

**SHEET INDEX**

SHEET #	DESCRIPTION
1	COVER SHEET
2	PETITION PLAN
3	AERIAL VIEW
4	TMP
5	TMP



DocuSigned by:

**SUE SCORE - 2.2**

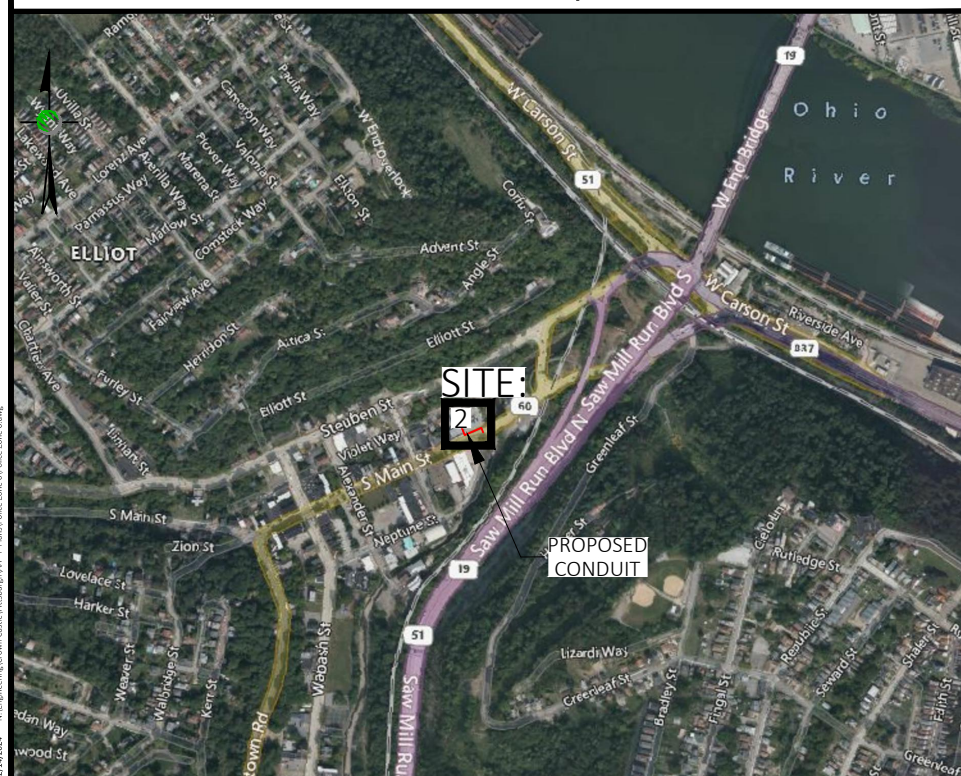


DocuSigned by:  
*Deborah J Androvich*  
 022C87128AE8432... | 10:56 AM PST

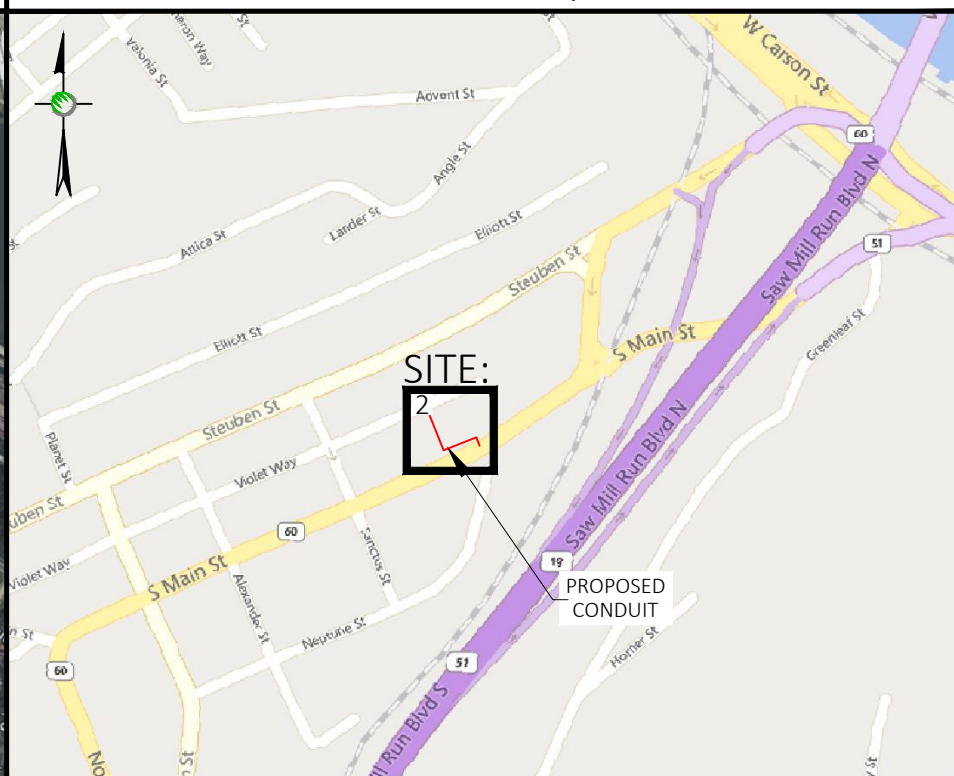
RATE CARD		
	UNITS	QUANTITY
I-4" HDPE	FT	279'
MULE TAPE	FT	279'

# UNDERGROUND PETITION PLAN FOR POLICE ZONE 6 PITTSBURGH, PA 15220

Location Map: NTS



Location Map: NTS



PREPARED BY:

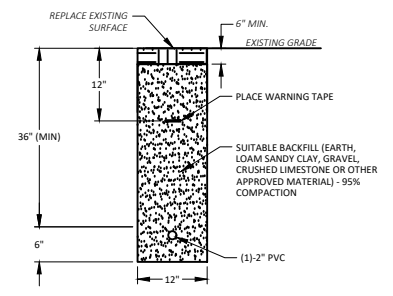
501 Holiday Drive  
 Pittsburgh, PA 15220  
 www.piketelecom.com  
 412-688-3555



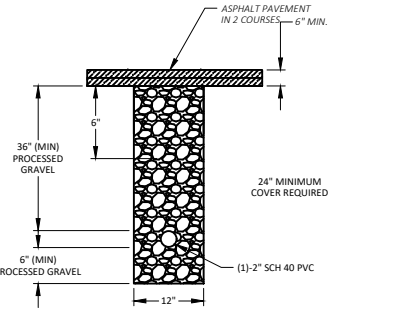
**GENERAL NOTES**

1. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
2. WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATION, ELEVATION AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR, AND THE INFORMATION FURNISHED TO THE ENGINEER FOR RESOLUTION OF THE CONFLICT.
3. THE CONTRACTOR SHOULD MAINTAIN A SEPARATION OF 18 INCHES MIN. WHEN CROSSING EXISTING WATER FACILITIES.
4. THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS FOR THE ALTERATION AND ADJUSTMENT OF GAS, ELECTRIC, TELEPHONE AND ANY OTHER PRIVATE UTILITIES BY THE UTILITY COMPANY.
5. THE CONTRACTOR SHALL NOT DISTURB PUBLIC TREES AND SHRUBS.
6. AREAS OUTSIDE THE LIMITS OF PROPOSED WORK DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION AT NO EXPENSE TO THE OWNER.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PLACING AND MAINTAINING TEMPORARY RESURFACING AND/OR PLATING FOR ALL EXCAVATIONS IN PAVED STREETS AND SIDEWALKS UNTIL PERMANENT RESURFACING IS COMPLETE.
8. JOINTS BETWEEN NEW BITUMINOUS CONCRETE ROADWAY PAVEMENT AND SAW CUT EXISTING PAVEMENT SHALL BE SEALED WITH BITUMEN AND BACK SANDED.
9. THE CONTRACTOR SHALL PROTECT AND SUPPORT ALL EXISTING UTILITY LINES THAT BECOME EXPOSED DUE TO EXCAVATION REQUIRED TO INSTALL THE PROPOSED CONDUIT.
10. THE CONTRACTOR SHALL REPLACE ALL DISTURBED TRAFFIC SIGNAL LOOP DETECTORS TO GOOD WORKING CONDITION AS REQUIRED BY THE LATEST STANDARDS OF THE MUNICIPAL TRAFFIC DEPARTMENT.
11. ALL EXISTING STATE, COUNTY, CITY, AND TOWN LOCATION LINES AND PRIVATE PROPERTY LINES HAVE BEEN ESTABLISHED FROM AVAILABLE INFORMATION AND THEIR EXACT LOCATION ARE NOT GUARANTEED.
12. THE CONTRACTOR SHALL REPLACE ALL PAVEMENT MARKINGS IN THEIR ENTIRETY THAT HAVE BEEN DAMAGED BY TRENCH EXCAVATION OR OPERATIONS OF THE CONTRACTOR WITH SIMILAR COLOR AND SIZE THERMOPLASTIC MARKINGS.

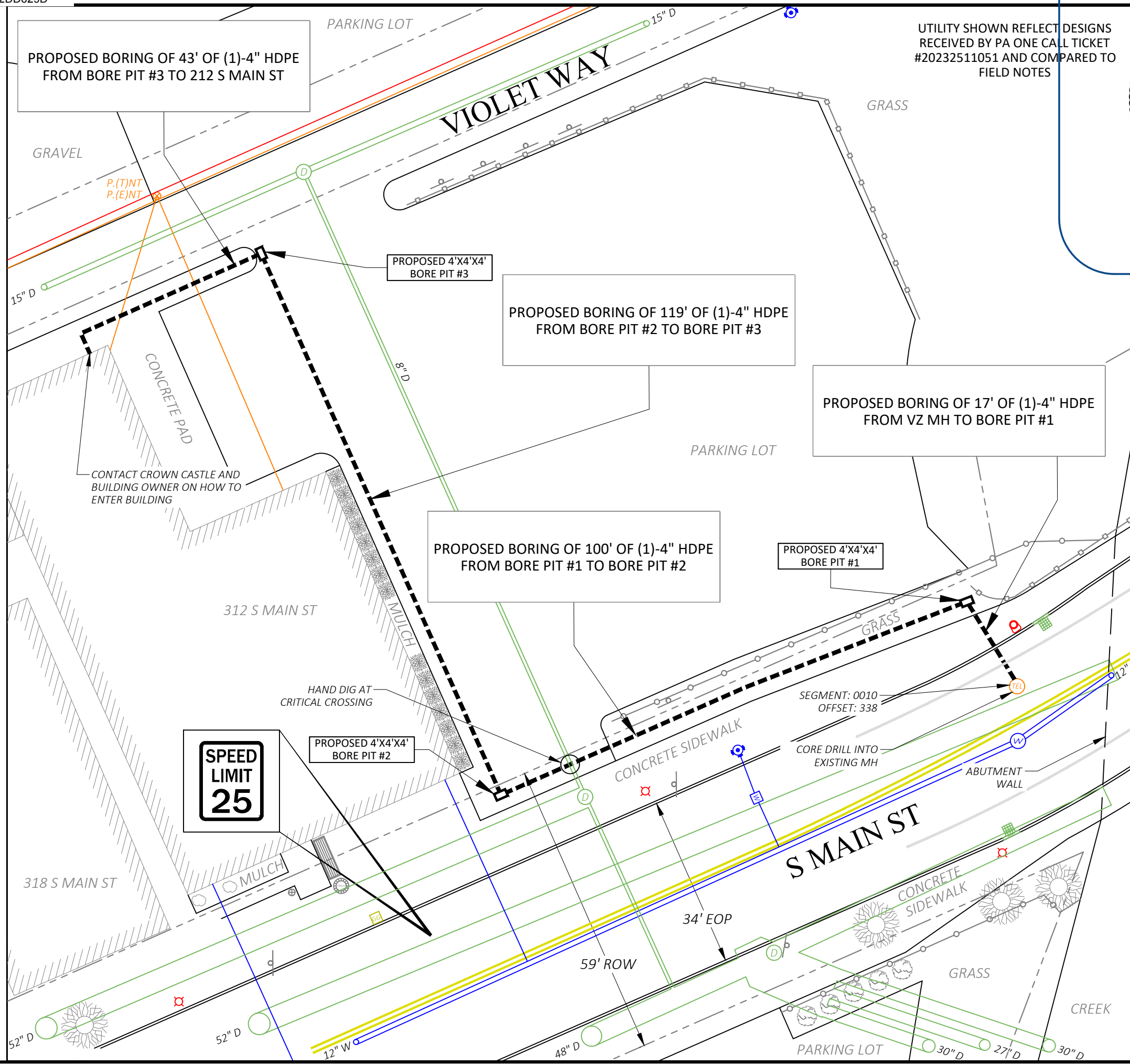
\* - ITEM SHOWN ON UTILITY RECORDS, BUT NOT FOUND IN FIELD.  
 ~ - ITEM FOUND IN FIELD, BUT NOT SHOWN ON UTILITY RECORDS



**PROPOSED DUCT CONFIGURATION**  
 SOFT SHOULDER PATCH AND DUCT BANK INSTALLATION DETAIL  
 N.T.S.

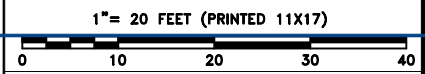


**PROPOSED DUCT CONFIGURATION**  
 ROADWAY PATCH AND DUCT BANK INSTALLATION DETAIL  
 N.T.S.



UTILITY SHOWN REFLECT DESIGNS RECEIVED BY PA ONE CALL TICKET #20232511051 AND COMPARED TO FIELD NOTES

**COMMONWEALTH OF PENNSYLVANIA**  
 REGISTERED PROFESSIONAL ENGINEER  
 DEBORAH J ANDROVICH  
 ENGINEER  
 PE052509E  
 Feb-24 | 10:50  
 022C87128AE8432...



**LEGEND**

⊗	ELECTRIC POLE	⊠	CATCH BASIN
⊗	JOINT UTILITY POLE	⊠	CATV HANDHOLE
⊗	LAMP POST	⊠	COMM PEDESTAL
⊗	TRAFFIC LIGHT	⊠	ELECTRIC HANDHOLE
⊗	CATV MANHOLE	⊠	FIRE HYDRANT
⊗	DRAIN MANHOLE	⊠	GAS GATE
⊗	ELECTRIC MANHOLE	⊠	GAS METER
⊗	SEWER MANHOLE	⊠	IRRIGATION VALVE
⊗	TELEPHONE MANHOLE	⊠	MAIL BOX
⊗	WATER MANHOLE	⊠	PARKING METER(S)
⊗	POLE ANCHOR GUY	⊠	SEWER GATE
⊗	BUSH/SHRUB	⊠	SIGN POLE
⊗	RIGHT OF WAY	⊠	STEEL POST
⊗	CULVERT	⊠	STREET LIGHT
⊗	FENCE	⊠	TEL HANDHOLE
⊗	GUARD RAIL	⊠	TRANSFORMER
⊗	ELECTRIC VAULT	⊠	UG CABLE MARKER
⊗	TRAFFIC HANDHOLE	⊠	WATER GATE
⊗	PROPOSED HANDHOLE	⊠	WATER METER
⊗	PROPOSED CONDUIT	⊠	EX. UG GAS
⊗	EX. UG WATER	⊠	EX. UG DRAIN
⊗	EX. UG TRAFFIC	⊠	EX. UG SEWER
⊗	EX. UG ELCO	⊠	EX. UG TELCO
⊗	EX. OH ELCO	⊠	EX. OH TELCO

**NOTE:**  
 EXISTING UTILITIES SHOWN ARE APPROXIMATE AND NOT WARRANTED TO BE CORRECT. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL PUBLIC AND PRIVATE UTILITIES PRIOR TO BEGINNING ANY EXCAVATION.

**CALL BEFORE YOU DIG**  
 UNDERGROUND SERVICE ALERT  
 72 HOURS NOTICE REQUIRED.  
 ENTER 1-888-DIG-SAFE

PREPARED BY:  
**PIKE TELECOM**  
 501 Holiday Drive  
 Pittsburgh, PA 15220  
 www.piketelcom.com  
 412-688-3555

PREPARED FOR:  
**CROWN CASTLE**

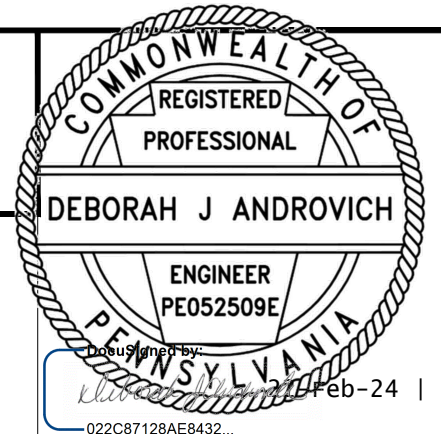
REV #	DESCRIPTION	DATE
1	BORE PITS AND NOTES ADDED	02/14/24

TITLE:  
**POLICE ZONE 6**  
 PITTSBURGH, PA 15220  
 CROWN CASTLE - PETITION PLAN

SURVEYED BY: PIKE  
 PRINT NO: 2 OF 5  
 DRAWN BY: IJD  
 SCALE: AS NOTED  
 DATE: 9/6/23  
 AS-BUILT:



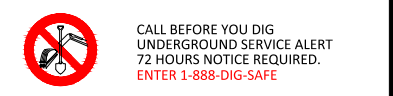
# SATELLITE VIEW OF PROPOSED PATH



**LEGEND**

X	ELECTRIC POLE	⊠	CATCH BASIN
⊗	JOINT UTILITY POLE	⊞	CATV HANDHOLE
⊙	LAMP POST	⊠	COMM PEDESTAL
⊞	TRAFFIC LIGHT	⊞	ELECTRIC HANDHOLE
⊞	CATV MANHOLE	⊞	FIRE HYDRANT
⊞	DRAIN MANHOLE	⊞	GAS GATE
⊞	ELECTRIC MANHOLE	⊞	GAS METER
⊞	SEWER MANHOLE	⊞	IRRIGATION VALVE
⊞	TELEPHONE MANHOLE	⊞	MAIL BOX
⊞	WATER MANHOLE	⊞	PARKING METER(S)
⊞	POLE ANCHOR GUY	⊞	SEWER GATE
⊞	BUSH/SHRUB	⊞	SIGN POLE
—R/W—	RIGHT OF WAY	⊞	STEEL POST
⊞	CULVERT	⊞	STREET LIGHT
⊞	FENCE	⊞	TEL HANDHOLE
⊞	GUARD RAIL	⊞	TRANSFORMER
⊞	ELECTRIC VAULT	⊞	UG CABLE MARKER
⊞	TRAFFIC HANDHOLE	⊞	WATER GATE
⊞	PROPOSED HANDHOLE	⊞	WATER METER
---	PROPOSED CONDUIT	---	EX. UG GAS
---	EX. UG WATER	---	EX. UG DRAIN
---	EX. UG TRAFFIC	---	EX. UG SEWER
---	EX. UG ELCO	---	EX. UG TELCO
---	EX. OH ELCO	---	EX. OH TELCO

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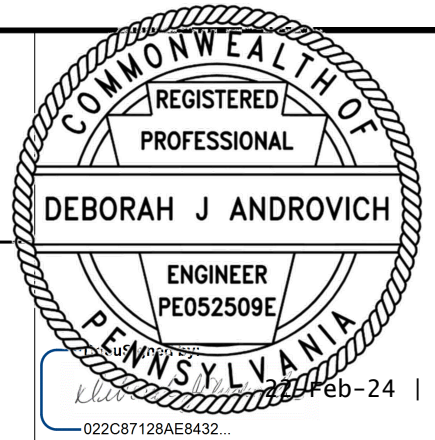
REV #	DESCRIPTION	DATE
1	BORE PITS AND NOTES ADDED	02/14/24

TITLE:  
**POLICE ZONE 6**  
 PITTSBURGH, PA 15220  
 CROWN CASTLE - PETITION PLAN

SURVEYED BY: PIKE	PRINT NO: 3 OF 5
DRAWN BY: IID	SCALE: AS NOTED
DATE: 9/6/23	AS-BUILT:



# TRAFFIC MANAGEMENT PLANS



## PATA 107 (Old PATA 10a) - Notes

- Each flagger shall be clearly visible to traffic for a minimum distance of E and shall be in constant communication with all other flaggers.
- For operations of 15 minutes or less:
  - The Road Work (W20-1), One Lane Road (W20-4), and Flagger Symbol (W20-7) signs are not required.
  - All channelizing devices may be eliminated if a shadow vehicle is present.
- The buffer space shall be extended so that the two-way traffic taper is placed before a horizontal (or crest vertical) curve to provide adequate sight distance for the flagger and a queue of stopped vehicles.
- When a shadow vehicle is not used, distance E is measured from end of taper to beginning of work space.

### Signs



### Sign Spacing Chart

Condition	Distance			
	A	B	C	F
	Feet	Feet	Feet	Feet
Urban 35 MPH or less	100	100	100	100
Urban Greater than 35 MPH	350	350	350	350
Rural	500	500	500	500

When multiple distance plaques are used on advance warning signs, they shall all be of the same series type.  
Example: either all "AHEAD" or XXX FEET.

### Taper Length Formulas

S	L
40 MPH or less	$L = \frac{WS^2}{60}$
45 MPH or more	$L = WS$

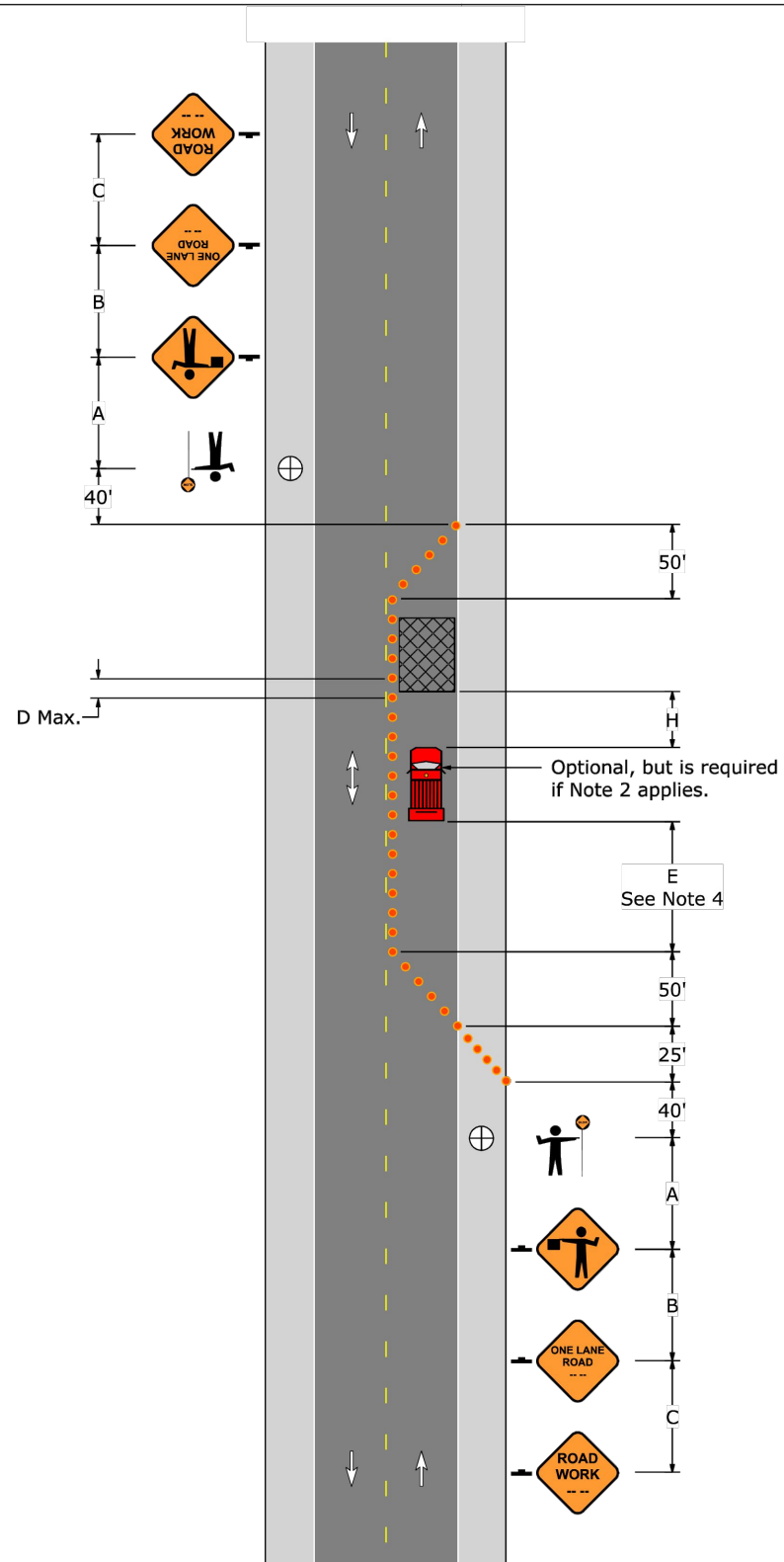
S = Regulatory Speed Limit  
W = Width of Offset  
L = Length

### Distance and Spacing Quick Reference Chart

Speed MPH	W Feet	L Feet	1/2L Feet	1/3L Feet	Min. Channelizing Devices Per Taper Type (Length)				D Feet	E Feet	H Feet
					L	1/2L	1/3L	50'			
25	10	105	55	35	6	6	6	6	50	155	150
	11	115	60	40							
	12	125	65	45							
30	10	150	75	50	6	6	6	6	60	200	150
	11	165	85	55							
	12	180	90	60							
35	10	205	105	70	6	6	6	6	70	250	150
	11	225	115	75							
	12	245	125	85							
40	10	270	135	90	6	6	6	6	80	305	150
	11	295	150	100							
	12	320	160	110							
45	10	450	225	150	6	6	6	6	90	360	150
	11	495	250	165							
	12	540	270	180							
50	10	500	250	170	6	6	6	6	100	425	250
	11	550	275	185							
	12	600	300	200							
55	10	550	275	185	6	6	6	6	110	495	250
	11	605	305	205							
	12	660	330	220							

Note: Channelizing devices used in taper shall be equally spaced at 1/2 D Max.

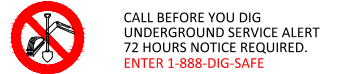
## PATA 107 (Old PATA 10a) Work In One Lane; Two Flaggers



### LEGEND

X	ELECTRIC POLE	⊠	CATCH BASIN
⊗	JOINT UTILITY POLE	⊠	CATV HANDHOLE
⊙	LAMP POST	⊠	COMM PEDESTAL
⊠	TRAFFIC LIGHT	⊠	ELECTRIC HANDHOLE
⊠	CATV MANHOLE	⊠	FIRE HYDRANT
⊠	DRAIN MANHOLE	⊠	GAS GATE
⊠	ELECTRIC MANHOLE	⊠	GAS METER
⊠	SEWER MANHOLE	⊠	IRRIGATION VALVE
⊠	TELEPHONE MANHOLE	⊠	MAIL BOX
⊠	WATER MANHOLE	⊠	PARKING METER(S)
⊠	POLE ANCHOR GUY	⊠	SEWER GATE
⊠	BUSH/SHRUB	⊠	STEEL POST
⊠	RIGHT OF WAY	⊠	STREET LIGHT
⊠	CULVERT	⊠	TEL HANDHOLE
⊠	FENCE	⊠	TRANSFORMER
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⊠	PROPOSED HANDHOLE	⊠	EX. UG GAS
⊠	PROPOSED CONDUIT	⊠	EX. UG DRAIN
⊠	EX. UG WATER	⊠	EX. UG TRAFFIC
⊠	EX. UG TRAFFIC	⊠	EX. UG SEWER
⊠	EX. UG ELCO	⊠	EX. UG TELCO
⊠	EX. OH ELCO	⊠	EX. OH TELCO

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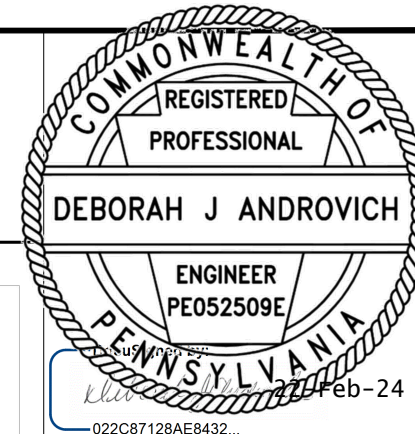
REV #	DESCRIPTION	DATE
1	BORE PITS AND NOTES ADDED	02/14/24

TITLE:  
**POLICE ZONE 6**  
PITTSBURGH, PA 15220  
CROWN CASTLE - PETITION PLAN

SURVEYED BY: PIKE	PRINT NO: 4 OF 5
DRAWN BY: IID	SCALE: AS NOTED
DATE: 9/6/23	AS-BUILT:

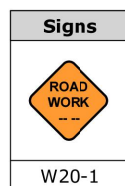


# TRAFFIC MANAGEMENT PLANS

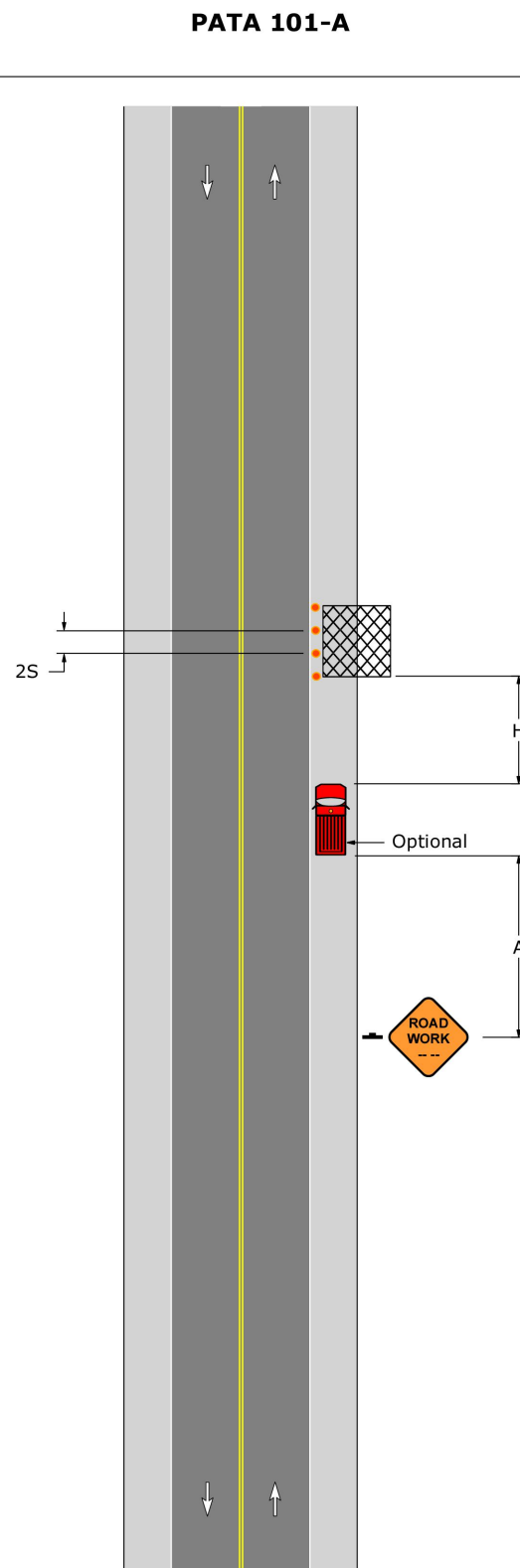


## PATA 101-A

1. The shadow vehicle and TTC devices are not required if the work space is outside the highway right-of-way, behind barrier, more than 2' behind curb, or 15' or more from the edge of the roadway.
2. For operations of 60 minutes or less, all TTC devices may be eliminated if a shadow vehicle is present and the operation does not proceed against normal traffic flow.
3. When a shadow vehicle is not used, distance A is measured from the ROAD WORK sign.



Sign Spacing, Channelizing Device Spacing, and Roll Ahead Space				
Speed S (MPH)	Channelizing Devices Spacing 2S (Feet)	Sign Spacing		Roll Ahead Space H (Feet)
		Urban A (Feet)	Rural A (Feet)	
25	50	100 - 200	500 - 800	150
30	60	100 - 200	500 - 800	150
35	70	100 - 200	500 - 800	150
40	80	350 - 500	500 - 800	150
45	90	350 - 500	500 - 800	150
50	100	350 - 500	500 - 800	250
55	110	350 - 500	500 - 800	250



LEGEND			
X	ELECTRIC POLE	[Grid]	CATCH BASIN
[X]	JOINT UTILITY POLE	[C]	CATCH HANDHOLE
[X]	LAMP POST	[X]	COMM PEDESTAL
[T]	TRAFFIC LIGHT	[E]	ELECTRIC HANDHOLE
[M]	CATV MANHOLE	[F]	FIRE HYDRANT
[D]	DRAIN MANHOLE	[G]	GAS GATE
[E]	ELECTRIC MANHOLE	[M]	GAS METER
[S]	SEWER MANHOLE	[I]	IRRIGATION VALVE
[T]	TELEPHONE MANHOLE	[M]	MAIL BOX
[W]	WATER MANHOLE	[P]	PARKING METER(S)
[A]	POLE ANCHOR GUY	[S]	SEWER GATE
[B]	BUSH/SHRUB	[S]	SIGN POLE
[R/W]	RIGHT OF WAY	[S]	STEEL POST
[C]	CULVERT	[S]	STREET LIGHT
[F]	FENCE	[T]	TEL HANDHOLE
[G]	GUARD RAIL	[T]	TRANSFORMER
[V]	ELECTRIC VAULT	[C]	UG CABLE MARKER
[H]	TRAFFIC HANDHOLE	[W]	WATER GATE
[H]	PROPOSED HANDHOLE	[W]	WATER METER
[C]	PROPOSED CONDUIT	[G]	EX. UG GAS
[W]	EX. UG WATER	[D]	EX. UG DRAIN
[T]	EX. UG TRAFFIC	[S]	EX. UG SEWER
[E]	EX. UG ELCO	[T]	EX. UG TELCO
[O]	EX. OH ELCO	[T]	EX. OH TELCO

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**POLICE ZONE 6**  
 PITTSBURGH, PA 15220  
 CROWN CASTLE - PETITION PLAN

SURVEYED BY: PIKE	PRINT NO: 5 OF 5
DRAWN BY: IID	SCALE: AS NOTED
DATE: 9/6/23	AS-BUILT:



**Subsurface Utility Engineering (SUE) Utility Rating Impact Form**

**Project Name:** \_\_\_\_\_ 312 S Main st  
**Project Location:** \_\_\_\_\_ Pittsburgh, PA

**Date of Analysis:** \_\_\_\_\_ 9/22/2023  
**Analysis Done By:** \_\_\_\_\_ Justin Malardie

**Project Scope:** \_\_\_\_\_ Proposed Boring of 279' of HDPE from VZ MH to the rear of 312 S Main St

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

ID	Complexity Factor		Low Complexity		Medium Complexity		High Complexity
1	Utility Density	<input checked="" type="checkbox"/>	Dense	<input type="checkbox"/>	Denser	<input type="checkbox"/>	Densest
2	Utility Type	<input type="checkbox"/>	Less-Critical	<input type="checkbox"/>	Sub-Critical	<input checked="" type="checkbox"/>	Critical
3	Utility Pattern - Parallel Utilities	<input checked="" type="checkbox"/>	Simple	<input type="checkbox"/>	Medium	<input type="checkbox"/>	Complex
4	Utility Pattern - Perpendicular Utilities	<input checked="" type="checkbox"/>	Simple	<input type="checkbox"/>	Medium	<input type="checkbox"/>	Complex
5	Utility Material	<input type="checkbox"/>	Rigid	<input type="checkbox"/>	Flexible	<input checked="" type="checkbox"/>	Brittle
6	Utility Access	<input type="checkbox"/>	Easy	<input checked="" type="checkbox"/>	Medium	<input type="checkbox"/>	Restricted
7	Utility Age	<input type="checkbox"/>	New	<input type="checkbox"/>	Medium	<input checked="" type="checkbox"/>	Old
8	Utility Record Quality	<input type="checkbox"/>	Good	<input checked="" type="checkbox"/>	Fair	<input type="checkbox"/>	Poor
9	Excavation Depth (inches)	<input type="checkbox"/>	Low	<input type="checkbox"/>	Medium	<input checked="" type="checkbox"/>	High
10	Excavation Method	<input type="checkbox"/>	Method A	<input type="checkbox"/>	Method B	<input checked="" type="checkbox"/>	Method C
<b>Total</b>			3		2		5

**SUE Impact Score** **2.2**