

# GREAT LAKES WATER AUTHORITY CONTRACT NO. GLWA-2204605

# FREUD PUMP STATION IMPROVEMENTS

### **DEVELOPMENT TEAM**

**ENGINEERS** 

DETROIT, MI 48226

TROY, MI 48084

607 SHELBY ST, SUITE 400

ARCADIS OF MICHIGAN, LLC

**BROWN AND CALDWELL** 

100 WEST BIG BEAVER RD, SUITE 540

# **OWNER**

GREAT LAKES WATER AUTHORITY

735 RANDOLPH ST DETROIT, MI 48226

# **CONTRACTOR**

KOKOSING INDUSTRIAL, INC.

20500 EUREKA RD, SUITE 110 TAYLOR, MI 48180

# **CONCEPT ARCHITECT**

INTOTO STUDIO

6505 WOODWARD AVE, SUITE 200 DETROIT, MI 48202

# LANDSCAPE ARCHITECT

**PEA GROUP** 

45 W. GRAND RIVER AVE, SUITE 501 DETROIT, MI 48226

# LIST OF DRAWINGS

### CIVIL

C-00-101 SITE PLAN
C-00-102 GRADING PLANS
C-00-503 STANDARD CIVIL DETAILS MISCELLANEOUS
C-02-504 MISCELLANEOUS CIVIL DETAILS

### LANDSCAPE

L-02-001 LANDSCAPE LEGENDS, SUMBOLS, AND NOTES
L-02-101 OVERALL LANDSCAPE PLAN
L-02-401 LANDSCAPE PLAN ENLARGEMENT
L-02-501 LANDSCAPE DETAILS
L-02-502 LANDSCAPE FENCE DETAILS
RENDERED LANDSCAPE SITE PLAN

## STRUCTURAL

S-00-017 STANDARD DETAILS 13

# ARCHITECTURAL

A-02-101 FIRST FLOOR PLAN

## **ELECTRICAL**

E-00-005 LIGHTING FIXTURE SCHEDULE E-02-103 FIRST FLOOR LIGHTING PLAN

### RENDERINGS

3 PAGES

### **ELEVATIONS**

4 PAGES

# LEGAL DESCRIPTION

2 PAGES 9 PAGES

JULY 2025

## **PROJECT SUMMARY**

# SITE DATA

APPROX. LOT SIZE: 693 NAVAHOE ST. (PARCEL E.2)

+/- 49,142.50 SF OR +/- 1.13 ACRES

ZONING

PD (PLANNED DEVELOPMENT DISTRICT)

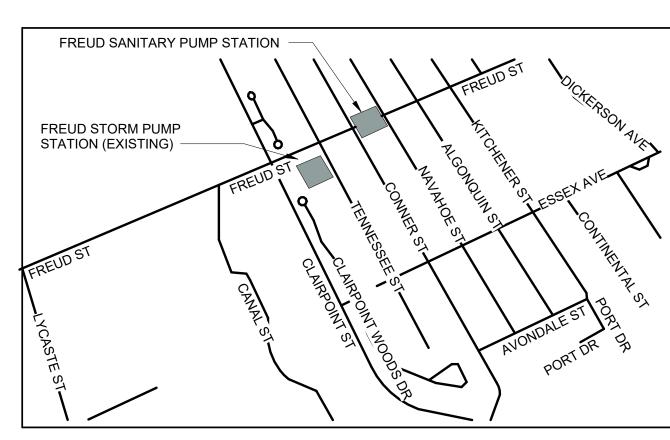
# **BUILDING DATA**

FREUD SANITARY PUMP STATION

HEIGHT FROM GRADE TO TOP OF ROOFTOP SCREENING 42' - 0" \* REQUEST ALLOWANCE UP TO 45' - 0"

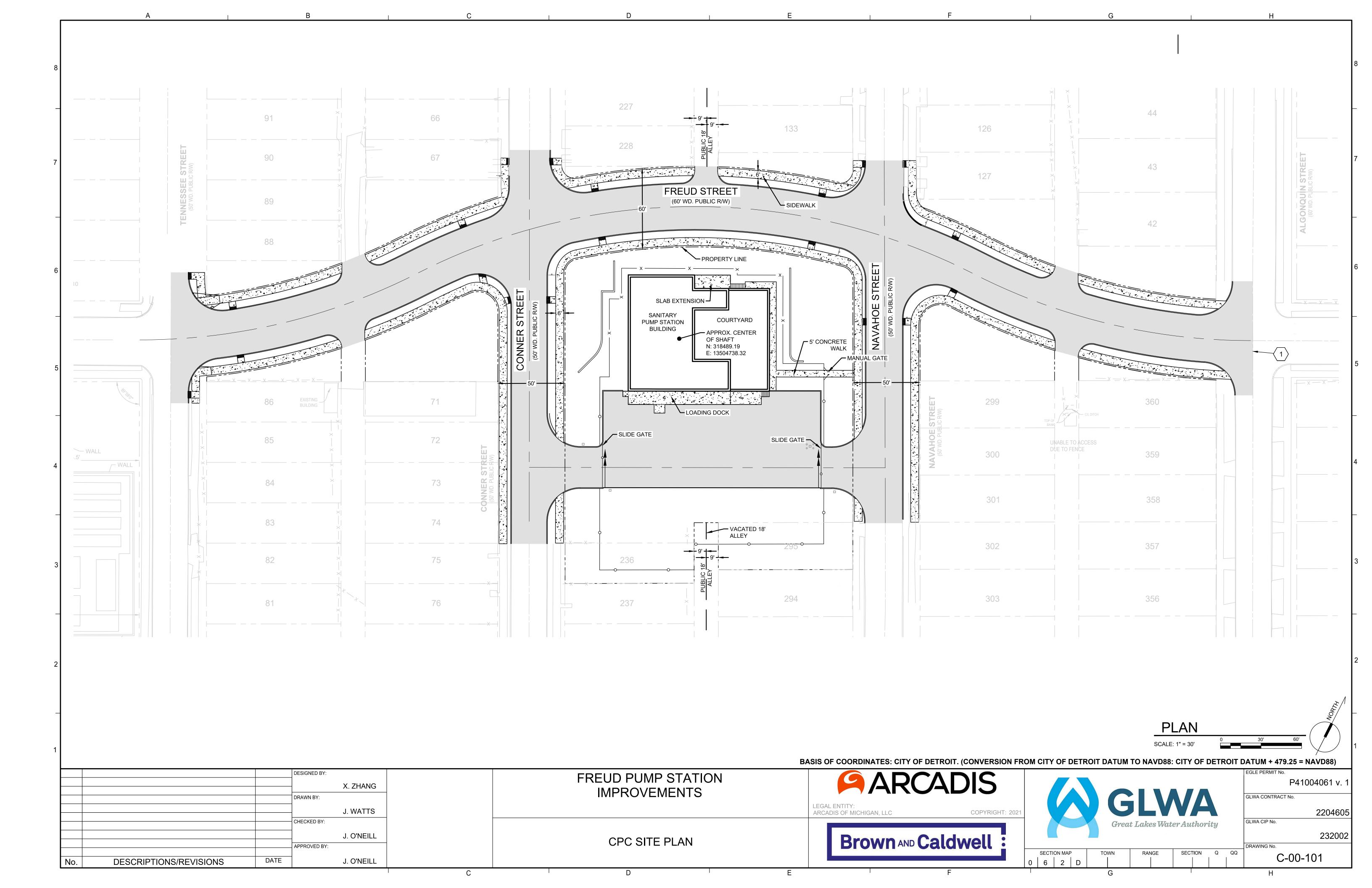
FREUD STORM PUMP STATION (EXISTING)

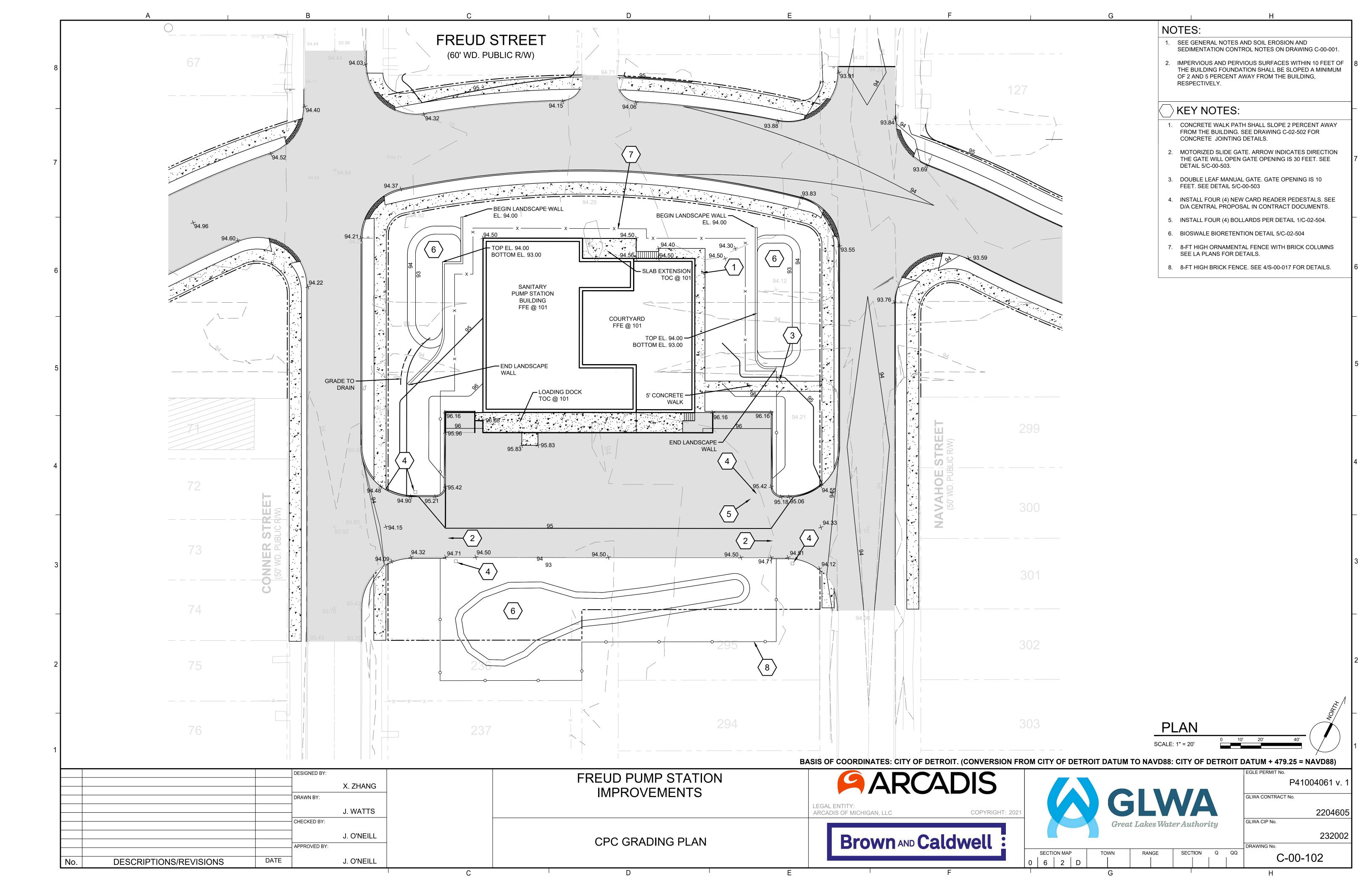
HEIGHT FROM GRADE TO TOP OF PARAPET WALL 51' - 2"

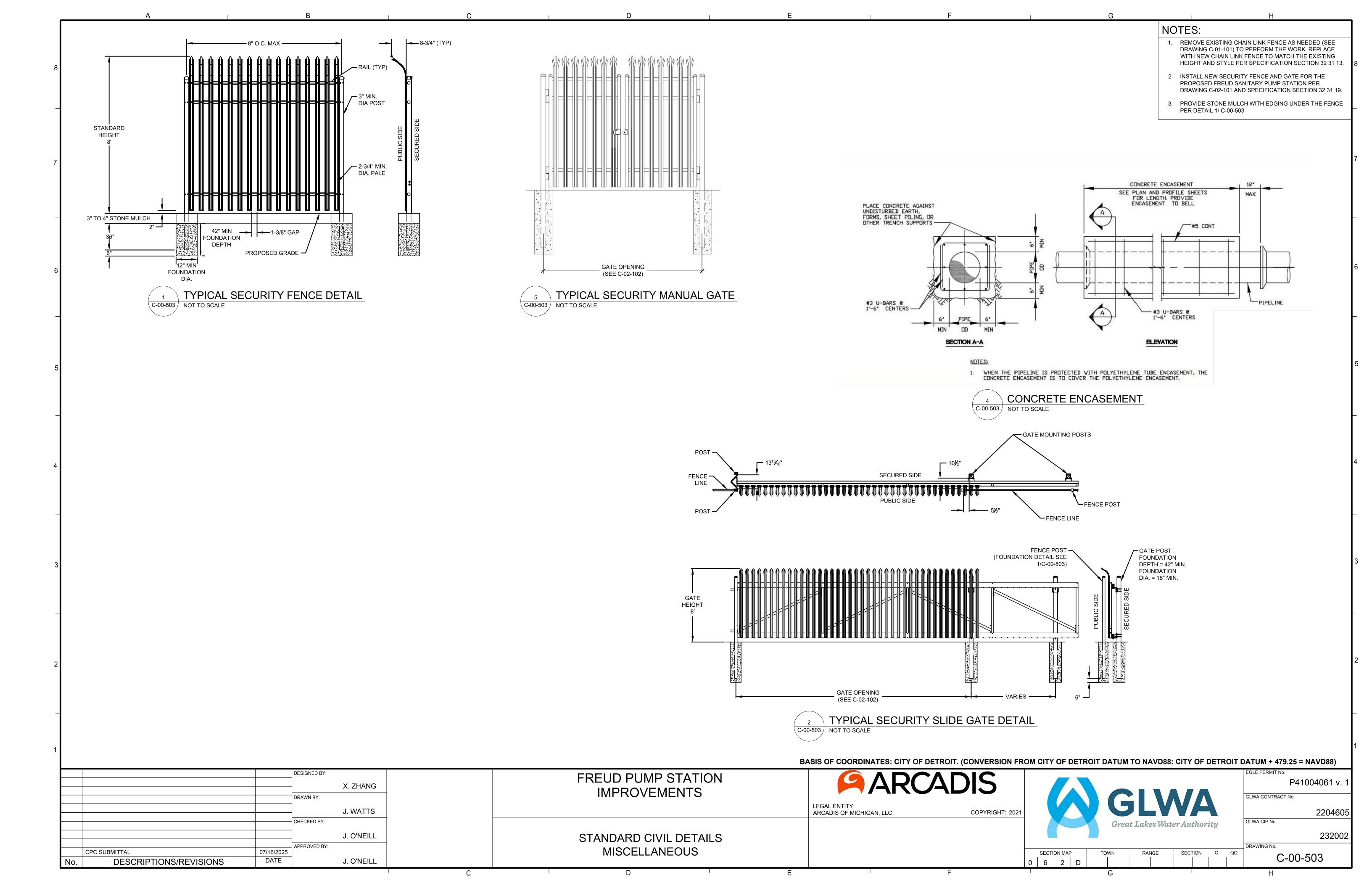


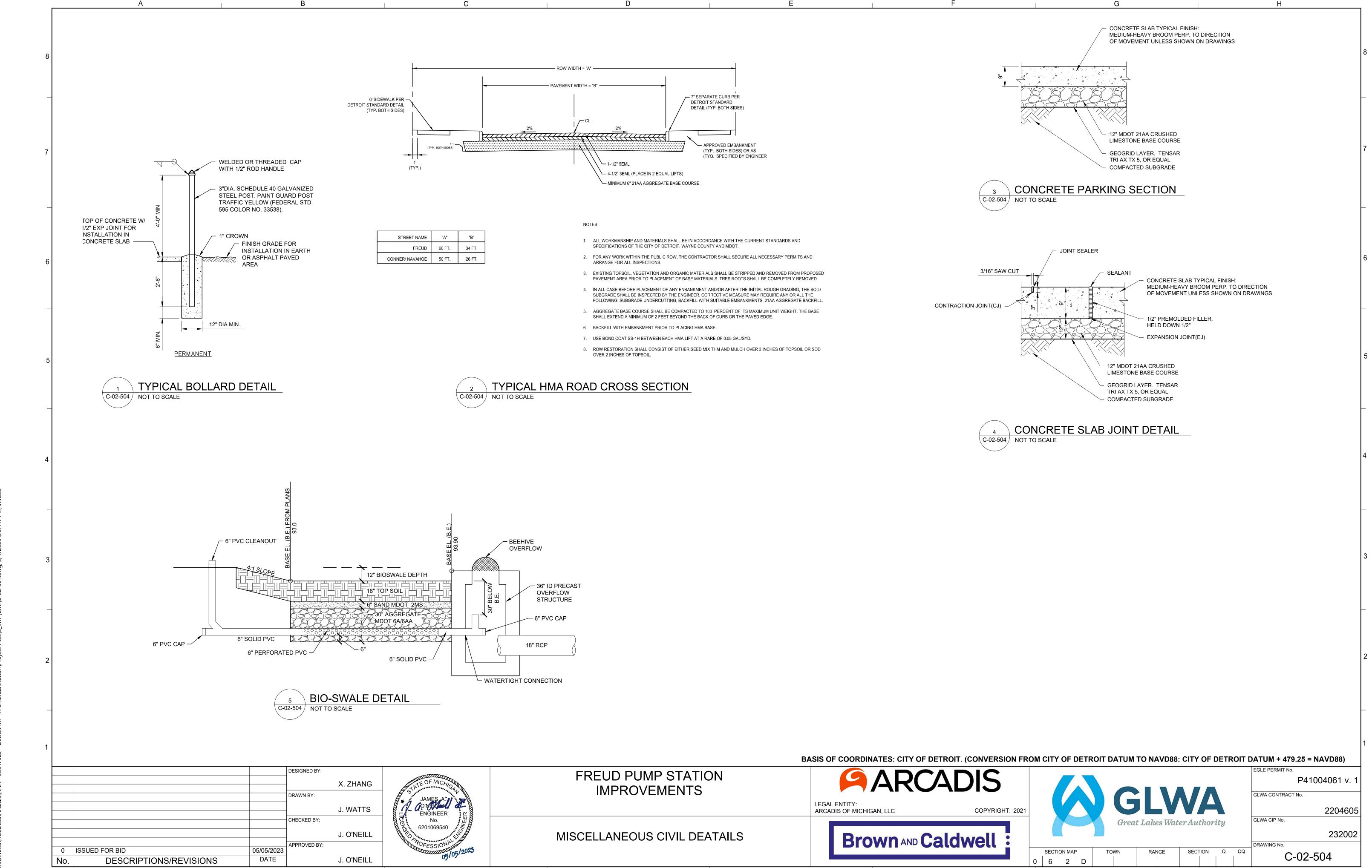
LOCATION MAP











CN Isers\ IWatts\ ACCDocs\ Arcadis\ ANA - 30047523 - Detroit MI - FPS Behabilitation\ Project Files\ 0 \WIP\Civil\ Civil\ C-02-504 dwg 5/4/20

### **GENERAL PLANTING NOTES:** LANDSCAPE CONTRACTOR SHALL VISIT SITE, INSPECT EXISTING SITE CONDITIONS AND REVIEW PROPOSED PLANTING AND RELATED WORK. IN CASE OF DISCREPANCY BETWEEN PLAN AND PLANT LIST, PLAN SHALL GOVERN QUANTITIES. CONTACT LANDSCAPE ARCHITECT WITH ANY CONCERNS. CONTRACTOR SHALL VERIFY LOCATIONS OF ALL ON SITE UTILITIES PRIOR TO BEGINNING CONSTRUCTION ON HIS/HER PHASE OF WORK. ELECTRIC, GAS, TELEPHONE, CABLE TELEVISION MAY BE LOCATED BY CALLING MISS DIG 1-800-482-7171. ANY DAMAGE OR INTERRUPTION OF SERVICES SHALL BE THE RESPONSIBILITY OF CONTRACTOR. CONTRACTOR SHALL COORDINATE ALL RELATED ACTIVITIES WITH OTHER TRADES ON THE JOB AND SHALL REPORT ANY UNACCEPTABLE JOB CONDITIONS TO OWNER'S REPRESENTATIVE PRIOR TO ALL PLANT MATERIAL TO BE PREMIUM GRADE NURSERY STOCK AND SHALL SATISFY AMERICAN ASSOCIATION OF NURSERYMEN STANDARD FOR NURSERY STOCK. ALL LANDSCAPE MATERIAL SHALL BE NORTHERN GROWN, 4. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL QUANTITIES SHOWN ON LANDSCAPE PLAN PRIOR TO PRICING THE WORK. 5. THE OWNER'S REPRESENTATIVE RESERVES THE RIGHT TO REJECT ANY PLANT MATERIAL NOT MEETING SPECIFICATIONS. 6. ALL SINGLE STEM SHADE TREES TO HAVE STRAIGHT TRUNKS AND SYMMETRICAL CROWNS. 7. ALL SINGLE TRUNK SHADE TREES TO HAVE A CENTRAL LEADER; TREES WITH FORKED OR IRREGULAR TRUNKS WILL NOT BE ACCEPTED. 8. ALL MULTI STEM TREES SHALL BE HEAVILY BRANCHED AND HAVE SYMMETRICAL CROWNS. ONE SIDED TREES OR THOSE WITH THIN OR OPEN CROWNS SHALL NOT BE ACCEPTED. 9. ALL EVERGREEN TREES SHALL BE HEAVILY BRANCHED AND FULL TO THE GROUND, SYMMETRICAL IN SHAPE AND NOT SHEARED FOR THE LAST FIVE GROWING SEASONS. 10. ALL TREES TO HAVE CLAY OR CLAY LOAM BALLS, TREES WITH SAND BALLS WILL BE REJECTED. 11. NO MACHINERY IS TO BE USED WITHIN THE DRIP LINE OF EXISTING TREES; HAND GRADE ALL LAWN AREAS WITHIN THE DRIP LINE OF EXISTING TREES. 12. ALL TREE LOCATIONS SHALL BE STAKED BY LANDSCAPE CONTRACTOR AND ARE SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION OF THE PLANT MATERIAL. 13. IT IS MANDATORY THAT POSITIVE DRAINAGE IS PROVIDED AWAY FROM ALL BUILDINGS. 14. ALL PLANTING BEDS SHALL RECEIVE 3" SHREDDED HARDWOOD BARK MULCH WITH PRE EMERGENT, SEE SPECIFICATIONS. SHREDDED PALETTE AND DYED MULCH WILL NOT BE ACCEPTED. 15. ALL LANDSCAPED AREAS SHALL RECEIVE 3" COMPACTED TOPSOIL. 16. SEE SPECIFICATIONS FOR ADDITIONAL COMMENTS, REQUIREMENTS, PLANTING PROCEDURES AND WARRANTY 17. CONTRACTOR SHALL NOT INSTALL PLANTS UNDER BUILDING OVERHANG AND SHALL NOTIFY LANDSCAPE ARCHITECT IF DRAWINGS CONFLICT WITH BUILDING OVERHANGS. 18. THE FOLLOWING SPECIFICATIONS SHALL APPLY TO SHEETS L-02-001, L-02-101, L-02-401, AND L-02-501. 328400 - PLANTING IRRIGATION 329133 - SOIL PREPARATION 329200 - TURF AND GRASSES 329300 - PLANTS LANDSCAPE SYMBOLS = PROPOSED DECIDUOUS SITE TREES = PROPOSED EVERGREEN SITE TREES = SHRUBS = PERENNIALS = SEEDED LAWN = STORMWATER SEED MIX

### **GENERAL IRRIGATION NOTES:**

NEW IRRIGATION SYSTEM AND CONTROLLER TO BE DESIGN/BUILD AND INSTALLED BY CONTRACTOR MEETING THE FOLLOWING CRITERIA:

- IRRIGATION IMPROVEMENTS SHALL COMPLY WITH ALL LOCAL AND STATE LAWS AND ORDINANCES WHERE
- CONTRACTOR SHALL PROVIDE SHOP DRAWINGS SHOWING THE LOCATION OF ALL MAIN LINES, LATERALS LINES,
- HEADS, DRIP IRRIGATION LINES, AND QUICK COUPLERS TO THE LANDSCAPE ARCHITECT PRIOR TO CONSTRUCTION.PLANS SHALL INCLUDE AND INDICATE SEPARATE ZONES FOR LAWN AND SHRUB AREAS. CONTRACTOR SHALL SUBMIT PRODUCT CUT SHEETS FOR PROPOSED EQUIPMENT INCLUDING ALL HEADS.
- CONSTRUCTION. IRRIGATION SYSTEM SHALL BE FLUSHED AT COMPLETION OF PROJECT AND ALL LINES TESTED UNDER NORMAL

VALVE BOXES, AND QUICK COUPLER VALVES FOR APPROVAL BY THE LANDSCAPE ARCHITECT PRIOR TO

- WATER PRESSURE FOR 12 HOURS. REPAIR ALL LEAKS AND REPEAT TEST.
- 5. ADJUST HEADS TO PROVIDED OPTIMUM COVERAGE AND PERFORMANCE.
- PROVIDE AS-BUILT INFORMATION FOR SYSTEM AND ANY PRODUCT INFORMATION TO OWNER ONCE SYSTEM IS INSTALLED AND ACCEPTED.
- THE ENTIRE SYSTEM SHALL BE GUARANTEED TO BE COMPLETE AND IN WORKING ORDER FOR A PERIOD OF ONE YEAR FROM THE DATE OF ITS ACCEPTANCE AND AGREES TO REPAIR OR REPLACE ANY SUCH DEFECTS OCCURRING WITHIN THAT YEAR, FREE OF EXPENSE TO THE OWNER. MINOR MAINTENANCE AND ADJUSTMENT SHALL BE BY OWNER.
- 8. REFER TO IRRIGATION SPECIFICATION FOR ADDITION MATERIAL AND DESIGN REQUIREMENTS

BASIS OF COORDINATES: CITY OF DETROIT. (CONVERSION FROM CITY OF DETROIT DATUM TO NAVD88: CITY OF DETROIT DATUM + 479.25 = NAVD88)

B. JENKINS K. DIETZEL CHECKED BY: N. BIRMELIN 07/07/2025 APPROVED BY: 1 | CPC SUBMITTAL 0 ISSUED FOR BID 05/05/2023 B. JENKINS DESCRIPTIONS/REVISIONS

= MASONRY WALL WITH COLUMN

= ORNAMENTAL FENCE WITH COLUMN



FREUD PUMP STATION **IMPROVEMENTS** 

ARCADIS

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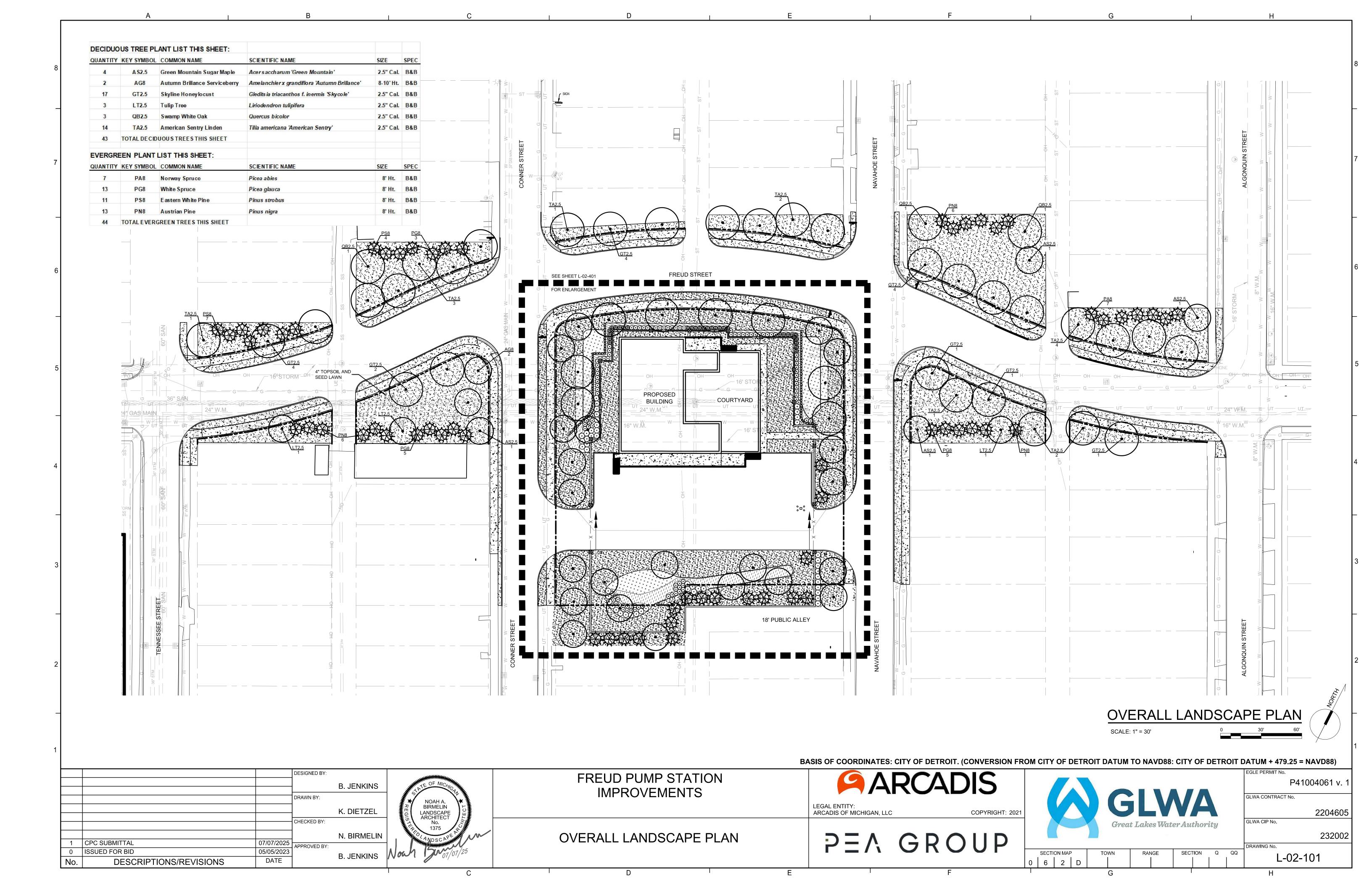


P41004061 v. GLWA CONTRACT No.

2204605 232002

SECTION Q QQ L-02-001

LANDSCAPE LEGENDS, SYMBOLS, AND NOTES

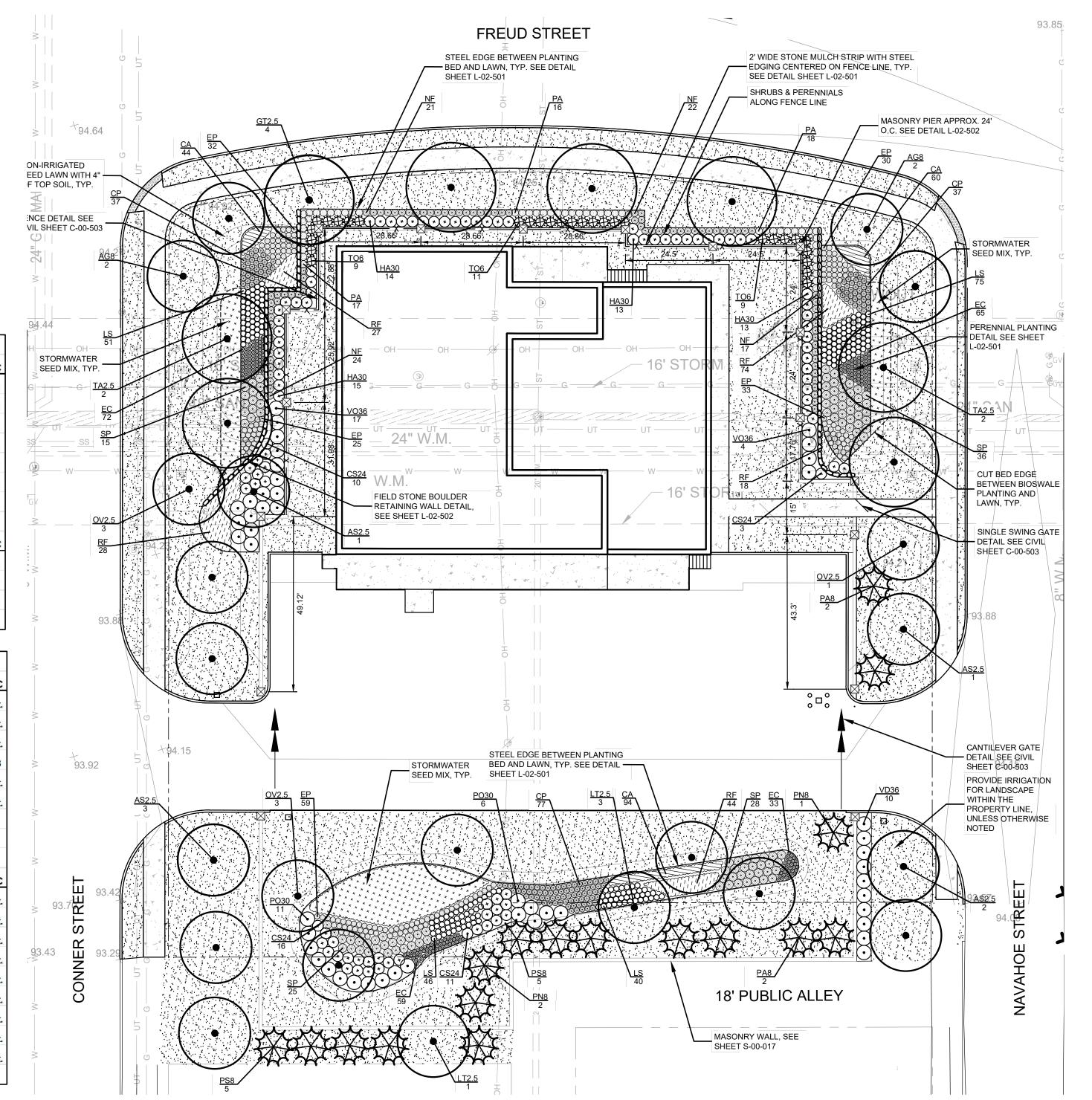


Stantec Native Plant Nursery 574-586-2412 stantec.com/native-plant-nursery **Botanical Name** Common Name Permanent Grasses/Sedges/Rushes: Bolboschoenus fluviatilis River Bulrush Carex cristatella Crested Oval Sedge Carex lurida Bottlebrush Sedge Carex vulpinoidea Brown Fox Sedge Elymus virginicus Virginia Wild Rye Glyceria striata Fowl Manna Grass Juncus effusus Common Rush Rice Cut Grass Leersia oryzoides Panicum virgatum Switch Grass Schoenoplectus tabernaemontani Softstem Bulrush Scirpus atrovirens Dark Green Rush Wool Grass Scirpus cyperinus Temporary Cover: Avena sativa Common Oat Lolium multiflorum Annual Rye Forbs & Shrubs: Alisma spp. Water Plantain (Various Mix) Asclepias incarnata Swamp Milkweed Bidens spp. Bidens (Various Mix) Helenium autumnale Sneezeweed Blue Flag Iris virginica Lycopus americanus Common Water Horehound Mimulus ringens Monkey Flower Oligoneuron riddellii Riddell's Goldenrod Ditch Stonecrop Penthorum sedoides Polygonum spp. Pinkweed (Various Mix) Sweet Black-Eyed Susan Rudbeckia subtomentosa Rudbeckia triloba Brown-Eyed Susan Sagittaria latifolia Common Arrowhead Senna hebecarpa Wild Senna Symphyotrichum novae-angliae New England Aster Thalictrum dasycarpum Purple Meadow Rue

Stormwater Seed Mix

DECIDUO	US TREE PL	ANT LIST THIS SHEET:			
QUANTITY	KEY SYMBOL	COMMON NAME	SCIENTIFIC NAME	SIZE	SPEC
7	AS2.5	Green Mountain Sugar Maple	Acer saccharum 'Green Mountain'	2.5" Cal.	B&B
4	AG8	Autumn Brillance Serviceberry	Amelanchier x grandiflora 'Autumn Brillance'	8-10' Ht.	B&B
4	GT2.5	Skyline Honeylocust	Gleditsia triacanthos f. inermis 'Skycole'	2.5" Cal.	B&B
4	LT2.5	Tulip Tree	Liriodendron tulipifera	2.5" Cal.	B&B
7	OV2.5	American Hophornbeam	Os trya virginiana	2.5" Cal.	B&B
4	TA2.5	American Sentry Linden	Tilia americana 'American Sentry'	2.5" Cal.	B&B
30	TOTAL DECID	UOUS TREES THIS SHEET			
EVERGRE	EN PLANT	LIST THIS SHEET:			
QUANTITY	KEYSYMBOL	COMMON NAME	SCIENTIFIC NAME	SIZE	SPEC
4	PA8	Norway Spruce	Picea abies	8' Ht.	B&B
10	PS8	Eastern White Pine	Pinus strobus	8' Ht.	B&B
3	PN8	Austrian Pine	Pinus nigra	8' Ht.	B&B
17	TOTAL EVERO	REEN TREES THIS SHEET			

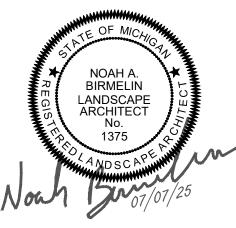
QUANTITY KEYSYMBOL COMMON NAME		COMMON NAME	SCIENTIFIC NAME	SIZE	SPEC
40	CS36	CS36 Kelseyi Dwarf Dogwood Comus sericea 'Kelseyi'		36" Ht.	Cont.
55	HA30	Incrediball Hydrangea	Hydrangea arborescens 'Abetwo'	30" Ht.	Cont.
17	PO30	Tiny Wine Ninebark	Physocarpus opulifolius 'Tiny wine'	30" Ht.	Cont.
29	TO6	Techny Arborvitae	Thuja occidentalis 'Techny'	6'	B&B
10	VD36	Blue Muffin Viburnum	Viburnum dentatum 'Christom'	36" Ht.	Cont.
21	VO36	Compact Cranberry Viburnum	Viburnum opulus 'Compactum'	36" Ht.	Cont.
172	TOTAL SHRUE	SS THIS SHEET			
PERENNI	AL PLANT LI	ST THIS SHEET:			
QUANTITY	KEYSYMBOL	COMMON NAME	SCIENTIFIC NAME	SIZE	SPEC
198	CA	Pennsylvania Sedge	Carex pennsylvanica	1 Gal.	Cont.
151	СР	Prairie Coreopsis	Coreops is palmata	1 Gal.	Cont.
	EP	Vintage Wine Purple Cone Flower	Echinacea purpurea 'Vintage Wine'	1 Gal.	Cont.
179					Cont.
179 170	EC	Chocolate Joe Pye	Eupatorium rugosum 'Chocolate'	1 Gal.	O o i i c.
		Chocolate Joe Pye Great Blue Lobelia	Eupatorium rugosum 'Chocolate' Lobelia siphilitica	1 Gal. 1 Gal.	Cont.
170	EC		•		
170 212	EC LS	Great Blue Lobelia	Lobelia s iphilitica	1 Gal.	Cont.
170 212 84	EC LS NF	Great Blue Lobelia Walkers low Catmint Dwarf Fountain Grass	Lobelia siphilitica Nepeta x faassenii 'Walkers Low'	1 Gal.	Cont.





BASIS OF COORDINATES: CITY OF DETROIT. (CONVERSION FROM CITY OF DETROIT DATUM TO NAVD88: CITY OF DETROIT DATUM + 479.25 = NAVD88)

| DESIGNED BY:
| B. JENKINS |
| DRAWN BY: |
| K. DIETZEL |
| K. DIETZEL |
| CHECKED BY: |
| N. BIRMELIN |
| APPROVED BY: |
| APPROVED BY: |
| B. JENKINS |
| B. JENKINS |
| APPROVED BY: |
| B. JENKINS |



# FREUD PUMP STATION IMPROVEMENTS

LANDSCAPE PLAN ENLARGEMENT

<b>ARC</b>	DIS
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PEA GROUP



P41004061 v. 1

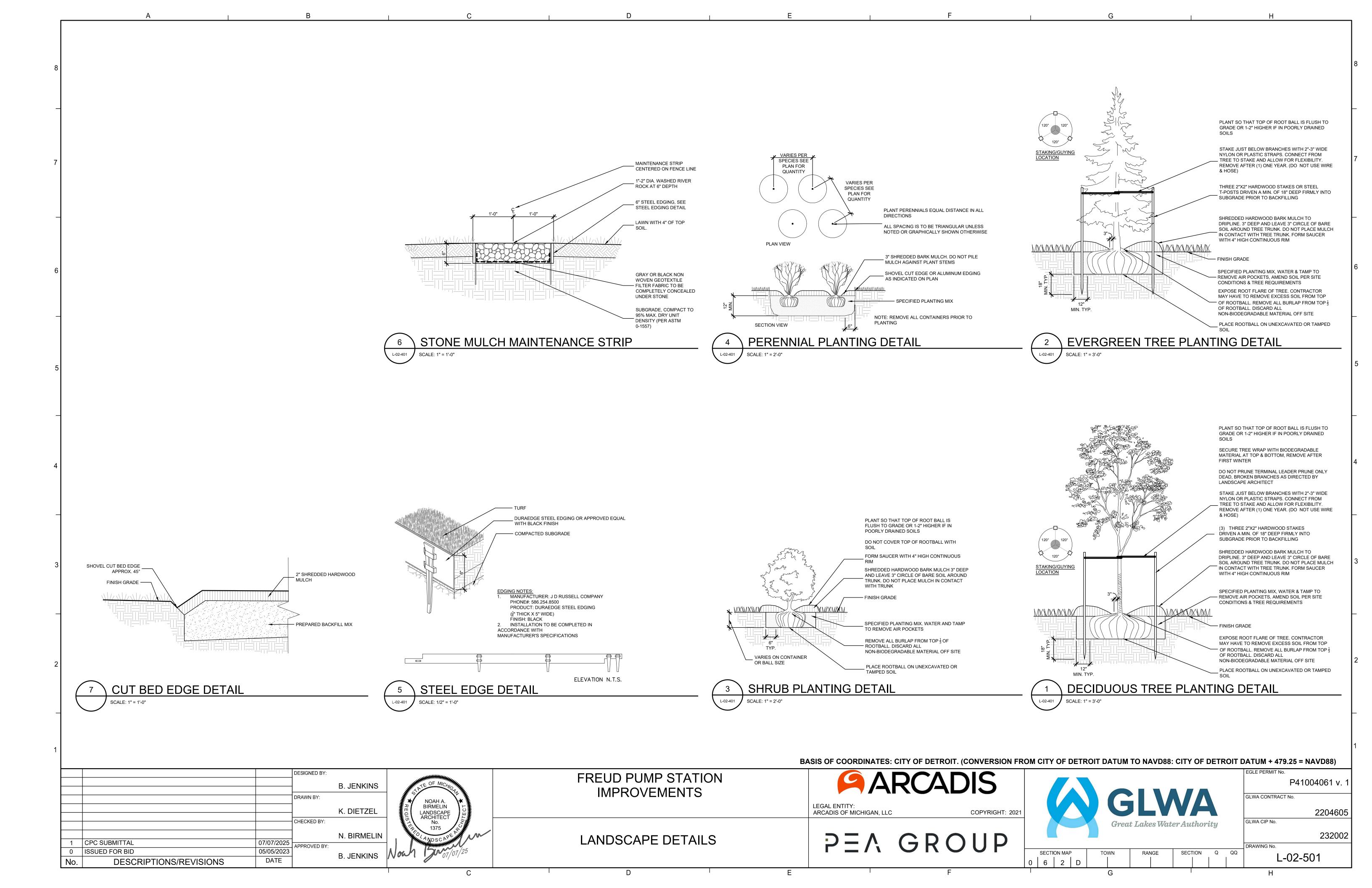
GLWA CONTRACT No.

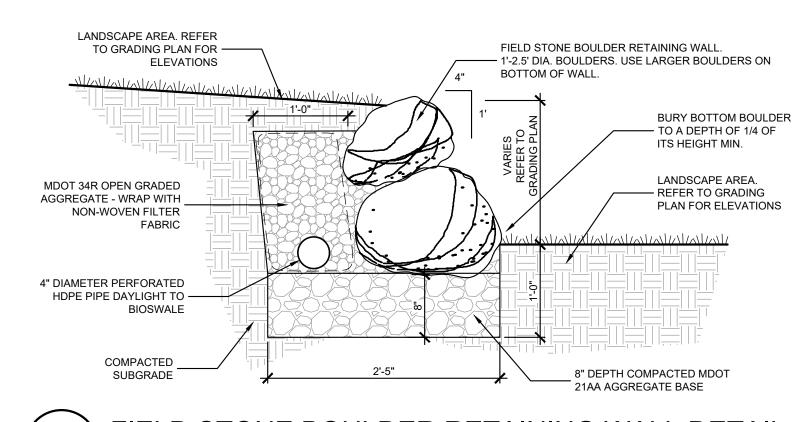
2204605

GLWA CIP No. 232002

SECTION MAP TOWN RANGE SECTION Q QQ L-02-401

D





FIELD STONE BOULDER RETAINING WALL DETAIL

SCALE: 1" = 1'-0"

CENTERED OF COLUMN - FINISH GRADE - MANKATO VENEER — LIMESTONE BASE EXTEND COLUMN FOOTING TO ALIGN WITH FENCE FOOTING MASONRY PIER ELEVATION SCALE: 1" = 2'-0" — GROUT FILLED VOID 6" THICK LIMESTONE, 28" SQUARE. USE PINS TO SET 5 OZ COPPER FLASHING, MORTAR UNDER CAP, CUT DRIP EDGE BACK SO NOT VISIBLE, TYP. — ¾" TOOLED MORTAR JOINTS 3/8" MORTAR SETTING BED BEHIND VENEER, TYP. (4) #5 BAR VERTICAL, ONE EACH CELL, TIED TO FOOTING REINFORCEMENT #9 HORZ. LADDER EVERY 3RD BRICK COURSE FILL ALL VOIDS WITH GROUT MANKATO VENEER TO MATCH COLOR AND SIZE OF VENEER ON THE SCREEN WALL AND BUILDING 28"x 21"x 6" LIMESTONE VENEER, WITH 2" - CHAMFER TO ALIGN WITH BRICK FACE ABOVE, ONE ON EACH SIDE 1" MORTAR BED AT BASE OF STONE VENEER AND CMU, TYP. CAST-IN-PLACED CONCRETE FOOTING, CONCRETE
TO BE 28 DAY = 4000 PSI SLUMP 4" MAX. 4.5% TO 7.5% AIR ENTRAINMENT #5 HORZ. AND VERTICAL BARS FOOTING APPROX. 16" O.C., 3" MIN. COVERAGE, TYP. TIE ALL REINFORCING

\_\_\_\_ LIMESTONE CAP

FENCE LINE TO BE

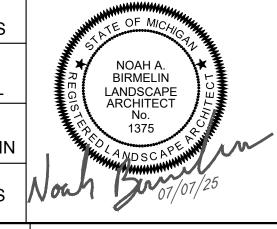
SECURITY FENCE, SEE CIVIL SHEET C-00-503

BASIS OF COORDINATES: CITY OF DETROIT. (CONVERSION FROM CITY OF DETROIT DATUM TO NAVD88: CITY OF DETROIT DATUM + 479.25 = NAVD88)

SECTION MAP

SCALE: 1" = 2'-0"

			DESIGNED BY:		
				B. JENKINS	
			DRAWN BY:		
				K. DIETZEL	
			CHECKED BY:		
				N. BIRMELIN	Ι.
1	CPC SUBMITTAL	07/07/2025	APPROVED BY:		
0	ISSUED FOR BID	05/05/2023		B. JENKINS	W
No.	DESCRIPTIONS/REVISIONS	DATE		D. JEINNING	/ <b>V</b>



# FREUD PUMP STATION IMPROVEMENTS

LANDSCAPE FENCE DETAILS



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PEA GROUP

4 L L	OW CITT OF BETROIT E	PATOW TO NAVDOO. CITT OF DET
2021		GLVA Great Lakes Water Authority

RANGE

MASONRY PIER DETAIL

P41004061 v. GLWA CONTRACT No.

(4) #5 L BAR SET IN SPREAD FOOTER AND EMBEDDED 4'

SUBGRADE, COMPACT TO 95% MAX. DRY UNIT DENSITY

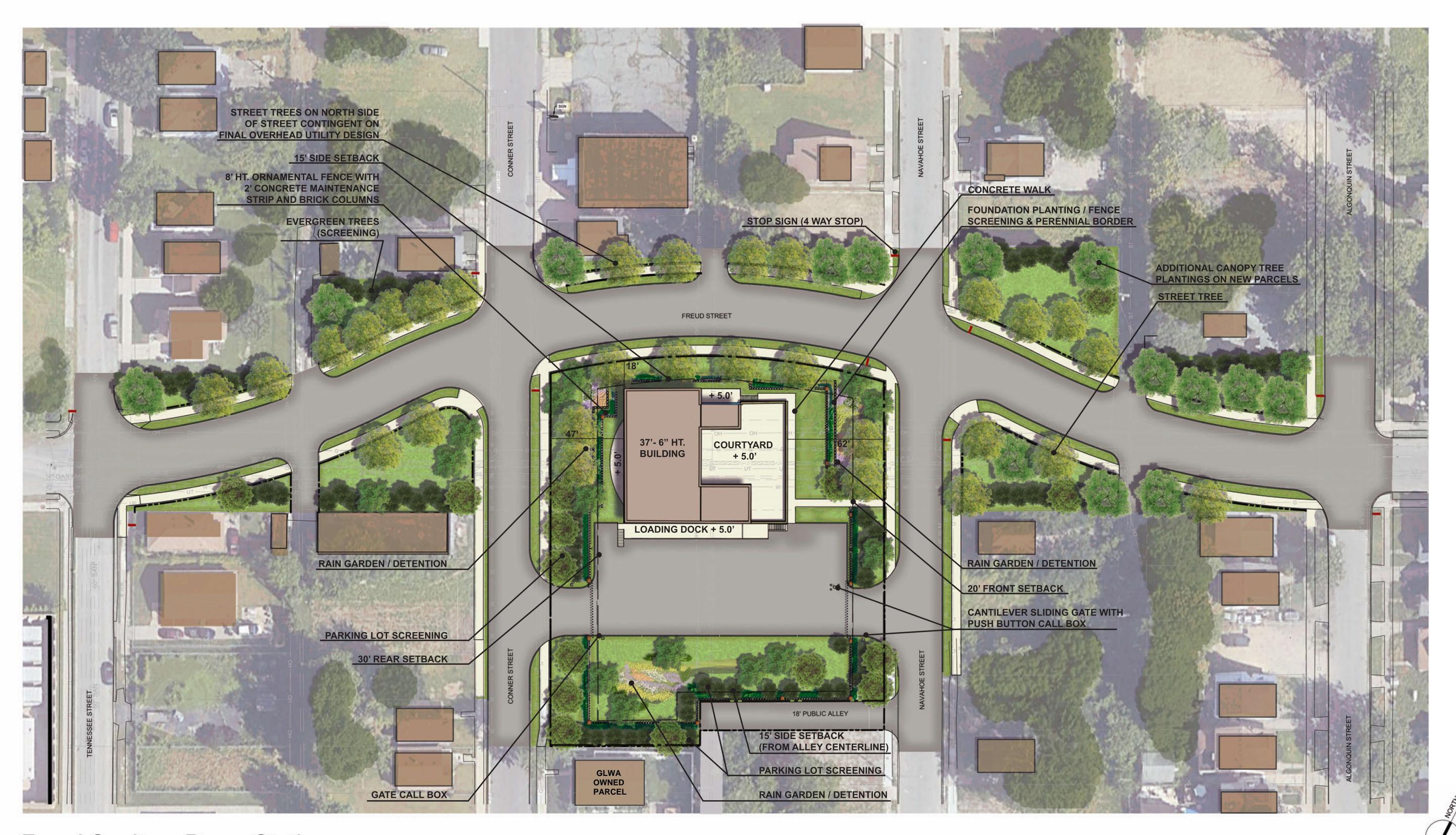
SECTION Q QQ

NTO COLUMN AND TIED TO VERTICAL BAR

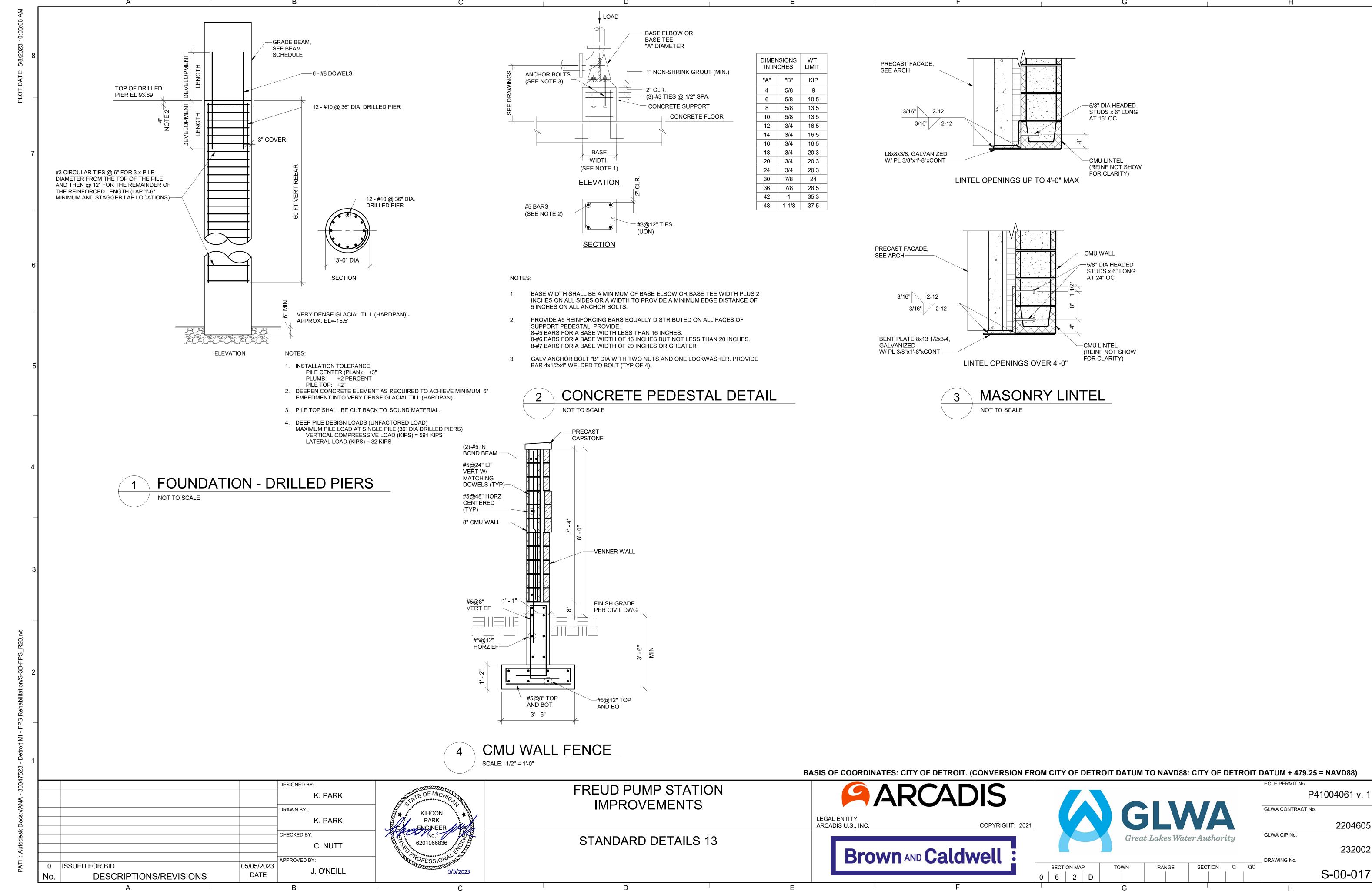
2204605 GLWA CIP No.

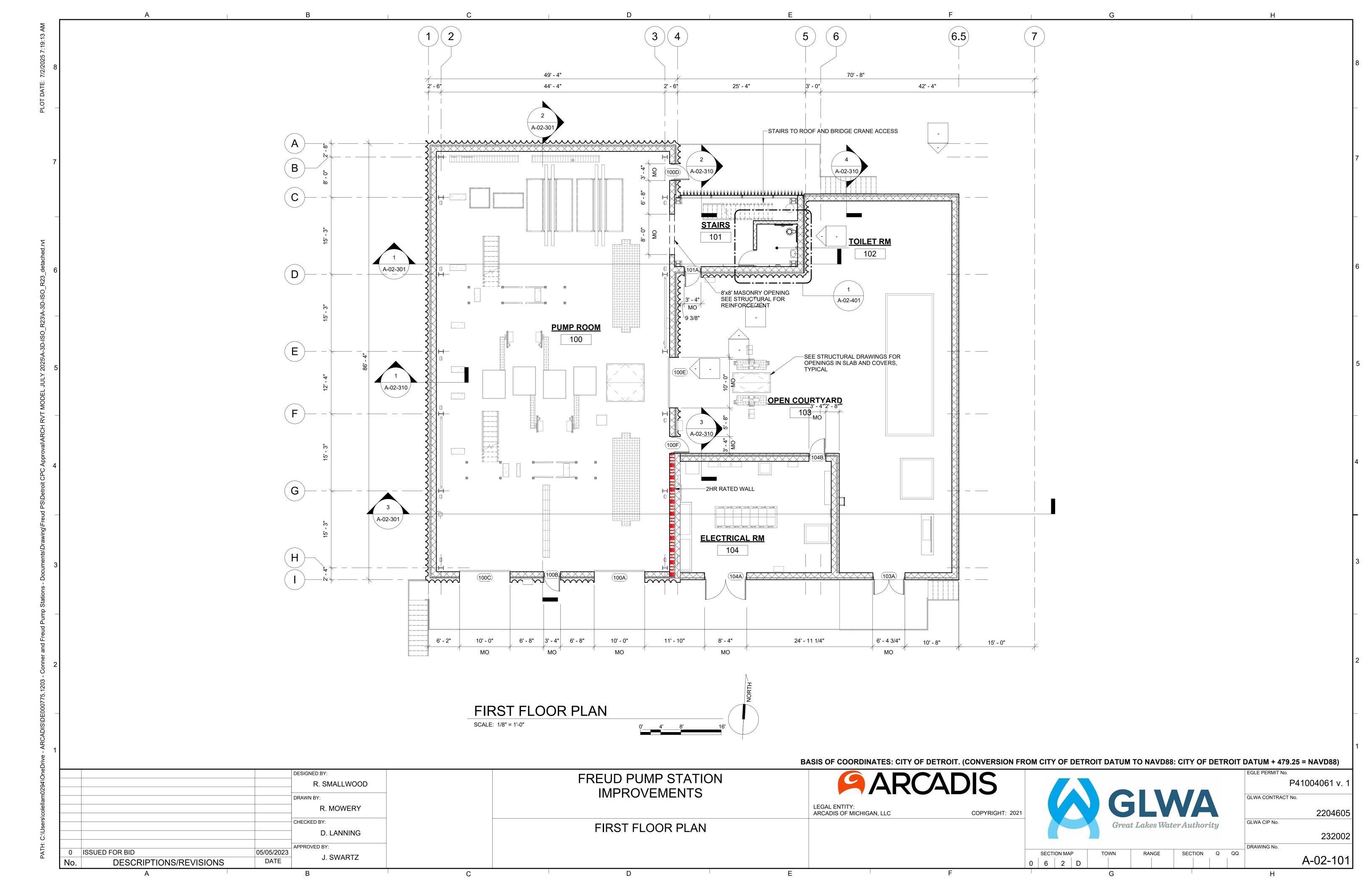
232002

L-02-502



Freud Sanitary Pump Station Site Plan





FIXTURE TYPE	DESCRIPTION	MANUFACTURER		
	"LED LINEAR FIXTURE • LUMEN OUTPUT: 4000 LUMENS • COLOR TEMPERATURE: 4000K			
A1A	<ul> <li>CRI: 80</li> <li>MOUNTING: SEE LIGHTING PLANS FOR MOUNTING</li> <li>CONSTRUCTION: INDUSTRIAL TYPE FIXTURE, FIBERGLASS HOUSING WITH INTEGRAL GASKET SUITABLE FOR WET LOCATIONS, 4-FOOT LENGTH</li> <li>BATTERY BACKUP: NO</li> <li>VOLTAGE: 120VAC</li> <li>OPTIONS:</li> </ul>	"• HOLOPHANE EMS LED SERIES • OR EQUAL		
	OPTIONS:     DISTRIBUTION: MEDIUM SPREAD DISTRIBUTION WITH AN ACRYLIC LOW PROFILE CLEAR LENS, LPACL CODE DISIGNATION FOR HOLOPHANE!  "LED LINEAR EXPLOSION PROOF FIXTURE			
A1B	<ul> <li>LUMEN OUTPUT: 4000 LUMENS</li> <li>COLOR TEMPERATURE: 4000K</li> <li>CRI: 80</li> <li>MOUNTING: SEE LIGHTING PLANS FOR MOUNTING</li> <li>CONSTRUCTION: VERSATILE HEAVY-DUTY, EXPLOSION-PROOF LED FIXTURE DESIGNED FOR HAZARDOUS ENVIRONMENTS. EXPLOSIOIN-PROOF, IMPACT AND HEAT RESISTANT GLASS TUBES.</li> <li>CORROSIOIN RESISTANT, COPPER FREE ALUMINUM ALLOY. 4-FOOT LENGTH</li> <li>BATTERY BACKUP: NO</li> </ul>	"• HOLOPHANE HXPL SERIES • OR EQUAL "		
A1C	VOLTAGE: 120VAC OPTIONS:"  "LED LINEAR FIXTURE LUMEN OUTPUT: 2000 LUMENS COLOR TEMPERATURE: 4000K CRI: 80  MOUNTING: SEE LIGHTING PLANS FOR MOUNTING CONSTRUCTION: INDUSTRIAL TYPE FIXTURE, FIBERGLASS HOUSING WITH INTEGRAL GASKET SUITABLE FOR WET LOCATIONS, 2-FOOT LENGTH BATTERY BACKUP: NO VOLTAGE: 120VAC OPTIONS:	"• HOLOPHANE EMS LED SERIES • OR EQUAL		
	DISTRIBUTION: MEDIUM SPREAD DISTRIBUTION WITH AN ACRYLIC LOW PROFILE CLEAR LENS, LPACL CODE DISIGNATION FOR HOLOPHANE"      "LED LOW BAY FIXTURE			
D1A	<ul> <li>LUMEN OUTPUT: 5000 LUMENS</li> <li>COLOR TEMPERATURE: 4000K</li> <li>CRI: 80</li> <li>MOUNTING: PENDANT MOUNT</li> <li>CONSTRUCTION: ROBUST CAST ALUMINUM HOUSING WITH LOW COPER CONTENT AND TGIC THERMOSET POWDER COAT FINISH. PRISMATIC BOROSILICATE GLASS WITH SILICONE RUBBER LENS.</li> <li>BATTERY BACKUP: NO</li> <li>VOLTAGE: 120VAC</li> <li>OPTIONS:</li> </ul>	"• HOLOPHANE PETROLUX LOW BAY PXLW SERIES • OR EQUAL		
	DISTRIBUTION:MEDIUM GLASS LENS WITH MINIMAL UPLIGHT"  "LED HIGH BAY FIXTURE  "LED HIGH BAY FIXTURE			
1	<ul> <li>LUMEN OUTPUT: 18000 LUMENS (NOMINAL)</li> <li>COLOR TEMPERATURE: 4000K</li> <li>CRI: 80</li> <li>MOUNTING: PENDANT MOUNT</li> <li>CONSTRUCTION: ROBUST CAST ALUMINUM HOUSING WITH LOW COPER CONTENT AND TGIC THERMOSET POWDER COAT FINISH. PRISMATIC BOROSILICATE GLASS WITH SILICONE RUBBER LENS.</li> <li>BATTERY BACKUP: NO</li> <li>VOLTAGE: 120VAC</li> </ul>	"• HOLOPHANE PETROLUX HIGH BAY PXHW SERIES • OR EQUAL		
G1A	OPTIONS: DISTRIBUTION:MEDIUM GLASS LENS WITH MINIMAL UPLIGHT"  "LED STANCHION MOUNT GLOBE LIGHT LUMEN OUTPUT: 2,000 LUMENS COLOR TEMPERATURE: 4900K CRI: 70 MOUNTING: STANCHION MOUNT CONSTRUCTION: DIE-CAST ALUMINUM WITH THERMAL SHOCK-RESISTANT FROSTED GLASS GLOBE.	• RAB VXLED26DG-3/4 • OR EQUAL		
	VOLTAGE: 120VAC     OPTIONS: "  "HAZARDOUS LED EMERGENCY LIGHT FIXTURE"			
HE1	• LUMEN OUTPUT: 4000 LUMENS • COLOR TEMPERATURE: 4000K • CRI: 80 • MOUNTING: SEE LIGHTING PLANS FOR MOUNTING • CONSTRUCTION: VERSATILE HEAVY-DUTY, EXPLOSION-PROOF LED FIXTURE DESIGNED FOR HAZARDOUS ENVIRONMENTS. EXPLOSION-PROOF, IMPACT AND HEAT RESISTANT GLASS TUBES. CORROSIOIN RESISTANT, COPPER FREE ALUMINUM ALLOY. 4-FOOT LENGTH • BATTERY BACKUP: NO • VOLTAGE: 120VAC • OPTIONS:"	HOLOPHANE HDXS SERIES     OR EQUAL		
HH1	"HAZARDOUS LED HIGH BAY LIGHT FIXTURE"  • LUMEN OUTPUT: 24000 LUMENS  • COLOR TEMPERATURE: 4000K  • CRI: 80  • MOUNTING: SEE LIGHTING PLANS FOR MOUNTING  • CONSTRUCTION: VERSATILE HEAVY-DUTY, EXPLOSION-PROOF LED FIXTURE DESIGNED FOR HAZARDOUS ENVIRONMENTS. EXPLOSIOIN-PROOF, IMPACT AND HEAT RESISTANT GLASS TUBES. CORROSIOIN RESISTANT, COPPER FREE ALUMINUM ALLOY. 4-FOOT LENGTH  • BATTERY BACKUP: NO  • VOLTAGE: 120VAC	HOLOPHANE PETROLUX     HPLED SERIES     OR EQUAL		
	• OPTIONS:"  "LED WALLPACK FIXTURE • LUMEN OUTPUT: 6000 LUMENS (30C1000 OPTION FOR HOLOPHANE) • COLOR TEMPERATURE: 4000K • CRI: 70+ • MOUNTING: SEE LIGHTING PLANS FOR MOUNTING • CONSTRUCTION: GRAY, IMPACT-RESISTANT, FULLY GASKETED HOUSING UL LISTED FOR WET LOCATIONS. UV STABILIZED, FULLY GASKETED GLASS LENS. FINISH SHALL PROVIDE CORROSION RESISTANCE. POWER FACTOR> 0.9 AND THD<20%. • BATTERY BACKUP: NO • VOLTAGE: 120VAC • OPTIONS:	"• HOLOPHANE W4G LED SERIES • OR EQUAL		
	DISTRIBUTION: MEDIUM SPREAD DISTRIBUTION, T3M CODE DESIGNATION FOR HOLOPHANE"      "LED WALLPACK FIXTURE      LIMEN OUTPUT: 2000 LIMENS (2004) 00 DEFICIAL FOR HOLOPHANE)			
WL2	<ul> <li>LUMEN OUTPUT: 8000 LUMENS (30C1000 OPTION FOR HOLOPHANE)</li> <li>COLOR TEMPERATURE: 4000K</li> <li>CRI: 70+</li> <li>MOUNTING: SEE LIGHTING PLANS FOR MOUNTING</li> <li>CONSTRUCTION: GRAY, IMPACT-RESISTANT, FULLY GASKETED HOUSING UL LISTED FOR WET LOCATIONS. UV STABILIZED, FULLY GASKETED GLASS LENS. FINISH SHALL PROVIDE CORROSION RESISTANCE. POWER FACTOR&gt; 0.9 AND THD&lt;20%.</li> <li>BATTERY BACKUP: NO</li> <li>VOLTAGE: 120VAC</li> <li>OPTIONS:</li> </ul>	"• HOLOPHANE W4G LED SERIES • OR EQUAL		
	DISTRIBUTION: MEDIUM SPREAD DISTRIBUTION, T3M CODE DESIGNATION FOR HOLOPHANE"	ETROIT (CONVERSION ES	OM CITY OF DETROIT DATIMATO MANDOS CITY OF DETROIT	FRATIIM : 470 OF - NAVESCO
NED BY:		<u> </u>	OM CITY OF DETROIT DATUM TO NAVD88: CITY OF DETROIT	EGLE PERMIT No.
B. SNAVELY	FREUD PUMP STATION IMPROVEMENTS  LEGAL ENTITY:	ADI2	GIWA	P41004061 v GLWA CONTRACT No.

B. SNAVELY CHECKED BY: T. ARMSTRONG 05/05/2023 DATE 0 ISSUED FOR BID T. ARMSTRONG

DESCRIPTIONS/REVISIONS



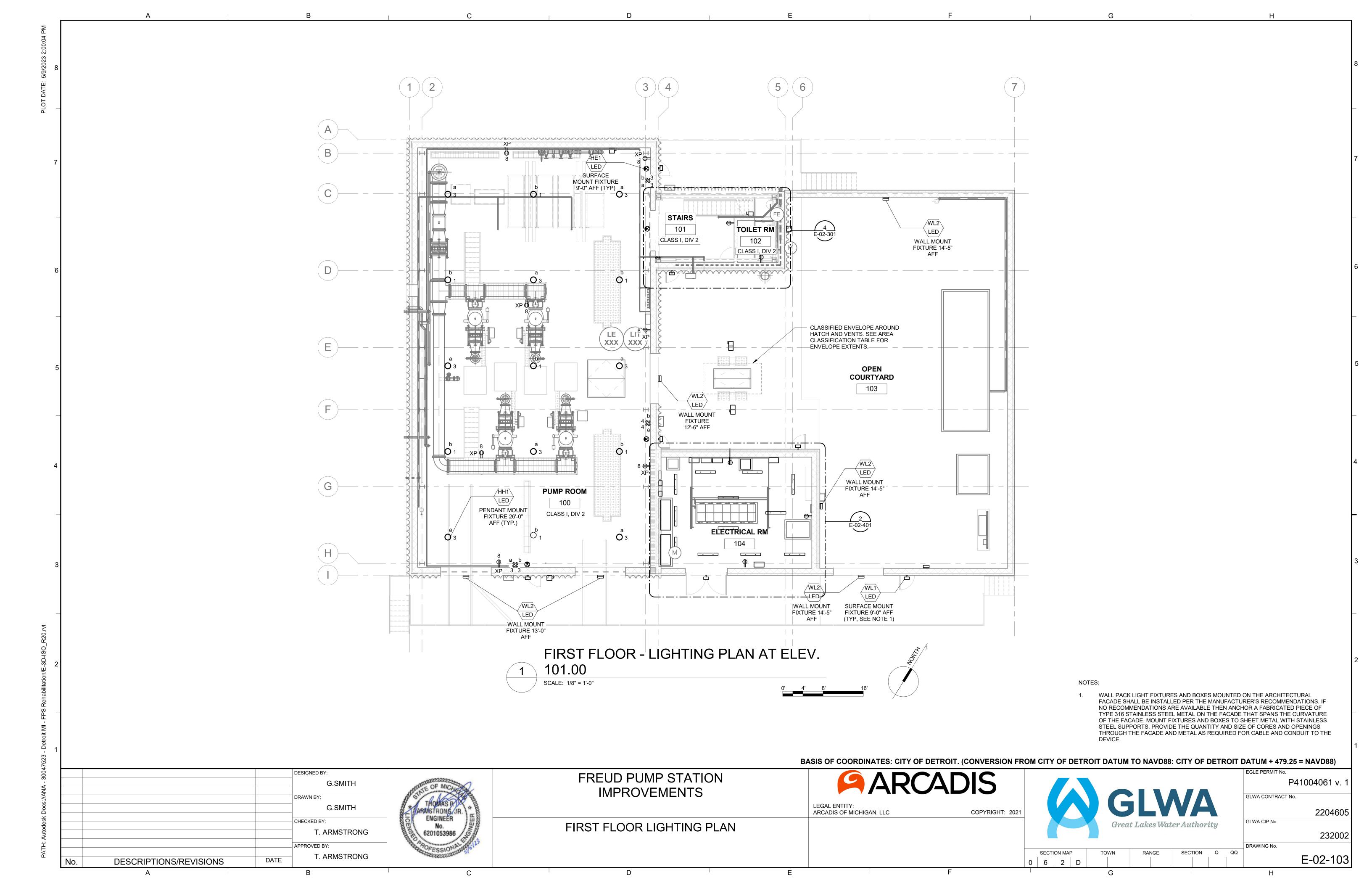
LEGAL ENTITY: ARCADIS OF MICHIGAN, LLC COPYRIGHT: 2021

P41004061 v. GLWA CONTRACT No. 2204605

232002 SECTION Q QQ

E-00-005

LIGHTING FIXTURE SCHEDULE



# CONNER STREET

**VIEW** 



# FREUD STREET

VIEW

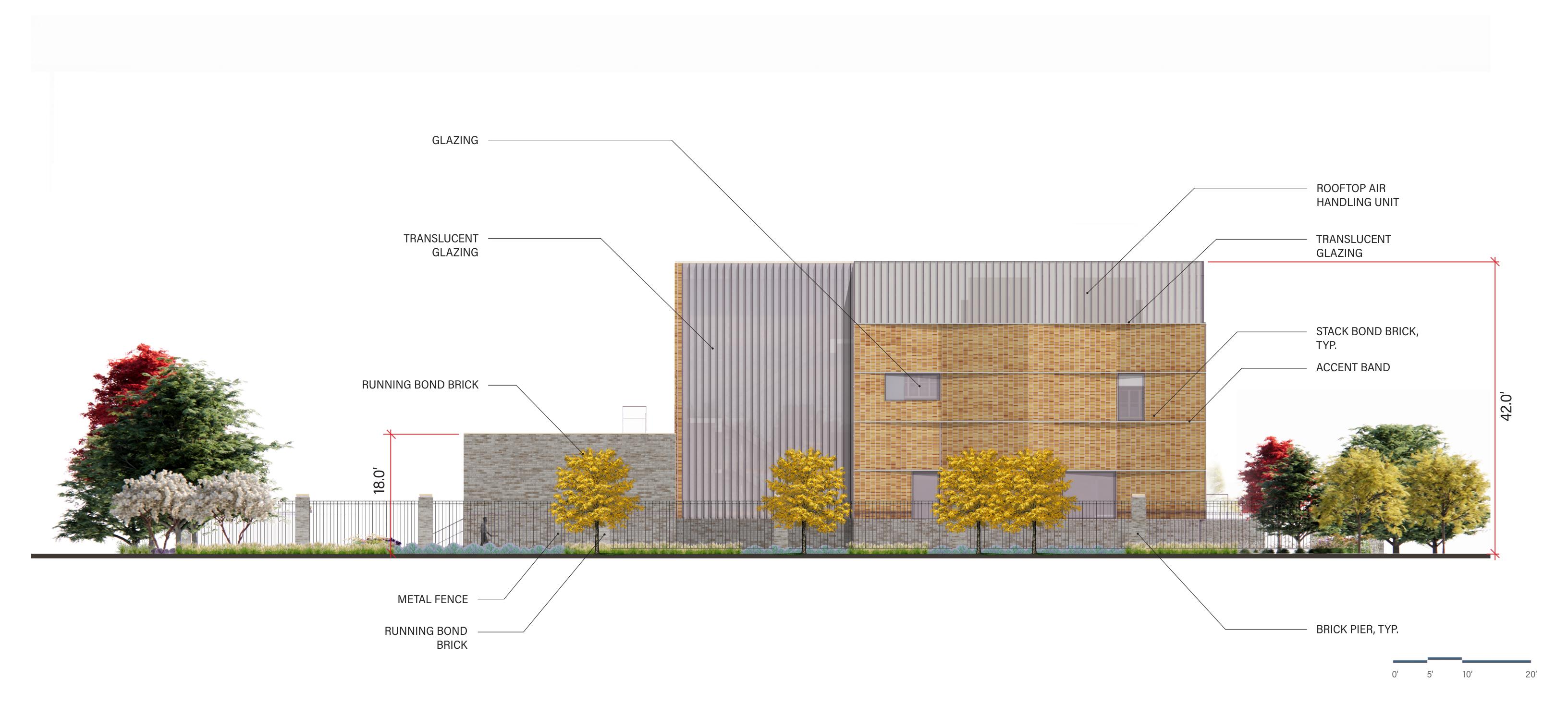


# NAVAHOE & FREUD

**VIEW** 



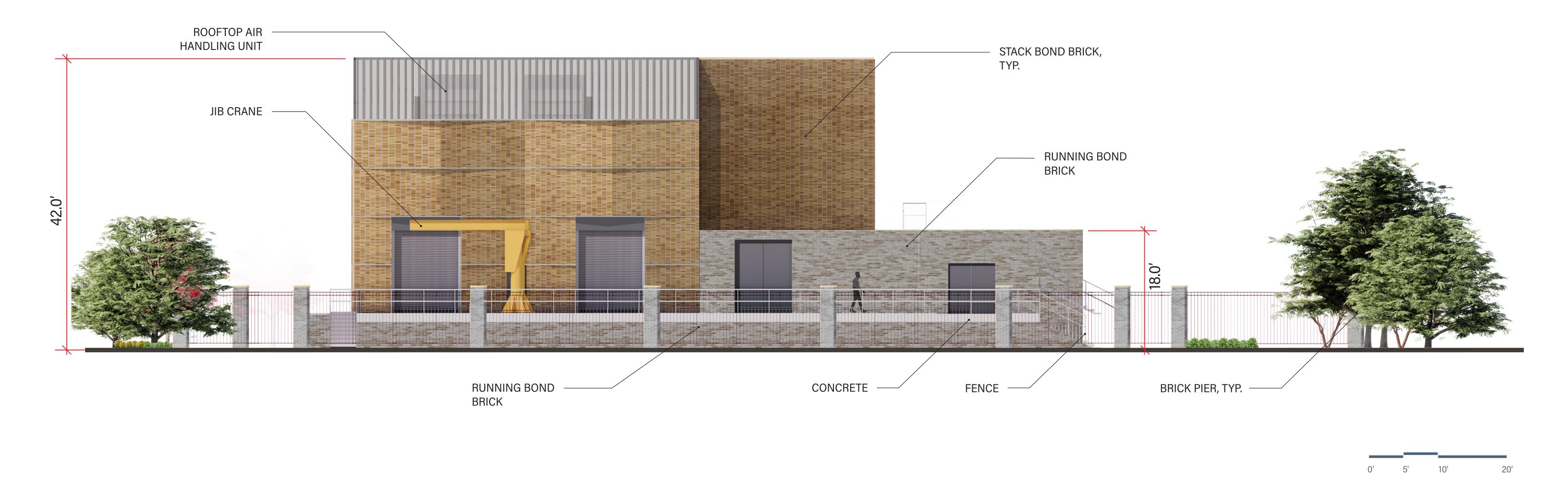
# NORTH ELEVATION



# WEST ELEVATION

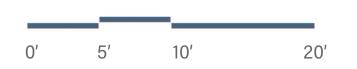


# SOUTH ELEVATION

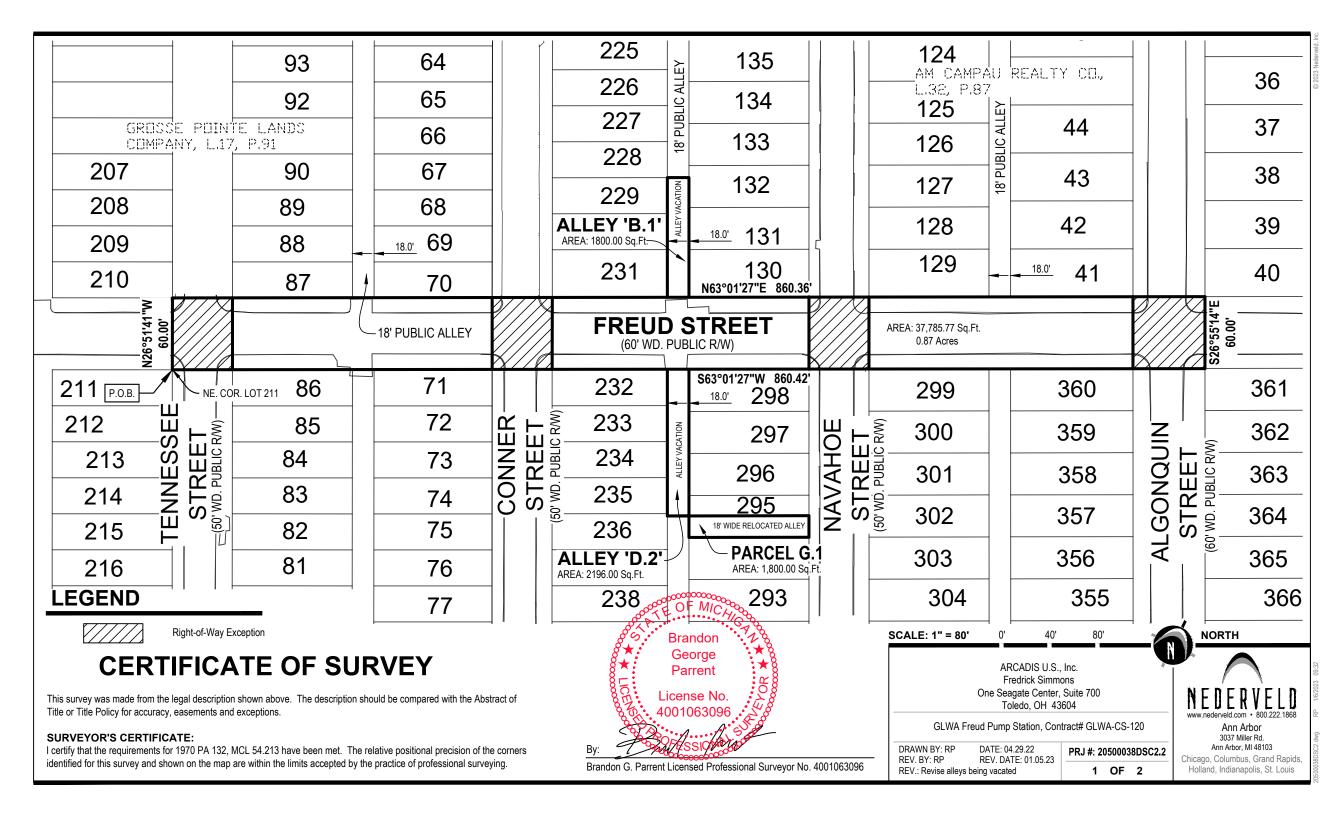


# EAST ELEVATION





GLWA | FREUD PUMP STATION | 07.14.2025 INTOTO STUDIO | 4 OF 4



Part of Grosse Pointe Lands Company Subdivision, being part of Private Claim 388, City of Detroit, Wayne County, Michigan, as recorded in Liber 27, Page 91, Wayne County Records, and part of AM Campau Realty Co., being part of Private Claim 322, City of Detroit, Wayne County, Michigan, as recorded in Liber 32, Page 87, Wayne County Records, described as: Commencing at the Northeast corner of Lot 211 of said Grosse Pointe Lands Company Subdivision for a Point of Beginning; thence N26°51'41"W 60.00 feet; thence N63°01'27"E 860.36 feet; thence S26°55'14"E 60.00 feet; thence S63°01'27"W 860.42 feet to the Point of Beginning. Excepting right-of-way of the Platted street crossings of Tennessee Street, Conner Street, Navahoe Street, and Algonquin street. Contains 0.87 acres.

#### **ALLEY VACATION DESCRIPTIONS**

ALLEY 'B.1' VACATION DESCRIPTION: Part of AM Campau Realty Co., being part of Private Claim 322. City of Detroit, Wayne County, Michigan, as recorded in Liber 32. Page 87, Wayne County Records, described as: 18 foot public alley adjacent to Lots 229, 230, and 231 of said AM Campau Realty Co., Contains 1800.00 square feet.

ALLEY 'D.2' VACATION DESCRIPTION: Part of AM Campau Realty Co., being part of Private Claim 322, City of Detroit, Wayne County, Michigan, as recorded in Liber 32, Page 87, Wayne County Records, described as: 18 foot public alley adjacent to Lots 296, 297, and 298, and the West 17 feet of Lot 295 of said AM Campau Realty Co.. Contains 2196.00 square feet.

PARCEL G.1 DESCRIPTION (18' WIDE RELOCATED ALLEY): Part of Lot 295, AM Campau Realty Co., being part of Private Claim 322, City of Detroit, Wayne County, Michigan, as recorded in Liber 32, Page 87, Wayne County Records, described as: Commencing at the Northeast corner of said Lot 295 as a Point of Beginning; thence S62°58'46"W 100.00 feet along the East line of said Lot 295; thence N26°55'14"W 18.00 feet along the South line of said Lot 295; thence N62°58'46"E 100.00 feet along the North line of said Lot 295; thence S26°55'14"E 18.00 feet along the East line of said Lot 295 to the Point of Beginning. Contains 1800.00 square feet. Subject to any and all easements, restrictions, right-of-way of record.

Pursuant to the alley rights per A.M. Campau Realty Company, Subdivision of part of the Lafferty Farm, P.C. 322, lying Southerly of Jefferson Avenue, conforming to the general plan of the City.

BASIS OF BEARING: NAD83 Michigan State Planes, South Zone, International Foot

### **CERTIFICATE OF SURVEY**

This survey was made from the legal description shown above. The description should be compared with the Abstract of Title or Title Policy for accuracy, easements and exceptions.

#### SURVEYOR'S CERTIFICATE:

I certify that the requirements for 1970 PA 132, MCL 54,213 have been met. The relative positional precision of the corners identified for this survey and shown on the map are within the limits accepted by the practice of professional surveying.



Brandon G. Parrent Licensed Professional Surveyor No. 4001063096

**NO SCALE** 

ARCADIS U.S., Inc. Fredrick Simmons One Seagate Center, Suite 700 Toledo, OH 43604

GLWA Freud Pump Station, Contract# GLWA-CS-120

DRAWN BY: RP REV. BY: RP

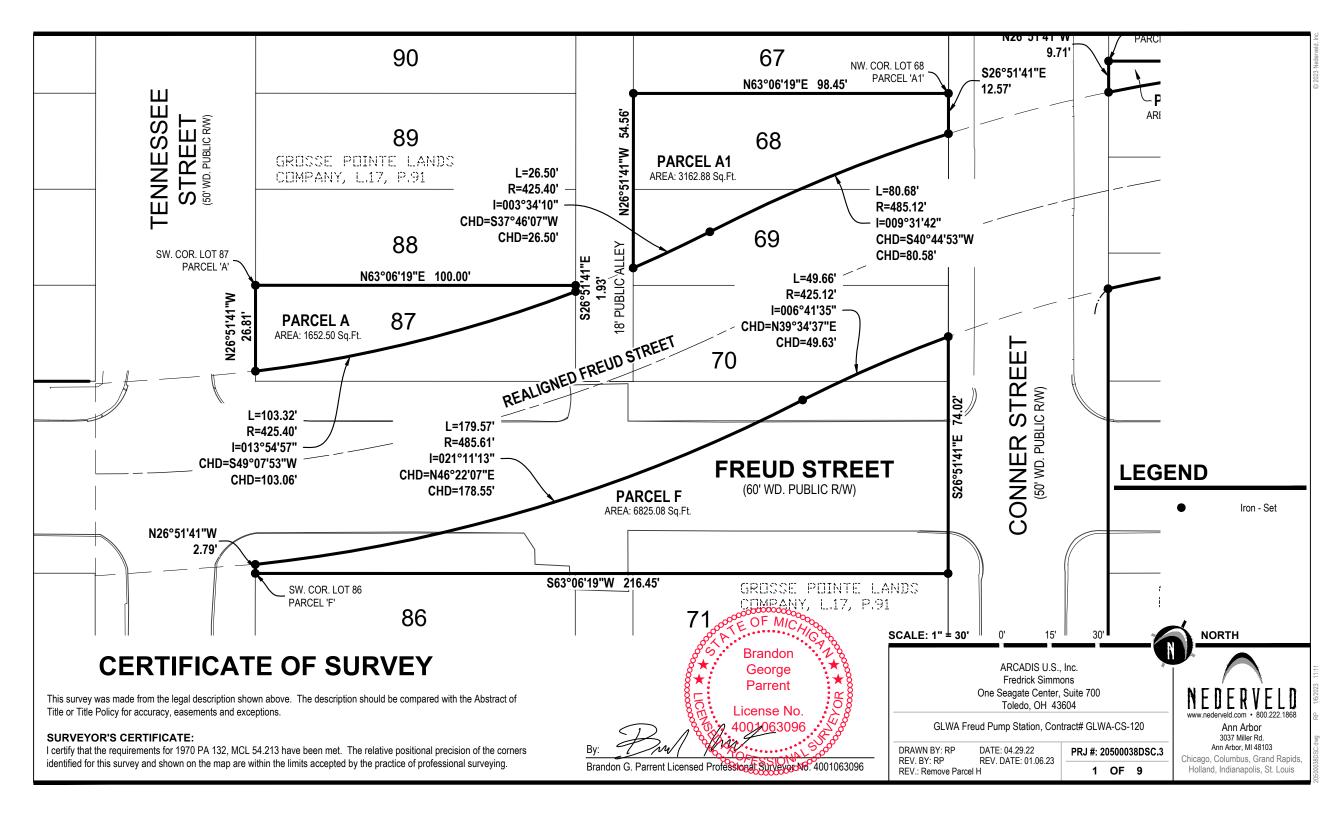
DATE: 04.29.22 REV\_DATE: 01 05 23 REV.: Revise alleys being vacated

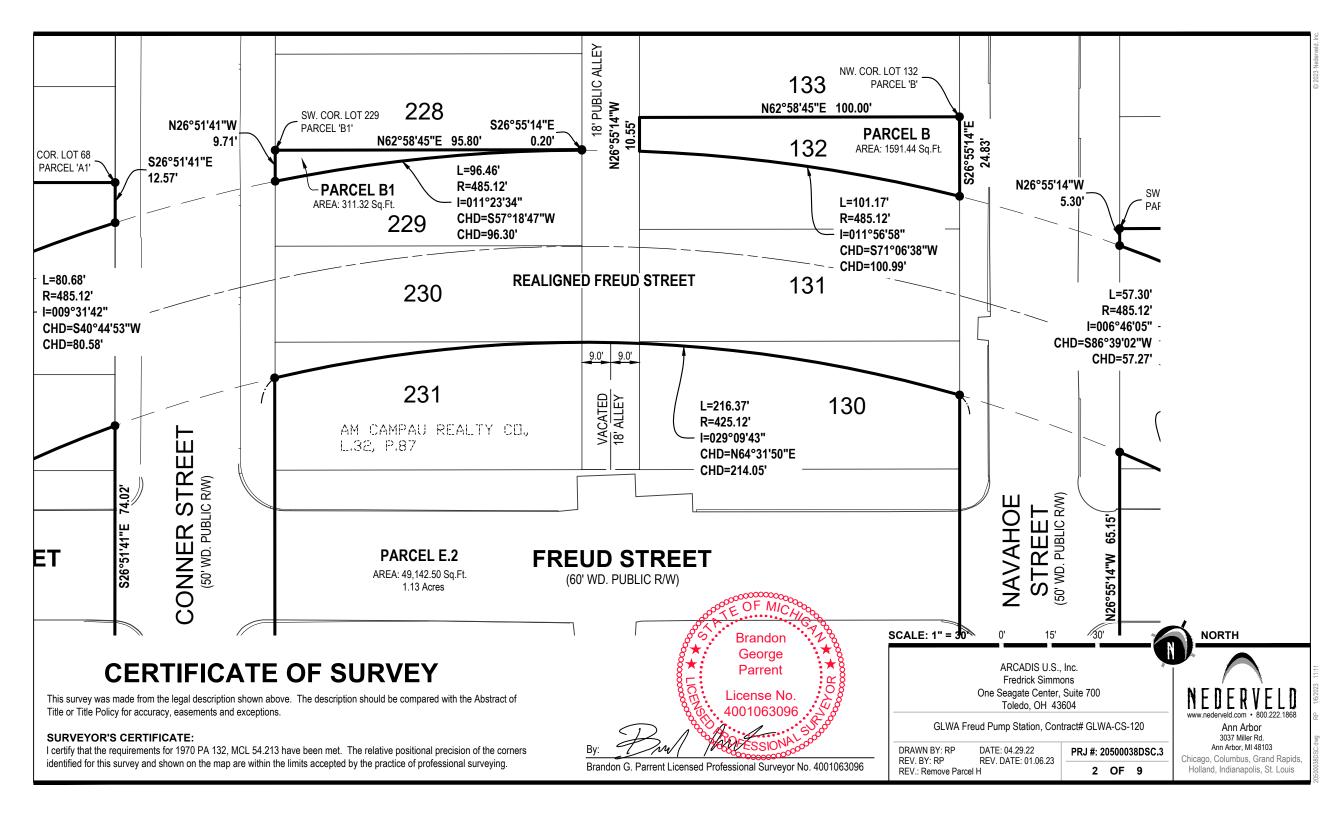
PRJ#: 20500038DSC2.2

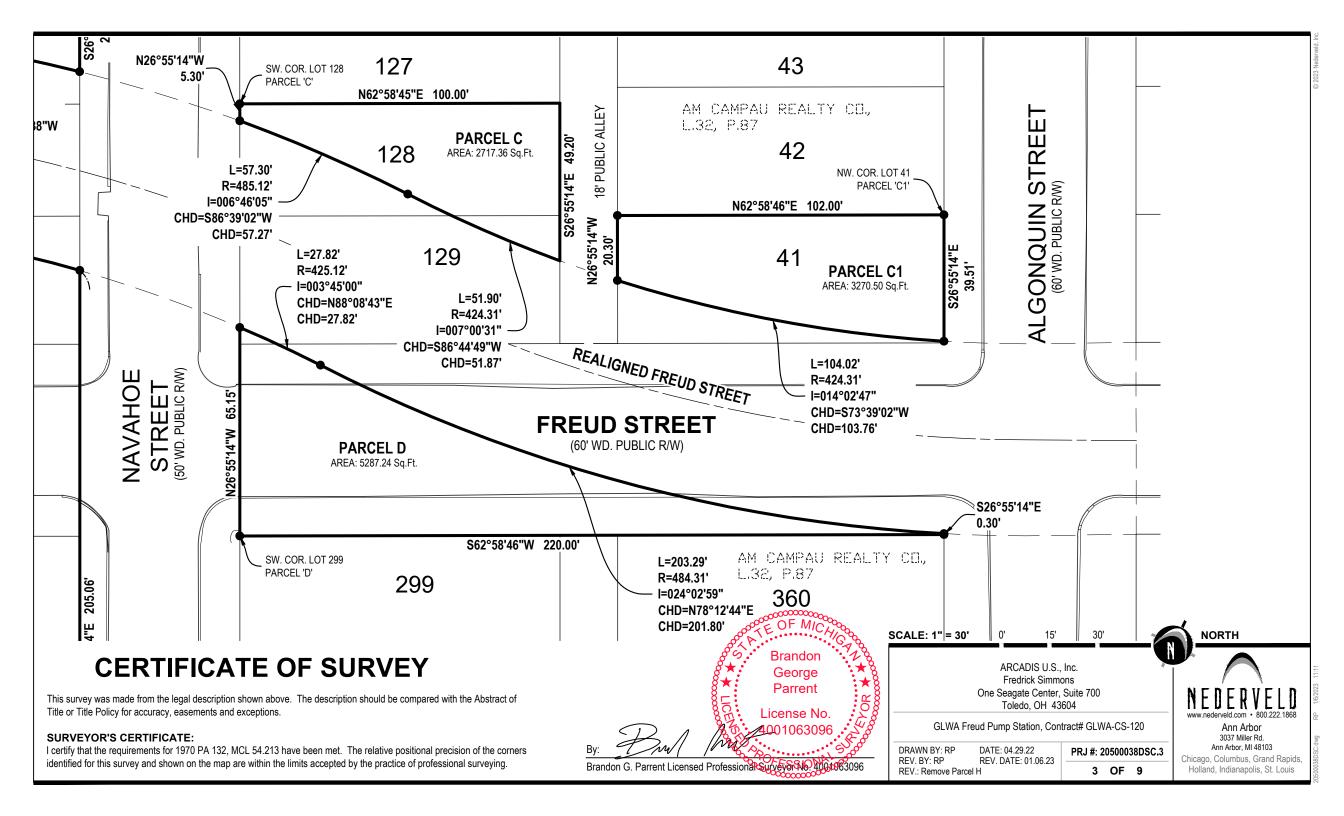
2 OF 2

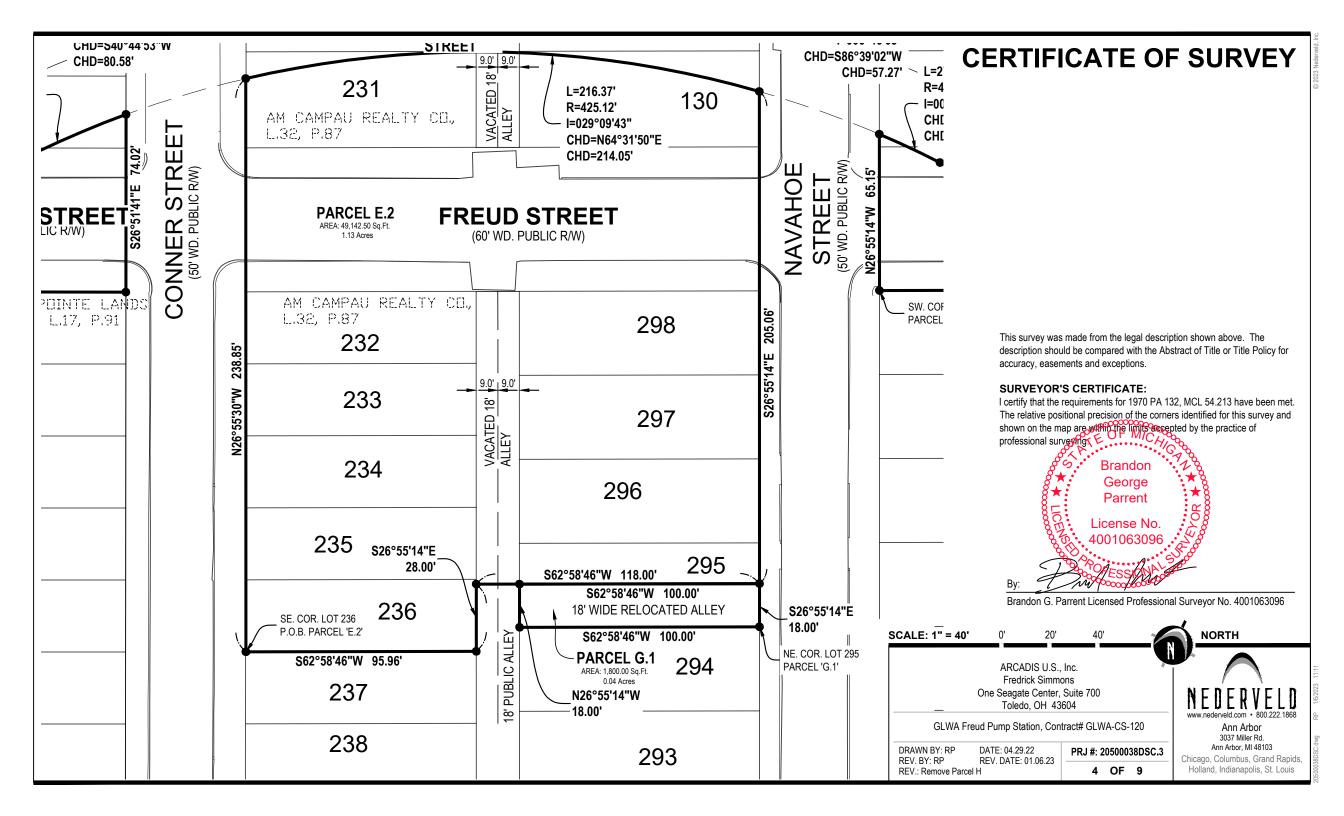
**NORTH** 3037 Miller Rd. Ann Arbor, MI 48103 Chicago, Columbus, Grand Rapids

Holland, Indianapolis, St. Louis









(Detroit Title and Escrow Agent, File No. FT-16515, dated October 31, 2022; Quit Claim Deed as recorded in Liber 21464, Page 551, WCR)

675 NAVAHOE

Lot 295, A.M. Campau Realty Co Subdivision, according to the plat thereof, as recorded in Liber 32, Page 87 of Plats, Wayne County Records.

(Detroit Title and Escrow Agent, File No. FT-16495, dated October 28, 2022; Quit Claim Deed as recorded in Liber 54799, Page 175, WCR)

678 CONNER

Lot 235, A. M. Campau Realty Company Subdivision, according to the plat thereof, as recorded

in Liber 32, Page 87 of Plats, Wayne County Records.

(Detroit Title and Escrow Agent, File No. FT-15194, dated March 4, 2022; Warranty Deed as recorded in Liber 54131, Page 1369, WCR)

681 NAVAHOE

Lot 296, A. M. Campau Realty Company Subdivision, according to the plat thereof, as recorded

in Liber 32, Page 87 of Plats, Wayne County Records.

(Detroit Title and Escrow Agent, File No. FT-15100, dated February 22, 2022; Quit Claim Deed as recorded in Liber 56021, Page 1236, WCR)

### **CERTIFICATE OF SURVEY DESCRIPTION**

682 CONNER

Lot 234, A. M. Campau Realty Company Subdivision, according to the plat thereof, as recorded

in Liber 32. Page 87 of Plats. Wayne County Records.

(Detroit Title and Escrow Agent, File No. FT-15187, dated March 4, 2022; Warranty Deed as recorded in Liber 54131, Page 1369, WCR)

686 CONNER

Lot 233, A. M. Campau Realty Company Subdivision, according to the plat thereof, as recorded

in Liber 32, Page 87 of Plats, Wayne County Records.

(Detroit Title and Escrow Agent, File No. FT-15188, dated March 4, 2022; Quit Claim Deed as recorded in Liber 54800, Page 151, WCR)

687 NAVAHOE

Lot 297, A. M. Campau Realty Company Subdivision, according to the plat thereof, as recorded

in Liber 32, Page 87 of Plats, Wayne County Records.

(Detroit Title and Escrow Agent, File No. FT-15101, dated February 22, 2022; Quit Claim Deed as recorded in Liber 52589, Page 578, WCR)

692 CONNER

Lot 232, A. M. Campau Realty Company Subdivision, according to the plat thereof, as recorded

in Liber 32, Page 87 of Plats, Wayne County Records.

(Detroit Title and Escrow Agent, File No. FT-15103, dated February 22, 2022; Quit Claim Deed as recorded in Liber 52316, Page 1009, WCR)

This survey was made from the legal description shown above. The description should be compared with the Abstract of Title or Title Policy for accuracy, easements and exceptions.

#### SURVEYOR'S CERTIFICATE:

I certify that the requirements for 1970 PA 132, MCL 54.213 have been met. The relative positional precision of the corners identified for this survey and shown on the map are within the limits accepted by the practice of professional surveying.

Brandon G. Parrent Licensed Professional Surveyor No. 400 1063096

**DESCRIPTION** 

693 NAVAHOE

Lot 298, A. M. Campau Realty Company Subdivision, according to the plat thereof, as recorded

in Liber 32, Page 87 of Plats, Wayne County Records.

(Detroit Title and Escrow Agent, File No. FT-15107, dated February 23, 2022; Warranty Deed as recorded in Liber 57048, Page 798, WCR)

700 CONNER

Lot 231, A. M. Campau Realty Company Subdivision, according to the plat thereof, as recorded

in Liber 32, Page 87 of Plats, Wayne County Records.

(Detroit Title and Escrow Agent, File No. FT-15189, dated March 4, 2022)

700 NAVAHOE

Lot 129, A. M. Campau Realty Company Subdivision, according to the plat thereof, as recorded

in Liber 32, Page 87 of Plats, Wayne County Records.

(Detroit Title and Escrow Agent, File No. FT-15102, dated February 22, 2022: Quit Claim Deed as recorded in Liber 56609. Page 634. WCR)

701 CONNER

Lot 70, Grosse Pointe Lands COS Subdivision, according to the plat thereof, as recorded in

Liber 27, Page 91 of Plats, Wayne County Records.

(Detroit Title and Escrow Agent, File No. FT-15104, dated February 22, 2022: Quit Claim Deed as recorded in Liber 51895. Page 1402. WCR)

OF MICANO SCALE

**Brandon** George Parrent

License No 400106309

ARCADIS U.S., Inc. Fredrick Simmons One Seagate Center, Suite 700 Toledo, OH 43604

GLWA Freud Pump Station, Contract# GLWA-CS-120

ORAWN BY: RP REV. BY: RP

DATE: 04.29.22 REV. DATE: 01.06.23 REV.: Remove Parcel H

PRJ #: 20500038DSC.3

5 OF 9

Ann Arbor, MI 48103

**NORTH** 

Chicago, Columbus, Grand Rapids, Holland, Indianapolis, St. Louis

in Liber 32, Page 87 of Plats, Wayne County Records.

(Detroit Title and Escrow Agent, File No. FT-15105, dated February 22, 2022; Quit Claim Deed as recorded in Liber 51895, Page 1415, WCR)

705 ALGONQUIN

Lot 41, A. M. Campau Realty Company Subdivision, according to the plat thereof, as recorded

in Liber 32, Page 87 of Plats, Wayne County Records.

(Detroit Title and Escrow Agent, File No. FT-15195, dated March 4, 2022; Declaration of Taking as recorded in Liber 57467, Page 706, WCR)

707 CONNER

Lot 69, Grosse Pointe Lands COS Subdivision, according to the plat thereof, as recorded in

Liber 27, Page 91 of Plats, Wayne County Records.

(Detroit Title and Escrow Agent, File No. FT-15191, dated March 4, 2022; Warranty Deed as recorded in Liber 57348, Page 797, WCR)

710 CONNER

Lot 230, A. M. Campau Realty Company Subdivision, according to the plat thereof, as recorded

in Liber 32, Page 87 of Plats, Wayne County Records.

Title or Title Policy for accuracy, easements and exceptions.

(Detroit Title and Escrow Agent, File No. FT-15190, dated March 4, 2022)

# CERTIFICATE OF SURVEY DESCRIPTION

710 NAVAHOE

Lot 128, A. M. Campau Realty Company Subdivision, according to the plat thereof, as recorded

in Liber 32. Page 87 of Plats. Wayne County Records.

(Detroit Title and Escrow Agent, File No. FT-15108, dated February 23, 2022; Quit Claim Deed as recorded in Liber 48218, Page 1297, WCR)

711 NAVAHOE

Lot 131, A. M. Campau Realty Company Subdivision, according to the plat thereof, as recorded

in Liber 32, Page 87 of Plats, Wayne County Records.

(Detroit Title and Escrow Agent, File No. FT-15106, dated February 22, 2022; Quit Claim Deed as recorded in Liber 52673, Page 238, WCR)

713 CONNER

Lot 68, Grosse Pointe Lands COS Subdivision, according to the plat thereof, as recorded in

Liber 27, Page 91 of Plats, Wayne County Records.

(Detroit Title and Escrow Agent, File No. FT-15192, dated March 4, 2022; Warranty Deed as recorded in Liber 57348, Page 797, WCR)

#### DESCRIPTION

716 CONNER

Lot 229, A. M. Campau Realty Company Subdivision, according to the plat thereof, as recorded

in Liber 32, Page 87 of Plats, Wayne County Records.

(Detroit Title and Escrow Agent, File No. FT-15193, dated March 4, 2022)

717 NAVAHOE

Lot 132, A. M. Campau Realty Company Subdivision, according to the plat thereof, as recorded

in Liber 32, Page 87 of Plats, Wayne County Records.

(Detroit Title and Escrow Agent, File No. FT-15109, dated February 23, 2022; Quit Claim Deed as recorded in Liber 51587, Page 49, WCR)

12415 FREUD

Lot 87, Grosse Pointe Lands COS Subdivision, according to the plat thereof, as recorded in Liber 27, Page 91 of Plats, Wayne County Records.

(Detroit Title and Escrow Agent, File No. FT-15110, dated February 23, 2022; Warranty Deed as recorded in Liber 57142, Page 529, WCR)

This survey was made from the legal description shown above. The description should be compared with the Abstract of

#### SURVEYOR'S CERTIFICATE:

I certify that the requirements for 1970 PA 132, MCL 54.213 have been met. The relative positional precision of the corners identified for this survey and shown on the map are within the limits accepted by the practice of professional surveying.



Brandon G. Parrent Licensed Professional Surveyor No. 4001063096

NO SCALE

ARCADIS U.S., Inc. Fredrick Simmons One Seagate Center, Suite 700 Toledo, OH 43604

GLWA Freud Pump Station, Contract# GLWA-CS-120

DRAWN BY: RP I REV. BY: RP I REV.: Remove Parcel H

DATE: 04.29.22 REV. DATE: 01.06.23 PRJ #: 20500038DSC.3

6 OF 9

Ann Arbor 3037 Miller Rd. Ann Arbor, MI 48103 Chicago, Columbus, Grand

**NORTH** 

Chicago, Columbus, Grand Rapids, Holland, Indianapolis, St. Louis

1/6/2023 11:11

5.dwg RP 1/6/2023

PARCEL A1 DESCRIPTION: Part of Lots 68 and 69, Grosse Pointe Lands Company Subdivision, being part of Private Claim 388, City of Detroit, Wayne County, Michigan, as recorded in Liber 27, Page 91, Wayne County Records, described as: Commencing at the Northwest corner of said Lot 68 as a Point of Beginning; thence S26°51'41"E 12.57 feet along the North line of said Lot 68; thence Southwesterly 80.68 feet along a 485.12 foot radius curve to the left, said curve having a central angle of 09°31'42", and a chord bearing S40°44'53"W 80.58 feet; thence Southwesterly 26.50 feet along a 425.40 foot radius curve to the right, said curve having a central angle of 03°34'10", and a chord bearing S37°46'07"W 26.50 feet; thence N26°51'41"W 54.56 feet; thence N63°06'19"E 98.45 feet along the West line of said Lot 68 to the Point of Beginning. Contains 3162.88 square feet. Subject to any and all easements, restrictions, right-of-way of record.

# CERTIFICATE OF SURVEY DESCRIPTION

PARCEL B DESCRIPTION: Part of Lot 132, AM Campau Realty Co., being part of Private Claim 322, City of Detroit, Wayne County, Michigan, as recorded in Liber 32, Page 87, Wayne County Records, described as: Commencing at the Northwest corner of said Lot 132 as a Point of Beginning; thence S26°55'14"E 24.83 feet along the North line of said Lot 132; thence Southwesterly 101.17 feet along a 485.12 foot radius curve to the left, said curve having a central angle of 11°56'58", and a chord bearing S71°06'38"W 100.99 feet; thence N26°55'14"W 10.55 feet along the South line of said Lot 132; thence N62°58'45"E 100.00 feet along the West line of said Lot 132 to the Point of Beginning. Contains 1591.44 square feet. Subject to any and all easements, restrictions, right-of-way of record.

PARCEL B1 DESCRIPTION: Part of Lot 229, AM Campau Realty Co., being part of Private Claim 322, City of Detroit, Wayne County, Michigan, as recorded in Liber 32, Page 87, Wayne County Records, described as: Commencing at the Southwest corner of said Lot 229 as a Point of Beginning; thence N62°58'45"E 95.80 feet along the West line of said Lot 229; thence S26°55'14"E 0.20 feet along the North line of Lot 229 of said AM Campau Realty Co.; thence Southwesterly 96.46 feet along a 485.12 foot radius curve to the left, said curve having a central angle of 11°23'34", and a chord bearing S57°18'47"W 96.30 feet; thence N26°51'41"W 9.71 feet along the South line of said Lot 229 to the Point of Beginning. Contains 311.32 square feet. Subject to any and all easements, restrictions, right-of-way of record.

#### DESCRIPTION

PARCEL C DESCRIPTION: Part of Lots 128 and 129, AM Campau Realty Co., being part of Private Claim 322, City of Detroit, Wayne County, Michigan, as recorded in Liber 32, Page 87, Wayne County Records, described as: Commencing at the Southwest corner of said Lot 128 as a Point of Beginning; thence N62°58'45"E 100.00 feet along the West line of said Lot 128; thence S26°55'14"E 49.20 feet along the North line of said Lots 128 and 129; thence Southwesterly 51.90 feet along a 424.31 foot radius curve to the right, said curve having a central angle of 07°00'31", and a chord bearing S86°44'49"W 51.87 feet; thence Southwesterly 57.30 feet along a 485.12 foot radius curve to the left, said curve having a central angle of 06°46'05", and a chord bearing S86°39'02"W 57.27 feet; thence N26°55'14"W 5.30 feet along the South line of said Lot 128 to the Point of Beginning. Contains 2717.36 square feet. Subject to any and all easements, restrictions, right-of-way of record.

PARCEL C1 DESCRIPTION: Part of Lot 41, AM Campau Realty Co., being part of Private Claim 322, City of Detroit, Wayne County, Michigan, as recorded in Liber 32, Page 87, Wayne County Records, described as: Commencing at the Northwest corner of said Lot 41 as a Point of Beginning; thence S26°55'14"E 39.51 feet along the North line of said Lot 41; thence Southwesterly 104.02 feet along a 424.31 foot radius curve to the right, said curve having a central angle of 14°02'47", and a chord bearing S73°39'02"W 103.76 feet; thence N26°55'14"W 20.30 feet along the South line of said Lot 41 to the Point of Beginning. Contains 3270.50 square feet. Subject to any and all easements, restrictions, right-of-way of record.

BASIS OF BEARING: NAD83 Michigan State Planes, South Zone, International Foot

This survey was made from the legal description shown above. The description should be compared with the Abstract of Title or Title Policy for accuracy, easements and exceptions.

#### SURVEYOR'S CERTIFICATE:

I certify that the requirements for 1970 PA 132, MCL 54.213 have been met. The relative positional precision of the corners identified for this survey and shown on the map are within the limits accepted by the practice of professional surveying.

Brandon
George
Parrent
License No.
4001063096

Brandon G. Parrent Licensed Professional Surveyor No. 4001063096

NO SCALE

ARCADIS U.S., Inc. Fredrick Simmons One Seagate Center, Suite 700 Toledo, OH 43604

GLWA Freud Pump Station, Contract# GLWA-CS-120

DRAWN BY: RP I REV. BY: RP I REV.: Remove Parcel H

DATE: 04.29.22 REV. DATE: 01.06.23

PRJ #: 20500038DSC.3

7 OF 9

NEDERVELD www.nederveld.com · 800.222.1868 Ann Arbor 3037 Miller Rd. Ann Arbor, MI 48103

**NORTH** 

Chicago, Columbus, Grand Rapids Holland, Indianapolis, St. Louis RP 1/6/2023 11:11

PARCEL D DESCRIPTION: Part of Lot 129, and vacated Freud Street adjacent to Lots 299 and 360, AM Campau Realty Co., being part of Private Claim 322, City of Detroit, Wayne County, Michigan, as recorded in Liber 32, Page 87, Wayne County Records, described as: Commencing at the Southwest corner of said Lot 299 as a Point of Beginning; thence N26°55'14"W 65.15 feet along the South line of said Lot 129 and an extension thereof; thence Northeasterly 27.82 feet along a 425.12 foot radius curve to the right, said curve having a central angle of 03°45'00", and a chord bearing N88°08'43"E 27.82 feet; thence Northeasterly 203.29 feet along a 484.31 foot radius curve to the left, said curve having a central angle of 24°02'59", and a chord bearing N78°12'44"E 201.80 feet; thence S26°55'14"E 0.30 feet; thence S62°58'46"W 220.00 feet along the West line of said Lots 299 and 360 to the Point of Beginning. Contains 5287.24 square feet. Subject to any and all easements, restrictions, right-of-way of record.

PARCEL E.2 DESCRIPTION: Part of Lots 130, 231, 232, 233, 234, 235, 236, 295, 296, 297, and 298, and vacated 18 foot public alley adjacent to said Lots 130, 296, 297, and 298, and adjacent to the West 17 feet of said Lot 295, and vacated Freud Street adjacent to said Lots 130 and 231, AM Campau Realty Co., being part of Private Claim 322, City of Detroit, Wayne County, Michigan, as recorded in Liber 32, Page 87, Wayne County Records, described as: Commencing at the Southeast corner of said Lot 236 as a Point of Beginning; thence N26°55'30"W 238.85 feet along the South line of said Lot 231 and an extension thereof, and the South line of said Lots 232, 233, 234, 235, and 236; thence Northeasterly 216,37 feet along a 425.12 foot radius curve to the right, said curve having a central angle of 29°09'43", and a chord bearing N64°31'50"E 214.05 feet; thence S26°55'14"E 205.06 feet along the North line of said Lot 130 and an extension thereof, and the North line of said Lots 295, 296, 297, and 298; thence S62°58'46"W 118,00 feet; thence S26°55'14"E 28.00 feet along the North line of said Lot 236; thence S62°58'46"W 95.96 feet along the East line of said Lot 236 to the Point of Beginning. Contains 49,142.50 square feet. 1.13 acres. Subject to any and all easements, restrictions, right-of-way of record.

# CERTIFICATE OF SURVEY DESCRIPTION

PARCEL F DESCRIPTION: Part of Lot 70, Grosse Pointe Lands Company Subdivision, being part of Private Claim 388, City of Detroit, Wayne County, Michigan, as recorded in Liber 27, Page 91, Wayne County Records, and that portion of vacated Freud Street adjacent to Lots 71 and 86 of said Grosse Pointe Lands Company Subdivision, described as: Commencing at the Southwest corner of said Lot 86 as a Point of Beginning; thence N26°51'41"W 2.79 feet; thence Northeasterly 179.57 feet along a 485.61 foot radius curve to the left, said curve having a central angle of 21°11'13", and a chord bearing N46°22'07"E 178.55 feet; thence Northeasterly 49.66 feet along a 425.12 foot radius curve to the right, said curve having a central angle of 06°41'35", and a chord bearing N39°34'37"E 49.63 feet; thence S26°51'41"E 74.02 feet; thence S63°06'19"W 216.45 feet along the West line of said Lots 71 and 86 to the Point of Beginning. Contains 6825.08 square feet. Subject to any and all easements, restrictions, right-of-way of record.

PARCEL G.1 DESCRIPTION (18' WIDE RELOCATED ALLEY): Part of Lot 295, AM Campau Realty Co., being part of Private Claim 322, City of Detroit, Wayne County, Michigan, as recorded in Liber 32, Page 87, Wayne County Records, described as: Commencing at the Northeast corner of said Lot 295 as a Point of Beginning; thence S62°58'46"W 100.00 feet along the East line of said Lot 295; thence N26°55'14"W 18.00 feet along the South line of said Lot 295; thence N62°58'46"E 100.00 feet along the North line of said Lot 295; thence S26°55'14"E 18.00 feet along the East line of said Lot 295 to the Point of Beginning. Contains 1800.00 square feet. Subject to any and all easements, restrictions, right-of-way of record.

Pursuant to the alley rights per A.M. Campau Realty Company, Subdivision of part of the Lafferty Farm, P.C. 322, lying Southerly of Jefferson Avenue, conforming to the general plan of the City.

BASIS OF BEARING: NAD83 Michigan State Planes South Zone, International Foot

This survey was made from the legal description shown above. The description should be compared with the Abstract of Title or Title Policy for accuracy, easements and exceptions.

#### SURVEYOR'S CERTIFICATE:

I certify that the requirements for 1970 PA 132, MCL 54.213 have been met. The relative positional precision of the corners identified for this survey and shown on the map are within the limits accepted by the practice of professional surveying.

Brandon
George
Parrent
License No.
4001063096

Brandon G. Parrent Licensed Professional Surveyor No. 4001063096

NO SCALE

ARCADIS U.S., Inc. Fredrick Simmons One Seagate Center, Suite 700 Toledo, OH 43604

GLWA Freud Pump Station, Contract# GLWA-CS-120

DRAWN BY: RP I REV. BY: RP I REV.: Remove Parcel H

DATE: 04.29.22 REV. DATE: 01.06.23

PRJ #: 20500038DSC.3

8 OF 9

NEDERVELD
www.nederveld.com · 800.222.1868
Ann Arbor
3037 Miller Rd.

**NORTH** 

Ann Arbor, MI 48103 Chicago, Columbus, Grand Rapids Holland, Indianapolis, St. Louis 2023 11:11

g RP 1/6/2023 11:

