

✓ Solicitation was successfully advertised.

Status: Advertised | Bids: 0

Update Advertisement

Withdraw Advertisement

More

<

Attachment List

Downloadable attachments that you provide, for the bidder, as part of the solicitation.

Bid Bond

A bid bond form that provides surety verification.

Build Your Own

This is a custom 'Build Your Own' component.

Envelope

The information supplied in this component will be available to the owner-agency immediately after the bid deadline, but before the bid is opened.

Item List

A list of biddable items. You define the quantity, description and units

>

General Info

Edit

! Click here to disable Q & A notifications for this solicitation.

Number

T5-03/23-148 5-Corners Intersection

Deadline

04/04/2023 10:00 AM EDT

Auto Advertise

Description

Summary:

The City of Charleston is soliciting bids for The 5-Corners Intersection project shall consist of the installation of new signal pole foundations, underground conduit, signal masts, signal arms, signal heads, signal cabinet, pre-wiring, equipment, detection equipment, and bus signs, such

Allow zero unit prices and labor?

Yes

Allow negative unit prices and labor?

Yes

Allow Electronic Signatures?

Yes

Allow vendors to ask questions?

Yes

Restricted?

Help

The City of Charleston is soliciting bids for the 5-Corners intersection project shall consist of the installation of new signal pole foundations, underground conduit, signal masts, signal arms, signal heads, signal cabinet, preemption equipment, detection equipment, roadway signs, curb painting, roadway painting, preformed thermoplastic roadway markings, field wiring, asphalt resurfacing and sidewalk improvements. This work shall include all materials, labor, tools, and equipment necessary to complete and protect all phases of the work performed as shown upon the attached drawings and in accordance with these specifications.

The work shall consist of the Vendor furnishing all materials, equipment and labor necessary for the satisfactory completion of this project. All materials, equipment, and workmanship shall be in accordance with the West Virginia Department of Transportation, Division of Highways, Standard Specifications for Roads and Bridges, 2023, as amended.

The details contained in the following specifications are not designed to exclude any manufacturer from bidding but are offered as a means of describing the needs of the City of Charleston. Where brand names are used, the words "or equal" are assumed to follow. All specifications are minimum requirements unless otherwise stated. Any deviations from the stated specifications must be described in detail. The merit of such deviations will be considered with regard to the City of Charleston's intended use.

A mandatory pre-bid conference for the purpose of discussing and clarifying the project drawings and specifications will be held at the City Engineering Office at 114 Dickinson Street at 10:00 am, Thursday, March 23, 2023

State

West Virginia

County

Kanawha



Restricted?

No

Mark solicitation as an RFP?

No



Q & A

[Edit](#)[Print](#)

Deadline

03/23/2023 10:00 AM EDT

Remarks

Technical Questions are due to: jamie.bowles@cityofcharleston.org no later than Monday March 27, 2023 at 4:00 pm

! No questions have been asked.

ATTACHMENT LIST

[Edit](#)[More](#)

Order	Name	Description
1	INTENT.pdf (53.3 KB)	
2	2023_02_28_PS&E Plans.pdf (3.32 MB)	
3	INFORMATION FOR BIDDERS-5- Corners.pdf (167 KB)	
4	Terms and Conditions (23).pdf (149 KB)	
5	COC Purchasing Affidavit.pdf (60.2 KB)	
6	Drug-Free_Workplace_Affidavit (7).pdf (78.1 KB)	
7	Local Vendor Preference.docx (86.6 KB)	
8	Construction Projects Handbook.pdf (1.25 MB)	
9	GENERAL CONDITIONS- For Construction Projects (9).pdf (112 KB)	

9 Attachments

[? Help](#)

▣ ADDENDUM ACKNOWLEDGMENT

[Edit](#)[More](#)

Click "+" to add addenda. If no addendum, type "N/A."

Addendum Number:*

Date of Acknowledgment:*

▣ Exceptions and Deviations

[Edit](#)[More](#)

! Optional: Vendor is not required to complete.

please include any suggested exceptions and deviations to the mandatory specifications.*

▣ BID AND PROPOSAL FORM (1 OF 3)

[Edit](#)[More](#)

I agree to supply the materials and perform the services as detailed in this solicitation, including accepting the terms and conditions associated with it.

required

☐ I acknowledge that I have read the solicitation carefully and agree to its terms.*

▢ BID AND PROPOSAL FORM (2 OF 3)

Edit More

Search for Item Code or Description



Reset Search

Order	Item Code	Description	Quantity	Units	Alternate	Optional	Fixed (Unit Price)	Unit Price
1	201001-000	CLEARING AND GRUBBING	1.0000	LS	×	×	×	
2	204001-000	MOBILIZATION	1.0000	LS	×	×	×	
3	207001-001	UNCLASSIFIED EXCAVATION	30.8000	CY	×	×	×	
4	408002-001	ASPHALT MATERIAL	219.0000	GA	×	×	×	
5	415005-001	STANDARD MILLING	1,907.0000	SY	×	×	×	
6	609001-001	CONCRETE SIDEWALK	140.0000	SY	×	×	×	
7	609002-001	BED COURSE MATERIAL	26.2000	CY	×	×	×	
8	609005-001	CURB RAMP, TYPE I	5.0000	EA	×	×	×	
9	609006-001	DETECTABLE WARNNG SURFACE	5.0000	EA	×	×	×	
10	610001-003	PLAIN CONCRETE CURBING, TY PE III	227.0000	LF	×	×	×	
11	636011-001	TRAFFIC CONTROL DEVICE	5,945.0000	UN	×	×	×	
12	636014-001	FLAGGER	100.0000	HR	×	×	×	
13	636021-001	ELECTRIC ARROW	20.0000	DA	×	×	×	
14	636025-001	WARNING LIGHTS, TYPE B	240.0000	DA	×	×	×	
15	639001-001	CONSTRUCT N LAYOUT STAKE	1.0000	LS	×	×	×	
16	642040-001	INLET PROTECTION	3.0000	EA	×	×	×	

16	042040-001	INLET PROTECTION	3.0000	EA	×	×	×
17	AA 1- 402001-026	ROADWAY ALTERNATES-MARSHALL ASPHALT SKID PVT, SG, TY IV	210.0000	TN	×	×	×
18	AA 2- 402001-027	ROADWAY ALTERNATES-MARSHALL ASPHALT SKID PVT, S, TY IV	200.0000	TN	×	×	×
19	657008-001	2.00 LB CHANNEL POST	56.0000	LF	×	×	×
20	657018-001	SUPPORT OR BRACKET REMOVAL	2.0000	EA	×	×	×
21	661001-001	0.080 IN FLAT SHEET SIGN	23.0000	SF	×	×	×
22	663001-026	EDGE LINE, TYPE II- 6 IN - YELLOW	378.0000	LF	×	×	×
23	663002-010	LANE LINE, TYPE V - 4 IN - YELLOW	30.0000	LF	×	×	×
24	663002-010	LANE LINE, TYPE V - 4 IN - WHITE	35.0000	LF	×	×	×
25	663002-040	CENTERLINE, TYPE II - 4 IN	994.0000	LF	×	×	×
26	663004-011	CHANNELIZING LINE, TYPE V - 6 IN	390.0000	LF	×	×	×
27	663005-011	STOP LINE, TYPE V - 24 IN	85.0000	LF	×	×	×
28	663006-010	CROSSWALK LINE, TYPE V - 12 IN X 6 FT	408.0000	LF	×	×	×
29	663010-010	ONE DIRECTION LANE ASSIGNMENT ARROW, TYPE V	4.0000	EA	×	×	×
30	663010-011	MULTI DIRECTIONAL LANE ASSIGNMENT ARROW, TYPE V	6.0000	EA	×	×	×
1 - 30 of 48 Items ← Previous 1 2 Next →							

Order	Item Code	Description	Quantity	Units	Alternate	Optional	Fixed (Unit Price)	Unit Price
31	663011-010	LANE LETTER, TYPE V	8.0000	EA	×	×	×	
32	660001-001	SIGNAL CONTROLLER 01	1.0000	LS	×	×	×	
33	660002-030	TRAFFIC DETECTOR, RADO 01	1.0000	LS	×	×	×	
34	660003-001	SIGNAL SECTION, G-16	8.0000	EA	×	×	×	
35	660003-006	SIGNAL SECTION, V-12	26.0000	EA	×	×	×	
36	660004-030	SIGNAL SUPPORT, All, PAINTED	2.0000	EA	×	×	×	
37	660004-050	SIGNAL SUPPORT, EI, PAINTED	6.0000	EA	×	×	×	
38	660007-001	MISCELLANEOUS SIGNAL, 01	1.0000	LS	×	×	×	
39	660010-001	PRIORITY CONTROL SYSTEM DETECTOR, D4	1.0000	EA	×	×	×	
40	660010-010	PRIORITY CONTROL SYSTEM EMITTER, OE	1.0000	EA	×	×	×	
41	661001-001	0.080 IN FLAT SHEET SIGN	40.0000	SF	×	×	×	
42	661030-001	INTERNALLY ILLUMINATED SIGN, 72" X 18", SS	2.0000	EA	×	×	×	
43	661030-001	INTERNALLY ILLUMINATED SIGN, 72" X 18", DS	1.0000	EA	×	×	×	
44	662002-001	GALVANIZED STEEL CONDUIT, 01	1.0000	LS	×	×	×	
45	662006-001	JUNCTION BOX, TYPE H, 18" x18"	3.0000	EA	×	×	×	
46	662006-001	JUNCTION BOX, TYPE H, 24"x24"	1.0000	EA	×	×	×	
47	662007-001	LUMINAIRE, TYPE LED	2.0000	EA	×	×	×	
48	662014-001	INCIDENT AL ELECTRICAL WORK, LCI	1.0000	LS	×	×	×	
31 - 48 of 48 Items								
← Previous 1 2 Next →								

▢ BID AND PROPOSAL FORM (3 OF 3)

[Edit](#)[More](#)

☐ Local Vendor Preference: - - By checking this box and signing below, I hereby certify and attest I have read the Local Vendor Preference statement found on the "Information for Bidders" document attached to this solicitation. **

☐ Business & Occupation Tax: - - By checking this box and signing below, I hereby certify and attest I have read the Business & Occupation Tax statement found on the "Information for Bidders" document attached to this solicitation. **

☐ Equal Employment Opportunities: - - I acknowledge and agree that, in the performance of any City contract, the vendor will not discriminate against any employee or applicant for employment because of race, color, religion, age, sex, sexual orientation, gender identity, disability, or national origin. **

Authorized Bidder's Signature:*

Title:*

Printed/Typed Bidder's Name:*

Date:*

Company Name:*

Address:*

Telephone Number:*

Fax Number:

Email Address:*

▢ MANDATORY PRE-BID MEETING

[Edit](#)[More](#)

☐ A mandatory pre-bid conference for the purpose of discussing and clarifying the project drawings and specifications will be held in the City Engineering Office at 114 Dickinson Street at 10:00 am, Thursday, March 23, 2023.*

▣ BID BOND

[Edit](#)[More](#)

- ☐ Bidder acknowledges that a 5% bid bond is required for submission.*

▣ VENDOR PROTESTS

[Edit](#)[More](#)

In the event that any vendor desires to protest City's selection, such vendor (hereinafter "Protestor") shall submit its protest in writing, which must be received by City within seven (7) calendar days of after City Council approves of the award. Provided that the City Manager reserves the right to extend the time for submission of the protest if he determines it is reasonable under the circumstances.

The written protest must be submitted to the **City Manager's Office, Attention: Ben Mishoe, 501 Virginia Street East, Room 101; Charleston, WV 25301.**

Only vendors who have submitted a timely and responsive proposal may protest City's selection. No protest may be filed if the RFP is withdrawn or if all proposals received in response to the RFP are rejected.

Protests shall include the following information:

1. The Protestor's name, address, telephone number, and fax number;
2. The solicitation number;
3. A detailed statement of the legal and/ or factual grounds for the protest;
4. Copies of all relevant and supporting documentation, if necessary; and
5. A statement as to the form of resolution or relief sought.

FAILURE TO SUBMIT THIS INFORMATION SHALL BE GROUNDS FOR REJECTION OF THE PROTEST.

The City Manager may refuse to review any protests when the matter involved is the subject of litigation before a court of competent jurisdiction; if the merits have previously been decided by a court of competent jurisdiction; or if it has been decided by the City Manager in a previous protest.

At the time of submitting the written protest, Protestor shall submit a certified check in the amount of one thousand dollars (\$1,000.00) or bond equal to five percent (5%) of the price of the selected proposal, whichever is greater. In the event the proposal being protested is for contracted services, an estimated average of the contract value will be determined in order to calculate the five percent (5%) bond value. This bonding requirement is designed to protect against frivolous claims and unnecessary expenditures of public funds and to allow City to offset any and all costs, fees, expenses or damages of any kind whatsoever incurred by City as the result of an unsuccessful protest.

In the event the protest is unsuccessful, the certified check or bond will be used by City to recoup any and all costs, fees, expenses, or damages of any kind whatsoever incurred by City and related in any way to the unsuccessful protest. Costs, fees, expenses, and damages shall include, but shall not be limited to, increased costs of labor, materials or services resulting from any delay, professional fees, including, but not limited to, attorney fees, and all costs, fees or expenses of any kind whatsoever related in any way to the unsuccessful protest. By signing this document, Protestor waives the right to receive any money retained by City as set forth herein. If there are any funds remaining after City has recouped amounts as permitted herein, the remaining funds will be returned to Protestor. In the event Protestor is successful, the full amount of the certified check or bond will be returned to Protestor.

Upon receipt of a timely written protest, City shall provide notice of the protest to vendor selected as the successful bidder (hereinafter "Selected Vendor") and provide Selected Vendor with a copy of the written protest and any documents related thereto. **Selected Vendor will have two (2) business days to file a written response to the protest.** A hearing may be held within five (5) business days of the **date of receipt of the written response to the protest by Selected Vendor**; provided that, City may, in its sole discretion, set the date of the hearing beyond the five (5) day time period specified herein if deemed necessary or convenient to do so by City. If a hearing is held, both Protestor and Selected Vendor will have an opportunity to appear and present evidence and testimony in support of their positions. The hearing will be held before the City Manager or his designee. The department head of the department seeking the RFP and the City Attorney shall be in attendance.

A decision will be made by City within five (5) business days of the hearing. Upon a decision having been made, both Protestor and Selected Vendor will be notified in writing of City's decision.

In the event City's selection is reversed, City will reevaluate all proposals which were originally and timely submitted, in accordance with state and city laws and regulations. During the reevaluation, issues addressed during the protest proceedings may be considered.

Once a written protest is filed, no work will be performed by Selected Vendor until such time as City has rendered a final decision on the protest; provided that, if City, in its sole discretion, determines time is of the essence regarding receipt of the goods or completion of the services to be performed, City may permit Selected Vendor to proceed pursuant to its proposal and any Agreement with City, until/unless the protest is successful.

By submitting a proposal, each vendor agrees that the procedure outlined herein is the exclusive remedy available to challenge/protest the award of a contract to a successful bidder. The decision of the city manager is final and is not appealable. Each vendor further agrees that, in the event any qualified vendor fails to submit a written protest and certified check or bond within the time period specified, that vendor thereby forever waives its right to any further claim, action, or remedy, including, but not limited to, the right to bring an action before any administrative agency or any court of competent jurisdiction.

Vendor Signature:*

Date:*

Required Document List

Edit

More

Name	Description	Omission Terms
List of Stockholders	➡ Please upload a copy of Bidder's List of Stockh...	➡ I have no Stockholders.
Drug-Free Workplace Conformance Affidavit	➡ Please upload a signed and notarized copy of B...	
City Purchasing Affidavit	➡ Please upload a signed and notarized copy of B...	
Bid Bond (5% of bid price)	➡ Please upload a copy of a fully executed 5% bi...	
Local Vendor Preference	➡ OPTIONAL- Please upload a signed copy of a f...	➡ OPTIONAL

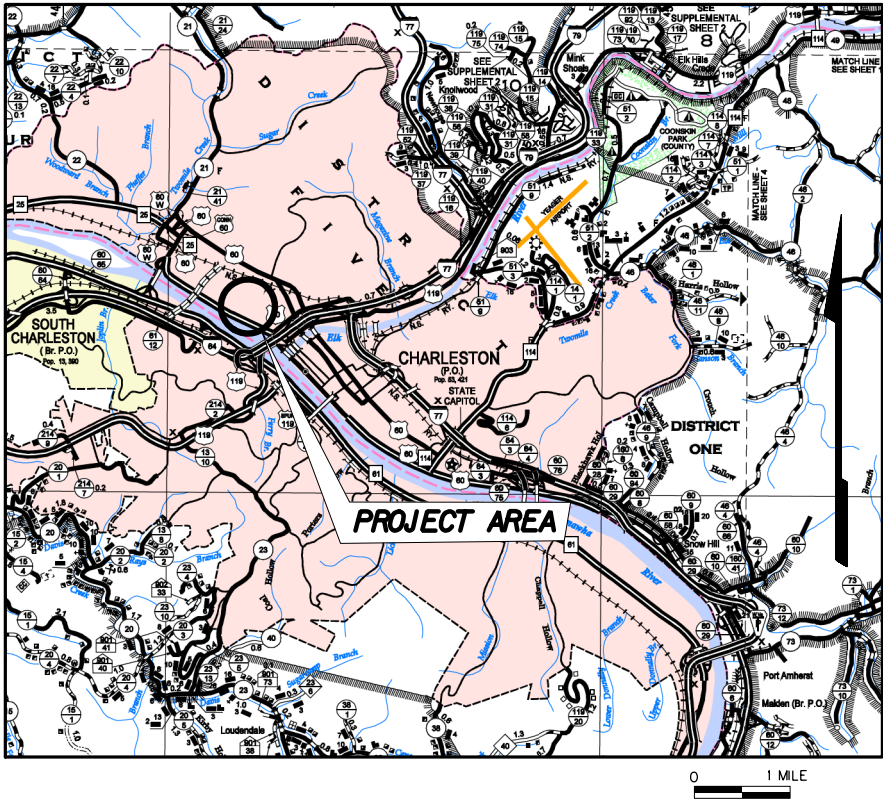
5 Required Documents

INTENT

The 5-Corners Intersection project shall consist of the installation of new signal pole foundations, underground conduit, signal masts, signal arms, signal heads, signal cabinet, preemption equipment, detection equipment, roadway signs, curb painting, roadway painting, preformed thermoplastic roadway markings, field wiring, asphalt resurfacing and sidewalk improvements. This work shall include all materials, labor, tools, and equipment necessary to complete and protect all phases of the work performed as shown upon the attached drawings and in accordance with these specifications.

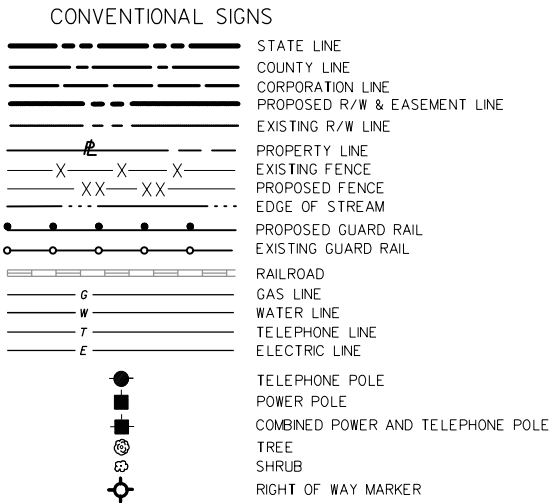
The work shall consist of the Vendor furnishing all materials, equipment and labor necessary for the satisfactory completion of this project. All materials, equipment, and workmanship shall be in accordance with the West Virginia Department of Transportation, Division of Highways, Standard Specifications for Roads and Bridges, 2023, as amended.

The details contained in the following specifications are not designed to exclude any manufacturer from bidding but are offered as a means of describing the needs of the City of Charleston. Where brand names are used, the words "or equal" are assumed to follow. All specifications are minimum requirements unless otherwise stated. Any deviations from the stated specifications must be described in detail. The merit of such deviations will be considered with regard to the City of Charleston's intended use.



UTILITIES ENCOUNTERED

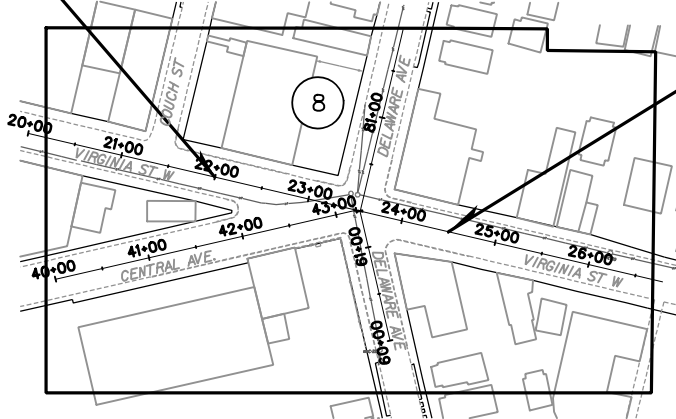
AMERICAN ELECTRIC POWER COMPANY (ELECTRIC)
FRONTIER - A CITIZENS COMMUNICATIONS COMPANY (PHONE)
SEGRA (FIBER)
MOUNTAINEER GAS COMPANY (GAS)
WEST VIRGINIA AMERICAN WATER (WATER)
OPTIMUM (FORMALLY SUDDENLINK)
CHARLESTON SANITARY BOARD



CITY OF CHARLESTON
FIVE CORNERS INTERSECTION
VIRGINIA STREET W,
DELAWARE AVENUE, AND CENTRAL AVENUE
KANAWHA COUNTY

Station	Station	FT	mile(s)
22+00.00	to 24+50.00	= 250.00	= 0.05
Total Project Length =		250.00	= 0.05

BEGIN PROJECT
VIRGINIA STREET W
STA. 22+00.00



END PROJECT
VIRGINIA STREET W
STA. 24+50.00



INDEX TO SHEETS

NO.	DESCRIPTION
1	TITLE SHEET
2	TYPICAL SECTIONS
3	SUMMARY OF QUANTITIES
4	QUANTITY TABLES
5	GENERAL NOTES
6	ISLAND MODIFICATION DETAIL
7	TTCP
8	PLAN SHEET
9 - 12	SIGNING AND PAVEMENT MARKING LAYOUT
13 - 22	TRAFFIC/PED SIGNAL MODIFICATIONS

REVISION NUMBER	SHEET NUMBER	REVISIONS	DATE	BY

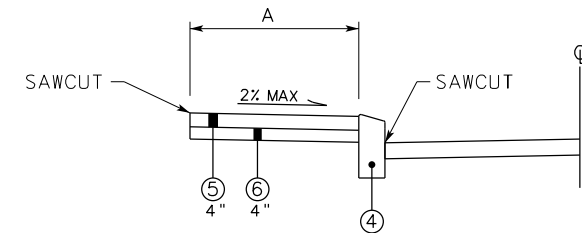
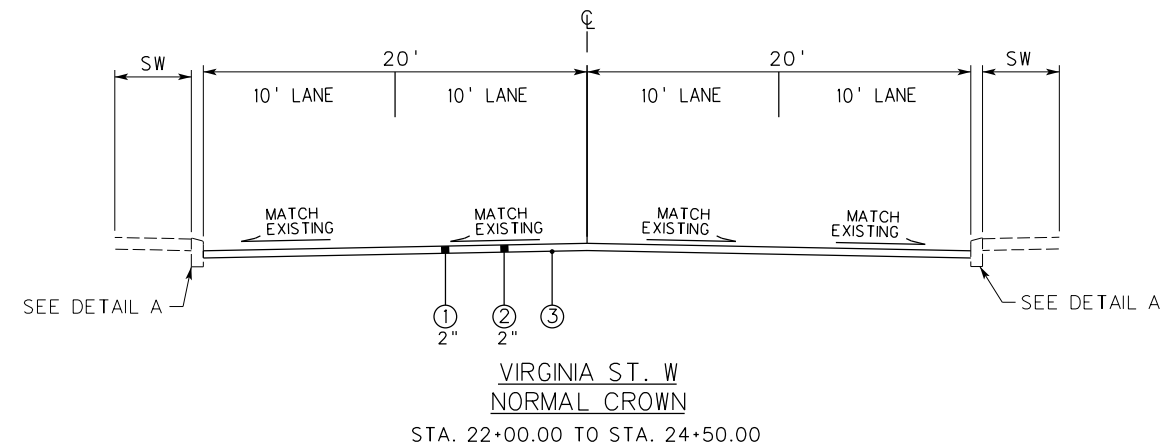


SIGNED: Amy Marie Balmer Staud
RESPONSIBLE CHARGE ENGINEER
DATE: February 28, 2023

PLANS PREPARED BY

HDR HDR ENGINEERING, INC.
CONSULTING ENGINEERS
CHARLESTON, WV
681-341-6100

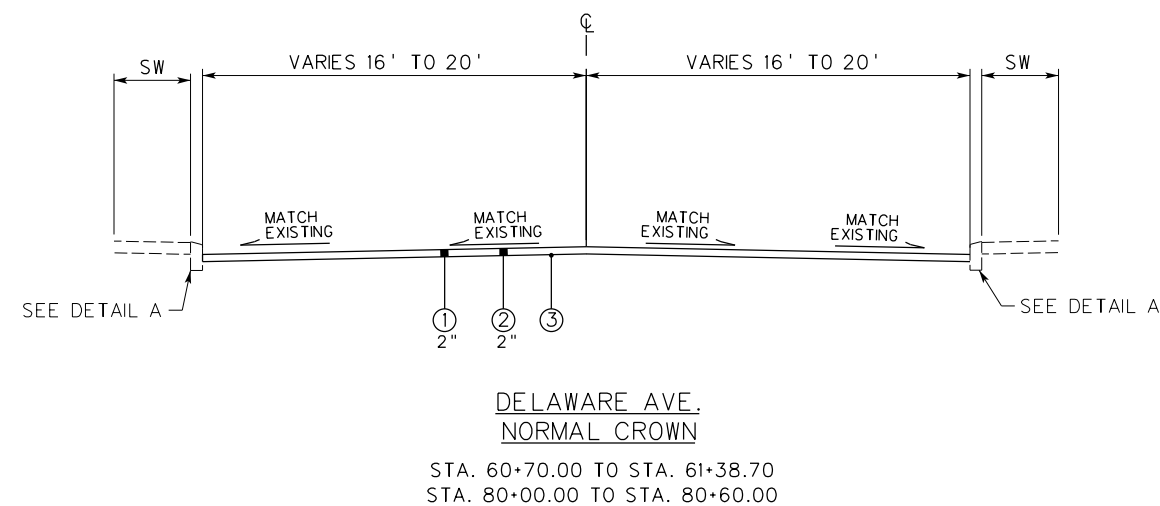
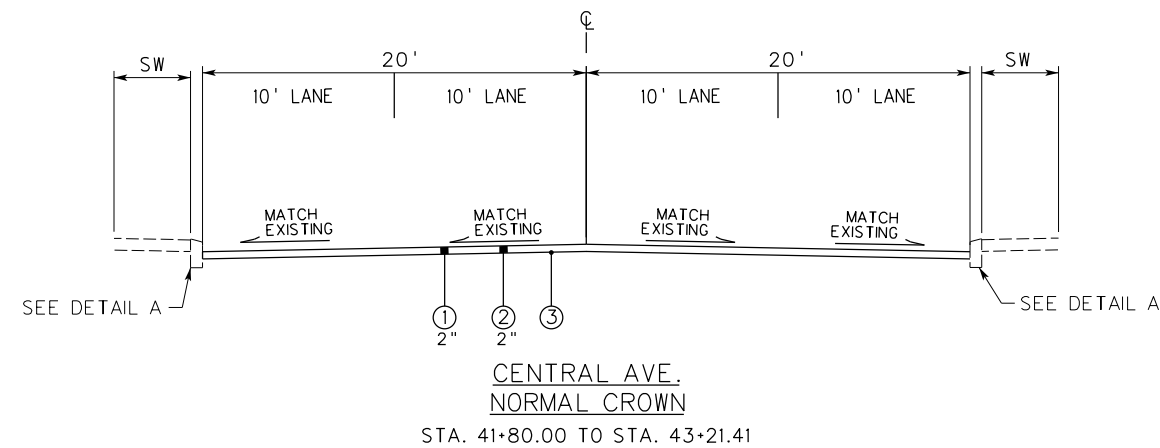
Sheet No.	Total Sheets
1	22



LOCATION			WIDTH	DETAIL SHEET 6
STA	STA	LT/RT	A	
VIRGINIA STREET				
22+18.02	22+53.11	RT	7.5' ±	A
22+70.10	23+32.99	LT	10.0' ±	B
23+77.34	23+94.78	LT	9.3'	C
23+92.10	24+02.84	RT	VARIES	D
24+02.84	24+15.19	RT	5.9'	D
CENTRAL AVENUE				
41+90.24	42+23.93	LT	3.5' ±	A
42+00.00	42+91.00	RT	3.8' ±	NA*
DELAWARE AVENUE				
80+22.51	80+58.19	LT	10.0' ±	B
80+24.24	80+57.71	RT	9.5' ±	C

*MATCH EXISTING CURB AND SIDEWALK LIMITS. NO DETAIL PROVIDED ON SHEET 6.

DETAIL A
PROPOSED CURB AND SIDEWALK LIMITS



- LEGEND:
- ① 402001-026 MARSHALL ASPHALT SKID PVT, SG, TY IV
 - ② 415005-001 STANDARD MILLING
 - ③ 408002-001 ASPHALT MATERIAL
 - ④ 610001-003 PLAIN CONCRETE CURBING, TYPE III
 - ⑤ 609001-001 CONCRETE SIDEWALK
 - ⑥ 609002-001 BED COURSE MATERIAL

 HDR ENGINEERING INC. CHARLESTON, WV 681-341-6100	REVISION	SHEET	REVISION	DATE	BY	CITY OF CHARLESTON TYPICAL SECTIONS
	NUMBER	NUMBER				

SUMMARY OF ESTIMATED QUANTITIES					
Alt. #	ITEM #		DESCRIPTION	UNIT	QTY
			ROADWAY		
	201001-000		CLEARING AND GRUBBING	LS	1
	204001-000		MOBILIZATION	LS	1
	207001-001		UNCLASSIFIED EXCAVATION	CY	30.8
	408002-001		ASPHALT MATERIAL	GA	219
	415005-001		STANDARD MILLING	SY	1907
	609001-001		CONCRETE SIDEWALK	SY	140
	609002-001		BED COURSE MATERIAL	CY	26.2
	609005-001		CURB RAMP, TYPE I	EA	5
	609006-001		DETECTABLE WARNING SURFACE	EA	5
	610001-003		PLAIN CONCRETE CURBING, TYPE III	LF	227
	636011-001		TRAFFIC CONTROL DEVICE	UN	5,945
	636014-001		FLAGGER	HR	100
	636021-001		ELECTRIC ARROW	DA	20
	636025-001		WARNING LIGHTS, TYPE B	DA	240
	639001-001		CONSTRUCTION LAYOUT STAKE	LS	1
	642040-001		INLET PROTECTION	EA	3
			ROADWAY ALTERNATES		
AA 1	402001-026		MARSHALL ASPHALT SKID PVT, SG, TY IV	TN	210
AA 2	402001-027		MARSHALL ASPHALT SKID PVT, S, TY IV	TN	200
			SIGNING AND PAVEMENT MARKINGS		
	657008-001		2.00 LB CHANNEL POST	LF	56
	657018-001		SUPPORT OR BRACKET REMOVAL	EA	2
	661001-001		0.080 IN FLAT SHEET SIGN	SF	23
	663001-026		EDGE LINE, TYPE II- 6 IN - YELLOW	LF	378
	663002-010		LANE LINE, TYPE V - 4 IN - YELLOW	LF	30
	663002-010		LANE LINE, TYPE V - 4 IN - WHITE	LF	35
	663002-040		CENTERLINE, TYPE II - 4 IN	LF	994
	663004-011		CHANNELIZING LINE, TYPE V - 6 IN	LF	390
	663005-011		STOP LINE, TYPE V - 24 IN	LF	85
	663006-010		CROSSWALK LINE, TYPE V - 12 IN X 6 FT	LF	408
	663010-010		ONE DIRECTION LANE ASSIGNMENT ARROW, TYPE V	EA	4
	663010-011		MULTI DIRECTIONAL LANE ASSIGNMENT ARROW, TYPE V	EA	6
	663011-010		LANE LETTER, TYPE V	EA	8

NOTE:

1. ITEM NUMBERS INDICATE 6 INCH WIDTH, HOWEVER, INTENT IS TO INSTALL 4 INCH WIDTH MARKINGS. INSTALL AS INDICATED ON PLAN, NOT BASED ON ITEM DESCRIPTION.

SUMMARY OF ESTIMATED QUANTITIES					
			TRAFFIC SIGNAL		
	660001-001		SIGNAL CONTROLLER 01	LS	1
	660002-030		TRAFFIC DETECTOR, RADD 01	LS	1
	660003-001		SIGNAL SECTION, G-16	EA	8
	660003-006		SIGNAL SECTION, V-12	EA	26
	660004-030		SIGNAL SUPPORT, AIL, PAINTED	EA	2
	660004-050		SIGNAL SUPPORT, E1, PAINTED	EA	6
	660007-001		MISCELLANEOUS SIGNAL, 01	LS	1
	660010-001		PRIORITY CONTROL SYSTEM DETECTOR, D4	EA	1
	660010-010		PRIORITY CONTROL SYSTEM EMITTER, 0E	EA	1
	661001-001		0.080 IN FLAT SHEET SIGN	SF	40
	661030-001		INTERNALLY ILLUMINATED SIGN, 72" X 18", SS	EA	2
	661030-001		INTERNALLY ILLUMINATED SIGN, 72" X 18", DS	EA	1
	662002-001		GALVANIZED STEEL CONDUIT, 01	LS	1
	662006-001		JUNCTION BOX, TYPE H, 18"x18"	EA	3
	662006-001		JUNCTION BOX, TYPE H, 24"x24"	EA	1
	662007-001		LUMINAIRE, TYPE LED	EA	2
	662014-001		INCIDENTAL ELECTRICAL WORK, LC1	LS	1

Sheet No.	Total Sheets
3	22

 HDR ENGINEERING, INC. CHARLESTON, WV 681-341-6100					
	REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY
CITY OF CHARLESTON SUMMARY OF QUANTITIES					

PLAIN CONCRETE CURB				
LOCATION			ITEM 610001-003 PLAIN CONCRETE CURBING, TYPE III	COMMENTS
STATION	STATION	LT/RT	LF	
VIRGINIA STREET				
22+18.02	22+53.11	RT	36	
22+70.10	23+00.65	LT	31	
23+24.91	23+32.98	LT	9	
24+11.69	24+15.19	RT	4	
DELAWARE AVENUE				
80+22.51	80+39.02	LT	17	
80+34.52	80+38.54	RT	5	
CENTRAL AVENUE				
41+90.24	42+23.93	LT	34	
42+00.00	42+91.00	RT	91	
TOTAL			227	

TEMPORARY POLLUTION CONTROL			
LOCATION		ITEM 642040-001 INLET PROTECTION	COMMENTS
STATION	LT/RT	EA	
VIRGINIA STREET			
23+22.00	LT	1	
DELAWARE AVENUE			
80+32.00	RT	1	
CENTRAL AVENUE			
41+88.00	LT	1	
TOTAL		3	

CITY OF CHARLESTON

QUANTITY TABLES

GOVERNING SPECIFICATIONS

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION, DIVISION OF HIGHWAYS, STANDARD SPECIFICATIONS, ROADS AND BRIDGES, ADOPTED 2023, THE CONTRACT DOCUMENTS, AND THE CONTRACT PLANS ARE THE GOVERNING PROVISIONS APPLICABLE TO THIS PROJECT.

STANDARD DETAILS

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION, DIVISION OF HIGHWAYS, STANDARD DETAILS BOOK, VOLUME I ISSUED MAY, 2016 AND VOLUME II ISSUED JANUARY 1, 2019 ARE APPLICABLE TO THIS PROJECT.

THE CONTRACTOR IS EXPECTED TO HAVE COPIES OF THE LATEST STANDARD DETAILS BOOK AND ANY REVISIONS, WHICH CAN BE FOUND AT:
WWW.TRANSPORTATION.WV.GOV/HIGHWAYS/ENGINEERING/PAGES/DETAILS.ASPX.

FULL DEPTH PAVEMENT REMOVAL

ALL PAVEMENTS AND SIDEWALK TO BE REMOVED SHALL BE SAWCUT TO PROVIDE A CLEAN INTERFACE WITH NEW CONSTRUCTION. SIDEWALK SHALL BE REMOVED AND REPLACED TO THE NEAREST EXISTING CONSTRUCTION JOINT OR SAWCUT TO PROVIDE 4' MINIMUM EXISTING CONCRETE SLAB WIDTH. COST OF SAWCUTTING SHALL BE INCIDENTAL TO OTHER BID ITEMS.

UTILITIES

EXISTING UTILITIES SHOWN ON THE PLANS HAVE BEEN LOCATED BASED ON FIELD SURFACE EVIDENCE AND INFORMATION PROVIDED BY THE UTILITY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CALL WEST VIRGINIA 811 (1-800-245-4848) AND TO ACCURATELY LOCATE ALL UTILITIES BY EXPLORATORY DIGGING IF NECESSARY.

WHEN WORKING NEAR EXISTING UNDERGROUND UTILITIES EXTREME CAUTION SHOULD BE USED. ALL EXCAVATIONS NEAR THE UNDERGROUND UTILITIES SHALL BE SHORED TO PREVENT MOVEMENT. ANY DAMAGE TO THE UTILITIES WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.

FOR CITY UTILITIES SUCH AS SIGNAL AND LIGHTING POWER FEEDS. THE CONTRACTOR MUST CONTACT CITY OF CHARLESTON DIRECTLY.

ASPHALT MIX DESIGN

USE HEAVY MIX DESIGN FOR MARSHALL ASPHALT ITEMS.

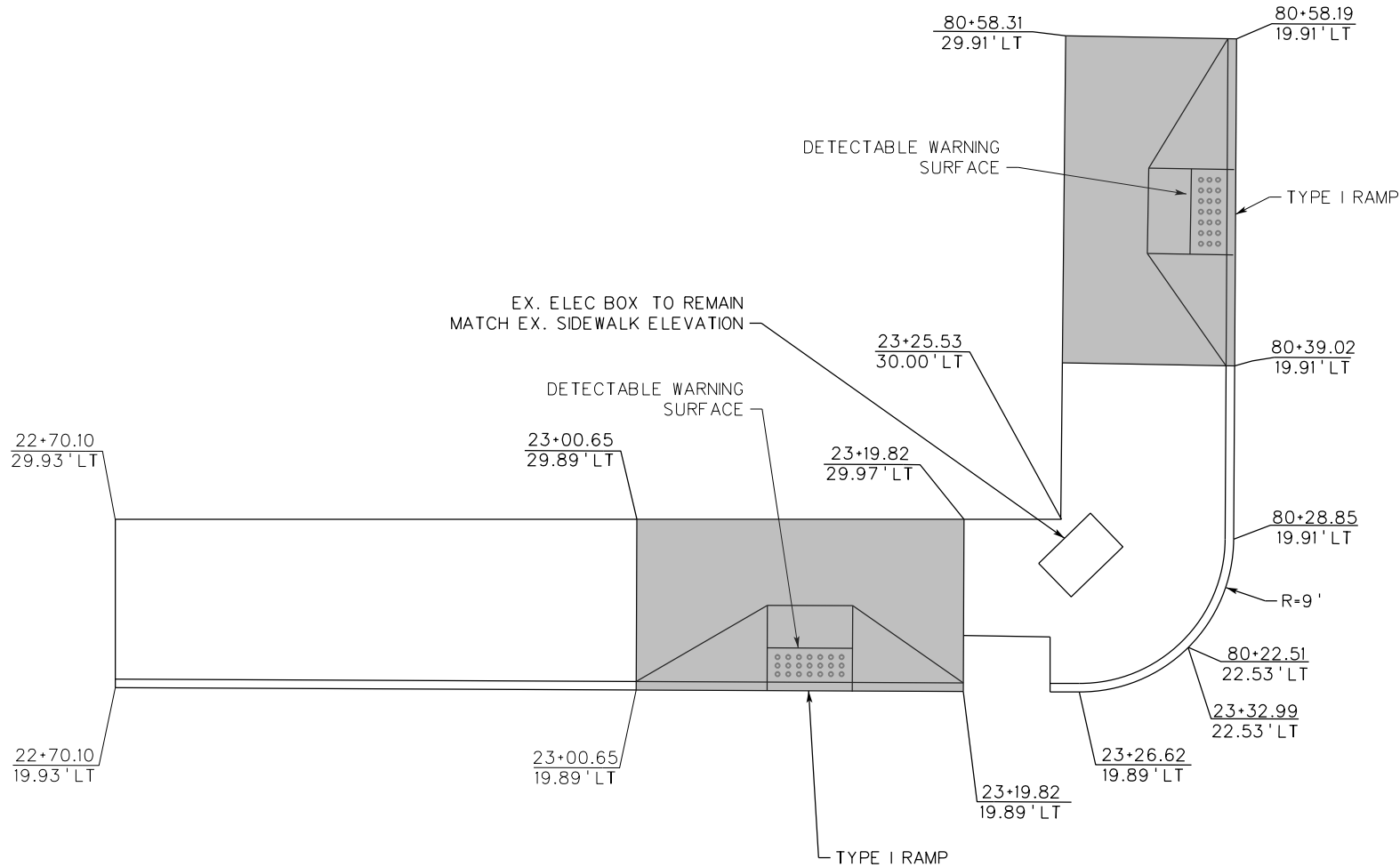
RELOCATION OF SIDEWALK ITEMS

NON-GROUND ATTACHED ITEMS TO BE MOVED DUE TO CONFLICT WITH SIDEWALK IMPROVEMENTS, SUCH AS RECYCLE BOXES, MAILBOXES, ETC., SHALL BE MOVED TO A NEAR LOCATION (APPROXIMATELY 20' OR LESS) IN THE SIDEWALK THAT DOES NOT INTERFERE WITH SIDEWALK IMPROVEMENTS OR INGRESS AND EGRESS FROM BUSINESSES. COST OF RELOCATING THESE ITEMS SHALL BE INCLUDED IN THE COST OF ITEM 201001-000, CLEARING AND GRUBBING.

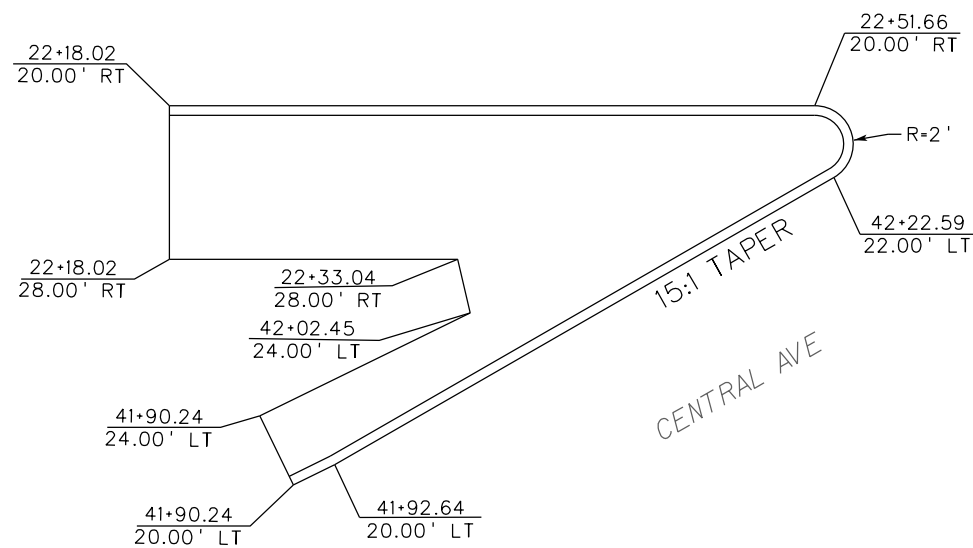
DETECTABLE WARNING SURFACE (DWS)

MATCH COLOR OF PROPOSED DWS TO EXISTING DWS.

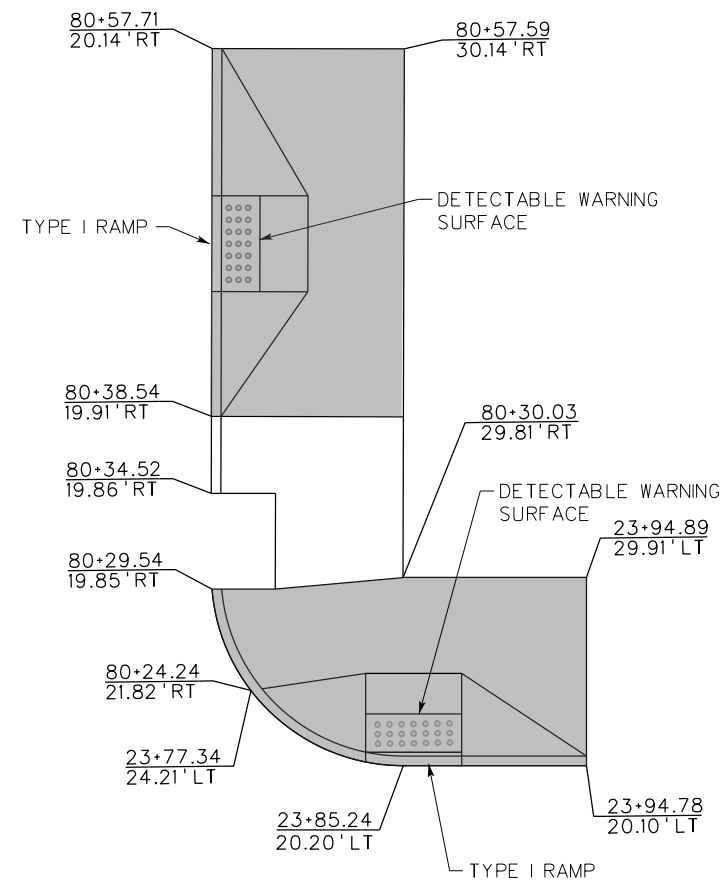
 HDR ENGINEERING, INC. CHARLESTON, WV 681-341-6100						CITY OF CHARLESTON GENERAL NOTES
	REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY	



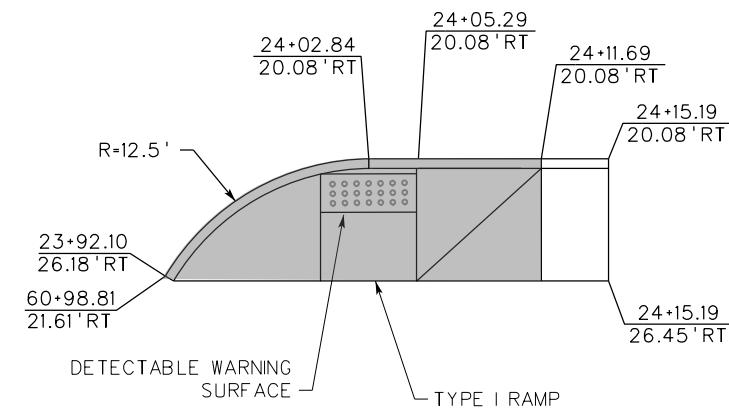
DETAIL B



DETAIL A



DETAIL C



DETAIL D

LEGEND

 CURB RAMP PAY LIMIT



REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

CITY OF CHARLESTON
CURB AND SIDEWALK DETAILS

TEMPORARY TRAFFIC CONTROL SUMMARY OF QUANTITIES

ITEM NO.	DESCRIPTION	QUANTITY	
		UNIT	TOTAL
636002-001	AGGREGATE FOR MAINTAINING TRAFFIC, STONE OR GRAVEL	TN	
636002-002	AGGREGATE FOR MAINTAINING TRAFFIC, SLAG	TN	
636003-001	BITUMINOUS MATERIAL FOR DUST PALLIATIVE	GA	
636005-001	TEMPORARY STRUCTURE FOR MAINTAINING TRAFFIC	EA	
636006-001	PILOT TRUCK AND DRIVER	DA	
636007-002	ERADICATION OF PAVEMENT MARKING	SF	-
636009-002	TEMPORARY PAVEMENT MARKING-TAPE 6 IN, TYPE 6 - WHITE, TYPE VIIb	LF	
636009-002	TEMPORARY PAVEMENT MARKING-TAPE 6 IN, TYPE 6 - YELLOW, TYPE VIIb	LF	
636010-003	TEMPORARY RAISED PAVEMENT MARKER, TYPE TCZ	EA	
636011-001	TRAFFIC CONTROL DEVICE	UN	5,945
636012-010	PROJECT TRAFFIC CONTROL DEVICE CLEANING	EA	
636013-001	INDIVIDUAL TRAFFIC CONTROL DEVICE CLEANING	EA	
636014-001	FLAGGER	HR	100
636014-002	TRAFFIC DIRECTOR	HR	
636019-001	TEMPORARY GUARDRAIL BARRIER	LF	
636020-001	REMOVE AND RESET TEMPORARY GUARDRAIL BARRIER	LF	
636021-001	ELECTRIC ARROW	DA	20
636022-001	CHANGEABLE MESSAGE SIGN	DA	
636023-002	TEMPORARY TRAFFIC SIGNAL	MO	
636024-001	TEMPORARY PIPE FOR MAINTAINING TRAFFIC	LF	
636025-001	WARNING LIGHTS, TYPE B	DA	240
636026-001	TEMPORARY LIGHTING	LS	
636028-002	SHADOW VEHICLE	MO	
636030-001	SPEED MONITORING TRAILER	DA	
636060-001	TEMPORARY IMPACT ATTENUATING DEVICE	EA	
636060-002	REMOVE AND RESET ATTENUATOR DEVICE	EA	
637001-001	WATER FOR DUST PALLIATIVE	MG	

TRAFFIC CONTROL DEVICES RATE SCHEDULE

DEVICE	DESCRIPTION	VALUES IN UNITS	QUANTITIES	TOTAL UNITS
1	SIGNS ON PORTABLE MOUNTS AND BARRICADES (TOTAL SIGN AREA 16 SQ. FT. OR GREATER)	170	16	2,720
2	SIGNS ON PORTABLE MOUNTS AND BARRICADES (TOTAL SIGN AREA LESS THAN 16 SQ. FT.)	80	10	800
3	SIGNS ON PERMANENT POSTS (TOTAL SIGN AREA 16 SQ. FT. OR GREATER)	180	-	-
4	SIGNS ON PERMANENT POSTS (TOTAL SIGN AREA LESS THAN 16 SQ. FT.)	90	-	-
5	BARRICADES - TYPE I	35	-	-
6	BARRICADES - TYPE II	60	-	-
7	BARRICADES - TYPE III	90	10	900
8	DRUMS	60	10	600
9	CONES	5	25	125
10	VERTICAL PANEL OR GROUND MOUNTED DELINEATORS	10	-	-
11	BARRIER OR GUARDRAIL MOUNTED DELINEATORS (BID INCIDENTAL TO BARRIER OR GUARDRAIL)	0	-	-
12	CHANNELIZER CONES	40	20	800
13	OVERSIZE SIGNS	300	-	-
TOTAL				5,945

1. ORANGE SIGN SHEETING SHALL BE REFLECTIVE FLUORESCENT ORANGE, TYPE ASTM-VI (ROLL-UP) OR TYPE ASTM-XI (RIGID). ALL OTHERS SHALL BE TYPE ASTM-IV UNLESS FY OR FYG. ANY FY OR FYG SHALL BE ASTM-XI.
2. DRUM AND CHANNELIZER CONE SHEETING TO BE SIX (6) INCH, TYPE ASTM-IV.
3. BARRICADE AND CONE SHEETING SHALL BE ASTM-IV.
4. ONLY DEVICES AND DELINEATORS ON THE APPROVED PRODUCTS LIST SHALL BE PERMITTED.

TEMPORARY TRAFFIC CONTROL STRATEGIES

1. TEMPORARY TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH SECTION 636 OF THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION, DIVISION OF HIGHWAYS STANDARD SPECIFICATIONS ROADS AND BRIDGES, ADOPTED 2023, AND THE "MANUAL ON TEMPORARY TRAFFIC CONTROL FOR STREETS AND HIGHWAYS", 2006 EDITION, WHICH IS MADE A PART OF THIS CONTRACT AND THE TRAFFIC CONTROL PLAN FOR INDIVIDUAL SEGMENTS AS DESCRIBED IN THESE PLANS.
2. REFLECTIVE SHEETING ON TEMPORARY TRAFFIC CONTROL DEVICES SHALL BE OF NEW CONDITION AT THE BEGINNING OF THE PROJECT LIFE. NIGHT VISIBILITY AND LEGIBILITY SHALL BE MAINTAINED. ALL WARNING SIGNS SHALL HAVE THE MINIMUM DIMENSIONS OF 48"x48" UNLESS OTHERWISE NOTED. SIGN SIZES AND COLORS ARE SHOWN IN THE WEST VIRGINIA DIVISION OF HIGHWAYS SIGN FABRICATION MANUAL.
3. ACCESS TO ALL HOUSES, SCHOOLS, AND BUSINESSES SHALL BE MAINTAINED AT ALL TIMES.
4. TRAFFIC SHALL BE MAINTAINED THROUGHOUT THE PROJECT AT ALL TIMES. ALSO, THE CONTRACTOR IS TO COORDINATE WITH THE CITY OF CHARLESTON TO MINIMIZE THE EFFECTS ON TRAFFIC FLOW.
5. OPEN HOLES ARE TO BE COVERED AND HAVE TYPE II BARRICADES WITH TYPE "A" LIGHTS. THERE IS NO SPECIFIC BID ITEM FOR TYPE "A" LIGHTS. TYPE "A" LIGHTS SHALL BE BID INCIDENTAL TO ITEM 636011-001.
6. ALL WORK THROUGHOUT THE LIFE OF THIS PROJECT SHALL BE COORDINATED WITH THE CITY OF CHARLESTON (CITY ENGINEER AT 304-348-8106) TO MINIMIZE EFFECTS ON TRAFFIC FLOW, ESPECIALLY FOR ANY 'SPECIAL EVENTS'.
7. THERE SHALL NOT BE ANY WORK PERFORMED THAT REQUIRES LANE CLOSURES AT ANY TIME DURING THE HOLIDAYS LISTED IN SECTION 101 OF THE STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES, ADOPTED 2017, AS AMENDED BY THE SUPPLEMENTAL SPECIFICATIONS DATED JANUARY 1, 2023.
- IF THE CONTRACTOR DOES NOT HAVE ALL LANES OPEN BY 6:00 AM ON THE FIRST OF THE APPLICABLE DATES HE WILL BE ASSESSED A PENALTY AMOUNT OF \$40/MIN OR FRACTION THEREOF.
8. CONTRACTOR SHALL COORDINATE THE USE OF ANY METERED PARKING SPACES WITH THE CITY OF CHARLESTON. THE CITY MAY REQUIRE DAILY OR WEEKLY RATES FOR USING OR BLOCKING THESE SPACES. CONTRACTOR IS RESPONSIBLE FOR ALL ASSOCIATED FEES. THIS SHALL BE BID INCIDENTAL TO ITEM 204001-000 MOBILIZATION.
9. CONTRACTOR COORDINATION
OTHER CONTRACTORS MAY BE WORKING IN THE INTERSECTION LOCATIONS PER THESE PLANS. IT IS IMPERATIVE THAT STRICT COORDINATION BETWEEN CONTRACTORS BE AGREED ON IN REFERENCE TO WORKING PLANS, STORAGE AREAS, DETOURS, AND LANE CLOSURES. THIS PLAN OF COORDINATION SHALL BE PRESENTED TO THE ENGINEER IN WRITING FOR APPROVAL.
10. COORDINATION WITH MEDIA
BEFORE THE CONTRACTOR PROCEEDS WITH ANY WORK THE CONTRACTOR SHALL COORDINATE SUCH WITH THE CITY OF CHARLESTON TO NOTIFY TELEVISION, RADIO, NEWSPAPERS, HOSPITALS, FIRE DEPARTMENTS, SCHOOLS, POLICE, EMERGENCY VEHICLES, ETC. AS APPROPRIATE.
11. WARNING LIGHTS
TYPE "B" WARNING LIGHTS SHALL BE PLACED ON THE FIRST TWO ADVANCED WARNING SIGNS ALONG EACH DIRECTION.
12. ELECTRIC ARROW
ELECTRIC ARROWS ARE MANDATORY ON TRANSITIONS AND SHALL HAVE A MINIMUM OF 1000 FEET SIGHT DISTANCE. THERE SHALL BE FIVE (5) DRUMS INSTALLED UPSTREAM OF THE ELECTRIC ARROW TO DELINEATE THE DEVICE.
13. FLAGGER
ALL FLAGGERS AND FLAGGING OPERATIONS SHALL BE FURNISHED AND SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. IF WORK IS PERFORMED AT NIGHT WITH A FLAGGER THEN THE FLAGGER STATIONS SHALL BE ADEQUATELY ILLUMINATED. ALL COSTS ASSOCIATED WITH A FLAGGER SHALL BE BID AS ITEM 636014-001.

14. MODIFIED SIGNAL WARNING SIGNS
ONE (1) W23-2 SIGN (1 - 30"x30") WITH FLAGS (2) SHALL BE INSTALLED IN ADVANCE OF THE INTERSECTION APPROXIMATELY 500' AS SHOWN IN THE SIGNAL QUANTITIES. THE SIGNS AND FLAGS ARE BID AS PART OF ITEMS 661001-001 AND 657008-001.
- THESE SIGN ASSEMBLIES (S8 AND S9) TO BE INSTALLED PRIOR TO TURNING ON MODIFIED SIGNAL AND TO REMAIN IN PLACE FOR THIRTY (30) DAYS AFTER TURNED ON, THEN THE CONTRACTOR SHALL REMOVE THE SIGNS, SUPPORTS, AND FLAGS FROM THESE LOCATIONS.
- ALL MATERIAL TO BE FURNISHED BY CONTRACTOR.
- SEE SIGNING QUANTITIES ON SHEET SG-9 FOR ADDITIONAL DETAILS.
15. CONTRACTOR SHALL SUBMIT APPLICATION FOR TTCP AND ALL CLOSURES FOR REVIEW AND APPROVAL BY THE CITY CHIEF OF POLICE. COORDINATE OBTAINING AND SUBMITTING APPLICATION THROUGH THE CITY TRAFFIC, PARKING AND TRANSPORTATION DEPARTMENT AT 304-348-0739.

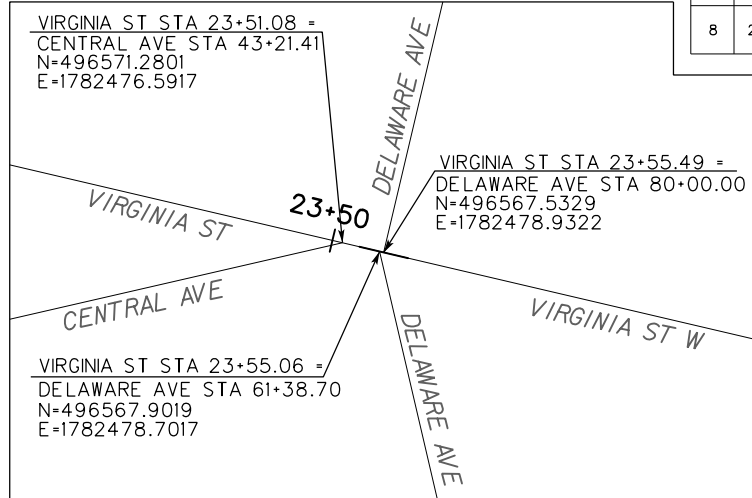
SEQUENCE OF CONSTRUCTION

1. SIDEWALK, CURBS, ISLAND AND UNDERGROUND WORK
(CONDUIT, JUNCTION BOXES, FOUNDATIONS, ETC.)
- NON-ROAD - USE CASE A3, A4, E2, OR E3 WITHOUT TYPE "B" LIGHTS FOR ONE, TWO, THREE, OR FOUR APPROACHES AS NECESSARY.
- IN ROADWAY - USE CASES A6, B1, B2, B3, B4, E4, E5, E6, E17, OR F2 AS APPROPRIATE. DO NOT CLOSE LANES OVERNIGHT.
- FOR PEDESTRIANS, USE CASE B3C AS NEEDED OR INSTALL "WORKERS" SIGNS (W21-1a), TYPE II BARRICADES OR DRUMS, CONSTRUCTION TAPE, AND TYPE "A" LIGHTS OR TYPE II BARRICADE OR DRUM FOR OVERNIGHT AS NECESSARY.
2. RENOVATION OF TRAFFIC SIGNAL:
- THE EXISTING SIGNAL SHALL REMAIN OPERATIONAL FOR AS LONG AS POSSIBLE. CONTRACTOR SHALL COMPLETE AS MUCH WORK AS POSSIBLE WITH THE EXISTING SIGNAL IN OPERATION. THE NEW SIGNAL HEADS SHALL BE COVERED UNTIL THEY ARE TO BE USED.
- CONVERT FROM OLD TO NEW OPERATION. DOWNTIME POWER SERVICE CHANGE SHALL OCCUR DURING THE DAYLIGHT HOURS AND SHALL NOT OCCUR DURING THE PEAK HOUR TRAFFIC CONDITIONS WHEN POSSIBLE. DURING ANY DOWNTIME, THE CONTRACTOR WILL USE CASE A6 WITH FLAGGERS ON ALL APPROACHES.
3. SIGNAL DOWNTIME
- ALL DOWNTIME IS TO BE COORDINATED WITH THE CITY OF CHARLESTON AT LEAST 1 WEEK IN ADVANCE.
- FLAGGER HOURS HAVE BEEN CALCULATED TO ASSIST WITH MAINTAINING TRAFFIC DURING THE CLOSING AND OPENING OF A TRAFFIC LANE, SIGNAL DOWNTIME AS DESCRIBED ABOVE AND INSTALLATION AND REMOVAL OF TRAFFIC SIGNAL RELATED DEVICES. ANY FLAGGER HOURS OUTSIDE OF THESE CONDITIONS SHALL BE APPROVED BY THE PROJECT ENGINEER.
- IF SIGNAL DOWNTIME EXCEEDS THE HOURS SHOWN ABOVE, THE CONTRACTOR SHALL BE PENALIZED AT A RATE OF \$40/MIN AND FRACTION THEREOF UNTIL SIGNAL IS TURNED ON.

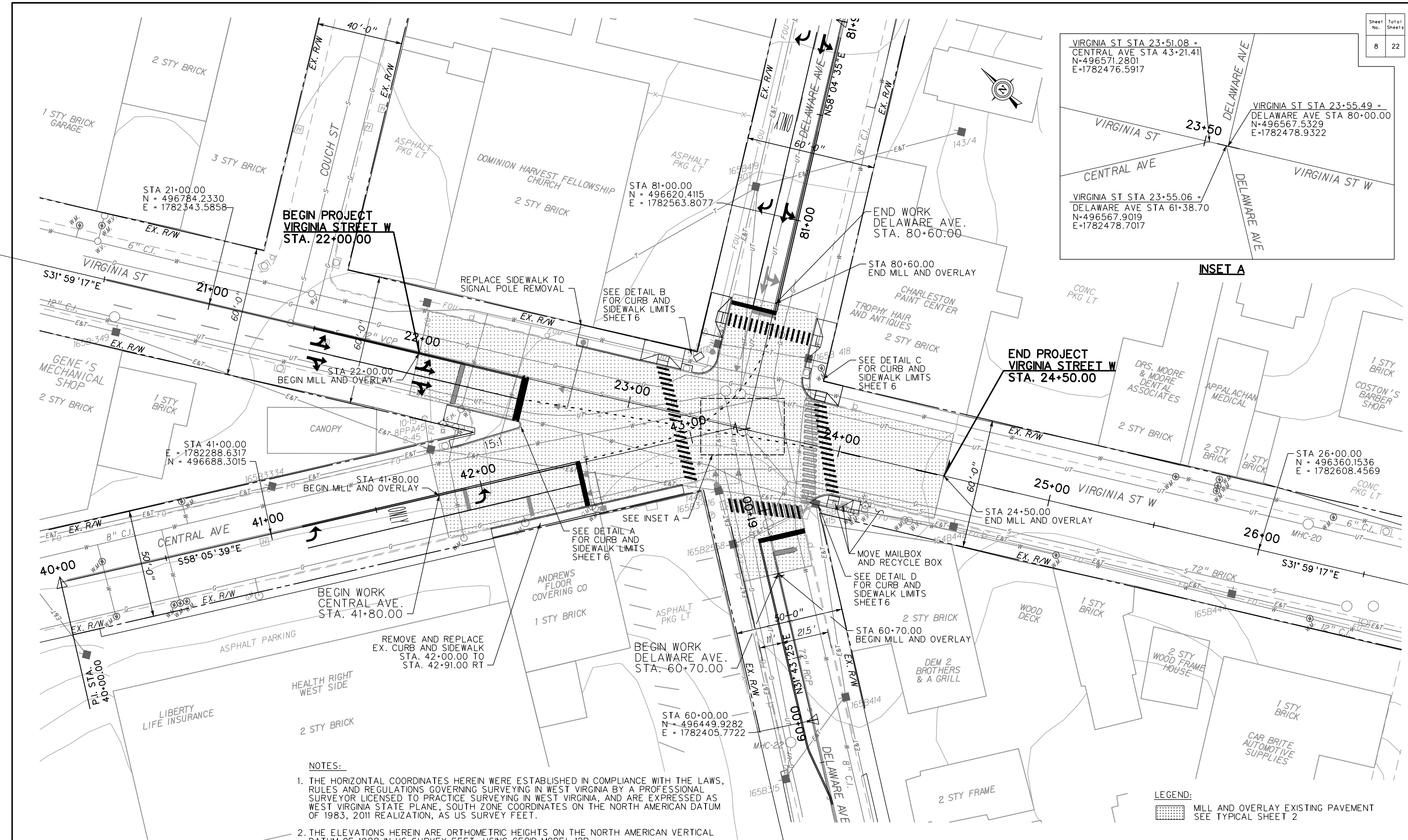
TTCP-1

 HDR ENGINEERING, INC. CHARLESTON, WV 681-341-6100					
	REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

CITY OF CHARLESTON
TEMPORARY TRAFFIC
CONTROL PLAN



INSET A



HDR		HDR ENGINEERING, INC.		CHARLESTON, WV		681-341-6100	
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY			

CITY OF CHARLESTON

PLAN SHEET

SUMMARY OF QUANTITIES			
ITEM NO.	DESCRIPTION	QUANTITY	
		UNIT	TOTAL
657008-001	2.00 LB CHANNEL POST	LF	56
657018-001	SUPPORT OR BRACKET REMOVAL	EA	2
661001-001	0.080 IN FLAT SHEET SIGN	SF	23
663001-026	EDGE LINE, TYPE II - 6 IN, YELLOW (SEE NOTE BELOW)	LF	378
663002-010	LANE LINE, TYPE V - 4 IN, YELLOW	LF	30
663002-010	LANE LINE, TYPE V - 4 IN, WHITE	LF	35
663002-040	CENTERLINE LINE, TYPE II - 4 IN	LF	994
663004-011	CHANNELIZING LINE, TYPE V - 6 IN (SEE NOTE BELOW)	LF	390
663005-011	STOP LINE, TYPE V - 24 IN	LF	85
663006-010	CROSSWALK LINE, TYPE V-12 IN X 6 FT	LF	408
663010-010	ONE DIRECTION LANE ASSIGNMENT ARROW, TYPE V	EA	4
663010-011	MULTI DIRECTIONAL LANE ASSIGNMENT ARROW, TYPE V	EA	6
663011-010	LANE LETTER, TYPE V	EA	8

NOTE:
ITEM NUMBERS INDICATE 6 INCH WIDTH, HOWEVER, INTENT IS TO INSTALL 4 INCH WIDTH MARKINGS.
INSTALL AS INDICATED ON PLAN, NOT BASED ON ITEM DESCRIPTION.

SIGNING AND PAVEMENT MARKING GENERAL NOTES

GOVERNING SPECIFICATIONS

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STANDARD DETAILS

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION, DIVISION OF HIGHWAYS, STANDARD DETAILS BOOK, VOLUME I, DATED MAY, 2016 & VOLUME II, DATED JANUARY 2019 SHALL APPLY TO THIS PROJECT.

STANDARD DETAILS DRAWINGS CAN BE FOUND AT:
www.transportation.wv.gov/highways/engineering/pages/details.aspx

SHOP DRAWING SUBMISSION

THE CONTRACTOR SHALL SUBMIT SIGN FABRICATION SHOP DRAWINGS IN EITHER ONE OF TWO WAYS: A SINGLE SUBMISSION OF ALL NON STANDARD FLAT SHEET SIGNS AND A SINGLE SUBMISSION OF ALL EXTRUDED PANEL SIGNS, OR A SINGLE COMBINED SUBMISSION OF ALL SIGN FABRICATION DETAILS. ADDITIONALLY, THE CONTRACTOR SHALL SUBMIT ALL BREAKAWAY SIGN SUPPORT SHOP DRAWINGS IN ONE SUBMISSION.

SHOP DRAWINGS FOR STANDARD FLAT SHEET SIGNS ARE NOT REQUIRED TO BE SUBMITTED TO THE WVDOH. CONTRACTOR SHALL FABRICATE ALL STANDARD FLAT SHEET SIGNS AS PER THE WVDOT SIGN FABRICATION MANUAL, LATEST EDITION.

CORNERS

CORNERS OF ALL SHEET ALUMINUM SIGNS SHALL BE ROUNDED; HOWEVER, CORNERS OF EXTRUDED ALUMINUM SIGN PANELS SHALL NOT BE ROUNDED. FABRICATED SIGNS WITH DIRECT APPLIED COPY (BLUE, GREEN, OR BROWN BACKGROUND) SHALL HAVE A 1-1/2" INCH CORNER RADIUS ON THE ALUMINUM BLANK.

DEMOUNTABLE COPY AND BORDERS

RIVETS USED FOR ATTACHING BLACK DEMOUNTABLE COPY AND BORDERS SHALL BE BLACK AND RIVETS USED FOR ATTACHING WHITE DEMOUNTABLE COPY AND BORDERS SHALL BE SILVER.

SIGN FABRICATION

ALL SIGNS SHALL BE FABRICATED IN ACCORDANCE WITH THE LATEST EDITION OF THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION, DIVISION OF HIGHWAYS "SIGN FABRICATION MANUAL", "DESIGN GUIDE FOR SIGNING", "STANDARD SPECIFICATIONS ROADS AND BRIDGES", LATEST EDITIONS.

SIGN PUNCHING

WHERE NOTED IN THE CONTRACT PLANS, SIGNS SHALL BE PUNCHED IN ACCORDANCE WITH THE STANDARD DETAILS.

HARDWARE

ON ALL FLAT SHEET SIGNS THE MOUNTING HARDWARE SHALL BE OF A VANDAL- RESISTANT DESIGN MEETING THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS.

PAVEMENT MARKING

- ALL MARKINGS SHALL BE CONTINUOUS AND CONSISTENT WITH THE EXISTING MARKINGS WHERE THEY JOIN.
- NO MARKINGS SHALL BE PLACED ON LONGITUDINAL CONSTRUCTION JOINTS UNLESS SO DIRECTED BY THE ENGINEER.
- THE CONTRACTOR SHALL SUPPLY AND INSTALL TYPE V "STOP LINE" PAVEMENT MARKINGS. THESE LINES SHALL BE 24" WIDE AND BID AS SUCH. THEY MAY BE INSTALLED AS TWO 12" WIDE LINES OR ONE 24" WIDE LINE. THESE MARKINGS SHALL BE IN ACCORDANCE WITH STANDARD SPECIFICATION 663.5.5.
- BEFORE PLACEMENT OF PAVEMENT MARKINGS THE CITY OF CHARLESTON INSPECTOR/ENGINEER SHALL DETERMINE WHETHER MARKINGS ARE STILL WARRANTED AND SHALL BE PERFORMED.

Sheet No.	Total Sheets
9	22



HDR

HDR ENGINEERING, INC.

CHARLESTON, WV

681-341-6100

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

CITY OF CHARLESTON

SIGNING AND PAVEMENT MARKINGS

SUMMARY OF QUANTITIES

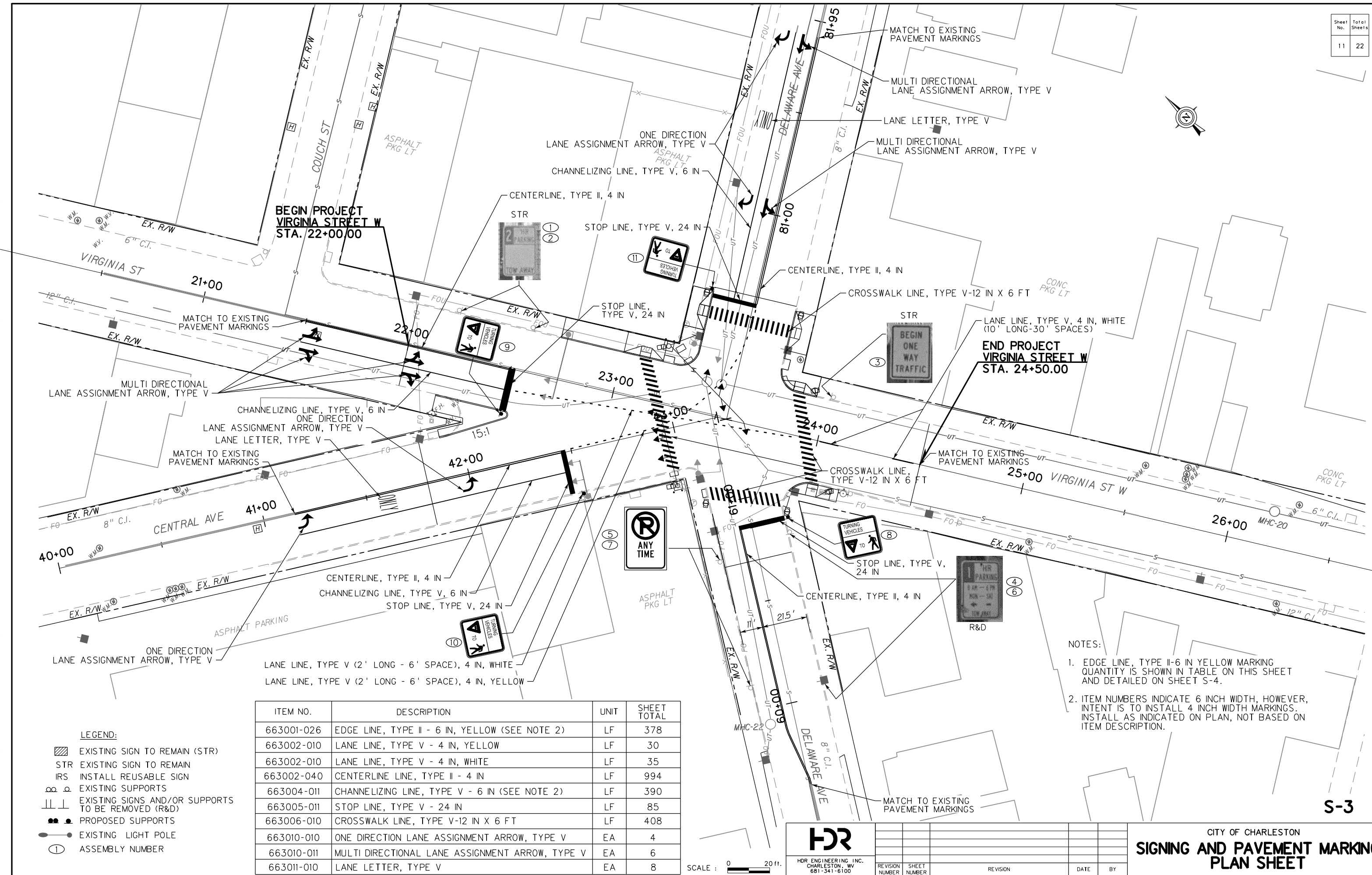
AND GENERAL NOTES

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SIGN DISPOSITION:
NEW - NEW SIGN ON NEW SUPPORT
R&D - REMOVE & DISCARD
R&S - REMOVE & SAVE
STR - SIGN TO REMAIN
IRS - INSTALLATION OF REUSABLE SIGN
** - EXCEPTION TO STANDARD PUNCHING

S-2

J04C23C03-PLAN e



LEGEND:

- EXISTING SIGN TO REMAIN (STR)
- STR EXISTING SIGN TO REMAIN
- IRS INSTALL REUSABLE SIGN
- EXISTING SUPPORTS
- EXISTING SIGNS AND/OR SUPPORTS TO BE REMOVED (R&D)
- PROPOSED SUPPORTS
- EXISTING LIGHT POLE
- ASSEMBLY NUMBER

LANE LINE, TYPE V (2' LONG - 6' SPACE), 4 IN, WHITE
LANE LINE, TYPE V (2' LONG - 6' SPACE), 4 IN, YELLOW

ITEM NO.	DESCRIPTION	UNIT	SHEET TOTAL
663001-026	EDGE LINE, TYPE II - 6 IN, YELLOW (SEE NOTE 2)	LF	378
663002-010	LANE LINE, TYPE V - 4 IN, YELLOW	LF	30
663002-010	LANE LINE, TYPE V - 4 IN, WHITE	LF	35
663002-040	CENTERLINE LINE, TYPE II - 4 IN	LF	994
663004-011	CHANNELIZING LINE, TYPE V - 6 IN (SEE NOTE 2)	LF	390
663005-011	STOP LINE, TYPE V - 24 IN	LF	85
663006-010	CROSSWALK LINE, TYPE V-12 IN X 6 FT	LF	408
663010-010	ONE DIRECTION LANE ASSIGNMENT ARROW, TYPE V	EA	4
663010-011	MULTI DIRECTIONAL LANE ASSIGNMENT ARROW, TYPE V	EA	6
663011-010	LANE LETTER, TYPE V	EA	8

NOTES:

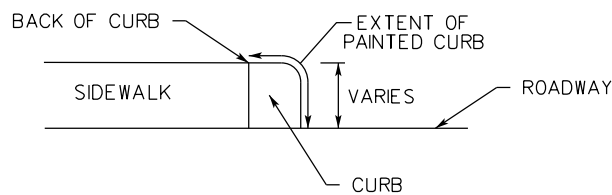
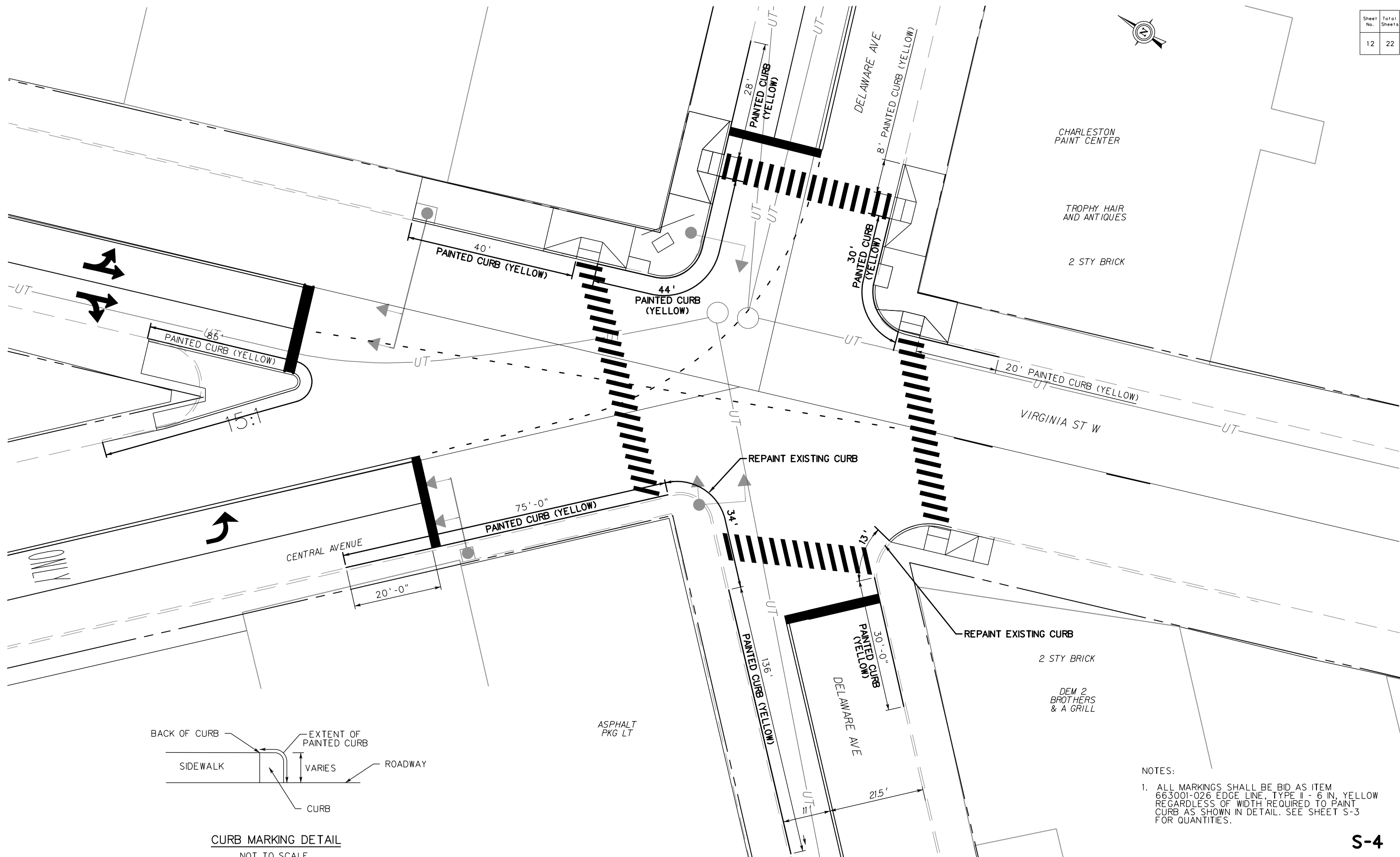
- EDGE LINE, TYPE II-6 IN YELLOW MARKING QUANTITY IS SHOWN IN TABLE ON THIS SHEET AND DETAILED ON SHEET S-4.
- ITEM NUMBERS INDICATE 6 INCH WIDTH, HOWEVER, INTENT IS TO INSTALL 4 INCH WIDTH MARKINGS. INSTALL AS INDICATED ON PLAN, NOT BASED ON ITEM DESCRIPTION.



HDR ENGINEERING, INC.
CHARLESTON, WV
681-341-6100

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

CITY OF CHARLESTON
**SIGNING AND PAVEMENT MARKING
PLAN SHEET**



CURB MARKING DETAIL
NOT TO SCALE

- NOTES:
- ALL MARKINGS SHALL BE BID AS ITEM 663001-026 EDGE LINE, TYPE II - 6 IN. YELLOW REGARDLESS OF WIDTH REQUIRED TO PAINT CURB AS SHOWN IN DETAIL. SEE SHEET S-3 FOR QUANTITIES.

S-4

HDR									
HDR ENGINEERING, INC. CHARLESTON, WV 681-341-6100		REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY			

CITY OF CHARLESTON
CURB MARKINGS

SCALE : 0 10 ft.

SIGNAL SUMMARY OF QUANTITIES				
ITEM NO.	DESCRIPTION	QUANTITY		TOTAL
		ALT.	UNIT	
660001-001	SIGNAL CONTROLLER, 01		LS	1
660002-030	TRAFFIC DETECTOR, RADD, 01		LS	1
660003-001	SIGNAL SECTION, G-16		EA	8
660003-006	SIGNAL SECTION, V-12		EA	26
660004-030	SIGNAL SUPPORT, AIL, PAINTED		EA	2
660004-050	SIGNAL SUPPORT, E1, PAINTED		EA	6
660005-010	JUNCTION BOX, TYPE H, 18" X 18"		EA	3
660005-010	JUNCTION BOX, TYPE H, 24" X 24"		EA	1
660007-001	MISCELLANEOUS SIGNAL, 01		EA	1
660010-001	PRIORITY CONTROL SYSTEM DETECTOR, D4		LS	1
660010-010	PRIORITY CONTROL SYSTEM EMITTER, OE		EA	1
661001-001	0.080 IN FLAT SHEET SIGN		SF	40
661030-001	INTERNALLY ILLUMINATED SIGN, 72" X 18", SS		EA	2
661030-001	INTERNALLY ILLUMINATED SIGN, 72" X 18", DS		EA	1
662002-001	GALVANIZED STEEL CONDUIT, 01		LS	1
662014-001	INCIDENTAL ELECTRICAL WORK		LS	1
662027-001	LUMINAIRE, TYPE LED		EA	2

GOVERNING SPECIFICATIONS

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STANDARD DETAILS VOLUME I AND II

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION, DIVISION OF HIGHWAYS, STANDARD DETAILS BOOK, VOLUME I, DATED MAY 2016 & VOLUME II, DATED JANUARY 2019, SHALL APPLY TO THIS PROJECT. STANDARD DETAILS DRAWINGS CAN BE FOUND AT:
<http://transportation.wv.gov/highways/engineering/Pages/Details.aspx>

2. THE NATIONAL ELECTRICAL CODE (NFPA 70).
3. ASPHALT OR CONCRETE WHICH HAS BEEN DISTURBED OR REMOVED TO INSTALL POLES OR CONDUIT SHALL BE REPLACED IN ACCORDANCE WITH ITS ORIGINAL DESIGN THICKNESS, AT THE CONTRACTOR'S EXPENSE.
4. ALL AREAS ON THIS PROJECT WHICH HAVE BEEN SEEDED AND MULCHED BY OTHERS AND WHICH ARE DISTURBED BY THE CONTRACTOR IN PERFORMING THE WORK UNDER THIS CONTRACT SHALL BE RESTORED TO THEIR ORIGINAL CONDITION USING SEEDING AND MULCHING METHODS AND MATERIALS AS APPROVED BY THE ENGINEER. NO ADDITIONAL COMPENSATION SHALL BE ALLOWED FOR THIS WORK.
5. THE INFORMATION SHOWN ON THESE DRAWINGS CONCERNING TYPE AND LOCATION OF UNDERGROUND UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION AS TO THE TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO. ANY DAMAGE INCURRED SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
6. COLOR CODING OF ELECTRICAL CONDUCTORS BY USE OF PHASE TAPE OR FIELD PAINT IS NOT ACCEPTABLE ON THIS PROJECT. CONDUCTORS MUST BE MANUFACTURER-COLORED, STRIPED, OR RIGID-MARKED AS SPECIFIED.
7. ALL METALLIC SIGNAL EQUIPMENT SUCH AS POLES, CONDUIT, AND CABINETS MUST BE DIRECTLY BONDED TOGETHER BY A SPECIAL RUN SINGLE-CONDUCTOR #8 AWG STRANDED COPPER WIRE. THE WIRE MUST BE INSULATED, COLOR CODED GREEN AND CONNECTED AT EACH BONDING POINT BY USE OF SCREW-TYPE COPPER OR BRONZE LUGS. IN ADDITION TO THIS BONDING, THE CONDUCTOR MUST BE CONNECTED TO ALL GROUND RODS IN THE SIGNAL SYSTEM AND TO THE EQUIPMENT GROUND BAR BUSS IN THE CONTROLLER CABINET.
8. TRAFFIC SIGNAL GROUND ROD CONNECTORS MUST BE ATTACHED AND SECURELY FASTENED BOTH AT THE FOUNDATION AND INSIDE POLE PRIOR TO ERECTION OF POLE. ENOUGH SLACK IN THE GROUNDING WIRE MUST BE ALLOWED FOR ERECTION OF POLE. BOTH CONNECTIONS MUST AGAIN BE CHECKED AFTER THE POLE IS INSTALLED.
9. EXCAVATIONS FOR TRAFFIC SIGNAL CONDUIT NOT UNDER ROADWAY OR SHOULDER AREAS, UNDER 12" IN WIDTH AND 30" IN DEPTH, MAY BE BACK FILLED IN LAYERS NOT EXCEEDING 4" AFTER COMPACTION. SPECIFIC DENSITY TESTS WILL NOT BE REQUIRED WHEN ACCEPTED COMPACTION TECHNIQUES ARE USED AND THE BACK FILLED EXCAVATION DENSITY IS COMPARABLE TO THAT OF THE SURROUNDING GROUND.
10. AC - (COMMON), LOGIC GROUND AND CHASSIS GROUND MUST BE ISOLATED IN THE CONTROLLER AND DETECTOR CIRCUITRY AS REQUIRED IN THE NEMA STANDARDS.
11. CONDUIT INSTALLATION NOTE

CONDUIT SHALL BE INSTALLED BY APPROVED JACKING OR DRILLING METHODS. PAVEMENT, BRICK, OR EXISTING SIDEWALK SHALL NOT BE DISTURBED UNLESS APPROVED BY THE ENGINEER. IN THE EVENT THAT THE SIDEWALK HAS TO BE OPENED, THE ENTIRE SECTION OF SIDEWALK MUST BE REPLACED, JOINT TO JOINT. UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER. BID THIS WORK AS PART OF ITEM 660007-001 (*) FOR INTERSECTION WORK OR 662002-001(*) AS INDICATED ON THE PLANS. -PER INTERSECTION

12. THREADED COUPLINGS SHALL BE USED TO CONNECT ALL CONDUITS. SLIP JOINTS, SET SCREW COUPLINGS, AND CONTINUOUS RUNNING THREADS ARE NOT ACCEPTABLE.
13. ALL NEW POLE BASES SHALL BE PROVIDED WITH VARMINT SCREENS AS SHOWN ON TES-41. THERE SHALL NOT BE ANY GAP BETWEEN CONNECTIONS OF VARMINT SCREEN.

ALSO THE TS-2 CABINET SHALL INCLUDE ISOLATION RELAY PANELS TO DRIVE THE COM
LITES FOR ALL PRIORITY CONTROL DEVICES.

- THE CABINET AND ALL COMPONENTS CONTAINED WITHIN THE CABINET SHALL BE NEW AND NOT REUSED OR REFURBISHED.

15. CONTRACTOR SHALL INSTALL ONE (1) NEW POWER SERVICE (METER, MAIN DISCONNECT).
BEFORE BIDDING, CONTRACTOR SHALL CONTACT POWER COMPANY TO DETERMINE POWER
DROP LOCATION AND ANY FEES ASSOCIATED WITH POWER DROP.

CONTRACTOR IS RESPONSIBLE FOR ALL FEES ASSESSED BY THE POWER COMPANY.
CONTRACTOR SHALL CONTACT POWER COMPANY AT LEAST 3 WEEKS PRIOR TO NEED FOR
'APPLICATION FOR SERVICE'. BID AS PART OF 660007-001.

EX. METER #794 089 318 WORK ORDER

16. THE CONTRACTOR SHALL SUPPLY THE CITY OF CHARLESTON TRAFFIC, PARKING AND TRANSPORTATION IN WRITING THE FOLLOWING INFORMATION FOR THE NEW/RENOVATED INTERSECTION PRIOR TO FINALIZING PROJECT:

- POWER SERVICE METER NUMBER
- CABINET AND CONTROLLER SERIAL NUMBERS
- CONFLICT MONITOR/MALFUNCTIONING MONITOR UNIT SERIAL NUMBER
- PRIORITY CONTROL SYSTEM SERIAL NUMBER
- VEHICLE DETECTION (RPD) SERIAL NUMBERS

INFORMATION SHALL BE EMAILED TO MATT HARTLINE (matt.hartline@cityofcharleston.org)

17. ALL REMOVED SIGNAL ITEMS (WITH THE EXCEPTION OF EXISTING SIGNAL POLES), INCLUDING THE EXISTING SIGNAL CABINET AND ALL OF ITS INTERNAL PARTS AND SOFTWARE SHALL BE RETURNED TO THE CITY OF CHARLESTON TRAFFIC PARKING AND TRANSPORTATION CONTACT MATT HARTLINE AT 304-348-0739 AT LEAST 3 DAYS PRIOR TO DELIVERY. THE TRAFFIC SIGNAL CONTROLLER SHALL BE PACKAGED SECURELY IN THE CABINET SO IT SHALL NOT BE DISLODGED FROM THE SHELF WHILE SHIPPING. DAMAGED ITEMS SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE. EACH OF THE FOLLOWING COMPONENTS SHALL BE LABELED WITH THE PROJECT NUMBER, THE INTERSECTION, AND SERIAL NUMBER:

- A) CABINET
- B) CONFLICT MONITOR/MALFUNCTIONING MONITOR UNIT
- C) CONTROLLER
- D) PRIORITY CONTROL SYSTEM (PCS)
- E) SIGNAL HEADS
- F) JUNCTION BOXES
- G) SIGNAL CONDUCTOR WIRE

ALL CABINETS AND EQUIPMENT SHALL BE RETURNED IN THE SAME CONDITION AS IT WAS WHEN TAKEN FROM THE POLE AND INTERSECTION WITHIN 5 DAYS OF REMOVAL. ALL EQUIPMENT IS PRESUMED TO BE WORKING UNLESS OTHERWISE NOTED BY THE PROJECT ENGINEER. THE PROJECT ENGINEER SHALL INSPECT AND NOTE ANY DAMAGES AND TAKE THE SERIAL NUMBER OF THE CONTROLLER AND CAMERAS PRIOR TO SHIPPING.

18. THE CONTROLLER MUST PROVIDE A TRUE MENU FORMAT FOR DATA ENTRY AND OPERATIONAL MONITORING. ALL CONTROLLER PARAMETERS INCLUDING OVERLAPS MUST BE KEYBOARD PROGRAMMABLE. AS A MINIMUM, A LIGHTED FORTY (40) COLUMN BY FOUR (4) LINE LIQUID CRYSTAL DATA DISPLAY SCREEN MUST BE PROVIDED ON THE FRONT OF THE CONTROLLER. THE DISPLAY MUST BE EASILY VISIBLE IN BOTH FULL DAYLIGHT AND AT NIGHT. BACK LIGHTING OF THE DISPLAY IS REQUIRED.

- ## 19. RADAR SENSOR PROCESSING UNIT RACKS

RADAR SENSOR UNIT RACKS TO BE CARD-RACK TYPE AND INSTALLED WITHIN THE CONTROLLER CABINET. THE RADAR SENSOR RACKS MUST HAVE A MINIMUM OF EIGHT (8) POSITIONS AND BE WIRED FOR 2 CHANNEL CONTACT CLOSURE CARD, WITH POSITIONS 7 AND 8 WIRED FOR PRIORITY VEHICLE PRE-EMPT CONTROL SYSTEMS. RACK MOUNTED POWER SUPPLY MUST ALSO BE FURNISHED WITH THESE UNITS AS WELL AS ALL ISOLATION COMPONENTS AS RECOMMENDED OR FURNISHED AS A STANDARD BY THE EQUIPMENT MANUFACTURER. BID RACKS AS PART OF ITEM 660001-001(*). -PER INTERSECTION

20.SIGNAL HEAD CONDUCTOR CABLE

ALL SIGNAL HEAD CONDUCTOR CABLE SHALL BE IMSA BLACK PE, 20-1, 7-CONDUCTOR, 16 AWG STRANDED COPPER CABLE RATED AT 600V. THIS CONDUCTOR CABLE SHALL BE RED, ORANGE, GREEN, BLACK, WHITE, AND TWO (2) DIFFERING COLORS IN ACCORDANCE WITH IMSA COLOR CODE.

21. ALL TRAFFIC SIGNAL SERVICE ENTRANCE CABLE(S) FROM THE SERVICE METER TO THE WVDON TRAFFIC SIGNAL CABINET, SHALL BE A TYPE TC, CONTROL CABINET-THHN. THIS CABLEING SHALL BE RATED AT 600 VOLTS AND SHALL CONSIST OF COPPER CONDUCTORS. CONDUCTORS SHALL BE PVC/NYLON INSULATED, THE CABLEING WILL HAVE AN OVERALL PVC JACKET THAT IS HEAT, MOISTURE, AND SUNLIGHT RESISTANT.

22. POLE MOUNTED CONTROLLER CABINETS SHALL BE MOUNTED AT A HEIGHT OF 3' ABOVE THE GROUND WITH NEW MOUNTING HARDWARE AND CONDULETS UNLESS OTHERWISE NOTED ON THE INDIVIDUAL SIGNAL PLAN SHEETS. ALL CONDULETS FROM THE POLE INTO THE CONTROLLER CABINETS SHALL BE 3" PAINTED BLACK.

- ## 23. AUDIBLE PEDESTRIAN PUSH BUTTONS

"AUDIBLE" PEDESTRIAN PUSH BUTTONS (8) SHALL BE PROVIDED FOR THIS PROJECT AS PER THE WDOH "APS" APL. THESE SHALL INCORPORATE A PUSH BUTTON WITH VIBRATOR, AUDIBLE MESSAGE, AND RELIEF SYMBOLS.

THESE APS UNITS ARE TO BE INSTALLED PER MANUFACTURER'S INSTRUCTIONS AND SHALL BE ONE OF THE MANUFACTURERS PROVIDED ON THE WVDON "APS" APL LIST. THESE ARE TO BE BID AS PART OF ITEM 660007-001(*) - * PER INTERSECTION.

ALL 3" CONDUIT POSTS SHALL BE PAINTED BLACK AND IN ACCORDANCE WITH TES-31.

24. UTILITY NOTE

THE CONTRACTOR MUST NOTIFY ALL APPLICABLE UTILITIES PRIOR TO ANY EXCAVATION FOR EXACT LOCATION OF THEIR UNDERGROUND FACILITIES. EXTREME CAUTION SHALL BE USED IN THESE AREAS ESPECIALLY IN EXCAVATING FOR FOUNDATIONS AND THE JACKING OF CONDUIT. IF NECESSARY THE CONTRACTOR SHALL HAND DIG TO LOCATE LINES OR SHALL OPEN CUT IN AREAS OF POSSIBLE CONFLICT. THESE AREAS TO BE DETERMINED BY THE PROJECT ENGINEER. CONTACT MISS UTILITY OF WV (1-800-245-4848), WATER, SEWER, AND ANY OTHER UTILITY NOT PART OF THE MISS UTILITY NETWORK PRIOR TO ANY EXCAVATING. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL CITY OWNED UTILITIES INCLUDING ANY SIGNAL AND LIGHTING CONDUITS WITHIN THE PROJECT AREA.

25. SIGNAL HEADS

1. ALL INTERSECTIONS SHALL HAVE NEW SIGNAL HEADS, SHALL BE NON-METALLIC, SHALL HAVE BACKPLATES AND CUTAWAY VISORS, UNLESS INDICATED OTHERWISE. BACKPLATES SHALL BE LOUVERED AND BLACK AND SHALL HAVE RETROREFLECTIVE 1" BORDER WITH A 1" MARGIN. THIS BORDER SHALL COMPRISE OF TYPE IX, FLUORESCENT YELLOW, PRESSURE SENSITIVE RETROREFLECTIVE SHEETING AND PLACED ON PERIMETER FACE OF ALL BACKPLATES.
- 2a. ALL NEW VEHICULAR AND PEDESTRIAN SIGNAL SECTIONS SHALL UTILIZE LIGHT EMITTING DIODE (L.E.D.) SIGNAL MODULES AT 120 VAC. ALL UNITS SHALL NOT UTILIZE MORE THAN 22 WATTS POWER CONSUMPTION.
- b. ALL L.E.D. TRAFFIC SIGNAL MODULES SHALL BE BID INCIDENTAL TO ITEM 660003-006 (V-12) OR 660003-001 (G-16), AS APPROPRIATE.
- c. ALL TRAFFIC SIGNAL MODULES SHALL CONFORM TO THE WYDOH SPECIFICATION CONCERNING L.E.D. SIGNAL MODULES.
- d. SEE THE WYDOH "APPROVED PRODUCTS LIST" (APL) FOR APPROVED L.E.D. MANUFACTURERS.
3. ALL MODULES SHALL CONFORM TO THE ITE VTCSH-LED CIRCULAR SIGNAL SUPPLEMENT, THE ITE VTCSH PART 3, AND THE ITE PTCSE-2 REQUIREMENTS. ALL UNITS MUST COME WITH A STANDARD 5 YEAR WARRANTY FROM THE DATE OF INSTALLATION.
4. VERTICAL CLEARANCE OF 17' (+ OR - 3") TO BE MAINTAINED TO THE BOTTOM OF ALL BACKPLATES.
5. SIGNAL HEAD CLAMP ATTACHMENT SHALL BE MADE OF STEEL.
6. ALL VEHICULAR AND PEDESTRIAN SIGNAL HEADS SHALL BE BLACK.

26. STOP BAR RADAR PRESENCE DETECTION SYSTEM (RPD)

A RADAR PRESENCE DETECTION SYSTEM (RPD) IS TO BE INSTALLED FOR THE INTERSECTION IN THIS PROJECT AS DESCRIBED IN THESE PLANS. THIS SHALL BE BID PER INTERSECTION [660002-030, TRAFFIC DETECTOR, RADD, (*)]
* PER INTERSECTION

THE RADAR PRESENCE DETECTION SYSTEM SHALL BE NON-INTRUSIVE AND EQUIVALENT TO THE WAVETRONIX SMARTSENSOR MATRIX, SMARTMICRO UMRR (UNIVERSAL MEDIUM RANGE RADAR) OR AN APPROVED EQUAL AS DEEMED APPROPRIATE BY THE TRAFFIC ENGINEERING DIVISION. THE CONTRACTOR IS TO SUPPLY A RADAR PRESENCE DETECTION SYSTEM (RPD) AS PRESCRIBED TO MEET REQUIRED PHASING AND SIGNAL OPERATION AS SHOWN IN PLANS. THERE SHALL BE NO PAYMENT FOR ANY SYSTEM THAT REQUIRES ADDITIONAL HARDWARE OR MATERIAL NOT SHOWN IN PLANS.

THE DIVISION APPROVED PRODUCT LIST (APLS) CAN BE FOUND AT
https://transportation.wv.gov/highways/mcst/Pages/APL_By_Number.aspx SECTION 715.042.001.

CONTRACTOR SHALL CONTACT MANUFACTURER REPRESENTATIVE PRIOR TO INSTALLATION.
DETECTION SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS WITH FINAL
APPROVAL BY CITY OF CHARLESTON, TRAFFIC, PARKING AND TRANSPORTATION.
CONTACT MATT HARTLINE AT 304-348-0739.

MOUNT RADAR SENSOR ON UPRIGHT, LUMINAIRE ARM OR MAST ARM AS PER MANUFACTURER'S RECOMMENDATION FOR BEST POSSIBLE TRAFFIC DETECTION. SEE SIGNAL SPECIAL DETAIL SHEET 16. DETAILS G3 OR G4.

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27. POLES

POLE LOCATIONS ON THE PLAN SHEETS MAY BE ALTERED ONLY WITH THE WRITTEN APPROVAL OF THE CITY OF CHARLESTON, TRAFFIC, PARKING AND TRANSPORTATION

ALL POLE COUPLINGS SHALL BE 3" WITH A WEATHERHEAD.

CONCRETE FOUNDATIONS SHALL BE SUBJECT TO SECTION 601 OF THE WVDOH STANDARD SPECIFICATIONS ADOPTED 2017, AS AMENDED BY THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION, DIVISION OF HIGHWAYS, SUPPLEMENTAL SPECIFICATIONS, DATED JANUARY 1, 2023. TRAFFIC SIGNAL POLE FOUNDATIONS SHALL CURE FOR A MINIMUM OF SEVEN (7) DAYS OR 3000 PSI STRENGTH PRIOR TO INSTALLING THE POLE.

ALL NEW FOUNDATION SIZES FOR NEW POLES SHALL BE IN ACCORDANCE WITH WEST VIRGINIA DIVISION OF HIGHWAYS STANDARD SHEET TES-30 OR TES-40.

NEW SIGNAL POLE FOUNDATIONS SHALL BE EXTENDED OUT OF THE GROUND TO BE FLUSH WITH SIDEWALK ELEVATION, UNLESS OTHERWISE NOTED IN THE PLANS.

ALL NEW SIGNAL POLES AND THEIR ANCHOR BOLTS AND ALL HARDWARE ARE TO BE SUPPLIED AND INSTALLED BY THE CONTRACTOR.

28. SIGNAL EQUIPMENT REMOVAL

ALL EXISTING TRAFFIC SIGNAL EQUIPMENT, WITH THE EXCEPTION OF SIGNAL POLES SHALL BE REMOVED AND DELIVERED TO THE CITY OF CHARLESTON. CONTACT: MATT HARTLINE AT 304-348-0739. AT LEAST 3 DAYS PRIOR TO DELIVERY.

IF A POLE'S FOUNDATION IS NOT TO BE REUSED, IT SHALL BE REMOVED AND AS NOTED IN THE PLANS, THE FOUNDATION SHALL BE REMOVED TO 12" BELOW GROUND OR SUBGRADE AND AREA REPLACED WITH SUITABLE MATCHING MATERIAL. BID ALL SIGNAL REMOVAL AS PART OF ITEM 660007-001 (*) , *-PER INTERSECTION

CONTRACTOR IS RESPONSIBLE FOR PLUGGING ANY UNUSED HOLES IN EXISTING POLES THAT ARE TO BE REUSED. COLOR OF THE PLUG SHALL MATCH POLE COLOR. BID AS PART OF ITEM 660007-001 (*) *PER INTERSECTION

ALL OTHER EXISTING EQUIPMENT TO BE REMOVED AT ALL INTERSECTIONS AND BECOME THE CONTRACTOR'S PROPERTY TO PROPERLY DISPOSE OF.

29. PEDESTRIAN CONTROL SIGNAL HEADS (TYPE G-16)

- COUNTDOWN LED PED MODULES - (SEE 'APL' LIST)

A) THESE SPECIFICATIONS COVER SYMBOLIC PEDESTRIAN SIGNAL ASSEMBLIES TO BE ILLUMINATED BY LED MODULES MOUNTED BEHIND A SINGLE LENS, WITH ONLY ONE SYMBOL DISPLAYED PER PEDESTRIAN INTERVAL. EACH SYMBOL (HAND AND WALKING PERSON) SHALL BE A MINIMUM 11" HIGH AND MEET THE LATEST REVISION OF ITE STANDARDS. THE MESSAGE BEARING SURFACE OF THE LENS SHALL BE A MINIMUM OF 18" x 17". ALL OTHER REQUIREMENTS OF THE CURRENT WEST VIRGINIA STANDARD SPECIFICATIONS FOR PEDESTRIAN CONTROL SIGNAL HEADS NOT SPECIFICALLY ADDRESSED HEREIN, WHERE APPLICABLE, SHALL BE INCLUDED AS PART OF THIS STANDARD. SYMBOLIC DISPLAY IS TO BE A HORIZONTAL, HAND- / WALKING PERSON, BID AS ITEM 660003-001 (G-16) ONE SECTION PER HEAD ASSEMBLY. THESE PEDESTRIAN HEADS SHALL BE BLACK IN COLOR AND THE ENCLOSURE HINGE SHALL BE LOCATED ON THE BOTTOM OF THE ENCLOSURE FOR MAINTENANCE PURPOSES.

MOUNTING DESCRIPTION:

LPM - MOUNTING BRACKET ON "SYMBOL" SIDE OF HEAD
RPM - MOUNTING BRACKET ON "NUMBER" SIDE OF HEAD
TPM - TOP POLE MOUNT

B) GENERAL DESIGN REQUIREMENTS (TYPE G-16)

THE NORMAL SIZE OF THE SIGNAL LENS SHALL BE 16". THE PEDESTRIAN HEAD LAMPS (G-16) MUST BE LED TYPE.

C) HOUSING

THE HOUSING SHALL BE DIE CAST ALUMINUM WITH DROP DOWN LENS DOOR. TOP AND BOTTOM MUST BE PROVIDED WITH CLOSEABLE OPENING OR KNOCKOUT FOR STANDARD 1½" PIPE BRACKETS WITH INTERLOCK SURFACE. SIDE-OF-POLE HINGE MOUNTED BRACKET SHALL BE PROVIDED WITH INTERNAL SCREW TERMINAL UNLESS OTHERWISE SPECIFIED. SIDE-OF-POLE MOUNT INSTALLATIONS MUST BE ATTACHED WITH TOP SCREWS AND HINGE BRACKETS AS SHOWN ON THE PLAN. BANDING AND PIPE MOUNTING BRACKETS ARE NOT TO BE USED, UNLESS CALLED FOR ON THE PLANS. POLE MOUNTING ADJUSTMENTS MUST BE PROVIDED FOR THE BRACKETS BOTH HORIZONTALLY AND VERTICALLY.

D) SUN VISOR

A SLANTING GRID PATTERN LENS VISOR TO DEFEAT THE EFFECT OF SUN GLARE AND AS PROTECTION AGAINST PHYSICAL DAMAGE SHALL BE ATTACHED IN FRONT OF THE PEDESTRIAN DISPLAY. THE GRID MUST BE MADE OF .030 INCH THICK BLACK IMPREGNATED POLYCARBONATE PLASTIC AND HAVE AN ON-END THICKNESS OF 1 1/2 ". THE LENS MUST BE READILY REMOVABLE WITHOUT THE USE OF SPECIAL TOOL.

30. SIGNAL POLE ELEVATIONS

PROPOSED SIGNAL POLE FOUNDATION ELEVATIONS MAY BE ADJUSTED NO MORE THAN 4" TO MATCH PROPOSED GRADES AND SLOPES, AS NEEDED, AND AS APPROVED BY ENGINEER OR INSPECTOR.

31. THE BELOW NOTED SIGNAL FACILITIES AND THEIR HARDWARE SHALL BE PAINTED.

SIGNAL POLES, SIGNAL HEADS, EXTENSION ARMS, CONDUIT POSTS, PROTECTIVE POSTS, CABINETS, HARDWARE, CONDULETS, LUMINAIRE ARMS	COLOR CODE FEDERAL STANDARD	I/S*
BLACK	AMS-STD-595, COLOR #17038	1

32. ISOLATION RELAY

EACH VEHICLE DETECTOR THAT IS NOT LOCATED IN THE CONTROLLER OR MASTER CABINET, MUST BE PROVIDED WITH ISOLATION RELAYS. IN ADDITION, ALL PEDESTRIAN PUSH BUTTONS (WHEN APPLICABLE) MUST BE PROVIDED WITH ISOLATIONS RELAYS. THE RELAYS ARE TO PROTECT THE CONTROL EQUIPMENT FROM INDUCED VOLTAGES AND OTHER EXTERNAL INTERFERENCE. THE ISOLATION RELAYS MUST BE LOCATED IN THE CONTROLLER (OR MASTER) CABINET. THE 24 VOLT CONTROLLER DETECTION AND LOGIC COMMON CIRCUITS ARE NOT TO RUN EXTERNAL TO THE CONTROLLER OR MASTER CABINETS. THE 24 VOLT INTERNAL POWER SUPPLY FROM THE CONTROLLER UNIT CAN NOT BE USED IN THE EXTERNAL ISOLATION SYSTEM.

33. CONTRACTOR IS RESPONSIBLE FOR CONFIRMING ALL EXISTING CONDUITS AND JUNCTION BOXES PRIOR TO CONSTRUCTION.

34. EXISTING STREET SIGNS

CONTRACTOR SHALL REMOVE ALL EXISTING STREET SIGNS, WHERE PRESENT, AND RETURN TO THE CITY OF CHARLESTON. THIS WORK SHALL BE BID INCIDENTAL TO 660007-001 (*) - * PER INTERSECTION.

35. CONDUIT POST

3" CONDUIT POSTS PAINTED BLACK AND TO BE ON LEVEL GROUND, NOT ON RAMP SLOPE. BUTTON SHALL BE ACCESSIBLE FROM SIDEWALK. BUTTONS SHALL BE 10' OR LESS FROM DETECTABLE WARNING SURFACE. USE THREADED COUPLINGS TO ATTACH 3" CONDUIT POST.

36. SIGNAL CONTRACTOR SHALL ADJUST WATER METER VALVES, GAS VALVES, MANHOLES, ETC. TO BE FLUSH WITH PAVEMENT, SIDEWALK, CURB RAMP, ETC. DUE TO SIGNAL WORK ASSOCIATED WITH INSTALLATION OF SIGNAL POLES, PEDESTRIAN POLES, JUNCTION BOXES AND CONDUIT. THIS WORK IS TO BE COORDINATED WITH ASSOCIATED UTILITY COMPANIES AND SHALL BE BID INCIDENTAL TO 660007-001 (*) - * PER INTERSECTION.

37. CONTRACTOR COORDINATION

OTHER CONTRACTORS MAY BE WORKING IN THE INTERSECTION LOCATIONS PER THESE PLANS. IT IS IMPERATIVE THAT STRICT COORDINATION BETWEEN CONTRACTORS BE AGREED ON IN REFERENCE TO WORKING PLANS, STORAGE AREAS, DETOURS, AND LANE CLOSURES. THIS PLAN OF COORDINATION SHALL BE PRESENTED TO THE ENGINEER IN WRITING FOR APPROVAL.

38. UTILITY VERIFICATION

ANY MODIFICATIONS MADE BY UTILITY PROVIDERS OR OTHERS SHALL BE THE CONTRACTORS RESPONSIBILITY TO VERIFY AND MODIFY THE DESIGN WITH ENGINEERS APPROVAL WITH NO ADDITIONAL COMPENSATION.

ANY RELOCATION AND/OR ADJUSTMENT OF SIGNAL ITEMS DUE TO FIELD CHANGES SHALL BE COORDINATED WITH THE CITY OF CHARLESTON. THE SIGNAL CONTRACTOR IS RESPONSIBLE FOR UTILITY VERIFICATION. ANY FIELD CONDITION CHANGES THAT AFFECT SIGNAL COMPONENTS, LOCATIONS OR ANY ADDITIONAL ITEMS NOT SHOWN SHALL BE INCIDENTAL TO APPROPRIATE SIGNAL COMPONENT BID ITEMS.

39. POLE DESIGN INFORMATION FOR CONTRACTOR/MANUFACTURER

- UPRIGHT/MAST ARM, WALL GAUGE AND OTHER SIGNAL STRUCTURE COMPONENTS TO BE DESIGNED BY THE MANUFACTURER
- THE MANUFACTURER'S DESIGN IS TO ROUND UP POLE/ARM MEMBER DESIGNATION TO WVDOT, DIVISION OF HIGHWAYS STANDARD DETAILS BOOK VOLUME II, SIGNING, SIGNALS LIGHTING, MARKINGS, AND ITS, DATED JANUARY 2019, TES-II POLE MEMBER AND ARM MEMBER TABLES
- THE MAST ARM TRAFFIC STRUCTURES SHALL BE DESIGNED IN ACCORDANCE WITH THE LOADING AND ALLOWABLE STRESS REQUIREMENTS OF THE 2013 AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS, SIXTH EDITION
- ALL DIMENSIONS ARE IN US CUSTOMARY UNITS
- STRUCTURES TO BE DESIGNED TO RESIST NATURAL WIND GUSTS BASED ON 90 MPH
- STRUCTURES ARE DESIGNED TO RESIST GALLOPING-INDUCED CYCLIC LOADS
- STRUCTURES ARE DESIGNED FOR TRUCK-INDUCED GUST LOADS

40. SPECIAL SIGNAL CONTROLLER REQUIREMENTS:

IN ADDITION TO REQUIREMENTS IN THE STANDARD SPECIFICATION, THE CONTROLLER UNIT MUST FEATURE A "MENU DRIVEN FORMAT" AND FULLY WIRED "D" CONNECTORS. ALL CONTROLLERS SHALL BE SYSTEM READY COMPLETE WITH CELL ROUTER.

THE CABINET AND ALL COMPONENTS CONTAINED WITHIN THE CABINET SHALL BE NEW AND NOT REUSED OR REFURBISHED.

41. LED LUMINAIRES

LUMINAIRE WORK ON SIGNAL POLES

- a. NEW LUMINAIRE ARMS SHALL BE THE TRUSS/CLAMP-ON TYPE, PAINTED BLACK AND SHALL BE SUPPLIED BY THE CONTRACTOR. BID AS PART OF POLE BID ITEM.
- b. LUMINAIRE WIRING SHALL BE SUNLIGHT-RESISTANT, THREE CONDUCTOR #12 IMSA CABLE, AND SHALL RUN CONTINUOUSLY WITH NO SPlicing OR IN-LINE FUSING. LUMINAIRE WIRING SHALL BE TAGGED AT ALL ACCESS POINTS.
- c. LUMINAIRES (4) SHALL BE BID AS ITEM 662007-001(LED). ALL OTHER ROADWAY LUMINAIRE WORK AND MATERIAL SHALL BE BID AS ITEM 662014-001.
- d. ALL NEW ROADWAY LUMINAIRES ON THIS PROJECT SHALL BE CLASSIFIED AS AN AN LED LAMP WITH A TYPE II OPTICS PATTERN WITH AN ELECTRONIC DRIVER THAT HAS A LIFE OF 100,000 HOURS AT 25 C, L70 POLYESTER POWDER-COATED ALUMINUM HOUSING AND ON THE WVDOH APPROVED PRODUCTS LISTING. ALL ELECTRICAL COMPONENTS WARRANTED FOR 5 YEARS.

THE SYSTEMS SHOWN SHALL BE 120 / 240 VOLT, 3 WIRE WITH GROUND, SINGLE PHASE, 60 HZ.

42. INTERNALLY ILLUMINATED SIGNS

ALL INTERNALLY ILLUMINATED SIGNS SHALL BE BID AS ITEM 661030-001, INTERNALLY ILLUMINATED SIGN (72"x18"), PER TYPE SINGLE SIDED OR DOUBLE SIDED.

THIS ITEM SHALL INCLUDE SIGN ASSEMBLY, ELECTRICAL COMPONENTS, SIGN MOUNTING HARDWARE, CABLE, PE CELL, POWER SUPPLY, MISC. HARDWARE, AND ALL WORK REQUIRED TO PROPERLY INSTALL THE SIGN.

THE SIGNS SHALL BE IN ACCORDANCE WITH TES-92 AND BE INSTALLED PER MANUFACTURER'S STANDARDS.

THE CONTRACTOR SHALL ENSURE THAT INTERNALLY ILLUMINATED SIGNS AND SIGNAL HEADS TO NOT BLOCK EACH OTHER AND BOTH SHALL BE VISIBLE AT ALL TIMES.

CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL EXISTING POLE SIZES, ANCHOR BOLT SIZES, BOLT ORIENTATION, BOLT CIRCLES, PRIOR TO ORDERING NEW POLES AND MATERIALS.

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SG-2

 HDR ENGINEERING, INC. CHARLESTON, WV 681-341-6100					
	REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

CITY OF CHARLESTON
SIGNAL
SUMMARY OF QUANTITIES
AND GENERAL NOTES

ESTIMATE OF QUANTITIES

ESTIMATE OF QUANTITIES: VIRGINIA STS/CENTRAL AVE. WITH DELAWARE ST.

LIST	QUANTITY	DESCRIPTION
1	1	CONTROLLER 660001-001 (01) TYPE C
2	1	SIGNAL MONITORING DEVICE
3	1	PAINTED BLACK CONTROLLER CABINET & DETECTOR CABINET (UNIT) (POLE MOUNT)
4	1	NEW POWER SERVICE
5	AS NEEDED	ISOLATED RELAYS
6	AS NEEDED	MISC. HARDWARE
7	AS NEEDED	CONDUIT (PVC, GSC, GALV.), CONDUCTOR CABLE
8	7	ONE-WAY 3 SECTION 12" RYG; MA
9	1	ONE-WAY 5 SECTION 12" Y → G → ;MA
10	8	1-SECTION WALK, DON'T WALK, LED 16" W/GRID (1-LPM; 1-RPM; 6-TPM), COUNTDOWN TYPE (G-16)
11	8	AUDIBLE PEDESTRIAN PUSH BUTTON & SIGN (4-R10-3aL & 4-R10-3aR)
12	4	PCS DETECTOR W/ CONFIRMATION LIGHT
13	2	PCS INTERFACE (RACK MOUNTED)
14	1	PCS EMITTER
15	4	STOP BAR SENSOR W/ SPLICE BOX (4-MAST ARM MTD.) 660002-030, RADD 01
16	AS NEEDED	RADAR SENSOR CONTACT CLOSURE CARDS
17	AS NEEDED	RADAR SENSOR CABLE AND HARDWARE
18	1	RADAR SENSOR PREASSEMBLED BACKPLATE
19	2	PAINTED BLACK SIGNAL POLE (TYPE A1L) W/FOUNDATION, ANCHOR BOLTS
20	6	PAINTED BLACK ALUMINUM PED POLE (TYPE E1) W/FOUNDATION, ANCHOR BOLTS
21	3	JUNCTION BOX, TYPE 'H' (18"x18")
22	1	JUNCTION BOX, TYPE 'H' (24"x24")
23	2	INTERNALLY ILLUMINATED SIGNS (SS), 72" X 18"
24	1	INTERNALLY ILLUMINATED SIGNS (DS), 72" X 18"
25	1	SIGN ARM
26	2	LUMINAIRE, LED
27	4	FLAT SHEET SIGNS AND MOUNTING HARDWARE
28	5	PROTECTIVE POST (SEE DETAIL "J")
29	8	DETECTABLE WARNING SURFACE (DWS)
30	2	LUMINAIRE ARM, PAINTED BLACK (15')

WORK DESCRIPTION

VIRGINIA ST./CENTRAL AVE. WITH DELAWARE ST.

- THIS IS AN EXISTING SIGNAL TO BE MODIFIED AS FOLLOWS:
1. THE CONTRACTOR SHALL REMOVE THE EXISTING SIGNAL COMPONENTS AS PER THE GENERAL NOTES AND DELIVER TO THE CITY ACCORDINGLY. BID ALL SIGNAL REMOVAL AS PART OF ITEM 660007-001.
 2. EXISTING CONDUIT AND JUNCTION BOXES SHALL BE ABANDONED. ALL EXISTING CONDUCTORS SHALL BE REMOVED. BID AS PART OF ITEM 660007-001.
 3. EXISTING SIGNAL FOUNDATIONS (4) SHALL BE REMOVED TO 12" BELOW SIDEWALK AND AREA REPLACED WITH SUITABLE MATCHING MATERIAL. THESE POLES SHALL BECOME THE CONTRACTOR'S PROPERTY TO DISPOSE OF PROPERLY. BID AS PART OF ITEM 660007-001.
 4. INSTALL NEW PAINTED BLACK P1, P2, P3, P4, P5, P6, P7 AND P8 (2-TYPE A1L; 6-TYPE E1) ON NEW FOUNDATIONS AS SHOWN IN THE PLANS.
 5. INSTALL NEW I/S CONTROLLER AND TS-2 CABINET PAINTED BLACK (POLE MTD.) AS SHOWN IN THE PLANS.
 6. INSTALL NEW POWER SERVICE (METER, MAIN DISCONNECT).
 7. INSTALL STOP BAR RADAR PRESENCE DETECTION (RPD) SYSTEM AS SHOWN ON PLAN SHEET.
 8. PRIORITY CONTROL SYSTEM (D4) SHALL BE INSTALLED AS SHOWN IN THE PLANS AND AS DETAILED IN PLANS AND SPECIFICATIONS. (4 PCS DETECTOR, 2 PCS INTERFACES, 1 EMITTER)
 9. INSTALL NEW BLACK SIGNAL HEADS, MOUNTING HARDWARE, AND SIGNAL HEAD CONDUCTOR CABLE AS SHOWN ON THE PLANS.
 10. INSTALL JBS AND CONDUITS AS SHOWN IN PLANS.
 11. INSTALL NEW AUDIBLE PEDESTRIAN PUSH BUTTONS (8) & SIGNS AS SHOWN.
 12. INSTALL SIGNS AND INTERNALLY ILLUMINATED SIGNS AS SHOWN ON PLAN SHEET.
 13. INSTALL NEW LUMNAIRES (2) AND PAINTED BLACK LUMINAIRE ARMS (2) ON P1 AND P2.
 14. INSTALL DETECTABLE WARNING SURFACES AS SHOWN IN PLANS AS PER MANUFACTURER INSTRUCTIONS. BID AS PART OF ITEM 609006-001.
 15. INSTALL PAVEMENT MARKINGS AS DETAILED IN PLANS.
 16. INSTALL CURB RAMPS AS SHOWN IN PLANS. REFER TO STANDARD DETAILS PVT7 SHEETS 1 AND 2. BID INSTALLATION AS ITEM 609005-001, CURB RAMP, TYPE *** PER TYPE.
 17. INSTALL FIVE (5) PROTECTIVE POSTS (PAINTED BLACK) PER DETAIL 'J'.

SG-3



HDR

HDR ENGINEERING INC.

CHARLESTON, WV

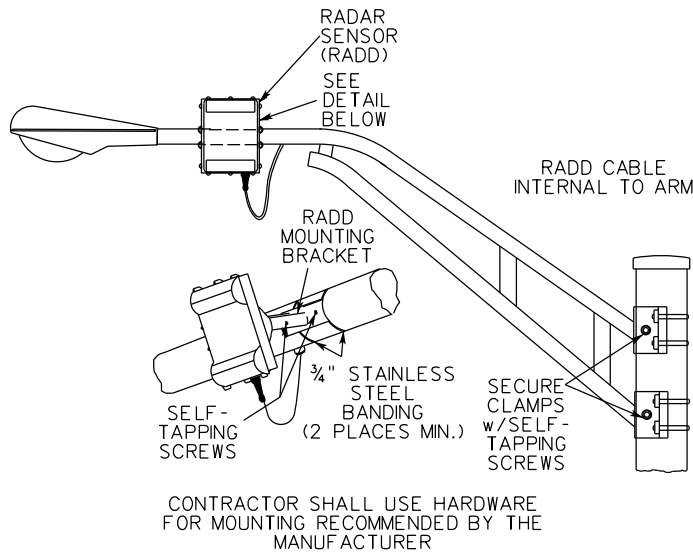
681-341-6100

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

CITY OF CHARLESTON

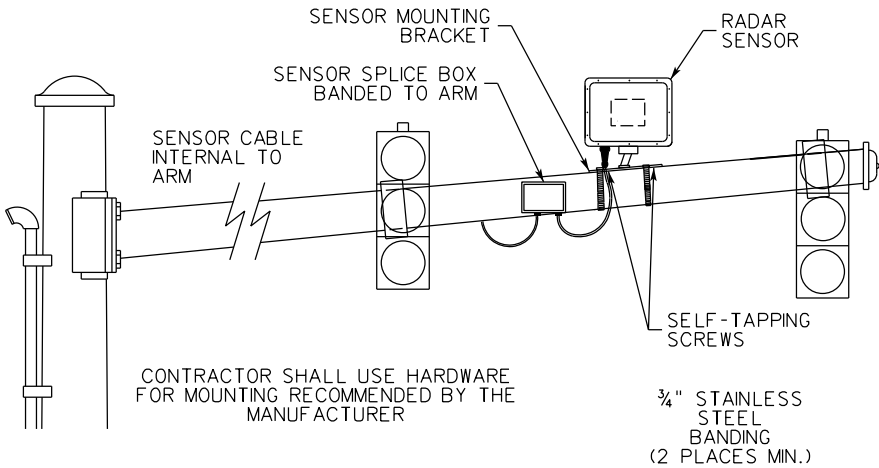
SIGNAL

ESTIMATE OF QUANTITIES AND WORK DESCRIPTION



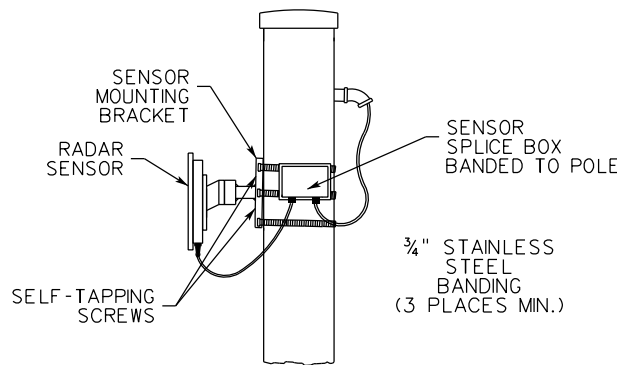
DETAIL 'G2'
RADAR SENSOR MOUNTED ON LUMINAIRE ARM
 (IF NECESSARY)

BID AS PART OF ITEM 660002-030 (*), TRAFFIC DETECTOR, RADD
 * - PER INTERSECTION



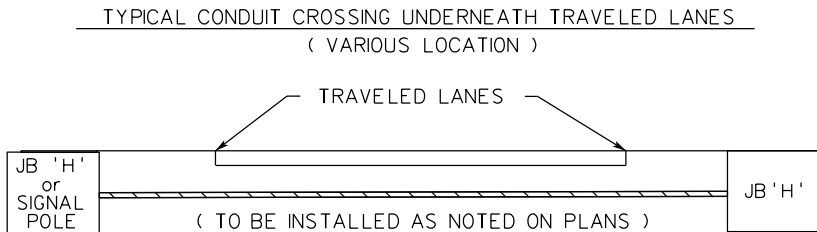
DETAIL 'G3'
RADAR SENSOR MOUNTED ON SIGNAL MAST ARM
 NOT TO SCALE

BID AS PART OF ITEM 660002-030 (*), TRAFFIC DETECTOR, RADD
 * - PER INTERSECTION



DETAIL 'G4'
RADAR SENSOR MOUNTED ON UPRIGHT POLE
 NOT TO SCALE

BID AS PART OF ITEM 660002-030 (*), TRAFFIC DETECTOR, RADD
 * - PER INTERSECTION

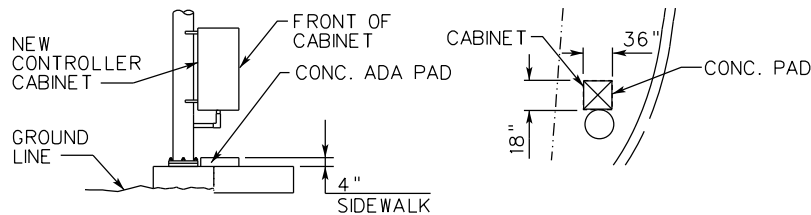


- SPECIFICATIONS:**
- 3" PVC COATED GALVANIZED STEEL CONDUIT
 - 2 mil RED URETHANE INTERIOR COATING
 - 40 mil GRAY PVC EXTERIOR COATING
 - INSTALL PER MANUFACTURERS INSTRUCTION
 - BID AS PART OF ITEM 662002-001, GALVANIZED STEEL CONDUIT (PER INTERSECTION)

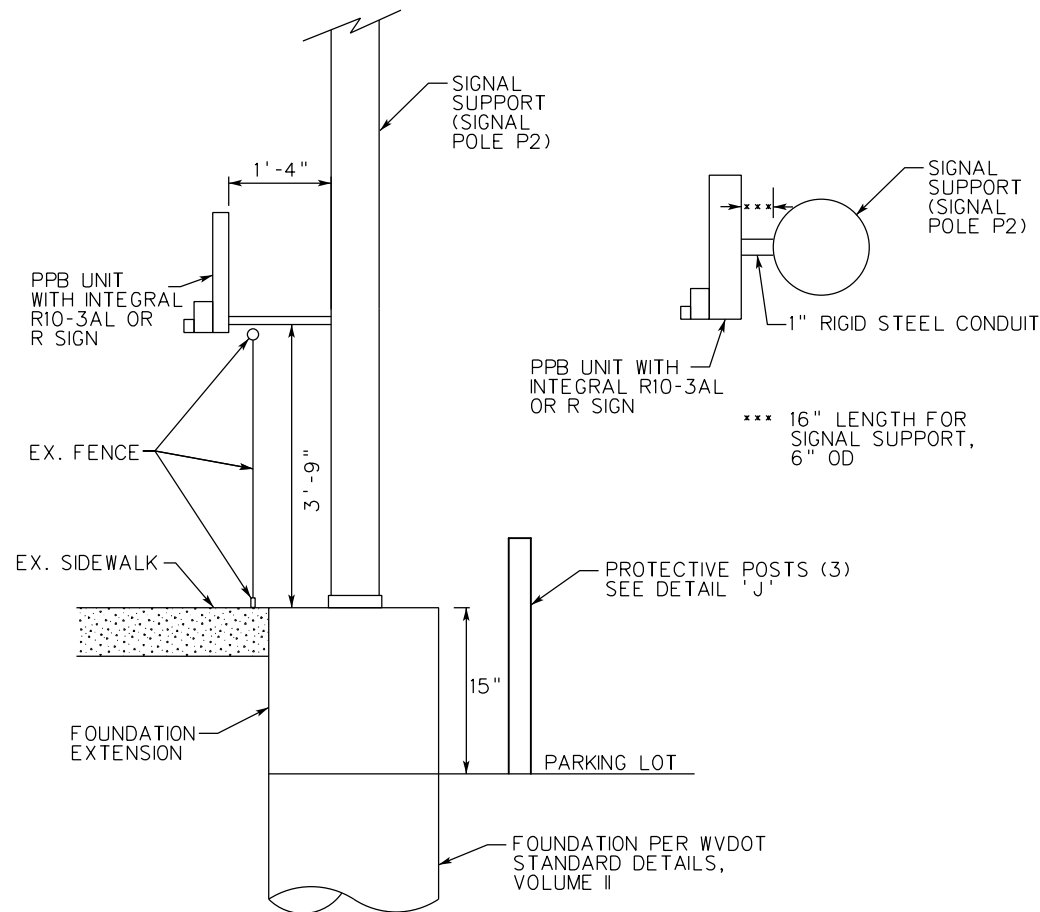
QUANTITIES (FOR INFORMATION ONLY):

I/S #1 - 160 LF

INSTALL CONCRETE PAD (36" x 18" x 4" TYP.) UNDER POLE MTD. CABINET AS INDICATED ON INDIVIDUAL INTERSECTION SHEETS. CONTRACTOR MAY REDUCE SIZE TO MATCH EXACT SIZE OF CABINET. BID ALL MATERIALS AND WORK AS PART OF ITEM 660007-001 (*) * - PER INTERSECTION

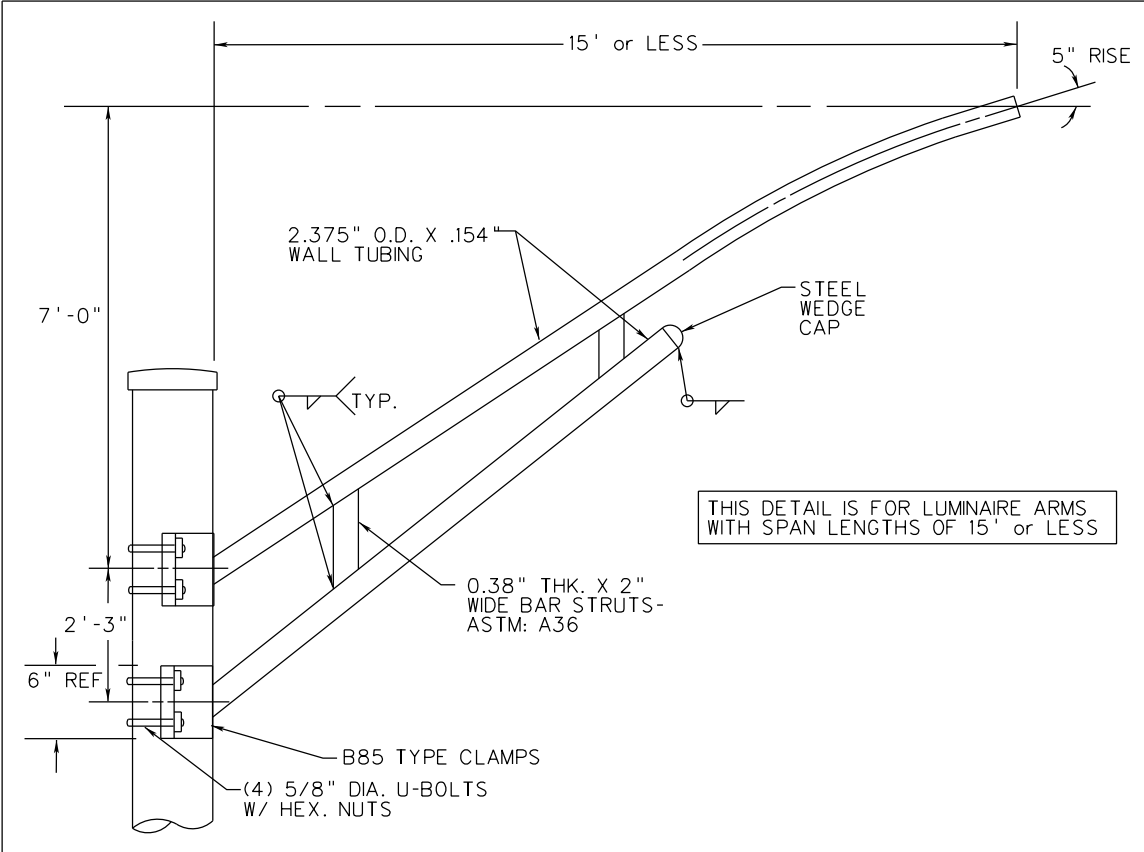


CONCRETE ADA PAD DETAIL 'H'
 NOT TO SCALE

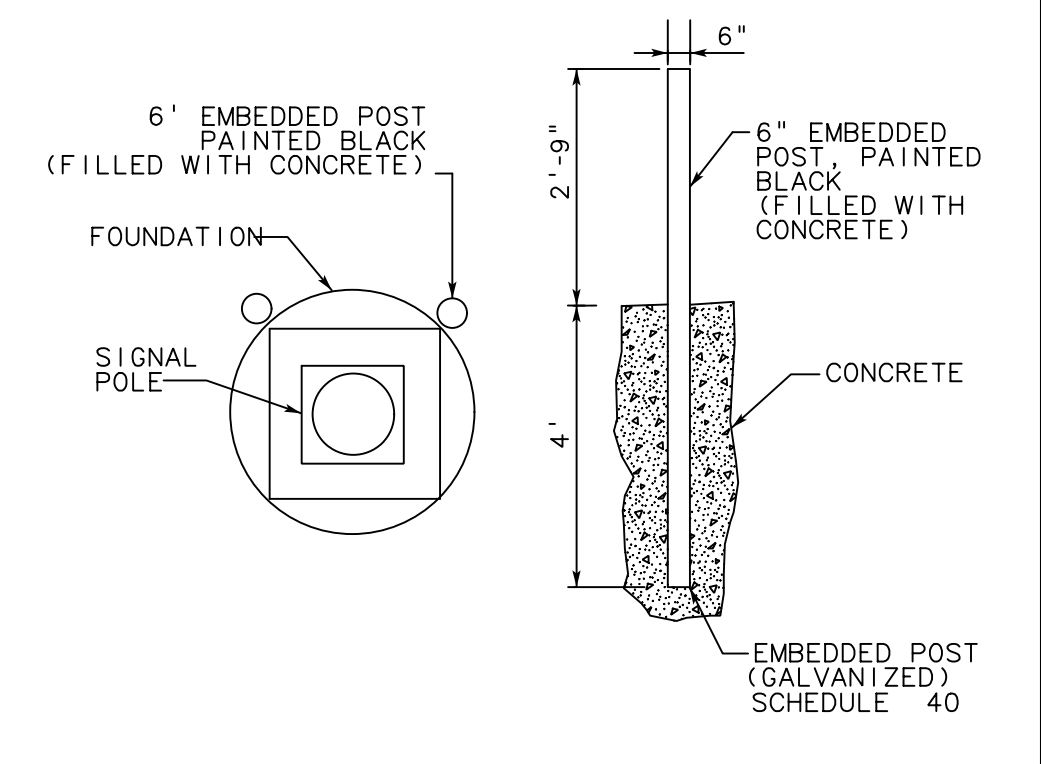


SIGNAL POLE P2
(FOUNDATION AND PEDESTRIAN PUSH BUTTON EXTENSION ARM DETAILS)
 NOT TO SCALE

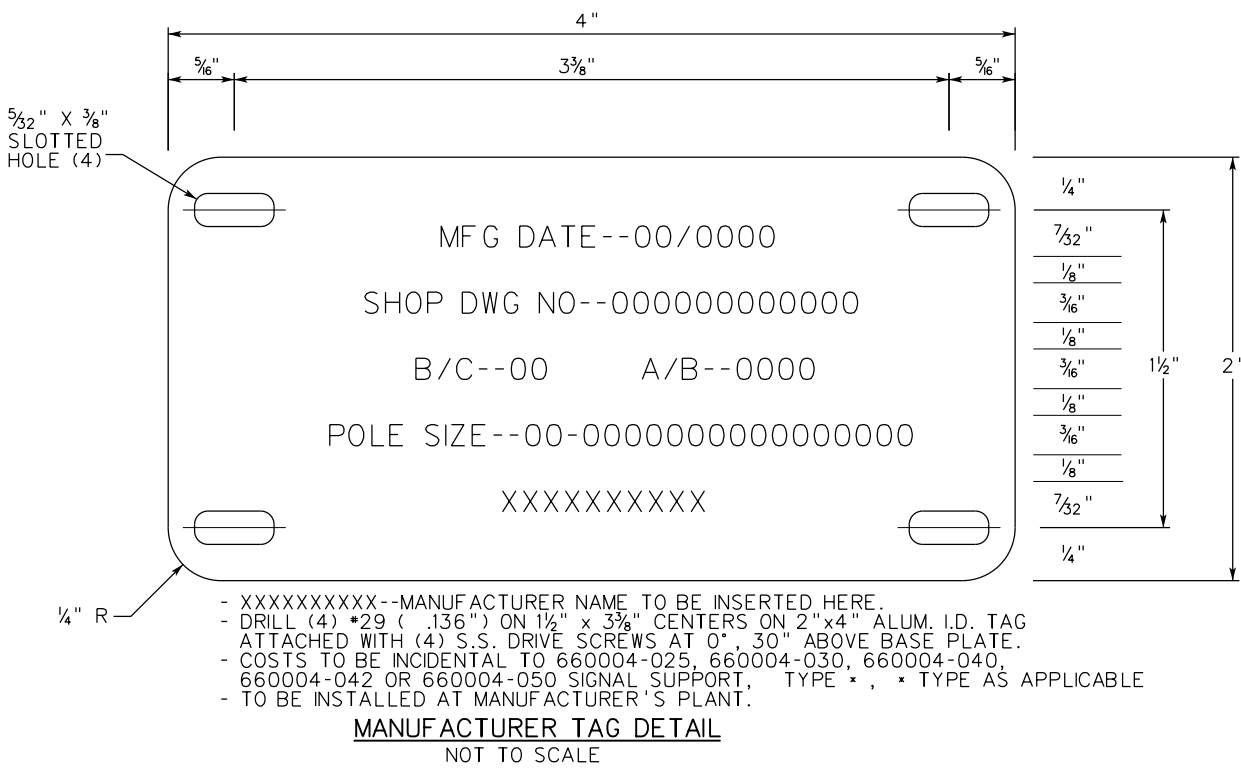
PEDESTRIAN PUSH BUTTON EXTENSION ARM BID AS PART OF ITEM 660007-001
 SIGNAL SUPPORT FOUNDATION EXTENSION BID AS PART OF ITEM 660004-050



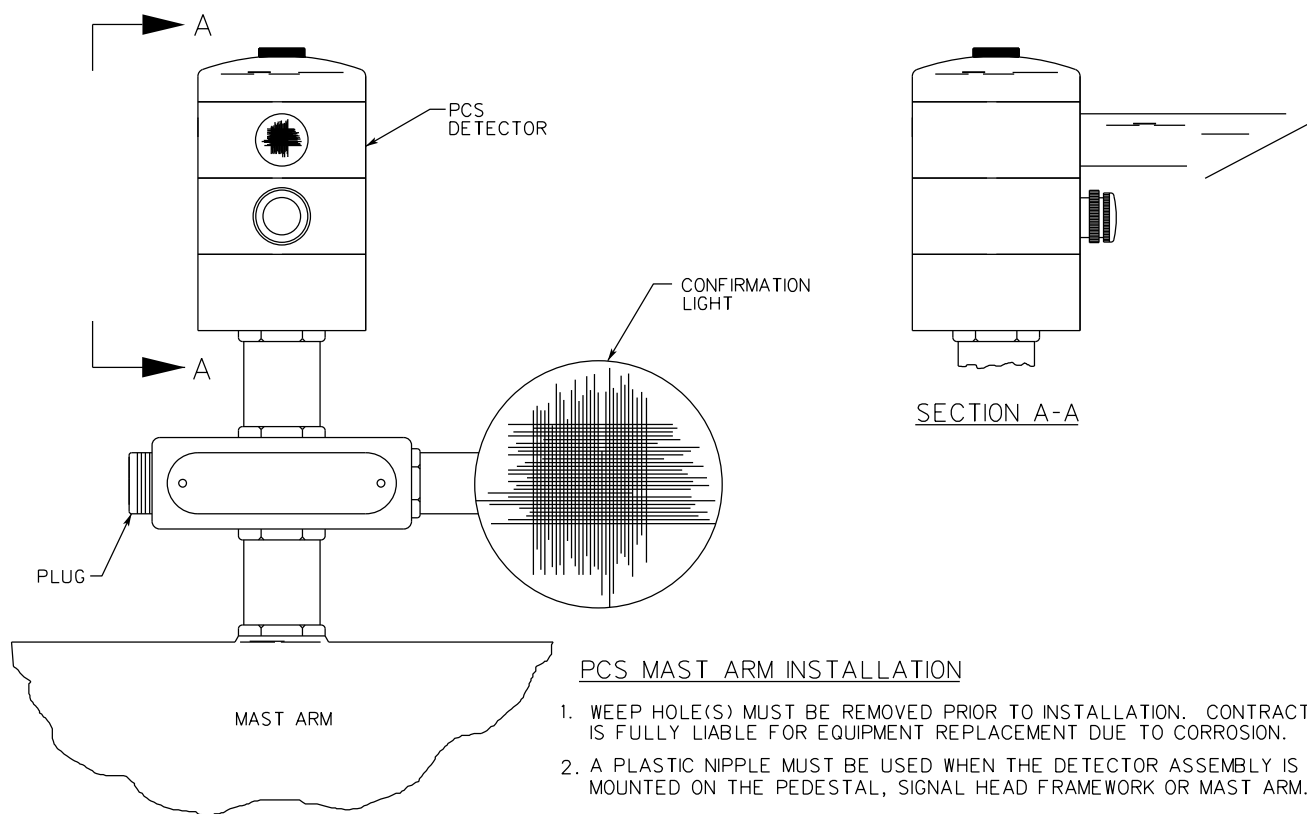
DETAIL "C2"
LUMINAIRE ARMS (PAINTED BLACK)
 SUPPLIED BY CONTRACTOR
 BID AS PART OF POLE BID ITEM



DETAIL 'J'
PROTECTIVE POSTS
 BID AS PART OF ITEM 660007-001 (*)
 * - PER INTERSECTION



HDR HDR ENGINEERING INC. CHARLESTON, WV 681-341-6100	REVISION	SHEET	REVISION	DATE	BY
	NUMBER	NUMBER			



PCS MAST ARM INSTALLATION

- 1. WEEP HOLE(S) MUST BE REMOVED PRIOR TO INSTALLATION. CONTRACTOR IS FULLY LIABLE FOR EQUIPMENT REPLACEMENT DUE TO CORROSION.
- 2. A PLASTIC NIPPLE MUST BE USED WHEN THE DETECTOR ASSEMBLY IS MOUNTED ON THE PEDESTAL, SIGNAL HEAD FRAMEWORK OR MAST ARM.

PCS DETAIL
NOT TO SCALE

PRIORITY CONTROL SYSTEM (PCS)
BID AS ITEM 660010-001 AND 660010-010

THE PRIORITY CONTROL SYSTEM SHALL PROVIDE ADVANCE SIGNAL CONTROL PER INTERSECTION APPROACH AS SHOWN ON THE PLAN SHEETS. THE SYSTEM CONSISTS OF AN EMITTER (1), DETECTORS WITH CONFIRMATION LIGHT, (4), CARD RACK MOUNTED SIGNAL INTERFACE UNITS, 2 EA), AND NECESSARY WIRING. THIS ALSO INCLUDES MOUNTING HARDWARE AND OTHER HARDWARE ITEMS TO COMPLETE THE SYSTEM.

THE EMITTER IS MOUNTED ON THE PRIORITY VEHICLE AND TRANSMITS A SHAPED, OPTICAL PATTERN OF CODED LIGHT TO A DETECTOR AT THE PRIORITIZED INTERSECTION APPROACH. THE INTERFACE UNIT WILL THEN INPUT A CALL TO THE CONTROLLER FOR A PROGRAMMED PREEMPTION ROUTINE. THE TRANSMIT/RECEIVE DISTANCE FOR EACH INTERSECTION APPROACH MUST BE USER PROGRAMMABLE AND WILL BE THE RESPONSIBILITY OF THE DIVISION OF HIGHWAYS TO BE DETERMINED AND SET. A MEANS FOR ADJUSTMENT OF THE TRANSMIT/RECEIVE DISTANCE PER APPROACH MUST BE PROVIDED WITH THE SYSTEM. PCS UNITS WILL BE PAID FOR AS ITEMS 660010-001 - "PRIORITY CONTROL SYSTEM DETECTORS."

- * D1, D2, D3, D4
CODE REPRESENTS THE NUMBER OF DETECTORS TO BE INSTALLED.
BID PER INTERSECTION

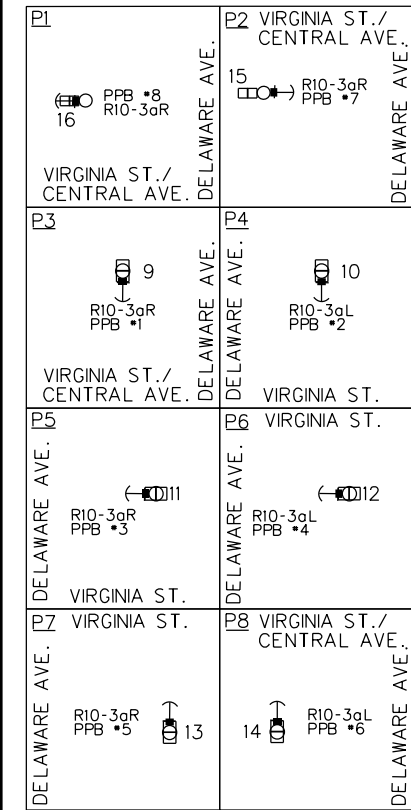
EXACT LOCATION AND AIM OF PCS DETECTOR TO BE FIELD DETERMINED BY THE PROJECT ENGINEER.

THESE PCS DETECTORS TO BE PLACED ON THE SAME FREQUENCY AS THE EXISTING CITY OF CHARLESTON PCS SYSTEM. (CHARLESTON FIRE DEPT. FIRE CHIEF, SHAWN WANNER- 304-348-8098)

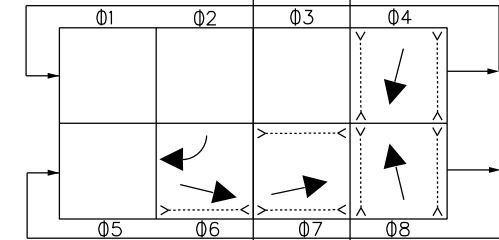
SEE 'APL' LIST FOR APPROVED PRIORITY CONTROL SYSTEMS FOR THIS PROJECT.

CONTRACTOR IS RESPONSIBLE FOR DEMONSTRATING USE OF PCS SYSTEM TO THE CHARLESTON FIRE DEPARTMENT PERSONNEL.

NEW AUDIBLE PUSH BUTTON
& SIGN LOCATIONS



DUAL RING PHASING

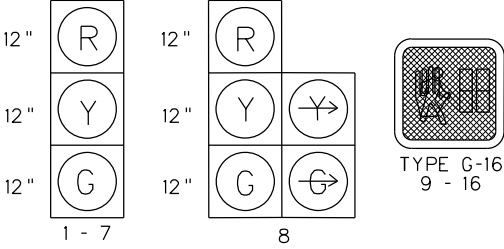


THIS CONTROLLER SHALL UTILIZE DUAL ENTRY
04, 06, 07 AND 08 ARE VEHICULAR & PPB ACTUATED

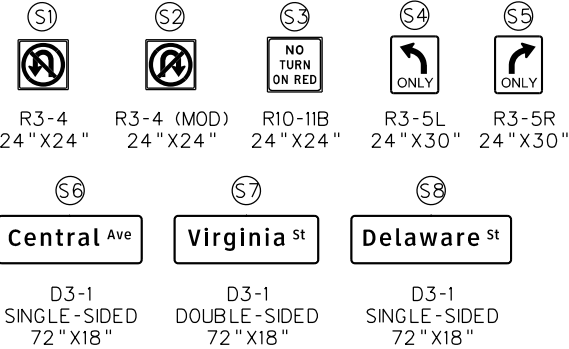
FLASH
SEQUENCE

HEAD NO.	FLASH
1 - 2	Y
3 - 8	R
9 - 16	Dark

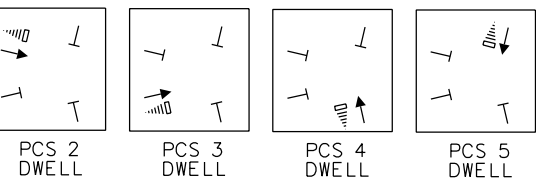
PROPOSED
SIGNAL HEADS



PROPOSED
SIGNS



PCS DETAIL



LEGEND

- CONTROLLER (POLE MTD.)
- JUNCTION BOX (TYPE H) (PROPOSED)
- JUNCTION BOX (TYPE H) (EXISTING)
- 3" CONDUIT PVC (GSC) (PROPOSED)
- 2" CONDUIT (PROPOSED)
- SIGN ASSEMBLY
- STOP BAR RADAR SENSOR (RPD)
- LUMINAIRE (PROPOSED)
- DETECTABLE WARNING SURFACE
- NEW SUPPORTS
- ASSEMBLY NUMBER
- SIGNAL POLE (PROPOSED)
- SIGNAL POLE (EXISTING)
- UTILITY POLE (EXISTING)
- TRAFFIC SIGNAL HEAD
- PEDESTRIAN HEAD
- PEDESTRIAN PUSH BUTTON AND SIGN
- PCS DETECTOR
- PCS EMITTER
- DETECTION ZONE

NOTES:
1. CONTRACTOR SHALL ERECT TEMPORARY
SIGNAGE ACCORDING TO SHEET SG-9
REMOVE TEMPORARY SIGNAGE AFTER
30 DAYS.

POLE CHART

POLE NO.	TYPE	UPRIGHT POLE						LOCATION	MAST ARM												LUMINAIRE		
		POLE MOUNTED SIGNAL ATTACHMENT		HEIGHT	O.D.	WALL GAUGE	ARM ATT.		ARM DESIGNATION	ARM ORIENTATION	DM 'L'	DM 'M'	DM 'N'	DM 'O'	DM 'P'	DM 'Q'	DM 'R'	DM 'R'	WALL GAUGE	O.D.	SPREAD	MOUNTING HEIGHT	ANGLE "C"
		"K"	"L"																				
EX. P1A	A1			28'	12"	3		EXISTING TO BE REMOVED															
P1	AIL	10'	PED HEAD	28'6"	*	*	19'	NEW ON NEW FOUNDATION			50'	48'	34'	32'	24'			*	*		15'	35'	W/LUM.
EX. P2A	A1			28'	12"	3		EXISTING TO BE REMOVED															
P2	AIL	10'	PED HEAD	28'6"	*	*	19'	NEW ON NEW FOUNDATION			35'	34'	26'	24'	14'			*	*		15'	35'	W/LUM.
EX. P3A	A1			28'	12"	3		EXISTING TO BE REMOVED															
EX. P4A	A1			28'	12"	3		EXISTING TO BE REMOVED															
P3	E1			10'	6"	Alum.		NEW ON NEW FOUNDATION															
P4	E1			10'	6"	Alum.		NEW ON NEW FOUNDATION															
P5	E1			10'	6"	Alum.		NEW ON NEW FOUNDATION															
P6	E1			10'	6"	Alum.		NEW ON NEW FOUNDATION															
P7	E1			10'	6"	Alum.		NEW ON NEW FOUNDATION															
P8	E1			10'	6"	Alum.		NEW ON NEW FOUNDATION															

* SEE NOTE ON SHEET SG-2 FOR POLE DESIGN INFORMATION FOR CONTRACTOR/MANUFACTURER
- DIMENSION 'K' IS TO BOTTOM OF PEDESTRIAN HEAD

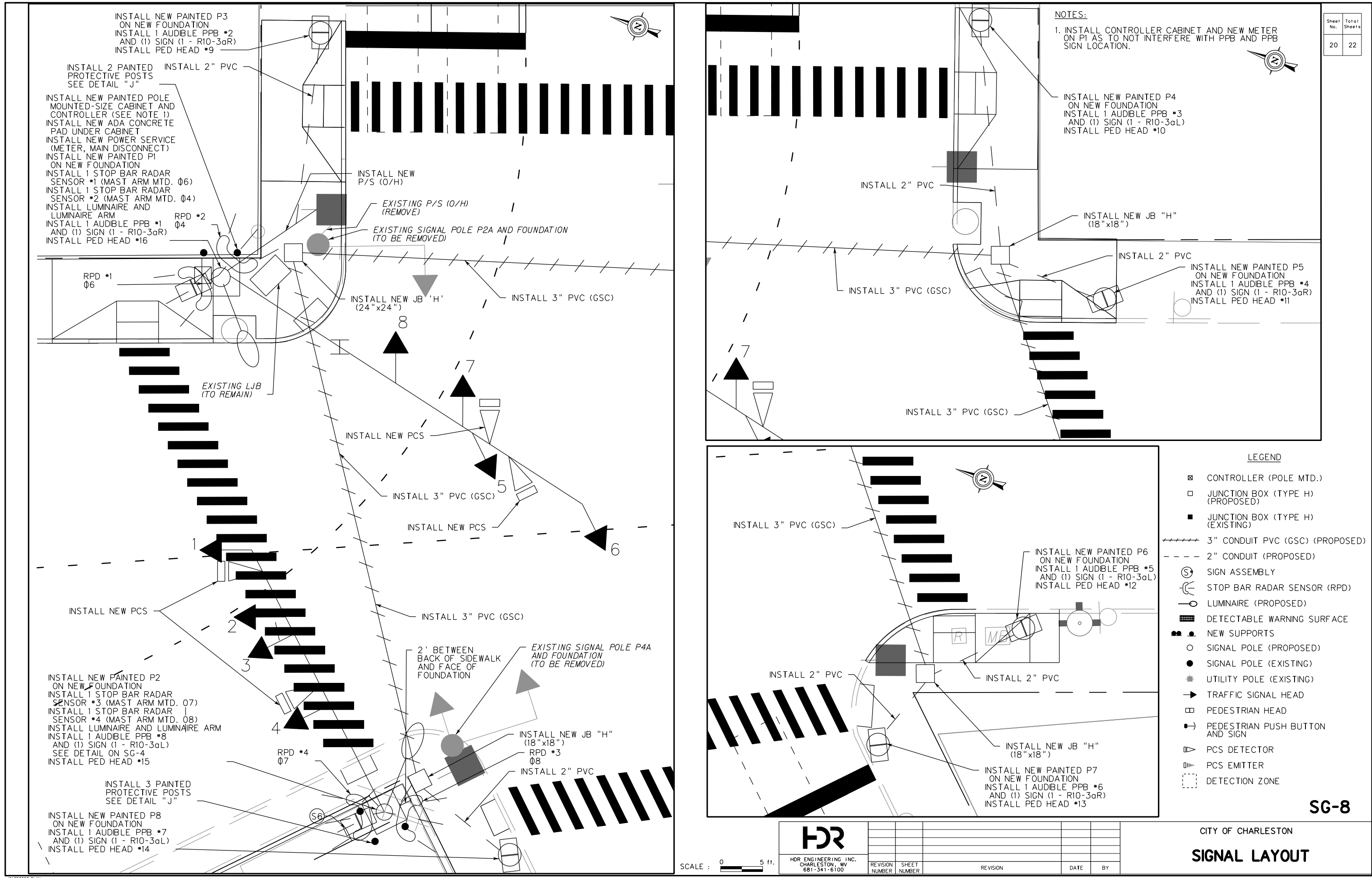
SCALE : 0 20 ft.

HDR		HDR ENGINEERING, INC.		CHARLESTON, WV		681-341-6100	
REVISION	SHEET	NUMBER	NUMBER	REVISION	DATE	BY	

CITY OF CHARLESTON

SIGNAL LAYOUT

SG-7



INSTALL NEW PAINTED P3
ON NEW FOUNDATION
INSTALL 1 AUDIBLE PPB #2
AND (1) SIGN (1 - R10-3aR)
INSTALL PED HEAD #9

INSTALL 2 PAINTED
PROTECTIVE POSTS
SEE DETAIL "J"

INSTALL NEW PAINTED POLE
MOUNTED-SIZE CABINET AND
CONTROLLER (SEE NOTE 1)
INSTALL NEW ADA CONCRETE
PAD UNDER CABINET
INSTALL NEW POWER SERVICE
(METER, MAIN DISCONNECT)
INSTALL NEW PAINTED P1
ON NEW FOUNDATION
INSTALL 1 STOP BAR RADAR
SENSOR #1 (MAST ARM MTD. Ø6)
INSTALL 1 STOP BAR RADAR
SENSOR #2 (MAST ARM MTD. Ø4)
INSTALL LUMINAIRE AND
LUMINAIRE ARM
INSTALL 1 AUDIBLE PPB #1
AND (1) SIGN (1 - R10-3aR)
INSTALL PED HEAD #16

INSTALL NEW
P/S (O/H)

EXISTING P/S (O/H)
(REMOVE)

EXISTING SIGNAL POLE P2A AND FOUNDATION
(TO BE REMOVED)

INSTALL NEW JB "H"
(24"x24")

INSTALL 3" PVC (GSC)

EXISTING LJB
(TO REMAIN)

INSTALL NEW PCS

INSTALL 3" PVC (GSC)

INSTALL NEW PCS

INSTALL 3" PVC (GSC)

2' BETWEEN
BACK OF SIDEWALK
AND FACE OF
FOUNDATION

EXISTING SIGNAL POLE P4A
AND FOUNDATION
(TO BE REMOVED)

INSTALL NEW JB "H"
(18"x18")

RPD #3
Ø8

INSTALL 2" PVC

INSTALL NEW PAINTED P2
ON NEW FOUNDATION
INSTALL 1 STOP BAR RADAR
SENSOR #3 (MAST ARM MTD. Ø7)
INSTALL 1 STOP BAR RADAR
SENSOR #4 (MAST ARM MTD. Ø8)
INSTALL LUMINAIRE AND LUMINAIRE ARM
INSTALL 1 AUDIBLE PPB #8
AND (1) SIGN (1 - R10-3aL)
SEE DETAIL ON SG-4
INSTALL PED HEAD #15

INSTALL 3 PAINTED
PROTECTIVE POSTS
SEE DETAIL "J"

INSTALL NEW PAINTED P8
ON NEW FOUNDATION
INSTALL 1 AUDIBLE PPB #7
AND (1) SIGN (1 - R10-3aL)
INSTALL PED HEAD #14

NOTES:

1. INSTALL CONTROLLER CABINET AND NEW METER
ON P1 AS TO NOT INTERFERE WITH PPB AND PPB
SIGN LOCATION.

INSTALL NEW PAINTED P4
ON NEW FOUNDATION
INSTALL 1 AUDIBLE PPB #3
AND (1) SIGN (1 - R10-3aL)
INSTALL PED HEAD #10

INSTALL NEW JB "H"
(18"x18")

INSTALL 2" PVC

INSTALL NEW PAINTED P5
ON NEW FOUNDATION
INSTALL 1 AUDIBLE PPB #4
AND (1) SIGN (1 - R10-3aR)
INSTALL PED HEAD #11

INSTALL 2" PVC

INSTALL 3" PVC (GSC)

INSTALL 3" PVC (GSC)

INSTALL 3" PVC (GSC)

INSTALL NEW PAINTED P6
ON NEW FOUNDATION
INSTALL 1 AUDIBLE PPB #5
AND (1) SIGN (1 - R10-3aL)
INSTALL PED HEAD #12

INSTALL 2" PVC

INSTALL 2" PVC

INSTALL NEW JB "H"
(18"x18")

INSTALL NEW PAINTED P7
ON NEW FOUNDATION
INSTALL 1 AUDIBLE PPB #6
AND (1) SIGN (1 - R10-3aR)
INSTALL PED HEAD #13

LEGEND

- ☒ CONTROLLER (POLE MTD.)
- JUNCTION BOX (TYPE H) (PROPOSED)
- JUNCTION BOX (TYPE H) (EXISTING)
- 3" CONDUIT PVC (GSC) (PROPOSED)
- - - - 2" CONDUIT (PROPOSED)
- ⊙ SIGN ASSEMBLY
- ⊖ STOP BAR RADAR SENSOR (RPD)
- ⊕ LUMINAIRE (PROPOSED)
- ▨ DETECTABLE WARNING SURFACE
- NEW SUPPORTS
- SIGNAL POLE (PROPOSED)
- SIGNAL POLE (EXISTING)
- UTILITY POLE (EXISTING)
- ➔ TRAFFIC SIGNAL HEAD
- ⊞ PEDESTRIAN HEAD
- ➔ PEDESTRIAN PUSH BUTTON AND SIGN
- ⊡ PCS DETECTOR
- ⊡ PCS EMITTER
- DETECTION ZONE

SG-8

CITY OF CHARLESTON

SIGNAL LAYOUT

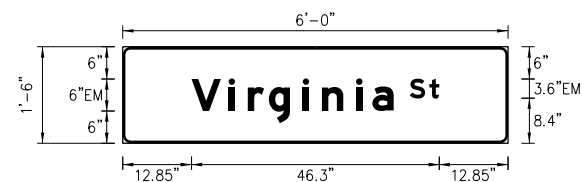
HDR
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CHARLESTON, WV
681-341-6100

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

SCALE : 0 5 ft.

ASSY. NO	S6
LxH (AREA)	6.0 x 1.5 (9.0 SF)
MATERIAL	INTERNALLY ILLUMINATED
	DOUBLE SIDED

S7
SIGN DETAIL
1:20



Letter spacings ore to start of next letter

LETTER POSITIONS (X)																LENGTH	SERIES / SIZE
	V	i	r	g	i	n	i	a		S	t						EM 2000
12.8	7	3.6	3.9	6.4	3.6	6.4	3.1	4	3	3.7	1.9	12.8					6/4.5, 3.6/2.7

Letter spacings are to start of next letter

							CITY OF CHARLESTON SIGN FABRICATION DETAILS
	HDR ENGINEERING INC. CHARLESTON, WV 681-341-6100	REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY	

INFORMATION FOR BIDDERS

- **Local Vendor Preference**

A local vendor may qualify for a competitive advantage applied to its bid when certain conditions are met. Such as, the vendor has marked on its bid submission that it is requesting to be considered a local vendor for bid evaluation purposes; the vendor provides documentation evidencing that it has the right to conduct business in the State of West Virginia; and the vendor submits an affidavit confirming that it has paid all applicable business taxes to the city or has a non-delinquent payment plan with the city and has had an active and current business and occupation tax account with the city collector during the entire preceding one-year period.

Competitive advantages shall be applied in the following manner:

- (1) A competitive advantage of 4% shall be applied to the local vendor's bid when, prior to applying the competitive advantage, the apparent lowest responsible bidder submits a bid that is greater than \$25,000 but does not exceed \$125,000.
- (2) The competitive advantage of \$5,000 shall be applied to the local vendor's bid when, prior to applying the competitive advantage, the apparent lowest responsible bidder submits a bid that is greater than \$125,000.

- **Business & Occupation Tax**

The City of Charleston broadly imposes a Business & Occupation Privilege Tax for the act or privilege of engaging in business activities within the City of Charleston. Business & Occupation Tax is measured by the application of rates against gross receipts or gross income of the business. All business activities are classified, and the classifications are significant inasmuch as the tax liability varies based on the different rates established for the specific types of business activities.

Individuals or businesses who do not have a physical location or office located in the City of Charleston are also subject to Business & Occupation Tax if they: 1) lease tangible personal property to lessees in Charleston, or 2) perform construction or installation contracts in Charleston or 3) render services in Charleston. Additionally, anyone who sells and/or delivers goods or products in Charleston may also be subject to Business & Occupation Tax.

Business & Occupation Tax should be considered when preparing your bid. If you are uncertain as to your business activity or how your business should properly calculate the tax when preparing your bid, please contact us at botax@cityofcharleston.org.

NOTE: No contract or purchase of materials or equipment will be awarded to a company whose Business & Occupation Tax status is delinquent.

- **Paper Bidding**

Electronic bid submission is preferred, but the City will also accept paper bids.

Receipt and Opening of Bids

Sealed bids will be received by the City Manager until **Tuesday, April 2, 2023, 10:00 a.m.** The bid opening will be held immediately following in the City Manager's office.

Preparation of Bid

Each bid must be submitted in a sealed envelope with the following information marked on the outside: **name of bidder, address, project name, and bid opening date and time.**

For the bid to be considered timely, it must be received by the City Manager's Office located at 501 Virginia Street East, Room 101, Charleston, WV 25301, by the established deadline. Vendors may hand deliver or mail their submissions to the aforementioned address. All documents in bid packet must be signed, dated and notarized where applicable or the bid may be disqualified.

Questions regarding the submission of paper bids should be directed to Jamie Bowels, Purchasing Director, at Jamie.Bowles@cityofcharleston.org or by calling 304-348-8014.

**GENERAL TERMS AND CONDITIONS
FOR
SERVICE AGREEMENTS**

These General Terms and Conditions apply to Service Agreements entered into between the City and Vendor and dominate over any competing terms made a part of the Service Agreement.

1. **DISPUTE RESOLUTION, JURISDICTION AND VENUE** – Any references to arbitration contained in the Agreement are hereby deleted, as is any requirement to waive a jury trial. If any breach, default, or other dispute arises out of this Agreement, the Parties agree that they will exercise good faith and commercially reasonable efforts to resolve said breach, default or other dispute through negotiation and/or mediation. If the parties cannot resolve the matter without litigation, the Parties acknowledge and agree that either the Circuit Court of Kanawha County, West Virginia or the Federal District Court for the Southern District of West Virginia shall have exclusive jurisdiction to resolve the breach, default or other dispute giving rise to the litigation. Any language requiring or permitting disputes under the Agreement to be resolved in any other court is deleted. Vendor acknowledges and agrees that resolution agreements reached through consultation and negotiation, or any other form of dispute resolution, may be subject to approval by City's governing body during a public meeting.
2. **NO INDEMNITY** – Any clause requiring the City to indemnify, defend or hold harmless any party is hereby deleted in its entirety. Any language requiring the City to agree to, or be subject to, any form of equitable relief not authorized by the Constitution or laws of the State of West Virginia is deleted.
3. **GOVERNING LAW** – The Agreement shall be deemed to be executed in the City of Charleston, State of West Virginia, and shall be governed by the laws of the State of West Virginia. This provision replaces any references to any other State's governing law.
4. **TAXES** – Provisions in the Agreement requiring the City to pay taxes are deleted. As a political subdivision of the State, the City is exempt from Federal, State, and local taxes and will not pay taxes for Vendor or any other party, including individuals, nor will the City file any tax returns or reports on behalf of Vendor or any other party.
5. **PAYMENT** – Any references to prepayment are deleted. Payments for goods or services will be in arrears only upon receipt of a proper invoice, detailing the goods or services provided or receipt of the goods or services, whichever is later. Notwithstanding the foregoing, payments for software licenses, subscriptions, or maintenance may be paid monthly or annually in advance.
6. **INTEREST** – Any language imposing any interest or charges due to late payment are deleted.

7. **RECOUPMENT** – Any language in the Agreement waiving the City’s right to set-off, counterclaim, recoupment, or other defense is hereby deleted.
8. **FISCAL YEAR FUNDING** – Services performed or goods provided under the Agreement may be continued in succeeding fiscal years for the term of the Agreement, contingent upon funds being appropriated by City Council or otherwise being available for the goods or services. In the event funds are not appropriated or otherwise available for the goods or services, the Agreement shall terminate without penalty on the next occurring June 30. After that date, the Agreement becomes of no effect and is null and void. However, the City agrees to use its best efforts to have the amounts contemplated under the Agreement included in its budget. Non-appropriation or non-funding shall not be considered an event of default.
9. **STATUTE OF LIMITATION** – Any clauses limiting the time in which the City may bring suit against Vendor or any lessor, individual, or other party are deleted.
10. **SIMILAR SERVICES** – Any provisions limiting the City’s right to obtain similar services or equipment in the event of default or non-funding during the term of the Agreement are hereby deleted.
11. **ATTORNEY FEES AND OTHER COSTS** – The City shall not be responsible for payment of attorney’s fees, costs of collection, or court costs of Vendor or of any lessor, individual or other party. Any different or conflicting provisions in the Agreement are invalid, null and void, and are deleted.
12. **ASSIGNMENT** – Notwithstanding any clause to the contrary, the City reserves the right to assign the Agreement to another City agency, board or commission upon thirty (30) days written notice to the Vendor. Vendor agrees not to assign the Agreement to any person or entity without the City’s prior written consent, which will not be unreasonably delayed or denied.
13. **LIMITATION OF LIABILITY** – Any provision limiting the Vendor’s liability for direct damages to person or property or limiting the Vendor’s liability under a warranty to a certain dollar amount or to the amount of the Agreement is hereby deleted. In addition, any limitation of Vendor’s liability is null and void to the extent that it precludes any action for injury to persons or for damages to personal property.
14. **RIGHT TO TERMINATE** – City shall have the right to terminate the Agreement upon thirty (30) days written notice to Vendor.
15. **TERMINATION CHARGES** – Any provision requiring the City to pay a fixed amount or liquidated damages upon termination or cancellation of the Agreement is hereby deleted. The City may only agree to reimburse Vendor for actual costs incurred or losses sustained

during the current fiscal year due to termination by the City prior to the end of any current agreement term.

16. **RENEWAL** – Any reference to automatic renewal, modification, or extension of the Agreement is hereby deleted. The Agreement may be renewed only upon authorized and mutual written agreement of the parties.
17. **INSURANCE** – Any provision requiring the City to insure equipment or property of any kind and name the Vendor as beneficiary or as an additional insured is hereby deleted.
18. **RIGHT TO NOTICE** – Any provision for repossession of equipment without notice is hereby deleted. However, the City does recognize a right of repossession upon default and with notice.
19. **NO WAIVER** – City does not waive and expressly preserves its right to due process and any and all immunities afforded the City under West Virginia State law. Any provision requiring the City to waive any rights, claims or defenses is hereby deleted.
20. **ACCELERATION** – Any reference to acceleration of payments in the event of default or non-funding is hereby deleted.
21. **DELIVERY** – All deliveries under the Agreement will be FOB destination unless the City expressly and knowingly agrees otherwise. Any contrary delivery terms are hereby deleted.
22. **CONFIDENTIAL INFORMATION** – Vendor acknowledges that City is a public entity and is subject to mandatory disclosure of certain information upon request under W.Va. Code § 29B-1-1 *et seq.* (the “Freedom of Information Act”) and W.Va. Code § 6-9A-1 *et seq.* (the “Open Governmental Proceedings Act”). Any provisions regarding confidential treatment or non-disclosure of the terms and conditions of the Agreement are hereby deleted. City contracts are public records under the Freedom of Information Act and public procurement laws. This Agreement and other public records may be disclosed without notice to the Vendor at the City’s sole discretion. Any provision regarding confidentiality or non-disclosure related to contract performance are only effective to the extent they are consistent with the Freedom of Information Act and incorporated into the Agreement through a separately approved and signed non-disclosure agreement.
23. **WARRANTIES** – Any reference to the waiver or exclusion of any specific or general warranties of merchantability or warranties of fitness or any other warranties are hereby deleted.
24. **PRICING ADJUSTMENTS** – To the extent the Agreement contains any provision allowing Vendor to escalate or otherwise increase prices or costs for services as set forth in the Agreement, no such provision shall be valid or enforceable. No prices or costs may be

increased by Vendor until and unless notice of proposed increase is provided to City by Vendor and agreed to in writing by City.

25. **THIRD-PARTY SOFTWARE** – If this Agreement contemplates or requires the use of third-party software, the vendor represents that none of the mandatory click-through, unsigned, or web-linked terms and conditions presented or required before using such third-party software conflict with any term of these General Terms and Conditions or that it has the authority to modify such third-party software's terms and conditions to be subordinate to these General Terms and Conditions. The Vendor shall indemnify and defend the City against all claims resulting from an assertion that such third-party terms and conditions are not in accord with, or subordinate to, these General Terms and Conditions.
26. **AMENDMENTS** – All amendments, modifications, alterations or changes to the Agreement shall be by mutual agreement, in writing, and signed by both parties. Any language to the contrary is deleted. No amendment, modification, alteration or change may be made to these General Terms and Conditions without the authorized and express written approval of the Mayor of the City of Charleston.
27. **LIABILITY OF INDIVIDUALS** – The Parties agree that the Agreement shall be not construed to extend any personal liability to individuals executing or administering the Agreement on behalf of City or Vendor. Notwithstanding, this provision shall not be construed to prevent Vendor or City from taking any and all legal action against any individual who commits fraud related to this Agreement.

CITY OF CHARLESTON PURCHASING AFFIDAVIT

VENDOR OWING A DEBT TO THE STATE OR POLITICAL SUBDIVISION:

West Virginia Code § 5A-3-10a provides that: No contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and the debt owed is an amount greater than one thousand dollars (\$1,000) in the aggregate.

PUBLIC IMPROVEMENT CONTRACTS & DRUG-FREE WORKPLACE ACT:

If this is a solicitation for a public improvement construction contract, the vendor, by its signature below, affirms that it has a written plan for a drug-free workplace policy in compliance with Article 1D, Chapter 21 of the **West Virginia Code**. The vendor **must** make said affirmation with its bid submission. Further, public improvement construction contracts may not be awarded to a vendor who does not have a written plan for a drug-free workplace policy in compliance with Article 1D, Chapter 21 of the **West Virginia Code** and who has not submitted that plan to the appropriate contracting authority in a timely fashion. For a vendor who is a subcontractor, compliance with Section 5, Article 1D, Chapter 21 of the **West Virginia Code** may take place before their work on the public improvement is begun.

ANTITRUST:

In submitting a bid to any agency for the State of West Virginia, the bidder offers and agrees that if the bid is accepted, the bidder will convey, sell, assign or transfer to the state of West Virginia all rights, title and interest in and to all causes of action it may now or hereafter acquire under the antitrust laws of the United States and the State of West Virginia for a price fixing and/or unreasonable restraints of trade relating to the particular commodities or services purchased or acquired by the state of West Virginia. Such assignment shall be made and become effective at the time the purchasing agency tenders the initial payment to the bidder.

I certify that this bid is made without prior understanding, agreement or connection with any corporation, firm, limited liability company, partnership or person or entity submitting a bid for the same materials, supplies, equipment or services and is in all respects fair and without collusion or fraud. I further certify that I am authorized to sign the certification on behalf of the bidder or this bid.

LICENSING:

Vendors must be licensed and in good standing in accordance with any and all state and local laws and requirements by any state or local agency of West Virginia, including, but not limited to, the West Virginia Secretary of State's Office, the West Virginia Tax Department, the West Virginia Insurance Commission or any other state agencies or political subdivision. Furthermore, the vendor must provide all necessary releases to obtain information to enable the Director or spending unit to verify that the vendor is licensed and in good standing with the above entities.

CONFIDENTIALITY:

The vendor agrees that he or she will not disclose to anyone, directly or indirectly, any such personally identifiable information or other confidential information gained from the agency, unless the individual who is the subject of the information consents to the disclosure in writing or the disclosure is made pursuant to the agency's policies, procedures and rules. Vendor further agrees to comply with the Confidentiality Policies and Information Security Accountability Requirements, set forth in <http://www.state.wv.us/admin/purchase/privacy/noticeConfidentiality.pdf>.

Under penalty of law for false swearing (**West Virginia Code § 61-5-3**), it is hereby certified that the vendor affirms and acknowledges the information in this affidavit and is in compliance with the requirements as stated.

Vendor's Name: _____

Authorized Signature: _____ Date: _____



State of West Virginia
DRUG FREE WORKPLACE CONFORMANCE AFFIDAVIT
West Virginia Code §21-1D-5

I, _____, after being first duly sworn, depose and state as follows:

1. I am an employee of _____; and,
(Company Name)
2. I do hereby attest that _____
(Company Name)

maintains a written plan for a drug-free workplace policy and that such plan and policy are in compliance with **West Virginia Code** §21-1D.

The above statements are sworn to under the penalty of perjury.

Printed Name: _____

Signature: _____

Title: _____

Company Name: _____

Date: _____

STATE OF WEST VIRGINIA,

COUNTY OF _____, TO-WIT:

Taken, subscribed and sworn to before me this _____ day of _____, _____.

By Commission expires _____

(Seal)

(Notary Public)



CITY OF CHARLESTON, WEST VIRGINIA

LOCAL VENDOR AFFIDAVIT

Pursuant to § 2-480 of the Charleston City Code, a Local Vendor may qualify for a competitive advantage applied to its bid when certain conditions are met. One condition requires the vendor to submit this affidavit confirming that **(1)** the vendor has paid all applicable business taxes to the City or has a non-delinquent payment plan with the City, and **(2)** the vendor must state that it has had an active and current business & occupation tax account with the City Collector during the entire one-year period prior to the bid opening.

AFFIRMATION: By signing this form, the vendor's authorized signer affirms and acknowledges under the penalty of law for false swearing (W. Va. Code § 61-5-3) that (1) the vendor has paid all applicable business taxes to the City or has a non-delinquent payment plan with the City, and (2) the vendor has had an active and current business & occupation tax account with the City Collector during the entire one-year period prior to the scheduled bid opening for the procurement listed below.

WITNESS THE FOLLOWING SIGNATURE:

Vendor's Corporate Name: _____

Authorized Signature: _____ Date: _____

(Printed Name and Title)

State of _____

County of _____, to wit:

Taken, subscribed, and sworn before me this ____ day of _____, 20 ____.

[SEAL]

Notary Public

My Commission expires _____, 20 ____.

Name of Procurement: _____ Bid Opening Date: _____

GENERAL CONDITIONS

- **Equipment Delivery Information if needed.**
- Only new equipment will be accepted. No factory refurbished, display or used equipment is allowed. All manuals, warranties and agreements must arrive at the time the equipment is delivered.
- **Only one bid will be accepted from each vendor.**
- Equipment will not be accepted by the City if all specifications and any other requirements have not been met. Return of the equipment, if necessary, will be at the expense of the bidder.
- Any deviations from the bid specifications must be included on a separate sheet and attached to the bid form.
- Enclose with this bid proposal all manufacturer brochures, all warranty agreements on equipment proposed, a list of the company's stockholders, the city's Purchasing Affidavit and any other documents as required by the City and described in this document. Firms must acknowledge the City's protest process, attached herein, by submitting a signed copy with their bid proposal. **Firms may not be considered, at the City's discretion, if any of the listed enclosures are not included with the bid submission.**
- Per City Code, facsimile, telephonic or oral bids will not be accepted.
- Debarred vendors may not submit bids or be awarded contracts.
- The City of Charleston is exempt from state and local taxes.
- The City Council or the City Manager reserves the right to reject any and all bids.
- Contract and Contract Documents

The Contract includes the invitation for bids, proposal, contract form, contract bond, specifications, special provisions, plans, notice to proceed, any change orders and other supplemental agreements that are required to complete the construction of the work in an acceptable manner.

The quantities listed in the contract documents are estimates. The City will pay for quantities actually in place. The City reserves the right to vary the quantities up to 50 % with no change in unit price, except for optional items that may or may not be completed as part of this project.

- Materials, Services, and Facilities

The Contractor shall provide and pay for all materials, labor, tools, equipment, and all other services and supplies to complete the project in the specified time except as noted in the Contract Documents.

- Surveys, Permits, and Regulations

Survey information is provided for informational purposes only. The Contractor shall verify existing information and obtain additional information, as necessary. The Contractor shall establish horizontal and vertical control as necessary for proper layout of the work. The Contractor shall obtain a building permit from the City of Charleston Building Commission. There will be no fee for the City's building permit. All other permits will be the Contractor's responsibility.

- Contractor's Obligations and Retainage

The Contractor agrees to indemnify, defend and hold the City harmless against any property damage or personal injury claim as a result of any activity resulting from this project. The Contractor shall carry general liability insurance in amounts equal to or in excess of \$1,000,000 per occurrence/claim and shall name the City as an additional insured on its liability policy.

The Contractor shall remove all debris and leave the site in a clean and orderly condition following the completion of the work. The City will hold a 10% retainage pending final acceptance of the job.

The Contractor shall guarantee that his work is free from defects for one (1) year after acceptance of the project by the City.

- Weather Conditions

In the event of temporary suspension of work due to inclement weather, or whenever the Engineer shall direct, the Contractor shall, and then cause his subcontractors to carefully protect their work and materials against damage or injury. If, in the opinion of the Engineer, any work or materials have been damaged or injured by reason of failure on the part of the Contractor or his Subcontractors to protect their work, such materials shall be removed and replaced at the expense of the Contractor.

- Responsibility of Avoiding Structures

The Contractor shall assume full responsibility for the protection of all property in the vicinity of the project. The Contractor shall notify the Engineer if their work encroaches on structures in the area of the project. The Contractor shall replace or repair anything damaged as a result of the Contractor's work at no additional cost to the City. The Contractor shall be responsible for notifying all utility companies prior to any construction and shall also be responsible for having any utility lines, valves, meters, manholes, etc. relocated or adjusted that may interfere with the completion of this project. The cost and scheduling of utility relocations shall be included in the base bid and shall be performed at no additional cost to the City.

- Traffic Control

A minimum of one lane of traffic is to be maintained on all streets whenever possible. The Contractor shall provide adequate cones, signs, and if necessary flag persons with appropriate clothing and equipment to control traffic during all phases of the operation. It

shall be the responsibility of the Contractor to notify the City Traffic Department, the City Engineer and the local residents of traffic and parking disruptions prior to beginning work.

Costs for all traffic control is incidental to the project.

- Cleanup

It shall be the responsibility of the contractor to keep the construction area clean from trash and debris at all times. The final cleanup shall be reviewed by the City Engineer prior to final payment.

- Superintendence by Contractor

The Contractor shall provide a superintendent or foreman who shall have full authority to act for the Contractor.

- Changes in Work

No changes in the work will be allowed without prior approval of the City. Changes will be accounted for by unit bid prices, an agreed lump sum, or the actual cost of labor, materials, rental costs, and other applicable costs.

- Time of Completion

The project shall be substantially complete within 6 months after the Notice to Proceed is issued.

- Payment and Performance Bonds

At the time of the execution of this contract, the successful bidder shall execute and deliver to the City Payment and Performance Bonds payable to the City of Charleston, both in the amount of **one hundred percent (100%)** of the contract price. As an alternate, the successful bidder may furnish cash bonds or U.S. Government Bonds in the amount of **one hundred percent (100%)** of the contract price for each of the Payment and Performance Bonds. Firms may also elect to provide the City with an irrevocable standby Letter of Credit in the amount of **two hundred percent (200%)** of the contract price, with the City as beneficiary, issued by a reputable lending institution with terms satisfactory to the City and its legal counsel in lieu of performance and payment bonds.

- Licenses

Bidders must be licensed contractors by the State of West Virginia.