



ARM Group Inc.

Engineers and Scientists

July 1, 2019

Ms. Barbara Brown
Project Coordinator
Maryland Department of the Environment
1800 Washington Boulevard
Baltimore, MD 21230

Re: Interim Use Work Plan:
Marketing Center
Area B: Sub-Parcel B6-2 (Retail Area)
Tradepoint Atlantic
Sparrows Point, MD 21219

Dear Ms. Brown:

On behalf of EnviroAnalytics Group, LLC (EAG), ARM Group Inc. (ARM) is submitting this Interim Use Work Plan to the Maryland Department of the Environment (MDE) and United States Environmental Protection Agency (USEPA) to facilitate improvements on an area within Sub-Parcel B6-2 (the Site) designated as the Marketing Center and surrounding roadways.

Project Background

The proposed major grading and utility installation tasks for the Site were covered by the agency-approved Sub-Parcel B6-2 Response and Development Work Plan (RADWP) Revision 1 dated January 24, 2018. The RADWP is the primary guidance document for all future development activities associated with the retail area. The RADWP also provided a Screening Level Risk Assessment (SLRA) for the entire Site to evaluate potential risks to Composite Workers and Construction Workers. The SLRA concluded that a capping remedy would adequately protect Composite Workers (and site visitors) from potential exposures to impacted materials left in place at the Site. Subsequent to the approval of the RADWP, an Addendum (Revision 2 dated May 22, 2018) was approved by the MDE and USEPA to facilitate the upcoming construction of a Royal Farms station designated as Retail Area #1, as well as ingress and egress roads surrounding the lot. The cap thicknesses proposed for the Retail Area #1 and associated roads meet the requirements specified by the RADWP to act as the final remedy.

The Marketing Center does not represent a permanent use of this area of the Site. The Marketing Center consists of an existing 2-story building which is currently surrounded by graded slag aggregate. As part of the upcoming development of Retail Area #1, the Marketing Center will be enclosed by portions of the ingress and egress roads (which were also approved for construction under the RADWP Addendum referenced above). This Interim Use Work Plan is being

submitted to facilitate site improvements at the Marketing Center including a temporary capping remedy surrounding the existing building. In addition, lighting improvements are proposed along the ingress and egress roads to be constructed by Baltimore Gas & Electric (BGE). This work is not intended to be the basis for the issuance of a No Further Action Letter or a Certificate of Completion. While a RADWP Addendum is not warranted (because the use of the Marketing Center is not permanent), the scope of work will be subject to many of the requirements specified by the Sub-Parcel B6-2 RADWP.

Project Description

Development drawings for the proposed Marketing Center and lighting improvements are provided as **Attachment 1** and **Attachment 2**. These drawings also show the ingress and egress roads associated with the Retail Area #1 (Royal Farms), which have already been approved for construction under the existing RADWP Addendum. As indicated in the drawings, the proposed Marketing Center will include the existing 2-story metal frame building, to be surrounded by landscaped areas (with trees) and paved sidewalks. Cross sections for the landscaped areas, tree plantings, and paved sidewalks are provided in the drawings. Although these cap installations are considered to be interim remedies (because the Marketing Center is not permanent), the cross sections for each type of proposed cap meet the minimum thicknesses given in the Sub-Parcel B6-2 RADWP.

The drawings in **Attachment 1** also show the locations of proposed lighting improvements along the ingress and egress roads, including in the immediate vicinity of the Marketing Center. Although the construction of the roads is covered by the existing RADWP Addendum, the lighting improvements were not included at that time. **Attachment 2** provides the approximate alignments of the proposed duct routes for electrical connections, as provided by BGE.

Work Requirements

The construction of the Marketing Center (and the lighting improvements) will remain subject to the implementation protocols outlined in the Sub-Parcel B6-2 RADWP, including but not limited to the following:

- Oversight will be provided by an Environmental Professional (EP) during interim remedy installation, as well as intrusive construction activities.
- Development activities will be conducted under a Health and Safety Plan (HASP).
- Soil screening requirements will be implemented as required.
- Erosion and sediment controls will be installed as required.
- Dust monitoring will be implemented as required.
- If dewatering is necessary, sampling and disposal will be conducted as required.



Upgraded Personal Protective Equipment (PPE) beyond standard Level D protection will be used for the entire scope of work covered by this Interim Use Work Plan as a protective measure to ensure that there are no unacceptable exposures for Construction Workers during project implementation. The modified Level D PPE requirements which will be applied during this project, including specific PPE details, planning, tracking/supervision, enforcement, and documentation, are outlined in the PPE Standard Operational Procedure (SOP) provided as **Attachment 3**.

A pre-construction meeting shall be held to address proper operating procedures for working on-site and monitoring excavations and trenching in potentially contaminated material. This meeting shall consist of the EP and the construction manager. The HASP and the PPE SOP shall be reviewed during the pre-construction meeting.

Any excavated soil must be staged and stockpiled in accordance with agency-approved best management practices. In most cases, excavated soil is expected to be suitable for placement below the permanent capping remedies proposed for installation within the Retail Area #1 or below the surrounding ingress and egress roads. Any excavated soil that is generated from trenching or excavation activities that is not proposed (or suitable) for reuse will be subject to review and approval by the MDE prior to final disposal. A sampling plan must be approved by the MDE and the results reviewed prior to reuse or removal of the material to another area of the property or an off-site location.

Utility backfill materials must be approved by the MDE Voluntary Cleanup Program (VCP). MDE VCP clean fill approved for commercial land use will be required at depths and alignments where the utility trench could be considered to be part of a landscaped cap (i.e., depths less than or equal to 2 feet). Slag or other approved backfill soil not meeting the MDE VCP definition of clean fill may be used in areas where the utility trench will be covered by an additional cap. Soil removed from utility trenches cannot be used as fill within the utility trenches unless such materials are approved for this use by the VCP.

TPA will coordinate with the EP to ensure that all intrusive work is monitored. Any notable or non-standard conditions, including but not limited to staining, strong odors, discoloration, evidence of non-aqueous phase liquid (NAPL), or other evidence of contamination which has not previously been characterized, will be reported to the MDE within 24 hours. If evidence of petroleum is encountered, preventive measures will be implemented to prevent the discharge to, or migration of, petroleum product along a utility conduit. NAPL has not been encountered in the direct vicinity of this project; however, the past investigation results cannot guarantee that NAPL will not be encountered during the proposed work. The Utility Excavation NAPL Contingency Plan (provided in the RADWP) provides protocols to be followed if product is encountered during construction activities. Preventative measures to inhibit the spread of petroleum product will be conducted in accordance with this plan.



Summary of Soil and Groundwater Conditions

The soil boring locations completed in the vicinity of this project during preceding Phase II Investigations are shown on **Figure 1**, along with a summary of the soil sample results that exceeded the Project Action Limits (PALs). PAL exceedances in the soil samples relevant for the proposed project were limited to four inorganics (arsenic, manganese, lead, and thallium) and one semi-volatile organic compound (SVOC) (benzo[a]pyrene).

The shallow groundwater sample locations in the vicinity of this project are shown on **Figure 2**, along with a summary of the shallow groundwater results that exceeded the PALs. Shallow groundwater PAL exceedances in the vicinity of the project consisted of six inorganics (cobalt, iron, manganese, nickel, thallium, and vanadium), three SVOCs (benz[a]anthracene, naphthalene, and pentachlorophenol), and total petroleum hydrocarbons diesel range organics (TPH-DRO).

Inspection and Maintenance

Inspections will be required to verify that there are no potential exposure risks for Composite Workers or visitors caused by deficiencies in the interim measures. Given that the proposed cap thicknesses meet the standards specified in the RADWP for permanent caps, inspections of the interim measures will be completed at a minimum frequency of annually. The MDE will be notified of any deficiencies. Tradepoint Atlantic personnel (the responsible party) or their designated agent will perform inspections, perform maintenance of the interim measures, and retain inspection records.

If a corrective action is required, the MDE notification will include documentation of the observed conditions and the location of any repairs. In addition, the MDE and USEPA will be provided with a written notice at least 30 days prior to any planned removal or modification to the proposed interim measures once they have been installed.

Schedule

At this time, EAG is requesting approval for Tradepoint Atlantic to proceed with the proposed work. Tradepoint Atlantic intends to commence work on the Site in mid-July 2019, and anticipates that the full scope of work will be completed by September 2019.

Reporting

A brief Completion Letter Report will be submitted to the MDE upon finishing the project to document the installation of the interim capping remedy at the Marketing Center. The construction of the lighting improvements along the ingress and egress roads (and the roads themselves) will be documented within the Development Completion Report for the Royal Farms station designated as Retail Area #1.



If you have any questions, or if we can provide any additional information at this time, please do not hesitate to contact ARM Group Inc. at 410-290-7775.

Respectfully submitted,
ARM Group Inc.



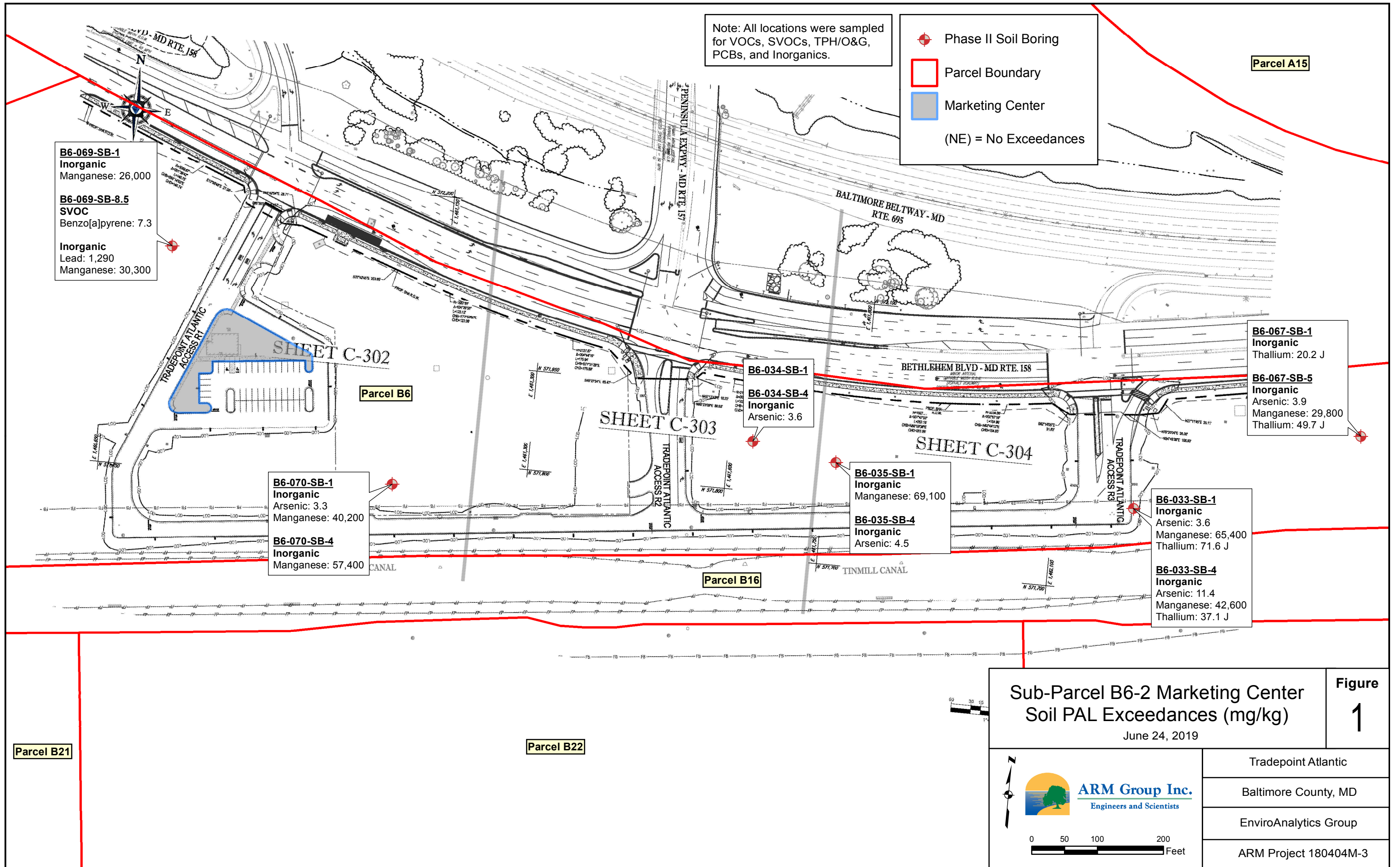
Taylor R. Smith, P.E.
Project Engineer



T. Neil Peters, P.E.
Senior Vice President



FIGURES



Note: All locations were sampled for VOCs, SVOCs, TPH/O&G, PCBs, and Inorganics.

- Phase II Soil Boring
- Parcel Boundary
- Marketing Center
- (NE) = No Exceedances

B6-069-SB-1
Inorganic
Manganese: 26,000

B6-069-SB-8.5
SVOC
Benzo[a]pyrene: 7.3

Inorganic
Lead: 1,290
Manganese: 30,300

Parcel A15

B6-067-SB-1
Inorganic
Thallium: 20.2 J

B6-067-SB-5
Inorganic
Arsenic: 3.9
Manganese: 29,800
Thallium: 49.7 J

B6-034-SB-1
B6-034-SB-4
Inorganic
Arsenic: 3.6

B6-035-SB-1
Inorganic
Manganese: 69,100

B6-035-SB-4
Inorganic
Arsenic: 4.5

B6-033-SB-1
Inorganic
Arsenic: 3.6
Manganese: 65,400
Thallium: 71.6 J

B6-033-SB-4
Inorganic
Arsenic: 11.4
Manganese: 42,600
Thallium: 37.1 J

B6-070-SB-1
Inorganic
Arsenic: 3.3
Manganese: 40,200

B6-070-SB-4
Inorganic
Manganese: 57,400

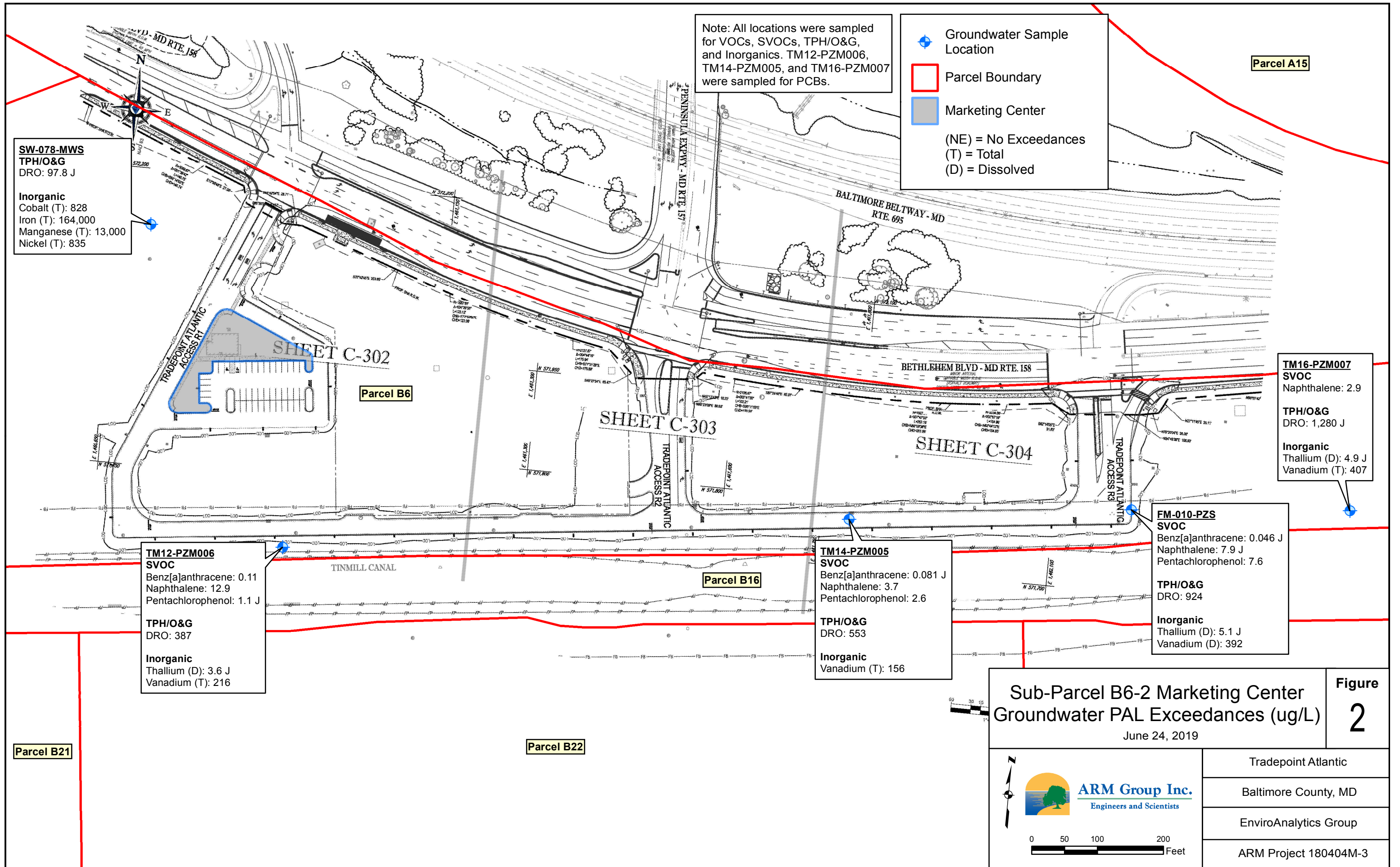
Sub-Parcel B6-2 Marketing Center
Soil PAL Exceedances (mg/kg)
June 24, 2019

Figure
1

ARM Group Inc.
Engineers and Scientists

0 50 100 200 Feet

| |
|-----------------------|
| Tradepoint Atlantic |
| Baltimore County, MD |
| EnviroAnalytics Group |
| ARM Project 180404M-3 |



Note: All locations were sampled for VOCs, SVOCs, TPH/O&G, and Inorganics. TM12-PZM006, TM14-PZM005, and TM16-PZM007 were sampled for PCBs.

- Groundwater Sample Location
 - Parcel Boundary
 - Marketing Center
- (NE) = No Exceedances
(T) = Total
(D) = Dissolved

SW-078-MWS
TPH/O&G
DRO: 97.8 J

Inorganic
Cobalt (T): 828
Iron (T): 164,000
Manganese (T): 13,000
Nickel (T): 835

Parcel A15

TM12-PZM006
SVOC
Benz[a]anthracene: 0.11
Naphthalene: 12.9
Pentachlorophenol: 1.1 J

TPH/O&G
DRO: 387

Inorganic
Thallium (D): 3.6 J
Vanadium (T): 216

Parcel B6

TM14-PZM005
SVOC
Benz[a]anthracene: 0.081 J
Naphthalene: 3.7
Pentachlorophenol: 2.6

TPH/O&G
DRO: 553

Inorganic
Vanadium (T): 156

Parcel B16

FM-010-PZS
SVOC
Benz[a]anthracene: 0.046 J
Naphthalene: 7.9 J
Pentachlorophenol: 7.6

TPH/O&G
DRO: 924

Inorganic
Thallium (D): 5.1 J
Vanadium (D): 392

TM16-PZM007
SVOC
Naphthalene: 2.9

TPH/O&G
DRO: 1,280 J

Inorganic
Thallium (D): 4.9 J
Vanadium (T): 407

Sub-Parcel B6-2 Marketing Center
Groundwater PAL Exceedances (ug/L)
June 24, 2019

Figure 2

Tradepoint Atlantic

Baltimore County, MD

EnviroAnalytics Group

ARM Project 180404M-3

0 50 100 200 Feet

Attachment 1

| STANDARD DRAWING LEGEND FOR ENTIRE PLAN SET (NOT TO SCALE) | | | | | | | | | | |
|--|--|-----------------|------------------------|--|-----|-----------------|-----|------------------|-----|---------------------------|
| LIMIT OF WORK | | ---LOW---LOW--- | | | | | | | | |
| LIMIT OF DISTURBANCE | | ---LOD---LOD--- | | | | | | | | |
| EXISTING NOTE | TYPICAL NOTE TEXT | PROPOSED NOTE | | | | | | | | |
| --- | ON-SITE PROPERTY LINE / R.O.W. LINE | --- | | | | | | | | |
| --- | NEIGHBORING PROPERTY LINE / INTERIOR PARCEL LINE | --- | | | | | | | | |
| --- | EASEMENT LINE | --- | | | | | | | | |
| --- | SETBACK LINE | --- | | | | | | | | |
| <table border="1"> <thead> <tr> <th colspan="2">CONCRETE CURB & GUTTER</th> </tr> </thead> <tbody> <tr> <td>---</td> <td>CURB AND GUTTER</td> </tr> <tr> <td>---</td> <td>SPILL TRANSITION</td> </tr> <tr> <td>---</td> <td>DEPRESSED CURB AND GUTTER</td> </tr> </tbody> </table> | | | CONCRETE CURB & GUTTER | | --- | CURB AND GUTTER | --- | SPILL TRANSITION | --- | DEPRESSED CURB AND GUTTER |
| CONCRETE CURB & GUTTER | | | | | | | | | | |
| --- | CURB AND GUTTER | | | | | | | | | |
| --- | SPILL TRANSITION | | | | | | | | | |
| --- | DEPRESSED CURB AND GUTTER | | | | | | | | | |
| --- | UTILITY POLE WITH LIGHT | --- | | | | | | | | |
| --- | POLE LIGHT | --- | | | | | | | | |
| --- | TRAFFIC LIGHT | --- | | | | | | | | |
| --- | UTILITY POLE | --- | | | | | | | | |
| --- | TYPICAL LIGHT | --- | | | | | | | | |
| --- | ACORN LIGHT | --- | | | | | | | | |
| --- | TYPICAL SIGN | --- | | | | | | | | |
| --- | PARKING COUNTS | --- | | | | | | | | |
| --- | CONTOUR LINE | --- | | | | | | | | |
| --- | SPOT ELEVATIONS | --- | | | | | | | | |
| --- | SANITARY LABEL | --- | | | | | | | | |
| --- | STORM LABEL | --- | | | | | | | | |
| --- | SANITARY SEWER LATERAL | --- | | | | | | | | |
| --- | UNDERGROUND WATER LINE | --- | | | | | | | | |
| --- | UNDERGROUND ELECTRIC LINE | --- | | | | | | | | |
| --- | UNDERGROUND GAS LINE | --- | | | | | | | | |
| --- | OVERHEAD WIRE | --- | | | | | | | | |
| --- | UNDERGROUND TELEPHONE LINE | --- | | | | | | | | |
| --- | UNDERGROUND CABLE LINE | --- | | | | | | | | |
| --- | STORM SEWER | --- | | | | | | | | |
| --- | SANITARY SEWER MAIN | --- | | | | | | | | |
| --- | HYDRANT | --- | | | | | | | | |
| --- | SANITARY MANHOLE | --- | | | | | | | | |
| --- | STORM MANHOLE | --- | | | | | | | | |
| --- | WATER METER | --- | | | | | | | | |
| --- | WATER VALVE | --- | | | | | | | | |
| --- | GAS VALVE | --- | | | | | | | | |
| --- | GAS METER | --- | | | | | | | | |
| --- | TYPICAL END SECTION | --- | | | | | | | | |
| --- | HEADWALL OR ENDWALL | --- | | | | | | | | |
| --- | GRATE INLET | --- | | | | | | | | |
| --- | CURB INLET | --- | | | | | | | | |
| --- | CLEAN OUT | --- | | | | | | | | |
| --- | ELECTRIC MANHOLE | --- | | | | | | | | |
| --- | TELEPHONE MANHOLE | --- | | | | | | | | |
| --- | ELECTRIC BOX | --- | | | | | | | | |
| --- | ELECTRIC PEDESTAL | --- | | | | | | | | |
| --- | MONITORING WELL | --- | | | | | | | | |
| --- | TEST PIT | --- | | | | | | | | |
| --- | BENCHMARK | --- | | | | | | | | |
| --- | BORING | --- | | | | | | | | |

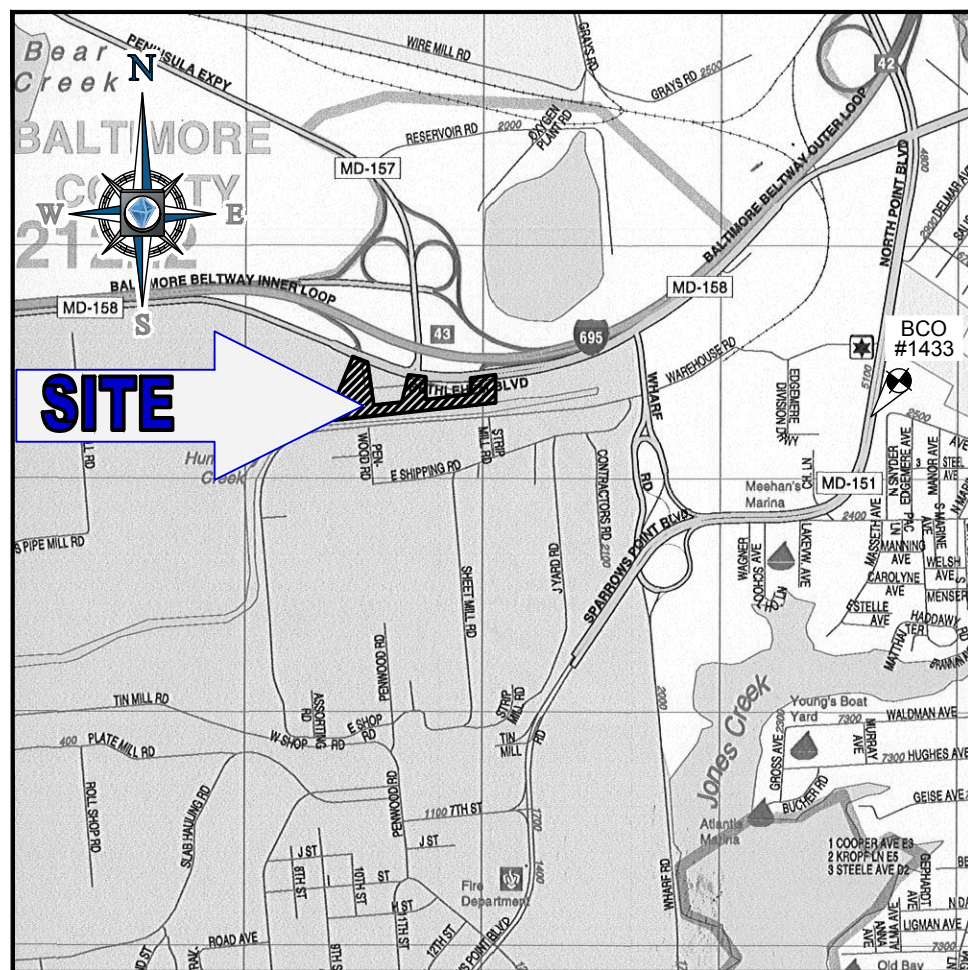
| STANDARD ABBREVIATIONS FOR ENTIRE PLAN SET | |
|---|--|
| AC | ACRES |
| ADA | AMERICANS WITH DISABILITY ACT |
| ARCH | ARCHITECTURAL |
| BC | BOTTOM OF CURB |
| BF | BASEMENT FLOOR |
| BK | BLOCK |
| BL | BASELINE |
| BLDG | BUILDING |
| BM | BUILDING BENCHMARK |
| BRL | BUILDING RESTRICTION LINE |
| CF | CUBIC FEET |
| CL | CENTERLINE |
| CMP | CORRUGATED METAL PIPE |
| CONN | CONNECTION |
| CONC | CONCRETE |
| CPP | CORRUGATED PLASTIC PIPE |
| CY | CUBIC YARDS |
| DEC | DECORATIVE |
| DEP | DEPRESSED |
| DIP | DUCTILE IRON PIPE |
| DOM | DOMESTIC |
| ELEC | ELECTRIC |
| ELEV | ELEVATION |
| EP | EDGE OF PAVEMENT |
| ES | EDGE OF SHOULDER |
| EW | END WALL |
| EX | EXISTING |
| FES | FLARED END SECTION |
| FF | FINISHED FLOOR |
| FH | FIRE HYDRANT |
| FG | FINISHED GRADE |
| G | GRADE |
| GF | GARAGE FLOOR (AT DOOR) |
| GH | GRADE HIGHER SIDE OF WALL |
| GL | GRADE LOWER SIDE OF WALL |
| GRT | GRATE |
| GV | GATE VALVE |
| HDPE | HIGH DENSITY POLYETHYLENE PIPE |
| HP | HIGH POINT |
| HOR | HORIZONTAL |
| HW | HEADWALL |
| INT | INTERSECTION |
| INV | INVERT |
| LF | LINEAR FOOT |
| LOC | LIMITS OF CLEARING |
| LOD | LIMITS OF DISTURBANCE |
| LOS | LINE OF SIGHT |
| LP | LOW POINT |
| L/S | LANDSCAPE |
| MAX | MAXIMUM |
| MIN | MINIMUM |
| MH | MANHOLE |
| MJ | MECHANICAL JOINT |
| OC | ON CENTER |
| PA | POINT OF ANALYSIS |
| PC | POINT CURVATURE |
| PCCR | POINT OF COMPOUND CURVATURE, CURB RETURN |
| PI | POINT OF INTERSECTION |
| POG | POINT OF GRADE |
| PROP | PROPOSED |
| PT | POINT OF TANGENCY |
| PTCR | POINT OF TANGENCY, CURB RETURN |
| PVC | POLYVINYL CHLORIDE PIPE |
| PVI | POINT OF VERTICAL INTERSECTION |
| PVT | POINT OF VERTICAL TANGENCY |
| R | RADIUS |
| RCP | REINFORCED CONCRETE PIPE |
| RET WALL | RETAINING WALL |
| R/W | RIGHT OF WAY |
| S | SLOPE |
| SAN | SANITARY SEWER |
| SF | SQUARE FEET |
| STA | STATION |
| STM | STORM |
| SW | SIDEWALK |
| TBR | TO BE REMOVED |
| TBRL | TO BE RELOCATED |
| TC | TOP OF CURB |
| TELE | TELEPHONE |
| TPF | TREE PROTECTION FENCE |
| TW | TOP OF WALL |
| TYP | TYPICAL |
| UG | UNDERGROUND |
| UP | UTILITY POLE |
| W | WIDE |
| WL | WATER LINE |
| WM | WATER METER |
| ± | PLUS OR MINUS |
| ° | DEGREE |
| Ø | DIAMETER |
| # | NUMBER |

RETAIL DEVELOPMENT ACCESS ROADS

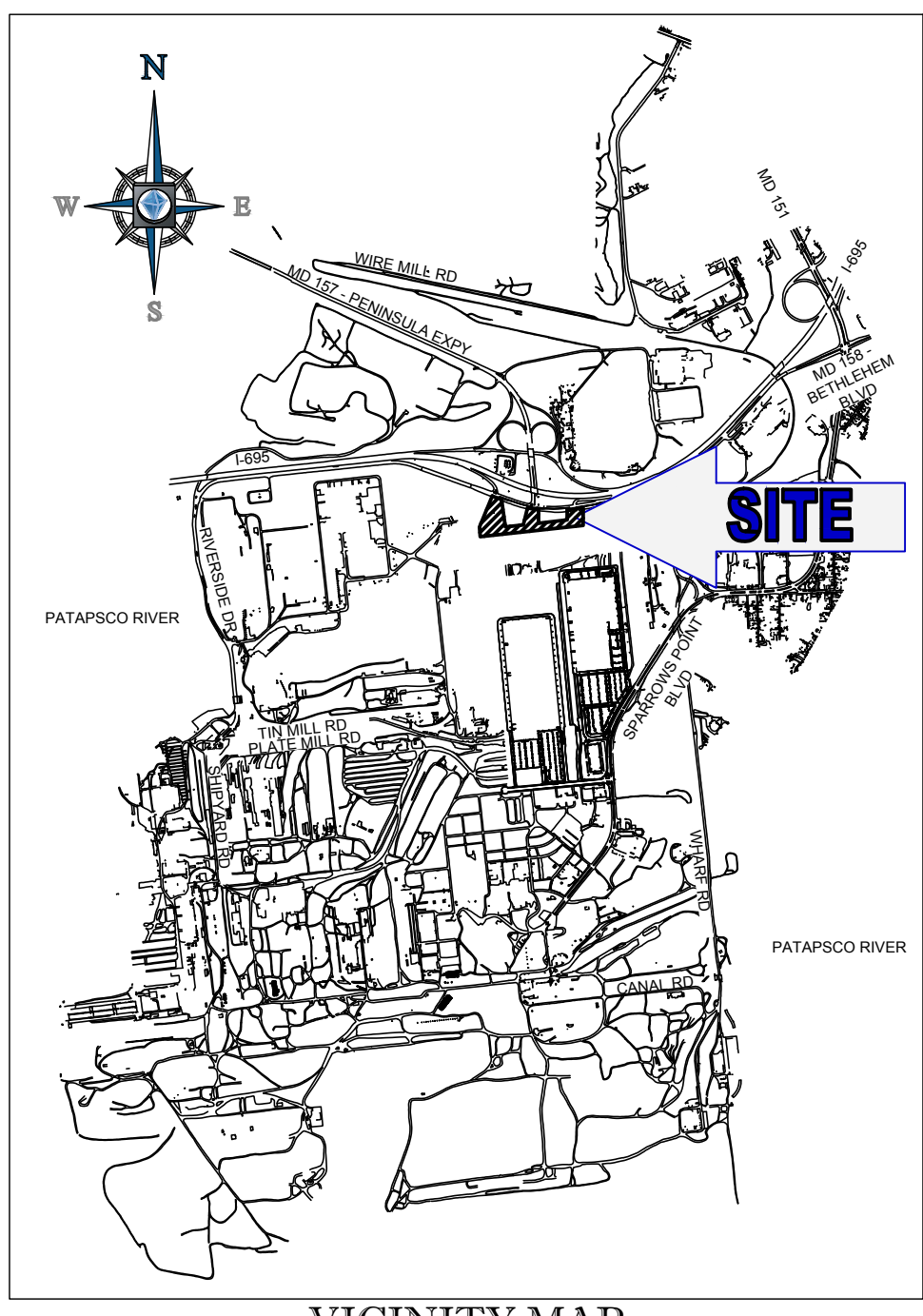


FOR TRADEPOINT ATLANTIC PHASE II PLANS

LOCATION OF SITE
SOUTHWEST CORNER OF BETHELHEM
BOULEVARD AT WHARF ROAD
TAX MAP 111, GRID 14, PARCEL 318
BALTIMORE, MD 21219
BALTIMORE COUNTY
DISTRICT: 07
DRC#: 010918E
TRACKING #: DRC-2017-00196



LOCATION MAP
COPYRIGHT ADC THE MAP PEOPLE
PERMIT USE NO. 20602153-5
SCALE: 1"=2000'



VICINITY MAP
SCALE: 1"=3000'

OWNER
TRADEPOINT ATLANTIC, LLC
1600 SPARROWS POINT BLVD
BALTIMORE, MD 21219
CONTACT: JUSTIN DUNN
PHONE: 410-708-1318

DEVELOPER
TRADEPOINT DEVELOPMENT, LLC
1600 SPARROWS POINT BLVD
BALTIMORE, MD 21219
CONTACT: JUSTIN DUNN
PHONE: 410-708-1318

ISSUED FOR CONSTRUCTION

SIGNATURE _____ DATE _____ SIGNATURE _____ DATE _____

SIGNATURE _____ DATE _____

THIS DOCUMENT IS NOT ISSUED BY BOHLER ENGINEERING FOR CONSTRUCTION WITHOUT THREE (3) SIGNATURES

PROJECT #: MD1620661

REVISION DATE: _____



PREPARED BY
BOHLER
ENGINEERING

901 DULANEY VALLEY ROAD, SUITE 801
TOWSON, MARYLAND 21204
Phone: (410) 821-7900
Fax: (410) 821-7987
MD@BohlerEng.com
CONTACT: ANDREW G. STINE, P.E.

REFERENCES

- EXISTING CONDITIONS
CAD FILES PROVIDED BY TRADEPOINT ATLANTIC
ENTITLED: "BASE - UTILITIES", "BASE - TOPO", "BASE - PLANOMETRICS"
RECEIVED: 5/27/16
- EXISTING SANITARY SEWER
WHITMAN, REQUART & ASSOCIATES, LLP
ENTITLED: "TRADE POINT ATLANTIC PRIVATE ON-SITE SANITARY SEWER SYSTEM (NORTHERN CAMPUS)"
TRADEPOINT ATLANTIC, LLC 1600 SPARROWS POINT BLVD. BALTIMORE, MARYLAND 21219
DATED: OCTOBER 2017
- MASS GRADING PLANS
BOHLER ENGINEERING
ENTITLED: "MASS GRADING PLANS FOR TRADEPOINT ATLANTIC, RETAIL AREA: BETHLEHEM BLVD (MD RTE. 158), TAX MAP 111, PARCEL 318, BALTIMORE MD, 21219; BALTIMORE COUNTY"
PROJECT NO.: MD1620661
DATED: 7/27/17, LAST REVISED: 5/4/18
- FOREST BUFFER PLAN
BOHLER ENGINEERING
ENTITLED: "FOREST BUFFER EASEMENT PLAN"
PROJECT NO.: MD1620661
DATED: 4/10/18, LAST REVISED 6/15/18
- GOVERNING AGENCIES
BALTIMORE COUNTY DEPARTMENT OF PUBLIC WORKS
111 WEST CHESAPEAKE AVENUE
TOWSON, MD 21204
CONTACT: STEVE WALSH
PHONE: (410) 887-3306
MARYLAND DEPARTMENT OF THE ENVIRONMENT
1800 WASHINGTON BOULEVARD
BALTIMORE, MD 21230
CONTACT: JENNIFER SMITH
PHONE: (410) 537-4311
BALTIMORE COUNTY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND SUSTAINABILITY
111 WEST CHESAPEAKE AVENUE, ROOM 318
TOWSON, MD 21204
CONTACT: JIM MARKLE
PHONE: (410) 887-4488
BALTIMORE COUNTY DEPARTMENT OF DEVELOPMENT MANAGEMENT
111 WEST CHESAPEAKE AVENUE
TOWSON, MD 21204
CONTACT: JAN COOK
PHONE: (410) 887-3321
- SURVEY
CONTROL POINT ASSOCIATES, INC.
ENTITLED: "PARTIAL TOPOGRAPHIC & LOCATION SURVEY; TRADEPOINT ATLANTIC, SPARROWS POINT BOULEVARD & TRADEPOINT AVENUE; PART OF MAP 111, GRID 14, PARCEL 318; CITY & COUNTY OF BALTIMORE; STATE OF MARYLAND"
FILE NO.: 02-160385-00
DATED: 12/11/17
- ROAD IMPROVEMENT PLANS
BOHLER ENGINEERING
ENTITLED: "SHA ACCESS PERMIT PLANS FOR TRADEPOINT ATLANTIC, BETHLEHEM BLVD (MD ROUTE 158) FROM STA. 2664+50 TO 2700+50; PENINSULA EXPRESSWAY (MD ROUTE 157) FROM STA. 0+00 TO STA. 8+25.17; INTERSTATE 695 RAMP B (FROM STA. 0+00 TO STA. 9+32.47) AND RAMP D; WHARF ROAD FROM STA. 0+00 TO STA. 4+50"
PROJECT NO.: MD1620661
DATED: 6/15/18
- UTILITY CONTACTS
WATER AND SEWER
BALTIMORE COUNTY DEPARTMENT OF PUBLIC WORKS
111 WEST CHESAPEAKE AVENUE
TOWSON, MD 21204
CONTACT: STEVE WALSH
PHONE: (410) 887-3306
GAS AND ELECTRIC:
BGE
1068 N. FRONT ST. ROOM 401
BALTIMORE, MD 21202
PHONE: (410) 850-4620
CABLE:
COMCAST BUSINESS SERVICES
5001 METRO DRIVE
BALTIMORE, MD 21215
PHONE: (800) 391-3000
TELEPHONE
VERIZON
99 SHAWAN ROAD
COCKEYSVILLE, MD 21030
PHONE: (410) 393-5793
STORM DRAIN:
BALTIMORE COUNTY DEPARTMENT OF PUBLIC WORKS
111 WEST CHESAPEAKE AVENUE
TOWSON, MD 21204
CONTACT: STEVE WALSH
PHONE: (410) 887-3306

| SHEET INDEX | |
|---|------------------------------------|
| SHEET TITLE | SHEET NUMBER |
| COVER SHEET | C-101 (E&S 1 OF 9) |
| GENERAL NOTES | C-102 |
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| EXISTING CONDITIONS AND DEMOLITION PLAN | C-202 - C-204 |
| OVERALL SITE PLAN | C-301 |
| SITE PLAN | C-302 - C-304 |
| OVERALL FINAL GRADING PLAN | C-401 (GRADING 1 OF 4) |
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| EROSION AND SEDIMENT CONTROL PLAN | C-602 - C-604 (E&S 3 - 5 OF 9) |
| PHASE I EROSION AND SEDIMENT CONTROL DRAINAGE AREA MAP | C-605 (E&S 6 OF 9) |
| PHASE II EROSION AND SEDIMENT CONTROL DRAINAGE AREA MAP | C-606 (E&S 7 OF 9) |
| EROSION AND SEDIMENT CONTROL NOTES AND DETAILS | C-607 - C-608 (E&S 8 - 9 OF 9) |
| OVERALL FINAL LANDSCAPE PLAN | C-701 |
| FINAL LANDSCAPE PLAN | C-702 - C-704 |
| FINAL LANDSCAPE NOTES AND DETAILS | C-705 |
| OVERALL LIGHTING PLAN | C-706 |
| LIGHTING PLAN | C-707 - C-709 |
| LIGHTING NOTES AND DETAILS | C-710 |
| SITE DETAILS | C-901 |

OWNER'S/DEVELOPER'S CERTIFICATION:
I/WE HEREBY CERTIFY THAT ANY CLEARING, GRADING, CONSTRUCTION AND/OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS PLAN AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THIS CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A MARYLAND DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I/WE ALSO CERTIFY THAT THE SITE WILL BE INSPECTED AT THE END OF EACH WORKING DAY, AND THAT ANY NEEDED MAINTENANCE WILL BE COMPLETED SO AS TO INSURE THAT ALL SEDIMENT CONTROL PRACTICES ARE LEFT IN OPERATIONAL CONDITION. I/WE AUTHORIZE THE RIGHT OF ENTRY FOR PERIODIC ON-SITE EVALUATION BY THE BALTIMORE COUNTY SOIL CONSERVATION DISTRICT BOARD OF SUPERVISORS OR THEIR AUTHORIZED AGENTS

SIGNATURE OWNER/DEVELOPER _____ DATE _____

PRINT NAME _____ TITLE _____

CONSULTANT'S CERTIFICATION:
I CERTIFY THAT THIS PLAN OF EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE, AND THAT THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE BALTIMORE COUNTY SOIL CONSERVATION DISTRICT AND THE CURRENT STATE OF MARYLAND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL. I HAVE REVIEWED THIS EROSION AND SEDIMENT CONTROL PLAN WITH THE OWNER/DEVELOPER.

SIGNATURE CONSULTANT _____ DATE _____

ANDREW G. STINE, P.E. 37687
PRINT NAME MD LICENSE NUMBER

REVIEWED AND APPROVED FOR SEDIMENT CONTROL UNDER SECTION 4-105

E&S 1 OF 9

BY _____ DATE _____
MARYLAND DEPARTMENT OF THE ENVIRONMENT

ELEVATIONS BASED ON NAVD 88, COORDINATES AND MERIDIAN ARE BASED ON THE MARYLAND COORDINATE SYSTEM (MCS) PER MONUMENTS BC0 #1433 AND GIS 2

BOHLER ENGINEERING

SITE CIVIL AND CONSULTING ENGINEERING ARCHITECTURE
LAND SURVEYING DESIGN PERMITTING SERVICES TRANSPORTATION SERVICES
SUSTAINABLE DESIGN

CHARLOTTE, NC
ATLANTA, GA
BALTIMORE, MD
BETHLEHEM, PA
CHICAGO, IL
COLUMBIA, SC
DENVER, CO
FORT LAUDERDALE, FL
HOUSTON, TX
INDIANAPOLIS, IN
JACKSONVILLE, FL
KANSAS CITY, MO
LONG BEACH, CA
LOS ANGELES, CA
MEMPHIS, TN
MIAMI, FL
MINNEAPOLIS, MN
NEW YORK, NY
PHILADELPHIA, PA
RICHMOND, VA
SAN ANTONIO, TX
SAN JOSE, CA
TAMPA, FL
WASHINGTON, DC

| REVISIONS | | | |
|-----------|---------|-----------------------------|-----|
| REV | DATE | COMMENT | BY |
| 1 | 8/10/18 | REVISIONS PER MDE | MJG |
| 2 | 12/5/18 | REVISED PER COUNTY COMMENTS | MCO |
| 3 | 2/26/19 | ISSUED FOR CONSTRUCTION | MCO |

811

KNOW WHAT'S BELOW
ALWAYS CALL 811
BEFORE YOU DIG
It's fast. It's free. It's the law.

APPROVED FOR CONSTRUCTION

PROJECT No.: MD1620661
DRAWN BY: CBC
CHECKED BY: MJG
DATE: 7/6/18
SCALE: AS NOTED
CAD I.D.: SD3

PROJECT: RETAIL DEVELOPMENT ACCESS ROADS FOR TRADEPOINT ATLANTIC PHASE II PLANS

LOCATION OF SITE
SOUTHWEST CORNER OF BETHELHEM BOULEVARD AT WHARF ROAD
TAX MAP 111, GRID 14, PARCEL 318
BALTIMORE, MD 21289
BALTIMORE COUNTY
DISTRICT: 07
DRC#: 010918E
TRACKING #: DRC-2017-00196

BOHLER ENGINEERING

901 DULANEY VALLEY ROAD, SUITE 801
TOWSON, MARYLAND 21204
Phone: (410) 821-7900
Fax: (410) 821-7987
MD@BohlerEng.com

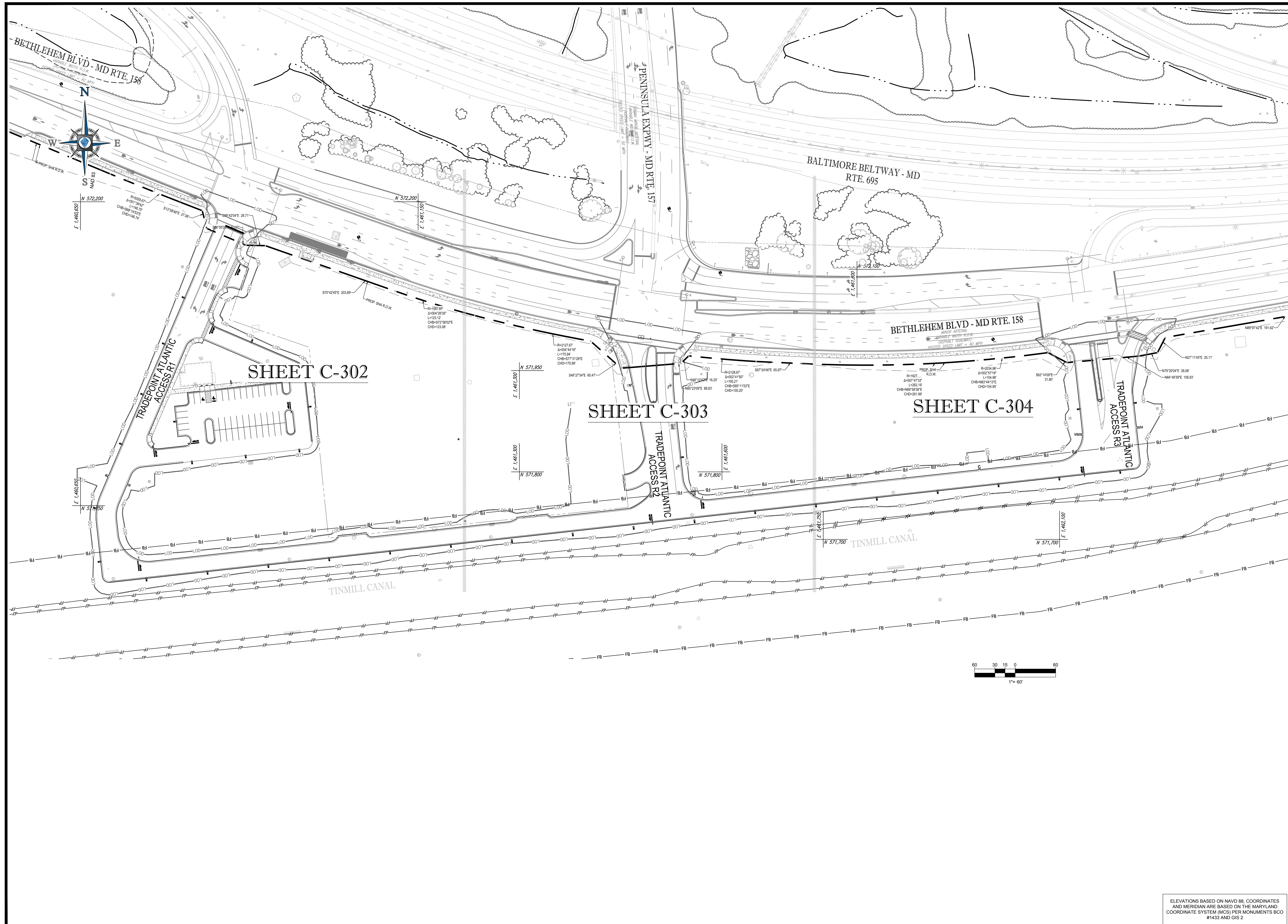
ANDREW G. STINE

PROFESSIONAL ENGINEER
MVA LICENSE NO. 37687
(PROFESSIONAL CERTIFICATION)
I, ANDREW G. STINE, HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 37687, EXPIRATION DATE: 7/21/21

SHEET TITLE:
COVER SHEET

SHEET NUMBER:
C-101

19-SF-0005



BOHLER ENGINEERING

SITE CIVIL AND CONSULTING ENGINEERING
 LAND SURVEYING DESIGN PERMITTING SERVICES TRANSPORTATION SERVICES
 SUSTAINABLE DESIGN URBAN DESIGN ARCHITECTURE

CHARLOTTE, NC
 ATLANTA, GA
 BALTIMORE, MD
 BOSTON, MA
 CHICAGO, IL
 CINCINNATI, OH
 DALLAS, TX
 DENVER, CO
 HOUSTON, TX
 INDIANAPOLIS, IN
 JACKSONVILLE, FL
 LOS ANGELES, CA
 MEMPHIS, TN
 MIAMI, FL
 MINNEAPOLIS, MN
 NEW YORK, NY
 PHILADELPHIA, PA
 RICHMOND, VA
 SAN ANTONIO, TX
 TAMPA, FL
 WASHINGTON, DC

REVISIONS

| REV | DATE | COMMENT | BY |
|-----|---------|-----------------------------|-----|
| 1 | 8/10/18 | REVISIONS PER MDE | MJG |
| 2 | 12/5/18 | REVISED PER COUNTY COMMENTS | MCO |
| 3 | 2/26/19 | ISSUED FOR CONSTRUCTION | MCO |

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APPROVED FOR CONSTRUCTION

| | |
|--------------|-----------|
| PROJECT No.: | MD1620661 |
| DRAWN BY: | CBC |
| CHECKED BY: | MJG |
| DATE: | 7/6/18 |
| SCALE: | 1"=60' |
| CAD I.D.: | SP3 |

PROJECT: **RETAIL DEVELOPMENT ACCESS ROADS FOR TRADEPOINT ATLANTIC PHASE II PLANS**

LOCATION OF SITE
 SOUTHWEST CORNER OF BETHLEHEM BOULEVARD AT WHARF ROAD
 TAX MAP 111, GRID 14, PARCEL 318
 BALTIMORE, MD 21289
 BALTIMORE COUNTY
 DISTRICT: 07
 DRC#: 010918E
 TRACKING #: DRC-2017-00196

BOHLER ENGINEERING

901 DULANEY VALLEY ROAD, SUITE 801
 TOWSON, MARYLAND 21284
 Phone: (410) 821-7900
 Fax: (410) 821-7987
 MD@BohlerEng.com

ANDREW G. STINE

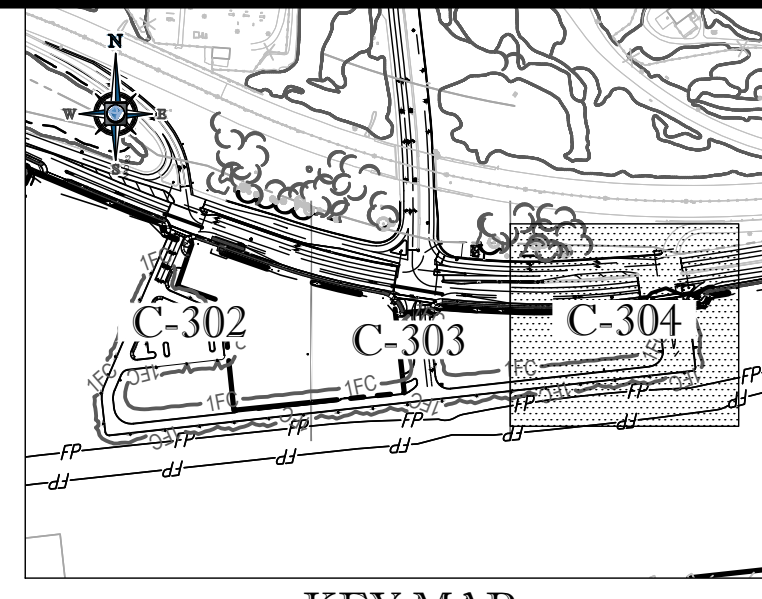
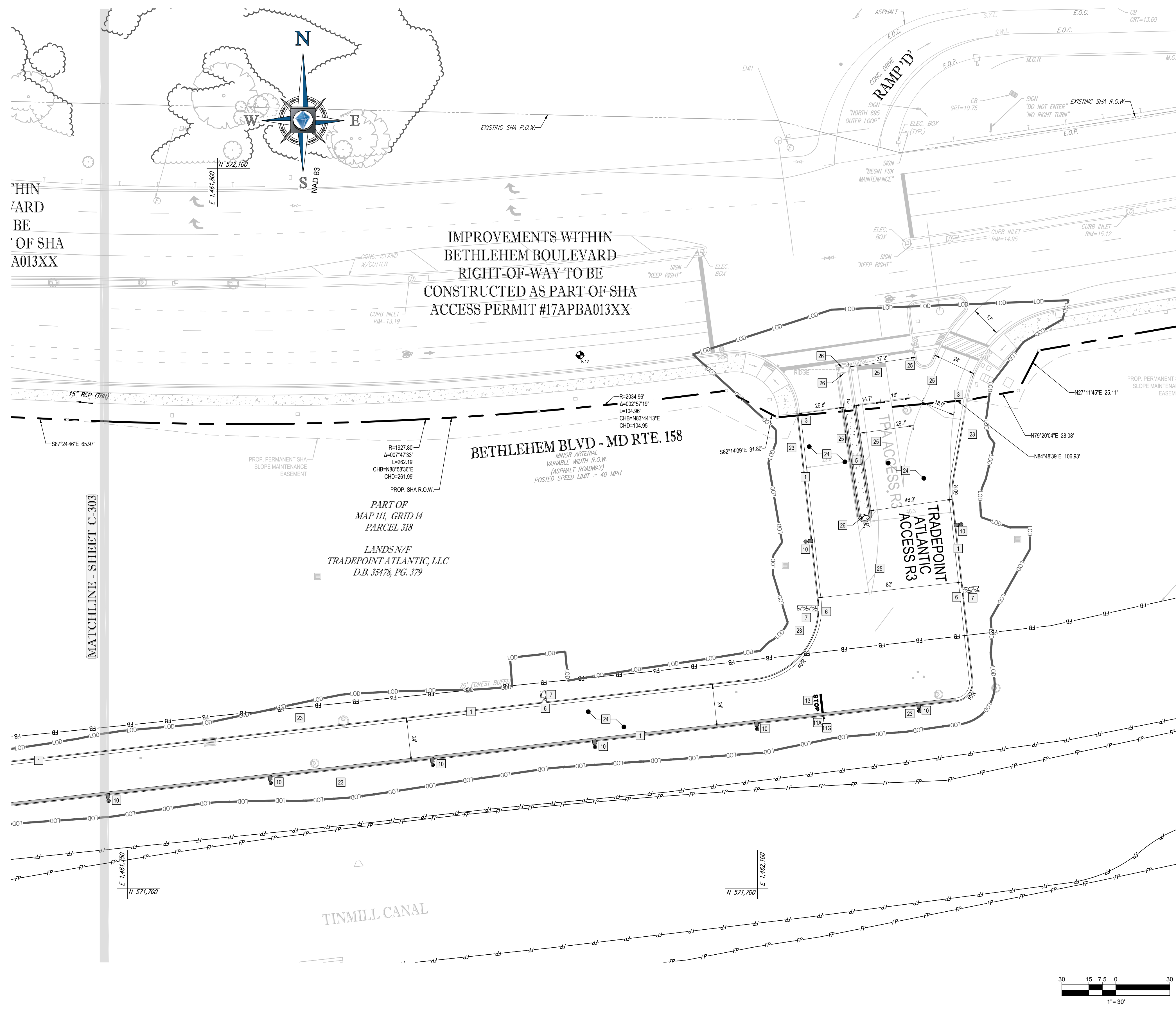
PROFESSIONAL ENGINEER
 MARYLAND LICENSE NO. 37897
 I, ANDREW G. STINE, HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A QUALY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
 LICENSE NO. 37897 - EXPIRES DATE: 7/12/19

SHEET TITLE:
OVERALL SITE PLAN

SHEET NUMBER:
C-301

19-SF-0005

ELEVATIONS BASED ON NAVD 88. COORDINATES AND MERIDIAN ARE BASED ON THE MARYLAND COORDINATE SYSTEM (MCS) PER MONUMENTS BCO #1433 AND GIS 2



SITE PLAN KEYNOTES

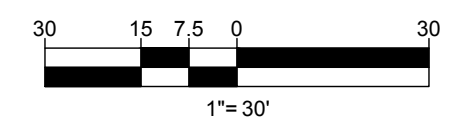
- 1 6" CONC. CURB W/ 1.5" GUTTER
- 2 8" SHA TYPE 'A' CONC. CURB AND GUTTER (MD-620.02)
- 3 TRANSITION FROM ONSITE CONC. CURB AND GUTTER TO SHA CONC. CURB AND GUTTER
- 4 3" CURB TAPER
- 5 SHA TYPE 'A' CURB MEDIAN (MD-645.01)
- 6 3" CURB CUT W/ 3" TAPERS
- 7 RIPRAP (REFER TO GRADING PLANS FOR SIZING)
- 8 CONC. SIDEWALK
- 9 ADA COMPLIANT SIDEWALK RAMP
- 10 SITE LIGHT (REFER TO LIGHTING PLAN)
- 11 TRAFFIC SIGNAGE
ALL SIGNS SHALL CONFORM TO THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) BY THE U.S. DEPARTMENT OF TRANSPORTATION.
- 11A "STOP" SIGN (R1-1)
- 11B "DO NOT BLOCK ENTRANCE" SIGN
- 11C NOT USED
- 11D "NO PARKING IN ACCESS AISLE" SIGN (TYP.)
- 11E ADA ACCESSIBLE SIGN (TYP.)
- 11F ADA ACCESSIBLE SIGN (WITH VAN ACCESSIBLE SIGN)
- 11G "INCOMING TRAFFIC DOES NOT STOP" SIGN
- 12 TYPE III BARRICADE WITH RED OM-III MARKER SIGNS (REFLECTIVE)
- 13 PAINTED STOP BAR AND GRAPHIC
- 14 PAINTED STOP BAR
- 15 4" WHITE STRIPING, 45° ANGLE, 4" O.C. PAVEMENT MARKING
- 16 ADA PARKING SYMBOL (WHITE SYMBOL WITH BLUE BACKGROUND)
- 17 VAN ADA PARKING SYMBOL (WHITE SYMBOL WITH BLUE BACKGROUND)
- 18 4" STANDARD WHITE PARKING STALL STRIPING (8'X18" TYP.)
- 19 NOT USED
- 20 4" SOLID WHITE LINE PAVEMENT MARKING
- 21 4" DOUBLE SOLID YELLOW LINE PAVEMENT MARKING
- 22 WHITE PAINTED DIRECTIONAL ARROW
- 23 LANDSCAPED AREA
- 24 ASPHALT PAVEMENT
- 25 PAVEMENT MARKING (REFER TO APPROVED SHA IMPROVEMENT PLANS)
- 26 SIGN (REFER TO APPROVED SHA IMPROVEMENT PLANS)

IMPROVEMENTS WITHIN
BETHLEHEM BOULEVARD
RIGHT-OF-WAY TO BE
CONSTRUCTED AS PART OF SHA
ACCESS PERMIT #17APBA013XX

BETHLEHEM BLVD - MD RTE. 158
MINOR ARTERIAL
VARIABLE WIDTH R.O.W.
(ASPHALT ROADWAY)
POSTED SPEED LIMIT = 40 MPH

PART OF
MAP III, GRID 14
PARCEL 318
LANDS N/F
TRADEPOINT ATLANTIC, LLC
D.B. 35478, PG. 379

MATCHLINE - SHEET C-303



ELEVATIONS BASED ON NAVD 88 COORDINATES
AND MERIDIAN ARE BASED ON THE MARYLAND
COORDINATE SYSTEM (MCS) PER DOCUMENT'S BCO
#1433 AND GIS 2

BOHLER ENGINEERING

SITE CIVIL AND CONSULTING ENGINEERING ARCHITECTURE
LAND SURVEYING DESIGN PERMITTING SERVICES TRANSPORTATION SERVICES
SUSTAINABLE DESIGN

CHARLOTTE, NC
ATLANTA, GA
BALTIMORE, MD
BETHESDA, MD
BIRMINGHAM, AL
CHICAGO, IL
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DENVER, CO
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INDIANAPOLIS, IN
JACKSONVILLE, FL
MEMPHIS, TN
MIAMI, FL
MINNEAPOLIS, MN
NEW YORK, NY
PHILADELPHIA, PA
RICHMOND, VA
SAN ANTONIO, TX
WASHINGTON, DC

REVISIONS

| REV | DATE | COMMENT | BY |
|-----|---------|-----------------------------|-----|
| 1 | 8/10/18 | REVISIONS PER MDE | MJG |
| 2 | 12/5/18 | REVISED PER COUNTY COMMENTS | MCO |
| 3 | 2/26/19 | ISSUED FOR CONSTRUCTION | MCO |

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APPROVED FOR CONSTRUCTION

| | |
|--------------|-----------|
| PROJECT No.: | MD1620661 |
| DRAWN BY: | CBC |
| CHECKED BY: | MJG |
| DATE: | 7/6/18 |
| SCALE: | AS NOTED |
| CAD I.D.: | SP3 |

PROJECT: **RETAIL DEVELOPMENT ACCESS ROADS** FOR

TRADEPOINT ATLANTIC
PHASE II PLANS

LOCATION OF SITE
SOUTHWEST CORNER OF BETHLEHEM BOULEVARD AT WHARF ROAD
TAX MAP 111, GRID 14, PARCEL 318
BALTIMORE, MD 21289
BALTIMORE COUNTY
DISTRICT: 07
DRC#: 010918E
TRACKING #: DRC-2017-00196

BOHLER ENGINEERING

901 DULANEY VALLEY ROAD, SUITE 801
TOWSON, MARYLAND 21284
Phone: (410) 821-7900
Fax: (410) 821-7987
MD@BohlerEng.com

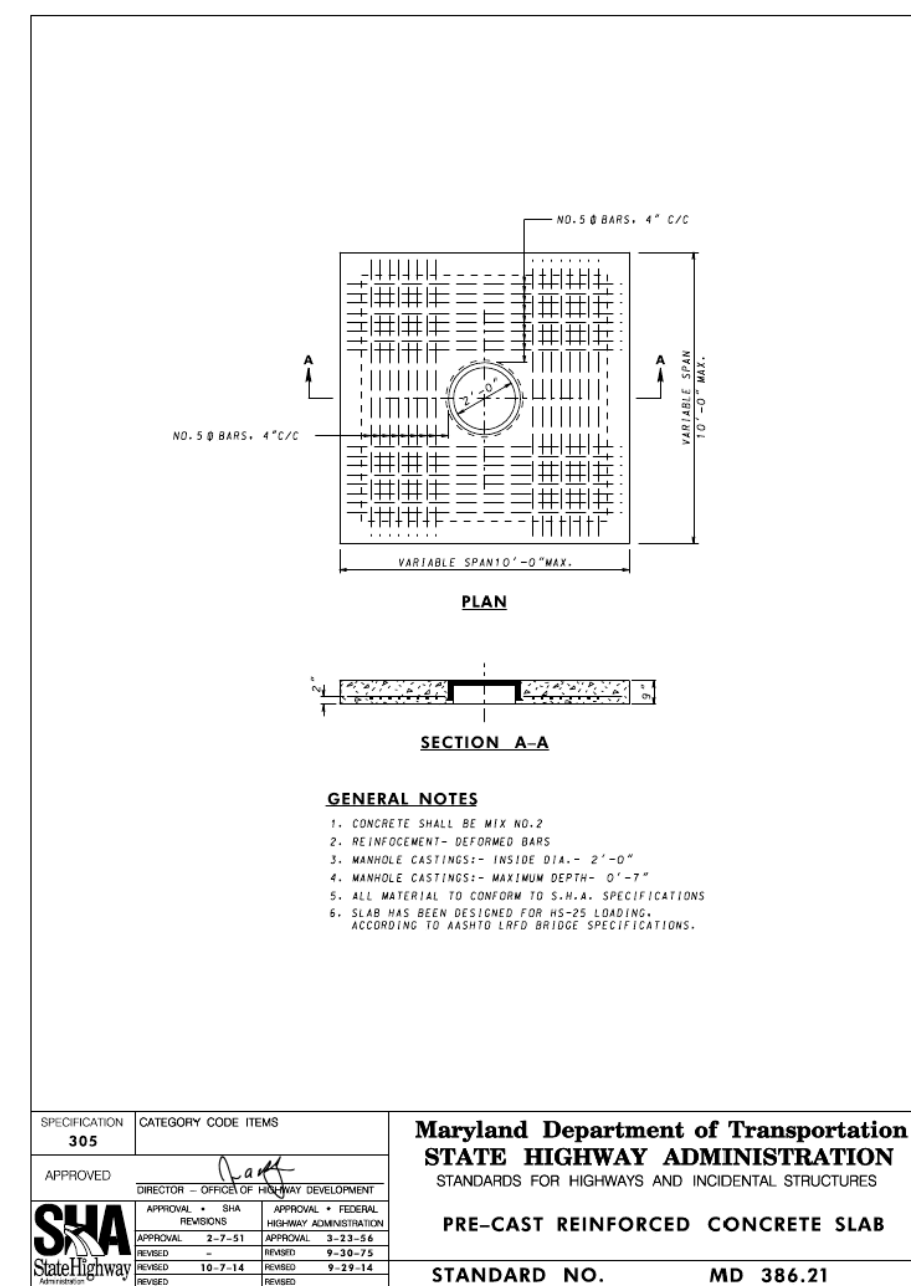
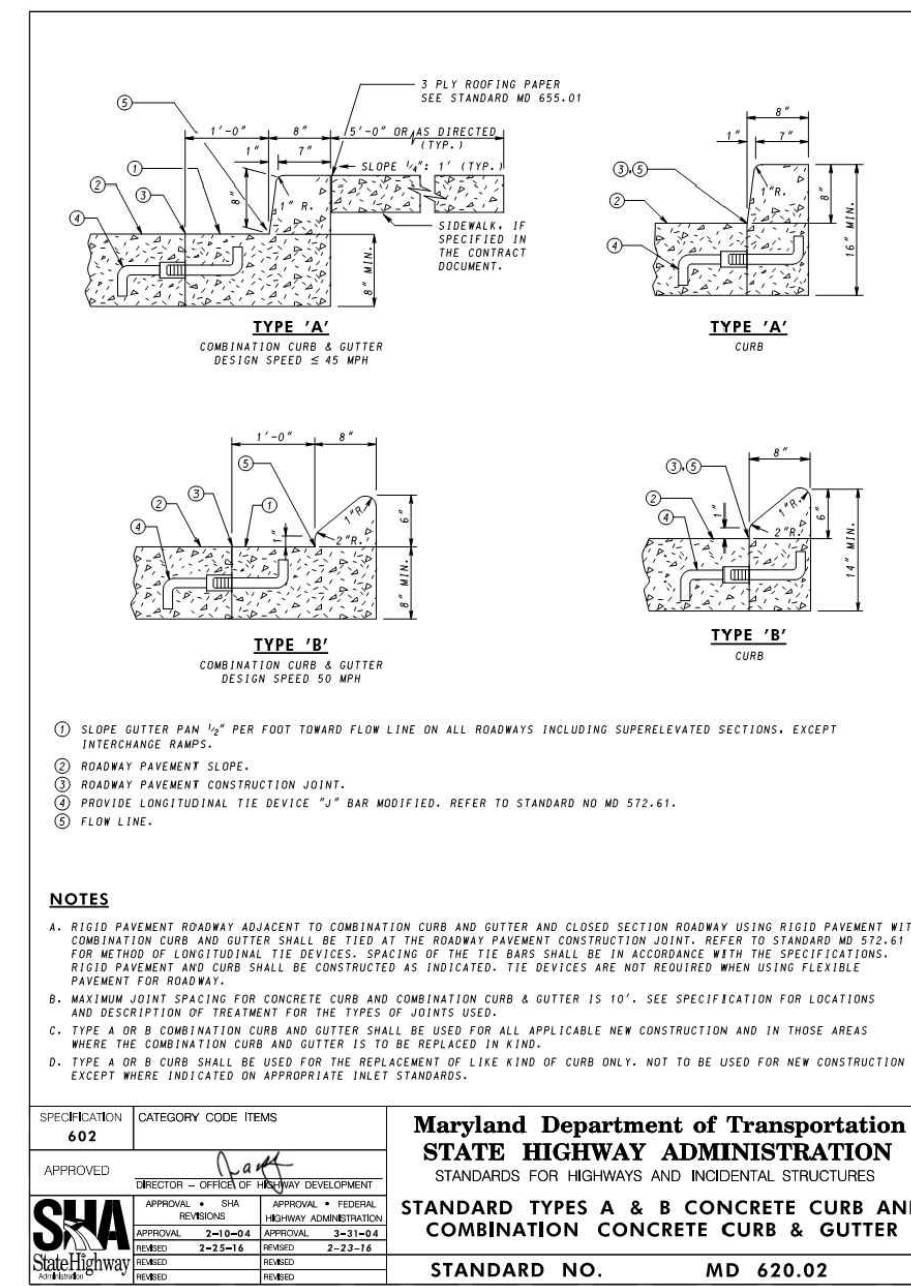
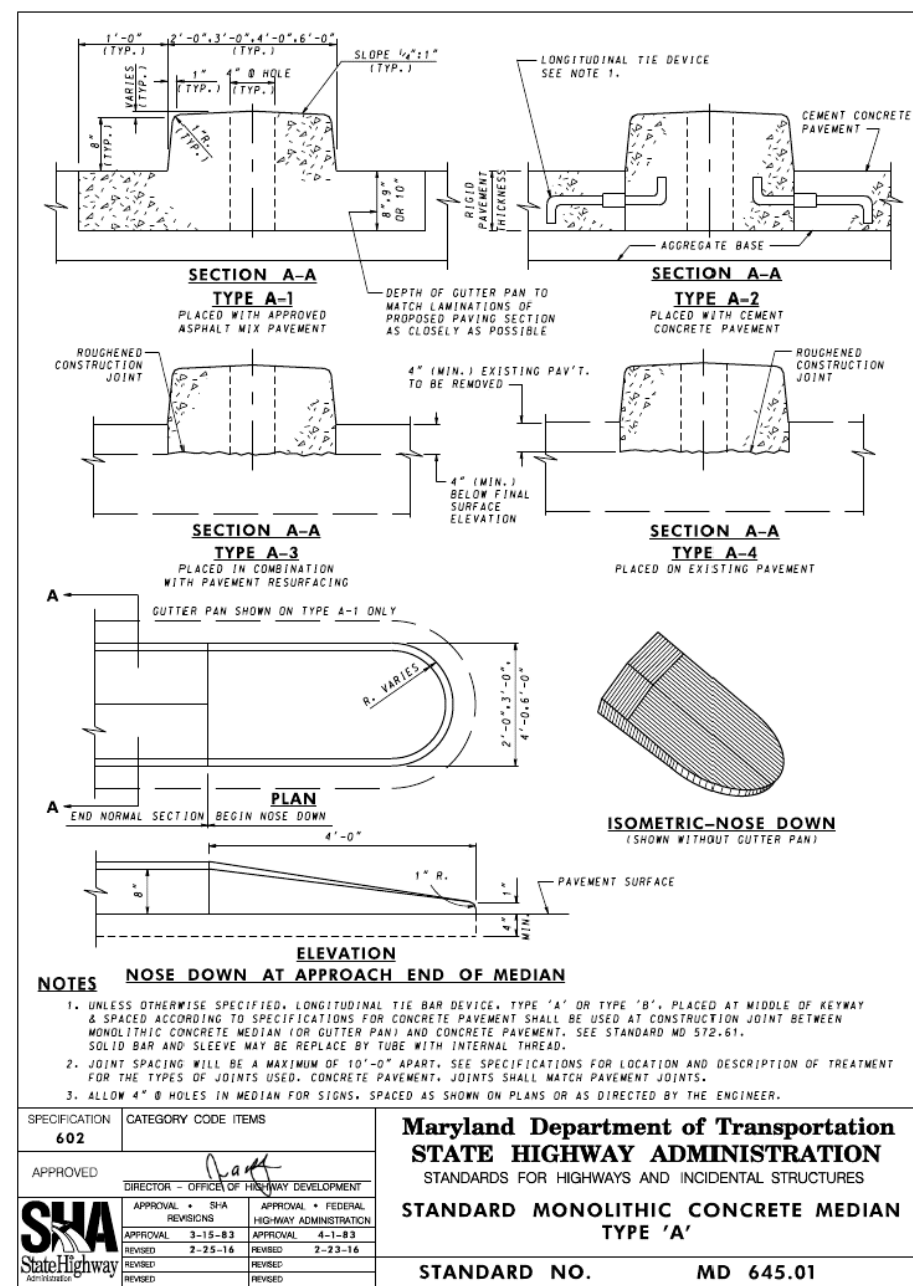
ANDREW G. STINE

PROFESSIONAL ENGINEER
MARYLAND LICENSE NO. 3397
(PROFESSIONAL CERTIFICATION)
I, ANDREW G. STINE, HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A QUALY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
LICENSE NO. 3789 - EXPIRES DATE: 7/12/19

SHEET TITLE:
SITE PLAN

SHEET NUMBER:
C-304

19-SF-0005



GEOTEX®

Product Data
 GEOTEX® 801

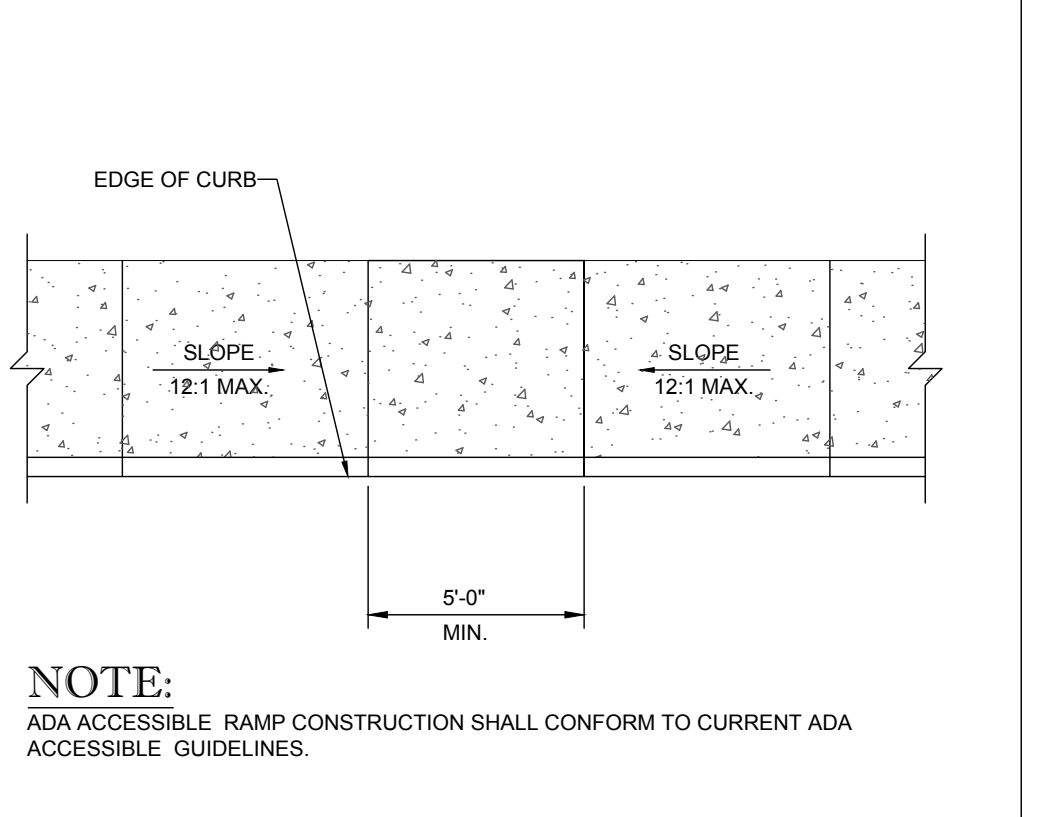
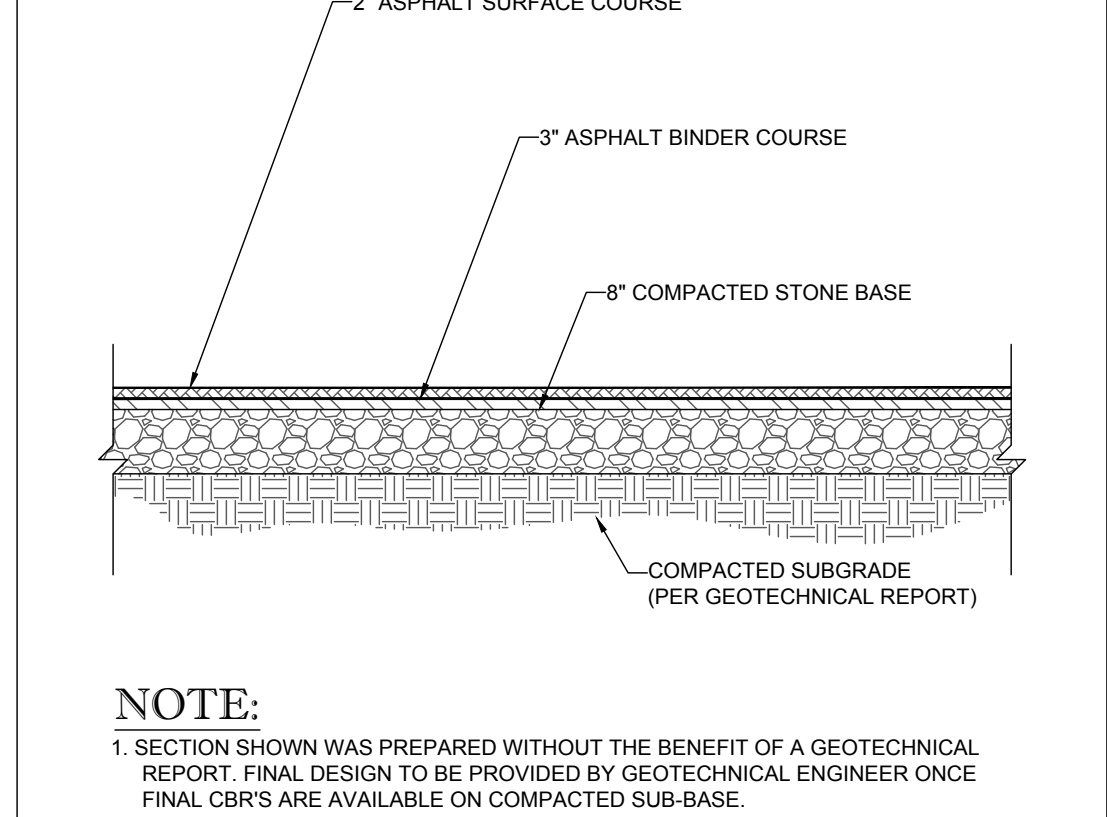
GEOTEX® 801 is a polypropylene, staple fiber, needle-punched nonwoven geotextile produced by Propex, and will meet the following Minimum Average Roll Values (MARV) when tested in accordance with the methods listed below. The fibers are needed to form a stable network that retains dimensional stability relative to each other. The geotextile is resistant to ultraviolet degradation and to biological and chemical environments normally found in soils.

GEOTEX® 801 conforms to the property values listed below. Propex performs internal Manufacturing Quality Control (MQC) tests that have been accredited by the Geosynthetic Accreditation Institute - Laboratory Accreditation Program (GAI/LAP). This product is NTPEP approved for AASHTO standards.

| PROPERTY | TEST METHOD | ENGLISH | METRIC |
|-----------------------------|-------------|-------------------------|---------------------------------------|
| ORIGIN OF MATERIALS | | | |
| % U.S. Manufactured | | 100% | 100% |
| Mechanics | | | |
| Grab Tensile Strength | ASTM D-4632 | 205 lbs | 912 N |
| Grab Elongation | ASTM D-4632 | 50% | 50% |
| CBR Puncture | ASTM D-4241 | 535 lbs | 2380 N |
| Technical Tear | ASTM D-4533 | 80 lbs | 358 N |
| Endurance | | | |
| UV Resistance at 500 hrs | ASTM D-4355 | 70% | 70% |
| Hydraulics | | | |
| Apparent Opening Size (AOS) | ASTM D-4751 | 60 US Sieve Series | 0.280 mm |
| Permeability | ASTM D-4491 | 1.4 sec ⁻¹ | 1.4 sec ⁻¹ |
| Water Flow Rate | ASTM D-4491 | 100 gpm/ft ² | 4074 l/m ² /m ² |
| Roll Sizes | | | |
| | | 12.5 ft x 360 ft | 3.81 m x 109.8 m |
| | | 15 ft x 300 ft | 4.57 m x 91.5 m |

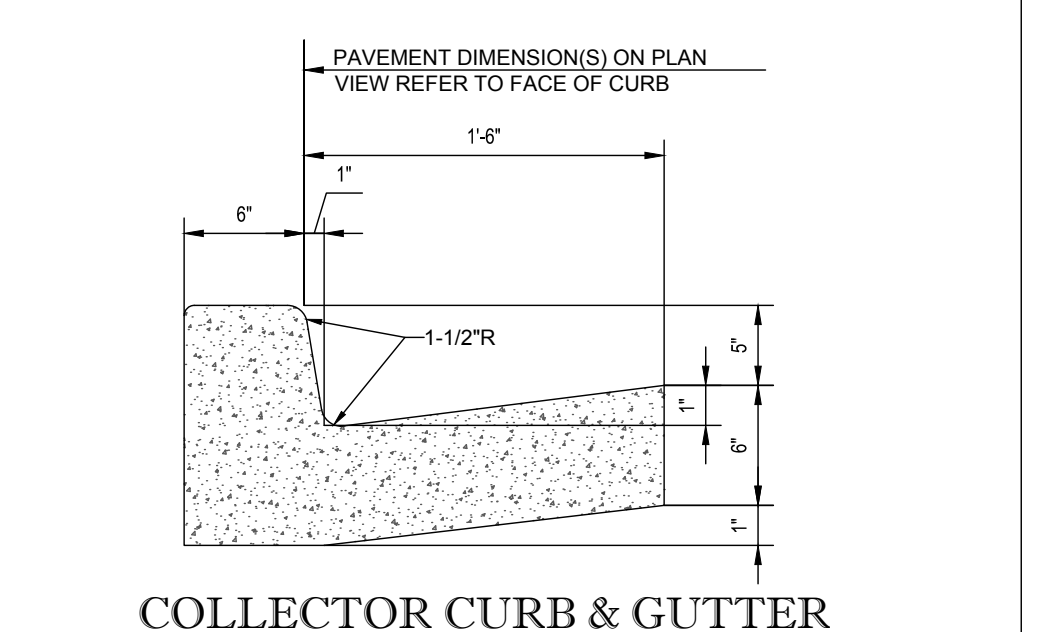
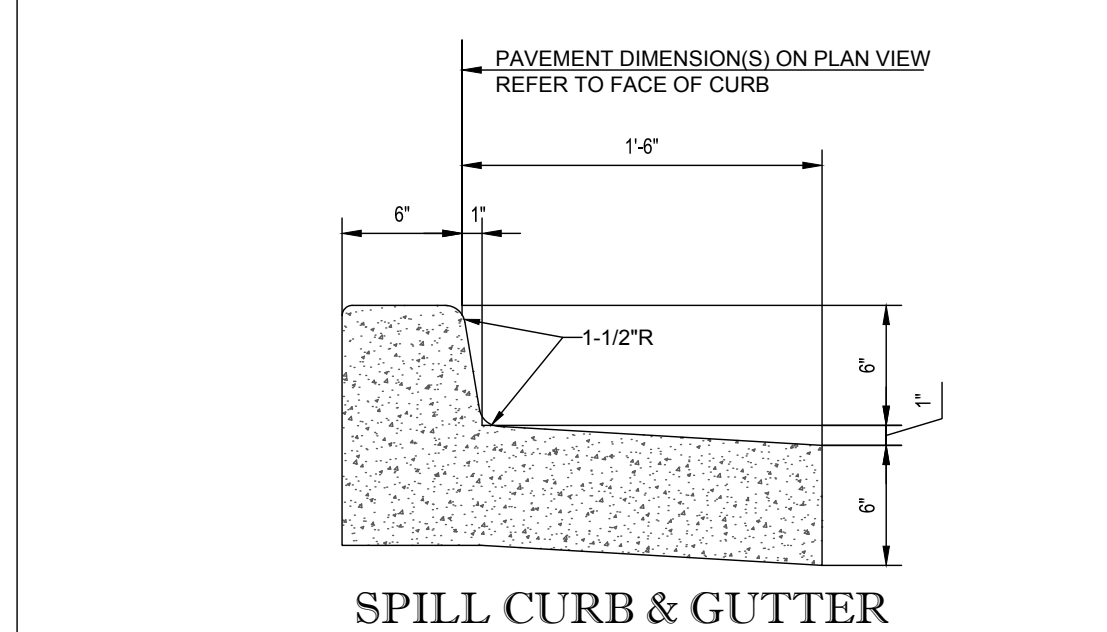
NOTES:
 1. The property values listed above are effective 04/03/2017 and are subject to change without notice.
 2. Values shown are in metric principle direction. Minimum average roll values (MARV) are calculated as the typical values less specified deviations. Statistically, it yields a 97.7% degree of confidence that any sample taken from quality assurance testing will exceed the value required.
 3. Maximum average roll value.
 4. Contact your local Territory Business Manager (TBM) for custom widths and colors. Lead times may vary depending on customer requirements and volume required.

Propex
 GEOSOLUTIONS
 Propex Operating Company, LLC 4019 Industry Drive Chattanooga, TN 37419 ph 800-621-3273 ph 423-855-1446
 www.propexglobal.com



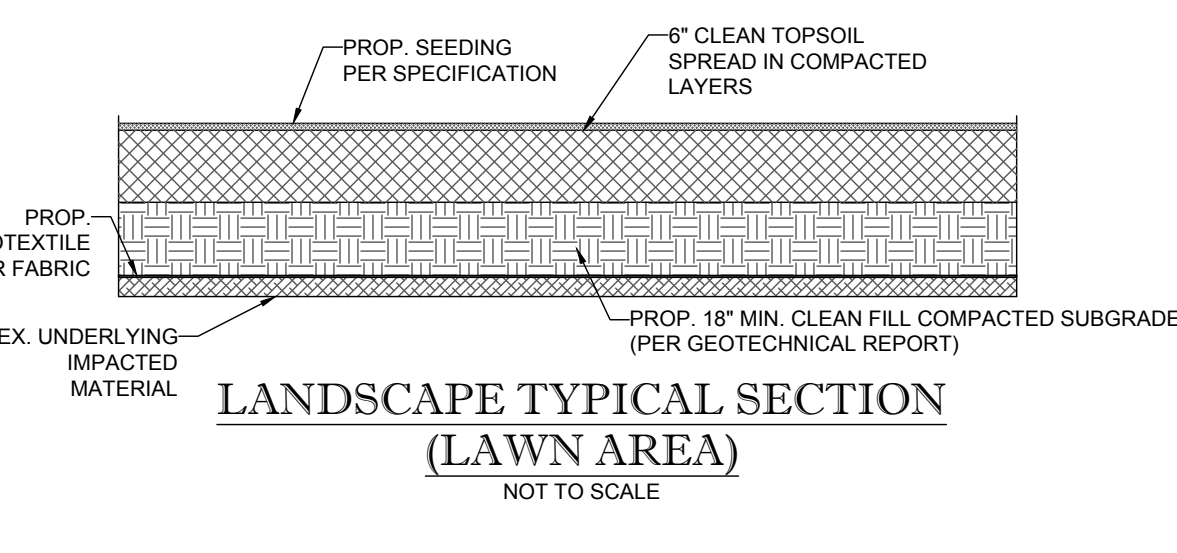
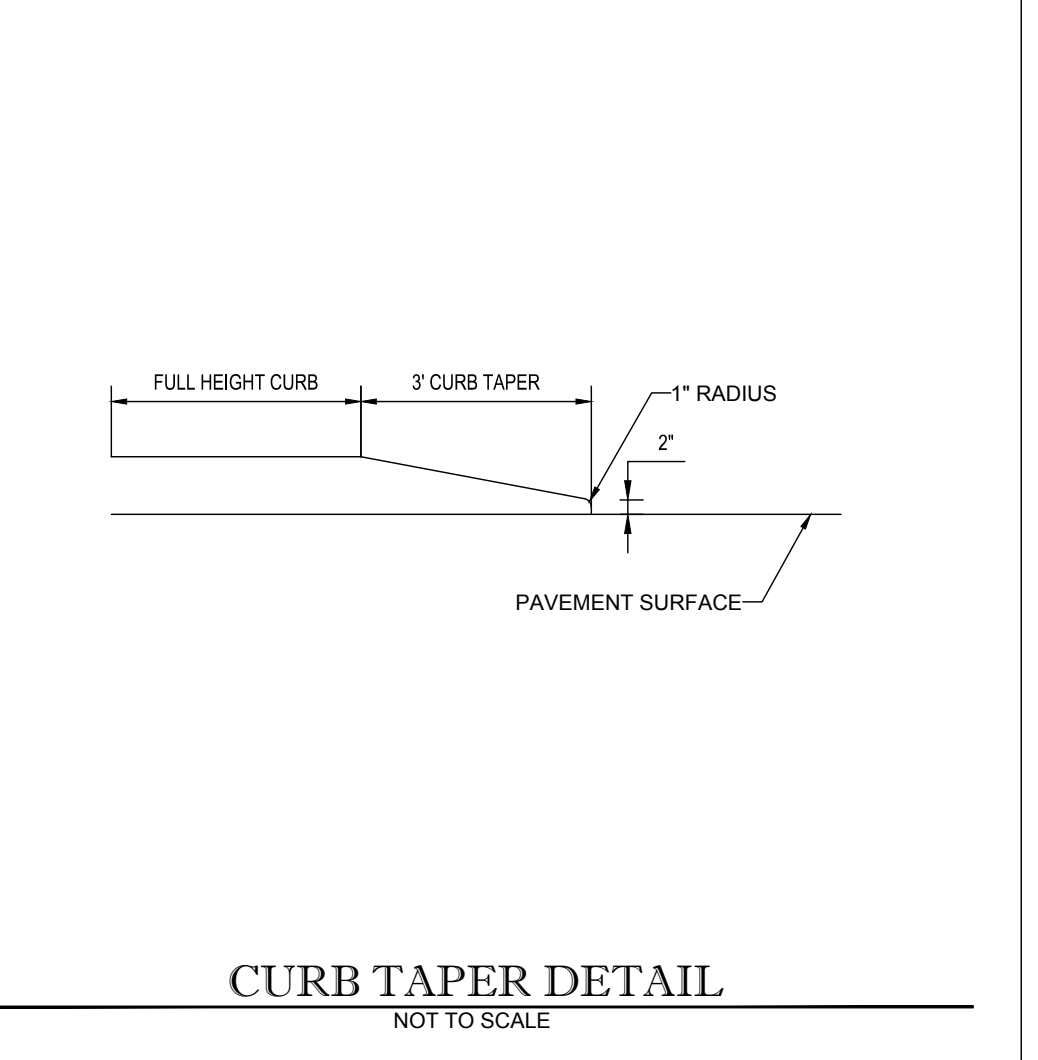
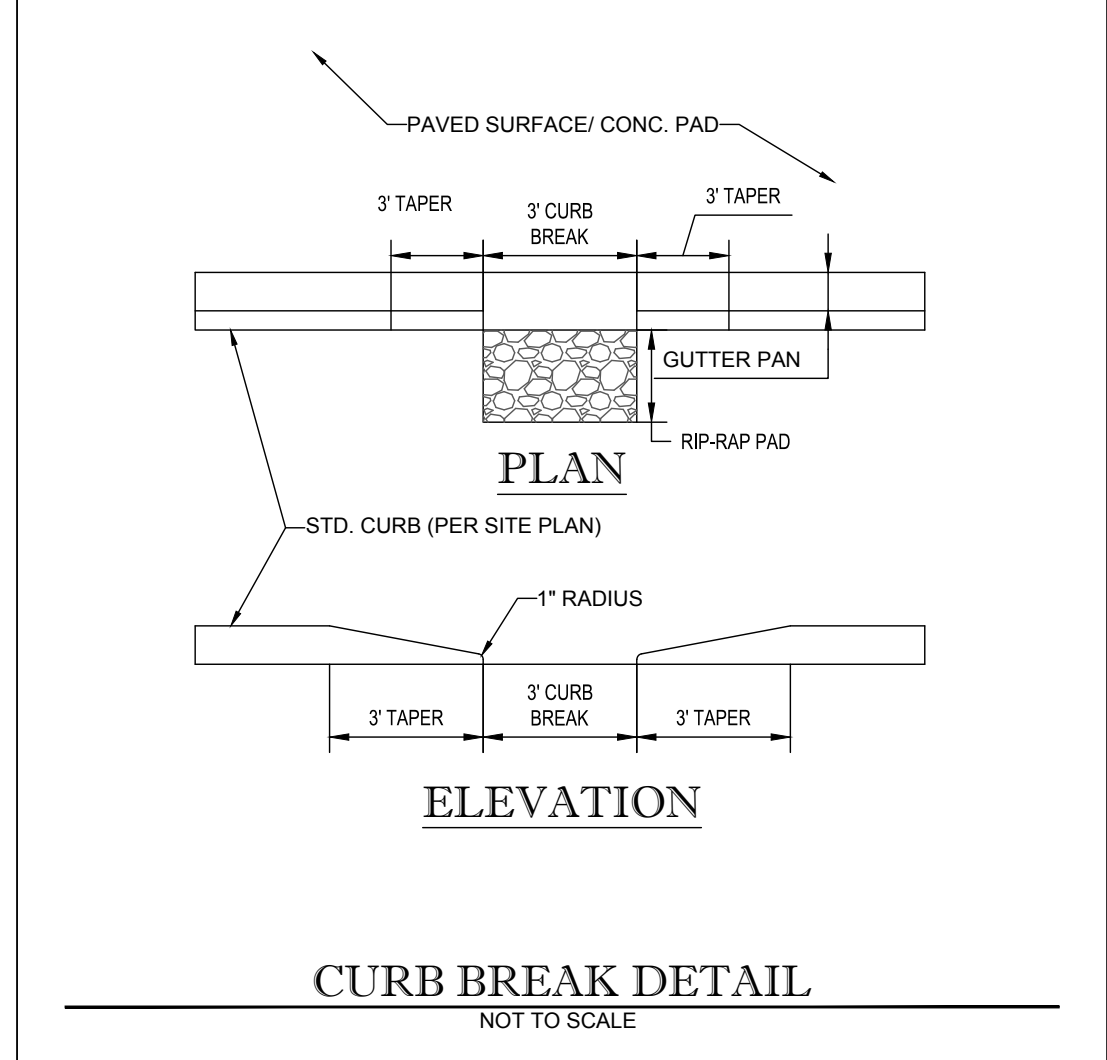
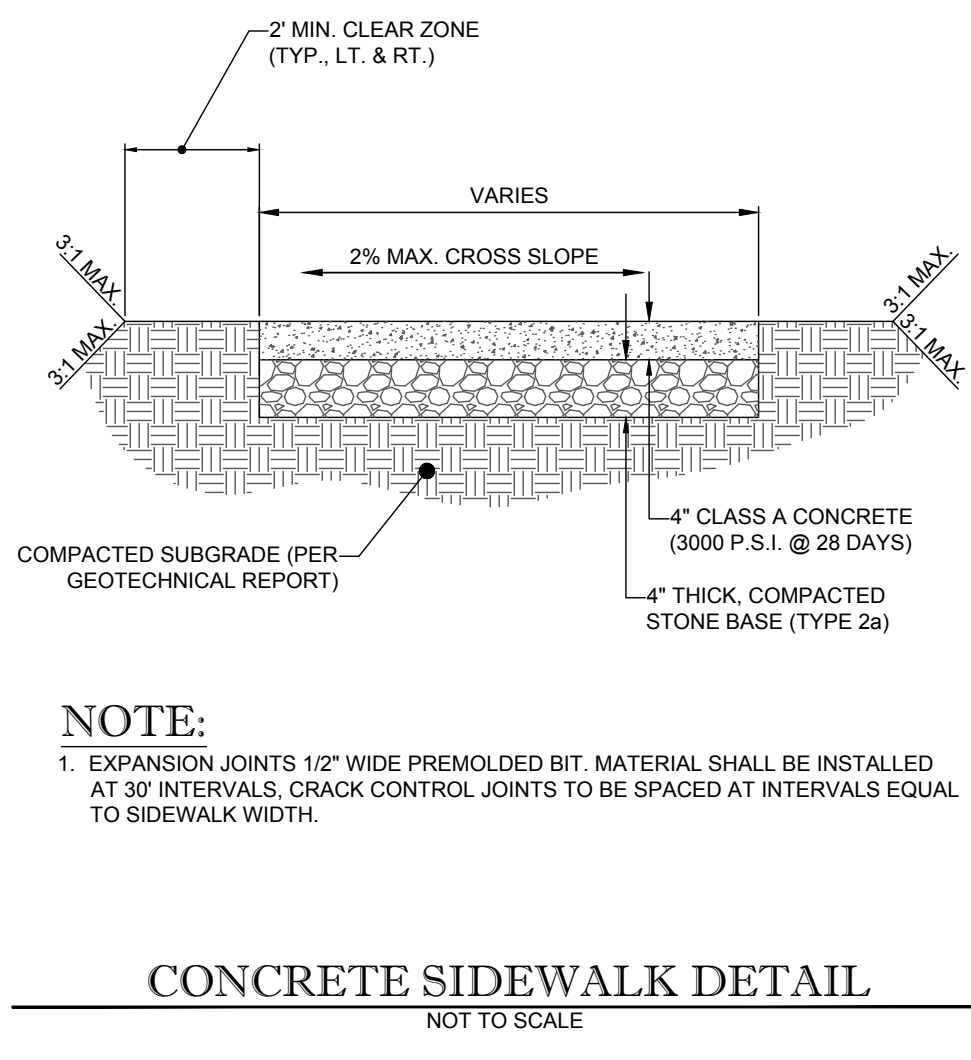
STANDARD DUTY ASPHALT PAVEMENT SECTION
 NOT TO SCALE

ADA ACCESSIBLE RAMP DETAIL
 NOT TO SCALE



NOTES:
 1. CONCRETE FOR CURBING SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,000 P.S.I. @ 28 DAYS.
 2. CONSTRUCTION STAKING FOR CURB INSTALLATION SHALL BE REFERENCED (CUT OR FILL) TO THE TOP OF CURB.
 3. AT CONTRACTOR'S OPTION, THE GUTTER THICKNESS MAY BE INCREASED AT THE EDGE OF PAVEMENT TO MAKE BOTTOM OF GUTTER CONTIGUOUS WITH BOTTOM OF ASPHALT PAVEMENT.
 4. CONTRACTION JOINTS SHALL BE PLACED @ 10'-0" O.C. TOOLED 1/4" (±1/16") WIDE, 1" DEEP. EXPANSION JOINTS SHALL BE PLACED @ 40'-0" INTERVALS, MAXIMUM, AND ALL P.C.'S.
 5. GUTTER PAN SLOPE TO BE ADJUSTED WITHIN ACCESSIBLE PARKING SPACES TO MATCH SLOPE BETWEEN SPOT ELEVATIONS.

CONCRETE CURB & GUTTER DETAIL
 NOT TO SCALE



ELEVATIONS BASED ON NAVD 88. COORDINATES AND MERIDIAN ARE BASED ON THE MARYLAND COORDINATE SYSTEM (MCS) PER MONUMENT'S BCO #1433 AND GIS 2

BOHLER ENGINEERING

SITE CIVIL AND CONSULTING ENGINEERING
 LAND SURVEYING AND CONSTRUCTION ARCHITECTURE
 SUSTAINABLE DESIGN PERMITTING SERVICES TRANSPORTATION SERVICES

CHARLOTTE, NC
 ATLANTA, GA
 BALTIMORE, MD
 BIRMINGHAM, AL
 CHICAGO, IL
 COLUMBIA, SC
 DALLAS, TX
 DENVER, CO
 HOUSTON, TX
 INDIANAPOLIS, IN
 JACKSONVILLE, FL
 KANSAS CITY, MO
 LOS ANGELES, CA
 MEMPHIS, TN
 MIAMI, FL
 MINNEAPOLIS, MN
 NEW YORK, NY
 OKLAHOMA CITY, OK
 PHOENIX, AZ
 RICHMOND, VA
 TAMPA, FL
 WASHINGTON, DC

| REVISIONS | | | |
|-----------|---------|-----------------------------|-----|
| REV | DATE | COMMENT | BY |
| 1 | 8/10/18 | REVISIONS PER MDE | MJG |
| 2 | 12/5/18 | REVISED PER COUNTY COMMENTS | MCO |
| 3 | 2/26/19 | ISSUED FOR CONSTRUCTION | MCO |

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 ALWAYS CALL 811
 BEFORE YOU DIG
 It's fast. It's free. It's the law.

APPROVED FOR
 CONSTRUCTION

PROJECT No.: MD1620661
 DRAWN BY: CBC
 CHECKED BY: MJG
 DATE: 7/6/18
 SCALE: NOT TO SCALE
 CAD I.D.: SD3

PROJECT:
RETAIL DEVELOPMENT ACCESS ROADS
 FOR
TRADEPOINT ATLANTIC PHASE II PLANS

LOCATION OF SITE
 SOUTHWEST CORNER OF BETHELHEM BOULEVARD AT WHARF ROAD
 TAX MAP 111, GRID 14, PARCEL 318
 BALTIMORE, MD 21289
 BALTIMORE COUNTY
 DISTRICT: 07
 DRC#: 010918E
 TRACKING #: DRC-2017-00196

BOHLER ENGINEERING

901 DULANEY VALLEY ROAD, SUITE 801
 TOWSON, MARYLAND 21204
 Phone: (410) 821-7900
 Fax: (410) 821-7987
 MD@BohlerEng.com

ANDREW G. STINE

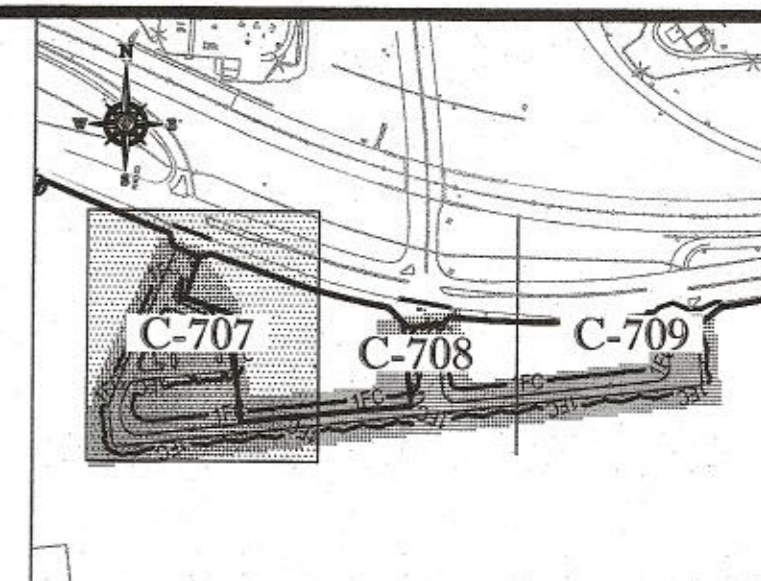
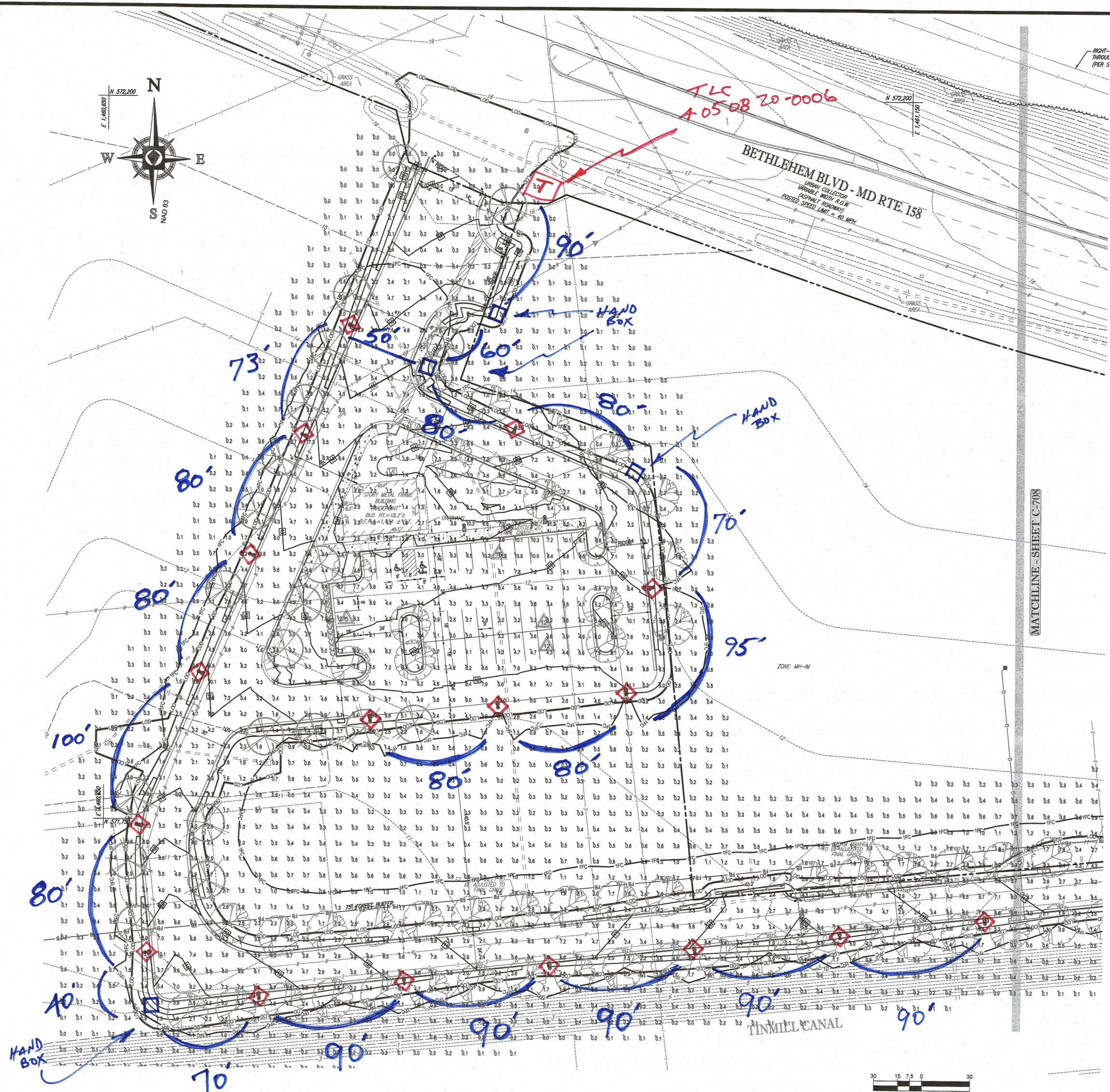
PROFESSIONAL ENGINEER
 MARYLAND LICENSE NO. 37897
 (PROFESSIONAL CERTIFICATION)
 I, ANDREW G. STINE, HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 37897. EXPIRATION DATE: 7/12/19

SHEET TITLE:
SITE DETAILS

SHEET NUMBER:
C-901

19-SF-0005

Attachment 2



KEY MAP
NOT TO SCALE

BOHLER ENGINEERING

SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING AND SURVEYING
SUSTAINABLE DESIGN PERMITTING SERVICES TRANSPORTATION SERVICES

CHARLOTTE, NC
ATLANTA, GA
BALTIMORE, MD
BOSTON, MA
DENVER, CO
FORT LAUDERDALE, FL
HOUSTON, TX
INDIANAPOLIS, IN
LOS ANGELES, CA
MEMPHIS, TN
MIAMI, FL
MINNEAPOLIS, MN
NEW YORK, NY
PHILADELPHIA, PA
PITTSBURGH, PA
RICHMOND, VA
SAN ANTONIO, TX
WASHINGTON, DC

REVISIONS

| REV | DATE | COMMENT | BY |
|-----|---------|-----------------------------|-----|
| 1 | 8/10/18 | REVISIONS PER MDE | MJG |
| 2 | 12/5/18 | REVISED PER COUNTY COMMENTS | MCO |
| 3 | 2/26/19 | ISSUED FOR CONSTRUCTION | MCO |

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APPROVED FOR CONSTRUCTION

PROJECT No.: MD1620661
DRAWN BY: CSC
CHECKED BY: MJG
DATE: 7/6/18
SCALE: AS NOTED
CAD L.D.: LPS

RETAIL DEVELOPMENT ACCESS ROADS FOR

TRADEPOINT ATLANTIC
PHASE II PLANS

LOCATION OF SITE
SOUTHWEST CORNER OF BETHLEHEM
BOULEVARD AT WHARF ROAD
TAX MAP 111, GRID 14, PARCEL 318
BALTIMORE, MD 21289
BALTIMORE COUNTY
DISTRICT: 07
DRC#: 010918E
TRACKING #: DRC-2017-00196

BOHLER ENGINEERING

901 DULANEY VALLEY ROAD, SUITE 801
TOWSON, MARYLAND 21284
Phone: (410) 821-7900
Fax: (410) 821-7987
MD@BohlerEng.com

E.R. McWILLIAMS

REGISTERED LANDSCAPE ARCHITECT
MARYLAND LICENSE NO. 986
PROFESSIONAL CERTIFICATION
ERIC R. McWILLIAMS, HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 3897, EXPIRATION DATE: 8/20/20

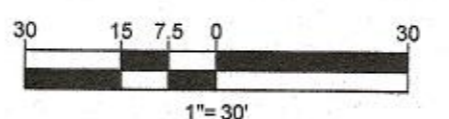
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LIGHTING PLAN

SHEET NUMBER:
C-707

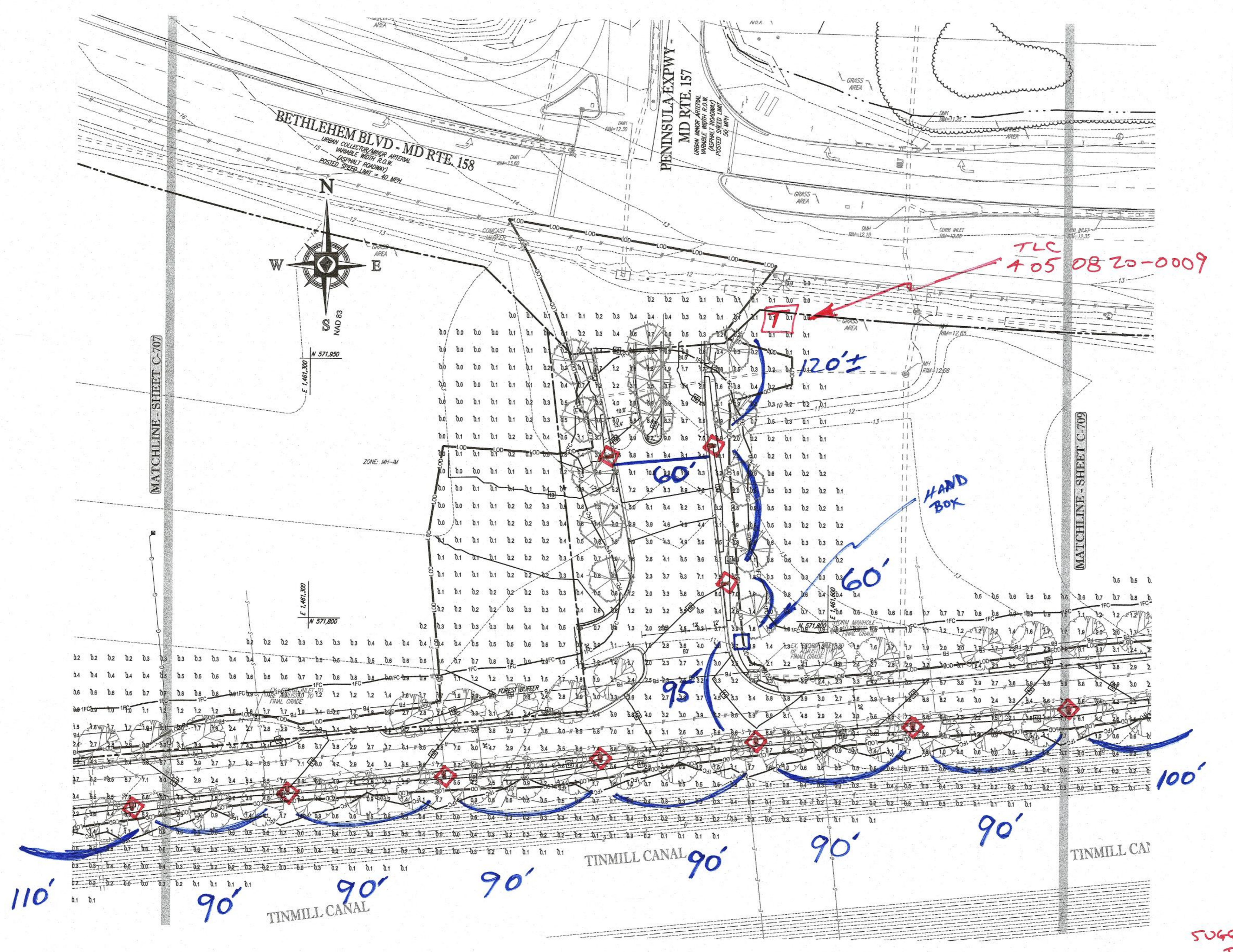
19-SF-0005

SUGGESTED DUCT ROUTES
1 of 3
TZLV
06-17-19

ELEVATIONS BASED ON NAVD 88. COORDINATES AND MERIDIAN ARE BASED ON THE MARYLAND COORDINATE SYSTEM (MCS) PER MONUMENTS BC0 #1433 AND GIS 2

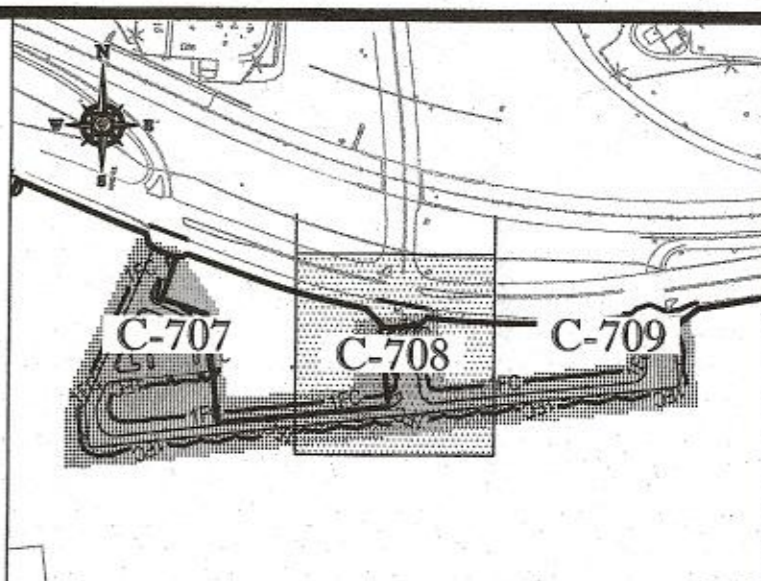


1"=30'



TLC
#05 0820-0009

SUGGESTED DUCT ROUTES
2 of 3
TLC
06.17.19



KEY MAP
NOT TO SCALE

BOHLER ENGINEERING

SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING PROGRAM MANAGEMENT LANDSCAPE ARCHITECTURE
SOIL DESIGN PERMITTING SERVICES TRANSPORTATION SERVICES

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NORTH CHARLOTTE, NC • RICHMOND, VA • CHARLOTTE, NC
NORFOLK, VA • ROANOKE, VA • WASHINGTON, DC

REVISIONS

| REV | DATE | COMMENT | BY |
|-----|---------|-----------------------------|-----|
| 1 | 8/10/18 | REVISIONS PER MDE | MJG |
| 2 | 12/5/18 | REVISED PER COUNTY COMMENTS | MCO |
| 3 | 2/26/19 | ISSUED FOR CONSTRUCTION | MCO |

811

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BEFORE YOU DIG

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APPROVED FOR CONSTRUCTION

PROJECT No.: MD1620561
DRAWN BY: CBC
CHECKED BY: MJG
DATE: 7/6/18
SCALE: AS NOTED
CAD I.D.: LPS

PROJECT: RETAIL DEVELOPMENT ACCESS ROADS FOR

TRADEPOINT ATLANTIC
PHASE II PLANS

LOCATION OF SITE
SOUTHWEST CORNER OF BETHLEHEM BOULEVARD AT WHARF ROAD
TAX MAP 111, GRID 14, PARCEL 318
BALTIMORE, MD 21289
BALTIMORE COUNTY
DISTRICT 07
DRC#: 010618E
TRACKING #: DRC-2017-00196

BOHLER ENGINEERING

901 DULANEY VALLEY ROAD, SUITE 801
TOWSON, MARYLAND 21284
Phone: (410) 821-7900
Fax: (410) 821-7987
MD@BohlerEng.com

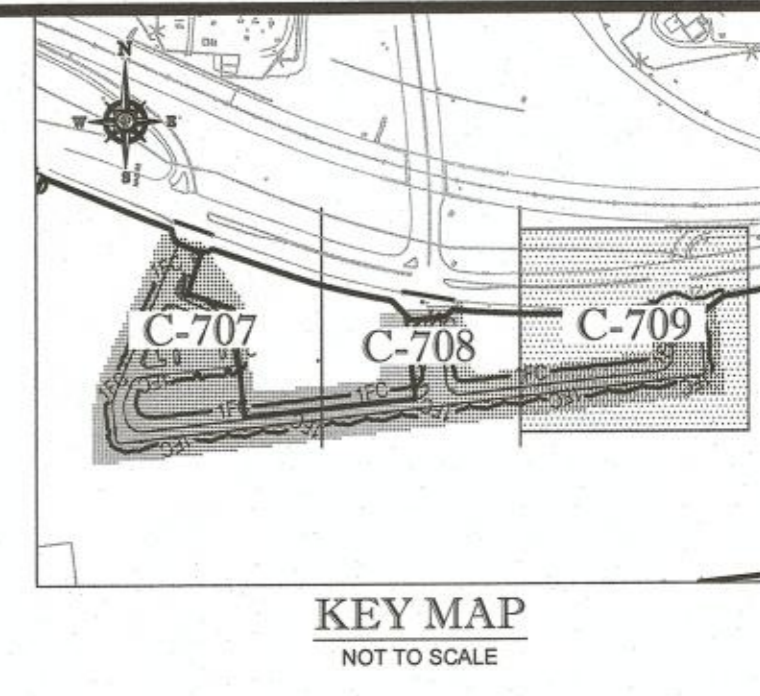
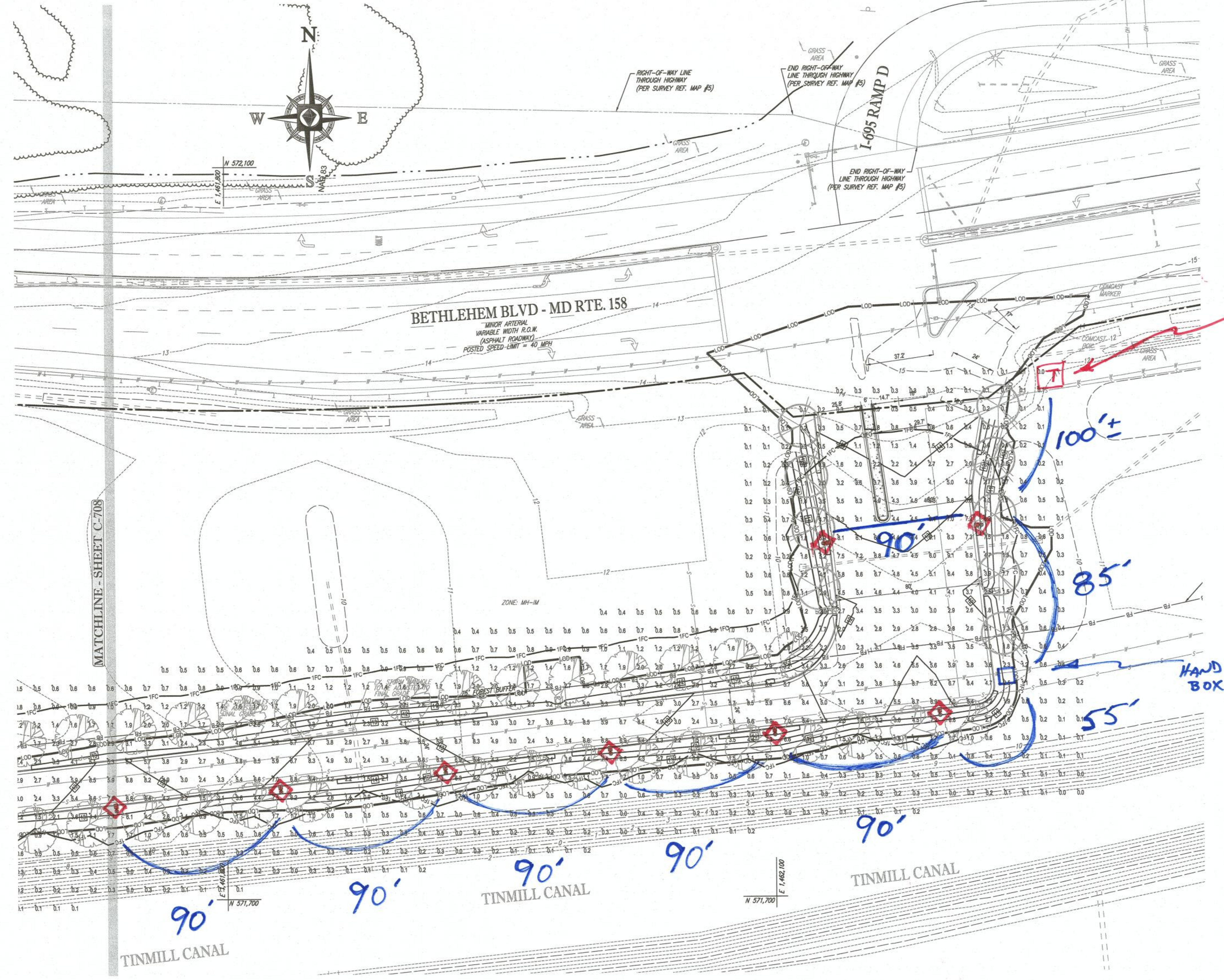
E.R. McWILLIAMS

REGISTERED LANDSCAPE ARCHITECT
MARYLAND LICENSE NO. 3917
PROFESSIONAL CERTIFICATION
I, ERIC R. McWILLIAMS, HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 3917, EXPIRATION DATE: 9/25/22

SHEET TITLE:
LIGHTING PLAN

SHEET NUMBER:
C-708

ELEVATIONS BASED ON NAVD 88, COORDINATES AND MERIDIAN ARE BASED ON THE MARYLAND COORDINATE SYSTEM (MCS) PER MONUMENTS BC0 #1433 AND GIS 2



BOHLER ENGINEERING
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 PHILADELPHIA, PA
 PITTSBURGH, PA
 NEW YORK, NY
 NEW YORK METRO
 NORTHERN NEW JERSEY
 REHOBOTH BEACH, DE
 WASHINGTON, DC

REVISIONS

| REV | DATE | COMMENT | BY |
|-----|---------|-----------------------------|-----|
| 1 | 8/10/18 | REVISIONS PER MDE | MJG |
| 2 | 12/5/18 | REVISED PER COUNTY COMMENTS | MCO |
| 3 | 2/26/19 | ISSUED FOR CONSTRUCTION | MCO |

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APPROVED FOR CONSTRUCTION

PROJECT No.: MD1620861
 DRAWN BY: CBC
 CHECKED BY: MJG
 DATE: 7/8/18
 SCALE: AS NOTED
 CAD I.D.: LPJ

TRADEPOINT ATLANTIC PHASE II PLANS

LOCATION OF SITE
 SOUTHWEST CORNER OF BETHLEHEM BOULEVARD AT WHARF ROAD
 TAX MAP 111, GRID 14, PARCEL 318
 BALTIMORE, MD 21289
 BALTIMORE COUNTY DISTRICT 07
 DR#: 010918E
 TRACKING #: DRC-2017-00196

BOHLER ENGINEERING
 901 DULANEY VALLEY ROAD, SUITE 88, TOWSON, MARYLAND 21284
 Phone: (410) 821-7800
 Fax: (410) 821-7987
 MD@BohlerEng.com

E.R. McWILLIAMS
 REGISTERED LANDSCAPE ARCHITECT
 MARYLAND LICENSE NO. 9897
 PROFESSIONAL CERTIFICATION
 I, ERIC R. McWILLIAMS, HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 9897, EXPIRATION DATE: 9/30/25

SHEET TITLE:
LIGHTING PLAN
 SHEET NUMBER:
C-709
 19-SF-0005

SUGGESTED DUCT ROUTES
 3 of 3
 TRLV
 06.17.19

ELEVATIONS BASED ON NAVD 88. COORDINATES AND MERIDIAN ARE BASED ON THE MARYLAND COORDINATE SYSTEM (MCS) PER MONUMENTS BOOK #1433 AND GIS 2

Attachment 3

Sparrows Point Development - PPE Standard

Operational Procedure, Revision 3

Planning, Tracking/Supervision, Enforcement, and Documentation

Planning

- Response and Development Work Plan (RDWP) for each individual redevelopment sub-parcel identifies and documents site conditions.
- RDWP is reviewed and approved by regulators.
- Contractor HASP to address site-specific conditions and PPE requirements:
 - Contractor H&S professional to sign-off on PPE requirements for site workers;
 - Job Safety Analysis (JSA) to be performed for ground intrusive work.
- Project Environmental Professional (EP) assigned to each construction project – monitors project during environmentally sensitive project phases and is available to construction contractor on an as needed basis. EP responsibilities include the following:
 - Dust monitoring
 - Routine ground intrusive breathing space air monitoring
 - Soil tracking
 - Water handling oversight
 - Ground intrusive work observation
 - Notification for unexpected conditions
- Pre-construction meeting identifies EP roles and responsibilities and reviews site conditions.
- Contractor to perform job-site HazCom. HazCom to be addressed in Contractor HASP and include:
 - PPE requirements,
 - Exposure time limits,
 - Identification of chemicals of concern and potential effects of over-exposure (adverse reactions),
 - Methods and routes of potential exposure.
- All personnel that will be performing ground intrusive work within impacted soils shall sign-off on HazCom.
- If, based on a thorough review of Site conditions, it is expected that construction workers will have the potential to encounter materials considered hazardous waste under RCRA or DOT regulations, HAZWOPER-trained personnel will be utilized.

Tracking/Supervision

- Contractor to record any day that there is ground intrusive work and confirm that proper PPE is being worn.
- EP will note ground intrusive work on daily work sheets and perform at least one spot check per day.
- EP will log on daily work sheets PPE compliance for all intrusive work areas at least once per day.

- EP to take example photos of Exclusion Zones/Contamination Reduction Zones periodically.

Work Zones Delineation

- Exclusion Zone – The Exclusion Zones will include the areas proposed for excavation or with active trenches, excavations, or ground intrusive work, at a minimum. Personnel working within the exclusion zone will be required to wear Modified Level D PPE as described in this SOP. EP to take example photos of Exclusion Zones/Contamination Reduction Zones periodically. The Exclusion Zones will be identified each work day.
- Contamination Reduction Zone – This work zone is located outside of the exclusion zone, but inside of the limits of development (LOD). The Contamination Reduction Zone will be located adjacent to the Exclusion Zone, and all personal decontamination including removal of all disposable PPE/removal of soil from boots will be completed in the Contamination Reduction Zone.

Documentation

- Contractor HASP and HazCom.
- Contractor ground intrusive tracking record.
- HASP and HazCom sign-in sheets.
- EP pre-con memos.
- EP daily work sheets.
- Records documenting intrusive work and proper PPE use to be provided in completion report.

Enforcement

- Non-compliance of PPE requirements will result in disciplinary action up to and including prohibition from working on Sparrows Point.

Unknown and/or Unexpected Conditions

If unknown and/or unexpected conditions are encountered during the project that the EP determines to have a reasonable potential to significantly impact construction worker health and safety, the following will be initiated:

1. Job stoppage,
2. TPA and MDE notification,
3. Re-assessment of conditions.

Work will not continue until EP has cleared the area. If hazardous waste is identified, a HAZWOPER contractor will be brought in to address. The approved contingency plan will be implemented, where appropriate.

Modified Level D PPE

Modified Level D PPE will include, at a minimum, overalls such as polyethylene-coated Tyvek or clean washable cloth overalls, latex (or similar) disposable gloves (when working in wet/chemical surroundings) or work gloves, steel-toe/steel-shank high ankle work boots with taped chemical-protective over-boots (as necessary), dust mask, hard hat, safety glasses with

side shields, and hearing protection (as necessary). If chemical-protective over-boots create increased slip/trip/fall hazardous, then standard leather or rubber work boots could be used, but visible soils from the sides and bottoms of the boots must be removed upon exiting the Exclusion Zone.

SP Development PPE Procedure 4-3-19