

ARM Group LLC

Engineers and Scientists

August 26, 2020

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

Re: RADWP Addendum
Area B: Sub-Parcel B6-3
Tradepoint Atlantic
Sparrows Point, MD 21219

Dear Ms. Brown:

On behalf of EnviroAnalytics Group, LLC (EAG), ARM Group LLC (ARM) is pleased to submit the following Response and Development Work Plan (RADWP) Addendum to the Maryland Department of the Environment (MDE) and the United States Environmental Protection Agency (USEPA). This RADWP Addendum is being submitted to document proposed modifications to the utility plan for the Sub-Parcel B6-3 development project on the Tradepoint Atlantic property located in Sparrows Point, Maryland. This includes modifications to external utility alignments and tie-in locations.

A RADWP is currently being implemented for Sub-Parcel B6-3. The previously submitted RADWP (Revision 1 dated June 17, 2020) was approved by the MDE and USEPA via email on June 22, 2020.

Project Description

The proposed work will include modifications to stormwater, sanitary sewer and force main, gas, electric, and telephone utility alignments and connection tie-ins to the Sub-Parcel B6-3 facility. Several alignments will be completed outside of the Sub-Parcel B6-3 boundary in external construction areas. The proposed stormwater utility will extend north to connect to the Tin Mill Canal (TMC). The sanitary sewer and force main utility will connect to an existing force main system to the northeast. Proposed gas, electric, and telephone connection tie-ins will be completed at the southeastern corner of Sub-Parcel B6-3 at Sparrows Point Boulevard. Note that, because the utility alignments have changed, the areas originally designated as "External Construction" areas in the approved RADWP are superseded by this revised plan.

Appendix A contains selected project construction drawings for the proposed work. *Sheet C-501* provides an overview of the proposed utility alignments, and *Sheet C-502* through *Sheet C-505* present the detail drawings. **Figure 1** provides an overview of the proposed work, incorporating the information shown on *Sheet C-501* to indicate the amended utility alignments as well as the associated limit of disturbance (LOD) for the development project.

Note that the installation of the outfall piping at the TMC has already been completed. This work was completed using OSHA certified HAZWOPER trained construction crews. The contractor has been instructed to cease all work on the TMC. The section of disturbed cap within the TMC will be replaced as originally constructed with a geotextile filter fabric overlain by rip-rap lining up to the final top of bank grade (with a minimum cap thickness of 2 feet). Work has been discontinued at the TMC until this Addendum is approved. The final capping will be performed by OSHA certified HAZWOPER trained construction crews. With the exception of the TMC outfall, the work covered by this Addendum does not include disturbances of any pre-existing cap.

Summary of Environmental Conditions

Proposed work extends outside of the area previously addressed by the Sub-Parcel B6-3 RADWP. Therefore, supplemental soil and groundwater data proximate to the proposed utility alignments and connection tie-ins are provided herein.

Soil boring locations from the Parcel B6 Phase II Investigation relevant to Sub-Parcel B6-3 are shown on **Figure S1** and **Figure S2**. One new soil boring location (B6-075-SB) has been selected as it provides relevant soil data in the vicinity of the stormwater and sanitary sewer force main near the northern end of the project. Soil sample results that exceeded the Project Action Limits (PALs) at the soil borings, including this new location, are shown on **Figure S1** and **Figure S2**. Arsenic was the only PAL exceedance at B6-075-SB.

Groundwater sampling locations from the Finishing Mills Groundwater Phase II Investigation relevant to Sub-Parcel B6-3 are shown on **Figure GW1**. One new groundwater sample location (TM18-PZM005) has been selected to characterize groundwater around the modified utility alignments. Aqueous PAL exceedances at this location include two SVOCs (benz[a]anthracene and naphthalene), two inorganics (total lead and manganese), and DRO. Based on groundwater elevation data obtained during the Finishing Mills Groundwater Phase II Investigation, groundwater may be encountered during ground intrusive work including excavations and utility trenching. All groundwater encountered will be managed in accordance with the protocols outlined in the RADWP, as specified below.

General Work Requirements

The construction of the proposed utilities will remain subject to the development implementation protocols outlined in the RADWP, including but not limited to the following:



- Oversight will be provided by an Environmental Professional (EP) during ground intrusive construction activities to ensure compliance with soil screening requirements, and proper water management.
- Development activities will be conducted under the property-wide Health and Safety Plan (provided as Appendix H of the RADWP).
- Any ground intrusive work will be performed using Modified Level D Personal Protective Equipment (PPE) in accordance with the requirements outlined in the approved PPE Standard Operational Procedure (SOP) (provided as Appendix C of the RADWP).
- Erosion and sediment controls will be installed as required.
- Dust monitoring will be implemented as required (see Section 5.1.5 of the RADWP).
- If dewatering is necessary, sampling and disposal will be conducted as required (see Section 5.2.2 of the RADWP).
- The Utility Excavation NAPL Contingency Plan will be implemented as required (provided as Appendix G of the RADWP).

In accordance with the RADWP, all utility trenches will be backfilled with bedding and backfill materials approved by the MDE. During field screening by the EP, if there is no evidence of significant contamination (i.e., elevated PID readings, staining, petroleum materials, etc.) the excavated materials will be proposed as backfill within the utility trenches, or placed elsewhere on the Sub-Parcel B6-3 under areas to be capped. The EP will monitor the soil excavation activities for signs of significantly contaminated material which may not be suitable for reuse. In general, all excavated materials are expected to be suitable for replacement within the utility trenches.

Any notable or non-standard conditions, including but not limited to staining, strong odors, discoloration, evidence of NAPL, or other evidence of contamination which has not previously been characterized, will be reported to the MDE. If required, preventive measures will be implemented in accordance with the Utility Excavation NAPL Contingency Plan to prevent the discharge to, or migration of, petroleum product along a utility conduit via 1) the use of low permeability backfill or 2) installation of trench plugs along the alignment.

Schedule & Reporting

As noted above, Modified Level D PPE will be used throughout the implementation of this utility installation fieldwork in accordance with the approved SOP to ensure Construction Worker safety. Tradepoint Atlantic intends to complete tying in and capping the TMC outfall upon agency approval, with an estimated completion date of September 2020. The modified utility installations and tie-ins will be documented in the same Development Completion Report as the remainder of Sub-Parcel B6-3.



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

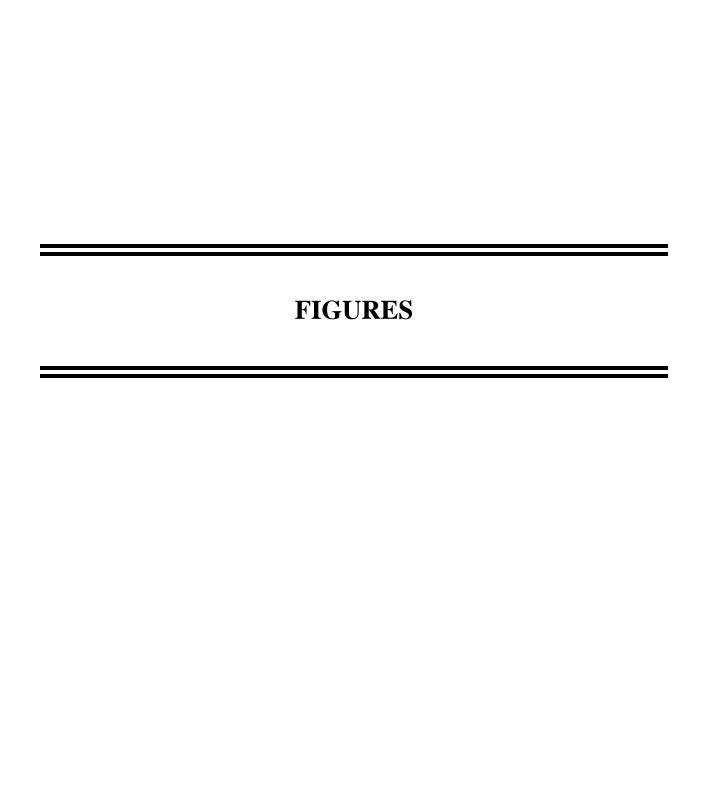
Respectfully Submitted, ARM Group LLC

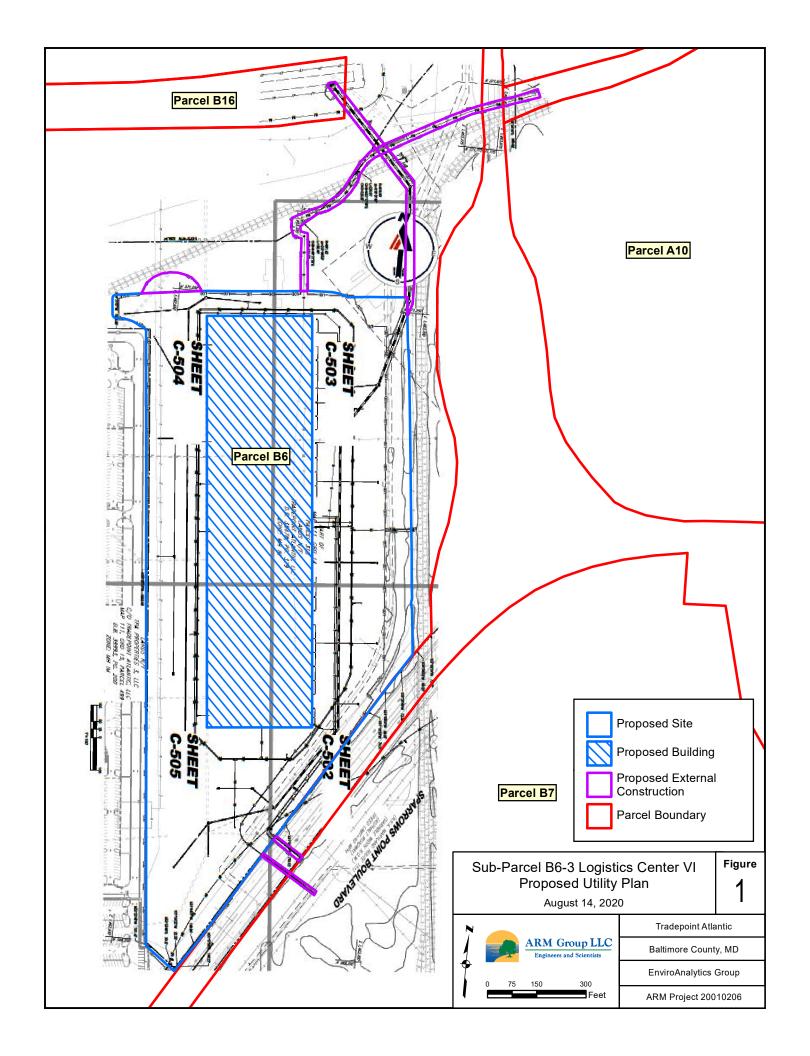
Joshua M. Barna, G.I.T.

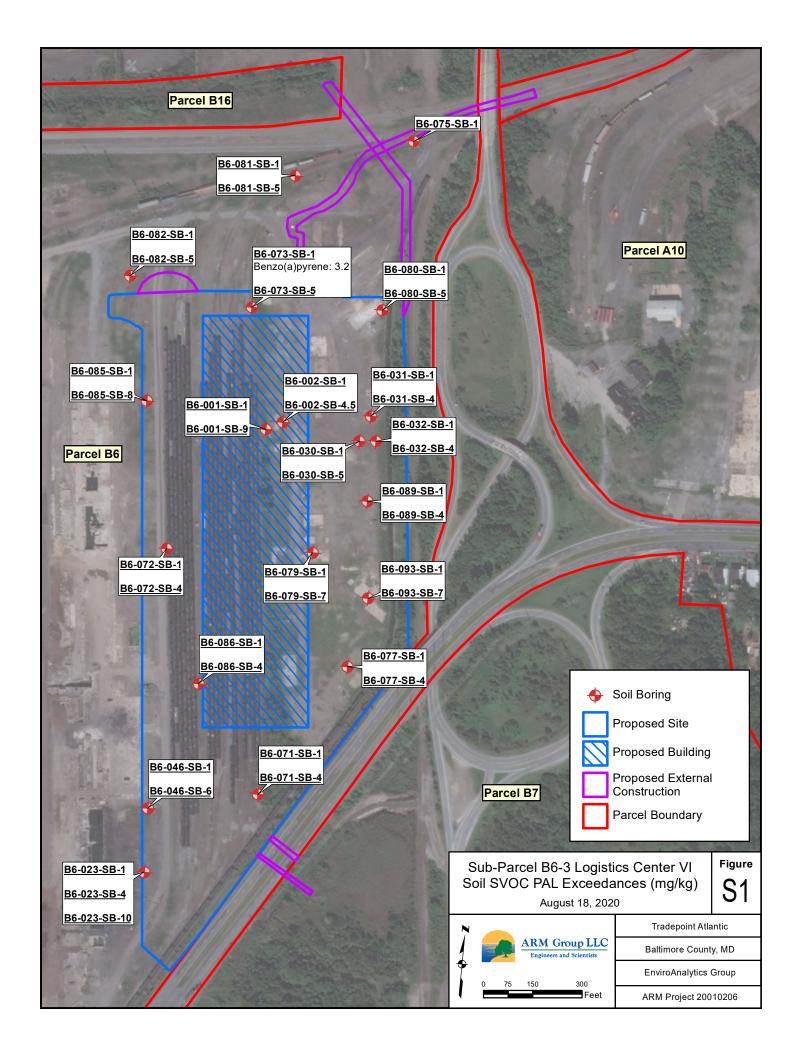
Staff Geologist

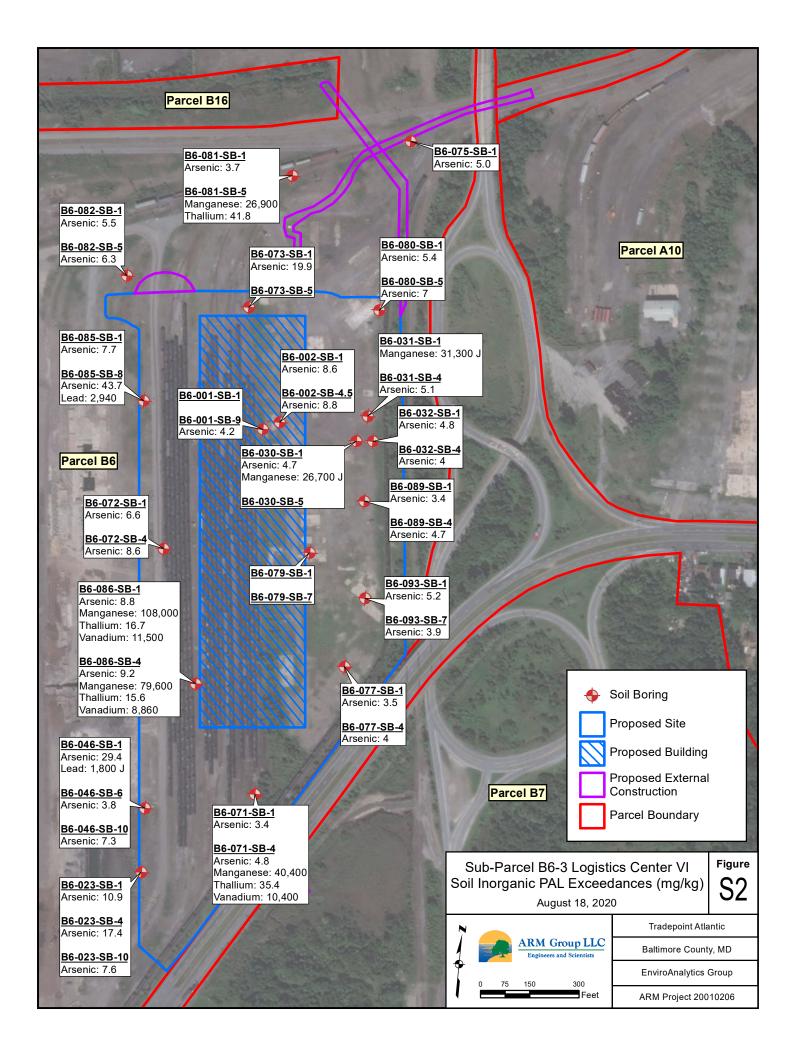
T. Neil Peters, P.E. Senior Vice President

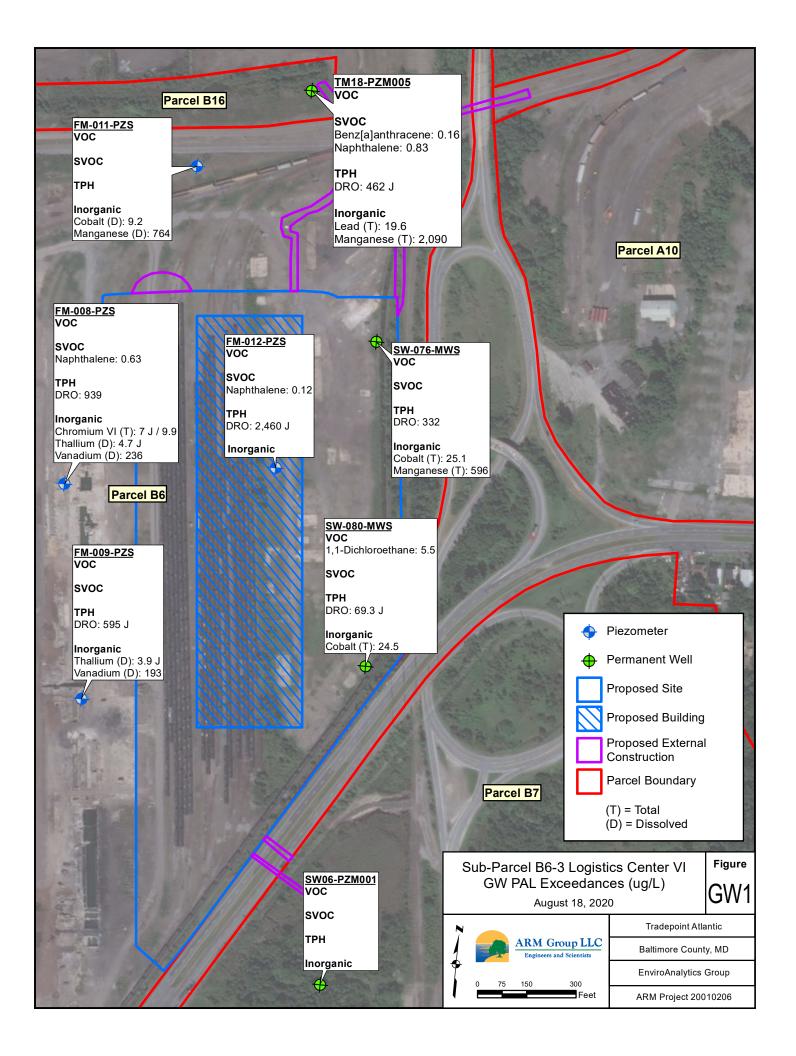












APPENDIX A

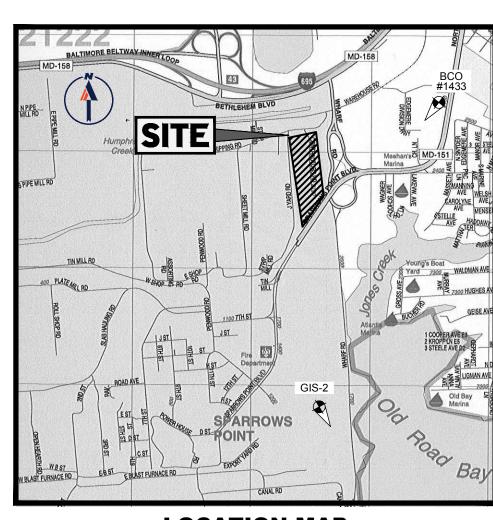
STANDARD DRAWING LEGEND FOR ENTIRE PLAN SET		Al	STANDARD ABBREVIATIONS	
LIMIT OF	WORK	LOWLOW		FOR ENTIRE PLAN SET
	DISTURBANCE	LODLOD	AC	ACRES
EXISTING NOTE	TYPICAL NOTE TEXT	PROPOSED NOTE	ADA	AMERICANS WITH DISABILITY ACT
	ONSITE PROPERTY		ARCH	ARCHITECTURAL
	LINE / R.O.W. LINE NEIGHBORING		BC BF	BOTTOM OF CURB
	PROPERTY LINE / INTERIOR PARCEL LINE		BK	BASEMENT FLOOR BLOCK
	EASEMENT		BL	BASELINE
	LINE		BLDG	BUILDING
	SETBACK LINE		ВМ	BUILDING BENCHMARK
			BRL	BUILDING RESTRICTION LINE
			CF	CUBIC FEET
		CURB AND GUTTER	CL	CENTERLINE CORRUGATED METAL PIPE
	CONCRETE CURR 8	SPILL TRANSITION	CONN	CONNECTION
	CONCRETE CURB & GUTTER	DEDDESCED CHIDA AND CHITED	CONC	CONCRETE
		DEPRESSED CURB AND GUTTER	CPP	CORRUGATED PLASTIC PIPE
	UTILITY POLE		CY	CUBIC YARDS
•	WITH LIGHT		DEC	DECORATIVE
	POLE LIGHT		DEP	DEPRESSED DUCTILE IRON PIPE
	TRAFFIC		DOM	DOMESTIC
□ €	LIGHT	□ €	ELEC	ELECTRIC
0	UTILITY	0	ELEV	ELEVATION
П	POLE	П	EP	EDGE OF PAVEMENT
	TYPICAL LIGHT		ES	EDGE OF SHOULDER
\$	ACORN	\$	EW	END WALL
T	LIGHT	T	EX	EXISTING CECTION
<u> </u>	TYPICAL SIGN		FES	FLARED END SECTION
\wedge	PARKING	\wedge	FF FH	FINISHED FLOOR FIRE HYDRANT
<u>/ </u>	COUNTS	<u>/ X \</u>	FG	FINISHED GRADE
			G	GRADE
	CONTOUR	190	GF	GARAGE FLOOR (AT DOOR)
169	CONTOUR LINE	187	GH	GRADE HIGHER SIDE OF WALL
	SPOT	TC 516.00 TC 516.00 MATCH EX	GL	GRADE LOWER SIDE OF WALL
TC 516.4 OR 516.4	ELEVATIONS	BC 515.55 (518.02 ±)	GRT	GRATE
			GV	GATE VALVE
SAN	SANITARY	SAN	HDPE	HIGH DENSITY POLYETHYLENE PIPE
	LABEL	#	HP	HIGH POINT
X #	STORM LABEL	X #	HOR	HORIZONTAL
	SANITARY SEWER	SL	HW	HEADWALL
SZ	LATERAL		INT	INTERSECTION INVERT
W	UNDERGROUND WATER LINE	W	LF	LINEAR FOOT
	UNDERGROUND	_	LOC	LIMITS OF CLEARING
E	ELECTRIC LINE	——Е—	LOD	LIMITS OF DISTURBANCE
	UNDERGROUND GAS LINE	G	LOS	LINE OF SIGHT
			LP	LOW POINT
OH	OVERHEAD WIRE	——————————————————————————————————————	L/S	LANDSCAPE
	UNDERGROUND		MAX	MAXIMUM
	TELEPHONE LINE		MIN	MINIMUM MANHOLE
C	UNDERGROUND CABLE LINE	c	MH	MECHANICAL JOINT
	STORM		OC	ON CENTER
	SEWER		- PA	POINT OF ANALYSIS
	SANITARY SEWER MAIN	s ————	PC	POINT CURVATURE
**	HYDRANT	7	PCCR	POINT OF COMPOUND
~~~			PI	CURVATURE, CURB RETURN POINT OF INTERSECTION
S	SANITARY MANHOLE		POG	POINT OF INTERSECTION  POINT OF GRADE
	STORM		PROP	PROPOSED
(U)	MANHOLE	((())	PT	POINT OF TANGENCY
⊗ ^{WM}	WATER METER	•	PTCR	POINT OF TANGENCY,
WV		_	PVC	CURB RETURN POLYVINYL CHLORIDE PIPE
$\bowtie$	WATER VALVE			POINT OF VERTICAL
	GAS		PVI	INTERSECTION
	VALVE	_	PVT	POINT OF VERTICAL TANGENCY
	GAS METER		RCP	RADIUS  REINFORCED CONCRETE PIPE
	TYPICAL END		RCP RET WALL	REINFORCED CONCRETE PIPE RETAINING WALL
	SECTION		RET WALL	RETAINING WALL RIGHT OF WAY
OR	HEADWALL OR ENDWALL	<b>J</b> OR	S	SLOPE
(mm)	GRATE	_	SAN	SANITARY SEWER
	INLET	■	SF	SQUARE FEET
	CURB INLET	<b>○</b>	STA	STATION
	CLEAN	_	STM	STORM
0	OUT	0	S/W	SIDEWALK
E	ELECTRIC MANHOLE	E	TBR TBRL	TO BE REMOVED  TO BE RELOCATED
	MANHOLE	_	TBRL	TO BE RELOCATED  TOP OF CURB
7	TELEPHONE MANHOLE	(T)	TELE	TELEPHONE
[EB]	ELECTRIC	EB	TPF	TREE PROTECTION FENCE
[EU]	BOX		TW	TOP OF WALL
EP	ELECTRIC PEDESTAL	EP	TYP	TYPICAL
	1	1	UG	UNDERGROUND
			UP	UTILITY POLE
	MONITORING		W	WIDE
	WELL		W/L	WATER METER
	TEST PIT	🖶	W/M	WATER METER
	""	I	⊢ ±	PLUS OR MINUS
<u> </u>	BENCHMARK		0	
				DEGREE DIAMETER

# PROJECT VIPER



# MASS GRADING PLANS

**LOCATION OF SITE** 1800 SPARROWS POINT BOULEVARD BALTIMORE, MD 21219 TM 111, GRID 14, PARCEL 318 **ELECTION DISTRICT 15 COUNCILMANIC DISTRICT 7 BALTIMORE COUNTY** 



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

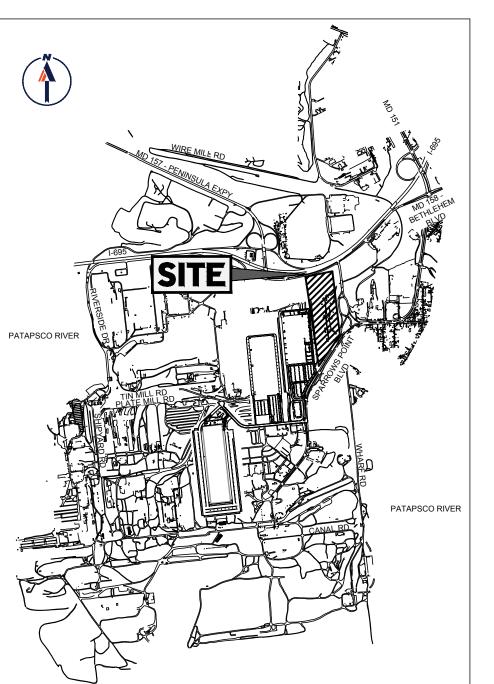
<u>GENERAL NOTE:</u> T IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL OF THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THIS PROJEC

ORK SCOPE PRIOR TO THE INITIATION OF CONSTRUCTION, SHOULD THE CONTRACTOR FIND A CONFLICT WITH THE DOCUMENTS RELATIVE THE SPECIFICATIONS OR APPLICABLE CODES, IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE PROJECT ENGINEER OF RECORD IN WRITING PRIOR TO THE START OF CONSTRUCTION. FAILURE BY THE CONTRACTOR TO NOTIFY THE PROJECT ENGINEER SHALL CONSTITUTE

EPTANCE OF FULL RESPONSIBILITY BY THE CONTRACTOR TO COMPLETE THE SCOPE OF THE WORK AS DEFINED BY THE DRAWINGS AN

OWNER/DEVELOPER

1600 SPARROWS POINT BLVD BALTIMORE, MD 21219 CONTACT: JOHN MARTIN III, PE PHONE: 301-651-3656



**VICINITY MAP** 

PREPARED BY



CONTACT: MICHAEL J. GESELL, P.E.

# **ISSUED FOR CONSTRUCTION**

SIGNATURE DATE SIGNATURE DATE

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

REVISION DATE

#### REFERENCES

- **♦ EXISTING CONDITIONS** CAD FILES PROVIDED BY TRADEPOINT ATLANTIC ENTITLED: "BASE - UTILITIES", "BASE - TOPO", "BASE -RECEIVED: 5/27/16
- ENTITLED: "ROUGH GRADING PLAN LOGISTICS CENTER VI" PREPARED BY: BOHLER ENGINEERING
- ENTITLED: "TOPOGRAPHIC SURVEY, TRADE POINT B6 EAST, 1600 SPARROWS POINT ROAD, 15TH ELECTION DISTRICT, BALTIMORE COUNTY, MARYLAND" PREPARED BY: BOHLER ENGINEERING

♦ 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: 1068 N. FRONT ST. ROOM 401 BALTIMORE, MD 21202 PHONE: (410) 850-4620

#### **GOVERNING AGENCIES**

- ◆ BALTIMORE COUNTY DEPARTMENT OF PUBLIC WORKS 111 WEST CHESAPEAKE AVENUE TOWSON, MD 21204
- ♦ MARYLAND DEPARTMENT OF THE **ENVIRONMENT**

CONTACT: STEVE WALSH PHONE: (410) 887-3306

1800 WASHINGTON BOULEVARD BALTIMORE, MD 21230 PHONE: (410) 537-4311

PHONE: (410) 887-4488

- ♦ BALTIMORE COUNTY DEPARTMENT OF **ENVIRONMENTAL PROTECTION AND SUSTAINABILIT** 111 WEST CHESAPEAKE AVENUE, ROOM 319 TOWSON, MD 21204 CONTACT: KRITTY UDHIN, P.E.
- **BALTIMORE COUNTY DEPARTMENT** OF DEVELOPMENT MANAGEMENT 111 WEST CHESAPEAKE AVENUE TOWSON, MD 21204 CONTACT: LLOYD MOXLEY PHONE: (410) 887-3321

#### **UTILITY CONTACTS**

COMCAST BUSINESS SERVICES 5001 METRO DRIVE BALTIMORE, MD 21215 PHONE: (800) 391-3000 ♦ <u>TELEPHONE</u>

99 SHAWAN ROAD COCKEYSVILLE, MD 21030 PHONE: (410) 393-5793

PHONE: (410) 887-3306

♦ STORM DRAIN:

BALTIMORE COUNTY DEPARTMENT OF PUBLIC 111 WEST CHESAPEAKE AVENUE TOWSON, MD 21204 CONTACT: STEVE WALSH

SHEET INDEX	
SHEET TITLE	SHEET NUMBER
COVER SHEET	C-101 (E&S 1 OF 15)
GENERAL NOTES	C-102
OVERALL MASS GRADING PLAN	C-401 (GRADING 1 OF 6)
MASS GRADING PLAN	C-402 - C-405 (GRADING 2 - 5 OF 6)
OVERALL UTILITY PLAN	C-501
UTILITY PLAN	C-502 - C-505
STORM PIPE AND STRUCTURE SCHEDULES	C-506 (GRADING 6 OF 6)
SANITARY SEWER PIPE AND STRUCTURE SCHEDULES	C-507
OVERALL PHASE I EROSION AND SEDIMENT CONTROL PLAN	C-601 (E&S 2 OF 15)
PHASE I EROSION AND SEDIMENT CONTROL PLAN	C-602 - C-605 (E&S 3 - 6 OF 15)
PHASE I EROSION AND SEDIMENT CONTROL DRAINAGE AREA MAP	C-606 (E&S 7 OF 15)
OVERALL PHASE II EROSION AND SEDIMENT CONTROL PLAN	C-607 (E&S 8 OF 15)
PHASE II EROSION AND SEDIMENT CONTROL PLAN	C-608 - C-611 (E&S 9 - 12 OF 15)
PHASE II EROSION AND SEDIMENT CONTROL DRAINAGE AREA MAP	C-612 (E&S 13 OF 15)
EROSION AND SEDIMENT CONTROL NOTES AND DETAILS	C-613 - C-614 (E&S 14 - 15 OF 15)
STORM DRAIN PROFILES	C-801 - C-805
WATER LINE PROFILES	C-806 - C-814
SANITARY SEWER PROFILES	C-815 - C-817
FORCE MAIN PROFILES	C-818
CONSTRUCTION DETAILS	C-901 - C-902

#### 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

#### **CONSULTANT'S CERTIFICATION:**

REVIEWED AND APPROVED FOR SEDIMENT

**CONTROL UNDER SECTION 4-105** 

MARYLAND DEPARTMENT OF THE ENVIRONMENT

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

SIGNATURE CONSULTANT MICHAEL J. GESELL, PE

44097 MD LICENSE NUMBER E&S 1 OF 15

MDE PROJECT #:20-SF-0155

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

TRACKING # DRC-2020-00034; DRC# 032420E; DIST 1

## **REVISIONS** REV DATE COMMENT

			CHECKED BY
1	05/26/2020	REV. PER MDE	MJG
	05/26/2020	COMMENTS	MJG
2	6/19/2020	REVISED TO LOWER	MJR
	0/19/2020	SITE	MJG
3	7/7/2020	REV. PER ARCHITECT	RMS
J	11112020	COMMENTS	MJG
4	7/27/20	REV PER CLIENT	ISL
	1121120	COMMENT	MJG



**ALWAYS CALL 811** It's fast. It's free. It's the law.

#### NOT APPROVED FOR CONSTRUCTION

DRAWN BY:

#### PROJECT VIPER LC VI



MASS GRADING PLANS

1800 SPARROWS POINT BOULEVARD BALTIMORE, MD 21219 TM 111, GRID 14, PARCEL 318 **ELECTION DISTRICT 15** COUNCILMANIC DISTRICT 7 BALTIMORE COUNTY

901 DULANEY VALLEY ROAD, SUITE 80 **TOWSON, MARYLAND 21204** Phone: (410) 821-7900 Fax: (410) 821-7987 MD@BohlerEng.com

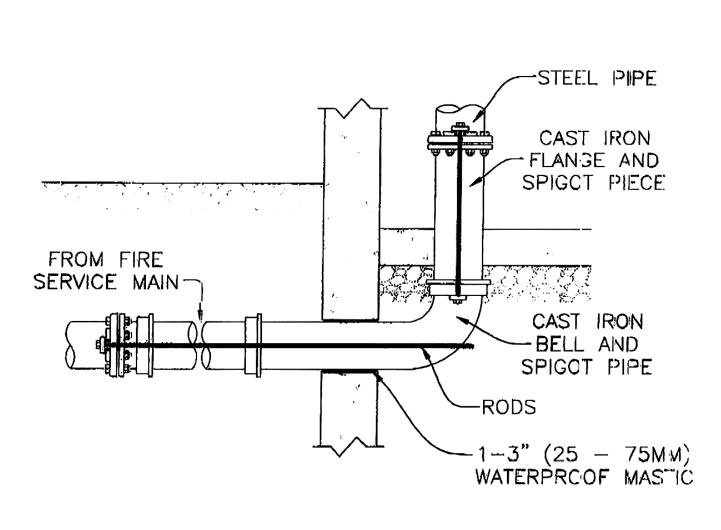
M.J. GESELL

PROFESSIONAL ENGINEER MARYLAND LICENSE No. 44097
PROFESSIONAL CERTIFICATION

I, MICHAEL J. GESELL, HEREBY CERTIFY THAT THESE OCUMENTS 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. 44097, EXPIRATION DATE: 6/9/21

**COVER** SHEET

C-101



### TYPICAL CONNECTION TO STANDPIPE RISER NOT TO SCALE

#### BALTIMORE COUNTY FIRE LINE UTILITY NOTES

- THE OVERALL INSTALLATION AND DESIGN SHALL BE IN COMPLIANCE WITH NFPA 24, 2007 EDITION, "STANDARD FOR THE INSTALLATION OF PRIVATE FIRE SERVICE MAINS AND THEIR APPURTENANCES"; THE BALTIMORE COUNTY DEPARTMENT OF PUBLIC WORKS, "STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION:; AND THE BALTIMORE COUNTY DEPARTMENT OF PUBLIC WORKS "DESIGN MANUAL".
- 2. ALL RODDING, CLAMPS, NUTS, BOLTS, AND OTHER RESTRAINING DEVICES EXCEPT THRUST BLOCKS, SHALL BE CLEANED AND COATED WITH BITUMINOUS OR ASPHALT. NFPA 24, 2007 EDITION, SECTION 10.8.3.5.
- 3. FERROUS METAL PIPING, IF UTILIZED, SHALL BE LINED, AND STEEL PIPE SHALL BE COATED AND WRAPPED. NFPA 24, 2007 EDITION, SECTIONS 10.1.2, 10.1.3,
- 4. ALL PIPING . FITTINGS. AND JOINTS SHALL MEET THE REQUIREMENTS SET FORTH IN NFPA 24, 2007 EDITION. SECTION 10.1 THROUGH 10.3.5.
- THRUST BLOCKS SHALL BE PROVIDED AT ALL CHANGES IN DIRECTION IN THE PIPELINE, AND AT ALL TEES, PLUGS, CAPS, AND BENDS. THRUST BLOCKS SHALL CONFORM TO THE BEARING AREAS NOTED IN THE TEXT OF THE STANDARD AND CONFIGURATIONS NOTED IN THE APPENDIX. NFPA 24, 2007 EDITION.
- 6. ALL VALVES (>2") CONTROLLING WATER SUPPLIES SHALL BE INSTALLED IN STANDARD VAULTS AS DETAILED BY THE BCDPW "STANDARD SPECIFICATION AND DETAILS FOR CONSTRUCTION" MANUAL, OR SHALL UTILIZE APPROVED POST INDICATOR VALVES. ROADWAY BOXES ARE NOT ACCEPTABLE. NFPA 24, 2007 EDITION, SECTIONS 6.1, 6.3 AND 6.4; BCDPW "DESIGN MANUAL", WATER MAIN SECTION, SECTION 2-4.7.
- FIRE HYDRANTS, PUBLIC AND PRIVATE SHALL BE UL LISTED OR BE FM OR BALTIMORE COUNTY DEPARTMENT OF PUBLIC WORKS APPROVED THREE (3) OUTLET HYDRANTS. OUTLETS SHALL BE 2-2 1 NST AND 1-4 1 BALTIMORE COUNTY STEAMER THREAD. NFPA 24, 2007 EDITION, SECTION 7.1.1 AND 7.1.1.2 BCDPW "DESIGN MANUAL", SECTION 2-4.4 STEAMER THREAD, AS DETAILED ON BCDPW PLATE W-3C, DATED 3/5/82. BALTIMORE COUNTY BILL 48-10 SECTION
- FIRE HYDRANTS SHALL HAVE A CENTERLINE SET BACK FROM THE CURB OF 24" AND SHALL HAVE THE CENTERLINE OF THE 4-1/2" STEAMER CONNECTION NO LESS THAN 17" NOR MORE THAN 30" ABOVE FINISHED GRADE, FACING THE ACCESS DRIVE. BCDPW "STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION", PLATE W-3A, W-3B.
- FIRELINES ARE SUBJECT TO A MINIMUM OF A 200-PSI HYDROSTATIC TEST IN ACCORDANCE WITH NFPA 24, 2007 EDITION, SECTION 10.10.2.2.1. ALL THRUST BLOCKS, TIE RODS, VALVES, FITTINGS, AND HYDRANT DRAIN FIELDS SHALL BE EXPOSED FOR FIRE DEPARTMENT INSPECTION AT THE TIME OF THE TEST. PIPE JOINTS MAY BE COVERED AT THE TIME OF THE TEST.
- 10. THE MINIMUM DEPTH OF COVER FOR ALL UNDERGROUND FIRE LINES SHALL BE A MINIMUM OF 4'-0" MEASURED FROM THE TOP OF THE PIPE. NFPA 24, 2007 EDITION, SECTION 10.4 AND TABLE A10.5.1.
- 11. PIPE SHALL NOT BE RUN MORE THAN ONE PIPE LENGTH (APPROXIMATELY 20 FEET) UNDER BUILDINGS. FITTINGS SHALL NOT BE LOCATED WITHIN THE BEARING AREA OF ANY FOUNDATIONS UNLESS APPROVED BY THE DESIGN ENGINEER. NFPA 24, 2007 EDITION, SECTION 10.6.
- 12. SPOOL PIECES ON VERTICAL RISES OR HORIZONTAL STUB-INS SHALL BE WELDED OR SCREWED FLANGE. OR LISTED UNIFLANGE TYPE FITTING. NOTE: UNIFLANGE TYPE FITTINGS SHALL BE SPECIFICALLY LISTED FOR ABOVEGROUND USE.
- 13. ON SITE (PRIVATE) HYDRANTS SHALL BE PAINTED RED, IN ORDER TO DISTINGUISH THEM FROM (ORANGE) PUBLIC HYDRANTS. BALTIMORE COUNTY BILL 48-10.
- 14. COORDINATE HYDROSTATIC TEST AND FLUSH WITH CONTRACTOR INSTALLING STUB-IN, SUCH THAT ENTIRE LEAD-IN IS TESTED AS A SINGLE UNIT.
- 15. COORDINATE HYDROSTATIC TEST AND FLUSH WITH CONTRACTOR INSTALLING LEAD-IN SUCH THAT ENTIRE LEAD TO THE BASE OF THE RISER IS TESTED AS A

#### TYPICAL NOTE TEXT EXISTING NOTE PROPOSED NOTE ONSITE PROPERTY LINE / R.O.W. LINE CONTOUR LINE TC 516.4 OR 516.4 **ELEVATIONS** SANITARY SEWER LINE -UNDERGROUND WATER LINE -INDUSTRIAL WATER LINE UNDERGROUND ELECTRIC LINE UNDERGROUND GAS LINE OVERHEAD WIRE UNDERGROUND TELEPHONE LINE STORM SEWER SANITARY SEWER FORCE MAIN LIMIT OF DISTURBANCE IDA CRITICAL AREA BOUNDARY CURB AND GUTTER CONCRETE CURB &

**LEGEND** 

## OWNER/DEVELOPER

TRADEPOINT ATLANTIC, LLC 1600 SPARROWS POINT BLVD BALTIMORE, MD 21219 CONTACT: JOHN MARTIN III, PE

# **LOCATION MAP**

COPYRIGHT ADC THE MAP PEOPLE PERMIT USE NO. 20602153-5 SCALE: 1"=1000'

#### BENCHMARK INFORMATION

MERIDIAN ARE BASED ON THE MARYLAND COORDINATE SYSTEM

N 571,683.79, E 1,466,230.69, ELEV. 16.59 IN MEDIAN OF NORTH POINT BLVD SOUTH OF NORTH SNYDER AVE.

N 565,182.39, E. 1,464,480.72, ELEV. 9.95 EAST SIDE OF WHARF ROAD 420'± NORTH OF LIGHT TOWER

REVIEW AND APPROVAL. <u>IT IS NOT INTENDED AS A CONSTRUCT DOCUMENT</u> UNLESS INDICATED OTHERWISE. PROJECT No.: DRAWN BY: **CHECKED BY:** 03/16/2020 GDP-4 DATE: CAD I.D.: PROJECT: PROJECT VIPER LC VI

Meehan's MD-151

Yard 7300 WALDMAN AV

Old Bay Marina



MASS GRADING PLANS

**REVISIONS** 

05/26/2020 COMMENTS

6/19/2020 | SITE

7/27/20

COMMENT

REVISED TO LOWER

**REV. PER ARCHITECT** 

COMMENTS REV PER CLIENT

Call before you dig

**ALWAYS CALL 811** 

It's fast. It's free. It's the law.

NOT APPROVED FOR

CONSTRUCTION

COMMENT

1800 SPARROWS POINT BOULEVARD BALTIMORE, MD 21219 TM 111, GRID 14, PARCEL 318 **ELECTION DISTRICT 15** COUNCILMANIC DISTRICT 7 BALTIMORE COUNTY

# **BOHLER**

901 DULANEY VALLEY ROAD, SUITE 80 **TOWSON, MARYLAND 21204** Phone: (410) 821-7900 Fax: (410) 821-7987 MD@BohlerEng.com

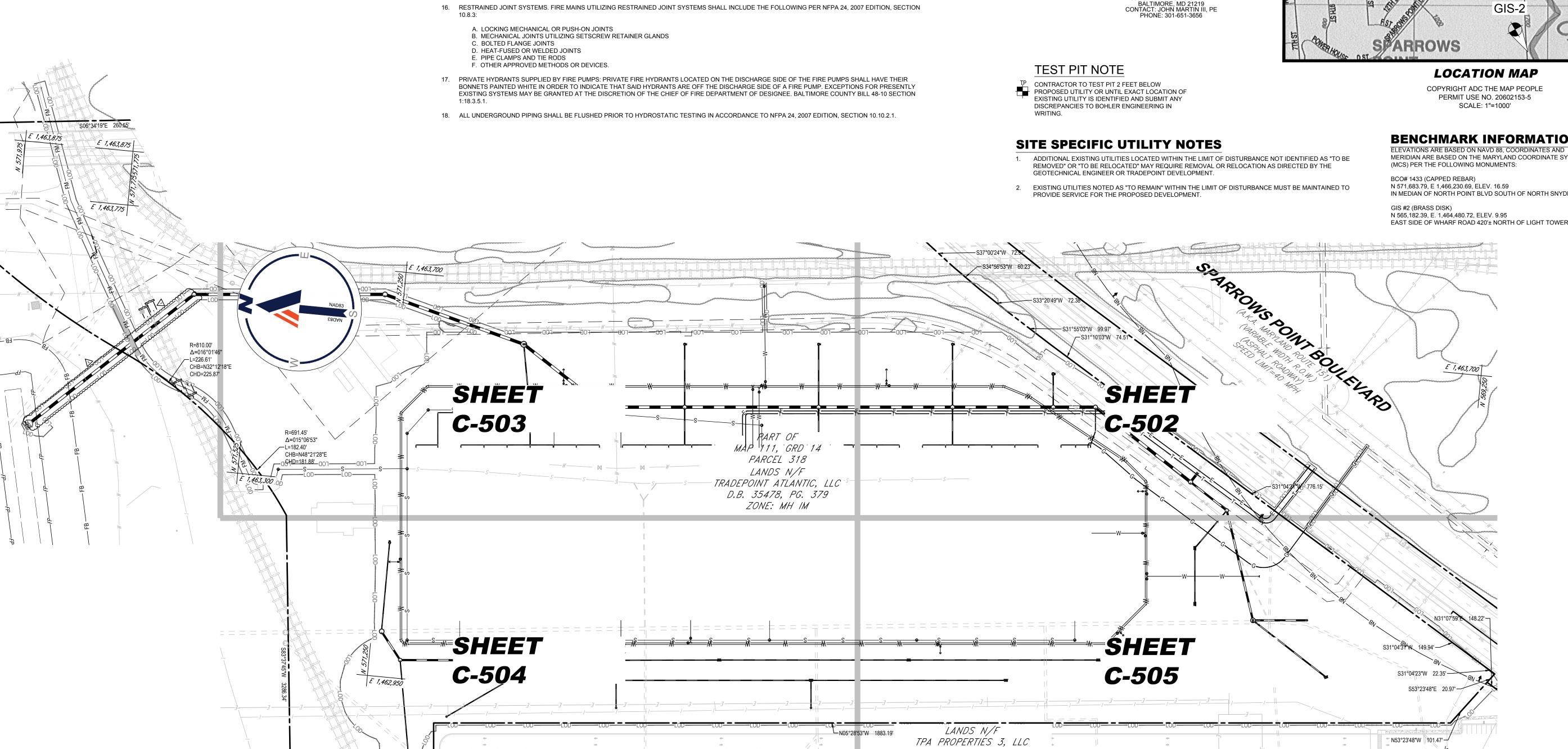
M.J. GESELL

PROFESSIONAL ENGINEER MARYLAND LICENSE No. 44097
PROFESSIONAL CERTIFICATION I, MICHAEL J. GESELL, 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. 44097, EXPIRATION DATE: 6/9/21

**OVERALL UTILITY PLAN** 

MARYLAND COORDINATE SYSTEM (MCS) C-501 ELEVATIONS BASED ON NAVD 88, COORDINATES AND MERIDIAN ARE BASED ON THE MARYLAND COORDINATE SYSTEM (MCS) PER MONUMENTS BCO #1433 AND GIS 2 **REVISION 4 - 7/27/20** TRACKING # DRC-2020-00034; DRC# 032420E; DIST

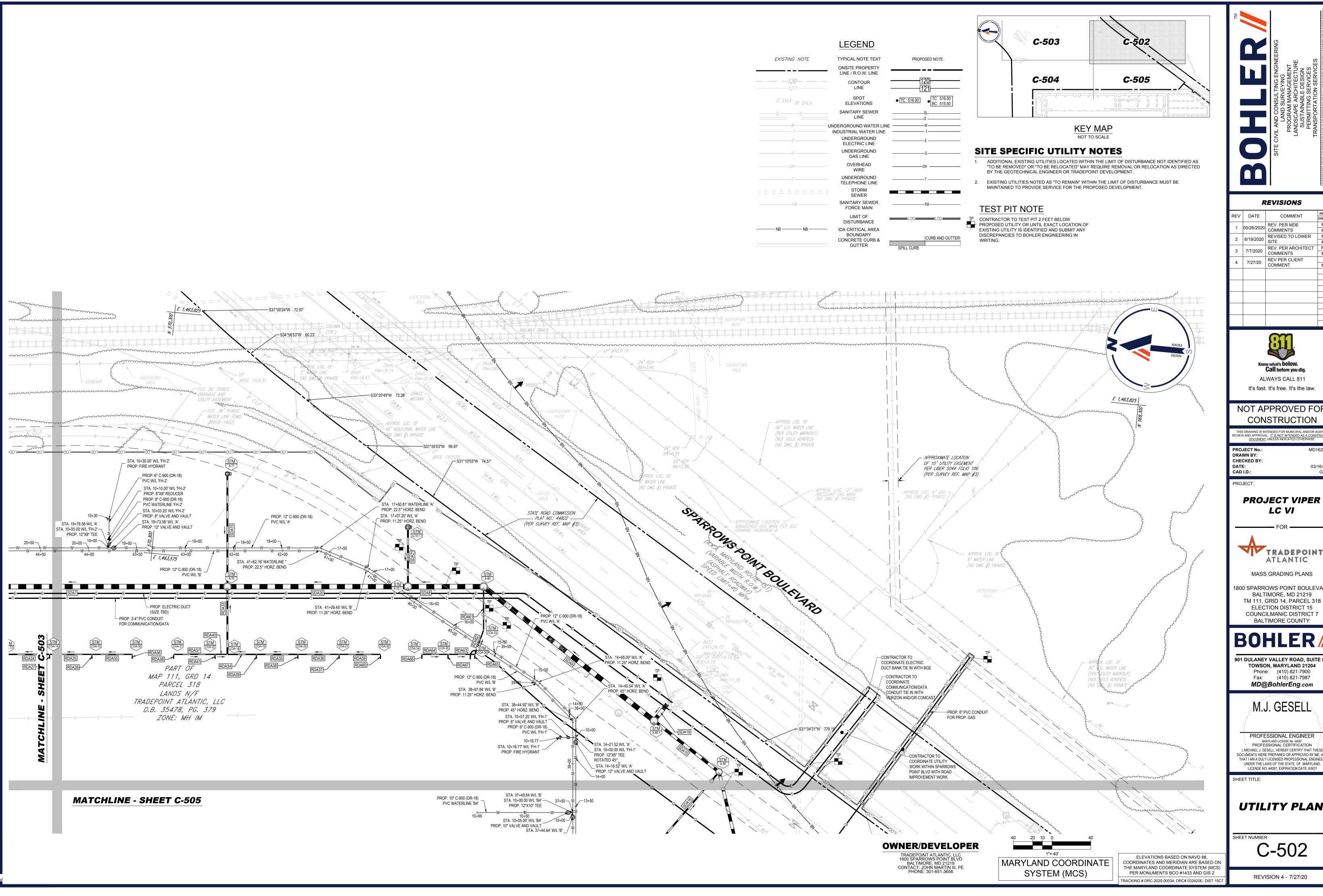


C/O TRADEPOINT ATLANTIC, LLC

MAP 111, GRD 15, PARCEL 499

D.B. 39993. PG. 200

ZONE: MH IM



#### **REVISIONS**

REV	DATE	COMMENT	DRAWN BY CHECKED BY
1	05/26/2020	REV. PER MDE	MJG
		COMMENTS	MJG
2	6/19/2020	REVISED TO LOWER	MJR
		SITE	MJG
3	7/7/2020	REV. PER ARCHITECT	RMS
		COMMENTS	MJG
4	7/27/20	REV PER CLIENT	ISL
4		COMMENT	MJG



**ALWAYS CALL 811** 

NOT APPROVED FOR

## CONSTRUCTION

REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

03/16/2020 GDP-4

## PROJECT VIPER



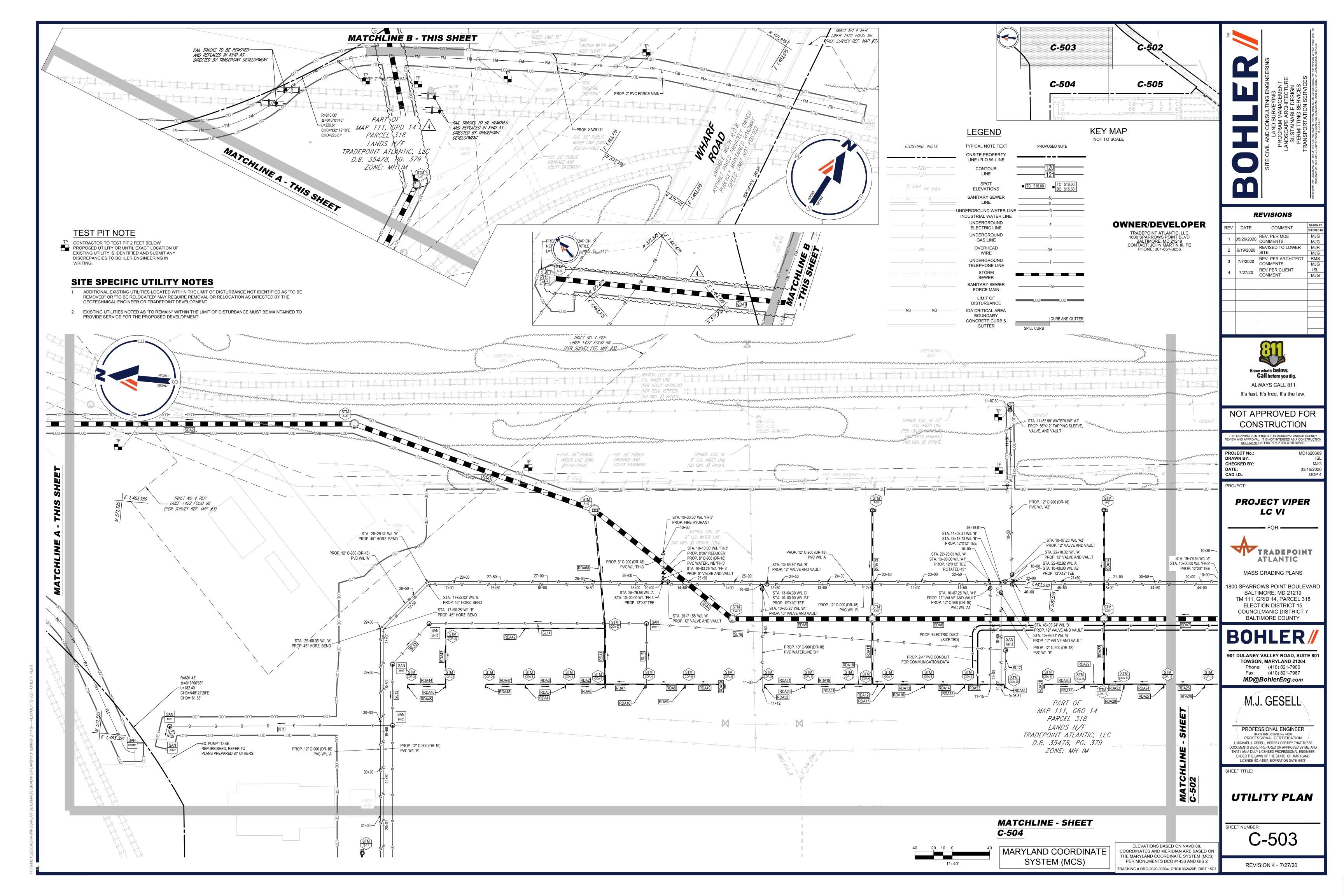
1800 SPARROWS POINT BOULEVARD BALTIMORE, MD 21219 TM 111, GRID 14, PARCEL 318 **ELECTION DISTRICT 15** 

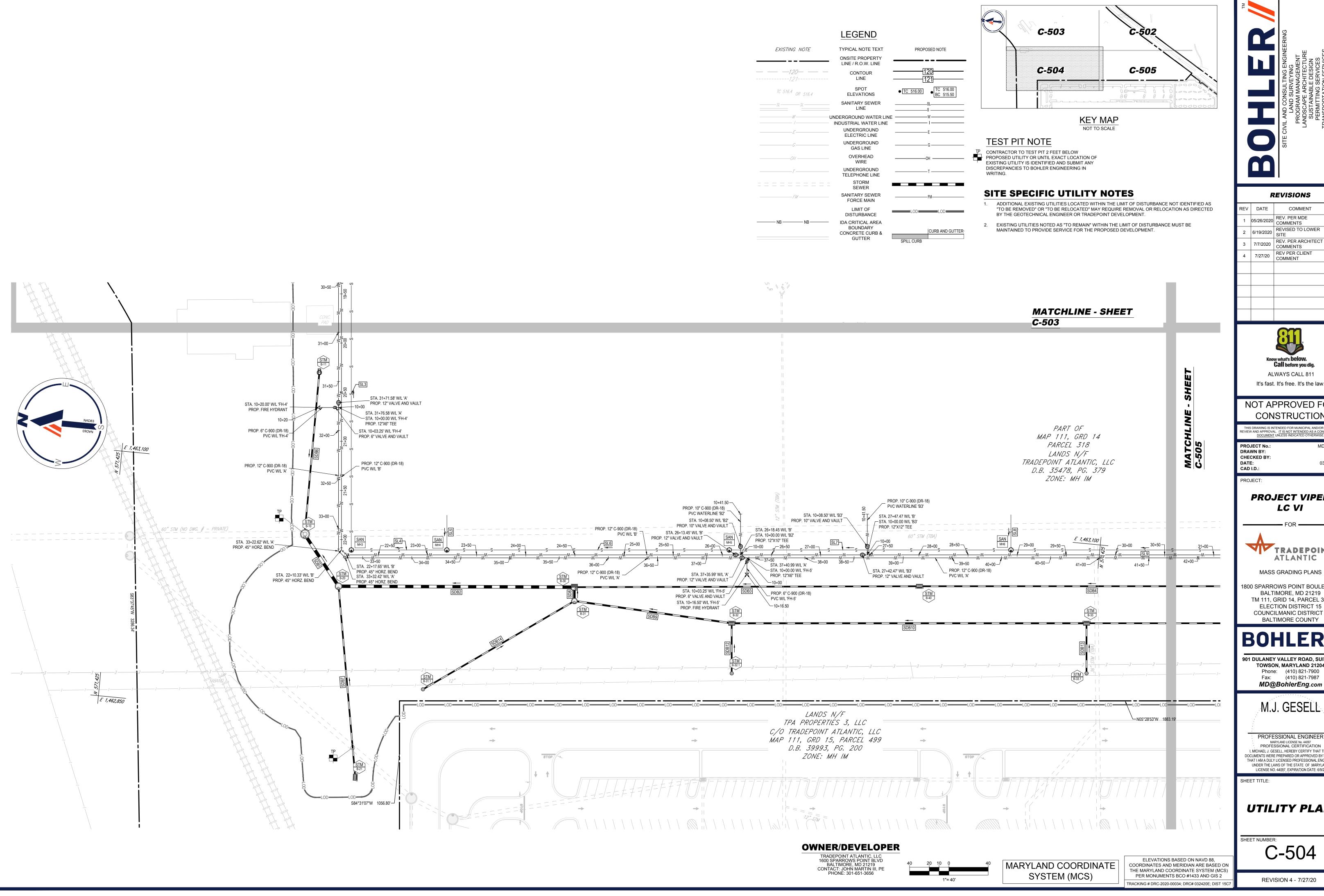
901 DULANEY VALLEY ROAD, SUITE 801 **TOWSON, MARYLAND 21204** Phone: (410) 821-7900 Fax: (410) 821-7987 MD@BohlerEng.com

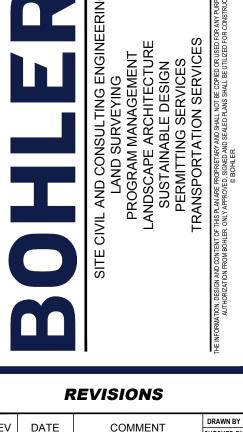
PROFESSIONAL ENGINEER MARYLAND LICENSE No. 44097
PROFESSIONAL CERTIFICATION I, MICHAEL J. GESELL, HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER

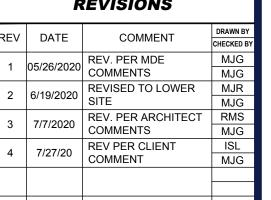
**UTILITY PLAN** 

C-502











**ALWAYS CALL 811** It's fast. It's free. It's the law.

#### NOT APPROVED FOR CONSTRUCTION

REVIEW AND APPROVAL. <u>IT IS NOT INTENDED AS A CONSTRUCT DOCUMENT</u> UNLESS INDICATED OTHERWISE. 03/16/2020 GDP-4

### PROJECT VIPER LC VI

TRADEPOINT

ATLANTIC

1800 SPARROWS POINT BOULEVARD BALTIMORE, MD 21219 TM 111, GRID 14, PARCEL 318 **ELECTION DISTRICT 15** COUNCILMANIC DISTRICT 7

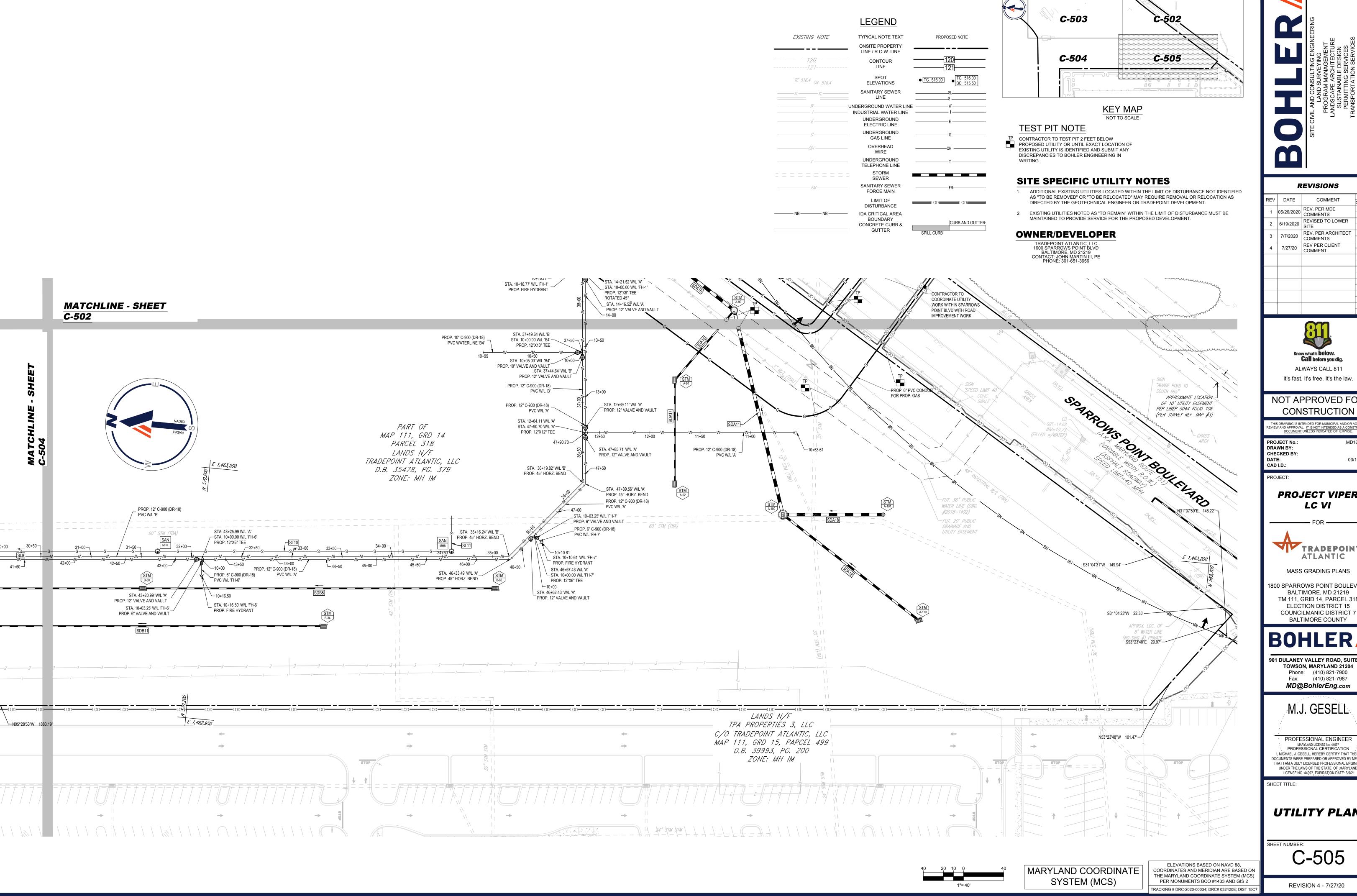
901 DULANEY VALLEY ROAD, SUITE 801 **TOWSON, MARYLAND 21204** Phone: (410) 821-7900 Fax: (410) 821-7987 MD@BohlerEng.com

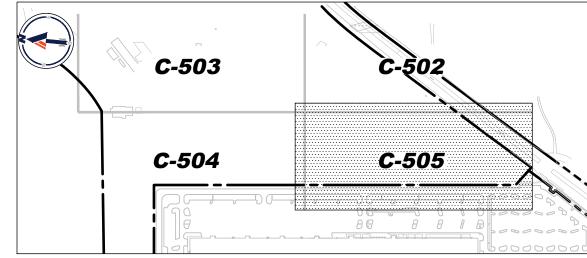
M.J. GESELL

PROFESSIONAL ENGINEER MARYLAND LICENSE № 44097
PROFESSIONAL CERTIFICATION
I, MICHAEL J. GESELL, 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. 44097, EXPIRATION DATE: 6/9/21

**UTILITY PLAN** 

C-504





### **REVISIONS**

	DATE	COMMENT	DRAWN BY CHECKED BY
05/26/2020		REV. PER MDE	MJG
	05/26/2020	COMMENTS	MJG
	6/19/2020	REVISED TO LOWER	MJR
	0/19/2020	SITE	MJG
	7/7/2020	REV. PER ARCHITECT	RMS
	11112020	COMMENTS	MJG
	7/27/20	REV PER CLIENT	ISL
	1121120	COMMENT	MJG
	I		



**ALWAYS CALL 811** 

It's fast. It's free. It's the law.

#### NOT APPROVED FOR CONSTRUCTION

REVIEW AND APPROVAL. <u>IT IS NOT INTENDED AS A CONSTRUCT DOCUMENT</u> UNLESS INDICATED OTHERWISE. PROJECT No.:

DRAWN BY: **CHECKED BY:** 03/16/2020 GDP-4

PROJECT:

### PROJECT VIPER LC VI



MASS GRADING PLANS

1800 SPARROWS POINT BOULEVARD BALTIMORE, MD 21219 TM 111, GRID 14, PARCEL 318 **ELECTION DISTRICT 15** COUNCILMANIC DISTRICT 7 BALTIMORE COUNTY

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

M.J. GESELL

PROFESSIONAL ENGINEER MARYLAND LICENSE No. 44097
PROFESSIONAL CERTIFICATION I, MICHAEL J. GESELL, 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,

**UTILITY PLAN** 

C-505