

# **Staff Report**

**Design Review Board** 

File Number: 7-A-23-DT

Meeting:	7/19/2023
Project:	500-600 Blocks of Gay Street Signal Poles
Applicant:	City of Knoxville Engineering

#### **Property Information**

Location: 500-600 Blocks Gay St.

Parcel ID 95 | G 001

**Zoning:** DK (Downtown Knoxville)

#### Description:

Intersections of W. Church Avenue, Clinch Avenue, Union Avenue, and Wall Avenue.

### **Description of Work**

Level III Site Design, Parking, Plaza, Landscape

Public improvements initiated by the City of Knoxville Engineering department. In-kind replacement of 21 traffic signal pedestal poles along the 500 and 600 blocks of Gay Street. Signal poles will be replaced at the intersections of W. Church Avenue, Clinch Avenue, Union Avenue, and Wall Avenue. Project includes installation of new flat sheet aluminum signs in existing layouts and locations. Signs include traffic signs, informational signs, directional signs, and pedestrian instructions, with specifications provided in the application packet.

### **Applicable Design Guidelines**

Downtown Design Guidelines

A. Public Realm

1. Pedestrian and Bicyclist Safety

1h. Install and time traffic signals to maximize pedestrian safety and convenience.

- 2. Resident and Visitor Orientation
- 2a. Establish a comprehensive wayfinding system for pedestrians.
- 2b. Create consistent parking signs and directional signs for both pedestrians and vehicular traffic.

#### Comments

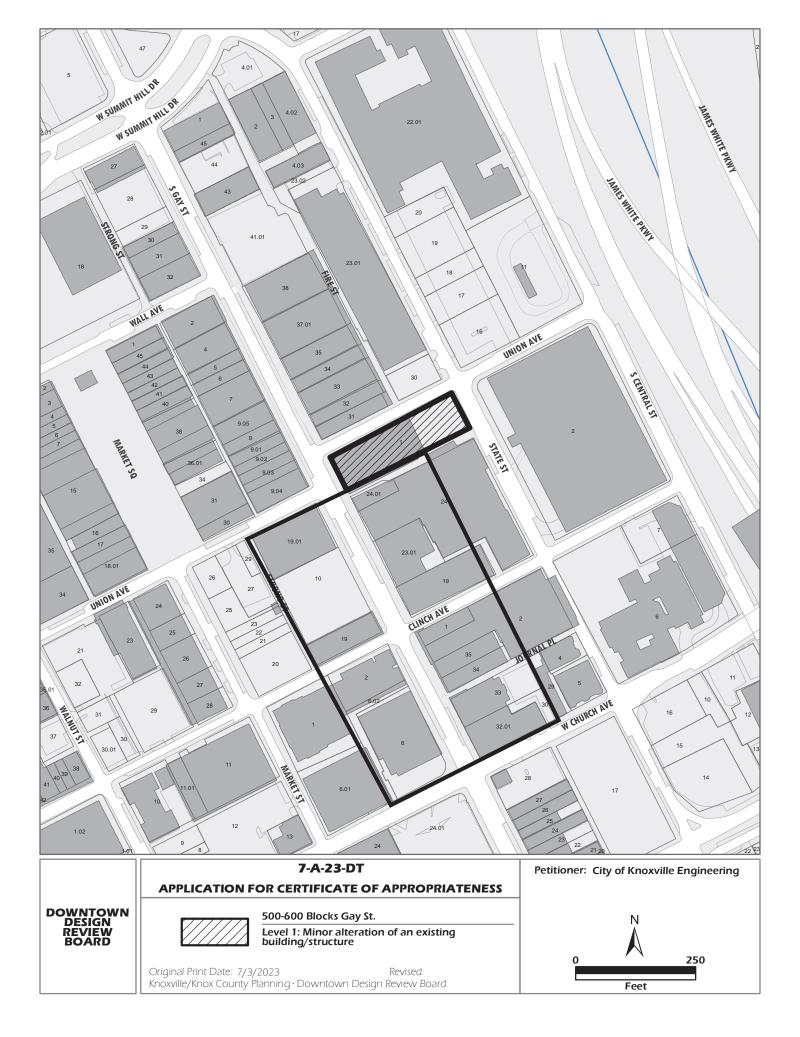
Per the zoning code, the "design of [public improvement] projects that are initiated by the City and KUB, such as improvements to or new construction of streets, sidewalks, way-finding and other signs, lighting, parks, and civic buildings must be submitted to the Design Review Board for approval."

The guidelines for "public realm" apply, which emphasize prioritizing pedestrian safety and comfort through public amenities, pedestrian-scale lighting, and sidewalks and crosswalks that are accessible to all and aesthetically pleasing. The guidelines also recommend installing and timing traffic signals to maximize pedestrian safety and convenience, along with incorporating clearly marked bus and trolley stops. Guidelines recommend a "comprehensive way-finding system for pedestrians, including consistent parking and directional signs for both pedestrian and vehicular traffic."

The proposal meets the design guidelines as it involves the in-kind replacement of signal poles at intersections of Knoxville's downtown which experience significant pedestrian traffic, along with automobiles. The signpost locations have been evaluated by the City of Knoxville and a consultant for safety in placement and construction. As the design will replicate the existing, there will be no further effect on the aesthetics of the two blocks of Gay Street. As detailed on pages 15 and 16 of the drawings, the signs will largely be replaced in-kind and feature a wide array of parking, directional, and safety-related signs.

#### Recommendation

Staff recommends approval of Certificate 7-A-23-DT as submitted.





## DESIGN REVIEW REQUEST

- DOWNTOWN DESIGN (DK)
- □ HISTORIC ZONING (H)
- □ INFILL HOUSING (IH)

#### City of Knoxville Engineering

Applicant		
6/14/23	7/19/23	7-A-23-DT
Date Filed	Meeting Date (if applicable)	File Number(s)

### **CORRESPONDENCE**

All correspondence related to this application should be directed to the approved contact listed below.

🗌 Owner 🔲 Contractor 🔳 Eng	ineer 🗌 Architect/Lan	dscape Architect			
Evan Hoffman		City of Knoxville E	ngineering		
Name		Company			
3131 Morris Avenue		Knoxville	TN	37909	
Address		City	State	Zip	
865-215-6147	ehoffman@kno>	kvilletn.gov			
Phone	Email				

### **CURRENT PROPERTY INFO**

Multiple	Owners
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Owner Name (if different from applicant)	Owner Address	Owner Phone
500 and 600 Blocks of Gay Street		
Property Address	Parce	el ID
Neighborhood	Zonir	lg
AUTHORIZATION		
4. Logal Constant	Lindsay Crockett	6/14/22

Lindsay hocket	Lindsay Crockett	6/14/23
Staff Signature 🧳	Please Print	Date
Evan Hoffman Digitally signed by Evan Hoffman Date: 2023.06.14 13:07:53 -04'00'	Evan Hoffman	6/14/23

# REQUEST

DOWN IOWN DESIGN	Level 1:         Signs       Alteration of an existing building/structure         Level 2:         Addition to an existing building/structure         Level 3:         Construction of new building/structure         Site design, parking, plazas, landscape         See required Downtown Design attachment for more details.         Brief description of work:       City of Knoxville Engineering has capital improvement project funding to replace traffic signal pedestal poles along Gay Street.         Signal poles will be replaced in-kind.
HISTORIC ZONING	Level 1:         Signs       Routine repair of siding, windows, roof, or other features, in-kind; Installation of gutters, storm windows/doors         Level 2:       Additions and accessory structures         Cevel 3:       Additions of a new primary building         Level 4:       Demolition of a contributing structure         Berequired Historic Zoning attachment for more details.         Brief description of work:
INFILL HOUSING	Level 1:         Driveways, parking pads, access point, garages or similar facilities       Subdivisions         Level 2:         Additions visible from the primary street       Changes to porches visible from the primary street         Level 3:         New primary structure         Site built       Modular         Multi-Sectional         See required Infill Housing attachment for more details.         Brief description of work:

	ATTACHMENTS	FEE 1:	TOTAL:
١Ľ	Downtown Design Checklist		
6	Historic Zoning Design Checklist	FEE 2:	
STAFF USE ONLY	Infill Housing Design Checklist		
FF	ADDITIONAL REQUIREMENTS		
STA	Property Owners / Option Holders	FEE 3:	
	Level 1: \$50 • Level 2: \$100 • Level 3: \$250 • Level 4: \$500		

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### SIGNAL IMPROVEMENTS FOR **CITY OF KNOXVILLE** GAY STREET FROM WEST CHURCH STREET



PRELIMINARY PLANS



1 PROJECT: 48187.00 DATE: 2023

Gresham Smith

865.521.6777

ROADWAY IMPROVEMENTS

CITY OF KNOXVILLE, TN

SPECIAL NOTES

PROPOSALS MAY BE REJECTED BY THE COMMISSIONER IF ANY OF THE UNIT PRICES CONTAINED THEREIN ARE OBVIOUSLY UNBALANCED, EITHER EXCESSIVE OR BELOW THE REASONABLE COST ANALYSIS VALUE.

THIS PROJECT TO BE CONSTRUCTED UNDER THE STANDARD SPECIFICATIONS OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION DATED JANUARY 1, 2021 AND ADDITIONAL SPECIFICATIONS AND SPECIAL PROVISIONS CONTAINED IN THE PLANS AND IN THE PROPOSAL CONTRACT.

DESIGNER PATRICK FIVEASH, P.E.

CHECKED BY: JASON BRADY, P.E.

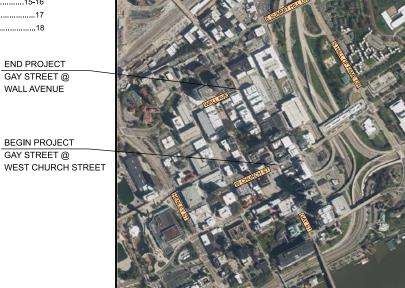
END PROJECT GAY STREET @ WALL AVENUE

**BEGIN PROJECT** 

GAY STREET @

SIGNAL PRELIMINARY

TO WALL AVENUE



PROJECT LENGTH

TO SCALE

.17 MILES

N

Gresham Smith

2095 Lakeskle Centre Way Suite 120 Knoxville, TN 37922

REVISION

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CITY OF KNOXVILLE

ESTIMATED QUANTITIES & NOTES

PROJECT: 45157.00
DATE: 2923

FOOTNOTES	ITEM NO.	DESCRIPTION	UNIT	QUANTITY	(2)	SIGN 26.0
4,5	712-01	TRAFFIC CONTROL	LS	1	(3)	PAY
5	712-06	SIGNS (CONSTRUCTION)	S.F.	200	(4)	TRA
1,2,6	713-13.02	FLAT SHEET ALUMINUM SIGNS (0.080" THICK)	S.F.	90	(5)	ITEN
	717-01	MOBILIZATION	LS	1		WO
7	730-23.28	PEDESTAL POLE (TYPE A)	EACH	2	(6)	ALL
	730-26.02	PEDESTRIAN PUSHBUTTON WITH 12" SIGN	EACH	6		BOL
	730-26.05	COUNTDOWN PEDESTRIAN SIGNAL	EACH	30	(7)	INS
7	730-26.06	PEDESTRIAN PUSHBUTTON POST	EACH	1		INST
3	920-10.05	INSTALLATION OF SIGNAL POLE #1	LS	1		
3	920-11.05	INSTALLATION OF SIGNAL POLE #2	LS	1		FORE
3	920-12.05	INSTALLATION OF SIGNAL POLE #3	LS	1		ACCE
3	920-13.05	INSTALLATION OF SIGNAL POLE #4	LS	1		ARE E
3	920-14.05	INSTALLATION OF SIGNAL POLE #5	LS	1	(1)	THEIR
3	920-15.05	INSTALLATION OF SIGNAL POLE #6	LS	1		SITE
3	920-16.05	INSTALLATION OF SIGNAL POLE #7	LS	1		ADVA ORIGI
3	920-17.05	INSTALLATION OF SIGNAL POLE #8	LS	1		PROJ
3	920-18.05	INSTALLATION OF SIGNAL POLE #9	LS	1	(2)	POSI
3	920-19.05	INSTALLATION OF SIGNAL POLE #10	LS	1		MEAS
3	920-20.05	INSTALLATION OF SIGNAL POLE #11	LS	1		OVER
3	920-20.13	INSTALLATION OF SIGNAL POLE #12	LS	1	(3)	THE S
3	920-20.21	INSTALLATION OF SIGNAL POLE #13	LS	1		TRAF
3	920-20.29	INSTALLATION OF SIGNAL POLE #14	LS	1	(4)	ENGIN
3	920-20.37	INSTALLATION OF SIGNAL POLE #15	LS	1		POLE
3	920-20.45	INSTALLATION OF SIGNAL POLE #16	LS	1	(5)	UP AN
3	920-20.53	INSTALLATION OF SIGNAL POLE #17	LS	1		INTER CURB
3	920-20.61	INSTALLATION OF SIGNAL POLE #17	LS	1	(6)	NEW
3	920-25.01	INSTALLATION OF SIGNAL POLE #18	LS	1		THE I
3	920-25.02	INSTALLATION OF SIGNAL POLE #19	LS	1	(7)	EXIST AFTEI
3	920-25.03	INSTALLATION OF SIGNAL POLE #20	LS	1	(8)	OPER
3	920-25.04	INSTALLATION OF SIGNAL POLE #21	LS	1		

ESTIMATED ROADWAY QUANTITIES

#### FOOTNOTES

- SIGN NO'S 1 AND 10 NOT INCLUDED IN THE QUANTITY CALCULATION CITY OF KNOXVILLE TO PROVIDE SIGNS.
- (2) SIGN NO 17 NOT INCLUDED IN THE QUANTITY CALCULATION. IT WILL BE INCLUDED WITH ITEM #730-26.02.
- (3) PAYMENT TO BE MADE TO CONTRACTOR ONCE SIGNAL POLE IS FULLY INSTALLED AND OPERATIONAL.
- TRAFFIC CONTROL WILL BE PAID 25% PER INTERSECTION OR AS DIRECTED BY THE ENGINEER.
- 5) ITEM NUMBER INCLUDES ALL TRAFFIC CONTROL ASSOCIATED WITH ROADWAY AND SIDEWALK WORK.
- (6) ALL SIGNS TO BE FASTENED TO PROPOSED SIGNAL POLES WITH THE USE OF APPROPRIATE BOLTS/SCREWS.
- INSTALLTION OF POLES TO INCLUDE ALL MATERIALS AND LABOR INCLUDING FOUNDATION INSTALLATION AND COMPLETE WIRING OF PEDESTRIAN SIGNAL.

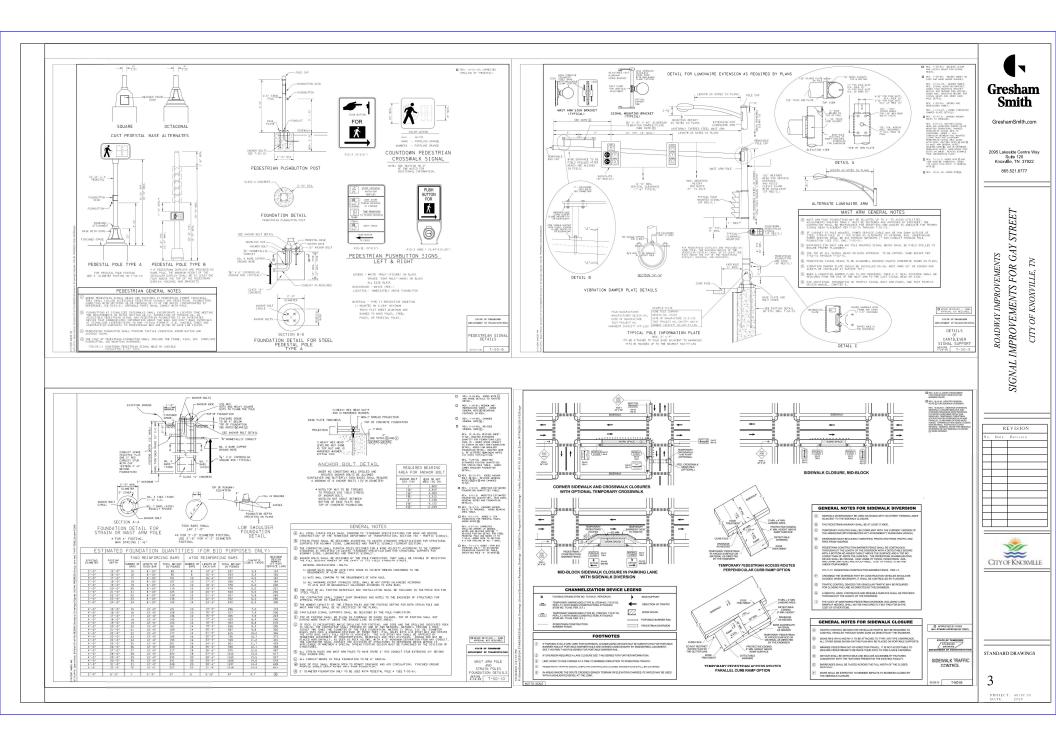
#### GENERAL NOTES

FOR BIDDING PURFOSES. THE CONTRACTOR IS TO ASSUME THAT THE EXISTING FOUNDATIONS ARE IN ACCEPTABLE CONDITION FOR RE-LSE IN ACCORDANCE WITH THESE PLANS. ONCE ALL FOUNDATIONS ARE EXPOSED AT THE CURRENT INTERSECTION UNDER CONSTRUCTION, THE ENGINEER AND/OR

1) THEIR MATERIALS TESTING SUBCONTRACTOR WILL VISIT THE SITE AND PERFORM THE NECESSARY OBSERVATIONS AND TESTS TO COVIEM THE CONDITION OF THE FOUNDATION. SCHEDULING OF THE SITE VISIT SHALL BE INITIATED BY THE CONTRACTOR NO LESS THAN FIVE (5) BUSINESS DAYS IN ADVANCE. SEE SHEET 17 FOR ADDITIONAL INFORMATION.

ORIGINAL PLANS ARE INCLUDED AS PART OF THIS BID SET FOR REFERENCE. THE INTENT OF THIS PROJECT IS TO REPLACE THE EXISTING POLES, MATCHING THE GENERAL STYLE, SIGNAL HEAD

- 2) POSITIONING AND SIGN LAYOUT AS EXISTS IN THE FIELD TODAY AND SHOWN IN THE SIGNAL LAYOUT SHEETS NUMBERED 5-9. CONTRACTOR TO CONFIRM ANY REQUIRED DIMENSIONS WITH FIELD MEASUREMENTS.
- OVERALL POLE HEIGHT MAY INCREASE DUE TO THE MINIMUM CLEARANCE BETWEEN THE TOP OF THE SIDEWALK AND THE BOTTOM OF THE PEDESTRIAN SIGNAL AS SHOWN ON TDCT STANDARD DRAWING T-SG6 AND SHEETS 10-14 (SIGN SCHEDULE LAYOUT) ON THIS PLAN SET.
- TRAFICS SIGNA AND SHEETS 10-14 (SIGN SCHEDULE LAYOUT) ON THIS PLAN SET. TRAFICS SIGNAL ASSEMBLY, MICLLDING BASE PLATE AND ANCHOR BOLT ARRANGEMENT, TO BE 4) ENGINEERED BY THE CONTRACTOR. SHOP DRAWINGS TO BE SUBMITTED AND SEALED BY A
- LICENSED PE IN THE STATE OF TENNESSEE. POLE DESIGN SHALL INCLUDE ALL NECESSARY DETAILS FOR PROTECTION AGAINST MOISTURE BUILD
- 5) UP AND CORROSION INCLUDING, BUT NOT LIMITED TO, LOCATION AND SIZING OF WEEP HOLES, INTERIOR AND EXTERIOR COATING AND WATER PROOFING OF CONNECTIONS.
- CURB RAMPS THAT ARE DAMAGED CURING REMOVAL OF OLD SIGNAL POLES AND INSTALLATION OF NEW SIGNAL POLES WILL BE REPLACED TO ADA STANDARDS. THIS COST WILL BE COVERED UNDER THE TEM NUMBER FOR EACH SIGNA\_ POLE/PEDESTRIAN PEDESTAL POLE.
- EXISTING BRICKS TO BE REMOVED AND REPLACED. SEE SHEET 17 FOR ADDITIONAL DETAILS. AFTER SIGNALS ARE INSTALLED, THEY ARE TO BE BAGGED FOR SEVEN (7) DAYS BEFORE MADE OPERATIONAL.







SIGNAL #4 NORTHWEST CORNER ORIGINAL POLE IDENTIFICATION: TM-E ORIGINAL FOUNDATION TYPE: TM-3 ORIGINAL POLE DETAIL TYPE: 2





ORIGINAL POLE IDENTIFICATION: TM-D ORIGINAL FOUNDATION TYPE: TM-4, ORIGINAL POLE DETAIL TYPE: NA

ALL SIGNAL POLE LOCATIONS SHOWN ARE APPROXIMATE.



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SIGNAL #1 NORTHEAST CORNER ORIGINAL POLE IDENTIFICATION: TM-A ORIGINAL FOUNDATION TYPE: TM-1 ORIGINAL POLE DETAIL TYPE: 2

SIGNAL IMPROVEMENTS FOR GAY STREET ROADWAY IMPROVEMENTS CITY OF KNOXVILLE, TN

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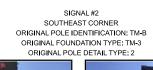


SOUTHEAST CORNER













SIGNAL LAYOUT WEST CHURCH AVENUE

5 SCALE: N.T.S. PROJECT: 48187.0 DATE: 2023

SIGNAL #3 SOUTHWEST CORNER



ORIGINAL POLE DETAIL TYPE: 2

ORIGINAL POLE IDENTIFICATION: TM-C ORIGINAL FOUNDATION TYPE: TM-3



SIGNAL #9 NORTHWEST CORNER ORIGINAL POLE IDENTIFICATION: TM-D ORIGINAL FOUNDATION TYPE: TM-2 ORIGINAL POLE DETAIL TYPE: 2



ALL SIGNAL POLE LOCATIONS SHOWN ARE APPROXIMATE.



NORTHEAST CORNER

ORIGINAL POLE IDENTIFICATION: TM-A

ORIGINAL FOUNDATION TYPE: TM-2

ORIGINAL POLE DETAIL TYPE: 5L



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ROADBRAY IMPROVEMENTS SIGNAL IMPROVEMENTS FOR GAY STREET CITY OF KNOXVILLE, IN

NDSS REVISION No. Date Revision



CITYOF KNOXML

SIGNAL LAYOUT CLINCH AVENUE

6 SCALE: N.T.S. PROJECT: 45187.00 DATE: 2023

SIGNAL #8 SOUTHWEST CORNER ORIGINAL POLE IDENTIFICATION: TM-C ORIGINAL POLE DETAIL TYPE: 7 ORIGINAL POLE DETAIL TYPE: 2





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SIGNAL #7

SOUTHEAST CORNER





NORTHWEST CORNER ORIGINAL POLE IDENTIFICATION: TM1.6 ORIGINAL FOUNDATION TYPE: TM-3 ORIGINAL POLE DETAIL TYPE: 5R



ALL SIGNAL POLE LOCATIONS SHOWN ARE APPROXIMATE.

NOTE #1: PEDESTAL POLE (TYPE A) (730-23.28) WITH COUNTDOWN PEDESTRIAN SIGNAL HEAD WITH AUDIBLE PUSHBUTTON AND SIGN PEDESTRIAN SIGNAL HEAD WITH ADDISE POSHBUT TOWARD SIGN TO BE INSTALLED. LOCATION MUST MEET ADA GUDELINES AND BE WITHIN TEN FEET OF CURB RAMP, LOCATION WILL BE DETERMINED BY ENGINEER. SEE TDOT STD DRAWING T-SG-6.



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NORTHEAST CORNER

ORIGINAL POLE IDENTIFICATION: TM1.3

ORIGINAL FOUNDATION TYPE: TM-3

ORIGINAL POLE DETAIL TYPE: 3R NOTE: INCLUDE SUPPLEMENTAL SIGNAL HEAD TO ATTACH TO NEW POLE.

> SIGNAL #11 SOUTHEAST CORNER

ORIGINAL POLE IDENTIFICATION: TM1.4

ORIGINAL FOUNDATION TYPE: TM-3

ORIGINAL POLE DETAIL TYPE: 3L

NOTE: INCLUDE SUPPLEMENTAL SIGNAL HEAD

TO ATTACH TO NEW POLE.



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SIGNAL IMPROVEMENTS FOR GAY STREET ROADWAY IMPROVEMENTS CITY OF KNOXVILLE, TN

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SIGNAL LAYOUT UNION AVENUE SOUTH

7 SCALE: N.T.S. PROJECT: 48187.00 DATE: 2023

SIGNAL #12 SOUTHWEST CORNER ORIGINAL POLE IDENTIFICATION: TM1.5 ORIGINAL FOUNDATION TYPE: TM-3 ORIGINAL POLE DETAIL TYPE: 5L





NORTHWEST CORNER ORIGINAL POLE IDENTIFICATION: TM1.8 ORIGINAL FOUNDATION TYPE: TM-2 ORIGINAL POLE DETAIL TYPE: 4R



ALL SIGNAL POLE LOCATIONS SHOWN ARE APPROXIMATE.



NORTHEAST CORNER

ORIGINAL POLE IDENTIFICATION: TM1.1

ORIGINAL FOUNDATION TYPE: TM-3

ORIGINAL POLE DETAIL TYPE: 5L

SIGNAL #15 SOUTHEAST CORNER

ORIGINAL POLE IDENTIFICATION: TM1.2

ORIGINAL FOUNDATION TYPE: TM-3

ORIGINAL POLE DETAIL TYPE: 1B

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ROADWAY IMPROVEMENTS SIGNAL IMPROVEMENTS FOR GAY STREET CITY OF KNOXVILLE, TN

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SIGNAL LAYOUT UNION AVENUE NORTH

8 SCALE: N.T.S. PROJECT: 48187.00 DATE: 2023

SIGNAL #16 SOUTHWEST CORNER ORIGINAL POLE IDENTIFICATION: TM1.7 ORIGINAL FOUNDATION TYPE: TM-3 ORIGINAL POLE DETAIL TYPE: 1A





SIGNAL #21 NORTHWEST CORNER ORIGINAL POLE IDENTIFICATION: TM1.12 ORIGINAL FOUNDATION TYPE: TM-4 ORIGINAL POLE DETAIL TYPE: 5R

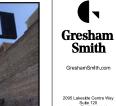


ALL SIGNAL POLE LOCATIONS SHOWN ARE APPROXIMATE.

NOTE #1: PEDESTAL POLE (TYPE A) (730-23.28) WITH COUNTDOWN PEDESTRIAN SIGNAL HEAD WITH ALDIBLE PUSHBUTTON AND SIGN TO BE INSTALLED. LOCATION MUST MEET ADA GUIDELINES AND BE WITHIN TEN FEET OF CURB RAMP. LOCATION WILL BE DETERMINED BY ENGINEER. SEE TDOT STD DRAWING T-SG-6.

NOTE #2: PEDESTRIAN PUSHBUTTON POST (730-26.06) WITH AUDIBLE PUSHBUTTON AND SIGN TO BE INSTALLED. LOCATION MUST MEET ADA GUIDELINES AND BE WITHIN TEN FEET OF CURB RAMP. LOCATION WILL BE DETERMINED BY ENGINEER. SEE TDOT STD DRAWING T-SG-6.





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SIGNAL #18 NORTHEAST CORNER ORIGINAL POLE IDENTIFICATION: TM1.9 ORIGINAL FOUNDATION TYPE: TM-4 ORIGINAL POLE DETAIL TYPE: 6R

SIGNAL IMPROVEMENTS FOR GAY STREET ROADWAY IMPROVEMENTS CITY OF KNOXVILLE, TN

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SIGNAL LAYOUT WALL AVENUE 9

SCALE: N.T.S. PROJECT: 48187.0

SIGNAL #20 SOUTHWEST CORNER ORIGINAL POLE IDENTIFICATION: TM-1.11 ORIGINAL FOUNDATION TYPE: TM-4 ORIGINAL POLE DETAIL TYPE: 5L

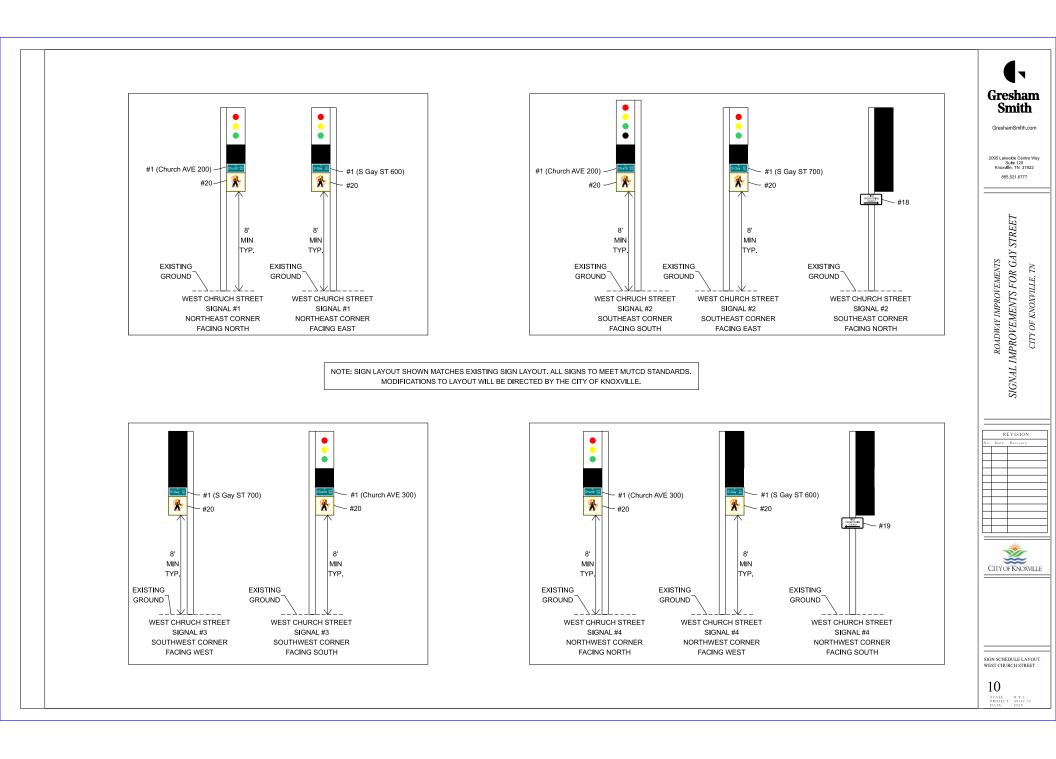


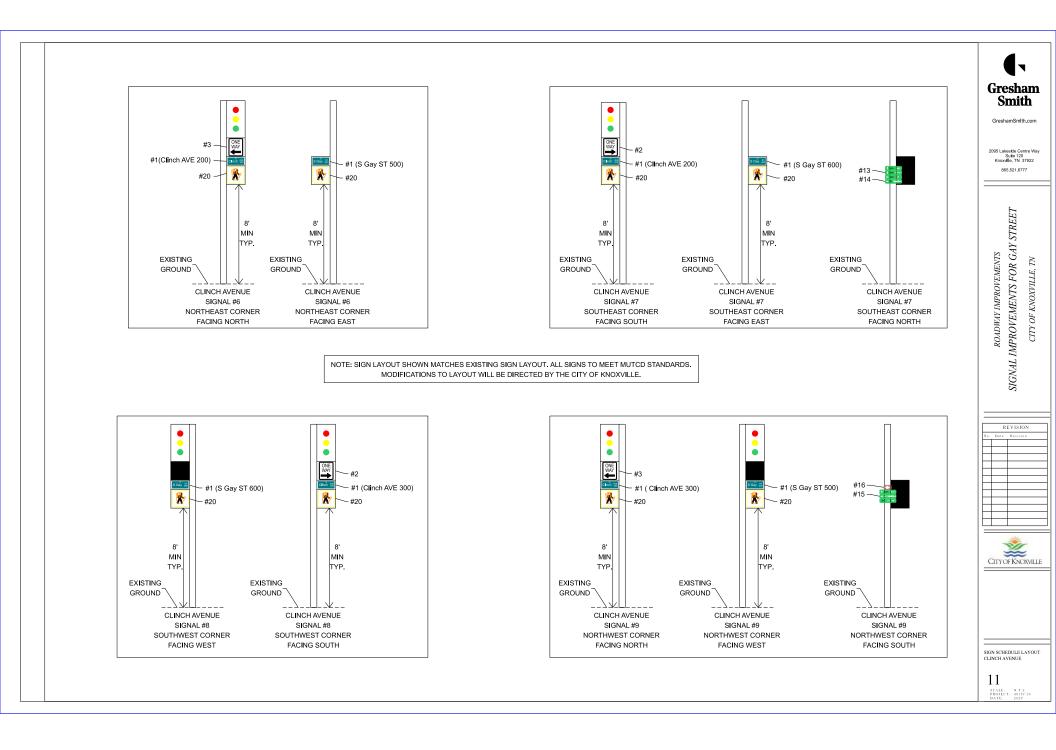


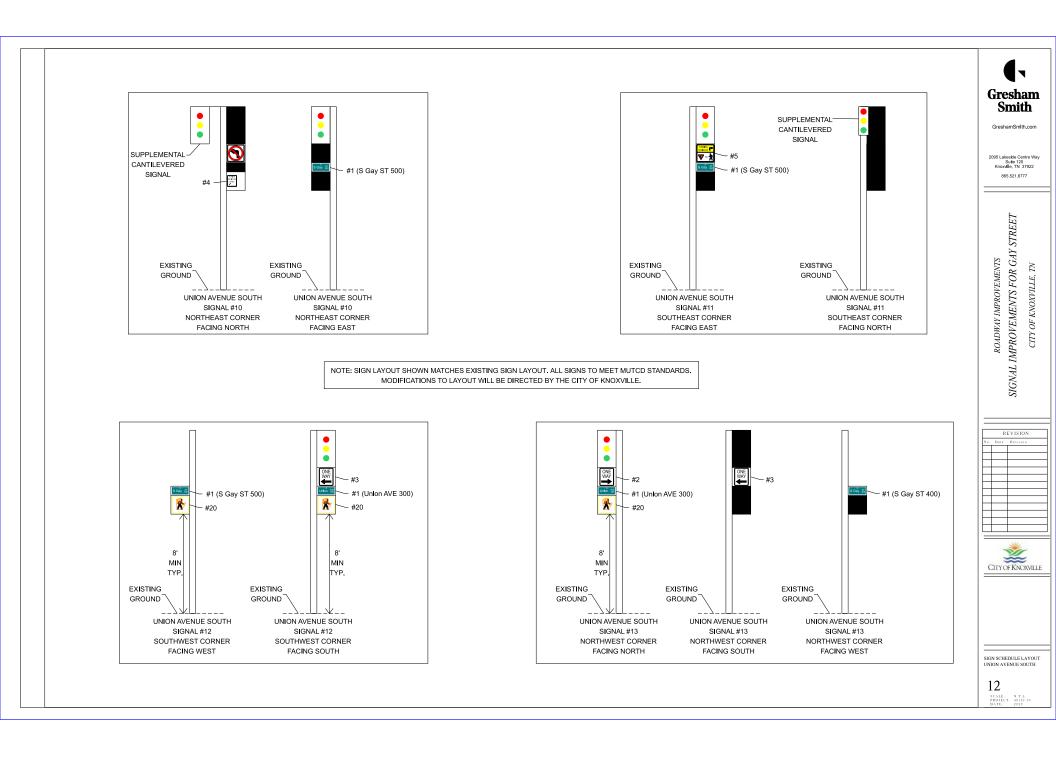
SIGNAL #19 SOUTHEAST CORNER ORIGINAL POLE IDENTIFICATION: TM1.10 ORIGINAL FOUNDATION TYPE: TM-4











Gresham Smith GreshamSmlth.com

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865.521.6777

SIGNAL IMPROVEMENTS FOR GAY STREET

REVISION

CITY OF KNOXVILLE

SIGN SCHEDULE LAYOUT UNION AVENUE NORTH

13 SCALE: N.T.S. PROJECT: 48187.00 DATE: 2023

CITY OF KNOXVILLE, TN

ROADWAY IMPROVEMENTS

- #8

UNION AVENUE NORTH

SIGNAL #15

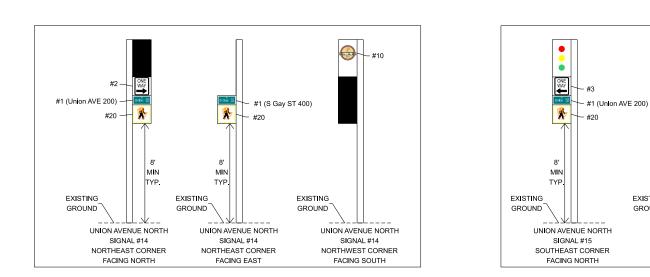
SOUTHEAST CORNER

FACING SOUTH

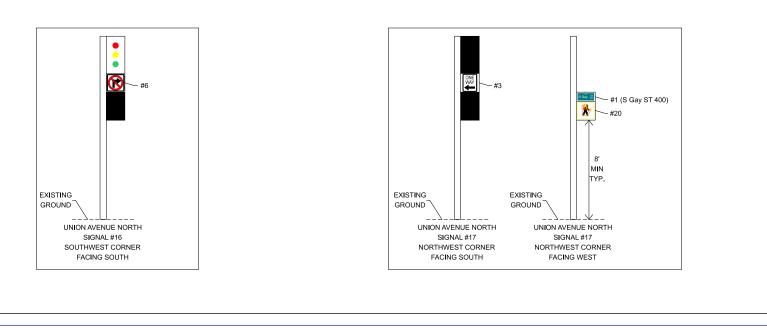
EXISTING

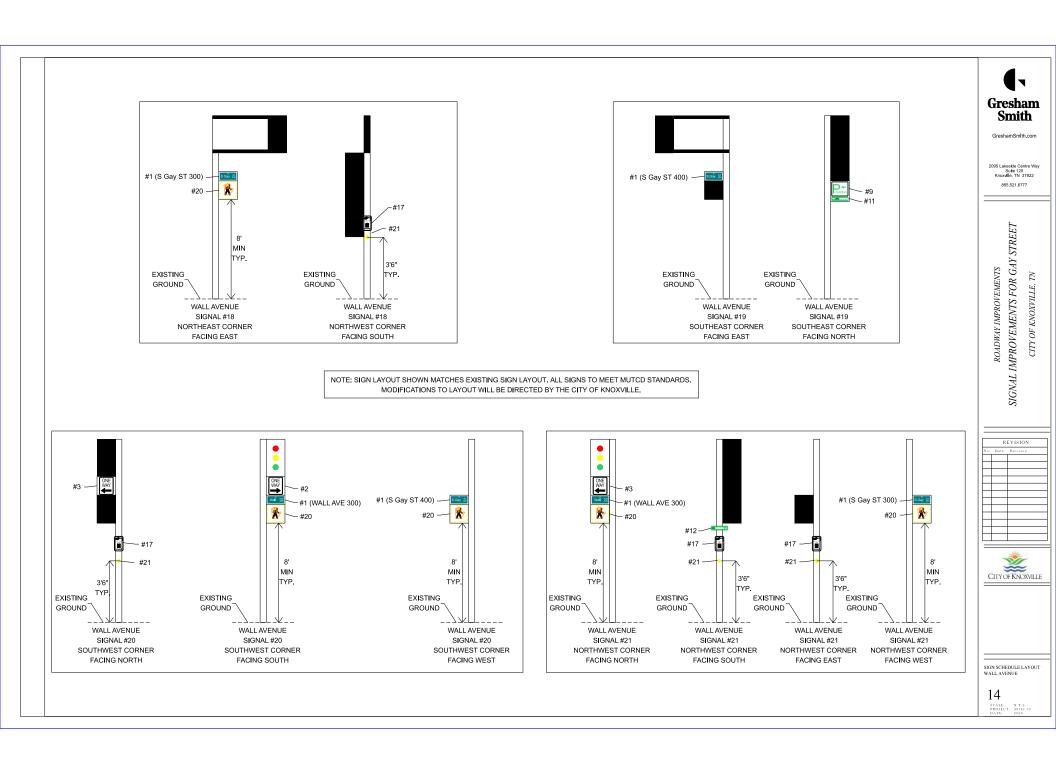
GROUND

4,



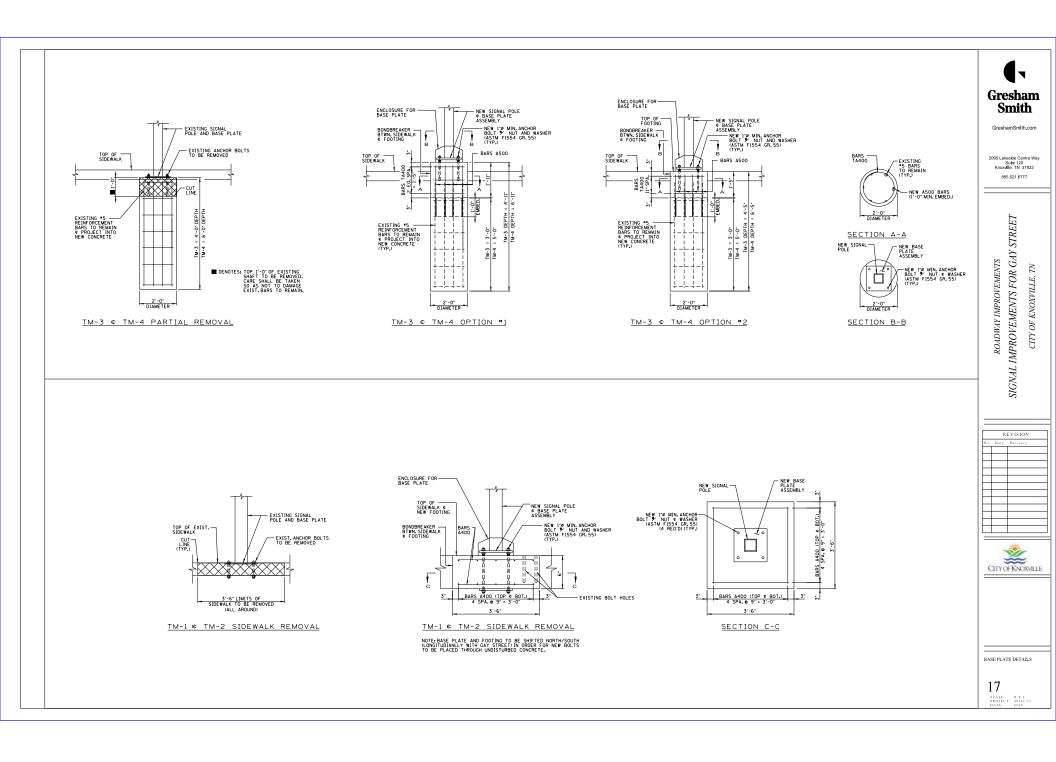
NOTE: SIGN LAYOUT SHOWN MATCHES EXISTING SIGN LAYOUT, ALL SIGNS TO MEET MUTCH STANDARDS. MODIFICATIONS TO LAYOUT WILL BE DIRECTED BY THE CITY OF KNOXVILLE.





		SIGNAL POLE NO	J	SIZ	ZE		$\top$		OPY		$\square$			SIGN F	ACE	RAILROAD (T-	EL DESIGN	(BREA	K-AWA	Y)	MINIMUM	
SIGN NO	LEGEND	(DIRECTION FACING)	LENGTH			S BORDER WIDTH	R CAPITAL	-	ER	AL SERIES	s SHIELD	O ARRO	OW COPY	1	1	SUPPORT TYPE	SUPPORT LENGTH	FOOTING				REMARKS
#1 D1-1	xxxx XXX	1N 1E 2S 2E 3W 3S 4N 4W 6N 6S 9N 7S 7E 8W 8S 9N 9W 10E 11E 12W 12S 13N 13W 14N 14E 15N 17W 15N 17W 14N 19E 20S 20W 21N 21W		NA									NA	NA	NA						MATCH EXISTING	CITY OF KNOXVILLE TO PROVIDE ALL D1-1 SIGNS. NOT INCLUDED IN ITEM #713-13.02
#2 R6-2R		7 SOUTH 8 SOUTH 13 NORTH 14 NORTH 20 SOUTH	24"	30"									BLACK	< WHITE	0.080"						MATCH EXISTING	
#3 R6-2L		6 NORTH 9 NORTH 12 SOUTH 13 SOUTH 15 NORTH 17 SOUTH 20 NORTH 21 NORTH	24*	30"									BLACK	< WHITE	0.080"						MATCH EXISTING	
#4	POLICE VEHICLES ONLY	10 NORTH	NA	NA									NA	NA	NA						MATCH EXISTING	CITY OF KNOXVILLE TO PROVIDE SIGN, NOT INCLUDED IN ITEM #713-13.02
#5 R10-15		11 EAST	30*	30"									BLACK	< YELLOW / WHITE	0.080"						MATCH EXISTING	
#6 R3-1		16 SOUTH	24"	24"								$\square$	BLACH	< WHITE	0.080"						MATCH EXISTING	
#7 R3-2		10 NORTH	24"	24"									BLACH	< WHITE	0.080"						MATCH EXISTING	
#8 D4-1		15 SOUTH	18"	15"									GREE	N WHITE	0.080"						MATCH EXISTING	
#9 D4-1		19 NORTH	18"	15"									GREE	N WHITE	0.080"						MATCH EXISTING	
#10	PUBLIC	14 SOUTH	NA	NA									NA	NA	NA						MATCH EXISTING	CITY OF KNOXVILLE TO PROVIDE SIGN. NOT INCLUDED IN ITEM #713-13.02
#11 D1-1b	🗲 🖟 Market Sq	19 NORTH	18"	6"									WHITE	GREEN	0.080"						MATCH EXISTING	
#12 D1-1b	Grेे Market Sq →	21 SOUTH	18"	6"									WHITE	GREEN	0.080"						MATCH EXISTING	
#13 D1-3b	↑ 3차 Z00 ↑ 3차 NKnox ← 3차 UT	7 NORTH	18"	18"									WHITE	E GREEN	0.080"						MATCH EXISTING	
#14			'	+'	+-	-	-	+	'	+		+	_						+	+	MATCH	

	· ·	SIGNAL POLE NO		SIZ	ZE			CC	OPY					SIGN F	ACE	STEFI	DESIGN (	BREAK	AWAY	)	MINIMUM	
SIGN NO	LEGEND '	(DIRECTION FACING)	LENGTH			BORDEF	CAPITAL			L SERIE	SHIELD	ARROW	COPY	BACKGROUND		SUPPORT TYPE	SUPPORT LENGTH	FOOTING		REIN STEEL LBS.	VERTICAL CLEARANCE	REMARKS
#15 D1-3b	↑ ৫ন্ট ljams → ৫ন্ট Codar Bluff ৫ন্ট UT →	9 SOUTH	18"	18"									WHITE	GREEN	0.080"						MATCH EXISTING	
#16	- <u>((((</u> 1)-	9 SOUTH	NA	NA									NA	NA	NA						MATCH EXISTING	CITY OF KNOXVILLE TO PROVIDE SIGN. NOT INCLUDED IN ITEM #713-13.02
#17 R10-3		18 WEST 19 WEST 20 EAST 21 EAST	- 9"	12"									BLACK	WHITE	0.080"						NA	TO BE PLACED ABOVE PEDESTRIAN PUSH BUTTON (#21)
#18	FIRST PRESBYTERIAN CHURCH	2 NORTH	NA	NA									NA	NA	NA						MATCH EXISTING	CITY OF KNOXVILLE TO PROVIDE SIGN. NOT INCLUDED IN ITEM #713-13.02
#19	FIRST PRESBYTERIAN CHURCH	4 SOUTH	NA	NA									NA	NA	NA						MATCH EXISTING	CITY OF KNOXVILLE TO PROVIDE SIGN. NOT INCLUDED IN ITEM #713-13.02
#20	PEDESTRIAN SIGNAL	1N         1E         2S         2E         3W           3S         4AN         4WN         6N         6E           7S         7E         8WN         8S         9N           9W12W         12S         13N         9W         8S         9N           12W12W         12S         13N         9W         12S         12N           14N         14E         15N         7W         18E         20S         20W         21N           10N         PEDESTAL         POLEAT         WALLAVE         10N         PEDESTAL         POLEAT         20S         20W         20K         20K		NA									NA	NA	NA						8'	
#21	PEDESTRIAN PUSH BUTTON	18 SOUTH 20 NORTH 21 SOUTH 21 EAST 21 EAST 21 CAPEDESTRAL POLE AT WALL AVE 1 ON PEDESTRAIN POST AT WALL AVE (SEE SHEET 9 FOR DETAILS)		NA									NA	NA	NA						3.5	



#### TRAFFIC CONTROL PHASING NOTES:

1. CONTRACTOR CAN ONLY HAVE ONE INTERSECTION UNDER ALL WAY/FOUR WAY STOP CONDITION AND UNDER CONSTRUCTION AT ONE TIME.

2. CONTRACTOR TO COORDINATE WITH THE CITY OF KNOXVILLE FOR CLOSING ON-STREET PARKING DURING CONSTRUCTION. 3. ALL R1-1 SIGNS USED AT THE INTERSECTION OF GAY STREET AND UNION AVENUE TO HAVE ILLUMINATED BOARDER.

4. CITY OF KNOXVILLE WILL BE INSTALL STOP BARS.

#### TRAFFIC CONTROL GENERAL NOTES:

1. THESE TRAFFIC CONTROL PLANS DO NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF INSTALLING TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH THE CURRENT EDITION OF THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES".

2. CONSTRUCTION SIGNING SHOWN IN THESE PLANS IS TO SERVE AS A GUIDE ONLY, OTHER SIGNS MAY BE REQUIRED DURING CONSTRUCTION.

THE CONTRACTOR IS DIRECTLY RESPONSIBLE FOR THE PROVISION OF ANY AND ALL TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH M.U.T.C.D. AND SECTION 712 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

4. CONTRACTOR TO OBTAIN APPROVAL FROM CITY FOR TRAFFIC CONTROL IMPLEMENTATION, SIDEWALKS MAY BE CLOSED WITH SIDEWALK DETOUR WITH APPROVAL FROM THE CITY.

5. IF A LANE OF TRAFFIC IS TO BE CLOSED TO SET THE NEW POLES, A FLAGGER MUST BE USED AND ONLY DURING THE HOURS OF \$00 AM, TO \$00 P,M, MONDAY THROUGH FRIDAY WITH APPROVAL FROM THE CITY OF KNOXILLE.

6. ON-STREET PARKING SPACES MAY BE REQUIRED TO BE CLOSED IN ORDER TO ACHIEVE SUFFICIENT SIGHT DISTANCE.



TRAFFIC CONTROL PLAN AT WEST CHURCH STREET

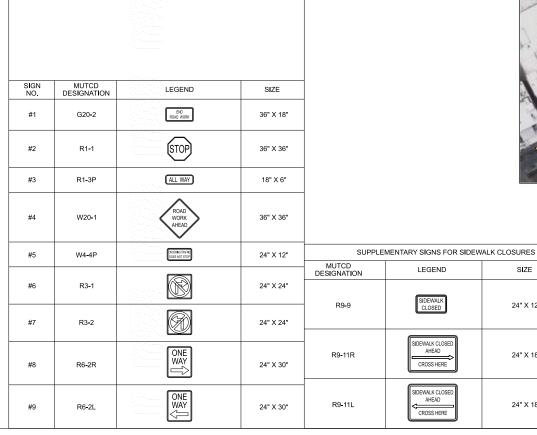


TRAFFIC CONTROL PLAN AT CLINCH AVENUE



TRAFFIC CONTROL PLAN AT WALL AVENUE

Ν



#6, #9 #2, #3

TRAFFIC CONTROL PLAN AT UNION AVENUE

SIZE

24" X 12"

24" X 18"

24" X 18"





Gresham

Smith

GreshamSmlth.com

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865,521,6777

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CITY OF KNOXVILLE,

ROADWAY IMPROVEMENTS

TRAFFIC CONTROL PLAN

18 SCALE: N.T.S. PROJECT: 48187.00