

LOCAL AUTHORITY APPROVAL

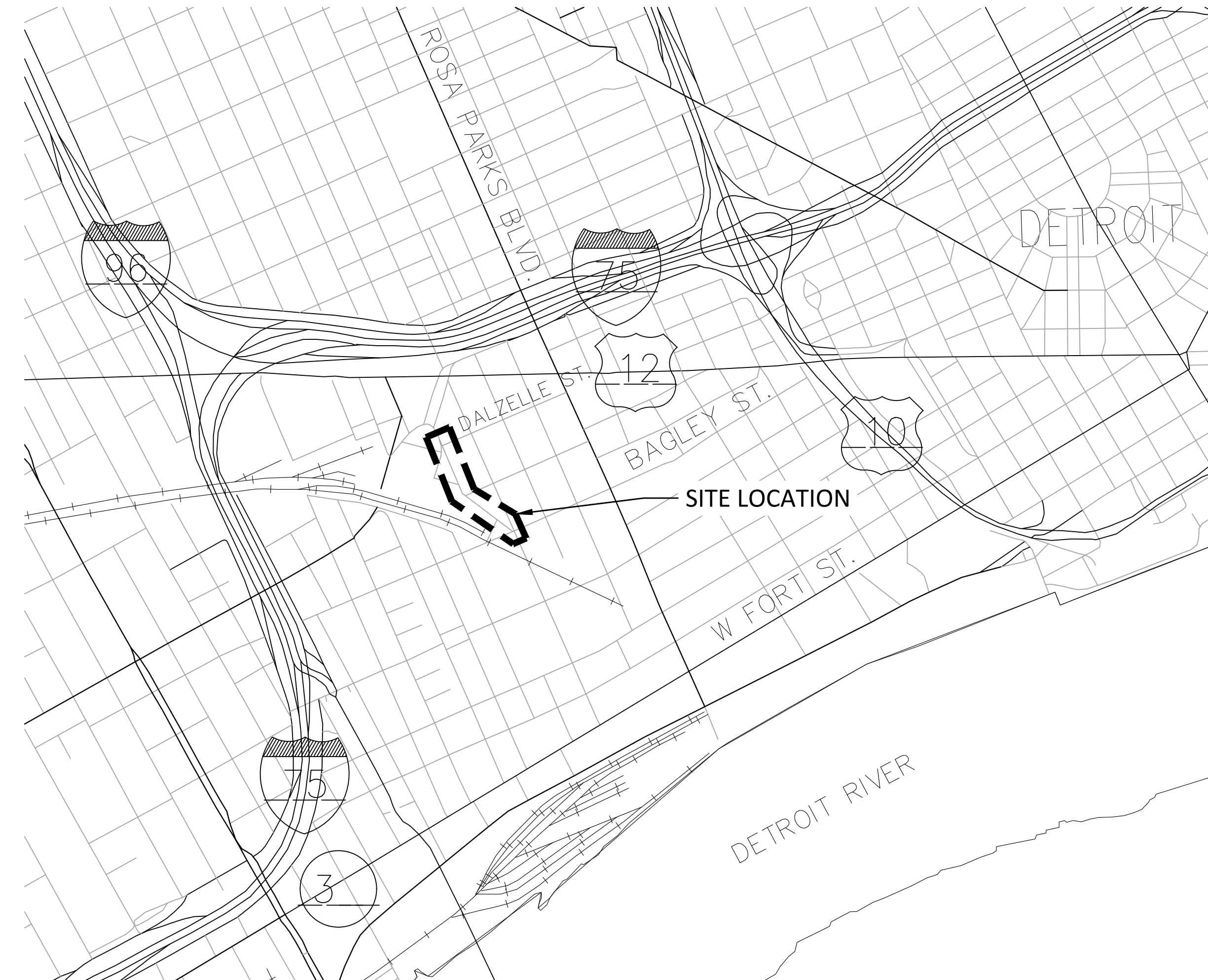
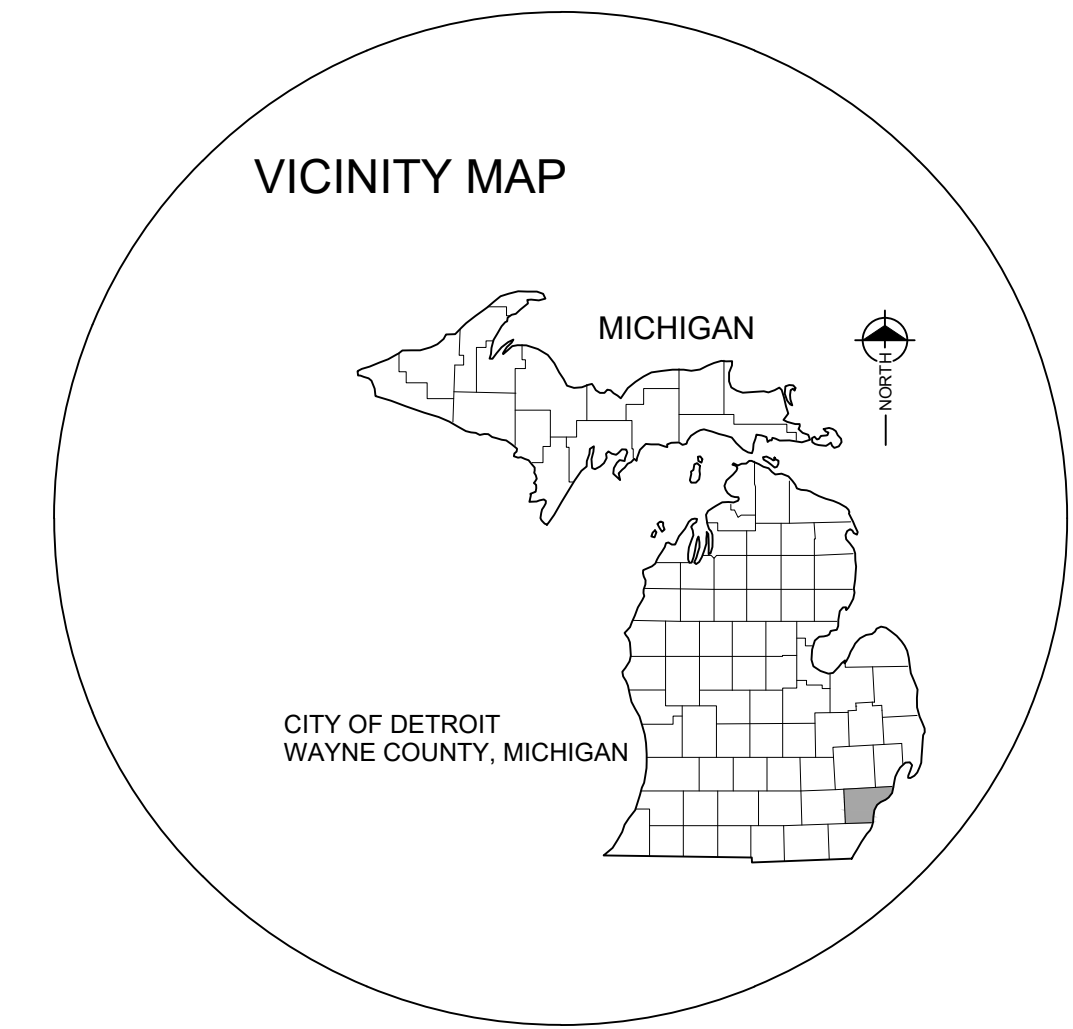
CITY OF DETROIT
 CITY ENGINEERING DIVISION
 DEPARTMENT OF PUBLIC WORKS
 COLEMAN A. YOUNG MUNICIPAL CENTER
 2 WOODWARD AVENUE
 DETROIT, MICHIGAN 48226

**CITY OF DETROIT
 DEPARTMENT OF PUBLIC WORKS**

15TH STREET STREETScape

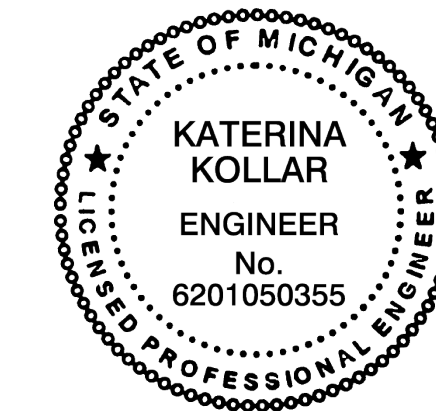
CITY OF DETROIT
 WAYNE COUNTY, MICHIGAN
 PROJECT NUMBER: PW-7038

ISSUED FOR BIDS
 02/10/2022



LOCATION MAP
 NORTH

THESE PLANS WERE PREPARED FOR
 CITY OF DETROIT, DEPARTMENT OF PUBLIC WORKS BY:
 FISHBECK



Katerina Kollar
 KATERINA KOLLAR, P.E.

2/10/2022

DATE

FISHBECK
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 DETROIT, MI 48226
 (313) 293-3550

APPROVALS

RECOMMENDED FOR APPROVAL BY:

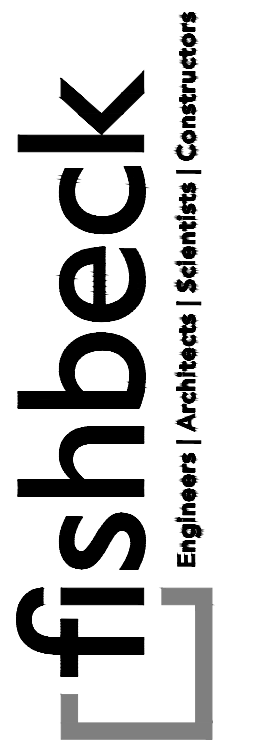
RICHARD DOHERTY, P.E. - CITY ENGINEER

DATE

CITY OF DETROIT

MILES: 0.23

CONTRACT FOR:
 THE 15TH STREET STREETScape PROJECT BEGINS AT THE INTERSECTION OF 15TH STREET AND DALZELLE STREET AND CONTINUES SOUTHEAST ALONG 15TH STREET UNTIL IT INTERSECTS WITH BAGLEY STREET. THE PROJECT PROVIDES BIKE LANES AND STREETScape IMPROVEMENTS AND INCLUDE THE FOLLOWING ELEMENTS: COLD MILLING AND HMA OVERLAY, FULL DEPTH PAVEMENT REPLACEMENT, SHARED USED PEDESTRIAN PATHWAYS, DRAINAGE STRUCTURE REHABILITATION, HARDScape, SIGNAGE, SIGNAL UPGRADES, PAVEMENT MARKINGS, SITE FURNISHINGS, ADA ACCESSIBILITY, IMPROVED LIGHTING, LANDSCAPING AND RETAINING WALL REPAIRS.



SMITHGROUP

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 SUITE 1700
 DETROIT, MI 48266
 313.983.3600
 www.smithgroup.com



City of Detroit

15th Street Streetscape

REVISIONS

02/10/2022	BIDS
01/28/2022	100% REVIEW
12/17/2021	90% REVIEW
10/29/2021	60% REVIEW
08/20/2021	30% REVIEW

Drawn By AOF
 Designer AOF
 Reviewer DPE
 Manager KKG

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PROJECT NO.
 210828

SHEET NO.
 1

TITLE001

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Standards and Specifications Reference - *Not To Be Printed*

- MDOT 2020 STANDARD SPECIFICATIONS FOR CONSTRUCTION
- 2011 MICHIGAN MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES
- 2012 AASHTO GUIDE FOR THE DEVELOPMENT OF BICYCLE FACILITIES
- 2012 AASHTO GUIDE FOR THE PLANNING, DESIGN, AND OPERATION OF PEDESTRIAN FACILITIES
- 2011 AASHTO GEOMETRIC DESIGN OF HIGHWAYS AND STREETS
- 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN
- CITY OF DETROIT STANDARD SPECIFICATIONS FOR PAVING AND RELATED CONSTRUCTION
- CITY OF DETROIT STREET AND ALLEY PLANS

Standard Plans: (Latest Edition) - *Not To Be Printed*

Title	Plan No.
CITY OF DETROIT STANDARDS	
TYPICAL JOINT LAYOUT FOR NON REINFORCED CONCRETE PAVEMENT	C-4379
STANDARD CURB DETAILS	C-4380
DETAIL OF ALLEY RETURN AND DRIVE APPROACH	C-4384
RECONSTRUCTION OF EXISTING SUMP MANHOLES AND NEW CATCH BASIN INSTALLATIONS	C-4390
FLAT TYPE, GRATE AND FRAME	C-4392
SIDEWALK JOINTING STANDARD	C-4462
CATCH BASINS "A" AND "B" AND FLAT GRATE AND FRAME	C-5028
SIDEWALK RAMP AND DETECTABLE WARNING DETAILS R-28 WITH CITY OF DETROIT THICKNESS AMENDMENT	
HMA FEATHERING DETAIL	
HMA APPROACH, MODIFIED	
DWSD MANHOLE ERGO ASSEMBLY	
CATCH BASIN 5000 M4 GRATE	
DWSD MANHOLE 5000 FRAME	
CATCH BASIN 5000Z4 5000M4 ASSEMBLY	
CATCH BASIN 5000 ASSEMBLY	
ADA CATCH BASIN 5000M5 GRATE	
ADA CATCH BASIN 5000Z4 5000M4 ASSEMBLY	
DWSD MANHOLE ERGO COVER	
DWSD MANHOLE FRAME	
DWSD MANHOLE, OVER EXISTING SEWER	
INLET PROTECTION FABRIC DROP	
SESC TEMPORARY FACILITIES	
SESC MAINTENANCE NOTES	
SESC GENERAL NOTES	
SESC MEASURES	
TYPICAL DETAIL AT CROSSING UNDER EXISTING UTILITIES	
SAWED LONGITUDINAL JOINT	
TYPICAL CROSS SECTION COLD MILLING HMA SURFACE AND RESURFACE	
PLD STREET TYPE COVER	
PLD HANDHOLD FRAME	
PLD MANHOLE COVER AND MANHOLE FRAME	
FIELD MARKING STANDARDS (STD-01 TO STD-09)	
MDOT STANDARDS	
ROAD	
DRAINAGE STRUCTURES	R-1-G*
MANHOLE BASE TYPE 1	R-2-D
MONUMENT BOXES	R-11-E
CONCRETE PAVEMENT REPAIR	R-44-F
GRANULAR BLANKET, UNDERDRAINS, OUTLET ENDINGS FOR UNDERDRAINS, AND SEWER BULKHEADS	R-80-F
BEDDING AND FILLING AROUND PIPE CULVERTS	R-82-D
UTILITY TRENCHES	R-83-C
SOIL EROSION & SEDIMENTATION CONTROL MEASURES	R-96-E
PAVEMENT MARKINGS	
PAVEMENT ARROW & MESSAGE DETAILS	PAVE-900-G
PAVEMENT MARKING RECESSING DETAILS	PAVE-901-A
LONGITUDINAL LINE TYPES & PLACEMENT	PAVE-905-E
PAVEMENT MARKINGS FOR NON-SIGNALIZED INTERSECTIONS	PAVE-930-D
LEFT TURN LANE MARKINGS	PAVE-935-E
INTERSECTION, STOP BAR & CROSSWALK MARKINGS	PAVE-945-D
BIKE LANE AND PAVEMENT MARKINGS	PAVE-962-B
SIGNING	
STANDARD SIGN INSTALLATIONS	SIGN-100-G
ROADSIDE SIGN LOCATIONS & SUPPORT SPACING	SIGN-120-E
STEEL POSTS	SIGN-200-D
MISCELLANEOUS SIGN CONNECTION DETAILS	SIGN-740-B
WORK ZONE DEVICES	
GROUND DRIVEN SIGN SUPPORTS FOR TEMP SIGNS	WZD-100-A *
TEMPORARY TRAFFIC CONTROL DEVICES	WZD-125-E *
* DENOTES SPECIAL DETAIL	

UTILITY INFORMATION

THE EXISTING UTILITIES SHOWN ON THE FOLLOWING DRAWINGS HAVE BEEN LOCATED FROM UTILITY RECORD DRAWINGS. ACTUAL UTILITY LOCATIONS MAY VARY FROM WHAT IS SHOWN. ALL UTILITIES TO BE FIELD VERIFIED BY UTILITY OWNER PRIOR TO CONSTRUCTION.

CITY OF DETROIT

DETROIT WATER & SEWERAGE
 6425 HUBER
 DETROIT, MI 48211
 EMERGENCY CUSTOMER SERVICE:
 313.267.8000
 HANNAH SLABAUGH
 Phone: 313.267.8000
 HANNAH.SLABAUGH@DETROITMI.GOV

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 PATELK@DETROITMI.GOV
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 GLWA FIELD SERVICES
 6425 HUBER STREET 1ST FLOOR
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 1301 THIRD STREET
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 FAX: 313.224.4128
 COMMUNITYRELATIONS@DETROITMI.GOV
 EMERGENCY MEDICAL SERVICES:
 313.596.5180

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 DETROIT, MI 48226
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 DETROIT, MI 48226
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 21500 MELROSE AVENUE
 SOUTHFIELD, MICHIGAN 48075
 PHONE: 248.794.7906
 MICHAEL.BRUNING@VERIZONWIRELESS.COM

INDEX OF SHEETS:

ROAD PLANS

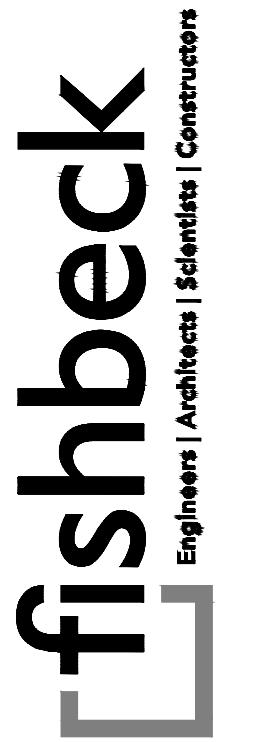
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City of Detroit

15th Street Streetscape

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01/28/2022	100% REVIEW
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08/20/2021	30% REVIEW

Drawn By AOF
 Designer AOF
 Reviewer DPE
 Manager KKS

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PROJECT NO.
210828

SHEET NO.
2
PROJ001

GENERAL ABBREVIATIONS

AFF ABOVE FINISH FLOOR	INTERSECT STATION)	MAX. MAXIMUM	INTERSECTION)
AHU AIR HANDLING UNIT	EWC ELECTRIC WATER COOLER	MEZZ. MEZZANINE	R RADIUS
AL. ALUMINUM	EX EXISTING	MIN. MINIMUM	REQD. REQUIRED
ALT. ALTERNATE	FD FLOOR DRAIN	MJ MASONRY OPENING	RD ROOF DRAIN
BF BARRIER FREE	FRT FIRE RETARDANT TREATED	MTD. MOUNTED	RO ROUGH OPENING
BRG. BEARING	FT. FOOT/FEET	N/A. NOT APPLICABLE	SCH. SCHEDULE
BVCS (VERTICAL TANGENT-CURVE INTERSECT STATION)	GA GAUGE/GAGE	NC NOISE CRITERIA	SF SQUARE FOOT
CJ CONTROL JOINT	GALV. GALVANIZED	NIC NOT IN CONTRACT	SIM. SIMILAR
CL. CENTERLINE	GC GENERAL CONTRACTOR	NO. NUMBER	SP. SPACE/SPACING
CLG. CEILING	HB HOSE BIBB	NRC NOISE REDUCTION COEFFICIENT	SQ. SQUARE
CMU CONCRETE MASONRY UNIT	HP HIGH POINT	NTS NOT TO SCALE	SS STAINLESS STEEL
CO. CLEANOUT	HORIZ. HORIZONTAL	OC ON CENTER	STD. STANDARD
CONC. CONCRETE	HVAC HEATING VENTILATING AIR CONDITIONING	OD OUTSIDE DIAMETER	TAN. TANGENT
CONST. CONSTRUCTION	ID INSIDE DIAMETER	OH. OVERHEAD	TYP. TYPICAL
CONT. CONTINUOUS	IE INVERT ELEVATION	OPP. OPPOSITE	UL UNDERWRITERS LABORATORY
DIA. DIAMETER	IN. INCH/INCHES	ORD OVERFLOW ROOF DRAIN	UNO UNLESS NOTED OTHERWISE
DN. DOWN	INSUL. INSULATION	PERP. PERPENDICULAR	VERT. VERTICAL
DS. DOWNSPOUT	LAV. LAVATORY	PG PLAN GRADE	VTR VENT THROUGH ROOF
EF EXHAUST FAN	LED LIGHT EMITTING DIODE	PL. PLATE	W/ WITH
EL. ELEVATION	LLH LONG LEG HORIZONTAL	POB POINT OF BEGINNING	WC WATER CLOSET
EJ EXPANSION JOINT	LLV LONG LEG VERTICAL	PSF POUNDS PER SQUARE FOOT	WH WATER HEATER
EQ. EQUAL	LP LOW POINT	PSI POUNDS PER SQUARE INCH	W/O WITHOUT
EVCS (VERTICAL CURVE-TANGENT INTERSECT STATION)	MFR. MANUFACTURER	PVC POLYVINYL CHLORIDE	WP. WEATHERPROOF
		PVI (POINT OF VERTICAL INTERSECTION)	WT. WEIGHT

SYMBOL LEGEND

SURVEY

	BENCH MARK
	SECTION CORNER
	CENTER OF SECTION
	QUARTER CORNER
	CONCRETE MONUMENT
	SET PROPERTY IRON
	PROPERTY LINE
	PROPERTY HOOK (COMMON PROPERTY OWNERSHIP)
	TITLE LINE / PROPERTY LINE
	ROW LINE
	SECTION LINE
	EASEMENT CENTERLINE
	EASEMENT LINE
	SURVEY LINE STATIONING
	CONTROL POINT
	SOIL BORING LOCATION

TOPOGRAPHY - PLAN

	GUARD RAIL
	EXISTING FENCE
	PROPOSED FENCE
	GRAVEL SURFACE
	PAVED SURFACE
	EXISTING CURB & GUTTER
	PROPOSED CURB & GUTTER
	PROPOSED CURB
	PROPOSED VALLEY CURB
	PROPOSED CURB & VALLEY CURB
	PROPOSED INVERTED CURB & GUTTER
	PROPOSED TURN DOWN CONCRETE SLAB
	PROPOSED CROSSWALK (PAINTED)
	PROPOSED PAVEMENT MARKING (PAINTED)
	PROPOSED PAVEMENT MARKING DIRECTION ARROWS (PAINTED)
	PROPOSED BARRIER FREE PARKING STALL
	PROPOSED BARRIER FREE RAMP
	A.D.A. TACTILE SURFACE
	PROPOSED SILT FENCE
	PROPOSED SIGN
	PROPOSED CONTOUR MAJOR
	PROPOSED CONTOUR MINOR
	GRADING FLOW ARROW
	PROPOSED GRADE ELEVATION
	PROPOSED GUTTER PAN ELEVATION
	PROPOSED TOP OF CURB ELEVATION
	PROPOSED TOP OF PAVEMENT ELEVATION
	PROPOSED TOP OF WALL ELEVATION
	PROPOSED SIDEWALK ELEVATION
	PROPOSED FINISHED FLOOR ELEVATION
	PROPOSED EDGE OF METAL ELEVATION
	PROPOSED HIGH POINT ELEVATION
	PROPOSED LOW POINT ELEVATION
	SHRUBS
	CONIFEROUS TREE
	DECIDUOUS TREE
	HEDGE EDGE OF WOODS
	WETLANDS
	EXISTING DITCH
	PROPOSED DITCH
	EDGE OF WATER
	CONTOUR MAJOR
	CONTOUR MINOR
	MONITORING WELL
	SOIL BORING
	LIGHT
	GUY ANCHOR
	UTILITY POLE
	SIGN
	FLAG POLE
	MAIL BOX
	PARKING METER
	RAILROAD TRACKS SCALE: 1" = 60' OR LESS
	RAILROAD TRACKS SCALE: 1" = 100' OR MORE

ALL SYMBOLS MAY NOT APPEAR ON DRAWINGS.

EXISTING UTILITIES

	8" SAN. SANITARY SEWER & MANHOLE
	12" STM. STORM SEWER & MANHOLE
	CATCH BASIN CURB TYPE
	CATCH BASIN LAWN TYPE
	VALVE
	HYDRANT
	PLUG
	6" WTR. WATER MAIN
	4" FM. FORCE MAIN
	2" GAS. GAS MAIN
	2" GAS (ABND) GAS MAIN ABANDONED
	ELEC. UNDERGROUND ELECTRIC
	OP. FIBER OPTICS
	TEL. UNDERGROUND TELEPHONE
	2" OIL. OIL TRANSMISSION LINE
	6" STEAM. UNDERGROUND STEAM
	2" SPRK. UNDERGROUND SPRINKLER
	CATV. CABLE TELEVISION
	TELEPHONE PEDESTAL
	PIPE-ONLY CULVERT
	FLARED END SECTION CULVERT
	HEADWALL CULVERT

SURFACING REMOVAL

	PAVT, REM/HMA SURFACE, REM
	SIDEWALK, REM
	_COLDMILLING HMA SURFACE, MODIFIED

REMOVAL

	OBJECT REMOVAL
	REMOVE UTILITY
	ABANDON UTILITY
	EROSION CONTROL, INLET PROTECTION, SEDIMENT TRAP
	CURB REMOVAL
	STORM SEWER REMOVAL
	SAWCUT
	TREE REMOVE

PROPOSED UTILITIES

	8" SAN. SANITARY SEWER & MANHOLE
	WYE & LEAD
	RISER & LEAD
	STANDARD SEWER CLEAN OUT
	MAX. ELEVATION OF LOT LEAD AT PROPERTY LINE
	12" STM. STORM SEWER & MANHOLE
	CATCH BASIN
	ELECTRIC LINE
	8" WATER. WATER MAIN
	VALVE & BOX
	VALVE & CHAMBER
	ELECTRIC HANDHOLE
	DATA HANDHOLE
	DATA MANHOLE
	PLUG
	STANDARD FIRE HYDRANT ASSEMBLY
	CURB STOP & BOX
	6" FM. FORCE MAIN
	FORCE MAIN AIR RELEASE STRUCTURE
	GAS PIPE
	TELEPHONE LINE
	12" CSP. PIPE-ONLY CULVERT
	12" CSP. FLARED END SECTION CULVERT
	_TRENCH DRAIN WITH ADA COMPLIANT GRATE
	_OR STRUCTURE COVER, ADJ, CASE 1, MODIFIED
	_OR STRUCTURE COVER, ADJ, CASE 2, MODIFIED
	_WATER SHUTOFF, ADJ, CASE 1, MODIFIED
	_WATER SHUTOFF, ADJ, CASE 2, MODIFIED
	ADJUST WITH NEW CASTING
	ADJUST BY OTHERS
	_HYDRANT ADJUST
	RELOCATE UTILITY

SURFACING PROPOSED

	HMA APPROACH
	6" CONCRETE SIDEWALK
	8" CONCRETE SIDEWALK
	8" CONCRETE PAVEMENT (INTERSECTIONS AT MARQUETTE AND DALZELLE)

GROUND SECTION

	PLANTING SECTION (SEE LANDSCAPE PLANS)
	SLOPE RESTORATION, NON-FREEWAY, TYPE A (SEE LANDSCAPE PLANS FOR TOPSOIL AND SEEDING)

TYPICAL SECTION

	REMOVAL
	HMA PROPOSED

PROPOSED FURNISHING

	TREE GRATE
--	------------

GRAPHIC SYMBOLS

	SECTION CUT LINE		ELEVATION, SECTION AND DETAIL DESIGNATION		EXTERIOR ELEVATION TAG		ENLARGED DETAIL FRAME
	NORTH ARROW DESIGNATION		PLAN DESIGNATION FLOOR PLAN		INTERIOR ELEVATION TAG		
	ROOM NAME AND NUMBER		ELEVATION TARGET		WALL TYPE TAG		
	DOOR NUMBER		ELEVATION TAG		SIGNAGE TAG		
	BULLETIN IDENTIFICATION		SKETCH IDENTIFICATION		FINISH TAG		
	ADDENDUM IDENTIFICATION		BARRIER FREE LOCATION		KEY NOTE TAG		
			DEMOLITION NOTE TAG				

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Designer	AOF
Reviewer	DPE
Manager	KK3

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GENERAL NOTES

1. PRIOR TO CONSTRUCTION ALL FENCING, BARRICADES, ENCLOSURES, ETC., MUST BE INSTALLED AND APPROVED BY OWNER OR CONSTRUCTION MANAGER.
2. DISPOSE OF DEMOLITION AND EXCAVATION MATERIALS IN ACCORDANCE WITH CONTRACT DOCUMENTS.
3. UNLESS SPECIFICALLY NOTED FOR REMOVAL ON THE PLANS, ALL SIDEWALKS, DRIVES, CULVERTS, DRAINAGE STRUCTURES, AND ABOVE AS WELL AS BELOW GRADE UTILITIES SHALL BE PROTECTED. ALL SUCH ITEMS DAMAGED OR DESTROYED DURING CONSTRUCTION SHALL BE REMOVED AND REPLACED WITH NEW AT NO ADDITIONAL COST TO THE OWNER.
4. PROTECT EXISTING TREES TO REMAIN WITH TEMPORARY FENCING AT THE DRIP LINE. NO GROUND DISTURBANCE OR STORAGE OF MATERIAL/EQUIPMENT SHALL OCCUR WITHIN THE DRIP LINE LIMITS.
5. ELECTRICAL, TELEPHONE, CABLE TV, WATER, FIBER OPTIC CABLE AND/OR GAS LINES NEEDING TO BE REMOVED OR RELOCATED SHALL BE COORDINATED WITH THE AFFECTED UTILITY COMPANY. ADEQUATE TIME SHALL BE PROVIDED FOR RELOCATION AND CLOSE COORDINATION WITH THE UTILITY COMPANY IS NECESSARY TO PROVIDE A SMOOTH TRANSITION IN UTILITY SERVICE. PAY CLOSE ATTENTION TO EXISTING UTILITIES WITHIN THE CONSTRUCTION LIMITS. GIVE NOTICE TO ALL UTILITY COMPANIES REGARDING DESTRUCTION AND REMOVAL OF ALL SERVICE LINES AND CAP ALL LINES BEFORE PROCEEDING WITH THE WORK.
6. THE LOCATIONS OF ALL EXISTING UTILITIES SHOWN ON THIS DRAWING HAVE BEEN DETERMINED FROM THE BEST INFORMATION AVAILABLE AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. VERIFY CRITICAL INVERT INFORMATION PRIOR TO BEGINNING CONSTRUCTION.
7. DAMAGE CAUSED TO SURROUNDING AREA PAVEMENT OUTSIDE THE CONSTRUCTION LIMITS SHALL BE SAWCUT AND REPLACED AT NO ADDITIONAL COST TO THE OWNER.
8. SAWCUT CURB AND GUTTER AND SIDEWALKS TO NEAREST JOINT.
9. SECURE AND COMPLY WITH ALL REQUIREMENTS OF ALL PERMITS REQUIRED FOR THIS WORK.
10. COORDINATE ALL CONSTRUCTION ACTIVITIES, INCLUDING HOURS OF OPERATION, WITH THE CITY OF DETROIT.
11. MAINTAIN ACCESS TO ADJACENT PROPERTIES AT ALL TIMES DURING CONSTRUCTION. PROVIDE TEMPORARY ACCESS PATHS, FENCING, SIGNAGE, AND ALL NECESSARY ITEMS TO ENSURE A SAFE AND CLEARLY DEFINED ACCESS PATH.
12. ALL CONSTRUCTION STAGING, MATERIALS STORAGE, CONSTRUCTION WASHING STATIONS, PROJECT MOCK-UP AREAS, AND ALL ASSOCIATED NEEDS ARE THE RESPONSIBILITY OF THE CONTRACTOR. ALL LABOR, MATERIALS AND EQUIPMENT ASSOCIATED WITH THESE ITEMS SHALL BE PROVIDED AS PART OF THE DEMOLITION PAY ITEMS. THE CONTRACTOR SHALL OBTAIN APPROVAL FROM ENGINEER FOR ALL CONSTRUCTION ACCESS POINTS. THE USE OF ADJACENT STREET R.O.W. WILL NOT BE PERMITTED FOR MATERIAL STAGING, STOCK PILING AND CONTRACTOR PARKING WITHOUT PRIOR WRITTEN CONSENT.
13. FOR PROTECTION OF UNDERGROUND UTILITIES AND CONFORMANCE WITH PUBLIC ACT 53, AS AMENDED, THE CONTRACTOR SHALL CALL "MISS DIG" AT 1-800-482-7171 A MINIMUM OF THREE FULL WORKING DAYS (72 HOURS), EXCLUDING SATURDAYS, SUNDAYS, AND HOLIDAYS, PRIOR TO BEGINNING CONSTRUCTION ACTIVITIES INCLUDING EACH EXCAVATION IN AREAS WHERE PUBLIC UTILITIES HAVE NOT BEEN PREVIOUSLY LOCATED. "MISS DIG" MEMBERS WILL THIS BE ROUTINELY NOTIFIED. THIS DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF NOTIFYING UTILITY OWNERS WHO MAY NOT BE A PART OF THE "MISS DIG" ALERT SYSTEM.
14. EXISTING SURVEY MONUMENTS SHALL BE PROTECTED DURING CONSTRUCTION OPERATIONS. IN THE EVENT EXISTING MONUMENTS ARE DISTURBED DURING CONSTRUCTION, THE MONUMENTS SHALL BE RESTORED TO PRE-CONSTRUCTION CONDITION AND PER CITY OF DETROIT SURVEY BUREAU REQUIREMENTS AT NO COST TO THE OWNER. NOTIFY CITY OF DETROIT SURVEY BUREAU OF ANY DISTURBED OR RESET MONUMENTS.
15. ANY MISCELLANEOUS LITTER AND DEBRIS INCLUDING SUCH ITEMS BUT NOT LIMITED TO: FOUNDATION AND ATTACHMENTS, TREE STUMPS AND ROOT STRUCTURES, PAVEMENT BASE MATERIAL, ABANDONED FENCES, ABANDONED PIPES, CONSTRUCTION DEBRIS, TRASH, ETC. IDENTIFIED ON THE PLANS AND ENCOUNTERED WITHIN THE PROJECT LIMITS SHALL BE REMOVED AND DISPOSED OF LEGALLY OFF-SITE BY THE CONTRACTOR. ALL LABOR, MATERIALS AND EQUIPMENT REQUIRED TO COMPLETE THIS WORK SHALL BE PAID AS PART OF THE PAY ITEM LITTER AND DEBRIS, REM.
16. SAW CUT LINES FOR NEW PAVEMENT SHALL BE CUT STRAIGHT LEAVING A CONSISTENT SMOOTH EDGE ALONG THE EXISTING PAVEMENT TO REMAIN. NEW PAVEMENT TO DIRECTLY ADJUT EXISTING PAVEMENT TO REMAIN, IF NECESSARY OR AS DIRECTED BY THE ENGINEER RE-SAW CUT THE PAVEMENT IF THE EDGE OF THE PAVEMENT IS DAMAGED BY CONSTRUCTION ACTIVITIES. ADDITIONAL SAW CUTS AND THE REQUIRED ADDITIONAL PAVEMENT REPLACEMENT IS INCLUDED AS PART OF THE ORIGINAL PAY ITEM AND SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER.

DEMOLITION & EROSION CONTROL NOTES

1. MAINTAIN AND REPAIR ALL SESC BEST MANAGEMENT PRACTICES BMPs DURING CONSTRUCTION UNTIL ALL VEGETATION IS ESTABLISHED, (ALL DISTURBED SOIL SURFACES ARE UNIFORMLY COVERED IN PERMANENT VEGETATION WITH A DENSITY OF 70% OR GREATER, OR AS DEFINED BY PERMIT.)
2. PERFORM ALL EARTH-DISTURBING CONSTRUCTION ACTIVITIES WITHIN THE LIMITS OF DISTURBANCE AS INDICATED ON THE DRAWINGS.
3. REVIEW THE LIMITS OF DISTURBANCE SHOWN ON THE DRAWINGS AND FIELD-STAKING THE LIMIT OF DISTURBANCE LINE PRIOR TO THE START OF CONSTRUCTION AND/OR CONTRACTORS OPERATIONS AT NO ADDITIONAL COST TO OWNER.
4. INSTALL PERIMETER EROSION AND SEDIMENT CONTROL MEASURES PRIOR TO THE START OF ANY LAND CLEARING OR GRADING ACTIVITIES.
5. APPLY TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES AS SHOWN ON THE DRAWINGS AND/OR AS REQUIRED BY SESC PERMIT AND IMPLEMENT ADDITIONAL MEASURES AS DICTATED BY SITE CONDITIONS.
6. ENSURE THAT ANY SEDIMENTATION RESULTING FROM WORK ON THIS SITE IS CONTAINED ON THE SITE AND NOT ALLOWED TO COLLECT ON ANY OFF-SITE AREAS OR IN WATERWAYS.
7. THE EXTENT OF REMOVALS AND DEMOLITION SHALL BE FIELD VERIFIED BY CONSTRUCTION MANAGER PRIOR TO CONSTRUCTION. NOTIFY ENGINEER OF ANY DEVIATIONS FROM INFORMATION SHOWN.

SITE LAYOUT NOTES

1. DIMENSIONS ARE TO BACK OF CURB, OUTSIDE FACE OF BUILDING, AND EDGE OF PAVEMENT UNLESS NOTED OTHERWISE.
2. KEEP THE APPROVED AND/OR MOST CURRENT SET OF PROJECT DRAWINGS ON SITE AT ALL TIMES. CONTRACTOR TO CONFIRM THEY ARE IN POSSESSION OF THE MOST CURRENT DRAWING FILES.

GRADING NOTES

1. FINISH GRADE OF SOIL EDGES ALONG PAVEMENT TO MATCH EDGE OF PAVEMENT.
2. GRADES SHOWN ARE FINAL SURFACE GRADES AFTER COMPLETION OF SURFACE IMPROVEMENTS AND PLACEMENT OF TOPSOIL.
3. GRADE AREAS AT SITE PERIMETER TO MATCH GRADES OF ADJACENT PARCELS.
4. REMOVE EXCESS SOIL FROM SITE AND DISPOSE OF PROPERLY IN ACCORDANCE WITH APPLICABLE REGULATIONS.
5. PROVIDE DRAINAGE AWAY FROM ALL PAVED SURFACES AS SHOWN ON THE DRAWINGS OR AS DIRECTED BY THE ENGINEER. ENSURE ALL AREAS WILL PROPERLY DRAIN TO NEAREST INLET WITHOUT STANDING OR PONDING WATER.
6. NOTIFY THE ENGINEER OF ANY DISCREPANCIES BETWEEN THE SURFACE GRADES AND THE ACTUAL SITE ELEVATIONS. ANY AREAS OF POOR DRAINAGE OR INADEQUATE DRAINAGE FROM PROPOSED IMPROVEMENTS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER AND SHALL BE MODIFIED AS REQUIRED AND APPROVED.
9. MEET EXISTING GRADE WITHIN THE ROADWAY AT THE SAW CUT LINE.
10. PROVIDE MINIMUM CROSS-SLOPE OF 1%, MAXIMUM CROSS-SLOPE OF 2%, AND MAXIMUM LONGITUDINAL SLOPE OF 5% (EXCEPT WHERE NOTED) ON SIDEWALKS (INCLUSIVE OF ALL SPECIFIED TOLERANCES).
11. GRADE ALL PAVEMENT SURFACES UNIFORMLY BETWEEN SPOT ELEVATIONS NOTED ON THE PLANS. (EXCEPT WHERE NOTED OTHERWISE)
12. ALL PERMANENT IMPROVEMENTS SHALL BE LOCATED WITHIN CITY OF DETROIT PROPERTY, GREENWAY EASEMENTS, AND/OR PUBLIC RIGHT-OF-WAY.
13. SPOT ELEVATIONS NOTED FOR ADA SIDEWALK RAMPS ARE REFERENCE POINTS ONLY. THE ADA SIDEWALK RAMPS TO BE FIELD VERIFIED AND SHALL BE IN ACCORDANCE WITH MDOT SIDEWALK RAMP AND DETECTABLE WARNING DETAILS PER STANDARD PLAN R-28 (LATEST EDITION) WITH CITY OF DETROIT THICKNESS AMENDMENT.
14. GRADE LONGITUDINAL GUTTER SLOPES UNIFORMLY BETWEEN SPOT ELEVATIONS AND AS ILLUSTRATED WITH DRAINAGE ARROWS ON THE PLANS. ENSURE PROPER DRAINAGE IS MAINTAINED ACROSS AND AWAY FROM ALL SIDEWALK AND RAMPS TO ENSURE WATER DOES NOT POND AT THE BASE OF THE RAMPS. ANY AREAS OF POOR DRAINAGE OR INADEQUATE DRAINAGE SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER AND SHALL BE MODIFIED AS REQUIRED AND APPROVED. GRADING MODIFICATIONS SHALL BE PROVIDED AT NO ADDITIONAL COST AND IS INCIDENTAL TO DEMOLITION AND GRADING PAY ITEMS.
15. REFERENCE CURB TRANSITIONS NOTED ON GRADING PLANS, AT SIDEWALK, ADA RAMPS, AND ADJACENT TO DRIVEWAY/ALLEY APPROACHES. CURB TRANSITIONS SHALL BE MADE UNIFORMLY WITHOUT ABRUPT CHANGES OR IRREGULARITIES. ENSURE THAT THE TOP OF CURB ELEVATION IS THE SAME AT INTERSECTIONS WITH DIFFERENT CURB TYPES AND EXISTING CURBS.
16. CONTRACTOR TO VERIFY ALL EXISTING SPOT ELEVATIONS ALONG LIMITS OF EXISTING AND NEW PAVEMENT WHERE THE GRADING PLANS NOTE MEET EXISTING (M.E.). NOTIFY THE ENGINEER OF ANY INCONSISTENCIES, DRAINAGE ISSUES, OR SLOPE DISCREPANCIES.
17. TOP OF LIGHT POLE FOUNDATIONS SHALL BE 6 INCHES HIGHER THAN FINISH GRADE IN LAWN/LANDSCAPE AREAS AND 3 INCHES HIGHER THAN ADJACENT FINISH GRADE IN PAVED AREAS. REFER TO SPOT ELEVATIONS NOTED ON GRADING PLANS. COORDINATE AND ADJUST TOP OF LIGHT POLE FOUNDATION ELEVATIONS TO COORDINATE WITH ALL APPROVED GRADING MODIFICATIONS AS REFERENCED IN NOTES.
18. TREE GRATES AND FRAMES SHALL BE SET WITH A UNIFORM SLOPE IN ONE DIRECTION CONSISTENT WITH THE ADJACENT PAVEMENT GRADES. DO NOT WRAP OR UNEVENLY DROP ONE OR MORE CORNERS OF THE TREE GRATES AND FRAMES. ENSURE THE TREE GRATES ARE SET FLUSH AND EVEN WITH THE FRAME AND ADJACENT CONCRETE.

SIGNAGE & STRIPING NOTES

1. ALL SIGNAGE AND STRIPING SHOWN ON THESE PLANS SHALL BE COORDINATED WITH THE CITY OF DETROIT TRAFFIC ENGINEERING DIVISION AND PER THE REQUIREMENTS OF THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MMUTCD) LATEST EDITION EXCEPT AS AMENDED BY SPECIAL PROVISIONS.
2. SIGN PLACEMENT SHALL BE INSTALLED TO PROVIDE A MINIMUM OF 2'-0" OF CLEARANCE FROM THE FACE OF CURB TO THE CLOSEST EDGE OF THE FACE OF THE SIGN OR AS DIRECTED BY THE DETROIT TRAFFIC ENGINEERING DIVISION.
3. PLACEMENT OF REGULATORY AND ADVANCE WARNING SIGNS TO BE COORDINATED WITH CITY OF DETROIT TRAFFIC ENGINEERING DIVISION.
3. LAYOUT OF ALL PAVEMENT MARKINGS AND SIGNAGE SHALL BE STAKED BY THE CONTRACTOR FOR CITY OF DETROIT TRAFFIC ENGINEERING DIVISION APPROVAL IN ADVANCE OF INSTALLATION.
4. EXISTING LIGHT POLES, TRAFFIC POLES, AND FREESTANDING POLES THAT ARE TO REMAIN HAVE EXISTING STREET SIGNS AND TRAFFIC SIGNS THAT SHALL BE PROTECTED AND REMAIN IN PLACE. THE CONTRACTOR SHALL REPLACE ANY SIGNAGE THAT IS TO REMAIN AT NO ADDITIONAL COST IF THE SIGN IS REMOVED OR DAMAGED DURING CONSTRUCTION.
5. ANY SIGNS REQUIRED TO BE REMOVED FOR CONSTRUCTION PURPOSES SHALL BE SALVAGED AND STORED BY THE CONTRACTOR, AND RE-INSTALLED FOLLOWING CONSTRUCTION ACTIVITIES UNLESS NOTED OTHERWISE ON THE PLANS OR AS AMENDED BY SPECIAL PROVISIONS. CONTRACTOR SHALL REPLACE AT NO ADDITIONAL COST ANY SIGN THAT IS DAMAGED BY CONSTRUCTION ACTIVITIES.
6. MODIFICATIONS AND/OR REMOVALS OF EXISTING SIGNS TO BE COORDINATED WITH AND COMPLETED UNDER THE DIRECTION OF THE CITY OF DETROIT TRAFFIC ENGINEERING DIVISION.
7. CROSSWALK STRIPING SHALL ALIGN WITH AND CENTER ON THE SIDEWALK ADA RAMPS UNLESS OTHERWISE SHOWN. FIELD VERIFY THE ALIGNMENT WITH ENGINEER PRIOR TO INSTALLATION.
8. ALL PAVEMENT MARKINGS AND SYMBOLS SHALL BE CENTERED IN EACH LANE UNLESS OTHERWISE SHOWN.
9. ALIGN ALL SIGN FACES PERPENDICULAR TO CENTERLINE OF ROAD AND SHARED USE PATH AS SHOWN ON PLANS

UTILITY NOTES

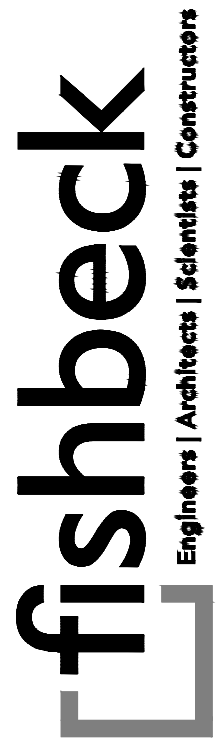
1. EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE.
2. VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF EXISTING UTILITIES PRIOR TO EXCAVATION WHERE NECESSARY TO AVOID SCHEDULE RISKS.
3. PROTECT AND MAINTAIN SERVICE OF OTHER UTILITIES AT CROSSINGS.
4. DO NOT CONNECT ROOF DRAINS, FOUNDATION DRAINS, AND OTHER CLEAN WATER SERVICES TO THE SANITARY SEWER.
5. PROVIDE AND MAINTAIN INLET FILTERS AT ALL CATCH BASIN INLETS, DURING CONSTRUCTION.
6. PROVIDE A MINIMUM OF EIGHTEEN (18) INCHES OF VERTICAL SEPARATION AND TEN (10) FEET OF HORIZONTAL SEPARATION BETWEEN THE WATER MAIN AND ALL SANITARY AND STORM SEWERS.
7. ADJUST ALL CASTINGS TO FINISH GRADES.
8. PIPE LENGTHS ARE TO CENTER OF STRUCTURES UNLESS NOTED OTHERWISE. ALL PIPE LENGTHS ARE FOR THE CONVENIENCE OF THE CONTRACTOR.
9. STORM SEWER WORK INDICATED ON THESE DRAWINGS SHALL REQUIRE A DETROIT WATER AND SEWERAGE DEPARTMENT (DWS) PERMIT TO BE OBTAINED BY THE CONTRACTOR. NOTIFY AND COORDINATE WITH MOHAMED BOUDAL PERMIT INSPECTOR (313-267-1375) A MINIMUM OF 48 HOURS PRIOR TO THE INITIATION OF STORM SEWER CONSTRUCTION WORK.
10. IN COMPLIANCE WITH PUBLIC ACT 53 OF THE STATE OF MICHIGAN (EFFECTIVE) AUGUST 1, 1974, AS AMENDED, NOTIFY IN ADVANCE OF CONSTRUCTION (72 HOURS/ 3 WORKING DAYS) ALL PUBLIC AND PRIVATE UTILITY PROVIDERS HAVING FACILITIES IN OR NEAR THE IMMEDIATE WORKING AREA. FOR CONVENIENCE THEY ARE IDENTIFIED ON THE ENCLOSED UTILITY PROVIDER LIST. THE LISTING DOES NOT, HOWEVER, RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF VERIFYING THE UTILITY LOCATIONS AND NOTIFYING ALL UTILITY OWNERS AND MISS DIG (1-800-482-7171).
11. ALL WORK TO BE LAID OUT PER STATION (STA) AND OFFSET (OFF) FROM HORIZONTAL CONTROL ALIGNMENT. OFFSETS FOR DRAINAGE STRUCTURES ARE TO BE CENTER OF STRUCTURE.
12. REPLACE SIDEWALKS, CURBS AND PAVEMENT DISTURBED AS PART OF UTILITY WORK OR OTHER CONSTRUCTION ACTIVITIES AND MATCH EXISTING CONDITIONS. PAVEMENT REMOVAL, TRENCHING, BACKFILL, PAVEMENT REPLACEMENT AND OTHER ASSOCIATED WORK AND MATERIALS REQUIRED FOR THE ADJUSTMENT, REMOVAL, REPLACEMENT AND INSTALLATION THAT IS NOT SHOWN ON THE DEMOLITION PLANS OR MATERIAL PLANS SHALL BE INCIDENTAL TO THE UTILITY LINE AND/OR STRUCTURE PAY ITEM.
13. UTILITY ADJUSTMENTS REQUIRED TO COMPLETE THE PROJECT ARE TO BE COORDINATED BY THE CONTRACTOR WITH THE INDIVIDUAL UTILITY PROVIDERS.
14. REVIEW, PERMIT AND INSPECTION FEES REQUIRED TO PERFORM THE UTILITY WORK SHALL BE COORDINATED BY THE CONTRACTOR AND SHALL BE INCLUDED IN THE BID.
15. ADJUST ALL SEWER, WATER AND ELECTRICAL STRUCTURES OR INFRASTRUCTURE AS INDICATED ON DRAWINGS. COORDINATE WITH APPROPRIATE CITY DEPARTMENTS AS NECESSARY.
16. COORDINATE ADJUSTMENT OF ALL GAS, STEAM, FIBER AND COMMUNICATION STRUCTURES OR INFRASTRUCTURE WITH APPROPRIATE UTILITY PROVIDER. APPROPRIATE UTILITY PROVIDER TO MAKE ANY ADJUSTMENTS TO GAS, STEAM, FIBER AND COMMUNICATION STRUCTURES AS NECESSARY.
17. RELOCATION OF UTILITY POLES TO BE COORDINATED WITH DETROIT PUBLIC LIGHTING AUTHORITY (PLA) AND DTE ENERGY.
18. ALL SEWER MANHOLES SHALL BE PRECAST CONCRETE IN ACCORDANCE WITH ASTM C478 WITH ECCENTRIC CONE OR FLAT-SLAB-TOP AS INDICATED.
19. PIPE CONNECTORS AT MANHOLES TO BE IN ACCORDANCE WITH ASTM C923, OR PER PIPE MANUFACTURER'S AND DWSO SPECIFICATIONS.
20. SEWER PIPE TO BE REINFORCED CONCRETE PIPE CONFORMING TO ASTM C76, CLASS IV, WALL B, MINIMUM INSIDE DIAMETER TO BE 8 INCHES OR PVC, ASTM D3034, SDR26 FOR SIZES 8 INCHES AND SMALLER.
21. PROPOSED INVERT FOR NEW SEWER CONNECTIONS TO EXISTING PIPES NOT AT EXISTING MANHOLES ARE ESTIMATED. VERIFY INVERT ELEVATIONS IN THE FIELD PRIOR TO THE START OF CONSTRUCTION.
22. EXISTING OUTLET SEWER INVERT ELEVATIONS TO BE FIELD VERIFIED.
23. EXTENSIONS OF EXISTING SEWER PIPE TO BE PERFORMED USING PIPE MATERIALS AND DIAMETERS TO MATCH THE EXISTING SEWER.
24. FOR ALL DIRECT TAPS TO EXISTING STRUCTURES, FIELD CORE DRILL EXISTING STRUCTURE TO ACCOMMODATE PROPOSED PIPE SIZE. GROUT PIPE OPENING TO BE WATERTIGHT.
25. ALL MANHOLE AND CATCH BASIN COVERS SHALL BE BOLTED DOWN.
26. PROTECT EXISTING IRRIGATION SPRINKLER HEADS DURING EXCAVATION.

TRAFFIC SIGNAL NOTES

1. CALL MISS DIG AT 811 OR (800) 482-7171 THREE WORKING DAYS PRIOR TO ANY EXCAVATION FOR THE LOCATIONS OF UNDERGROUND UTILITIES.
2. A MINIMUM CLEARANCE OF 3.0' HORIZONTAL & 1.0' VERTICAL MUST BE MAINTAINED BETWEEN D.P.W. FACILITIES & EXISTING U.G. FACILITIES, EXCEPT WATER WHICH REQUIRES A 3.5' HORIZONTAL CLEARANCE.
3. EXISTING O.H. & T.S. FACILITIES ARE NOT NECESSARILY SHOWN ON PLANS.
4. ALL OVERHEAD WIRES & UNDERGROUND CABLES SHALL CONSIST OF COPPER CONDUCTORS AS PER SPECIFICATIONS.
5. ALL NEW ANCHOR GUYS SHALL BE INSTALLED ON A 1:1 RATIO OR AS NEARLY AS POSSIBLE (EXCEPT WHERE OTHERWISE NOTED). (STRUT GUYS ARE EXCEPTED).
6. ARM GUYS SHALL BE SIEMENS-MARTIN GRADE. ANCHOR AND POLE GUYS SHALL BE EXTRA HIGH STRENGTH GRADE.
7. INSTALL WOOD POLES SO AS NOT TO INTERFERE WITH TRAFFIC OR FUTURE CONSTRUCTION STAGES.
8. ALL SALVAGED WOOD POLES DIRECTED TO BE INSTALLED SHALL BE POLES PREVIOUSLY INSTALLED NEW ON THE CONTRACT.
9. ALL TRAFFIC SIGNALS SHALL BE MOUNTED WITH NEW STANDARD TRAFFIC SIGNAL BRACKETS AND FITTINGS.
10. ALL TRAFFIC SIGNAL ITEMS, AS CALLED FOR ON PLANS, SHALL INCLUDE ALL CABLES FROM THE CONTROLLER TO THE TRAFFIC SIGNALS AS INDICATED.
11. EXERCISE CAUTION NOT TO DISTURB EXISTING CABLES WHEN ENTERING PROPOSED CONDUIT INTO EXISTING MANHOLES & HANDHOLES. WALLS SHALL BE CORE DRILLED FOR ENTRANCE OF CONDUITS.
12. FOR TRAFFIC SIGNAL SPAN WIRE USE 3/8" EXTRA HIGH STRENGTH GRADE AS PER SPECIFICATIONS.
13. SIDEWALK RAMPS SHALL BE CONSTRUCTED OF THE TYPE & LOCATION AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
14. SEAL CABLE ENDS WHERE COILING OF CABLE IS CALLED FOR ON PLANS. (CONTRACTOR SHALL RECEIVE PAYMENT FOR COILED-UP LENGTHS OF CABLE.)
15. PROPOSED TRAFFIC SIGNALS SHALL BE PUT INTO OPERATION AT TIME OF REMOVAL OF EXISTING TRAFFIC SIGNALS FACILITIES. CONTRACTOR SHALL NOTIFY D.P.W. INSPECTOR IF HE IS UNABLE TO MAINTAIN TRAFFIC SIGNALS IN AN OPERABLE CONDITION AT ALL TIMES.
16. WHERE INSTALLATION OF NEW MANHOLES OR HANDHOLES OVER EXISTING CONDUITS (TO ACCOMMODATE NEW AND EXISTING CONDUITS) IS CALLED FOR ON PLANS, CONTRACTOR SHALL CAREFULLY & SO AS NOT TO DAMAGE EXISTING CABLES. REMOVE THE EXISTING CONDUITS & ENCASEMENT WITHIN THE HANDHOLES. EXISTING CABLES SHALL BE EXTENDED AND PROPERLY TRAINED, RACKED & SUPPORTED.
17. WHERE ABANDONING OF U.G. CABLES IS CALLED FOR ON THE PLANS OR DIAGRAMS, CONTRACTOR SHALL CUT AND REMOVE CABLE WITHIN MANHOLES, HANDHOLES AND CONDUIT.
18. UNDERGROUND CABLE QUANTITIES ARE ITEMIZED ON THE GENERAL PLANS. ALL CABLES SHALL BE TAGGED IN ALL M.H.'S AND H.H.'S. THIS INCLUDES EXISTING CABLES THAT ARE RECONNECTED TO OTHER CIRCUITS OR RENDERED DEAD.
19. CONTRACTOR SHALL NOTIFY THE TRAFFIC ENGINEERING DIVISION AT (313) 224-1315 AFTER COMPLETING WORK AT ANY TRAFFIC SIGNAL INTERSECTION.
20. ALL CABLES SHALL BE TRAINED & PROPERLY RACKED IN ALL MANHOLES & HANDHOLES. RACKS ARE TO BE INSTALLED WHERE NECESSARY & ARE INCLUDED IN THE INSTALLATION OF UNDERGROUND CABLE.
21. ALL CONDUITS STUBBED OUT OF STRUCTURES SUCH AS MANHOLES, HANDHOLES OR FOUNDATION SHALL EXTEND 3' BEYOND THE PAVEMENT LIMIT (EXCEPT OTHERWISE INDICATED). ALL UNOCCUPIED CONDUITS SHALL BE PLUGGED WITH PLASTIC TAPERED PLUGS SIZED TO MATCH THE CONDUIT (CARLAN P258T OR EQUAL).
22. THE "FINAL" CONDUIT MUST BE TRIMMED FLUSH WITH THE STRUCTURE WALL AND HAVE END BELLS AND SPACERS AND BE TUCK POINTED. DO NOT ENCASE FINAL CONDUIT WITHOUT INSPECTION BY THE D.P.W. TRAFFIC ENGINEERING DIVISION INSPECTOR.
23. INSTALL 3/8" DIAMETER YELLOW POLYPROPYLENE ROPE IN ALL "FINAL" CONDUIT. (INCLUDED IN "CONDUIT" PAY ITEM).
24. CONDUIT TRENCHES SHALL BE EXCAVATED FROM MANHOLE TO MANHOLE TO ASSURE A CLEAR PASSAGE WITH PROPER GRADING PRIOR TO BUILDING ENCASED CONDUIT RUN.
25. CONDUIT DIRECTION TO BE MARKED IN THE FIELD UPON INSTALLATION, MARKING METHODOLOGY TO BE CONFIRMED WITH THE CITY OF DETROIT TRAFFIC ENGINEERING DEPARTMENT.

LANDSCAPE NOTES

1. REFER TO SHEET LAND001 FOR LANDSCAPE NOTES.



Engineers | Architects | Scientists | Constructors

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City of Detroit

15th Street Streetscape

REVISIONS

DATE	DESCRIPTION
02/10/2022	BIDS
01/28/2022	100% REVIEW
12/17/2021	90% REVIEW
10/29/2021	60% REVIEW
08/20/2021	30% REVIEW

Drawn By AOF
Designer AOF
Reviewer DPE
Manager KKS

Hard copy is intended to be 24"x36" when plotted. Scale(s) indicated and graphic quality may not be accurate for any other size.

PROJECT NO.

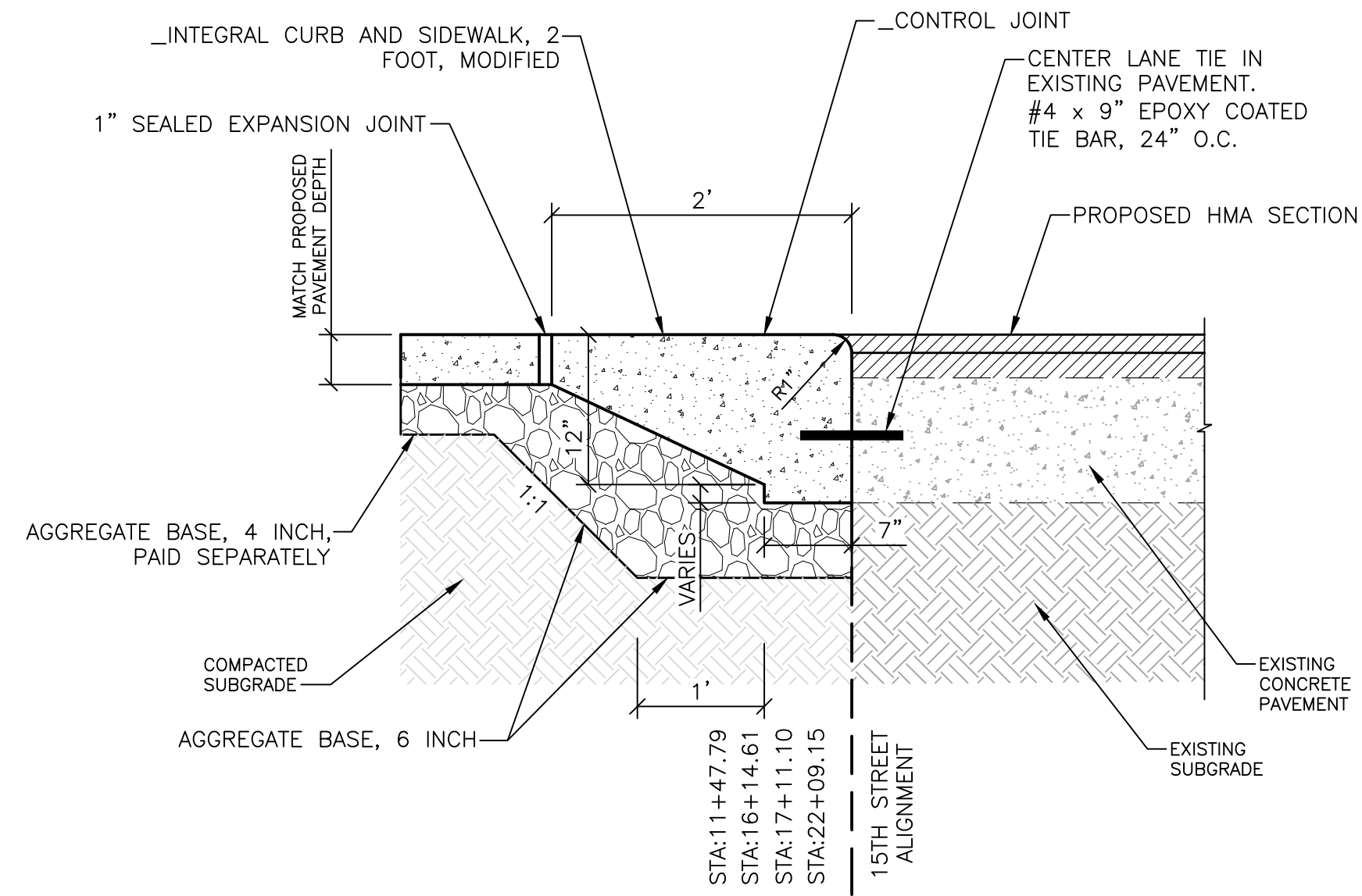
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SHEET NO.

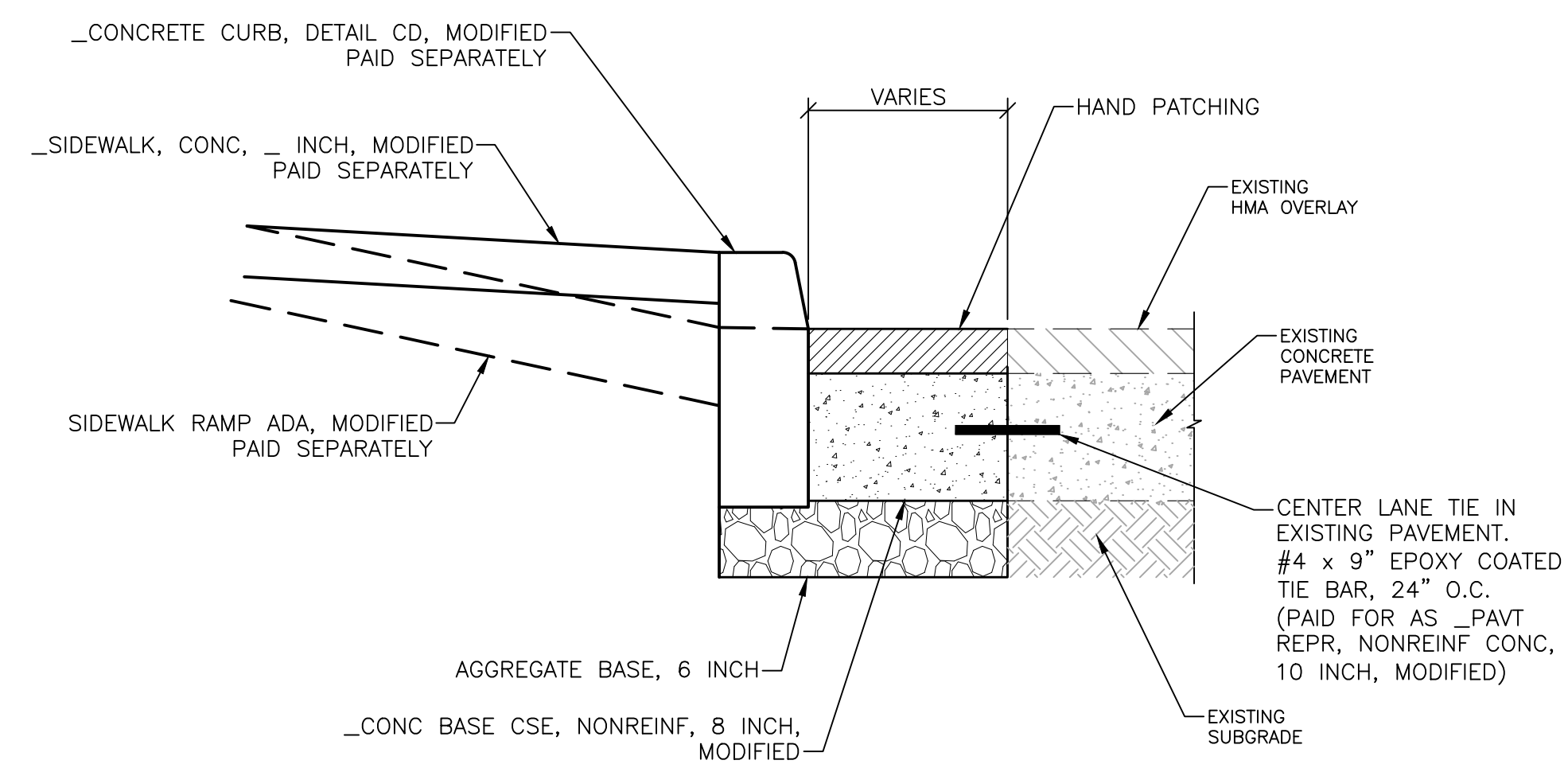
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NOTE001

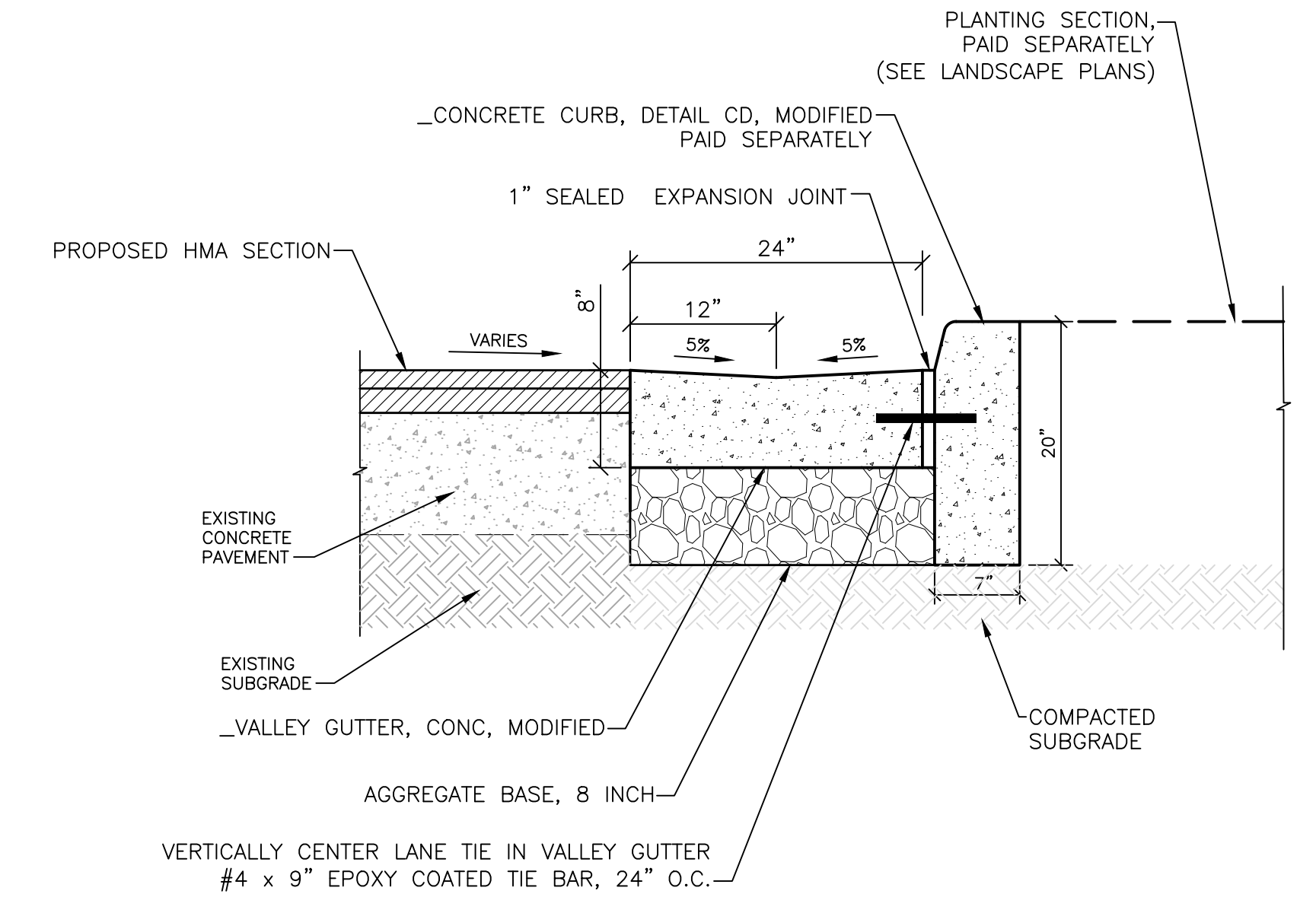
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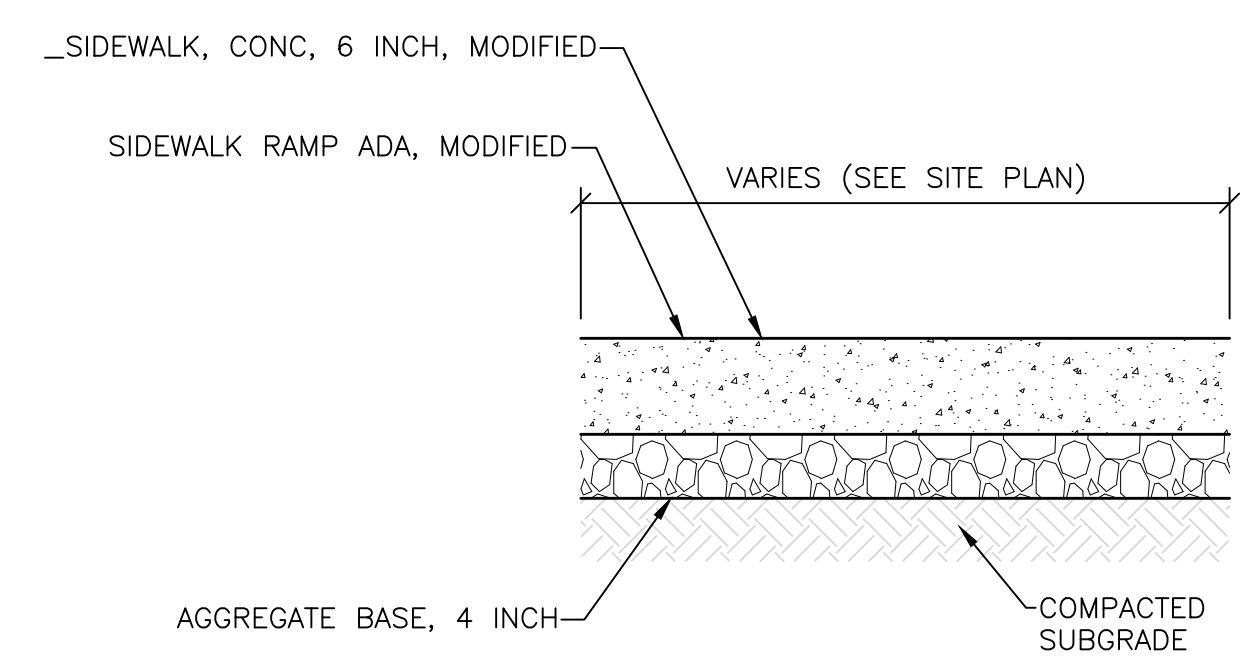
INTEGRAL CURB AND SIDEWALK, 2 FOOT, MODIFIED
NO SCALE



FULL DEPTH PAVEMENT REPAIR
NO SCALE
NOTE: CONCRETE BASE COURSE TO BE 10 INCHES AT 14TH ST.

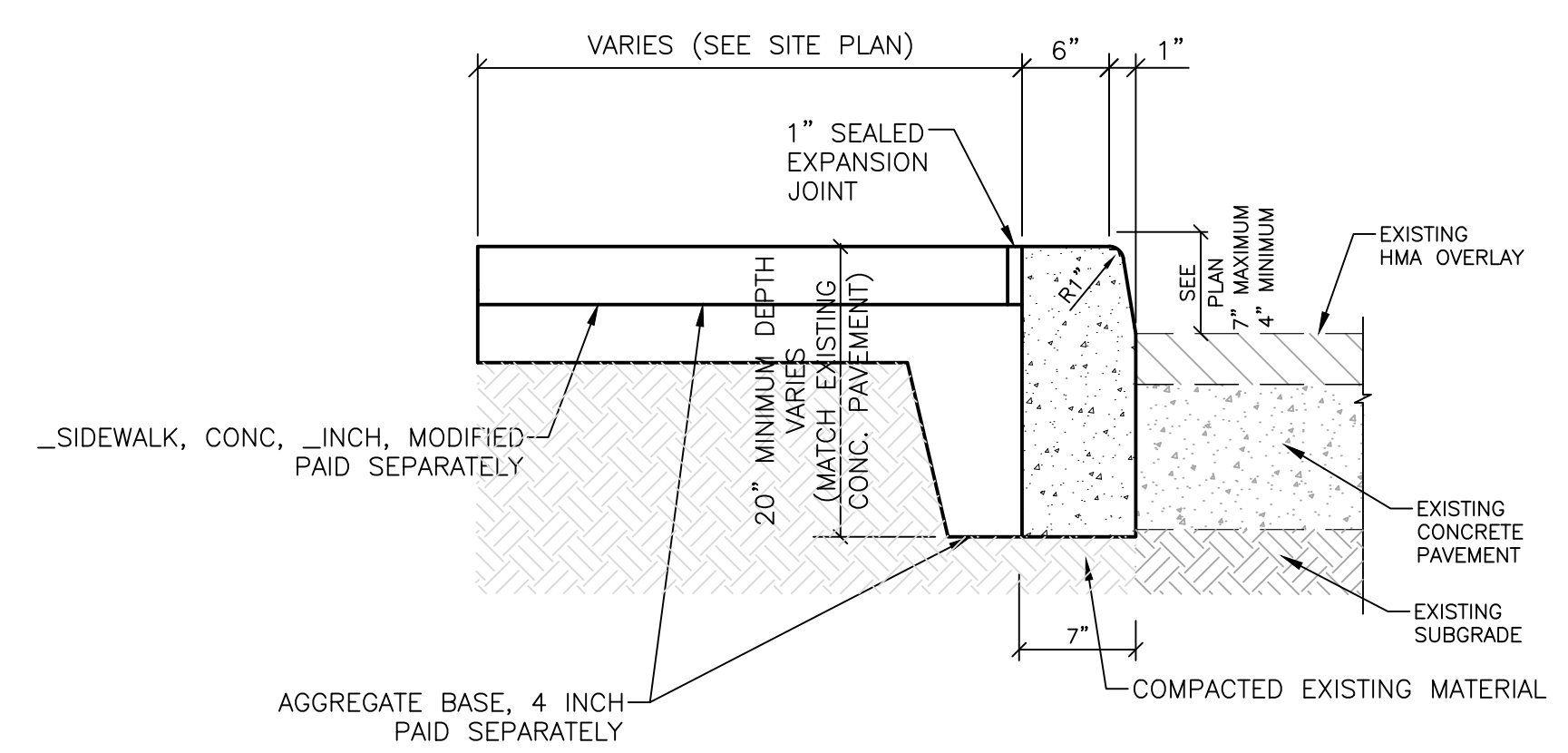


DETAIL AT CONCRETE CURB

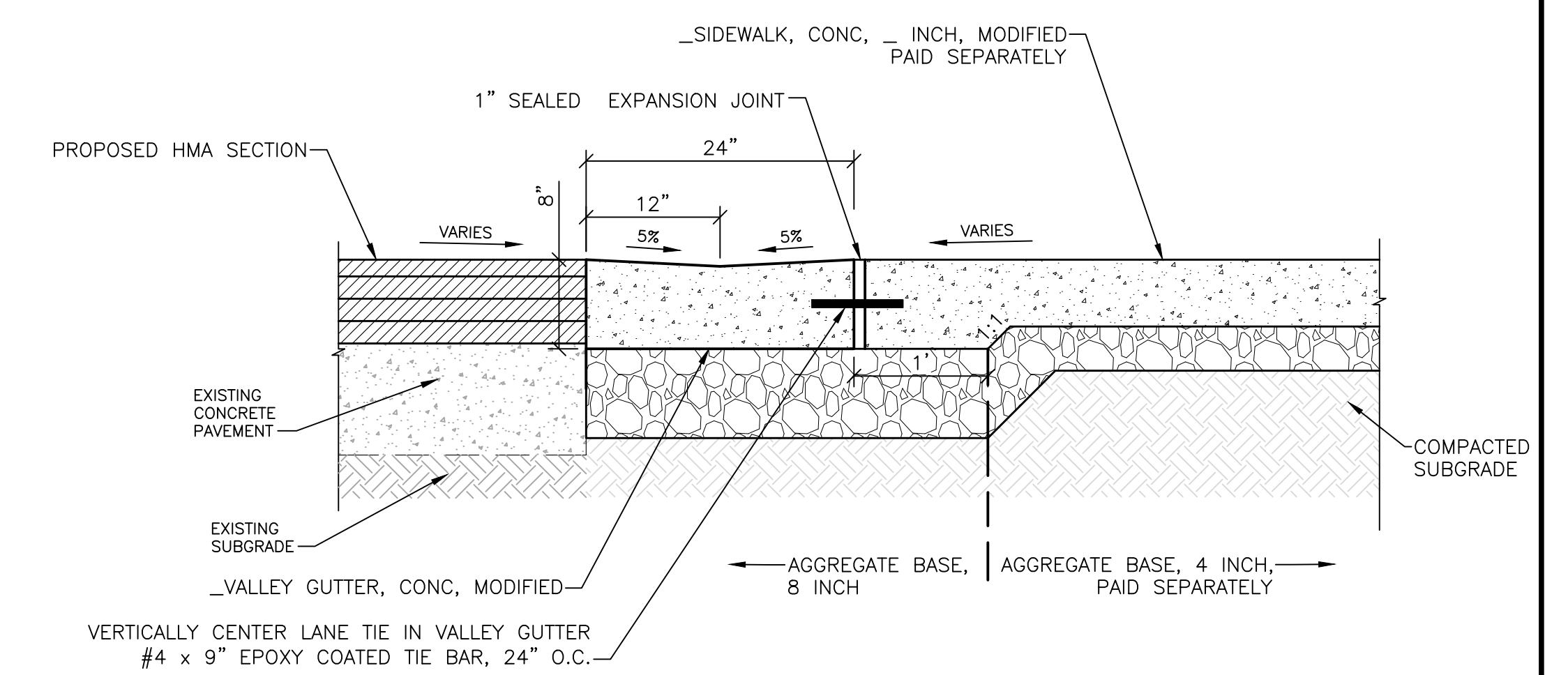


6 INCH SIDEWALK
NO SCALE

NOTE: REFER TO JOINTING PLANS FOR PAVEMENT JOINT TYPES AND LOCATIONS.

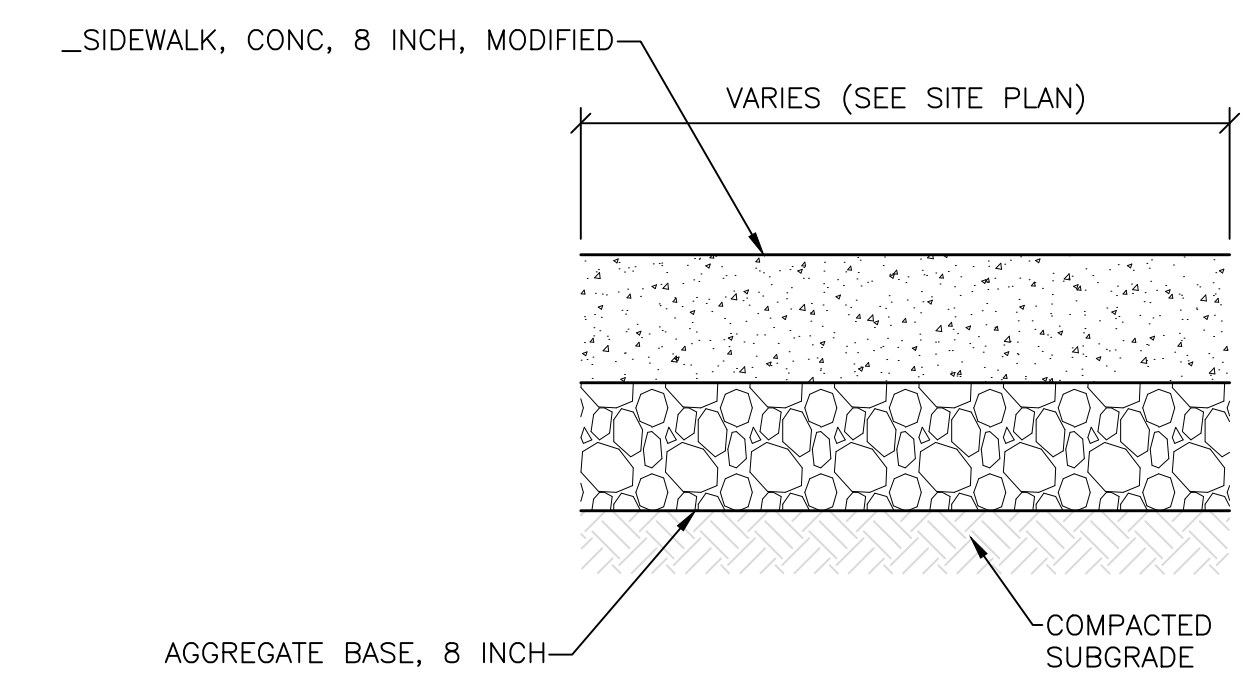


CONCRETE CURB, DETAIL CD, MODIFIED
NO SCALE



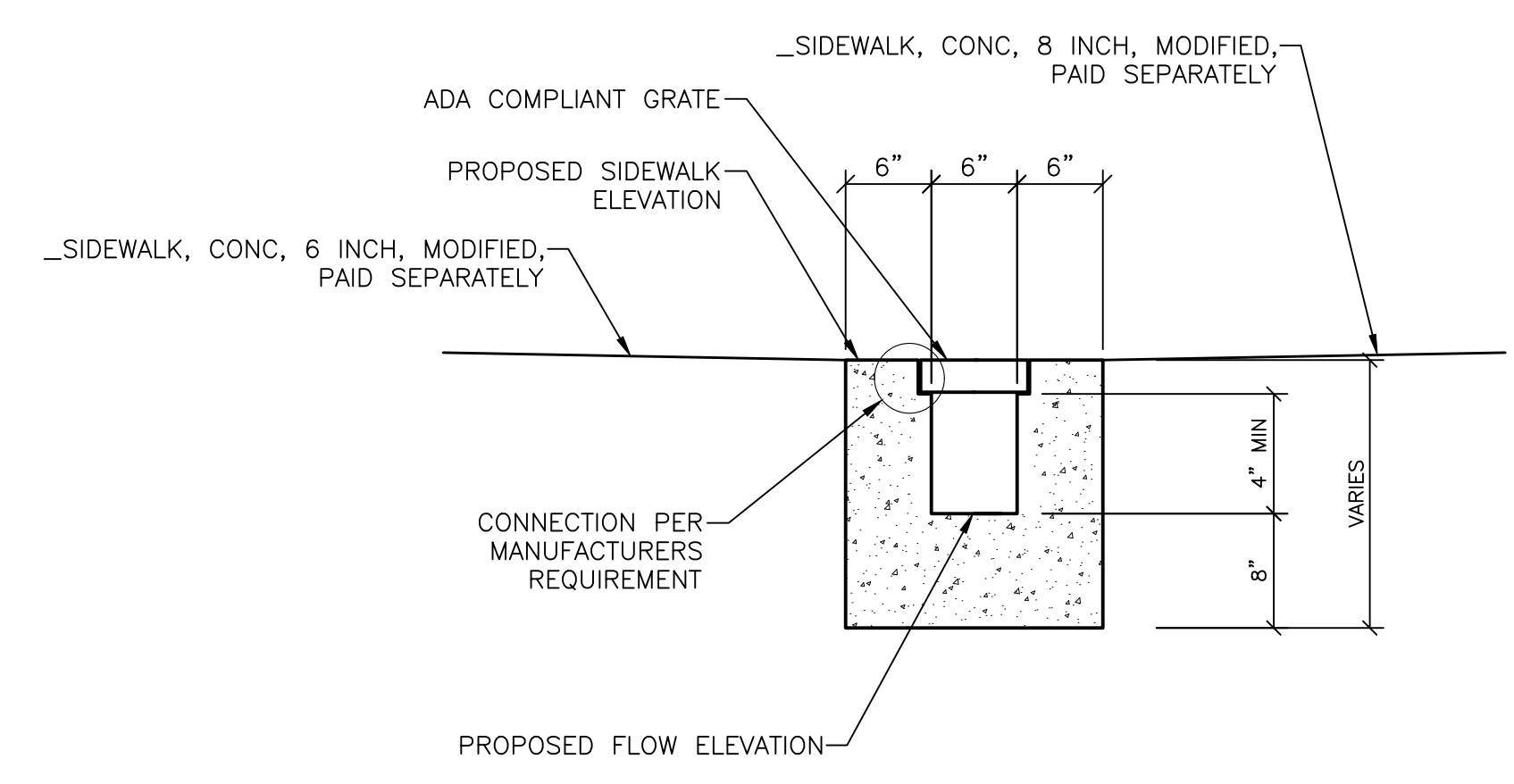
DETAIL AT CONCRETE SIDEWALK

VALLEY GUTTER, CONC, MODIFIED
NO SCALE



8 INCH SIDEWALK
NO SCALE

NOTE: REFER TO JOINTING PLANS FOR PAVEMENT JOINT TYPES AND LOCATIONS.



TRENCH DRAIN WITH ADA COMPLIANT GRATE DETAIL
NO SCALE

REVISIONS

02/10/2022	BIDS
01/28/2022	100% REVIEW
12/17/2021	90% REVIEW
10/29/2021	60% REVIEW
08/20/2021	30% REVIEW

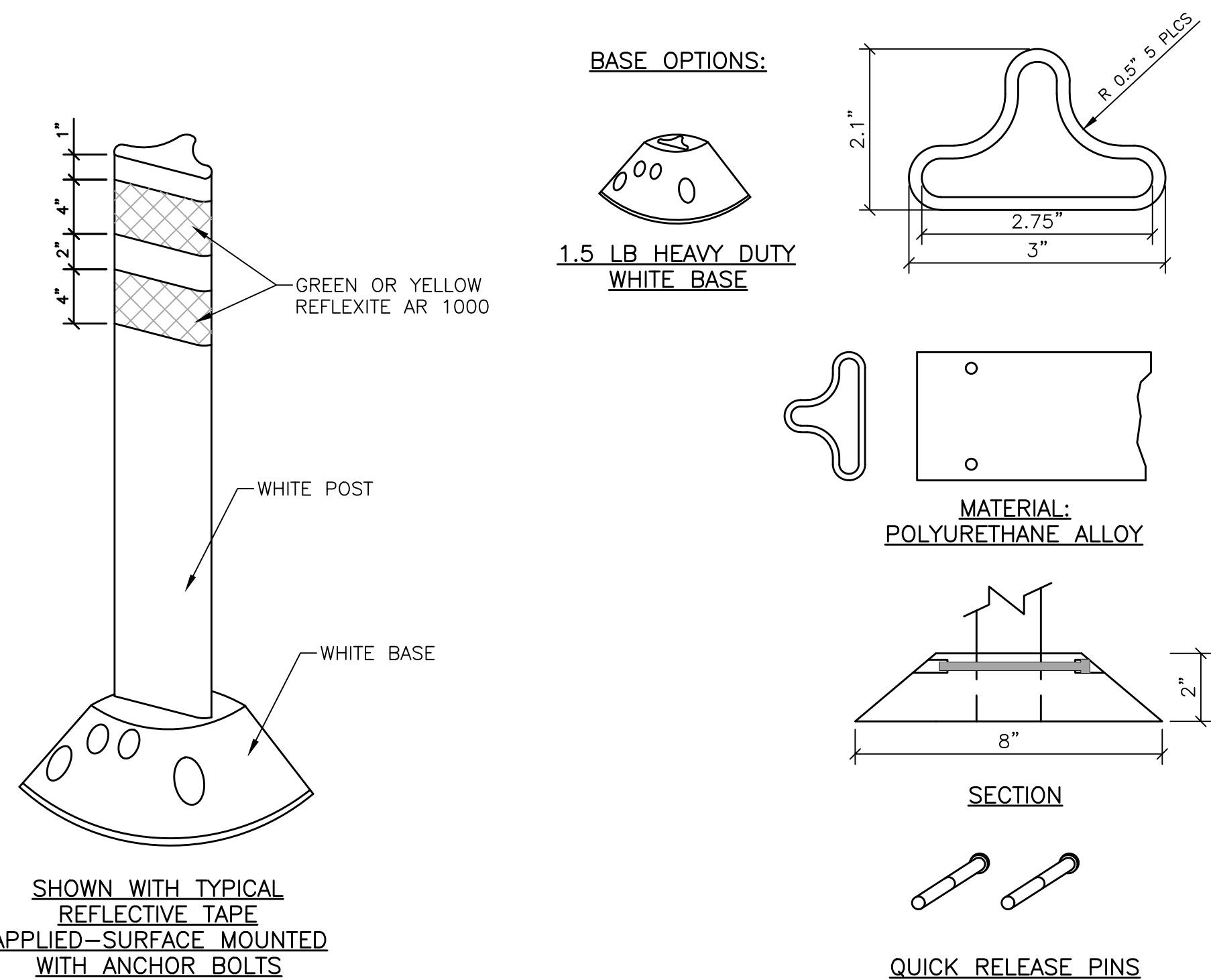
Drawn By AOF
Designer AOF
Reviewer DPE
Manager KKS

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PROJECT NO.
210828

SHEET NO.
5

MSCDET001

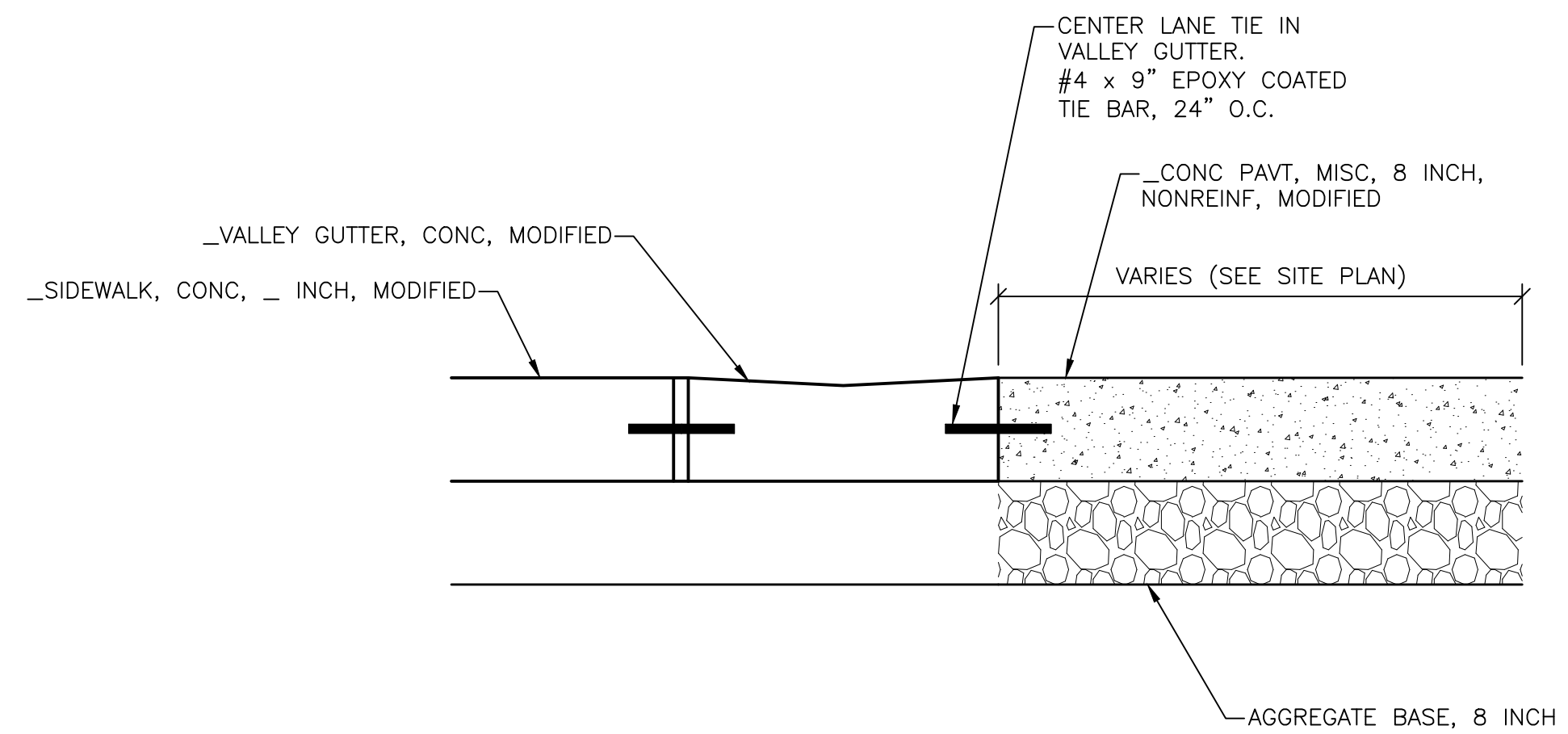
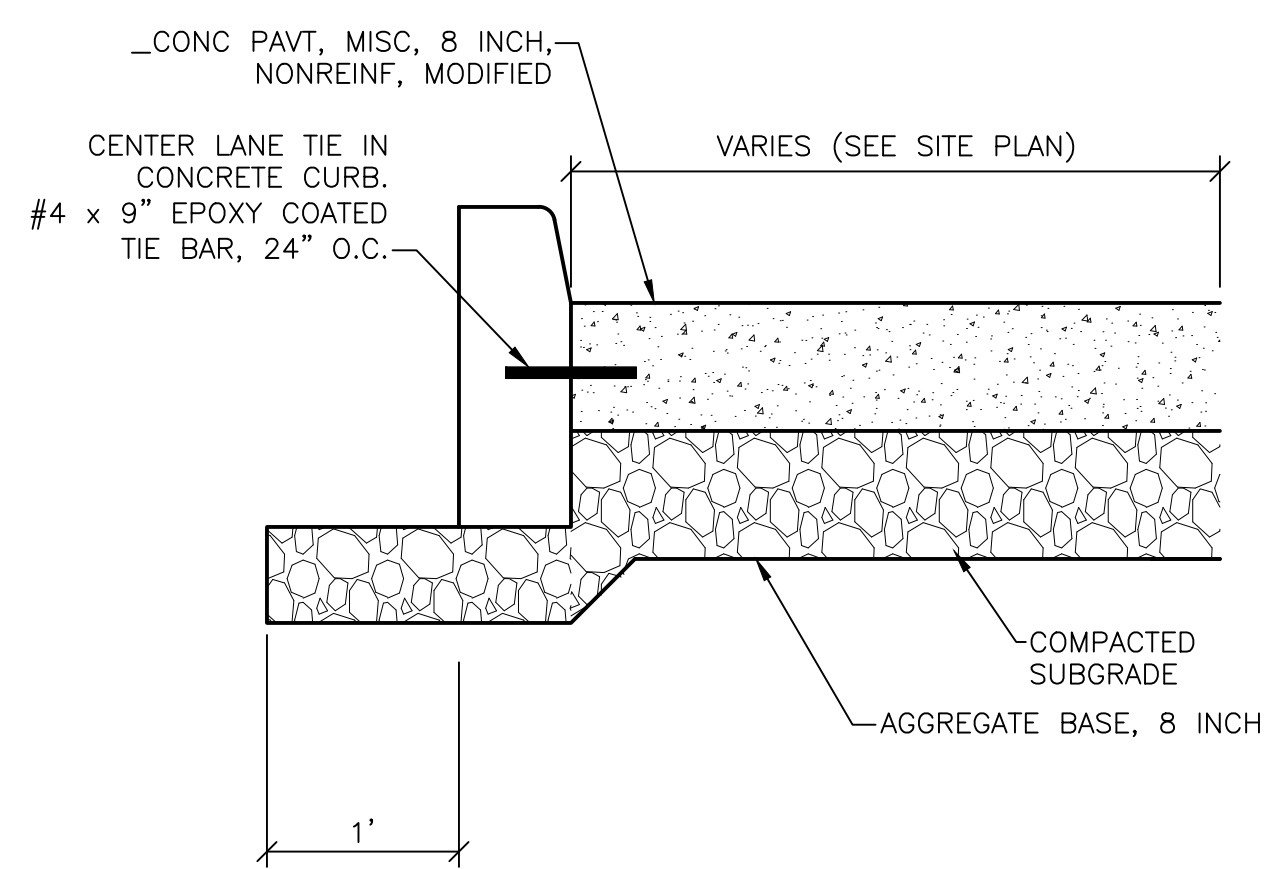
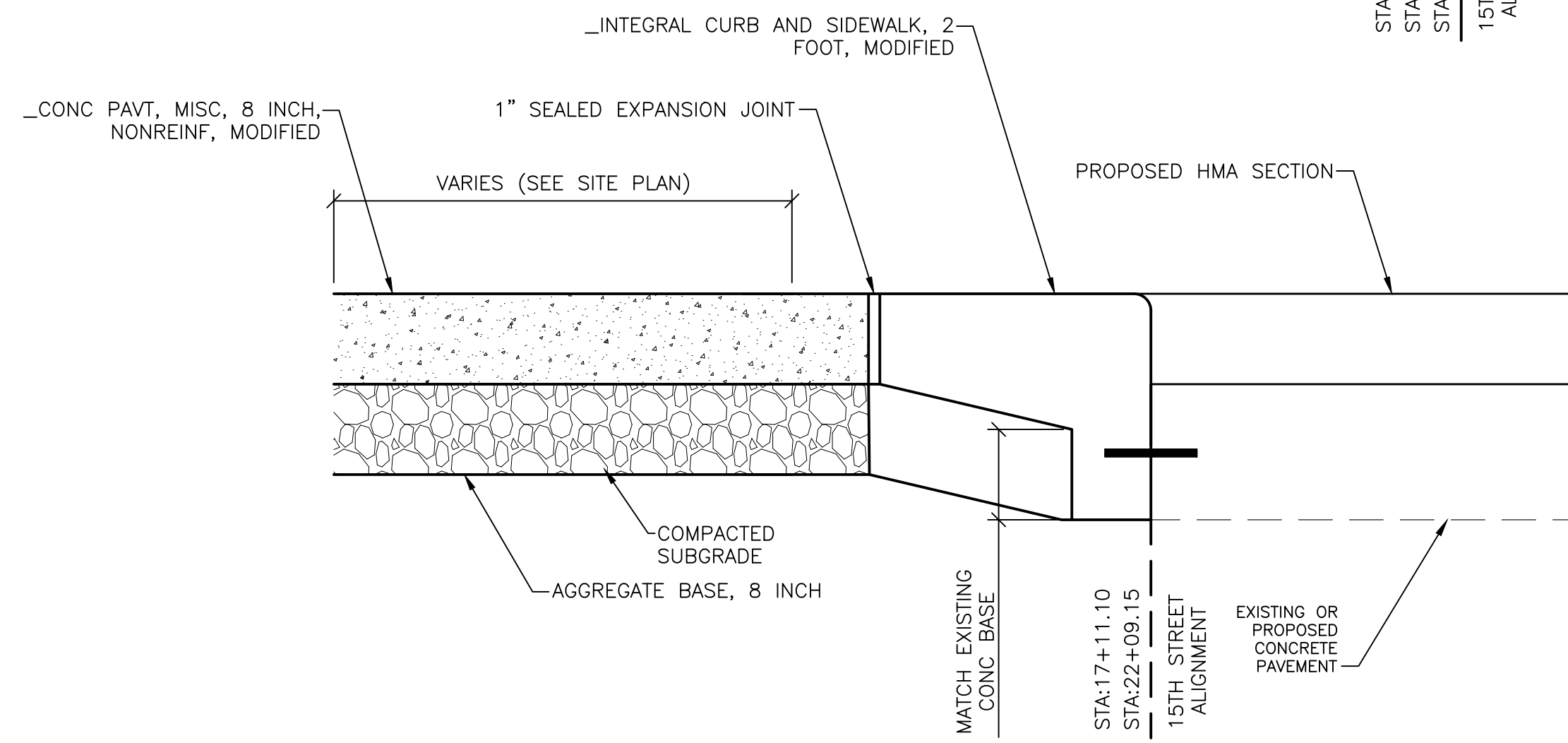
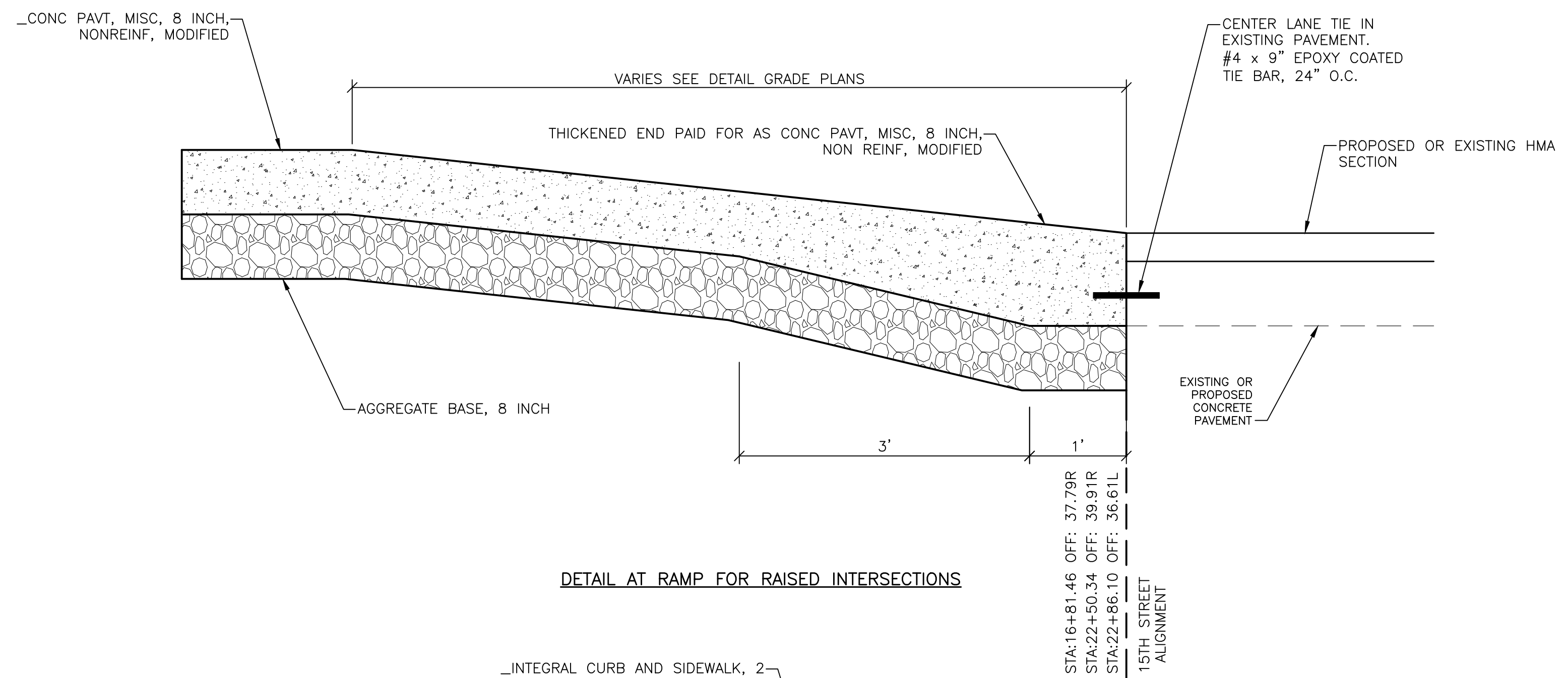


SHOWN WITH TYPICAL REFLECTIVE TAPE APPLIED - SURFACE MOUNTED WITH ANCHOR BOLTS

HEIGHT: 36"
POST COLOR: WHITE
REFLECTIVE SHEETING: FACTORY APPLIED REFLEXITE AR 1000
SHEETING COLOR: GREEN OR YELLOW
BASE: 1.5 LB HEAVY DUTY BASE - WHITE

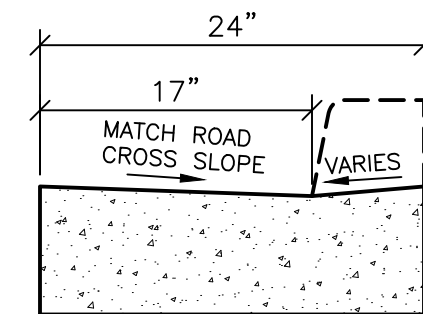
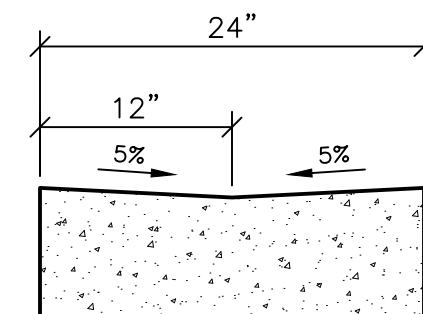
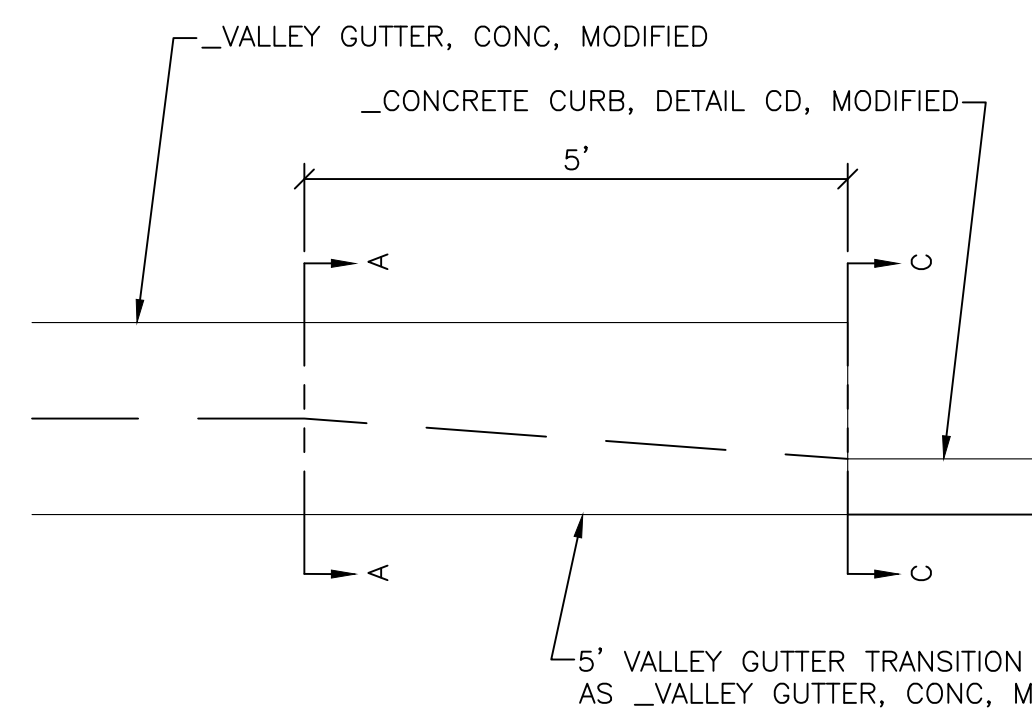
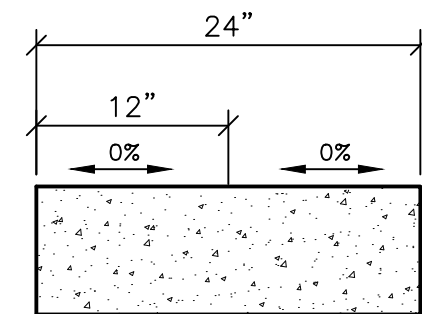
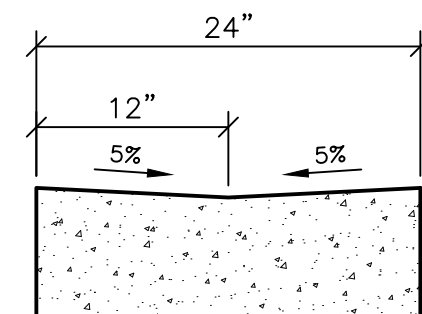
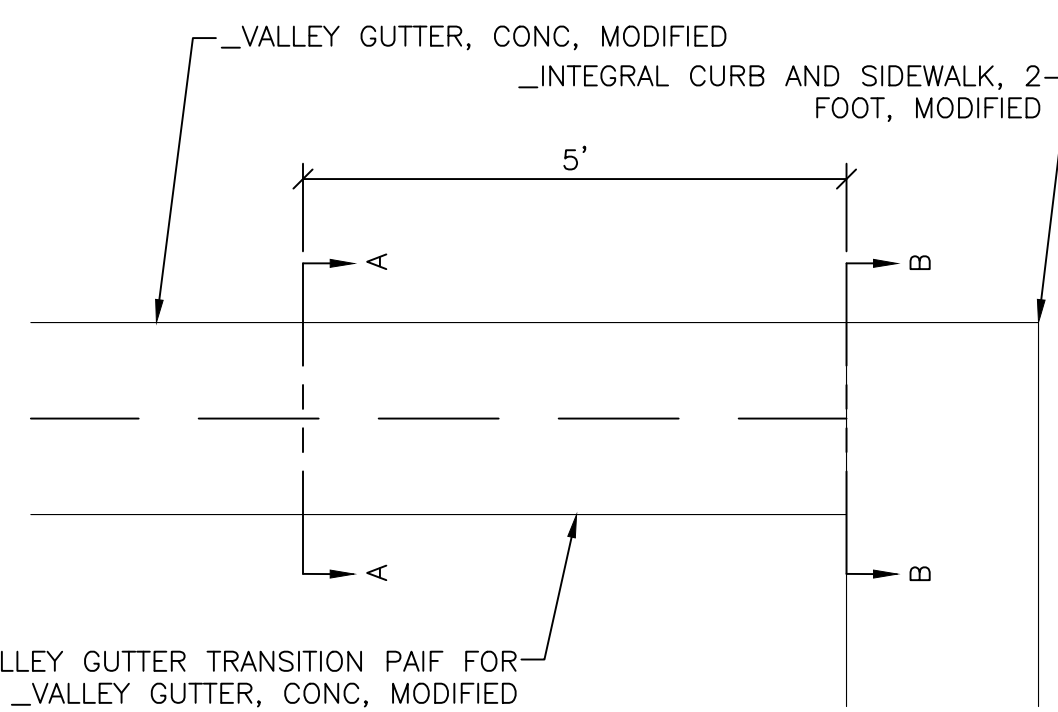
NOTES:
1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS

POST, DELINEATOR, 36 INCH, WHITE
NO SCALE



8 INCH CONCRETE PAVEMENT AT MARANTETTE AND DALZELLE INTERSECTIONS
NO SCALE

NOTE: REFER TO JOINTING PLANS FOR PAVEMENT JOINT TYPES AND LOCATIONS.



VALLEY GUTTER TRANSITION DETAILS
NO SCALE

REVISIONS

02/10/2022	BIDS
01/28/2022	100% REVIEW
12/17/2021	90% REVIEW
10/29/2021	60% REVIEW
08/20/2021	30% REVIEW

Drawn By	AOF
Designer	AOF
Reviewer	DPE
Manager	KK3

Hard copy is intended to be 24"x36" when plotted. Scale(s) indicated and graphic quality may not be accurate for any other size.

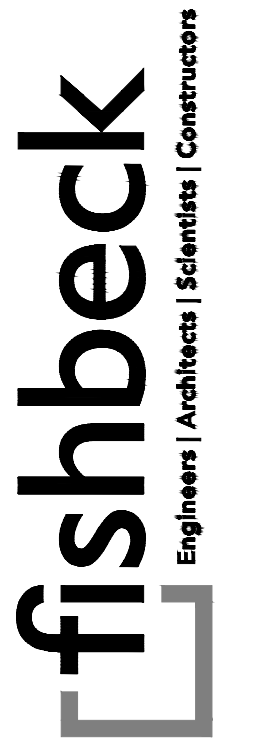
PROJECT NO.
210828

SHEET NO.
6

MSCDET002

QUANTITIES THIS SHEET

JN PW-7038	
CAT 0001	
1	LSUM _Mobilization, Max. 10%
60	Ft Exploratory Investigation, Vertical
100	Cyd Maintenance Gravel, LM
20	Ton Hand Patching
4	Ea Band, Sign
5	Ea Fdn, Perforated Steel Square Tube Sign Breakaway System, Rem
7	Ea Post Hole Through Conc for Steel Post
112	Ft Post, Steel, 3 lb
2	Ea Sign, Type III, Erect, Salv
19	Ea Sign, Type III, Rem
38	Sft Sign, Type IIIA
8	Sft Sign, Type IIIB
6	Ea Reflective Panel for Permanent Sign Support, 6 foot
2	Ea Sign, Type III, Rem, Salv
200	Ft Pavt Mrkg, Polyurea, 12 inch, Cross Hatching, White
66	Ft Pavt Mrkg, Polyurea, 12 inch, Cross Hatching, Yellow
1799	Ft Pavt Mrkg, Polyurea, 12 inch, Crosswalk
131	Ft Pavt Mrkg, Polyurea, 18 inch, Stop Bar
1994	Ft Pavt Mrkg, Sprayable Thermopl, 4 inch, White
716	Ft Pavt Mrkg, Sprayable Thermopl, 4 inch, Yellow
1	Ea Pavt Mrkg, Polyurea, Lt Turn Arrow Sym
1	Ea Pavt Mrkg, Polyurea, Only
1996	Sft Recessing Pavt Mrkg, Transv
40	Ft _Pavt Mrkg, Polymer Cement Surfacing, 12 inch, White
208	Ft _Pavt Mrkg, Polymer Cement Surfacing, 4 inch, Yellow
73	Ft Pavt Mrkg, Polyurea, 4 inch, Cross Hatching White
1080	Sft _Pavt Mrkg, Polymer Cement Surfacing, Green
12	Ea _Pavt Mrkg, Polymer Cement Surfacing, Bike, Small Sym
12	Ea _Pavt Mrkg, Polymer Cement Surfacing, Direction Arrow Sym
6	Ea _Pavt Mrkg, Polymer Cement Surfacing, Speed Table Sym
18	Ea _Post, Delineator, 36 inch, White
30	Ea Barricade, Type III, High Intensity, Double Sided, Lighted, Furn
30	Ea Barricade, Type III, High Intensity, Double Sided, Lighted, Oper
8	Ea Pedestrian Type II Barricade, Temp
100	Ft Pedestrian Type II Channelizer, Temp
2	Ea Lighted Arrow, Type C, Furn
2	Ea Lighted Arrow, Type C, Oper
1	LSUM Minor Traf Devices
500	Ft Pavt Mrkg, Longit, 6 inch or Less Width, Rem
50	Ft Pavt Mrkg, Longit, Greater than 6 inch Width, Rem
1200	Ft Pavt Mrkg, Wet Reflective, Type NR, Paint, 4 inch, White, Temp
1200	Ft Pavt Mrkg, Wet Reflective, Type NR, Paint, 4 inch, Yellow, Temp
1200	Ft Pavt Mrkg, Wet Reflective, Type R, Tape, 4 inch, White, Temp
1200	Ft Pavt Mrkg, Wet Reflective, Type R, Tape, 4 inch, Yellow, Temp
80	Ea Plastic Drum, Fluorescent, Furn
80	Ea Plastic Drum, Fluorescent, Oper
5	Ea Sign Cover
3	Ea Sign, Portable, Changeable Message, NTCIP-Compliant, Furn
3	Ea Sign, Portable, Changeable Message, NTCIP-Compliant, Oper
72	Sft Sign, Type A, Temp, Prismatic, Furn
72	Sft Sign, Type A, Temp, Prismatic, Oper
764	Sft Sign, Type B, Temp, Prismatic, Furn
764	Sft Sign, Type B, Temp, Prismatic, Oper
200	Sft Sign, Type B, Temp, Prismatic, Spec, Furn
200	Sft Sign, Type B, Temp, Prismatic, Spec, Oper
1	LSUM Traf Regulator Control
1	LSUM Contractor Staking
58	Hr Staking Plan Errors and Extras, Max \$180/hour
1	LSUM _Audio-Visual Filming
1	LSUM _Litter and Debris, Rem



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City of Detroit

15th Street Streetscape

REVISIONS

02/10/2022	BIDS
01/28/2022	100% REVIEW
12/17/2021	90% REVIEW
10/29/2021	60% REVIEW
08/20/2021	30% REVIEW

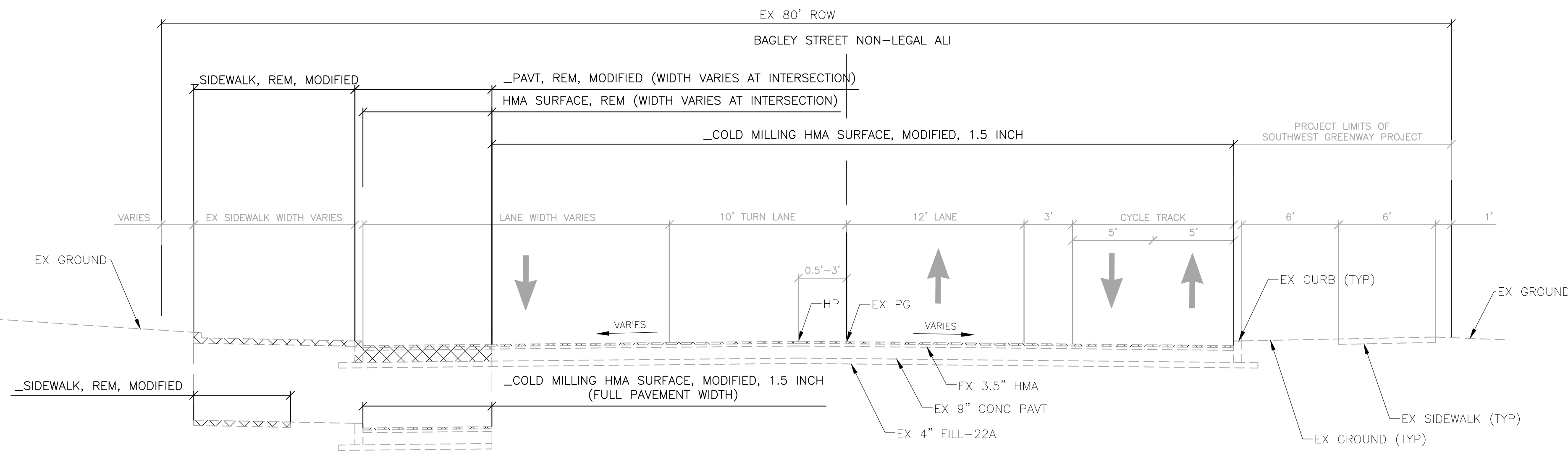
Drawn By	AOF
Designer	AOF
Reviewer	DPE
Manager	KK3

Hard copy is intended to be 24"x36" when plotted. Scale(s) indicated and graphic quality may not be accurate for any other size.

PROJECT NO.
210828

SHEET NO.
7

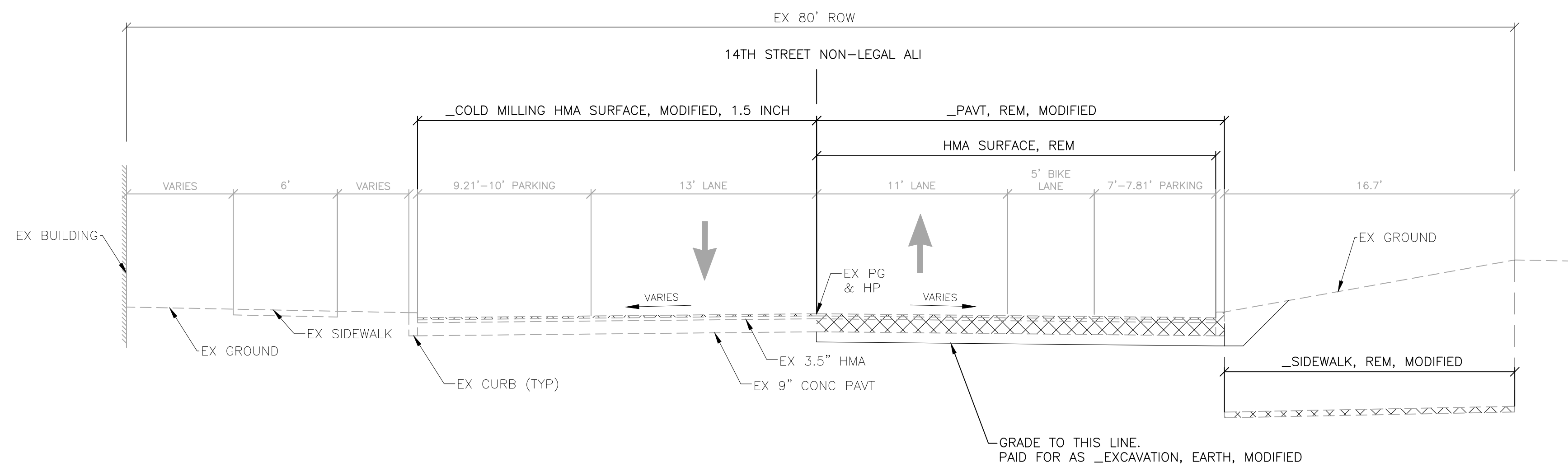
MSCQNT001



APPLIES TO:
BAGLEY STREET NON-LEGAL ALI
STA 7+95.31 TO STA 8+00.39

EXISTING BAGLEY STREET NORMAL SECTION

APPLIES TO:
BAGLEY STREET NON-LEGAL ALI
STA 06+71.29 TO STA 08+02.73

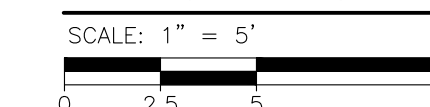


APPLIES TO:
14TH STREET NON-LEGAL ALI
STA 50+9515.72 TO STA 50+24.41

EXISTING 14TH STREET NORMAL SECTION

APPLIES TO:
14TH STREET NON-LEGAL ALI
STA 50+15.72 TO STA 51+26.59

EXISTING TYPICAL CROSS SECTION



REVISIONS

02/10/2022	BIDS
01/28/2022	100% REVIEW
12/17/2021	90% REVIEW
10/29/2021	60% REVIEW
08/20/2021	30% REVIEW

Drawn By	AOF
Designer	AOF
Reviewer	DPE
Manager	KK3

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PROJECT NO.

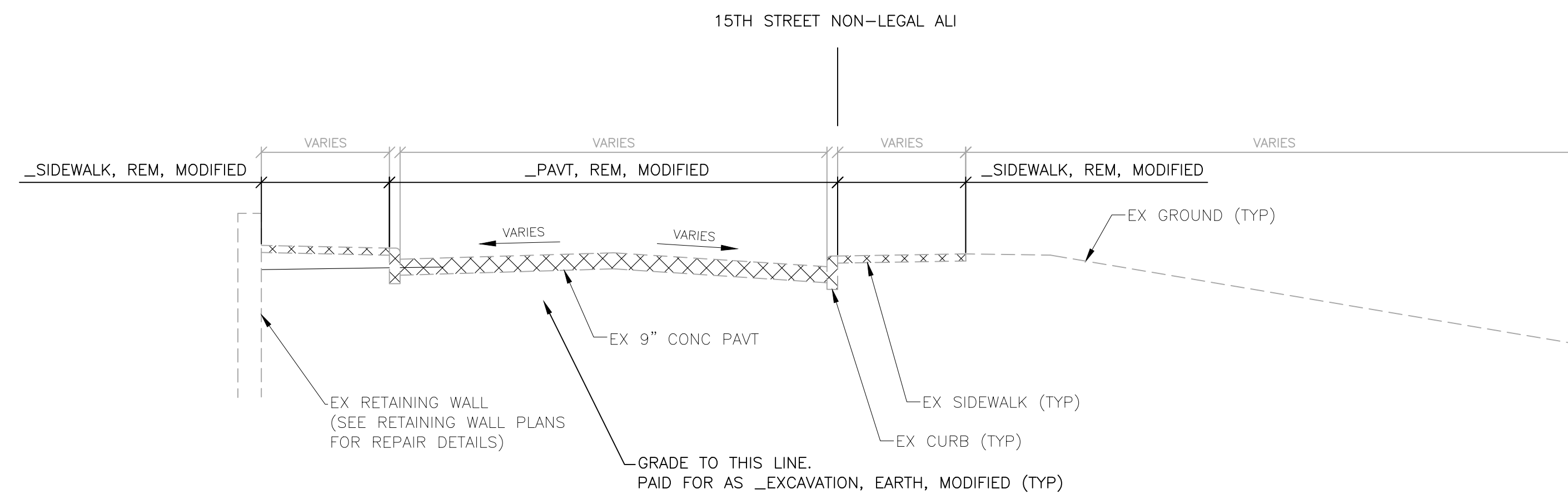
210828

SHEET NO.

8

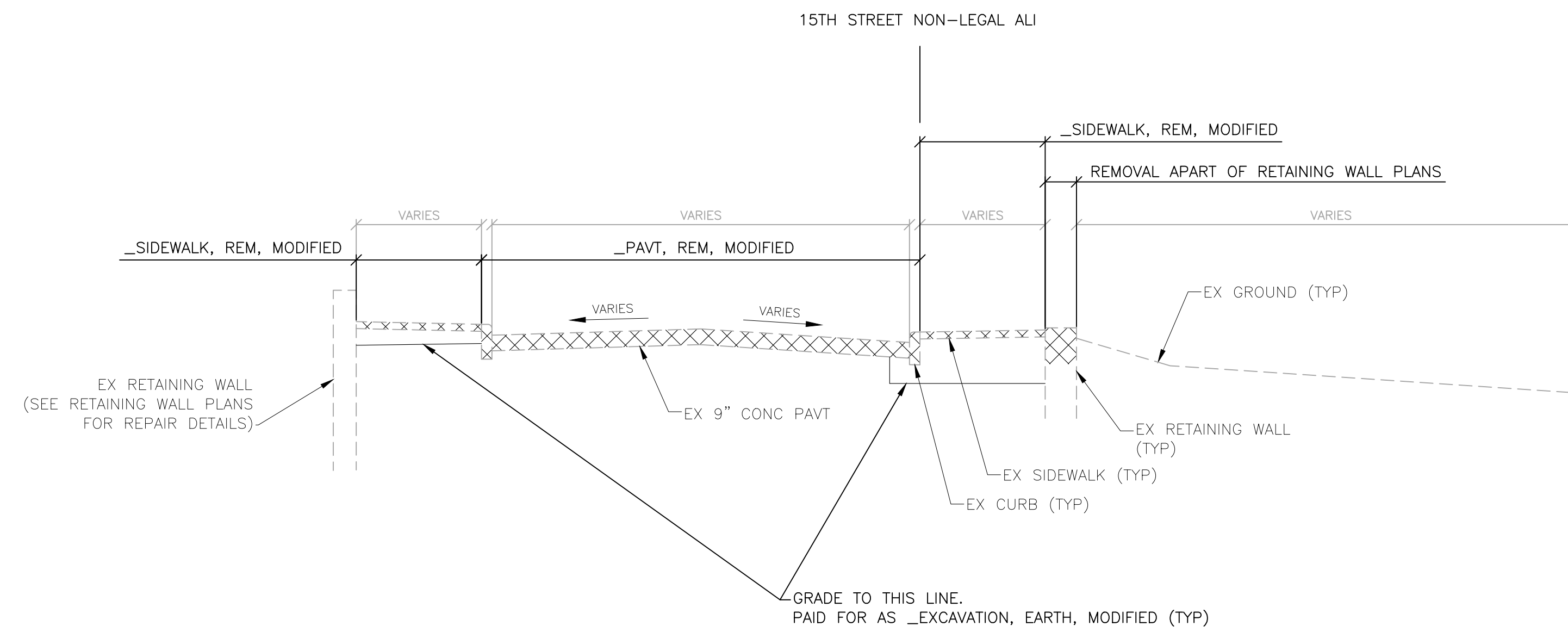
EXTYP001

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EXISTING 15TH STREET NORMAL SECTION

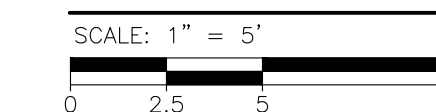
APPLIES TO:
15TH STREET NON-LEGAL ALI
STA 10+68.56 TO STA 10+94.29



EXISTING 15TH STREET NORMAL SECTION

APPLIES TO:
15TH STREET NON-LEGAL ALI
STA 10+94.29 TO STA 11+47.79

EXISTING TYPICAL CROSS SECTION



REVISIONS

02/10/2022	BIDS
01/28/2022	100% REVIEW
12/17/2021	90% REVIEW
10/29/2021	60% REVIEW
08/20/2021	30% REVIEW

Drawn By AOF
Designer AOF
Reviewer DPE
Manager KKS

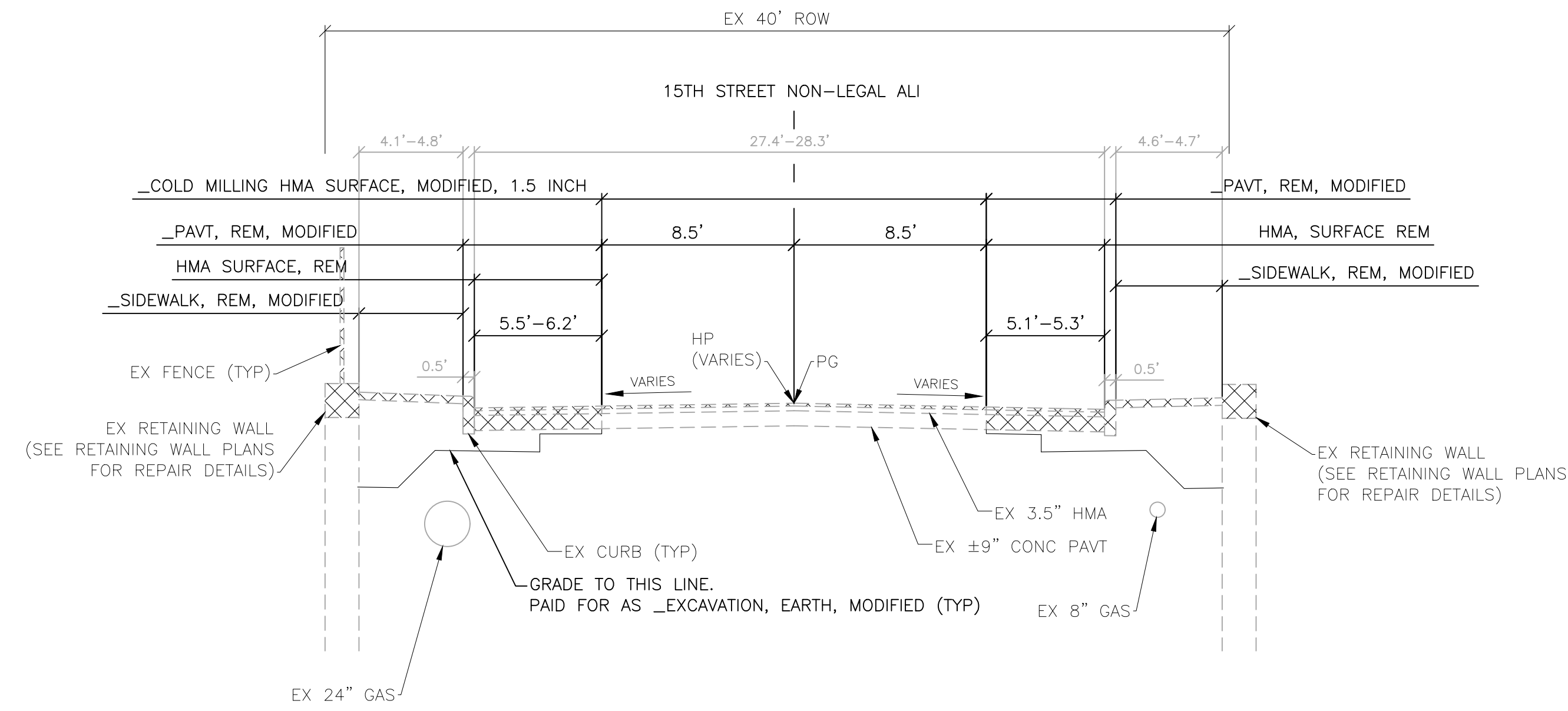
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PROJECT NO.
210828

SHEET NO.
9

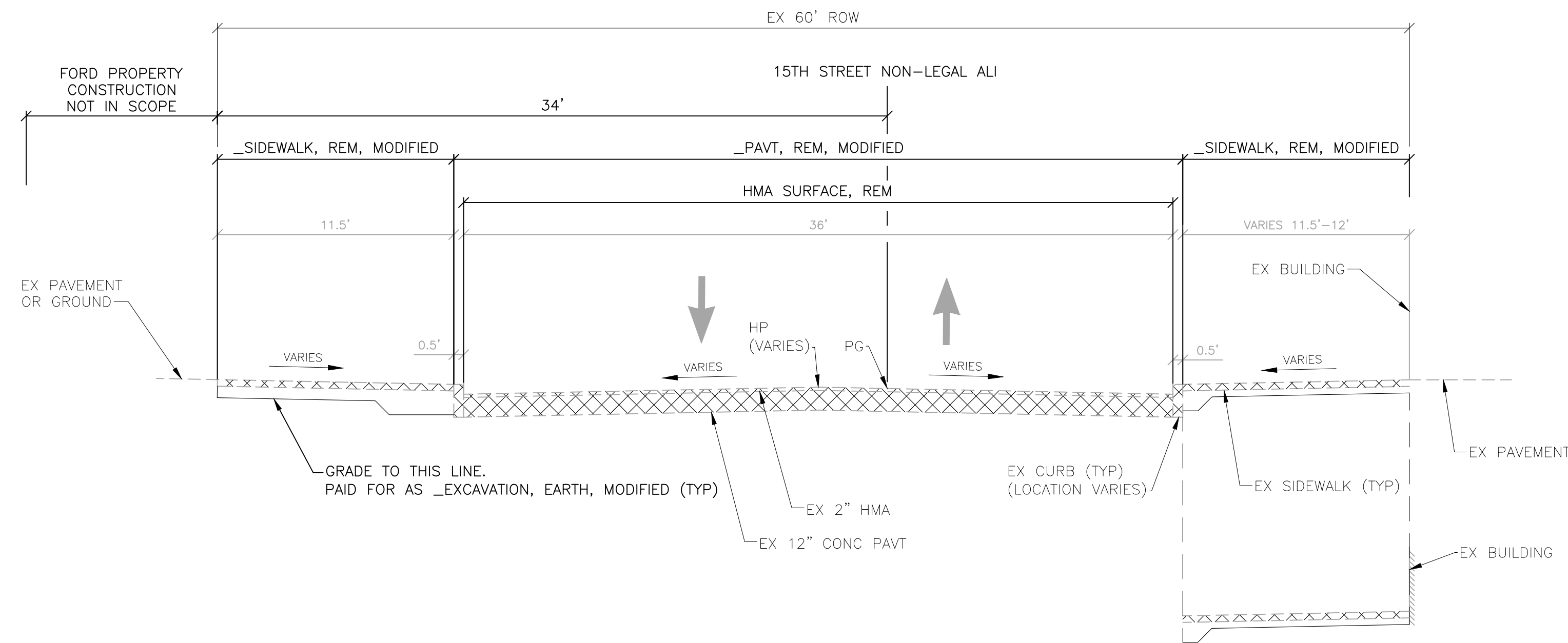
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EXISTING 15TH STREET NORMAL SECTION

APPLIES TO:
 15TH STREET NON-LEGAL ALI
 STA 11+47.79 TO STA 16+14.61

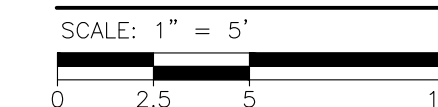


EXISTING 15TH STREET NORMAL SECTION

APPLIES TO:
 15TH STREET NON-LEGAL ALI
 STA 16+14.61 TO STA 17+11.10

APPLIES TO:
 15TH STREET NON-LEGAL ALI
 STA 17+10.50 TO STA 18+23.63

EXISTING TYPICAL CROSS SECTION



REVISIONS

02/10/2022	BIDS
01/28/2022	100% REVIEW
12/17/2021	90% REVIEW
10/29/2021	60% REVIEW
08/20/2021	30% REVIEW

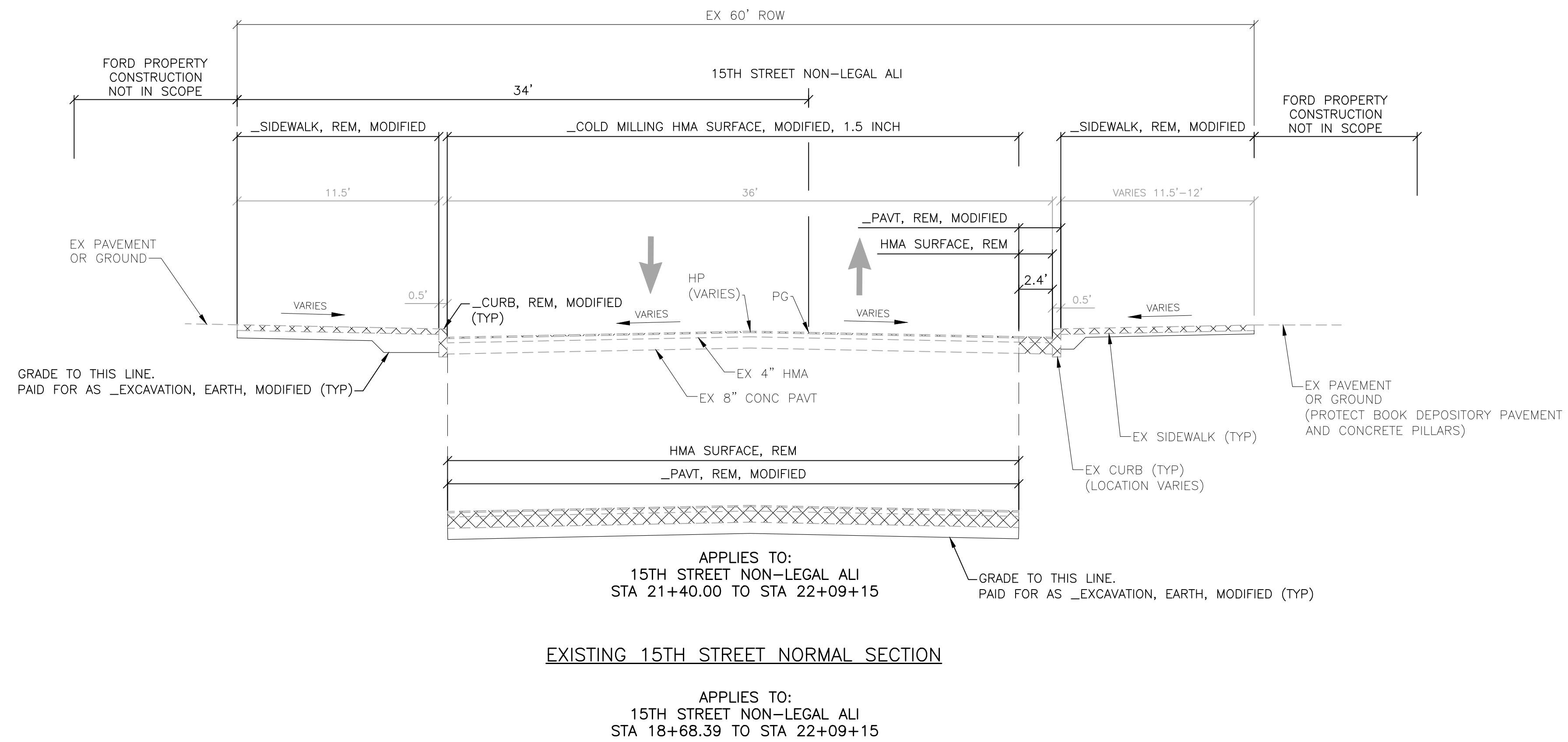
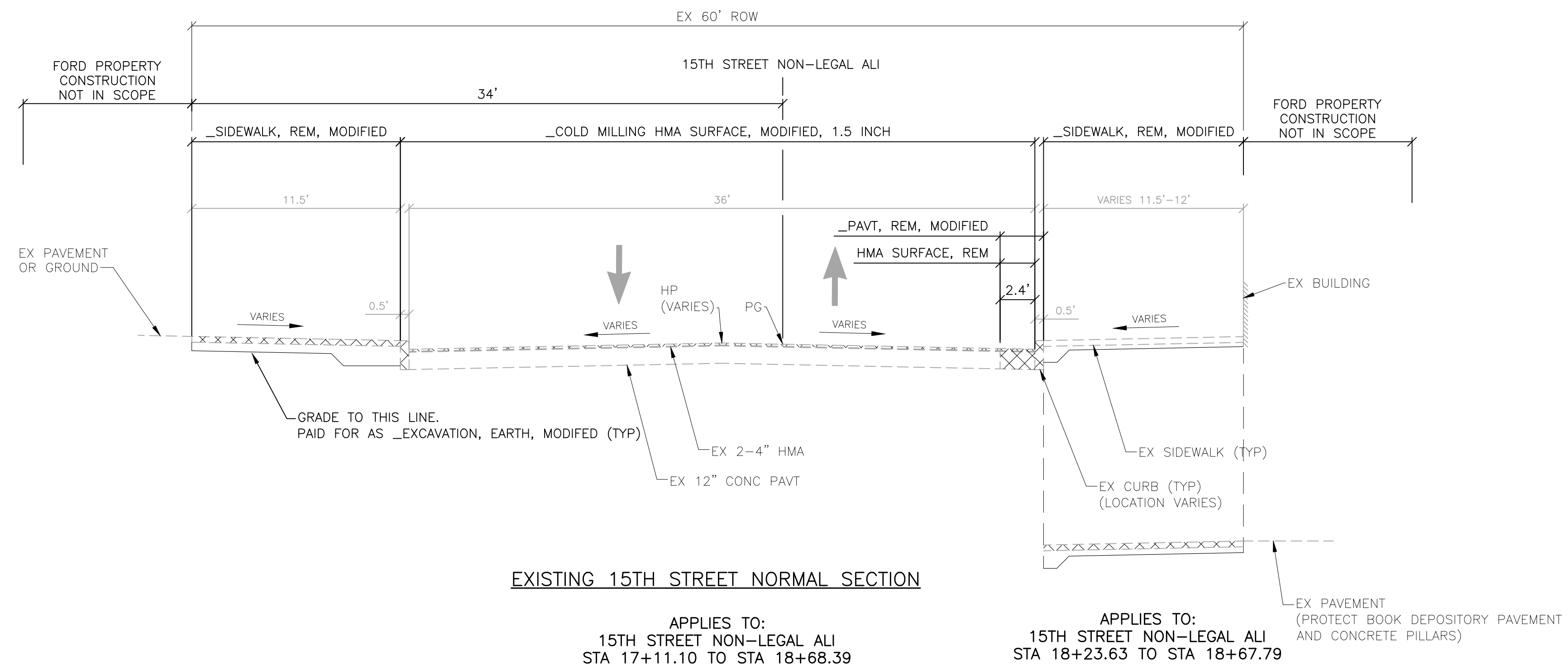
Drawn By AOF
 Designer AOF
 Reviewer DPE
 Manager KKS

Hard copy is intended to be
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 not be accurate for any other size.

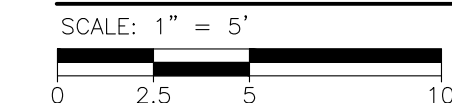
PROJECT NO.
 210828

SHEET NO.
 10

EXTYP003



EXISTING TYPICAL CROSS SECTION



REVISIONS

02/10/2022	BIDS
01/28/2022	100% REVIEW
12/17/2021	90% REVIEW
10/29/2021	60% REVIEW
08/20/2021	30% REVIEW

Drawn By AOF
Designer AOF
Reviewer DPE
Manager KKS

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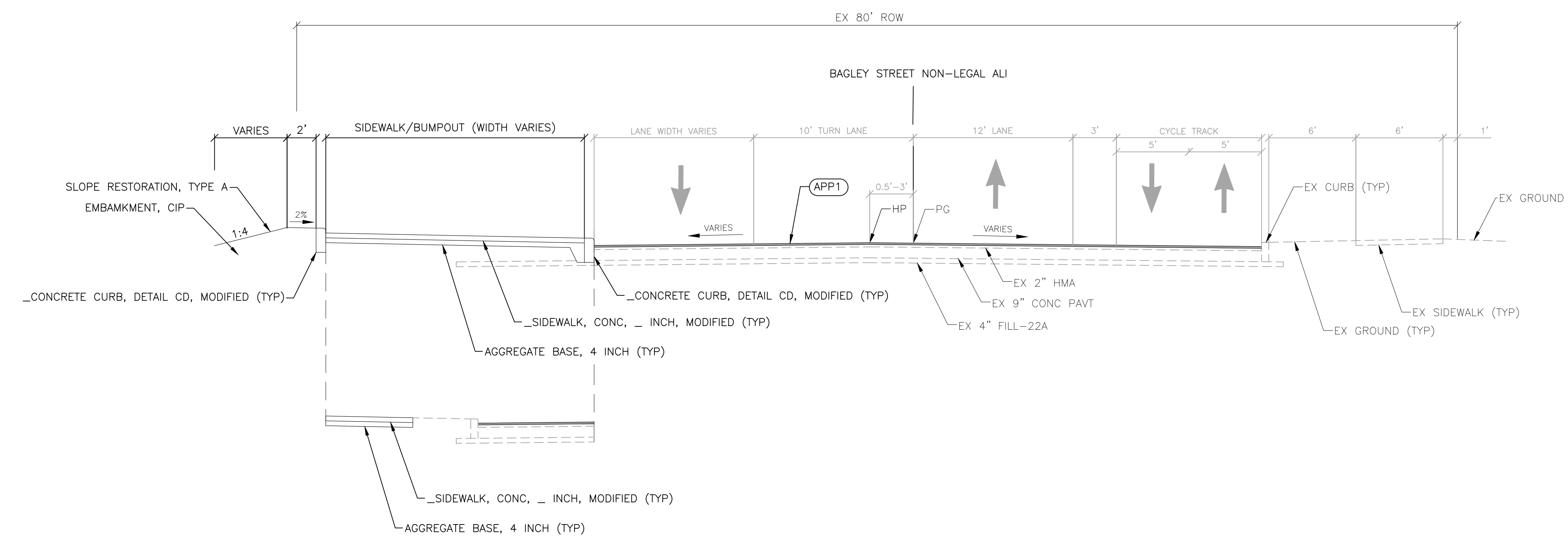
PROJECT NO.

210828

SHEET NO.

11

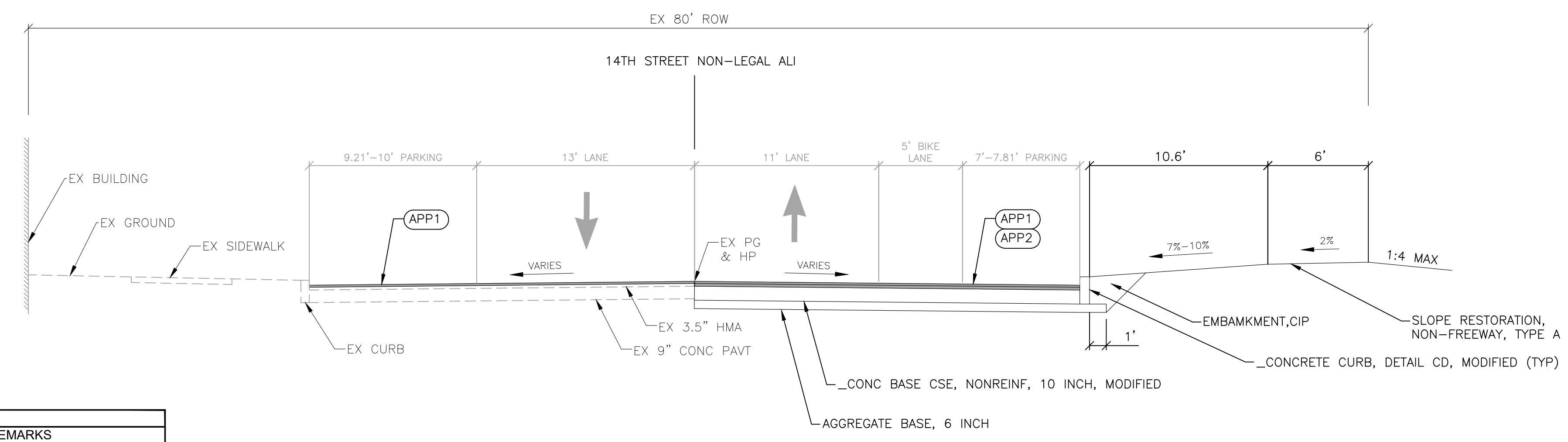
EXTYP003



APPLIES TO:
BAGLEY STREET NON-LEGAL ALI
STA 7+95.31 TO STA 8+00.39

PROPOSED BAGLEY STREET NORMAL SECTION

APPLIES TO:
15TH STREET NON-LEGAL ALI
STA 06+56.94 TO STA 08+02.73



PROPOSED 14TH STREET NORMAL SECTION

APPLIES TO:
14TH STREET NON-LEGAL ALI
STA 50+15.72 TO STA 51+26.59

HMA APPLICATION ESTIMATE				
IDENT NO.	ITEM	RATE LBS PER SYD	PERFORMANCE GRADE	REMARKS
5EMH	HMA, 5EMH	165	64-22	TOP COURSE (AWI = 260)
4EMH	HMA, 4EMH	220	64-22	LEVELING COURSE
4EMH-1	HMA, 4EMH	VARIES (220-440)	64-22	LEVELING COURSE
APP1	HMA APPROACH, MODIFIED	165	64-22	HMA, 5EMH (FOR INTERSECTIONS)
APP2	HMA APPROACH, MODIFIED	220	64-22	HMA, 4EMH (FOR INTERSECTIONS)
WEDG	HMA, 5EMH	VARIES (0-275)	64-22	WEDGING/SCRATCH COURSE
HP	HAND PATCHING	VARIES	64-22	USE HMA, 5EMH
	BOND COAT	0.05-0.15 GAL		

NOTES:

- THE CONTRACTOR SHALL PLACE ADDITIONAL HMA MIXTURE AT VARIOUS LOCATIONS WHERE NEEDED, IN ORDER TO MAKE A UNIFORM CROSS-SECTION. AN ADDITIONAL 10% OF HMA 5EMH HAS BEEN ESTIMATED TO PROVIDE MATERIAL TO RE-ESTABLISH THE PAVEMENT CROSS-SECTION AND FOR WEDGING AT MILLED STREET INTERSECTIONS.
- "_COLD-MILLING HMA SURFACE, MODIFIED" SHALL APPLY ACROSS THE FULL PAVEMENT WIDTH AS SHOWN ON THE PLAN OR AS DIRECTED BY THE ENGINEER.

PROJECT SUMMARY:

BAGLEY STREET
COLD MILL FROM 1 1/2 INCHES OF EXISTING HMA SURFACE AND REPLACE WITH 1 1/2" OF 5EMH HMA WEARING COURSE MIXTURE WITH A YIELD OF 165 LBS PER SQUARE YARD.

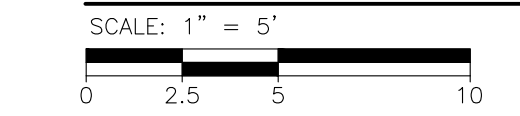
14TH STREET
COLD MILL FROM 1 1/2 INCHES OF EXISTING HMA SURFACE AND REPLACE WITH 1 1/2" OF 5EMH HMA WEARING COURSE MIXTURE WITH A YIELD OF 165 LBS PER SQUARE YARD. FULL DEPTH RECONSTRUCT PAVEMENT SECTION TO BE COMPOSED OF 2 INCHES OF 4EMH HMA LEVELING COURSE MIXTURE WITH A YIELD OF 220LBS PER SQUARE YARD AND 1 1/2" OF 5EMH HMA WEARING COURSE MIXTURE WITH A YIELD OF 165 LBS PER SQUARE YARD.

15TH STREET
BAGLEY TO MARANTETTE - COLD MILL 1 1/2 INCHES OF EXISTING HMA SURFACE AT ALIGNMENT AND AT A CONSTANT 2% CROSS SLOPE. REPLACE WITH 0-2.5 INCHES OF WEDGING, 5EMH HMA MIXTURE WITH A YIELD OF 0-275LBS PER SQUARE YARD AND 1 1/2" OF 5EMH HMA WEARING COURSE MIXTURE WITH A YIELD OF 165 LBS PER SQUARE YARD.

MARANTETTE TO DALZELLE - COLD MILL 1 1/2 INCHES OF EXISTING HMA SURFACE AT ALIGNMENT AND AT A CONSTANT 2% SLOPE CROSS SLOPE. REPLACE WITH 0-2.5 INCHES OF WEDGING, 5EMH HMA MIXTURE WITH A YIELD OF 0-275LBS PER SQUARE YARD, 8-10 INCHES OF 4EMH HMA LEVELING COURSE MIXTURE WITH 2 INCH LIFTS, EACH WITH A YIELD OF 220LBS PER SQUARE YARD, AND 1 1/2" OF 5EMH HMA WEARING COURSE MIXTURE WITH A YIELD OF 165 LBS PER SQUARE YARD. FULL DEPTH RECONSTRUCT PAVEMENT SECTION TO BE COMPOSED OF 6 INCHES OF 4EMH HMA LEVELING COURSE MIXTURE WITH 2 INCH LIFTS, EACH WITH A YIELD OF 220LBS PER SQUARE YARD AND 1 1/2" OF 5EMH HMA WEARING COURSE MIXTURE WITH A YIELD OF 165 LBS PER SQUARE YARD.

THE PROJECT ALSO INCLUDES CONCRETE CURB, SIDEWALK, CURB RAMPS, DRAINAGE STRUCTURES, EXCAVATION, PAVEMENT REMOVAL, LANE TIES, PAVEMENT MARKINGS, SIGNAGE AND MISCELLANEOUS CONSTRUCTION.

PROPOSED TYPICAL CROSS SECTION



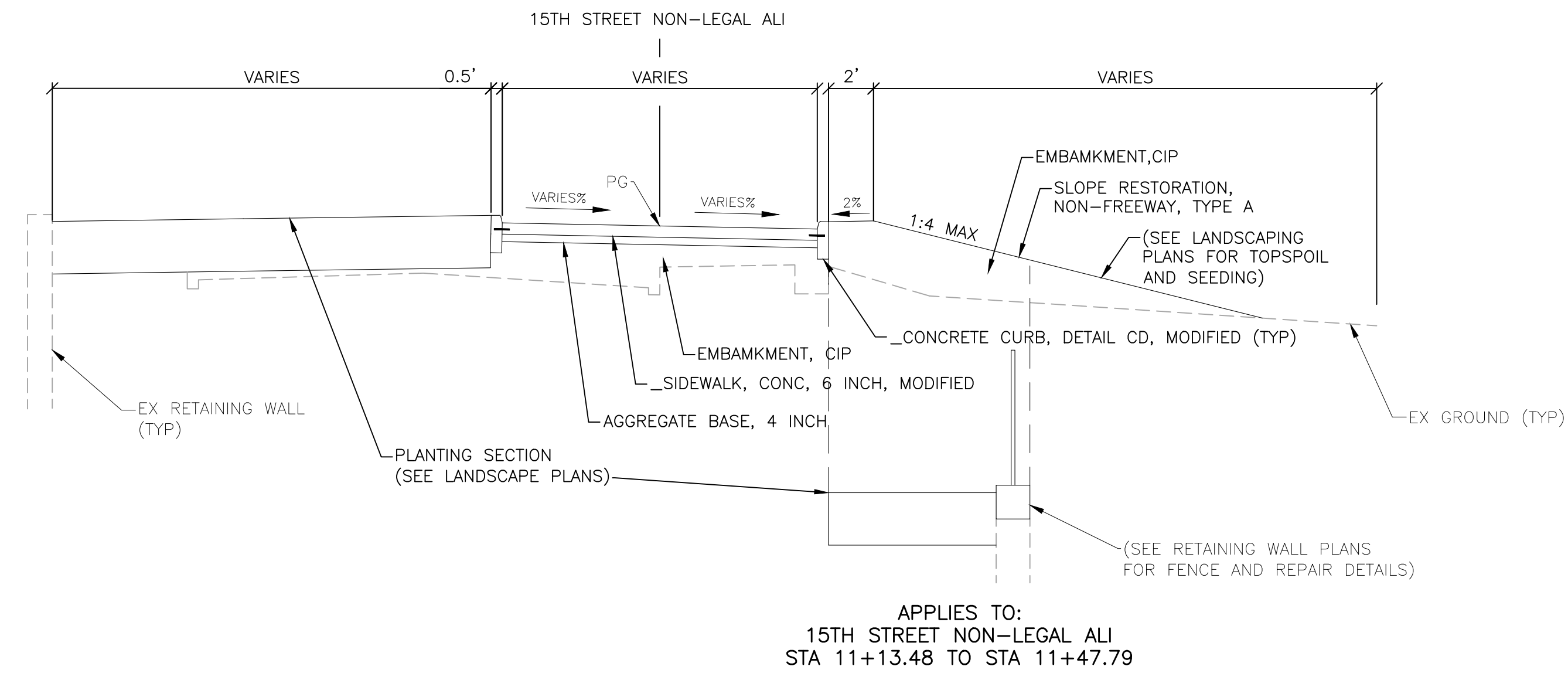
REVISIONS

02/10/2022	BIDS
01/28/2022	100% REVIEW
12/17/2021	90% REVIEW
10/29/2021	60% REVIEW
08/20/2021	30% REVIEW

Drawn By	AOF
Designer	AOF
Reviewer	DPE
Manager	KK3

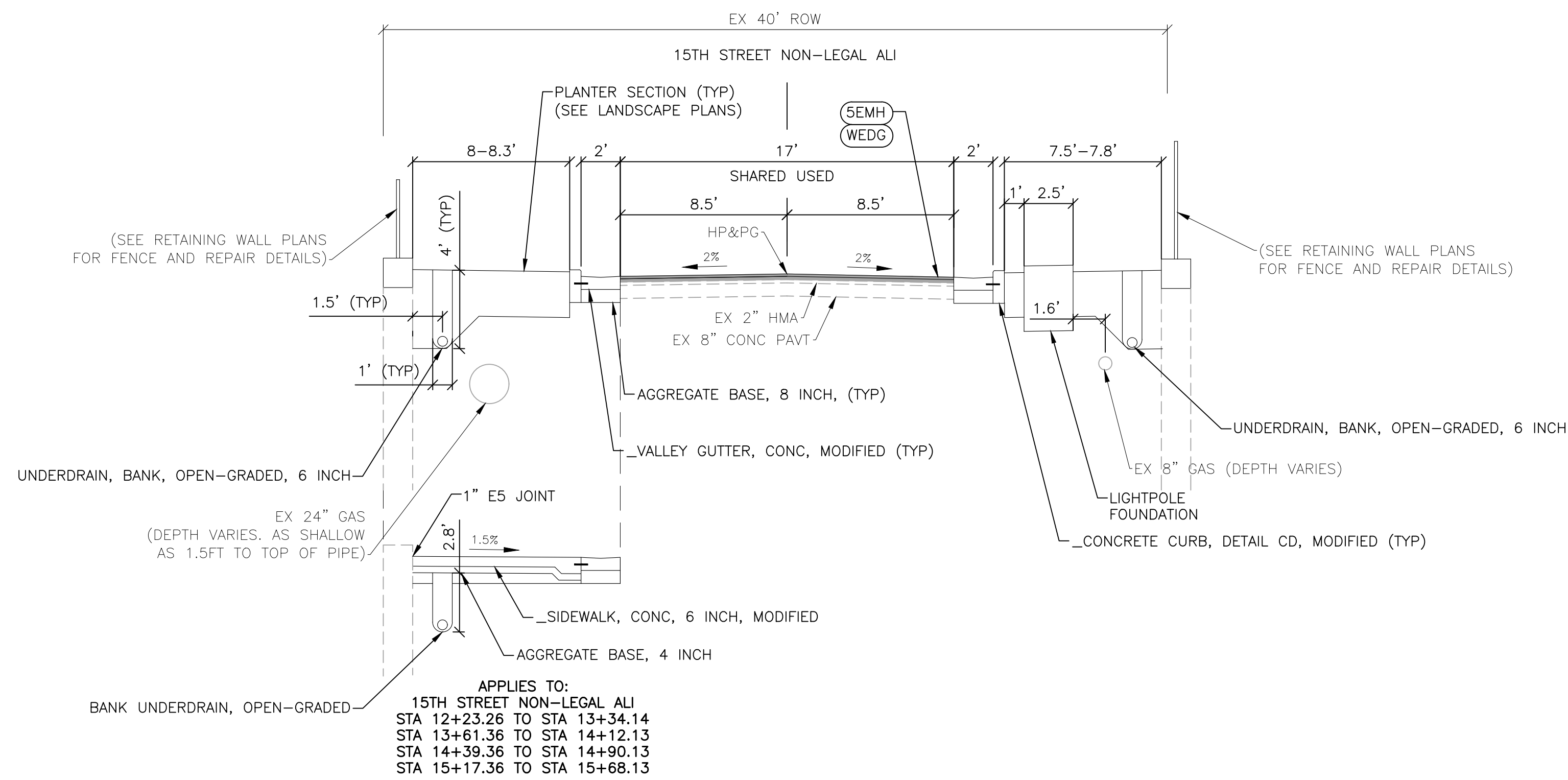
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PROJECT NO.	210828
SHEET NO.	12
	PRTYP001



PROPOSED 15TH STREET NORMAL SECTION

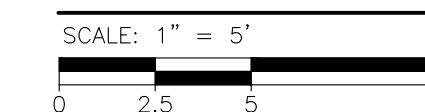
APPLIES TO:
15TH STREET NON-LEGAL ALI
STA 10+68.56 TO STA 11+47.79



PROPOSED 15TH STREET NORMAL SECTION

APPLIES TO:
15TH STREET NON-LEGAL ALI
STA 11+47.79 TO STA 16+14.61

PROPOSED TYPICAL CROSS SECTION



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REVISIONS

02/10/2022	BIDS
01/28/2022	100% REVIEW
12/17/2021	90% REVIEW
10/29/2021	60% REVIEW
08/20/2021	30% REVIEW

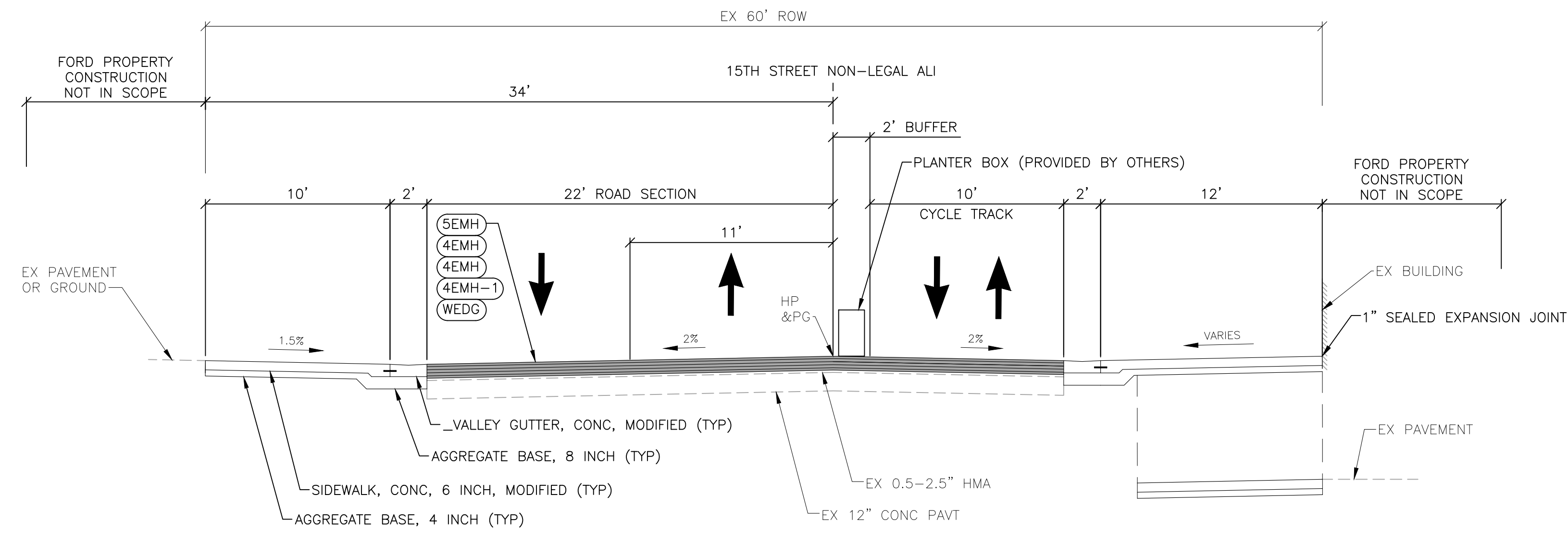
Drawn By AOF
Designer AOF
Reviewer DPE
Manager KKS

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PROJECT NO.
210828

SHEET NO.
13
PRTYP002

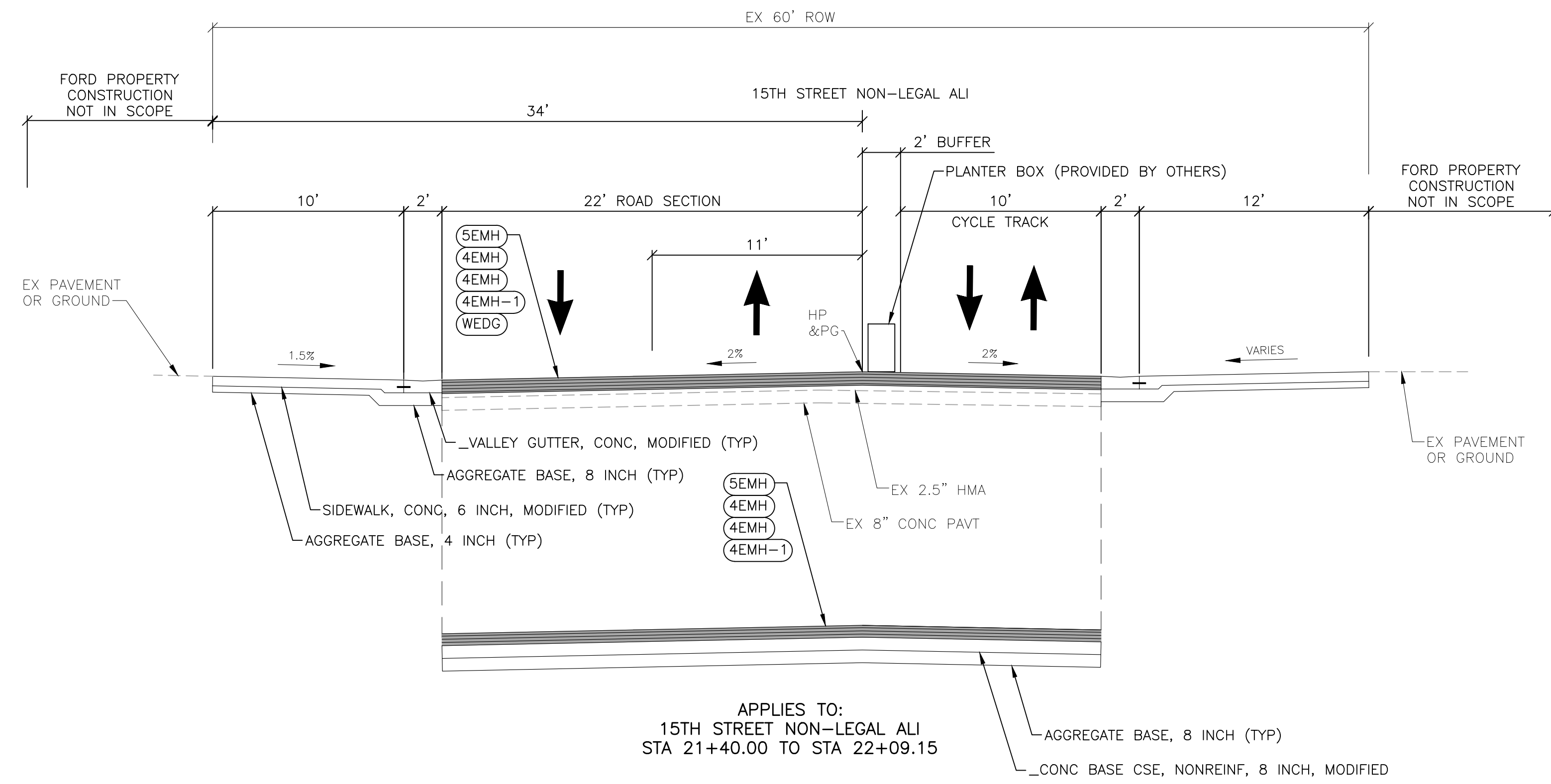
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APPLIES TO:
 15TH STREET NON-LEGAL ALI
 STA 18+23.63 TO STA 18+67.79

PROPOSED 15TH STREET NORMAL SECTION

APPLIES TO:
 15TH STREET NON-LEGAL ALI
 STA 17+11.10 TO STA 18+67.79

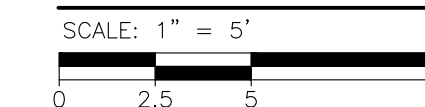


APPLIES TO:
 15TH STREET NON-LEGAL ALI
 STA 21+40.00 TO STA 22+09.15

PROPOSED 15TH STREET NORMAL SECTION

APPLIES TO:
 15TH STREET NON-LEGAL ALI
 STA 18+67.79 TO STA 22+09.15

PROPOSED TYPICAL CROSS SECTION



REVISIONS

02/10/2022	BIDS
01/28/2022	100% REVIEW
12/17/2021	90% REVIEW
10/29/2021	60% REVIEW
08/20/2021	30% REVIEW

Drawn By AOF
 Designer AOF
 Reviewer DPE
 Manager KKS

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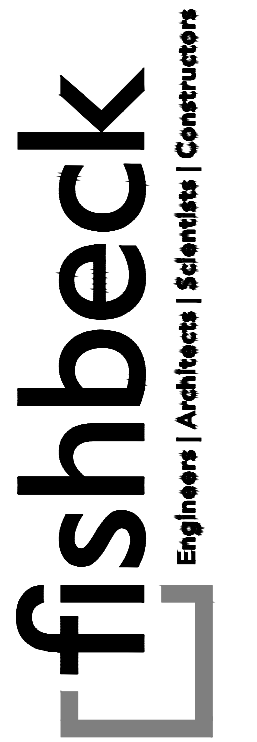
PROJECT NO.
210828

SHEET NO.
14
PRTYP003



15TH STREET

14TH STREET



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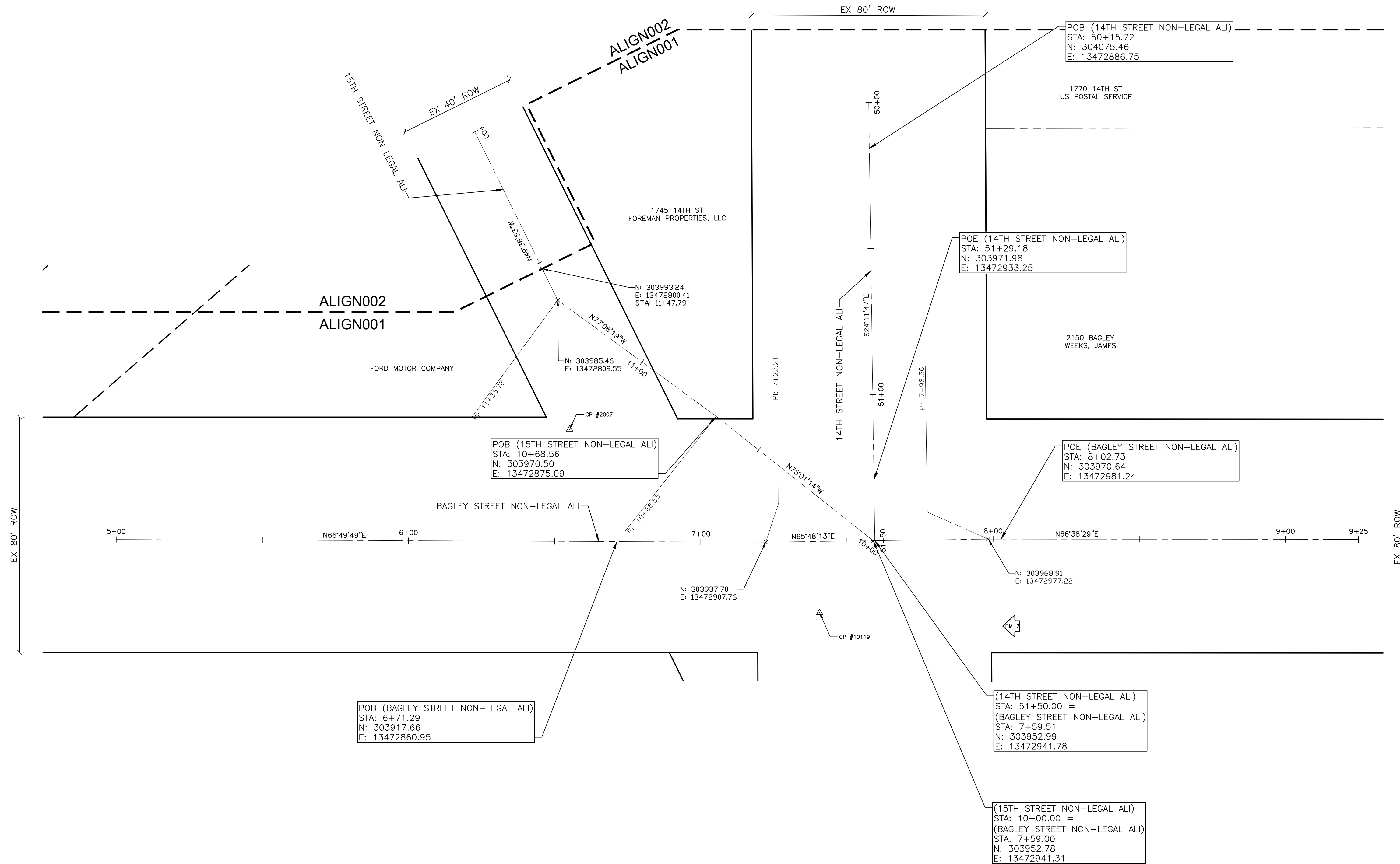


City of Detroit

15th Street Streetscape

BAGLEY STREET

BAGLEY STREET



BENCHMARKS

HORIZONTAL DATUM: NAD83
 VERTICAL DATUM: DETROIT
 BM #2
 SET ARROW ON HYDRANT (1977) LOCATED AT THE SOUTH SIDE OF BAGLEY AVENUE AT THE 14TH STREET INTERSECTION.
 ELEV. = 126.67'

CONTROL POINTS

CP #10119
 N=303922.89
 E=13472934.26
 ELEV=127.13
 CP #2007
 N=303946.47
 E=13472830.82
 ELEV=132.49

SURVEYED BY:

SURVEY PROVIDED BY: GIFFELS WEBSTER ON APRIL 29, 2021 AND REFLECT CONDITIONS AT THAT TIME

ALIGNMENT AND SURVEY PLAN

SCALE: 1" = 20'

REVISIONS

02/10/2022	BIDS
01/28/2022	100% REVIEW
12/17/2021	90% REVIEW
10/29/2021	60% REVIEW
08/20/2021	30% REVIEW

Drawn By AOF
 Designer AOF
 Reviewer DPE
 Manager KKS

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PROJECT NO.
210828

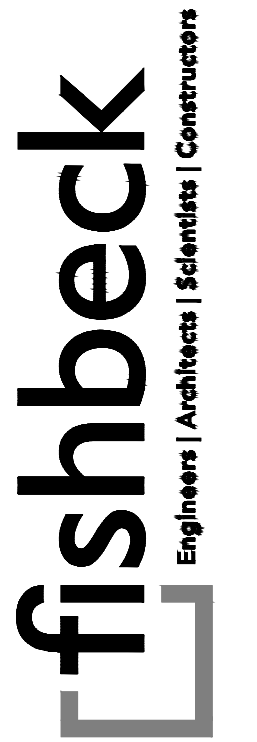
SHEET NO.
15
ALIGN001

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14TH STREET



BAGLEY STREET



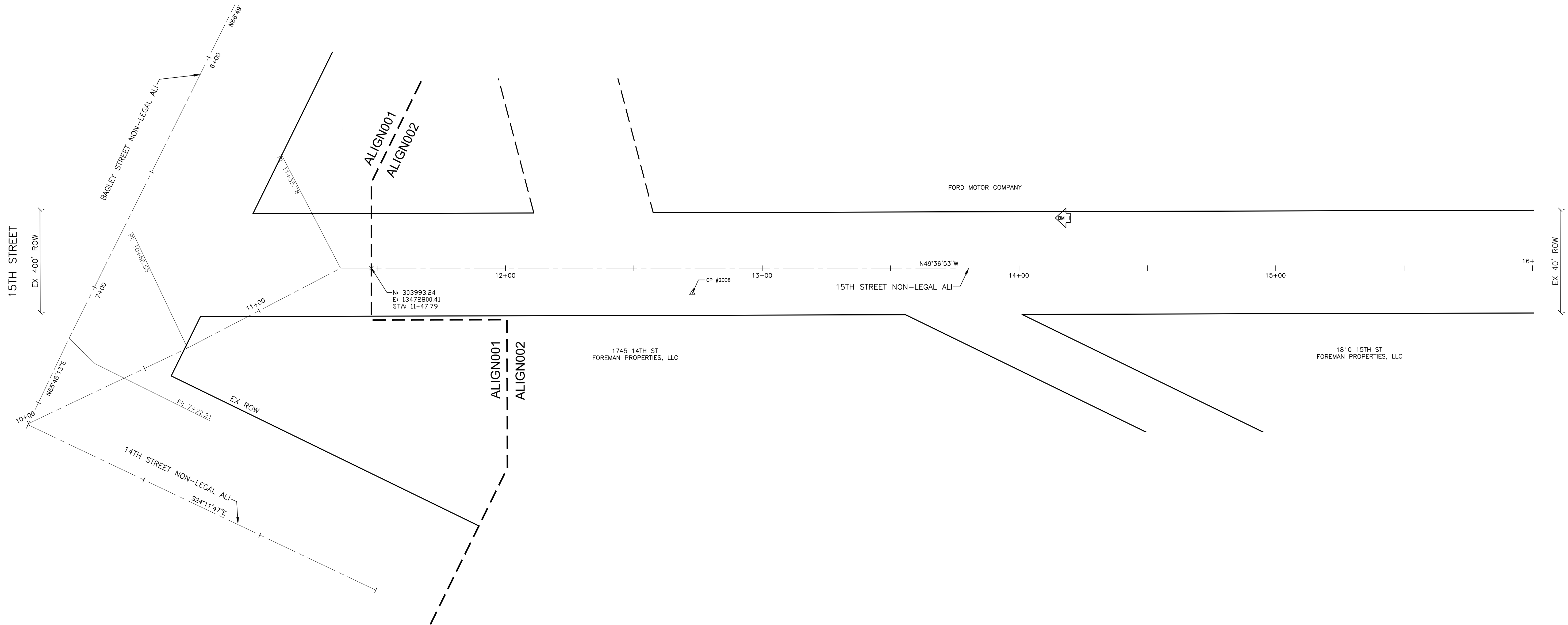
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SUITE 1700
DETROIT, MI 48266
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City of Detroit

15th Street Streetscape



BENCHMARKS

HORIZONTAL DATUM: NAD83
VERTICAL DATUM: DETROIT

BM #1
SET MAG NAIL WITH GW WASHER ON TOP OF THE CONCRETE
RETAINING WALL LOCATED ON THE WEST SIDE OF 15TH STREET ±
280' SOUTH OF MARANTETTE STREET.
ELEV.= 127.88'

CONTROL POINTS

CP #2006
N=304081.62
E=13472711.46
ELEV=132.21

SURVEYED BY:

SURVEY PROVIDED BY: GIFFELS WEBSTER ON APRIL 29, 2021
AND REFLECT CONDITIONS AT THAT TIME

ALIGNMENT AND SURVEY PLAN

SCALE: 1" = 20'
0 10 20 40

REVISIONS

02/10/2022	BIDS
01/28/2022	100% REVIEW
12/17/2021	90% REVIEW
10/29/2021	60% REVIEW
08/20/2021	30% REVIEW

Drawn By AOF
Designer AOF
Reviewer DPE
Manager KKS

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PROJECT NO.

210828

SHEET NO.

16

ALIGN002

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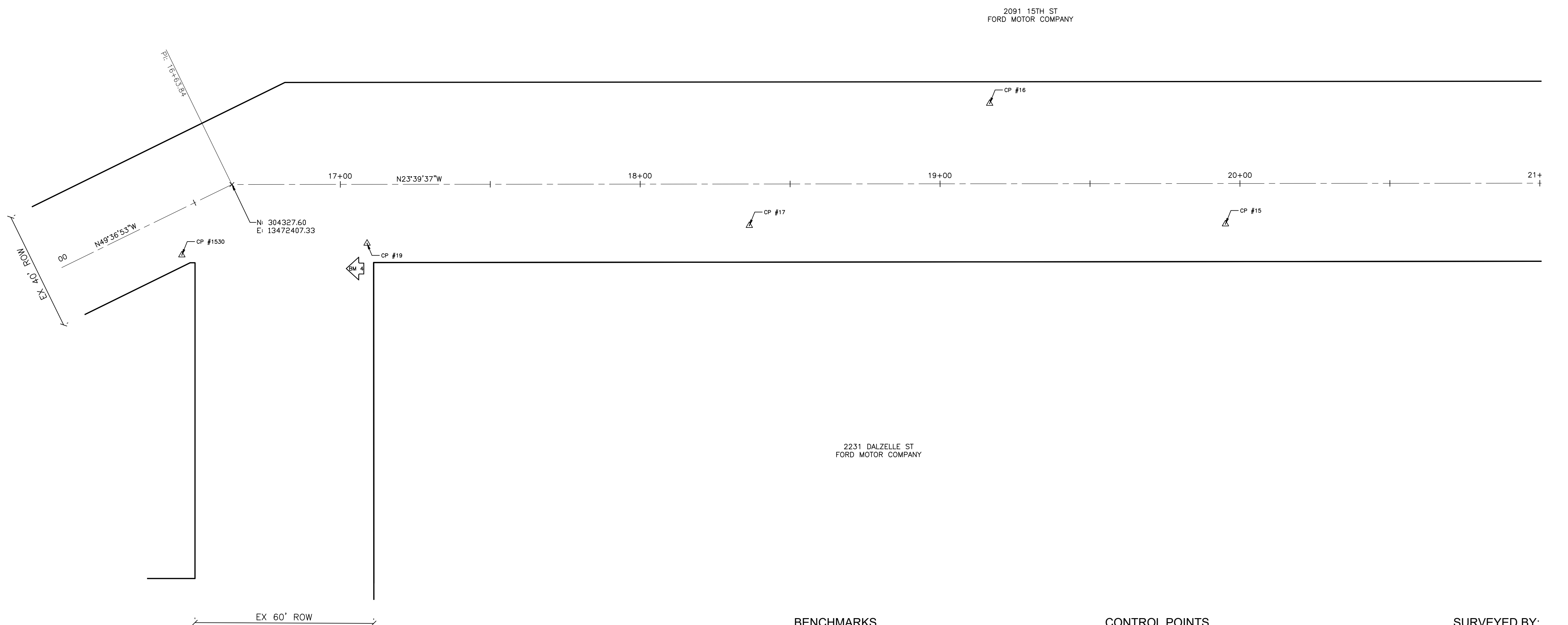


City of Detroit

15th Street Streetscape

15TH STREET

15TH STREET



BENCHMARKS

HORIZONTAL DATUM: NAD83
VERTICAL DATUM: DETROIT

BM #4
ARROW ON HYDRANT AT THE NORTHEAST CORNER OF 15TH STREET AND MARQUETTE STREET.
ELEV.= 120.62'

CONTROL POINTS

CP #1530
N=3040321.72
E=13472435.57
ELEV=118.67

CP #16
N=304548.36
E=13472281.39
ELEV=118.01

CP #19
N=304376.75
E=13472407.26
ELEV=117.64

CP #15
N=304636.50
E=13472286.74
ELEV=118.12

CP #17
N=304491.20
E=13472350.79
ELEV=117.98

SURVEYED BY:

SURVEY PROVIDED BY: GIFFELS WEBSTER ON APRIL 29, 2021 AND REFLECT CONDITIONS AT THAT TIME

ALIGNMENT AND SURVEY PLAN

SCALE: 1" = 20'
0 10 20 40

REVISIONS

02/10/2022	BIDS
01/28/2022	100% REVIEW
12/17/2021	90% REVIEW
10/29/2021	60% REVIEW
08/20/2021	30% REVIEW

Drawn By AOF
Designer AOF
Reviewer DPE
Manager KKS

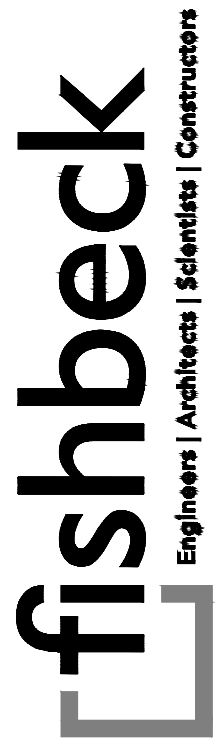
Hard copy is intended to be 24"x36" when plotted. Scale(s) indicated and graphic quality may not be accurate for any other size.

PROJECT NO.
210828

SHEET NO.
17
ALIGN002



LACOMBE DRIVE



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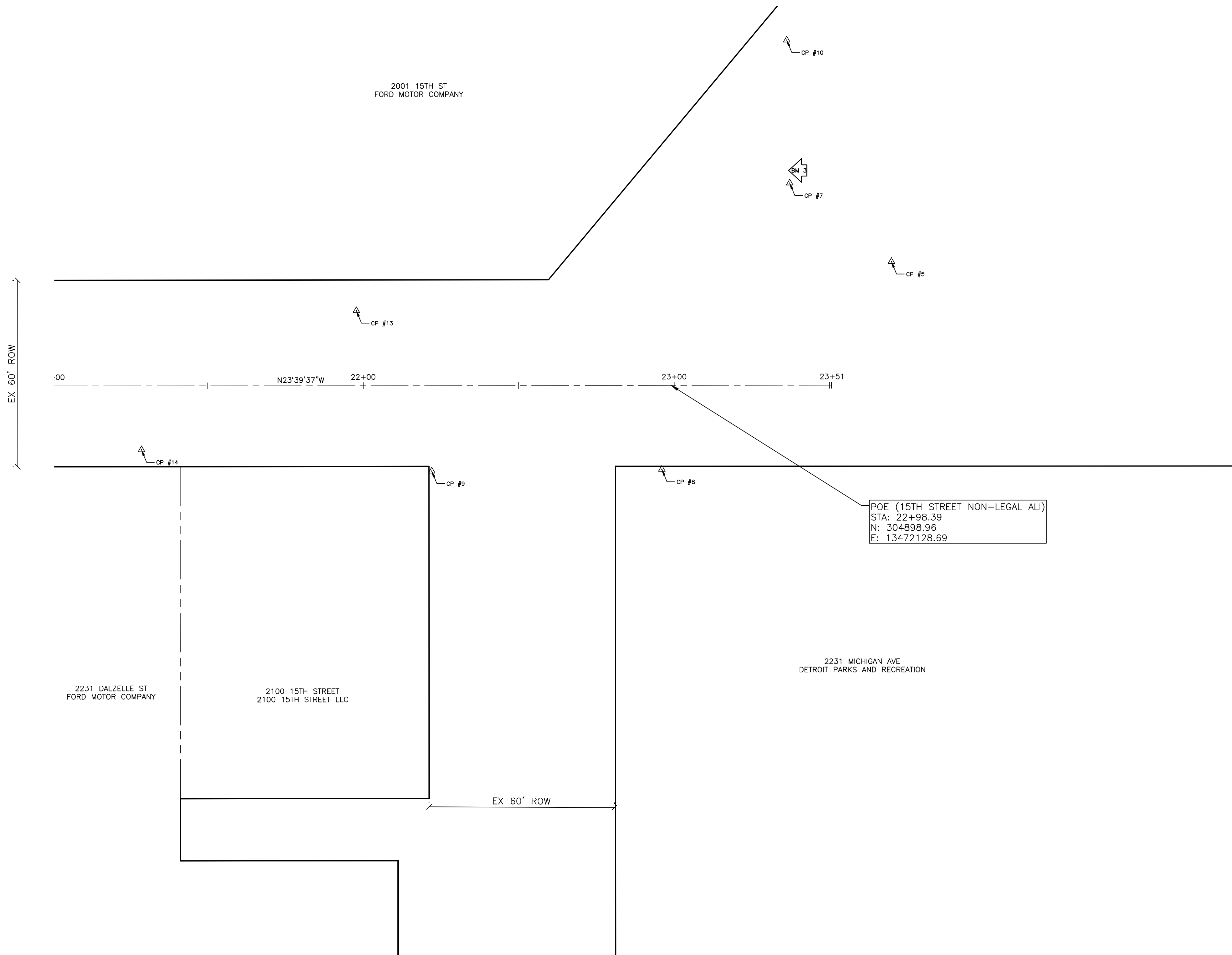


15TH STREET

City of Detroit

15th Street Streetscape

15TH STREET



BENCHMARKS

HORIZONTAL DATUM: NAD83
VERTICAL DATUM: DETROIT

BM #3
ARROW ON HYDRANT ON EAST END OF CONCRETE MEDIAN IN LACOMBE DRIVE, WEST OF '15 STREET.
ELEV.= 120.75'

CONTROL POINTS

CP #14 N=304761.60 E=13472239.65 ELEV=118.14	CP #5 N=304958.37 E=13472087.56 ELEV=117.70
CP #13 N=304806.99 E=13472170.96 ELEV=117.52	CP #7 N=304918.28 E=13472077.51 ELEV=117.78
CP #9 N=304849.89 E=13472208.55 ELEV=117.55	CP #10 N=304889.72 E=13472032.24 ELEV=117.75
CP #8 N=304917.48 E=13472178.38 ELEV=118.01	

SURVEYED BY:

SURVEY PROVIDED BY: GIFFELS WEBSTER ON APRIL 29, 2021
AND REFLECT CONDITIONS AT THAT TIME

DALZELLE STREET

REVISIONS

02/10/2022	BIDS
01/28/2022	100% REVIEW
12/17/2021	90% REVIEW
10/29/2021	60% REVIEW
08/20/2021	30% REVIEW

Drawn By AOF
Designer AOF
Reviewer DPE
Manager KK3

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PROJECT NO.

210828

SHEET NO.

18

ALIGN004

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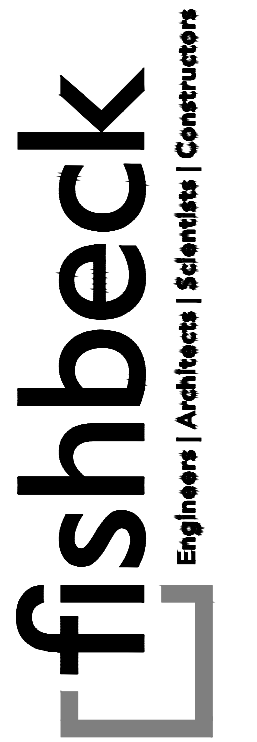
ALIGNMENT AND SURVEY PLAN

SCALE: 1" = 20'
0 10 20 40



15TH STREET

14TH STREET



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City of Detroit

15th Street Streetscape

REVISIONS

02/10/2022	BIDS
01/28/2022	100% REVIEW
12/17/2021	90% REVIEW
10/29/2021	60% REVIEW
08/20/2021	30% REVIEW

Drawn By AOF
 Designer AOF
 Reviewer DPE
 Manager KKS

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PROJECT NO.

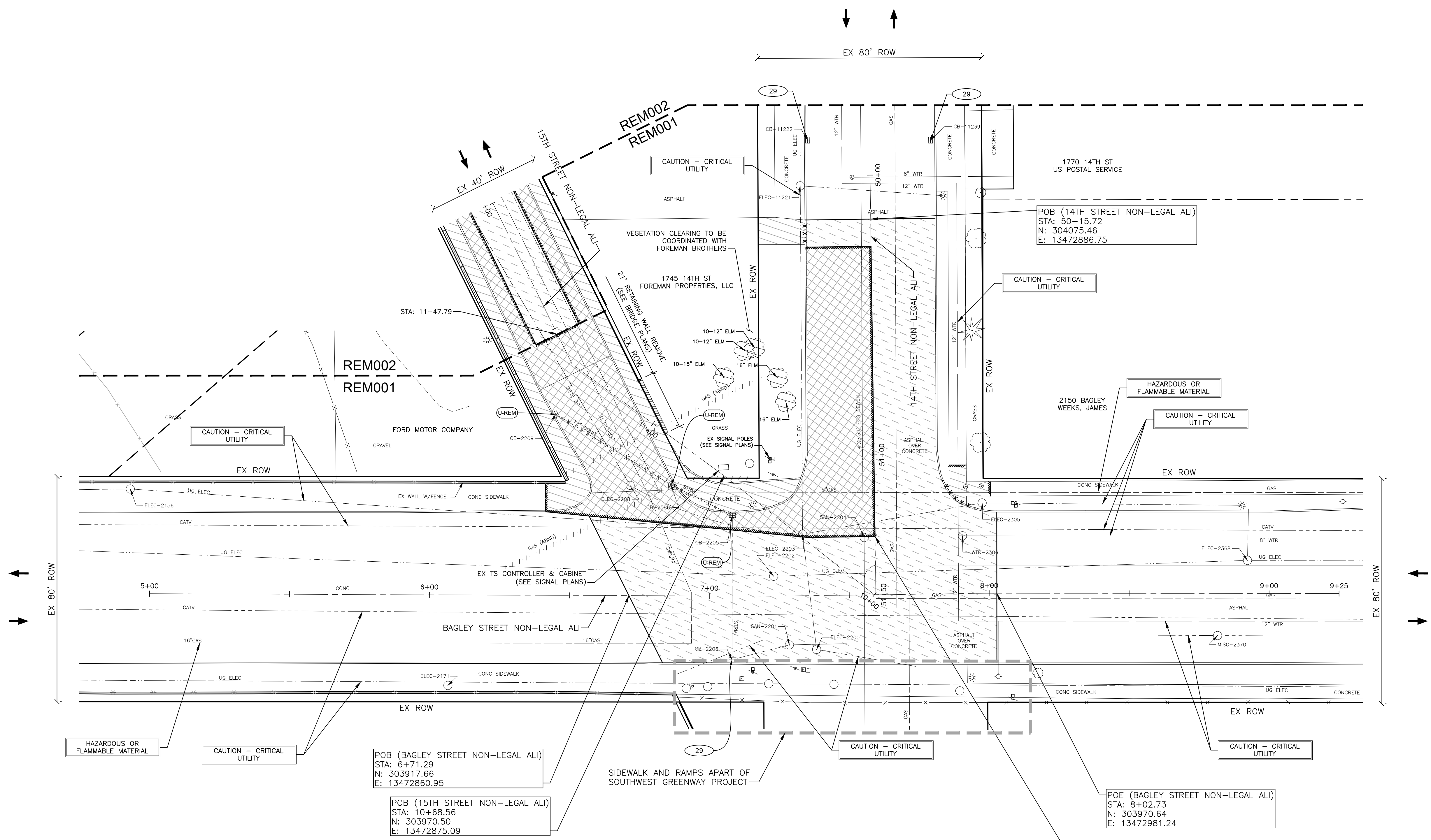
210828

SHEET NO.

19

REM001

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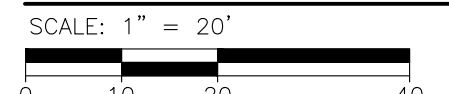


QUANTITIES THIS SHEET

JN PW-7038		
CAT 0001		
5	Ea	Tree, Rem, 6 inch to 18 inch
3	Ea	Dr Structure, Rem
73	Ft	Sewer, Rem, Less than 24 inch
26	Ft	Curb, Rem, Modified
564	Syd	Pavt, Rem, Modified
154	Syd	Sidewalk, Rem, Modified
84	Cyd	Excavation, Earth, Modified
6	Ea	Erosion Control, Inlet Protection, Fabric Drop
548	Syd	HMA Surface, Rem
1020	Syd	Cold Milling HMA Surface, Modified

- NOTES
- EXISTING LIGHT POLES REMOVALS TO BE SHOWN ON LIGHTING PLANS
 - RETAINING WALL REPAIRS AND REMOVALS SHOWN ON RETAINING WALL PLANS

REMOVAL AND SESC PLAN



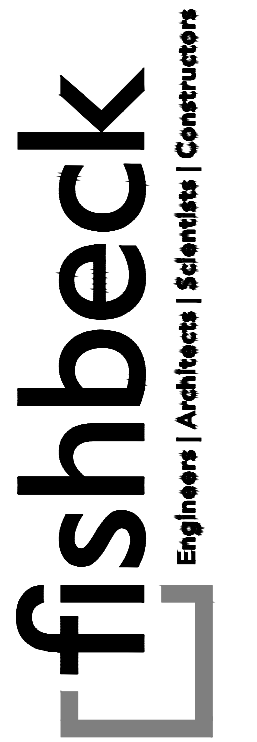
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14TH STREET



15TH STREET

14TH STREET



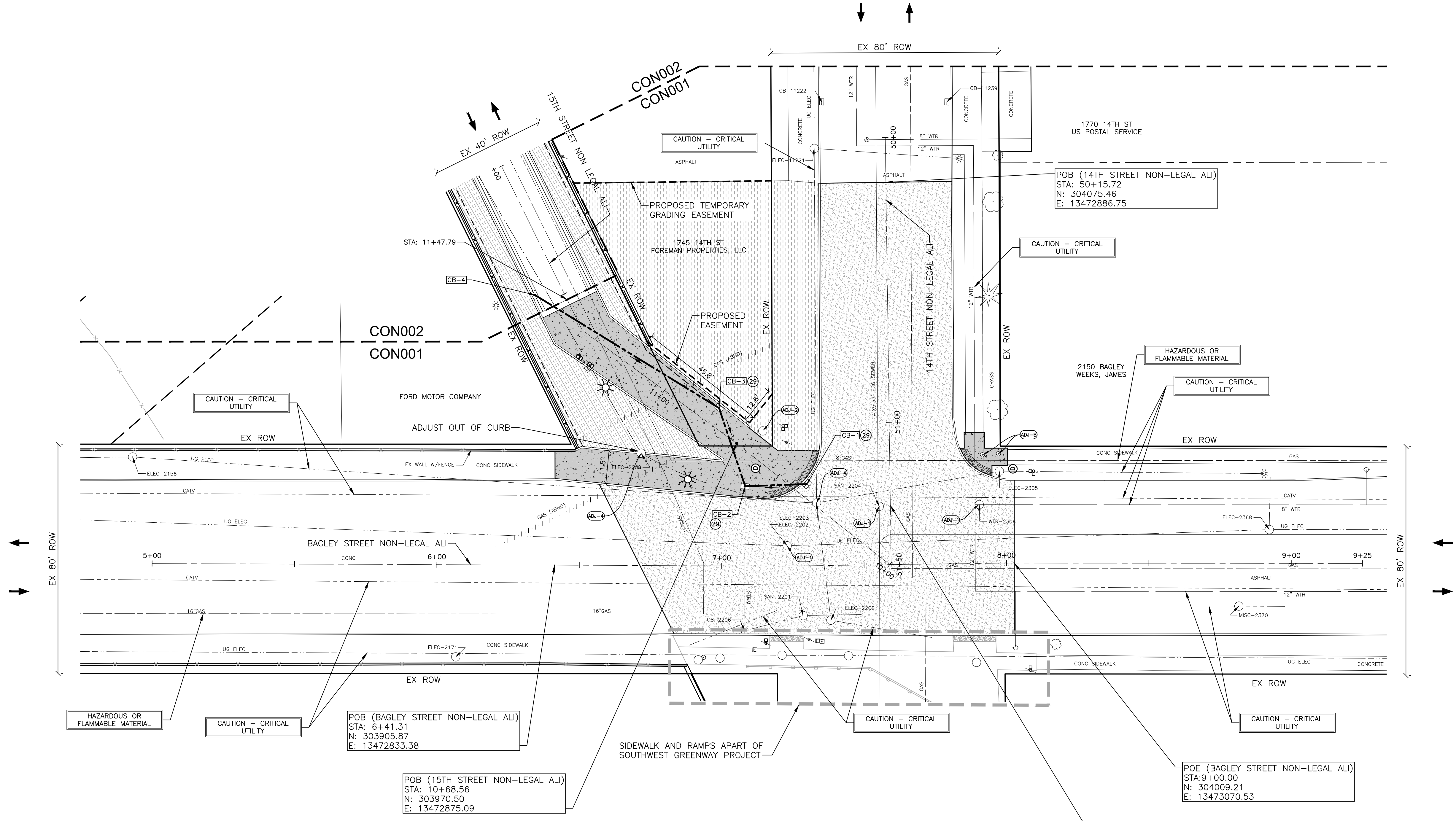
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15th Street Streetscape



QUANTITIES THIS SHEET

JN PW-7038		CAT 0001	
313	Cyd	Embankment, CIP	
440	Syd	Streetscape Grading	
3	Ea	Erosion Control, Inlet Protection, Fabric Drop	
294	Syd	Aggregate Base, 4 inch	
309	Syd	Aggregate Base, 6 inch	
127	Ft	Video Taping Sewer and Culv Pipe	
10	Ft	Dr Structure Lead, Cleaning, Modified	
1	Ft	Dr Structure Cleaning, Modified	
3	Ea	Dr Structure Cover, Adj, Case 1, Modified	
1	Ea	Dr Structure Cover, Adj, Case 2, Modified	
110	Ft	Underdrain, Bank, Open-Graded, 6 inch	
140	Ton	HMA Approach, Modified	
285	Syd	Conc Base, Cse, Nonreinf, 10 inch, Modified	
353	Ft	Concrete Curb, Detail CD, Modified	
21	Ft	Integral Curb and Sidewalk, 2 Foot, Modified	
39	Ft	Detectable Warning Surface Tile, Modified	
50	Ft	Curb Ramp Opening, Conc, Modified	
2093	Sft	Sidewalk, Conc, 6 inch, Modified	
566	Sft	Sidewalk Ramp, ADA, Modified	
616	Syd	Slope Restoration, Non-Freeway, Type A	
2	Ea	Water Shutoff, Adj, Case 2, Modified	

NOTES

- FOR LANDSCAPE AND SITE FURNISHING DETAILS SEE LANDSCAPE PLANS.
- FOR LIGHTING DETAILS SEE LIGHTING PLANS.
- FOR SIGNAL DETAIL SEE SIGNAL PLANS.

PLOT INFO: Z:\2021\10828\CADD\CON001.DWG LAYOUT: CON001 DATE: 2/16/2022 TIME: 6:08:58 AM USER: ADFRANZON

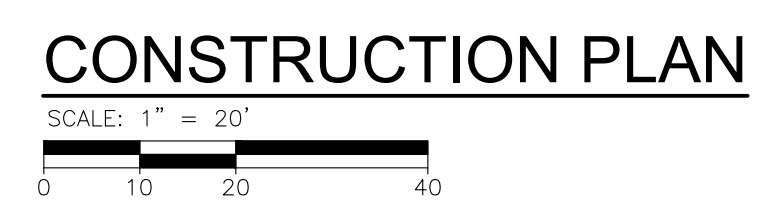
REVISIONS

02/10/2022	BIDS
01/28/2022	100% REVIEW
12/17/2021	90% REVIEW
10/29/2021	60% REVIEW
08/20/2021	30% REVIEW

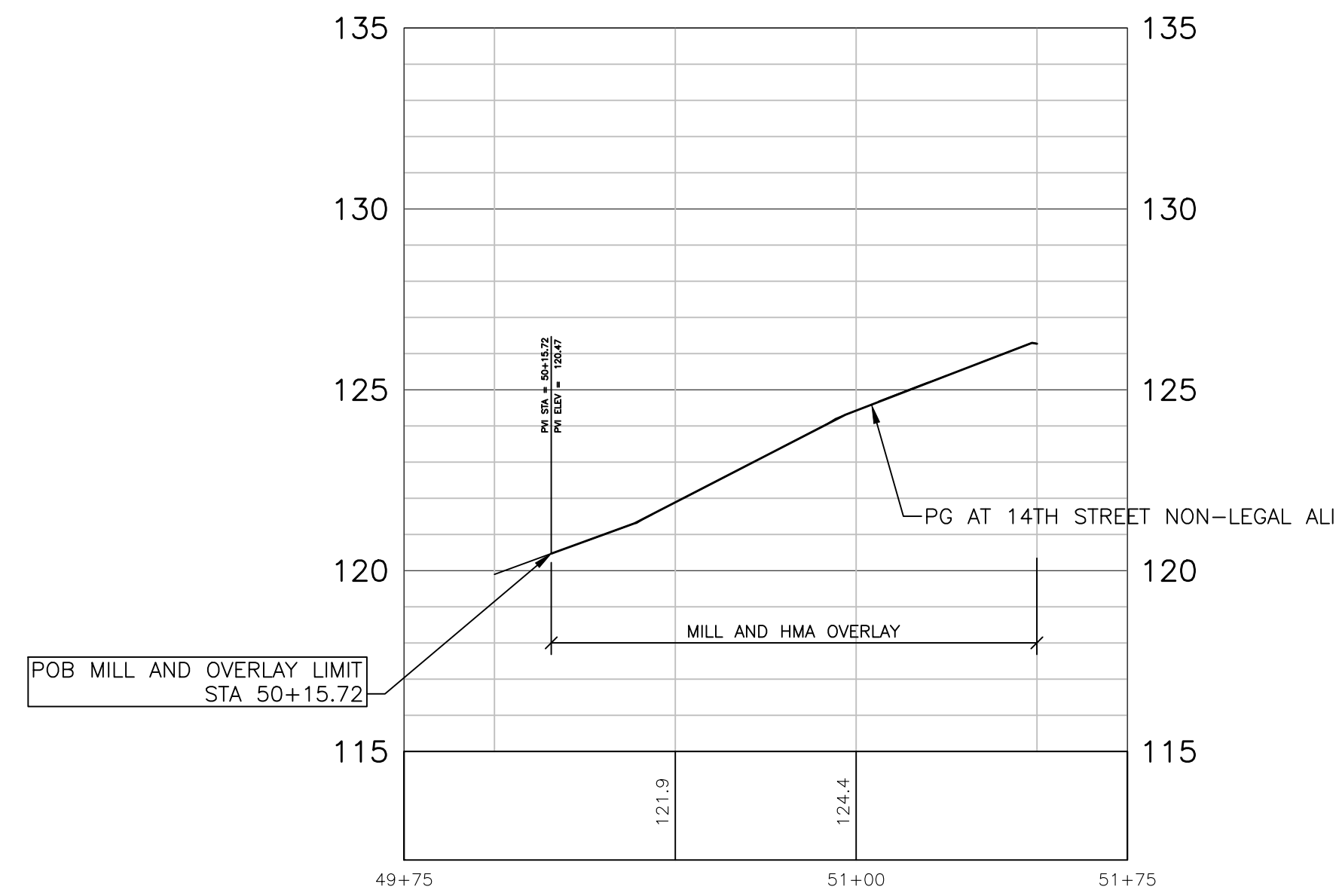
Drawn By AOF
 Designer AOF
 Reviewer DPE
 Manager KK3

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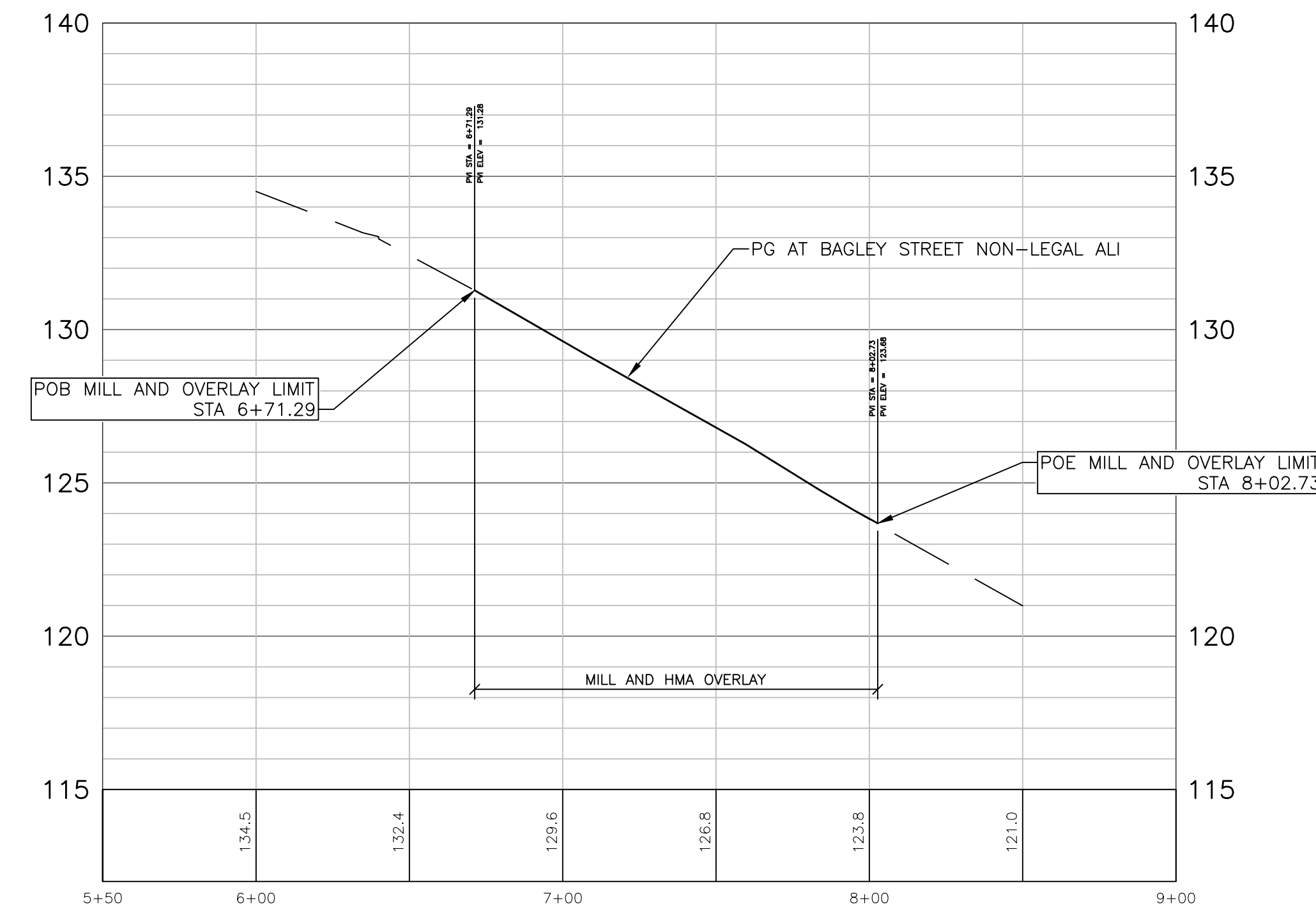
PROJECT NO.
210828
 SHEET NO.
20
CON001



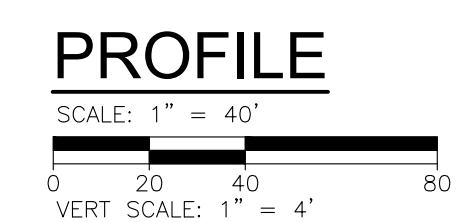
14TH STREET



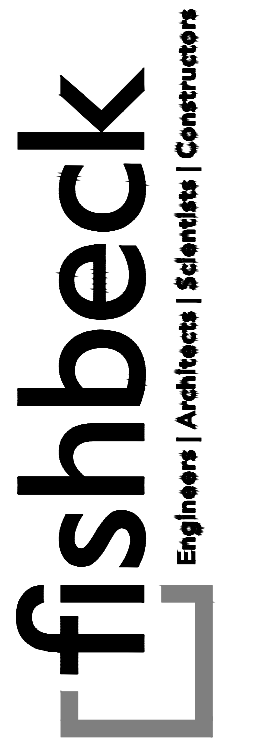
14TH STREET NON-LEGAL ALI



BAGLEY STREET NON-LEGAL ALI



PLOT INFO: Z:\2021\10828\CADD\21828_PROF001.DWG LAYOUT: CONTRL01 DATE: 2/8/2022 TIME: 3:27:17 PM USER: AOFRANZON



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15th Street Streetscape

REVISIONS

02/10/2022	BIDS
01/28/2022	100% REVIEW
12/17/2021	90% REVIEW
10/29/2021	60% REVIEW
08/20/2021	30% REVIEW

Drawn By AOF
Designer AOF
Reviewer DPE
Manager KK3

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210828

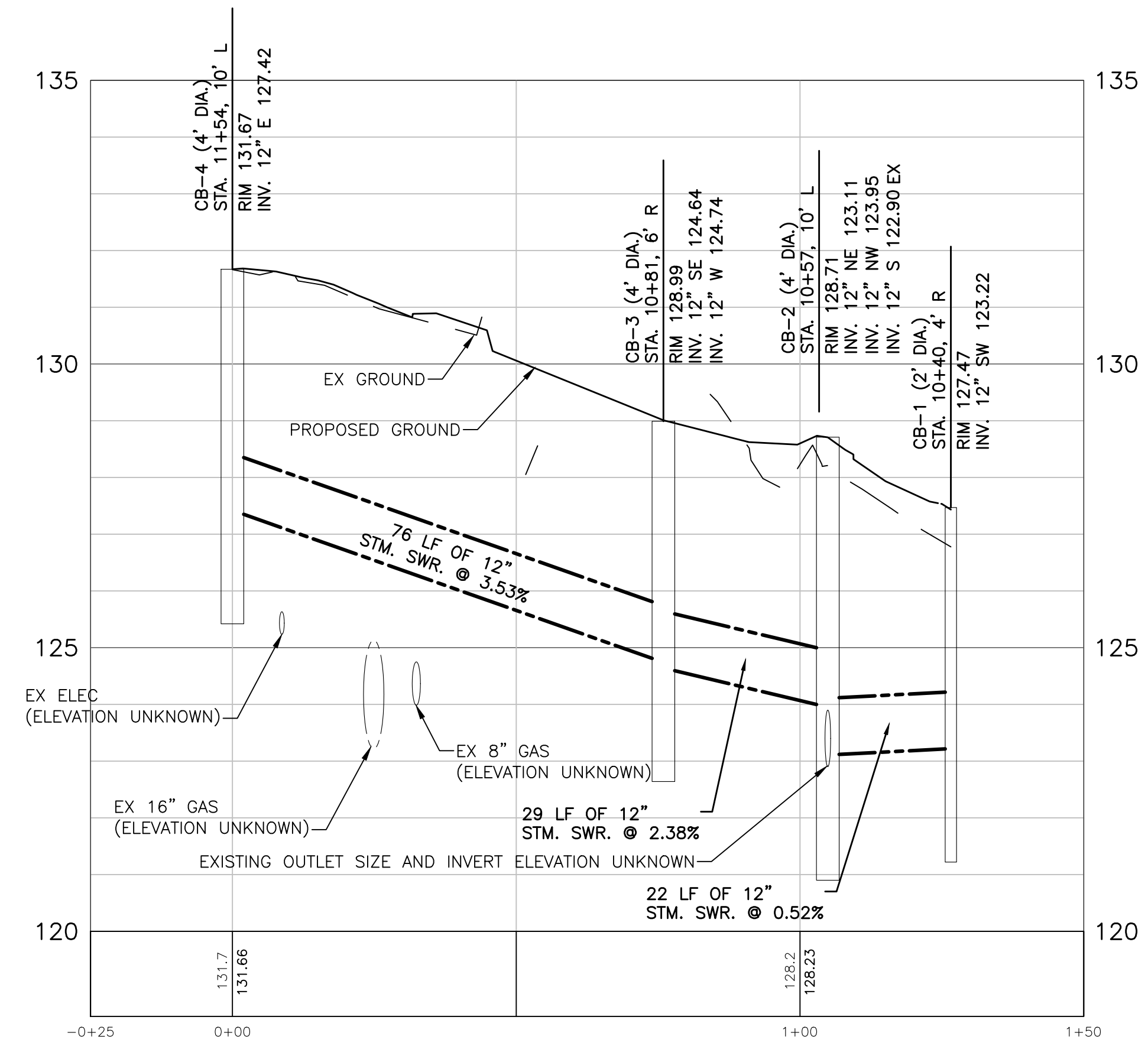
SHEET NO.
21
PROF001

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DRAINAGE PROFILES AND TABLE

STRUCT NO.	ALIGNMENT	STATION	OFFSET		Sewer, CI IV, 12 inch, Tr Det B	Dr Structure Cover, Type ADA, Modified	Dr Structure Cover, Type VAL, Modified	Dr Structure, 24 in dia, Modified	Dr Structure, 48 in dia, Modified
			FT	FT					
CB-1	15th Street	10+40.38	4.13 RT	127.47	22	1	--	1	--
CB-2	15th Street	10+56.87	9.93 LT	128.71	--	1	--	--	1
CB-3	15th Street	10+81.13	5.90 RT	128.99	29	1	--	--	1
CB-4	15th Street	11+53.68	9.50 LT	131.67	76	--	1	--	1
TOTAL					127	3	1	1	3

NOTE: CONTRACTOR TO VERIFY OUTLET PIPE IS IN GOOD CONDITION. CB-2, CB-3, AND CB-4 ARE TO BE MANHOLE TYPE B. CB-01 CAN BE EITHER MANHOLE TYPE A OR TYPE B. SEE DETAIL ON SHEET.



CB-4 TO CB-1

SCALE: 1" = 20'



CATCH BASIN "A"

REVISÉD DATE/METRIC TO ENGLISH UNIT SYSTEM: DEC. 2002

CITY OF DETROIT
CITY ENGINEERING DIVISION, D.P.W.
STANDARD PLAN FOR
CATCH BASINS "A" AND "B"
AND FLAT GRATE AND FRAME

APPROVED: *Danny Vander*
CITY ENGINEER

PREPARED BY: K.S.M.
DRAWN BY: *Danny Vander*
CHECKED BY: M.F.S.
CITY ENGINEER

DATE: 03/07/2018
DRAWING NO.: 35
SHEET: 1 OF 1

CATCH BASIN "B"

REVISÉD DATE/METRIC TO ENGLISH UNIT SYSTEM: DEC. 2002

CITY OF DETROIT
CITY ENGINEERING DIVISION, D.P.W.
STANDARD PLAN FOR
CATCH BASINS "A" AND "B"
AND FLAT GRATE AND FRAME

APPROVED: *Danny Vander*
CITY ENGINEER

PREPARED BY: K.S.M.
DRAWN BY: *Danny Vander*
CHECKED BY: M.F.S.
CITY ENGINEER

DATE: 03/07/2018
DRAWING NO.: 35
SHEET: 2 OF 1

DETAIL OF TRAP FOR CATCH BASIN "B"

REVISÉD DATE/METRIC TO ENGLISH UNIT SYSTEM: DEC. 2002

CITY OF DETROIT
CITY ENGINEERING DIVISION, D.P.W.
STANDARD PLAN FOR
CATCH BASINS "A" AND "B"
AND FLAT GRATE AND FRAME

APPROVED: *Danny Vander*
CITY ENGINEER

PREPARED BY: K.S.M.
DRAWN BY: *Danny Vander*
CHECKED BY: M.F.S.
CITY ENGINEER

DATE: 03/07/2018
DRAWING NO.: 35
SHEET: 3 OF 1

ALUMINUM MANHOLE STEP STANDARD DETAILS

NO SCALE

REVISÉD DATE/METRIC TO ENGLISH UNIT SYSTEM: DEC. 2002

CITY OF DETROIT
CITY ENGINEERING DIVISION, D.P.W.
STANDARD PLAN FOR
CATCH BASINS "A" AND "B"
AND FLAT GRATE AND FRAME

APPROVED: *Danny Vander*
CITY ENGINEER

PREPARED BY: K.S.M.
DRAWN BY: *Danny Vander*
CHECKED BY: M.F.S.
CITY ENGINEER

DATE: 03/07/2018
DRAWING NO.: 35
SHEET: 4 OF 1

PLOT INFO: Z:\2022\10828\CAD\CDD2\10828_CONTRBL01.DWG LAYOUT: CONTRBL01 DATE: 2/15/2022 TIME: 8:10:28 AM USER: AOF:RANZON



REVISIONS

02/10/2022	BIDS
01/28/2022	100% REVIEW
12/17/2021	90% REVIEW
10/29/2021	60% REVIEW
08/20/2021	30% REVIEW

Drawn By: AOF
 Designer: AOF
 Reviewer: DPE
 Manager: KKS

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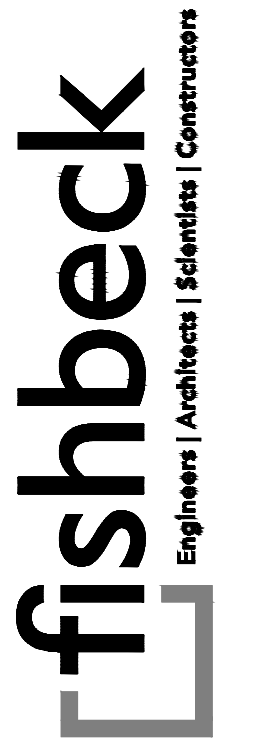
PROJECT NO.
210828

SHEET NO.
22

CONTRBL001



BAGLEY STREET



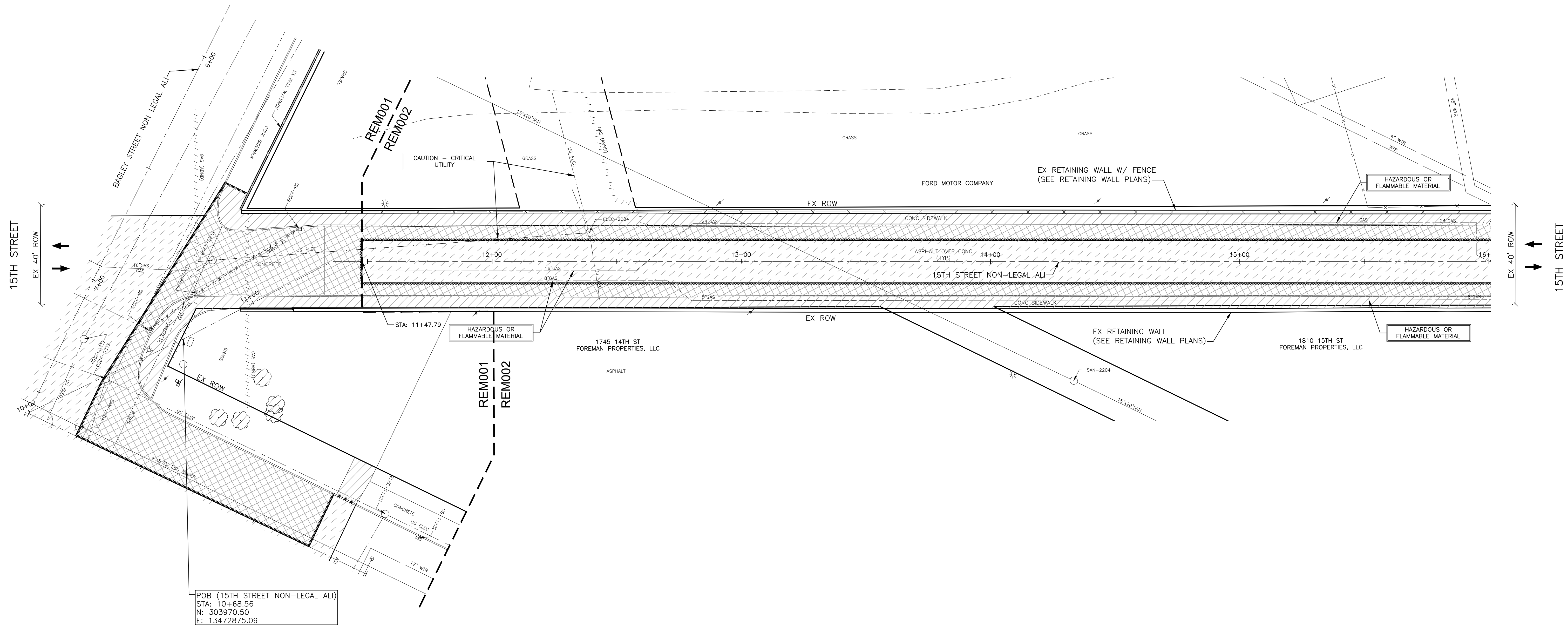
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15th Street Streetscape



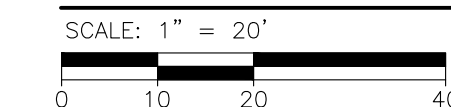
POB (15TH STREET NON-LEGAL ALI)
STA: 10+68.56
N: 303970.50
E: 13472875.09

QUANTITIES THIS SHEET	
JN PW-7038	
CAT 0001	
597	Syd Pavt, Rem, Modified
460	Syd Sidewalk, Rem, Modified
475	Cyd Excavation, Earth, Modified
546	Syd HMA Surface, Rem
856	Syd Cold Milling HMA Surface, Modified

NOTES

- EXISTING LIGHT POLES REMOVALS TO BE SHOWN ON LIGHTING PLANS.
- RETAINING WALL REPAIRS AND FENCE REMOVAL APART OF RETAINING WALL PLANS

REMOVAL AND SESC PLAN



14TH STREET

REVISIONS

02/10/2022	BIDS
01/28/2022	100% REVIEW
12/17/2021	90% REVIEW
10/29/2021	60% REVIEW
08/20/2021	30% REVIEW

Drawn By AOF
Designer AOF
Reviewer DPE
Manager KKS

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PROJECT NO.

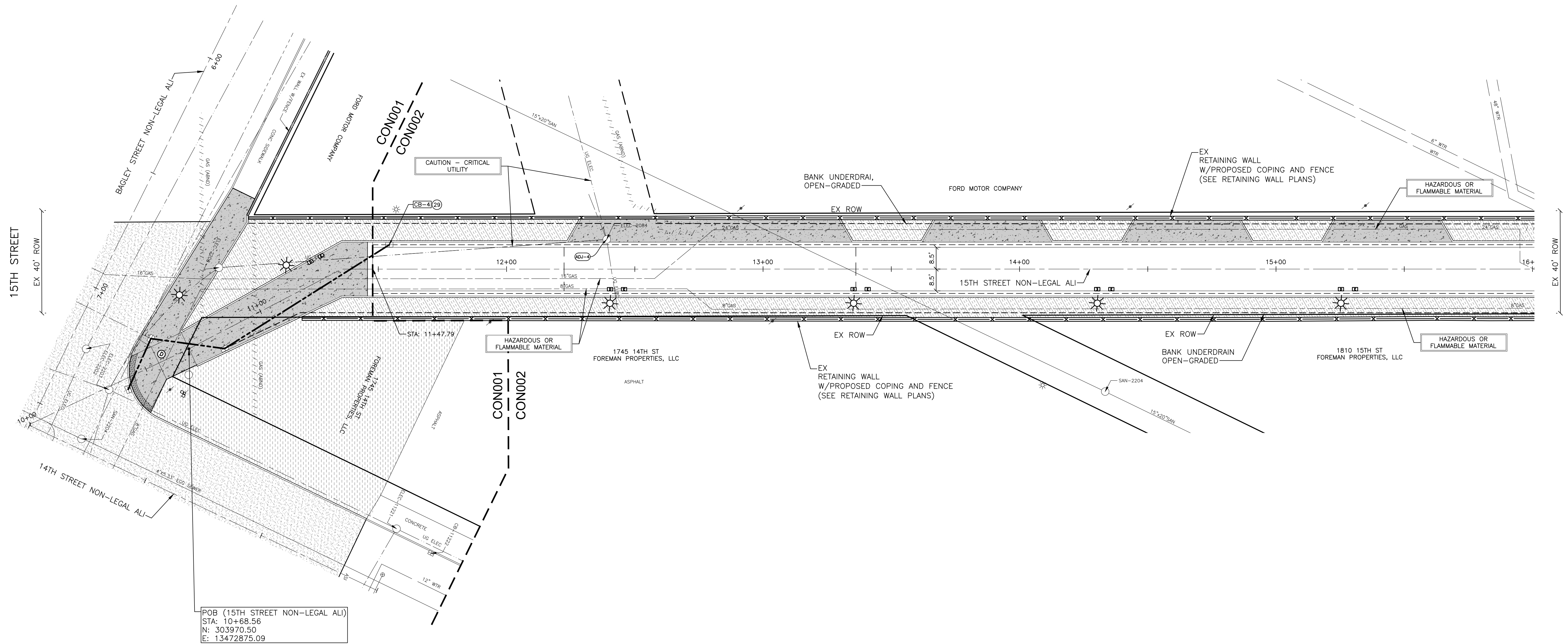
210828

SHEET NO.

23

REM002

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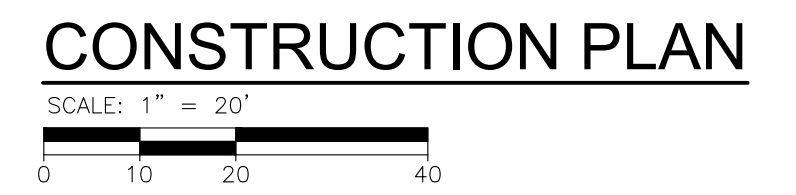


POB (15TH STREET NON-LEGAL ALI)
STA: 10+68.56
N: 303970.50
E: 13472875.09

QUANTITIES THIS SHEET

QTY	UNIT	DESCRIPTION
1	Ea	Erosion Control, Inlet Protection, Fabric Drop
208	Syd	Aggregate Base, 4 inch
230	Syd	Aggregate Base, 8 inch
885	Ft	Underdrain, Bank, Open-Graded, 6 inch
198	Ton	HMA, 5EMH
10	Ton	Conditioning Existing Pavement, Modified
714	Ft	Concrete Curb, Detail CD, Modified
905	Ft	Valley Gutter, Conc, Modified
2127	Sft	Sidewalk, Conc, 6 inch, Modified
1	Ea	Water Shutoff, Adj, Case 2, Modified

- NOTES**
- FOR LANDSCAPE AND SITE FURNISHING DETAILS SEE LANDSCAPE PLANS.
 - FOR LIGHTING DETAILS SEE LIGHTING PLANS.
 - FOR RETAINING WALL DETAILS SEE RETAINING WALL PLANS.



14TH STREET

PLOT INFO: Z:\2021\10828\CADD\CON002.DWG LAYOUT: CON002 DATE: 2/10/2022 TIME: 11:08:19 AM USER: ADFRANZON

REVISIONS

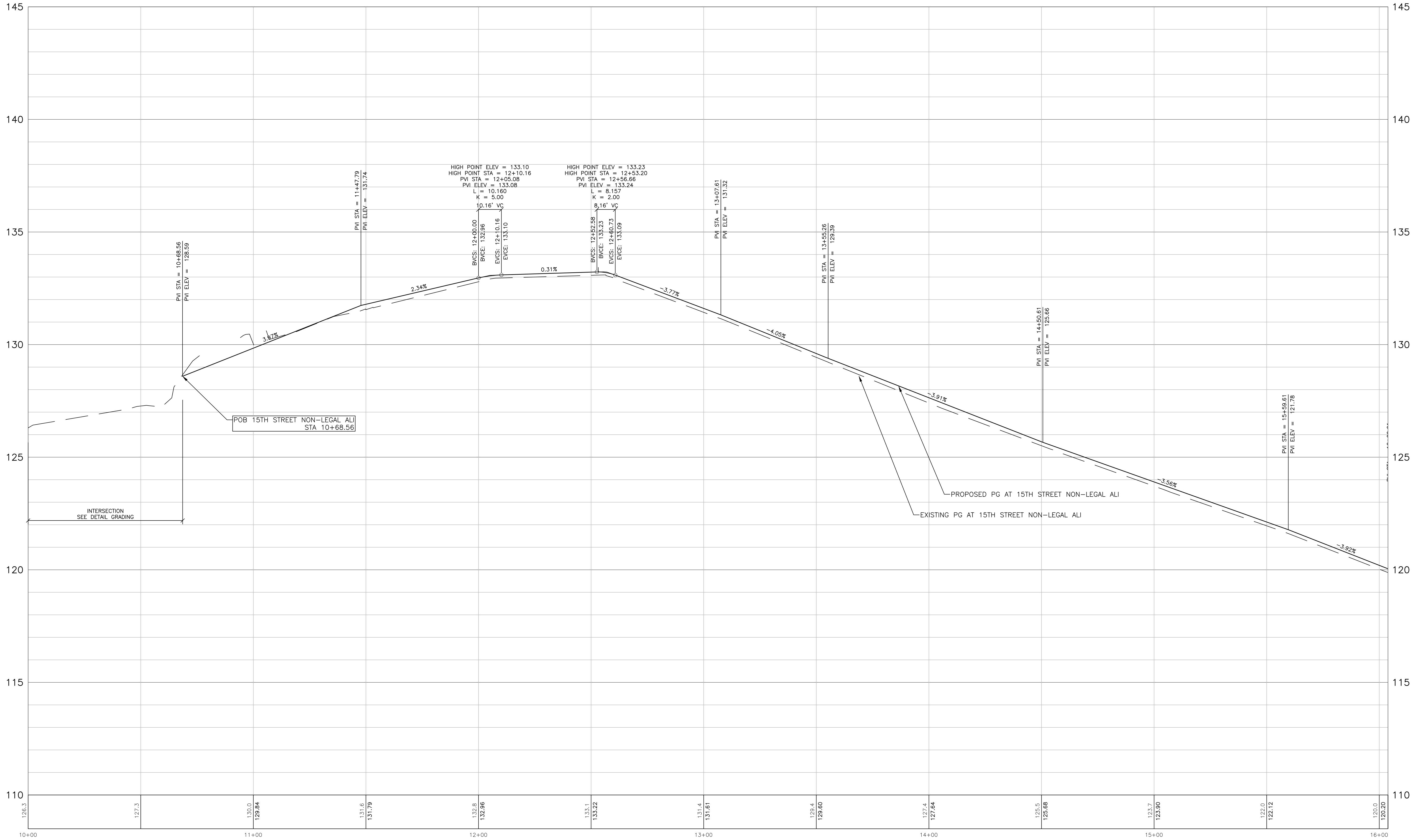
DATE	DESCRIPTION
02/10/2022	BIDS
01/28/2022	100% REVIEW
12/17/2021	90% REVIEW
10/29/2021	60% REVIEW
08/20/2021	30% REVIEW

Drawn By: AOF
Designer: AOF
Reviewer: DPE
Manager: KKS

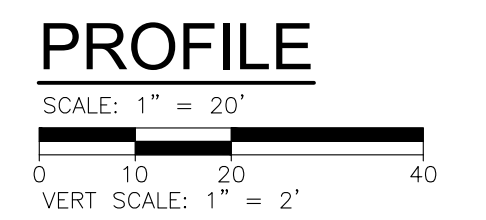
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PROJECT NO.
210828

SHEET NO.
24
CON002



PLOT INFO: Z:\2021\10828\CADD\210828_PROF002.DWG LAYOUT: CONTRL01 DATE: 2/8/2022 TIME: 3:32:30 PM USER: AOFRAANZON



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15th Street Streetscape

REVISIONS

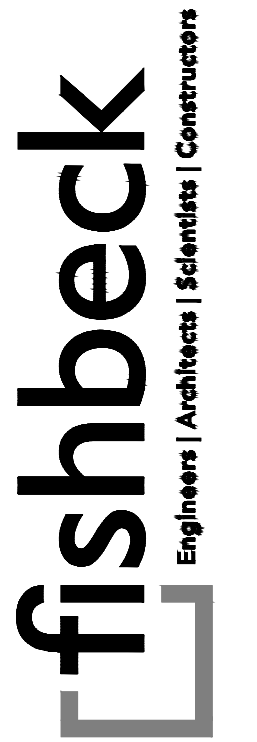
02/10/2022	BIDS
01/28/2022	100% REVIEW
12/17/2021	90% REVIEW
10/29/2021	60% REVIEW
08/20/2021	30% REVIEW

Drawn By AOF
Designer AOF
Reviewer DPE
Manager KKS

Hard copy is intended to be 24"x36" when plotted. Scale(s) indicated and graphic quality may not be accurate for any other size.

PROJECT NO.
210828

SHEET NO.
25
PROF002



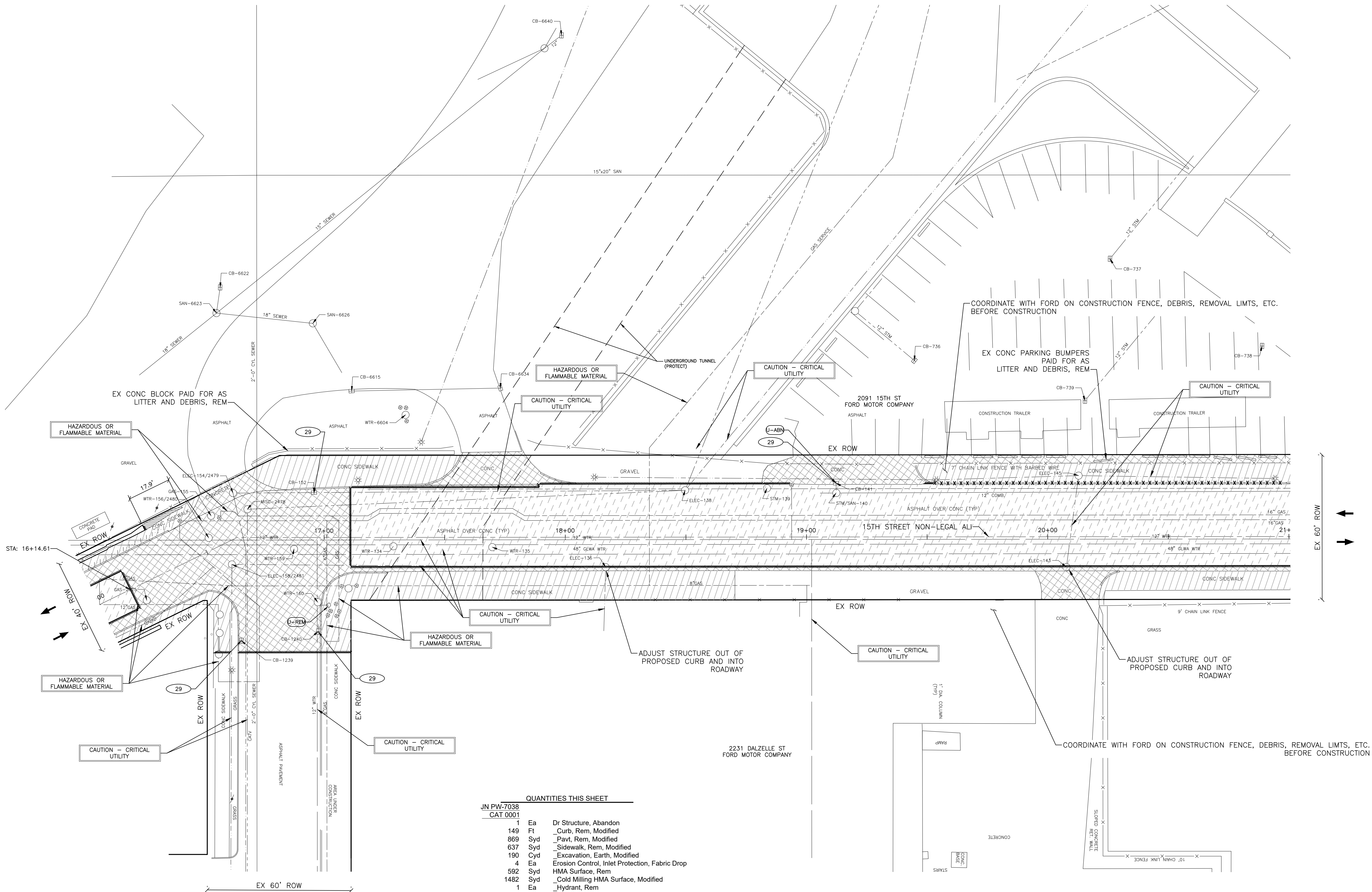
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15th Street Streetscape



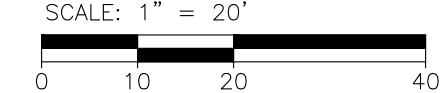
QUANTITIES THIS SHEET

JN PW-7038	1	Ea	Dr Structure, Abandon
CAT 0001	149	Ft	_Curb, Rem, Modified
	869	Syd	_Pavt, Rem, Modified
	637	Syd	_Sidewalk, Rem, Modified
	190	Cyd	_Excavation, Earth, Modified
	4	Ea	Erosion Control, Inlet Protection, Fabric Drop
	592	Syd	HMA Surface, Rem
	1482	Syd	Cold Milling HMA Surface, Modified
	1	Ea	_Hydrant, Rem

NOTES

- EXISTING LIGHT POLES REMOVALS TO BE SHOWN ON LIGHTING PLANS.
- RETAINING WALL REMOVALS SHOWN ON RETAINING WALL PLANS.
- OLD HYDRANTS TO BE SALVAGED AND RETURNED TO DWS.
- REMOVE OLD HYDRANT LEAD TAPPING SLEEVE IF HYDRANT IS CONNECTED TO THE MAIN VIA A TAPPING SLEEVE AND REPLACE WITH PIPE SLEEVES.
- OLD HYDRANT LEAD AND TAP CANT BE REUSED UNLESS IT IS IN GOOD CONDITION.
- DWS CASTINGS REMOVED TO BE SALVAGED AND RETURNED TO DWS.

REMOVAL AND SESC PLAN



REVISIONS

02/10/2022	BIDS
01/28/2022	100% REVIEW
12/17/2021	90% REVIEW
10/29/2021	60% REVIEW
08/20/2021	30% REVIEW

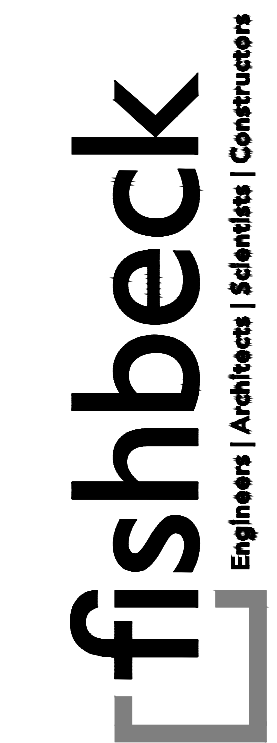
Drawn By AOF
Designer AOF
Reviewer DPE
Manager KKS

Hard copy is intended to be 24"x36" when plotted. Scale(s) indicated and graphic quality may not be accurate for any other size.

PROJECT NO.
210828

SHEET NO.
26
REM003

PLOT INFO: Z:\2021\10836\CADD\210828_REM003.DWG LAYOUT: REM003 DATE: 2/16/2022 TIME: 9:53:20 AM USER: AOFFANZON



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City of Detroit

15th Street Streetscape

REVISIONS

02/10/2022	BIDS
01/28/2022	100% REVIEW
12/17/2021	90% REVIEW
10/29/2021	60% REVIEW
08/20/2021	30% REVIEW

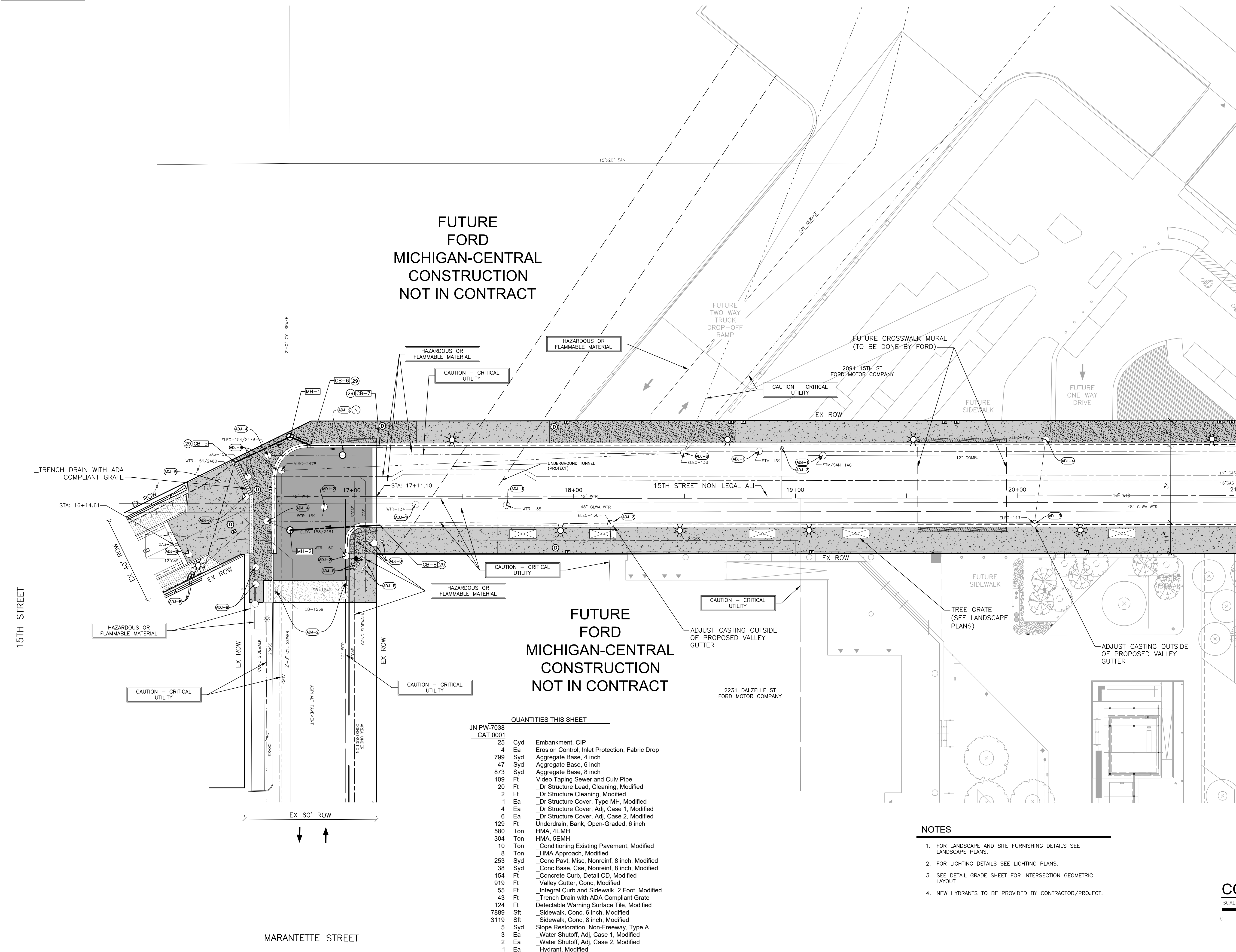
Drawn By AOF
Designer AOF
Reviewer DPE
Manager KKS

PROJECT NO.
210828

SHEET NO.
27
CON003

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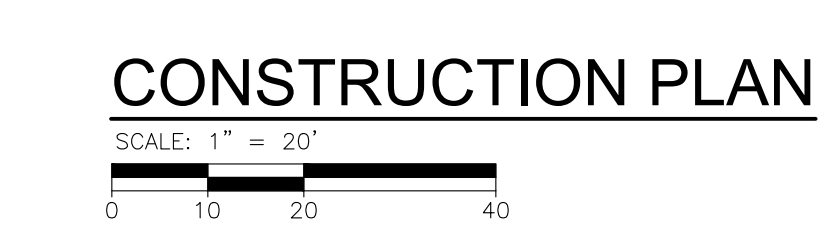
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QUANTITIES THIS SHEET

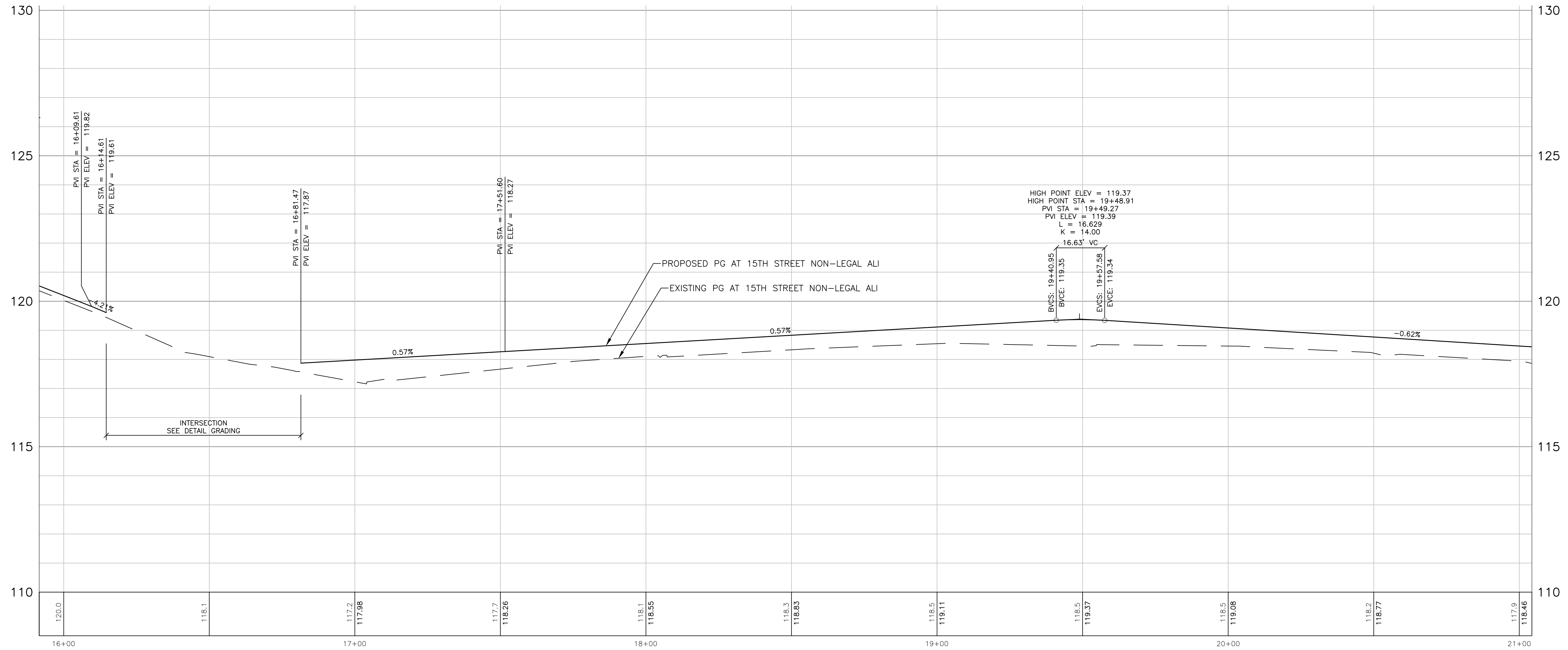
JN PW-7038 CAT 0001	Quantity	Unit	Description
25	Cyd	Embankment, CIP	
4	Ea	Erosion Control, Inlet Protection, Fabric Drop	
799	Syd	Aggregate Base, 4 inch	
47	Syd	Aggregate Base, 6 inch	
873	Syd	Aggregate Base, 8 inch	
109	Ft	Video Taping Sewer and Culv Pipe	
20	Ft	Dr Structure Lead, Cleaning, Modified	
2	Ft	Dr Structure Cleaning, Modified	
1	Ea	Dr Structure Cover, Type MH, Modified	
4	Ea	Dr Structure Cover, Adj, Case 1, Modified	
6	Ea	Dr Structure Cover, Adj, Case 2, Modified	
129	Ft	Underdrain, Bank, Open-Graded, 6 inch	
580	Ton	HMA, 4EMH	
304	Ton	HMA, 5EMH	
10	Ton	Conditioning Existing Pavement, Modified	
8	Ton	HMA Approach, Modified	
253	Syd	Conc Pavn, Misc, Nonreinf, 8 inch, Modified	
38	Syd	Conc Base, Cse, Nonreinf, 8 inch, Modified	
154	Ft	Concrete Curb, Detail CD, Modified	
919	Ft	Valley Gutter, Conc, Modified	
55	Ft	Integral Curb and Sidewalk, 2 Foot, Modified	
43	Ft	Trench Drain with ADA Compliant Grate	
124	Ft	Detectable Warning Surface Tile, Modified	
7889	Sft	Sidewalk, Conc, 6 inch, Modified	
3119	Sft	Sidewalk, Conc, 8 inch, Modified	
5	Syd	Slope Restoration, Non-Freeway, Type A	
3	Ea	Water Shutoff, Adj, Case 1, Modified	
2	Ea	Water Shutoff, Adj, Case 2, Modified	
1	Ea	Hydrant, Modified	

- NOTES**
- FOR LANDSCAPE AND SITE FURNISHING DETAILS SEE LANDSCAPE PLANS.
 - FOR LIGHTING DETAILS SEE LIGHTING PLANS.
 - SEE DETAIL GRADE SHEET FOR INTERSECTION GEOMETRIC LAYOUT
 - NEW HYDRANTS TO BE PROVIDED BY CONTRACTOR/PROJECT.

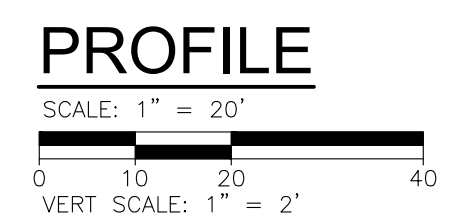


MARANTETTE STREET

15TH STREET



PLOT INFO: Z:\2021\10828\CADD\210828_PROF003.DWG LAYOUT: PROF003 DATE: 2/10/2022 TIME: 1:42:59 AM USER: ADRHANNON



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City of Detroit

15th Street Streetscape

REVISIONS

02/10/2022	BIDS
01/28/2022	100% REVIEW
12/17/2021	90% REVIEW
10/29/2021	60% REVIEW
08/20/2021	30% REVIEW

Drawn By AOF
 Designer AOF
 Reviewer DPE
 Manager KKS

Hard copy is intended to be 24"x36" when plotted. Scale(s) indicated and graphic quality may not be accurate for any other size.

PROJECT NO.
210828

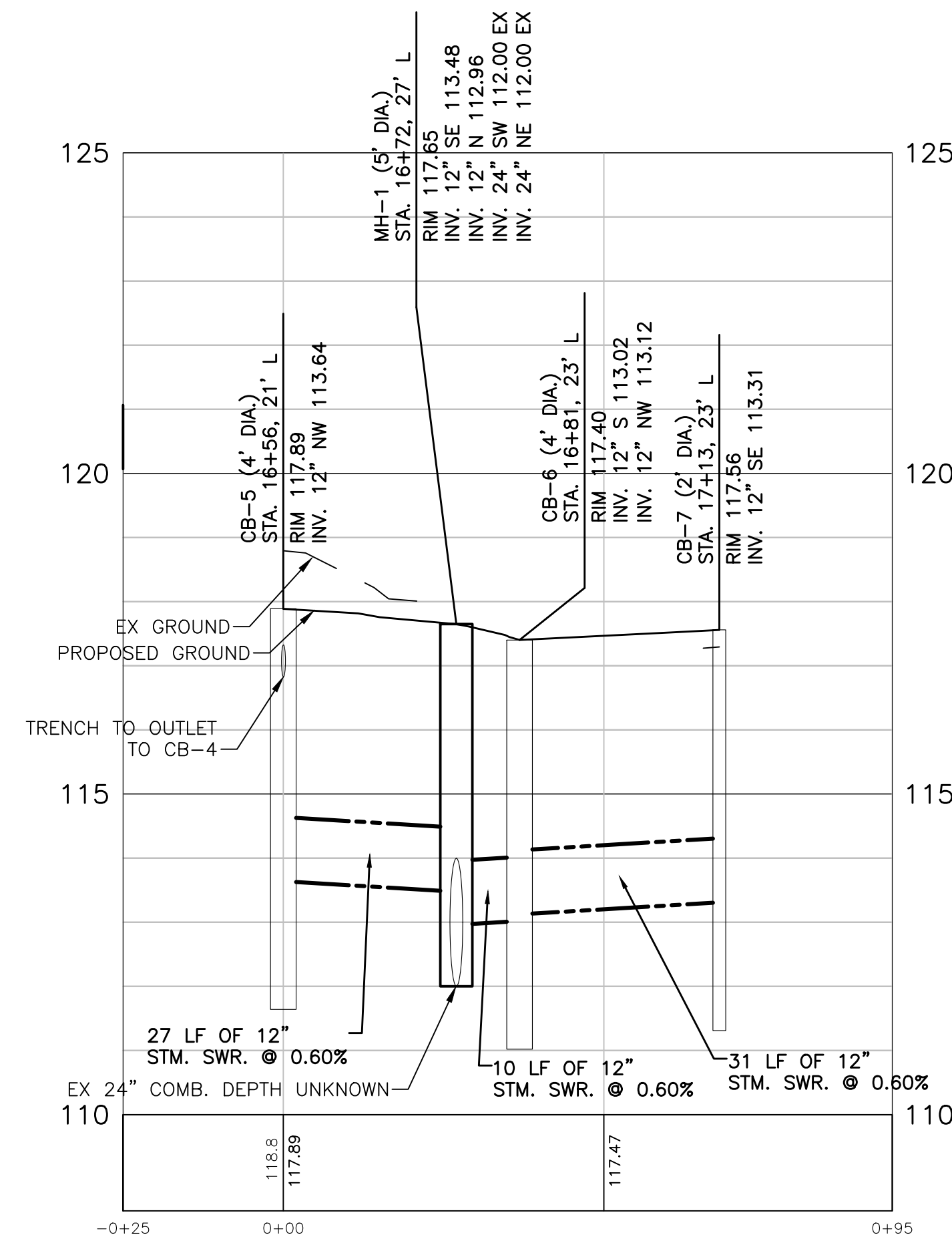
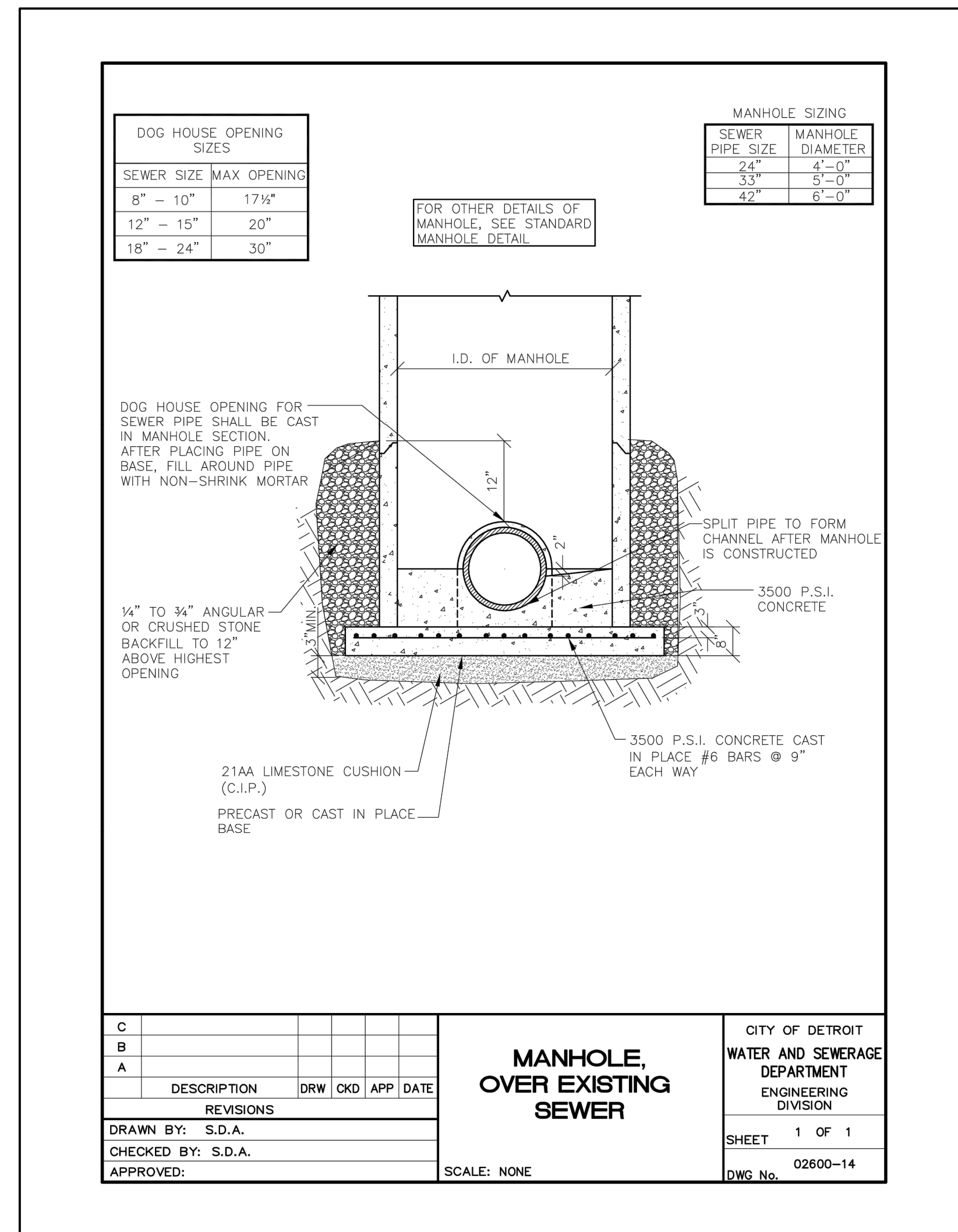
SHEET NO.
28
PROF003

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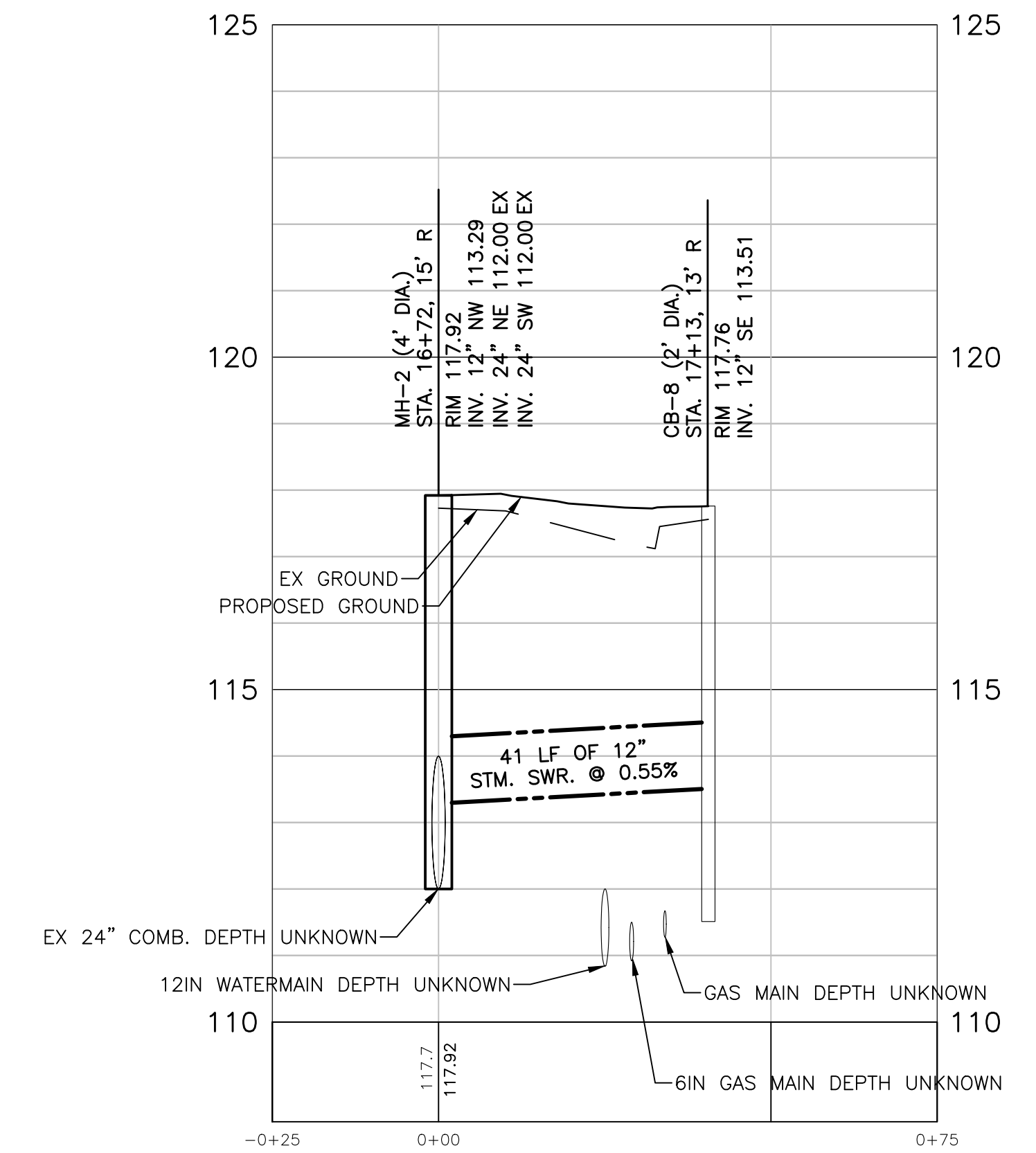
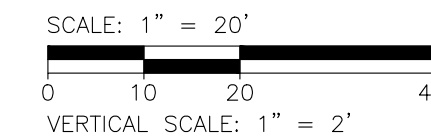
DRAINAGE PROFILES AND TABLE

DRAINAGE STRUCTURE AND SEWER TABLE					Sewer, CI IV, 12 inch, Tr Det B	Sewer Tap, 24 inch	_Dr Structure Cover, Type ADA, Modified	_Dr Structure Cover, Type VAL, Modified	_Dr Structure Cover, Type MH, Modified	_Dr Structure, 48 in dia, Modified	_Dr Structure, 60 in dia, Modified	
STRUCT NO.	ALIGNMENT	STATION	OFFSET		RIM ELEV	Ft	Ea	Ea	Ea	Ea	Ea	
			FT	FT								
CB-5	15th Street	16+55.17	21.03 LT	117.89	27	--	1	--	--	1	--	
CB-6	15th Street	16+80.86	23.00 LT	117.4	10	--	1	--	--	1	--	
CB-7	15th Street	17+12.02	23.00 LT	117.56	31	--	1	--	--	1	--	
CB-8	15th Street	17+12.02	13.00 RT	117.76	41	--	1	--	--	1	--	
MH-1	15th Street	16+71.52	26.18 LT	117.65	--	1	--	1	1	--	1	
MH-2	15th Street	16+70.50	15.18 RT	117.92	--	1	--	1	1	--	1	
TOTAL						109	2	1	3	2	5	1

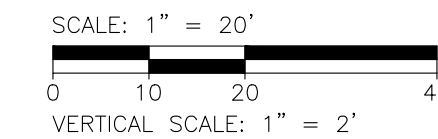
NOTE: FOR MH1 AND MH2 REFER TO DWS DETAIL 'MANHOLE, OVER EXISTING SEWER' ON THIS SHEET. CB-5, CB-6, MH-1, AND MH-2 ARE TO BE MANHOLE TYPE B. CB-7 AND CB-8 CAN BE EITHER MANHOLE TYPE A OR TYPE B. REFER TO DETAIL ON SHEET NO. 22.



CB-5 TO CB-7



MH-2 TO CB-8



PLOT INFO: Z:\2021\10828\CADD\210828_CONTRBL003.DWG LAYOUT: CONTRBL003 DATE: 21/10/2022 TIME: 8:13:11 AM USER: AOFRANZON

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REVISIONS

02/10/2022	BIDS
01/28/2022	100% REVIEW
12/17/2021	90% REVIEW
10/29/2021	60% REVIEW
08/20/2021	30% REVIEW

Drawn By: AOF
Designer: AOF
Reviewer: DPE
Manager: KK3

Hard copy is intended to be 24"x36" when plotted. Scale(s) indicated and graphic quality may not be accurate for any other size.

PROJECT NO.
210828

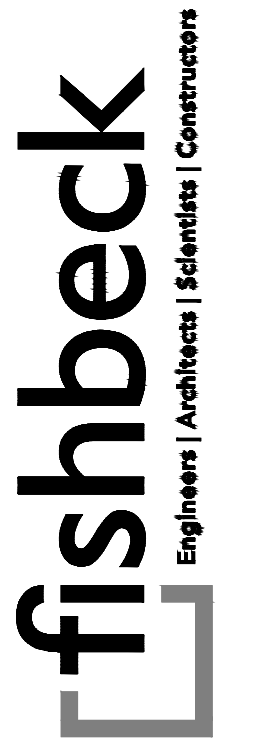
SHEET NO.
29

CONTRBL003

CONSTRUCTION TABLE AND PROFILE



LACOMBE DRIVE



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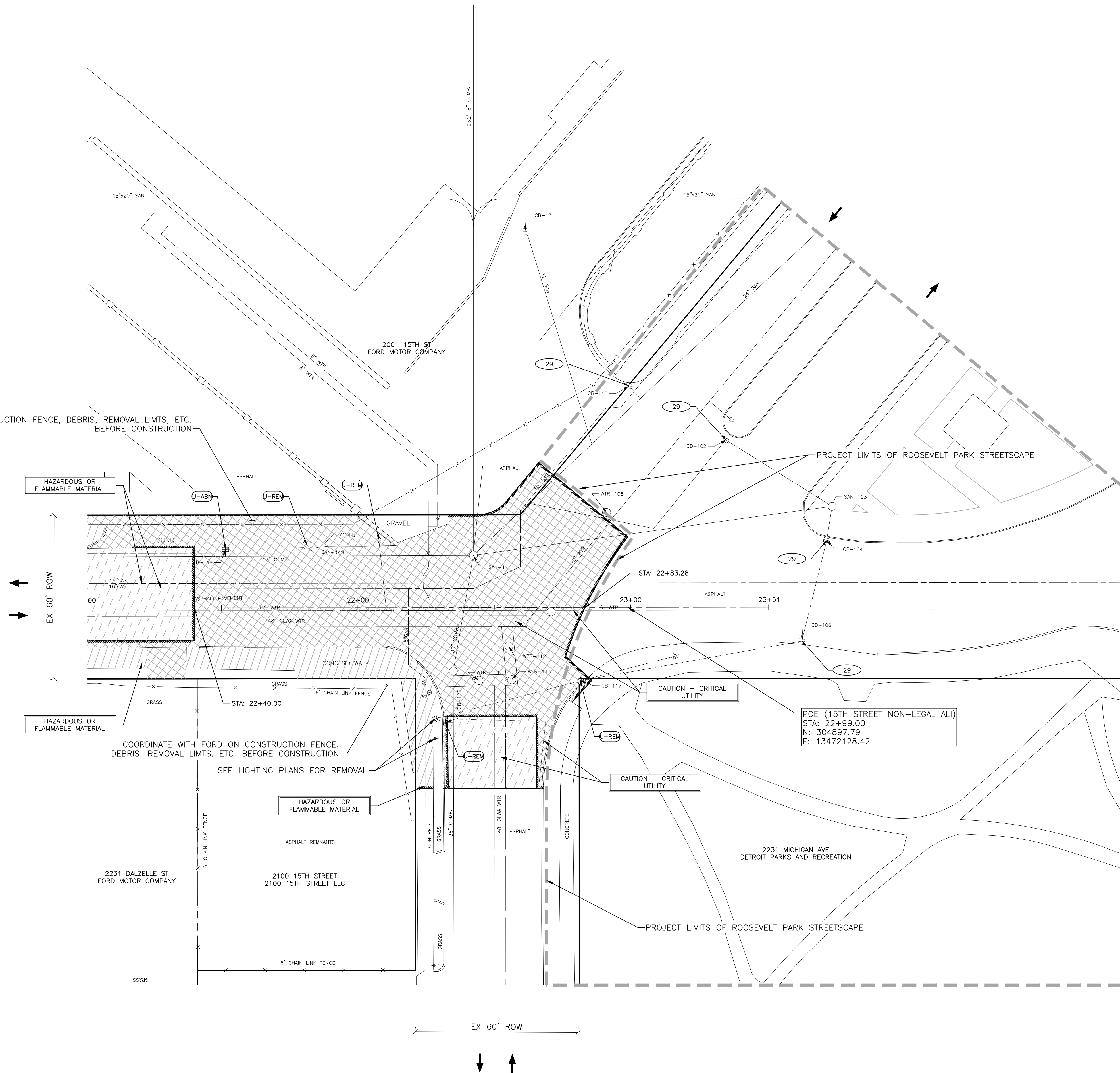


City of Detroit

15th Street Streetscape

15TH STREET

15TH STREET



COORDINATE WITH FORD ON CONSTRUCTION FENCE, DEBRIS, REMOVAL LIMITS, ETC. BEFORE CONSTRUCTION

COORDINATE WITH FORD ON CONSTRUCTION FENCE, DEBRIS, REMOVAL LIMITS, ETC. BEFORE CONSTRUCTION

SEE LIGHTING PLANS FOR REMOVAL

POE (15TH STREET NON-LEGAL ALI)
STA: 22+99.00
N: 304897.79
E: 13472128.42

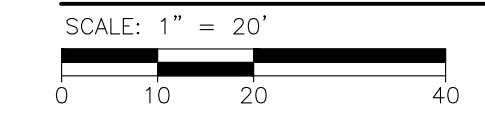
QUANTITIES THIS SHEET

JN PW-7038			
CAT 0001			
1	Ea	Dr Structure, Abandon	
3	Ea	Dr Structure, Rem	
1062	Syd	Pavt, Rem, Modified	
157	Syd	Sidewalk, Rem, Modified	
380	Cyd	Excavation, Earth, Modified	
4	Ea	Erosion Control, Inlet Protection, Fabric Drop	
900	Syd	HMA Surface, Rem	
244	Syd	Cold Milling HMA Surface, Modified	
1	Ea	Hydrant, Rem	

NOTES

- EXISTING LIGHT POLES REMOVALS TO BE SHOWN ON LIGHTING PLANS.
- RETAINING WALL REMOVALS SHOWN ON RETAINING WALL PLANS.
- OLD HYDRANTS TO BE SALVAGED AND RETURNED TO DWSD
- REMOVE OLD HYDRANT LEAD TAPPING SLEEVE IF HYDRANT IS CONNECTED TO THE MAIN VIA A TAPPING SLEEVE AND REPLACE WITH PIPE SLEEVES.
- OLD HYDRANT LEAD AND TAP CANT BE REUSED UNLESS IT IS IN GOOD CONDITION.
- DWSD CASTINGS REMOVED TO BE SALVAGED AND RETURNED TO DWSD.

REMOVAL AND SESC PLAN



DALZELLE STREET

PLOT INFO: Z:\2021\10828\CADD\210828_REM004.DWG LAYOUT: REM004 DATE: 2/16/2022 TIME: 9:53:23 AM USER: AOFANANZON

REVISIONS

02/10/2022	BIDS
01/28/2022	100% REVIEW
12/17/2021	90% REVIEW
10/29/2021	60% REVIEW
08/20/2021	30% REVIEW

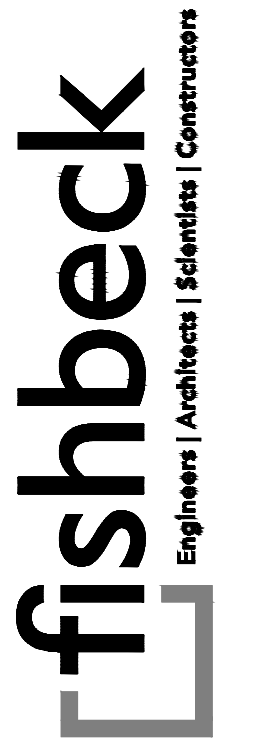
Drawn By	AOF
Designer	AOF
Reviewer	DPE
Manager	KK3

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PROJECT NO.	210828
SHEET NO.	30
	REM004



LACOMBE DRIVE



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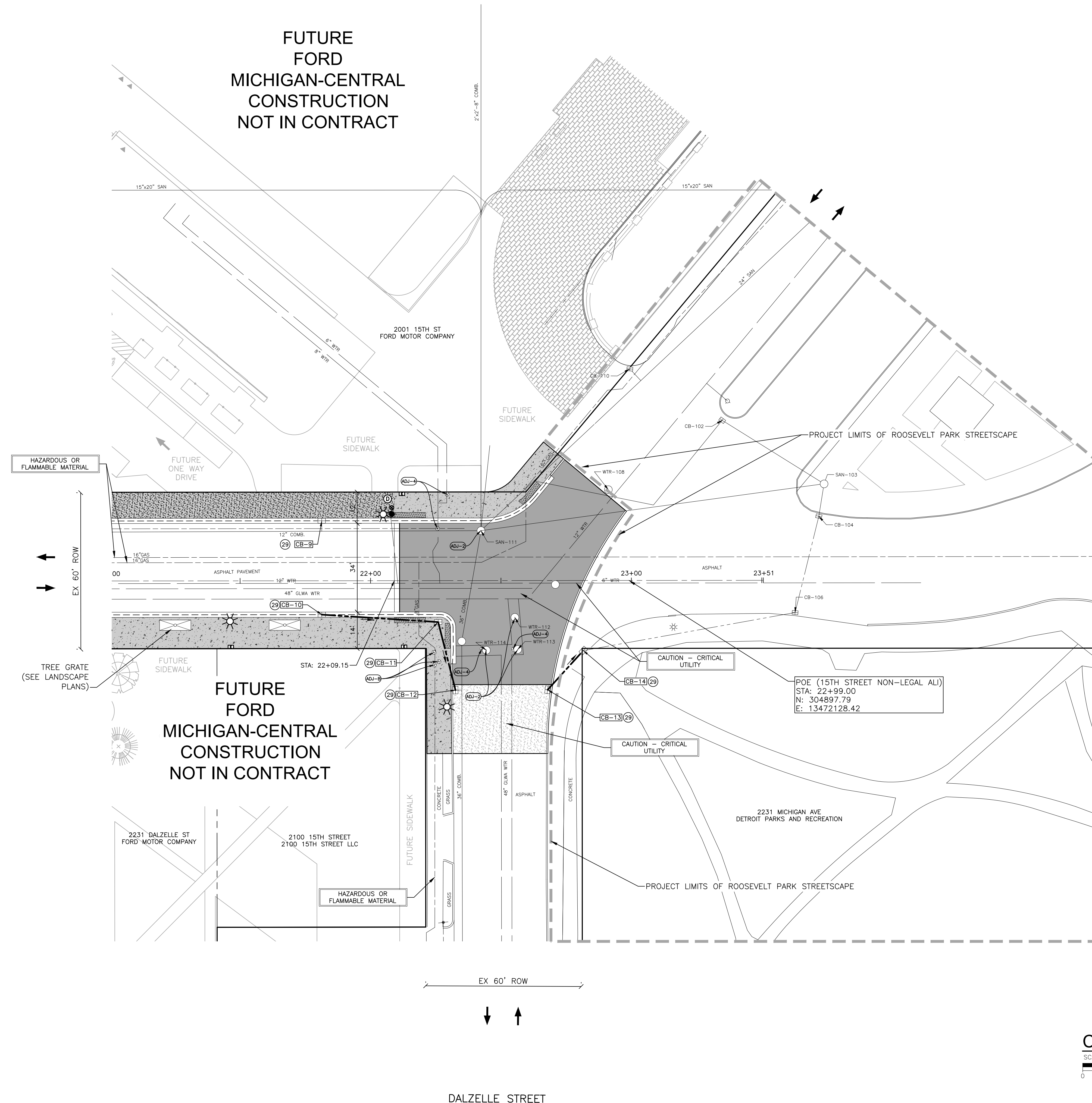
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City of Detroit

15th Street Streetscape

15TH STREET



15TH STREET

JN PW-7038
CAT 0001

75	Cyd	Embankment, CIP
6	Ea	Erosion Control, Inlet Protection, Fabric Drop
259	Syd	Aggregate Base, 4 inch
19	Syd	Aggregate Base, 6 inch
955	Syd	Aggregate Base, 8 inch
92	Ft	Video Taping Sewer and Culv Pipe
20	Ft	_Dr Structure Lead, Cleaning, Modified
2	Ft	_Dr Structure Cleaning, Modified
4	Ea	_Dr Structure Cover, Adj, Case 2, Modified
140	Ton	HMA, 4EMH
100	Ton	HMA, 5EMH
5	Ton	_Conditioning Existing Pavement, Modified
11	Ton	_HMA Approach, Modified
466	Syd	_Conc Pavt, Misc, Nonreinf, 8 inch, Modified
274	Syd	_Conc Base, Cse, Nonreinf, 8 inch, Modified
152	Ft	_Concrete Curb, Detail CD, Modified
325	Ft	_Valley Gutter, Conc, Modified
34	Ft	_Integral Curb and Sidewalk, 2 Foot, Modified
44	Ft	Detectable Warning Surface Tile, Modified
2544	Sft	_Sidewalk, Conc, 6 inch, Modified
1092	Sft	_Sidewalk, Conc, 8 inch, Modified
4	Ea	_Water Shutoff, Adj, Case 2, Modified
1	Ea	_Hydrant, Modified

NOTES

- FOR LANDSCAPE AND SITE FURNISHING DETAILS SEE LANDSCAPE PLANS.
- FOR LIGHTING DETAILS SEE LIGHTING PLANS.
- SEE DETAIL GRADE SHEET FOR INTERSECTION GEOMETRIC LAYOUT.
- NEW HYDRANTS ARE TO BE PROVIDED BY CONTRACTOR/PROJECT.

REVISIONS

02/10/2022	BIDS
01/28/2022	100% REVIEW
12/17/2021	90% REVIEW
10/29/2021	60% REVIEW
08/20/2021	30% REVIEW

Drawn By	AOF
Designer	AOF
Reviewer	DPE
Manager	KK3

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PROJECT NO.

210828

SHEET NO.

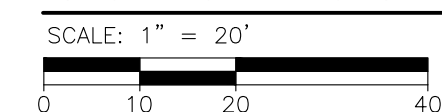
31

CON004

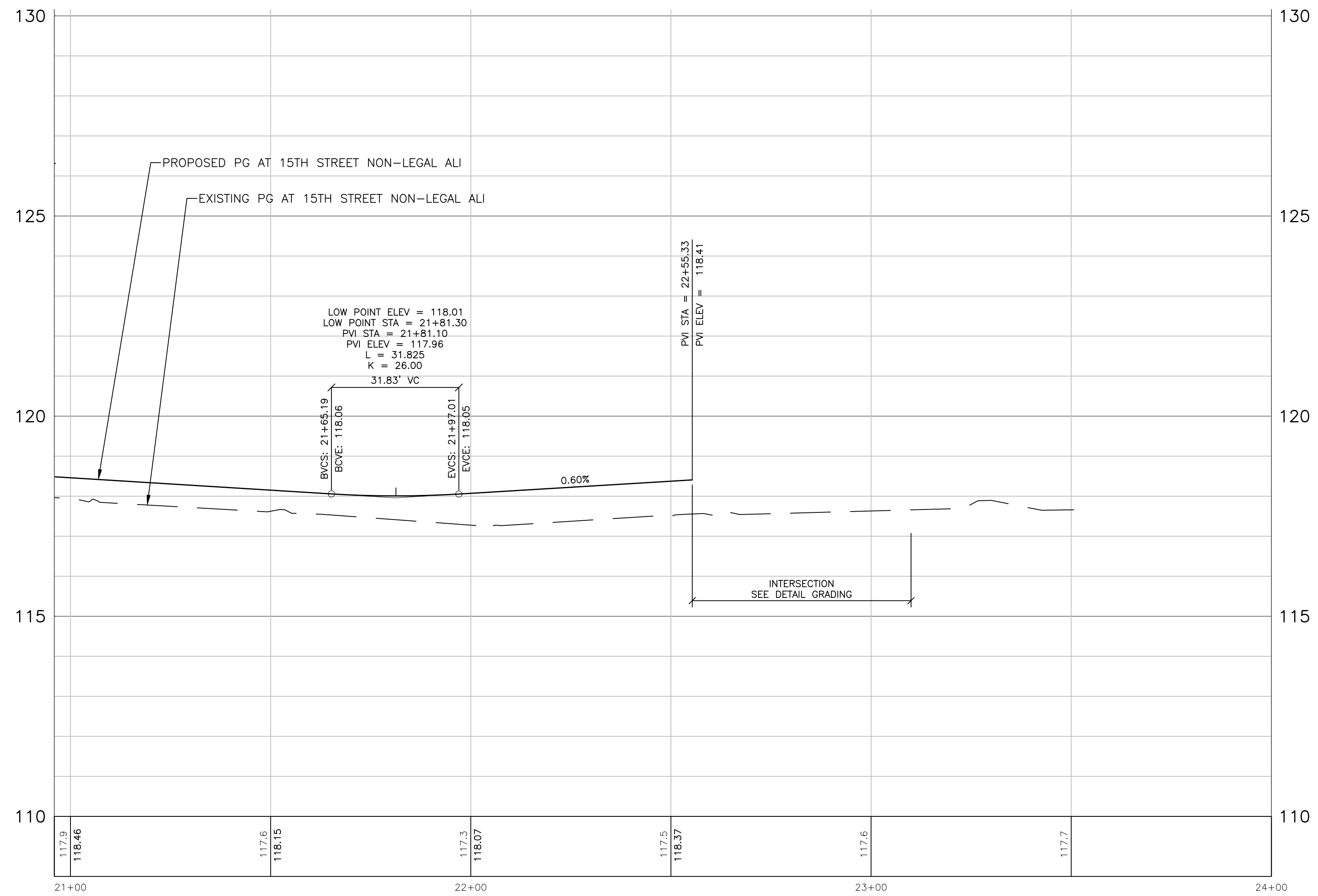
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PLOT INFO: Z:\2021\10828\CAD\CD\210828_CON004.DWG LAYOUT: CON004 DATE: 2/16/2022 TIME: 6:16:19 AM USER: AOFFANZON

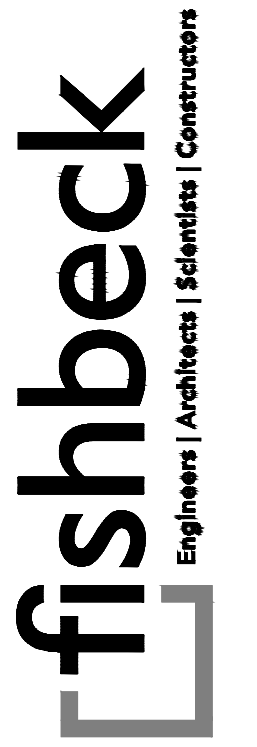
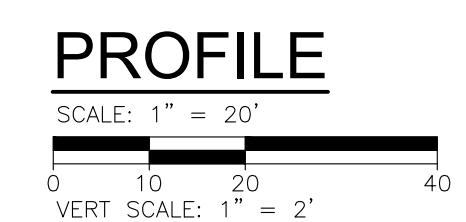
CONSTRUCTION PLAN



DALZELLE STREET



PLOT INFO: Z:\2021\10828\CADD\210828_PROF004.DWG LAYOUT: PROF004 DATE: 2/10/2022 TIME: 1:43:35 AM USER: ADFRANZON



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City of Detroit

15th Street Streetscape

REVISIONS

02/10/2022	BIDS
01/28/2022	100% REVIEW
12/17/2021	90% REVIEW
10/29/2021	60% REVIEW
08/20/2021	30% REVIEW

Drawn By AOF
 Designer AOF
 Reviewer DPE
 Manager KK3

Hard copy is intended to be 24"x36" when plotted. Scale(s) indicated and graphic quality may not be accurate for any other size.

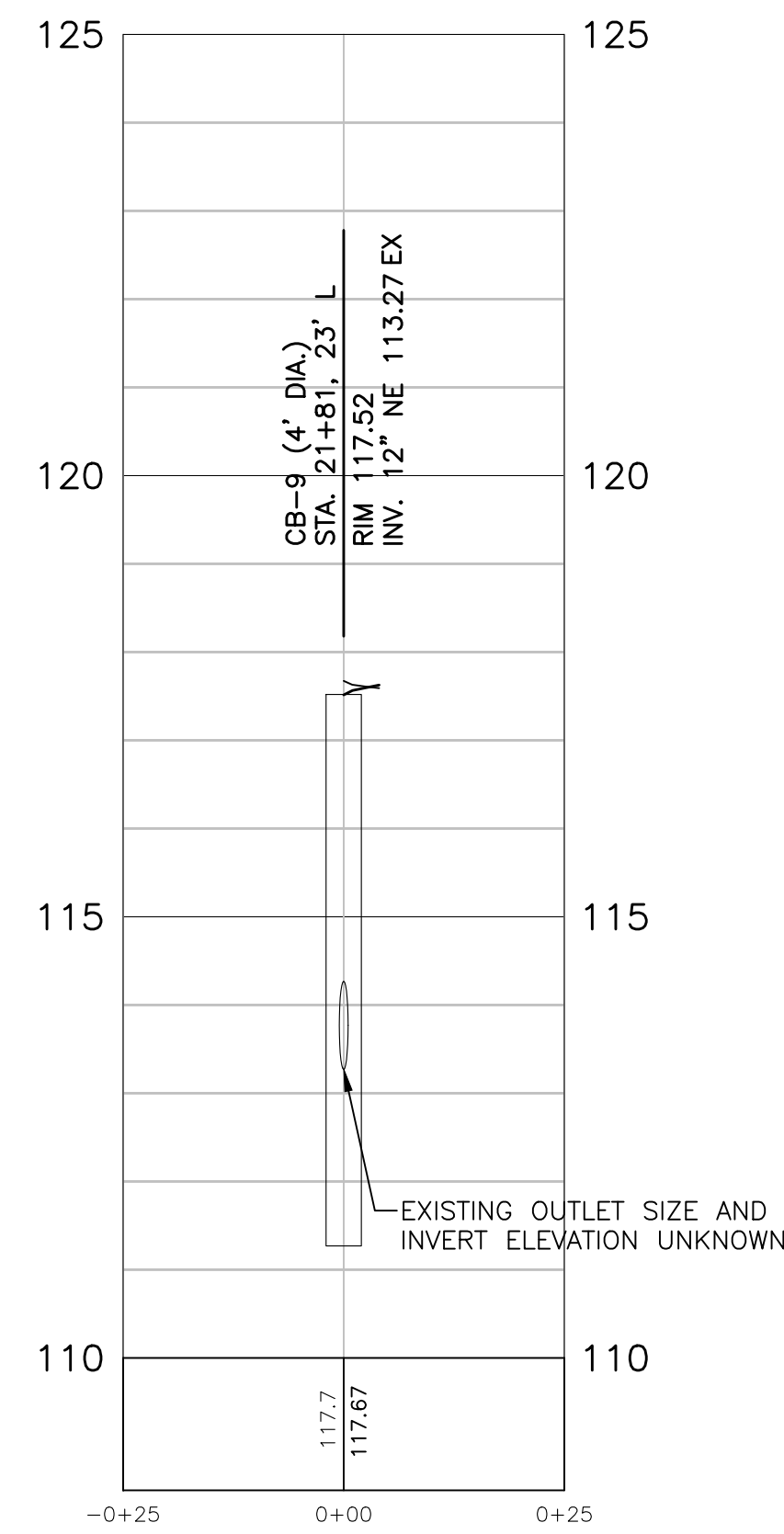
PROJECT NO.
210828

SHEET NO.
32
PROF004

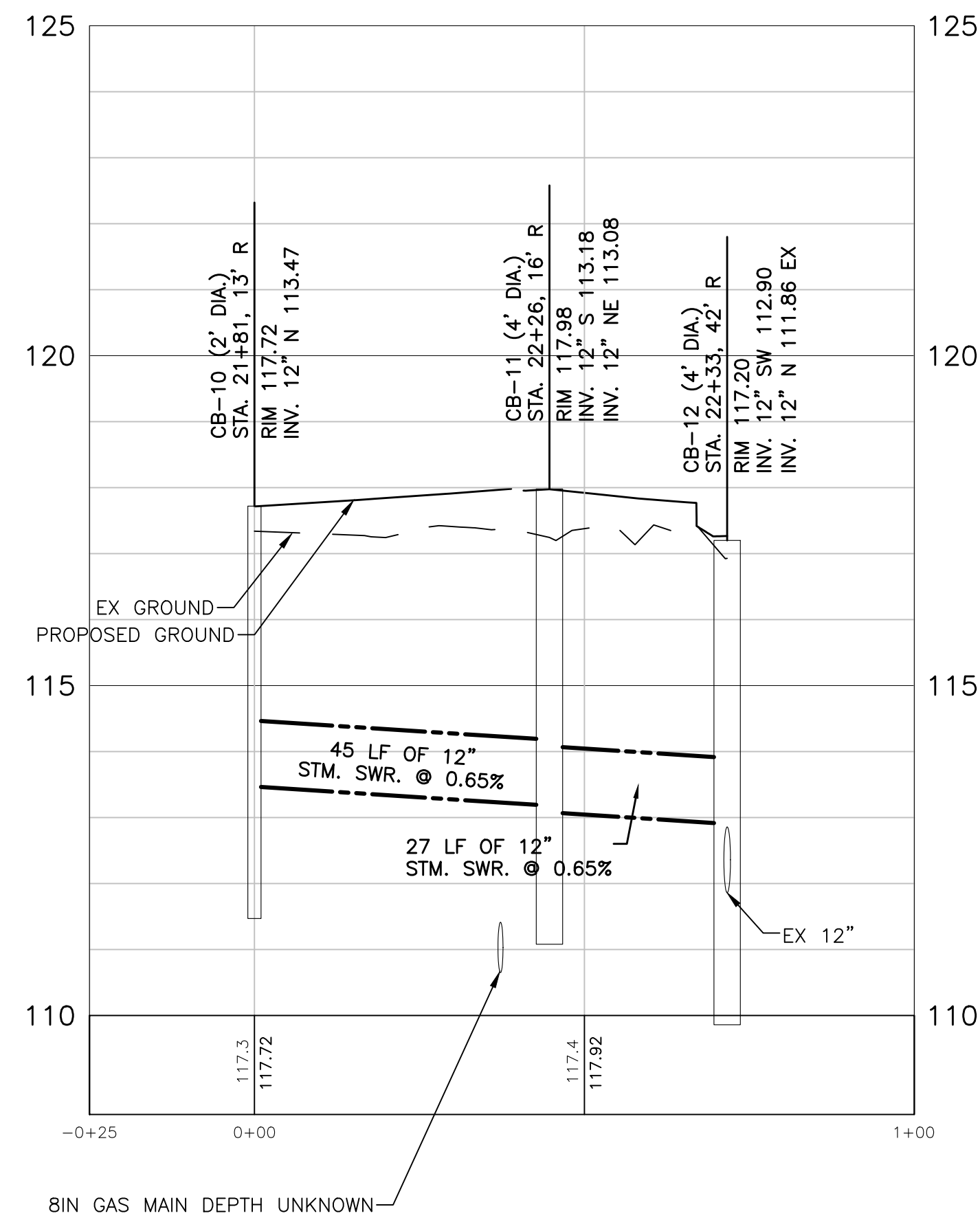
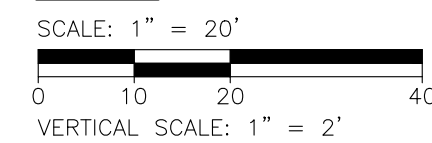
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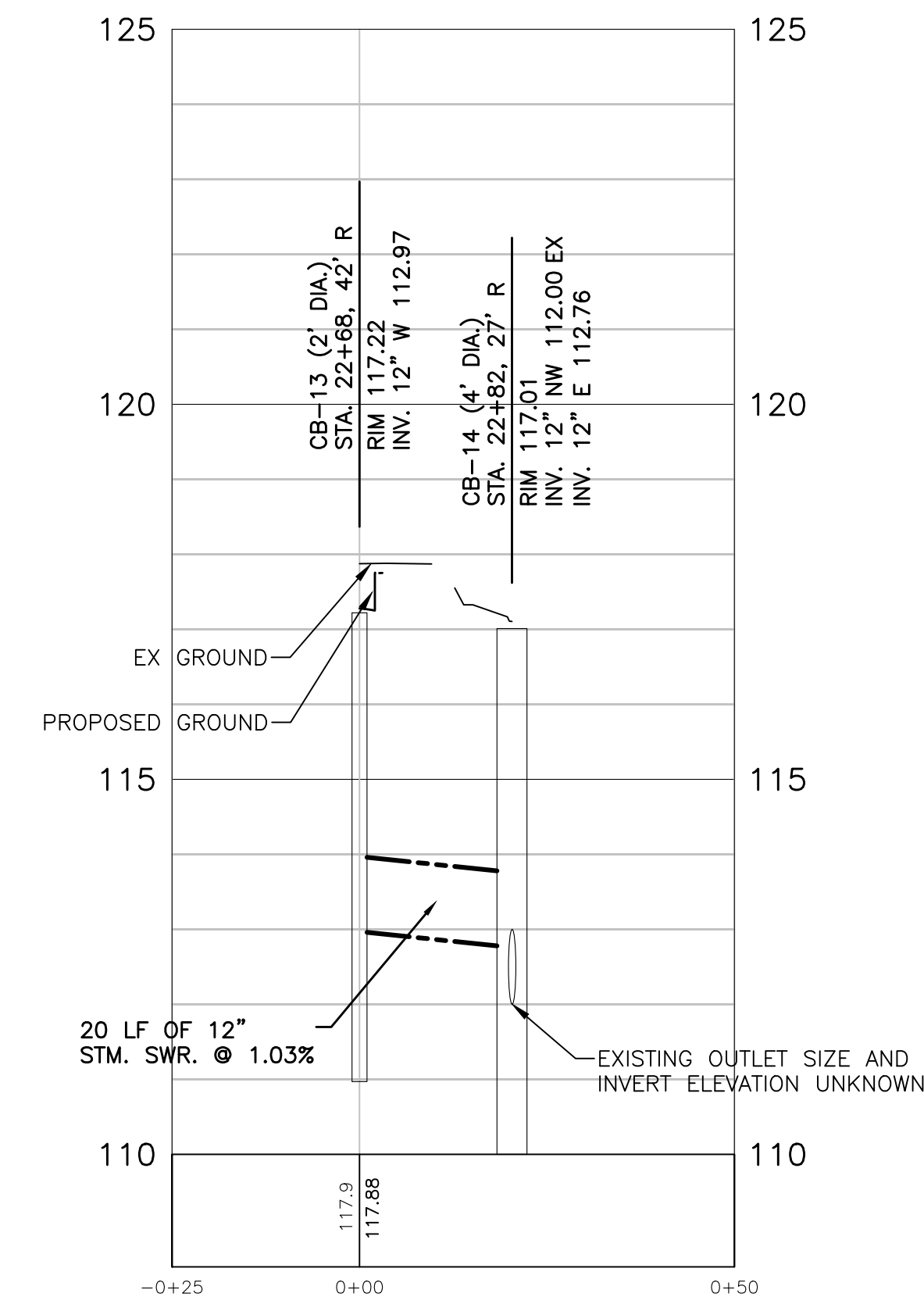
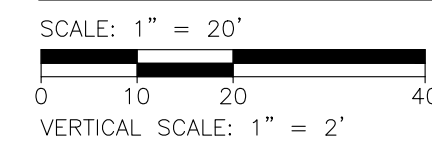
DRAINAGE PROFILES AND TABLE



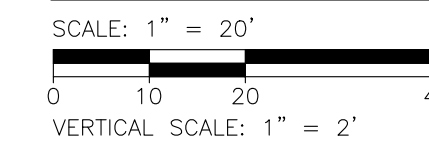
CB-9



CB-10 TO CB-12



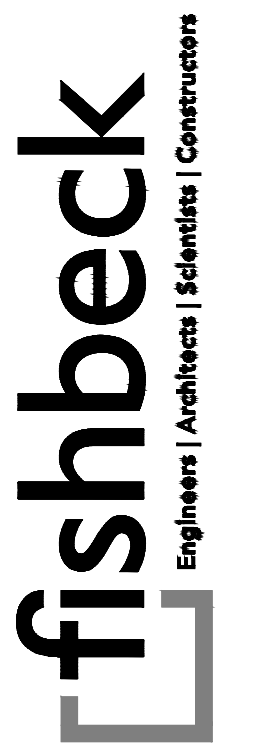
CB-13 TO CB-14



DRAINAGE STRUCTURE AND SEWER TABLE					Sewer, CI V, 12 inch, Tr Det B	_Dr Structure Cover, Type ADA, Modified	_Dr Structure Cover, Type VAL, Modified	_Dr Structure Cover, Type CB, Modified	_Dr Structure, 24 in dia, Modified	_Dr Structure, 48 in dia, Modified
STRUCT NO.	ALIGNMENT	STATION	OFFSET		RIM ELEV	Ft	Ea	Ea	Ea	Ea
			FT	FT						
CB-10	15th Street	21+81.30	13.00 RT	117.72	45	--	1	--	1	--
CB-11	15th Street	22+25.92	15.88 RT	117.98	27	--	1	--	--	1
CB-12	15th Street	22+32.53	41.99 RT	117.2	--	--	--	1	--	1
CB-13	15th Street	22+67.84	41.91 RT	117.22	20	--	--	1	1	--
CB-14	15th Street	22+81.54	26.88 RT	117.01	--	1	--	--	--	1
CB-9	15th Street	21+81.30	23.00 LT	117.52	--	--	1	--	--	1
TOTAL					92	2	2	2	2	4

NOTE: CONTRACTOR TO VERIFY OUTLET PIPES ARE IN GOOD CONDITION. CB-9, CB-11, CB-12, AND CB-14 ARE TO BE MANHOLE TYPE B. CB-10 AND CB-13 CAN BE EITHER MANHOLE TYPE A OR TYPE B. SEE DETAIL ON SHEET NO. 22.

PLOT INFO: Z:\2021\10828\CADD\210828_CONTRBL004.DWG LAYOUT: CONTRBL004 DATE: 21/12/2022 TIME: 8:16:36 AM USER: AOFRANZON



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City of Detroit

15th Street Streetscape

REVISIONS

02/10/2022	BIDS
01/28/2022	100% REVIEW
12/17/2021	90% REVIEW
10/29/2021	60% REVIEW
08/20/2021	30% REVIEW

Drawn By AOF
Designer AOF
Reviewer DPE
Manager KKS

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PROJECT NO.

210828

SHEET NO.

33

CONSTRUCTION TABLE AND PROFILE

CONTRBL004

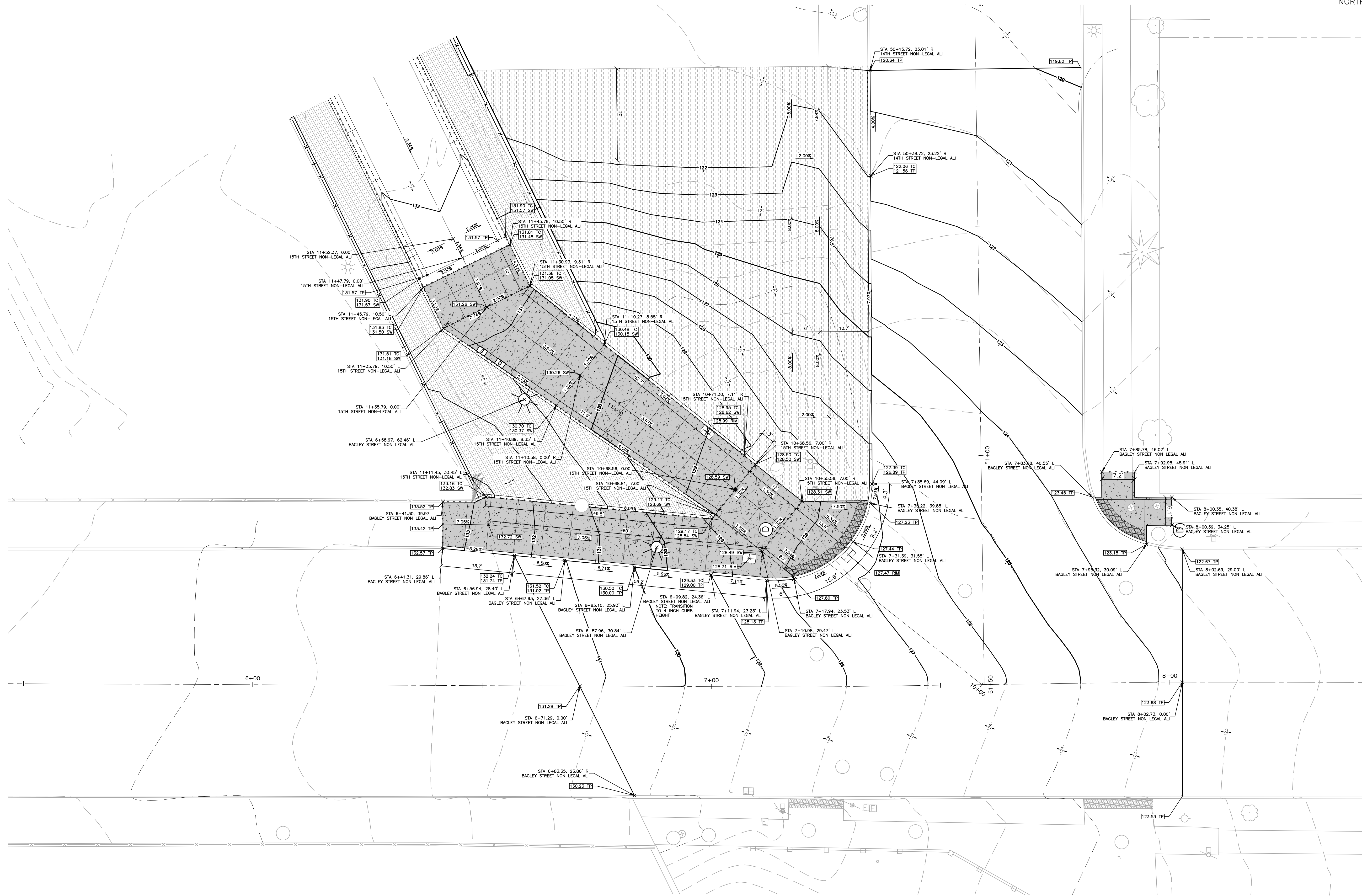
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PLOT INFO: Z:\2021\10828\CADD\DETGRD001.DWG LAYOUT: DETGRD001.DWG DATE: 2/10/2022 TIME: 9:51:59 AM USER: ADRANZON

BAGLEY STREET

BAGLEY STREET



REVISIONS

02/10/2022	BIDS
01/28/2022	100% REVIEW
12/17/2021	90% REVIEW
10/29/2021	60% REVIEW
08/20/2021	30% REVIEW

Drawn By	AOF
Designer	AOF
Reviewer	DPE
Manager	KK3

Hard copy is intended to be 24"x36" when plotted. Scale(s) indicated and graphic quality may not be accurate for any other size.

PROJECT NO.

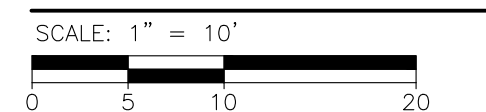
210828

SHEET NO.

34

DETGRD001

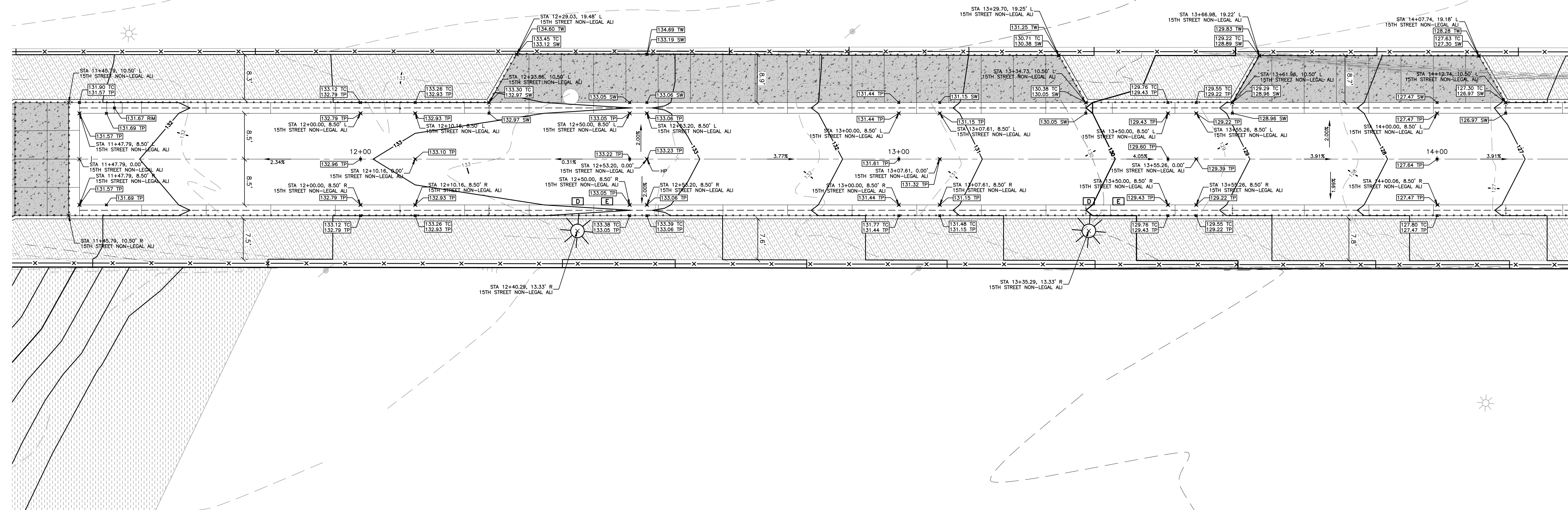
DETAIL GRADE





15TH STREET

15TH STREET



City of Detroit

15th Street Streetscape

REVISIONS

02/10/2022	BIDS
01/28/2022	100% REVIEW
12/17/2021	90% REVIEW
10/29/2021	60% REVIEW
08/20/2021	30% REVIEW

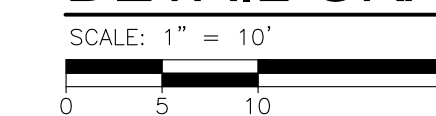
Drawn By AOF
Designer AOF
Reviewer DPE
Manager KKS

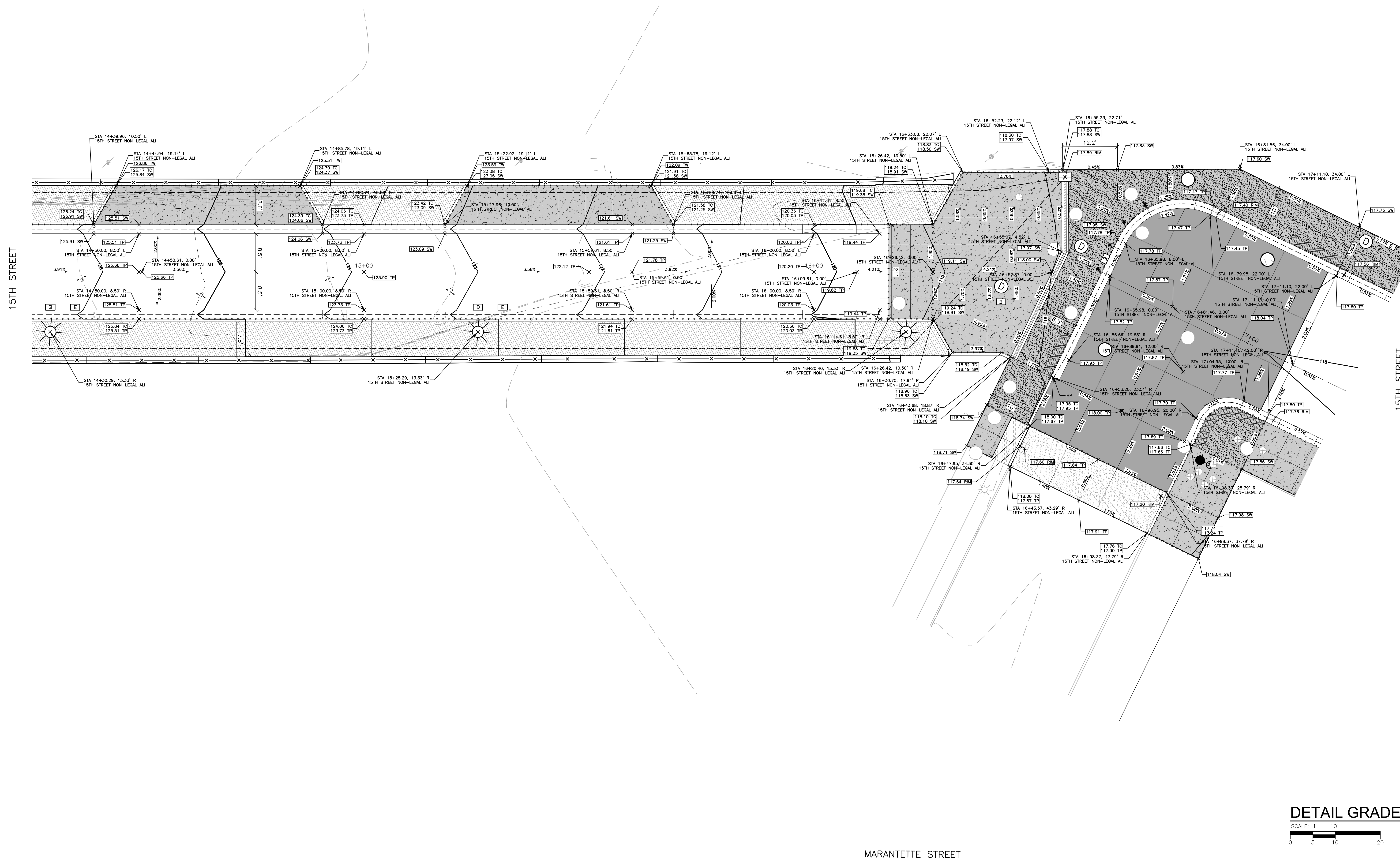
Hard copy is intended to be 24"x36" when plotted. Scale(s) indicated and graphic quality may not be accurate for any other size.

PROJECT NO.
210828

SHEET NO.
35
DETGRD002

DETAIL GRADE





PLOT INFO: Z:\2021\10828\CADD\210828_DETGRD003.DWG LAYOUT: DETGRD003 DATE: 2/10/2022 TIME: 9:42:41 AM USER: ADRANZON

REVISIONS

02/10/2022	BIDS
01/28/2022	100% REVIEW
12/17/2021	90% REVIEW
10/29/2021	60% REVIEW
08/20/2021	30% REVIEW

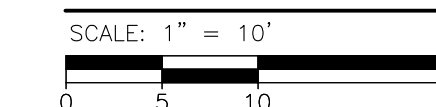
Drawn By: AOF
Designer: AOF
Reviewer: DPE
Manager: KKS

Hard copy is intended to be 24"x36" when plotted. Scale(s) indicated and graphic quality may not be accurate for any other size.

PROJECT NO.
210828

SHEET NO.
36
DETGRD003

DETAIL GRADE

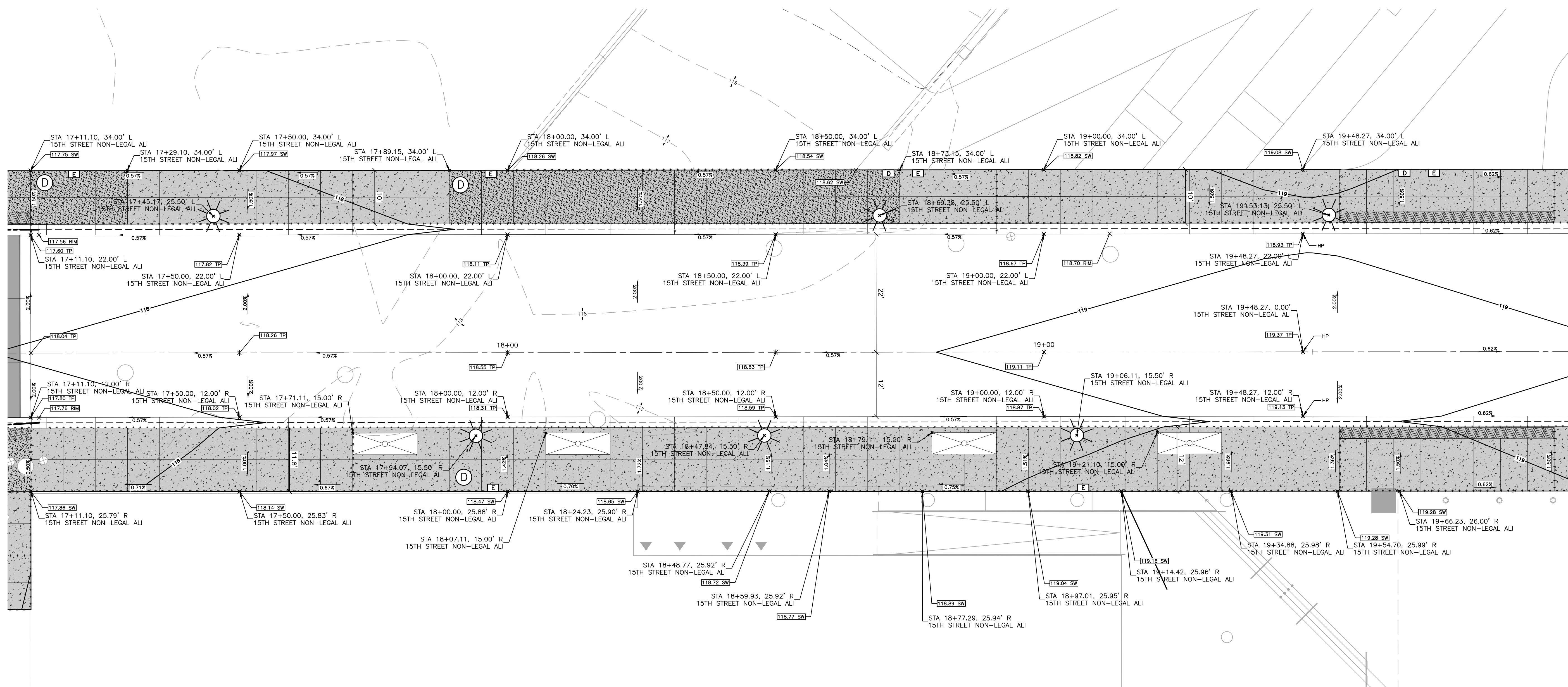


MARANETTE STREET



15TH STREET

15TH STREET



PLOT INFO: Z:\2021\10836\CADD\210828_DETGRD004.DWG LAYOUT: DETGRD004 DATE: 2/10/2022 TIME: 9:47:15AM USER: AOPRANZON

REVISIONS

02/10/2022	BIDS
01/28/2022	100% REVIEW
12/17/2021	90% REVIEW
10/29/2021	60% REVIEW
08/20/2021	30% REVIEW

Drawn By: AOF
Designer: AOF
Reviewer: DPE
Manager: KKS

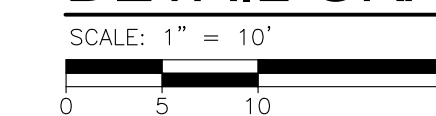
Hard copy is intended to be 24"x36" when plotted. Scale(s) indicated and graphic quality may not be accurate for any other size.

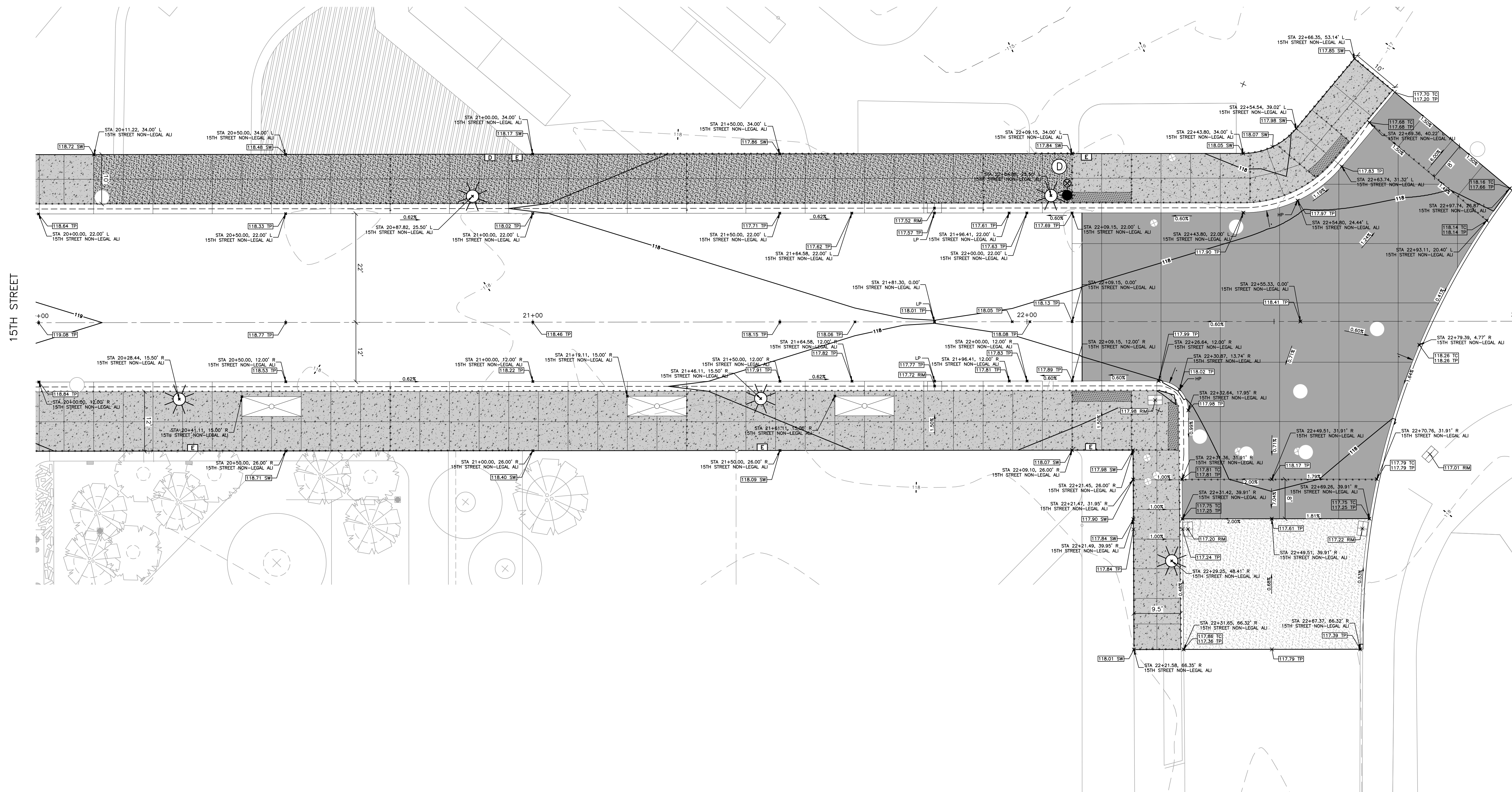
PROJECT NO.
210828

SHEET NO.
37

DETGRD004

DETAIL GRADE





REVISIONS

02/10/2022	BIDS
01/28/2022	100% REVIEW
12/17/2021	90% REVIEW
10/29/2021	60% REVIEW
08/20/2021	30% REVIEW

Drawn By AOF
Designer AOF
Reviewer DPE
Manager KKS

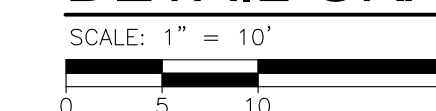
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PROJECT NO.
210828

SHEET NO.
38

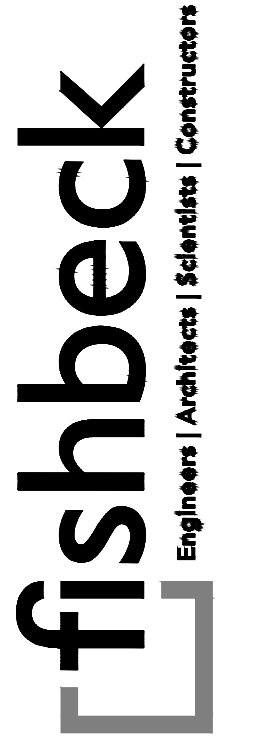
DETGRD005

DETAIL GRADE





BAGLEY STREET



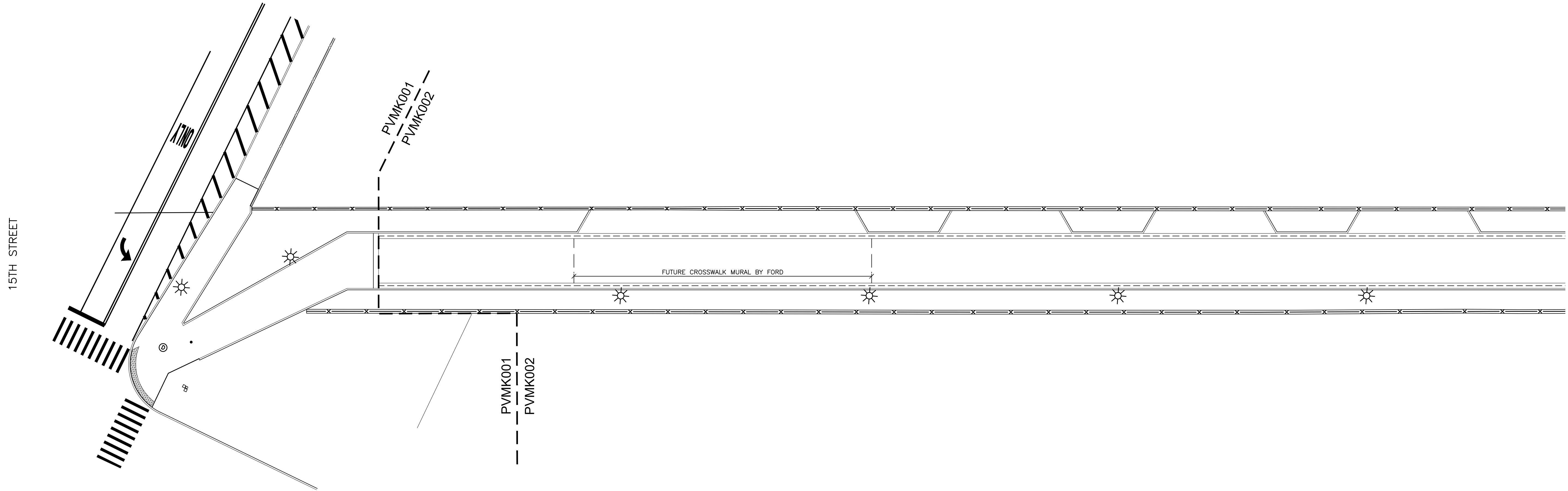
SMITHGROUP

500 GRISWOLD
SUITE 1700
DETROIT, MI 48266
313.983.3600
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City of Detroit

15th Street Streetscape



NOTES

- ALL PAVEMENT MARKINGS AND SIGNING SHALL COMPLY WITH THE CURRENT EDITION OF "MICHIGAN MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES".
- SEE CITY OF DETROIT FIELD MARKING STANDARDS NO. STD-01 TO STD-09 FOR DETAILS NOT SHOWN ON THE PLANS.

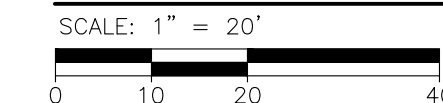
SIGNING LEGEND

- ◇◇ EXISTING SIGN SINGLE/DOUBLE SUPPORT
- ◇◇ PROPOSED SIGN SINGLE/DOUBLE SUPPORT
- X REMOVE SIGN SUPPORT
- R REMOVE SIGN
- N NEW SIGN AND SUPPORT
- P PROTECT SIGN AND SUPPORT
- S REMOVE, SALVAGE, & RE-INSTALL WITH NEW SUPPORT

PAVEMENT MARKING LEGEND

- 4W PAVT MRKG, SPRAYABLE THERMOPL, 4 INCH, WHITE (SINGLE, SOLID)
- 4WCH PAVT MRKG, POLYUREA, 4 INCH, CROSS HATCHING, WHITE (20' SPACING, 45°)
- 4YB PAVT MRKG, POLYMER CEMENT SURFACING, 4 INCH, YELLOW (SINGLE, BROKEN, 3" MARK, 9" GAP)
- 4YD PAVT MRKG, SPRAYABLE THERMOPL, 4 INCH, YELLOW (DOUBLE, SOLID)
- 4YDB PAVT MRKG, SPRAYABLE THERMOPL, 4 INCH, YELLOW (DOUBLE, SOLID-BROKEN, 10" MARK, 30" GAP)
- 12WB PAVT MRKG, POLYMER CEMENT SURFACING, 12 INCH, WHITE (SINGLE, BROKEN, 2" MARK, 6" GAP)
- 12WCH PAVT MRKG, POLYUREA, 12 INCH, CROSS HATCHING, WHITE (10' SPACING, 45°)
- 12YCH PAVT MRKG, POLYUREA, 12 INCH, CROSS HATCHING, YELLOW (10' SPACING, 45°)
- 12CW PAVT MRKG, POLYUREA, 12 INCH, CROSSWALK (RECESSED)
- 18SB PAVT MRKG, POLYUREA, 18 INCH, STOP BAR (RECESSED)
- PCSG PAVT MRKG, POLYMER CEMENT SURFACING, GREEN
- ONLY PAVT MRKG, POLYUREA, ONLY
- ↩ PAVT MRKG, POLYUREA, LT TURN ARROW SYM
- ↑ PAVT MRKG, POLYMER CEMENT SURFACING, DIRECTION ARROW SYM
- 🚲 PAVT MRKG, POLYMER CEMENT SURFACING, BIKE, SMALL SYM
- ⚡ PAVT MRKG, POLYMER CEMENT SURFACING, SPEED TABLE SYM
- POST, DELINEATOR, 36 INCH, WHITE

PERMANENT PAVEMENT MARKING & SIGNING PLAN



14TH STREET

REVISIONS

02/10/2022	BIDS
01/28/2022	100% REVIEW
12/17/2021	90% REVIEW
10/29/2021	60% REVIEW
08/20/2021	30% REVIEW

Drawn By AOF
Designer AOF
Reviewer DPE
Manager KKS

Hard copy is intended to be 24"x36" when plotted. Scale(s) indicated and graphic quality may not be accurate for any other size.

PROJECT NO.

210828

SHEET NO.

40

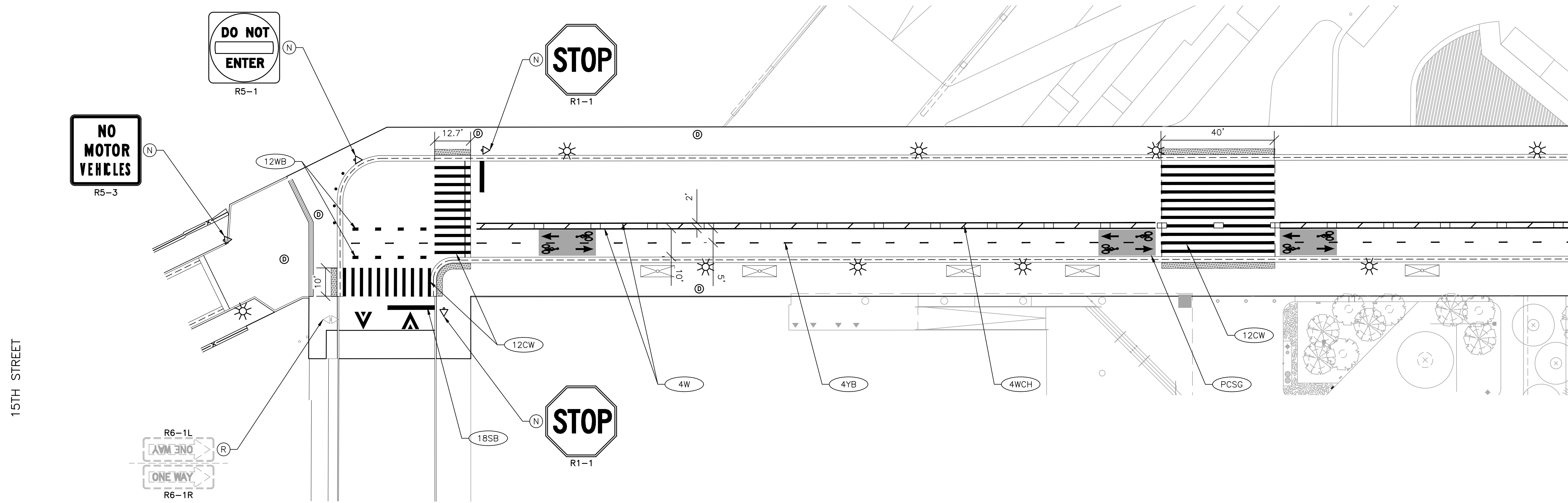
PVMK002

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PERMANENT SIGNING SUMMARY (THIS SHEET ONLY)						
SIGN	DESCRIPTION	QTY EACH	SIZE INCH X INCH	UNIT AREA SFT	TOTAL AREA SFT	SIGN TYPE
R1-1	STOP	2	30 X 30	6.25	12.5	IIIA
R5-1	DO NOT ENTER	1	30 X 30	6.25	6.25	IIIA
R5-3	NO MOTOR VEHICLES	1	24 X 24	4	4	IIIB

FOR INFORMATION ONLY										
PERMANENT SIGN SUPPORT SUMMARY (THIS SHEET ONLY)										
SIGN	DESCRIPTION	QTY EACH	TYPE OF POST	NO. BANDS PER SIGN	NO. POSTS PER SIGN	LENGTH PER SIGN	TOTAL LENGTH	REFLECTIVE PANEL		POST HOLE THROUGH CONCRETE
								3 FOOT	6 FOOT	
R1-1	STOP	2	3 LB	-	1	14	28	-	2	2
R5-1	DO NOT ENTER	1	3 LB	-	1	14	14	-	1	1
R5-3	NO MOTOR VEHICLES	1	3 LB	-	-	14	14	-	-	-



NOTES

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- SEE CITY OF DETROIT FIELD MARKING STANDARDS NO. STD-01 TO STD-09 FOR DETAILS NOT SHOWN ON THE PLANS.

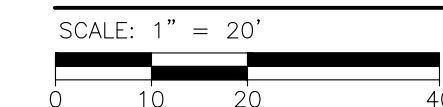
SIGNING LEGEND

- ◇◇ EXISTING SIGN SINGLE/DOUBLE SUPPORT
- ◇◇ PROPOSED SIGN SINGLE/DOUBLE SUPPORT
- X REMOVE SIGN SUPPORT
- (R) REMOVE SIGN
- (N) NEW SIGN AND SUPPORT
- (P) PROTECT SIGN AND SUPPORT
- (S) REMOVE, SALVAGE, & RE-INSTALL WITH NEW SUPPORT

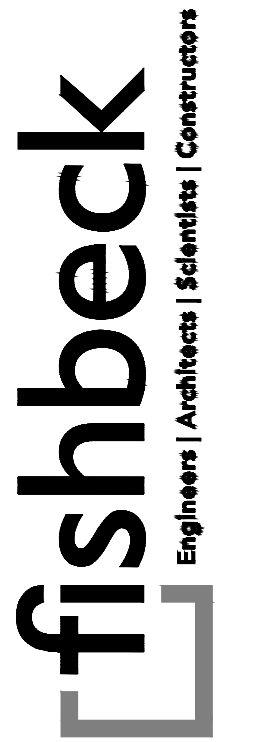
PAVEMENT MARKING LEGEND

- (4W) PAVT MRKG, SPRAYABLE THERMOPL, 4 INCH, WHITE (SINGLE, SOLID)
- (4WCH) PAVT MRKG, POLYUREA, 4 INCH, CROSS HATCHING, WHITE (20' SPACING, 45°)
- (4YB) PAVT MRKG, POLYMER CEMENT SURFACING, 4 INCH, YELLOW (SINGLE, BROKEN, 3" MARK, 9' GAP)
- (4YD) PAVT MRKG, SPRAYABLE THERMOPL, 4 INCH, YELLOW (DOUBLE, SOLID)
- (4YDB) PAVT MRKG, SPRAYABLE THERMOPL, 4 INCH, YELLOW (DOUBLE, SOLID-BROKEN, 10" MARK, 30' GAP)
- (12WB) PAVT MRKG, POLYMER CEMENT SURFACING, 12 INCH, WHITE (SINGLE, BROKEN, 2" MARK, 6' GAP)
- (12WCH) PAVT MRKG, POLYUREA, 12 INCH, CROSS HATCHING, WHITE (10' SPACING, 45°)
- (12YCH) PAVT MRKG, POLYUREA, 12 INCH, CROSS HATCHING, YELLOW (10' SPACING, 45°)
- (12CW) PAVT MRKG, POLYUREA, 12 INCH, CROSSWALK (RECESSED)
- (18SB) PAVT MRKG, POLYUREA, 18 INCH, STOP BAR (RECESSED)
- (PCSG) PAVT MRKG, POLYMER CEMENT SURFACING, GREEN
- (ONLY) PAVT MRKG, POLYUREA, ONLY
- (LT TURN) PAVT MRKG, POLYUREA, LT TURN ARROW SYM
- (DIRECTION) PAVT MRKG, POLYMER CEMENT SURFACING, DIRECTION ARROW SYM
- (BIKE) PAVT MRKG, POLYMER CEMENT SURFACING, BIKE, SMALL SYM
- (SPEED) PAVT MRKG, POLYMER CEMENT SURFACING, SPEED TABLE SYM
- (POST) POST, DELINEATOR, 36 INCH, WHITE

PERMANENT PAVEMENT MARKING & SIGNING PLAN



PLOT INFO: Z:\2021\10828\CADD\210828_PVMK003.DWG LAYOUT: PVMK003 DATE: 2/26/22 TIME: 4:05:38 PM USER: KPAWLOWSKI



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15TH STREET

City of Detroit

15th Street Streetscape

REVISIONS

02/10/2022	BIDS
01/28/2022	100% REVIEW
12/17/2021	90% REVIEW
10/29/2021	60% REVIEW
08/20/2021	30% REVIEW

Drawn By: AOF
Designer: AOF
Reviewer: DPE
Manager: KKS

Hard copy is intended to be 24"x36" when plotted. Scale(s) indicated and graphic quality may not be accurate for any other size.

PROJECT NO.

210828

SHEET NO.

41

PVMK003

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MARANTETTE STREET

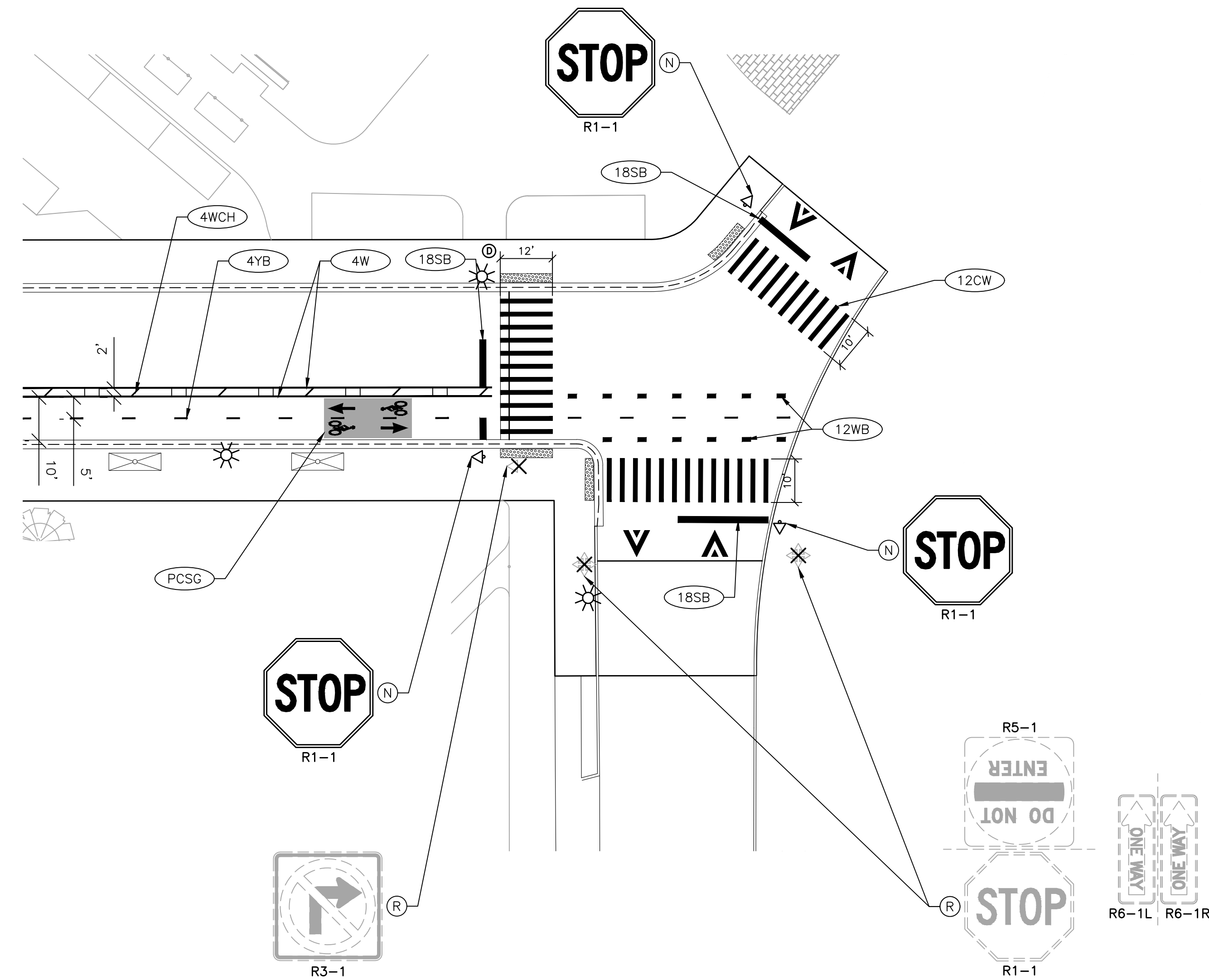


LACOMBE DRIVE



PERMANENT SIGNING SUMMARY (THIS SHEET ONLY)						
SIGN	DESCRIPTION	QTY EACH	SIZE INCH X INCH	UNIT AREA SFT	TOTAL AREA SFT	SIGN TYPE
R1-1	STOP	3	30 X 30	6.25	18.75	III A

FOR INFORMATION ONLY										
PERMANENT SIGN SUPPORT SUMMARY (THIS SHEET ONLY)										
SIGN	DESCRIPTION	QTY EACH	TYPE OF POST	NO. BANDS PER SIGN	NO. POSTS PER SIGN	LENGTH PER SIGN	TOTAL LENGTH	REFLECTIVE PANEL		POST HOLE THROUGH CONCRETE
								3 FOOT	6 FOOT	
R1-1	STOP	3	3 LB	-	1	14	42	-	3	3



NOTES

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SIGNING LEGEND

- ◇◇ EXISTING SIGN SINGLE/DOUBLE SUPPORT
- ◇◇ PROPOSED SIGN SINGLE/DOUBLE SUPPORT
- X REMOVE SIGN SUPPORT
- (R) REMOVE SIGN
- (N) NEW SIGN AND SUPPORT
- (P) PROTECT SIGN AND SUPPORT
- (S) REMOVE, SALVAGE, & RE-INSTALL WITH NEW SUPPORT

PAVEMENT MARKING LEGEND

- (4W) PAVT MRKG, SPRAYABLE THERMOPL, 4 INCH, WHITE (SINGLE, SOLID)
- (4WCH) PAVT MRKG, POLYUREA, 4 INCH, CROSS HATCHING, WHITE (20' SPACING, 45')
- (4YB) PAVT MRKG, POLYMER CEMENT SURFACING, 4 INCH, YELLOW (SINGLE, BROKEN, 3" MARK, 9" GAP)
- (4YD) PAVT MRKG, SPRAYABLE THERMOPL, 4 INCH, YELLOW (DOUBLE, SOLID)
- (4YDB) PAVT MRKG, SPRAYABLE THERMOPL, 4 INCH, YELLOW (DOUBLE, SOLID-BROKEN, 10" MARK, 30" GAP)
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- (18SB) PAVT MRKG, POLYUREA, 18 INCH, STOP BAR (RECESSED)
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- (DIRECTION) PAVT MRKG, POLYMER CEMENT SURFACING, DIRECTION ARROW SYM
- (BIKE) PAVT MRKG, POLYMER CEMENT SURFACING, BIKE, SMALL SYM
- (SPEED) PAVT MRKG, POLYMER CEMENT SURFACING, SPEED TABLE SYM
- (POST) POST, DELINEATOR, 36 INCH, WHITE

NOTES

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- (POST) POST, DELINEATOR, 36 INCH, WHITE

PERMANENT PAVEMENT MARKING & SIGNING PLAN

SCALE: 1" = 20'
0 10 20 40

DALZELLE STREET

SMITHGROUP

500 GRISWOLD
SUITE 1700
DETROIT, MI 48266
313.983.3600
www.smithgroup.com



City of Detroit
15th Street Streetscape

REVISIONS

02/10/2022	BIDS
01/28/2022	100% REVIEW
12/17/2021	90% REVIEW
10/29/2021	60% REVIEW
08/20/2021	30% REVIEW

Drawn By AOF
Designer AOF
Reviewer DPE
Manager KKS

Hard copy is intended to be 24"x36" when plotted. Scale(s) indicated and graphic quality may not be accurate for any other size.

PROJECT NO.
210828

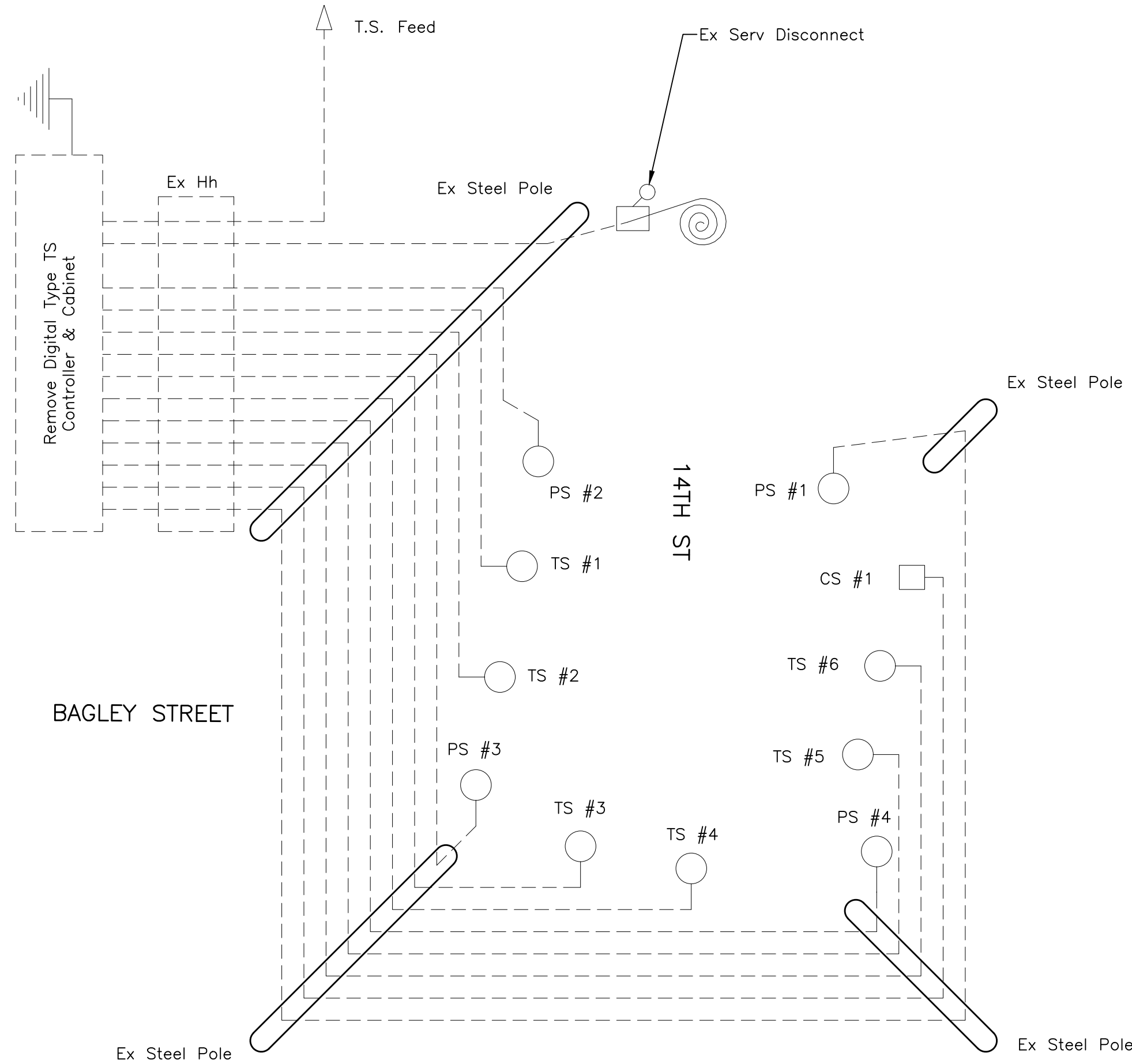
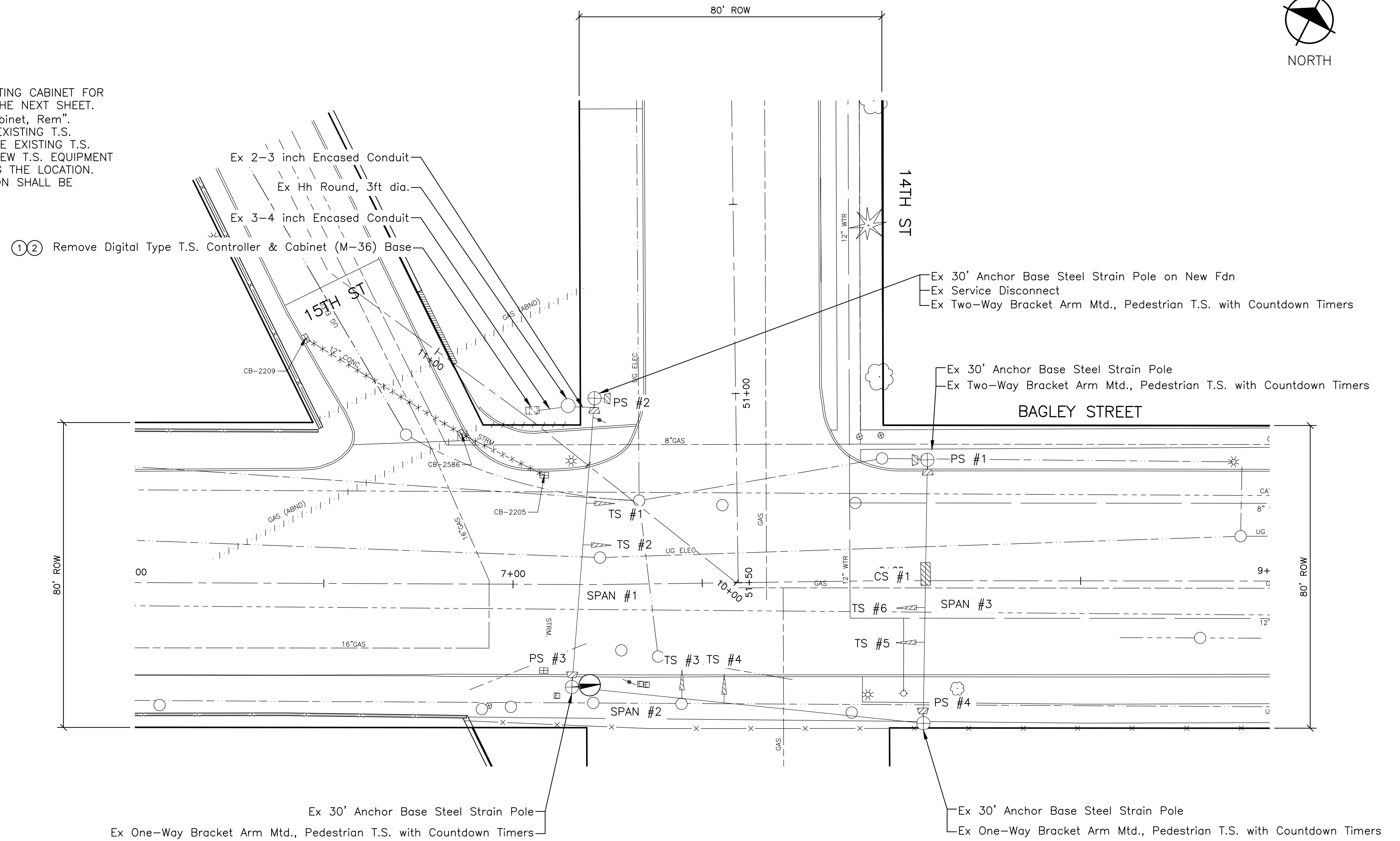
SHEET NO.
42
PVMK004



LIST OF MATERIAL			
NO.	ITEM	QUANTITIES	CODE
①	Controller and Cabinet, Rem	1 Ea	8200030
②	Controller Fdn, Rem	1 Ea	8200046

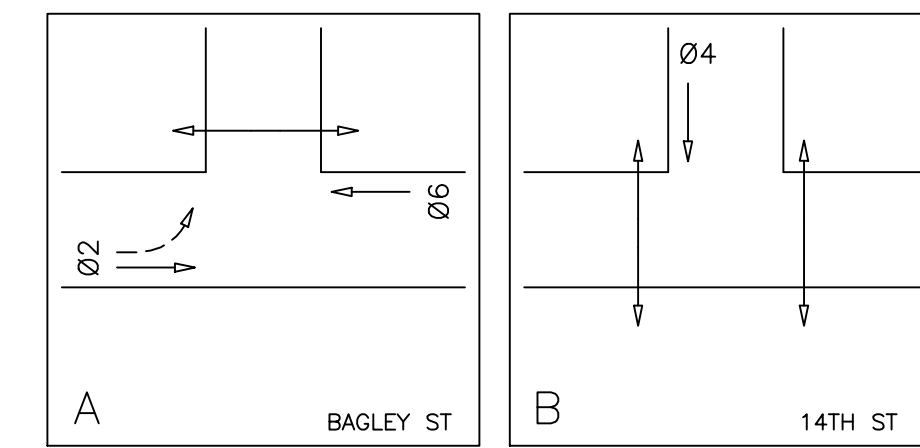
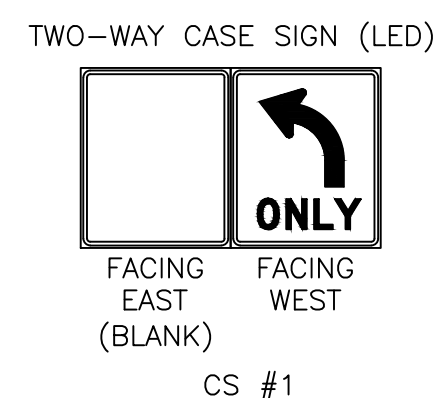
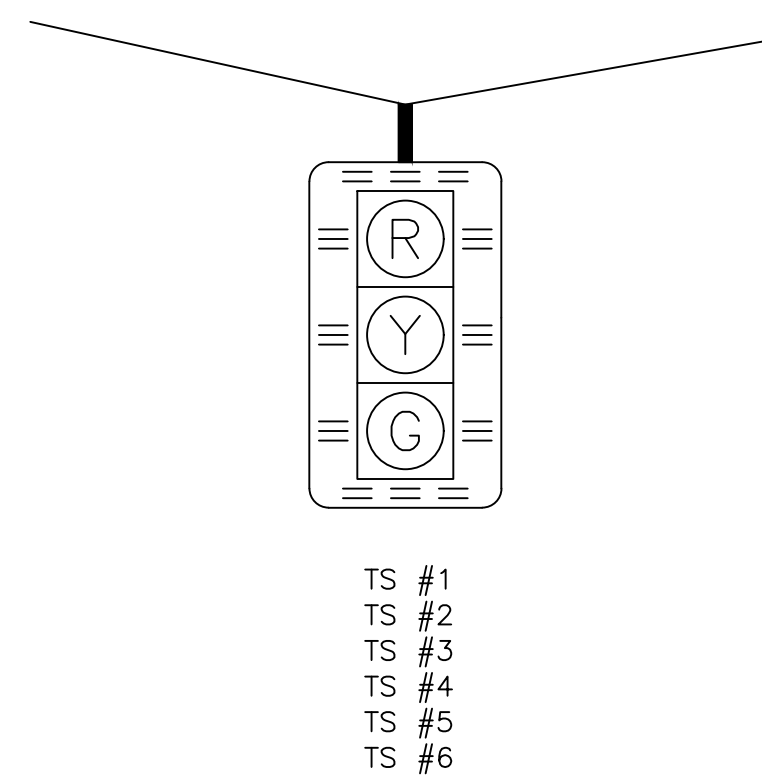
NOTES:

1. THE CONTRACTOR SHALL DISCONNECT ALL CABLING FROM THE EXISTING CABINET FOR RECONNECTION TO THE PROPOSED CABINET LOCATION SHOWN ON THE NEXT SHEET. PAYMENT SHALL BE INCLUDED IN THE PAY ITEM "Controller and Cabinet, Rem".
2. THE CONTRACTOR SHALL COMPLETE THE SWITCH-OVER FROM THE EXISTING T.S. EQUIPMENT TO THE NEW T.S. EQUIPMENT IN ONE WORKING DAY. THE EXISTING T.S. EQUIPMENT SHALL NOT BE TURNED OFF PRIOR TO 9:00 AM. THE NEW T.S. EQUIPMENT SHALL BE BACK IN OPERATION PRIOR TO THE CONTRACTOR LEAVING THE LOCATION. WHILE THE T.S. EQUIPMENT IS NOT IN OPERATION, THE INTERSECTION SHALL BE CONTROLLED WITH ALL-DIRECTION STOP CONTROL.



REMOVAL WIRING DIAGRAM

NO SCALE

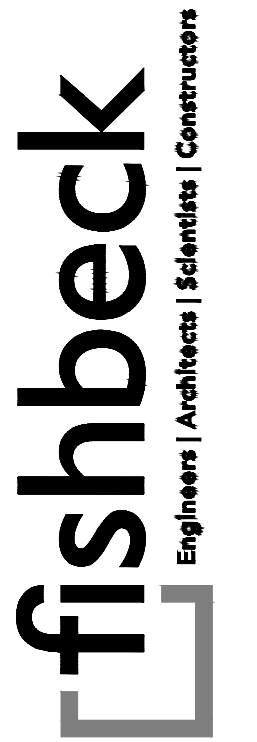


PHASING DIAGRAM

REMOVAL SHEET

SCALE: 1" = 20'

PLOT INFO: Z:\2021\10828\CADD\CD\210828_SIGNAL001.DWG LAYOUT: SIGNAL001 DATE: 2/26/2022 TIME: 4:02:40 PM USER: KREDSMA



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SUITE 1700
DETROIT, MI 48266
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City of Detroit

15th Street Streetscape

REVISIONS

02/10/2022	BIDS
01/28/2022	100% REVIEW
12/17/2021	90% REVIEW
10/29/2021	60% REVIEW
08/20/2021	30% REVIEW

Drawn By AOF
Designer AOF
Reviewer DPE
Manager KK3

Hard copy is intended to be 24"x36" when plotted. Scale(s) indicated and graphic quality may not be accurate for any other size.

PROJECT NO.
210828

SHEET NO.
43

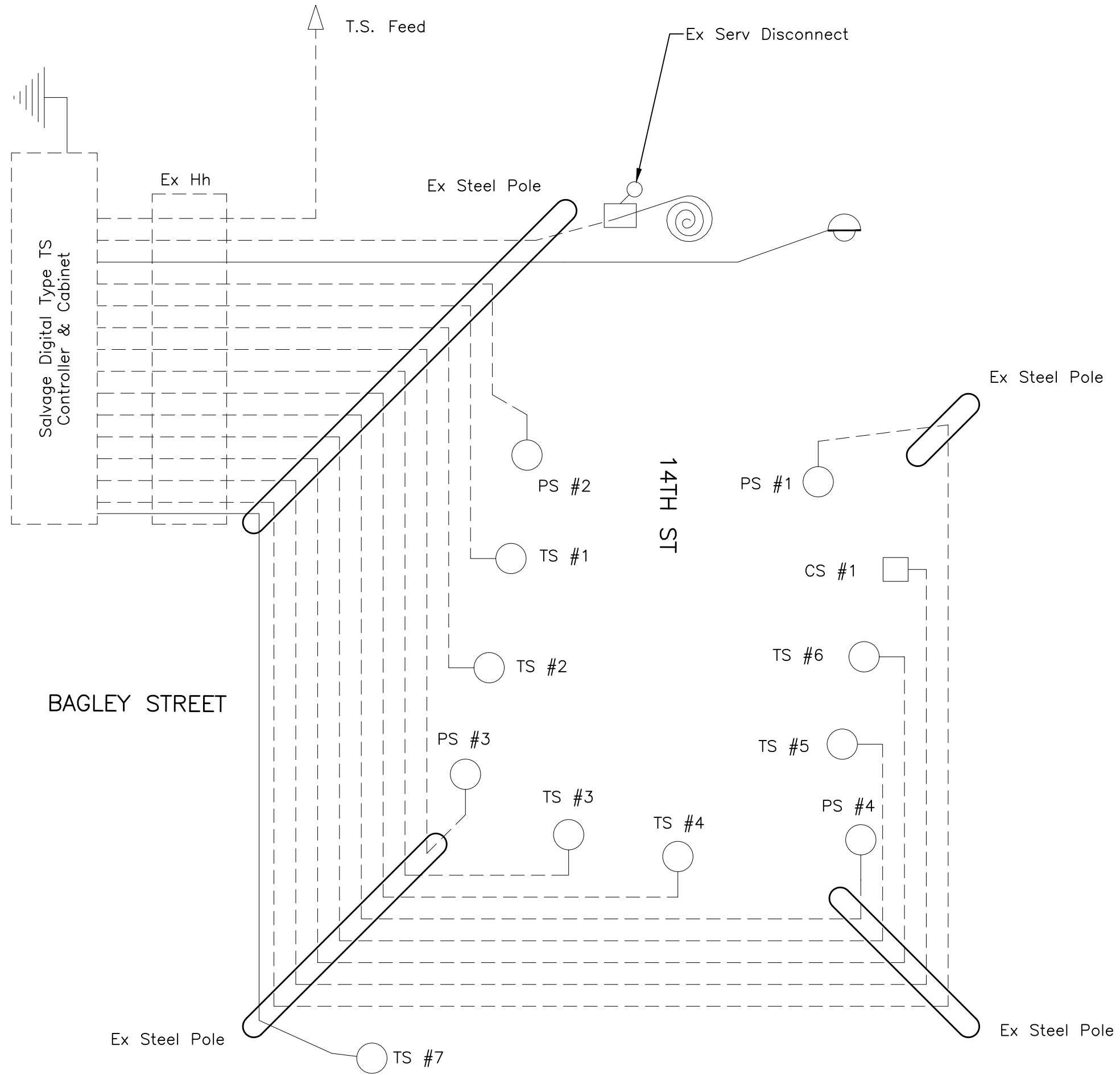
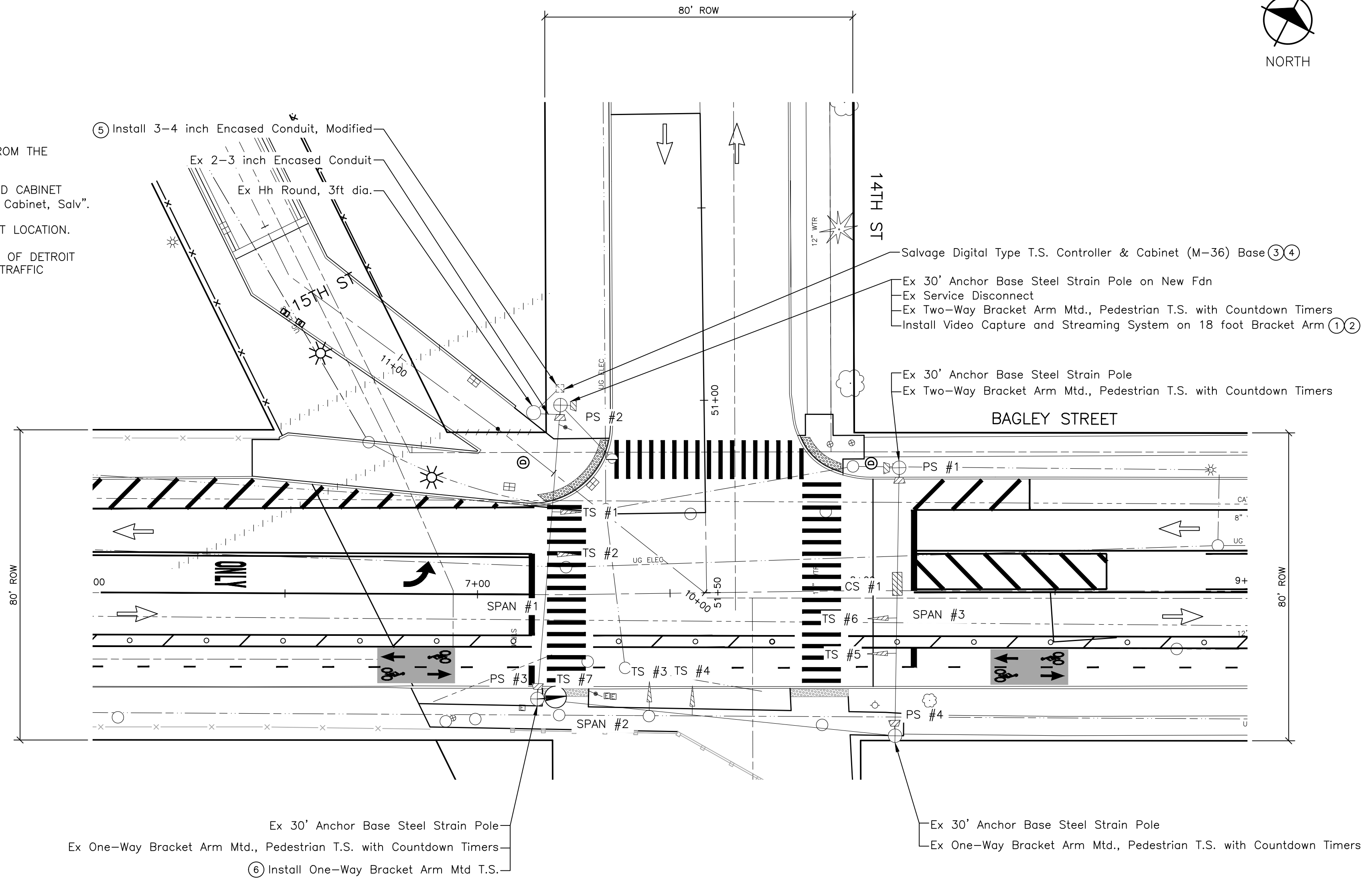
SIGNAL001



LIST OF MATERIAL			
NO.	ITEM	QUANTITIES	CODE
1	Bracket, Truss, With 18 Foot Arm	1 Ea	8200378
2	Video Capture and Streaming System	1 Ea	8207050
3	Controller and Cabinet, Salv	1 Ea	8200037
4	Controller Fdn, Base Mtd	1 Ea	8200045
5	Conduit, Encosed, 3, 4 inch, Modified	15 Ft	8187001
6	TS, One Way Bracket Arm Mtd (LED)	1 Ea	8200333
	Cellular Data Streaming for 2 hours per month and for 3 Year	1 Ea	8207050

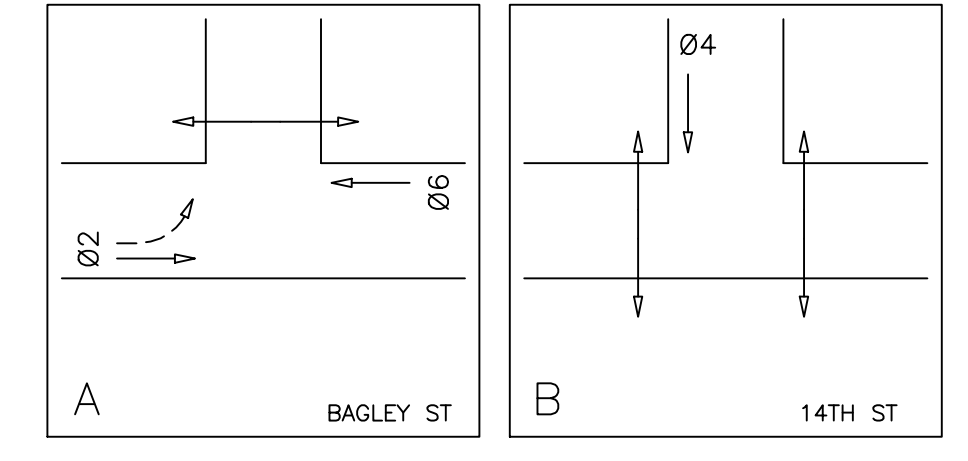
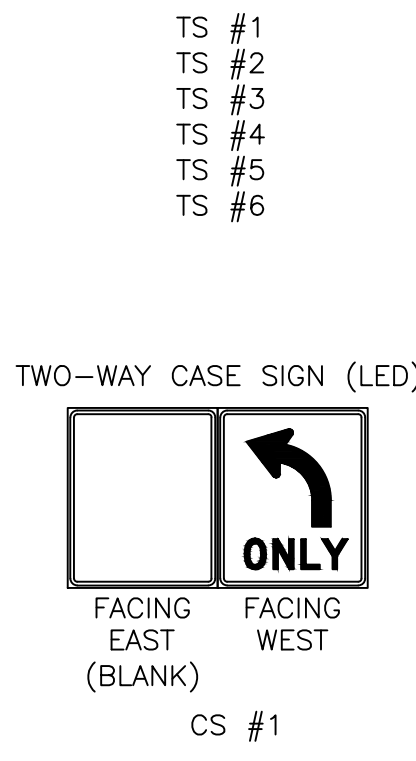
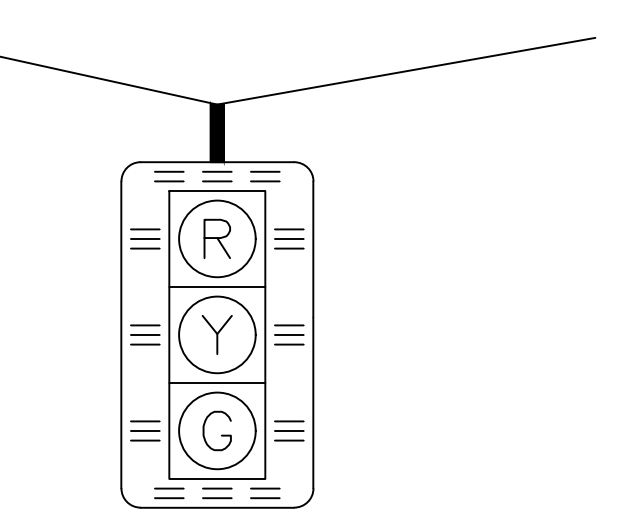
- NOTES:
1. THE HEIGHT OF THE VIDEO DETECTION CAMERA SHALL BE AT LEAST 30' FROM THE PAVEMENT SURFACE.
 2. THE CONTRACTOR SHALL RECONNECT ALL CABLING FROM TO THE PROPOSED CABINET LOCATION. PAYMENT SHALL BE INCLUDED IN THE PAY ITEM "Controller and Cabinet, Salv".
 3. NO SPLICING IS ALLOWED WHILE REDIRECTING CABLES TO THE NEW CABINET LOCATION.
 4. CONTACT KIRIT PATEL (313-628-5641, patelki@detroitmi.gov) OF THE CITY OF DETROIT DPW, TRAFFIC ENGINEERING DIVISION, 48 HOURS PRIOR TO ACTIVATION OF TRAFFIC SIGNALS.

MOUNTING DETAILS FOR POLE AND PEDESTAL MOUNTED PEDESTRIAN AND TRAFFIC SIGNALS			
ITEM	MOUNTED ON	REFER TO DETAIL SHEET	REFER TO DETAIL
2-WAY PS	PEDESTAL	1509	D2
2-WAY PS	POLE	1510	D3
1-WAY PS	PEDESTAL	1509	B2
1-WAY PS	POLE	1508	B1
2-WAY TS	PEDESTAL	1509	C2
2-WAY TS	POLE	1510	A3
1-WAY TS	PEDESTAL	1509	A2
1-WAY TS	POLE	1508	A1
TS & PS	PEDESTAL	1509	MOUNT PED SIGNALS ON BACK OF PEDESTAL
TS & PS	POLE	1510	MOUNT PED SIGNALS ON BACK OF POLE



CABLE TYPE	
CAMERA	CAT 5e CABLE (OUTDOOR RATED)
1W3C TS	1-7/C #16 PJ

INSTALLATION WIRING DIAGRAM
NO SCALE



PHASING DIAGRAM

INSTALLATION SHEET
SCALE: 1" = 20'
0 10 20 40

PLOT INFO: Z:\2021\10828\CADD\CD\10828_SIGNAL002.DWG LAYOUT: SIGNAL002 DATE: 2/26/2022 TIME: 4:04:35 PM USER: KREDSMA



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DETROIT, MI 48266
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City of Detroit
15th Street Streetscape

REVISIONS

02/10/2022	BIDS
01/28/2022	100% REVIEW
12/17/2021	90% REVIEW
10/29/2021	60% REVIEW
08/20/2021	30% REVIEW

Drawn By: AOF
Designer: AOF
Reviewer: DPE
Manager: KK3

Hard copy is intended to be 24"x36" when plotted. Scale(s) indicated and graphic quality may not be accurate for any other size.

PROJECT NO.
210828

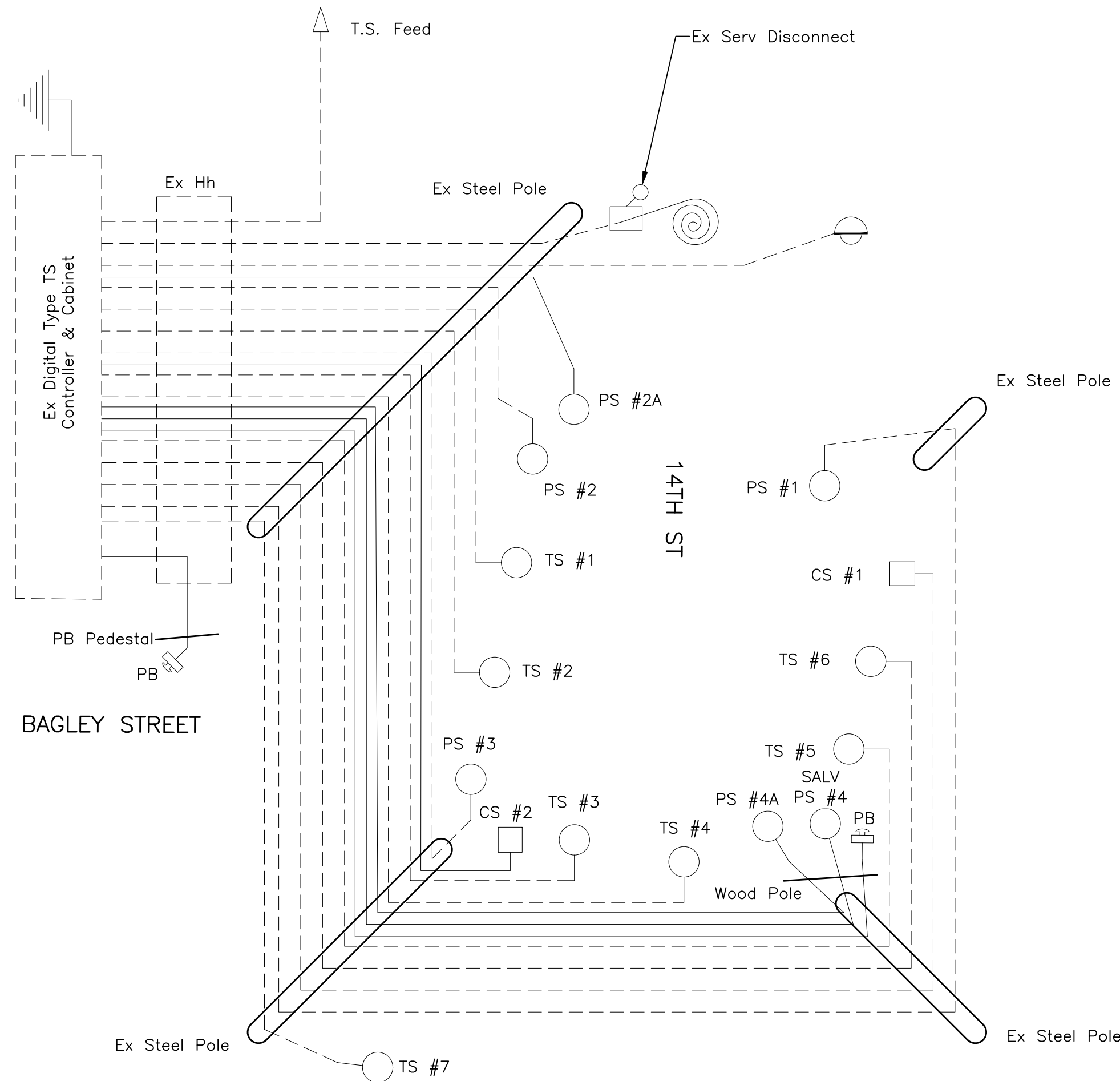
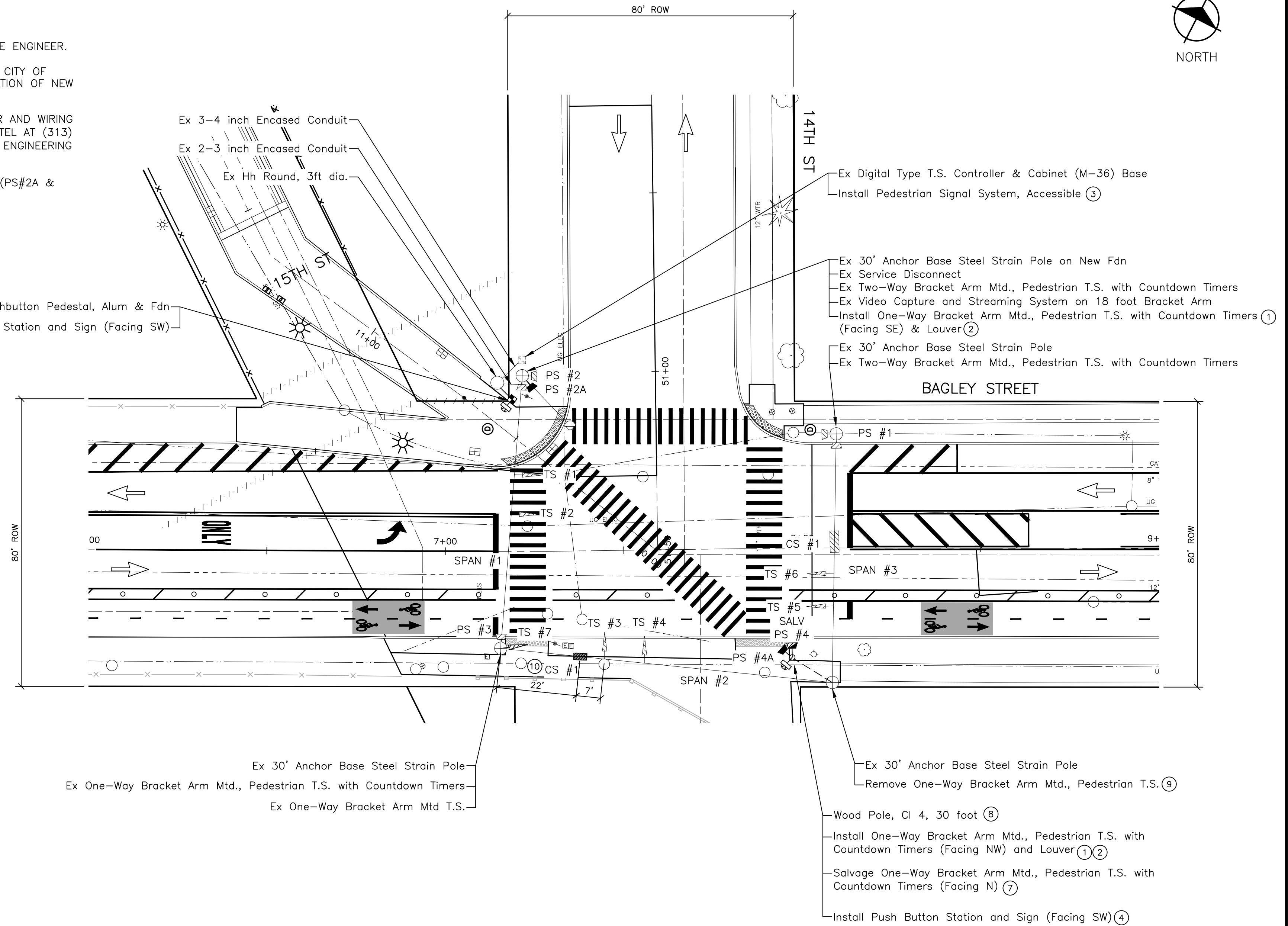
SHEET NO.
44

SIGNAL002

- NOTES:
1. TIME OF INSTALLATION OF PEDESTRIAN SIGNALS TO BE DETERMINED BY THE ENGINEER.
 2. CONTACT KIRIT PATEL AT (313) 628-5641 (patelki@detroitmi.gov) OF THE CITY OF DETROIT DPW, TRAFFIC ENGINEERING DIVISION, 48 HOURS PRIOR TO ACTIVATION OF NEW PEDESTRIAN SIGNALS.
 3. CONTRACTOR SHALL BE RESPONSIBLE FOR PROGRAMMING THE CONTROLLER AND WIRING THE CABINET. TIMING PERMITS CAN BE OBTAINED BY CONTACTING KIRIT PATEL AT (313) 628-5641 (patelki@detroitmi.gov) OF THE CITY OF DETROIT DPW, TRAFFIC ENGINEERING DIVISION.
 4. THE PEDESTRIAN SIGNALS FACING DIAGONALLY ACROSS THE INTERSECTION (PS#2A & PS#4A) SHALL HAVE VERTICAL LOUVERS.

LIST OF MATERIAL			
NO.	ITEM	QUANTITIES	CODE
1	TS, Pedestrian, One Way Bracket Arm Mtd (LED) Countdown	2 Ea	8200336
2	Louver	2 Ea	8200080
3	Pedestrian Signal System, Accessible	1 Ea	8200240
4	Push Button Station and Sign	2 Ea	8200128
5	Pushbutton, Pedestal, Alum	1 Ea	8200100
6	Pedestal, Fdn	1 Ea	8200105
7	TS, Pedestrian, One Way Bracket Arm Mtd, Salv	1 Ea	8200226
8	Wood Pole, Cl 4, 30 foot	1 Ea	8182349
9	TS, Pedestrian, Bracket Arm Mtd, Rem	1 Ea	8200180
10	Case Sign, Disappearing Legend, 24 inch by 30 inch	1 Ea	8200015
	Conduit, Encosed, 1, 3 inch, Modified	15 Ft	8187001

MOUNTING DETAILS FOR POLE AND PEDESTAL MOUNTED PEDESTRIAN AND TRAFFIC SIGNALS			
ITEM	MOUNTED ON	REFER TO DETAIL SHEET	REFER TO DETAIL
2-WAY PS	PEDESTAL	1509	D2
2-WAY PS	POLE	1510	D3
1-WAY PS	PEDESTAL	1509	B2
1-WAY PS	POLE	1508	B1
2-WAY TS	PEDESTAL	1509	C2
2-WAY TS	POLE	1510	A3
1-WAY TS	PEDESTAL	1509	A2
1-WAY TS	POLE	1508	A1
TS & PS	PEDESTAL	1509	MOUNT PED SIGNALS ON BACK OF PEDESTAL
TS & PS	POLE	1510	MOUNT PED SIGNALS ON BACK OF POLE

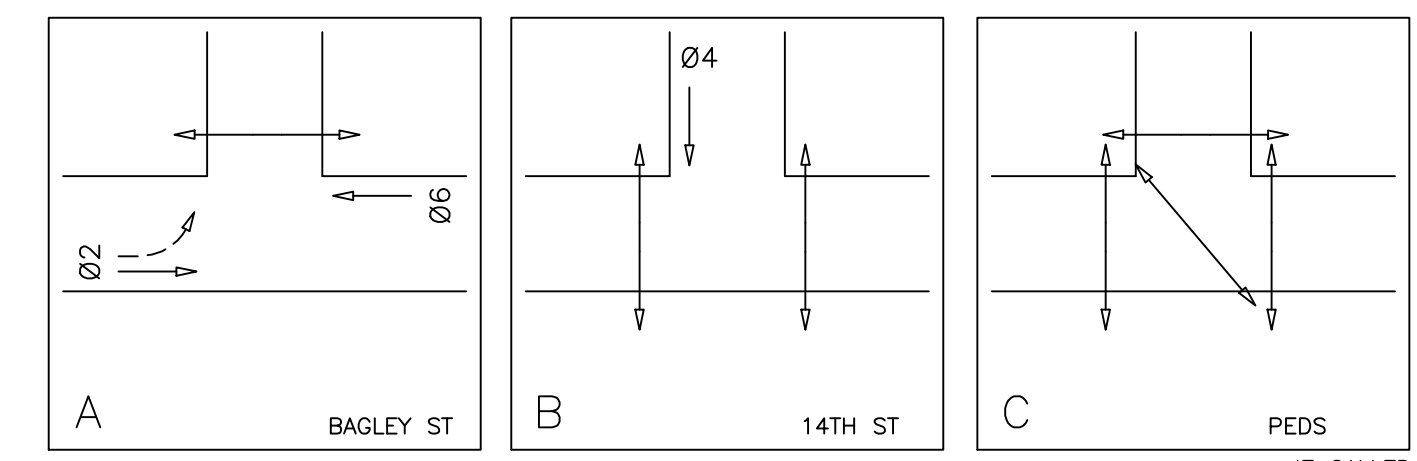
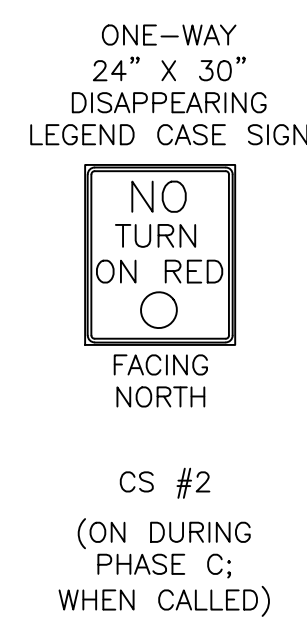
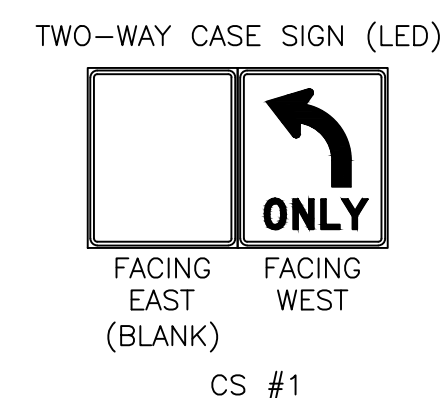
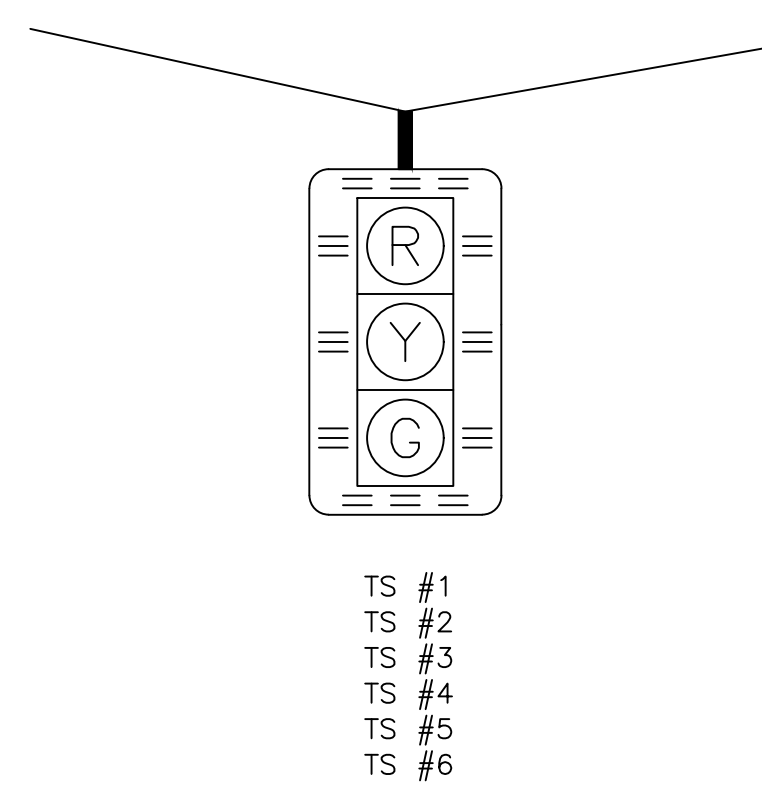


	CABLE TYPE
1W2S PS	1-5/C#16 P.J.
CASE SIGN	1-3/C#16 P.J.
Pushbutton	1-2/C#12 SHIELDED (MSA 50-2)

INSTALLATION WIRING DIAGRAM

NO SCALE

PS = Pedestrian Traffic Signal



PHASING DIAGRAM

FUTURE INSTALLATION SHEET

SCALE: 1" = 20'
0 10 20 40



REVISIONS

02/10/2022	BIDS
01/28/2022	100% REVIEW
12/17/2021	90% REVIEW
10/29/2021	60% REVIEW
08/20/2021	30% REVIEW

Drawn By: AOF
Designer: AOF
Reviewer: DPE
Manager: KK3

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PROJECT NO.
210828

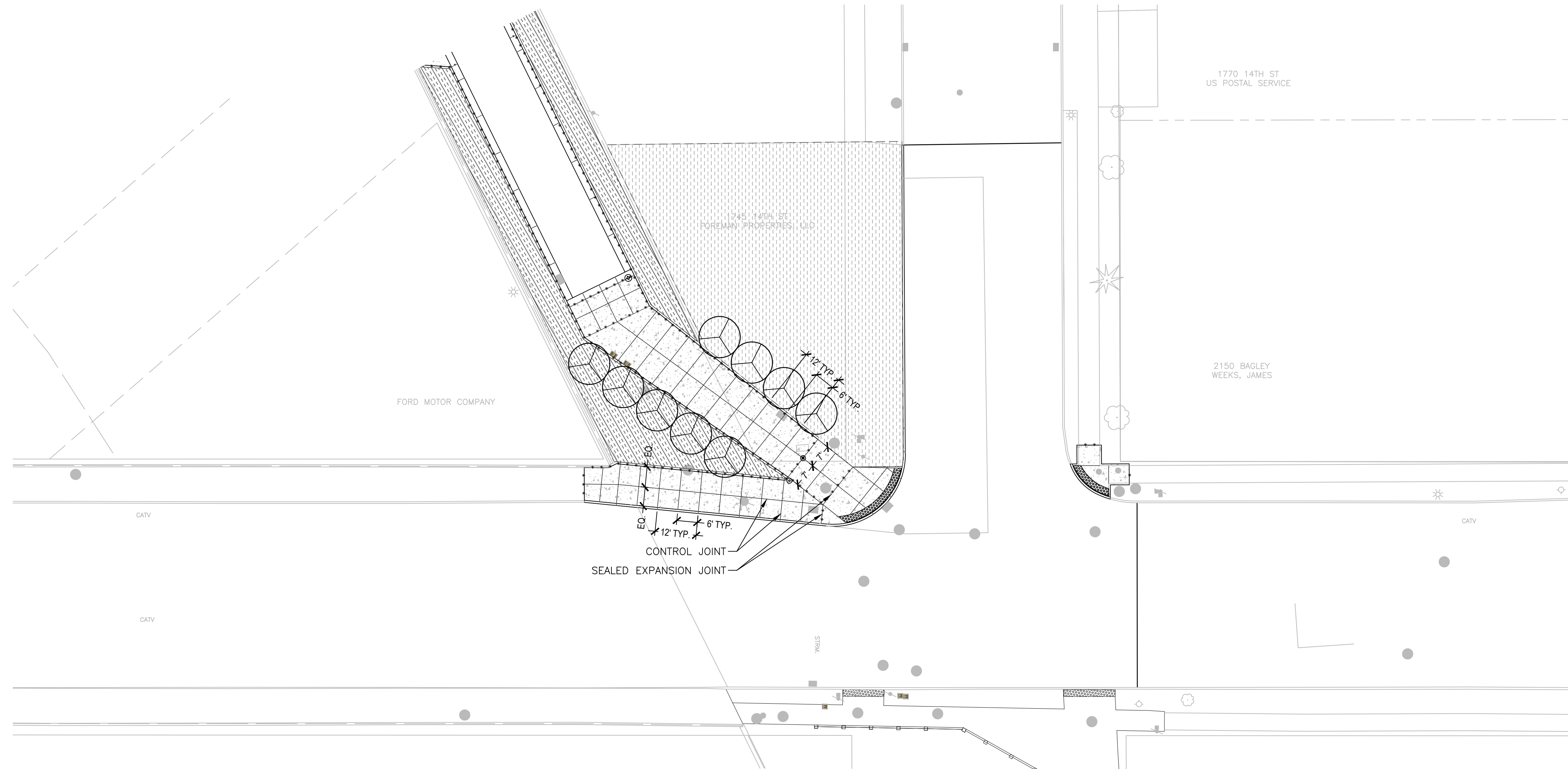
SHEET NO.
45

SIGNAL003



15TH STREET

14TH STREET



LEGEND

- CONTROL JOINT
- SEALED EXPANSION JOINT
- ▨ PLANTING BED, SEE LANDSCAPE PLANS
- ▤ SEEDING, MIXTURE TUF, MODIFIED
- Ⓞ TRASH RECEPTACLE
- BOLLARD REMOVABLE
- FREESTANDING PLANTER BY FORD (N.I.C.)

JOINTING NOTES

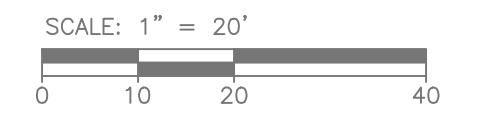
1. NOTIFY THE ENGINEER OF ANY DISCREPANCIES BETWEEN THE PLANS AND SITE CONDITIONS IN ADVANCE OF CONSTRUCTION ACTIVITIES AND INSTALLATION OF SITE ELEMENTS.
2. ALL DIMENSIONS ARE FROM BACK OF CURB, EDGE OF PAVEMENT, OR CENTER OF FIXTURE UNLESS OTHERWISE NOTED.
3. THERE SHALL BE 1/2" SEALED EXPANSION JOINT AT ALL CURB/SIDEWALK, BUILDING/SIDEWALK, LIGHT POLE, OR ANY OTHER FIXED OBJECTS (I.E. EXISTING PAVEMENT, WALLS, POLES, FOUNDATIONS). JOINTING PLANS DO NOT SHOW EVERY REQUIRED SEALED EXPANSION JOINT.
4. CONTROL JOINTS AND SEALED EXPANSION JOINTS IN CURBS TO ALIGN WITH CONTROL JOINTS AND SEALED EXPANSION JOINTS IN THE ADJACENT SIDEWALK/PAVEMENT.
5. CONTROL JOINTS AND SEALED EXPANSION JOINTS AT DRIVEWAY AND ALLEY APPROACHES SHALL ALIGN WITH ADJACENT CURB RETURNS.
6. CONTROL JOINTS AND SEALED EXPANSION JOINTS TO ALIGN WITH ADJACENT PAVEMENT, CURBS, WALLS, ETC UNLESS OTHERWISE NOTED ON THE PLANS. ALIGN JOINTS PERPENDICULAR TO PAVEMENT EDGE AND ALIGN WITH CENTER POINTS OF ARCS, AS SHOWN.
7. PAVEMENT JOINTING IS INCIDENTAL TO THE PAVING AND MATERIALS PAY ITEMS.

JOINT SPACING

(JOINT SPACING SHALL BE PROVIDED AS INDICATED BELOW UNLESS NOTED OTHERWISE ON THE PLANS.)

	MAXIMUM SPACING
CONTROL JOINTS IN SIDEWALKS, CURBS, WALLS, ETC.	10'-0"
CONTROL JOINTS IN CONC. PAVEMENT FOR PARKING AREAS AND ROADS	15'-0"
SEALED EXPANSION JOINTS IN SIDEWALKS AND WALLS	60'-0"
SEALED EXPANSION JOINTS IN CURBS	120'-0"
SEALED EXPANSION JOINTS IN CONC. PAVEMENT FOR PARKING AREAS AND ROADS	120'-0"

JOINTING PLAN



PLOT INFO: C:\USERS\KIBBONS\SMITHGROUP\COMPANIES\INCORP.\1812 - SMITHGROUP - SMITHGROUP\ADMIN\PROJ\15TH AND BAGLEY\CAD\BASE\2022\2128_FISHBECK_1001\210628_JOINTING001.DWG LAYOUT: JOINTING001 DATE: 2/10/2022 TIME: 7:15:05 AM USER: KIBBONS



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City of Detroit
15th Street Streetscape

REVISIONS

02/10/2022	100% REVIEW
12/17/2021	90% REVIEW
10/27/2021	60% REVIEW
08/16/2021	30% REVIEW

Drawn By AOF
Designer AOF
Reviewer DPE
Manager KKS

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PROJECT NO.
210828

SHEET NO.
46

JOINTING001

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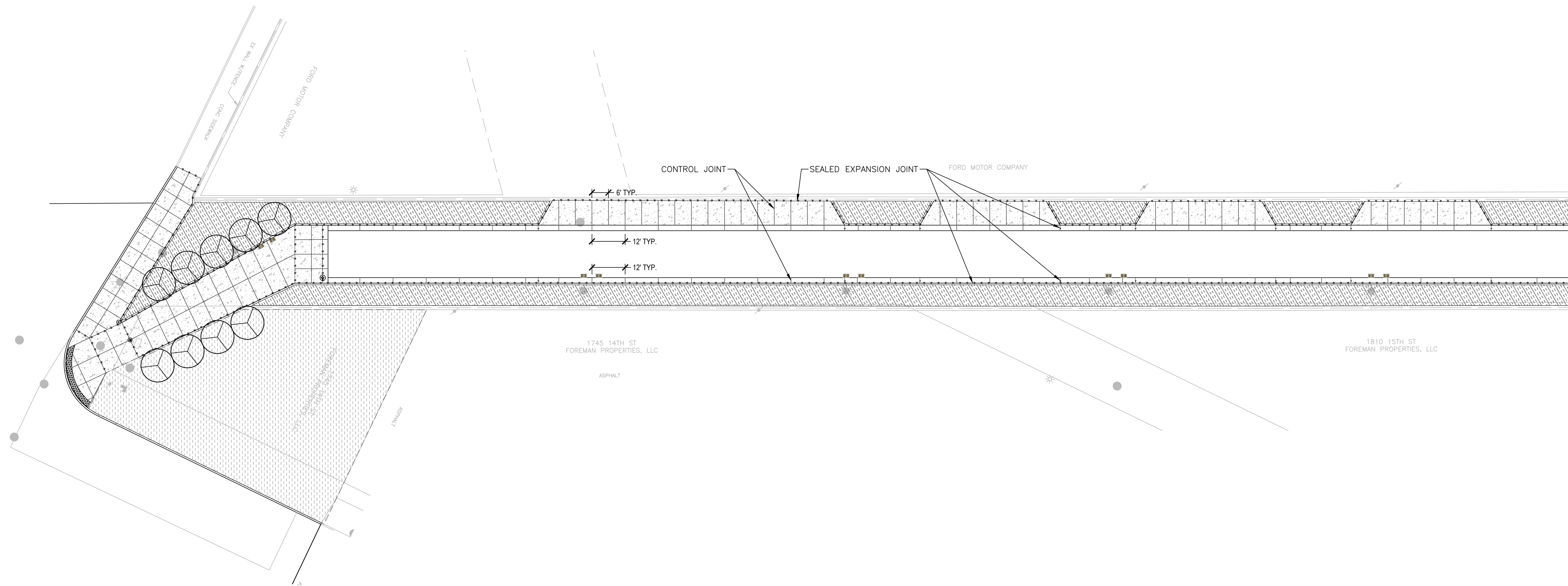
14TH STREET 15TH STREET



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15TH STREET

15TH STREET



JOINTING NOTES

1. REFER TO SHEET JOINTING001 FOR JOINTING NOTES.

LEGEND

- CONTROL JOINT
- XXXX SEALED EXPANSION JOINT
- [Hatched Box] PLANTING BED, SEE LANDSCAPE PLANS
- [Dotted Box] SEEDING, MIXTURE TUF, MODIFIED
- ⊕ TRASH RECEPTACLE
- BOLLARD REMOVABLE
- [Empty Box] FREESTANDING PLANTER BY FORD (N.I.C.)

JOINTING PLAN

SCALE: 1" = 20'
0 10 20 40

14TH STREET

REVISIONS

02/10/2022	100% REVIEW
12/17/2021	90% REVIEW
10/27/2021	60% REVIEW
08/16/2021	30% REVIEW

Drawn By AOF
Designer AOF
Reviewer DPE
Manager KJK

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PROJECT NO.
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47

JOINTING002



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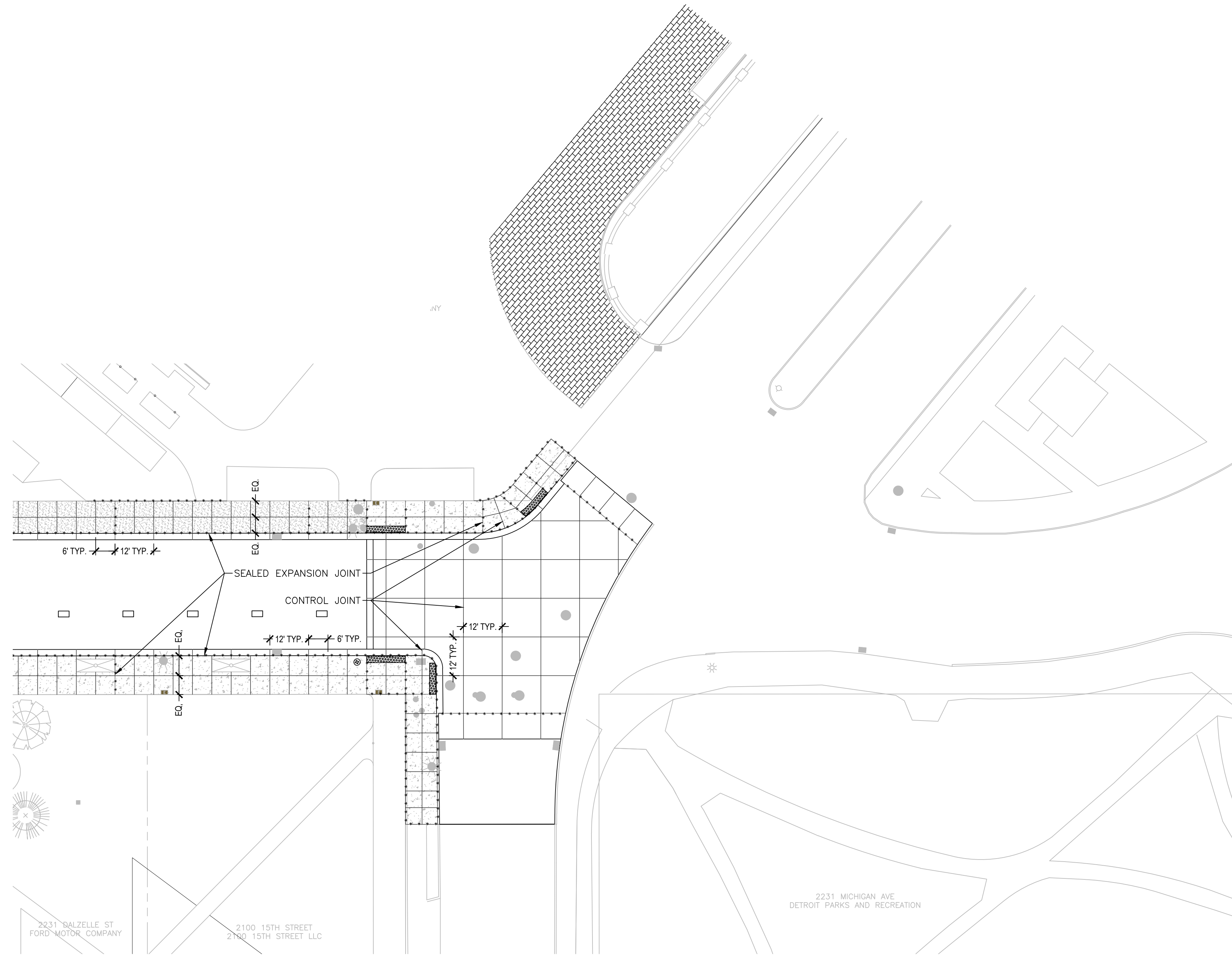
City of Detroit

15th Street Streetscape

PLOT INFO: C:\USERS\KGBIBBONS\SMITHGROUP\COMPANIES\INCORP.\15152_SMITHTGROUP - SMITHGROUP\ADMIN\PROJ\INFO\15TH AND DALZELLE\CAD\BASE\2022\21082_JOINTING004.DWG LAYOUT: JOINTING004.DWG DATE: 2/15/2022 TIME: 7:15:09 AM USER: KGBIBBONS

15TH STREET

15TH STREET



JOINTING NOTES

1. REFER TO SHEET JOINTING001 FOR JOINTING NOTES.

LEGEND

- CONTROL JOINT
- XXXXX SEALED EXPANSION JOINT
- PLANTING BED, SEE LANDSCAPE PLANS
- _SEEDING, MIXTURE TUF, MODIFIED
- _TRASH RECEPTACLE
- _BOLLARD REMOVABLE
- FREESTANDING PLANTER BY FORD (N.I.C.)

JOINTING PLAN

SCALE: 1" = 20'
0 10 20 40

REVISIONS

02/10/2022	100% REVIEW
12/17/2021	90% REVIEW
10/27/2021	60% REVIEW
08/16/2021	30% REVIEW

Drawn By AOF
Designer AOF
Reviewer DPE
Manager KKK

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PROJECT NO.

210828

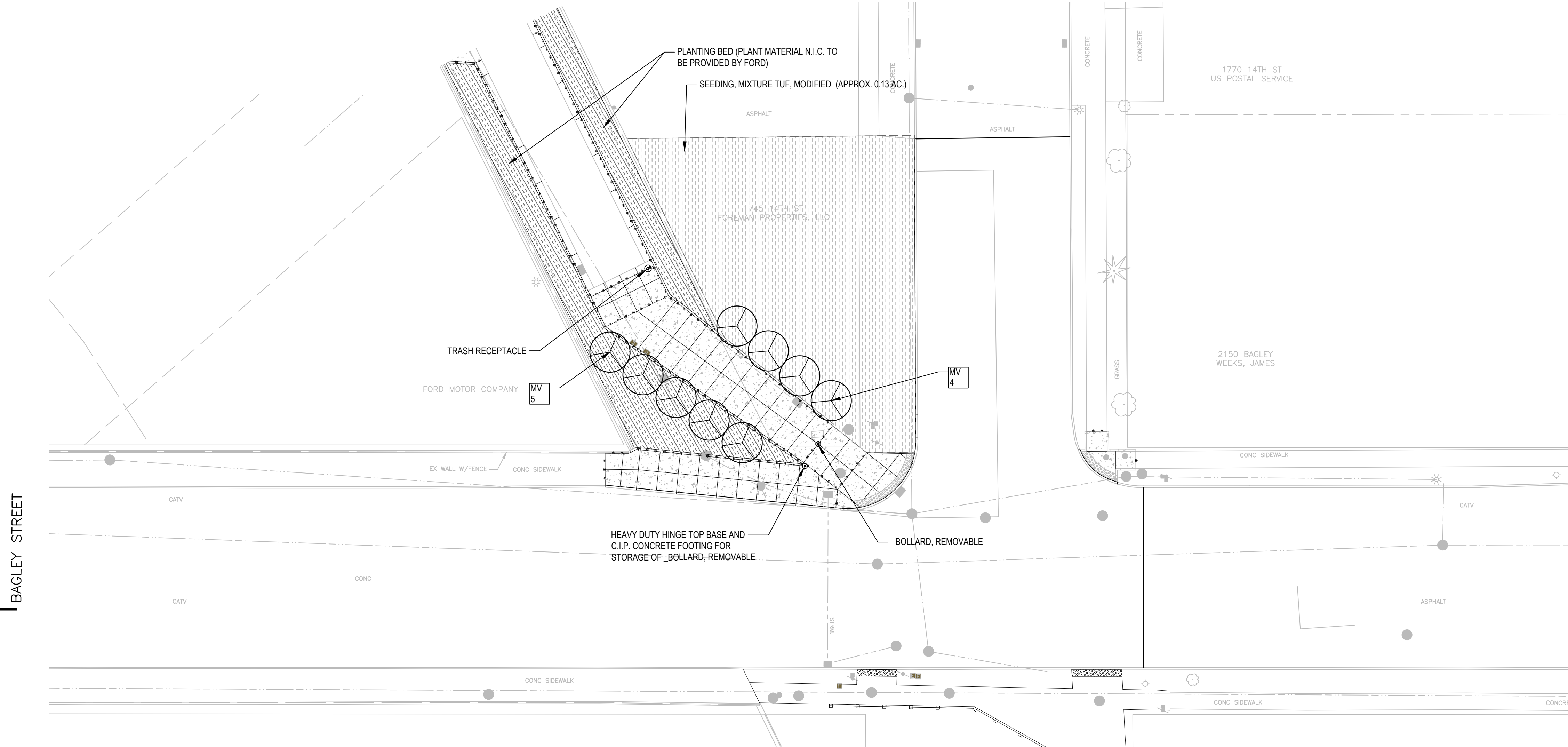
SHEET NO.

49

JOINTING004

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DALZELLE STREET



LEGEND

- DECIDUOUS SHADE TREE
- ORNAMENTAL TREE
- PLANTING BED, SEE PLANTING NOTE #14
- SEEDING, MIXTURE TUF, MODIFIED
- TRASH RECEPTACLE
- BOLLARD REMOVABLE
- FREESTANDING PLANTER BY FORD (N.I.C.)
- PLANT CODE IN PLANT SCHEDULE
- PLANT QUANTITY

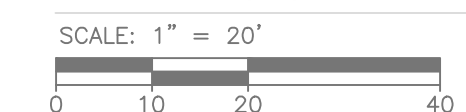
PLANTING NOTES

1. ENGINEER WILL REVIEW PLANT MATERIAL AND RESERVES THE RIGHT TO REJECT ANY MATERIAL THAT DOES NOT MEET THE SPECIAL PROVISIONS, PLANT LIST, OR DESIGN REQUIREMENTS OF THE PROJECT. PLANTS INSTALLED THAT DO NOT COMPLY TO BE IMMEDIATELY REMOVED.
2. ALL MATERIAL SUPPLIED FOR AN INDIVIDUAL ITEM ON THE PLANT LIST SHALL MATCH SIZE, SHAPE, FORM, AND NOTED REQUIREMENTS. IN ADDITION THE PLANT MATERIAL SHALL CONFORM TO THE SPECIFICATIONS AND SUPPLEMENTARY REQUIREMENTS IN THE SPECIAL PROVISIONS.
3. ENGINEER SHALL REVIEW PLACEMENT OF PLANT MATERIAL PRIOR TO INSTALLATION, AND RESERVES THE RIGHT TO ADJUST LAYOUT TO ACCOMMODATE SITE CONDITIONS AND DESIGN INTENT AT NO ADDITIONAL COST. ALL PLANTINGS SHALL BE INSTALLED IN A LOGICAL SEQUENCE WITHIN THE SAME PLANTING TIME FRAME. IF THE PLANT MATERIAL IS INSTALLED WITHOUT PRIOR APPROVAL THE ENGINEER RESERVES THE RIGHT TO REQUEST LAYOUT ADJUSTMENTS AT NO ADDITIONAL COST.
4. CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT PLANTS AND ENSURE HEALTH AND PLANT QUALITY DURING SHIPMENT, HANDLING, INSTALLATION AND ESTABLISHMENT.
5. ALL PLANTING BEDS SHALL RECEIVE 24" OF PLANTING MIX AND 2" DOUBLE SHREDDED HARDWOOD BARK MULCH UNLESS NOTED OTHERWISE.
6. ALL PLANTINGS SHALL RECEIVE A MIN. OF 2" OF DOUBLE PROCESSED SHREDDED HARDWOOD BARK MULCH, WHERE LANDSCAPE BEDS MEET PAVEMENTS OR LAWNS; CUT THE GRADE TO ALLOW FOR MULCH AND 1" DROP FROM THE ADJOINING FINISH GRADE. KEEP MULCH 4" FROM TREE TRUNKS AND SHRUB CROWNS.
7. ALL DISTURBED SEEDING AREAS SHALL RECEIVE A MINIMUM OF 4" DEEP TOPSOIL. TOPSOIL REMOVED DURING DEMOLITION / SITE PREPARATION CAN BE RE-USED, HOWEVER IT MUST MEET OR EXCEED THE TOPSOIL REQUIREMENTS IN THE SPECIAL PROVISIONS. ADDITIONAL TOPSOIL REQUIRED SHALL BE PROVIDED BY THE CONTRACTOR FROM OFF SITE SOURCES.
8. SPACE PLANT MATERIALS AS SHOWN ON PLANS AND INDICATED IN PLANT SCHEDULE. PLANT MATERIALS SHALL CONFORM TO PLANT SCHEDULES AND SIZES SHALL BE THE MINIMUM INDICATED ON THE PLANT SCHEDULE OR LARGER. INSTALLATION OF LARGER PLANTS AT NO ADDITIONAL COST TO OWNER. ALL MEASUREMENTS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF ANLA STANDARDS FOR NURSERY STOCK.
9. PRIOR TO INSTALLATION, DEMARCATÉ LAYOUT OF ALL SEED AREAS, AND INDIVIDUAL TREES FOR REVIEW AND APPROVAL BY ENGINEER. THE ENGINEER WILL REVIEW THESE LOCATIONS WITH THE CONTRACTOR AND MAY MAKE MINOR ADJUSTMENTS AS NECESSARY. SUCH ADJUSTMENTS WILL BE AT NO ADDITIONAL COST TO THE OWNER.
10. SEEDING APPLIES TO ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITIES EVEN IF ACTIVITIES EXTEND BEYOND THE APPROXIMATED SEEDING LIMITS INDICATED ON THE DRAWINGS. REPAIR ANY DISTURBED AREAS TO THE SAME CONDITION AS ORIGINALLY FOUND. IN AREAS WHERE LAWN IS DISTURBED BEYOND THE LIMITS OF CONSTRUCTION, REPLACE LAWN WITH NEW SEED (INCLUDING TOPSOIL, SEED AND MULCH) AT NO ADDITIONAL COST TO THE OWNER. REFER TO SPECIFICATIONS FOR SEED MIXES.
11. REFER TO DEMOLITION PLANS FOR EROSION CONTROL MEASURES.
12. LEGALLY DISPOSE OF DEBRIS ASSOCIATED WITH LANDSCAPE PLANS OFF-SITE.
13. MINIMIZE CULTIVATION WITHIN THE DRIP LINES OF EXISTING TREES. PREPARE SOIL FOR SEEDING AREAS BY MINIMIZING DISTURBANCE TO 4 INCH DEPTH. HAND CULTIVATE WHEN ENCOUNTERING ROOTS. NO HEAVY EQUIPMENT ALLOWED WITHIN DRIP LINE OF EXISTING TREES.
14. REFER TO 'PLANTING BED' DETAIL, SHEET NO. 58, LAND007 LANDSCAPE DETAILS FOR PLANTING BEDS. PROVIDE PLANT MIX, DRAINAGE AGGREGATE, UNDERDRAIN, AND OTHER RELATED ITEMS AS SHOWN. PLANT MATERIAL FOR PLANTING BEDS WILL BE PROVIDED AND INSTALLED BY FORD AS PART OF A SEPARATE CONTRACT AND ARE NOT INCLUDED.

PLANT SCHEDULE

Qty.	Abv.	Botanical Name	Common Name	Root	Size	Comments	Spacing
Deciduous Trees							
3	QM	Quercus macrocarpa	Bur Oak	B&B	4" Cal.	One central leader, well branched, 6' branching ht.	As shown
4	UP	Ulmus 'Patriot'	Patriot Elm	B&B	4" Cal.	One central leader, well branched, 6' branching ht.	As shown
Ornamental Trees							
9	MV	Magnolia virginiana	Sweet Bay Magnolia	B&B	1.5" Cal.	6' branch height, well branched.	As shown

LANDSCAPE PLAN



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City of Detroit

15th Street Streetscape

REVISIONS

02/10/2022	100% REVIEW
12/17/2021	90% REVIEW
10/27/2021	60% REVIEW
08/16/2021	30% REVIEW

Drawn By AOF
Designer AOF
Reviewer DPE
Manager KKK

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PROJECT NO.
210828

SHEET NO.
50

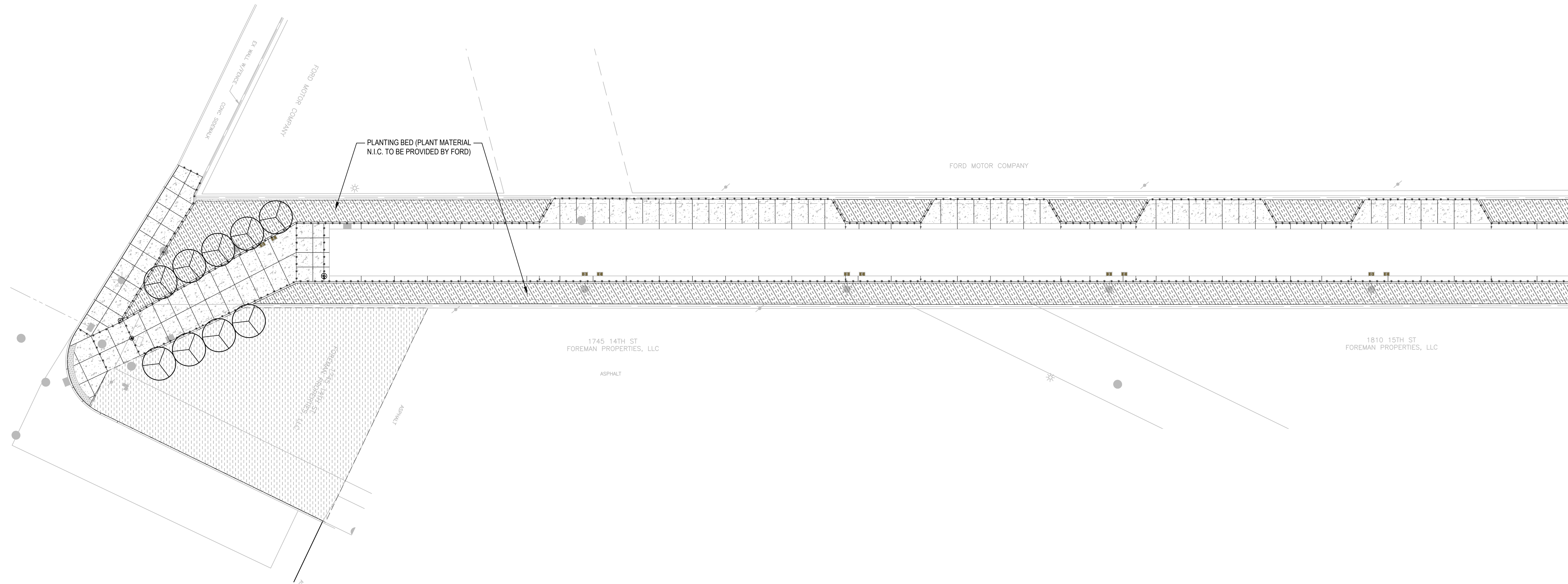
LAND001



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15TH STREET

15TH STREET



PLANTING NOTES

- REFER TO SHEET LAND001 FOR PLANTING NOTES AND PLANTING SCHEDULE.

LEGEND

- DECIDUOUS SHADE TREE
- ORNAMENTAL TREE
- PLANTING BED, SEE PLANTING NOTE #14
- _SEEDING, MIXTURE TUF, MODIFIED
- _TRASH RECEPTACLE
- _BOLLARD REMOVABLE
- FREESTANDING PLANTER BY FORD (N.I.C.)
- PLANT CODE IN PLANT SCHEDULE
- PLANT QUANTITY

REVISIONS

02/10/2022	100% REVIEW
12/17/2021	90% REVIEW
10/27/2021	60% REVIEW
08/16/2021	30% REVIEW

Drawn By AOF
Designer AOF
Reviewer DPE
Manager KKS

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PROJECT NO.
210828

SHEET NO.
51

LAND002

LANDSCAPE PLAN

SCALE: 1" = 20'
0 10 20 40

14TH STREET



15TH STREET

City of Detroit

15th Street Streetscape

REVISIONS

02/10/2022	100% REVIEW
12/17/2021	90% REVIEW
10/27/2021	60% REVIEW
08/16/2021	30% REVIEW

Drawn By AOF
Designer AOF
Reviewer DPE
Manager KJK

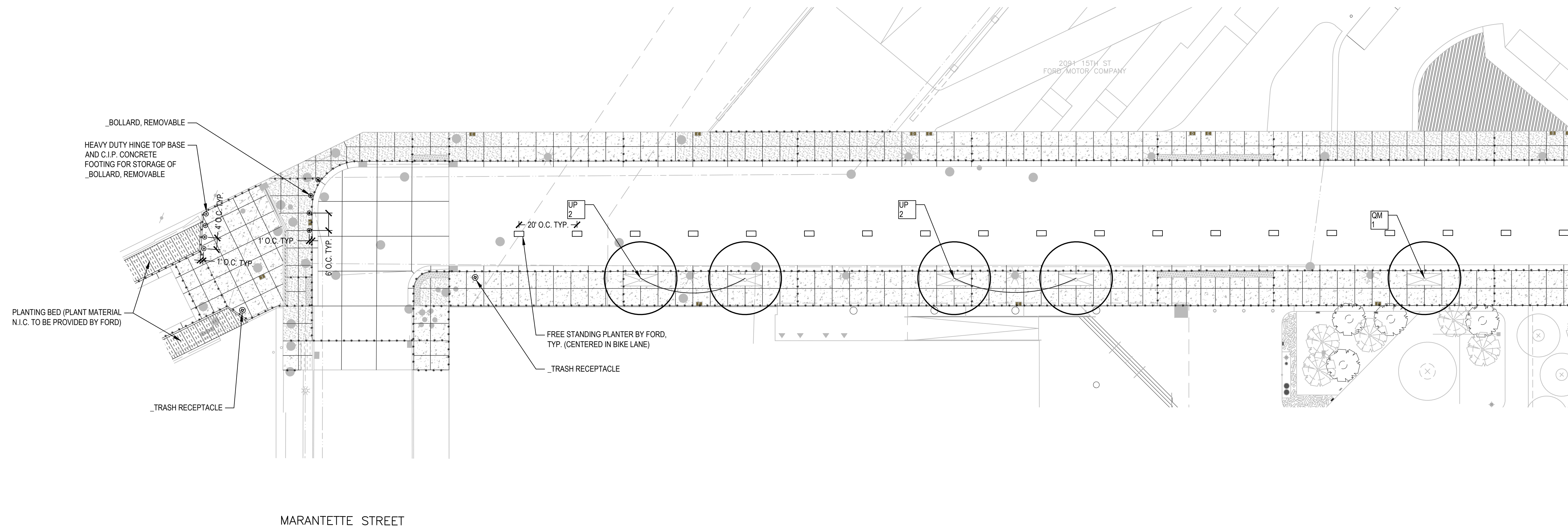
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PROJECT NO.
210828

SHEET NO.
52

LAND003

15TH STREET



MARANTETTE STREET

PLANTING NOTES

1. REFER TO SHEET LAND001 FOR PLANTING NOTES AND PLANTING SCHEDULE.

LEGEND

- DECIDUOUS SHADE TREE
- ORNAMENTAL TREE
- PLANTING BED, SEE PLANTING NOTE #14
- SEEDING, MIXTURE TUF, MODIFIED
- TRASH RECEPTACLE
- BOLLARD REMOVABLE
- FREESTANDING PLANTER BY FORD (N.I.C.)
- PLANT CODE IN PLANT SCHEDULE
- PLANT QUANTITY

LANDSCAPE PLAN

SCALE: 1" = 20'
0 10 20 40



LACOMBE DRIVE



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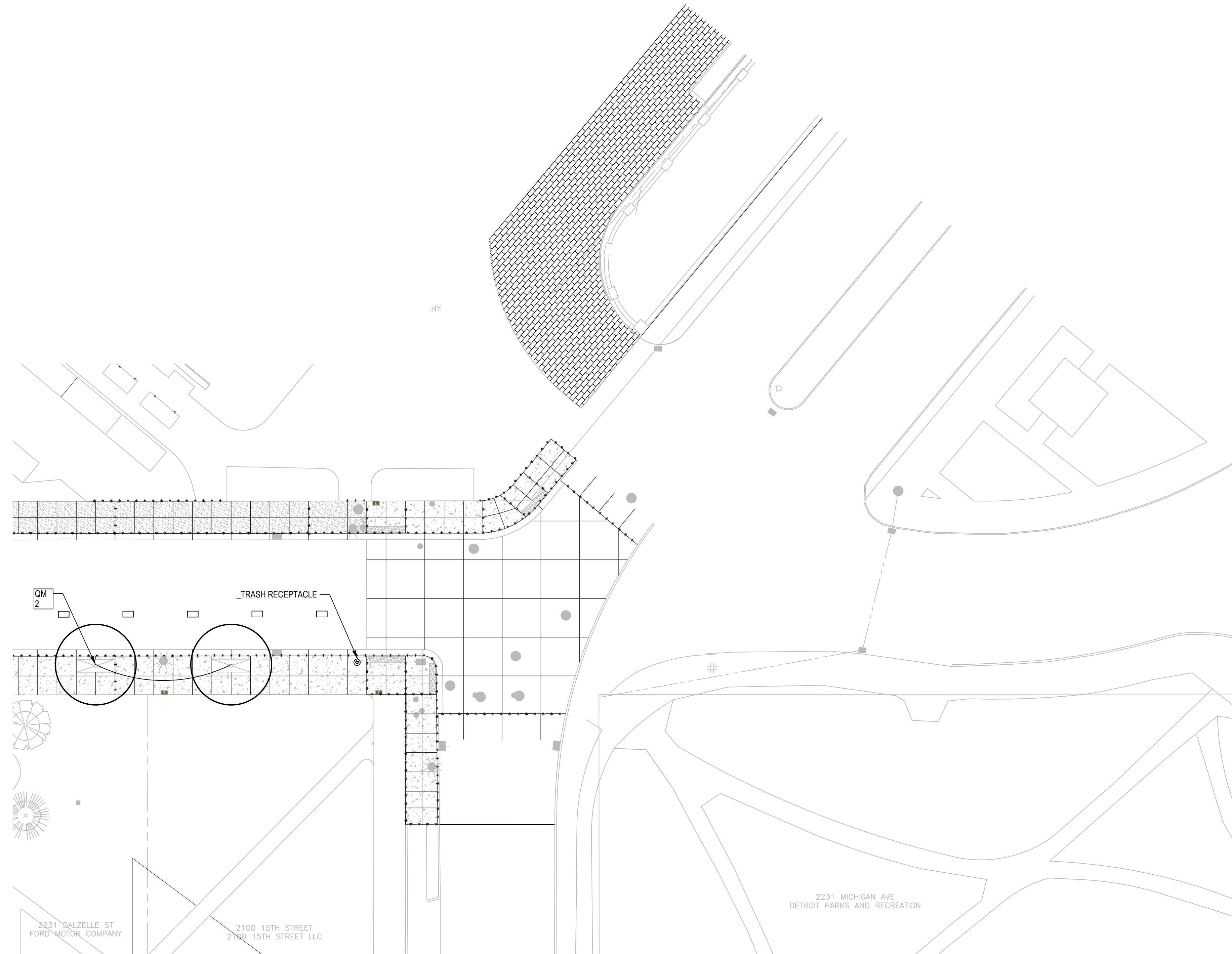
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City of Detroit

15th Street Streetscape

15TH STREET



PLANTING NOTES

1. REFER TO SHEET LAND001 FOR PLANTING NOTES AND PLANTING SCHEDULE.

LEGEND

- DECIDUOUS SHADE TREE
- ORNAMENTAL TREE
- PLANTING BED, SEE PLANTING NOTE #14
- _SEEDING, MIXTURE TUF, MODIFIED
- _TRASH RECEPTACLE
- _BOLLARD REMOVABLE
- FREESTANDING PLANTER BY FORD (N.I.C.)
- PLANT CODE IN PLANT SCHEDULE
- PLANT QUANTITY

REVISIONS

02/10/2022	100% REVIEW
12/17/2021	90% REVIEW
10/27/2021	60% REVIEW
08/16/2021	30% REVIEW

Drawn By AOF
Designer AOF
Reviewer DPE
Manager KKS

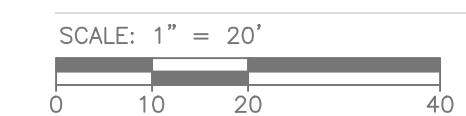
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PROJECT NO.
210828

SHEET NO.
53

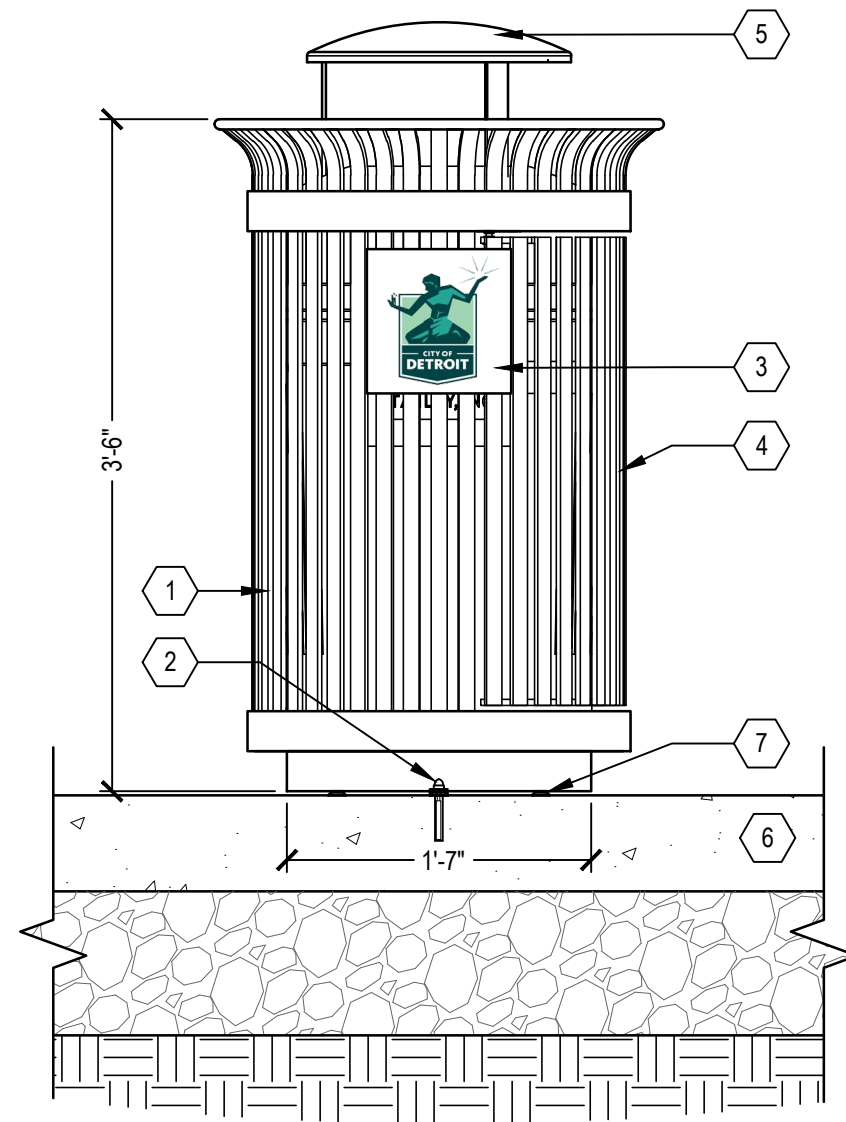
LAND004

LANDSCAPE PLAN



DALZELLE STREET

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FRONT ELEVATION

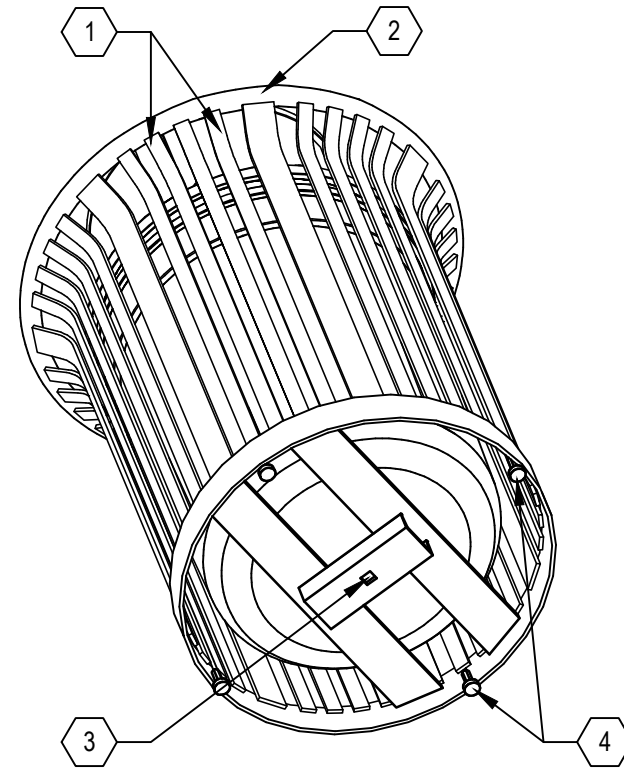
- 1 VICTOR STANLEY MODEL SD-42 TRASH RECEPTACLE
- 2 1/2" Ø X 4" S.S. VANDAL RESISTANT ANCHOR BOLT, TYP.
- 3 CUSTOM STEEL PLAQUE WITH PRESSURE SENSITIVE OUTDOOR DECAL OF CITY OF DETROIT LOGO - ONE PLAQUE ON OPPOSITE SIDE OF SELF-CLOSING DOOR.
- 4 STANDARD LOCKABLE LATCH
- 5 RAIN BONNET LID
- 6 CONCRETE
- 7 PROVIDE ADJUSTABLE GLIDES

_TRASH RECEPTACLE

NO SCALE

NOTES:

1. _TRASH RECEPTACLE TO BE VICTOR STANLEY, MODEL SD-42 WITH RAIN BONNET LID, 36 GALLON CAPACITY.
2. ALL FABRICATED COMPONENTS ARE STEEL HOT-DIPPED GALVANIZED WITH BLACK POWDER COAT FINISH.
3. SURFACE MOUNT USING (1) 1/2" Ø X 3" SSSL VANDAL RESISTANT ANCHOR BOLT.
4. SEE CONSTRUCTION PLANS FOR _TRASH RECEPTACLE LOCATIONS. CONFIRM ALL _TRASH RECEPTACLE LOCATIONS AND ORIENTATION INCLUDING ORIENTATION OF THE DOOR WITH ENGINEER PRIOR TO INSTALLATION. ADJUSTMENTS TO THE LOCATION AND ORIENTATION SHALL BE PROVIDED AT NO ADDITIONAL COST.
5. INSTALL PER MANUFACTURER'S RECOMMENDATIONS. ADJUST LEVELING FEET TO ENSURE RECEPTACLE IS SET LEVEL AND PLUMB.
6. PROVIDE HIGH DENSITY PLASTIC LINER. DRILL 3/4" Ø DRAINAGE HOLES IN BOTTOM OF LINER.

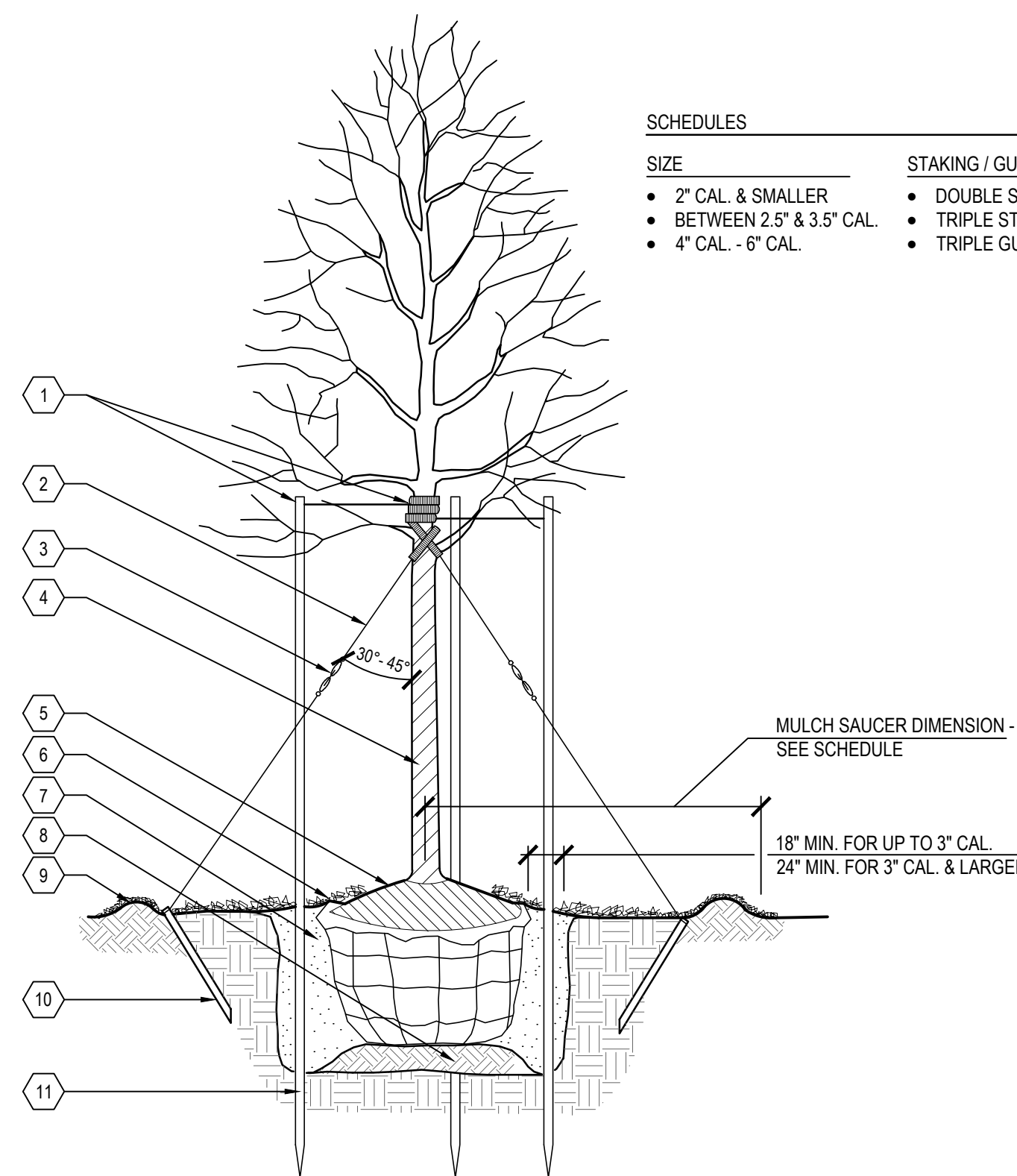


AXONOMETRIC VIEW- SURFACE MOUNTING

- 1 3/8" X 1" VERTICAL SOLID STEEL BARS
- 2 5/8" SOLID STEEL TOP RING
- 3 3/4" SQUARE CENTER ANCHOR BOLT HOLE
- 4 LEVELING FEET WITH A 3/8" Ø THREADED STEEL SHAFT

DECIDUOUS TREE

NO SCALE



SCHEDULES

SIZE	STAKING / GUYING	MULCH SAUCER DIMENSION (NON-BED AREAS)
• 2" CAL. & SMALLER	• DOUBLE STAKE	• 4' DIA.
• BETWEEN 2.5" & 3.5" CAL.	• TRIPLE STAKE	• 5' DIA.
• 4" CAL. - 6" CAL.	• TRIPLE GUY	• MIN. 8' DIA. - EXTEND OUTSIDE DIAMETER TO INCLUDE GUYING STAKES

NOTES:

NEWER CUT CENTRAL LEADERS PRUNE ONLY TO REMOVE DEAD OR DAMAGED BRANCHES.

- 1 TOP OF STAKES AND GUYS TO BE SET ABOVE FIRST BRANCHES. SET STAKES VERTICAL AND AT SAME HEIGHT
- 2 GUYING CABLE 3 GUYS PER TREE
- 3 TURNBUCKLE
- 4 TREE WRAP
- 5 REMOVE BURLAP FROM TOP 1/3 OF ROOT BALL
- 6 2" DEEP DOUBLE SHREDDED HARDWOOD BARK MULCH. DO NOT COVER ROOT FLARE
- 7 _PLANTING MIXTURE
- 8 COMPACTED _PLANTING MIXTURE
- 9 MOUND _PLANTING MIX TO FORM SAUCER AROUND PLANT PIT. SET SAUCER OUTSIDE OF GUY STAKES
- 10 2x4 WOOD OR #3/16" METAL FENCE POST ANCHOR STAKE TO BE DRIVEN BELOW FINISH GRADE. MIN. LENGTH TO BE 24"
- 11 STAKES TO EXTEND 12" BELOW TREE PIT IN UNDISTURBED GROUND

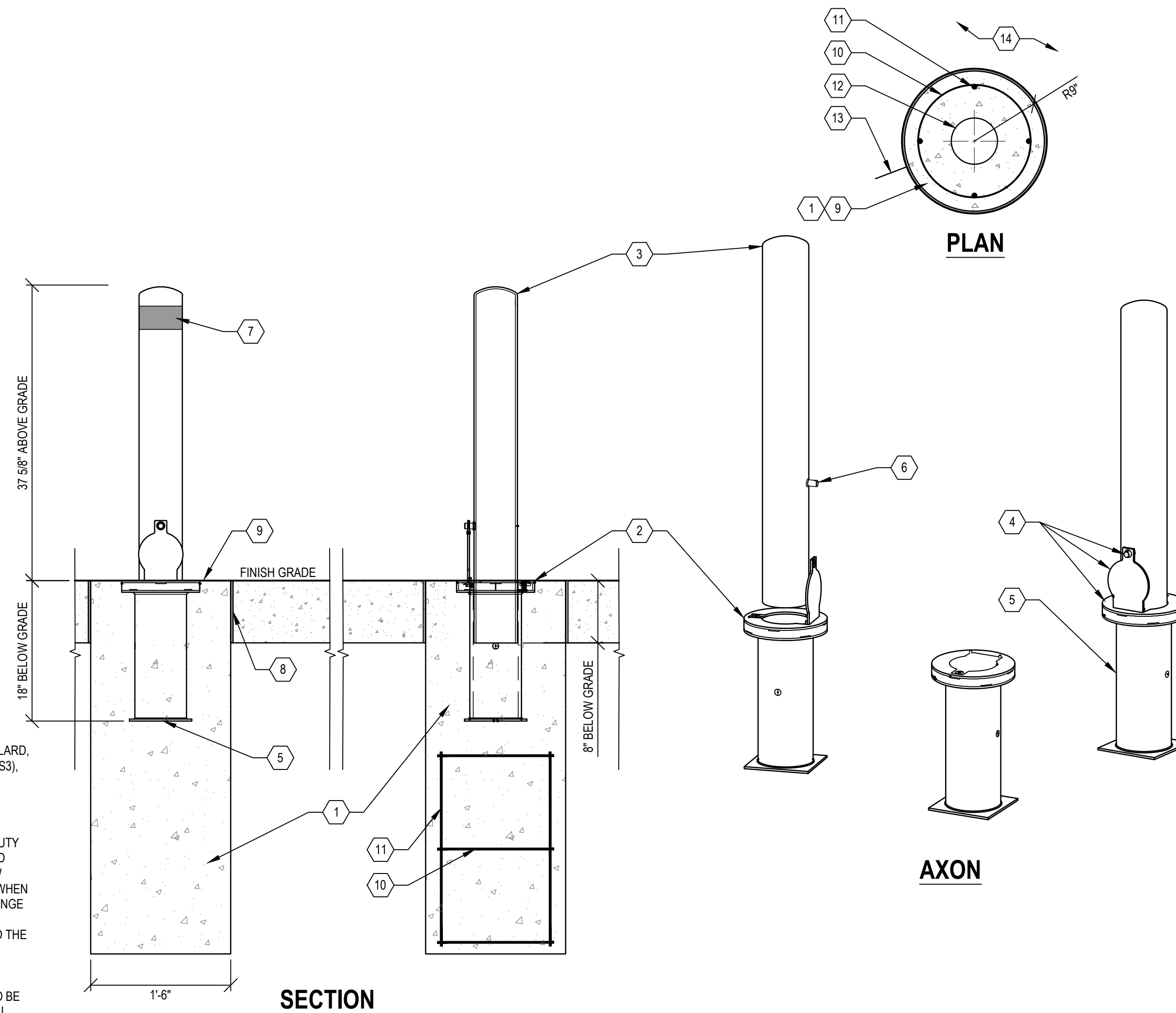
- 1 C.I.P. CONCRETE FOOTING
- 2 FLUSH SURFACE WHEN BOLLARD IS REMOVED
- 3 RS3 HEAD
- 4 SSSL TOP PLATE, LID AND LOCKING PIN
- 5 HEAVY DUTY HINGE TOP BASE
- 6 PADLOCK OPERATED
- 7 REFLECTIVE SHEETING, SEE NOTE 5
- 8 SEALED EXPANSION JOINT
- 9 MEDIUM BROOM FINISH CONCRETE TO MATCH ADJACENT CONCRETE FINISH
- 10 #4 @ 12" TIES
- 11 (4) #6 VERT. BARS
- 12 _BOLLARD, REMOVABLE
- 13 CONCRETE JOINTING WHERE SHOWN ON JOINTING PLANS
- 14 ADJACENT PAVEMENT

NOTES:

- 1) _BOLLARD, REMOVABLE SHALL BE: MAXIFORCE REMOVABLE BOLLARD, ROUND HD BODY, PADLOCK OPERATED, ROUND STYLE 3 HEAD (RS3), HEAVY DUTY HINGE TOP BASE (6"), HOT-DIP GALVANIZED AND POWDER COATED (GPC).
- 2) COLOR TO BE APPROVED BY OWNER.
- 3) INSTALL PER MANUFACTURER'S REQUIREMENTS.
- 4) LOCATE BOLLARD AS SHOWN ON PLANS. NOTE THAT (2) HEAVY DUTY HINGE TOP BASES WITH CONCRETE FOOTINGS WILL BE REQUIRED FOR EACH BOLLARD. SECONDARY HINGE TOP BASES WILL ALLOW OWNER TO RELOCATE BOLLARDS TO APPROPRIATE LOCATIONS WHEN THEY ARE REMOVED FROM PRIMARY LOCATIONS. SECONDARY HINGE TOP BASE LOCATIONS ARE IDENTIFIED ON PLANS.
- 5) APPLY WHITE REFLEXITE AR1000 REFLECTIVE SHEETING AROUND THE TOP OF BOLLARD JUST BELOW THE RS3 HEAD TO INCREASE VISIBILITY.
- 6) PROVIDE EXTERIOR RATED COMMERCIAL GRADE COMBINATION PADLOCK WITH SHACKLE SEAL AND DIAL DUST COVER. COLOR TO BE BLACK. MASTER LOCK PRO-SERIES NO. 1178 OR APPROVED EQUAL.

_REMOVABLE BOLLARD

NO SCALE



SECTION

AXON



REVISIONS

02/10/2022	100% REVIEW
12/17/2021	90% REVIEW
10/27/2021	60% REVIEW
08/16/2021	30% REVIEW

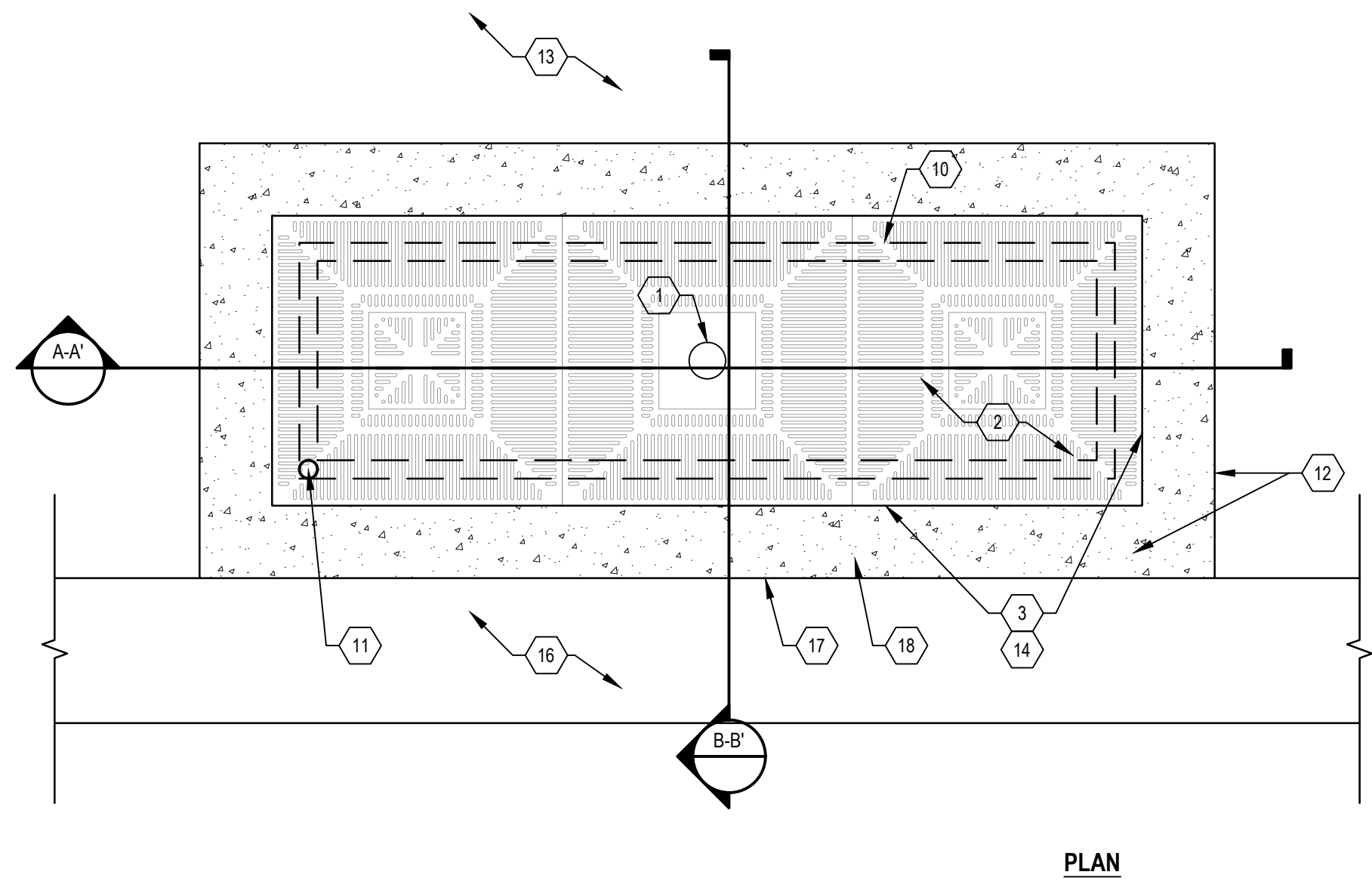
Drawn By: KG
Designer: KG
Reviewer: DPE
Manager: KK3

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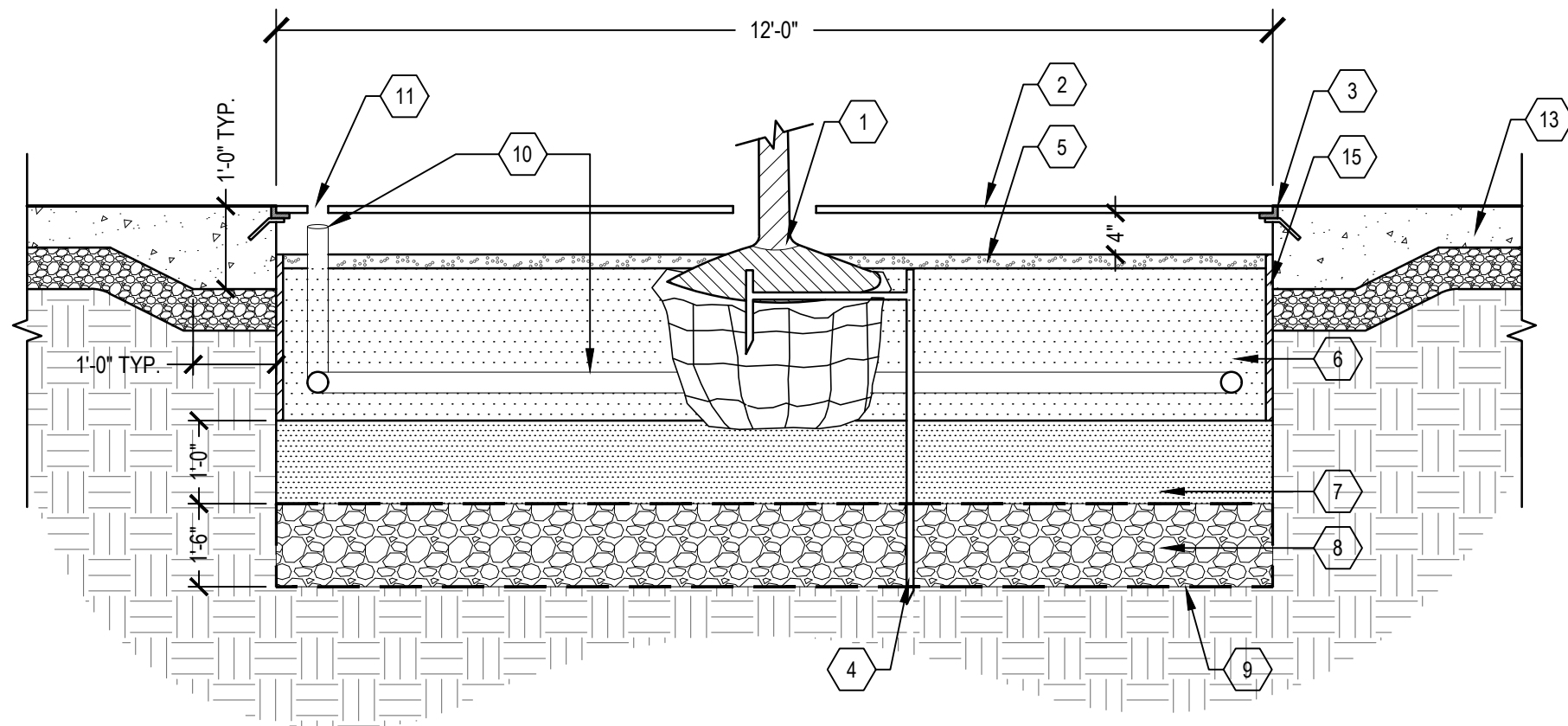
PROJECT NO.
210828

SHEET NO.
54

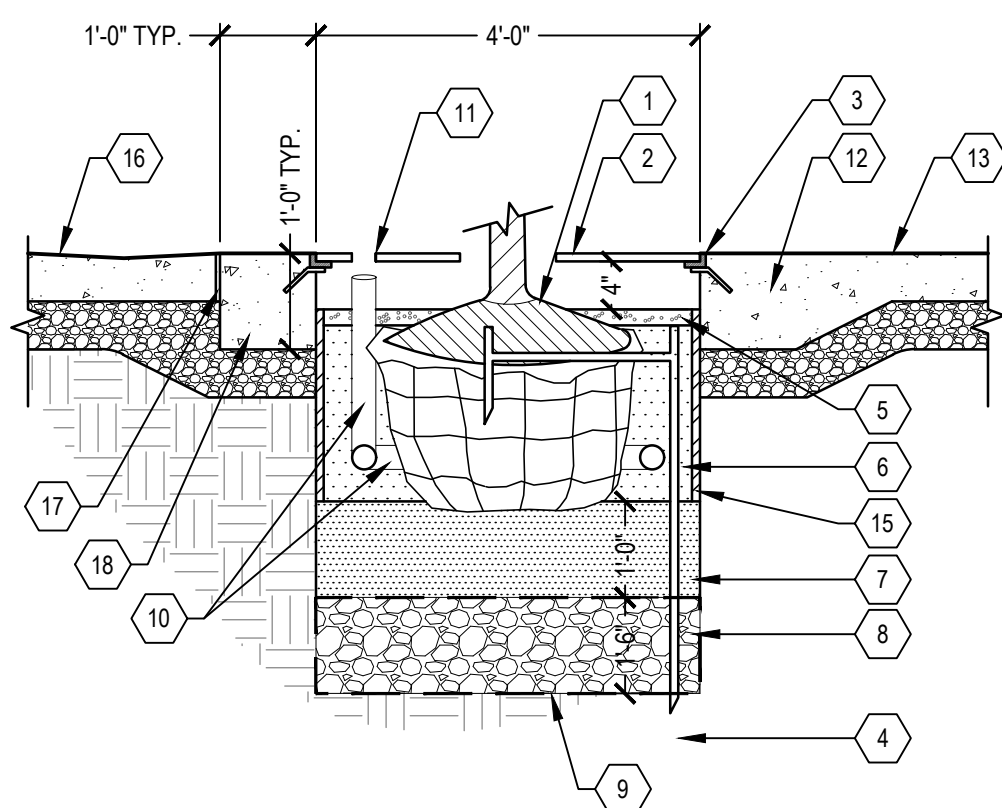
LAND005



PLAN



SECTION A-A'

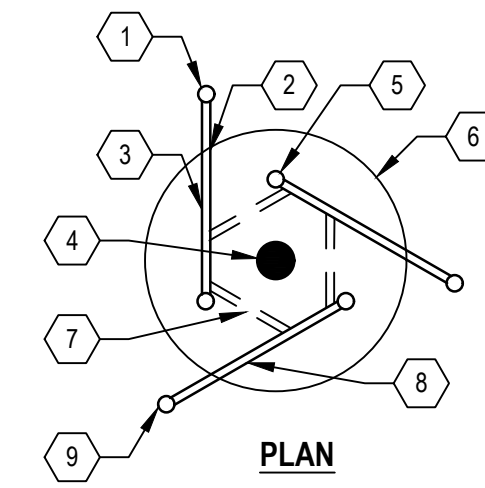


SECTION B-B'

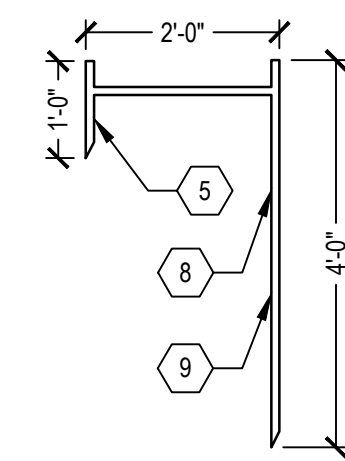
- 1 DECIDUOUS TREE, REFER TO LANDSCAPE PLANS
- 2 TREE GRATE, IRON SMITH: ADA OR E.J. SUNRAY
- 3 TREE GRATE, FRAME AND FRAME ANCHOR INTO CONCRETE
- 4 ROOT BALL STABILIZER, SEE DETAIL 2
- 5 PEA STONE, 2-INCH DEPTH
- 6 PLANTING MIXTURE (COMPACT TO 70-80% PROCTOR)
- 7 PLANTING MIXTURE (BELOW ROOT BALL; COMPACT TO 85-90% PROCTOR)
- 8 AGGREGATE BASE, DRAINAGE COURSE, 18-INCH DEPTH
- 9 GEOTEXTILE SEPARATOR - COMPLETELY WRAP DRAINAGE AGGREGATE AND OVERLAP GEOTEXTILE 12"
- 10 WATERING / AERATION PIPE LOOP, 3-INCH Ø PVC, PROVIDE CAP WITH S. S. SCREEN, 3' X 11' RECTANGLE, 90° FITTINGS TO BE GLUED, 1/8-INCH Ø HOLES DRILLED EVERY 6" ON BOTTOM OF PIPE; NO DRILLING WITHIN FITTINGS
- 11 ACCESS HOLE IN GRATE 6" Ø MIN. WITH ACCESS PANEL PLATE (ALIGNED ON ROAD SIDE OF TREE GRATE) TO ALIGN WITH VERTICAL PIPE OF WATERING / AERATION SYSTEM, COORDINATE WITH TREE GRATE MANUFACTURER
- 12 THICKENED EDGE CONCRETE (MIN. 12" DEEP X 12" WIDE FROM EDGE OF FRAME)
- 13 ADJACENT PAVEMENT, SEE PLANS
- 14 TREE GRATES SHALL BE CENTERED IN FRAME WITH 1/8" OR LESS GAP TO COMPLY WITH ADA REQUIREMENTS. IF NEEDED A METAL SHIM CAN BE ADDED BETWEEN THE GRATE AND FRAME TO CLOSE THE GAP AT SPOT WELDS. SPOT WELDS SHALL BE COMPLETED TO HIDE THE SHIM AND THE WELD GROUND SMOOTH
- 15 ROOT BARRIER (24" DEEP X 24" WIDE PER PANEL) CONTINUOUS PANELS ON ALL SIDES OF THE TREE PIT
- 16 VALLEY GUTTER, CONC. MODIFIED
- 17 SEALED EXPANSION JOINT
- 18 12" X 12" CONCRETE PAVEMENT ALONG BACK OF VALLEY, GUTTER, CONC. MODIFIED

NOTES:

- 1. TREE GRATES: SEE MANUFACTURER INFORMATION FOR EACH GRATE - SEE DETAILS
- 2. TREE GRATE TO BE ADA COMPLIANT.
- 3. SPOT WELD EACH TREE GRATE SECTION TO THE FRAME IN A MINIMUM OF 3 LOCATIONS TO ENSURE TREE GRATES CAN NOT BE REMOVED, OR PROVIDE VANDAL RESISTANT / TAMPERPROOF BOLT SYSTEM TO DETER THEFT.
- 4. PROVIDE (1) - 6" Ø MIN. HOLE IN THE TREE GRATE FOR THE AERATION / WATERING RISER. THE HOLE SHALL BE PROVIDED BY THE MANUFACTURER AT THE FACTORY AND SHALL BE COORDINATED WITH THE GRATE DESIGN AND STRUCTURAL LOAD RATINGS. PROVIDE VANDAL RESISTANT / TAMPER-PROOF SCREWS FOR THE CIRCULAR ACCESS PANEL. ACCESS HOLE TO BE PROVIDED ON THE ROAD SIDE OF THE TREE GRATE.
- 5. LOCATE TREE GRATES AS SHOWN ON CONSTRUCTION PLANS AND CONFIRM LOCATIONS WITH ENGINEER PRIOR TO PROCEEDING WITH INSTALLATION OF CAST-IN-PLACE CONCRETE SIDEWALK. COORDINATE CONCRETE CONTROL AND SEALED EXPANSION JOINTS IN THE CONCRETE PAVEMENT WITH THE TREE GRATE AS SHOWN ON PLANS.
- 6. INSTALL THE TREE GRATE AND FRAME WITH A UNIFORM SLOPE IN ONE DIRECTION CORRESPONDING WITH THE ADJACENT PAVEMENT SLOPE. DO NOT WARP OR UNEVENLY DROP THE ELEVATION OF ONE OR MORE CORNERS OF THE TREE GRATE AND FRAME TO ENSURE GRATES SET FLUSH CONTINUOUSLY AROUND THE FRAME WITHOUT ROCKING. ENSURE THE TREE GRATES ARE SET FLUSH AND EVEN WITH THE FRAME AND ADJACENT PAVEMENT.

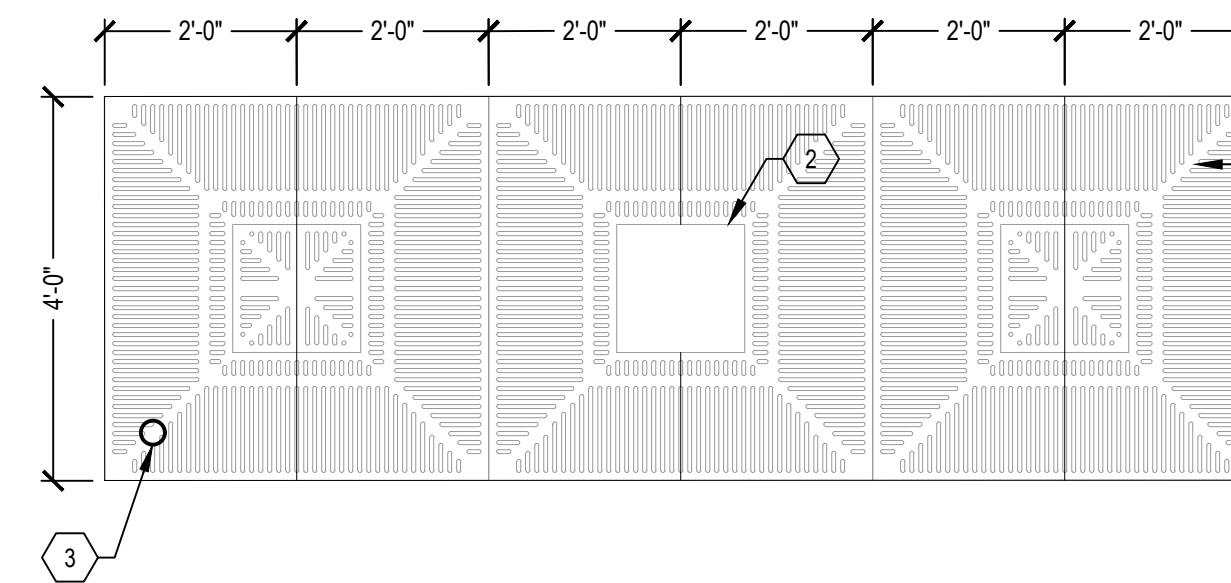


PLAN

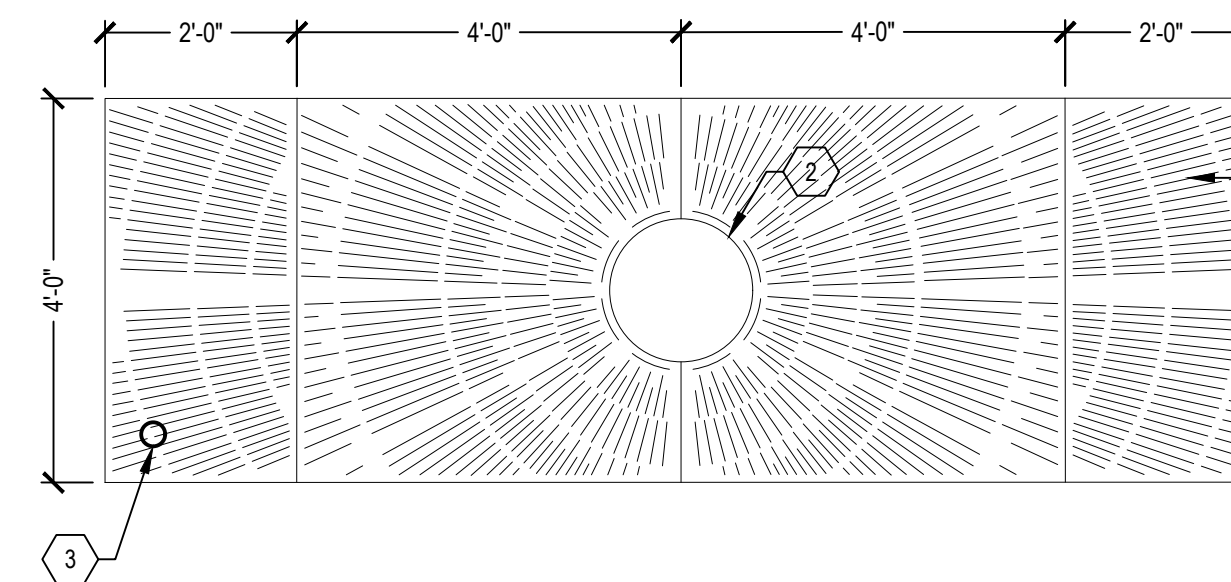


ELEVATION

- 1 PLACE SAFETY CAPS ON EXPOSED ENDS AFTER INSTALLATION
- 2 LOCATE ROOT BALL STABILIZERS (STAPLES) EQUALLY AROUND THE TREE BALL
- 3 DRIVE ROOT BALL STABILIZER (STAPLE) INTO THE GROUND UNTIL THE CROSS-BAR IS RECESSED 1" TO 2" BELOW THE SURFACE OF THE ROOT BALL
- 4 TREE TRUNK
- 5 SHORT PRONG - LOCATE HALFWAY BETWEEN THE TREE TRUNK AND OUTER EDGE OF THE TREE BALL
- 6 TREE ROOT BALL
- 7 FOR LOOSE ROOT BALLS OR CONTAINER STOCK, TIE BURLAP TREE WRAP (3'-5' WIDTH) TO THE CROSS BARS ON EITHER SIDE OF THE TREE TRUNK. KEEP BURLAP WRAP AWAY FROM TREE TRUNK.
- 8 48" STEEL ROOT BALL STABILIZER (STAPLE) PROVIDE (3) PER TREE
- 9 LONG PRONG - LOCATE OUTSIDE AND ADJACENT TO THE TREE BALL



- 1 TREE GRATE, IRON SMITH: ADA, 4X12, SIX PANELS 812.662.9944 WWW.IRONSMITH.CC
- 2 24" X 24" OPENING SIZE
- 3 ACCESS HOLE 6" Ø MIN. WITH ACCESS PANEL PLATE IN GRATE (ALIGNED ON ROAD SIDE OF TREE GRATE) TO ALIGN WITH VERTICAL PIPE OF WATERING / AERATION SYSTEM, COORDINATE WITH TREE GRATE MANUFACTURER. PROVIDE VANDAL RESISTANT / TAMPER PROOF SET-SCREWS FOR ACCESS COVER PLATE AND PROVIDE CORRESPONDING TOOL TO ENGINEER.



- 1 TREE GRATE, E.J. SUNRAY, 4X12, TWO PANEL SIZES: (2) 4'X2' AND (2) 4'X4' 800.626.4653 WWW.E.JCO.COM
- 2 24" Ø OPENING
- 3 ACCESS HOLE 6" Ø MIN. WITH ACCESS PANEL PLATE IN GRATE (ALIGNED ON ROAD SIDE OF TREE GRATE) TO ALIGN WITH VERTICAL PIPE OF WATERING / AERATION SYSTEM, COORDINATE WITH TREE GRATE MANUFACTURER. PROVIDE VANDAL RESISTANT / TAMPER PROOF SET-SCREWS FOR ACCESS COVER PLATE AND PROVIDE CORRESPONDING TOOL TO ENGINEER.

TREE GRATE AND FRAME, 4X12'

SCALE: 1/4" = 1'-0"

REVISIONS	
02/10/2022	100% REVIEW
12/17/2021	90% REVIEW
10/27/2021	60% REVIEW
08/16/2021	30% REVIEW

Drawn By	KG
Designer	KG
Reviewer	DPE
Manager	KK3

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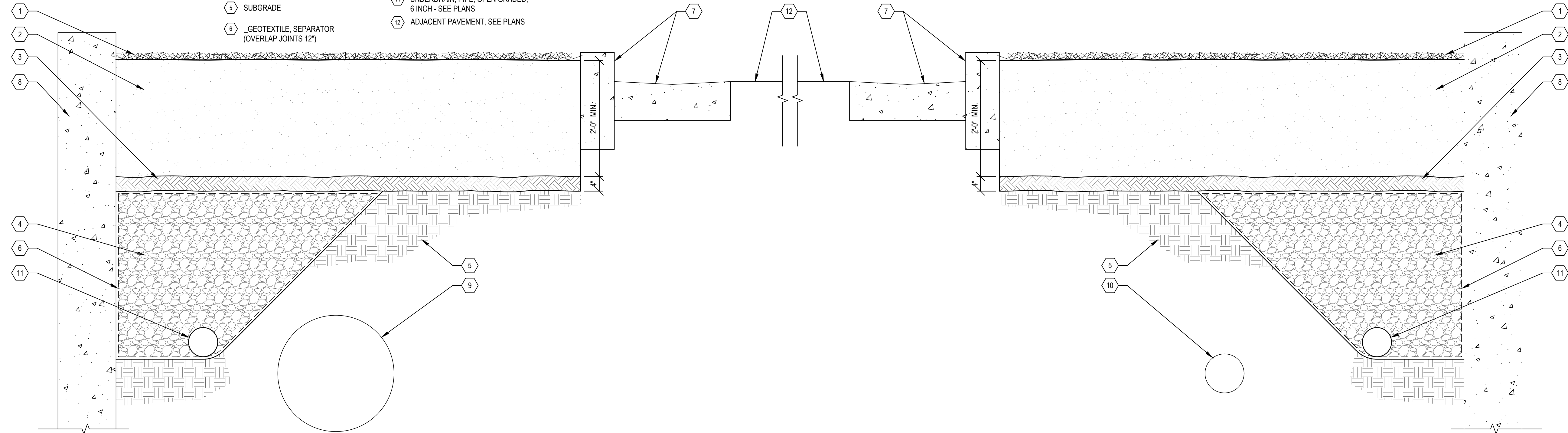
PROJECT NO.	210828
SHEET NO.	55
LAND006	



PLOT INFO: C:\USERS\KGIBBONS\SMITHGROUP\COMPANIES\INCORP - 15152 - SMITHGROUP - SMITHGROUP\ADMIN\PROJ\INFO\15152\AND\BAGLEY\CAD\BASE\2022\2125_FISHBECK_100%210508_LAYOUT_DET.DWG LAYOUT_LAYOUT.DWG DATE: 2/10/2022 TIME: 7:30:16 AM USER: KGIBBONS

NOTE:
 1. FUTURE PERENNIAL PLANTINGS ARE BY FORD.
 2. EXISTING GAS LINES AND SHALLOW UTILITIES ARE PRESENT. HAND DIG AND EXERCISE CAUTION IN THE PRESENCE OF ANY EXISTING UTILITIES. CONTACT UTILITY PROVIDERS AND MISS DIG PRIOR TO CONSTRUCTION.

- ① .MULCH, HARDWOOD BARK, 2 INCH DEPTH - DOUBLE SHREDDED HARDWOOD BARK MULCH
- ② .PLANTING MIXTURE, 24 INCH DEPTH, PLANTERS TO BE FILLED WITH PLANT BED MIX
- ③ .SCARIFY TO 4" DEPTH AND RECOMPACT
- ④ .AGGREGATE BASE, DRAINAGE COURSE
- ⑤ .SUBGRADE
- ⑥ .GEOTEXTILE, SEPARATOR (OVERLAP JOINTS 12")
- ⑦ .CONCRETE CURB AND VALLEY GUTTER, SEE PLANS
- ⑧ EXISTING RETAINING WALL
- ⑨ EXISTING 24" Ø GAS LINE, NOTIFY UTILITY PROVIDER AND MISS DIG PRIOR TO CONSTRUCTION
- ⑩ EXISTING 8" Ø GAS LINE, NOTIFY UTILITY PROVIDER AND MISS DIG PRIOR TO CONSTRUCTION
- ⑪ UNDERDRAIN, PIPE, OPEN GRADED, 6 INCH - SEE PLANS
- ⑫ ADJACENT PAVEMENT, SEE PLANS



PLANTING BED

NO SCALE

LANDSCAPE DETAILS
 SCALE: AS SHOWN



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500 GRISWOLD
 SUITE 1700
 DETROIT, MI 48266
 313.983.3600
 www.smithgroup.com



City of Detroit

15th Street Streetscape

REVISIONS

02/10/2022	100% REVIEW
12/17/2021	90% REVIEW
10/27/2021	60% REVIEW
08/16/2021	30% REVIEW

Drawn By: KG
 Designer: KG
 Reviewer: DPE
 Manager: KK3

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PROJECT NO.
 210828

SHEET NO.
 56

LAND007

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REVISIONS

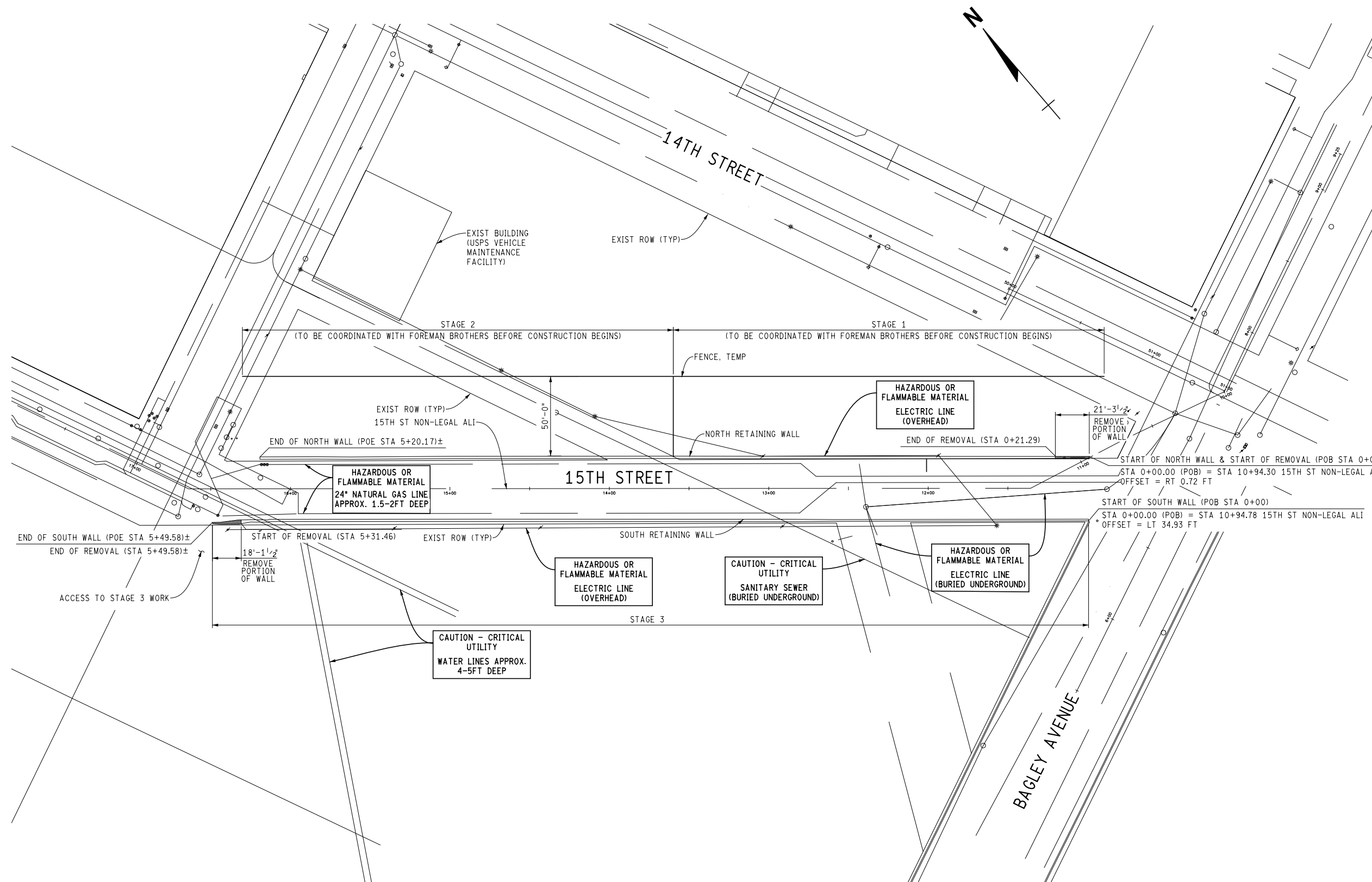
02/10/2022	BIDS
01/28/2022	100% REVIEW
12/17/2021	90% REVIEW
10/29/2021	60% REVIEW
08/20/2021	30% REVIEW

Drawn By SH2
Designer SH2
Reviewer MM3
Manager KK3

Hard copy is intended to be 24"x36" when plotted. Scale(s) indicated and graphic quality may not be accurate for any other size.

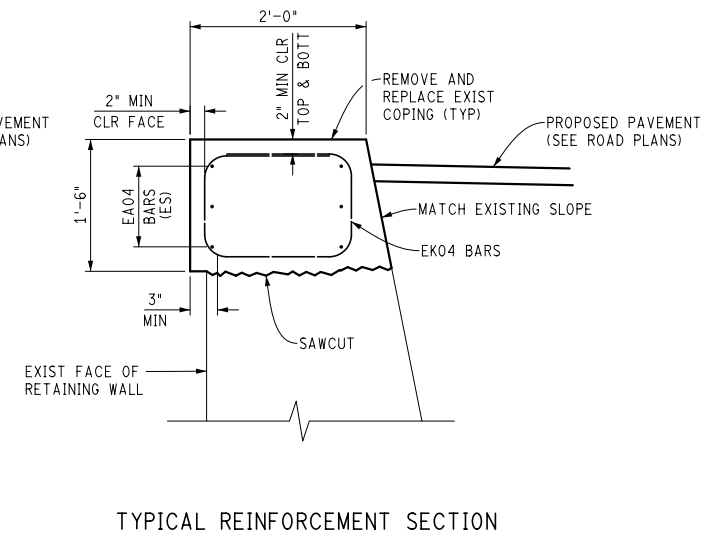
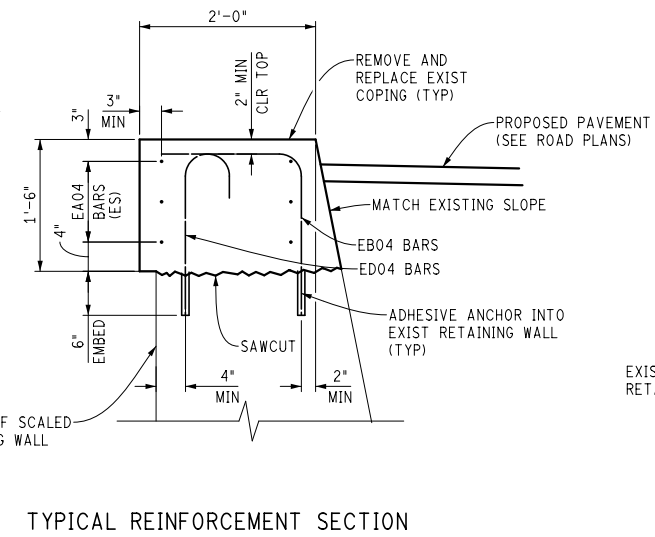
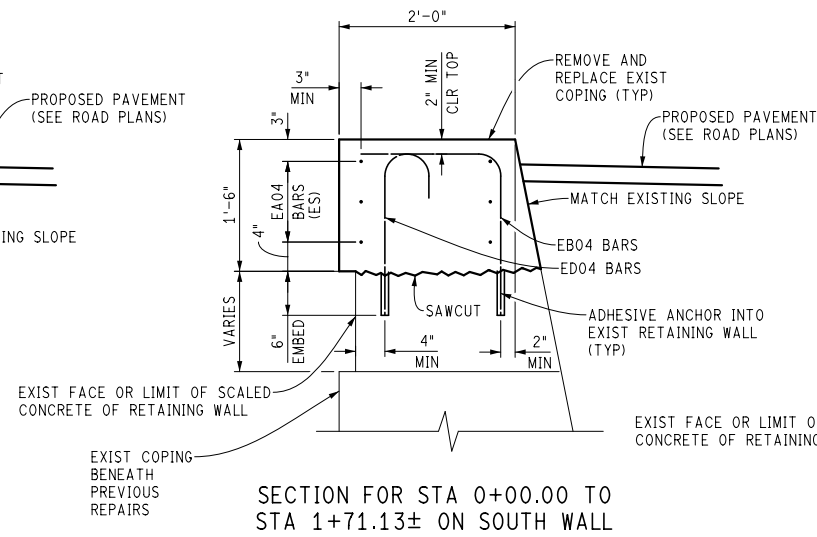
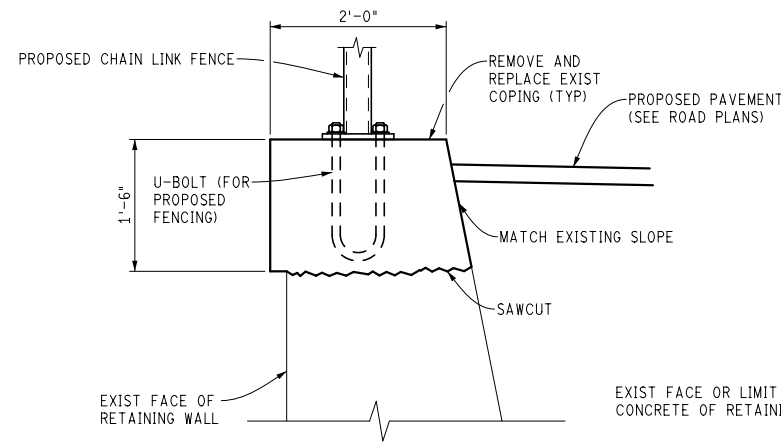
PROJECT NO.
210828

SHEET NO.
57
SITE001



**RETAINING WALL REPAIRS
GENERAL PLAN OF SITE**

SCALE 1" = 30'



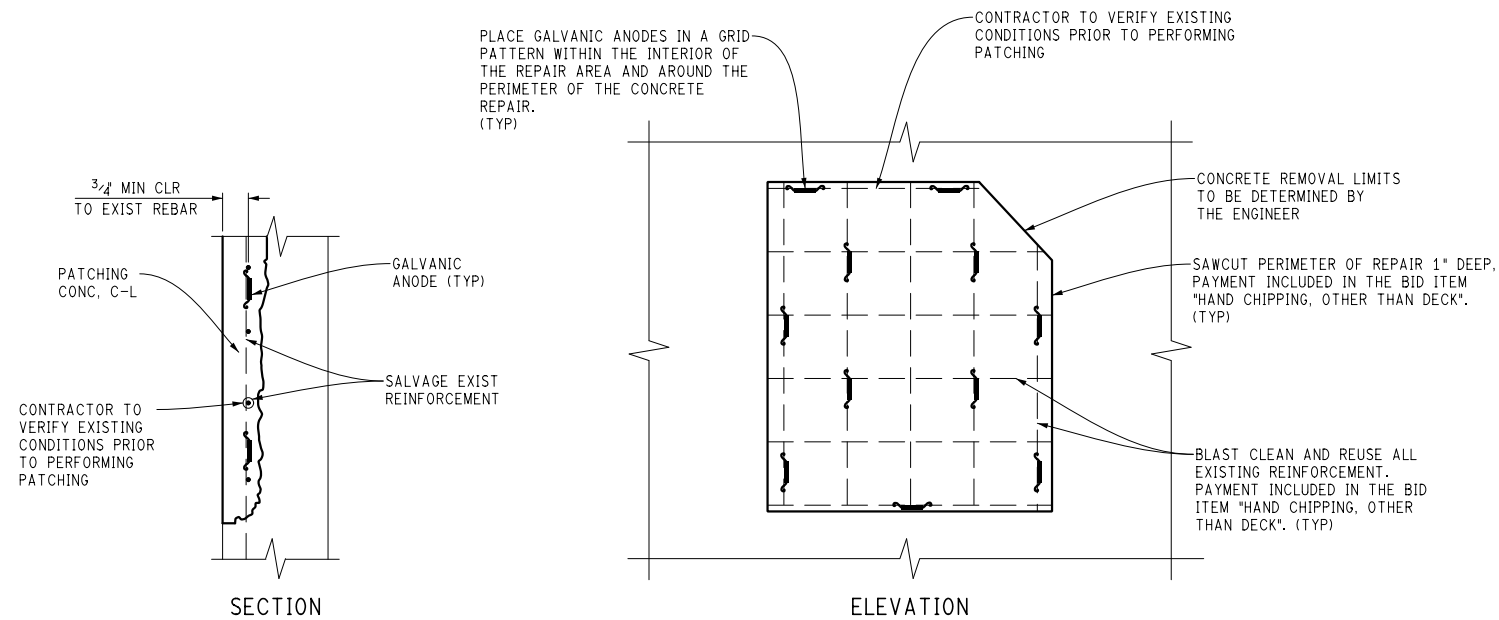
REPLACEMENT COPING FENCE DETAILS

REPLACEMENT COPING REINFORCEMENT DETAILS

CONTRACTOR IS TO FIELD VERIFY RETAINING WALL THICKNESS AFTER EXCAVATION AND PRIOR TO REMOVAL OF PORTIONS OF RETAINING WALL.

MISCELLANEOUS QUANTITIES

0.28	Acre Clearing
1	LSUM Structures, Rem Portions
135	Cyd Conc, Grade 3500
1535	Syd Conc Surface Coating
1650	Cft Hand Chipping, Other Than Deck
3300	Sft Patch Forming
230	Ft Flushing Cracks, Water
230	Ft Structural Cracks, Repr
80	Cyd Patching Conc, C-L
1650	Ea Embedded Galvanic Anode
15	Cyd Excavation, Fdn
550	Ft Fence, Rem
600	Ft Fence, Temp
1052	Ea Adhesive Anchoring of Vertical Bar, 1/2 inch



TYPICAL RETAINING WALL PATCHING DETAILS

NOTES:

WORK COVERED BY THESE PLANS INCLUDE RETAINING WALL PATCHING, BRUSH CLEARING, PARTIAL WALL REPLACEMENT AND PLACEMENT OF PEDESTRIAN FENCING.

NO LIVE LOAD OR HEAVY EQUIPMENT SHALL BE PERMITTED WITHIN 10' OF BACK OF RETAINING WALLS UNTIL WALL PATCHING HAS BEEN COMPLETED.

FOR BEVEL AND MOLDING DETAILS, SEE MDOT STANDARD PLAN B-103-SERIES.

LOW TEMPERATURE PROTECTION OF CONCRETE SHALL BE APPLIED ACCORDING TO SECTION 706.03 J. OF THE STANDARD SPECIFICATIONS FOR CONSTRUCTION. LOW TEMPERATURE PROTECTION OF CONCRETE WILL NOT BE PAID FOR SEPARATELY, BUT WILL BE INCLUDED IN THE BID ITEM "PATCHING CONC, C-L".

ENGINEER TO VERIFY AND APPROVE THE LIMITS OF COPING REMOVAL AFTER EXCAVATION ALONG 15TH STREET. ANY ADDITIONAL REMOVAL WITHOUT THE ENGINEER'S APPROVAL IS TO BE REPLACED AT THE EXPENSE OF THE CONTRACTOR, AS DIRECTED BY THE ENGINEER.

ENGINEER TO VERIFY AND APPROVE THE LIMITS PRIOR TO REMOVAL OF THE RETAINING WALL. ANY ADDITIONAL REMOVAL WITHOUT THE ENGINEERS APPROVAL WILL BE REPLACED AT THE EXPENSE OF THE CONTRACTOR, AS DIRECTED BY THE ENGINEER.

NOTIFY EACH UTILITY COMPANY A MINIMUM OF THREE FULL WORKING DAYS IN ADVANCE OF WORK IMPACTING THAT COMPANY'S CONDUITS OR FACILITIES.

APPLY CONCRETE SURFACE COATING TO ALL EXPOSED CONCRETE PORTIONS OF RETAINING WALLS TO 1FT BELOW GRADE ON BACKSIDE OF RETAINING WALLS. USE CONCRETE SURFACE COATING AMS-STD-595 COLOR NUMBER #36650 LIGHT GREY. THE ESTIMATED AREA OF COATING IS 1535 SYD.



REVISIONS

02/10/2022	BIDS
01/28/2022	100% REVIEW
12/17/2021	90% REVIEW
10/29/2021	60% REVIEW
08/20/2021	30% REVIEW

Drawn By SH2
Designer SH2
Reviewer MM3
Manager KK3

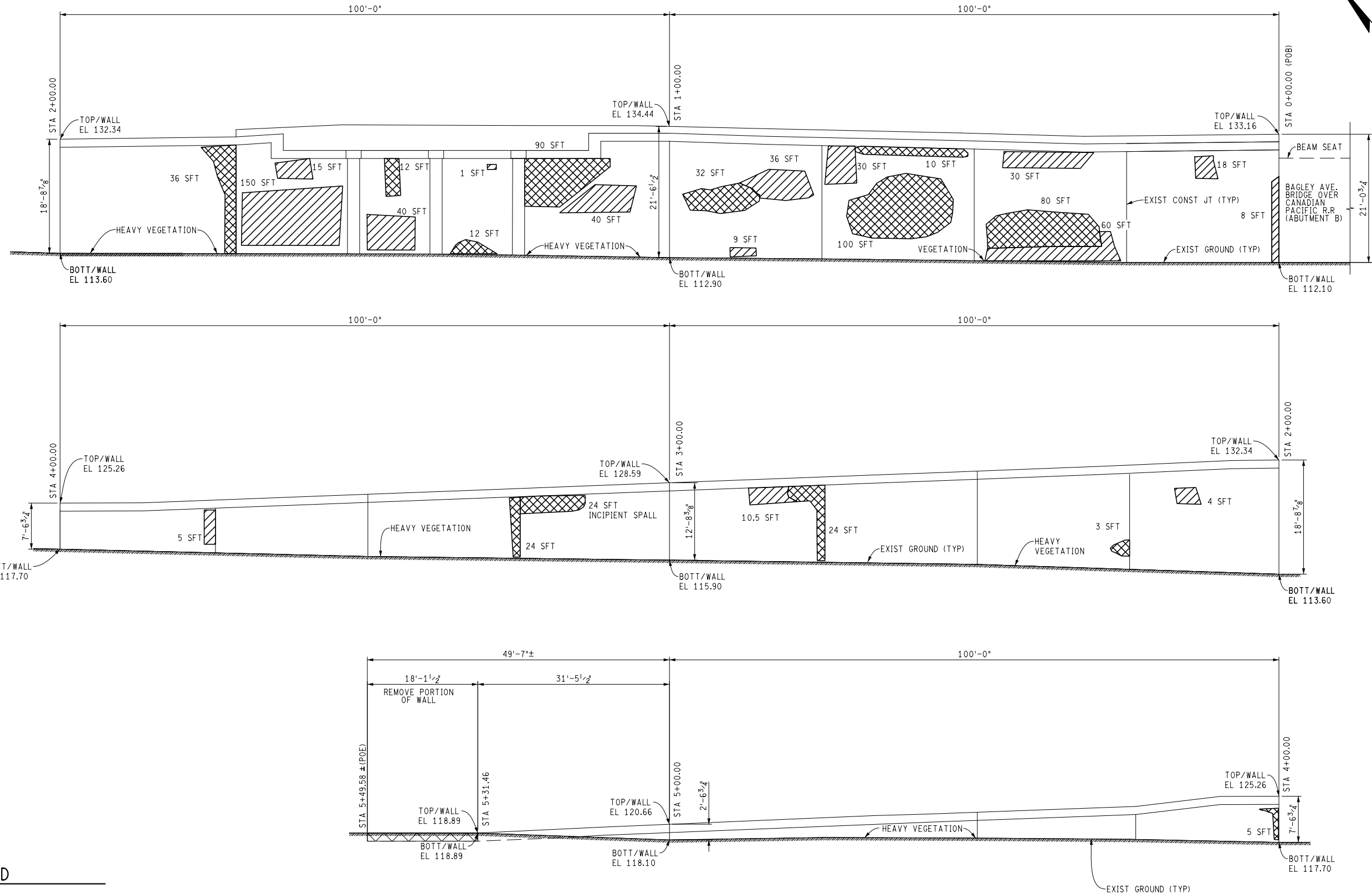
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PROJECT NO.
210828

SHEET NO.
58

WALL001

PLOT INFO: Z:\2021\10828\CAD\CEN\RETAINING WALL\WALL_02.DGN LAYOUT MODEL DATE: --- TIME: --- USER: DMABRY



LEGEND

- = DELAMINATION
- = SPALL

SOUTH RETAINING WALL ELEVATION
(LOOKING NORTHEAST)
(DEFICIENCIES ESTIMATED DURING ON-SITE INSPECTION)



REVISIONS

02/10/2022	BIDS
01/28/2022	100% REVIEW
12/17/2021	90% REVIEW
10/29/2021	60% REVIEW
08/20/2021	30% REVIEW

Drawn By SH2
Designer SH2
Reviewer MM3
Manager KK3

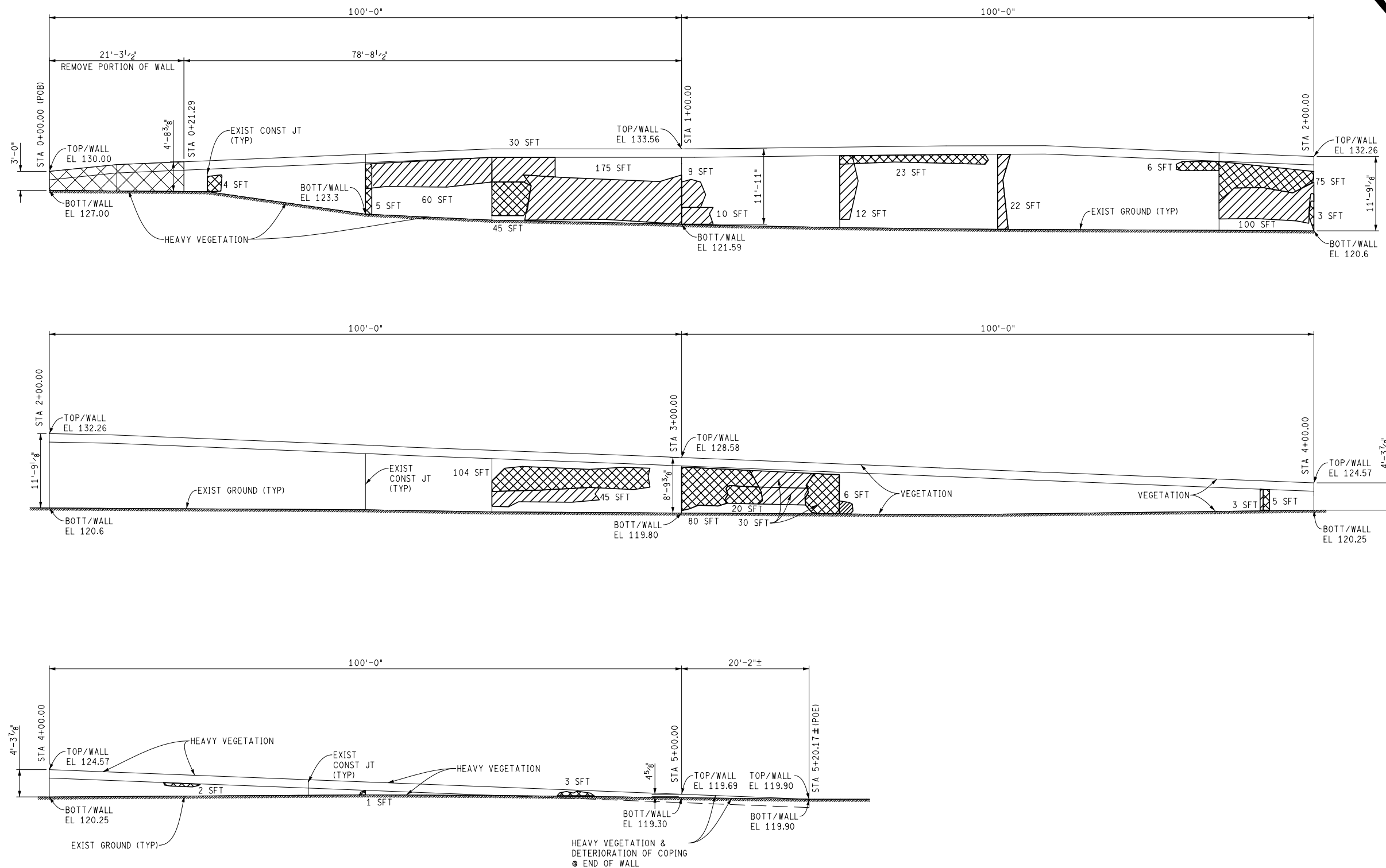
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PROJECT NO.
210828

SHEET NO.
59

WALL002

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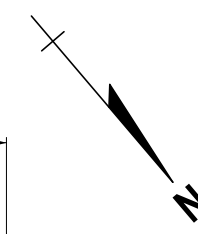


LEGEND

- = DELAMINATION
- = SPALL

NORTH RETAINING WALL ELEVATION

(LOOKING SOUTHWEST)
(DEFICIENCIES ESTIMATED DURING ON-SITE INSPECTION)



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City of Detroit
15th Street Streetscape

REVISIONS	
02/10/2022	BIDS
01/28/2022	100% REVIEW
12/17/2021	90% REVIEW
10/29/2021	80% REVIEW
08/20/2021	30% REVIEW

Drawn By SH2
Designer SH2
Reviewer MM3
Manager KK3

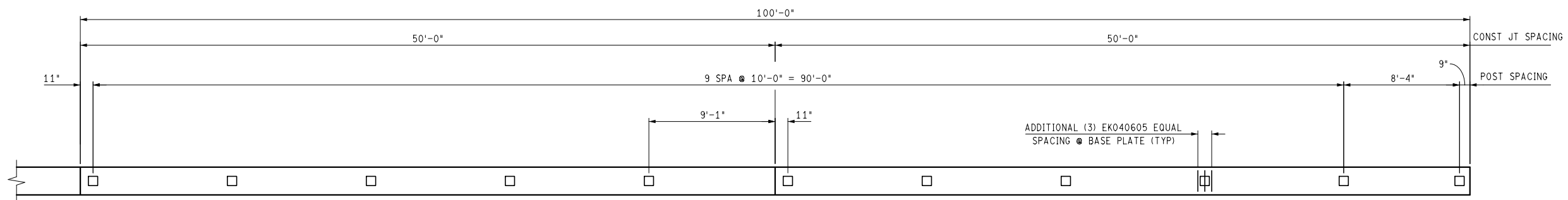
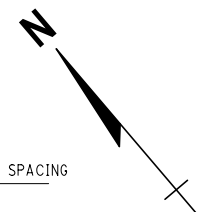
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PROJECT NO.
210828

SHEET NO.
60

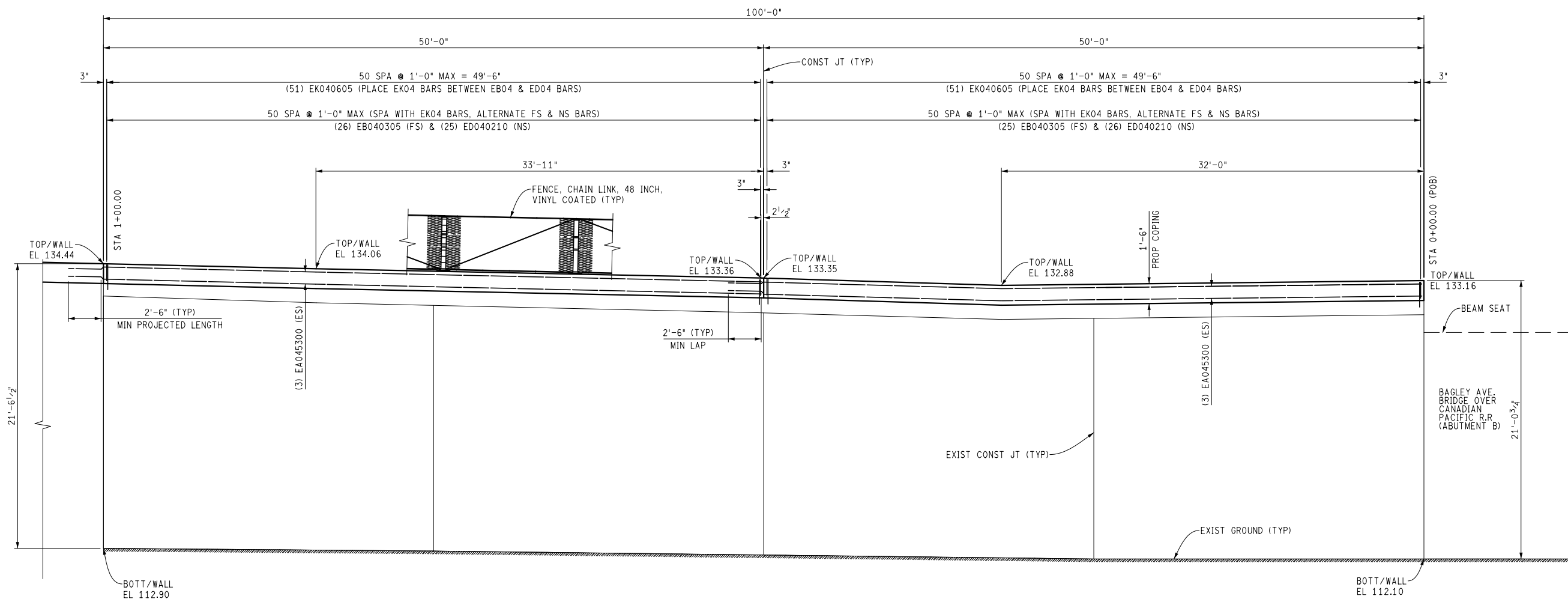
WALL003

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SOUTH RETAINING WALL PARTIAL PLAN VIEW

(REINFORCING IN COPING NOT SHOWN FOR CLARITY)



SOUTH RETAINING WALL PARTIAL ELEVATION

(LOOKING NORTHEAST)



REVISIONS

02/10/2022	BIDS
01/28/2022	100% REVIEW
12/17/2021	90% REVIEW
10/29/2021	80% REVIEW
08/20/2021	30% REVIEW

Drawn By SH2
Designer SH2
Reviewer MM3
Manager KK3

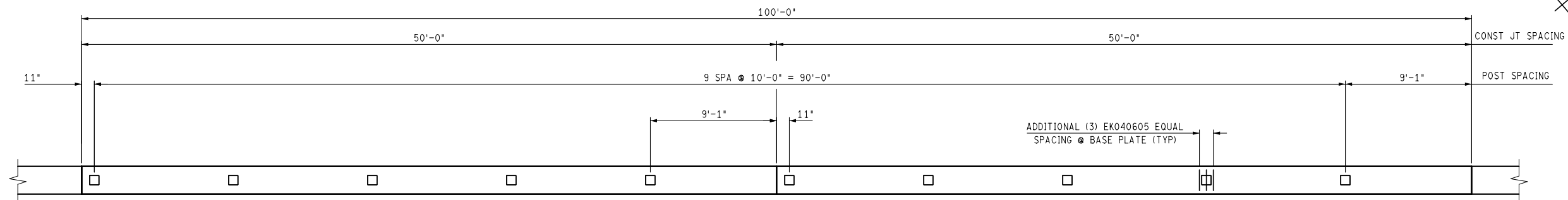
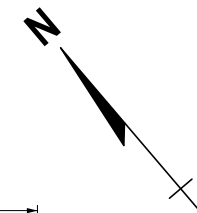
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PROJECT NO.
210828

SHEET NO.
61

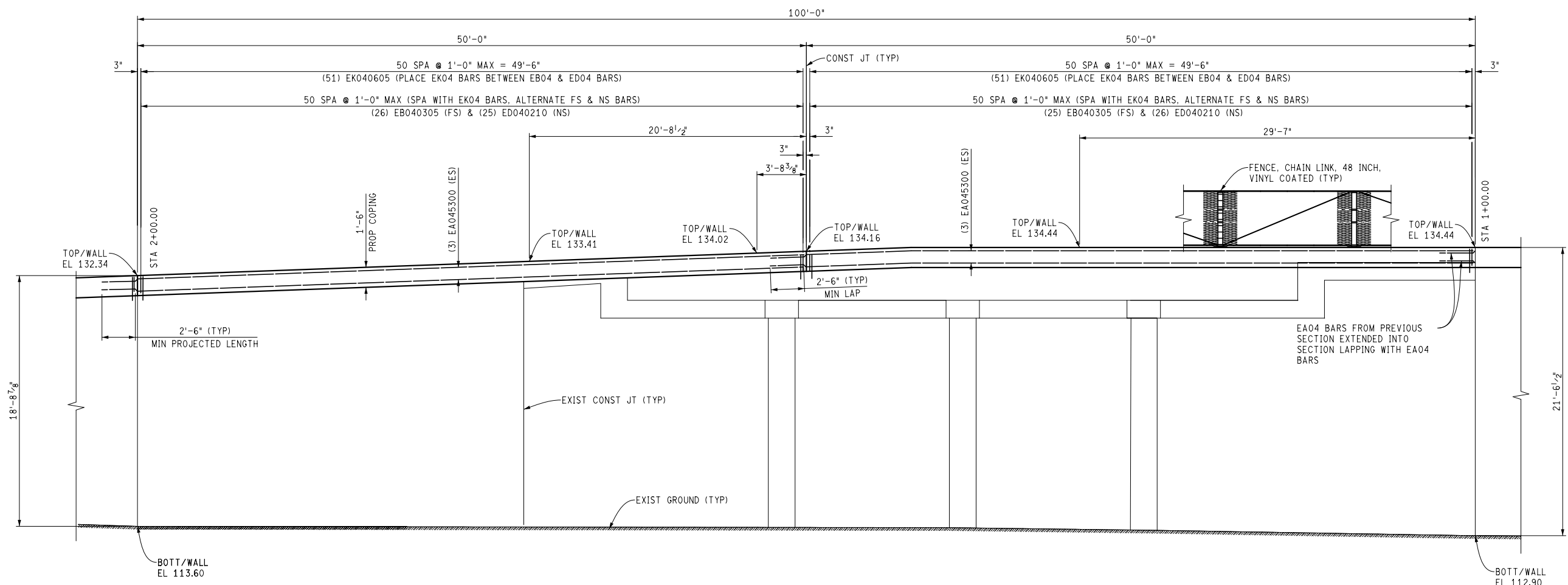
WALL004

PLOT INFO: Z:\2021\10828\CAD\CORPORATE\RETAINING WALL\WALL_004.DGN LAYOUT: MODEL DATE: --- TIME: --- USER: DMANBY



SOUTH RETAINING WALL PARTIAL PLAN VIEW

(REINFORCING IN COPING NOT SHOWN FOR CLARITY)



SOUTH RETAINING WALL PARTIAL ELEVATION

(LOOKING NORTHEAST)



REVISIONS

02/10/2022	BIDS
01/28/2022	100% REVIEW
12/17/2021	90% REVIEW
10/29/2021	80% REVIEW
08/20/2021	30% REVIEW

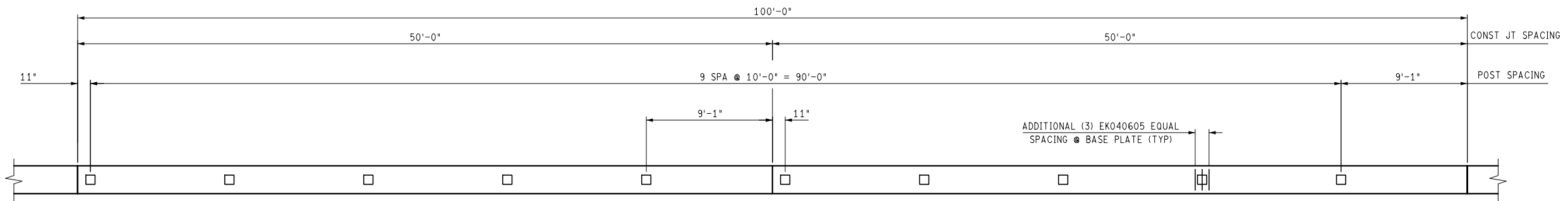
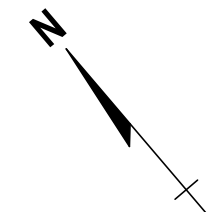
Drawn By SH2
Designer SH2
Reviewer MM3
Manager KK3

Hard copy is intended to be 24"x36" when plotted. Scale(s) indicated and graphic quality may not be accurate for any other size.

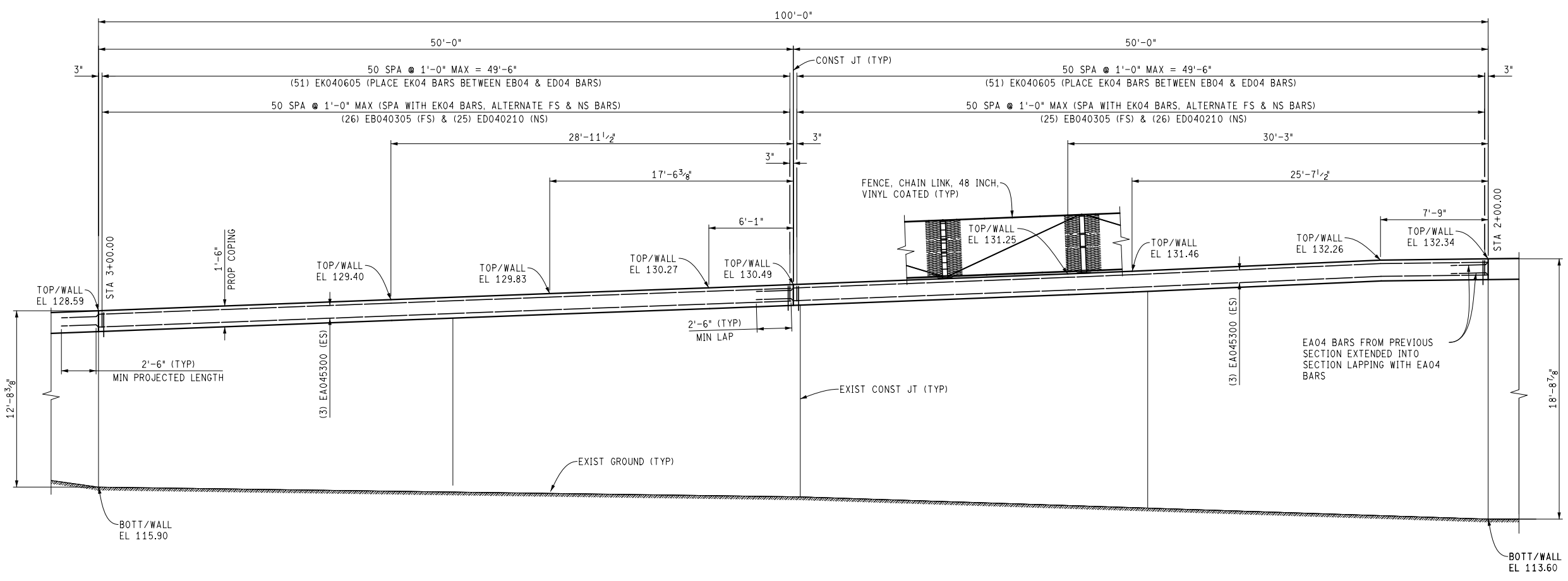
PROJECT NO.
210828

SHEET NO.
62

WALL005



SOUTH RETAINING WALL PARTIAL PLAN VIEW
(REINFORCING IN COPING NOT SHOWN FOR CLARITY)



SOUTH RETAINING WALL PARTIAL ELEVATION
(LOOKING NORTHEAST)

PLOT INFO: Z:\2021\10828\CAD\CORRECTING WALL\WALL_06.DGN LAYOUT: MODEL DATE: --- TIME: --- USER: DMANBY

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15th Street Streetscape

REVISIONS	
02/10/2022	BIDS
01/28/2022	100% REVIEW
12/17/2021	90% REVIEW
10/29/2021	60% REVIEW
08/20/2021	30% REVIEW

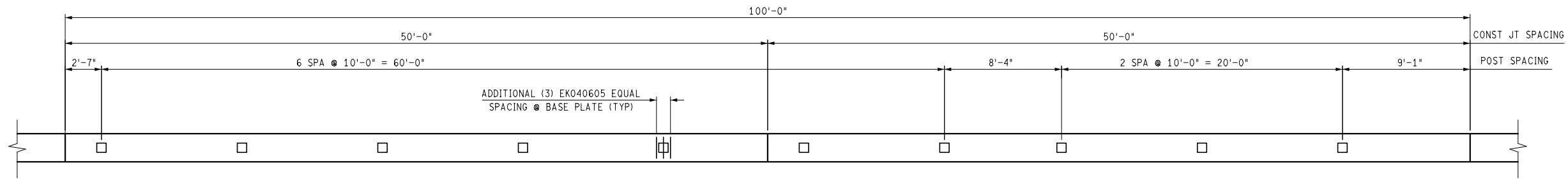
Drawn By SH2
Designer SH2
Reviewer MM3
Manager KK3

Hard copy is intended to be 24"x36" when plotted. Scale(s) indicated and graphic quality may not be accurate for any other size.

PROJECT NO.
210828

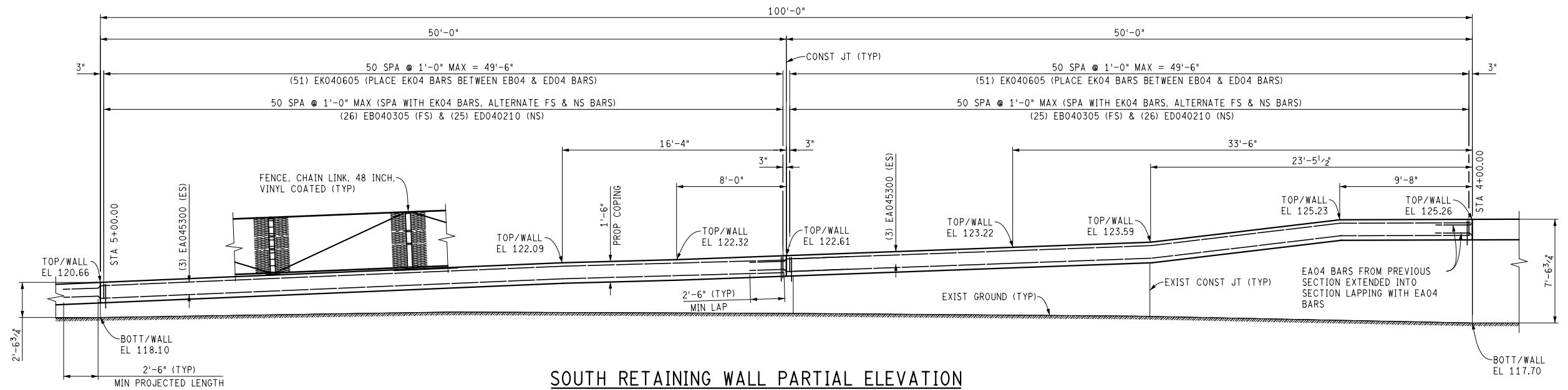
SHEET NO.
63

WALL006



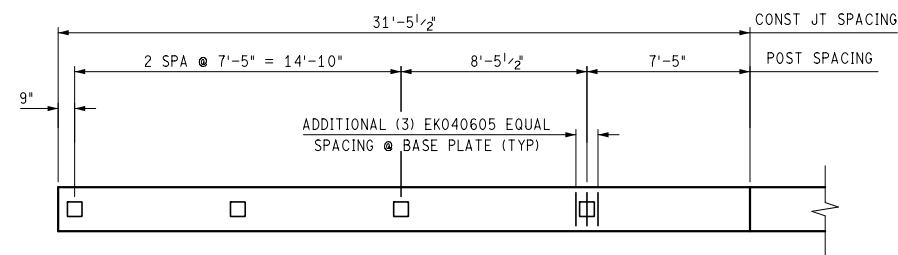
SOUTH RETAINING WALL PARTIAL PLAN VIEW

(REINFORCING IN COPING NOT SHOWN FOR CLARITY)



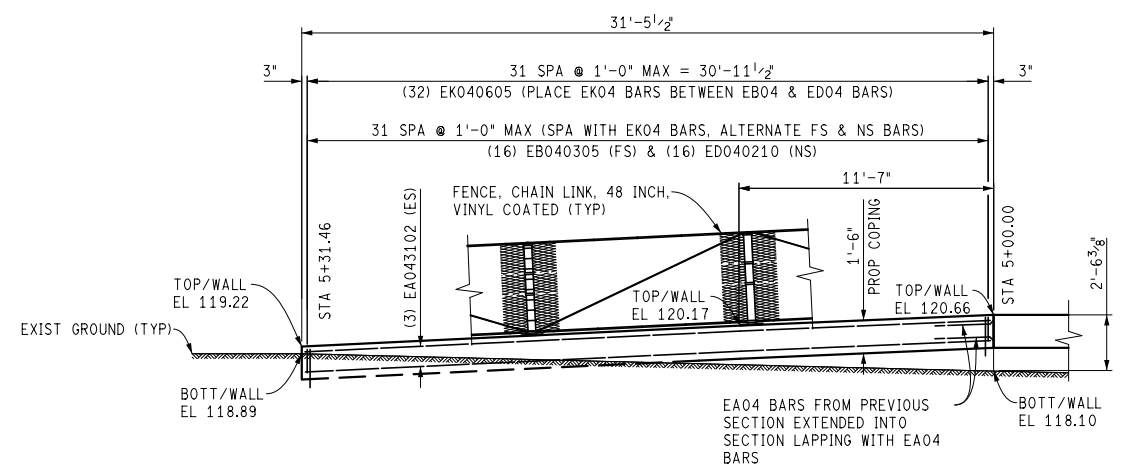
SOUTH RETAINING WALL PARTIAL ELEVATION

(LOOKING NORTHEAST)



SOUTH RETAINING WALL PARTIAL PLAN VIEW

(REINFORCING IN COPING NOT SHOWN FOR CLARITY)



SOUTH RETAINING WALL PARTIAL ELEVATION

(LOOKING NORTHEAST)

PLOT INFO: Z:\2021\10828\CAD\CIVIL\RETAINING WALL\WALL_08.DGN LAYOUT MODEL DATE: --- TIME: --- USER: DMARBY



REVISIONS

02/10/2022	BIDS
01/28/2022	100% REVIEW
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10/29/2021	60% REVIEW
08/20/2021	30% REVIEW

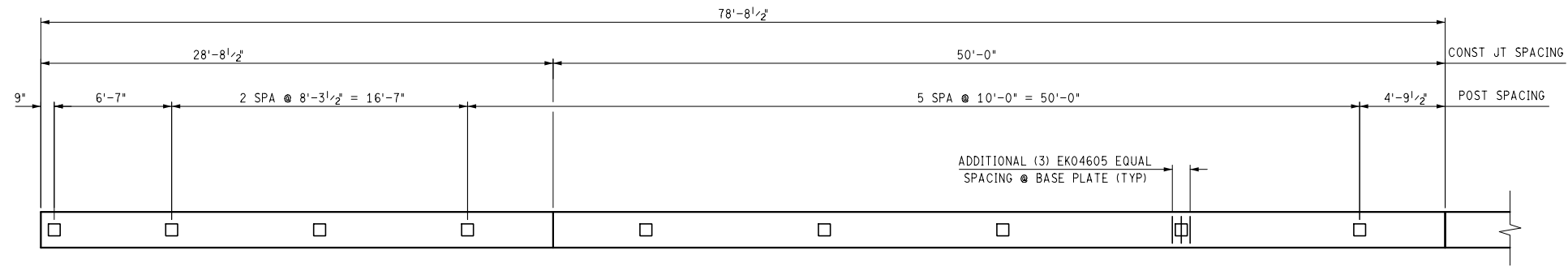
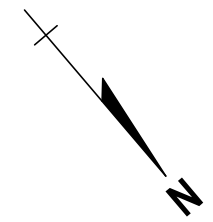
Drawn By SH2
Designer SH2
Reviewer MM3
Manager KK3

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210828

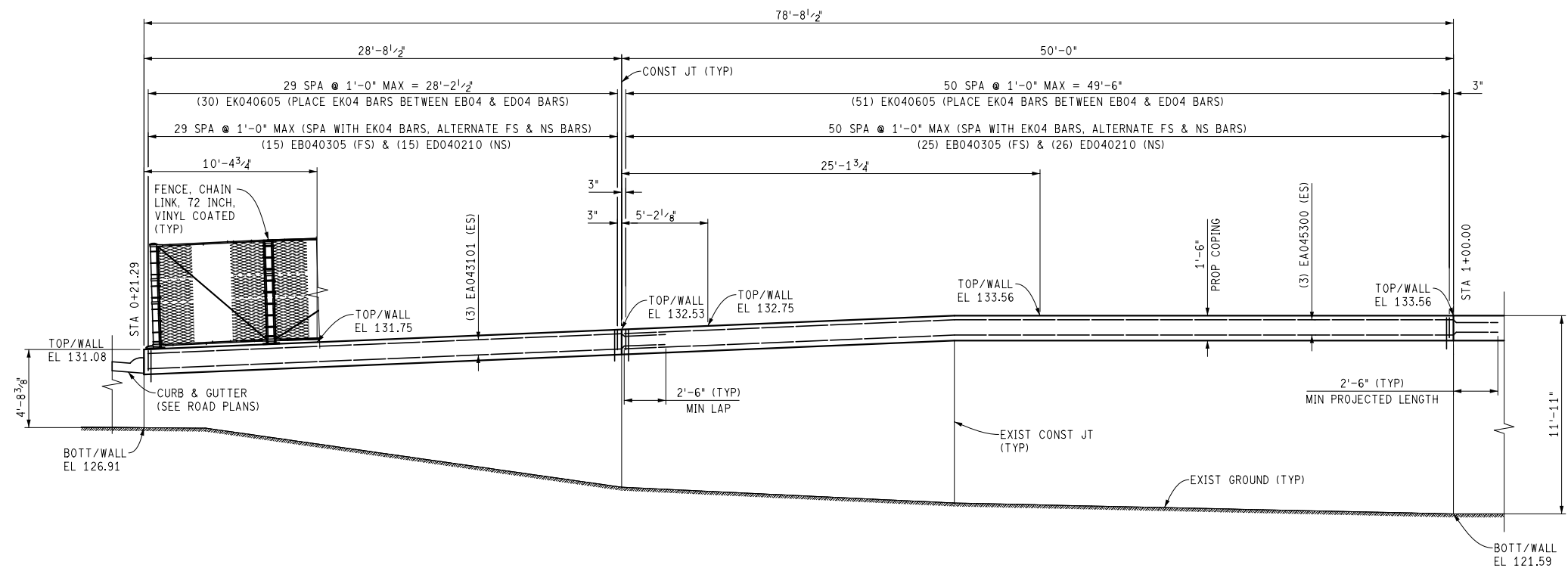
SHEET NO.
65

WALL008



NORTH RETAINING WALL PARTIAL PLAN VIEW

(REINFORCING IN COPING NOT SHOWN FOR CLARITY)



NORTH RETAINING WALL PARTIAL ELEVATION

(LOOKING SOUTHWEST)

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15th Street Streetscape

REVISIONS	
02/10/2022	BIDS
01/28/2022	100% REVIEW
12/17/2021	90% REVIEW
10/29/2021	80% REVIEW
08/20/2021	30% REVIEW

Drawn By SH2
Designer SH2
Reviewer MM3
Manager KK3

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PROJECT NO.
210828

SHEET NO.
66

WALL009

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REVISIONS

02/10/2022	BIDS
01/28/2022	100% REVIEW
12/17/2021	90% REVIEW
10/29/2021	60% REVIEW
08/20/2021	30% REVIEW

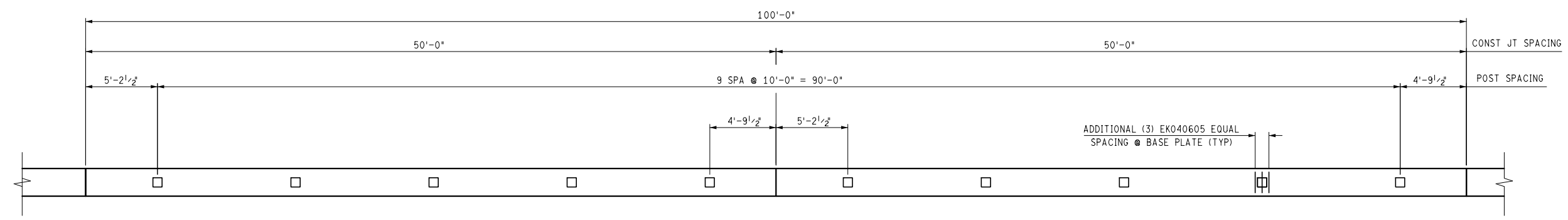
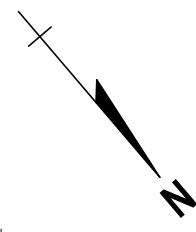
Drawn By SH2
Designer SH2
Reviewer MM3
Manager KK3

Hard copy is intended to be 24"x36" when plotted. Scale(s) indicated and graphic quality may not be accurate for any other size.

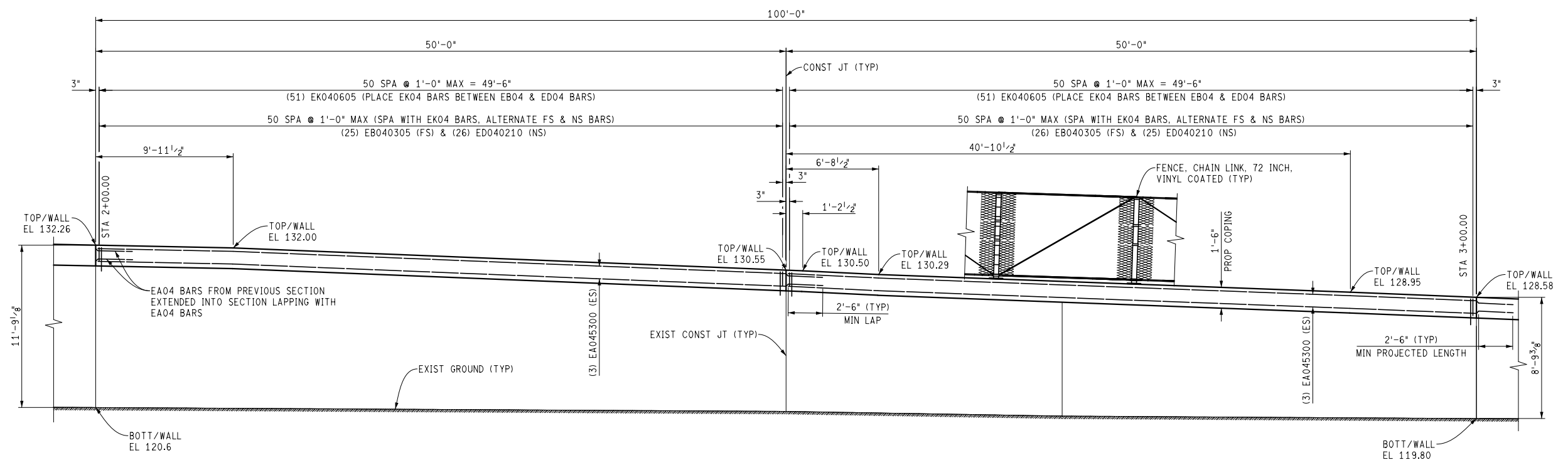
PROJECT NO.
210828

SHEET NO.
68

WALL011



NORTH RETAINING WALL PARTIAL PLAN VIEW
(REINFORCING IN COPING NOT SHOWN FOR CLARITY)



NORTH RETAINING WALL PARTIAL ELEVATION
(LOOKING SOUTHWEST)



REVISIONS

02/10/2022	BIDS
01/28/2022	100% REVIEW
12/17/2021	90% REVIEW
10/29/2021	60% REVIEW
08/20/2021	30% REVIEW

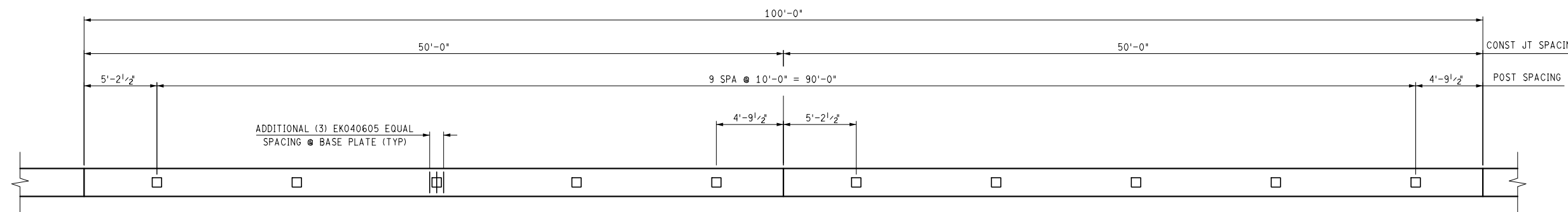
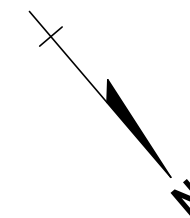
Drawn By SH2
Designer SH2
Reviewer MM3
Manager KK3

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PROJECT NO.
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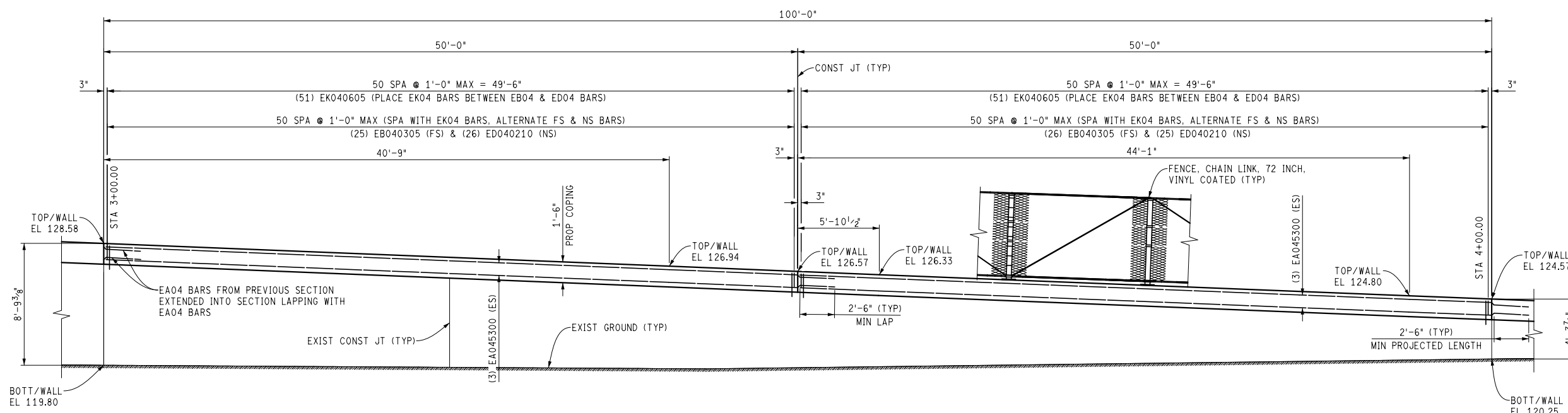
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WALL012



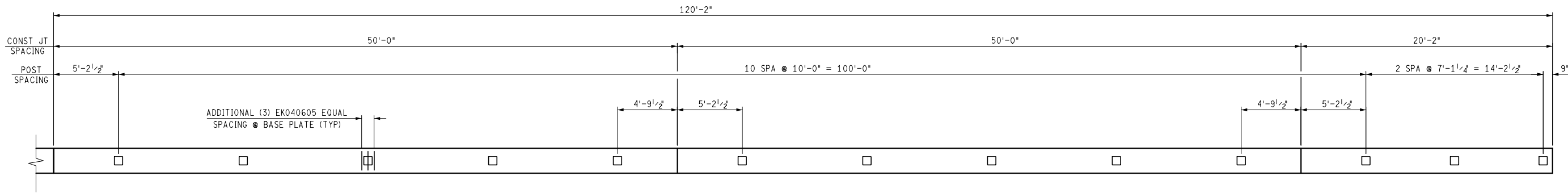
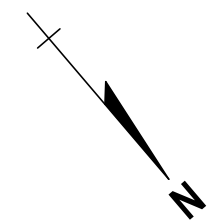
NORTH RETAINING WALL PARTIAL PLAN VIEW

(REINFORCING IN COPING NOT SHOWN FOR CLARITY)

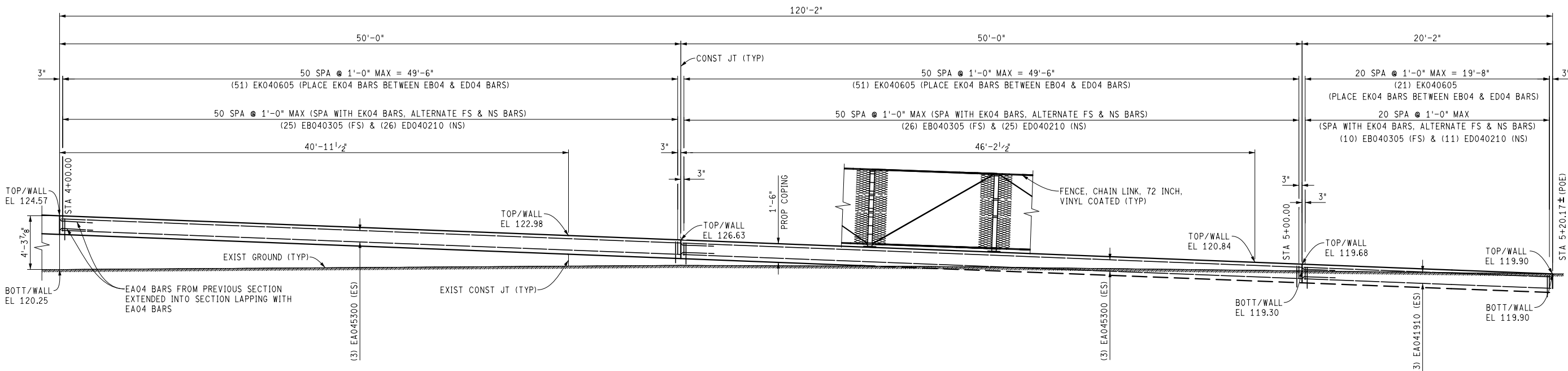


NORTH RETAINING WALL PARTIAL ELEVATION

(LOOKING SOUTHWEST)



NORTH RETAINING WALL PARTIAL PLAN VIEW
(REINFORCING IN COPING NOT SHOWN FOR CLARITY)



NORTH RETAINING WALL PARTIAL ELEVATION
(LOOKING SOUTHWEST)

PLOT INFO: Z:\2021\10828\CAD\CIVIL\RETAINING WALL\WALL_013.DGN LAYOUT: MODEL DATE: --- TIME: --- USER: DMARBY

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12/17/2021	90% REVIEW
10/29/2021	80% REVIEW
08/20/2021	30% REVIEW

Drawn By SH2
Designer SH2
Reviewer MM3
Manager KK3

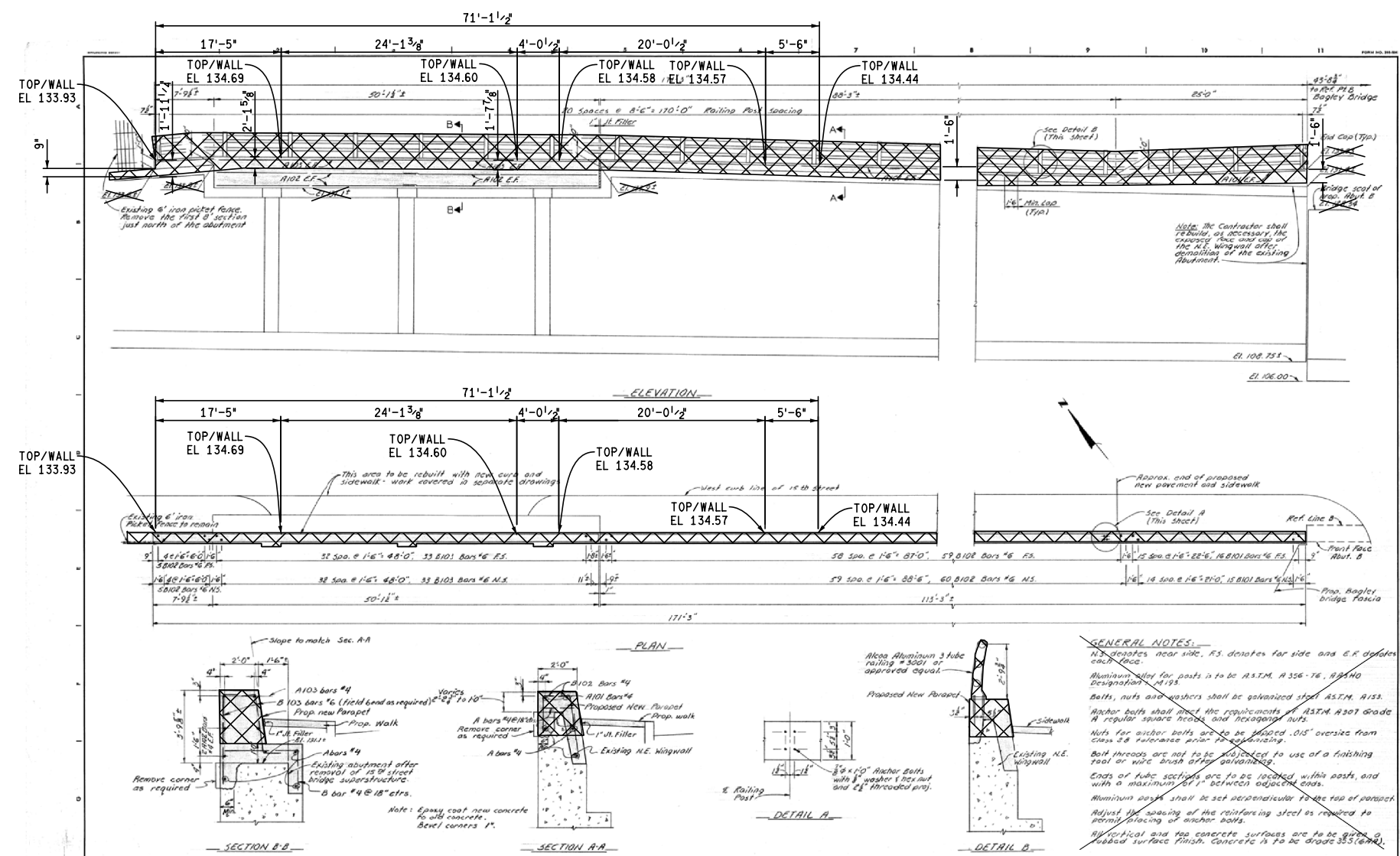
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PROJECT NO.
210828

SHEET NO.
70

WALL013

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GENERAL NOTES:
 N.S. denotes near side, F.S. denotes far side and E.F. denotes each face.
 Aluminum alloy for posts is to be ASTM A 306-78, 30430 Designation, 4098.
 Bolts, nuts and washers shall be galvanized steel ASTM A 153.
 Anchor bolts shall meet the requirements of ASTM A 307 Grade A regular square heads and hexagonal nuts.
 Nuts for anchor bolts are to be coated. Oil's oversize from class 2B tolerance prior to galvanizing.
 Bolt threads are not to be subjected to use of a finishing tool or wire brush after galvanizing.
 Ends of tube sections are to be located within posts, and with a maximum of 1/2" between adjacent tubes.
 Aluminum posts shall be set perpendicular to the top of parapet.
 Adjust the spacing of the reinforcing steel as required to permit placing of anchor bolts.
 All vertical and top concrete surfaces are to be given a rubbed surface finish. Concrete is to be grade 355 (min).

DESIGNED BY: [Signature]	APPROVED: [Signature]	CITY OF DETROIT CITY ENGINEERING DEPARTMENT CITY ENGINEERS OFFICE	WEST SIDE INDUSTRIAL REHABILITATION PROJECT NO. 2 BAGLEY AVE. BRIDGE CROSSING THE P.C.R.R.	SHEET 44 OF 65 SHEETS
TRACED BY: A.G.	APPROVED: [Signature]	FOR COMMUNITY PLANNING, ECONOMIC DEVELOPMENT DEPARTMENT	N.E. WINGWALL PARAPET DETAILS	CONTRACT NO. PW 6332
CHECKED BY: J.M. Guire				DRWG NO. 519
				DATE 10-23

EXISTING

FOR INFORMATION ONLY

DO NOT WORK FROM THIS SHEET. THE INFORMATION SHOWN HERE IS FOR REFERENCE ONLY. NO PAY ITEMS ARE SHOWN.

PLOT INFO: Z:\2021\10\23\210828\CAD\CEN\RETAINING WALL\REM_001.DWG LAYOUT: MODEL DATE: 10-23-21 USER: CHANBY

NO.	DESCRIPTION	BY	CHECKED BY	APPROVED
1	PLAN			
2	GRADE			
3	ESTIMATE			
4	FINAL			

CITY OF DETROIT CITY ENGINEERING DIVISION - D.P.W. BUREAUS OF STREETS AND HIGHWAYS FOR	BAGLEY AVE. BRIDGE OVER CANADIAN PACIFIC R.R. EXISTING N.E. WINGWALL PARAPET DETAILS	SHEET 44 OF 65 SHEETS CONTRACT NO. PW 6332 ASSIGNMENT NO. DATE
---	---	---

JN: 210828

THE ONLY ITEMS OF WORK TO BE DONE FROM THIS SHEET ARE IDENTIFIED BY THE LEGEND BOX BELOW. LABELED WITH THIS PROJECTS JOB NUMBER.

PROPOSED WORK
 DENOTES REMOVAL PORTIONS

JN: 210828

ENTIRE EXISTING COPING TO BE REMOVED ON NORTH WALL. REMOVE 1'-6" FROM TOP OF EXISTING SOUTH WALL UNLESS DIRECTED BY THE ENGINEER.

PORTIONS OF NORTH & SOUTH RETAINING WALL TO BE REMOVED TO THE LIMITS SHOWN ON DRAWINGS WALLOO2 & WALLOO3. EXISTING REINFORCEMENT IS TO BE CUT FLUSH WITH REMAINING PORTIONS OF THE RETAINING WALL.

EXISTING PLANS FOR NORTH WALL AND REMAINING PORTIONS OF SOUTH WALL ARE NOT AVAILABLE. CONTRACTOR IS TO VERIFY CONDITIONS IN THE FIELD AFTER EXCAVATION AND DIMENSIONS OF BACKFACE OF WALL PRIOR TO REMOVAL OF PORTIONS OF RETAINING WALL.

FENCE REMOVAL, INCLUDING PREVIOUS ANCHOR PLATES, SHALL BE INCLUDED IN THE BID ITEM "FENCE, REM". EXISTING ANCHOR BOLTS ARE TO BE CUT FLUSH WITH EXIST/PROP FACE OF RETAINING WALL AND PATCHED WITH AN APPROVED MORTAR.

CONTRACTOR TO CONFIRM REBAR COVER TO FRONT FACE OF EACH WALL BEFORE CONDUCTING REMOVAL OPERATIONS.



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15th Street Streetscape

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01/28/2022	100% REVIEW
12/17/2021	90% REVIEW
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08/20/2021	30% REVIEW

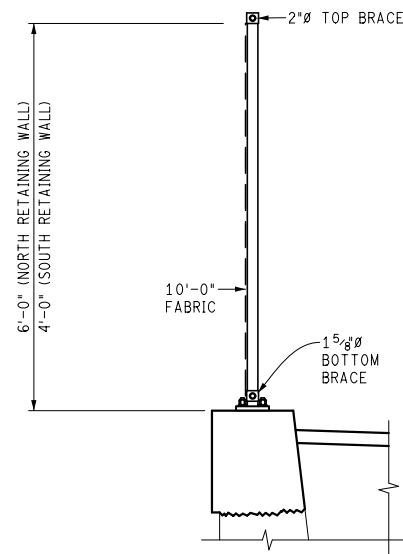
Drawn By SH2
 Designer SH2
 Reviewer MM3
 Manager KK3

Hard copy is intended to be 24"x36" when plotted. Scale(s) indicated and graphic quality may not be accurate for any other size.

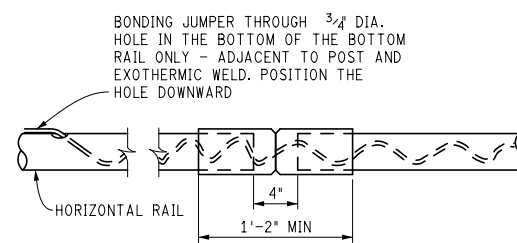
PROJECT NO.
210828

SHEET NO.
71

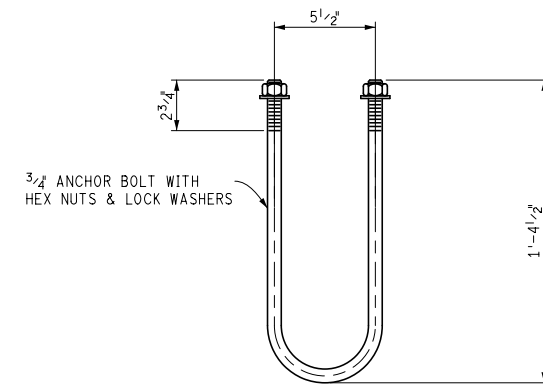
REM001



TYPICAL SECTION THRU FENCE

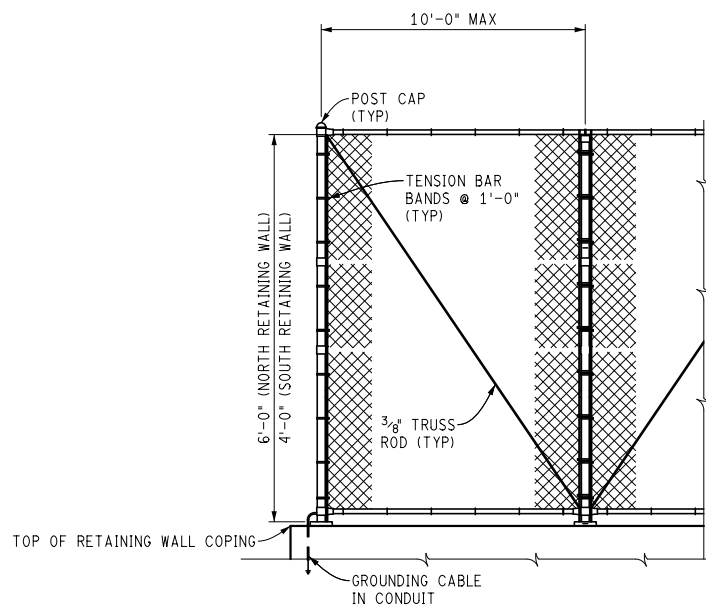


EXPANSION SLEEVE DETAIL

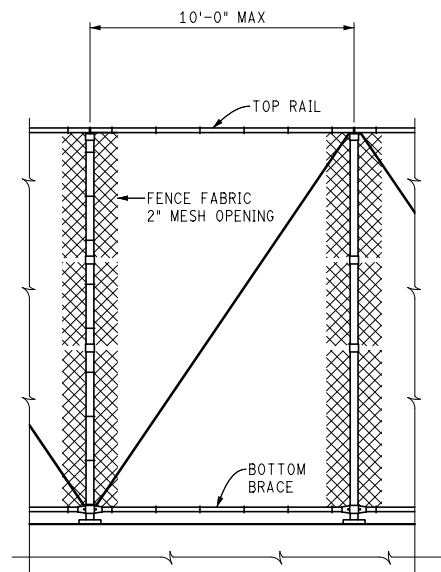


ANCHOR BOLT DETAIL

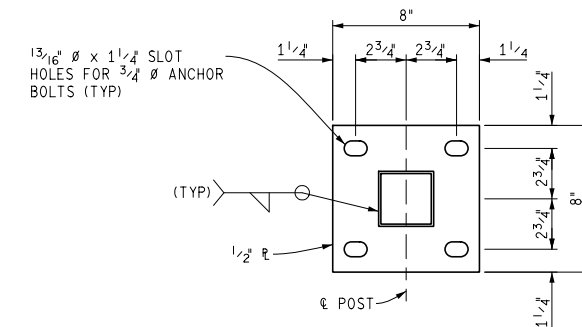
MISCELLANEOUS QUANTITIES	
533	F+ Fence, Chain Link, 48 inch, Vinyl Coated
500	F+ Fence, Chain Link, 72 inch, Vinyl Coated



AT END POST



AT TYPICAL PANEL



BASE PLATE DETAIL

NOTES:

FENCE FABRIC WILL BE #9 GAGE MESH. MESH SIZE OPENING WILL BE 2".

ALL POSTS WILL BE INSTALLED PLUMB AND MAY BE SHIMMED WITH NON-METALLIC SHIMS, APPROVED BY THE ENGINEER.

THE GROUNDING CABLE WILL BE PLACED IN A NON-METALLIC CONDUIT, FROM THE END POST CONNECTION TO THE GROUND ROD CONNECTION. THE CONDUIT WILL BE SECURED TO THE STRUCTURE USING EITHER EXPANSION BOLTS OR ADHESIVE ANCHORED BOLTS WITH GALVANIZED METAL STRIPS, AS APPROVED BY THE ENGINEER.

EXPANSION JOINT SLEEVES, FOR HORIZONTAL RAILS, SHALL BE THE MANUFACTURER'S STANDARD OVERSIZED SLEEVES, CRIMPED IN THE MIDDLE.

PLOT INFO: Z:\2021\10\29\CAD\CENRETAINING WALL\FENCE_001.DGN LAYOUT:MODEL DATE: TIME: USER: DNABWY



REVISIONS

02/10/2022	BIDS
01/28/2022	100% REVIEW
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10/29/2021	60% REVIEW
08/20/2021	30% REVIEW

Drawn By SH2
Designer SH2
Reviewer MM3
Manager KK3

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PROJECT NO.
210828

SHEET NO.
72

FENCE001

PLOT INFO: Z:\2021\10828\CAD\REINFORCING WALL\REF_001.DGN LAYOUT: MODEL DATE: --- TIME: --- USER: DMARBY

BAR	DIMENSIONS													NO. REQ'D	TOTAL WT.	
	a	b	c	d	e	f	g	h	i	j	k	m	p			
NORTH WALL																
EA041910	19'-10"														6	80
EA043101	31'-1"														6	125
EA045300	53'-0"														54	1,912
EB040305	1'-10"	1'-7"													254	580
ED040210	1'-10"	0'-6"	0'-6"												256	485
EK040605	1'-2"	1'-3"	1'-3"	1'-7"											666	2,855
SOUTH WALL																
EA043102	31'-2"														6	125
EA045300	53'-0"														60	2,125
EB040305	1'-10"	1'-7"													271	619
ED040210	1'-10"	0'-6"	0'-6"												271	513
EK040605	1'-2"	1'-3"	1'-3"	1'-7"											707	3,031
SUBTOTAL:																12,450

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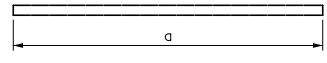
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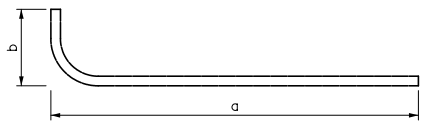
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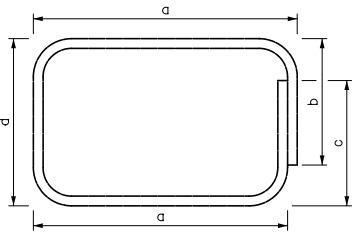
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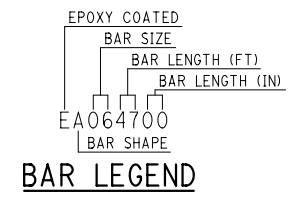
A



B



K



BAR LEGEND

MISCELLANEOUS QUANTITIES
20830 Lb Reinforcement, Steel, Epoxy Coated

NOTES:
 REINFORCEMENT TO BE BUNDLED AND TAGGED AS TO THE LOCATION AS SHOWN ON THIS SHEET.



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15th Street Streetscape

REVISIONS

DATE	DESCRIPTION	BY	CHKD
02/10/2022	BIDS		
01/28/2022	100% REVIEW		
12/17/2021	90% REVIEW		
10/29/2021	80% REVIEW		
08/20/2021	30% REVIEW		

Drawn By SH2
 Designer SH2
 Reviewer MM3
 Manager KK3

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PROJECT NO.
 210828

SHEET NO.
 73

REINF001

PUBLIC LIGHTING AUTHORITY OF DETROIT
 CITY OF DETROIT, WAYNE COUNTY, MICHIGAN
CONSTRUCTION PLANS FOR 15TH STREET LIGHTING - 48216
 15TH STREET STREETScape

PROJECT DESCRIPTION

THIS PROJECT CONSISTS OF UPGRADING THE STREET LIGHTING ON 15TH STREET FROM BAGLEY TO DALZELLE. THE EXISTING STREET LIGHTING WILL BE REMOVED AND REPLACED WITH NEW DUAL FIXTURE LIGHTING STANDARDS WITH STREET SIDE AND SIDEWALK SIDE LUMINAIRES BETWEEN MARANTETTE AND DOUBLE ARM LIGHTING STANDARDS BETWEEN MARANTETTE AND BAGLEY.

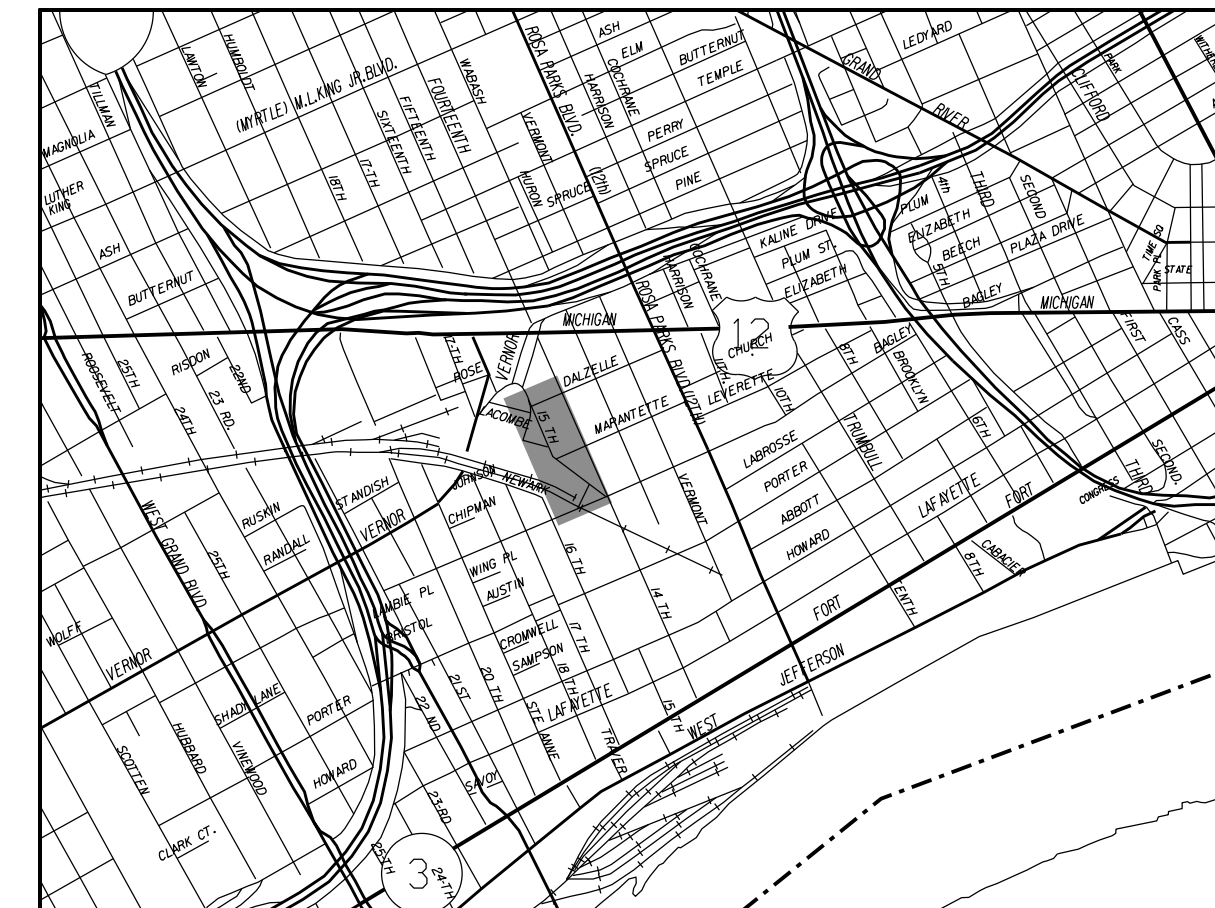
CONSTRUCTION PLANS SHEET INDEX

CO-01	COVER
LQ-01	LEGEND AND QUANTITIES
GI-01	GENERAL INFORMATION
UG-01 TO UG-02	UNDERGROUND CONSTRUCTION AND REMOVALS PLANS
IN-01 TO IN-02	OVERHEAD CONSTRUCTION AND CABLING PLANS
DT-01	COMERICA LIGHTING STANDARD DETAILS
DT-02	DATA COMMUNICATIONS LIGHTING STANDARD DETAILS (5 SHEETS)
DT-03	ROUND TAPERED ALUMINUM LIGHTING STANDARD DETAILS
DT-04	150W STREET LUMINAIRE DETAILS
DT-05	139W STREET LUMINAIRE DETAILS (2 SHEETS)
DT-06	UNDERGROUND ALUMINUM 4 AWG 600V XHHW-2 CABLE DETAILS (2 SHEETS)
DT-07	OVERHEAD ALUMINUM 4 AWG 600V QUADRUPEX CABLE DETAILS (2 SHEETS)
DT-08	UNDERGROUND FED LIGHTING STANDARD BASE ELECTRICAL CONNECTIONS DETAILS (2 SHEETS)
DT-09	LAMP CORD CABLE DETAILS (2 SHEETS)
DT-10	FUSE HOLDER DETAILS (2 SHEETS)
DT-11	OVERHEAD CONSTRUCTION DETAILS (2 SHEETS)
DT-12	IDENTIFICATION TAG DETAILS (2 SHEETS)
DT-13	STREET LIGHTING PHOTO CONTROLLER DETAILS
DT-14	UNDERGROUND LIGHTING AND RECEPTACLE CIRCUITS TYPICAL WIRING SCHEMA DETAILS (3 SHEETS)
DT-15	OVERHEAD LIGHTING CIRCUITS TYPICAL WIRING SCHEMA DETAILS (3 SHEETS)
DT-16	UNDERGROUND STRUCTURES DETAILS (8 SHEETS)

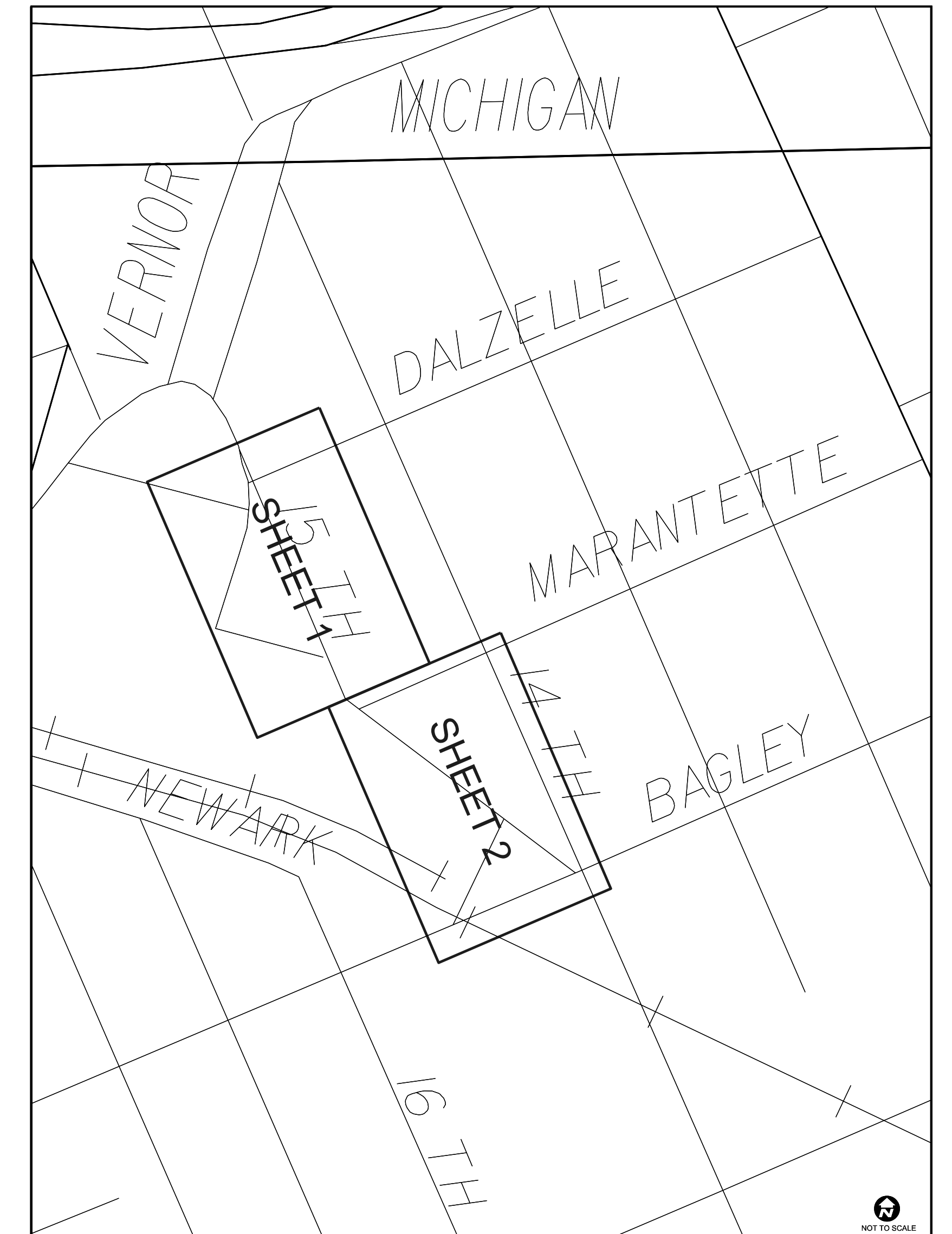
COUNTY LOCATION MAP



PROJECT LOCATION MAP



PLAN SHEET INDEX



LEGENDS

GENERAL LEGEND

- EGC Equipment Ground Conductor
- PLA Detroit Public Lighting Authority
- PLD Detroit Public Lighting Department
- EGC Equipment Ground Conductor
- C.P. Cable Pole
- Existing Lighting Controller (LC)
- Existing Wood Pole
- Existing Wood Pole with Bracket Arm and Luminaire
- Existing Lighting Standard
- Existing Double Fixture Lighting Standard
- Existing Strain Pole with Bracket Arm and Luminaire
- Existing Traffic Signal Pedestal
- Existing Polymer Handhole
- Existing Polymer Manhole
- Existing PLA Precast Concrete Round Handhole
- PLD Existing Polymer Handhole
- Existing Polymer Communications Handhole

LUMINAIRE ID TAG FORMAT

- TAG FORMAT WYYYZZZZZ-OO
- CODES DESCRIPTION
- W Luminaire Type - Options Are:
L = LED Luminaire
S = Sodium Luminaire
- YYY Luminaire Wattage Such as 150 for a 150W Luminaire
- ZZZZZ The Assigned Alphanumeric ID Code Such as ABC123
- OO Work Code Option That Is Not Part of ID Tag - Options Are:
- AX = Connect Luminaire to Circuit AX Phase Where X Is:
A1 = A1 Phase - Multiple Circuits
A2 = A2 Phase - Multiple Circuits
BX = Connect Luminaire to Circuit BX Phase Where X Is:
B1 = B1 Phase - Multiple Circuits
B2 = B2 Phase - Multiple Circuits
O = Connect Luminaire to Next Phase in Sequence to Source Luminaire Location
X = Luminaire Circuit Phase Connection Unknown
RT = Install or Replace Luminaire ID Tag Where No Other Work is Being Performed
RA = Replace Bracket Arm While Replacing the Luminaire
R = Location With a Receptacle
- L101ABC123-B-R Is a 101W Luminaire with ID ABC123 Attached to the B Circuit with a Receptacle

UNDERGROUND CONSTRUCTION AND REMOVAL PLANS

- Remove Luminaire, Bracket Arm, Lighting Standard and Foundation
- Remove (2) Luminaires, (2) Bracket Arms, Lighting Standard and Foundation
- Remove and Salvage Luminaire, Bracket Arm and Lighting Standard Remove Lighting Standard Foundation
- Remove Luminaire, Bracket Arm and Lighting Standard Remove the Lighting Standard Foundation as Necessary Install a New Lighting Standard Foundation as Necessary
- Install Comerica Lighting Standard Foundation - DT-01 (Unless Noted Otherwise)
- Install Data Communications Lighting Standard Foundation - DT-02 (Unless Noted Otherwise)
- Install Tapered Aluminum Lighting Standard Foundation - DT-03 (Unless Noted Otherwise)
- Remove Wood Pole
- Remove Luminaire, Bracket Arm and Wood Pole
- Install Wood Pole
- Remove Strain Pole and Foundation
- Existing Conduit
- Existing Overhead Street Lighting Cable (Unless Otherwise Noted)
- Remove Underground Cable (3) 1/C Phase Conductors for Street Lighting Along With (Unless Otherwise Noted)
- Remove Overhead Cable Overhead Triplex (Unless Otherwise Noted)
- Install (2) 3" Direct Buried Conduits EXCEPTION: (1) 3" Direct Buried Conduit from Manhole to Data Lighting Standard EXCEPTION: (1) 3" Direct Buried Conduit from Lighting Handhole to Data Lighting Standard (Unless Otherwise Noted)
- Install (6) 3" Direct Buried Conduits (Unless Otherwise Noted)
- Install a (2) 3" Encased Conduit Bank and a (4) 3" Encased Conduit Bank in a Common Trench with 12" of Separation (Unless Otherwise Noted)
- Install (4) 3" Directional Bored Conduits (Unless Otherwise Noted)
- Install Precast Concrete Square Handhole - DT-16.5
- Install Precast Concrete Round Handhole - DT-16.4
- Install Polymer Handhole 13" x 24" Structure with "LIGHTING" Legend - DT16.6
- Install Polymer Manhole 30" x 48" Structure with "LIGHTING" Legend - DT-16.6
- Install Polymer Data Communications Manhole 30" x 48" Structure with "MCD-T" Legend - DT-16.6
- Install Ground Rod

LIST OF MATERIAL QUANTITIES

PLA STOCK QUANTITIES			
MDOT CODE	DESCRIPTION	TOTAL	UOM
8197050	Light Std, Comerica Single	1	Ea
8197050	Light Std, Data	2	Ea
8197050	Luminaire, Teardrop	2	Ea

OVERHEAD CONSTRUCTION AND CABLING PLANS

- Install Comerica Lighting Standard Assembly with a 150W Street Luminaire - DT-01 and DT-04
- Install Data Communications Lighting Standard Assembly With a 150W Street Luminaire - DT-02 - DT-04
- Install Tapered Aluminum Lighting Standard Assembly With a 139W Street Luminaire - DT-03 and DT-05
- Existing Overhead Street Lighting Cable (Unless Otherwise Noted)
- Existing Conduit or Conduit Installed Under This Project
- Install 600V Aluminum Underground Cable (2) 1/C 4 AWG Phase Conductors and (1) 1/C 4 AWG EGC for Street Lighting Along With (Unless Otherwise Noted)
- Install 600V Aluminum Underground Cable (3) 1/C 4 AWG Phase Conductors and (1) 1/C 4 AWG EGC for Street Lighting Along With (Unless Otherwise Noted)
- Install 600V Aluminum Overhead Quadruplex Cable - Hackney (3) 1/C 4 AWG Phase Conductors and (1) 1/C 4 AWG EGC for Street Lighting (Unless Otherwise Noted)
- Remove Luminaire on Existing Bracket Arm and Wood Pole
- Install Luminaire on Existing Bracket Arm and Wood Pole
- Remove Luminaire and Install Luminaire on Existing Bracket Arm and Lighting Standard
- Remove Luminaire and Bracket Arm on Existing Wood Pole
- Install Luminaire and Bracket Arm on Existing Wood Pole
- Install Lighting Controller (LC)
- Remove Lighting Controller (LC)

ELECTRICAL DIAGRAMS

- Existing Lighting Controller Not Connected to Circuit
- Lighting Controller Connected to Circuit
- Lighting Standard Luminaire Not Connected to the Lighting Controller
- Lighting Standard Luminaire Connected to the Lighting Controller
- Pole Mounted Luminaire Not Connected to the Lighting Controller
- Pole Mounted Luminaire Connected to the Lighting Controller
- Overhead Street Lighting Cable Not Connected to the Lighting Controller
- 600V Aluminum Underground Cable Connected to the Lighting Controller (2) 1/C #4 AWG Phase Conductors and (1) 1/C #4 EGC (Unless Otherwise Noted)
- 600V Aluminum Underground Cable Connected to the Lighting Controller (3) 1/C #4 AWG Phase Conductors and (1) 1/C #4 EGC (Unless Otherwise Noted)
- 600V Aluminum Overhead Quadruplex Cable Connected to the Lighting Controller (3) 1/C #4 AWG Phase Conductors and (1) 1/C #4 EGC (Unless Otherwise Noted)

LIST OF PAY ITEM QUANTITIES

MDOT CODE	DESCRIPTION	CONSTRUCTION QUANTITIES					TOTAL	UOM
		UG-01	UG-02	IN-01	IN-02	MISC		
8190016	Cable, Rem	415	345	--	--	--	760	Ft
8190029	Conduit, DB, 1, 3 inch	130	160	--	--	--	290	Ft
8190032	Conduit, DB, 2, 3 inch	475	125	--	--	--	600	Ft
8190038	Conduit, DB, 4, 3 inch	--	75	--	--	--	75	Ft
8190277	Light Std Arm, Rem	--	2	--	--	--	2	Ea
8190280	Light Std Fdn, Rem	--	2	--	--	--	2	Ea
8190305	Light Std Shaft, Rem	--	2	--	--	--	2	Ea
8190365	Luminaire, Rem and Salv	5	2	--	--	--	7	Ea
8190495	Wood Pole, Fit Up, Sec Cable Pole	--	1	--	--	--	1	Ea
8197001	Cable, Equipment Grounding Wire, 1/C#4, Modified	--	--	1,110	860	--	1,970	Ft
8197001	Cable, Sec, 600V, 2, 1/C#4, Modified	--	--	350	165	--	515	Ft
8197001	Cable, Sec, 600V, 3, 1/C#4, Modified	--	--	765	690	--	1,455	Ft
8197001	Cable, Sec, Quadruplex, Aluminum, 4 AWG	--	--	--	110	--	110	Ft
8197001	Conduit, DB, 6, 3 inch	495	530	--	--	--	1,025	Ft
8197001	Conduit, Directional Bore, 4, 3 inch	--	170	--	--	--	170	Ft
8197001	Conduit, Encased, 2, 3 inch	165	60	--	--	--	225	Ft
8197001	Conduit, Encased, 4, 3 inch	245	60	--	--	--	305	Ft
8197050	Bracket Arm, Bolt On, Rem and Salv	4	--	--	--	--	4	Ea
8197050	Hh, Polymer Conc, Modified	11	8	--	--	--	19	Ea
8197050	Hh, Round, Modified	1	--	--	--	--	1	Ea
8197050	Hh, Type S	1	--	--	--	--	1	Ea
8197050	Light Std Arm, Comerica, Single	--	--	5	6	--	11	Ea
8197050	Light Std Fdn, Comerica, Modified	4	--	--	--	--	4	Ea
8197050	Light Std Fdn, Data, Modified	5	6	--	--	--	11	Ea
8197050	Light Std Fdn, Modified	--	1	--	--	--	1	Ea
8197050	Light Std, Comerica Single, Install	--	--	4	--	--	4	Ea
8197050	Light Std, Data, Install	--	--	5	6	--	11	Ea
8197050	Light Std, Tapered Aluminum	--	--	--	1	--	1	Ea
8197050	Luminaire, 139W	--	--	--	1	--	1	Ea
8197050	Luminaire, Teardrop, Install	--	--	9	6	--	15	Ea
8197050	Mh, Polymer Conc, Data, Modified	8	9	--	--	--	17	Ea
8197050	Photo Control, Lighting	--	1	--	--	--	1	Ea
8197050	Splice	--	--	--	--	1	1	Ea
8197050	Tag, Pole	--	--	--	--	1	1	Ea
8197050	Wood Pole, Rem and Salv	4	--	--	--	--	4	Ea

GENERAL INFORMATION

1. ALL MATERIAL AND EQUIPMENT FURNISHED BY THE CONTRACTOR MUST BE NEW AND MUST COMPLY WITH THE SPECIFICATIONS FOR THAT MATERIAL AND EQUIPMENT. THE OWNER SHALL HAVE THE RIGHT TO REJECT ANY EQUIPMENT WHICH DOES NOT MEET WITH SPECIFICATIONS.
2. CONSTRUCTION MUST BE PERFORMED BY QUALIFIED AND EXPERIENCED PERSONNEL. ALL WORK MUST MEET THE CURRENT STANDARDS AND PRACTICES OF THE PUBLIC LIGHTING AUTHORITY (PLA), THE MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT), THE NATIONAL ELECTRICAL CODE, THE ELECTRIC CODE OF THE CITY OF DETROIT AND THE NATIONAL ELECTRICAL SAFETY CODE.
3. THE CONTRACTOR MUST USE PUBLIC LIGHTING AUTHORITY (PLA) SPECIFICATIONS FOR THIS PROJECT.
4. THE CONSTRUCTION CONTRACTOR SHALL RETURN ALL SALVAGED PUBLIC LIGHTING AUTHORITY (PLA) EQUIPMENT TO THE PLA.

LOCATION: 2703 23RD STREET, DETROIT, MICHIGAN 48216
 CONTACT: JOHN VERNON (PLA) AT (248) 330-9039
 HOURS: MONDAY FRIDAY FROM 9:30 A.M. TO 3:30 P.M. MUST PROVIDE 24 HOURS NOTICE.

THE CONSTRUCTION CONTRACTOR IS RESPONSIBLE FOR TRANSPORTING ALL SALVAGED EQUIPMENT TO THE PLA YARD.

5. THE CONSTRUCTION CONTRACTOR SHALL RETURN ALL REMOVED DETROIT PUBLIC LIGHTING DEPARTMENT (PLD) EQUIPMENT TO THE PLD.

THE CONSTRUCTION CONTRACTOR IS RESPONSIBLE FOR TRANSPORTING DECOMMISSIONED EQUIPMENT TO THE PLD YARD.
6. ALL SHOP DRAWINGS MUST BE APPROVED BY THE PUBLIC LIGHTING AUTHORITY (PLA). CONTACT (313) 324-8290.
7. CALL MISS DIG AT 811 OR (800) 482-7171 A FULL THREE WORKING DAYS BEFORE TO ANY EXCAVATION FOR THE LOCATIONS OF UNDERGROUND UTILITIES.
8. THE CONTRACTOR IS TO NOTIFY DTE GAS AT (800) 477-4747 IF A PROTECTIVE COATED GAS MAIN IS EXPOSED OR DAMAGED.
9. THE CONTRACTOR IS TO NOTIFY DTE ELECTRIC AT (800) 477-4747 IF THE PROTECTIVE COATING OF ANY DTE ELECTRIC HIGH VOLTAGE UNDERGROUND LINE IS EXPOSED OR DAMAGED.

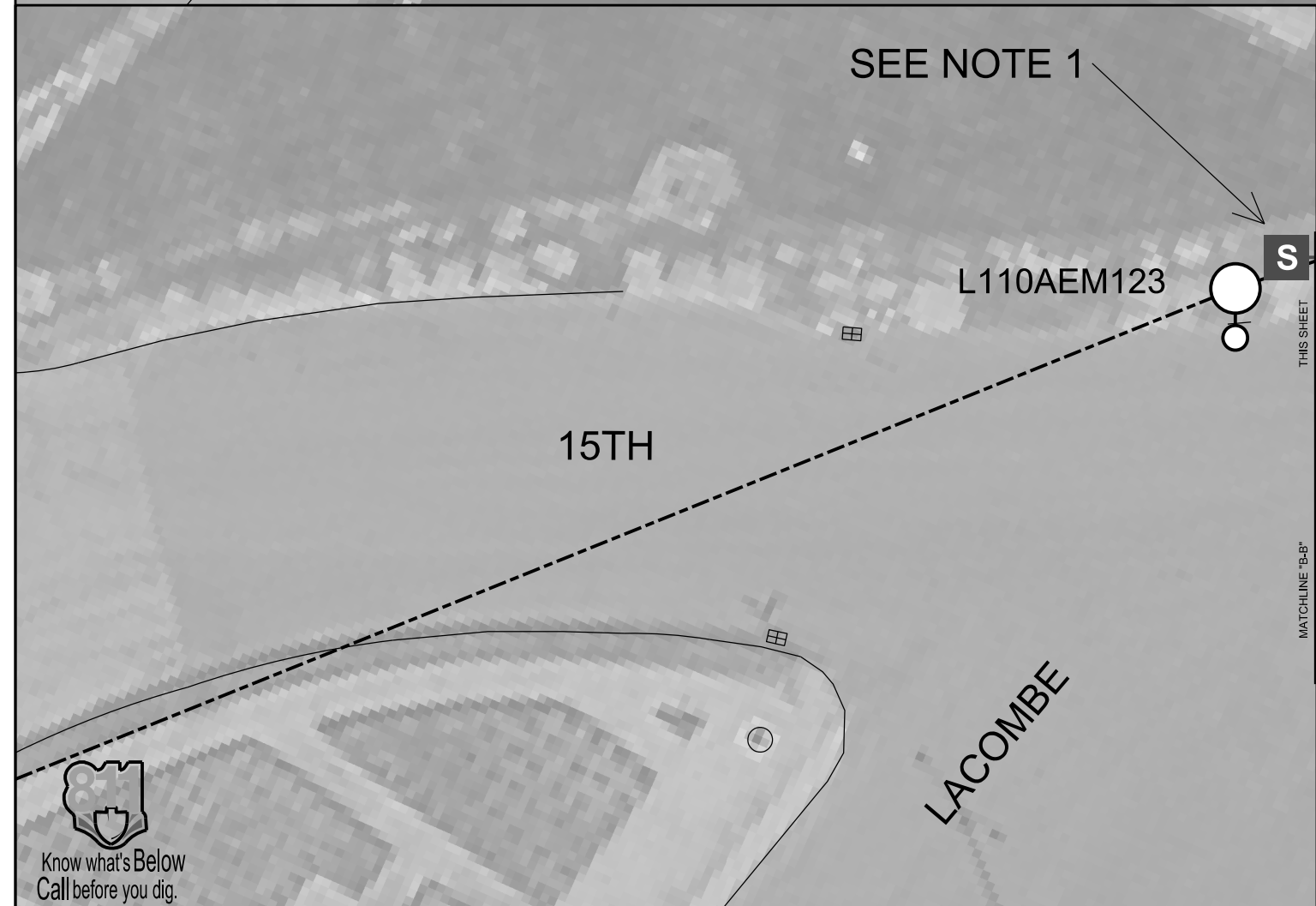
10. ALL EXISTING DETROIT PUBLIC LIGHTING DEPARTMENT (PLD) LIGHTING, PRIMARY TRANSMISSION, ETC., CIRCUITS MUST ALWAYS BE MAINTAINED IN AN OPERATIONAL CONDITION. NOTIFY THE PLD SYSTEM OPERATOR AT (313) 961-1364 48 HOURS BEFORE TO BEGINNING WORK ON PLD CIRCUITS AND KEEP THE OPERATOR INFORMED DAILY.
11. ALL VEHICLE DIRECTION, STREET NAME, AND PARKING SIGNS ON CITY OF DETROIT ROADS ARE THE PROPERTY OF THE CITY OF DETROIT DEPARTMENT OF PUBLIC WORKS (DPW). THE CONTRACTOR WILL NOT REMOVE OR RELOCATE ANY VEHICLE DIRECTION, STREET NAME OR PARKING SIGNS UNLESS CITY OF DETROIT DPW GRANTS ADVANCE AUTHORIZATION. FOR ANY VEHICLE DIRECTION, STREET NAME OR PARKING SIGN ENCOUNTERED ON A STREET LIGHT POLE, THE CONTRACTOR WILL STOP WORK AND CALL THE DETROIT DPW SIGN SHOP AT (313) 224-6950 TO COORDINATE 72 HOURS PRIOR TO THE REMOVAL OR RELOCATION.
12. ANY PERMANENT SIGNS THAT ARE DAMAGED OR REMOVED MUST EITHER BE REINSTALLED, IF IN USABLE CONDITION, OR REPLACED WITH A UNIT THAT MEETS THE CURRENT SPECIFICATIONS OF THE SIGN'S MAINTAINING AGENCY.
13. REMOVAL, REPLACEMENT, EXCAVATION, AND BACKFILL RELATED TO PAVEMENT, SIDEWALKS AND CURBS MUST BE DONE ACCORDING TO THE CITY OF DETROIT, DEPARTMENT OF PUBLIC WORKS, CITY ENGINEERING DIVISION STANDARD SPECIFICATIONS FOR PAVING AND RELATED CONSTRUCTION OR THE SPECIFICATION OF THE AUTHORITY HAVING JURISDICTION.
14. WITHIN FIVE DAYS OF COMPLETING EACH SECTION OF THE UNDERGROUND OR OVERHEAD WORK, THE CONTRACTOR SHALL FURNISH TO THE PUBLIC LIGHTING AUTHORITY (PLA) AN EXACT RECORD, AS-BUILT DRAWINGS, OF ALL UNDERGROUND AND OVERHEAD WORK INSTALLED. THE AS-BUILT DRAWINGS SHALL INCLUDE, BUT NOT LIMITED TO, STREET LIGHTING COMPONENTS, STRUCTURES, CONDUIT LENGTHS AND CABLE ROUTING INCLUDING THEIR LOCATIONS.
15. THE CONTRACT UNIT PRICE SHALL BE PAYMENT IN FULL FOR FOUNDATION REMOVAL AND BACKFILLING THE HOLE WITH GRANULAR MATERIAL. DISPOSAL OF WASTE EXCAVATED MATERIAL ALONG WITH REMOVING PAVEMENT, SIDEWALK, CURB AND GUTTER ALONG WITH ANY ASSOCIATED REPLACEMENT IS ALSO INCLUDED.
16. THE CONTRACTOR SHALL SECURE ALL NECESSARY PERMITS COVERING CONSTRUCTION OPERATIONS INCLUDING PERMITS FROM THE PUBLIC AUTHORITIES HAVING JURISDICTION OVER THE STREETS OR OTHER PUBLIC PROPERTIES IN WHICH THE WORK IS LOCATED AND THE IMPROVEMENT THEREIN. THE BIDDER SHALL ASCERTAIN THE AMOUNT OF ANY CHARGES REQUIRED BY SUCH AUTHORITIES AND WILL INCLUDE THE COST THEREOF IN THE BID PRICES.

17. THE CONTRACTOR MUST ASCERTAIN THE REQUIREMENTS OF THE PUBLIC AUTHORITIES HAVING JURISDICTION OVER THE STREETS OR OTHER PUBLIC PROPERTIES; OR THE PRIVATE PROPERTY OWNER AND INCLUDE IN HIS BID PRICE ALL EXISTING INFRASTRUCTURE RESTORATION COSTS INCLUDING SIDEWALKS, PAVEMENT AND LANDSCAPING TO THE SATISFACTION OF THE AUTHORITY HAVING JURISDICTION OR PROPERTY OWNER IN EACH CASE, WHICH MAY INCLUDE UPGRADES FROM THE EXISTING CONDITION.
18. THE CONTRACTOR ASSUMES ALL RISKS AND RESPONSIBILITIES BECAUSE OF EXISTING SOIL CONDITIONS AND MUST COMPLETE THE WORK IN WHATEVER MATERIAL AND UNDER WHATEVER GROUND CONDITIONS MAY BE ENCOUNTERED OR CREATED WITHOUT ADDITIONAL COST TO THE PUBLIC LIGHTING AUTHORITY (PLA).
19. THE LOCATIONS OF EXISTING UNDERGROUND OBSTRUCTIONS OR UTILITY FACILITIES ARE NOT NECESSARILY INDICATED ON THE PLANS. WHERE UTILITY FACILITIES ARE SHOWN, LOCATIONS ARE ONLY APPROXIMATIONS. CORRECTNESS OF EXACT UTILITY LOCATIONS IS NOT GUARANTEED. THE CONTRACTOR MUST EXERCISE CAUTION IN AVOIDING DAMAGE TO UTILITIES AND MUST NOTIFY THE UTILITIES THAT THEY ARE PROPOSING TO BREAK PAVEMENT OR EXCAVATE SO THAT THEY MAY PROVIDE THE CONTRACTOR WITH THE VERY LATEST LOCATION INFORMATION OF THEIR EXISTING FACILITIES.
20. HANDHOLE AND MANHOLE STRUCTURE LOCATIONS ARE SHOWN IN PROXIMITY TO WHERE THEY ARE TO BE INSTALLED. STRUCTURES ARE NOT TO BE INSTALLED IN ADA RAMPS. STRUCTURE INSTALLATION IN SIDEWALKS, ROADWAYS OR DRIVEWAYS IS TO BE AVOIDED WHERE POSSIBLE UNLESS CALLED FOR BY THE PLANS. STRUCTURES INSTALLED IN ROADWAYS OR DRIVEWAYS SHALL BE OF THE PRECAST CONCRETE TYPE. STRUCTURES SHALL NOT BE INSTALLED ON PRIVATE PROPERTY UNLESS CALLED FOR SPECIFICALLY BY THE PLANS WITH AN AUTHORIZED EASEMENT. FURTHER, STRUCTURES ARE TO BE INSTALLED CLEAR OF FIRE HYDRANTS, TREES, UTILITIES, AND ANY OTHER UNDERGROUND STRUCTURES.
21. NO SPLICING WILL BE ALLOWED BETWEEN THE CONTROL CABINET AND HANDHOLE/MANHOLE; HANDHOLE/MANHOLE TO HANDHOLE/MANHOLE; HANDHOLE/MANHOLE TO UNDERGROUND STREET LIGHTING STANDARD; AND HANDHOLE/MANHOLE TO CABLE RISER.
22. THE FOLLOWING WIRE COLOR CODING IS TO BE USED FOR THE UNDERGROUND STREET LIGHTING AND RECEPTACLES ON THIS PROJECT: BLACK (A PHASE); RED (B PHASE); WHITE (NEUTRAL); GREEN (GROUND).
23. THE FOLLOWING CABLE IDENTIFICATION IS TO BE USED FOR GROUNDED OVERHEAD TRIPLEX AND QUADRUPLIX ON THIS PROJECT: NO RIB (A PHASE); ONE RIB (NEUTRAL); TWO RIBS (B PHASE); BARE MESSENGER (EQUIPMENT GROUNDING CONDUCTOR OR EGC).

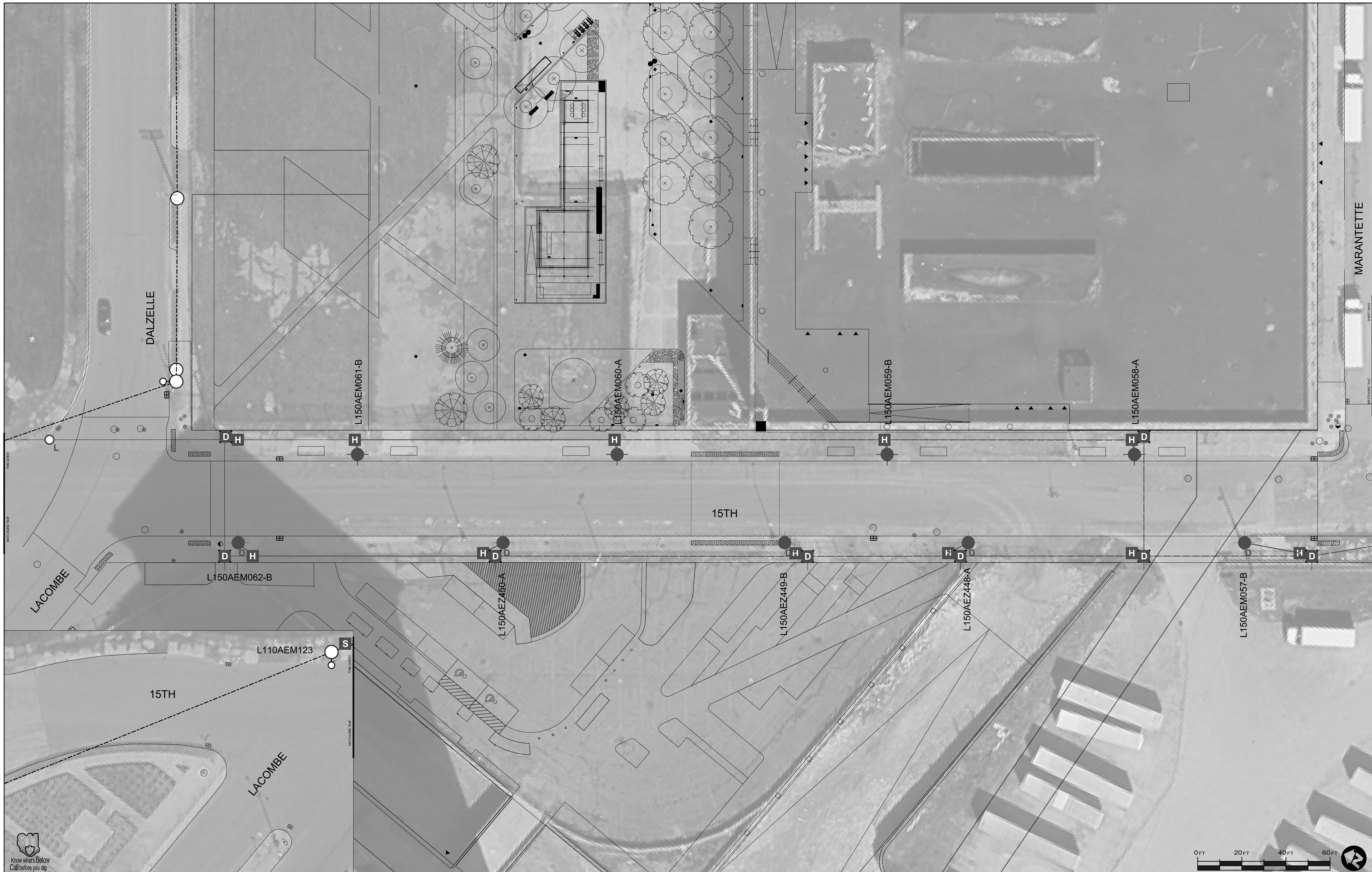
THE CABLE IDENTIFICATION FOR INSTANCES OF EXISTING UNGROUNDED OVERHEAD DUPLEX OR TRIPLEX ALONG WITH CONNECTIONS TO THE EXISTING UNGROUNDED OVERHEAD ON THIS PROJECT: NO RIB (A PHASE); ONE RIB (B PHASE); BARE MESSENGER (NEUTRAL).

IF ANY EXISTING OVERHEAD CABLE DOES NOT MATCH EITHER OF THESE SCENARIOS, CONTACT THE PROJECT ENGINEER BEFORE MAKING ANY CONNECTIONS.
24. THE CONTRACTOR MUST CORE INTO PRECAST HANDHOLES AND MANHOLES.
25. THE CONTRACTOR IS TO TRIM EXISTING TREES TO PROVIDE A CLEAR 10 FOOT RADIUS AROUND EACH LUMINAIRE.
26. ALL UNDERGROUND STREET LIGHTING STANDARD LOCATIONS ARE TO BE INSTALLED WITH THE CENTER 3 FEET BACK OF CURB FACE (BOC) OR SIDEWALK EDGE UNLESS OTHERWISE INDICATED ON THE PLANS.
27. THE CONTRACTOR IS TO CALL THE DETROIT PUBLIC LIGHTING DEPARTMENT (PLD) SENIOR SYSTEM OPERATOR AT (313) 267-4151 FOR ANY PLD FACILITIES COORDINATION. COORDINATION INCLUDES BEING GRANTED ACCESS TO PLD MANHOLES AND HANDHOLES; GAINING LOCKOUT/TAGOUT PROTECTION FOR WORKING ON PLD EQUIPMENT; ANY OTHER WORK INVOLVING PLD FACILITIES.
28. THE CONTRACTOR IS TO CALL (313) 224-1610 FOR COORDINATING ANY DETROIT DEPARTMENT OF PUBLIC WORKS TRAFFIC SIGNAL WORK.
29. LUMINAIRE WOOD POLE MOUNTING HEIGHT SHALL BE AT 30 FEET UNLESS THE PLANS SPECIFY OTHERWISE.
30. REPLACEMENT LUMINAIRE LOCATIONS SHALL BE CONNECTED TO THE SAME CIRCUIT PHASE OF THE LUMINAIRE LOCATION THEY ARE REPLACING. NEW LUMINAIRE LOCATIONS WILL BE CONNECTED TO THE CIRCUIT PHASE CALLED FOR ON THE PLAN SHEETS.
31. INSTALL SHORTING CAPS ON ALL LUMINAIRES UNLESS OTHERWISE DIRECTED BY THE PLANS.
32. REFER TO THE STREETScape PAVING PLANS FOR UNDERGROUND UTILITY LOCATIONS.
33. CONTRACTOR TO VERIFY MANUFACTURER MODEL NUMBERS WITH THE PUBLIC LIGHTING AUTHORITY (PLA) FOR ALL LUMINAIRES AND LIGHTING STANDARDS PRIOR TO PLACING AN ORDER FOR THESE ITEMS.
34. CONTRACTOR TO COORDINATE ALL HANDHOLE AND MANHOLE INSTALLATION LOCATIONS IN THIS PROJECT WITH ROADWAY CONSTRUCTION PROJECT ENGINEER PRIOR TO INSTALLATION.

NOTE 1:
 THE IDENTIFIED HANDHOLE, MANHOLE AND CONDUITS MAY BE BUILT BY EITHER THIS PROJECT OR THE ROOSEVELT PARK PROJECT EITHER IN WHOLE OR PART. CONSTRUCT ANY INFRASTRUCTURE NOT ALREADY BUILT. BUILD OUT TO MATCH ANY ALREADY EXISTING INFRASTRUCTURE.









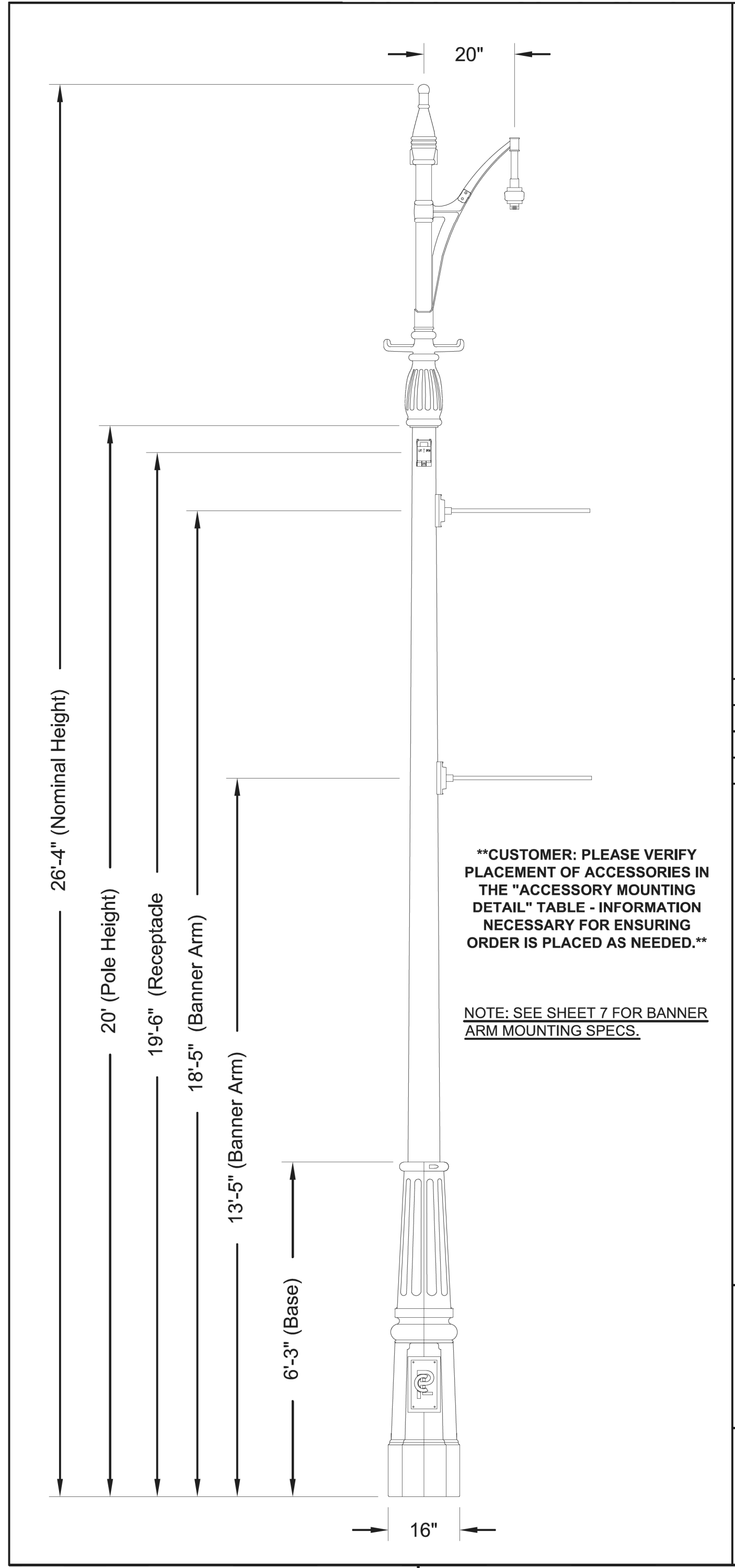
Public Lighting Authority of Detroit
 400 Monroe, Suite 485
 Detroit, Michigan 48226
 313-324-8290 office
 313-638-2805 fax
 pladetroit.org

PROJECT DESCRIPTION
DESIGN ENGINEERING FOR STREET LIGHTING
15TH FROM BAGLEY TO DALZELLE
 OVERHEAD INSTALLATION AND CABLING PLANS
 SHEET 2 OF 2

Consulting Engineering Associate and Wade Trim Joint Venture
 16580 Wyoming
 Detroit, Michigan 48221
 313-341-5797

Consulting Engineering Associates, Inc. **WADE TRIM**

DATE:	PROJECT REVISION DESCRIPTIONS:	SHEET
2022-01-28	SEALED DOCUMENTS	IN-02
2022-02-11	UPDATED DETAIL	P.O. NO. 1838 JOB NO. 142828
		PAGE 7 OF 46



Specifications

POST DESCRIPTION
The lighting post shall consist of a cast aluminum clamshell base with CPL logo access doors and a round smooth tapered steel shaft. The post shall be provided with (1) Single Comerica Park Crossarm, (1) GFI receptacle with small, in use weatherproof cover and (2) Bolt on Kalamazoo Banner Arms (customer to provide mounting hardware). The Comerica Park Crossarm for use with threaded 1.5" NPT for pendant mount luminaire by others.

MATERIALS
The base material and decorations shall be heavy-wall cast aluminum formed true to pattern with complete detail. The shaft shall be smooth steel (ASTM A595) with a steel anchor plate. The luminaire arm shall be cast aluminum (356.1 alloy) and aluminum pipe construction. All external hardware shall be stainless steel. Anchor bolts shall be hot-dip galvanized steel.

DIMENSIONS
The post shall be 20'-0" in height and 8" butt diameter with a 16" square x 75" tall clamshell base.

INSTALLATION
Anchor plate to fit an 11.5" bolt circle with four, hot-dip galvanized, L-type, anchor bolts. Two doors in the base, one coinciding with the shaft handhole (4" x 10" nominal) to provide wiring access.

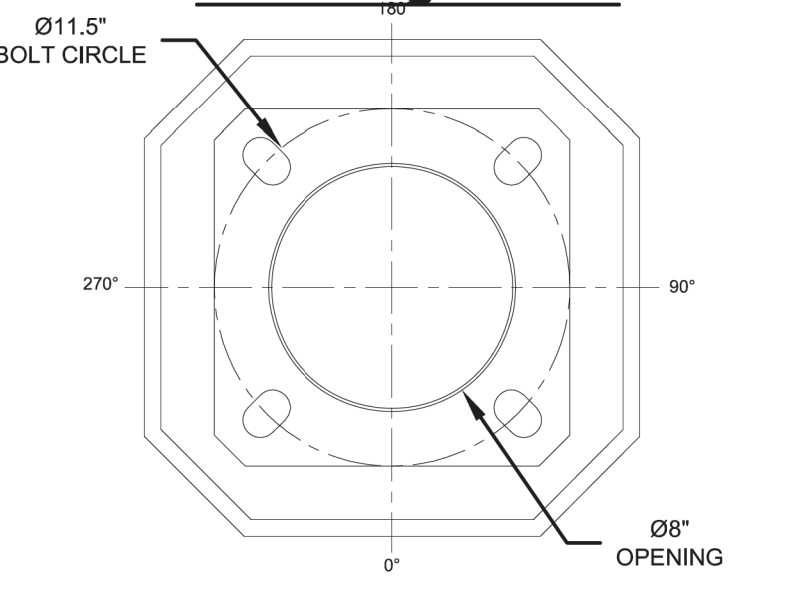
FINISH
The entire post assembly shall be Tiger Drylac Finish RAL6008.

NOTE:
Crossarm to be prewired with 31-ft. of 12-ga. wire side one - black, white, green. Side two - red, white, green.

Accessory Mounting Detail

	Orientation	Height
RECEPTACLE	0°	19'-6"
BANNER ARMS	90°	18'-5"
BANNER ARMS	90°	13'-5"

Anchorage Detail



DO NOT USE TO SET ANCHOR BOLTS
CONTACT CUSTOMER SERVICE FOR TEMPLATE

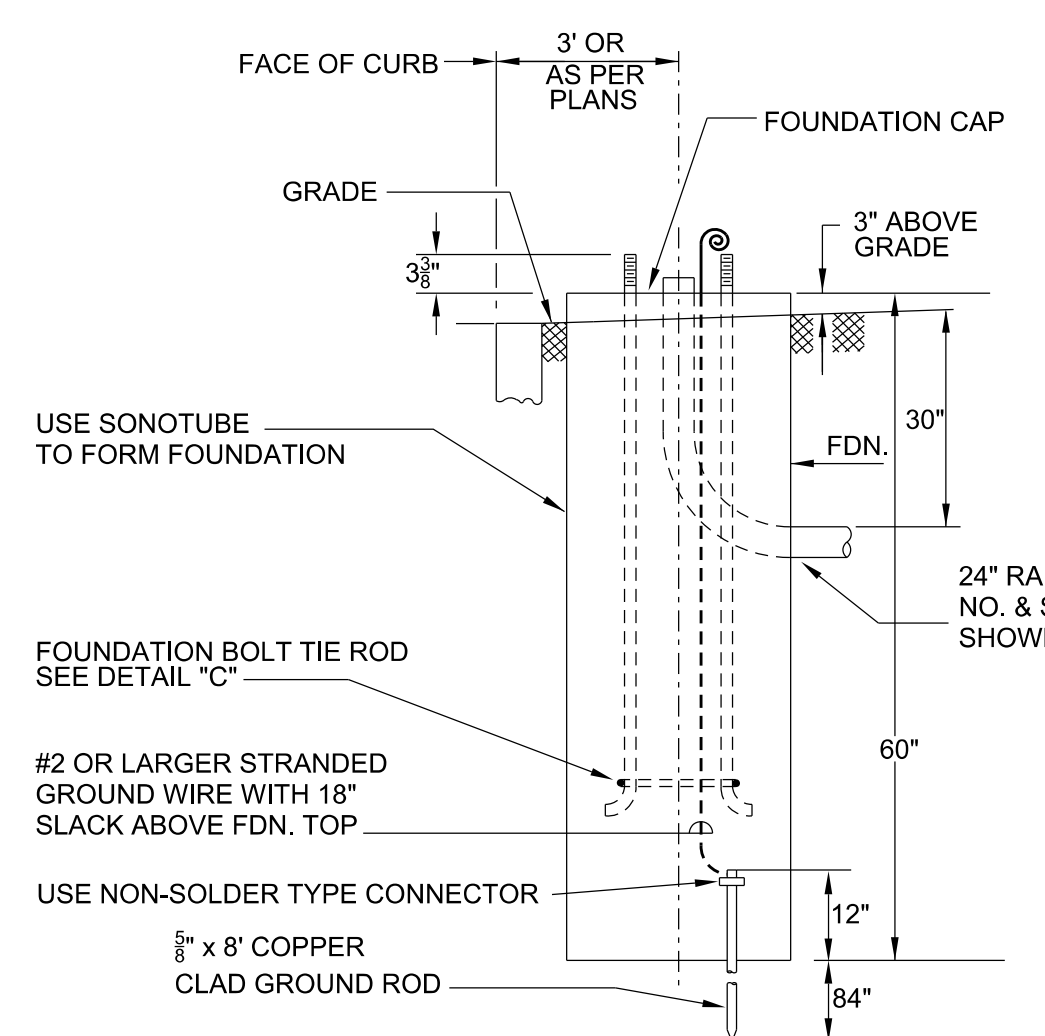
PATENT PENDING

Catalog #'s: RFD 219696
Pole: DT20RT(8.0E)-S/CS RXXX (2 BA PROVS)
Anchor Bolts: AB-27-4
Clamshell Base: DT16CSBCA-MOD-HH-HEX-RAL6008
Banner Arms: (2) KBW-D-3-CA/CS
Receptacle: FGIUS-S25RAL6008DGRSH
Prewired Arm: DTC20/1-CARAL6008-PREWIRED I

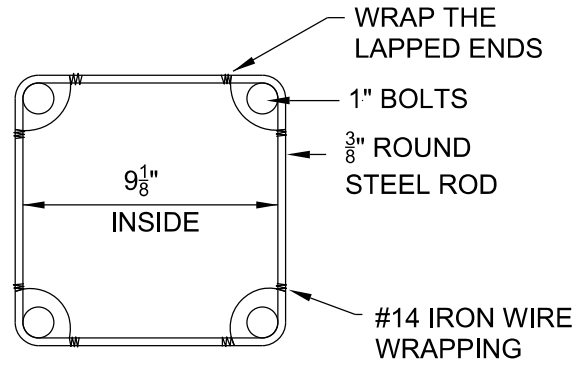
Customer Signature: _____ **Date:** _____

ANCHOR BASE FOUNDATION PLAN

NOT TO SCALE



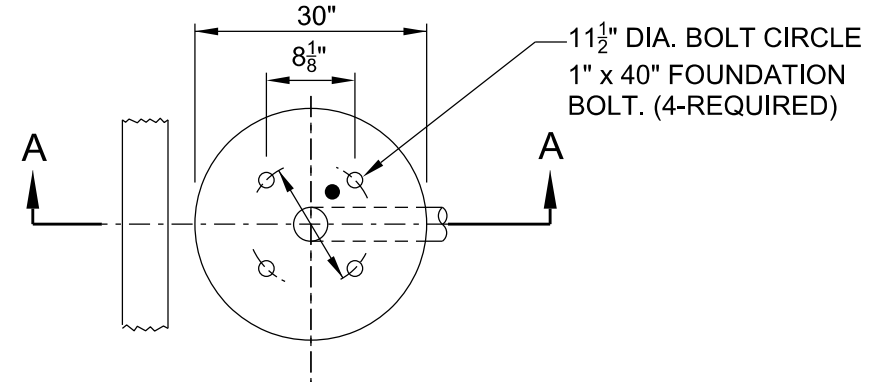
SECTION A-A



DETAIL "C"

ANCHOR BOLT TIE ROD

ALL FOUNDATION CAPS SHALL HAVE A SMOOTH FINISH WITH BEVELED EDGES & SHALL BE SHAPED TO ALLOW COMPLETE DRAINAGE OF WATER. ANCHOR BOLT PROJECTIONS ABOVE CAP SHALL BE CLEANED OF ALL CONCRETE & FULLY USABLE THEIR FULL LENGTH.



TOP VIEW

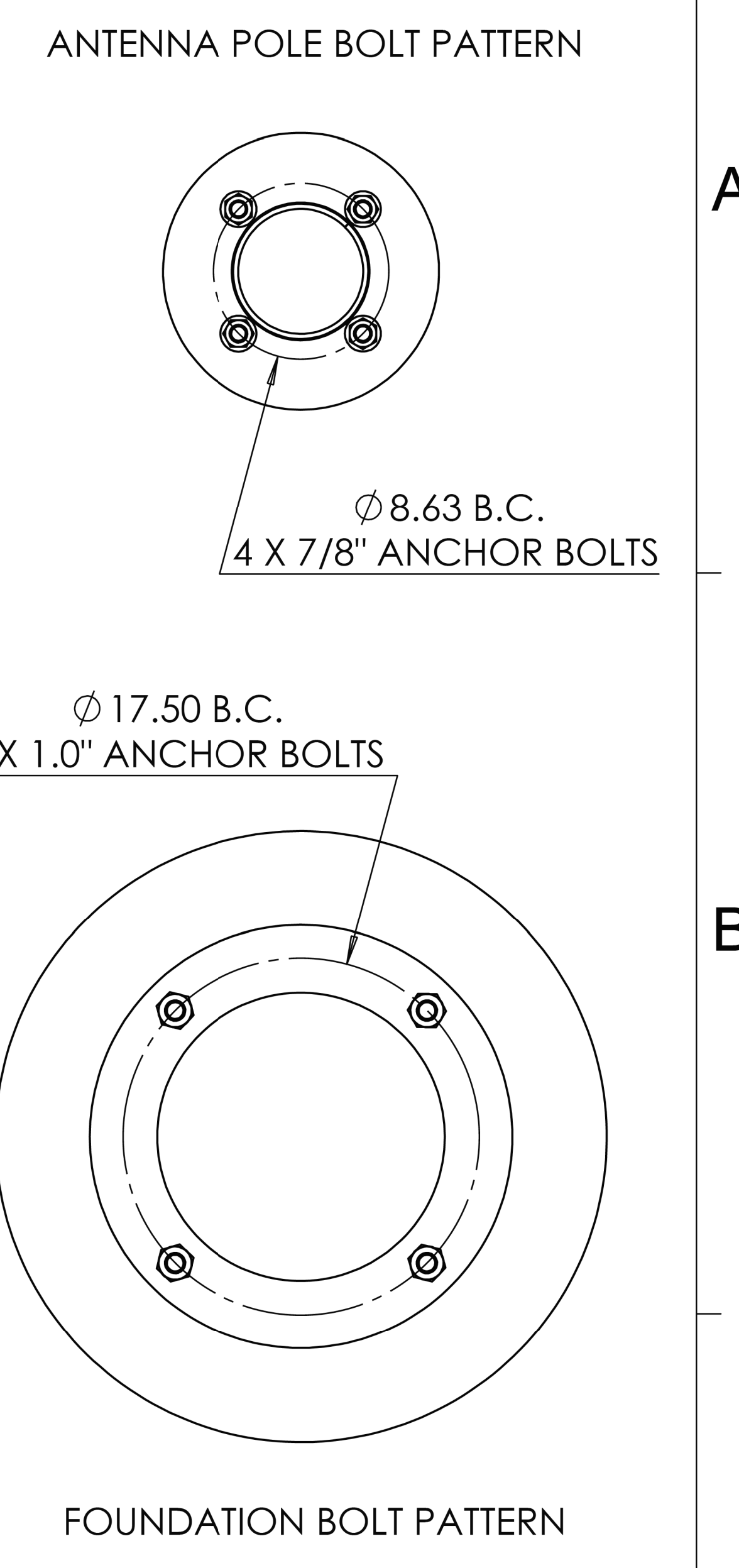
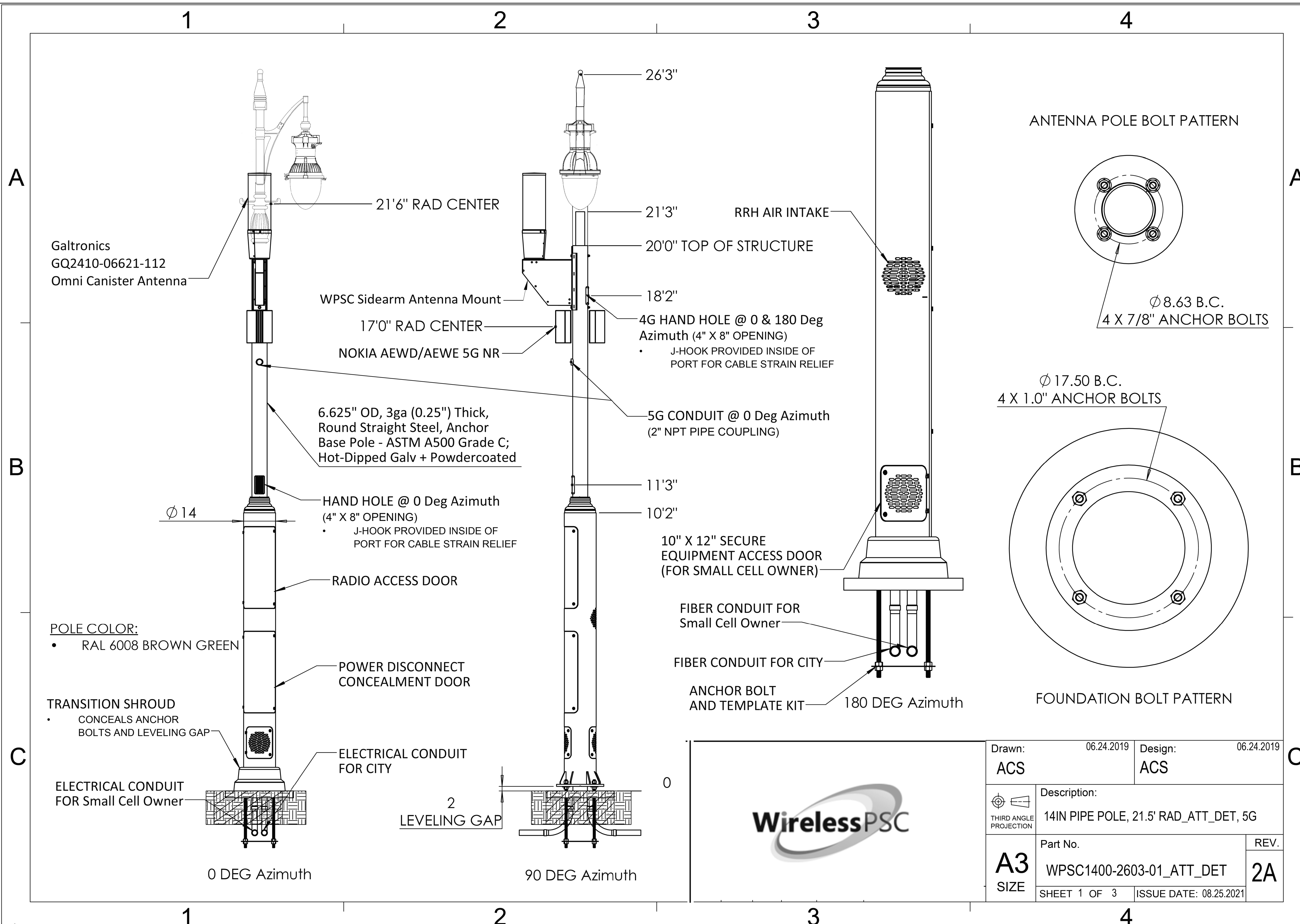


Detroit PLA Comerica Park Maintenance Assemblies

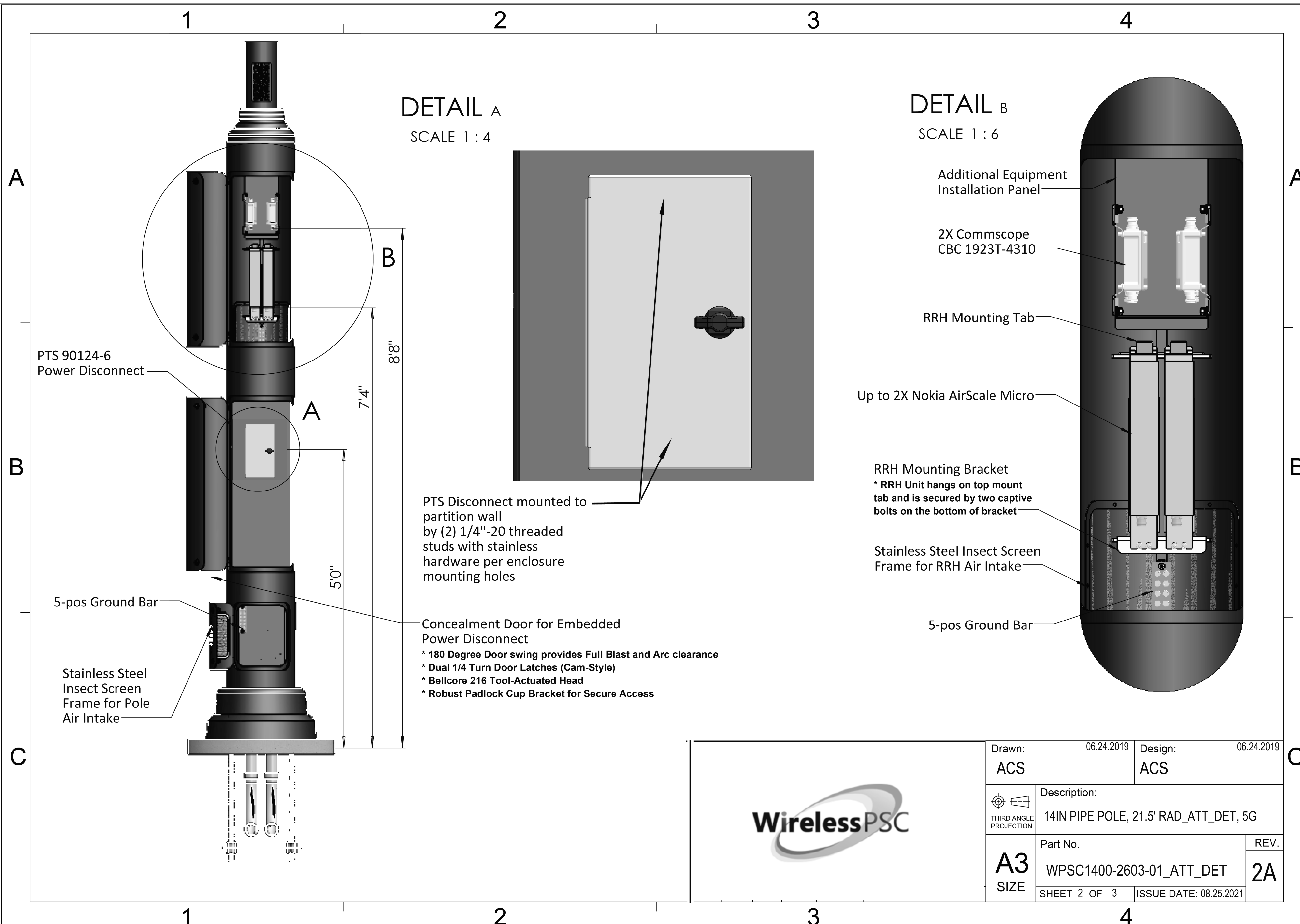
Detroit, Michigan

ORDER #:	TYPE:	DRAWING #:
REVISION:	REVISION DATE:	TSG011147
DRAWN: MAB	ORIGIN DATE: 12/12/18	PAGE: 2

THIS DRAWING, WHEN APPROVED, SHALL BECOME THE COMPLETE SPECIFICATION FOR THE MATERIAL TO BE FURNISHED BY HOLOPHANE ON THE ORDER NOTED ABOVE. A UNIT OF SIMILAR DESIGN MAY BE SUPPLIED, BUT ONLY AFTER APPROVAL BY THE CUSTOMER IN WRITING. ON POLE ORDERS AN ANCHOR BOLT TEMPLATE PRINT WILL BE SUPPLIED WITH EACH ANCHOR BOLT ORDER TO MATCH THE POLE PROVIDED. THIS PRINT IS THE PROPERTY OF HOLOPHANE AND IS LOANED SUBJECT TO RETURN UPON DEMAND AND UPON EXPRESS CONDITION THAT IT WILL NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO OUR INTERESTS, AND ONLY IN CONNECTION WITH MATERIAL FURNISHED BY HOLOPHANE.



	Drawn: ACS	06.24.2019	Design: ACS	06.24.2019
	Description: 14IN PIPE POLE, 21.5' RAD_ATT_DET, 5G			
A3 SIZE	Part No. WPSC1400-2603-01_ATT_DET		REV. 2A	
	SHEET 1 OF 3		ISSUE DATE: 08.25.2021	



DETAIL A
SCALE 1 : 4

DETAIL B
SCALE 1 : 6

PTS 90124-6
Power Disconnect

5-pos Ground Bar

Stainless Steel
Insect Screen
Frame for Pole
Air Intake

PTS Disconnect mounted to
partition wall
by (2) 1/4"-20 threaded
studs with stainless
hardware per enclosure
mounting holes

Concealment Door for Embedded
Power Disconnect
* 180 Degree Door swing provides Full Blast and Arc clearance
* Dual 1/4 Turn Door Latches (Cam-Style)
* Bellcore 216 Tool-Actuated Head
* Robust Padlock Cup Bracket for Secure Access

Additional Equipment
Installation Panel

2X Commscope
CBC 1923T-4310

RRH Mounting Tab

Up to 2X Nokia AirScale Micro

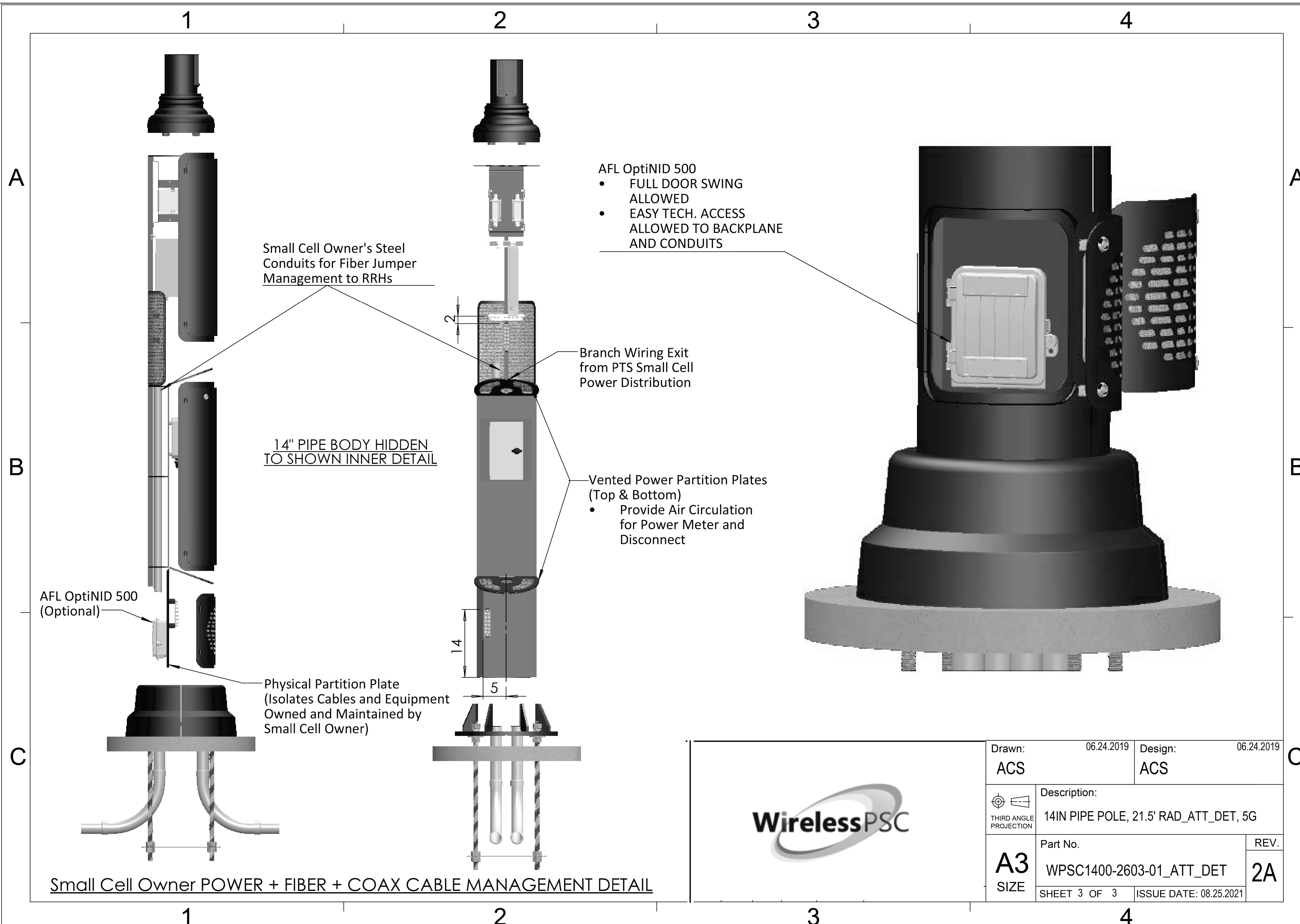
RRH Mounting Bracket
* RRH Unit hangs on top mount
tab and is secured by two captive
bolts on the bottom of bracket

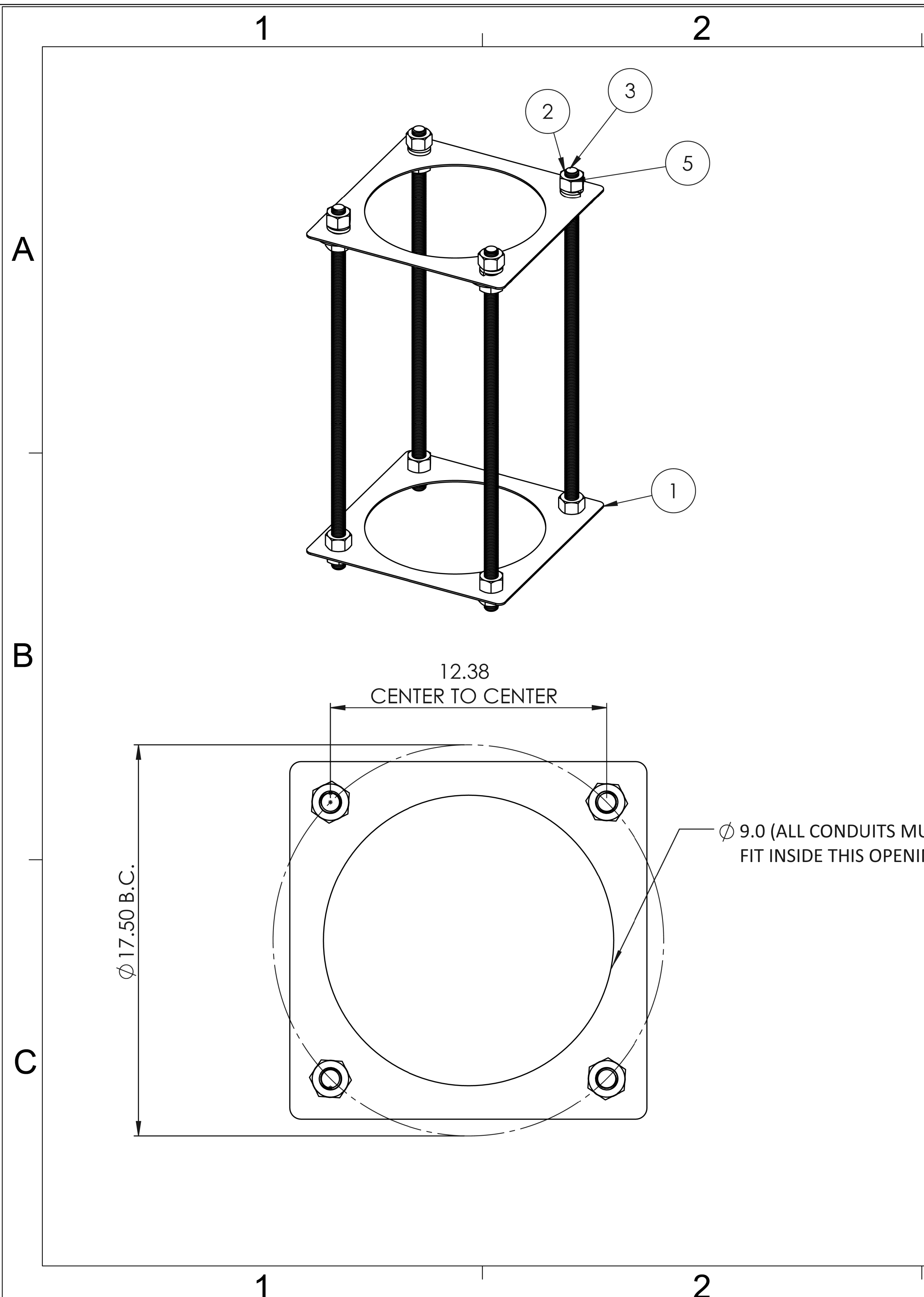
Stainless Steel Insect Screen
Frame for RRH Air Intake

5-pos Ground Bar

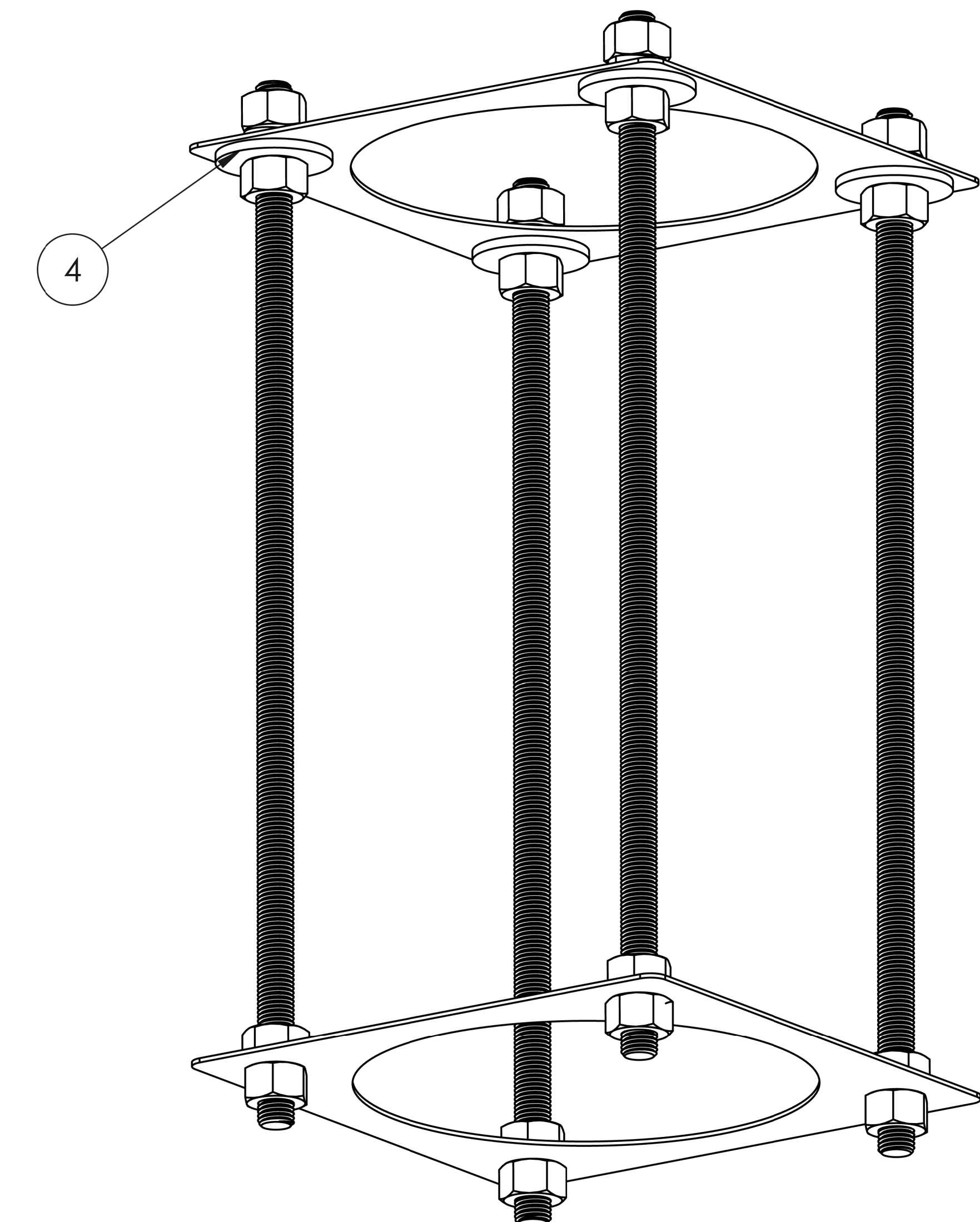


Drawn:	06.24.2019	Design:	06.24.2019
ACS		ACS	
Description:			
14IN PIPE POLE, 21.5' RAD_ATT_DET, 5G			
Part No.			REV.
WPSC1400-2603-01_ATT_DET			2A
SHEET 2 OF 3		ISSUE DATE: 08.25.2021	

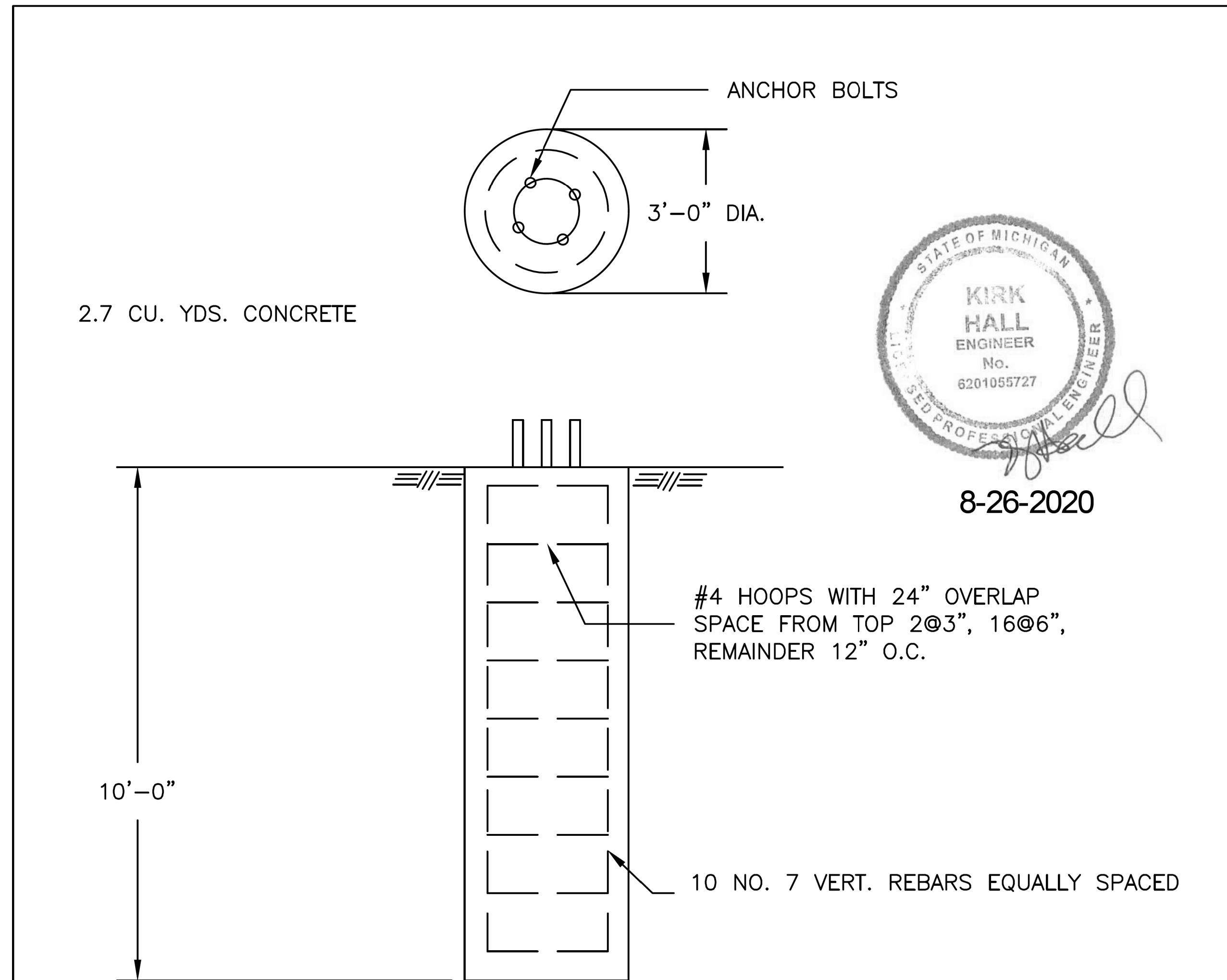




ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	TEMPLATE		2
2	93335A346	1"-8 X 36" L, Threaded Rod	4
3	91694A335	1" - 8 Heavy Hex Nut	16
4	98970A200	1" - 8 Thick, Oversized Washer	4
5	95160A270	1" SPLIT LOCK WASHER	4



	Drawn: 11.12.2018 ACS	Design: 11.12.2018 ACS
	Description: ANCHOR BOLT ASSEMBLY	
	Part No. A3 SIZE	REV. 0E
	SHEET 1 OF 1 ISSUE DATE: 01.09.2019	



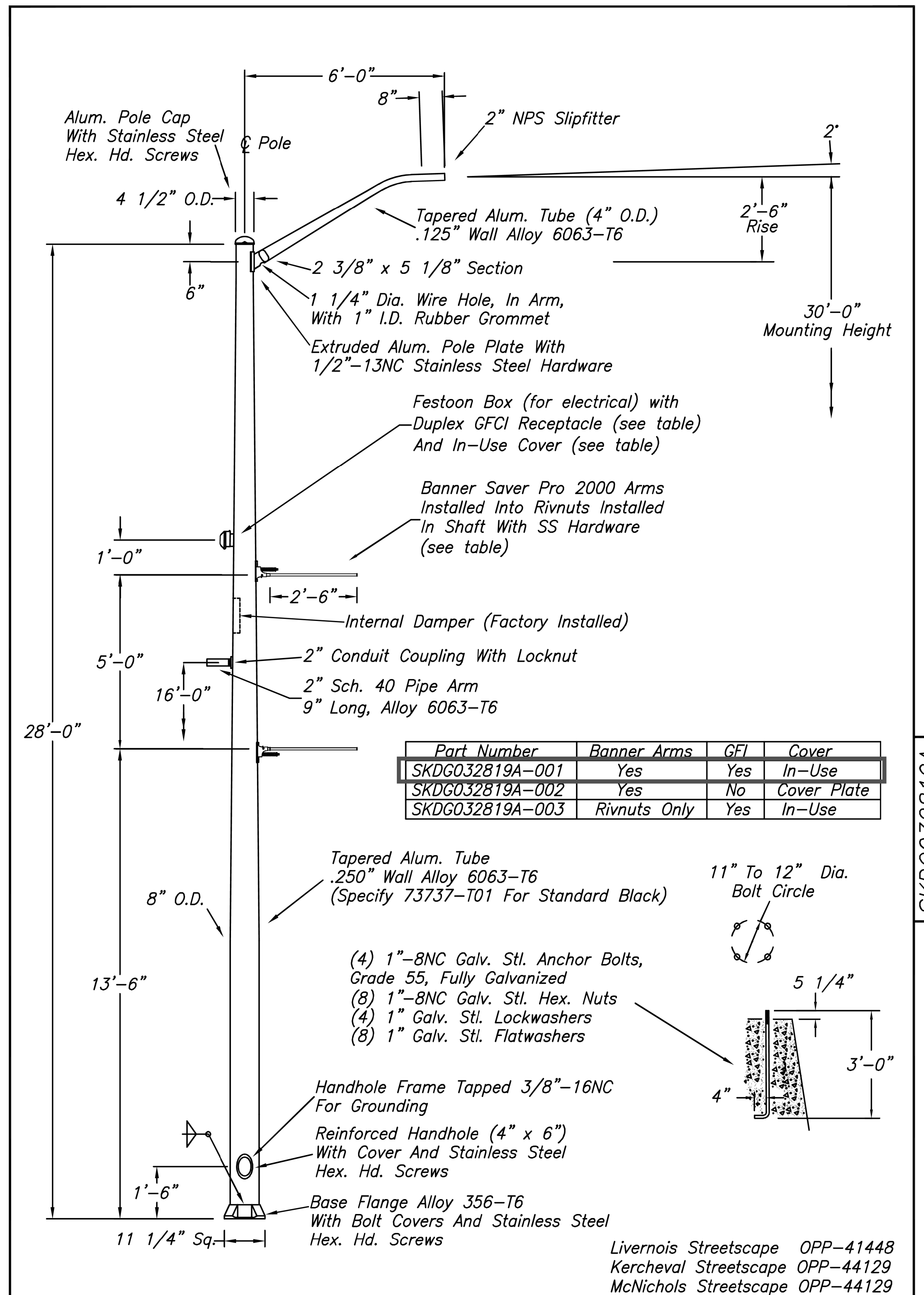
8-26-2020

BASE REACTIONS	
OTM:	40008.0 FT. LBS
SHEAR (3 LEGS)	1941.0 LBS
WT. NO ICE	2287.0 LBS
WT. 1" ICE	4552.0 LBS

GENERAL NOTES

1. CONCRETE TO HAVE 4500 PSI MIN. COMPRESSIVE STRENGTH AFTER 28 DAYS.
2. ALL REINFORCMENT STEEL IS DEFORMED AND MEETS THE STRENGTH REQUIREMENTS OF ASTM A615 GRADE 60.
3. EMBEDDED STEEL TO HAVE 3" MIN. CONCRETE COVER.
4. WORLD TOWER COMPANY WAS NOT PROVIDED WITH A SITE SPECIFIC SOILS REPORT. FOUNDATIONS DESIGNED FOR NORMAL DRY SOILS CONDITIONS IN ACCORDANCE WITH TIA-G. NO ALLOWANCE WAS MADE FOR SOFT SOILS, CORROSIVE SOILS, PEATS, ORGANICS, WATER, OR ROCK IN THE EXCAVATION(S).
5. SOIL PARAMETERS TO BE VERIFIED PRIOR TO CONSTRUCTION.

TITLE: FOUNDATION DETAIL 27.3' MONOPOLE FOR: WIRELESS PSC, LLC SITE: DETROIT WAYNE COUNTY, MI	WORLD TOWER			
	SCALE NONE	DWN. LKG	CKD.	DATE 8-25-20
	FILE	DWG. NO. Q200732F		



Part Number	Banner Arms	GFI	Cover
SKDGO32819A-001	Yes	Yes	In-Use
SKDGO32819A-002	Yes	No	Cover Plate
SKDGO32819A-003	Rivnuts Only	Yes	In-Use

- Tapered Alum. Tube
.250" Wall Alloy 6063-T6
(Specify 73737-T01 For Standard Black)
- 11" To 12" Dia. Bolt Circle
- (4) 1"-8NC Galv. Stl. Anchor Bolts, Grade 55, Fully Galvanized
- (8) 1"-8NC Galv. Stl. Hex. Nuts
- (4) 1" Galv. Stl. Lockwashers
- (8) 1" Galv. Stl. Flatwashers
- Handhole Frame Tapped 3/8"-16NC For Grounding
- Reinforced Handhole (4" x 6") With Cover And Stainless Steel Hex. Hd. Screws
- Base Flange Alloy 356-T6 With Bolt Covers And Stainless Steel Hex. Hd. Screws

Livernois Streetscape OPP-41448
 Kercheval Streetscape OPP-44129
 McNichols Streetscape OPP-44129

Ref: 33265, 52925

NO.	REVISIONS	DATE
1	Add Table And Project Notes (DG)	5.19

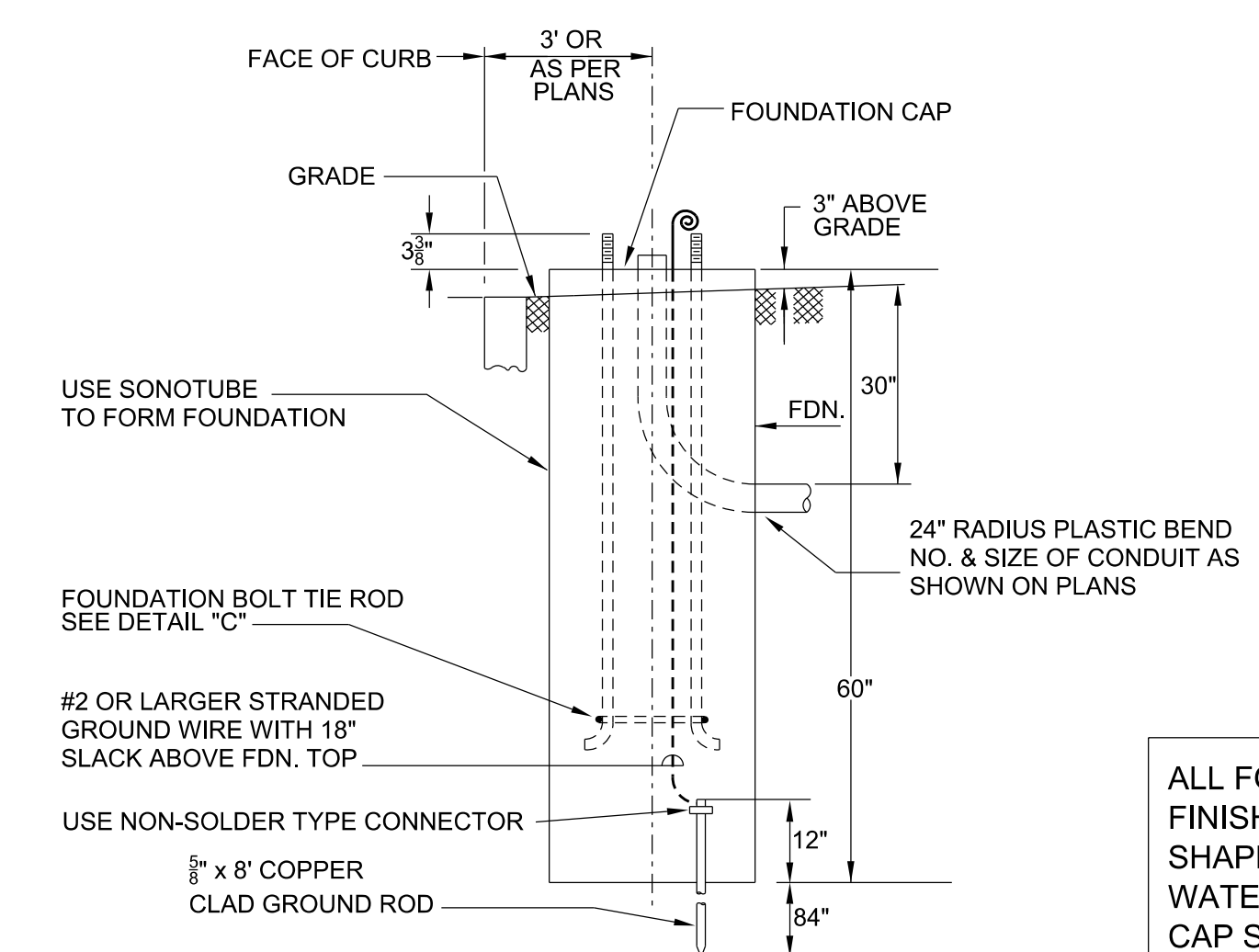
WARNING: DO NOT INSTALL LIGHTING POLES WITHOUT LUMINAIRES

hapco
Abingdon, Va.

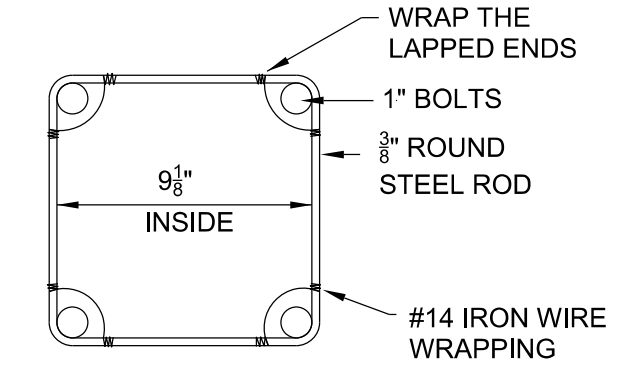
TITLE 30' Light Pole
 CUSTOMER PLA - Detroit -ELUS
 SCALE NTS DATE 3.28.19
 BY RDG DWG. NO.
 CHK'D SKDGO32819A

SKDGO32819A

ANCHOR BASE FOUNDATION PLAN
NOT TO SCALE



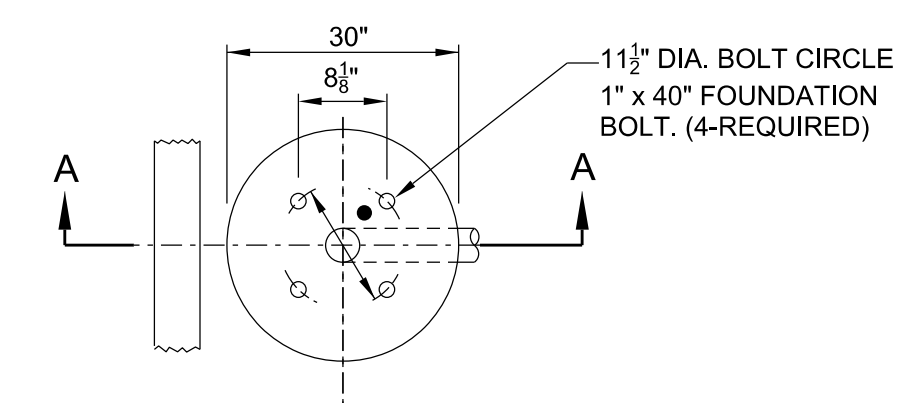
SECTION A-A



DETAIL "C"

ANCHOR BOLT TIE ROD

ALL FOUNDATION CAPS SHALL HAVE A SMOOTH FINISH WITH BEVELED EDGES & SHALL BE SHAPED TO ALLOW COMPLETE DRAINAGE OF WATER. ANCHOR BOLT PROJECTIONS ABOVE CAP SHALL BE CLEANED OF ALL CONCRETE & FULLY USABLE THEIR FULL LENGTH.



TOP VIEW



K804 CORONET SR. - LED

The K804 Coronet Sr. is a solid looking pendant designed to increase roadway performance while providing superior spacing. Suitable for off roadway applications as well, this time-less design can be used in both contemporary and historical settings. A 3/4 scaled version of this fixture is also available.



King Luminaire

PRODUCT SPECIFICATIONS

LED ENGINE

Light engine shall include an array of 60 or 84 solid state Cree X-Series high power LEDs (light emitting diodes). The emitters shall be mounted to a metal core circuit board using SMT technology. The LEDs and circuit boards shall then be mounted to a high performance heat sink which is vented to the outside ambient air to provide dynamic airflow for cooling the system.

OPTICS

External light control shall consist of high precision refractive lenses mounted above the LED emitter arrays in such a way to achieve optimum uplight control. The lenses shall also control horizontal light distribution so that Type II, III, IV or V IESNA distribution patterns are achieved.

LENS

The K804 Coronet Sr. pendant is available with or without a lens. Lens options include: clear sag glass lens; clear shallow glass lens; rippled acrylic deep dish lens or rippled glass deep dish lens. The sag and shallow glass lens shall be made of #9000 clear borosilicate glass (fully annealed). It shall maintain a minimum thickness of 0.3". The rippled acrylic deep dish globe shall be moulded of acrylic Acrylite Plus Acrylic Polymer, or equivalent, having a minimum thickness of 0.09". The rippled glass deep dish lens shall be made of clear borosilicate glass (fully annealed) with a rippled pattern. It shall maintain a minimum thickness of 0.25". The lens is secured by means of a cast aluminum holding ring. Additionally, a continuous circular gasket rated for 270°F will assist in sealing the lens and provide an IP66 ingress rating.

DECORATIVE BODY

The luminaire shall consist of an aluminum alloy 383 housing that acts as the enclosure for the engine and is of adequate thickness to give structural rigidity. The engine must be affixed to the inside of the housing with stainless steel screws.

PLUMBIZER

The K804 Coronet Sr. comes with multiple mounting options including the KPL10, KPL11, KPL20, KPL21, KPL30, KPL31 and KPL40. Please contact King Luminaire for more details and specifications.

DRIVER

The LED universal dimmable driver will be class 2 and capable of 120 - 277V or 347 - 480V input voltage, greater than 0.9 power factor, less than 20% total harmonic distortion. The case temperature of the driver can range from -40°C up to 70°C. Each LED system comes with a standard surge protection designed to withstand up to 20kV/10kA of transient line surge as per IEEE C62.41.2 C High. An in-line ferrite choke is utilized to provide protection against EFT's. The driver assembly will be mounted on a heavy duty fabricated aluminum bracket to allow complete tool-less maintenance. Dimming capable using 1-10vdc (10% to 100%), 10v PWM, or resistance.

PHOTOMETRICS

Fixtures are tested to IESNA LM79 specifications. These reports are available upon request.

CHROMATICITY

High output LEDs come standard at 3000K & 4000K (+/- 300K) with a minimum nominal 70 CRI. Additional CCT emitters are available upon request.

LUMEN MAINTENANCE

Reported (TM21) and Calculated (L70) reports are available upon request with a minimum calculated value of 100,000 hrs.

WIRING

All internal wiring and connections shall be completed so that it will be necessary only to attach the incoming supply connectors to Mate-N-Lok connectors or to a terminal block. Mate-N-Lok shall be certified for 600V operation. Internal wire connectors shall be crimp connector only and rated at 1000V and 150°C. All wiring to be CSA certified and/or UL listed, type SFF-2, SEWF-2, or SEW-2

No. 14 gauge, 150°C, 600V, and color coded for the required voltage.

THERMALS

Fixtures tested to DOE sanctioned standards to determine the maximum in-situ solder-point or junction-point temperatures of the LED emitters. This report is available upon request.

FINISH

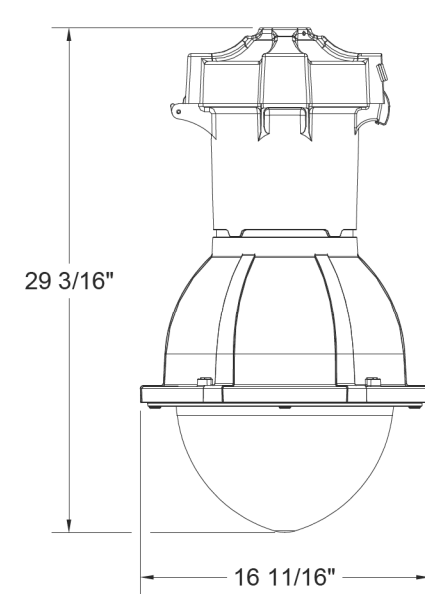
Housing is finished with a 13 step KingCoat™ SuperDurable polyester TGIC powder coat. Standard colors include strobe white, brown metal, marina blue, gate gray, Chicago bronze, standard gold, standard black, federal green and rain forest. Please see our website for a complete list of colors. RAL and custom color matches are available.

MISCELLANEOUS

All exterior hardware and fasteners, wholly or partly exposed, shall be stainless steel alloy. All internal fasteners are stainless steel or zinc coated steel. All remaining internal hardware is stainless steel, aluminum alloy, or zinc coated steel.

WARRANTY

The K804 Coronet Sr. LED luminaire comes with a 7 year limited warranty.



CERTIFICATION:

CSA US Listed
Suitable for wet locations
ISO 9001
IP66
ARRA Compliant
LM79 / LM80 Compliant

DRIVER INFO:

>0.9 Power Factor
<20% Total Harmonic Distortion
120 - 277V & 347 - 480V
-40°C Min. Case Temperature
70°C Max. Case Temperature
Surge Protection: ANSI C136.2
extreme level 20kV/10kA
Dimming Capable: 1-10vdc

EPA:

Flat Lens: 0.80 sq. ft.
Sag Lens: 0.86 sq. ft.
Shallow Lens: 1.05 sq. ft.
Deep Dish Acrylic: 1.30 sq. ft.
Deep Dish Glass: 1.30 sq. ft.

FIXTURE WEIGHT:

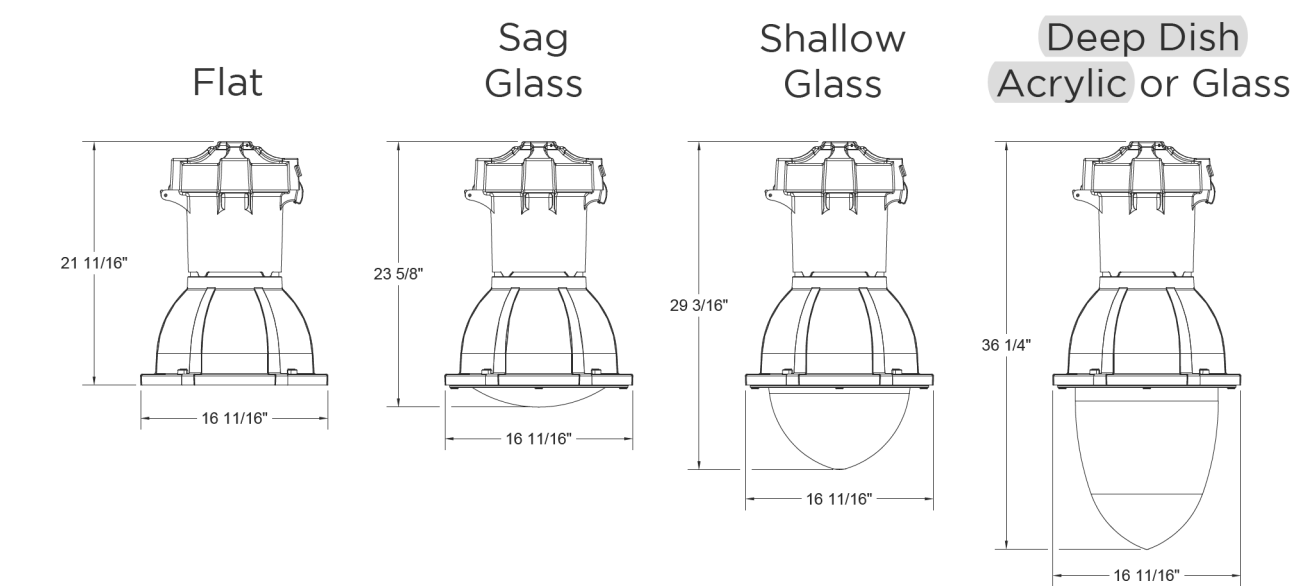
Flat Lens: 30 lbs
Sag Lens: 35 lbs
Shallow Lens: 38 lbs
Deep Dish Acrylic: 38 lbs
Deep Dish Glass: 43 lbs



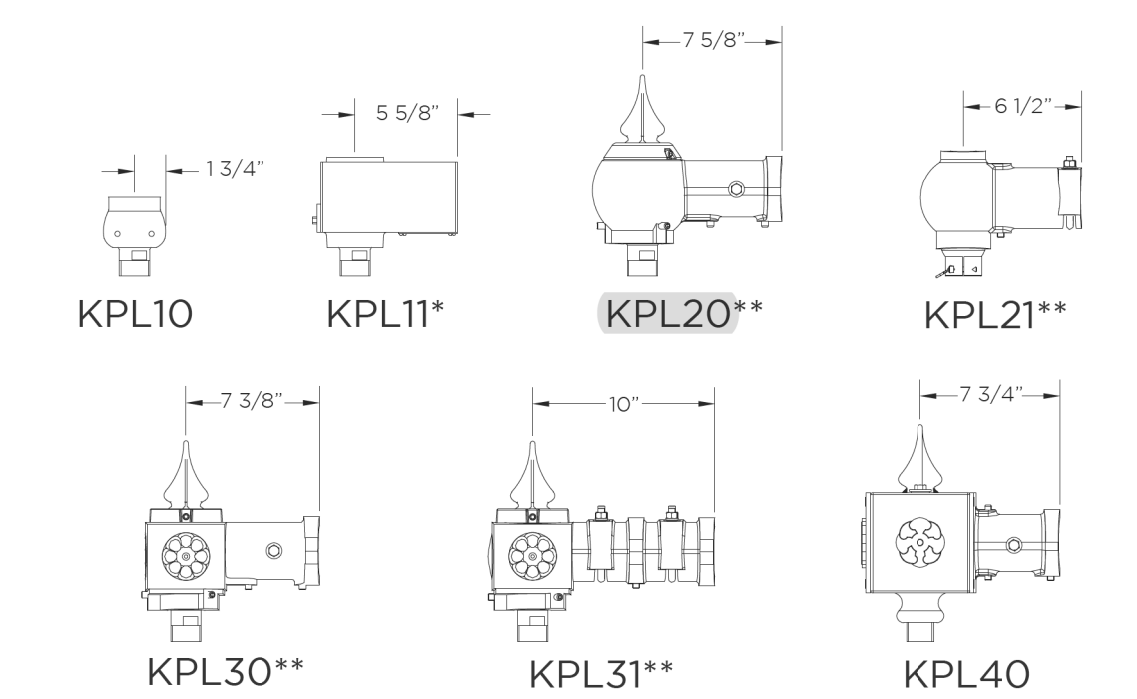
Not all product variations listed on this page are DLC qualified. Visit www.designlights.org search to confirm qualification. Contact King Luminaire for product specifications that are exempt from CSA Certification. 10-15-2020

FIXTURE OPTIONS

Lens Options



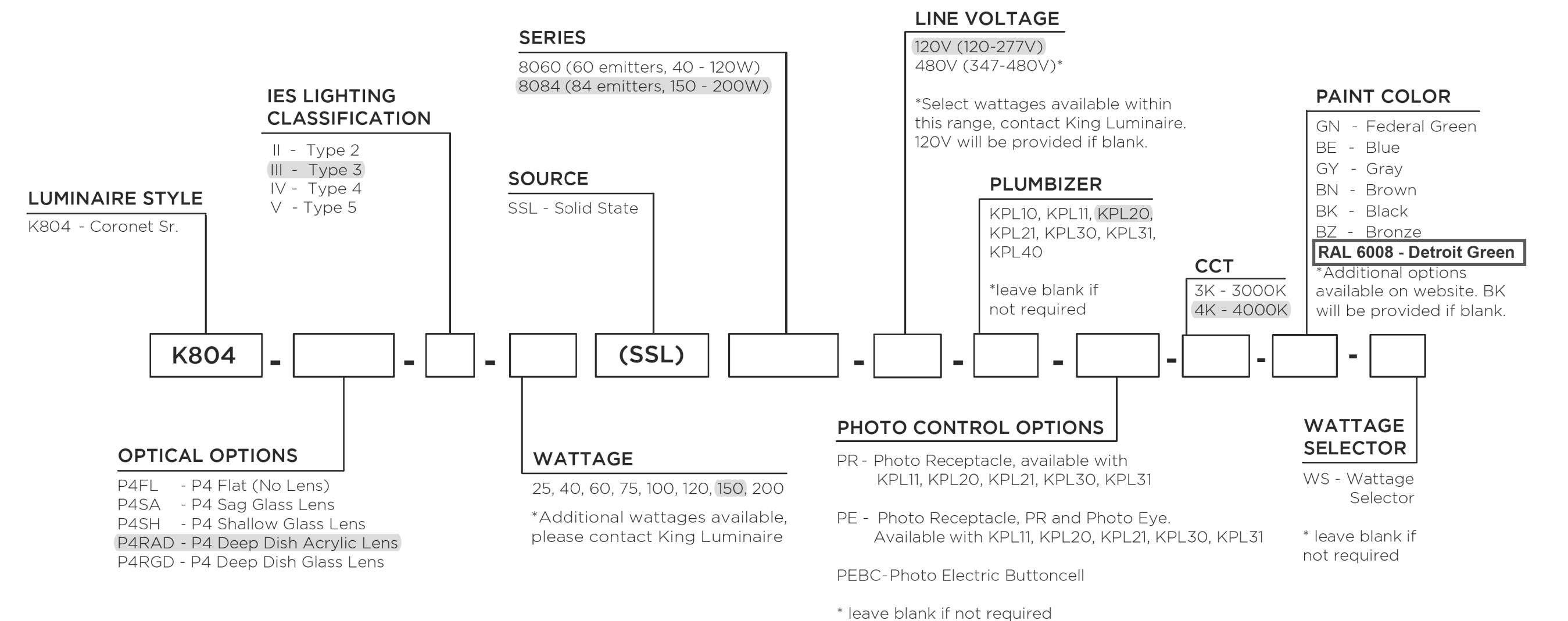
Plumbizer/Mounting Options



*Available with PR7
**Available with PR7 or finial

K804 CORONET SR. - LED

HOW TO ORDER



StressCrete GROUP

www.scgrp.com

King Luminaire

XSP Series

XSP2™ LED Street/Area Luminaire – Double Module – Version C

Product Description

Designed from the ground up as a totally optimized LED street and area lighting system, the XSP Series delivers incredible efficiency without sacrificing application performance. Beyond substantial energy savings and reduced maintenance, Cree achieves greater optical control with our NanoOptic® Precision Delivery Grid™ optic when compared to traditional cobra head luminaires. The XSP Series is the better alternative for traditional street and area lighting with quick payback and improved performance.

Applications: Roadway, parking lots, walkways and general area spaces

Performance Summary

NanoOptic® Precision Delivery Grid™ optic

Assembled in the U.S.A. of U.S. and imported parts

CRI: Minimum 70 CRI

CCT: 3000K (+/- 300K); 4000K (+/- 300K); 5700K (+/- 500K)

Limited Warranty*: 10 years on luminaire/10 years on Colorfast DeltaGuard® finish

* See <http://lighting.cree.com/warranty> for warranty terms

Accessories

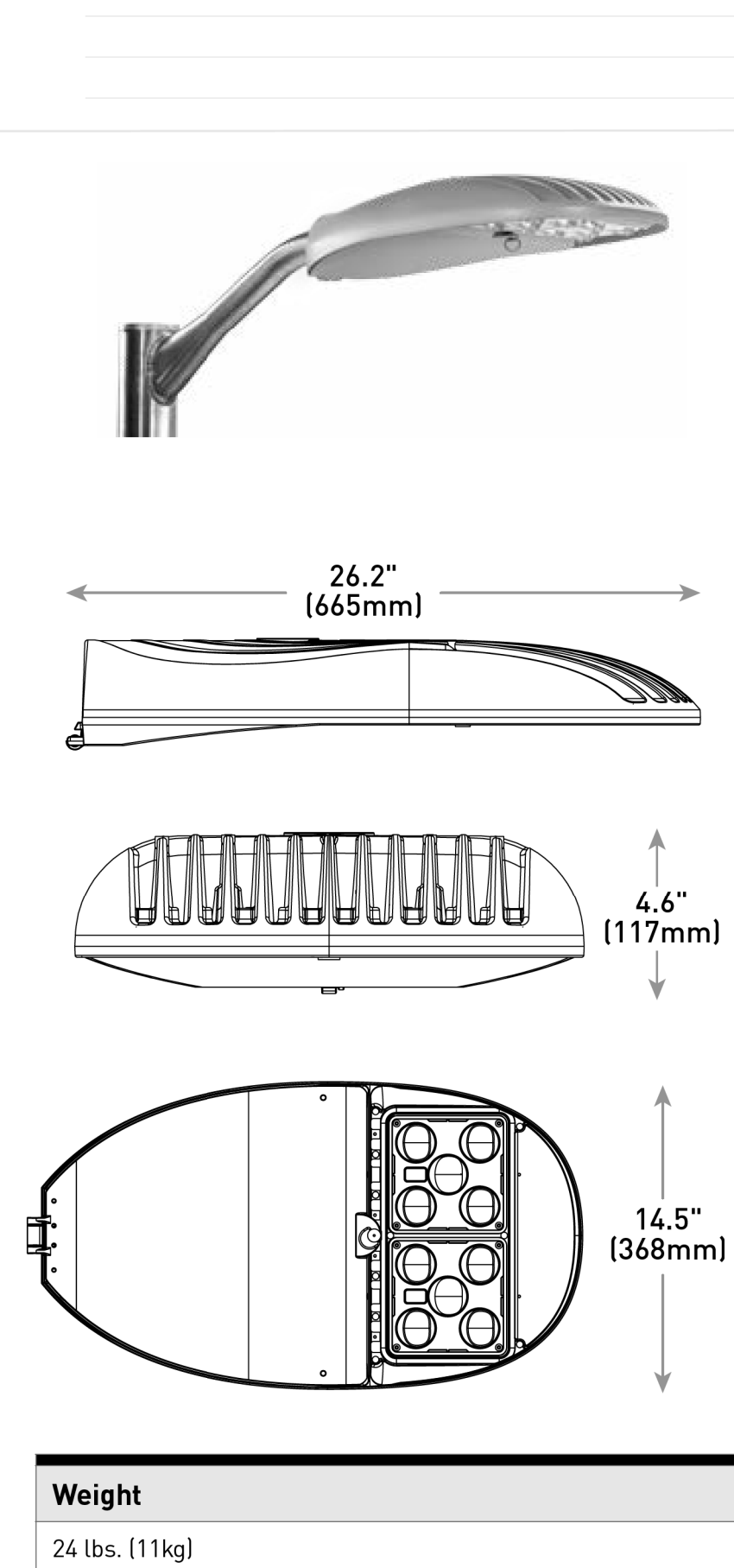
Field-Installed	
Backlight Control Shield XA-SP2BLS - Provides 1/2 mounting height cutoff	Bird Spikes XA-SP2BRD5PK

Ordering Information

Example: BXSP-C-HT-2ME-F-30K-UL-SV

BXSP	C	HT	Optic	F	CCT	Voltage	Color Options	Options
BXSP	C	HT Horizontal Tenon	2LG* Type II Long 2ME* Type II Medium 3ME* Type III Medium 4ME* Type IV Medium	F 139W	30K 3000K 40K 4000K 57K 5700K	UL Universal 120-277V UH Universal 347-480V	BK Black BZ Bronze SV Silver WH White	G Small Four Point Mounting - Mounts to 1.25" [32mm] IP, 1.66" [42mm] O.D. horizontal tenon J Large Four Point Mounting - Mounts to 2" [51mm] IP, 2.375" [60mm] O.D. horizontal tenon N-09/08/07/06/05/04 Utility Label, NEMA® 7-Pin Photocell Receptacle & Field Adjustable Output - Must select Q9, Q8, Q7, Q6, Q5 or Q4 - Settings Q3-Q1 are not available with N option - External wattage label per ANSI C136.15 based on Q setting selected - 7-pin receptacle per ANSI C136.41 - Factory connected 0-10V dim leads - Photocell and shorting cap by others - Power/lumens may only be adjusted down in the field - Refer to page 6 for power and lumen values Q9/Q8/Q7/Q6/Q5/Q4/Q3/Q2/Q1 Field Adjustable Output - Must select Q9, Q8, Q7, Q6, Q5, Q4, Q3, Q2, or Q1 - Power/lumens are fully adjustable in the field - Refer to page 6 for power and lumen values R NEMA® 7-Pin Photocell Receptacle - 7-pin receptacle per ANSI C136.41 - Factory connected 0-10V dim leads - Photocell and shorting cap by others UTL Utility Label - Includes exterior wattage label per ANSI C136.15 that indicates the maximum available wattage of the luminaire

* Available with Backlight Shield when ordered with field-installed accessory (see table above)



Weight
24 lbs. [11kg]

XSP2™ LED Street/Area Luminaire – Double Module – Version C

Product Specifications

CONSTRUCTION & MATERIALS

- Die cast aluminum housing
- Tool-less entry
- Mounts on 1.25" [32mm] IP, 1.66" [42mm] O.D. or 2" [51mm] IP, 2.375" [60mm] O.D. horizontal tenon (minimum 8" [203mm] in length) and is adjustable +/- 5° to allow for fixture leveling (includes two axis T-level to aid in leveling)
- Luminaire secures with two mounting bolts standard; optional four point mounting available
- Exclusive Colorfast DeltaGuard® finish features an E-Coat epoxy primer with an ultra-durable powder topcoat, providing excellent resistance to corrosion, ultraviolet degradation and abrasion. Black, bronze, silver and white are available
- Weight:** 24 lbs. [11kg]

ELECTRICAL SYSTEM

- Input Voltage:** 120-277V or 347-480V, 50/60Hz
- Power Factor:** > 0.9 at full load
- Total Harmonic Distortion:** < 20% at full load
- Class 1 driver
- Integral 10kV surge suppression protection standard
- When code dictates fusing, a slow blow fuse or type C/D breaker should be used to address inrush current
- Designed with 0-10V dimming capabilities. Controls by others
- 10V Source Current:** 0.15mA

REGULATORY & VOLUNTARY QUALIFICATIONS

- cULus Listed
- Suitable for wet locations
- Certified to ANSI C136.31-2001, 3G bridge and overpass vibration standards
- Meets CALTrans 611 Vibration testing
- 10kV surge suppression protection tested in accordance with IEEE/ANSI C62.41.2
- Meets FCC Part 15, Subpart B, Class A standards for conducted and radiated emissions
- Luminaire and finish endurance tested to withstand 5,000 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117
- Meets Buy American requirements within ARRA
- RoHS compliant. Consult factory for additional details
- Dark Sky Friendly, IDA Approved when ordered with 30K CCT. Please refer to <http://darksky.org/fsa/fsa-products/> for most current information

Electrical Data*								
Input Power Designator	System Watts 120-277V	System Watts 347-480V	Total Current (A)					
			120V	208V	240V	277V	347V	480V
F	139	135	1.22	0.68	0.59	0.52	0.40	0.29

* Electrical data at 25°C (77°F). Actual wattage may differ by +/- 10% when operating between 120-480V +/- 10%

XSP Series Version C Ambient Adjusted Lumen Maintenance¹

Ambient	Initial LMF	25K hr Projected ² LMF	50K hr Projected ² LMF	75K hr Calculated ³ LMF	100K hr Calculated ³ LMF
5°C (41°F)	1.04	1.02	1.01	1.00	0.99
10°C (50°F)	1.03	1.01	1.00	0.99	0.98
15°C (59°F)	1.02	1.00	0.99	0.98	0.97
20°C (68°F)	1.01	0.99	0.98	0.97	0.96
25°C (77°F)	1.00	0.98	0.97	0.96	0.95

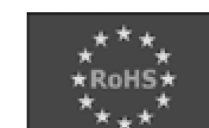
¹ Lumen maintenance values at 25°C (77°F) are calculated per TM-21 based on LM-80 data and in-situ luminaire testing. Luminaire ambient temperature factors (LATF) have been applied to all lumen maintenance factors

² In accordance with IESNA TM-21-11, Projected Values represent interpolated value based on time durations that are within six times [6X] the IESNA LM-80-08 total test duration (in hours) for the device under testing (DUT), i.e. the packaged LED chip

³ In accordance with IESNA TM-21-11, Calculated Values represent time durations that exceed six times [6X] the IESNA LM-80-08 total test duration (in hours) for the device under testing (DUT), i.e. the packaged LED chip



US: lighting.cree.com



T (800) 236-6800 F (262) 504-5415



Rev. Date: V7 10/19/2017



Canada: www.cree.com/canada

T (800) 473-1234 F (800) 890-7507

US: lighting.cree.com

T (800) 236-6800 F (262) 504-5415

Canada: www.cree.com/canada



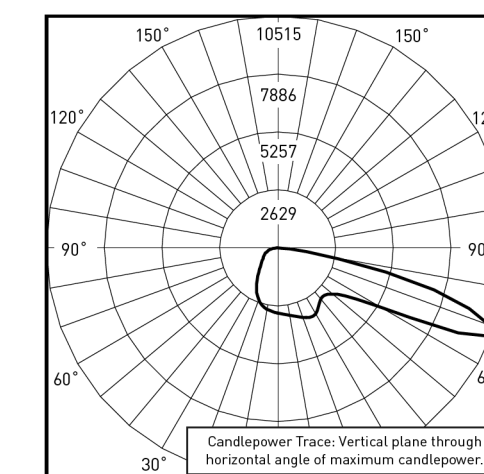
T (800) 473-1234 F (800) 890-7507

XSP2™ LED Street/Area Luminaire – Double Module – Version C

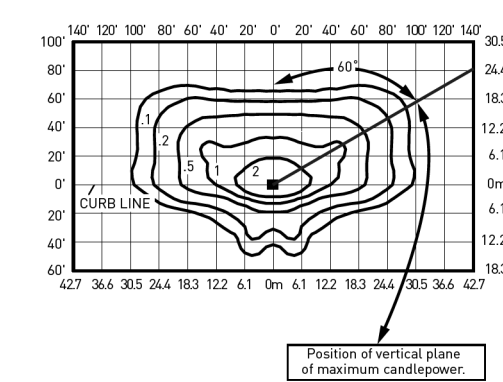
Photometry

All published luminaire photometric testing performed to IESNA LM-79-08 standards by a NVLAP accredited laboratory. To obtain an IES file specific to your project consult: <http://lighting.cree.com/products/outdoor/street-and-roadway/xsp-series-1>

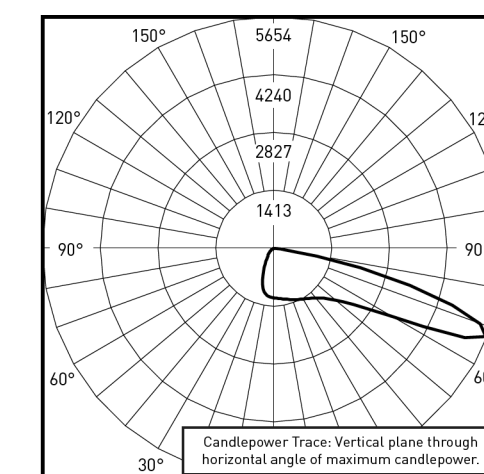
3ME



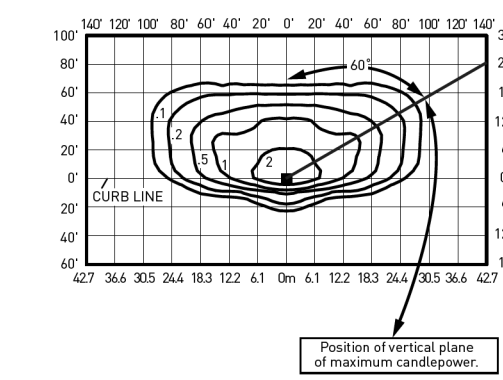
RESTL Test Report #: PL10532-001A
BXSP-C--3ME-F-40K-UL**
Initial Delivered Lumens: 13,408



BXSP-C--3ME-F-40K-UL**
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 13,434
Initial FC at grade



RESTL Test Report #: PL10388-002A
BXSP-C--3ME-F-40K-UL w/XA-SP1BLS**
Initial Delivered Lumens: 6,086



BXSP-C--3ME-F-40K-UL w/XA-SP2BLS**
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 11,195
Initial FC at grade

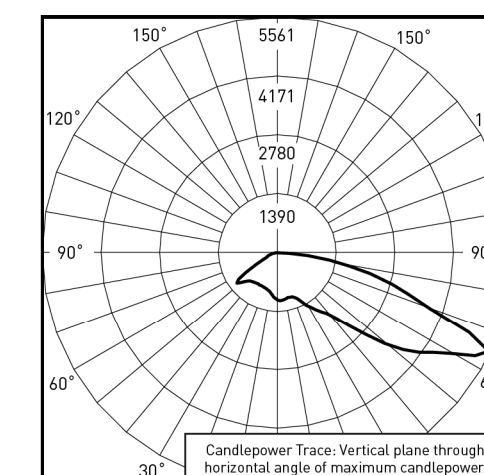
Type III Medium Distribution						
Input Power Designator	3000K		4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
F	11,011	B2 U0 G2	13,434	B2 U0 G3	14,095	B2 U0 G3

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens
 ** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: <https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf>

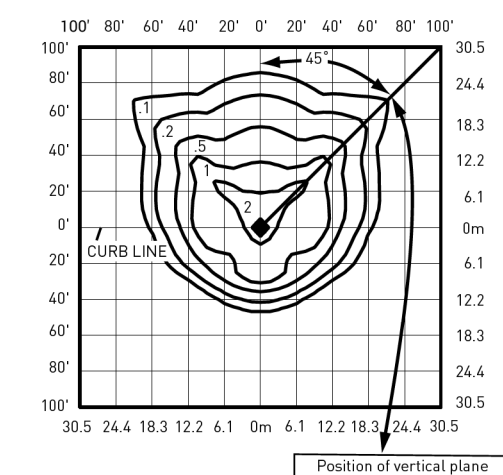
Type III Medium w/BLS Distribution						
Input Power Designator	3000K		4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
F	9,176	B1 U0 G2	11,195	B2 U0 G2	11,746	B2 U0 G2

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens
 ** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: <https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf>

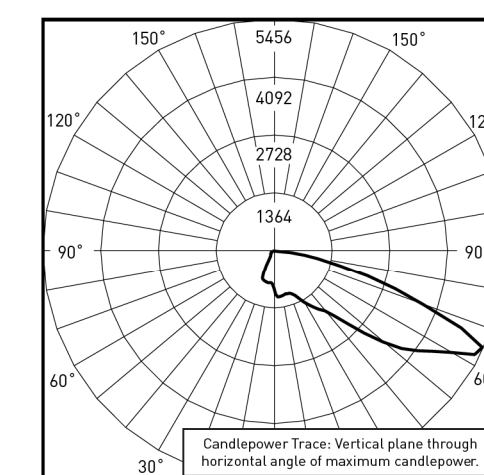
4ME



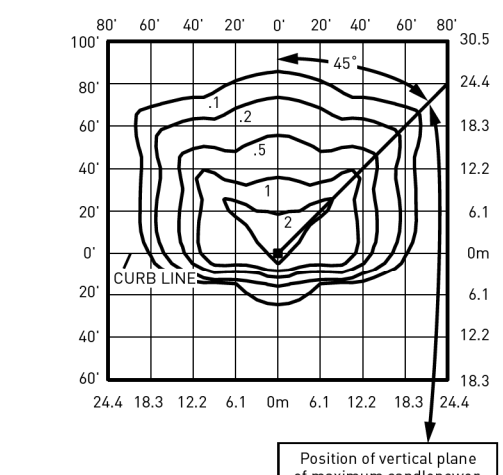
CESTL Test Report #: PL04091-001
BXSP-C--4ME-F-30K-UL**
Initial Delivered Lumens: 6,923



BXSP-C--4ME-F-30K-UL**
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 11,134
Initial FC at grade



CESTL Test Report #: PL04092-001
BXSP-C--4ME-F-30K-UL w/XA-SP1BLS**
Initial Delivered Lumens: 5,530



BXSP-C--4ME-F-30K-UL w/XA-SP2BLS**
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 8,687
Initial FC at grade

Type IV Medium Distribution						
Input Power Designator	3000K		4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
F	11,134	B2 U0 G2	13,583	B3 U0 G3	14,251	B3 U0 G3

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens
 ** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: <https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf>

Type IV Medium w/BLS Distribution						
Input Power Designator	3000K		4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
F	8,687	B1 U0 G2	10,598	B2 U0 G2	11,119	B2 U0 G2

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens
 ** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: <https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf>



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Canada: www.cree.com/canada T (800) 473-1234 F (800) 890-7507

SIMpull XHHW-2®

Aluminum XHHW Wire & Cable



600 Volt Alumaflex® Brand Aluminum Alloy (AA-8176) Conductor. Cross-linked Polyethylene (XLPE) Insulation. Moisture Resistant High Heat. Sunlight Resistant in Sizes 6 AWG and Larger. CT Rated in Sizes 1/0 AWG and Larger.

APPLICATIONS

Southwire SIMpull XHHW-2® aluminum conductors are primarily used in conduit or recognized raceways for service and feeder wiring as specified in the National Electrical Code. XHHW-2 conductors may be used in wet or dry locations at temperatures not to exceed 90°C. Voltage rating for XHHW-2 conductors is 600 volts. Suitable for use in Health Care Facilities per section 517.160 of the NEC where a dielectric constant of 3.5 or less may be specified. This product is designed to be installed without the application of pulling lubricant.



STANDARDS & REFERENCES

Southwire Aluminum Type XHHW-2 conductors comply with the following:

- ASTM- All Applicable Standards
- UL Standard 44
- NOM-ANCE 90° C
- Federal Specification A-A-59544
- National Electrical Code, NFPA 70
- NEMA WC-70 (ICEA S-95-658) Construction Requirements
- RoHS/Reach Compliant

CONSTRUCTION

Southwire Type XHHW-2 aluminum conductors are Alumaflex® brand AA-8000 series aluminum alloy, compact stranded. The insulation is an abrasion, moisture and heat resistant SIMpull® thermoset cross-linked polyethylene. Conductor sizes 6 AWG and larger are listed and marked sunlight resistant in all colors. Available in black, white, red, blue, brown, orange, yellow, purple, gray, and green. Some colors are subject to economic order quantity.

Revised March 12, 2018

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Conductor		Insulation Thickness (mils)	Nominal O.D. (mils)	Approx. Net Wt. Per 1000' (lbs.)	Allowable Ampacities+			Standard Package
Size (AWG or kcmil)	No. of strands				60°C	75°C	90°C	
8	7	45	227	30	35	40	45	BCD
6	7	45	259	39	40	50	55	BCD
4	7	45	303	57	55	65	75	BCD
2	6	45	358	85	75	90	100	BCD
1	8	55	413	108	85	100	115	BC
1/0	10	80	450	180	115	135	150	ABC
2/0	12	55	490	161	115	135	150	ABCD
3/0	16	55	537	198	130	155	175	BCD
4/0	19	55	589	243	150	180	205	ABCD
250	22	55	650	293	170	205	230	BCD
300	35	65	700	346	195	230	260	BC
350	35	65	746	398	210	250	280	BCD
400	35	65	789	449	225	270	305	CD
500	35	65	866	552	260	310	350	ABCDE
600	58	80	973	675	285	340	385	ABD
700	58	80	1037	777	315	375	425	N/A
750	58	80	1068	829	320	385	435	ABCE
900	58	80	1162	979	355	425	480	N/A
1000	58	80	1220	1085	375	445	500	C

+ Allowable Ampacities shown are for general use as specified by the National Electrical Code, Sections 310.15 and 240.4(D). Unless the equipment is marked for use at higher temperatures, the conductor ampacities shall be limited to the following per NEC 110.14(C): 60°C - When terminated to equipment for circuits rated 100 amperes or less marked for 14 through 1 AWG conductors. 75°C - When terminated to equipment for circuits rated over 100 amperes or marked for conductors larger than 1 AWG. 90°C - THHN dry locations and THWN wet or dry locations for ampacity adjustment purposes using NEC section 310.15.

Package Codes
A-500'
B-2,500'
C-1,000'
D-5,000'

RECOMMENDED SAMPLE SPECIFICATIONS:

Conductors shall be UL-listed Type XHHW-2, suitable for operation at 600 volts or less in wet or dry locations at temperatures not to exceed 90 °C. Conductors shall be annealed Alumaflex® brand aluminum alloy as manufactured by Southwire Company or approved equal.

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Conductor		
Size (AWG or kcmil)	No. of strands	Stock Numbers
8	7	Stock #: N/A
6	7	Stock #: BK:112706, BN:591209, OE:591210, YW:591211, GN:585321
4	7	Stock #: BK:112714, RD:591114, BE:591115, WE:591116, BN:591201, OE:591202, YW:591203, GN:585320
2	7	Stock #: BK:112722, BN:591213, OE:591214, YW:591215, GN:585319
1	18	Stock #: BK:112730, RD:591204, BE:591205, WE:591206, BN:591207, OE:591208, YW:591216, GN:585318, GY:596497
1/0	18	Stock #: BK:112748, RD:591284, BE:591285, WE:591286, BN:585291, OE:585292, YW:585293, GY:585294, GN:585290, PE:596423
2/0	18	Stock #: BK:112755, RD:591288, BE:591289, WE:591290, BN:585296, OE:585297, YW:585298, GY:585300, GN:585295, PE:596422
3/0	18	Stock #: BK:112763, RD:585302, BE:585303, WE:585304, BN:585305, OE:585306, YW:585308, GY:585309, GN:585301, PE:596421
4/0	18	Stock #: BK:112771, RD:585317, BE:585316, WE:585314, BN:585313, OE:585312, YW:585311, GY:585310, GN:567439, PE:592563
250	22	Stock #: BK:278341, RD:576390, BE:576391, WE:576392, BN:576385, OE:576386, YW:576387, GY:576388, GN:567440, PE:592468
300	35	Stock #: BK:278358, RD:576382, BE:576383, WE:576384, BN:576133, OE:576134, YW:576135, GY:576136, GN:576361, PE:593380
350	35	Stock #: BK:278366, RD:576378, BE:576379, WE:576380, BN:576374, OE:576375, YW:576376, GY:576377, GN:567437, PE:592562
400	35	Stock #: BK:278374, RD:576370, BE:576372, WE:576373, BN:576127, OE:576129, YW:576130, GY:576131, GN:567384, PE:593379
500	35	Stock #: BK:278382, RD:576367, BE:576368, WE:576369, BN:576362, OE:576364, YW:576365, GY:576366, GN:576394, PE:589196
600	58	Stock #: BK:278390, RD:576350, BE:576351, WE:576352, BN:576345, OE:576346, YW:576347, GY:576349, GN:567375, PE:589197
700	58	Stock #: BK:278408, RD:591293, BE:591294, WE:591295, BN:576341, OE:576342, YW:576343, GY:576344, GN:591296
750	58	Stock #: BK:278416, RD:592233, BE:592234, WE:592235, BN:567432, OE:567433, YW:567434, GY:567435, GN:567436, PE:592469
900	58	Stock #: BK:554059, BN:560445, OE:560446, YW:560447, GY:560448, PE:596424
1000	58	Stock #: BK:278424

Color Abbreviations
 BK-Black RD- Red BE-Blue WE-White BN-Brown
 OE-Orange YW- Yellow GY-Grey GN-Green PE-Purple

Revised March 12, 2018

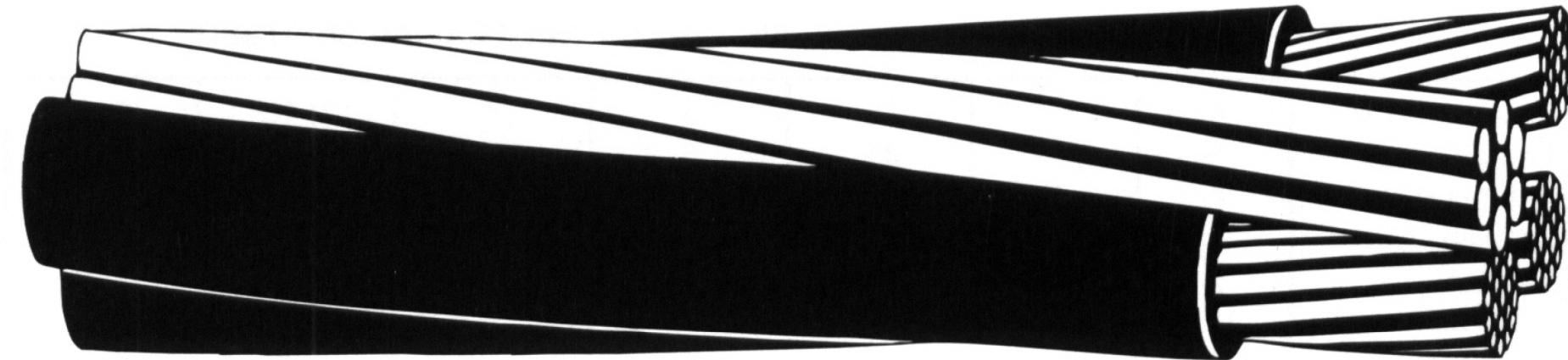
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Quadruplex Service Drop

Aluminum Conductors. Polyethylene or Crosslinked Polyethylene Insulation.



APPLICATIONS

Used to supply 3-phase power, usually from a pole-mounted transformer, to the user's service head where connection to the service entrance cable is made. To be used at voltages of 600 volts phase-to-phase or less and at conductor temperatures not to exceed 75°C for polyethylene insulated conductors or 90°C for crosslinked polyethylene (XLP) insulated conductors.

SPECIFICATIONS

Southwire's quadruplex service drop cable meets or exceeds the following ASTM specifications:

- B-230 Aluminum Wire, 1350-H19 for Electrical Purposes.
- B-231 Aluminum Conductors, Concentric-Lay-Stranded.
- B-232 Aluminum Conductors, Concentric-Lay-Stranded, Coated Steel Reinforced (ACSR).
- B-399 Concentric-Lay-Stranded, 6201-T81 Aluminum Alloy Conductors.
- B-901 Compressed Round Stranded Aluminum Conductors Using Single Input Wire.

Southwire's quadruplex service drop cable meets or exceeds all applicable requirements of ICEA S-76-474 .

CONSTRUCTION

Conductors are concentrically stranded, compressed 1350-H19 aluminum. Insulated with either polyethylene or crosslinked polyethylene (XLP). Neutral messengers are concentrically stranded 6201, AAC, or ACSR. Conductors are manufactured with ridges for phase identification (one conductor one ridge, one conductor two ridges, one conductor plain.)



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Quadruplex Service Drop

Code* Word	Phase Conductor			Bare Neutral Messenger			Weight Per 1000 ft.(lbs.)		Allowable Ampacities+		
	Size (AWG or kcmil)	Strand-ing	Insul. Thick. (mils)	Equiv. Dia. (AWG)++	Size++ (kcmil)	Strand-ing	Rated Strength (lbs).	XLP	POLY	XLP	POLY
6201 ALLOY NEUTRAL-MESSENGER											
Bay	6	1	45	6	30.58	7	1110	137	137	75	60
French Coach	6	7	45	6	30.58	7	1110	146	146	75	60
German Coach	4	1	45	4	48.69	7	1760	205	205	100	80
Arabian	4	7	45	4	48.69	7	1760	217	217	100	80
Belgian	2	7	45	2	77.47	7	2800	328	328	135	105
Shetland	1/0	9	60	1/0	123.3	7	4460	519	519	180	140
Thoroughbred	2/0	11	60	2/0	155.4	7	5390	639	639	205	160
Trotter	3/0	17	60	3/0	195.7	7	6790	789	789	235	185
Walking	4/0	18	60	4/0	246.9	7	8560	977	977	275	210

*Code words for XLP insulated products are formed by adding "/XLP" to the conventional code words above (e.g.-Bay/XLP).
 +Conductor temperature of 90°C for XLP, 75°C for Poly; ambient temperature of 40°C; emissivity 0.9; 2 ft./sec. wind in sun.
 ++Designated sizes are: ACSR 6/1 diameter equivalent and AAC with equivalent resistivity per ASTM B-399 for 6201.

Code* Word	Phase Conductor			Bare Neutral Messenger			Weight Per 1000 ft.(lbs.)		Allowable Ampacities+		
	Size (AWG or kcmil)	Strand-ing	Insul. Thick. (mils)	Size (AWG or kcmil)	Strand-ing	Rated Strength (lbs).	XLP	POLY	XLP	POLY	
AAC NEUTRAL-MESSENGER											
Clydesdale	4	1	45	4	7	881	198	198	100	80	
Pinto	4	7	45	4	7	881	211	211	100	80	
Mustang	2	7	45	2	7	1350	318	318	135	105	
Criollo	1/0	9	60	1/0	7	1990	503	503	180	140	
Percheron	2/0	11	60	2/0	7	2510	619	619	205	160	
Hanovarian	3/0	17	60	3/0	19	3310	764	764	235	185	
Oldenburg	4/0	18	60	4/0	19	4020	945	945	275	210	
Lippizaner	336.4	19	80	336.4	19	6146	1519	1519	370	280	

*Code words for XLP insulated products are formed by adding "/XLP" to the conventional code words above (e.g.-Bay/XLP).
 +Conductor temperature of 90°C for XLP, 75°C for Poly; ambient temperature of 40°C; emissivity 0.9; 2 ft./sec. wind in sun.



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Quadruplex Service Drop

Code* Word	Phase Conductor			Bare Neutral Messenger			Weight Per 1000 ft.(lbs.)		Allowable Ampacities+	
	Size (AWG or kcmil)	Strand-ing	Insul. Thick. (mils)	Size (AWG or kcmil)	Strand-ing	Rated Strength (lbs.)	XLP	POLY	XLP	POLY
ACSR NEUTRAL-MESSENGER										
Morochuca	6	1	45	6	6/1	1190	145	145	75	60
Chola	6	7	45	6	6/1	1190	153	153	75	60
Morgan	4	1	45	4	6/1	1860	217	217	100	80
Hackney	4	7	45	4	6/1	1860	229	229	100	80
Palomino	2	7	45	2	6/1	2850	347	347	135	105
Costena	1/0	9	60	1/0	6/1	4380	549	549	180	140
Grullo	2/0	11	60	2/0	6/1	5310	677	677	205	160
Suffolk	3/0	17	60	3/0	6/1	6620	837	837	235	185
Appaloosa	4/0	18	60	4/0	6/1	8350	1038	1038	275	210
Gelding	336.4	19	80	4/0	6/1	8350	1494	1494	370	280
Bronco	336.4	19	80	336.4	18/1	8680	1568	1568	370	280

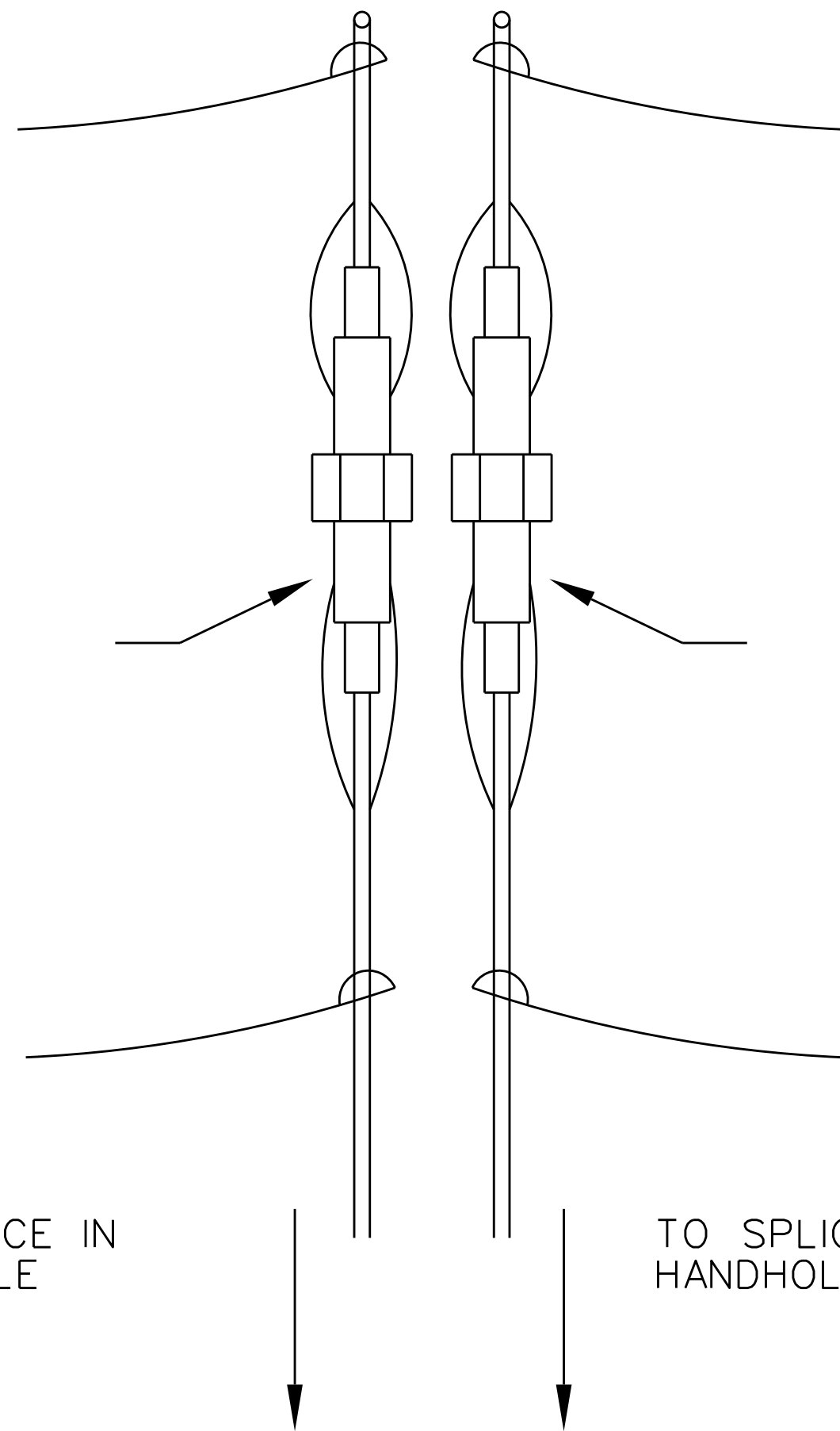
*Code words for XLP insulated products are formed by adding "/XLP" to the conventional code words above (e.g.-Bay/XLP).
 +Conductor temperature of 90°C for XLP, 75°C for Poly; ambient temperature of 40°C; emissivity 0.9; 2 ft./sec. wind in sun.

LAMP CORD
120V FEED
BLACK INSULATED
MINIMUM SIZE:
ALUMINUM 12 AWG
COPPER 14 AWG

LAMP CORD
INSTALL TRON-HEB FUSE
HOLDER WITH 5A FUSE.
FUSE TO BE CAPTIVE ON
LOAD END (LUMINAIRE).
INSULATE ENDS CAREFULLY.

STREET LIGHTING CIRCUIT
120V FEED
BLACK INSULATED
MINIMUM SIZE:
ALUMINUM 12 AWG
COPPER 14 AWG

TO SPLICE IN
HANDHOLE



RECEPTACLE CORD
120V FEED
BLACK INSULATED
MINIMUM SIZE 12 AWG
COPPER ONLY

RECEPTACLE CORD
INSTALL TRON-HEB FUSE
HOLDER WITH 3A FUSE.
FUSE TO BE CAPTIVE ON
LOAD END (RECEPTACLE).
INSULATE ENDS CAREFULLY.

RECEPTACLE CIRCUIT
120V FEED
BLACK INSULATED
MINIMUM SIZE:
ALUMINUM 10 AWG
COPPER 12 AWG

TO SPLICE IN
HANDHOLE

** ALL CABLES TO BE SIZED AT MINIMUM SIZE OR AS INDICATED ON PLANS
** ADDITIONAL LUMINAIRES REQUIRE ADDITIONAL FUSE HOLDERS

LUMINAIRE AND RECEPTACLE
120V POWER FEED
POLE BASE CONNECTION

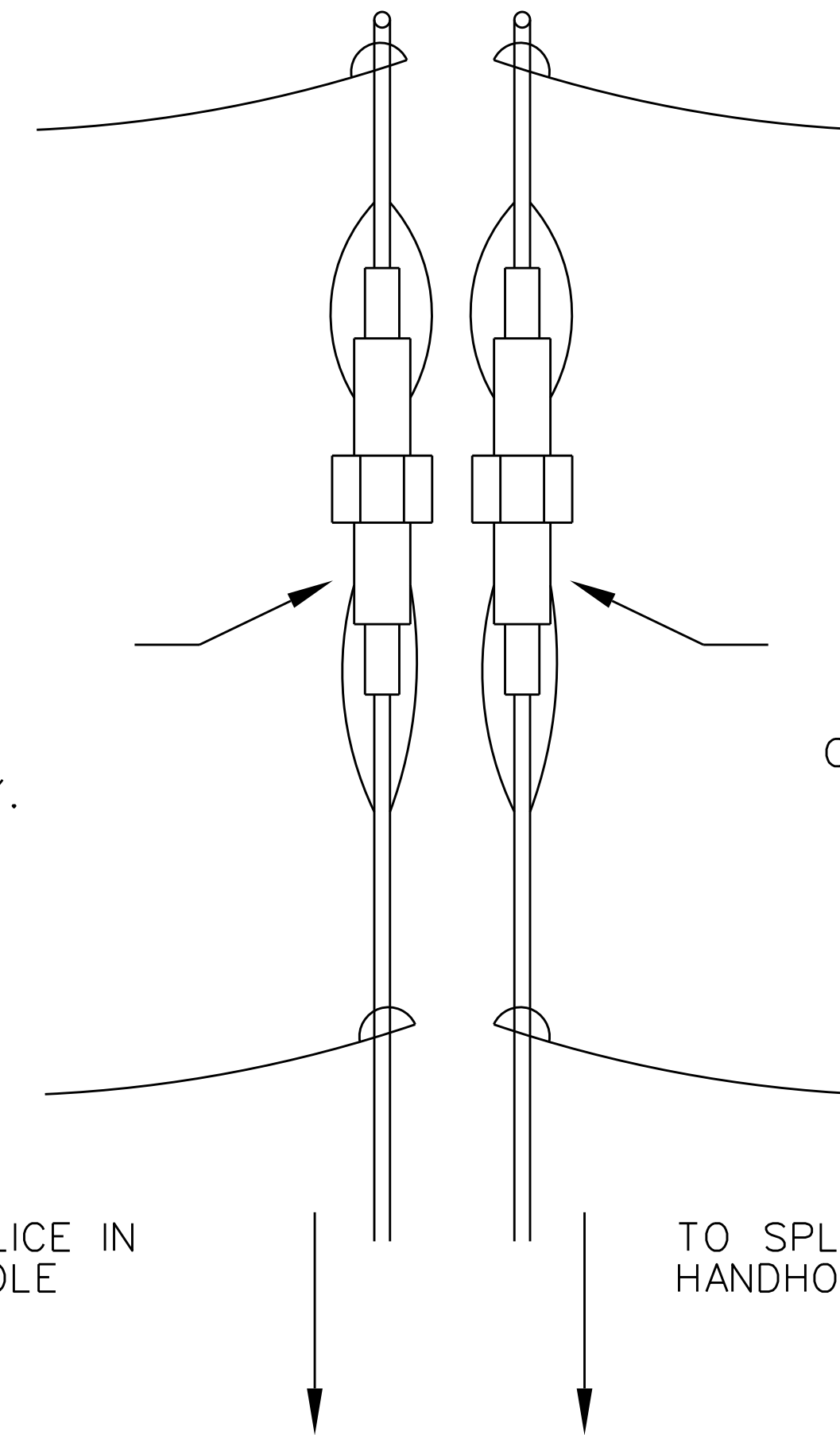
NOT TO SCALE

LAMP CORD
NEUTRAL
WHITE INSULATED
MINIMUM SIZE:
ALUMINUM 12 AWG
COPPER 14 AWG

LAMP CORD
INSTALL TRON-HEB FUSE
HOLDER WITH A DUMMY
"NEUTRAL". THE DUMMY
"NEUTRAL" TO BE CAPTIVE
ON LOAD END (LUMINAIRE).
INSULATE ENDS CAREFULLY.

STREET LIGHTING CIRCUIT
NEUTRAL
WHITE INSULATED
MINIMUM SIZE:
ALUMINUM 12 AWG
COPPER 14 AWG

TO SPLICE IN
HANDHOLE



RECEPTACLE CORD
NEUTRAL
WHITE INSULATED
MINIMUM SIZE 12 AWG
COPPER ONLY

RECEPTACLE CORD
INSTALL TRON-HEB FUSE
HOLDER WITH A DUMMY
NEUTRAL. THE DUMMY
NEUTRAL TO BE CAPTIVE
ON LOAD END (RECEPTACLE).
INSULATE ENDS CAREFULLY.

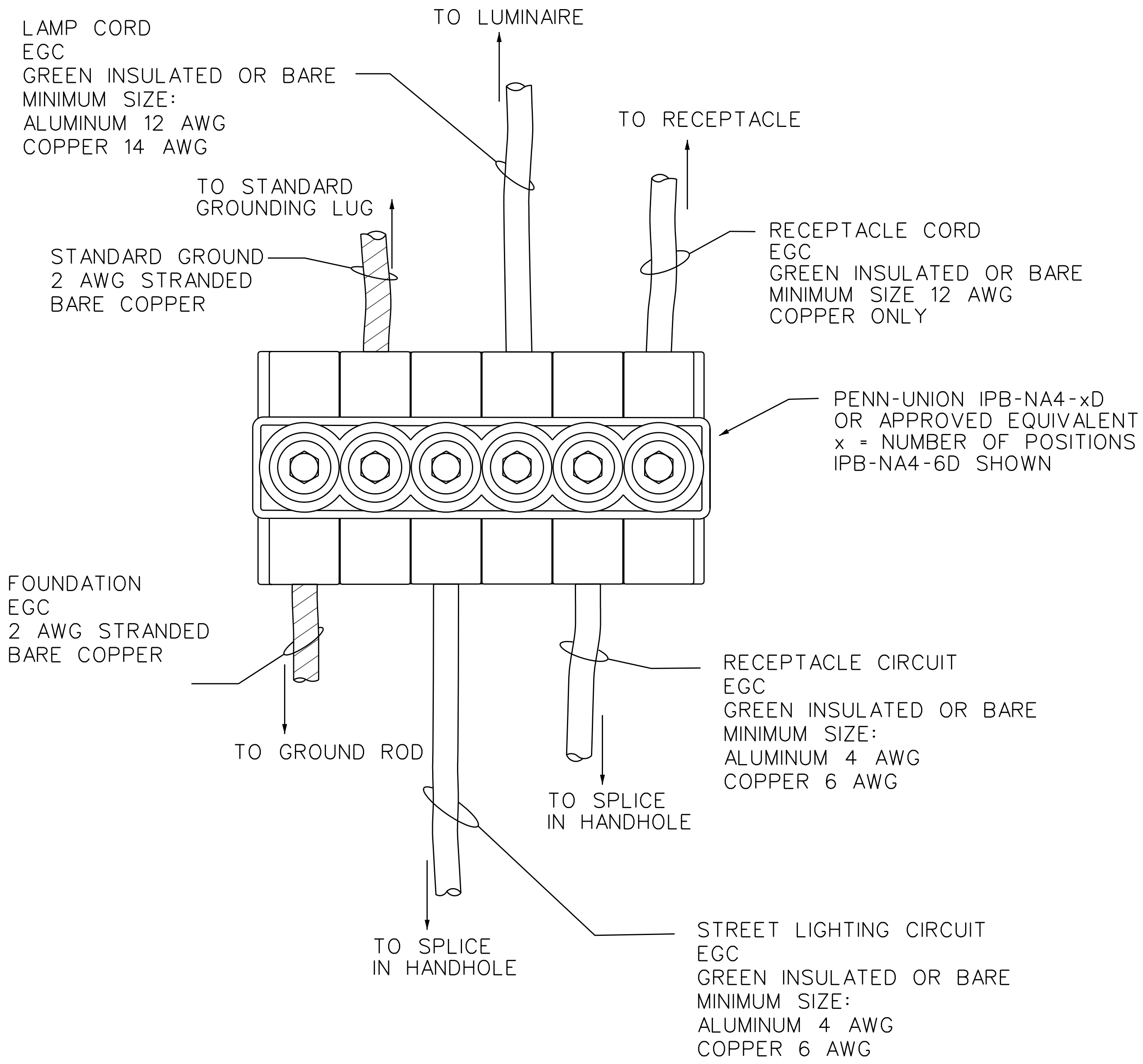
RECEPTACLE CIRCUIT
NEUTRAL
WHITE INSULATED
MINIMUM SIZE:
ALUMINUM 10 AWG
COPPER 12 AWG

TO SPLICE IN
HANDHOLE

** ALL CABLES TO BE SIZED AT MINIMUM SIZE OR AS INDICATED ON PLANS
** ADDITIONAL LUMINAIRES REQUIRE ADDITIONAL FUSE HOLDERS

LUMINAIRE AND RECEPTACLE
120V NEUTRAL
POLE BASE CONNECTION

NOT TO SCALE



** ALL CABLES TO BE SIZED AT MINIMUM SIZE OR AS INDICATED ON PLANS
 ** SIZE THE POWER BAR AS NEEDED FOR LUMINAIRES AND RECEPTACLE

EQUIPMENT GROUND CONDUCTOR (EGC) POLE BASE CONNECTION

NOT TO SCALE

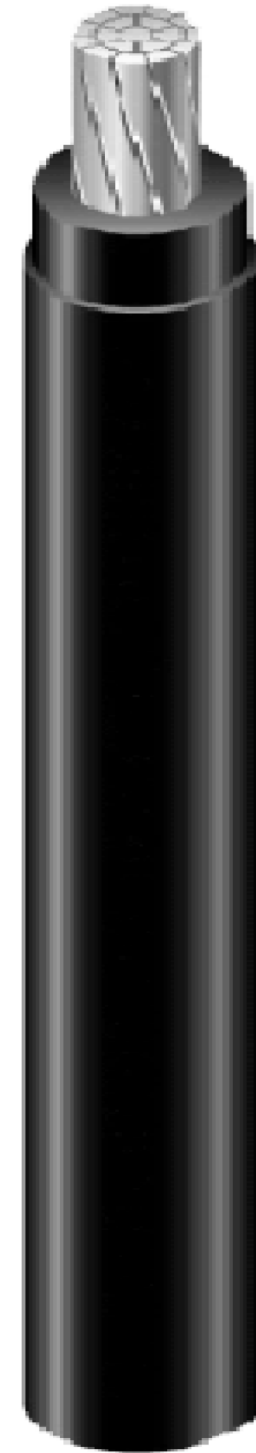
SIMpull THHN® Aluminum THHN Wire & Cable with Alumaflex® Brand Conductors



600 Volt Alumaflex® Brand Aluminum Alloy (AA-8176) Conductor. Thermoplastic Insulation/SIM Nylon Sheath, Heat, Moisture, Gasoline and Oil Sunlight Resistant. Also Rated THWN-2. SIM Technology® for Easier Pulling

APPLICATIONS

Southwire SIMpull THHN® Aluminum THHN Wire & Cable with Alumaflex® Brand conductors are primarily used in conduit and cable trays for services, feeders and branch circuits in commercial or industrial applications as specified in the 2011 National Electrical Code. When used as Type THHN or T90 Nylon conductor is suitable for use in dry locations at temperatures not to exceed 90°C. When used as Type THWN-2 or TWN75, conductor is suitable for use in wet or dry locations at temperatures not to exceed 90°C or not to exceed 75°C when exposed to oil or coolant. Voltage for all applications is 600 volts. This cable should be installed without application of pulling lubricant.



STANDARDS & REFERENCES

Southwire Aluminum SIMpull THHN® conductors comply with the following:

- ASTM B-800 and B-801
- UL Standard 83
- CSA
- Federal Specification A-A-59544
- VW-1 – Sizes 4 through 1 AWG
- CT - Sizes 1/0 AWG and larger Sizes Rated for CT use
- FT1 - Sizes 4 AWG through 750 kcmil
- T90 Nylon – Sizes 4 AWG through 750 kcmil
- TWN 75 – Sizes 8 AWG through 750 kcmil
- National Electrical Code, NFPA 70
- NEMA WC-70 Construction Requirements
- RoHS/Reach Compliant

CONSTRUCTION

Southwire SIMpull THHN® conductors are Alumaflex® Brand AA-8000 series aluminum alloy, compact stranded. Insulated with a tough heat and moisture-resistant polyvinyl chloride (PVC), over which a SIM (SLIKQWIK® Infused Membrane) nylon (polyamide) or UL-listed equal jacket is applied. Conductor sizes 1/0 AWG and larger are listed and marked sunlight resistant in colors. Available in black, white, red, blue,

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purple, green, yellow, orange, brown, and gray. Also available in striped configurations. Some colors are subject to economic order quantity.

Conductor		Insulation Thickness (mils)	Jacket Thickness (mils)	Nominal O.D. (mils)	Net Wt. Per 1000' (lbs.)	Allowable Ampacities+			Standard Package
Size (AWG or kcmil)	No. of strands					60°C	75°C	90°C	
8	7	30	5	204	27	35	40	45	B
6	7	30	5	239	38	40	50	60	C
4	7	40	6	305	62	55	65	75	BCD
2	6	40	6	360	91	75	90	100	BC
1	8	50	7	413	117	85	100	115	BC
1/0	10	50	7	450	141	100	120	135	BCD
2/0	12	50	7	490	172	115	135	150	BCD
3/0	16	50	7	537	210	130	155	175	BCD
4/0	19	50	7	589	257	150	180	205	BCD
250	22	60	8	656	311	170	205	230	ABC
300	35	60	8	706	365	190	230	255	BC
350	35	60	8	752	418	210	250	280	BC
400	35	60	8	795	471	225	270	305	BC
500	35	60	8	872	576	260	310	350	BC
600	58	70	9	971	700	285	340	385	BC
700	58	70	9	1035	804	310	375	420	C
750	58	70	9	1066	856	320	385	435	ABC
900	58	70	9	1139	1013	355	425	480	N/A
1000	58	70	9	1218	1117	375	445	500	N/A

+ Allowable Ampacities shown are for general use as specified by the National Electrical Code, Sections 310.15 and 240.4(D). Unless the equipment is marked for use at higher temperatures, the conductor ampacities shall be limited to the following per NEC 110.14(C): 60°C - When terminated to equipment for circuits rated 100 amperes or less marked for 14 through 1 AWG conductors. 75°C - When terminated to equipment for circuits rated over 100 amperes or marked for conductors larger than 1 AWG. 90°C - THHN dry locations and THWN wet or dry locations for ampacity adjustment purposes using NEC section 310.15.H17

Package Codes
A-500'
B-2,500'
C-1,000'
D-5,000'

RECOMMENDED SAMPLE SPECIFICATIONS:

Conductors shall be UL-listed Type THHN and THWN-2, suitable for operation at 600 volts, as specified in the National Electrical Code. Sizes 8 through 1 AWG shall be rated VW-1, larger sizes shall be rated for CT Use. Conductors shall be Alumaflex aluminum alloy, insulated with high-heat and moisture resistant PVC, jacketed with abrasion, moisture, gasoline, and oil resistant nylon or UL-listed equivalent as manufactured by Southwire Company or approved equal.

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Conductor		Stock Numbers
Size (AWG or kcmil)	No. of strands	
8	7	Stock #: N/A
6	7	Stock #: BK:563768, RD:573834, BE:573835, WE:578332, GN:566358
4	7	Stock #: BK:563769, RD:573544, BE:573833, WE:577628, GN:562211
2	7	Stock #: BK:563770, RD:573541, BE:573542, WE:563493, BN:587026, OE:587027, YW:587028, GY:578329, GN:562745
1	18	Stock #: BK:563771, RD:583155, BE:583156, WE:578328, BN:587023, OE:587024, YW:587025, GY:578327, GN:562746
1/0	18	Stock #: BK:562747, RD:562748, BE:562749, WE:562750, BN:562753, OE:562754, YW:562752, GY:562755, GN:562756, PE:573380
2/0	18	Stock #: BK:562212, RD:562214, BE:562621, WE:562213, BN:562758, OE:562759, YW:562757, GY:562760, GN:562761, PE:573370
3/0	18	Stock #: BK:562663, RD:562665, BE:562666, WE:562664, BN:562763, OE:562764, YW:562762, GY:562765, GN:562766, PE:573371
4/0	18	Stock #: BK:562671, RD:562673, BE:562674, WE:562672, BN:561805, OE:561806, YW:561807, GY:562767, GN:562768, PE:573372
250	22	Stock #: BK:560444, RD:562626, BE:562627, WE:562625, BN:561863, OE:561864, YW:561865, GY:561866, GN:561867, PE:573373
300	35	Stock #: BK:562667, RD:562669, BE:562670, WE:562668, BN:562771, OE:562772, YW:562770, GY:562773, GN:562774, PE:573374
350	35	Stock #: BK:560443, RD:562623, BE:562624, WE:562622, BN:561858, OE:561859, YW:561861, GY:561862, GN:562775, PE:573375
400	35	Stock #: BK:562677, RD:562776, BE:562778, WE:562779, BN:562781, OE:562782, YW:562780, GY:562783, GN:562699, PE:573376
500	35	Stock #: BK:560442, RD:562696, BE:562697, WE:562698, BN:561853, OE:561854, YW:561855, GY:561856, GN:561857, PE:573377
600	58	Stock #: BK:560441, RD:562630, BE:562631, WE:562628, BN:561847, OE:561848, YW:561849, GY:561850, GN:561851, PE:573379
700	58	Stock #: BK:562689, RD:562690, BE:562691, WE:562692, BN:561843, OE:561844, YW:561846, GY:562693
750	58	Stock #: BK:562632, RD:562634, BE:562635, WE:562633, BN:561838, OE:561839, YW:561840, GY:561841, GN:561842, PE:573481
900	58	Stock #: BK:562679, RD:562681, BE:562682, WE:562683, BN:561782, OE:561783, YW:561785, GY:561786, GN:562684
1000	58	Stock #: BK:562680, BN:564280, OE:564281, YW:564282, GY:564283

Color Abbreviations					
BK-Black	RD-Red	BE-Blue	WE-White	BN-Brown	
	OE-Orange	YW-Yellow	GY-Grey	GN-Green	

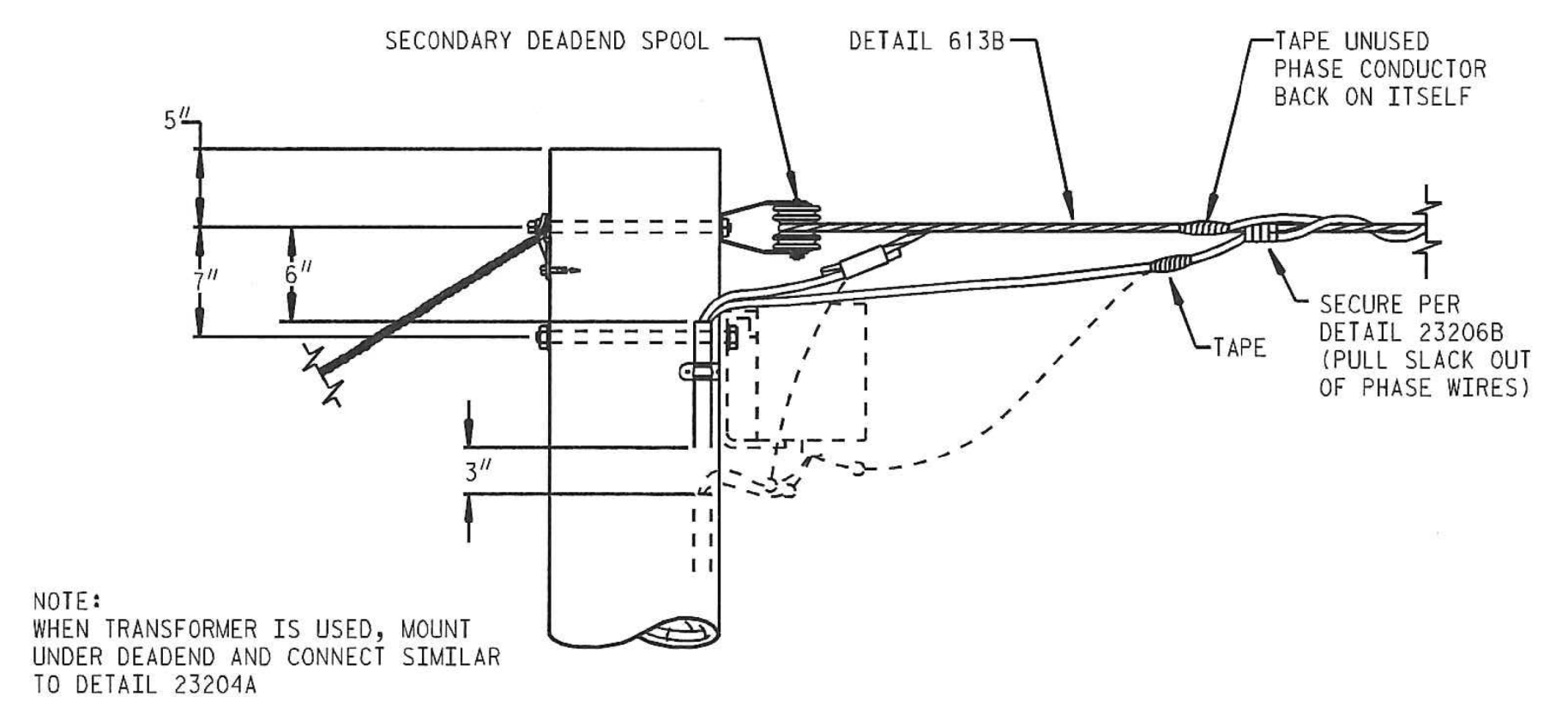
Revised March 12, 2018

The Power of Connections.™



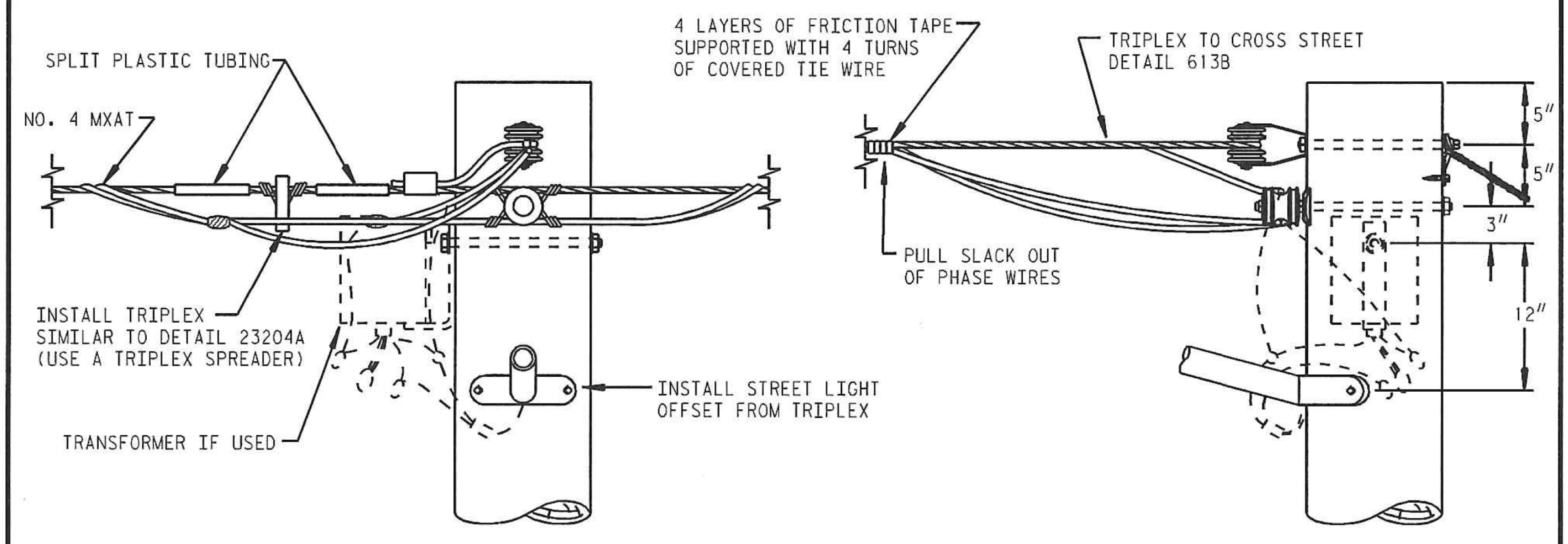
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One Southwire Drive, Carrollton, GA 30119, USA

23-STREET LIGHTING



NOTE:
WHEN TRANSFORMER IS USED, MOUNT UNDER DEADEND AND CONNECT SIMILAR TO DETAIL 23204A

DEADEND POLE
DETAIL 23206A

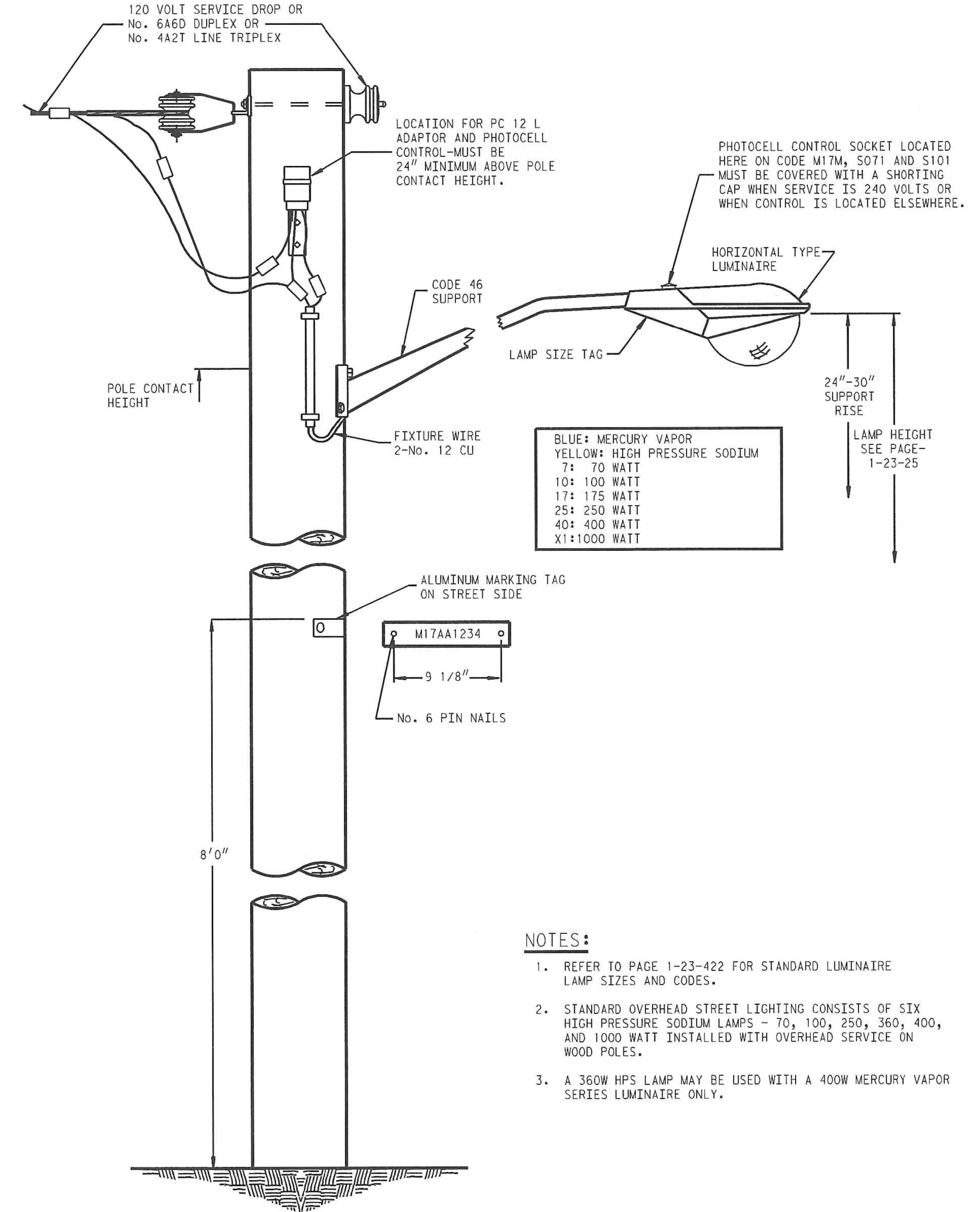


TRIPLEX TEE FEED
DETAIL 23206B

120 OR 240 VOLT CIRCUIT
NO. 4A2T LINE TRIPLEX

N:\DGN\JG1123206.DGN
JUN-08-2000 DKR/RUSSELL REVIEWED 10/2002

23-STREET LIGHTING



BLUE:	MERCURY VAPOR
YELLOW:	HIGH PRESSURE SODIUM
7:	70 WATT
10:	100 WATT
17:	175 WATT
25:	250 WATT
40:	400 WATT
X1:	1000 WATT

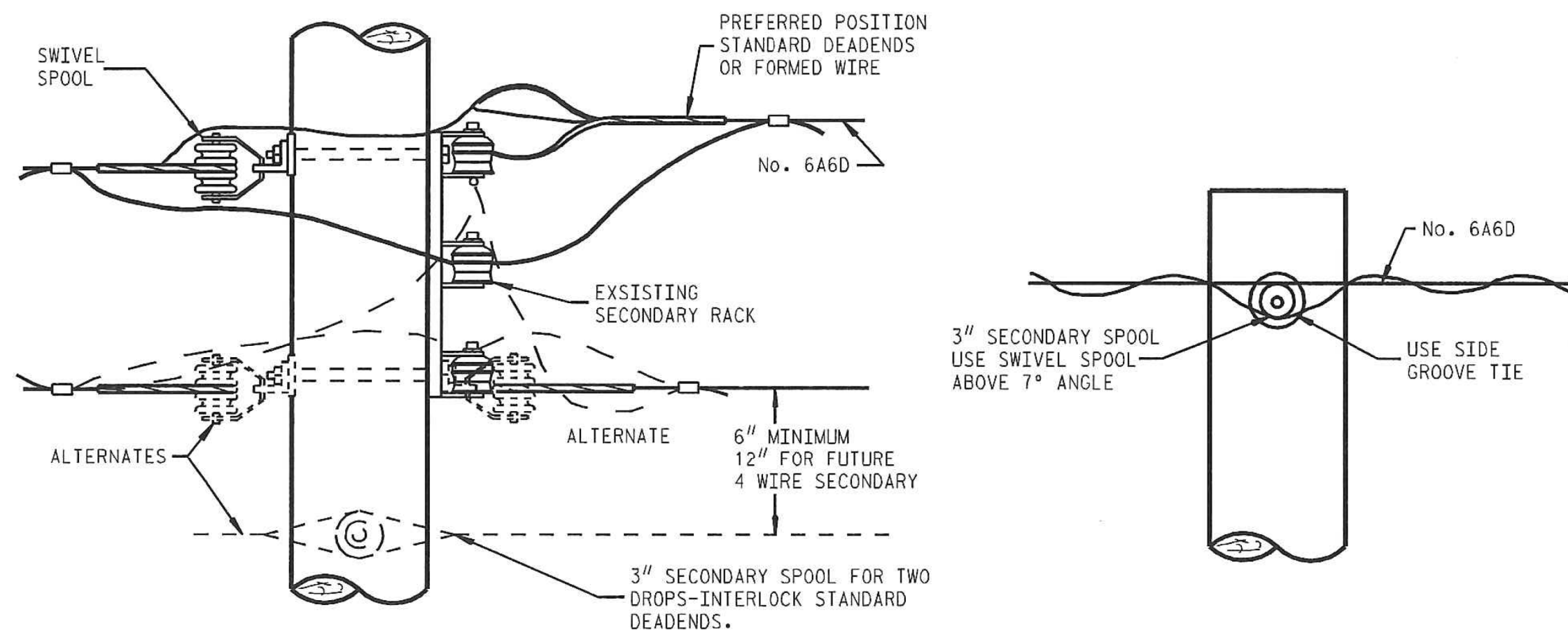
- NOTES:
- REFER TO PAGE 1-23-422 FOR STANDARD LUMINAIRE LAMP SIZES AND CODES.
 - STANDARD OVERHEAD STREET LIGHTING CONSISTS OF SIX HIGH PRESSURE SODIUM LAMPS - 70, 100, 250, 360, 400, AND 1000 WATT INSTALLED WITH OVERHEAD SERVICE ON WOOD POLES.
 - A 360W HPS LAMP MAY BE USED WITH A 400W MERCURY VAPOR SERIES LUMINAIRE ONLY.

REFER TO PG. 1-23-236 FOR POLE SETTING AND RAKING

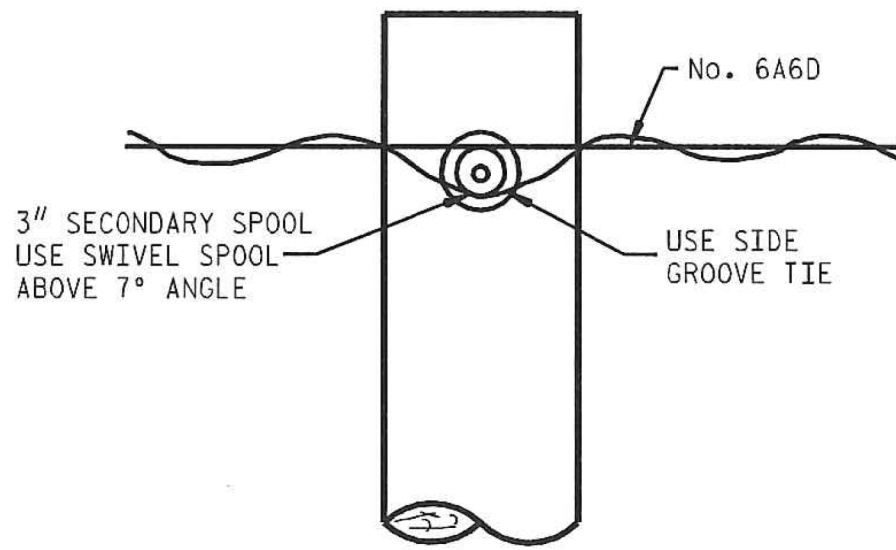
STANDARD OVERHEAD
STREET LIGHT INSTALLATION

DETROIT, MICHIGAN
C:\DGN\123201.DGN (120,17)
FEB-08-1998 TRH/RERING REVIEWED 10/2002

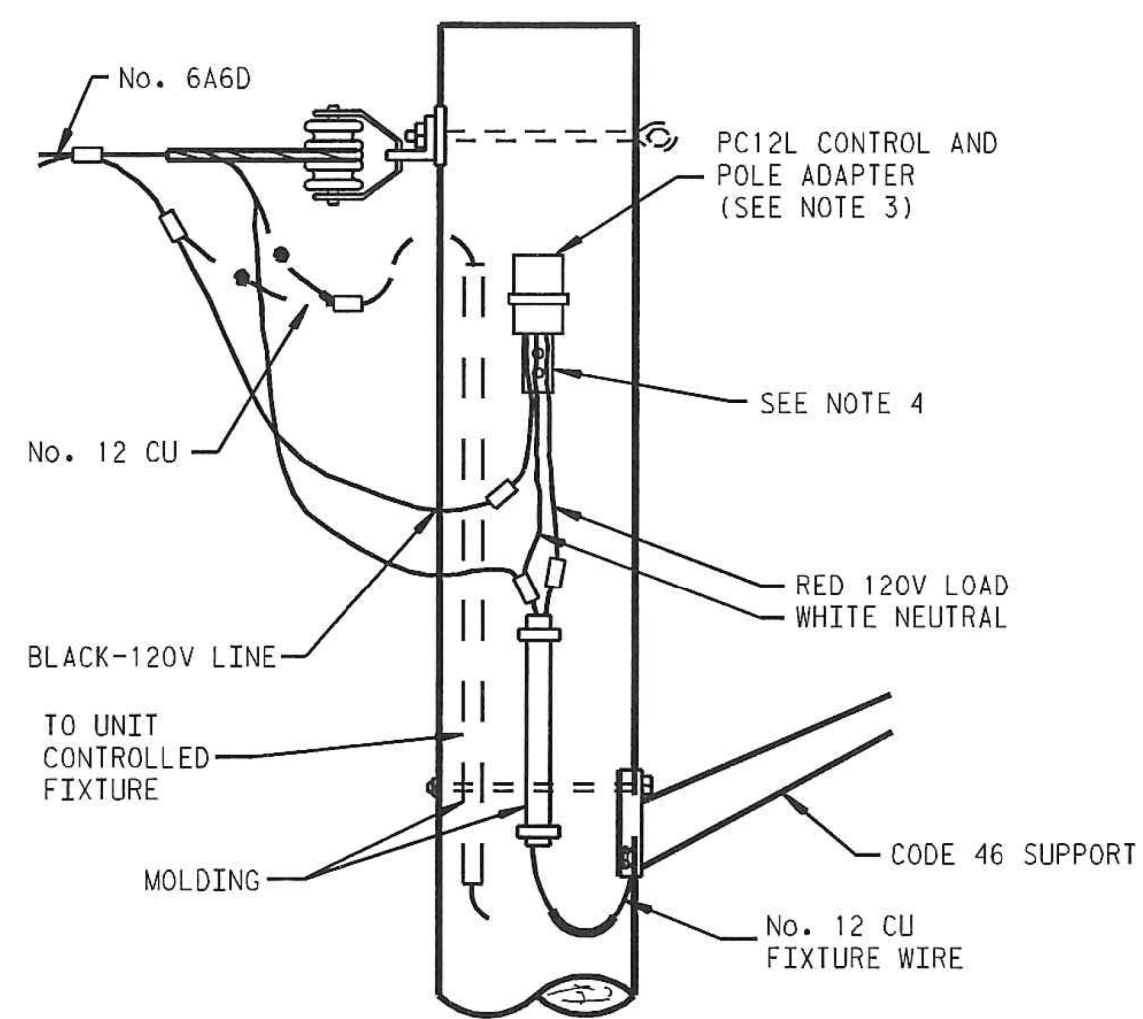
23-STREET LIGHTING



120 VOLT DUPLEX DROP FROM LINE POLE
DETAIL 23202A



120 VOLT DUPLEX DROP TANGENT POLE
DETAIL 23202C



120 VOLT DUPLEX DROP ON FIXTURE POLE
DETAIL 23202B

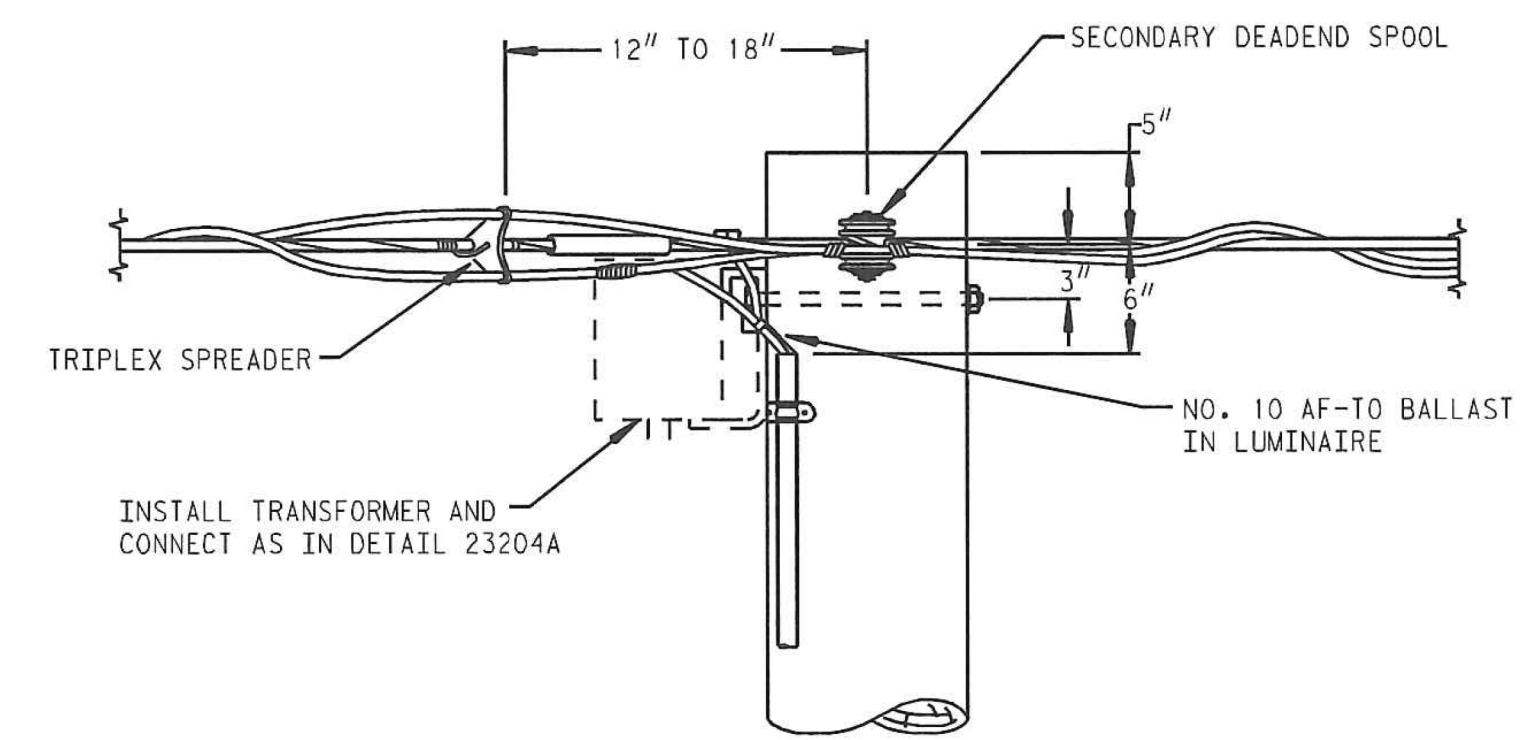
NOTES:

- DROP MAY BE:
1. 120 VOLT SERVICE TO A STREET LIGHT CONTROL.
 2. 120 VOLT STREET CIRCUIT FROM A STREET LIGHT CONTROL
 3. SEE CONTROL DETAILS FOR MOUNTING & CONNECTION
 4. FUSED FEED TO ORNAMENTAL LIGHTS-SEE PAGE 1-23-227

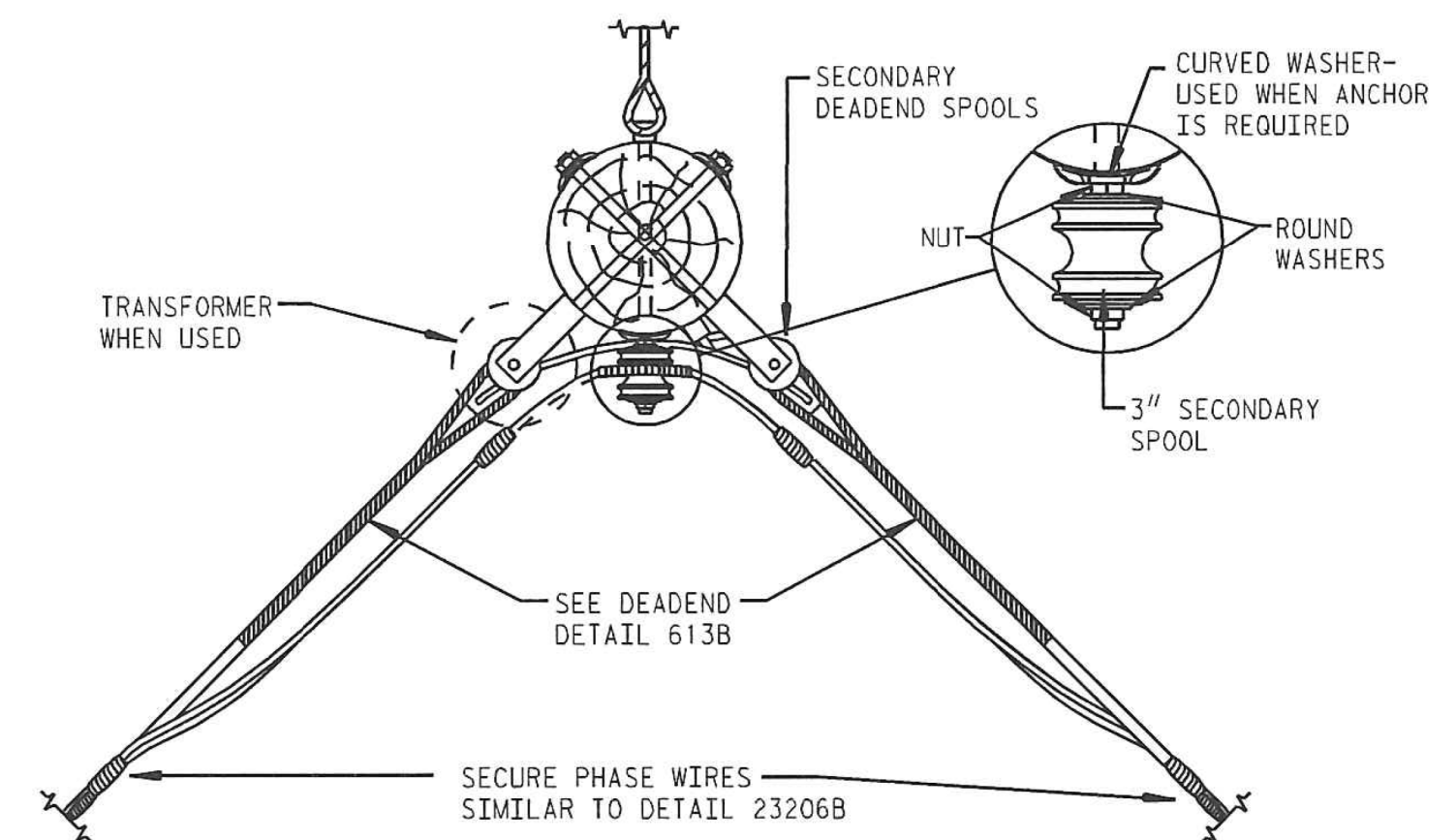
STREET LIGHT DROP
120 VOLT SERVICE OR CIRCUIT

DETROIT, MICHIGAN C:\DGM\123202.DGN(120,17) FEB-06-1998 TRWIERING REVIEWED 10/2002

23-STREET LIGHTING



ANGLE POLE (5° TO 15°)
DETAIL 23205A



ANGLE POLE OVER 15°
DETAIL 23205B

120 OR 240 VOLT
CIRCUIT NO. 4A2T LINE TRIPLEX

SERVICE SPLICE FOR 4A
LOOP SPLICE FOR NO. 2 ACSR

.DGN-UGH123205.DGN
4AY-30-2000 DKR/RUSSELL REVIEWED 10/2002

IDENTIFICATION TAG TEXT LEGEND

LIGHTING CONTROLLER (LC) ID TAG NAMING CONVENTION LEGEND

THE FORMAT FOR LIGHTING CONTROLLER ID TAGS SHALL FOLLOW THE FOLLOWING PATTERN:

LCVVWXX

THE SECTIONS SEPARATED FOR CLARITY ARE LC-VV-W-XX. THE LC STAND FOR LIGHTING CONTROLLER. THE V, W AND X ARE AS FOLLOWS:

VV LAST TWO DIGITS OF THE ZIP CODE WHERE THE LIGHTING CONTROLLER IS LOCATED

W ID ASSIGNED TO THE FIRM DESIGNING THE CIRCUIT. EXAMPLES INCLUDE:

M	METRO ENGINEERING SOLUTIONS
T	TETRA TECH
W	C.E.A. AND WADE TRIM JOINT VENTURE

XX ID ASSIGNED TO THE LIGHTING CONTROLLER (LC)

THE TAG SHALL HAVE THE LETTERS MOUNTED HORIZONTALLY WITH THE HOLDER MOUNTED VERTICALLY.

AN EXAMPLE LIGHTING CONTROLLER ID TAG IS:

LC16W30 AN LC INSTALLED IN THE 48230 ZIP THAT WAS LAID OUT BY THE C.E.A AND WADE TRIM JOINT VENTURE AND HAS BEEN ASSIGNED AN ID OF 30 IN THAT ZIP CODE.

CABLE ID TAG NAMING CONVENTION LEGEND

THE FORMAT FOR CABLE TAGS SHALL FOLLOW THE FOLLOWING PATTERN:

UUUVVWXXYZ

THE SECTIONS SEPARATED FOR CLARITY ARE UUU-VV-W-XX-Y-Z. THE VV-W-XX COMES FROM THE ASSIGNED LIGHTING CONTROLLER ID. THE VARIOUS VALUES STAND FOR:

UUU	PLA	FOR STREET LIGHTING CIRCUITS
	REC	FOR RECEPTACLE CIRCUITS

VVWXX THE ASSIGNED LC ID. SEE THE LC NAMING CONVENTION

Y THE CIRCUIT BRANCH ID (1, 2, 3, 4, ETC.)

Z THE CONDUCTOR CLASSIFICATION

CLASSIFICATIONS ARE:

A	A PHASE CONDUCTOR
B	B PHASE CONDUCTOR
N	NEUTRAL CONDUCTOR
G	EQUIPMENT GROUND CONDUCTOR (EGC)

THE TAG SHALL HAVE THE LETTERS MOUNTED AND THE HOLDER MOUNTED HORIZONTALLY.

NOTE: CABLE TAG LABELS ARE GENERATED FOR THE CABLE(S) BEING TAGGED DEPENDING ON WHAT IS INCLUDED UNDER THE TAG. FOR INSTANCE, AN ENTIRE BRANCH CIRCUIT 4 CABLE BUNDLE INCLUDING 2 POWER LEGS, 1 NEUTRAL AND 1 EGC COULD BE TAGGED WITH A SINGLE UUU-VV-W-XXY TAG AS LONG AS THE CABLES ARE ALL PHYSICALLY TIED TOGETHER. WHEN AN ENTIRE BRANCH CIRCUIT IS BUNDLED AND TAGGED TOGETHER WITH A CIRCUIT IDENTIFIER OF UUU-VV-W-XX-Y THEN THE INDIVIDUAL CABLES IN THAT BUNDLE CAN BE TAGGED WITH JUST AN "A", "B", "N" OR "G".

NOTE: AN EQUIPMENT GROUND CONDUCTOR (EGC) CAN BE SHARED BETWEEN BRANCH CIRCUITS OR EVEN LIGHTING CONTROLLER CIRCUITS IF ALL THE CABLES SHARE THE SAME CONDUIT WHICH CREATES A UNIQUE TAGGING CONVENTION. THE EGC, IF TAGGED SEPARATELY, IS TAGGED TO INDICATE WHAT LEVEL OF SHARING IS USING THE EGC. THE LEVELS OF EGC TAGGING ARE:

UUUVVWXXYG	AN EGC FOR A BRANCH CIRCUIT OR INDIVIDUAL PHASE BUNDLE
UUUVVWXXG	AN EGC SHARED BETWEEN MULTIPLE BRANCH CIRCUITS
EGC	AN EGC SHARED BETWEEN DIFFERENT TYPES OF CIRCUITS OR LCS

NOTE: THERE EXISTS DECORATIVE LIGHTING WITHIN THE DETROIT LIGHTING AREA UTILIZING STRAND LIGHTING. THOSE CIRCUITS ARE BUNDLED TOGETHER AND GET A UNIQUE TAG OF "STRAND".

EXAMPLE CABLES TAGS ARE:

PLA26W5A1A	PLA STREET LIGHTING BRANCH CIRCUIT BUNDLE
PLA26W5A1AA	PLA STREET LIGHTING BRANCH CIRCUIT LAMP LOOP
REC26W5A1A	RECEPTACLE BRANCH CIRCUIT BUNDLE
STRAND	STRAND LIGHTING FEED CABLE BUNDLE

IDENTIFICATION TAG TEXT LEGEND - CONTINUED

LUMINAIRE ID TAG NAMING CONVENTION LEGEND

THE FORMAT FOR LUMINAIRE ID TAGS SHALL FOLLOW THE FOLLOWING PATTERN:

WXXXYYZZZ

THE SECTIONS SEPARATED FOR CLARITY ARE W-XXX-YYY-ZZZ. THE W, X, Y AND Z ARE AS FOLLOWS:

W THE LUMINAIRE TYPE. SOME LUMINAIRE TYPES ARE:

- L LIGHT EMITTING DIODE (LED) FIXTURE
- S SODIUM VAPOR FIXTURE

XXX THE LUMINAIRE WATTAGE. SOME EXAMPLES ARE:

- 118 118W LUMINAIRE
- 152 152W LUMINAIRE

THESE WATTAGES ARE REGARDLESS OF THE LUMINAIRE TYPE.

YYY THE ALPHA PORTION OF THE PLA ASSIGNED LUMINAIRE ID.

ZZZ THE NUMERIC PORTION OF THE PLA ASSIGNED LUMINAIRE ID.

THE TAG SHALL HAVE THE LETTERS MOUNTED HORIZONTALLY WITH THE HOLDER MOUNTED VERTICALLY.

AN EXAMPLE LUMINAIRE ID TAG IS:

L118AFK941 A 118W LED LUMINAIRE WITH THE PLA ID OF AFK941.

MATERIALS

CABLE CIRCUIT IDENTIFICATION TAGS

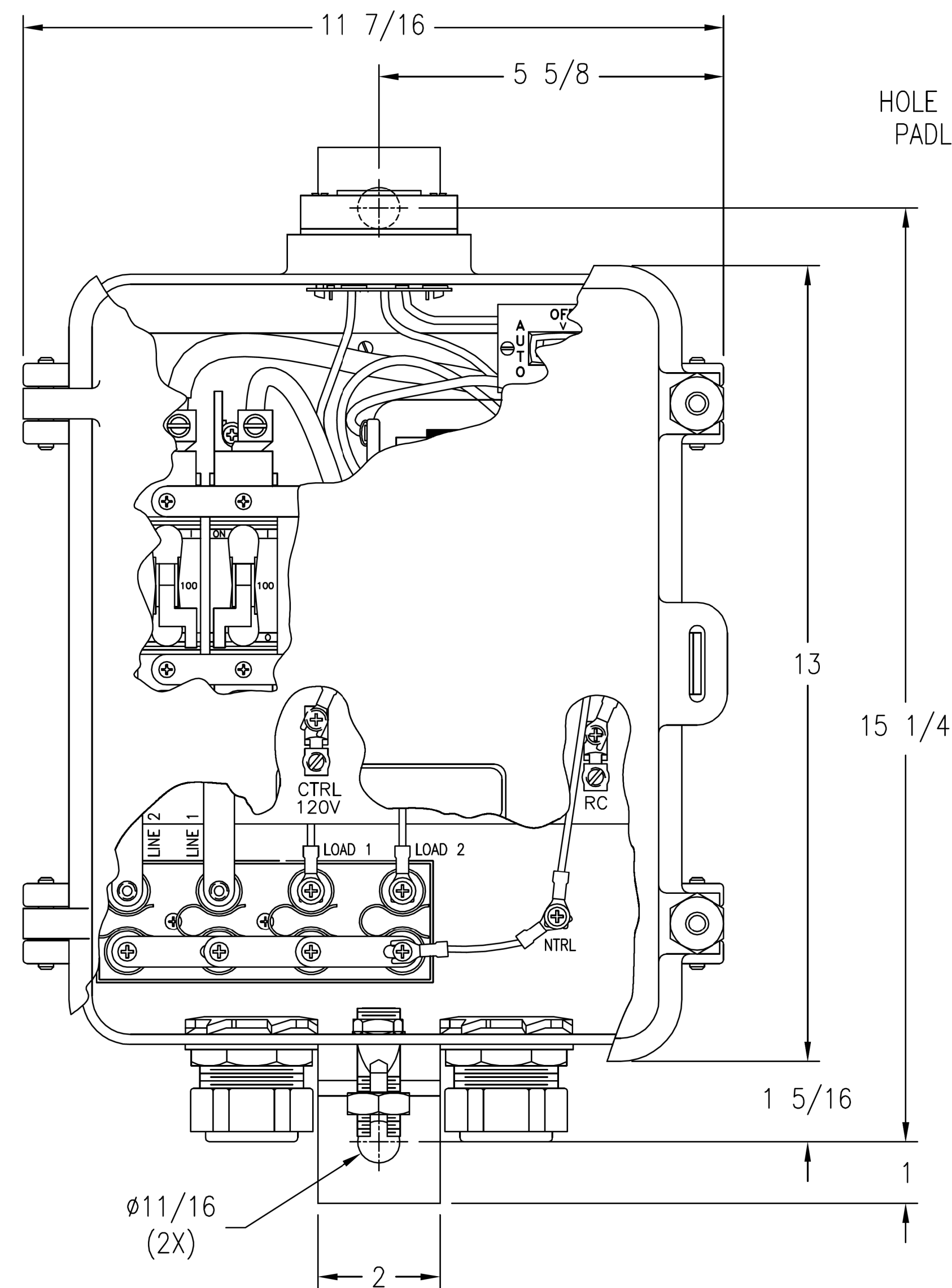
THE IDENTIFICATION TAGS FOR CABLE CIRCUITS SHALL USE TECH PRODUCTS, INC. FASTTAGS MINIATURE MARKERS. THE TAGS SHALL HAVE BLACK RAISED LETTERING ON A YELLOW BACKGROUND. THE LETTERING SHALL BE ORIENTATED HORIZONTALLY AND IN A SINGLE LINE.

LIGHTING CONTROLLER IDENTIFICATION TAGS

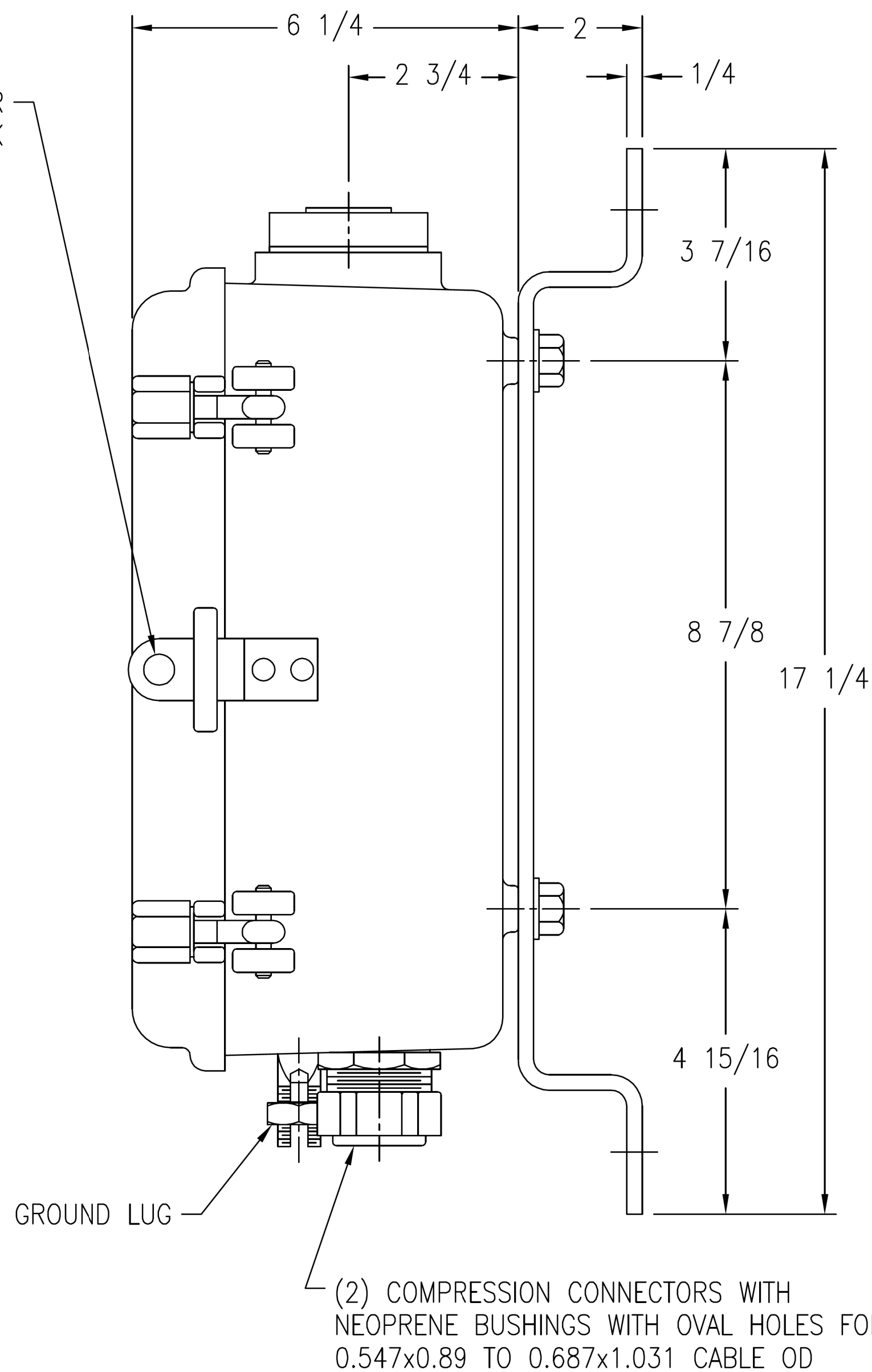
THE IDENTIFICATION TAGS FOR LIGHTING CONTROLLERS SHALL USE TECH PRODUCTS, INC. EVERLAST 1" VERTICALLY MOUNTED NUMBERS AND LETTERS WITH SOLID BLACK POLYPROPYLENE CHARACTERS EMBEDDED IN A BRIGHT YELLOW POLYPROPYLENE BACKGROUND. THE LETTERS SHALL BE STACKED VERTICALLY WITH THE HOLDER MOUNTED VERTICALLY ON THE POLE. EACH CHARACTER SHALL BE 0.70" TALL WHEN MOUNTED. THE TAG SHALL BE MOUNTED ON THE POLE'S STREETSIDE.

LUMINAIRE IDENTIFICATION TAGS

THE IDENTIFICATION TAGS FOR LUMINAIRES SHALL USE TECH PRODUCTS, INC. EVERLAST 1" VERTICALLY MOUNTED NUMBERS AND LETTERS WITH SOLID BLACK POLYPROPYLENE CHARACTERS EMBEDDED IN A BRIGHT YELLOW POLYPROPYLENE BACKGROUND. THE LETTERS SHALL BE STACKED VERTICALLY WITH THE HOLDER MOUNTED VERTICALLY ON THE POLE. EACH CHARACTER SHALL BE 0.70" TALL WHEN MOUNTED. A TAG IS MOUNTED ON THE POLE FOR EACH INDIVIDUAL LUMINAIRE ON THE POLE. THE TAG(S) SHALL BE MOUNTED ON THE POLE'S STREETSIDE.



HOLE FOR PADLOCK



GROUND LUG

(2) COMPRESSION CONNECTORS WITH NEOPRENE BUSHINGS WITH OVAL HOLES FOR 0.547x0.89 TO 0.687x1.031 CABLE OD

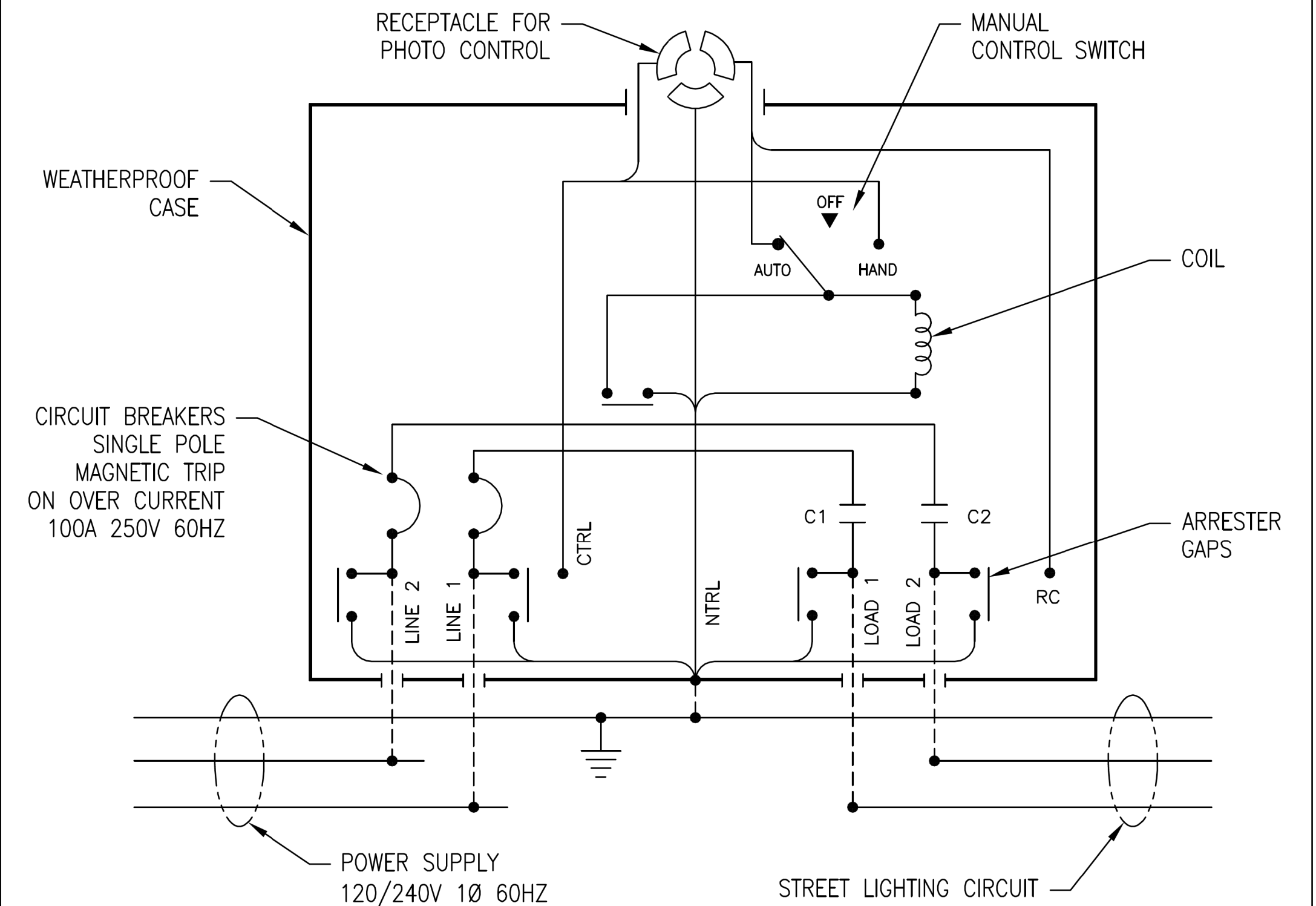
CONTROL TERMINALS WILL ACCEPT #6 THRU #14 AWG WIRE
LINE/LOAD TERMINALS WILL ACCEPT #4 THRU #1/0 AWG WIRE

CAST ALUMINUM WEATHERPROOF CASE WITH BRACKET

TRINETICS		Menomonee Falls, Wisconsin U.S.A.	
TYPE MR-YO	LINE	POLE 2	
SPEC. NO. 6442	SERIAL NO. XXXX	FOR INSTRUCTIONS REFER IS-11939	
CONTROL CIRCUIT RATING			
120 VOLTS		60 HZ	
A-C LOAD CIRCUIT 100 AMPS 120/240 VOLTS			

NAMEPLATE DETAIL

CONNECTIONS FOR TYPE MR-YO SPEC 6442 STREET LIGHT CONTROL ASS'Y WITH SINGLE POLE MAGNETIC TRIP ON OVERLOAD CIRCUIT BREAKERS.



TWO POLE STREET LIGHT CONTROL ASS'Y WIRED FOR OPERATION WITH 120V PHOTO CONTROL UNIT AND RATED FOR SWITCHING A STREET LIGHTING LOAD WITH NORMAL CURRENT WHICH DOES NOT EXCEED THE LOAD CURRENT RATING SHOWN ON THE NAMEPLATE. IF SUPPLY IS 240/480V, A SEPARATE 120V SOURCE MUST BE CONNECTED TO "CTRL" TERMINAL FOR PC OPERATION.

THE LOCATION OF THE PHOTO CONTROL UNIT MAY BE EITHER AT THE CONTROL ASS'Y AND PLUGGED INTO THE RECEPTACLE PROVIDED FOR SAME, OR AT A REMOTE POINT SUCH AS AN AUXILIARY PHOTO CONTROL MOUNTING ADAPTER OR ANOTHER STREET LIGHT CONTROL ASS'Y.

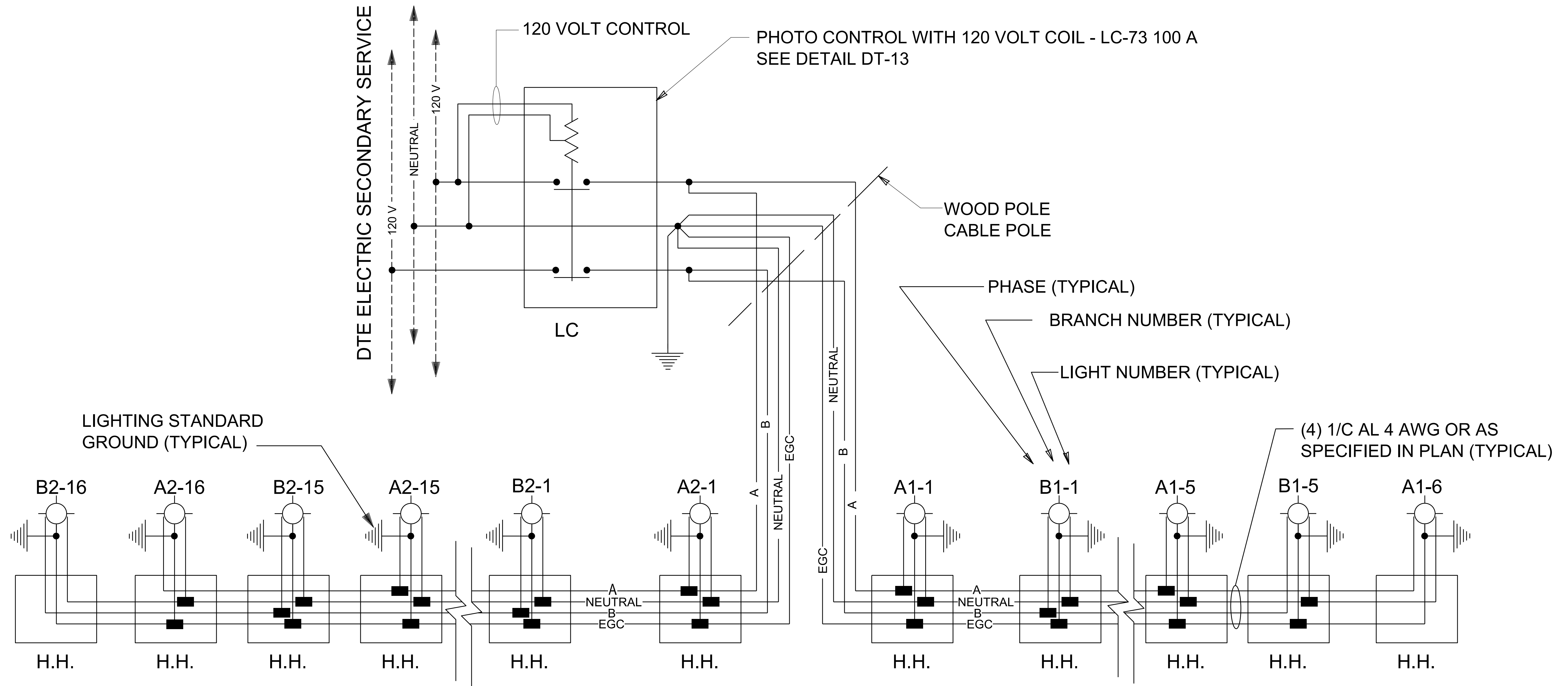
WHEN PHOTO CONTROL IS TO BE REMOTE, CLOSE THE SELF CONTAINED RECEPTACLE FOR PHOTO CONTROL WITH AN OPEN CIRCUITED CAP. ESTABLISH THE OPERATING CIRCUIT BY WIRING FROM THE "RC" TERMINAL TO THE LOAD LEAD OF THE REMOTELY LOCATED AUXILIARY PHOTO CONTROL MOUNTING ADAPTER, OR TO THE "RC" TERMINAL OF ANOTHER STREET LIGHT CONTROL ASS'Y. INTERCONNECTION OF "RC" TERMINALS OF TWO OR MORE STREET LIGHT CONTROL ASSEMBLIES PROVIDES GANG OPERATION WITH A SINGLE PC UNIT.

MANUAL CONTROL SWITCH IS SHOWN IN "AUTO" POSITION AND PHOTO CONTROL ESTABLISHES ON-OFF STREET LIGHT OPERATING SCHEDULE. MANUAL CONTROL SWITCH IN HAND OR OFF POSITIONS BY-PASSES PHOTO CONTROL TO PROVIDE, RESPECTIVELY, STREET LIGHT CIRCUIT ON OR OFF OPERATION. REMOTE PC LOCATION OR GANG OPERATION CONNECTIONS ARE NOT AFFECTED BY OPERATION OF INDIVIDUAL MANUAL CONTROL SWITCHES. HOWEVER, 120V MUST BE AVAILABLE AT EACH STREET LIGHT CONTROL ASSEMBLY TO PERMIT HAND-ON CIRCUIT OPERATION WITH RESPECTIVE MANUAL CONTROL SWITCH.

THE RELAY MUST BE ENERGIZED CONTINUOUSLY AT 120V DURING THE TIME OF RELAY CONTACT CLOSURE.

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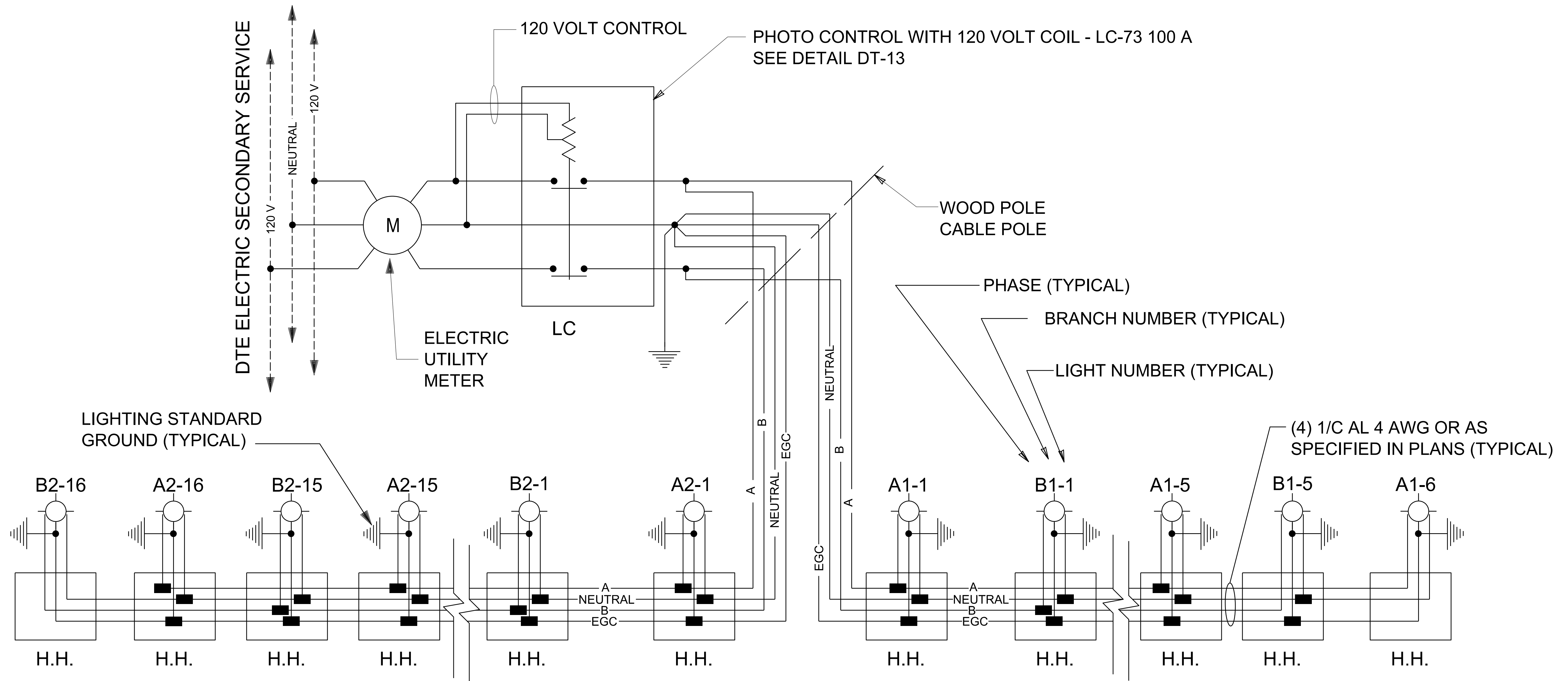
TRINETICS		RELAY ASSEMBLY	
		MR-YO SPEC 6442	
THIRD ANGLE PROJECTION	SIZE B	DRAWN BY G Pietschmann	DATE 7/14/11
ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED	FAMILY ID C1643	APPROX. WEIGHT 24 LB	SCALE 5/16
			PART NUMBER 31183000



UNDERGROUND STREET LIGHTING CIRCUIT TYPICAL WIRING SCHEMATIC THREE CONDUCTOR AND EQUIPMENT GROUND CONDUCTOR (EGC)

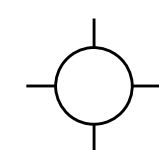
NOT TO SCALE



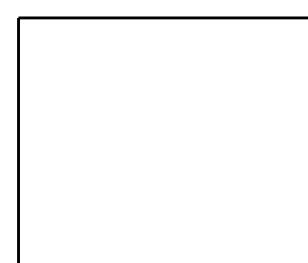


RECEPTACLE CIRCUIT TYPICAL WIRING SCHEMATIC THREE CONDUCTOR AND EQUIPMENT GROUND CONDUCTOR (EGC)

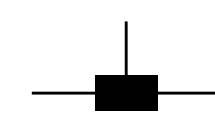
NOT TO SCALE



UNDERGROUND FED LIGHTING STANDARD



HANDHOLE



HOMAC RAB 1/0-xx MECHANICAL CONNECTOR INSTALLED IN HANDHOLE
xx = IS THE OUTLET CONFIGURATION RAB 1/0-21 IS SHOWN
SIZE AS NECESSARY FOR MULTIPLE RECEPTACLES OR CIRCUIT BRANCHES

CABLES IN HANDHOLES AND MANHOLES:

STREET LIGHTING AND RECEPTACLE CABLES IN HANDHOLES AND MANHOLES SHALL BE PULLED STRAIGHT THROUGH THE STRUCTURE UNLESS THERE IS A TAP REQUIRED TO SERVICE A STREET LIGHT, RECEPTACLE OR CIRCUIT BRANCH LOCATION.

LOCATIONS REQUIRING A SERVICE TAP WILL HAVE THE SERVICE PHASE TAPPED WITH THE APPROPRIATE HOMAC RAB CONNECTOR AND THE NON-SERVICE PHASE PULLED STRAIGHT THROUGH.

LOCATIONS REQUIRING CIRCUIT TAPS FOR CIRCUIT BRANCHES WILL BE IDENTIFIED ON THE PLANS WITH THE REQUIRED TAP SIZE AND PHASE PROVIDED.

EXAMPLE 1 - LAMP LOOP:

AN EXAMPLE IS A HANDHOLE LOCATION WITH BOTH THE A PHASE AND THE B PHASE COMING IN AND CONTINUING ALONG TO FEED ADDITIONAL STREET LIGHT LOCATIONS. THE HANDHOLE ALSO FEEDS A STREET LIGHTING STANDARD THAT HAS 2 LUMINAIRES THAT ARE TO BE CONNECTED TO THE B PHASE CABLE AND NO RECEPTACLE. THE B PHASE CABLE WILL HAVE A 4-WAY HOMAC RAB CONNECTOR INSTALLED. THE NEUTRAL WILL HAVE A 4-WAY HOMAC RAB CONNECTOR INSTALLED. THE EGC WILL HAVE A 3-WAY HOMAC RAB CONNECTOR INSTALLED. THE A PHASE CABLE WILL BE PULLED STRAIGHT THROUGH.

EXAMPLE 2 - CIRCUIT BRANCH:

AN EXAMPLE IS A HANDHOLE LOCATION WITH BOTH THE A PHASE AND THE B PHASE COMING IN AND FEEDING TWO DIFFERENT DIRECTIONS GOING OUT WITHOUT A STREET LIGHT LOCATION DIRECTLY CONNECTED TO THE HANDHOLE. THIS EXAMPLE REQUIRES CABLE 3-WAYS (ALSO CALLED A T-TAP OR BRANCH) TO BE INSTALLED TO FEED THE TWO DIFFERENT DIRECTIONS. A 3-WAY HOMAC RAB WILL BE INSTALLED ONTO EACH OF THE A PHASE, B PHASE, NEUTRAL AND EGC CABLES.

UNDERGROUND PHASE IDENTIFICATION

CURRENT UNDERGROUND CONSTRUCTION WIRING STANDARD				
CONDUCTOR ID	BLACK	WHITE/WHITE STRIPE	RED/RED STRIPE	GREEN/BARE
PHASE	A PHASE	NEUTRAL	B PHASE	EGC
OBSOLETE UNDERGROUND CONSTRUCTION WIRING STANDARD				
CONDUCTOR ID	BLACK	WHITE/WHITE STRIPE	RED/RED STRIPE	GREEN/BARE
PHASE	A PHASE	NEUTRAL	B PHASE	----

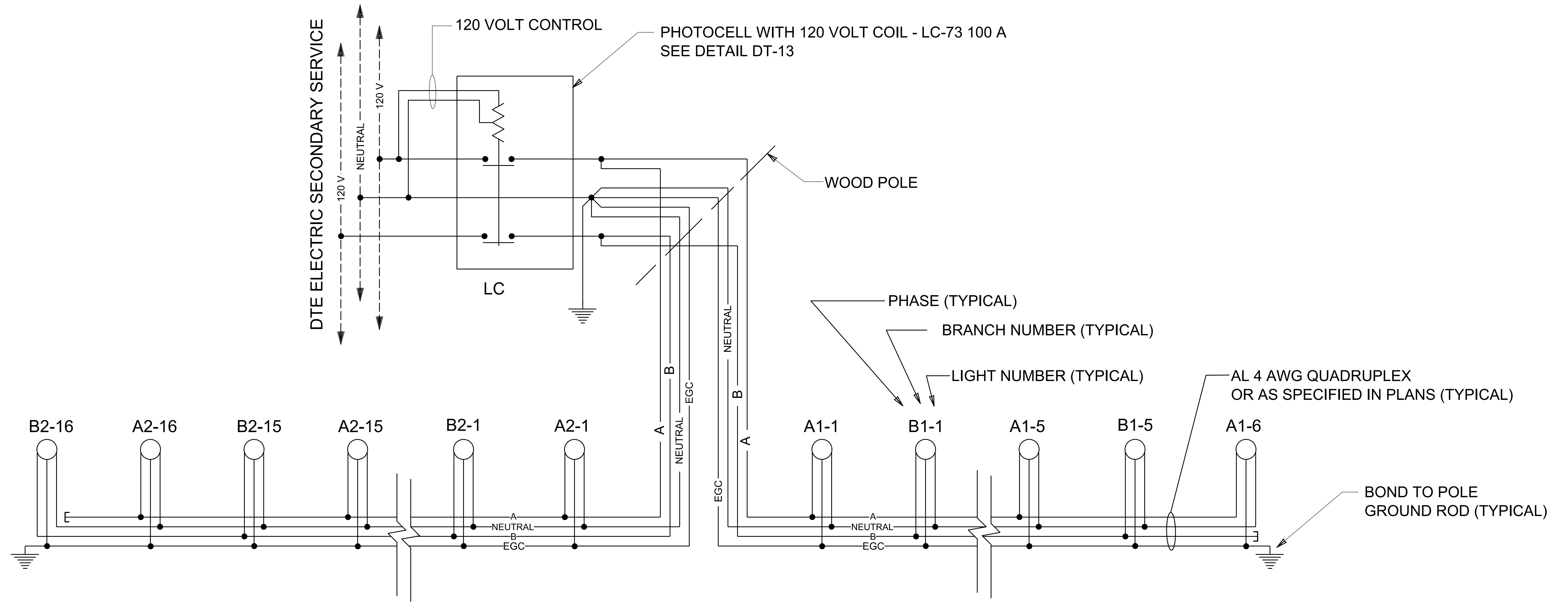
*** WHEN MODIFICATIONS OR ADDITIONS ARE REQUIRED ON OBSOLETE STYLE CONSTRUCTION CIRCUITS, THE CHANGES SHOULD BE MADE WITH THE OBSOLETE STYLE OR THE ENTIRE CIRCUIT MUST BE UPDATED.

*** THE CURRENT UNDERGROUND CONSTRUCTION AND THE OBSOLETE UNDERGROUND CONSTRUCTION STANDARDS SHALL NOT BE INTERMINGLED EXCEPT AT THE CIRCUIT SOURCE POINT WHERE THE NEUTRAL IS BONDED TO THE GROUND AT THE MAIN BREAKER.

*** THERE ARE INSTALLATIONS WHERE NEITHER COLOR-CODED, EITHER COLORED INSULATION OR PHASE MARKED, CONDUCTORS ARE USED SO THAT ALL THE CONDUCTORS ARE THE SAME COLOR, TYPICALLY BLACK. PHASING MUST BE FIELD VERIFIED PRIOR TO CONNECTING ANY COLOR-CODED CONDUCTORS TO NON-CODED CONDUCTORS.

*** PRIOR TO CONNECTING ANY NEW CIRCUIT CABLING TO EXISTING CIRCUIT CABLING, CARE IS TO BE TAKEN BY VERIFYING THE EXISTING CIRCUIT CABLING PHASING TO ENSURE THAT PROPER ELECTRICAL CONNECTIONS ARE MADE. IF THE EXISTING CIRCUIT CABLING IS FOUND TO HAVE IMPROPER PHASE IDENTIFICATIONS THEN THE EXISTING CIRCUIT CABLING MUST BE CORRECTED PRIOR TO CONNECTING ANY NEW CABLING.

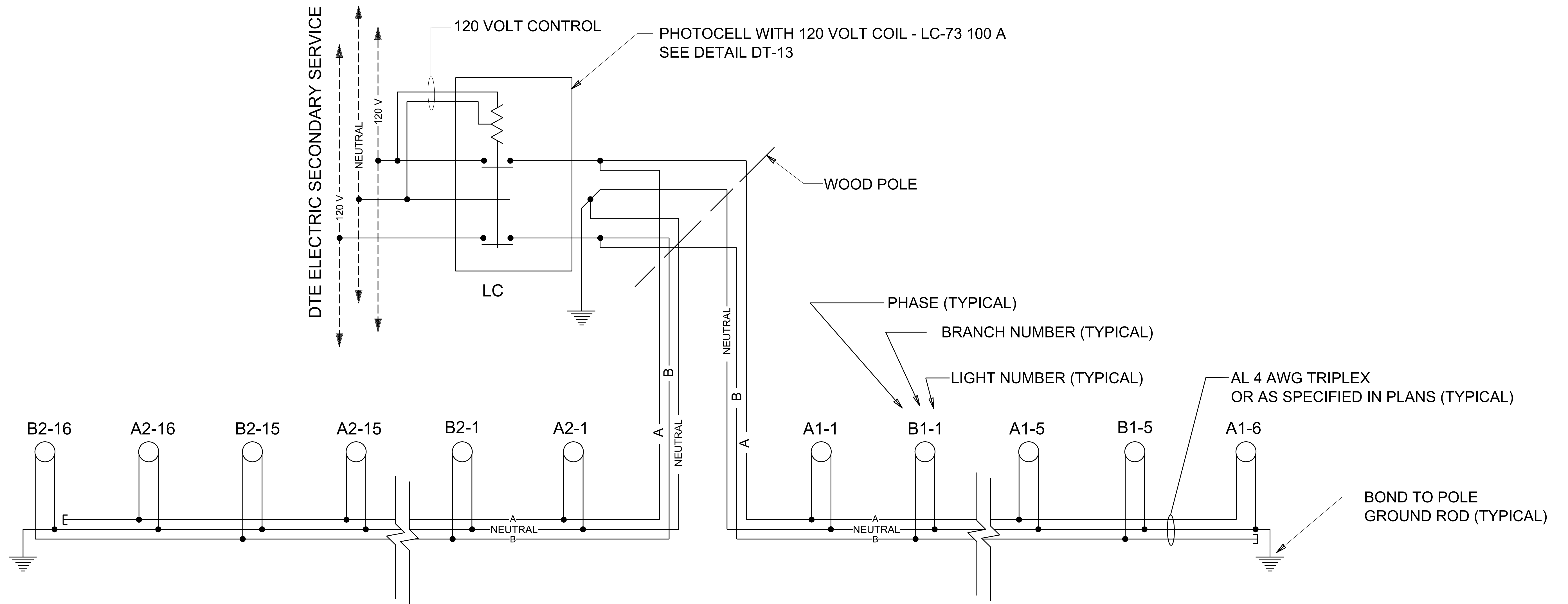
*** THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING EXISTING CIRCUIT PHASE IDENTIFICATIONS PRIOR TO CONNECTING ANY NEW CIRCUIT CABLING TO EXISTING CIRCUIT CABLING. IF THE EXISTING CIRCUIT CABLING IS FOUND TO HAVE IMPROPER PHASE IDENTIFICATIONS THEN THE EXISTING CIRCUIT CABLING MUST BE CORRECTED PRIOR TO CONNECTING ANY NEW CABLING.



CURRENT LIGHTING CONTROL DIAGRAM QUADRUPLEX WITH EQUIPMENT GROUND CONDUCTOR (EGC)

NOT TO SCALE

○ OVERHEAD FED STREET LIGHT STANDARD OR POLE



OBSOLETE LIGHTING CONTROL DIAGRAM TRIPLEX WITH NEUTRAL BONDED TO GROUND

NOT TO SCALE



OVERHEAD FED STREET LIGHT STANDARD OR POLE

OVERHEAD PHASE IDENTIFICATION

CURRENT OVERHEAD CONSTRUCTION WIRING STANDARD

CABLE TYPE	NO RIB	1 RIB	2 RIBS	MESSENGER
QUADRUPLIX	A PHASE	NEUTRAL	B PHASE	EGC
TRIPLEX	A PHASE	NEUTRAL	----	EGC
DUPLEX	----	----	----	----

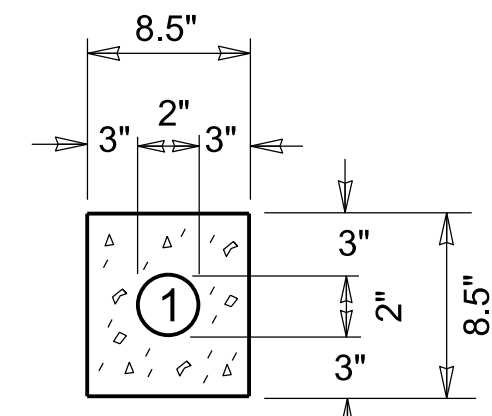
OBSOLETE OVERHEAD CONSTRUCTION WIRING STANDARD

CABLE TYPE	NO RIB	1 RIB	2 RIBS	MESSENGER
QUADRUPLIX	----	----	----	----
TRIPLEX	A PHASE	B PHASE	----	NEUTRAL
DUPLEX	A PHASE	----	----	NEUTRAL

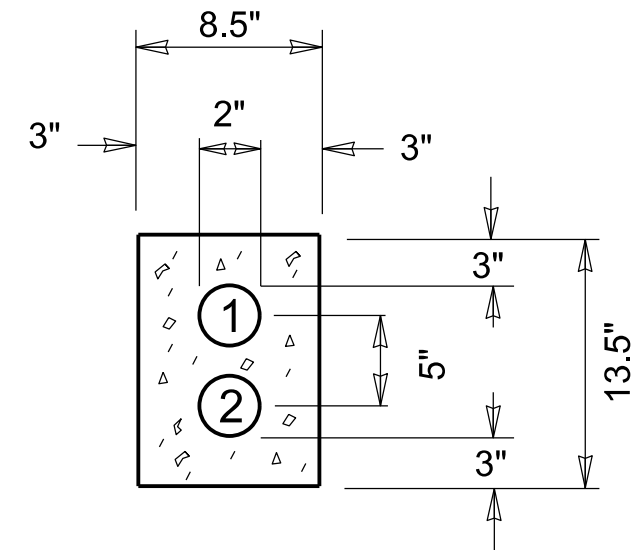
*** WHEN MODIFICATIONS OR ADDITIONS ARE REQUIRED ON OBSOLETE STYLE CONSTRUCTION CIRCUITS, THE CHANGES SHOULD BE MADE WITH THE OBSOLETE STYLE OR THE ENTIRE CIRCUIT MUST BE UPDATED.

*** THE CURRENT OVERHEAD CONSTRUCTION AND THE OBSOLETE OVERHEAD CONSTRUCTION STANDARDS SHALL NOT BE INTERMINGLED EXCEPT AT THE CIRCUIT SOURCE POINT WHERE THE NEUTRAL IS BONDED TO THE GROUND AT THE MAIN BREAKER.

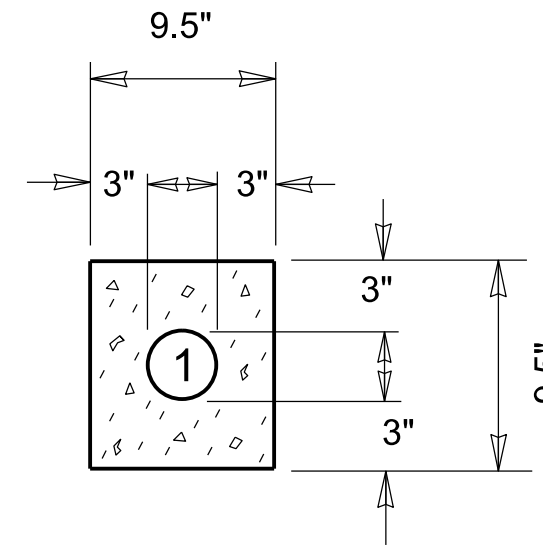
*** THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING EXISTING CIRCUIT PHASE IDENTIFICATIONS PRIOR TO CONNECTING ANY NEW CIRCUIT CABLING TO EXISTING CIRCUIT CABLING. IF THE EXISTING CIRCUIT CABLING IS FOUND TO HAVE IMPROPER PHASE IDENTIFICATIONS THEN THE EXISTING CIRCUIT CABLING MUST BE CORRECTED PRIOR TO CONNECTING ANY NEW CABLING.



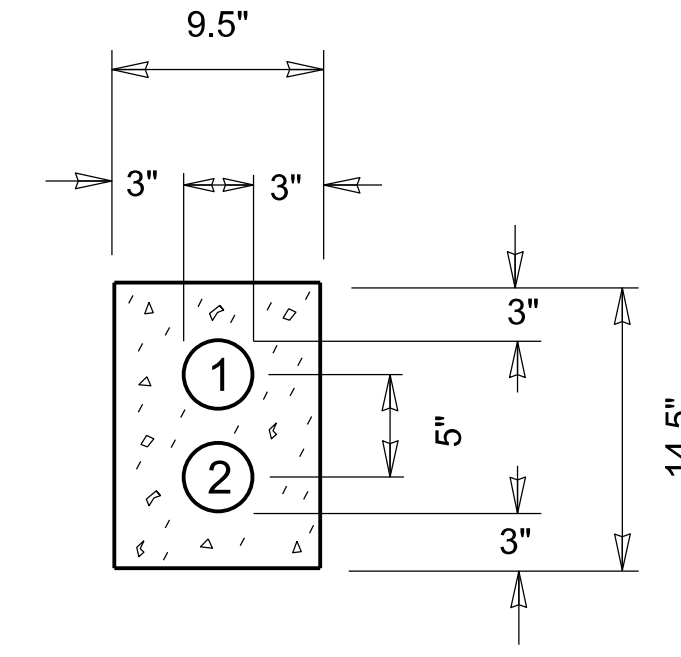
1 - 2" CONDUIT



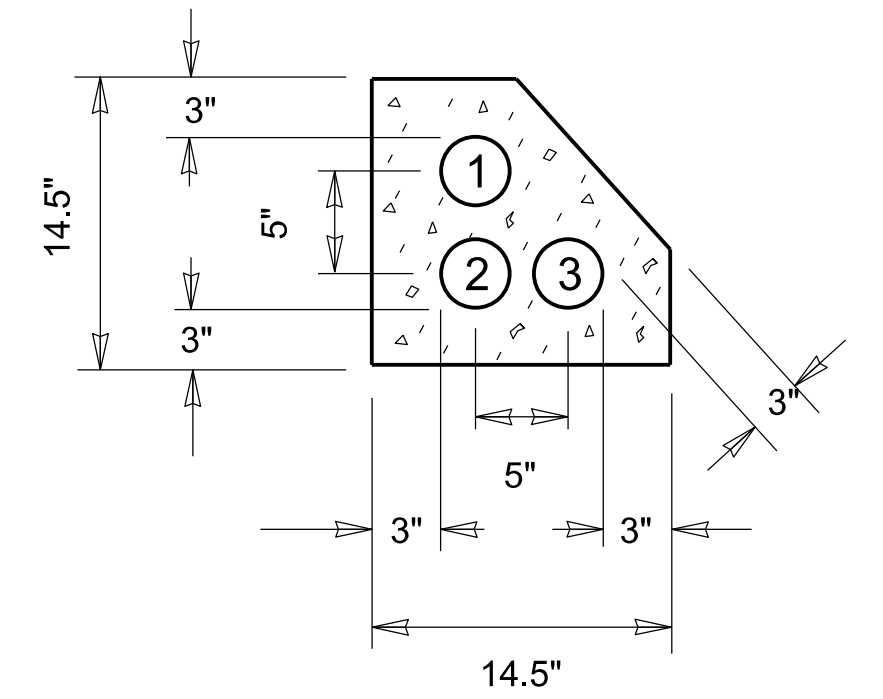
2 - 2" CONDUITS



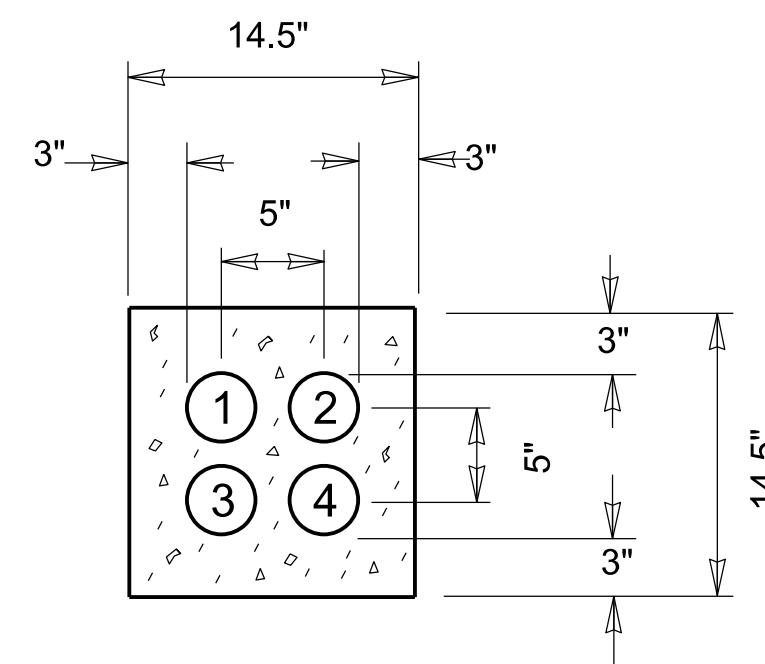
1 - 3" CONDUIT



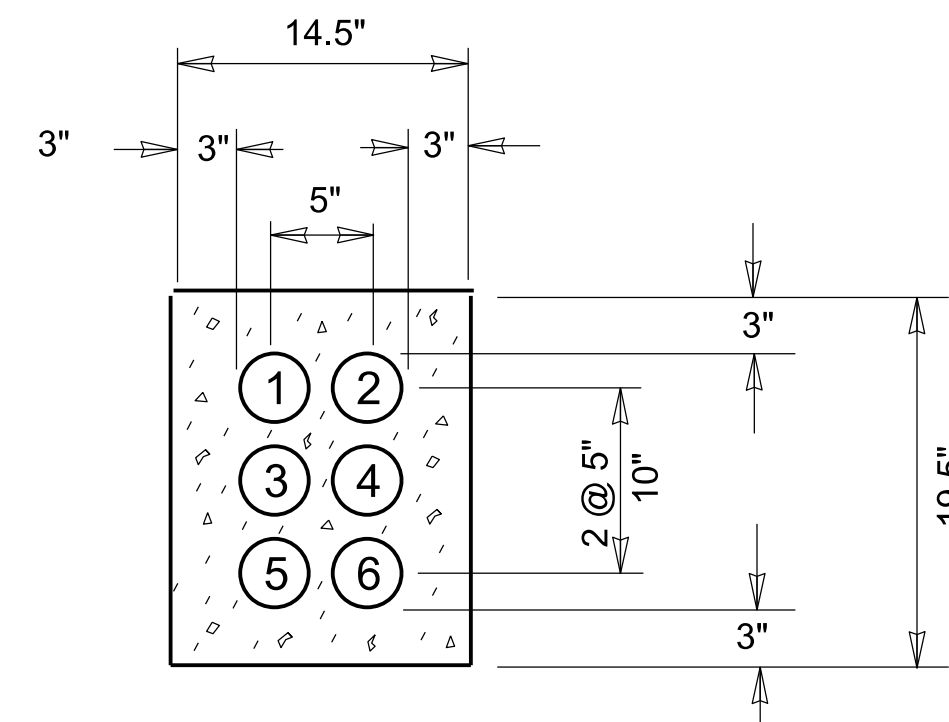
2 - 3" CONDUITS



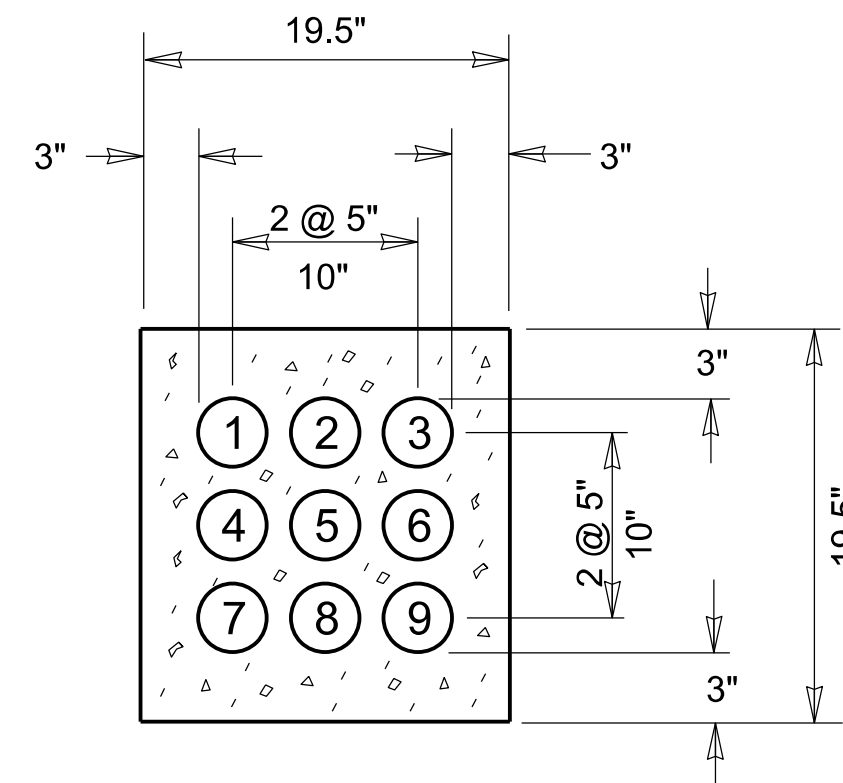
3 - 3" CONDUITS



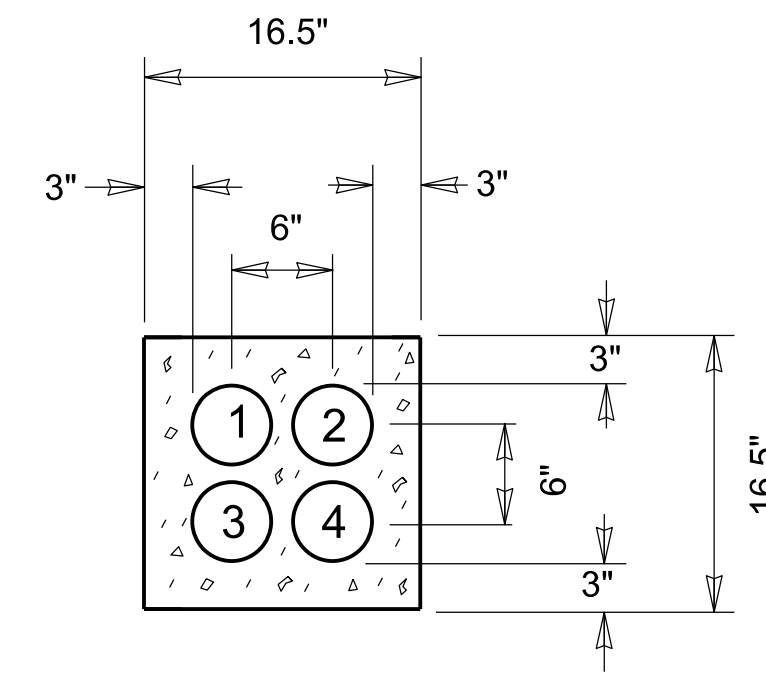
4 - 3" CONDUITS



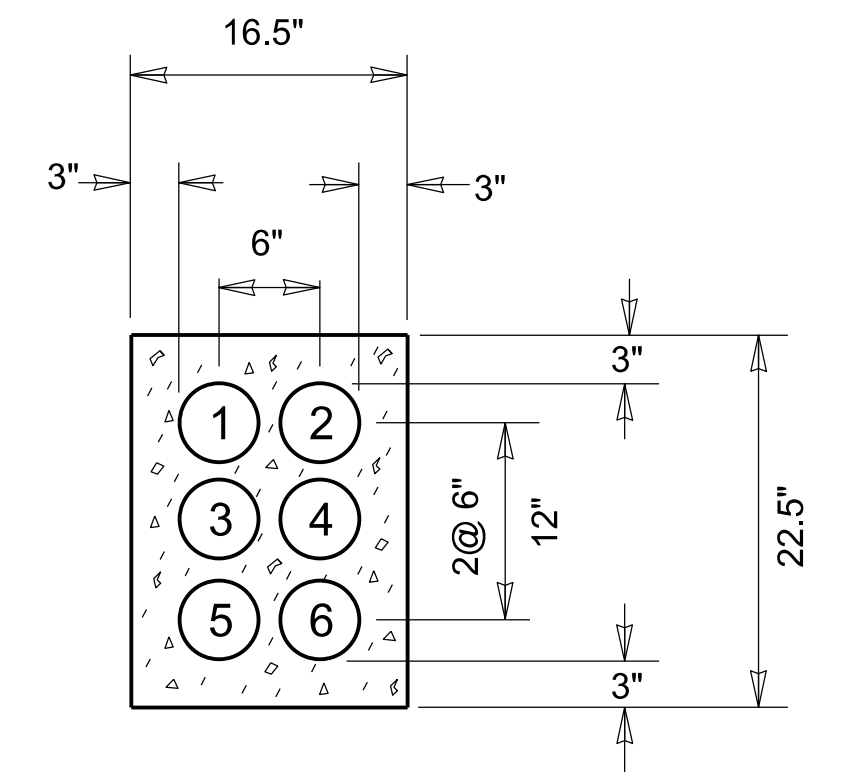
6 - 3" CONDUITS



9 - 3" CONDUITS



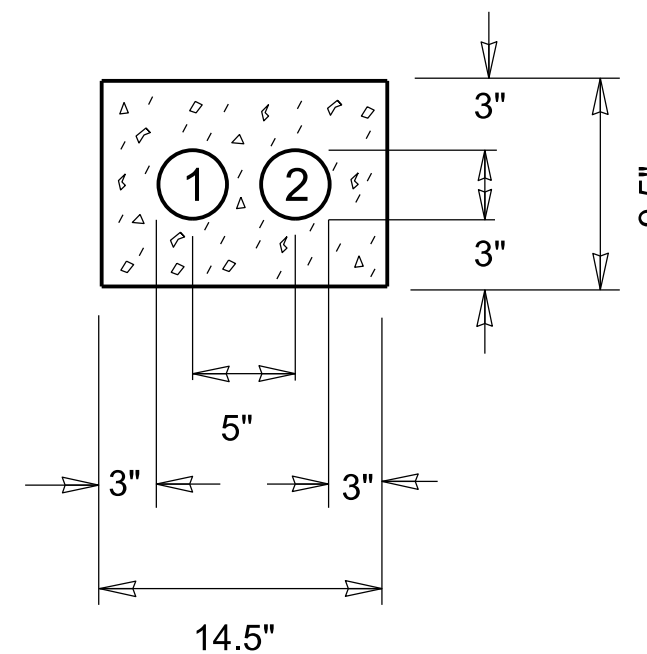
4 - 4" CONDUITS



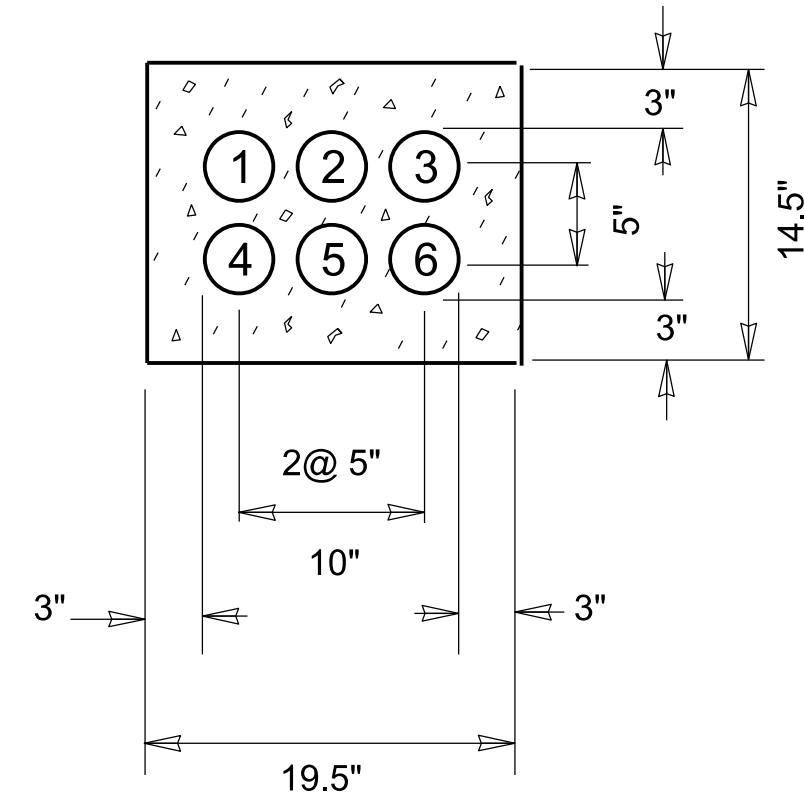
6 - 4" CONDUITS

ALTERNATE ARRANGEMENT OF 3" CONDUIT

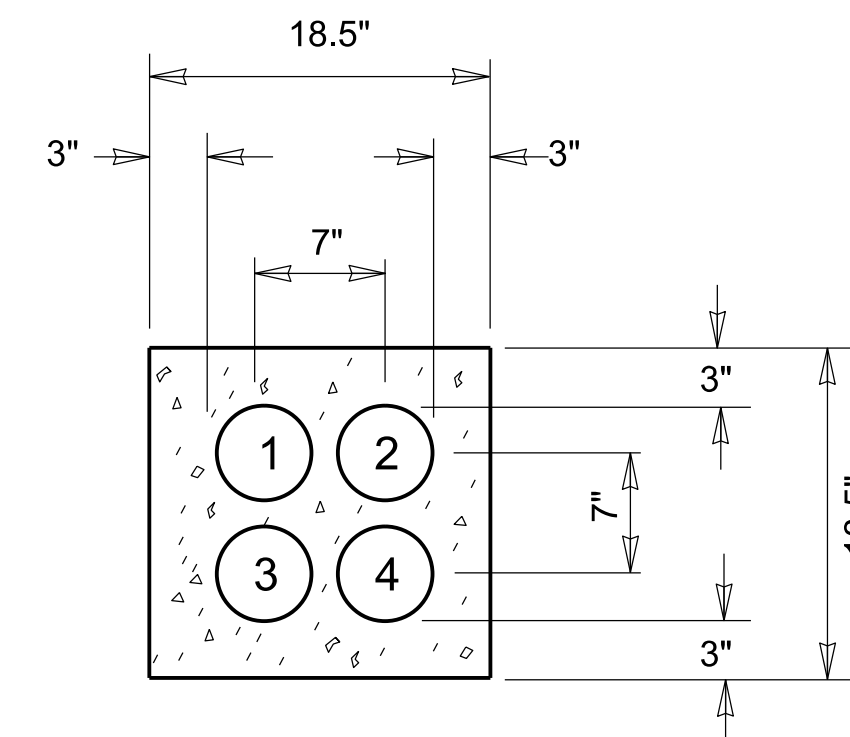
(TO SUIT FIELD CONDITIONS)
(TO BE APPROVED BY THE ENGINEER)



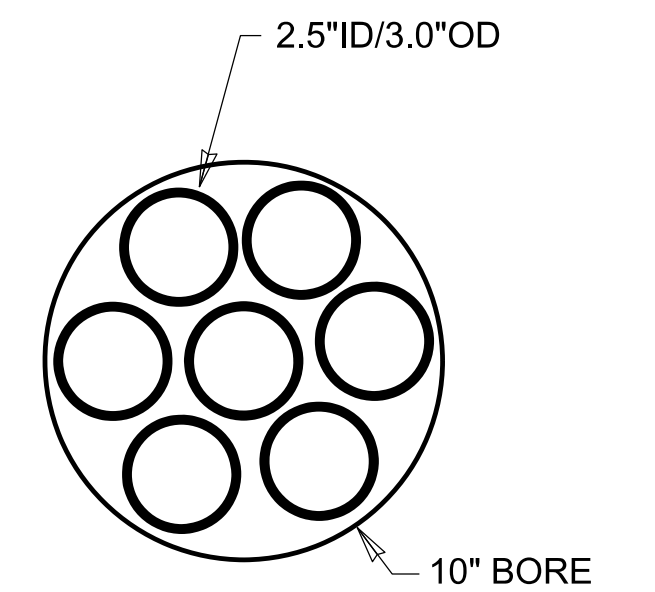
2-3" CONDUITS



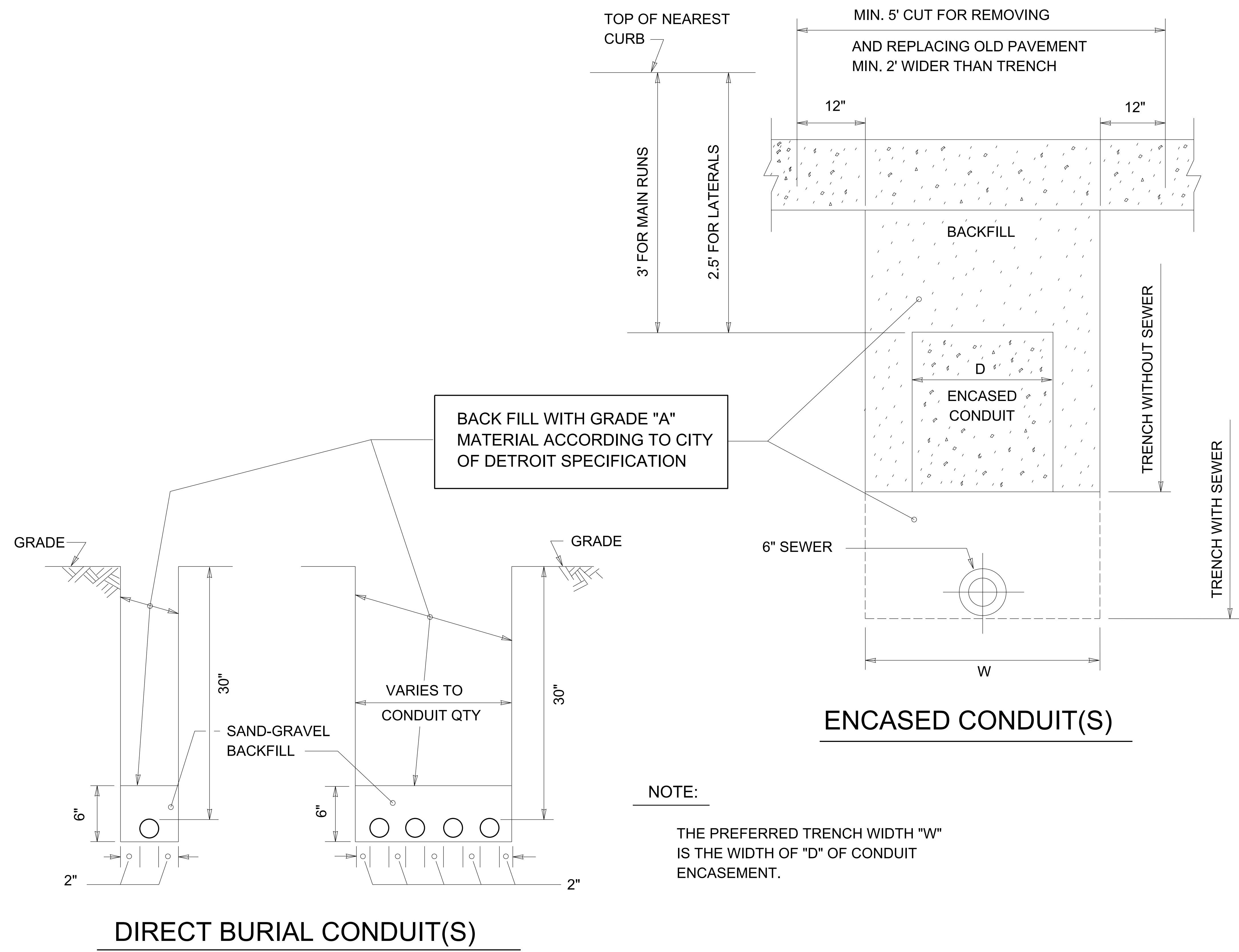
6-3" CONDUITS

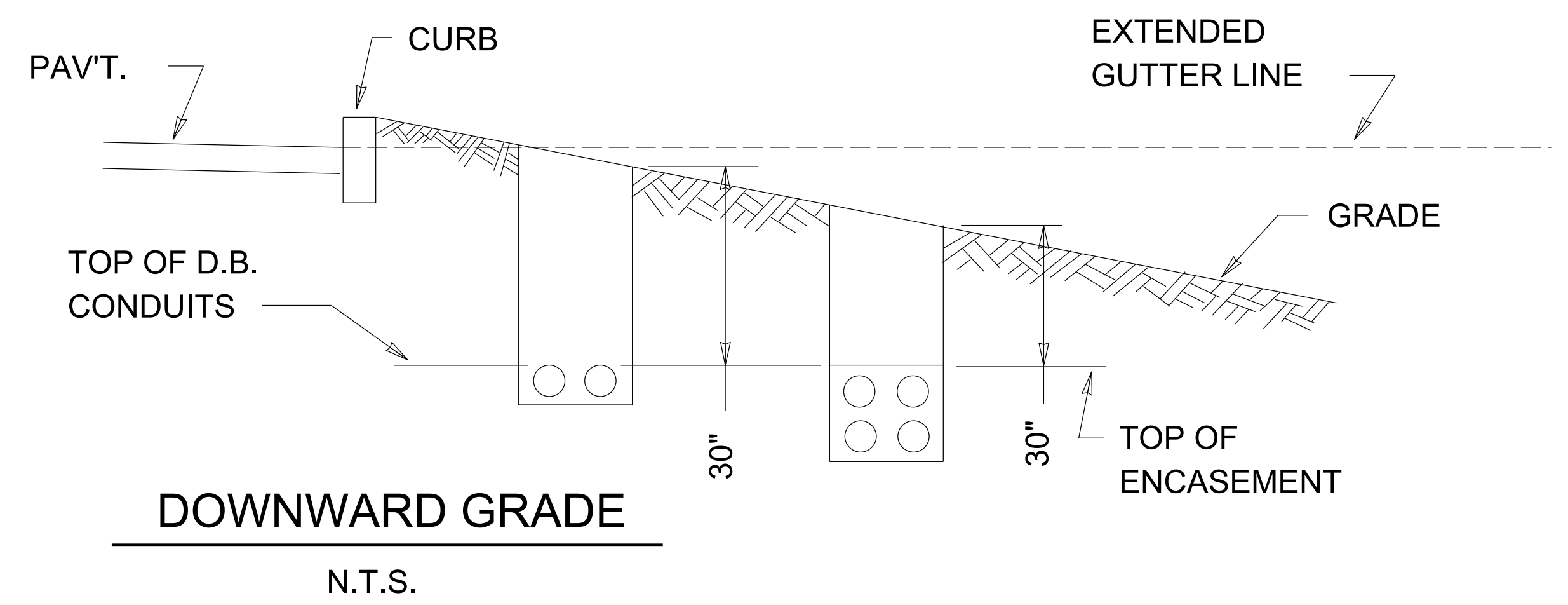
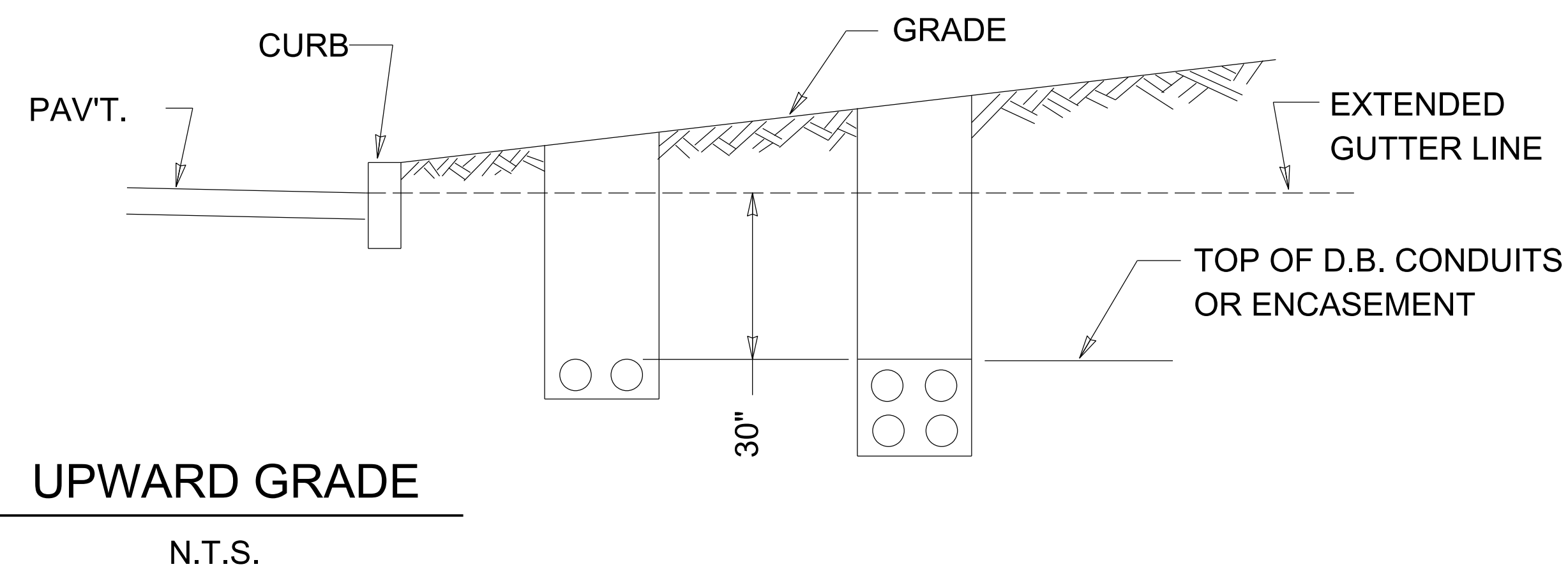


4 - 5" CONDUITS

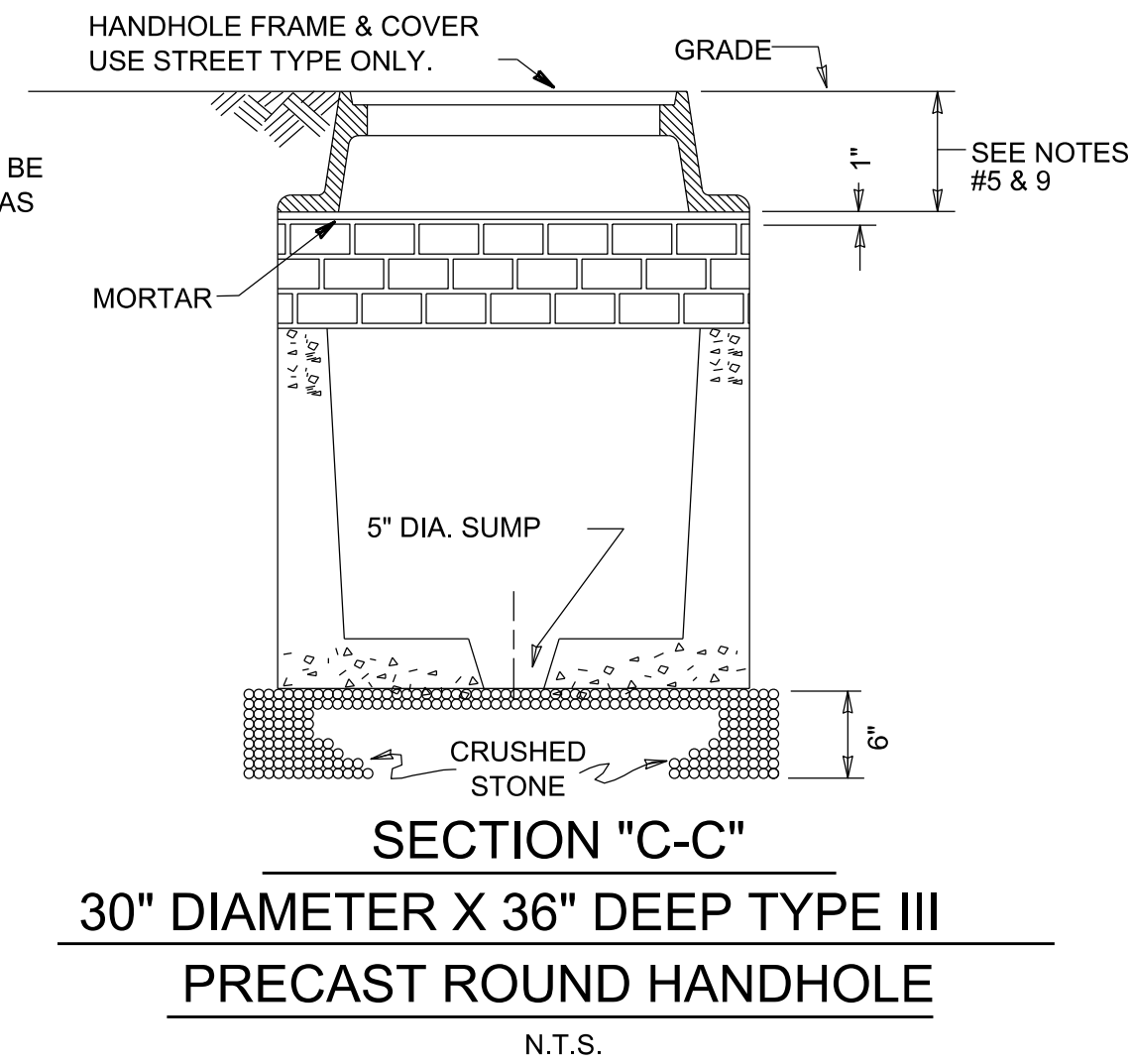
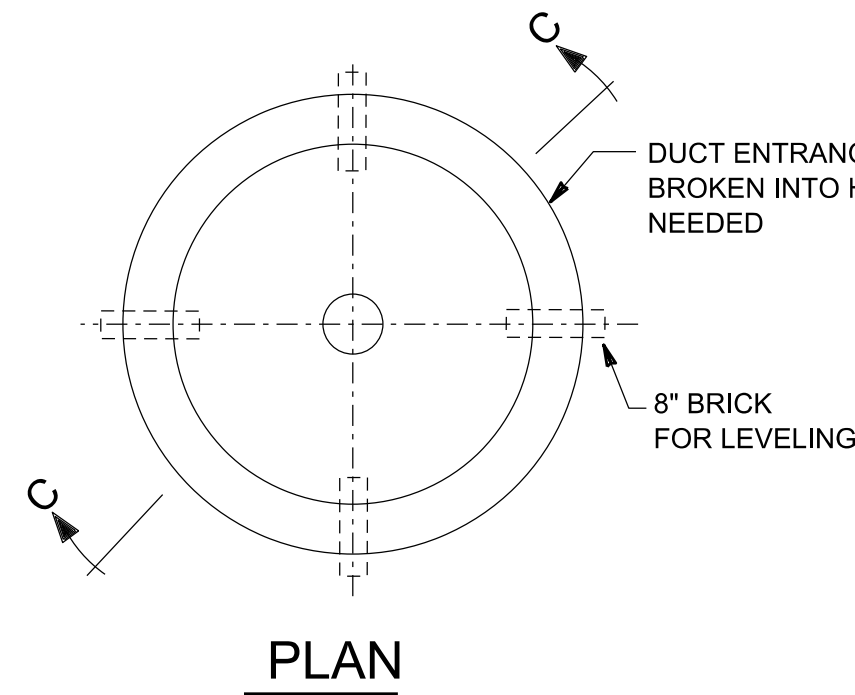


7-2.5" CONDUITS
IN
10" DIRECTIONAL BORE

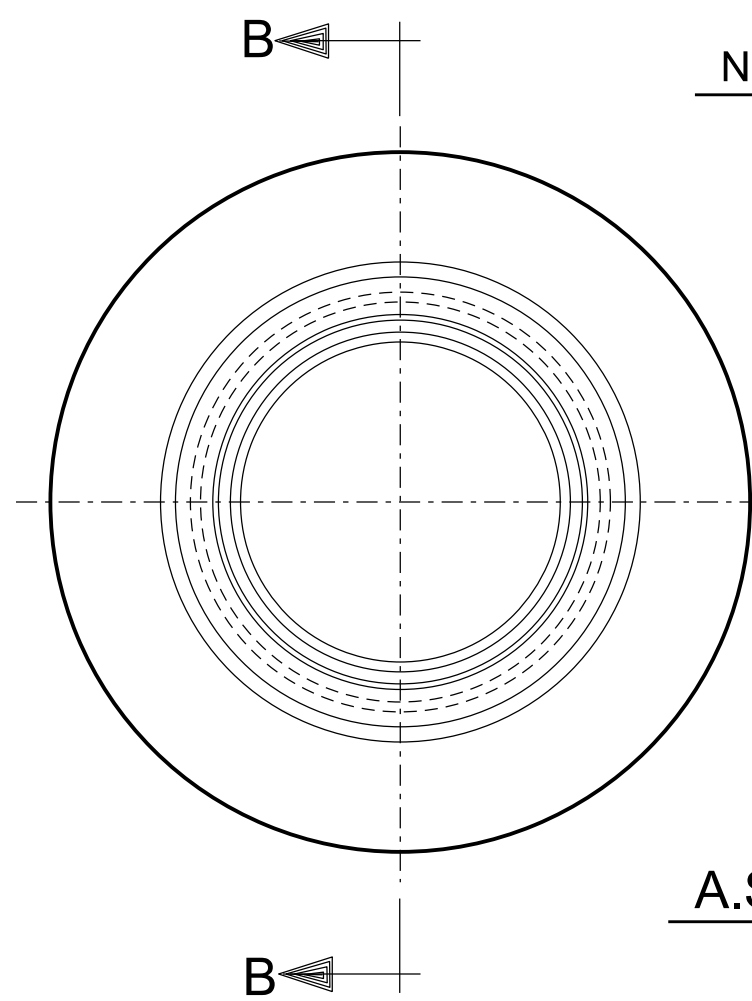




ROUND PRECAST HANDHOLE DETAILS



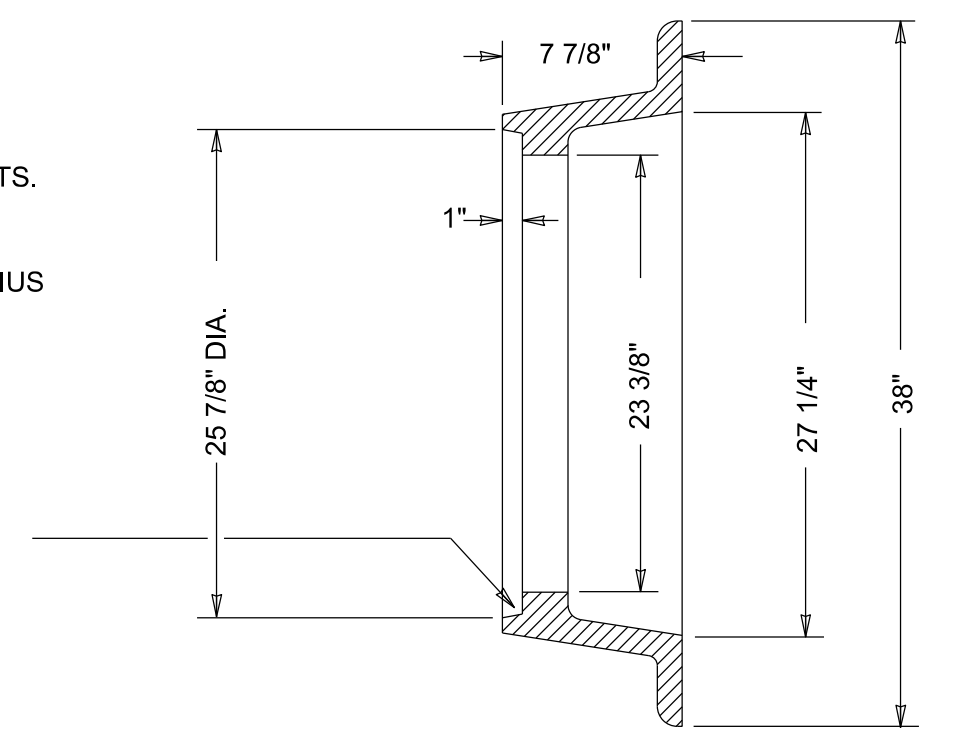
NOTE:
BELL ENDS ARE REQUIRED ON EACH CONDUIT BROKEN OUT IN HANDHOLE. TYPE AND SIZE SHALL BE IDENTICAL TO CONDUIT TYPE AND SIZE.



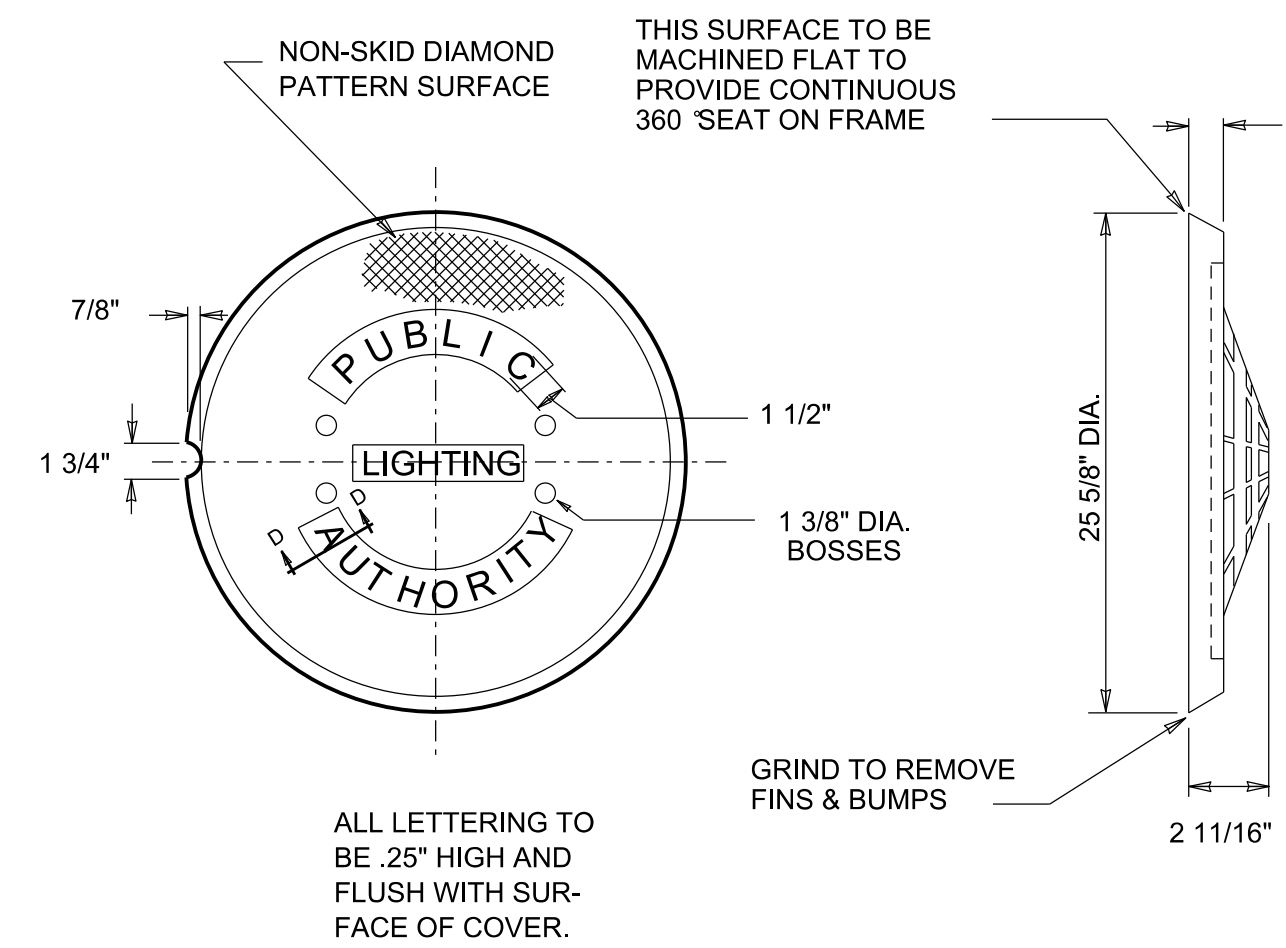
- NOTE:**
1. FRAMES MAY BE A.S.T.M. CLASS 30 GRAY IRON IF THE CONTRACTOR SO ELECTS.
 2. ALL FILLETS ARE .5" RADIUS & ALL ROUNDS ARE .25" RADIUS

THIS SURFACE TO BE MACHINED FLAT TO PROVIDE CONTINUOUS 360° SEAT FOR COVER

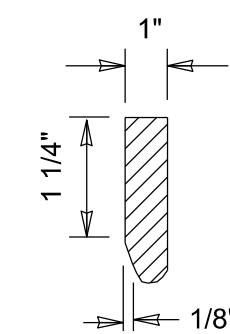
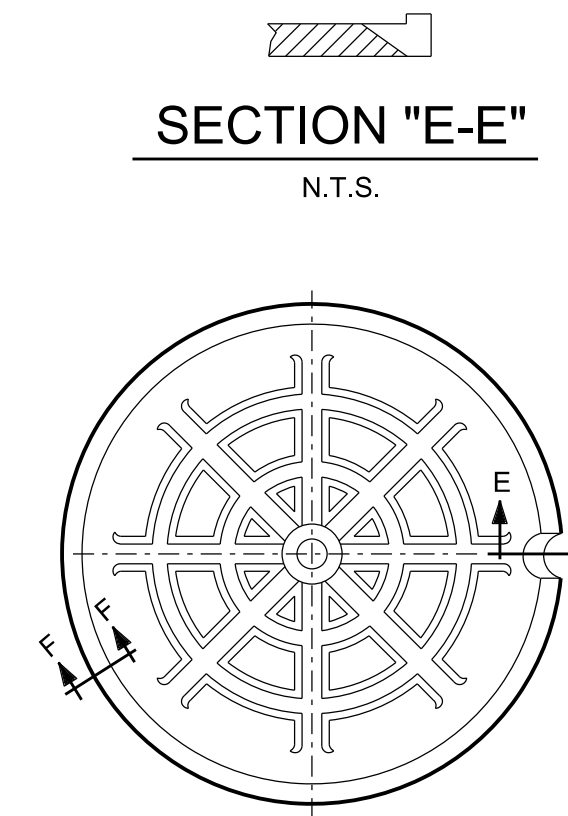
A.S.T.M. CLASS 20 OR 30 GRAY IRON
APPROX. 255 LBS.
HANDHOLE FRAME
N.T.S.



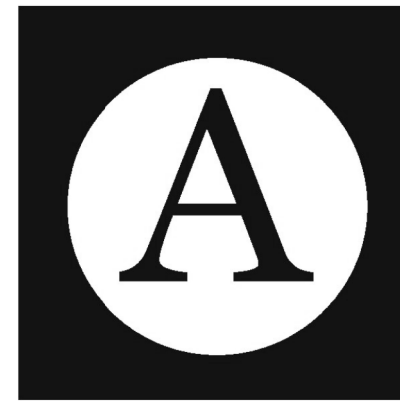
SECTION "B-B"
N.T.S.



A.S.T.M. CLASS 30 GRAY IRON
APPROX. WT. 145 LBS.
STREET TYPE COVER
TO BE USED IN STREETS & DRIVES
N.T.S.



SECTION "F-F"
N.T.S.

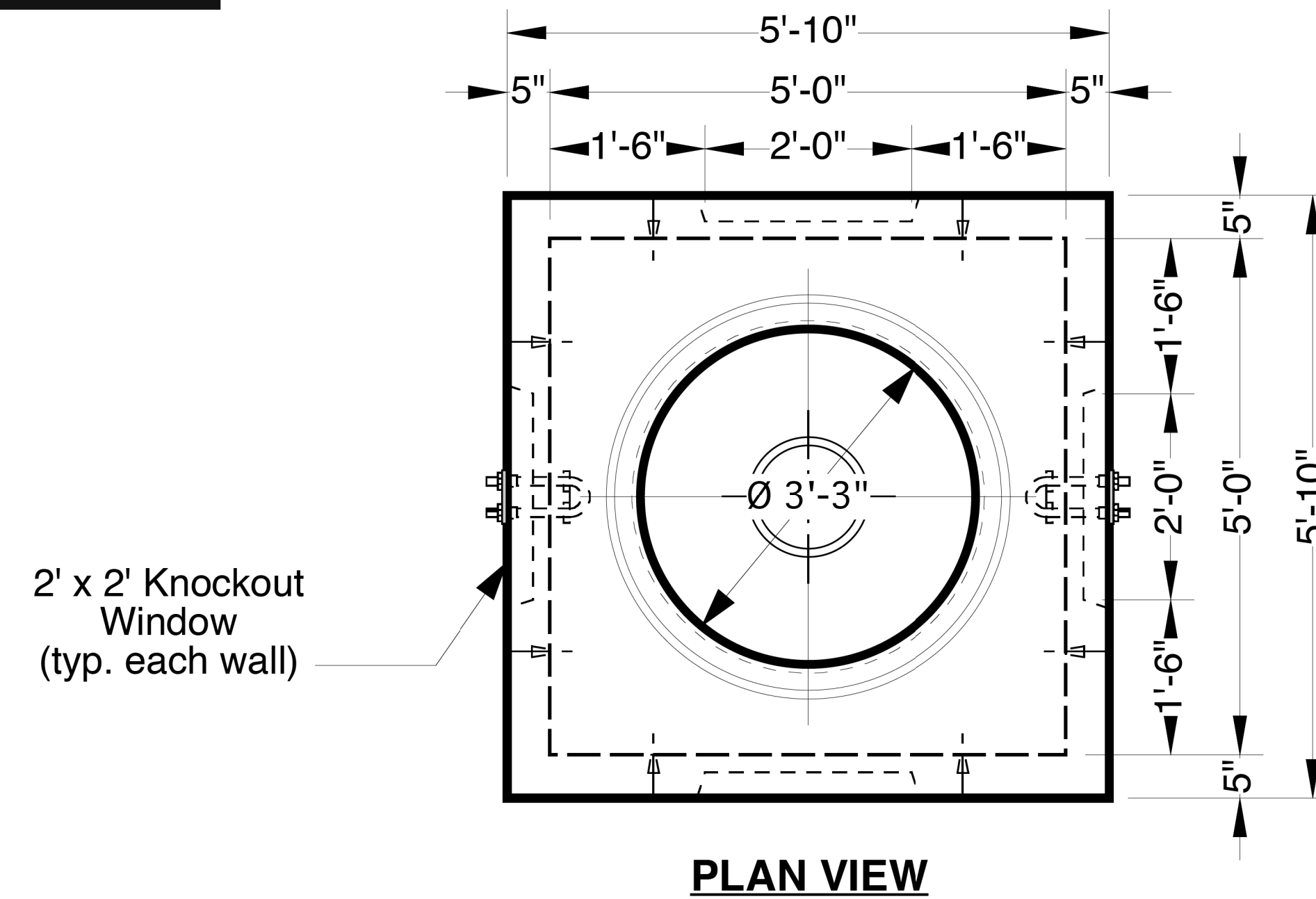


5' x 5' x 5' Handhole

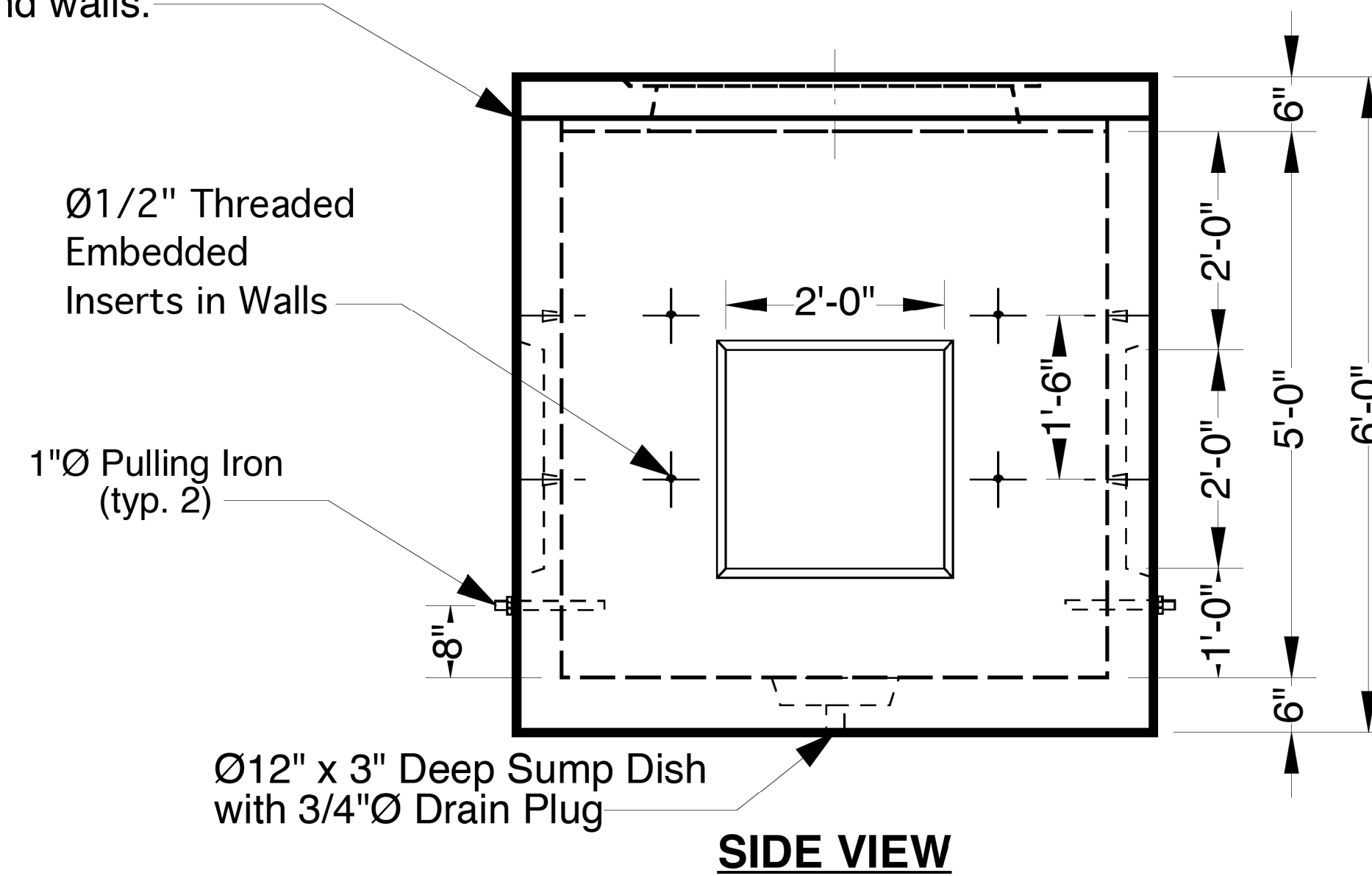
Advance Concrete Products Company



(800) 824-8351 (248) 887-4173 Fax: (248) 887-2755



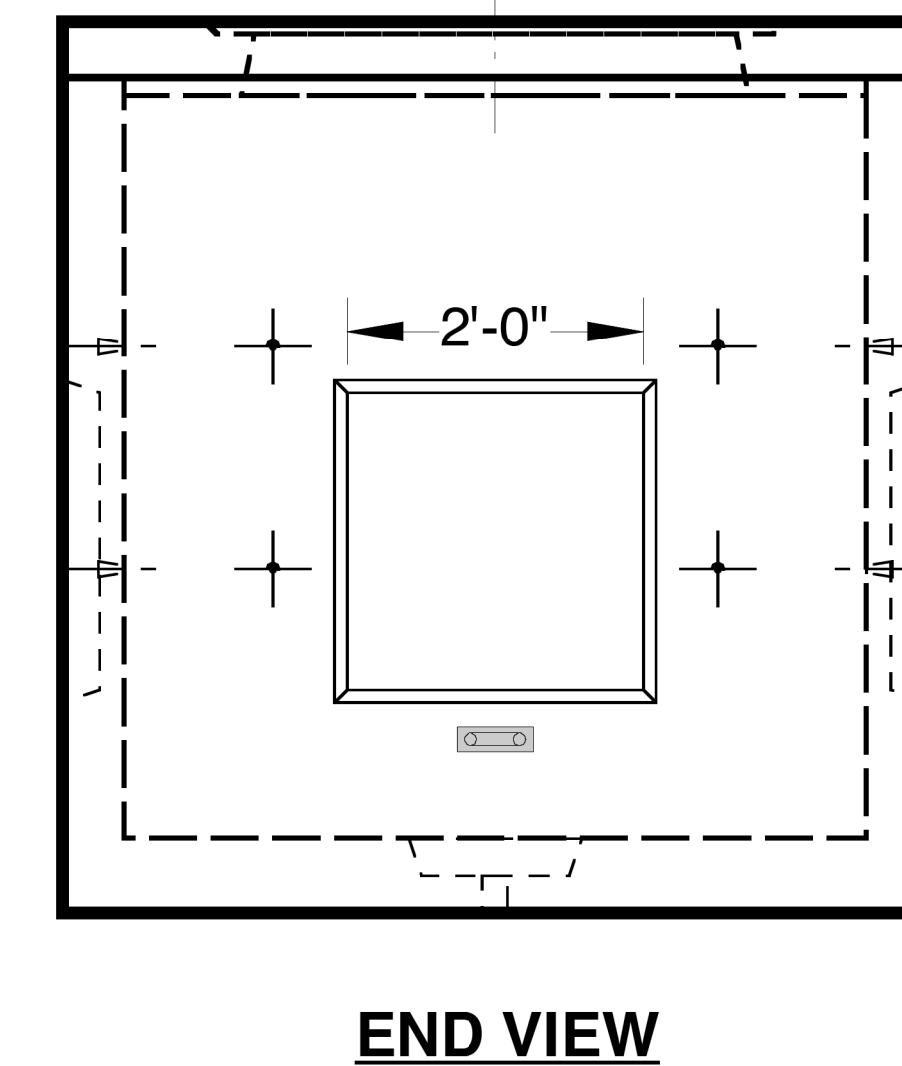
* Please allow for 1/2" height differential depending on air temperature affecting viscosity of Ø1" rope mastic between roof and walls.



1" Ø Butyl Rubber Rope Mastic Is Provided For Placement In Top Seam.

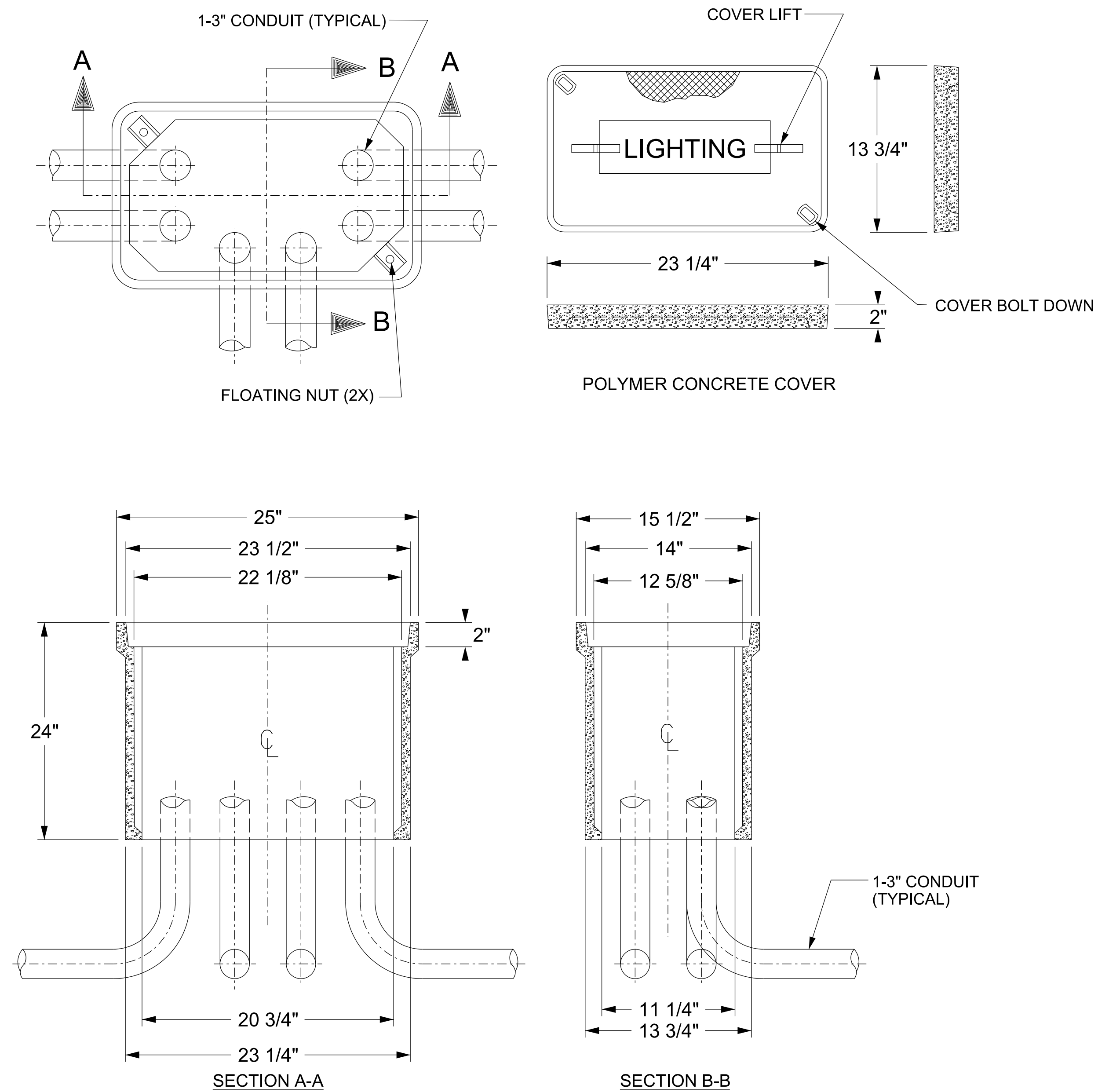
- Options -
- Cast Iron Heavy Duty Frames & Covers
- Galvanized Steel Hardware
- 6", 12" And 24" High Grade Adjustment Rings
- Custom Openings

Approximate Weight Total: ± 10,900 Lbs.
Bottom Section : ± 8,900 Lbs. Roof: ± 2,000 Lbs.



PROVIDE WITH PUBLIC LIGHTING AUTHORITY FRAME AND COVER SHOW ON SHEET DT-16.4

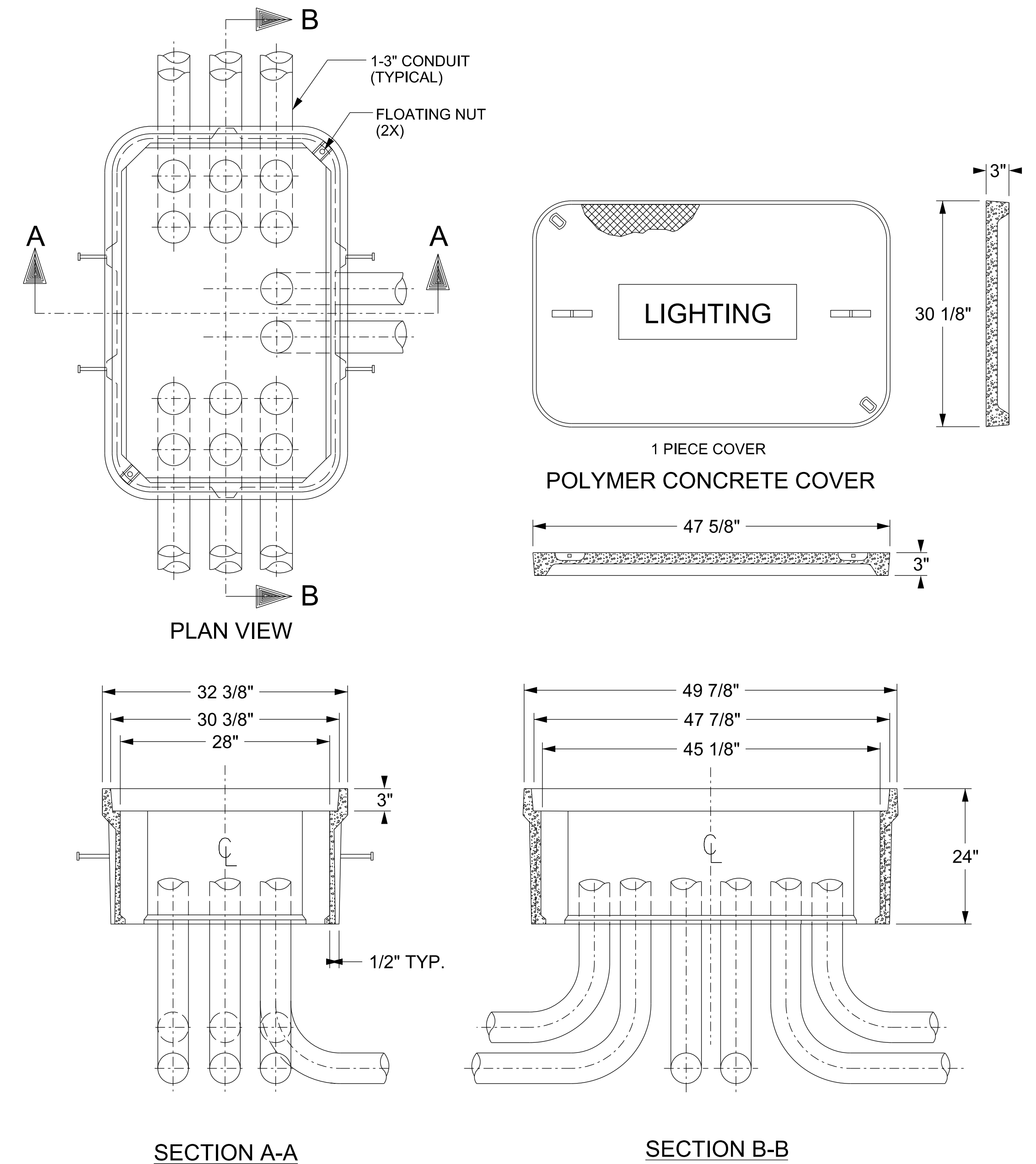
POLYMER CONCRETE HANDHOLE ASSEMBLY
13" X 24" X 24" DEEP



ASSEMBLY TO HAVE AN OPEN BOTTOM
LOAD RATING: ANSI TIER 15/22 - 20K POUNDS

NOT TO SCALE

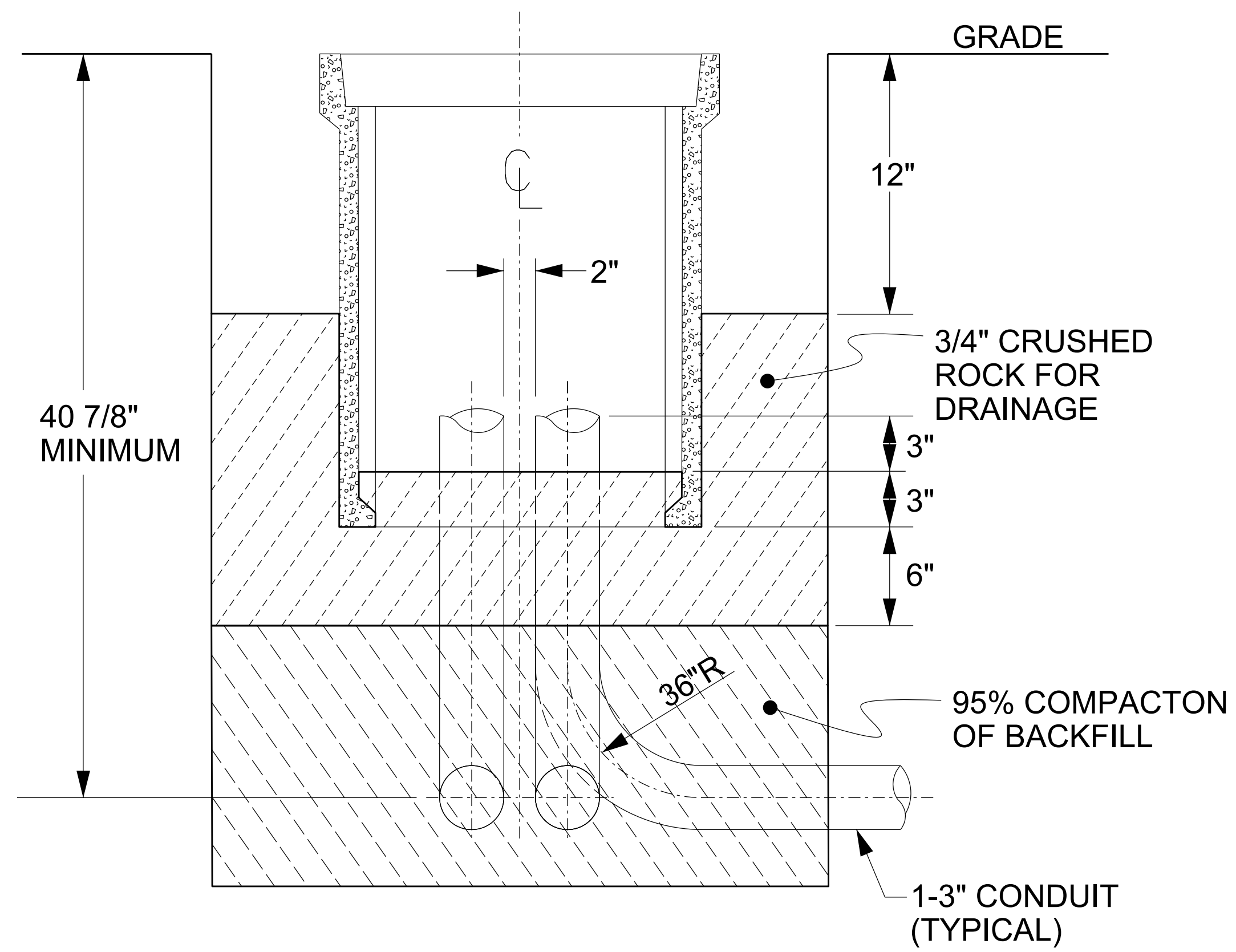
POLYMER CONCRETE MANHOLE ASSEMBLY
30" X 48" X 24" DEEP



ASSEMBLY TO HAVE AN OPEN BOTTOM
LOAD RATING: ANSI TIER 15/22 - 20K POUNDS

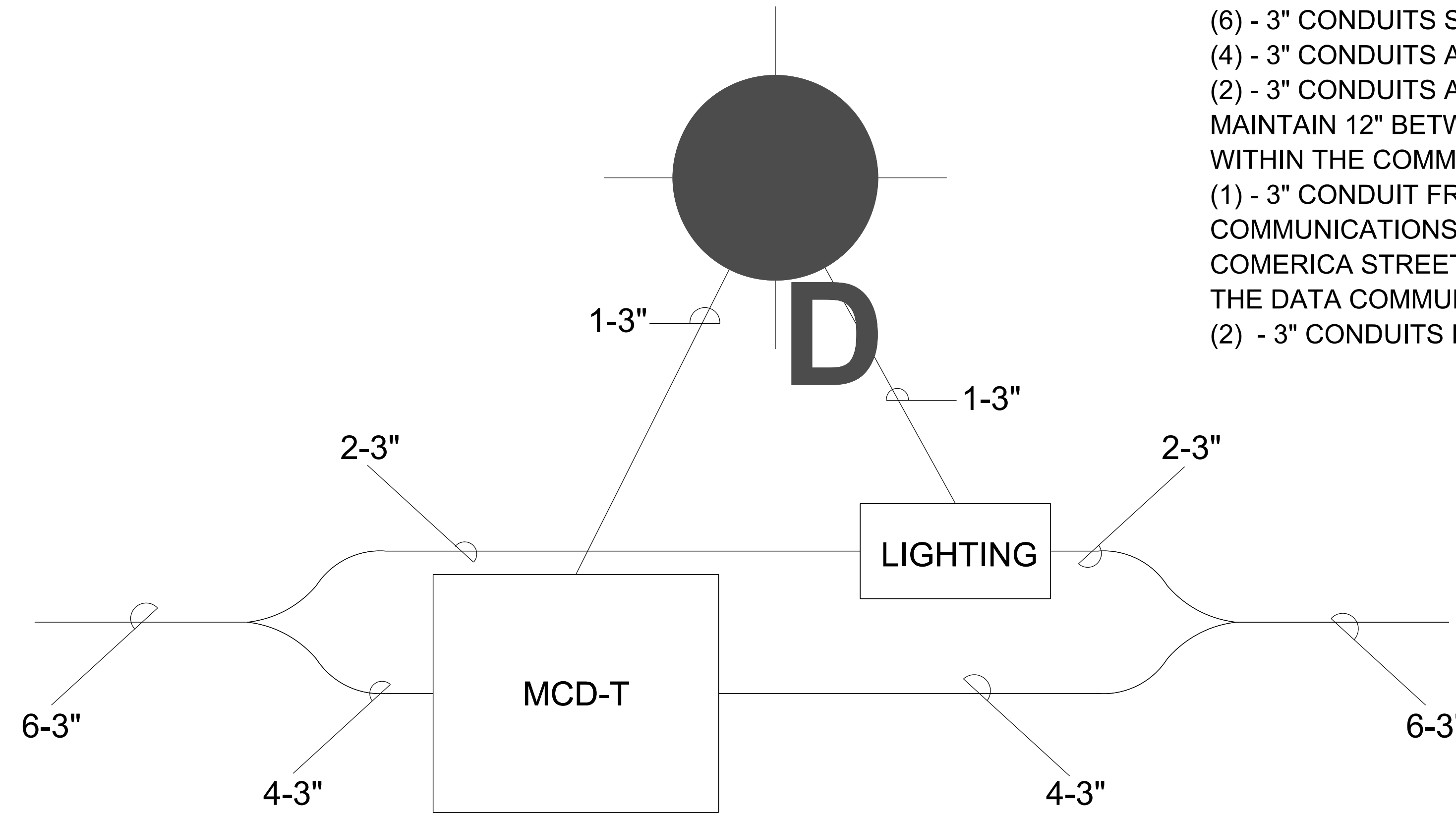
NOT TO SCALE

POLYMER CONCRETE STRUCTURE INSTALLATION

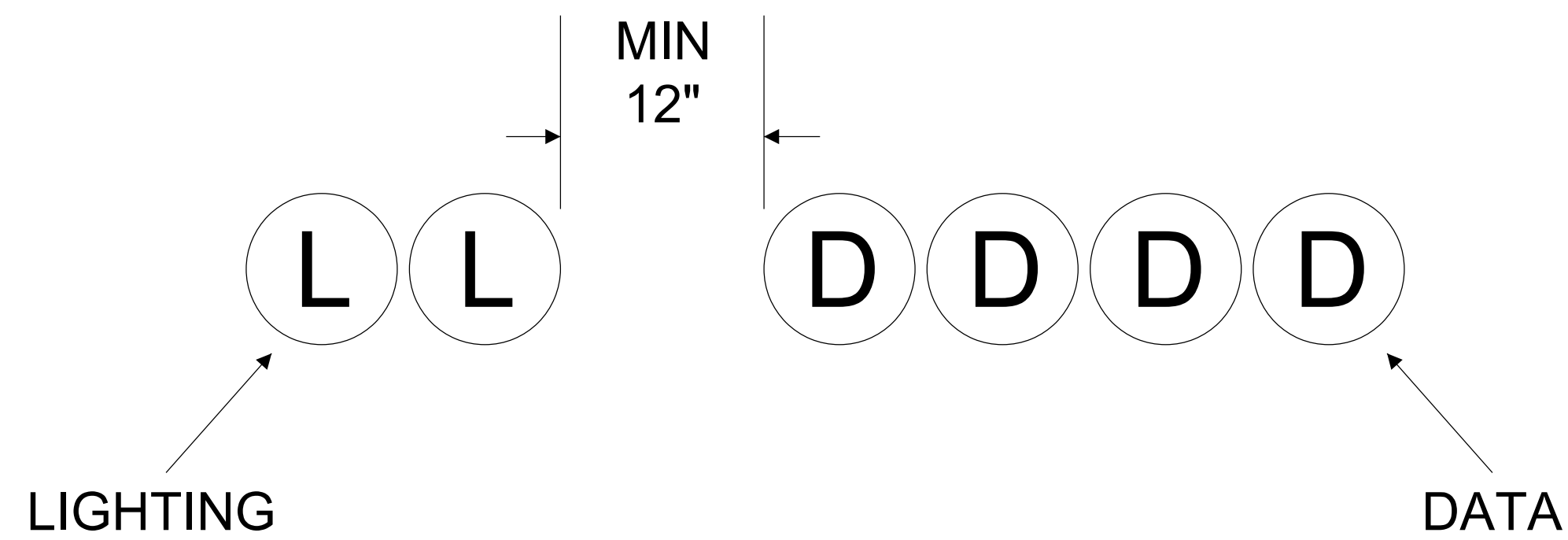


NOT TO SCALE

SHARED TRENCH DIRECT BURIED CONDUIT LAYOUT DETAILS



- (6) - 3" CONDUITS SHARE A COMMON TRENCH
- (4) - 3" CONDUITS ARE FOR DATA COMMUNICATIONS
- (2) - 3" CONDUITS ARE FOR STREET LIGHTING
- MAINTAIN 12" BETWEEN DATA AND STREET LIGHTING CONDUITS WITHIN THE COMMON TRENCH
- (1) - 3" CONDUIT FROM EACH STRUCTURE FEEDS A DATA COMMUNICATIONS STREET LIGHTING STANDARD COMERICA STREET LIGHTING STANDARDS ARE NOT CONNECTED TO THE DATA COMMUNICATION CONDUIT AND RECEIVE
- (2) - 3" CONDUITS FROM THE STREET LIGHTING HANDHOLE (NOT SHOWN)



NOT TO SCALE