

City of Detroit Inter-Departmental Communication

TO:

Richard Doherty, City Engineer

City Engineering/Department of Public Works

FROM:

Debra Singleton, Engineer

Detroit Water and Sewerage Department

DATE:

May 16, 2017

RE:

Petition No. 934

Requested Encroachment into a Portion of Dequindre Ave. in the Area Bound by

Rivard, Cherboneau Place, St. Aubin, and East Lafayette Blvd.

We have reviewed the above Petition received by this office. With regard to DWSD's interests, our comments are as follows:

Our records indicate that there are water mains in the area of encroachments. DWSD
has no objection to the requested encroachments provided that the attached Provisions
for Encroachment are strictly followed.

If you have any questions, please call me at (313) 267-8309 or Mohamed Boudali at (313) 964-9236.

Sincerely,

Debra Singleton

Engineer

Permits Section

DS//gl

Attachments

CC: Mohamad Farhat, CSF

City of Detroit City Engineering Division, Department of Public Works Survey Bureau

NOTICE OF PROPOSED CHANGE IN PROPERTY

			Date: <u>08/12/2016</u>
			Petition: X934
	AT&T Telecommunication		
	Comcast Television (CATV)		Berm Use
	Detroit Edison (DTE)		
	Fire Department		Conversion to Easement
	Great Lakes Water Authority		
	Michcon (DTE)		Dedication
	Planning & Development Department		
	Public Lighting Authority	X	Encroachment
	Public Lighting Department		
	Police Department		Temporary Closing
	Solid Waste Division, DPW		
	Street Design Bureau, DPW		Vacation
	Street Maintenance Division, DPW		
	Traffic Engineering Division, DPW		
	Water and Sewerage Department		
ind the	petition drawing is attached. Property shown on the attached prinicated. Kindly report (using the back of this sheet) the nature of your proposed change and the estimated costs of removing and rerocessary).	oui	services, if any affected by
	ease return one copy to City Engineering Division, DPW within two	O W	eeks of the submittal date.
Ro	n Brundidge, Director, Department of Public Works		
Ву	Richard Doherty, CED DPW City Engineer		

The proposed change in property (referred to on the other side of this sheet) would affect our services as follows: Not Involved Involved; but asking you to hold action on this petition until further notice. Involved; but no objections to the property change. Involved; but no objections to the property change...provided as easement of the full width of the public right-of-way (street, alley or other public place) is reserved. Involved; the nature of our services and the estimated costs of removing and/or rerouting such services are: (Utility or City Department) Ву Title Date Area code – Telephone number

Petition: x934

TO:

City Engineering Division, DPW 2 Woodward Ave., Suite 642 Detroit, Michigan 48226-3462 Survey Bureau: 313-224-3970

PETITION NO. 934 JONES LANG LASALLE 226 E. HUDSON AVE., SUITE 200 ROYAL OAK, MICHIGAN 48067 C/O RHONDA COLLINS PHONE NO. 313 570-1476

> CHERBONEAU PLACE 70 FT. WD. |30 FT.PUBLIC |EASEMENT 20' BIKE PATH LAFAYETTE 12 633.71 EASEMENT PUBLIC RIVARD ST. 70 FT. WE F. 7 & 181 P. C. 181 P. C. 7. 22 FT. PUBL EASEMENT 47 FT. PUBLIC EASEMENT 30 FT. PUB. EASE. 23 FT. PUBLIC EASEMENT ORLEANS ST 1 FT. PUBLIC EASEMENT_ 20 FT. PUB. EASE. 27 FT. PUBLIC EASEMENT 636.00 14 643..64

E. LAFAYETTE BLVD. 120 FT. WD.



- REQUEST ENCROACHMENT (With Performance Space)

(FOR OFFICE USE ONLY)

CARTO 38 B & C

В					
A					
	DESCRIPTION	DRWN	CHKD	APPD	DATE
	REVI	SIONS			
DR.	AWN BY WLW	CHECI	KED		
DA'	т е 08-12-16	APPR	OVED		

REQUEST ENCROACHMENT
A PORTION OF DEQUINDRE AVE.
VARIOUS WIDTHS IN THE AREA BOUND BY
RIVARD ST., CHERBONEAU PLACE, ST. AUBIN AVE.
AND E. LAFAYETTE BLVD.
(With Performance Space)

CITY OF DETROIT
CITY ENGINEERING DEPARTMENT
SURVEY BUREAU

ST. AUBIN AVE. 120 FT. WI

JOB NO. 01-01

DRWG. NO. X934

PROVISIONS FOR ENCROACHMENT For Petition 934

Detroit Water and Sewerage (DWSD) agree to the proposed encroachment subject to the fulfilling of the following provisions:

- 1. By approval of this petition the (DWSD) does not waive any of its rights to its facilities located in the right of way, and at all time, DWSD, its agents or employees, shall have the right to enter upon the right of way to maintain, repair, alter, service, inspect, or install its facilities. All costs incident to the damaging, dismantling, demolishing, removal and replacement of structures or other improvements herein permitted and incurred in gaining access to DWSD's facilities for maintenance, repairing, alteration, servicing or inspection caused by the encroachment shall be borne by the petitioner. All costs associated with gaining access to DWSD's facilities, which could normally be expected had the petitioner not encroached into the right of way shall be borne by DWSD.
- 2. All construction performed under this petition shall not be commenced until after five (5) days written notice to DWSD. Seventy-two (72) hours notice shall also be provided in accordance with P.A. 53 1974, as amended, utilizing the MISS DIG one call system.
- 3. Construction under this petition is subject to inspection and approval by DWSD forces. The cost of such inspection shall, at the discretion of DWSD, be borne by the petitioner.
- 4. If DWSD facilities located within the right of way shall break or be damaged as the result of any action on the part of the petitioner, then in such event the petitioner agrees to be liable for all costs incident to the repair, replacement or relocation of such broken or damaged DWSD facilities.
- 5. The petitioner shall hold DWSD harmless for any damage to the encroaching device constructed or installed under this petition, which may be caused by the failure of DWSD's facilities.

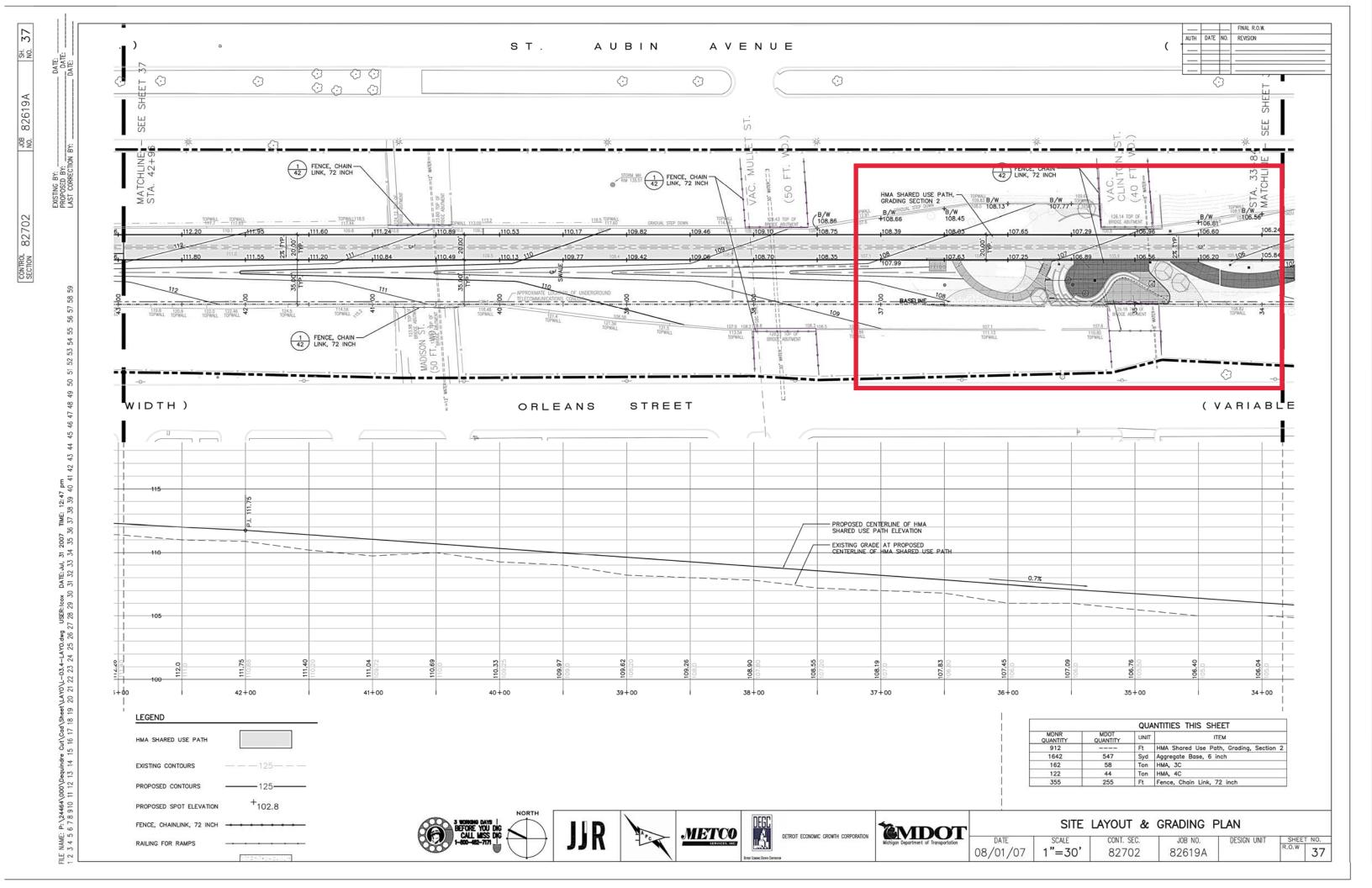
.

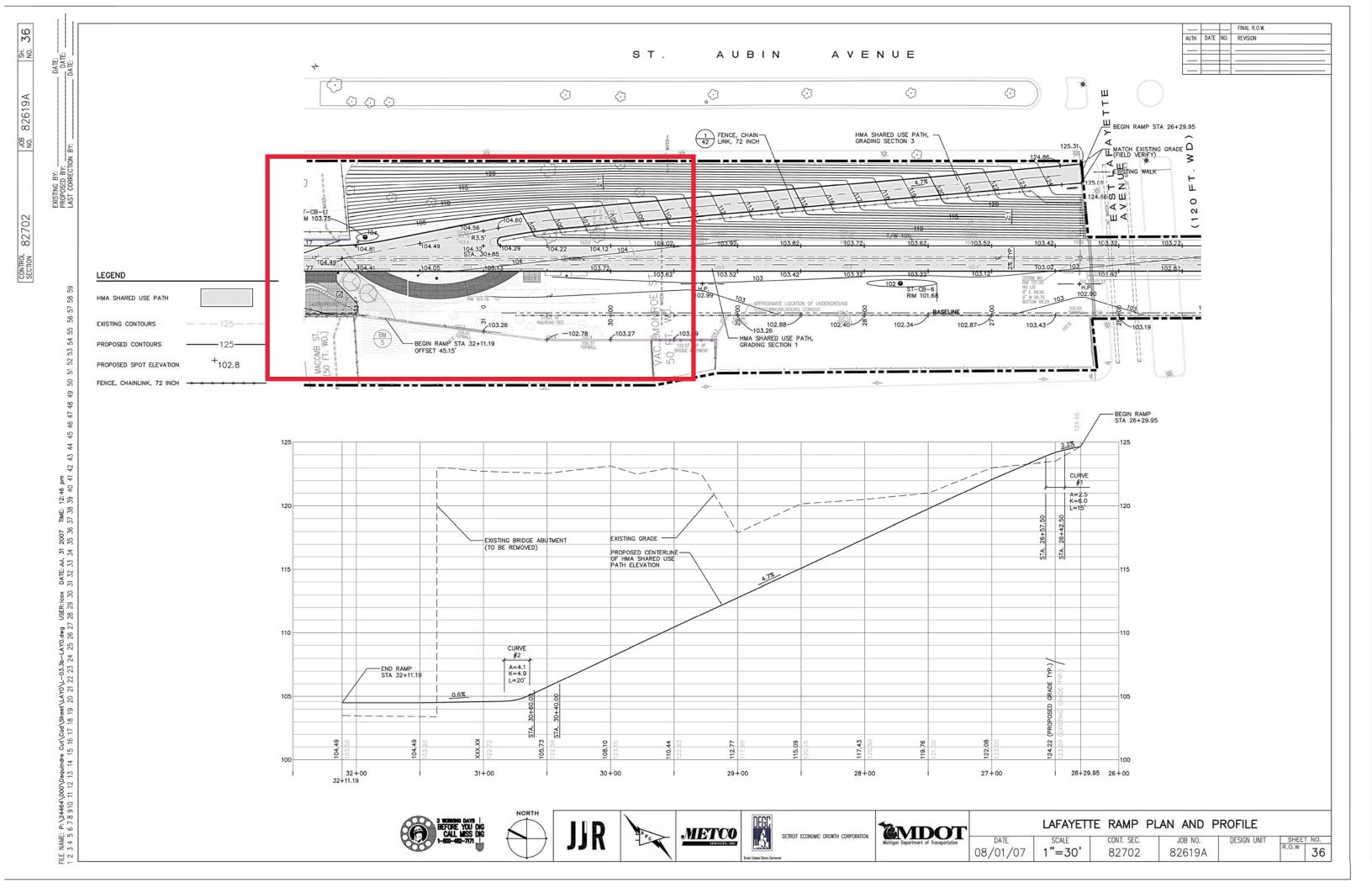
PROPERTY CHANGE RECORD

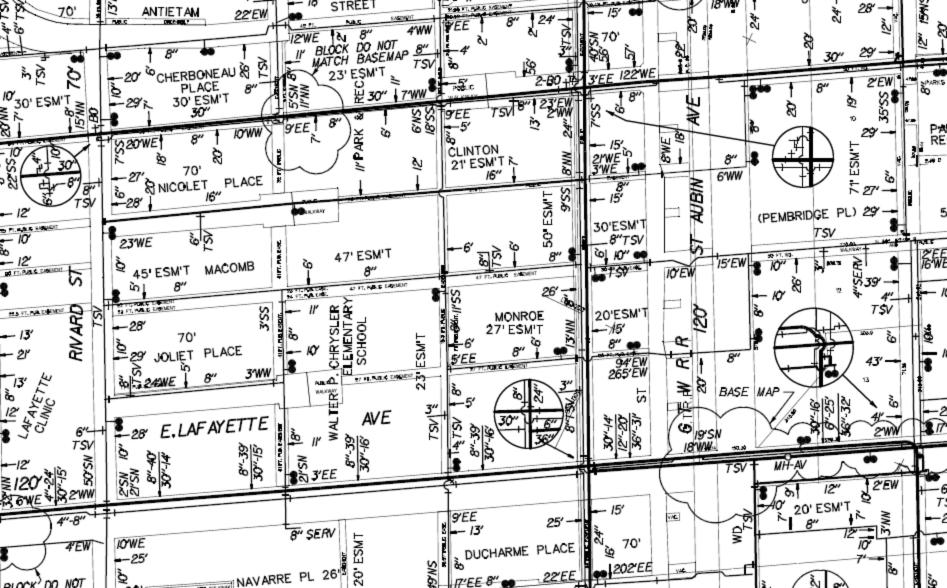
PETITION NO: X934
Name:JONES LANG LASALLE
Address: 226 E. HIDSON AVE., SUITE 200 ROYAL OAK, MI. 48067
Phone: 313 570-1476
LOCATION / REQUEST: ENCROACHMENT A PORTION OF DEQUINDRE AVE. VARIOUS
WIDTHS IN THE AREA BOUND BY RIVARD ST., CHERBONEAU PLACE, ST. AUBIN AVE.
AND E. LAFAYETTE BLVD. (With Performance Space)

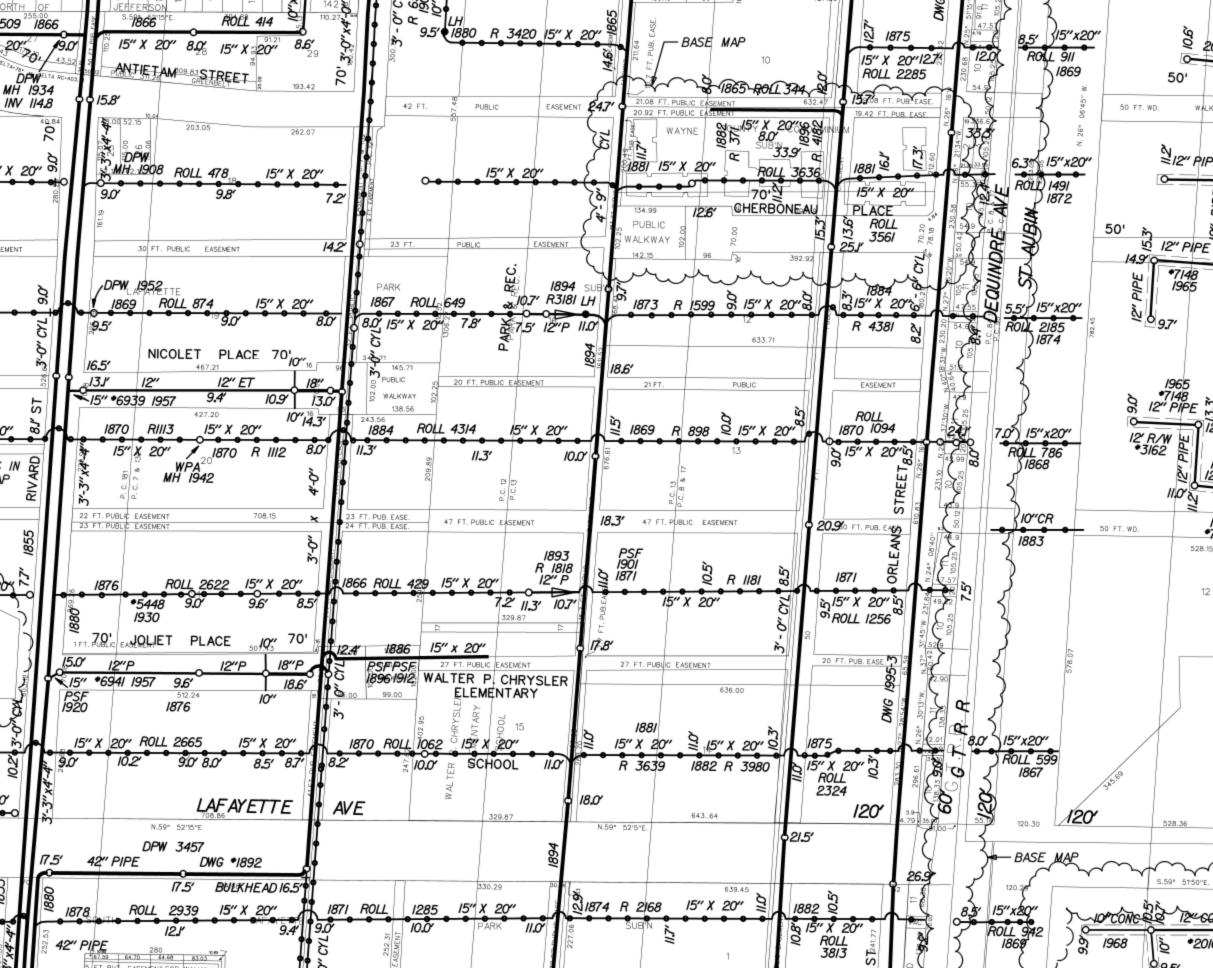
RECORD OF CITY DEPARTMENT AND PRIVATELY OWNED UTILITY REPLIES

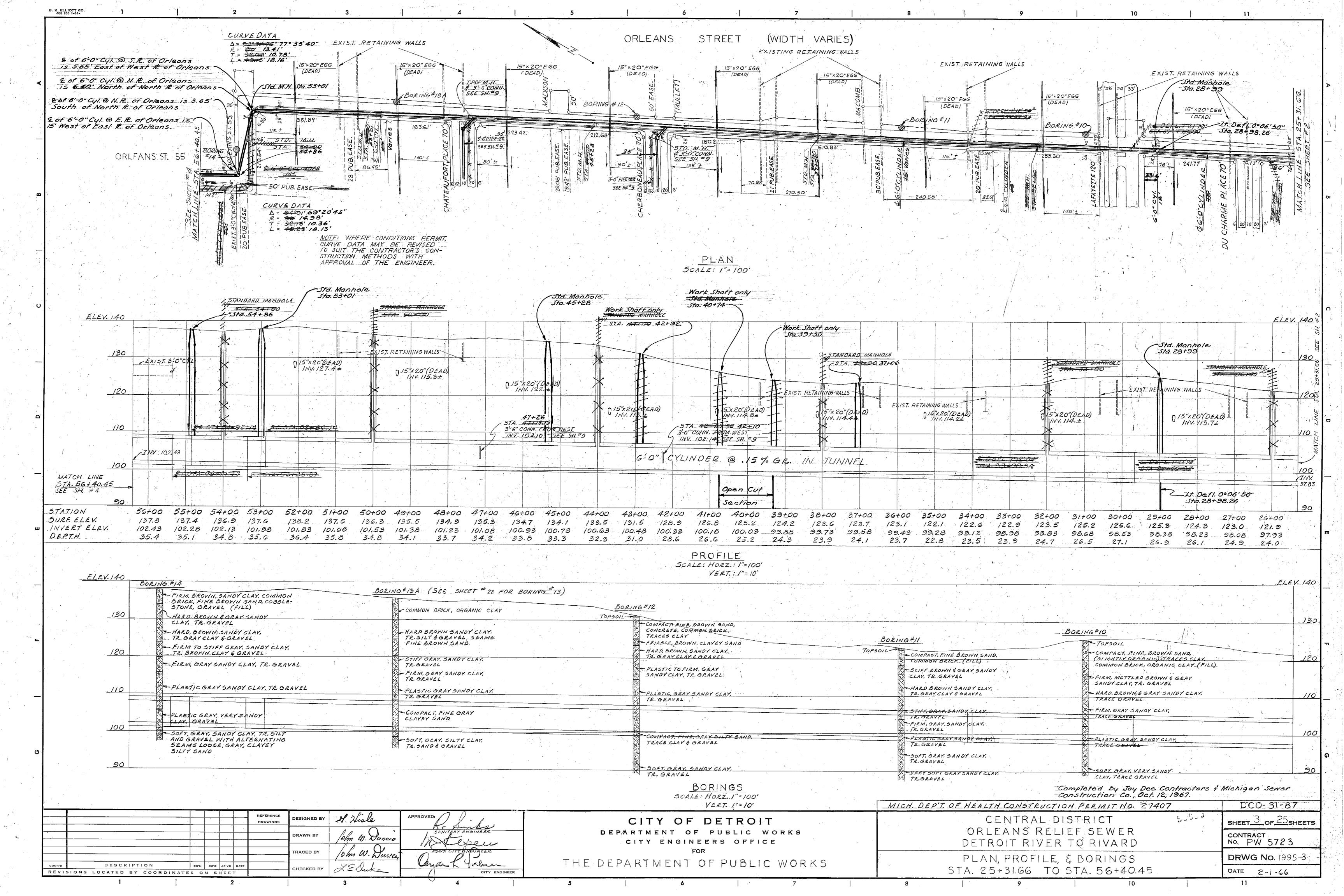
ТО	DATE SENT	RETURN DATE	ОК	REMARKS
AT&T Telecommunication	08/12/2016			
Comcast Television (CATV)				
Detroit Edison (DTE-Electric)				
Fire Department				
Great Lakes Water Authority				
Michcon (DTE-Gas)				
Planning & Development Department				
Public Lighting Authority				
Public Lighting Department				
Police Department				
Solid Waste Division, DPW				
Street Design Bureau, DPW				
Street Maintenance Division, DPW				
Traffic Engineering Division, DPW				
Water and Sewerage Department				
Notices:				











DETROIT RIVERFRONT CONSERVANCY DETROIT, MI

CAMPBELL MEMORIAL TERRACE DETROIT, MI

ISSUED FOR BIDS 20 JAN 2016

HAMILTON ANDERSON PROJECT NUMBER: 2015061.00

HamiltonAnderson

architecture landscape architecture urban design

SITE DETAILS SITE DETAILS

LANDSCAPE PLAN LANDSCAPE DETAILS

CANOPY ROOF PLAN AND ELEVATIONS

ROOF DETAILS/NOTES

GENERAL NOTES AND ABBREVIATIONS

EXISTING ABUTMENT MODIFICATION PLAN & ELEVATIONS

EXISTING ABUTMENT MODIFICATION DETAILS CANOPY FOUNDATION PLAN

CANOPY PLAN

CANOPY SECTIONS-**CANOPY SECTIONS-2**

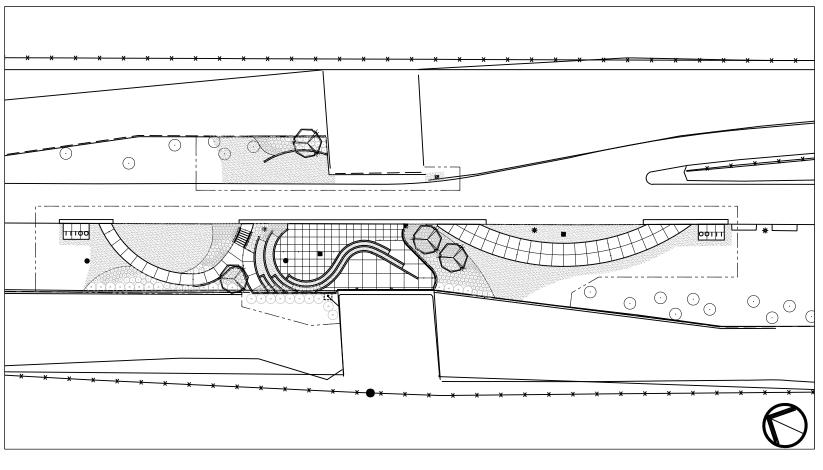
SCHEDULES AND DETAILS

DETAILS

DETAILS

SITE MAP PROJECT IMAGE **DESIGN TEAM LOCATION MAP**







OWNER

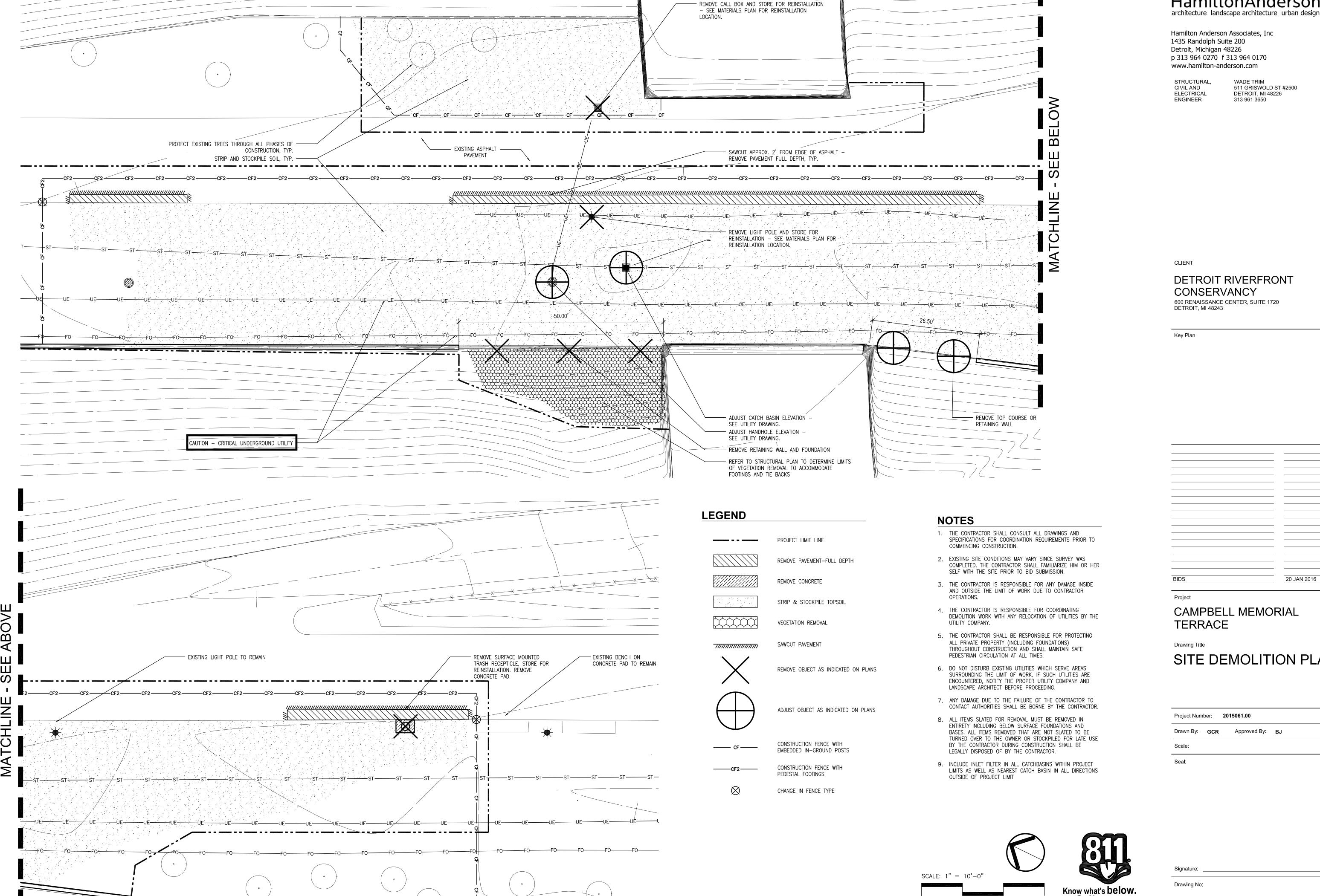
DETROIT RIVERFRONT CONSERVANCY **600 RENAISSANCE CENTER Suite 1720 DETROIT, MI 48243** P 131 566 8200 www.detroitriverfront.org

ARCHITECT/ LANDSCAPE ARCHITECT

HAMILTON ANDERSON ASSOCIATES 1435 RANDOLPH SUITE 200 DETROIT, MI 48226 P 313 964 0270 F 313 964 0170 www.hamilton-anderson.com

CIVIL, ELECTRICAL AND STRÚCTURAL ENGINEER

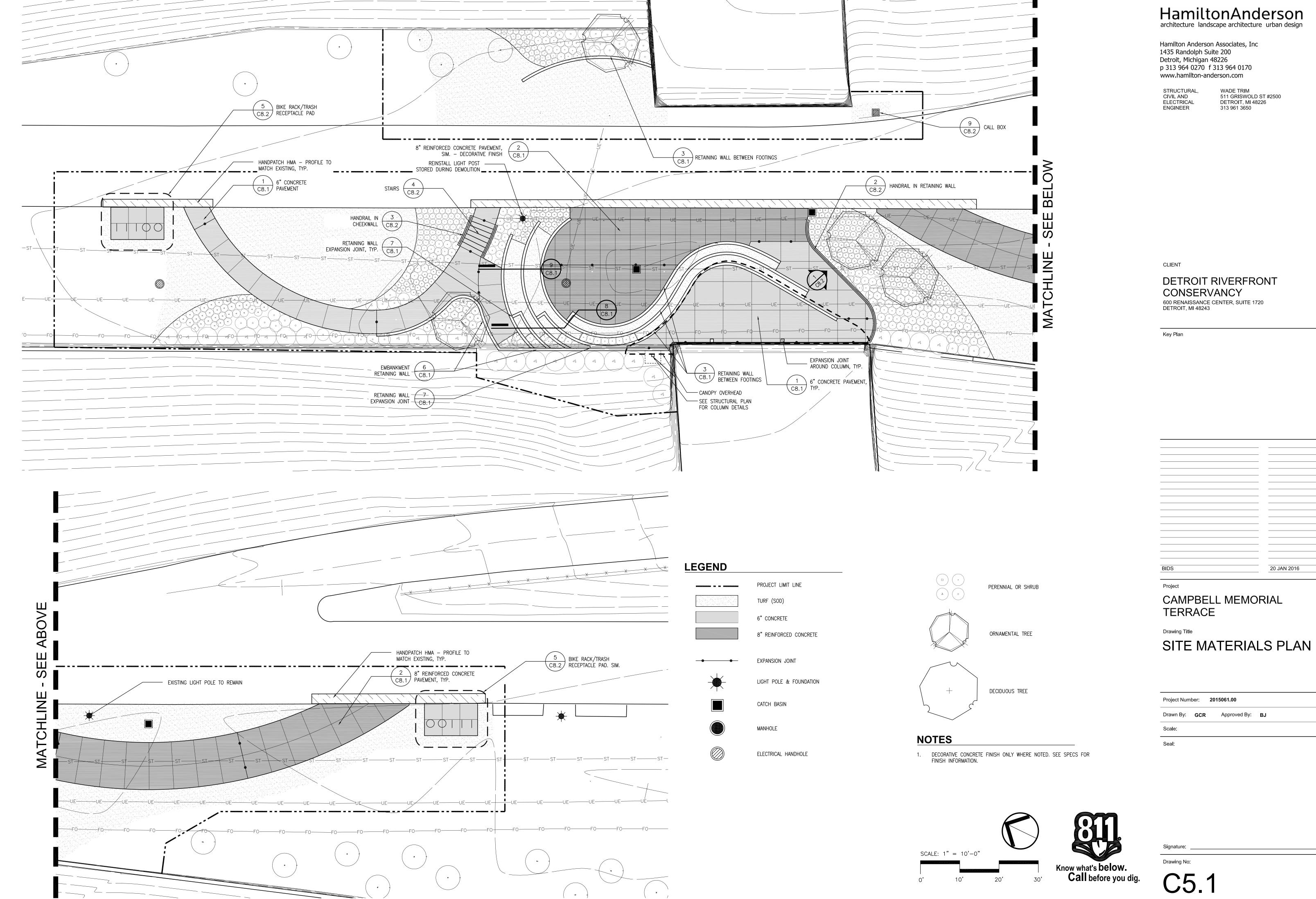
WADE TRIM 511 GRISWOLD **SUITE 2500 DETROIT, MI 48226** P 313 961 3650 www.wadetrim.com

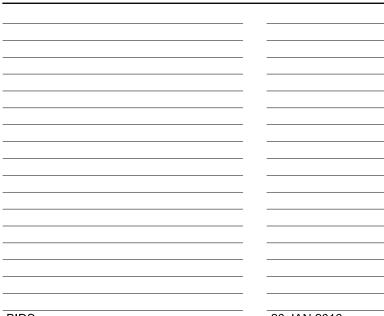


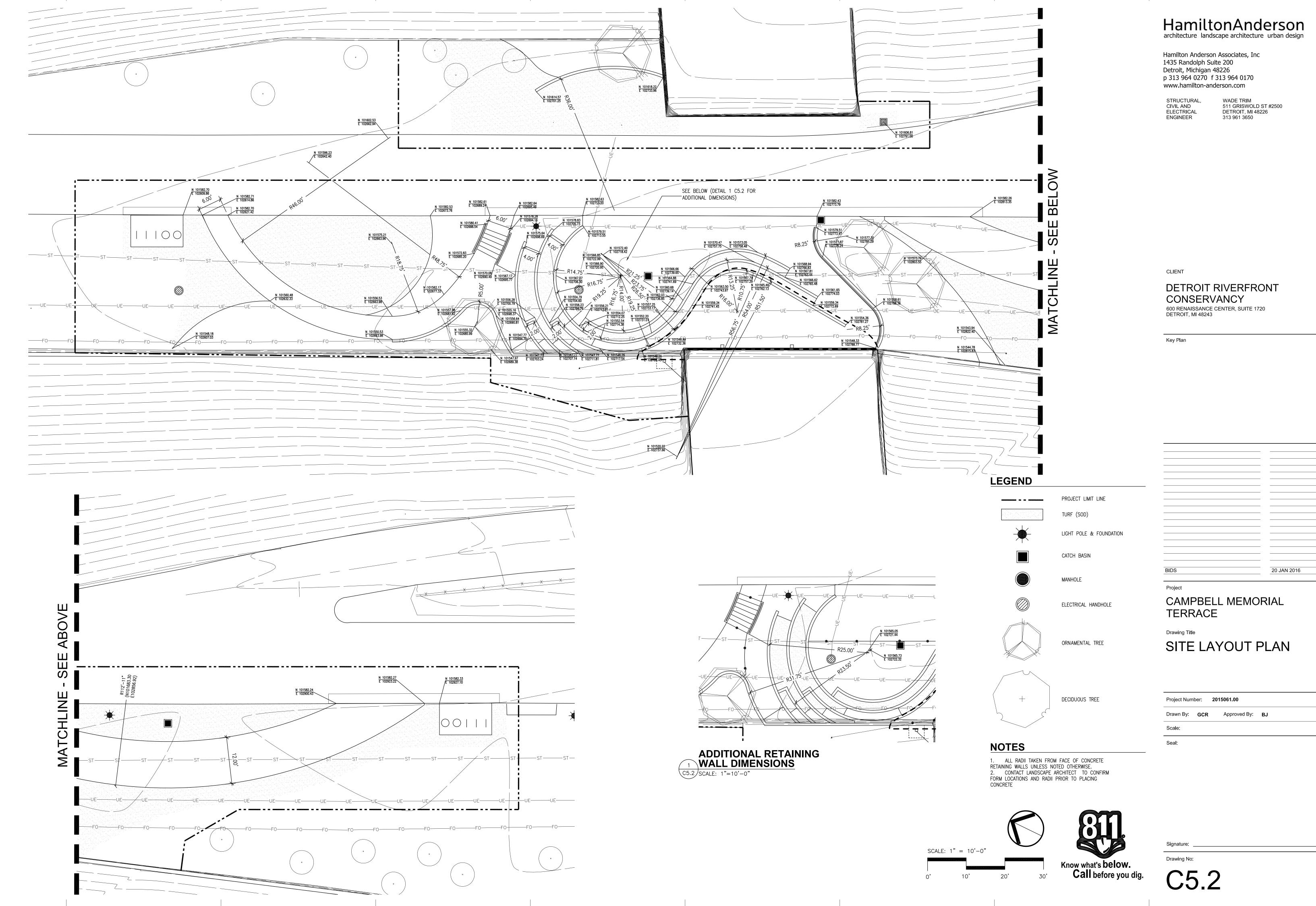
HamiltonAnderson

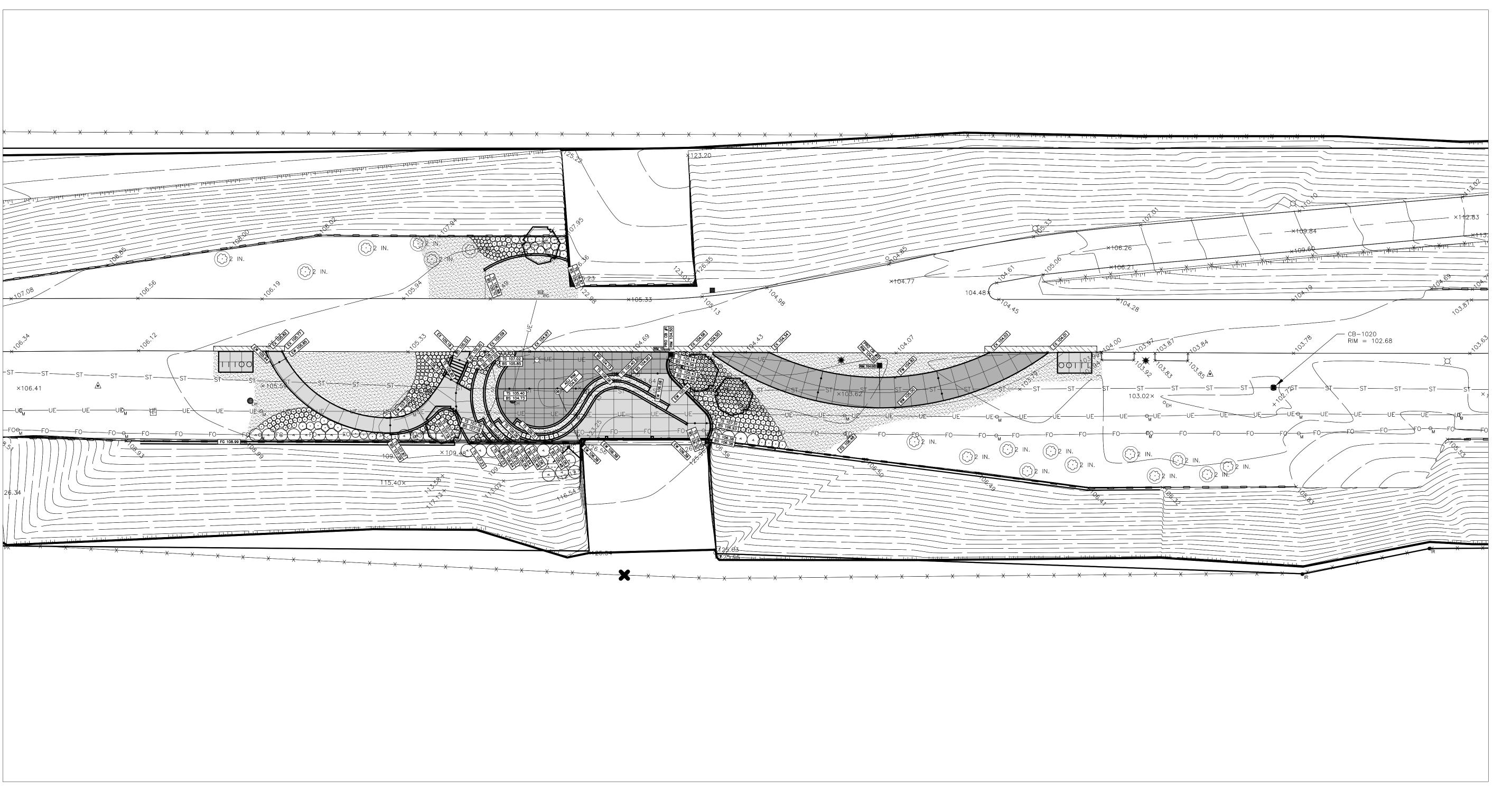
SITE DEMOLITION PLAN

Call before you dig.









HamiltonAnderson architecture landscape architecture urban design

Hamilton Anderson Associates, Inc 1435 Randolph Suite 200 Detroit, Michigan 48226 p 313 964 0270 f 313 964 0170 www.hamilton-anderson.com

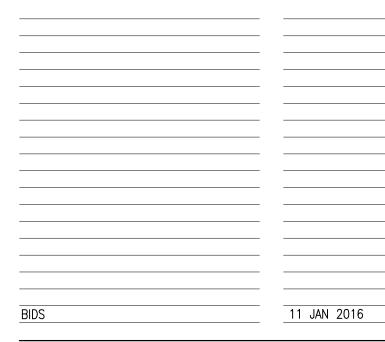
STRUCTURAL, CIVIL AND ELECTRICAL ENGINEER

WADE TRIM 511 GRISWOLD ST #2500 DETROIT, MI 48226 313 961 3650

CLIENT

DETROIT RIVERFRONT CONSERVANCY 600 RENAISSANCE CENTER, SUITE 1720 DETROIT, MI 48243

Key Plan



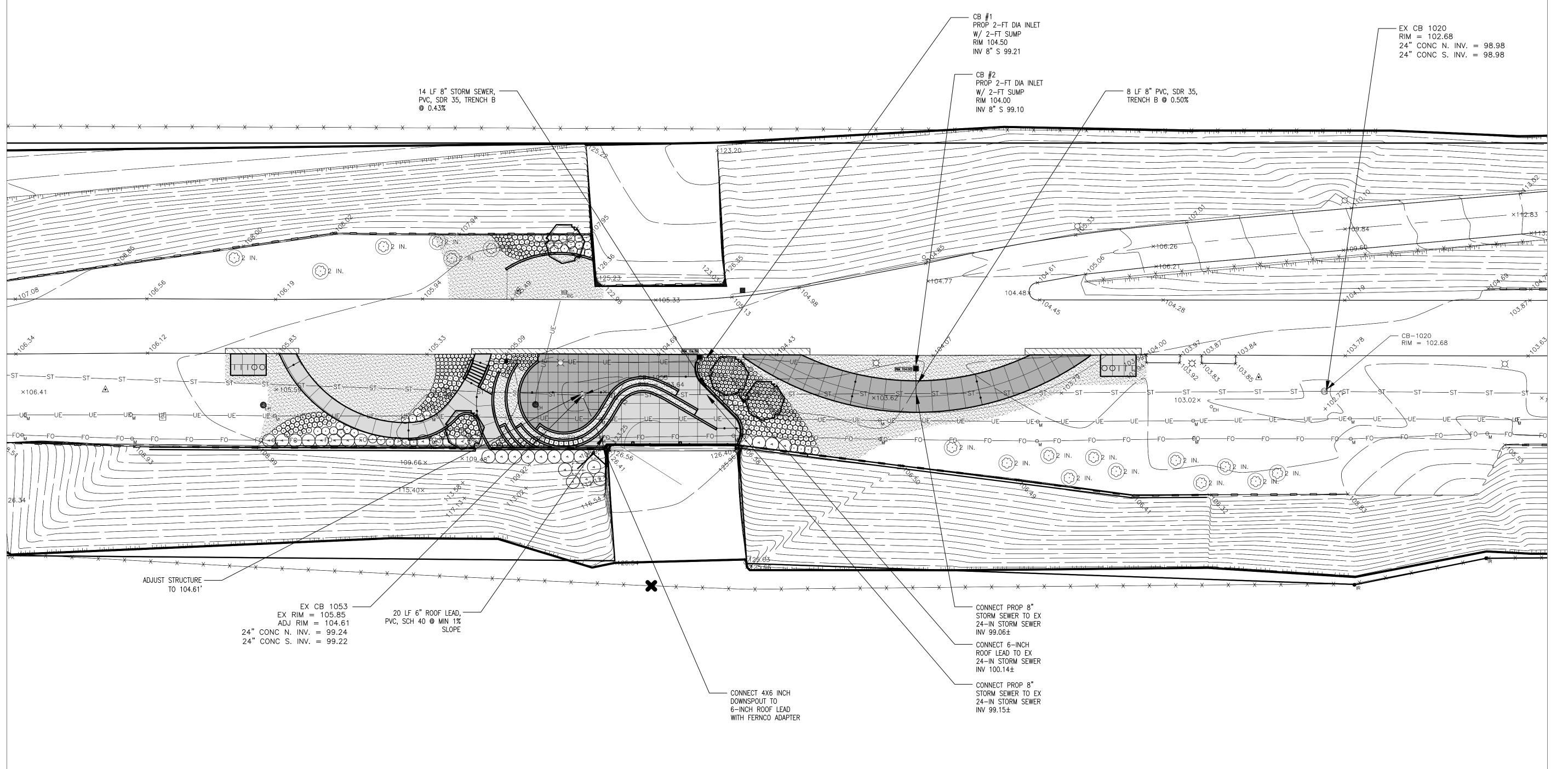
CAMPBELL MEMORIAL TERRACE

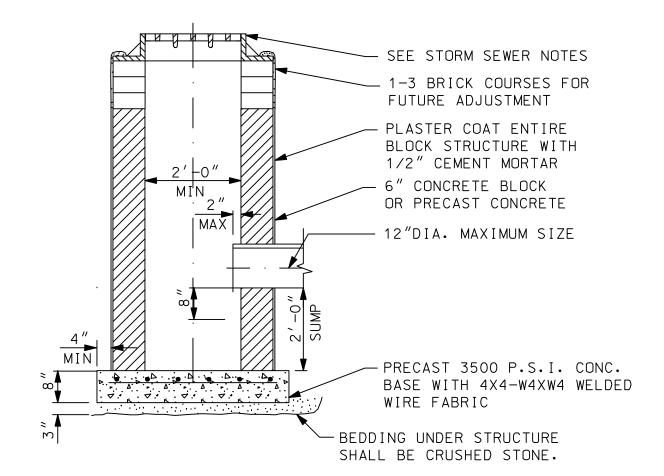
Drawing Title

PROPOSED GRADING PLAN

Project Number: **2015061.00**







STANDARD INLET W/ 2' SUMP NOT TO SCALE

<u>NOTES</u>

- 1. CONTRACTOR SHALL EXPOSE ALL EXISTING UTILITIES BEFORE INSTALLING PROPOSED UTILITIES TO ENSURE THERE ARE NO CONFLICTS.
- 2. CONTRACTOR SHALL USE KOR-N-TEE CONNECTOR TO CONNECT STORM SEWER TO EX. 24-INCH STORM SEWER.
- 3. CONTRACTOR SHALL USE BOX OUT IN RETAINING WALL FOUNDATION FOR 6-INCH ROOF LEAD CONNECTION TO DOWNSPOUT. REMAINING VOID TO BE FILLED WITH MORTAR.
- 4. USE 24" STANDARD A.D.A. COVER AND TYPE S FRAME FROM WWW.URBANACCESSORIES.COM OR EQUIVALENT FOR STRUCTURE ADJUSTMENT IN DANCE FLOOR AREA.
- 5. USE 18" STANDARD A.D.A COVER AND TYPE S FRAME FROM WWW.URBANACCESSORIES.COM OR EQUIVALENT FOR REMAINING STRUCTURES.

ESTIMATED QUANTITIES THIS SHEET

- EA STANDARD STORM INLET W/ 2' SUMP
- 2 EA CONNECT 8-INCH STORM SEWER TO EX 24-INCH STORM SEWER
- 1 EA CONNECT 6-INCH ROOF LEAD TO EX 24-INCH STORM SEWER
- 20 LF 6-INCH ROOF LEAD, PVC, SCH 40
- 22 LF 8-INCH STORM SEWER, PVC, SDR 35, TRENCH B
- EΑ 6X4-INCH TO 6-INCH DIA FERNCO ADAPTER
- CONNECT TO EX CATCH BASIN WITH
- 6-INCH KOR-N-TEE CONNECTOR 2 EA CONNECT TO EX 24-INCH STORM SEWER WITH
- 8-INCH KOR-N-TEE CONNECTOR
- 1 EA ADJUST CATCH BASIN

HamiltonAnderson

Hamilton Anderson Associates, Inc 1435 Randolph Suite 200 Detroit, Michigan 48226 p 313 964 0270 f 313 964 0170 www.hamilton-anderson.com

CIVIL AND **ELECTRICAL**

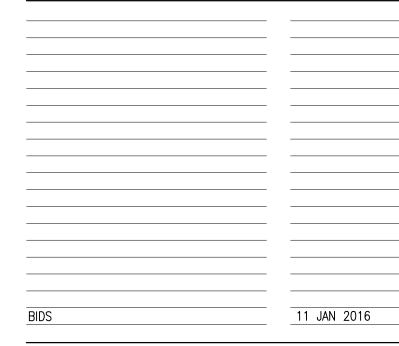
511 GRISWOLD ST #2500 DETROIT, MI 48226 313 961 3650

CLIENT

DETROIT RIVERFRONT CONSERVANCY

600 RENAISSANCE CENTER, SUITE 1720 DETROIT, MI 48243

Key Plan



CAMPBELL MEMORIAL **TERRACE**

Drawing Title

PROPOSED STORM SEWER PLAN

Project Number: **2015061.00**

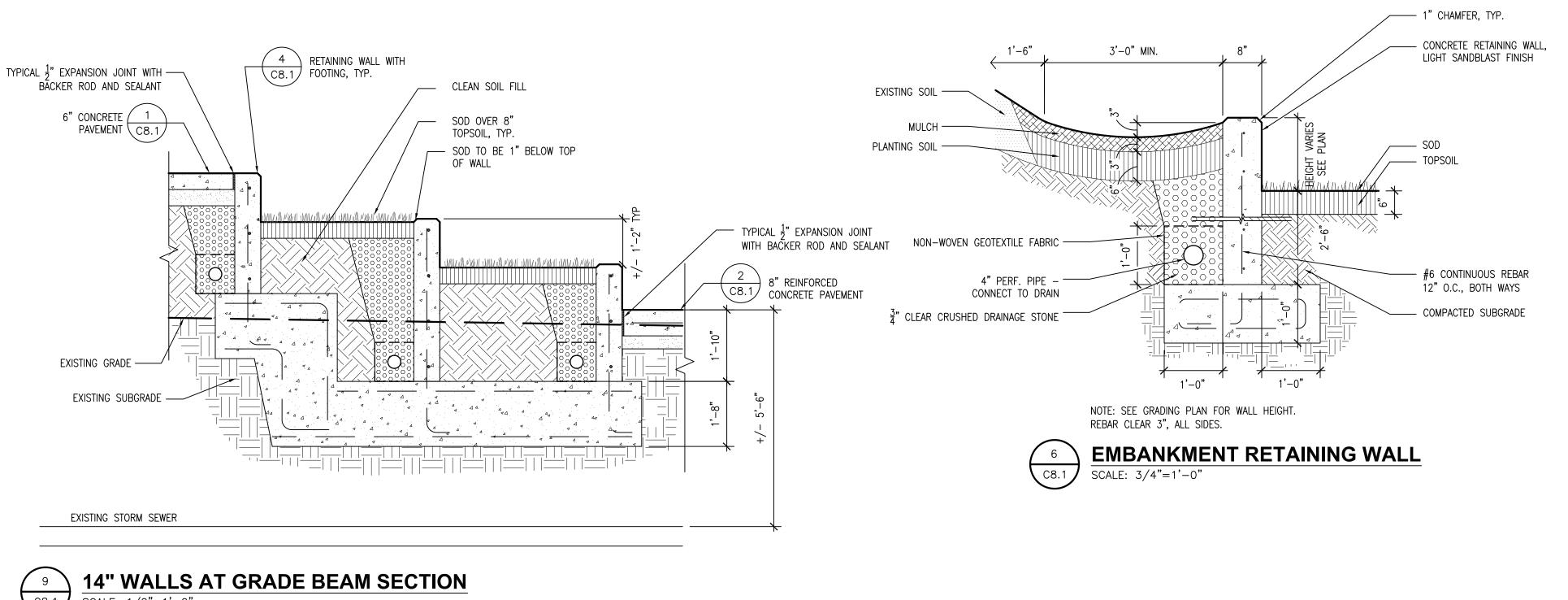
Approved By: VCM Drawn By: CGT

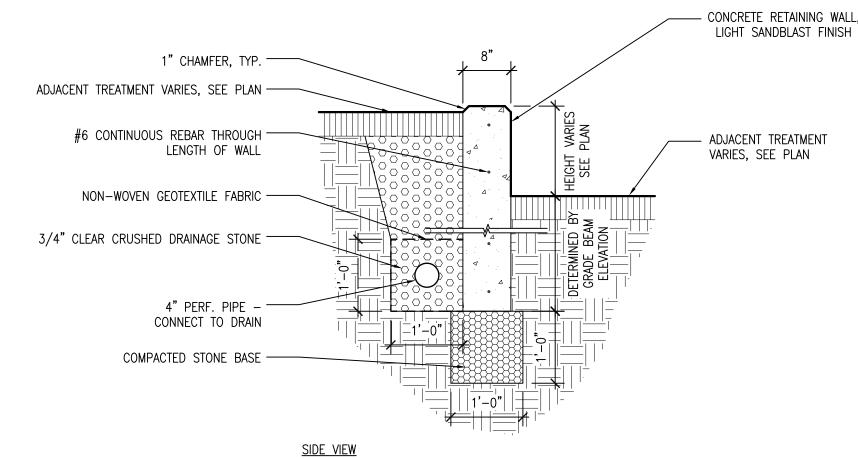
Scale:

Seal:



Signature: ____





NOTE: SEE GRADING PLAN AND SECTIONS FOR WALL HEIGHT. DETAIL TO BE UTILIZED FOR AREAS BETWEEN FOOTINGS. REBAR CLEAR 3" ALL SIDES.



DETROIT RIVERFRONT CONSERVANCY 600 RENAISSANCE CENTER, SUITE 1720 DETROIT, MI 48243

HamiltonAnderson architecture landscape architecture urban design

WADE TRIM

313 961 3650

511 GRISWOLD ST #2500

DETROIT, MI 48226

Hamilton Anderson Associates, Inc

p 313 964 0270 f 313 964 0170

www.hamilton-anderson.com

1435 Randolph Suite 200

Detroit, Michigan 48226

STRUCTURAL,

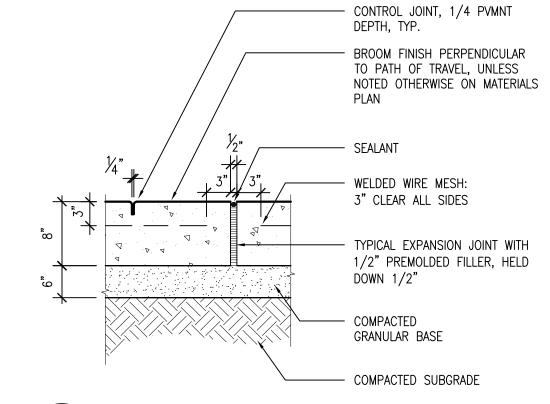
CIVIL AND

ENGINEER

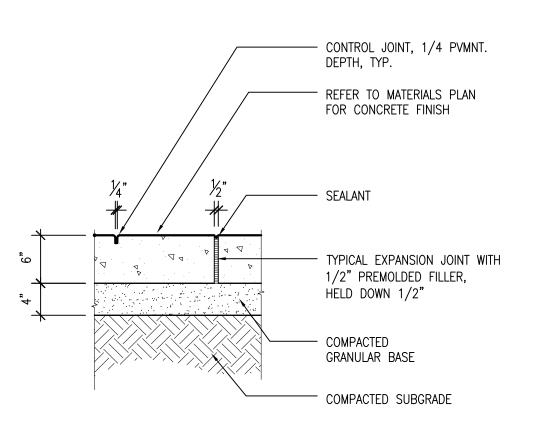
ELECTRICAL

Key Plan

CLIENT











Signature Drawing No.

CAMPBELL MEMORIAL

Approved By: BJ

SITE DETAILS

Project Number: **2015061.00**

Drawn By: GCR

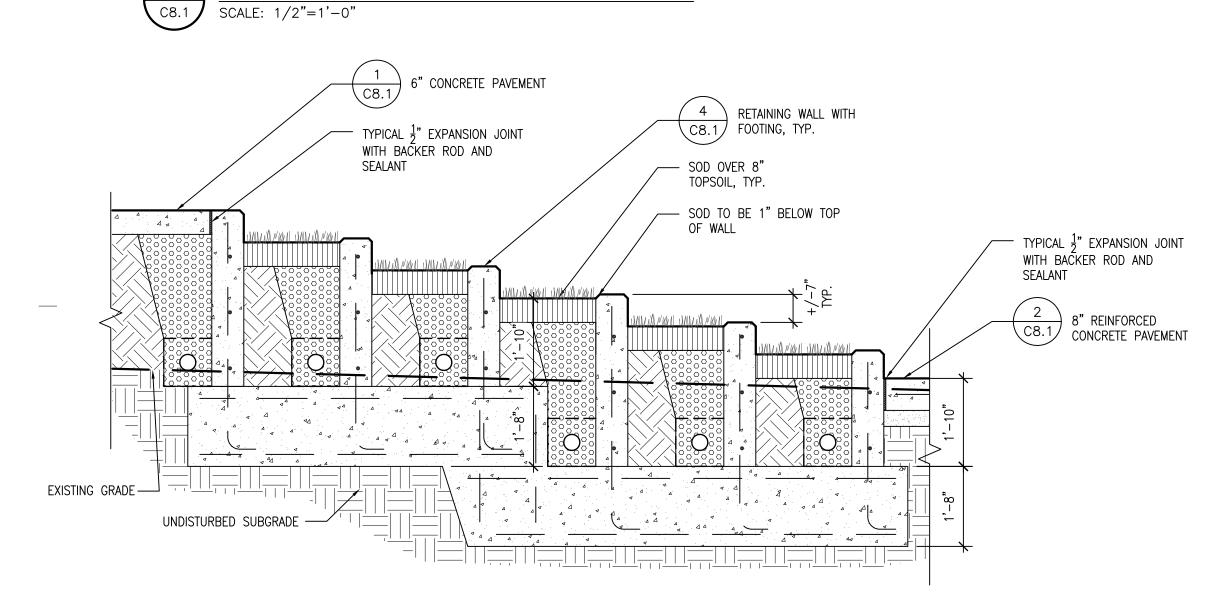
Scale:

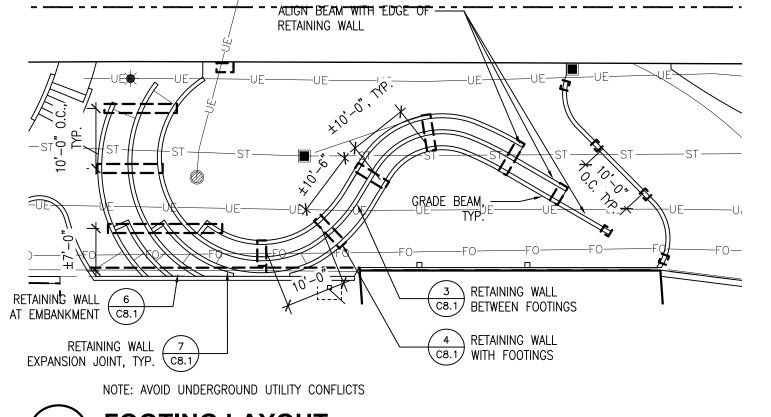
Seal

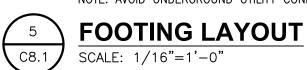
TERRACE

Drawing Title

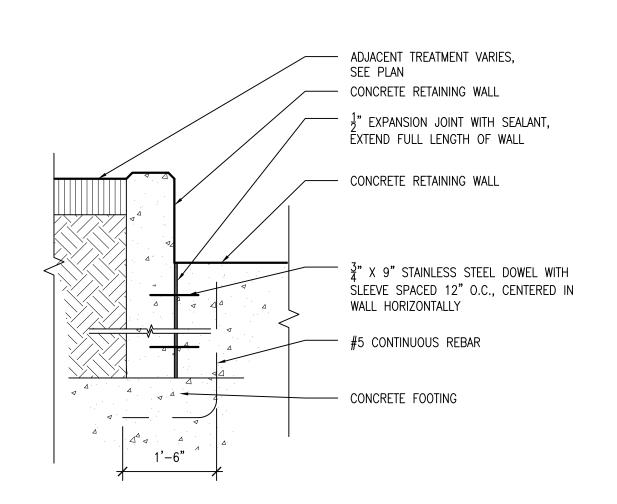
20 JAN 2016





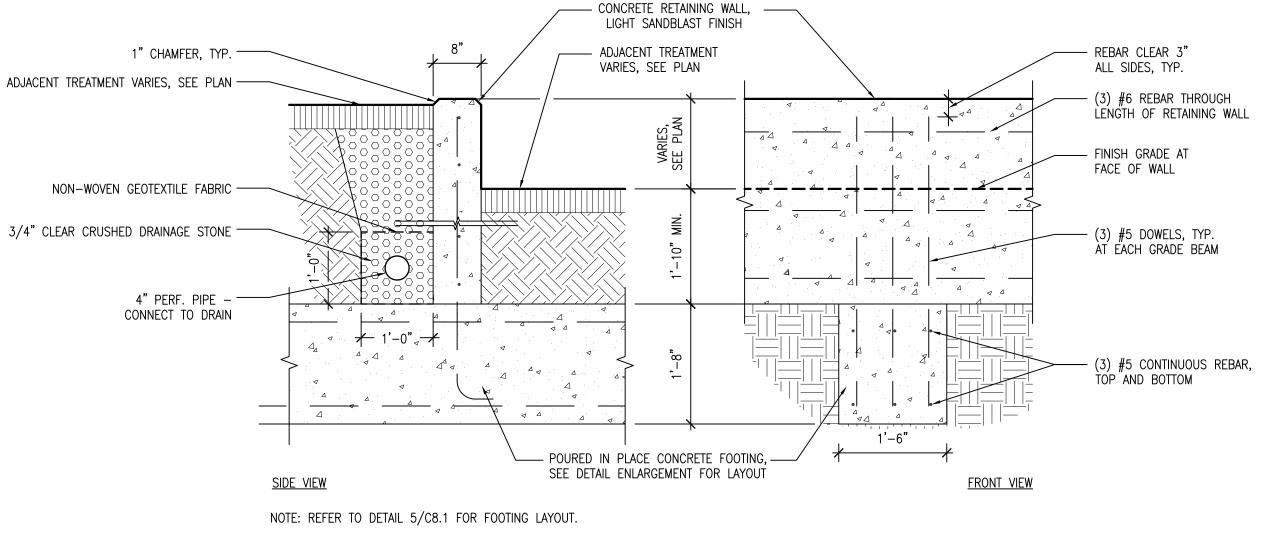






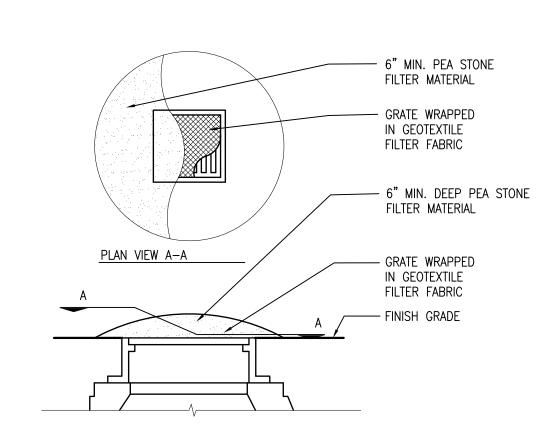
NOTE: REBAR CLEAR 3" ALL SIDES **RETAINING WALL EXPANSION JOINT**

SCALE: 3/4"=1'-0"

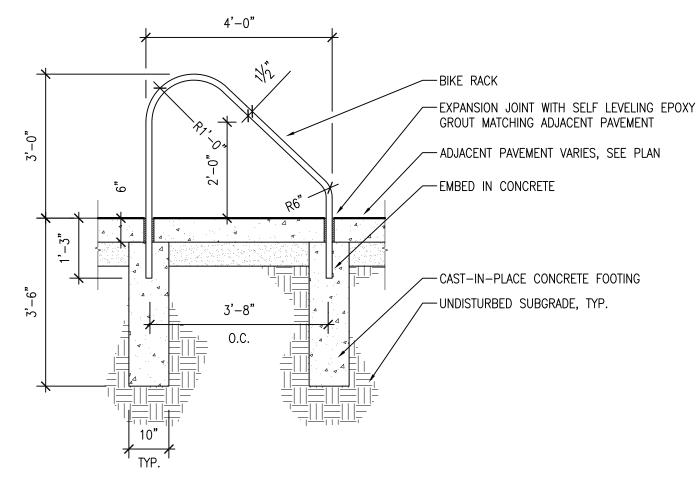


SEE GRADING PLAN AND SECTIONS FOR WALL HEIGHT. REBAR CLEAR 3" ALL SIDES.

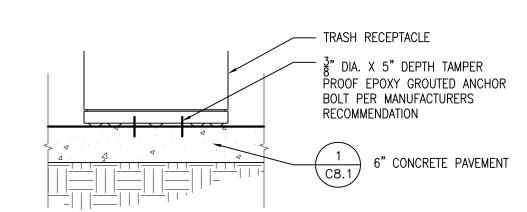
RETAINING WALL WITH FOOTING SCALE: 3/4"=1'-0"



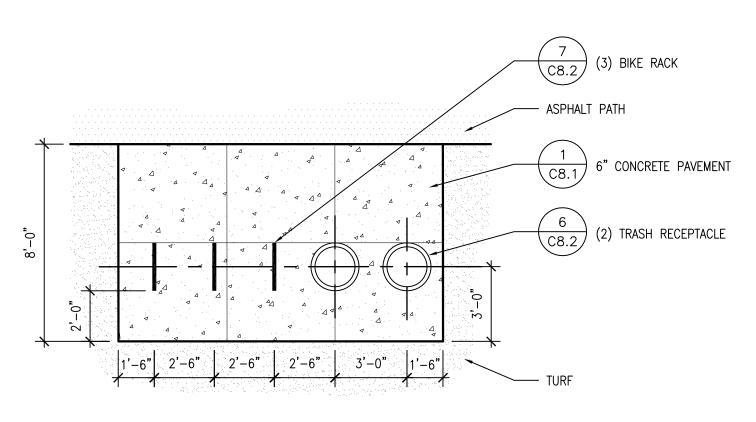
STORM INLET FILTER



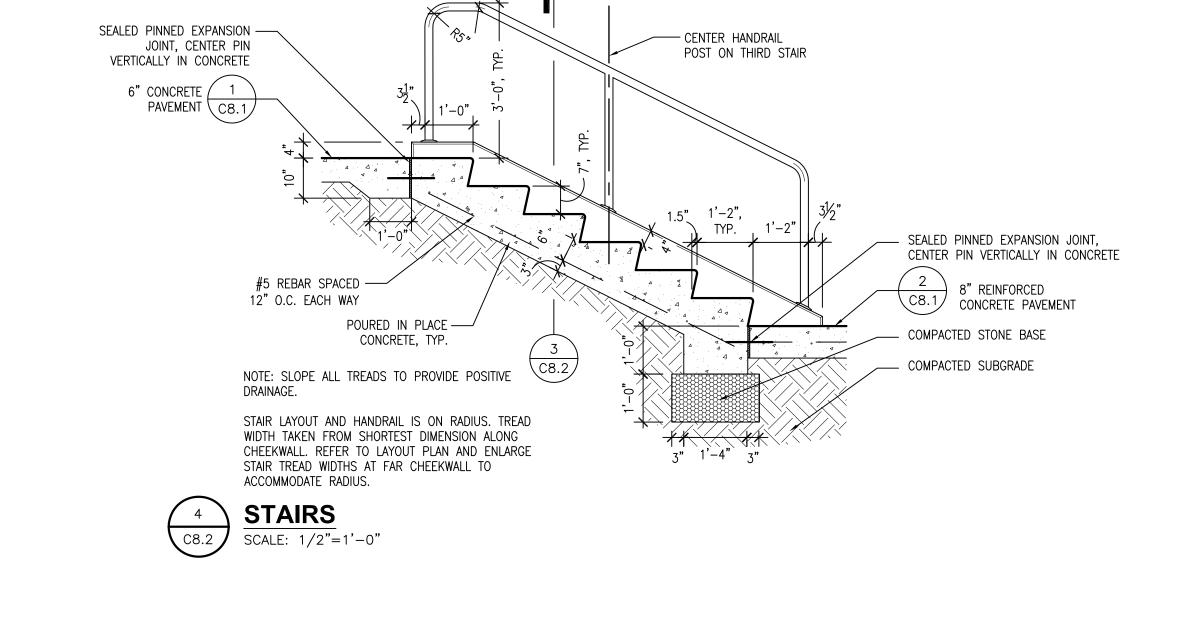


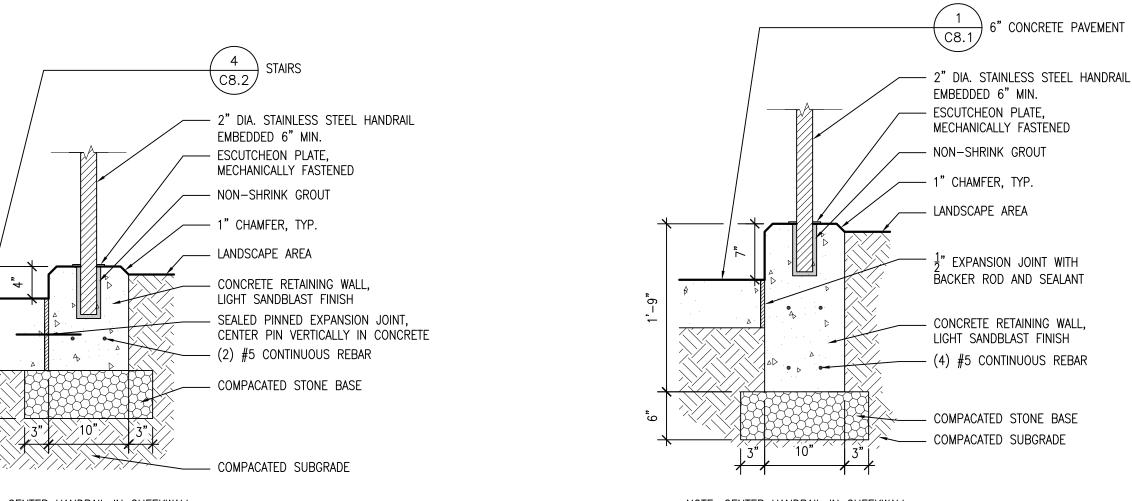




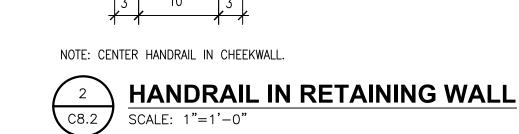


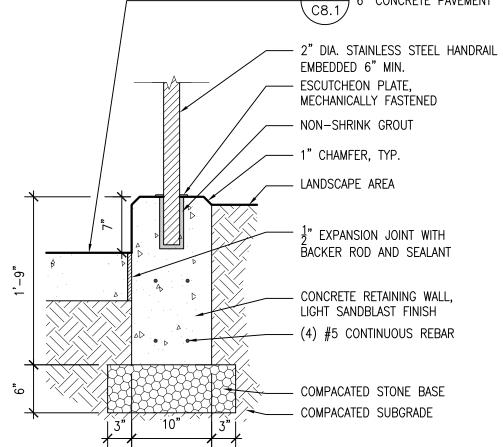


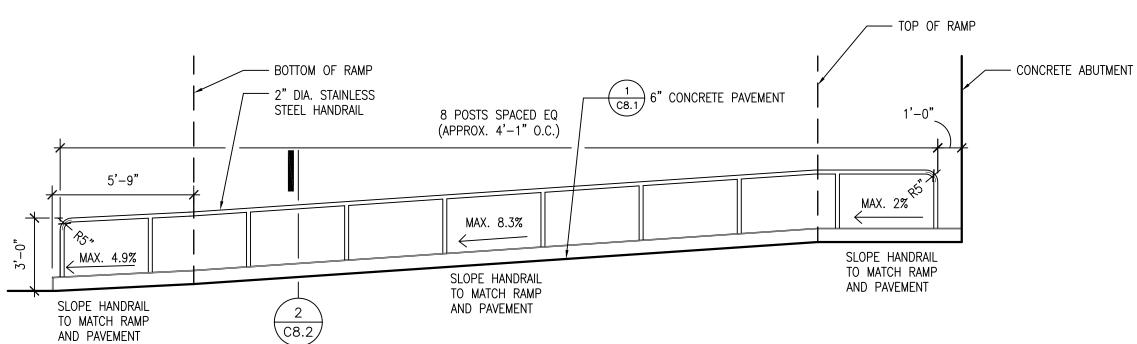




NOTE: CENTER HANDRAIL IN CHEEKWALL. HANDRAIL IN CHEEKWALL C8.2 SCALE: 1"=1'-0"







NOTE: CONTRACTOR TO VERIFY DIMENSIONS IN FIELD.

UNFOLDED RAMP AND HANDRAIL ELEVATION SCALE: 1/4"=1'-0"



HamiltonAnderson architecture landscape architecture urban design

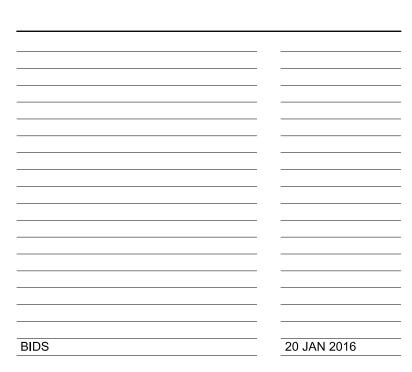
Hamilton Anderson Associates, Inc 1435 Randolph Suite 200 Detroit, Michigan 48226 p 313 964 0270 f 313 964 0170 www.hamilton-anderson.com

STRUCTURAL, WADE TRIM 511 GRISWOLD ST #2500 DETROIT, MI 48226 CIVIL AND ELECTRICAL ENGINEER 313 961 3650

CLIENT

DETROIT RIVERFRONT CONSERVANCY 600 RENAISSANCE CENTER, SUITE 1720 DETROIT, MI 48243

Key Plan



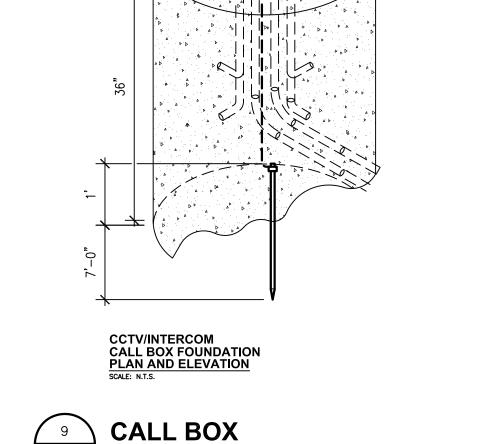
CAMPBELL MEMORIAL TERRACE

Drawing Title

SITE DETAILS

Project Number: 2015061.00 Approved By: BJ Scale: Seal

Signature: ___ Drawing No:



SCALE: 1/2"=1'-0"

CCTV/INTERCOM

BOLTS $\frac{3}{4}$ " X 24" _ 5" MIN. THREAD

STUB UP ELECTRIC AND COMMUNICATION CONDUIT

WITHIN 4" CIRCLE

CENTER OF THE FOUNDATION

CALL BOX FOUNDATION PLACEMENT DETAIL

-EDGE OF SHARED

- 24" FOUNDATION

CCTV/INTERCOM

USE PATH

-BASE OF

CALL BOX

- BOLTS TO BE IN LINE PARELLEL WITH PHONE

- 9" BOLT CIRCLE

- 24" FOUNDATION

ABOVE CONCRETE

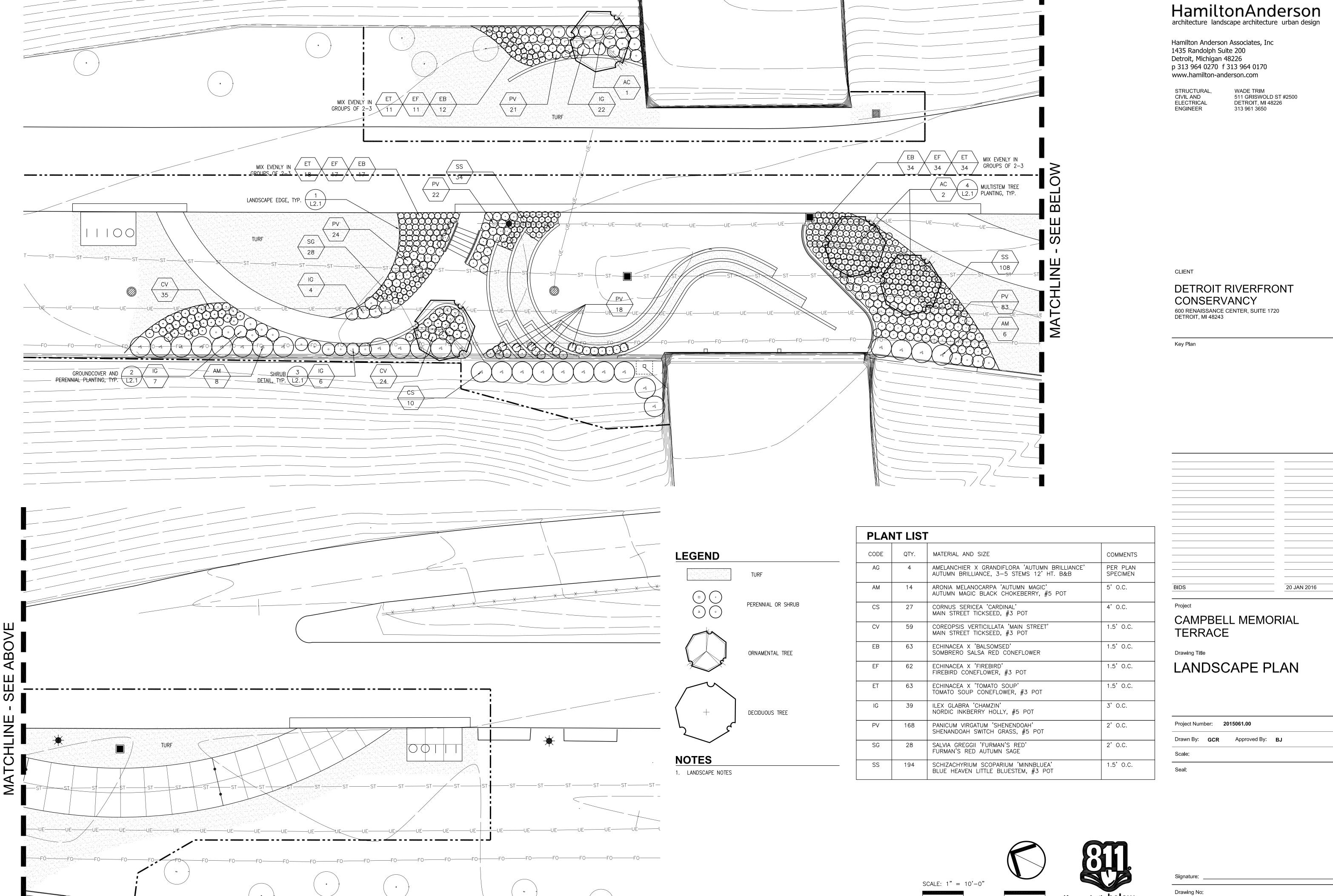
FACEPLATE FACING WALKING

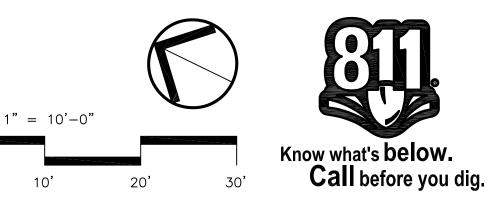
- STUB UP ELECTRIC AND

COMMUNICATION CONDUITS AT THE

CENTER OF THE FOUNDATION WITHIN

4" CIRCLE 5" MINIMUM PROJECTION





NOTES: DO NOT CUT LEADERS. SHRUB SHALL BEAR SAME RELATION TO FINISH GRADE AS IN NURSERY. STAKE 3 LARGEST STEMS. SET STAKES PLUMB AND EQUAL HT. BIND HOSE TOGETHER
W/ SINGLE WIRE STAY 2 PLY REINFORCED RUBBER HOSE ABOVE FIRST BRANCHES APPROX. 1/3 HT. OF TREE — EARTH SAUCER 3" MULCH — REMOVE BURLAP FROM TOP 1/3 OF BALL. REMOVE ALL PLASTIC WRAP, WIRE AND ROT PROOF WRAP. —— PLANTING MIXTURE -SET ROOT BALL ON UNDISTURBED SOIL **MULTI STEM TREE PLANTING** 1/4"=1'-0"

HamiltonAnderson architecture landscape architecture urban design

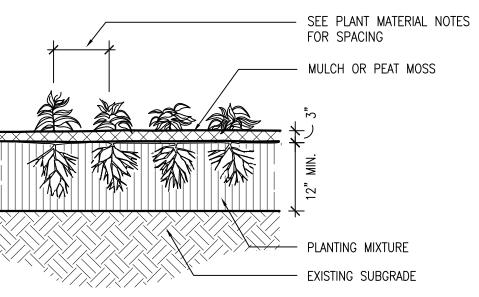
Hamilton Anderson Associates, Inc 1435 Randolph Suite 200 Detroit, Michigan 48226 p 313 964 0270 f 313 964 0170 www.hamilton-anderson.com

STRUCTURAL, WADE TRIM
CIVIL AND 511 GRISWOLD ST #2500
ELECTRICAL DETROIT, MI 48226
ENGINEER 313 961 3650

CLIENT

DETROIT RIVERFRONT CONSERVANCY 600 RENAISSANCE CENTER, SUITE 1720 DETROIT, MI 48243

Key Plan



2X

NOTES: PLANTS TO BE SET WITH BOTTOM LEAVES PARALLEL WITH GRADE AFTER MULCH.

NOTES: DO NOT TRIM EVERGREENS (APPLY

SHRUB SHALL BEAR SAME RELATION TO FINISH GRADE AS IN NURSERY.

WILT PROOF FIRST WINTER)

3" MULCH ——

EARTH SAUCER ----

LIMIT OF BAREROOT SPREAD —

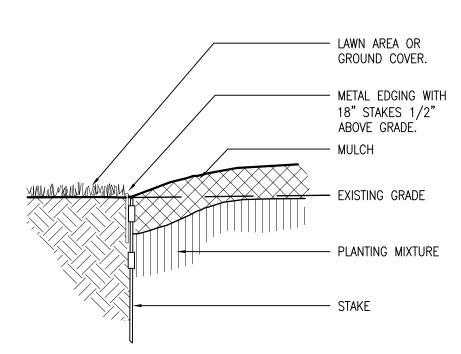
SET ROOT BALL ON UNDISTURBED SOIL

SHRUB DETAIL

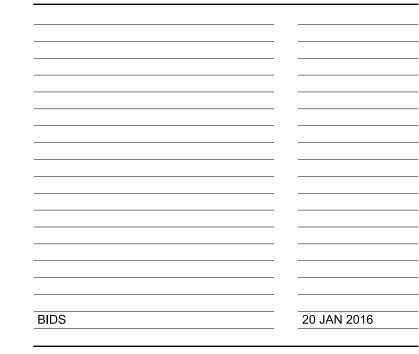
PLANTING MIXTURE —

REMOVE BURLAP FROM TOP
1/3 OF BALL, OR REMOVE
COLLAR FROM FIBER POT
AND PUNCTURE TO ALLOW
ROOT GROWTH.





 $\begin{array}{c}
1 \\
L2.1
\end{array}$ LANDSCAPE EDGE 1"=1'-0"



Projec

CAMPBELL MEMORIAL TERRACE

Drawing Title

LANDSCAPE DETAILS

Project Number: 2015061.00

Drawn By: GCR Approved By: BJ

Scale:

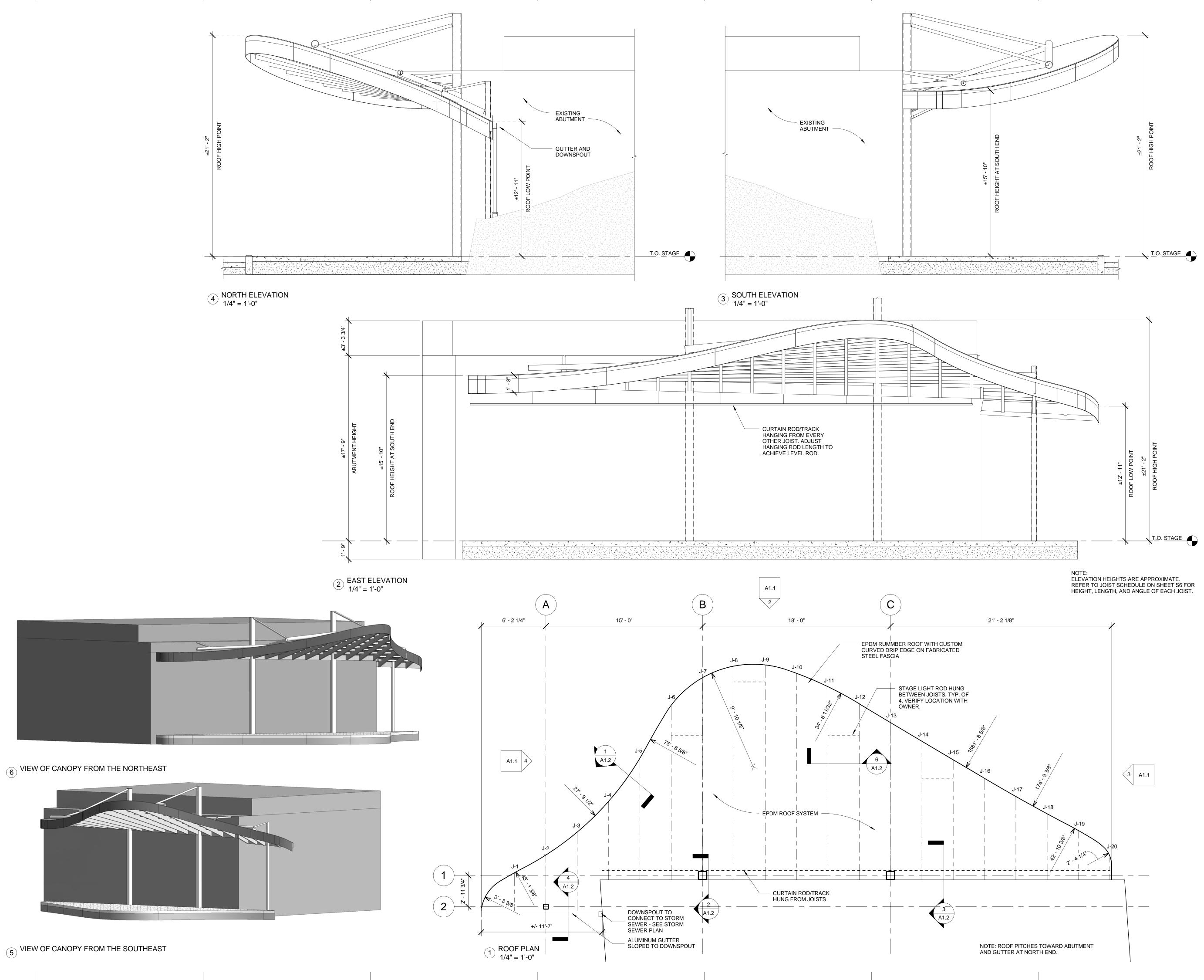
Seal:



Signature: ___

Drawing No:

_2.1



HamiltonAnderson architecture landscape architecture urban design

Hamilton Anderson Associates, Inc 1435 Randolph Suite 200 Detroit, Michigan 48226 p 313 964 0270 f 313 964 0170 www.hamilton-anderson.com

WADE TRIM 511 GRISWOLD ST #2500 DETROIT, MI 48226 313 961 3650 STRUCTURAL, CIVIL AND ELECTRICAL

DETROIT RIVERFRONT CONSERVANCY

600 RENAISSANCE CENTER, SUITE 1720 DEROIT, MI 48243

Key Plan

11 JAN 2016

CAMPBELL MEMORIAL TERRACE

Drawing Title

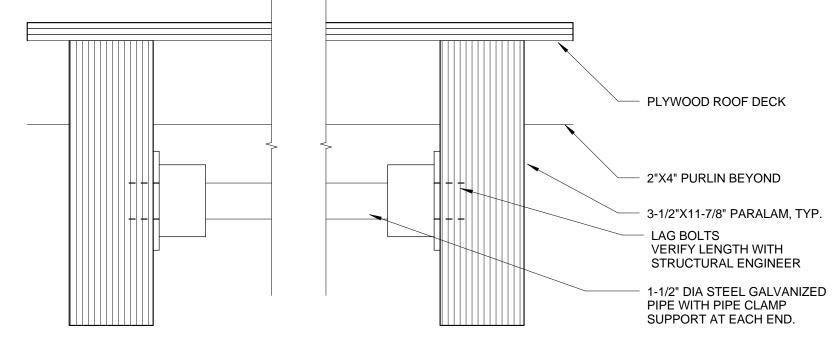
CANOPY ROOF PLAN AND ELEVATIONS

Project Number: 2015061.00 Approved By: Scale: 1/4" = 1'-0"

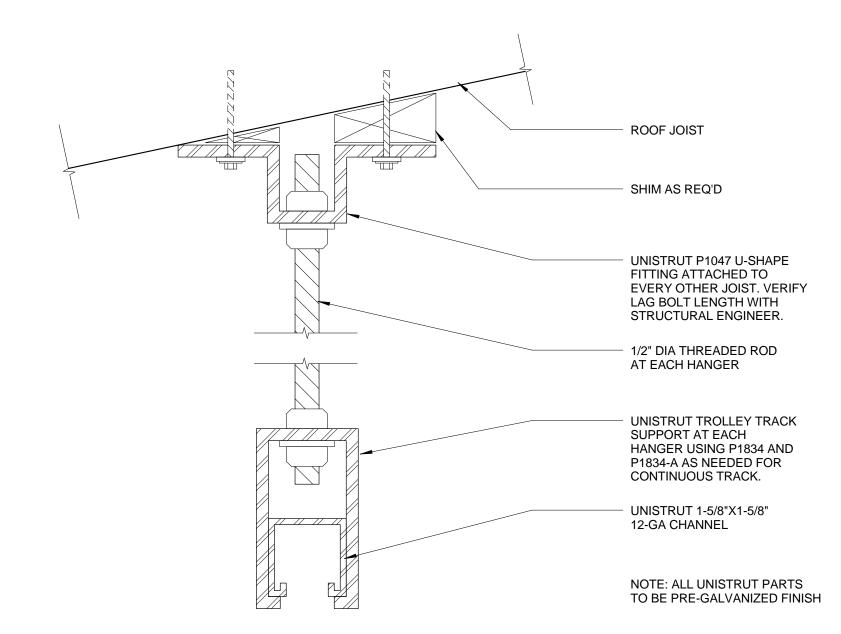
Seal:

Signature:

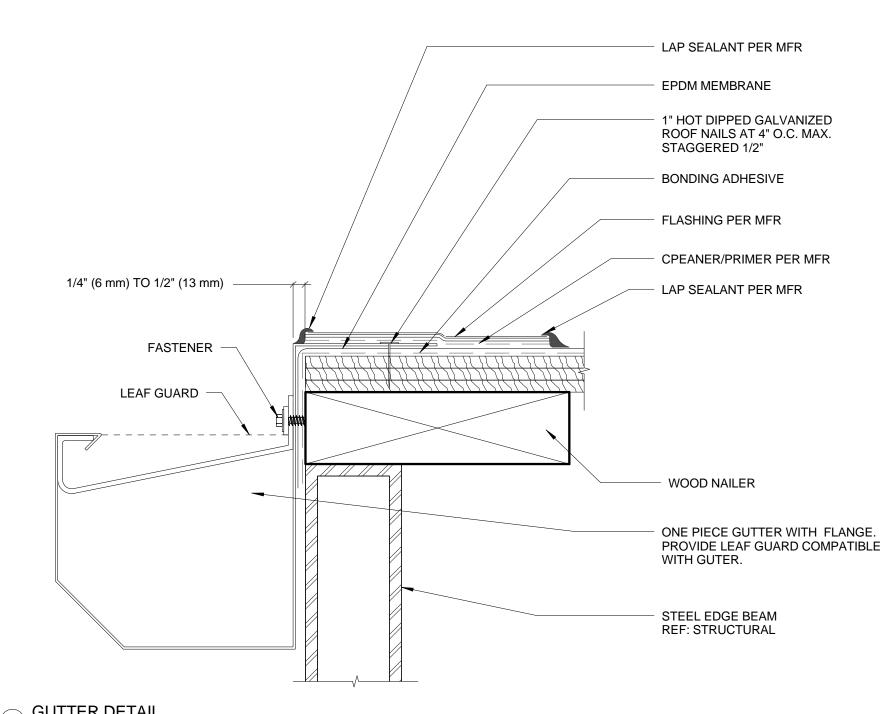
Drawing No:



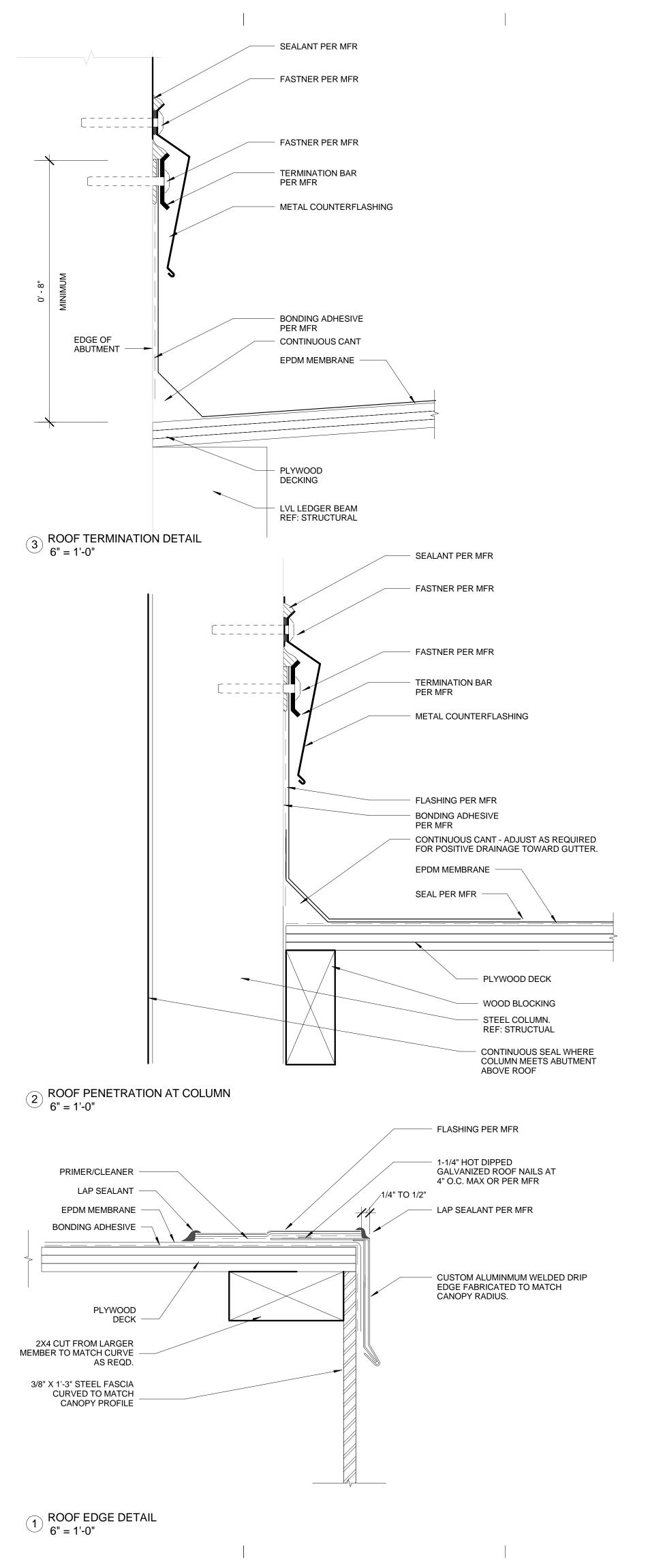




5 CURTAIN ROD HANGING DETAIL 6" = 1'-0"



GUTTER DETAIL 6" = 1'-0"



architecture landscape architecture urban design

Hamilton Anderson Associates, Inc

1435 Randolph Suite 200 Detroit, Michigan 48226 p 313 964 0270 f 313 964 0170 www.hamilton-anderson.com

STRUCTURAL, CIVIL AND WADE TRIM 511 GRISWOLD ST #2500 **ELECTRICAL** DETROIT, MI 48226 **ENGINEER** 313 961 3650

DETROIT RIVERFRONT CONSERVANCY

600 RENAISSANCE CENTER, SUITE 1720 DEROIT, MI 48243

Key Plan

11 JAN 2016

CAMPBELL MEMORIAL — TERRACE

Drawing Title ROOF DETAILS/NOTES

Drawn By: Designer Approved By: Checker

Scale: As indicated

Project Number: 2015061.00

Seal:

Signature:

Drawing No:

GENERAL NOTES

- 1. DESIGN CODES AND GUIDANCE DOCUMENTS:
 - A. 2012 MICHIGAN BUILDING CODE (MBC).
 B. AISC SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS
 - ANSI/AISC 360-10.

 C. AISC CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND PRINCES AISC 202 42.
 - BRIDGES, AISC 303-10.

 D. AISC STEEL CONSTRUCTION MANUAL, FOURTEENTH EDITION.
 - AMERICAN WELDING SOCIETY (AWS)

 a) AWS D1.1: 2010 STRUCTURAL STEEL
 - b) AWS D1.2: 2014 ALUMINUM
 c) AWS D1.3: 2008 SHEET STEEL
 d) AWS D1.4: 2001 REINFORCING STEEI
 - d) AWS D1.4: 2001 REINFORCING STEEL
 e) AWS D1.6: 2007 STAINLESS STEEL
 OCCUPATIONAL SAFETY AND HEALTH ACT, OSHA REGULATIONS
 - (STANDARDS-29 CFR) PART 1926 SUBPART R-STEEL ERECTION.
 G. MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES.
 ASCE 7-10.
- THE CONTRACTOR IS RESPONSIBLE FOR THE STABILITY OF STRUCTURES DURING CONSTRUCTION. THE ENGINEER TAKES NO RESPONSIBILITY FOR MEANS, METHODS OR SAFETY DURING CONSTRUCTION.
- DIMENSIONS AND ELEVATIONS OF EXISTING STRUCTURES ARE BASED ON PREVIOUS CONSTRUCTION DRAWINGS. CONTRACTOR IS RESPONSIBLE FOR VERIFYING W/ FIELD MEASUREMENTS ALL DIMENSIONS AND ELEVATIONS FOR FABRICATION AND/OR MODIFICATIONS OR ADDITIONS BEING MADE UNDER THIS CONTRACT.

STEEL

- STRUCTURAL STEEL AND MISCELLANEOUS METAL WORK SHALL CONFORM TO THE SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS, ANSI/AISC 360-10 AND AISC CODE OF STANDARD PRACTICE FOR STEEL BUILDING AND BRIDGES (AISC 303-10).
- 2. ALL MISCELLANEOUS METALS SHALL CONFORM TO ASTM A-36.
- 3. ALL STRUCTURAL STEEL TUBES (HSS) SHALL CONFORM TO ASTM A500, GRADE B
- 4. ALL STRUCTURAL PIPE SHALL CONFORM TO ASTM A53, GRADE B, TYPE E OR S. SEE NOTE #9 BELOW.
- 5. ALL STEEL COLUMNS, PLATES, BRACING AND SUPPORT FRAMING BEAMS SHALL BE SHOP PAINTED PER SPECIFICATIONS.
- 6. BOLTS SHALL BE A MINIMUM 3/4" DIAMETER, ASTM A325N, TYPE 1, UNLESS NOTED OTHERWISE. PROVIDE COMPATIBLE A563 GRADE DH, HEAVY HEX NUTS AND F436 GRADE 1 WASHERS.
- 7. ALL SHOP CONNECTIONS SHALL BE WELDED. ALL PRINCIPAL FIELD CONNECTIONS SHALL BE 3/4" DIA (MIN) HS BOLTS, UNLESS DETAILED OTHERWISE.
- 8. WELDING SHALL CONFORM TO AWS D1.1-1 AND AISC 341-05. ALL ELECTRODES FOR SHOP AND FIELD WELDS SHALL CONFORM TO AWS A5.1 OR A5.5, CLASS E70XX.
- 9. ALL STEEL ELEMENTS SHALL BE FINISHED AS FOLLOWS WITH A ZINC-RICH URETHANE/ INORGANIC WATER-BASED EPOXY/POLYURETHANE SYSTEM:
 - SURFACE PREPARATION: SSPC-SP6/NACE 3.
 SHOP PRIME WITH SERIES 94-H2O HYDRO-ZINC, (DFT 2.5 TO 3.5 MILS) BY
 - 2. SHOP PRIME WITH SERIES 94-H2O HYDRO-ZINC, (DFT 2.5 TO 3.5 MILS) I
 TNEMEC CO. (OR APROVED EQUAL).
 - 3. SHOP COAT BACKSIDE OF COLUMNS C-1 & C-2 (SURFACE EXPOSED TO CONCRETE ABUTMENT) WITH BITUMASTIC 300M (DFT 20 MILS) BY CARBOLINE
 - (OR APPROVED EQUAL).

 4. FIELD TOUCH-UP ALL WELDS AND DAMAGED AREAS WITH HYDRO-ZINC PRIMER

 6.
 - AFTER STEEL ERECTION.
 5. FIELD COAT ALL EXPOSED STEEL WITH INTERMEDIATE COAT OF SERIES 27WB
 - TYPOXY (DFT 4.0 TO 6.0 MILS) BY TNEMEC CO. (OR APPROVED EQUAL).

 6. FIELD COAT ALL EXPOSED STEEL WITH FINISH COAT OF SERIES 1095
 ENDURA-SHEILD (2-COATS AT DFT 2.0 TO 3.0 MILS) BY TNEMEC CO.

WOOD FRAMING

(OR APPROVED EQUAL).

- ALL PURLINS SHALL BE NOMINAL 2x4, SPRUCE-PINE-FUR NO. 1. ALL PURLINS SHALL BE WOLMANIZED TREATED CONFORMING TO AWPA CATEGORY UC3B.
- 2. ALL PURLINS SHALL BE FASTENED WITH HU24TF STAINLESS STEEL HANGERS (BY SIMPSON STRONG-TIE) AT BOTH ENDS WITH STAINLESS STEEL RING SHANK NAILS PER MANUFACTURERS RECOMMENDATIONS.
- 3. ALL JOISTS AND LEDGER BEAMS SHALL BE 3 1/2"x11 7/8" PARALLAM PLUS PSL MEMBERS WITH WOLMANIZED TREATMENT, UNLESS OTHERWISE NOTED, WITH
 - THE FOLLOWING PROPERTIES:
 - A. MEETS REQUIREMENTS OF AWPA USE CATEGORY UC3B B. SERVICE LEVEL 2
 - C. MIN. MODULUS OF ELASTICITY AT SERVICE LEVEL 1.46x10 PSI
 - D. MIN. MODULUS OF ELASTICITY AT SERVICE LEVEL 1.46x10 PSI
 D. MIN. ALLOWABLE FLEXURAL STRESS AT SERVICE LEVEL 1,800 PSI
 E. ALL FASTENERS SHALL BE 304 STAINLESS STEEL
- 4. ALL PLYWOOD SHALL BE MARINE GRADE PLYWOOD CONFORMING TO APA SERIES V-600, EXPOSURE 1. TOTAL PLYWOOD SHEATHING SHALL BE 3/4" THICK (TOTAL THICKNESS) INSTALLED IN A MINIMUM OF (3)-1/4" PLIES. THINNER PLIES MAY BE REQUIRED TO CREATE WARPED SURFACE WITH OUT DAMAGING LAMINATES. ALL INTERMEDIATE PLIES SHALL BE FULLY ADHERED WITH WATER PROOF GLUE AND NAILED TO SUPPORT MEMBERS WITH STAINLESS STEEL NAILS AS REQUIRED TO CONSTUCT THE 3/4" THICK SHEATHING.
- 5. FINAL PLYWOOD FASTENERS SHALL CONSIST OF STAINLESS STEEL (ASTM A304) 10d RING SHANK NAILS SPACED AT 6" MAXIMUM AT PANEL EDGES AND AT ALL INTERMEDIATE SUPPORTS.

CONCRETE

- 1. ALL CONCRETE FOR FOUNDATIONS SHALL HAVE A COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS.
- 2. ALL REINFORCING STEEL SHALL BE NEW BILLET STEEL DEFORMED BARS CONFORMING TO ASTM A615, GRADE 60.

CONCRETE/ABUTMENT REPAIR

- 1. LOCATE AREAS OF CONCRETE INDICATED ON SHEET S-2. MARK ON SURFACE OF CONCRETE THE AREA TO BE REPAIRED AS SPECIFIED. PRIOR TO THE REMOVAL OF ANY CONCRETE. PROVIDE 24 HOURS NOTICE TO THE ENGINEER IN ORDER FOR THE ENGINEER AND CONTRACTOR TO VERIFY REPAIR LIMITS.
- 2. SAWCUT PERIMETER OF AREA TO BE REPAIRED TO DEPTH OF 4" AS SHOWN. THE REPAIRED AREAS SHALL BE IN A RECTANGULAR SHAPE, WITH SAW CUTS AT RIGHT ANGLES.
- REMOVE ALL BOND INHIBITING MATERIALS FROM CONCRETE INCLUDING BUT NOT LIMITED TO DIRT, CONCRETE SLURRY, AND LOOSELY BONDED AGGREGATE, BY ABRASIVE BLASTING OR HIGH PRESSURE WATERBLASTING. CHECK THE SURFACE AFTER CLEANING TO INSURE THAT SURFACE IS FREE FROM ADDITIONAL LOOSE AGGREGATE AND THAT ADDITIONAL DELAMINATIONS ARE NOT PRESENT.
- 4. INSTALL DOWELS WITH 180° HOOKS AS SHOWN. THEN INSTALL REMAINING REINFORCING.
- 5. COAT ALL EXPOSED CONCRETE SURFACES TO RECEIVE PATCHING MATERIAL WITH CORROSION INHIBITION BONDING AGENT AND APPLY PATCH MATERIAL AS SPECIFIED.
- 6. PRIOR TO ANY PATCHING OF CONCRETE, PROVIDE 24 HOUR NOTICE TO THE ENGINEER FOR INSPECTION OF THE REPAIRED LIMITS AND TO QUANTIFY REPAIR AREAS AND CONFIRM PROPER PREPERATION OF CONCRETE SUBSTRATE.
- CONCRETE REPAIR MORTAR SHALL BE SIKA CRETE 211 SCC PLUS.

DESIGN LOADS

- . DESIGN LOADS SHALL BE IN ACCORDANCE WITH THE MICHIGAN BUILDING CODE 2012 (MBC) AND NFPA 68/69.
 - DE 2012 (MBC) AND NFPA 68/69. SNOW LOADS
 - FLAT ROOF SNOW LOAD: PF=25psf SNOW EXPOSURE FACTOR: CE=1.2
 - SNOW EXPOSURE FACTOR: CE=1.2 SNOW LOAD IMPORTANCE FACTOR: I=1.0 THERMAL FACTOR: CT=1.2
 - 5. DRIFTING SNOW PER ASCE-10
 - B. WIND LOADS
 - 1. BASIC WIND SPEED (3-SECOND)=115mph
 2. WIND EXPOSURE CATEGORY: C.
 - 2. WIND EXPOSURE CATEGORY: C 3. HEIGHT AND EXPOSURE FACTOR: K_7 =0.9
 - C. EARTHQUAKE LOADS
 - SPECTRAL RESPONSE ACCELERATION AT SHORT PERIODS: Ss=0.090
 SPECTRAL RESPONSE ACCELERATION AT 1-SEC PERIODS: S1=0.046
 - SPECTRAL RESPONSE ACCELERATION AT 1-SEC PERIODS: \$1=0.046
 SITE CLASS D (ASSUMED PENDING FINAL GEOTECHNICAL REPORT)
 DESIGN SPECTRAL RESPONSE ACCELERATION AT SHORT PERIODS
 - Sds=0.096
 5. DESIGN SPECTRAL RESPONSE ACCELERATION AT 1-SEC PERIODS Sd1=0.073
 - 6. SEISMIC USE GROUP: III7. SEISMIC IMPORTANCE FACTOR: I=1.25
 - D. LIVE LOAD: 20 PSF

MISCELLANEOUS NOTES

- 1. ALL EXISTING DIMENSIONS AND ELEVATIONS SHOWN WITH THE ± SYMBOL, ARE APPROXIMATE AND SHALL BE VERIFIED IN FIELD BY THE CONTRACTOR BEFORE FABRICATION AND CONSTRUCTION.
- 2. ALL ADHESIVE ANCHORING SYSTEMS FOR POST INSTALLED ANCHORS AND/OR REINFORCING DOWELS IN CONCRETE AND MASONRY SHALL
- 3. ALL POST INSTALLED ANCHORS/ANCHOR BOLTS INTO NEW OR EXISTING CONCRETE SHALL BE ASTM A316 STAINLESS STEEL THREADED ROD WITH STAINLESS STEEL WASHER AND NUT.

BE "HIT-HY 200 ADHESIVE ANCHORING SYSTEM" BY HILTI AT SIZE AND SPACING INDICATED ON DRAWINGS (OR APPROVED EQUAL).

CANOPY INSTALLATION REQUIREMENTS AND RECOMMENDED CONSTRUCTION SEQUENCE

- PERFORM PARTIAL ABUTMENT DEMOLITION AND EXISTING PAVEMENT DEMOLITION AS SHOWN ON SHEET S-2 AND AS REQUIRED TO CONSTRUCT THE PROPOSED CANOPY. CORE DRILL HOLES THROUGH TOP OF ABUTMENT (4 LOCATIONS) FOR NEW 1" DIA. THROUGH BOLTS. CONCRETE CORES SHALL BE INSPECTED BY ENGINEER PRIOR TO INSTALLING BOLTS.
- 2. EXCAVATE BEHIND TOP OF EXISTING ABUTMENT AS INDICATED ON SHEET S-2 AND S-3.
- 3. INSTALL NEW DOWELS (WITH ADHESIVE ANCHORING SYSTEM) FOR THE "ABUTMENT
- MODIFICATIONS" SHOWN ON SHEETS S-2 AND S-3.

 4. INSTALL COLUMN SUPPORT PIERS, BRACE SUPPORT PIERS AND CONCRETE
- REPLACEMENT AT LEDGER BEAM AS SHOWN ON SHEET S-3.
- 5. LOCATE ALL UNDERGROUND UTILITIES IN THE VICINITY OF THE PROPOSED CANOPY FOUNDATION.
- 6. REMOVE PORTIONS OF EXISTING RETAINING WALL AND EXCAVATE FOR NEW CANOPY
- FOUNDATION.

 7 RELOCATE ANY LITH ITIES THAT INTERFERE WITH THE CONSTRUCTION OF THE PROPOSEL
- RELOCATE ANY UTILITIES THAT INTERFERE WITH THE CONSTRUCTION OF THE PROPOSED FOUNDATIONS. IF REQUIRED, FIBER OPTICS CAN BE MOVED BEYOND LIMITS OF FOUNDATION WITHIN EXCAVATION WITH COORDINATION OF THE APPROPRIATE UTILITY.
- 8. INSTALL ALL DOWELS (WITH ADHESIVE ANCHORING SYSTEM) INTO EXISTING ABUTMENT
- THAT ARE INDICATED TO BE INCORPORATED INTO THE CANOPY FOUNDATIONS.

 INSTALL CANOPY FOUNDATIONS AS SHOWN ON SHEET S-4.
- 10. INSTALL PROPOSED CANOPY SUPPORT STEEL INCLUDING: (3) NEW TUBE COLUMNS, (4) NEW PIPE BEAMS WITH HANGERS, (5) NEW PIPE STRUTS, (1) NEW HSS LEDGER BEAM AND (5) NEW PIPE BRACES, WITH ALL WELDS AND BOLTS AS SHOWN. PROVIDE ALL
- 11. INSTALL PROPOSED WOOD LEDGER BEAMS TO FACE OF EXISTING ABUTMENT (ANCHOR TO NEW "CONCRETE REPLACEMENT AT LEDGER BEAM" AS SHOWN ON SHEET S-3).

TEMPORARY SHORING AND BRACING NECESSARY TO ERECT NEW SUPPORT STEEL.

- 12. INSTALL AND FASTEN JOIST J-2 THROUGH J-18. INSTALL AND FASTEN ALL PURLINS BETWEEN JOIST J-2 AND J-18. PROVIDE ALL TEMPORARY SHORING AND BRACING REQUIRED TO INSTALL WOOD FRAMING.
- 13. INSTALL AND CONNECT PROPOSED STEEL FASCIA BEAM.
- 14. INSTALL JOIST J-1 AND J-19 AND ALL PARTIAL, REMAINING PURLINS.
- 15. INSTALL NEW PLYWOOD SHEATHING. INSTALL IN A MINIMUM OF (3) SEPARATE PLIES OF 1/4" THICK, MARINE GRADE PLYWOOD FOR A TOTAL THICKNESS OF 3/4". CONTRACTOR MAY INSTALL WITH MORE, THINNER PLIES IF REQUIRED TO WARP SHEATHING WITH OUT DAMAGING SHEATHING. THE FIRST PLY SHALL BE ADHERED TO ALL PERIMETER AND INTERMEDIATE PURLINS AND JOISTS WITH A CONTINUOUS BEAD OF WATER PROOF GLUE. EACH SUBSEQUANT LAYER/PLY SHALL BE FULLY ADHERED TO THE PREVIOUS PLY WITH WATER PROOF GLUE AND SHALL BE SECURED WITH STAINLESS STEEL NAILS OR SCREWS. SPACING OF SS FASTENERS SHALL BE DETERMINED BY THE CONTRACTOR AS REQUIRED TO SECURE THE SHEATHING DURING CONSTRUCTION. FINAL PLY SHALL BE SECURED WITH STAINLESS STEEL RING SHANK NAILS AT A MAX SPACING OF 6" SECURED INTO ALL PERIMETER AND INTERMEDIATE PURLINS AND JOISTS.
- INSTALL GUTTER, DOWNSPOUT AND ROOFING INCLUDING ALL FLASHING AS SHOWN ON ARCHITECTURAL DRAWINGS.

ABBREVIATIONS

ALT B BLDG BM BSMT CJ CL CLR COL CONC CONSTR CONT CLSM COR CY DET DIA	ALTERNATE BOTTOM BUILDING BEAM BASEMENT CONSTRUCTION JOINT CENTERLINE CLEAR COLUMN CONCRETE CONSTRUCTION CONTINUOUS CONTINUOUS CONTROLLED LOW STRENGTH MATERIAL CORNER CUBIC YARD DETAIL DIAMETER	HP HK HT ID IE IF IN INT JT KIP KB LP LGTH MAX MIN MO NF NS	HIGH POINT HOOK HEIGHT INSIDE DIAMETER INVERT ELEVATION INSIDE FACE INCHES INTERIOR JOINT THOUSAND POUNDS KNEE BRACE LOW POINT LENGTH MAXIMUM MINIMUM MASONRY OPENING NEAR FACE NEAR SIDE
CY	CORNER	MIN	MINIMUM
	CUBIC YARD	MO	MASONRY OPENING
DIAG	DIAGONAL	NTS	NOT TO SCALE
DISC	DISCONTINUOUS	NIC	NOT IN CONTRACT
DIST	DISTANCE	OC	ON CENTER OUTSIDE DIAMETER OUTSIDE FACE OPENING
DWLS	DOWELS	OD	
EJ	EXPANSION JOINT	OF	
EE	EACH END	OPNG	
EF	EACH FACE	PSF	POUNDS PER SQ. FOOT
ES	EACH SIDE	PSI	POUNDS PER SQ. INCH
EW	EACH WAY	REINF	REINFORCEMENT
EA	EACH	RE	REFER TO
EL	ELEVATION	SHTS	SHEETS
EX	EXISTING	SIM	SIMILAR
EXT	EXTERIOR/EXTENSION	SJ	SLAB CONTROL JOINT
FD	FLOOR DRAIN	SS	STAINLESS STEEL
FF	FAR FACE	STIR	STIRRUPS
FS	FAR SIDE	STRUCT	STRUCTURAL
FIN FL FND	FINISH FLOOR FOUNDATION	T/ TOS	TOP ELEVATION TOP OF STRUCTURAL STEEL
FT GALV GR H OR HORIZ	FEET GALVANIZED GRADE HORIZONTAL	TYP UNO V OR VERT	TYPICAL UNLESS NOTED OTHERWISE VERTICAL
		WP	WORK POINT

HamiltonAnderson

architecture landscape architecture urban design

Hamilton Anderson Associates, Inc 1435 Randolph Suite 200 Detroit, Michigan 48226 p 313 964 0270 f 313 964 0170 www.hamilton-anderson.com

STRUCTURAL, WADE TRIM
CIVIL AND 511 GRISWOLD ST #2500
ELECTRICAL DETROIT, MI 48226
ENGINEER 313 961 3650

313 961 3650

DETROIT RIVERFRONT
CONSERVANCY

600 RENAISSANCE CENTER, SUITE 1720 DEROIT, MI 48243

Key Plan

BIDS 11 JAN 2016

Project

CAMPBELL MEMORIAL

GENERAL NOTES AND ABBREVIATIONS

Project Number: 2015061.00

TERRACE

Drawn By: Designer Approved By: Checker

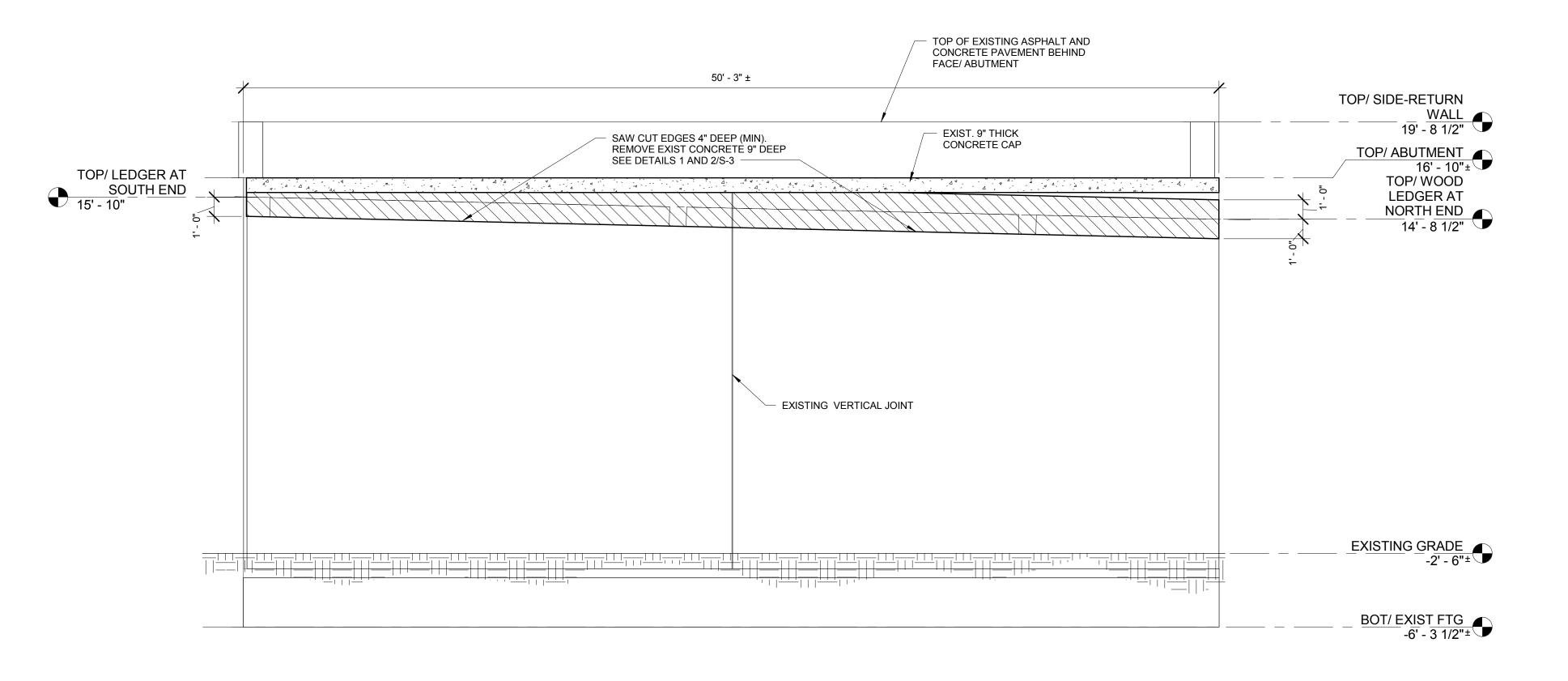
Scale: 1" = 1'-0"

Seal:

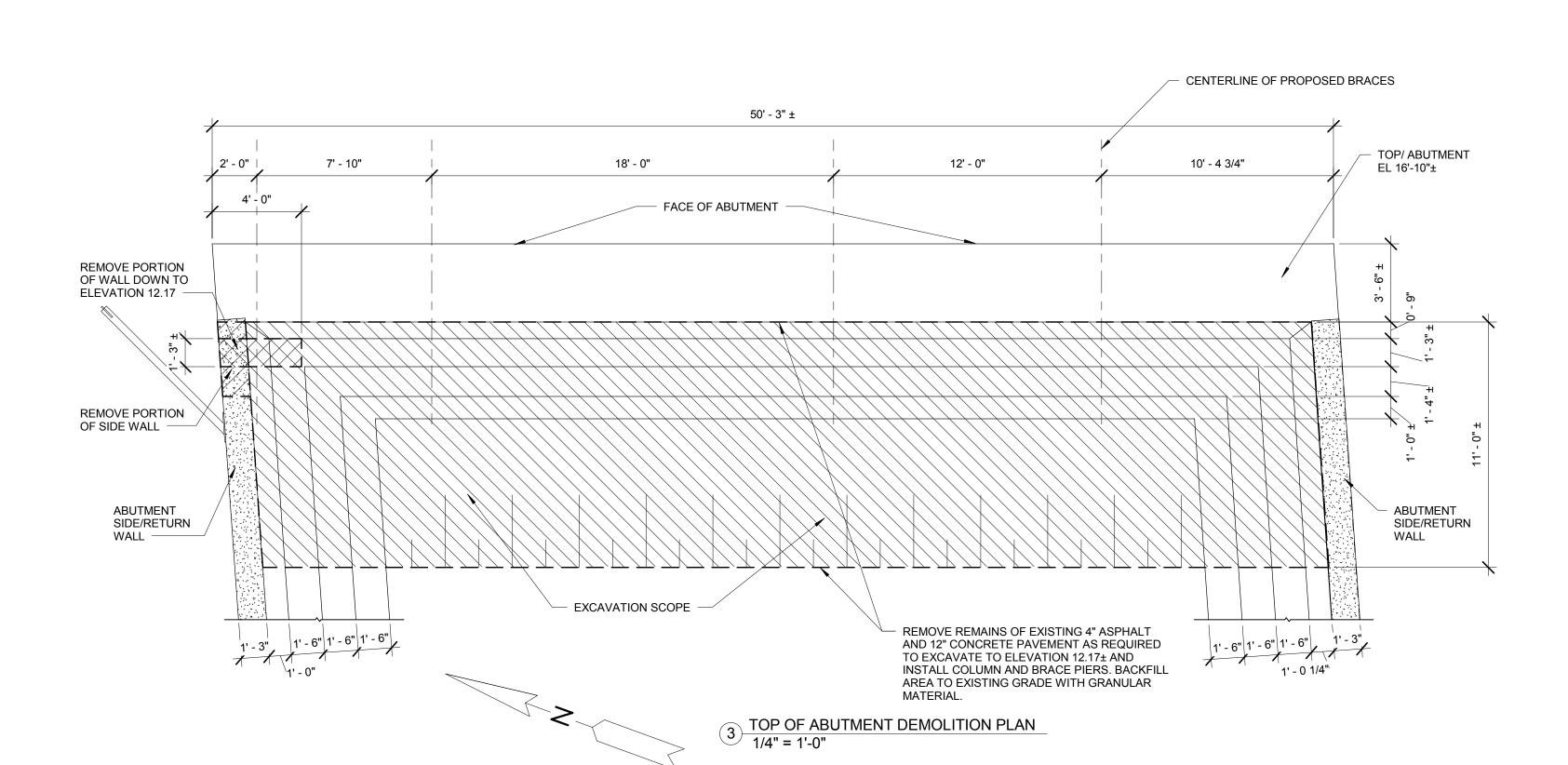
Signature:

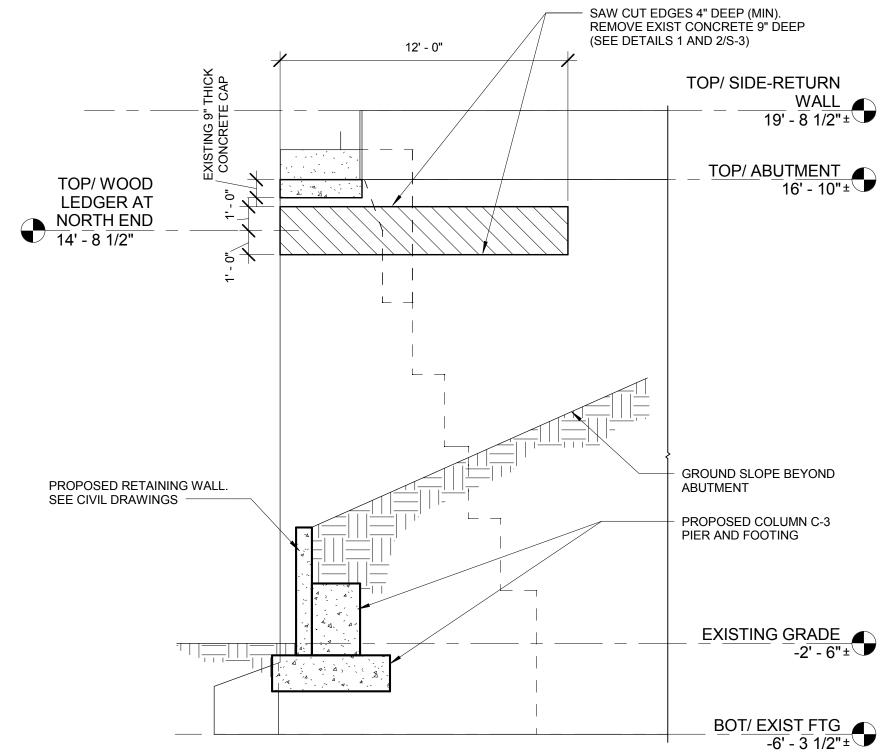
Drawing No:

C



1 ABUTMENT MODS-EAST ELEVATION 1/4" = 1'-0"





2 ABUTMENT MODS.-NORTH ELEVATION 1/4" = 1'-0"

HamiltonAnderson architecture landscape architecture urban design

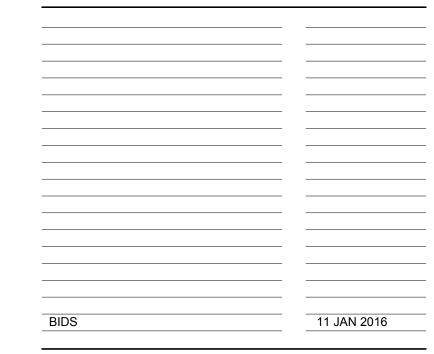
Hamilton Anderson Associates, Inc 1435 Randolph Suite 200 Detroit, Michigan 48226 p 313 964 0270 f 313 964 0170 www.hamilton-anderson.com

STRUCTURAL CIVIL AND ELECTRICAL ENGINEER WADE TRIM 511 GRISWOLD ST #2500 DETROIT, MI 48226 313 961 3650

DETROIT RIVERFRONT CONSERVANCY

600 RENAISSANCE CENTER, SUITE 1720 DEROIT, MI 48243

Key Plan



Projec

CAMPBELL MEMORIAL TERRACE

Drawing Title

EXISTING ABUTMENT MODIFICATION PLAN & ELEVATIONS

Project Number: 2015061.00

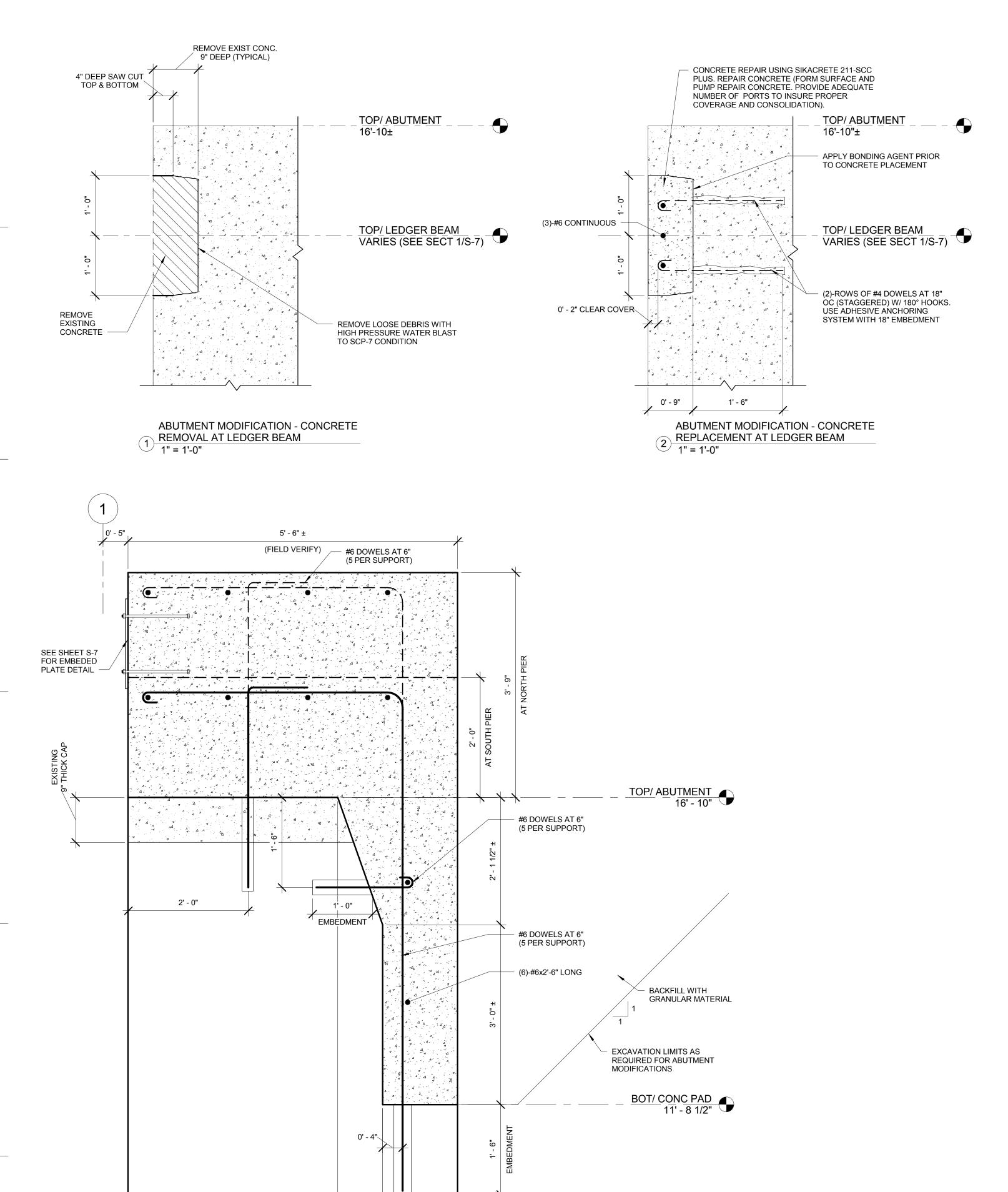
Drawn By: Designer Approved By: Checker

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

Seal:

Signature:

Drawing No:



1' - 3" ±

0' - 9" ±

4 BRACE SUPPORT PIER DETAIL
1" = 1'-0"

3' - 6" ±

#6 DOWELS AT 12" OC (6 PER PIER) 5' - 6" ± FIELD VERIFY (8)-#6 BARSx5'-6" LONG TOP/ ABUTMENT 16' - 10" - #6 DOWELS AT 12" OC (6 PER PIER) ANCHOR PLATE 3/4"x9"x2'-0" LONG (TYPICAL) 1" DIA THROUGH #6 DOWELS AT 12" OC (6 PER PEIR) **BOLT WITH ADHESIVE** 3' - 6" ± 0' - 9" ± ANCHORING SYSTEM BACKFILL WITH
GRANULAR MATERIAL FILL CORE WITH EPOXY 1' - 6" EXCAVATION LIMITS AS FACE OF EXISTING ABUTMENT **EMBEDMENT** REQUIRED FOR ABUTMENT MODIFICATIONS ADHESIVE ANCHORING SYSTEM (TYP) BOT/ CONC PAD 11' - 8 1/2" 1' - 3" ±

3 COLUMN SUPPORT PIER DETAIL
1" = 1'-0"

Hamilton Anderson

Hamilton Anderson Associates, Inc 1435 Randolph Suite 200 Detroit, Michigan 48226 p 313 964 0270 f 313 964 0170

www.hamilton-anderson.com

STRUCTURAL, CIVIL AND ELECTRICAL ENGINEER

WADE TRIM 511 GRISWOLD ST #2500 DETROIT, MI 48226 313 961 3650

DETROIT RIVERFRONT CONSERVANCY

600 RENAISSANCE CENTER, SUITE 1720 DEROIT, MI 48243

Key Plan

BIDS 11 JAN 2016

Projec

CAMPBELL MEMORIAL TERRACE

Drawing Title

EXISTING ABUTMENT MODIFICATION DETAILS

Project Number: 2015061.00

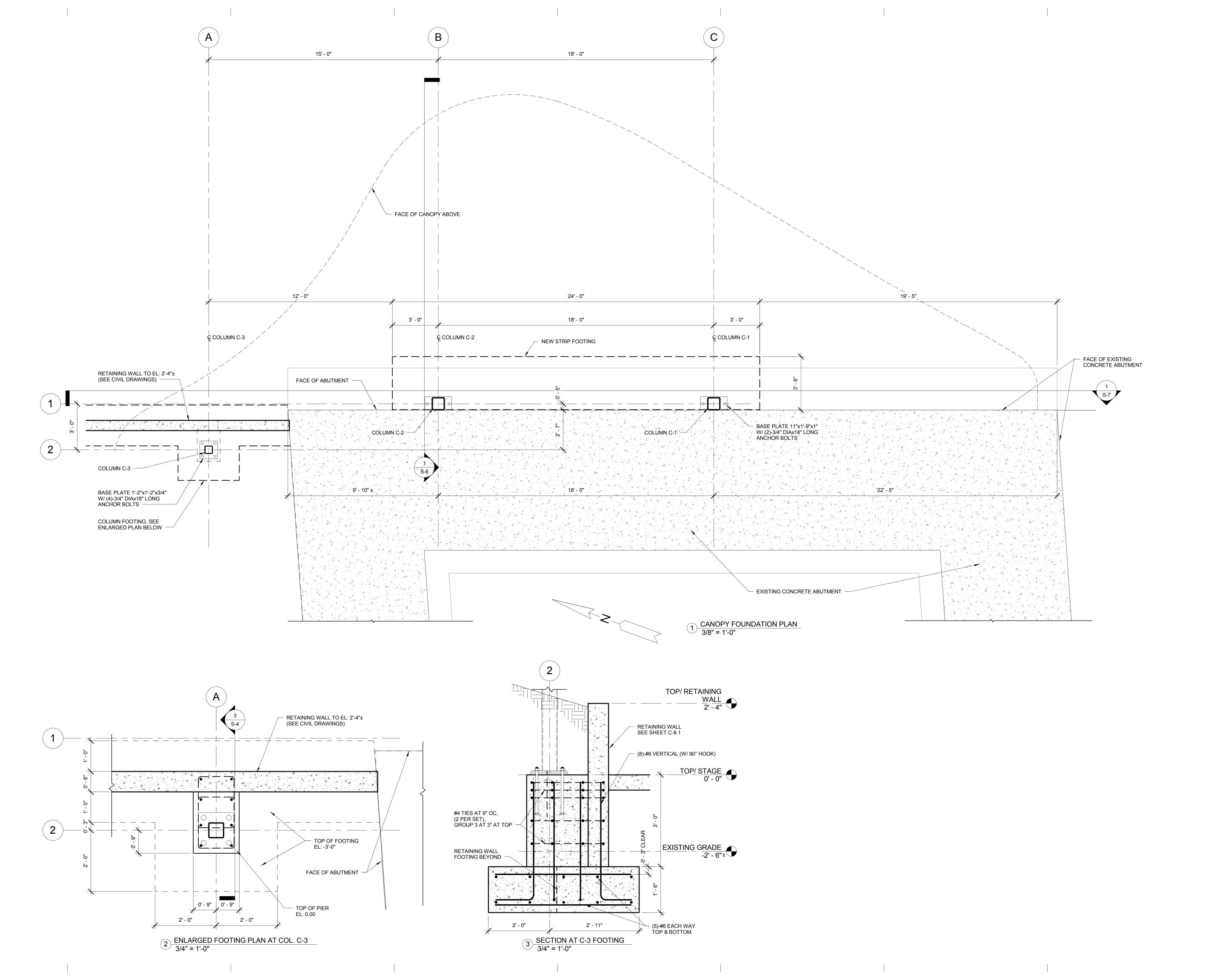
Drawn By: Designer Approved By: Checker

Scale: 1" = 1'-0"

Seal:

Signature: ____

Drawing No:



HamiltonAnderson

Hamilton Anderson Associates, Inc 1435 Randolph Suite 200 Detroit, Michigan 48226 p 313 964 0270 f 313 964 0170 www.hamilton-anderson.com

STRUCTURAL, CIVIL AND ELECTRICAL ENGINEER

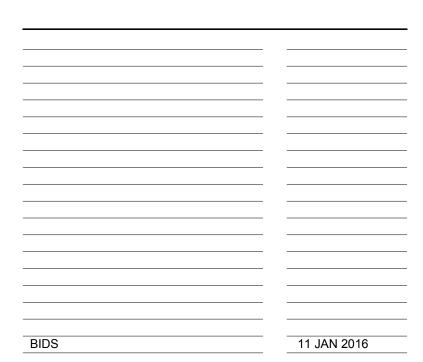
WADE TRIM 511 GRISWOLD ST #2500 DETROIT, MI 48226 313 961 3650

ient

DETROIT RIVERFRONT CONSERVANCY

600 RENAISSANCE CENTER, SUITE 1720 DEROIT, MI 48243

Key Plan



Projec

CAMPBELL MEMORIAL TERRACE

Drawing Title

CANOPY FOUNDATION PLAN

Project Number: 2015061.00

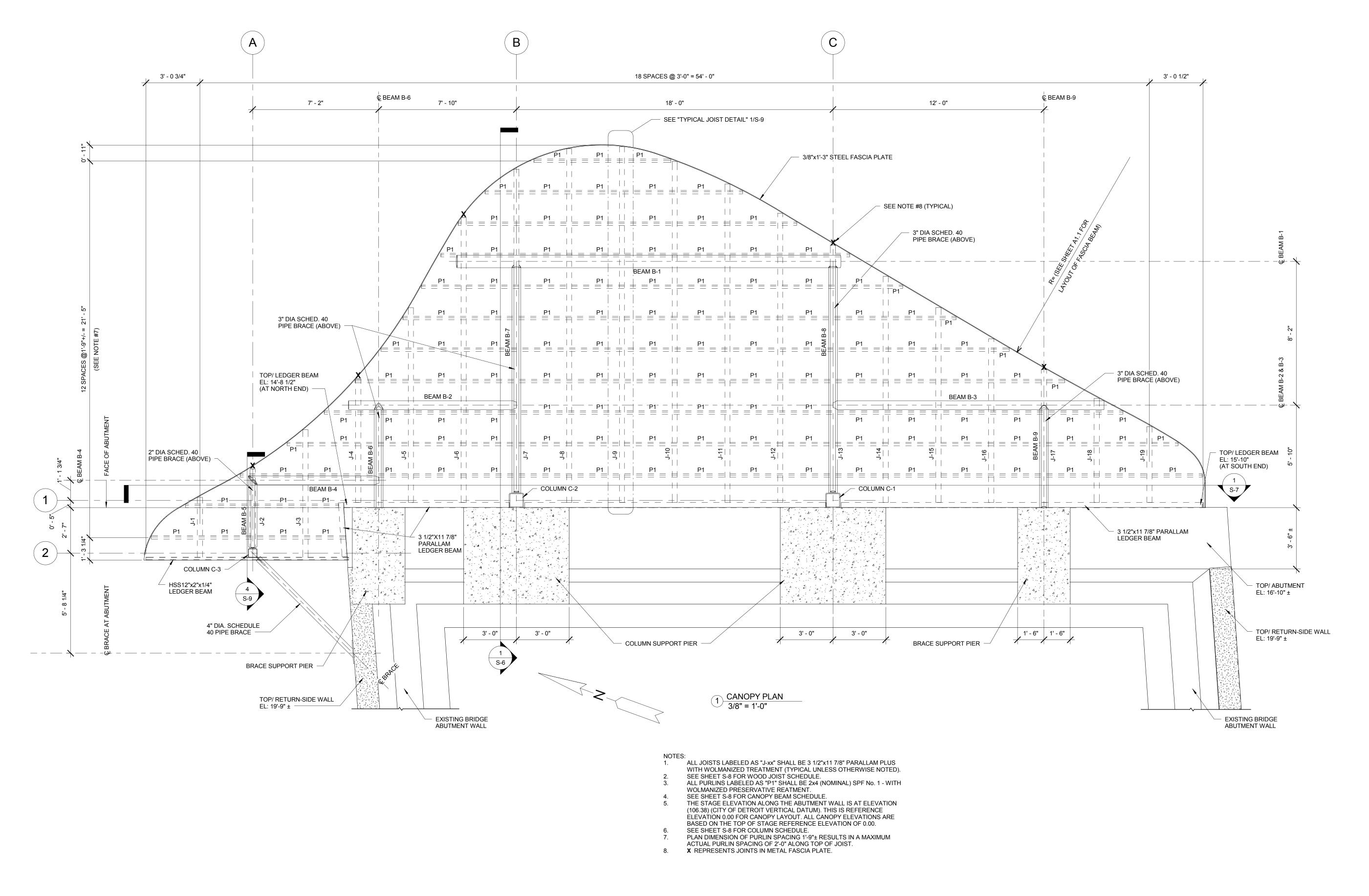
Drawn By: Designer Approved By: Checker

Scale: As indicated

Seal:

Signature:

Drawing No:



HamiltonAnderson architecture landscape architecture urban design

Hamilton Anderson Associates, Inc 1435 Randolph Suite 200 Detroit, Michigan 48226 p 313 964 0270 f 313 964 0170

www.hamilton-anderson.com

STRUCTURAL CIVIL AND ELECTRICAL ENGINEER WADE TRIM 511 GRISWOLD ST #2500 DETROIT, MI 48226 313 961 3650

DETROIT RIVERFRONT

CONSERVANCY

600 RENAISSANCE CENTER, SUITE 1720 DEROIT, MI 48243

Key Plan

BIDS 11 JAN 2016

Proied

CAMPBELL MEMORIAL TERRACE

CANOPY PLAN

Project Number: 2015061.00

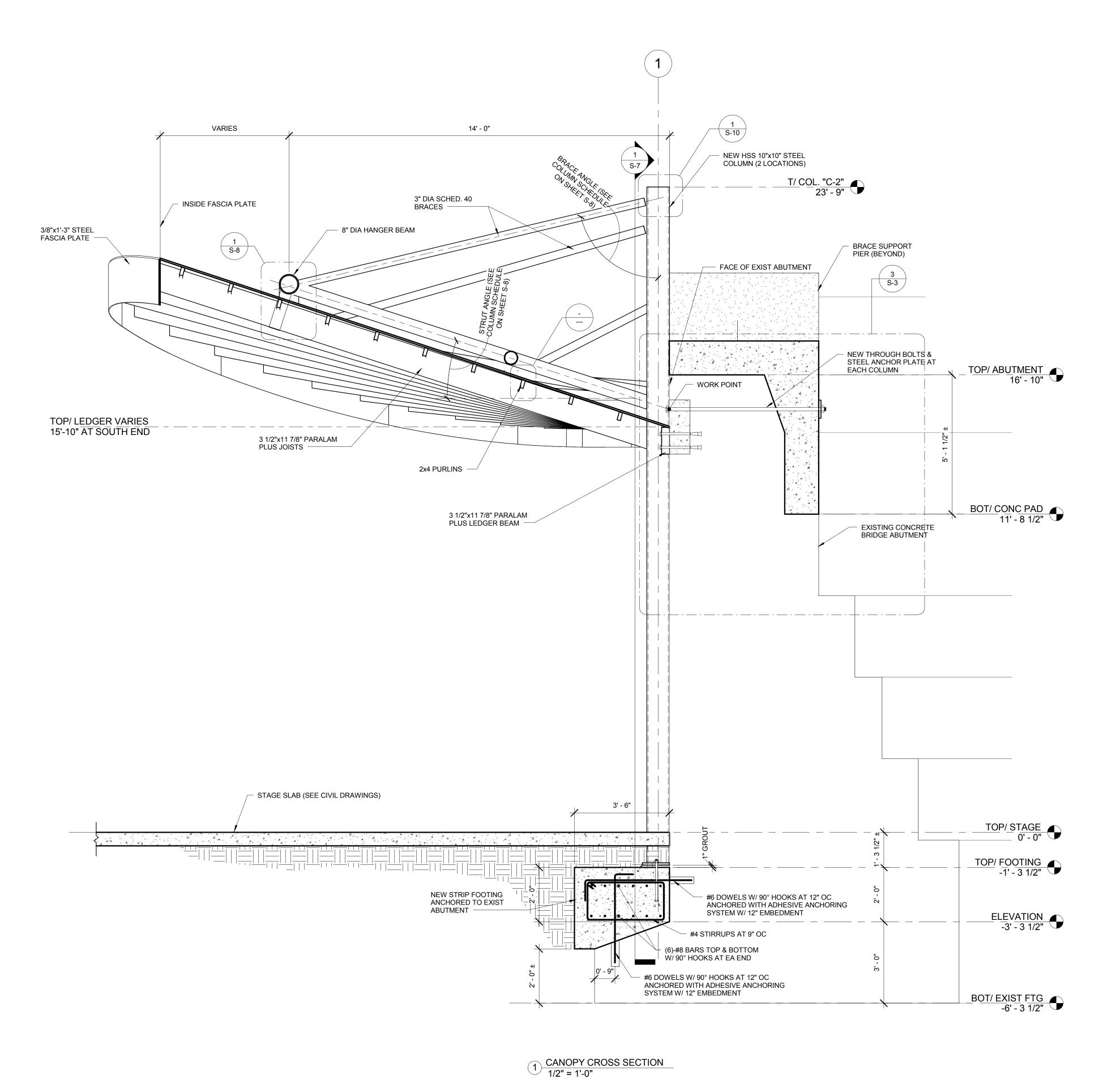
Drawn By: Designer Approved By: Checker

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

Seal:

Signature:

Drawing No:



HamiltonAnderson

Hamilton Anderson Associates, Inc 1435 Randolph Suite 200

Detroit, Michigan 48226 p 313 964 0270 f 313 964 0170 www.hamilton-anderson.com

STRUCTURAL, CIVIL AND ELECTRICAL **ENGINEER**

WADE TRIM 511 GRISWOLD ST #2500 DETROIT, MI 48226 313 961 3650

DETROIT RIVERFRONT CONSERVANCY

600 RENAISSANCE CENTER, SUITE 1720 DEROIT, MI 48243

Key Plan

11 JAN 2016

CAMPBELL MEMORIAL TERRACE

Drawing Title

CANOPY SECTIONS-1

Project Number: 2015061.00

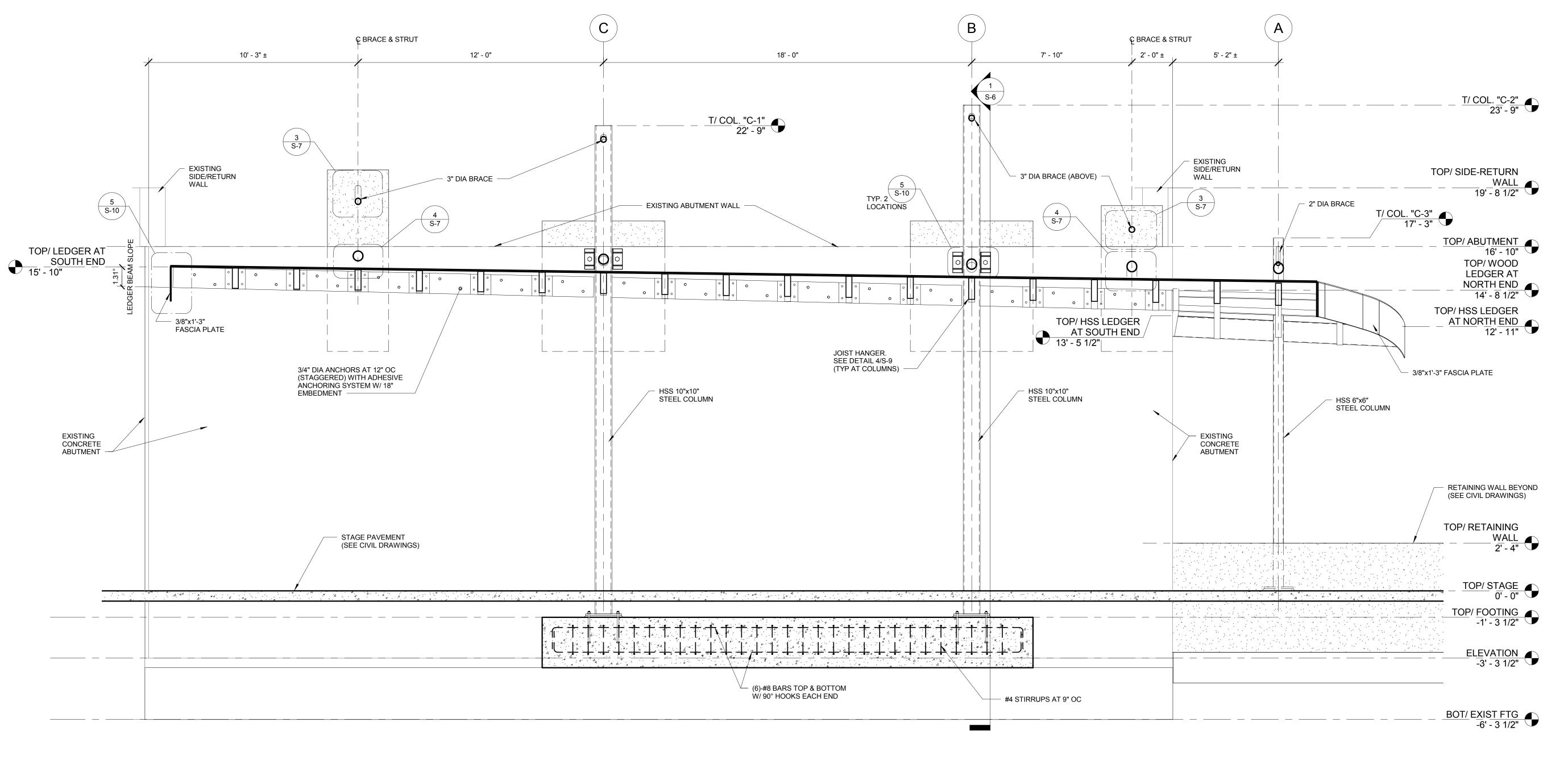
Drawn By: Designer Approved By: Checker

Scale: 1/2" = 1'-0"

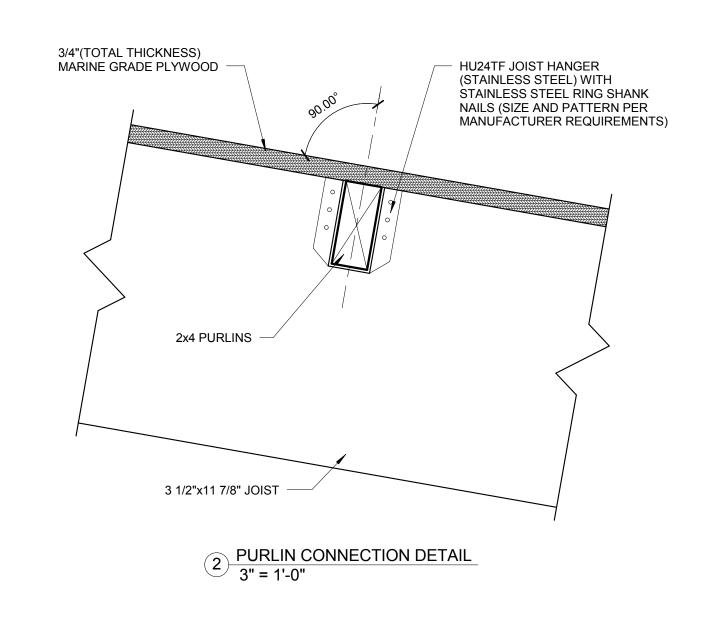
Seal:

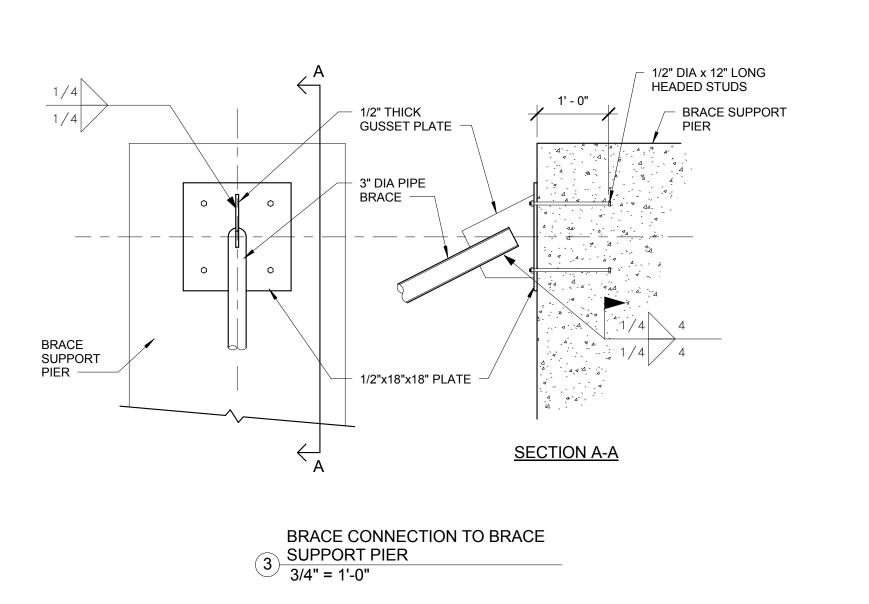
Signature: ____

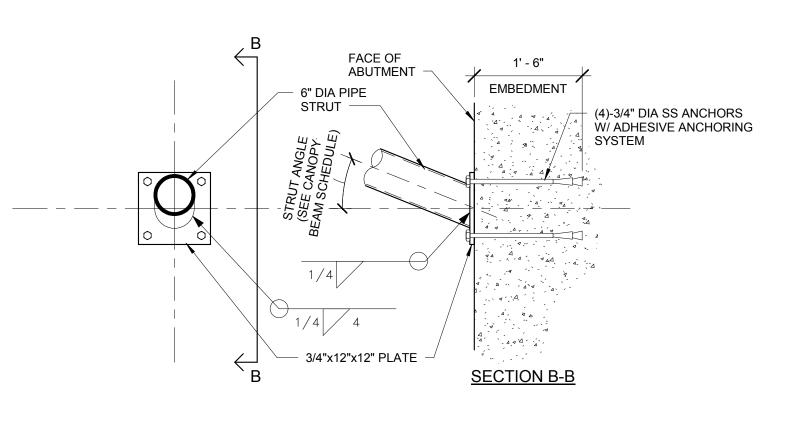
Drawing No:



1 CANOPY LONGITUDINAL SECTION
3/8" = 1'-0"







STRUT CONNECTION TO ABUTMENT

DETAIL

3/4" = 1'-0"

Hamilton Anderson

Hamilton Anderson Associates, Inc 1435 Randolph Suite 200 Detroit, Michigan 48226 p 313 964 0270 f 313 964 0170

www.hamilton-anderson.com

STRUCTURAL, CIVIL AND ELECTRICAL ENGINEER WADE TRIM 511 GRISWOLD ST #2500 DETROIT, MI 48226 313 961 3650

DETROIT RIVERFRONT
CONSERVANCY
600 RENAISSANCE CENTER, SUITE 1720

DEROIT, MI 48243

Key Plan

BIDS 11 JAN 2016

Project

CAMPBELL MEMORIAL TERRACE

CANOPY SECTIONS-2

Project Number: 2015061.00

Drawn By: Designer Approved By: Checker

Scale: As indicated

Seal:

Signature: _

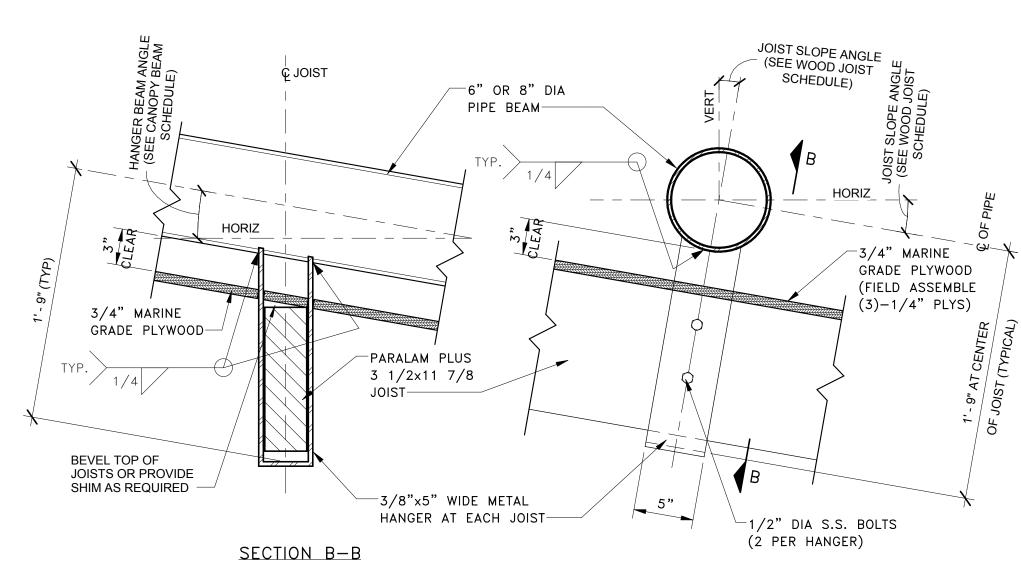
Drawing No:

		CANOP	Y BEAM	SCHEDUL	_E	
BEAM MARK	BEAM SECTION	TYPE	ANGLE	SEE DETAIL	BRACE ANGLE	REMARKS
B-1	PIPE - 8" DIA. EXTRA STRONG	HANGER BEAM	5.25°	A/S-8	NA	PROVIDE CLOSURE PLATE AT BOTH ENDS
B-2	PIPE - 6" DIA. STANDARD WEIGHT	HANGER BEAM	1.38°	B/S-8	NA	PROVIDE CLOSURE PLATE AT OPEN END
B-3	PIPE - 6" DIA. STANDARD WEIGHT	HANGER BEAM	1.38°	C/S-8	NA	PROVIDE CLOSURE PLATE AT OPEN END
B-4	PIPE - 4" DIA. STANDARD WEIGHT	HANGER BEAM	-0.39°	D/S-8	NA	
B-5	PIPE - 4" DIA. STANDARD WEIGHT	STRUT	24.0°	4/S-9	78°	
B-6	PIPE - 6" DIA. STANDARD WEIGHT	STRUT	21.22°	E/S-8	89.5°	
B-7	PIPE - 6" DIA. STANDARD WEIGHT	STRUT	17.92°	E/S-8	76.64°	
B-8	PIPE - 6" DIA. STANDARD WEIGHT	STRUT	9.88°	E/S-8	74.01°	
B-9	PIPE - 6" DIA. STANDARD WEIGHT	STRUT	4.27°	E/S-8	63.0°	

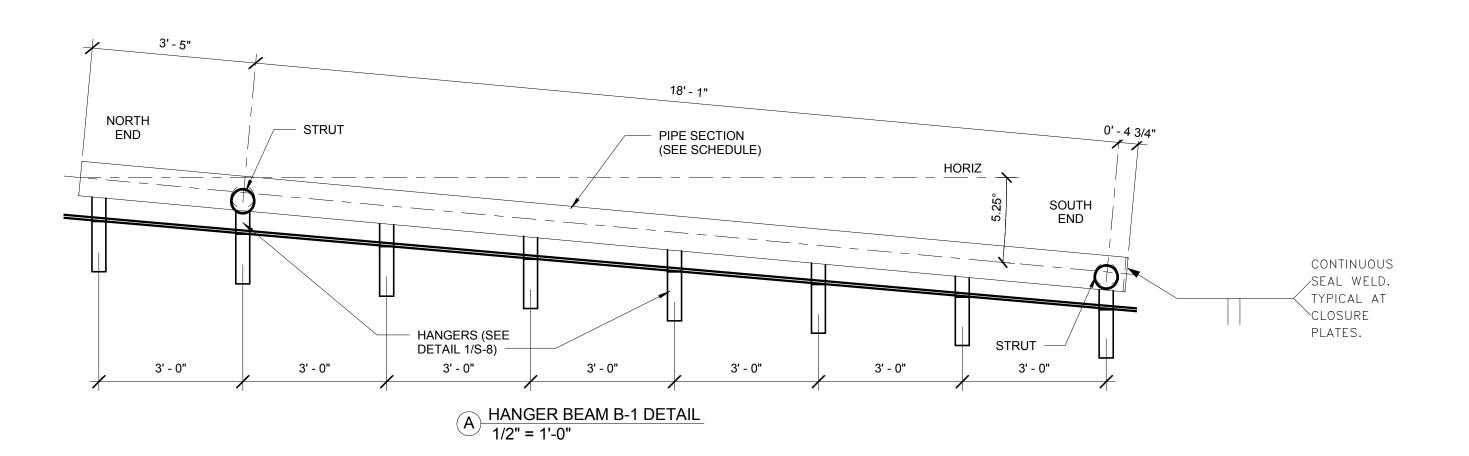
		WOOD	JOIST S	CHEDULI	E
JOIST MARK	JOIST SIZE (THICKNESxDEPTH)	JOIST LENGTH (FEET)*	JOIST SLOPE ANGLE	REFERENCE DETAIL	REMARKS
J-1	3 1/2"x11 7/8"	3'-10 1/2"	25.29°	1/S-9	LENGTH OF JOIST FROM HSS 12x2 TO FASCIA PLATE
J-2	3 1/2"x11 7/8"	5'-1 3/4"	24.0°	1/S-9	LENGTH OF JOIST FROM FACE OF COLUMN TO FASCIA PLATE
J-3	3 1/2"x11 7/8"	8'-0"	22.92°	1/S-9	LENGTH OF JOIST FROM HSS 12x2 TO FASCIA PLATE
J-4	3 1/2"x11 7/8"	7'-9"	21.70°	1/S-9	
J-5	3 1/2"x11 7/8"	12'-1"	20.46°	1/S-9	
J-6	3 1/2"x11 7/8"	17'-4 1/2"	19.20°	1/S-9	
J-7	3 1/2"x11 7/8"	19'-5 1/4"	17.92°	1/S-9	LENGTH OF JOIST FROM FACE OF COLUMN TO FASCIA PLATE
J-8	3 1/2"x11 7/8"	21'-0 1/2"	16.62°	1/S-9	
J-9	3 1/2"x11 7/8"	21'-0 1/4"	15.30°	1/S-9	
J-10	3 1/2"x11 7/8"	20'-0 3/4"	13.97°	1/S-9	
J-11	3 1/2"x11 7/8"	18'-7 1/2"	12.62°	1/S-9	
J-12	3 1/2"x11 7/8"	16'-10 1/2"	11.25°	1/S-9	
J-13	3 1/2"x11 7/8"	14'-5"	9.88°	1/S-9	LENGTH OF JOIST FROM FACE OF COLUMN TO FASCIA PLATE
J-14	3 1/2"x11 7/8"	13'-1 1/4"	8.49°	1/S-9	
J-15	3 1/2"x11 7/8"	11'-3 1/4"	7.09°	1/S-9	
J-16	3 1/2"x11 7/8"	9'-5 1/2"	5.68°	1/S-9	
J-17	3 1/2"x11 7/8"	7'-8 1/4"	4.27°	1/S-9	
J-18	3 1/2"x11 7/8"	6'-0 1/4"	2.85°	1/S-9	
J-19	3 1/2"x11 7/8"	4'-4 3/4"	1.42°	1/S-9	

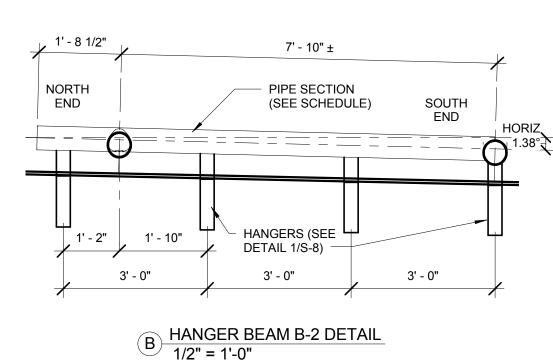
*JOIST LENGTH IS DISTANCE FROM FACE OF LEDGER BEAM (OR FACE OF COLUMN) TO INSIDE OF FASCIA PLATE ALONG THE CENTERLINE OF THE JOIST ALONG THE TOP OF THE JOIST.

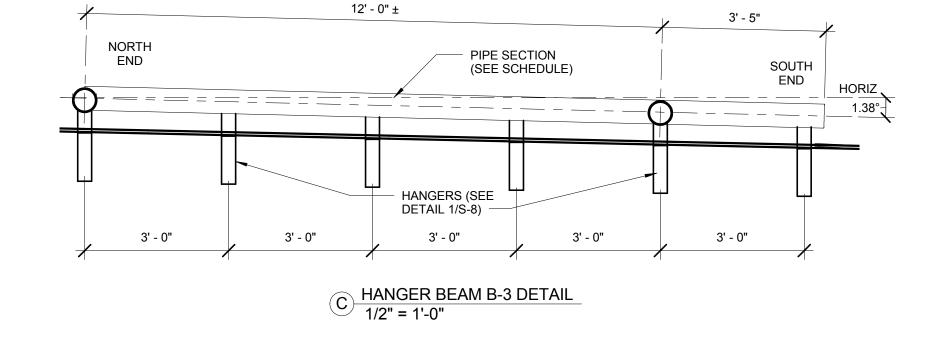
	COLUMN SCHEDULE							
COLUMN MARK	COLUMN SIZE	BOTTOM OF BASE PLATE ELEVATION		REFERENCE DETAIL/SECTION	STRUT ANGLE	STRUT ELEVATION	BRACE ANGLE	REMARKS
C-1	HSS 10x10x1/2	-1.208'	22'-9"	1/S-6	9.88°	16'-11 1/4"	74.01°	
C-2	HSS 10x10x1/2	-1.208'	23'-9"	1/S-6	17.92°	15'-8 1/2"	76.64°	
C-3	HSS 6x6x3/8	0.083'	17'-3"	4/S-9	24.12°	13'-11 3/4"	78.0°	

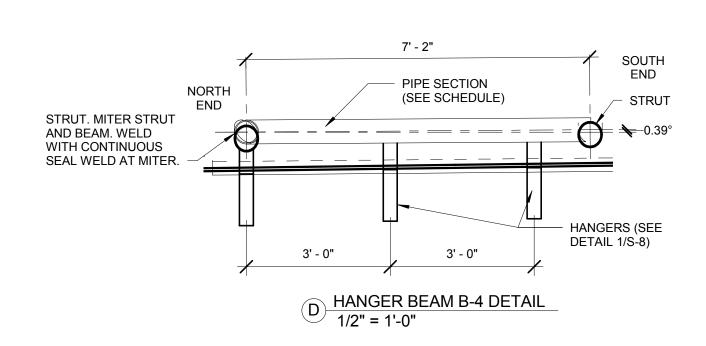


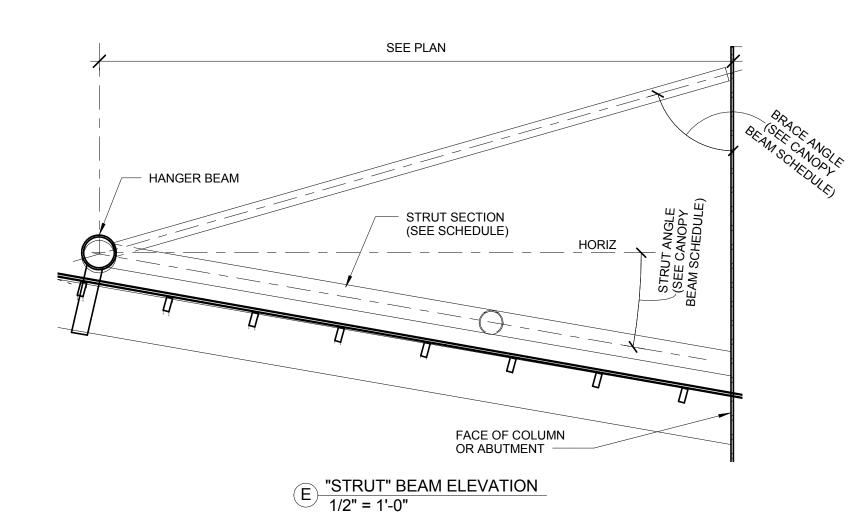
1 JOIST TO SUPPORT STEEL "HANGER"
1 1/2" = 1'-0"











HamiltonAnderson

Hamilton Anderson Associates, Inc 1435 Randolph Suite 200 Detroit, Michigan 48226

p 313 964 0270 f 313 964 0170 www.hamilton-anderson.com

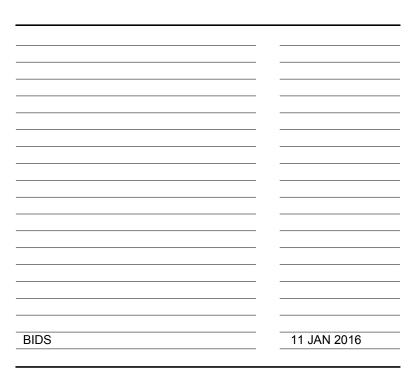
STRUCTURAL, CIVIL AND ELECTRICAL ENGINEER

WADE TRIM 511 GRISWOLD ST #2500 DETROIT, MI 48226 313 961 3650

DETROIT RIVERFRONT CONSERVANCY

600 RENAISSANCE CENTER, SUITE 1720 DEROIT, MI 48243

Key Plan



Pro

CAMPBELL MEMORIAL TERRACE

Drawing Title

SCHEDULES AND DETAILS

Project Number: 2015061.00

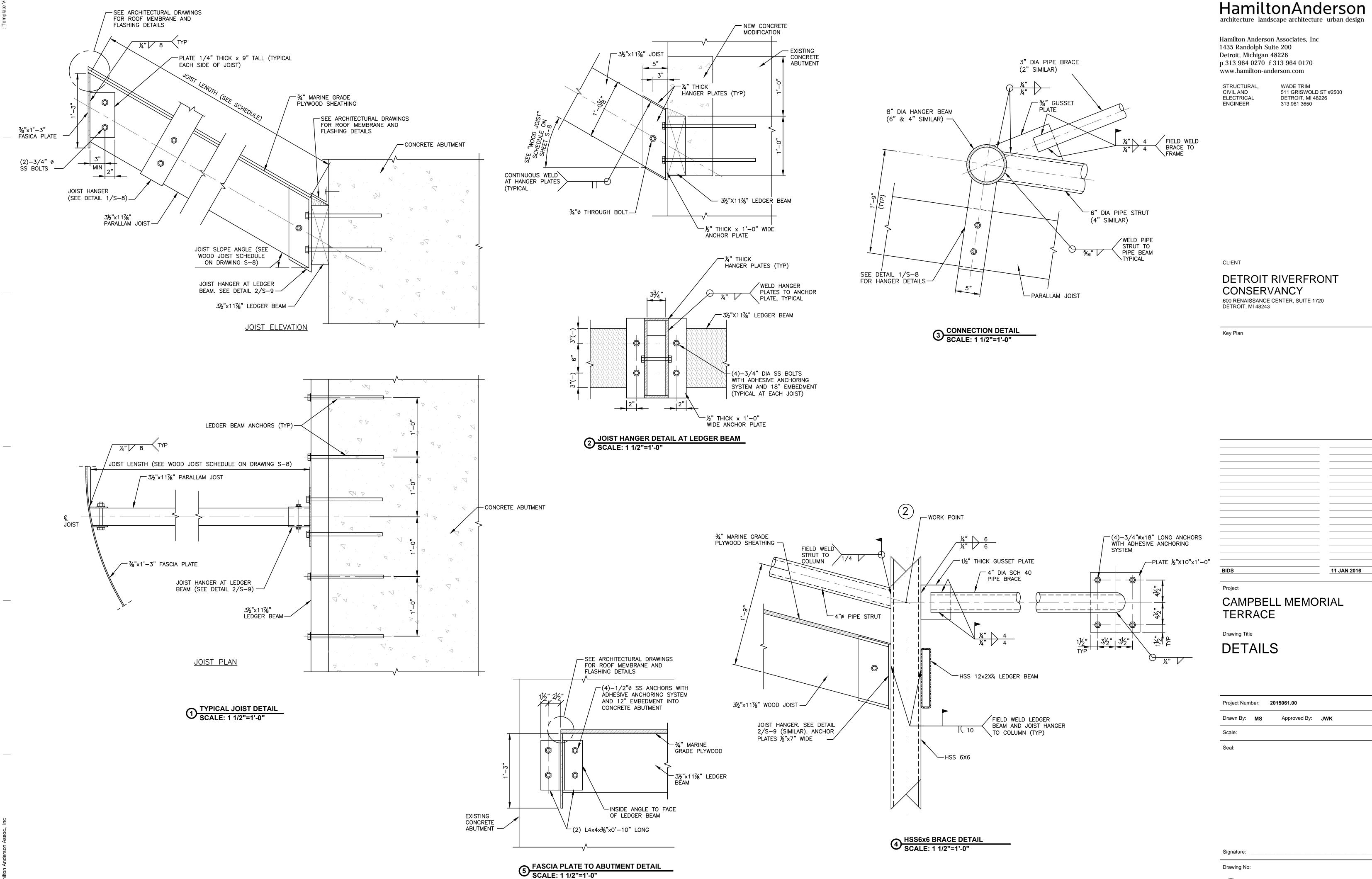
Drawn By: Designer Approved By: Checker

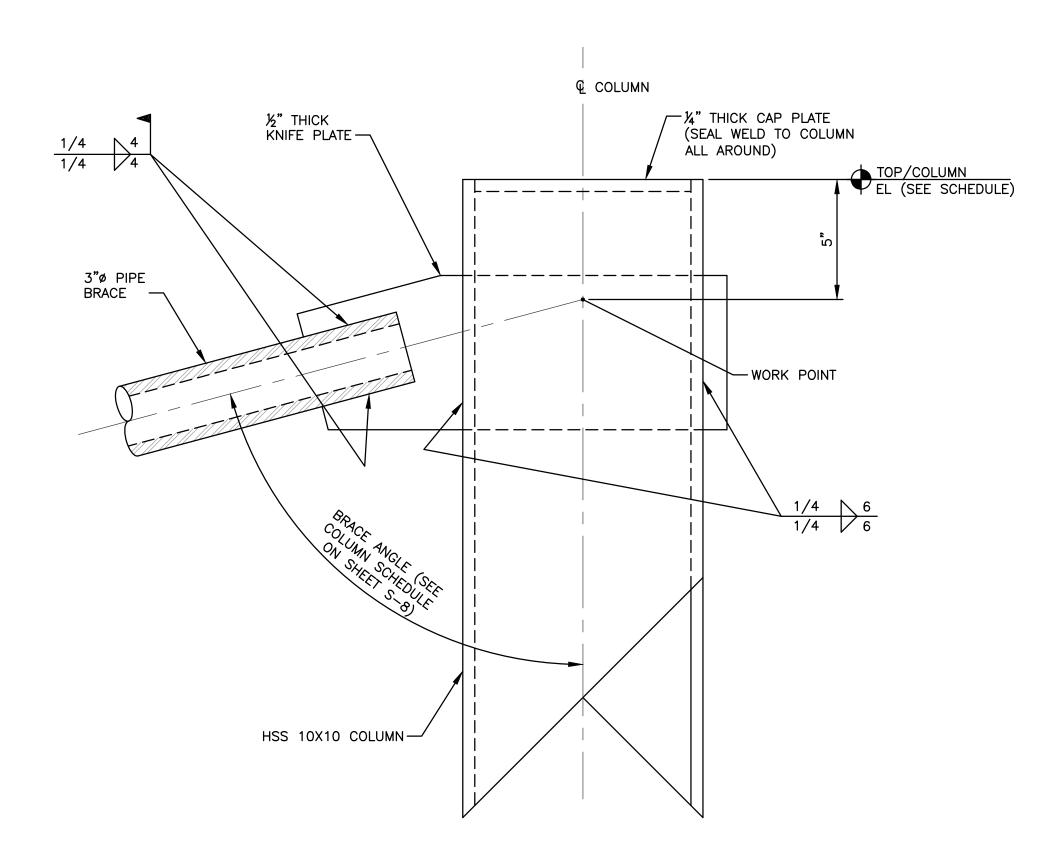
Scale: As indicated

Seal:

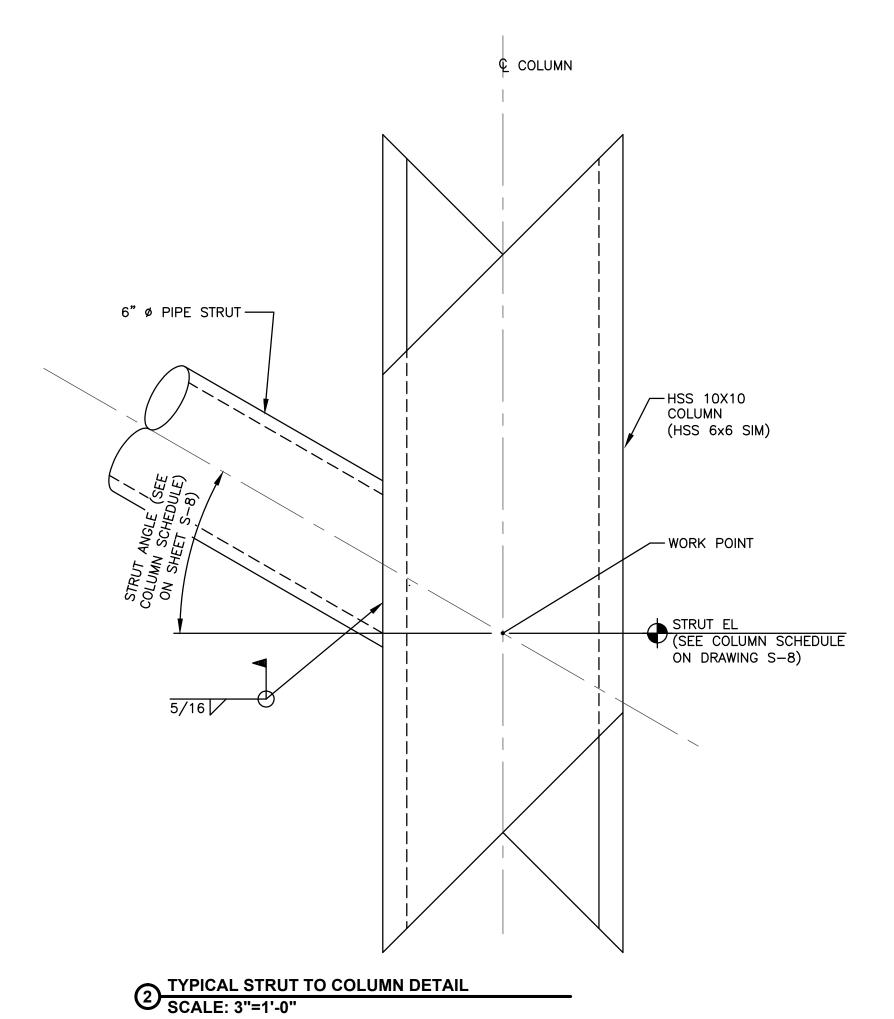
Signature: ____

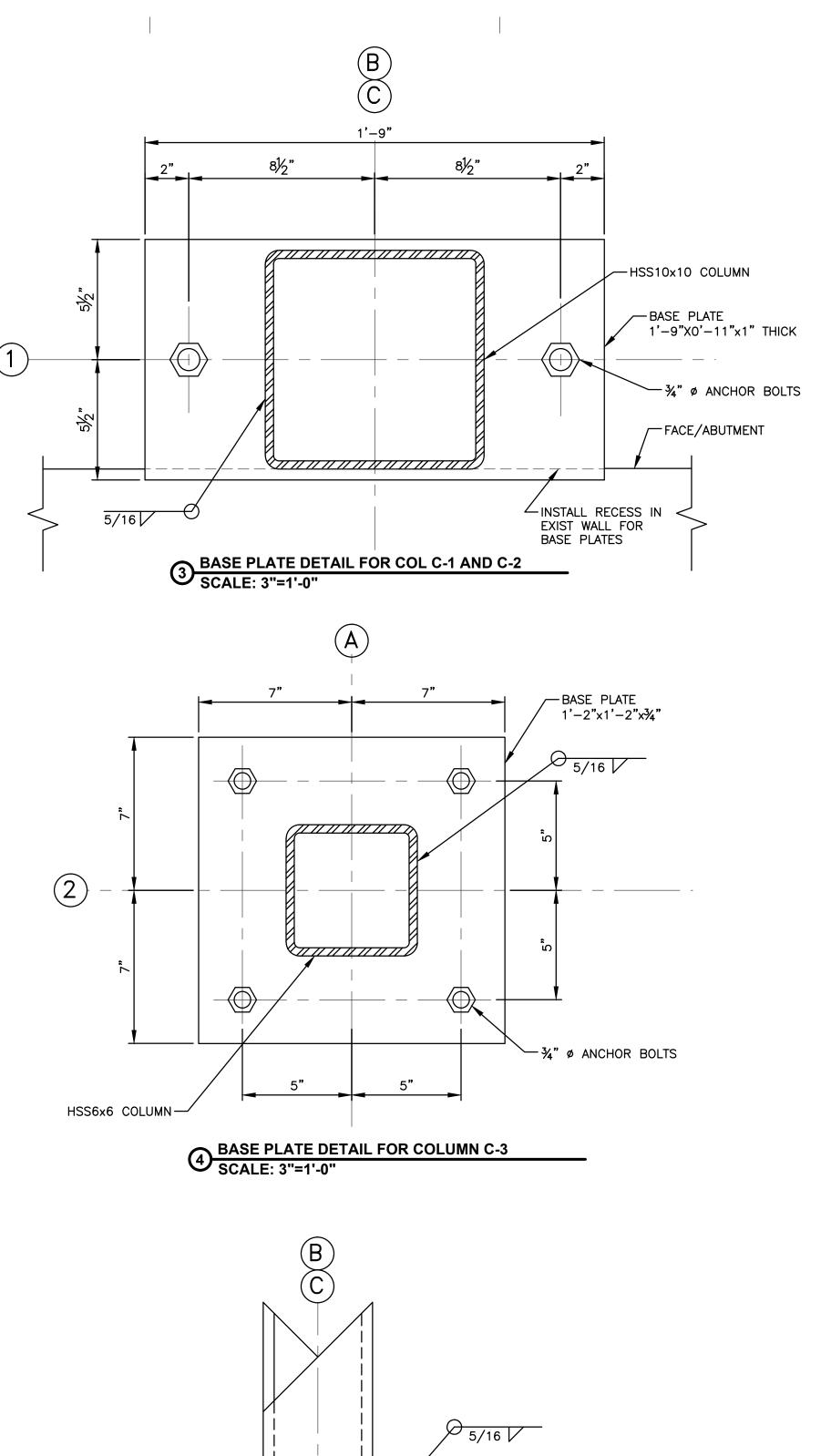
Drawing No:

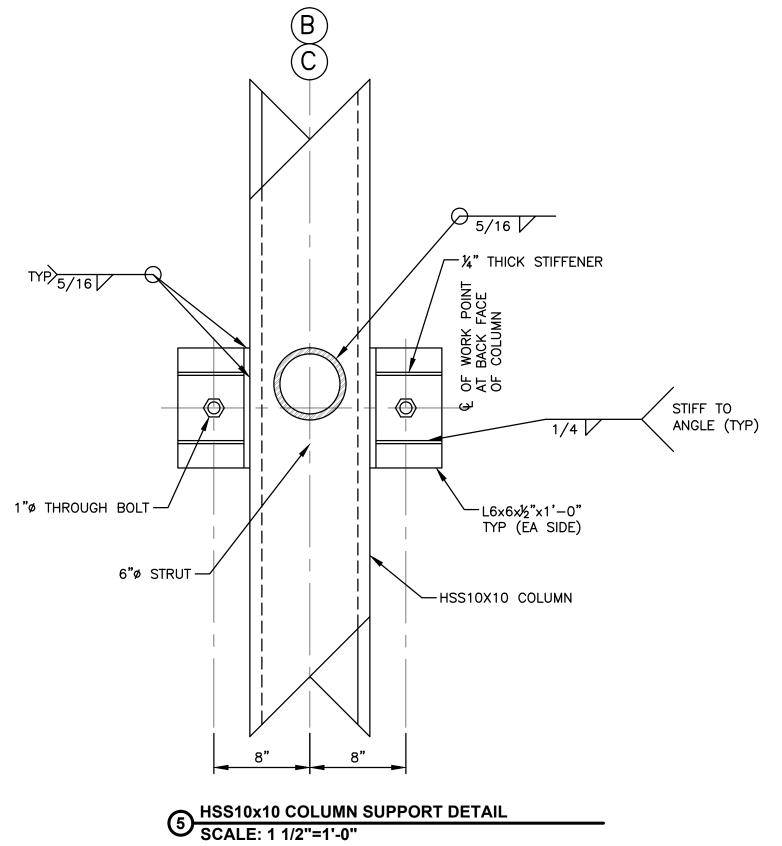




TYPICAL BRACE TO COLUMN DETAIL SCALE: 1 1/2"=1'-0"







HamiltonAnderson architecture landscape architecture urban design

Hamilton Anderson Associates, Inc 1435 Randolph Suite 200 Detroit, Michigan 48226 p 313 964 0270 f 313 964 0170 www.hamilton-anderson.com

STRUCTURAL, WADE TRIM
CIVIL AND 511 GRISWOLD ST #2500
ELECTRICAL DETROIT, MI 48226
ENGINEER 313 961 3650

CLIENT

DETROIT RIVERFRONT CONSERVANCY

600 RENAISSANCE CENTER, SUITE 1720 DETROIT, MI 48243

Key Plan

BIDS	11 JAN 2016
	-

Proj

CAMPBELL MEMORIAL TERRACE

Drawing Title

DETAILS

Project Number:		2015061.00	
MS	Drawn By:	Approved By:	JWK
	Scale:		

Signatu

Drawing No:



Revised Wall Alignment | Campbell Memorial Terrace