



# STORAGE UNIT ADDITION FOR PROJECT PEERLESS

603 E. MILWAUKEE ST.  
DETROIT, MI. 48202

DETROIT HISTORIC DISTRICT COMMISSION





PROJECT PEERLESS

# CURRENT PHOTOGRAPHS

## CURRENT PHOTOGRAPHS

### EAST ELEVATION 1



**This existing block addition on 603 E. Milwaukee will be demolished. This scope of work was approved by the HDC in our Notice of Denial (denial was for other scope of work not including this structure) on 11/16/2021.**

EAST ELEVATION 2



EAST ELEVATION 3





PROJECT PEERLESS

# SCOPE OF WORK



## **EXISTING CONDITIONS**

603 E. Milwaukee is a corner property in the Jam Handy / North End East Grand Blvd. historic district. It is a brick and steel frame construction. On the east side of the building is a miscellaneous single-story concrete block structure, which currently sits as an addition to the main brick building on the site. We have previously proposed an application to the HDC to demolish the existing concrete block structure, which is still scheduled to occur. This scope of demolition was approved previously by the HDC in a 'Notice of Denial' form (denial was for other scope of work not including this structure) on 11/16/2021.

## **DESCRIPTION OF PROJECT**

We are proposing to construct a new single-story, slab on grade, masonry wall storage addition with an outdoor patio / recreation area on the roof at 603 E. Milwaukee. The new addition and patio will be placed in the location of the existing masonry structure and will be approximately 41'-0" L x 18'-0" W x 19'-0" H. This new addition will be used by the 2<sup>nd</sup> floor tenants. We are planning to use masonry block for the façade, painted wood stairs and a painted black metal railing. For reference, please see the following supportive drawings later in this document for elevations and renderings.



PROJECT PEERLESS

# PROPOSED NEW STORAGE ADDITION



City of Detroit,  
Wayne County, Michigan  
**CONSTRUCTION DOCUMENTS**

Prepared For  
**Ferry Street Ventures, LLC**

PART OF THE NE 1/4 OF SECTION 31,  
CITY OF DETROIT,  
WAYNE COUNTY, MICHIGAN

**Owner**

FERRY STREET VENTURES, LLC  
1520 NORTH JOHNSON STREET  
ARLINGTON, VA 22201  
CONTACT:  
MR. EDMUND J. FISH  
EMAIL: FISH.EDMUNDJ@GMAIL.COM

**Architect**

DS ARCHITECTS, INC  
7300 DIXIE HIGHWAY  
SUITE 600  
CLARKSTON, MI 48346  
CONTACT:  
MR. DEREK SLUPKA, AIA, LEED, AP  
PHONE: (248)605-2030  
EMAIL: DEREK@DSARCHITECTS.COM

**Civil Engineer**

NOWAK & FRAUS ENGINEERS  
46777 WOODWARD AVENUE  
PONTIAC, MICHIGAN 48342  
CONTACT:  
MR. JASON R. LONGHURST, P.E.  
PHONE: (248) 332-7931  
EMAIL: JLONGHURST@NFE-ENGR.COM

**Landscape Architect**

NOWAK & FRAUS ENGINEERS  
46777 WOODWARD AVENUE  
PONTIAC, MICHIGAN 48342  
CONTACT:  
MR. GEORGE OSTROWSKI  
PHONE: (248) 332-7931  
EMAIL: GOSTROWSI@NFE-ENGR.COM



LOCATION MAP

REVISIONS:	
2021-12-03	ISSUED FOR OWNER REVIEW
2022-05-11	REVISED PER OWNER
2022-08-18	REVISED PER ROW REVIEW
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2023-08-07	REVISED PER OWNER
2023-09-11	REVISED PER OWNER

**LEGAL DESCRIPTION**

PARCEL 1  
03001776  
603 E MILWAUKEE AVE

LOTS 1 AND 2, SUB OF LOTS 88-95, FRISBIE AND FOXEN'S SUB, CITY OF DETROIT, WAYNE COUNTY, MICHIGAN, AS RECORDED IN LIBER 8, PAGE 78 OF PLATS, WAYNE COUNTY RECORDS.

PARCEL 2  
03001777  
609 E MILWAUKEE AVE

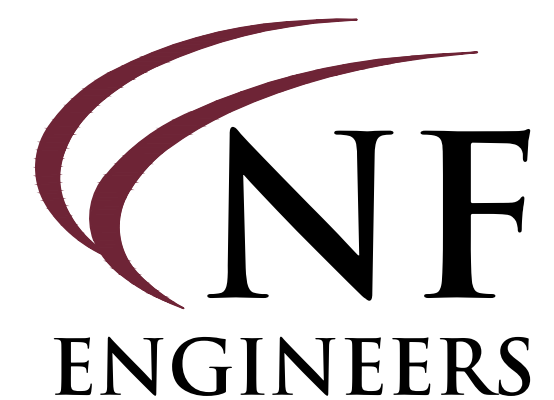
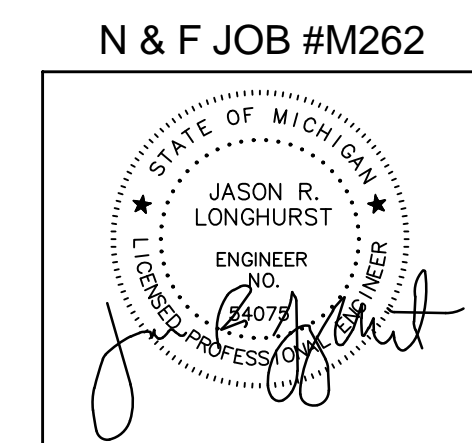
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**SHEET INDEX**

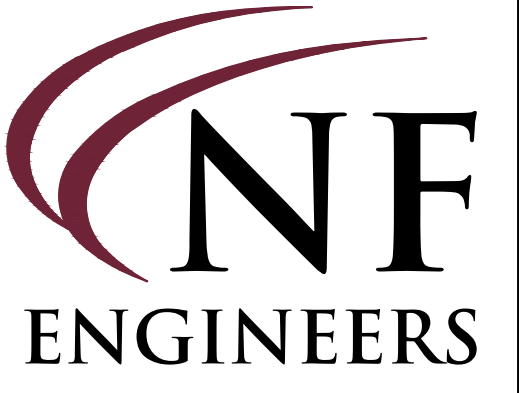
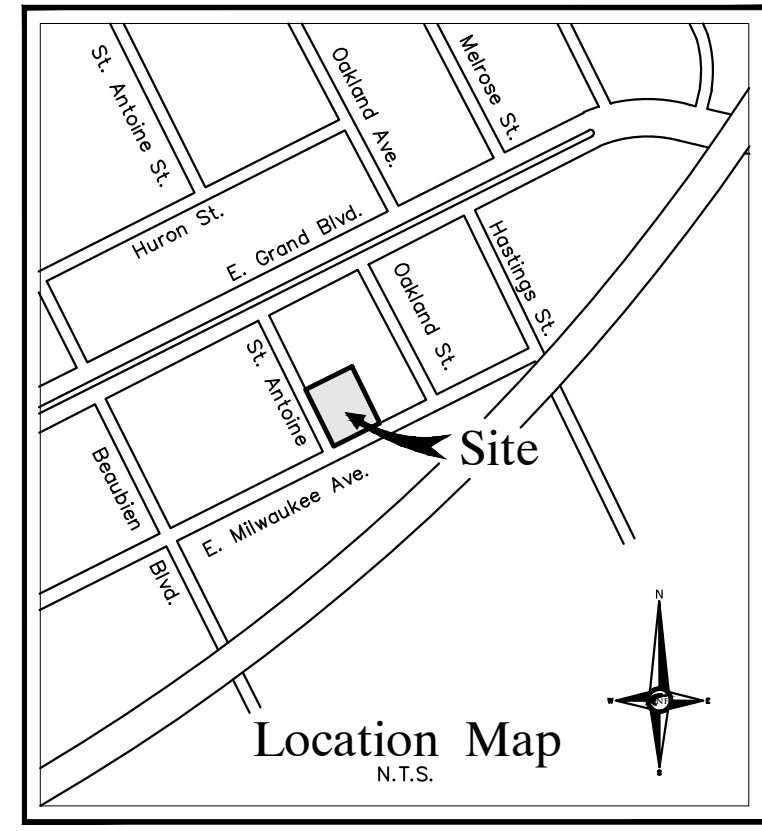
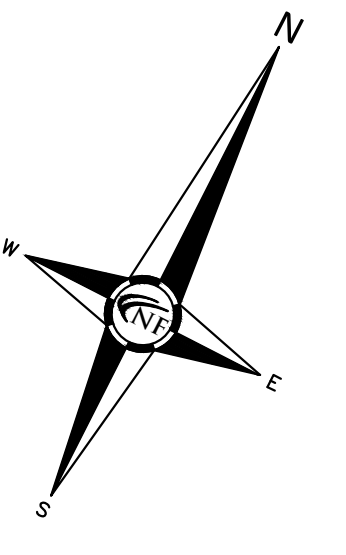
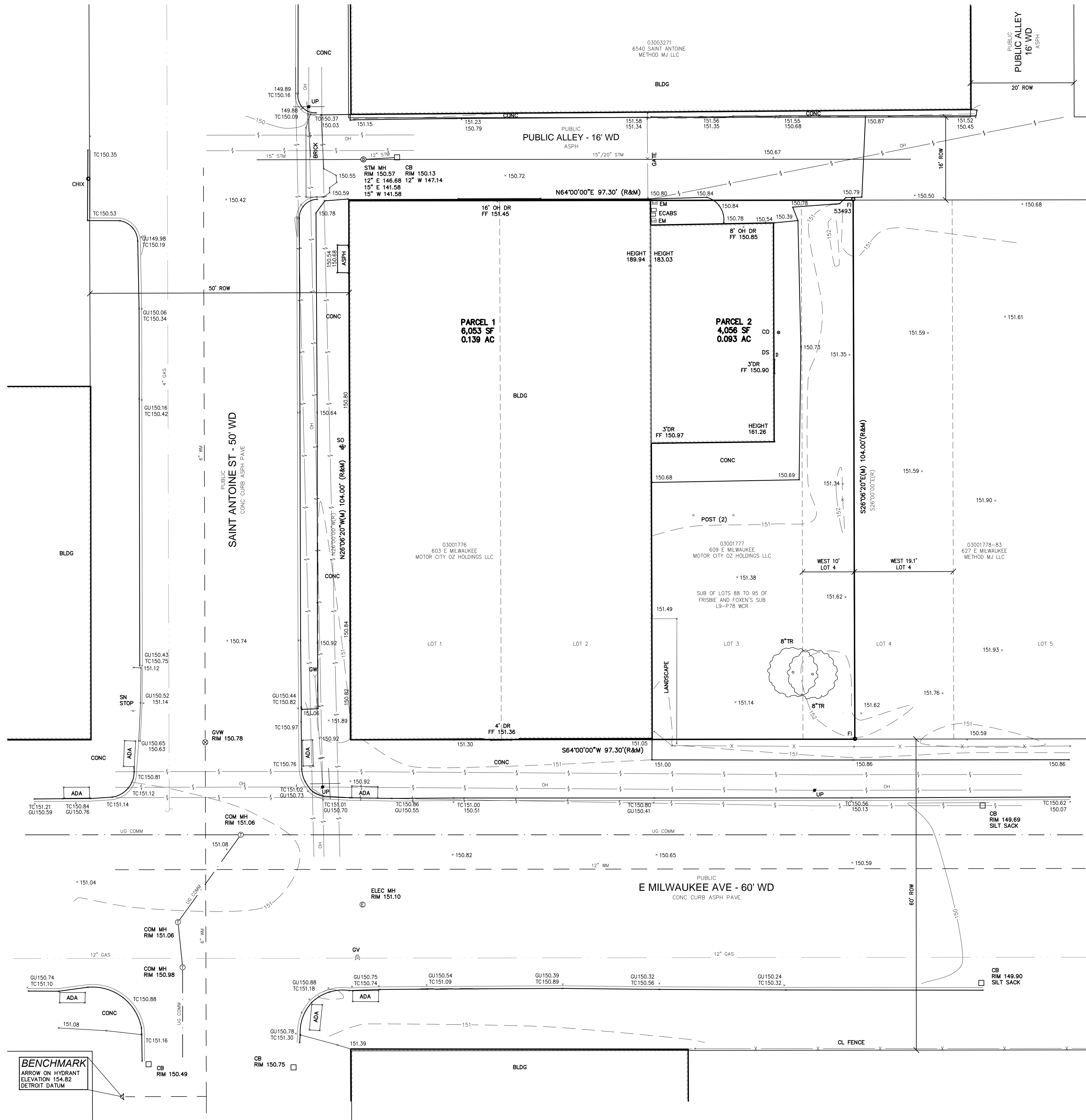
C0	Cover Sheet
C1	Boundary and Topographic Survey
C2	Demolition Plan
C3	Engineering Plan
C4	Storm Profile
C5	Soil Erosion Control and Drainage Area Plan
C6	Notes and Details
C7	Notes and Details
C8	Notes and Details
L1	Landscape Plan

Project Name

**603 E MILWAUKEE AVE  
DETROIT MI.**



N & F JOB #M262  
CIVIL ENGINEERS  
LAND SURVEYORS  
LAND PLANNERS  
NOWAK & FRAUS ENGINEERS  
46777 WOODWARD AVE.  
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**PROJECT**  
603 E Milwaukee Ave  
Detroit, Michigan

**CLIENT**  
Ferry Street Ventures, LLC  
1520 North Johnson Street  
Arlington, VA 22201

**LEGAL DESCRIPTION**

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03001777  
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**SURVEY NOTES**

ALL ELEVATIONS ARE EXISTING ELEVATIONS, UNLESS OTHERWISE NOTED.  
UTILITY LOCATIONS WERE OBTAINED FROM MUNICIPAL OFFICIALS AND RECORDS OF UTILITY COMPANIES, AND NO GUARANTEE CAN BE MADE TO THE COMPLETENESS, OR EXACTNESS OF LOCATION.

**COVID-19 PANDEMIC CONDITION**

DUE TO THE UNPRECEDENTED COVID-19 PANDEMIC CONDITION AND RESTRICTIONS THE STANDARD DATA WHICH IS OBTAINED FROM MISS DIG / CALL 811 HAS BEEN RESTRICTED TO CRITICAL INFRASTRUCTURE ONLY. NFE WILL MAKE EVERY EFFORT TO OBTAIN CURRENT REFERENCE DATA FROM THE GOVERNING AGENCIES; HOWEVER, THIS DATA MAY BE PARTIAL OR INCOMPLETE. NFE WILL ISSUE THIS SURVEY WITH THE BEST AVAILABLE INFORMATION FROM OUR FIELD SURVEY AND OTHER AVAILABLE REFERENCE DATA. NFE WILL NOT BE RESPONSIBLE FOR INCOMPLETE OR PARTIAL DATA PROVIDED BY THIRD PARTY FACILITY OWNERS.

ALL SURVEYS BEING UTILIZED FOR DESIGN PURPOSES BY OTHERS; IT WILL BE THE CLIENT'S OBLIGATION TO UPDATE THE UTILITY INFORMATION AS IT BECOMES AVAILABLE. NFE IS NOT RESPONSIBLE FOR BURIED UTILITIES FOR WHICH PLANS WERE NOT FURNISHED OR CANNOT BE OBSERVED IN THE FIELD.

**MISS DIG / UTILITY DISCLAIMER NOTE**

A MISS DIG TICKET NUMBER A093430171, PURSUANT TO MICHIGAN PUBLIC ACT 174 WAS ENTERED FOR THE SURVEYED PROPERTY, DUE TO THE EXTENDED REPORTING PERIOD FOR UNDERGROUND FACILITY OWNERS TO PROVIDE THEIR RECORDS, THE SURVEY MAY NOT REFLECT ALL THE UTILITIES AT THE TIME THE SURVEY WAS ISSUED ON 2-24-21. THE SURVEY ONLY REFLECTS THOSE UTILITIES WHICH COULD BE OBSERVED BY THE SURVEYOR IN THE FIELD OR AS DEPICTED BY THE UTILITY COMPANY RECORDS FURNISHED PRIOR TO THE DATE THIS SURVEY WAS ISSUED. THE CLIENT AND/OR THEIR AUTHORIZED AGENT SHALL VERIFY WITH THE FACILITY OWNERS AND/OR THEIR AUTHORIZED AGENTS, THE COMPLETENESS AND EXACTNESS OF THE UTILITIES LOCATION.

**DTE DISCLAIMER NOTE**

PLEASE NOTE THAT DTE HAS NEW REGULATIONS THAT MAY IMPACT DEVELOPMENT OUTSIDE THEIR EASEMENT OR THE PUBLIC RIGHT OF WAY. CLIENT SHALL CONTACT DTE TO DETERMINE THE "NEW" STRUCTURES AND POWER LINE REQUIREMENTS AS THEY MAY APPLY TO ANY FUTURE BUILDING OR RENOVATION OF A STRUCTURE. DTE ENERGY CAN BE CONTACTED AT 800-477-4747.

**PROJECT LOCATION**  
Part of the Northeast 1/4 of Section 31  
Town 1 South, Range 12 East  
City of Detroit, Wayne County, Michigan

**SHEET**  
Boundary and Topographic Survey



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2023-09-11	REVISED PER OWNER

**DRAWN BY:**  
J. Nelson

**DESIGNED BY:**  
J. Nelson

**APPROVED BY:**  
J. Longhurst

**DATE:**  
December 1, 2021

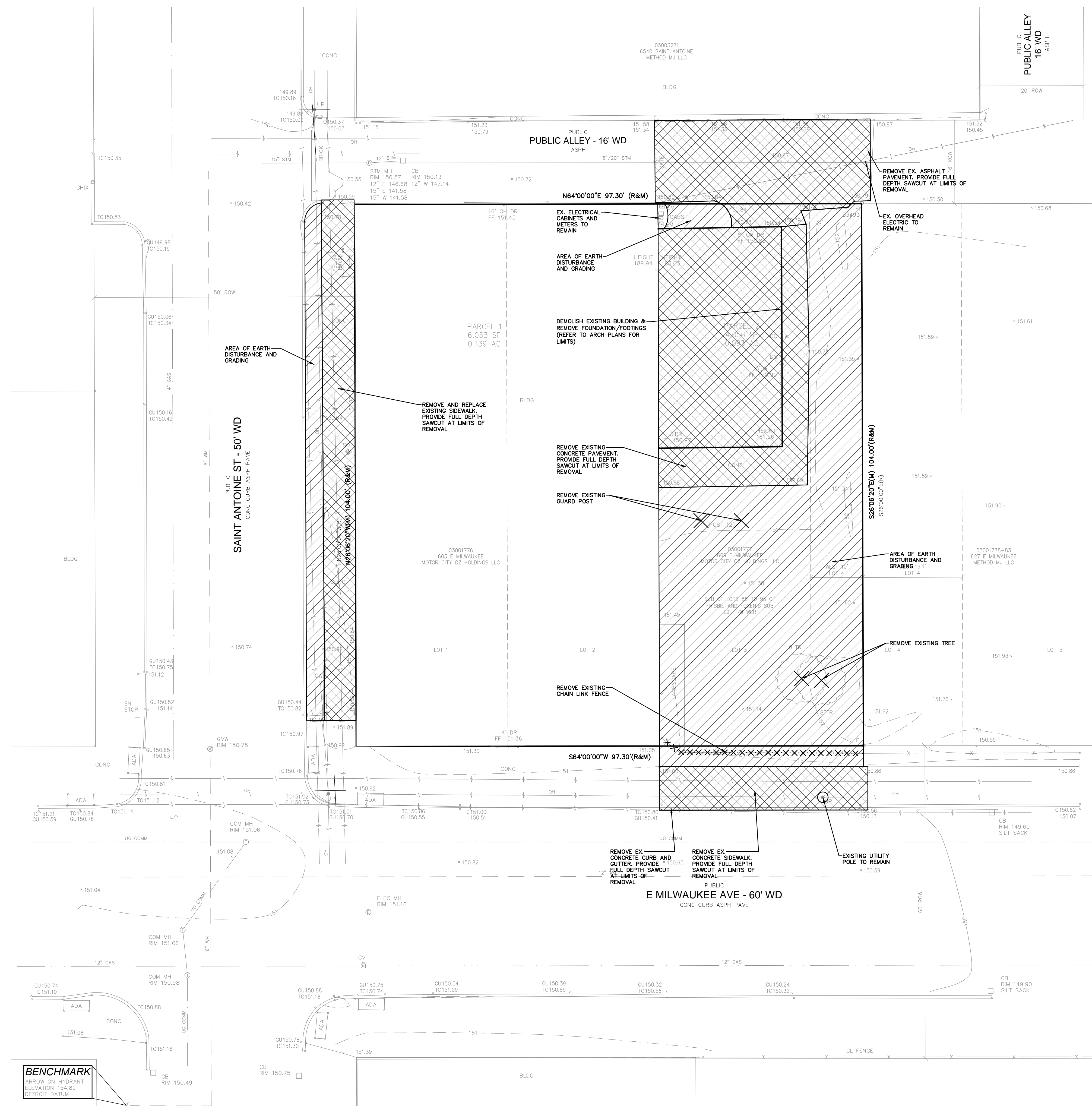
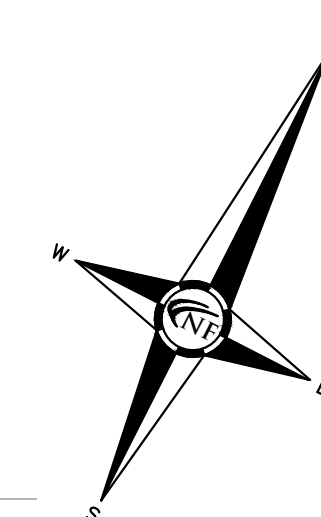
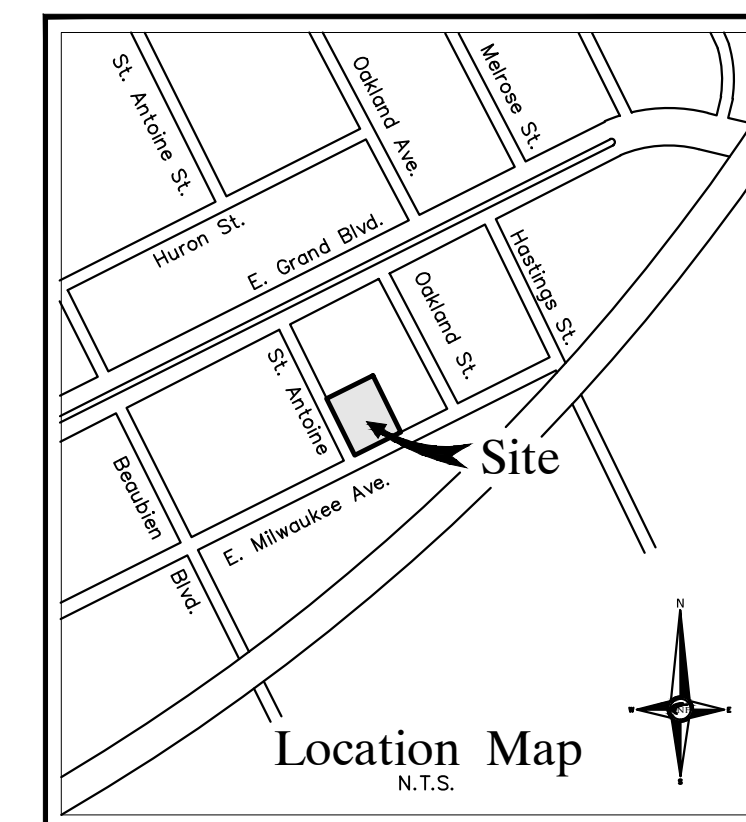
**SCALE:** 1" = 10'

**NFE JOB NO.** M262      **SHEET NO.** C1

**LEGEND**

	MANHOLE		EXISTING SANITARY SEWER
	HYDRANT		EXISTING SAN. CLEAN OUT
	MANHOLE CATCH BASIN		EXISTING WATER MAIN
	UTILITY POLE		EXISTING STORM SEWER
	GUY WIRE		EX. R.Y. CATCH BASIN
	GUY POLE		EXISTING BURIED CABLES
	LIGHT POLE		OVERHEAD LINES
	SIGN		EXISTING GAS MAIN

**BENCHMARK**  
ARROW ON HYDRANT  
ELEVATION 154.82  
DETROIT DATUM



### DEMOLITION NOTES

DEMOLITION OF SITE IMPROVEMENTS SHALL BE ALLOWED ONLY AFTER AN APPROVED PERMIT HAS BEEN SECURED FROM THE PUBLIC AGENCY HAVING JURISDICTION OVER SAID DEMOLITION.

FOR ANY DEMOLITION WITHIN PUBLIC RIGHT-OF-WAY, THE CONTRACTOR SHALL PAY FOR, AND SECURE, ALL NECESSARY PERMITS AND LIKEWISE SHALL ARRANGE FOR ALL SITE INSPECTIONS.

SITE DEMOLITION INCLUDES THE COMPLETE REMOVAL OF SITE IMPROVEMENTS AND OFF-SITE DISPOSAL. DEBRIS SHALL BE TRANSPORTED TO AN APPROPRIATE DISPOSAL FACILITY THAT IS LICENSED FOR THAT TYPE OF DEBRIS.

THE CONTRACTOR SHALL COORDINATE TRUCK ROUTES WITH THE MUNICIPALITY PRIOR TO COMMENCEMENT OF SITE DEMOLITION. ALL TRUCKS SHALL BE TARPED OR PROPERLY SECURED TO CONTAIN DEMOLITION DEBRIS PRIOR TO LEAVING SITE.

EXISTING ON-SITE UNDERGROUND UTILITIES AND BUILDING SERVICES HAVE BEEN INDICATED BASED UPON THE BEST AVAILABLE UTILITY RECORDS AND/OR ON-SITE INSPECTION. NO GUARANTEE IS MADE BY THE DESIGN ENGINEER, AS TO THE COMPLETENESS OR ACCURACY OF UTILITY DATA. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFICATION OF UTILITY INFORMATION (THE DESIGN ENGINEER MAKES NO GUARANTEE NOR ASSUMES ANY LIABILITY AS TO THE COMPLETENESS AND/OR ACCURACY OF UTILITY DATA).

PRIOR TO THE REMOVAL OR ABANDONMENT OF ANY EXISTING UNDERGROUND UTILITY OR BUILDING SERVICE LINES CALLED FOR IN THE PLANS OR DISCOVERED DURING EXCAVATION, THE CONTRACTOR MUST DETERMINE IF THE UTILITY LINE OR BUILDING SERVICE IS STILL IN USE. IF THE UTILITY LINE OR BUILDING SERVICE IS STILL IN USE/ACTIVE, THE CONTRACTOR MUST TAKE ALL THE NECESSARY STEPS TO GUARANTEE THAT THE UTILITY LINE OR BUILDING SERVICE IS RECONNECTED WITHOUT AN INTERRUPTION IN SERVICE. THE RECONNECTION OF THE UTILITY LINE OR BUILDING SERVICE MUST BE IN ACCORDANCE WITH THE STANDARDS AND REQUIREMENTS OF THE APPROPRIATE GOVERNMENTAL AGENCY OR PRIVATE UTILITY COMPANY.

SOIL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSTALLED BY THE CONTRACTOR PRIOR TO SITE DEMOLITION.

\* THE CONTRACTOR SHALL NOTIFY MISS DIG (1-800-482-7171) A MINIMUM OF THREE (3) WORKING DAYS PRIOR TO THE START OF THE SITE DEMOLITION.

THE CONTRACTOR SHALL COORDINATE THE REMOVAL AND/OR RELOCATION OF EXISTING UTILITY POLES AND BUILDING SERVICES WITH UTILITY COMPANY. REMOVAL OF THE UTILITY COMPANIES ELECTRICAL SERVICES SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS AND REQUIREMENTS OF THE UTILITY COMPANY.

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THE CONTRACTOR SHALL COORDINATE THE REMOVAL AND/OR RELOCATION OF EXISTING UTILITY POLES AND BUILDING SERVICES WITH THE UTILITY COMPANY. REMOVAL OF THE UTILITY COMPANIES COMMUNICATION SERVICES SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS AND REQUIREMENTS OF THE UTILITY COMPANY.

THE CONTRACTOR SHALL COORDINATE THE REMOVAL AND/OR RELOCATION OF EXISTING UTILITY POLES AND BUILDING SERVICES WITH THE APPROPRIATE CABLE MEDIA COMPANY. REMOVAL OF CABLE SERVICES SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS AND REQUIREMENTS OF THE CABLE COMPANY.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFICATION OF PRIVATE UTILITY COMPANIES AND COORDINATE UTILITY SERVICE SHUT-OFF/DISCONNECT, PRIOR TO DEMOLITION OF EXISTING STRUCTURES OR PROPERTIES.

ALL UTILITY METERS SHALL BE REMOVED BY THE APPROPRIATE UTILITY COMPANY.

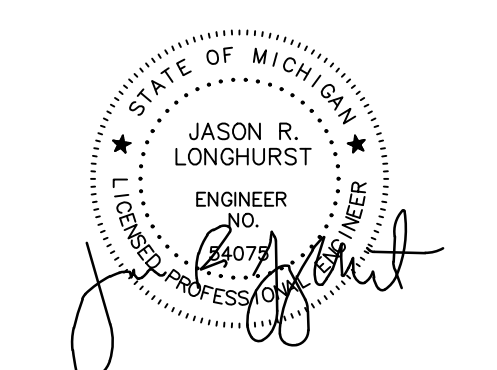
ANY ON-SITE STORM SEWER FACILITIES LOCATED DURING DEMOLITION SHALL BE REMOVED AND BULK HEADED AT THE PROPERTY LINE IF INDICATED FOR REMOVAL ON THE PLANS.

PRIOR TO BUILDING DEMOLITION, ALL HAZARDOUS MATERIAL SHALL BE REMOVED BY OTHERS. THE DEMOLITION CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER SHOULD ANY SUSPICIOUS MATERIAL BE FOUND.

WATER SERVICES AND/OR STOP-BOX SHALL BE PRESERVED AND BULK HEADED AT THE PROPERTY LINE OR AS DIRECTED BY THE OWNER'S REPRESENTATION.

WHERE EXISTING BUILDINGS PLANNED FOR DEMOLITION FALL WITHIN PROPOSED BUILDING FOOT PRINTS, BASEMENT FLOOR SLABS, FOUNDATION WALLS AND FOOTINGS SHALL BE COMPLETELY REMOVED AND BACK FILLED WITH DOT CLASS II GRANULAR MATERIAL AND BE MACHINE COMPACTED TO A MINIMUM OF 98% OF MATERIALS MAXIMUM DENSITY.

SEAL



PROJECT  
603 E Milwaukee Ave  
Detroit, Michigan

CLIENT  
Ferry Street Ventures, LLC  
1520 North Johnson Street  
Arlington, VA 22201

PROJECT LOCATION  
Part of the Northeast 1/4  
of Section 31  
Town 1 South, Range 12  
East  
City of Detroit,  
Wayne County, Michigan

SHEET  
Demolition Plan



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DRAWN BY:  
**L. Gross**

DESIGNED BY:  
**T. Wood**

APPROVED BY:  
**J. Longhurst**

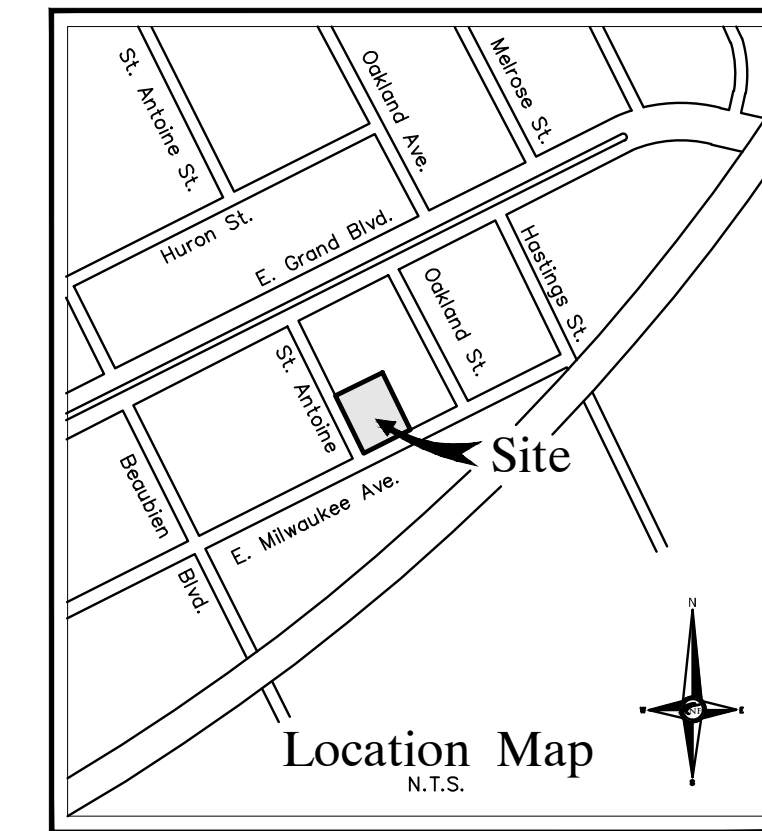
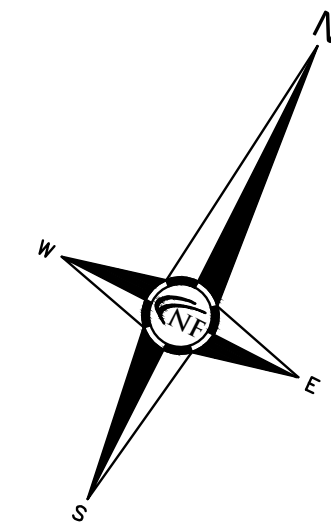
DATE:  
**December 1, 2021**

SCALE: 1" = 10'

NFE JOB NO. **M262** SHEET NO. **C2**

**UTILITY CROSSING SCHEDULE**

A PR. 12" STORM B/P 145.40  
EX. 15" STORM T/P 143.39 V.I.F.  
VERTICAL CLEARANCE 2.11'



**NF ENGINEERS**  
CIVIL ENGINEERS  
LAND SURVEYORS  
LAND PLANNERS

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**FENCING AND LANDSCAPING**

FENCING AND LANDSCAPING WILL BE PART OF A DEFERRED SUBMITTAL.

**ROW SIDEWALK REPLACEMENT NOTE**

RESTORE DAMAGED PUBLIC SIDEWALKS ADJACENT TO THE PROPERTY PER DETAIL C-4462 AS DIRECTED BY THE CITY INSPECTOR.

**UTILITY CROSSING NOTE**

AT LOCATIONS WHERE THERE ARE CROSSING WITH EXISTING UTILITIES AND THEIR DEPTHS ARE UNKNOWN, 18" VERTICAL SEPARATION WILL BE MAINTAINED WHENEVER POSSIBLE. IF THE 18" SEPARATION IS NOT OBTAINABLE, A CONCRETE ENCASUREMENT WILL BE CONSTRUCTED IN SEPARATE TRENCHES.

CONTRACTOR SHALL MAINTAIN A MINIMUM OF 18" VERTICAL CLEARANCE AND A MINIMUM OF 10' HORIZONTAL SEPARATION BETWEEN UTILITIES. WHERE 10' SEPARATION CANNOT BE MAINTAINED, 18" VERTICAL CLEARANCE SHALL BE PROVIDED AND UTILITIES SHALL BE CONSTRUCTED IN SEPARATE TRENCHES.

CONTRACTOR SHALL FIELD VERIFY EXACT DEPTH OF EXISTING PIPE WHERE EXISTING CROSSES PROPOSED. CONTACT ENGINEER IF CONFLICT OCCURS.

**NOTES**

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS AND SPECIFICATIONS OF THE CITY OF DETROIT.

THE DESIGN WORKMANSHIP AND CONSTRUCTION MATERIALS SHALL BE IN GENERAL CONFORMANCE WITH THE CITY OF DETROIT WATER AND SEWER DEPARTMENT STORMWATER MANAGEMENT DESIGN MANUAL, LATEST EDITION.

**GENERAL PAVING NOTES**

PAVEMENT SHALL BE OF THE TYPE, THICKNESS AND CROSS SECTION AS INDICATED ON THE PLANS AND AS FOLLOWS:

**CONCRETE:** PORTLAND CEMENT TYPE IA (AIR-ENTRAINED) WITH A MINIMUM CEMENT CONTENT OF SIX SACKS PER CUBIC YARD, MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3,500 PSI AND A SLUMP OF 1 1/2 TO 3 INCHES.

**ASPHALT:** BASE COURSE - MDT HMA 4E1, 20A; SURFACE COURSE - MDT HMA 5E1, 20A; ASPHALT CEMENT PENETRATION GRADE 58-22, BOND COAT - MDT SS-1H EMULSION AT 0.10 GALLON PER SQUARE YARD.

PAVEMENT BASE SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY (MODIFIED PROCTOR) PRIOR TO PLACEMENT OF PROPOSED PAVEMENT. EXISTING SUB-BASE SHALL BE PROOF-ROLLED IN THE PRESENCE OF THE ENGINEER TO DETERMINE STABILITY.

ALL CONCRETE PAVEMENT, DRIVEWAYS, CURB & GUTTER, ETC., SHALL BE SPRAY CURED WITH WHITE MEMBRANE CURING COMPOUND IMMEDIATELY FOLLOWING FINISHING OPERATION.

ALL CONCRETE PAVEMENT JOINTS SHALL BE FILLED WITH HOT POURED RUBBERIZED ASPHALT JOINT SEALING COMPOUND IMMEDIATELY AFTER SAWCUT OPERATION. FEDERAL SPECIFICATION SS-S164.

ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS AND SPECIFICATIONS OF THE MUNICIPALITY AND THE MICHIGAN DEPARTMENT OF TRANSPORTATION LATEST EDITION SPECIFICATIONS FOR CONSTRUCTION, CURRENT EDITION.

ALL TOP OF CURB ELEVATIONS, AS SHOWN ON THE PLANS, ARE CALCULATED FOR A 6" CONCRETE CURB UNLESS OTHERWISE NOTED.

ALL SIDEWALK RAMPS, CONFORMING TO PUBLIC ACT NO. 8, 1993, SHALL BE INSTALLED AS INDICATED ON THE PLANS.

CONSTRUCTION OF A NEW OR RECONSTRUCTED DRIVE APPROACH CONNECTING TO AN EXISTING STATE OR COUNTY ROADWAY SHALL BE ALLOWED ONLY AFTER AN APPROVED PERMIT HAS BEEN SECURED FROM THE AGENCY HAVING JURISDICTION OVER SAID ROADWAY.

FOR ANY WORK WITHIN THE PUBLIC RIGHT-OF-WAY, THE CONTRACTOR SHALL PAY FOR AND SECURE ALL NECESSARY PERMITS AND LIKEWISE ARRANGE FOR ALL INSPECTION.

EXISTING TOPSOIL, VEGETATION AND ORGANIC MATERIALS SHALL BE STRIPPED AND REMOVED FROM PROPOSED PAVEMENT AREA PRIOR TO PLACEMENT OF BASE MATERIALS.

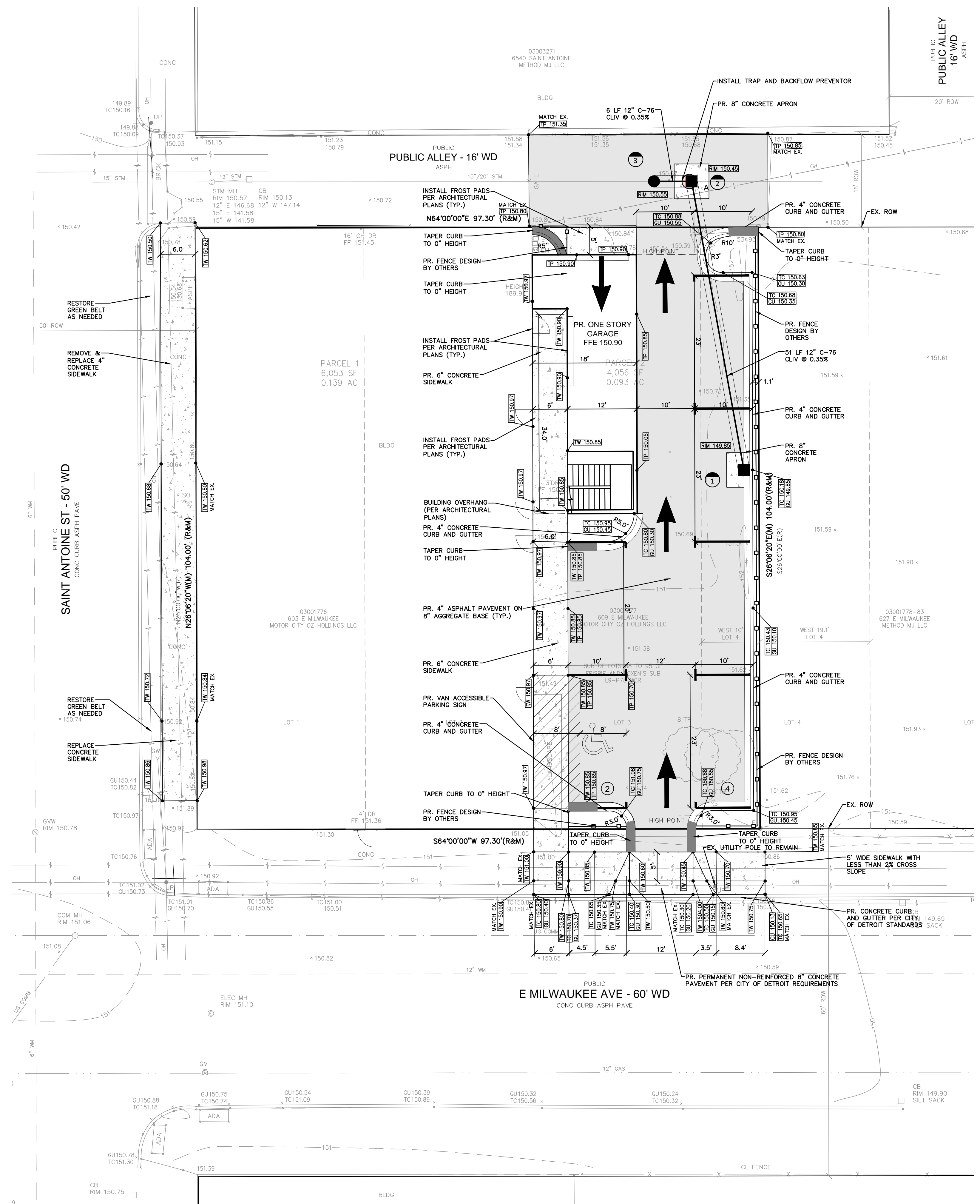
EXPANSION JOINTS SHOULD BE INSTALLED AT THE END OF ALL INTERSECTION RADII.

SIDEWALK RAMPS, CONFORMING TO PUBLIC ACT NO. 8, 1973, SHALL BE INSTALLED AS SHOWN AT ALL STREET INTERSECTIONS AND AT ALL BARRIER FREE PARKING AREAS AS INDICATED ON THE PLANS.

ALL PAVEMENT AREAS SHALL BE PROOF-ROLLED UNDER THE SUPERVISION OF A GEOTECHNICAL ENGINEER PRIOR TO THE PLACEMENT OF BASE MATERIALS AND PAVING MATERIALS.

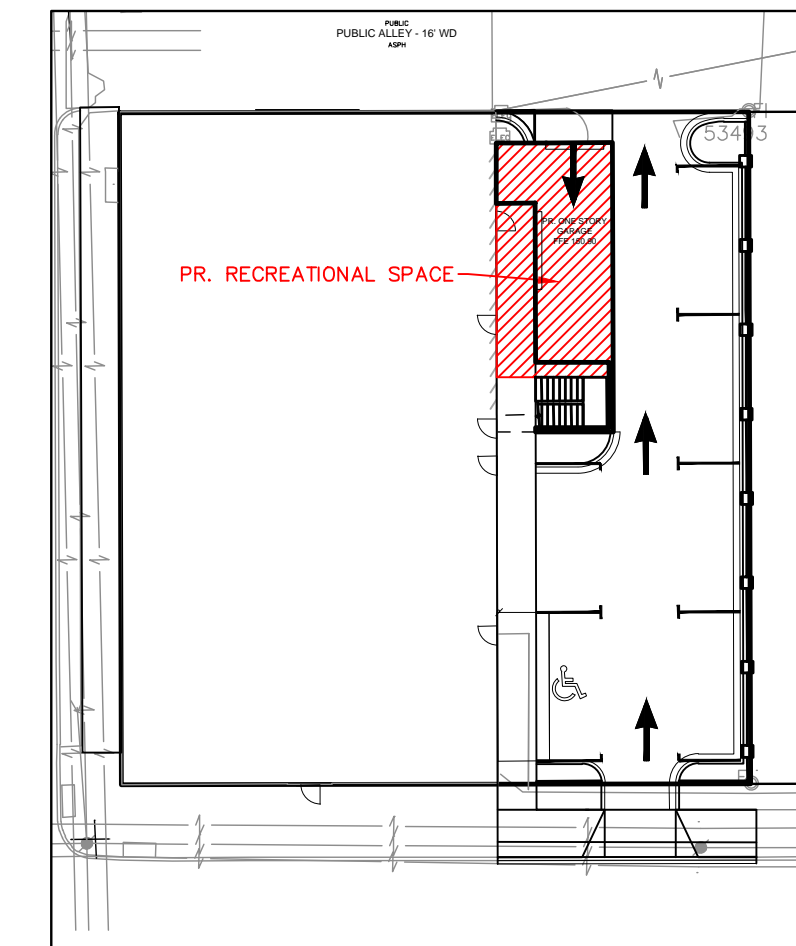
FILL AREAS SHALL BE MACHINE COMPACTED IN UNIFORM LIFTS NOT EXCEEDING 9 INCHES THICK TO 98% OF THE MAXIMUM DENSITY (MODIFIED PROCTOR) PRIOR TO PLACEMENT OF PROPOSED PAVEMENT.

Storm Drainage Structure Schedule	
Structure Name	Structure Details
#1 PR. 2' DIA. CATCH BASIN A PER CITY OF DETROIT DETAILS	PR. RIM 149.85 PR. 12" NW. INV. 145.68
#2 PR. 4' DIA CATCH BASIN B PER CITY OF DETROIT DETAILS INSTALL TIDEFLEX BACKFLOW PREVENTOR AND TRAP ON SW LINE	PR. RIM 150.45 PR. 12" SE. INV. 145.50 PR. 12" SW. INV. 145.40
#3 4' DIA. MANHOLE BUILD OVER EX. 15" STORM SEWER PIPE V.I.F. EX. STORM INV.	PR. RIM 150.55 PR. 12" NE. INV. 145.38 EX. 15" NE. INV. 141.85 EX. 15" SW. INV. 141.85
#8 Null Structure	PR. RIM 143.37 EX. 15" SW. INV. 141.85



**RECREATIONAL SPACE**

FIRST FLOOR IS A 6,023 S.F. MULTIFAMILY RESIDENTIAL  
SECOND FLOOR IS A 5,732 S.F. SINGLE FAMILY RESIDENTIAL  
TOTAL SQUARE FOOTAGE IS 6,023 + 5,732 = 11,755 S.F.  
REQUIRED RECREATIONAL SPACE AREA IS 0.07 \* 11,755 S.F. = 823 S.F.  
PROVIDED RECREATIONAL SPACE AREA IS 653 SF



**RECREATIONAL SPACE RATIO EXHIBIT**

SCALE 1"=30'

**ESTIMATED QUANTITIES**

PAVING			
DESCRIPTION	QUANTITY	UNITS	
4" ASPHALT ON 8" 21AA BASE	335	S.Y.	
4" CONCRETE SIDEWALK	600	S.F.	
6" CONCRETE SIDEWALK	760	S.F.	
8" NON-REINFORCED CONCRETE ROW PAVEMENT	12	S.Y.	
4" CONCRETE CURB & GUTTER	220	L.F.	
8" CONCRETE APRON	10	S.F.	

STORM			
DESCRIPTION	QUANTITY	UNITS	
12" DIA. CLIV C-76 STORM SEWER PIPE	60	L.F.	
2' DIA. CATCH BASIN (CATCH BASIN A)	1	EA.	
4' DIA. CATCH BASIN WITH TRAP AND 2' SUMP (CATCH BASIN B)	1	EA.	
BUILD 4' DIA. MANHOLE OVER EX. PIPE	1	EA.	

PAVING LEGEND	
	PROPOSED CONCRETE PAVEMENT
	PROPOSED ASPHALT PAVEMENT

LEGEND	
	MANHOLE
	HYDRANT
	MANHOLE CATCH BASIN
	UTILITY POLE
	GUY WIRE
	C.O. MANHOLE
	HYDRANT
	INLET
	C.B. MANHOLE
	PROPOSED LIGHT POLE
	TC 600.00
	GU 600.00
	TW 600.00
	TP 600.00
	FG 600.00
	EXISTING SANITARY SEWER
	SAN. CLEAN OUT
	EXISTING WATERMAIN
	EXISTING STORM SEWER
	EX. Y. CATCH BASIN
	EXISTING BURIED CABLES
	OVERHEAD LINES
	LIGHT POLE
	SIGN
	EXISTING GAS MAIN
	PR. SANITARY SEWER
	PR. WATER MAIN
	PR. STORM SEWER
	PR. R. Y. CATCH BASIN
	PROPOSED BURIED CABLES
	PR. TOP OF CURB ELEVATION
	PR. GUTTER ELEVATION
	PR. TOP OF WALK ELEVATION
	PR. TOP OF P.V.M.T. ELEVATION
	FINISH GRADE ELEVATION

SEAL

PROJECT  
603 E Milwaukee Ave  
Detroit, Michigan

CLIENT  
Ferry Street Ventures, LLC  
1520 North Johnson Street  
Arlington, VA 22201

PROJECT LOCATION  
Part of the Northeast 1/4  
of Section 31  
Town 1 South, Range 12  
East  
City of Detroit,  
Wayne County, Michigan

SHEET  
Engineering Plan

**811**  
Know what's below  
Call before you dig.

DATE ISSUED/REVISED  
2021-12-03 ISSUED FOR OWNER REVIEW  
2022-05-11 REVISED PER OWNER  
2022-08-18 REVISED PER ROW REVIEW  
2022-08-25 REVISED PER ROW REVIEW  
2022-09-27 REVISED PER ROW REVIEW  
2022-10-25 REVISED PER CITY REVIEW  
2022-10-26 REVISED PER OWNER  
2022-11-08 REVISED PER CITY REVIEW  
2022-11-30 REVISED PER CITY REVIEW  
2023-08-07 REVISED PER OWNER  
2023-09-17 REVISED PER OWNER

DRAWN BY:  
**L. Gross**

DESIGNED BY:  
**T. Wood**

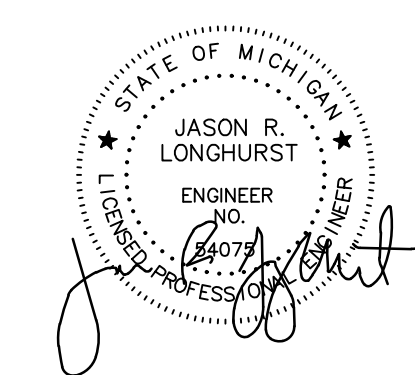
APPROVED BY:  
**J. Longhurst**

DATE:  
December 1, 2021

SCALE: 1" = 10'

NFE JOB NO. **M262** SHEET NO. **C3**

SEAL



PROJECT  
603 E Milwaukee Ave  
Detroit, Michigan

CLIENT  
Ferry Street Ventures, LLC  
1520 North Johnson Street  
Arlington, VA 22201

PROJECT LOCATION  
Part of the Northeast 1/4  
of Section 31  
Town 1 South, Range 12  
East  
City of Detroit,  
Wayne County, Michigan

SHEET  
Storm Profile



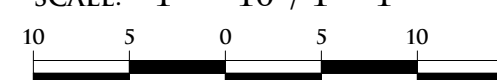
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DATE	ISSUED/REVISED
2021-12-03	ISSUED FOR OWNER REVIEW
2022-05-11	REVISED PER OWNER
2022-08-18	REVISED PER ROW REVIEW
2022-08-25	REVISED PER ROW REVIEW
2022-09-27	REVISED PER ROW REVIEW
2022-10-25	REVISED PER CITY REVIEW
2022-10-26	REVISED PER OWNER
2022-11-08	REVISED PER CITY REVIEW
2022-11-30	REVISED PER CITY REVIEW
2023-08-07	REVISED PER OWNER
2023-09-11	REVISED PER OWNER

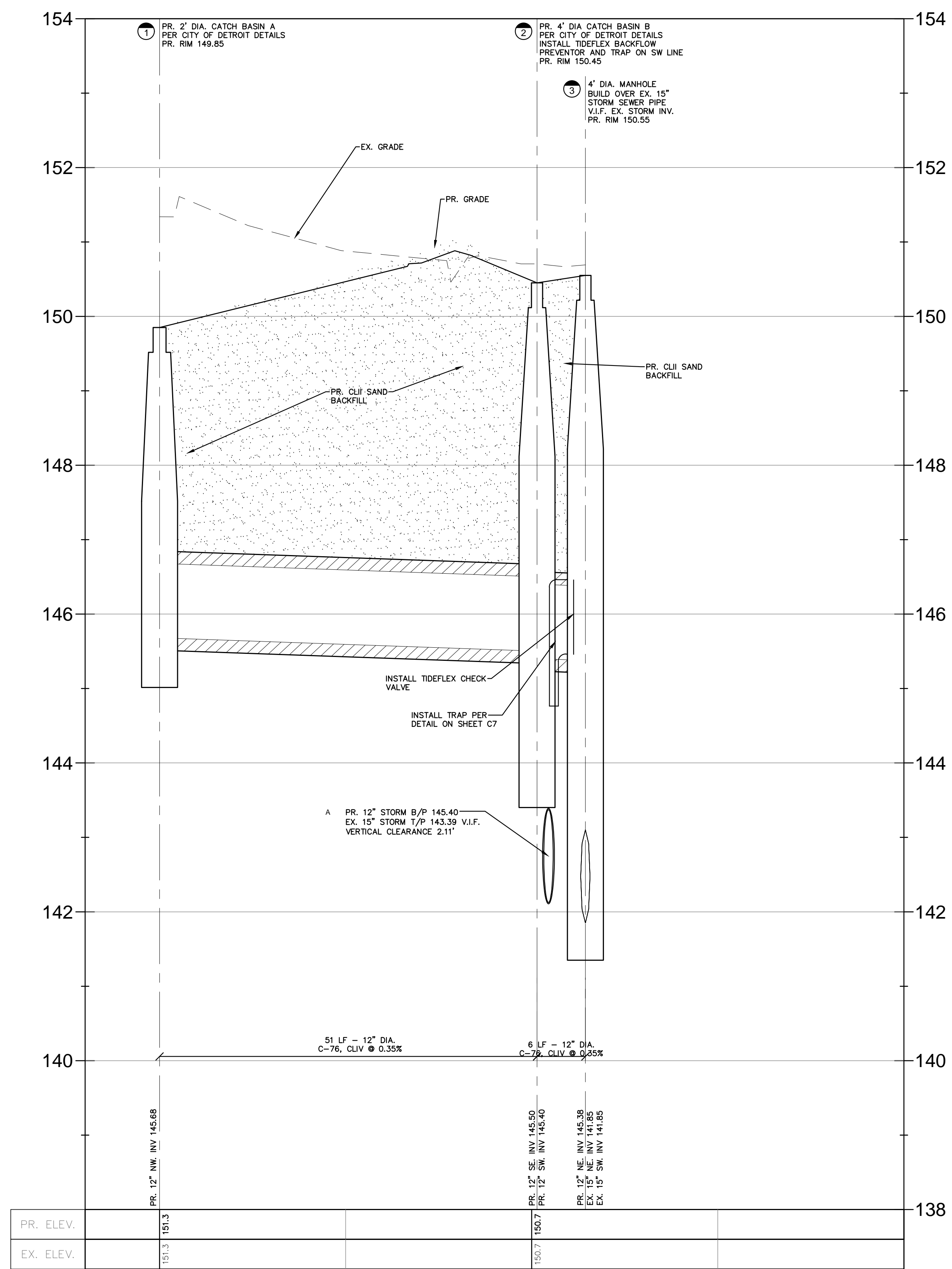
DRAWN BY:  
A. Panley  
DESIGNED BY:  
A. Panley  
APPROVED BY:  
J. Longhurst

DATE:  
December 1, 2021

SCALE: 1" = 10' / 1" = 1'



NFE JOB NO. SHEET NO.  
M262 C4



PR. ELEV.	EX. ELEV.
154.0	154.0
152.0	152.0
150.0	150.0
148.0	148.0
146.0	146.0
144.0	144.0
142.0	142.0
140.0	140.0
138.0	138.0

ITEM	QTY.	DESCRIPTION	MAT'L
1	1	ULTRAFLEX CHECKMATE CHECK VALVE	MUST BE SUPPLIED
2	1	CLAMP	MUST BE SUPPLIED

NOTES:  
1. PIPE INSIDE DIAMETER - MUST BE SUPPLIED (MINIMUM ALLOWABLE PIPE DIAMETER - 9.50 INCHES)  
2. CLAMP INSTALLED IN UPSTREAM OR DOWNSTREAM CUFF DEPENDING ON INSTALLATION ORIENTATION  
3. MAXIMUM ALLOWABLE BACK PRESSURE - 71.0 FEET  
4. IT IS RECOMMENDED TO BOLT OR PIN CHECKMATE TO PIPE AS SHOWN, 4 PLACES 90° APART

PROPRIETARY NOTICE  
THIS DOCUMENT CONTAINS PROPRIETARY INFORMATION OF TIDEFLEX TECHNOLOGIES. IT IS LOANED BY TIDEFLEX TECHNOLOGIES, SUBJECT TO THE CONDITIONS THAT IT AND THE INFORMATION EMBODIED THEREIN SHALL BE USED ONLY FOR RECORD AND REFERENCE PURPOSES. IT SHALL NOT BE USED OR CAUSED TO BE USED IN ANY WAY PREJUDICIAL TO THE INTERESTS OF TIDEFLEX TECHNOLOGIES. IT SHALL NOT BE REPRODUCED OR COPIED IN WHOLE OR PART, OR DISCLOSED TO ANYONE WITHOUT THE DIRECT WRITTEN PERMISSION OF TIDEFLEX TECHNOLOGIES AND SHALL BE RETURNED UPON REQUEST.

OPPORTUNITY No: XXXXX SALES ORDER No: TXX-XXXX  
600 N. BELL AVE. CARNEGIE, PA. 15106  
info@tideflex.com 412.279.0044 fax 412.279.5410  
A Division of Red Valve Company, Inc.  
TT PRODUCT: 10" ULTRAFLEX CHECKMATE CHECK VALVE  
TT PART No: CMCBUF-100-APPROVAL  
DR. BY: TLM DATE: 1-31-17 CHKD. BY: DATE:  
CAD SCALE: FULL REV  
PLOT SCALE: 1 = 1 DWG No: TTS-XXXX

\* PATENT PENDING \*

CUSTOMER: XXX  
ORDER No: XXX

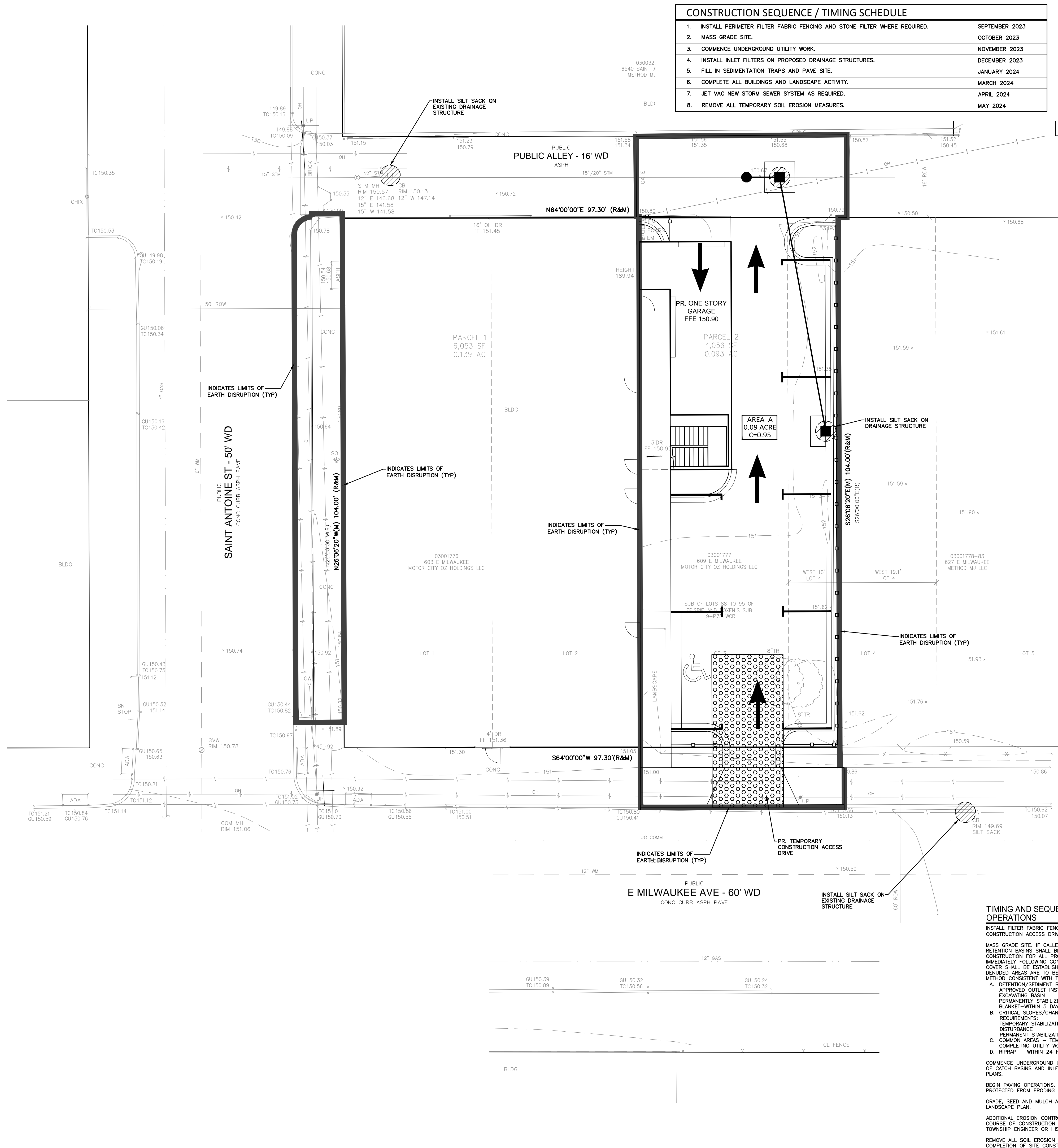
Drainage Area (Location)	From Structure Number	To Structure Number	Drainage Area (Acres)	Runoff Coefficient (C)	Equivalent Area (C * A)	Total Area (Sum C * A)	Time of Concentration (Minutes)	Rainfall Intensity (Inches/Hr.)	Actual Discharge (CFS)	Pipe Size (Inches)	Pipe Slope (% Slope)	Pipe Length (Feet)	Flow Velocity (Ft / Sec)	Time of Flow (Minutes)	Full Pipe Capacity (CFS)	H. G. Elev. Upper End (Feet)	H. G. Elev. Lower End (Feet)	H. G. Slope (% Slope)	Km at Str	Head Loss (Feet)	Head Loss Friction (Feet)	Theoretical Velocity (Ft / Sec)	Rim Elevation (Upper) (Feet)	Change in Elevation (Feet)	Invert Elev. Upper End (Feet)	Invert Elev. Lower End (Feet)	COVER (Feet)	RIM TO HG (Feet)
A	1	2	0.09	0.95	0.086	0.086	5.00	5.64	0.48	12	0.35	51	2.91	0.29	2.28	146.21	146.20	0.02	0.50	0.00	0.01	0.61	149.85	0.18	145.68	145.50	3.00	3.64
	2	3				0.086	5.29	5.57	0.48	12	0.35	6	2.91	0.03	2.28	146.19	146.18	0.02	1.50	0.01	0.00	0.61	150.45	0.02	145.40	145.38	3.88	4.26

T min= 5 Minutes  
I = 38.4164\*(10^0.2082)/((12.3258 + D)^0.8405)  
n (Conc.) 0.013  
n (Pvc) 0.012  
Head Loss Friction Hf=L(Qn/(0.46D^2.67))^2  
Head Loss Structure Hm=Km(V^2 / 2g)

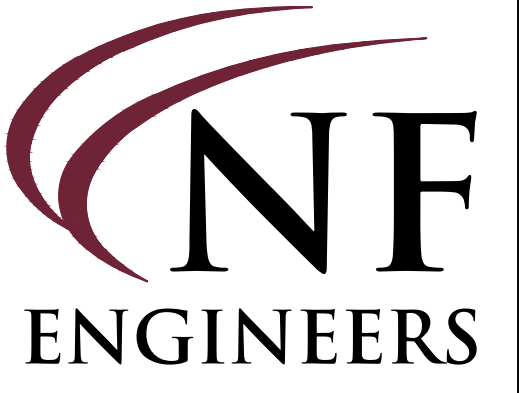
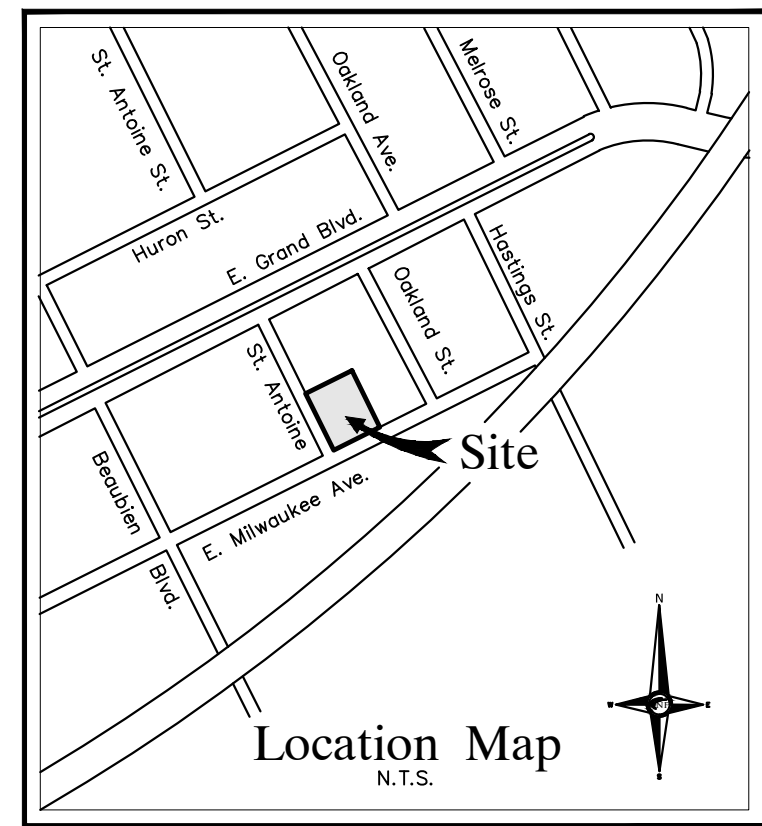
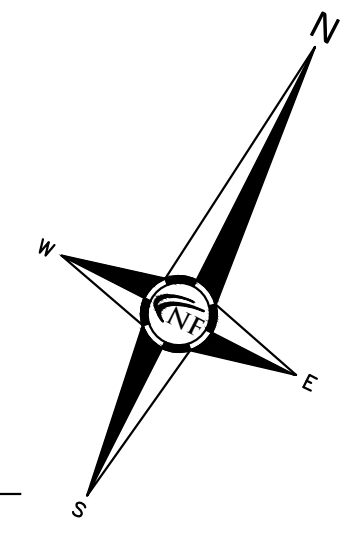
Time of Concentration  
10 Year Storm Event Intensity  
Manning's Roughness Coefficient  
Manning's Roughness Coefficient

Detroit, Wayne County  
Storm Sewer Calculations

Project No: M262  
Project Name: 603 E Milwaukee Avenue  
Location: Detroit  
Dated: 12/1/2021  
Revised: 11/30/2022

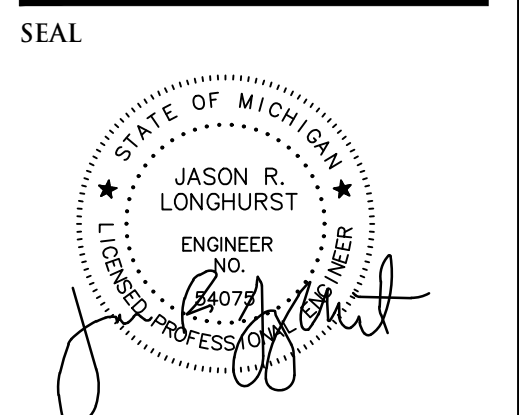


CONSTRUCTION SEQUENCE / TIMING SCHEDULE		
1. INSTALL PERIMETER FILTER FABRIC FENCING AND STONE FILTER WHERE REQUIRED.	SEPTEMBER 2023	
2. MASS GRADE SITE.	OCTOBER 2023	
3. COMMENCE UNDERGROUND UTILITY WORK.	NOVEMBER 2023	
4. INSTALL INLET FILTERS ON PROPOSED DRAINAGE STRUCTURES.	DECEMBER 2023	
5. FILL IN SEDIMENTATION TRAPS AND PAVE SITE.	JANUARY 2024	
6. COMPLETE ALL BUILDINGS AND LANDSCAPE ACTIVITY.	MARCH 2024	
7. JET VAC NEW STORM SEWER SYSTEM AS REQUIRED.	APRIL 2024	
8. REMOVE ALL TEMPORARY SOIL EROSION MEASURES.	MAY 2024	



**CIVIL ENGINEERS  
LAND SURVEYORS  
LAND PLANNERS**

NOWAK & FRAUS ENGINEERS  
4677 WOODWARD AVE.  
PONTIAC, MI 48342-5032  
TEL. (248) 332-7931  
FAX. (248) 332-8257  
WWW.NOWAKFRAUS.COM



PROJECT  
603 E Milwaukee Ave  
Detroit, Michigan

CLIENT  
Ferry Street Ventures, LLC  
1520 North Johnson Street  
Arlington, VA 22201

PROJECT LOCATION  
Part of the Northeast 1/4  
of Section 31  
Town 1 South, Range 12  
East  
City of Detroit,  
Wayne County, Michigan

SHEET  
Soil Erosion Control and  
Drainage Area Plan



**NOTES AND PERFORMANCE REQUIREMENTS**

ALL EROSION AND SEDIMENTATION CONTROL WORK SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF THE CANTON TOWNSHIP AND THE WAYNE COUNTY EROSION CONTROL MANUAL.

DAILY INSPECTION SHALL BE MADE BY THE SUBCONTRACTOR TO DETERMINE EFFECTIVENESS OF EROSION AND SEDIMENT CONTROL MEASURES AND ANY NECESSARY REPAIRS SHALL BE PERFORMED WITHOUT DELAY.

EROSION AND ANY SEDIMENTATION FROM WORK ON THIS SITE SHALL BE CONTAINED ON THE SITE AND NOT ALLOWED TO COLLECT ON ANY OFF-SITE AREAS OR IN WATERWAYS. WATERWAYS INCLUDE BOTH NATURAL AND MAN-MADE OPEN DITCHES, STREAMS, STORM DRAINS, LAKES AND PONDS.

EROSION AND SEDIMENTATION CONTROL MEASURES ARE TO BE PLACED PRIOR TO, OR AS THE FIRST STEP IN CONSTRUCTION. SEDIMENTATION CONTROL PRACTICES WILL BE APPLIED AS A PERIMETER DEFENSE AGAINST ANY TRANSPORTING OF SILT OFF THE SITE.

SUBCONTRACTOR SHALL APPLY TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES AS REQUIRED AND AS DIRECTED ON THESE PLANS. HE SHALL REMOVE TEMPORARY MEASURES AS SOON AS PERMANENT STABILIZATION OF SLOPES, DITCHES AND OTHER EARTH CHANGES HAVE BEEN ACCOMPLISHED.

PERMANENT SOIL EROSION CONTROL MEASURES FOR ALL SLOPES, CHANNELS, DITCHES OR ANY DISTURBED LAND AREA SHALL BE COMPLETED WITHIN 5 CALENDAR DAYS AFTER FINAL GRADING OR THE FINAL EARTH CHANGES HAVE BEEN COMPLETED. WHEN IT IS NOT POSSIBLE TO PERMANENTLY STABILIZE A DISTURBED AREA AFTER AN EARTH CHANGE HAS BEEN COMPLETED OR WHERE SIGNIFICANT EARTH CHANGE ACTIVITY CEASED, TEMPORARY SOIL EROSION CONTROL MEASURES SHALL BE MAINTAINED. ALL TEMPORARY SOIL EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL PERMANENT SOIL EROSION CONTROL MEASURES ARE IMPLEMENTED. ALL PERMANENT SOIL EROSION CONTROL MEASURES WILL BE IMPLEMENTED AND ESTABLISHED BEFORE A CERTIFICATE OF COMPLIANCE IS ISSUED.

ALL MUD/DIRT TRACKED ONTO EXISTING CITY/COUNTY ROADS FROM THIS SITE, DUE TO CONSTRUCTION, SHALL BE PROMPTLY REMOVED BY THE SUBCONTRACTOR/BUILDER.

MAINTENANCE REQUIREMENTS SHALL BE AS FOLLOWS:  
STREET SCRAPING - DAILY  
STREET SWEEPING - WEEKLY MINIMUM  
STRUCTURAL SEDIMENT CONTROLS - 48 HOURS AFTER STORM EVENT (WEEKLY MINIMUM) SEDIMENT BASIN CLEANOUT - ANNUALLY MINIMUM

RESTORATION REQUIREMENTS AND FINAL INSPECTION REQUIREMENTS SHALL BE AS FOLLOWS:  
DISTURBED EARTH MUST BE PERMANENTLY STABILIZED WITH VEGETATION OR HARD SURFACE. ACCUMULATED SEDIMENT MUST BE REMOVED FROM STORM SEWER SYSTEM.  
REMOVE ALL THE TEMPORARY CONTROLS AFTER GETTING APPROVAL BY THE WAYNE COUNTY SOIL EROSION INSPECTOR.

NOTIFY WAYNE COUNTY SOIL EROSION OFFICE 48 HOURS BEFORE WORK IS TO BEGIN. (734) 326-3936.

**NOTES**

A WAYNE COUNTY SOIL EROSION PERMIT IS REQUIRED FOR THIS PROJECT.

NO WETLANDS OR FLOODPLAINS ARE ON THE SITE.

STORAGE OF TOPSOIL MUST BE INSIDE PROJECT LIMITS.

FOR PAVED INLET PROTECTION, USE WOVEN MONOFILAMENT GEOTEXTILE/ 100 gpm PER SQUARE FT. OR APPROVED EQUAL.

NO SILT FENCE, BURLAP, OR STONE TO BE USED AS FILTERS.

SITE IS APPROXIMATELY ±3.38 MILES FROM THE DETROIT RIVER.

AREA OF DISTURBANCE IS 0.14 ACRES.

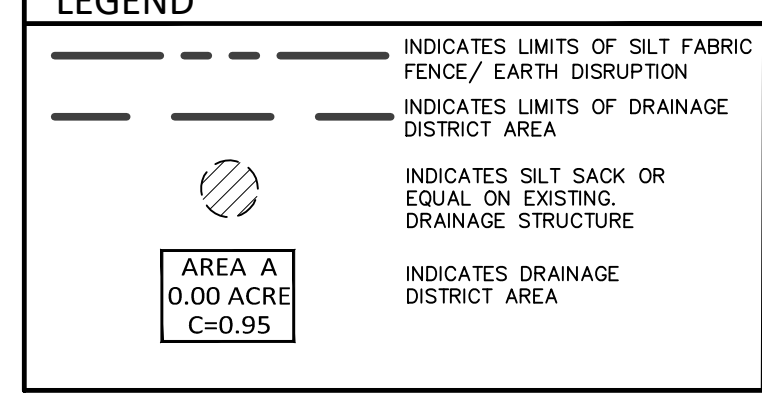
**SOIL DATA**

THIS SITE CONSISTS OF URBAN LAND-RIVERFRONT COMPLEX, DENSE SUBSTRATUM, 0 TO 4 PERCENT SLOPES, BASED ON DATA PROVIDED BY THE UNITED STATES DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE.

**ESTIMATED QUANTITIES**

DESCRIPTION	QUANTITY	UNITS
TEMPORARY CONSTRUCTION ACCESS DRIVE	50	EA.
SILT SACK OR EQUAL	4	EA.

**LEGEND**



**TIMING AND SEQUENCE OF CONSTRUCTION OPERATIONS**

INSTALL FILTER FABRIC FENCE AS SHOWN ON THE PLANS. INSTALL CONSTRUCTION ACCESS DRIVE AS SHOWN ON THE PLANS. (DAY 1)

MASS GRADE SITE. IF CALLED FOR ON THE PLANS, DETENTION OR RETENTION BASINS SHALL BE CONSTRUCTED PRIOR TO ANY OTHER CONSTRUCTION FOR ALL PROJECTS LOCATED WITHIN THE MUNICIPALITY. IMMEDIATELY FOLLOWING CONSTRUCTION OF THE BASIN, SUITABLE GROUND COVER SHALL BE ESTABLISHED, WEATHER CONDITIONS PREVAILING. ALL DENUDED AREAS ARE TO BE PROTECTED FROM EROSION BY AN APPROVED METHOD CONSISTENT WITH THE GROWING SEASON.

A. DETENTION/SEDIMENT BASIN TIMING REQUIREMENTS:  
APPROVED OUTLET INSTALLED - WITHIN 5 DAYS OF EXCAVATING BASIN  
PERMANENTLY STABILIZED WITH SEED AND MULCH BLANKET-WITHIN 5 DAYS OF FINAL GRADE

B. CRITICAL SLOPES/CHANNELS/SWALES TIMING REQUIREMENTS:  
TEMPORARY STABILIZATION - WITHIN 15 DAYS OF EARTH DISTURBANCE  
PERMANENT STABILIZATION - WITHIN 5 DAYS OF FINAL GRADE

C. COMMON AREAS - TEMPORARY STABILIZATION WITHIN 5 DAYS OF COMPLETING UTILITY WORK

D. RIPRAP - WITHIN 24 HOURS OF PLACING OUTLET/CULVERT

COMMENCE UNDERGROUND UTILITY WORK. PROMPTLY UPON BACKFILLING OF CATCH BASINS AND INLETS, INSTALL INLET FILTERS AS SHOWN ON THE PLANS.

BEGIN PAVING OPERATIONS. INLETS, CATCH BASINS, ETC. ARE TO BE PROTECTED FROM ERODING EARTH AND SEDIMENT AT ALL TIMES.

GRADE, SEED AND MULCH ALL DISTURBED AREAS OR LANDSCAPE PER LANDSCAPE PLAN.

ADDITIONAL EROSION CONTROL MEASURES WILL BE PROVIDED DURING THE COURSE OF CONSTRUCTION WHERE DETERMINED NECESSARY BY THE TOWNSHIP ENGINEER OR HIS AUTHORIZED REPRESENTATIVE.

REMOVE ALL SOIL EROSION AND SEDIMENTATION MEASURES AFTER COMPLETION OF SITE CONSTRUCTION.

DRAWN BY:  
A. Panley

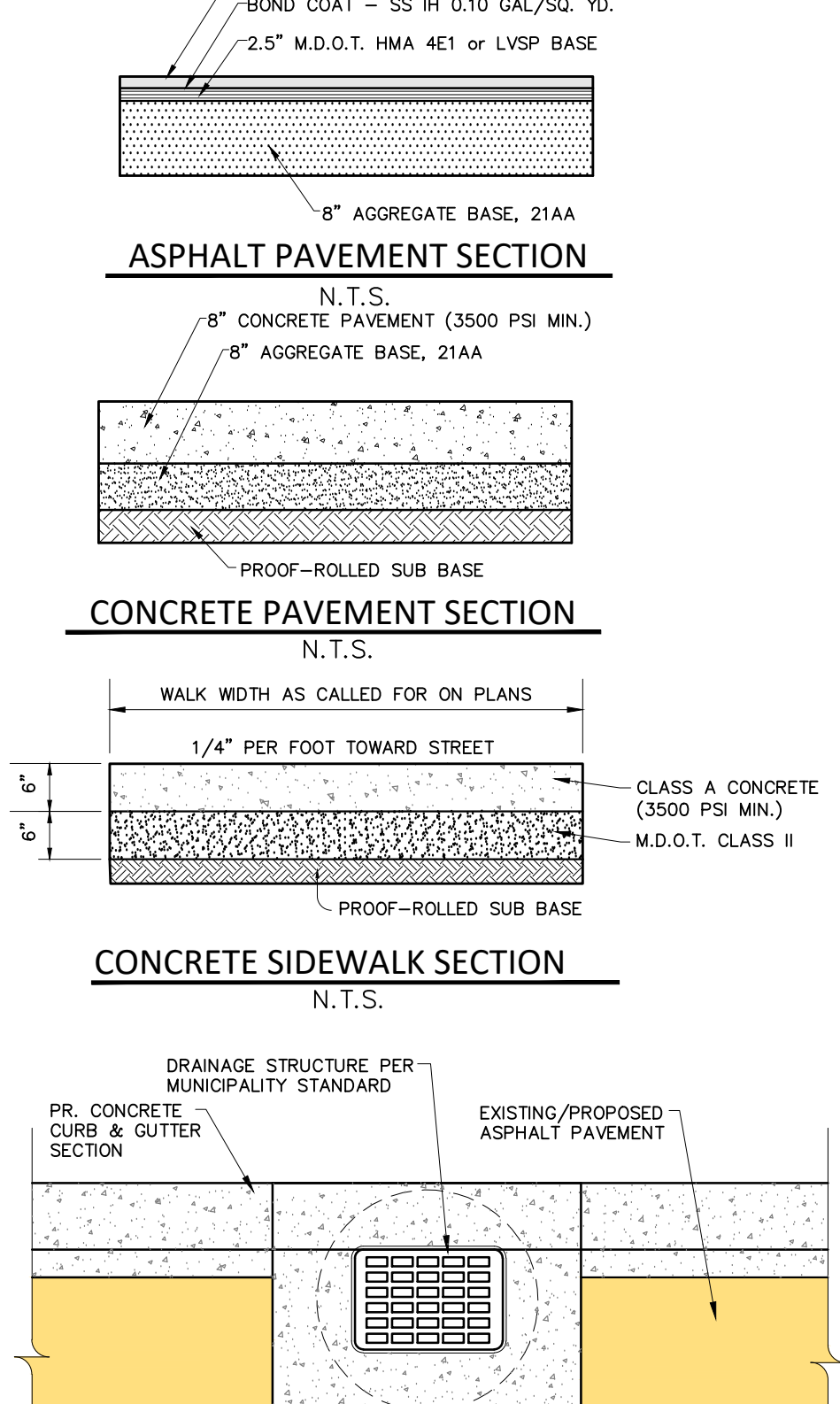
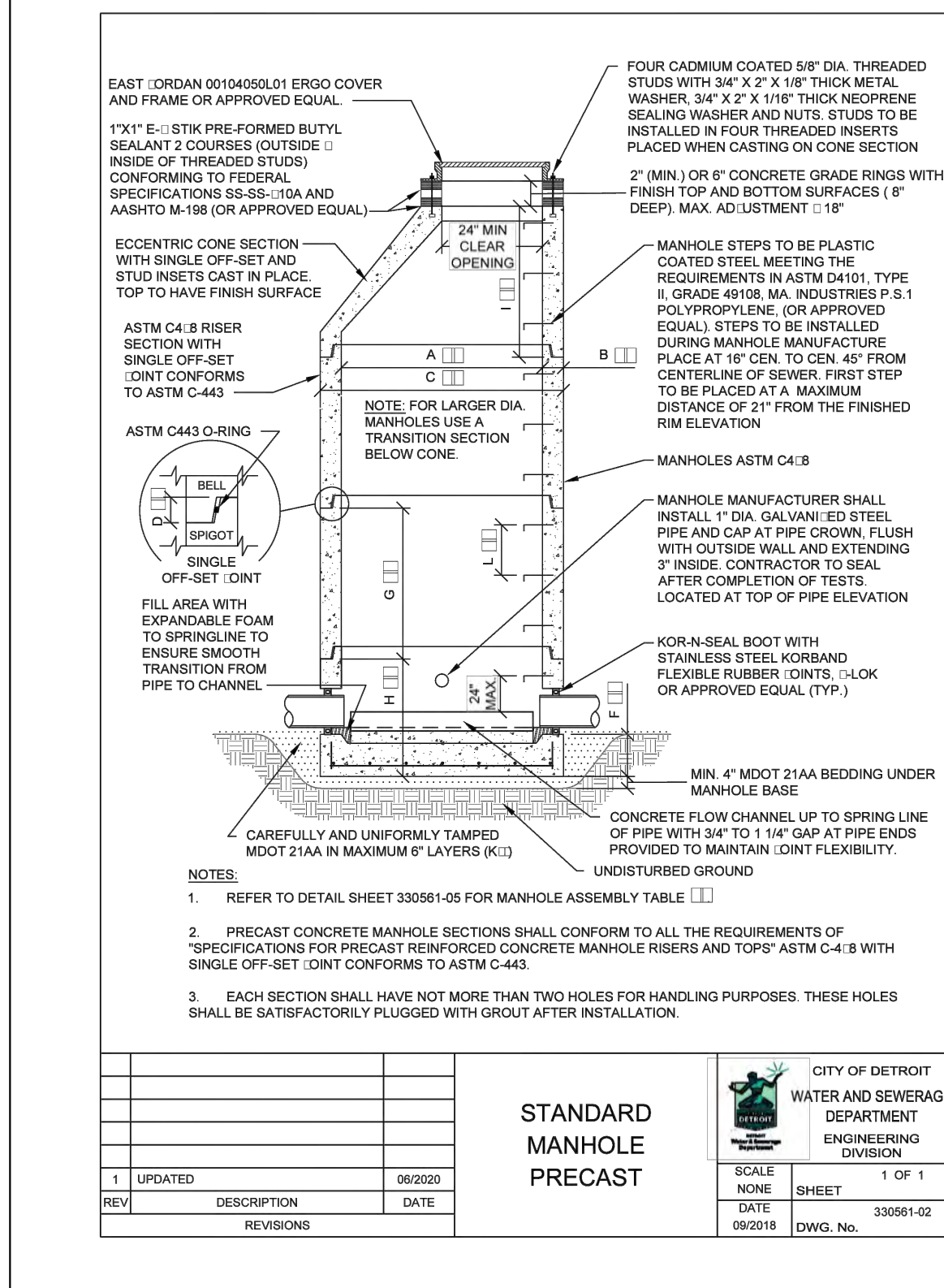
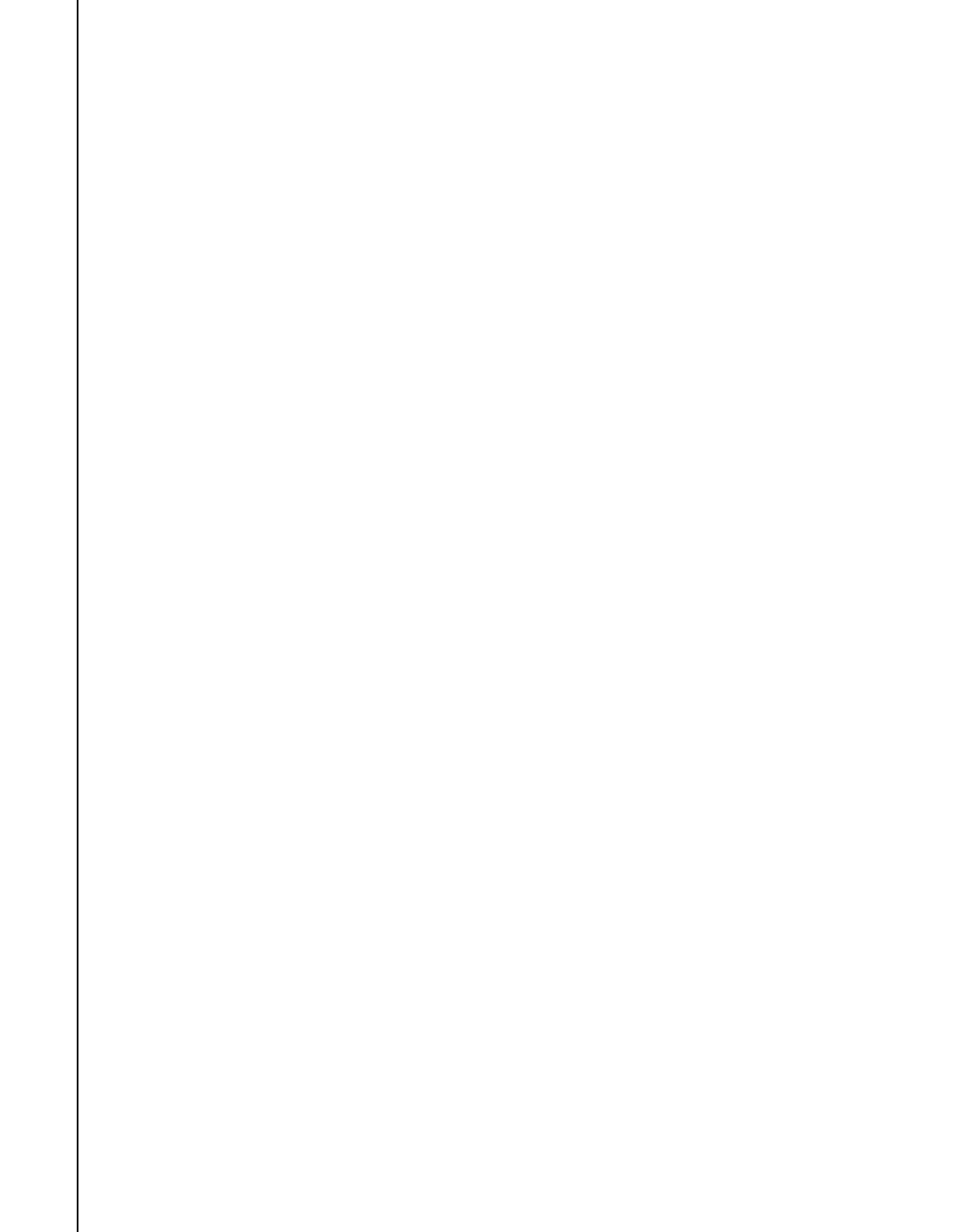
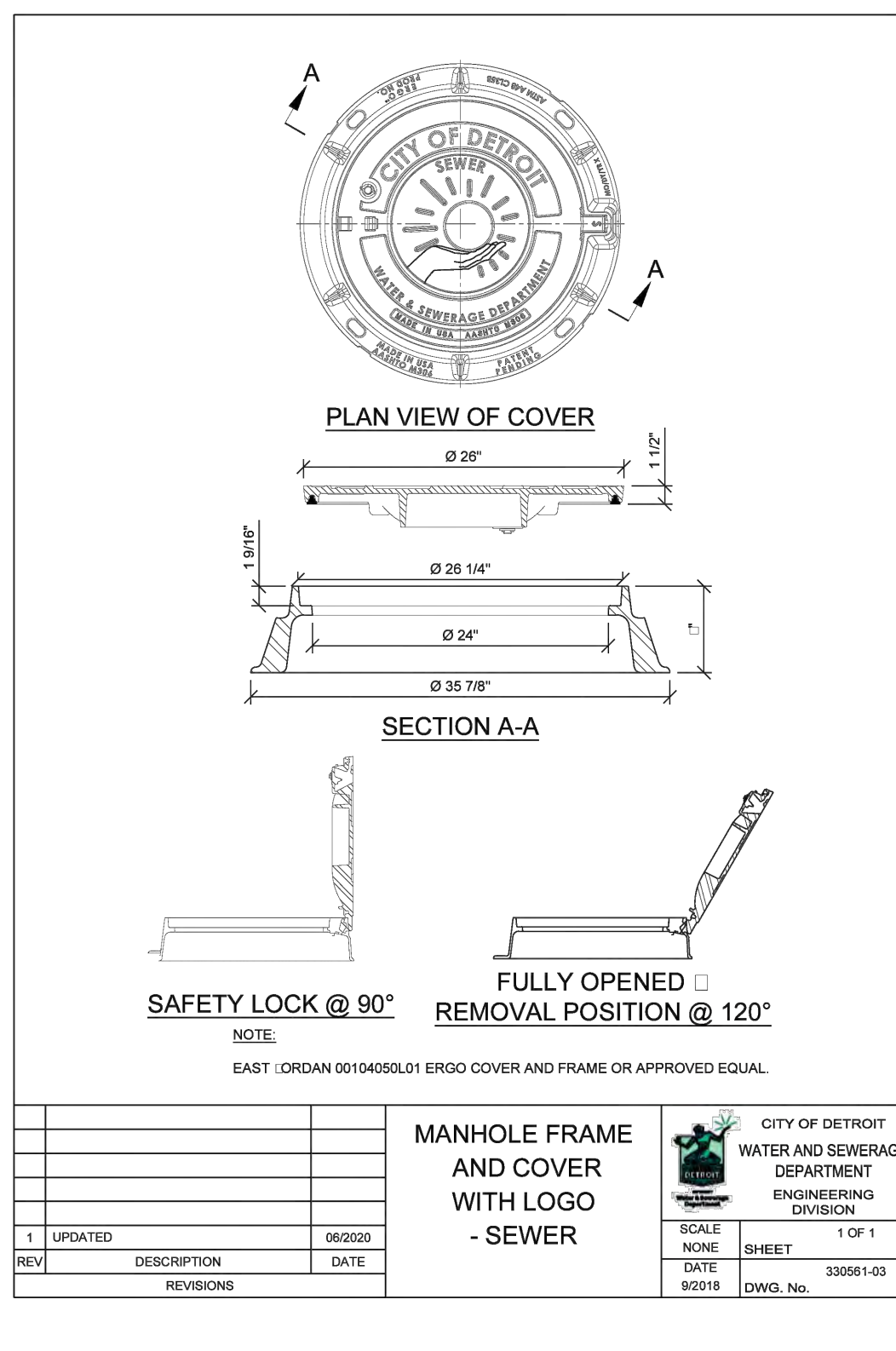
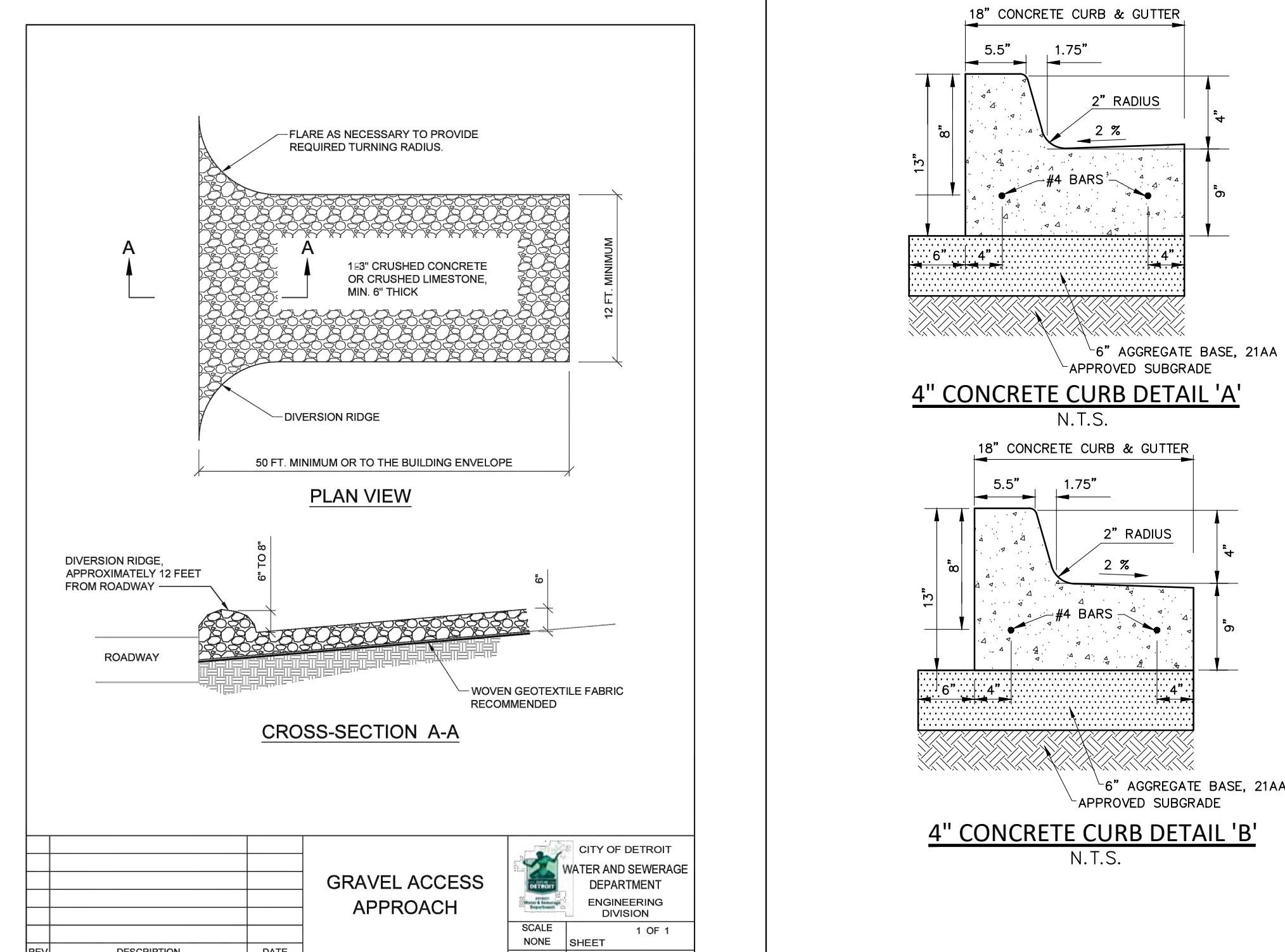
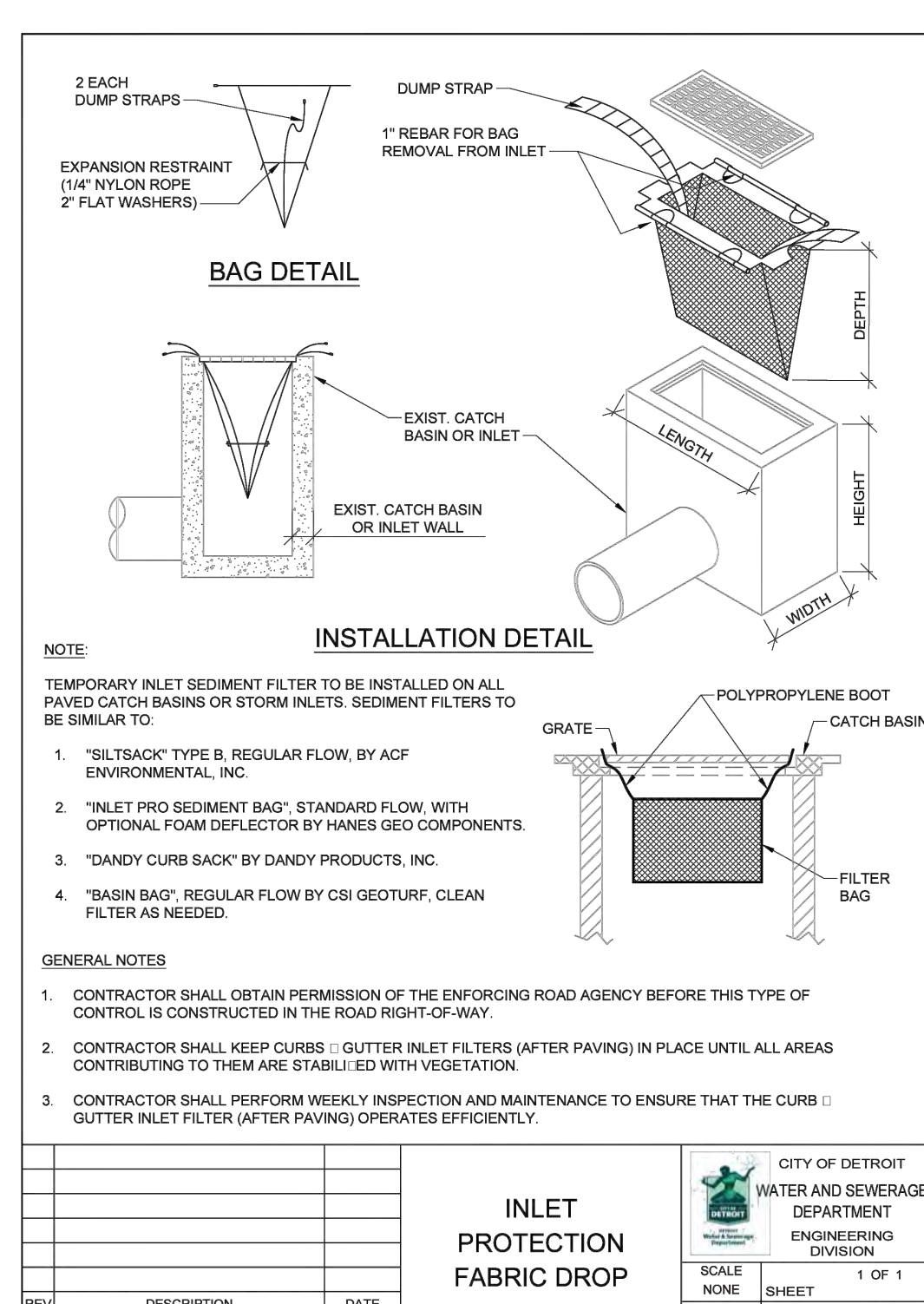
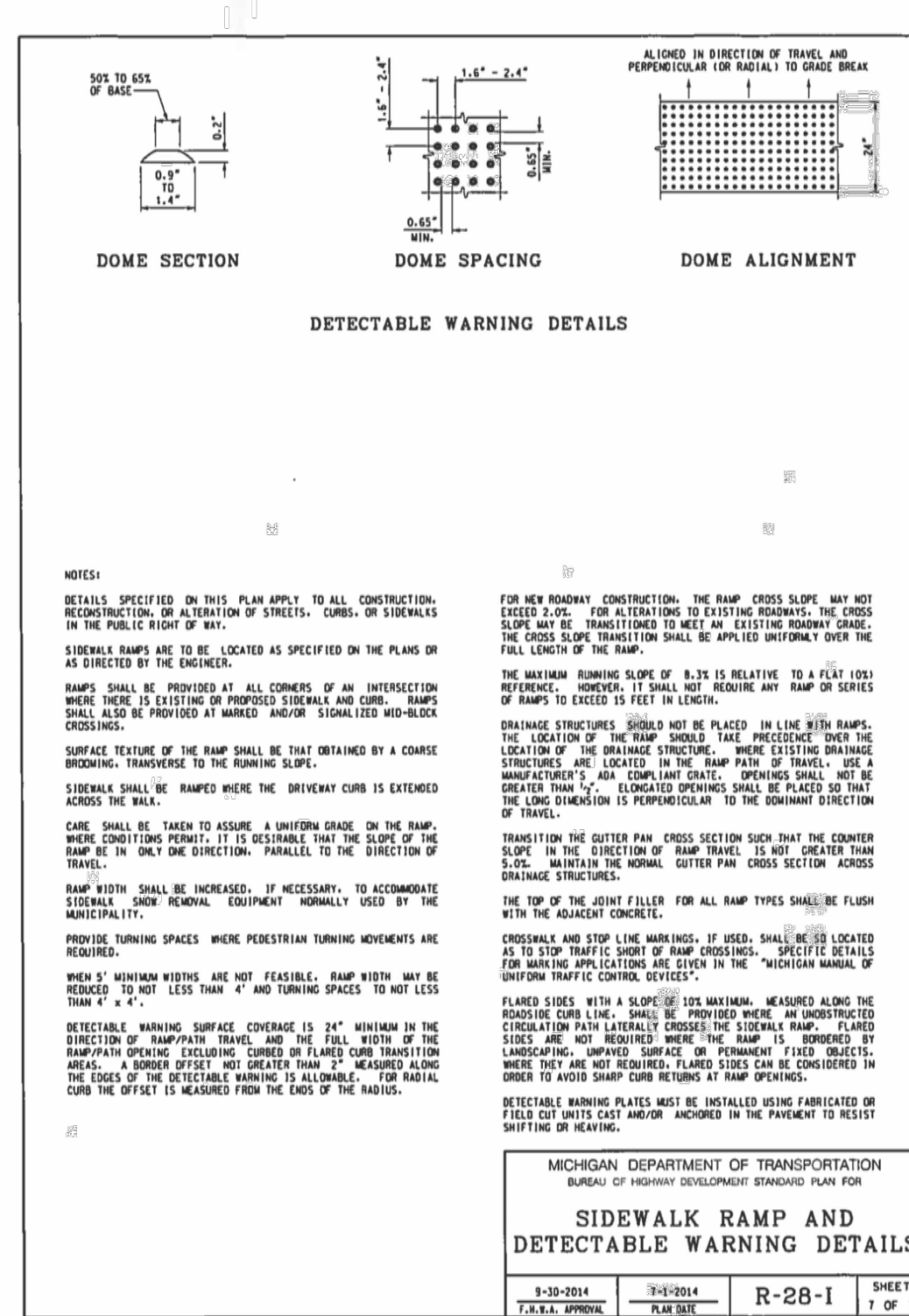
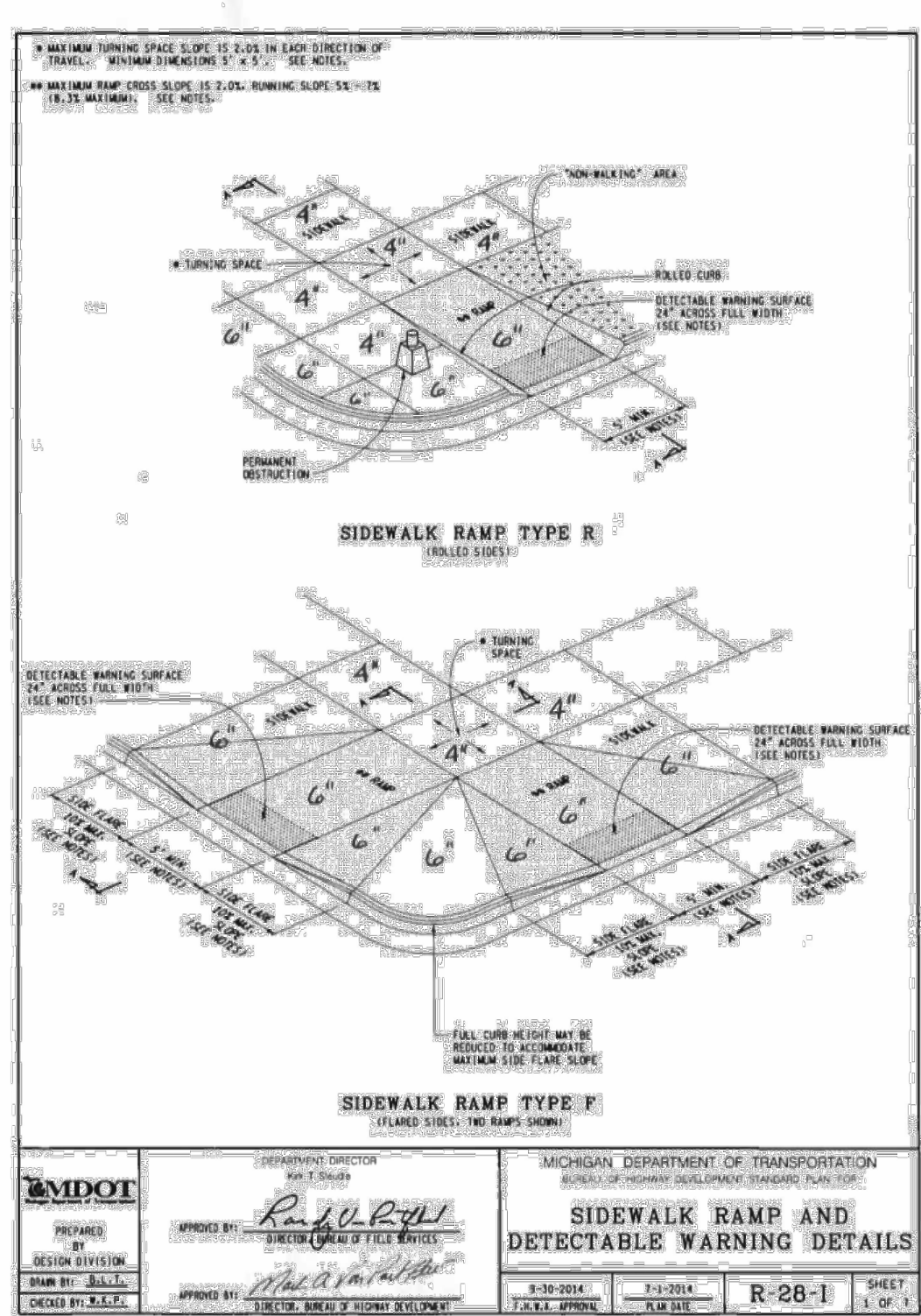
DESIGNED BY:  
A. Panley

APPROVED BY:  
J. Longhurst

DATE:  
December 1, 2021

SCALE: 1" = 10'

NFE JOB NO. M262 SHEET NO. C5



**BY-PASS PUMPING**

FROM TIME TO TIME IT MAY BE NECESSARY FOR THE CONTRACTOR TO BY-PASS PUMP TO COMPLETE THE WORK INDICATED ON THE PLANS. THE COST OF BY-PASS PUMPING, THE METHODS, EQUIPMENT AND MEANS OF PROVIDING THAT WORK ARE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE CONSIDERED PART OF THE WORK WHETHER SPECIFICALLY CALLED OUT ON THE PLANS OR NOT.

**MEANS AND METHODS FOR PIPE CONSTRUCTION**

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE MEANS AND METHODS FOR CONSTRUCTING THE UNDERGROUND PIPES PROPOSED ON THE PLANS, INCLUDING BUT NOT LIMITED TO THE NEED FOR SHORING/BRACING OF TRENCHES, DEWATERING OF TRENCHES, SCHEDULING THE WORK AT OFF PEAK HOURS, AND/OR MAINTAINING EXISTING FLOWS THAT MAY BE ENCOUNTERED VIA PUMPING, BY-PASS PIPING OR OTHER MEANS. THE CONTRACTOR SHALL NOT BE PAID ANY ADDITIONAL COMPENSATION TO IMPLEMENT ANY MEANS AND METHODS TO SATISFACTORILY COMPLETE THE CONSTRUCTION.

**PAVEMENT REMOVAL**

THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE THICKNESS OF THE PAVEMENT REMOVAL. PAVEMENT CORE SAMPLES ARE FOR INFORMATIONAL PURPOSES ONLY AS TO THE THICKNESS OF THE PAVEMENT AT THE LOCATION OF THE SAMPLE. THE OWNER AND ENGINEER MAKE NO REPRESENTATION, WARRANTY OR GUARANTEE THAT THE SAMPLES ACCURATELY REFLECT THE PAVEMENT THICKNESS ON THE PROJECT.

**MAINTENANCE OF TRAFFIC**

DURING THE PROGRESS OF THE WORK THE CONTRACTOR SHALL ACCOMMODATE BOTH VEHICULAR AND PEDESTRIAN TRAFFIC IN THE ROAD RIGHTS OF WAY. THE CONTRACTOR SHALL PROVIDE ALL SIGNS, BARRICADES, FLAG PERSONS AND OTHER TRAFFIC CONTROL MEASURES AS REQUIRED BY MDOT, THE COUNTY, OR THE COMMUNITY HAVING JURISDICTION OF THE ROAD AND IN CONFORMANCE WITH THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

IN ADDITION, WHERE THE WORK REQUIRES THE CLOSURE OF ONE OR MORE LANES OR IS WITHIN THE INFLUENCE OF THE ROAD OR PEDESTRIAN RIGHT OF WAY, THE CONTRACTOR SHALL PROVIDE ALL SIGNS, BARRICADES, FLAG PERSONS AND OTHER TRAFFIC CONTROL MEASURES AS REQUIRED BY MDOT, THE COUNTY, OR THE COMMUNITY HAVING JURISDICTION OF THE ROAD AND IN CONFORMANCE WITH THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

COMPENSATION FOR TRAFFIC CONTROL SHALL BE CONSIDERED INCLUDED IN THE CONTRACT PRICE(S) UNLESS SPECIFIC TRAFFIC CONTROL ITEMS ARE INCLUDED IN THE ACCEPTED BID PROPOSAL.

**IRRIGATION**

THE CONTRACTOR SHALL MAINTAIN OR REPAIR ANY EXISTING IRRIGATION SYSTEMS WITHIN THE PROJECT AREA UNLESS THE DRAWINGS CALL FOR THE IRRIGATION SYSTEM TO BE REMOVED. THE OWNER AND NEE MAKE NO REPRESENTATIONS, WARRANTY OR GUARANTEE AS TO THE LOCATION OF THE IRRIGATION SYSTEM. THE CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO PROTECT THE IRRIGATION SYSTEM DURING CONSTRUCTION ACTIVITIES. COMPENSATION FOR MAINTAINING OR REPAIRING EXISTING IRRIGATION SYSTEMS SHALL BE CONSIDERED INCLUDED IN THE CONTRACT PRICE(S) UNLESS SPECIFIC IRRIGATION SYSTEM REPAIR ITEMS ARE INCLUDED IN THE ACCEPTED BID PROPOSAL.

**SUB-SOIL CONDITIONS**

ANY SOIL BORING PROVIDED BY THE OWNER AND/OR ENGINEER IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY. THIS INFORMATION IS NOT OFFERED AS EVIDENCE OF GROUND CONDITIONS THROUGHOUT THE PROJECT AND ONLY REFLECT THE GROUND CONDITIONS AT THE LOCATION OF THE BORING ON THE DATE THEY WERE TAKEN.

THE ACCURACY AND RELIABILITY OF THE SOIL LOGS AND REPORT ARE NOT WARRANTED OR GUARANTEED BY THE ENGINEER AS TO THE SUB-SOIL CONDITIONS FOUND ON THE SITE. THE CONTRACTOR SHALL MAKE THEIR OWN DETERMINATION AND SUB-SOIL INVESTIGATION AND SECURE OTHER SUCH INFORMATION AS THE CONTRACTOR CONSIDERS NECESSARY TO DO THE WORK PROPOSED AND IN PREPARATION OF THEIR BID.

**SUBGRADE UNDERCUTTING AND PREPARATION**

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REMOVE ANY AND ALL SOILS WHICH DO NOT CONFORM TO THE PLANS AND SPECIFICATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE A SUBGRADE IN CONFORMANCE WITH THE PROJECT PLANS AND/OR SPECIFICATIONS. THE MEANS AND METHODS USED TO ACHIEVE THE REQUIRED RESULT SHALL REST SOLELY WITH THE CONTRACTOR.

ANY AREAS OF UNDERCUTTING THAT RESULT IN ADDITIONAL OR EXTRA WORK BECAUSE THEY COULD NOT BE IDENTIFIED BY THE CONTRACTOR'S PRE-BID SITE OBSERVATION OR ARE NOT SET FORTH IN THE PLANS AND SPECIFICATIONS, SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER AND ENGINEER BEFORE ANY EXTRA WORK IS PERFORMED. THE CONTRACTOR SHALL MAKE A REQUEST FOR ANY ADDITIONAL COMPENSATION FOR THE UNDERCUTTING IN WRITING AND THE REQUEST SHALL CONFORM TO THE CONTRACT'S CHANGE ORDER PROVISIONS.

**STRUCTURE BACKFILL**

STRUCTURAL BACKFILL SHALL BE PLACED IN CONFORMANCE WITH THE PROJECT PLANS, SPECIFICATIONS OR AS REQUIRED BY THE COMMUNITY, GOVERNMENT AGENCY OR UTILITY THAT HAS JURISDICTION OVER THE WORK.

**TRENCH BACKFILL**

TRENCH BACKFILL SHALL BE PLACED IN CONFORMANCE WITH THE PLANS AND/OR SPECIFICATIONS. TRENCH BACKFILL SHALL ALSO BE INSTALLED IN CONFORMANCE WITH THE COMMUNITY REQUIREMENTS OR AGENCY/UTILITY GOVERNING SAID TRENCH CONSTRUCTION. IN THE CASE OF CONFLICTING REQUIREMENTS, THE MORE STRINGENT SHALL APPLY.

**EARTH BALANCE / GRADING**

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE WHETHER THE SITE EARTHWORK BALANCES OR NOT. ANY EXCESS CUT MATERIAL SHALL BE DISPOSED OF BY THE CONTRACTOR. IN A LIKE MANNER, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO IMPORT APPROVED FILL MATERIAL AND PLACE IT AS REQUIRED TO ATTAIN THE SITE GRADE AND CONFORMANCE WITH THE ENGINEER'S PLAN AND ALL APPLICABLE GOVERNMENTAL STANDARDS. THE ENGINEER AND OWNER MAKE NO REPRESENTATION AS TO THE QUANTITIES THAT MAY BE NEEDED TO CREATE A BALANCED EARTHWORK CONDITION OR THAT THE SITE EARTHWORK IS BALANCED.

**SOIL EROSION / SEDIMENTATION CONTROL**

THE CONTRACTOR SHALL OBTAIN THE REQUIRED SOIL EROSION PERMIT AND SATISFY ALL REGULATORY REQUIREMENTS FOR CONTROLLING SOIL EROSION AND SEDIMENT TRANSPORT. THE CONTRACTOR IS RESPONSIBLE FOR THE MEANS AND METHODS. THE ENGINEER AND OWNER ARE NOT RESPONSIBLE FOR INSPECTION OR APPROVAL OF THE CONTRACTOR'S WORK IN CONNECTION WITH SATISFYING THE SOIL PROTECTION PERMIT REQUIREMENTS UNLESS SPECIFICALLY STATED IN THE CONTRACT DOCUMENTS.

**DAMAGE TO PRIVATE PROPERTY**

ALL SIDEWALKS, DRIVEWAYS, LAWNS, FENCING, TREES, SHRUBS, SPRINKLERS, LANDSCAPING, ETC., THAT ARE DAMAGED DURING CONSTRUCTION MUST BE REPAIRED OR REPLACED, IN KIND OR BETTER, BY THE CONTRACTOR. ALL STREET SIGNS, MAIL BOXES, ETC., REMOVED SHALL BE REPLACED IN KIND OR BETTER, BY THE CONTRACTOR. ALL THE REPAIRS OR REPLACEMENTS DUE TO THE CONTRACTOR'S WORK ARE TO BE INCLUDED IN THE CONTRACT PRICE(S) AND SHALL NOT BE AN EXTRA TO THE CONTRACT.

THE CONTRACTOR SHALL SECURE PERMISSION IN WRITING FROM ADJACENT PROPERTY OWNERS PRIOR TO ENTERING UPON ANY ADJOINING PROPERTIES, UNLESS OFFSITE PERMITS HAVE ALREADY BEEN OBTAINED BY THE OWNER AND ARE PART OF THE CONTRACT DOCUMENTS.

**DEWATERING OF TRENCH AND EXCAVATIONS**

IF NOT SPECIFICALLY PROVIDED FOR IN THE CONSTRUCTION DESIGN DOCUMENTS, THE DESIGN OR QUALITATIVE ANALYSIS OF GROUND WATER DEWATERING SYSTEMS IS BEYOND THE SCOPE OF DESIGN FOR THESE DOCUMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SELECTING AND PROVIDING APPROPRIATE EXCAVATION DEWATERING SYSTEMS FOR USE DURING CONSTRUCTION.

THE DEWATERING METHOD SELECTED BY THE CONTRACTOR WILL NOT ADVERSELY AFFECT ADJACENT PAVEMENTS OR STRUCTURES PRIOR TO BEGINNING DEWATERING CONDITIONS. MEANS AND METHODS OF DEWATERING ARE SOLELY THE RESPONSIBILITY OF THE CONTRACTOR. THE COST OF DEWATERING WILL BE CONSIDERED INCLUDED IN THE WORK OF CONSTRUCTING THE UNDERGROUND UTILITIES UNLESS SPECIFICALLY INDICATED OTHERWISE.

**UTILITIES**

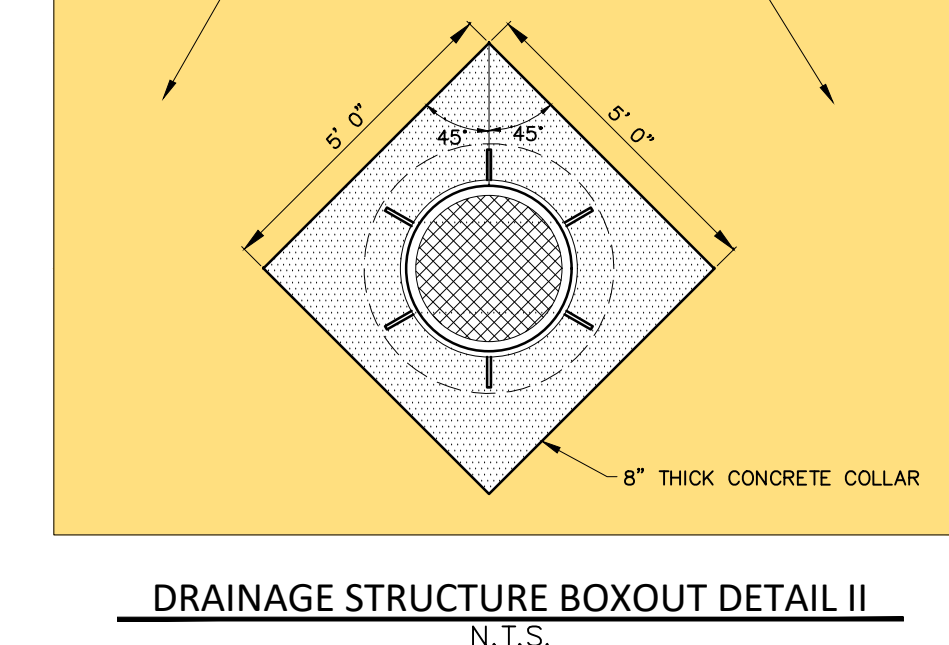
AT LEAST 72 HOURS (3 WORKING DAYS) PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY MISS DIG AND THE LOCAL COMMUNITY (WHERE APPLICABLE) TO STAKE LOCATIONS OF EXISTING UTILITIES.

THE CONTRACTOR SHALL EXPOSE AND VERIFY EXISTING UTILITIES FOR LOCATION, SIZE, DEPTH, MATERIAL, AND CONFIGURATION PRIOR TO COMMENCING WORK. ANY FIELD CHANGES DUE TO THE CONTRACTOR'S WORK ARE TO BE APPROVED BY THE OWNER AND ENGINEER BEFORE THE WORK IS DONE.

THE CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES FROM DAMAGE. ANY SERVICE OR UTILITY DAMAGED OR REMOVED BY THE CONTRACTOR SHALL BE REPAIRED OR REPLACED AT THE EXPENSE OF THE CONTRACTOR, IN CONFORMANCE WITH THE REQUIREMENTS OF THE UTILITY COMPANY PROVIDER.

**MANHOLE FRAME AND COVER WITH LOGO - SEWER**

**CITY OF DETROIT WATER AND SEWERAGE DEPARTMENT ENGINEERING DIVISION**



**811**  
Know what's below  
Call before you dig.

**DATE ISSUED/REVISED**

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**DRAWN BY:**  
L. Gross

**DESIGNED BY:**  
T. Wood

**APPROVED BY:**  
J. Longhurst

**DATE:**  
December 1, 2021

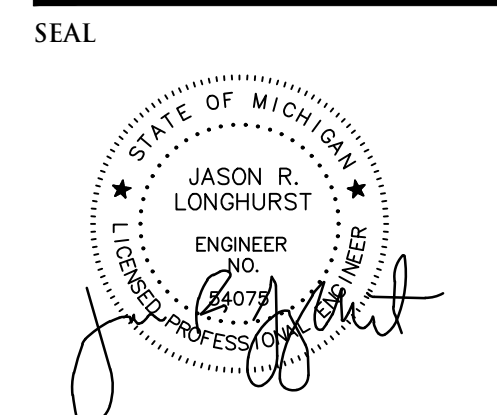
**SCALE:**  
N.T.S.

**NEE JOB NO.**  
M262

**SHEET NO.**  
C6



**NOWAK & FRAUS ENGINEERS**  
4677 WOODWARD AVE.  
PONTIAC, MI 48342-5032  
TEL. (248) 332-7931  
FAX. (248) 332-8257  
WWW.NOWAKFRAUS.COM



**PROJECT**  
603 E Milwaukee Ave  
Detroit, Michigan

**CLIENT**  
Ferry Street Ventures, LLC  
1520 North Johnson Street  
Arlington, VA 22201

**PROJECT LOCATION**  
Part of the Northeast 1/4  
of Section 31  
Town 1 South, Range 12  
East  
City of Detroit,  
Wayne County, Michigan

**SHEET**  
Notes and Details



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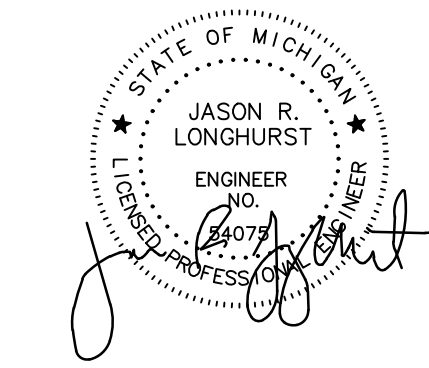
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**ALUMINUM MANHOLE STEP STANDARD DETAILS**  
NO SCALE

NOTES:  
1. MANHOLE STEPS SHALL CONFORM TO THE REQUIREMENTS FOR "ALUMINUM ALLOY EXTRUDED BARS, RODS, SHAPES AND TUBES", A.S.T.M. B201 (CURRENT), ALLOY 6061, TEMPER T-6, OR APPROVED EQUAL.  
2. EITHER THE FLANGED LEG OR PARALLEL LEG STEP MAY BE USED FOR POURED IN PLACE CONCRETE CONSTRUCTION OR IN WET CAST MANHOLE UNITS.  
3. THE PARALLEL LEG STEP SHALL BE USED IN EXISTING STRUCTURES BY PLACING IN DRILLED HOLES AND GROUTING WITH NON-SHRINK GROUT.

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DRAWING NO. 35  
DETAIL STANDARD NO. C-5028  
SHEET 4 OF 7

**DETAIL OF TRAP FOR CATCH BASIN "B"**

NOTES:  
SEWER TRAP TO BE OF THE SAME MAT'L. & STRENGTH AS THE OUTLET SEWER PIPE.  
TRAP SHALL BE SUPPORTED BY BLOCKING ON ANY OTHER MEMS UNTIL CATCH BASIN IS COMPLETED AND CONCRETE OR MORTAR AROUND BRICK IS SET. ANY JOISTS BETWEEN THE TRAP AND GROUND UNDERNEATH SHALL BE FILLED WITH GRADE "A" CONCRETE.

REVISED DATE (METRIC TO ENGLISH UNIT SYSTEM): DEC. 2002  
DRAWING NO. 35  
DETAIL STANDARD NO. C-5028  
SHEET 2 OF 7

**SECTION B-B  
CATCH BASIN "B"**

NOTE "A":  
WALL THICKNESS SHALL BE 8" FROM THE TOP OF STRUCTURE TO A DEPTH OF 15". BELOW 15" THE THICKNESS OF THE WALL SHALL BE 12"

REVISED DATE (METRIC TO ENGLISH UNIT SYSTEM): DEC. 2002  
DRAWING NO. 35  
DETAIL STANDARD NO. C-5028  
SHEET 2 OF 7

**SECTION A-A  
CATCH BASIN "A"**

REVISED DATE (METRIC TO ENGLISH UNIT SYSTEM): DEC. 2002  
DRAWING NO. 35  
DETAIL STANDARD NO. C-5028  
SHEET 1 OF 7

**TYPICAL DETAIL AT CROSSING UNDER EXISTING UTILITIES**

NOTES:  
1. ALL MDOT CLASS II GRANULAR MATERIAL, PLACE AND COMPACT (IN MAX. 12" LIFTS) BY "CONTROLLED DENSITY METHOD" TO 98% PER SPECIFICATION 31 23.3.3.10 B OF MAXIMUM UNIT WEIGHT.  
2. WATERMANS CROSSING UNDER SEWERS - WHEN IT IS IMPOSSIBLE TO OBTAIN THE MINIMUM 18-INCH CLEARANCE, REPLACE THE SEWER PIPE (MINIMUM OF 10 FT. ON BOTH SIDES OF WATERMAN) WITH WATER WORKS GRADE 150PSI PRESSURE TESTED TO ENSURE WATER TIGHTNESS.  
3. "W" - SEE TRENCH DETAILS FOR TRENCH WIDTH.  
4. TRENCHING SHALL BE PER OSHA 29 CFR, SUBPART P

REVISED DATE (METRIC TO ENGLISH UNIT SYSTEM): DEC. 2002  
DRAWING NO. 35  
DETAIL STANDARD NO. C-5028  
SHEET 7 OF 7

**GENERAL NOTES**

- CENTER OF CATCH BASIN SHALL BE 20 INCHES FROM BACK OF CURB.
- ALL SIZES AND FLOW LINES OF PIPES, AND ELEVATIONS FOR TOP AND BOTTOM OF STRUCTURES SHALL BE DETERMINED FROM THE PLANS OR CONSTRUCTION REQUIREMENTS. THE BELL SHALL BE REMOVED FROM THE FIRST LENGTH OF OUTLET PIPE PROJECTING THROUGH THE WALL OF THE STRUCTURE WHEN ANY STRUCTURE IS CONSTRUCTED OF PRECAST CONCRETE OR CONCRETE BLOCK. THE TOP OF THE MASONRY SHALL BE LEFT SUFFICIENTLY LOW TO PERMIT PROPER ADJUSTMENT OF THE COVER TO GRADE BY THE USE OF MORTAR OR BRICKS AS DIRECTED BY THE ENGINEER.
- A TRAP, AS RETAINED ON SHEET 3 OF 7, SHALL BE PLACED WHERE CALLED FOR IN THE OUTLET SEWER LINE OF CATCH BASIN "B". THIS TRAP SHALL BE SET INTO THE MASONRY WALL AS SHOWN ON THE DETAILS.
- THE MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARD SPECIFICATIONS FOR PAVING AND RELATED CONSTRUCTION EXCEPT AS NOTED ON THIS SHEET AND ON THE DETAILS.
- A PLASTER COAT OF MORTAR 1/2" IN THICKNESS SHALL BE APPLIED TO THE OUTER SURFACE OF THE STRUCTURE AS SHOWN. A 1/2" CEMENT PLASTER COAT SHALL BE PLACED ON THE INSIDE OF ALL SUMPS.
- CONTRACTOR SHALL VERIFY ELEVATIONS OF EXISTING UTILITIES TO ENABLE CONSTRUCTION TO INDICATED ELEVATIONS SHOWN ON DRAWINGS. IF NECESSARY, INVERT ELEVATIONS SHOWN ON THE DRAWINGS MAY BE ALTERED IN THE FIELD TO CLEAR EXISTING UTILITIES. SUCH ALTERATIONS, UPWARD OR DOWNWARD, SHALL BE AT NO CHANGE IN CONTRACT PRICE.
- WHEN PRECAST CONCRETE PIPE SECTIONS ARE USED FOR CATCH BASINS, EITHER A SECTION OF THE INLET AND OUTLET PIPES OR AN OPENING OR EYE FOR THE INLET AND OUTLET PIPES SHALL BE CAST INTO THE WALL OF THE CATCH BASIN PIPE WHEN IT IS BEING MANUFACTURED. EYES IN PRECAST PIPE SECTIONS SHALL BE FURNISHED TO ACCOMMODATE A FLEXIBLE JOINT CONNECTION SUCH AS PRESS-MODE BY PRESS SEAL GASKET CORP. OR RES-SEAL BY SCALES WFG. CORP.
- PAY LIMIT FOR SEWERS SHALL BE INSIDE FACES OF STRUCTURES UNLESS OTHERWISE NOTED.
- ALL DIMENSIONS ARE IN (INCHES) UNLESS OTHERWISE NOTED.

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DRAWING NO. 35  
DETAIL STANDARD NO. C-5028  
SHEET 7 OF 7

**SECTION G-G**

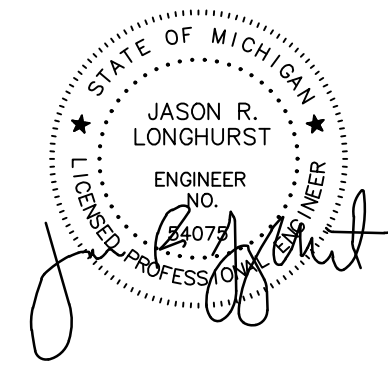
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DRAWING NO. 35  
DETAIL STANDARD NO. C-5028  
SHEET 6 OF 7

**SECTION D-D**

REVISED DATE (METRIC TO ENGLISH UNIT SYSTEM): DEC. 2002  
DRAWING NO. 35  
DETAIL STANDARD NO. C-5028  
SHEET 5 OF 7



SEAL



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L. Gross  
DESIGNED BY:  
T. Wood  
APPROVED BY:  
J. Longhurst

DATE:  
December 1, 2021

SCALE: N.T.S.

### EXPANSION JOINTS

ALL EXPANSION JOINT PAPER SHALL EXTEND 1" BELOW THE BOTTOM OF THE THINNER OF ADJOINING PAVEMENT SECTIONS.

- PLACE 1/2" PAPER EXPANSION JOINTS AT LOT LINES WHEN LOT LINES ARE BETWEEN 25' AND 50' APART.
- PLACE ADDITIONAL 1/2" PAPER EXPANSION JOINTS SO THAT THE DISTANCE BETWEEN JOINTS DOES NOT EXCEED 15.2 m WHEN LOT LINES ARE OVER 15.240 m APART.
- PLACE 1/2" PAPER EXPANSION JOINTS AT EVERY SECOND LOT LINE AND CONTRACTION JOINT AT INTERVENING LOT LINE WHEN LOT LINES ARE LESS THAN 25' APART.
- PLACE 1" PAPER EXPANSION JOINTS AT CURB AND BUILDING OR PROPERTY LINE OR AT ALTERNATE POSITION (A) AS SHOWN FOR DRIVEWAY.
- PLACE 1" PAPER EXPANSION JOINTS AT CURB AND BUILDING OR PROPERTY LINE FOR FULL WIDTH SIDEWALK EXCEEDING 7' IN WIDTH.
- PLACE 1" PAPER EXPANSION JOINTS AT CURB CIRCLES OR AT ALTERNATE POSITION (B) AS SHOWN.
- PLACE 1" PAPER EXPANSION JOINTS AT INTERSECTIONS OF SERVICE WALKS AND SIDEWALKS AND CURBS.
- PLACE 1" PAPER EXPANSION JOINTS AT MARGIN FLAGS AT CROSSWALKS.
- PLACE 1" PAPER EXPANSION JOINTS AT ALLEY APRONS.
- PLACE 1/2" PAPER EXPANSION JOINT BOTH SIDES OF SIDEWALK FLAG ABUTTING TREE AND ON CENTERLINE JOINT.

### CONTRACTION JOINTS

- PLACE CONTRACTION JOINTS AT INTERVALS OF NOT LESS THAN 5' NOR MORE THAN 7' ON WALKS 5' WIDE OR WIDER, INCLUDING FULL WIDTH WALKS.
- PLACE CONTRACTION JOINTS AT INTERVALS OF NOT LESS THAN 4' NOR MORE THAN 7' ON WALKS 4' WIDE.
- PLACE CONTRACTION JOINTS AT THE MARGIN LINE ON FULL WIDTH WALKS (OPTIONAL).

### DRIVEWAYS

- PLACE CONTRACTION JOINTS IN DRIVEWAYS SO THAT NO SLAB WILL EXCEED THE DIMENSIONS OF 15' BY 15'.
- PLACE 1" PAPER EXPANSION JOINTS ON ALL SIDES OF COMMERCIAL DRIVES.
- PLACE CONTRACTION OR CONTRACTION JOINT ON CENTERLINE WHEN WIDTH OF DRIVEWAY EXCEEDS 15'
- PLACE 1/2" PAPER EXPANSION JOINTS ON BOTH SIDES OF RESIDENTIAL DRIVEWAYS. IF DRIVEWAY EDGE IS WITHIN 2' OF LOT LINE, PLACE THIS EXPANSION PAPER AT PROPERTY LINE.

REVISOR DATE (METRIC TO ENGLISH UNIT SYSTEM) DEC. 2002

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9		C-4462	1	2 OF 2

### TYPICAL SECTION

PAVEMENT AT CENTER MUST BE TRUE TO GRADE AT ALL POINTS FOR FREE FLOW OF WATER.

ALLEY R.O.W. WIDTH

PAVE TO PROPERTY LINE AT ABUTTING GARAGE ENTRANCES, PAVED AREAS OR BUILDINGS.

ONE COURSE CONCRETE

LONGITUDINAL CONTRACTION JOINT SEE NOTE 2

PLACE EXPANSION JOINT ALONG BRICK OR CONCRETE BUILDINGS OR CONCRETE PAVEMENT.

ALLEY WIDTH	H
15'	5'
17'	4'
19'	3'

NOTES:

- PLACE EXPANSION JOINTS AT ALL STREET PROPERTY LINES AND ALLEY INTERSECTIONS.
- LONGITUDINAL CONTRACTION JOINT TO BE CONSTRUCTED IN PARALLELS 1" AND OVER IN WIDTH UNLESS OTHERWISE NOTED ON PAVING PLAN.
- MAXIMUM SPACING BETWEEN EXPANSION JOINTS SHOULD NOT EXCEED 600 FEET.
- IF STREET IS ECONOMY PAVED THE AREA BETWEEN THE WALK AND EDGE OF PAVEMENT SHALL BE PAVED WITH 6" STONE BASE PLUS 1" OF COLD PATCH MATERIAL. THE WALK FLAG SHALL BE 6" THICK.
- CONTRACTION JOINTS SHALL BE SPACED AT 15' C. TO C. TOP SLAB AGGREGATE AND 6.0 m C. TO C. FOR NATURAL AGGREGATE.

### CONSTRUCTION SYMBOLS LEGEND

- EXISTING SEWER MANHOLE
- PROPOSED SEWER MANHOLE
- EXISTING CATCH BASIN
- PROPOSED CATCH BASIN
- ADJUST EXISTING CATCH BASIN
- ADJUST EXISTING MANHOLE
- CONSTRUCT CATCH BASIN
- CONSTRUCT MANHOLE
- ABANDON EXISTING CATCH BASIN
- STONING AND GRADING
- CONSTRUCT STANDARD 4" CONCRETE SIDEWALK

REVISOR DATE (METRIC TO ENGLISH UNIT SYSTEM) DEC. 2002

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### TYPICAL PLAN

CONTRACTION JOINTS SEE NOTE 5

PAVE PORTION OF ALLEY RETURN FULL WIDTH OF ALLEY RIGHT OF WAY

PROPERTY LINE EXPANSION JOINT

EXPANSION JOINT

UNPAVED STREET

PAVED STREET

REBUILD ALLEY RETURNS WITH A 10' RADIUS TO OBTAIN GRADE MORE EXISTING GRADES EXCEED 1" PER FOOT AND CONSULTING PERMIT.

AT "T" INTERSECTION, WHERE ONLY THE "T" OR STEM IS PAVED, CONTRACTOR SHALL GRADE BACK AND STONE THE UNPAVED PORTION 6" DEEP UNIFORMLY A DISTANCE OF 10'.

AT ANGULAR "T" ALLEYS PLACE CONTRACTION JOINT AT INTERSECTION AND AN EXPANSION JOINT AT FIRST PANEL.

TO PERMIT JOINT ON @ OF MANHOLES AND CATCH BASINS ADJUST ONE OR MORE PANELS EITHER SIDE OF OPENINGS.

CONTRACTION JOINTS SEE NOTE 5

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9		C-4396	1	2 OF 2

### TYPICAL PLAN

UNPAVED STREET

PAVED STREET

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### SECTION A-A

ALLEY WIDTH = W

PROPERTY LINE

EXISTING SIDEWALK

1" EXPANSION JOINT

END OF CURB

END OF RADIUS

GUTTER LINE

2" STREET PAVEMENT

ALLEY RETURN OR COMMERCIAL DRIVE APPROACH

CONC. ALLEY RETURN

1" EXP. JT.

FINISH TOP EDGE TO 1/2" RADIUS FOR EXPANSION JOINT

6" RESIDENTIAL

6" COMMERCIAL

1" EXPANSION JOINT

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### SECTION B-B

PROPERTY LINE

7" MIN. 9" MAX.

VARIABLE 1" TYP.

SIDEWALK

1" EXPANSION JOINT

BERM AREA

BACK OF CURB

1" EXPANSION JOINT

OPENING 12" MAX. OFFSET

10" STD. CURB CUT

UNLESS OTHERWISE APPROVED BY ENGINEER

STREET PAVEMENT

DETAIL OF CURB CUT OPENINGS FOR RESIDENTIAL DRIVEWAY

1" EXPANSION JOINT

CONC. ALLEY RETURN

1" EXPANSION JOINT

8.33% MAX.

1.5" TIP CURB

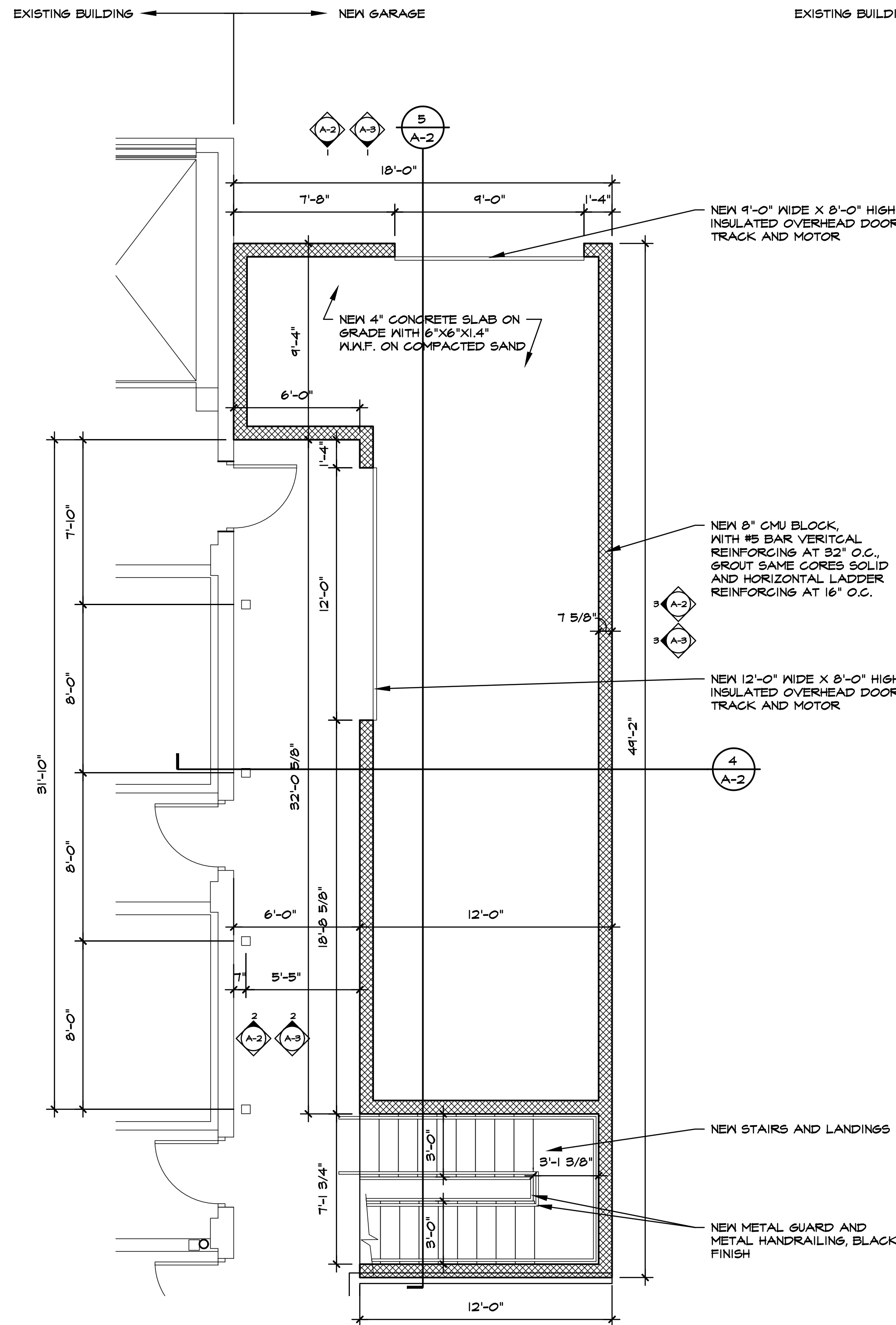
GUTTER LINE


PAVEMENT

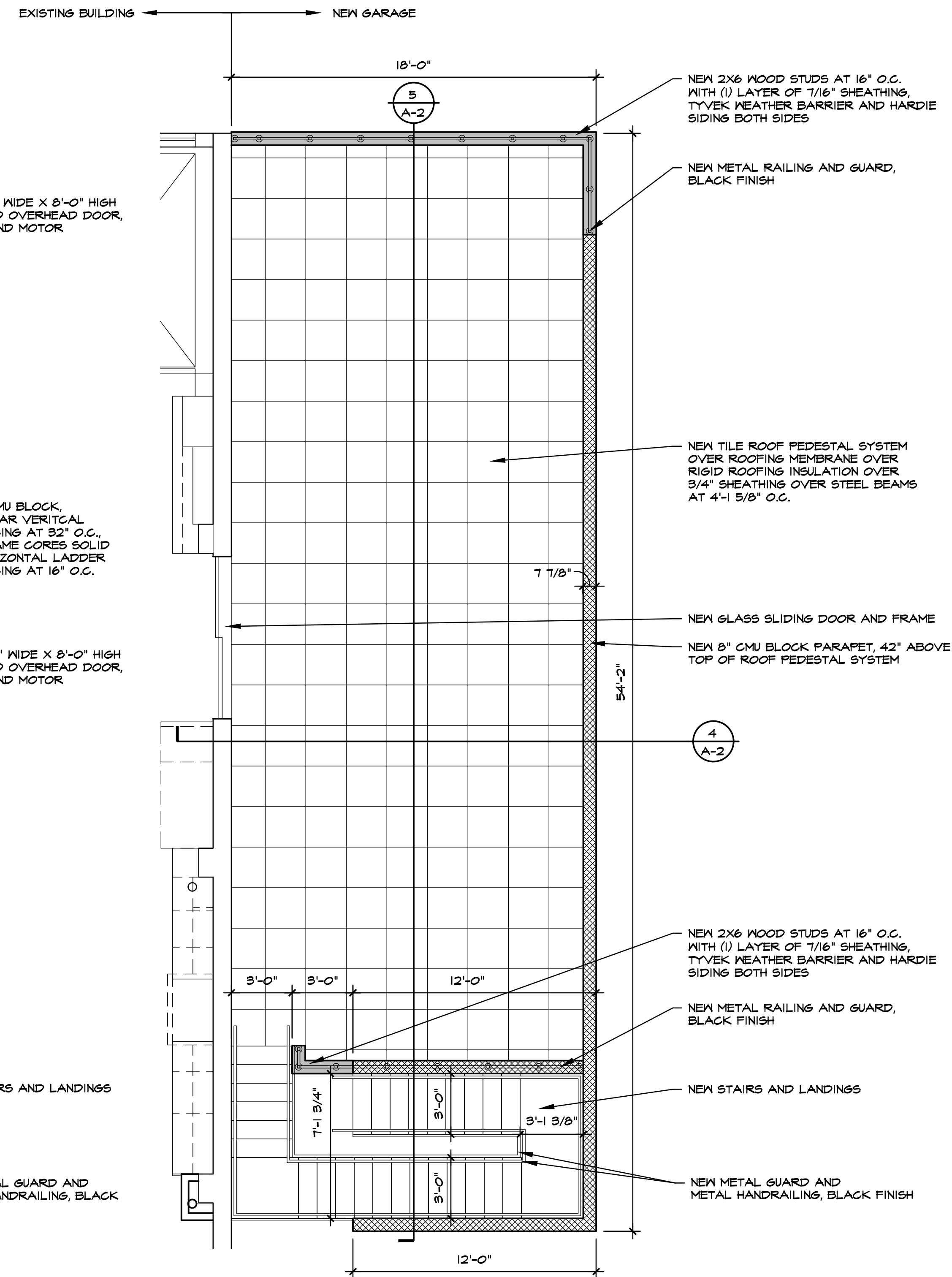
6" RESIDENTIAL

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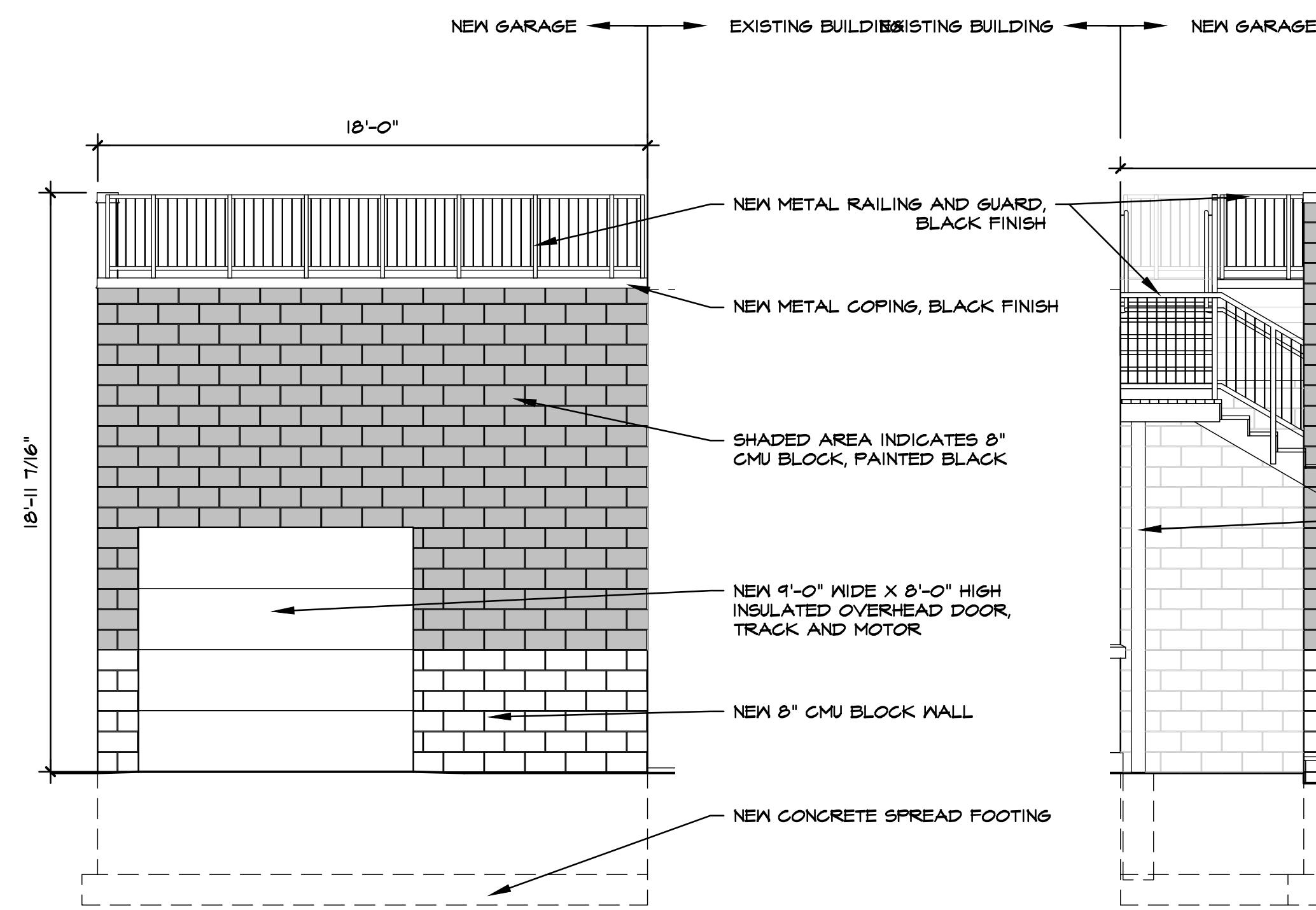


**FLOOR PLAN**   
1/4" = 1'-0"

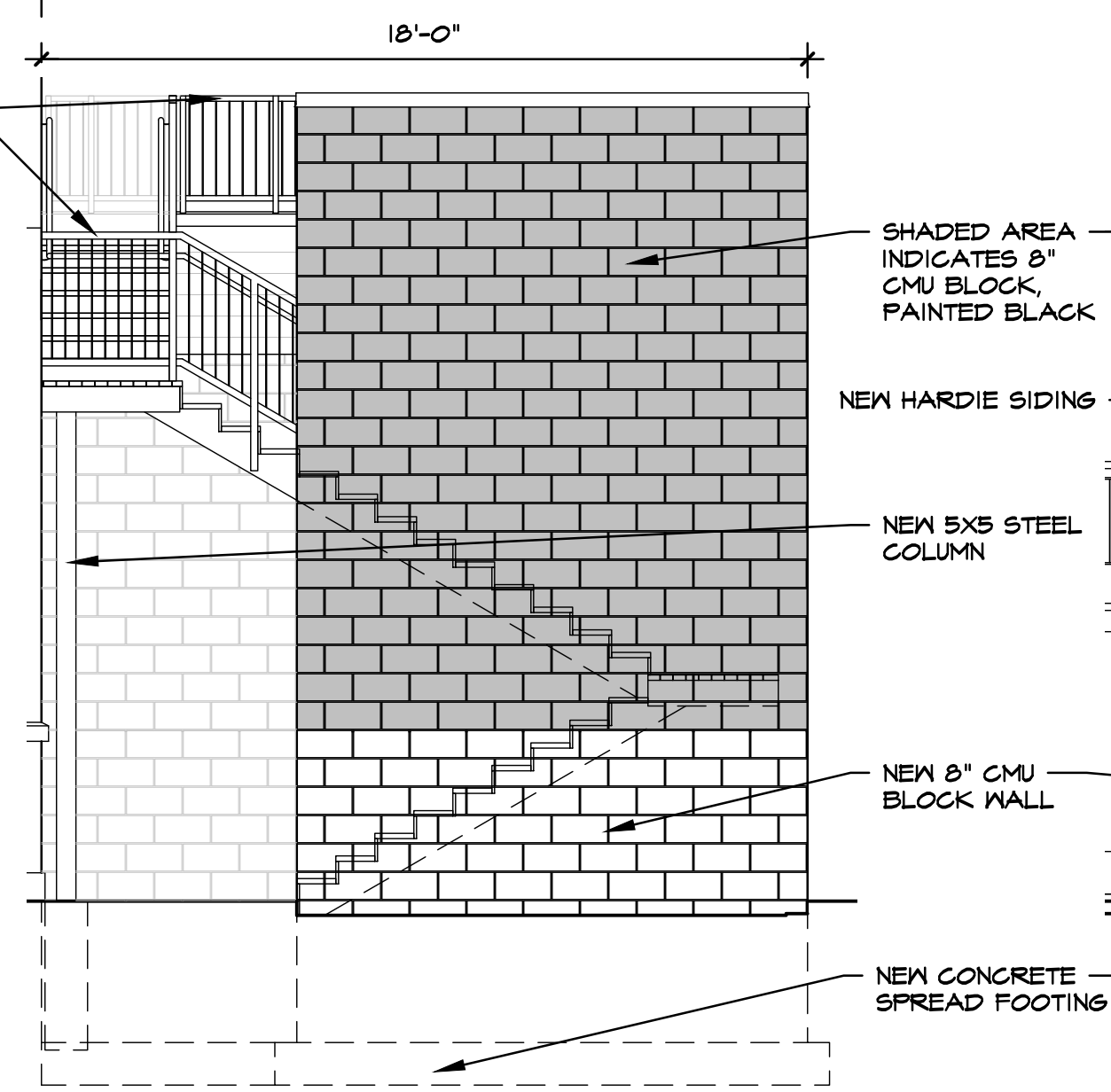


**ROOF PLAN**   
1/4" = 1'-0"

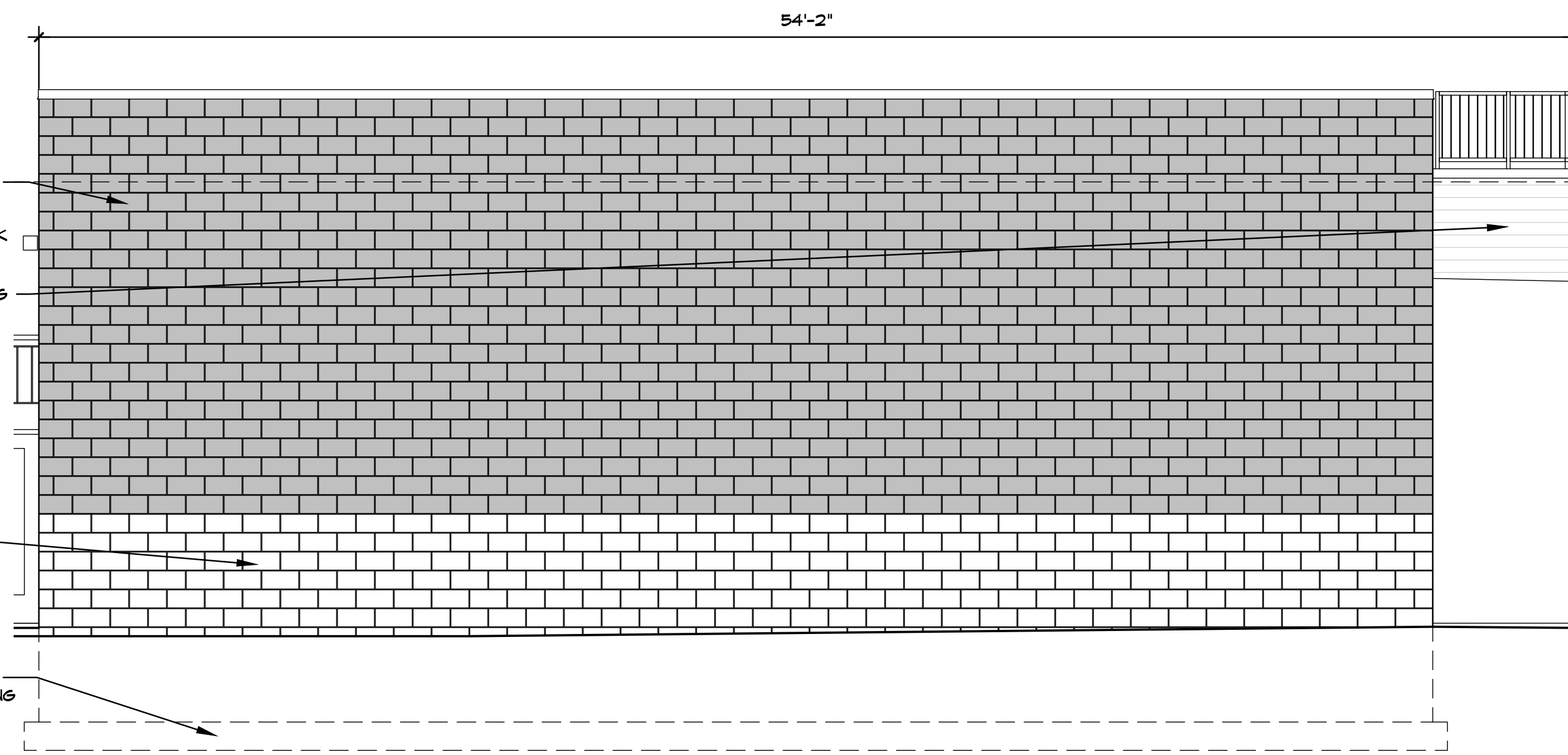
Seal
<p><b>PROJECT PEERLESS</b></p> <p>Project: 603 E. MILWAUKEE ST. DETROIT, MI 48202</p>
<p>Drawing Title</p> <p><b>FLOOR PLAN ROOF PLAN</b></p>
<p>Project Number</p> <p><b>20-40-159</b></p>
<p>Drawn</p> <p>KJM</p>
<p>Checked</p> <p>DJS</p>
<p>Scale</p> <p>1/4" = 1'-0"</p>
<p>Dwg</p> <p>PEERLESS GARAGE - CDS</p>
<p>Issued for</p> <p>HDC REVIEW</p>
<p>Date</p> <p>9-18-23</p>
<p>By</p> <p>DJS</p>
<p>Sheet Number</p> <p><b>A-1</b></p> <p>of</p> <p>3</p>



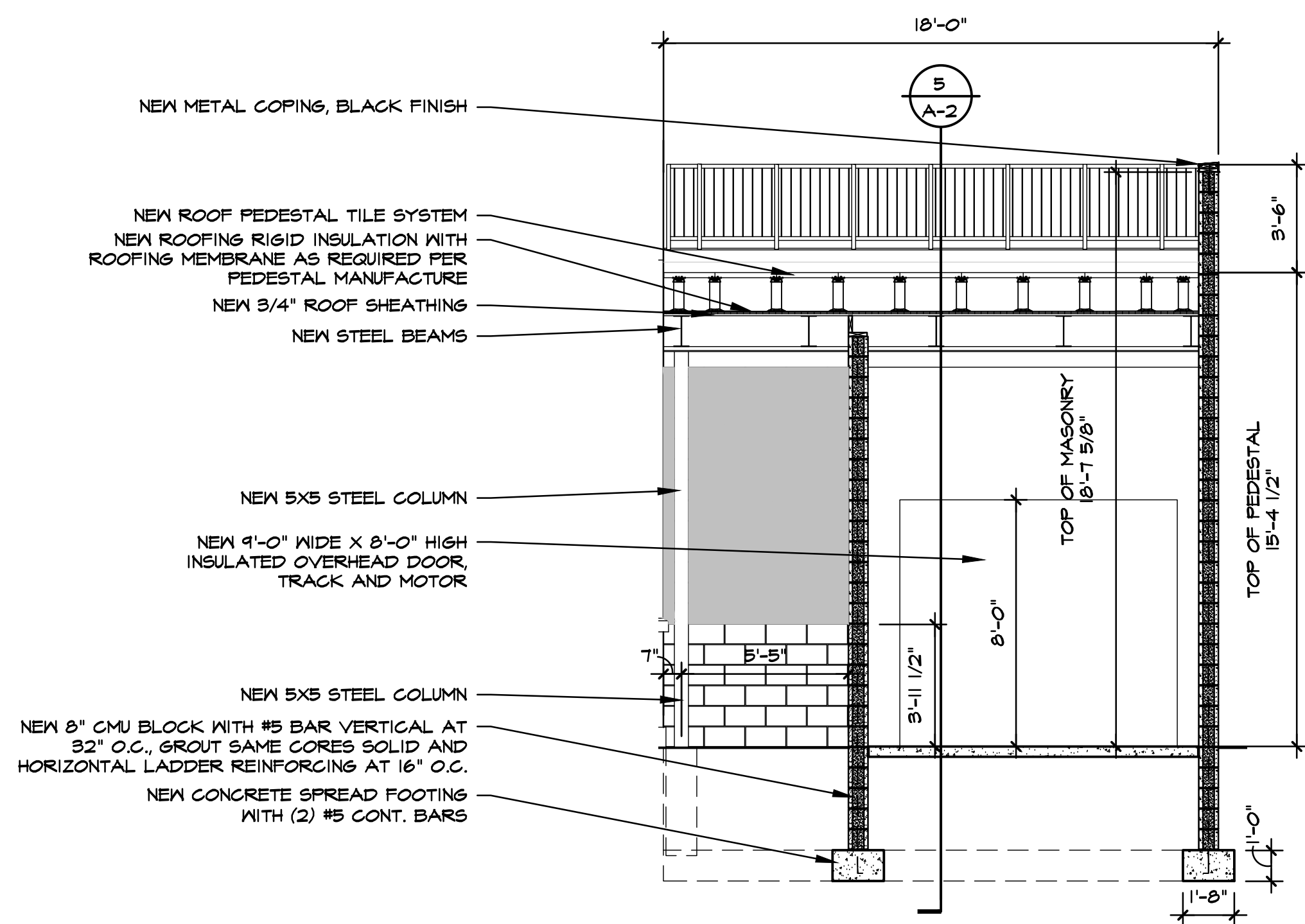
1 NORTH ELEVATION  
A-1 1/4" = 1'-0"



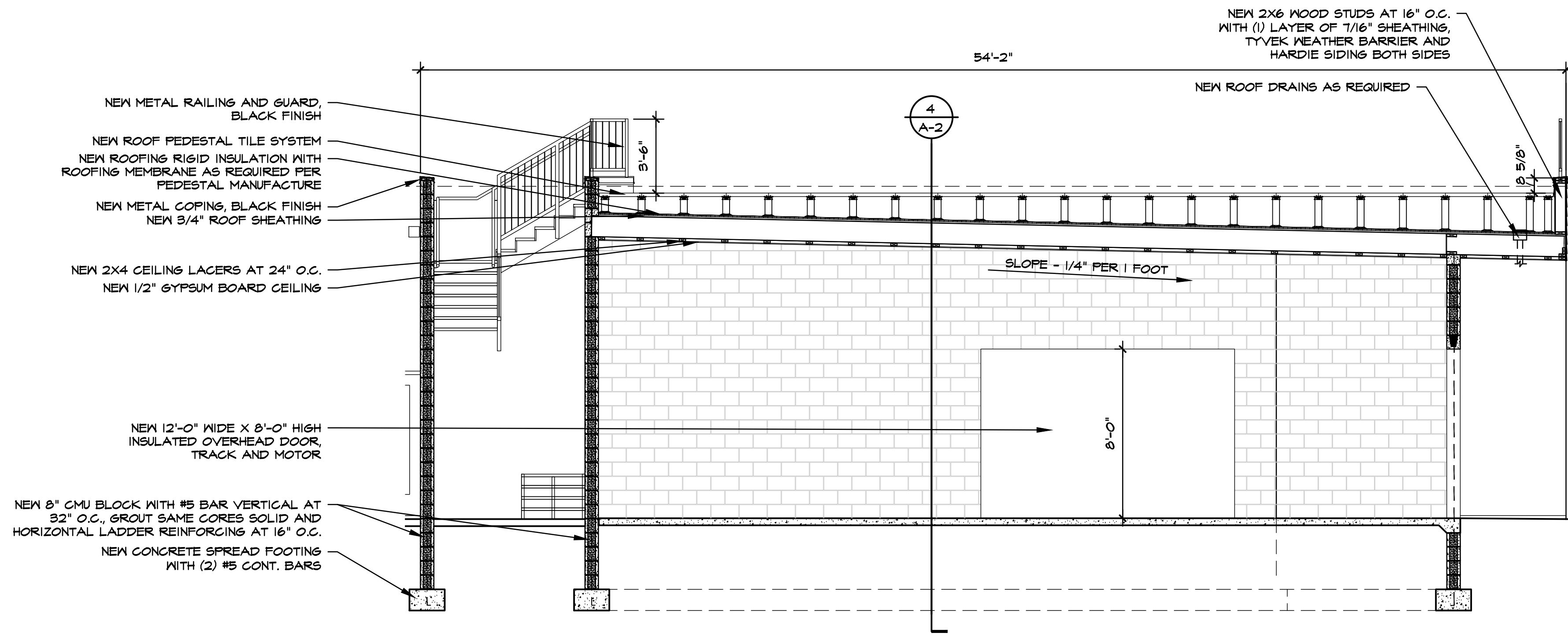
2 SOUTH ELEVATION  
A-1 1/4" = 1'-0"



3 EAST ELEVATION  
A-1 1/4" = 1'-0"



4 BUILDING SECTION  
A-1 1/4" = 1'-0"



5 BUILDING SECTION  
A-1 1/4" = 1'-0"



7300 DIXIE HWY. #600  
CLARKSTON, MI 48346  
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Seal

Project **PROJECT PEERLESS**

603 E. MILWAUKEE ST.  
DETROIT, MI 48202

Drawing Title  
**ELEVATIONS AND SECTIONS**

Project Number  
**20-40-159**

Drawn KJM

Checked DJS

Scale 1/4" = 1'-0"

Dwg. PEERLESS GARAGE - CDS

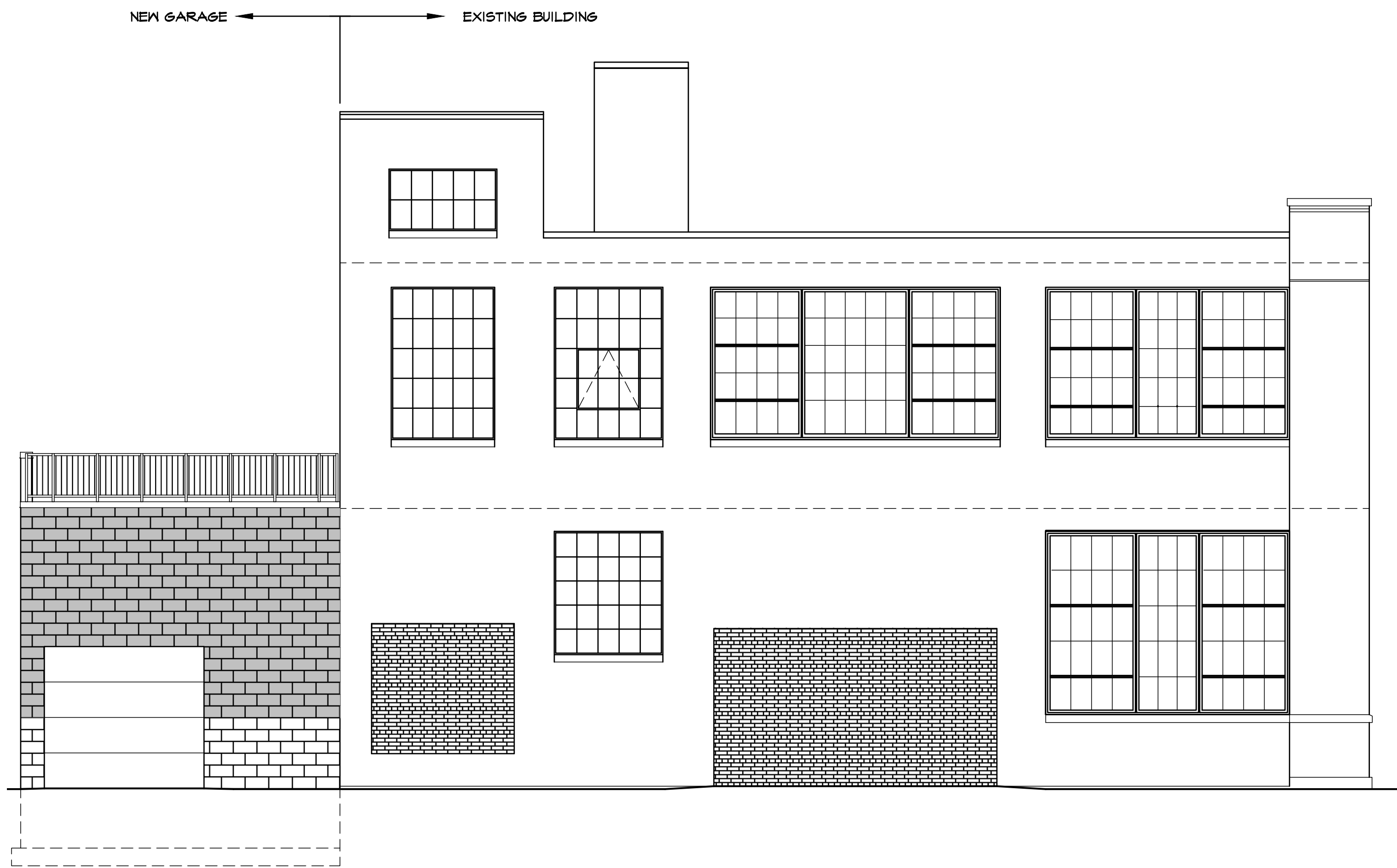
Issued for Date By  
HDC REVIEW 9-18-23 DJS

Sheet Number

**A-2**

of

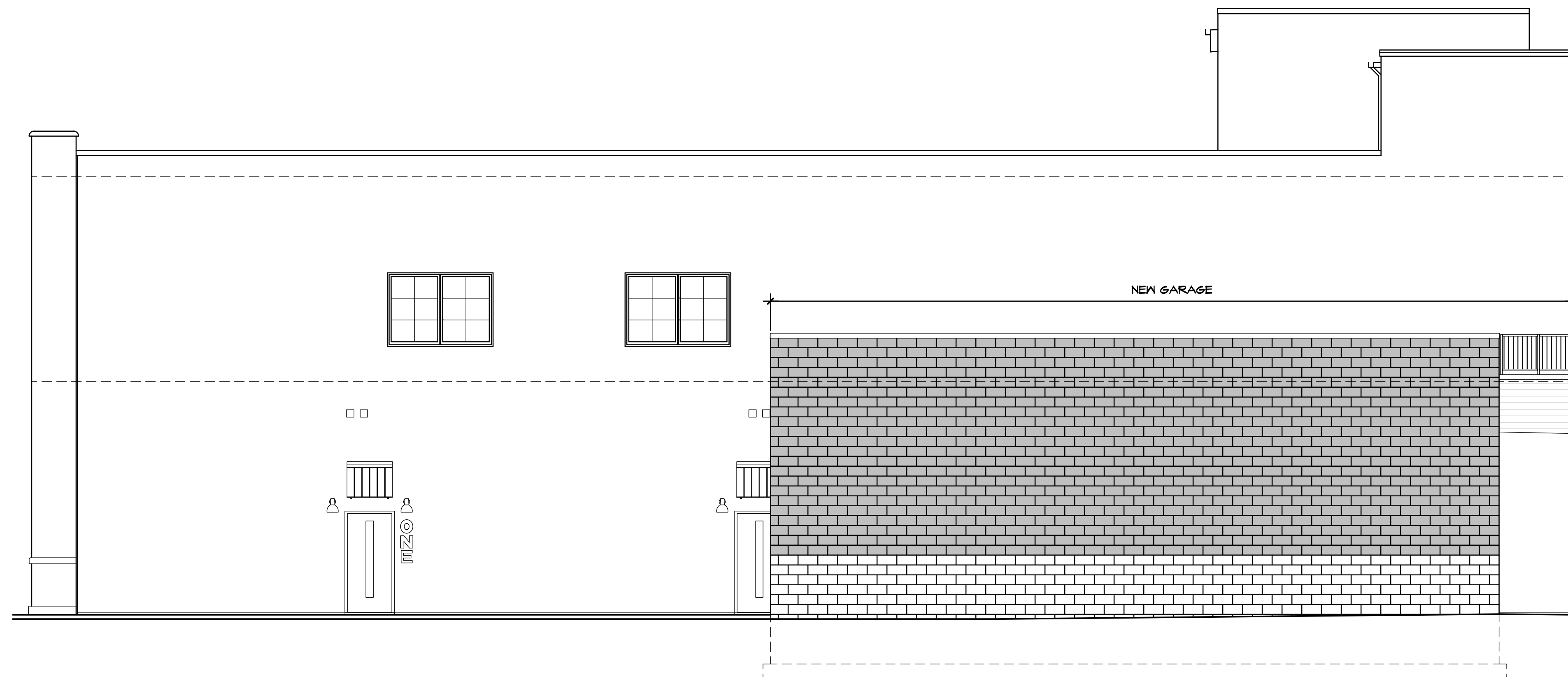
3



1 NORTH ELEVATION  
A-1 1/4" = 1'-0"



2 SOUTH ELEVATION  
A-1 1/4" = 1'-0"



3 EAST ELEVATION  
A-1 1/4" = 1'-0"



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Project **PROJECT PEERLESS**

603 E. MILWAUKEE ST.  
DETROIT, MI 48202

Drawing Title  
**ELEVATIONS AND SECTIONS**

Project Number  
**20-40-159**

Drawn KJM

Checked DJS

Scale 3/16" = 1'-0"

Dwg. PEERLESS GARAGE - CDS

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Sheet Number  
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of  
3



