Exhibit H: Typical Traffic Control Plans

North Metro Natural Gas Pipeline Project Routing Study

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Project: 24" NMR PIPELINE

Method of Handling Traffic: ONE LANE CLOSED ON TWO LANE ROAD

PREPARED BY:

Jennifer Ealey 10/25/2016

ATSSA TCS DATE

PHONE: 970-242-0669 CERTIFICATION # 245588 ISSUE DATE: 06/28/2013

EXPIRATION DATE: 06/24/2017

BASED ON A ONE LANE ROAD WORK ZONE:

TAPER: 50'

DEVICE SPACING: 20'

BUFFER: 100'

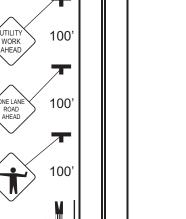
DEVICE SPACING: 40'

END TAPER: 50'

DEVICE SPACING: 20' TRANSITION AREA: 100'

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UTILITY WORK AHEAD	100'	
	7	
ONE LANE ROAD AHEAD	100'	
	~	
	100'	
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UTILITY MORK AHEAD 100'	/	T	
~ _	(WORK)	100'	
		7	
ONE LANE ROAD AHEAD	(ROAD)	100'	
~ ~	\\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	7	





SIGN SPACING PER MUTCD FIGURE 6H-3			
ROAD TYPE	DISTANC	ES BETWE	EN SIGNS
	Α	В	С
URBAN (35 MPH AND LESS)	100'	100'	100'
URBAN (40 MPH AND GREATER)	350'	350'	350'
RURAL	500'	500'	500'
EXPRESSWAY / FREEWAY	1000'	1500'	2640'

NO PARKING NO SIGNS WILL BE USED **PARKING** WHEN NEEDED.



NOTES:

- 1. CONTRACTOR WILL NEED ONE LANE CLOSED ON TWO LANE ROAD DURING WORKING HOURS ONLY.
- 2. FLAGGERS WILL STOP TRAFFIC FOR ONE LANE ROAD WORK ZONE.
- 3. CONTRACTOR WILL WORK IN HALF OF THE ROADWAY AT A TIME.
- 4. AT NIGHT, HAZARDS WILL BE MARKED AND DELINEATED WITH DRUMS AND FLASHING LIGHTS.
- 5. REFER TO MUTCD 2009 EDITION FIGURE 6H-10 FOR A TYPICAL APPLICATION.

SIGNS AND DEVICES:

- 2 UTILITY WORK AHEAD
- 2 ONE LANE ROAD AHEAD
- 2 FLAGGER SYMBOL CONES DRUMS / LIGHTS



CEPC16-001-1

Project: 24" NMR PIPELINE

DATE

Method of Handling Traffic: ONE LANE CLOSED ON TWO LANE ROAD AT AN INTERSECTION

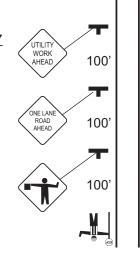
PREPARED BY:

Jennifer Ealey 10/25/2016

ATSSA TCS PHONE: <u>970-242-0669</u>

CERTIFICATION # 245588 ISSUE DATE: 06/28/2013

EXPIRATION DATE: 06/24/2017



BASED ON A ONE LANE ROAD WORK ZONE:

TAPER: 50'

WORK ZONE

ONE LANE

ROAD AHEAD

, UTILITY

WORK

100'

100'

100'

VARIOU

DEVICE SPACING: 20'

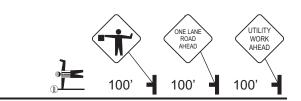
BUFFER: 100'

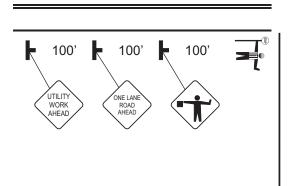
DEVICE SPACING: 40'

END TAPER: 50'

DEVICE SPACING: 20' TRANSITION AREA: 100'











SIGN SPACING PER MUTCD FIGURE 6H-3			
ROAD TYPE	DISTANCES BETWEEN SIGNS		
	Α	В	С
URBAN (35 MPH AND LESS)	100'	100'	100'
URBAN (40 MPH AND GREATER)	350'	350'	350'
RURAL	500'	500'	500'
EXPRESSWAY / FREEWAY	1000'	1500'	2640'

NOTES:

 CONTRACTOR WILL NEED ONE LANE CLOSED ON TWO LANE ROAD DURING WORKING HOURS ONLY.

VARIOUS

- 2. FLAGGERS WILL STOP TRAFFIC FOR ONE LANE ROAD WORK ZONE.
- 3. AT NIGHT, HAZARDS WILL BE BARRICADED WITH DRUMS AND FLASHING LIGHTS.
- 4. REFER TO MUTCD 2009 EDITION FIGURES 6H-10 AND 27 FOR TYPICAL APPLICATIONS.

SIGNS:

- 4 UTILITY WORK AHEAD
- 4 ONE LANE ROAD AHEAD
- 4 FLAGGER SYMBOL CONES DRUMS / LIGHTS

CEPC16-001-2

Project: 24" NMR PIPELINE

Method of Handling Traffic: TYPICAL SHOULDER CLOSURE

PREPARED BY:

Jennifer Ealey 10/25/2016

ATSSA TCS DATE PHONE: 970-242-0669

CERTIFICATION # 245588 ISSUE DATE: 06/28/2013

EXPIRATION DATE: 06/24/2017

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COMMON URBAN SPEED LIMITS

BASED ON A SPEED OF 25 MPH:

SHOULDER TAPER: 41' DEVICE SPACING: 25' SHOULDER BUFFER: 155' DEVICE SPACING: 50' SHOULDER END TAPER: 50' DEVICE SPACING: 25

BASED ON A SPEED OF 40 MPH:

SHOULDER TAPER: 105' DEVICE SPACING: 40' SHOULDER BUFFER: 305' DEVICE SPACING: 80' SHOULDER END TAPER: 50° DEVICE SPACING: 25

BASED ON A SPEED OF 35 MPH:

SHOULDER TAPER: 80' DEVICE SPACING: 35' SHOULDER BUFFER: 250 DEVICE SPACING: 70' SHOULDER END TAPER: 50' DEVICE SPACING: 25'

BASED ON A SPEED OF 50 MPH:

SHOULDER TAPER: 200' **DEVICE SPACING: 55** SHOULDER BUFFER: 425 DEVICE SPACING: 110' SHOULDER END TAPER: 50' DEVICE SPACING: 25'





SIGN SPACING PER MUTCD FIGURE 6H-3			
ROAD TYPE	DISTANCES BETWEEN SIGNS		
	Α	В	С
URBAN (35 MPH AND LESS)	100'	100'	100'
URBAN (40 MPH AND GREATER)	350'	350'	350'
RURAL	500'	500'	500'
EXPRESSWAY / FREEWAY	1000'	1500'	2640'

VARIOUS 100 100 UTILITY SHOULDEF WORK WORK

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AHEAD

SHOULDER

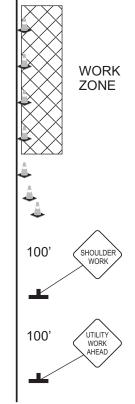
WORK

100

100

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VARI



NOTES:

- CONTRACTOR WILL NEED THE SHOULDER CLOSED DURING WORKING HOURS ONLY.
- AT NIGHT ALL HAZARDS WILL BE MARKED AND DELINEATED.
- REFER TO MUTCD FIGURE 6H-3 FOR A TYPICAL APPLICATION.
- 4. ALL SIDE STREETS INTERSECTING WITHIN WORK ZONE SHALL HAVE A "UTILITY WORK AHEAD" POSTED.

SIGNS & DEVICES:

3 - UTILITY WORK AHEAD CONES

3 - SHOULDER WORK

CEPC16-001-3

CC ENTERPRISES - TRAFFIC CONTROL SPECIALISTS, INC PREPARED BY: Jennifer Ealey 10/25/2016 Contractor: CAMPOS EPC LLC. MHT # 4 ATSSATCS DATE PHONE: 970-242-0669 Project: 24" NMR PIPELINE CERTIFICATION # 245588 Method of Handling Traffic: RIGHT LANE CLOSURE ISSUE DATE: 06/28/2013 EXPIRATION DATE: 06/24/2017 AT NIGHT HAZARDS FLAGGING POSITIONS (STEEL PLATES) DETERMINED IN THE SHALL HAVE IELD. FLAGGER SYMBOL ADVANCED 100' MINIMUM FROM WARNING. FLAGGER STATION. 100' **BASED ON A SPEED OF 40 MPH: TAPER: 320' DEVICE SPACING: 40'** BUFFER: 305' 1. CONTRACTOR WILL NEED THE LEFT LANES CLOSED ON A FIVE LANE ROAD DURING WORKING HOURS ONLY. DEVICE SPACING: 80' 2. AT NIGHT ALL HAZARDS WILL BE BARRICADED WITH DRUMS AND FLASHING LIGHTS. END TAPER: 50' - 100' MAX 3. REFER TO MUTCD FIGURE 6H-33 FOR A TYPICAL APPLICATION DEVICE SPACING: 25' SIGNS AND DEVICES: 7 - UTILITY WORK AHEAD 1 - RIGHT LANE CLOSED AHEAD 1 - TRANSITION SYMBOL (1L) CEPC16-001-4 2 - TYPE II BARRICADE 2 - SIDEWALK CLOSED 1 - TYPE C ARROWBOARD *CC ENTERPRISES IS NOT LIABLE FOR SETUP CONE OF EQUIPMENT BY OTHER PERSONS. DRUM (NIGHTTIME)

IMPLEMENTATION OF THE PLAN MAY NEED TO BE ADJUSTED TO ONSITE CONDITIONS.

CC ENTERPRISES - TRAFFIC CONTROL SPECIALISTS, INC MHT # 5

Contractor: CAMPOS EPC LLC.

Project: 24" NMR PIPELINE Method of Handling Traffic:

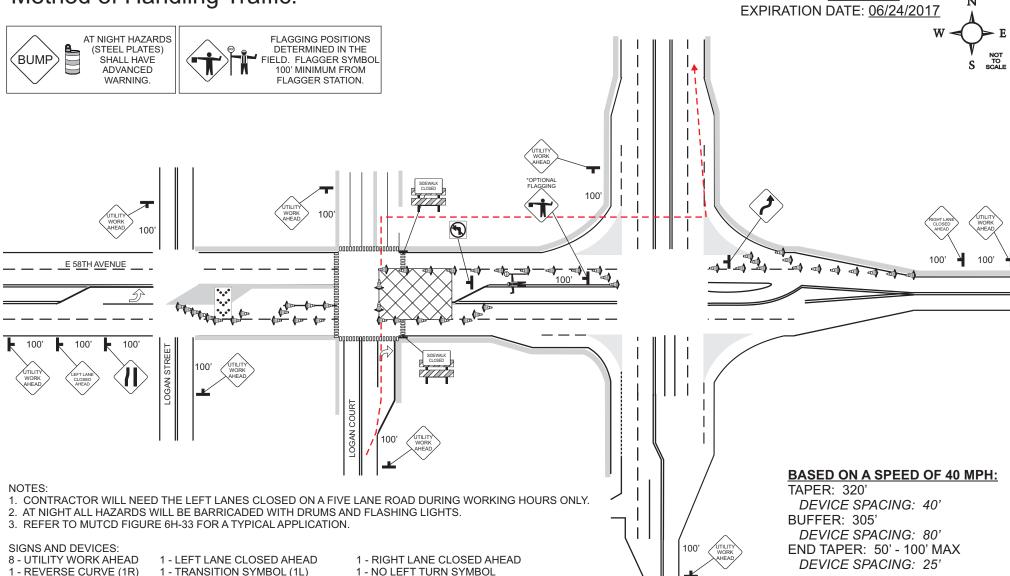
1 - REVERSE CURVE (1R) 2 - SIDEWALK CLOSED

DRUM (NIGHTTIME)

2 - TYPE II BARRICADE

1 - YIELD

1 - TYPE C ARROWBOARD



1 - FLAGGER SYMBOL

CONE

CEPC16-001-5

*CC ENTERPRISES IS NOT LIABLE FOR SETUP OF EQUIPMENT BY OTHER PERSONS. IMPLEMENTATION OF THE PLAN MAY NEED TO BE ADJUSTED TO ONSITE CONDITIONS.

PREPARED BY: Jennifer Ealey

PHONE: 970-242-0669

CERTIFICATION # 245588

ISSUE DATE: 06/28/2013

ATSSA TCS

10/25/2016

DATE

CC ENTERPRISES - TRAFFIC CONTROL SPECIALISTS, INC PREPARED BY: Jennifer Ealey 10/25/2016 Contractor: CAMPOS EPC LLC. MHT # 6 ATSSA TCS DATE PHONE: 970-242-0669 Project: 24" NMR PIPELINE CERTIFICATION # 245588 Method of Handling Traffic: RIGHT LANE CLOSURE / ROAD CLOSURE ISSUE DATE: 06/28/2013 EXPIRATION DATE: 06/24/2017 AT NIGHT HAZARDS WHEN WORK ZONE FLAGGING POSITIONS IS IN THE PARKING (STEEL PLATES) DETERMINED IN THE LOT. PARKING STALLS SHALL HAVE IELD. FLAGGER SYMBOL SHALL BE CLOSED WITH ADVANCED 100' MINIMUM FROM DRUMS AND CAUTION WARNING. FLAGGER STATION. TAPE. CLOSED 100' E 58TH AVENUE LOGAN STREE LOGAN COURT NOTES: 1. CONTRACTOR WILL NEED THE RIGHT LANE CLOSED ON A FIVE LANE ROAD DURING WORKING HOURS ONLY. 2. AT NIGHT ALL HAZARDS WILL BE BARRICADED WITH DRUMS AND FLASHING LIGHTS. **BASED ON A SPEED OF 40 MPH:** 3. REFER TO MUTCD FIGURES 6H-33 AND 20 FOR TYPICAL APPLICATIONS. **TAPER: 320** DEVICE SPACING: 40' SIGNS AND DEVICES: BUFFER: 305' 6 - UTILITY WORK AHEAD 1 - RIGHT LANE CLOSED AHEAD 1 - NO RIGHT TURN SYMBOL 1 - NO LEFT TURN SYMBOL DEVICE SPACING: 80' 3 - SIDEWALK CLOSED 2 - SPECIAL (DETOUR BUSINESS ACCESS) END TAPER: 50' - 100' MAX 4 - TYPE II BARRICADE 1 - SIDEWALK CLOSED CROSS HERE WITH ARROW (1L) **DEVICE SPACING: 25** 1 - DETOUR ARROW (1D) 1 - ROAD CLOSED CEPC16-001-6 3 - DETOUR AHEAD 1 - YIFI D CONE *CC ENTERPRISES IS NOT LIABLE FOR SETUP DRUM (NIGHTTIME) OF EQUIPMENT BY OTHER PERSONS.

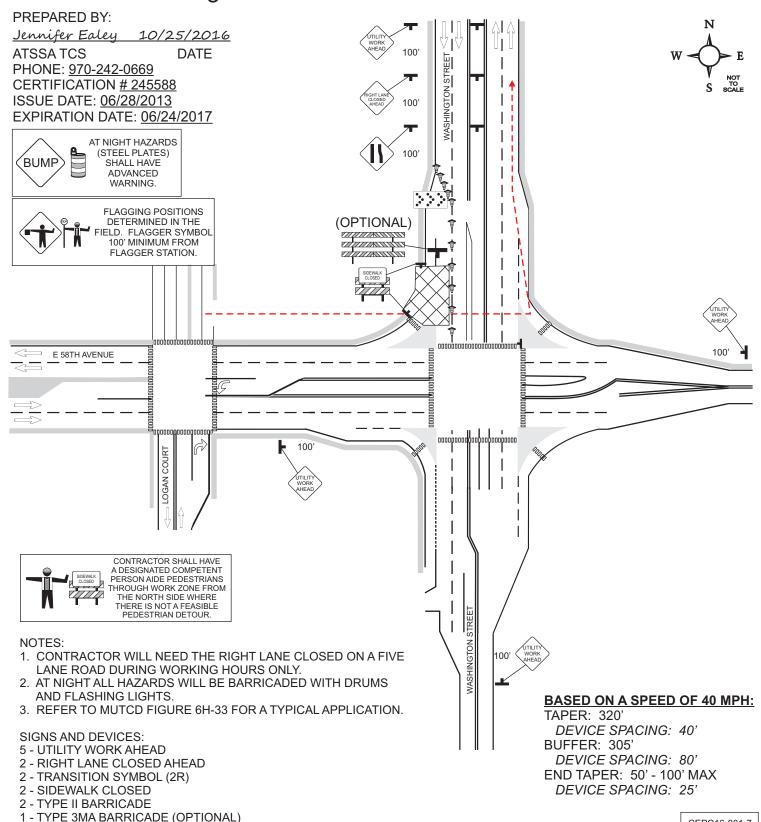
IMPLEMENTATION OF THE PLAN MAY NEED TO BE ADJUSTED TO ONSITE CONDITIONS.

Project: 24" NMR PIPELINE Method of Handling Traffic:

1 - TYPE C ARROWBOARD

DRUM (NIGHTTIME)

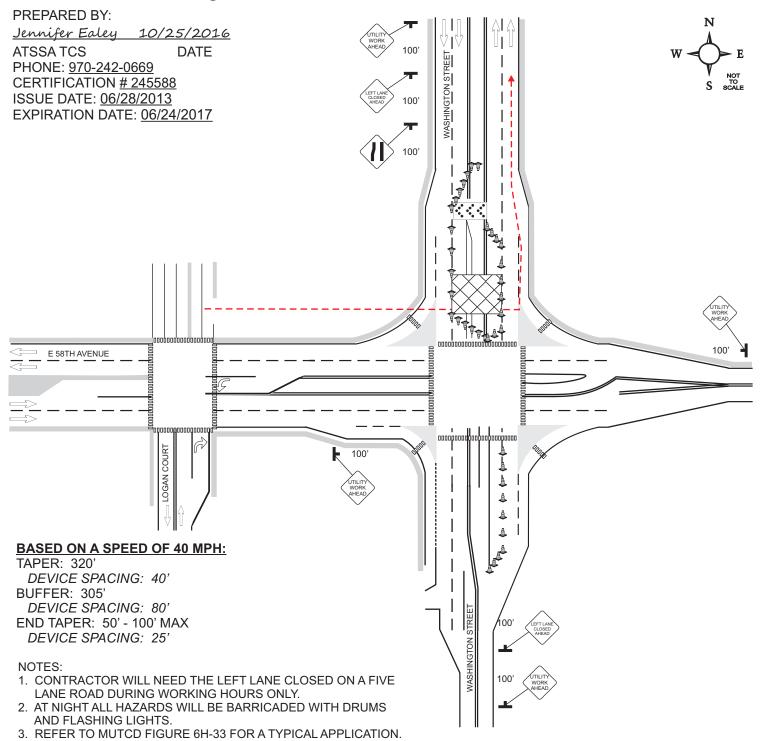
CONE



CEPC16-001-7

Project: 24" NMR PIPELINE

Method of Handling Traffic: LEFT LANE CLOSURE



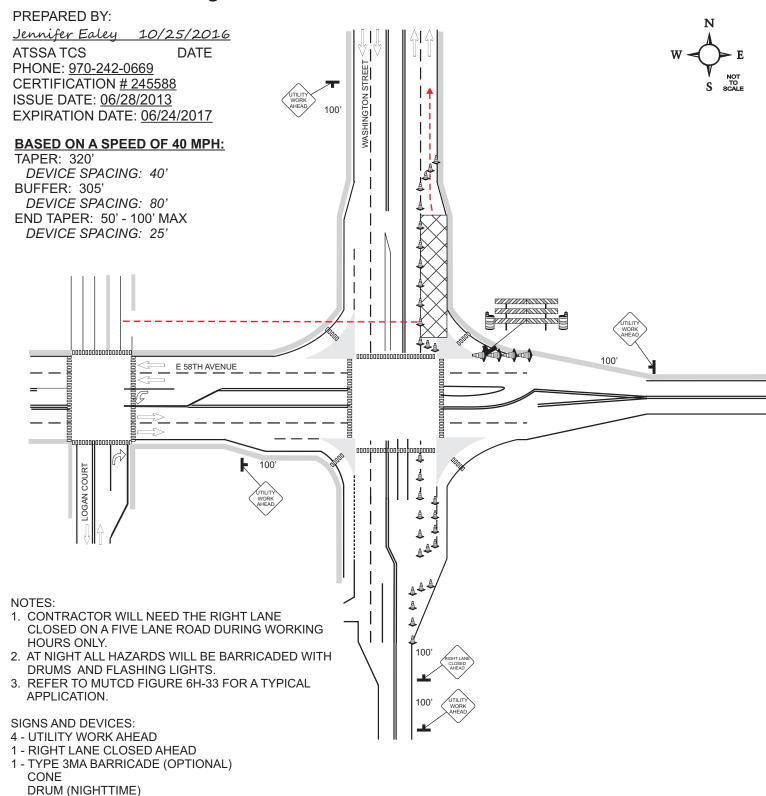
SIGNS AND DEVICES:

- 5 UTILITY WORK AHEAD
- 3 LEFT LANE CLOSED AHEAD
- 2 TRANSITION SYMBOL (2L)
- 1 TYPE C ARROWBOARD CONE DRUM (NIGHTTIME)

CEPC16-001-8

Project: 24" NMR PIPELINE Y

Method of Handling Traffic: RIGHT LANE CLOSURE



CEPC16-001-9