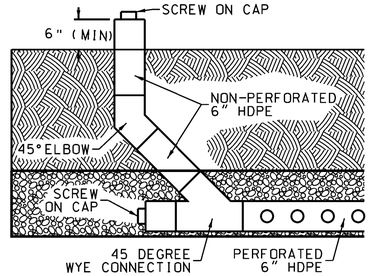
NOT TO SCALE



SWM FACILITY NO. 2 UNDERDRAIN NETWORK

NOT TO SCALE

Max WSE (100) 336.40

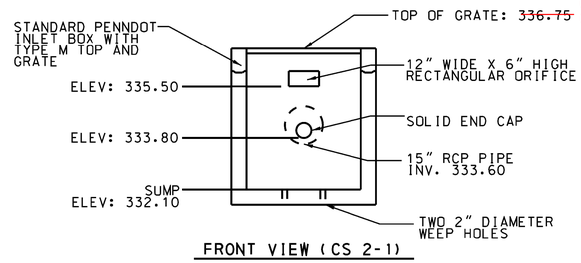


CLEANOUT DETAIL

~~NOT TO SCALE~~

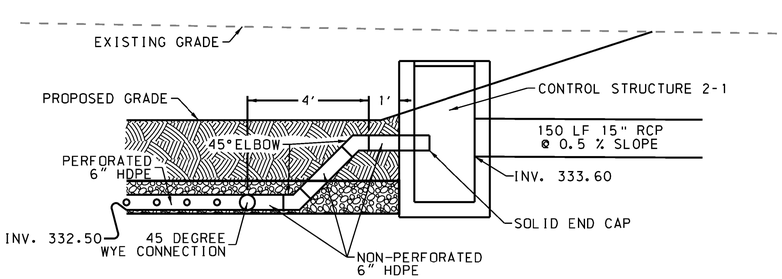
INSPECTION PORT
ITEM NUMBER: 9000-0024
NOT TO SCALE

2



1

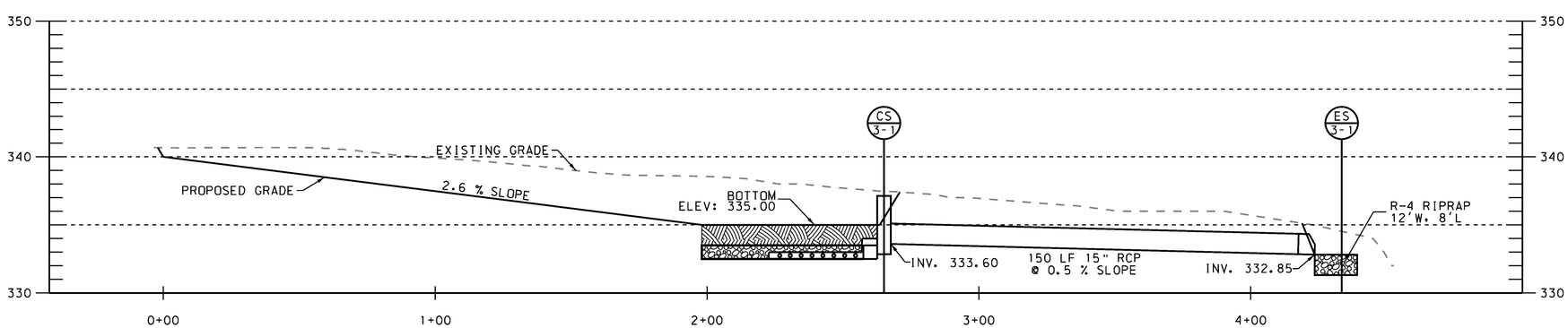
FRONT VIEW (CS 2-1)



SIDE VIEW

SWM FACILITY NO. 2 CONTROL STRUCTURE (CS 2-1)

NOT TO SCALE



SWM FACILITY NO. 2 PROFILE

HORIZONTAL SCALE: 1"=25'
VERTICAL SCALE 1"= 5'

POST CONSTRUCTION STORMWATER MANAGMENT PLAN DETAILS

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JENNI ERIN WOODWORTH
ENGINEER
NO.PE073132

11-12-2019

DESIGN BY: EBD | CHECKED BY: JEW

DWG SWM-17 OF 25

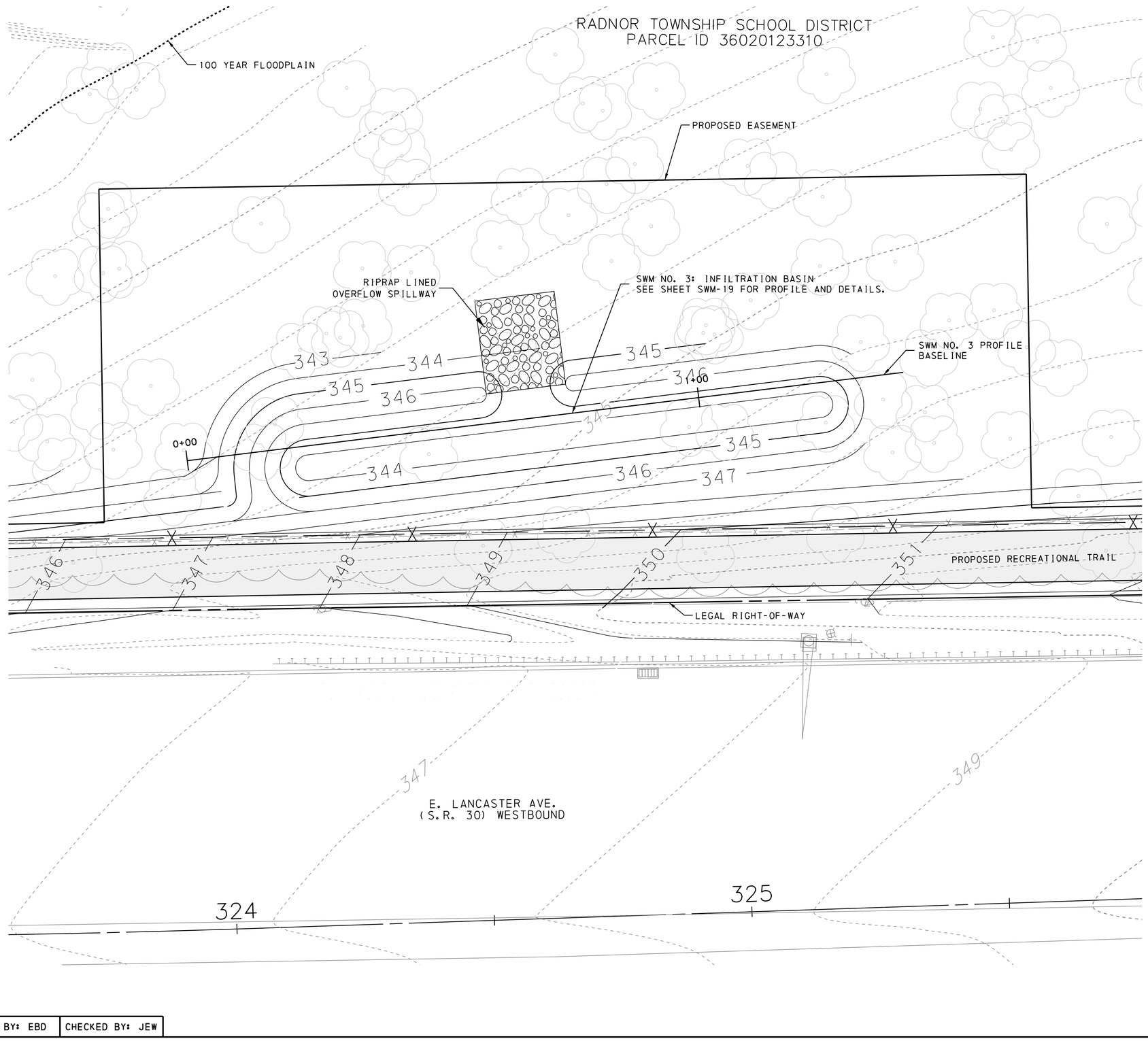
PLOTTED: 10/11/2019 5:47:26 PM

A.D. MARBLE

FILE NAME: x:\Projects\P1585\CADD\Plan\PCSW\PCSW Details 04.dgn

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	DELAWARE	0030	RRT	33 OF 53
RADNOR TOWNSHIP				

REVISION NUMBER	REVISIONS	DATE	BY



LEGEND

- 375 — EXISTING CONTOUR MAJOR
- 374 — EXISTING CONTOUR MINOR
- 375 — PROPOSED CONTOUR MAJOR
- 374 — PROPOSED CONTOUR MINOR
- PROPOSED ROCK OUTLET PROTECTION
- EXISTING STREAM BOUNDARY
- EXISTING WETLAND BOUNDARY
- EXISTING TREE
- UTILITY POLE, LIGHT POLE, SIGN
- EXISTING RIGHT-OF-WAY
- S — EXISTING SANITARY SEWER
- T — EXISTING UNDERGROUND TELEPHONE
- E — EXISTING ELECTRIC LINE
- W — EXISTING WATER LINE
- X — EXISTING FENCE
- EXISTING GUIDERAIL

SWM NO. 3: BASELINE COORDINATE TABLE			
POINT	STATION	NORTHING	EASTING
POB-1	0+00.00	265615.33	2637969.22
POE-1	1+40.00	265609.28	2638109.09

NOTES:

1. COMPACTION OF SOILS BENEATH THE INFILTRATION BASIN TO BE AVOIDED DURING CLEARING, GRUBBING AND TREE REMOVAL OPERATION.

POST CONSTRUCTION STORMWATER MANAGMENT PLAN DETAILS

0 10 20
SCALE IN FEET: 1"=10'

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JENNI ERIN WOODWORTH
ENGINEER

11-12-2019

DESIGN BY: EBD | CHECKED BY: JEW

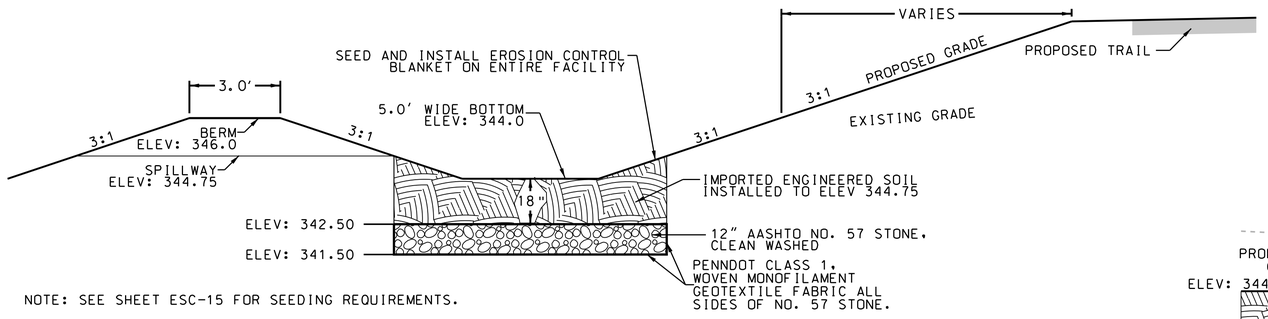
DWG SWM-18 OF 25

PLOTTED: 10/9/2019 4:50:23 PM

A.D. MARBLE
FILE NAME: X:\Projects\P1585\CADD\Plan\PCSW\PCSW Details 05.dgn

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	DELAWARE	0030	RRT	34 OF 53
RADNOR TOWNSHIP				

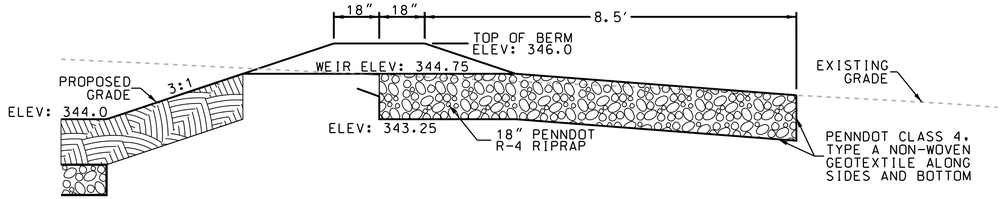
REVISION NUMBER	REVISIONS	DATE	BY



NOTE: SEE SHEET ESC-15 FOR SEEDING REQUIREMENTS.

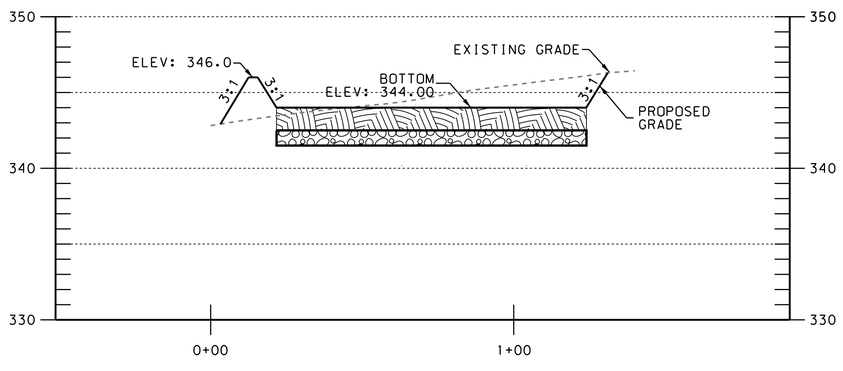
SWM FACILITY NO. 3 TYPICAL SECTION

NOT TO SCALE



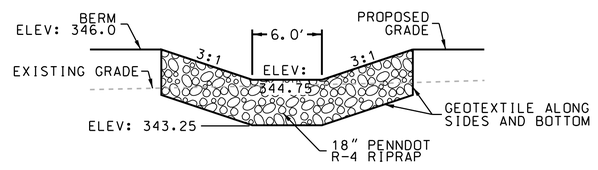
SWM FACILITY NO. 3 SPILLWAY DETAIL 2

NOT TO SCALE



SWM FACILITY NO. 3 PROFILE

HORIZONTAL SCALE: 1"=25'
VERTICAL SCALE 1"= 5'



SWM FACILITY NO. 3 SPILLWAY DETAIL 1

NOT TO SCALE

POST CONSTRUCTION STORMWATER MANAGMENT PLAN DETAILS

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JENNI ERIN WOODWORTH
ENGINEER

11-12-2019

DESIGN BY: EBD | CHECKED BY: JEW

DWG SWM-19 OF 25

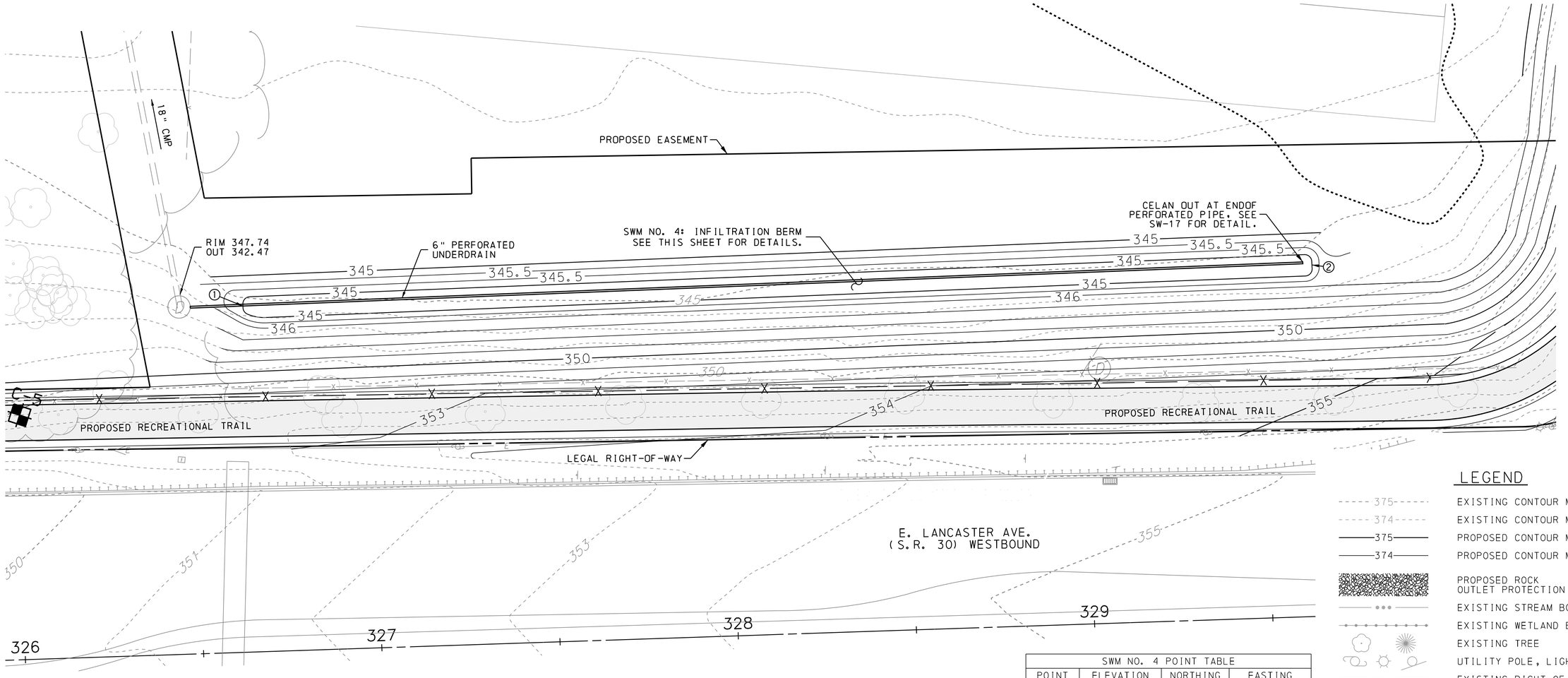
PLOTTED: 10/9/2019 4:50:24 PM
A.D. MARBLE
FILE NAME: X:\Projects\P1585\CADD\Plan\PCSW\PCSW Details 06.dgn

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	DELAWARE	0030	RRT	35 OF 53
RADNOR TOWNSHIP				

REVISION NUMBER	REVISIONS	DATE	BY

NOTES:

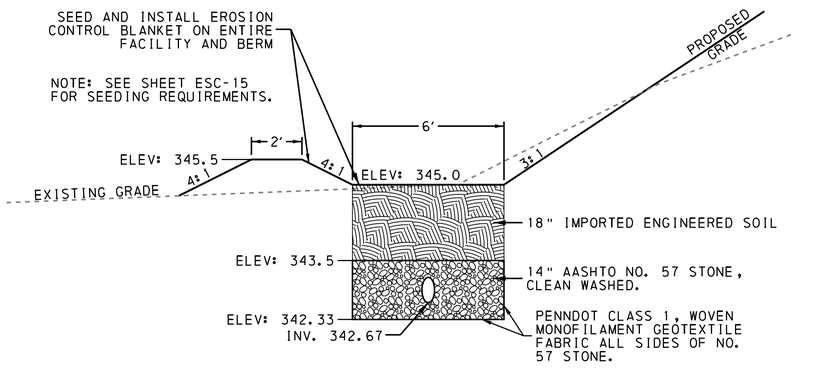
1. COMPACTION OF SOILS BENEATH THE INFILTRATION BERM TO BE AVOIDED DURING CLEARING, GRUBBING AND TREE REMOVAL OPERATION.



LEGEND

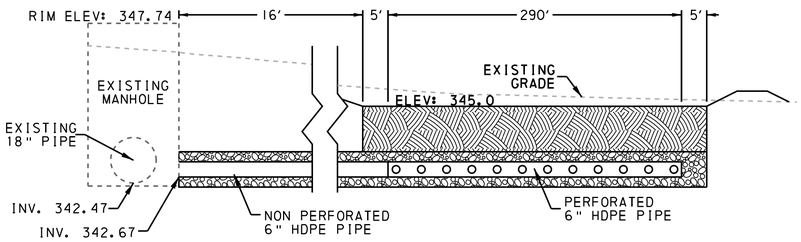
- 375 — EXISTING CONTOUR MAJOR
- 374 — EXISTING CONTOUR MINOR
- 375 — PROPOSED CONTOUR MAJOR
- 374 — PROPOSED CONTOUR MINOR
- PROPOSED ROCK OUTLET PROTECTION
- EXISTING STREAM BOUNDARY
- EXISTING WETLAND BOUNDARY
- EXISTING TREE
- UTILITY POLE, LIGHT POLE, SIGN
- EXISTING RIGHT-OF-WAY
- S — EXISTING SANITARY SEWER
- T — EXISTING UNDERGROUND TELEPHONE
- E — EXISTING ELECTRIC LINE
- W — EXISTING WATER LINE
- X — EXISTING FENCE
- EXISTING GUIDERAIL

SWM NO. 4 POINT TABLE			
POINT	ELEVATION	NORTHING	EASTING
1	334.50	265,547.21	2,638,536.07
2	334.50	265,585.37	2,638,238.50



SWM FACILITY NO. 4 TYPICAL SECTION

NOT TO SCALE



SWM FACILITY NO. 4 PROFILE

NOT TO SCALE

POST CONSTRUCTION STORMWATER MANAGMENT PLAN DETAILS

0 15 30

SCALE IN FEET: 1"=15'

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — JENNI ERIN WOODWORTH — ENGINEER

11-12-2019

DWG SWM-20 OF 25

DESIGN BY: EBD | CHECKED BY: JEW

PLOTTED: 10/9/2019 4:50:26 PM

A.D. MARBLE

FILE NAME: X:\Projects\P1585\CADD\Plan\PCSW\PCSW Details 07.dgn

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	DELAWARE	0030	RRT	36 OF 53
RADNOR TOWNSHIP				

REVISION NUMBER	REVISIONS	DATE	BY

CURVE DATA TABLE						
CURVE	RADIUS	DELTA	LENGTH	DEGREE	TANGENT	EXTERNAL
C-1	60	24°16′59"	25.43	95°29′35"	12.91	1.37
C-2	70	38°51′40"	47.48	81°51′04"	24.69	4.23

SWM NO. 5 POINT TABLE			
POINT	ELEVATION	NORTHING	EASTING
1	404.00	266,614.35	2,627,418.15
2	404.00	266,609.48	2,627,415.61
3	404.00	266,599.79	2,627,423.22
4	404.00	266,591.79	2,627,442.44
5	404.00	266,596.95	2,627,456.41
6	404.00	266,612.36	2,627,454.02
7	404.00	266,614.47	2,627,435.84
8	404.00	266,613.94	2,627,424.96

LEGEND

- EXISTING CONTOUR MAJOR (375)
- EXISTING CONTOUR MINOR (374)
- PROPOSED CONTOUR MAJOR (375)
- PROPOSED CONTOUR MINOR (374)
- PROPOSED ROCK OUTLET PROTECTION
- EXISTING STREAM BOUNDARY
- EXISTING WETLAND BOUNDARY
- EXISTING TREE
- UTILITY POLE, LIGHT POLE, SIGN
- EXISTING RIGHT-OF-WAY
- EXISTING SANITARY SEWER (S)
- EXISTING UNDERGROUND TELEPHONE (T)
- EXISTING ELECTRIC LINE (E)
- EXISTING WATER LINE (W)
- EXISTING FENCE (X)
- EXISTING GUIDERAIL

SWM NO. 5-2: BASELINE COORDINATE TABLE			
POINT	STATION	NORTHING	EASTING
POB	10+00.00	266,631.73	2,627,375.46
C-1: PC	10+55.37	266,610.36	2,627,426.54
C-1: PI	10+68.28	266,605.37	2,627,438.45
C-1: PT	10+80.80	266,605.73	2,627,451.35
C-2: PC	11+04.05	266,606.37	2,627,474.60
C-2: PI	11+28.75	266,607.05	2,627,499.28
C-2: PT	11+51.53	266,623.06	2,627,518.07
PI	11+64.95	266,631.76	2,627,528.29
POE	11+95.00	266,651.38	2,627,551.05

NOTES:

1. COMPACTION OF SOILS BENEATH THE INFILTRATION BASIN TO BE AVOIDED DURING CLEARING, GRUBBING AND TREE REMOVAL OPERATION.

POST CONSTRUCTION STORMWATER MANAGMENT PLAN DETAILS

0 15 30
SCALE IN FEET: 1"=15'

DWG SWM-21 OF 25

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL JENNI ERIN WOODWORTH ENGINEER NO.PE073152

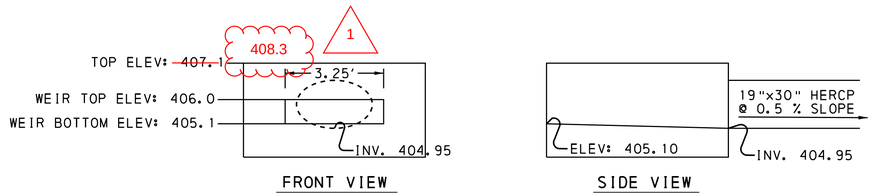
06-11-2020

A.D. MARBLE
FILE NAME: $FILENAME$
PLOTTED: $DATE$ $TIME$

DESIGN BY: EBD | CHECKED BY: JEW

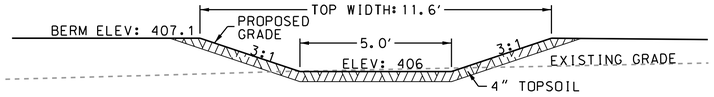
DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	DELAWARE	0030	RRT	37 OF 53
RADNOR TOWNSHIP				

REVISION NUMBER	REVISIONS	DATE	BY
1	ADDENDUM 1	10/28/20	EBD



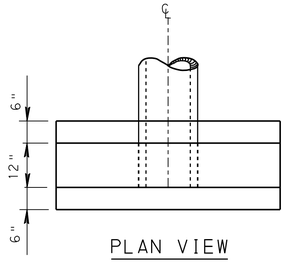
SWM FACILITY NO. 5 CONTROL STRUCTURE

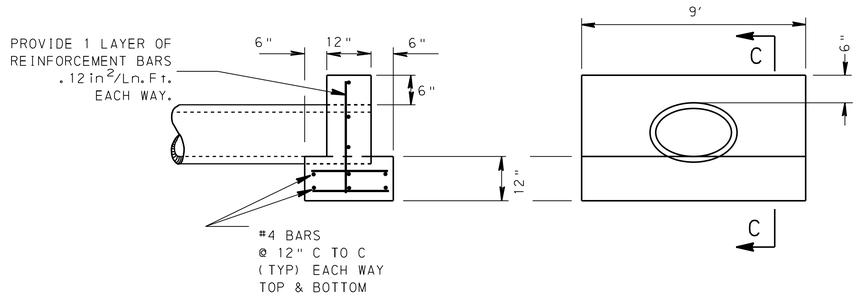
NOT TO SCALE



SWM FACILITY NO. 5 SPILLWAY DETAILS

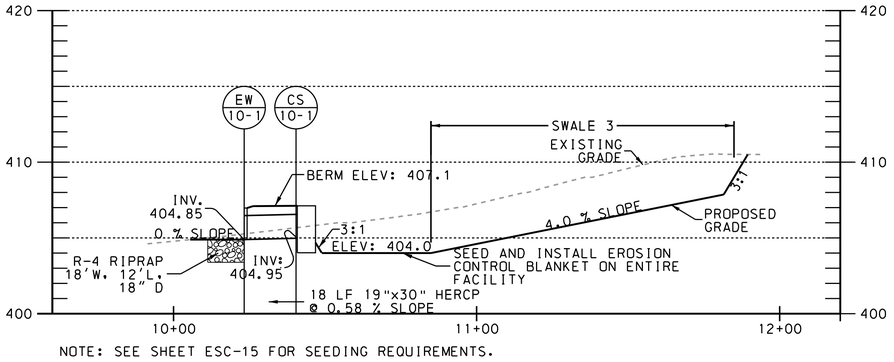
NOT TO SCALE





TYPE D ENDWALL

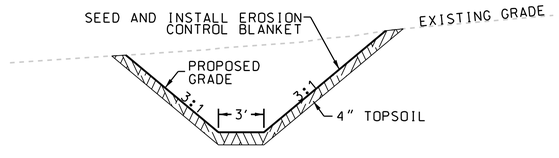
NOT TO SCALE



NOTE: SEE SHEET ESC-15 FOR SEEDING REQUIREMENTS.

SWM FACILITY NO. 5 PROFILE

HORIZONTAL SCALE: 1"=25'
VERTICAL SCALE 1"= 5'



SWALE NO. 3 CROSS SECTION

NOT TO SCALE

POST CONSTRUCTION STORMWATER MANAGMENT PLAN DETAILS

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JENNI ERIN WOODWORTH
ENGINEER

06-11-2020

DESIGN BY: EBD | CHECKED BY: JEW

DWG SWM-22 OF 25

PLOTTED: $DATE$ $TIME$

A.D. MARBLE
FILE NAME: $FILENAME$

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	DELAWARE	0030	RRT	38 OF 53
RADNOR TOWNSHIP				

REVISION NUMBER	REVISIONS	DATE	BY

STORMWATER MANAGEMENT GENERAL NOTES

THE INTEGRITY OF STREAM CHANNELS IS PRESERVED AND THE PHYSICAL, BIOLOGICAL, AND CHEMICAL QUALITIES OF RECEIVING STREAMS ARE MAINTAINED BY PRE PREVENTING AN INCREASE IN THE RATE OR VOLUME OF STORMWATER RUNOFF.

IMPERVIOUS AREAS ARE MINIMIZED BY SITING THE TRAIL IN LOCATIONS WHERE AN EXISTING SIDEWALK ALREADY EXISTS.

LAND CLEARING, GRADING, AND SOIL COMPACTION ARE MINIMIZED BY MINIMIZING THE LIMIT OF DISTURBANCE. IN SOME LOCATIONS, THE EMBANKMENTS OF THE TRAIL ALSO SERVE AS EMBANKMENTS OF THE STORMWATER BMPS, REDUCING THE OVERALL PROJECT FOOTPRINT.

OTHER STRUCTURAL AND NONSTRUCTURAL BMPS ARE UTILIZED THAT PREVENT OR MINIMIZE ANY CHANGES IN STORMWATER RUNOFF.

THIS PCSW PLAN MAXIMIZES THE PROTECTION OF EXISTING DRAINAGE FEATURES AND EXISTING VEGETATION.

PROTECTION PROVIDED FOR INFILTRATION BMPs UNTIL DRAINAGE AREA COMPLETELY STABILIZED.

PROJECT WASTE INCLUDING EXCAVATED SOIL, OR ANY WASTE GENERATED DURING CONSTRUCTION ALONG WITH ALL BUILDING MATERIALS AND WASTES SHALL BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WIT THE DEPARTMENTS 271.1 AND 287.1 ET. SEQ. NO BUILDING MATERIALS OR WASTES OR UNUSED MATERIALS SHALL BE BURNED, BURIED, DUMPED OR DISCHARGED AT THIS SITE.

POLLUTION CAUSING MATERIALS ARE NOT EXPECTED AT THIS SITE. INSTRUCTIONS AND DETAILS FOR PROPER HANDLING ARE NOT REQUIRED. THE LOCATION OF SUCH MATERIALS ARE NOT SHOWN.

SPECIFICATIONS:

THE FOLLOWING SPECIFICATIONS APPLY TO ALL POST CONSTRUCTION STORMWATER MANAGEMENT AND EROSION AND SEDIMENT CONTROL PRACTICIES ONLY. REFER TO THE TRAIL CONSTRUCTION PLAN SET FOR ALL SPECIFICATIONS RELATING TO ALL OTHER ITEMS.

ANY SPECIFICATIONS NOT LISTED BELOW SHALL CONFORM TO THE PENNSYLVANIA DEPARTMENT OF TRANSPORTATION'S PUBLICATION 408/2016-3.

1) GEOTEXTILE
GEOTEXTILE SHALL CONSIST OF NEEDLED NON-WOVEN POLYPROPYLENE FIBERS AND MEET AASHTO CLASS 2 AND THE FOLLOWING PROPERTIES:
A) GRAB TENSILE STRENGTH (ASTM-D4632) $\geq$ 120 LBS
B) MULLEN BURST STRENGTH (ASTM-D3786) $\geq$ 225 PSI
C) FLOW RATE (ASTM-D4491) > 95 GAL/MIN/FT^2
D) UV RESISTANCE AFTER 500 HRS (ASTM-D4355) $\geq$ 70%
E) HEAT-SET OR HEAT-CALENDARED FABRICS ARE NOT PERMITTED

2) IMPORTED ENGINEERED SOIL:
PRIOR TO PLACEMENT, THE CONTRACTOR SHALL PROVIDE A PRODUCT SLIP OF THE ENGINEERED SOIL CONTAINING THE PARTICLE SIZE ANALYSIS FOR REVIEW AND APPROVAL BY THE REPRESENTATIVE.

IMPORTED ENGINEERED SOIL SHALL MEET ALL THE SPECIFICATIONS BELOW AND SHALL BE A FERTILE, NATURAL SOIL, FREE FROM LARGE STONES, ROOTS, CLODS, PLANTS, PEAT, SOD, POCKETS OF COARSE SAND, PAVEMENT AND BUILDING DEBRIS, GLASS, NOXIOUS WEEDS INCLUDING INVASIVE SPECIES, INFESTATIONS OF UNDESIRABLE ORGANISMS AND DISEASE CAUSING PATHOGENS, AND OTHER EXTRANEOUS MATERIALS HARMFUL TO PLANT GROWTH.

THE TEXTURE OF THE IMPORTED ENGINEERED SOIL SHALL CONFORM TO THE CLASSIFICATION WITHIN THE UNITED STATES DEPARTMENT OF AGRICULTURE FOR SANDY LOAM OR LOAMY SAND. THE ENGINEERED SOIL SHOULD BE A MIXTURE OF SAND, SILT AND CLAY PARTICLES AS REQUIRED TO MEET THE CLASSIFICATION. RANGES OF PARTICLE SIZE DISTRIBUTION, AS DETERMINED BY PIPETTE METHOD IN COMPLIANCE WITH ASTM F-1632. ARE AS FOLLOWS:

i.	SAND (0.05 TO 2.0MM):	50-85%
ii.	SILT (0.002 TO 0.05MM):	40% MAXIMUM
iii.	CLAY (LESS THAN 0.002MM):	10% MAXIMUM
iv.	GRAVEL (2.0 TO 12.7MM):	15% MAXIMUM

ENGINEERED SOIL SHOULD BE SCREENED AND FREE OF STONES LARGER THAN HALF-INCH (12.7MM) IN ANY DIMENSION. NO MORE THAN 10% OF THE SOIL VOLUME SHOULD BE COMPOSED OF SOIL PEDS GREATER THAN ONE INCH. CLODS, OR NATURAL CLUMPS OF SOILS, GREATER THAN THREE INCHES IN ANY DIMENSION SHOULD BE ABSENT FROM THE SOIL. SMALL CLODS RANGING FROM ONE TO THREE INCHES AND PEDS, NATURAL SOIL CLUMPS UNDER ONE INCH IN ANY DIMENSION, MAY BE PRESENT BUT SHOULD NOT MAKE UP MORE THAN 10% OF THE SOIL BY VOLUME.

THE pH OF THE SOIL SHOULD HAVE A RANGE OF 5.8 TO 7.1.

SOLUBLE SALTS SHOULD BE LESS THAN 2.0 MMHOS/CM (dS/m), TYPICALLY AS MEASURED BY 1:2 SOIL-WATER RATIO BASIC SOIL SALINITY TESTING. SODIC SOILS (EXCHANGEABLE SOIDUM PERCENTAGE GREATER THAN 15 AND/OR SODIUM ADSORPTION RATIO GREATER THAN 13) ARE NOT ACCEPTABLE FOR USE REGARDLESS OF AMENDMENT.

ORGANIC CONTENT OF PLANITNG SOIL SHOULD HAVE A RANGE OF 3% TO 15% BY WEIGHT, AS DETERMINED BY LOSS ON IGNITION (ASTM D2974). TO ADJUST ORGANIC CONTENT, SOIL MAY BE AMENDED, PRIOR TO PLACING AND FINAL GRADING, WITH THE ADDITION OF ORGANIC COMPOST.

3) AASHTO NO. 57 STONE, CLEAN WASHED:
STONE MEETING THE GRADATION OF AASHTO NO. 57 AND IS CLEAN WASHED. CLEAN WASHED STONE MUST HAVE LESS THAN 0.5% WASH LOSS, BY MASS WHEN TESTED PER AASHTO T-11 WASH LOSS TEST.

4) PERFORRATED HDPE PIPE
PIPE SHALL CONFORM TO AASHTO M294, TYPE S AND ADS N-12 ST IB PIPE OR EQUAL. PIPE SHALL BE SOIL TIGHT AND JOINED USING A BELL AND SPIGOT JOINT MEETING ASTM F2648.THE PERFORRATED PIPE MUST BE CONTINUOUSLY PERFORATED AND HAVE A SMOOTH INTERIOR.

5) EROSION CONTROL BLANKET
SHALL CONFORM TO EXTENDED-TERM TEMPORARY ROLLED EROSION CONTROL PRODUCT, TYPE 3B AS SPECIFIED IN PENNDOT PUBLICATION 408/2016-3 AND AS FOLLOWS:

SHALL BE COMPOSED OF 100% NATURAL, BIO-DEGRADABLE FIBERS SUCH AS COCONUT FIBERS, JUTE AND STRAW. NO PLASTIC NETTING IS PERMITTED.

SHALL HAVE A MINIMUM UNVEGETATED SHEAR STRESS OF 2.0 LB/SF

SHALL HAVE A FUNCTIONAL LONGEVITIY OF 18-MONTHS.

POST CONSTRUCTION STORMWATER MANAGMENT PLAN GENERAL NOTES

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL JENNI ERIN WOODWORTH ENGINEER

DWG SWM-23 OF 25

11-12-2019

DESIGN BY: EBD | CHECKED BY: JEW

PLOTTED: 10/9/2019 4:50:28 PM

A.D. MARBLE
FILE NAME: X:\Projects\P1585\CADD\Plan\PCSW\PCSW Details 10.dgn

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	DELAWARE	0030	RRT	39 OF 53
RADNOR TOWNSHIP				

REVISION NUMBER	REVISIONS	DATE	BY

SEQUENCE OF CONSTRUCTION

GENERAL NOTES:

1. PROCEED WITH ALL EARTH DISTURBANCE ACTIVITIES IN ACCORDANCE WITH THE FOLLOWING SEQUENCE. COMPLETE IN COMPLIANCE WITH CHAPTER 102 REGULATIONS. LIMIT CLEARING, GRUBBING, AND TOPSOIL STRIPPING TO AREAS DESCRIBED. MANY TREES IN THE WORK AREA ARE NOT BEING REMOVED, ESPECIALLY OUTSIDE THE GRADING LIMITS BUT INSIDE THE AREA WHERE LINEAR EROSION AND SEDIMENT CONTROL PRACTICES ARE TO BE INSTALLED. CLEARING IN THESE AREAS IS TO BE LIMITED TO ONLY THE AREA REQUIRED TO INSTALL THESE PRACTICES, GENERALLY COMPOST FILTER SOCK. ROOT PRUNING WILL BE REQUIRED ON THE EDGES OF TRENCHING AND CUT SLOPES TO PROTECT THE TREES THAT ARE REMAINING.
2. AT LEAST 10 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, INCLUDING CLEARING AND GRUBBING, INVITE ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES, ALL APPROPRIATE MUNICIPAL OFFICIALS, THE E&S PLAN PREPARER, A REPRESENTATIVE FROM THE DELAWARE COUNTY CONSERVATION DISTRICT, AND A REPRESENTATIVE FROM THE PA DEP SOUTHEAST REGIONAL OFFICE TO SCHEDULE AN ON-SITE PRE-CONSTRUCTION MEETING.
3. AT LEAST 3 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, OR EXPANDING INTO AN AREA PREVIOUSLY UNMARKED, NOTIFY THE PENNSYLVANIA ONE CALL SYSTEM INC. AT 1-800-242-1776 FOR THE LOCATION OF EXISTING UNDERGROUND UTILITIES.
4. IMMEDIATELY IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO ELIMINATE THE POTENTIAL FOR ACCELERATED EROSION AND SEDIMENT POLLUTION UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, AND NOTIFY THE DELAWARE COUNTY CONSERVATION DISTRICT AND/OR PA DEP.
5. IMMEDIATELY SEED, MULCH, OR OTHERWISE PROTECT THE SITE FROM ACCELERATED EROSION AND SEDIMENTATION UPON TEMPORARY CESSATION OF ANY EARTH DISTURBANCE OR ANY STAGE OR PHASE OF ANY ACTIVITIES WHERE A CESSATION OF EARTH DISTURBANCE ACTIVITIES EXCEEDS 4 DAYS PENDING FUTURE EARTH DISTURBANCE ACTIVITIES.
6. THE SEQUENCE OF CONSTRUCTION HAS BEEN BROKEN DOWN BY PROJECT AREA. THE FIRST AREA IS THE WORK ADJACENT TO RADNOR HIGH SCHOOL (ESC SHEETS 1-9). THE SECOND IS THE WEST WAYNE PRESERVE WHICH IS ADJACENT TO THE FRIENDS OF RADNOR TRAIL PARK (ESC SHEET 10. THE FINAL AREA IS THE WORK AREA PARALLEL TO I-476 (SHEETS 11-13). WORK IN THESE AREA MAY BE DONE IN ANY ORDER OR SIMULTANEOUSLY.
7. DETAILS FOR CONSTRUCTING AND MAINTAINING EROSION AND SEDIMENT CONTROL BMP'S ARE LOCATED ON SHEETS ESC 14-20 OF THE EROSION AND SEDIMENT CONTROL PLAN. A COPY OF THE APPROVED DRAWINGS (STAMPED, SIGNED AND DATED BY THE REVIEWING AGENCY) MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES.

RADNOR HIGH SCHOOL AND RADNOR CHESTER ROAD

1. CONDUCT ON-SITE PRE-CONSTRUCTION MEETING.
2. FIELD-MARK LIMITS OF DISTURBANCE. INSTALL CONSTRUCTION FENCE ALONG LOD.
3. INSTALL ROCK CONSTRUCTION ENTRANCES FOLLOWED BY COMPOST FILTER SOCK AND INLET PROTECTION AS SHOWN ON THE PLANS. EROSION AND SEDIMENT CONTROL PRACTICES DO NOT NEED TO BE INSTALLED FOR THE ENTIRE PROJECT AREA AND MAY BE DONE INCREMENTALLY WITH THE APPROVAL OF THE CONSERVATION DISTRICT AS LONG AS ALL DISTURBED AREAS ARE PROTECTED WITH CONTROL MEASURES AS SHOWN ON THE PLANS.
4. PERFORM CLEARING AND GRUBBING FOR CONSTRUCTION AREA. THIS SHOULD BE LIMITED TO THE AREAS THAT WILL BE GRADED AND SHOULD NOT INCLUDE AREAS OUTSIDE OF THE GRADING LIMITS. ROOT PRUNING SHALL BE PERFORMED ALONG THE EDGES OF ALL TRENCHING AND CUT AREAS TO PROTECT THE EXISTING TREES INSIDE AND OUTSIDE THE LOD THAT ARE TO REMAIN. REMOVE THE FIRST 3" OF TOPSOIL AS SHOWN ON PLANS AND STOCKPILE FOR LATER USE DURING FINAL GRADING. EXCESS SOIL THAT CANNOT BE STORED ON SITE IS TO BE REMOVED FROM THE SITE.
5. CONSTRUCT VEGETATED SWALES AS SHOWN ON SWM 14-17. SEE THIS SHEET FOR SWM BMP SEQUENCE OF CONSTRUCTION.
6. PERFORM ROUGH GRADING FOR THE TRAIL.
7. PAVE THE TRAIL AS SHOWN ON THE PAVING PLANS AND COMPLETE FINE GRADING.
8. CONSTRUCT INFILTRATION TRENCH, INFILTRATION BASINS, AND INFILTRATION BERM AS DETAILED ON SWM 14-20. THESE SWM FACILITIES CAN BE CONSTRUCTED IN ANY ORDER OR CONCURRENTLY. SEE THIS SHEET FOR CONSTRUCTION SEQUENCE OF INDIVIDUAL BMPS. COMPACTION OF INFILTRATION AREAS SHALL BE AVOIDED.
9. ESTABLISH PERMANENT SEEDING IN ALL EARTH DISTURBED AREAS AS REMOVE ALL TEMPORARY EROSION AND SEDIMENT POLLUTION CONTROL DEVICES WHEN A UNIFORM 70% PERENNIAL VEGETATIVE COVER HAS BEEN ESTABLISHED THROUGHOUT. AREAS DISTURBED DURING REMOVAL OF THE CONTROLS MUST BE STABILIZED IMMEDIATELY.
10. IF ANY DISTURBED AREAS CANNOT BE PERMANENTLY STABILIZED IMMEDIATELY OR IF GRADING OPERATION ARE INTERRUPTED FOR MORE THAN 4 DAYS, INTERIM STABILIZATION MEASURES WILL BE IMPLEMENTED. INTERIM MEASURES CONSIST OF SEEDING WITH FORMULA E, ANNUAL RYE GRASS, AND MULCHING WITH HAY. ALTERNATIVE INTERIM MEASURES MAY BE USED ONLY IF APPROVED BY THE ENGINEER.

SEQUENCE OF CONSTRUCTION (CONTINUED)

WEST WAYNE PRESERVE

1. CONDUCT ON-SITE PRE-CONSTRUCTION MEETING.
2. FIELD-MARK LIMITS OF DISTURBANCE. INSTALL CONSTRUCTION FENCE ALONG LOD, AND WETLAND.
3. INSTALL ROCK CONSTRUCTION ENTRANCE FOLLOWED BY COMPOST FILTER SOCK AND INLET PROTECTION.
4. PERFORM CLEARING AND GRUBBING FOR CONSTRUCTION AREA. THIS SHOULD BE LIMITED TO THE AREAS THAT WILL BE GRADED AND SHOULD NOT INCLUDE AREAS OUTSIDE OF THE GRADING LIMITS. ROOT PRUNING SHALL BE PERFORMED ALONG THE LIMITS OF ALL TRENCHING AND CUT AREAS TO PROTECT THE EXISTING TREES INSIDE AND OUTSIDE THE LOD THAT ARE TO REMAIN. CONSTRUCTION EQUIPMENT IS NOT PERMITTED IN THE AREA OF THE BOTTOM OF THE INFILTRATION BASIN. REMOVE THE FIRST 3" OF TOPSOIL AS SHOWN ON PLANS AND STOCKPILE FOR LATER USE DURING FINAL GRADING. EXCESS SOIL THAT CANNOT BE STORED ONSITE IS TO BE REMOVED FROM THE SITE.
5. INSTALL VEGETATED SWALE IN ACCORDANCE WITH SWM 21-22. SEE THIS SHEET FOR BMP SPECIFIC CONSTRUCTION SEQUENCE.
6. CONSTRUCT INFILTRATION BASIN AS SHOWN ON SHEET SWM 21-22. SEE THIS SHEET FOR BMP SPECIFIC CONSTRUCTION SEQUENCE.
7. ESTABLISH PERMANENT SEEDING IN ALL EARTH DISTURBED AREAS AS REMOVE ALL TEMPORARY EROSION AND SEDIMENT POLLUTION CONTROL DEVICES WHEN A UNIFORM 70% PERENNIAL VEGETATIVE COVER HAS BEEN ESTABLISHED THROUGHOUT. AREAS DISTURBED DURING REMOVAL OF THE CONTROLS MUST BE STABILIZED IMMEDIATELY.
8. IF ANY DISTURBED AREAS CANNOT BE PERMANENTLY STABILIZED IMMEDIATELY OR IF GRADING OPERATION ARE INTERRUPTED FOR MORE THAN 4 DAYS, INTERIM STABILIZATION MEASURES WILL BE IMPLEMENTED. INTERIM MEASURES CONSIST OF SEEDING WITH FORMULA E, ANNUAL RYE GRASS, AND MULCHING WITH HAY. ALTERNATIVE INTERIM MEASURES MAY BE USED ONLY IF APPROVED BY THE ENGINEER.

CONSTRUCTION SEQUENCE OF PERMANENT STORMWATER BMPs

1. STEPS MARKED AS CRITICAL STAGES SHALL BE INSPECTED DURING CONSTRUCTION BY A PROFESSIONAL KNOWLEDGEABLE IN THE DESIGN AND CONSTRUCTION OF POST CONSTRUCTION STORMWATER MANAGEMENT BMPS.

VEGETATED SWALES 1-3

1. ROUGH GRADE THE VEGETATED SWALES. AVOID EXCESS COMPACTION.
2. CRITICAL STAGE. FINE GRADE THE VEGETATED SWALES. ENSURE GRADING IS CONSISTENT WITH PCSM PLANS. REGRADE AS REQUIRED. IF SUBGRADE HAS BEEN COMPACTED DURING TREE REMOVAL; STEPS SHOULD BE TAKEN TO CORRECT, SUCH AS TILLING OR AERATING.
3. CRITICAL STAGE. SEED, VEGETATE AND INSTALL PROTECTIVE LINING AS PER E&S DETAILS. ENSURE PLANTING AND PROTECTIVE LINING IS CONSISTENT WITH PLAN DETAILS.
4. ONCE ALL TRIBUTARY AREAS ARE SUFFICIENTLY STABILIZED, REMOVE TEMPORARY EROSION AND SEDIMENT CONTROLS. IT IS VERY IMPORTANT THAT THE SWALE BE STABILIZED BEFORE RECEIVING UPLAND STORMWATER RUNOFF.

INFILTRATION BASIN (SWM NO. 3 AND SWM NO. 5)

1. PROTECT INFILTRATION BASIN AREA PRIOR TO COMPACTION
2. CRITICAL STAGE. EXCAVATE BASIN BOTTOM AS SHOWN ON PLANS. ENSURE THE SUBGRADE IS FREE FROM ROCKS AND DEBRIS AND UNCOMPACTED.
3. CRITICAL STAGE. INSTALL ENGINEERED SOIL. ENSURE SOIL REMAINS UNCOMPACTED. CONSTRUCT BASIN BERMS AND EMERGENCY SPILLWAYS. INSTALL OUTLET CONTROL STRUCTURES. IF SUBGRADE HAS BEEN COMPACTED DURING TREE REMOVAL; CORRECTIVE STEPS SHOULD BE TAKEN.
4. SEED AND STABILIZE TOPSOIL.
5. DO NOT REMOVE EROSION AND SEDIMENT CONTROL MEASURES UNTIL SITE IS FULLY STABILIZED.

INFILTRATION TRENCH (SWM NO. 1)

1. PROTECT INFILTRATION TRENCH AREA FROM COMPACTION PRIOR TO INSTALLATION.
2. CRITICAL STAGE. EXCAVATE INFILTRATION TRENCH BOTTOM TO A UNIFORM SUBGRADE. ENSURE TRENCH BOTTOM IS UNIFORM, LEVEL, AND FREE FROM ROCKS. DO NOT COMPACT SUBGRADE. IF SUBGRADE HAS BEEN COMPACTED DURING TREE REMOVAL; STEPS SHOULD BE TAKEN TO CORRECT, SUCH AS TILLING OR AERATING.
3. CRITICAL STAGE. PLACE GEOTEXTILE ALONG BOTTOM AND SIDES OF TRENCH. FOLD BACK AND SECURE EXCESS GEOTEXTILE DURING STONE PLACEMENT.
4. CRITICAL STAGE. PLACE STONE AND HDPE PIPE IN TRENCH.
5. CRITICAL STAGE. FOLD AND SECURE GEOTEXTILE OVER INFILTRATION TRENCH, WITH A MINIMUM OVERLAP OF 16-INCHES.
6. CRITICAL STAGE. PLACE ENGINEERED SOIL ON TOP OF TRENCH.
7. BUILD EMBANKMENTS AS REQUIRED. SEED AND STABILIZE TOPSOIL.
8. DO NOT REMOVE EROSION AND SEDIMENT CONTROL MEASURES UNTIL SITE IS FULLY STABILIZED.

CONSTRUCTION SEQUENCE OF PERMANENT STORMWATER BMPs (CONTINUED)

EXTENDED RELEASE BASIN (SWM. 2)

1. PROTECT EXTENDED RELEASE BASIN FROM COMPACTION PRIOR TO INSTALLATION.
2. CRITICAL STAGE. EXCAVATE BASIN BOTTOM. SUBGRADE SHOULD BE UNCOMPACTED AND FREE FROM ROCKS AND DEBRIS. IF SUBGRADE HAS BEEN COMPACTED DURING TREE REMOVAL; CORRECTIVE STEPS SHOULD BE TAKEN.
3. CRITICAL STAGE. INSTALL OUTLET PIPE AND CONTROL STRUCTURES.
4. CRITICAL STAGE. INSTALL STONE AND HDPE PIPE.
5. CRITICAL STAGE. INSTALL ENGINEERED SOIL.
6. CONSTRUCT EMERGENCY SPILLWAY.

INFILTRATION BERM (SWM. 4)

1. PROTECT INFILTRATION BERM FROM COMPACTION PRIOR TO INSTALLATION.
2. CRITICAL STAGE. INSTALL 6" NON PERFORATED HDPE PIPE AND CONNECT TO EXISTING MANHOLE.
3. CRITICAL STAGE. EXCAVATE TRENCH BOTTOM. THE SUBGRADE SHOULD BE FLAT, FREE FROM DEBRIS, AND UNCOMPACTED.
4. CRITICAL STAGE. INSTALL GEOTEXTILE ALONG BOTTOM AND SIDES OF TRENCH. FOLD BACK AND SECURE EXCESS GEOTEXTILE DURING STONE PLACEMENT. (CS)
5. CRITICAL STAGE. INSTALL STONE AND PERFORATED PIPE.
6. CRITICAL STAGE. FOLD AND SECURE GEOTEXTILE OVER TRENCH, WITH A MINIMUM OF 16" OVERLAP.
7. CRITICAL STAGE. INSTALL IMPORTED ENGINEERED SOIL
8. CONSTRUCT BERM.
9. SEED AND STABILIZE AREA.
10. DO NOT REMOVE EROSION AND CONTROL MEASURES UNTIL SITE IS FULLY STABILIZED.

INSPECTION AND MAINTENANCE SCHEDULE

VEGETATED SWALES:

MAINTENANCE ACTIVITIES TO BE DONE ANNUALLY AND WITHIN 48 HOURS AFTER EVERY MAJOR STORM EVENT (>1 INCH RAINFALL DEPTH)

- INSPECT AND CORRECT EROSION PROBLEMS, DAMAGE TO VEGETATION, AND SEDIMENT AND DEBRIS.
- ACCUMULATION (ADDRESS WHEN > 3 INCHES AT ANY SPOT OR COVERING VEGETATION.
- INSPECT VEGETATION ON SIDE SLOPES FOR EROSION AND FORMATION OF RILLS OR GULLIES, CORRECT AS NEEDED.
- INSPECT FOR POOLS OF STANDING WATER; DEWATER AND DISCHARGE TO AN APPROVED LOCATION AND RESTORE TO DESIGN GRADE.
- MOW AND TRIM VEGETATION TO ENSURE SAFETY, AESTHETICS, PROPER SWALE OPERATION, OR TO SUPPRESS WEEDS AND INVASIVE VEGETATION; DISPOSE OF CUTTINGS IN A LOCAL COMPOSTING FACILITY; MOW ONLY WHEN SWALE IS DRY TO AVOID RUTTING.
- INSPECT FOR LITTER; REMOVE PRIOR TO MOWING.
- INSPECT FOR UNIFORMITY IN CROSS-SECTION AND LONGITUDINAL SLOPE, CORRECT AS NEEDED.
- INSPECT SWALE INLET (CURB CUTS, PIPES, ETC.) AND OUTLET FOR SIGNS OF EROSION OR BLOCKAGE, CORRECT AS NEEDED.

MAINTENANCE ACTIVITIES TO BE DONE AS NEEDED:

- PLANT ALTERNATIVE GRASS SPECIES IN EVENT OF UNSUCCESSFUL ESTABLISHMENT.
- ROTOTILL AND REPLANT SWALE IF DRAWN DOWN TIME IS MORE THAN 48 HOURS.
- INSPECT AND CORRECT CHECK DAMS WHEN SIGNS OF ALTERED WATER FLOW (CHANNELIZATION, OBSTRUCTIONS, EROSION, ETC.) ARE IDENTIFIED.
- WATER DURING DRY PERIODS, FERTILIZE, AND APPLY PESTICIDE ONLY WHEN ABSOLUTELY NECESSARY.

SUBSURFACE TRENCH:

- CATCH BASINS AND INLETS SHOULD BE INSPECTED AND CLEANED AT LEAST TWO TIMES PER YEAR.
- THE VEGETATION ALONG THE SURFACE OF THE INFILTRATION TRENCH SHOULD BE MAINTAINED IN GOOD CONDITIONS, AND AY BARE SPOTS REVEGETATED AS SOON AS POSSIBLE.
- VEHICLES SHOULD NOT BE PARKED OR RIVEN ON A VEGETATED INFILTRATION TRENCH, AND CARE SHOULD BE TAKEN TO AVOID EXCESSIVE COMPACTION BY MOWERS.

INFILTRATION BASIN:

- CATCH BASINS AND INLETS (UPGRADIENT OF INFILTRATION BASIN) SHOULD BE INSPECTED AND CLEANED AT LEAST TWO TIMES PER YEAR AND AFTER RUNOFF EVENTS.
- THE VEGETATION ALONG THE SURFACE OF THE INFILTRATION BASIN SHOULD BE MAINTAINED IN GOOD CONDITION, AND ANY BARE SPOTS REVEGETATED AS SOON AS POSSIBLE.
- VEHICLES SHOULD NOT BE PARKED OR DRIVEN ON AN INFILTRATION BASIN, AND CARE SHOULD BE TAKEN TO AVOID EXCESSIVE COMPACTION BY MOWERS.
- INSPECT THE BASIN AFTER RUNOFF EVENTS AND MAKE SURE THAT RUNOFF DRAINS DOWN WITHIN 72 HOURS. MOSQUITO'S SHOULD NOT BE A PROBLEM IF WATER DRAINS IN 72 HOURS. MOSQUITOES REQUIRE A CONSIDERABLY LONG BREEDING PERIOD WITH RELATIVELY STATIC WATER LEVELS.
- ALSO INSPECT FOR ACCUMULATION OF SEDIMENT, DAMAGE TO OUTLET CONTROL STRUCTURES, EROSION CONTROL MEASURES, SIGNS OF WATER CONTAMINATION/SPILLS, AND SLOPE STABILITY IN THE BERMS.
- MOW ONLY AS APPROPRIATE FOR VEGETATIVE COVER SPECIES.
- REMOVE ACCUMULATED SEDIMENT FROM BASIN AS REQUIRED. RESTORE ORIGINAL CROSS SECTION AND INFILTRATION RATE. PROPERLY DISPOSE OF SEDIMENT.

PLOTTED: $DATE$ $TIME$

A.D. MARBLE
FILE NAME: $FILENAME$

DESIGN BY: EBD | CHECKED BY: JEW

POST CONSTRUCTION
STORMWATER MANAGEMENT PLAN
GENERAL NOTES

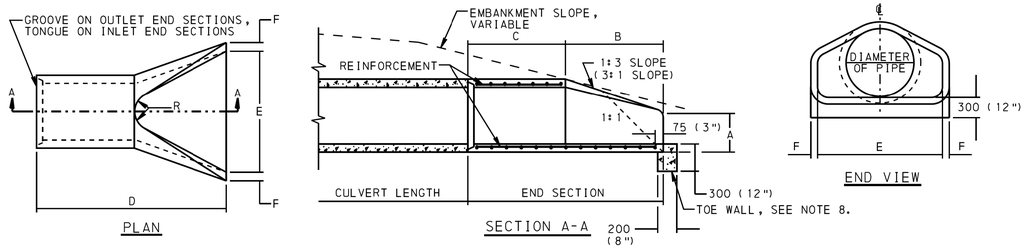
COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JENNI ERIN WOODWORTH
ENGINEER

DWG SWM-24 OF 25

06-11-2020

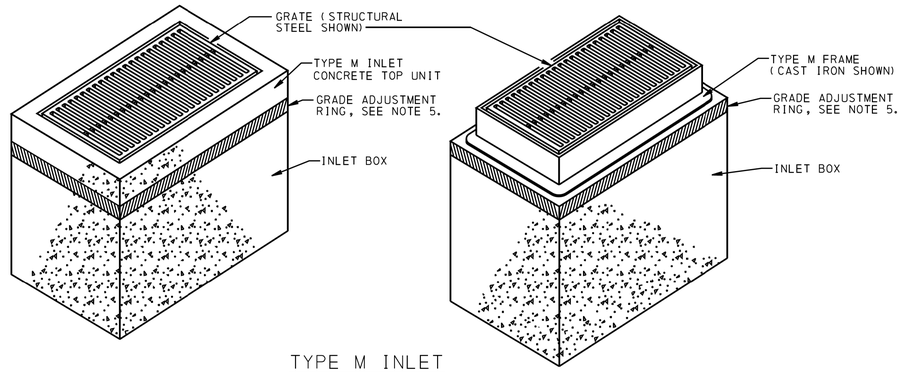
DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	DELAWARE	0030	RRT	40 OF 53
RADNOR TOWNSHIP				

REVISION NUMBER	REVISIONS	DATE	BY
2	ADDENDUM 2	11/2/20	MRH



SLOPE DETAIL

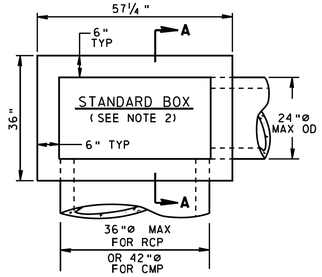
CONCRETE END SECTIONS



TYPE M INLET

NOTES

1. CONSTRUCT INLET BOXES IN ACCORDANCE WITH THE REQUIREMENTS OF PUBLICATION 408, SECTION 605.
2. PROVIDE INLET BOXES WITH 610 x 1150 (24"x 45¼") STANDARD OPENING TO ACCOMMODATE THE STANDARD TOP COMPONENTS.
3. FOR CAST-IN-PLACE OR PRECAST CONSTRUCTION, PROVIDE INLET WALLS 150 (6") THICK, UNLESS OTHERWISE INDICATED.
4. INLETS THAT EXCEED THE MAXIMUM HEIGHT SHOWN SHALL REQUIRE SPECIAL DETAILS AND DESIGN FOR THE INLET WALLS AND BASE. CONSTRUCT INLETS THAT EXCEED 1500 (5') IN HEIGHT WITH STEPS SIMILAR TO MANHOLES. SEE RC-39M.
5. LOCATE PIPE OR PIPES, AS INDICATED, WITH THE INLET BOTTOM SHAPED TO CHANNEL THE FLOW TOWARD THE OUTLET PIPE. WHEN PROJECT CONDITIONS REQUIRE PIPES TO BE LOCATED WITHIN 100 (4") FROM THE TOP OF THE INLET BOX, PROVIDE AN ADDITIONAL #10 (#3) REINFORCEMENT BAR LOCATED 40 (1½") FROM THE TOP OF THE INLET BASE, FULL WIDTH ALONG THE INLET FACE. IF REINFORCED CONCRETE PIPE IS USED, THE PIPE BLOCKOUT MAY BE FORMED 'FLUSH' WITH THE INLET BASE. LIMIT PIPE BLOCKOUT OF WALL TO 25 mm (1").
6. PLACE #13 (#4) REINFORCEMENT BARS, MINIMUM 300 (12") LONG, SPACED AT 300 (12") C TO C, AS DOWELS BETWEEN THE INLET BASE AND WALLS WHEN THE CONCRETE WALLS AND INLET BASE ARE NOT CONSTRUCTED MONOLITHICALLY.
7. FOR CAST-IN-PLACE CONSTRUCTION, WHEN THE BASE IS CONSTRUCTED MONOLITHICALLY WITH THE VERTICAL WALLS, PROVIDE 75 (3") MINIMUM FROM THE BOTTOM OF THE PIPE TO THE BOTTOM OF THE INLET BOX.
8. FOR INLETS OTHER THAN AS SHOWN ON THE STANDARDS, PROVIDE REINFORCEMENT BASED ON PHL 93 AND P-82 LOADING AND IN ACCORDANCE WITH PUBLICATION 408.
11. CONSTRUCTION JOINTS AND KEYS MAY BE CONSTRUCTED UPWARDS OR DOWNWARDS. CLEAN JOINTS AND KEYS THOROUGHLY BEFORE PLACING NEXT CONCRETE SEGMENT.
12. WHEN NECESSARY, THE BLOCKOUT MAY REMOVE UP TO 25 mm (1") OF EACH WALL AT 3:00/9:00 LOCATIONS FOR RC PIPE CONNECTIONS.
12. SUBBASE MATERIAL: PROVIDE NO. 2A COURSE AGGREGATE IN ACCORDANCE WITH PUBLICATION 408, SECTION 703.2 AND COMPACT IN ACCORDANCE WITH SECTION 350.3(E). PLACE AND COMPACT IN 4" MAXIMUM LAYERS TO A MINIMUM DEPTH OF 12".



PENNDOT STANDARD INLET DETAILS

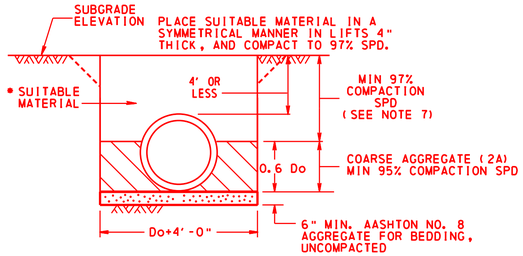
NOT TO SCALE

Do = OUTSIDE DIAMETER OF PIPE

SPD = STANDARD PROCTOR DENSITY

ID = INSIDE DIAMETER

• SUITABLE MATERIAL = MATERIAL CONTAINING NO DEBRIS, ORGANIC MATTER, FROZEN MATERIAL OR LARGE STONES WITH A DIAMETER GREATER THAN ONE-HALF THE THICKNESS OF THE COMPACTED LAYERS BEING PLACED.

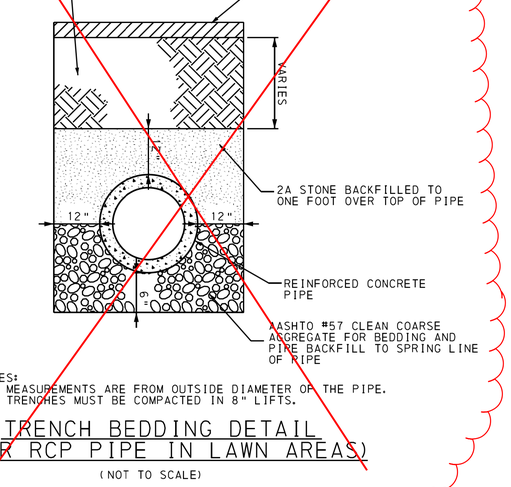


NOTES

1. THE INSTALLATION OF PIPES 72" OR GREATER INSIDE DIAMETER OR SPAN IS PERMITTED WITHOUT PLACING EMBANKMENT FIRST. MAKE THE BACKFILL ENVELOPE AS SHOWN ON THIS DRAWING EXCEPT PROVIDE 2A MATERIAL ON EACH SIDE OF THE PIPE EQUAL TO ONE OUTSIDE DIAMETER OR SPAN OF THE PIPE. FOR CONCRETE PIPE, THE WIDTH OF UNCOMPACTED AGGREGATE FOR BEDDING (AASHTO NO. 8) REMAINS AT Do + 4'-0". PAYMENT FOR THE 2A MATERIAL IS AS PER NOTE 3.
2. A HIGHER STRENGTH PIPE THAN SPECIFIED MAY BE SUPPLIED AT NO ADDITIONAL COST TO THE DEPARTMENT.
3. PAYMENT FOR THE BACKFILL ENVELOPE INCLUDING BEDDING, COARSE AGGREGATE AND SUITABLE MATERIAL UP TO 12" ABOVE THE PIPE IS INCIDENTAL TO THE PIPE.
4. TO PRECLUDE POINT LOADING ON RELATIVELY RIGID CONCRETE PIPE, DO NOT COMPACT AASHTO NO. 8 BEDDING MATERIAL.
5. FOR TRENCH BOX/SHORING INSTALLATION REQUIREMENTS REFER TO PUBLICATION 408, SECTION 601.
6. PERMIT PLACEMENT OF BACKFILL MATERIAL IN LAYERS, LIFTS, 8" THICK WHEN USING VIBRATORY COMPACTION EQUIPMENT.
7. COMPACT TOP 3'-0" OF SUBGRADE TO 100% IN ACCORDANCE WITH PUBLICATION 408, SECTION 206.3.
8. FOR REINFORCED CONCRETE PIPES INSTALLED WITH 49' OF COVER OR MORE, PROVIDE 12" BEDDING MINIMUM AND 16" WHEN ROCK IS PRESENT.
9. SEE PENNDOT STANDARD DETAIL RC-30M FOR PIPE ISTALLATION PROCEDURES.

PIPE INSTALLATION FOR CONCRETE PIPE, SHALLOW FILLS 4'-0" AND LESS

2 DETAIL REMOVED AND REPLACED.



NOTES:
ALL MEASUREMENTS ARE FROM OUTSIDE DIAMETER OF THE PIPE.
ALL TRENCHES MUST BE COMPACTED IN 8" LIFTS.

TRENCH BEDDING DETAIL (FOR RCP PIPE IN LAWN AREAS)

(NOT TO SCALE)

POST CONSTRUCTION STORMWATER MANAGMENT PLAN DETAILS

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — JENNI ERIN WOODWORTH — ENGINEER

06-11-2020

DWG SWM-25 OF 25

DESIGN BY: EBD | CHECKED BY: JEW

A.D. MARBLE
FILE NAME: $FILENAME$

PLOTTED: $DATE$ $TIME$

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	DELAWARE	0030	RRT	41 OF 53
RADNOR TOWNSHIP				
REVISION NUMBER	REVISIONS		DATE	BY

LEGEND

375	EXISTING CONTOUR MAJOR
374	EXISTING CONTOUR MINOR
375	PROPOSED CONTOUR MAJOR
374	PROPOSED CONTOUR MINOR
LOD	LIMIT OF DISTURBANCE NPDES PERMIT BOUNDARY
x	PROPOSED FENCE
	EXISTING RIGHT-OF-WAY
℄	EXISTING PROPERTY LINE
	EXISTING TREE
	REMOVAL OF EXISTING TREE
	PROPOSED TREE/PLANTING
	EXISTING STREAM BOUNDARY
	EXISTING WETLAND
	UTILITY POLE, LIGHT POLE, SIGN
	EXISTING WOOD LINE
S	EXISTING SANITARY SEWER
T	EXISTING UNDERGROUND TELEPHONE
E	EXISTING ELECTRIC LINE
W	EXISTING WATER LINE
G	EXISTING GAS LINE
C	EXISTING UNDERGROUND CONDUIT
x	EXISTING FENCE
	EXISTING GUIDERAIL

NOTES:

1. SEE LANDSCAPING PLANS FOR PLANTING TYPES AND PLANTING DETAILS.

N/L RADNOR TOWNSHIP
DBV 0838 PG 2245
PARCEL ID 36040235510

N/L MICHAEL S. & KIMBERLY G. OLSAN
DBV 2452 PG 2289
PARCEL ID 36040257900

N/L CHRISTINE M. & JOHN C. KLINE
DBV 3240 PG 0319
PARCEL ID 36040255400

N/L GREGORY E. & EMMA DAILEY STATON
DBV 4937 PG 1741
PARCEL ID 36040255500

MATCHLINE STATION 407+50 - SEE SHEET PL 2

RADNOR CHESTER RD.

RADNOR TRAIL

LEGAL RIGHT-OF-WAY

PROPOSED RECREATIONAL TRAIL

CHEW LANE

40.00' ROW

LOD

001

401 402 403 404 405 406 407

TREE REMOVAL AND PLANTING PLAN

SCALE IN FEET: 1"=25'

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JENNI ERIN WOODWORTH
ENGINEER

11-12-2019

DESIGN BY: EBD | CHECKED BY: JEW

DWG PL-01 OF 13

PLOTTED: 10/9/2019 4:50:34 PM

A.D. MARBLE
FILE NAME: X:\Projects\P1585\CADD\Plan\Planting\For SWM\Tree Removal Plan 01.dgn

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	DELAWARE	0030	RRT	42 OF 53
RADNOR TOWNSHIP				

REVISION NUMBER	REVISIONS	DATE	BY

RADNOR TOWNSHIP SCHOOL DISTRICT
PARCEL ID 36020123310

RADNOR CENTER RD.

EXISTING DIRT HIKING PATH

PROTECT EXISTING TREE CANOPY -11,077 SF

PROTECT EXISTING TREE CANOPY -11,077 SF

LOD

PROPOSED RECREATIONAL TRAIL

1001 1002 1003 1004 1005 1006 1007

LEGAL RIGHT OF WAY

LEGAL RIGHT OF WAY

E. LANCASTER AVE.
(S.R. 30) WESTBOUND

E. LANCASTER AVE.
(S.R. 30) EASTBOUND

LEGAL RIGHT OF WAY

N/L LOUIE BREBIS
CLEMENTINE III &
PROVCO PARTNERS LLC
C/O
DBV 3759 PG 0479
PARCEL ID 36040256100

N/L MICHAEL R. MATTERN &
PETER DO
DBV 2319 PG 1319
PARCEL ID 36040256500

RADNOR CENTER RD.

LEGAL RIGHT OF WAY

RIGHT OF WAY NOT VERIFIED
DOT PLANS ILLEGIBLE

MATCHLINE STATION 407+50 - SEE SHEET PL 1

MATCHLINE STATION 310+50 - SEE SHEET PL 3

LEGEND

375	EXISTING CONTOUR MAJOR
374	EXISTING CONTOUR MINOR
375	PROPOSED CONTOUR MAJOR
374	PROPOSED CONTOUR MINOR
LOD	LIMIT OF DISTURBANCE NPDES PERMIT BOUNDARY
x	PROPOSED FENCE
	EXISTING RIGHT-OF-WAY
PL	EXISTING PROPERTY LINE
	EXISTING TREE
	REMOVAL OF EXISTING TREE
	PROPOSED TREE/PLANTING
	EXISTING STREAM BOUNDARY
	EXISTING WETLAND
	UTILITY POLE, LIGHT POLE, SIGN
	EXISTING WOOD LINE
S	EXISTING SANITARY SEWER
T	EXISTING UNDERGROUND TELEPHONE
E	EXISTING ELECTRIC LINE
W	EXISTING WATER LINE
G	EXISTING GAS LINE
C	EXISTING UNDERGROUND CONDUIT
x	EXISTING FENCE
	EXISTING GUIDERAIL

NOTES:

1. SEE LANDSCAPING PLANS FOR PLANTING TYPES AND PLANTING DETAILS.

TREE REMOVAL AND PLANTING PLAN

SCALE IN FEET: 1"=25'

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JENNI ERIN WOODWORTH
ENGINEER

11-12-2019

DWG PL-02 OF 13

DESIGN BY: EBD | CHECKED BY: JEW

A.D. MARBLE
FILE NAME: X:\Projects\P1585\CADD\Plan\Planing\For SWM\Tree Removal Plan 02.dgn
PLOTTED: 10/9/2019 4:50:35 PM

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	DELAWARE	0030	RRT	43 OF 53
RADNOR TOWNSHIP				

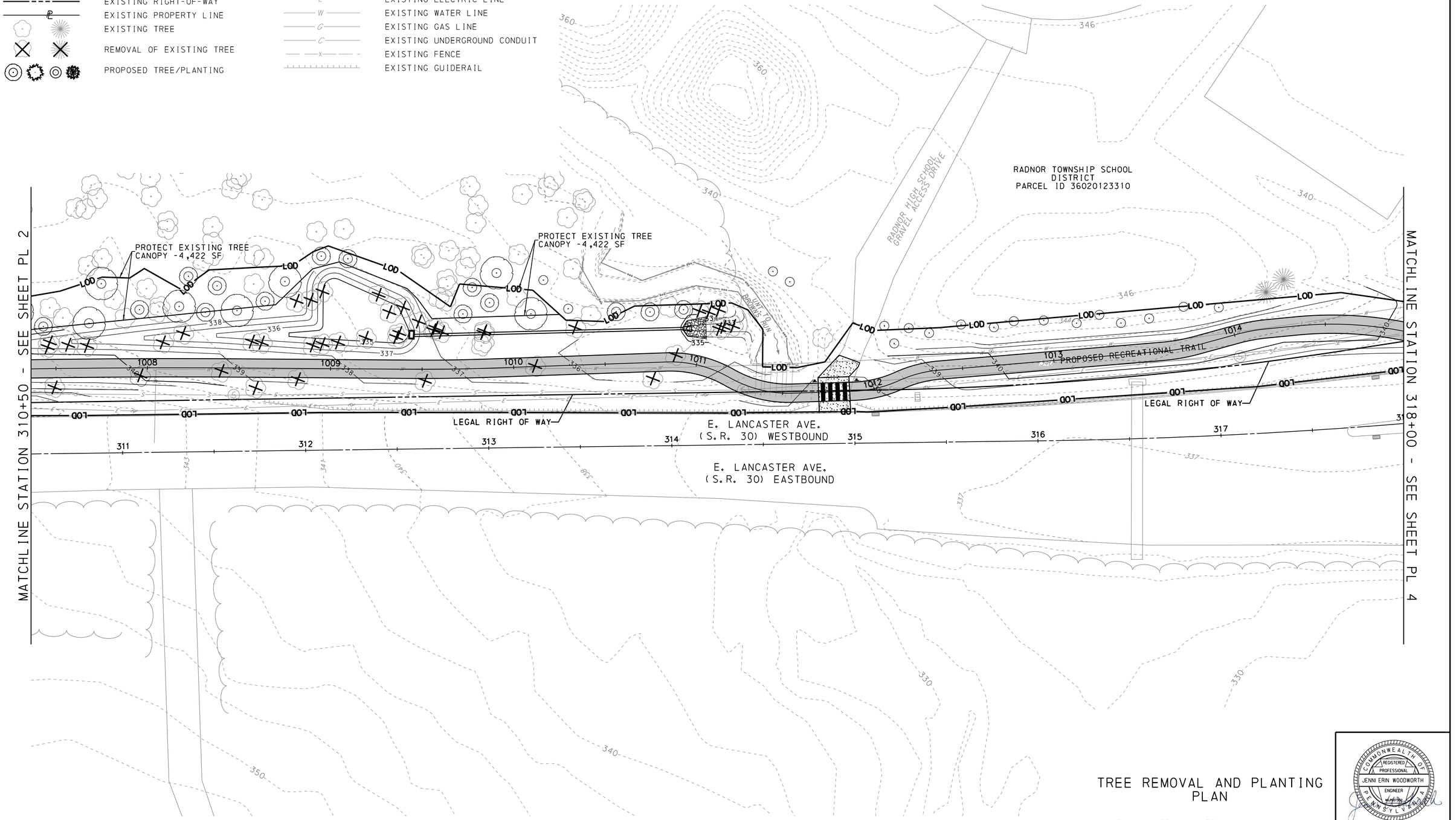
REVISION NUMBER	REVISIONS	DATE	BY

LEGEND

375	EXISTING CONTOUR MAJOR
374	EXISTING CONTOUR MINOR
375	PROPOSED CONTOUR MAJOR
374	PROPOSED CONTOUR MINOR
LOD	LIMIT OF DISTURBANCE NPDES PERMIT BOUNDARY
x	PROPOSED FENCE
	EXISTING RIGHT-OF-WAY
℄	EXISTING PROPERTY LINE
	EXISTING TREE
	REMOVAL OF EXISTING TREE
	PROPOSED TREE/PLANTING
	EXISTING STREAM BOUNDARY
	EXISTING WETLAND
	UTILITY POLE, LIGHT POLE, SIGN
	EXISTING WOOD LINE
S	EXISTING SANITARY SEWER
T	EXISTING UNDERGROUND TELEPHONE
E	EXISTING ELECTRIC LINE
W	EXISTING WATER LINE
G	EXISTING GAS LINE
C	EXISTING UNDERGROUND CONDUIT
x	EXISTING FENCE
	EXISTING GUIDERAIL

NOTES:

1. SEE LANDSCAPING PLANS FOR PLANTING TYPES AND PLANTING DETAILS.



TREE REMOVAL AND PLANTING PLAN

0 25 50
SCALE IN FEET: 1"=25'

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JENNI ERIN WOODWORTH
ENGINEER
049782

11-12-2019

DESIGN BY: EBD | CHECKED BY: JEW

DWG PL-03 OF 13

PLOTTED: 10/9/2019 4:50:35 PM
A.D. MARBLE
FILE NAME: X:\Projects\P1585\CADD\Plan\Planting\For SMW\Tree Removal Plan 03.dgn

PLOTTED: 10/9/2019 4:50:36 PM

LEGEND

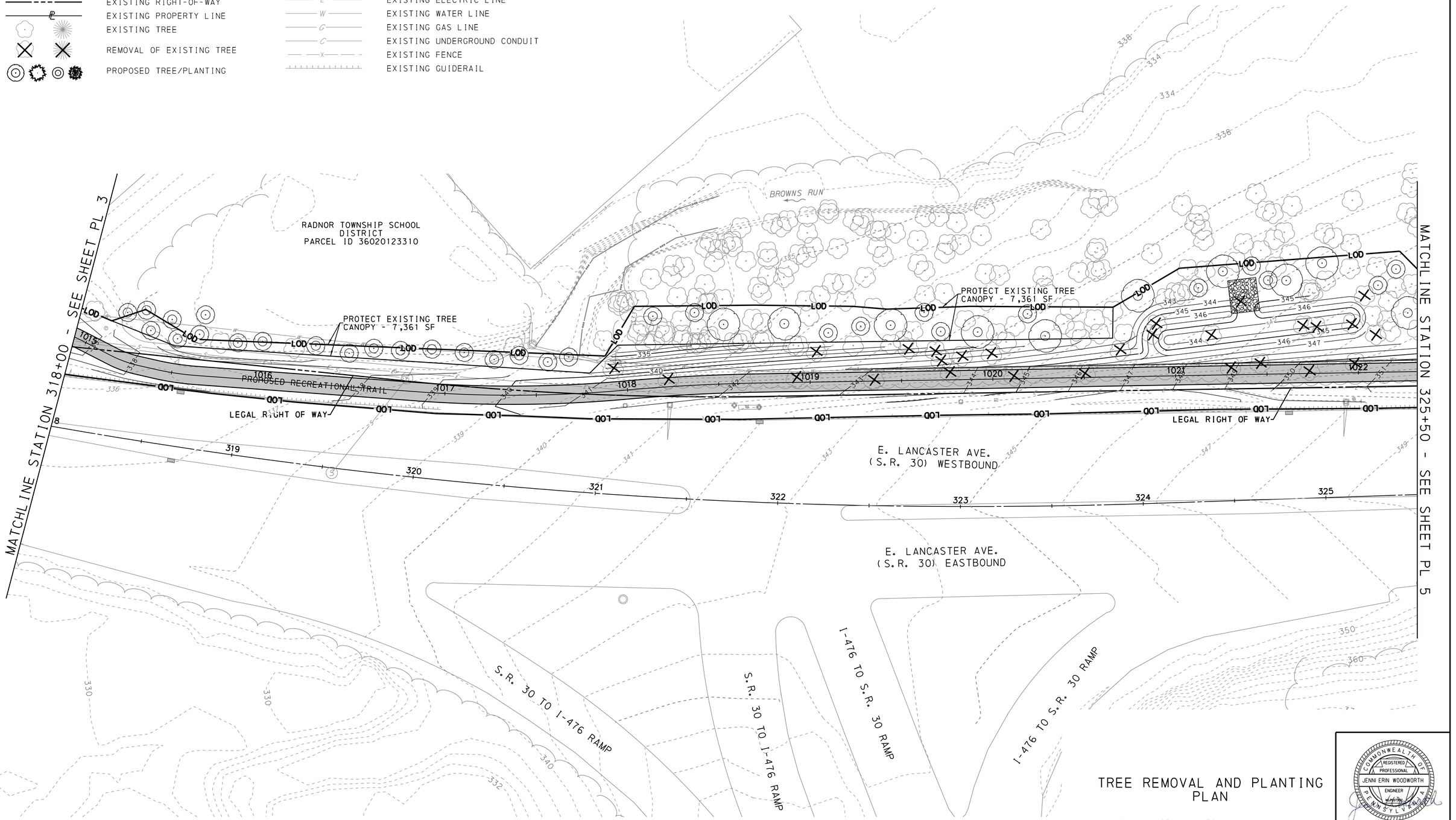
375	EXISTING CONTOUR MAJOR
374	EXISTING CONTOUR MINOR
375	PROPOSED CONTOUR MAJOR
374	PROPOSED CONTOUR MINOR
LOD	LIMIT OF DISTURBANCE NPDES PERMIT BOUNDARY
x	PROPOSED FENCE
	EXISTING RIGHT-OF-WAY
P	EXISTING PROPERTY LINE
	EXISTING TREE
	REMOVAL OF EXISTING TREE
	PROPOSED TREE/PLANTING
	EXISTING STREAM BOUNDARY
	EXISTING WETLAND
	UTILITY POLE, LIGHT POLE, SIGN
	EXISTING WOOD LINE
S	EXISTING SANITARY SEWER
T	EXISTING UNDERGROUND TELEPHONE
E	EXISTING ELECTRIC LINE
W	EXISTING WATER LINE
G	EXISTING GAS LINE
C	EXISTING UNDERGROUND CONDUIT
x	EXISTING FENCE
	EXISTING GUIDERAIL

NOTES:

1. SEE LANDSCAPING PLANS FOR PLANTING TYPES AND PLANTING DETAILS.

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	DELAWARE	0030	RRT	44 OF 53
RADNOR TOWNSHIP				

REVISION NUMBER	REVISIONS	DATE	BY



TREE REMOVAL AND PLANTING PLAN

SCALE IN FEET: 1"=25'

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JENNI ERIN WOODWORTH
ENGINEER

11-12-2019

DWG PL-04 OF 13

DESIGN BY: EBD	CHECKED BY: JEW

A.D. MARBLE
FILE NAME: x:\Projects\P1585\CADD\Plan\Planting\For SWM\Tree Removal Plan 04.dgn

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	DELAWARE	0030	RRT	45 OF 53
RADNOR TOWNSHIP				

REVISION NUMBER	REVISIONS	DATE	BY

LEGEND

375	EXISTING CONTOUR MAJOR
374	EXISTING CONTOUR MINOR
375	PROPOSED CONTOUR MAJOR
374	PROPOSED CONTOUR MINOR
LOD	LIMIT OF DISTURBANCE NPDES PERMIT BOUNDARY
x	PROPOSED FENCE
	EXISTING RIGHT-OF-WAY
PL	EXISTING PROPERTY LINE
	EXISTING TREE
	REMOVAL OF EXISTING TREE
	PROPOSED TREE/PLANTING
	EXISTING STREAM BOUNDARY
	EXISTING WETLAND
	UTILITY POLE, LIGHT POLE, SIGN
	EXISTING WOOD LINE
S	EXISTING SANITARY SEWER
T	EXISTING UNDERGROUND TELEPHONE
E	EXISTING ELECTRIC LINE
W	EXISTING WATER LINE
G	EXISTING GAS LINE
C	EXISTING UNDERGROUND CONDUIT
x	EXISTING FENCE
	EXISTING GUIDERAIL

NOTES:

1. SEE LANDSCAPING PLANS FOR PLANTING TYPES AND PLANTING DETAILS.

SCALE IN FEET: 1"=25' (0, 25, 50)

TREE REMOVAL AND PLANTING PLAN

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL JENNI ERIN WOODWORTH ENGINEER

DESIGN BY: EBD | CHECKED BY: JEW

DWG PL-05 OF 13

11-12-2019

PLOTTED: 10/9/2019 4:50:37 PM

A.D. MARBLE

FILE NAME: X:\Projects\P1585\CADD\Plan\Planting\For SWM\Tree Removal Plan 05.dgn

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	DELAWARE	0030	RRT	46 OF 53
RADNOR TOWNSHIP				

REVISION NUMBER	REVISIONS	DATE	BY

LEGEND

375	EXISTING CONTOUR MAJOR
374	EXISTING CONTOUR MINOR
375	PROPOSED CONTOUR MAJOR
374	PROPOSED CONTOUR MINOR
LOD	LIMIT OF DISTURBANCE NPDES PERMIT BOUNDARY
x	PROPOSED FENCE
	EXISTING RIGHT-OF-WAY
℄	EXISTING PROPERTY LINE
	EXISTING TREE
	REMOVAL OF EXISTING TREE
	PROPOSED TREE/PLANTING
	EXISTING STREAM BOUNDARY
	EXISTING WETLAND
	UTILITY POLE, LIGHT POLE, SIGN
	EXISTING WOOD LINE
S	EXISTING SANITARY SEWER
T	EXISTING UNDERGROUND TELEPHONE
E	EXISTING ELECTRIC LINE
W	EXISTING WATER LINE
G	EXISTING GAS LINE
C	EXISTING UNDERGROUND CONDUIT
x	EXISTING FENCE
	EXISTING GUIDERAIL

MATCHLINE STATION 504+00 - SEE SHEET PL 5

MATCHLINE STATION 511+50 - SEE SHEET PL 7

RADNOR TOWNSHIP SCHOOL DISTRICT
PARCEL ID 36020123310

BROWNS RUN

LEGAL RIGHT OF WAY

LEGAL RIGHT OF WAY 511

PROPOSED RECREATIONAL TRAIL

KING OF PRUSSIA RD.

KING OF PRUSSIA RD.

LOD

LOD

1030 1031 1032 1033 1034 1035 1036

505 506 507 508 509 510 511

NOTES:

1. SEE LANDSCAPING PLANS FOR PLANTING TYPES AND PLANTING DETAILS.

TREE REMOVAL AND PLANTING PLAN

SCALE IN FEET: 1"=25'

DESIGN BY: EBD | CHECKED BY: JEW

DWG PL-06 OF 13

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JENNI ERIN WOODWORTH
ENGINEER

11-12-2019

PLOTTED: 10/9/2019 4:50:38 PM

A.D. MARBLE

FILE NAME: X:\Projects\P1585\CADD\Plan\Planting\For SWM\Tree Removal Plan 06.dgn

NOTES:

1. SEE LANDSCAPING PLANS FOR PLANTING TYPES AND PLANTING DETAILS.

LEGEND

375	EXISTING CONTOUR MAJOR
374	EXISTING CONTOUR MINOR
375	PROPOSED CONTOUR MAJOR
374	PROPOSED CONTOUR MINOR
LOD	LIMIT OF DISTURBANCE NPDES PERMIT BOUNDARY
x	PROPOSED FENCE
	EXISTING RIGHT-OF-WAY
℄	EXISTING PROPERTY LINE
	EXISTING TREE
	REMOVAL OF EXISTING TREE
	PROPOSED TREE/PLANTING
	EXISTING STREAM BOUNDARY
	EXISTING WETLAND
	UTILITY POLE, LIGHT POLE, SIGN
	EXISTING WOOD LINE
S	EXISTING SANITARY SEWER
T	EXISTING UNDERGROUND TELEPHONE
E	EXISTING ELECTRIC LINE
W	EXISTING WATER LINE
G	EXISTING GAS LINE
C	EXISTING UNDERGROUND CONDUIT
x	EXISTING FENCE
	EXISTING GUIDERAIL

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	DELAWARE	0030	RRT	47 OF 53
RADNOR TOWNSHIP				

REVISION NUMBER	REVISIONS	DATE	BY

MATCHLINE STATION 511+50 - SEE SHEET PL 6

MATCHLINE STATION 519+50 - SEE SHEET PL 8

RAIDER RD.

KING OF PRUSSIA RD.

LEGAL RIGHT OF WAY

PROPOSED RECREATIONAL TRAIL

LOD

QOT

1037 1038 1039 1040 1041 1042 1043 1044

512 513 514 515 516 517 518 519

RADNOR TOWNSHIP SCHOOL DISTRICT
PARCEL ID 36020123310

370 360 364 368 380

TREE REMOVAL AND PLANTING PLAN

0 25 50
SCALE IN FEET: 1"=25'

DWG PL-07 OF 13

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JENNI ERIN WOODWORTH
ENGINEER
No. PE082332

11-12-2019

DESIGN BY: EBD | CHECKED BY: JEW

A.D. MARBLE

PLOTTED: 10/9/2019 4:50:38 PM

FILE NAME: X:\Projects\P1585\CADD\Plan\Planting\For SWM\Tree Removal Plan 07.dgn

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	DELAWARE	0030	RRT	48 OF 53
RADNOR TOWNSHIP				
REVISION NUMBER	REVISIONS		DATE	BY

LEGEND

375	EXISTING CONTOUR MAJOR
374	EXISTING CONTOUR MINOR
375	PROPOSED CONTOUR MAJOR
374	PROPOSED CONTOUR MINOR
LOD	LIMIT OF DISTURBANCE NPDES PERMIT BOUNDARY
x	PROPOSED FENCE
	EXISTING RIGHT-OF-WAY
℄	EXISTING PROPERTY LINE
	EXISTING TREE
	REMOVAL OF EXISTING TREE
	PROPOSED TREE/PLANTING
	EXISTING STREAM BOUNDARY
	EXISTING WETLAND
	UTILITY POLE, LIGHT POLE, SIGN
	EXISTING WOOD LINE
S	EXISTING SANITARY SEWER
T	EXISTING UNDERGROUND TELEPHONE
E	EXISTING ELECTRIC LINE
W	EXISTING WATER LINE
G	EXISTING GAS LINE
C	EXISTING UNDERGROUND CONDUIT
x	EXISTING FENCE
	EXISTING GUIDERAIL

MATCHLINE STATION 519+50 - SEE SHEET PL 7

MATCHLINE STATION 526+50 - SEE SHEET PL 9

TRUSTEE OF UNIVERSITY OF PENNSYLVANIA
PARCEL ID 36020115800

RADNOR TOWNSHIP SCHOOL DISTRICT
PARCEL ID 36020123310

PROPOSED RECREATIONAL TRAIL

HARRISONS RUN

KING OF PRUSSIA RD.

LEGAL RIGHT OF WAY

NOTES:

1. SEE LANDSCAPING PLANS FOR PLANTING TYPES AND PLANTING DETAILS.

TREE REMOVAL AND PLANTING PLAN

SCALE IN FEET: 1"=25'

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JENNI ERIN WOODWORTH
ENGINEER
No. PE087332

11-12-2019

DESIGN BY: EBD | CHECKED BY: JEW

DWG PL-08 OF 13

PLOTTED: 10/9/2019 4:50:39 PM

A.D. MARBLE

FILE NAME: X:\Projects\P1585\CADD\PlanPlanting\For SWM\Tree Removal Plan 08.dgn

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	DELAWARE	0030	RRT	49 OF 53
RADNOR TOWNSHIP				

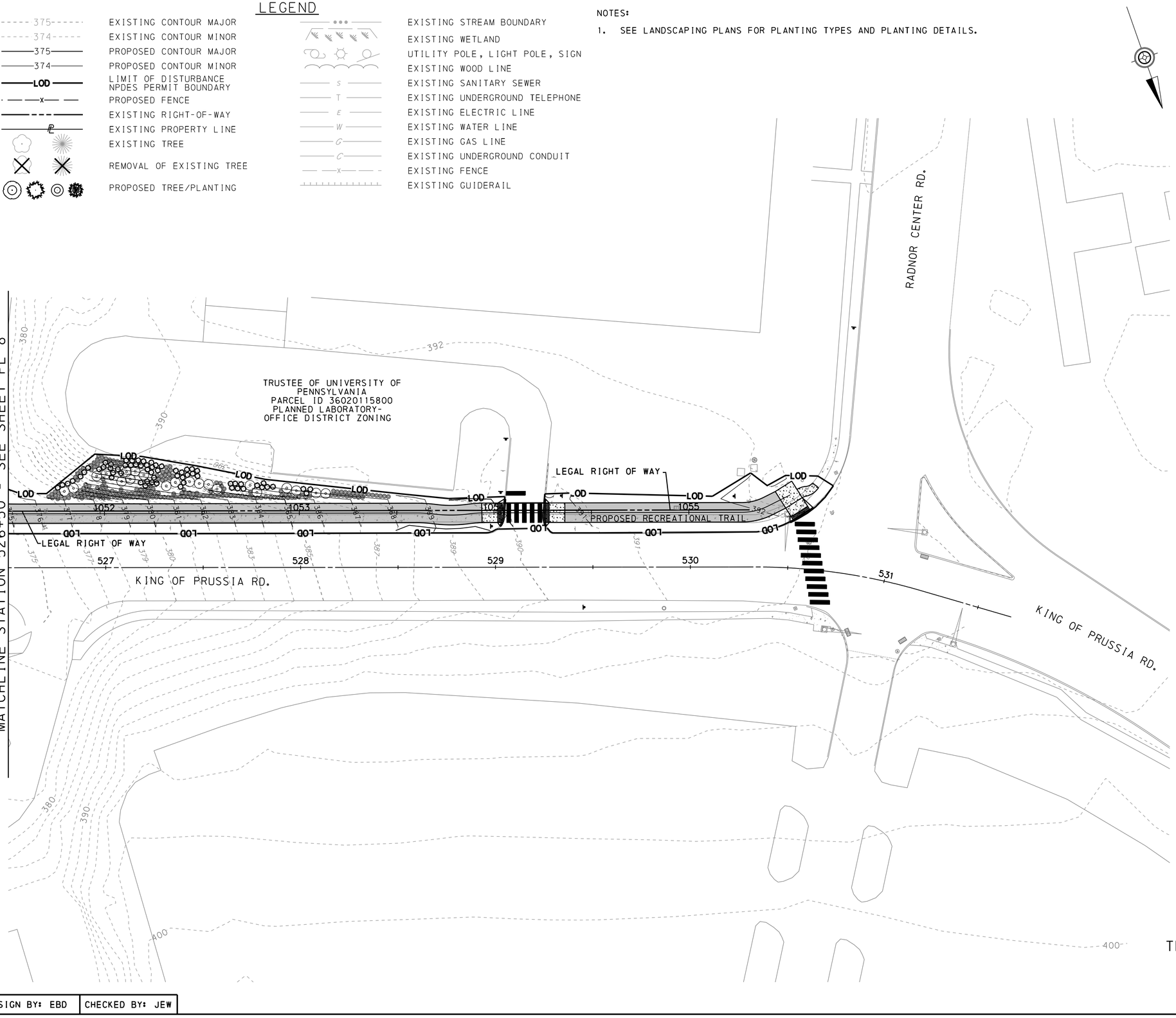
REVISION NUMBER	REVISIONS	DATE	BY

LEGEND

375	EXISTING CONTOUR MAJOR
374	EXISTING CONTOUR MINOR
375	PROPOSED CONTOUR MAJOR
374	PROPOSED CONTOUR MINOR
LOD	LIMIT OF DISTURBANCE NPDES PERMIT BOUNDARY
x	PROPOSED FENCE
	EXISTING RIGHT-OF-WAY
℄	EXISTING PROPERTY LINE
	EXISTING TREE
	REMOVAL OF EXISTING TREE
	PROPOSED TREE/PLANTING
	EXISTING STREAM BOUNDARY
	EXISTING WETLAND
	UTILITY POLE, LIGHT POLE, SIGN
	EXISTING WOOD LINE
S	EXISTING SANITARY SEWER
T	EXISTING UNDERGROUND TELEPHONE
E	EXISTING ELECTRIC LINE
W	EXISTING WATER LINE
G	EXISTING GAS LINE
C	EXISTING UNDERGROUND CONDUIT
x	EXISTING FENCE
	EXISTING GUIDERAIL

NOTES:

1. SEE LANDSCAPING PLANS FOR PLANTING TYPES AND PLANTING DETAILS.



TREE REMOVAL AND PLANTING PLAN

SCALE IN FEET: 1"=25'

0 25 50

DWG PL-09 OF 13

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JENNI ERIN WOODWORTH
ENGINEER

11-12-2019

DESIGN BY: EBD | CHECKED BY: JEW

A.D. MARBLE
FILE NAME: X:\Projects\P1585\CADD\Plan\Planting\For SWM\Tree Removal Plan 09.dgn
PLOTTED: 10/9/2019 4:50:40 PM

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	DELAWARE	0030	RRT	50 OF 53
RADNOR TOWNSHIP				

REVISION NUMBER	REVISIONS	DATE	BY

LEGEND

- EXISTING CONTOUR MAJOR (375)
- EXISTING CONTOUR MINOR (374)
- PROPOSED CONTOUR MAJOR (375)
- PROPOSED CONTOUR MINOR (374)
- LIMIT OF DISTURBANCE / NPDES PERMIT BOUNDARY (LOD)
- PROPOSED FENCE
- EXISTING RIGHT-OF-WAY
- EXISTING PROPERTY LINE
- EXISTING TREE
- REMOVAL OF EXISTING TREE
- PROPOSED TREE/PLANTING
- EXISTING STREAM BOUNDARY
- EXISTING WETLAND
- UTILITY POLE, LIGHT POLE, SIGN
- EXISTING WOOD LINE
- EXISTING SANITARY SEWER
- EXISTING UNDERGROUND TELEPHONE
- EXISTING ELECTRIC LINE
- EXISTING WATER LINE
- EXISTING GAS LINE
- EXISTING UNDERGROUND CONDUIT
- EXISTING FENCE
- EXISTING GUIDERAIL

NOTES:

1. SEE LANDSCAPING PLANS FOR PLANTING TYPES AND PLANTING DETAILS.

CONESTOGA ROAD

LENOIR AVE.

LEGAL RIGHT-OF-WAY

CONESTOGA ROAD

N/L ROBERT M. HALLIGAN
DBV. 2499 PG 116
CLOSURE: 0.00
36-12-511

N/L RADNOR TOWNSHIP
DBV. 1517 PG 1594
CLOSURE 0.36'
36-12-514

N/L ALBERT CONSTANTINE
DBV 5711 PG 43
CLOSURE: 0.00
36-12-510

N/L FRANCIS W. & KRISTINE HEERY
DBV 5910 PG 404
CLOSURE: 0.00
36-12-509

N/L 7 EAST STATE STREET, LLC
DBV 5000 PG 1032
CLOSURE: 0.00
36-12-504

N/L JONATHAN P AND ELIZABETH MAXFIELD W YATES
DB 5136 PG 0352
36-12-503

N/L EADEH FAMILY LTD PARTNERSHIP
DB 1739 PG 2011
36-12-502

N/L CARLA B BATES
DB 5722 PG 1237
36-12-501

PROTECT EXISTING TREES

PROTECT EXISTING TREE

EXISTING RAIL TRAIL

FRIENDS OF RADNOR TRAIL PARK PARKING LOT

TREE REMOVAL AND PLANTING PLAN

0 25 50
SCALE IN FEET: 1"=25'

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JENNI ERIN WOODWORTH
ENGINEER

06-11-2020

DWG PL-10 OF 13

DESIGN BY: EBD | CHECKED BY: JEW

A.D. MARBLE
FILE NAME: $FILENAME$

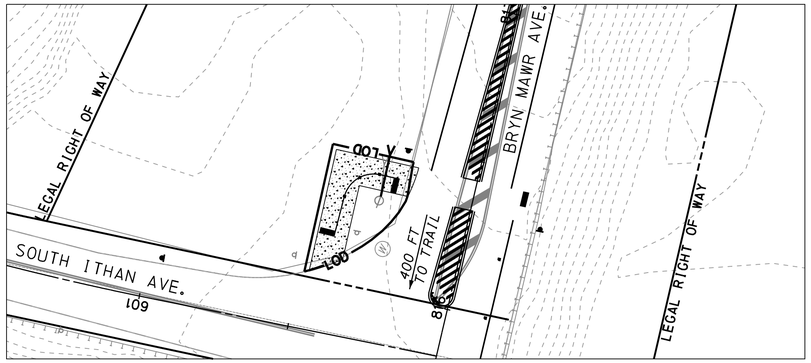
PLOTTED: $DATE$ $TIME$

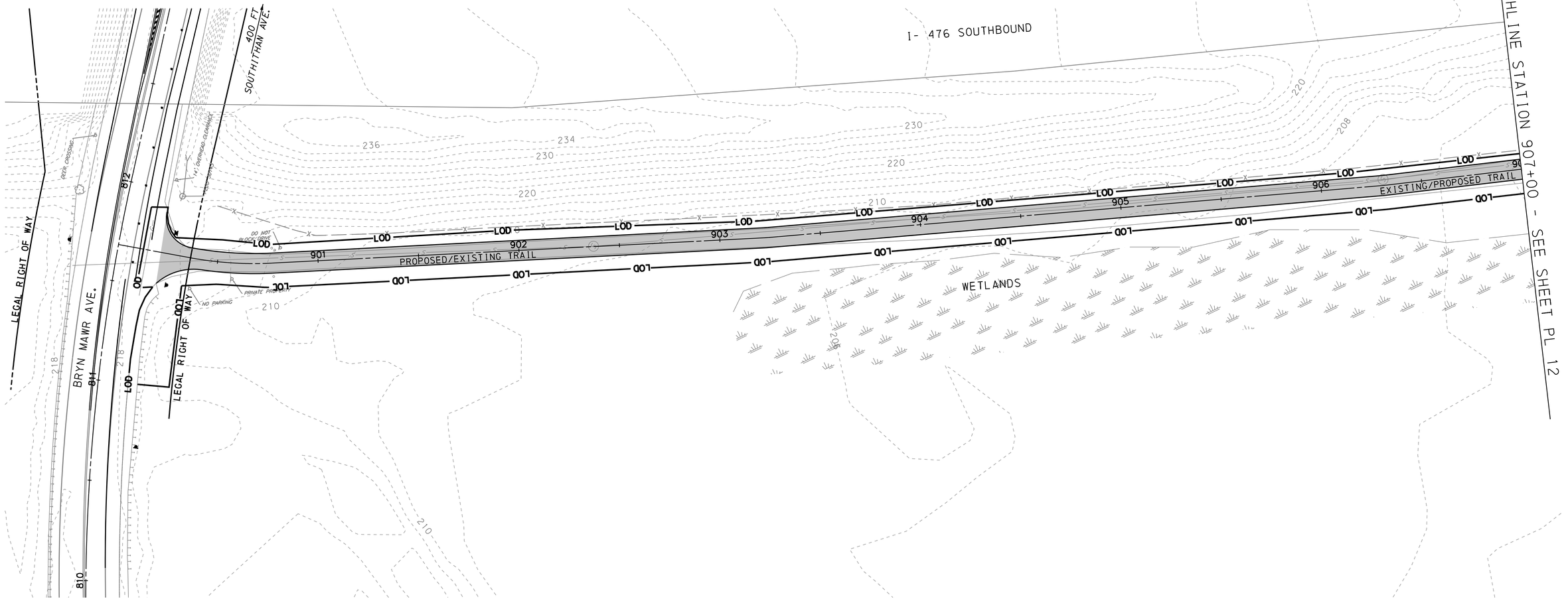
DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	DELAWARE	0030	RRT	51 OF 53
RADNOR TOWNSHIP				

REVISION NUMBER	REVISIONS	DATE	BY

LEGEND

375	EXISTING CONTOUR MAJOR
374	EXISTING CONTOUR MINOR
375	PROPOSED CONTOUR MAJOR
374	PROPOSED CONTOUR MINOR
LOD	LIMIT OF DISTURBANCE NPDES PERMIT BOUNDARY
x	PROPOSED FENCE
	EXISTING RIGHT-OF-WAY
℄	EXISTING PROPERTY LINE
	EXISTING TREE
	REMOVAL OF EXISTING TREE
	PROPOSED TREE/PLANTING
	EXISTING STREAM BOUNDARY
	EXISTING WETLAND
	UTILITY POLE, LIGHT POLE, SIGN
	EXISTING WOOD LINE
S	EXISTING SANITARY SEWER
T	EXISTING UNDERGROUND TELEPHONE
E	EXISTING ELECTRIC LINE
W	EXISTING WATER LINE
G	EXISTING GAS LINE
C	EXISTING UNDERGROUND CONDUIT
x	EXISTING FENCE
	EXISTING GUIDERAIL





NOTES:

1. NO PLANTINGS OR TREES REMOVED THIS SHEET.

TREE REMOVAL AND PLANTING PLAN

SCALE IN FEET: 1"=25'

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JENNI ERIN WOODWORTH
ENGINEER

11-12-2019

DESIGN BY: EBD | CHECKED BY: JEW

DWG PL-11 OF 13

PLOTTED: 10/9/2019 4:50:42 PM
A.D. MARBLE
FILE NAME: X:\Projects\P1585\CADD\Plan\Planting\For SWM\Tree Removal Plan 11.dgn

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	DELAWARE	0030	RRT	52 OF 53
RADNOR TOWNSHIP				

REVISION NUMBER	REVISIONS	DATE	BY

LEGEND

- 375 EXISTING CONTOUR MAJOR
- 374 EXISTING CONTOUR MINOR
- 375 PROPOSED CONTOUR MAJOR
- 374 PROPOSED CONTOUR MINOR
- LOD LIMIT OF DISTURBANCE NPDES PERMIT BOUNDARY
- x PROPOSED FENCE
- EXISTING RIGHT-OF-WAY
- EXISTING PROPERTY LINE
- EXISTING TREE
- REMOVAL OF EXISTING TREE
- PROPOSED TREE/PLANTING
- EXISTING STREAM BOUNDARY
- EXISTING WETLAND
- UTILITY POLE, LIGHT POLE, SIGN
- EXISTING WOOD LINE
- S EXISTING SANITARY SEWER
- T EXISTING UNDERGROUND TELEPHONE
- E EXISTING ELECTRIC LINE
- W EXISTING WATER LINE
- G EXISTING GAS LINE
- C EXISTING UNDERGROUND CONDUIT
- x EXISTING FENCE
- EXISTING GUIDERAIL

NOTES:

1. NO PLANTINGS OR TREES REMOVED THIS SHEET.

TREE REMOVAL AND PLANTING PLAN

SCALE IN FEET: 1"=25'

JENNI ERIN WOODWORTH ENGINEER

DWG PL-12 OF 13

11-12-2019

DESIGN BY: EBD | CHECKED BY: JEW

PLOTTED: 10/9/2019 4:50:43 PM

A.D. MARBLE

FILE NAME: X:\Projects\P1585\CADD\Plan\Planting\For SWM\Tree Removal Plan 12.dgn

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	DELAWARE	0030	RRT	53 OF 53
RADNOR TOWNSHIP				

REVISION NUMBER	REVISIONS	DATE	BY

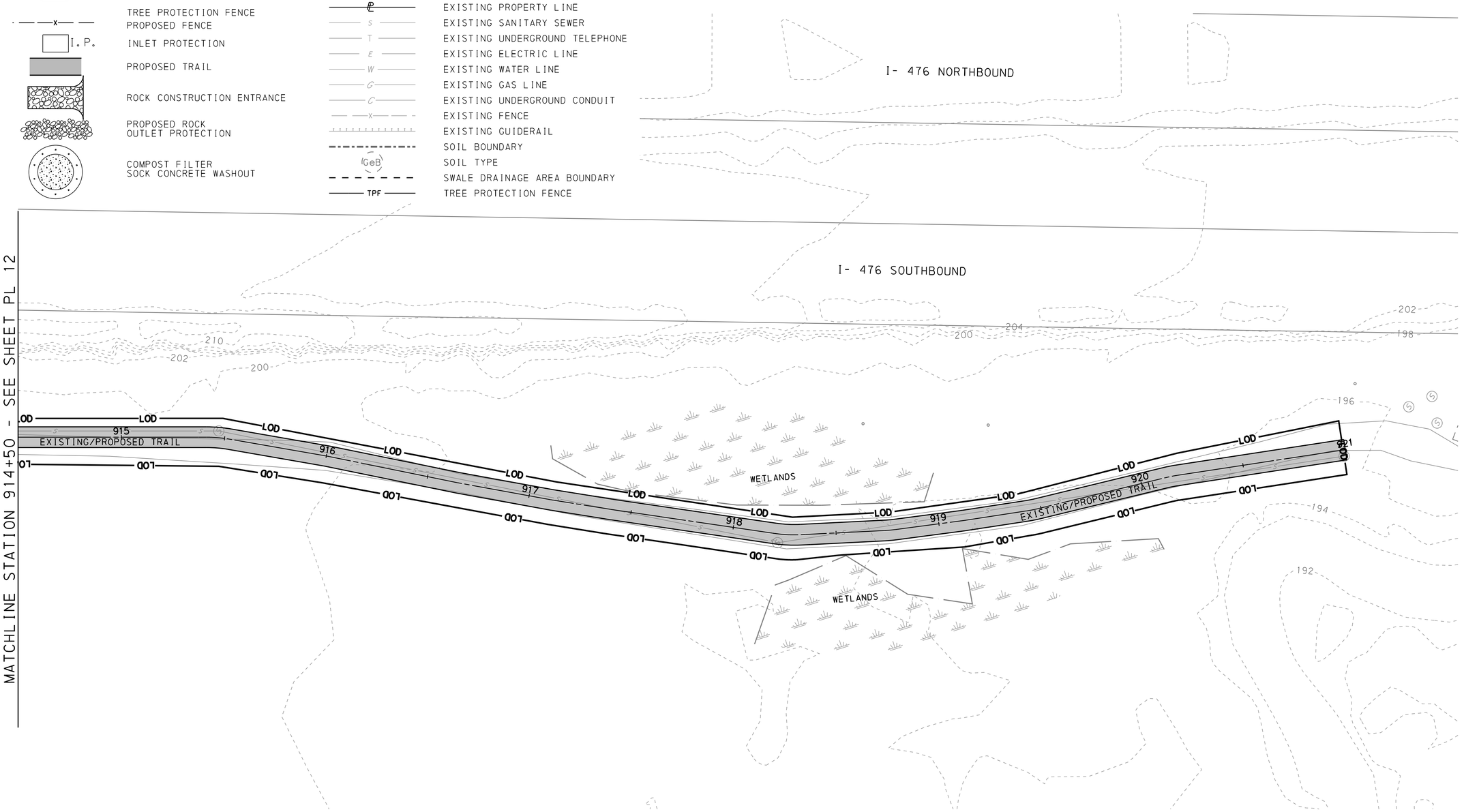
LEGEND

375	EXISTING CONTOUR MAJOR
374	EXISTING CONTOUR MINOR
375	PROPOSED CONTOUR MAJOR
374	PROPOSED CONTOUR MINOR
LOD	LIMIT OF DISTURBANCE NPDES PERMIT BOUNDARY
CFS12	COMPOST FILTER SOCK
	TREE PROTECTION FENCE
x	PROPOSED FENCE
I. P.	INLET PROTECTION
	PROPOSED TRAIL
	ROCK CONSTRUCTION ENTRANCE
	PROPOSED ROCK OUTLET PROTECTION
	COMPOST FILTER SOCK CONCRETE WASHOUT

	EXISTING STREAM BOUNDARY
	EXISTING WETLAND
	EXISTING TREE
	UTILITY POLE, LIGHT POLE, SIGN
	EXISTING WOOD LINE
	EXISTING RIGHT-OF-WAY
P	EXISTING PROPERTY LINE
S	EXISTING SANITARY SEWER
T	EXISTING UNDERGROUND TELEPHONE
E	EXISTING ELECTRIC LINE
W	EXISTING WATER LINE
G	EXISTING GAS LINE
C	EXISTING UNDERGROUND CONDUIT
x	EXISTING FENCE
	EXISTING GUIDERAIL
	SOIL BOUNDARY
GeB	SOIL TYPE
	SWALE DRAINAGE AREA BOUNDARY
TPF	TREE PROTECTION FENCE

NOTES:

1. NO PLANTINGS OR TREES REMOVED THIS SHEET.



TREE REMOVAL AND PLANTING PLAN

SCALE IN FEET: 1"=25'

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JENNI ERIN WOODWORTH
ENGINEER

11-12-2019

DESIGN BY: EBD | CHECKED BY: JEW

DWG PL-13 OF 13

PLOTTED: 10/9/2019 4:50:44 PM
A.D. MARBLE
FILE NAME: X:\Projects\P1585\CADD\Plan\Planting\For SWM\Tree Removal Plan 13.dgn