

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
HAM-75-3.84
STRENG ST CS
SEPARATION (BU-26)
MSD PID 11143260, SS#6339
HAMILTON COUNTY
CITY OF CINCINNATI

PROJECT DESCRIPTION

THIS IS PHASE 5A OF THE HAMILTON 75 CORRIDOR PROJECTS (MCE). THE PROJECT ADDS A LANE TO IR 75 SB, PROVIDES 4-LANE CONTINUITY NB, AND RECONFIGURES IR 74 EB RAMP TO IR 75. THE PROJECT ALSO INCLUDES SURFACE COURSE AND ADDITIONAL PAVEMENT WORK TO THE SOUTH AND IMPROVEMENTS TO RAMP A AT THE HOPPLE ST INTERCHANGE.

BU-26 WORK DESCRIPTION

BU-26 PROVIDES NEW SANITARY ONLY SEWER ALONG STRENG STREET FOR SEPARATION IN THE VICINITY OF THE STRENG/LUDLOW INTERSECTION.

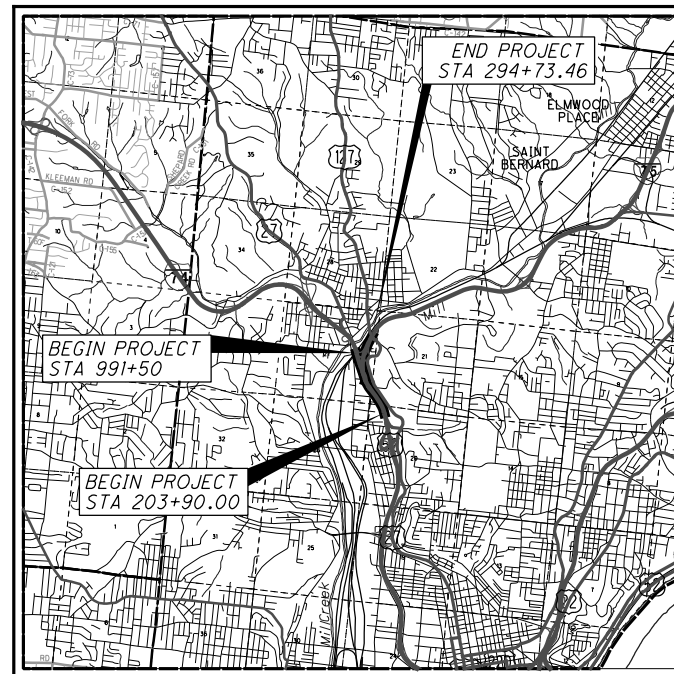
LIMITED ACCESS

THIS IMPROVEMENT IS ESPECIALLY DESIGNED FOR THROUGH TRAFFIC AND HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY OR FREEWAY BY ACTION OF THE DIRECTOR IN ACCORDANCE WITH THE PROVISIONS OF SECTION 5511.02 OF THE OHIO REVISED CODE.

2016 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PLANS AND CHANGES LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.



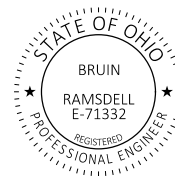
LOCATION MAP

LATITUDE: 39° 09' 03" LONGITUDE: -84° 32' 24"



PORTION TO BE IMPROVED	—————
INTERSTATE HIGHWAY	—————
FEDERAL ROUTES	—————
STATE ROUTES	—————
COUNTY & TOWNSHIP ROADS	—————
OTHER ROADS	—————

The DBT confirms that the record drawings have been updated to incorporate all red-lined changes and have been approved by the appropriate parties. These updated drawings represent the final and accurate record of the buildable unit's design and construction.



INDEX OF SHEETS:

TITLE SHEET	1
SCHEMATIC PLAN	2
GENERAL NOTES	3 - 10
SEWER PLAN AND PROFILE	11
SEWER DETAILS	12

DESIGN DESIGNATION

	IR 75		IR 74		DIRECTIONAL ROADWAY	
	SOUTH OF MITCHELL	SOUTH OF IR 74	WEST OF BEEKMAN	EAST OF BEEKMAN	IR 75 NB TO IR 74 WB	IR 74 EB TO IR 75 SB
CURRENT ADT (2010)	149,400	152,100	75,000	88,300	25,300	25,300
DESIGN YEAR ADT (2030)	174,300	179,200	89,300	102,000	29,800	29,800
DESIGN HOURLY VOLUME (2030)	14,640	15,050	8,040	9,180	4,100	4,380
DIRECTIONAL DISTRIBUTION	0.54	0.70	0.72	0.73	1.00	1.00
TRUCKS (24 HOUR B&C)	0.16	0.13	0.15	0.13	0.03	0.08
DESIGN SPEED	60 MPH	60 MPH	60 MPH	60 MPH	50 MPH	50 MPH
LEGAL SPEED	55 MPH	55 MPH	55 MPH	55 MPH	50 MPH	50 MPH
DESIGN FUNCTIONAL CLASSIFICATION:	03 URBAN INTERSTATE	03 URBAN INTERSTATE	03 URBAN INTERSTATE	03 URBAN INTERSTATE	03 URBAN INTERSTATE	03 URBAN INTERSTATE

NHS PROJECT ----- YES

DESIGN EXCEPTIONS

DESIGN FEATURE	APPROVAL DATES	SHEET NUMBERS
STOP. SIGHT DIST. - SB IR 75 (CURVE 6)	4/6/18	SEE BU-14
SHOULDER WIDTH - IR 74-1892R BRIDGE	4/10/18	SEE BU-14
SHOULDER WIDTH - RAMP P 1908S BRIDGE	12/12/18	SEE BU-14
CURVE RADIUS - RAMP P 1908S BRIDGE	12/12/18	SEE BU-14
STOP. SIGHT DIST. - RAMP P 1908S BRIDGE	12/12/18	SEE BU-14
S.E. RATE - IR 74 EB CURVE 13, 1908R BRIDGE	4/26/18	SEE BU-14

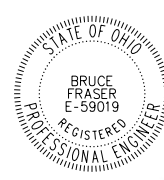
SUPPLEMENTAL SPECIFICATIONS

800-2016	1/19/18	814	7/15/16	866	4/21/17	914	7/15/16
804	1/15/16	821	4/20/12	867	4/15/16	921	4/20/12
806	3/2/15	832	1/17/14	902	12/31/12	939	7/17/15
808	10/16/15	839	7/17/15	904	7/15/16		
809	1/19/18	840	4/15/16	908	10/20/17		

STANDARD CONSTRUCTION DRAWINGS

BP-1.1	7/28/00	MH-1.1	1/15/16	RM-1.1	7/18/14	HL-10.11	1/19/18	MT-95.30	7/21/17	TC-7.65	1/15/16	ITS-10.10	7/17/15
BP-2.1	7/17/15	MH-1.2	1/15/16	RM-4.1	7/21/17	HL-10.12	1/20/17	MT-95.31	7/21/17	TC-9.10	1/19/18	ITS-10.11	1/19/18
BP-2.2	7/18/08			RM-4.3	7/18/14	HL-10.13	1/20/17	MT-95.32	7/21/17	TC-9.30	1/19/18	ITS-13.10	7/17/15
BP-2.3	7/18/14	DM-1.1	7/21/17	RM-4.4	7/21/17	HL-10.15	7/17/15	MT-95.40	1/20/17	TC-12.30	1/19/18	ITS-14.10	7/17/15
BP-2.4	7/19/13	DM-1.2	1/18/13	RM-4.5	7/21/17	HL-10.31	1/19/18	MT-95.45	7/21/17	TC-15.115	10/18/13	ITS-14.11	7/17/15
BP-3.1	7/18/14	DM-1.3	7/18/14	RM-4.6	7/19/13	HL-20.11	4/21/17	MT-95.50	7/21/17	TC-16.21	1/19/18	ITS-15.10	7/17/15
BP-6.1	7/19/13	DM-2.1	1/18/13			HL-20.13	1/19/18	MT-95.73	1/19/18	TC-21.10	7/21/17	ITS-15.11	7/17/15
BP-8.1	7/18/08	DM-4.1	1/15/16	A-1-69	7/19/02	HL-20.21	1/19/18	MT-98.10	1/20/17	TC-21.20	1/19/18	ITS-50.10	1/19/18
		DM-4.2	7/20/12	AS-1-15	7/17/15	HL-20.24	1/19/18	MT-98.11	1/20/17	TC-21.50	7/15/16	ITS-50.11	1/15/16
CB-1.1	1/15/16	DM-4.3	1/15/16	AS-2-15	1/19/18	HL-30.11	1/19/18	MT-98.20	7/18/14	TC-22.10	10/18/13	ITS-50.12	1/19/18
CB-1.2	1/15/16	DM-4.4	1/15/16	EXJ-4-87	1/19/18	HL-30.21	1/19/18	MT-98.21	7/18/14	TC-22.20	1/17/14	ITS-60.10	7/15/16
CB-1.3	1/15/16			GSD-1-96	7/19/02	HL-30.22	1/17/14	MT-98.29	1/20/17	TC-41.30	10/18/13		
CB-2.1	1/15/16	MGS-1.1	1/19/18	PCB-91	1/18/13	HL-30.31	1/17/14	MT-98.30	7/21/17	TC-42.10	10/18/13		
CB-2.2	1/15/16	MGS-2.1	1/19/18	PSID-1-13	7/15/16	HL-30.32	1/17/14	MT-99.30	1/19/18	TC-42.20	10/18/13		
CB-2.3	1/15/16	MGS-3.1	1/19/18	RB-1-55	7/19/13	HL-30.33	1/17/14	MT-99.60	7/15/16	TC-52.10	10/18/13		
CB-3.1	1/15/16	MGS-3.2	1/18/13	SBR-1-13	1/14/14	HL-30.41	1/19/18	MT-101.70	1/17/14	TC-52.20	1/19/18		
CB-3.3	1/15/16	MGS-4.2	7/19/13	SBR-2-13	1/14/14	HL-40.10	1/20/17	MT-101.75	7/15/16	TC-61.30	1/20/17		
		MGS-4.3	1/18/13	SICD-1-96	7/18/14	HL-40.20	1/20/17	MT-101.80	1/16/18	TC-65.10	1/17/14		
I-2.1	1/15/16	MGS-5.2	7/15/16	SICD-2-14	7/18/14	HL-50.11	1/16/15	MT-101.90	7/21/17	TC-65.11	7/21/17		
I-2.2	1/15/16	MGS-5.3	7/15/16	VPF-1-90	1/19/18	HL-50.21	1/19/18	MT-102.10	1/20/17	TC-71.10	1/19/18		
I-2.3	1/15/16	MGS-6.1	1/19/18			HL-60.12	7/15/16	MT-102.20	7/18/14	TC-72.20	7/15/16		
I-2.4	1/15/16					HL-60.21	1/16/15	MT-103.10	1/19/18	TC-73.20	7/21/17		
						HL-60.31	7/21/17	MT-104.10	10/16/15				
								MT-105.10	7/19/13				

ENGINEERS SEAL:



SIGNED: *Bruce Fraser*
DATE: 10/15/2019

UNDERGROUND UTILITIES

Contact Two Working Days Before You Dig



OHIO811, 8-1-1, or 1-800-362-2764 (Non-members must be called directly)

BRamsdell 1:36:23 PM 5/23/2022 C:\2017\01113\C.Design\104667-HAM-75-3.84\Design\Roadway\Sheets\BU-26-Streng St CS_Sep.104667-GT001.dgn

FEDERAL PROJECT NO. E170 (713)

PID NO. 104667

CONSTRUCTION PROJECT NO. 183000

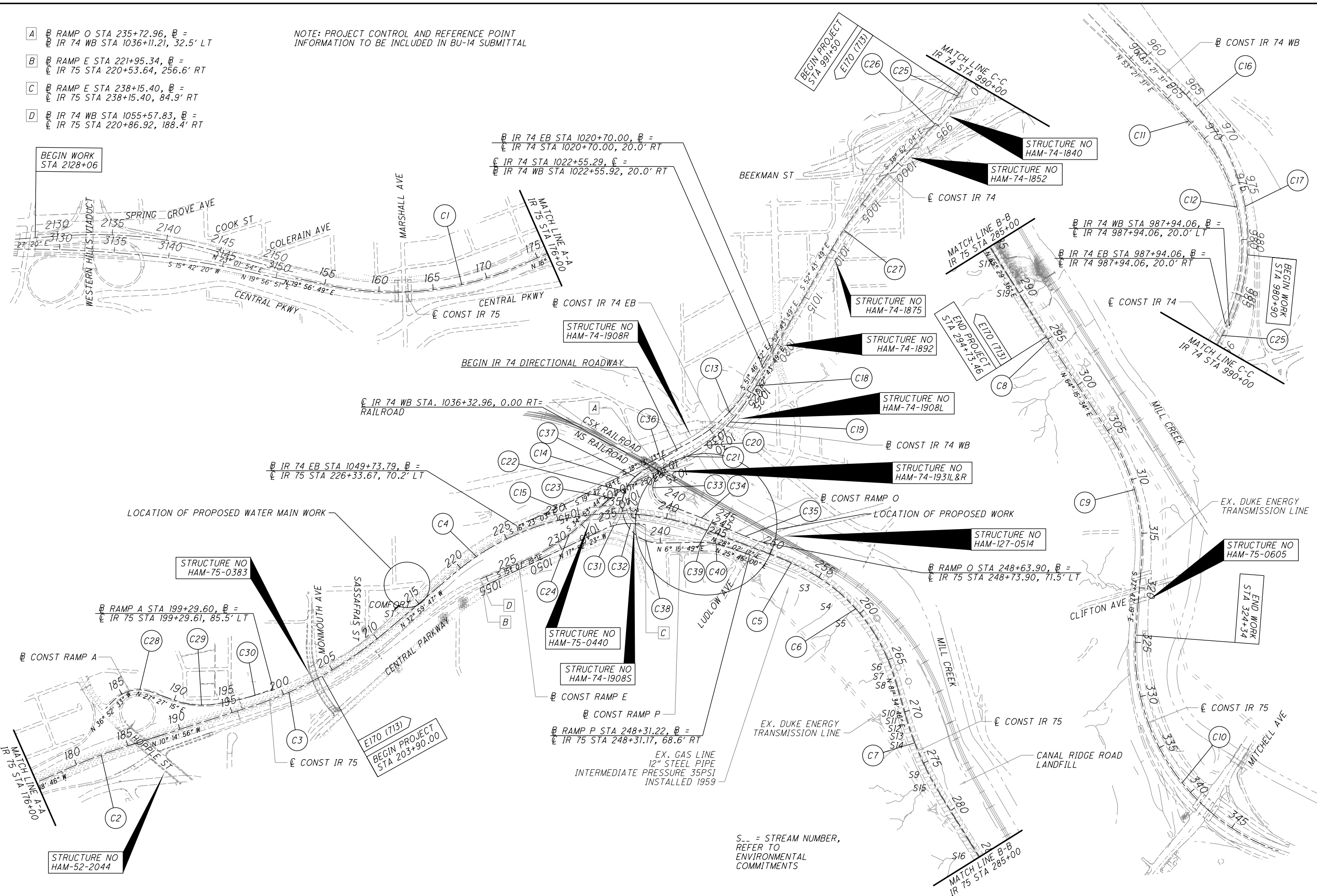
RAILROAD INVOLVEMENT CSXT (CSX OP# OH1179) NORFOLK SOUTHERN

HAM-75-3.84

1
12

- A $\text{B RAMP O STA } 235+72.96, \text{B} =$
 $\text{C IR 75 STA } 220+53.64, 256.6' \text{ RT}$
- B $\text{B RAMP E STA } 221+95.34, \text{B} =$
 $\text{C IR 75 STA } 220+53.64, 256.6' \text{ RT}$
- C $\text{B RAMP E STA } 238+15.40, \text{B} =$
 $\text{C IR 75 STA } 238+15.40, 84.9' \text{ RT}$
- D $\text{B IR 74 WB STA } 1055+57.83, \text{B} =$
 $\text{C IR 75 STA } 220+86.92, 188.4' \text{ RT}$

NOTE: PROJECT CONTROL AND REFERENCE POINT INFORMATION TO BE INCLUDED IN BU-14 SUBMITTAL



S... = STREAM NUMBER, REFER TO ENVIRONMENTAL COMMITMENTS

N

200
400
800
HORIZONTAL SCALE IN FEET

CALCULATED	BER	CHECKED	JS
------------	-----	---------	----

SCHEMATIC PLAN

HAM-75-3.84

BRamsdell 1:36:26 PM 5/23/2022 C:\2017\01113\C.Design\104667_HAM-75-3.84\Design\Roadway\Sheets\BU-26_Strength_St_CS_Sep_104667_GBO001.dgn

UTILITIES

LISTED BELOW ARE ALL UTILITIES LOCATED WITHIN THE PROJECT CONSTRUCTION LIMITS TOGETHER WITH THEIR RESPECTIVE OWNERS:

WATER, STORM, & SEWER

METROPOLITAN SEWER DISTRICT OF GREATER CINCINNATI
ATTN: ROB FRANKLIN
1600 GEST STREET
CINCINNATI, OH 45204
513-557-7188
ROB.FRANKLIN@CINCINNATI-OH.GOV

ATTN: ANDY BACHMAN
1600 GEST STREET
CINCINNATI, OH 45204
513-244-3904
ANDY.BACHMAN@CINCINNATI-OH.GOV

CINCINNATI STORMWATER MANAGEMENT UTILITY
ATTN: ROB GOODPASTER
4747 SPRING GROVE AVE
CINCINNATI, OH 45232
513-591-7746
ROBERT.GOODPASTER@CINCINNATI-OH.GOV

GREATER CINCINNATI WATER WORKS
ATTN: JON HUNSEDER
4747 SPRING GROVE AVE
CINCINNATI, OH 45232
513-591-5056
JON.HUNSEDER@GCWW.CINCINNATI-OH.GOV

ELECTRIC

DUKE ENERGY - ELECTRIC
ATTN: AARON WRIGHT
139 EAST 4TH STREET, ROOM 467A
CINCINNATI, OH 45202
513-287-3674
AARON.WRIGHT@DUKE-ENERGY.COM

GAS

DUKE ENERGY - GAS
ATTN: BRAD SEITER
139 EAST 4TH ST., ROOM 460A
CINCINNATI, OH 45202
513-287-4415
BRALEY.SEITER@DUKE-ENERGY.COM

TELEPHONE & CABLE

CINCINNATI BELL - UNDERGROUND
ATTN: MARK CONNER
221 E 4TH ST, BLDG 121-900
CINCINNATI, OH 45201
513-565-7043
MARK.CONNER@CINBELL.COM

CINCINNATI BELL - AERIAL
ATTN: DORIAN JOHNSON
221 E 4TH ST, BLDG 121-900
CINCINNATI, OH 45201
513-566-5120
DORIAN.JOHNSON@CINBELL.COM

CHARTER (FKA TIME WARNER CABLE)
ATTN: KENT RIEGER
11252 CORNELL PARK DR
CINCINNATI, OH 45242
513-386-5499
KENT.RIEGER@TWCABLE.COM

TELEPHONE & CABLE - CONTINUED

MCI/VERIZON
ATTN: ALLAN GUEST
120 RAVINE ST
AKRON, OH
330-253-8267
ALLAN.GUEST@VERIZONBUSINESS.COM

QUEST/CENTURYLINK
ATTN: CHRIS STRAYER
441 W. BROAD ST
PATASKALA, OH 43062
330-886-1299
CHRISTOPHER.STRAYER@CENTURYLINK.COM

CITY OF CINCINNATI TELECOM
ATTN: EDDIE SELLO
1106 BATES AVENUE
CINCINNATI, OH 45225
513-352-2391
EDDIE.SELLON@CINCINNATI-OH.GOV

ITS (FORMERLY ARTIMIS)
ODOT CENTRAL OFFICE OF TRAFFIC OPERATIONS
1606 WEST BROAD STREET
COLUMBUS, OH 43223

ODOT ITS IS A NON-OUPS MEMBER
FOR LOCATES CONTACT:
ODOT CENTRAL OFFICE OF TRAFFIC OPERATIONS
1606 WEST BROAD STREET
COLUMBUS, OH 43223
614-387-4113
CEN.ITS.LAB@DOT.OHIO.GOV

LOCAL MUNICIPALITIES

CITY OF CINCINNATI ENGINEERING
ATTN: CITY ENGINEER
CHRIS KELLY
801 PLUM ST, ROOM 450
CITY HALL
CINCINNATI, OH 45202
513-352-3721
CHRIS.KELLY@CINCINNATI-OH.GOV

CITY OF CINCINNATI TRAFFIC
ATTN: LINDA KISER
801 PLUM ST, ROOM 320
CINCINNATI, OH 45202
513-352-3730
LINDA.KISER@CINCINNATI-OH.GOV

CITY OF CINCINNATI LIGHTING
ATTN: CURTIS HINES
801 PLUM ST, ROOM 320
CINCINNATI, OH 45202
513-532-3462
CURTIS.HINE@CINCINNATI-OH.GOV

CITY OF CINCINNATI SIGNALS
ATTN: ANDY CARTER
801 PLUM ST, ROOM 320
CINCINNATI, OH 45202
513-352-5272
ANDY.CARTER@CINCINNATI-OH.GOV

THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS AS REQUIRED BY SECTION 153.64 O.R.C.

SURVEYING PARAMETERS

PRIMARY PROJECT CONTROL MONUMENTS GOVERN ALL POSITIONING ON ODOT PROJECTS. SEE SHEETS 4-5 OF THE BU-14 PLANS FOR A TABLE CONTAINING PROJECT CONTROL INFORMATION.

USE THE FOLLOWING PROJECT CONTROL, VERTICAL POSITIONING, AND HORIZONTAL POSITIONING PARAMETERS FOR ALL SURVEYING:

PROJECT CONTROL

POSITIONING METHOD: GNSS
MONUMENT TYPE: B

VERTICAL POSITIONING

ORTHOMETRIC HEIGHT DATUM: NAVD 1988
GEOID: GEOID 03

HORIZONTAL POSITIONING

REFERENCE FRAME: NAD 1983 (1995)
ELLIPSOID: GRS80
MAP PROJECTION: LAMBERT CONFORMAL CONIC
COORDINATE SYSTEM: OHIO SOUTH (3402)
COMBINED SCALE FACTOR: 0.999916592897
ORIGIN OF COORDINATE SYSTEM: 0, 0

USE THE POSITIONING METHODS AND MONUMENT TYPE USED IN THE ORIGINAL SURVEY TO RESTORE ALL MONUMENTS RELATED TO PRIMARY PROJECT CONTROL THAT ARE DAMAGED OR DESTROYED BY CONSTRUCTION ACTIVITIES. RESTORE THE DAMAGED OR DESTROYED MONUMENTS IN ACCORDANCE WITH CMS 623.

UNITS ARE IN U.S. SURVEY FEET.

BRamsdell 1:36:27 PM 5/23/2022 \\012017\01113\C.Design\104667_HAM-75-3.84\Design\Roadway\Sheets\BU-26_Streng St CS_Sep.104667_GN001.dgn

CALCULATED
LZS
CHECKED
JS

GENERAL NOTES

HAM-75-3.84

3
12

PLANS REFERENCE THE CURRENT VERSIONS OF MSD AND THE CITY OF CINCINNATI STANDARD CONSTRUCTION DRAWING AND SUPPLEMENTAL SPECIFICATIONS. SEE THE FOLLOWING WEBSITES TO OBTAIN COPIES OF THE CURRENT STANDARD DOCUMENTS:

[HTTP://WWW.MSDGC.ORG/ABOUT_MSD/LEGAL_AND_ORGANIZATIONAL_DOCUMENTS/INDEX.HTML](http://www.msdbg.org/about_msd/legal_and_organizational_documents/index.html)

METROPOLITAN SEWER DISTRICT (MSD) OF GREATER CINCINNATI STANDARD CONSTRUCTION DRAWINGS

CITY OF CINCINNATI STORMWATER UTILITY (SMU) STANDARD CONSTRUCTION DRAWINGS

[HTTP://WWW.CINCINNATI-OH.GOV/DOTE/MANUALS-PERMIT-SUPPLEMENTS](http://www.cincinnati-oh.gov/dote/manuals-permits-supplements)

CITY OF CINCINNATI STANDARD CONSTRUCTION DRAWINGS

CITY OF CINCINNATI SUPPLEMENT TO THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION (ODOT) CONSTRUCTION AND MATERIAL SPECIFICATION (CMS)

CITY OF CINCINNATI STREET RESTORATION BOOK

SANITARY SEWER NOTES

ALL SANITARY SEWERS SHALL BE PVC, SDR 35, ASTM D-3034 IN ACCORDANCE WITH MSDGC RULES AND REGULATIONS, OR DUCTILE IRON CLASS 56 IN ACCORDANCE WITH ODOT ITEM 611, EXCEPT WHERE NOTED.

MANHOLES ON SANITARY AND COMBINED SEWERS: ALL PROPOSED MANHOLES AND DROP MANHOLES SHALL BE TYPE T ON SEWERS 48-INCH OR LARGER AND TYPE S ON SEWERS 42-INCH AND SMALLER. THE MODIFIED TYPE S MANHOLE SHALL BE USED ON SEWERS 24-INCH TO 42-INCH WHEN NOT LOCATED IN PAVED AREAS. THE STANDARD PRECAST MANHOLE BASE WITH FLEXIBLE MANHOLE JOINTS SHALL BE USED WITH P.V.C. PIPE. IF THE CONTRACTOR PROVIDES PRECAST MANHOLES, THE CONTRACTOR SHALL ASSUME ANY RISK OF MAKING FIELD MODIFICATIONS DUE TO FIELD CONDITIONS.

ALL FENCING AND GUARDRAIL DAMAGES BY SEWER CONSTRUCTION SHALL BE REPLACED IN KIND BY THE CONTRACTOR AND ALL ASSOCIATED COSTS SHOULD BE INCLUDED WITH ITEM 611.

ROOF DRAINS, FOUNDATION DRAINS, AND OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SEWER ARE PROHIBITED.

ALL MANHOLES ON PUBLIC SANITARY SEWERS SHALL HAVE STANDARD LIDS AND FRAMES IN ACCORDANCE WITH ACC. NO. 49005, EXCEPT WHERE NOTED. THE FRAME SHALL BE SECURELY FASTENED TO THE TOP MANHOLE SECTION BY FOUR 3/4-INCH STAINLESS STEEL CINCH ANCHORS.

FOR SANITARY SEWER MANHOLES CONSTRUCTED IN GRASS AREAS, THE RIM ELEVATION SHALL BE 3" HIGH SUCH THAT THE SURROUNDING GRADE AND THE PAVEMENT SHALL BE FEATURED AWAY FROM THE MANHOLE RIM AT A GRADUAL SLOPE.

SANITARY SEWER NOTES (CONTINUED)

THE CONTRACTOR SHALL TEST ALL MANHOLE LEAKAGE BY MEANS OF VACUUM TESTING. THE VACUUM TESTING CANNOT BE DONE UNTIL AFTER THE MANHOLES ARE SET TO FINAL GRADE AND THE MANHOLE CASTINGS ARE BOLTED DOWN. ALL LIFT HOLES SHALL BE PLUGGED. ANY OTHER OPENINGS, SUCH AS PRESSURE RELIEF VALVES, SHALL BE TEMPORARILY PLUGGED TO ALLOW THE VACUUM TEST. ALL PIPES ENTERING THE MANHOLE SHALL BE PLUGGED AND CARE SHALL BE TAKEN TO SECURELY BRACE THE PLUGS FROM BEING DRAWN INTO THE MANHOLE. THE VACUUM EQUIPMENT TEST HEAD SHALL BE PLACED IN THE OPENING OF THE TOP SLAB OR CONE SECTION AND THE SEAL INFLATED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. VACUUM TESTING SHALL BE IN ACCORDANCE WITH ASTM C1244. A VACUUM OF 10 INCHES MERCURY (10" HG) SHALL BE DRAWN AND THE VACUUM PUMP SHUT OFF. WITH THE VALVES CLOSED, THE TIME SHALL BE MEASURED FOR THE VACUUM TO DROP TO NINE INCHES MERCURY (9" HG). THE MANHOLE SHALL PASS IF THE TIME MEETS OR EXCEEDS THE ALLOWABLE TIME AS CALCULATED BY ASTM C1244, OR AS APPROVED BY THE ENGINEER. ALL MANHOLE REPAIR AND RETESTING REQUIRED BECAUSE OF FAILURE TO MEET THE TESTING REQUIREMENTS SHALL BE BORNE BY THE CONTRACTOR AT HIS COST. THE COST OF THE LEAKAGE TEST SHALL BE INCLUDED IN THE PRICE BID FOR THE VARIOUS ITEM 611 ITEMS.

A DEFLECTION TEST WILL BE REQUIRED ON ALL MAINLINE PVC SEWERS AS SPECIFIED IN THE LATEST EDITION OF THE CITY OF CINCINNATI SUPPLEMENT TO THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, CONSTRUCTION AND MATERIAL SPECIFICATIONS. MAXIMUM LIMIT FOR VERTICAL DEFLECTION SHALL BE 5% OF THE PIPE INSIDE DIAMETER. DEFLECTION TEST SHALL BE CONDUCTED 30 DAYS AFTER PLACING BACKFILL. CONTRACTOR SHALL REPAIR OR REPLACE SEWERS FAILING THE DEFLECTION TESTS AT NO COST TO ODOT.

ALL MAINLINE CONDUITS 36-INCHES AND SMALLER SHALL BE SUBJECTED TO AN AIR TEST. THIS TEST SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST ASTM OR UNI-BELL PVC PIPE ASSOCIATION REQUIREMENTS FOR EACH UNIQUE PIPE MATERIAL IN EFFECT AT THE TIME THAT BIDS ARE SUBMITTED. THE CONTRACTOR SHALL PERFORM THE LEAKAGE TEST AT NO ADDITIONAL COST TO ODOT, INCLUDING FURNISHING ALL LABOR, MATERIALS, AND APPURTENANCES NECESSARY FOR PERFORMANCE OF THE LEAKAGE TEST. THE COST OF THE LEAKAGE TEST SHALL BE INCLUDED IN THE BID PRICE FOR THE APPROPRIATE 611 ITEMS.

FLOW WILL BE PERMITTED THROUGH THE NEWLY CONSTRUCTED SEWER, PRIOR TO TESTING REQUIREMENTS BEING MET, ON AN AS NEEDED BASIS, AS DIRECTED BY THE ENGINEER.

MAINTAINING FLOW

EXISTING 15-INCH SEWER AT EXISTING MANHOLE D950, IR-75 STA. 249+33.31, 142.51' RT:

THE CONTRACTOR SHALL MAINTAIN SEWAGE FLOW WITHIN THE EXISTING SEWER AT ALL TIMES DURING CONSTRUCTION BY BY-PASS PUMPING OR DIVERTING SEWAGE FLOW INTO TEMPORARILY INSTALLED CONDUIT. THE EXISTING 15-INCH DIAMETER SEWER AT EXISTING MANHOLE 29613031 IS COMBINED AND CONVEYS DRY WEATHER FLOW AND WET WEATHER FLOWS DURING RAIN EVENTS.

DRY WEATHER FLOW SHALL BE MAINTAINED FROM THE EXISTING 15-INCH DIAMETER SEWER AT ALL TIMES UNTIL THE DRY WEATHER FLOW IS DIVERTED FROM THE EXISTING 15-INCH DIAMETER COMBINED SEWER INTO THE PROPOSED SEPARATE 12-INCH DIAMETER SANITARY SEWER. A MINIMUM OF 32 GALLONS PER MINUTE (0.07 CUBIC FEET PER SECOND) PEAK DRY WEATHER FLOW SHALL BE MAINTAINED.

MAINTAINING FLOW (CONTINUED)

PUMPS, CONDUIT, OR OTHER METHODS USED TO MAINTAIN WET WEATHER FLOW MUST BE OF ADEQUATE SIZE TO HANDLE A MINIMUM OF 15,800 GALLONS PER MINUTE (35.1 CUBIC FEET PER SECOND) WET WEATHER FLOW BASED ON A 10-YEAR, 24-HOUR SCS TYPE II STORM.

THE DESCRIPTION, DESIGN, CALCULATIONS, EQUIPMENT LIST AND EQUIPMENT LAYOUT, STANDARD OPERATING PROCEDURES AND EQUIPMENT MAINTENANCE PLANS, EMERGENCY OPERATING PROCEDURES, NOTIFICATION AND RESPONSE IN THE EVENT OF UNFORESEEN BY-PASSING DISCHARGES INTO ADJACENT AREAS, AND RECORD-KEEPING METHODS FOR THE MANAGEMENT OF MAINTAINING FLOWS AND BY-PASSING IS TO BE DEFINED IN A CONTRACTOR'S TEMPORARY BYPASS PLAN (CTBP) AND SUBMITTED TO MSD, FOR REVIEW BY MSD ENGINEERING PER THE SUBMITTAL REQUIREMENTS OF SPEC SECTION 01 33 00, FOR APPROVAL PRIOR TO EXCAVATION. ALLOW 30 DAYS FOR REVIEW OF THE SUBMISSION. THIS PLAN SHALL LIST THE CONTRACTOR'S SINGLE POINT OF CONTACT, WITH PHONE NUMBERS DURING THE WORKDAY AND THE OFF-HOURS, WHO IS RESPONSIBLE FOR THE MAINTENANCE OF FLOW. ALTERNATE CONTACT AND PHONE NUMBERS ARE ALSO REQUIRED.

THE COST OF THIS WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE VARIOUS CONTRACT ITEMS.

IT SHALL BE NOTED AND PLANNED THAT THE MILL CREEK SURFACE WATER ELEVATION AT THE PROJECT LOCATION IS VARIABLE AND IS DEPENDENT ON RAINFALL EVENTS THAT OCCUR WITHIN THE MILL CREEK DRAINAGE BASIN THAT IS LOCATED IN CENTRAL HAMILTON COUNTY AND SOUTHERN PORTIONS OF BUTLER COUNTY. FEMA DATA SHOWS THE 100 YEAR FLOOD ELEVATION AT 485.4 FEET NEAR THE PROJECT.

THERE ARE MANY SOURCES AND PREDICTIVE AND FORECASTING INFORMATION FOR BOTH LOCAL WEATHER AND OHIO RIVER SURFACE WATER ELEVATIONS. LOCAL WEATHER WEBSITES INCLUDING TELEVISION, RADIO, OR PUBLIC AGENCY-BASED, SUCH AS [HTTP://WWW.WKRC.COM/WEATHER/DOPPLER/DOPPLER12.ASPX](http://www.wkrc.com/weather/doppler/doppler12.aspx) OR [HTTP://WWW.NWS.NOAA.GOV/CGI-BIN/AHPS.CGI?ILN&MLGO1&HYDROGRAPH](http://www.nws.noaa.gov/cgi-bin/ahps.cgi?iln&mlgo1&hydrograph) OR [HTTP://WWW.RIVERWATCH.NOAA.GOV/FORECASTS/ILNVRVD1LN.S.HTML](http://www.riverwatch.noaa.gov/forecasts/ilnrvd1ln.s.html) FOR THE OHIO RIVER AT CINCINNATI, OHIO. MSD IS NOT RESPONSIBLE FOR THE ACCURACY OF THESE OR OTHER SOURCES OF PREDICTIVE AND FORECASTING INFORMATION, BUT ARE LISTED AS A MEANS TO ILLUSTRATE THE AVAILABILITY OF INFORMATION RESOURCES.

DUKE ENERGY FACILITIES

WORK UNDER AND ADJACENT TO ENERGIZED DUKE ENERGY FACILITIES MUST BE PERFORMED PER OSHA REQUIREMENTS AND ALL OTHER APPLICABLE HEALTH AND SAFETY STANDARDS. AN OUTAGE HAS NOT BEEN APPROVED OR GUARANTEED FOR CONSTRUCTION OF THE PROPOSED SEWER IMPROVEMENTS.

MSD REQUIREMENTS

ALL PROPOSED COMBINED SEWER AND SANITARY PIPING AND RELATED APPURTENANCES WORK TO BE PROVIDED TO THE METROPOLITAN SEWER DISTRICT MUST BE INSTALLED AND TESTED IN ACCORDANCE WITH MSD RULES AND REGULATIONS, POLICIES, AND STANDARD DRAWINGS. ALL MATERIALS MUST CONFORM TO MSD RULES AND REGULATIONS, POLICIES AND STANDARD DRAWINGS. SEPARATE SANITARY PLANS MUST BE SUBMITTED AND APPROVED BY MSD. MSD MUST BE CONTACTED FOR INSPECTION 48 HOURS PRIOR TO THE BEGINNING OF ANY MSD WORK. THE PERMIT TO INSTALL FOR THE SANITARY AND COMBINED SEWER WORK MUST BE OBTAINED FROM OEPA PRIOR TO THE START OF ANY WORK AND IT MUST BE PROCESSED THROUGH MSD'S DEVELOPMENT SERVICES OFFICE. ALL STORMWATER CONNECTIONS TO THE COMBINED SEWER REQUIRE A STORMWATER CONNECTION PERMIT FROM MSD'S DEVELOPMENT SERVICES OFFICE.

ALL EXISTING SEWERS TO REMAIN IN SERVICE MUST BE DIGITALLY VIDEOTAPED PRE- AND POST-CONSTRUCTION AND A COPY PROVIDED TO THE MSD INSPECTOR. ANY DAMAGE CAUSED TO THE SEWERS DURING CONSTRUCTION MUST BE REPAIRED TO THE SATISFACTION OF MSD. ACCESS TO SEWERS MUST BE MAINTAINED AT ALL TIMES.

ALL SEWER WORK MUST BE VERIFIED AND LOCATED WITH AS-BUILTS PERFORMED BY A SURVEYOR TO INCLUDE RIM ELEVATIONS, INVERT ELEVATIONS OF ALL CONNECTIONS AT STRUCTURES (ALONG WITH THE DIRECTION OF CONNECTION AND DESIGNATION AS "FLOW IN" OR "FLOW OUT" OF THE STRUCTURE), PIPE MATERIALS AND DIMENSIONS, STRUCTURE TYPES WITH HORIZONTAL COORDINATE LOCATION, GRATE AND LID SIZES, AND NOTE PERTINENT CHANGES TO THE PLANS. DATUM FOR THE SURVEY SHOULD BE NOTED AND SHOULD BE PER MSD STANDARDS OR THE ORIGINAL PLANS. THE AS-BUILT SHOULD BE SIGNED, SEALED, AND DATED BY A LICENSED SURVEYOR.

BRamedell 1:36:27 PM
5/23/2012
01:2017\01113\C.Design\104667_HAM-75-3.84_Design_Roadway_Sheets\BU-26_Strength_St_CS_Sep_104667_GN002.dgn

CALCULATED
LZS
CHECKED
JS

GENERAL NOTES

HAM-75-3.84

TRENCHING AND BACKFILLING

PART 1 GENERAL

SCOPE

THIS SECTION COVERS PREPARATION OF THE SITE; REMOVAL AND DISPOSAL OF ALL DEBRIS; EXCAVATION AND TRENCHING; THE HANDLING, STORAGE, TRANSPORTATION, AND DISPOSAL OF ALL EXCAVATED MATERIAL; ALL NECESSARY SHEETING, SHORING, AND PROTECTION OF WORK; PREPARATION OF SUBGRADES; PUMPING AND DEWATERING AS NECESSARY; PROTECTION OF ADJACENT PROPERTY; BACKFILLING; PIPE EMBEDMENT; SURFACING AND GRADING; AND OTHER APPURTENANT WORK.

GENERAL

COSTS FOR TRENCHING AND BACKFILLING AS SPECIFIED HEREIN SHALL BE INCLUDED IN THE PRICE BID FOR ALL TYPES OF CONDUIT SPECIFIED ON THE CONTRACT PLANS.

WITH REFERENCE TO THE TERMS AND CONDITIONS OF THE CONSTRUCTION STANDARDS FOR EXCAVATIONS SET FORTH IN OSHA "SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION", CHAPTER XVII OF TITLE 29, CFR, PART 1926, CONTRACTOR SHALL EMPLOY A COMPETENT PERSON AND, WHEN NECESSARY BASED ON THE REGULATIONS, A REGISTERED PROFESSIONAL ENGINEER, TO ACT UPON ALL PERTINENT MATTERS OF THE WORK OF THIS SECTION.

ALL BACKFILL OPERATIONS SHALL BE IN ACCORDANCE WITH THE CITY OF CINCINNATI SUPPLEMENT TO THE STATE OF OHIO (ODOT) CONSTRUCTION AND MATERIAL SPECIFICATIONS (CMS), AS SHOWN ON MSD STANDARD DRAWING ACC. NO. 49032, EXCEPT AS OTHERWISE NOTED HEREIN. ALL REQUIREMENTS OF THESE ITEMS SHALL BE STRICTLY ADHERED TO BY THE CONTRACTOR AND ENFORCED BY THE ENGINEER.

SUBMITTALS

SUBMIT SHEETING AND SHORING DESIGN PLANS, SIGNED AND SEALED BY PROFESSIONAL ENGINEER LICENSED OR REGISTERED IN THE STATE OF OHIO.

PART 2 - PRODUCTS

MATERIALS

CLASS A CLSM. THE INITIAL TRIAL MIXTURE FOR CLASS A CLSM SHALL CONSIST OF THE FOLLOWING MINIMUM PROPORTIONS PER CUBIC YARD:

FLY ASH: 250 LB [113 KG]

SAND (SSD): 2860 LB [1297 KG]

WATER: 370 LB [168 KG]

AIR ENTRAINING AGENT: 6 PERCENT

MINIMUM COMPRESSIVE STRENGTH AT 56 DAYS: 129 PSI [889 KPA]

CONTROLLED LOW STRENGTH MATERIAL (CLSM) AS SPECIFIED HEREIN ABOVE THE "INITIAL BACKFILL" SHALL BE REQUIRED WHERE THE TRENCH IS LOCATED ANYWHERE IN THE RIGHT OF WAY OR ANY PART OF THE TRENCH IS WITHIN TWO FEET OF THE OUTSIDE EDGE A RIGHT-OF-WAY, CLSM SHALL BE USED AND SHALL EXTEND TO THE PAVEMENT SUBGRADE OR TO THE TOPSOIL FOR THE ENTIRE WIDTH OF THE TRENCH.

COMPACTED BANK RUN GRAVEL BACKFILL, MEETING THE REQUIREMENTS OF SECTION 703.20 OF THE CITY SUPPLEMENT AND MSD STANDARD DRAWING 49032, ABOVE THE "INITIAL BACKFILL" SHALL BE REQUIRED FOR ALL CONDUITS AND TRENCHES UNDER SIDEWALKS, DRIVEWAY AND PARKING LOT PAVEMENTS, WHEN CLSM IS NOT REQUIRED AS SPECIFIED ABOVE.

TRENCHING AND BACKFILLING (CONTINUED)

BEDDING AND INITIAL BACKFILL FOR PLASTIC PIPES SHALL BE CLASS I OR CLASS II AS DEFINED BELOW AND APPLIED AS PER MSD STANDARD DRAWING ACCESSION NUMBER 49032 REQUIREMENTS.

CLASS I - ANGULAR 1/4 INCH TO 1 INCH GRADED STONE, INCLUDING A NUMBER OF FILL MATERIALS SUCH AS CORAL, SLAG, CINDERS, CRUSHED STONE, CRUSHED SHELLS, AND SHELLS. WHERE ANY UNGRADED (ONE SIZE AGGREGATED) CRUSHED STONE, CORAL OR SLAG IS USED, LIMIT SIZE TO 1 INCH MAXIMUM. USE THIS MATERIAL WHERE THE DEPTH OF COVER OF THE CONDUIT IS BETWEEN FOURTEEN (14) FEET AND THIRTY-FIVE (35) FEET.

CLASS II - COARSE SANDS AND GRAVELS WITH MAXIMUM PARTICLE SIZE OF 1 INCH, INCLUDING VARIOUS GRADED SANDS AND GRAVELS CONTAINING SMALL PERCENTAGES OF FINES, GENERALLY BEING GRANULAR AND NON-COHESIVE, EITHER WET OR DRY. SOIL TYPES GW, GP, SW, AND SP ARE INCLUDED IN THIS CLASS AS FURTHER DEFINED IN ASTM-D-2487. USE OF THIS MATERIAL IS APPLICABLE TO CONDUITS WHEN THE DEPTH OF COVER IS FOURTEEN (14) FEET OR LESS.

MATERIALS TESTING

PRELIMINARY REVIEW OF MATERIALS AS REQUIRED BY ENGINEER, ALL TESTS FOR PRELIMINARY REVIEW OF MATERIALS SHALL BE MADE BY AN ACCEPTABLE INDEPENDENT TESTING LABORATORY AT THE EXPENSE OF CONTRACTOR. TWO INITIAL GRADATION TESTS SHALL BE MADE FOR EACH TYPE OF EMBEDMENT, FILL, BACKFILL, OR OTHER MATERIAL, AND ONE ADDITIONAL GRADATION TEST SHALL BE MADE FOR EACH ADDITIONAL FIVE-HUNDRED (500) TONS OF EACH MATERIAL DELIVERED TO THE SITE. IN ADDITION, ONE SET OF INITIAL ATTERBERG LIMITS TEST SHALL BE MADE FOR EACH FILL MATERIALS CONTAINING MORE THAN TWENTY (20) PERCENT BY WEIGHT PASSING THE NO. 200 SIEVE. ONE ADDITIONAL ATTERBERG LIMITS TEST SHALL BE MADE ON EACH ADDITIONAL FIVE-HUNDRED (500) TONS OF EACH MATERIAL DELIVERED TO THE SITE.

ALL MATERIAL TESTING ON CLSM SHALL BE MADE BY AN INDEPENDENT TESTING LABORATORY AT THE EXPENSE OF CONTRACTOR.

FIELD TESTING EXPENSE. ALL MOISTURE DENSITY (PROCTOR) TESTS AND RELATIVE DENSITY TESTS ON THE MATERIALS, AND ALL IN PLACE FIELD DENSITY TESTS, SHALL BE MADE BY AN INDEPENDENT TESTING LABORATORY AT THE EXPENSE OF OWNER. CONTRACTOR SHALL PROVIDE ACCESS TO THE MATERIALS AND WORK AREA AND SHALL ASSIST THE LABORATORY AS NEEDED IN OBTAINING REPRESENTATIVE SAMPLES.

REQUIRED TESTS. FOR PLANNING PURPOSES, THE FOLLOWING GUIDELINES SHALL BE USED FOR FREQUENCY OF FIELD TESTS. ADDITIONAL TESTS SHALL BE PERFORMED AS NECESSARY FOR JOB CONDITIONS AND NUMBER OF FAILED TESTS. TEST RESULTS SHALL BE SUBMITTED IN ACCORDANCE WITH ITEM 106 OF THE ODOT CMS AND THE CITY OF CINCINNATI SUPPLEMENT THERETO.

TRENCHING AND BACKFILLING (CONTINUED)

TWO MOISTURE DENSITY (PROCTOR) TESTS IN ACCORDANCE WITH ASTM D698 (OR, WHEN REQUIRED, ASTM D1557), OR TWO RELATIVE DENSITY TESTS IN ACCORDANCE WITH ASTM D4253 AND D4254 FOR EACH TYPE OF GENERAL FILL, DESIGNATED FILL, BACKFILL, OR OTHER MATERIAL PROPOSED. IN-PLACE FIELD DENSITY AND MOISTURE TESTS AT INTERVALS OF 1000 FEET MAXIMUM ALONG THE TRENCH. ONE IN-PLACE FIELD DENSITY AND MOISTURE TEST FOR EVERY 200 CUBIC YARDS OF BACKFILL. ONE IN-PLACE DENSITY AND MOISTURE TEST WHENEVER THERE IS A SUSPICION OF A CHANGE IN THE QUALITY OF MOISTURE CONTROL OR EFFECTIVENESS OF COMPACTION. AT LEAST ONE TEST FOR EVERY FULL SHIFT OF COMPACTION OPERATIONS ON MASS EARTHWORK. ADDITIONAL GRADATION, PROCTOR, AND RELATIVE DENSITY TESTS WHENEVER THE SOURCE OR QUALITY OF MATERIAL CHANGES.

TESTING OF CLSM SHALL BE AS FOLLOWS: COMPRESSIVE STRENGTH. FOR EVERY 200 CUBIC YARDS OF CLSM PLACED, FILL FOUR 6 BY 12 INCH PLASTIC CYLINDER MOLDS TO OVERFLOWING AND THEN TAP SIDES LIGHTLY. CURE CYLINDERS IN THE MOLDS COVERED UNTIL TIME OF TESTING, AT LEAST 14 DAYS. STRIP THE CYLINDERS CAREFULLY USING A KNIFE TO CUT AWAY THE PLASTIC MOLD. CAP THE CYLINDERS WITH HIGH STRENGTH GYPSUM PLASTER OR OTHER CAPPING PROCESS THAT WILL NOT BREAK THESE LOW STRENGTH MATERIALS. TEST CYLINDERS IN ACCORDANCE WITH ASTM C39. TWO CYLINDERS SHALL BE TESTED AT 7 DAYS AND THE OTHER TWO CYLINDERS SHALL BE TESTED AT 56 DAYS.

FLOW OF FILL. ONCE EACH DAY THAT CLSM IS PLACED, TEST THE FILL MATERIAL IN ACCORDANCE WITH ASTM C939 FOR THE EFFLUX TIME. WET SCREENING MAY BE REQUIRED TO REMOVE COARSE PARTICLES.

UNIT WEIGHT AND YIELD. ONCE EACH DAY THAT CLSM IS PLACED, DETERMINE UNIT WEIGHT AND YIELD IN ACCORDANCE WITH ASTM C138.

AIR CONTENT. ONCE EACH DAY THAT CLSM IS PLACED, DETERMINE AIR CONTENT IN ACCORDANCE WITH ASTM C231. PENETRATION RESISTANCE. ONCE EACH DAY THAT CLSM IS PLACED, DETERMINE EARLY BEARING STRENGTH IN ACCORDANCE WITH ASTM C403 PENETRATION PROCEDURE.

PART 3 - EXECUTION

CLEARING AND GRUBBING
CLEARING AND GRUBBING SHALL BE PERFORMED ITEM 201 OF THE ODOT CMS AND THE CITY OF CINCINNATI SUPPLEMENT THERETO.

EXCAVATION
EXCAVATIONS SHALL PROVIDE ADEQUATE WORKING SPACE AND CLEARANCES FOR THE WORK TO BE PERFORMED THEREIN AND FOR INSTALLATION AND REMOVAL OF CONCRETE FORMS. IN NO CASE SHALL EXCAVATION FACES BE UNDERCUT FOR EXTENDED FOOTINGS.

SUBGRADE SURFACES SHALL BE CLEAN AND FREE OF LOOSE MATERIAL OF ANY KIND WHEN CONCRETE IS PLACED THEREON.

EXCEPT WHERE EXTERIOR SURFACES ARE SPECIFIED TO BE DAMP-PROOFED, MONOLITHIC CONCRETE MANHOLES AND OTHER CONCRETE STRUCTURES OR PARTS THEREOF, WHICH DO NOT HAVE FOOTINGS THAT EXTEND BEYOND THE OUTSIDE FACE OF EXTERIOR WALLS, MAY BE PLACED DIRECTLY AGAINST EXCAVATION FACES WITHOUT THE USE OF OUTER FORMS, PROVIDED THAT SUCH FACES ARE STABLE.

TRENCHING AND BACKFILLING (CONTINUED)

NO CLASSIFICATION OF EXCAVATED MATERIALS WILL BE MADE FOR PAYMENT PURPOSES. EXCAVATION AND TRENCHING WORK SHALL INCLUDE THE REMOVAL AND SUBSEQUENT HANDLING OF ALL MATERIALS EXCAVATED OR OTHERWISE REMOVED IN PERFORMANCE OF THE WORK, REGARDLESS OF THE TYPE, CHARACTER, COMPOSITION, OR CONDITION THEREOF.

BLASTING OR OTHER USE OF EXPLOSIVES FOR EXCAVATION WILL NOT BE PERMITTED.

DEWATERING

DEWATERING EQUIPMENT SHALL BE PROVIDED TO REMOVE AND DISPOSE OF ALL SURFACE WATER AND GROUNDWATER ENTERING EXCAVATIONS, TRENCHES, OR OTHER PARTS OF THE WORK. EACH EXCAVATION SHALL BE KEPT DRY DURING SUBGRADE PREPARATION AND CONTINUALLY THEREAFTER UNTIL THE STRUCTURE TO BE BUILT, OR THE PIPE TO BE INSTALLED THEREIN, IS COMPLETED TO THE EXTENT THAT NO DAMAGE FROM HYDROSTATIC PRESSURE, FLOTATION, OR OTHER CAUSE WILL RESULT.

ALL EXCAVATIONS FOR CONCRETE STRUCTURES OR TRENCHES WHICH EXTEND DOWN TO OR BELOW GROUNDWATER SHALL BE DEWATERED BY LOWERING AND KEEPING THE GROUNDWATER BENEATH SUCH EXCAVATIONS.

SURFACE WATER SHALL BE DIVERTED OR OTHERWISE PREVENTED FROM ENTERING EXCAVATIONS OR TRENCHES TO THE GREATEST EXTENT POSSIBLE WITHOUT CAUSING DAMAGE TO ADJACENT PROPERTY.

CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONDITION OF ANY PIPE OR CONDUIT WHICH HE MAY USE FOR DRAINAGE PURPOSES, AND ALL SUCH PIPE OR CONDUIT SHALL BE LEFT CLEAN AND FREE OF SEDIMENT.

CONTRACTOR SHALL OBTAIN FROM THE APPROPRIATE AGENCIES AND AUTHORITIES, THE DEWATERING AND STORMWATER DISCHARGE PERMITS REQUIRED TO REMOVE AND DISPOSE OF GROUNDWATER, SURFACE WATER, AND ANY OTHER WATER USED IN CONTRACTOR'S OPERATIONS. THE PERMITS SHALL BE OBTAINED PRIOR TO START OF CONSTRUCTION.

BRamedell 1:36:28 PM
5/23/2022
O:\2017\01113\C.Design\104667_HAM-75-3.84.Design\Roadway\Sheets\BU-26-Strang_St_CS_Sep_104667_GN003.dgn

CALCULATED
LZS
CHECKED
JS

GENERAL NOTES

HAM-75-3.84

5
12

TRENCHING AND BACKFILLING (CONTINUED)

SHEETING AND SHORING

EXCEPT WHERE BANKS ARE CUT BACK ON A STABLE SLOPE OR OTHER EFFECTIVE TRENCH SUPPORT IS PROVIDED, EXCAVATIONS FOR STRUCTURES AND TRENCHES SHALL BE SUPPORTED WITH SHORING AS NECESSARY TO PREVENT CAVING OR SLIDING. SHEET PILING OR OTHER EXCAVATION SUPPORT SYSTEMS SHALL BE INSTALLED AS NECESSARY TO LIMIT THE EXTENT OF EXCAVATIONS FOR DEEPER STRUCTURES AND TO PROTECT ADJACENT STRUCTURES AND FACILITIES FROM DAMAGE DUE TO EXCAVATION AND SUBSEQUENT CONSTRUCTION. CONTRACTOR SHALL ASSUME COMPLETE RESPONSIBILITY FOR, AND SHALL INSTALL ADEQUATE PROTECTION SYSTEMS FOR PREVENTION OF DAMAGE TO EXISTING FACILITIES. SHEETING, SHORING AND EXCAVATION SUPPORT SYSTEMS SHALL MET ALL APPLICABLE OSHA (OCCUPATIONAL SAFETY & HEALTH ADMINISTRATION) REQUIREMENTS. TRENCH SHEETING MAY BE REMOVED IF THE PIPE STRENGTH IS SUFFICIENT TO CARRY TRENCH LOADS BASED ON TRENCH WIDTH TO THE BACK OF SHEETING. TRENCH SHEETING SHALL NOT BE PULLED AFTER BACKFILLING. WHERE TRENCH SHEETING IS LEFT IN PLACE, IT SHALL NOT BE BRACED AGAINST THE PIPE, BUT SHALL BE SUPPORTED IN A MANNER WHICH WILL PRECLUDE CONCENTRATED LOADS OR HORIZONTAL THRUSTS ON THE PIPE. CROSS BRACES INSTALLED ABOVE THE PIPE TO SUPPORT SHEETING MAY BE REMOVED AFTER PIPE EMBEDMENT HAS BEEN COMPLETED. TRENCH SHEETING SHALL BE REMOVED UNLESS OTHERWISE PERMITTED BY ENGINEER. TRENCH SHEETING WILL NOT BE REMOVED, IF IN THE OPINION OF ENGINEER, REMOVAL OF THE SHEETING WILL CAUSE DAMAGE TO THE FACILITY IT IS PROTECTING. IF LEFT IN PLACE, THE SHEETING SHALL BE CUT OFF 3 FEET BELOW FINISHED GRADE. THE DESIGN OF THE SUPPORT SYSTEM SHALL BE SUCH AS TO PERMIT COMPLETE REMOVAL WHILE MAINTAINING SAFETY AND STABILITY AT ALL TIMES.

STABILIZATION

SUB-GRADES FOR CONCRETE STRUCTURES AND TRENCH BOTTOMS SHALL BE FIRM, DENSE, AND THOROUGHLY COMPACTED AND CONSOLIDATED; SHALL BE FREE FROM MUD AND MUCK; AND SHALL BE SUFFICIENTLY STABLE TO REMAIN FIRM AND INTACT UNDER THE FEET OF THE WORKERS. SUB-GRADES FOR CONCRETE STRUCTURES OR TRENCH BOTTOMS WHICH ARE OTHERWISE SOLID, BUT WHICH BECOME MUCKY ON TOP DUE TO CONSTRUCTION OPERATIONS, SHALL BE REINFORCED WITH CRUSHED ROCK OR GRAVEL AS SPECIFIED FOR GRANULAR FILLS. THE STABILIZING MATERIAL SHALL BE PLACED IN A MANNER THAT NO VOIDS REMAIN IN THE GRANULAR FILL. ALL EXCESS GRANULAR FILL WITH UNFILLED VOID SPACE SHALL BE REMOVED. THE FINISHED ELEVATION OF STABILIZED SUB-GRADES SHALL ALLOW FOR INSTALLATION OF PIPES, MANHOLES, ETC. TO THE ELEVATIONS INDICATED ON THE DRAWINGS.

TRENCH EXCAVATION

NO MORE TRENCH SHALL BE OPENED IN ADVANCE OF PIPE LAYING THAN IS NECESSARY TO EXPEDITE THE WORK. ONE(1) BLOCK OR FOUR-HUNDRED (400) FEET, WHICHEVER IS THE SHORTER, SHALL BE THE MAXIMUM LENGTH OF OPEN TRENCH ON ANY LINE UNDER CONSTRUCTION. EXCEPT WHERE NO DIG METHODS ARE INDICATED ON THE DRAWINGS, IS SPECIFIED, OR IS PERMITTED BY ENGINEER, ALL TRENCH EXCAVATION SHALL BE OPEN CUT FROM THE SURFACE AND CONFORM TO MSD STANDARD DRAWING 49032.

TRENCHING AND BACKFILLING (CONTINUED)

ALIGNMENT, GRADE, AND MINIMUM COVER

THE ALIGNMENT AND GRADE OR ELEVATION OF EACH PIPELINE SHALL BE FIXED AND DETERMINED FROM OFFSET STAKES. VERTICAL AND HORIZONTAL ALIGNMENT OF PIPES, AND THE MAXIMUM JOINT DEFLECTION USED IN CONNECTION THEREWITH, SHALL BE IN CONFORMITY WITH REQUIREMENTS OF THE SECTION COVERING INSTALLATION OF PIPE. WHERE PIPE GRADES OR ELEVATIONS ARE NOT DEFINITELY FIXED BY THE CONTRACT DRAWINGS, TRENCHES SHALL BE EXCAVATED TO A DEPTH SUFFICIENT TO PROVIDE A MINIMUM DEPTH OF BACKFILL COVER OVER THE TOP OF THE PIPE OF 36 INCHES OVER PIPES BELOW PAVED AND GRADED STREETS AND, OF 36 INCHES OVER PIPES IN OTHER LOCATIONS. GREATER PIPE COVER DEPTHS MAY BE NECESSARY ON VERTICAL CURVES OR TO PROVIDE ADEQUATE CLEARANCE BENEATH EXISTING PIPES, CONDUITS, DRAINS, DRAINAGE STRUCTURES, OR OTHER OBSTRUCTIONS ENCOUNTERED AT NORMAL PIPE GRADES. MEASUREMENT OF PIPE COVER DEPTH SHALL BE MADE VERTICALLY FROM THE OUTSIDE TOP OF PIPE TO FINISHED GROUND OR PAVEMENT SURFACE ELEVATION, EXCEPT WHERE FUTURE SURFACE ELEVATIONS ARE INDICATED ON THE DRAWINGS.

WHERE THE SEWER TRENCH IS IN A FILL SECTION AND THE TOP OF THE PIPE EXTENDS ABOVE THE VERTICAL LIMITS OF WHERE THE FILL BEGINS (PORTIONS OF THE TRENCH BACKFILL ARE IN THE CONSTRUCTED EMBANKMENT) THE CONTRACTOR SHALL REFER TO SECTION 603 REQUIREMENTS IN THE CITY OF CINCINNATI SUPPLEMENT TO THE ODOT CMS, FOR PLACEMENT OF THE EMBANKMENT FILL PRIOR TO BEGINNING THE TRENCH EXCAVATION.

MECHANICAL EXCAVATION

THE USE OF MECHANICAL EQUIPMENT WILL NOT BE PERMITTED IN LOCATIONS WHERE ITS OPERATION WOULD CAUSE DAMAGE TO TREES, BUILDINGS, CULVERTS, OR OTHER EXISTING PROPERTY, UTILITIES, OR STRUCTURES ABOVE OR BELOW GROUND. IN ALL SUCH LOCATIONS, HAND EXCAVATING METHODS SHALL BE USED. MECHANICAL EQUIPMENT USED FOR TRENCH EXCAVATION SHALL BE OF A TYPE, DESIGN, AND CONSTRUCTION, AND SHALL BE SO OPERATED, THAT THE ROUGH TRENCH EXCAVATION BOTTOM ELEVATION CAN BE CONTROLLED, AND THAT TRENCH ALIGNMENT IS SUCH THAT PIPE, WHEN ACCURATELY LAID TO SPECIFIED ALIGNMENT, WILL BE CENTERED IN THE TRENCH WITH ADEQUATE SIDEWALL CLEARANCE. UNDERCUTTING THE TRENCH SIDEWALL TO OBTAIN SIDEWALL CLEARANCE WILL NOT BE PERMITTED. IN LOCATIONS WHERE MAXIMUM TRENCH WIDTHS ARE REQUIRED FOR DESIGNATED RIGID CONDUITS, MECHANICAL EQUIPMENT SHALL BE OPERATED SO THAT UNIFORM TRENCH WIDTHS AND VERTICAL SIDEWALLS ARE OBTAINED AT LEAST FROM AN ELEVATION TWELVE (12) INCHES ABOVE THE TOP OF THE INSTALLED PIPE TO THE BOTTOM OF THE TRENCH.

CUTTING CONCRETE SURFACE CONSTRUCTION CUTS IN CONCRETE PAVEMENT AND CONCRETE BASE PAVEMENT SHALL BE NO LARGER THAN NECESSARY TO PROVIDE ADEQUATE WORKING SPACE FOR PROPER INSTALLATION OF PIPE AND APPURTENANCES. CUTTING SHALL BE STARTED WITH A CONCRETE SAW IN A MANNER WHICH WILL PROVIDE A CLEAN GROOVE AT LEAST ONE AND ONE-HALF (1 1/2) INCHES DEEP ALONG EACH SIDE OF THE TRENCH AND ALONG THE PERIMETER OF CUTS FOR STRUCTURES.

TRENCHING AND BACKFILLING (CONTINUED)

CONCRETE PAVEMENT AND CONCRETE BASE PAVEMENT OVER TRENCHES EXCAVATED FOR PIPELINES SHALL BE REMOVED SO THAT A SHOULDER NOT LESS THAN 6 INCHES IN WIDTH AT ANY POINT IS LEFT BETWEEN THE CUT EDGE OF THE PAVEMENT AND THE TOP EDGE OF THE TRENCH. TRENCH WIDTH AT THE BOTTOM SHALL NOT BE GREATER THAN AT THE TOP AND NO UNDERCUTTING WILL BE PERMITTED. PAVEMENT CUTS SHALL BE MADE TO AND BETWEEN STRAIGHT OR ACCURATELY MARKED CURVED LINES WHICH, UNLESS OTHERWISE REQUIRED, SHALL BE PARALLEL TO THE CENTER LINE OF THE TRENCH. PAVEMENT REMOVAL FOR CONNECTIONS TO EXISTING LINES OR STRUCTURES SHALL NOT EXCEED THE EXTENT NECESSARY FOR THE INSTALLATION.

WHERE THE TRENCH PARALLELS THE LENGTH OF CONCRETE WALKS, AND THE TRENCH LOCATION IS ALL OR PARTIALLY UNDER THE WALK, THE ENTIRE WALK SHALL BE REMOVED AND REPLACED. WHERE THE TRENCH CROSSES DRIVES, WALKS, CURBS, OR OTHER SURFACE CONSTRUCTION, THE SURFACE CONSTRUCTION SHALL BE REMOVED AND SUBSEQUENTLY REPLACED BETWEEN EXISTING JOINTS OR BETWEEN SAW CUTS AS SPECIFIED FOR PAVEMENT.

EXCAVATION BELOW PIPE SUB-GRADE

EXCEPT WHERE OTHERWISE REQUIRED, PIPE TRENCHES SHALL BE EXCAVATED BELOW THE UNDERSIDE OF THE PIPE AS SHOWN ON MSD STANDARD DRAWING ACC. NO. 49032 TO PROVIDE FOR THE INSTALLATION OF GRANULAR EMBEDMENT.

BELL HOLES SHALL PROVIDE ADEQUATE CLEARANCE FOR TOOLS AND METHODS USED FOR INSTALLING PIPE. NO PART OF ANY BELL OR COUPLING SHALL BE IN CONTACT WITH THE TRENCH BOTTOM, TRENCH WALLS, OR GRANULAR EMBEDMENT WHEN THE PIPE IS JOINTED.

ARTIFICIAL FOUNDATIONS IN TRENCHES. WHENEVER UNSUITABLE OR UNSTABLE SOIL CONDITIONS ARE ENCOUNTERED, TRENCHES SHALL BE EXCAVATED BELOW GRADE AND THE TRENCH BOTTOM SHALL BE BROUGHT TO GRADE WITH SUITABLE MATERIAL. IN SUCH CASES, PAYMENT WILL BE MADE FOR CHANGES OR ADDITIONS TO THE WORK IN ACCORDANCE WITH ODOT SECTION 109 AND THE CITY OF CINCINNATI SUPPLEMENT THERETO.

BACKFILL INSTALLATION REQUIREMENTS

COMPACTED BACKFILL
WHERE CLSM IS NOT REQUIRED, COMPACTED GRANULAR BACKFILL FOR THE FULL DEPTH OF SEWER TRENCH SHALL CONFORM TO REQUIREMENTS OF MSD STANDARD DRAWING ACCESSION NUMBER 49032, IN THE LOCATIONS INDICATED BELOW. WHERE BENEATH PAVEMENTS, SURFACINGS, DRIVEWAYS, CURBS, GUTTERS, WALKS, OR OTHER SURFACE CONSTRUCTION OR STRUCTURES.

WHERE IN STREET, ROAD, OR HIGHWAY SHOULDERS. BACKFILLING IN AREAS OTHER THAN INDICATED ABOVE CAN CONSIST OF LOCAL SITE MATERIAL WITH THE FOLLOWING QUALIFICATIONS:
NO ROCKS, FROZEN LUMPS, OR FOREIGN MATER AND PARTICAL IN EXCESS OF THREE (3) INCHES SHALL BE INCLUDED. MATERIAL DOES NOT CONSIST OF HIGHLY PLASTIC SILTS, CLAYS, ORGANIC SILTS OR PEAT. NO RUBBISH, MUCK OR UNSUITABLE MATERIALS ARE INCLUDED, AND ANY STONES OR SHALE OF UP TO ONE-HALF CUBIC (0.5) FOOT IN VOLUME IN THE BACKFILL ARE SEPARATED FOR EACH OTHER AND THE PIPE BY AT LEAST SIX (6) INCHES OF EARTH OR APPROVED SITE OR SELECT BACKFILL.

TRENCHING AND BACKFILLING (CONTINUED)

JETTED BACKFILL

IN LIEU OF COMPACTING THE BANK RUN GRAVEL BACKFILL IN FOUR (4) INCH LIFTS, THE BANK RUN GRAVEL BACKFILL MAY BE COMPACTED BY THOROUGHLY JETTING WITH WATER, IN AREAS OUTSIDE OF THE RIGHT OF WAY, PROVIDED SATISFACTORY DRAINAGE AND REMOVAL OF THE FREE WATER IS PROVIDED. THE BANK RUN GRAVEL BACKFILL SHALL BE CONSOLIDATED BY THOROUGHLY JETTING WITH WATER. FOR JETTING, A HOSE NOT SMALLER THAN ONE AND ONE-HALF (1-1/2) INCH DIAMETER AND A NOZZLE NOT SMALLER THAN ONE (1) INCH DIAMETER AND NOT SHORTER THAN TWO-THIRDS (2/3) THE DEPTH OF THE TRENCH CARRYING A WATER PRESSURE OF FORTY (40) POUNDS PER SQUARE INCH (PSI) SHALL BE INSERTED IN A UNIFORM PATTERN, AT FIVE FEET MAXIMUM SPACING, TO OBTAIN MAXIMUM CONSOLIDATION. AFTER THE FINAL JETTING OF THE TRENCH, THE BACKFILL SHALL BE LEFT TO SETTLE AND TO PERMIT DRAINAGE OF IMPOUNDED WATER. TYPICAL JETTING PROCEDURES SHALL INCLUDE A WATER REMOVAL SYSTEM AT INTERVALS NOT TO EXCEED FIVE HUNDRED (500) LINEAL FEET OF TRENCH. WATER REMOVAL SHALL NOT BEGIN UNTIL THE WATER SURFACES ABOVE THE BACKFILL. AFTER JETTING IS COMPLETE, THE AREA AROUND THE JETTING HOLE SHALL BE FILLED AND COMPACTED BY THE USE OF THE BUCKET ON THE EQUIPMENT USED FOR EXCAVATING. SETTLED TRENCH SURFACES SHALL THEN BE BROUGHT TO GRADE BY FILLING WITH BANK RUN GRAVEL BACKFILL AND COMPACTED TO A DENSITY EQUAL TO THAT OF THE ADJACENT GROUND. WATER SHALL BE REMOVED BY INSTALLING AN OPENING IN THE MANHOLE OR INSTALLING A VERTICAL EIGHT-INCH PERFORATED PIPE WITH FILTER PAPER ADJACENT TO THE MANHOLE. IF THE VERTICAL PIPE METHOD IS USED, THE VERTICAL PIPE SHALL BE FILLED WITH AASHTO #57 STONE AFTER ALL WATER IS REMOVED BY PUMPING. ALL MANHOLE OPENINGS SHALL BE PLUGGED AND SEALED AFTER JETTING AND WATER REMOVAL OPERATIONS ARE COMPLETED.

SPECIAL BACKFILL REQUIREMENTS

BACKFILL MATERIAL FOR TYPE "C" CONDUIT SHALL CONFORM TO BACKFILL INSTALLATION REQUIREMENTS BELOW.

THE BACKFILL FOR TYPE "C" CONDUIT SHALL BE FINALLY CONSOLIDATED BY MECHANICAL COMPACTION OR BY THOROUGHLY JETTING WITH WATER AS SPECIFIED ABOVE. IF THE BACKFILL IS FINALLY CONSOLIDATED BY JETTING, THE CONTRACTOR SHALL ASSUME ALL RESPONSIBILITY AND ASSOCIATED COSTS FOR ANY GROUND OR HILLSIDE MOVEMENT AND/OR INSTABILITY RELATED TO THE JETTING COMPACTION PROCEDURES.

THE CONTRACTOR SHALL INCLUDE THE COST FOR THE NECESSARY BACKFILL AND COMPACTION WITH THE VARIOUS CONDUIT ITEMS IN UNIT PRICES FOR VARIOUS CONDUIT CLASS ITEMS. NO ADDITIONAL PAYMENT SHALL BE MADE FOR THE USE OF CONTROLLED LOW STRENGTH MATERIAL (CLSM) DENSITY BACKFILL WHEN REQUIRED BY THE JURISDICTIONAL AGENCY OR DUE TO UNSUPPORTED TRENCHES, OVER EXCAVATING, OR THE INABILITY TO PROPERLY COMPACT THE BACKFILL IN THE EXCAVATED TRENCH. STRUCTURE BACKFILL. BACKFILL AROUND MANHOLES AND SMALL CONCRETE VAULTS SHALL MEET THE REQUIREMENTS SPECIFIED FOR COMPACTED TRENCH BACKFILL.

CONTROLLED LOW STRENGTH MATERIAL (CLSM). CLSM SHALL NOT BE PLACED ON FROZEN GROUND. BATCHING, MIXING, AND PLACING OF CLSM MAY BE STARTED WHEN WEATHER CONDITIONS ARE FAVORABLE AND WHEN THE TEMPERATURE IS AT LEAST 34°F AND RISING. AT TIME OF PLACEMENT, CLSM SHALL HAVE A TEMPERATURE OF AT LEAST 40°F. MIXING AND PLACING SHALL STOP WHEN THE TEMPERATURE IS 38°F AND FALLING. EACH FILLING STAGE SHALL BE AS CONTINUOUS AN OPERATION AS IS PRACTICABLE.

BRamedell 1:36:28 PM
5/23/2022
D:\2017\01113 C. Design\104667-HAM-75-3.84\Design\Roadway\Sheets\BU-26-Strang_St_CS_Sep_104667_GN004.dgn

CALCULATED
LZS
CHECKED
JS

GENERAL NOTES

HAM-75-3.84

6
12

TRENCHING AND BACKFILLING (CONTINUED)

CLSM SHALL BE DISCHARGED FROM THE MIXER BY AN ACCEPTABLE PROCEDURE INTO THE AREA TO BE FILLED. CLSM SHALL BE PLACED TO LIMITS INDICATED ON THE DRAWINGS. MIXING CLSM WITH IN-SITU SOIL SHALL BE AVOIDED.

WHEN CLSM IS PLACED AS BACKFILL AGAINST STRUCTURES, THE FILL SHALL BE PLACED IN LIFTS OF 2 TO 3 FEET AND THE NEXT LIFT SHALL NOT BE PLACED UNTIL THE PREVIOUS LIFT HAS TAKEN INITIAL SET AND AT LEAST 16 HOURS HAVE ELAPSED FROM THE END OF PLACEMENT. LIFT THICKNESS SHALL BE REDUCED AS NECESSARY TO PREVENT FLOATION OF THE STRUCTURE.

WHEN CLSM IS PLACED OVER CULVERTS OR PIPELINES, THEY SHALL BE ANCHORED TO PREVENT FLOTATION DURING THE PLACEMENT OF CLSM. UNLESS OTHERWISE REQUIRED, CLSM SHALL BE PLACED TO ONE FOOT BELOW SUBGRADE ELEVATION IF THE SUBGRADE ELEVATION IS NOT MORE THAN 5 FEET OVER THE TOP OF THE CULVERT OR PIPE. IF THE SUBGRADE IS MORE THAN 5 FEET OVER THE TOP OF THE CULVERT OR PIPE FILL, CLSM SHALL BE PLACED TO AN ELEVATION 2 FEET OVER THE TOP OF THE CULVERT OR PIPE, AND THE REMAINDER SHALL BE BACKFILLED WITH SOIL DESIGNATED BY ENGINEER.

DRAINAGE MAINTENANCE

TRENCHES ACROSS ROADWAYS, DRIVEWAYS, WALKS, OR OTHER TRAFFICWAYS ADJACENT TO DRAINAGE DITCHES OR WATERCOURSES SHALL NOT BE BACKFILLED PRIOR TO COMPLETION OF BACKFILLING THE TRENCH ON THE UPSTREAM SIDE OF THE TRAFFICWAY, TO PREVENT IMPOUNDING WATER AFTER THE PIPE HAS BEEN LAID. BRIDGES AND OTHER TEMPORARY STRUCTURES REQUIRED TO MAINTAIN TRAFFIC ACROSS SUCH UNFILLED TRENCHES SHALL BE CONSTRUCTED AND MAINTAINED BY CONTRACTOR. BACKFILLING SHALL BE DONE SO THAT WATER WILL NOT ACCUMULATE IN UNFILLED OR PARTIALLY FILLED TRENCHES. ALL MATERIAL DEPOSITED IN ROADWAY DITCHES OR OTHER WATERCOURSES CROSSED BY THE LINE OF TRENCH SHALL BE REMOVED IMMEDIATELY AFTER BACKFILLING IS COMPLETED, AND THE ORIGINAL SECTION, GRADES, AND CONTOURS OF DITCHES OR WATERCOURSES SHALL BE RESTORED. SURFACE DRAINAGE SHALL NOT BE OBSTRUCTED LONGER THAN NECESSARY.

FINAL GRADING

AFTER OTHER OUTSIDE WORK HAS BEEN FINISHED, AND BACKFILLING AND EMBANKMENTS COMPLETED AND SETTLED, ALL AREAS WHICH ARE TO BE GRADED SHALL BE BROUGHT TO EXISTING GRADE AND SLOPE.

USE OF GRADERS OR OTHER POWER EQUIPMENT WILL BE PERMITTED FOR FINAL GRADING AND DRESSING OF SLOPES, PROVIDED THE RESULT IS UNIFORM AND EQUIVALENT TO MANUAL METHODS. ALL SURFACES SHALL BE GRADED TO SECURE EFFECTIVE DRAINAGE.

FINAL GRADES AND SURFACES SHALL BE SMOOTH, EVEN, AND FREE FROM CLOUDS AND STONES, WEEDS, BRUSH, AND OTHER DEBRIS.

DISPOSAL OF EXCESS EXCAVATED MATERIALS

DISPOSAL OF EXCESS MATERIAL FROM OTHER TRENCH EXCAVATION SITES SHALL BE AS FOLLOWS. EXCEPT AS OTHERWISE PERMITTED, ALL EXCESS EXCAVATED MATERIALS SHALL BE DISPOSED OF AWAY FROM THE SITE.

TRENCHING AND BACKFILLING (CONTINUED)

BROKEN CONCRETE AND OTHER DEBRIS RESULTING FROM PAVEMENT OR SIDEWALK REMOVAL, EXCAVATED ROCK IN EXCESS OF THE AMOUNT PERMITTED TO BE INSTALLED IN TRENCH BACKFILL, DEBRIS ENCOUNTERED IN EXCAVATION WORK, AND OTHER SIMILAR WASTE MATERIALS SHALL BE DISPOSED OF AWAY FROM THE SITE.

SETTLEMENT

CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SETTLEMENT OF TRENCH BACKFILL WHICH MAY OCCUR WITHIN THE CORRECTION PERIOD STIPULATED IN THE GENERAL CONDITIONS.

CONTRACTOR SHALL MAKE, OR CAUSE TO BE MADE, ALL REPAIRS OR REPLACEMENTS MADE NECESSARY BY SETTLEMENT WITHIN THIRTY (30) DAYS AFTER NOTICE FROM ENGINEER.

RESTORATION OF IMPROVEMENTS

ALL SURFACE RESTORATION SHALL BE COMPLETED IN STRICT ACCORDANCE WITH THE APPROPRIATE ITEMS OF THE CITY SUPPLEMENT TO ODOT CMS, AS DIRECTED BY THE ENGINEER. ALL DISTURBED AREAS SHALL BE RESTORED AS NEARLY AS PRACTICAL TO THE CONDITION THEY WERE PRIOR TO CONSTRUCTION WITHIN THIRTY (30) DAYS OF PIPE INSTALLATION, AT THE DIRECTION OF THE ENGINEER.

ROADS, STREETS, AND OTHER PAVED SURFACES

UNLESS OTHERWISE SPECIFIED, ROADS AND STREETS IN WHICH THE SURFACE IS REMOVED, BROKEN, OR DAMAGED DURING THE WORK, SHALL BE RESURFACED AND BROUGHT TO THE ORIGINAL GRADE AND SECTION. ROADWAYS USED BY THE CONTRACTOR SHALL BE CLEANED AND REPAIRED. BEFORE RESURFACING MATERIAL IS PLACED, EDGES OF PAVEMENTS SHALL BE TRIMMED BACK FAR ENOUGH TO PROVIDE CLEAN, SOLID, VERTICAL FACES, AND SHALL BE FREE OF LOOSE MATERIAL. ALL PAVED SURFACES SHALL BE CUT WITH A PAVEMENT SAW. ROUGH CUTS ARE NOT ALLOWED.

PAVEMENT RESTORATION SHALL BE IN ACCORDANCE WITH THE "TYPICAL RESTORATION SECTION" ON THE DRAWINGS AND PROVISIONS OF CDOTE, AS DIRECTED BY THE CITY.

ALL DRIVEWAYS SHALL BE CONSTRUCTED IN KIND IN ACCORDANCE WITH ITEM 627 OF THE CITY SUPPLEMENT TO ODOT CMS.

CONCRETE WALKS SHALL BE RESTORED WITH A FIVE (5) INCH THICK PLAIN PORTLAND CEMENT CONCRETE WALK (ITEM 608).

CULTIVATED AREAS AND OTHER SURFACE IMPROVEMENTS

CULTIVATED OR PLANTED AREAS AND OTHER SURFACE IMPROVEMENTS WHICH ARE DAMAGED BY ACTIONS OF THE CONTRACTOR SHALL BE RESTORED AS NEARLY AS POSSIBLE TO THEIR ORIGINAL CONDITION. THE CONTRACTOR SHALL RESTORE UNPAVED AREAS BY SEEDING AND MULCHING IN ACCORDANCE WITH ITEM 659 OF THE ODOT CMS UNLESS OTHERWISE NOTED HEREIN.

ALL DRAINAGE DITCHES DISTURBED BY THE CONTRACTOR'S WORK SHALL BE RESTORED, RESHAPED, AND GRADED TO DRAIN PROPERLY. SOD, EROSION CONTROL MATS, OR OTHER METHODS SHALL BE USED BY THE CONTRACTOR TO ENSURE THAT DRAINAGE DITCHES ARE RESTORED TO THE PRE-CONSTRUCTION CONDITION AS MUCH AS PRACTICAL.

ITEM 201 - CLEARING AND GRUBBING

PROVIDE CLEARING AND GRUBBING AS NEEDED PER CMS 201.

ITEM 202 SPECIAL - FILL AND PLUG EXISTING CONDUIT

SEWERS TO BE ABANDONED SHALL BE PLUGGED OR SEALED WHERE THEY JOIN MANHOLES, CATCH BASINS, OR INLETS. ALL EXISTING SEWER ENCOUNTERED IN CONSTRUCTION OPERATIONS THAT ARE INACTIVE, OR ARE TO BE ABANDONED AS DETERMINED BY THE ENGINEER, SHALL BE PLUGGED OR SEALED AT BOTH ENDS WHERE BROKEN INTO, BEFORE PROCEEDING WITH BACKFILLING.

THIS ITEM SHALL BE CONSTRUCTED AS SHOWN ON THE PLANS AND AS DIRECTED BY THE ENGINEER. FILL, SEAL AND ABANDON EXISTING SEWERS 12-INCH AND LARGER IN ACCORDANCE WITH THE METHOD DESCRIBED IN SECTION 202 OF THE CITY OF CINCINNATI SUPPLEMENT TO THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, CONSTRUCTION AND MATERIAL SPECIFICATION. THE MATERIAL USED FOR FILLING THE EXISTING SEWERS SHALL BE CONTROLLED LOW STRENGTH MATERIAL (CLSM) OR A MIXTURE OF FLY ASH AND WATER AT A RATE OF 1,900 POUNDS OF FLY ASH TO 950 POUNDS OF WATER. MIXTURE MAY BE VARIED AS APPROVED BY THE ENGINEER.

WHERE PLUGGING OR SEALING IS REQUIRED, PIPE LESS THAN 12-INCHES IN DIAMETER SHALL BE SEALED BY THE INSTALLATION OF A SUITABLE PRECAST CONCRETE OR VITRIFIED CLAY STOPPER, PROPERLY CEMENTED INTO PLACE.

ITEM 451 - 10" REINFORCED CONCRETE PAVEMENT, AS PER PLAN, CLASS QC 1

THIS ITEM SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 451.06 OF THE CITY OF CINCINNATI SUPPLEMENT TO THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, CONSTRUCTION AND MATERIAL SPECIFICATION, EXCEPT AS OTHERWISE NOTED IN THE PLANS AND SPECIFICATIONS. PAYMENT WILL BE MADE PER SQUARE YARD.

STORM SEWER NOTES

PIPE JOINTS: ALL PROPOSED CONDUIT SHALL HAVE RESILIENT AND FLEXIBLE JOINTS.

UNDERGROUND STRUCTURES: LOCATIONS OF UNDERGROUND STRUCTURES ARE NOT GUARANTEED.

ROOF DRAINS, FOUNDATION DRAINS, AND OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SEWER ARE PROHIBITED.

THE CONTRACTOR SHALL FURNISH ALL FRAMES AND COVERS IN ACCORDANCE WITH MSDGC ACC. NO. 49005 OR 120282.

ALL FENCING AND GUARDRAIL DAMAGES BY SEWER CONSTRUCTION SHALL BE REPLACED IN KIND BY THE CONTRACTOR AND ALL ASSOCIATED COSTS SHOULD BE INCLUDED WITH ITEM 611.

MANHOLES ON PUBLIC STORM SEWERS SHALL HAVE STANDARD LIDS AND FRAMES, MSDGC ACC. NO. 120282, EXCEPT WHERE NOTED. THE FRAME SHALL BE SECURELY FASTENED TO THE TOP MANHOLE SECTION BY FOUR 3/4-INCH STAINLESS STEEL CINCH ANCHORS. ALL PROPOSED MANHOLES IN THE SIDEWALK SPACE SHALL HAVE A SKID-PROOF, ADA-APPROVED LID PER ACC. NO. 49005.

STORMS SEWERS SHALL COMPLY WITH ODOT ITEM 611, AND SHALL BE REINFORCED CONCRETE PIPE, TYPE C, CLASS III, UNLESS OTHERWISE NOTED. PVC AND PLASTIC CONDUITS, IF NOTED ON THE PLANS, SHALL CONFORM TO ODOT ITEM 611. TYPE E CONDUIT SHALL NOT BE USED FOR PUBLIC STORM SEWERS OR FOR STORM SEWERS TO BE LOCATED UNDER PAVED SURFACES. ALL CONDUITS SHALL HAVE BEDDING AND BACKFILL PER ACC. NO. 49032.

ITEM 611 - MANHOLE, MISC.: MODIFIED TYPE S MANHOLE

THIS ITEM SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE METROPOLITAN SEWER DISTRICT OF GREATER CINCINNATI (MSDGC) STANDARD DRAWING ACC. NO. 49049, TYPE "B", EXCEPT AS OTHERWISE NOTED ON THE PLANS AND IN THE SPECIFICATIONS. IF PVC PIPE IS INSTALLED, THE PRECAST MANHOLE BASE SHALL BE USED IN ACCORDANCE WITH STANDARD DRAWING ACC. NO. 49056.

ITEM 611 - MANHOLE, MISC.: MODIFIED TYPE F DROP MANHOLE

THIS ITEM SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE METROPOLITAN SEWER DISTRICT OF GREATER CINCINNATI (MSDGC) STANDARD DRAWING ACC. NO. 49003, 49003A, AND 49048, EXCEPT AS OTHERWISE NOTED ON THE PLANS AND IN THE SPECIFICATIONS.

ITEM 611 - MANHOLE, MISC.: REMODEL BOTTOM OF EXISTING MANHOLE

THIS ITEM SHALL BE CONSTRUCTED IN ACCORDANCE WITH STANDARD DRAWING ACC. NO. 49004 AND AS DIRECTED BY THE ENGINEER.

BRamedell 1:36:29 PM 5/23/2022 0:2017 01113 C:\Design\Roadway\Sheets\BU-26-Strang St CS Sep 104667_GN005.dgn

CALCULATED
LZS
CHECKED
JS

GENERAL NOTES

HAM-75-3.84

ITEM 611 - CONDUIT, MISC.: VIDEO TAPING OF INSTALLED SEWERS

CONTRACTOR TO FURNISH VIDEOTAPING OF INSTALLED SEWERS MEETING THE REQUIREMENTS OF THE CITY OF CINCINNATI SUPPLEMENT TO THE STATE OF OHIO (ODOT) CONSTRUCTION AND MATERIAL SPECIFICATIONS AND ACCORDING TO THE FOLLOWING CURRENT REQUIREMENTS:

CURRENT PACP CERTIFICATION OF ALL CCTV OPERATORS WILL BE REQUIRED FOR ALL CCTV WORK.

DATABASE SHALL BE UNMODIFIED NASSCO-PACP CERTIFIED ACCESS DATABASE.

CCTV SOFTWARE SHALL BE NASSCO-PACP CERTIFIED.

INITIAL SURVEY TELEVISION INSPECTION

THE CONTRACTOR SHALL TELEVISION THE SEWER AND SHALL INSPECT THE UPSTREAM AND DOWNSTREAM MANHOLES OF EACH SEWER SEGMENT TELEVISIONED AND DOCUMENT ALL OBSERVATIONS.

SEWER SECTIONS AND MANHOLES SHALL BE INSPECTED BY MEANS OF REMOTE CCTV. IF A BLOCKAGE CANNOT BE REMOVED AND HAMPERS THE VIDEOTAPING OF THE SEWER IN ONE DIRECTION, THEN THE CONTRACTOR SHALL ATTEMPT TO COMPLETE THE SECTION BY TELEVISIONING FROM THE OTHER MANHOLE TO COMPLETE THE SECTION. THIS REVERSAL MUST IMMEDIATELY FOLLOW THE INITIAL DIRECTION ON THE SAME SURVEY AND REPORT. THE CONTRACTOR MUST IMMEDIATELY REPORT THE OBSTRUCTION TO THE ENGINEER.

THE RECORDED VIDEO MUST SHOW THE ENTIRE CIRCUMFERENCE OF THE SEWER. ANY FLOW CONTROL TO REMOVE STANDING WATER AND DEBRIS SHALL BE INCIDENTAL TO THIS ITEM. THE CONTRACTOR MUST ALSO CONSIDER WEATHER CONDITIONS TO OBTAIN THE BEST VIDEO IMAGE OF THE SEWER. THIS MAY REQUIRE THE CONTRACTOR TO DELAY ANY VIDEO WORK UNTIL AFTER MAJOR RAIN EVENTS TO ALLOW THE SYSTEM TO RETURN TO LOWER DRY WEATHER FLOW.

PERFORM ALL CCTV INSPECTIONS IN ACCORDANCE WITH NASSCO'S PIPELINE ASSESSMENT CERTIFICATION PROGRAM (PACP). CCTV INSPECTIONS WILL BE CONDUCTED ENTIRELY IN DIGITAL FORMAT. THE ENTIRE INSPECTION SURVEY SHALL BE RECORDED IN MPEG-1 FORMAT WRITTEN TO DVD AND SUBMITTED WITH DIGITAL LINKS TO THE SURVEY. ALL CLEANING AND TELEVISION INSPECTION REPORTS SHALL BE WITH-IN +/- 2 (TWO) FEET OF THE MEASURED LINEAR FOOTAGE BETWEEN MANHOLES ALONG THE EXISTING SEWER CENTERLINE FROM THE CENTER OF THE MANHOLE. THE DOCUMENTATION OF THE WORK SHALL CONSIST OF PACP CCTV REPORTS, UNMODIFIED PACP DATABASE, LOGS, ELECTRONIC REPORTS, ETC. NOTING IMPORTANT FEATURES ENCOUNTERED DURING THE INSPECTION. THE SPEED OF TRAVEL SHALL BE SLOW ENOUGH TO INSPECT EACH PIPE JOINT, TEE CONNECTION, STRUCTURAL DETERIORATION, INFILTRATION AND INFLOW SOURCES, AND DEPOSITS, BUT SHOULD NOT, AT ANY TIME, BE FASTER THAN 30 FEET PER MINUTE. THE CAMERA MUST BE CENTERED IN THE PIPE TO PROVIDE ACCURATE DISTANCE MEASUREMENTS TO PROVIDE EXACT LOCATIONS OF IMPORTANT FEATURES IN THE SEWER AND THESE FOOTAGE MEASUREMENTS SHALL BE DISPLAYED AND DOCUMENTED ON THE VIDEO. THE COMPLETED DVD WILL BECOME THE PROPERTY OF THE MSD.

ITEM 611 - CONDUIT, MISC.: VIDEO TAPING OF INSTALLED SEWERS

EVERY SECTION OF SEWER (MANHOLE TO MANHOLE) SHALL BE IDENTIFIED BY AUDIO AND ALPHANUMERIC ON THE VIDEO DISPLAY AND SHALL INCLUDE: PROJECT NAME, MUNICIPALITY, STREET NAME, CAGIS MANHOLE NUMBERS (CONTRACTOR SHALL REQUEST THE EIGHT DIGIT MANHOLE NUMBERS ASSIGNED BY MSD FOR ALL PROPOSED AND EXISTING MANHOLES INCLUDED IN VIDEO), INSPECTOR'S NAME, SEWER DIAMETER AND LENGTH, AND DATE OF INSPECTION. IMPORTANT FEATURES SHALL BE IDENTIFIED BY AUDIO AND ON PACP LOG TO INCLUDE ALL MANHOLES, ACTIVE AND INACTIVE SERVICE CONNECTIONS, STRUCTURAL DEFECTS, MAINTENANCE PROBLEMS, GREASE, ROOTS, INFILTRATION, OBVIOUS INFLOW SOURCES, ETC. ALL VIDEO MUST BE CONTINUOUSLY METERED FROM MANHOLE TO MANHOLE. IN ADDITION TO TELEVISIONING THE SEWER, ALL MANHOLES SHALL BE PANNED WITH THE VIDEO CAMERA AND VISUALLY INSPECTED. IF THE CONTRACTOR DOES NOT SUBMIT THE SPECIFIED INFORMATION, OR IF IT IS NOT IN THE REQUIRED FORMAT, OR IF CAGIS MANHOLE NUMBERS ARE NOT INCLUDED, PAYMENT FOR VIDEOTAPING OF FINAL SEWERS AND FOR SEWER PIPE INSTALLED WILL NOT BE MADE UNTIL THE VIDEO INFORMATION IS CORRECTED.

ITEM 630 - SIGNING, MISC.: REMOVAL OF COMMERCIAL/PRIVATE SIGN AND REERECTION

THE CONTRACTOR SHALL CAREFULLY REMOVE THE COMMERCIAL/PRIVATE SIGN SPECIFIED IN THIS PLAN SET FOR REERECTION. THE REMOVED SIGN SHALL BE IMMEDIATELY RE-ERECTED ON APPROVED TEMPORARY SUPPORTS IN THE SAME GENERAL VICINITY ALONG THE ROADWAY TO BE VIEWED BY THE MOTORING PUBLIC. UNLESS THE ORIGINAL SUPPORTS WILL BE REUSED, THE CONTRACTOR SHALL REMOVE AND DISPOSE OF THE SUPPORTS AND FOUNDATIONS IN ACCORDANCE WITH ITEM 630.12. THE CONTRACTOR SHALL RE-ERECT THE SIGN AT ITS EXISTING LOCATION AND MOUNTING HEIGHT ON PERMANENT SUPPORTS AT THE COMPLETION OF THE PROJECT. THE CONTRACTOR SHALL FIELD VERIFY THE EXISTING SIGN CONFIGURATION AND SHALL SUBMIT WORKING DRAWINGS AND CALCULATIONS FOR PERMANENT SIGN SUPPORTS ACCORDING TO 501.05. ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH CMS AND SCD.

ITEM 614 - LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE

THIS ITEM SHALL INCLUDE USE OF A MARKED POLICE VEHICLE WITH UNIFORMED POLICE OFFICER FOR TRAFFIC CONTROL ASSISTANCE WITH TRAFFIC AND PEDESTRIAN SAFETY OF THE TRAVELING PUBLIC, PEDESTRIANS AND FOR THE SAFETY OF THE WORKERS.

THIS ITEM SHALL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 614 OF THE OHIO, DEPARTMENT OF TRANSPORTATION, CONSTRUCTION AND MATERIAL SPECIFICATIONS AND 2010 CITY OF CINCINNATI SUPPLEMENT TO ODOT.

ITEM 614 - MAINTAINING TRAFFIC

THE CONTRACTOR MUST PERFORM THE REQUIRED WORK WITH THE MAXIMUM SAFETY OF, AND THE LEAST INCONVENIENCE TO, THE TRAVELING PUBLIC AND THE CONTRACTOR. THE ENGINEER MUST APPROVE ANY PROPOSED VARIANCE FROM THE MAINTENANCE OF TRAFFIC NOTES, IN ADVANCE, IN WRITING. EXCEPT AS MODIFIED HEREIN, THE REQUIREMENTS FOR MAINTAINING TRAFFIC, AS INDICATED IN THE "STATE OF OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATION", ITEM 614; "THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES" (OMUTCD), PART 6; AND THE CITY OF CINCINNATI "TRAFFIC SAFETY HANDBOOK" (BLUE BOOK) CURRENT EDITIONS, LATEST REVISIONS AND PERTINENT ITEMS OF SPECIFICATIONS AND PROPOSAL SHALL APPLY. USE DRUMS, SIGNS, SIGN SUPPORTS, BARRICADES, IMPACT ATTENUATORS AND OTHER TRAFFIC CONTROL DEVICES THAT ARE CERTIFIED TO MEET NCHRP350 SAFE-CRASH STANDARDS OR ARE MODIFIED BY CONTRACT DOCUMENTS. DO NOT USE HEAVY, NON-YIELDING DEVICES OR SUPPORTS THAT DO NOT CONFORM TO THE CURRENT STANDARDS OF NCHRP350 UNLESS ALLOWED BY CONTRACT DOCUMENTS.

TRAFFIC CONTROL GENERAL

ALL TRAFFIC CONTROL WILL CONFORM TO THE REQUIREMENTS OF THE PLAN, STANDARD CONSTRUCTION DRAWINGS SHOWN ON THE PLAN, AND THE OMUTCD FOR STREETS AND HIGHWAYS, FOR THE INSTALLATION, MAINTENANCE, AND OPERATION OF ALL TRAFFIC CONTROLS AND TRAFFIC CONTROL DEVICES. WHEN THE PLANS OR STANDARD CONSTRUCTION DRAWINGS DO NOT COVER A SPECIFIC TRAFFIC CONTROL SITUATION, PLACE THE NECESSARY TRAFFIC CONTROL DEVICES ACCORDING TO THE OMUTCD AND USE THE PROCEDURES REQUIRED BY THE OMUTCD.

IN ADDITION TO ITEM 614, "MAINTAINING TRAFFIC," AS SET FORTH IN THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS, THE FOLLOWING NOTES APPLY TO THE WORK CARRIED OUT WITHIN THE LIMITS OF THIS PROJECT.

THE CONTRACTOR WILL BE REQUIRED ON AN INTERIM AND/OR PERMANENT BASIS TO FURNISH, ERECT, MAINTAIN AND SUBSEQUENTLY REMOVE ALL LIGHTS, SIGNS, BARRICADES AND ALL OTHER TRAFFIC CONTROL DEVICES NECESSARY FOR THE SAFETY AND MAINTENANCE OF TRAFFIC. THIS ALSO INCLUDES ALL ADVANCE WARNING SIGNAGE, REGULATORY SIGNS, INFORMATIONAL SIGNS, DETOUR SIGNS AND DIRECTIONAL SIGNS. KEEP ALL EQUIPMENT CLEAN AND IN PROPER WORKING CONDITION. ALL SIGNS ARE TO BE RETROREFLECTORIZED OR ILLUMINATED AND OF THE MOST RECENT COLOR AND TYPE AS SPECIFIED IN THE OMUTCD MANUAL.

ITEM 614 - MAINTAINING TRAFFIC (CONTINUED)

PLACE ANY TRAFFIC CONTROL DEVICE THAT BECOMES MOVED OR DAMAGED DURING THE DURATION OF THE PROJECT. ASSIGN A COMPETENT PERSON TO CHECK THE WORK ZONE ON A DAILY BASIS TO CORRECT ANY DEFICIENCIES. MAKE THESE CHECKS BEFORE WORK IS TO START FOR THE DAY TO ASSURE ALL DEVICES ARE IN PLACE OR, IF NOT NEEDED, ARE COVERED OR REMOVED FROM THE SITE. IF THE CONTRACTOR IS NOT WORKING AND NO ROADWAY HAZARDS ARE PRESENT, COVER OR REMOVE FROM THE SITE ANY UNNECESSARY SIGNS.

THE STANDARD CHANNELIZING DEVICE FOR CLOSING ANY LANE TO TRAFFIC IS PROPERLY WEIGHTED 36" DRUMS OR 42" CONES. TAPERS FOR LANE CLOSURES HAVE 36" DRUMS OR 42" CONES. 28" CONES MAY BE USED FOR DAYTIME ONLY, SHORT DURATION CLOSURES. ALL CHANNELIZING DEVICES ARE ORANGE IN COLOR WITH A MINIMUM OF TWO RETROREFLECTIVE BANDS (42" CONES HAVE A MINIMUM OF FOUR RETROREFLECTIVE BANDS). THE RETROREFLECTIVE MATERIAL USED ON CHANNELIZING DEVICES HAS A SMOOTH, SEALED SURFACE THAT WILL DISPLAY APPROXIMATELY THE SAME COLOR DAY AND NIGHT. KEEP ALL RETROREFLECTIVE MATERIAL ON DEVICES IN GOOD CONDITION, MAINTAINING THEIR RETROREFLECTIVE PROPERTIES.

FLASHING ARROW PANELS SHOULD BE USED FOR ALL LANE CLOSURES AND MAY BE REQUIRED AT ANY TIME DURING THE JOB OR PROJECT BY THE PROJECT ENGINEER, THE INSPECTOR OR A TRAFFIC ENGINEERING OFFICIAL. USE ARROW PANELS IN THE CINCINNATI BUSINESS DISTRICT (CBD) AREA FOR ANY WORK WITHIN A TRAVEL LANE. ARROW PANELS MUST CONFORM TO THE OMUTCD PART 6, SECTION 6F.53, "ARROW PANELS". FOR A STATIONARY LANE CLOSURE THE ARROW PANEL SHOULD BE LOCATED ON THE SHOULDER AT THE BEGINNING OF THE MERGING TAPER. WHERE THE SHOULDER IS NARROW, THE ARROW PANEL SHOULD BE LOCATED IN THE CLOSED LANE. USE THE ARROW PANEL IN COMBINATION WITH APPROPRIATE SIGNS, CHANNELIZING DEVICES AND OTHER TEMPORARY TRAFFIC CONTROL DEVICES. REFER TO NOTE #14.A., FLASHING ARROW PANELS SHALL BE USED FOR LANE CLOSURES ON LUDLOW AVENUE. IF FLAGGING IS NECESSARY, THE REQUIRED METHOD OF FLAGGING IS WITH APPROVED STOP/SLOW PADDLES. FLAGS SHOULD BE LIMITED TO EMERGENCY SITUATIONS, INTERSECTIONS AND LOW SPEED, LOW VOLUME LOCATIONS, WHICH CAN BEST BE CONTROLLED BY A SINGLE FLAGGER. THE FLAGGING OPERATION AND FLAGGING STATION WILL CONFORM TO THE OMUTCD PART 6E, "FLAGGER CONTROL".

FAILURE TO COMPLY WITH MAINTENANCE OF TRAFFIC REQUIREMENTS WILL RESULT IN WORK PROGRESS BEING SUSPENDED. THE CONTRACTOR WILL BE ORDERED TO REMOVE ALL PERSONNEL AND EQUIPMENT FROM THE CITY OF CINCINNATI RIGHT-OF-WAY UNTIL PROPER TRAFFIC CONTROL IS IN PLACE AND APPROVED BY THE DEPARTMENT OF TRANSPORTATION AND ENGINEERING'S INSPECTOR AND/OR A TRAFFIC ENGINEERING OFFICIAL.

BEFORE WORK BEGINS, SUBMIT TO THE ENGINEER THE NAME AND TELEPHONE NUMBER OF A PERSON(S) WHO CAN BE REACHED 24 HOURS A DAY BY THE CITY OF CINCINNATI AND ALL INTERESTED POLICE AGENCIES. THIS PERSON(S) IS RESPONSIBLE FOR REPLACING AND MAINTAINING NECESSARY TRAFFIC CONTROL DEVICES PER THE APPROVED TRAFFIC CONTROL PLAN.

BRamedell 1:36:30 PM
5/23/2022
C:\2017\01113\C.Design\104667.HAM-75-3.84.Design\Roadway\Sheets\BU-26-Strang_St_CS_Sep_104667_GN006.dgn

CALCULATED
LZS
CHECKED
JS

GENERAL NOTES

HAM-75-3.84

8
12

ITEM 614 - MAINTAINING TRAFFIC (CONTINUED)

PEDESTRIAN PROTECTION AND PEDESTRIAN ACCESS WILL BE MAINTAINED AT ALL TIMES AND WILL CONFORM TO THE OMTCD PART6D.01, "PEDESTRIAN CONSIDERATION". PEDESTRIANS' SAFETY IS OF UTMOST IMPORTANCE THROUGHOUT THE LIFE OF THE CONTRACT OR JOB. PEDESTRIANS WILL NOT BE LED INTO CONFLICTS WITH WORK SITE VEHICLES, EQUIPMENT OR OPERATIONS. PEDESTRIANS WILL NOT BE LED INTO CONFLICTS WITH VEHICLES MOVING THROUGH OR AROUND THE WORK SITE. PEDESTRIANS WILL BE PROVIDED WITH A SAFE, CONVENIENT AND ACCESSIBLE PATH THAT REPLICATES AS NEARLY AS PRACTICAL THE MOST DESIRED CHARACTERISTICS OF THE EXISTING SIDEWALK(S) OR FOOTPATH(S). IF THE PEDESTRIAN PATHWAY IS TO BE CLOSED, POST SIGNS TO DIRECT PEDESTRIANS TO THE SAFEST CROSSING POINT. IF THE PATHWAY IS TO BE CLOSED BETWEEN SAFE CROSSING POINTS, POST SIGNS IN ADVANCE OF THE CLOSED AREA AT A SAFE CROSSING POINT OR MAKE ARRANGEMENTS FOR SAFE PEDESTRIAN PASSAGE. IF PEDESTRIAN BARRIERS ARE REQUIRED BY TRAFFIC ENGINEERING OR THE PROJECT ENGINEER, THE PROJECT ENGINEER WILL APPROVE THE TYPE USED. THE SAFETY OF PEDESTRIANS IS THE RESPONSIBILITY OF THE CONTRACTOR.

NOTIFY THE FOLLOWING GROUPS FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK AND THREE (3) DAYS NOTICE PRIOR TO ANY STREET CLOSURE WITH THE APPROVAL OF THE CITY TRAFFIC ENGINEER OR HIS/HER DESIGNEE AND THE PROJECT ENGINEER.

- LOCAL POLICE DISTRICT
 - LOCAL FIREHOUSES
 - QUEEN CITY METRO
 - TANK (FOR WORK IN CBD)
 - LOCAL SCHOOLS
 - LOCAL HOSPITALS
 - ABUTTING PROPERTY OWNERS
- THE ENGINEER MAY REQUIRE ADDITIONAL CONTACTS.

IF TEMPORARY SIGNS TO RESTRICT PARKING ARE INSTALLED, NOTIFY THE LOCAL POLICE DISTRICT 24 HOURS PRIOR TO INSTALLATION AND POST THE SIGNS AT LEAST 14 HOURS BEFORE THE PARKING RESTRICTION LISTED ON THE SIGN. DATES AND TIMES ON TEMPORARY SIGNS MUST BE PROPERLY WORDED AND LEGIBLE.

THE CONTRACTOR WILL MAKE ARRANGEMENTS AND PAY FOR THE SERVICES OF AN OFF-DUTY POLICE OFFICER AND CRUISER, AS NEEDED. THE CINCINNATI POLICE DEPARTMENT (PHONE: 352-2583) AND HAMILTON COUNTY SHERIFF'S DEPARTMENT (PHONE: 595-8513) REQUIRES ADVANCE NOTICE FOR THESE SERVICES. THE USE OF A POLICE OFFICER(S) WITH A MARKED POLICE VEHICLE IS ENCOURAGED AND MAY BE REQUIRED BY TRAFFIC ENGINEERING, THE PROJECT ENGINEER, OR THE ROW INSPECTOR WHEN WORK IS DONE WITHIN A SIGNALIZED INTERSECTION. THE HIRING OF A POLICE OFFICER(S) IS FOR ASSISTANCE WITH TRAFFIC AND PEDESTRIAN CONTROL, FOR THE SAFETY OF THE TRAVELING PUBLIC AND FOR THE SAFETY OF THE CONTRACTOR'S EMPLOYEES. THE POLICE OFFICER(S) IS CONSIDERED TO BE EMPLOYED BY THE CONTRACTOR AND THE CONTRACTOR IS RESPONSIBLE FOR THEIR ACTIONS. ALTHOUGH THEY ARE EMPLOYED BY THE CONTRACTOR, THE POLICE OFFICER'S PLACEMENT AND DUTIES WILL BE DETERMINED BY TRAFFIC ENGINEERING, THE PROJECT ENGINEER, OR THE ROW INSPECTOR. THE CLOSING OF A ROAD FOR THE PURPOSE OF THE PROPOSED WORK WILL ONLY BE DONE WITH ADVANCED NOTIFICATION AND THE APPROVAL OF TRAFFIC ENGINEERING.

ITEM 614 - MAINTAINING TRAFFIC (CONTINUED)

THE CONTRACTOR, THROUGH THE ENGINEER OR INSPECTOR, IS REQUIRED TO CONTACT ANDY CARTER OF THE TRAFFIC ENGINEERING DIVISION AT 352-5272, OR TRAFFIC SERVICE BUREAU CONTROLLER SERVICE SECTION AT 352-4391 ONE WEEK PRIOR TO ANY GRINDING OR CURB REPAIR OPERATIONS NEAR VEHICLE LOOP DETECTORS. THEY WILL COORDINATE WITH THE CONTRACTOR TO SAVE THE EXISTING LOOPS OR TO ARRANGE FOR PROPER SIGNAL OPERATION IF THE LOOP(S) MUST BE DESTROYED.

ALL SUB-CONTRACTORS MUST ADHERE TO THE SAME MAINTENANCE OF TRAFFIC REQUIREMENTS AS THE GENERAL CONTRACTOR. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR ALL SUB-CONTRACTORS.

ONE WEEK PRIOR TO ANY GRINDING OR PAVING, NOTIFY THE TRAFFIC ENGINEERING REPRESENTATIVE. THE TRAFFIC ENGINEERING REPRESENTATIVE WILL APPROVE OR NOT APPROVE THE DATE AND TIME WITH RESPECT TO AREA EVENTS AND/OR PLANNED LANE CLOSURES.

NO OBSTRUCTIONS TO TRAFFIC ARE TO BE PLACED IN THAT PORTION OF THE ROADWAY OR SIDEWALK AREA WHERE THE MAIN DIRECTIONAL FLOW OF TRAFFIC IS CONCENTRATED DURING THE HOURS OF 6:00-9:00 AM AND 3:00-6:00 PM IN THE CBD, OR ANY OTHER THROUGH STREET, AS DEFINED IN THE CITY OF CINCINNATI'S TRAFFIC CODE.

IF, IN THE OPINION OF THE CITY ENGINEER, THE CITY TRAFFIC ENGINEER, OR HIS/HER DESIGNEE, PROPER PROVISIONS AND MAINTENANCE OF TRAFFIC OR TRAFFIC CONTROLS ARE NOT PROVIDED BY THE CONTRACTOR, THE CITY WILL PROVIDE APPROPRIATE PROVISIONS TO MAINTAIN SAFE TRAFFIC CONTROLS. THE COST OF THESE SERVICES WILL BE CHARGED TO THE CONTRACTOR.

FAILURE TO FOLLOW ESTABLISHED TRAFFIC SAFETY REQUIREMENTS MAY CONSTITUTE A VIOLATION OF THE CONTRACT AND SUBJECTS THE CONTRACTOR TO ALL SANCTIONS AND PENALTIES AUTHORIZED BY THE CINCINNATI MUNICIPAL CODE.

POLICE, FIRE AND LOCAL RESIDENT TRAFFIC IS TO BE MAINTAINED AT ALL TIMES. THE FOLLOWING RESTRICTIONS ON LOCAL ROADWAYS SHALL APPLY TO THE CONSTRUCTION INVOLVED IN THIS PROJECT. THESE RESTRICTIONS ARE SUBJECT TO BE CHANGED BY THE CITY OF CINCINNATI TRAFFIC ENGINEER OR HIS/HER DESIGNEE DUE TO UNFORESEEN CIRCUMSTANCES OR TRAFFIC CONDITIONS.

NO TRAFFIC WILL BE DETOURED OR ROADWAY CLOSED WITHOUT PRIOR APPROVAL OF THE DEPARTMENT OF TRANSPORTATION AND ENGINEERING, DIVISION OF TRAFFIC ENGINEERING. NO OPEN TRENCH WILL BE LEFT UNATTENDED. KEEP ALL AREAS IN THE ROADWAY AND SIDEWALK IN SAFE, PASSABLE CONDITION AND MEET ALL REQUIREMENTS SET BY THE DEPARTMENT OF TRANSPORTATION AND ENGINEERING'S CITY ENGINEER AND CITY TRAFFIC ENGINEER OR HIS/HER DESIGNEE.

ON THE FOLLOWING STREET(S), FROM THE HOURS OF 6AM TO 9AM AND FROM 3PM TO 6PM, MONDAY THROUGH FRIDAY, ALL LANES WILL BE OPEN AND AVAILABLE TO TRAFFIC. ALL OTHER TIMES AT LEAST TWO LANES WILL BE OPEN AND AVAILABLE TO TRAFFIC (ONE LANE IN EACH DIRECTION). ALL LANES NOT APPROVED FOR A PERMANENT CLOSURE WILL BE OPEN AND AVAILABLE TO TRAFFIC WHEN NO WORK IS BEING DONE. USE ARROW PANELS FOR ALL LANE CLOSURES.

ITEM 614 - MAINTAINING TRAFFIC (CONTINUED)

LUDLOW AVE
MAINTAIN TRAFFIC AT ALL TIMES. AT LEAST TWO 10' LANES WILL REMAIN OPEN AND AVAILABLE TO TRAFFIC (ONE LANE IN EACH DIRECTION) AT ALL TIMES, OR USE A FLAGGING OPERATION TO MOVE TRAFFIC AROUND THE WORK SITE. ALL LANES NOT APPROVED FOR A PERMANENT CLOSURE WILL BE OPEN AND AVAILABLE TO TRAFFIC WHEN NO WORK IS BEING DONE.

STRENG ST
STRENG ST MAY BE CLOSED DURING WORK HOURS. POST "ROAD CLOSED TO THROUGH TRAFFIC" SIGNS AT EACH END OF THE STREET SEGMENT TO BE CLOSED. ONLY ONE STREET SEGMENT MAY BE CLOSED AT A TIME. MAINTAIN LOCAL AND EMERGENCY TRAFFIC AT ALL TIMES. FLAG TRAFFIC AS NECESSARY. ALL LANES NOT APPROVED FOR A PERMANENT CLOSURE WILL BE OPEN AND AVAILABLE TO TRAFFIC WHEN NO WORK IS BEING DONE.

WORK ZONE TRAFFIC SIGNALS
REFER TO SECTION 1314 OF THE CITY OF CINCINNATI SUPPLEMENT TO STATE OF OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS FOR THE REQUIREMENTS OF MAINTENANCE OF EXISTING TRAFFIC SIGNALS AND STREET LIGHTING CIRCUITS.

WORK ZONE PAVEMENT MARKINGS
REPLACE ALL PAVEMENT MARKINGS, WHICH ARE REMOVED OR DAMAGED DURING THE PROJECT OR JOB TO THE SAME OR BETTER, CONDITION AND TYPE AS BEFORE THE WORK BEGAN.

MAINTAIN VISIBLE MARKINGS AFTER EACH WORKDAY. FOLLOWING THE GRINDING OPERATIONS, USE PAINTED TEMPORARY PAVEMENT MARKINGS. DO NOT APPLY CONSTRUCTION TAPE IN THE WET OR COLD WEATHER PERIODS, AS IT SHOULD NOT BE EXPECTED TO WITHSTAND SNOWPLOWING OPERATIONS.

FOLLOWING THE PLACEMENT OF THE LEVELING COURSE, APPLY PAINT OR CONSTRUCTION TAPE PER THE FINAL STRIPING PLAN TO SERVE AS TEMPORARY PAVEMENT MARKINGS. IF CONSTRUCTION TAPE IS USED FOR TEMPORARY PAVEMENT MARKINGS ON THE LEVELING COURSE, REMOVE IT BEFORE PLACEMENT OF THE SURFACE COURSE.

PLACE ALL TEMPORARY PAVEMENT MARKINGS TO RETAIN LANE ASSIGNMENTS AND SHY AWAY FROM AREAS NEAR CURBS, ISLANDS, ETC., UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

INSTALL THESE TEMPORARY PAVEMENT MARKINGS WITH THE SAME PROFESSIONAL ALIGNMENT AND GENERAL POSITIVE GUIDANCE THAT IS UTILIZED WITH THE PERMANENT PAVEMENT MARKINGS.

AFTER THE PLACEMENT OF THE SURFACE COURSE, USE PAINT FOR LAYOUT OF THE FINAL STRIPING PLAN. DO NOT USE CONSTRUCTION TAPES ON THE SURFACE COURSE. AFTER THE ENGINEER HAS APPROVED THE LAYOUT OF THE TEMPORARY PAVEMENT MARKINGS, APPLY PERMANENT PAVEMENT MARKINGS IN THERMOPLASTIC ON ASPHALT SURFACE COURSES.

THE CITY WILL PROVIDE DOCUMENTATION SO THAT THE TEMPORARY PAVEMENT MARKINGS CAN BE PROPERLY ALIGNED. THE ENGINEER WILL PROVIDE INSPECTION AND APPROVE THE LAYOUT. THE CONTRACTOR WILL PERFORM THE LAYOUT.

ON ANY STREET WHICH HAS THE SURFACE COURSE PLACED AFTER NOVEMBER 1, THE CONTRACTOR WILL BE REQUIRED TO MAINTAIN VISIBLE PAVEMENT MARKINGS UNTIL MARCH 15 OF THE FOLLOWING YEAR OR UNTIL THE PERMANENT PAVEMENT MARKINGS ARE PLACED.

STREET RESTORATION NOTES

FINAL PAVEMENT RESTORATION REQUIREMENTS

RESTORATION REQUIREMENTS MAY CHANGE BASED ON CONDITION OF PAVEMENT AT THE TIME WORK COMMENCES.

STRENG STREET AND LUDLOW AVENUE:
STANDARD TRENCH AND PAVEMENT RESTORATION IN ACCORDANCE WITH THE MOST RECENT VERSION OF THE CITY OF CINCINNATI STANDARD RESTORATION OF STREET OPENINGS - STANDARD RESTORATION, ASPHALT SURFACE ON CONCRETE BASE AND CONCRETE PAVEMENT.

ADDITIONAL RESTORATION

PER THE CITY OF CINCINNATI "STREET RESTORATION BOOK", IF COLLATERAL DAMAGE OCCURS DUE TO CONSTRUCTION ACTIVITY, OR THE DOTE INSPECTOR DEEMS THE FINAL RESTORATION SUBSTANDARD, ADDITIONAL RESTORATION MAY BE REQUIRED.

CONTROLLED DENSITY FILL (CDF)

CDF SHALL BE USED AS TRENCH BACKFILL IN ALL AREAS OF THE PUBLIC R/W INCLUDING UNDER SIDEWALKS, DRIVEWAYS, AND SOD AREAS. ON PUBLIC STREETS LABELED "PAPER STREETS" OR "UNIMPROVED PORTIONS", THE CONTRACTOR HAS THE OPTION TO BACKFILL THE TRENCH IN SOD AREAS IN ACCORDANCE WITH ODOT 611 USING GRANULAR BACKFILL.

PAVEMENT SAWING

NO VERMEER (REG. TRADEMARK) OR SIMILAR TRENCHER TYPESAW USE ALLOWED.

SIDEWALK/DRIVEWAY RESTORATION

CONCRETE SIDEWALKS SHALL BE A MINIMUM OF 5" THICK. CONCRETE DRIVEWAYS SHALL BE A MINIMUM OF 7" THICK CLASS MS CONCRETE. DISTURBED OR DAMAGED SIDEWALKS OR DRIVEWAYS SHALL BE REPLACED JOINT TO JOINT. DISTURBED SIDEWALK AND/OR DRIVEWAYS MUST BE TEMPORARILY RESTORED DAILY WITH ASPHALT.

EQUIPMENT

THE PERMITTED EQUIPMENT MUST BE PLACED/REMOVED DAILY IN ACCORDANCE WITH THE POSTED PARKING AND TRAFFIC CONTROL SIGNS (INCLUDING TIME RESTRICTIONS), AT LEAST 15 FEET CLEAR OF THE NEAREST FIRE HYDRANT AND 50 FEET CLEAR OF THE NEAREST INTERSECTION. THE CONTRACTOR IS CAUTIONED REGARDING DAMAGE TO STREET PAVING AND FACILITIES.

THE CONTRACTOR IS RESPONSIBLE FOR ASSURING THAT THE WORK AREA IS SECURED AND PEDESTRIANS CANNOT WALK UNDER EQUIPMENT OR INTO THE WORK AREA. TRAFFIC CONTROL DEVICES MUST BE USED TO SECURE THE WORK AREA. PEDESTRIAN, ADVANCED WARNING OR INSTRUCTIONAL SIGNS ARE REQUIRED.

O.U.P.S.

AT LEAST 2 WORKING DAYS PRIOR TO COMMENCEMENT OF ANY STREET OPENING, THE OHIO UTILITIES PROTECTION SERVICE MUST BE NOTIFIED OF WORK AT 1-800-362-2764 OR BY CALLING 811.

BRamsdell 1:36:30 PM
5/23/2022
C:\2017\01113\C_Design\104667_HAM-75-3.84_Design\Roadway\Sheets\BU-26-Streng_St_CS_Sep_104667_GN007.dgn

CALCULATED
LZS
CHECKED
JS

GENERAL NOTES

HAM-75-3.84

STREET RESTORATION NOTES (CONTINUED)

PAVEMENT MARKING RESTORATION

WHEN REPLACING PORTIONS OF EXISTING PAVEMENT MARKINGS DUE TO CONSTRUCTION ACTIVITY, PAVEMENT MARKINGS ARE TO BE REPLACED IN KIND. BEFORE ANY WORK COMMENCES, IT WILL BE CONTRACTOR'S RESPONSIBILITY TO DOCUMENT THE LOCATIONS OF PAVEMENT MARKINGS THAT WILL BE REMOVED AND REPLACED. ONE WEEK BEFORE WORK BEGINS, THE PERMITTEE MUST PROVIDE THE ENGINEER WITH A SKETCH OR DRAWING DETAILING (DIMENSIONS, TYPE, ETC.) THE LOCATIONS OF THE EXISTING PAVEMENT MARKINGS. IF THIS SKETCH IS NOT PROVIDED, THE ENGINEER WILL HAVE A SURVEY CREW LOCATE THE EXISTING PAVEMENT MARKINGS AT THE CONTRACTOR'S COST.

NO PARKING SIGNS

IF NEEDED, IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN "NO PARKING" SIGNS AND/OR PARKING METER BAGS FROM CINCINNATI POLICE DEPARTMENT (CPD) DISTRICT HEADQUARTERS.

CPD REGULATIONS AND PROCEDURES ARE AS FOLLOWS: THE REQUEST MUST BE MADE TO THE DISTRICT OFFICE 24 HOURS IN ADVANCE.

WHEN A PARKING RESTRICTION FORM IS RECEIVED, THE ACCEPTING OFFICER WILL REVIEW THE FORM FOR COMPLETENESS AND SIGN THAT IT WAS RECEIVED.

THE RECEIVING OFFICER WILL ADVISE THE REQUESTING PARTY THAT THEY WILL BE NOTIFIED UPON APPROVAL. ALTHOUGH SIGNS AND BAGS MAY BE GIVEN TO REQUESTING PARTIES AT TIME OF REQUEST, SIGNS ARE NOT TO BE POSTED UNTIL NOTIFICATION OF APPROVAL IS MADE.

ONCE APPROVED/DISAPPROVED, THE REQUEST WILL BE GIVEN TO THE DESK OFFICER WHO WILL MAKE THE NOTIFICATION. THE CONTRACTOR MUST POST THE SIGNS AND CALL THE DISTRICT 14 HOURS IN ADVANCE.

THE SIGNS WILL NOT BE ENFORCED IF THE CONTRACTOR FAILS TO NOTIFY THE DISTRICT.

TRENCHPLATES

THE CONTRACTOR MUST PROVIDE THE FOLLOWING INFORMATION ABOUT TRENCH PLATES THAT WILL REMAIN OVERNIGHT ON CINCINNATI STREETS TO THE CITY'S CUSTOMER SERVICE HOTLINE AT (513) 591-6000 BY 4:00 PM, DAILY:
 LOCATION OF STREET PLATE (STREET ADDRESS OR INTERSECTION)
 CONTRACTOR NAME
 EMERGENCY CONTACT NAME AND TELEPHONE NUMBER (365/24)
 PLATE IDENTIFICATION INITIALS
 START DATE AND ANTICIPATED REMOVAL DATE

PLEASE NOTE THAT TRENCH PLATES MAY ONLY BE USED ON CINCINNATI STREETS FOR EMERGENCY PURPOSES OR TO ALLOW TIME FOR A DURABLE REPAIR AND HIGH-QUALITY STREET RESTORATION. EVERY ATTEMPT MUST BE MADE TO MINIMIZE THE EXTENT AND DURATION OF SUCH USE.

UNATTENDED TRENCH PLATES MUST HAVE PERMANENT VISIBLE MARKINGS, SUCH AS THE INITIALS OF THE COMPANY, PLACED ON THE PLATES TO HELP IDENTIFY THE OWNER OF THE TRENCH PLATES.

STREET RESTORATION NOTES (CONTINUED)

TRENCH PLATES MUST BE OF ADEQUATE SIZE AND STRENGTH, PINNED AND PROPERLY ANCHORED, AND ASPHALT WEDGED TO MINIMIZE TRAFFIC IMPACTS AND NOISE. THE CONTRACTOR SHALL BE ALLOWED TO WELD PLATES TOGETHER IN LIEU OF PINNING AT THE DISCRETION AND SATISFACTION OF THE ENGINEER. HOWEVER, IF THE WELDS FAIL AND/OR PLATES SHIFT OR BECOME LOOSE, THE CONTRACTOR MUST PIN AND ANCHOR PLATES FROM THAT POINT ON.

THE CONTRACTOR LEAVING TRENCH PLATES ON CINCINNATI STREETS MUST BE ON SITE WITHIN 60 MINUTES FOLLOWING INITIAL NOTIFICATION TO RESOLVE PROBLEMS ASSOCIATED WITH THEIR USE. THE CONTRACTOR WILL BE CHARGED A MINIMUM OF \$250 FOR CITY COSTS ASSOCIATED WITH REINSTALLING LOOSE OR DISLOCATED TRENCH PLATES. IF THE TRENCH PLATES HAVE NOT BEEN PREVIOUSLY CALLED IN OR THE EMERGENCY CONTACT FAILS TO RESPOND PROMPTLY, THESE CHARGES WILL BE DOUBLED.

TRAFFIC SIGNAL OR STREET LIGHTING DAMAGE

THE CONTRACTOR WILL BE BILLED FOR ALL COSTS OF REPAIR, BY THE CITY, OF ANY DAMAGE TO CITY LOOP DETECTORS, STREET LIGHTING SYSTEM, OR TRAFFIC SIGNAL UNDERGROUND FACILITIES AS A RESULT OF CONTRACTOR'S WORK UNDER THIS PERMIT. PLEASE CONTACT ANDY CARTER OF THE CITY OF CINCINNATI DEPARTMENT OF TRANSPORTATION AND ENGINEERING AT 352-5272 IF ANY OF THESE ITEMS ARE ENCOUNTERED DURING CONSTRUCTION.

WALLS OR STRUCTURES SUPPORTING THE RIGHT OF WAY

ANY WORK NEAR A WALL OR STRUCTURE SUPPORTING THE RIGHT OF WAY MUST BE COORDINATED WITH THE CITY OF CINCINNATI DEPARTMENT OF TRANSPORTATION AND ENGINEERING STRUCTURES SECTION. CONTACT RICH POHANA OF THE STRUCTURES SECTION AT 513-352-5278.

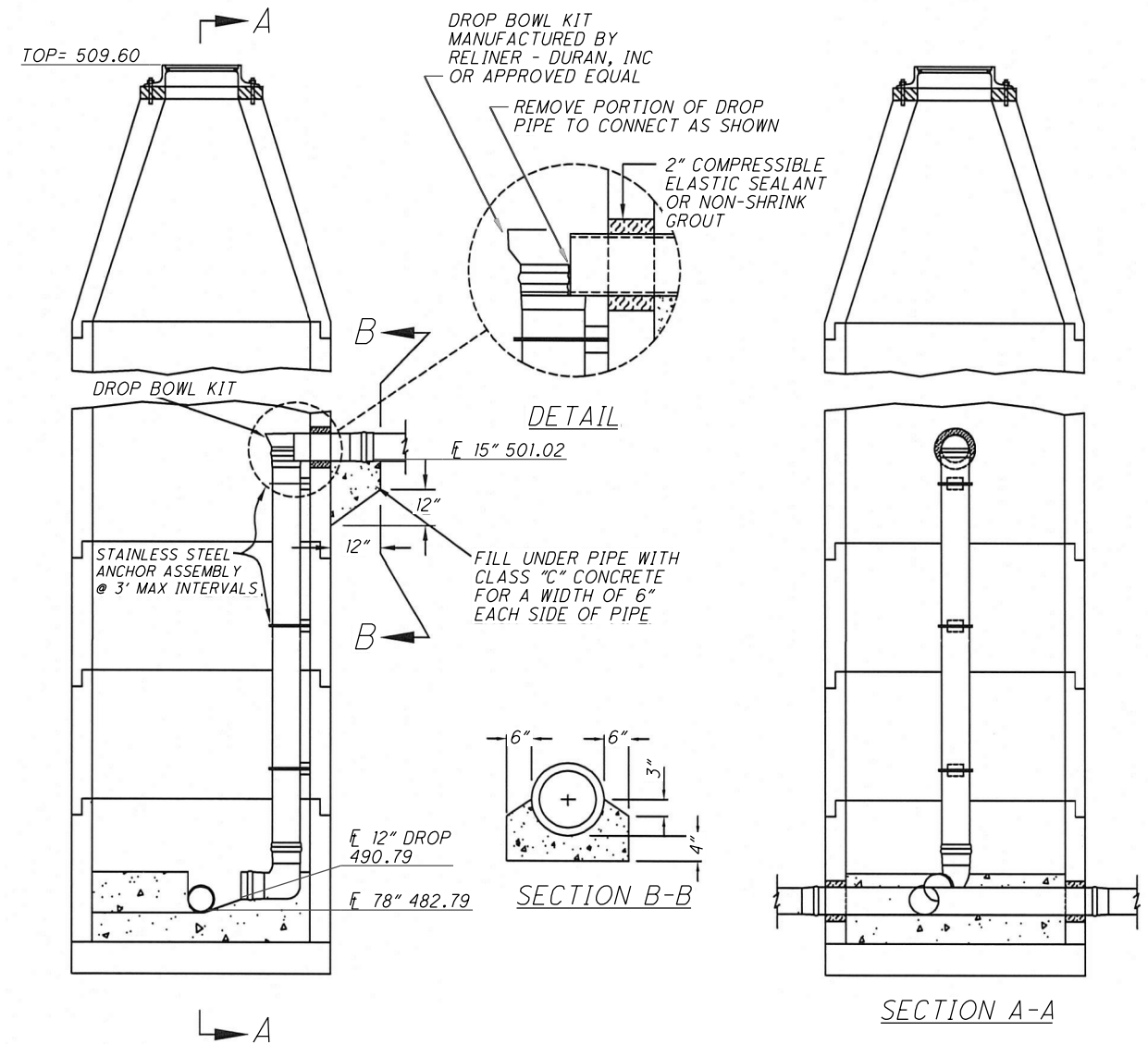
CONCRETE CURB REPAIR

ALL CONCRETE CURB REPAIR IN THE CITY OF CINCINNATI R/W SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE MOST RECENT VERSION OF THE CITY OF CINCINNATI STANDARD RESTORATION OF STREET OPENINGS - CONCRETE CURB REPAIR DRAWING.

NON RIGID PAVEMENT RESTORATION

ALL NON-RIGID PAVEMENT RESTORATION IN THE CITY OF CINCINNATI R/W SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE MOST RECENT VERSION OF THE CITY OF CINCINNATI STANDARD RESTORATION OF STREET OPENINGS STANDARD RESTORATION FOR ALL NON RIGID PAVEMENT.

MSD STANDARD INTERNAL DROP DETAIL



THIS DRAWING REFERENCES MSD STANDARD DETAIL #49061

CALCULATED
LZS
CHECKED
JS

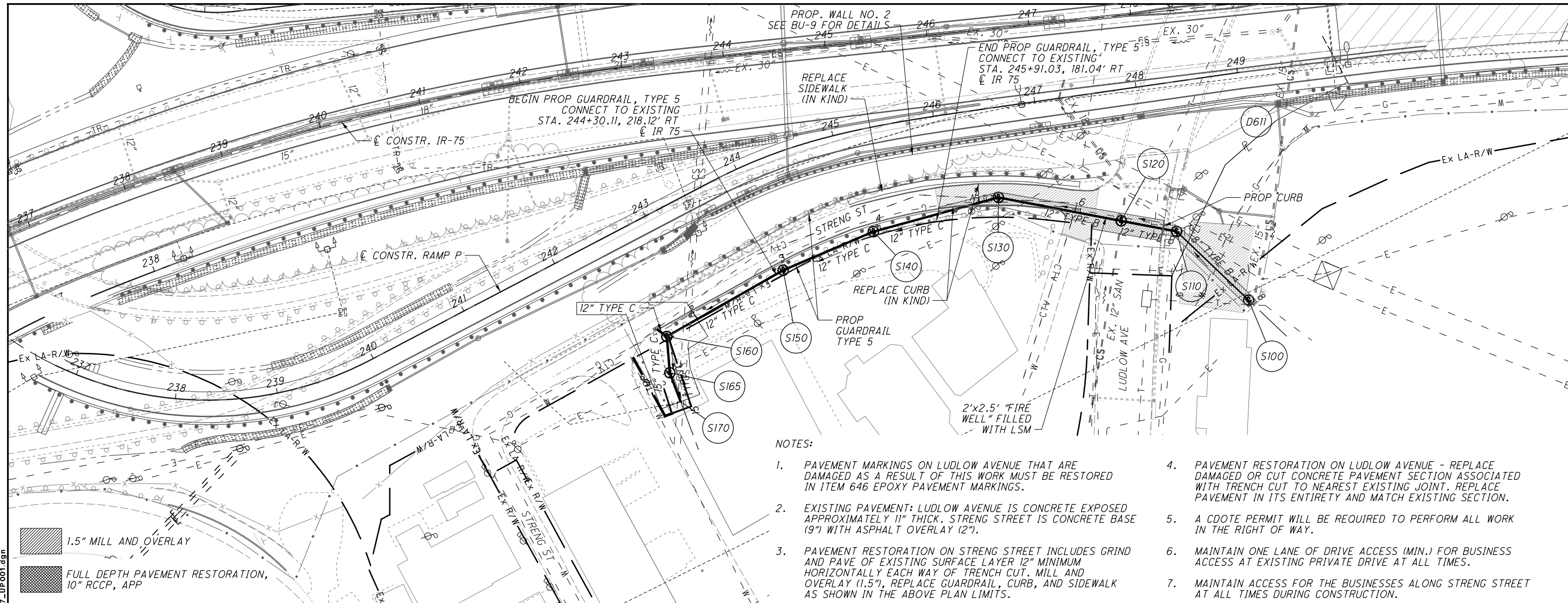
GENERAL NOTES

HAM-75-3.84

10
12

BRamedell 1:36:31 PM 5/23/2022 C:\2017\01113\C.Design\104667.HAM-75-3.84.Design\Roadway\Sheets\BU-26_Streng St CS Sep.104667_GNO08.dgn

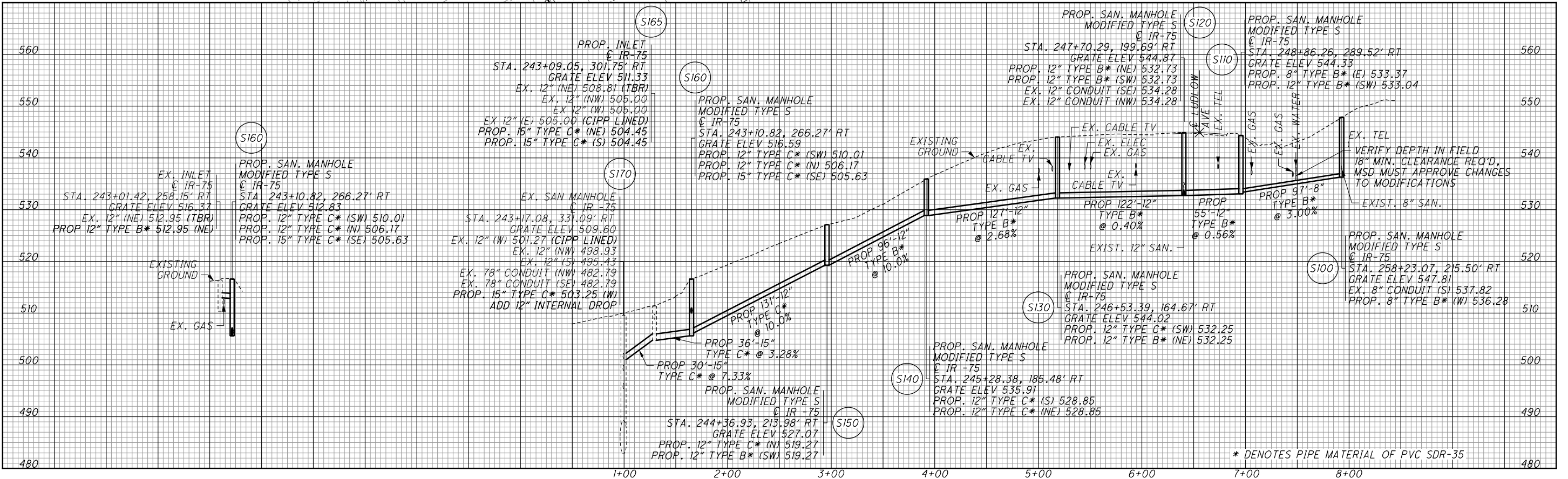
BRamsdell 2:26:00 PM
 6/2/2023
 C:\2017\01113\C.Design\104667.HAM-75-3.84.Design\Roadway\Sheets\BU-26-Streng St CS_Sep.104667_UP001.dgn



1.5" MILL AND OVERLAY
 FULL DEPTH PAVEMENT RESTORATION, 10" RCCP, APP

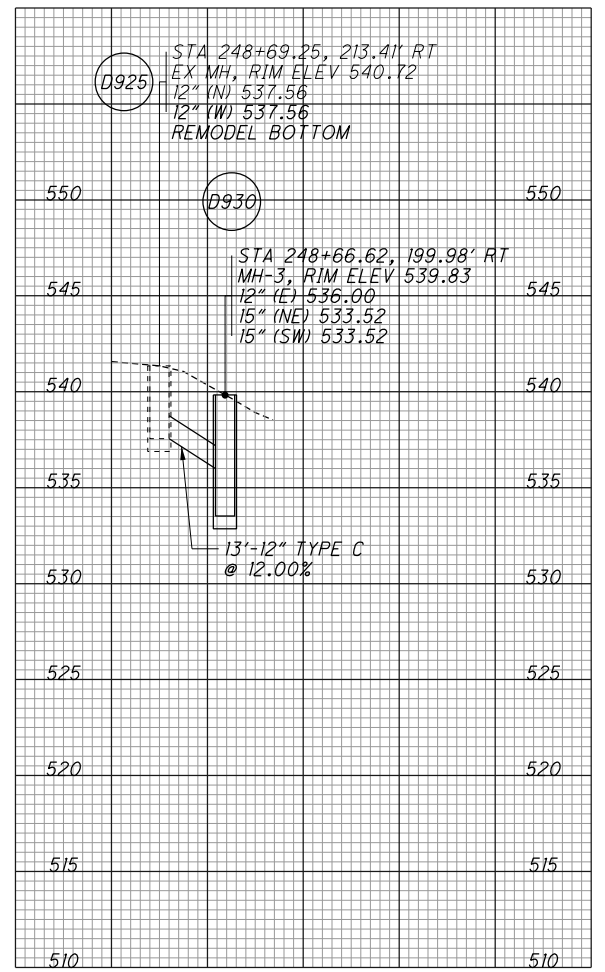
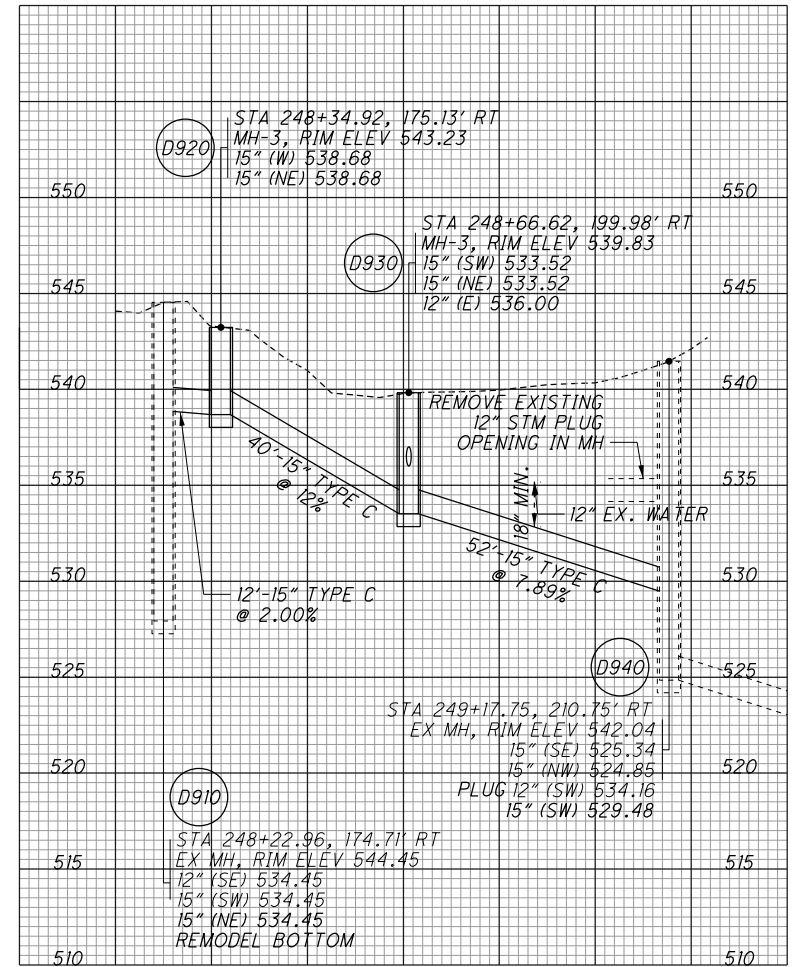
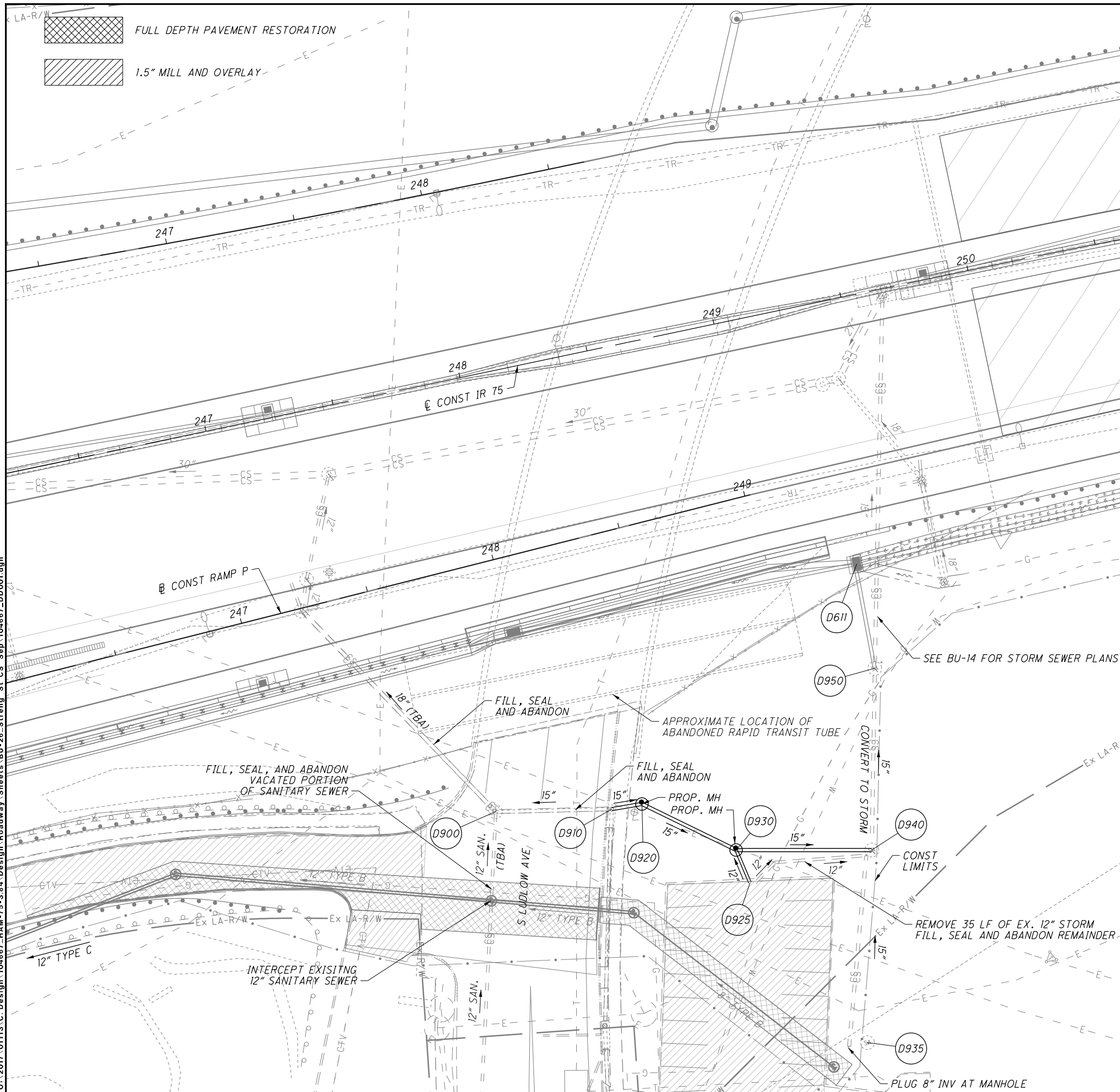
NOTES:

- PAVEMENT MARKINGS ON LUDLOW AVENUE THAT ARE DAMAGED AS A RESULT OF THIS WORK MUST BE RESTORED IN ITEM 646 EPOXY PAVEMENT MARKINGS.
- EXISTING PAVEMENT: LUDLOW AVENUE IS CONCRETE EXPOSED APPROXIMATELY 11" THICK. STRENG STREET IS CONCRETE BASE (9") WITH ASPHALT OVERLAY (2").
- PAVEMENT RESTORATION ON STRENG STREET INCLUDES GRIND AND PAVE OF EXISTING SURFACE LAYER 12" MINIMUM HORIZONTALLY EACH WAY OF TRENCH CUT. MILL AND OVERLAY (1.5"), REPLACE GUARDRAIL, CURB, AND SIDEWALK AS SHOWN IN THE ABOVE PLAN LIMITS.
- PAVEMENT RESTORATION ON LUDLOW AVENUE - REPLACE DAMAGED OR CUT CONCRETE PAVEMENT SECTION ASSOCIATED WITH TRENCH CUT TO NEAREST EXISTING JOINT. REPLACE PAVEMENT IN ITS ENTIRETY AND MATCH EXISTING SECTION.
- A CDOTE PERMIT WILL BE REQUIRED TO PERFORM ALL WORK IN THE RIGHT OF WAY.
- MAINTAIN ONE LANE OF DRIVE ACCESS (MIN.) FOR BUSINESS ACCESS AT EXISTING PRIVATE DRIVE AT ALL TIMES.
- MAINTAIN ACCESS FOR THE BUSINESSES ALONG STRENG STREET AT ALL TIMES DURING CONSTRUCTION.



* DENOTES PIPE MATERIAL OF PVC SDR-35

BRamedell 2:25:23 PM
 6/2/2023
 C:\2017\01113\C.Design\104667_HAM-75-3.84 Design\Roadway\Sheets\BU-26_Streng_St_CS_Sep.104667_DD001.dgn



STORM SEWER SEPARATION PLAN & PROFILE
 S LUDLOW AVE
 HAM-75-3.84
 CALCULATED CML CHECKED JS
 HORIZONTAL SCALE IN FEET
 0 20 40