

City of Detroit

Joseph Campau Streetscape

From Jefferson to Southern Terminus Detroit, Wayne County, MI

Issued for 100% Construction Documents, May 9, 2019
Project Number PW-7009



Fishbeck, Thompson, Carr & Huber, Inc.

Engineers • Scientists • Architects • Constructors
1001 Woodward Avenue, Suite 860, Detroit, MI 48226
(313) 293-3550 www.ftch.com

LOCAL AUTHORITY APPROVAL

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

PROJECT DESCRIPTION (0.3 MILES/1,684 FEET PROJECT LENGTH)

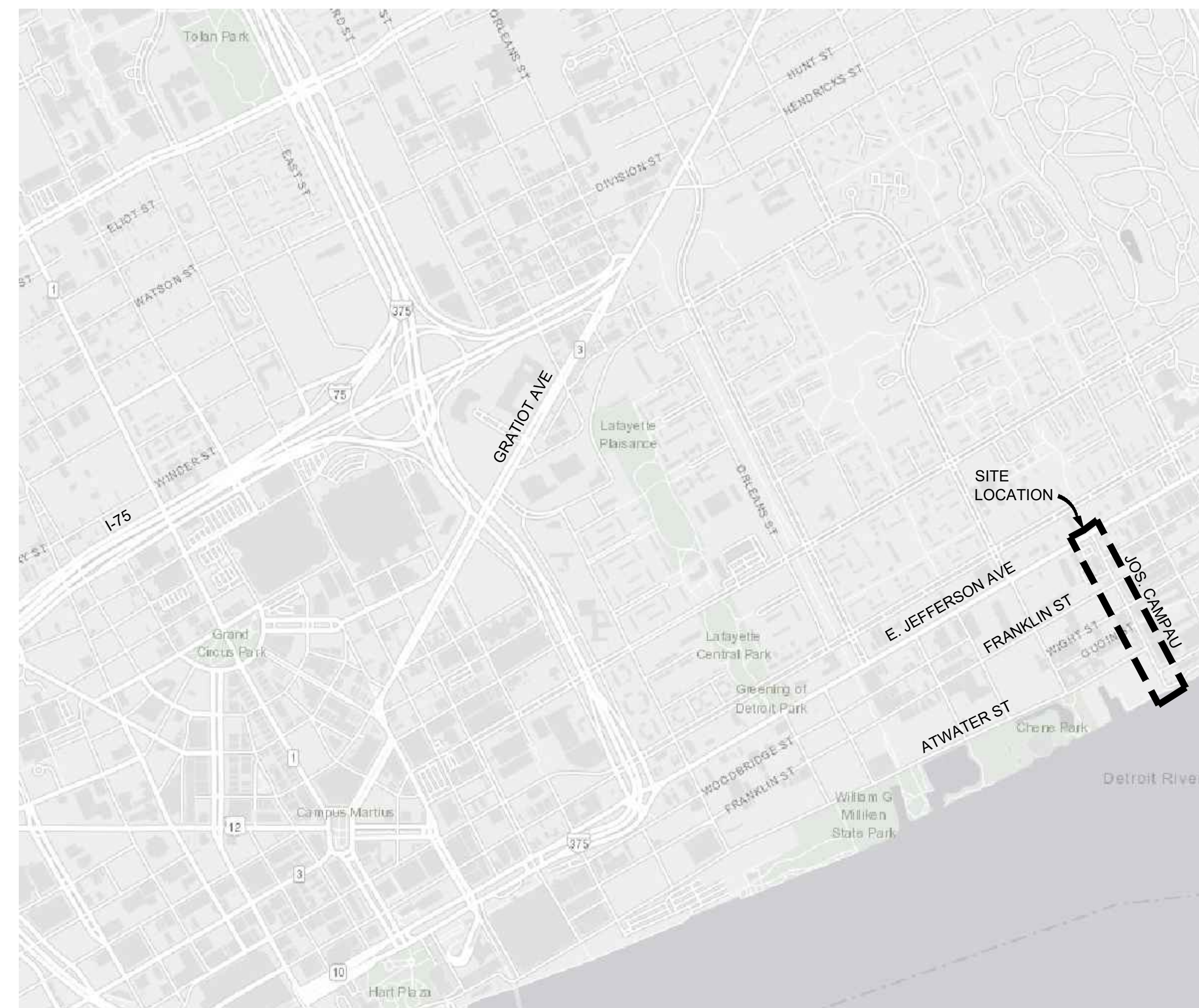
THE JOSEPH CAMPAU STREETScape PROJECT BEGINS AT THE INTERSECTION OF JOSEPH CAMPAU AVENUE AND EAST JEFFERSON AVENUE AND CONTINUES TO THE SOUTHEAST ALONG JOSEPH CAMPAU AVENUE UNTIL IT REACHES THE RIVERFRONT. THE PROJECT PROVIDES BIKE LANES AND STREETScape IMPROVEMENTS AND WILL INCLUDE THE FOLLOWING ELEMENTS: COLD MILLING AND TWO COURSE HMA OVERLAY, 10-FOOT-WIDE TWO WAY PROTECTED BIKE PATH, DRAINAGE STRUCTURE REHABILITATION, HARDSCAPE, SIGNAGE, PAVEMENT MARKINGS, SITE FURNISHINGS, ADA ACCESSIBILITY, IMPROVED LIGHTING, LANDSCAPING, AND CONNECTION OPPORTUNITIES WITH THE DETROIT RIVERWALK.

Standards and Specifications Reference - *Not To Be Printed*

- MDOT 2012 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
- CITY OF DETROIT STANDARD SPECIFICATIONS FOR PAVING AND RELATED CONSTRUCTION
- CITY OF DETROIT STREET AND ALLEY PLANS

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

LOCATION MAP



VICINITY MAP



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.

UTILITIES

DETROIT WATER & SEWER
GLWA
DALE ECHOLS
6425 HUBER ST
DETROIT, MI 48211
Phone: 313.267.4857
DALE.ECHOLS@GLWATER.ORG

DETROIT PUBLIC LIGHTING
9449 GRINNEL
DETROIT MI 48226
PHONE: 586.803.3516 EXT. 715

DETROIT WATER AND SEWER DEPARTMENT
735 RANDOLPH ST
DETROIT MI 48226
PHONE: 313.267.8000

FIRE

CITY OF DETROIT
FIRE CHIEF
ERIC JONES
1301 THIRD STREET
DETROIT, MI 48226
PHONE: 313.596.2900

GAS

DTE GAS COMPANY
BARBARA SAUNDERS
ONE ENERGY PLAZA
DETROIT, MI 48226
Phone: 313.235.5111
SAUNDERSB@DTEENERGY.COM

TELEPHONE

AT&T
DEREK BULKLEY
17651 MICHIGAN AVE.
DEARBORN, MI 48126
PHONE: 313.240.5480
DB3451@ATT.COM

ELECTRIC

ITC HOLDING CORP
PAUL BELZAK
27175 ENERGY WAY
NOVI, MI 48377
PHONE: 248.946.3308
PBELZAK@ITCRANSCO.COM

DTE GAS COMPANY
SARA FORCE
ONE ENERGY PLAZA
DETROIT, MI 48226
SARA.FORCE@DTEENERGY.COM

CABLE

SIGMA NETWORK SERVICES (COMCAST
CATV)
TIFFANY FORBES
27096 OAKMEAD DRIVE
PERRYSBURG, OH 35551
PHONE: 419.874.9262 EXT. 144
TFORBES@TEAMSIGMA.COM

CROWN CASTLE FIBER
KIM DASSON
300 MERIDIAN CENTRE
ROCHESTER, NY 14618
PHONE: 585.568.8436
KIM.DASSON@CROWNCastle.COM

SEAL

ftch
engineers
scientists
architects
constructors

fishbeck, thompson, carr & huber, inc.
www.ftch.com



SMITHGROUP

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

City of Detroit
Joseph Campau Streetscape

REVISIONS

DATE	DESCRIPTION	BY	APP'D
5/9/2019	100% CD		
1/23/2019	95% CD		
8/10/2018	50% CD		
7/27/2018	30% CD		

Drawn By AOF
Designer KK3
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.
180391

SHEET NO.

G101

© Copyright 2018
All Rights Reserved

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-STAKE 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.

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 ABUT 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.

INDEX OF SHEETS:

CIVIL

- G101 COVER SHEET
- G001 LEGEND AND NOTES SHEET
- G002 NOTES SHEET
- C101 EXISTING CONDITIONS PLAN
- C102 TOPOGRAPHIC SURVEY AND ALIGNMENT PLAN
- C201 MAINTENANCE OF TRAFFIC PLAN - STAGE 1
- C202 DETOUR PLAN - STAGE 1
- C203 MAINTENANCE OF TRAFFIC PLAN - STAGE 2
- C204 DETOUR PLAN - STAGE 2
- C205 MAINTENANCE OF TRAFFIC PLAN - STAGE 3
- C206 DETOUR PLAN - STAGE 3
- C207 MAINTENANCE OF TRAFFIC PLAN - STAGE 4
- C208 DETOUR PLAN - STAGE 4
- C209 MAINTENANCE OF TRAFFIC PLAN - STAGE 5
- C210 DETOUR PLAN - STAGE 5
- C211 MAINTENANCE OF TRAFFIC PLAN - STAGE 6
- C212 DETOUR PLAN - STAGE 6
- C301 REMOVAL PLAN AND SESC PLAN STA 51+00 TO STA 59+75
- C302 REMOVAL PLAN AND SESC PLAN STA 59+75 TO STA 67+50
- C401 CONSTRUCTION PLAN STA 51+00 TO STA 59+75
- C402 CONSTRUCTION PLAN STA 59+75 TO STA 67+50
- C402 DIMENSIONAL AND PAVING PLAN
- C501 GRADING PLAN
- C502 GRADING PLAN
- C503 DETAIL GRADING PLAN
- C504 DETAIL GRADING PLAN
- C505 DETAIL GRADING PLAN
- C601 PERMANENT PAVEMENT MARKING PLAN
- C602 PERMANENT PAVEMENT MARKING PLAN
- C701 TYPICALS
- C702 TYPICALS
- C703 MISCELLANEOUS DETAILS
- C704 MISCELLANEOUS DETAILS
- C705 MISCELLANEOUS DETAILS
- C706 MISCELLANEOUS DETAILS
- C707 MISCELLANEOUS DETAILS



fishbeck thompson carr & huber, inc.
www.ftch.com



SMITHGROUP

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

City of Detroit

Joseph Campau Streetscape

SYMBOL LEGEND

SURVEY	TOPOGRAPHY - PLAN
BENCH MARK	SHRUBS
SECTION CORNER	CONIFEROUS TREE
CENTER OF SECTION	DECIDUOUS TREE
QUARTER CORNER	HEDGE EDGE OF WOODS
CONCRETE MONUMENT	WETLANDS
PROPERTY IRON	EXISTING DITCH
SET PROPERTY IRON	PROPOSED DITCH
PROPERTY LINE	EDGE OF WATER
PROPERTY HOOK (COMMON PROPERTY OWNERSHIP)	CONTOUR MAJOR
TITLE LINE / PROPERTY LINE	CONTOUR MINOR
ROW LINE	MONITORING WELL
SECTION LINE	SOIL BORING
EASEMENT CENTERLINE	GUY ANCHOR
EASEMENT LINE	LIGHT
SURVEY LINE STATIONING	UTILITY POLE
TRAVERSE POINT	SIGN
SOIL BORING LOCATION	FLAG POLE
	MAIL BOX
	PARKING METER
	RAILROAD TRACKS SCALE: 1" = 60' OR LESS
	RAILROAD TRACKS SCALE: 1" = 100' OR MORE

EXISTING UTILITIES	PROPOSED UTILITIES	MISCELLANEOUS
8" SAN. SANITARY SEWER & MANHOLE	8" SAN. SANITARY SEWER & MANHOLE	<p>SOIL EROSION CONTROL</p> <p> SOIL EROSION CONTROL MEASURES</p> <p> SECTION SCALE: SCALE OF SECTION</p> <p> DETAIL SCALE: SCALE OF DETAIL</p>
12" STM. STORM SEWER & MANHOLE	WYE & LEAD	
CATCH BASIN CURB TYPE	RISER & LEAD	
CATCH BASIN LAWN TYPE	STANDARD SEWER CLEAN OUT	
VALVE	MAX. ELEVATION OF LOT LEAD AT PROPERTY LINE	
HYDRANT	12" STM. STORM SEWER & MANHOLE	
PLUG	CATCH BASIN	
6" WTR. WATER MAIN	UNDER DRAIN	
4" FM. FORCE MAIN	8" WATER WATER MAIN	
2" GAS. GAS MAIN	VALVE & BOX	
ELEC. UNDERGROUND ELECTRIC	VALVE & CHAMBER	
OP. FIBER OPTICS	METER	
TEL. UNDERGROUND TELEPHONE	PLUG	
2" OIL. OIL TRANSMISSION LINE	STANDARD FIRE HYDRANT ASSEMBLY	
6" STEAM. UNDERGROUND STEAM	CURB STOP & BOX	
2" SPRK. UNDERGROUND SPRINKLER	6" FM. FORCE MAIN	
CATV. CABLE TELEVISION	FORCE MAIN AIR RELEASE STRUCTURE	
TELEPHONE PEDESTAL	GAS PIPE	
PIPE-ONLY CULVERT	TELEPHONE LINE	
FLARED END SECTION CULVERT	12" CSP. PIPE-ONLY CULVERT	
HEADWALL CULVERT	FLARED END SECTION CULVERT	
COMBINED SEWER	12" CSP	

ALL SYMBOLS MAY NOT APPEAR ON DRAWINGS.

ELECTRICAL

- CO-01 COVER SHEET
- LQ-01 LEGENDS AND QUANTITIES SHEET
- GI-01 GENERAL INFORMATION SHEET
- UG-01 UNDERGROUND CONSTRUCTION PLAN SHEETS
- UG-02 UNDERGROUND CONSTRUCTION PLAN SHEETS
- IN-01 OVERHEAD CONSTRUCTION AND CABLING PLAN SHEETS
- IN-02 OVERHEAD CONSTRUCTION AND CABLING PLAN SHEETS
- ED-01 LC 07M39 ELECTRICAL DIAGRAM SHEETS (2 SHEETS)
- DT-01 ALUMINUM POST TOP STANDARD DETAILS
- DT-02 130W POST TOP LUMINAIRE DETAILS
- DT-03 UNDERGROUND ALUMINUM TRIPLEX CODE WORD BRENAU STREET LIGHTING CABLE DETAILS
- DT-04 LAMP CORD CABLE DETAILS
- DT-05 FUSE HOLDER DETAILS
- DT-06 UNDERGROUND FED STANDARD BASE ELECTRICAL CONNECTION DETAILS
- DT-07 LUMINAIRE AND CABLE ID TAG DETAILS
- DT-08 STREET LIGHTING CONTROLLER DETAILS
- DT-09 UNDERGROUND LIGHTING AND RECEPTACLE CIRCUITS TYPICAL WIRING SCHEMA DETAILS
- DT-10 UNDERGROUND CONSTRUCTION DETAILS
- DT-11 POLYMER CONCRETE 13" X 24" HANDHOLE DETAILS

REVISIONS

5/9/2019	100% CD
1/23/2019	95% CD
8/10/2018	50% CD
7/27/2018	30% CD

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.
180391

SHEET NO.

G001

PLOT INFO: Z:\2018\180391\TASK2 - JOSEPH CAMPAU\CADD\CD\G001\80391_CD.DWG LAYOUT: C001 DATE: 5/9/2019 TIME: 12:38:10 PM USER: AOF

UTILITY NOTES

- 1. EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE.
2. VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF EXISTING UTILITIES PRIOR TO EXCAVATION WHERE NECESSARY.
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 JUNIVIA SANDERS PERMIT INSPECTOR (313-999-3928) 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 DWS 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 WATERIGHT.
25. ALL MANHOLE AND CATCH BASIN COVERS SHALL BE BOLTED DOWN.

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 SURVEY 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).
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.

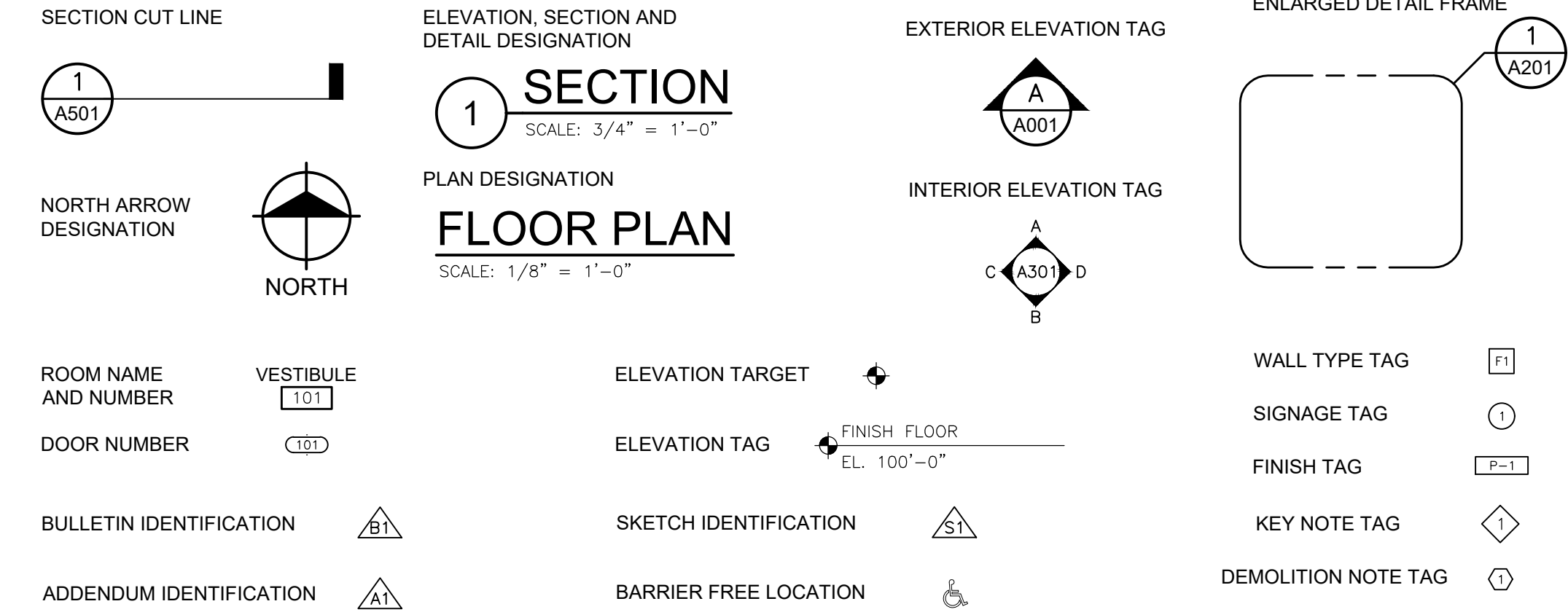
SIGNAGE & STRIPING NOTES

- 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.
4. 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.
10. FIELD VERIFY MILE MARKER SIGN LOCATIONS AND MILEAGE NUMBERS PRIOR TO FABRICATION AND INSTALLATION. MILEAGE DESIGNATIONS ARE SEQUENTIAL AND BASED UPON EXISTING DESIGNATIONS ON THE DETROIT RIVERWALK. NEAREST EXISTING SIGN IS LOCATED AT THE SOUTHERN END OF JOSEPH CAMPAU AT THE DETROIT RIVER.

GENERAL ABBREVIATIONS

Table with 4 columns: Abbreviation, Full Name, Abbreviation, Full Name. Includes terms like AFF ABOVE FINISH FLOOR, FD FLOOR DRAIN, MEZZ. MEZZANINE, RD ROOF DRAIN, etc.

GRAPHIC SYMBOLS



UNIT PRICE SCHEDULE table with columns: ITEM NO., PAY ITEM, DESCRIPTION, PAY UNIT, QTY. Lists items like Mobilization, Door Hanger Notification, Tree, Stump, Curb and Gutter, Pavt, Rem, Sidewalk, Rem, B-10 Instrumentation Cabinet, etc.

Table with 4 columns: Item No., Description, Unit, Quantity. Lists items like Post, Steel, 3 lb, Sign, Type III, Erect, Salv, Sign, Type III, Rem, Sign, Type IIIA, Sign, Type IIIB, Pavt Mrkg, Ovly Cold Plastic, 12 inch, Crosswalk, etc.

Table with 4 columns: Item No., Description, Unit, Quantity. Lists items like Liliun asiatic 'Trogon', #1 cont, Prune Tree, Sign, Mileage Marker, Sign, Trailhead, Vertical, Soil Cell, Tradescantia 'Sweet Kate', #1 cont, Trash Receptacle, Watering and Cultivating, First Season, Min. 4,200, Modified, etc.

PLT: I:\CADD\2016\180391\TASK2 - JOSEPH CAMPAU\CADD\CD\CD02\080391_CD.DWG LAYOUT: G002 DATE: 5/9/2019 TIME: 1:39:45 PM USER: AOF



SMITHGROUP

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

City of Detroit

Joseph Campau Streetscape

REVISIONS

Table with 2 columns: Date, Description. Lists revision dates like 5/9/2019 100% CD, 1/23/2019 95% CD, etc.

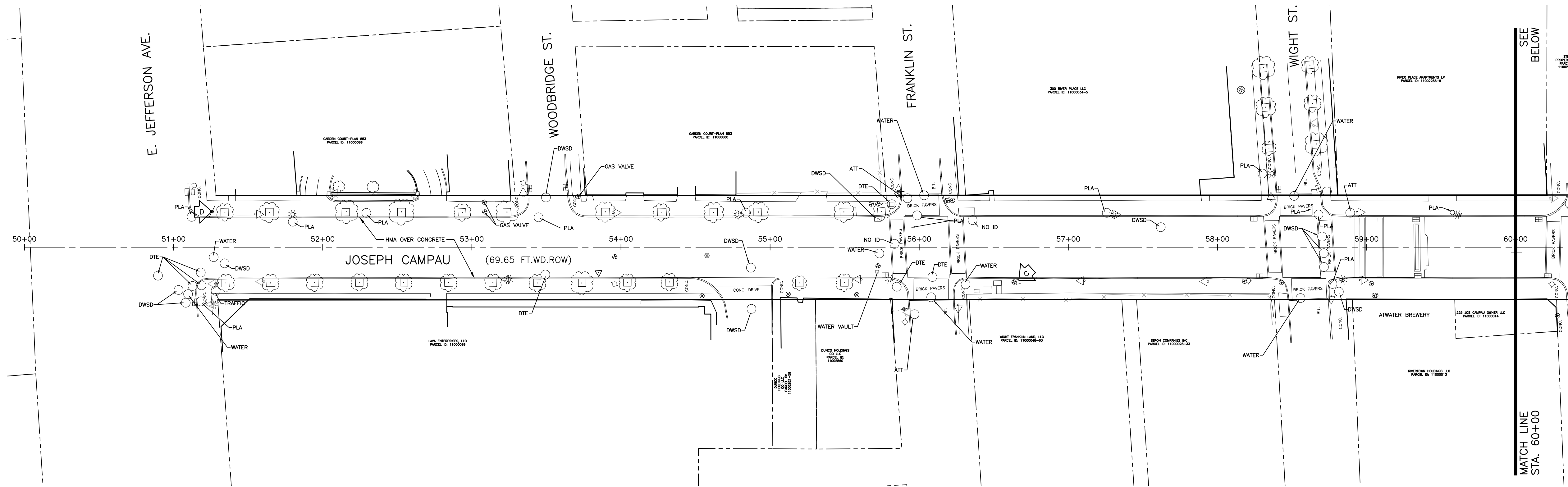
Table with 2 columns: Role, Name. Lists roles like Drawn By AOF, Designer AOF, Reviewer DPE, Manager KKS.

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. 180391

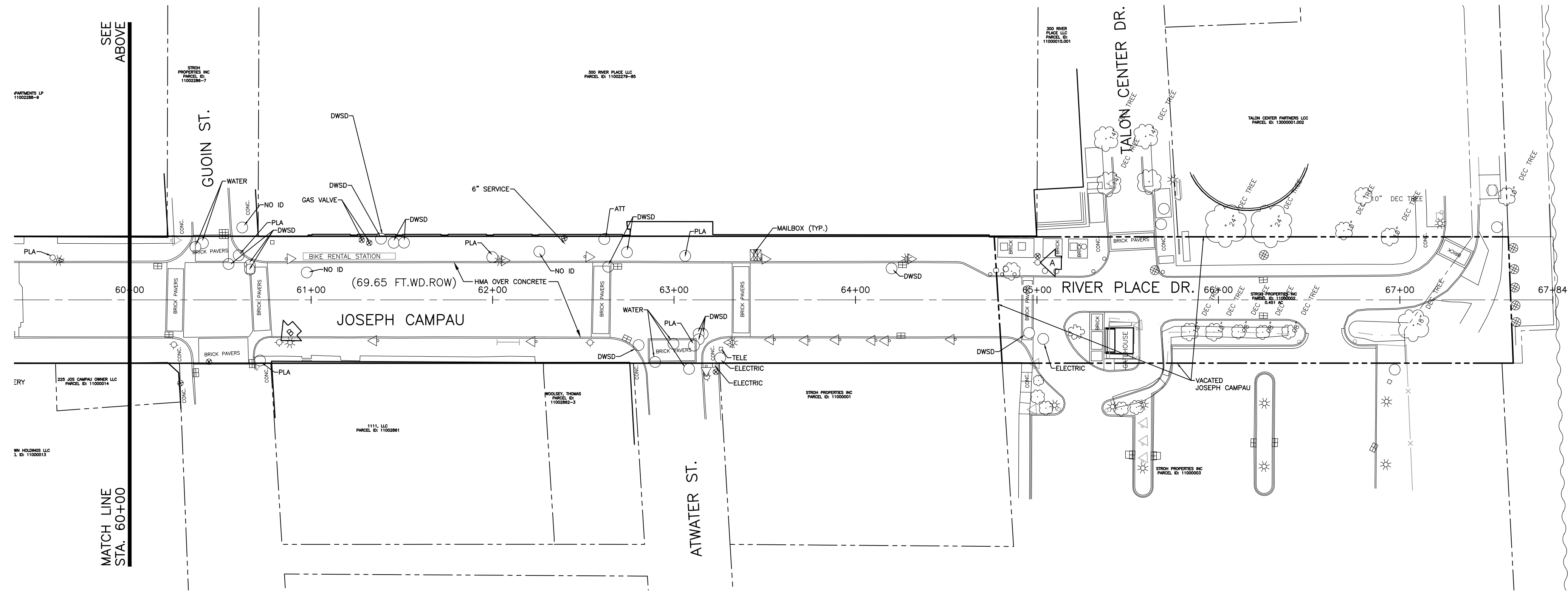
SHEET NO.

G002

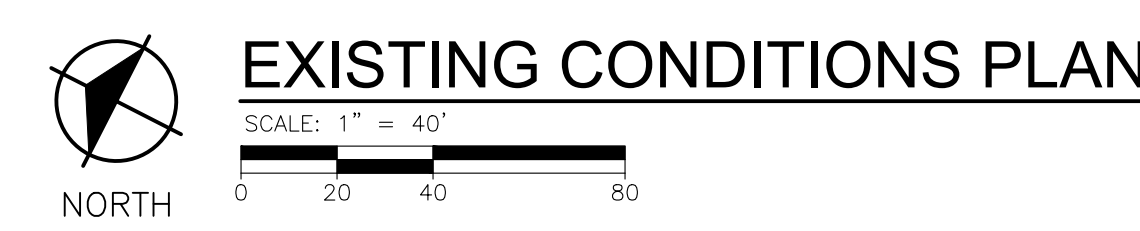


BENCH MARKS

- BENCH MARK A ELEVATION: 581.766
ARROW ON HYDRANT LOCATED AT NORTHEAST CORNER OF JOSEPH CAMP AU AVENUE AND RIVER PLACE DRIVE.
1. NOTE TEXT HERE...
- BENCH MARK B ELEVATION: 583.362
ARROW ON HYDRANT LOCATED AT SOUTHWEST CORNER OF JOSEPH CAMP AU AVENUE AND GUOIN ST
- BENCH MARK C ELEVATION: 586.362
ARROW ON HYDRANT LOCATED AT SOUTHWEST CORNER OF JOSEPH CAMP AU AVENUE AND FRANKLIN STREET
- BENCH MARK D ELEVATION: 595.820
TOP SOUTHEAST BOLT ON METAL STRAIN POLE LOCATED AT SOUTHWEST CORNER OF JOSEPH CAMP AU AVENUE AND JEFFERSON AVENUE



PLOT INFO: Z:\2018\180391\TASK2 - JOSEPH CAMP AU\CD\CD101180391 CD.DWG LAYOUT: C101 DATE: 5/9/2019 TIME: 12:38:38 PM USER: AOF



EXISTING CONDITIONS PLAN

REVISIONS

5/9/2019	100% CD
1/23/2019	95% CD
8/10/2018	50% CD
7/27/2018	30% CD

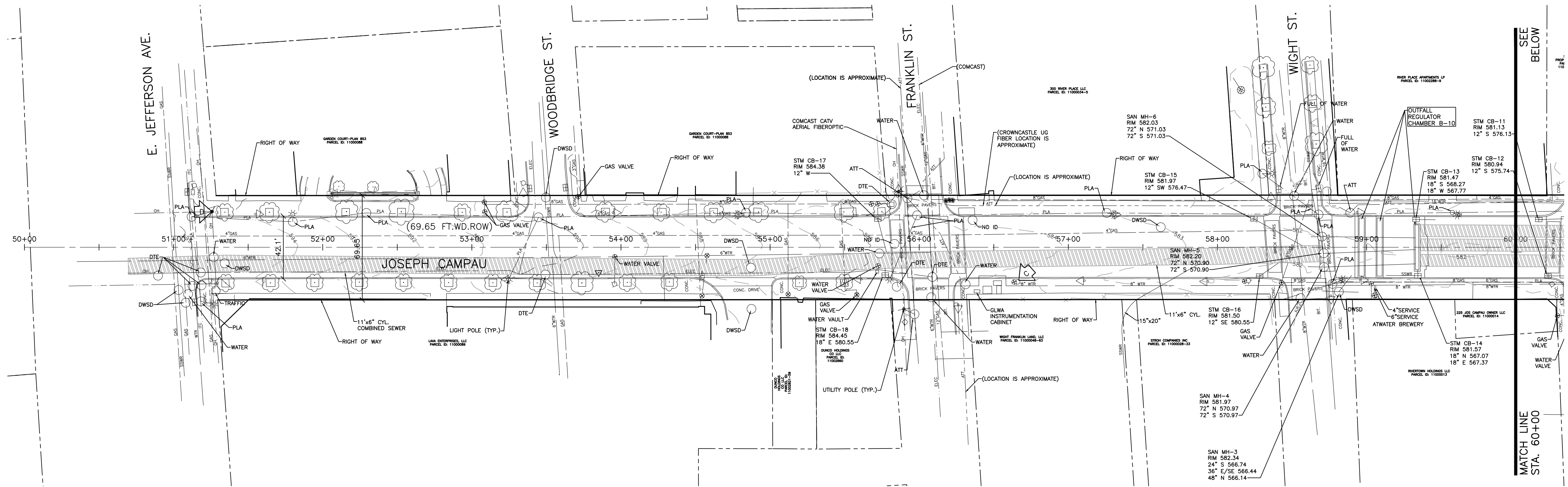
Drawn By AOF
Designer AOF
Reviewer DPE
Manager KK3

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.
180391

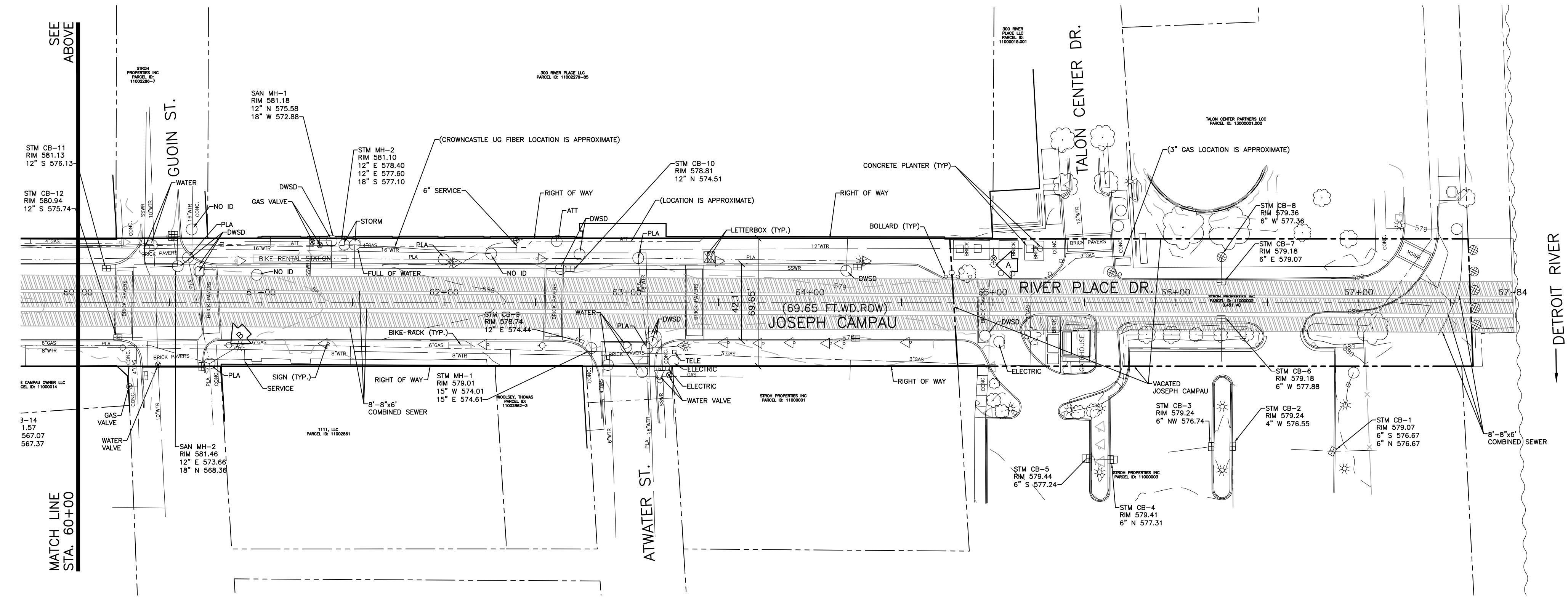
SHEET NO.

C101

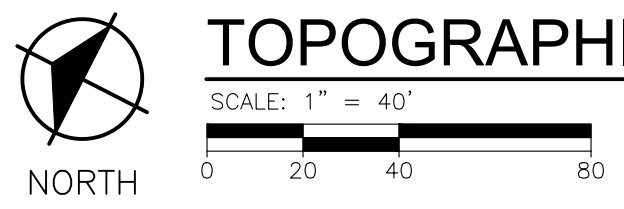


BENCH MARKS

- BENCH MARK A ELEVATION: 581.766
ARROW ON HYDRANT LOCATED AT NORTHEAST CORNER OF JOSEPH CAMPANU AVENUE AND RIVER PLACE DRIVE.
1. NOTE TEXT HERE...
- BENCH MARK B ELEVATION: 583.362
ARROW ON HYDRANT LOCATED AT SOUTHWEST CORNER OF JOSEPH CAMPANU AVENUE AND GUOIN ST
- BENCH MARK C ELEVATION: 586.362
ARROW ON HYDRANT LOCATED AT SOUTHWEST CORNER OF JOSEPH CAMPANU AVENUE AND FRANKLIN STREET
- BENCH MARK D ELEVATION: 595.820
TOP SOUTHEAST BOLT ON METAL STRAIN POLE LOCATED AT SOUTHWEST CORNER OF JOSEPH CAMPANU AVENUE AND JEFFERSON AVENUE



PLOT INFO: Z:\2018\180391\TASK 2 - JOSEPH CAMPANU\CD\CD102\180391 CD DWG LAYOUT C102 DATE: 5/9/2019 TIME: 12:38:48 PM USER: AOF



TOPOGRAPHIC SURVEY AND ALIGNMENT PLAN

REVISIONS

5/9/2019	100% CD
1/23/2018	95% CD
8/10/2018	50% CD
7/27/2018	30% CD

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

SURVEYED BY:

SURVEY PROVIDED BY: FTCH ON 6/4/18 AND REFLECT CONDITIONS AT THAT TIME

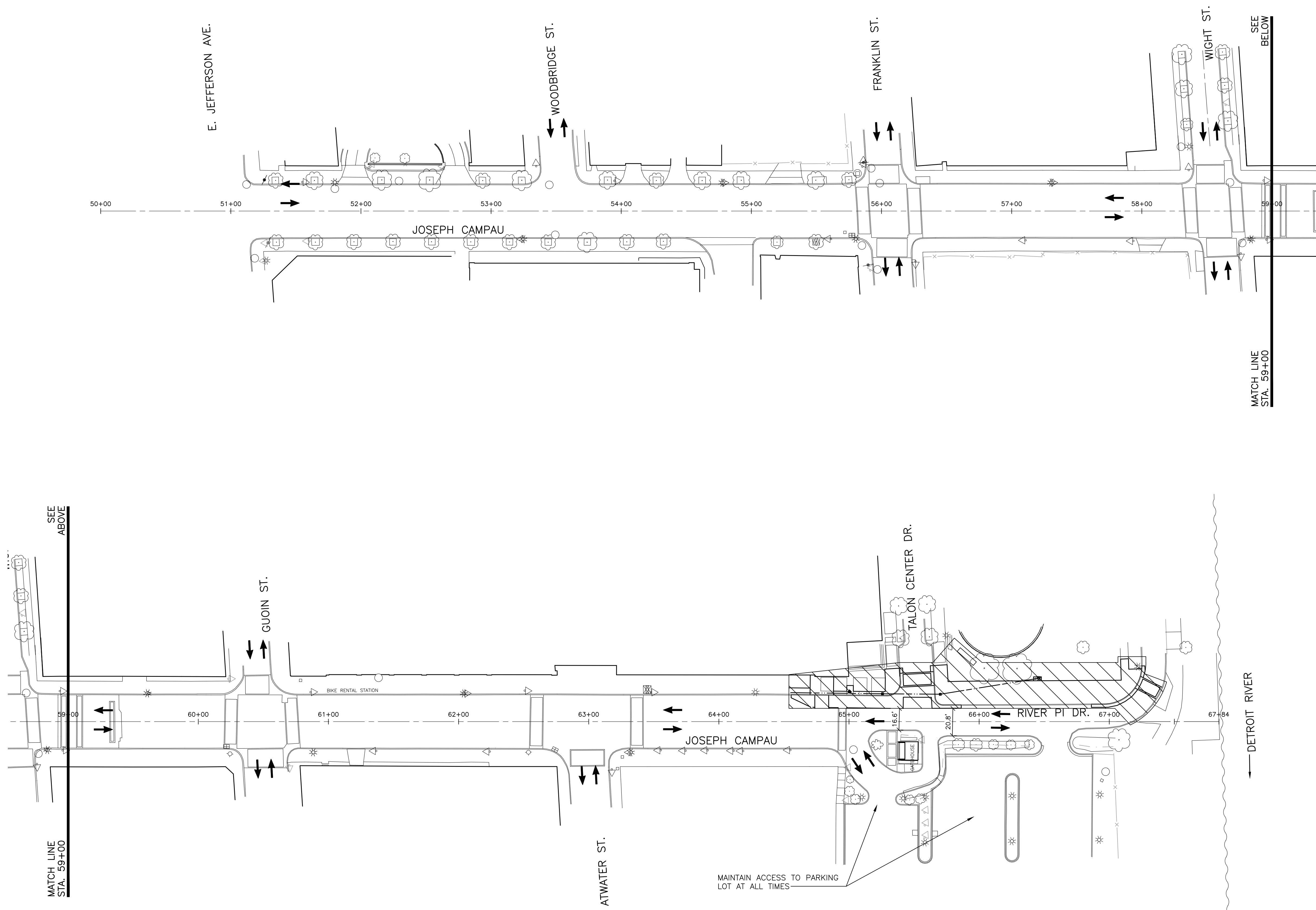
Hard copy is intended to be 24"x36" when plotted. Scale(s) indicated and graphic quality may not be accurate for any other size.

PROJECT NO.
180391

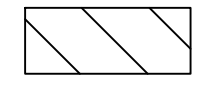



SHEET NO.

C102

PLT: I:\DC\Z\2018\180391\TASK2 - JOSEPH CAMPAU\CD\CD201180391_CD.DWG LAYOUT: C201 DATE: 5/9/2019 TIME: 12:39:03 PM USER: AOF



LEGEND

-  WORK ZONE
-  DIRECTION OF TRAFFIC
-  TYPE II OR TYPE III BARRICADE
-  TEMP. CONSTRUCTION SIGN



MAINTENANCE OF TRAFFIC PLAN - STAGE 1



REVISIONS

5/9/2019	100% CD
1/23/2019	95% CD
8/10/2018	50% CD
7/27/2018	30% CD

Drawn By	KP
Designer	KP
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.
180391

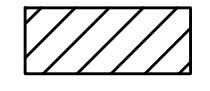
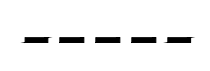
SHEET NO.

C201

PLOT INFO: Z:\2018\180391\TASK2 - JOSEPH CAMPAU\CAD\C202\180391_CD.DWG LAYOUT: C202 DATE: 5/9/2019 TIME: 12:39:17 PM USER: ACF



LEGEND

-  WORK ZONE
-  DETOUR ROUTE



DETOUR PLAN - STAGE 1

NO SCALE

ftc&h

engineers
scientists
architects
constructors

fishbeck, thompson, carr & huber, inc.
www.ftch.com



SMITHGROUP

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

City of Detroit

Joseph Campau Streetscape

REVISIONS

5/9/2019	100% CD
1/23/2019	95% CD
8/10/2018	50% CD
7/27/2018	30% CD

Drawn By	KP
Designer	KP
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.

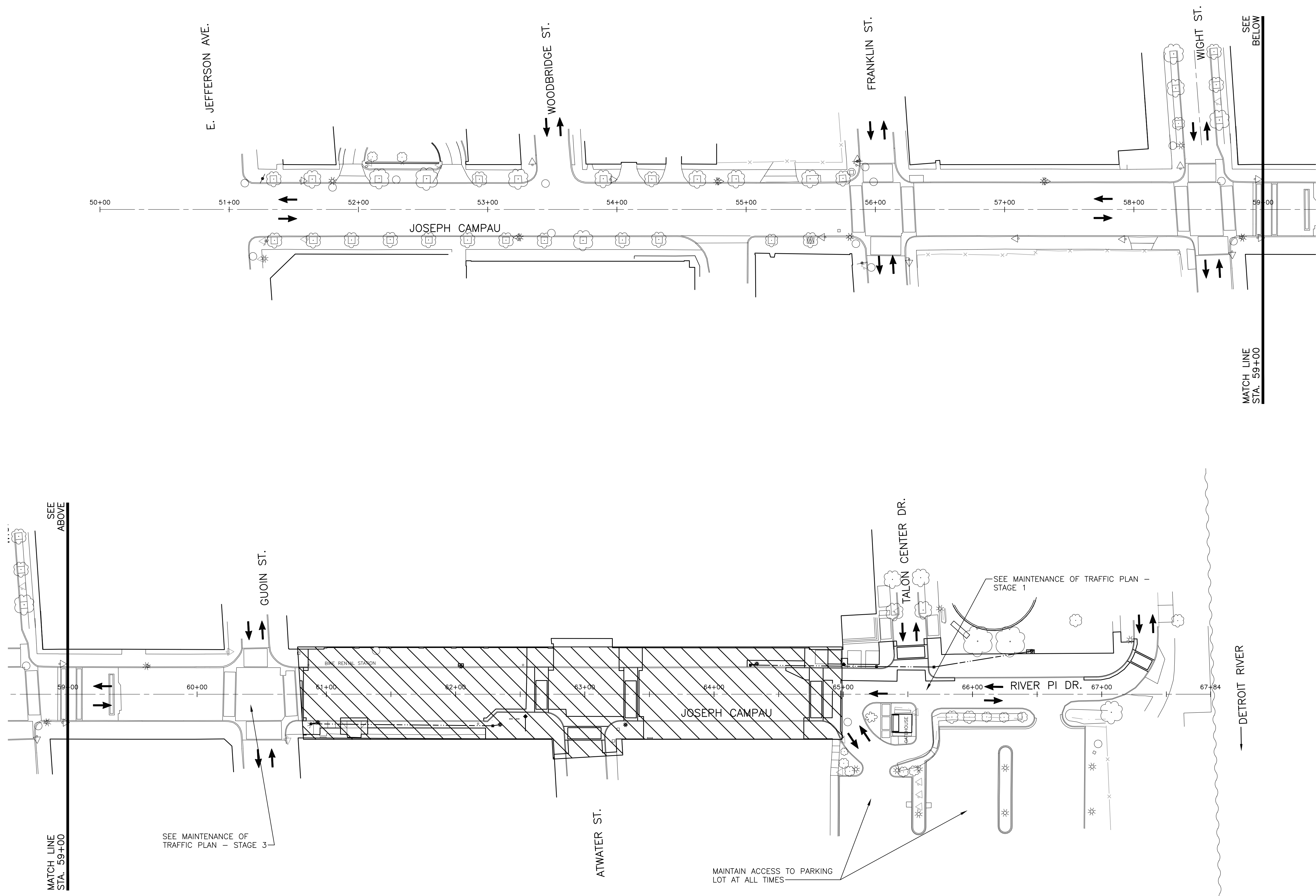
180391

SHEET NO.

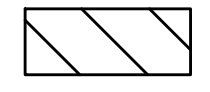



C202

© Copyright 2018
All Rights Reserved

PLT: I:\DC\Z\2018\180391\TASK2 - JOSEPH CAMPAU\CD\CD203\180391_CD.DWG LAYOUT C203 DATE: 5/9/2019 TIME: 12:39:33 PM USER: KK3



LEGEND

-  WORK ZONE
-  DIRECTION OF TRAFFIC
-  TYPE II OR TYPE III BARRICADE
-  TEMP. CONSTRUCTION SIGN

MAINTENANCE OF TRAFFIC PLAN - STAGE 2

SCALE: 1" = 40'



NORTH



REVISIONS

5/9/2019	100% CD
1/23/2019	95% CD
8/10/2018	50% CD
7/27/2018	30% CD

Drawn By	KP
Designer	KP
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.
180391

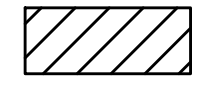
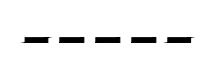
SHEET NO.

C203

PLOT INFO: Z:\2018\180391\TASK2 - JOSEPH CAMPANUCAD\C204\180391_CD.DWG LAYOUT: C204 DATE: 5/9/2019 TIME: 12:39:46 PM USER: ACF



LEGEND

-  WORK ZONE
-  DETOUR ROUTE



DETOUR PLAN - STAGE 2

NO SCALE

NORTH

ftc&h

engineers
scientists
architects
constructors

fishbeck, thompson, carr & huber, inc.
www.ftch.com



SMITHGROUP

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

City of Detroit

Joseph Campau Streetscape

REVISIONS

5/9/2019	100% CD
1/23/2019	95% CD
8/10/2018	50% CD
7/27/2018	30% CD

Drawn By	KP
Designer	KP
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.

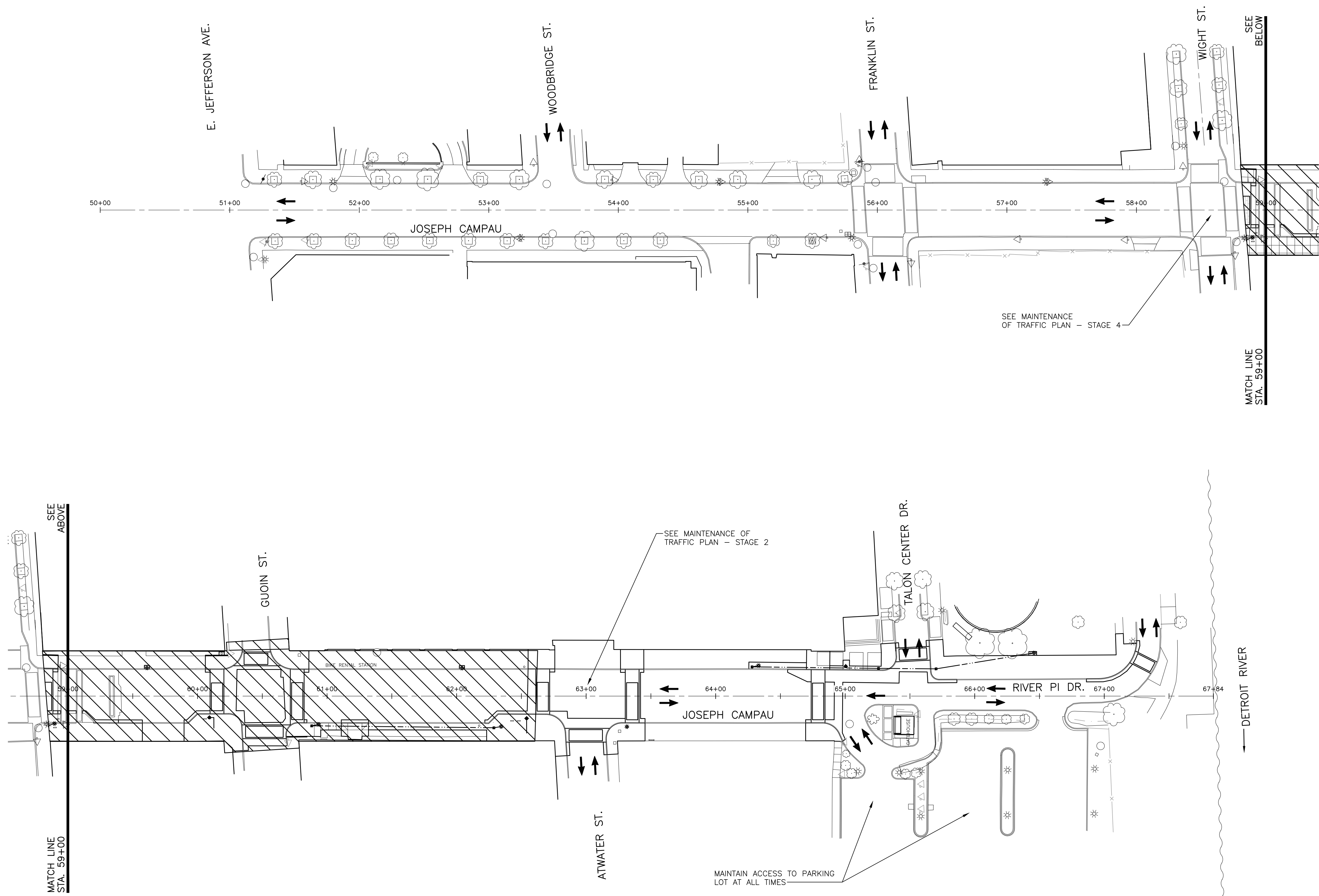
180391

SHEET NO.

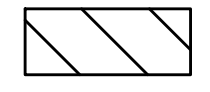

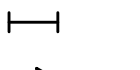

C204

© Copyright 2018
All Rights Reserved

PLOT INFO: Z:\2018\180391\TASK2 - JOSEPH CAMPAU\CAD\C205\180391_CD.DWG LAYOUT C205 DATE: 5/9/2019 TIME: 12:40:03 PM USER: KK3



LEGEND

-  WORK ZONE
-  DIRECTION OF TRAFFIC
-  TYPE II OR TYPE III BARRICADE
-  TEMP. CONSTRUCTION SIGN

MAINTENANCE OF TRAFFIC PLAN - STAGE 3

SCALE: 1" = 40'



NORTH



REVISIONS

5/9/2019	100% CD
1/23/2019	95% CD
8/10/2018	50% CD
7/27/2018	30% CD

Drawn By	KP
Designer	KP
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.
180391

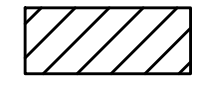
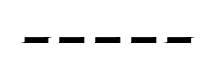
SHEET NO.

C205

PLOT INFO: Z:\2018\180391\TASK2 - JOSEPH CAMPAU\CAD\C206\180391_CD.DWG LAYOUT: C206 DATE: 5/9/2019 TIME: 12:40:16 PM USER: ACF



LEGEND

-  WORK ZONE
-  DETOUR ROUTE



DETOUR PLAN - STAGE 3

NO SCALE

NORTH



SMITHGROUP

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

City of Detroit

Joseph Campau Streetscape

REVISIONS

5/9/2019	100% CD
1/23/2019	95% CD
8/10/2018	50% CD
7/27/2018	30% CD

Drawn By KP
Designer KP
Reviewer DPE
Manager KKS

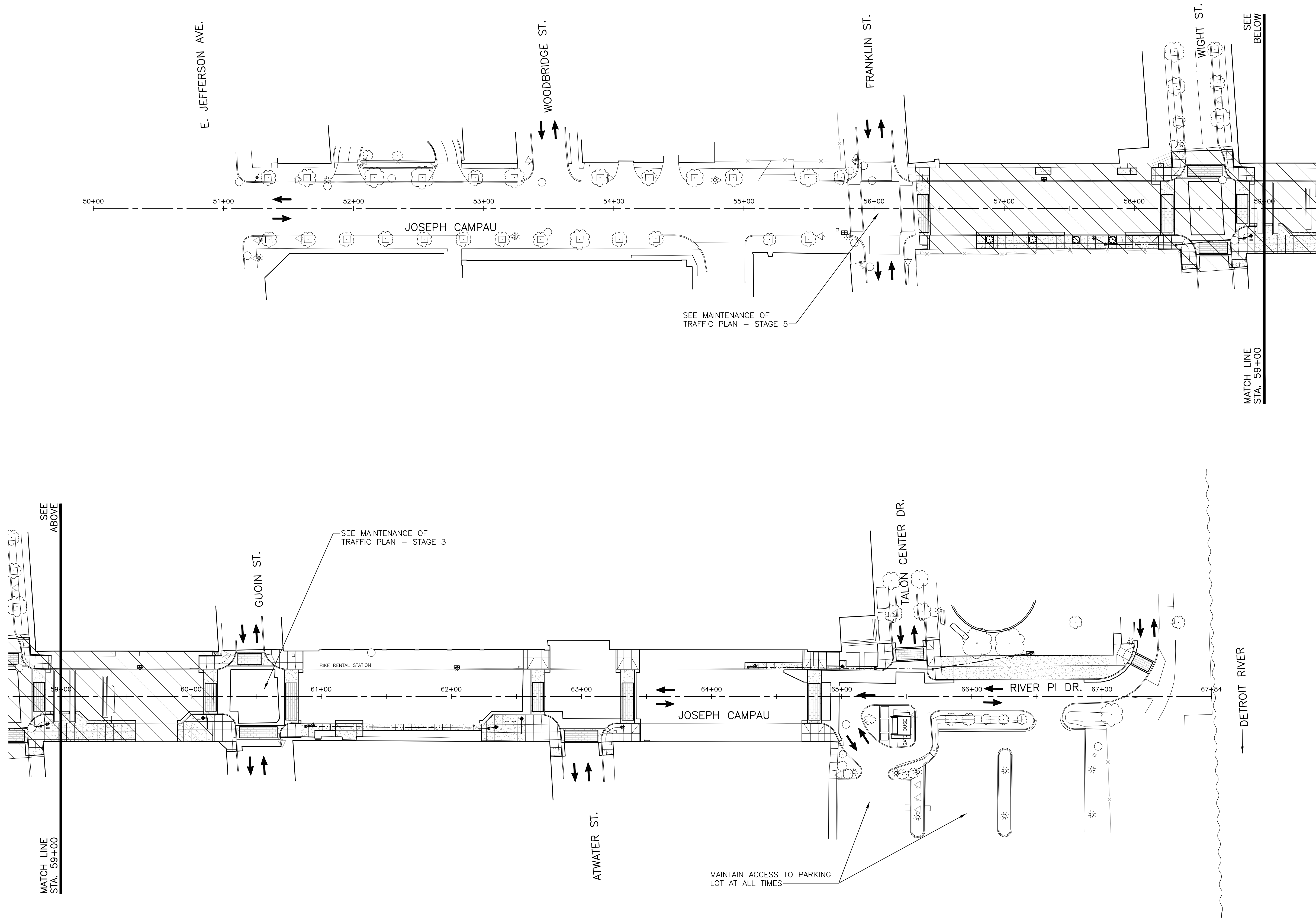
Hard copy is intended to be 24"x36" when plotted. Scale(s) indicated and graphic quality may not be accurate for any other size.

PROJECT NO.
180391

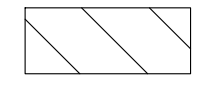



SHEET NO.

C206

PLOT INFO: Z:\2018\180391\TASK2 - JOSEPH CAMPAU\CD\CD207\180391_CD.DWG LAYOUT: C207 DATE: 5/9/2019 TIME: 12:40:32 PM USER: AOF

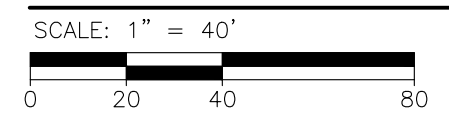


LEGEND

-  WORK ZONE
-  DIRECTION OF TRAFFIC
-  TYPE II OR TYPE III BARRICADE
-  TEMP. CONSTRUCTION SIGN



MAINTENANCE OF TRAFFIC PLAN - STAGE 4



REVISIONS

5/9/2019	100% CD
1/23/2019	95% CD
8/10/2018	50% CD
7/27/2018	30% CD

Drawn By KP
Designer KP
Reviewer DPE
Manager KKS

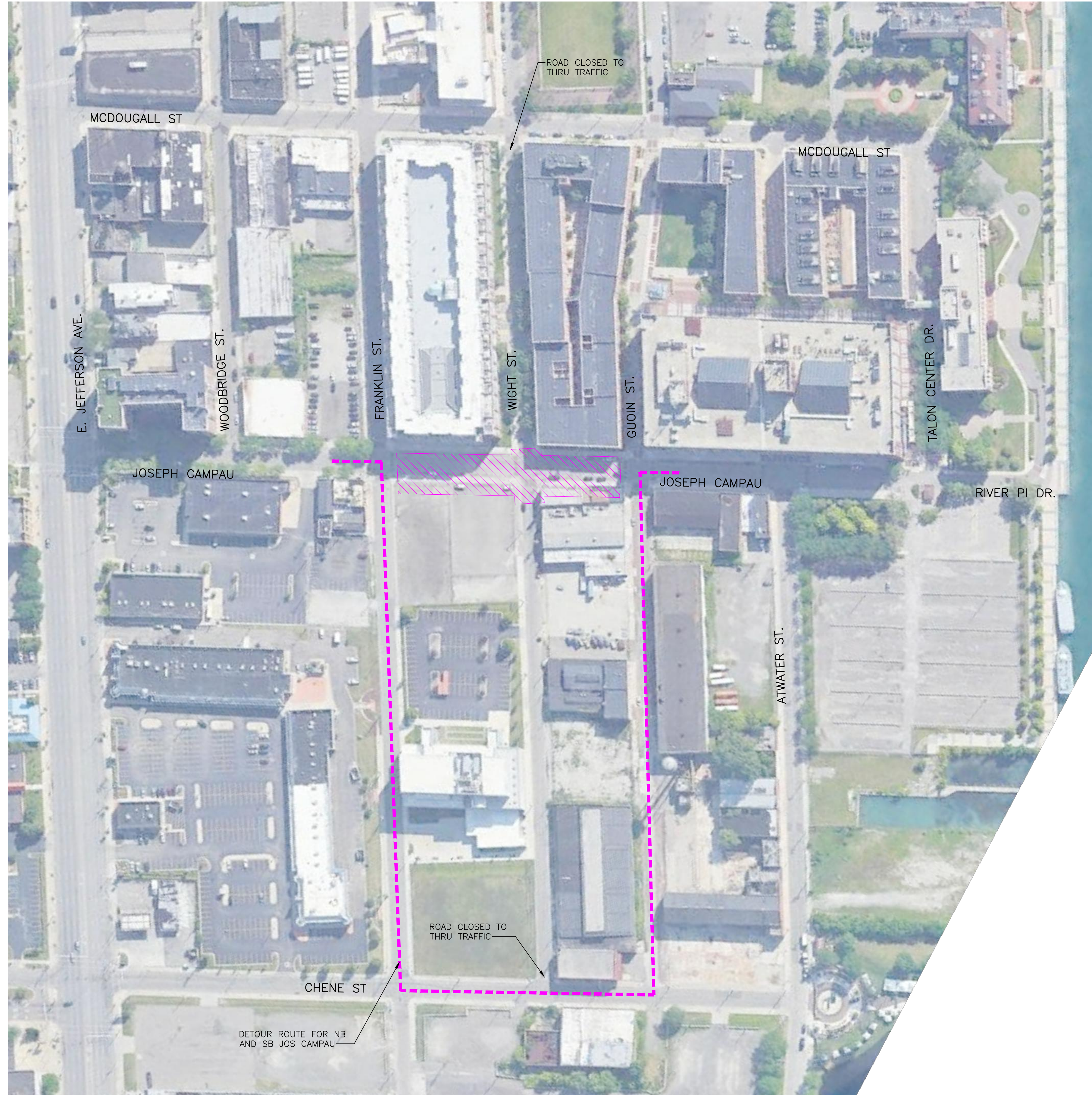
Hard copy is intended to be 24"x36" when plotted. Scale(s) indicated and graphic quality may not be accurate for any other size.

PROJECT NO.
180391

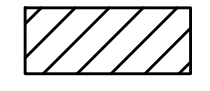
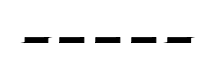
SHEET NO.

C207

PLOT INFO: Z:\2018\180391\TASK2 - JOSEPH CAMPAU\CAD\C208\180391_CD.DWG LAYOUT: C208 DATE: 5/9/2019 TIME: 12:40:46 PM USER: ACF



LEGEND

-  WORK ZONE
-  DETOUR ROUTE



DETOUR PLAN - STAGE 4

NO SCALE

ftc&h

engineers
scientists
architects
constructors

fishbeck, thompson, carr & huber, inc.
www.ftch.com



SMITHGROUP

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

City of Detroit

Joseph Campau Streetscape

REVISIONS

5/9/2019	100% CD
1/23/2019	95% CD
8/10/2018	50% CD
7/27/2018	30% CD

Drawn By	KP
Designer	KP
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.

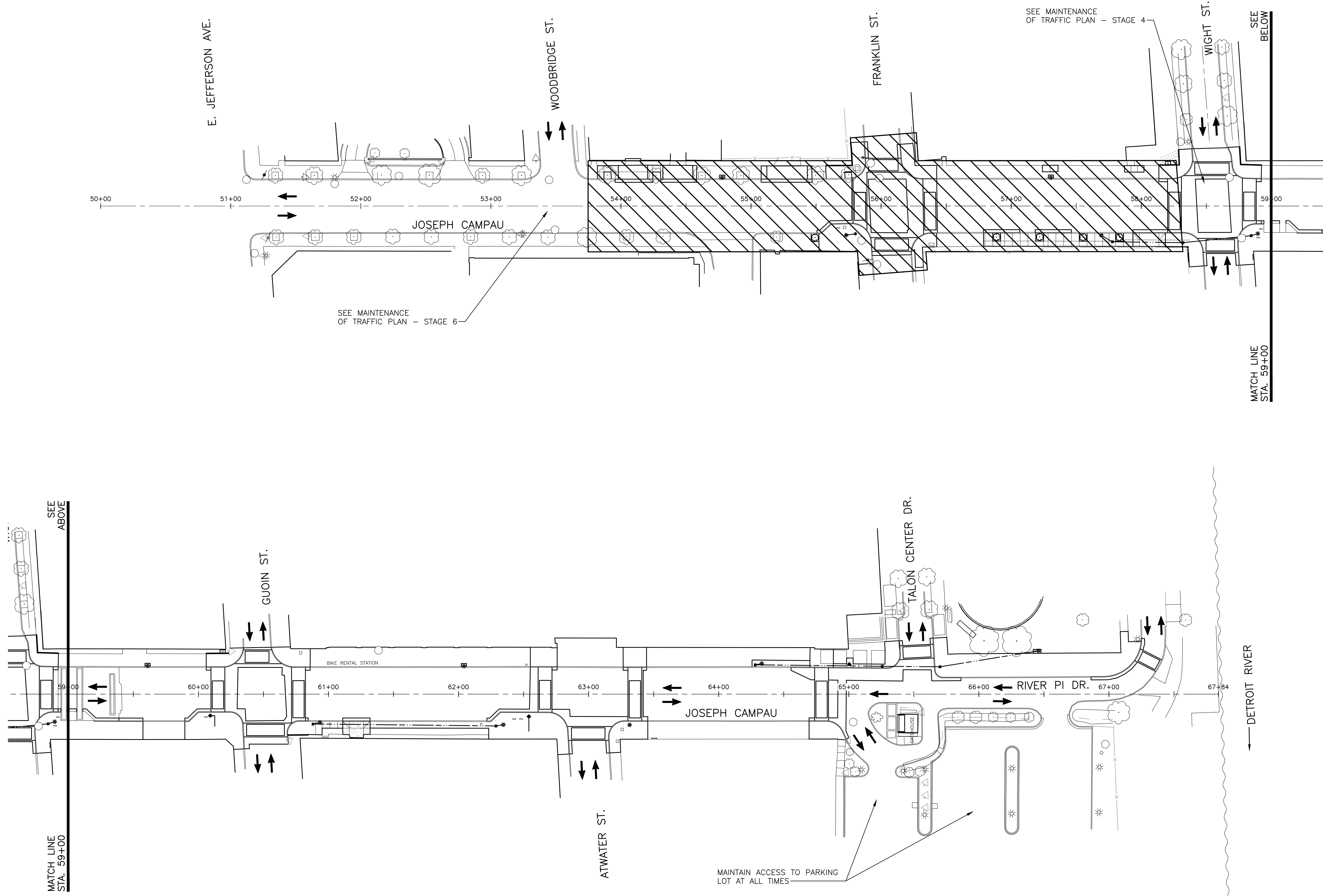
PROJECT NO.
180391

SHEET NO.

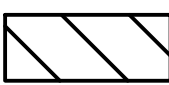



C208

© Copyright 2018
All Rights Reserved

PLOT INFO: Z:\2018\180391\TASK2 - JOSEPH CAMPAU\CAD\C209\180391_CD.DWG LAYOUT: C209 DATE: 5/9/2019 TIME: 12:41:02 PM USER: AOF

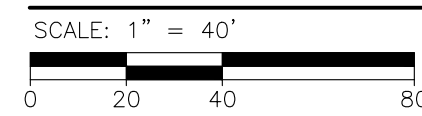


LEGEND

-  WORK ZONE
-  DIRECTION OF TRAFFIC
-  TYPE II OR TYPE III BARRICADE
-  TEMP. CONSTRUCTION SIGN



MAINTENANCE OF TRAFFIC PLAN - STAGE 5



ftc&h

engineers
scientists
architects
constructors

fishbeck, thompson, carr & huber, inc.
www.ftch.com



SMITHGROUP

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

City of Detroit

Joseph Campau Streetscape

REVISIONS

5/9/2019	100% CD
1/23/2019	95% CD
8/10/2018	50% CD
7/27/2018	30% CD

Drawn By	KP
Designer	KP
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.
180391

SHEET NO.

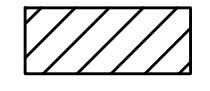
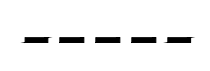
C209

© Copyright 2018
All Rights Reserved

PLOT INFO: Z:\2018\180391\TASK2 - JOSEPH CAMPANUCAD\C210\180391_CD.DWG LAYOUT: C210 DATE: 5/9/2019 TIME: 12:41:17 PM USER: ACF



LEGEND

-  WORK ZONE
-  DETOUR ROUTE



DETOUR PLAN - STAGE 5

NO SCALE

ftc&h

engineers
scientists
architects
constructors

fishbeck, thompson, carr & huber, inc.
www.ftch.com



SMITHGROUP

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

City of Detroit

Joseph Campau Streetscape

REVISIONS

5/9/2019	100% CD
1/23/2019	95% CD
8/10/2018	50% CD
7/27/2018	30% CD

Drawn By	KP
Designer	KP
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.

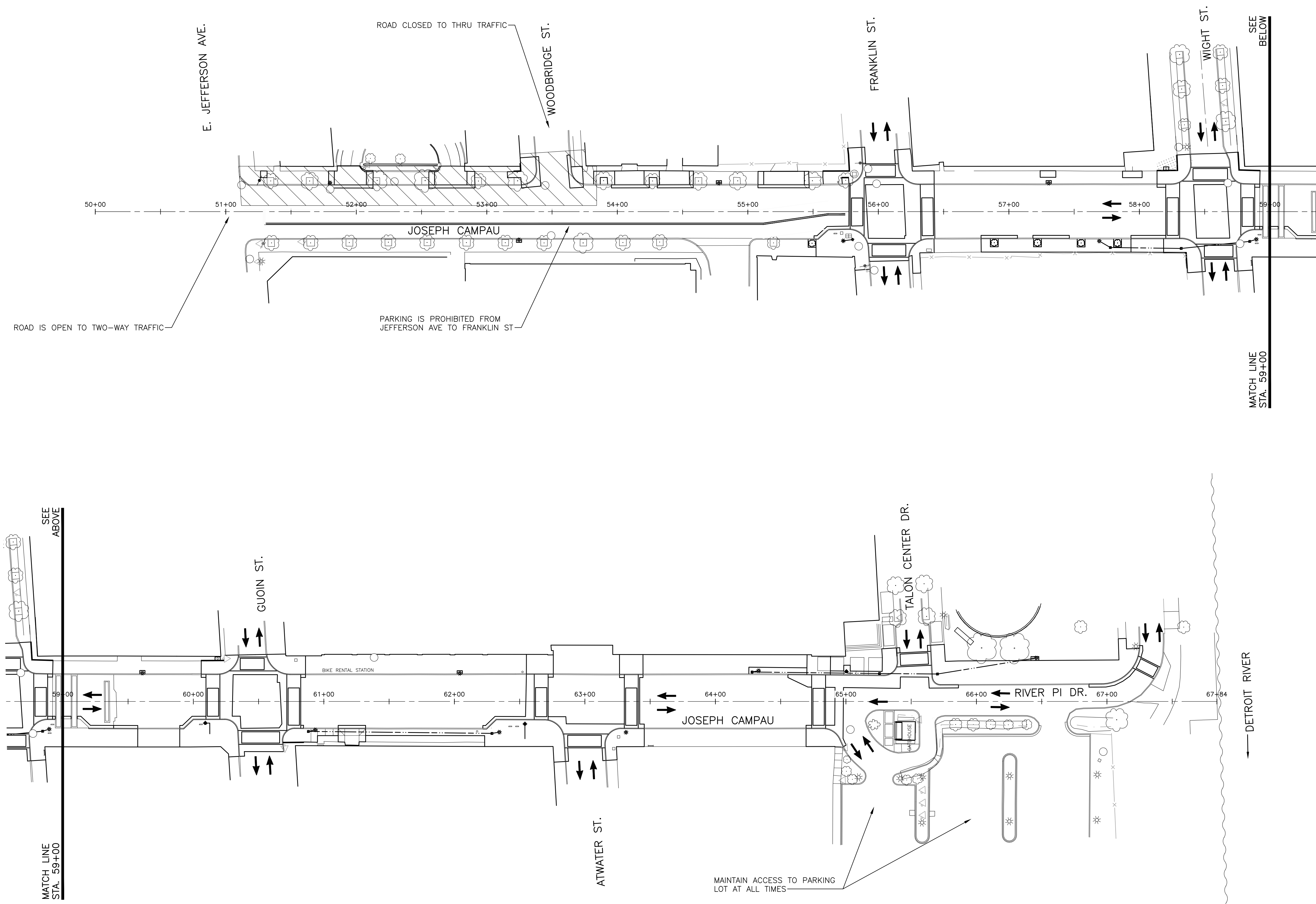
180391

SHEET NO.

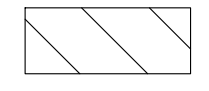



C210

© Copyright 2018
All Rights Reserved

PLT: I:\DC\2018\180391\TASK2 - JOSEPH CAMPAU\CD\CD211\180391_CD.DWG LAYOUT: C211 DATE: 5/9/2019 TIME: 12:41:31 PM USER: AOF

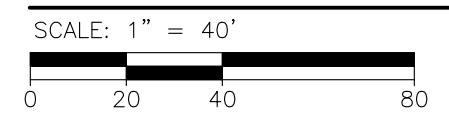


LEGEND

-  WORK ZONE
-  DIRECTION OF TRAFFIC
-  TYPE II OR TYPE III BARRICADE
-  TEMP. CONSTRUCTION SIGN



MAINTENANCE OF TRAFFIC PLAN - STAGE 6



REVISIONS

5/9/2019	100% CD
1/23/2019	95% CD
8/10/2018	50% CD
7/27/2018	30% CD

Drawn By	KP
Designer	KP
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.
180391



SHEET NO.

C211

PLOT INFO: Z:\2018\180391\TASK2 - JOSEPH CAMPANUCAD\C212\180391_CD.DWG LAYOUT: C212 DATE: 5/9/2019 TIME: 12:41:46 PM USER: ACF



LEGEND

-  WORK ZONE
-  DETOUR ROUTE



DETOUR PLAN - STAGE 6

NO SCALE

ftc&h

engineers
scientists
architects
constructors

fishbeck, thompson, carr & huber, inc.
www.ftch.com



SMITHGROUP

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

City of Detroit

Joseph Campau Streetscape

REVISIONS

5/9/2019	100% CD
1/23/2019	95% CD
8/10/2018	50% CD
7/27/2018	30% CD

Drawn By	KP
Designer	KP
Reviewer	DPE
Manager	KK3

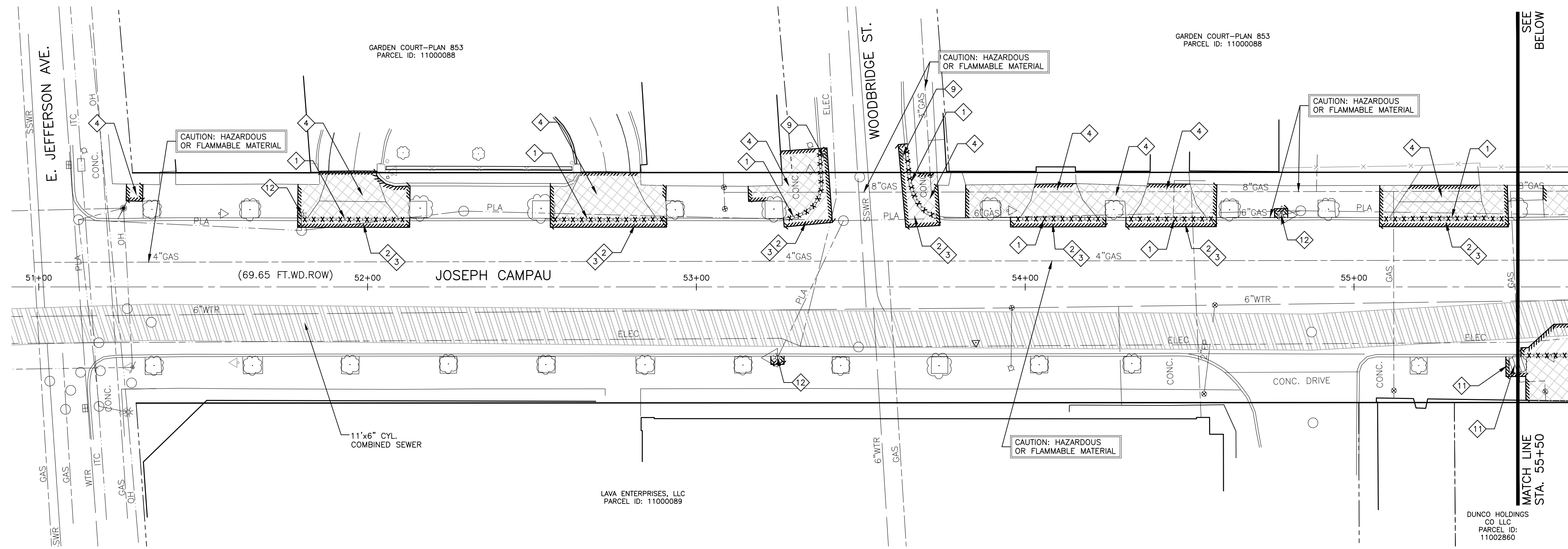
Hard copy is intended to be 24"x36" when plotted. Scale(s) indicated and graphic quality may not be accurate for any other size.

PROJECT NO.
180391

SHEET NO.

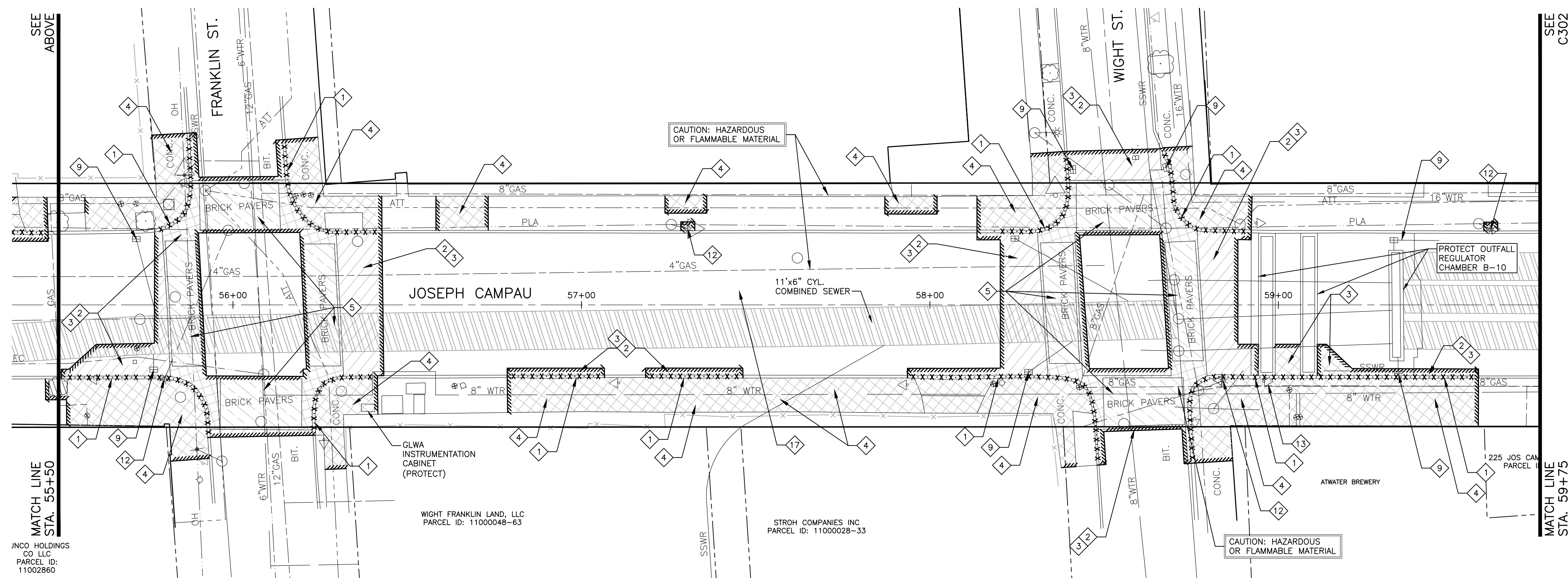
C212

© Copyright 2018
All Rights Reserved



DEMOLITION SYMBOL LEGEND

- SAWCUT
- CURB REMOVAL
- REMOVE BITUMINOUS PAVEMENT FULL DEPTH
- REMOVE CONCRETE PAVEMENT
- REMOVE BRICK PAVERS
- TREE PROTECTION
- TREE REMOVAL



KEYNOTE LEGEND

- 1 CURB AND GUTTER, REM
- 2 HMA SURFACE, REM
- 3 PAVT, REM
- 4 SIDEWALK, REM
- 5 _PAVERS, REM
- 6 HYDRANT, RELOCATE, CASE 1
- 7 STUMP, REM, 6 INCH TO 18 INCH
- 8 _SIDEWALK, BRICK PAVERS, SALV AND REINSTALL
- 9 EROSION CONTROL, INLET PROTECTION, SEDIMENT TRAP
- 10 _LETTERBOX, RELOCATE AND RESTORE
- 11 TREE, REM, 6 INCH TO 18 INCH
- 12 REMOVE LIGHT POLE AND FOUNDATION (SEE ELECTRICAL)
- 13 _B-10 INSTRUMENTATION CABINET AND PEDESTAL, REM
- 14 _BOLLARD, REM
- 15 _PLANTER, RELOCATE AND RESTORE
- 16 _MONUMENT SIGN, SALV AND REINSTALL
- 17 _COLD MILLING HMA SURFACE, MODIFIED



REMOVAL PLAN AND SESC PLAN STA 51+00 TO STA 59+75

SCALE: 1" = 20'



SMITHGROUP

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

City of Detroit

Joseph Campau Streetscape

REVISIONS

5/9/2019	100% CD
1/23/2019	95% CD
8/10/2018	50% CD
7/27/2018	30% CD

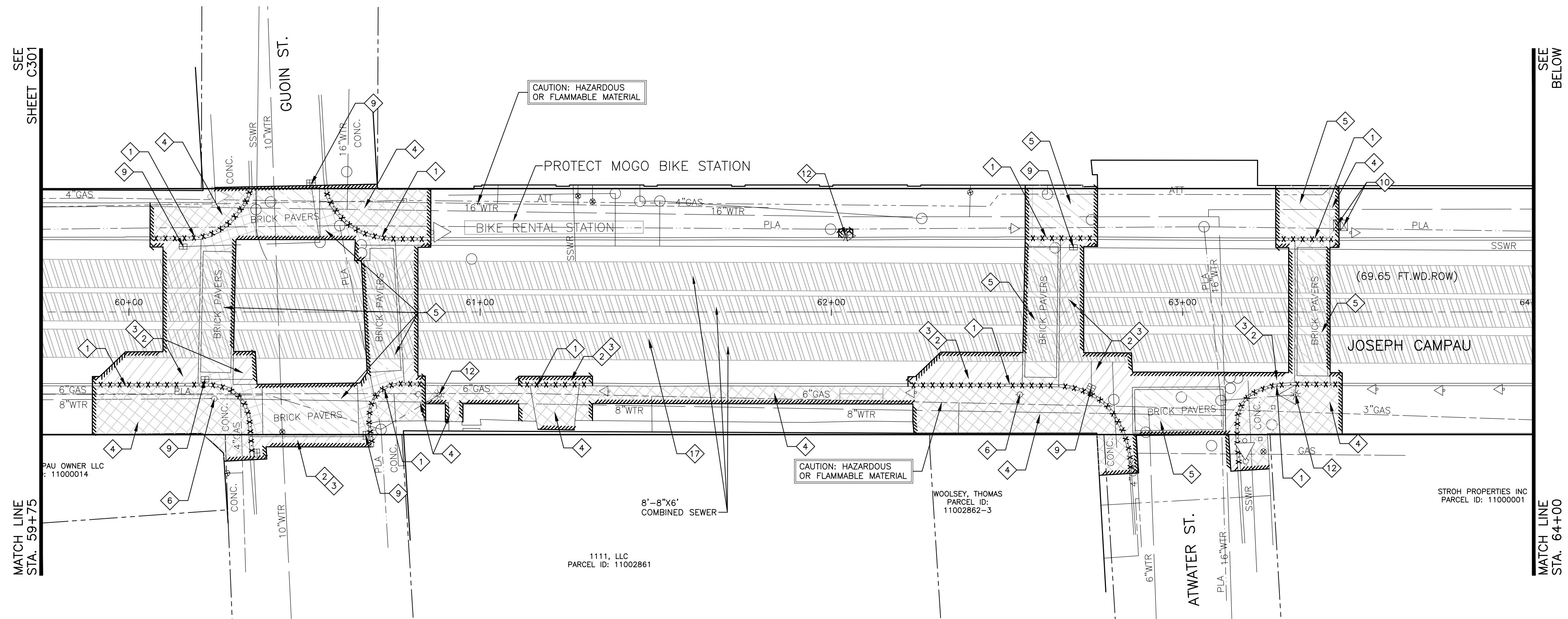
Drawn By AOF
Designer AOF
Reviewer DPE
Manager KKS

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.
180391

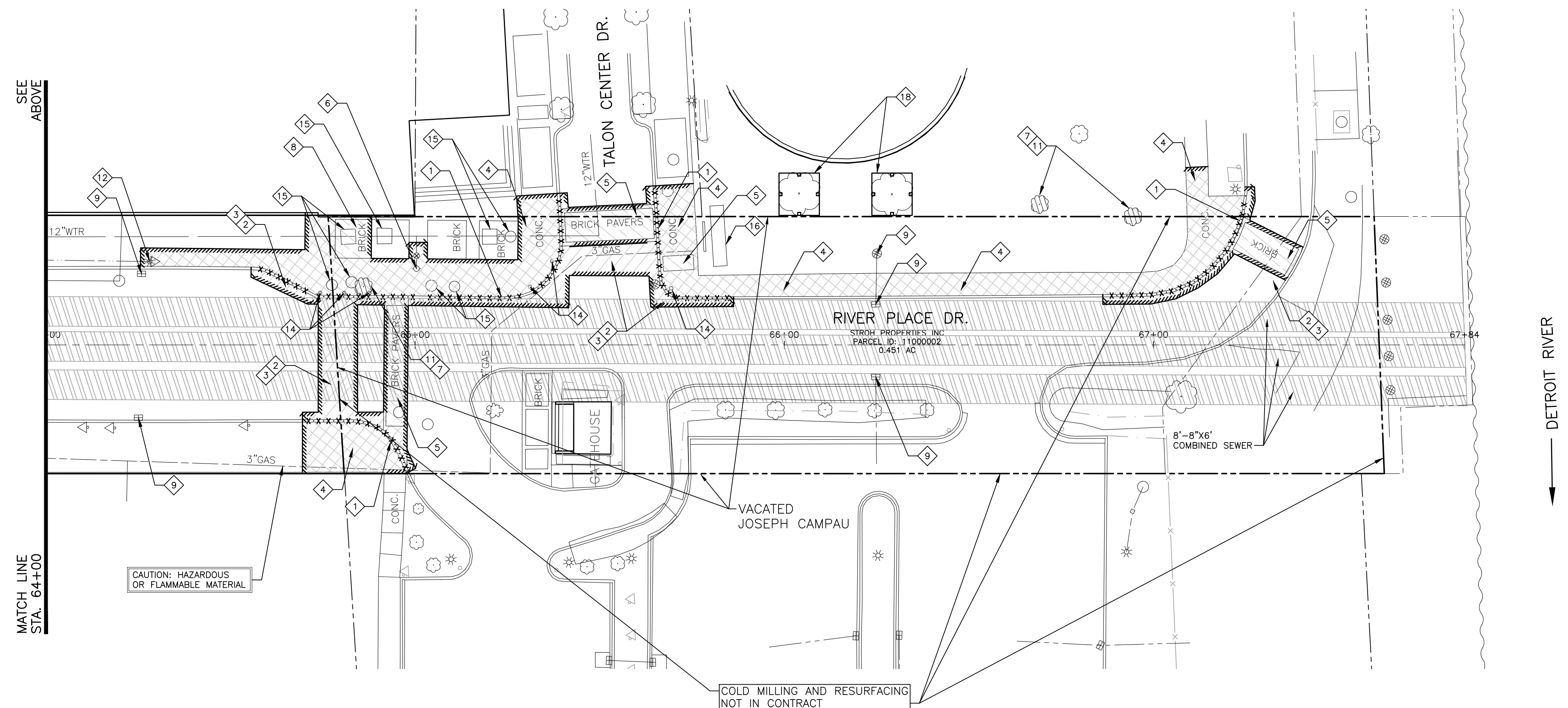
SHEET NO.

C301



DEMOLITION SYMBOL LEGEND

- SAWCUT
- CURB REMOVAL
- REMOVE BITUMINOUS PAVEMENT FULL DEPTH
- REMOVE CONCRETE PAVEMENT
- REMOVE BRICK PAVERS
- TREE PROTECTION
- TREE REMOVAL



KEYNOTE LEGEND

- CURB AND GUTTER, REM
- HMA SURFACE, REM
- PAVT, REM
- SIDEWALK, REM
- _PAVERS, REM
- HYDRANT, RELOCATE, CASE 1
- STUMP, REM, 6 INCH TO 18 INCH
- _SIDEWALK, BRICK PAVERS, SALV AND REINSTALL
- EROSION CONTROL, INLET PROTECTION, SEDIMENT TRAP
- _LETTERBOX, RELOCATE AND RESTORE
- TREE, REM, 6 INCH TO 18 INCH
- REMOVE LIGHT POLE AND FOUNDATION (SEE ELECTRICAL)
- _B-10 INSTRUMENTATION CABINET AND PEDESTAL, REM
- _BOLLARD, REM
- _PLANTER, RELOCATE AND RESTORE
- _MONUMENT SIGN, SALV AND REINSTALL
- _COLD MILLING HMA SURFACE, MODIFIED
- FENCE, PROTECTIVE

REMOVAL PLAN AND SESC PLAN STA 59+75 TO STA 67+50
 SCALE: 1" = 20'
 NORTH



REVISIONS

5/9/2019	100% CD
1/23/2019	95% CD
8/10/2018	50% CD
7/27/2018	30% CD

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.

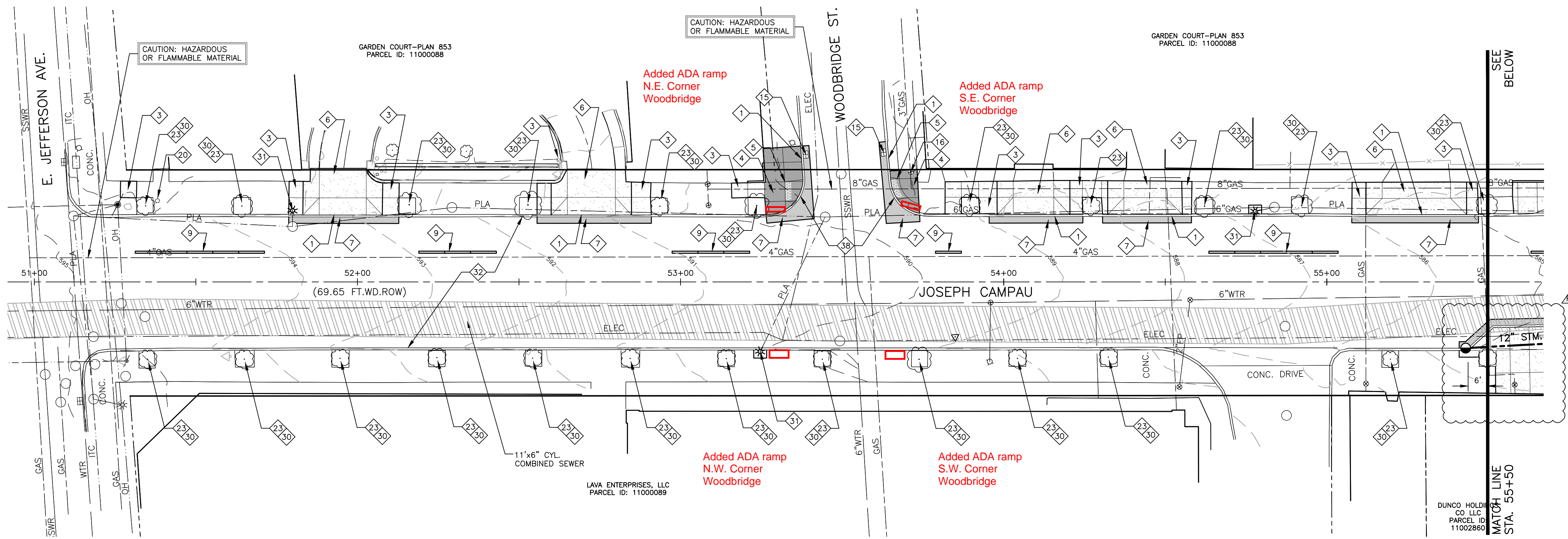
PROJECT NO.
180391

SHEET NO.

C302

Call MISS DIG
3 full working days before you dig!
Michigan's Utility Notification Organization
1-800-482-7171
on the net at: www.missdig.org

As-Builts



SYMBOL LEGEND

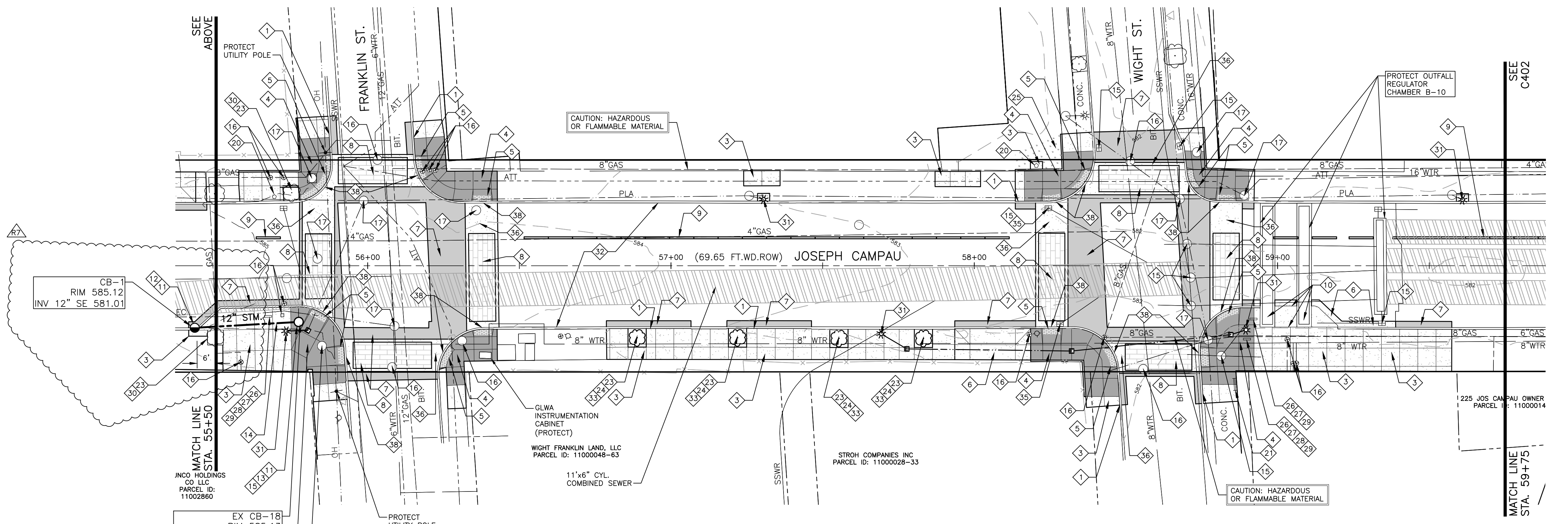
- ASPHALT PAVEMENT
- CONCRETE PAVEMENT
- UNIT PAVER CROSSWALK
- 6" SIDEWALK/RAMP
- 4" THICK CONCRETE SIDEWALK
- SOD
- DETECTABLE WARNING SURFACE
- LIGHT POLE
- TRASH RECEPTACLE
- HANDHOLE
- PLANTER
- CURB INLET
- BIKE RACK
- BEEHIVE INLET
- FIRE HYDRANT

NOTE:

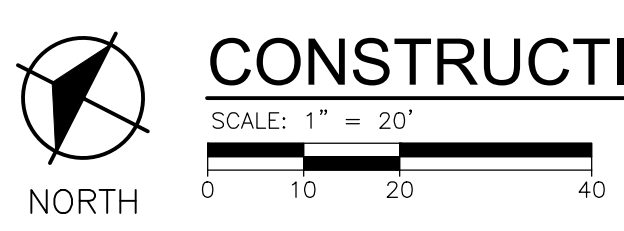
- ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT STANDARDS AND SPECIFICATIONS OF THE CITY OF DETROIT.
- ALL STRUCTURE COVERS TO BE ADJUSTED

KEYNOTE LEGEND

- 1 CONCRETE CURB, DETAIL CD, MODIFIED
- 2 STEP CURB
- 3 SIDEWALK, CONC. 4 INCH, MODIFIED
- 4 SIDEWALK RAMP, CONC. 6 INCH, MODIFIED
- 5 DETECTABLE WARNING SURFACE, MODIFIED
- 6 DRIVEWAY, NONREINF. CONC. 8 INCH, MODIFIED
- 7 HAND PATCHING
- 8 UNIT PAVER CROSSWALK
- 9 BUMPERBLOCK, CONC. DIVIDER
- 10 GATE COVER WITH CURB PLATE
- 11 DR STRUCTURE COVER, MODIFIED
- 12 DR STRUCTURE, 48 INCH DIA, MODIFIED
- 13 DR STRUCTURE, TAP, 12 INCH
- 14 SEWER, CL IV, 12 INCH, TR DET B
- 15 DR STRUCTURE COVER, ADJ. CASE1, MODIFIED
- 16 WATER SHUTOFF, ADJ. CASE 1, MODIFIED
- 17 STRUCTURE COVER TO BE ADJUSTED BY OTHERS
- 18 HYDRANT RELOCATE, CASE 1
- 19 MONUMENT SIGN, SALV AND REINSTALL
- 20 TRASH RECEPTACLE
- 21 BIKE RACK
- 22 ROOT BARRIER
- 23 POROUS RESIN BONDED AGGREGATE
- 24 GLEDITSIA TRIACANTHOS 'SHADEMASTER', 4 INCH, B&B
- 25 SODDING
- 26 LANDSCAPE PLANTER 20" X 20" X 20"
- 27 LANDSCAPE PLANTER 36" X 36" X 36"
- 28 LANDSCAPE PLANTER 36" X 42" X 42"
- 29 PLANTING MIXTURE, 12 INCH DEPTH
- 30 PRUNE TREE
- 31 LIGHT POLE (SEE ELECTRICAL)
- 32 HMA 4E3, 5E3
- 33 SOIL CELL
- 34 SIDEWALK, BRICK PAVERS, SALV AND REINSTALL
- 35 DR STRUCTURE COVER, ADA COMPLIANT, MODIFIED
- 36 CONCRETE BASE, PAVERS
- 37 SIDEWALK, CONC. 6 INCH, MODIFIED
- 38 CURB RAMP OPENING, CONC



PROPOSED STRUCTURE DATA					PROPOSED PIPE DATA			
STRUCTURE	RIM	SIZE	INVERT	ELEVATION	PIPE NAME	SIZE	LENGTH	SLOPE
CB-1	585.12	48"	12" SE.	581.01	CB-1 > EX CB-18	12	34	0.75%
CB-2	581.33	24"	12" SE.	577.00	CB-2 > EX CB-12	12	30	3.35%
CB-3	579.34	48"	12" SE.	575.24	CB-3 > EX CB-9	12	50	0.99%
CB-4	579.90	48"	12" SW.	577.40	CB-4 > EX CB-8	12	14	0.30%



CONSTRUCTION PLAN STA 51+00 TO STA 59+75

ftch
engineers
scientists
architects
constructors

fishbeck, thompson, carr & huber, inc.
www.ftch.com



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

City of Detroit
Joseph Campau Streetscape

REVISIONS

DATE	DESCRIPTION	BY	APP'D
9/13/2019	RFI 7		
9/30/2019	100% CD		
1/23/2019	95% CD		
8/10/2018	50% CD		
7/27/2018	30% CD		

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.

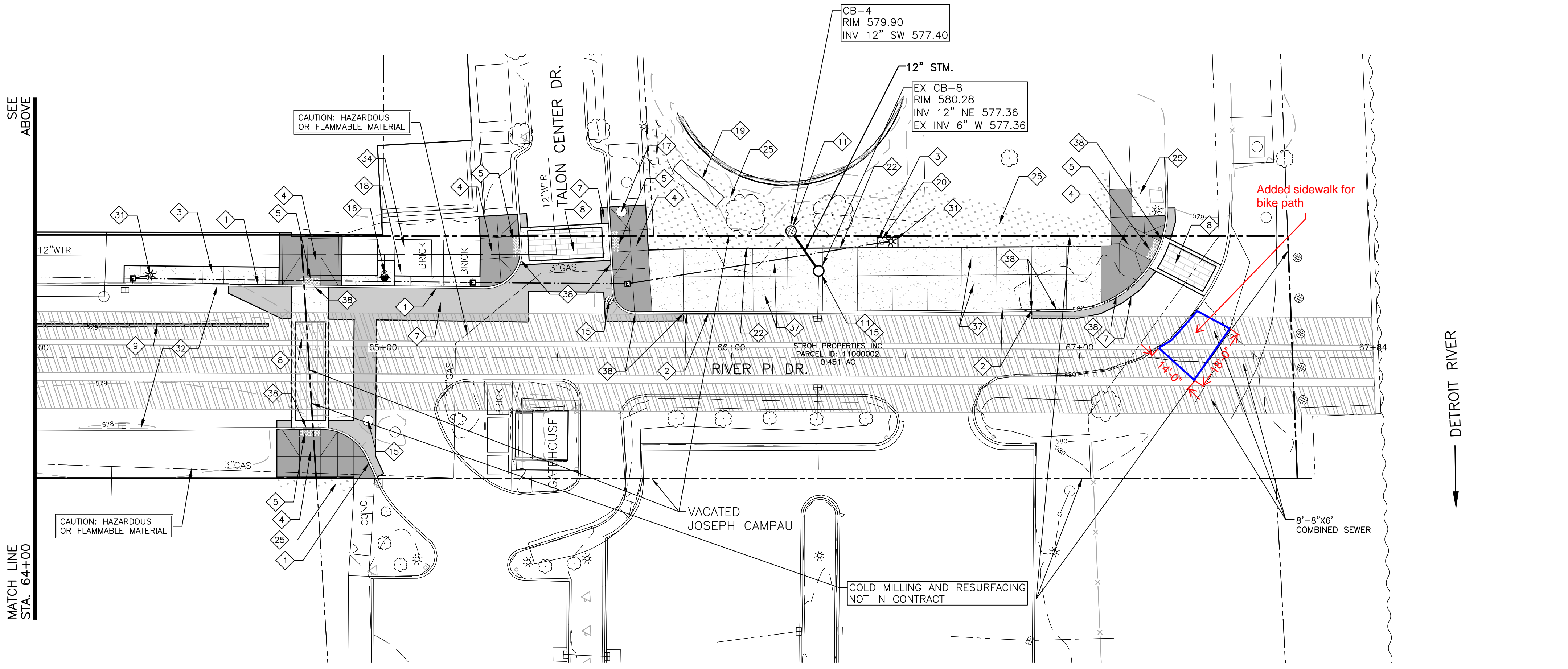
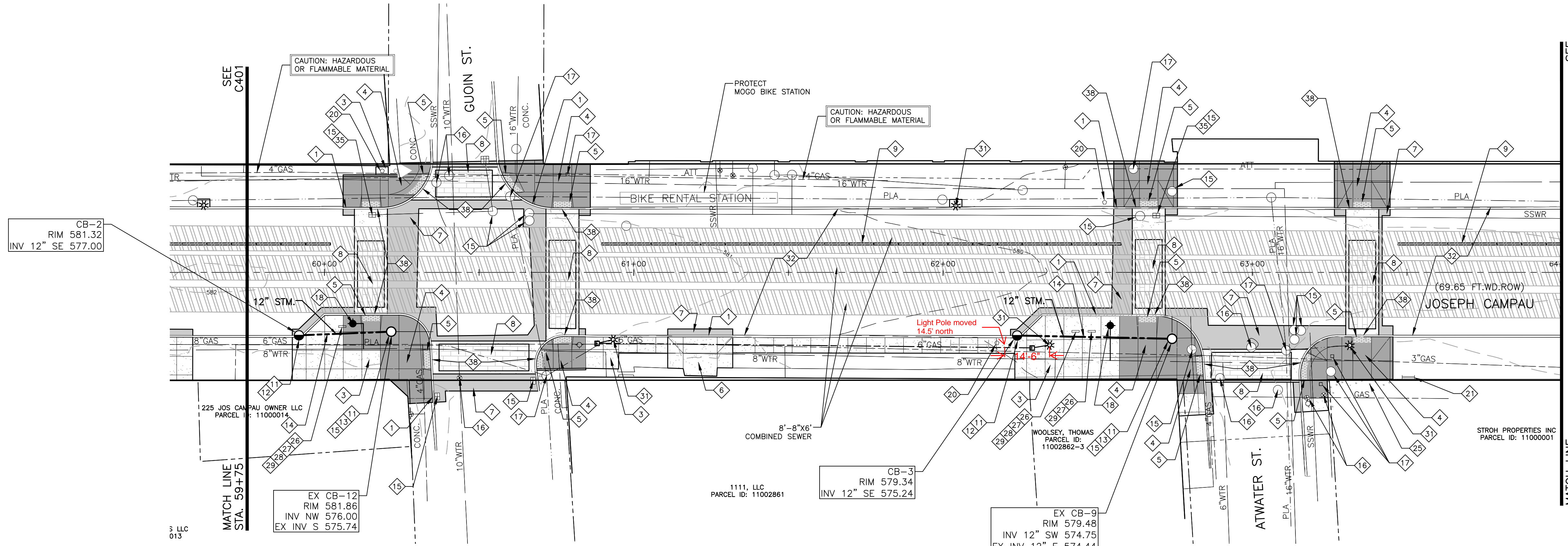
PROJECT NO.
180391
SHEET NO.

C401

© Copyright 2018
All Rights Reserved

PLOT INFO: Z:\2018\180391\TASK2 - JOSEPH CAMPAU\CD\C401\180391_CD.DWG LAYOUT C401 DATE: 9/13/2019 TIME: 10:53:31 AM USER: AOF

As-Builts



SYMBOL LEGEND

- ASPHALT PAVEMENT
- CONCRETE PAVEMENT
- UNIT PAVER CROSSWALK
- 6" SIDEWALK/RAMP
- 4 7/8" THICK CONCRETE SIDEWALK
- SOD
- DETECTABLE WARNING SURFACE
- LIGHT POLE
- TRASH RECEPTACLE
- HANDHOLE
- PLANTER
- CURB INLET
- BIKE RACK
- BEEHIVE INLET
- FIRE HYDRANT

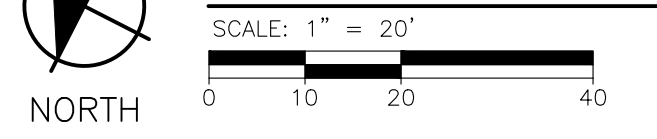
NOTE:

- ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT STANDARDS AND SPECIFICATIONS OF THE CITY OF DETROIT.
- ALL STRUCTURE COVERS TO BE ADJUSTED

KEYNOTE LEGEND

- 1 CONCRETE CURB, DETAIL CD, MODIFIED
- 2 STEP CURB
- 3 SIDEWALK, CONC, 4 INCH, MODIFIED
- 4 SIDEWALK RAMP, CONC, 6 INCH, MODIFIED
- 5 DETECTABLE WARNING SURFACE, MODIFIED
- 6 DRIVEWAY, NONREINF, CONC, 8 INCH, MODIFIED
- 7 HAND PATCHING
- 8 UNIT PAVER CROSSWALK
- 9 BUMPERBLOCK, CONC, DIVIDER
- 10 GATE COVER WITH CURB PLATE
- 11 DR STRUCTURE COVER, MODIFIED
- 12 DR STRUCTURE, 48 INCH DIA, MODIFIED
- 13 DR STRUCTURE, TAP, 12 INCH
- 14 SEWER, CL IV, 12 INCH, TR DET B
- 15 DR STRUCTURE COVER, ADJ, CASE1, MODIFIED
- 16 WATER SHUTOFF, ADJ, CASE 1, MODIFIED
- 17 STRUCTURE COVER TO BE ADJUSTED BY OTHERS
- 18 HYDRANT RELOCATE, CASE 1
- 19 MONUMENT SIGN, SALV AND REINSTALL
- 20 TRASH RECEPTACLE
- 21 BIKE RACK
- 22 ROOT BARRIER
- 23 POROUS RESIN BONDED AGGREGATE
- 24 GLEDITSIA TRIACANTHOS 'SHADEMASTER', 4 INCH, B&B
- 25 SODDING
- 26 LANDSCAPE PLANTER 20" X 20" X 20"
- 27 LANDSCAPE PLANTER 36" X 36" X 36"
- 28 LANDSCAPE PLANTER 36" X 42" X 42"
- 29 PLANTING MIXTURE, 12 INCH DEPTH
- 30 PRUNE TREE
- 31 LIGHT POLE (SEE ELECTRICAL)
- 32 HMA 4E3, 5E3
- 33 SOIL CELL
- 34 SIDEWALK, BRICK PAVERS, SALV AND REINSTALL
- 35 DR STRUCTURE COVER, ADA COMPLIANT, MODIFIED
- 36 CONCRETE BASE, PAVERS
- 37 SIDEWALK, CONC, 6 INCH, MODIFIED
- 38 CURB RAMP OPENING, CONC

CONSTRUCTION PLAN STA 59+75 TO STA 67+50



PROPOSED STRUCTURE DATA				
STRUCTURE	RIM	SIZE	INVERT	ELEVATION
CB-1	584.86	48"	12" SE.	580.92
CB-2	581.33	24"	12" SE.	577.00
CB-3	579.34	48"	12" SE.	575.24
CB-4	579.90	48"	12" SW	577.40

PROPOSED PIPE DATA			
PIPE NAME	SIZE	LENGTH	SLOPE
CB-1 > EX CB-18	12"	24'	0.72%
CB-2 > EX CB-12	12"	30'	3.35%
CB-3 > EX CB-9	12"	50'	0.99%
CB-4 > EX CB-8	12"	14'	0.30%



SMITHGROUP
500 GRISWOLD
SUITE 1700
DETROIT, MI 48226
313.983.3600
www.smithgroup.com

City of Detroit
Joseph Campau Streetscape

REVISIONS

DATE	DESCRIPTION	BY	CHKD
5/9/2019	100% CD		
1/23/2019	95% CD		
8/10/2018	50% CD		
7/27/2018	30% CD		

Drawn By AOF
Designer AOF
Reviewer DPE
Manager KKS

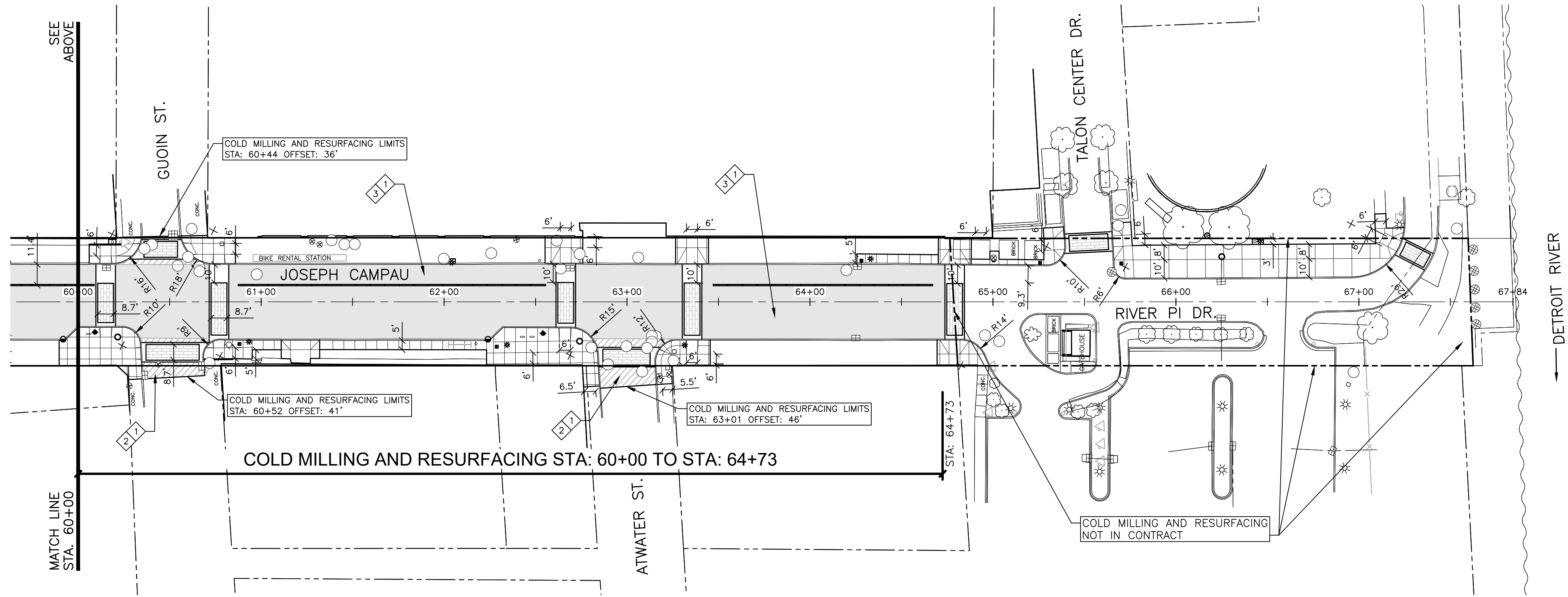
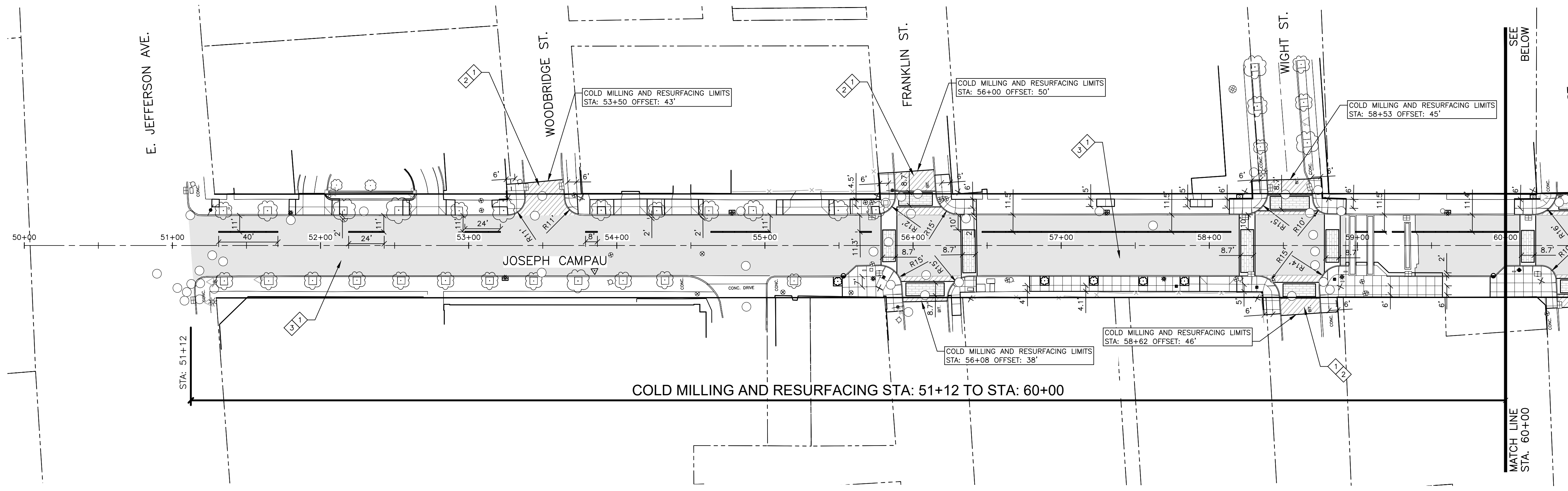
Hard copy is intended to be 24"x36" when plotted. Scale(s) indicated and graphic quality may not be accurate for any other size.

PROJECT NO.
180391

SHEET NO.

C402

PLOT INFO: Z:\2018\180391\TASK2 - JOSEPH CAMPAU\CD\CD\180391_CD.DWG LAYOUT C403 DATE: 5/9/2019 TIME: 12:43:17 PM USER: AOF



DIMENSIONAL AND PAVING PLAN
 SCALE: 1" = 40'
 NORTH

- SYMBOL LEGEND**
- _COLD MILLING HMA SURFACE, MODIFIED
 - _HMA APPROACH, MODIFIED
 - HMA 4E3
HMA 5E3
 - LIGHT POLE
 - TRASH RECEPTACLE
 - HANDHOLE
 - PLANTER
 - CURB INLET
 - BIKE RACK
 - BEEHIVE INLET
 - FIRE HYDRANT

- KEYNOTE LEGEND**
- _COLD MILLING HMA SURFACE, MODIFIED
 - HMA 4E3
HMA 5E3
 - _HMA APPROACH, MODIFIED

REVISIONS

5/9/2019	100% CD
1/23/2019	95% CD
8/10/2018	50% CD
7/27/2018	30% CD

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

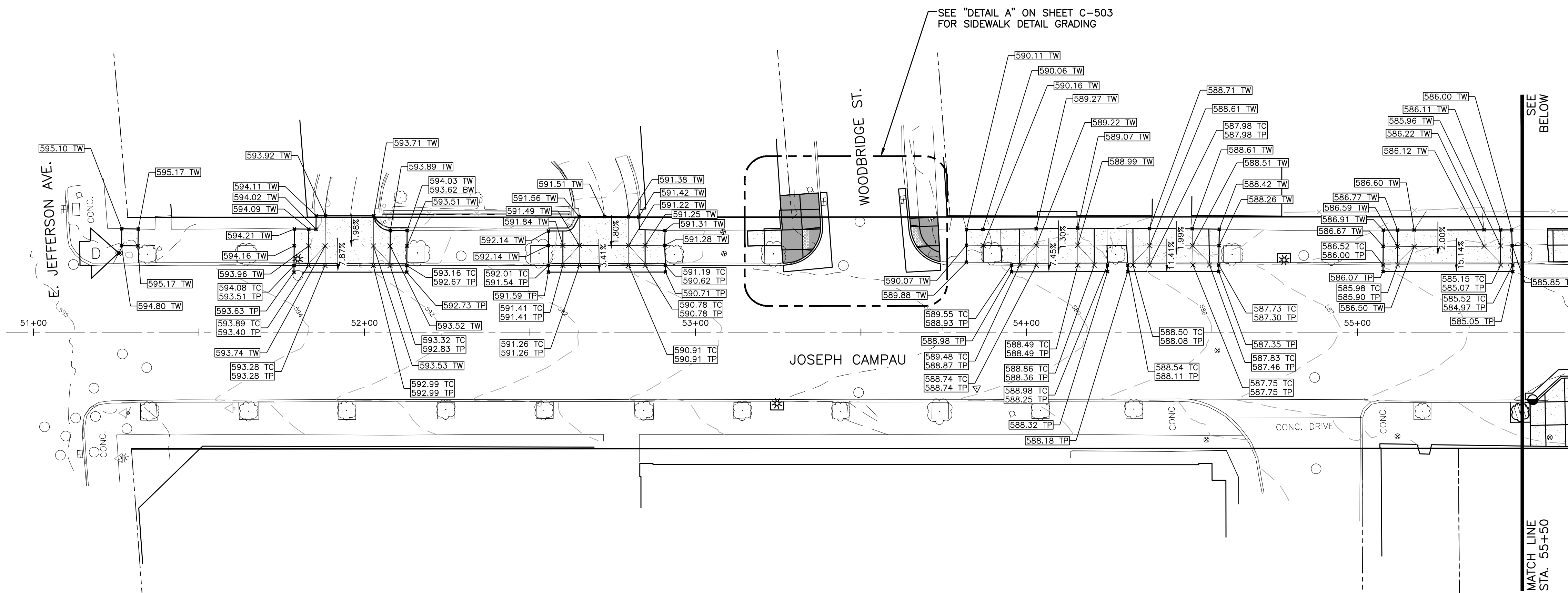
Hard copy is intended to be 24"x36" when plotted. Scale(s) indicated and graphic quality may not be accurate for any other size.

PROJECT NO.
180391

SHEET NO.

C403

PLOT INFO: Z:\2018\180391\TASK2 - JOSEPH CAMPAUCAD\CD\501\80391 CD.DWG LAYOUT C501 DATE: 5/9/2019 TIME: 12:43:38 PM USER: AOF



SYMBOL LEGEND

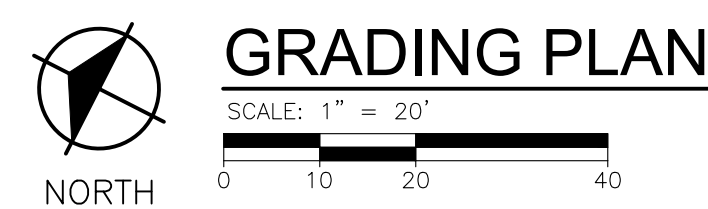
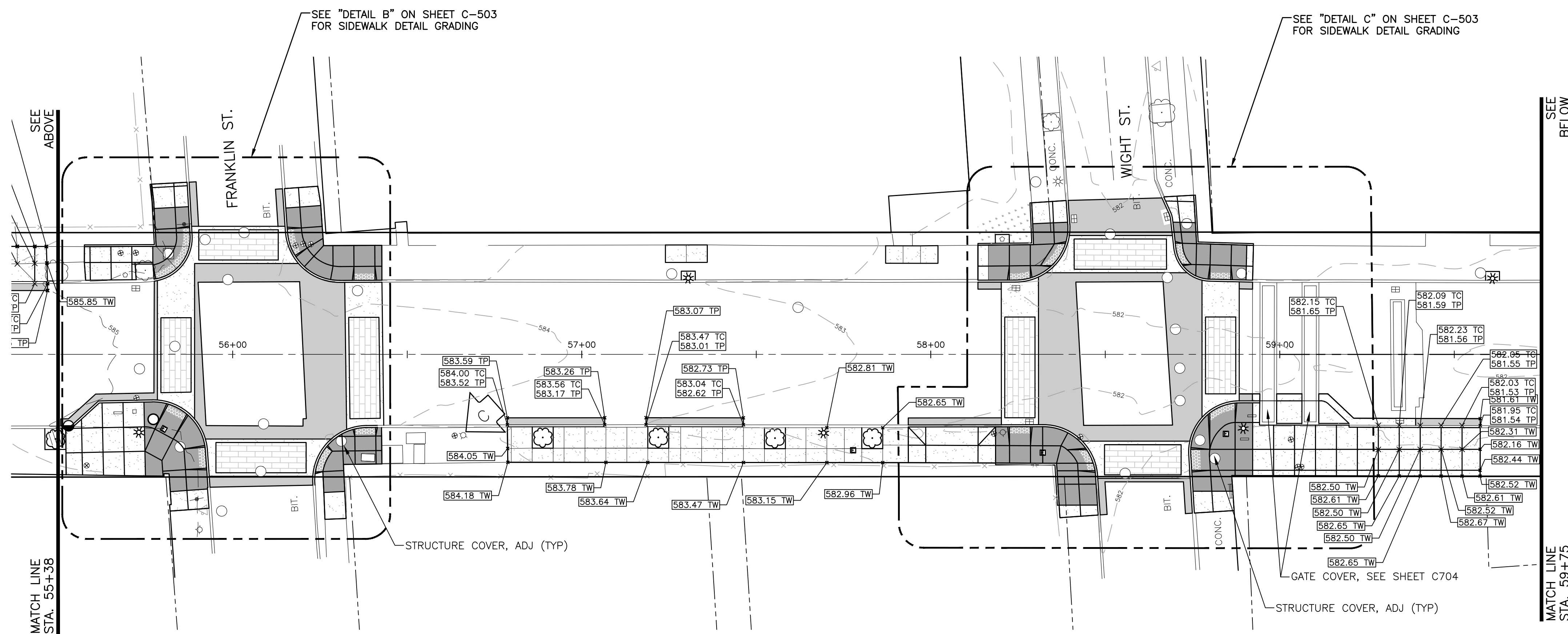
- ASPHALT PAVEMENT
- CONCRETE PAVEMENT
- UNIT PAVER CROSSWALK
- 6" SIDEWALK/RAMP
- 4" THICK CONCRETE SIDEWALK
- SOD
- DETECTABLE WARNING SURFACE

BENCH MARKS

- BENCH MARK A ELEVATION: 581.766
ARROW ON HYDRANT LOCATED AT NORTHEAST CORNER OF JOSEPH CAMPAU AVENUE AND RIVER PLACE DRIVE.
- BENCH MARK B ELEVATION: 583.362
ARROW ON HYDRANT LOCATED AT SOUTHWEST CORNER OF JOSEPH CAMPAU AVENUE AND GUININ ST
- BENCH MARK C ELEVATION: 586.362
ARROW ON HYDRANT LOCATED AT SOUTHWEST CORNER OF JOSEPH CAMPAU AVENUE AND FRANKLIN STREET
- BENCH MARK D ELEVATION: 595.820
TOP SOUTHEAST BOLT ON METAL STRAIN POLE LOCATED AT SOUTHWEST CORNER OF JOSEPH CAMPAU AVENUE AND JEFFERSON AVENUE.

SPOT ELEVATION LEGEND

- SPOT ELEVATION
- GP GUTTER PAN
- TC TOP OF CURB
- TP TOP OF PAVEMENT
- GR GRADE ELEVATION
- TW TOP OF WALK
- EW EDGE OF WALK
- FF FINISH FLOOR
- EM EDGE OF METAL
- LP LOW POINT
- HP HIGH POINT



REVISIONS

5/9/2019	100% CD
1/23/2019	95% CD
8/10/2018	50% CD
7/27/2018	30% CD

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

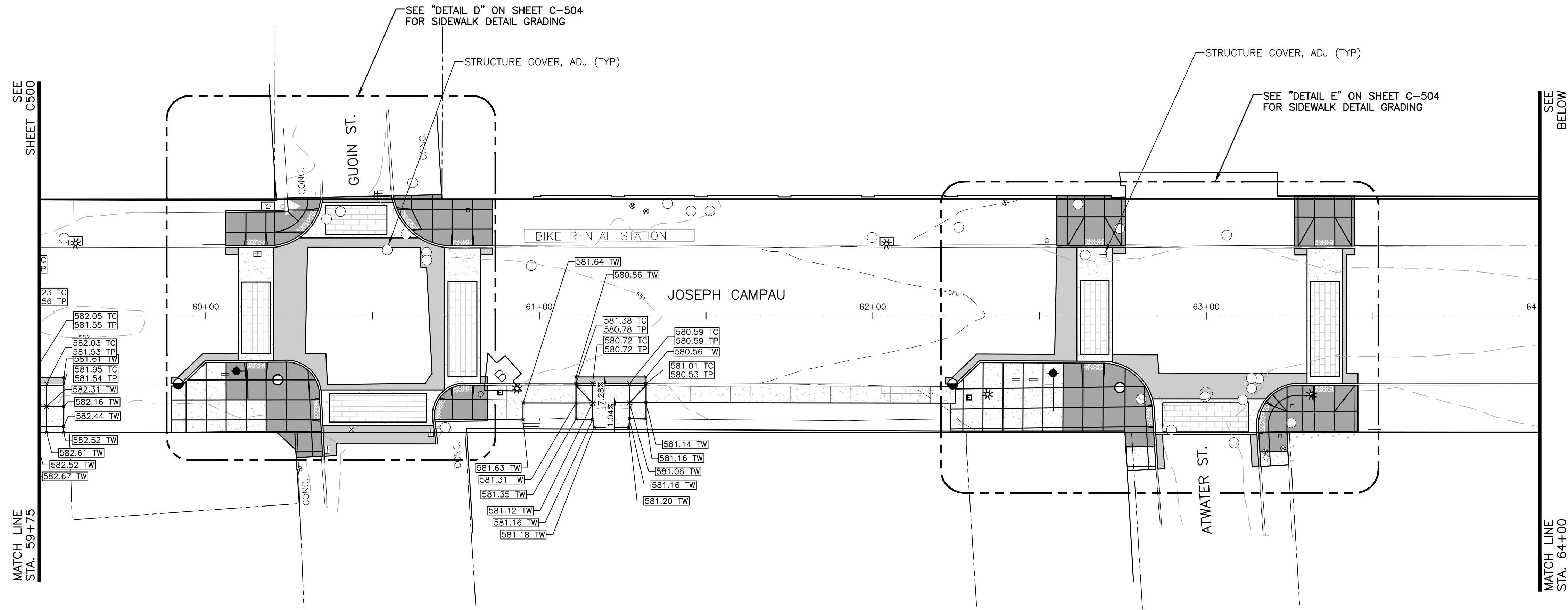
Hard copy is intended to be 24"x36" when plotted. Scale(s) indicated and graphic quality may not be accurate for any other size.

PROJECT NO.
180391

SHEET NO.

C501

PLOT INFO: Z:\2018\180391\TASK2 - JOSEPH CAMPANUCAD\CAD\C502.DWG LAYOUT C502 DATE: 5/9/2019 TIME: 12:43:46 PM USER: AOF



SYMBOL LEGEND

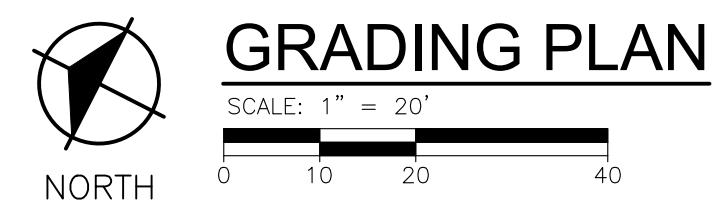
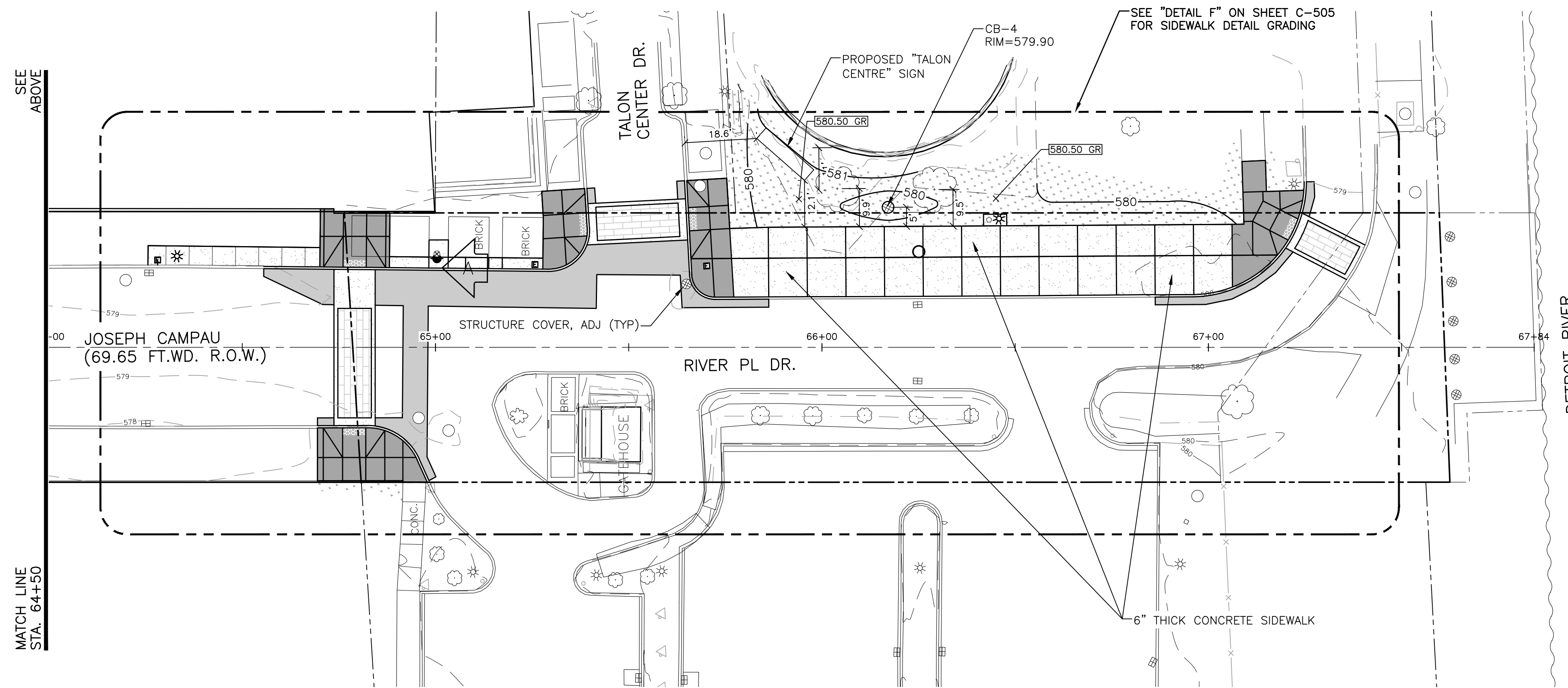
- ASPHALT PAVEMENT
- CONCRETE PAVEMENT
- UNIT PAVEMENT CROSSWALK
- 6" SIDEWALK/RAMP
- 4"/6" THICK CONCRETE SIDEWALK
- SOD
- DETECTABLE WARNING SURFACE

BENCH MARKS

- BENCH MARK A ELEVATION: 581.766
ARROW ON HYDRANT LOCATED AT NORTHEAST CORNER OF JOSEPH CAMPAU AVENUE AND RIVER PLACE DRIVE.
- BENCH MARK B ELEVATION: 583.362
ARROW ON HYDRANT LOCATED AT SOUTHWEST CORNER OF JOSEPH CAMPAU AVENUE AND GUOIN ST
- BENCH MARK C ELEVATION: 586.362
ARROW ON HYDRANT LOCATED AT SOUTHWEST CORNER OF JOSEPH CAMPAU AVENUE AND FRANKLIN STREET
- BENCH MARK D ELEVATION: 595.820
TOP SOUTHEAST BOLT ON METAL STRAIN POLE LOCATED AT SOUTHWEST CORNER OF JOSEPH CAMPAU AVENUE AND JEFFERSON AVENUE.

SPOT ELEVATION LEGEND

- 604.50 SPOT ELEVATION
- GP GUTTER PAN
- TC TOP OF CURB
- TP TOP OF PAVEMENT
- GR GRADE ELEVATION
- TW TOP OF WALK
- EW EDGE OF WALK
- FF FINISH FLOOR
- EM EDGE OF METAL
- LP LOW POINT
- HP HIGH POINT



ftc&h
engineers
scientists
architects
constructors

fishbeck, thompson, carr & huber, inc.
www.ftch.com



SMITHGROUP
500 GRISWOLD
SUITE 1700
DETROIT, MI 48226
313.983.3600
www.smithgroup.com

City of Detroit

Joseph Campau Streetscape

REVISIONS

5/9/2019	100% CD
1/23/2019	95% CD
8/10/2018	50% CD
7/27/2018	30% CD

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.

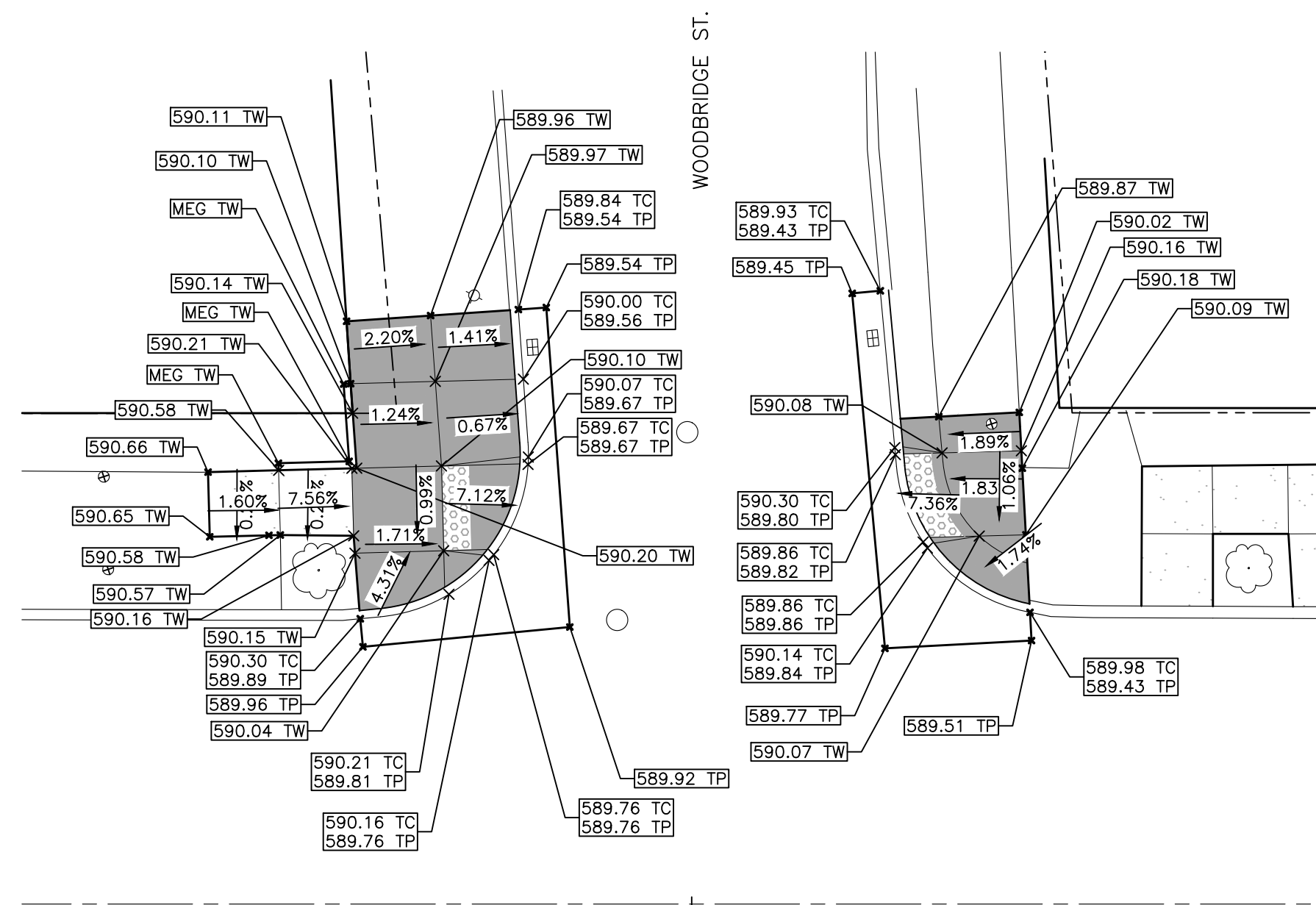
PROJECT NO.
180391

SHEET NO.

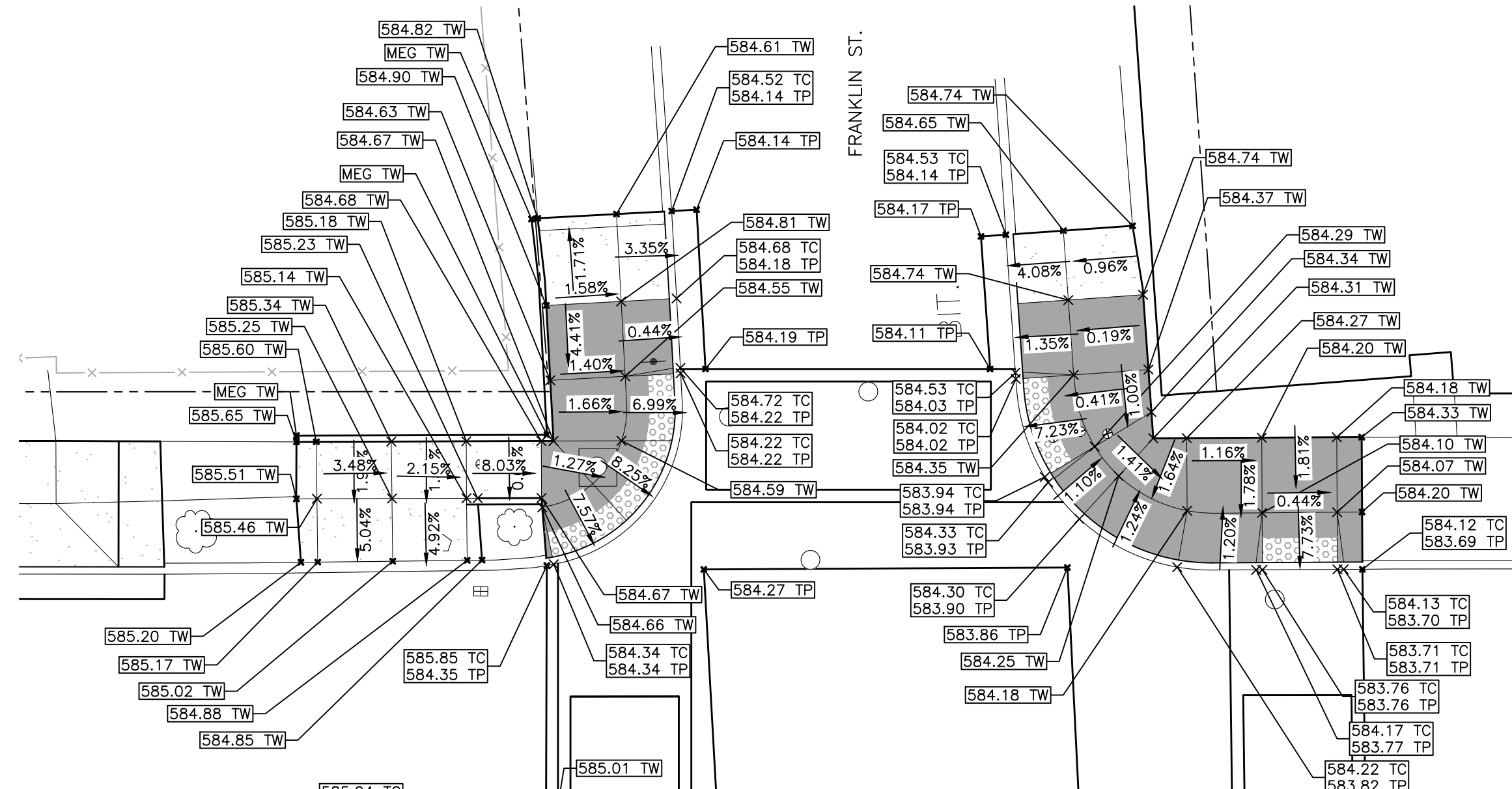
C502

© Copyright 2018
All Rights Reserved

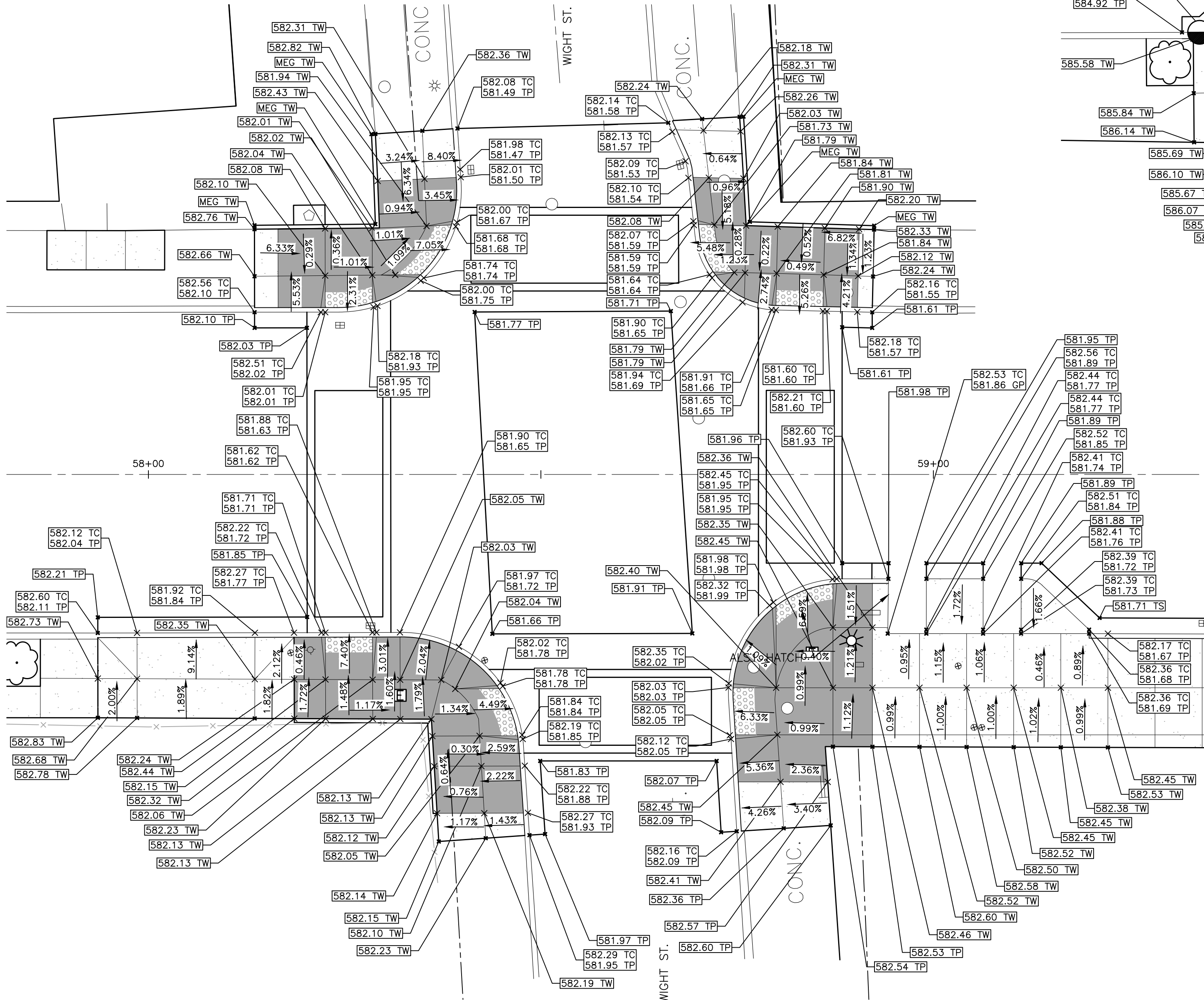
PLT: I:\CADD\2018\180391\TASK2 - JOSEPH CAMP/CA/CD/C503/180391_CD.DWG LAYOUT: C503 DATE: 5/9/2019 TIME: 12:44:17 PM USER: AOF



"DETAIL A"



"DETAIL B"



"DETAIL C"

SYMBOL LEGEND

- CONCRETE PAVEMENT
- 6" SIDEWALK/RAMP
- 4" THICK CONCRETE SIDEWALK
- DETECTABLE WARNING SURFACE

BENCH MARKS

- BENCH MARK A ELEVATION: 581.766
ARROW ON HYDRANT LOCATED AT NORTHEAST CORNER OF JOSEPH CAMP/PAU AVENUE AND RIVER PLACE DRIVE.
- BENCH MARK B ELEVATION: 583.362
ARROW ON HYDRANT LOCATED AT SOUTHWEST CORNER OF JOSEPH CAMP/PAU AVENUE AND GUOIN ST
- BENCH MARK C ELEVATION: 586.362
ARROW ON HYDRANT LOCATED AT SOUTHWEST CORNER OF JOSEPH CAMP/PAU AVENUE AND FRANKLIN STREET
- BENCH MARK D ELEVATION: 595.820
TOP SOUTHEAST BOLT ON METAL STRAIN POLE LOCATED AT SOUTHWEST CORNER OF JOSEPH CAMP/PAU AVENUE AND JEFFERSON AVENUE.

SPOT ELEVATION LEGEND

- [604.50] SPOT ELEVATION
- GP GUTTER PAN
- TC TOP OF CURB
- TP TOP OF PAVEMENT
- GR GRADE ELEVATION
- TW TOP OF WALK
- EW EDGE OF WALK
- FF FINISH FLOOR
- EM EDGE OF METAL
- LP LOW POINT
- HP HIGH POINT
- MEG MATCH EXISTING GRADE

ftch
engineers
scientists
architects
constructors

fishbeck thompson carr & huber, inc.
www.ftch.com



SMITHGROUP

500 GRISWOLD
SUITE 1700
DETROIT, MI 48226
313.983.3600
www.smithgroup.com

City of Detroit

Joseph Campau Streetscape

REVISIONS

5/9/2019	100% CD
1/23/2019	95% CD
8/10/2018	50% CD
7/27/2018	30% CD

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.

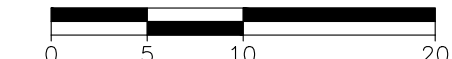
PROJECT NO.
180391

SHEET NO.



DETAIL GRADING PLAN

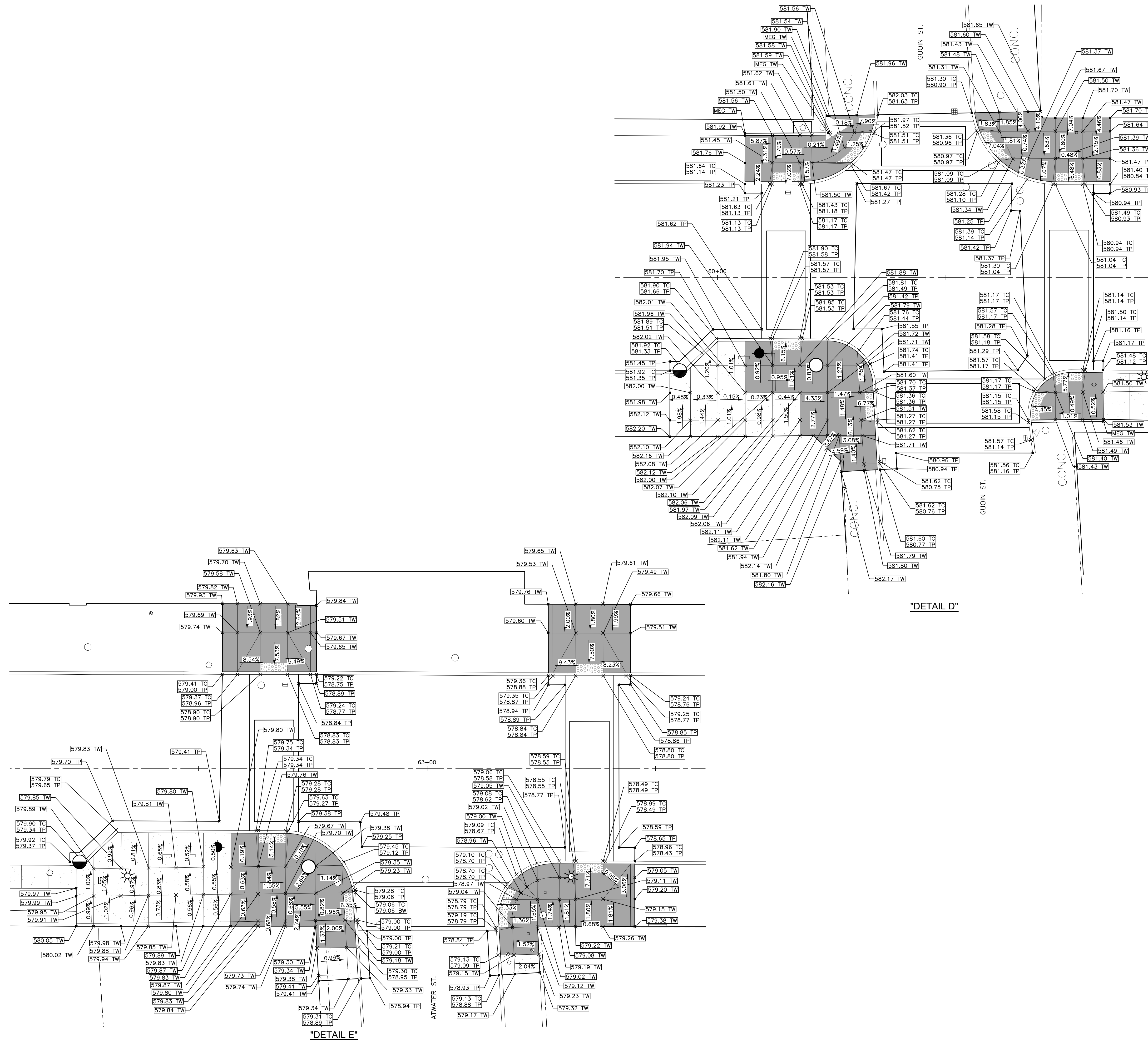
SCALE: 1" = 10'



C503

© Copyright 2018
All Rights Reserved

PLOT INFO: Z:\2018\180391\TASK2 - JOSEPH CAMP/CD/C502/180391 CD.DWG LAYOUT C504 DATE: 5/9/2019 TIME: 12:44:27 PM USER: AOF



SYMBOL LEGEND

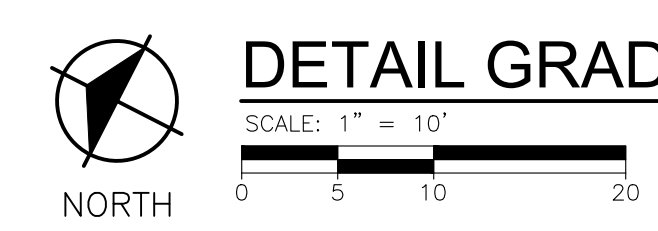
- CONCRETE PAVEMENT
- 6" SIDEWALK/RAMP
- 4" THICK CONCRETE SIDEWALK
- DETECTABLE WARNING SURFACE

BENCH MARKS

- BENCH MARK A: ELEVATION: 581.766
ARROW ON HYDRANT LOCATED AT NORTHEAST CORNER OF JOSEPH CAMPAU AVENUE AND RIVER PLACE DRIVE.
- BENCH MARK B: ELEVATION: 583.362
ARROW ON HYDRANT LOCATED AT SOUTHWEST CORNER OF JOSEPH CAMPAU AVENUE AND GUOIN ST
- BENCH MARK C: ELEVATION: 586.362
ARROW ON HYDRANT LOCATED AT SOUTHWEST CORNER OF JOSEPH CAMPAU AVENUE AND FRANKLIN STREET
- BENCH MARK D: ELEVATION: 595.820
TOP SOUTHEAST BOLT ON METAL STRAIN POLE LOCATED AT SOUTHWEST CORNER OF JOSEPH CAMPAU AVENUE AND JEFFERSON AVENUE.

SPOT ELEVATION LEGEND

- SPOT ELEVATION
- GP GUTTER PAN
- TC TOP OF CURB
- TP TOP OF PAVEMENT
- GR GRADE ELEVATION
- TW TOP OF WALK
- EW EDGE OF WALK
- FF FINISH FLOOR
- EM EDGE OF METAL
- LP LOW POINT
- HP HIGH POINT
- MEG MATCH EXISTING GRADE



DETAIL GRADING PLAN

ftc&h
engineers
scientists
architects
constructors

fishbeck thompson carr & huber, inc.
www.ftch.com



SMITHGROUP

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

City of Detroit

Joseph Campau Streetscape

REVISIONS

5/9/2019	100% CD
1/23/2019	95% CD
8/10/2018	50% CD
7/27/2018	30% CD

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.
180391

SHEET NO.

C504

© Copyright 2018
All Rights Reserved



BENCH MARKS

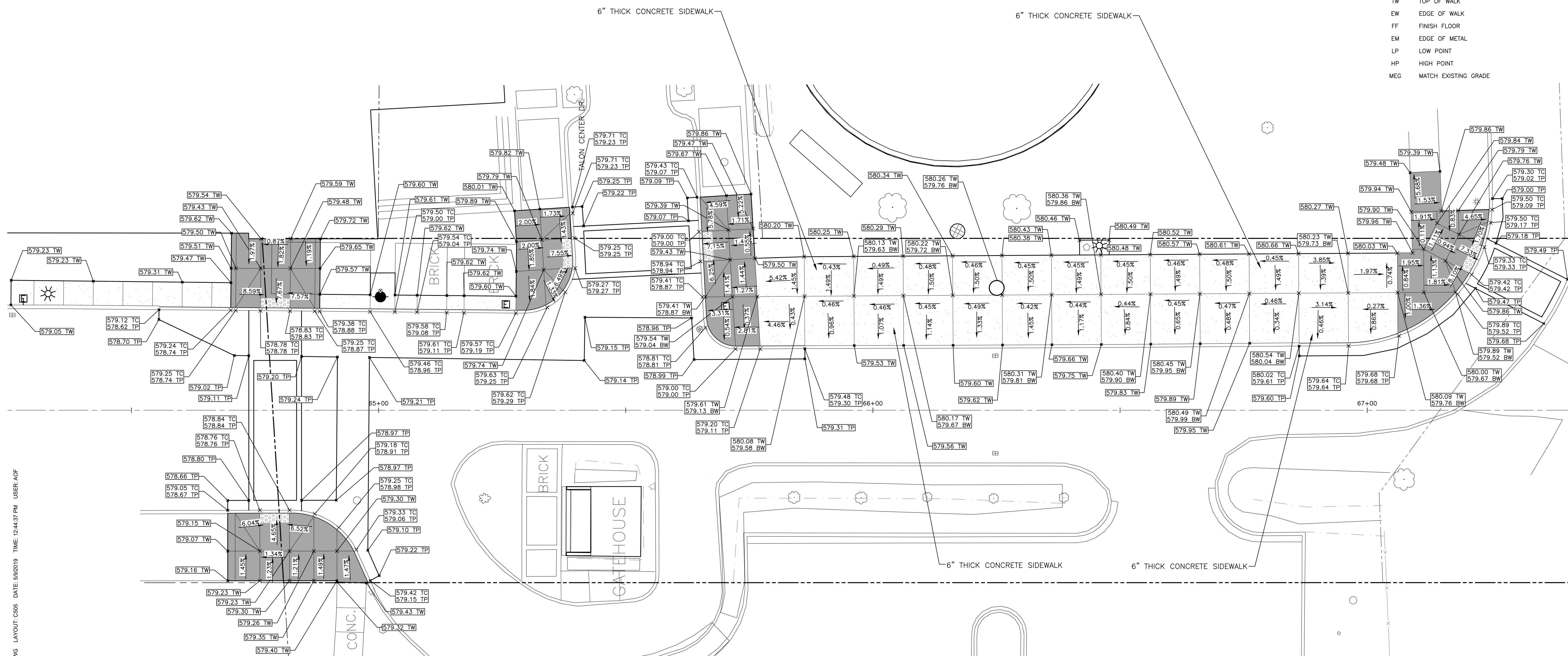
- BENCH MARK A ELEVATION: 581.766
ARROW ON HYDRANT LOCATED AT NORTHEAST CORNER OF JOSEPH CAMPAU AVENUE AND RIVER PLACE DRIVE.
- BENCH MARK B ELEVATION: 583.362
ARROW ON HYDRANT LOCATED AT SOUTHWEST CORNER OF JOSEPH CAMPAU AVENUE AND GUOIN ST
- BENCH MARK C ELEVATION: 586.362
ARROW ON HYDRANT LOCATED AT SOUTHWEST CORNER OF JOSEPH CAMPAU AVENUE AND FRANKLIN STREET
- BENCH MARK D ELEVATION: 595.820
TOP SOUTHEAST BOLT ON METAL STRAIN POLE LOCATED AT SOUTHWEST CORNER OF JOSEPH CAMPAU AVENUE AND JEFFERSON AVENUE

SYMBOL LEGEND

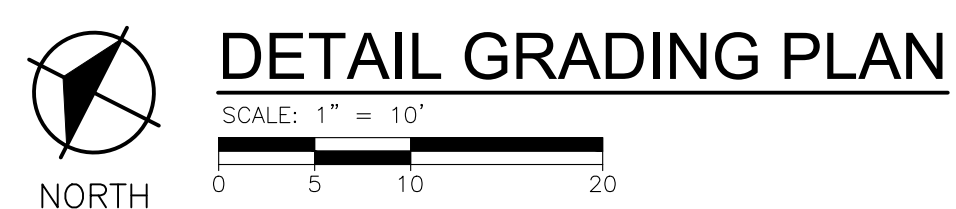
- CONCRETE PAVEMENT
- 6" SIDEWALK/RAMP
- 4"/6" THICK CONCRETE SIDEWALK
- DETECTABLE WARNING SURFACE

SPOT ELEVATION LEGEND

- SPOT ELEVATION
- GP GUTTER PAN
- TC TOP OF CURB
- TP TOP OF PAVEMENT
- GR GRADE ELEVATION
- TW TOP OF WALK
- EW EDGE OF WALK
- FF FINISH FLOOR
- EM EDGE OF METAL
- LP LOW POINT
- HP HIGH POINT
- MEG MATCH EXISTING GRADE



"DETAIL F"



PLOT INFO: Z:\2018\180391\TASK2 - JOSEPH CAMPAU\CD\CD502\180391_CD.DWG LAYOUT: C505 DATE: 5/9/2019 TIME: 12:44:37 PM USER: AOF

REVISIONS

5/9/2019	100% CD
1/23/2019	95% CD
8/10/2018	50% CD
7/27/2018	30% CD

Drawn By AOF
Designer AOF
Reviewer DPE
Manager KKS

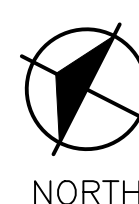
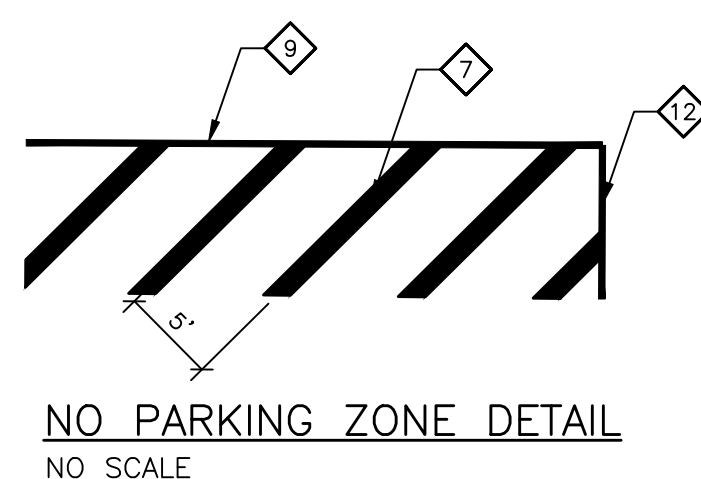
Hard copy is intended to be 24"x36" when plotted. Scale(s) indicated and graphic quality may not be accurate for any other size.

PROJECT NO.
180391

SHEET NO.

C505

PLOT INFO: Z:\2018\180391\TASK2 - JOSEPH CAMP/CAJ/CAD/CDD/001180391 CD.DWG LAYOUT: C601 DATE: 5/9/2019 TIME: 12:44:55 PM USER: ADF



PERMANENT PAVEMENT MARKING PLAN

SCALE: 1" = 40'
0 20 40 80

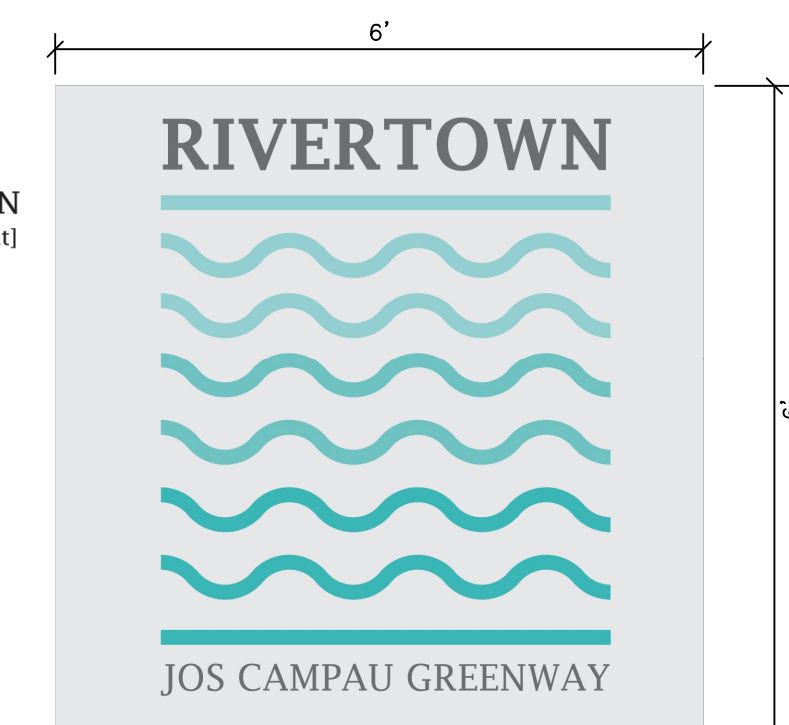
NOTES

1. ALL PAVEMENT MARKINGS SHALL COMPLY WITH THE CURRENT EDITION OF "MICHIGAN MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES".
2. BUMPER BLOCKS SHALL BE INSTALLED AFTER PAVEMENT MARKINGS HAVE BEEN COMPLETED.

KEYNOTE LEGEND

- 1 NOT USED
- 2 PAVT MRKG, OVLY COLD PLASTIC, 12 INCH, CROSSWALK
- 3 PAVT MRKG, OVLY COLD PLASTIC, 18 INCH, STOP BAR
- 4 PAVT MRKG, MODIFIED URETHANE, DIRECTION ARROW SYM, BIKE
- 5 PAVT MRKG, MODIFIED URETHANE, BIKE
- 6 _PAVT MRKG, POLYMER CEMENT SURFACING, GREEN
- 7 PAVT MRKG, MODIFIED URETHANE, 12 INCH, CROSS HATCHING, WHITE
- 8 _PAVT MRKG, OVLY COLD PLASTIC, LOADING ZONE, WHITE
- 9 PAVT MRKG, SPRAYABLE THERMOPL, 4 INCH, WHITE (SINGLE, SOLID)
- 10 PAVT MRKG, SPRAYABLE THERMOPL, 12 INCH, WHITE (SINGLE, 1" MARK, 6" GAP)
- 11 PAVT MRKG, SPRAYABLE THERMOPL, 12 INCH, WHITE (SINGLE, 1" MARK, 3" GAP)
- 12 PAVT MRKG, MODIFIED URETHANE, 4 INCH, WHITE (SINGLE, SOLID)
- 13 PAVT MRKG, SPRAYABLE THERMOPL, 4 INCH, YELLOW (DOUBLE, SOLID)
- 14 PAVT MRKG, SPRAYABLE THERMOPL, 4 INCH, YELLOW (SINGLE, 3" MARK, 9" GAP)
- 15 _PAVT MRKG, PATHWAY LOGO
- 16 _POST DELINEATOR, 36 INCH, WHITE
- 17 PAVT MRKG, MODIFIED URETHANE, 4 INCH, CROSS HATCHING, WHITE
- 18 PAVT MRKG, SPRAYABLE THERMOPL, 4 INCH, WHITE (SINGLE, 2" MARK, 4" GAP)
- 19 PAVT MRKG, MODIFIED URETHANE, 4 INCH, YELLOW (SINGLE, 3" MARK, 9" GAP)
- 20 _RECESSING PAVT MRKG, 12 INCH
- 21 _RECESSING PAVT MRKG, 18 INCH

RIVERTOWN
[Lucida Fax Font]



PAVT MRKG, PATHWAY LOGO
NO SCALE



REVISIONS

5/9/2019	100% CD
1/23/2019	95% CD
8/10/2018	50% CD
7/27/2018	30% CD

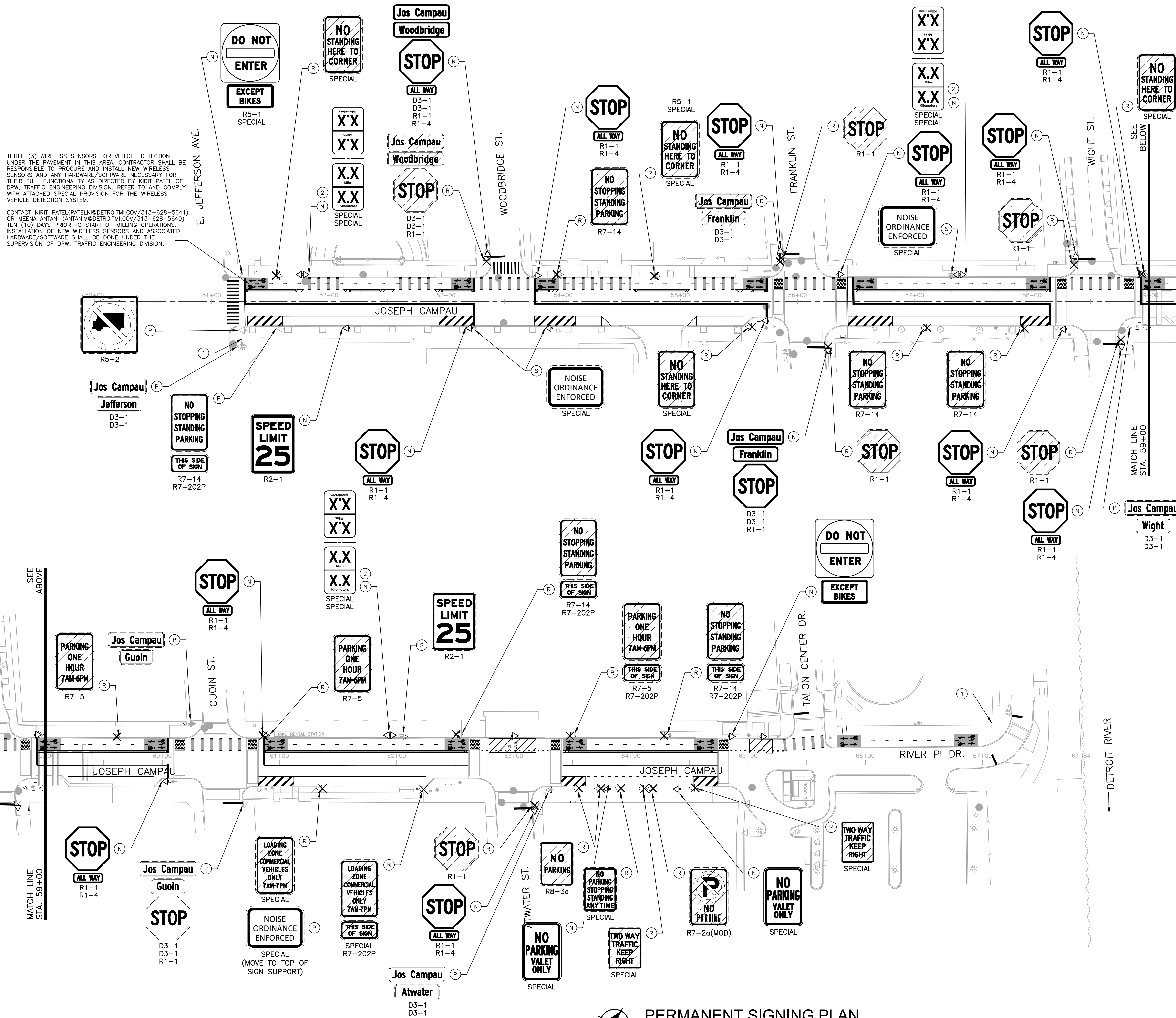
Drawn By KP
Designer KP
Reviewer DPE
Manager **ftch**

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.
180391

SHEET NO.

C601



THREE (3) WIRELESS SENSORS FOR VEHICLE DETECTION UNDER THE PAVEMENT IN THIS AREA. CONTRACTOR SHALL BE RESPONSIBLE TO PROCURE AND INSTALL NEW WIRELESS SENSORS AND ANY HARDWARE/SOFTWARE NECESSARY FOR THEIR FULL FUNCTIONALITY AS DIRECTED BY KIRIT PATEL OF DPW, TRAFFIC ENGINEERING DIVISION. REFER TO AND COMPLY WITH ATTACHED SPECIAL PROVISION FOR THE WIRELESS VEHICLE DETECTION SYSTEM.

CONTACT KIRIT PATEL (PATELKI@DETROITMI.GOV/313-628-5641) OR MEENA ANANI (ANANIM@DETROITMI.GOV/313-628-5640) TEN (10) DAYS PRIOR TO START OF MILLING OPERATIONS. INSTALLATION OF NEW WIRELESS SENSORS AND ASSOCIATED HARDWARE/SOFTWARE SHALL BE DONE UNDER THE SUPERVISION OF DPW, TRAFFIC ENGINEERING DIVISION.

NOTES

1. ALL SIGNING SHALL COMPLY WITH THE CURRENT EDITION OF "MICHIGAN MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES".

LEGEND

- (N) NEW SIGN AND SUPPORT
- (P) PROTECT SIGN AND SUPPORT
- (S) REMOVE, SALVAGE, & RE-INSTALL WITH NEW SUPPORT
- (R) REMOVE SIGN
- (1) _SIGN, TRAILHEAD, VERTICAL
- (2) _SIGN, MILEAGE MARKER
- (X) REMOVE SIGN SUPPORT
- (V) EXISTING SIGN SUPPORT
- (V) PROPOSED SIGN SUPPORT

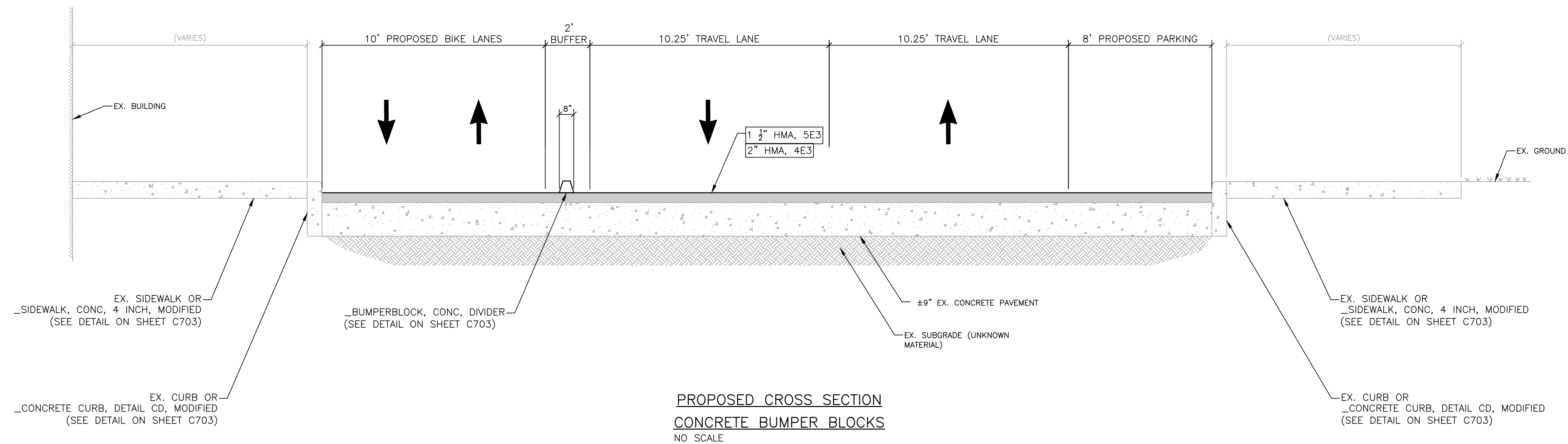
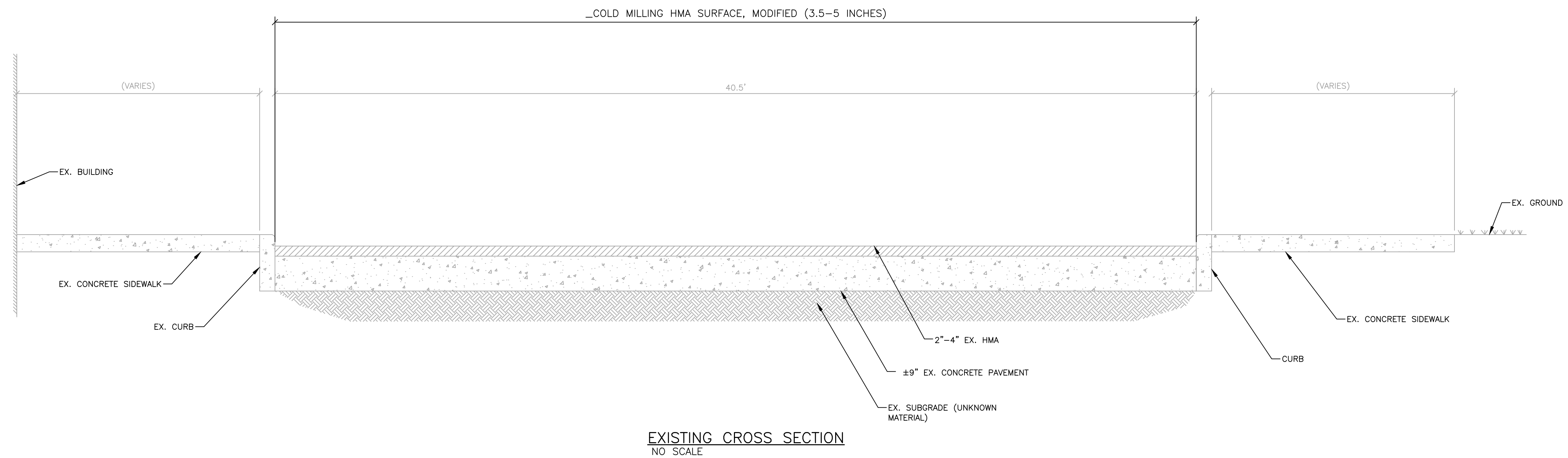
PLOT INFO: Z:\2018\180391\AS2 - JOSEPH CAMPAU\CD\CD02\02180391_CD.DWG LAYOUT: C602 DATE: 5/9/2019 TIME: 12:45:14 PM USER: KK3

PERMANENT SIGNING PLAN
 SCALE: 1" = 40'

REVISIONS

DATE	DESCRIPTION	BY	CHKD
5/9/2019	100% CD	KP	KK3
1/23/2019	95% CD	KP	DPE
8/10/2018	50% CD	DPE	KK3
7/27/2018	30% CD	KK3	

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



HMA APPLICATION ESTIMATE				
IDENT NO.	ITEM	RATE LBS PER SYD	PERFORMANCE GRADE	REMARKS
5E3	HMA, 5E3	165	64-22	TOP COURSE (AWI = 260)
4E3	HMA, 4E3	220	64-22	LEVELING COURSE
HP	HAND PATCHING	VARIABLES	64-22	USE HMA, 5E3
	*BOND COAT	0.05-0.15 GAL		

NOTES:

1. 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 5E HAS BEEN ESTIMATED TO PROVIDE MATERIAL TO RE-ESTABLISH THE PAVEMENT CROSS-SECTION AND FOR WEDGING AT MILLED STREET INTERSECTIONS.
2. "COLD-MILLING HMA SURFACE MODIFIED" SHALL APPLY ACROSS THE FULL PAVEMENT WIDTH AS SHOWN ON THE PLAN OR AS DIRECTED BY THE ENGINEER.
3. IF EXISTING HMA OVERLAY IS LESS THAN 3/4", COLD MILL THE FULL WIDTH OR AS DIRECTED BY THE ENGINEER.

PROJECT SUMMARY:

COLD MILL FROM 3/4" INCHES UP TO 5 INCHES, AS DIRECTED BY THE ENGINEER OF EXISTING HMA SURFACE AND REPLACED WITH 2 INCHES OF 4E HMA LEVELING COURSE MIXTURE WITH A YIELD OF 220LBS PER SQUARE YARD AND 1 1/2" OF 5E HMA WEARING COURSE MIXTURE WITH A YIELD OF 165 LBS PER SQUARE YARD. THE PROJECT ALSO INCLUDED CONCRETE CURB, SIDEWALK, CURB RAMPS, DRIVE APPROACHES, DRAINAGE STRUCTURES, EXCAVATION, PAVEMENT REMOVAL, LANE TIES, PAVEMENT MARKINGS AND MISCELLANEOUS CONSTRUCTION.

JOSEPH CAMPAU - STA. 51+00
TYPICAL CROSS SECTIONS
NO SCALE

REVISIONS

DATE	DESCRIPTION	BY	APP'D
5/9/2019	100% CD		
1/23/2019	95% CD		
8/10/2018	50% CD		
7/27/2018	30% CD		

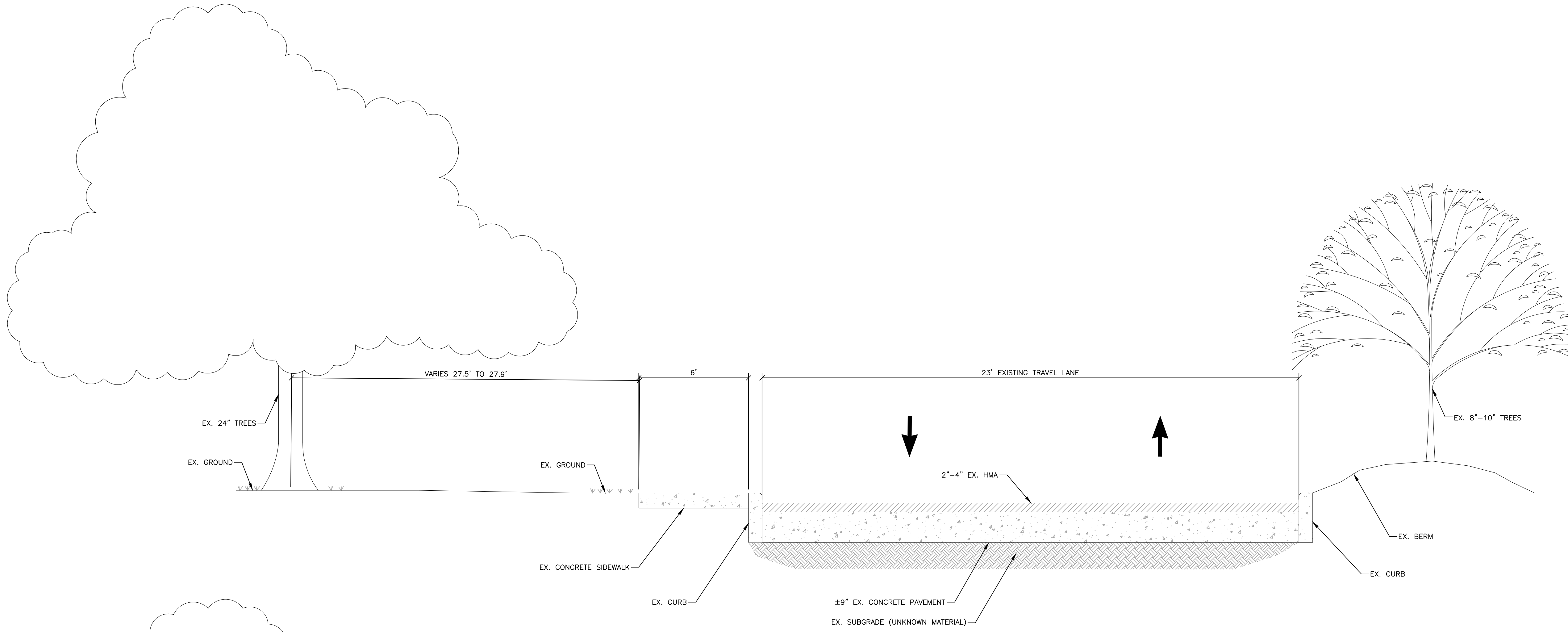
Drawn By	AOF
Designer	AOF
Reviewer	DPE
Manager	KK3

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

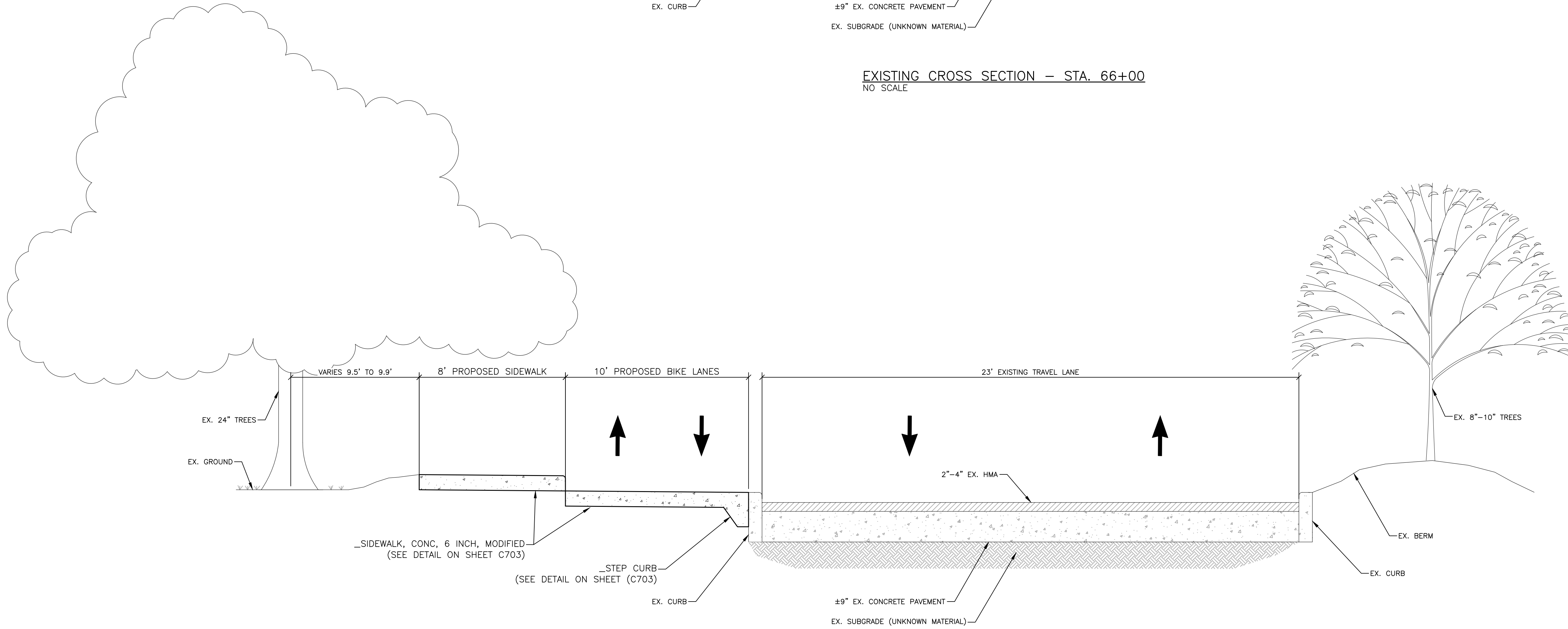
PROJECT NO.
180391

SHEET NO.

C701



EXISTING CROSS SECTION - STA. 66+00
NO SCALE



PROPOSED CROSS SECTION - STA. 66+00
NO SCALE

TALON CENTER DRIVE - STA. 66+00
TYPICAL CROSS SECTIONS
NO SCALE

PLT: I:\C702\2018\180391\TASK2 - JOSEPH CAMPANU\CAD\C702\180391_CD.DWG LAYOUT: C702 DATE: 5/9/2019 TIME: 12:45:36 PM USER: AOF

REVISIONS

5/9/2019	100% CD
1/23/2019	95% CD
8/10/2018	50% CD
7/27/2018	30% CD

Drawn By	AOF
Designer	AOF
Reviewer	DPE
Manager	KK3

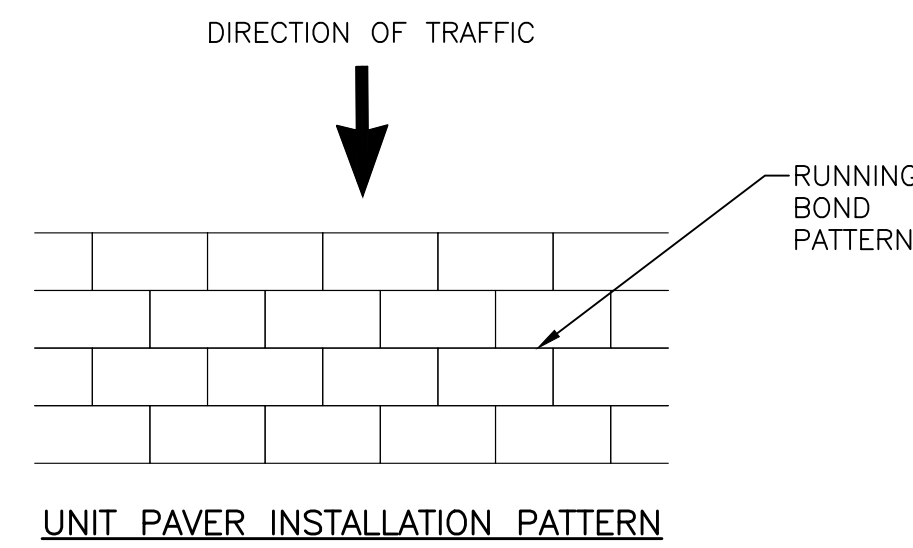
Hard copy is intended to be 24"x36" when plotted. Scale(s) indicated and graphic quality may not be accurate for any other size.

PROJECT NO.

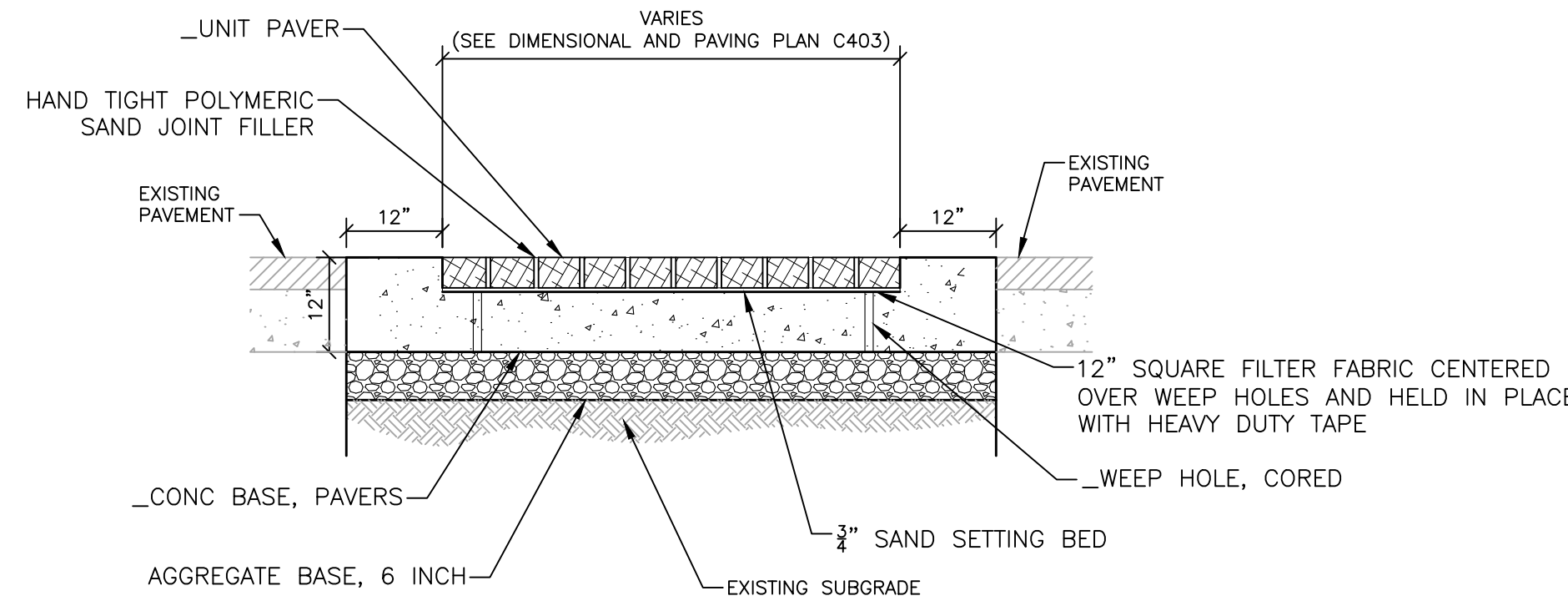
180391

SHEET NO.

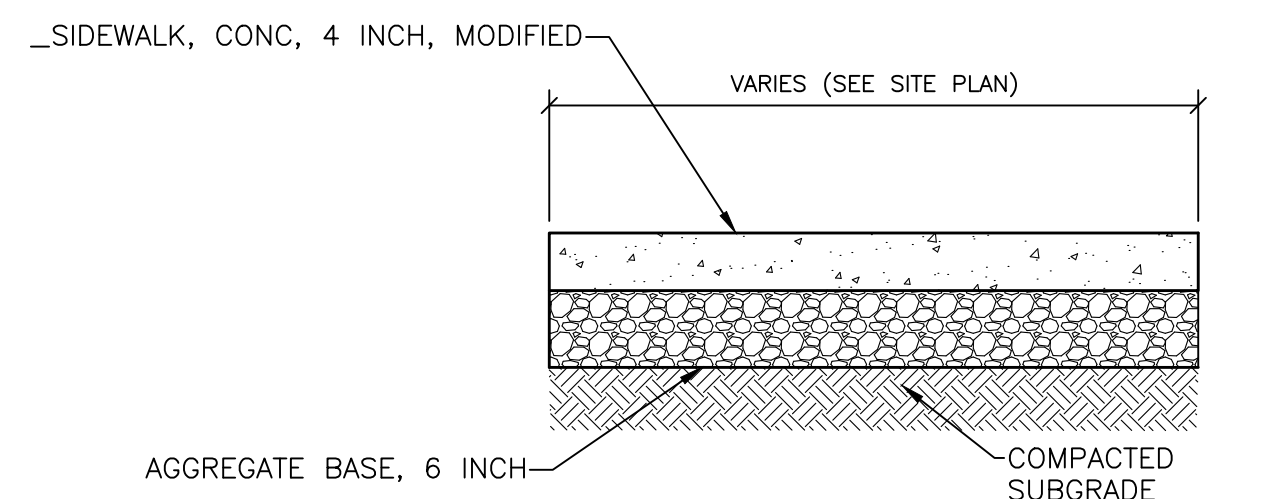
C702



UNIT PAVER INSTALLATION PATTERN

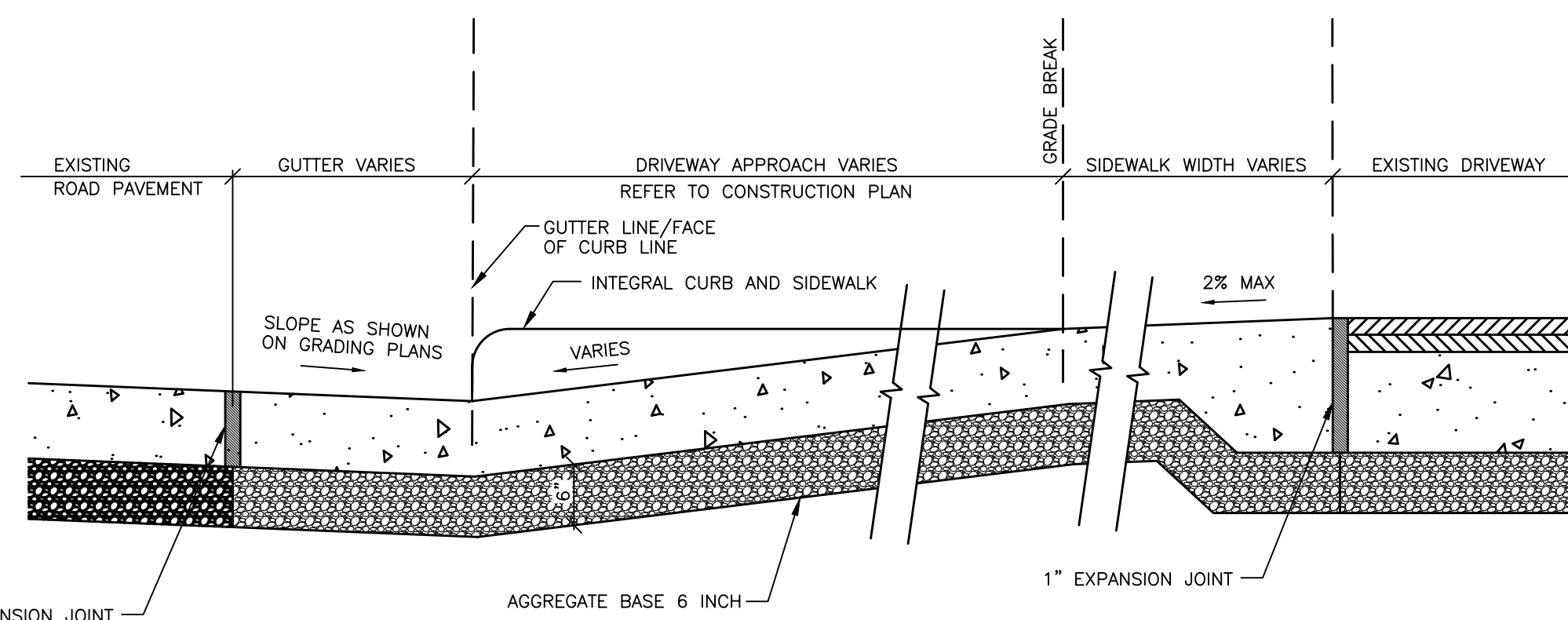


UNIT PAVER CROSSWALK
NO SCALE

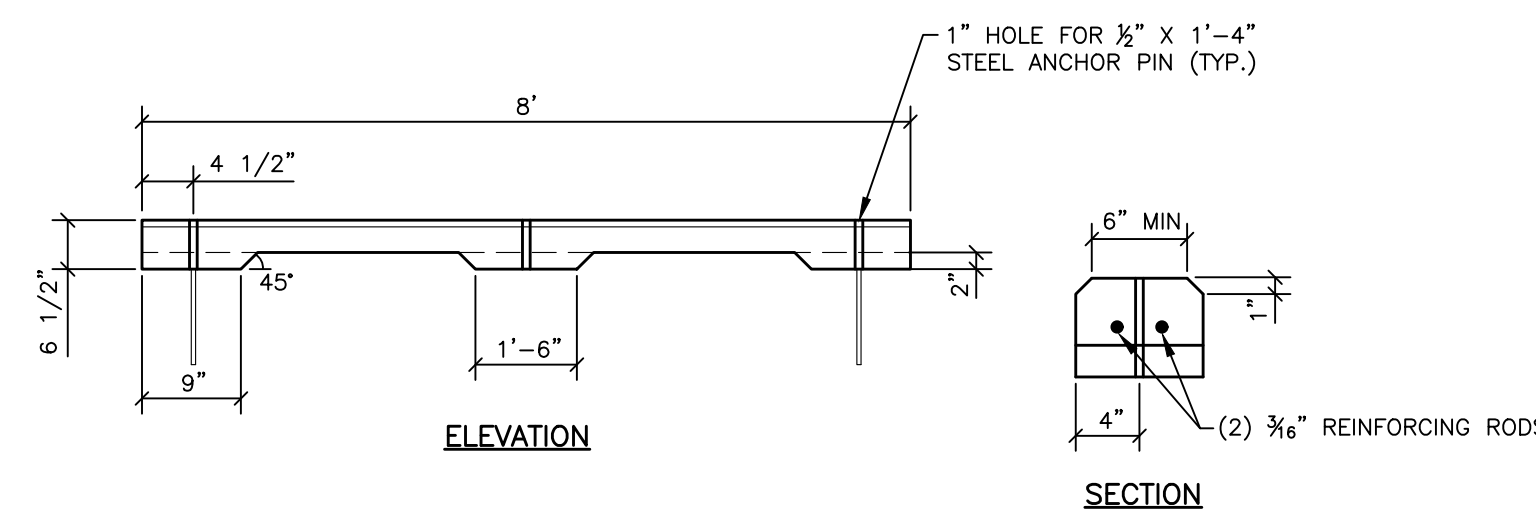


SIDEWALK, CONC. 4 INCH, MODIFIED
NO SCALE

NOTE: SIDEWALK THICKNESS TO BE 8" AT ALL DRIVE ENTRANCES AND 6" AT ALL RAMPS.

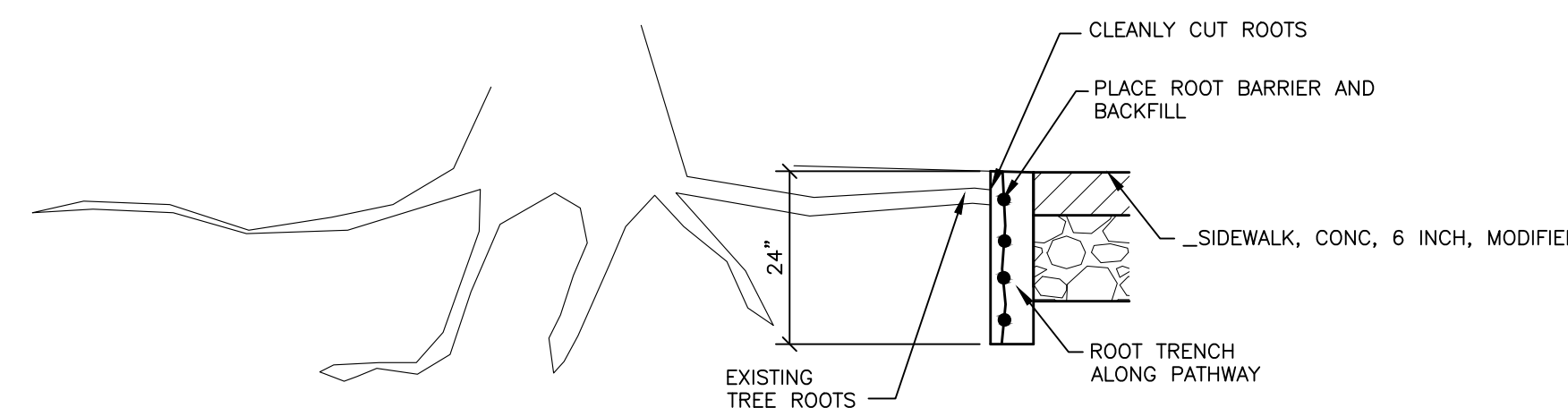


DRIVEWAY, NONREINF. CONC. 8 INCH, MODIFIED
NO SCALE



INSTALLATION PLAN

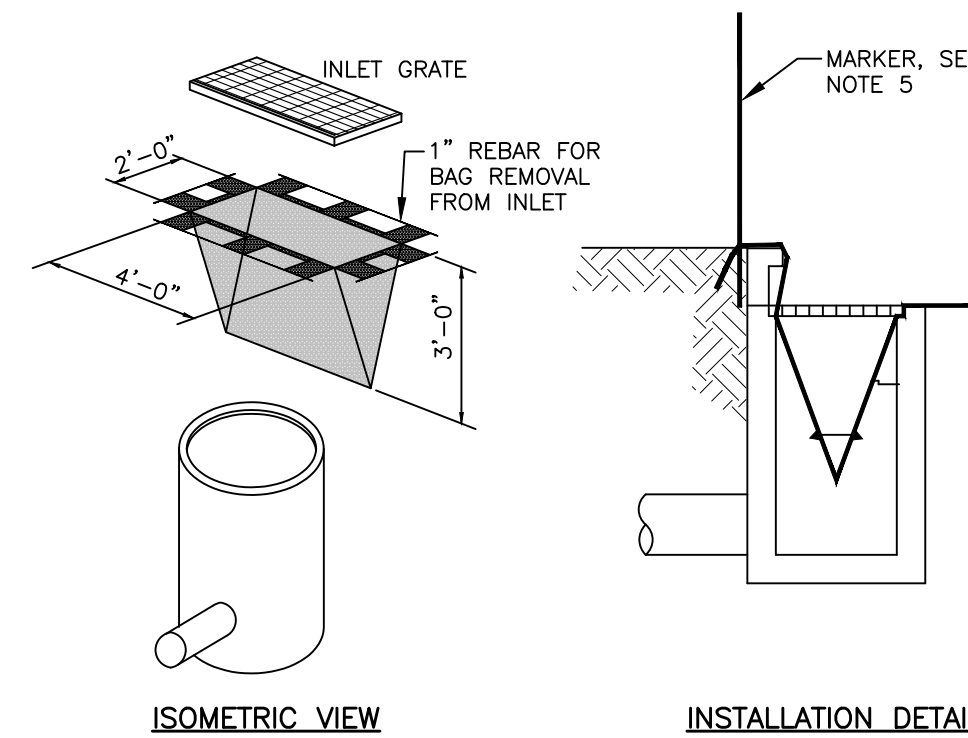
BUMPERBLOCK, CONC. DIVIDER
NO SCALE



ROOT BARRIER
NO SCALE

NOTES:

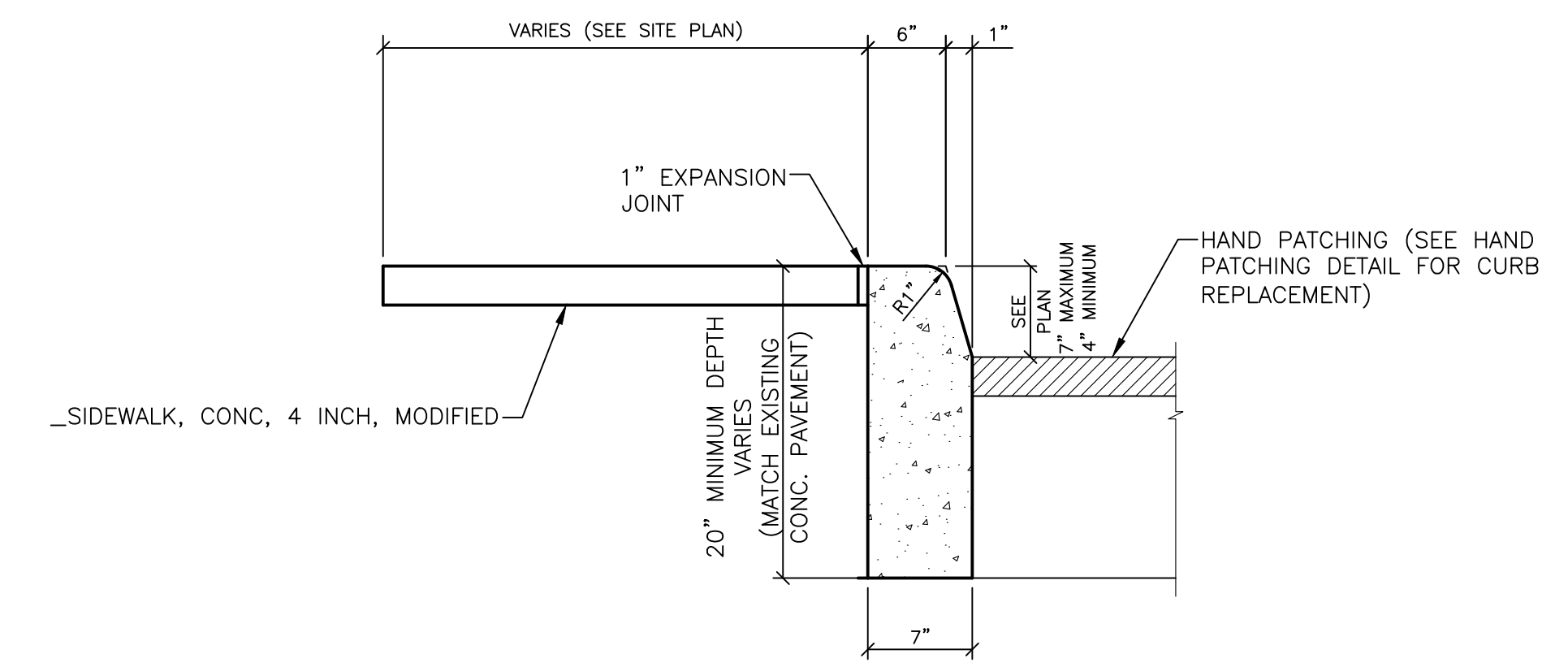
1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
2. ROOTS TO BE PRUNED BY AN ARBORIST PRIOR TO INSTALLATION.
3. ROOT BARRIER TO BE INSTALLED VERTICALLY ALONG EDGE OF SIDEWALK WITH THE TOP OF THE BARRIER ABOUT 4" BELOW FINISH GRADE.
4. ROOT BARRIER TO EXTEND THE LENGTH OF THE TREE CROWN BUT USUALLY CAN BE FIELD VERIFIED BY THE ARBORIST TO EXTEND JUST PAST THE LIMITS OF THE ROOTS.



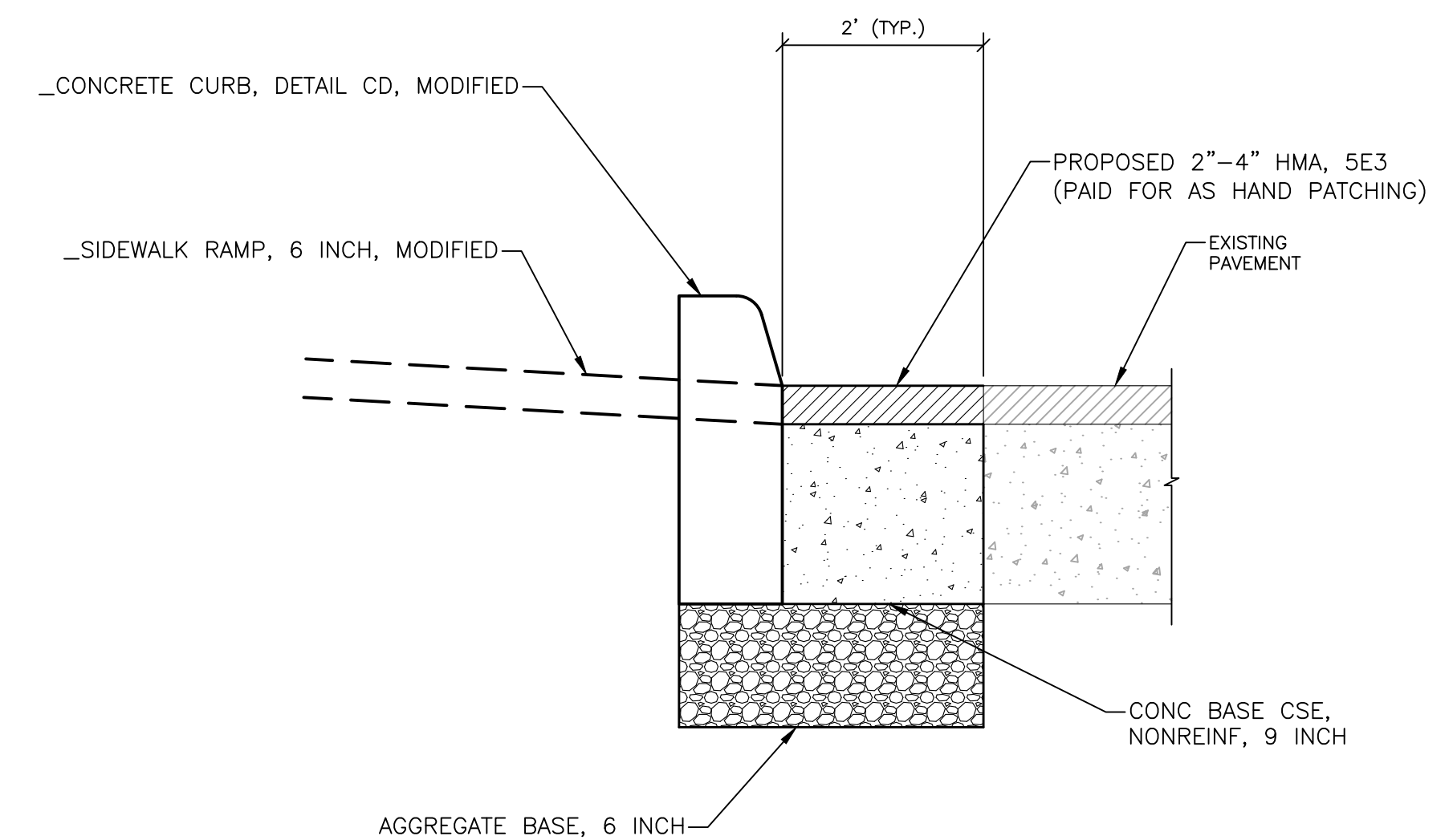
NOTES:

1. PLACE FILTER FABRIC BAG INSIDE THE INLET BENEATH THE GRATE.
2. REPLACE GRATE, WHICH WILL HOLD BAG IN PLACE.
3. ANCHOR FILTER BAG SO IT WILL NOT DROP INTO CATCH BASIN.
4. EXTEND FLAPS OF BAG BEYOND THE BAG. BURY IN SOIL IN EARTH AREAS.
5. IF CATCH BASIN IS IN A LOW DEPRESSION - MARK CB LOCATION WITH A MARKER TO ASSIST LOCATING CATCH BASIN IF FLOODING OCCURS.
6. INSPECT DROP INLET FILTERS ROUTINELY AND AFTER EACH RAIN EVENT.
7. REPLACE DAMAGED FILTER BAGS IMMEDIATELY.
8. CLEAN AND/OR REPLACE FILTER BAG WHEN 1/2 FULL. REPLACE CLOGGED FABRIC IMMEDIATELY.
9. VACUUM OUT CATCH BASIN SUMP IF FILTER BAG TEARS.
10. REMOVE ENTIRE PROTECTIVE MECHANISM WHEN UPGRADIENT AREAS ARE STABILIZED AND STREETS HAVE BEEN SWEEPED AND/OR DIRECTED BY ENGINEER/OWNER.

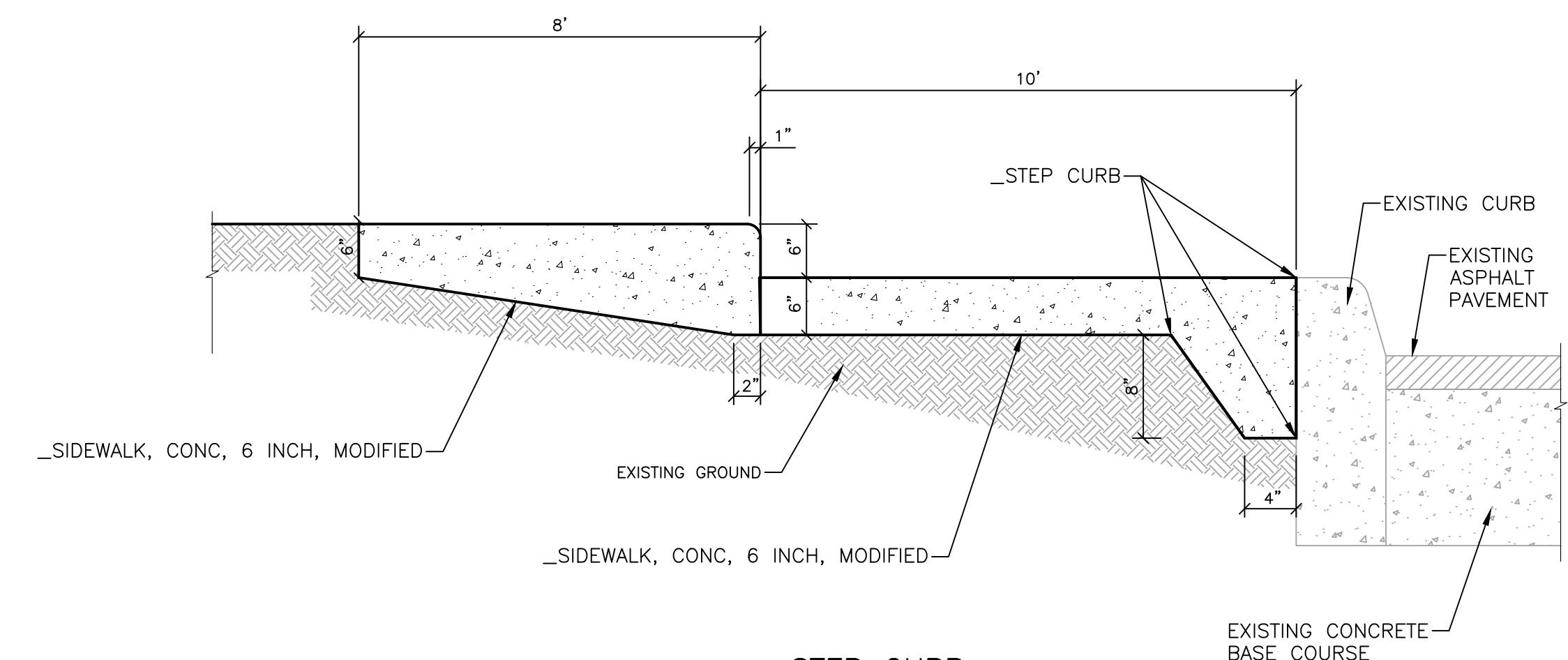
EROSION CONTROL, INLET PROTECTION, SEDIMENT TRAP
NO SCALE



CONCRETE CURB, DETAIL CD, MODIFIED
NO SCALE



HAND PATCHING
NO SCALE



STEP CURB
NO SCALE

MISCELLANEOUS DETAILS

NO SCALE



REVISIONS

5/9/2019	100% CD
1/23/2019	95% CD
8/10/2018	50% CD
7/27/2018	30% CD

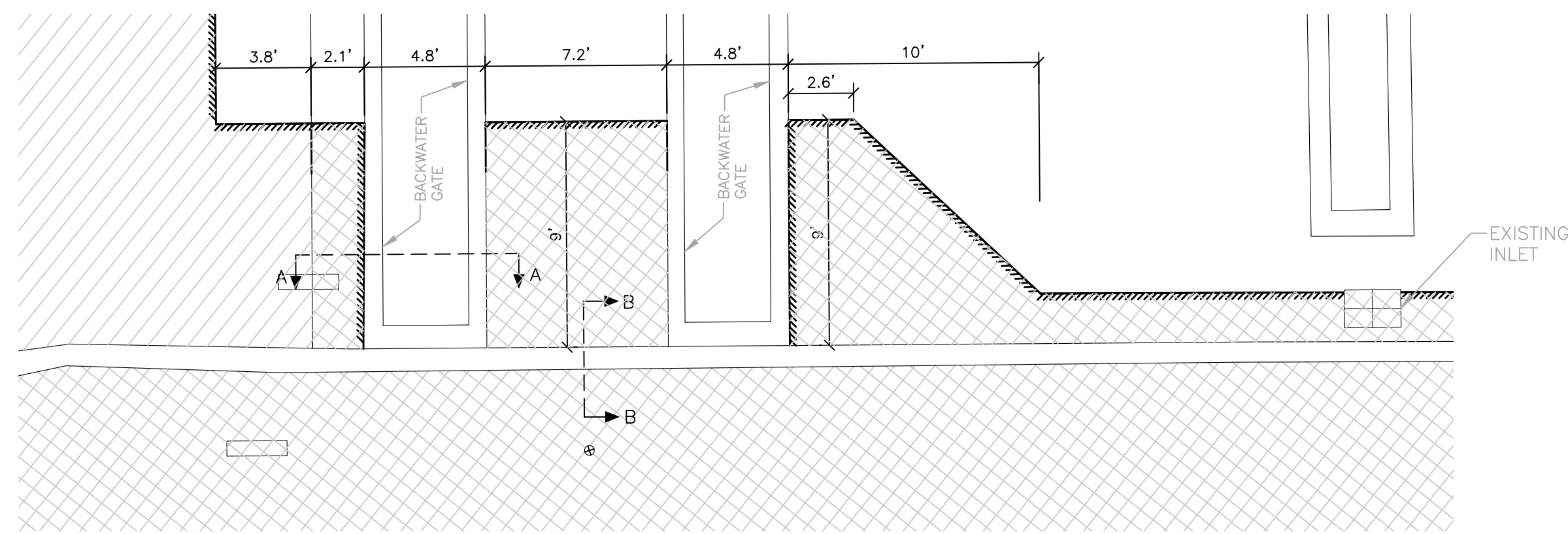
Drawn By	AOF
Designer	AOF
Reviewer	DPE
Manager	KK3

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

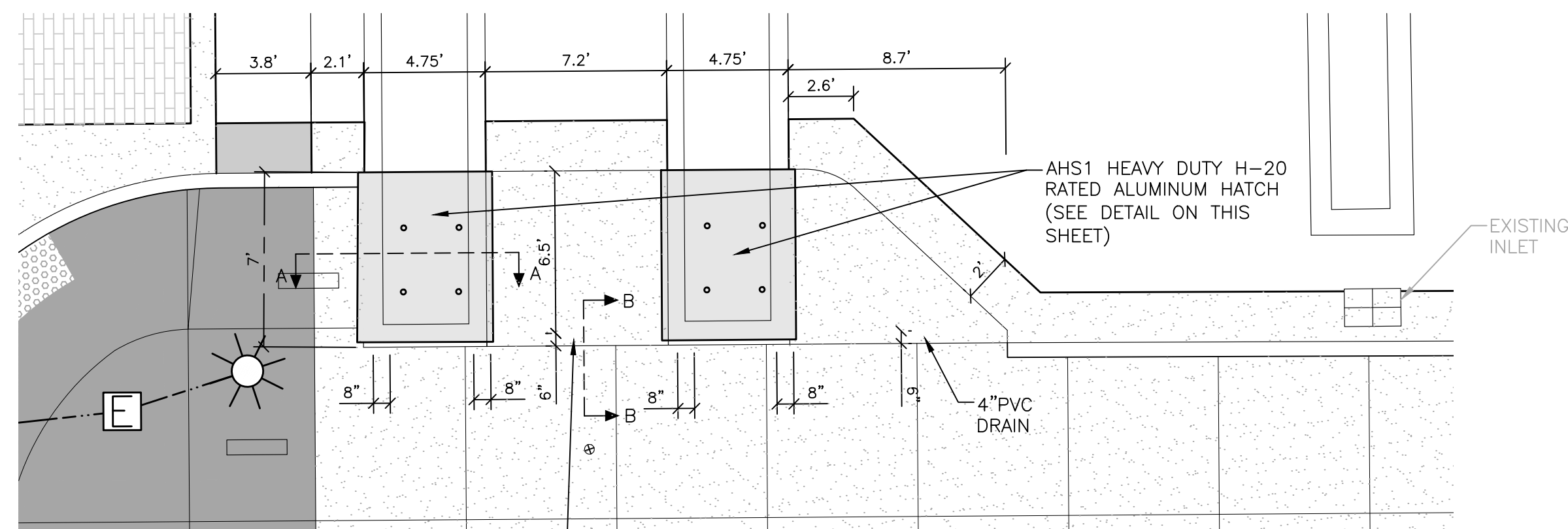
PROJECT NO.
180391

SHEET NO.

C703

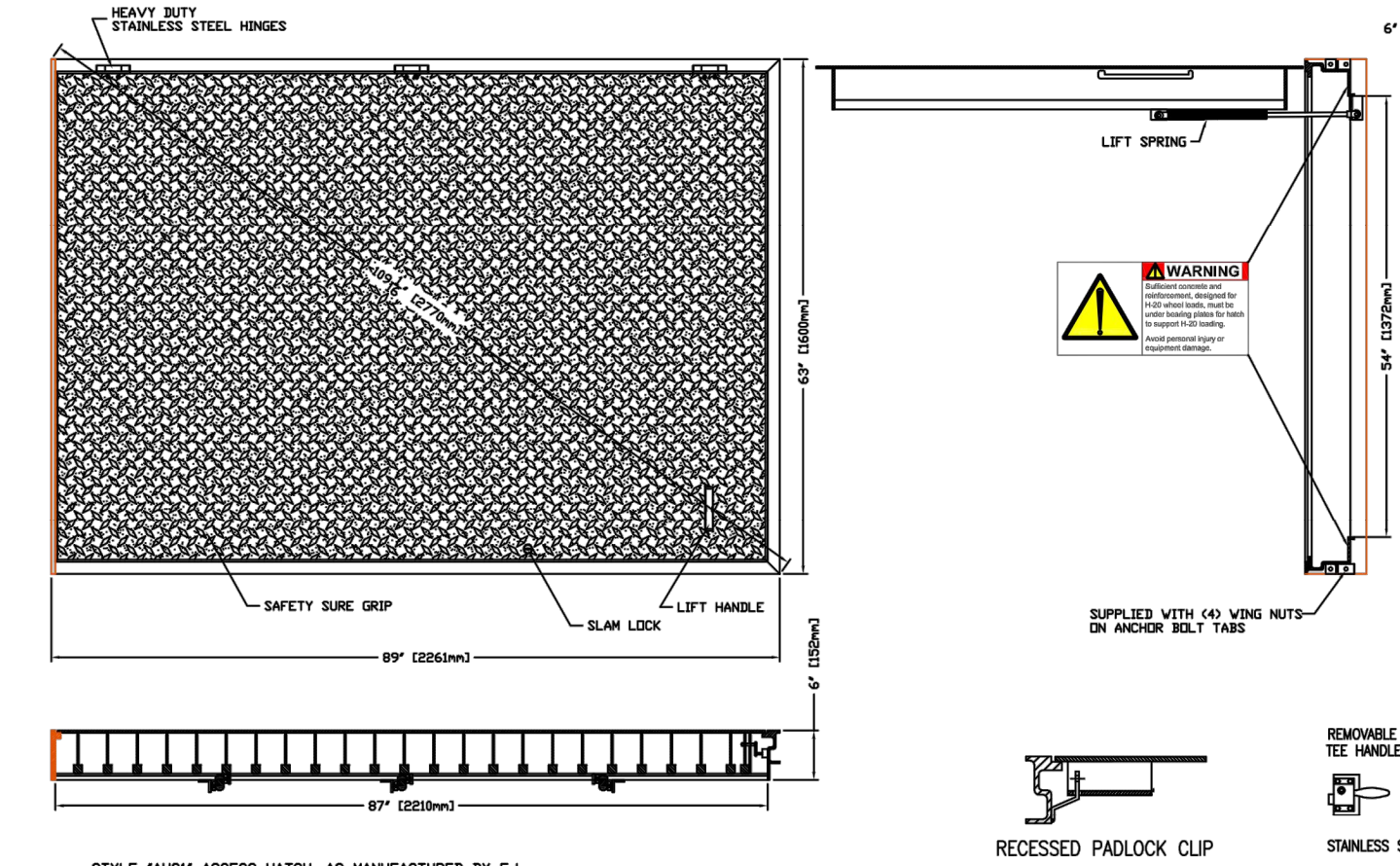


PLAN VIEW (DEMOLITION)



PLAN VIEW (PROPOSED)

AHS1 Heavy Duty H-20 Rated Aluminum Hatch



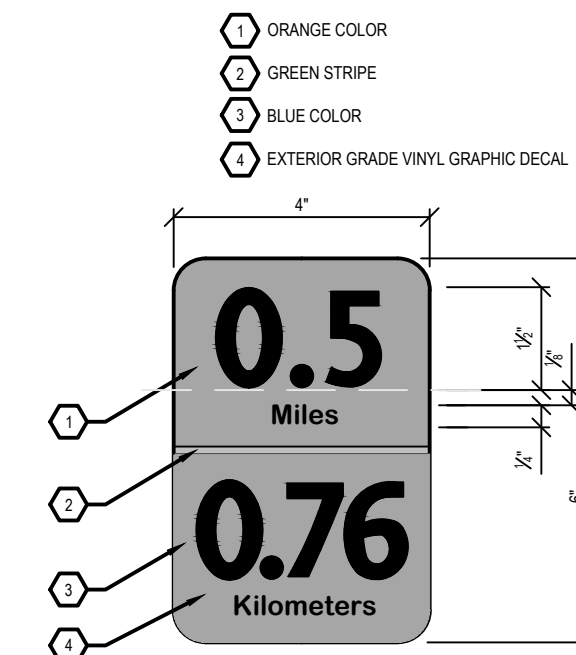
Product Number
201903-7804
Design Features
-Materials
Aluminum
-Design Load
Heavy Duty (Not in Driving Lane)

AHS1
-Coating
Mill Finish

Certification
201903-7804
NPR19-000273
Est. Weight = 535 lbs
Country of Origin: Made in USA

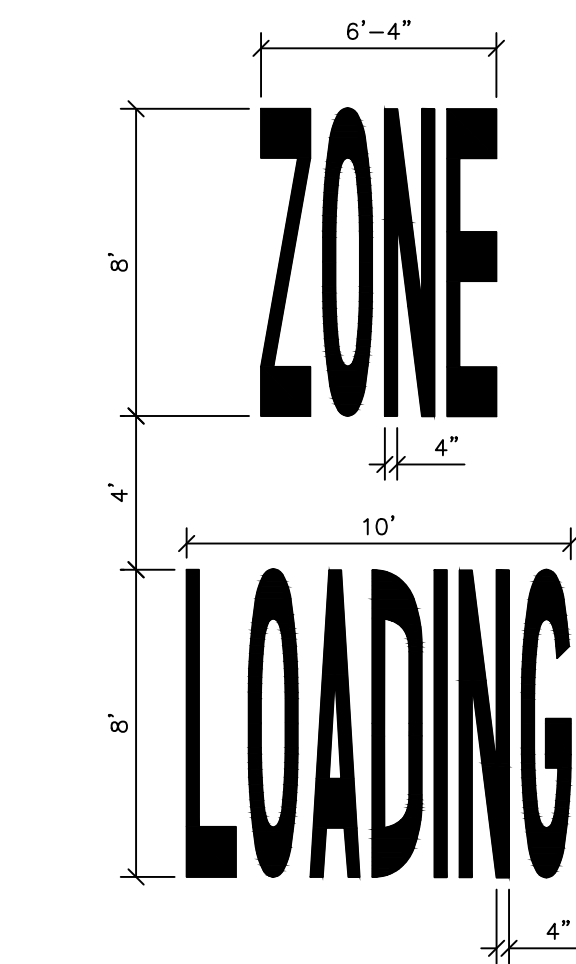
Drawing Revision
03/26/19 Designer: MAW
Revised By:

Disclaimer
Weights (balk), dimensions (inch/mm) and drawings provided for your guidance. We reserve the right to modify specifications without prior notice.
CONFIDENTIAL: This drawing is the property of EJ Group, Inc. and embodies confidential information, registered marks, patents, trade secret information, and/or know-how that is the property of EJ Group, Inc. All rights reserved.
Contact
800 626 4653
ejco.com



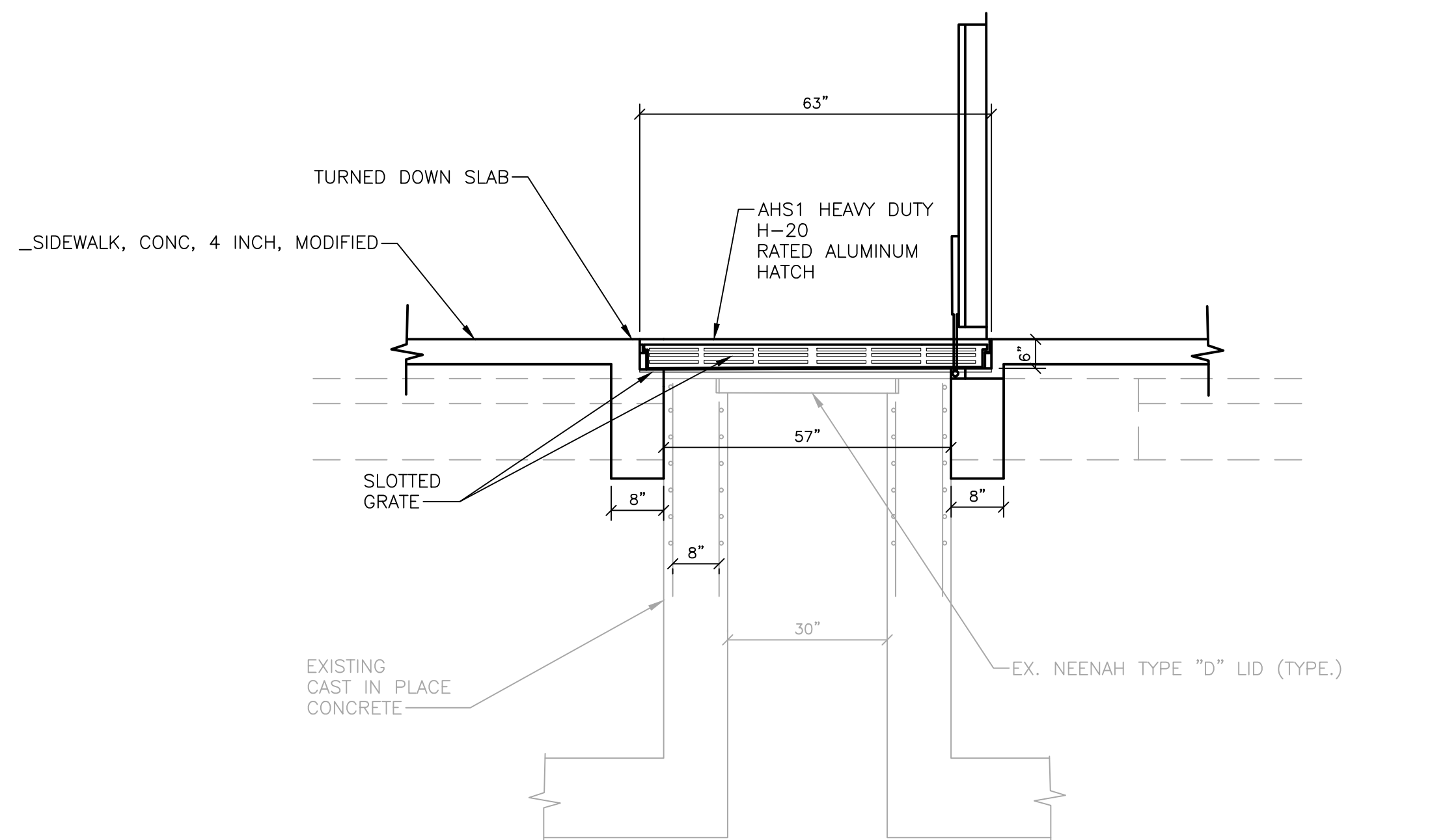
- NOTE**
- REFER TO LAYOUT AND MATERIALS PLANS FOR LOCATIONS. FIELD VERIFY LOCATIONS AND ORIENTATION WITH ENGINEER PRIOR TO INSTALLATION.
 - SIGNS TO MATCH SIZE, COLOR, FONT, ETC. EXISTING MILEAGE MARKER SIGNS ON THE DETROIT RIVERWALK.
 - FIELD VERIFY AND COORDINATE DISTANCE TEXT WITH SPECIFIC LOCATIONS. DISTANCES TO BE A CONTINUATION OF EXISTING DETROIT RIVERWALK MILEAGE MARKERS. NEAREST LOCATION LOCATED AT THE SOUTHERN END OF JOS CAMPAU AT THE DETROIT RIVER. THE MILEAGE MARKER AT THIS LOCATION IS 1.7 MILES/2 KILOMETERS.
 - MOUNT SIGNS ON LIGHT POLES 3'-6" FROM FINISHED GRADE. ONE DECAL ON EACH SIDE OF THE LIGHT POLE WITH EXTERIOR GRADE ADHESIVE. ORIENT DECALS TO BE PERPENDICULAR TO THE SHARED USE PATH FOR DIRECT VIEWING. REFER TO SIGNAGE AND STRIPING PLANS FOR LOCATIONS.

SIGN, MILEAGE MARKER
NO SCALE

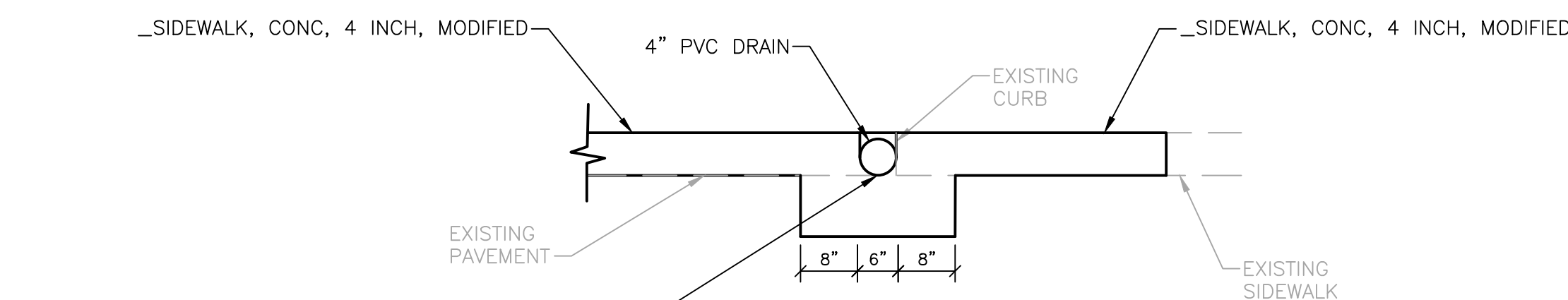


PAVT MRKG, OVLY COLD PLASTIC, LOADING ZONE
NO SCALE

- NOTES:**
- ALL LETTERS ARE 16 INCHES WIDE UNLESS NOTED OTHERWISE.
 - ALL GAPS BETWEEN LETTERS ARE 4 INCHES UNLESS NOTED OTHERWISE.



SECTION VIEW (A)
ACCESS COVER



SECTION VIEW (B)
TRENCH DRAIN

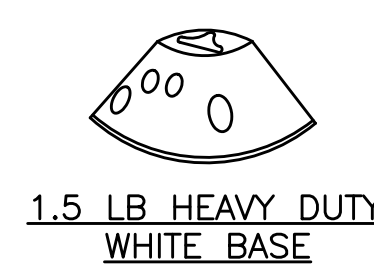
GATE COVER WITH CURB PLATE
NO SCALE

NOTES:

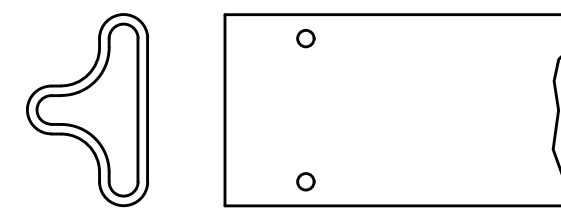
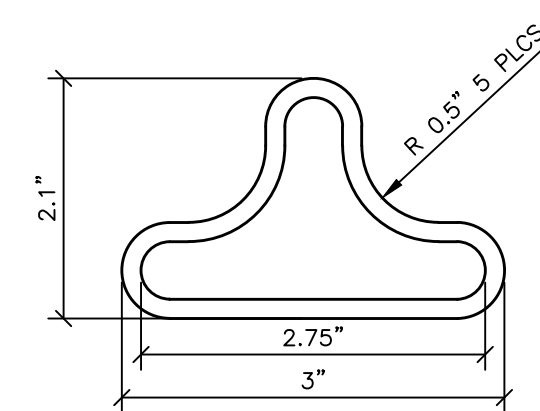
- PRIOR TO BEGINNING ANY WORK NEAR OUTFALL REGULATOR CONTACT GLWA

AHS1 HEAVY DUTY H-20 RATED ALUMINUM HATCH
NO SCALE

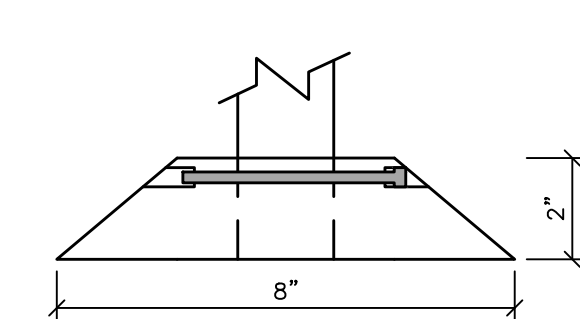
BASE OPTIONS:



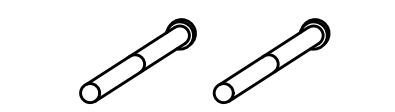
1.5 LB HEAVY DUTY
WHITE BASE



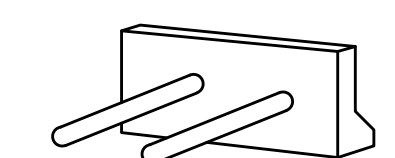
MATERIAL:
POLYURETHANE ALLOY



SECTION



QUICK RELEASE PINS



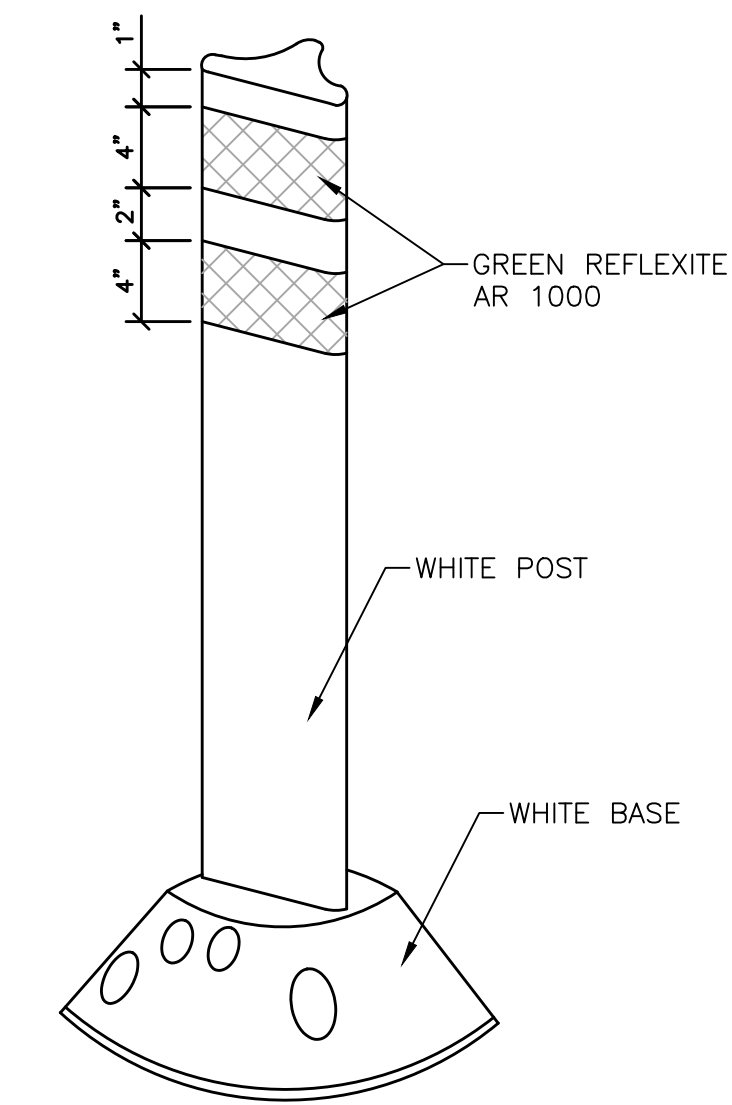
PIN REMOVAL TOOL

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

NOTES:

- INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS

POST, DELINEATOR, 36 INCH, WHITE
NO SCALE



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

MISCELLANEOUS DETAILS
NO SCALE

PLOT INFO: Z:\2018\180391\ASR2 - JOSEPH CAMPAU\CAD\CDC704\180391_CD.DWG LAYOUT: C704 USER: AOF DATE: 5/9/2019 TIME: 12:48:02 PM



SMITHGROUP

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

REVISIONS

5/9/2019	100% CD
1/23/2019	95% CD
8/10/2018	50% CD
7/27/2018	30% CD

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.
180391

SHEET NO.



REVISIONS

5/9/2019	100% CD
1/23/2019	95% CD
8/10/2018	50% CD
7/27/2018	30% CD

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.
180391
SHEET NO.

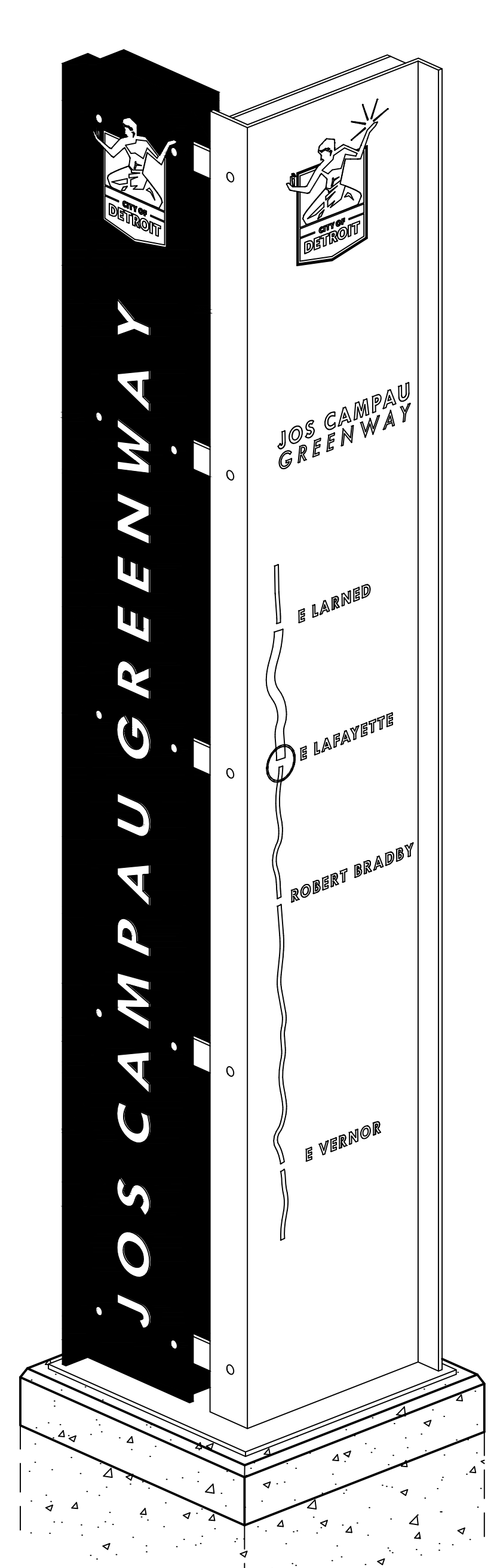
C705

NOTES:

- SUBMIT COMPLETE SHOP DRAWINGS SHOWING FABRICATION, MATERIALS, INSTALLATION DETAILS, DIMENSIONS, FONTS / LETTERING, FINISHES, ACCESSORIES, JOINTS, WELDS, ANCHORAGE, GRAPHIC SYMBOLS, COLORS AND OTHER APPURTENANCES REQUIRED FOR A COMPLETE SIGN INSTALLATION TO THE ENGINEER FOR REVIEW AND APPROVAL. SHOP DRAWINGS SHALL BE APPROVED PRIOR TO FABRICATION.
- COORDINATE AND FIELD VERIFY SIGN LOCATION AND ORIENTATION WITH THE ENGINEER PRIOR TO FABRICATION AND INSTALLATION. VERIFY FIELD CONDITIONS AND MEASUREMENTS BEFORE FABRICATION AND INSTALLATION. VERIFY UTILITY LINES IN THE AREA PROPOSED FOR THE SIGN INSTALLATION. ANY DAMAGE DURING INSTALLATION OF SIGN TO UTILITIES WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR AT NO ADDITIONAL COST.
- EXPOSED PORTION OF THE CONCRETE FOUNDATION SHALL BE CLEAN, SMOOTH, CONSISTENT FINISH WITHOUT IMPERFECTIONS, CHIPS, MARKS AND HONEYCOMB. FOUNDATIONS NOT MEETING THESE REQUIREMENTS SHALL BE REPLACED AT NO ADDITIONAL COST.
- SHOP FABRICATE AND PRE-ASSEMBLE SIGN.
- APPROVED SIGN FABRICATORS SHALL BE ONE OF THE FOLLOWING:

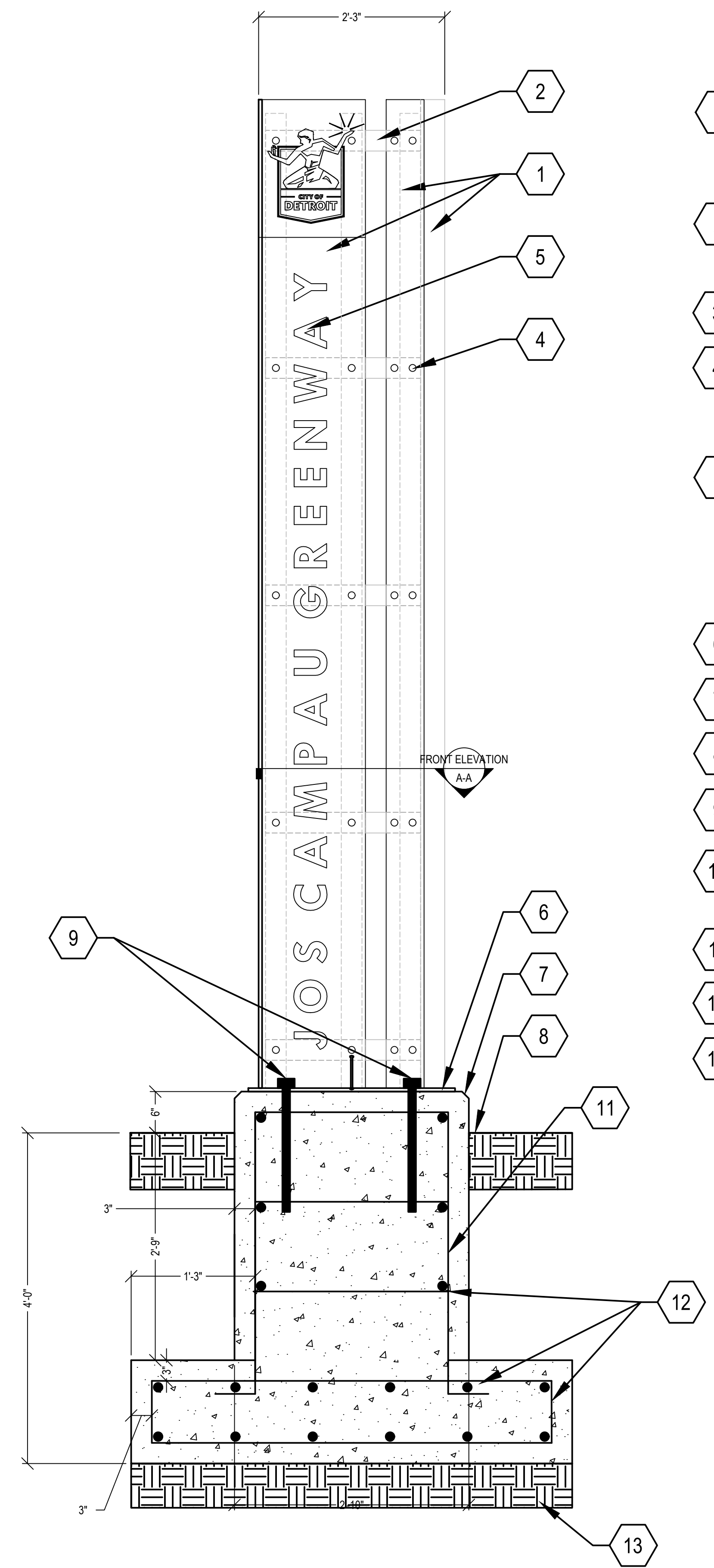
BO-MAR INDUSTRIES
3838 SOUTH ARLINGTON AVE.
INDIANAPOLIS, INDIANA 46203
ADAM LEE
317-430-0680
ADAML@BO-MARIND.COM

TARU LAHTI DESIGN
3101 24TH STREET
DETROIT, MICHIGAN 48216
TARU LAHTI
313-600-1599
TARULAHTI12@GMAIL.COM
- ALL STEEL COMPONENTS TO BE EXTERIOR RATED AND SHALL EITHER BE GALVANIZED, POWDERCOATED OR STAINLESS STEEL.
- ALL EXPOSED HARDWARE TO BE TACIC WELDED ON NON-EXPOSED SIDE FOR VANDAL RESISTANCE OR OTHER METHOD APPROVED BY ENGINEER.
- THE TRAILHEAD SIGN DETAILS ARE PROVIDED TO FORM THE BASIS OF DESIGN AND ARE PROVIDED TO ILLUSTRATE THE AESTHETIC, PERFORMANCE AND FUNCTIONAL CHARACTERISTICS ONLY. THE DIMENSIONS SHOWN ARE PROVIDED TO QUANTIFY THE FORM AND OVERALL SCALE OF THE SIGN. THE DIMENSIONS PROVIDED DO NOT INDICATED THE PRECISE SIZES OF MEMBERS OR ASSEMBLIES.
- THE CONTRACTOR IS REQUIRED TO PROVIDE THE ENGINEERING AND STRUCTURAL DESIGN AS WELL AS ALL OTHER REQUIRED COMPONENTS IN ORDER TO PROVIDE A COMPLETE AND OPERATIONAL SIGN THAT MATCHES THE DESIGN ILLUSTRATED. MODIFICATIONS TO THE FOUNDATION, ANCHORAGES/FASTENERS, STRUCTURAL MEMBERS AND OTHER COMPONENTS MAY BE NECESSARY.
- SIGNS MUST WITHSTAND 100 MPH WIND LOADS AND MEET ALL APPLICABLE BUILDING CODES, LAWS AND REGULATIONS. THE DESIGN LOADS SHALL BE IN ACCORDANCE WITH THE INTERNATIONAL AND MICHIGAN BUILDING CODES.
- THE CONTRACTOR IS REQUIRED TO PROVIDE THE ENGINEERING, MATERIALS, EQUIPMENT, FABRICATION, TOOLS, LABOR AND INSTALLTION OF THE TRAILHEAD SIGN INCLUDING ALL ANCHORAGES/MOUNTING ACCESSORIES, FOUNDATIONS, FITTINGS, FASTENINGS, STRUCTURAL SUPPORTS, RIGGING AND FINISHES. ALL SIGN MATERIALS SHALL BE DESIGNED AND RATED FOR EXTERIOR ENVIRONMENTS.



COLOR: MATTE BLACK
COLOR: CITY OF DETROIT STANDARD - PANTONE 309
COLOR: CITY OF DETROIT STANDARD - PANTONE 622
CITY OF DETROIT LOGO - FLAT WHITE
CITY OF DETROIT LOGO - COLOR
ANODIZED CAST ALUMINUM LETTERS, COLOR: WHITE
VINYL PRINT GRAPHIC, COLOR: WHITE

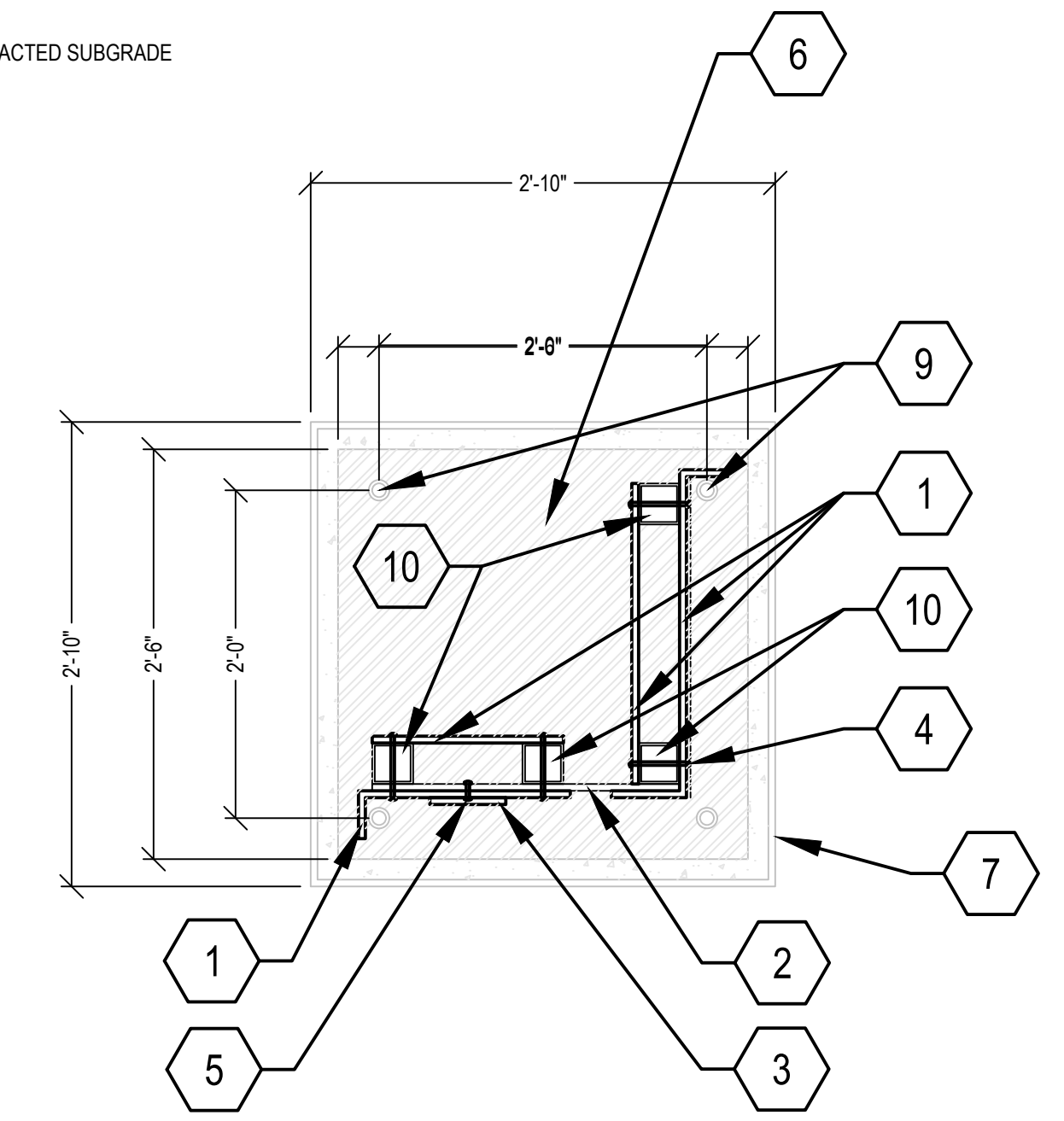
3D VIEW



SECTION

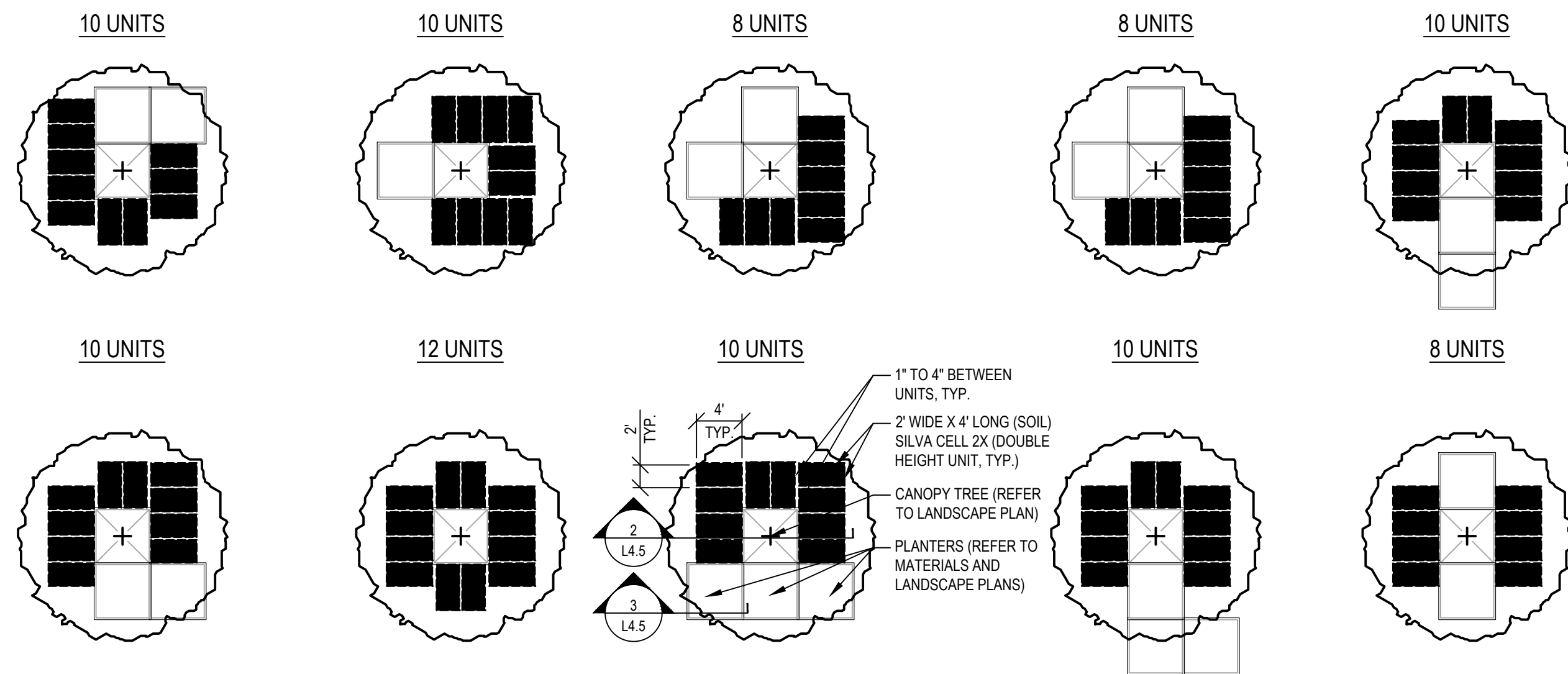
SIGN, TRAILHEAD, VERTICAL
NO SCALE

- 1 1/2" THICK SOLID STEEL PANELS (POWDERCOAT IN COLORS IDENTIFIED) - WELD AND RIVET TO STEEL POSTS
- 2 22 1/2" x 3" x 1/2" THICK SOLID STEEL SUPPORT PLATE - WELD AND RIVET TO SOLID STEEL PANELS
- 3 ANODIZED CAST ALUMINUM LETTERS
- 4 FASTENERS
- 5 FASTEN CAST ALUMINUM LETTERS WITH HEAVY DUTY FLAT METAL WALL MOUNTING SYSTEM BOLTED THROUGH METAL WITH NUTS AND WASHERS BY GEMINI SIGN LETTERS (GEMINISIGNLETTERS.COM); ACCESS TO MOUNTING SYSTEM AND NUTS AFTER SIGN IS ASSEMBLED SHOULD NOT PROVIDE FOR VANDAL RESISTANCE
- 6 STEEL BASE PLATE CONNECTION TO FOUNDATION
- 7 CONCRETE FOUNDATION - 1" CHAMFER ON TOP EDGE
- 8 FINISH GRADE
- 9 ANCHOR BOLTS
- 10 3 x 3 x 1/4" THICK TUBE STEEL POSTS (WITH FLAT POST CAP ON TOP)
- 11 (4) - #6 BARS, VERT, TYP
- 12 #4 @ 12" TIES, TYP
- 13 COMPACTED SUBGRADE



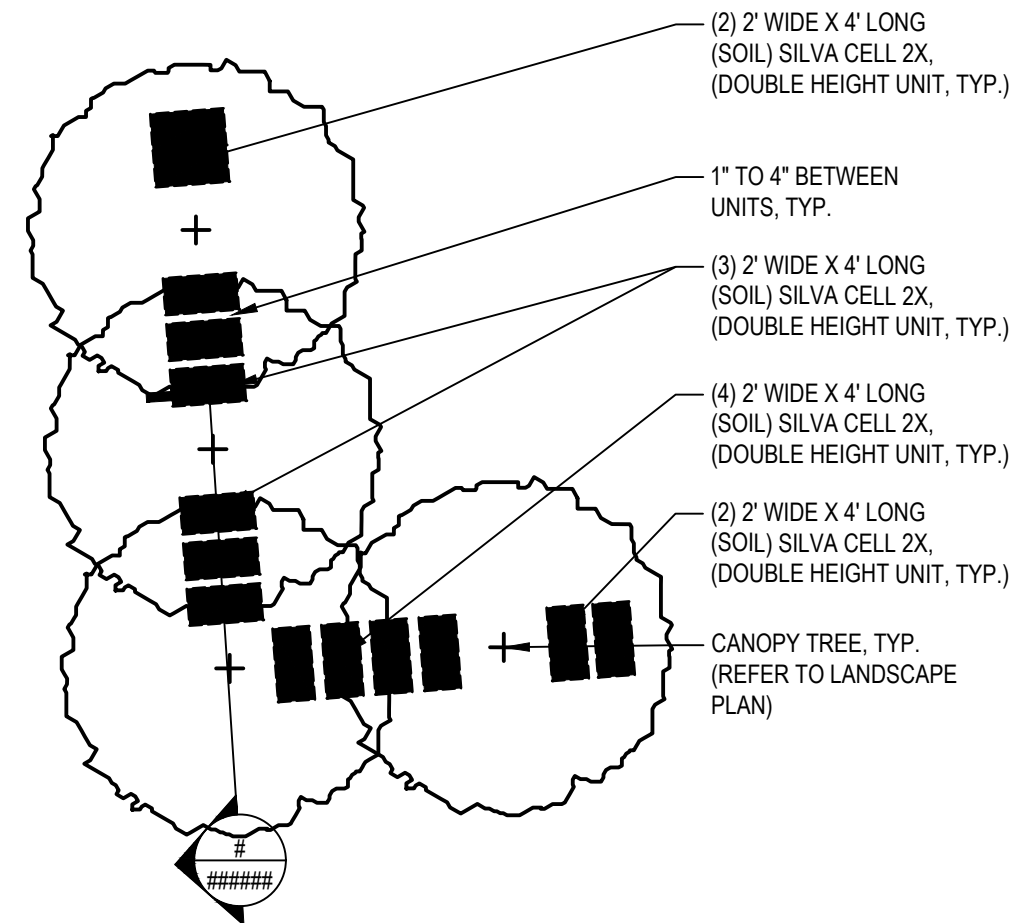
PLAN/SECTION A-A

MISCELLANEOUS DETAILS
NO SCALE



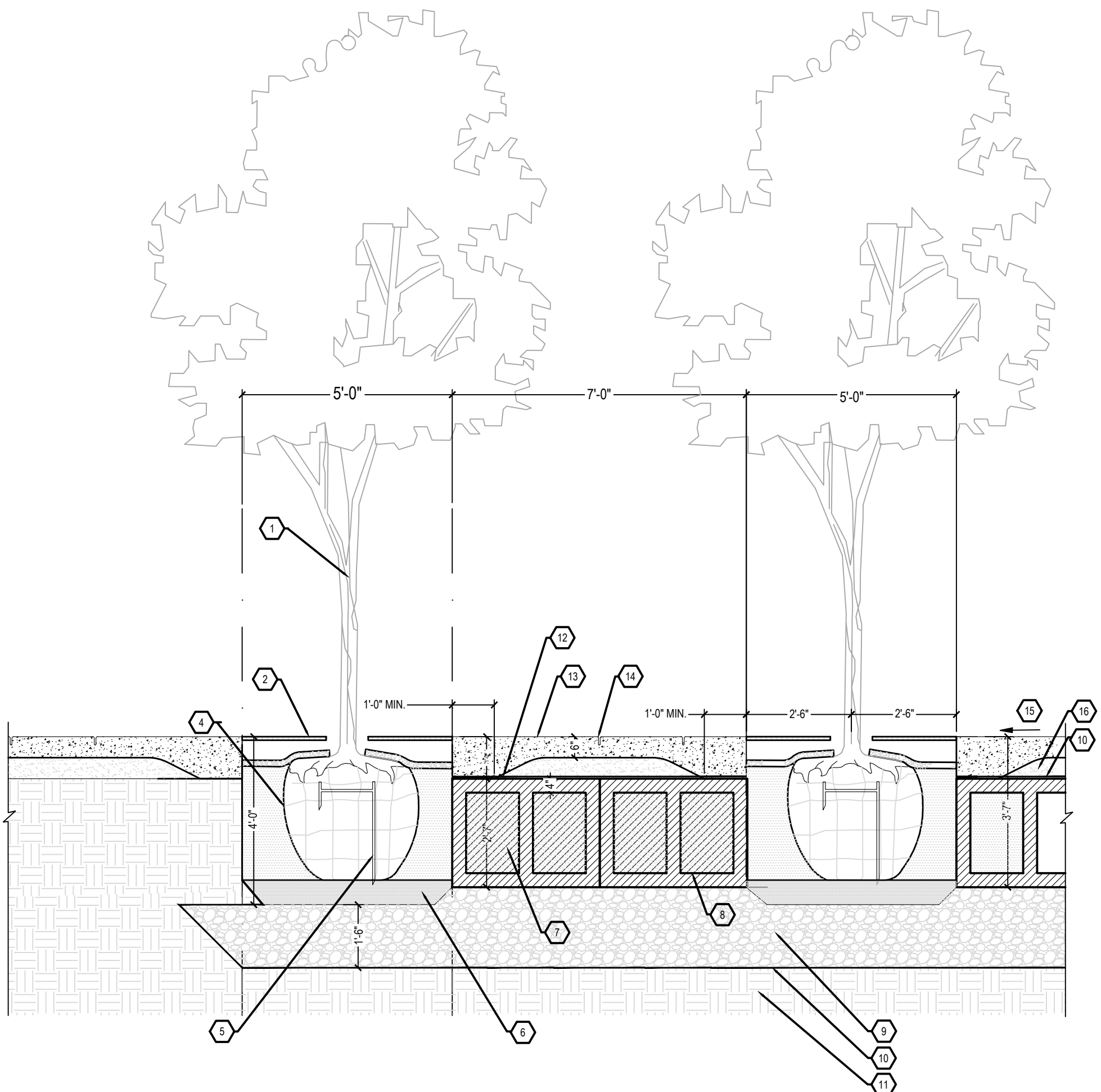
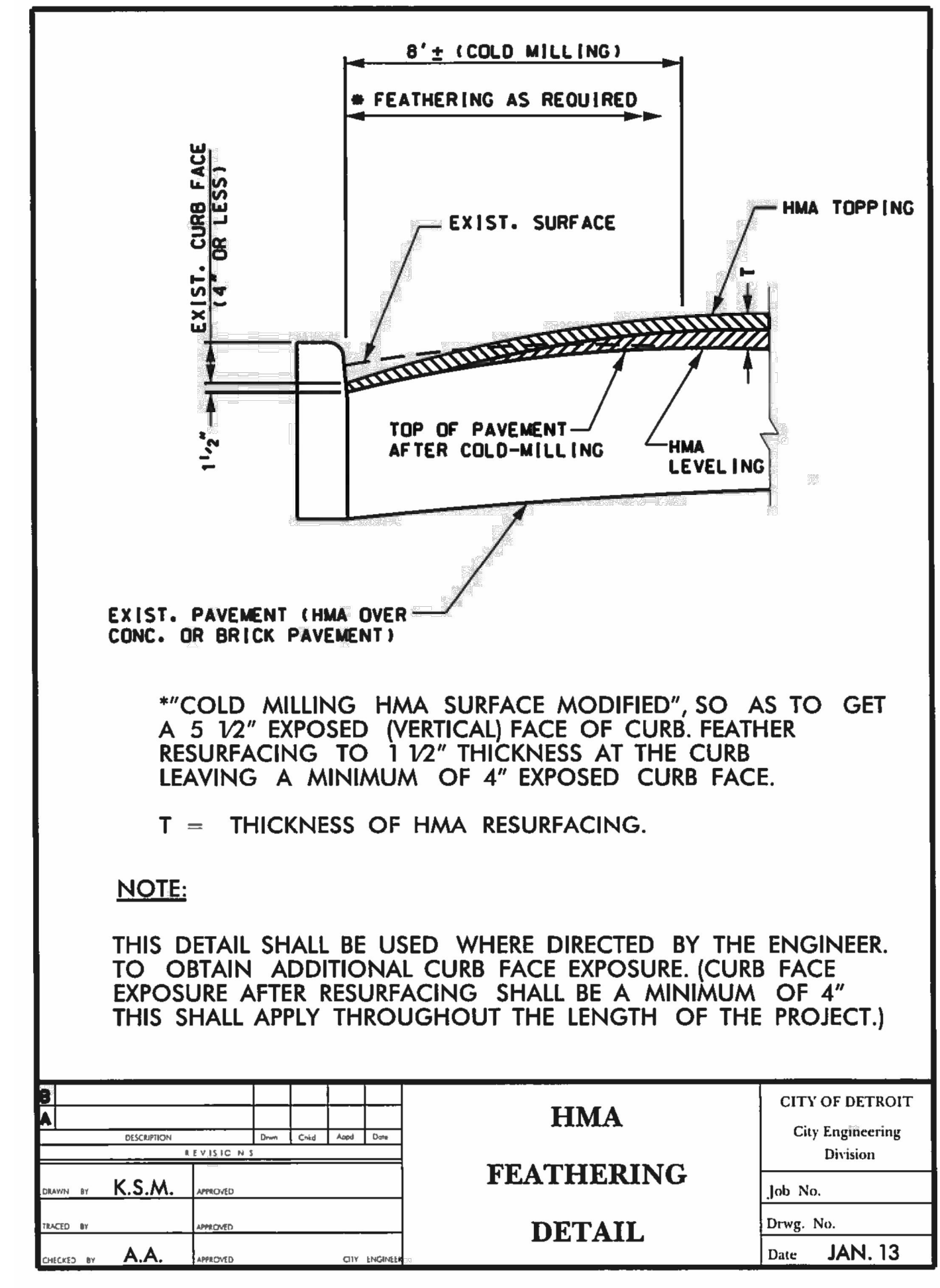
- NOTES:
1. INSTALL SOIL (SILVA) CELL 2X UNITS PER MANUFACTURERS REQUIREMENTS, INCLUDING ALL ANCHORING.
 2. PROVIDE 1" MIN. TO 4" MAX SPACING BETWEEN (SOIL) SILVA CELL 2X UNITS.
 3. CONTRACTOR TO PROVIDE INSTALLATION SEQUENCE PLAN TO OWNER'S REPRESENTATIVE FOR APPROVAL PRIOR TO COMMENCING WORK.
 4. PROVIDE 6 TO 12 (SOIL) SILVA CELL 2X UNITS FOR EACH LOCATION AS SHOWN.

SOIL CELL LAYOUT
NO SCALE



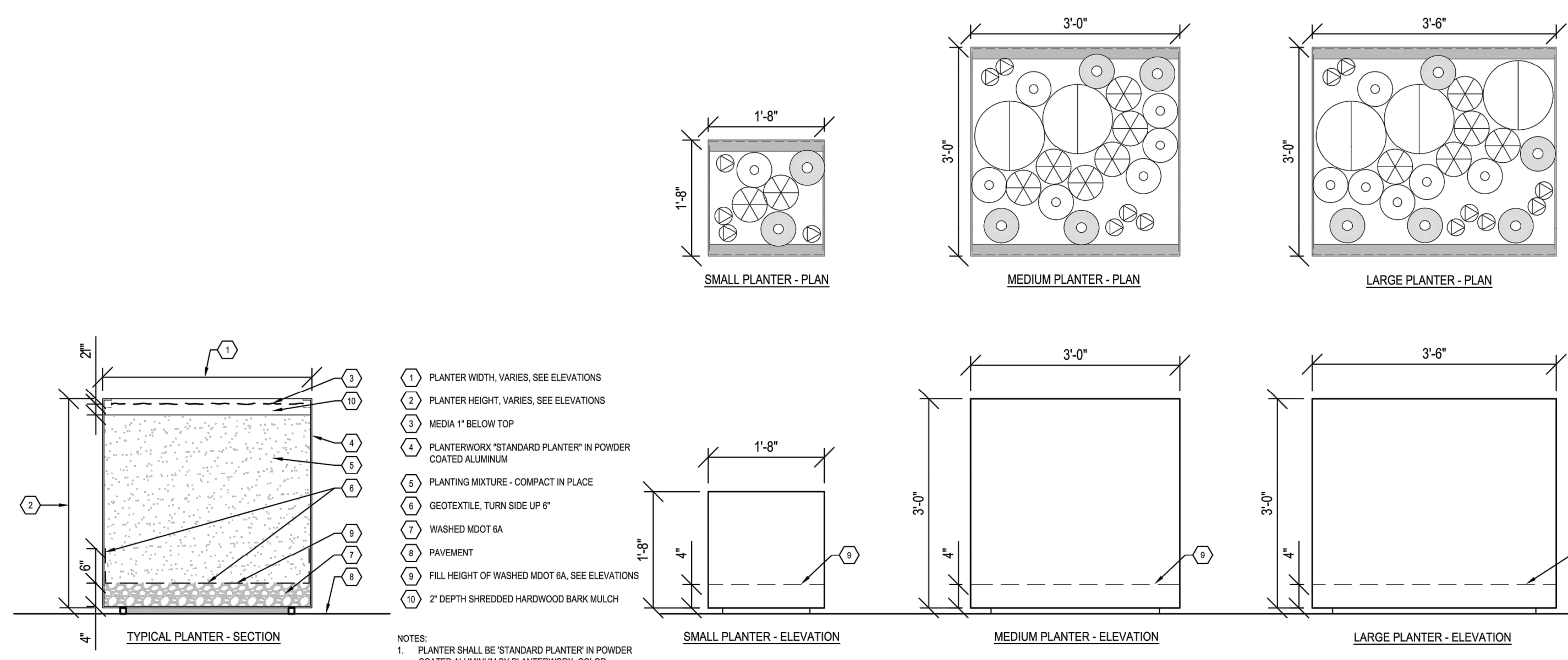
- NOTES:
1. INSTALL SOIL (SILVA) CELL 2X UNITS PER MANUFACTURERS REQUIREMENTS, INCLUDING ALL ANCHORING.
 2. PROVIDE 1" MIN. TO 4" MAX SPACING BETWEEN (SOIL) SILVA CELL 2X UNITS.
 3. CONTRACTOR TO PROVIDE INSTALLATION SEQUENCE PLAN TO ENGINEER FOR APPROVAL PRIOR TO COMMENCING WORK.
 4. PROVIDE (SOIL) SILVA CELL 2X UNITS FOR EACH LOCATION AS SHOWN ON PLAN.

SOIL CELL
NO SCALE



- | | | |
|---|---|--|
| 1 CANOPY TREE (REFER TO LANDSCAPE PLANS) | 7 PLANTING MIX (COMPACT TO 70-80% PROCTOR) | 12 SOIL CELL |
| 2 POROUS RESIN BONDED AGGREGATE | 8 GEOGRID AROUND PERIMETER OF SILVA CELL 2X UNITS; ATTACH TO UNITS WITH CABLE TIE | 13 SIDEWALK, CONC. 6 INCH |
| 4 DEEPROOT UB12-2 ROOT BARRIER, TYP.; INSTALL FOUR PER TREE, EQUALLY SPACE AT CONCRETE EDGE RESTRAINT | 9 AGGREGATE BASE, DRAINAGE | 14 CONTROL JOINT |
| 5 ROOT BALL STABILIZER | 10 GEOTEXTILE FABRIC | 15 SLOPE VARIES (REFER TO GRADING PLANS) |
| 6 PLANTING MIX (BELOW ROOT BALL; COMPACT TO 85-90% PROCTOR) | 11 SUBGRADE | 16 GRANULAR MATERIAL, CL II, MODIFIED |

SOIL CELL
NO SCALE



COMMON NAME	BOTANICAL NAME	ROOT	SIZE	COMMENTS	SPACING	QUANTITIES
ASIANIC TROGON LILY	LELUM ASIATIC TROGON	CONT.	NO. 1	FULL PLANT, WELL ROOTED	AS SHOWN	25
SWEET KATE SPIDERWORT	TRIDESCANZIA SWEET KATE	CONT.	NO. 1	FULL PLANT, WELL ROOTED	AS SHOWN	65
COSMIC BLUE GERMAN GARLIC	ALLIUM SENESCENS COSMIC BLUE	CONT.	NO. 1	FULL PLANT, WELL ROOTED	AS SHOWN	65
SERBIAN BELLFLOWER	CAMPANULA POSCHANSKYANA BLUE WATERFALL	CONT.	NO. 1	FULL PLANT, WELL ROOTED	AS SHOWN	55
BLUE FESCUE	FESTUCA GALICA BEYOND BLUE	CONT.	NO. 1	FULL PLANT, WELL ROOTED	AS SHOWN	60

- NOTES:
1. PLANTER SHALL BE STANDARD PLANTER IN POWDER COATED ALUMINUM BY PLANTERWORK, COLOR SHALL BE CONFIRMED BY OWNER.
 2. SEE LAYOUT PLANS FOR PLANTER LOCATIONS, ORIENTATION, AND TYPE.

LANDSCAPE PLANTER_Hx_Wx_D
NO SCALE

MISCELLANEOUS DETAILS
NO SCALE



REVISIONS

5/9/2019	100% CD
1/23/2019	95% CD
8/10/2018	50% CD
7/27/2018	30% CD

Drawn By AOF
Designer AOF
Reviewer DPE
Manager KK3

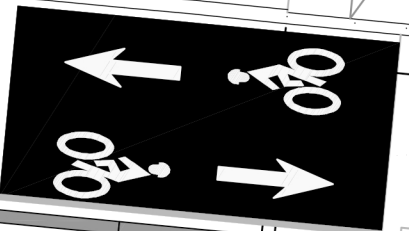
Hard copy is intended to be 24"x36" when plotted. Scale(s) indicated and graphic quality may not be accurate for any other size.

PROJECT NO.
180391

SHEET NO.

C706

PLOT INFO: Z:\2018\180391\TASK2 - JOSEPH CAMPANUCAD\CD\CD706\180391_CD.DWG LAYOUT C706 DATE: 5/9/2019 TIME: 12:46:27 PM USER: KK3

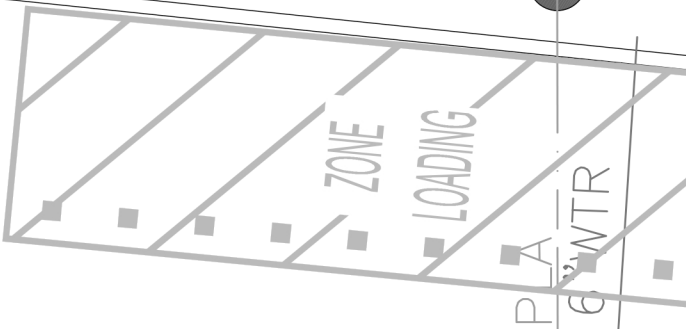


RIVERTOWN

62+00

63+00

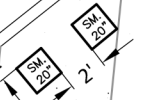
JOS CAMPAU



P.A. 16" WTR

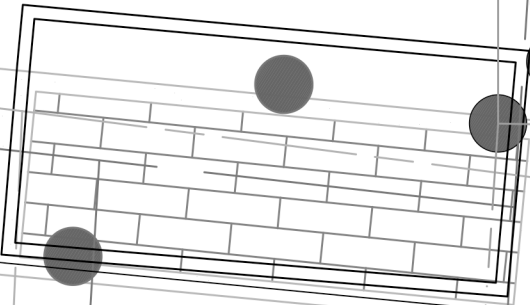
6" GAS

8" WTR



ANDREWS ON THE CORNER

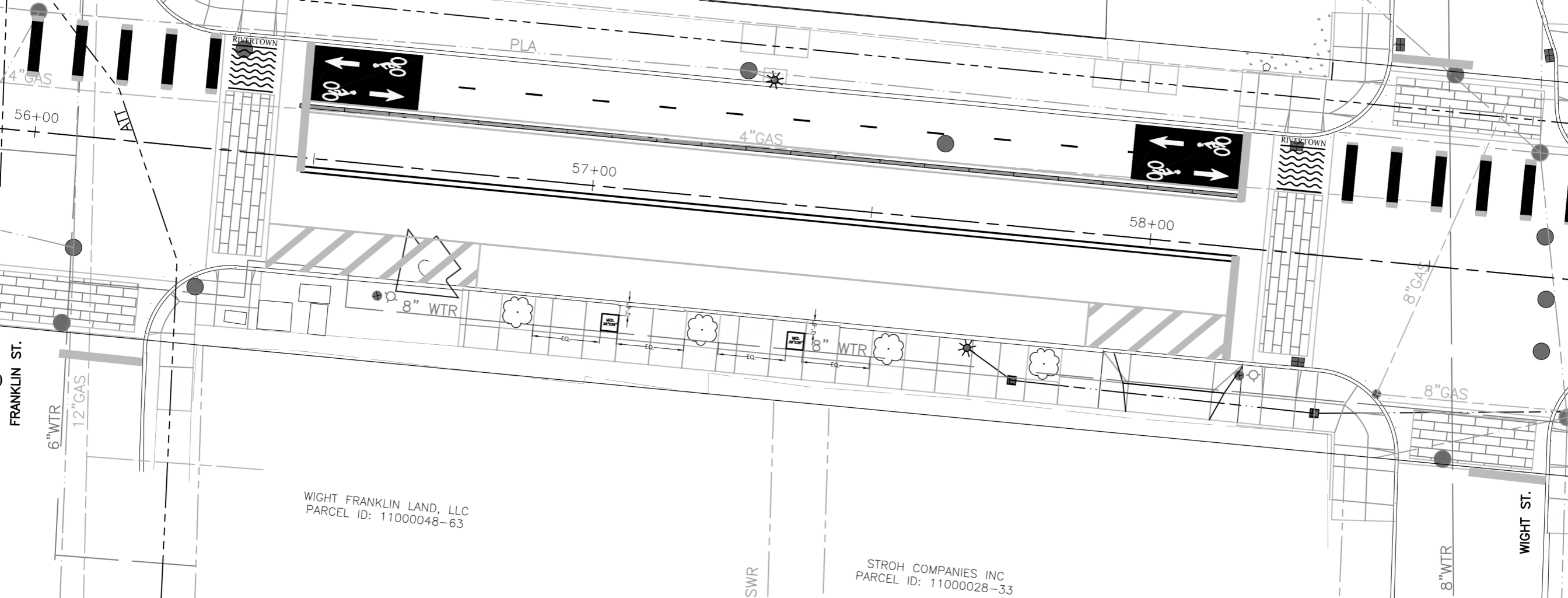
WOOLSEY, THOMAS
PARCEL ID:
11002862-3



ATWATER ST.

4" GAS

SSWR



RIVERTOWN

PLA

4" GAS

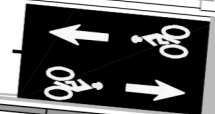
56+00

ATL



4" GAS

57+00



RIVERTOWN

58+00

8" WTR

8" WTR

8" GAS

8" GAS

FRANKLIN ST.

6" WTR

12" GAS

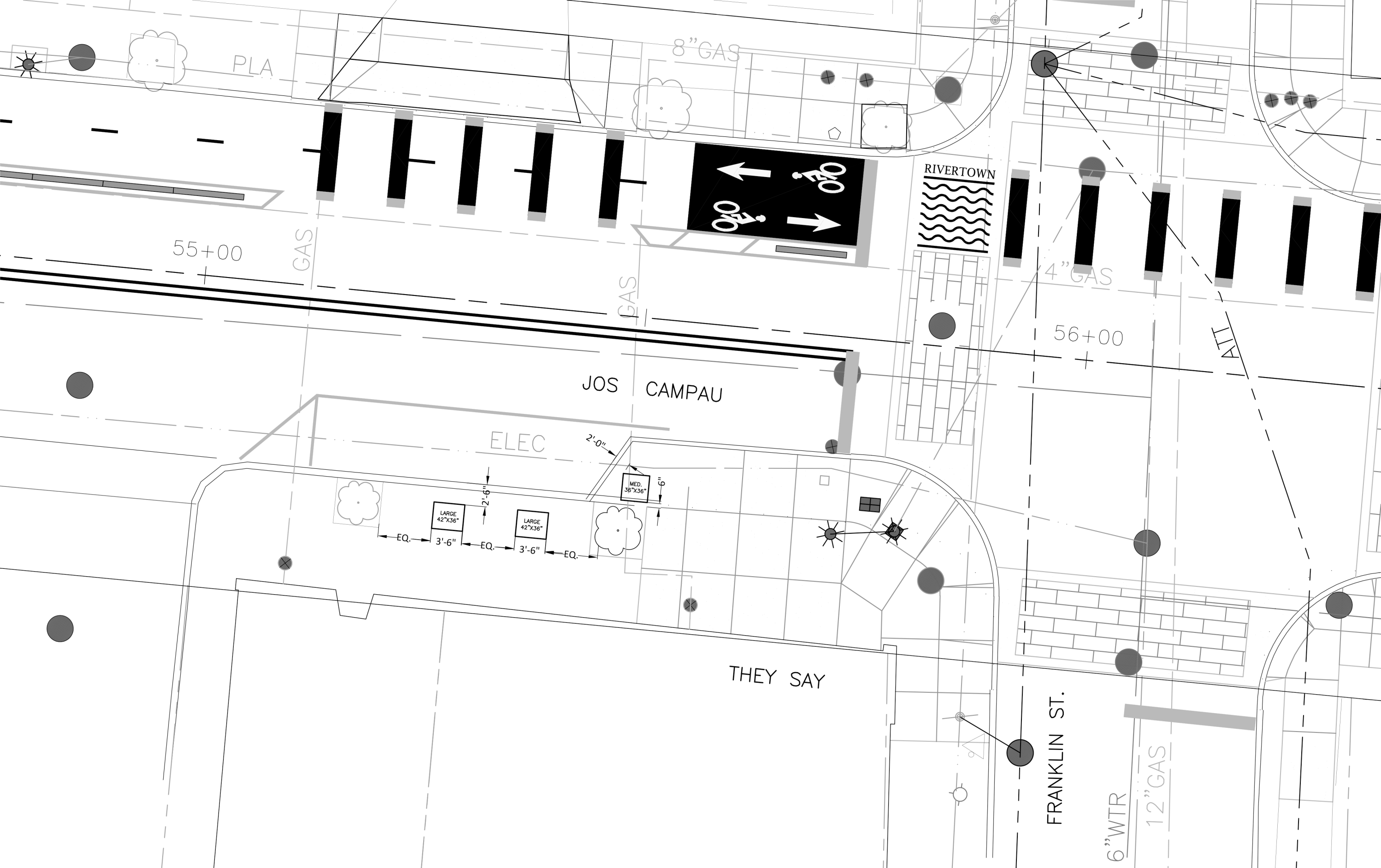
WIGHT FRANKLIN LAND, LLC
PARCEL ID: 11000048-63

SWR

STROH COMPANIES INC
PARCEL ID: 11000028-33

8" WTR

WIGHT ST.



PLA

8" GAS

55+00

GAS

GAS

RIVERTOWN

4" GAS

56+00

ALL

JOS CAMPAU

ELEC

2'-0"

MED. 36"X36"

LARGE 42"X36"

LARGE 42"X36"

EQ.

3'-6"

EQ.

3'-6"

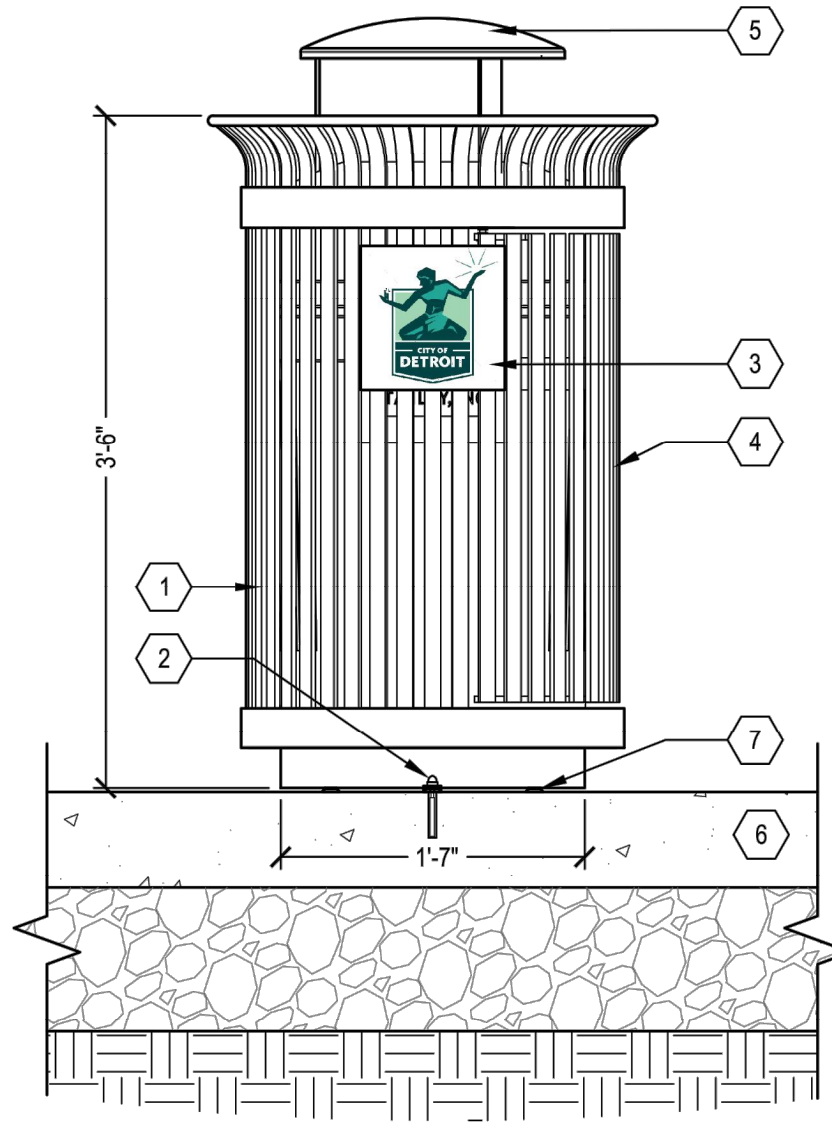
EQ.

THEY SAY

FRANKLIN ST.

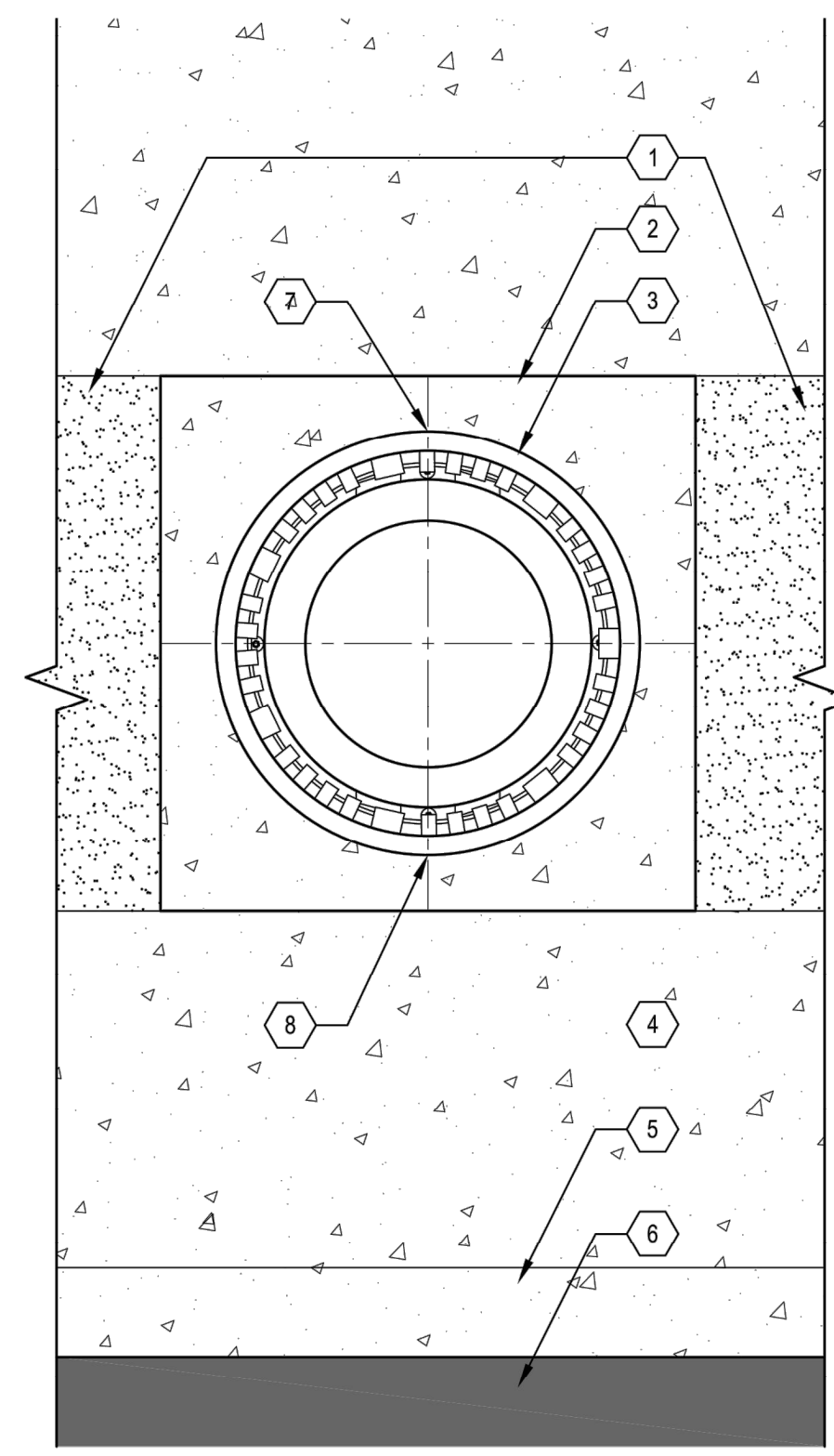
6" WTR

12" GAS



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 SIDEWALK
- 7 PROVIDE ADJUSTABLE GLIDES



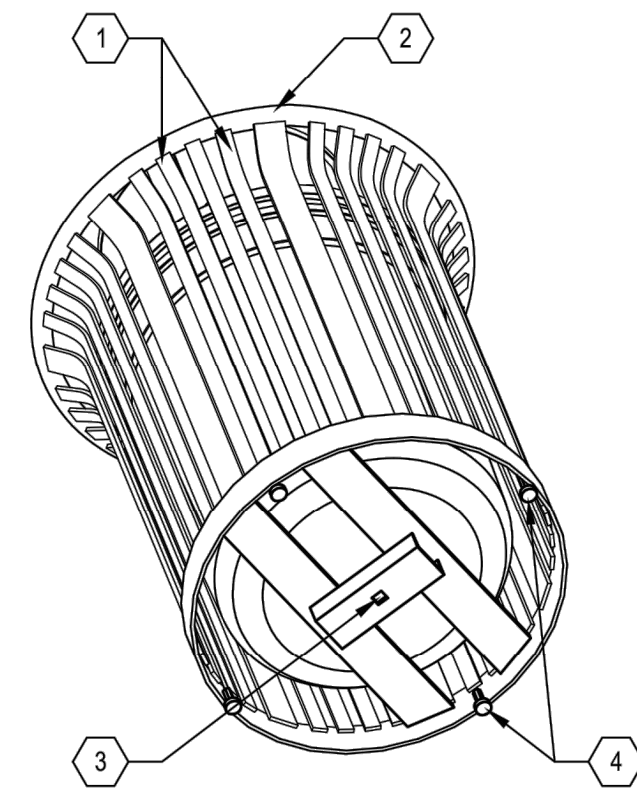
PLAN (RECEPTACLE ALONG WALK)

- 1 EXISTING LANDSCAPE AREA
- 2 TRASH RECEPTACLE CENTERED ON EXISTING CONCRETE PAD, BOTH DIRECTIONS OR LOCATED AS DIRECTED BY ENGINEER
- 3 VICTOR STANLEY MODEL SD-42 TRASH RECEPTACLE
- 4 CONCRETE SIDEWALK
- 5 CONCRETE CURB
- 6 HMA ROAD
- 7 ORIENT PLAQUE WITH DETROIT LOGO ON SIDEWALK SIDE
- 8 ORIENT DOOR WITH LOCK TOWARDS ROADWAY

TRASH RECEPTACLE
NO SCALE

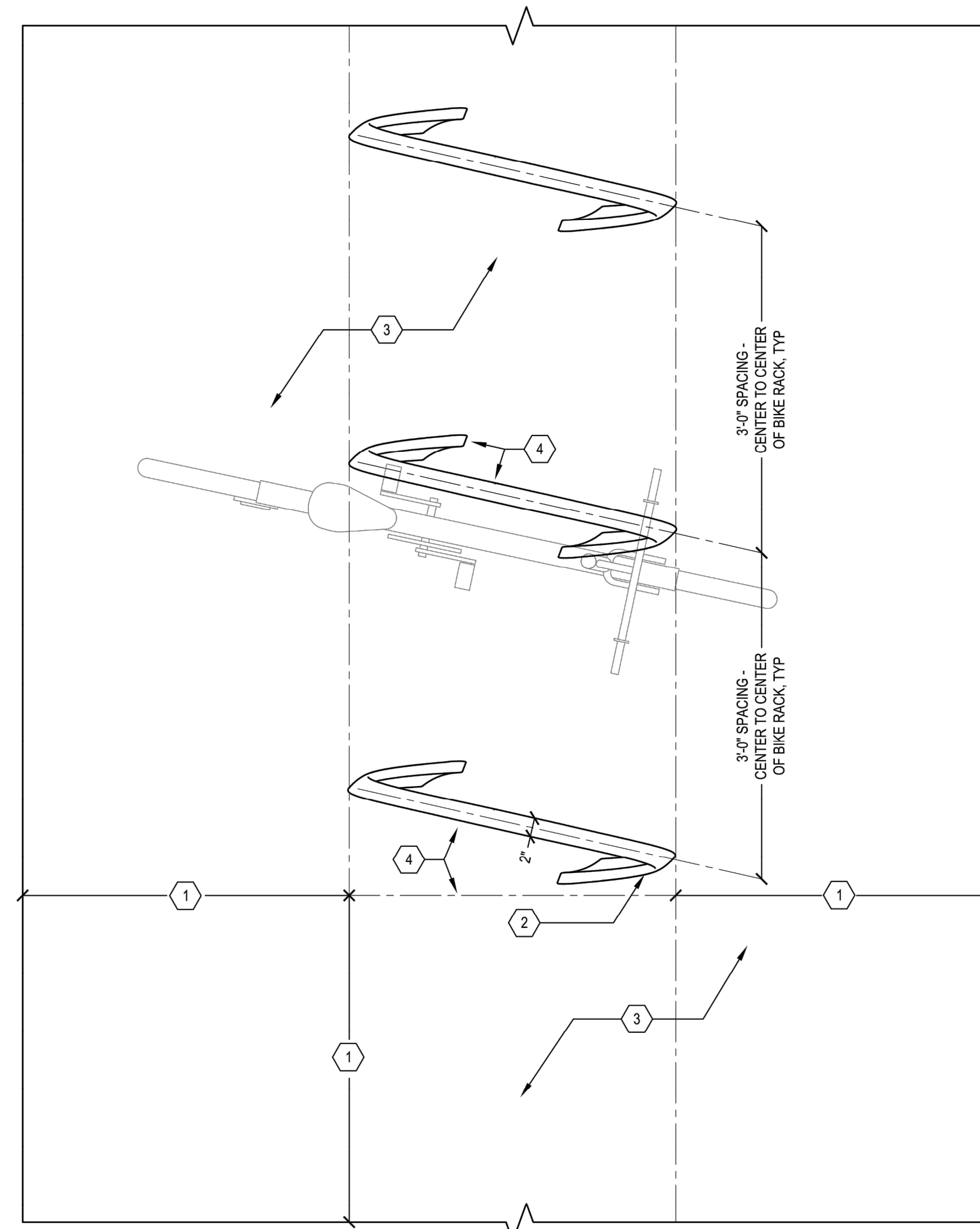
NOTES:

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 4" S.S. THREADED ANCHOR RODS. FILL HOLES WITH ANCHORING ADHESIVE/ EPOXY.
4. SEE LAYOUT PLANS FOR TRASH RECEPTACLE LOCATIONS. CONFIRM ALL TRASH RECEPTACLE LOCATIONS AND ORIENTATIONS WITH ENGINEER PRIOR TO INSTALLATION.
5. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.
6. PROVIDE HIGH DENSITY PLASTIC LINER. DRILL 3/8" Ø DRAINAGE HOLES IN BOTTOM OF LINER.



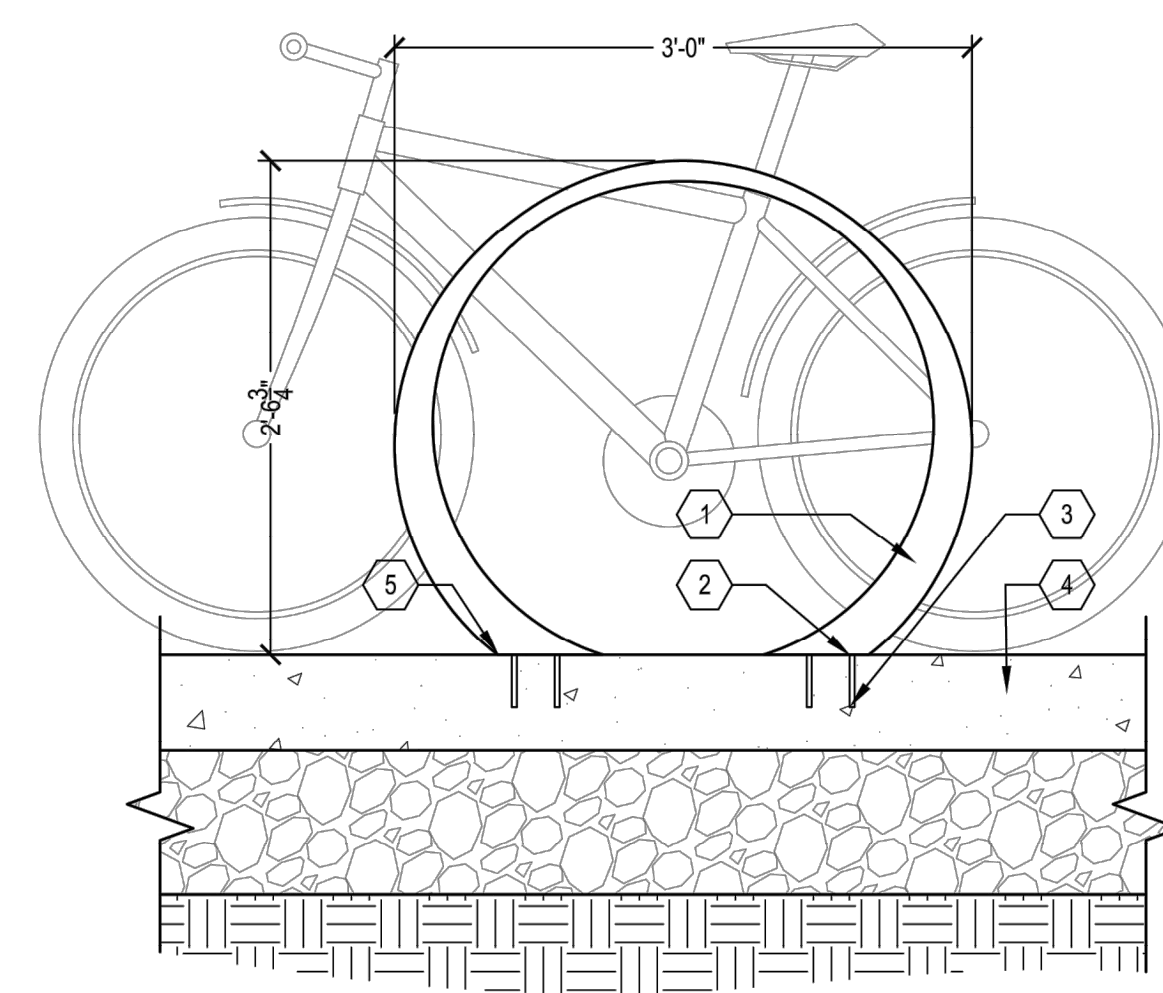
AXONOMETRIC VIEW- SURFACE MOUNTING

- 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



PLAN - LAYOUT

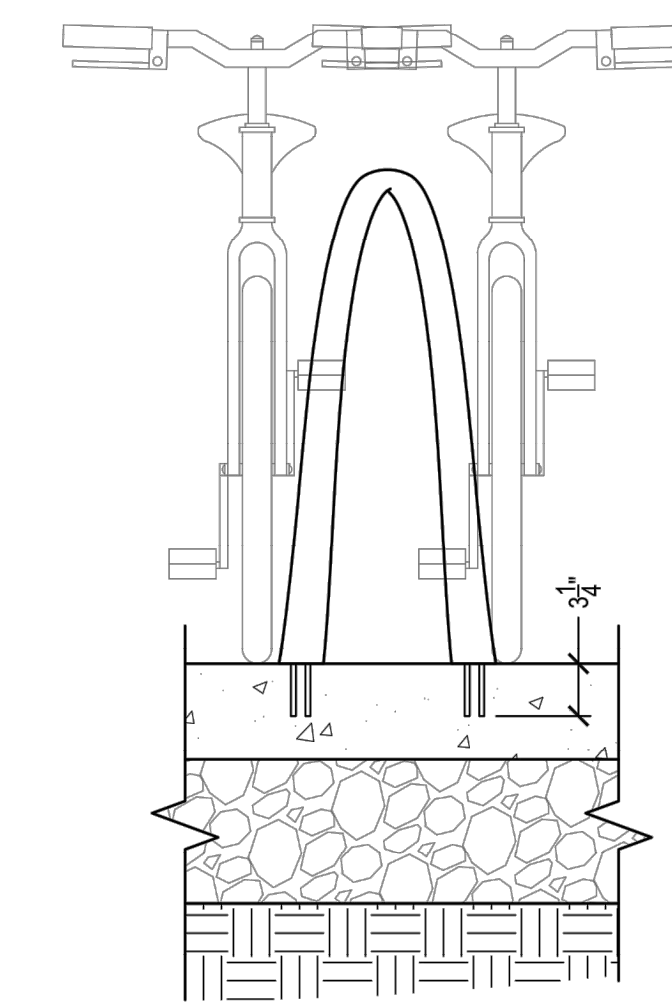
- 1 PROVIDE MIN 3'-0" CLEARANCE AROUND ALL SIDES OF BIKE RACK AND ADJACENT WALLS, CURBS, STRUCTURES, AND OTHER OBSTRUCTIONS
- 2 LOOP BIKE RACK
- 3 CONCRETE SIDEWALK
- 4 BIKE RACKS ARE MANUFACTURED WITH A TWIST IN THE ALIGNMENT. LAYOUT BIKE RACKS IN PARALLEL AS SHOWN WITH ANGLE TO ADJACENT BACK OF SIDEWALK, CURB, AND BUILDING AS SHOWN.



FRONT ELEVATION

- 1 LOOP BIKE RACK
- 2 7/16" Ø X 4" S.S. THREADED ANCHOR RODS
- 3 (4) 7/16" DIA. HOLES - 4 1/4" DEEP FOR ANCHOR RODS
- 4 CONCRETE SIDEWALK
- 5 BOTTOM OF BIKE RACK TO SET FLUSH ON CONCRETE PAVEMENT

BIKE RACK
NO SCALE



SECTION

NOTES:

1. BIKE RACK TO BE LANDSCAPE FORMS, 35 COLLECTION, MODEL 'LOOP'.
2. BIKE RACK IS ALUMINUM CASTING WITH MATTE BLACK POWDER COAT FINISH.
3. SURFACE MOUNT USING (4) 5/16" Ø X 4" S.S. THREADED ANCHOR RODS. FILL HOLES WITH ANCHORING ADHESIVE/ EPOXY. REMOVE EXCESS EPOXY FROM CONCRETE AND BIKE RACK BEFORE IT CURES.
4. SEE LAYOUT PLANS FOR BIKE RACK LOCATIONS. CONFIRM LOCATIONS, SPACING, AND ORIENTATION ON-SITE WITH ENGINEER PRIOR TO INSTALLATION.
5. INSTALL PER MANUFACTURERS RECOMMENDATIONS.
6. PRIOR TO INSTALLATION CONFIRM WITH ENGINEER THAT AN ACCESSIBLE ADA PEDESTRIAN PATH IS PROVIDED ADJACENT TO BIKE RACKS.

PLOT INFO: Z:\2018\180391\TASK2 - JOSEPH CAMPANU\CADD\C707\180391_CD.DWG LAYOUT: C707 DATE: 5/9/2019 TIME: 12:48:37 PM USER: AOF



REVISIONS

5/9/2019	100% CD
1/23/2019	95% CD
8/10/2018	50% CD
7/27/2018	30% CD

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.
180391

SHEET NO.

C707

PUBLIC LIGHTING AUTHORITY OF DETROIT
CITY OF DETROIT, WAYNE COUNTY, MICHIGAN

CONSTRUCTION PLANS FOR JOSEPH CAMPAU - 48207
STREETSCAPE PROJECT STREET LIGHTING IMPROVEMENT

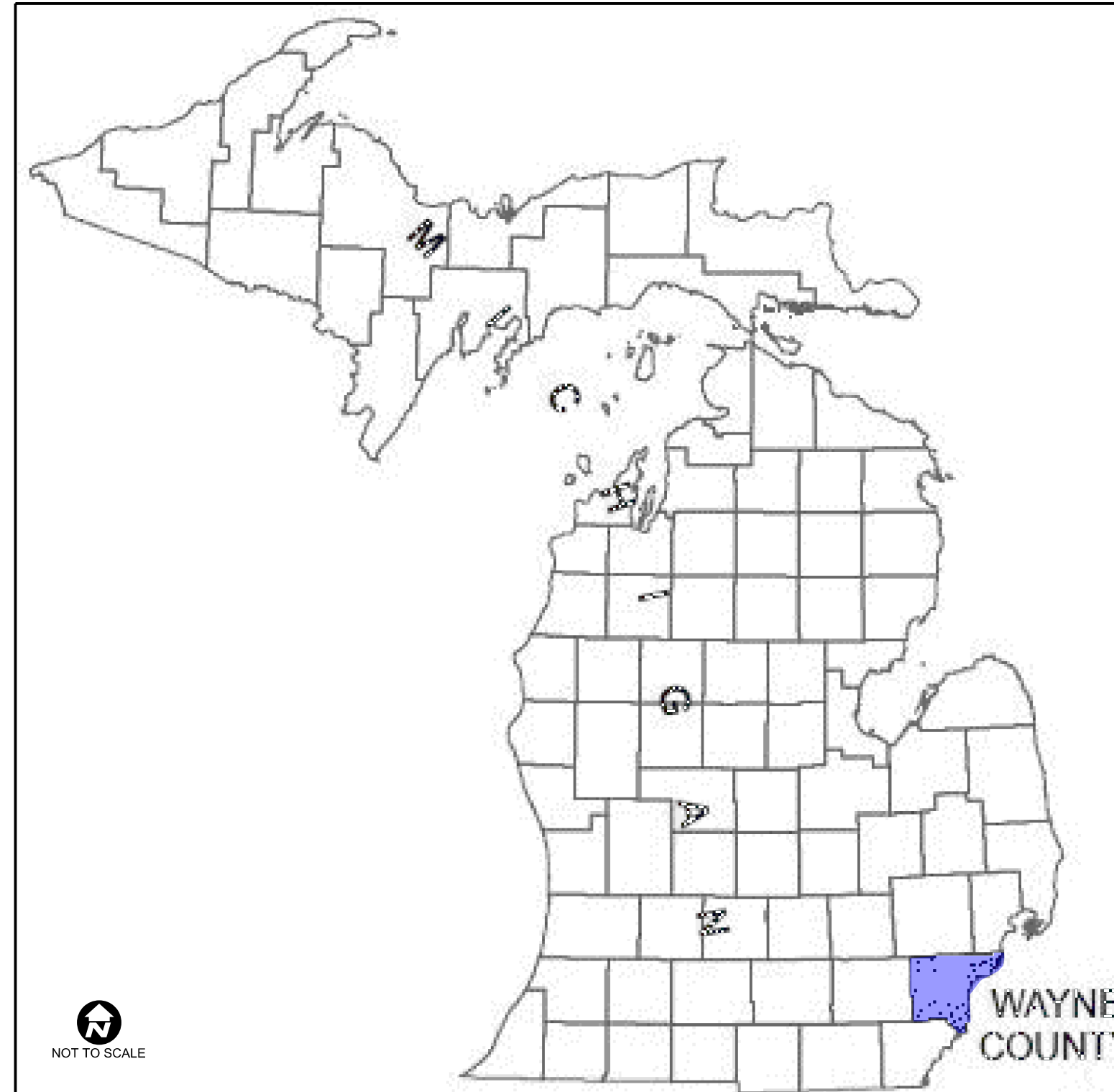
PROJECT DESCRIPTION

UPDATE THE JOSEPH CAMPAU STREET LIGHTING AS PART OF THE STREETSCAPE PROJECT FROM JEFFERSON TO THE DETROIT RIVER. STREET LIGHTING STANDARDS WILL BE REPLACED WITH NEW RIVERTOWN SYTLE POST TOP STANDARDS TO CONTINUE THE LIGHTING TREATMENT FROM ATWATER ALONG THE RIVER.

CONSTRUCTION PLANS SHEET INDEX

CO-01	COVER SHEET
LQ-01	LEGENDS AND QUANTITIES SHEET
GI-01	GENERAL INFORMATION SHEET
UG-01 TO UG-02	UNDERGROUND CONSTRUCTION PLAN SHEETS
IN-01 TO IN-02	OVERHEAD CONSTRUCTION AND CABLING PLAN SHEETS
ED-01	LC 07M39 ELECTRICAL DIAGRAM SHEETS (2 SHEETS)
DT-01	ALUMINUM POST TOP STANDARD DETAILS
DT-02	130W POST TOP LUMINAIRE DETAILS
DT-03	UNDERGROUND ALUMINUM TRIPLEX CODE WORD BRENAU STREET LIGHTING CABLE DETAILS
DT-04	LAMP CORD CABLE DETAILS
DT-05	FUSE HOLDER DETAILS
DT-06	UNDERGROUND FED STANDARD BASE ELECTRICAL CONNECTIONS DETAILS
DT-07	LUMINAIRE AND CABLE ID TAG DETAILS
DT-08	STREET LIGHTING CONTROLLER DETAILS
DT-09	UNDERGROUND LIGHTING AND RECEPTACLE CIRCUITS TYPICAL WIRING SCHEMA DETAILS
DT-10	UNDERGROUND CONSTRUCTION DETAILS
DT-11	POLYMER CONCRETE 13" X 24" HANDHOLE DETAILS

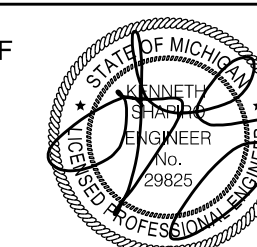
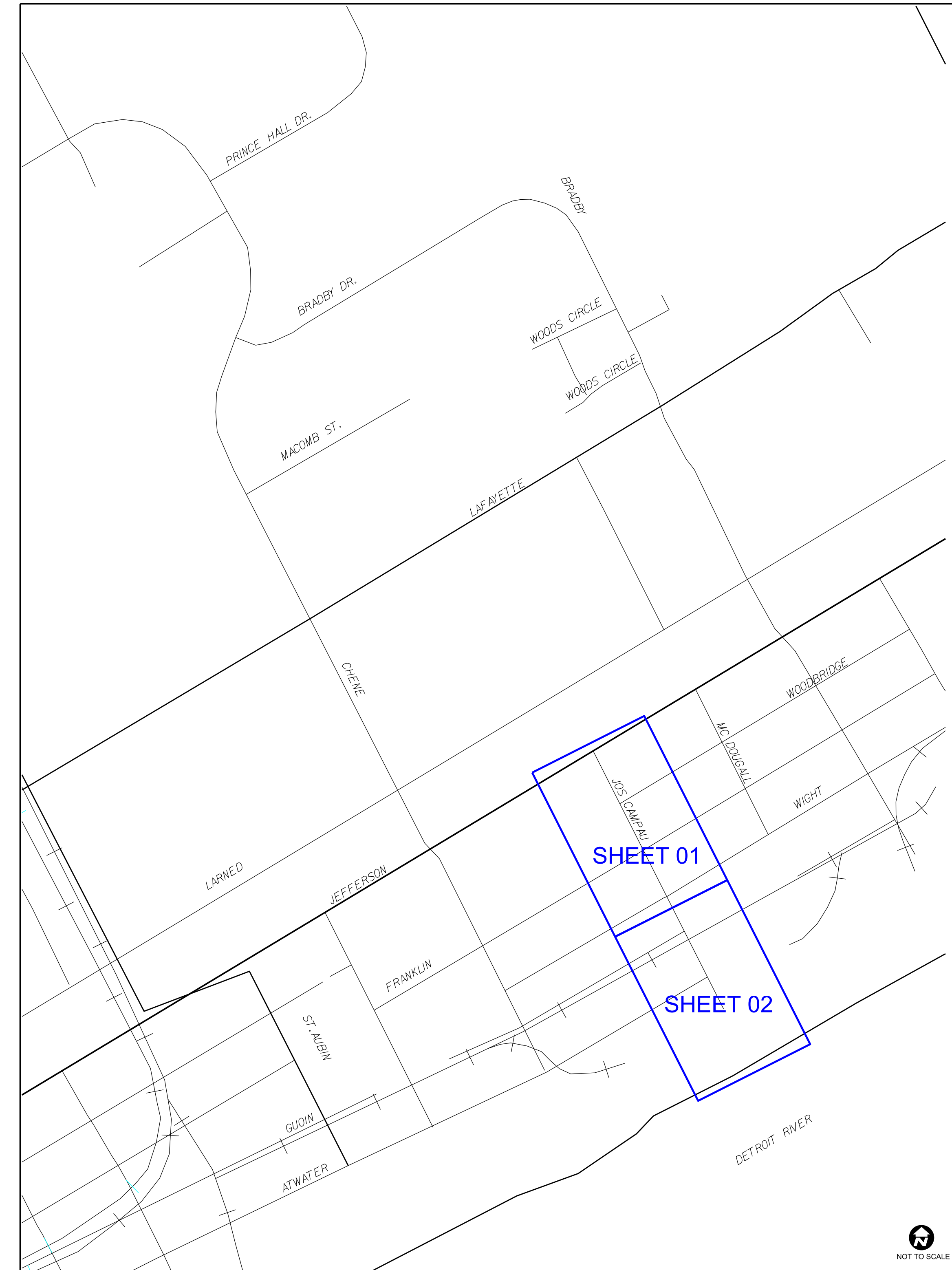
COUNTY LOCATION MAP



PROJECT LOCATION MAP



INSTALLATION PLAN SHEET INDEX



REVISIONS

DATE:	DESCRIPTION:
2019-05-03	CED REVISIONS
2019-05-07	CODE UPDATES
2019-05-08	ADDITIONAL PAY ITEMS

LEGENDS

GENERAL LEGEND

- EGC Equipment Ground Conductor
- PLA Detroit Public Lighting Authority
- PLD Detroit Public Lighting Department
- EGC Equipment Ground Conductor
- PLD--- Existing Public Lighting Department Conduit
- ELEG--- Existing DTE Electric Conduit
- ITC--- Existing ITC Conduit
- ☑ 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
- Ⓜ Existing Polymer Handhole
- Ⓜ Existing Polymer Manhole
- Existing Precast Concrete Round Handhole
- PLD Existing Polymer Handhole

LUMINAIRE ID TAG FORMAT

- TAG FORMAT WYYYYZZZZZ-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:
RT = Install or Replace Luminaire ID Tag Where No Other Work is Being Performed
RA = Replace Bracket Arm While Replacing the Luminaire

UNDERGROUND CONSTRUCTION AND REMOVAL PLANS

- ⊗ Remove Luminaire, Bracket Arm, Lighting Standard and Foundation
- ⊗_S 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 Aluminum Post Top Lighting Standard Foundation
- ⊗ Remove Wood Pole
- ⊗ Remove Luminaire, Bracket Arm and Wood Pole
- Install Wood Pole
- ⊗ Remove Strain Pole
- Ⓜ Install Polymer Handhole
- _L Install Precast Concrete Round Handhole
- Ⓜ Install Polymer Manhole

OVERHEAD CONSTRUCTION AND CABLING PLANS

- Install Aluminum Post Top Lighting Standard Assembly (Unless Noted Otherwise)
- Install 600V Underground Aluminum Cable Triplex Code Word Brenau, (2) 1/C 1/0 AWG and (1) 1/C #2 AWG Phase Conductors for Underground Street Lighting Cable Without EGC (Unless Otherwise Noted)
- - - Existing 600V Underground Aluminum Cable Triplex Code Word Brenau, (2) 1/C 1/0 AWG and (1) 1/C #2 AWG Phase Conductors for Underground Street Lighting Cable Without EGC (Unless Noted Otherwise)
- ⊗ Remove Luminaire
- Install Luminaire
- ☑ Install Lighting Controller (LC)
- ⊗ Remove Lighting Controller (LC)

ELECTRICAL DIAGRAMS

- ⊙ 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
- Underground 600V Aluminum Cable Triplex Code Word Brenau, (2) 1/C 1/0 AWG and (1) #2 AWG Phase Conductors Without EGC Cable Attached to the Lighting Controller (Unless Noted Otherwise)

LIST OF PAY ITEM QUANTITIES

MDOT CODE	DESCRIPTION	QUANTITIES							TOTAL	UOM
		SHEET	UG-01	UG-02	IN-01	IN-02	MISC			
8190016	Cable, Rem		20	20				40	Ft	
8190032	Conduit, DB, 2, 3 inch		80	325				405	Ft	
8190278	Light Std Arm, Rem and Salv			2				2	Ea	
8190280	Light Std Fdn, Rem		6	5				11	Ea	
8190305	Light Std Shaft, Rem		6	3				9	Ea	
8190306	Light Std Shaft, Rem and Salv			2				2	Ea	
8190365	Luminaire, Rem and Salv		6	5				11	Ea	
8190604	Conduit, Directional Bore, 2, 3 inch		60	60				120	Ft	
8197001	Cable, Sec, Triplex, Aluminum				150	450		600	Ft	
8197050	Bracket Arm, Bolt On, Rem		6	3				9	Ea	
8197050	Conduit Repair, Pavement						1	1	Ea	
8197050	Conduit Repair, Sidewalk or Dirt						1	1	Ea	
8197050	Hh, Polymer Conc, Modified		3	5				8	Ea	
8197050	Hh, Round, Modified		1					1	Ea	
8197050	Light Std Fdn, Modified		7	7				14	Ea	
8197050	Light Std, Aluminum, Post Top, 14.5 Feet						2	2	Ea	
8197050	Light Std, Aluminum, Post Top, 14.5 Feet, Install				7	7		14	Ea	
8197050	Luminaire, Post Top, 130W						2	2	Ea	
8197050	Luminaire, Post Top, 130W, Install				7	7		14	Ea	

**** CAUTION: Utility information is approximate. Contact MISS DIG and exercise caution when excavating.**

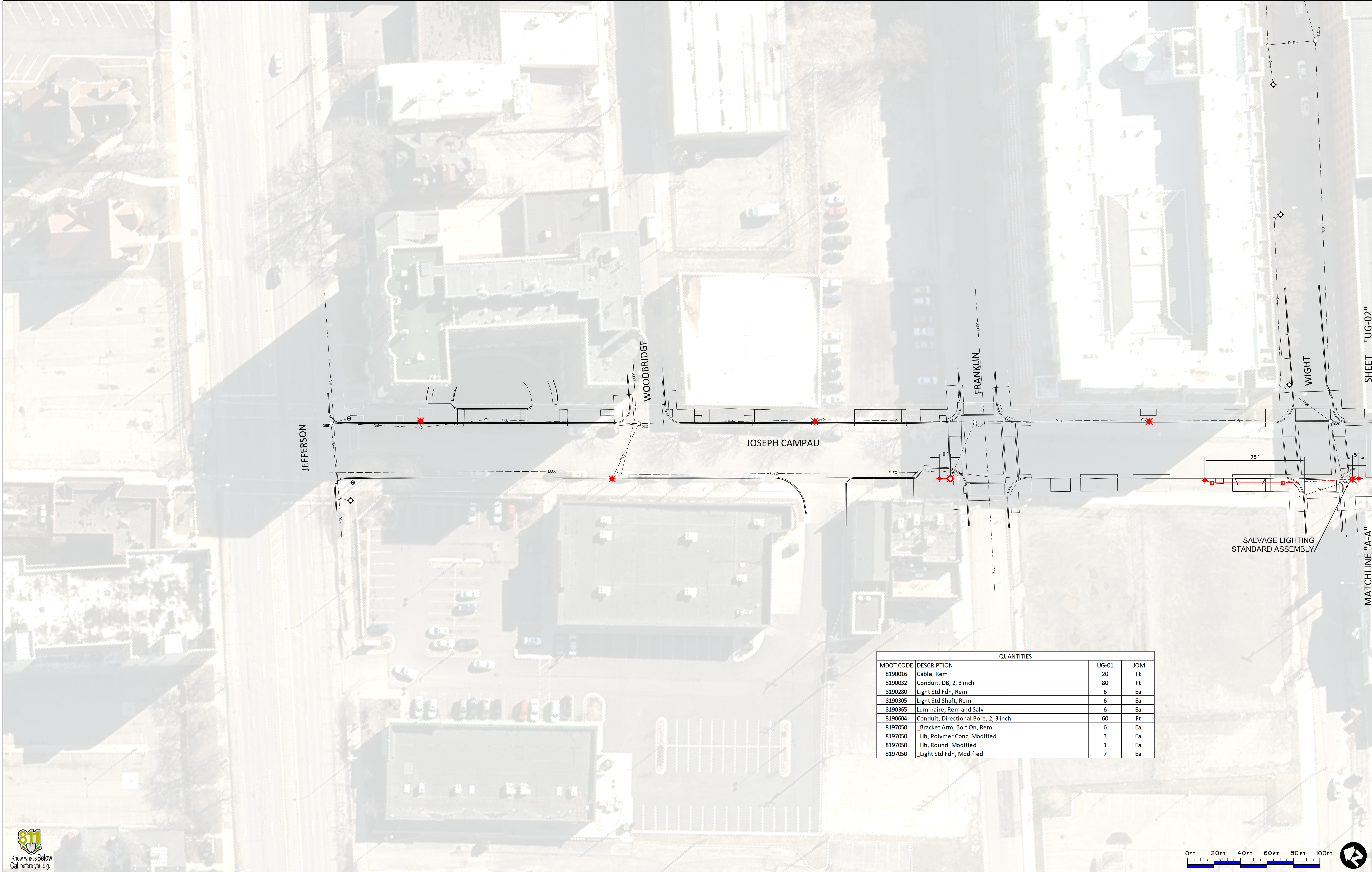
GENERAL INFORMATION

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 STANDARDS AND PRACTICES OF THE PUBLIC LIGHTING AUTHORITY (PLA), 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. ALL SALVAGED PUBLIC LIGHTING AUTHORITY (PLA) EQUIPMENT SHALL BE RETURNED TO THE PLA.
5. ALL REMOVED PUBLIC LIGHTING DEPARTMENT (PLD) EQUIPMENT SHALL BE RETURNED TO THE PLD.
6. THE CONSTRUCTION CONTRACTOR IS RESPONSIBLE FOR TRANSPORTING DECOMMISSIONED EQUIPMENT TO THE PUBLIC LIGHTING DEPARTMENT (PLD) YARD.
7. ALL SHOP DRAWINGS MUST BE APPROVED BY THE PUBLIC LIGHTING AUTHORITY (PLA). CONTACT (313) 324-8290.
8. CALL MISS DIG AT 811 OR (800) 482-7171 A FULL THREE WORKING DAYS PRIOR TO ANY EXCAVATION FOR THE LOCATIONS OF UNDERGROUND UTILITIES.
9. THE CONTRACTOR IS TO NOTIFY DTE GAS AT (800) 477-4747 IF A PROTECTIVE COATED GAS MAIN IS EXPOSED OR DAMAGED.
10. 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.
11. ALL EXISTING 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 PRIOR TO BEGINNING WORK ON PLD CIRCUITS AND KEEP THE OPERATOR INFORMED ON A DAILY BASIS.
12. 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 ADVANCE AUTHORIZATION IS GRANTED BY THE CITY OF DETROIT DPW. IN THE EVENT THAT A VEHICLE DIRECTION, STREET NAME OR PARKING SIGN IS 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.
13. 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.
14. 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.
15. 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.
16. 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.
17. 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.
18. THE CONTRACTOR MUST ASCERTAIN THE REQUIREMENTS OF SAID AUTHORITIES AND WILL INCLUDE IN HIS BID PRICE ALL COSTS OF RESTORING EXISTING INFRASTRUCTURE INCLUDING SIDEWALKS, PAVEMENT AND LANDSCAPING TO THE SATISFACTION OF THE AUTHORITY HAVING JURISDICTION IN EACH CASE, WHICH MAY INCLUDE UPGRADES FROM THE EXISTING CONDITION.
19. 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).

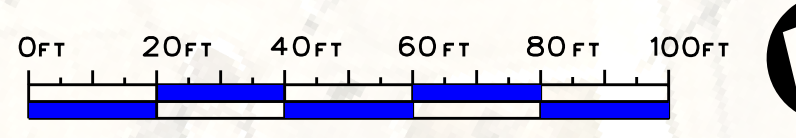
20. THE LOCATIONS OF EXISTING UNDERGROUND OBSTRUCTIONS OR UTILITY FACILITIES ARE NOT NECESSARILY INDICATED ON THE PLANS. WHERE UTILITY FACILITIES ARE SHOWN, LOCATIONS ARE ONLY APPROXIMATIONS. THE EXACT UTILITY LOCATIONS ARE NOT GUARANTEED FOR CORRECTNESS. THE CONTRACTOR MUST EXERCISE CAUTION IN AVOIDING DAMAGE TO UTILITIES AND MUST NOTIFY THE UTILITIES THAT THEY ARE IN FACT PROPOSING TO BREAK PAVEMENT OR EXCAVATE SO THAT THEY MAY PROVIDE THE CONTRACTOR WITH THE VERY LATEST LOCATION INFORMATION OF THEIR EXISTING FACILITIES.
21. 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. INSTALLING STRUCTURES 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. ADDITIONALLY, STRUCTURES ARE TO BE INSTALLED CLEAR OF FIRE HYDRANTS, TREES, UTILITIES AND ANY OTHER UNDERGROUND STRUCTURES.
22. NO SPLICING WILL BE ALLOWED BETWEEN: CONTROL CABINET AND HANDHOLE/MANHOLE; HANDHOLE/MANHOLE TO HANDHOLE/MANHOLE; HANDHOLE/MANHOLE TO UNDERGROUND STREET LIGHTING STANDARD AND HANDHOLE/MANHOLE TO CABLE RISER.
23. 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).
24. THE FOLLOWING CABLE IDENTIFICATION IS TO BE USED FOR GROUNDED OVERHEAD TRIPLEX AND QUADRUPLX 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 PRIOR TO MAKING ANY CONNECTIONS.
25. THE CONTRACTOR MUST CORE INTO EXISTING HANDHOLES AND MANHOLES.
26. THE CONTRACTOR IS TO TRIM EXISTING TREES TO PROVIDE A CLEAR 10 FOOT RADIUS AROUND EACH LUMINAIRE.
27. ALL UNDERGROUND STREET LIGHTING STANDARD LOCATIONS ARE TO BE INSTALLED WITH THE CENTER 3 FEET BACK OF CURB FACE (BOC) UNLESS OTHERWISE INDICATED ON THE PLANS.
28. 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.
29. THE CONTRACTOR IS TO CALL (313) 224-1610 FOR COORDINATING ANY DETROIT DEPARTMENT OF PUBLIC WORKS TRAFFIC SIGNAL WORK.
30. NEW LIGHTING STANDARDS SHALL BE CONNECTED TO THE SAME CIRCUIT PHASE OF THE LIGHTING STANDARD THEY ARE REPLACING. NEW LIGHTING STANDARD LOCATIONS WILL BE CONNECTED TO THE CIRCUIT PHASE CALLED FOR ON THE PLAN SHEETS.



MDOT CODE	DESCRIPTION	QUANTITIES	
		UG-01	UOM
8190016	Cable, Rem	20	Ft
8190032	Conduit, DB, 2, 3 inch	80	Ft
8190280	Light Std Fdn, Rem	6	Ea
8190305	Light Std Shaft, Rem	6	Ea
8190365	Luminaire, Rem and Salv	6	Ea
8190604	Conduit, Directional Bore, 2, 3 inch	60	Ft
8197050	Bracket Arm, Bolt On, Rem	6	Ea
8197050	Hh, Polymer Conc, Modified	3	Ea
8197050	Hh, Round, Modified	1	Ea
8197050	Light Std Fdn, Modified	7	Ea



Public Lighting Authority of Detroit
 65 Cadillac Square, Suite 3100
 Detroit, Michigan 48226
 313-324-8290 office
 313-638-2805 fax
 pladetroit.org

PROJECT DESCRIPTION
DESIGN ENGINEERING FOR THE JOSEPH CAMPAU STREETSCAPE PROJECT
 UNDERGROUND INSTALLATION AND REMOVAL PLAN
 SHEET 1 OF 2

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

Consulting Engineering Associates, Inc. WADE TRIM

REVISIONS	DATE:	DESCRIPTION:
	2019-05-03	CED REVISIONS
	2019-05-07	CODE UPDATES
	2019-05-08	ADDITIONAL PAY ITEMS

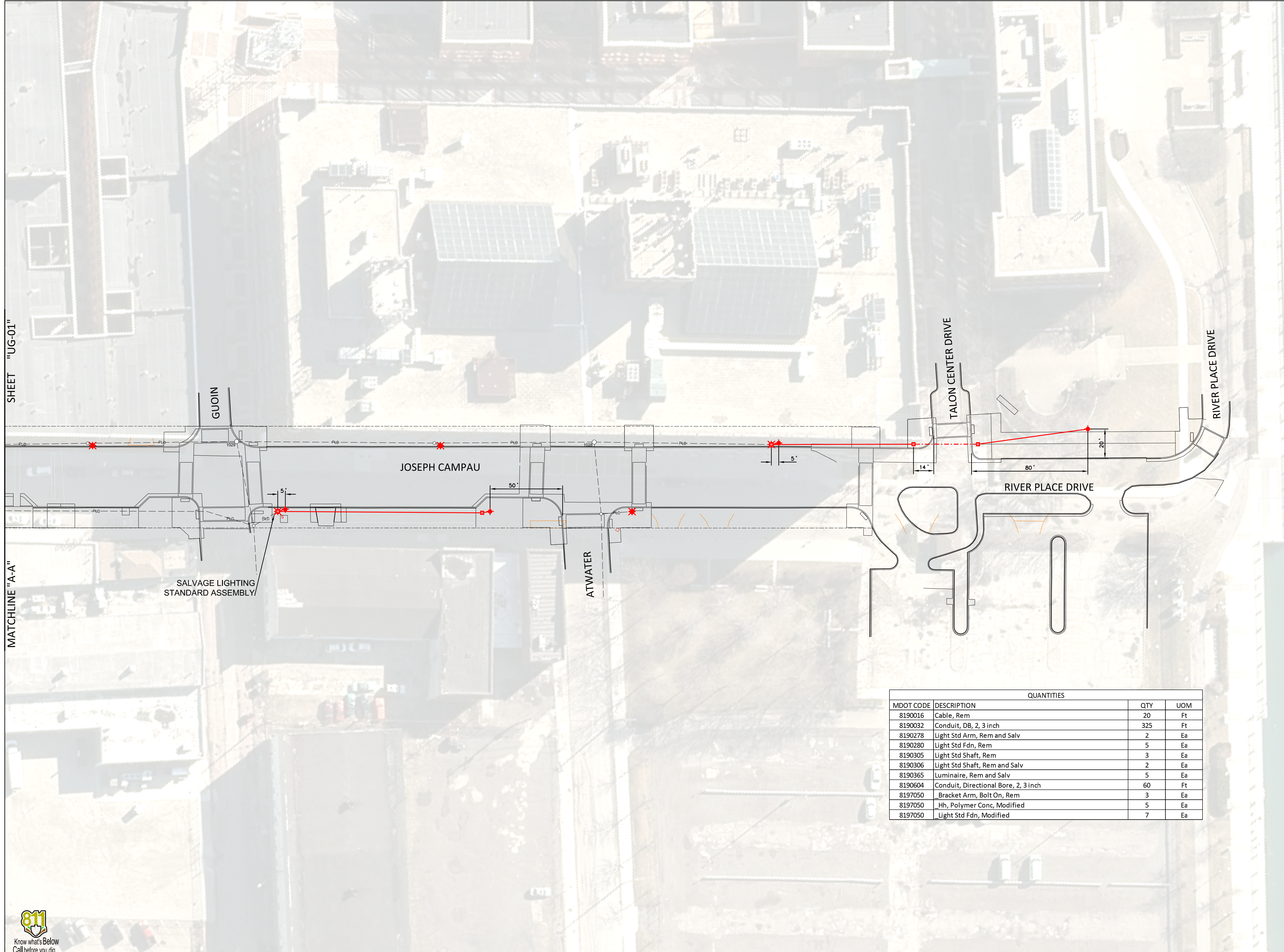
SHEET
UG-01

P.O. NO. 1792 JOB NO. 142816
 PAGE E004 OF 20

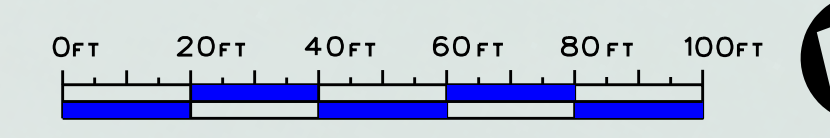
MATCHLINE "A-A" SHEET "UG-02"

SHEET "UG-01"

MATCHLINE "A-A"



QUANTITIES			
MDOT CODE	DESCRIPTION	QTY	UOM
8190016	Cable, Rem	20	Ft
8190032	Conduit, DB, 2, 3 inch	325	Ft
8190278	Light Std Arm, Rem and Salv	2	Ea
8190280	Light Std Fdn, Rem	5	Ea
8190305	Light Std Shaft, Rem	3	Ea
8190306	Light Std Shaft, Rem and Salv	2	Ea
8190365	Luminaire, Rem and Salv	5	Ea
8190604	Conduit, Directional Bore, 2, 3 inch	60	Ft
8197050	Bracket Arm, Bolt On, Rem	3	Ea
8197050	_Hh, Polymer Conc, Modified	5	Ea
8197050	Light Std Fdn, Modified	7	Ea



Public Lighting Authority of Detroit
 65 Cadillac Square, Suite 3100
 Detroit, Michigan 48226
 313-324-8290 office
 313-638-2805 fax
 pladetroit.org

PROJECT DESCRIPTION
DESIGN ENGINEERING FOR THE JOSEPH CAMPAU STREETSCAPE PROJECT
 UNDERGROUND INSTALLATION AND REMOVAL PLAN
 SHEET 2 OF 2

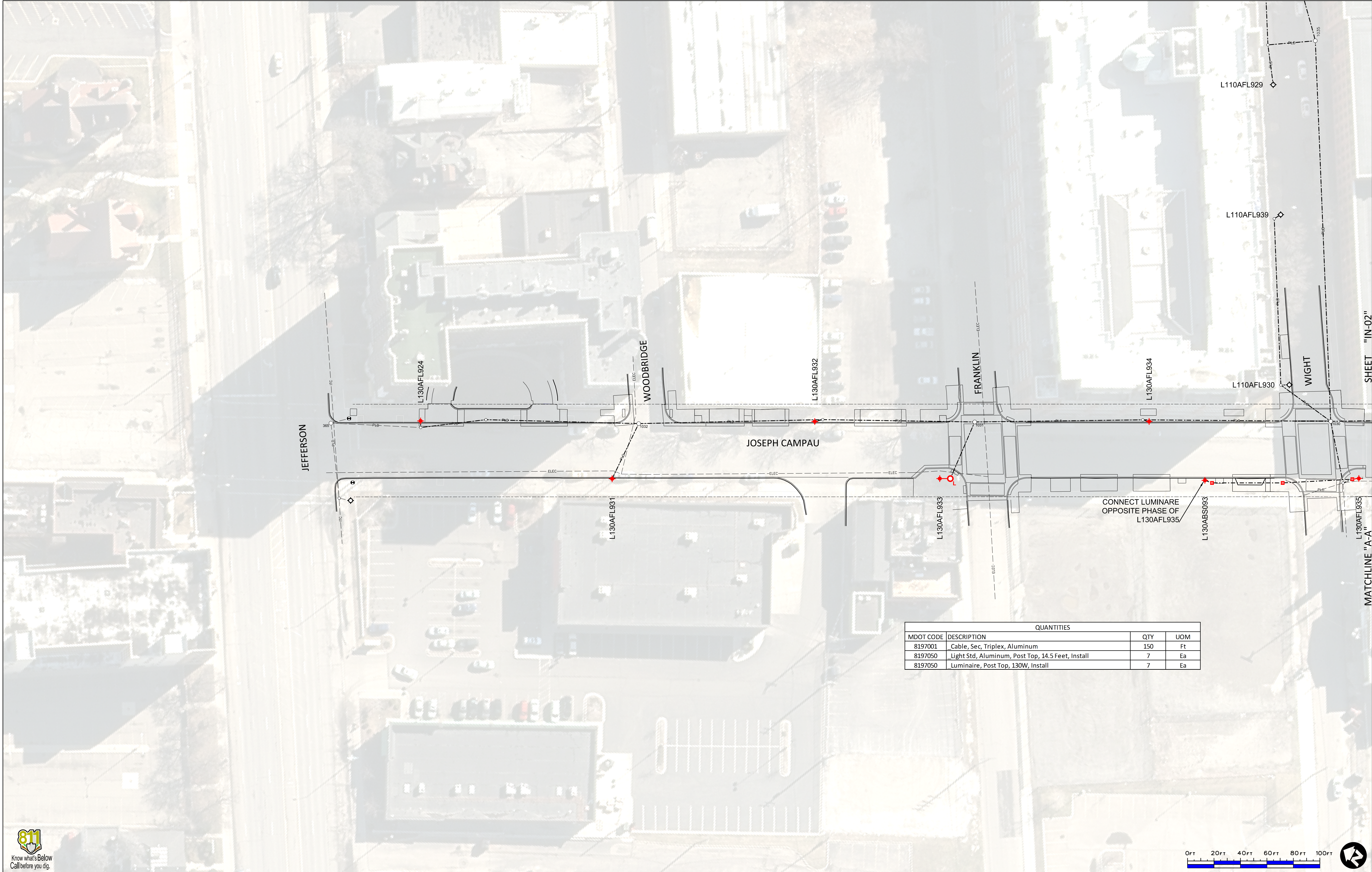
Consulting Engineering Associate and Wade Trim Joint Venture
 16580 Wyoming
 Detroit, Michigan 48221
 313-341-5797

Consulting Engineering Associates, Inc. WADE TRIM

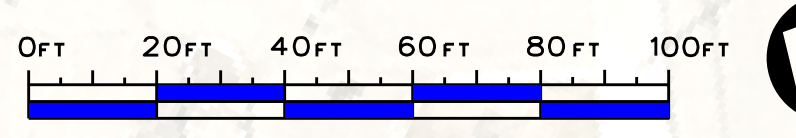
REVISIONS	DATE:	DESCRIPTION:
	2019-05-03	CED REVISIONS
	2019-05-07	CODE UPDATES
	2019-05-08	ADDITIONAL PAY ITEMS

SHEET
UG-02

P.O. NO. 1792 JOB NO. 142816
 PAGE E005 OF 20

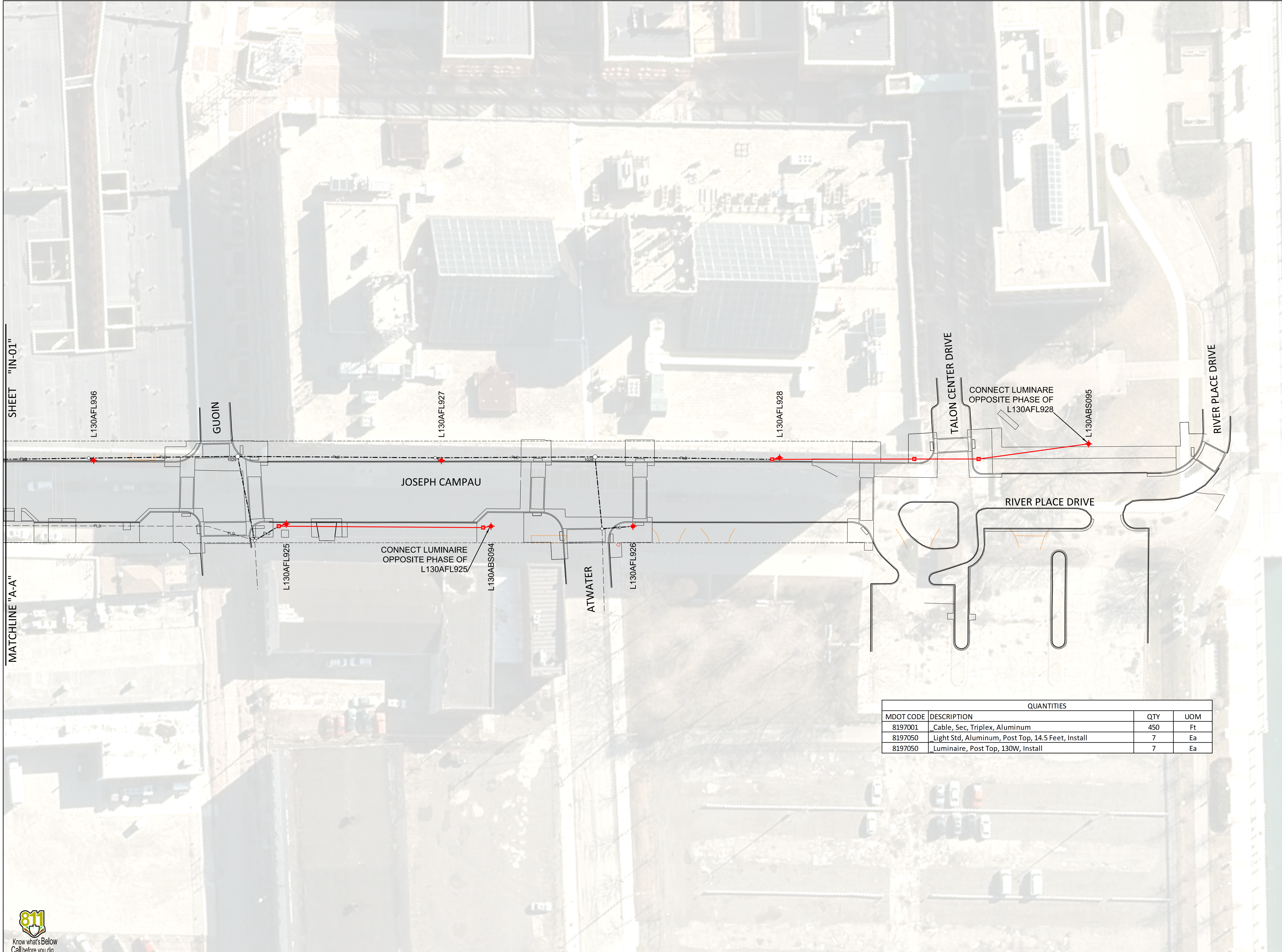


QUANTITIES			
MDOT CODE	DESCRIPTION	QTY	UOM
8197001	Cable, Sec, Triplex, Aluminum	150	Ft
8197050	Light Std, Aluminum, Post Top, 14.5 Feet, Install	7	Ea
8197050	Luminaire, Post Top, 130W, Install	7	Ea

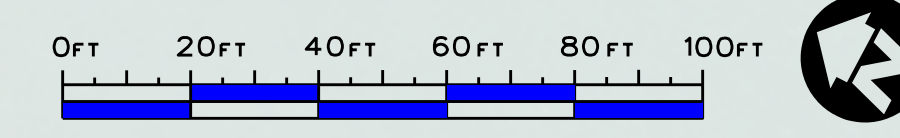


SHEET "IN-01"

MATCHLINE "A-A"



QUANTITIES			
MDOT CODE	DESCRIPTION	QTY	UOM
8197001	Cable, Sec, Triplex, Aluminum	450	Ft
8197050	Light Std, Aluminum, Post Top, 14.5 Feet, Install	7	Ea
8197050	Luminaire, Post Top, 130W, Install	7	Ea



Public Lighting Authority of Detroit
 65 Cadillac Square, Suite 3100
 Detroit, Michigan 48226
 313-324-8290 office
 313-638-2805 fax
 pladetroit.org

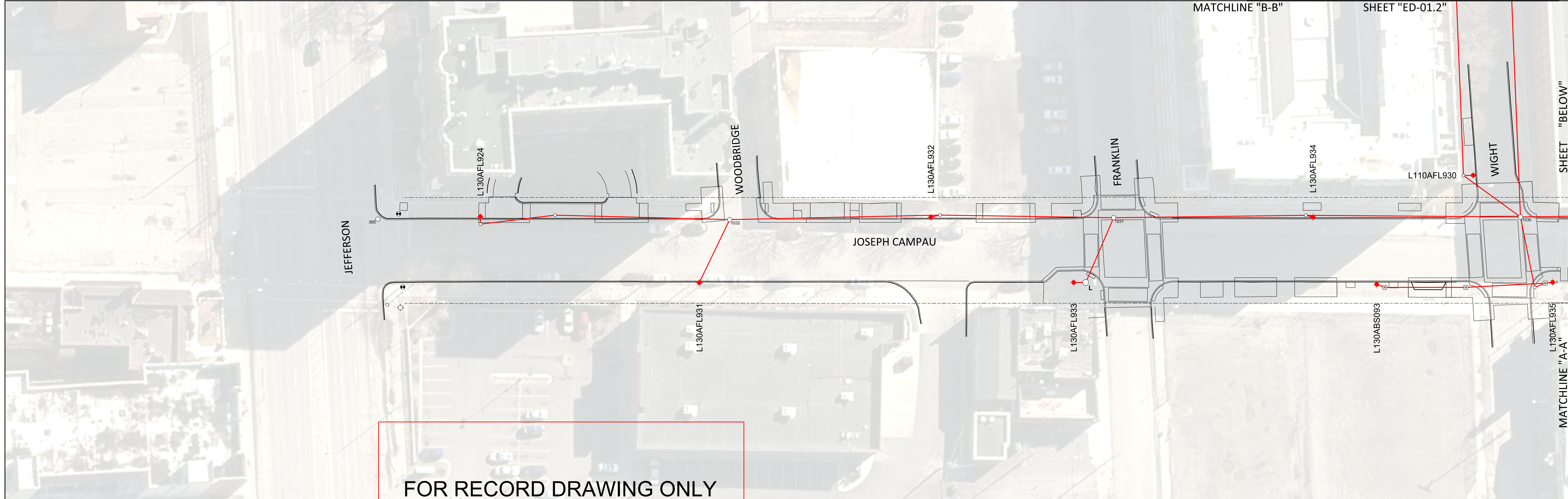
PROJECT DESCRIPTION
DESIGN ENGINEERING FOR THE JOSEPH CAMPAU STREETSCAPE PROJECT
 OVERHEAD INSTALLATION AND CABLING PLAN
 SHEET 2 OF 2

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

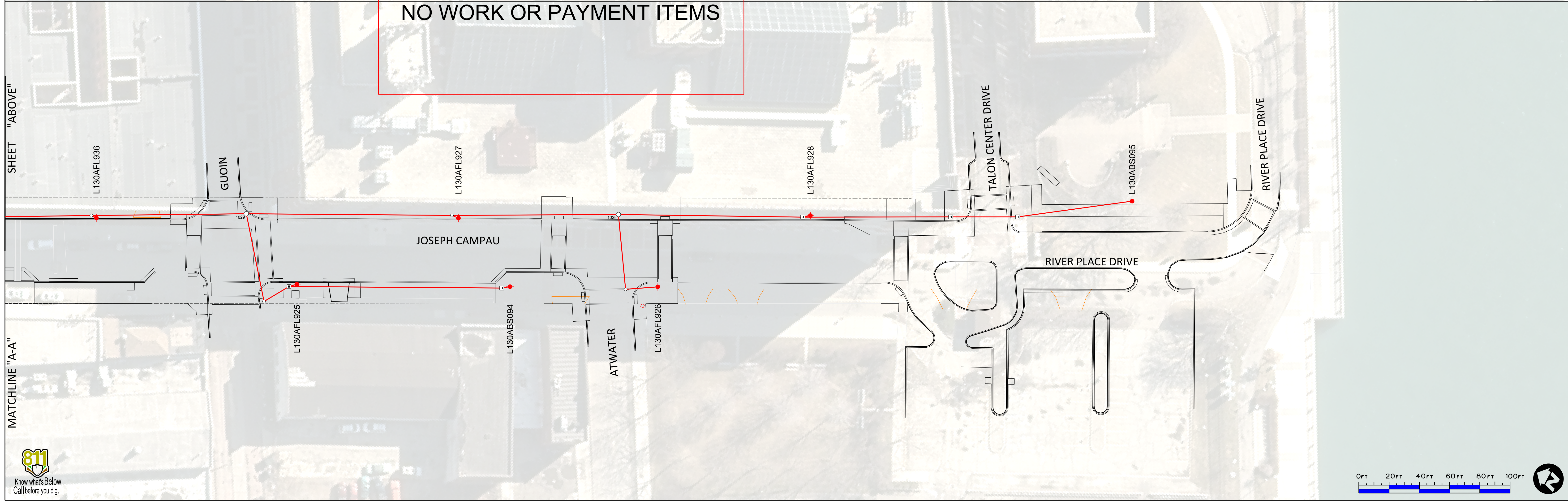
Consulting Engineering Associates, Inc. WADE TRIM

REVISIONS	DATE:	DESCRIPTION:
	2019-05-03	CED REVISIONS
	2019-05-07	CODE UPDATES
	2019-05-08	ADDITIONAL PAY ITEMS

SHEET
IN-02
 P.O. NO. 1792 JOB NO. 142816
 PAGE E007 OF 20



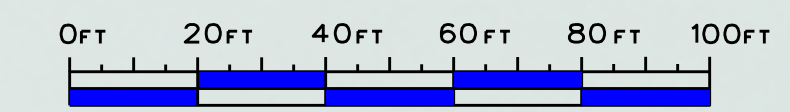
FOR RECORD DRAWING ONLY
NO WORK OR PAYMENT ITEMS



SHEET "ABOVE"

MATCHLINE "A-A"

MATCHLINE "A-A" SHEET "BELOW"



REVISIONS	DATE:	DESCRIPTION:
	2019-05-03	CED REVISIONS
	2019-05-07	CODE UPDATES
	2019-05-08	ADDITIONAL PAY ITEMS

SHEET "ED-01.1"

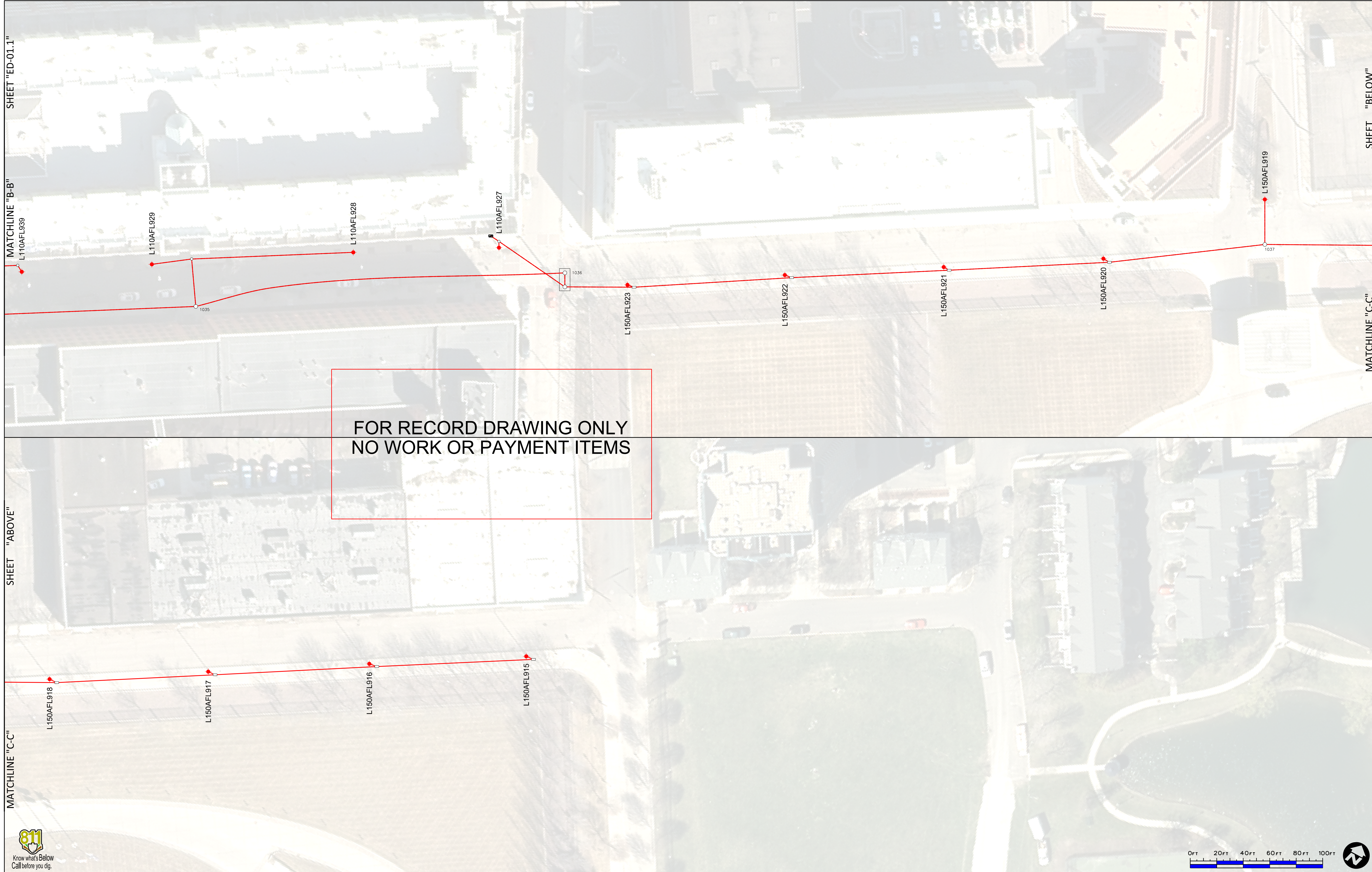
MATCHLINE "B-B"

SHEET "ABOVE"

MATCHLINE "C-C"

SHEET "BELOW"

MATCHLINE "C-C"



FOR RECORD DRAWING ONLY
NO WORK OR PAYMENT ITEMS



Public Lighting Authority
of Detroit
65 Cadillac Square, Suite 3100
Detroit, Michigan 48226
313-324-8290 office
313-638-2805 fax
pladetroit.org

PROJECT DESCRIPTION
DESIGN ENGINEERING FOR THE
JOSEPH CAMPAU STREETSCAPE PROJECT
ELECTRICAL DIAGRAM
LC 07M39
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

REVISIONS	DATE:	DESCRIPTION:
	2019-05-03	CED REVISIONS
	2019-05-07	CODE UPDATES
	2019-05-08	ADDITIONAL PAY ITEMS

SHEET	
ED-01.2	
P.O. NO.	JOB NO.
1792	142816
PAGE E009 OF 20	

CORE CAST NILAND-21 SERIES

SCALE: 3/8"=1'-0"

CSI POLE SPECIFICATION

I. BASE & POLE
Base and pole shall be one piece cast aluminum. Aluminum shall be certified as pure 99.99% copper free of any porosity, foreign materials or ceramic fillers. Base casting shall be of uniform wall thickness with no warping or mold shifting. Minimum wall thickness shall be .250". Cast aluminum access cover shall be secured with two stainless steel screws. Shaft shall be of uniform wall thickness with no warping or mold shifting. Minimum wall thickness shall be .250". The anchor bolt locations in the base shall be cast in place as part of the base casting, for maximum strength.

II. ANCHORAGE DETAIL
Standards 12 feet high or less shall use 1/2" x 18" L-type anchor bolts. Standards higher than 12 feet shall use 3/4" x 24" L-type bolts.

FINISHES

Five Year Powder Coating Warranty
Niland Company factory-applied powder coatings are warranted against peeling, excessive fading and cracking under normal climatic exposure for a period of five years from date of shipment. Damage to finish coating caused by abuse or mishandling during installation is not covered by warranty. This warranty is limited to the repair or replacement of the material involved and does not include reimbursement of consequential expenses such as installation or removal of equipment or transportation costs.

I. STANDARD FINISH
Satin iron achieved by rotary sanding, blasting and phosphate conversion coating.

II. THERMOSET POWDER PAINT FINISH
Pre-treatment shall consist of degreasing phosphate acid-etching with 140° and de-ionizing water, rinsed and oven dried.

FINISH COAT
Thermoseal TGC super polyester powder coat finish electrostatically applied, oven cured and bonded at approximately 420° F to a minimum dry film thickness of 1.6 mils. All Niland powders must pass a minimum 3000-hour salt-spray test for corrosion resistance. The National Association of Architectural Metal Manufacturers, Metal Finishes Manual rates the outdoor life of these powders at 15+ years.

III. LIQUID FINISH
Optional liquid finish is first prime coated then finished with a two part liquid epoxy coat.

WARRANTY
Niland Company warrants to repair or replace, at our option, any equipment that fails due to defects in material or workmanship within one year from date of shipment. This warranty does not include failures as a result of improper installation, mishandling or misapplication. This guarantee is limited to repair or replacement only and does not include reimbursement for expense of installation, removal of equipment, transportation or any other expenses that may be incurred. Authorization must be obtained from Niland Company in El Paso, Texas before any material is returned.

Niland Company

NILAND COMPANY • P.O. BOX 179 • EL PASO, TEXAS 79902 • TEL: (915) 779-1400 • FAX: (915) 779-3018 • E-MAIL: INFO@NILAND.COM
300 N. GARDEN ST. EL PASO, TEXAS 79902 • TEL: (915) 779-1400 • FAX: (915) 779-3018 • WEB PAGE: HTTP://WWW.NILAND.COM

CCN-21 SERIES CAST POLE & BASE

SCALE: 1"=1'-0"

ORDERING GUIDE

Catalog Code Description: CCN-21-C.TF-ht-top-globe

Name of Base (Core Cast Niland): Diameter of Base (21")
Type of Pole (Tapered Fluted): Height of Pole (None)
Top Style (None): Color (None): Optional Equip. (None)

Post Selection:
Specify pole height from bottom of base.
Catalog Code Shaft Type Height
CCN-21-CATF- 4.625"-6.5" tapered-fluted 12' & 14'
CCN-21-CITF- 4.625"-6.5" tapered-fluted 12' & 14'

Check Appropriate Boxes for Material

Cast Aluminum Cast Iron

Shaft Options

1/4" Extrusion 4.625"-6.5" Dia./N.T.S.

Optional Pole Accessories

GFI Receptacles (See Accessories Section)
 Banner Arms (See Accessories Section)
 Flag Pole Holders (See Accessories Section)
 Signage (See Accessories Section)

Check Appropriate Boxes for Finish

Black Hand Brushed Green
 Bronze Hand Brushed Gray
 Green Custom BAL 6008

Ordering Instructions
To order, simply follow the format for the Catalog Code. Once the base has been selected, use the base initials to begin your catalog code. The next entry on the code is the diameter of the base. Next, you will choose the type of pole that the product will have whether it is smooth, fluted, tapered fluted etc. The height of the pole is next and it is measured from the bottom of the base. The post top style is next and followed by the globe type. Codes can be found under each item. The code description is:
Base Series-Diameter-Pole Shaft-Height-Top-Globe.

Niland Company

NILAND COMPANY • P.O. BOX 179 • EL PASO, TEXAS 79902 • TEL: (915) 779-1400 • FAX: (915) 779-3018 • E-MAIL: INFO@NILAND.COM
300 N. GARDEN ST. EL PASO, TEXAS 79902 • TEL: (915) 779-1400 • FAX: (915) 779-3018 • WEB PAGE: HTTP://WWW.NILAND.COM

ANCHOR BASE FOUNDATION PLAN NOT TO SCALE

SECTION A-A

TOP VIEW

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.

DETAIL "C"

ANCHOR BOLT TIE ROD

REV.	ALTERATION	DATE	BY

SPECIFICATIONS

CATALOGUE NO: K13 CAPITAL ONLY
 ROTOLOCK S/F 3" LONG TENON

QUANTITY: 16

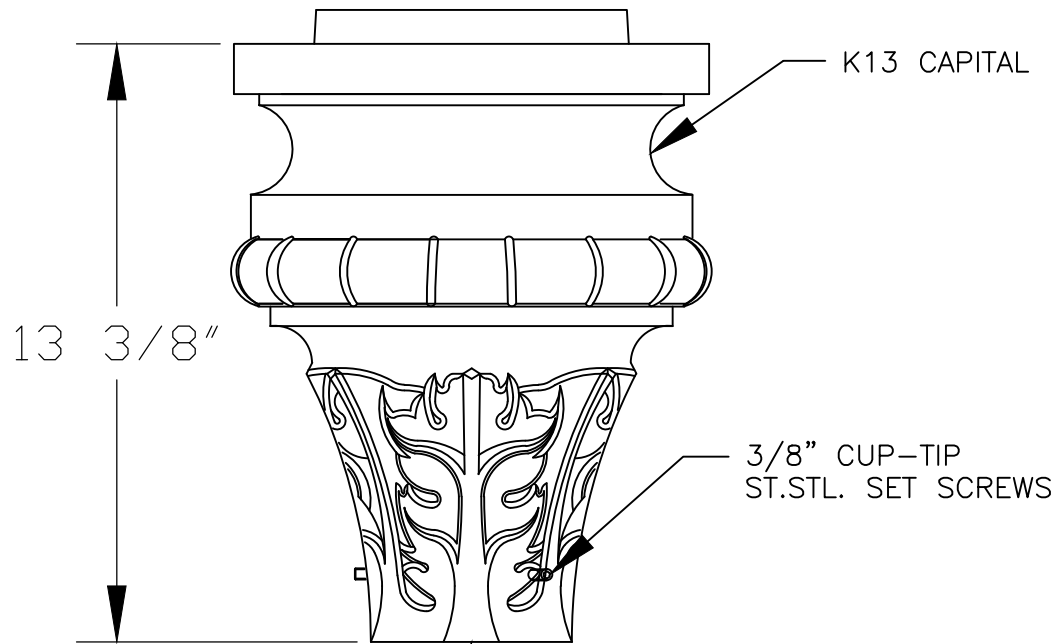
OPTICAL SYSTEM: -

IES CLASS: -

PAINT: TEXTURED RAL 6008

OPTIONS: S/F K118R-T1AR



NOTE: REFERENCE EXISTING DWG: KUS-1908047-1



CUSTOMER APPROVAL & DATE: _____

TO FIT OVER
 3 1/2" O.D. TENON
 X 3" LONG

CUSTOMER ORDER No: COMPLAINT CF-750 /
KING MFG. ORDER No: -
KING U.S. ORDER No: KUS-1911025

 		<i>Manufacturing Locations:</i> Burlington, Ontario 1-800-268-7809 Northport, Alabama 1-800-435-6563 Atchison, Kansas 1-800-837-1024 Jefferson, Ohio 1-800-268-7809	
King Luminaire • StressCrete • Est. 1953 STRESSCRETE GROUP			
PROJECT/CUSTOMER: CITY OF DETROIT - JOSEPH CAMPAU STREETScape - COPIED PHASE			
DRAWN BY: PMISTRY	AT: SC1	CHECKED BY:	DATE: 11/26/19
DRAWING TYPE: APPROVAL/MFG. DWG.		REVISION:	
DRAWING NUMBER: KUS-1911025-1			



K118 - WASHINGTON ACORN

The King Luminaire Washington Fixture is a beautiful depiction of this street light classic. The historical accurate acorn shape teamed with King's high performance LED engines makes for a perfect solution for city streets, parks, schools and commercial areas.

PROJECT: _____
PREPARED BY: _____
DATE: _____



Product Specification

LED ENGINE
Light engine shall be an array of 36, 42, 54 or 63 solid state Cree XPG2 light emitting diodes mounted to a multi-sided, vertical heat sink of highly conductive aluminum. The LED emitters are mounted to removable circuit boards such that they are in full thermal contact with the vertical heat sink. The vertical heat sink is open at the bottom and vented at the top to provide appropriate "dynamic airflow" cooling for the LED array. The emitters are arranged in various patterns on each face of the vertical heat sink to provide the required light distribution.

The globe assembly is a self-contained unit consisting of the globe, rugged cast locking ring, and the LED light engine and optical baffles. The LED light engine is of a modular design, and is able to be quickly removed from the globe assembly. The globe assembly is secured to the main housing by means of a spring-tensioned, twist-locking "roto-lock" unit to allow tool-less removal of the globe, while maintaining a secure seal between the globe assembly and the main body of the luminaire, making the K118 Washington Luminaire suitable for an outdoor environment.

LUMEN MAINTENANCE
Reported (TM21) and Calculated (LT0) reports are available upon request with a minimum calculated value of 50,000hrs.

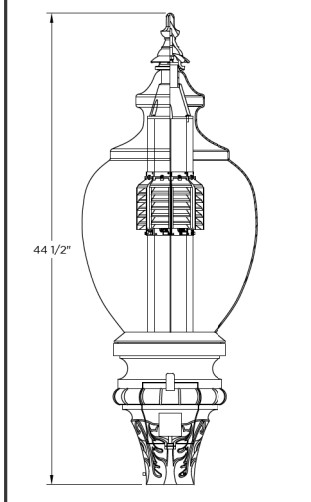
WIRING
All internal wiring and connections shall be completed so that it will be necessary only to attach the incoming supply connectors to Mate-N-Loc connectors or to a terminal block. Mate-N-Loc shall be certified for 600V operation. Internal wire connectors shall be crimp connector only and rated at 1000V and 150C. All wiring to be CSA certified and/or UL listed, type SFF-2, SEWP-2, or SEW-2 No. 14 gauge, 150C, 600V, and color coded for the required voltage.

THERMALS
Fixtures tested by a DOE sanctioned test facility to determine the maximum In-Situ solder-point or junction-point temperatures of the LED emitters. This report will be made available.

FINISH
Housing is finished with a 13 step kingcoat™ SuperDurable polyester TGIC powder coat. Standard colors include strobe white, brown metal, marina blue, gale grey, Chicago bronze, standard gold, federal green and rain forest. RAL and custom color matches are available. Please see the King Color selector for complete list of colors.

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

WARRANTY
K118 Washington fixtures come with a 7 year limited warranty.



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

DRIVER INFO:
>0.9 Power Factor
<20% Total Harmonic Distribution
120 - 277V or 277 - 480V
35°C Minimum Temperature
65°C Maximum Ambient Operating Temperature
20kV Surge Protection

EPA:
160 sq. ft.
FIXTURE WEIGHT:
46 lbs.

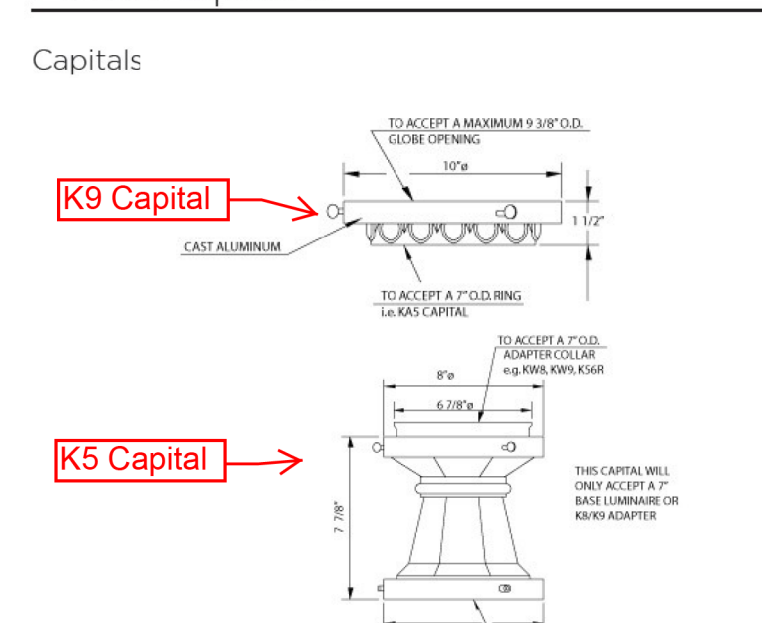


WASHINGTON ACORN - K118

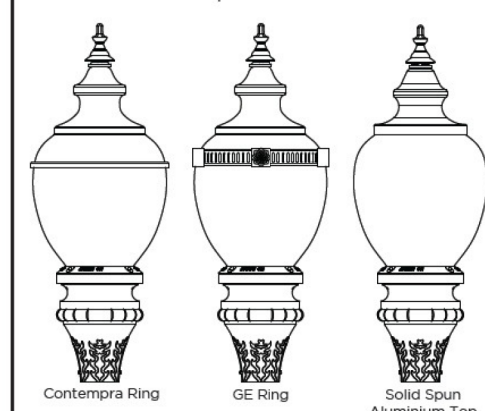
Power & Lumens

33	32	31							
3rd Generation Baffled Array	2nd Generation Baffled Array	1st Generation Baffled Array							
Catalog Code	Input Watts	Voltage/InA	Series	IES	CCT	BUG	Lumens	Efficacy	Application
K118-B200-V-60(SSL)-1036-120	60.56	120/500mA	1036 (36 emitters)	Type IV	4500	BUJ302	4228	69.8	[Icons]
K118-B200-V-75(SSL)-1036-120	82.56	120/667mA	1036 (36 emitters)	Type IV	4500	BUJ303	5429	65.8	[Icons]
K118-B200-V-100(SSL)-1054-120	93.14	120/533mA	1054 (54 emitters)	Type IV	4500	BUJ303	6846	73.5	[Icons]
K118-B200-V-40(SSL)-1042-120	43.66	120/200mA	1042 (42 emitters)	Type II	4500	BUJ301	3454	79.1	[Icons]
K118-B200-V-60(SSL)-1042-120	54.92	120/283mA	1042 (42 emitters)	Type II	4500	BUJ301	3945	53.6	[Icons]
K118-B200-V-75(SSL)-1042-120	69.08	120/525mA	1042 (42 emitters)	Type II	4500	BUJ302	4619	66.9	[Icons]
K118-B200-V-100(SSL)-1063-120	93.54	120/467mA	1063 (63 emitters)	Type II	4500	BUJ302	7317	78.2	[Icons]
K118-B200-V-100(SSL)-1063-120	108.59	120/544mA	1063 (63 emitters)	Type II	4500	BUJ302	7730	71.3	[Icons]
K118-B200-V-75(SSL)-1042-120	71.2	120/525mA	1042 (42 emitters)	Type V	4500	BUJ301	4697	66	[Icons]
K118-B200-V-100(SSL)-1063-120	90.66	120/467mA	1042 (42 emitters)	Type V	4500	BUJ301	4661	91.3	[Icons]
K118-R100-V-75(SSL)-1042-120	68.84	120/525mA	1042 (42 emitters)	Type III	4500	BUJ403	5281	76.7	[Icons]
K118-R100-V-100(SSL)-1063-120	93.79	120/467mA	1063 (63 emitters)	Type III	4500	BUJ403	7144	76.2	[Icons]
K118-T1AR-III-130(SSL) 130.6 120/800mA Type III 4500 B2U5G5 10,589 81.1									

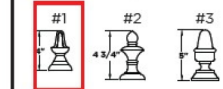
Fixture Options



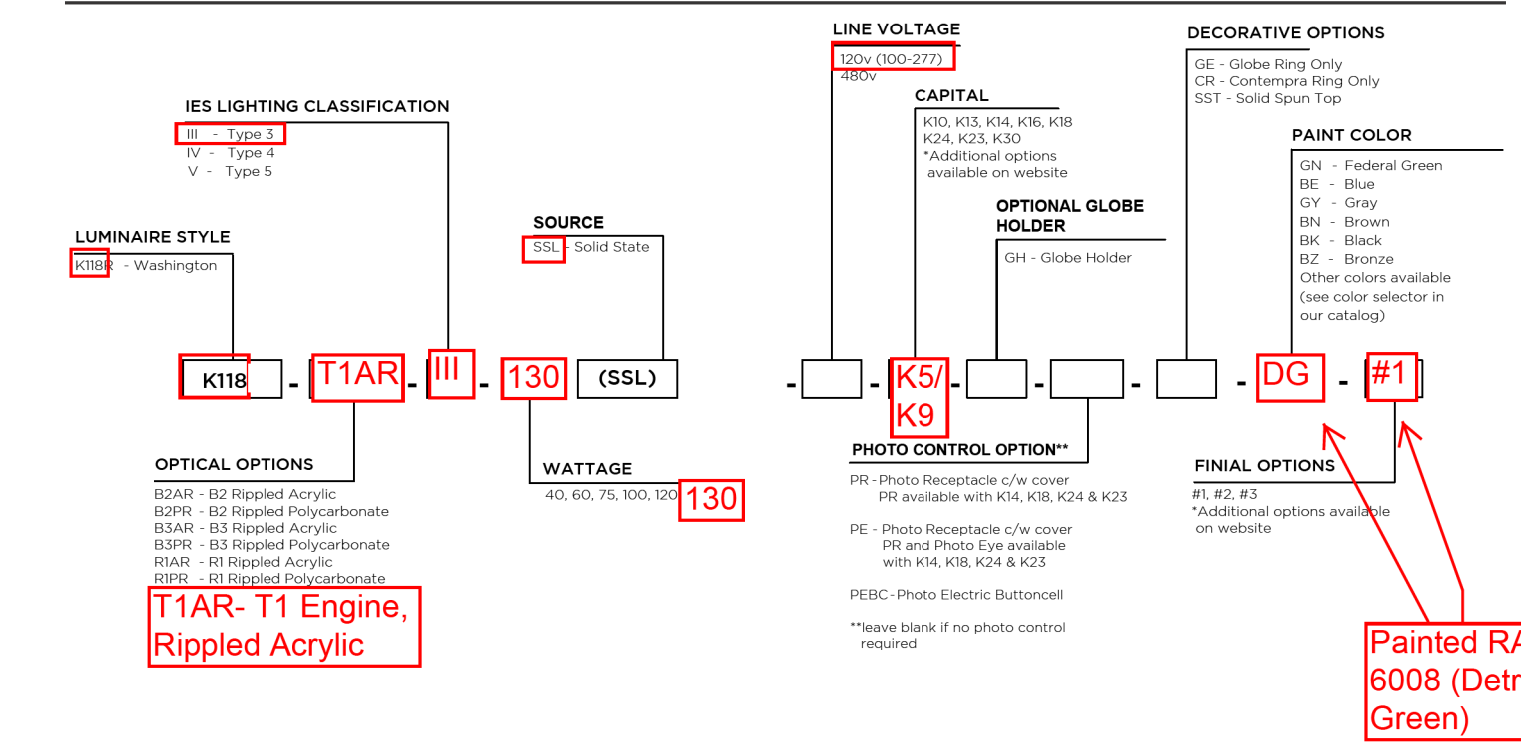
Decorative Options



Final Options



How to Order



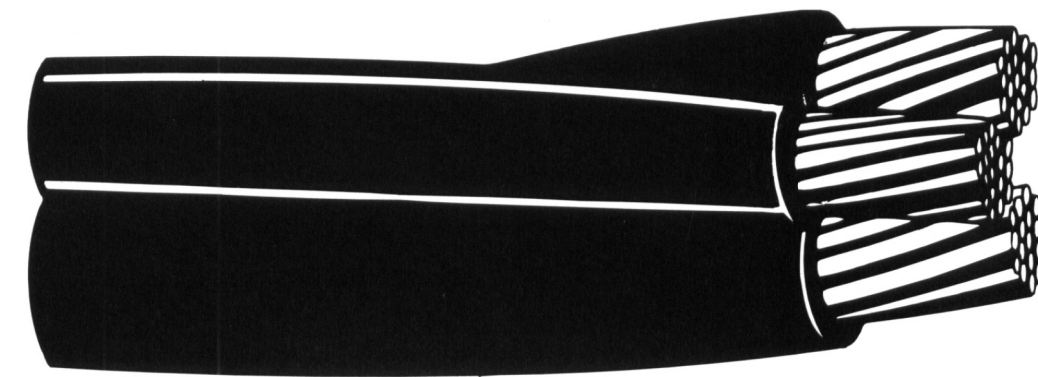
WASHINGTON ACORN - K118

KING LED TECHNOLOGY
KING LUMINAIRE 1153 State Route 46N Jefferson, OH 44047 Phone: 1.800.268.7809 www.kingluminaire.com

16-3 Triplex 600V Secondary UD

Triplex 600V Secondary UD

Aluminum Conductors. Cross-linked Polyethylene (XLP) Insulation.



APPLICATIONS

Used for secondary distribution and underground service at 600 volts or less, either direct burial or in ducts.

SPECIFICATIONS

Southwire's triplex or paralleled 600 volt secondary UD cable meets or exceeds the following applicable ASTM specifications:

- B-230 Aluminum 1350-H19 Wire for Electrical Purposes.
- B-231 Aluminum 1350 Conductors, Concentric-Lay-Stranded.
- B-609 Aluminum 1350 Round Wire, Annealed and Intermediate Tempers, for Electrical Purposes.
- B-901 Compressed Round Stranded Aluminum Conductors Using Single Input Wire.

Southwire's triplex 600 volt secondary UD cable meets or exceeds all applicable requirements of ICEA S-105-692 for cross-linked polyethylene insulated conductors and UL Standard 854 for Type USE-2.

CONSTRUCTION

Conductors are stranded, compressed 1350-H19, H16, or H26 aluminum, insulated with vulcanized interlinked polyethylene (VIP¹). Southwire's cross-linked polyethylene. Neutrals are triple yellow extruded stripe. Cables with "YES" neutrals have sequential footage markers. Conductors are durably surface printed for identification. Two phase conductors and one neutral conductor are cabled together to produce the triplex cable configuration. Conductors are also available paralleled.

¹ VIP is a registered trademark of Southwire Company for cross-linked polyethylene(XLP).



Copyright 2013, Southwire Company. All Rights Reserved.
*Southwire is a registered trademark of Southwire Company.

Wed Feb 17 11:26:14 EST 2010

Page 1 of 2

Triplex 600V

Code Word	Phase Conductor			Neutral			Diameter (mils)		Weight Per 1000 feet (lbs.)	Allowable Ampacities+	
	Size (AWG)	Stranding	Insul. Thick. (mils)	Size (AWG)	Stranding	Insul. Thick. (mils)	Single Phase Cond.	Complete Cable		Direct Burial	In Ducts
TRIPLEXED WITH YELLOW EXTRUDED STRIPE NEUTRAL.											
Erskine	6	7	60	6	7	60	288	644	134	95	70
Vassar	4	7	60	4	7	60	345	745	191	125	90
Stephens	2	7	60	4	7	60	403	870	249	165	120
Ramapo	2	7	60	2	7	60	403	870	278	165	120
Brenau	1/0	9	80	2	7	60	512	1108	387	215	160
Bergen	1/0	9	80	1/0	9	80	512	1108	441	215	160
Converse	2/0	11	80	1	9	80	555	1199	478	245	180
Hunter	2/0	11	80	2/0	11	80	555	1199	535	245	180
Hollins	3/0	17	80	1/0	9	80	603	1302	581	280	205
Rockland	3/0	17	80	3/0	17	80	603	1302	651	280	205
Sweetbriar	4/0	18	80	2/0	11	80	658	1421	709	315	240
Monmouth	4/0	18	80	4/0	18	80	658	1421	796	315	240
Pratt	250	26	95	3/0	17	80	732	1581	853	345	265
Wesleyan	350	37	95	4/0	18	80	831	1795	1118	415	320
Holyoke	500	37	95	300	37	95	980	2117	1545	495	395
Rider	500	37	95	350	37	95	980	2117	1598	495	395

+Ampacity: 90°C conductor temperature, 20°C ambient, RHO 90, 100% load factor for three conductor triplex with neutral carrying only unbalanced load. Technical data for cable with solid black neutral is identical to yellow extruded stripe data except for "YES" suffix to code word. Also available in paralleled construction. For NEC Applications, use NEC Table 310.16 Ampacities.



Copyright 2013, Southwire Company. All Rights Reserved.
*Southwire is a registered trademark of Southwire Company.

Wed Feb 17 11:26:14 EST 2010

Page 2 of 2

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,

Revised March 12, 2018

The Power of Connections.™



Southwire®

©2015 Southwire Company, LLC. All rights reserved. ®Registered Trademark and ™Trademark of Southwire Company, LLC. One Southwire Drive, Carrollton, GA 30118, USA

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

Conductor Size (AWG or kcmil)	No. of strands	Insulation Thickness (mils)	Jacket Thickness (mils)	Nominal O.D. (mils)	Net Wt. Per 1000' (lbs.)	Allowable Ampacities*			Standard Package
						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 340.4(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.H(1)

Package Codes
A-507
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.

Revised March 12, 2018

The Power of Connections.™



Southwire®

©2015 Southwire Company, LLC. All rights reserved. ®Registered Trademark and ™Trademark of Southwire Company, LLC. One Southwire Drive, Carrollton, GA 30118, USA

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

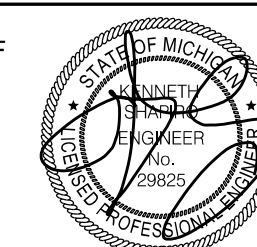
Revised March 12, 2018

The Power of Connections.™



Southwire®

©2015 Southwire Company, LLC. All rights reserved. ®Registered Trademark and ™Trademark of Southwire Company, LLC. One Southwire Drive, Carrollton, GA 30118, USA



REVISIONS	DATE:	DESCRIPTION:
	2019-05-03	CED REVISIONS
	2019-05-07	CODE UPDATES
	2019-05-08	ADDITIONAL PAY ITEMS



TRON® In-Line Fuse Holders

HEB Series Single-Pole Breakaway & Non-Breakaway for 1/32" x 1 1/2" Fuses



Non-Breakaway Fuse Holders

See page 2 for breakaway holders
Catalog Symbol: HEB
Description:
 Water resistant, single-pole non-breakaway in-line fuse holders for 1/32" x 1 1/2" midgest fuses. Typical fuse types: BAF, DCM, FNM, FNQ AND KTK.
Ratings:
 Volts: 600V (or less)
 Amps: Up to 30A*

Agency Information:
 (1)UL Recognized, Guide IZLT2, File E14853
 (2)CSA Certified, Class 6225-01, File 47235
 (3)ICE

Coupling Nut Torque: 10-20lb-in.
Part Number Explanation
 Example: HEB-AK
 • HEB = Holder series
 • A = Loadside terminal (copper crimp for #12 copper wire)
 • K = Lineside terminal (copper setscrew for two #6 copper wires)

Part Number Selection
 From the table on page three, select the combination of desired loadside and lineside terminals for the application (define terminal type, wire size, number of wires per terminal and whether the terminal accepts solid and/or stranded conductors). Then in the right hand two columns, select either the non-breakaway or breakaway holder part number to order.

Available Part Numbers
 HEB-AA(1) (2) (3), HEB-AB(2), HEB-AC(2), HEB-AD(2), HEB-AE(2), HEB-AJ, HEB-AK, HEB-AL, HEB-AR, HEB-AY, HEB-BA(1), HEB-BB(2), HEB-BC(2), HEB-BD(2), HEB-CC(2), HEB-CD(2), HEB-J, HEB-JK, HEB-JL, HEB-JY, HEB-LL, HEB-NN, HEB-PP(2), HEB-QQ(2), HEB-RR(2), HEB-SS, HEB-TT(2), HEB-ZA.

Insulating Boots
 For insulating boots, see page 2. Insulating boots are not included with non-breakaway holders and must be ordered separately. They come standard with the breakaway holders. When insulating boots are utilized, extra heat retention requires that fuses are sized at a minimum of 200% of the RMS load current.

*Amp rating limited by conductor size.

Breakaway Fuse Holders

Catalog Symbol: HEB
Description:
 Single-pole breakaway in-line fuse holders for 1/32" x 1 1/2" midgest fuses. Typical fuse types: BAF, DCM, FNM, FNQ AND KTK.
Ratings:
 Volts: 600V (or less)
 Amps: Up to 30A*

Agency Information:
 (1)UL Recognized, Guide IZLT2, File E14853
 (2)CSA Certified, Class 6225-01, File 47235
 (3)ICE

Coupling Nut Torque: 10-20lb-in.
Part Number Explanation
 Example: HEB-AW-RYC
 • HEB = Holder series
 • AW = Loadside terminal (copper crimp for #12 copper wire)
 • RYC = Lineside terminal (copper setscrew for two #6 copper wires)

Part Number Selection
 From the table on page three, select the combination of desired loadside and lineside terminals for the application (define terminal type, wire size, number of wires per terminal and whether the terminal accepts solid and/or stranded conductors). Then in the right hand two columns, select either the non-breakaway or breakaway holder part number to order.

Available Part Numbers
Breakaway Units:
 (Includes fuse holder, breakaway part and insulating boots):
 HEB-AW-RLA, HEB-AW-RLC-A(1) (2) (3), HEB-AW-RLC-B, HEB-AW-RLC-C, HEB-AW-RLC-J, HEB-AW-RYA, HEB-AW-RYC, HEB-BW-RLC-A, HEB-BW-RLC-B, HEB-BW-RYC, HEB-JW-RLC-J, HEB-JW-RYC, HEB-KW-RLC-J, HEB-KW-RYC, HEB-LW-RLA, HEB-LW-RLC-J, HEB-LW-RYA
Fuse Holder Only: HEB-AW(2), HEB-BW(2), HEB-DW(2), HEB-JW, HEB-LW
Breakaway Part: RLC-A, RLC-B, RLC-C, RLC-J, RYC, RLA, RYA

*Amp rating limited by conductor size.

Specification Data - Lineside Breakaway

Terminal Type	Conductor Data			Catalog Symbol
	Wire Size	No. of Wires per Terminal	Terminal Style	
Copper Crimp	#12 to #8	1	•	-RLC-A
	#8	1	•	-RLC-B
	#4	1	•	-RLC-C
Copper Setscrew	#12 to #2	1	••	-RLC-J
	#12 to #3	2	••	-RYC
Aluminum Setscrew	#12 to #2	1	••	-RLA
	#12 to #3	2	••	-RYA
Solid Breakaway	(Required with Breakaway Receptacle)		W	

Part Numbers	Type
2A0660	Single conductor
2A0661	Two conductor

Two insulating boots come standard with the breakaway holders (example: HEB-AW-RLC-A). The insulating boots are not included with the non-breakaway holders (example: HEB-AA) or the individual pieces of the breakaway holders (example: HEB-AW, RCL-A). Two insulating boots must be ordered for each holder when ordering them separately. When insulating boots are utilized, extra heat retention requires that fuses are sized at a minimum of 200% of the RMS load current.

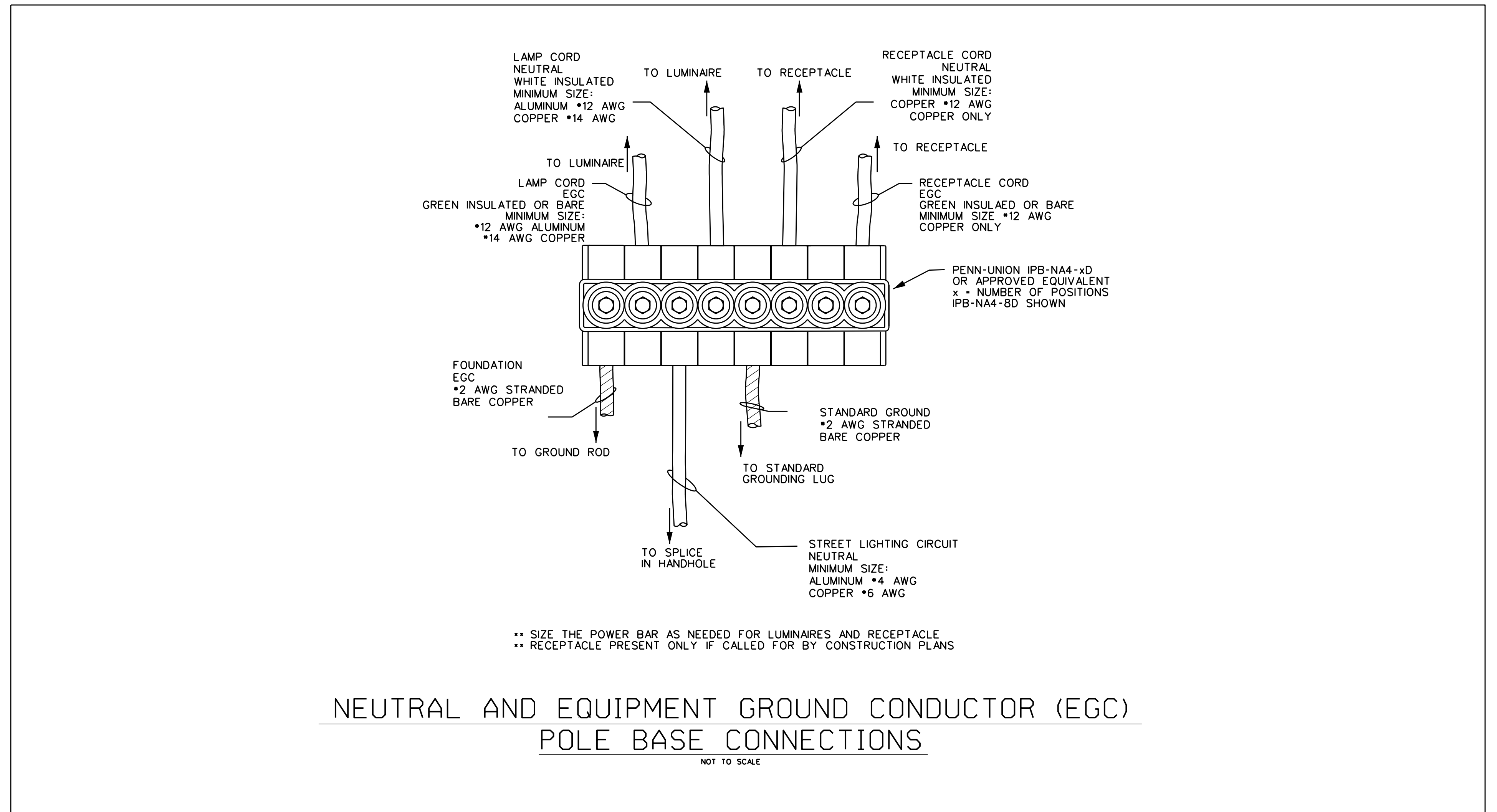
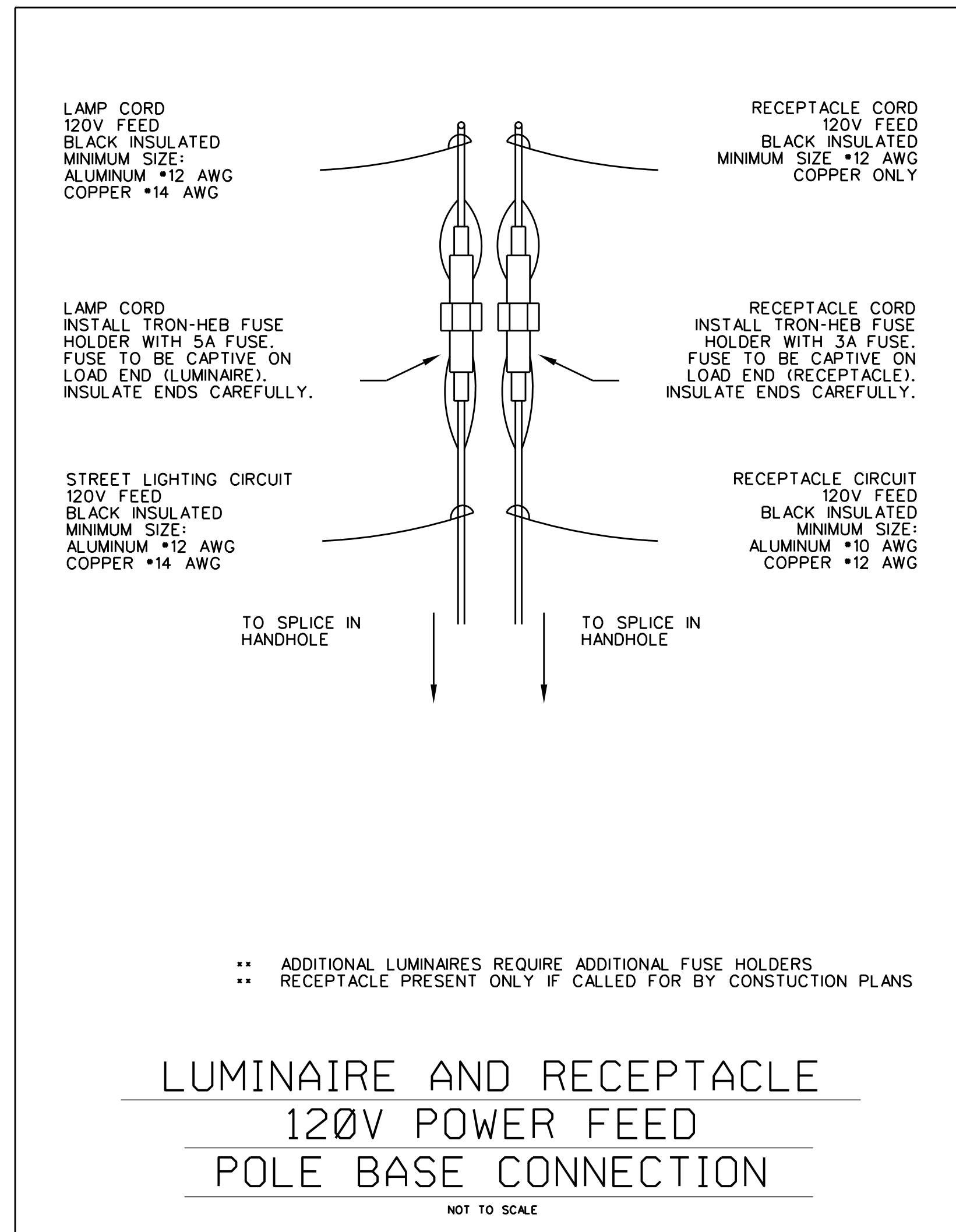
For HEB Holders Only

Directions: To select complete holder P/N, work from left to right starting with loadside terminal options and then lineside terminal options. Then determine breakaway or non-breakaway style.

Terminal Type	Loadside Terminal			Lineside Terminal			Available P/N's	
	Wire Size	No. of Wires per Terminal	Terminal Style	Wire Size	No. of Wires per Terminal	Terminal Style	Non-Breakaway P/N (Boots not included)	Breakaway P/N (Boots included)
Copper Crimp	#12 to #8	1	Y	#12 to #8	1	Y	HEB-AA(1)(2)(3)	HEB-AW-RLC-A(1)(2)(3)
	#12 to #8	2	Y	#12 to #8	2	Y	HEB-AB(2)	HEB-AW-RLC-B
	#12 to #8	1	Y	#12 to #8	1	Y	HEB-AC(2)	HEB-AW-RLC-C(4)
Copper Crimp	#12 to #8	1	Y	#12 to #8	1	N	HEB-AD(2)	N/A
	#12 to #8	2	Y	#12 to #8	2	Y	HEB-AE(2)	N/A
	#12 to #8	1	Y	#12 to #8	1	Y	HEB-AJ	HEB-AW-RLC-J
Copper Crimp	#12 to #8	1	Y	#12 to #3	2	Y	HEB-AK	HEB-AW-RYC
	#12 to #8	1	Y	#12 to #2	1	Y	HEB-AL	HEB-AW-RLA
	#12 to #8	2	Y	#12 to #2	2	Y	HEB-AY	HEB-AW-RYA
Copper Crimp	#12 to #8	1	Y	#12 to #8	1	N	HEB-AR	N/A
	#12 to #8	2	Y	#12 to #8	1	Y	HEB-BA(2)	HEB-BW-RLC-A
	#12 to #8	2	Y	#12 to #8	2	Y	HEB-BB(2)	HEB-BW-RLC-B
Copper Crimp	#10	2	Y	#10	2	Y	HEB-BC(2)	N/A
	#10	2	Y	#10	2	Y	HEB-BD(2)	N/A
	#10	2	Y	#10	2	Y	HEB-CC(2)	N/A
Copper Crimp	#8	2	Y	#8	2	Y	HEB-DD(2)	N/A
	#8	2	Y	#8	2	Y	HEB-ZA	N/A
	#20, #18	1	Y	#12 to #8	1	Y	HEB-JJ	HEB-JW-RLC-J
Copper Setscrew	#12 to #3	1	Y	#12 to #3	1	Y	HEB-JK	HEB-JW-RYC
	#12 to #3	1	Y	#12 to #3	2	Y	HEB-JL	N/A
	#12 to #3	1	Y	#12 to #2	1	Y	HEB-JY	N/A
Aluminum Setscrew	#12 to #2	1	Y	#12 to #2	1	Y	HEB-LL	HEB-LW-RLA
	#12 to #2	1	N	#8	1	N	HEB-NN	N/A
	#6	1	N	#6	1	N	HEB-PP(2)	N/A
Aluminum Crimp	#6	1	N	#6	1	N	HEB-QQ(2)	N/A
	#4	1	N	#4	1	N	HEB-RR(2)	N/A
	#3, #4	1	N	#2	1	N	HEB-TT(2)	N/A
Aluminum Crimp	#1, #2	1	N	#10	1	N	HEB-SS	N/A
	#10	1	N	Solid Terminal for aluminum connector	#8 to #12	1	Y	N/A
	Solid Terminal for aluminum connector	#10 to #14	1	N	Solid Terminal for aluminum connector	#10 to #14	1	N

Contact your local Cooper Bussmann representative for other possible terminations not listed.

The only controlled copy of this Data Sheet is the electronic read-only version located on the Cooper Bussmann Network Drive. All other copies of this document are by definition uncontrolled. This bulletin is intended to clearly present comprehensive product data and provide technical information that will help the end user with design applications. Cooper Bussmann reserves the right, without notice, to change design or construction of any products and to discontinue or limit distribution of any products. Cooper Bussmann also reserves the right to change or update, without notice, any technical information contained in this bulletin. Once a product has been selected, it should be tested by the user in all possible applications.



LUMINAIRE IDENTIFICATION TAG

1-23-452 1995 LINE CONSTRUCTION STANDARDS 1995 1-23-452

23-STREET LIGHTING

TYPICAL 1/2" NUMBERS FABRICATED ON ALUMINUM TAPE

LAMP SIZE AND SERIAL No. TAG (IDENTIFICATION ONLY)

TYPICAL TAG FOR NEW CONSTRUCTION & MAINTENANCE

STREET LIGHT MARKING TAGS

TAGS (ALUMINUM)		CHARACTER PLATE	
LETTER	Ed. No. 822-822	LETTER	Ed. No. 822-822
A	0413	1	0470
B	0414	1	0471
C	0415	1	0472
D	0416	1	0473
E	0417	1	0474
F	0418	1	0475
G	0419	1	0476
H	0460		
I	0411	1	0485
J	0461	1	0487
K	0462	1	0489
L	0463	1	0491
M	0464	1	0490
N	0465	1	0491
O	0466	1	0492
P	0467	1	0493
Q	0468	1	0494
R	0469	1	0495
S	0469	1-1	0496

NOTES:

1. PROPER FASTENERS MUST BE ORDERED: FOR WOOD POLES USE PIN NAILS (Ed. No. 284-0091); FOR METAL POLES USE DRIVE SCREWS (Ed. No. 255-0600).
2. LAMP DESCRIPTIONS ARE ON PAGES 1-23-439 AND 440.
3. TAG POSITIONS ARE SHOWN ON PAGES 1-23-439, 440 AND 300.
4. STOCK NUMBERS FOR TAG LETTERS, NUMBERS AND CHARACTER PLATES ARE SHOWN ON THE ADJACENT CHARTS.

CONSOLIDATED INDUSTRIES 2019-05-08 11:00 AM

CABLE IDENTIFICATION

FASTTAGS™ MINIATURE MARKERS

The most versatile marking system available
Designed for ease of use, visibility and legibility

No matter what it is that you have to identify, **FASTTAGS** can do it. The three dimensional tags create remarkably contrasting characters that remain legible in the most adverse conditions, even if they are painted over. The highly raised characters make these tags ideal for oily, dusty or dimly lit environments. The UV stabilized, hot stamped foil assures long term legibility.

Tags and Holders at Actual Size

Each card has 25 of the same character

The same tags and holders can be used for both vertical or horizontal applications eliminating the need for dual inventories. The holders can be mounted using cable ties, nails, screws or adhesive, making the applications endless.

The tags are available with yellow or orange background colors, are non conductive and non corroding. Assembling the polymer tags into the holder is a breeze, no more fumbling and frustration.

See Reverse for Handy Tagging Kit

Please Turn →

Cable Tagging Nomenclature

PLA26W5AA1

PLA = Public Lighting Authority

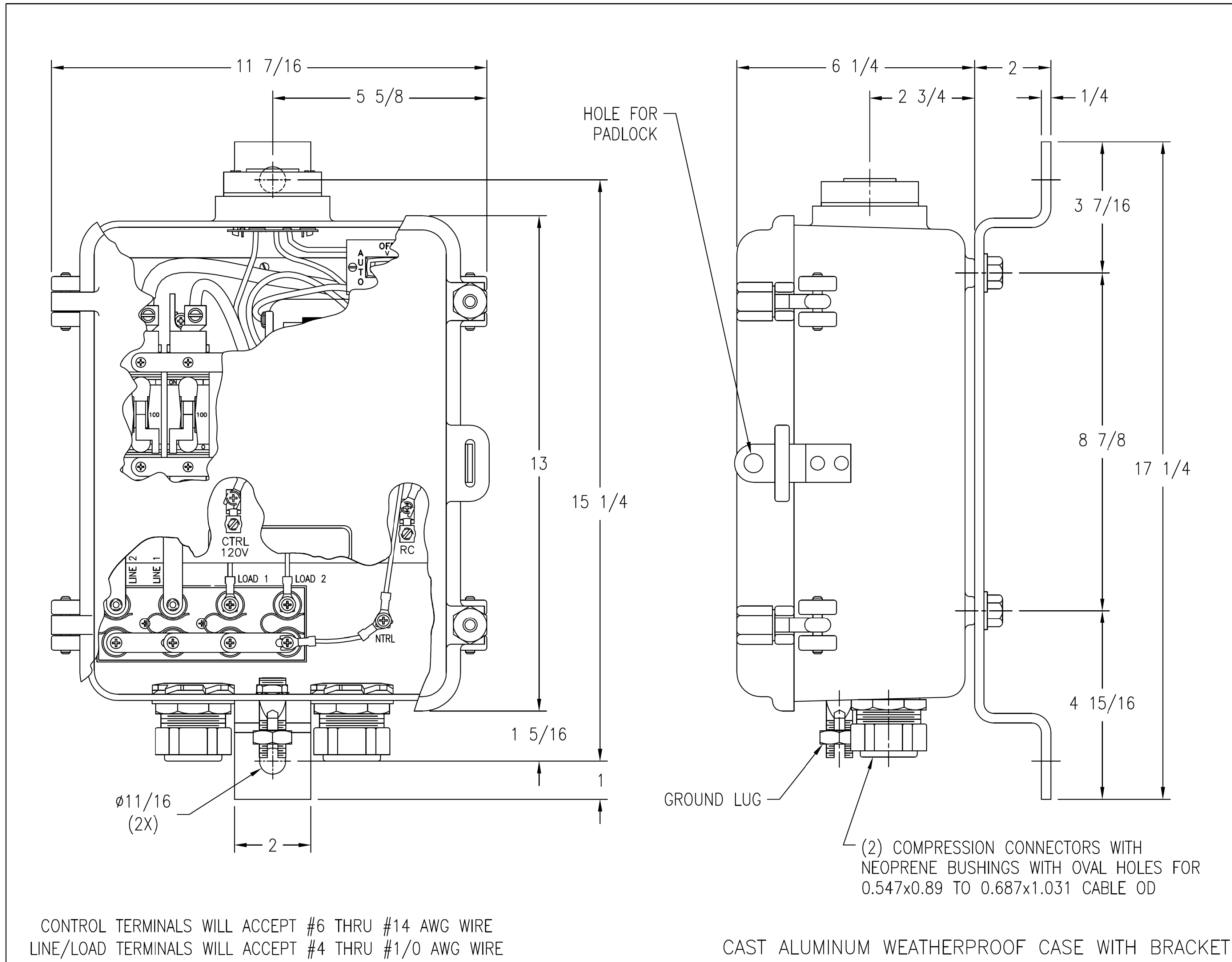
26W5A = LC number

- 26 = Last two digits of ZIP Code (i.e. 48226)

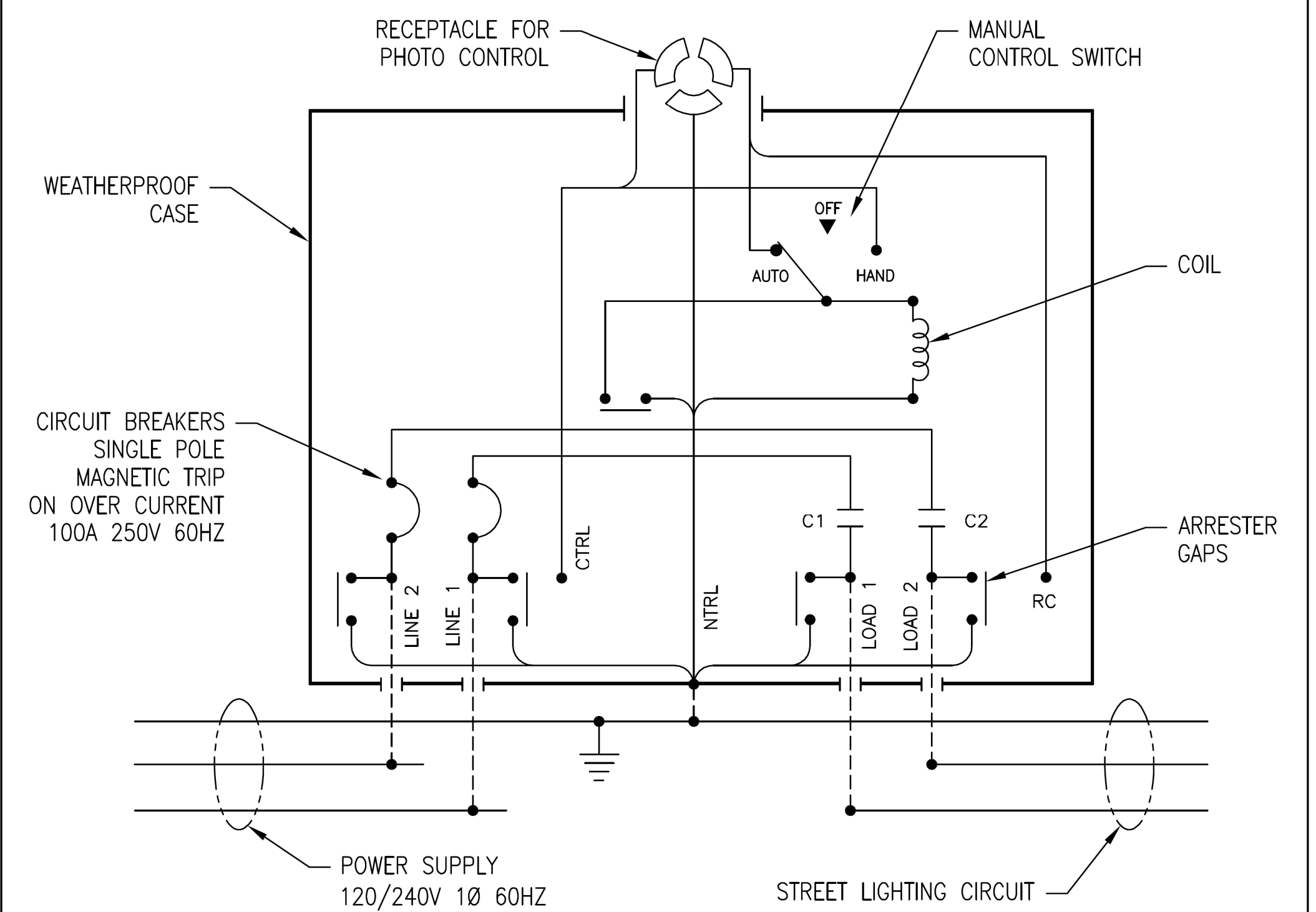
- W = Design group, Wade Trim / CEA

- 5A = Unique Light Control (LC) number

A1 = Circuit Number



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.

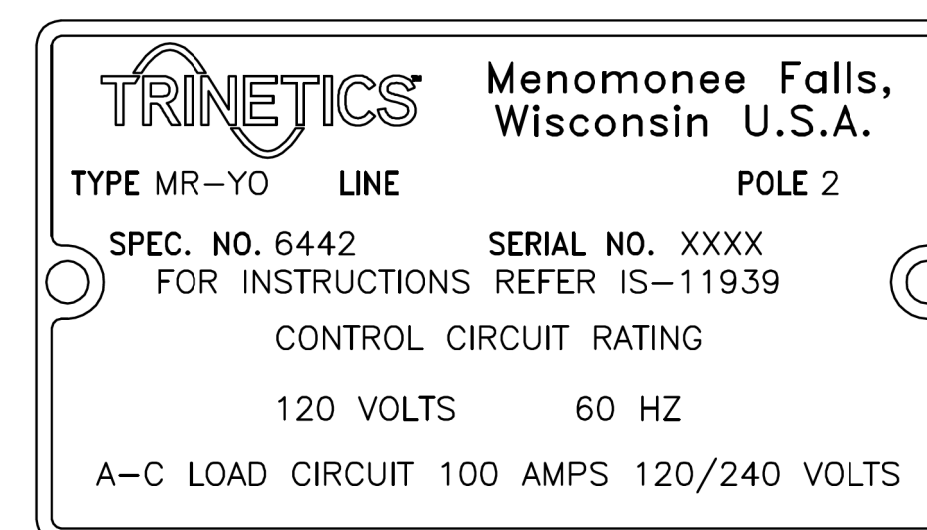
THE LOCATION OF THE PHOTO CONTROL UNIT MAY BE EITHER AT THE CONTROL ASS'Y AND PLUGGED INTO THE RECEPTACLE PROVIDED FOR SAME, OR AT A REMOTE POINT SUCH AS AN AUXILIARY PHOTO CONTROL MOUNTING ADAPTER OR ANOTHER STREET LIGHT CONTROL ASS'Y.

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.

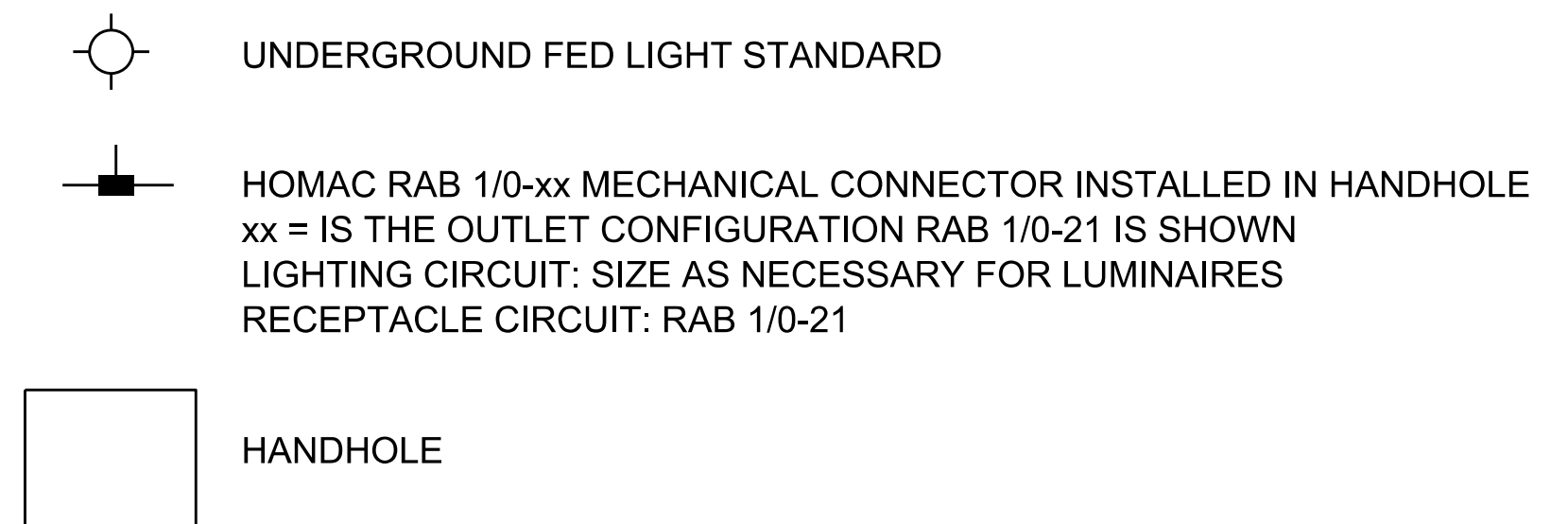
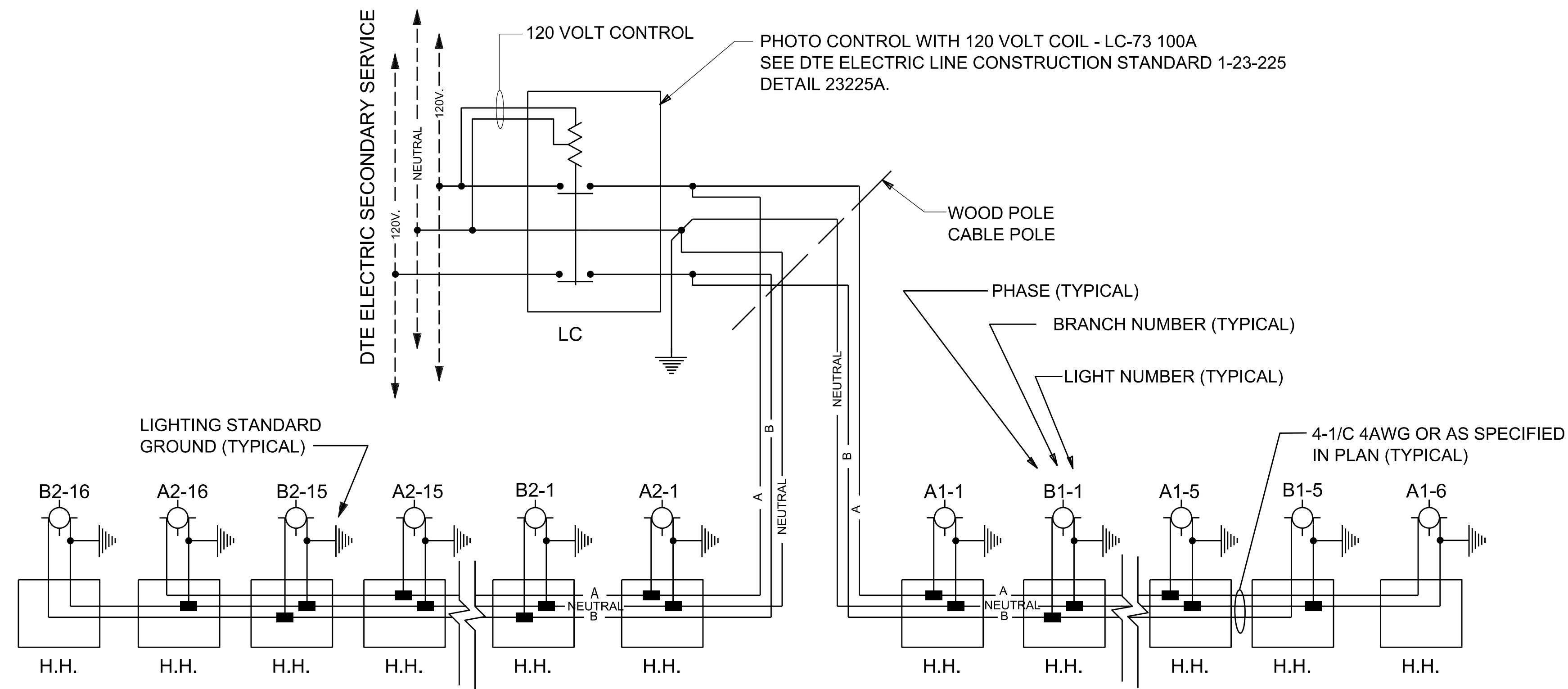
MANUAL CONTROL SWITCH IS SHOWN IN "AUTO" POSITION AND PHOTO CONTROL ESTABLISHES ON-OFF STREET LIGHT OPERATING SCHEDULE. MANUAL CONTROL SWITCH IN HAND OR OFF POSITIONS BY-PASSES PHOTO CONTROL TO PROVIDE, RESPECTIVELY, STREET LIGHT CIRCUIT ON OR OFF OPERATION. REMOTE PC LOCATION OR GANG OPERATION CONNECTIONS 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.

THIS DRAWING AND ALL INFORMATION THEREON IS THE SOLE PROPERTY OF TRINETICS. IT MUST NOT BE COPIED, REPRODUCED OR SUBMITTED TO OTHERS WITHOUT WRITTEN AUTHORIZATION. ALL REPRODUCTIONS ARE SUBJECT TO RETURN ON DEMAND.



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



UNDERGROUND STREET LIGHTING CIRCUIT TYPICAL WIRING SCHEMATIC - OBSOLETE STANDARD
THREE CONDUCTOR WITHOUT EQUIPMENT GROUND CONDUCTOR (EGC)

NOT TO SCALE

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	---

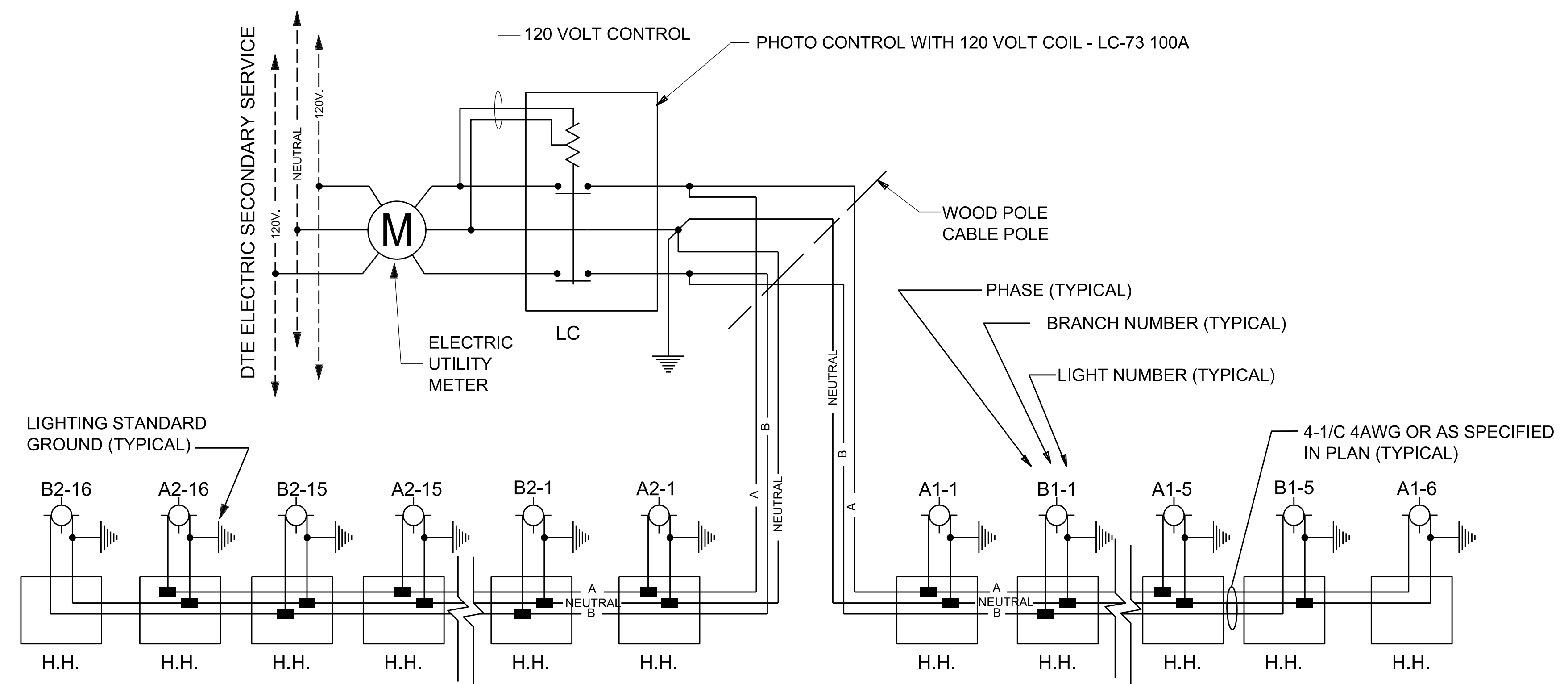
*** WHEN MODIFICATIONS OR ADDITIONS ARE REQUIRED ON OBSOLETE STYLE CONSTRUCTION CIRCUITS, THE CHANGES SHOULD BE MADE WITH THE OBSOLETE STYLE OR THE ENTIRE CIRCUIT MUST BE UPDATED.

*** 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.

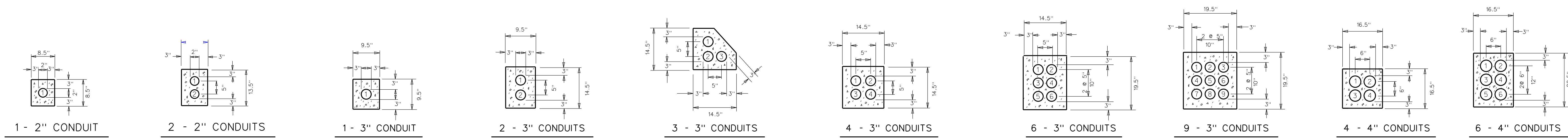
*** PRIOR TO CONNECTING ANY NEW CIRCUIT CABLING TO EXISTING CIRCUIT CABLING, CARE IS TO BE TAKEN BY VERIFYING THE EXISTING CIRCUIT CABLING PHASING TO ENSURE THAT PROPER ELECTRICAL CONNECTIONS ARE MADE. IF THE EXISTING CIRCUIT CABLING IS FOUND TO HAVE IMPROPER PHASE IDENTIFICATIONS THEN THE EXISTING CIRCUIT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



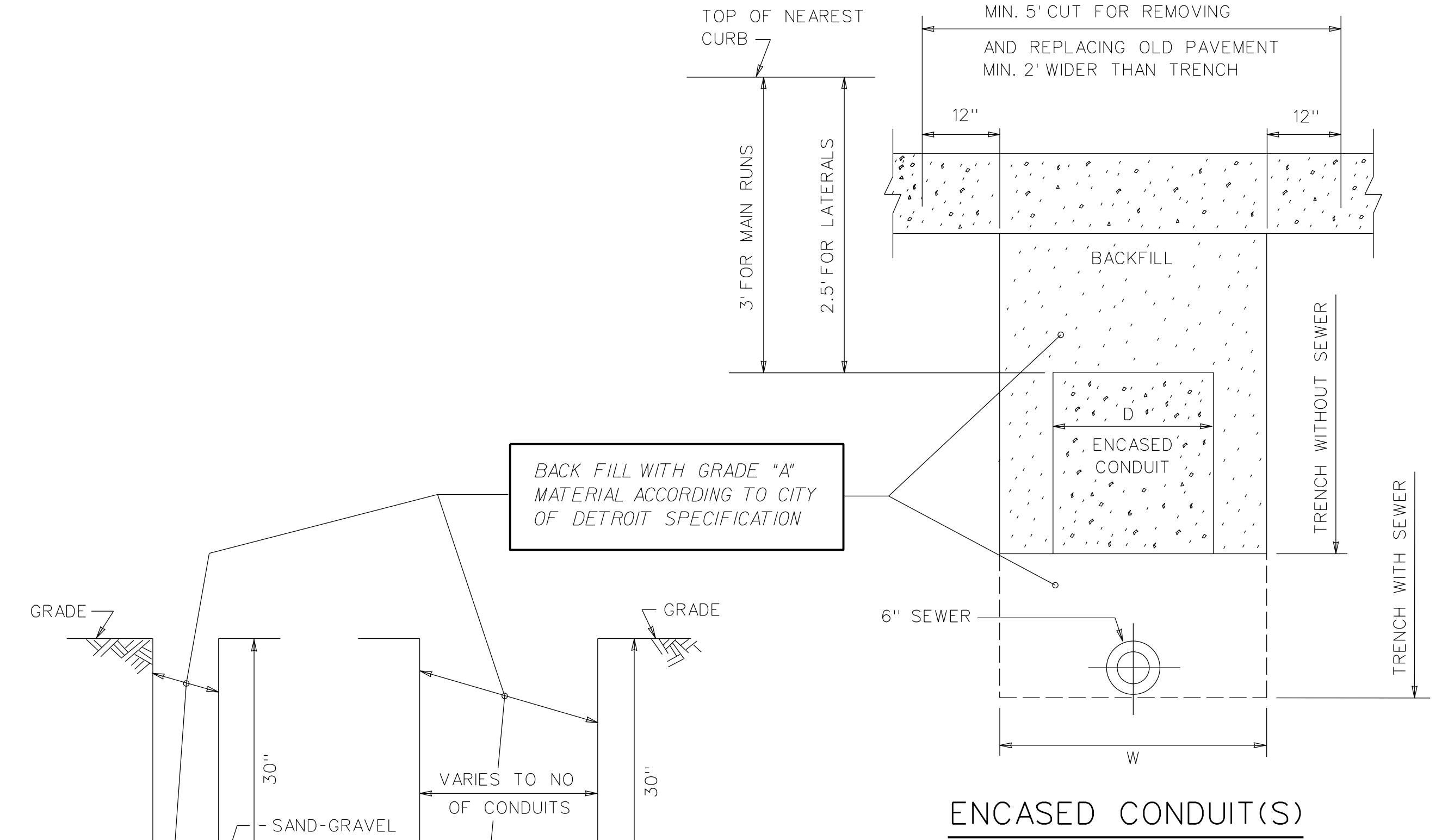
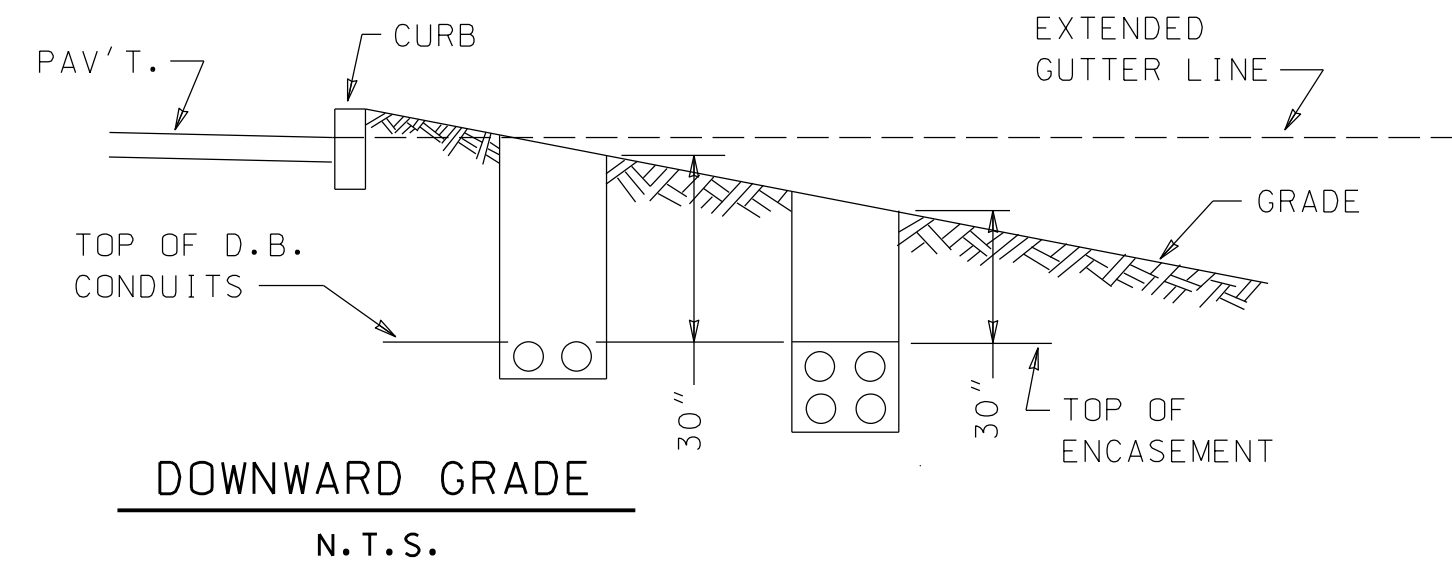
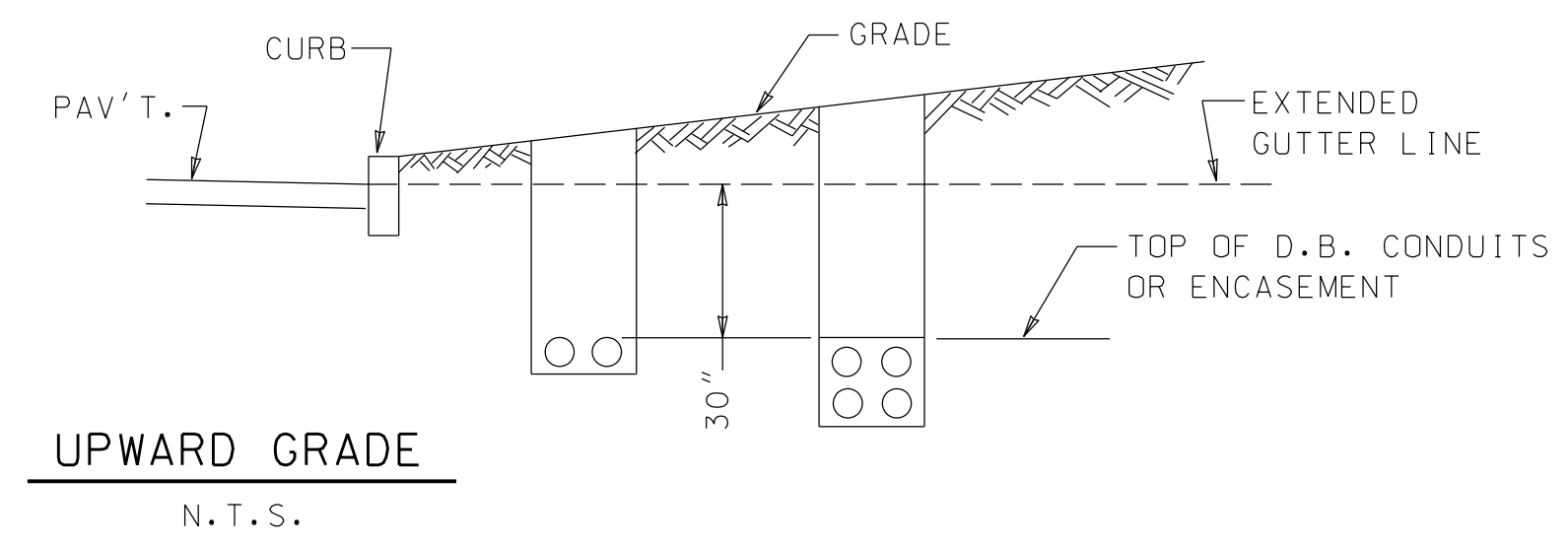
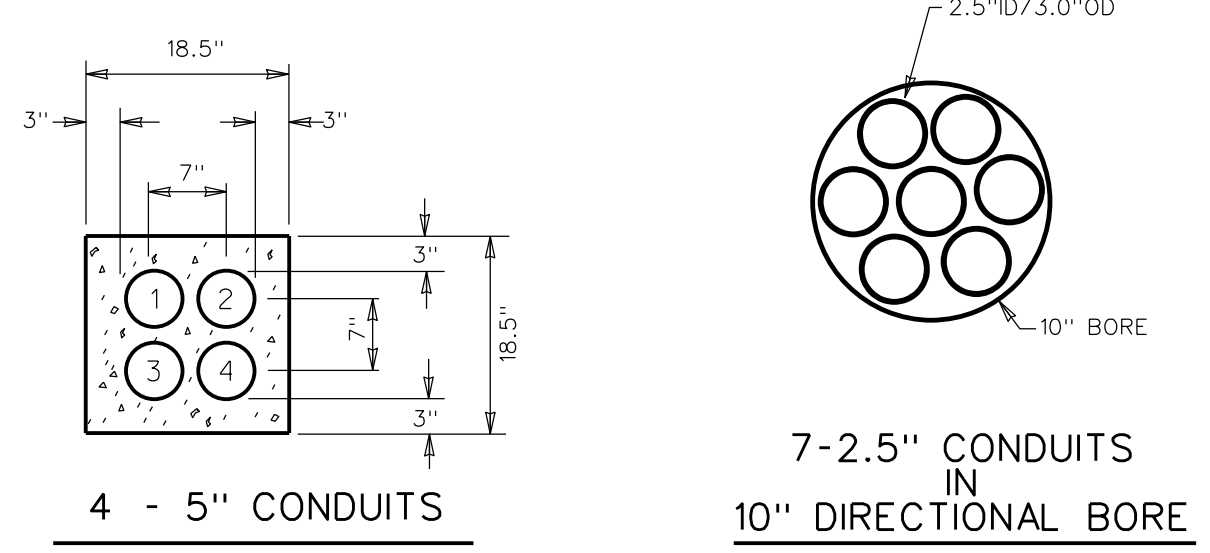
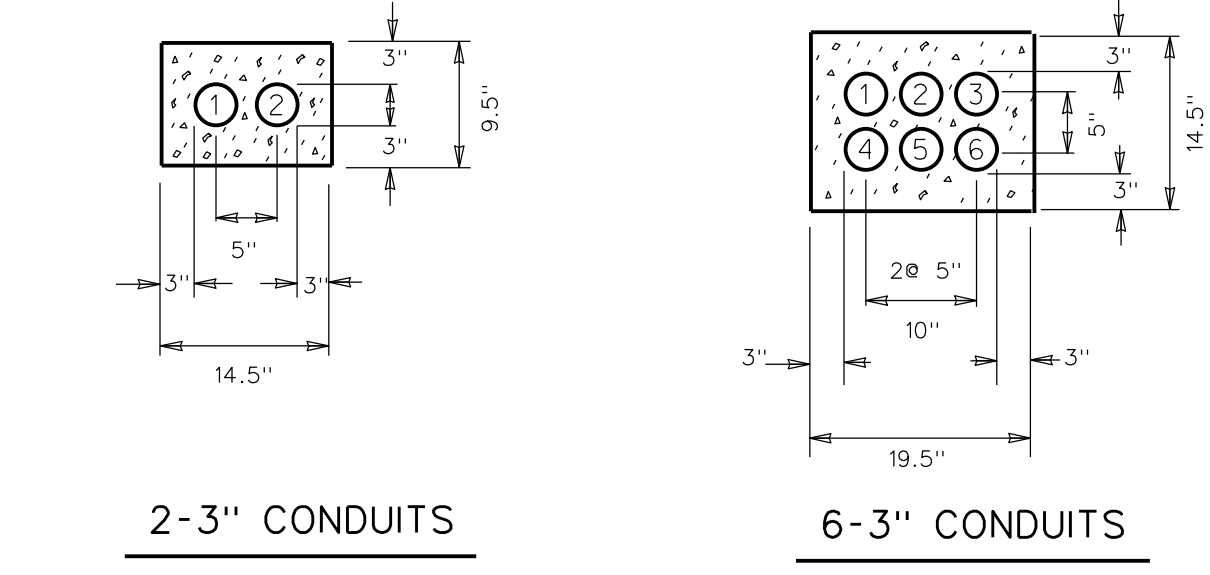
RECEPTACLE CIRCUIT TYPICAL WIRING SCHEMATIC - OBSOLETE STANDARD
THREE CONDUCTOR WITHOUT EQUIPMENT GROUND CONDUCTOR (EGC)

NOT TO SCALE



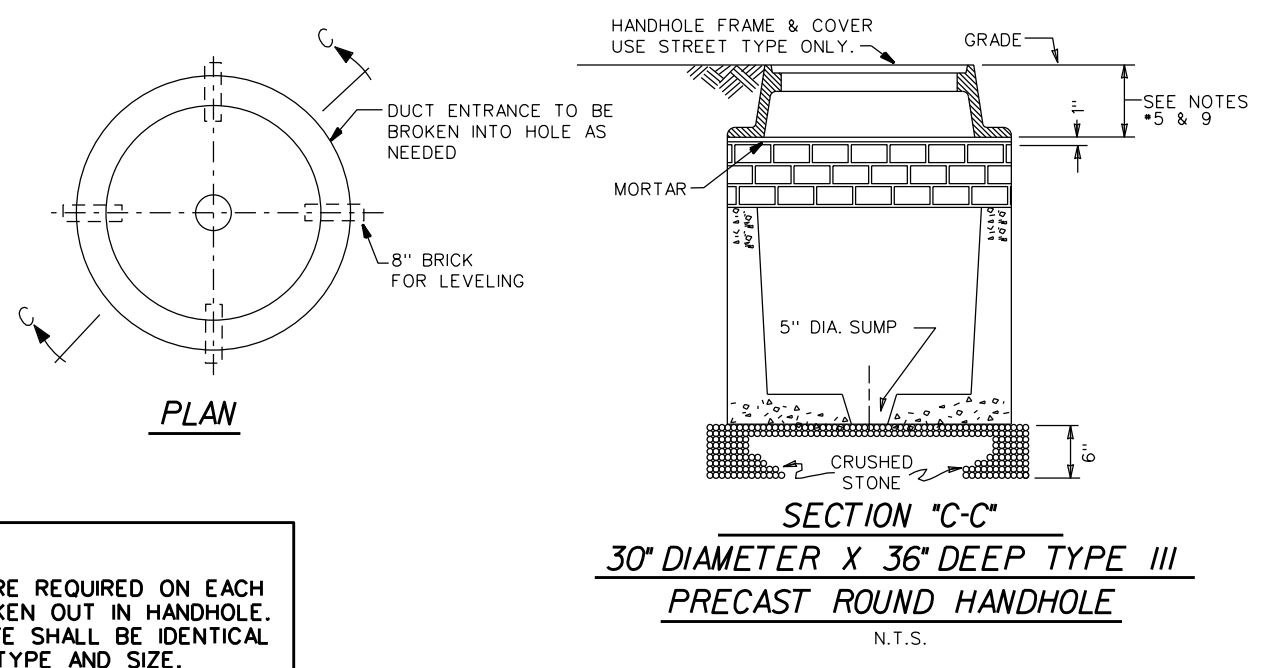
ALTERNATE ARRANGEMENT OF 3" CONDUIT

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

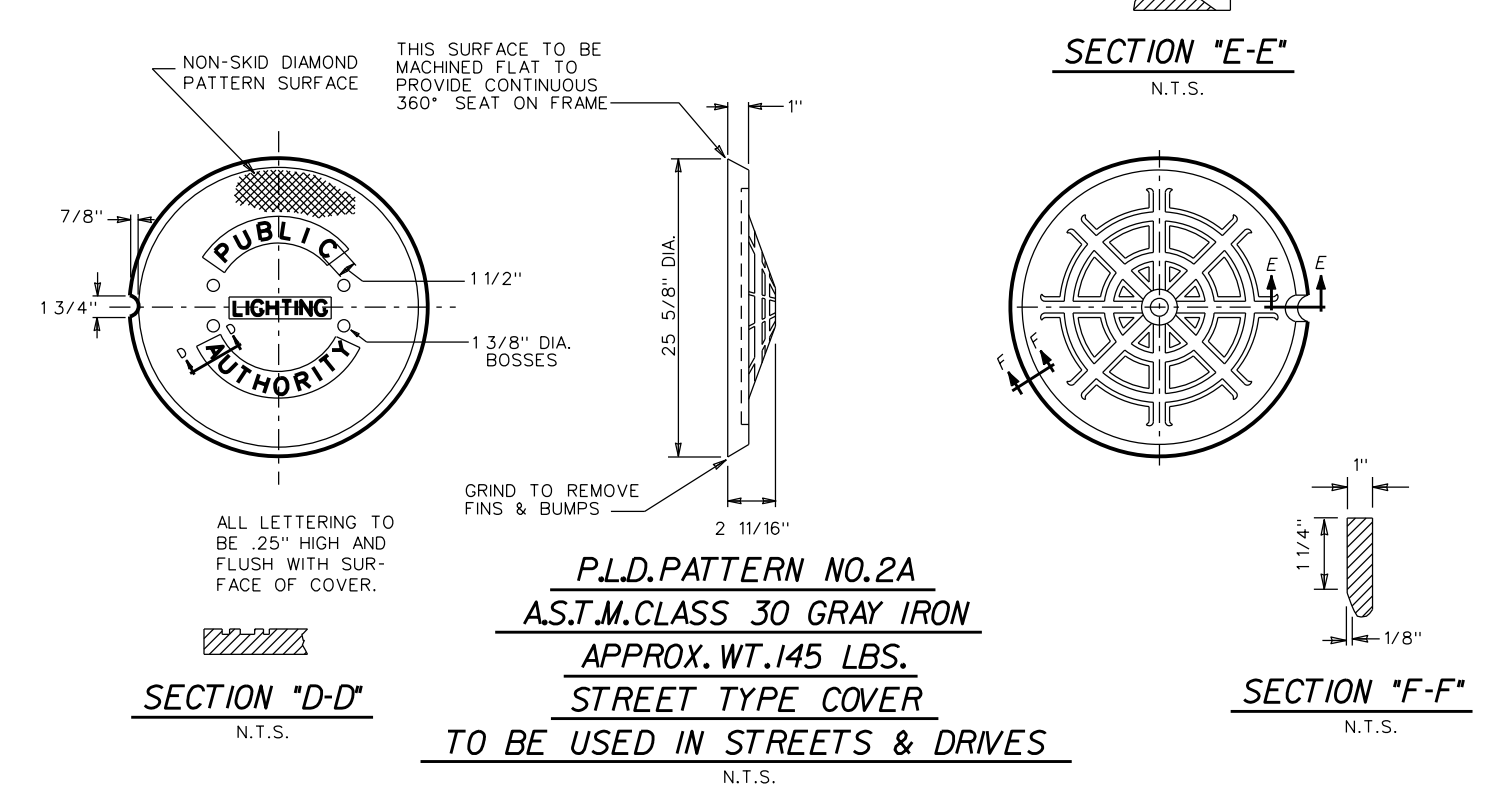
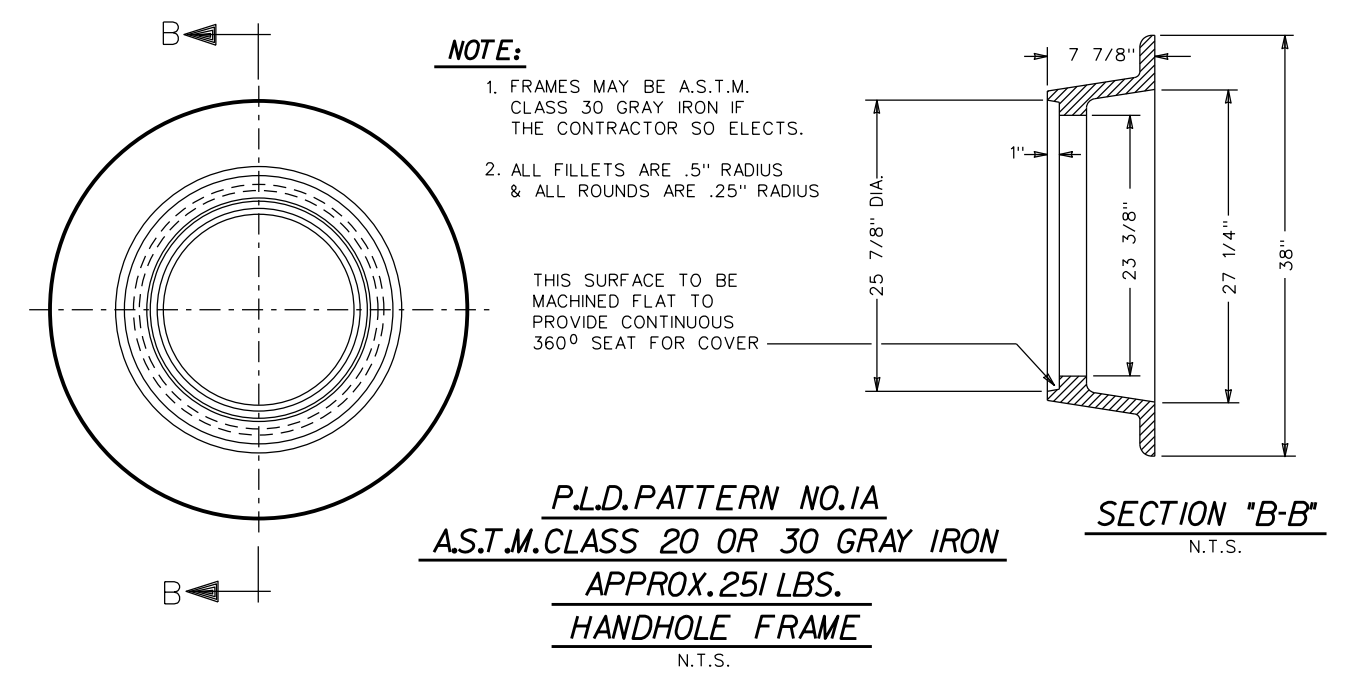


NOTE:
THE PREFERRED TRENCH WIDTH "W" IS THE WIDTH OF "D" OF CONDUIT ENCASEMENT.

ROUND PRECAST HANDHOLE DETAILS



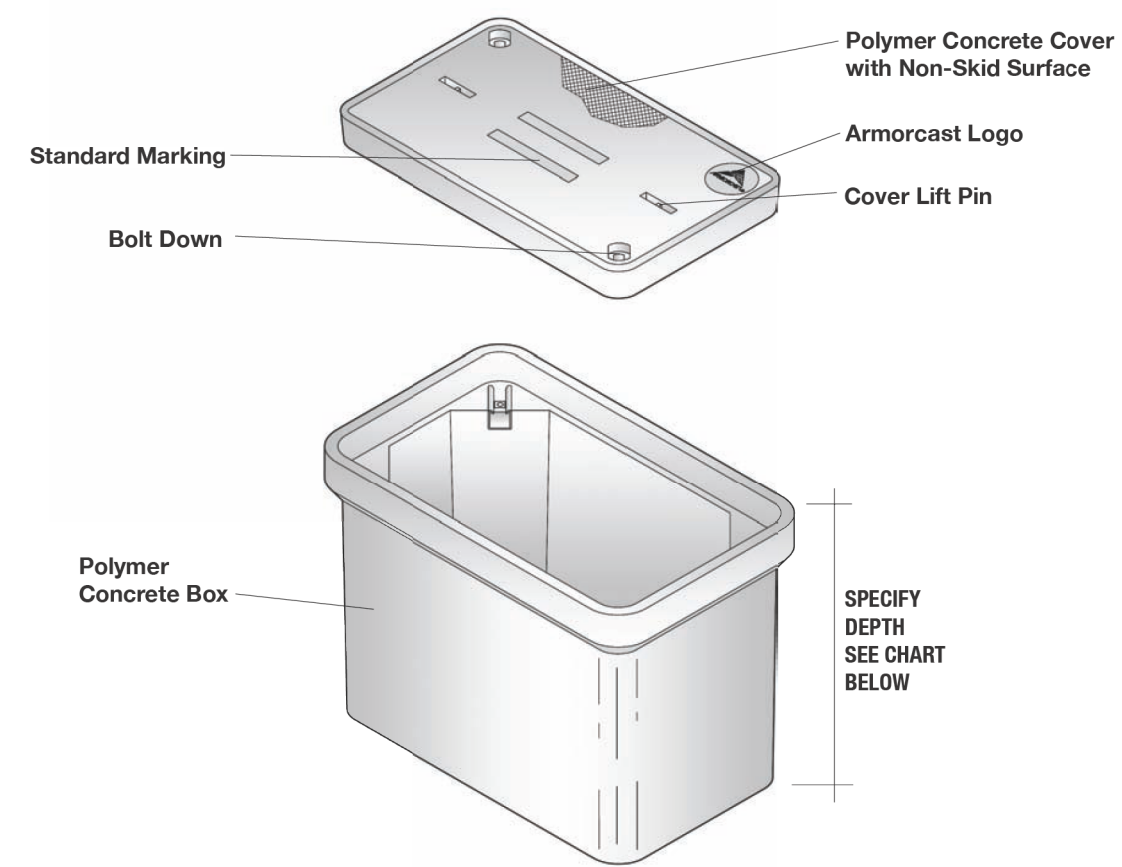
NOTE:
BELL ENDS ARE REQUIRED ON EACH CONDUIT BROKEN OUT IN HANDHOLE. TYPE AND SIZE SHALL BE IDENTICAL TO CONDUIT TYPE AND SIZE.



13" x 24" BOX ASSEMBLY 12" to 24" DEPTHS



POLYMER CONCRETE ARMORCAST PRODUCTS COMPANY
A6001946



13"W x 24"L BOX ASSEMBLIES Specify Depth Below

DESCRIPTION	NOMINAL SIZE W x L x D	LOAD RATING	ANSI TIER	PART NUMBER	APPROX. WEIGHT	PALLET QTY.
Box & Cover Assembly	13" x 24" x 12"	10K	8	A6001946APCX12	83 lbs.	15
	13" x 24" x 18"	20K	15 / 22	A6001946TAPCX12 / A6001946HDAPCX12	91 lbs.	15
Box & Cover Assembly	13" x 24" x 18"	10K	8	A6001946APCX18	117 lbs.	10
	13" x 24" x 18"	20K	15 / 22	A6001946TAPCX18 / A6001946HDAPCX18	125 lbs.	10
Box & Cover Assembly	13" x 24" x 24"	10K	8	A6001946APCX24	125 lbs.	5
	13" x 24" x 24"	20K	15 / 22	A6001946TAPCX24 / A6001946HDAPCX24	133 lbs.	5

COMPONENTS MORE COVER VARIATIONS ARE AVAILABLE IN OUR "COVER SECTION"

DESCRIPTION	NOMINAL SIZE W x L x D	LOAD RATING	ANSI TIER	PART NUMBER	APPROX. WEIGHT	PALLET QTY.
Replacement Covers	13" x 24"	10K	8	A6001966	33 lbs.	50
	13" x 24"	20K	15 / 22	A6001969 / A6001969HD	41 lbs.	50
Replacement Boxes	13" x 24" x 12"	10K / 20K	8 / 15	A6001946PCX12	50 lbs.	15
	13" x 24" x 18"	10K / 20K	8 / 15	A6001946PCX18	64 lbs.	10
	13" x 24" x 24"	10K / 20K	8 / 15	A6001946PCX24	92 lbs.	5

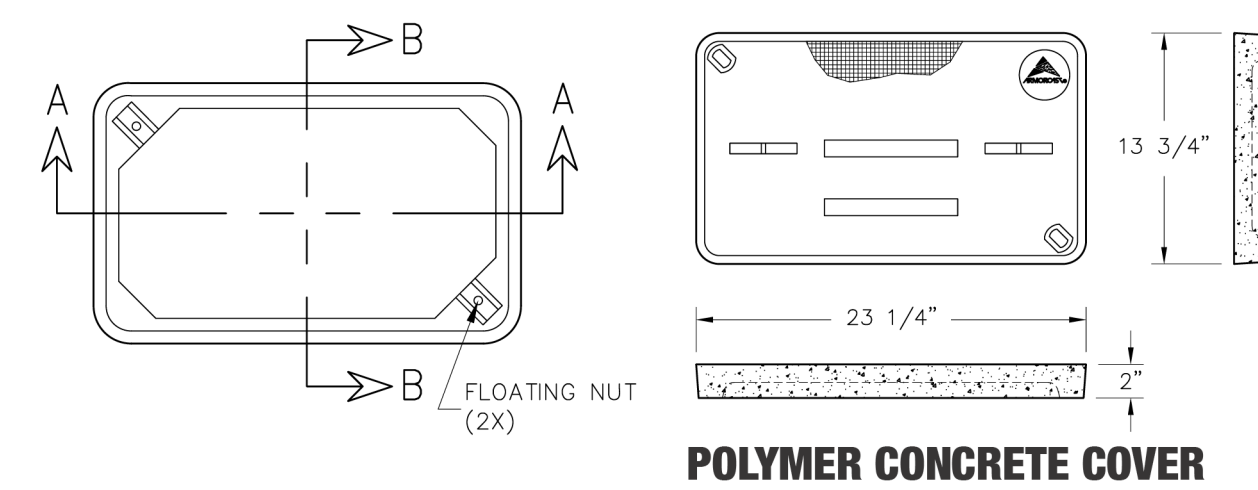
• Boxes are Open Bottom and Stackable, also available with Solid Bottoms.
• For sizes not shown please contact Armorcast Products for more information.
© 2011 Armorcast Products Company 811
www.armorcastprod.com Tel: (818) 982-3600 Fax: (818) 982-7742

32

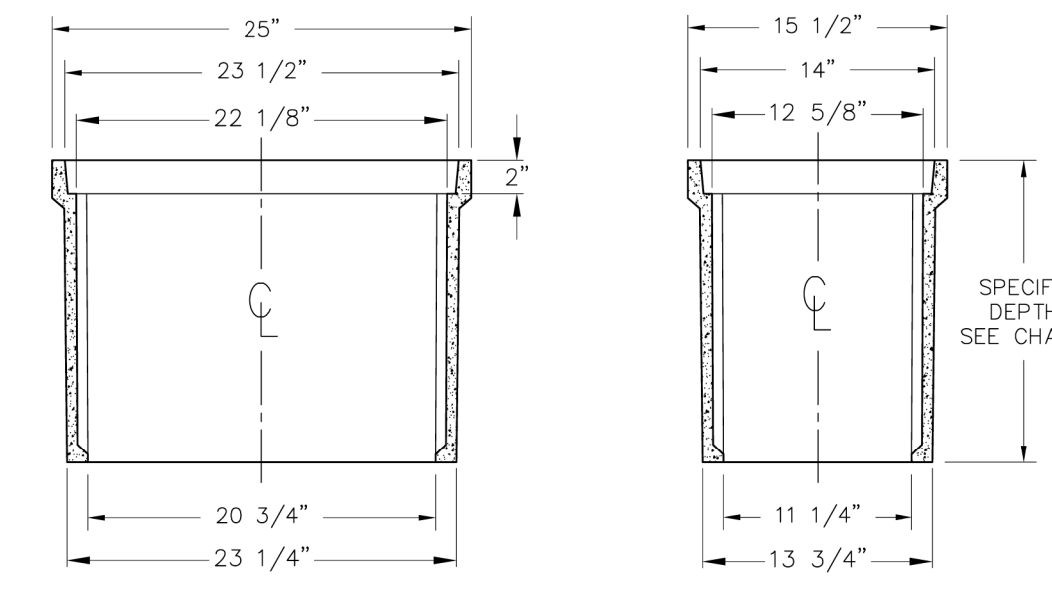


13" x 24" BOX ASSEMBLY STANDARD DIMENSIONS

POLYMER CONCRETE ARMORCAST PRODUCTS COMPANY
A6001946



POLYMER CONCRETE COVER



POLYMER CONCRETE BOX

Armorcast Products Company reserves the right to update or discontinue product information at any time without notice.
© 2011 Armorcast Products Company 811
www.armorcastprod.com Tel: (818) 982-3600 Fax: (818) 982-7742

33