CONTRACT DRAWINGS

PAYNE PARK AQUATIC FACILITY

NORTH TONAWANDA, NEW YORK
PROJECT NO. 2023-01
MEMORIAL POOL REVITALIZATION
GRANT NUMBER: EPF 230185

Mayor
Austin J. Tylec

President of Common Council
Joseph Lavey, Jr.

Aldermen
Joseph Lavey, Jr., Alderman-at-Large
Joe Loncar, Alderman-at-Large
Robert Schmigel, 1st Ward
Frank DiBernardo, 2nd Ward
Joe Marranca, 3rd Ward

City Clerk Treasurer
Donna L. Braun

City Engineer
Chelsea L. Spahr

Attorney
Edward A. Zebulske, III

Director of Parks, Recreation & Youth
Alex Domaradzki

Superintendent of Public Works
John Urban

830 PAYNE AVENUE
NORTH TONAWANDA, NY 14120

12/16/2025

FOR BID

23065

BRANDSTETTER CARROLL INC
ARCHITECTS . ENGINEERS . PLANNERS

Lexington Cincinnati Cleveland Dallas Charleston

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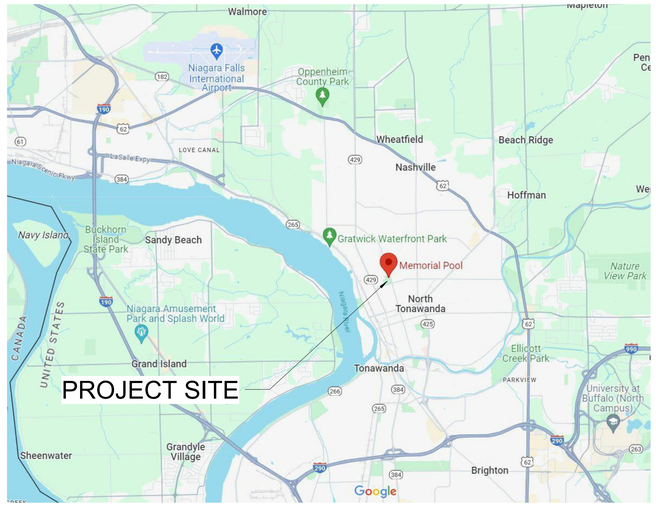
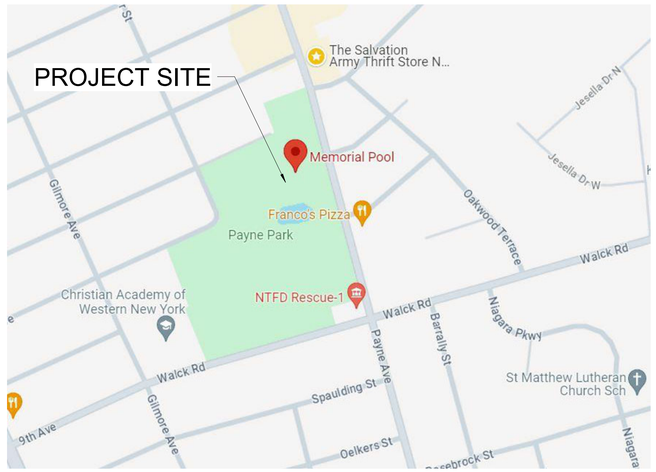
Plotted 12/15/2025 4:20:31 PM

LOCATION MAP



AREA MAP



NORTH PLAN

NORTH TRUE

PROJECT TEAM, OWNER & UTILITIES

ARCHITECT OF RECORD
Brandstetter Carroll Inc.
1220 West 6th Street, Suite 300
Cleveland, Ohio 44113
Contact: Nancy Nozik, AIA
Phone: 216.241.4480
nnozik@bciaep.com

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Lexington, Kentucky 40517
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Fax: 859.268.3341
Contact: Lisa Shuster

STRUCTURAL ENGINEER
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2217 E.9th Street, Suite 350
Cleveland, Ohio 44115
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Phone: 216.875.0100
Fax: 216.205.4130
Email: jleuthaeuser@barberhoffman.com

MECHANICAL, ELECTRICAL AND PLUMBING ENGINEER
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Eastlake, Ohio 44095
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Email: tpool@tecinceng.com

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Fax: 859.268.3341
Contact: Charlie Schneider

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Email: cspahr@northtonawanda.org

WATER SERVICE
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Water Department
658 Erie Avenue
North Tonawanda, NY 14120
Phone:716.695.8537

STORM SERVICE
City of North Tonawanda
Deptartment of Public Works
758 Erie Avenue
North Tonawanda, NY 14120
Phone: 716.695.8585

SEWER SERVICE
City of North Tonawanda
Deptartment of Public Works
758 Erie Avenue
North Tonawanda, NY 14120
Phone: 716.695.8585

STREET LIGHTS & TRAFFIC SIGNALS
City of North Tonawanda
Deptartment of Public Works
758 Erie Avenue
North Tonawanda, NY 14120
Phone: 716.695.8585

ELECTRIC SERVICE
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North Tonawanda, NY 14120
Phone: 716.693.7234

GAS SERVICE
Gas Company
name
address
city state zip
Phone:

TELEPHONE
Spectrum
name
address
city state zip
Phone:

TELECOMMUNICATIONS
Verizon / Greenlight
name
address
city state zip
Phone:

CABLE
Spectrum
name
address
city state zip
Phone:

GENERAL NOTES

1. NO WORK IS AUTHORIZED ON OR WITHIN THE EXISTING POOL BUILDING.
2. THERE WILL BE NO ALTERATIONS, DEMOLITION, UTILITY TIE-INS, OR MODIFICATIONS TO THE EXISTING STRUCTURE.
3. ALL PROJECT WORK WILL OCCUR OUTSIDE OF THE FOOTPRINT OF THE EXISTING POOL BUILDING.
4. THE EXISTING POOL STRUCTURE IS TO BE FULLY PROTECTED FROM POTENTIAL DAMAGE DURING CONSTRUCTION ACTIVITY.

DRAWING INDEX

- ■ - DRAWING SHEET ISSUED
- ▒ - DRAWING SHEET NUMBER CHANGED
- ▬ - DRAWING SHEET NAME CHANGED
- ▲ - DRAWING SHEET NUMBER AND SHEET NAME CHANGED
- X - DRAWING SHEET DELETED
- [ ] - DRAWING SHEET NOT ISSUED

SHT NO.	SHEET NAME	ISSUED FOR PERMIT - 08/09/2024	11/14/2024 - REVIEW	FINAL OWNER REVIEW - 05/23/2025	FOR BID - 12/16/2025
GENERAL					
G-000	COVER SHEET	■	■	■	■
G-101	DRAWING INDEX & GENERAL NOTES	■	■	■	■
G-201	LIFE SAFETY PLAN AND CODE REVIEW	■	■	■	■
CIVIL					
C G-100	COVER SHEET	■	■	■	■
C G-101	GENERAL NOTES AND LEGEND	■	■	■	■
C-101	OVERALL EXISTING CONDITIONS PLAN	■	■	■	■
C-102	DEMOLITION PLAN	■	■	■	■
C-103	SITE PLAN	■	■	■	■
C-104	GRADING AND PAVING PLAN	■	■	■	■
C-105	UTILITY PLAN	■	■	■	■
C-106	EROSION AND SEDIMENT CONTROL PLAN	■	■	■	■
C-106A	EROSION AND SEDIMENT CONTROL DETAILS	■	■	■	■
C-107	SITE DETAILS 1	■	■	■	■
C-108	SITE DETAILS 2	■	■	■	■
C-108A	SITE DETAILS 3				■
C-109	WATER AND SEWER DETAILS 1	■	■	■	■
C-110	WATER AND SEWER DETAILS 2	■	■	■	■
CIVIL POOL					
CP-101	LAP & ACTIVITY POOL PLAN - LAYOUT & MATERIALS	■	■	■	■
CP-102	DECK LAYOUT PLAN - LOCATION & DIMENSIONAL	■	■	▬	■
CP-103	LAP & ACTIVITY POOL PLAN - DIMENSIONAL	■	■	▲	■
CP-104	POOL DISCHARGE AND FEATURE PIPING PLAN	■	■	▬	■
CP-105	LAP & ACTIVITY POOL PLAN - RETURN & WATER PIPING	■	■	▬	■
CP-106	LAP & ACTIVITY POOL PLAN - GRAVITY & SUCTION PIPING				■
CP-301	LAP POOL SECTIONS				■
CP-302	ACTIVITY POOL SECTIONS				■
CP-401	FILTER ROOM SECTIONS & DETAILS	■	■	▬	■
CP-501	SURGE TANK	■	■	■	■
CP-502	DETAILS	■	■	■	■
CP-503	DETAILS	■	■	■	■
CP-504	DETAILS	■	■	■	■
CP-505	DETAILS	■	■	■	■
CP-601	POOL EQUIPMENT SCHEDULES	■	■	■	■
CP-602	PROCESS FLOW DIAGRAMS	■	■	■	■
STRUCTURAL					
S-001	GENERAL NOTES	■	■	■	■
S-002	SPECIAL INSPECTIONS	■	■	■	■
S-101	FOUNDATION PLAN	■	■	■	■
S-102	ROOF FRAMING PLAN	■	■	■	■
S-201	SECTIONS	■	■	■	■
S-202	SECTIONS	■	■	■	■
S-301	TYPICAL DETAILS	■	■	■	■
S-302	TYPICAL DETAILS	■	■	■	■
ARCHITECTURAL					
A-001	ARCHITECTURAL GENERAL NOTES	■	■	■	■
A-101	FLOOR PLAN	■	■	■	■
A-102	DIMENSION PLAN	■	■	■	■
A-111	REFLECTED CEILING PLAN & NOTES	■	■	■	■
A-112	CEILING / SOFFIT SECTIONS AND DETAILS			■	■
A-121	ROOF PLAN, NOTES AND ROOF DETAILS	■	■	■	■
A-151	SIGNAGE FLOOR PLAN	■	■	■	■
A-201	EXTERIOR ELEVATIONS	■	■	■	■
A-202	EXTERIOR ELEVATIONS	■	■	■	■
A-211	CAST STONE DETAILS AND ELEVATIONS	■	■	■	■
A-212	CAST STONE ELEVATIONS	■	■	■	■
A-213	CAST STONE DETAILS AND SCHEDULE			■	■
A-301	BUILDING SECTIONS	■	■	■	■
A-302	BUILDING SECTIONS	■	■	■	■
A-311	WALL SECTIONS	■	■	■	■
A-312	WALL SECTIONS	■	■	■	■
A-313	WALL SECTIONS AT FILTER PIT	■	■	■	■
A-314	WALL SECTIONS AT ENTRANCE TOWERS	■	■	■	■
A-401	ENLARGED PLANS, ELEVATIONS & DETAILS			■	■
A-403	CASEWORK DETAILS	■	■	■	■
A-601	DOOR SCHEDULES, WINDOW TYPE AND DETAILS	■	■	■	■
A-901	3D VIEWS	■	■	■	■
MECHANICAL					
M-101	FIRST FLOOR MECHANICAL PLAN	■	■	■	■
M-102	HVAC DETAILS & SPECIFICATIONS	■	■	■	■
PLUMBING					
P-001	PLUMBING LEGEND & SCHEDULES	■	■	■	■
P-002	PLUMBING SCHEDULES & DETAILS	■	■	■	■
P-101	FIRST FLOOR PLUMBING PLAN	■	■	■	■
ELECTRICAL					
E-001	ELECTRICAL DETAILS, SCHEDULES & NOTES	■	■	■	■
E-002	ELECTRICAL DETAILS, SCHEDULES & NOTES	■	■	■	■
E-003	ELETRICAL SPECIFICATIONS	■	■	■	■
E-101	FIRST FLOOR LIGHTING PLAN	■	■	■	■
E-102	FIRST FLOOR POWER AND COMM PLAN	■	■	■	■
SHEET A-501 DELETED. DETAILS MOVED TO A-401 AND A-601		■	■	■	■

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p. 216.241.4480 www.brandstettercarroll.com

Lexington Cincinnati Cleveland Dallas Charleston

REGISTERED ARCHITECT RICHARD THOMAS PARKER 036165 STATE OF NEW YORK

CITY OF NORTH TONAWANDA, N.Y.

It is a violation of New York Education Law Art. 145 Sec. 7209 & Art. 147 Sec. 7307, for any person, unless acting under the direction of a licensed architect, professional engineer, or land surveyor, to alter an item in any way. If an item bearing the seal of an architect, engineer, or land surveyor is altered; the altering architect, engineer, or land surveyor shall affix to the item their seal and notation 'altered by' followed by their signature and date of such alteration, and a specific description of the alteration.

NO ALTERATION PERMITTED HEREON EXCEPT AS PROVIDED UNDER SECTION 7209 SUBDIVISION 2 OF THE NEW YORK EDUCATION LAW

Revisions: NUMBER DATE DESCRIPTION

Issue Date: 12/16/2025 FOR BID

PAYNE PARK AQUATIC FACILITY

830 PAYNE AVENUE
NORTH TONAWANDA, NY 14120

DRAWING INDEX & GENERAL NOTES

City Project No.
2023-01

BCI Project No.
23065

G-101

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CODE DATA

APPLICABLE PROJECT CODES

Building Code:	2020 Building Code of New York State (IBC 2018 Amended)
Fire Code:	2020 Fire Code of New York State (IFC 2018 Amended)
Plumbing Code:	2020 Plumbing Code of New York State (IPC 2018 Amended)
Mechanical Code:	2020 Mechanical Code of New York State (IMC 2018 Amended)
Electrical Code:	2017 National Electric Code (NFPA 70)
Energy Code:	2020 Energy Code of New York State (IECC 2018 Amended)
Accessibility Code:	2009 New York State Accessibility Code (A117.1, 2009 Not Amended)

POOL HOUSE:

Construction Type:	VB	
Sprinklered	No	
Use Group:	U Utility	
Climate Zone:	Marine 4	
	Allowable	Actual
Building Area:	5,500 sf	4,054 sf
Building Perimeter:	348 lf	
	Allowable	Actual
Building Height:	1 Story, 40 Feet	1 Story, 20 Feet

Fire Resistance Rating Requirements:

Primary Structural Frame:	0 Hours
Bearing Walls:	0 Hours
Non-bearing Walls:	0 Hours
Floor Construction:	0 Hours
Roof Construction:	0 Hours

Exit Access Travel Distance: 200'-0" (Not Sprinklered) (Table 1017.2)

SWIMMING POOL:

Use Group: A-4 Assembly

Pool Surface Area:

Lap Pool	6,567 sf
Activity Pool	4,239 sf

Pool Perimeter:

Lap Pool	348 lf
Activity Pool	321 lf

Pool Volume:

Lap Pool	302,027 gal
Activity Pool	77,637 gal

Useable Deck Area: 6,890 sf

Table 1004.1.2, 2017 New York Building Code

OCCUPANT LOAD:

Pool House Building:		
Guard Room	296 sf at 150sf / person	= 2 people
Cashier	124 sf at 150 sf / person	= 2 people
Concessions	281 sf at 200 sf / person	= 2 people
Pool Equipment Room	517 sf at 300 sf / person	= 2 people
Swimming Pool:		
Activity Pool	Water surface area	= 5,340 sf
	50 sf / person	= 106 persons
Lap Pool	Water surface area	= 3,935 sf
	50 sf / person	= 78 persons
Activity Pool Deck	5,083 sf at 15 sf / person	= 338 persons
Lap Pool Deck	4,038 sf at 15 sf / person	= 269 persons
Total Occupancy:		= 791 persons

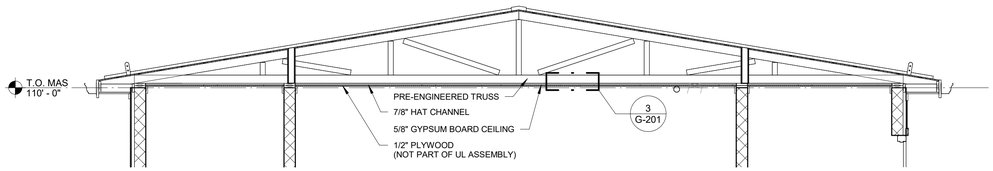
PLUMBING FIXTURE REQUIREMENTS: (400 Male, 400 Female) — Table 403.1, (2017 New York Plumbing Code)

Fixture	Required	Provided	Fixture	Required	Provided
Male Water Closet:	5	6	Female Water Closet:	10	10
Male Lavatory:	2	3	Female Lavatory:	3	7
Urinal:	0	3			
Shower:	0	2			
Service Sink:	1	2			
Drinking Fountain:	1	1			

CODE LEGEND

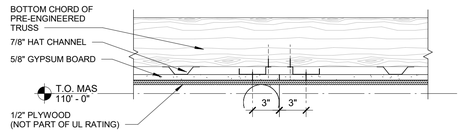
- 3 — OCCUPANCY LOAD
- 1-HR RATED PARTITION
- FE — FIRE EXTINGUISHER - WALL MOUNTED
- AED — AED - WALL MOUNTED (AUTOMATED EXTERNAL DEFIBRILLATOR)
- TRAVEL DISTANCE FOR EGRESS:
  - EGRESS PATH P1 = 14' - 8"
  - EGRESS PATH P2 = 14' - 5"
  - EGRESS PATH P3 = 11' - 3"
  - EGRESS PATH P4 = 12' - 1"
  - EGRESS PATH P5 = 37' - 9"
  - EGRESS PATH P6 = 37' - 9"

NOTE: ALL INTERIOR WALL ASSEMBLIES ARE TO EXTEND TO THE BOTTOM OF THE TRUSS CORD ABOVE UNLESS NOTED OTHERWISE.



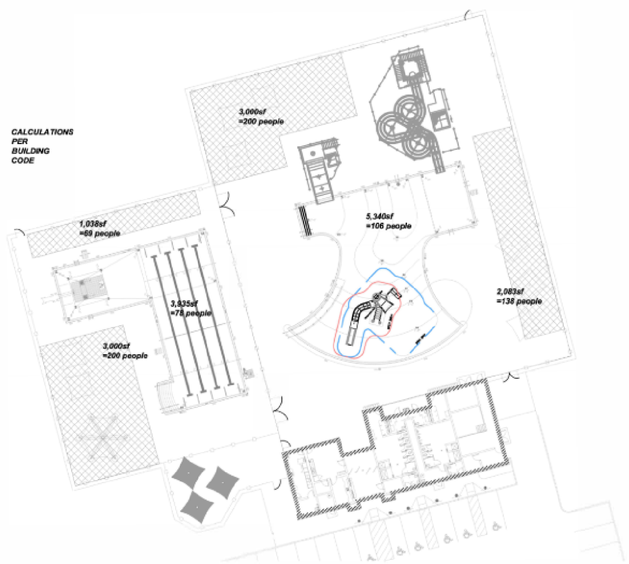
2 UL P552 - 1 HR RATED ROOF / CEILING ASSEMBLY @ 1 HR RATED ROOMS

1/4" = 1'-0"



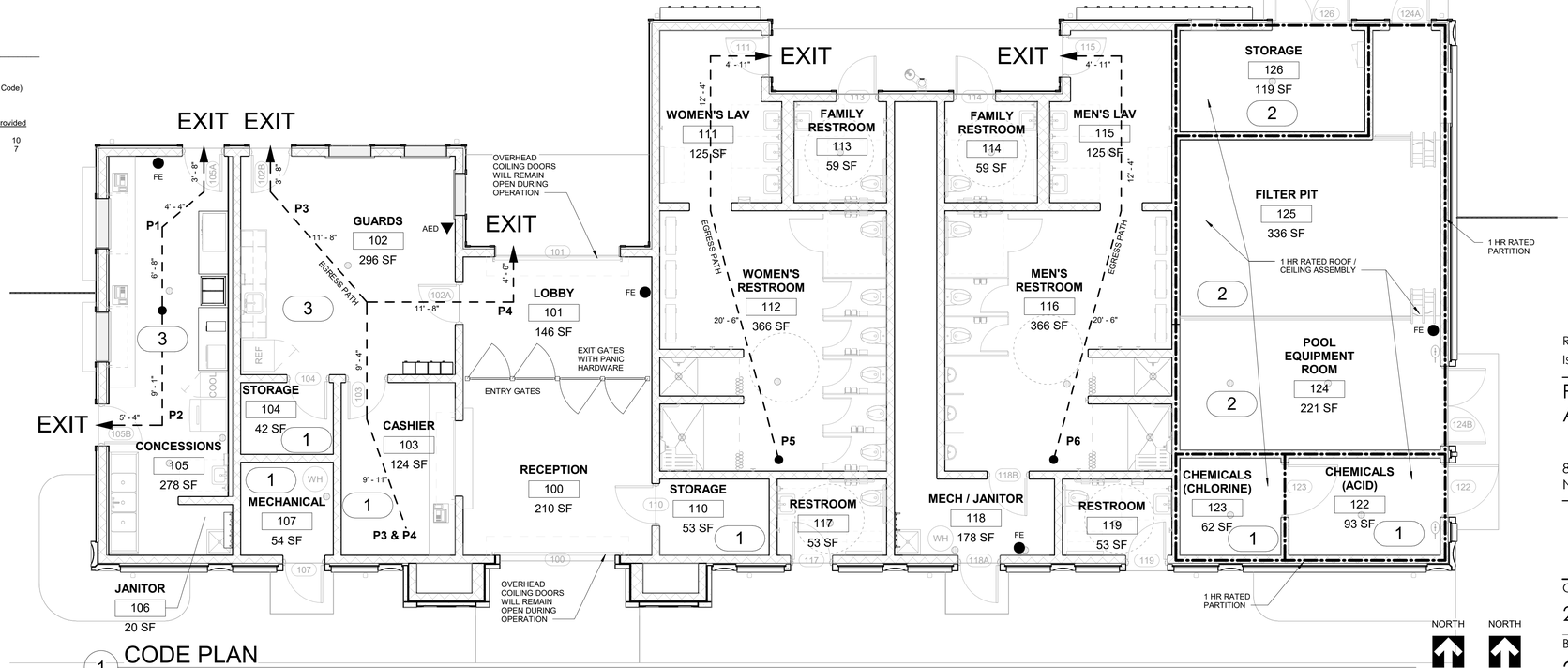
3 UL P552 - END JOINT DETAIL

1 1/2" = 1'-0"



4 POOL CODE PLAN

N.T.S.



1 CODE PLAN

3/16" = 1'-0"

BRANDSTETTER CARROLL INC
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Lexington Cincinnati Cleveland Dallas Charleston

REGISTERED ARCHITECT
RICHARD THOMAS PARKER
026165
STATE OF NEW YORK

CITY OF NORTH TONAWANDA, N.Y.

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Revisions: NUMBER DATE DESCRIPTION

Issue Date: 12/16/2025 FOR BID

PAYNE PARK
AQUATIC FACILITY

830 PAYNE AVENUE
NORTH TONAWANDA, NY 14120

LIFE SAFETY PLAN AND
CODE REVIEW

City Project No.
2023-01

BCI Project No.
23065

G-201

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CONTRACT DRAWINGS
CITY OF NORTH TONAWANDA PARKS
PAYNE PARK AQUATIC FACILITY

830 PAYNE AVENUE

CITY OF NORTH TONAWANDA

NIAGARA COUNTY, NEW YORK

Project No. 2023-01

City Project No. 23065

DECEMBER16, 2025

MAYOR
Austin J. Tylec

President of Common Council
Joseph Lavey, Jr.

Aldermen
Joseph Lavey, Jr., Alderman-at-Large
Joe Loncar, Alderman-at-Large
Robert Schmigel, 1st Ward
Frank DiBernardo, 2nd Ward
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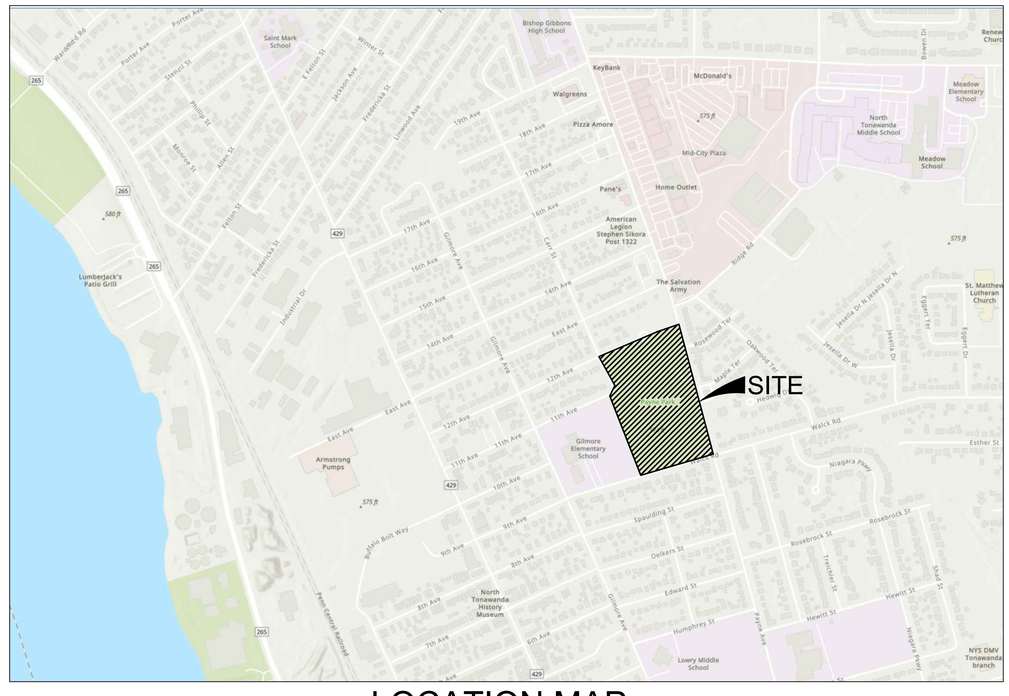

LOCATION MAP

LIST OF DRAWINGS	
DWG	TITLE
G-100	COVER SHEET
G-101	GENERAL NOTES AND LEGEND
C-101	OVERALL EXISTING CONDITIONS PLAN
C-102	DEMOLITION PLAN
C-103	SITE PLAN
C-104	GRADING AND PAVING PLAN
C-105	UTILITY PLAN
C-106	EROSION AND SEDIMENT CONTROL PLAN
C-106A	EROSION AND SEDIMENT CONTROL DETAILS
C-107	SITE DETAILS 1
C-108	SITE DETAILS 2
C-108A	SITE DETAILS 3
C-109	WATER AND SEWER DETAILS 1
C-110	WATER AND SEWER DETAILS 2

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ENGINEERS AND SURVEYORS
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www.nussclarke.com

NUSSBAUMER & CLARKE, INC.
A CORPORATION REGISTERED TO PRACTICE PROFESSIONAL ENGINEERING & LAND SURVEYING IN THE STATE OF NEW YORK
CERTIFICATE NO. 027

23J1-0040

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GENERAL NOTES:

1. TOPOGRAPHICAL INFORMATION BASED UPON SURVEY PERFORMED BY NUSSBAUMER & CLARKE, INC ON 05/26/2023.
2. ALL BIDDERS ARE REQUIRED TO INSPECT THE PROJECT SITE IN ITS ENTIRETY PRIOR TO SUBMITTING THEIR BID, AND BECOME FAMILIAR WITH ALL CONDITIONS AS THEY MAY AFFECT THEIR BID. CONTRACTOR AND SUB-CONTRACTOR SHALL BE FAMILIAR WITH ALL DRAWINGS AND SPECIFICATIONS PRIOR TO COMMENCING THE CONSTRUCTION.
3. LOCATIONS OF ANY UTILITIES SHOWN ON THESE PLANS ARE APPROXIMATE ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION OF SUCH UTILITIES, PROTECTING ALL EXISTING UTILITIES AND REPAIRING ANY DAMAGE DONE DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ON-SITE COORDINATION WITH UTILITY COMPANIES AND PUBLIC AGENCIES AND FOR OBTAINING ALL REQUIRED PERMITS AND PAYING ALL REQUIRED FEES.
4. WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATION, ELEVATION AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR AND THE INFORMATION FURNISHED TO THE ENGINEER FOR RESOLUTION OF THE CONFLICT.
5. THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS FOR THE ALTERATION AND ADJUSTMENT OF GAS, ELECTRIC, TELEPHONE AND ANY OTHER PRIVATE UTILITIES BY THE UTILITY OWNER AT NO ADDITIONAL COST TO THE OWNER.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING ALL DRAWINGS AND SPECIFICATIONS TO DETERMINE THE EXTENT OF EXCAVATION AND DEMOLITION REQUIRED TO RECEIVE SITE IMPROVEMENTS.
7. ANY DISCREPANCIES OR CONFLICTS BETWEEN THE DRAWINGS AND EXISTING CONDITIONS, EXISTING CONDITIONS TO REMAIN, TEMPORARY CONSTRUCTION, PERMANENT CONSTRUCTION AND WORK OF ADJACENT CONTRACTS SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER BEFORE PROCEEDING. ITEMS ENCOUNTERED IN AREAS OF EXCAVATION THAT ARE NOT INDICATED ON THE DRAWINGS, BUT ARE VISIBLE ON SURFACE, SHALL BE THE CONTRACTOR'S RESPONSIBILITY AND SHALL BE REMOVED AT NO ADDITIONAL COST TO THE OWNER.
8. ANY ALTERATIONS TO THESE DRAWINGS MADE IN THE FIELD DURING CONSTRUCTION SHALL BE RECORDED BY THE GENERAL CONTRACTOR ON "AS-BUILT" DRAWINGS.
9. ALL AREAS DISTURBED BY THE CONTRACTOR'S OPERATIONS OUTSIDE THE PROJECT LIMITS, SHALL BE RESTORED TO THE ORIGINAL CONDITION BY THE CONTRACTOR AT NO ADDITIONAL COST AND TO THE SATISFACTION OF THE OWNER.
10. ALL KNOWN EXISTING STATE, COUNTY AND TOWN LOCATION LINES AND PRIVATE PROPERTY LINES HAVE BEEN ESTABLISHED FROM AVAILABLE INFORMATION AND ARE INDICATED ON THE PLANS.
11. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT HIS EMPLOYEES, AS WELL AS PUBLIC USERS FROM INJURY DURING THE ENTIRE CONSTRUCTION PERIOD USING ALL NECESSARY SAFEGUARDS, INCLUDING BUT NOT LIMITED TO, THE ERECTION OF TEMPORARY WALKS, STRUCTURES, PROTECTIVE BARRIERS, COVERING, OR FENCES AS NEEDED.
12. TREES AND SHRUBS WITHIN THE LIMITS OF WORK SHALL BE REMOVED ONLY UPON THE APPROVAL OF THE ENGINEER OR AS NOTED ON THE PLANS.
13. THE CONTRACTOR SHALL CALL UDIG NY AT LEAST 72 HOURS, SATURDAYS, AND HOLIDAYS EXCLUDED, PRIOR TO EXCAVATING AT ANY LOCATION.
14. NO FILLING SHALL OCCUR AROUND EXISTING TREES TO REMAIN WITHOUT THE APPROVAL OF THE OWNER OR OWNER REPRESENTATIVE.
15. ALL UNSUITABLE UNCONTAMINATED EXCESS SOIL FROM CONSTRUCTION ACTIVITIES SHALL BE DISPOSED OF THE BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. REMOVAL ACTIVITIES SHALL BE ACCORDANCE WITH STATE AND LOCAL REGULATIONS AT NO ADDITIONAL COST TO THE OWNER. SUITABLE SOIL EXCAVATION AS PART OF THE PROJECT MUST MEET ONE OR MORE OF THE MATERIAL REQUIREMENTS SPECIFIED IN 02300-EARTHWORK. ON-SITE FILL MATERIALS, WHICH DO NOT CONFORM TO SPEC 02300, SHALL NOT BE USED BELOW ANY STRUCTURES. IF THE CONTRACTOR PROPOSES TO USE THE EXISTING FILL ON SITE BELOW PAVEMENT AREAS, HE MUST DEMONSTRATE THAT THE FILL MEETS THE REQUIREMENTS PER 02300. ALL EXCAVATED FILL MATERIAL WHICH DOES NOT MEET THE REQUIREMENTS OF THE CONTRACT DOCUMENTS SHALL BE REMOVED AND DISPOSED OF OFF-SITE AT NO ADDITIONAL COST.
16. CONTRACTOR'S STAGING AREA MUST BE WITHIN THE CONTRACT LIMIT LINE AND IN AREAS APPROVED BY OWNER. ANY OTHER AREAS THAT THE CONTRACTOR MAY WISH TO USE FOR STAGING MUST BE COORDINATED WITH THE OWNER.
17. THE CONTRACTOR SHALL KEEP ALL STREETS, PARKING LOTS AND WALKS THAT ARE NOT RESTRICTED FROM PUBLIC USE DURING CONSTRUCTION BROOM CLEAN AT ALL TIMES. THE CONTRACTOR SHALL USE ACCEPTABLE METHODS AND MATERIALS TO MAINTAIN ADEQUATE DUST CONTROL THROUGHOUT CONSTRUCTION.
18. CONTRACTOR SHALL COORDINATE ALL WORK WITH THE OWNER.
19. CONTRACTOR SHALL DEWATER AS NECESSARY TO PERFORM THE PROPOSED WORK. CONTRACTOR SHALL BE AWARE OF PERCHED GROUNDWATER. THE LIMIT OF WORK SHALL BE DELINEATED IN THE FIELD PRIOR TO THE START OF SITE CLEARING OR CONSTRUCTION.
20. DEEP SUMP CATCH BASINS AND STORMWATER BASIN SHALL BE CLEANED FOLLOWING CONSTRUCTION AND SHALL FOLLOW THE OPERATION AND MAINTENANCE PLAN THEREAFTER.
21. HAULING OF EARTH MATERIALS TO AND FROM THE SITE SHALL BE RESTRICTED TO THE HOURS OF 7:00 AM TO 6:00 PM MONDAY THROUGH FRIDAY.
22. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING THE SWPPP AND SHALL INCLUDE THE COST OF ALL REQUIRED SWPPP INSPECTIONS IN THEIR BID.

PROJECT TEAM, OWNER AND UTILITIES:

OWNER GROUP:
City of North Tonawanda
City Hall - City Engineer
216 Payne Avenue
North Tonawanda, NY 14120 - 5493
Contact: Chelsea L. Spahr, P.E.
Phone: 716-695-8585
Email: cspahr@northtonawanda.org

WATER SERVICE:
City of North Tonawanda
Water Department
658 Erie Avenue
North Tonawanda, NY 14120
Phone: 716-695-8537

STORM SERVICE:
City of North Tonawanda
Department of Public Works
758 Erie Avenue
North Tonawanda, NY 14120
Phone: 716-695-8585

ELECTRIC SERVICE:
National Grid
900-2048 New Road
Niagara Falls, NY 14304
Phone: 800-443-1837

GAS SERVICE:
National Fuel
409 Main St.
Buffalo, NY 14203
Phone: 716-686-6123

SEWER SERVICE:
City of North Tonawanda
Department of Public Works
758 Erie Avenue
North Tonawanda, NY 14120
Phone: 716-695-8585

STREET LIGHTS & TRAFFIC SIGNALS:
City of North Tonawanda
Department of Public Works
758 Erie Avenue
North Tonawanda, NY 14120
Phone: 716-695-8585

CABLE:
CHARTER - TIME WARNER CABLE
355 CHICAGO ST.
BUFFALO, NY 14204
PHONE: 888-406-7063

VERIZON
6733 TRANSIT ROAD
BUFFALO, NY, 14221
PHONE: 1-888-839-3327

GREENLIGHT NETWORKS - BUFFALO
150 LAWRENCE BELL DR.
BUFFALO, NY, 14221
PHONE: 716-919-4300

GRADING, DRAINAGE AND UTILITY NOTES:

1. ALL WORK RELATING TO INSTALLATION, RENOVATION OR MODIFICATION OF WATER, DRAINAGE AND/OR SEWER SERVICES SHALL BE PERFORMED IN ACCORDANCE WITH THE STANDARDS OF THE CITY OF NORTH TONAWANDA.
2. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND GRADES ON THE GROUND AND REPORT ANY DISCREPANCIES IMMEDIATELY TO THE OWNER.
3. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AWAY FROM ALL BUILDING FOUNDATIONS AND STRUCTURES.
4. CONTRACTOR SHALL ENSURE ALL AREAS ARE PROPERLY PITCHED TO DRAIN, WITH NO SURFACE WATER PONDING OR PUDDLING.
5. ALL NEW WALKWAYS / ACCESS PATHS MUST CONFORM TO CURRENT AMERICANS WITH DISABILITIES ACT (ADA) REGULATIONS: WALKWAYS SHALL MAINTAIN A CROSS PITCH OF NOT MORE THAN ONE AND A HALF PERCENT (1.5%) AND THE RUNNING SLOPE (PARALLEL TO THE DIRECTION OF TRAVEL) BETWEEN 1% MIN. AND 5% MAX.
6. MINIMUM SLOPE ON ALL WALKWAYS WILL BE 1:100 OR 1% TO PROVIDE POSITIVE DRAINAGE. ANY DISCREPANCIES NOT ALLOWING THIS TO OCCUR SHALL BE REPORTED TO THE OWNER PRIOR TO CONTINUING WORK.
7. ALL UTILITY GRATES, COVERS OR OTHER SURFACE ELEMENTS INTENDED TO BE EXPOSED AT GRADE SHALL BE FLUSH WITH THE ADJACENT FINISHED GRADE AND ADJUSTED TO PROVIDE A SMOOTH TRANSITION AT ALL EDGES.
8. THE CONTRACTOR SHALL SET SUBGRADE ELEVATIONS TO ALLOW FOR POSITIVE DRAINAGE AND PROVIDE EROSION CONTROL DEVICES, STRUCTURES, MATERIALS AND CONSTRUCTION METHODS TO DIRECT SILT MIGRATION AWAY FROM DRAINAGE AND OTHER UTILITY SYSTEMS, PUBLIC/PRIVATE STREETS AND WORK AREAS. CLEAN BASINS REGULARLY AND AT THE END OF THE PROJECT.
9. EXCAVATION REQUIRED WITHIN PROXIMITY OF KNOWN EXISTING UTILITY LINES SHALL BE DONE BY HAND. CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING UTILITY LINES OR STRUCTURES INCURRED DURING CONSTRUCTION OPERATIONS AT NO COST TO THE OWNER.
10. WHERE NEW EARTHWORK MEETS EXISTING EARTHWORK, CONTRACTOR SHALL BLEND NEW EARTHWORK SMOOTHLY INTO EXISTING, PROVIDING VERTICAL CURVES OR ROUNDS AT ALL TOP AND BOTTOM OF SLOPES.
11. WHERE A SPECIFIC LIMIT OF WORK LINE IS NOT OBVIOUS OR IMPLIED, BLEND GRADES TO EXISTING CONDITIONS WITHIN 5 FEET OF PROPOSED CONTOURS.
12. RESTORE ALL DISTURBED AREAS AND LIMITS OF ALL REMOVALS TO LOAM AND SEED (L&S) UNLESS OTHERWISE NOTED.
13. THE CONTRACTOR SHALL REMOVE ALL SURFACE VEGETATION PRIOR TO GRADING THE SITE. STUMPS SHALL BE REMOVED BY THE CONTRACTOR. TEMPORARY EROSION CONTROL MEASURES SHOWN ON THE DRAWINGS (INCLUDING SILT FENCE, COMPOST FILTER TUBES, OR SILT SOCKS) SHALL BE INSTALLED BY THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THESE TEMPORARY EROSION CONTROL MEASURES THROUGHOUT THE PROJECT WHICH COST SHALL BE INCIDENTAL TO THE PROJECT.
14. ALL EXISTING DRAINAGE FACILITIES TO REMAIN SHALL BE MAINTAINED FREE OF DEBRIS, SOIL, SEDIMENT, AND FOREIGN MATERIAL AND OPERATIONAL THROUGHOUT THE LIFE OF THE CONTRACT. REMOVE ALL SOIL, SEDIMENT, DEBRIS AND FOREIGN MATERIAL FROM ALL DRAINAGE STRUCTURES, INCLUDING BUT NOT LIMITED TO, DRAINAGE INLETS, MANHOLES AND CATCH BASINS WITHIN THE LIMIT OF WORK AND DRAINAGE STRUCTURES OUTSIDE THE LIMIT OF WORK THAT ARE IMPACTED BY THE WORK FOR THE ENTIRE DURATION OF CONSTRUCTION.

SEWER NOTES:

1. THE CONTRACTOR IS ADVISED A TRENCH SHIELD AND/OR SHORING DESIGNED IN ACCORDANCE WITH OSHA STANDARDS SHALL BE USED IN ALL OPEN TRENCH EXCAVATIONS".
2. ANY CONTRACTOR AND/OR PLUMBER PERFORMING WORK IN A CONFINED SPACE (I.E. MANHOLES, THAT THEY HAVE THEIR OWN CONFINED SPACE ENTRY PROGRAM THAT MEETS OR EXCEEDS OSHA'S REGULATIONS. CERTIFICATION MUST BE NOTARIZED BY A NOTARY PUBLIC". WETWELLS, CHAMBERS) OWNED BY AN ERIE COUNTY SEWER DISTRICT, MUST CERTIFY TO THE COUNTY
3. CONSTRUCTION SHALL CONFORM TO THE RULES AND REGULATIONS FOR CITY OF NORTH TONAWANDA SEWER DISTRICT.
4. IF ANY PROPOSED SEWER LATERAL RUNS UNDER PAVED AREA AND HAS LESS THAN FOUR (4) FEET OF COVER, THEN CONCRETE ENCASEMENT IS REQUIRED. ATTACH DETAIL NO. 6 TO PLANS. ON SITE PLAN AND PROFILE HATCHMARK AND/OR LABEL "CONCRETE ENCASEMENT" IN AFFECTED AREAS.

   OR
5. IF ANY PROPOSED SEWER LATERAL RUNS UNDER PAVED AREA AND HAS MORE THAN FOUR (4) FEET OF COVER, THEN ON SITE PLAN AND PROFILE HATCHMARK AND LABEL, "SELECT FILL REQUIRED" IN AFFECTED AREAS.
6. THE CONTRACTOR MUST CONTACT THE DISTRICT OFFICE 48 HOURS IN ADVANCE OF CONSTRUCTION.
7. VENTS MUST BE INSTALLED SIX (6) INCHES ABOVE GRADE, IN A GRASSY AREA WITH A MUSHROOM CAP. IF THE VENT IS IN A SIDEWALK OR PAVED AREA, THEN PROTECT WITH BOLLARDS (3 MINIMUM).
8. CLEANOUTS (C.O) ARE REQUIRED EVERY ONE HUNDRED FEET (100') AND AT CHANGE OF DIRECTION. ABANDONED SANITARY SEWER CONNECTIONS FROM THE SITE, IF ANY, REQUIRE PROOF OF A DISTRICT PERMIT FOR DISCONNECTION PRIOR TO THE NEW CONNECTION BEING MADE.
9. REUSE OF EXISTING BUILDING SEWERS SHALL CONFORM TO THE RULES AND REGULATIONS FOR ECSD, ARTICLE III, SECTION 304.

IT IS A VIOLATION OF NEW YORK EDUCATION LAW ART. 145 sec. 7209 & art. 146 sec. 7307, for any person, unless acting under the direction of a licensed architect, professional engineer, or land surveyor, to alter an item in any way. If an item bearing the seal of an architect, engineer, or land surveyor is altered; the altering architect, engineer, or land surveyor shall affix to the item theri seal and notation "altered by" followed by their signature and date of such alteration, and a specific description of the alteratino.

SEQUENCE OF OPERATIONS

1. NOTIFY SEDIMENT CONTROL INSPECTOR AT LEAST 24 HOURS PRIOR TO START OF CONSTRUCTION.
2. SURVEY AND STAKEOUT FOR CLEARING, STRIPPING AND EROSION CONTROL ACTIVITIES.
3. INSTALL EROSION AND SEDIMENT CONTROLS.
4. PERFORM THE NECESSARY WORK TO ENSURE PROPER SURFACE DRAINAGE WHILE MAINTAINING EROSION AND SEDIMENT CONTROL AS DEFINED BY CITY SPECIFICATIONS AND DESIGN DRAWINGS.
5. WHEN ACTIVITIES TEMPORARILY CEASE DURING CONSTRUCTION, SOIL STOCKPILES AND EXPOSED SOIL SHOULD BE STABILIZED BY SEED AND MULCH OR OTHER APPROPRIATE MEASURES AS SOON AS POSSIBLE, BUT IN NO CASE MORE THAN 14 DAYS AFTER CONSTRUCTION ACTIVITY HAS CEASED.
6. NOTIFY SEDIMENT CONTROL INSPECTOR AND OBTAIN APPROVAL BEFORE PROCEEDING FURTHER.
7. SITE PREPARATION AND CONSTRUCTION SHALL NOT ADVERSELY AFFECT THE FREE FLOW OF STORM RUNOFF OR WATER COURSES.
8. UPON COMPLETION OF CONSTRUCTION, RESTORATION SHALL COMMENCE.
9. EROSION AND SEDIMENT CONTROLS ARE TO BE REMOVED AS THEIR USEFULNESS DIMINISH. AT ALL INSTANCES, NOTIFY THE SEDIMENT CONTROL INSPECTOR AND OBTAIN WRITTEN APPROVAL BEFORE REMOVAL OF ANY EROSION AND SEDIMENT CONTROL DEVICE OR MECHANISM.

SEDIMENT AND EROSION CONTROL NOTES:

1. ALL EROSION/SEDIMENT CONTROL MEASURES SHALL COMPLY WITH ALL REQUIREMENTS OF STATE AND CITY OF NORTH TONAWANDA SOIL EROSION CONTROL AND CONSERVATION AUTHORITIES.
2. ALL DISTURBED AREAS TO BE SEEDED WITHIN 14 DAYS OF INITIAL GRADING.
3. ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO THE INITIATION OF GRADING, AND/OR EXCAVATION.
4. ALL EARTH BERMS AND SEDIMENT DAMS ARE TO BE MULCHED AND SEEDED WITHIN 7 DAYS AFTER GRADING. ALL SOIL STOCKPILES ARE TO BE MULCHED AND SEEDED WITHIN 14 DAYS.
5. DURING CONSTRUCTION, ALL SEDIMENT CONTROL STRUCTURES WILL BE INSPECTED AFTER EACH RAINFALL AND REPAIRED IF NECESSARY. SEDIMENT TO BE REMOVED TO A SUITABLE DISPOSAL AREA AND STABILIZED WITH PERMANENT VEGETATIVE COVER.
6. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL SEDIMENT AND CONTROL MEASURES UNTIL DISTURBED AREAS ARE STABILIZED.
7. AFTER FINE GRADING, ALL DISTURBED AREAS ARE TO BE PERMANENTLY MULCHED AND SEEDED.
8. NO SLOPE SHALL BE GREATER THAN 1:2.
9. TOPSOIL MAY NOT BE REMOVED FROM THE WORK SITE WITHOUT A PERMIT FROM THE CITY OF NORTH TONAWANDA.
10. FOLLOWING INITIAL SOIL DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN SEVEN CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER CONTROLS, DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES GREATER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1); AND FOURTEEN DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE. THIS DOES NOT APPLY TO THOSE AREAS WHICH ARE CURRENTLY BEING USED FOR MATERIAL STORAGE OR FOR THOSE AREAS ON WHICH ACTUAL CONSTRUCTION ACTIVITIES ARE CURRENTLY BEING PERFORMED. MAINTENANCE SHALL BE PERFORMED AS NECESSARY TO ENSURE THAT STABILIZED AREAS CONTINUOUSLY MEET THE APPROPRIATE REQUIREMENTS OF GOVERNING AUTHORITIES.
11. STUMPS AND BRUSH MAY NOT BE BURIED IN THE CITY OF NORTH TONAWANDA.
12. ALL CITY OF NORTH TONAWANDA CONSTRUCTION SPECIFICATIONS SHALL APPLY. NO DEVIATIONS FROM THE SPECIFICATIONS WILL BE ALLOWED WITHOUT THE WRITTEN APPROVAL OF THE TOWN ENGINEER.
13. TEMPORARY SEEDING MIXTURE: ANNUAL RYE GRASS OR WINTER RYE IF PLANTED DURING OCTOBER/NOVEMBER. FOR PERMANENT SEEDING REFER TO TABLE IN MANUAL ENTITLED "NEW YORK GUIDELINES FOR URBAN EROSION AND SEDIMENT CONTROL".

SEED MIXTURE NOTES:

1. THE PROPOSED ADJACENT PLANTING AREA WILL BE SEEDED WITH AN APPROPRIATE CONSERVATION SEED MIXTURE. THE SEED MIXTURE PROVIDES A PERMANENT MIXED COVER OF GRASSES, FORBS AND LEGUMES WITH AN INITIAL COVER OF ANNUALS. THE MIX IS DESIGNED TO PROVIDE COVER, SEED AND FORAGE FOR A VARIETY OF HERBIVORES. THE SEED MIXTURE WILL CONTAIN THE FOLLOWING AND BE SEEDED AT A RATE 25 POUNDS PER ACRE.

SEED MIXTURE - PERCENT SEED & SEED SPECIES	
29.4% RED CLOVER	11.98% TIMOTHY
24.4% CREEPING RED FESCUE	9.0% KENTUCKY BLUE GRASS
19.8% PERENNIAL RYE	2.9% WHITE CLOVER

EXISTING LEGEND:

EXIST. STORM SEWER MANHOLE
EXIST. MAJOR CONTOUR
EXIST. MINOR CONTOUR
EXIST. YARD DRAIN
EXIST. TREE
EXIST. UTILITY POLE W/GUY POST
EXIST. VERIZON CABLE MARKER
EXIST. HYDRANT
EXIST. WATER SERVICE BOX
EXIST. GAS METER
EXIST. STORM SEWER LINE
EXIST. FENCE
EXIST. WATERLINE
EXIST. SANITARY SEWER
EXIST. OVERHEAD WIRE
EXIST. UNDERGROUND ELECTRICAL
EXIST. GAS LINE
EXIST. CENTERLINE OF SWALE
EXIST. TOP OF BANK
EXIST. TREELINE
EXIST. STORM STRUCTURE (D.I.)
EXIST. CLEANOUT
EXIST. LIGHT
EXIST. ELECTRIC METER
EXIST. COMMUNICATION MANHOLE
EXIST. SANITARY MANHOLE
EXIST. SIGN
EXIST. METER BOX
EXIST. WATER VALVE
EXIST. WETLAND MARKER
EXIST. WETLAND BUFFER LINE
EXIST. WETLAND AREA
EXIST. ASPHALT DRIVE
EXIST. CONCRETE

PROPOSED LEGEND:

PROP. MAJOR CONTOUR
PROP. MINOR CONTOUR
PROP. ASPHALT PAVEMENT
PROP. HEAVY DUTY ASPHALT PAVEMENT
PROP. LANDSCAPE BED
PROP. CONCRETE
PROP. STORM SEWER
PROP. WATERLINE
PROP. SANITARY SEWER
PROP. CATCH BASIN
PROP. END SECTION
PROP. CLEANOUT
PROP. SANITARY MANHOLE
PROP. STORM MANHOLE
PROP. RIDGE LINE
PROP. UNDERGROUND ELECTRICAL
PROP. GAS LINE
PROP. RAIN DRAIN
PROP. PARKING LOT LIGHT POLES

CITY PROJECT NO. 23065

NUSSBAUMER & CLARKE, INC.
ENGINEERS AND SURVEYORS
EST. 1933
3556 Lake Shore Road, Suite 500 | Buffalo, NY 14219
(716) 827-8000 | (716) 826-7958 fax
www.nussclarke.com

CITY OF NORTH TONAWANDA

PAYNE PARK AQUATIC FACILITY
830 PAYNE AVENUE, NORTH TONAWANDA, NY

GENERAL NOTES AND LEGEND

REVISIONS

No.	DESCRIPTION	DATE
0	ISSUED FOR PERMIT	08/09/24
1	ISSUED FOR REVIEW	11/14/24
2	FINAL OWNER REVIEW	05/23/25
3	ISSUED FOR BID	12/16/25

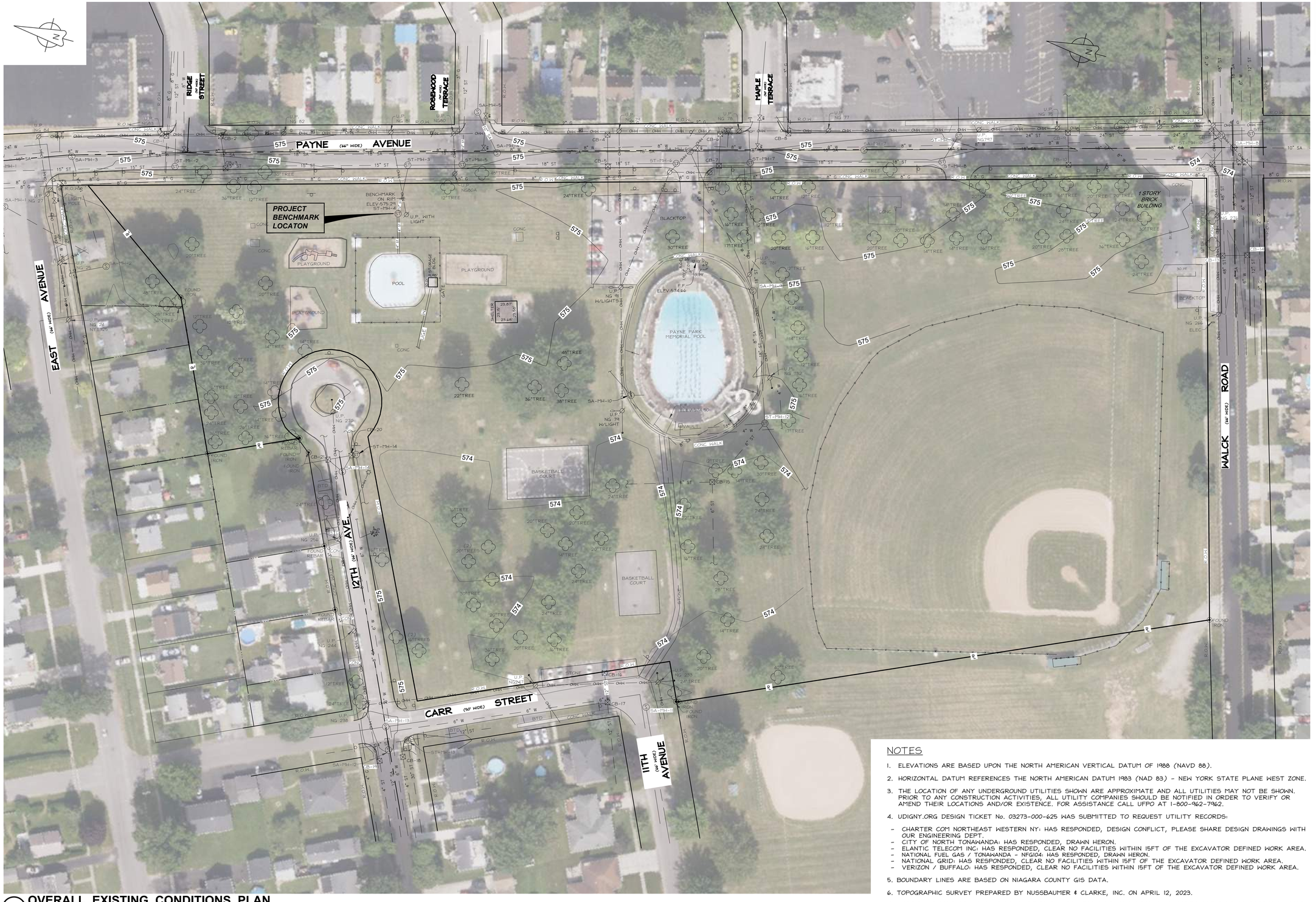
NUSSBAUMER & CLARKE, INC.
A CORPORATION REGISTERED TO PRACTICE PROFESSIONAL ENGINEERING & LAND SURVEYING IN THE STATE OF NEW YORK
CERTIFICATE NO. 027

UNAUTHORIZED ALTERATION OR ADDITION TO THIS ENGINEERING DRAWING IS A VIOLATION OF SECTION 7209. PROVISION 2 OF THE NEW YORK STATE EDUCATION LAW.

PROJECT NUMBER	23J2-0040
DATE	06-25-24
DRAWN BY	TJB
DESIGNED BY	TJB
CHECKED BY	RJP
APPROVED BY	MTM
SCALE:	AS NOTED
	= 1 INCH
SHEET No.	2 OF 14

G-101

i:\2023\0040 nt payne park aquatic facility design\08b working dwgs\Discipline\G-General\G-101 GENERAL NOTES AND LEGEND.dwg 12/15/2025 VSARCIONE



NOTES

1. ELEVATIONS ARE BASED UPON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
2. HORIZONTAL DATUM REFERENCES THE NORTH AMERICAN DATUM 1983 (NAD 83) - NEW YORK STATE PLANE WEST ZONE.
3. THE LOCATION OF ANY UNDERGROUND UTILITIES SHOWN ARE APPROXIMATE AND ALL UTILITIES MAY NOT BE SHOWN. PRIOR TO ANY CONSTRUCTION ACTIVITIES, ALL UTILITY COMPANIES SHOULD BE NOTIFIED IN ORDER TO VERIFY OR AMEND THEIR LOCATIONS AND/OR EXISTENCE. FOR ASSISTANCE CALL UFPO AT 1-800-962-7962.
4. UDIGNY.ORG DESIGN TICKET No. 03273-000-625 WAS SUBMITTED TO REQUEST UTILITY RECORDS:
   - CHARTER COM NORTHEAST WESTERN NY: HAS RESPONDED, DESIGN CONFLICT, PLEASE SHARE DESIGN DRAWINGS WITH OUR ENGINEERING DEPT.
   - CITY OF NORTH TONAWANDA: HAS RESPONDED, DRAWN HERON.
   - ELANTIC TELECOM INC: HAS RESPONDED, CLEAR NO FACILITIES WITHIN 15FT OF THE EXCAVATOR DEFINED WORK AREA.
   - NATIONAL FUEL GAS / TONAWANDA - NFGI04: HAS RESPONDED, DRAWN HERON.
   - NATIONAL GRID: HAS RESPONDED, CLEAR NO FACILITIES WITHIN 15FT OF THE EXCAVATOR DEFINED WORK AREA.
   - VERIZON / BUFFALO: HAS RESPONDED, CLEAR NO FACILITIES WITHIN 15FT OF THE EXCAVATOR DEFINED WORK AREA.
5. BOUNDARY LINES ARE BASED ON NIAGARA COUNTY GIS DATA.
6. TOPOGRAPHIC SURVEY PREPARED BY NUSSBAUMER & CLARKE, INC. ON APRIL 12, 2023.
7. VERTICAL BENCHMARK ELEVATION: EXISTING RIM OF STORM SEWER MANHOLE AT NORTHEAST SIDE OF PROPERTY NEAR PAYNE AVENUE AND NOTED ON PLAN.

CITY PROJECT NO. 23065

A1 OVERALL EXISTING CONDITIONS PLAN
SCALE: 1" = 50'-0"

NUSSBAUMER & CLARKE, INC.
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EST. 1933
3556 Lake Shore Road, Suite 500 | Buffalo, NY 14219
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CITY OF NORTH TONAWANDA

PAYNE PARK AQUATIC FACILITY
830 PAYNE AVENUE, NORTH TONAWANDA, NY

OVERALL EXISTING CONDITIONS PLAN

REVISIONS

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1	ISSUED FOR REVIEW	11/14/24
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NUSSBAUMER & CLARKE, INC.
A CORPORATION REGISTERED TO PRACTICE PROFESSIONAL ENGINEERING & LAND SURVEYING IN THE STATE OF NEW YORK
CERTIFICATE NO. 027

NUSSBAUMER AND CLARKE, INC. INCORPORATED SEAL 1933 BUFFALO, N.Y.

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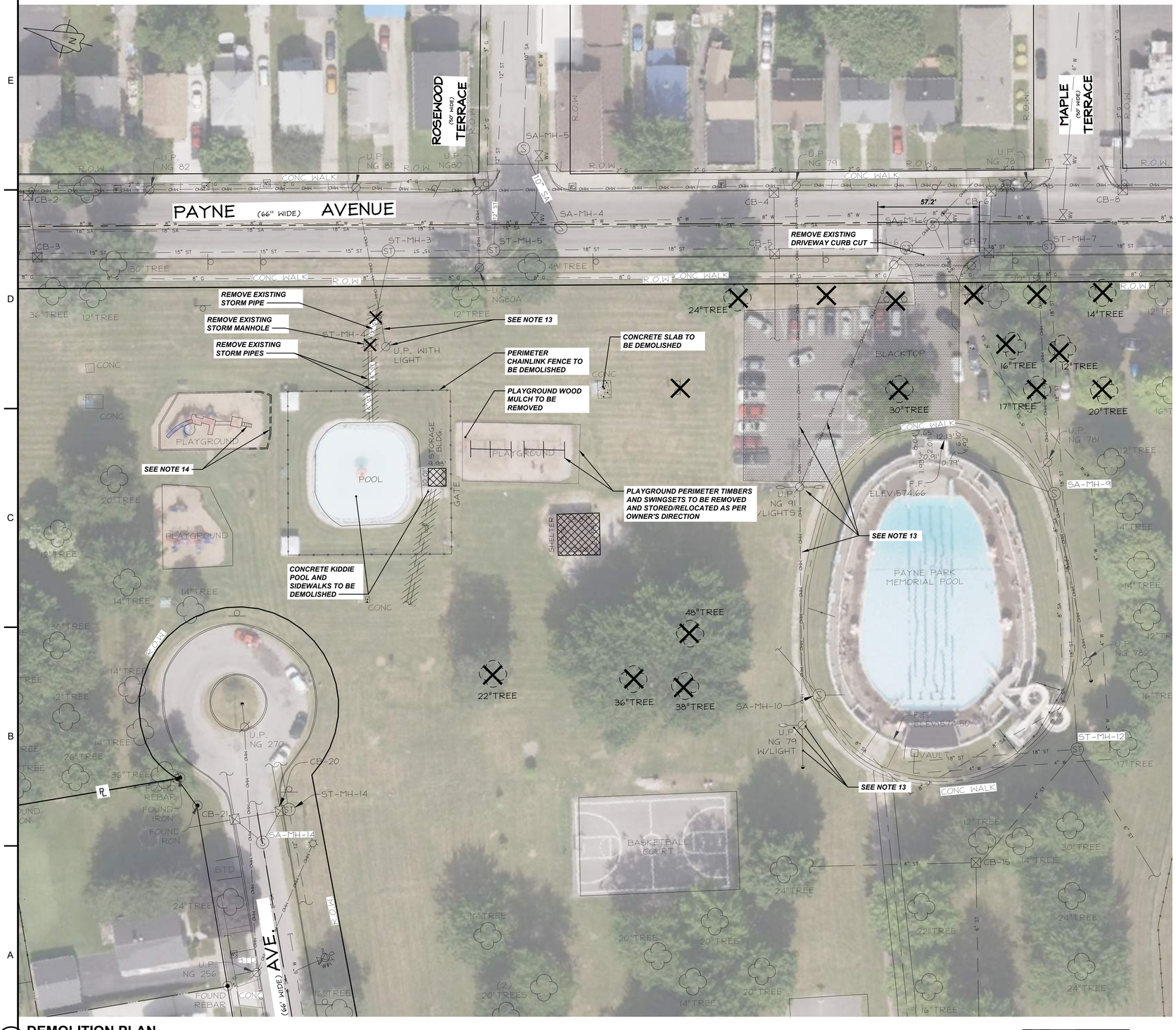
SHEET No.	3 OF 14

C-101

R:\2023\0040 nt payne park aquatic facility design\08x working dwgs\Disciplines\C-Civil\C-101 Existing Conditions plan.dwg 12/15/2025 VSARCIONE



DEMOLITION NOTES:

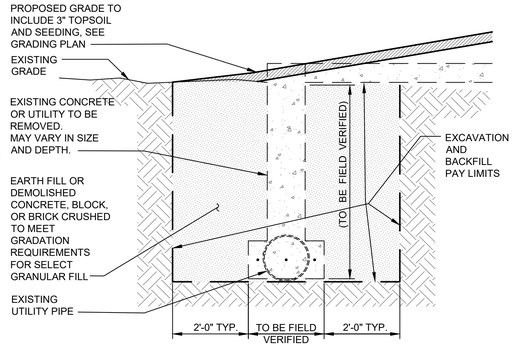
1. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO PREPARING A BID PROPOSAL IN ORDER TO VERIFY THE LOCATIONS OF EXISTING UTILITIES, THE GRADING OF THE SITE, THE ITEMS TO BE REMOVED WITHIN THE EXISTING BUILDINGS, THE EXISTING WATER, SEWER, GAS, AND ELECTRICAL SERVICES TO BE DISCONNECTED, AND TO BECOME FAMILIAR WITH EXISTING CONDITIONS.
2. THE CONTRACTOR SHALL PERFORM ALL WORK WITH CARE SO THAT ANY PLANTS AND MATERIALS WHICH ARE TO REMAIN IN PLACE OR ARE TO REMAIN THE PROPERTY OF THE OWNER WILL NOT BE DAMAGED. THE CONTRACTOR SHALL REPAIR OR REPLACE ANY DAMAGED PLANTS OR MATERIALS IN A MANNER SATISFACTORY TO THE OWNER, AT THE EXPENSE OF THE CONTRACTOR.
3. AREAS DISTURBED OUTSIDE OF THE WORK LIMITS ARE TO BE RESTORED, AS REQUIRED, TO THE SATISFACTION OF THE OWNER, AT THE EXPENSE OF THE CONTRACTOR.
4. EXISTING NATURAL GAS SERVICE LINE TO BE CAPPED AND ABANDONED PER NATIONAL FUEL STANDARDS AND POLICIES.
5. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO SECURE A DISPOSAL SITE. ALL COSTS ASSOCIATED WITH DISPOSAL INCLUDING PERMITTING, TRANSPORTATION TO SITE ETC., SHALL BE INCLUDED IN THE BASE BID AMOUNT.
6. ALL WORK ON THIS PROJECT IS TO BE CONDUCTED WITHIN THE PROPERTY BOUNDARY. ANY DAMAGE CREATED BY THE CONTRACTOR OR THE CONTRACTOR'S REPRESENTATIVE OUTSIDE THE PROPERTY BOUNDARY SHALL BE REPAIRED TO THE OWNER'S SATISFACTION AT NO ADDITIONAL EXPENSE TO THE OWNER.
7. ALL COSTS ASSOCIATED WITH DISCONNECTION OF GAS, ELECTRICAL, WATER AND SEWER SERVICES TO THE EXISTING BUILDING SHALL BE PAID FOR BY THE CONTRACTOR AND INCLUDED IN THE BASE BID.
8. ALL ELECTRICAL WORK TO BE PERFORMED BY A LICENSED ELECTRICAL CONTRACTOR.
9. EXISTING WATER SERVICE (¾"Ø OR 1"Ø) TO BE CRIMPED AND ABANDONED IN PLACE (IF APPLICABLE) PER CITY OF NORTH TONAWANDA REQUIREMENTS.
10. EXISTING SANITARY SEWER LOCATION WHICH SERVICES EXISTING BUILDINGS TO BE FIELD LOCATED AND ABANDONED PER CITY OF NORTH TONAWANDA SEWER DISTRICT STANDARDS.
11. THE CONTRACTOR SHALL SECURE ALL WORK AREAS DURING NON-WORK HOURS.
12. TREE REMOVAL SHALL BE PERFORMED BY A LICENSED CONTRACTOR.
13. EXISTING UTILITY POLE, LIGHT FIXTURE AND OVERHEAD POWER LINE TO BE DEMOLISHED. CONTRACTOR TO COORDINATE REMOVAL/DISCONNECT WITH NATIONAL GRID POWER CORPORATION.
14. EXISTING PLAYGROUND AREA BORDER TO BE REMOVED AND RELOCATED/REWORKED AS SHOWN ON DWG. C-103, SITE PLAN. EXISTING STEEL LADDER TO BE RELOCATED TO AN ADAJCENT SIDE OF THE TOWER AS BASE WILL NOT BE AT A SAFE DISTANCE FROM EDGE OF RELOCATED BORDER.

GENERAL NOTES:

1. ALL UTILITIES TO BE FIELD VERIFIED PRIOR TO THE START OF CONSTRUCTION.
2. SURVEY PREPARED BY NUSSBAUMER & CLARKE, INC. MARCH 23, 2023.
3. ALL SANITARY SEWER EASEMENTS BELONG TO CITY OF NORTH TONAWANDA SEWER DISTRICT.

DEMOLITION LEGEND

- PIPE — EXISTING UNDERGROUND UTILITY TO BE REMOVED
- EXISTING PAVEMENTS TO BE DEMOLISHED
- EXISTING BUILDING TO BE DEMOLISHED
- EXISTING CONCRETE TO BE DEMOLISHED
- TREES TO BE REMOVED
- SIGNS TO BE REMOVED



A5 EXCAVATION AND BACKFILL DETAIL
SCALE: NTS

A1 DEMOLITION PLAN
SCALE: 1" = 30'-0"

0 15 30 60 ft

CITY PROJECT NO. 23065

NUSSBAUMER & CLARKE, INC.
ENGINEERS AND SURVEYORS
EST. 1933
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www.nussclarke.com

CITY OF NORTH TONAWANDA

PAYNE PARK AQUATIC FACILITY
830 PAYNE AVENUE, NORTH TONAWANDA, NY
DEMOLITION PLAN

REVISIONS		
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NUSSBAUMER & CLARKE, INC.
A CORPORATION REGISTERED TO PRACTICE PROFESSIONAL ENGINEERING & LAND SURVEYING IN THE STATE OF NEW YORK
CERTIFICATE NO. 027
NUSSBAUMER AND CLARKE, INCORPORATED SEAL 1933 BUFFALO, N.Y.
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DRAWN BY	TJB
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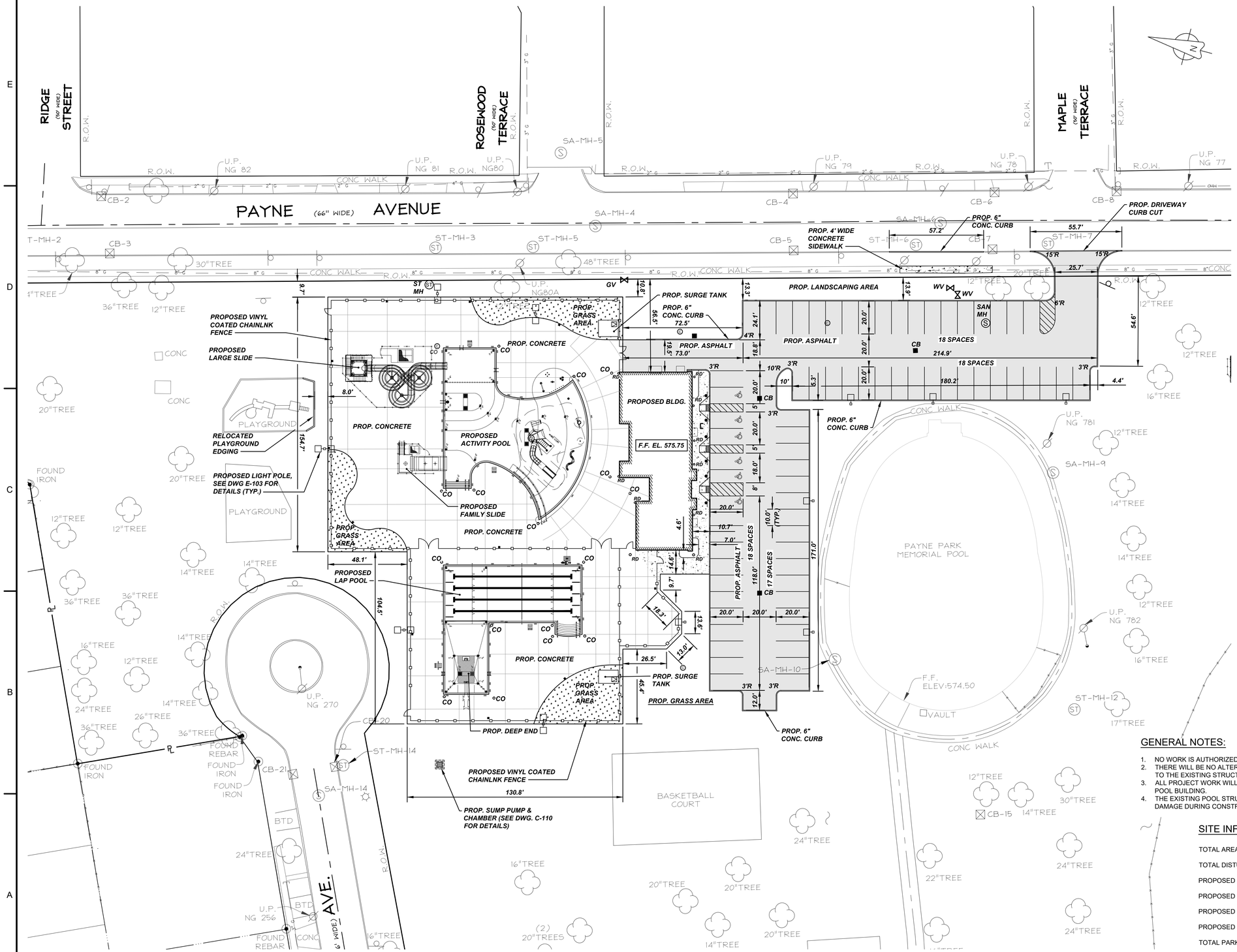
SCALE:	AS NOTED
	= 1 INCH
SHEET No.	4 OF 14

C-102

I:\2023\0040 nt payne park aquatic facility design\08b working dwgs\Discipline\C-Civil\C-102 Demolition plan.dwg 12/15/2025 VSARCIONE



1 SITE PLAN

SCALE: 1" = 30'-0"

GENERAL NOTES:

1. NO WORK IS AUTHORIZED ON OR WITHIN THE EXISTING POOL BUILDING.
2. THERE WILL BE NO ALTERATIONS, DEMOLITION, UTILITY TIE-INS, OR MODIFICATIONS TO THE EXISTING STRUCTURE.
3. ALL PROJECT WORK WILL OCCUR OUTSIDE OF THE FOOTPRINT OF THE EXISTING POOL BUILDING.
4. THE EXISTING POOL STRUCTURE IS TO BE FULLY PROTECTED FROM POTENTIAL DAMAGE DURING CONSTRUCTION ACTIVITY.

SITE INFO:

TOTAL AREA:	12.12±ACRES
TOTAL DISTURBED AREA:	2.35± ACRES
PROPOSED ASPHALT (PARKING)	20,314± SF (0.47± ACRES)
PROPOSED CONCRETE (POOL DECK):	18,634± S.F.
PROPOSED SIDEWALK	1,246± S.F.
PROPOSED BUILDING	4,100± S.F.
TOTAL PARKING STALLS:	71 (INCLUDES 6 HC STALLS)
CURRENT ZONING:	PARK

CITY PROJECT NO. 23065

NUSSBAUMER & CLARKE, INC.
ENGINEERS AND SURVEYORS
EST. 1933
3556 Lake Shore Road, Suite 500 | Buffalo, NY 14219
(716) 827-8000 | (716) 826-7958 fax
www.nussclarke.com

CITY OF NORTH TONAWANDA, N.Y.

PAYNE PARK AQUATIC FACILITY

830 PAYNE AVENUE, NORTH TONAWANDA, NY

SITE PLAN

REVISIONS

No.	DESCRIPTION	DATE
0	ISSUED FOR PERMIT	08/09/24
1	ISSUED FOR REVIEW	11/14/24
2	FINAL OWNER REVIEW	05/23/25
3	ISSUED FOR BID	12/16/25

NUSSBAUMER & CLARKE, INC.
A CORPORATION REGISTERED TO PRACTICE PROFESSIONAL ENGINEERING & LAND SURVEYING IN THE STATE OF NEW YORK
CERTIFICATE NO. 027

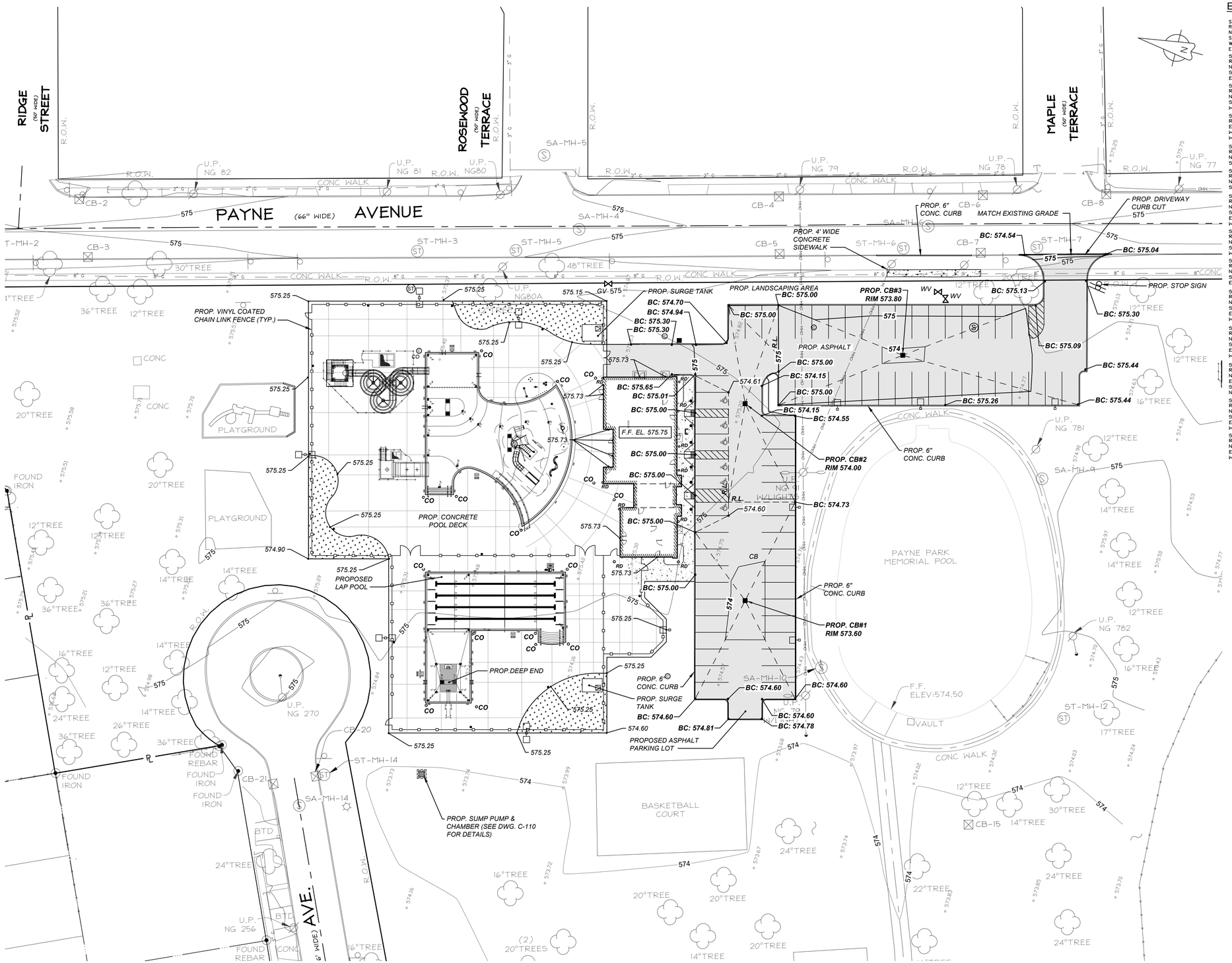
NUSSBAUMER AND CLARKE, INC. INCORPORATED SEAL 1933 BUFFALO, N.Y.

UNAUTHORIZED ALTERATION OR ADDITION TO THIS ENGINEERING DRAWING IS A VIOLATION OF SECTION 7209, PROVISION 2 OF THE NEW YORK STATE EDUCATION LAW.

PROJECT NUMBER	23J2-0040
DATE	06-25-24
DRAWN BY	TJB
DESIGNED BY	--
CHECKED BY	--
APPROVED BY	MTM
SCALE:	AS NOTED
	= 1 INCH
SHEET No.	5 OF 14

C-103

I:\2023\0040 nt payne park aquatic facility design\08b working dwgs\Discipline\C-Civil\C-103 Site plan.dwg 12/15/2025 VSARCIONE



EXIST. STRUCTURE INVERTS/RIMS LIST

ST-MH-1
RIM: 575.31
N 12"INV=570.31
S 15"INV=570.31
W 12"INV=570.26
E 12"INV=570.41

ST-MH-2
RIM:574.55
N 15"INV=570.00
S 15"INV=570.00
E 12"INV=570.05

ST-MH-3
RIM:575.33
N 18"INV=569.67
S 18"INV=569.67
W 8"INV=569.93

ST-MH-4
RIM:575.29
E 12"INV=570.74
W 6"INV=570.79

ST-MH-5
RIM:575.14
N 18"INV=569.39
S 18"INV=569.39

ST-MH-6
RIM:574.50
N 18"INV=568.92
S 18"INV=568.92

ST-MH-7
RIM:574.62
N 18"INV=568.84
S 18"INV=568.84
E 12"INV=569.12
W 18"INV=569.02

ST-MH-8
RIM:574.94
N 18"INV=568.54
SE 18"INV=568.54
W 12"INV=569.01

ST-MH-9
RIM:574.93
NW 18"INV=570.46
S 18"INV=568.75
E 15"INV=571.03

ST-MH-10
RIM:574.16
N 24"INV=566.53
S 24"INV=562.71
E 48"INV=563.18
W 48"INV=563.06

ST-MH-11
RIM:574.36
N 24"INV=568.68
S 30"INV=568.68
E 12"INV=568.68
W 12"INV=568.63

ST-MH-12
RIM:574.47
N 18"INV=569.47
S 18"INV=569.42
SW 6"INV=571.12
NW 6"INV=570.32

ST-MH-13
RIM:575.01
N 24"INV=569.01
S 12"INV=569.33
E 12"INV=569.39
W 30"INV=569.01

ST-MH-14
RIM:574.55
N 12"INV=570.92
E 12"INV=570.73
W 12"INV=570.70

SA-MH-1
RIM:575.29
N 30"INV=562.05
S 30"INV=562.05

SA-MH-2
RIM:576.70
N 18"INV=570.80

SA-MH-3
RIM:575.35
S 18"INV=551.75
W 18"INV=551.75

SA-MH-4
RIM:575.21
N 18"INV=554.41
S 18"INV=554.41
E 10"INV=555.87

SA-MH-5
RIM:575.11
E 10"INV=557.21
W 10"INV=557.21

SA-MH-6
RIM:574.79
N 6"INV=554.79
S 18"INV=554.79

SA-MH-7
RIM:575.24
N 18"INV=555.14
S 18"INV=555.14

SA-MH-8
RIM:574.50
N 18"INV=554.50
S 18"INV=554.50

SA-MH-9
RIM:574.69
N 6"INV=570.84
E 8"INV=567.69
W 8"INV=567.69
FLOWS EAST

SA-MH-10
RIM:575.02
NE 8"INV=569.09
SW 8"INV=568.92
S 6"INV=571.00

SA-MH-11
RIM:574.42
N 10"INV=569.92

SA-MH-12
RIM:575.13
E 12"INV=570.18
W 12"INV=570.03

SA-MH-13
RIM:575.25
N 8"INV=568.93
S 8"INV=568.75
E 8"INV=568.93

SA-MH-14
RIM:575.00
E 8"INV=569.82
W 8"INV=569.85
NE 8"INV=570.45
(SEALED AT CB-21)
SE 8"INV=570.28
(SEALED AT CB-20)

CB-1
RIM:574.36
SUMP=570.76
NO PIPES VISIBLE

CB-2
RIM:574.56
N INV=572.46
W 8"INV=570.66

CB-3
RIM:574.46
E 8"INV=570.21

CB-4
RIM:574.26
W 8"INV=570.71

CB-5
RIM:574.26
E 8"INV=569.88
W 18"INV=569.58

CB-6
RIM:574.24
W 8"INV=570.69
N 8"INV=572.34
S 8"INV=572.34

CB-7
RIM:574.13
E 8"INV=569.81
N 6"INV=572.43
S 6"INV=572.43

CB-8
RIM:574.52
NE INV=572.92
S INV=572.92
SUMP=569.67

CB-9
RIM:574.49
E 6"INV=570.59
W 8"INV=570.14

CB-10
RIM:574.38
E 8"INV=571.03

CB-11
RIM:574.22
N 6"INV=571.07
S 6"INV=570.97
SW 12"INV=570.67

CB-12
RIM:573.95
N 6"INV=571.91
S 6"INV=571.75
SE 12"INV=571.40

CB-13
RIM:573.66
SUMP=562.24
NO PIPES VISIBLE

CB-14
RIM:573.60
N 12"INV=570.14
E 6"INV=570.43
W 6"INV=570.30

CB-15
RIM:573.72
N 6"INV=570.37
SE 6"INV=570.10
W 6"INV=570.94

CB-16
RIM:573.00
W 12"INV=571.00

CB-17
RIM:574.32
E 12"INV=570.77
W 12"INV=570.57

CB-18
RIM:574.43
E 4"INV=572.88
W 4"INV=572.88
SUMP=568.93
FILLED WITH DEBRIS

CB-19
RIM:574.39
E INV=573.04
W 4"INV=573.04
SUMP=569.49
FILLED WITH DEBRIS

CB-20
RIM:574.46
N 12"INV=570.54
S 12"INV=570.86
E 6"INV=572.66
W 6"INV=572.66

CB-21
RIM:574.49
N 6"INV=571.77
S 12"INV=571.07
E 6"INV=572.69
W 6"INV=572.74

1 **SITE PLAN**
SCALE: 1" = 30'-0"

CITY PROJECT NO. 23065

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ENGINEERS AND SURVEYORS
EST. 1933
3556 Lake Shore Road, Suite 500 | Buffalo, NY 14219
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CITY OF NORTH TONAWANDA, N.Y.

PAYNE PARK AQUATIC FACILITY
830 PAYNE AVENUE, NORTH TONAWANDA, NY

GRADING AND PAVING PLAN

REVISIONS

No.	DESCRIPTION	DATE
0	ISSUED FOR PERMIT	08/09/24
1	ISSUED FOR REVIEW	11/14/24
2	FINAL OWNER REVIEW	05/23/25
3	ISSUED FOR BID	12/16/25

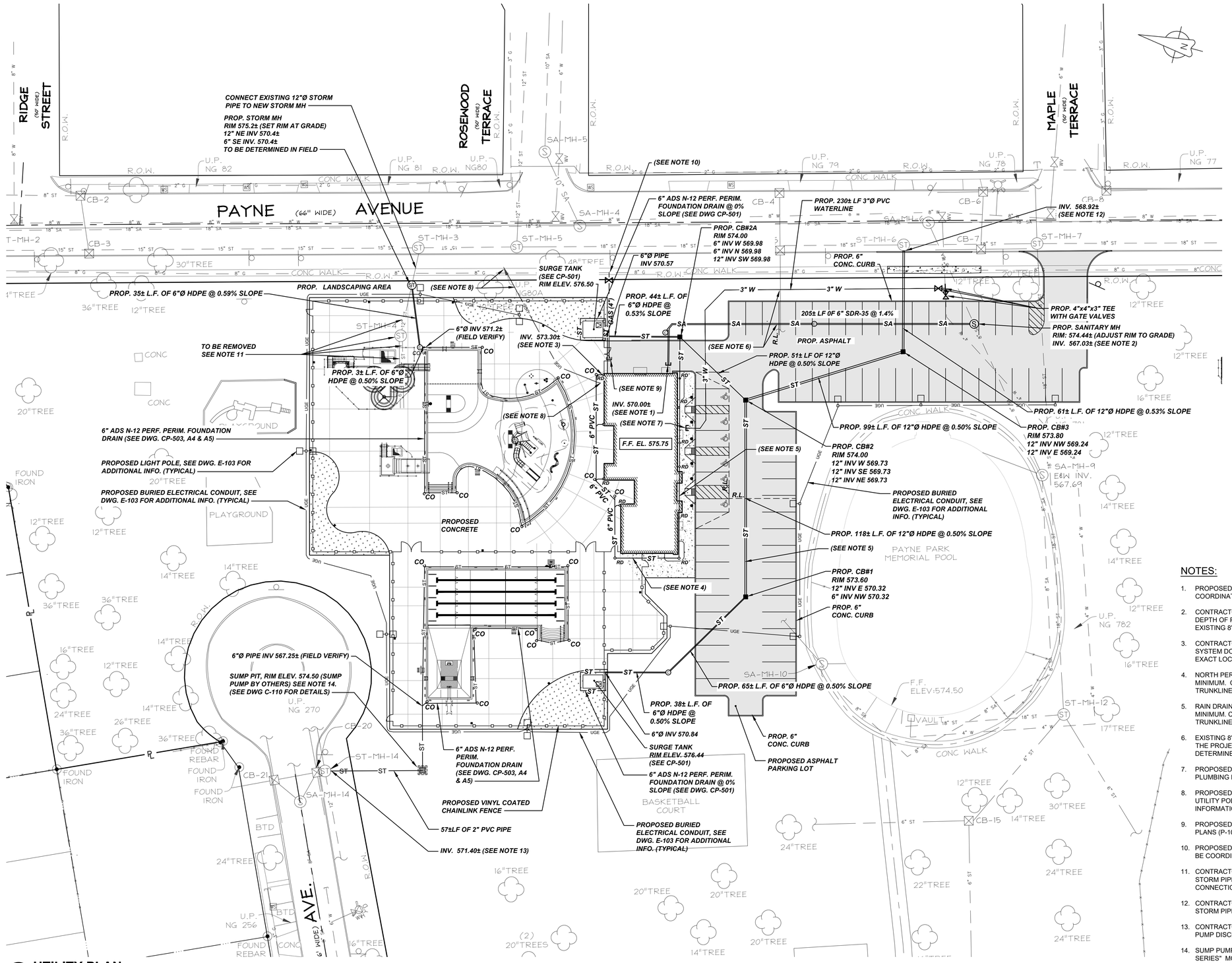
NUSSBAUMER & CLARKE, INC.
A CORPORATION REGISTERED TO PRACTICE PROFESSIONAL ENGINEERING & LAND SURVEYING IN THE STATE OF NEW YORK
CERTIFICATE NO. 027

UNAUTHORIZED ALTERATION OR ADDITION TO THIS ENGINEERING DRAWING IS A VIOLATION OF SECTION 7209. PROVISION 2 OF THE NEW YORK STATE EDUCATION LAW.

PROJECT NUMBER	23J2-0040
DATE	06-25-24
DRAWN BY	TJB
DESIGNED BY	TJB
CHECKED BY	RJP
APPROVED BY	MTM
SCALE:	AS NOTED
	= 1 INCH
SHEET No.	6 OF 14

C-104

I:\2023\0040 nt payne park aquatic facility design\08b working dwgs\Discipline\C-Civil\C-104 Grading and Paving Plan.dwg 12/15/2025 VSARCIONE



EXIST. STRUCTURE INVERTS/RIMS LIST

ST-MH-1
RIM: 575.31
N 12"INV=570.31
S 15"INV=570.31
W 12"INV=570.26
E 12"INV=570.41

ST-MH-2
RIM:574.55
N 15"INV=570.00
S 15"INV=570.00
E 12"INV=570.05

ST-MH-3
RIM:575.33
N 18"INV=569.67
S 18"INV=569.67
W 8"INV=569.93

ST-MH-4
RIM:575.29
E 12"INV=570.74
W 6"INV=570.59
W 6"INV=570.79

ST-MH-5
RIM:575.14
N 18"INV=569.39
S 18"INV=569.39

ST-MH-6
RIM:574.60
N 18"INV=568.92
S 18"INV=568.92

ST-MH-7
RIM:574.62
N 18"INV=568.84
S 18"INV=568.84
E 12"INV=569.12
W 18"INV=569.02

ST-MH-8
RIM:574.14
N 18"INV=568.54
SE 18"INV=568.54
W 12"INV=569.01

ST-MH-9
RIM:574.95
NW 18"INV=570.46
S 18"INV=568.75
E 15"INV=571.03

ST-MH-10
RIM:574.16
N 24"INV=566.53
S 24"INV=562.71
E 48"INV=563.18
W 48"INV=563.06

ST-MH-11
RIM:574.38
N 24"INV=568.68
S 30"INV=568.68
E 12"INV=568.68
W 12"INV=568.63

ST-MH-12
RIM:574.47
N 18"INV=569.47
E 18"INV=569.42
SW 6"INV=571.12
NW 6"INV=570.32

ST-MH-13
RIM:575.01
N 24"INV=569.01
S 12"INV=569.33
E 12"INV=569.34
W 30"INV=569.01

ST-MH-14
RIM:574.55
N 12"INV=570.92
E 12"INV=570.73
W 12"INV=570.70

SA-MH-1
RIM:575.29
N 30"INV=562.05
S 30"INV=562.05

SA-MH-2
RIM:576.70
N 18"INV=570.80

SA-MH-3
RIM:575.35
S 18"INV=551.75
W 18"INV=551.75

SA-MH-4
RIM:575.21
N 18"INV=554.41
S 18"INV=554.41
E 10"INV=555.87

SA-MH-5
RIM:575.11
E 10"INV=557.21
W 10"INV=557.21

SA-MH-6
RIM:574.79
N 18"INV=554.79
S 18"INV=554.79

SA-MH-7
RIM:575.24
N 18"INV=555.14
S 18"INV=555.14

SA-MH-8
RIM:574.50
N 18"INV=554.50
S 18"INV=554.50

SA-MH-9
RIM:574.69
N 6"INV=570.84
E 8"INV=567.64
W 8"INV=567.69
FLOWS EAST

SA-MH-10
RIM:575.02
NE 8"INV=569.09
SW 8"INV=568.92
S 6"INV=571.00

SA-MH-11
RIM:574.42
W 10"INV=569.92

SA-MH-12
RIM:575.13
E 12"INV=570.18
W 12"INV=570.03

SA-MH-13
RIM:575.25
N 8"INV=568.93
S 8"INV=568.75
E 8"INV=568.93

SA-MH-14
RIM:575.00
E 8"INV=569.82
W 8"INV=569.86
NE 8"INV=570.46
(SEALED AT CB-21)
SE 8"INV=570.26
(SEALED AT CB-20)

CB-1
RIM:574.36
SUMP=570.76
NO PIPES VISIBLE

CB-2
RIM:574.56
N INV=572.46
W 8"INV=570.66

CB-3
RIM:574.46
E 8"INV=570.21

CB-4
RIM:574.29
W 8"INV=570.71

CB-5
RIM:574.28
E 8"INV=569.88
W 18"INV=569.58

CB-6
RIM:574.24
W 8"INV=570.69
N 8"INV=572.34
S 8"INV=572.34

CB-7
RIM:574.13
E 8"INV=569.81
N 6"INV=572.43
S 6"INV=572.43

CB-8
RIM:574.52
NE INV=572.92
S INV=572.92
SUMP=569.67

CB-9
RIM:574.49
E 6"INV=570.59
W 8"INV=570.14

CB-10
RIM:574.38
E 8"INV=571.03

CB-11
RIM:574.22
N 6"INV=571.07
S 6"INV=570.97
SW 12"INV=570.67

CB-12
RIM:573.95
N 6"INV=571.91
S 6"INV=571.95
SE 12"INV=571.40

CB-13
RIM:573.64
SUMP=562.24
NO PIPES VISIBLE

CB-14
RIM:573.60
N 12"INV=570.14
E 6"INV=570.43
W 6"INV=570.30

CB-15
RIM:573.72
N 6"INV=570.37
SE 6"INV=570.10
W 6"INV=570.94

CB-16
RIM:573.00
W 12"INV=571.00

CB-17
RIM:574.32
E 12"INV=570.77
W 12"INV=570.57

CB-18
RIM:574.43
E 4"INV=572.88
W 4"INV=572.88
SUMP=568.93
FILLED WITH DEBRIS

CB-19
RIM:574.39
E 4"INV=573.04
N 4"INV=573.04
SUMP=569.49
FILLED WITH DEBRIS

CB-20
RIM:574.46
N 12"INV=570.54
S 12"INV=570.86
E 6"INV=572.66
W 6"INV=572.66

CB-21
RIM:574.49
N 6"INV=571.77
S 12"INV=571.07
E 6"INV=572.69
W 6"INV=572.74

NOTES:

1. PROPOSED SANITARY SEWER LOCATION AND INVERT TO BE COORDINATED WITH PLUMBING PLANS (P-101).
2. CONTRACTOR TO VERIFY EXISTING PIPE DEPTH TO DETERMINE DEPTH OF PROP. SANITARY MANHOLE, TIE IN OF THE NEW PIPE AND EXISTING 8" SANITARY SEWER.
3. CONTRACTOR TO COORDINATE NORTH PERIMETER ROOF DRAIN SYSTEM DOWNSPOUTS WITH ARCHITECTURAL ROOF PLANS FOR EXACT LOCATIONS.
4. NORTH PERIMETER ROOF DRAIN SYSTEM TO BE SLOPED AT 0.5% MINIMUM. CONTRACTOR TO COORDINATE CONNECTION TO 12" HDPE TRUNKLINE.
5. RAIN DRAIN LEADERS ON SOUTH SIDE OF BUILDING TO SLOPE AT 0.5% MINIMUM. CONTRACTOR TO COORDINATE CONNECTIONS TO 12" HDPE TRUNKLINE AND CB#2A AND CB#2.
6. EXISTING 8" STORM PIPE TO BE FIELD VERIFIED IF IT EXTENDS INTO THE PROJECT AREA FROM CB#5. TOPOGRPHIC SURVEY COULD NOT DETERMINE WHERE OR HOW FAR THE EXISTING PIPE GOES.
7. PROPOSED WATER LINE LOCATION TO BE COORDINATED WITH PLUMBING PLANS (P-101).
8. PROPOSED BURIED ELECTRICAL CONDUIT "DROP" FROM EXISTING UTILITY POLE TO NEW BUILDING. SEE DWG. E-103 FOR ADDITIONAL INFORMATION.
9. PROPOSED GAS LINE LOCATION TO BE COORDINATED WITH PLUMBING PLANS (P-101).
10. PROPOSED GAS LINE CONNECTION TO EXIST. 8" MAIN TRUNK LINE TO BE COORDINATED BY CONTRACTOR WITH LOCAL UTILITY.
11. CONTRACTOR TO CONNECT NEW 6"Ø HDPE PIPE AND EXISTING 12"Ø STORM PIPE TO NEW STORM MANHOLE. PROVIDE WATERTIGHT CONNECTION. APPROXIMATE INV EL. TO BE DETERMINED IN FIELD.
12. CONTRACTOR TO CORE DRILL MANHOLE TO CONNECT OF NEW 12" STORM PIPE. PROVIDE WATERTIGHT CONNECTION.
13. CONTRACTOR TO CORE DRILL MANHOLE TO CONNECT NEW SUMP PUMP DISCHARGE PIPE. PROVIDE WATERTIGHT CONNECTION.
14. SUMP PUMP PROVIDED BY ZOELLER PUMP COMPANY "MIGHTY MATE SERIES" MODEL NO. 57 OR EQUAL. SUMP PUMP MODEL NUMBER/SIZE TO BE RE-EVALUATED DURING EXCAVATION.

1A UTILITY PLAN
SCALE: 1" = 30'-0"

CITY PROJECT NO. 23065

NUSSBAUMER & CLARKE, INC.
ENGINEERS AND SURVEYORS
EST. 1933
3556 Lake Shore Road, Suite 500 | Buffalo, NY 14219
(716) 827-8000 | (716) 826-7958 fax
www.nussclarke.com

CITY OF NORTH TONAWANDA, N.Y.

PAYNE PARK AQUATIC FACILITY
830 PAYNE AVENUE, NORTH TONAWANDA, NY

UTILITY PLAN

REVISIONS

No.	DESCRIPTION	DATE
0	ISSUED FOR PERMIT	08/09/24
1	ISSUED FOR REVIEW	11/14/24
2	FINAL OWNER REVIEW	05/23/25
3	ISSUED FOR BID	12/16/25

NUSSBAUMER & CLARKE, INC.
A CORPORATION REGISTERED TO PRACTICE PROFESSIONAL ENGINEERING & LAND SURVEYING IN THE STATE OF NEW YORK
CERTIFICATE NO. 027

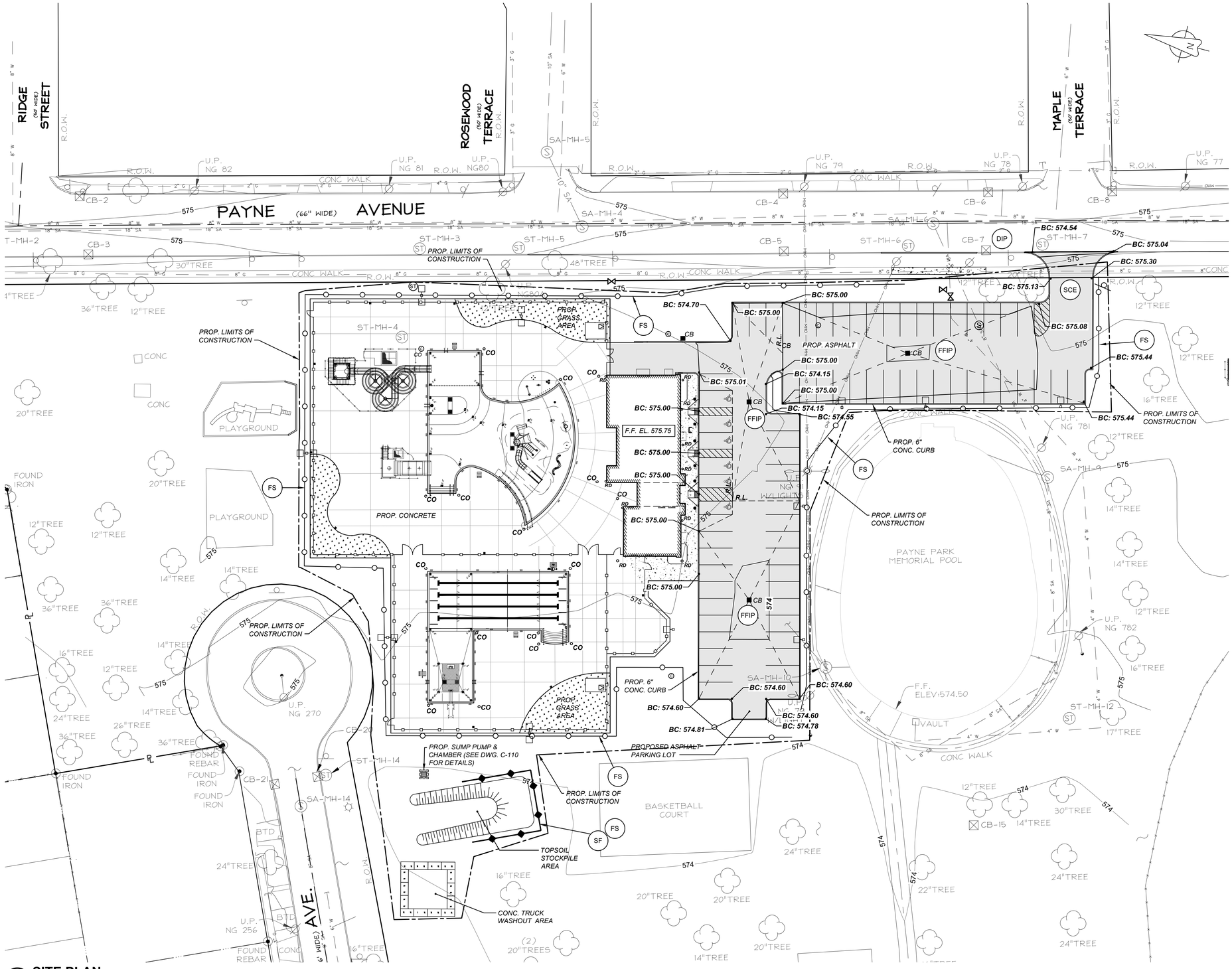
NUSSBAUMER AND CLARKE, INC. INCORPORATED SEAL 1933 BUFFALO, N.Y.

UNAUTHORIZED ALTERATION OR ADDITION TO THIS ENGINEERING DRAWING IS A VIOLATION OF SECTION 7209, PROVISION 2 OF THE NEW YORK STATE EDUCATION LAW.

PROJECT NUMBER	23J2-0040
DATE	06-25-24
DRAWN BY	TJB
DESIGNED BY	TJB
CHECKED BY	RJP
APPROVED BY	MTM
SCALE:	AS NOTED
	= 1 INCH
SHEET No.	7 OF 14

C-105

I:\2023\0040 nt payne park aquatic facility design\08s working dwgs\Discipline\C-Civil\C-105 Utility Plan.dwg 12/15/2025 VSARCIONE



EROSION CONTROL LEGEND:

- DIP — DROP INLET PROTECTOR
- FFIP — FILTER FABRIC INLET PROTECTOR
- SCE — STABILIZED CONSTRUCTION ENTRANCE
- SF — SILT FENCE
- FS — FILTER SOCK
- PROPOSED 12"Ø FILTER SOCK

1 SITE PLAN
SCALE: 1" = 30'-0"

CITY PROJECT NO. 23065

NUSSBAUMER & CLARKE, INC.
ENGINEERS AND SURVEYORS
EST. 1933
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www.nussclarke.com

CITY OF NORTH TONAWANDA, N.Y.

PAYNE PARK AQUATIC FACILITY

830 PAYNE AVENUE, NORTH TONAWANDA, NY

EROSION AND SEDIMENT CONTROL PLAN

REVISIONS

No.	DESCRIPTION	DATE
0	ISSUED FOR PERMIT	08/09/24
1	ISSUED FOR REVIEW	11/14/24
2	FINAL OWNER REVIEW	05/23/25
3	ISSUED FOR BID	12/16/25

NUSSBAUMER & CLARKE, INC.
A CORPORATION REGISTERED TO PRACTICE PROFESSIONAL ENGINEERING & LAND SURVEYING IN THE STATE OF NEW YORK
CERTIFICATE NO. 027

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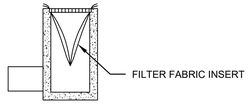
PROJECT NUMBER	23J2-0040
DATE	06-25-24
DRAWN BY	TJB
DESIGNED BY	TJB
CHECKED BY	RJP
APPROVED BY	MTM
SCALE:	AS NOTED
	= 1 INCH
SHEET No.	8 OF 14

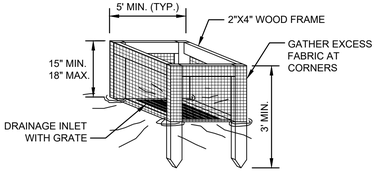
C-106

I:\2023\0040 nt payne park aquatic facility design\08b working dwgs\Discipline\C-Civil\C-106 Erosion and Sediment Control Plan.dwg 12/15/2025 VSARCONE

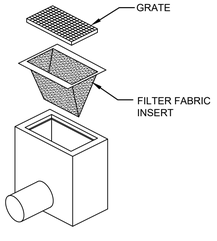
SECTION VIEW



SECTION VIEW



PERSPECTIVE VIEW



PERSPECTIVE VIEW

SILT FENCE INLET PROTECTION (FOR UNPAVED AREAS)

FILTER FABRIC INLET PROTECTION (FOR PAVED AREAS)

FFIP

SILT FENCE INLET PROTECTION NOTES:

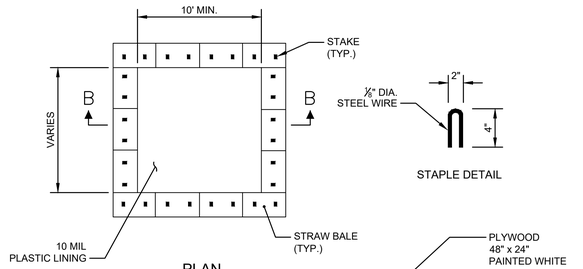
1. FILTER FABRIC SHALL HAVE AN EOS OF 40-85. BURLAP MAY BE USED FOR SHORT TERM APPLICATIONS.
2. CUT FABRIC FROM A CONTINUOUS ROLL TO ELIMINATE JOINTS. IF JOINTS ARE NEEDED THEY WILL BE OVERLAPPED TO THE NEXT STAKE.
3. STAKE MATERIALS WILL BE STANDARD 2"X4" WOOD OR EQUIVALENT. METAL WITH A MINIMUM LENGTH OF 3 FEET.
4. SPACE STAKES EVENLY AROUND INLET 3 FEET APART AND DRIVE A MINIMUM 18 INCHES DEEP. SPANS GREATER THAN 3 FEET MAY BE BRIDGED WITH THE USE OF WIRE MESH BEHIND THE FILTER FABRIC FOR SUPPORT.
5. FABRIC SHALL BE EMBEDDED 1 FOOT MINIMUM BELOW GROUND AND BACKFILLED. IT SHALL BE SECURELY FASTENED TO THE STAKES AND FRAME.
6. A 2"X4" WOOD FRAME SHALL BE COMPLETED AROUND THE CREST OF THE FABRIC FOR OVER FLOW STABILITY.

FILTER FABRIC INLET PROTECTION NOTES:

1. INSPECT ON A WEEKLY BASIS AND REMOVE SILT AS NECESSARY.

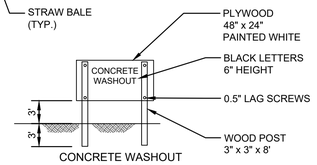
A1 FILTER FABRIC INLET PROTECTION DETAIL

SCALE: NOT TO SCALE

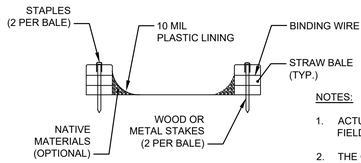


PLAN

TYPE "ABOVE GRADE" WITH STRAW BALES



CONCRETE WASHOUT SIGN DETAIL (OR EQUIVALENT)



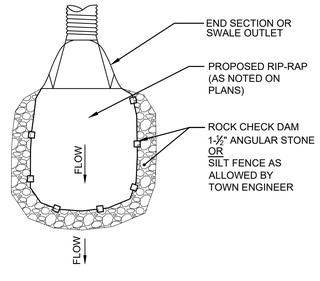
SECTION B-B

NOTES:

1. ACTUAL LAYOUT DETERMINED IN FIELD.
2. THE CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30 FT. OF THE TEMPORARY CONCRETE WASHOUT FACILITY.

C3 CONCRETE TRUCK WASH OUT DETAIL

SCALE: NOT TO SCALE

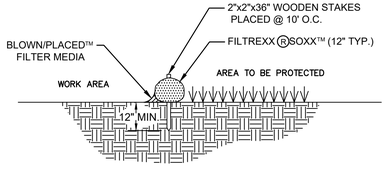


1. SEDIMENT SHALL BE REMOVED WHEN IT HAS ACCUMULATED TO A DEPTH OF WHERE THE RIP-RAP IS NOT VISIBLE AND/OR NO LONGER FUNCTIONS AS A FLOW DISSIPATER. REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.
3. THE STRUCTURE SHALL BE INSPECTED AFTER EACH RAIN EVENT, AND REPAIRS MADE AS NEEDED.
4. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND WATER POLLUTION SHALL BE MINIMIZED.
5. THE SEDIMENT TRAP SHALL BE REMOVED AND THE AREA STABILIZED WHEN THE CONSTRUCTED DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

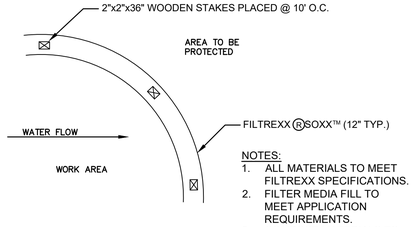
A2 STORM OUTLET SEDIMENT TRAP

SCALE: NOT TO SCALE

SOST



SECTION



PLAN

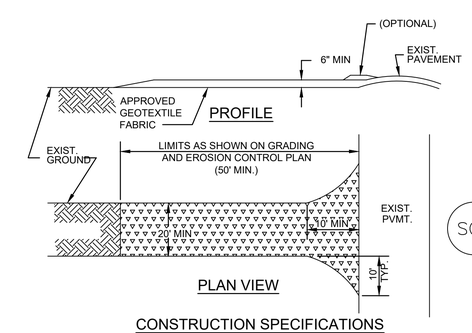
NOTES:

1. ALL MATERIALS TO MEET FILTREXX SPECIFICATIONS.
2. FILTER MEDIA FILL TO MEET APPLICATION REQUIREMENTS.
3. COMPOST MATERIALS TO BE DISPERSED ON SITE, AS DETERMINED BY ENGINEER.

A4 FILTREXX® SEDIMENT CONTROL

SCALE: NOT TO SCALE

SS



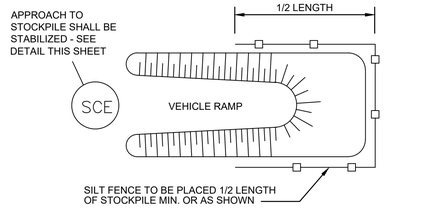
PLAN VIEW

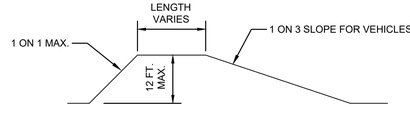
CONSTRUCTION SPECIFICATIONS

1. STONE SIZE - USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH - AS REQ'D, BUT NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESI-DENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY).
3. THICKNESS - NOT LESS THAN SIX (6) INCHES.
4. WIDTH - TEN (10) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
5. FILTER CLOTH - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE. FILTER WILL NOT BE REQ'D ON A SINGLE FAMILY RESIDENCE LOT.
6. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 1:5 SLOPES WILL BE PERMITTED.
7. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBIC RIGHT-OF-WAY MUST BE REMOVED IMMEDIATELY.
8. WASHING - WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY. WHEN WASHING IS REQ'D, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN EVENT.

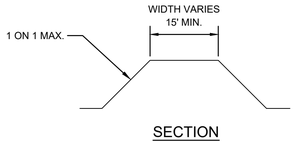
C5 STABILIZED CONSTRUCTION ENTRANCE DETAILS

SCALE: NOT TO SCALE





LONGITUDINAL VIEW



SECTION

SEED MIXTURE NOTES:

THE PROPOSED ADJACENT PLANTING AREA WILL BE SEEDED WITH AN APPROPRIATE CONSERVATION SEED MIXTURE. THE SEED MIXTURE PROVIDES A PERMANENT MIXED COVER OF GRASSES, FORBS AND LEGUMES WITH AN INITIAL COVER OF ANNUALS. THE MIX IS DESIGNED TO PROVIDE COVER, SEED AND FORAGE FOR A VARIETY OF HERBIVORES. THE SEED MIXTURE WILL CONTAIN THE FOLLOWING AND BE SEEDED AT A RATE 25 POUNDS PER ACRE.

SEED MIXTURE - PERCENT SEED & SEED SPECIES
29.4% RED CLOVER
24.4% CREEPING RED FESCUE
19.8% PERENNIAL RYE
11.98% TIMOTHY
9.0% KENTUCKY BLUE GRASS
2.9% WHITE CLOVER

A5 TOPSOIL STOCKPILE DETAILS

SCALE: NOT TO SCALE

CITY PROJECT NO. 23065

NUSSBAUMER & CLARKE, INC.
ENGINEERS AND SURVEYORS
EST. 1933
3556 Lake Shore Road, Suite 500 | Buffalo, NY 14219
(716) 827-8000 | (716) 826-7958 fax
www.nussclarke.com

CITY OF NORTH TONAWANDA

PAYNE PARK AQUATIC FACILITY
830 PAYNE AVENUE, NORTH TONAWANDA, NY
EROSION AND SEDIMENT CONTROL DETAILS

REVISIONS

No.	DESCRIPTION	DATE
0		

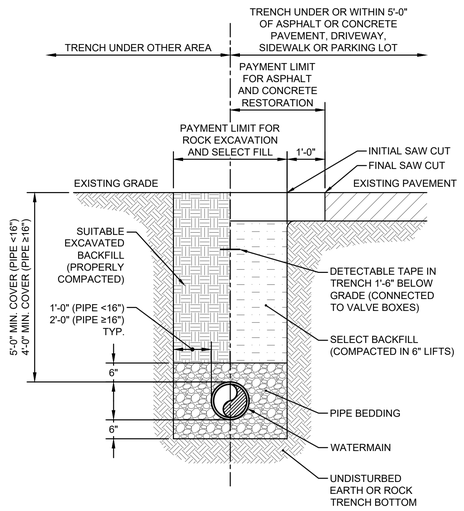
NUSSBAUMER & CLARKE, INC.
A CORPORATION REGISTERED TO PRACTICE PROFESSIONAL ENGINEERING & LAND SURVEYING IN THE STATE OF NEW YORK
CERTIFICATE NO. 027

UNAUTHORIZED ALTERATION OR ADDITION TO THIS ENGINEERING DRAWING IS A VIOLATION OF SECTION 7209, PROVISION 2 OF THE NEW YORK STATE EDUCATION LAW.

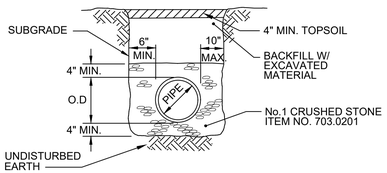
PROJECT NUMBER	23J2-0040
DATE	06-25-24
DRAWN BY	TJB
DESIGNED BY	TJB
CHECKED BY	RJP
APPROVED BY	MTM
SCALE:	AS NOTED
	= 1 INCH
SHEET No.	9 OF 14

C-106A

I:\2023\0040 nt payne park aquatic facility design\08b working dwgs\Discipline\C-Civil\C-108 SITE DETAILS 2.dwg 12/15/2025 VSARCIONE



C1 TYPICAL TRENCH
SCALE: NOT TO SCALE



SPECIAL NOTE REGARDING TRENCH BACKFILL MATERIAL:

1. SHALE SHALL NOT BE USED AS BACKFILL MATERIAL FOR PIPE CROSSINGS OF THE PAVEMENT AND CURBS.
2. SHALE SHALL NOT BE PLACED DIRECTLY AGAINST THE UNPROTECTED PIPE SURFACE. A MINIMUM OF 12" OF BEDDING STONE OR SELECT MATERIAL SHALL OVERLAY THE CROWN OF THE PIPE PRIOR TO PLACEMENT OF SHALE MATERIAL.

NOTES:
MATERIALS USED FOR THE CONSTRUCTION OF CATCH BASINS AND STORM MANHOLES SHALL MEET THE REQUIREMENTS SPECIFIED IN NYSDOT SECTION 604-2.

CONSTRUCTION OF STORM SEWERS AND UNDERDRAINS SHALL MEET THE REQUIREMENTS SPECIFIED IN NYSDOT SECTION 603-3 AND 605-3 AS APPLICABLE.

CONSTRUCTION OF CATCH BASINS AND STORM MANHOLES SHALL MEET THE REQUIREMENTS SPECIFIED IN NYSDOT SECTION 604-3.

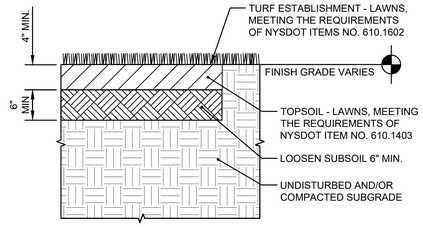
MATERIALS USED FOR UNDERDRAIN FILTER MATERIAL SHALL MEET THE REQUIREMENTS SPECIFIED IN NYSDOT SECTION 605-2 UNDERDRAIN FILTER TYPE II.

THE CONTRACTOR SHALL SCHEDULE AND CONDUCT HIS/HER OPERATIONS TO MINIMIZE EROSION OF SOILS AND TO MINIMIZE SILTING AND MUDDYING OF STREAMS, RIVERS, IRRIGATION SYSTEMS. IMPOUNDMENTS (LAKES, RESERVOIRS, ECT.) AND LANDS ADJACENT TO/OR AFFECTED BY THE WORK CONSTRUCTION OF DRAINAGE FACILITIES AND PERFORMANCE OF OTHER CONTRACT WORK WHICH WILL CONTRIBUTE TO THE CONTROL OF EROSION AND SEDIMENTATION SHALL BE CARRIED OUT IN CONJUNCTION WITH EARTHWORK OPERATIONS OR AS SOON THEREAFTER AS PRACTICAL.

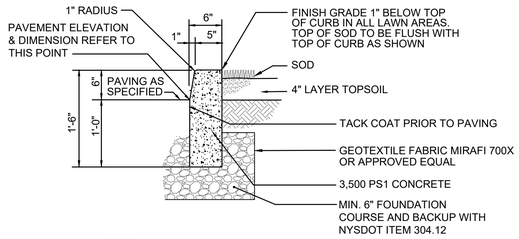
THE CONTRACTOR SHALL NOT DISCHARGE DUST INTO THE ATMOSPHERE OF SUCH QUANTITY, CHARACTER OR DURATION THAT IT UNREASONABLY INTERFERES WITH THE COMFORTABLE ENJOYMENT OF LIFE AND PROPERTY, OR IS HARMFUL TO PLANTS AND ANIMALS.

ALL APPLICABLE REGULATIONS OF FISH, WILDLIFE, AND ENVIRONMENTAL PROTECTION AGENCIES AND STATUTES RELATING TO THE PREVENTION ABATEMENT OF POLLUTION SHALL BE COMPLIED WITH.

A1 STORM TRENCH DETAIL TYPICAL SECTION FOR EARTH BACKFILL
SCALE: NOT TO SCALE



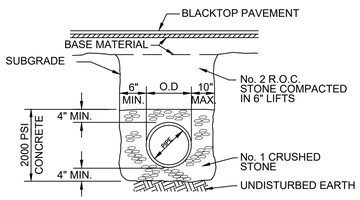
D2 LAWN ESTABLISHMENT AND RESTORATION
SCALE: NOT TO SCALE



NOTE:

1. CONTROL JOINTS TO BE 2" DEEP AT 15'-0" O.C. BOTHWAYS - SEE SPECIFICATIONS FOR FURTHER JOINT REQUIREMENTS SEE NYSDOT 702-0700

C2 TYPICAL CURB DETAIL
SCALE: NOT TO SCALE



PIPE BEDDING MATERIAL

NO. 1 CRUSHED STONE WITH A GRADATION CONFORMING WITH NYSDOT SECTION 703-02. THE CRUSHED STONE SHALL BE WELL GRADED WITH NO PARTICLES LARGER THAN ONE (1) INCH AND HAVING A MAXIMUM GRADATION MEETING THE LIMITS DESCRIBED IN THE SPECIFICATIONS. THE BEDDING SHALL BE COMPACTED IN 6" LIFTS WITH EQUIPMENT ACCEPTABLE TO THE PIPE MANUFACTURER. NO SLAG SHALL BE ALLOWED.

NOTES:

A. PIPE INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

B. TRENCHING OPERATIONS SHALL INCLUDE ALL NECESSARY DEWATERING.

C. TRENCH DETAILS ARE ONLY SHOWN FOR PURPOSES OF MATERIAL PLACEMENT AND MAXIMUM PAY LIMITS.

D. AN OSHA APPROVED MOVABLE PROTECTIVE TRENCH SHIELD SHALL BE USED IN ALL UNSHEETED TRENCH AREAS.

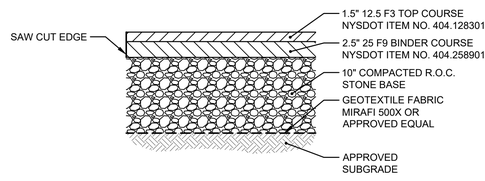
E. TEMPORARY SHEETING AT CONTRACTOR'S OPTION AND EXPENSE. TEMPORARY SHEETING TO MEET OSHA REQUIREMENT.

PIPE MATERIAL SPECIFICATIONS

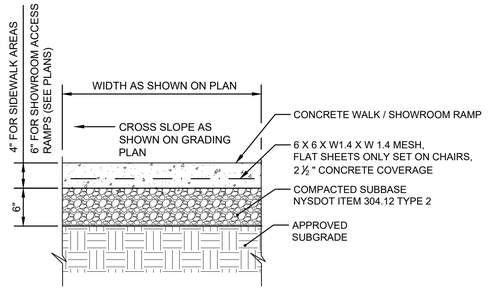
1. HDPE PIPE - CORRUGATED POLYETHYLENE PIPE (8" TO 24" HDPE) SHALL MEET AASHTO M294 SPECS. JOINTS TO BE FIELD JOINED WITH STANDARD SPLIT COUPLERS.

2. CORRUGATED METAL PIPE SHALL BE ALUMINIZED STEEL TYPE 2 WITH A MINIMUM 16 GUAGE AND MEET ASTM DESIGN DESIGNATION A-444 SPECS. JOINTS FOR CMP SHALL BE FIELD JOINED WITH ALUMINIZED METAL BANDS.

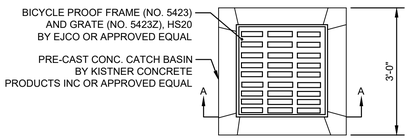
A2 TYPICAL SECTION FOR SELECT BACKFILL AND CONCRETE ENCASEMENT STORM TRENCH DETAIL
SCALE: NOT TO SCALE



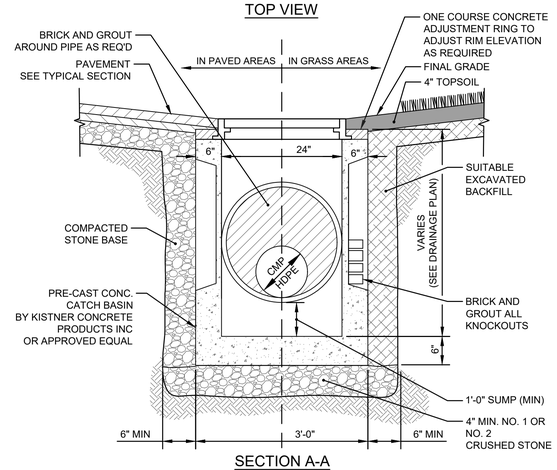
D4 STANDARD PARKING LOT PAVEMENT SECTION
SCALE: NOT TO SCALE



C4 CONCRETE SIDEWALK DETAIL
SCALE: NOT TO SCALE

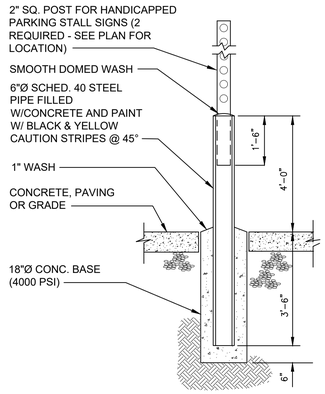


TOP VIEW

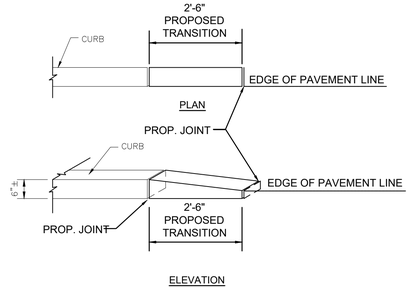


SECTION A-A

A4 24" SQ CATCH BASIN
SCALE: NOT TO SCALE



C5 TYPICAL BOLLARD DETAIL
SCALE: NOT TO SCALE



A5 CURB TRANSITION DETAIL
SCALE: NOT TO SCALE

CITY PROJECT NO. 23065

NUSSBAUMER & CLARKE, INC.
ENGINEERS AND SURVEYORS
EST. 1933
3556 Lake Shore Road, Suite 500 | Buffalo, NY 14219
(716) 827-8000 | (716) 826-7958 fax
www.nussclarke.com

CITY OF NORTH TONAWANDA, N.Y.

PAYNE PARK AQUATIC FACILITY
830 PAYNE AVENUE, NORTH TONAWANDA, NY

SITE DETAILS 1

REVISIONS

No.	DESCRIPTION	DATE
0	ISSUED FOR PERMIT	08/09/24
1	ISSUED FOR REVIEW	11/14/24
2	FINAL OWNER REVIEW	05/23/25
3	ISSUED FOR BID	12/16/25

NUSSBAUMER & CLARKE, INC.
A CORPORATION REGISTERED TO PRACTICE PROFESSIONAL ENGINEERING & LAND SURVEYING IN THE STATE OF NEW YORK
CERTIFICATE NO. 027

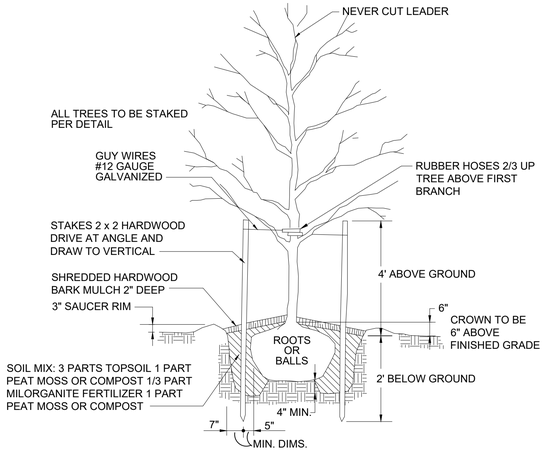
NUSSBAUMER AND CLARKE, INC. INCORPORATED SEAL 1933 BUFFALO, N.Y.

UNAUTHORIZED ALTERATION OR ADDITION TO THIS ENGINEERING DRAWING IS A VIOLATION OF SECTION 7209, PROVISION 2 OF THE NEW YORK STATE EDUCATION LAW.

PROJECT NUMBER	23J2-0040
DATE	06-25-24
DRAWN BY	TJB
DESIGNED BY	TJB
CHECKED BY	RJP
APPROVED BY	MTM
SCALE:	AS NOTED
	= 1 INCH
SHEET No.	10 OF 14

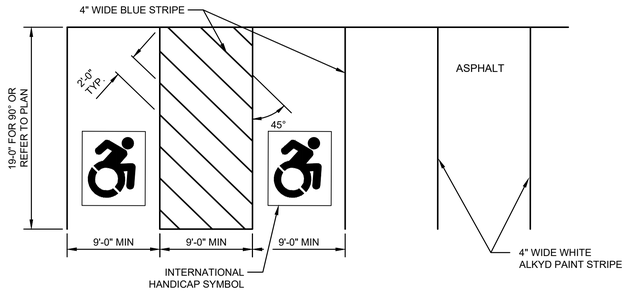
C-107

I:\2023\0040 nt payne park aquatic facility design\08s working dwgs\Discipline\C-Civil\C-108 SITE DETAILS 2.dwg 12/15/2025 VSARCIONE



C1 DECIDUOUS TREE PLANTING

SCALE: NO SCALE



GENERAL HANDICAP SIGN NOTES:

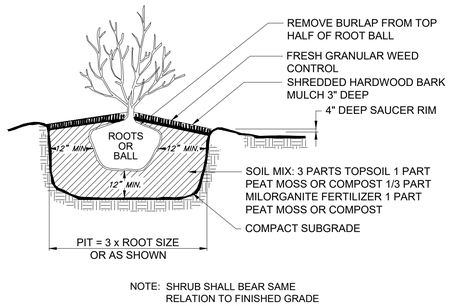
1. TOP PORTION OF FTP-25 SHALL HAVE A REFLECTIVE BLUE BACKGROUND WITH WHITE REFLECTIVE SYMBOL AND BORDER.
2. BOTTOM PORTION OF FTP-25 SHALL HAVE A REFLECTIVE WHITE BACKGROUND WITH BLACK OPAQUE LEGEND AND BORDER.
3. FTP-25 SHALL BE FABRICATED ON ONE PANEL.
4. THE SIGN SHALL BE PLACED A MINIMUM OF 3' FROM THE WHEEL STOP OR THE BACK OF CURB (WHERE APPLICABLE).

NOTE:

ACCESSIBLE PARKING SPACES AND ACCESS AISLES SHALL BE LEVEL WITH A SLOPE OF 1.5% (2% MAXIMUM) (EXAMPLE: 1.92 INCHES MAX. VERTICAL IN 8 FEET HORIZONTAL) OR 1:50 IN ALL DIRECTIONS. THIS INCLUDES BOTH "RUNNING SLOPES" AND "CROSS SLOPES."

A1 STRIPING DETAIL FOR HANDICAP AND STANDARD PARKING

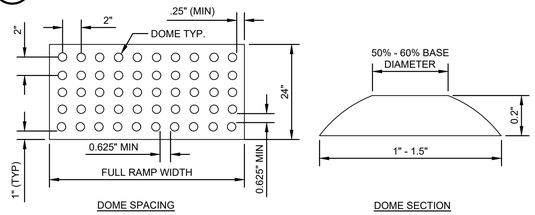
SCALE: NOT TO SCALE



NOTE: SHRUB SHALL BEAR SAME RELATION TO FINISHED GRADE AS IT BORE TO PREVIOUSLY EXISTING GRADE.

C3 SHRUB PLANTING DETAIL

SCALE: NO SCALE



NOTES:

1. THE DETAILS PROVIDED ARE NOT DRAWN TO SCALE, THE QUANTITY OF DOMES DEPICTED ON THE DETECTABLE WARNING FIELD (THE DOMES AND THE ENTIRE 24" LEVEL SURFACE) IS FOR ILLUSTRATION ONLY.
2. THE SIZE OF THE DETECTABLE WARNING FIELD SHALL BE 24" IN THE DIRECTION OF TRAVEL AND SHALL EXTEND THE FULL WIDTH OF THE CURB RAMP OR FLUSH SURFACE, EXCLUSIVE OF SIDE FLARES.
3. LOCATION OF DETECTABLE WARNINGS. DETECTABLE WARNINGS SHALL BE LOCATED SO THAT THE EDGE OF THE WARNING FIELD NEAREST TO THE ROADWAY OR STREET SURFACE IS 6" TO 9" (12" WHERE TRAVERSABLE CURB IS USED) FROM THE EDGE OF THE ROADWAY/STREET, OR FROM THE FRONT OF THE DROPPED CURB, WHERE A DROPPED CURB CONTINUES ACROSS THE BOTTOM OF THE SIDEWALK CURB RAMP.
4. THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 16" TO 19" FROM THE FACE OF THE GATE ARM. WHERE THERE IS NO GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE TRACKS SHALL BE 15 FEET FROM THE CENTERLINE OF THE NEAREST TRACK.
5. DOME ALIGNMENT. DOMES SHALL BE ALIGNED ON A SQUARE GRID IN THE PREDOMINANT DIRECTION OF TRAVEL.
6. COLOR REQUIREMENTS. THE DETECTABLE WARNING FIELD SHALL BE THE COLOR SPECIFIED IN THE CONTRACT DOCUMENTS OR SHALL VISUALLY CONTRAST WITH THE ADJOINING CURB RAMP, OR OTHER ADJACENT WALKWAY SURFACES WHERE THERE IS NO CURB RAMP, EITHER LIGHT-ON DARK, OR DARK-ON-LIGHT AS DEFINED IN THE AMERICANS WITH DISABILITIES ACCESSIBILITY GUIDELINES (ADAAG).
7. PAYMENT LINES ARE THE 24" DIMENSION SHOWN IN THE DETAILS EXTENDING THE FULL WIDTH OF THE CURB RAMP AND/OR APPLICABLE SURFACES.
8. OMIT DETECTABLE WARNINGS WHERE THERE WILL BE LESS THAN 24" OF SPACE BETWEEN THE DETECTABLE WARNING FIELDS.

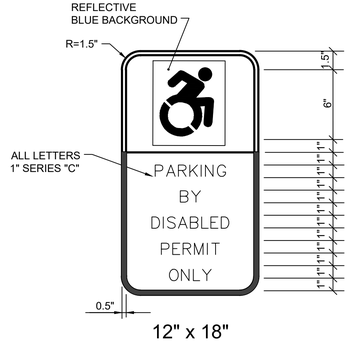
A3 DETECTABLE WARNING FIELD DETAIL

SCALE: NOT TO SCALE

M.U.T.C.D. R1-1 STOP SIGN

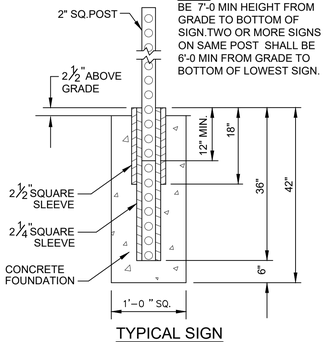
M.U.T.C.D. R7-8 FEDERAL HANDICAP PARKING SIGN (TYP.)

M.U.T.C.D. R7-6



12" x 18"

HANDICAPPED PARKING SIGN DETAIL



TYPICAL SIGN POST INSTALLATION

NOTE: SINGLE SIGNS SHALL BE 7'-0 MIN HEIGHT FROM GRADE TO BOTTOM OF SIGN.TWO OR MORE SIGNS ON SAME POST SHALL BE 6'-0 MIN FROM GRADE TO BOTTOM OF LOWEST SIGN.

GENERAL HANDICAP SIGN NOTES:

1. TOP PORTION OF FTP-25 SHALL HAVE A REFLECTIVE BLUE BACKGROUND WITH WHITE REFLECTIVE SYMBOL AND ORDER.
2. BOTTOM PORTION OF FTP-25 SHALL HAVE A REFLECTIVE WHITE BACKGROUND WITH BLACK OPAQUE LEGEND AND BORDER.
3. FTP-25 SHALL BE FABRICATED ON ONE PANEL.
4. THE SIGN SHALL BE PLACED A MINIMUM OF 3' FROM THE WHEEL STOP OR THE BACK OF CURB (WHERE APPLICABLE).
5. HANDICAPPED PARKING SIGN TO BE LOCATED ON BUILDING FACE AS NOTED ON SITE PLAN. MOUNTING HEIGHT REQUIREMENT IS PER NOTE REFERENCED IN DETAIL "TYPICAL SIGN POST INSTALLATION" ABOVE.

A4 TYPICAL SIGN POST INSTALLATION

SCALE: NOT TO SCALE

CITY PROJECT NO. 23065

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ENGINEERS AND SURVEYORS
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3556 Lake Shore Road, Suite 500 | Buffalo, NY 14219
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CITY OF NORTH TONAWANDA, NY

PAYNE PARK AQUATIC FACILITY

830 PAYNE AVENUE, NORTH TONAWANDA, NY

SITE DETAILS 2

REVISIONS

No.	DESCRIPTION	DATE
0	ISSUED FOR PERMIT	08/09/24
1	ISSUED FOR REVIEW	11/14/24
2	FINAL OWNER REVIEW	05/23/25

NUSSBAUMER & CLARKE, INC.
A CORPORATION REGISTERED TO PRACTICE PROFESSIONAL ENGINEERING & LAND SURVEYING IN THE STATE OF NEW YORK
CERTIFICATE NO. 027

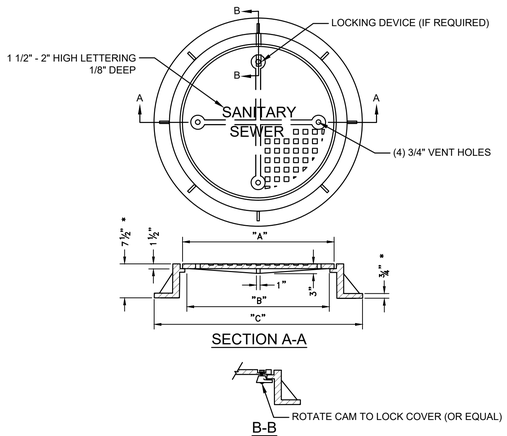
NUSSBAUMER AND CLARKE, INC. INCORPORATED SEAL 1933 BUFFALO, N.Y.

UNAUTHORIZED ALTERATION OR ADDITION TO THIS ENGINEERING DRAWING IS A VIOLATION OF SECTION 7209. PROVISION 2 OF THE NEW YORK STATE EDUCATION LAW.

PROJECT NUMBER	23J2-0040
DATE	06-25-24
DRAWN BY	TJB
DESIGNED BY	TJB
CHECKED BY	RJP
APPROVED BY	MTM
SCALE:	AS NOTED
	= 1 INCH
SHEET No.	11 OF 14

C-108

I:\2023\0040 nt payne park aquatic facility design\08b working dwgs\Discipline\C-Civil\C-108 SITE DETAILS 2.dwg 12/15/2025 VSARCIONE



LOCKING DEVICE IF REQUIRED

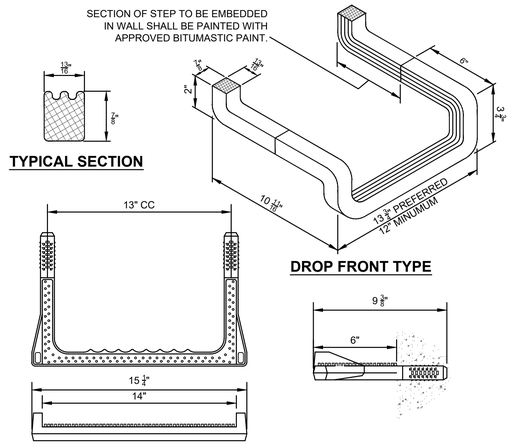
TABLE				
PIPE SIZE	DIMENSION "A"	DIMENSION "B"	DIMENSION "C"	WEIGHT OF COVER
8" THRU 18"	24"	22 1/4"	35" (MAX.)	84"
OVER 18"	32"	30"	46" (MAX.)	98"

STANDARD FRAME AND COVER NOTES:

1. MATERIAL: ASTM A48 CLASS 30B CAST IRON CONFORMING TO AASHTO DESIGNATION M105-06.
2. UNIT MUST WITHSTAND HS-20 WHEEL LOADING, AND CONFORM TO AASHTO DESIGNATION M306-10.
3. ALL DIMENSIONS ARE TO BE CONSIDERED MINIMUM WITH THE EXCEPTION OF THE COVER, WHICH MUST CONFORM EXACTLY TO MAINTAIN INTERCHANGEABILITY WITHIN THE COUNTY.
4. COATING NOT REQUIRED.
5. FRAMES AND COVERS SHALL HAVE MACHINED BEARING SURFACES.
6. LOCKING DEVICE MUST BE SITUATED TO ALLOW EASY REMOVAL OF COVER.
7. NO LETTERING OTHER THAN ECSD SANITARY WILL BE ALLOWED ON THE EXPOSED SURFACE OF THE COVER.
8. *1/2" FLANGE THICKNESS AND 7" HEIGHT ACCEPTABLE IF CLASS 35 CAST IRON MATERIAL PROVIDED.

C1 STANDARD FRAME AND COVER

SCALE: NOT TO SCALE



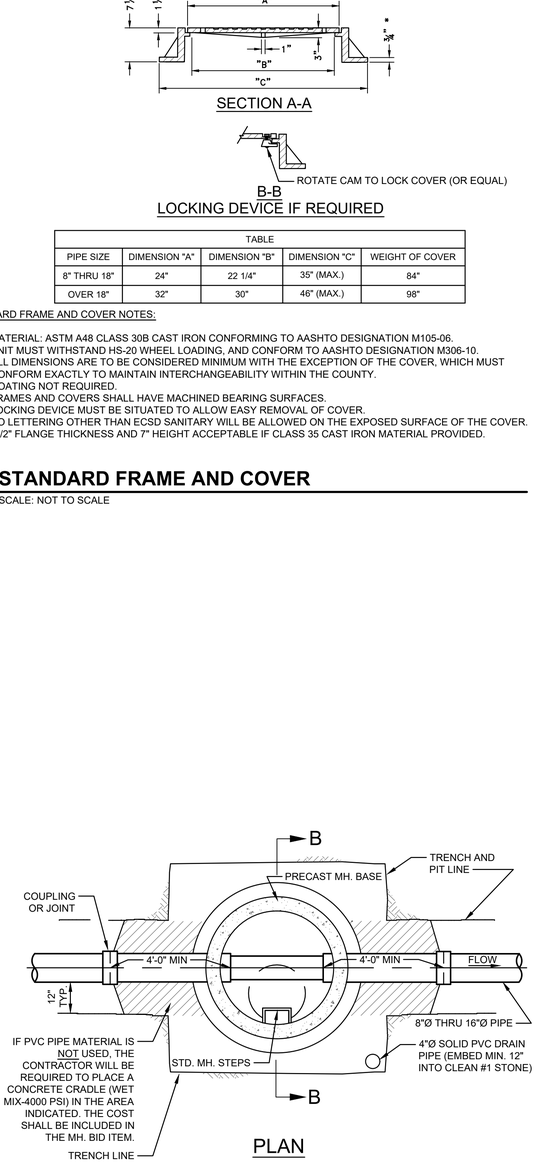
NOTES:

1. MANHOLE STEPS SHALL BE OF FORGED ALUMINUM ALLOY.
2. AN ACCEPTABLE ALTERNATE IS THE STEEL REINFORCED COPOLYMER POLYPROPYLENE MANHOLE STEP.
3. THE STEPS SHALL BE EMBEDDED IN THE WALLS OF THE CONCRETE MANHOLE BARREL WHILE THE MANHOLE IS BEING CAST OR SECURELY GROUTED IN PLACE AFTER CASTING.

REINFORCED COPOLYMER POLYPROPELENE TYPE

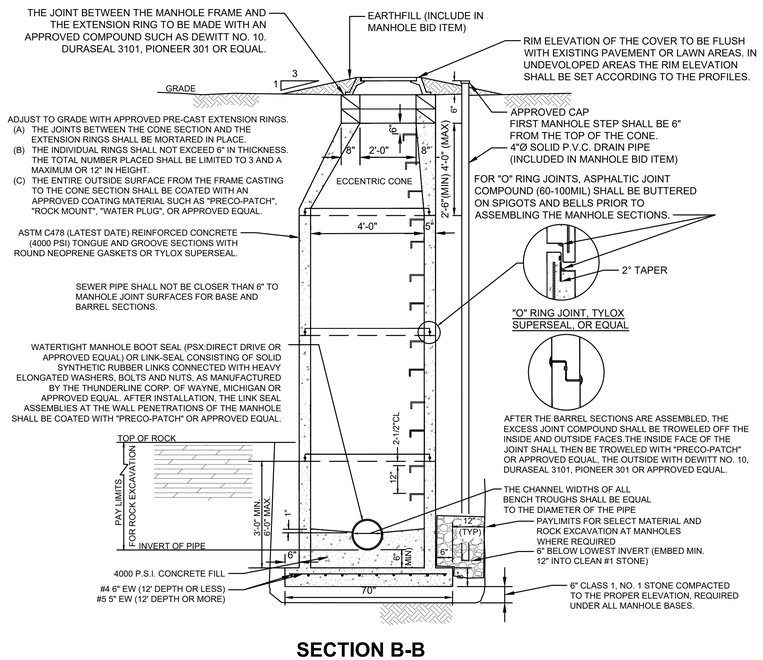
C2 STANDARD MANHOLE STEP

SCALE: NOT TO SCALE



A1 MONOLITHIC PRECAST BASE MANHOLES 4'-0" DIA. BASE FOR 15"Ø SEWERS OR LESS

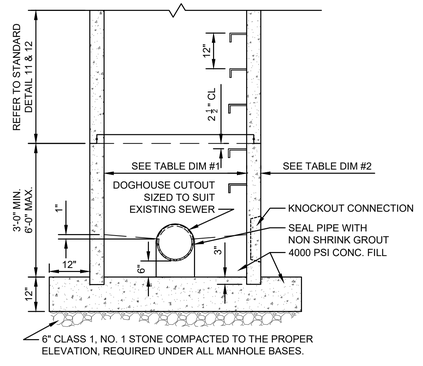
SCALE: NOT TO SCALE



SECTION B-B

A2 MONOLITHIC PRECAST BASE MANHOLES 4'-0" DIA. BASE FOR 15"Ø SEWERS OR LESS (SECTION B-B)

SCALE: NOT TO SCALE



PIPE SIZE	DIMENSION #1	DIMENSION #2
8"-16"	4'-0" *	5"
18"	5'-0"	6"
21"-27"	5'-0"	6"
30"-36"	6'-0"	7"

* FOR DROP CONNECTIONS INSIDE DIAMETER SHALL BE 5'-0"

NOTES:
AREA AROUND DOGHOUSE CUTOUT & PIPE TO BE MADE WATERTIGHT UTILIZING A HYDRAULIC CEMENT MIXTURE (WATERPLUG, PRECO-PATCH, OR APPROVED EQUAL).

A5 PRECAST DOGHOUSE BASE MANHOLE

SCALE: NOT TO SCALE

CITY PROJECT NO. 23065

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www.nussclarke.com

CITY OF NORTH TONAWANDA NEW YORK

PAYNE PARK AQUATIC FACILITY
830 PAYNE AVENUE, NORTH TONAWANDA, NY

SITE DETAILS 3

REVISIONS

No.	DESCRIPTION	DATE
0	ISSUED FOR PERMIT	08/09/24
1	ISSUED FOR REVIEW	11/14/24
2	FINAL OWNER REVIEW	05/23/25

NUSSBAUMER & CLARKE, INC.
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CERTIFICATE NO. 027

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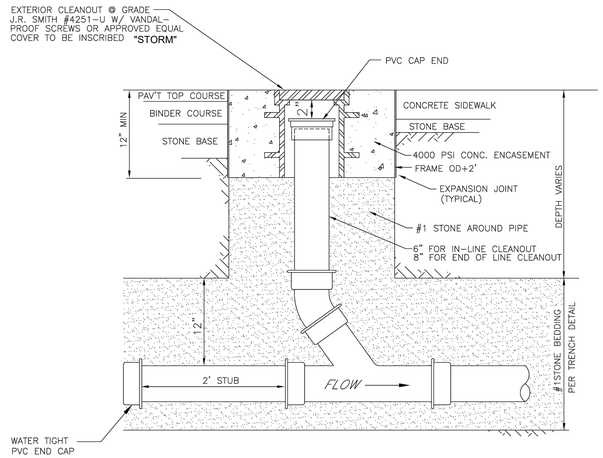
PROJECT NUMBER	23J2-0040
DATE	06-25-24
DRAWN BY	TJB
DESIGNED BY	TJB
CHECKED BY	RJP
APPROVED BY	MTM
SCALE:	AS NOTED
	= 1 INCH
SHEET No.	12 OF 14

C-108A

I:\2023\0040 nt payne park aquatic facility design\08b working dwgs\Discipline\C-Civil\C-108A SITE DETAILS 3.dwg 12/15/2025 YSARCIONE

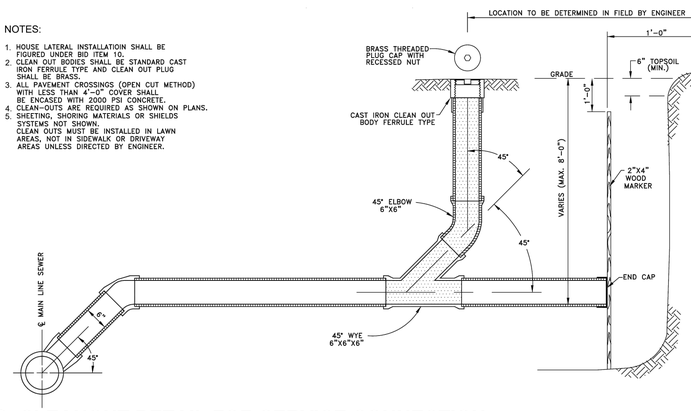


D1 CLEANOUT IN PAVEMENT / SIDEWALKS

SCALE: NOT TO SCALE

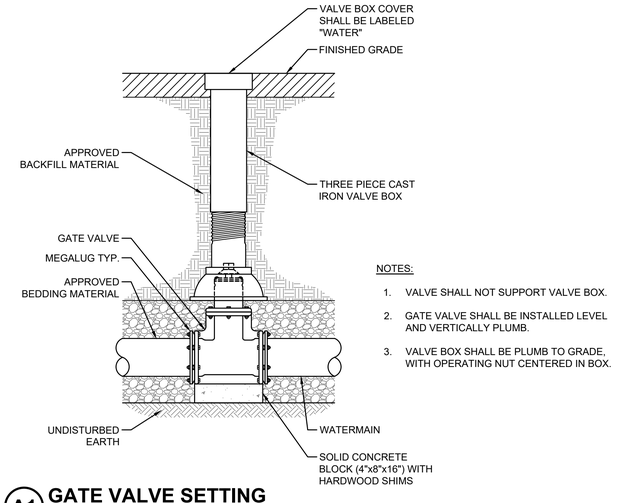
NOTES:

1. HOUSE LATERAL INSTALLATION SHALL BE FIGURED UNDER BID ITEM 10.
2. CLEAN OUT BODIES SHALL BE STANDARD CAST IRON FERRULE TYPE AND CLEAN OUT PLUG SHALL BE BRASS.
3. ALL PAVEMENT CROSSINGS (OPEN CUT METHOD) WITH LESS THAN 4'-0" COVER SHALL BE ENCASED WITH 2000 PSI CONCRETE.
4. CLEAN-OUTS ARE REQUIRED AS SHOWN ON PLANS.
5. SHEETING, SHORING MATERIALS OR SHIELDS SYSTEMS NOT SHOWN. CLEAN OUTS MUST BE INSTALLED IN LAWN AREAS, NOT IN SIDEWALK OR DRIVEWAY AREAS UNLESS DIRECTED BY ENGINEER.



C1 CLEANOUT DETAIL FOR SERVICE CONNECTION

SCALE: NOT TO SCALE

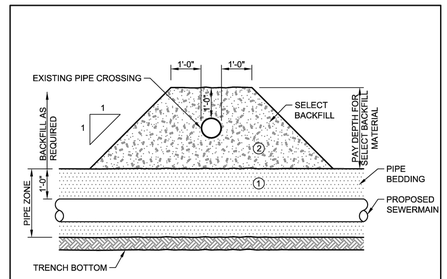


NOTES:

1. VALVE SHALL NOT SUPPORT VALVE BOX.
2. GATE VALVE SHALL BE INSTALLED LEVEL AND VERTICALLY PLUMB.
3. VALVE BOX SHALL BE PLUMB TO GRADE, WITH OPERATING NUT CENTERED IN BOX.

A1 GATE VALVE SETTING

SCALE: NOT TO SCALE



MATERIALS

PIPE BEDDING MATERIAL (NYSDOT LATEST EDITION)

1. NO. 1 CRUSHED STONE OR CLEAN NO.1 CRUSHED GRAVEL WITH A GRADATION CONFORMING WITH NYSDOT SECTION 703-02.THE STONE SHALL BE WELL GRADED WITH NO PARTICLES LARGER THAN ONE INCH AND HAVING A MAXIMUM GRADATION MEETING THE LIMITS DESCRIBED IN THE SPECIFICATIONS.

SELECT MATERIAL BACKFILL (NYSDOT LATEST EDITION)

2. NO. 2 RUN OF CRUSHER STONE WITH A GRADATION CONFORMING WITH NYSDOT SECTION 304.12, TYPE 2 (COMPACTED IN 6" LIFTS TO 95% DENSITY)

NOTES: NO SLAG SHALL BE ALLOWED FOR MATERIALS 1 & 2 NO GRAVEL SHALL BE ALLOWED FOR MATERIAL 2.

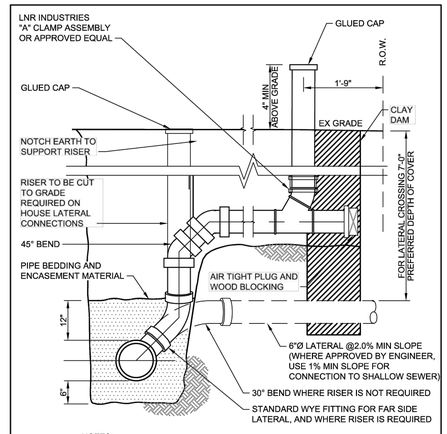
PIPE CROSSING SUPPORT

REV #	DATE	DESCRIPTION

NIAGARA COUNTY SEWER DISTRICT NO. 1
STANDARD DETAILS

DRAWING SCALE	ISSUE DATE	
NTS	2012	SD - 012

630943-00(001)GN-BU016 JUL 24/2012



NOTES:
1. BEND AND RISER REQUIRED WHERE DEPTH EXCEEDS 8'-0".
2. EXCEPT WHERE THE DEPTH OF A MAIN SEWER IS A LIMITING FACTOR, ALL HOUSE LATERALS BUILT UNDER STREET PAVEMENT SHALL HAVE A MINIMUM DEPTH OF COVER OF 6'-0". IF SUCH COVER CANNOT BE OBTAINED, PIPE SHALL BE ENCASED IN 6" CONCRETE.

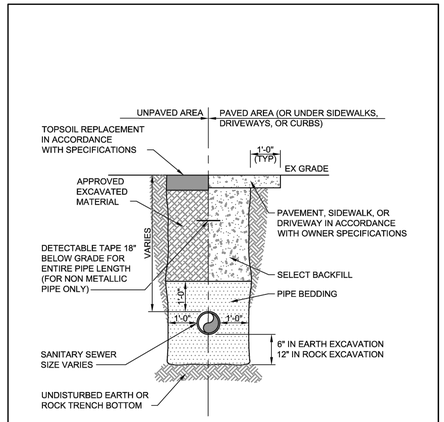
SANITARY SEWER SERVICE CONNECTION DETAIL

REV #	DATE	DESCRIPTION

NIAGARA COUNTY SEWER DISTRICT NO. 1
STANDARD DETAILS

DRAWING SCALE	ISSUE DATE	
NTS	2012	SD - 013

630943-00(001)GN-BU018 JUL 24/2012



NOTES:

1. DIMENSIONS ARE PAVEMENT LIMITS WHERE APPROPRIATE.

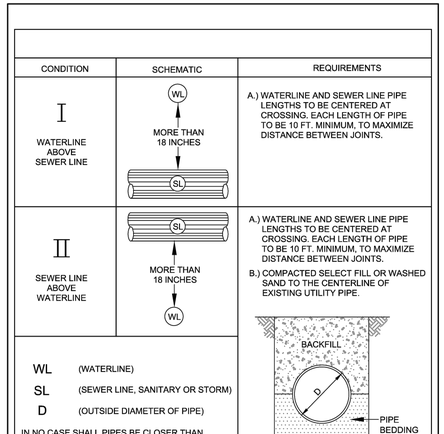
TYPICAL TRENCH DETAIL (GRASS AND PAVEMENT)

REV #	DATE	DESCRIPTION

NIAGARA COUNTY SEWER DISTRICT NO. 1
STANDARD DETAILS

DRAWING SCALE	ISSUE DATE	
NTS	2012	SD - 001

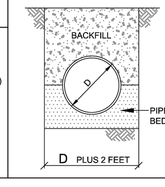
630943-00(001)GN-BU001 JUL 24/2012



CONDITION	SCHEMATIC	REQUIREMENTS
I WATERLINE ABOVE SEWER LINE	WL — MORE THAN 18 INCHES — SL	A.) WATERLINE AND SEWER LINE PIPE LENGTHS TO BE CENTERED AT CROSSING. EACH LENGTH OF PIPE TO BE 10 FT. MINIMUM, TO MAXIMIZE DISTANCE BETWEEN JOINTS.
II SEWER LINE ABOVE WATERLINE	SL — MORE THAN 18 INCHES — WL	A.) WATERLINE AND SEWER LINE PIPE LENGTHS TO BE CENTERED AT CROSSING. EACH LENGTH OF PIPE TO BE 10 FT. MINIMUM, TO MAXIMIZE DISTANCE BETWEEN JOINTS. B.) COMPACTED SELECT FILL OR WASHED SAND TO THE CENTERLINE OF EXISTING UTILITY PIPE.

WL (WATERLINE)
SL (SEWER LINE, SANITARY OR STORM)
D (OUTSIDE DIAMETER OF PIPE)

IN NO CASE SHALL PIPES BE CLOSER THAN 18 INCHES APART. DISTANCES ARE MEASURED BETWEEN OUTSIDES OF PIPE.



WATER/SEWER CROSSING DETAIL

REV #	DATE	DESCRIPTION

NIAGARA COUNTY SEWER DISTRICT NO. 1
STANDARD DETAILS

DRAWING SCALE	ISSUE DATE	
NTS	2012	SD - 011

630943-00(001)GN-BU009 JUL 24/2012

CITY PROJECT NO. 23065

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CITY OF NORTH TONAWANDA, NY

PAYNE PARK AQUATIC FACILITY

830 PAYNE AVENUE, NORTH TONAWANDA, NY

WATER AND SEWER DETAILS 1

REVISIONS

No.	DESCRIPTION	DATE
0	ISSUED FOR PERMIT	08/09/24
1	ISSUED FOR REVIEW	11/14/24
2	FINAL OWNER REVIEW	05/23/25
3	ISSUED FOR BID	12/16/25

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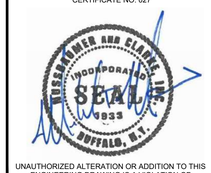

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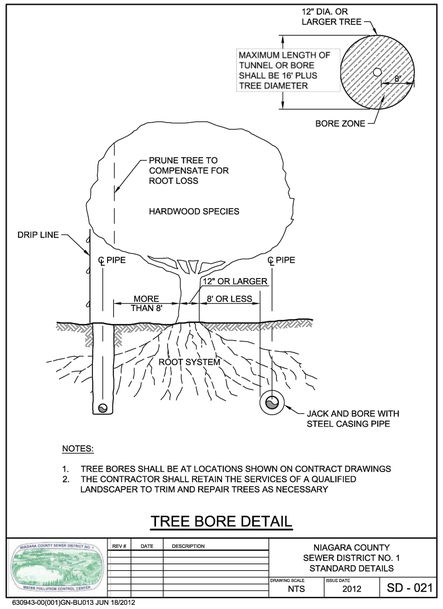
PROJECT NUMBER	23J2-0040
DATE	06-25-24
DRAWN BY	TJB
DESIGNED BY	TJB
CHECKED BY	RJP
APPROVED BY	MTM
SCALE:	AS NOTED
	= 1 INCH
SHEET No.	13 OF 14

C-109

I:\2023\0040 nt payne park aquatic facility design\06b working dwgs\Discipline\C-Civil\C-110 Water and Sewer Details 2.dwg 12/15/2025 VSARCIONE



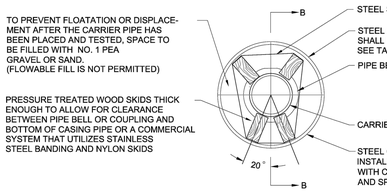
NOTES:

1. TREE BORES SHALL BE AT LOCATIONS SHOWN ON CONTRACT DRAWINGS
2. THE CONTRACTOR SHALL RETAIN THE SERVICES OF A QUALIFIED LANDSCAPER TO TRIM AND REPAIR TREES AS NECESSARY

TREE BORE DETAIL

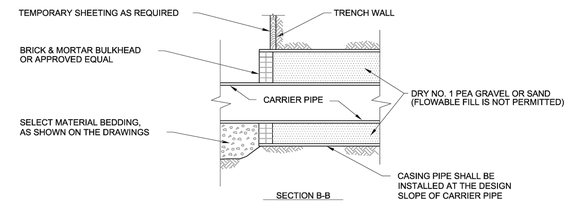
REV #	DATE	DESCRIPTION	NIAGARA COUNTY SEWER DISTRICT NO. 1 STANDARD DETAILS		
			DRAWING SCALE: NTS	ISSUE DATE: 2012	SD - 021

630943-00(001)GN-BU013 JUN 18/2012



SCHEDULE FOR DIAMETER AND THICKNESS OF CASING PIPE

CARRIER PIPE DIAMETER	CASING PIPE DIAMETER	CASING PIPE THICKNESS (MIN)
6"	18"	0.375
8"	20"	0.375
10"	24"	0.375
12"	28"	0.375
15"	30"	0.375
18"	36"	0.500
21"	42"	0.500
24"	48"	0.500



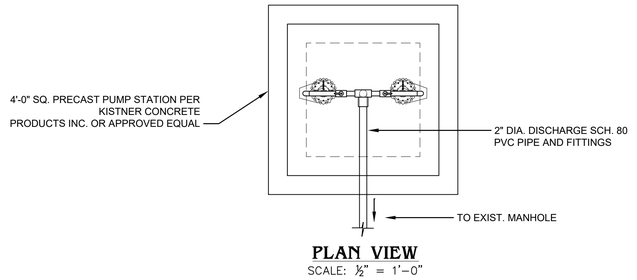
NOTES:

1. CASING PIPE GRADE SHALL BE AS SHOWN ON PLANS OR AS ORDERED BY ENGINEER.
2. MAXIMUM ALLOWABLE ERROR FOR THE CASING PIPE SHALL BE 0.2 OF A FOOT ABOVE OR BELOW THE DESIGN GRADE.
3. THE MAXIMUM ALLOWABLE ERROR ON THE HORIZONTAL ALIGNMENT OF THE CASING PIPE SHALL NOT EXCEED 4" OFF THE DESIGNED CENTERLINE OF IMPROVEMENT.
4. JACKING AND RECEIVING PIT, TEMPORARY SHEETING AND SHORING SHALL BE DESIGNED BY A N.Y.S. LICENSED ENGINEER RETAINED BY THE CONTRACTOR.
5. ANY ERROR IN GRADE AND/OR ALIGNMENT WHICH EXCEED THE NOTED ALLOWABLES SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.

TYPICAL CASING PIPE

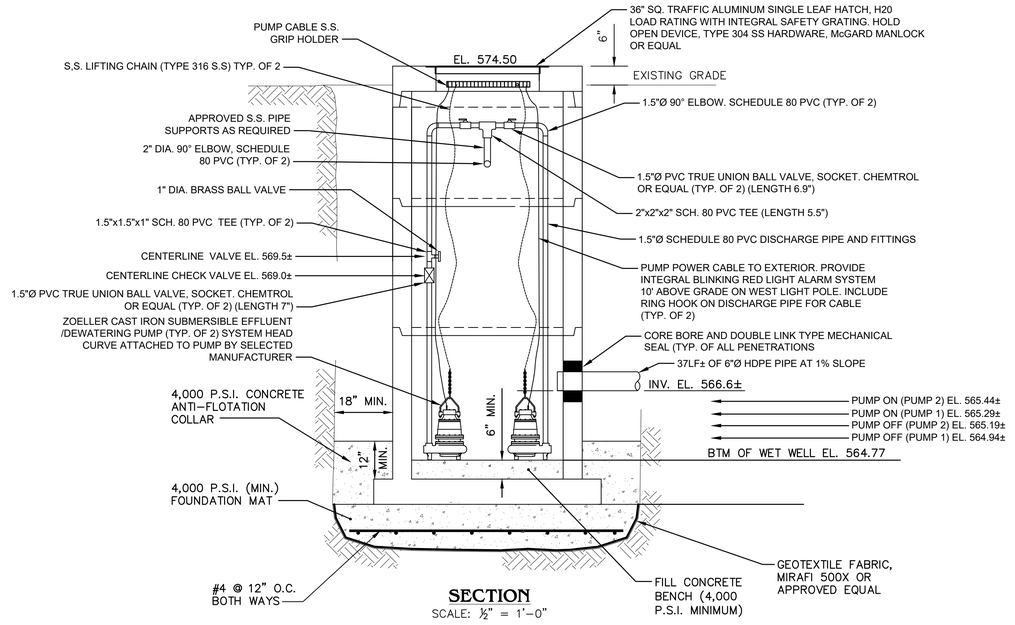
REV #	DATE	DESCRIPTION	NIAGARA COUNTY SEWER DISTRICT NO. 1 STANDARD DETAILS		
			DRAWING SCALE: NTS	ISSUE DATE: 2012	SD - 015

630943-00(001)GN-BU010 JUL 24/2012



PLAN VIEW

SCALE: ½" = 1'–0"



SECTION

SCALE: ½" = 1'–0"

A3 SUMP PUMP PIT DETAIL

SCALE: NOT TO SCALE

NOTE: BOTTOM OF PUMP STA. TO BE SLOPED TOWARDS PUMP

CITY PROJECT NO. 23065

NUSSBAUMER & CLARKE, INC.
ENGINEERS AND SURVEYORS
EST. 1933
3556 Lake Shore Road, Suite 500 | Buffalo, NY 14219
(716) 827-8000 | (716) 826-7958 fax
www.nussclarke.com

CITY OF NORTH TONAWANDA NY

PAYNE PARK AQUATIC FACILITY

830 PAYNE AVENUE, NORTH TONAWANDA, NY

WATER AND SEWER DETAILS 2

REVISIONS

No.	DESCRIPTION	DATE
0	ISSUED FOR PERMIT	08/09/24
1	ISSUED FOR REVIEW	11/14/24
2	FINAL OWNER REVIEW	05/23/25
3	ISSUED FOR BID	12/16/25

NUSSBAUMER & CLARKE, INC.
A CORPORATION REGISTERED TO PRACTICE PROFESSIONAL ENGINEERING & LAND SURVEYING IN THE STATE OF NEW YORK
CERTIFICATE NO. 027

NUSSBAUMER AND CLARKE, INC. INCORPORATED SEAL 1933 BUFFALO, N.Y.

UNAUTHORIZED ALTERATION OR ADDITION TO THIS ENGINEERING DRAWING IS A VIOLATION OF SECTION 7209. PROVISION 2 OF THE NEW YORK STATE EDUCATION LAW.

PROJECT NUMBER	23J2-0040
DATE	06-25-24
DRAWN BY	TJB
DESIGNED BY	TJB
CHECKED BY	RJP
APPROVED BY	MTM
SCALE:	AS NOTED
	= 1 INCH
SHEET No.	14 OF 14

C-110

I:\2023\0040 nt payne park aquatic facility design\06b working dwgs\Discipline\C-Civil\C-110 Water and Sewer Details 2.dwg 12/15/2025 VSARCIONE

Coded Notes

1. CONCRETE STAIRS – SEE A1/CP-503 FOR ADDITIONAL INFORMATION.
2. 20' HEXAGON UMBRELLA.
3. SAFETY ROPE WITH FLOATS – FLOATS TO BE INSTALLED WITH LOCKS TO MAINTAIN POSITION ON ROPE.
4. S.S. HANDRAIL ALONG BOTH SIDES OF 1:12 RAMP – SEE B4/CP-502.
5. 4-POST HYPAR SHADE FROM USA SHADE (OR APPROVED EQUAL).
6. BACKSTROKE TURN FLAG – SEE B3/CP-502 FOR ADDITIONAL INFORMATION – TYP.
7. LADDER WITH RECESSED STEPS – SEE C1/CP-503 FOR INFORMATION – TYP.
8. DEPTH AND "NO-DIVE" MARKERS – TYPICAL – SEE C4/CP-503 FOR INFORMATION.
9. ZERO DEPTH GUTTER AND ENTRY – SEE C3/CP-503 AND B1/CP-301 FOR INFORMATION.
10. S.S. HANDRAIL – TYP. – SEE A1/CP-503.
11. 8'-0" TALL VINYL COATED CHAIN LINK FENCE – SEE C1/CP-505 FOR INFORMATION.
12. 4'-0" TALL VINYL COATED CHAIN LINK FENCE – SEE C1/CP-505 FOR INFORMATION.
13. 4'-0" WIDE X 4'-0" TALL FENCE GATE – SEE C3/CP-505 FOR INFORMATION.
14. (2) 4'-0" WIDE X 8'-0" TALL DOUBLE FENCE GATES – SEE C2/CP-505 FOR INFORMATION.
15. (2) 6'-0" WIDE X 4'-0" TALL DOUBLE FENCE GATES – SEE C2/CP-505 FOR INFORMATION.
16. LIFE GUARD CHAIR – TYPICAL.
17. BASKETBALL HOOP.
18. VOLLEYBALL NET.
19. DIVING BOARD.
20. ADA CHAIR LIFT – SEE C1/CP-502.
21. – NOT USED –
22. LARGE WATER SLIDE.
23. FAMILY SLIDE.
24. POST AND NET ROPE FENCE – SEE B1/CP-502.
25. DECK HYDRANT.
26. 4" PAINTED LINE AT DEPTH CHANGE.
27. – NOT USED –
28. 4'-0" WIDE X 8'-0" TALL FENCE GATE WITH PANIC HARDWARE – SEE D2/CP-505.
29. LAP POOL SURGE TANK – SEE CP-501.
30. ACTIVITY POOL SURGE TANK – SEE CP-501.

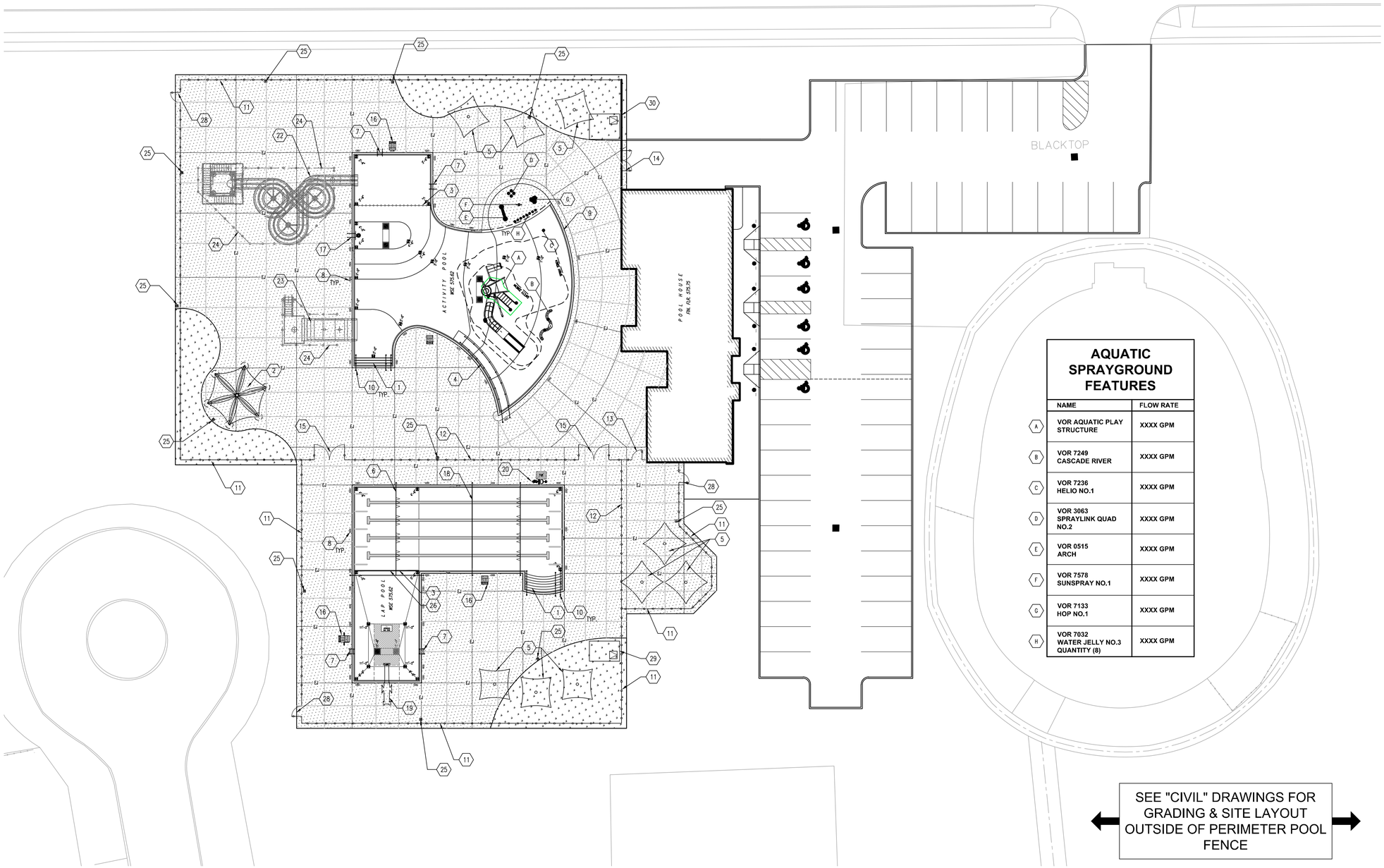
General Notes

1. EXISTING SITE PLAN CONDITIONS INDICATED ARE BASED UPON SURVEY PERFORMED BY OTHERS. IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL CONDITIONS PRIOR TO CONSTRUCTION.
2. THE CONTRACTOR SHALL MAINTAIN OWNER ACCESS TO SITE AND OR FACILITIES DURING CONSTRUCTION.
3. THE CONTRACTOR MUST COORDINATE ALL SITE STAGING/CONSTRUCTION ACTIVITIES WITH THE OWNER PRIOR TO COMMENCEMENT OF WORK.
4. CONTRACTOR TO FIELD VERIFY ACTUAL FIELD CONDITIONS PRIOR TO COMMENCING WORK.
5. ALL DISTURBED GRASS AREAS, ADJACENT TO OR IN THE CONSTRUCTION ZONE, SHALL BE PROPERLY FILLED WITH TOP SOIL AND COMPACTED AS REQUIRED TO REMOVE ALL RUTS AND OR SURFACE IRREGULARITIES. UPON COMPLETION OF FINISH GRADING, SOD OR SEED SHALL BE PLACED IN ACCORDANCE TO THE SPECIFICATIONS.
6. ALL NEW PAVEMENT AREAS SHALL BE CONSTRUCTED AS PER DETAILS AND SPECIFICATIONS – SEE CIVIL DRAWINGS.
7. IT IS THE CONTRACTORS RESPONSIBILITY TO ENSURE THAT ALL NEW AND RESURFACED PAVEMENT AREAS ALONG WITH MODIFIED GRASS AREAS ALLOW THE FOLLOWING: SLOPE DIRECTS RAINFALL AWAY FROM ALL STRUCTURES, AND PAVEMENT/GRASS AREAS ARE CONSTRUCTED IN A MANNER WHICH PROHIBIT ANY AND ALL PONDING.
8. IT IS THE CONTRACTORS RESPONSIBILITY TO DETERMINE THE PRESENCE OF EXISTING PIPING AND UTILITIES PRIOR TO CONSTRUCTION ACTIVITIES.

Legend

- CONCRETE DECK – SEE A3 & D3/C-504
- SOD – REFER TO SPECIFICATIONS
- EJ — EXPANSION JOINT
- CONTROL JOINT
- VINYL COATED CHAIN LINK FENCE – SEE C1/C-504
- DECK HYDRANT – SEE C4/CP-502

TYP



AQUATIC SPRAYGROUND FEATURES

	NAME	FLOW RATE
A	VOR AQUATIC PLAY STRUCTURE	XXXX GPM
B	VOR 7249 CASCADE RIVER	XXXX GPM
C	VOR 7236 HELIO NO.1	XXXX GPM
D	VOR 3063 SPRAYLINK QUAD NO.2	XXXX GPM
E	VOR 0515 ARCH	XXXX GPM
F	VOR 7578 SUNSPRAY NO.1	XXXX GPM
G	VOR 7133 HOP NO.1	XXXX GPM
H	VOR 7032 WATER JELLY NO.3 QUANTITY (8)	XXXX GPM

SEE "CIVIL" DRAWINGS FOR GRADING & SITE LAYOUT OUTSIDE OF PERIMETER POOL FENCE

Lap & Activity Pool Plan - Layout & Materials

1"=20'-0"

0 20' 40'

TRUE NORTH

BRANDSTETTER CARROLL INC
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1220 West 6th Street, Suite 300, Cleveland, Oh 44113
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Lexington Cincinnati Cleveland Dallas Charleston

REGISTERED ARCHITECT RICHARD THOMAS PARKER 036165 STATE OF NEW YORK

CITY OF NORTH TONAWANDA, N.Y.

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Revisions: NUMBER DATE DESCRIPTION

Issue Date: 12-16-2025 ISSUED FOR BID

PAYNE PARK
AQUATIC FACILITY

848 PAYNE AVENUE
NORTH TONAWANDA, NY 14120

Lap & Activity Pool Plan - Layout & Materials

City Project No. 2023-01

Project No. 23065

CP-101

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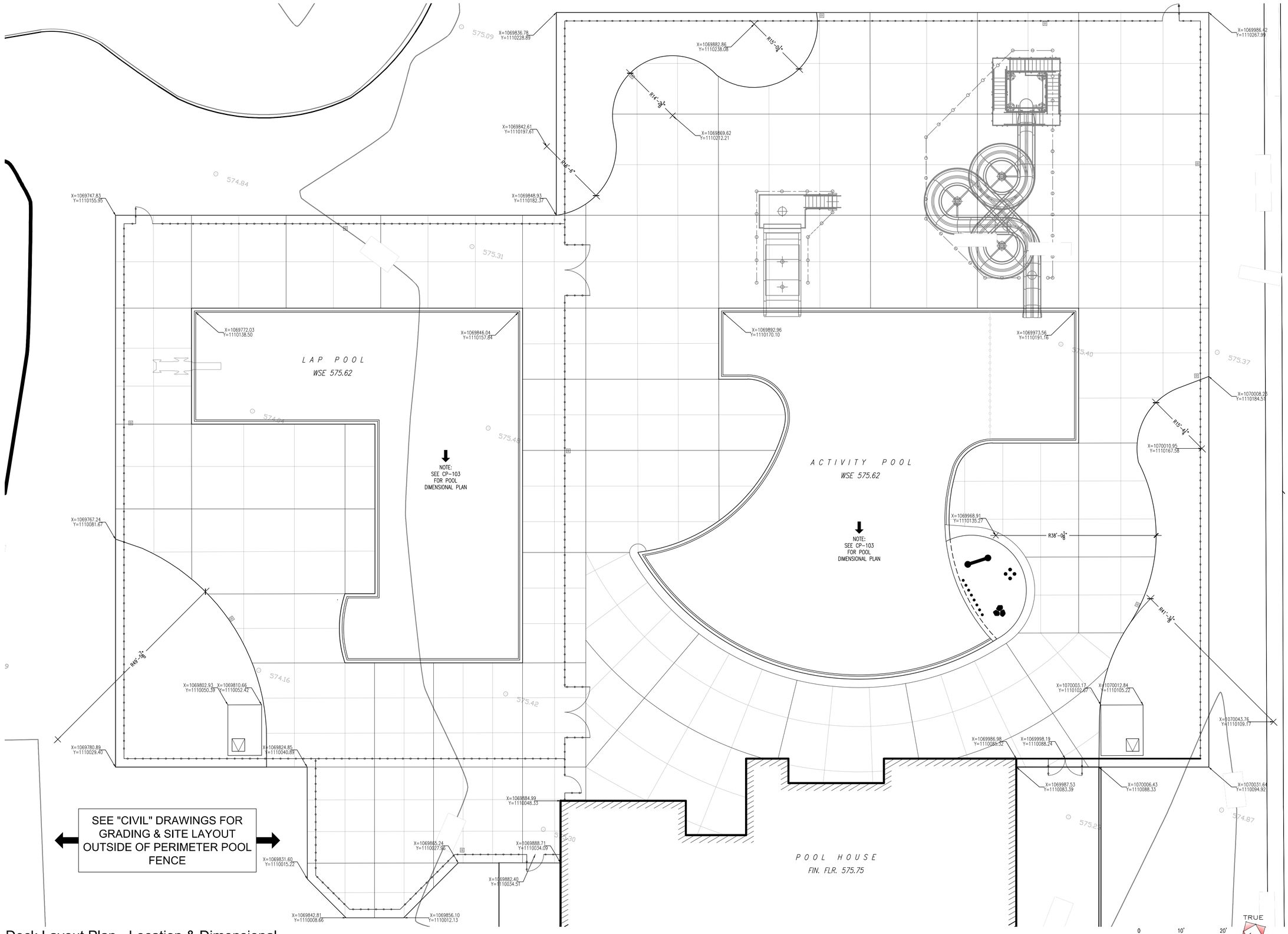

Deck Layout Plan - Location & Dimensional

1"= 10'-0"

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Deck Layout Plan - Location & Dimensional

City Project No.
2023-01

Project No.
23065

CP-102

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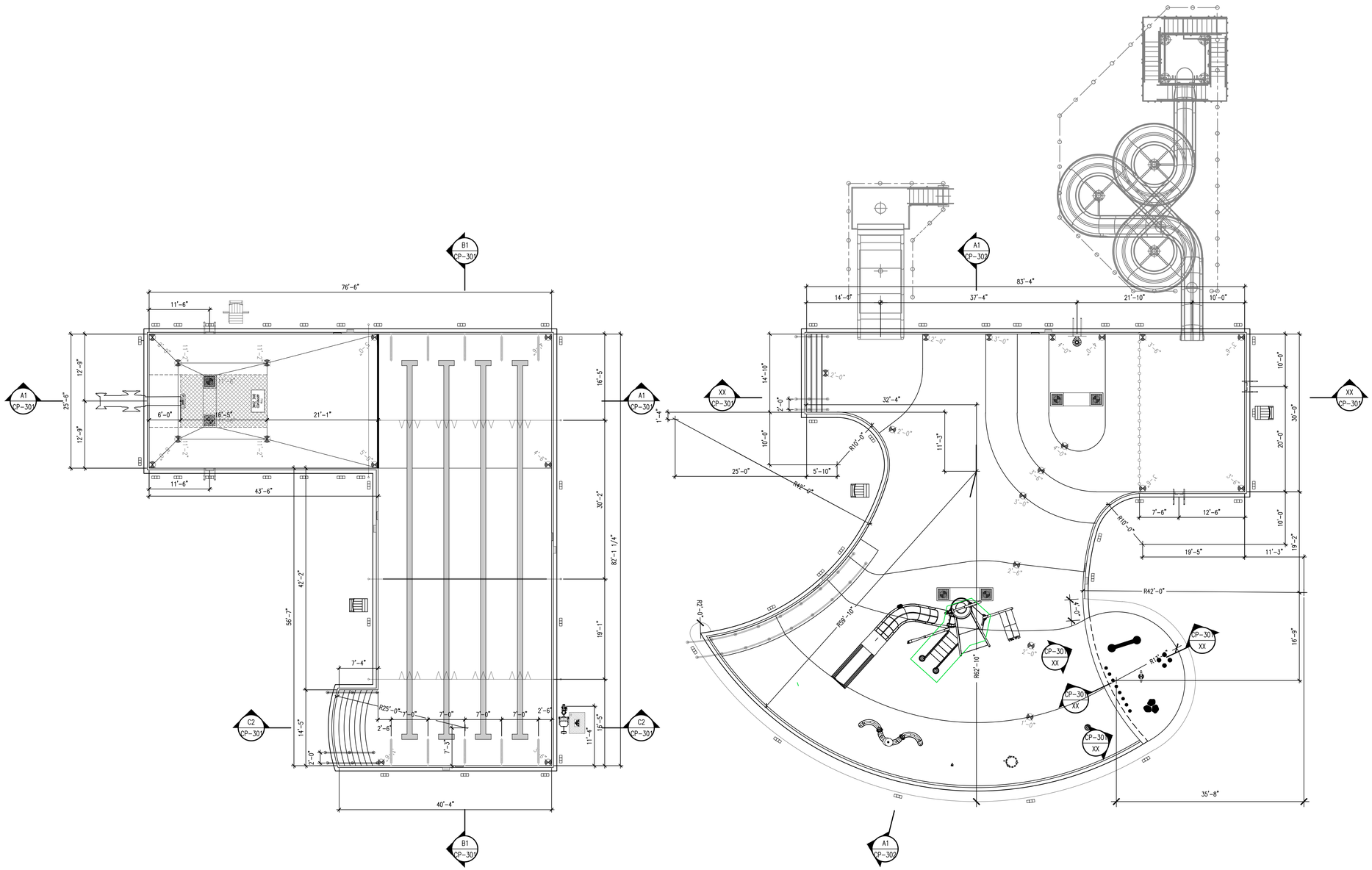

Lap & Activity Pool Plan - Dimensional

1"= 10'-0"

0 10' 20'

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AQUATIC FACILITY

848 PAYNE AVENUE
NORTH TONAWANDA, NY 14120

Lap & Activity Pool Plan - Dimensional

City Project No. 2023-01

Project No. 23065

CP-103

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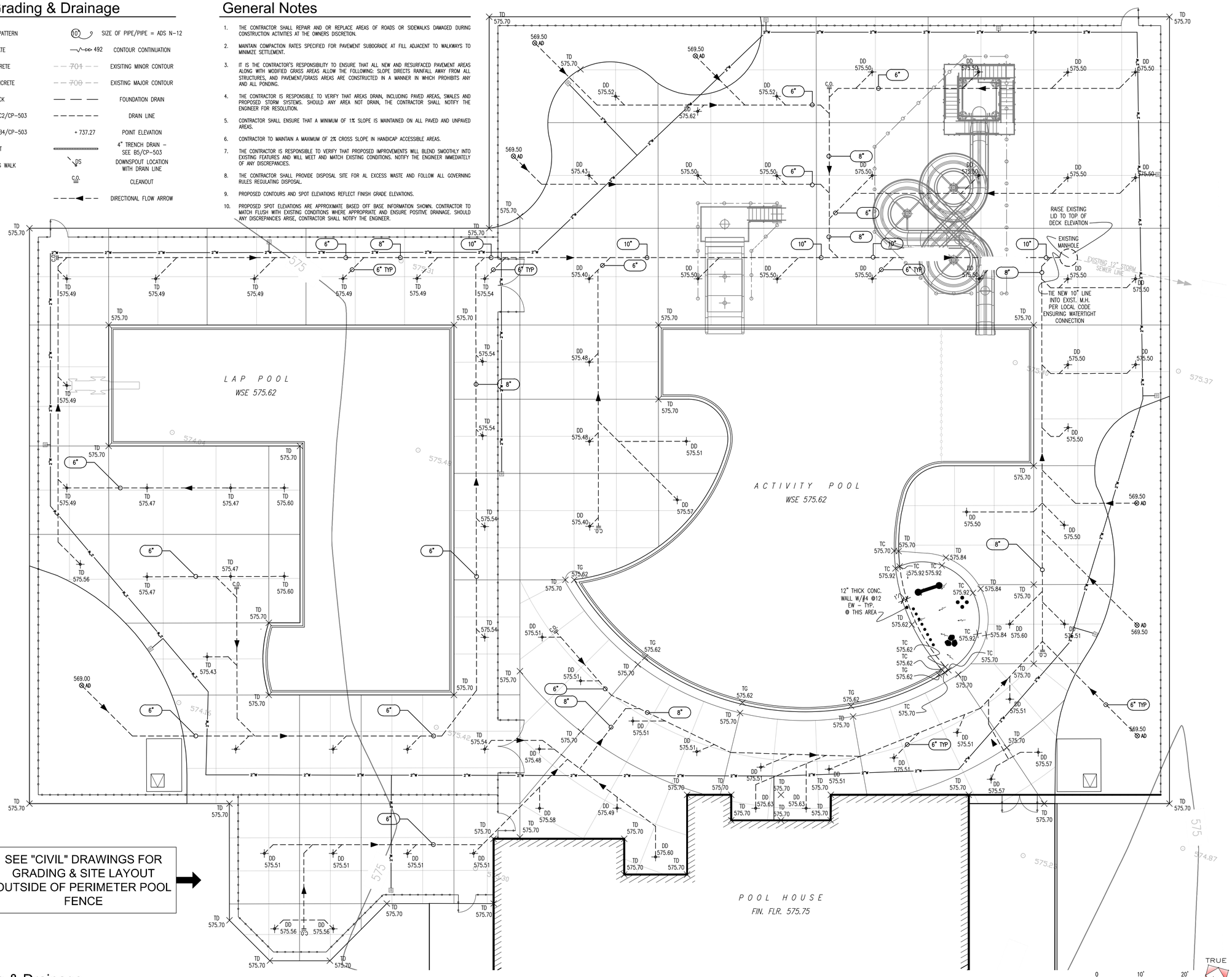
Legend - Grading & Drainage

	DRAINAGE FLOW PATTERN	10"	SIZE OF PIPE/PIPE = ADS N-12
TG	TOP OF GRATE	492	CONTOUR CONTINUATION
TC	TOP OF CONCRETE	701	EXISITING MINOR CONTOUR
BC	BOTTOM OF CONCRETE	700	EXISTING MAJOR CONTOUR
TD	TOP OF DECK		FOUNDATION DRAIN
AD	AREA DRAIN - SEE C2/CP-503		DRAIN LINE
DD	DECK DRAIN - SEE B4/CP-503	+ 737.27	POINT ELEVATION
DS	DOWNSPOUT		4" TRENCH DRAIN - SEE B5/CP-503
TEW	TOP OF EXISTING WALK	DS	DOWNSPOUT LOCATION WITH DRAIN LINE
INV.	INVERT	C.O.	CLEANOUT
			DIRECTIONAL FLOW ARROW

General Notes

1. THE CONTRACTOR SHALL REPAIR AND OR REPLACE AREAS OF ROADS OR SIDEWALKS DAMAGED DURING CONSTRUCTION ACTIVITIES AT THE OWNERS DISCRETION.
2. MAINTAIN COMPACTION RATES SPECIFIED FOR PAVEMENT SUBGRADE AT FILL ADJACENT TO WALKWAYS TO MINIMIZE SETTLEMENT.
3. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT ALL NEW AND RESURFACED PAVEMENT AREAS ALONG WITH MODIFIED GRASS AREAS ALLOW THE FOLLOWING: SLOPE DIRECTS RAINFALL AWAY FROM ALL STRUCTURES, AND PAVEMENT/GRASS AREAS ARE CONSTRUCTED IN A MANNER IN WHICH PROHIBITS ANY AND ALL PONDING.
4. THE CONTRACTOR IS RESPONSIBLE TO VERIFY THAT AREAS DRAIN, INCLUDING PAVED AREAS, SWALES AND PROPOSED STORM SYSTEMS. SHOULD ANY AREA NOT DRAIN, THE CONTRACTOR SHALL NOTIFY THE ENGINEER FOR RESOLUTION.
5. CONTRACTOR SHALL ENSURE THAT A MINIMUM OF 1% SLOPE IS MAINTAINED ON ALL PAVED AND UNPAVED AREAS.
6. CONTRACTOR TO MAINTAIN A MAXIMUM OF 2% CROSS SLOPE IN HANDICAP ACCESSIBLE AREAS.
7. THE CONTRACTOR IS RESPONSIBLE TO VERIFY THAT PROPOSED IMPROVEMENTS WILL BLEND SMOOTHLY INTO EXISTING FEATURES AND WILL MEET AND MATCH EXISTING CONDITIONS. NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.
8. THE CONTRACTOR SHALL PROVIDE DISPOSAL SITE FOR AL EXCESS WASTE AND FOLLOW ALL GOVERNING RULES REGULATING DISPOSAL.
9. PROPOSED CONTOURS AND SPOT ELEVATIONS REFLECT FINISH GRADE ELEVATIONS.
10. PROPOSED SPOT ELEVATIONS ARE APPROXIMATE BASED OFF BASE INFORMATION SHOWN. CONTRACTOR TO MATCH FLUSH WITH EXISTING CONDITIONS WHERE APPROPRIATE AND ENSURE POSITIVE DRAINAGE. SHOULD ANY DISCREPANCIES ARISE, CONTRACTOR SHALL NOTIFY THE ENGINEER.



Deck Grading & Drainage

1"= 10'-0"

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PAYNE PARK
AQUATIC FACILITY

848 PAYNE AVENUE
NORTH TONAWANDA, NY 14120

Deck Grading & Drainage

City Project No. 2023-01

Project No. 23065

CP-104

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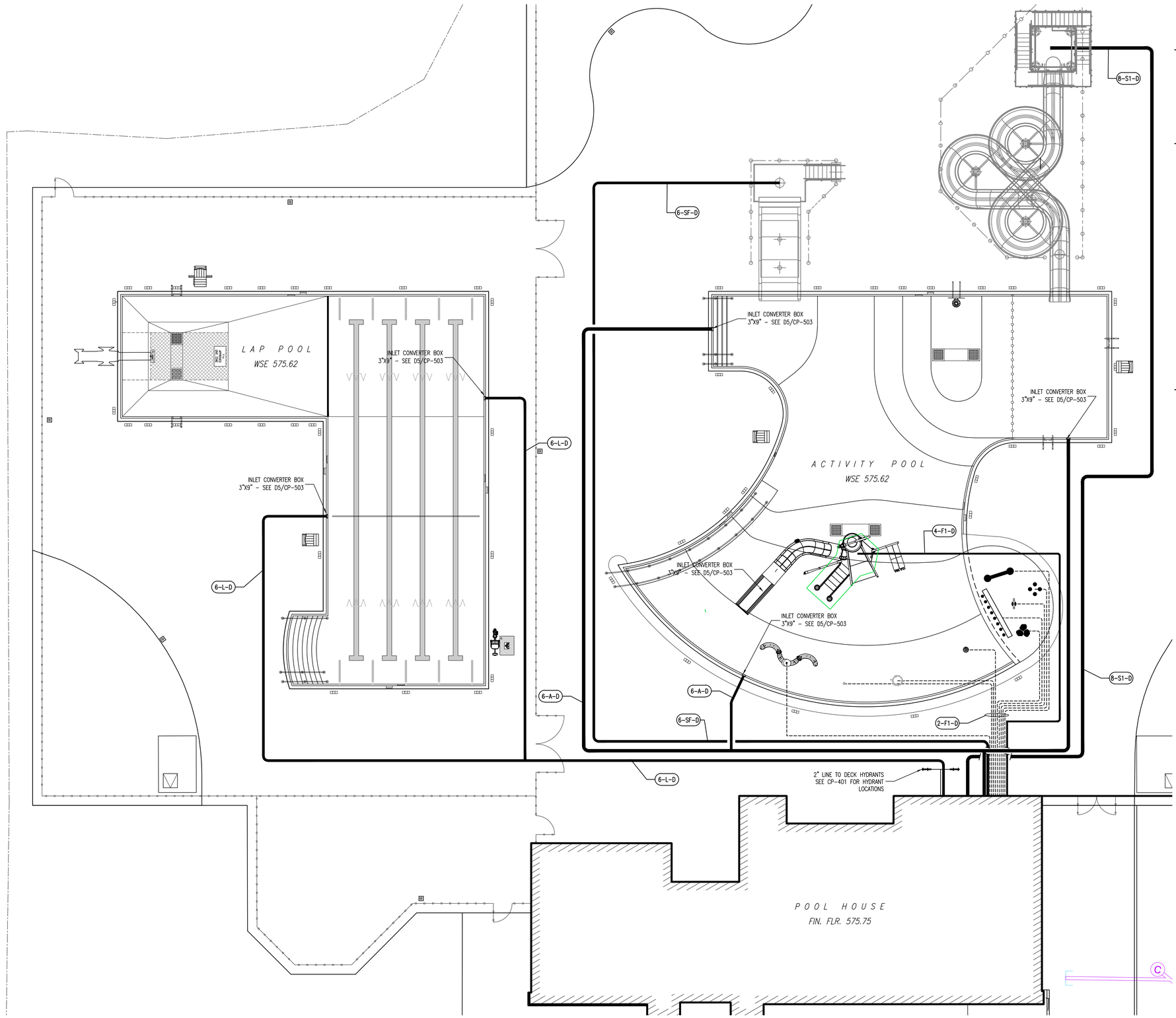

Lap & Activity Pool Plan - Return & Water Piping

1"= 10'-0"

Legend - Piping

NOTE: ALL POOL PIPING TO BE SCH 80 PVC

- FEATURE PIPING
- POOL DISCHARGE PIPING

Pipe Tag Legend

8"-A-G

- 8" = PIPE SIZE (IN.)
- A = POOL TYPE (ZONE)
  - L = LAP POOL
  - A = ACTIVITY POOL
  - S = SLIDE
  - F = FEATURE
- G = PIPING TYPE
  - D = DISCHARGE LINE
  - G = GRAVITY LINE
  - S = SUCTION LINE

General Notes

1. PIPING INDICATED ON SITE PLAN(S) IS TO AN EXTENT SCHEMATIC IN NATURE. NEW PIPING INDICATED MAY REQUIRE SHIFTING TO AVOID CONFLICT WITH EXISTING PIPING, UTILITIES, AND OR SITE FEATURES. FITTINGS ARE NOT SHOWN. THE CONTRACTOR SHALL PROVIDE ALL FITTINGS REQUIRED (INCLUDING FITTINGS REQUIRED TO TRANSITION OVER NEW AND EXISTING PIPING).
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3. IT IS THE CONTRACTORS RESPONSIBILITY TO DETERMINE THE PRESENCE OF EXISTING PIPING AND UTILITIES PRIOR TO CONSTRUCTION ACTIVITIES.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL MODIFICATIONS TO EXISTING PIPING REQUIRED TO ACCOMMODATE NEW PIPING, STRUCTURES OR OTHER RELATED CONSTRUCTION ISSUES.
5. EXISTING STRUCTURES SUCH AS: CULVERT PIPES, UTILITIES, PIPELINES, ETC., SHALL BE PROTECTED DURING EXCAVATION. PROVIDE SHORING AS NECESSARY AND/OR REQUIRED BY REGULATIONS.
6. THE CONTRACTOR SHALL EXPOSE EXISTING PIPING (TO VERIFY EXACT LOCATIONS) PRIOR TO PLACEMENT OF NEW PIPING. IF EXISTING CONDITIONS PRESENT PROBLEMS RELATIVE TO DESIGN INTENT, CONTACT ENGINEER FOR APPROVAL OF PROPOSED DEVIATION FROM PLANS. HORIZONTAL AND VERTICAL ALIGNMENT OF PIPING SHALL BE CONSISTENT WITH PLANS UNLESS APPROVED BY ENGINEER.
7. ALL SITE PIPING SHALL BE INSTALLED WITH A MINIMUM OF 36" OF COVER UNLESS NOTED OTHERWISE.
8. PRESSURE PIPING SHALL BE PLACED USING A UNIFORM SLOPE EXCEPT WHERE NECESSARY TO AVOID EXISTING PIPING. CONTRACTOR TO PROVIDE WINTERIZATION AND DRAINING INSTRUCTIONS AND SCHEMATICS TO OWNER.

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AQUATIC FACILITY

848 PAYNE AVENUE
NORTH TONAWANDA, NY 14120

Lap & Activity Pool Plan - Return & Water Piping

City Project No. 2023-01

Project No. 23065

CP-105

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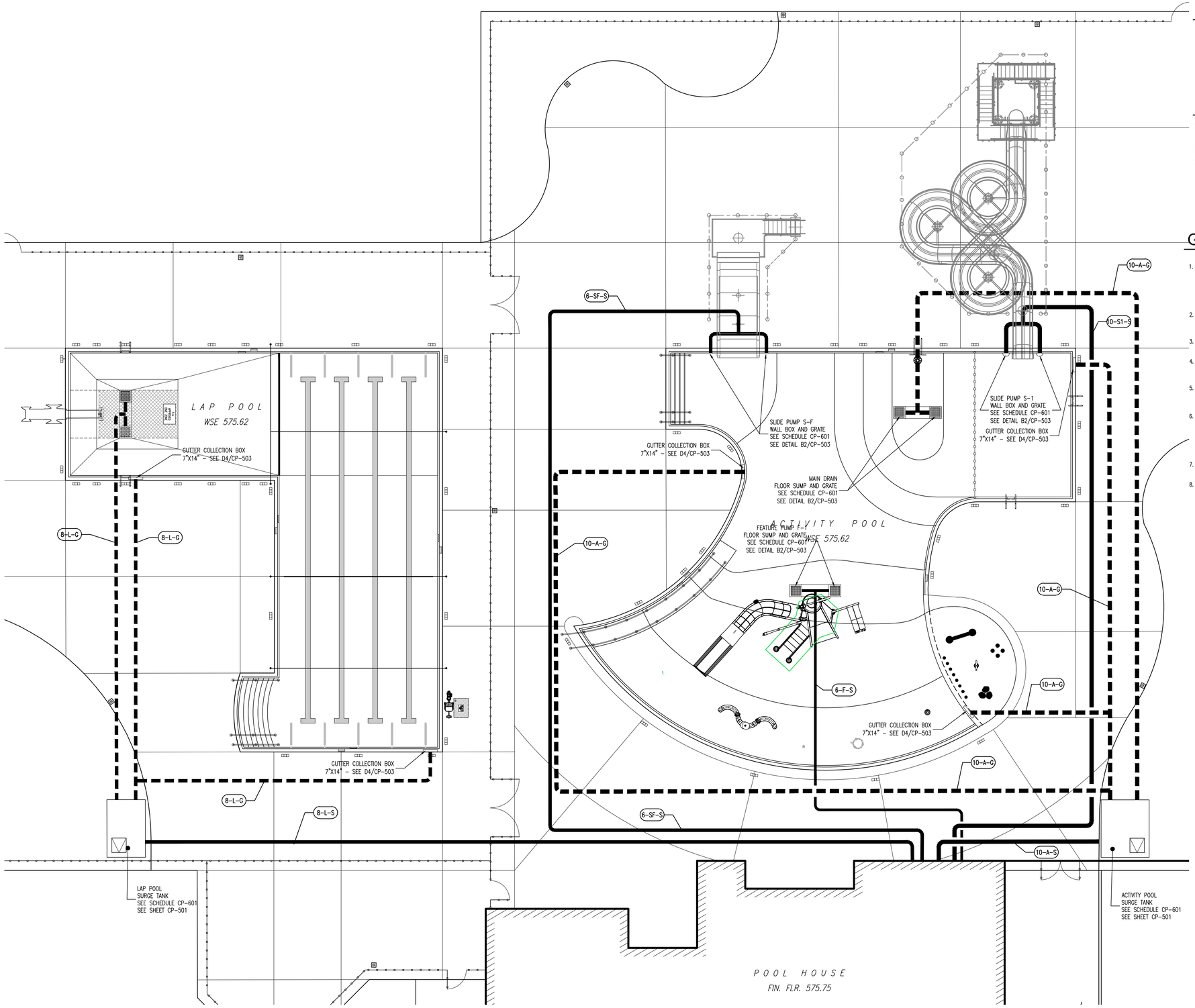

Legend - Piping

NOTE: ALL POOL PIPING TO BE SCH 80 PVC

- GRAVITY AND DRAIN PIPING
- SUCTION PIPING

Pipe Tag Legend

8"-A-G

- PIPE SIZE (IN.)
- POOL TYPE (ZONE)
  - L = LAP POOL
  - A = ACTIVITY POOL
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Lap & Activity Pool Plan - Gravity & Suction Piping

1"= 10'-0"

0 10' 20'

TRUE NORTH

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AQUATIC FACILITY

848 PAYNE AVENUE
NORTH TONAWANDA, NY 14120

Lap & Activity Pool Plan - Gravity & Suction Piping

City Project No. 2023-01

Project No. 23065

CP-106

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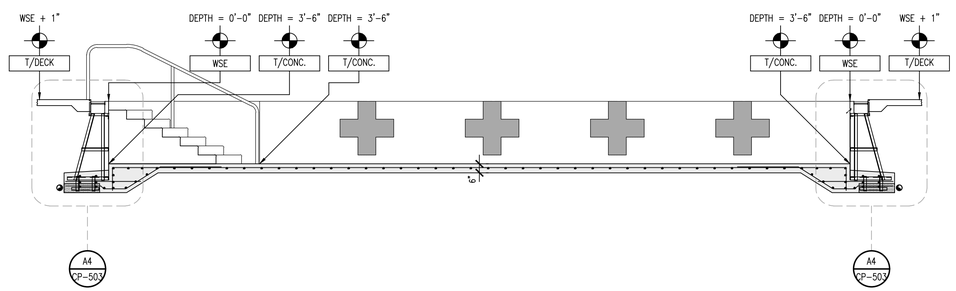
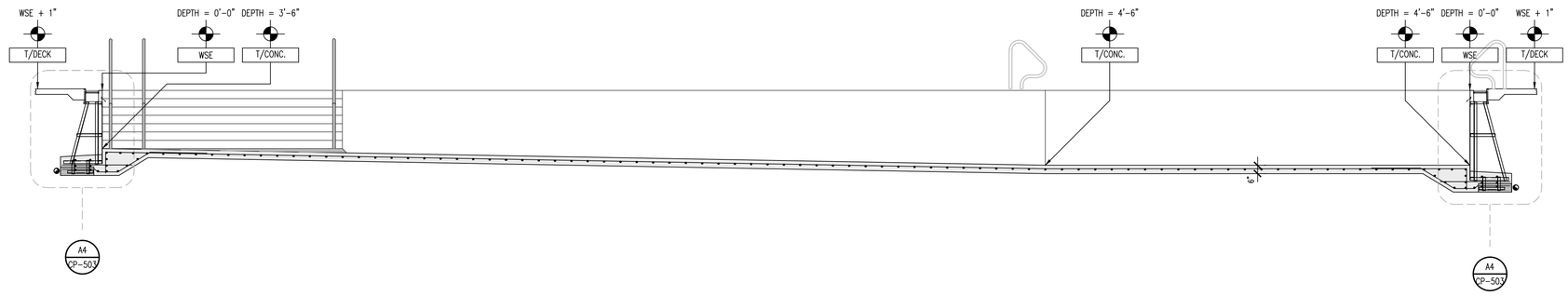


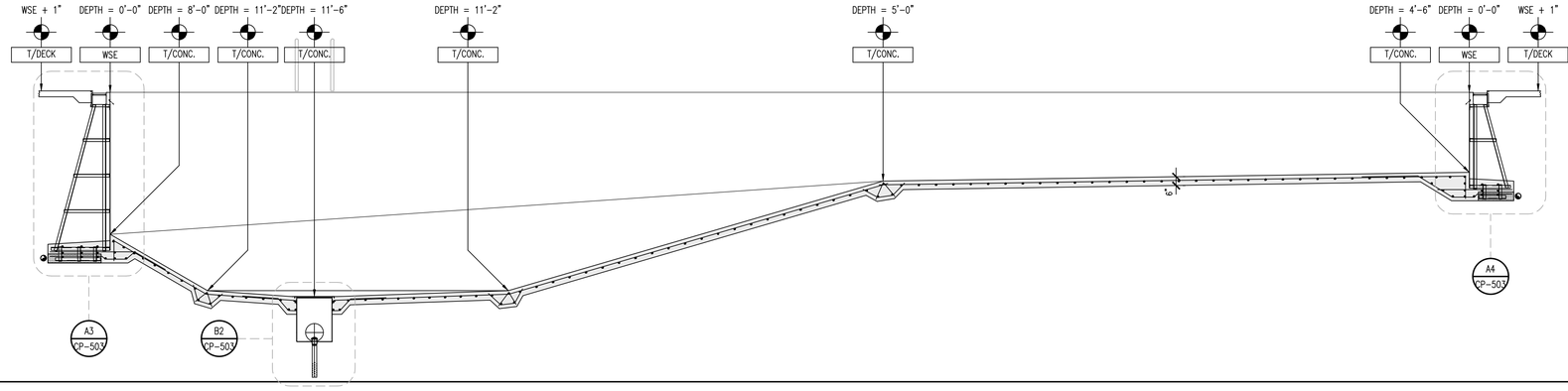
STAIR REINFORCEMENT:
SHALL BE #4 BARS
@ 12" O.C. AS DEPICTED

C2 Pool Section
1/4"=1'-0"



STAIR REINFORCEMENT:
SHALL BE #4 BARS
@ 12" O.C. AS DEPICTED

B1 Pool Section
1/4"=1'-0"



STAIR REINFORCEMENT:
SHALL BE #4 BARS
@ 12" O.C. AS DEPICTED

A1 Pool Section
1/4"=1'-0"

BRANDSTETTER
CARROLL INC
ARCHITECTS ENGINEERS PLANNERS
1220 West 6th Street, Suite 300, Cleveland, OH 44113
p. 216.241.4480 www.brandstettercarroll.com

Lexington Cincinnati Cleveland Dallas Charleston

REGISTERED ARCHITECT
RICHARD THOMAS PARKER
026165
STATE OF NEW YORK

CITY OF NORTH TONAWANDA, N.Y.

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Revisions: NUMBER DATE DESCRIPTION
Issue Date: 12-16-2025 ISSUED FOR BID

PAYNE PARK
AQUATIC FACILITY

848 PAYNE AVENUE
NORTH TONAWANDA, NY 14120

Lap Pool Sections

City Project No.
2023-01

Project No.
23065

CP-301

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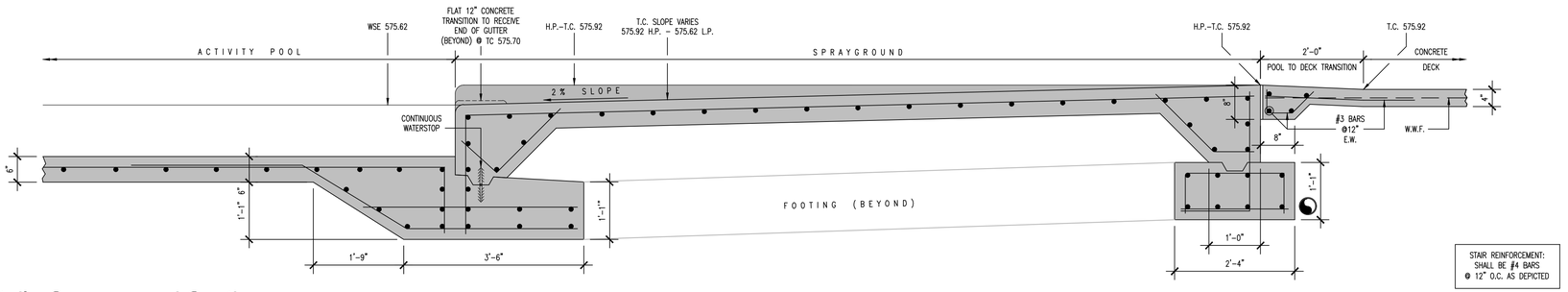
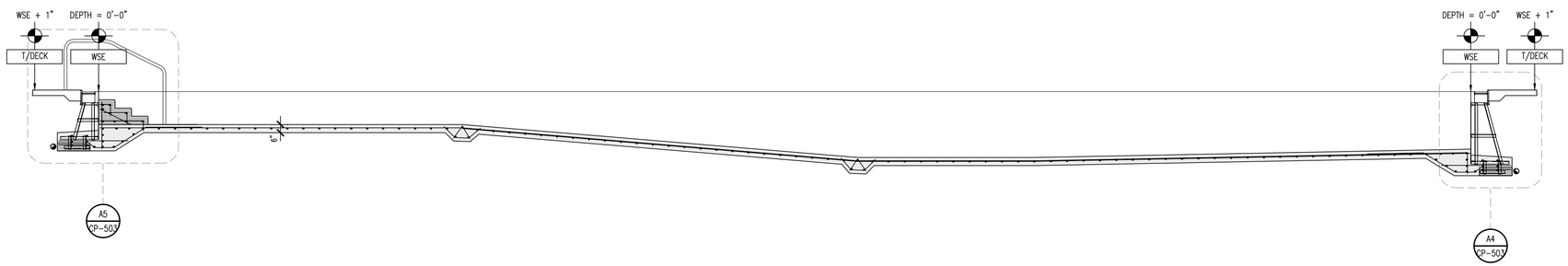
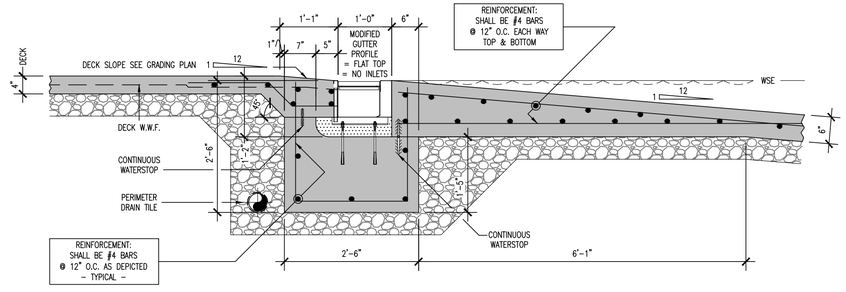


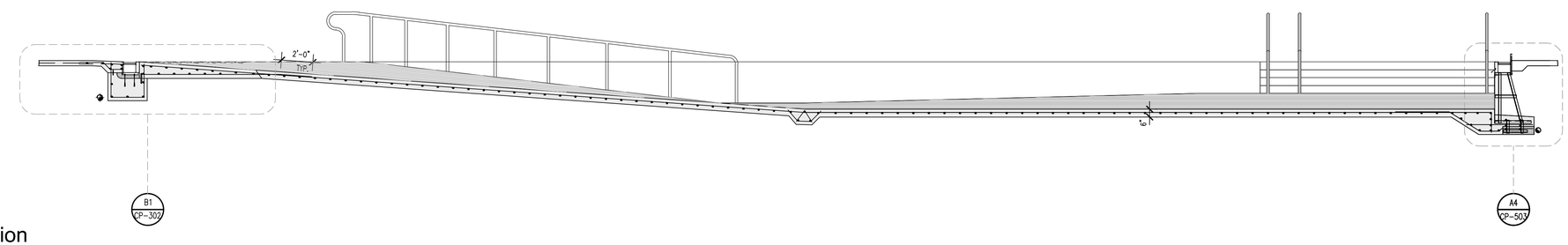
D1 Detail - Sprayground Section
3/4"=1'-0"



C1 Pool Section
1/4"=1'-0"



B1 Detail - Zero Depth Entry
3/4"=1'-0"



A1 Pool Section
1/4"=1'-0"

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PAYNE PARK
AQUATIC FACILITY

848 PAYNE AVENUE
NORTH TONAWANDA, NY 14120

Activity Pool Sections

City Project No.
2023-01

Project No.
23065

CP-302

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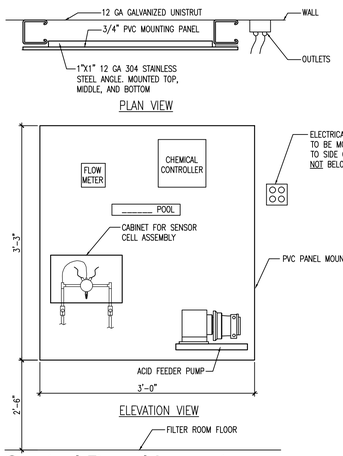
General Notes

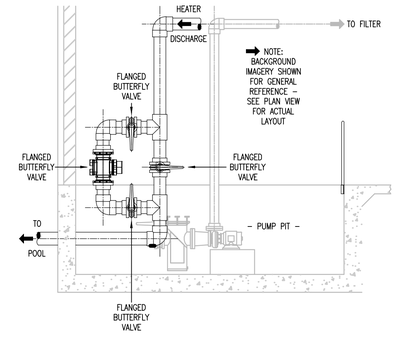
1. PIPING SHOWN IS SCHEMATIC IN NATURE. CONTRACTOR TO PROVIDE FINAL EQUIPMENT LAYOUT PRIOR TO INSTALLING ANY EQUIPMENT.
2. PIPING SHALL BE RAN CLOSE TO CEILING IN ALL AREAS WHERE PRACTICAL. MINIMUM HEIGHT TO BOTTOM OF PIPE 8'-0".
3. PIPING ARRANGEMENT SHALL ALLOW FOR ACCESS TO EQUIPMENT FOR MAINTENANCE.
4. ALL POOL PIPING SHALL BE SCHEDULE 80 PVC.
5. ALL PIPING SHALL BE LABELED WITH MANUFACTURED LABELS. (SEE SPECIFICATIONS)
6. VARIABLE FREQUENCY DRIVES FOR PUMPS LOCATED IN PITS AROUND THE FACILITY SHALL BE LOCATED ADJACENT TO THE CORRESPONDING PIT AND MOUNTED ON A UNISTRUT FRAME, SEE ELECTRICAL PLANS FOR MORE INFORMATION.
7. ALL PIPING AT OR AROUND PUMP SHALL BE FLANGED PIPING.
8. PIPE SUPPORTS NOT SHOWN – ENSURE ALL PIPING IS SUPPORTED WITH STAINLESS STEEL PIPE SUPPORT/HANGER SYSTEM THAT PROVIDES FIRM SUPPORT WITH "0" MOVEMENT.
9. ALL PIPE PENETRATIONS THRU WALLS/SLAB SHALL BE SEALED USING INTERLOCKING LINK PIPE SEAL SYSTEM UNLESS NOTED OTHERWISE.

Coded Notes - See CP-601 for Detailed Equipment Information

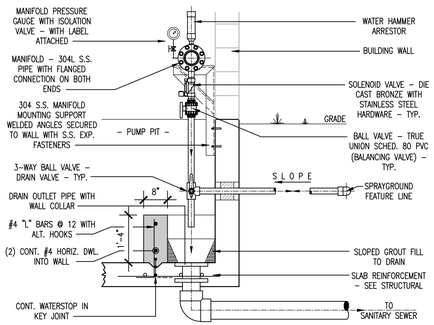
1. LAP POOL RECIRCULATION PUMP.
2. ACTIVITY POOL RECIRCULATION PUMP.
3. LARGE SLIDE PUMP.
4. SMALL SLIDE PUMP.
5. ACTIVITY POOL FEATURE PUMP.
6. CONCRETE HOUSE KEEPING PAD. SIZE PER EQUIPMENT MANUFACTURER, HEIGHT SHOULD ALLOW FOR HAIR AND LINT STRAINER CLEARANCES.
7. PUMP MOTOR STARTERS (VFD).
8. LAP POOL FILTER – 1 VERTICAL TANK.
9. ACTIVITY POOL FILTER – 1 VERTICAL TANK.
10. SMALL SLIDE RETURN LINE.
11. LARGE SLIDE RETURN LINE.
12. ACTIVITY POOL LARGE FEATURE RETURN LINE.
13. PUMP SUCTION LINE – PROVIDE PRESSURE GAUGE CLOSE TO PUMP.
14. LAP POOL FILTERED WATER RETURN LINE.
15. LAP POOL CONTROL PANEL SEE A1/CP-401.
16. FLANGED BUTTERFLY VALVING FOR U.V. SYSTEM.
17. LAP POOL U.V. UNIT – SEE C2/CP-401.
18. ACTIVITY POOL U.V. UNIT – SEE C2/CP-401.
19. 2" SCH 80 PVC DOMESTIC WATER SUPPLY, SEE PLUMBING PLANS FOR CONTINUATION.
20. AUTOFILL SOLENOID VALVE AND BYPASS – SEE B2/CP-401.
21. CLEAR SPACE REQUIRED AROUND POOL HEATERS – CONFIRM DISTANCE WITH MANUFACTURER.
22. FLEXIBLE COUPLING – SIZE TO MATCH PIPE – TYP.
23. ACTIVITY POOL CONTROL PANEL SEE A1/CP-401.
24. HAIR & LINT STRAINER – TYP.
25. LAP POOL U.V. CONTROLLER.
26. PUMP DISCHARGE LINE – PROVIDE PRESSURE GAUGE AND ISOLATION VALVE IN VERTICAL LINE ABOVE PUMP – TYP.
27. ACTIVITY POOL U.V. CONTROLLER.
28. FLANGED ECCENTRIC REDUCER WITH FLAT SIDE UP ON PUMP SUCTION – TYP.
29. DRAIN DOWN PIT DRAIN: SEE PLUMBING PLAN FOR ALL FLOOR DRAINS & CONNECTION TO SANITARY SEWER – TYP.
30. FILTER PIPING: ALL FILTER PIPING MUST BE VERIFIED WITH THE FILTER MFR. PRIOR TO FABRICATION/CONSTRUCTION.
31. 48"X40" PALLET FOR CL2 TABLET STORAGE.
32. 48"X40" PALLET FOR ACID TABLET STORAGE.
33. DOUBLE CHECK BACK-FLOW PREVENTER: ALL POTABLE WATER SUPPLY LINES SHALL SHALL BE CONNECTED AFTER BACK-FLOW PREVENTER – SEE PLUMBING DRAWINGS.
34. 1 1/2" ALUMINUM HANDRAIL – TYP.
35. ACTIVITY POOL SMALL FEATURE RETURN LINE(S) FROM DISTRIBUTION CONTROL MANIFOLD – PROVIDE POSITIVE CONSISTENT SLOPE BACK TO BUILDING FROM FEATURE.
36. FLANGED BUTTERFLY VALVE FOR FEATURE FLOW CONTROL.
37. FLANGED BUTTERFLY VALVE – TYP.
38. FLANGED CONCENTRIC REDUCER TYPICAL WHERE NEEDED ON ALL PUMP DISCHARGE LINES.
39. FILTERED WATER DISCHARGE LINE FROM FILTER.
40. CL2 TABLET MODULAR FEEDER SYSTEM.
41. ACID TABLET MODULAR FEEDER SYSTEM.
42. ACTIVITY POOL FILTERED WATER RETURN LINE.
43. LAPEYRE "ALTERNATING TREAD" STAIRS: PROVIDE HOT-DIP GALVANIZED STAIRS WITH 304 S.S. FASTENERS.
44. 304 S.S. ACTIVITY POOL FEATURE MANIFOLD WITH DRAIN DOWN PIT – SEE C3/CP-401.
45. LAP POOL HEATER.
46. ACTIVITY POOL HEATER.
47. HEATER PIPING: ALL HEATER PIPING MUST BE VERIFIED WITH THE HEATER MFR. PRIOR TO FABRICATION/CONSTRUCTION.
48. 2" FEED LINE TO DECK HYDRANTS – SEE CP-101 FOR HYDRANT LOCATIONS.



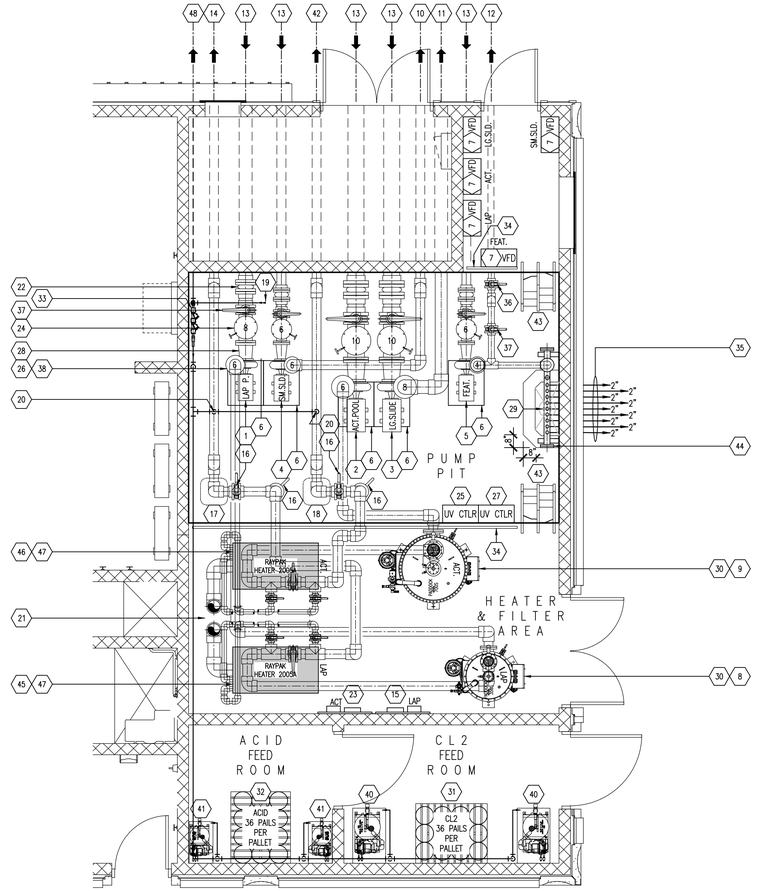
B1 Control Panel Layout
1"=1'-0"



C2 Section - U.V.
1/4"=1'-0"

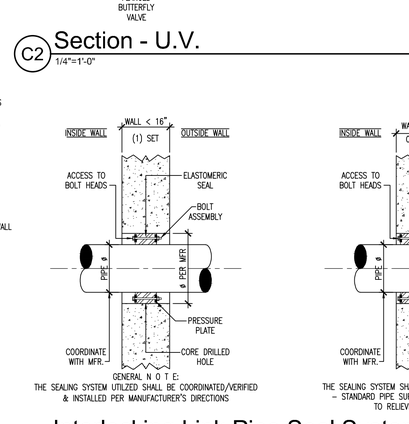


C3 Manifold with Drain Down Pit
1/2"=1'-0"

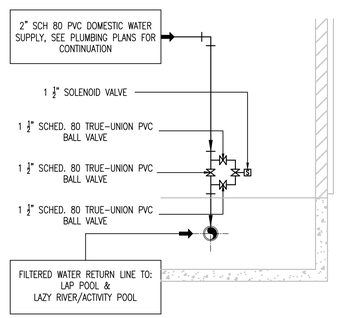


A4 Filter Room - Chemical Rooms
1/4"=1'-0"

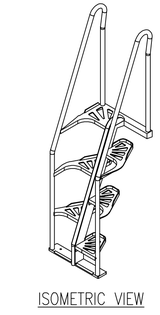
NOTE: VERIFY ALL PIPE SIZES/GENERAL LAYOUT PRIOR TO FABRICATION/CONSTRUCTION



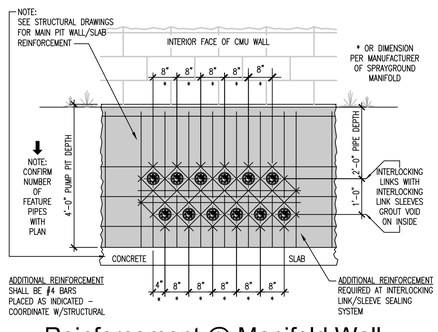
B2 Interlocking Link Pipe Seal System
1" = 1'-0"



A1 Detail - Make-Up Water Supply
1/4"=1'-0"



A2 Alternating Tread Access Stairs
1/2"=1'-0"



A3 Reinforcement @ Manifold Wall Pipe Penetrations
1/2"=1'-0"

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PAYNE PARK
AQUATIC FACILITY

848 PAYNE AVENUE
NORTH TONAWANDA, NY 14120

Filter Room
Sections & Details

City Project No.
2023-01

Project No.
23065

CP-401

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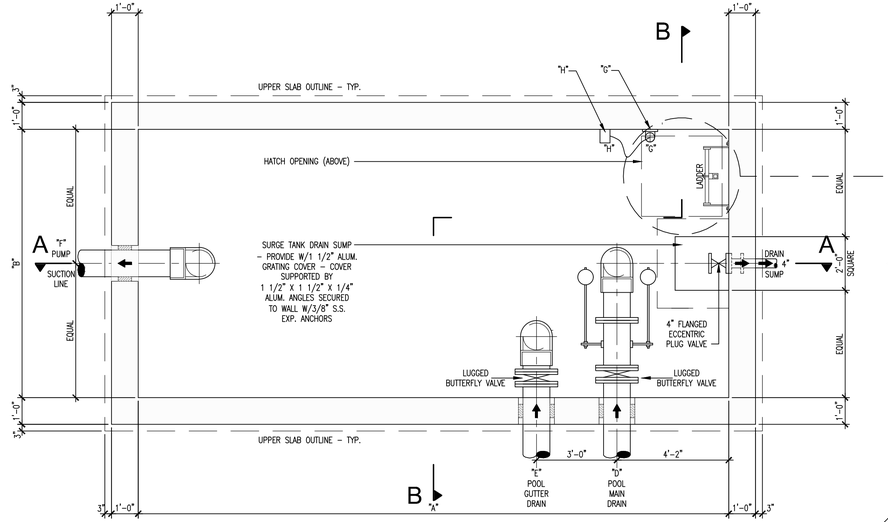
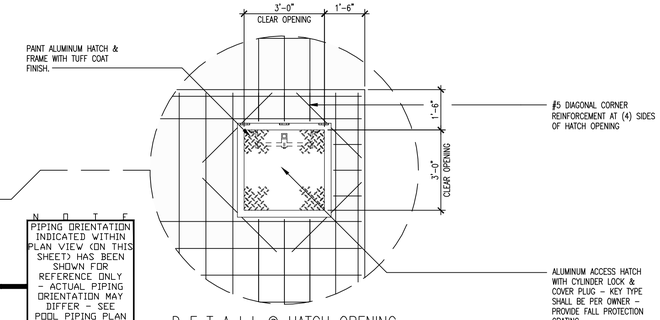
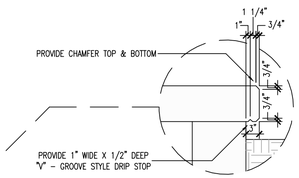
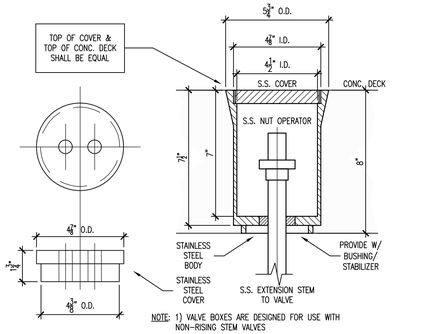


P L A N V I E W



D E T A I L @ HATCH OPENING





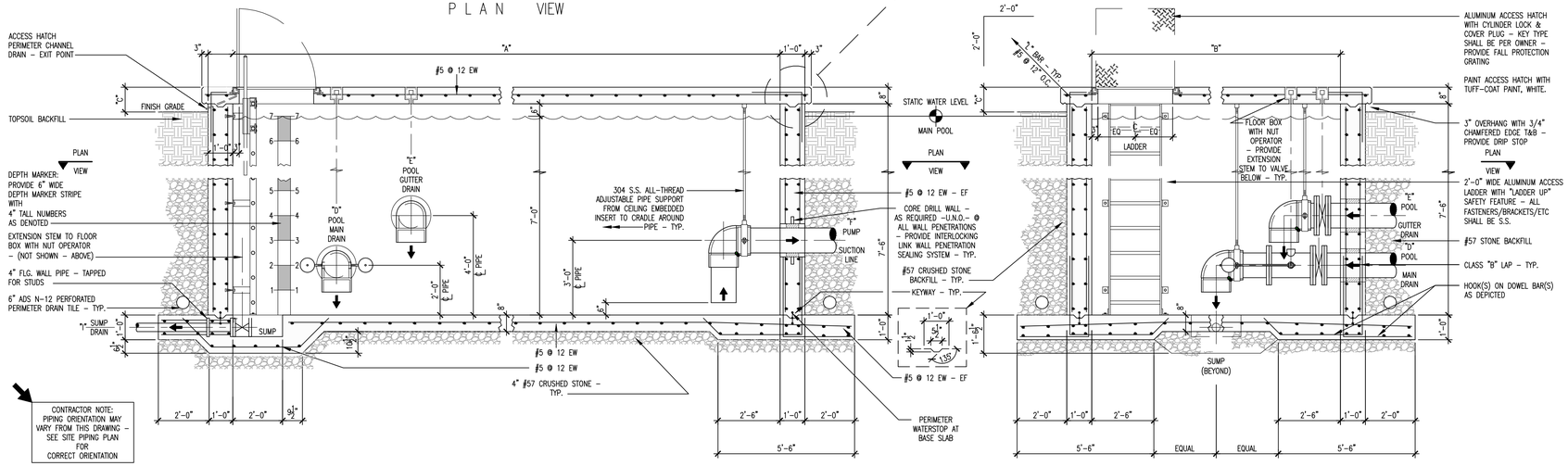
D5 Valve Floor Box

3" = 1'-0"

L E G E N D		LAP	ACTIVITY
MARK	I T E M	VALUE	VALUE
"A"	INSIDE FACE TO INSIDE FACE OF CONCRETE WALL	12'	12'
"B"	INSIDE FACE TO INSIDE FACE OF CONCRETE WALL	8'	10'
"C"	TOP OF OF UPPER SLAB TO FINISH GRADE	–	15"
"D"	POOL MAIN DRAIN – PIPE DIAMETER	8"	10"
"E"	POOL GUTTER DRAIN – PIPE DIAMETER	8"	10"
"F"	PUMP SUCTION LINE – PIPE DIAMETER	8"	10"
"G"	WATER LEVEL SENSOR WITH PVC PIPE (FASTENED TO WALL)	4"	4"
"H"	WATER LEVEL SENSOR VENT BOX (FASTENED TO WALL)	N/A	N/A
"I"	SURGE TANK DRAIN	4"	4"

Legend - Lap & Activity Pool Surge Tanks

- N/A



B1 Surge Tank Detail

3/8" = 1'-0"

1. PIPING ORIENTATION INDICATED WITHIN DETAIL AND OR SECTION: THE PIPING ORIENTATION DEPICTED MAY CHANGE AND MUST BE VERIFIED/COORDINATED WITH SITE PIPING PLAN PRIOR TO COMMENCEMENT OF FABRICATION/CONSTRUCTION ACTIVITIES.
2. ALL PIPING SHALL BE SCHEDULE 80 PVC UNLESS NOTED OTHERWISE.
3. PROVIDE FLANGED PIPING CONNECTIONS WHERE GRAPHICALLY OR VERBALLY INDICATED.
4. PROVIDE HDPE PIPE SLEEVES, WITH WALL COLLAR, AT WALL PENETRATIONS. SLEEVE SHALL BE SPECIFICALLY DESIGNED TO ACCEPT INTERLOCKING LINK PIPE/SLEEVE ANNULAR SEALING SYSTEM. SYSTEM SHALL PROVIDE "WATER-TIGHT" PASSAGE OF PIPE THROUGH CONCRETE WALL. TYPICAL AT ALL PIPE/CONCRETE WALL PENETRATIONS UNLESS NOTED OTHERWISE.
5. PROVIDE WALL PIPE AT ALL SUMPS.
6. ALL FASTENERS SHALL BE 304 S.S. UNLESS NOTED OTHERWISE.
7. ALL PIPING IN WATER SLIDE PUMP PIT SHALL BE FLANGED SCHEDULE 80 PVC PIPE.
8. ALL PIPING WITHIN SURGE TANK SHALL SCHEDULE 80 PVC PIPE. PIPING CONNECTIONS AT VALVES AND APPURTENANCES SHALL BE FLANGED.
9. ALL PIPING SHALL BE SUPPORTED BY CEILING AND OR FLOOR AND OR WALL IN A MANNER WHICH PROHIBITS ALL MOVEMENT DURING PASSAGE OF FLOW.
10. ALL STEEL MEMBERS/FABRICATIONS SHALL BE HOT-DIP GALVANIZED UPON COMPLETION OF ALL FABRICATION ACTIVITIES.

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PAYNE PARK
AQUATIC FACILITY

848 PAYNE AVENUE
NORTH TONAWANDA, NY 14120

SURGE TANK

City Project No. 2023-01
Project No. 23065

CP-501

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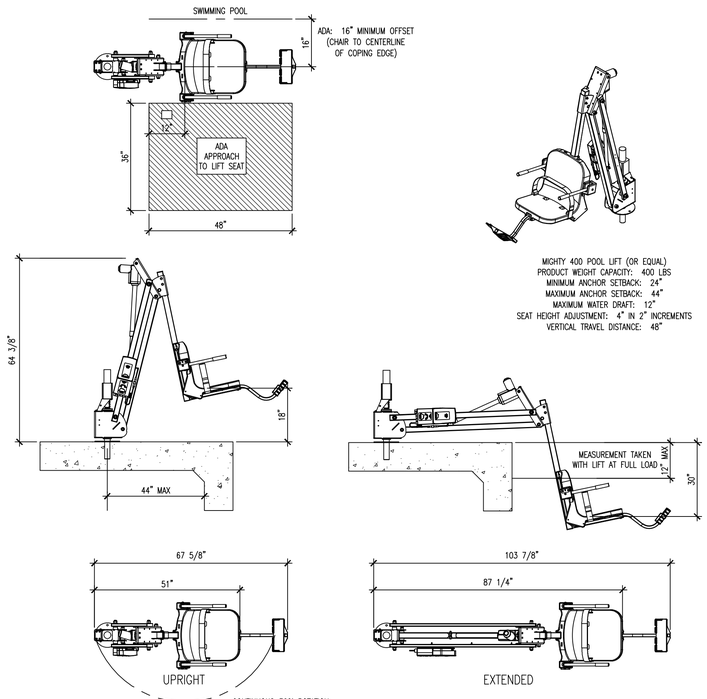
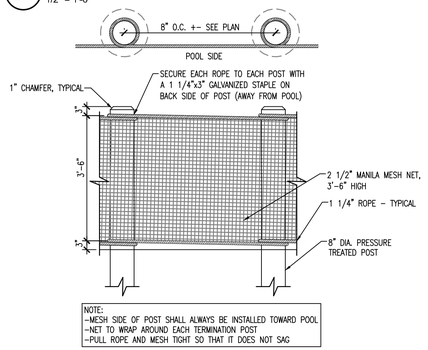
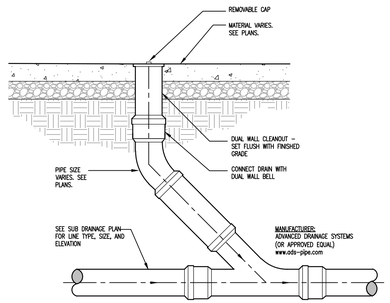


MIGHTY 400 POOL LIFT (OR EQUAL)
PRODUCT WEIGHT CAPACITY: 400 LBS
MINIMUM ANCHOR SETBACK: 24"
MAXIMUM ANCHOR SETBACK: 44"
MAXIMUM WATER DRAFT: 12"
SEAT HEIGHT ADJUSTMENT: 4" IN 2" INCREMENTS
VERTICAL TRAVEL DISTANCE: 48"

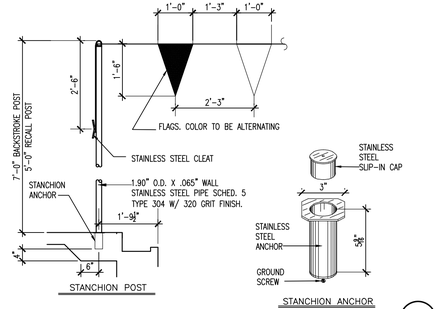
C1 Detail - ADA Lift
1/2" = 1'-0"



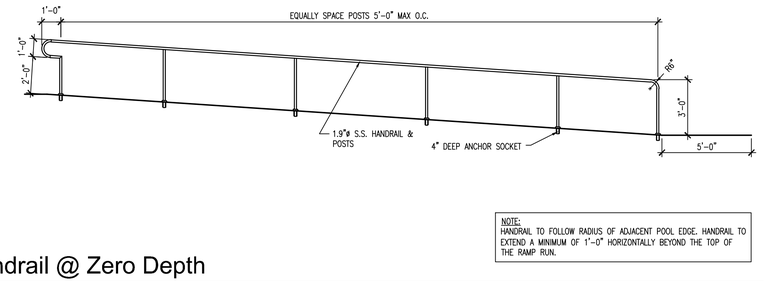
B2 Cleanout
3/4" = 1'-0"



B3 Detail - Backstroke Flag
1/2" = 1'-0"



C4 Deck Hydrant Detail
1 1/2" = 1'-0"

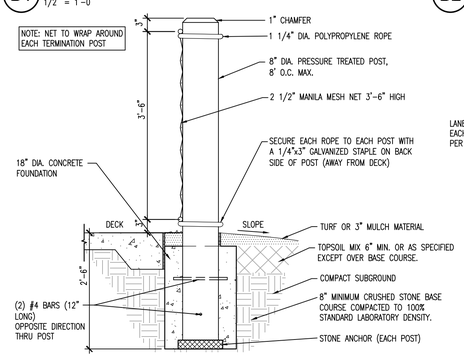


C5 Deck Drain
1 1/2" = 1'-0"

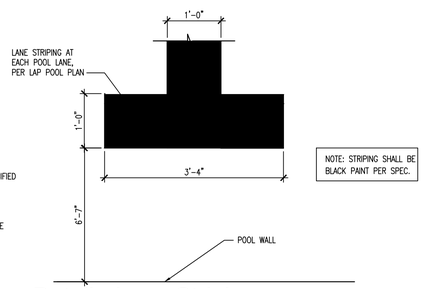
NOTE:
HANDRAIL TO FOLLOW RADIUS OF ADJACENT POOL EDGE. HANDRAIL TO EXTEND A MINIMUM OF 1'-0" HORIZONTALLY BEYOND THE TOP OF THE RAMP RUN.

B4 Handrail @ Zero Depth
1/4"=1'-0"

B1 Barrier Fence Elevation
1/2" = 1'-0"

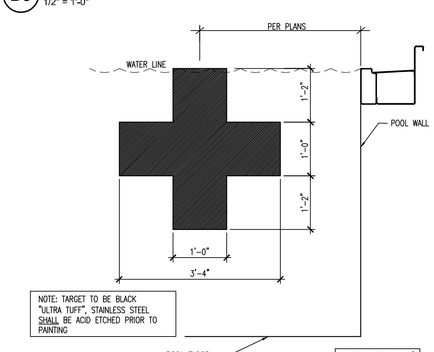


A2 Detail - Lane Striping
3/4" = 1'-0"



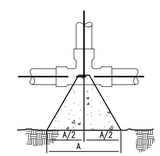
NOTE: STRIPING SHALL BE BLACK PAINT PER SPEC.

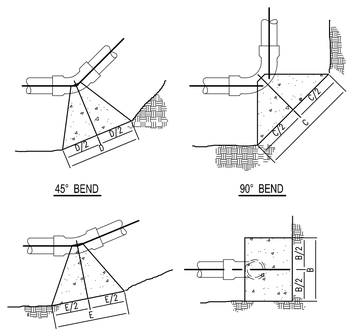
A3 Detail - Pool Wall Target
3/4" = 1'-0"



PIPE SIZE	A	B	C	D	E
.5" AND SMALLER	1'-6"	1'-0"	2'-6"	1'-0"	
6"	2'-0"	1'-6"	3'-0"	1'-6"	1'-0"
8"	2'-6"	2'-0"	3'-6"	2'-0"	1'-0"
10"	3'-6"	2'-6"	4'-6"	2'-6"	1'-6"
12"	4'-0"	3'-0"	5'-6"	3'-0"	1'-6"

NOTES
1. CONCRETE TO BE 3000 PSI.
2. ALL FITTINGS TO BE GLUED JOINTS.
3. THRUST BLOCKS TO BE PLACED AGAINST UNDISTURBED EARTH - USE ADDITIONAL CONC. AS REQUIRED FOR OVER-EXCAVATION.
4. TYPICAL - ALL WATER PIPING FOR POOL FILTRATION SYSTEM AND FEATURES.





D4 Thrust Blocks
1"=1'-0"

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REGISTERED ARCHITECT RICHARD THOMAS PARKER 036165 STATE OF NEW YORK

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PAYNE PARK
AQUATIC FACILITY

848 PAYNE AVENUE
NORTH TONAWANDA, NY 14120

Details

City Project No.
2023-01

Project No.
23065

CP-502

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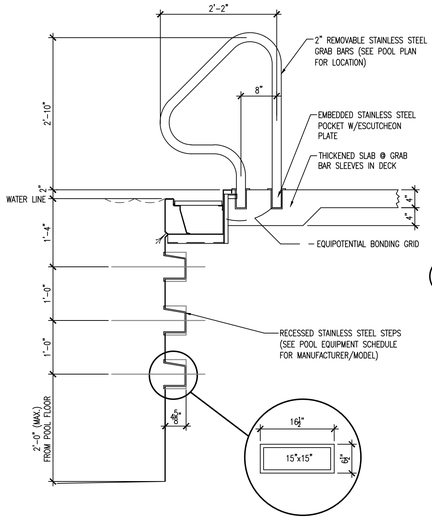
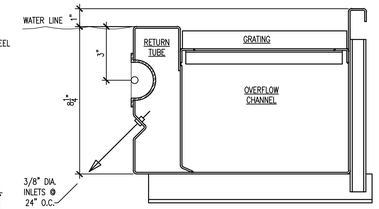


C1 Recessed Step & Grab Bar

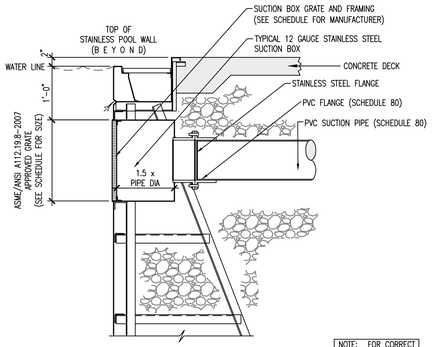
3/4" = 1'-0"

NOTE: SEE A1&A2/ CP-503 FOR CORRECT GUTTER PROFILE



D2 Detail - Recessed Rope Anchor @ Lap Pool & Activity Pool

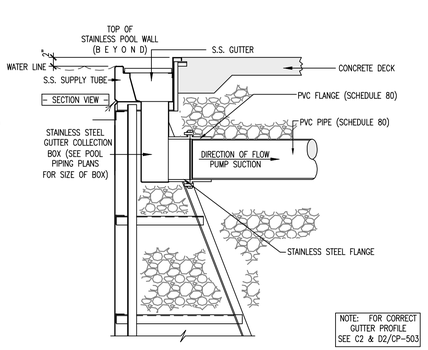
3" = 1'



D3 Wall Suction Box

3/4" = 1'-0"

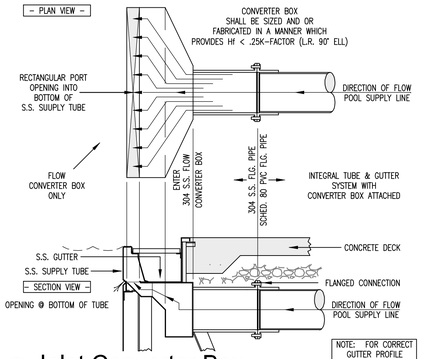
NOTE: FOR CORRECT GUTTER PROFILE SEE C2 & D2/CP-503



D4 Gutter Collection Box

3/4" = 1'-0"

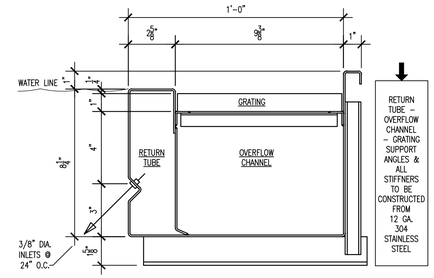
NOTE: FOR CORRECT GUTTER PROFILE SEE C2 & D2/CP-503



D5 Inlet Converter Box

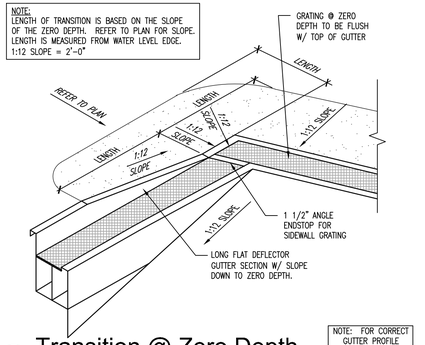
3/4" = 1'-0"

NOTE: FOR CORRECT GUTTER PROFILE SEE C2 & D2/CP-503



C2 Detail - Return Tube & Gutter @ Lap & Activity Pool

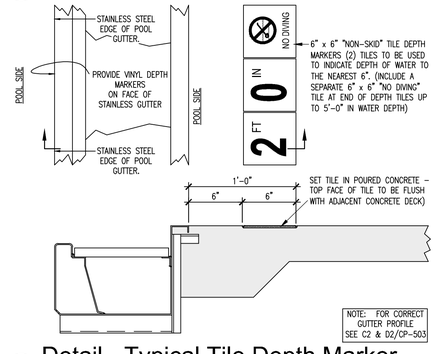
3" = 1'



C3 Transition @ Zero Depth

N.T.S.

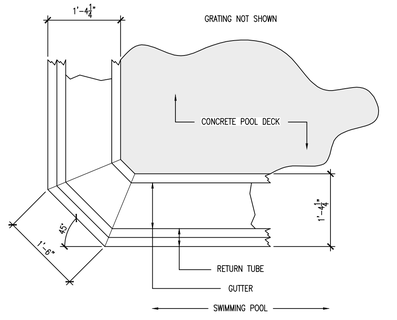
NOTE: FOR CORRECT GUTTER PROFILE SEE C2 & D2/CP-503



C4 Detail - Typical Tile Depth Marker

1 1/2" = 1'-0"

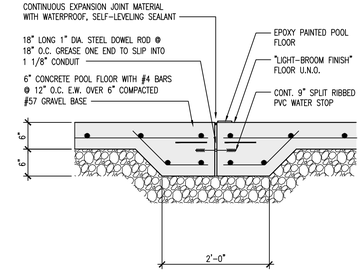
NOTE: FOR CORRECT GUTTER PROFILE SEE C2 & D2/CP-503



C5 Pool Corner

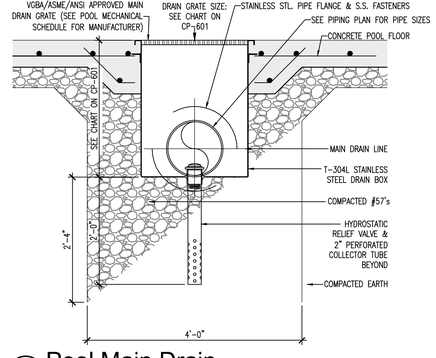
3/4" = 1'-0"

NOTE: FOR CORRECT GUTTER PROFILE SEE C2 & D2/CP-503



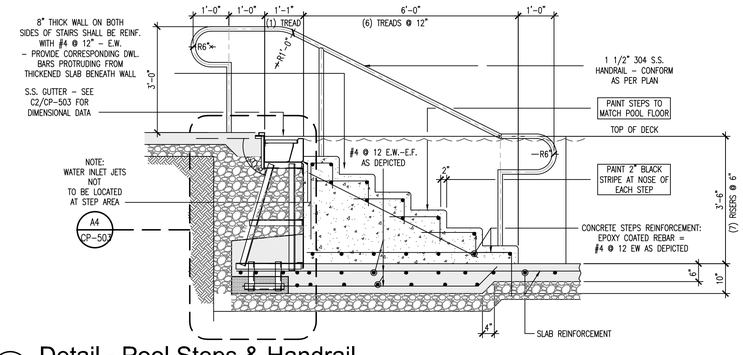
B1 Pool Floor & Expansion Joint

3/4" = 1'-0"



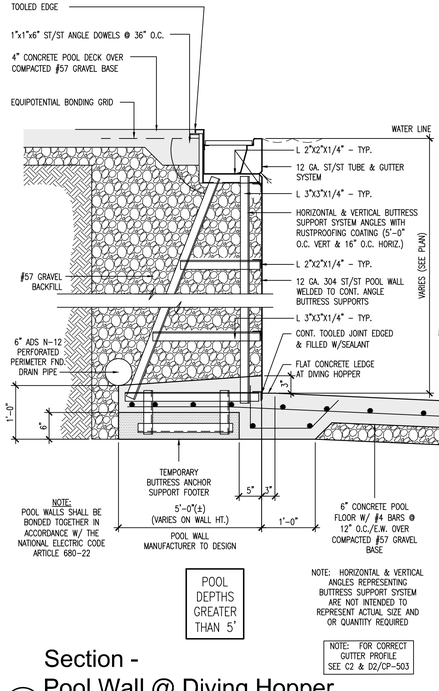
B2 Pool Main Drain

NTS



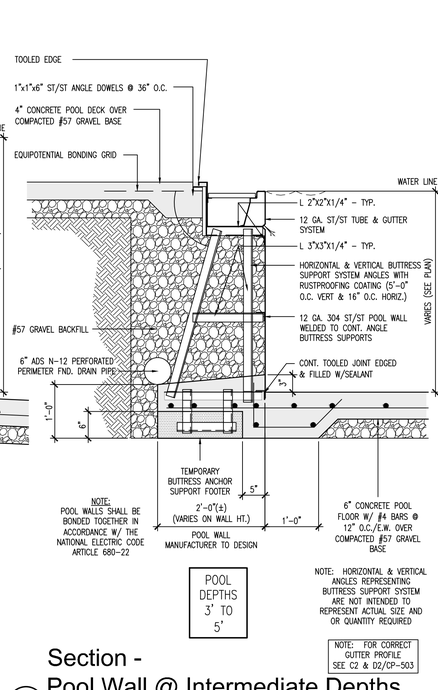
A1 Detail - Pool Steps & Handrail

1/2" = 1'-0"



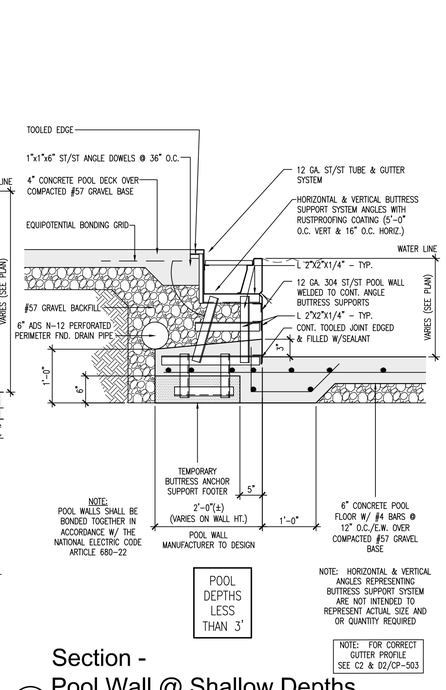
A3 Section - Pool Wall @ Diving Hopper

3/4" = 1'-0"



A4 Section - Pool Wall @ Intermediate Depths

3/4" = 1'-0"



A5 Section - Pool Wall @ Shallow Depths

3/4" = 1'-0"

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PAYNE PARK AQUATIC FACILITY

848 PAYNE AVENUE
NORTH TONAWANDA, NY 14120

Details

City Project No. 2023-01

Project No. 23065

CP-503

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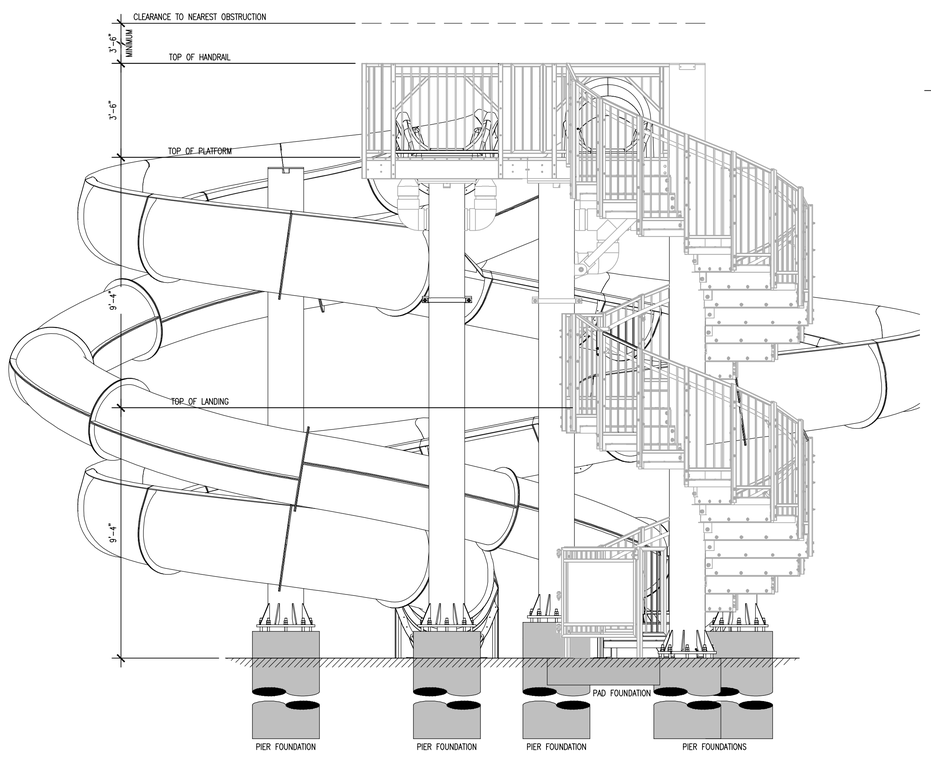
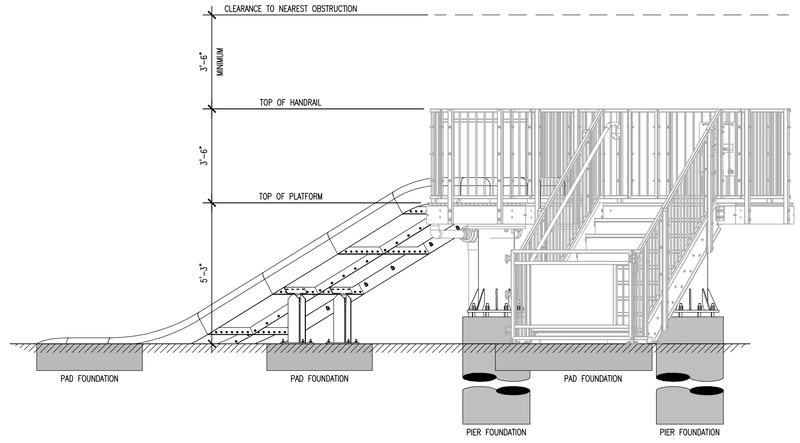
CONTRACTOR NOTE:

THE INTENT OF THIS DRAWING IN NOT TO BE USED IN CONSTRUCTION OF THE FAMILY SLIDE OR THE DOUBLE SLIDE.
THE INTENT IS TO PROVIDE THE CONTRACTOR A VERY GENERAL KNOWLEDGE OF THESE FEATURES.
ALL INFORMATION TO BE USED FOR CONSTRUCTION/INSTALLATION SHALL BE OBTAINED FROM THE SLIDE EQUIPMENT MANUFACTURER.
THIS INCLUDES BUT IS NOT LIMITED TO: GENERAL PLACEMENT – ASSEMBLY – CONCRETE/STRUCTURAL REINFORCEMENT REQUIREMENTS.



B4 Double Slide
3/8"=1'-0"



A4 Family Slide
3/8"=1'-0"

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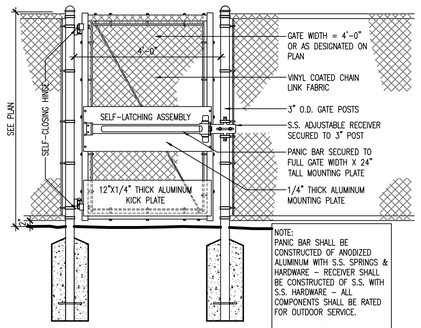
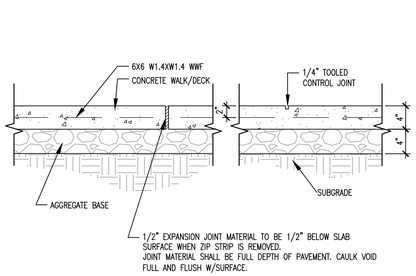


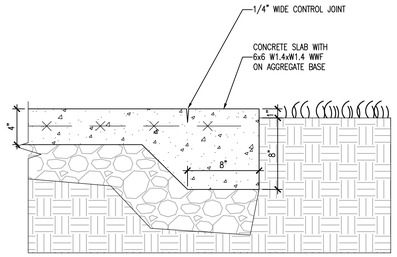
Chanlink Fence Gate with Panic Hardware

D2 1/2" = 1'-0"



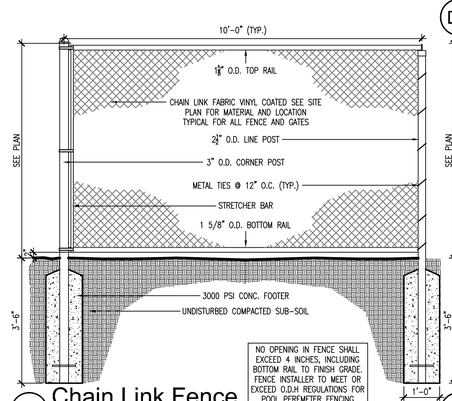
4" Concrete Walk/Deck With Expansion and Control Joint

D3 1-1/2" = 1'-0"



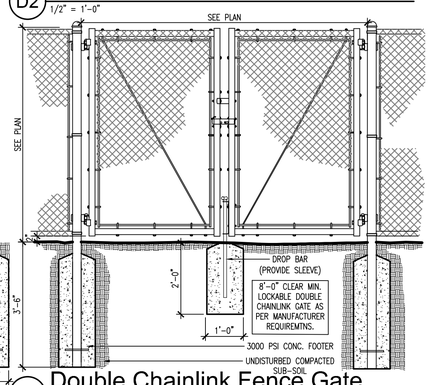
Typical Edge of 4" Walk

D4 1 1/2"=1'-0"



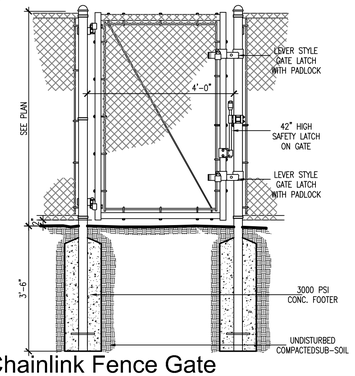
Chain Link Fence

C1 1/2" = 1'-0"



Double Chainlink Fence Gate

C2 1/2" = 1'-0"



Chainlink Fence Gate

C3 1/2" = 1'-0"

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CP-505

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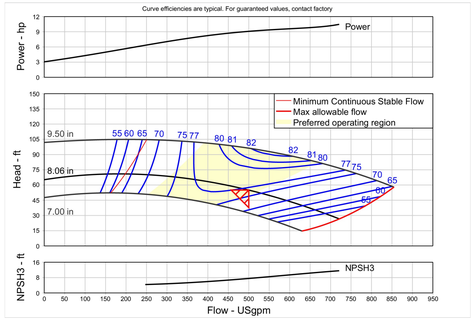
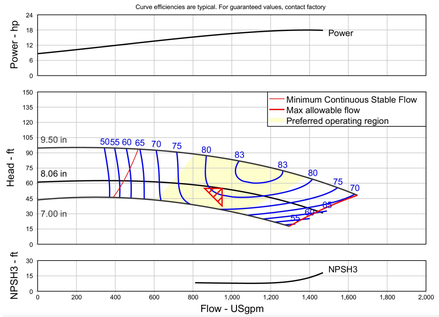
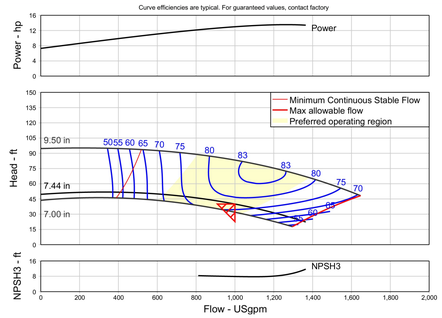


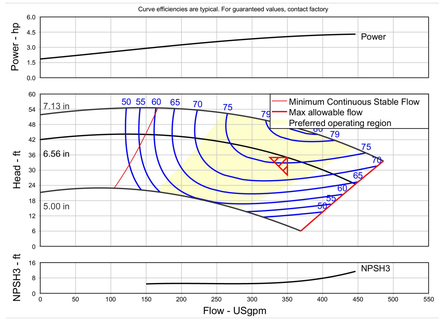
A-R Pump Curve



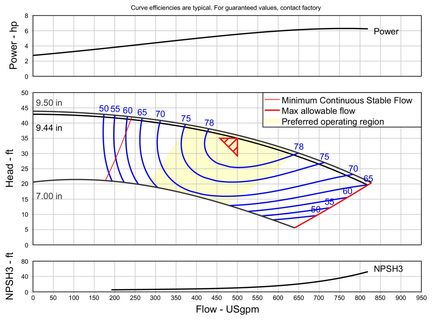
P-R Pump Curve



S-1 Pump Curve



A-F Pump Curve



S-F Pump Curve

			Lap Pool Recirculation	Activity Pool Recirculation	Activity Pool Feature	Family Slide	Water Slide
Pump ID			L-R	A-R	A-F	S-F	S-1
Pool Classification			Public Pool (Lap) 6-Hour Turnover	Special Use Pool 2-Hour Turnover			
POOL	Surface Area	SF	3,935	5,342			
	Pool Perimeter	LF	332	369			
	Volume	GAL	170,350	94,725			
Surge	Required Capacity	GAL	3935	5342			
	Gutter Volume	GAL	832	925			
	Tank Volume	GAL	3949	4937			
	Surge Capacity Provided	GAL	4781	5861			
	Surge Tank Inside Dim	FT	12'0"x8'0"x7'	12'0"x10'0"x7'			
FILTER	TURNOVER RATE - REQ.	HRS	6	2			
	TURNOVER RATE - ACT.	HRS	5.2	1.7			
	FLOW RATE REQUIRED	GPM	473	789			
	FLOW AT 110%	GPM	521	868			
	FLOW RATE PROVIDED	GPM	550	950			
	FILTER AREA REQUIRED	SF	344	594			
	FILTER AREA PROVIDED	SF	351.2	707.3			
	MAXIMUM ALLOWABLE FILTER FLOW	GPM	565	1138			
	FILTER TYPE		Regenative Media	Regenative Media			
	MANUFACTURER		Paddock	Paddock			
	MODEL No.		PPEC 350S	PPEC 700S			
	POWER REQUIREMENTS		110V 20A	110V 20A			
	FILTER RATE - ACTUAL	GPM/SF	1.6	1.3			
PUMP and MOTOR STARTER (VFD)	FLOW RATE	GPM	550	950	350	450	950
	Head	FT	55	55	35	35	40
	MANUFACTURER		Aurora	Aurora	Aurora	Aurora	Aurora
	MODEL No.		3801 3x4x9.5	3801 5x6x9.5A	3801 3x4x7A	3801 4x5x9.5	3801 5x6x9.5A
	H.P.	HP	15	20	5	7.5	20
	R.P.M.	RPM	1800	1800	1800	1800	1800
	IMPELLER	IN	8.06	8.06	6.56	9.44	8.06
	VFD MANUFACTURER		AcuDrive	AcuDrive	AcuDrive	AcuDrive	AcuDrive
	MODEL No.		AD150-2302-N12	AD200-2302-N12	AD050-2302-N12	AD075-2302-N12	AD200-2302-N12
	HAIR / LINT STRAINER		Fluidtrol SW 4x8	Fluidtrol SW 6x10	Fluidtrol SW 4x6	Fluidtrol SW 5x8	Fluidtrol SW 6x10
INLET RETURNS	GUTTER INLETS (6 GPM)	QTY	92.0	159.0			
	3/8" INLET SPACING	FT	3.6	2.3			
	TOTAL FLOW	gpm	552	954			
FLOOR DRAINS OR WALL SUCTION BOXES and RETURN AND SUPPLY PIPES	GRATE TYPE / MFGR		Paddock Pool Equipment Company				
	MODEL No.		2424PCFC	2448PCFC-AVRD	2424PCFC	2424PCFC	2448PCFC-AVRD
	MAXIMUM GRATE VEL.	FPS	1.5	1.5	1.5	1.5	1.5
	MINIMUM OPEN AREA	SQ IN	117.65	203.21	74.87	96.26	203.21
	OPEN AREA PROVIDED		219.60	439.20	219.60	219.60	439.20
	VELOCITY THROUGH GRATE		0.48	0.82	0.30	0.39	0.82
	MAX FLOW THROUGH GRATE		920	1996	920	920	1996
	BOX SIZE (2 EACH)	IN	24"x24"x30"	24x48x36"	24"x24"x30"	24"x24"x30"	18"X36"X36"
	SUCTION / GRAVITY PIPE SIZ	IN	8	10	6	8	10
	VELOCITY (Max 6)	FPS	3.93	4.31	4.39	3.21	4.31
	DISCHARGE PIPE SIZE	IN	6	8	6	6	8
	VELOCITY (Max 8)	FPS	6.90	6.78	4.39	5.64	6.78
HEATER	MANUFACTURER		Raypak	Raypak			
	MODEL No.		Xtherm P-2005A	Xtherm P-2005A			
	BTU - Output	BTU	1,969,000	1,969,000			
	HEATER ELECTRICAL	AMPS	120V 18 AMP	120V 18 AMP			
	CIRCULATION PUMP	AMPS	120V 17 AMP	120V 17 AMP			
	GAS CONNECTION	IN	2	2			
	WATER CONNECTION	IN	2.5	2.5			
	COMBUSTION AIR	IN	8.0	8.0			
	FLUE SIZE	IN	8	8			
CHLORINE FEEDER	CAPACITY REQUIRED	lbs/d	307	307			
	CAPACITY ACTUAL	lbs/d	525	525			
	MAKE		ACCU-TAB	ACCU-TAB			
	MODEL No.		3140AT	3140AT			
	POWER REQUIREMENTS		120V 15 AMP	120V 15 AMP			
pH Control	Make		Acid-Rite	Acid-Rite			
	MODEL No.		450	450			
	POWER REQUIREMENTS		120V 15 AMP	120V 15 AMP			
UV DISINFECTION	MANUFACTURER		ETS	ETS			
	MODEL No.		WF-215-6-N	WF-225-F8-N			
	Voltage		230V	230V			
	Loads @ 230V	AMPS	15	24			
	No. Power / Breaker		30 AMP Type 'D'	40 AMP Type 'D'			
CHEM CONTROLLER	MANUFACTURER		Chemtrol	Chemtrol			
	MODEL No.		PC 3000	PC 3000			
	POWER REQUIREMENTS		110V 20A	110V 20A			
FLOWMETER	MAKE		+GF Signet'	+GF Signet'	Flow Viz	Flow Viz	Flow Viz
	MODEL No.		Type 2551	Type 2551	FV-6 Digital	FV-6 Digital	FV-8 Digital
	SIZE		Remote Mount	Remote Mount	6	6	8
	RANGE	GPM	15-8000	15-8000	300-1000	300-1000	600-1800

Pool and Pump Data Sheet

N.T.S.

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Lexington Cincinnati Cleveland Dallas Charleston

REGISTERED ARCHITECT RICHARD THOMAS PARKER 036165 STATE OF NEW YORK

CITY OF NORTH TONAWANDA, N.Y.

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Revisions: NUMBER DATE DESCRIPTION

Issue Date: 12-16-2025 ISSUED FOR BID

PAYNE PARK
AQUATIC FACILITY

848 PAYNE AVENUE
NORTH TONAWANDA, NY 14120

POOL EQUIPMENT SCHEDULES

City Project No. 2023-01

Project No. 23065

CP-601

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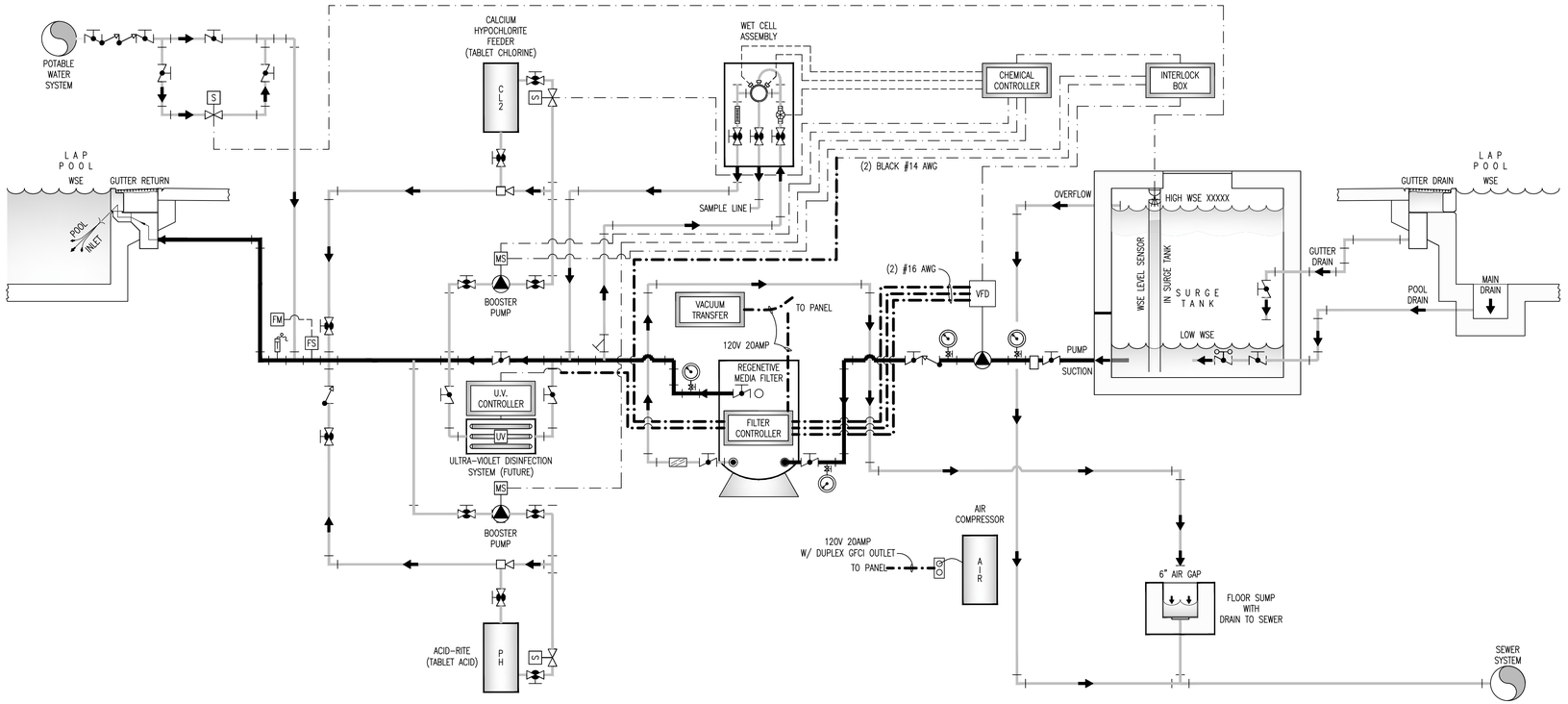
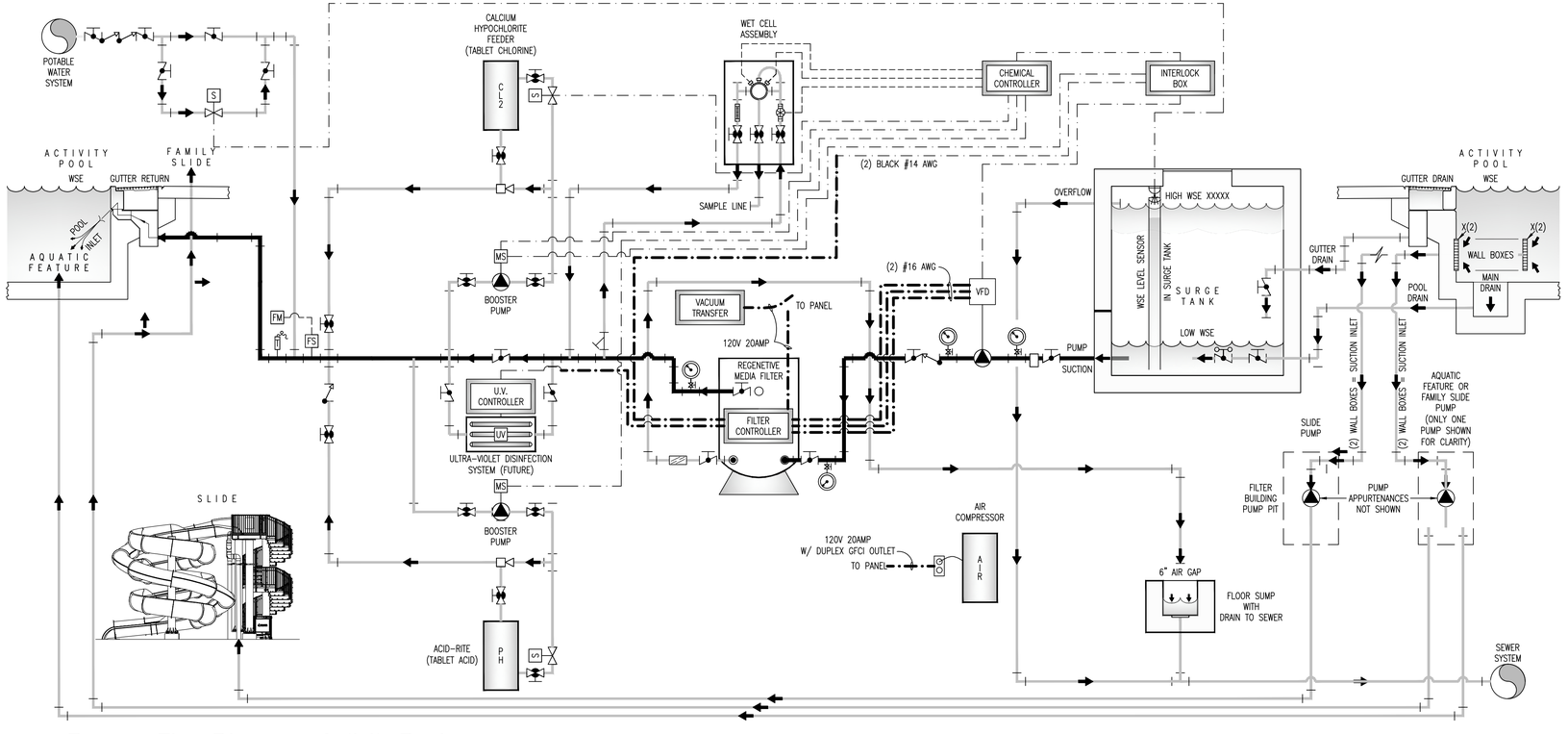


Process Flow Diagram - Lap Pool

N.T.S.



Process Flow Diagram - Activity Pool

N.T.S.

General Notes

ALL VALVES 4" AND LARGER ARE TO BE BUTTERFLY VALVES.

ALL VALVES UP TO 3" SHALL BE BALL VALVES.

ALL PVC PIPING FOR POOL AND SPLASH GROUND TO BE SCHEDULE 80 PVC. PROPERLY SUPPORT ALL PIPING ABOVE FINISHED FLOOR FOR WATER THRUST.

PROVIDE ACCESS PANEL TO EACH OF THE FILTER TANKS.

CONTRACTOR IS TO VERIFY SIZES OF ALL EQUIPMENT AND PROVIDE AN EQUIPMENT LAYOUT DRAWING BEFORE BEGINNING CONSTRUCTION.

PROVIDE ALL INFLUENT AND EFFLUENT PRESSURE GAUGES FOR EACH FILTER TANK.

	GATE VALVE (HAND OPERATED)	ALARM	AUDIBLE/VISUAL ALARM
M	GATE VALVE (MOTOR OPERATED)		PUMP
	BALL VALVE (HAND OPERATED)	FM	FLOW METER
M	BALL VALVE (MOTOR OPERATED)		PIRO FLOW METER
	BUTTERFLY VALVE (HAND OPERATED)		IN-LINE FLOW METER
M	BUTTERFLY VALVE (MOTOR OPERATED)	FI	FLOW INTERLOCK
	PLUG VALVE (HAND OPERATED)	FS	FLOW SENSOR
M	PLUG VALVE (MOTOR OPERATED)	MS	MOTOR STARTER
	THREE WAY VALVE (HAND OPERATED)		PRESSURE GAUGE WITH ISOLATION VALVE
H	THREE WAY BALL VALVE (HYDRAULIC OPERATED)	AV	AUTOMATIC AIR VENT
P	THREE WAY BALL VALVE (PNEUMATIC OPERATED)	MV	MANUAL AIR VENT
S	SOLENOID VALVE		THERMOMETER (IN-LINE)
PR	PRESSURE REDUCING VALVE		TEMPERATURE SENSOR (DIGITAL)
	FLOAT VALVE (MODULATING)		WATER LINE
	CHECK VALVE (SWING GATE)		LOW VOLTAGE CONTROL
	DOUBLE CHECK BACKFLOW PREVENTER		1 PHASE POWER
	CHECK VALVE (DUCK BILL)		3 PHASE POWER
	VENTURI TUBE		VENT LINE
	EJECTOR/INJECTOR		CO2 LINE
	"Y" STRAINER		PHONE LINE
	SENSOR CELL		FLOW DIRECTION
	ROTARY SAFETY FLOW SWITCH		SIGHT GLASS
PT	PRESSURE TRANSDUCER – SIGNAL TO CHEMICAL CONTROLLER	PT V	VACUUM PRESSURE TRANSDUCER – SIGNAL TO CHEMICAL CONTROLLER

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PAYNE PARK AQUATIC FACILITY

848 PAYNE AVENUE
NORTH TONAWANDA, NY 14120

Process Flow Diagrams

City Project No. 2023-01

Project No. 23065

CP-602

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CODES AND STANDARDS

1. New construction has been designed to, and shall be constructed in accordance with the following building codes and standards:
   - A. 2020 Building Code of New York State (BCNYS 2020)
   - B. ASCE 7-16, Minimum Design Loads and Associated Criteria for Buildings and Other Structures
2. Unless explicitly modified in the Contract Drawings and Specifications, the Contractor shall comply with provisions of:
   - A. ACI 301-20, Specifications for Structural Concrete
   - B. ACI 318-14, Building Code Requirements for Structural Concrete
   - C. TMS 402-13, Building Code Requirements for Masonry Structures
   - D. TMS 602-13, Specification for Masonry Structures
   - E. AISC 360-16, Specification for Structural Steel Buildings
   - F. AWS D1.1-15, Structural Welding Code - Steel
   - G. AWC NDS-2018, National Design Specification (NDS) for Wood Construction with 2018 Supplement
   - H. AWC SDWPS-15, Special Design Provisions for Wind and Seismic
   - I. TPI 1-2014, National Design Standard for Metal-plate-connected Wood Truss Construction
   - J. APA PDS-12, Panel Design Specification

DESIGN LOADS

Floor live load (unless otherwise noted) ---------- 100 psf

Roof loads

Roof live load	20 psf
Rain Intensity (BCNYS Figure 1611.1)	i = 2.33 in/hr
Ponding Instability (BCNYS 1611.2)	not critical (1)

(1) Assumes primary drainage is blocked and rain accumulates to depth of overflow (see Architect's detail) at 62.4 pcf

Roof snow load data

Ground snow load (BCNYS 1608.2)	p_g = 50 psf
Flat-roof snow load (ASCE 7, 7.3)	p_f = 38.5 psf (2)
Minimum snow load (ASCE 7, 7.3.4)	p_m = 20 psf
Rain-on-snow surcharge (ASCE 7, 7.10)	5 psf
Snow exposure factor (ASCE 7, Table 7.3-1)	C_e = 1.0
Snow importance factor (ASCE 7, Table 1.5-2)	I_s = 1.0
Thermal factor (ASCE 7, Table 7.3-2)	C_t = 1.1
Slope Factor (ASCE 7, Figure 7.4-1)	C_s = 1.0

(2) Increased for snow buildup / unbalanced per ASCE 7, 7.6 to 7.9

Wind design data

Ultimate design wind speed (BCNYS Figure 1609.3)	V_{ult} = 109 mph
Nominal design wind speed (BCNYS 1609.3.1)	V_{asd} = 84.4 mph
Risk category (BCNYS, Table 1604.5)	II
Exposure category (BCNYS 1609.4)	B
Internal pressure coefficient (ASCE 7, Table 26.13-1)	GCpi = ±0.18
Components and Cladding	
Effective Wind Area	10 ft² (3)
Zone 1 (Roof Interior)	+16.0, -40.2 psf
Zone 2e (Roof Eave)	+16.0, -40.2 psf
Zone 2n (Roof Neutral)	+16.0, -58.7 psf
Zone 2r (Roof Ridge)	+16.0, -58.7 psf
Zone 3e (Roof Eave)	+16.0, -58.7 psf
Zone 3r (Roof Ridge)	+16.0, -69.7 psf
Zone 4 (Wall Interior)	+17.7, -23.6 psf
Zone 5 (Wall Corner)	+17.7, -29.1 psf

(+) Indicates pressure acting toward the surface
(-) Indicates pressure acting away from the surface
Edge and corner zones are defined as areas within 4'-8" of edge or corners

(3) Components and cladding engineer may calculate wind loads based on actual effective wind area per ASCE 7

Earthquake design data

Risk category (BCNYS, Table 1604.5)	II
Seismic importance factor (ASCE 7, Table 1.5-2)	I_e = 1.0
Mapped spectral response acceleration parameters	
Short period	S_s = 0.165 g
1-second period	S_1 = 0.045 g
Site class	D
Design spectral response acceleration parameters	
Short period	S_{ds} = 0.176 g
1-second period	S_{d1} = 0.071 g
Seismic design category	B
Basic seismic-force-resisting system (ASCE 7, Table 12.2-1)	
A. Bearing wall systems	
B. Intermediate reinforced masonry shear wall	
Design base shear (ASCE 7, 12.8-1)	V = 13.3 Kips
Seismic response coefficient (ASCE 7, 12.8-2)	C_s = 0.050
Response modification factor (ASCE 7, Table 12.2-1)	R = 3.5
Analysis procedure	Equivalent lateral force procedure

DESIGN STRESSES

Concrete minimum compressive strength in 28 days:

Footings	f'_c = 3,000 psi
Structural concrete subject to freezing and thawing	f'_c = 5,000 psi
Reinforcing bars (ASTM A615, Grade 60)	F_y = 60,000 psi
Welded wire reinforcement (ASTM A1064)	F_y = 70,000 psi
Structural steel W, WT and S shapes (ASTM A992 or ASTM A572/50)	F_y = 50,000 psi
Structural steel other shapes (ASTM A36)	F_y = 36,000 psi
Anchor rods (ASTM F1554, Grade 55 weldable)	F_y = 55,000 psi
Masonry	f'_m = 2,000 psi
Load-bearing CMU (ASTM C90)	
Mortar (ASTM C270)	Type M or S
Grout (ASTM C476)	3,000 psi
Soil bearing pressure for foundations (native soil subgrade)	1,500 psf

GENERAL

1. All new construction shall comply with the Contract Documents and the Building Code.
2. Typical details and general notes apply to all parts of the work except where specifically detailed or unless otherwise noted.
3. The structural drawings illustrate structural members. Refer to architectural, mechanical, and electrical drawings for non-structural items which require special provisions during the construction of the structural members.
4. Drawings are not to be scaled.
5. Refer to architectural plans for floor depressions, openings, slopes, drains, curbs, pads, embedded items, non-bearing partitions, etc. Refer to mechanical and electrical plans for sleeves, openings, and hangers for pipes, ducts, and equipment.
6. No pipes or ducts shall be embedded into structural members unless so shown on the plans or approved by the Engineer.
7. The Contractor shall verify and be responsible for all dimensions and conditions which impact the work. Field verify sizes, elevations, hole locations, etc., prior to fabrication.
8. The Contractor shall carefully review the drawings to identify the scope of work required, visit the site to relate the scope of work to existing conditions and determine the extent to which those conditions and physical surroundings will impact the work.
9. Locate existing underground utilities in areas of construction. Coordinate with utility companies for any shut-off requirements of still active lines.
10. The Contractor shall resolve any conflicts on the drawings or in the specifications with the Architect/Engineer before proceeding with the work.
11. Any deviation, modification, or substitution from the approved set of structural drawings shall be submitted to the Owner, Architect, and Engineer for review/approval prior to its use or inclusion on the shop drawings.
12. The Contractor shall provide all necessary shores, braces, and guys required to support all loads to which the building structure and components, soils, other structures, and utilities may be subjected during construction. Shoring systems shall be designed, signed, and sealed by a professional engineer licensed in the jurisdiction where the project is located.
13. The Contractor shall provide means, method, techniques, sequence, and procedure of construction as required.
14. The Contractor shall protect all work, materials, and equipment from damage and shall provide proper storage facilities for materials and equipment during construction.
15. Site visits performed by the Architect/Engineer do not constitute inspections of means and methods of construction performed by the Contractor.
16. Structural observations performed by the Architect/Engineer during construction are not the continuous and special inspection services and do not waive the responsibility for the inspections required of the Building Department Inspector or the testing agency. Observations also do not guarantee the Contractor's performance and shall not be considered as supervision of construction.
17. The Contractor shall review shop drawings for completeness and compliance with contract documents. The Contractor shall stamp shop drawings prior to submission to the Architect and Engineer.
18. Review of the shop drawings by the Architect's Engineers shall not be construed as an authorization to deviate from the Contract Documents.
19. Shop drawings will not be processed if they are incomplete, lack coordination with relevant portion of contract documents, lack calculations if required, or if deviations, modifications, and substitutions are indicated without prior written approval from the Architect/Engineer.
20. It is a violation of New York State law for any person to alter any document that bears the seal of a Professional Engineer, unless the person is acting under the direction of a licensed Professional Engineer.

MASONRY CONSTRUCTION

1. Masonry walls shown on structural drawings have been designed in accordance with TMS 402, Building Code Requirements for Masonry Structures.
2. Masonry walls shall be constructed in accordance with TMS 602, Specifications for Masonry Structures, and the project specifications.
3. Determine compressive strength of masonry (f'm) by the unit strength method (Article 1.4.B.2 of TMS 602).
   - A. Mortar shall meet the Property Specifications' requirements of ASTM C270, and shall be field tested according to ASTM C780.
   - B. The strength of grout shall be determined by tests in accordance with ASTM C1019.
4. Intersecting walls shall be anchored by one of the following methods (does not apply at control joints or where non-load-bearing partitions abut bearing walls):
   - A. Fifty percent of the units at the intersection shall be laid in an overlapping masonry bonding pattern, with alternate units having a bearing of not less than 3" on the unit below.
   - B. Walls shall be tied by galvanized steel straps 1 1/2" x 1/4" x 24" with 2" bend at 90° each end. Grout straps solid into cores of block at 24" maximum vertical spacing.
5. Corners of bearing walls shall be built in running bond.
6. Provide corner bars in bond beams at wall intersections and corners to match bond beam reinforcing.
7. Provide a minimum of 24" depth of solid masonry under the bearing ends of all beams; and 8" of solid masonry under the bearing ends of loose lintels.
8. Unless otherwise noted, provide galvanized ladder type joint reinforcement at 16" on center vertically per ASTM A951.
9. Welding of reinforcing bars (including tack welding) is not permitted without permission of Engineer in writing.
10. Provide shop drawings which indicate size, spacing, bending details, and type of all reinforcing bars placed in masonry walls.
11. Provide dowels from supporting member (footing, beam, or slab) for all reinforced walls same size, location, and spacing as wall reinforcing.
12. Wall reinforcing shall be held in position during grouting.
13. For bars at face of wall, maintain 1/2" clearance from inside face of CMU to reinforcing.
14. Provide bond beam with (1) #4 continuous reinforcing bar at sill of all openings, unless otherwise noted.
15. Splices:
   - A. Lap all splices in accordance with the following table.
   - B. Increase splice length by 50% for epoxy-coated reinforcing.
   - C. Splice lengths greater than 64" require high lift grouting. The Contractor, at his option, may use open-ended masonry units or mechanical splices for ease of construction.

Bar Size	Reinforcing Centered in Wall Nominal Wall Width, f'_m = 2,000 psi					Reinforcing at Face 2" cover
	6"	8"	10"	12"	16"	
#3	15"	15"	15"	15"	15"	15"
#4	20"	20"	20"	20"	20"	22"
#5	28"	25"	25"	25"	25"	35"
#6	53"	38"	30"	30"	30"	64"
#7		52"	40"	35"	35"	87"
#8		79"	61"	50"	40"	131"
#9			78"	64"	46"	166"

FOUNDATIONS AND SLABS ON GROUND

1. Ground supported building components including foundations, slabs-on-grade, foundation walls, and retaining walls are designed in accordinance with recommendations provided in the Geotechnical Report prepared by Glynn Group, Geotechnical Engineers dated August 6, 2024. The Geotechnical Report is provided for reference as the source of information used to design ground supported building components. The Structural Engineer is not responsible or liable for the accuracy of information presented in the Geotechnical Report. .
2. Footings: Elevations given are to top of footings and grade beams.
3. Slab on ground, ramps and steps: Slab elevations given are to top of structural slab. See Architect's drawings for layout of ramps and steps.
4. All footings must be supported on undisturbed soil capable of achieving the design soil bearing pressure without appreciable settlement. Where additional excavation is required to attain the design bearing pressure, backfill the overexcavated area with CLSM orlean concrete up to the design bearing elevation.
5. Controlled Low Strength Material (CLSM) shall meet the following requirements, unless specifically stated in the Geotechnical Report:
   - A. Unit weight between 90 pcf and 120 pcf per ASTM D6023.
   - B. Flowability of a minimum of 8" per ASTM D6103.
   - C. Unconfined compression strength = 100 psi per ASTM D4832.
   - D. CLSM shall be protected and not loaded until meeting ASTM D6024.
6. Unless otherwise noted, compact all engineered fills to 95% of the maximum dry density per ASTM D1557 Modified Proctor Method.
7. In granular soils (sands and gravel) the soil shall be mechanically tamped to a hard surface immediately prior to placing footing.
8. Before backfill, all walls must be adequately braced. For backfill requirements, see specifications and/or geotechnical report.
9. When excavations approach the ground water level, the water level shall be lowered by an acceptable dewatering system so that the water level is maintained continuously a minimum of 2'-0" below the excavation.
10. The bottom of foundations shall be protected against freezing until backfill or other permanent protective cover is in place.

CONCRETE CONSTRUCTION

1. All concrete construction shall be in accordance with the latest Building Code Requirements for Structural Concrete ACI 318 and ACI Detailing Manual, except that construction and removal of forms and reshoring shall be inspected by the Contractor's engineer.
2. Reinforcing steel shall have the following minimum coverage in accordance with the following table. Place bars as near to the concrete surface as these minima permit wherever possible, unless noted otherwise:

Concrete Exposure	Member	Reinforcement	Specified cover, in.
Cast against and permanently in contact with ground	All	All	3
Exposed to weather or in contact with ground	All	No. 6 through No. 18 bars	2
		No. 5 bar and smaller	1 1/2
Not exposed to weather or in contact with ground	Slabs, joists and walls	No. 14 and No. 18 bars	1 1/2
		No. 11 bar and smaller	3/4
	Beams, columns, pedestals, and tension ties	Primary reinforcement, stirrups, ties, spirals, and hoops	1 1/2

3. Welded wire reinforcement for slabs on ground shall have a minimum top coverage of 1" and a maximum top coverage of 1 1/2", unless otherwise noted. Reinforcement shall be positively supported and maintained in this position during placement of concrete. Support of reinforcement on masonry cubes in not permitted.
4. Furnish bar supports where necessary during construction.
5. Provide pipe sleeves and inserts in concrete work where required. See architectural and mechanical drawings.
6. Welding of reinforcing bars (including tack welding) is not permitted without permission of Engineer in writing. Where and when permitted, welded rebars shall comply with ASTM A706 (Fy=60 ksi) and welding shall conform to AWS D1.4. Welding shall be performed by certified welders.
7. Provide horizontal keyways in construction joints in walls and wall footings; minimum 1 1/2" depth with height equal to one-third of member depth, unless otherwise shown or noted.
8. All exposed corners of concrete beams, columns, walls, and steel members encased in concrete are to be chamfered 45°. Minimum chamfer to be 1/2".
9. At wall and footing corners, innermost reinforcing shall have 1'-0" long hook at far face. For outer reinforcing, provide corner bars with lap length of 36 bar diameters (2'-0" minimum).
10. Provide foundation dowels for all walls, piers, and columns same size and spacing as vertical steel.
11. Drawings show typical reinforcing conditions. Contractor shall prepare detailed placement drawings of all conditions showing quantity, spacing, sizes, clearances, laps, intersections, and coverage required by the structural details, applicable code, and trade standards. Contractor shall notify reinforcing inspector of any adjustments from typical conditions which are proposed in placement drawings to facilitate field placement of reinforcing steel and concrete.
12. Bar bends shall be made cold. Bars shall not be bent after any portion of the bar is encased in concrete.
13. Splices (grade 60 deformed bars):
   - A. Lap all compression splices 30 bar diameters of the larger bar.
   - B. Lap all tension splices in accordance with the following tables. Provide Class B Tension Lap Splices unless otherwise noted.
   - C. Increase tension or compression splice lengths by the following factors. Increases are Cumulative:
     1. Epoxy-coated with clear cover less than 3 bar diameters or clear spacing less than 6 bar diameters: 1.5
     2. Epoxy-coated other bars: 1.2
   - D. Top bars are defined as horizontal bars with more than 12" of fresh concrete below.

Bar Size	Class B Tension Lap Splice					
	f'_c = 3,000 psi		f'_c = 4,000 psi		f'_c = 5,000 psi	
	Top	Other	Top	Other	Top	Other
#3	28"	22"	24"	19"	22"	17"
#4	37"	29"	33"	25"	29"	23"
#5	47"	36"	41"	31"	36"	28"
#6	56"	43"	49"	37"	43"	34"
#7	81"	63"	71"	54"	63"	49"
#8	93"	72"	81"	62"	72"	56"
#9	105"	81"	91"	70"	81"	63"
#10	118"	91"	102"	79"	92"	70"
#11	131"	101"	113"	87"	102"	78"

LOOSE LINTEL SCHEDULE

1. Steel lintes shall be hot-dip galvanized.
2. Lintels exposed to weather shall be 3/8" minimum thickness.
3. Bottom plates in beam/plate assemblies shall be 1/2" less in width than the supported masonry wall. Stop end of bottom plates 1/2" from edge of opening.
4. Weld bottom plates to lintels with continuous fillet welds (exterior side).
5. Steel lintels and lintel plates in exterior walls shall be fabricated, followed by hot-dip galvanizing of the complete assembly.
6. Lintels shall have minimum bearing at each end of 1" per foot of opening (6" minimum) except as detailed.
7. Lintels shall have 8" minimum solid masonry below bearing points and shall extend beyond the full bearing area.
8. Lintel bearing plates shall be held back 1/2" minimum from face of masonry at opening. Provide flexible caulk between lintel and masonry at this location. Match mortar color.
9. The following schedules apply to brick veneer where lintels are not indicated on the structural drawings. See schedule on S-102 for masonry lintels.
   - A. Provide angle with 3 1/2" leg horizontal as follows:

Span Limits	Angle Size
0'-0" to 4'-0"	L3 x 3 1/2 x 1/4
4'-1" to 5'-6"	L4 x 3 1/2 x 5/16
5'-7" to 7'-6"	L5 x 3 1/2 x 5/16
7'-7" to 9'-6"	L6 x 3 1/2 x 3/8

STEEL CONSTRUCTION

1. Steel detailing, fabrication, and erection shall conform to the AISC Specification for Structural Steel Buildings and Code of Standard Practice, and the AWS Structural Welding Code.
2. The Contractor shall be responsible for the control of all erection procedures and sequences with relation to temperature differentials and weld shrinkage.
3. All additional steel required for erection purposes shall be provided at no additional cost and shall be removed unless approved by the Owner in writing.
4. Connections - welded or high strength bolted:
   - A. Bolts shall be ASTM F3125 and shall be installed in accordance with "Specifications for Structural Joints Using High-Strength Bolts"
   - B. Provide bearing type connections with thread included in the shear plane for all connections.
   - C. Provide hardened washers under nuts at all high-strength bolts, except where plate washers are used per AISC Specifications.
   - D. Unless snug tight connections are noted on the drawings as being permitted, all bolts should be tightened to full pretensioning load.
   - E. Use standard holes with the following exceptions: oversize holes are permitted when bolts are loaded in tension; short slotted holes are permitted for shear loading perpendicular to the slot.
   - F. Where minimum AISC fillet weld thickness requirement exceeds welds shown on details, or weld size is not specified, provide minimum AISC weld.
5. Welding electrodes shall be E70XX except where other electrodes are required for compatibility with material being welded.
6. All slip connections shall be provided with a means of preventing the nuts from unthreading.
7. Shop drawings are required and shall note type of electrodes, size of all welds, and type and size of all bolts.
8. Beams bearing on masonry shall have angle wall anchors and bear a minimum of 8" onto the wall. Masonry shall be built tightly around beam unless otherwise noted.
9. See all contract drawings for miscellaneous steel requirements.
10. All shop and field welding shall be performed by a recently certified welder.
11. All welding and high strength bolting must be inspected by a qualified testing laboratory. Laboratory shall be approved by the Architect and/or Engineer.
12. Miscellaneous hanging loads such as stair stringers, pipes, mechanical units, etc., supported by steel members shall be applied in such a manner that no torsional forces are induced in the steel members, i.e., loads shall pass through the centerline of wide flange sections and through the shear center of channels.

WOOD CONSTRUCTION

1. Framing plans are schematic; see architectural drawings for dimensions.
2. Wood stress grades:
   - A. Structural Sawn Lumber: (Spruce-Pine-Fir No.1/No.2)
     F_b = 875 psi, F_c = 425 psi
     F_t = 450 psi, $F_{c\perp}$ = 1,150 psi
     F_v = 135 psi, E = 1.4 x 10E6 psi
     G = 0.42, E_{min} = 510,000 psi
   - B. Laminated Veneer Lumber (LVL)
     F_b = 2,600 psi, F_t = 1.555 psi
     E = 2.0 x 10E6 psi, F_c = 750 psi
     F_v = 285 psi, $F_{c\perp}$ = 2,510 psi
3. Construction shall conform to the National Design Specification (NDS) for Wood Construction.
4. Cutting of joists and beams for pipes shall not be permitted without the approval of the Engineer.
5. Bolts shall conform to ASTM A307 with 1/16" oversized holes. Standard plain washers shall be used on all bearings of heads and nuts against wood, unless otherwise noted.
6. All metal fasteners, connectors or other hardware exposed to weather or in direct contact with preservation treated lumber shall be stainless steel, or have galvanized coating (per ASTM A123 or A153)
7. Unless otherwise noted, wood sills shall be anchored with 5/8" diameter anchor rods with 12" embedment spaced at 4'-0" on center maximum with a minimum of two bolts per sill. Bolts shall be ASTM A307 with washers.
8. Double plates shall lap a minimum of 4'-0" at splices and be nailed with no less than (8) 16d nails except as otherwise noted or shown. All cuts in plates shall occur over a bearing.
9. At double plates, provide 16d nails at 16" on center unless noted otherwise.
10. Joist hangers, sheet metal framing clips and angles, straps, etc. shall be as manufactured by the Simpson Company or other approved.

SHOP-FABRICATED WOOD TRUSS CONSTRUCTION

1. Trusses to be designed in accordance with ANSI/TPI 1 "National Design Standard for Metal Plate Connected Wood Truss Construction".
2. Truss manufacturer shall be an approved fabricator per Section 1704.2.5.1 of the Building Code.
3. Framing plans are schematic; see architectural drawings for dimensions, work points, overhangs, etc.
4. Trusses are to be spaced at 24" on center maximum. Web arrangement is to be the manufacturer's standard unless otherwise noted on drawings. Coordinate web arrangement with architectural and mechanical drawings.
5. Cutting of trusses for pipes, conduits, or other utilities shall not be permitted without the approval of the Engineer and must be in accordance with the manufacturer's requirements. Obtain approval in writing before proceeding. Notching of members is not allowed.
6. All connections shall be of galvanized steel and shall comply with the ANSI/TPI National Design Standard for Metal Plate Connected Wood Truss Construction. Trusses exposed to weather shall have connections of type 304 stainless steel.
7. Trusses shall be designed under the supervision of a Professional Engineer licensed in the jurisdiction where project is located.
8. All truss-to-truss connections shall be by truss manufacturer.
9. Do not install roof sheathing below piggyback trusses. Truss manufacturer shall indicate top chord blocking for the lower truss and piggyback attachment details.
10. Lower gable end trusses for construction of outrigger framing.
11. Truss manufacturer shall supply the following information for approval prior to fabrication:
   - A. Truss configuration, including span, pitch, and spacing of panel points, including piggyback, truss-to-truss, and falsework framing.
   - B. Species, stress grade, and nominal size of lumber used.
   - C. Design dead and live loads, including panel point loads and reactions.
   - D. Calculations of member axial forces and flexural stresses, including the design for combined loading, as applicable.
   - E. Joint and splice connection design and details.
   - F. Drawings to indicate truss layout, configuration, and permanent individual truss member restraint/bracing.
   - G. Calculations sealed by a professional engineer licensed in the jurisdiction where project is located.
   - H. Relevant sections of the Building Component Safety Information (BCSI) publications.
   - I. All referenced standard industry details.
12. Verify that supports are ready to receive trusses.
13. Install members level and plumb and within tolerances of ANSI/TPI 1.
14. Temporary bracing shall be provided as indicated in the latest Building Component Safety Information (BCSI).
15. Permanent/individual truss member restraint shall be installed as required by the truss manufacturer. Restraint/bracing shall follow BCSI-B3 - "Permanent restraint/bracing of chords and web members", unless the truss manufacturer specifies more stringent requirements.
16. The truss manufacturer shall provide design and details of temporary installation restraint/bracing and permanent individual truss member/restraint bracing for all trusses with clear spans 60 feet or greater. Calculations and drawings shall be sealed by a Professional Engineer licensed in the jurisdiction where the project is located.
17. Provide header/girder trusses at roof openings. Coordinate locations with architectural and mechanical drawings.
18. Frame openings between trusses with visually graded lumber.
19. See Design Loads section for required snow, wind and seismic design criteria. See below for minimum design loads (in addition to weight of truss) and maximum deflections, unless otherwise noted.
20. Roof trusses:
   - A. Top Chord
     Dead Load ---------- 15 psf
     Live Load ---------- 20 psf
   - B. Bottom Chord
     Dead Load ---------- 10 psf
     Live Load (non-concurrent w/ roof LL) ------ 10 psf
   - C. Deflection
     50% Dead Load + 100% Live Load --------- L/360, 3/4" max.

POST-INSTALLED ANCHORS

1. Anchorage to hardened concrete or masonry shall include torque controlled expansion anchors and adhesive anchors of size, number and spacing as shown on the drawings.
2. All anchors shall be installed in accordance with the Manufacturer's Printed Installation Instructions (MPII).
3. Existing reinforcing bars in the concrete or masonry may conflict with specific anchor locations. Reinforcing bars shall not be cut unless specifically noted on the drawings or approved by the Engineer of Record. The contractor shall review the structural drawings and shall locate the position of reinforcing bars in the vicinity of the anchors, by ground penetrating radar (GPR), x-ray, or other means.
4. Anchors shall be installed in holes drilled with a rotary impact hammer drill. Core drilling of holes is not permitted. Holes and anchor shall be thoroughly cleaned per the MPII prior to installation of the anchor.
5. Stainless steel anchors shall be used at all exterior locations and where specifically noted on the drawings.
6. Remove and replace misplaced or malfunctioning anchors. Patch failed anchor locations with high-strength non-shrink, non-metallic grout.
7. Installed adhesive anchors shall be securely held in-place to prevent displacement while the adhesive cures.
8. All anchors supporting structural elements shall be enclosed with a fire-resistance-rated envelope or protected by approved fire-resistance rated materials.
9. Quality Control:
   - A. All anchors shall be periodically inspected to meet the requirements of MPII and the ICC-ES ESR report for the product.
   - B. All anchor installers shall be trained by the manufacturer or manufacturer's representative for each individual product being installed.
10. Submittals:
   - A. Technical product literature, highlighting each anchor and size to be used on the project.
   - B. Manufacturer's Printed Installation Instructions (MPII) for each anchor type.
   - C. Engineering Design Data: For each substitution request, provide calculations substantiating specified design requirements, sealed by a professional engineer licensed in the jurisdiction where project is located.
11. Where a specific type of anchorage is indicated on the drawings, substitution for a different type of anchorage shall meet the requirements of ACI 355.2 Category 1 or ACI 355.4 Category 1 for anchorage into concrete or shall have an ICC-ES ESR report for anchorage into masonry. Substitution shall not be permitted without prior written approval of the Engineer of Record.
12. Anchors to hardened concrete shall be supplied as an entire system and shall be as follows:
   - A. Torque Controlled Anchors (Expansion Anchors) in cracked and un-cracked concrete as indicated on the drawings shall be Hilti KWIK Bolt TZ2 Expansion Anchor (ICC-ES Evaluation Report: ESR# 4266).
   - B. Adhesive anchors in cracked and un-cracked concrete indicated on the drawings shall be Hilti HIT-HY 200 V3 Safe Set Adhesive Anchoring System (ICC-ES Evaluation Report: ESR# 4868). The following anchor rods shall be used with the system:
     1. Reinforcing bar meeting the requirements of ASTM A615/A706 Grade 60.
     2. All-threaded rod shall be Hilti HIT-Z rods.
13. Requirements and design parameters of post-installed anchors into hardened concrete:
   - A. Concrete shall have a minimum compressive strength of 2,500 psi and a minimum age of 21-days at the time of installation for adhesive anchors and 7-days for expansion anchors.
   - B. Concrete temperature at the time of installation of adhesive anchors shall be a minimum of 50°F.
   - C. Concrete may be water saturated or dry; water filled holes shall not be allowed.
   - D. Embedment depth and anchor projection shall be as detailed on the drawings. Unless otherwise noted, minimum embedment depths, spacing, and edge distance shall be by the table below.
14. Anchors into masonry shall be supplied as an entire system and shall be as follows:
   - A. Torque Controlled Expansion Anchors (Expansion Anchors) in solid or grout filled masonry as indicated on the drawings shall be Hilti KWIK Bolt TZ2 Expansion Anchor (ICC-ES Evaluation Report: ESR# 4561).
   - B. Adhesive anchors in hollow, solid or grout filled masonry as indicated on the drawings shall be Hilti HIT-HY 270 Hybrid for Masonry Construction (ICC-ES Evaluation Report: ESR# 4143). Screen tubes shall be used for all connections to hollow masonry. The following anchor rods shall be used with the system:
     1. All-threaded rod shall be Hilti HAS-E rod.
     2. Stainless steel anchor rods shall be AISI Type 304 or 316.
15. Requirements and design parameters of post-installed anchors into masonry:
   - A. Masonry grout shall have a minimum compressive strength of 2,000 psi and a minimum age of 21-days at the time of installation for adhesive anchors and 7-days for expansion anchors.
   - B. Masonry temperature at the time of installation of adhesive anchors shall be between 41°F, and 104°F.
   - C. Masonry may be water saturated or dry; water filled holes shall not be allowed.
   - D. Embedment depth and anchor projection shall be as detailed on the drawings. Unless otherwise noted, minimum embedment depths, spacing, and edge distance shall be by the table below.

Post-installed Concrete Anchors						
	Torque-controlled Anchors			Adhesive Anchors		
Diameter	Minimum Embed.	Min. Edge Distance	Minimum Spacing	Minimum Embed.	Min. Edge Distance	Minimum Spacing
3/8" #3	2 1/2"	5"	6"	4 1/2"	4 1/2"	4 1/2"
1/2" #4	3 1/4"	6"	6"	6"	6"	6"
5/8" #5	4"	7"	7"	7 1/2"	7 1/2"	7 1/2"
3/4" #6	4 3/4"	12"	8"	8 1/2"	8 1/2"	8 1/2"
#7	-	-	-	10 1/2"	10 1/2"	10 1/2"
#8	-	-	-	12"	12"	12"
#9	-	-	-	13 1/2"	13 1/2"	13 1/2"

Post-installed Masonry Anchors						
	Torque-controlled Anchors			Adhesive Anchors		
Diameter	Minimum Embed.	Min. Edge Distance	Minimum Spacing	Minimum Embed.	Min. Edge Distance	Minimum Spacing
3/8"	2 1/2"	12"	10"	3 1/2"	12"	13 1/2"
1/2"	3 1/4"	12"	13"	4 1/2"	12"	18"
5/8"	4"	20"	16"	5 3/4"	20"	22 1/2"
3/4"	4 3/4"	20"	19"	6 3/4"	20"	27"

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NO ALTERATION PERMITTED HEREON EXCEPT AS PROVIDED UNDER SECTION 7209 SUBDIVISION 2 OF THE NEW YORK EDUCATION LAW

Revisions: NUMBER DATE DESCRIPTION

Issue Date: 12-16-2025 ISSUED FOR BID

PAYNE PARK AQUATIC FACILITY

848 PAYNE AVENUE
NORTH TONAWANDA, NY 14120

GENERAL NOTES

City Project No. 2023-01

BCI Project No. 23065

S-001

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STRUCTURAL TESTING AND SPECIAL INSPECTIONS

Structural testing and special inspections are required. The owner shall engage a qualified independent testing agency to conduct structural testing and special inspections. Special inspectors shall be employed or retained by the approved testing agency and have the recommended experience and certifications as summarized in Appendix C of the current International Code Counsel (ICC) Special Inspection Manual. The testing agency may employ or retain multiple special inspectors with differing areas of expertise as required for the project.

At or before project completion, the qualified testing agency shall submit a written summary statement indicating that applicable structural testing and special inspections have been completed. The written summary statement shall clearly identify non-compliant test and inspection results. The written summary statement shall be sealed by the testing agencies supervising professional engineer and be submitted to the owner, building official, and design professionals. The required testing and inspections are indicated in the following table.

Description of Structural Special Inspection & Testing Requirements

Verification and Inspection	Frequency	Referenced Standard	BC Reference	Additional Notes
Soils: Foundation Bearing & Engineered Fill Placement				
Verify materials below shallow foundations are adequate to achieve the design bearing capacity.	Periodic	Geotechnical Report	N/A	
Verify excavations are extended to proper depth and have reached proper material.	Periodic	Geotechnical Report	N/A	
Perform classification and testing of compacted fill materials.	Periodic	Geotechnical Report	N/A	
Verify use of proper materials, densities and lift thicknesses during placement and compaction of compacted fill.	Continuous	Geotechnical Report	N/A	
Prior to placement of compacted fill, observe subgrade and verify that site has been prepared properly.	Periodic	Geotechnical Report	N/A	
Verify all requirements of geotechnical report are met.	Periodic	Geotechnical Report	N/A	
Cast-In-Place Concrete				
Inspect reinforcing steel including prestressing tendons: a. Verify reinforcing bar grade. b. Verify reinforcing bars are free of dirt, excessive rust, and damage. c. Verify reinforcing bars are adequately tied, chaired, and supported to prevent displacement during concrete placement. d. Verify proper clear distances between bars and to surfaces of concrete. e. Verify reinforcing bar size and placement. f. Verify bar laps for proper length and stagger. g. Verify mechanical splices placement and attachment. h. Verify epoxy or galvanized coating and coating damage is repaired.	Periodic - Prior to each pour.	ACI 318: Ch 20, 25.2, 25.3, 26.1-26.6.3	1908.4	
Inspection of reinforcing steel welding: a. Verify weldabilty of reinforcing steel. b. Verify proper electrodes and storage of electrodes. c. Verify proper joint preparation. d. Inspect single- pass fillet welds, maximum 5/16". e. Inspect all other welds. f. Review welder certifications for both fabricator's shop staff and field erectors.	Periodic Periodic Continuous Periodic Continuous Each welder	AWS D1.4 ACI 318: 26.6.4		
Inspect embedments, bolts, headed bolts, and headed studs to be installed in concrete prior to and during concrete placement.	Periodic	ACI 318: 17.8.2	N/A	
Verify use of required mix design: a. Verify mixer truck trip ticket conforms to approved mix design. b. Verify that total water added to mix on site does not exceed that allowed by the concrete mix design. c. Verify that concrete quality is indicative of adequate mixing time, consistency, and relevant time limits.	Periodic - Prior to each pour.	ACI 318: 26.4.3 ACI 301	1904.1 1904.2 1908.2 1908.3	
Inspect formwork for cleanliness, shape, location and dimensions of the concrete member being formed.	Periodic - Prior to each pour.	ACI 318: 26.11.1.2(b)	N/A	
Inspect concrete and shotcrete placement for proper application techniques, including proper consolidation, reinforcement remains at proper location, and conveyance and depositing avoid segregation and contamination.	Continuous	ACI 318: 26.5	1908.6 1908.7 1908.8	
Sample fresh concrete:	Obtain one composite sample of each class of concrete placed each day shall be taken not less than once a day, nor less than once for each 150 cy. of concrete nor less than once for each 5,000 sqft. of surface area for slabs or walls. If the total volume of concrete is such that frequency of testing required would provide less than five composite samples for a given class of concrete, tests shall be made from at least five randomly selected batches (per ASTM D3665) or from each batch if fewer than five batches are used.	ACI 318: 26.4 ASTM C 172	1908.10	A composite sample shall consist of the following: five 4" diameter cylinders, or four 6" diameter cylinders.
Obtain test cylinders of concrete.	One set of five 4" diameter cylinders or four 6" diameter cylinders for each composite sample.	ACI 318: 26.12 ASTM C 31	N/A	Cast additional cylinders at contractor's request and expense for field cured specimens to determine shoring removal, early strength for post-tensioning, etc.
Obtain grout cubes for deferred placed concrete toppings	One set of three 2" molded-cube for each composite sample.	ASTM C 109	N/A	
Perform slump tests.	One test at point of discharge for each composite sample.	ASTM C 143	N/A	
Perform air content tests.	One test at point of discharge for each composite sample.	ASTM C 231, pressure method for normalweight concrete; ASTM C 173, volumetric method for lightweight concrete	N/A	
Determine the temperature of fresh concrete.	One test for each composite sample, and test hourly and when air temperature is below 40°F or when above 80°F.	ASTM C 1064	N/A	
Determine the unit weight of fresh lightweight concrete.	One test at point of discharge for each composite sample of lightweight concrete.	ASTM C567	N/A	
Review and inspect cold weather concrete procedures and placement.	Periodic - Prior to each pour.	ACI 306.1 ACI 318 26.5.4		
Review and inspect hot weather concrete procedures and placement.	Periodic - Prior to each pour.	ACI 305.1 ACI 318 26.5.5		
Inspect for maintenance of specified curing temperature and techniques.	Periodic - After each pour.	ACI 318: 26.5.3-26.5.5	1908.9	
Laboratory test concrete cylinders for compressive strength.	One specimen tested at 7 days, two specimens tested at 28 days, and one specimen retained in reserve for later testing if required.	ACI 318: 26.12 ASTM C 39	N/A	Three specimens shall be tested at 28 days if using 4" diameter cylinders. Test additional cylinders at contractor's request and expense.
Laboratory test concrete cubes for compressive strength for deferred placement toppings.	Test one set of three specimens at 28 days.	ASTM C 109	N/A	
Inspect anchors post- installed into hardened concrete a. Adhesive anchors installed in horizontally or upwardly inclined orientations to resist sustained tension loads. b. All other Mechanical anchors and adhesive anchors not defined in a.	Continuous Periodic	 ACI 318: 17.8.2.4 ACI 318: 17.8.2	N/A	
Measure & report floor slab levelness (F_L) and flatness (F_F) for shored, non-cambered, and non-inclined surfaces.	Measure all floors within 24 hours of finishing.	ACI 117 4.8.5 ASTM E1155	N/A	
Measure & report floor slab flatness for cambered, unshored, and inclined surfaces.	Measure the gap under a freestanding (unleveled) 10 ft. straightedge.	ACI 117: 4.8.6	N/A	
Deferred placement floor toppings shall be tested for delamination by dragging a steel chain over the surface.	All floor areas after 28 days.	N/A	N/A	

Description of Structural Special Inspection & Testing Requirements

Verification and Inspection	Frequency		Referenced Standard	BC Reference	Additional Notes
Masonry					
Masonry Level of Inspection: Level 3 shall be used for Risk Category IV. See general notes for Risk Category:	**Level 2**	**Level 3**			
Verify compliance with approved submittals.	Periodic	Periodic	TMS 602: Art. 1.5	N/A	
Verification of f'_m and f'_{AAC} prior to construction.	Periodic	Periodic	TMS 602: Art. 1.4B	N/A	
Verify slump flow and VSI for self-consolidating grout delivered to the site.	Continuous	Continuous	TMS 602: Art. 1.5, 1.6.3	N/A	
Verification of f'_m and f'_{AAC} for every 5,000 sq. ft. of masonry.	N/A	Periodic	TMS 602: Art. 1.4B	N/A	
Verify proportions of materials as delivered for premixed or preblended mortar, and grout.	N/A	Periodic	TMS 602: Art. 1.4B	N/A	
As masonry construction begins, the following shall be verified to ensure compliance:					
Verify proportions of site-prepared mortar.	Periodic	Periodic	TMS 602: Art. 2.1, 2.6A, 2.6C	N/A	
Verify grade, type, and size of reinforcement, connectors, and anchor bolts.	Periodic	Periodic	TMS 602: Art. 3.4, 3.6A	N/A	
Verify properties of thin-bed mortar for AAC masonry	Continuous	Continuous	TMS 602: Art. 2.1 C.1	N/A	
Verify sample panel construction	Periodic	Continuous	TMS 602: Art. 1.6 D	N/A	
Prior to grouting, the following shall be verified to ensure compliance:					
Verify grout space is clean.	Periodic	Continuous	TMS 602: Art. 3.2 D, 3.2 F	N/A	
Verify placement of reinforcement, connectors, and anchor bolts.	Periodic	Continuous	TMS 602: Art. 3.2 E, 3.4	N/A	
Verify proportions of site-prepared grout.	Periodic	Periodic	TMS 602: Art. 2.6 B	N/A	
During construction the inspection program shall verify:					
Materials and procedures with the approved submittals	Periodic	Periodic	TMS 602: Art. 1.5	N/A	
Placement of masonry units and mortar joint construction	Periodic	Periodic	TMS 602: Art. 3.3 B	N/A	
Size and locations of structural members	Periodic	Periodic	TMS 602: Art. 3.3 F	N/A	
Type, size, and location of reinforcement and anchors, including other details of anchorage of masonry to structural members, frames, or other construction	Periodic	Continuous	TMS 402: Sec. 1.2.1 (e), 6.2.1, 6.3.1	N/A	
Verify welding of reinforcing bars.	Continuous	Continuous	TMS 402: Sec. 6.1.6.1.2	N/A	
Verify preparation, construction and protection of masonry during cold weather (temperature below 40°F)	Periodic	Periodic	TMS 602: Art. 1.8C	N/A	
Verify preparation, construction and protection of masonry during hot weather (temperature above 90°F)	Periodic	Periodic	TMS 602: Art. 1.8D	N/A	
Verify placement of grout and grouting procedures	Continuous	Continuous	TMS 602: Art. 3.5	N/A	
Verify placement of AAC masonry units and construction of thin-bed mortar joints	Continuous	Continuous	TMS 602: Art. 3.3 B.9, 3.3 F.1.b	N/A	
Observe preparation of grout specimens, mortar specimens and/or prisms.	Periodic	Continuous	TMS 602: Art. 1.4 B.2.a.3, 1.4 b.2.b.3, 1.4 B.2.c.3, 1.4 B.3, 1.4 B.4	N/A	
Structural Steel					
Inspection Tasks Prior to Welding:			AISC 360 Table N5.4-1	2204.1	
Welder qualification records and continuity records	Observe		AISC 360 Section N5.4		
Verify procedure specifications (WPS) available	Perform		AISC 360 Section N5.4		
Manufacturer certifications for welding consumables available	Perform		AISC 360 Section N5.4		
Material identification (type/grade)	Observe		AISC 360 Section N5.4		
Welder identification system	Observe		AISC 360 Section N5.4		
Fit up of groove welds and CJP welds of HSS joints (including joint geometry) a. Joint preparation b. Dimensions (alignment, root opening, root face, bevel) c. Cleanliness (condition of steel surface) d. Tacking (tack weld quality and location) e. Backing type and fit (if applicable)	Observe		AISC 360 Section N5.4		
Configuration and finish of access holes	Observe		AISC 360 Section N5.4		
Fit up of fillet welds a. Dimensions (alignment,gaps at root) b. Cleanliness (condition of steel surface) c. Tacking (tack weld quality and location)	Observe				
Inspection Tasks During Welding:			AISC 360 Table N5.4-2	2204.1	
Control and handling of welding consumables a. Packing b. Exposure control	Observe		AISC 360 Section N5.4		
No welding over cracked tack welds	Observe		AISC 360 Section N5.4		
Environmental conditions a. Wind speed within limits b. Precipitation and temperature	Observe		AISC 360 Section N5.4		
WPS followed a. Settings on welding equipment b. Travel speed c. Selected welding material d. Shielding gas type/flow rate e. Preheat applied f. Interpass temperature maintained g. Proper position (F,V,H,OH)	Observe		AISC 360 Section N5.4		
Welding techniques a. Interpass and final cleaning b. Each pass within profile limitations c. Each pass meets quality requirements	Observe		AISC 360 Section N5.4		
Inspection Tasks After Welding:			AISC 360 Table N5.4-3	2204.1	
Welds cleaned	Observe		AISC 360 Section N5.4		
Size,length and location of welds	Perform		AISC 360 Section N5.4		
Welds meet visual acceptance criteria a. Crack prohibition b. Weld/base-metal fusion c. Crater cross section d. Weld profiles e. Weld size f. Undercut g. Porosity	Perform		AISC 360 Section N5.4		

Description of Structural Special Inspection & Testing Requirements

Verification and Inspection	Frequency	Referenced Standard	BC Reference	Additional Notes
Structural Steel (CONT.)				
Arc strikes	Perform	AISC 360 Section N5.4		
k-Area (When welding of doubler plate, continuity plates or stiffeners in k-area, visually inspect the wed k-area for crack with in 3 in.)	Perform	AISC 360 Section N5.4		
Weld access holes in rolled heavy shapes and built-up heavy shapes (visually inspect the weld acces hole for cracks)	Perform	AISC 360 Section N5.4		
Backing removed and weld tabs removed (if required)	Perform	AISC 360 Section N5.4		
Repair activities	Perform	AISC 360 Section N5.4		
Document acceptance or rejection of welded joint or member	Perform	AISC 360 Section N5.4		
No prohibited welds have been added without the approval of the EOR	Observe	AISC 360 Section N5.4		
Inspection of Welding in Field and in Non AISC Certified Shops: a. Complete joint penetration groove welds subject to transversely applied tension loading in butt, T and corner joints with materials 5/16 inches or thicker. b. Welder qualifications.	Test 100% of welds by ultrasonic testing for risk category III or IV. Test 10% of welds by ultrasonic testing for risk category II.	AISC 360 Section N5.5		All welds subject to non-destructive testing shall also meet visual acceptance criteria per AWS Table 6.1.
Inspection Tasks Prior to Bolting:		AISC 360 Table N5.6-1	2204.2	
Manufacturer's certifications available for fastener materials	Perform	AISC 360 Section N5.6		
Fasteners marked in accordance with ASTM requirements	Observe	AISC 360 Section N5.6		
Correct fasteners selected for the joint detail (grade, type, bolt length if threads are to be excluded from shear plane)	Observe	AISC 360 Section N5.6		
Correct bolting procedure selected for joint detail	Observe	AISC 360 Section N5.6		
Connecting elements, including the appropriate faying surface condition and hole preparation, if specified, meet applicable requirements	Observe	AISC 360 Section N5.6		
Pre-Installation verification testing by installation personnel observed and documented for fastener assemblies and methods used	Observe	AISC 360 Section N5.6		
Protected storage provided for bolts,nuts washers and other fastener components	Observe	AISC 360 Section N5.6		
Inspection Tasks During Bolting:		AISC 360 Table N5.6-2	2204.2	
Fastener assemblies, of suitable condition, placed in all holes and washers (if required) are positioned as required	Observe	AISC 360 Section N5.6		
Joint brought to the snug- tight condition prior to the pretensioning operation	Observe	AISC 360 Section N5.6		
Fastener component not turned by the wrench prevented from rotating	Observe	AISC 360 Section N5.6		
Fasteners are pretensioned in accordance with the RCSC specification, progressing systematically from the most rigid point toward the free edges	Observe	AISC 360 Section N5.6 AISC 348		
Inspection Tasks After Bolting:		AISC 360 Table N5.6-3	2204.2	
Document acceptance or rejection of bolted connections	Perform	AISC 360 Section N5.6		
Inspection of Steel Frame: a. Verify installation of all members. b. Verify proper application of details to each joint and connection. c. Verify bracing and stiffening of framing members. d. Verify members and detail critical to frame stability.	Perform	AISC 360 Section N5.8		
Verify Material Grade of Structural Steel: a. Verify identification markings conform to AISC 360 for materials specified in the approved construction documents. b. Manufacturer's certificate of compliance required.	Observe	AISC 360 Section N5.8		
Inspection of anchor rods and other embedments supporting structural steel: a. Verify the diameter, grade, type and length of anchor rod or embedded item b. Verify the extent or depth of embedment into concrete prior to placement of concrete.	Observe	AISC 360 Section N5.8		
Inspection of Welding and Bolting in AISC Certified Shop: a. Review Fabricator's Certificate of Compliance for certified fabricators shop.	Once for Each Fabricator	AISC 360 Section N6	1704.2	
Visually inspect exposed cut surfaces of galvanized structural steel main members and exposed corners of rectangular HSS for cracks subsequent to galvanizing.	Perform	AISC 360 Section N5.7		
Placement and installation of steel headed stud anchors	Perform	AISC 360 Section N5.4		

Verification and Inspection	Frequency	Referenced Standard	BC Reference	Additional Notes
Wood				
Wood Construction				
Review manufacturer's Certificate of Compliance for certified fabricators.	Once per manufacturer.	N/A	1704.2	Shop inspection is required if the manufacturer is not certified.
Verify temporary installation restraint/bracing and permanent individual truss member restraint/bracing.	Continuous for truss spans greater than 60'-0"	N/A	1705.5.2	
Verify drag struts, braces, and shear wall strapping, hold-downs, end posts, sheathing thickness, attachment size, quantity, and pattern.	Continuous	N/A	1705.5.1	

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PAYNE PARK
AQUATIC FACILITY

848 PAYNE AVENUE
NORTH TONAWANDA, NY 14120

SPECIAL INSPECTIONS

City Project No.
2023-01

BCI Project No.
23065

S-002

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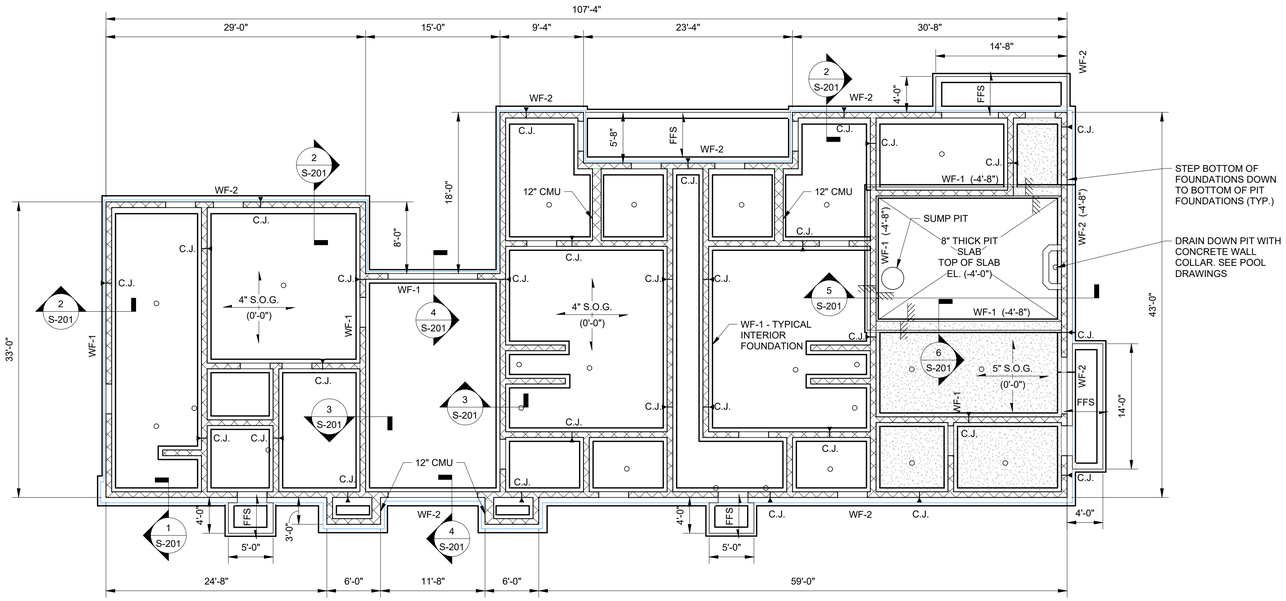

FOUNDATION PLAN

1/8" = 1'-0"

NOTES:

1. FIRST FLOOR ELEVATION = 575.75' = REFERENCE ELEVATION (0'-0").
2. ELEVATIONS GIVEN ARE TO TOP OF FOOTING AND ARE AT (-0'-8") UNLESS OTHERWISE NOTED.
3. FOUNDATION THICKNESSES NOTED ARE MINIMUM. BOTTOM OF FOOTING SHALL BE AT A MINIMUM OF 4'-0" BELOW FINAL GRADE AT EXTERIOR FOOTINGS.
4. COORDINATE FINISHED FLOOR ELEVATIONS, SLAB DEPRESSIONS AND SLOPES WITH ARCHITECTURAL DRAWINGS.

LEGEND:

- X" S.O.G. — X" THICK SLAB ON GROUND WITH 6x6-W2.9xW2.9 WELDED WIRE REINFORCEMENT. SEE DETAILS FOR ADDITIONAL REINFORCING REQUIREMENTS. SLOPE TO FLOOR DRAINS.
- ○ — FLOOR DRAIN
- FFS — FROST FREE SLAB. SEE DETAIL.
- WF-X — WALL FOOTING. SEE SCHEDULE.
- ⊠ — 8" CMU WALL (UNLESS OTHERWISE NOTED) WITH #5@48" O.C. VERTICAL REINFORCEMENT WITH (1) #5 AT ENDS OF WALLS, JAMBS, AND CORNERS. GROUT REINFORCED CELLS, AND CELLS BELOW GRADE SOLID.
- C.J. — MASONRY CONTROL JOINT

WALL FOOTING (WF-X) SCHEDULE

MARK	DIMENSIONS		REINFORCEMENT	REMARKS
	WIDTH	THICKNESS		
WF-1	1'-6"	3'-4"	(2) #5 T & B	
WF-2	2'-0"	3'-4"	(3) #5 T & B	

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848 PAYNE AVENUE
NORTH TONAWANDA, NY 14120

FOUNDATION PLAN

City Project No. 2023-01

BCI Project No. 23065

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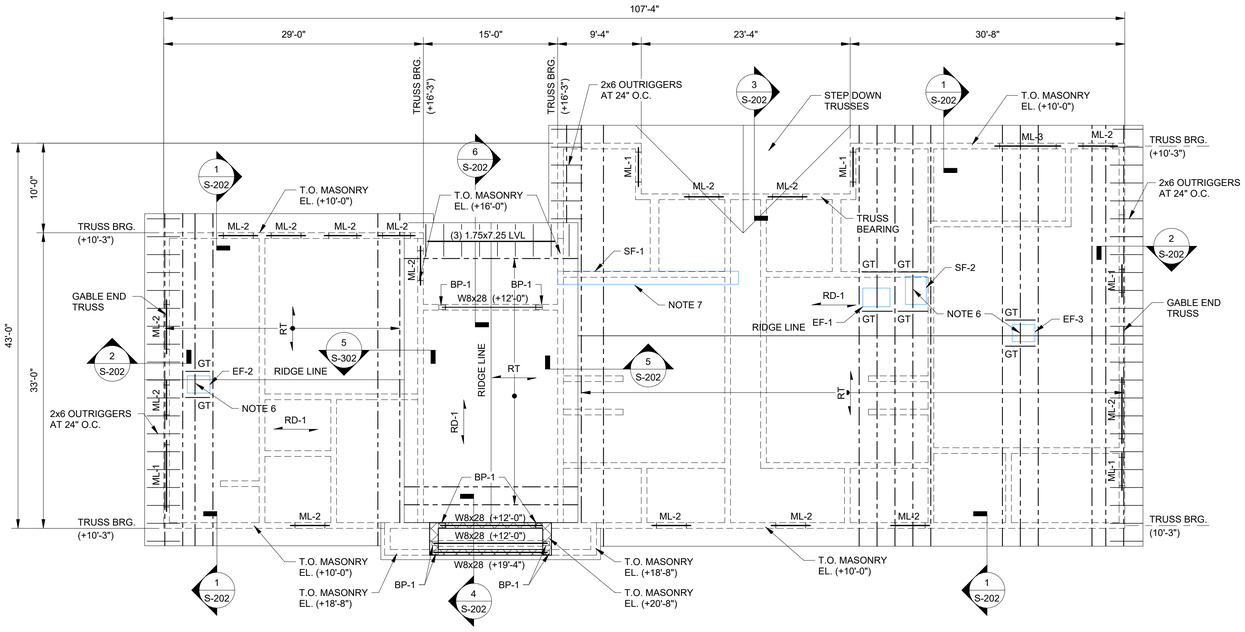
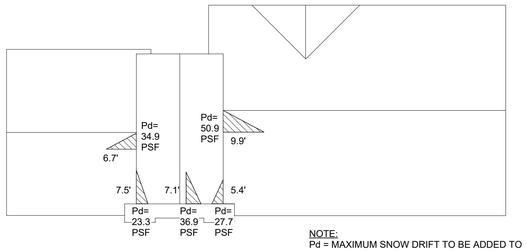
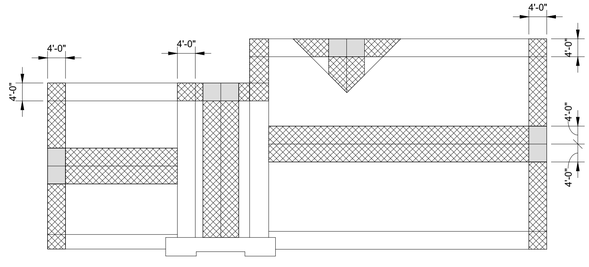


ROOF FRAMING PLAN
1/8" = 1'-0"



NOTE:
Pd = MAXIMUM SNOW DRIFT TO BE ADDED TO FLAT ROOF SNOW LOAD. Pb.1 = 38.5 PSF.

SNOW DRIFT DIAGRAM
1/16" = 1'-0"

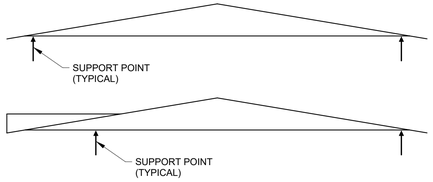


	GROSS WIND FORCE	NET WIND FORCE
ZONE 1, 2e	+16.0 /-40.2 PSF	+16.0 /-22.2 PSF
ZONE 2n, 2r, 3e	+16.0 /-58.7 PSF	+16.0 /-40.7 PSF
ZONE 3r	+16.0 /-69.7 PSF	+16.0 /-51.7 PSF

ROOF UPLIFT DIAGRAM
1/16" = 1'-0"

NOTES:

1. TRUSS BEARING ELEVATION = (+10'-3") = REFERENCE EL. (0'-0") UNLESS OTHERWISE NOTED.
2. EXTERIOR DIMENSIONS ARE TO FACE OF CMU.
3. SEE ARCHITECTURAL DRAWINGS FOR ALL OTHER DIMENSIONS AND ELEVATIONS.
4. COORDINATE LOCATION AND SIZE OF ALL ROOF OPENINGS WITH ARCHITECTURAL DRAWINGS AND MECHANICAL CONTRACTOR. SEE OPENING DETAILS.
5. STEEL MEMBERS TO BE HOT-DIPPED GALVANIZED UNLESS OTHERWISE NOTED.
6. BOTTOM CHORD OF TRUSSES SHALL BE ABOVE EXHAUST AND SUPPLY FANS (EX-X AND SF-X). COORDINATE WITH MECHANICAL CONTRACTOR FOR CLEARANCE REQUIREMENTS.
7. MAINTAIN CLEAR OPENING THROUGH TRUSSES FOR SUPPLY FAN AND DUCTS. COORDINATE DIMENSIONS WITH MECHANICAL CONTRACTOR.



CANTILEVERED TRUSS PROFILE

TYPICAL TRUSS PROFILES
1/8" = 1'-0"

LEGEND:

RD-1	5/8" APA RATED SHEATHING (32/16). SEE DETAILS FOR ADDITIONAL INFORMATION.
RT	METAL-PLATE CONNECTED WOOD TRUSSES AT 24" O.C. MAX. SEE GENERAL NOTES FOR ADDITIONAL INFORMATION.
GT	GIRDER TRUSS. BOTTOM CHORD SHALL BE ABOVE EXHAUST AND SUPPLY DUCTS. COORDINATE WITH MECHANICAL CONTRACTOR.
ML-X	MASONRY LINTEL. SEE SCHEDULE FOR ADDITIONAL INFORMATION.
BP-X	BEAM BEARING PLATE. SEE SCHEDULE ON S-302.

MASONRY LINTEL SCHEDULE

MARK	SIZE (W x H)	BOTTOM REINFORCEMENT
ML-1	8x8	(2) #5
ML-2	8x16	(2) #5
ML-3	8x24	(2) #5

NOTE: PROVIDE ML-1 AT OPENINGS UNLESS OTHERWISE NOTED.

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ROOF FRAMING PLAN

City Project No. 2023-01
BCI Project No. 23065

S-102

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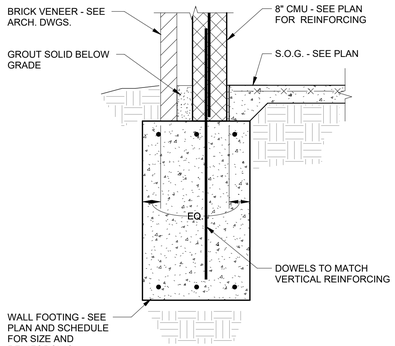
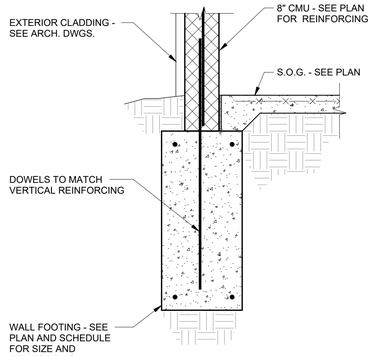


SECTION 1
3/4" = 1'-0"



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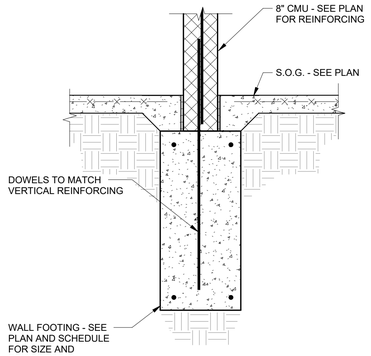

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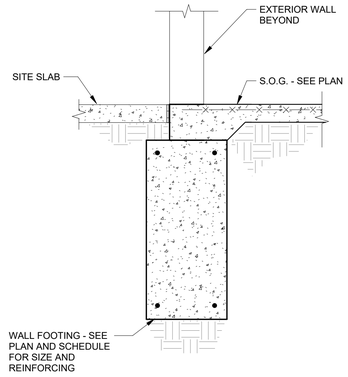

SECTION 4
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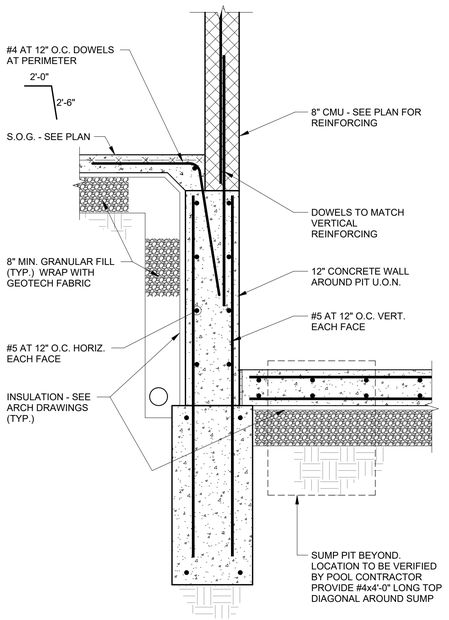

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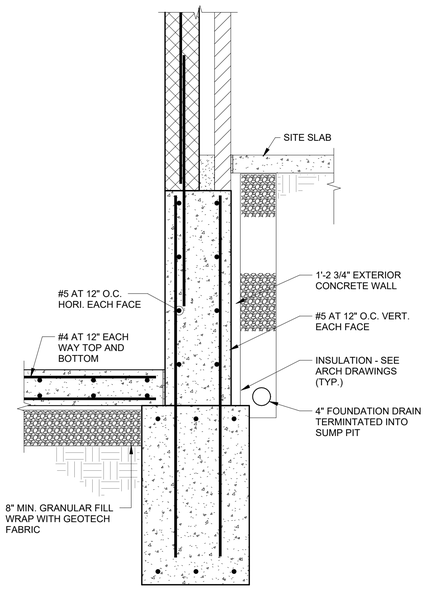

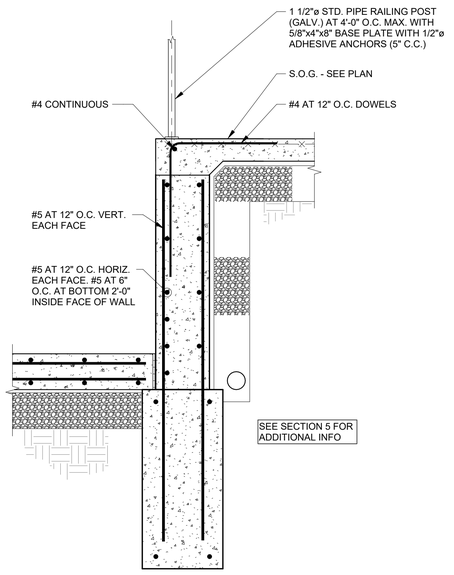

SECTION 6
3/4" = 1'-0"

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SECTIONS

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BCI Project No.
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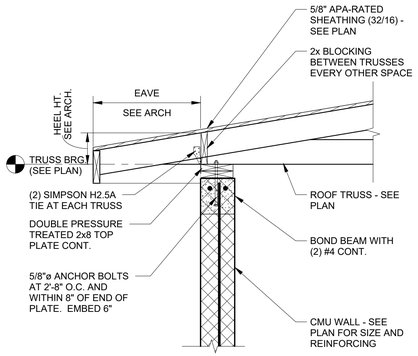

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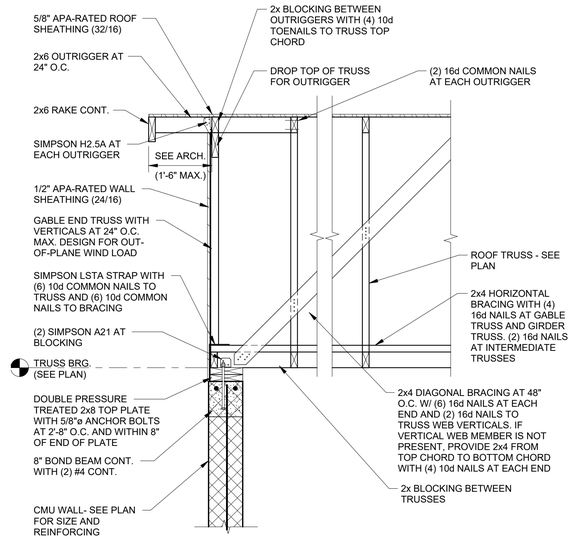

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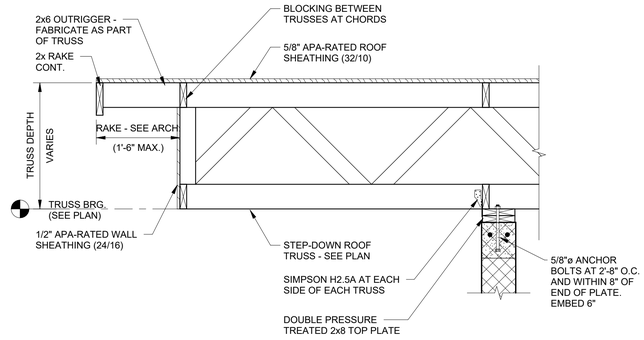

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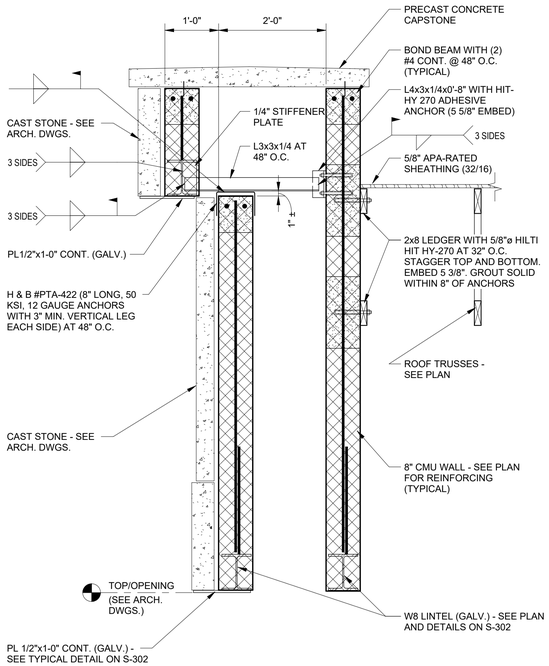

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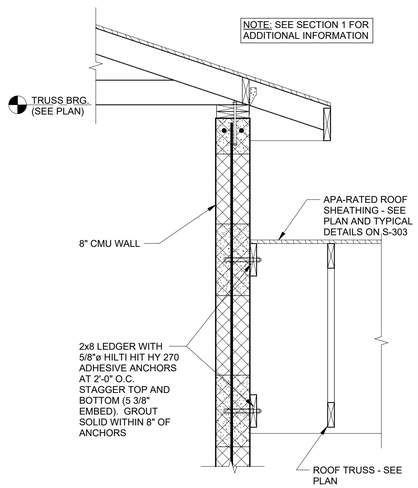

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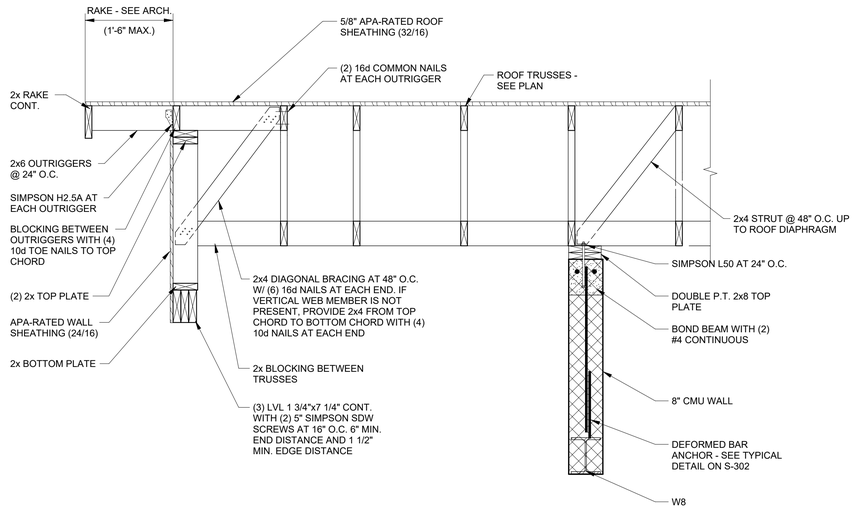

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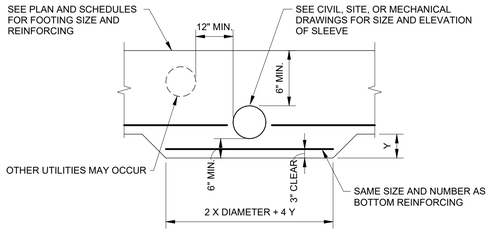
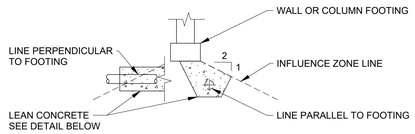
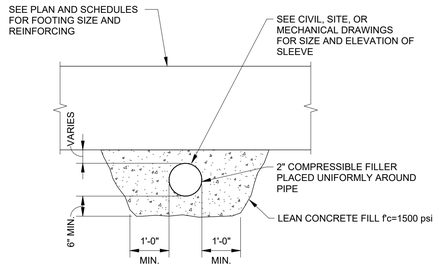


NOTE:
IF DIRECT PENETRATION OF PIPE IS REQUIRED IN LIEU OF SLEEVE, PROVIDE 2" COMPRESSIBLE FILLER, PLACED UNIFORMLY AROUND PIPE.

FOOTING REINFORCING DETAIL FOR PENETRATIONS OR SLEEVES

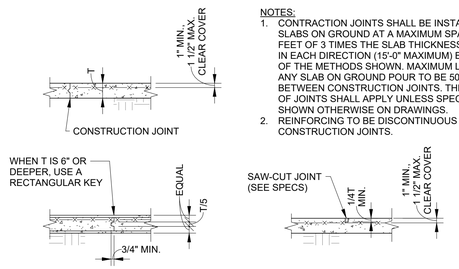


INFLUENCE ZONE



NOTE: PROVIDE CONCRETE PROTECTION AROUND UTILITY LINE WHEN LINE IS WITHIN FOOTING INFLUENCE ZONE. SEE DETAIL ABOVE FOR INFLUENCE ZONE DEFINITION

FOOTING DETAIL WITH UTILITY LINES BELOW

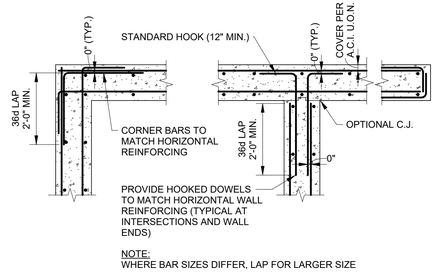


NOTES:
1. CONTRACTION JOINTS SHALL BE INSTALLED IN SLABS ON GROUND AT A MAXIMUM SPACING IN FEET OF 3 TIMES THE SLAB THICKNESS IN INCHES IN EACH DIRECTION (15'-0" MAXIMUM) BY EITHER OF THE METHODS SHOWN. MAXIMUM LENGTH OF ANY SLAB ON GROUND POUR TO BE 50'-0" BETWEEN CONSTRUCTION JOINTS. THIS SPACING OF JOINTS SHALL APPLY UNLESS SPECIFICALLY SHOWN OTHERWISE ON DRAWINGS.
2. REINFORCING TO BE DISCONTINUOUS THROUGH CONSTRUCTION JOINTS.

CONSTRUCTION JOINT

SAWED CONTRACTION JOINT

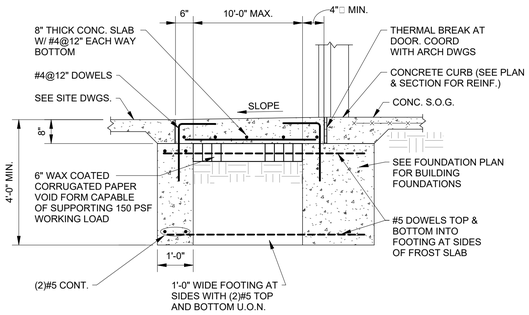
SLAB ON GROUND JOINTS



NOTE:
WHERE BAR SIZES DIFFER, LAP FOR LARGER SIZE

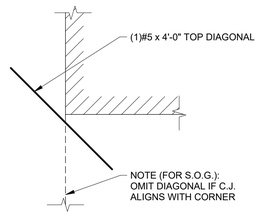
CONCRETE WALL REINFORCING DETAIL

(2 LAYERS OF WALL REINFORCING)



NOTES:
1. SEE ARCHITECTURAL DRAWINGS FOR DIMENSIONS AND SLOPE.
2. PROVIDE EPOXY COATED REINFORCING.

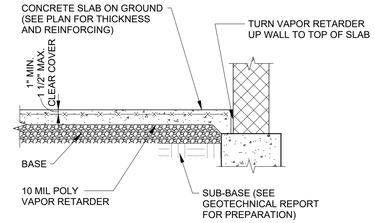
FROST FREE SLAB DETAIL



AT INSIDE CORNERS

SLAB REINFORCING DETAILS

NOTE:
SEE TYPICAL SLAB ON GROUND JOINT DETAILS, SLAB REINFORCING DETAILS, AND SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.



SLAB ON GROUND DETAIL

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PAYNE PARK AQUATIC FACILITY

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NORTH TONAWANDA, NY 14120

TYPICAL DETAILS

City Project No.
2023-01

BCI Project No.
23065

S-301

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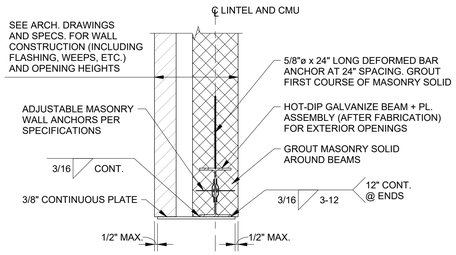
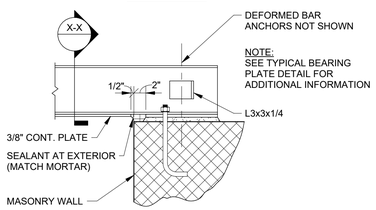
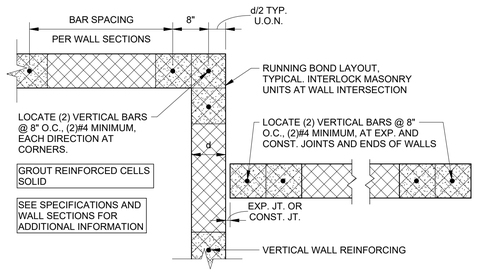


SECTION X-X

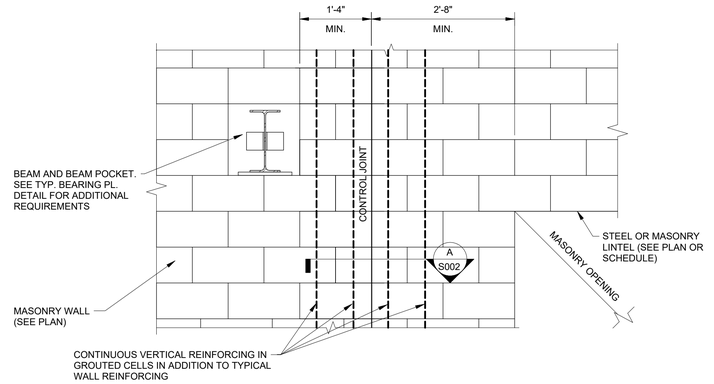


ELEVATION

TYPICAL WIDE FLANGE LINTEL W/ BOTTOM PLATE DETAIL

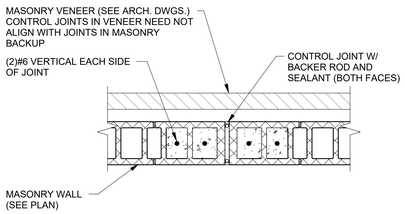


REINFORCING DETAILS FOR CORNERS AND ENDS OF MASONRY WALLS



ELEVATION

TYPICAL MASONRY WALL CONTROL JOINT DETAIL



PLAN DETAIL

NOTES:

1. CONDUIT, PIPING, SLEEVES, ETC. SHALL NOT BE INSTALLED (EMBEDDED) IN THE SAME CELL WITH VERTICAL REINFORCING. NOR SHALL CONDUIT, PIPING, SLEEVES, ETC. BE INSTALLED (EMBEDDED) HORIZONTALLY THROUGH A MASONRY CELL WITH GROUTED VERTICAL REINFORCING.
2. STEEL OR MASONRY LINTELS SHALL NOT SPAN CONTROL JOINTS.
3. ALL HORIZONTAL REINFORCING SHALL BE DISCONTINUOUS AT CONTROL JOINTS.
4. BEARING PLATES SHALL NOT SPAN CONTROL JOINTS.
5. MAXIMUM JOINT SPACING 25'-0".

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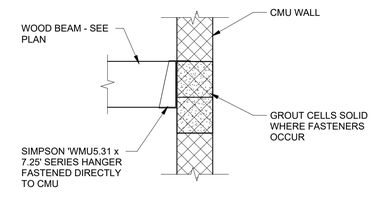
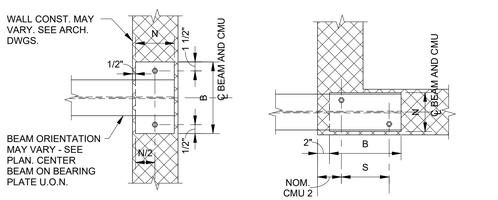
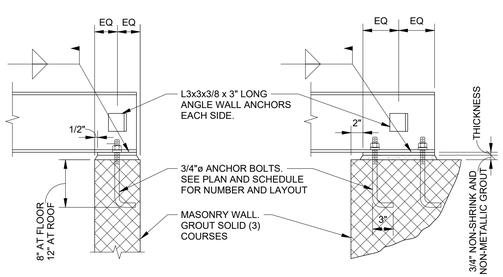


TYPICAL WOOD BEAM TO CMU WALL CONNECTION DETAIL



PLAN DETAIL (PERPENDICULAR TO WALL)

PLAN DETAIL (PARALLEL TO WALL)



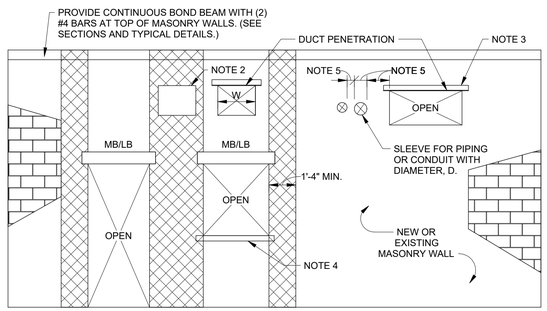
ELEVATION DETAIL (PERPENDICULAR TO WALL)

ELEVATION DETAIL (PARALLEL TO WALL)

TYPICAL BEAM BEARING PLATE DETAILS

BEARING PLATE SCHEDULE (SIZE & REINFORCING)			
MARK	SIZE (THICKNESSxNxB)	# ANCHORS	MASONRY PIER REINFORCING*
BP-1	5/8"x7"x1'-0"	(2) 5/8"ø	TYPICAL WALL REINFORCING

* GROUT REINFORCED CELLS SOLID FOR FULL HEIGHT OF WALL -TYPICAL

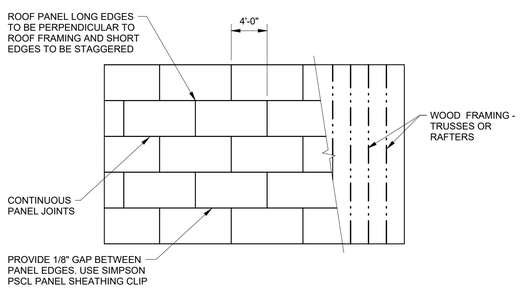


NOTES:

1. WHEN CUTTING PENETRATIONS THROUGH EXISTING OR NEW MASONRY WALLS, LOCATE ALL WALL AND BEAM REINFORCING (HORIZ./VERT. REINFORCEMENT, LINTELS, BOND BEAMS, ETC.) PRIOR TO CUTTING. DO NOT CUT WALL OR BEAM REINFORCING.
2. DO NOT LOCATE WALL PENETRATIONS WITHIN MASONRY PIERS. WHERE POSSIBLE, STACK WALL PENETRATION VERTICALLY. FOR EXAMPLE, LOCATE DUCT PENETRATIONS DIRECTLY ABOVE DOOR OR WINDOW OPENINGS.
3. PROVIDE LOOSE LINTELS ABOVE ALL WALL PENETRATIONS PER SCHEDULE IN GENERAL NOTES.
4. PROVIDE CONTINUOUS 8" BOND BEAMS WITH(2) #4 BELOW OPENINGS WITH WIDTHS, W, GREATER THAN OR EQUAL TO 8'-0". EXTEND BOND BEAM TO ADJACENT MASONRY PIER (2'-8" MIN. BEYOND EDGE OF OPENING).
5. DO NOT LOCATE SLEEVE PENETRATIONS WITHIN 2'-8" OF DUCT PENETRATIONS. MAINTAIN A MINIMUM SLEEVE SPACING OF 3"D (8" MINIMUM).

MB/LB DENOTES MASONRY/LINTEL BEAM. SEE PLANS AND TYPICAL DETAILS FOR ADDITIONAL INFORMATION.

TYPICAL MASONRY WALL PENETRATION DETAIL



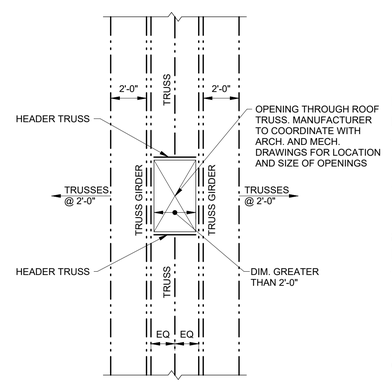
DIAPHRAGM TYPE : UNBLOCKED DIAPHRAGM (EXCEPT BLOCKING ALONG THE RIDGES)

ROOF SHEATHING : 19/32" MIN. APA RATED SHEATHING EXPOSURE I (40/20 SPAN RATING)

NAILING PATTERN : 10d COMMON NAILS (1 1/2" PENETRATION) AT 6" (MAX.) ALONG ALL SUPPORTED EDGES AND 12" (MAX.) ALONG ALL INTERMEDIATE FRAMING MEMBERS

SHEATHING TO BE CONTINUOUS UNDER FALSEWORK. SEE ARCHITECTURAL DRAWINGS FOR OPENINGS BENEATH FALSEWORK FOR VENTILATION

TYPICAL ROOF SHEATHING ATTACHMENT



TYPICAL PLAN DETAIL AT ROOF OPENING THROUGH TRUSSES

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CITY OF NORTH TONAWANDA, N.Y.

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PAYNE PARK
AQUATIC FACILITY

848 PAYNE AVENUE
NORTH TONAWANDA, NY 14120

TYPICAL DETAILS

City Project No.
2023-01

BCI Project No.
23065

S-302

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GENERAL PLAN NOTES

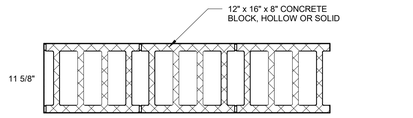
1. DO NOT SCALE DRAWINGS. WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTOR IS TO FIELD VERIFY ALL DIMENSIONS PRIOR TO COMMENCEMENT OF WORK.
2. ALL DIMENSIONS ARE TO FACE OF STUDS, MASONRY, OR CENTERLINE OF STRUCTURAL STEEL UNLESS OTHERWISE INDICATED.
3. MECHANICAL AND ELECTRICAL ITEMS ARE SHOWN FOR THE SOLE PURPOSE OF INDICATING THEIR RESPECTIVE LOCATIONS. REFER TO MECHANICAL AND ELECTRICAL DRAWING FOR SIZE, TYPE, AND OTHER REQUIREMENTS PERTAINING SPECIFICALLY TO THESE ITEMS.
4. REFER TO STRUCTURAL DRAWINGS FOR SIZE, TYPES, LOCATION, CONNECTIONS, REINFORCEMENT AND OTHER REQUIREMENTS PERTAINING TO STRUCTURAL COMPONENTS. CONTRACTOR RESPONSIBLE FOR VERIFYING ALL DIMENSIONS, ELEVATIONS, INVERTS, BENCHMARKS, UTILITIES, & STRUCTURAL ELEMENTS. CONTRACTOR SHALL ADJUST BASED ON CONDITIONS AS NEEDED.
5. ALL PENETRATIONS IN WALLS, ROOFS, FLOORS, OR SHAFTS, TO BE SEALED PER CODE. FIRE BLOCKING TO BE PROVIDED AS REQUIRED BY CODE.
6. WHERE ITEMS CANNOT BE INSTALLED BECAUSE NEW WALLS, STRUCTURE, OR FLOORS ARE BEING INSTALLED OR ERECTED, INSTALL BOXES, SLEEVES, INSERT FIXTURES, OR OTHER DEVICES AS NECESSARY TO PERMIT INSTALLATION OF WORK DURING OTHER PHASES OF CONSTRUCTION. LAYOUT CHASES, HOLES, OR OTHER OPENINGS WHICH MUST BE PROVIDED IN MASONRY, CONCRETE, OR OTHER TYPES OF CONSTRUCTION.
7. ALL PIPING, CONDUIT, DUCTWORK & EQUIPMENT IN EXPOSED AREAS TO BE MOUNTED AS HIGH AS POSSIBLE.
8. ALL PIPES, CONDUIT, DUCTWORK & EQUIPMENT TO BE CONCEALED IN WALLS, ABOVE CEILING, & BELOW FLOORS.
9. CONTRACTOR TO PATCH & REPAIR ANY ITEMS DAMAGED DURING CONSTRUCTION ACTIVITIES TO FINISH STATE & MATCHING ADJACENT MATERIALS.
10. PROVIDE & INSTALL BLOCKING IN WALL FOR ALL EQUIPMENT, FIXTURES, ACCESSORIES AS REQUIRED, COORDINATE W/ OWNER FOR SPECIALTY & OWNER PROVIDED EQUIPMENT.
11. ALL CMU CORNERS AND OPENINGS TO RECEIVE 1" BULLNOSE.

GENERAL CEILING NOTES

1. ALL LIGHTS, SPRINKLERS AND DIFFUSERS ARE TO BE COORDINATED WITH CEILING GRIDS PRIOR TO INSTALLATION. GRIDS & TILES SHOULD BE ADJUSTED TO BE CENTERED OR BE EQUALLY SPACED WITHIN ROOM.
2. ALL DIMENSIONS ARE TO FACE OF CMU OR STUD UNLESS IS NOTED OTHERWISE.
3. DO NOT SCALE DRAWINGS. WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS.
4. ALL EXPOSED STRUCTURE IS TO BE PAINTED.
5. ALL BULKHEADS SHALL BE 8" BELOW THE FINISHED CEILING UNLESS NOTED OTHERWISE
6. REFER TO SHEET A-601 FOR DOOR AND WINDOW TYPES AND DETAILS & ASSOCIATED BULKHEADS.
7. SOFFIT FRAMING IS TO EXTEND TO THE DECK ABOVE UNLESS NOTED OTHERWISE.
8. ALL EXPOSED STRUCTURE IS TO BE PAINTED 2'-0" ABOVE ALL FINISHED CEILING MATERIALS.
9. REFER TO THE CODE PLANS FOR RATED ASSEMBLIES.
10. REFER TO THE CODE PLANS FOR RATED VERTICAL AND HORIZONTAL ASSEMBLY LOCATIONS AND DETAILS.

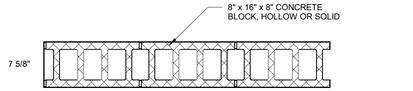
GENERAL ROOF NOTES

1. DO NOT SCALE DRAWINGS, WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS.
2. ALL DIMENSIONS ARE TO FACE OF STUDS, MASONRY, OR CENTERLINE OF STRUCTURAL STEEL UNLESS OTHERWISE INDICATED.
3. ROOF PENETRATIONS ARE SHOWN GRAPHICALLY. COORDINATE W/ MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS FOR LOCATIONS.
4. ALL MECHANICAL, PLUMBING, AND ELECTRICAL ROOF PENETRATIONS ARE TO BE PAINTED TO MATCH ROOF COLOR.
5. ALL CRICKETS TO SLOPE MINIMUM OF 1/4":12"



FOR STRUCTURAL WALL REINFORCEMENT, REFER TO STRUCTURAL DRAWING DETAILS

TYPE M12 (UP TO INDICATED T.O. MASONRY)

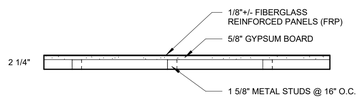


FOR STRUCTURAL WALL REINFORCEMENT, REFER TO STRUCTURAL DRAWING DETAILS

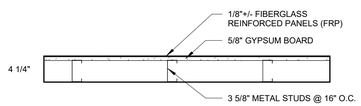
TYPE M8 (UP TO INDICATED T.O. MASONRY)

TYPE M8F (UP TO INDICATED T.O. MASONRY WITH STUD WALL TYPE S4 ON TOP TO UNDERSIDE OF DECK)

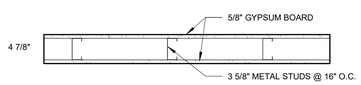
FIRE RATED PARTITION: UL #905 - 2 HOUR RATED (1 HOUR NEEDED)



TYPE S2F (TO ABOVE CEILING)



TYPE S4F (TO ABOVE CEILING)



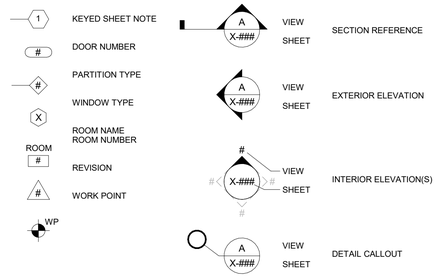
TYPE S4 (TO UNDERSIDE OF DECK)

FIRE RATED PARTITION: UL #419 - 1 HOUR RATED

WALL TYPES

1" = 1'-0"

ARCHITECTURAL SYMBOL LEGEND



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REGISTERED ARCHITECT
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026165
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ARCHITECTURAL
GENERAL NOTES

City Project No.
2023-01

BCI Project No.
23065

A-001

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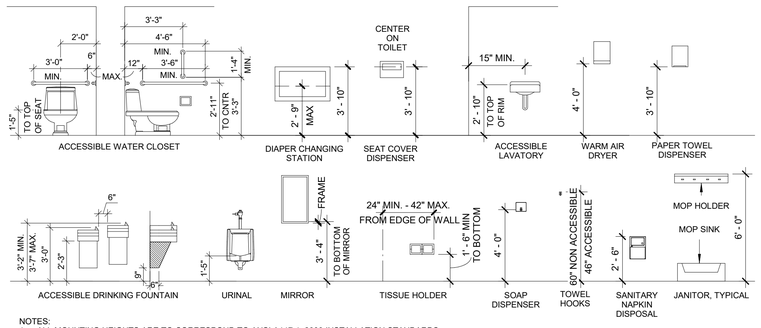


NOTES:
1. ALL MOUNTING HEIGHTS ARE TO CORRESPOND TO ANSI A117.1_2009 INSTALLATION STANDARDS.
2. MAXIMUM MOUNTING HEIGHTS SHOWN FOR RESTROOM ACCESSORIES WITH OPERABLE PARTS. REFER TO CURRENT ANSI A117.1_2009 FOR MINIMUM MOUNTING HEIGHTS.
3. ALL DIMENSIONS ARE TO FINISHED WALL.
4. FIXTURE ELEVATIONS ARE SHOWN FOR GRAPHIC PURPOSES ONLY. REFER TO PLUMBING PLANS AND SCHEDULES FOR EXACT TYPE AND PROFILE.
5. SEE SHEET A-401 FOR SIM SHOWER CONTROL MOUNTING DIMENSIONS.

TYPICAL ACCESSIBLE MOUNTING HEIGHTS

1/4" = 1'-0"

FINISH LEGEND

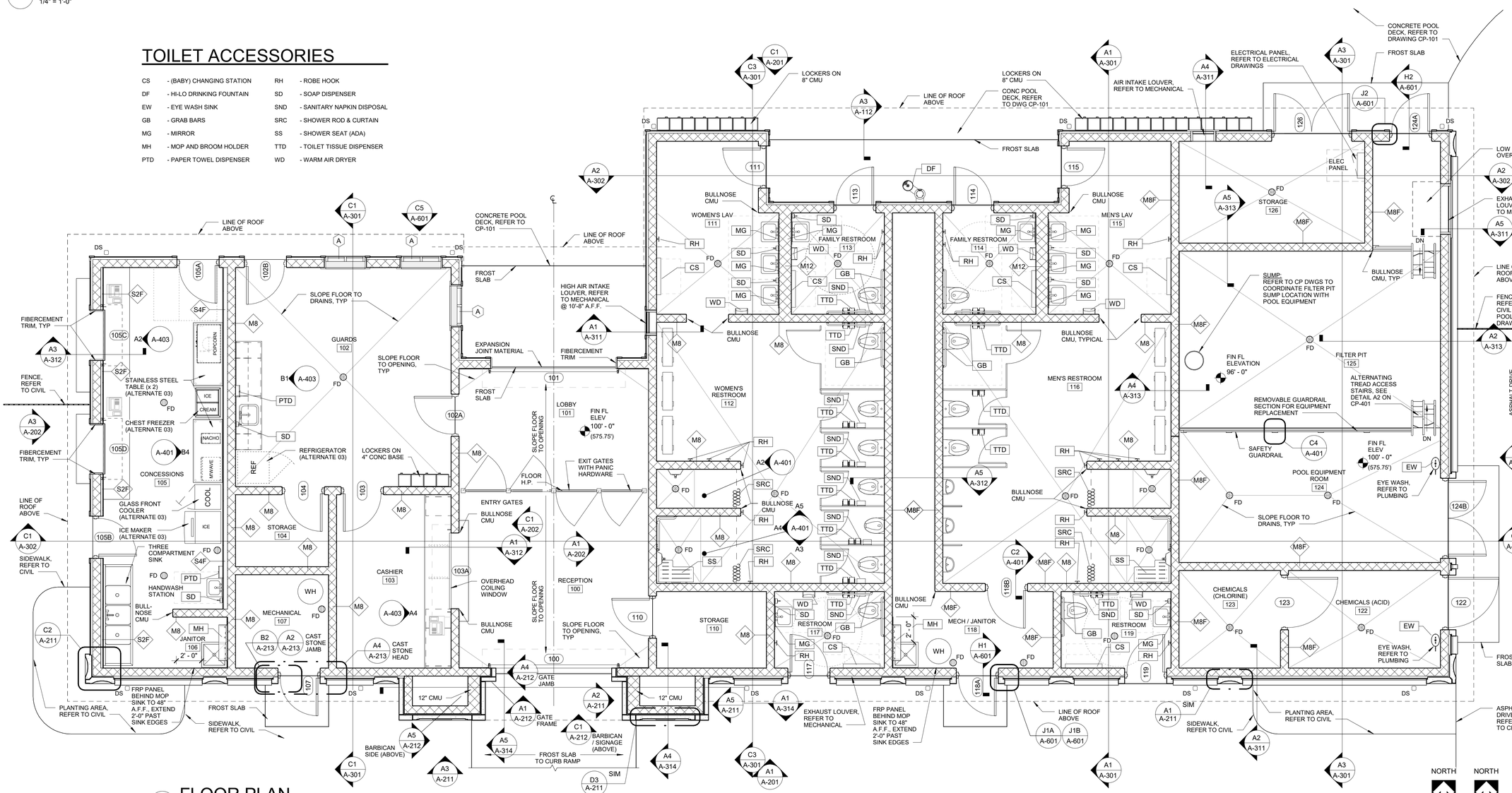
CMU	- CONCRETE MASONRY UNIT
EXP	- EXPOSED
F B&B	- FIBERCEMENT BOARD & BATTEN
FRP	- FRP ON GYPSUM WALLBOARD
GWB	- GYPSUM WALLBOARD
PLYWD	- PLYWOOD
PT	- PAINT
RB	- RUBBER BASE
RES	- RESINOUS FLOORING
S CONC	- SEALED CONCRETE

ROOM FINISH SCHEDULE

ROOM NO.	ROOM NAME	FLOOR FINISH	BASE FINISH	WALL FINISH	CEILING FINISH	COMMENTS	REVISIONS	REV. DESCRIPTION
100	RECEPTION	S CONC	RB	CMU PT	F B&B			
101	LOBBY	S CONC	RB	CMU PT	F B&B			
102	GUARDS	S CONC	RB	CMU PT	GWB PT			
103	CASHIER	S CONC	RB	CMU PT	GWB PT			
104	STORAGE	S CONC	RB	CMU PT	PLYWD PT			
105	CONCESSIONS	RES	RES	FRP / CMU	GWB PT			
106	JANITOR	RES	RES	CMU PT	GWB PT			
107	MECHANICAL	S CONC	RB	CMU PT	PLYWD PT			
110	STORAGE	S CONC	RB	CMU PT	PLYWD PT			
111	WOMEN'S LAV	RES	RES	CMU PT	GWB PT			
112	WOMEN'S RESTROOM	RES	RES	CMU PT	GWB PT			
113	FAMILY RESTROOM	RES	RES	CMU PT	GWB PT			
114	FAMILY RESTROOM	RES	RES	CMU PT	GWB PT			
115	MEN'S LAV	RES	RES	CMU PT	GWB PT			
116	MEN'S RESTROOM	RES	RES	CMU PT	GWB PT			
117	RESTROOM	RES	RES	CMU PT	GWB PT			
118	MECH / JANITOR	S CONC	RB	CMU PT	EXP			
119	RESTROOM	RES	RES	CMU PT	GWB PT			
122	CHEMICALS (ACID)	S CONC	-	CMU PT	PLYWD PT	FIRE RATED ROOF / CEILING ASSEMBLY		
123	CHEMICALS (CHLORINE)	S CONC	-	CMU PT	PLYWD PT	FIRE RATED ROOF / CEILING ASSEMBLY		
124	POOL EQUIPMENT ROOM	S CONC	-	CMU PT	PLYWD PT	FIRE RATED ROOF / CEILING ASSEMBLY		
125	FILTER PIT	S CONC	-	CMU PT	PLYWD PT	FIRE RATED ROOF / CEILING ASSEMBLY		
126	STORAGE	S CONC	RB	CMU PT	PLYWD PT	FIRE RATED ROOF / CEILING ASSEMBLY		

TOILET ACCESSORIES

CS	- (BABY) CHANGING STATION	RH	- ROBE HOOK
DF	- HI-LO DRINKING FOUNTAIN	SD	- SOAP DISPENSER
EW	- EYE WASH SINK	SND	- SANITARY NAPKIN DISPOSAL
GB	- GRAB BARS	SRC	- SHOWER ROD & CURTAIN
MG	- MIRROR	SS	- SHOWER SEAT (ADA)
MH	- MOP AND BROOM HOLDER	TTD	- TOILET TISSUE DISPENSER
PTD	- PAPER TOWEL DISPENSER	WD	- WARM AIR DRYER



A1 FLOOR PLAN

1/4" = 1'-0"

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REGISTERED ARCHITECT RICHARD THOMAS PARKER 036165 STATE OF NEW YORK

CITY OF NORTH TONAWANDA, N.Y.

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Revisions:

NUMBER	DATE	DESCRIPTION
Issue Date:	12/16/2025	FOR BID

PAYNE PARK AQUATIC FACILITY

830 PAYNE AVENUE
NORTH TONAWANDA, NY 14120

FLOOR PLAN

City Project No. 2023-01
BCI Project No. 23065

A-101

NORTH PLAN NORTH TRUE

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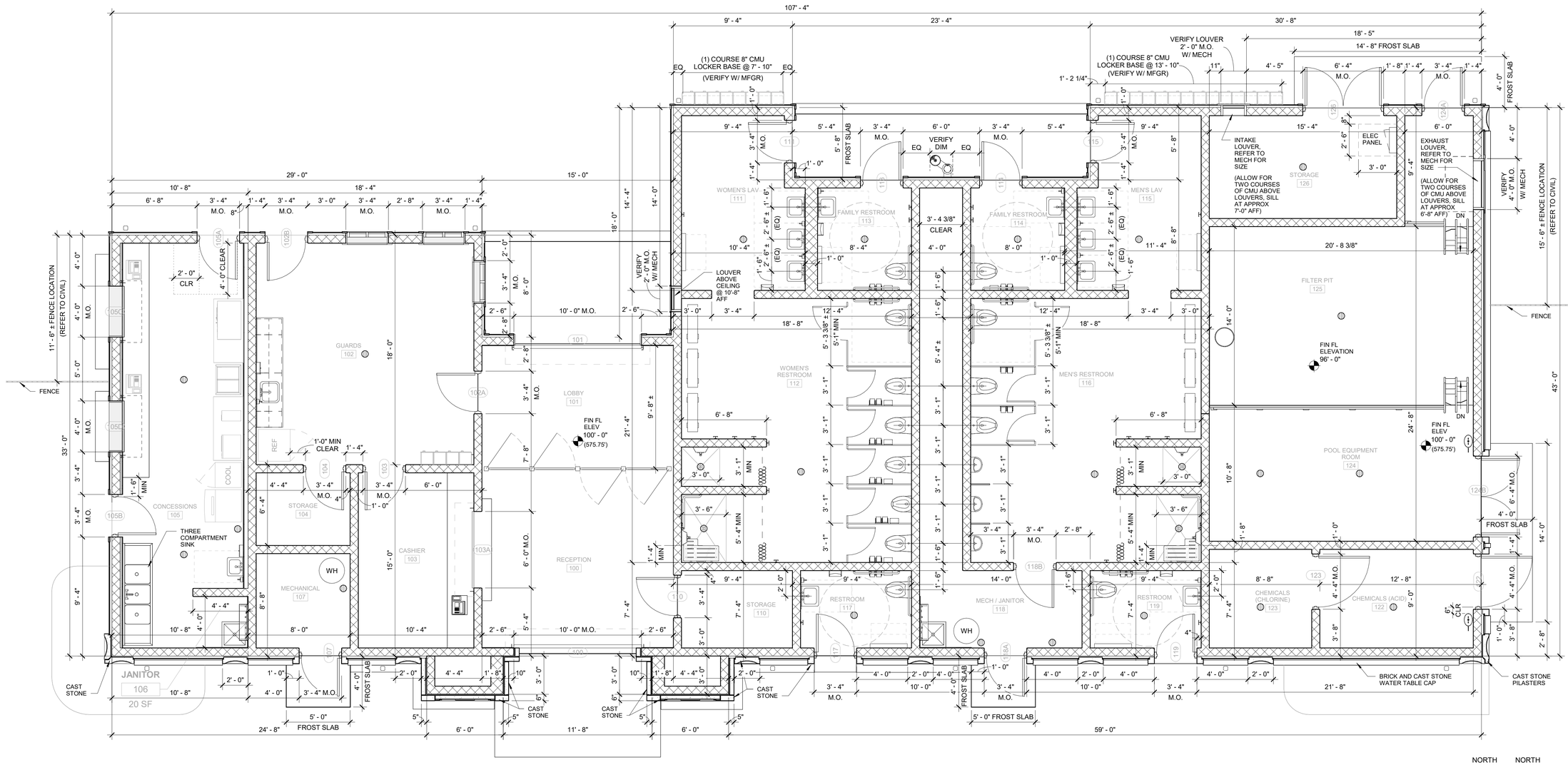

1 DIMENSION PLAN
1/4" = 1'-0"

NORTH PLAN

NORTH TRUE

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PAYNE PARK AQUATIC FACILITY

830 PAYNE AVENUE
NORTH TONAWANDA, NY 14120

DIMENSION PLAN

City Project No. 2023-01

BCI Project No. 23065

A-102

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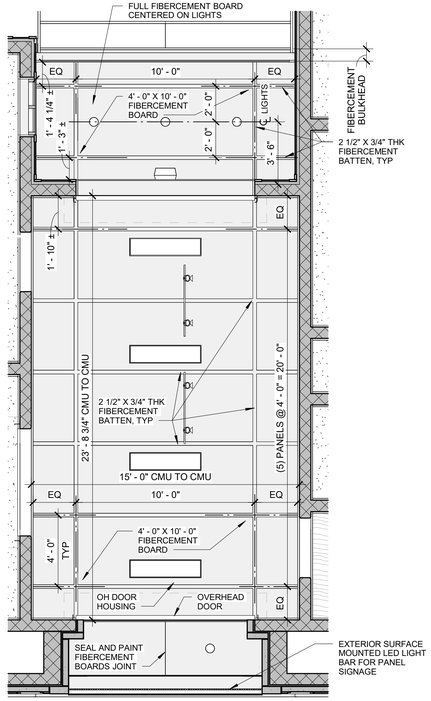
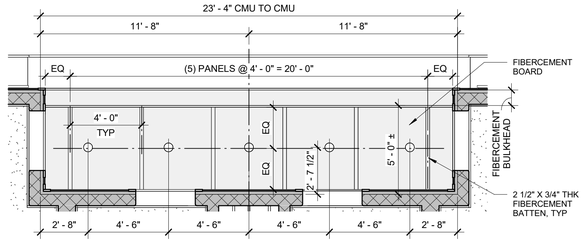


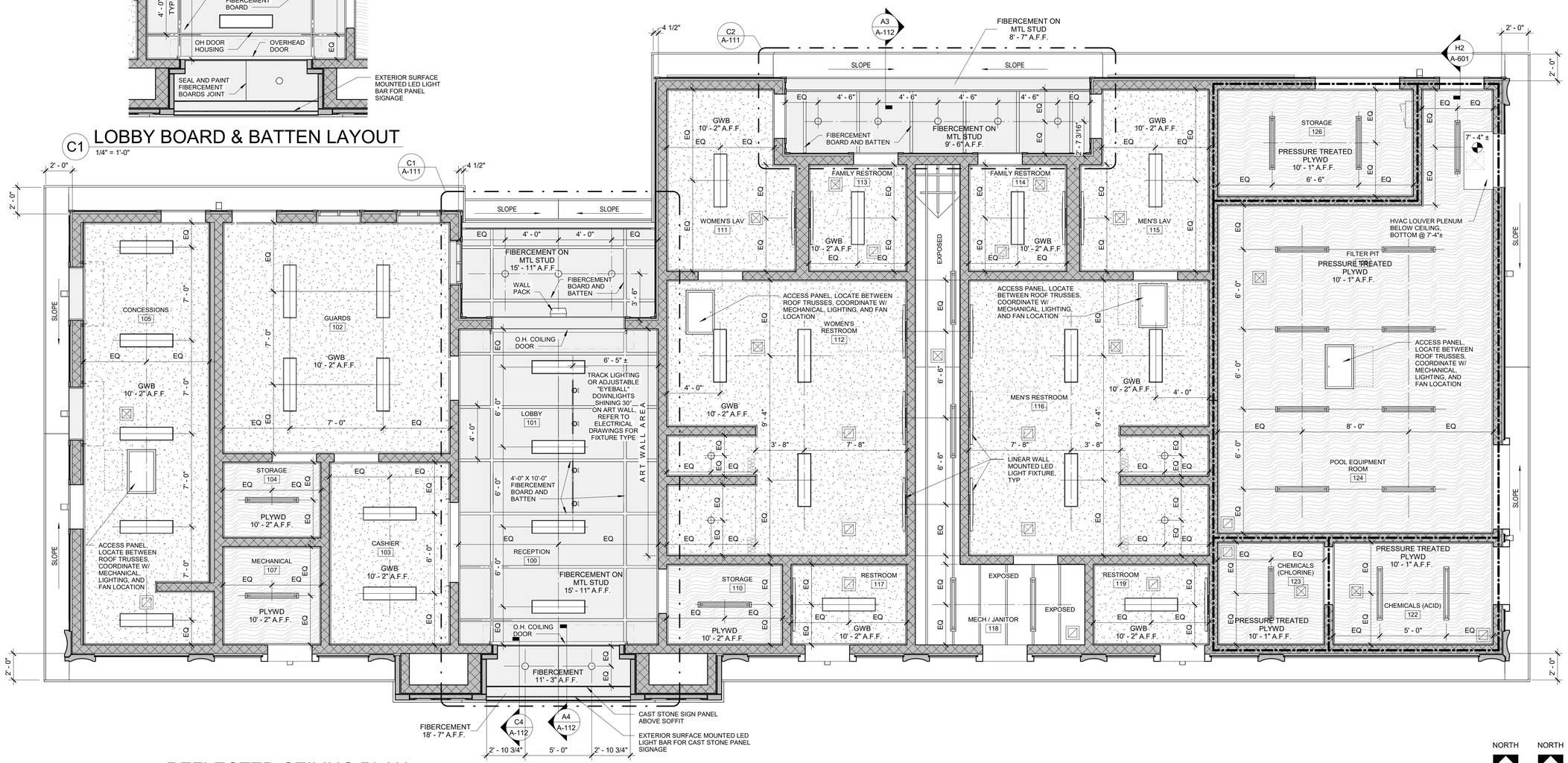
C1 LOBBY BOARD & BATTEN LAYOUT

1/4" = 1'-0"

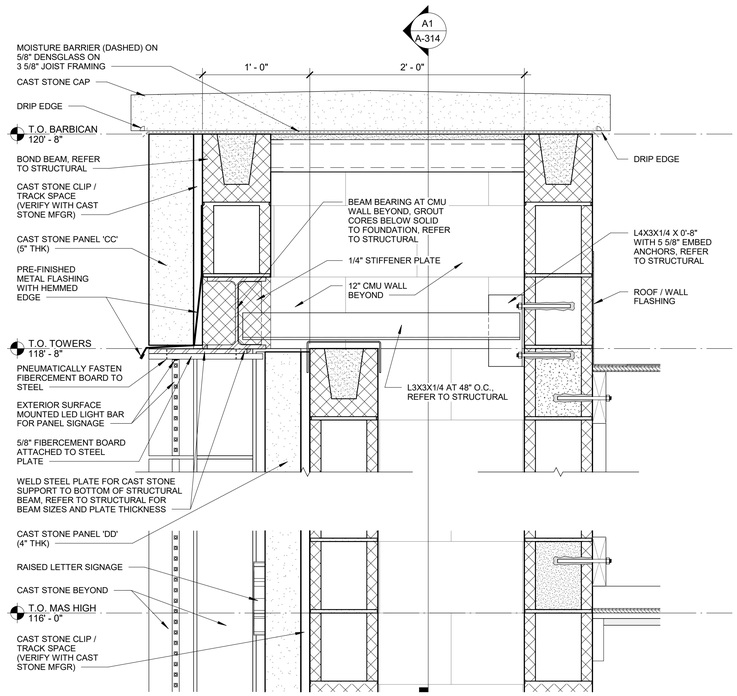


C2 MAIN RESTROOM ALCOVE BOARD & BATTEN LAYOUT

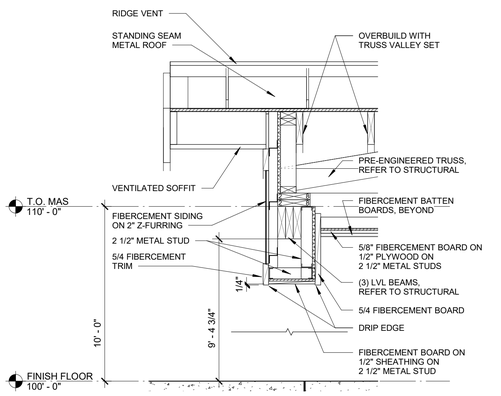
1/4" = 1'-0"


2' - 0"
C1 A-111
4 1/2"
A3 A-112
C2 A-111
FIBERCEMENT ON MTL STUD 8' - 7" A.F.F.
SLOPE
SLOPE
H2 A-601
2' - 0"
2' - 0"
EQ
4' - 6"
4' - 6"
4' - 6"
4' - 6"
EQ
FIBERCEMENT BOARD AND BATTEN
FIBERCEMENT ON MTL STUD 9' - 6" A.F.F.
2' - 7 3/16"
GWB 10' - 2" A.F.F.
GWB 10' - 2" A.F.F.
STORAGE 126
PRESSURE TREATED PLYWD 10' - 1" A.F.F.
6' - 6"
7' - 4" ±
WOMEN'S LAV 111
FAMILY RESTROOM 113
FAMILY RESTROOM 114
MEN'S LAV 115
HVAC LOUVER PLENUM BELOW CEILING, BOTTOM @ 7'-4"±
FILTER PIT 121
PRESSURE TREATED PLYWD 10' - 1" A.F.F.
SLOPE
SLOPE
2' - 0"
2' - 0"
CONCESSIONS 105
GUARDS 102
GWB 10' - 2" A.F.F.
7' - 0"
7' - 0"
7' - 0"
7' - 0"
7' - 0"
EQ
EQ
EQ

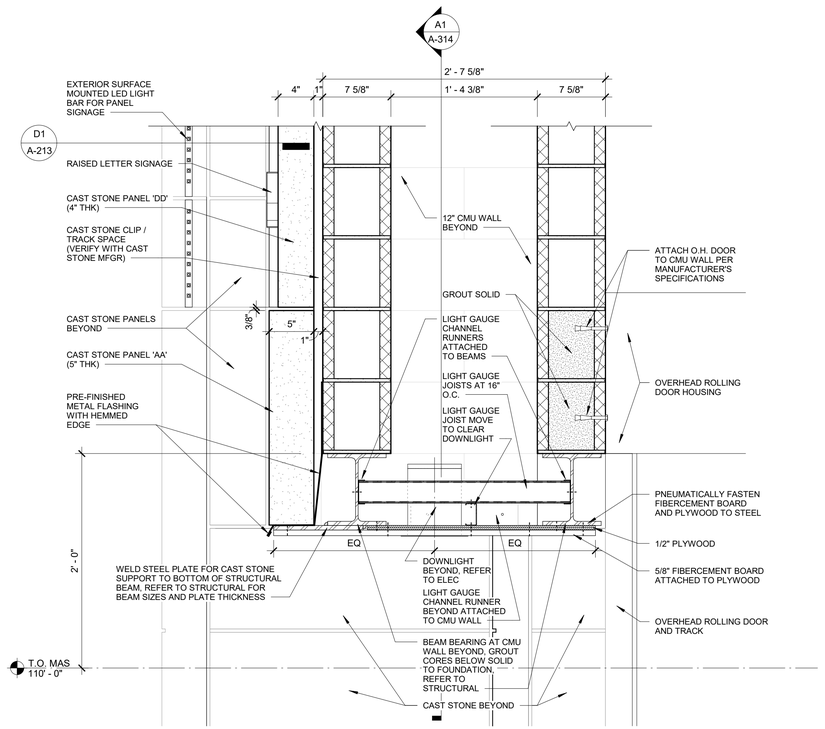
Plotted 12/8/2025 3:08:54 PM



C4 ENTRANCE SIGNAGE SOFFIT SECTION DETAIL
1 1/2" = 1'-0"



A3 RESTROOM ALCOVE BULKHEAD
3/4" = 1'-0"



A4 ENTRANCE CEILING / SOFFIT SECTION DETAIL
1 1/2" = 1'-0"

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REGISTERED ARCHITECT
RICHARD THOMAS PARKER
026165
STATE OF NEW YORK

CITY OF NORTH TONAWANDA, N.Y.

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PAYNE PARK
AQUATIC FACILITY

830 PAYNE AVENUE
NORTH TONAWANDA, NY 14120

CEILING / SOFFIT SECTIONS AND DETAILS

City Project No.
2023-01

BCI Project No.
23065

A-112

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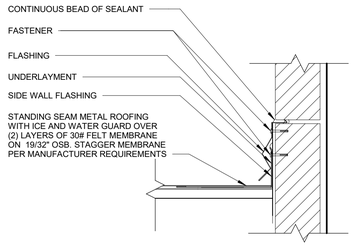
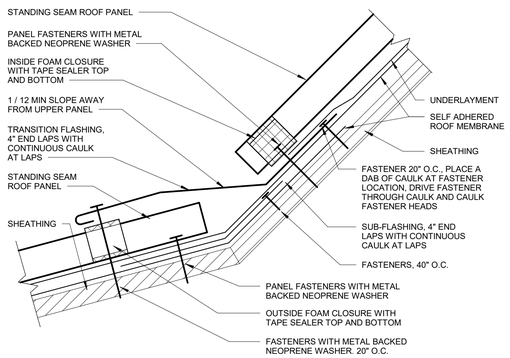
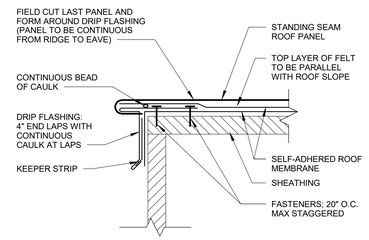


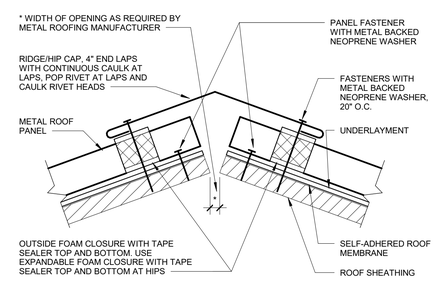
D1 FLASHING DETAIL
3" = 1'-0"



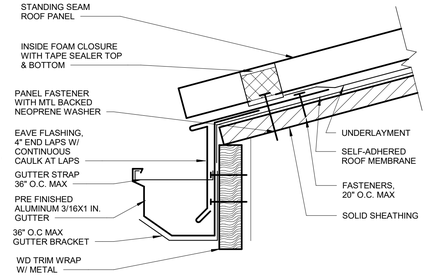
D2 TRANSITION FLASHING
6" = 1'-0"



D3 TYP RAKE DETAIL
6" = 1'-0"

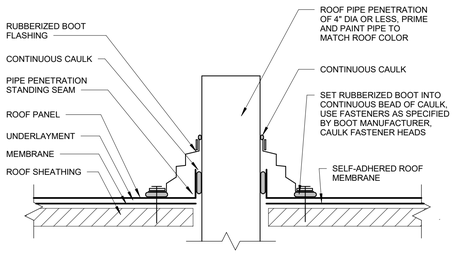


D4 ROOF RIDGE VENT
6" = 1'-0"



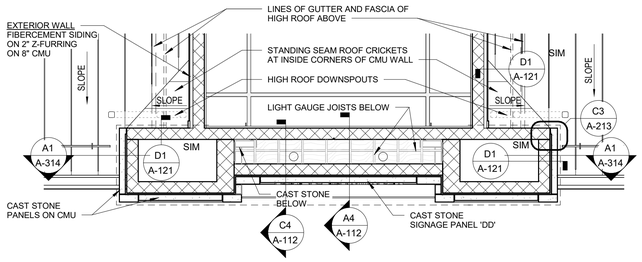
D5 ROOF DETAIL
6" = 1'-0"

NOTE:
ALL FELTING UNDERLAYMENT, CAULKING, AND FASTENERS ARE ITEMS TO BE FURNISHED AND INSTALLED BY THE ROOFING CONTRACTOR.

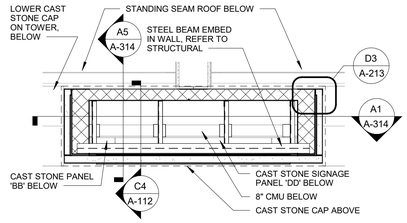


NOTE:
1. PIPE TO BE PAINTED TO PREVENT RUST RUN-OFF FROM STAINING PANELS.
2. POSITION SQUARE BASED BOOTS IN DIAMOND ORIENTATION WHERE POSSIBLE TO AID IN DIVERTING WATER.

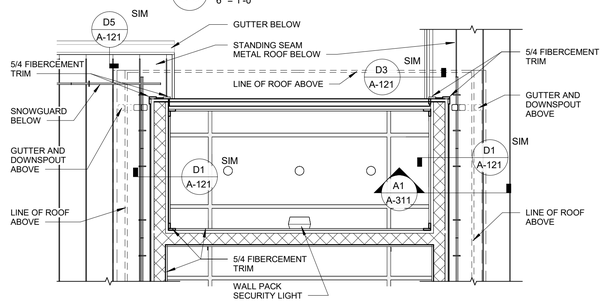
C1 TYP ROOF PENETRATION
6" = 1'-0"



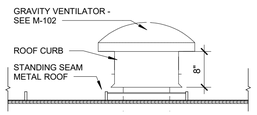
C2 LOW ROOF CRICKETS AT ENTRANCE
1/4" = 1'-0"



C3 UPPER BARBICAN WALLS
1/4" = 1'-0"

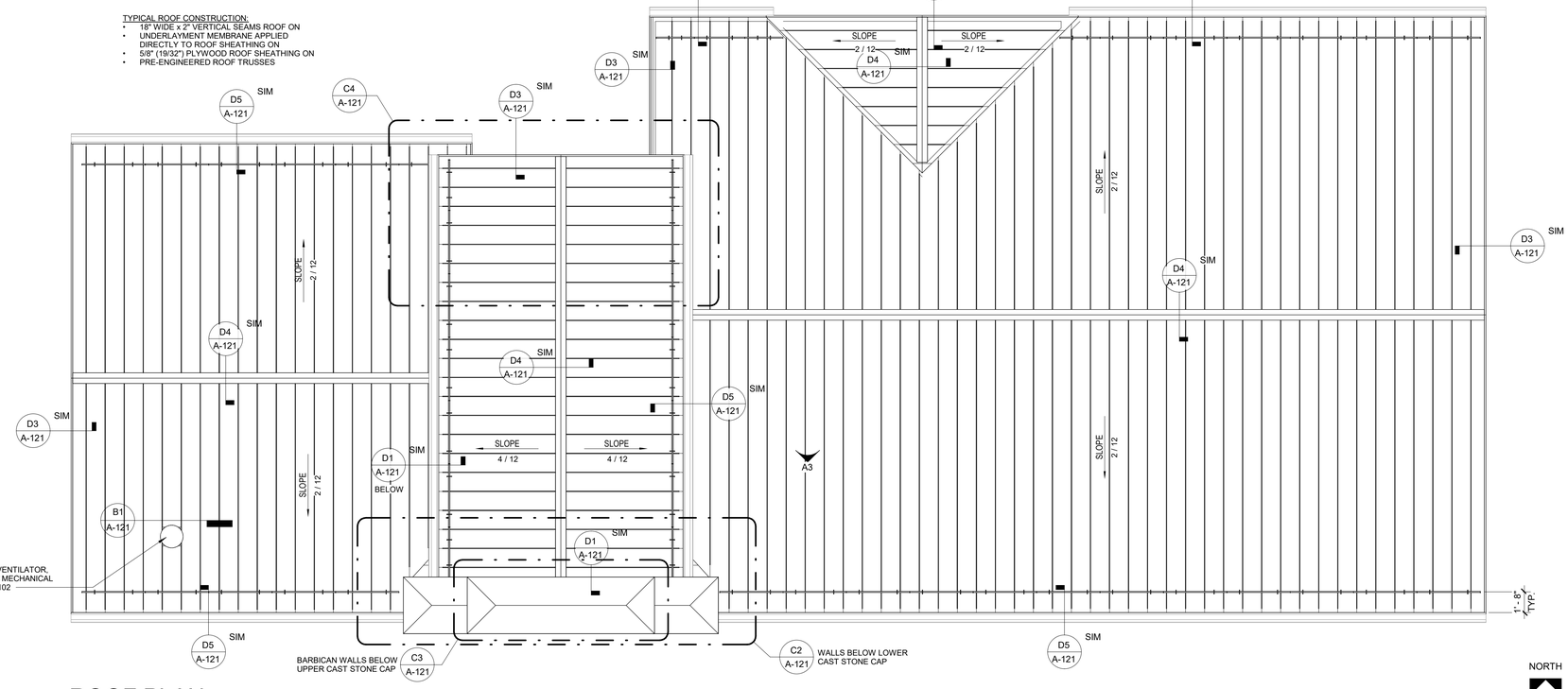


C4 LOW ROOFS AT BACK OF ENTRANCE
1/4" = 1'-0"



B1 VENTILATOR CURB
3/4" = 1'-0"

TYPICAL ROOF CONSTRUCTION:
- 18" WIDE x 2" VERTICAL SEAMS ROOF ON
- UNDERLAYMENT MEMBRANE APPLIED DIRECTLY TO ROOF SHEATHING ON
- 5/8" (19/32") PLYWOOD ROOF SHEATHING ON
- PRE-ENGINEERED ROOF TRUSSES



A2 ROOF PLAN
3/16" = 1'-0"

GENERAL ROOF NOTES

1. DO NOT SCALE DRAWINGS, WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS.
2. ALL DIMENSIONS ARE TO FACE OF STUDS, MASONRY, OR CENTERLINE OF STRUCTURAL STEEL UNLESS OTHERWISE INDICATED.
3. ROOF PENETRATIONS ARE SHOWN GRAPHICALLY. COORDINATE W/ MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS FOR LOCATIONS.
4. ALL MECHANICAL, PLUMBING, AND ELECTRICAL ROOF PENETRATIONS ARE TO BE PAINTED TO MATCH ROOF COLOR.
5. ALL CRICKETS TO SLOPE MINIMUM OF 1/4":12"

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NORTH TONAWANDA, NY 14120

ROOF PLAN, NOTES AND ROOF DETAILS

City Project No.
2023-01

BCI Project No.
23065

A-121

NORTH PLAN

NORTH TRUE

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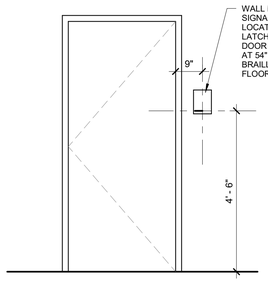
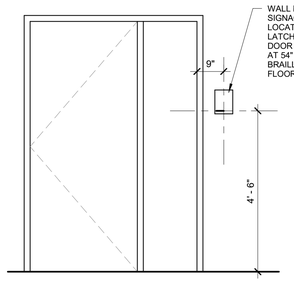


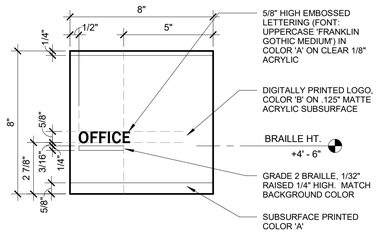
TACTILE SIGNAGE DOOR MOUNTING HEIGHT

D1 1/2" = 1'-0"

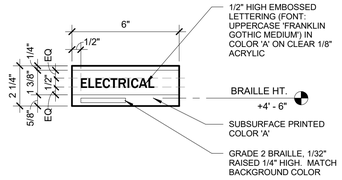


TACTILE SIGNAGE DOOR SIDELIGHT MOUNTING HEIGHT

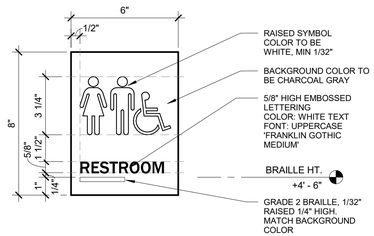
D2 1/2" = 1'-0"



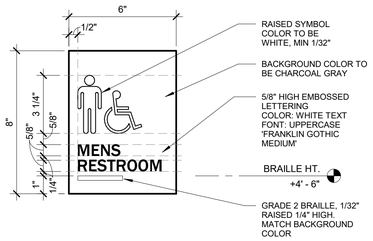
ONE-LINE SIGN - TYPE A1



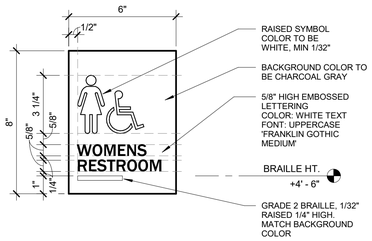
UTILITY SIGN - TYPE B1



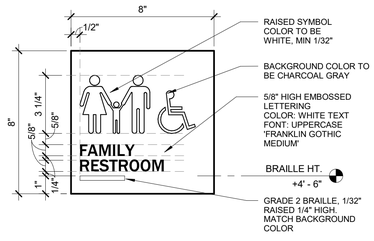
RESTROOM SIGN - TYPE C



RESTROOM SIGN - TYPE CM



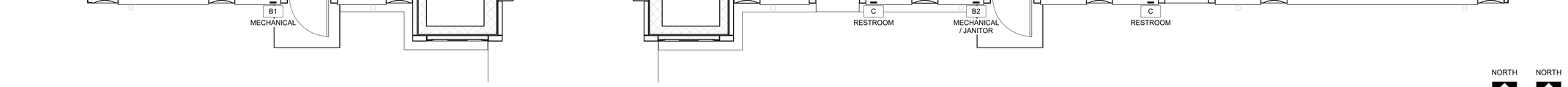
RESTROOM SIGN - TYPE CW



RESTROOM SIGN - TYPE C3

SIGNAGE LEGEND

NOTE:
SEE THIS SHEET FOR SIGNAGE PLACEMENT DETAILS



A1 SIGNAGE FLOOR PLAN

1/4" = 1'-0"

NORTH PLAN

NORTH TRUE

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NORTH TONAWANDA, NY 14120

SIGNAGE FLOOR PLAN

City Project No. 2023-01

BCI Project No. 23065

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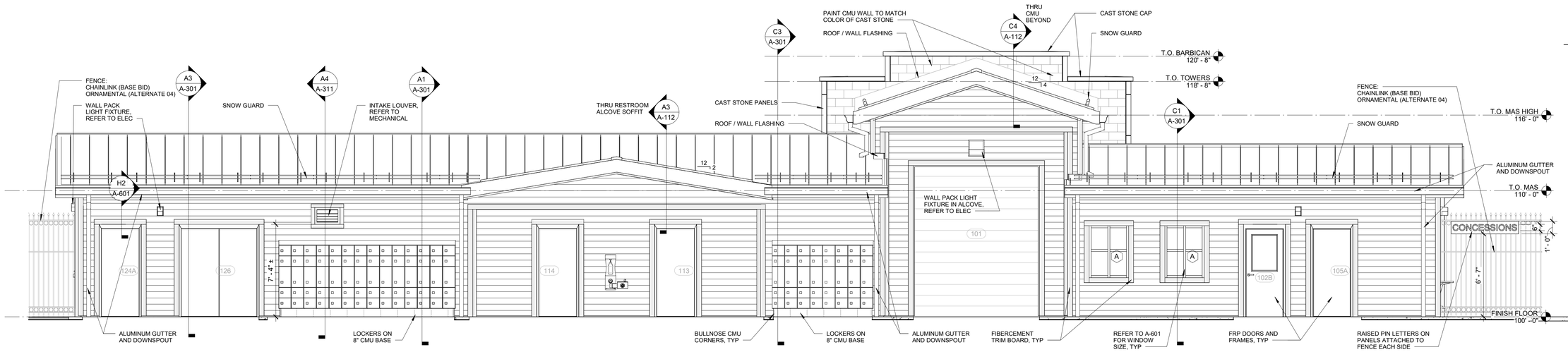
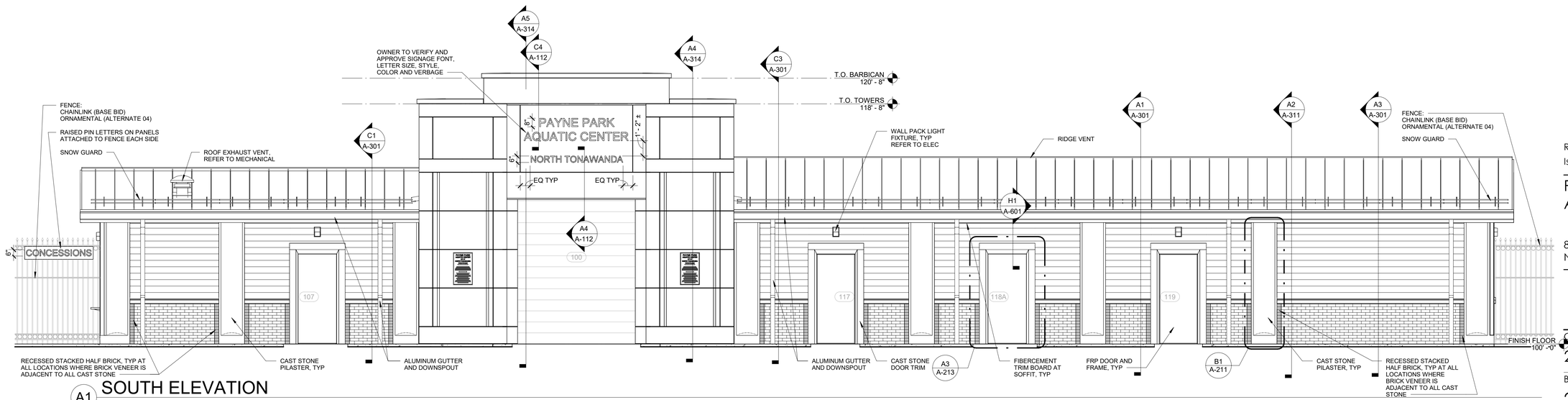


C1 NORTH ELEVATION
1/4" = 1'-0"



A1 SOUTH ELEVATION
1/4" = 1'-0"

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NORTH TONAWANDA, NY 14120

EXTERIOR ELEVATIONS

City Project No. 2023-01

BCI Project No. 23065

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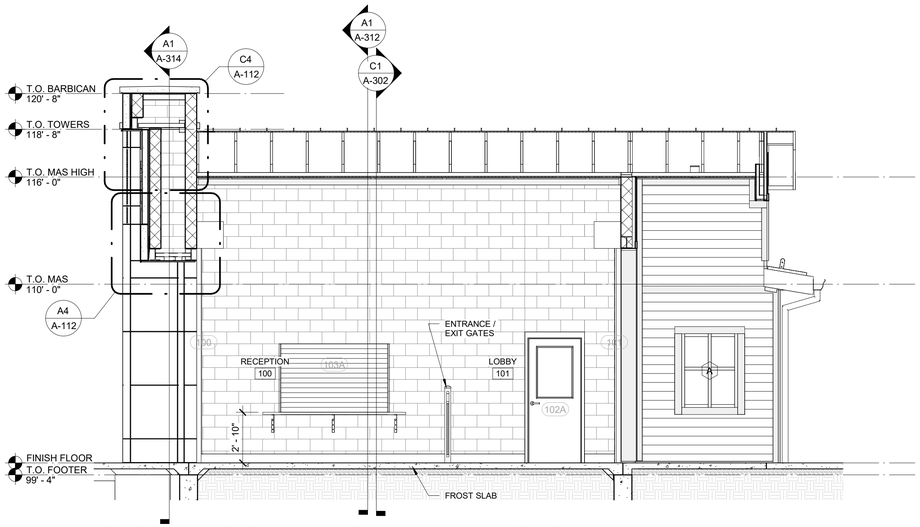

C1 ENTRANCE PACKAGE LOOKING WEST
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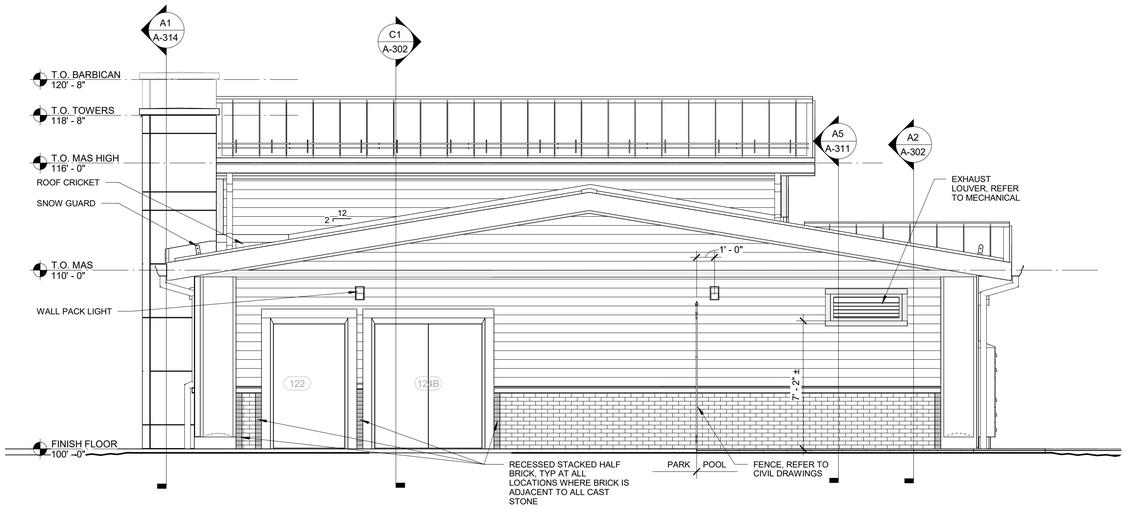
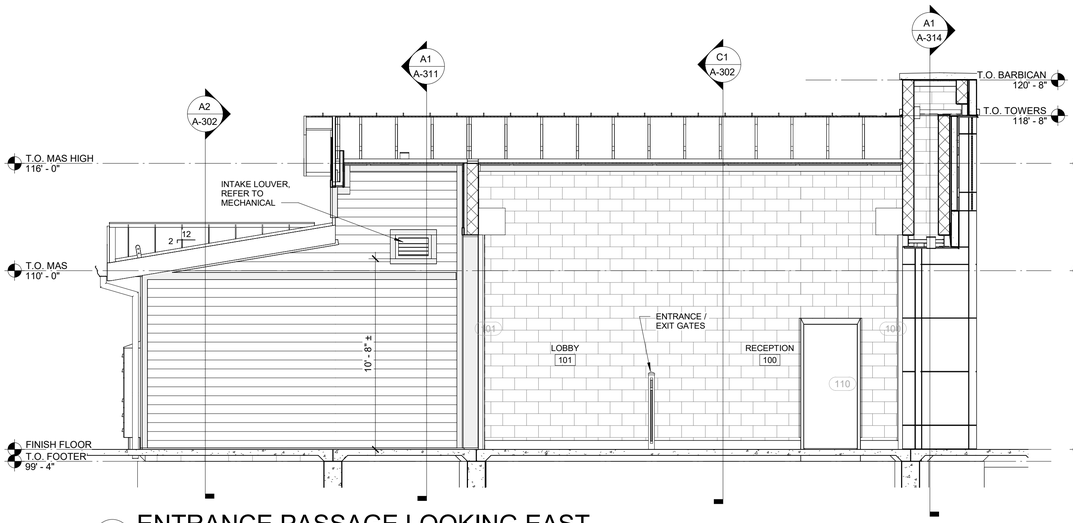
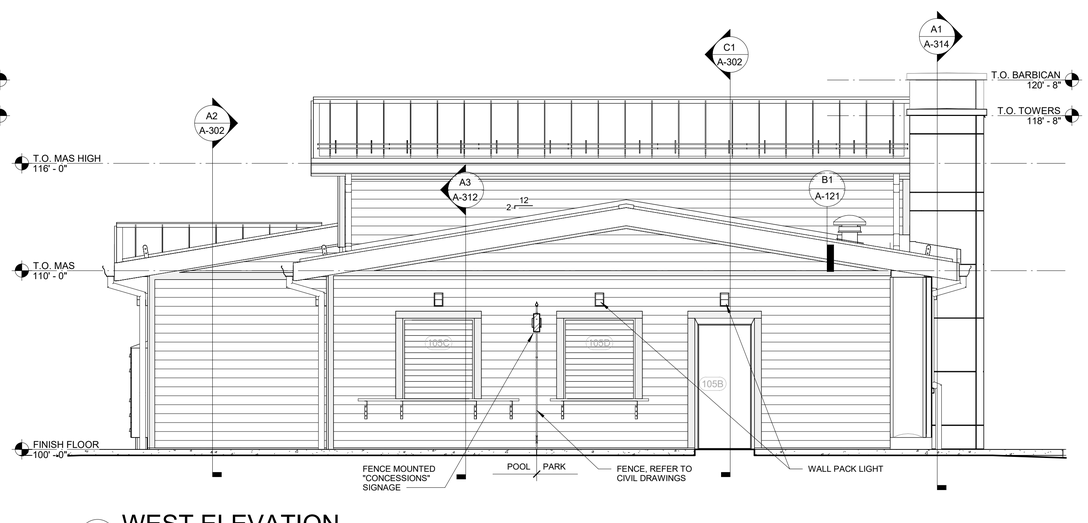


C3 EAST ELEVATION
1/4" = 1'-0"



A1 ENTRANCE PASSAGE LOOKING EAST
1/4" = 1'-0"



A3 WEST ELEVATION
1/4" = 1'-0"

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AQUATIC FACILITY

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NORTH TONAWANDA, NY 14120

EXTERIOR ELEVATIONS

City Project No.
2023-01

BCI Project No.
23065

A-202

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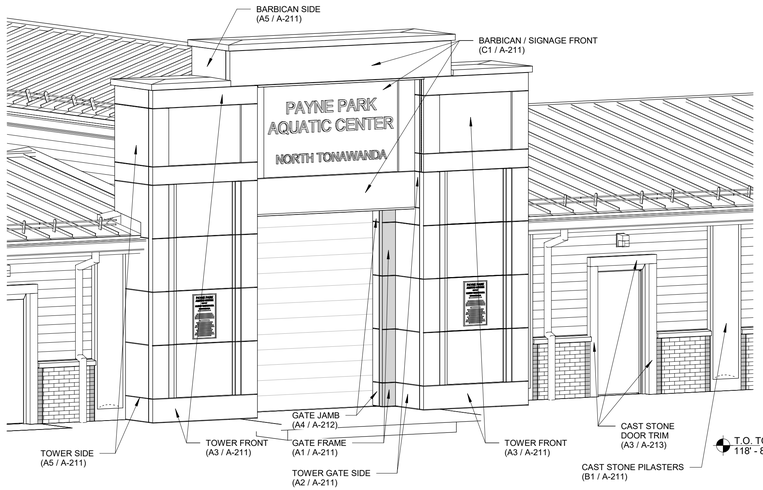
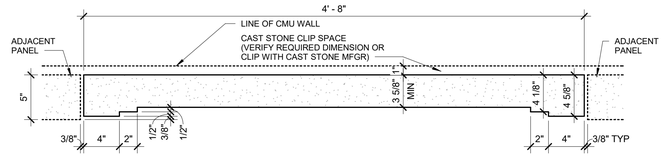
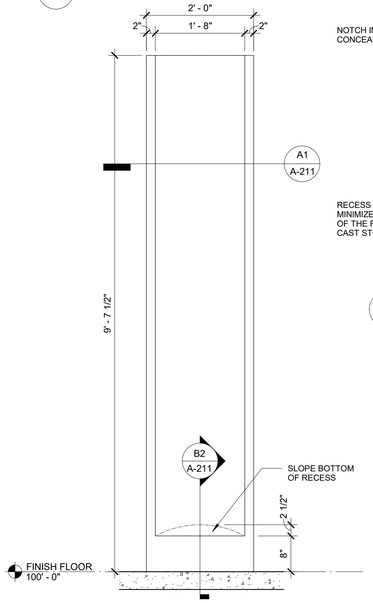


D1 3D VIEW - CAST STONE ENTRANCE



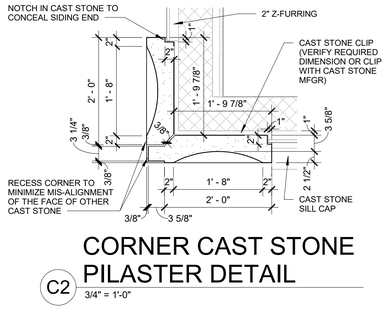
D3 CAST STONE TOWER PANEL PROFILE - PANEL 'E'

1 1/2" = 1'-0"



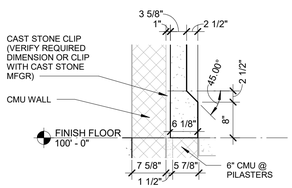
B1 CAST STONE PILASTER ELEVATION

3/4" = 1'-0"



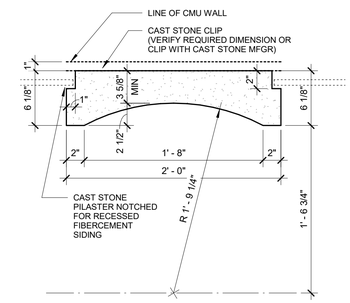
C2 CORNER CAST STONE PILASTER DETAIL

3/4" = 1'-0"



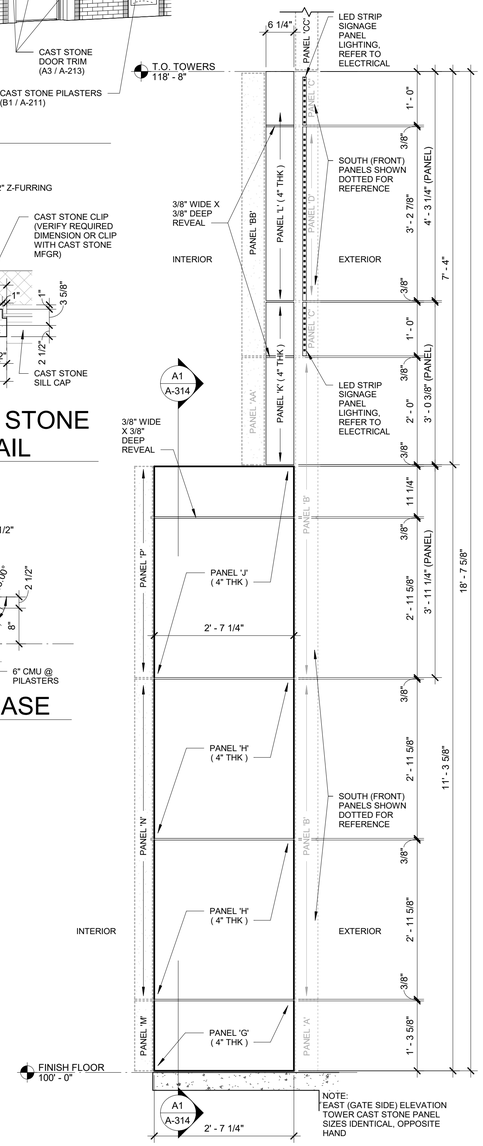
B2 PILASTER BASE

3/4" = 1'-0"



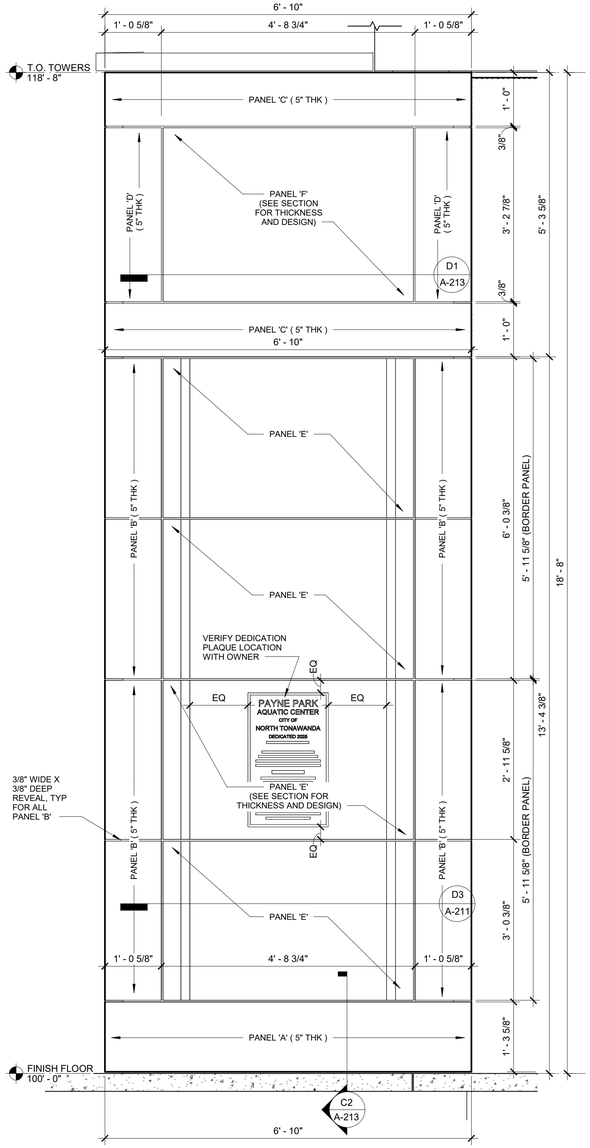
A1 CAST STONE PILASTER PROFILE

1 1/2" = 1'-0"



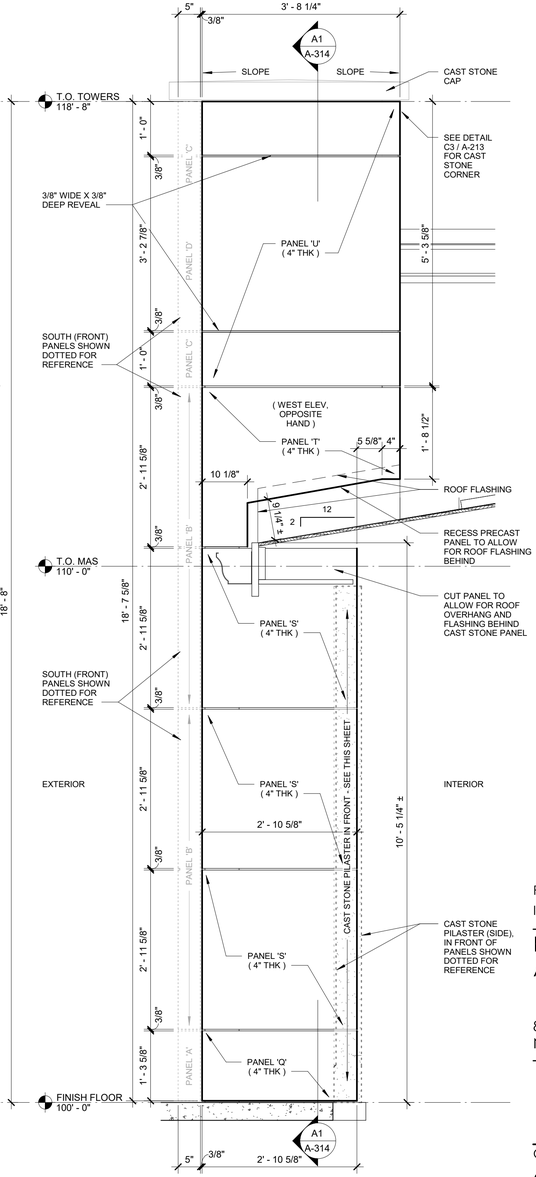
A2 WEST (GATE SIDE) ELEVATION TOWER STONE PANEL SIZES

3/4" = 1'-0"



A3 SOUTH (FRONT) ELEVATION TOWER STONE PANEL SIZES

3/4" = 1'-0"



A5 EAST (OUTSIDE) ELEVATION TOWER STONE PANEL SIZES

3/4" = 1'-0"

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PAYNE PARK
AQUATIC FACILITY

830 PAYNE AVENUE
NORTH TONAWANDA, NY 14120

CAST STONE DETAILS
AND ELEVATIONS

City Project No.
2023-01

BCI Project No.
23065

A-211

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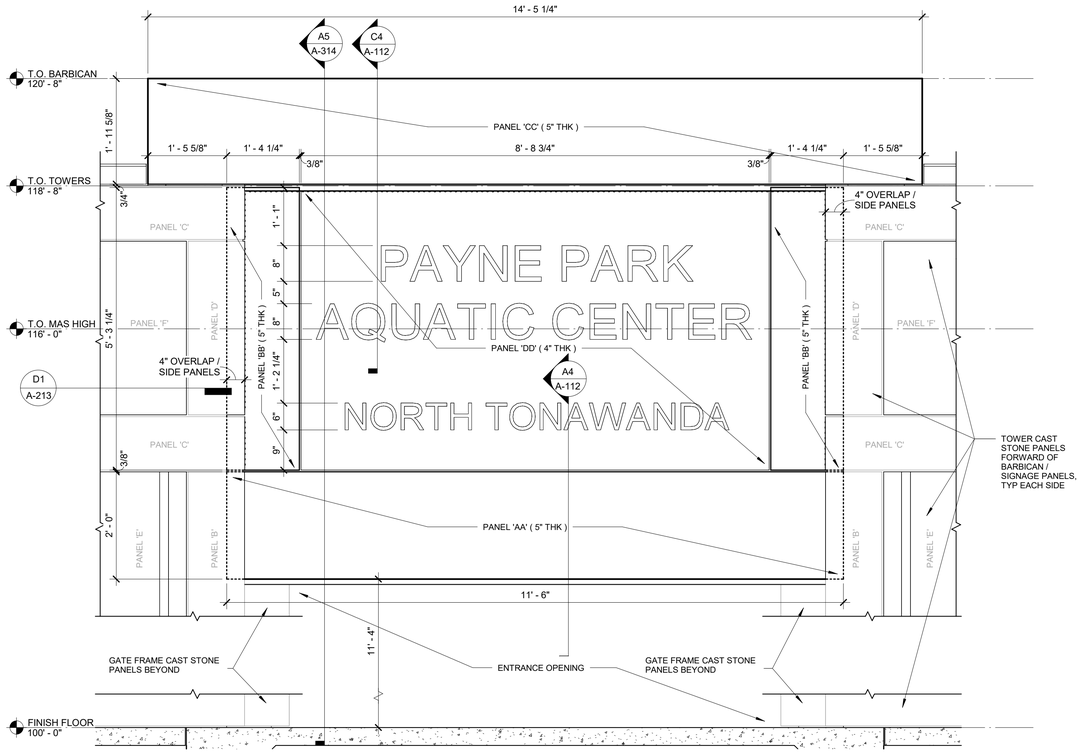
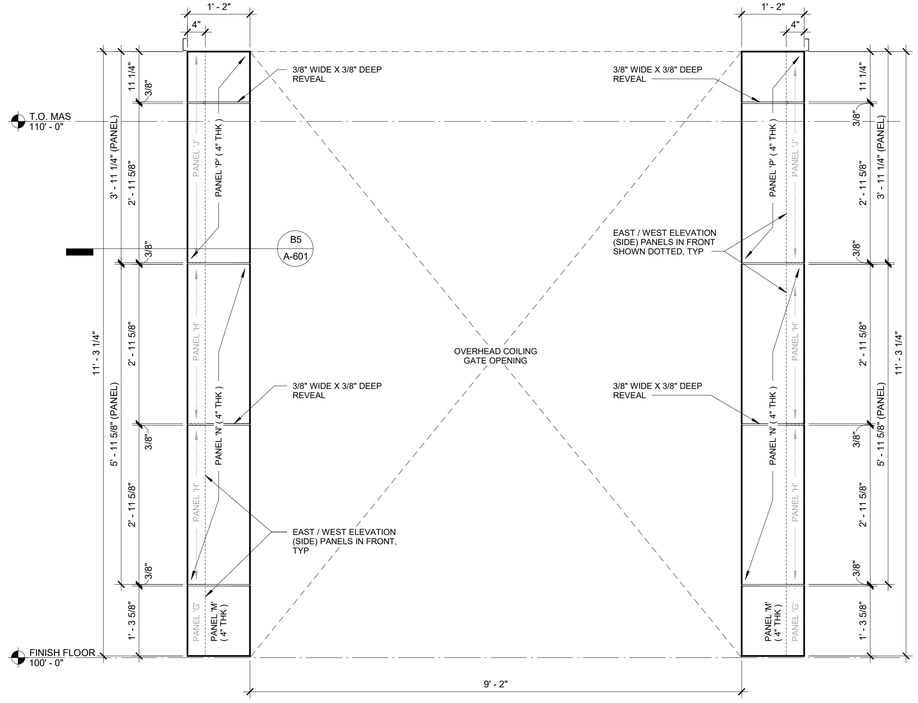


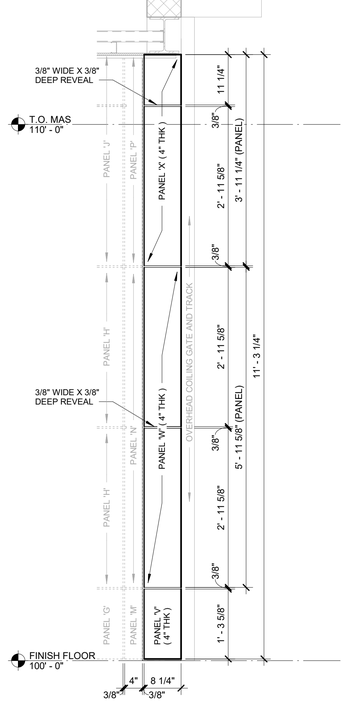
C1 SOUTH (FRONT) ELEVATION BARBICAN / SIGNAGE CAST STONE PANEL SIZES

3/4" = 1'-0"



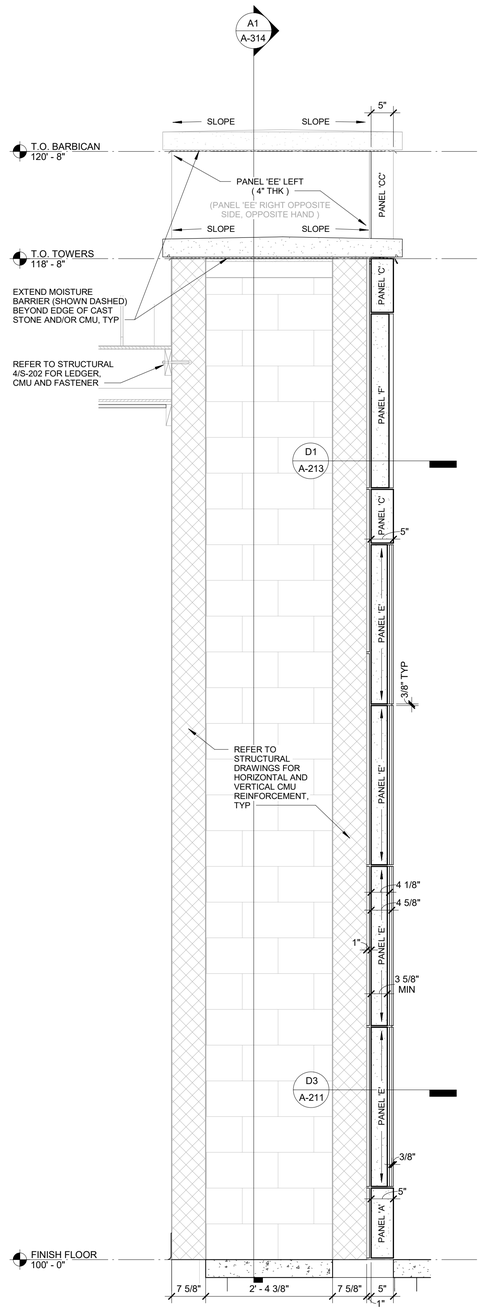
A1 SOUTH ELEVATION INTERIOR GATE FRAME STONE PANEL SIZES

3/4" = 1'-0"



A4 EAST ELEVATION GATE JAMB CAST STONE PANEL SIZES

3/4" = 1'-0"



A5 WEST ELEVATION BARBICAN CAST STONE PANEL SIZE

3/4" = 1'-0"

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PAYNE PARK
AQUATIC FACILITY

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CAST STONE ELEVATIONS

City Project No. 2023-01

BCI Project No. 23065

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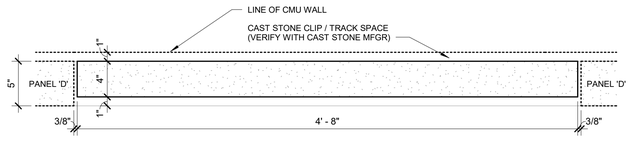
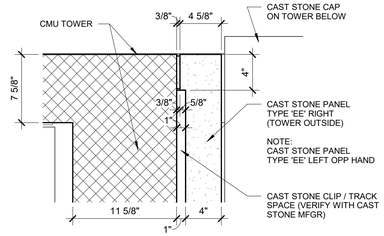
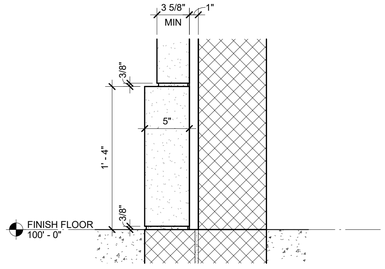


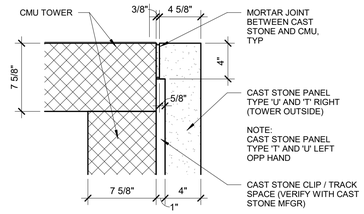
D1 CAST STONE TOWER PANEL PROFILE - PANEL 'F'
1 1/2" = 1'-0"



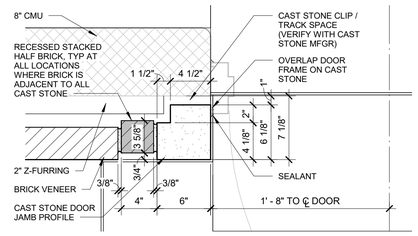
D3 CAST STONE AT BACK CMU (LOCATED AT BARBICAN)
1 1/2" = 1'-0"



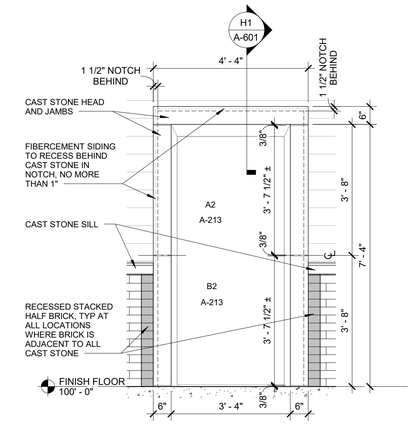
C2 TOWER CAST STONE FRONT BASE PROFILE
1 1/2" = 1'-0"



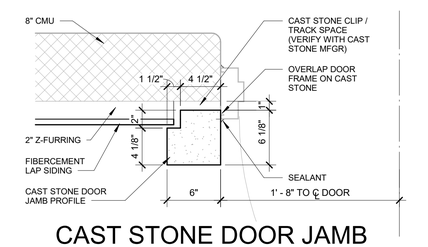
C3 CAST STONE AT BACK CMU (LOCATED AT UPPER TOWER)
1 1/2" = 1'-0"



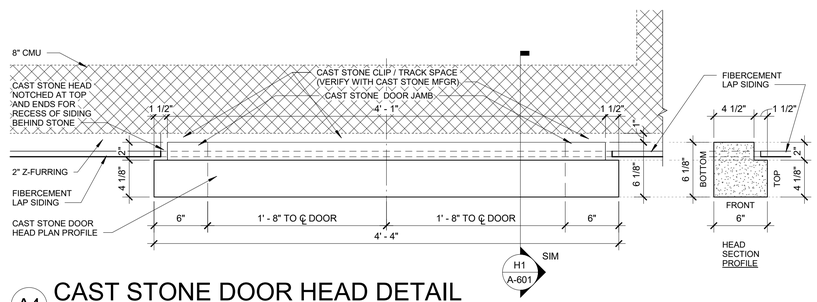
B2 CAST STONE DOOR JAMB DETAIL AT LOWER BRICK
1 1/2" = 1'-0"



A3 CAST STONE DOOR HEAD & JAMBS ELEVATION
1/2" = 1'-0"



A2 CAST STONE DOOR JAMB DETAIL AT UPPER LAP SIDING
1 1/2" = 1'-0"



A4 CAST STONE DOOR HEAD DETAIL
1 1/2" = 1'-0"

CAST STONE PANEL SCHEDULE

PANEL TYPE	PANEL WIDTH	PANEL HEIGHT	PANEL THICKNESS	PANEL COMMENT	DETAIL / SHEET
PANEL 'A'	6' - 10"	1' - 3 5/8"	5"	FRONT PANEL BASE	
PANEL 'A'	6' - 10"	1' - 3 5/8"	5"	FRONT PANEL BASE	
PANEL 'AA'	11' - 6"	2' - 0"	5"	EXCESSIVE LENGTH	
PANEL 'B'	1' - 0 5/8"	5' - 11 5/8"	5"	REVEAL ADDED	
PANEL 'B'	1' - 0 5/8"	5' - 11 5/8"	5"	REVEAL ADDED	
PANEL 'B'	1' - 0 5/8"	5' - 11 5/8"	5"	REVEAL ADDED	
PANEL 'B'	1' - 0 5/8"	5' - 11 5/8"	5"	REVEAL ADDED	
PANEL 'B'	1' - 0 5/8"	5' - 11 5/8"	5"	REVEAL ADDED	
PANEL 'B'	1' - 0 5/8"	5' - 11 5/8"	5"	REVEAL ADDED	
PANEL 'B'	1' - 0 5/8"	5' - 11 5/8"	5"	REVEAL ADDED	
PANEL 'B'	1' - 0 5/8"	5' - 11 5/8"	5"	REVEAL ADDED	
PANEL 'BB'	1' - 4 1/4"	5' - 3 1/4"	5"		
PANEL 'BB'	1' - 4 1/4"	5' - 3 1/4"	5"		
PANEL 'C'	6' - 10"	1' - 0"	5"		
PANEL 'C'	6' - 10"	1' - 0"	5"		
PANEL 'C'	6' - 10"	1' - 0"	5"		
PANEL 'C'	6' - 10"	1' - 0"	5"		
PANEL 'CC'	14' - 5 1/4"	1' - 11 5/8"	5"	EXCESSIVE LENGTH	
PANEL 'D'	1' - 0 5/8"	3' - 2 7/8"	5"		
PANEL 'D'	1' - 0 5/8"	3' - 2 7/8"	5"		
PANEL 'D'	1' - 0 5/8"	3' - 2 7/8"	5"		
PANEL 'D'	1' - 0 5/8"	3' - 2 7/8"	5"		
PANEL 'DD'	8' - 8 3/4"	5' - 3 1/4"	4"	PANEL WITH SIGNAGE	
PANEL 'E'	4' - 8"	2' - 11 5/8"	3 5/8"	MIN THICKNESS, STEPPED PANEL	4 / A-211
PANEL 'E'	4' - 8"	2' - 11 5/8"	3 5/8"	MIN THICKNESS, STEPPED PANEL	4 / A-211
PANEL 'E'	4' - 8"	2' - 11 5/8"	3 5/8"	MIN THICKNESS, STEPPED PANEL	4 / A-211
PANEL 'E'	4' - 8"	2' - 11 5/8"	3 5/8"	MIN THICKNESS, STEPPED PANEL	4 / A-211
PANEL 'E'	4' - 8"	2' - 11 5/8"	3 5/8"	MIN THICKNESS, STEPPED PANEL	4 / A-211
PANEL 'E'	4' - 8"	2' - 11 5/8"	3 5/8"	MIN THICKNESS, STEPPED PANEL	4 / A-211
PANEL 'E'	4' - 8"	2' - 11 5/8"	3 5/8"	MIN THICKNESS, STEPPED PANEL	4 / A-211
PANEL 'E'	4' - 8"	2' - 11 5/8"	3 5/8"	MIN THICKNESS, STEPPED PANEL	4 / A-211
PANEL 'EE' LEFT	2 5/8"	2' - 0"	4"	PART OF "L" SHAPE PANEL	
PANEL 'EE' LEFT	3' - 6 1/4"	2' - 0"	4"	"L" SHAPE PANEL	
PANEL 'EE' RIGHT	2 5/8"	2' - 0"	4"	PART OF "L" SHAPE PANEL	
PANEL 'EE' RIGHT	3' - 6 1/4"	2' - 0"	4"	"L" SHAPE PANEL	
PANEL 'F'	4' - 8"	3' - 2 7/8"	4"		2 / A-213
PANEL 'F'	4' - 8"	3' - 2 7/8"	4"		2 / A-213
PANEL 'G'	2' - 7 1/4"	1' - 3 5/8"	4"		
PANEL 'G'	2' - 7 1/4"	1' - 3 5/8"	4"		
PANEL 'H'	2' - 7 1/4"	2' - 11 5/8"	4"		
PANEL 'H'	2' - 7 1/4"	2' - 11 5/8"	4"		
PANEL 'H'	2' - 7 1/4"	2' - 11 5/8"	4"		
PANEL 'H'	2' - 7 1/4"	2' - 11 5/8"	4"		
PANEL 'J'	2' - 7 1/4"	3' - 11 1/4"	4"	REVEAL ADDED	
PANEL 'J'	2' - 7 1/4"	3' - 11 1/4"	4"	REVEAL ADDED	
PANEL 'K'	6 1/4"	3' - 0 3/8"	4"	REVEAL ADDED	
PANEL 'K'	6 1/4"	3' - 0 3/8"	4"	REVEAL ADDED	
PANEL 'L'	6 1/4"	4' - 3 1/4"	4"	REVEAL ADDED	
PANEL 'L'	6 1/4"	4' - 3 1/4"	4"	REVEAL ADDED	
PANEL 'M'	1' - 2"	1' - 3 5/8"	4"		
PANEL 'M'	1' - 2"	1' - 3 5/8"	4"		
PANEL 'N'	1' - 2"	5' - 11 5/8"	4"	REVEAL ADDED	
PANEL 'N'	1' - 2"	5' - 11 5/8"	4"	REVEAL ADDED	
PANEL 'P'	1' - 2"	3' - 11 1/4"	4"	REVEAL ADDED	
PANEL 'P'	1' - 2"	3' - 11 1/4"	4"	REVEAL ADDED	
PANEL 'Q'	2' - 10 5/8"	1' - 3 5/8"	4"		
PANEL 'Q'	2' - 10 5/8"	1' - 3 5/8"	4"		
PANEL 'S'	2' - 10 5/8"	2' - 11 5/8"	4"		
PANEL 'S'	2' - 10 5/8"	2' - 11 5/8"	4"		
PANEL 'S'	2' - 10 5/8"	2' - 11 5/8"	4"	CUT AT LEFT (WEST) ROOF / SOFFIT	SEE 3 / A-211 SIM, OPP HAND
PANEL 'S'	2' - 10 5/8"	2' - 11 5/8"	4"	CUT AT RIGHT (EAST) ROOF / SOFFIT	SEE 3 / A-211
PANEL 'S'	2' - 10 5/8"	2' - 11 5/8"	4"		
PANEL 'S'	2' - 10 5/8"	2' - 11 5/8"	4"		
PANEL 'T' LEFT	4 5/8"	1' - 8 1/2"	4"	PART OF "L" SHAPE PANEL	8/ A-211 SIM, OPP HAND
PANEL 'T' LEFT	3' - 6 1/4"	2' - 11 5/8"	4"	"L" SHAPE PANEL, CUT FOR ROOF/FLASHING	8/ A-211 SIM, OPP HAND
PANEL 'T' RIGHT	4 5/8"	1' - 8 1/2"	4"	PART OF "L" SHAPE PANEL	8/ A-211 SIM
PANEL 'T' RIGHT	3' - 8 1/4"	2' - 11 5/8"	4"	"L" SHAPE PANEL, CUT FOR ROOF/FLASHING	8/ A-211 SIM
PANEL 'U' LEFT	2 5/8"	5' - 3 5/8"	4"	PART OF "L" SHAPE PANEL, (2) REVEALS ADDED	8/ A-211 OPP HAND
PANEL 'U' LEFT	3' - 6 1/4"	5' - 3 5/8"	4"	"L" SHAPE PANEL, (2) REVEALS ADDED	8/ A-211 OPP HAND
PANEL 'U' RIGHT	2 5/8"	5' - 3 5/8"	4"	PART OF "L" SHAPE PANEL, (2) REVEALS ADDED	8/ A-211
PANEL 'U' RIGHT	3' - 6 1/4"	5' - 3 5/8"	4"	"L" SHAPE PANEL, (2) REVEALS ADDED	8/ A-211
PANEL 'V'	8 1/4"	1' - 3 5/8"	4"		
PANEL 'V'	8 1/4"	1' - 3 5/8"	4"		
PANEL 'W'	8 1/4"	5' - 11 5/8"	4"	REVEAL ADDED	
PANEL 'W'	8 1/4"	5' - 11 5/8"	4"	REVEAL ADDED	
PANEL 'X'	8 1/4"	3' - 11 1/4"	4"	REVEAL ADDED	
PANEL 'X'	8 1/4"	3' - 11 1/4"	4"	REVEAL ADDED	

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Revisions: NUMBER DATE DESCRIPTION

Issue Date: 12/16/2025 FOR BID

PAYNE PARK
AQUATIC FACILITY

830 PAYNE AVENUE
NORTH TONAWANDA, NY 14120

CAST STONE DETAILS
AND SCHEDULE

City Project No.
2023-01

BCI Project No.
23065

A-213

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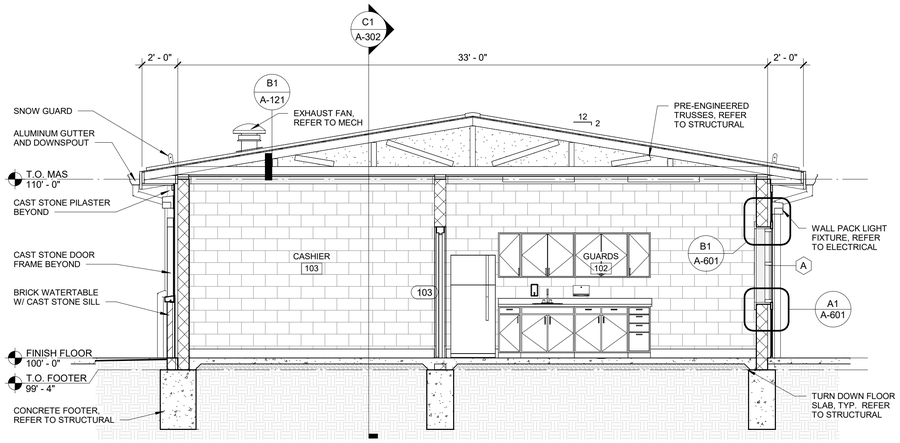
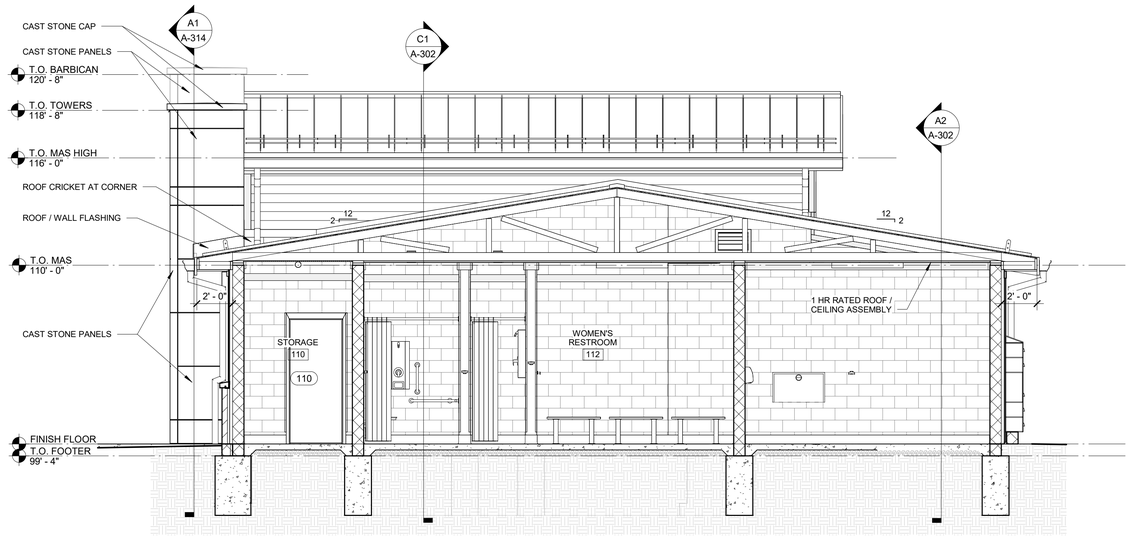
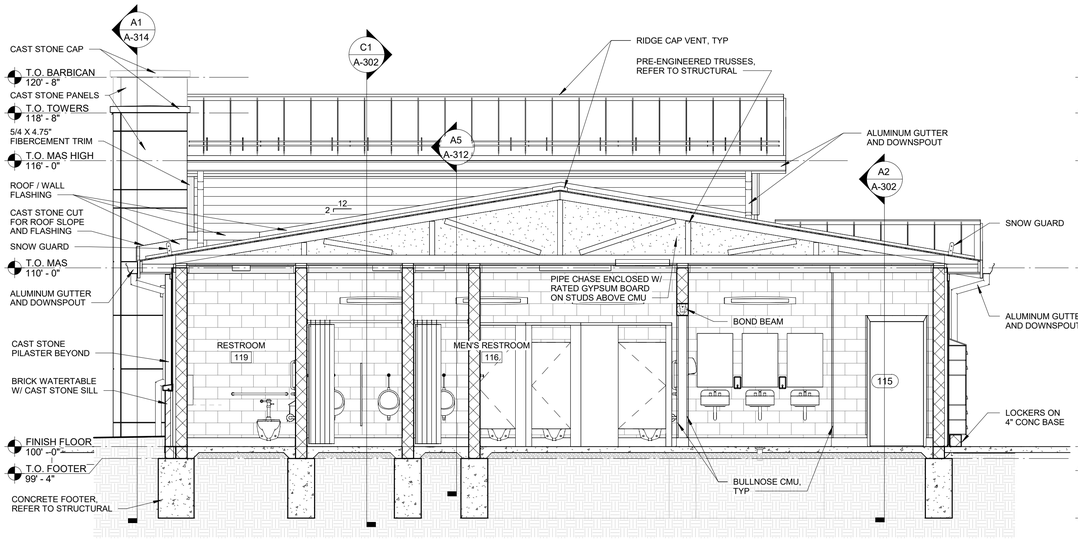


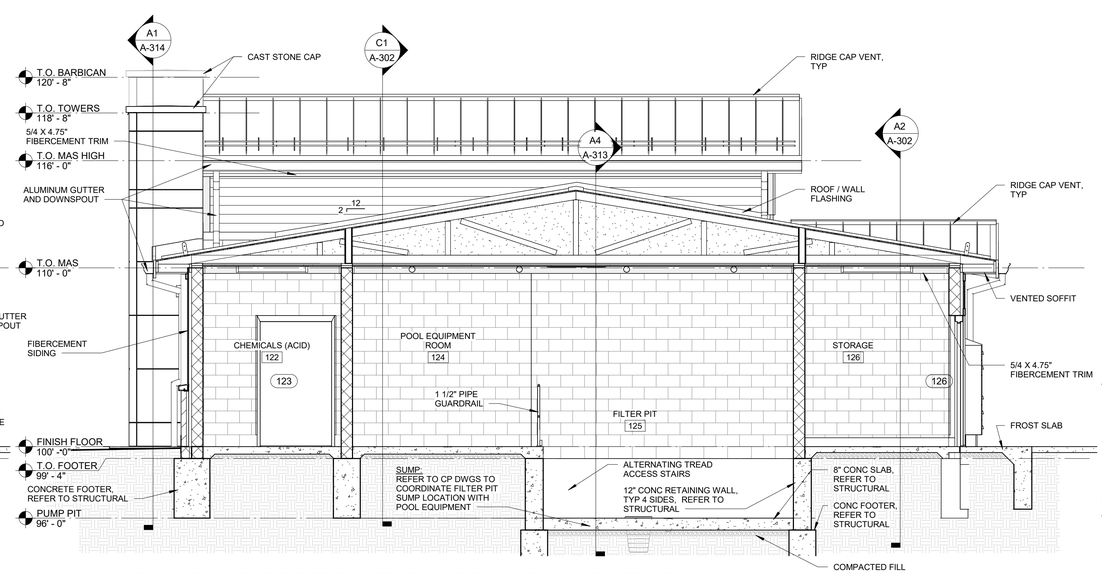
C1 BUILDING SECTION THRU ADMINISTRATIVE
1/4" = 1'-0"



C3 BUILDING SECTION THRU WOMENS SHOWER / RESTROOM
1/4" = 1'-0"



A1 BUILDING SECTION THRU MENS RESTROOM
1/4" = 1'-0"



A3 BUILDING SECTION THRU POOL EQUIPMENT
1/4" = 1'-0"

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026165
STATE OF NEW YORK

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PAYNE PARK AQUATIC FACILITY

830 PAYNE AVENUE
NORTH TONAWANDA, NY 14120

BUILDING SECTIONS

City Project No. 2023-01
BCI Project No. 23065

A-301

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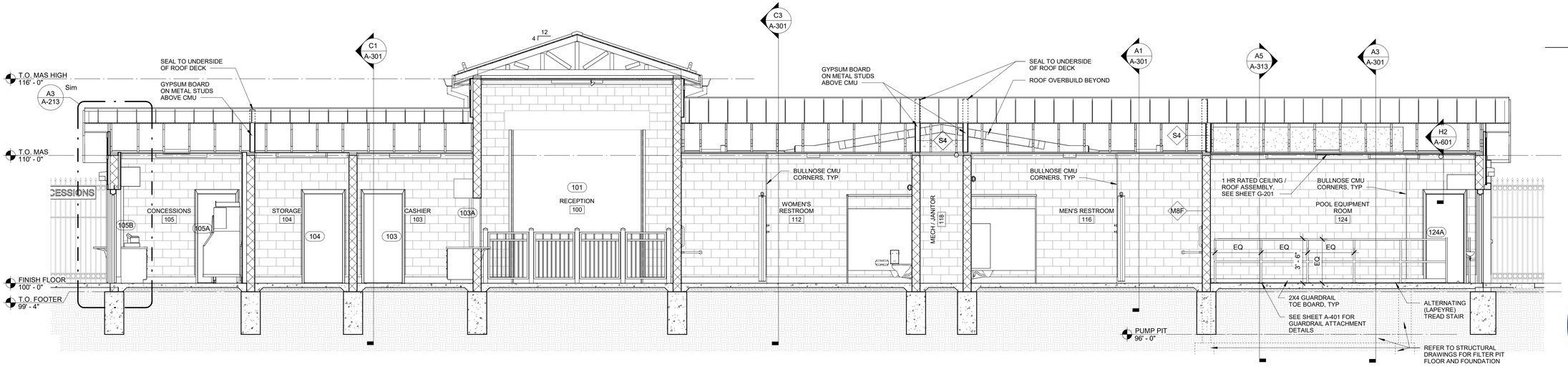
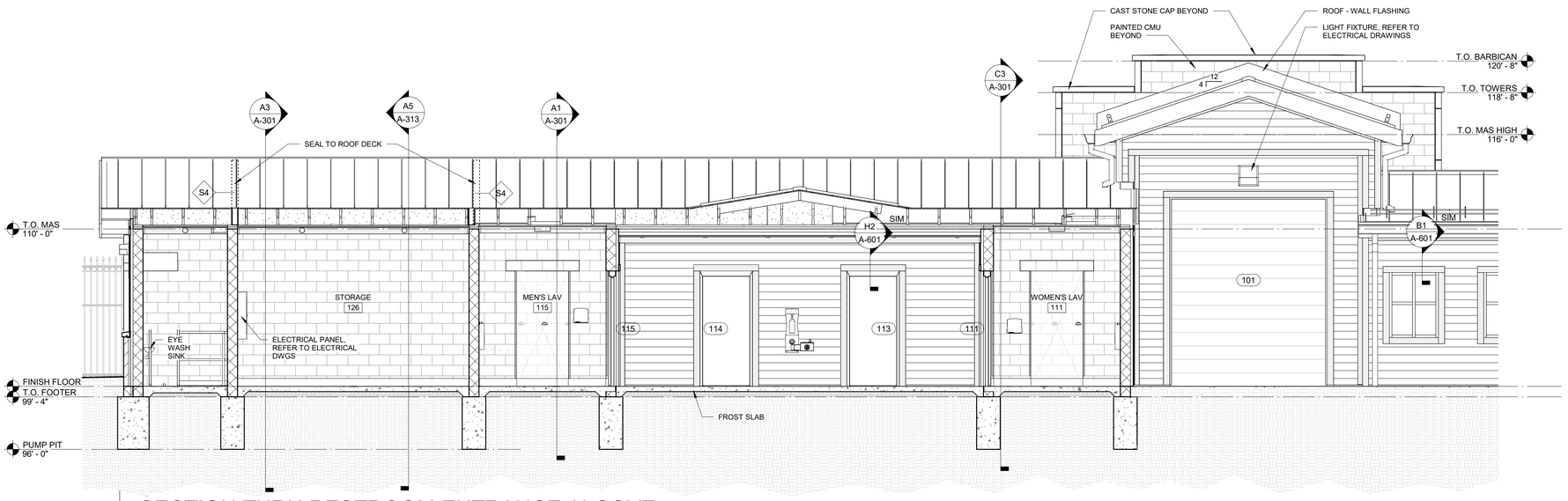


C1 LONGITUDINAL BUILDING SECTION
1/4" = 1'-0"



A2 SECTION THRU RESTROOM ENTRANCE ALCOVE
1/4" = 1'-0"

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PAYNE PARK AQUATIC FACILITY

830 PAYNE AVENUE
NORTH TONAWANDA, NY 14120

BUILDING SECTIONS

City Project No.
2023-01

BCI Project No.
23065

A-302

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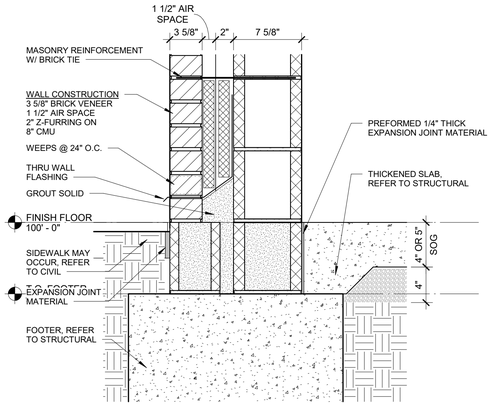
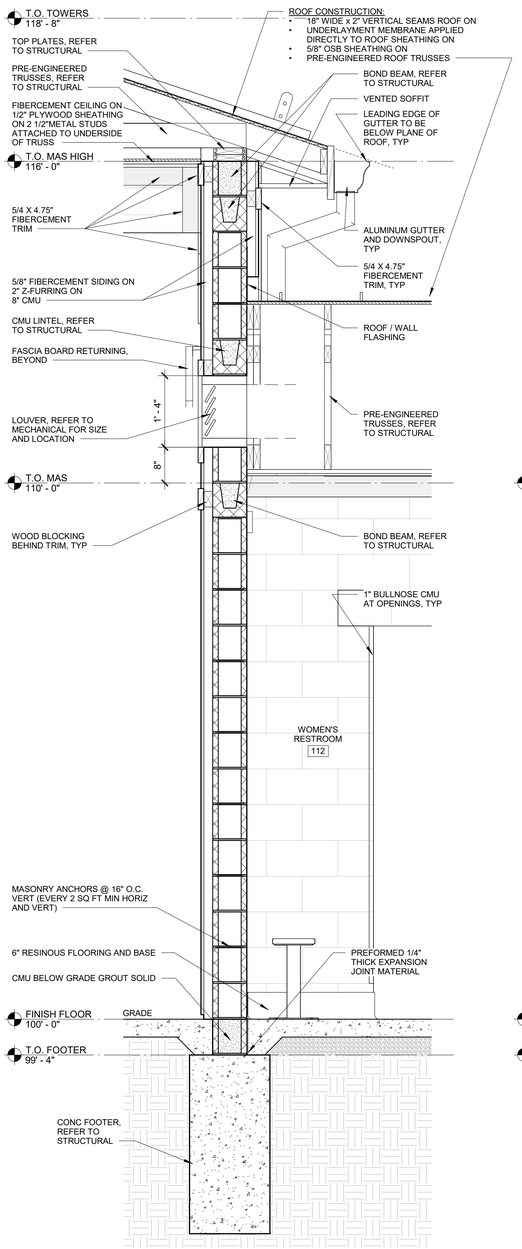
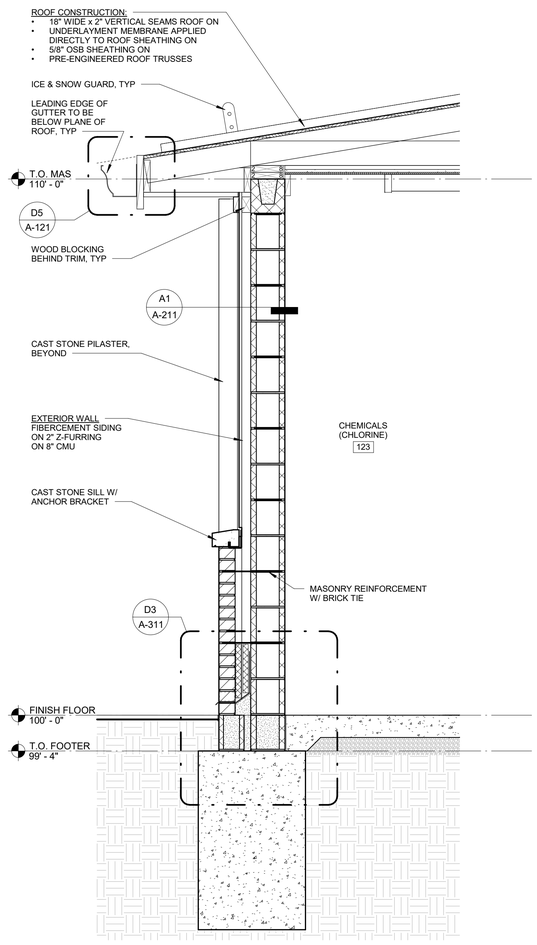


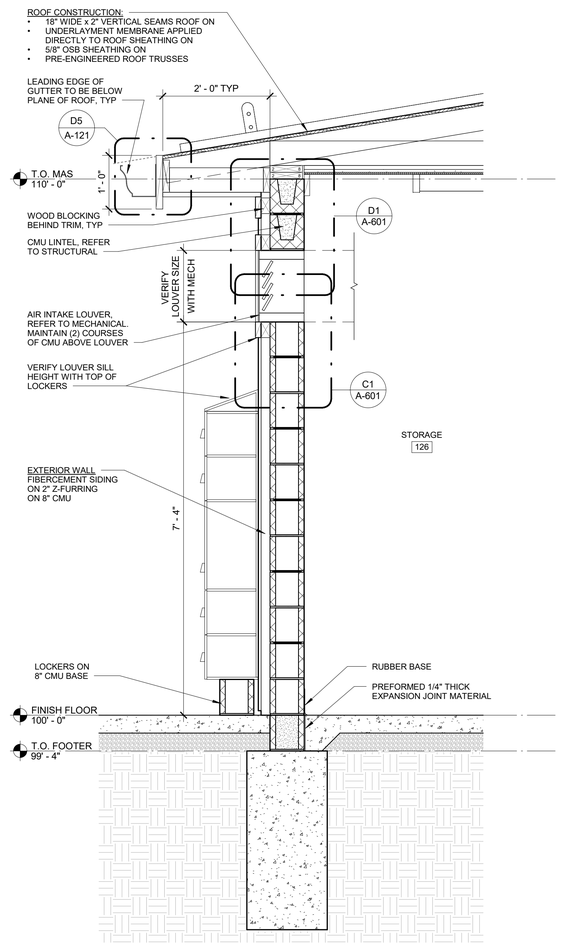
D3 TYPICAL BRICK WALL FLASHING
1 1/2" = 1'-0"



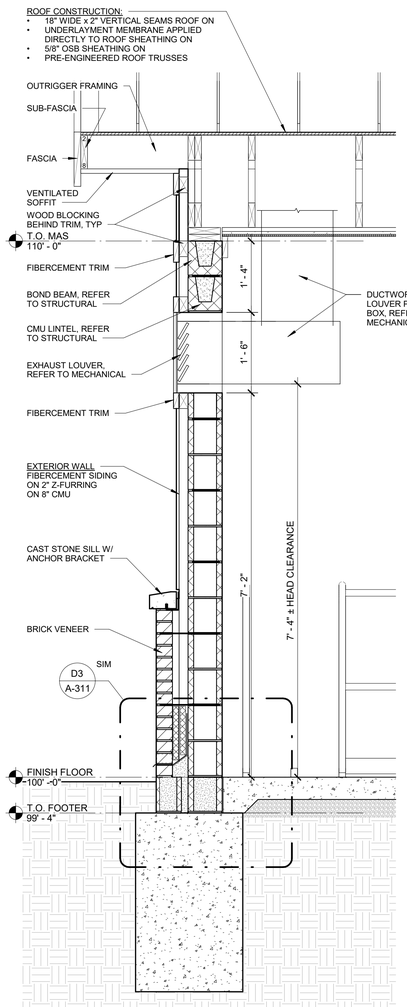
A1 HIGH WALL NEAR ENTRANCE
3/4" = 1'-0"



A2 SOUTH WALL AT CAST STONE
3/4" = 1'-0"



A4 TYPICAL NORTH WALL
3/4" = 1'-0"



A5 TYPICAL EAST WALL
3/4" = 1'-0"

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PAYNE PARK AQUATIC FACILITY

830 PAYNE AVENUE
NORTH TONAWANDA, NY 14120

WALL SECTIONS

City Project No.
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BCI Project No.
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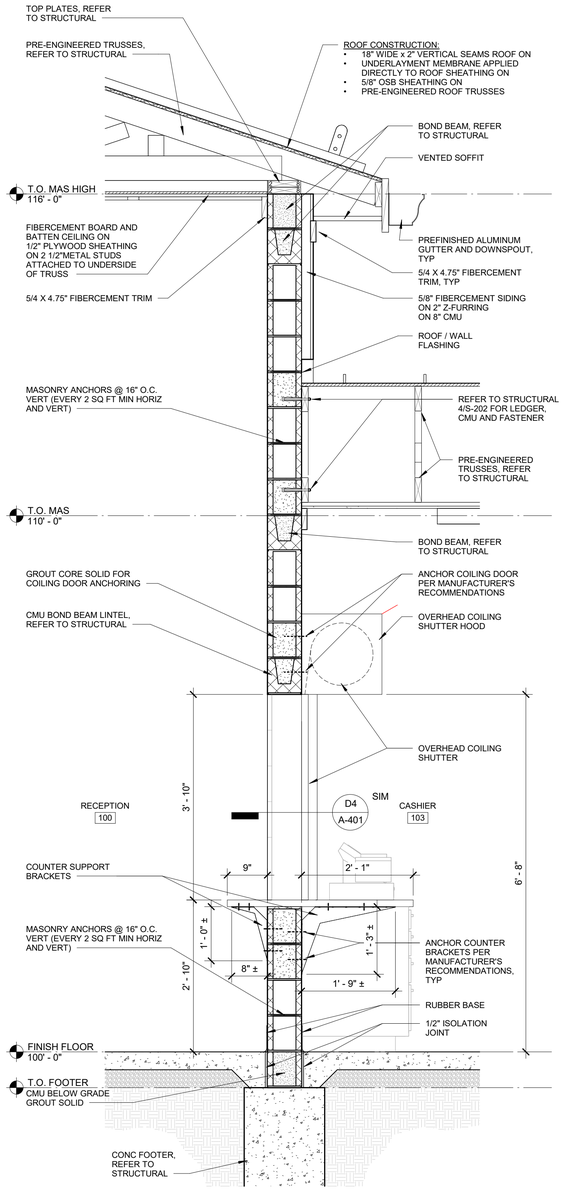
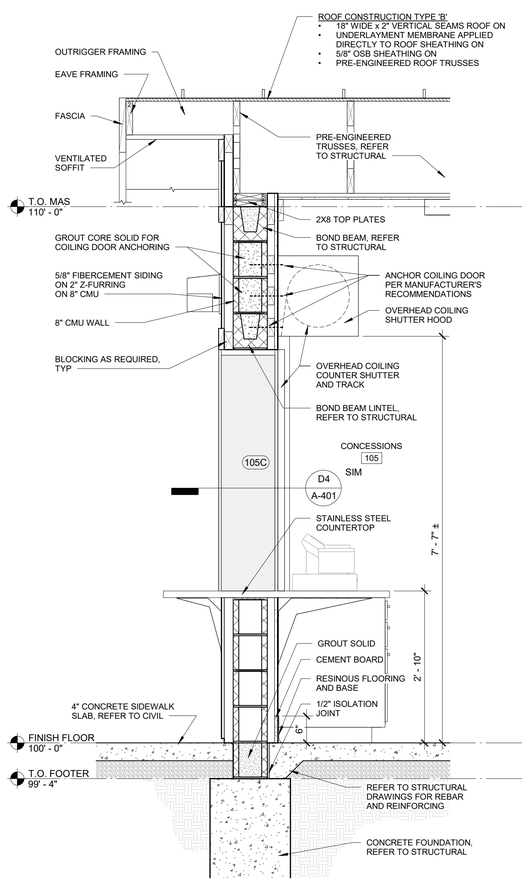
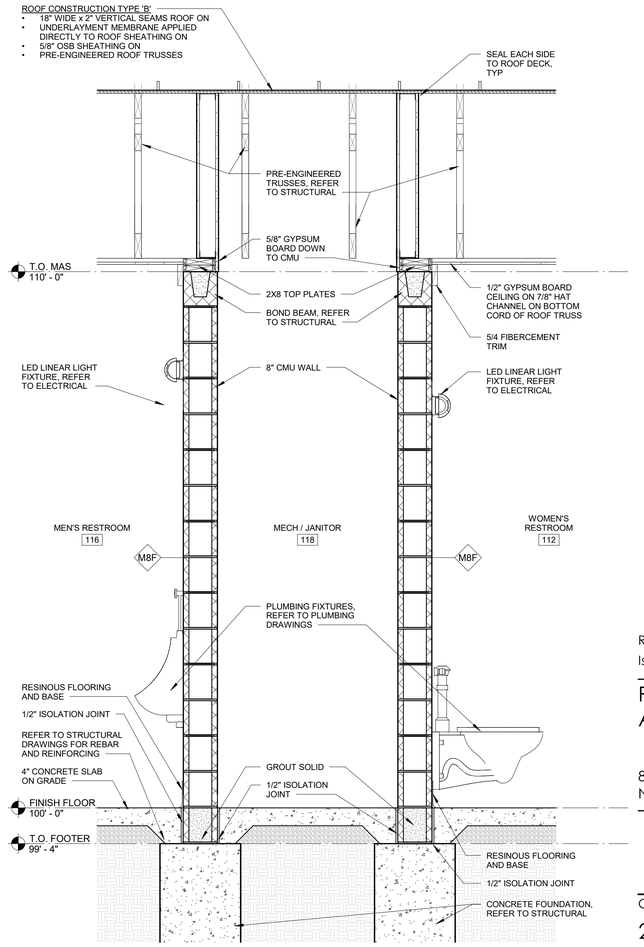


A1 WALL AT CASHIER WINDOW
3/4" = 1'-0"



A3 WALL AT CONCESSIONS WINDOW
3/4" = 1'-0"



A5 PLUMBING CHASE WALL SECTION
3/4" = 1'-0"

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PAYNE PARK AQUATIC FACILITY

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NORTH TONAWANDA, NY 14120

WALL SECTIONS

City Project No. 2023-01
BCI Project No. 23065

A-312

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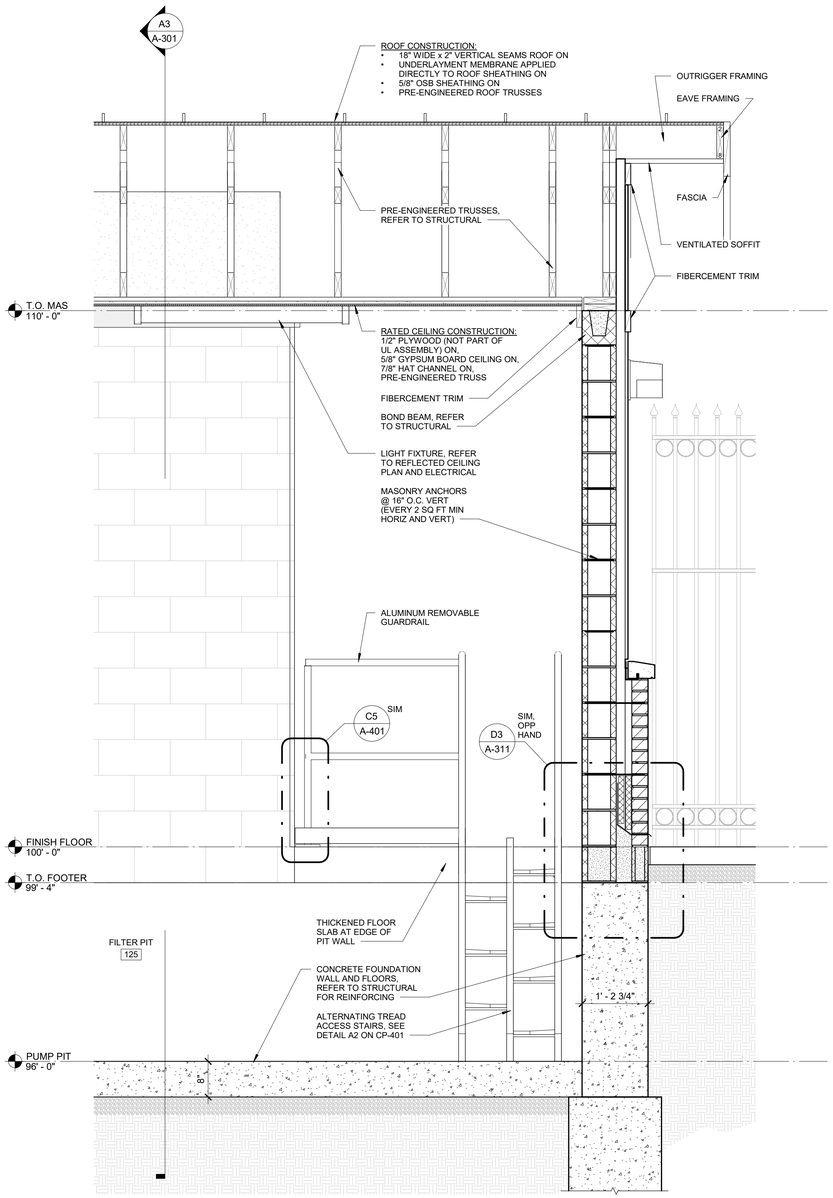
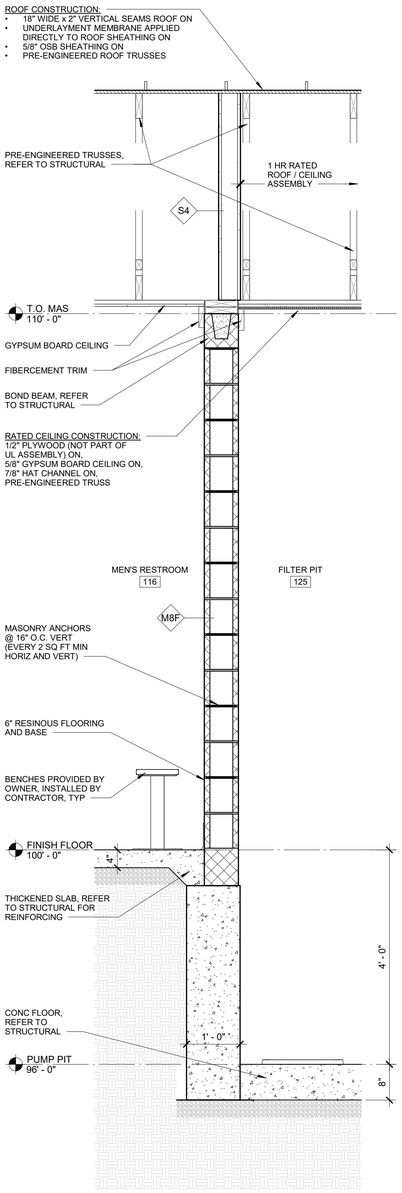
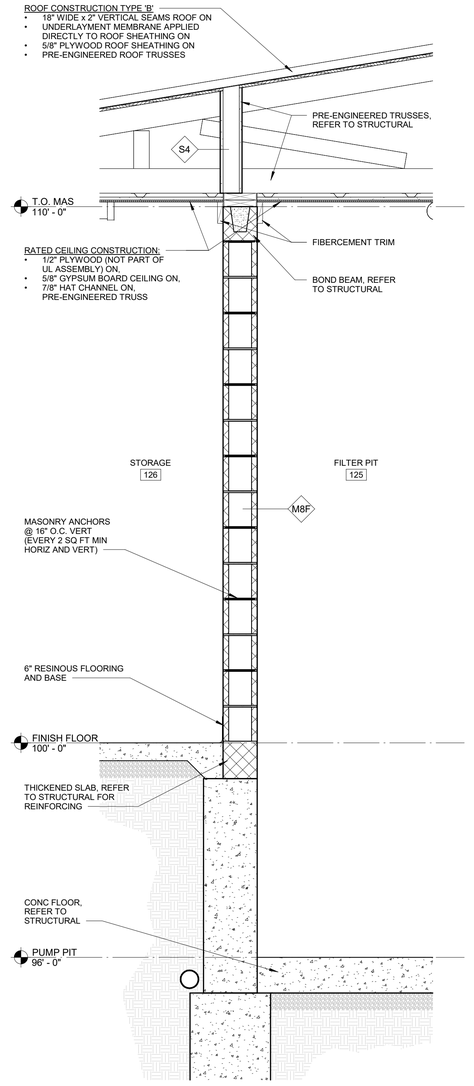


A2 EXTERIOR WALL AND PIT WALL SECTION
3/4" = 1'-0"



A4 INTERIOR PIT WALL SECTION
3/4" = 1'-0"



A5 INTERIOR PIT WALL SECTION 2
3/4" = 1'-0"

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PAYNE PARK
AQUATIC FACILITY

830 PAYNE AVENUE
NORTH TONAWANDA, NY 14120

WALL SECTIONS AT FILTER PIT

City Project No.
2023-01

BCI Project No.
23065

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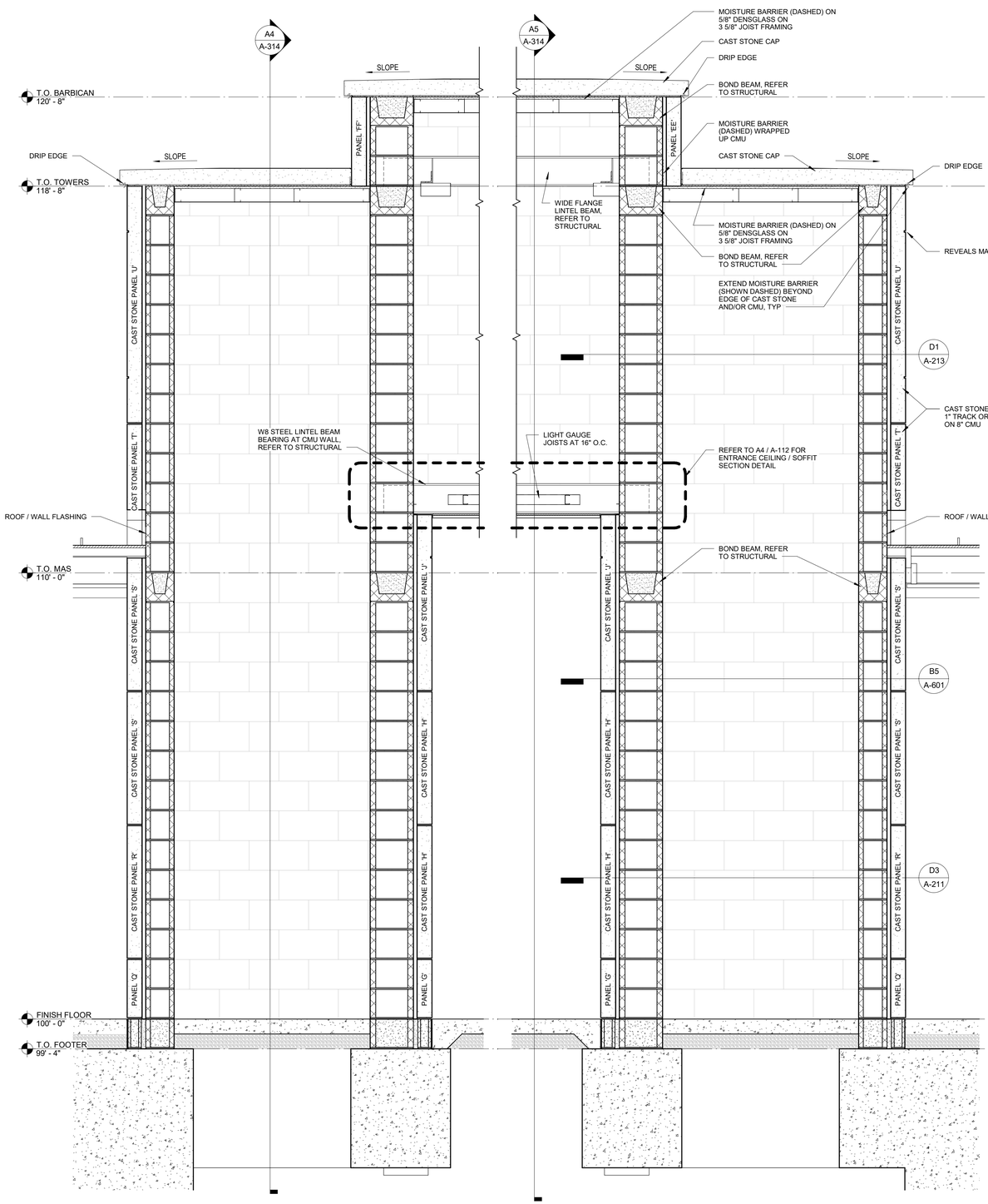
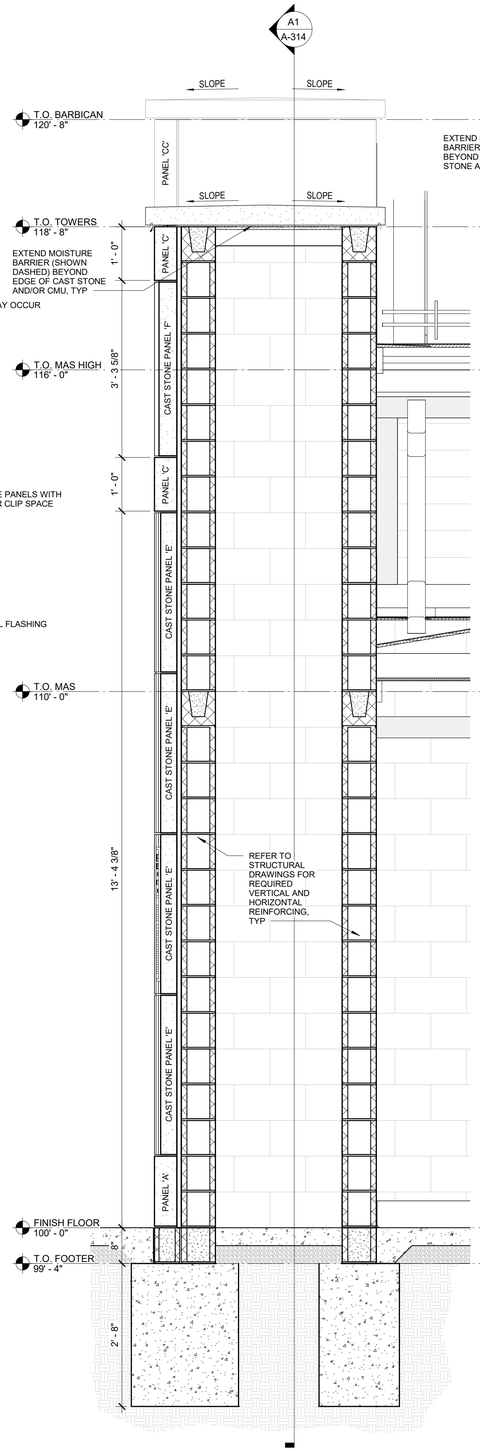
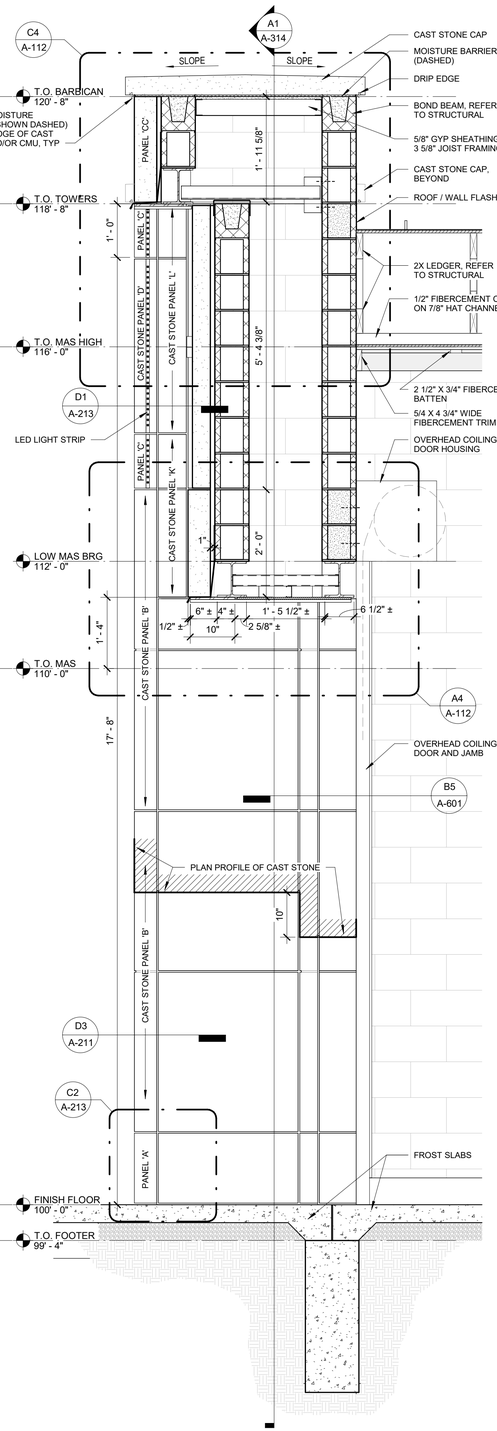


A1 SECTION THRU TOWERS AND BARBICAN
3/4" = 1'-0"



A4 TOWER WALL SECTION
3/4" = 1'-0"



A5 BARBICAN WALL SECTION
3/4" = 1'-0"

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PAYNE PARK AQUATIC FACILITY

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WALL SECTIONS AT ENTRANCE TOWERS

City Project No. 2023-01

BCI Project No. 23065

A-314

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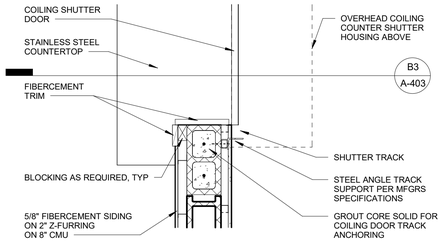
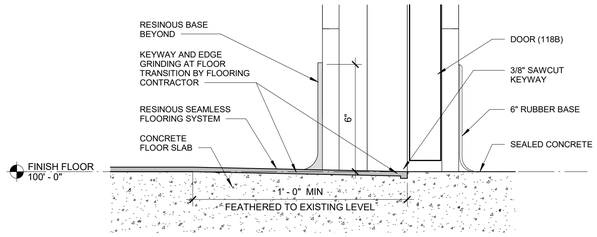
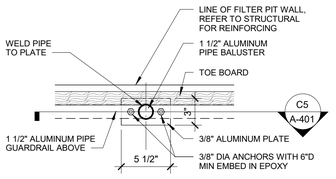


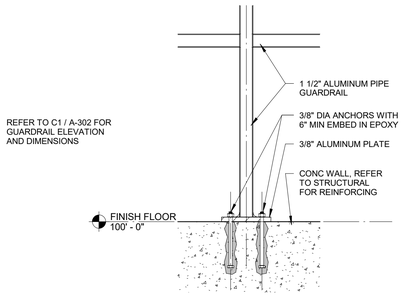
D4 OVERHEAD COILING DOOR TRACK
3/4" = 1'-0"



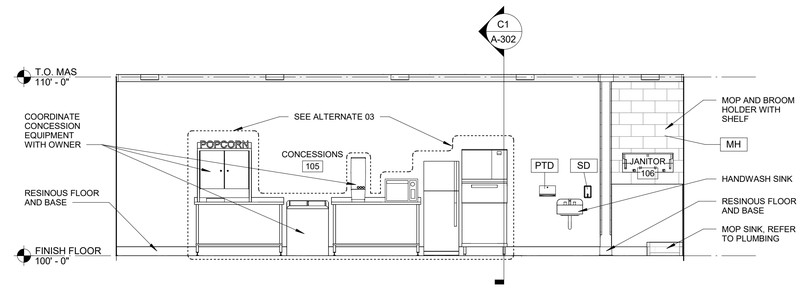
C2 RESINOUS FLOORING TRANSITION
3" = 1'-0"



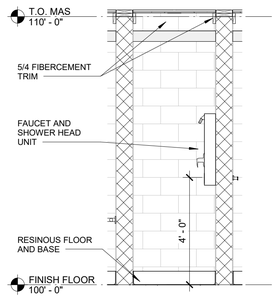
C4 GUARDRAIL ATTACHMENT PLATE AT PUMP PIT
1 1/2" = 1'-0"



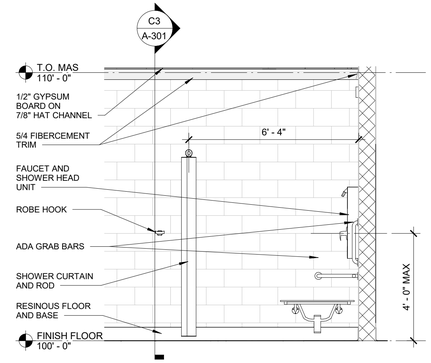
C5 GUARDRAIL ATTACHMENT
1 1/2" = 1'-0"



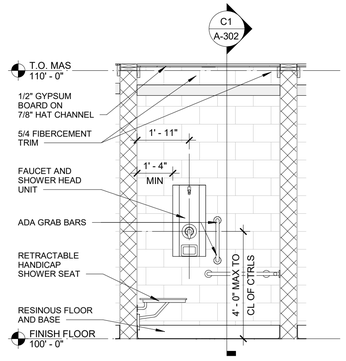
B4 CONCESSIONS EQUIPMENT ELEVATION
1/4" = 1'-0"



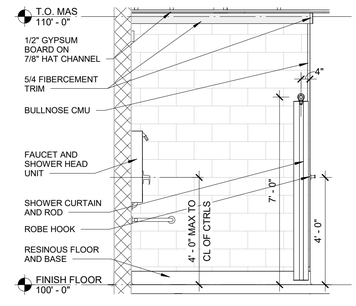
A2 TYP SHOWER SIDE
3/8" = 1'-0"



A3 TYP ADA SHWR BENCH SIDE
3/8" = 1'-0"



A4 TYP ADA SHOWER BACK
3/8" = 1'-0"



A5 TYP ADA SHOWER SIDE
3/8" = 1'-0"

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PAYNE PARK
AQUATIC FACILITY

830 PAYNE AVENUE
NORTH TONAWANDA, NY 14120

ENLARGED PLANS, ELEVATIONS & DETAILS

City Project No.
2023-01

BCI Project No.
23065

A-401

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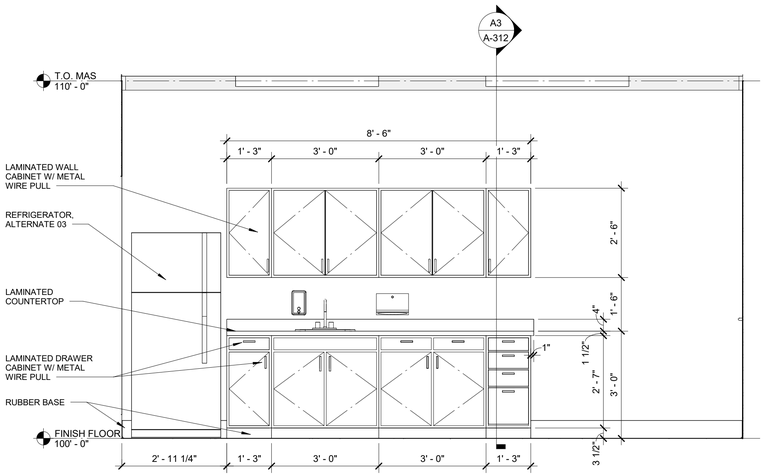
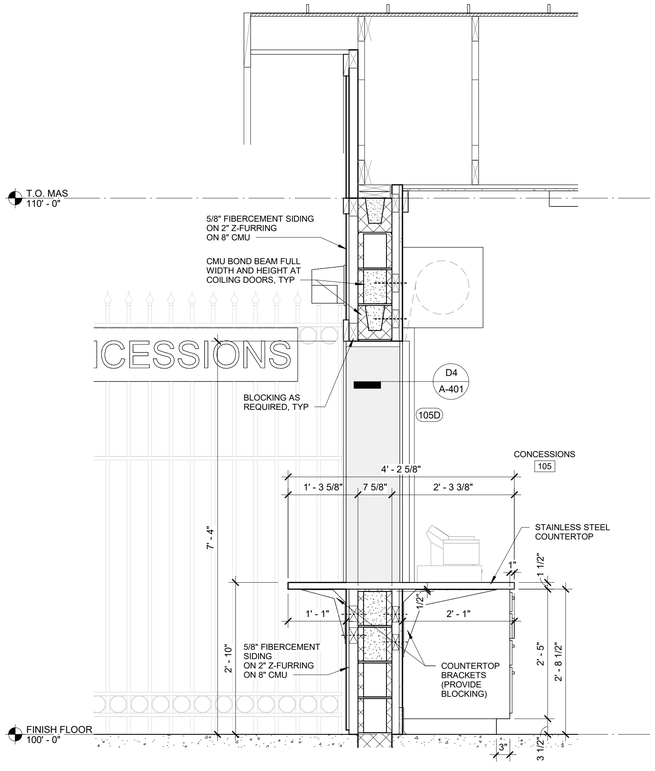
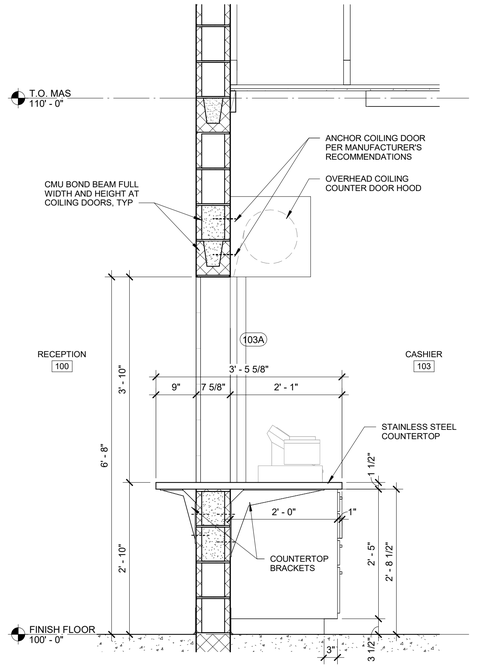


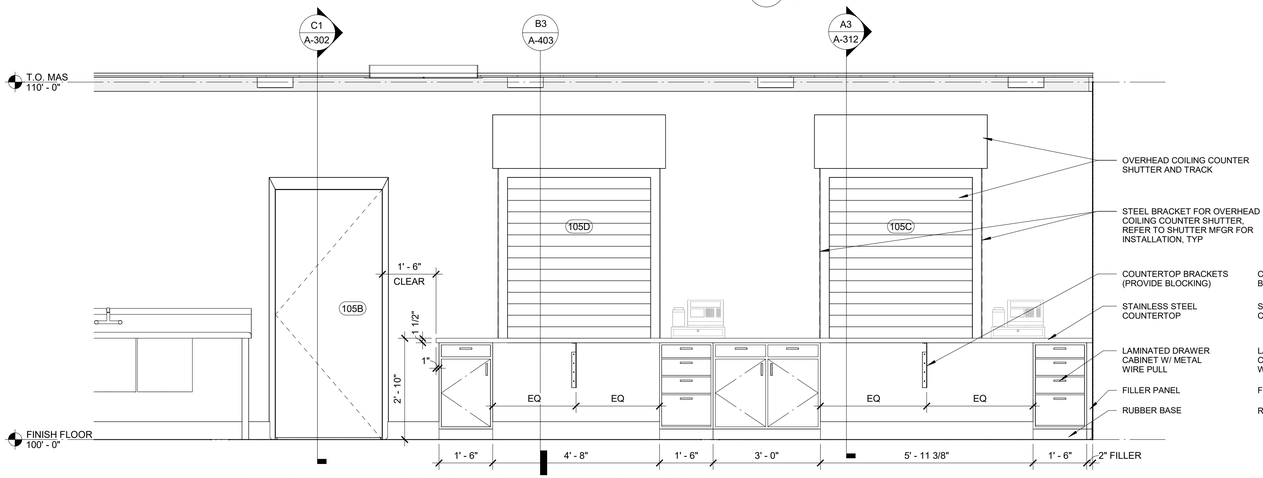
B1 GUARD CASEWORK ELEVATION
1/2" = 1'-0"



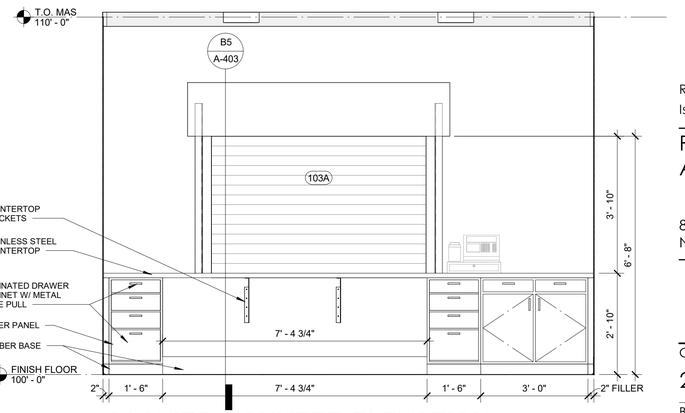
B3 CONSESSIONS COUNTER SECTION
3/4" = 1'-0"



B5 CASHIER COUNTER SECTION
3/4" = 1'-0"



A2 CONCESSIONS COUNTER ELEVATION
1/2" = 1'-0"



A4 CASHIER COUNTER ELEVATION
1/2" = 1'-0"

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STATE OF NEW YORK

CITY OF NORTH TONAWANDA, N.Y.

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Revisions:

NUMBER	DATE	DESCRIPTION
Issue Date:	12/16/2025	FOR BID

PAYNE PARK AQUATIC FACILITY

830 PAYNE AVENUE
NORTH TONAWANDA, NY 14120

CASEWORK DETAILS

City Project No.
2023-01

BCI Project No.
23065

A-403

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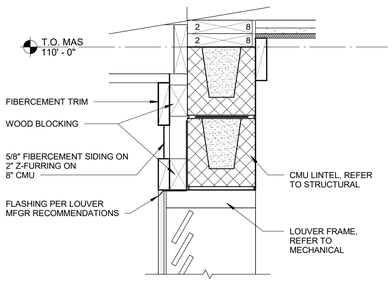
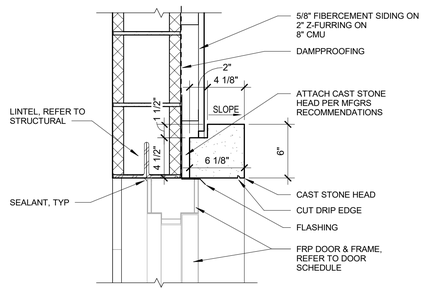


D1 LOUVER HEAD FLASHING
1 1/2" = 1'-0"



H1 DOOR HEAD AT CAST STONE FRAME
1 1/2" = 1'-0"

DOOR SCHEDULE

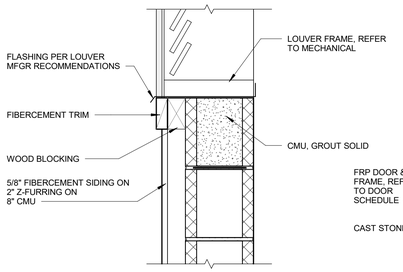
DOOR NO.	DOOR WIDTH	DOOR HEIGHT	DOOR THK	DOOR TYPE	DOOR MATL	FRAME TYPE	FRAME MATL	DETAILS HEAD	DETAILS JAMB	HW SET	GLAZING TYPE	FIRE RATING	COMMENTS	REVISIONS	REV. DESCRIPTION
100	10' - 0"	12' - 0"	3"										OVERHEAD COILING DOOR		
101	10' - 0"	12' - 0"	3"										OVERHEAD COILING DOOR		
102A	3' - 0"	7' - 0"	1 3/4"	HG	FRP	F2	FRP	H3/A-601	J3/A-601		TEMP				
102B	3' - 0"	7' - 0"	1 3/4"	HG	FRP	F2	FRP	H2/A-601	J2/A-601		TEMP				
103	3' - 0"	7' - 0"	1 3/4"	F	FRP	F2	FRP	H3/A-601	J3/A-601						
103A	6' - 0"	3' - 10"	1 1/2"										OVERHEAD COILING WINDOW		
104	3' - 0"	7' - 0"	1 3/4"	F	FRP	F2	FRP	H3/A-601	J3/A-601						
105A	3' - 0"	7' - 0"	1 3/4"	F	FRP	F2	FRP	H2/A-601	J2/A-601						
105B	3' - 0"	7' - 0"	1 3/4"	F	FRP	F2	FRP	H2/A-601	J2/A-601						
105C	4' - 0"	4' - 6"	1"										OVERHEAD COILING WINDOW		
105D	4' - 0"	4' - 6"	1"										OVERHEAD COILING WINDOW		
107	3' - 0"	7' - 0"	1 3/4"	F	FRP	F2	FRP	H1/A-601	J1A-B/A-601						
110	3' - 0"	7' - 0"	1 3/4"	F	FRP	F2	FRP	H3/A-601	J3/A-601						
111	3' - 0"	7' - 0"	1 3/4"	F	FRP	F2	FRP	H2/A-601	J2/A-601						
113	3' - 0"	7' - 0"	1 3/4"	F	FRP	F2	FRP	H2/A-601	J2/A-601						
114	3' - 0"	7' - 0"	1 3/4"	F	FRP	F2	FRP	H2/A-601	J2/A-601						
115	3' - 0"	7' - 0"	1 3/4"	F	FRP	F2	FRP	H2/A-601	J2/A-601						
117	3' - 0"	7' - 0"	1 3/4"	F	FRP	F2	FRP	H1/A-601	J1A-B/A-601						
118A	3' - 0"	7' - 0"	1 3/4"	F	FRP	F2	FRP	H1/A-601	J1A-B/A-601						
118B	3' - 0"	7' - 0"	1 3/4"	F	FRP	F2	FRP	H3/A-601	J3/A-601						
119	3' - 0"	7' - 0"	1 3/4"	F	FRP	F2	FRP	H1/A-601	J1A-B/A-601				ADD KICK PLATE PANELS		
122	4' - 0"	7' - 0"	1 3/4"	F	FRP	F2	FRP	H1/A-601	J1A-B/A-601				ADD KICK PLATE PANELS		
123	4' - 0"	7' - 0"	1 3/4"	F	FRP	F2	FRP	H3/A-601	J3/A-601						
124A	3' - 0"	7' - 0"	1 3/4"	F	FRP	F2	FRP	H2/A-601	J2/A-601						
124B	6' - 0"	7' - 0"	1 3/4"	F	FRP	F2	FRP	H1/A-601	J1A-B/A-601						
126	6' - 0"	7' - 0"	1 3/4"	F	FRP	F2	FRP	H2/A-601	J2/A-601						

DOOR SCHEDULE ABBREVIATION:

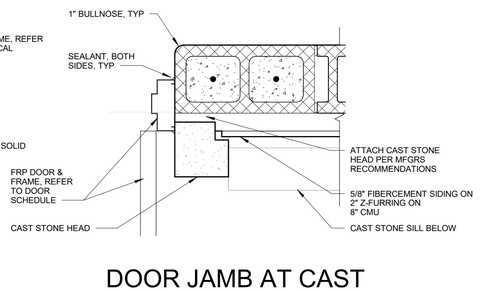
AL	- ALUMINUM
FRP	- FIBER REINFORCED PLASTIC
GL	- GLASS
HM	- HOLLOW METAL
SF	- STOREFRONT SYSTEM
TEMP	- TEMPERED

GENERAL DOOR NOTES:

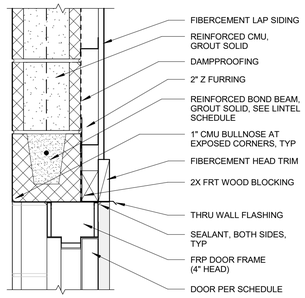
1. ALL EXTERIOR DOORS AND FRAMES TO BE INSULATED.
2. GROUT SOLID HOLLOW METAL FRAMES IN MASONRY WALLS.
3. FIELD VERIFY DIMENSIONS.
4. GLAZING TO BE SAFETY (TEMPERED) IN ALL DOOR OPENINGS.
5. SEE THIS SHEET FOR ALUMINUM DOOR FRAME TYPES.



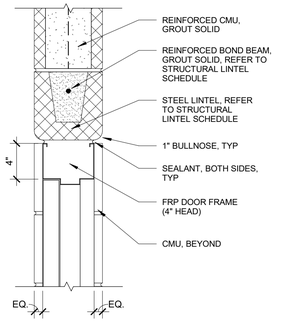
C1 LOUVER SILL FLASHING
1 1/2" = 1'-0"



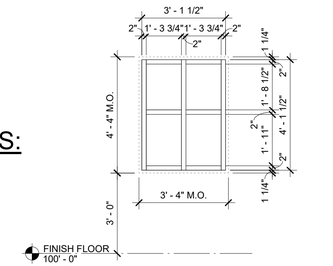
J1A DOOR JAMB AT CAST STONE FRAME & SIDING
1 1/2" = 1'-0"



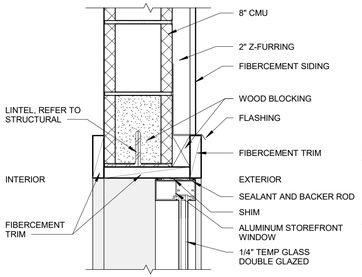
H2 EXTERIOR CMU / SIDING HEAD
1 1/2" = 1'-0"



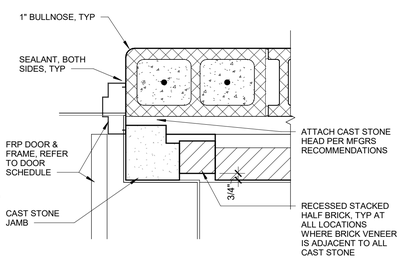
H3 INTERIOR CMU HEAD
1 1/2" = 1'-0"



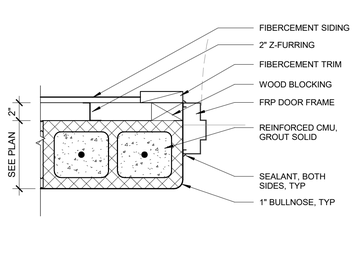
C5 GUARDS WINDOWS
3/8" = 1'-0"



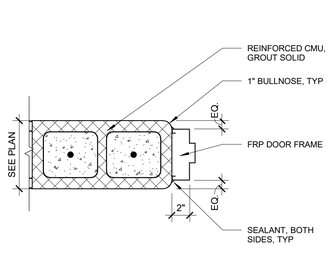
B1 WINDOW HEAD FLASHING
1 1/2" = 1'-0"



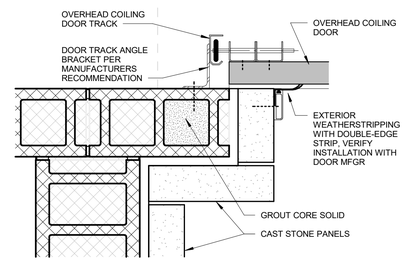
J1B DOOR JAMB AT CAST STONE FRAME & BRICK
1 1/2" = 1'-0"



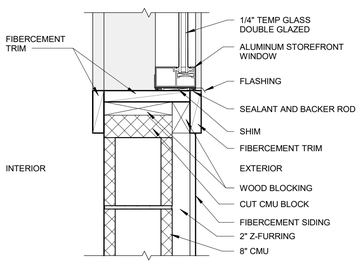
J2 EXTERIOR CMU / SIDING JAMB
1 1/2" = 1'-0"



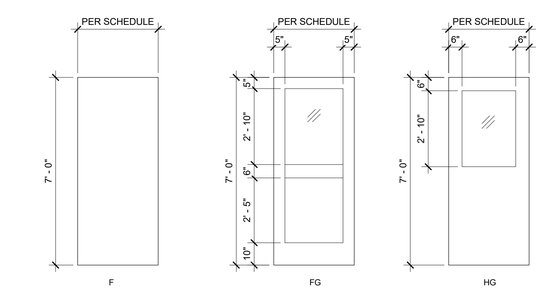
J3 INTERIOR CMU JAMB
1 1/2" = 1'-0"



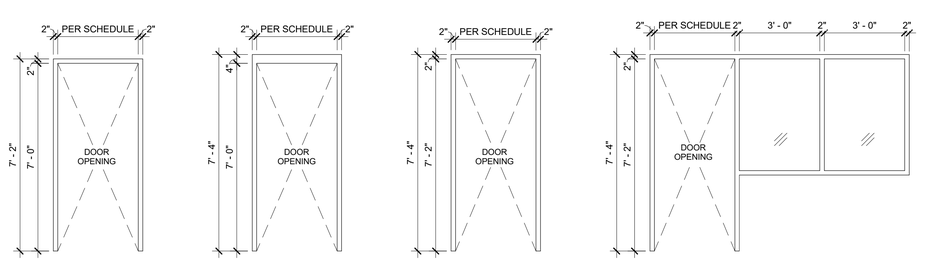
B5 OVERHEAD COILING DOOR JAMB / TRACK SECTION
1 1/2" = 1'-0"



A1 WINDOW SILL FLASHING
1 1/2" = 1'-0"



A2 DOOR TYPES
3/8" = 1'-0"



A4 FRAME TYPES
3/8" = 1'-0"

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Revisions: NUMBER DATE DESCRIPTION

Issue Date: 12/16/2025 FOR BID

PAYNE PARK
AQUATIC FACILITY

830 PAYNE AVENUE
NORTH TONAWANDA, NY 14120

DOOR SCHEDULES, WINDOW TYPE AND DETAILS

City Project No. 2023-01

BCI Project No. 23065

A-601

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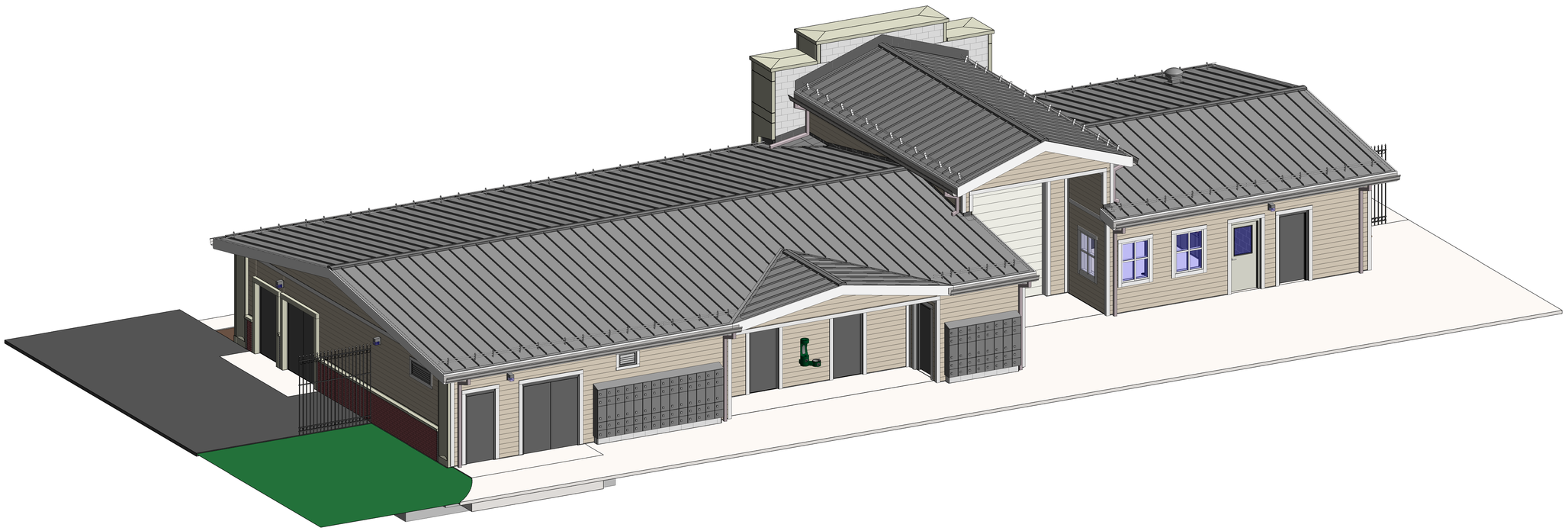
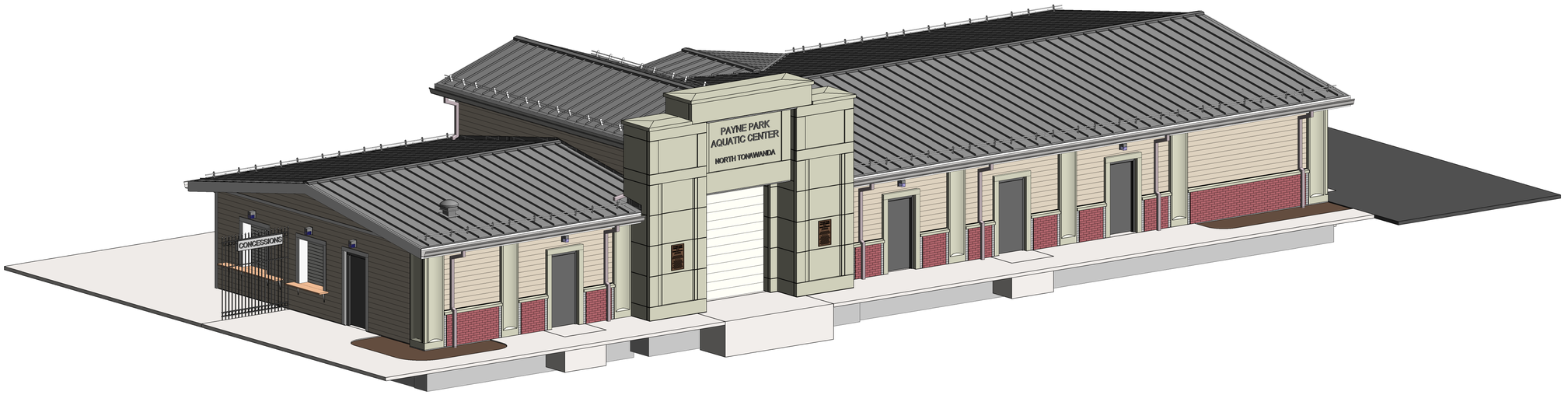


2 3D VIEW - POOL SIDE



1 3D VIEW - FRONT

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PAYNE PARK AQUATIC FACILITY

830 PAYNE AVENUE
NORTH TONAWANDA, NY 14120

3D VIEWS

City Project No. 2023-01
BCI Project No. 23065

A-901

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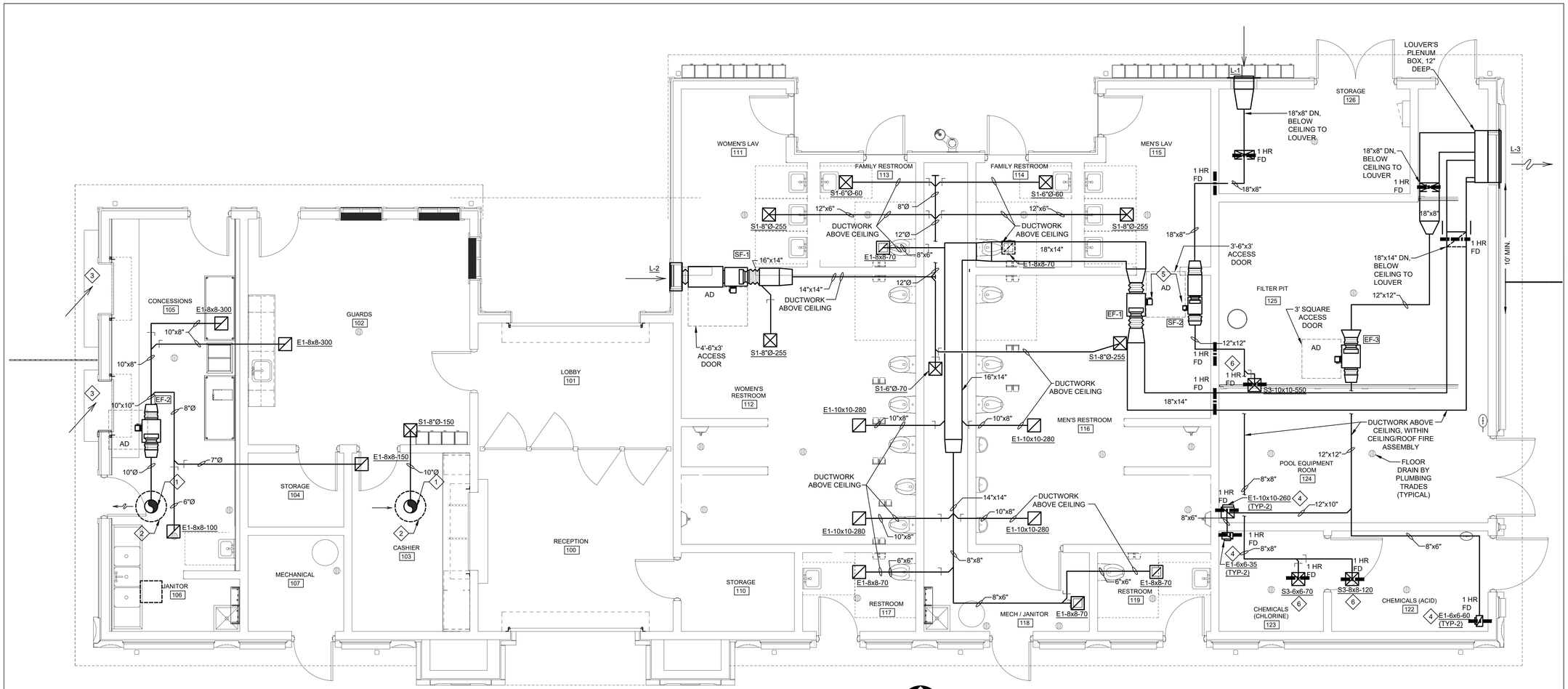


PLAN NOTES

1. EXTEND 10" DIAMETER UP TO 12" DIAMETER ROOFTOP OPENING.
2. ROOF MOUNTED, GRAVITY VENTILATOR DEVICE SIZE 12. COOK MODEL PR, SIZE 12. PROVIDE BACKDRAFT DAMPER. PROVIDE AN 8" HIGH ROOF CURB FOR A 2 /12 ROOF PITCHED STANDING SEAM ROOF EQUAL TO DREXEL 200S 18" WIDE, 90-DEGREE 2" STANDING SEAM METAL ROOF PANS.
   PRE-FURNISHED WITH COLOR TO MATCH ROOF COLOR. PAINT BOTH GRAVITY VENTILATOR AND ROOF CURB.
3. MAKE-UP AIR TO COME INTO THE CONCESSION THRU THE PASS THRU WINDOWS.
4. PROVIDE HIGH-LOW EXHAUST. REFER TO "HIGH/LOW EXHAUST DUCT DETAIL" ON DRAWING M-102. PROVIDE FIRE DAMPER AT CEILING PENETRATION.
5. INSTALL MOTORS SUCH THAT ACCESS IS THRU SHARED CEILING ACCESS PANEL.
6. PROVIDE 1 HOUR FIRE RATED DAMPER IN SUPPLY GRILLE THROAT.

GENERAL NOTES

A. ALL WORK TO BE COMPLETED IN ACCORDANCE WITH THE LOCAL BUILDING CODE AND AUTHORITY HAVING JURISDICTION.

B. MECHANICAL HVAC WORK SHALL BE COMPLETED BY AN INDIVIDUAL OR BUSINESS THAT IS LICENSED BY THE STATE CONSTRUCTION INDUSTRY LICENSING BOARD.

C. PROVIDE VOLUME DAMPER IN DUCTWORK AT ALL CONNECTIONS TO DIFFUSERS AND GRILLES.

D. CFM'S NOTED ARE MINIMUM AIR FLOW.

E. ALL BRANCH DUCTWORK TO DIFFUSERS OR REGISTERS SHALL BE EQUAL TO THE NECK SIZE ON THE DIFFUSER OR REGISTER, UNLESS OTHERWISE NOTED.

FIRST FLOOR MECHANICAL PLAN

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

REGISTERS, GRILLES, AND DIFFUSERS SCHEDULE

MARK	MANUFACTURER	MODEL	DESCRIPTION	MATERIAL	FINISH	FRAME TYPE	NECK SIZE	REMARKS
S1	PRICE	SCDA	SUPPLY DIFFUSER - ADJUSTABLE	ALUMINUM	WHITE	12"x12" SURFACE	REFER TO PLAN	
S2	PRICE	530	DOUBLE DEFLECTION SUPPLY	ALUMINUM	WHITE	SURFACE	8" H. x 14" W.	
S3	PRICE	530	DOUBLE DEFLECTION SUPPLY	ALUMINUM	WHITE	SURFACE	8" H. x 14" W.	PROVIDE 1 HR. FIRE DAMPER
E1	PRICE	530	EXHAUST GRILLE	ALUMINUM	WHITE	SURFACE	REFER TO PLAN	

LOUVER SCHEDULE

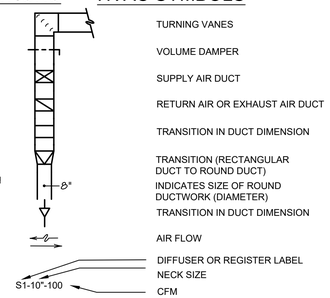
MARK	SERVICE	MAKE/MODEL	CFM	INTAKE/ EXHAUST	SIZE (HEIGHT X WIDTH)	PRESSURE DROP (IN W.C.)	MIN. FREE AREA (S.F.)	FREE AREA VELOCITY (FPM)	MOUNTING HEIGHT A.F.F. TO BOTTOM	REMARKS
L-1	SF-2, MAKE-UP	GREENHECK ESD-635	695	EXHAUST	16" H. x 24" W.	0.07	1.07	649	7'-4"	1-4
L-2	SF-1, RESTROOM MAKE-UP	GREENHECK ESD-635	1,130	INTAKE	16" H. x 28" W.	0.09	1.10	807	10'-8"	1-4
L-3	EF-1 & EF-3 EXHAUST	GREENHECK ESD-635	1,825	EXHAUST	18" H x 48" W.	0.08	2.66	686	7'-4"	1-4

REMARKS:
1. ALUMINUM LOUVER, MOUNT ON EXTERIOR WALL, SEAL AROUND EXTERIOR FLANGES WEATHER TIGHT.
2. PROVIDE TWO (2) KYNAR FINISH PAINT ON LOUVER. COLOR TO BE SELECTED BY ARCHITECT.
3. PROVIDE BIRDSCREEN
4. PROVIDE MOTOR OPERATED DAMPER, 120 VOLT MOTOR OPERATOR. ELECTRICAL TRADES TO WIRE COMPLETE.

MECHANICAL ABBREVIATIONS

CFM	CUBIC FEET PER MINUTE
CLG	CEILING
deg. F	DEGREES FAHRENHEIT
DIA	DIAMETER
EA	EXHAUST AIR
ETR	EXISTING TO REMAIN
G.C.	GENERAL CONTRACTOR
HZ	HERTZ
MAX	MAXIMUM
MCA	MINIMUM CIRCUIT AMPACITY
MIN	MINIMUM
MOCP	MAXIMUM OVERCURRENT PROTECTION
NEC	NATIONAL ELECTRIC CODE
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
OA	OUTSIDE AIR
OBC	OHIO BUILDING CODE
OMC	OHIO MECHANICAL CODE
RA	RETURN AIR
RPM	REVOLUTIONS PER MINUTE
SA	SUPPLY AIR
TYP	TYPICAL
UL	UNDERWRITERS LABORATORY

HVAC SYMBOLS



TURNING VANES
VOLUME DAMPER
SUPPLY AIR DUCT
RETURN AIR OR EXHAUST AIR DUCT
TRANSITION IN DUCT DIMENSION
TRANSITION (RECTANGULAR DUCT TO ROUND DUCT)
INDICATES SIZE OF ROUND DUCTWORK (DIAMETER)
TRANSITION IN DUCT DIMENSION
AIR FLOW
DIFFUSER OR REGISTER LABEL
NECK SIZE
CFM

FAN SCHEDULE

MARK	AREA SERVED	MANUFACTURER	MODEL	TYPE	CFM	ESP	MOTOR (HP OR WATTS)	MAXIMUM RPM	DRIVE	VOLTAGE	SONES	WEIGHT (pounds)	REMARKS
EF-1	RESTROOMS & JC	GREENHECK	BSQ-140	INLINE, INSIDE MOUNTED EXHAUST FAN	1,470	0.75	1/2 HP	1,567	DIRECT	120V-1 PH	9.6	115	1-3, 6-7, 11-12
EF-2	CONCESSIONS JANITOR'S, GUARD & CASHIER	GREENHECK	BSQ-100	INLINE, INSIDE MOUNTED EXHAUST FAN	850	0.5	1/4 HP	1,407	DIRECT	120V-1 PH	9.7	96	1-3, 4, 12
EF-3	PUMP ROOM POOL CHLORINE EXHAUST	GREENHECK	BSQ-90	INLINE, INSIDE MOUNTED EXHAUST FAN	705	0.75	1/2 HP	1919	DIRECT	120V-1 PH	16.6	145	1-3, 5-8, 12
SF-1	RESTROOMS & JC	GREENHECK	SQ-120-VG	INLINE, INSIDE MOUNTED SUPPLY FAN	1,200	0.75	1/2 HP	1,567	DIRECT	120V-1 PH	9.6	115	1-3, 6, 9-10, 12
SF-2	PUMP ROOM POOL CHLORINE SUPPLY	GREENHECK	SQ-7-VG	INLINE, INSIDE MOUNTED SUPPLY FAN	705	0.75	1/2 HP	1919	DIRECT	120V-1 PH	16.6	145	1-3, 6, 9, 11-12

REMARKS:
1. FAN SPEED CONTROLLER WITH DISCONNECT. ELECTRICAL TRADES TO INSTALL.
2. GRAVITY OPERATED BACKDRAFT DAMPER.
3. PROVIDE VIBRATION ISOLATORS ON RODS. SUPPORT FAN FROM STRUCTURE.
4. EXHAUST FAN SHALL BE TURNED ON BY A TIMER, TO BE PROVIDED AND INSTALLED BY ELECTRICAL TRADES.. FAN SHALL BE ON DURING BUILDING OPERATION HOURS.
5. REMOTE ON/OFF SWITCH BY ELECTRICAL TRADES. FAN TO ALWAYS BE OPERATIONAL.
6. ALUMINUM HOUSING, MOTOR COVER, AND WHEEL
7. HI-PRO POLYESTER COATING, 5,000 HOUR SALT SPRAY RATED
8. TEFC MOTOR.
9. PROVIDE WITH FILTER ON INLET, SIZED FOR 500 FPM.
10. FAN MUST BE ON WHEN EF-1 IS OPERATIONAL.
11. FAN MUST BE ON WHEN EF-3 IS OPERATIONAL.
12. CONTRACTOR TO ROTATE MOTOR TO INSTALL MOTOR ON THE SIDE OF THE FAN, PER MANUFACTURER'S RECOMMENDATIONS.

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Revisions:
Issue Date: 12-16-2025 ISSUED FOR BID

PAYNE PARK
AQUATIC FACILITY

830 PAYNE AVENUE
NORTH TONAWANDA, NY 14120

FIRST FLOOR
MECHANICAL PLAN

City Project No.
2023-01

BCI Project No.
23065

M-101

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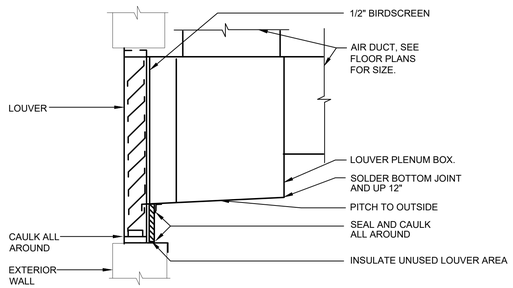
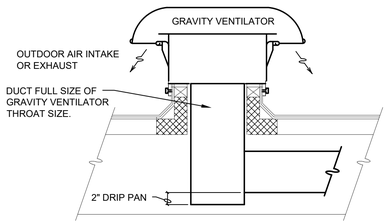


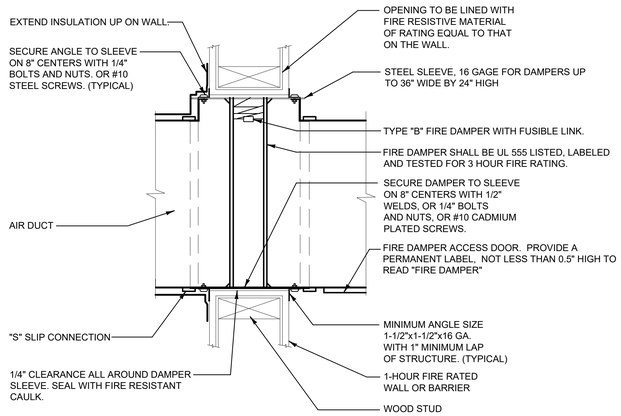
DUCT-LOUVER CONNECTION

NO SCALE



GRAVITY ROOF VENTILATOR

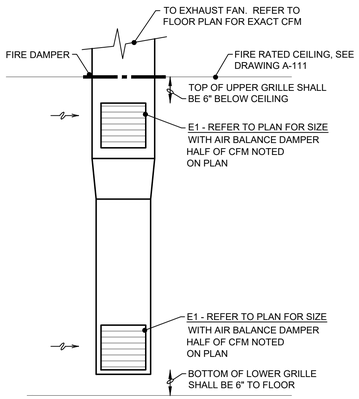
NO SCALE



FIRE DAMPER DETAIL

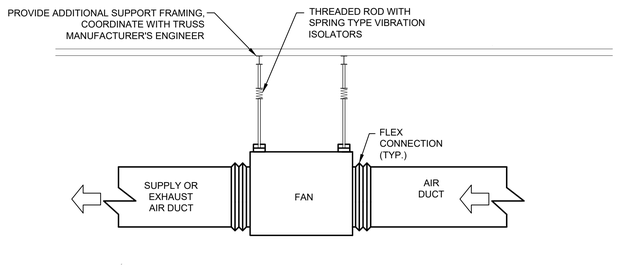
NO SCALE

NOTE: REFER TO ARCHITECTURAL DRAWINGS FOR MORE DETAILS AND REQUIREMENTS



HIGH/LOW EXHAUST DUCT DETAIL

NO SCALE



FAN - DETAIL

NO SCALE

HVAC SPECIFICATIONS

SECTION 23 05 00 – COMMON WORK RESULTS FOR HVAC

PART 1 GENERAL

1.1 SUBMITTALS
- A. PRODUCT DATA: SUBMIT VALVES AND GAGES.

PART 2 PRODUCTS

2.1 FIRESTOPPING
- A. MANUFACTURERS:
  1. DOW CORNING CORP.
  2. FIRE TRAK CORP.
  3. HILTI CORP.
  4. INTERNATIONAL PROTECTIVE COATING CORP.
  5. 3M FIRE PROTECTION PRODUCTS.
  6. SPECIFIED TECHNOLOGY, INC.
  7. TREMCO, INC.
- B. MATERIALS CONFORMING TO FLAME (F) AND TEMPERATURE (T) RATINGS REQUIRED BY LOCAL BUILDING CODE AND AS TESTED BY NATIONALLY ACCEPTED TEST AGENCIES ACCORDING TO ASTM E814 OR UL 1479 FIRE TESTS IN CONFIGURATION THAT IS REPRESENTATIVE OF FIELD CONDITIONS. DEGREE RATING MUST BE MINIMUM OF ONE (1) HOUR BUT NOT LESS THAN FIRE RESISTANCE OF ASSEMBLY BEING PENETRATED.
- C. DO NOT USE FIRESTOP MATERIALS WHICH DISSOLVE IN WATER AFTER CURING.
- D. DO NOT USE FIRESTOP MATERIALS WHOSE SHELF LIFE HAS EXPIRED.

PART 3 EXECUTION

3.1 INSTALLATION
- A. INSTALL FIRESTOPPING AT THE FOLLOWING PENETRATIONS:
  1. WHERE PENETRATIONS INCLUDING PIPING OR DUCTWORK WHICH PASS THROUGH ONE OR BOTH OUTER SURFACES OF FIRE-RATED FLOOR OR WALL.
  2. WHERE PENETRATION OCCURS THROUGH STRUCTURAL FLOOR OR ROOF AND SPACE WOULD OTHERWISE REMAIN OPEN BETWEEN SURFACES OF PENETRATION AND EDGE OF ADJOINING STRUCTURAL FLOOR OR ROOF.
  3. WHERE PENETRATION OCCURS THROUGH FIRE-RATED WALLS OR PARTITIONS OF HOLLOW-TYPE CONSTRUCTION, PROVIDE FIRESTOPPING TO COMPLETELY FILL SPACES AROUND PENETRATION, ON EACH SIDE OF WALL OR PARTITION.
  4. AT SLEEVED PENETRATIONS, FIRESTOP ANNULAR SPACE, BETWEEN SLEEVE AND WALL OPENINGS.

SECTION 23 05 93 - TESTING, ADJUSTING, AND BALANCING FOR HVAC

PART 1 GENERAL

1.1 SUBMITTALS
- A. FINAL REPORT: REQUIRED

1.2 REPORT FORMS: AABC NATIONAL STANDARDS FOR TOTAL SYSTEM BALANCE FORMS.

1.3 AIR HANDLING SYSTEMS: ADJUST FANS AND AIR DISTRIBUTION OUTLETS AND INLETS AIRFLOWS TO WITHIN PLUS OR MINUS 5 PERCENT OF DESIGN.

SECTION 23 07 00 - HVAC INSULATION

PART 1 GENERAL

1.1 SUBMITTALS
- A. PRODUCT DATA: [REQUIRED.] [NOT REQUIRED.]
- B. SAMPLES: [REQUIRED.] [NOT REQUIRED.]

PART 2 PRODUCTS

2.1 DUCTWORK INSULATION
- A. FLEXIBLE GLASS FIBER: FLEXIBLE, NONCOMBUSTIBLE BLANKET WITH VAPOR BARRIER JACKET.
- B. DUCT INSULATION "R" VALUES SHALL BE EQUAL TO OR GREATER THAN REQUIRED BY CODE.
- C. INSULATION SHALL NOT CONTAIN ANY PBDE (POLYBROMINATED DIPHENL ETHERS) FLAME RETARDANTS.
- D.

PART 3 EXECUTION

3.1 SCHEDULES

		THICKNESS INCH
A.	DUCTWORK INSULATION	
1.	FLEXIBLE GLASS FIBER SUPPLY DUCTS	1.5

SECTION 23 30 00 – HVAC AIR DISTRIBUTION

PART 1 GENERAL

1.1 SUBMITTALS
- A. PRODUCT DATA: [REQUIRED.] [NOT REQUIRED.]
- B. SHOP DRAWINGS: [REQUIRED.] [NOT REQUIRED.]

PART 2 PRODUCTS

2.1 DUCTWORK
- A. MATERIALS
  1. ALUMINUM DUCTS: ASTM B209; ALUMINUM SHEET, ALLOY 3003-H14. ALUMINUM CONNECTORS AND BAR STOCK: ALLOY 6061- T6 OR OF EQUIVALENT STRENGTH.

2.2 DUCT ACCESSORIES
- A. VOLUME CONTROL DAMPERS
  1. FABRICATION: SMACNA HVAC DUCT CONSTRUCTION STANDARDS – ALUMINUM METAL AND FLEXIBLE.
  2. SINGLE BLADE DAMPERS: ALUMINUM - FABRICATE FOR DUCT SIZES TO 12 X 30 INCH.
  3. QUADRANTS: PROVIDE LOCKING, INDICATING REGULATORS ON DAMPERS.
- B. FIRE DAMPERS
  1. STAINLESS STEEL FIRE DAMPER.
  2. FABRICATE IN ACCORDANCE WITH NFPA 90A AND UL 555.
  3. FABRICATE CURTAIN TYPE DAMPERS WITH BLADES OUT OF AIR STREAM.
  4. FIRE RESISTANCE: 1-1/2 HOURS.
  5. FUSIBLE LINK RELEASE TEMPERATURE: 165 DEGREES F.
  6. MOUNTING: VERTICAL OR HORIZONTAL AS INDICATED ON DRAWINGS.
- C. BACKDRAFT DAMPERS: FABRICATE ALUMINUM MULTI-BLADE, PARALLEL ACTION GRAVITY BALANCED BACKDRAFT DAMPERS OF GALVANIZED STEEL OR EXTRUDED ALUMINUM, WITH CENTER PIVOTED BLADES LINKED TOGETHER.
- D. FLEXIBLE DUCT CONNECTIONS: UL LISTED FIRE-RETARDANT NEOPRENE COATED WOVEN GLASS FIBER FABRIC TO NFPA 90A, APPROXIMATELY 3 INCHES WIDE, CRIMPED INTO METAL EDGING STRIP.
- E. DUCT ACCESS DOORS
  1. FABRICATE ALUMINUM IN ACCORDANCE WITH SMACNA HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE.
  2. ACCESS DOORS WITH SHEET METAL SCREW FASTENERS ARE NOT ACCEPTABLE.

2.3 GRILLES, REGISTERS, AND DIFFUSERS
- A. MANUFACTURER: TITUS OR SIMILAR BY ANEMOSTAT, KRUEGER, E. H. PRICE COMPANY OR NAILOR-HART.
- B. GENERAL: ALL SHALL BE ALUMINUM. GRILLE, REGISTER, AND DIFFUSER INFORMATION MARK, MODEL NUMBER, TYPE, SIZE, FINISH, AND ACCESSORY ITEMS ARE INDICATED IN SCHEDULE. LOCATIONS, TYPE, CFM, AND DIRECTIONS OF THROW (WHERE APPLICABLE) ARE INDICATED ON DRAWINGS.
- C. DEFINITIONS: TERMS USED FOR GRILLES, REGISTERS, AND DIFFUSERS ARE AS FOLLOWS:
  1. GRILLES: SAME STYLE AS REGISTERS BUT WITHOUT DAMPER.
  2. REGISTERS: ITEMS LABELED AS REGISTERS ARE TO BE FURNISHED WITH OPPOSED BLADE DAMPERS.
- D. FINISH: FURNISH GRILLES, REGISTERS AND DIFFUSERS WITH FACTORY APPLIED OFF-WHITE FINISH UNLESS NOTED OTHERWISE.

2.4 LOUVERS
- A. 4 INCHES DEEP WITH BLADES ON 45 DEGREE SLOPE, HEAVY CHANNEL FRAME, BIRDSCREEN WITH 1/2 INCH SQUARE MESH FOR EXHAUST AND 3/4 INCH FOR INTAKE.
- B. MATERIAL: 12 GAGE THICK EXTRUDED ALUMINUM.
- C. FINISH: FACTORY BAKED ENAMEL FINISH COLOR TO BE SELECTED BY ARCHITECT.
- D. INSTALLATION: ANGLE FLANGE WITH ALUMUNIUM SCREWS.

2.5 GRAVITY VENTILATOR
- A. SPUN 16 GAUGE RIGID ALUMINUM STRUCTURAL COMPONENTS.BASE SHALL BE CONTINUOUSLY WELDED CURB CAP. BIRDSCREEN WITH 1/2 INCH SQUARE.
- B. MATERIAL: 16 GAGE THICK EXTRUDED ALUMINUM.
- C. FINISH: FACTORY BAKED ENAMEL FINISH COLOR TO BE SELECTED BY ARCHITECT.
- D. ROOF CURB SHALL BE SUBMITTED FOR REVIEW. ROOF CURB TO MEET REQUIREMENTS OF NEW ROOF WARRANTIES.
  1. ROOF IS A SLOPED ROOF. REFER TO ARCHITECTURAL DRAWINGS FOR SLOPED ROOF.
  2. ROOF IS VERTICAL RIB STANDING SEAM METAL ROOF WITH 18" PANELS. PANEL TO HAVE 2" HEIGH RIB WITH 90 DEGREE MECHANICALLY LOCKED PANEL SEAMS.
  3. ROOF MANUFACTURER: DREXEL METALS MODEL DMC 200S.
  4. ROOF CURB FLASHING SHALL BE ACCEPTABLE TO ROOF PANEL MANUFACTURER AND CAN NOT COMPROMISE THE ROOF PANEL MANUFACTURER'S WARRANTIES.
- E. INSTALLATION: ANGLE FLANGE WITH ALUMUNIUM SCREWS.

2.6 CENTRIFUGAL IN-LINE FANS
- A. CENTRIFUGAL FAN UNIT: [V-BELT] [DIRECT DRIVE] WITH GALVANIZED STEEL HOUSING [LINED WITH 1/2 INCH ACOUSTIC INSULATION], [TOTALLY ENCLOSED FAN COOLED] [OPEN DRIP PROOF] TYPE MOTOR WITH LUBRICATED SEALED BEARINGS, MOTOR MOUNTED ON RUBBER-IN-SHEAR ISOLATORS, OUTLET DUCT COLLAR, GRAVITY BACKDRAFT DAMPER IN DISCHARGE.
- B. DISCONNECT SWITCH.
- C. VARIABLE AND ADJUSTABLE PITCH MOTOR SHEAVE.
- D. MANUFACTURER: GREENHECK OR EQUAL BY LOREN COOK.

PART 3 EXECUTION

3.1 INSTALLATION
- A. INSTALL BACKDRAFT DAMPERS ON DISCHARGE OF EXHAUST FANS.
- B. CONNECT DIFFUSERS OR TROFFER BOOTS TO LOW PRESSURE DUCTS WITH 5 FEET MAXIMUM LENGTH OF FLEXIBLE DUCT.
- C. INSTALL FLEXIBLE CONNECTIONS IMMEDIATELY ADJACENT TO EQUIPMENT IN DUCTS ASSOCIATED WITH FANS AND MOTORIZED EQUIPMENT.
- D. INSTALL DUCT ACCESS DOORS FOR INSPECTION AND CLEANING BEFORE AND AFTER FILTERS, COILS, FANS, AUTOMATIC DAMPERS, AND AT FIRE DAMPERS.
- E. CHECK LOCATION OF AIR OUTLETS AND INLETS AND MAKE NECESSARY ADJUSTMENTS IN POSITION TO CONFORM WITH ARCHITECTURAL FEATURES, SYMMETRY, AND LIGHTING ARRANGEMENT.
- F. PROVIDE BALANCING DAMPERS ON DUCT TAKE-OFF TO DIFFUSERS, AND GRILLES AND REGISTERS.

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PAYNE PARK
AQUATIC FACILITY

830 PAYNE AVENUE
NORTH TONAWANDA, NY 14120

HVAC DETAILS & SPECIFICATIONS

City Project No.
2023-01

BCI Project No.
23065

M-102

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PLUMBING FIXTURE SCHEDULE

MARK	FIXTURE	WASTE	VENT	HW	CW	MANUFACTURER AND MODEL NUMBER
WC-1	WALL MOUNTED WATER CLOSET	4"	2"	-	1"	FIXTURE: WALL HUNG, FLUSH VALVE, WHITE VITREOUS CHINA, ELONGATED BOWL, 1-1/2 INCH INLET SPUD, SIPHON JET ACTION, 1.1/ 1.6 GALLONS PER FLUSH. AMERICAN STANDARD 'AFWALL' MODEL 3351.101 OR BY KOHLER AND ZURN. SEAT: WHITE, HEAVY DUTY COMMERCIAL GRADE, OPEN FRONT LESS COVER, SELF-SUSTAINING CHECK HINGES WITH STAINLESS STEEL POSTS BY CHURCH MODEL 9500SSCT OR EQUAL. FLUSH VALVE: EXPOSED CHROME PLATED, DIAPHRAGM TYPE WITH OSCILLATING HANDLE, SEAT BUMPER, INTEGRAL SCREWDRIVER STOP, VACUUM BREAKER, WALL AND SPUD FLANGES. 1.6 GALLONS PER FLUSH. SLOAN ROYAL 111 OR EQUAL. CARRIER: EXTRA HEAVY DUTY - 750 LBS, EZCARRY ADJUSTABLE VERTICAL SIPHON JET NO-HUB WATER CLOSET CARRIER SYSTEM, CAST IRON. INSTALL AND ANCHOR IN ACCORDANCE WITH MANUFACTURERS' PUBLISHED INSTRUCTIONS. ZURN ZN1202-N4.
WC-2	WALL MOUNTED WATER CLOSET ADA	4"	2"	-	1"	SAME AS WC-1 BUT MOUNTED AT HEIGHT TO MEET ADA REQUIREMENTS AND MOUNT FLUSH VALVE WITH HANDLE TO WIDE SIDE OF STALL.
UR-1	URINAL FLUSH VALVE	2"	1-1/2"	-	3/4"	FIXTURE: AMERICAN STANDARD 6590.001 "WASHBROOK" OR APPROVED EQUAL. WALL HUNG, WASHOUT FLUSH ACTION, WHITE VITREOUS CHINA, 3/4 INCH TOP SPUD AND WALL HANGER. 1.0 GPF (3.8 LITER) FLUSH VALVE: SLOAN ROYAL 186-1. EXPOSED CHROME PLATED, DIAPHRAGM TYPE WITH OSCILLATING HANDLE, SEAT BUMPER, INTEGRAL SCREWDRIVER STOP, VACUUM BREAKER, WALL AND SPUD FLANGES. 1.0 GALLONS PER FLUSH. CARRIER: STEEL UPRIGHTS WITH SUPPORT PLATES, BEARING STUDS AND BLOCK FEET FOR ANCHORING TO FLOOR CONSTRUCTION. ZURN OR SIMILAR BY SMITH. MOUNTED AT HEIGHT TO MEET ADA REQUIREMENTS.
UR-2	URINAL FLUSH VALVE (ADA COMPLIANT)	2"	1-1/2"	-	3/4"	SAME AS UR-1 BUT MOUNTED AT HEIGHT TO MEET ADA REQUIREMENTS.
L-1	LAVATORY WALL MOUNTED	1-1/4"	1-1/2"	1/2"	1/2"	FIXTURE: AMERICAN STANDARD 'LUCERNE' MODEL 0355.012 OR EQUAL. 20 INCH x 18 INCH WALL-HUNG LAVATORY, VITREOUS CHINA, 4 INCH CENTERS. FOR WALL HANGER (INCLUDED) OR CONCEALED ARMS SUPPORT FAUCET: AMERICAN STANDARD METERING FAUCET MODEL 1340.227 OR EQUAL. CAST CENTER-SET, 0.5 GPM, VANDAL-RESISTANT AERATOR, EASY-PUSH HANDLES, ADJUSTABLE FLOW CYCLE. SUPPLIES: FURNISH CHROME PLATED RIGID OR FLEXIBLE SUPPLIES WITH LOOSE KEY STOPS, REDUCERS, AND ESCUTCHEONS. INSULATED FOR ADA COMPLIANCE. DRAIN: STAINLESS STEEL NON-REMOVABLE STRAINER WITH 1-1/4 INCH TAILPIECE. CHICAGO FAUCET NO. 327. TRAP: CHROME PLATED CAST BRASS ADJUSTABLE "P" TRAP WITH CLEAN-OUT AND 17 GAUGE WASTE TO WALL WITH ESCUTCHEON. INSULATED AND OFFSET TO MEET ADA COMPLIANCE. PROVIDE PLUMBREX MODEL X4114 TRAP COVER AND MODEL X4333 PRO EXTREME TRAP WRAP.
S-1	WALL MOUNTED STAINLESS STEEL HAND SINK	1-1/2"	1-1/2"	1/2"	1/2"	FIXTURE & FAUCET: ADVANCE TABCO #7-PS-60 STAINLESS STEEL HAND SINK COMPLETE WITH SPLASH MOUNTED 4 INCH O.C. GOOSENECK FAUCET WITH CONTROL STOPS. SUPPLIES: FURNISH CHROME PLATED RIGID OR FLEXIBLE SUPPLIES, REDUCERS, AND ESCUTCHEONS. DRAIN: STAINLESS STEEL BASKET STRAINER WITH CHROME PLATED BRASS 1-1/2 INCH DIAMETER TAILPIECE. TRAP: FURNISH CHROME PLATED BRASS ADJUSTABLE "P" TRAP WITH CLEANOUT AND 17 GAUGE WASTE TO WALL WITH ESCUTCHEON.
S-2	COUNTERTOP SINK	1-1/2"	1-1/2"	1/2"	1/2"	FIXTURE: JUST SL-2222-A-GR OR SIMILAR BY ELKAY. 19 INCH BY 16 INCH BY 7-1/2 INCH DEPTH, 18 GAUGE, TYPE 304 STAINLESS STEEL, SELF RIM, DOUBLE LEDGE, SINGLE COMPARTMENT WITH UNDERCOATING, DRILLED TO ACCOMMODATE FAUCET. FAUCET: MOEN MODEL 87014 'ESSIE' SINGLE HANDLE PULL-DOWN KITCHEN FAUCET. 1.5 GPM, NON-AERATING LAMINAR OUTLET. SUPPLIES: FURNISH CHROME PLATED RIGID OR FLEXIBLE SUPPLIES, REDUCERS, AND ESCUTCHEONS. DRAIN: STAINLESS STEEL BASKET STRAINER WITH CHROME PLATED BRASS 1-1/2 INCH DIAMETER TAILPIECE. TRAP: FURNISH CHROME PLATED BRASS ADJUSTABLE "P" TRAP WITH CLEANOUT AND 17 GAUGE WASTE TO WALL WITH ESCUTCHEON.
S-3	THREE COMPARTMENT SINK	1-1/2"	1-1/2"	1/2"	1/2"	FIXTURE: ELKAY MODEL 3C18X18-2-18X, STAINLESS STEEL THREE COMPARTMENT SINK, LEFT AND RIGHT DRAINBOARDS, 18 INCH x 18 INCH x 12 INCH DEEP BOWLS. FAUCET: KRONNE ROYAL SERIES MODEL 17-109W 8 INCH CENTER WALL MOUNT, PRE-RINSE WITH ADD-ON FAUCET WITH CONTROL STOPS. SUPPLIES: FURNISH CHROME PLATED RIGID OR FLEXIBLE SUPPLIES, REDUCERS, AND ESCUTCHEONS. DRAIN: STAINLESS STEEL BASKET STRAINER WITH CHROME PLATED BRASS 1-1/2 INCH DIAMETER TAILPIECE. TRAP: FURNISH CHROME PLATED BRASS ADJUSTABLE "P" TRAP WITH CLEANOUT AND 17 GAUGE WASTE TO WALL WITH ESCUTCHEON.
SH-1	SHOWER	2"	1-1/2"	1/2"	1/2"	ENCLOSURE: SHOWER ENCLOSURE AND FLOOR CONSTRUCTED UNDER ANOTHER DIVISION OF WORK. FITTINGS: PROVIDE ACORN MODEL 450B SERIES SURFACE MOUNT APEX STAINLESS STEEL SHOWER WITH 1.5 GPM, CHROME FINISH, SINGLE-HANDLE POSI-TEMP PRESSURE BALANCING SHOWER TRIM ONLY OR EQUAL. SHOWER DRAIN: COMPLETE WITH DURA-COATED CAST IRON BODY, COLLAR CLAMP, ADJUSTABLE PVC HEAD AND SECURED STAINLESS STEEL STRAINER. ZURN MODEL FD2250 OR APPROVED EQUAL
SH-2	SHOWER	2"	1-1/2"	1/2"	1/2"	ENCLOSURE: SHOWER ENCLOSURE AND FLOOR CONSTRUCTED UNDER ANOTHER DIVISION OF WORK. FITTINGS: PROVIDE ACORN MODEL 450BBF SERIES ADA SURFACE MOUNT STAINLESS STEEL APEX SHOWER WITH HANDHELD WITH 1.5 GPM, CHROME FINISH, STATIONARY SHOWERHEAD, HAND-HELD SHOWER, 3 FUNCTION TRANSFER VALVE, 69 INCH METAL HOSE AND 30 INCH SLIDE BAR SINGLE-HANDLE POSI-TEMP PRESSURE BALANCING SHOWER TRIM ONLY OR EQUAL. SHOWER DRAIN: COMPLETE WITH DURA-COATED CAST IRON BODY, COLLAR CLAMP, ADJUSTABLE PVC HEAD AND SECURED STAINLESS STEEL STRAINER. ZURN MODEL FD2250 OR APPROVED EQUAL
BF-1	ELECTRIC BOTTLE FILLING STATION (OUTDOOR)	1-1/2"	1-1/2"	-	1/2"	FIXTURE: OUTDOOR BOTTLE FILLING STATION WALL MOUNTED WITH SINGLE FOUNTAIN, NON-FILTERED, NON-REFRIGERATED. HEAVY DUTY VANDAL RESISTANT, LAMINAR FLOW, 300 SERIES STAINLESS. MECHANICAL BUTTON ACTIVATION. FINISH: STAINLESS STEEL. MANUFACTURER: ELKAY LK4408BF OR EQUAL. ROUGH-IN: PROVIDE STOP VALVE, CAST BRASS P-TRAP, AND 17 GAUGE TAILPIECE. MOUNTING HEIGHT: TO ACCOMMODATE WHEELCHAIR USERS.
MB-1	MOP BASIN	3"	1-1/2"	1/2"	1/2"	FIXTURE: MUSTEE MODEL 63M, 24 X 24 X 10 INCH HIGH MOLDED STONE, FLOOR MOUNTED, STAINLESS STEEL STRAINER OR APPROVED EQUAL FAUCET:MUSTEE 63.600A FAUCET, ROUGH CHROME FINISH, THREADED SPOUT WITH BUCKET HOOK, VACUUM BREAKER, HOSE OUTLET SPOUT END, WALL BRACE, CAST BRASS INDEXED LEVER HANDLES, AND STOPS IN SHANKS OR EQUAL. ACCESSORIES: 48 INCH LONG HEAVY DUTY, 5/8 INCH DIAMETER HOSE AND HOSE CLIP, STAINLESS STEEL HOSE BRACKET, AND STAINLESS STEEL MOP HANGER WITH 3 GRIPS.
EFEW-1	EMERGENCY FACE/ EYEWASH	3/4"	3/4"	1/2" TEMPERED WATER		FIXTURE: HAWS MODEL 7260B-7270B OR EQUAL. WALL MOUNTED EYE-FACE WASH WITH GREEN ABS PLASTIC 11 INCH BOWL, AN AXION MSR EYE/FACE WASH HEAD SHALL FEATURE INVERTED DIRECTIONAL LAMINAR FLOW, CHROME-PLATED BRASS STAY-OPEN BALL VALVE EQUIPPED WITH STAINLESS STEEL BALL AND STEM, WATER STRAINER, WALL BRACKET, YELLOW PLASTIC POP-OFF DUST COVER. THERMOSTATIC MIXING VALVE: HAWS MODEL 9201EW OR EQUAL WITH A FLOW RATE OF 1 TO 10 GPM.

NOTE: PROVIDED BY PLUMBING CONTRACTOR.

PLUMBING EQUIPMENT SCHEDULE

MARK	EQUIPMENT	WASTE	VENT	HW	CW	MANUFACTURER, MODEL NUMBER, AND DESCRIPTION
FD-1	FLOOR DRAIN	3" or 4"	-	-	-	ZURN EZ1, 5 INCH TOP ASSEMBLY ADJUSTABLE FLOOR DRAIN, PVC OR ABS SOLVENT WELD BODY WITH BOTTOM OUTLET, COMBINATION INVERTIBLE MEMBRANE CLAMP AND ADJUSTABLE COLLAR WITH SEEPAGE SLOTS AND TOP ASSEMBLY OR EQUAL.
FD-2	FLOOR DRAIN	3" or 4"	-	-	-	ZURN FD2360, LARGE CAPACITY FLOOR DRAIN, LOW PROFILE DESIGN WITH PVC OR ABS BODY, WITH SEDIMENT BUCKET AND DEEP GRATE OR EQUAL.
TP-1	TRAP SEALER	-	-	-	-	SURE SEAL MODEL SS3009V & SS4009V INLINE FLOOR DRAIN TRAP SEAL. COMMERCIAL GRADE UV AND OZONE RESISTANT ABS PLASTIC HOUSING WITH PROPRIETARY EPDM RUBBER DIAPHRAGM AND SOFT RUBBER SEALING GASKET. FLOOR RATING ASSE - 1072 AF-GW.
WH-1	FREEZE PROOF WALL HYDRANT	-	-	-	3/4"	FIXTURE: ENCASED, NON-FREEZE, FLUSH WALL HYDRANT WITH BRONZE CASING, ALL BRONZE INTERIOR PARTS, NON-TURNING OPERATING ROD WITH FREE FLOATING COMPRESSION CLOSURE VALVE, REPLACEABLE BRONZE SEAT AND SEAT WASHER, AND 3/4" IP INLET. NICKEL BRONZE BOX AND HINGED COVER WITH OPERATING KEY LOCK. ZURN Z1305 OR EQUAL.
FCO	FLOOR CLEANOUT	-	-	-	-	FLOOR CLEANOUT: DUCO CAST IRON CLEANOUT WITH ROUND NICKEL BRONZE TOP. ZURN LC-CR05NI.
WCO	WALL CLEANOUT	-	-	-	-	WALL CLEANOUT: DUCO CAST IRON CAULK FERRULE AND CAST IRON LEAD SEAL PLUG WITH STAINLESS STEEL COVER AND SCREW. SMITH FIGURE 4400 OR SIMILAR BY MIFAB OR ZURN. FULL SIZE OF PIPE AND NOT LESS THAN 4 INCHES FOR LARGER SIZES.
ECO	EXTERIOR CLEANOUT	-	-	-	-	ECO-1: EXTRA HEAVY CAST IRON ACCESS HOUSING WITH ADJUSTABLE ANCHOR FLANGE AND EXTRA HEAVY SECURED NON-SKID CAST IRON COVER WITH VANDAL PROOF SCREWS. CAST IRON CLEANOUT FERRULE WITH COUNTERSUNK BRASS CLEANOUT PLUG. SMITH FIGURE 4250 OR SIMILAR BY MIFAB OR ZURN. FULL SIZE OF PIPE AND NOT LESS THAN 4 INCHES FOR LARGER SIZES.
	POINT OF USE THERMOSTATIC MIXING VALVE	-	-	3/8"	3/8"	WATER TEMPERATURE REGULATING VALVE, LEAD FREE BRONZE BODY, THREADED CONNECTIONS. LOW TEMPERATURE, DUAL ACTION, INTERCHANGEABLE THERMOSTAT, INTEGRAL FILTER WASHERS AND CHECK VALVES. ASSE 1070 LISTED. ADJUSTABLE FROM 80 DEGREES F TO 120 DEGREES F WITH LOCKING FEATURE. SET OUTLET TEMPERATURE AT 110 DEGREES F. MAXIMUM PRESSURE 150 PSI. WATTS SERIES LFUSG-B OR EQUAL.
	CALIBRATED BALANCING VALVES	REFER TO PLUMB. PLAN FOR SIZING				2 INCHES AND SMALLER: WORKING PRESSURE: 125 PSIG. MAXIMUM OPERATING TEMPERATURE: 250 DEGREES F. BRONZE BODY, BRASS BALL CONSTRUCTION WITH CALIBRATED ORIFICE. THREADED END CONNECTIONS.
	TEMPERATURE AND PRESSURE RELIEF VALVE	REFER TO PLUMB. PLAN FOR SIZING				ANSI Z21.22 CERTIFIED, BRONZE BODY, TEFLON SEAT, STAINLESS STEEL STEM AND SPRINGS, AUTOMATIC, DIRECT PRESSURE ACTUATED, TEMPERATURE RELIEF MAXIMUM 210 DEGREES F, CAPACITY ASME CERTIFIED AND LABELED. WATTS SERIES 40, 140, 240.
	WATER HAMMER ARRESTORS	SIZE PER PDI STANDARD - WH 201 TABLE 5				PERMANENTLY SEALED BELLOWS OR EXPANDING CHAMBER TYPE DEVICE FOR CONTROL OF WATER HAMMER, P.D.I.APPROVED. SMITH HYDROTROL OR SIMILAR BY JOSAM, MIFAB, WADE, ZURN, OR EQUAL.

NOTE: PROVIDED BY PLUMBING CONTRACTOR, UNLESS OTHERWISE NOTED.

PLUMBING ABBREVIATIONS

AFF	ABOVE FINISHED FLOOR
AHJ	AUTHORITY HAVING JURISDICTION
ARCH	ARCHITECT
BFF	BELOW FINISHED FLOOR
CFH	CUBIC FEET PER HOUR
CW	DOMESTIC COLD WATER
deg. F	DEGREES FAHRENHEIT
DIA	DIAMETER
DP	DISPOSAL
E.C.	ELECTRICAL CONTRACTOR
ECO	EXTERIOR CLEANOUT
EWC	ELECTRIC WATER COOLER
FD	FLOOR DRAIN
G.C.	GENERAL CONTRACTOR
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
HB	HOSE BIBB
HP	HORSEPOWER
HW	DOMESTIC HOT WATER
in. w.c.	INCHES WATER COLUMN
KW	KILOWATT
L	LAVATORY
M.C.	MECHANICAL CONTRACTOR
MIN	MINIMUM
MR	MOP RECEPTOR
MV	MIXING VALVE
NPSH	NET POSITIVE SUCTION HEAD
OPC	OHIO PLUMBING CODE
P	PUMP
P.C.	PLUMBING CONTRACTOR
PH	PHASE
PVC	POLYVINYL CHLORIDE PLASTIC
QTY	QUANTITY
S	SINK
SH	SHOWER
TBD	TO BE DETERMINED
TYP.	TYPICAL
V	VOLTS
VTR	VENT THROUGH ROOF
WC	WATER CLOSET
WCO	WALL CLEANOUT
WH	WALL HYDRANT

PLUMBING SYMBOLS

	REDUCED PRESSURE BACKFLOW PREVENTER
	CHECK VALVE
	CLEANOUT
	CLEANOUT (HORIZONTAL)
	FLOW DIRECTION
	FLOW SWITCH
	PIPE ELBOW, DOWN
	PIPE ELBOW, UP
	PIPE TEE, DOWN
	PIPE TEE, UP
	PRESSURE GAGE WITH GAGE COCK (WATER)
	PRESSURE REDUCING VALVE
	TEMPERATURE AND PRESSURE RELIEF VALVE
	VACUUM RELIEF VALVE
	SHUTOFF VALVE
	STRAINER
	THERMOMETER
	UNION
SAN	SANITARY SEWER (BELOW GRADE)
SAN	SANITARY SEWER (ABOVE GRADE)
V	VENT PIPING
CW	COLD WATER (BELOW GRADE)
CW	DOMESTIC COLD WATER
HW	120° DOMESTIC HOT WATER
140° HW	140° DOMESTIC HOT WATER
140° HWR	140° DOMESTIC HOT WATER RETURN
G	NATURAL GAS (BELOW GRADE)
G	NATURAL GAS

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PAYNE PARK AQUATIC FACILITY

830 PAYNE AVENUE
NORTH TONAWANDA, NY 14120

PLUMBING LEGEND & SCHEDULES

City Project No.
2023-01

BCI Project No.
23065

P-001

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Plotted

ELECTRIC WATER HEATER SCHEDULE

MARK	MANUFACTURER	MODEL	FUEL	KW INPUT	STORAGE CAPACITY (gallons)	FINAL TEMPERATURE (degrees F)	RECOVERY GPH	TEMPERATURE RISE (degrees F)	VOLTAGE	EXPANSION TANK	REMARKS
EWH-1	A.O. SMITH	DEL-40	ELECTRIC	UPPER 5.0 LOWER 5.0	40	140	41	100	208V-3PH	AMTROL MODEL ST - 5	SIMULTANEOUS ELEMENT OPERATION
EWH-2	A.O. SMITH	DEN-80	ELECTRIC	UPPER 5.0 LOWER 5.0	80	140	41	100	208V-3PH	AMTROL MODEL ST - 5	SIMULTANEOUS ELEMENT OPERATION

NOTES:
1 - PROVIDED BY PLUMBING CONTRACTOR.
2 - EQUIVALENT MANUFACTURERS BY LOCHINVAR, RHEEM OR BRADFORD WHITE.

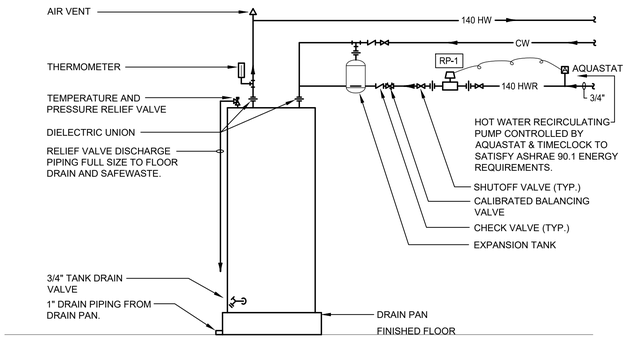
PUMP SCHEDULE

MARK	MANUF.	MODEL	TYPE	SERVICE	GPM	TOTAL HEAD (FT)	SIZE		RPM	HP	VOLTAGE	REMARKS
							SUCTION	DISCHARGE				
RP-1	BELL & GOSSETT	NBF-10S/LW	CIRCULATOR	HOT WATER SYSTEM	12	7	3/4"	3/4"	2800	41 W	115V-1PH	SEE NOTE 1 & 2
SP-1	ZOELLER	MODEL M53 CAST IRON SERIES	SUBMERSIBLE PUMP	FOOTER DRAIN SYSTEM	10	17	1-1/2"	1-1/2"	1550	3/10 HP	115V-1PH	SEE NOTE 3

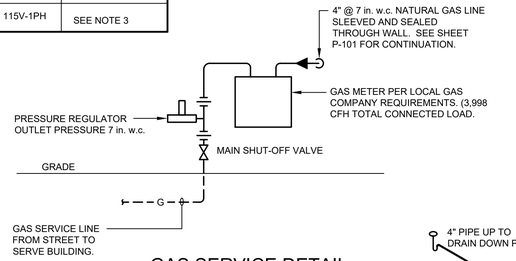
NOTES:
1 - PROVIDED BY PLUMBING CONTRACTOR.
2 - EQUIVALENT MANUFACTURERS BY GRUNDFOS.
3 - SUMP PUMP TO BE HARDWIRED, CONTRACTOR TO PROVIDE ZOELLER 18" x 30" POLYETHYLENE SUMP BASIN WITH EXTENSION, OPEN GRATE COVER OR EQUAL.

NATURAL GAS LOAD

MARK/ EQUIPMENT	GAS INPUT	GAS TOTAL	
(2) POOL HEATER	1,999 CFH	3,998 CFH	WATER HEATING
TOTAL		3,998 CFH	



WATER HEATER DETAIL
NO SCALE

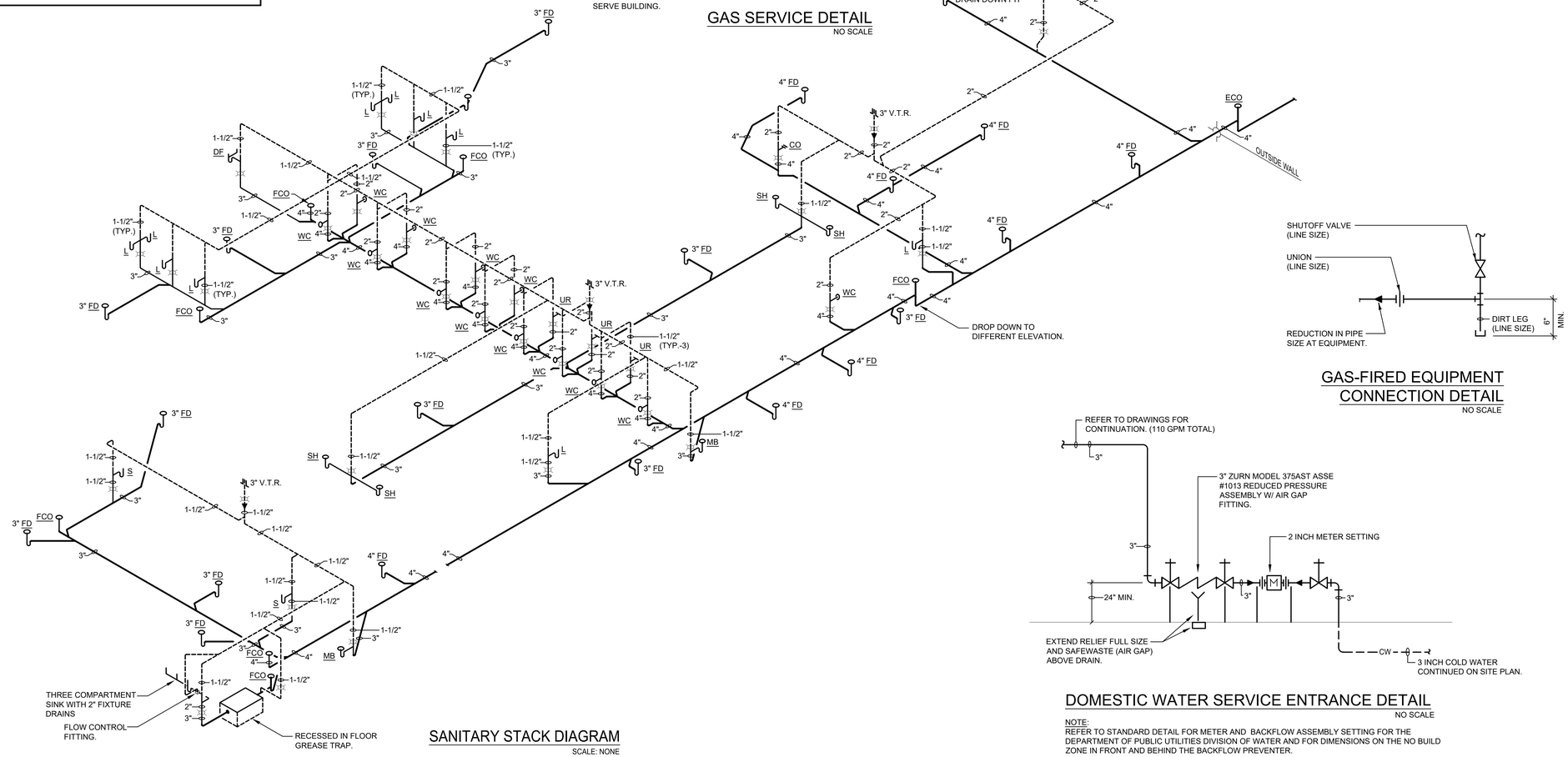


GAS SERVICE DETAIL
NO SCALE

NOTES

A. ELECTRIC WATER (EWH-1) WILL NOT HAVE A RECIRCULATING PUMP. INLET AND OUTLET PIPE CONNECTION SIZES ARE 3/4 INCH.

B. ELECTRIC WATER (EWH-2) WILL HAVE A RECIRCULATING PUMP. INLET AND OUTLET PIPE CONNECTION SIZES ARE 1-1/4 INCH.



SANITARY STACK DIAGRAM
SCALE: NONE

NOTE:
REFER TO SHEET P-001 FOR PLUMBING FIXTURE CONNECTION SCHEDULE FOR ALL FIXTURE CONNECTION SIZES.

GAS-FIRED EQUIPMENT CONNECTION DETAIL
NO SCALE

DOMESTIC WATER SERVICE ENTRANCE DETAIL
NO SCALE

NOTE:
REFER TO STANDARD DETAIL FOR METER AND BACKFLOW ASSEMBLY SETTING FOR THE DEPARTMENT OF PUBLIC UTILITIES DIVISION OF WATER AND FOR DIMENSIONS ON THE NO BUILD ZONE IN FRONT AND BEHIND THE BACKFLOW PREVENTER.

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PAYNE PARK AQUATIC FACILITY

830 PAYNE AVENUE
NORTH TONAWANDA, NY 14120

PLUMBING SCHEDULES, & DETAILS

City Project No.
2023-01

BCI Project No.
23065

P-002

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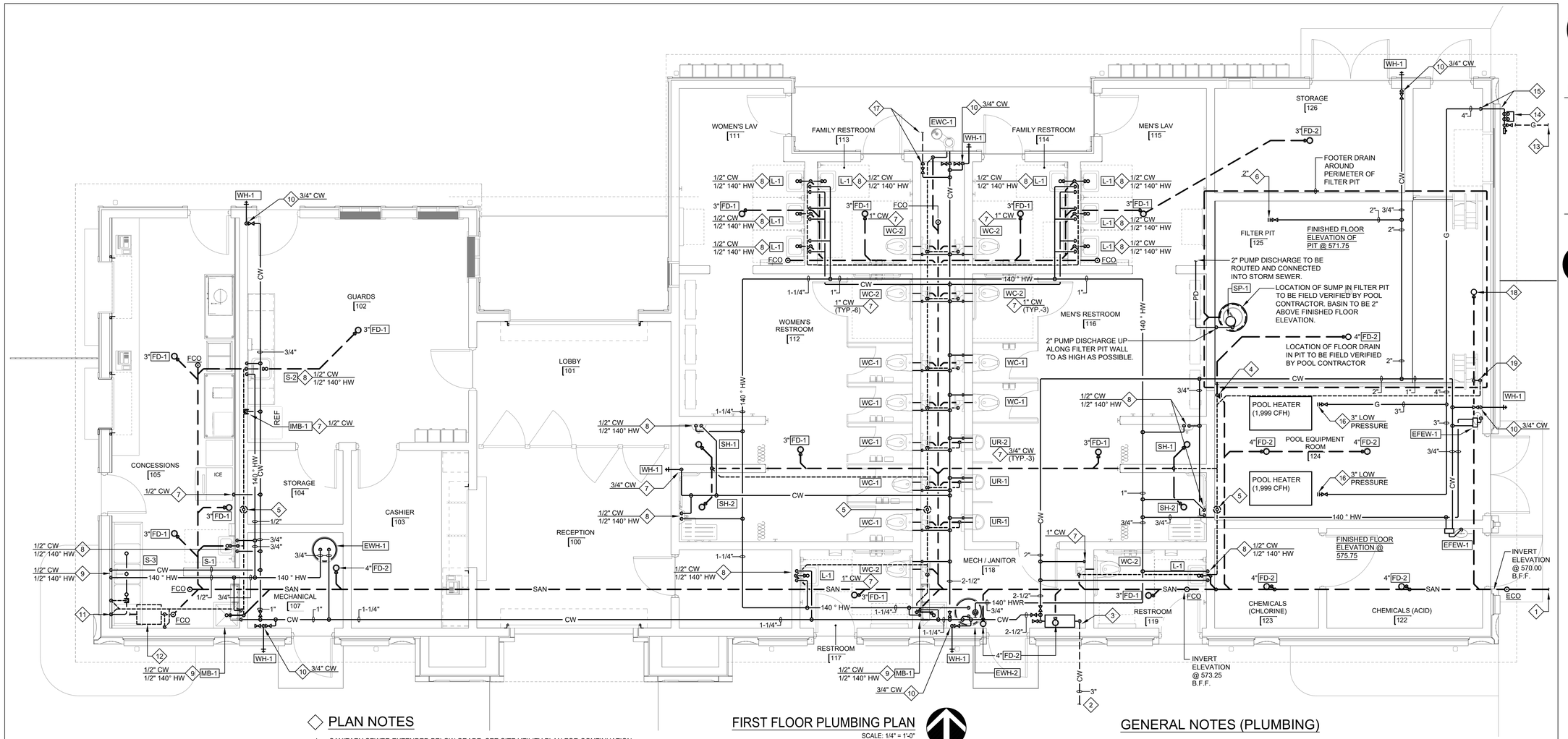

PLAN NOTES

1. SANITARY SEWER EXTENDED BELOW GRADE. SEE SITE UTILITY PLAN FOR CONTINUATION.
2. COLD WATER SERVICE EXTENDED BELOW GRADE. SEE SITE UTILITY PLAN FOR CONTINUATION.
3. 3" INCOMING COLD WATER SLEEVED AND SEAL UP THROUGH SLAB. REFER TO P-002 FOR INCOMING DOMESTIC WATER SERVICE ENTRANCE DETAIL.
4. 4" SANITARY DOWN AND 2" VENT UP ALONG WALL, PROVIDE CLEAN-OUT AT BASE.
5. 3" VENT THROUGH ROOF.
6. 2" COLD WATER LINE WITH SHUT-OFF VALVE FOR CONNECTION TO AUTO FILL BY POOL EQUIPMENT CONTRACTOR. SEE SHEET CP-401 FOR CONNECTION TO BACKFLOW ASSEMBLY.
7. COLD WATER PIPING DOWN TO SERVE FIXTURE.
8. 140 DEGREE HOT & COLD WATER PIPING DOWN TO SERVE FIXTURE. PROVIDE APPROVED WATER TEMPERATURE LIMITING DEVICE, SET AT 110 DEGREES THAT CONFORMS TO ASSE 1070.
9. 140 DEGREE HOT & COLD WATER PIPING DOWN IN WALL TO SERVE FIXTURE.
10. COLD WATER PIPING DOWN IN WALL, SLEEVE AND SEAL THROUGH WALL TO 30 INCHES ABOVE GRADE TO SERVE WALL HYDRANT.
11. 3" GREASE WASTE DOWN AND 1-1/2" VENT PIPING UP IN WALL.
12. PROVIDE JOSAM 60108H-RT GREASE INTERCEPTOR RECESSED IN FLOOR WITH GASKETED NON-SKID COVER OR EQUAL WITH 100 LB GREASE CAPACITY PER 2020 PLUMBING CODE OF NEW YORK STATE TABLE 1003.3.5.1.
13. NATURAL GAS SERVICE EXTENDED BELOW GRADE. SEE SITE UTILITY PLAN FOR CONTINUATION.
14. NATURAL GAS PIPING UP THROUGH GRADE TO NATURAL GAS METER. PROVIDE MAIN SHUT-OFF VALVE BEFORE REGULATOR. 4" @ 7" W.C. FROM GAS METER. SEE THIS SHEET FOR GAS METER NOTE AND SHEET P-002 FOR GAS SERVICE DETAIL.
15. 4" @ 7" W.C. NATURAL GAS PIPING SLEEVED AND SEALED THROUGH WALL. RISE UP ALONG WALL TO AS HIGH AS POSSIBLE.
16. LOW PRESSURE NATURAL GAS LINE WITH SHUT-OFF VALVE FOR CONNECTION TO POOL HEATER'S BY POOL EQUIPMENT CONTRACTOR.
17. 1-1/2" COLD WATER DOWN IN CHASE TO BELOW SLAB TO SERVE DECK HYDRANTS, REFER TO SHEET CP-106 FOR CONTINUATION.
18. 4" SANITARY SEWER PIPE UP TO DRAIN DOWN PIT, REFER TO SHEET CP-401 FOR LOCATION.
19. 2" VENT FROM TOP OF SANITARY SEWER UP ALONG WALL.

FIRST FLOOR PLUMBING PLAN

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

NOTES

A. REFER TO SHEET P-001 FOR PLUMBING FIXTURE CONNECTION SCHEDULE FOR ALL FIXTURE CONNECTION SIZES.

B. REFER TO SHEET P-002 FOR SANITARY STACK DIAGRAM FOR ALL SANITARY AND VENT SIZES.

GAS METER NOTE

LOW PRESSURE NATURAL GAS SERVING PROJECT PAYNE PARK AQUATIC FACILITY 848 PAYNE AVENUE NORTH TONAWANDA, NY 14120. GAS COMPANY TO PROVIDE GAS METER. (TOTAL CONNECTED LOAD = 3,998 CFH) (TOTAL EQUIVALENT LENGTH OF GAS PIPING = 100 FEET). (PRESSURE DROP @ 0.3 in w.c.) BASED ON THE 2018 IFGC TABLE 402.4(1).

NOTE:
ENTIRE BUILDING WILL BE VACANT DURING WINTER MONTHS AND WILL NOT BE HEATED. SLOPE DOMESTIC HOT AND COLD WATER PIPING AND PROVIDE DRAIN VALVES AT LOW POINTS IN SYSTEM, WATER HEATER TO BE DRAINED WHILE FAUCETS ARE OPENED. ANTIFREEZE IS TO BE ADDED TO ALL DRAIN TRAPS TO PREVENT DAMAGE FROM FREEZING TO FACILITATE PLUMBING SYSTEM EVACUATION.

CALCULATIONS:
THREE COMPARTMENT SINK,
BOWL SIZE 24 INCHES x 16 INCHES x 12 INCHES = 4,608 cu. in.

4,608 cu. in. x 3 bowls = 13,824 cu. in.

13,824 cu. in. / 231 = 59.8 gallons x 75% = 44.8 gallons

Total flow = 50 gallons with a grease retention capacity of 100 pounds per New York Plumbing Code 1003.3.5.1

GENERAL NOTES (PLUMBING)

A. SCHEDULE UTILITY SERVICE SHUTDOWNS REQUIRED FOR NEW CONSTRUCTION WITH OWNER AND GENERAL TRADES CONTRACTOR PRIOR TO SHUTTING DOWN SYSTEMS. GIVE ONE WEEK ADVANCE NOTICE IN WRITING.

B. CUT FLOOR, WALL, AND CEILING CONSTRUCTION FOR PENETRATIONS TO ACCOMMODATE PIPING. COORDINATE WITH GENERAL TRADES CONTRACTOR. PATCH CONSTRUCTION TO MATCH, OR TO SATISFACTION OF ARCHITECT AND OWNER.

C. COORDINATE ROUTING OF NEW PIPING WITH NEW BUILDING CONDITIONS AND WITH WORK OF OTHER TRADES. PROVIDE CHANGES IN LOCATION, DIRECTION, OFFSETS, AS MAY BE REQUIRED, WHETHER SPECIFICALLY INDICATED OR NOT, AND AT NO ADDITIONAL COST TO THE OWNER.

D. ALL WORK TO BE COMPLETED IN ACCORDANCE WITH THE LOCAL, STATE, AND FEDERAL BUILDING CODES AND AUTHORITY HAVING JURISDICTION.

E. PLUMBING WORK SHALL BE COMPLETED BY AN INDIVIDUAL OR BUSINESS THAT IS LICENSED BY THE STATE CONSTRUCTION INDUSTRY LICENSING BOARD.

F. CONTRACTOR SHALL VERIFY INVERT ELEVATIONS OF SEWERS TO WHICH NEW WASTE LINES ARE TO BE CONNECTED BEFORE STARTING WORK OR INSTALLATION OF NEW WASTE SYSTEM.

G. ALL FIXTURES SHALL BE PROVIDED WITH SHUT-OFF BALL VALVES ON SUPPLY LINES.

H. ALL PUBLIC HAND WASHING SINKS SHALL BE SUPPLIED WITH TEMPERED WATER WITH AN APPROVED TEMPERATURE LIMITING DEVICE THAT CONFORMS TO ASSE 1070.

I. NO PIPING OR EQUIPMENT SHALL BE INSTALLED ABOVE ELECTRICAL EQUIPMENT.

J. EXACT LOCATION OF PLUMBING FIXTURES SHALL BE DETERMINED FROM ARCHITECTURAL DRAWINGS.

K. ALL PLUMBING WORK IS TO RUN IN A NEAT AND PROFESSIONAL MANNER, WITH THE AESTHETICS OF THE FACILITY OF PARAMOUNT IMPORTANCE. ALL ROUGH-IN WORK TO BE HIDDEN WITHIN WALLS AND ABOVE CEILING UNLESS OTHERWISE NOTED.

L. ALL MATERIALS USED SHALL BE NEW AND UNDAMAGED.

M. FURNISH ACCESS DOORS (RATED OR NON-RATED AS REQUIRED) WHERE VALVES OR EQUIPMENT ARE CONCEALED BEHIND A NON ACCESSIBLE CEILING OR WALL. FURNISH ACCESS DOORS TO GENERAL CONTRACTOR FOR INSTALLATION.

N. FIRE SEAL OPENINGS AROUND ALL PIPING PENETRATIONS. PENETRATIONS THROUGH FIRE RATED CONSTRUCTION SHALL BE SEALED WITH LISTED FIRE RATED MATERIALS.

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FIRST FLOOR PLUMBING PLAN

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P-101

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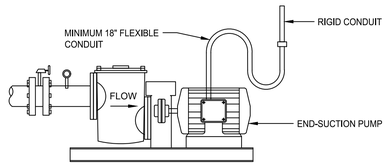
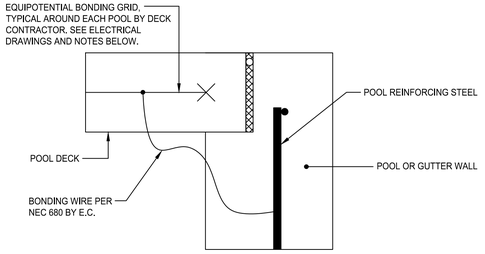


PUMP CONDUIT DETAIL

NO SCALE

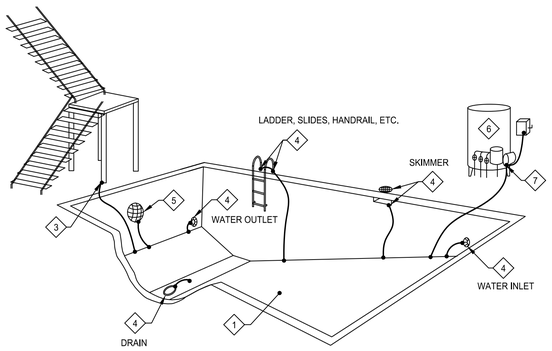


POOL GROUNDING DETAIL

NO SCALE

NOTES

1. ALL POOLS SHALL HAVE AN EQUIPOTENTIAL BONDING GRID THAT CONFORMS TO ALL NEC 680 REQUIREMENTS.
2. THIS DRAWING IS NOT INTENDED TO DETAIL THE POOL WALLS OR DECKS AND IS GENERIC IN NATURE. REFER TO ARCHITECTURAL DRAWINGS FOR POOL & DECK SECTIONS AND CONSTRUCTIONS REQUIREMENTS.
3. SEE POOL DRAWINGS FOR ADDITIONAL BONDING AND GROUNDING REQUIREMENTS.



EQUIPOTENTIAL BONDING DETAIL

SCALE: NONE

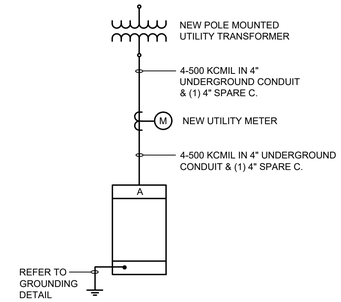
GENERAL BONDING DETAIL NOTES:

ALL PARTS SHOWN SHALL BE BONDED TOGETHER AND CONNECTED TO COMMON BONDING GRID WITH #8 AWG MINUMUM SOLID COPPER AND IN ACCORDANCE WITH NEC 680. ALL BONDING CONNECTIONS SHALL BE MADE WITH UL LISTED BRASS, COPPER, OR COPPER ALLOY CONNECTIONS OR CLAMPS. THE COMMON BONDING GRID SHALL BE ON ALL OF THE FOLLOWING:

1. THE STRUCTURE REINFORCING STEEL OF A CONCRETE POOL WHERE THE RODS ARE BONDED TOGETHER.
2. THE WALL OF A BOLTED OR WELDED METAL POOL.
3. A SOLID COPPER CONDUCTOR (INSULATED, COVERED, OR BARE), #8 AWG MINIMUM.
4. BRASS RMC OR IMC, OR OTHER IDENTIFIED CORROSION RESISTANT METAL CONDUIT.

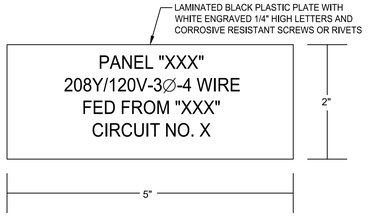
DETAIL NOTES:

1. ALL OF THE POOL STRUCTURE'S METALLIC PARTS, INCLUDING THE METAL GUTTER AND WALL OF THE POOL, COPING STONES AND POOL DECK SHALL BE BONDED.
2. METAL SHEATHED CABLES/RACEWAYS, METAL PIPING, AND ALL FIXED METAL PARTS THAT ARE NOT SEPARATED FROM THE POOL BY A PERMANENT BARRIER AND ARE LOCATED WITHIN 5' HORIZONTALLY OF THE POOL'S INSIDE WALL, AND WITHIN 12' VERTICALLY ABOVE THE POOL'S MAXIMUM WATER LEVEL SHALL BE BONDED.
3. ALL DIVING STRUCTURES, OBSERVATION STANDS, TOWERS, OR PLATFORMS NOT SEPARATED FROM THE POOL BY PERMANENT BARRIER SHALL BE BONDED,
4. ALL METAL FITTINGS WITHIN, OR ATTACHED TO, THE POOL STRUCTURE SHALL BE BONDED.
5. ALL FORMING SHELLS AND MOUNTING BRACKETS OF NO-NICHE LIGHTING FIXTURES SHALL BE BONDED, UNLESS A LISTED LOW-VOLTAGE LIGHTING SYSTEM IS USED THAT DOES NOT REQUIRE BONDING.
6. ALL METAL PARTS OF THE POOL WATER CIRCULATING SYSTEM, INCLUDING PUMP MOTORS, HEATERS, AND FILTRATION UNITES, SHALL BE BONDED. POOL EQUIPMENT MUST BE BONDED TO THE COMMON BONDING GRID REGARDLESS OF THE INTERVENING DISTANCE AND/OR LOCATION TO THE POOL. METAL PARTS OF LISTED EQUIPMENT INCORPORATING AN APPROVED SYSTEM OF DOUBLE INSULATION AND PROVIDING MEANS FOR GROUNDING INTERNAL INACCESSIBLE, NONCURRENT-CARRYING PARTS SHALL BE BONDED,
7. BONDING WIRE TERMINATES AT MOTOR GROUNDING CONNECTION AND DOES NOT HAVE TO BE EXTENDED TO ANY REMOTE PANELBOARD OR SERVICE EQUIPMENT.
8. PROVIDE BONDING REPORT BEFORE ODH FINAL INSPECTION.



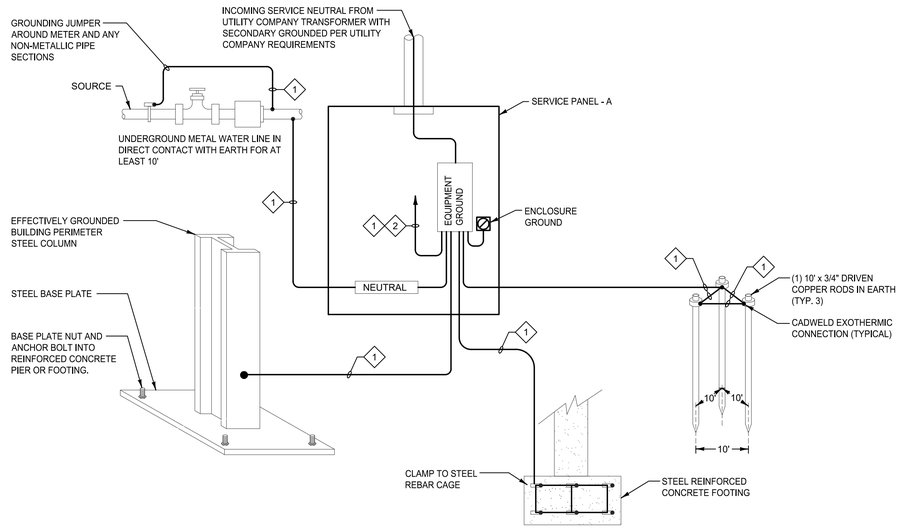
ONE LINE DIAGRAM

NO SCALE



TYPICAL PANELBOARD NAMEPLATE DETAIL

NO SCALE



SERVICE GROUNDING ELECTRODE SYSTEM WIRING DIAGRAM

NO SCALE

1. THE GROUNDING ELECTRODE CONDUCTORS SHALL BE SIZED PER TABLE 250-66 OF THE NEC. RUN CONCEALED IN AREAS OF FINISHED CONSTRUCTION, EXPOSED IN UN-FINISHED AREAS.
2. GROUND CONDUCTORS TO OTHER POINTS AND EQUIPMENT, AS REQUIRED BY NEC ARTICLE 250.

ELECTRICAL GENERAL NOTES

A. THE ELECTRICAL INSTALLATION MUST MEET OR EXCEED THE MINIMUM REQUIREMENTS OF THE LATEST EDITION OF THE NATIONAL ELECTRIC CODE AND ANY APPLICABLE STATE OR LOCAL CODES, AS INTERPRETED BY THE LOCAL AUTHORITY HAVING JURISDICTION.

B. CONFIRM THE CEILING TYPES IN ALL AREAS WITH THE GENERAL TRADES CONTRACTOR OR WITH THE EXISTING BUILDING CEILING CONDITIONS, AND FURNISH THE PROPER LIGHT FIXTURE TRIMS AND SUPPORTS TO SUIT EACH CEILING TYPE.

C. ALL LIGHTING FIXTURE LOCATIONS INDICATED ON THIS DRAWING SHALL BE SUPERSEDED BY THE ARCHITECTURAL REFLECTED CEILING PLAN FOR THE AREA. ELECTRICAL CONTRACTOR SHALL REVIEW ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS OF LIGHT FIXTURES.

D. ALL WALL MOUNTED LIGHTING FIXTURE LOCATIONS INDICATED ON THIS DRAWING SHALL HAVE THE MOUNTING HEIGHTS VERIFIED WITH THE ARCHITECT BEFORE ROUGH-IN.

E. BRANCH CIRCUIT WIRING FOR EMERGENCY LIGHTING BATTERY PACKS AND EXIT LIGHTS SHALL BE INSTALLED AND CONNECTED IN ACCORDANCE WITH ARTICLE 700 OF THE NATIONAL ELECTRICAL CODE.

F. THIS CONTRACTOR SHALL COORDINATE INSTALLATION OF AND MOUNTING OF ALL DUPLEX RECEPTACLES, TELEPHONE, DATA, OUTLETS, ETC., WITH ROOM ELEVATIONS AND ALL MILLWORK DRAWINGS BEFORE ROUGH-IN.

G. ALL EXISTING UNUSED ELECTRICAL WIRE, CONDUIT, AND EQUIPMENT SHALL BE REMOVED.

H. OPEN WIRE AND OPEN CABLES INSTALLED WITHIN THE RETURN AIR CEILING SPACE SHALL BE PLENUM RATED LETTER CODE 'P'.

I. ALL WIRE FOR POWER, LIGHTING, AND CONTROL SYSTEMS SHALL BE 600 VOLT THHN-THWN, 90 DEGREE INSULATED AND SHALL BE COPPER. ALL WIRE FOR COMMUNICATIONS SYSTEMS SHALL BE COPPER.

J. FIRE SEAL OPENINGS AROUND ALL CONDUIT PENETRATIONS. PENETRATIONS THROUGH FIRE RATED CONSTRUCTION SHALL BE SEALED WITH LISTED FIRE RATED MATERIALS.

K. ALL HOMERUN WIRING SHALL BE RUN IN EMT THIN-WALL THREADLESS CONDUIT. TYPE MC CABLE MAY BE INSTALLED CONCEALED WITHIN WALL AND CEILING SPACES FOR BRANCH CIRCUIT WIRING.

L. ALL ELECTRICAL EQUIPMENT SHALL BE U.L. LISTED OR LABELED.

M. COORDINATE THE ELECTRICAL WORK WITH ALL TRADES ON SITE AND WITH THE OWNER'S REPRESENTATIVE. REFER TO THE PLANS AND DETAILS SHOWING THE ARCHITECTURAL, STRUCTURAL, MECHANICAL, PLUMBING AND TECHNOLOGY WORK TO PROPERLY PLAN AND INSTALL THE ELECTRICAL SYSTEMS AND EQUIPMENT.

N. PROVIDE LABELS FOR NEW PANELBOARDS TO WARN OF POTENTIAL ARC FLASH HAZARDS IN ACCORDANCE WITH NEC 110.16(A).

O. PROVIDE LABEL TO INDICATE MAXIMUM AVAILABLE FAULT CURRENT AT SERVICE EQUIPMENT IN ACCORDANCE WITH NEC 110.24(A).

ELECTRICAL SYMBOLS

A 3,5	**BRANCH CIRCUIT HOMERUN TO PANEL "A", CIRCUIT #3 AND #5. PROVIDE THE PROPER QUANTITY OF 12 AWG CONDUCTORS FOR THE CIRCUIT(S) INDICATED. A SEPARATE GROUNDING CONDUCTOR IS REQUIRED FOR ALL BRANCH CIRCUITS.**
S	SINGLE POLE SWITCH - MOUNTING AT 48" A.F.F.
S3	THREE-WAY SWITCH - MOUNTING AT 48" A.F.F.
M	OCCUPANCY SENSOR SWITCH WITH OVERRIDE SWITCH - WALL MOUNTED AT 48" A.F.F. OR AS NOTED
(M)	OCCUPANCY SENSOR SWITCH - CEILING MOUNTED
A	LIGHT FIXTURE TYPE 'A'
B	LIGHT FIXTURE TYPE 'B'
C	LIGHT FIXTURE, WALL MOUNTED TYPE 'C'
	EXIT SIGN - CEILING MOUNTED, SHADING INDICATES LIGHTED FACE. ARROW INDICATES CHEVRON DIRECTION
	DUPLEX RECEPTACLE - MOUNTING AT 18" A.F.F.
	TWO DUPLEX RECEPTACLES MOUNTED IN A 2-GANG BOX AT 18" A.F.F. UNLESS OTHERWISE NOTED
36"	DUPLEX RECEPTACLE - INDICATES MOUNTING AT 36" A.F.F.
	SINGLE RECEPTACLE - MOUNTING AT 18" A.F.F. - REFER TO PLANS FOR TYPES AND RATINGS
C	DUPLEX RECEPTACLE - MOUNTING AT 6" ABOVE COUNTER
G	DUPLEX RECEPTACLE - GROUND FAULT CIRCUIT INTERRUPTER (GFCI) TYPE
T	DUPLEX RECEPTACLE - TAMPER RESISTANT TYPE
WP G	GFCI TYPE DUPLEX RECEPTACLE IN WEATHERPROOF ENCLOSURE
J	JUNCTION BOX - MOUNTING HEIGHT AND SIZE AS REQUIRED
	PANELBOARD - 0 TO 150 VOLTS TO GROUND
	PANELBOARD - 151 TO 600 VOLTS TO GROUND
	TRANSFORMER
	DATA OUTLET - MOUNTING AT 18" A.F.F.
4	PLAN NOTE TAG, REFER TO PLANS FOR DESCRIPTION
AH-3	INDICATES POWER CONNECTION TO AIR HANDLER #3-REFER TO EQUIPMENT CONNECTION SCHEDULES FOR REQUIREMENTS
60/3	ONE-LINE DIAGRAM REPRESENTATION OF A MOLDED CASE CIRCUIT BREAKER - "60/3" INDICATES 60 AMPERE CIRCUIT BREAKER RATING AND POLES
	ONE-LINE DIAGRAM REPRESENTATION OF A TRANSFORMER, SIZE AS NOTED
M	ONE-LINE DIAGRAM REPRESENTATION OF A METER
E.C.	ELECTRICAL CONTRACTOR
M.C.	MECHANICAL CONTRACTOR
P.C.	PLUMBING CONTRACTOR
A.F.F.	ABOVE FINISHED FLOOR
U.O.N.	UNLESS OTHERWISE NOTED
AS/AF/AT	AMPERE SWITCH/AMPERE FUSE/AMPERE TRIP
WP	WEATHERPROOF - NEMA 3R RATED

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CITY OF NORTH TONAWANDA, N.Y.

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Revisions:
Issue Date: 12-16-2025 ISSUED FOR BID

PAYNE PARK AQUATIC FACILITY

830 PAYNE AVENUE
NORTH TONAWANDA, NY 14120

ELECTRICAL DETAILS, SCHEDULES & NOTES

City Project No. 2023-01
BCI Project No. 23065

E-001

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Plotted

D C B A

1 2 3 4 5

MECHANICAL EQUIPMENT WIRING SCHEDULE

"DC"= DIRECT CONNECT
"VFD"= VARIABLE FREQUENCY DRIVE

COMBINATION STARTER AND FUSED DISCONNECT | FUSED DISCONNECT | NON-FUSED DISCONNECT | S SWITCH | J JUNCTION BOX

ITEM NO.	EQUIPMENT	HP	KW	MCA	FLA	VOLTS	ϕ	CONNECTION BY EC	PANEL / CKT.NO.	CIRC BKR AMPS	CIRC BKR POLES	WIRING AND CONDUIT	NOTES
EF-1	EXHAUST FAN - RESTROOMS & JC	1/2	1.2	-	9.8	120	1	①④	A / 33	20	1	2-12 AWG & 1-12 AWG GND - 3/4" C.	
EF-2	EXHAUST FAN	1/4	0.7	-	5.8	120	1	①②	A / 35	15	1	2-12 AWG & 1-12 AWG GND - 3/4" C.	
EF-3	EXHAUST FAN	1/2	1.2	-	9.8	120	1	①③④	A / 37	20	1	2-12 AWG & 1-12 AWG GND - 3/4" C.	
EWH-1	ELECTRIC WATER HEATER	-	10.0	-	27.8	208	3	30A	A / 43,45,47	40	3	3-8 AWG & 1-10 AWG GND - 3/4" C.	
EWH-2	ELECTRIC WATER HEATER	-	10.0	-	27.8	208	3	30A	A / 49,51,53	40	3	3-8 AWG & 1-10 AWG GND - 3/4" C.	
RP-1	RECIRC PUMP	-	0.041	-	1	120	1	ⓟ	A / 22	20	1	2-12 AWG & 1-12 AWG GND - 3/4" C.	
SF-1	SUPPLY FAN	1/2	1.2	-	9.8	120	1	①④⑤	A / 39	20	1	2-12 AWG & 1-12 AWG GND - 3/4" C.	
SF-2	SUPPLY FAN	1/2	1.2	-	9.8	120	1	①④⑥	A / 41	20	1	2-12 AWG & 1-12 AWG GND - 3/4" C.	
SP-1	SUBMERSIBLE PUMP	3/10	0.9	-	7.2	120	1	S	A / 65	20	1	2-12 AWG & 1-12 AWG GND - 3/4" C.	

SCHEDULE NOTES

1. WIRE THRU FAN SPEED CONTROLLER FURNISHED BY M.C., INSTALLED BY E.C.
2. PROVIDE AND WIRE THRU TIMECLOCK FOR CONTROL.
3. E.C. TO PROVIDE AND WIRE THRU REMOTE ON/OFF SWITCH - COORDINATE LOCATION WITH M.C.
4. PROVIDE AND WIRE THRU SINGLE PHASE MOTOR STARTER - FRANKLIN SYSTEMS BAS-1P.
5. INTERLOCK OPERATION WITH EF-1.
6. INTERLOCK OPERATION WITH EF-3.

CIRCUIT BREAKER PANEL SCHEDULE

PANEL A AMP 400 VOLTAGE 208/120V-3Ø-4W

INTERRUPTING CAPACITY 25,000 SPACES 84 AMPS RMS SYM 25,000 MAIN 400/3 MOUNTING SURFACE

LOAD DESCRIPTION	CONTINUOUS LOAD ØA	CONTINUOUS LOAD ØB	CONTINUOUS LOAD ØC	NON-CONTINUOUS LOAD (80%) ØA	NON-CONTINUOUS LOAD (80%) ØB	NON-CONTINUOUS LOAD (80%) ØC	RECEPTACLE LOAD ØA	RECEPTACLE LOAD ØB	RECEPTACLE LOAD ØC	C/B FRAME	CKT NO.	Ø	CKT NO.	C/B FRAME	RECEPTACLE LOAD ØA	RECEPTACLE LOAD ØB	RECEPTACLE LOAD ØC	NON-CONTINUOUS LOAD (80%) ØA	NON-CONTINUOUS LOAD (80%) ØB	NON-CONTINUOUS LOAD (80%) ØC	CONTINUOUS LOAD ØA	CONTINUOUS LOAD ØB	CONTINUOUS LOAD ØC	LOAD DESCRIPTION
CONC. POS STATION				0.7						20/1	1	A	2	20/1	0.7									CASHIER LOUNGE REC
CONC. POS STATION					0.7					20/1	3	B	4	20/1		0.7								110,100,101,111 REC
CONC. HAND DRYER						1.5				20/1	5	C	6	20/1				1.5						WMN HAND DRYER
CONC. ICE MACHINE				1.5						20/1	7	A	8	20/1					1.5					113 HAND DRYER
CONC. COOLER					1.0					20/1	9	B	10	20/1						1.5				114 HAND DRYER
CONC. MICROWAVE						1.5				20/1	11	C	12	20/1							0.5			EWC
NACHO CHEESE				1.0						20/1	13	A	14	20/1	0.7									111,113,114,115 REC
NACHO CHIP					1.0					20/1	15	B	16	20/1						1.5				MENS HAND DRYER
ICE CREAM MACHINE						1.5				20/1	17	C	18	20/1							1.5			117 HAND DRYER
POPCORN MACHINE				1.0						20/1	19	A	20	20/1					1.5					118 HAND DRYER
STOR. MEC. EXT REC									0.5	20/1	21	B	22	20/1	0.7									117,118,119, EXT REC
GUARDS REC									0.4	20/1	23	C	24	20/1		1.0								POOL EQ. STOR REC
GUARDS DISPOSAL				1.5						20/1	25	A	26	20/1							1.3			INTERIOR LTG
GUARDS REFRIG					1.0					20/1	27	B	28	20/1								1.4		INTERIOR LTG
GUARDS,STOR,101 REC									0.9	20/1	29	C	30	20/1							0.6			ROLLING DOORS
SITE LTG	1.2									20/1	31	A	32							5.8				LAP POOL RECIRCULATION PUMP
EF-1					1.2					20/1	33	B	34	90/3						5.8				
EF-2						0.7				15/1	35	C	36								5.8			
EF-3				1.2						20/1	37	A	38							2.1				ACTIVITY POOL FEATURE PUMP
SF-1					1.2					20/1	39	B	40	35/3						2.1				
SF-2						1.2				20/1	41	C	42								2.1			
EWH-1				3.3						43	A	44								7.5				ACTIVITY POOL RECIRCULATION PUMP
					3.3					40/3	45	B	46	100/3						7.5				
						3.3					47	C	48								7.5			
EWH-2				3.3						49	A	50								3.0				FAMILY SLIDE PUMP
					3.3					40/3	51	B	52	50/3						3.0				
						3.3					53	C	54								3.0			
POOL HEATER				2.2						25/1	55	A	56							7.5				WATER SLIDE PUMP
POOL HEATER RECIRC					2.0					25/1	57	B	58	100/3						7.5				
POOL HEATER						2.2				25/1	59	C	60								7.5			
POOL HEATER RECIRC				2.0						25/1	61	A	62	20/1						1.2				LAP CTRL PANEL
M.O.D.S					0.3					20/1	63	B	64	20/1						1.8				CHLORINE CNTL PNL
SP-1						0.9				20/1	65	C	66	20/1							1.8			ACID CONTROL PNL
SUMP PUMP				0.9						20/1	67	A	68	20/1						1.8				ACID CONTROL PNL
SPARE										20/1	69	B	70	20/1						1.8				CHLORINE CNTL PNL
SPARE										20/1	71	C	72	20/1							1.2			ACTIVITY CTRL PANEL
ACTIVITY POOL UV SYSTEM				2.9						73	A	74	20/1							1.2				FILTER
					2.9					40/3	75	B	76	20/1						1.2				FILTER
						2.9					77	C	78	20/1										SPARE
LAP POOL UV SYSTEM				1.8						79	A	80	20/1											SPARE
					1.8					30/3	81	B	82	20/1										SPARE
						1.8					83	C	84	20/1										SPARE
	1.2			23.3	19.7	20.9		0.5	1.3	KW	SUB-TOTALS	KW			1.4	1.4	1.0	33.1	33.7	33.0	1.3	1.4		

CONNECTED LOAD PER PHASE

PHASE A	60.4	KWC
	503.2	AMPS
PHASE B	56.8	KWC
	473.5	AMPS
PHASE C	56.1	KWC
	467.8	AMPS

TOTAL CONNECTED LOAD	173.3	KWC
	481.2	AMPS
TOTAL DEMAND LOAD	140.6	KWD
	390.3	AMPS

SCHEDULE REMARKS:

PANEL TO BE SERVICE ENTRANCE RATED.

PROVIDE GFCI C/B'S FOR CIRCUITS # 32,34,36, 38,40,42, 44,46,48, 50,52,54, 55, 56,58,60, 57, 59, 61, 73,75,77, & 79,81,83.

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CITY OF NORTH TONAWANDA, N.Y.

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ELECTRICAL DETAILS, SCHEDULES & NOTES

City Project No. 2023-01
BCI Project No. 23065

E-002

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SECTION 260000 - ELECTRICAL SPECIFICATIONS

PART 1 GENERAL

1.1 PROVIDE ALL LABOR AND MATERIAL FOR ALL SYSTEMS AS INDICATED ON THE DRAWINGS AND SPECIFIED HEREIN, OR REASONABLY IMPLIED, TESTED AND READY FOR USE BY THE OWNER.

1.2 REFER TO THE ARCHITECTURAL, STRUCTURAL, MECHANICAL AND OTHER CONTRACT DOCUMENTS FOR THE PROJECT. ELECTRICAL WORK AND/OR COORDINATION ITEMS INDICATED ON THESE DOCUMENTS ARE A PART OF THE ELECTRICAL SCOPE OF WORK.

1.3 DISCREPANCIES BETWEEN EACH DIVISION'S DOCUMENTS OR BETWEEN THE DOCUMENTS AND THE EXISTING BUILDING OR SITE CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE BEFORE SUBMITTING A BID.

1.4 THE ELECTRICAL SCOPE OF WORK INCLUDES, BUT IS NOT LIMITED TO THE FOLLOWING EQUIPMENT OR SYSTEMS:

A. LIGHTING AND LIGHTING CONTROLS
B. WIRING DEVICES
C. POWER DISTRIBUTION EQUIPMENT
D. BRANCH CIRCUIT PANELBOARDS
E. UTILITY SERVICE INSTALLATION DRAWINGS
F. TELE-COMMUNICATIONS CONDUIT SYSTEM
G. GROUNDING AND GROUNDING SYSTEMS
H. NEW POWER AND COMMUNICATIONS UTILITY SERVICES.
I. CONNECTIONS AND POWER CIRCUITS FOR EQUIPMENT PROVIDED UNDER ANOTHER DIVISION, OR BY THE OWNER.

1.5 SUBMITTALS, OR SHOP DRAWINGS ARE REQUIRED FOR THE FOLLOWING EQUIPMENT OR SYSTEMS:

A. LIGHTING AND LIGHTING CONTROLS
B. WIRING DEVICES
C. POWER DISTRIBUTION EQUIPMENT
D. BRANCH CIRCUIT PANELBOARDS
E. UTILITY SERVICE INSTALLATION DRAWINGS
F. PROVIDE SUBMITTALS ONLY FOR EQUIPMENT LISTED ABOVE. ALL SUBMITTALS MUST BE REVIEWED FOR PROPER CONTENT AND ACCURACY BY THE CONTRACTOR BEFORE SUBMISSION TO THE ENGINEER.
G. SUBMITTALS SHALL BE REVIEWED ONLY FOR GENERAL COMPLIANCE AND NOT FOR DIMENSIONS, QUANTITIES, ETC. THE SUBMITTALS THAT ARE RETURNED SHALL BE USED FOR PROCUREMENT. THE RESPONSIBILITY OF CORRECT PROCUREMENT REMAINS SOLELY WITH THE CONTRACTOR. THE SUBMITTAL REVIEW SHALL NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR ERRORS OR OMISSIONS AND DEVIATIONS FROM THE CONTRACT REQUIREMENTS. ELECTRONIC COPIES ARE REQUIRED. REFER TO DIVISION 1 FOR EXACT QUANTITIES AND OTHER SUBMITTAL REQUIREMENTS.

1.6 RECORD DRAWINGS AND OPERATION AND MAINTENANCE MANUALS ARE REQUIRED TO BE SUBMITTED TO THE OWNER'S REPRESENTATIVE AND APPROVED BEFORE A FINAL CONTRACT PAY REQUEST. RECORD DRAWINGS INCLUDE A CLEAN SET OF CONTRACT DRAWINGS IDENTIFYING CHANGES OR DEVIATIONS MADE TO THE ORIGINAL DESIGN AND MUST INCLUDE FEEDER ROUTINGS. OPERATION AND MAINTENANCE MANUALS (3 SETS) SHALL INCLUDE A COPY OF ALL APPROVED SUBMITTALS, EQUIPMENT MAINTENANCE INSTRUCTIONS, TEST REPORTS, INSPECTION REPORTS, EQUIPMENT WARRANTIES, AND THE CONTRACTORS' ONE-YEAR GUARANTEE ON EQUIPMENT AND LABOR. REFER TO DIVISION 1 FOR EXACT QUANTITIES AND OTHER SUBMITTAL REQUIREMENTS.

1.7 OBTAIN AND PAY FOR LOCAL PERMITS, LICENSES, AND INSPECTION FEES NECESSARY FOR THE WORK. PERMANENT AND TEMPORARY UTILITY SERVICE INSTALLATION CHARGES ARE NOT INCLUDED IN THE BASE-BID WORK; SUCH CHARGES ARE INCLUDED AS AN ALLOWANCE OF $10,000 IN THE CONTRACT. THE UN-USED PORTION OF THIS ALLOWANCE SHALL BE RETURNED TO THE OWNER AT THE COMPLETION OF THE PROJECT. THIS CONTRACTOR IS RESPONSIBLE FOR CONTACTS WITH UTILITY COMPANIES, AND FOR ARRANGEMENT OF WORK ORDERS.

1.8 TEMPORARY POWER AND LIGHTING SHALL BE PROVIDED TO OSHA REQUIREMENTS FOR THE CONSTRUCTION PERIOD. TEMPORARY UTILITY POWER AND TELEPHONE SERVICES WILL BE BROUGHT TO THE SITE UNDER THIS CONTRACT, BUT THE OWNER WILL PAY FOR RELATED MONTHLY CHARGES.

1.9 SUBMISSION OF A BID ASSUMES KNOWLEDGE OF ALL DOCUMENTS AVAILABLE RELATED TO THE WORK, AS WELL AS EXISTING CONDITIONS MADE AVAILABLE FOR REVIEW AND INSPECTION DURING THE BIDDING (2ND) PERIOD. THIS CONTRACTOR SHALL INFORM THE OWNER'S REPRESENTATIVE OF ANY UNKNOWN AND/OR CONCEALED CONDITIONS AFFECTING THE NEW WORK, AS THEY ARE DISCOVERED.

1.10 WHEREVER THE WORD "PROVIDE" IS USED, IT SHALL MEAN: FURNISHED AND INSTALLED BY THE ELECTRICAL CONTRACTOR.

1.11 THE ELECTRIC SERVICE, THE ELECTRICAL DISTRIBUTION SYSTEM AND ALL NON-CURRENT CARRYING METAL PARTS OF THE ELECTRICAL SYSTEM SHALL BE GROUNDED IN ACCORDANCE WITH ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE, AND ALL OTHER APPLICABLE CODES AND STANDARDS. ALL BRANCH CIRCUITS AND FEEDERS SHALL BE GROUNDED BY MEANS OF AN INSULATED GROUNDING CONDUCTOR INSTALLED WITHIN EACH RACEWAY. THE ENTIRE GROUNDING SYSTEM SHALL BE TESTED FOR CONTINUITY AT THE COMPLETION OF THE WORK.

1.12 THE NEW MATERIAL AND LABOR SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR FROM THE ACCEPTANCE BY THE OWNERS' REPRESENTATIVE. NOTE THAT CERTAIN SPECIFIED ITEMS OF EQUIPMENT MAY CARRY A LONGER PERIOD OF WARRANTEE.

1.13 PROVIDE A PERMANENT NAMEPLATE OR PLAQUE TO IDENTIFY THE MAXIMUM FAULT CURRENT AMPERES AVAILABLE AT THE MAIN SERVICE DISCONNECTING MEANS, IN ACCORDANCE WITH NATIONAL ELECTRICAL CODE ARTICLE 110.

PART 2 PRODUCTS

2.1 ALL MATERIAL, EQUIPMENT INSTALLATION AND LABOR SHALL BE IN ACCORDANCE WITH THE LATEST APPLICABLE NATIONAL, STATE AND LOCAL CODES AND NFPA PUBLICATIONS, AS INTERPRETED BY THE AUTHORITY HAVING JURISDICTION. THIS CONTRACTOR MUST ADHERE TO PROPER INSTALLATION TECHNIQUES IN ACCORDANCE WITH INDUSTRY STANDARDS AS DEFINED BY ANSI AND NECA. IN ADDITION, OSHA REQUIREMENTS AND ANY SITE-SPECIFIC SAFETY STANDARDS SHALL BE FOLLOWED FOR SAFETY OF PERSONNEL ON SITE. NEW EQUIPMENT SHALL BE UL AND/OR CSA LISTED.

2.2 WIRING DEVICES SHALL BE "SPECIFICATION GRADE", AND SHALL BE OF ONE MANUFACTURER, WITH MATCHING PLASTIC PLATES. HUBBELL DEVICES ARE LISTED; LEVITON AND PASS & SEYMOUR DEVICES WITH EQUAL SPECIFICATIONS MAY BE SUPPLIED. IVORY DEVICES AND PLATES SHALL BE PROVIDED, UNLESS OTHERWISE REQUESTED. THE OWNERS' REPRESENTATIVE WILL CONFIRM COLORS OF DEVICES AND PLATES DURING THE SUBMITTAL APPROVAL PROCESS. UNLESS NOTED OTHERWISE, STANDARD DEVICES SHALL BE:

A. LIGHT SWITCHES: 120/277 VOLT, QUIET TYPE, HUBBELL #1221 (SINGLE POLE), #1223 (THREE-WAY) AND #1224 (FOUR-WAY).
B. LIGHTING DIMMERS: LUTRON "NOVA T-STAR" SERIES ONLY, SLIDE-TO-OFF FEATURE, WITH VOLTAGE, RATINGS AND TYPE TO SUIT THE APPLICATION AND WIRING AS INDICATED ON THE PLANS. USE MATCHING LUTRON "ON-OFF" SWITCHES WITH A COMMON COVER PLATE IF SHOWN ADJACENT TO DIMMER CONTROLS.
C. GENERAL PURPOSE RECEPTACLES: 125 VOLT, 20 AMPERE, 2-POLE, 3-WIRE, DUPLEX TYPE, NEMA 5-20R, HUBBELL #5362.
D. GFCI RECEPTACLES: 125 VOLT, 20 AMPERE, 2-POLE, 3-WIRE DUPLEX TYPE, NEMA 5-20R, HUBBELL #GFR-5362, SELF-TESTING AND FEED-THRU TYPE CAPABLE OF PROTECTING DOWNSTREAM CIRCUIT DEVICES.
E. EXTERIOR RECEPTACLES: PROVIDE A GFCI RECEPTACLE WITH A TAYMAC #MX4380S, METAL EXTRA DUTY "IN-USE" COVER AND HORIZONTAL MOUNTED BOX.
F. OTHER SPECIAL PURPOSE DEVICES MAY BE SPECIFIED ON THE PLANS. THESE INCLUDE FLOOR OUTLETS AND SURFACE RACEWAY SYSTEMS.
G. LINE-VOLTAGE WALL OCCUPANCY SENSORS: WATTSTOPPER #DW-100 SERIES, DUAL TECHNOLOGY, 120/277 VOLT, 800W/1200W RATED, WITH ON/OFF BUTTON. SENSOR SWITCH TYPE WSD-PDT IS CONSIDERED AN EQUIVALENT.
H. LINE-VOLTAGE CEILING OCCUPANCY SENSORS: WATTSTOPPER #DT-355 SERIES, DUAL TECHNOLOGY, 120/277 VOLT, 800W/1200W RATED, WITH 360° COVERAGE. SENSOR SWITCH TYPE CMR-PDT-9 IS CONSIDERED AN EQUIVALENT.
I. LOW-VOLTAGE CEILING OCCUPANCY SENSORS: WATTSTOPPER #DT-300-U, DUAL TECHNOLOGY, 24VDC/VAC, 43MA, WITH 360° STANDARD COVERAGE. PROVIDE EACH SENSOR WITH A #BZ-150-U UNIVERSAL VOLTAGE (POWER PACK) RELAY. SENSOR SWITCH TYPE CM-PDT-9 WITH #PP-20 IS CONSIDERED AN EQUIVALENT.
J. WIRING DEVICES SHALL BE PROVIDED WITH A GROUNDED WIRE CONNECTED TO THE DEVICE AND/OR THE OUTLET BOX.

2.3 ALL WIRING SHALL BE COPPER, 90 DEGREE C. RATED, TYPE THHN, THWN OR XHHW, WITH 600-VOLT INSULATION UNLESS INDICATED OTHERWISE ON THE DRAWINGS. THE MINIMUM WIRE SIZE IS #12 FOR 120-VOLT BRANCH CIRCUITS; #10 SHALL BE USED FOR CIRCUIT LENGTHS GREATER THAN 150 FEET.

A. FOR NEW DISTRIBUTION SYSTEMS, COLOR CODE BRANCH CIRCUIT AND FEEDER CONDUCTORS AS FOLLOWS:
1. 208Y/120 VOLT, 3 PHASE, 4 WIRE SYSTEM
A. PHASE A-BLACK
B. PHASE B-RED
C. PHASE C-BLUE
D. NEUTRAL-WHITE
E. GROUND-GREEN
2. IN ADDITION TO THESE REQUIREMENTS, ALSO PROVIDE COLOR CODING OF CONDUCTORS AT ALL JUNCTION OR PULLBOXES.

2.4 ALL WIRING SHALL BE INSTALLED IN CONDUIT, AS PERMITTED BY THE NATIONAL ELECTRICAL CODE. AT THE CONTRACTOR'S OPTION, AND AS PERMITTED BY THE NATIONAL ELECTRICAL CODE, TYPE MC CABLE, OR A MANUFACTURED WIRING SYSTEM MAY BE USED FOR 20 AMPERE AND 30 AMPERE BRANCH CIRCUITS IN STUD WALLS AND ABOVE ACCESSIBLE LAY-IN CEILINGS IN LIEU OF CONDUIT AND WIRE. HOMERUNS TO PANELS SHALL BE IN CONDUIT. PVC CONDUIT MAY BE USED FOR EXTERIOR UNDERGROUND CIRCUITS AND FOR INTERIOR CIRCUITS AND FEEDERS LOCATED UNDER THE GROUND FLOOR SLAB. FLEXIBLE CONDUIT SHALL BE USED FOR CONNECTIONS TO MOTORS, EQUIPMENT, TRANSFORMERS, LIGHTING FIXTURES, AND FOR BRANCH CIRCUIT WIRING INSTALLED IN CASEWORK. EXPOSED CONDUIT IN HIGH TRAFFIC AREAS SHALL BE RIGID GALVANIZED OR IMC, FROM THE FLOOR TO A LEVEL OF 8'-0" ABOVE THE FLOOR.

2.5 LIGHTING FIXTURES AND ASSOCIATED DRIVERS, AND LIGHTING CONTROLS SHALL BE AS INDICATED ON THE DRAWINGS, COMPLETE WITH PROPER LEDS, ACCESSORIES AND SUPPORTS AS RECOMMENDED BY THE MANUFACTURER AND IN ACCORDANCE WITH NATIONAL ELECTRICAL CODE, ARTICLES 410 AND 411, OR ANY LOCAL CODES THAT MAY APPLY.

A. ADJUSTABLE FIXTURES SHALL BE AIMED UNDER THE DIRECTION OF THE OWNER'S REPRESENTATIVE.
B. IMMEDIATELY PRECEDING THE FINAL INSPECTION, THIS CONTRACTOR SHALL THOROUGHLY CLEAN ALL FIXTURES OF DUST, DIRT, GREASE, FINGERMARKS, ETC. ALL FIXTURES SHALL BE OPERATING AT THE TIME OF OWNER'S ACCEPTANCE.

2.6 PANELBOARDS, TRANSFORMERS, DISCONNECTS, AND OTHER POWER DISTRIBUTION EQUIPMENT SHALL BE PROVIDED FROM ONE MANUFACTURER WHEREVER POSSIBLE. APPROVED MANUFACTURERS ARE SQUARE D, GENERAL ELECTRIC, SIEMENS/ITE OR CUTLER HAMMER. CIRCUIT BREAKERS SHALL BE BOLT-ON TYPE, UNLESS INDICATED OTHERWISE ON THE DRAWINGS, WITH INTERRUPTING RATINGS EQUAL TO OR GREATER THAN FAULT CURRENTS AVAILABLE AT THE POINT OF SERVICE, 10 KAIC MINIMUM FOR 208Y/120 VOLT SYSTEMS. OTHER CIRCUIT BREAKER RATINGS SUCH AS HACR, HID, SWD, GFCI AND SHUNT-TRIP FEATURES SHALL BE PROVIDED WHERE REQUIRED BY CODE OR AS INDICATED ON THE DRAWINGS. BALANCE THE LOAD ON EACH PANEL AND DISTRIBUTION SYSTEM INSTALLED.

A. BRANCH CIRCUIT PANELS SHALL BE FLUSH OR SURFACE MOUNTED AS INDICATED, LOCKABLE AND KEYED ALIKE, AND SHALL HAVE A DOOR-IN-DOOR COVER.
B. BUSSING FOR PANELBOARDS SHALL BE TIN PLATED ALUMINUM.

2.7 FUSIBLE AND NON-FUSED DISCONNECT SWITCHES SHALL BE HEAVY DUTY WITH QUICK MAKE/ QUICK BREAK OPERATION, WITH A NEMA 1 RATING (INTERIOR) OR NEMA 3R RATING (EXTERIOR) UNLESS OTHERWISE NOTED OR REQUIRED BY CODE. PROVIDE DIFFERENT ENCLOSURES IF NEEDED, BASED ON THE CONDITIONS AFFECTING THE EQUIPMENT. FUSES SHALL BE DUAL ELEMENT- TIME DELAY, BUSSMAN TYPE LPN-RK (250 VOLT) OR TYPE LPS-RK (600 VOLT) FOR 600 AMPERES AND BELOW, AND BUSSMAN TYPE KRP-C ABOVE 600 AMPERES. EQUIVALENT FUSES BY FERRAZ-SHAWMUT OR LITTELFUSE ARE ACCEPTABLE.

2.8 NAMEPLATES SHALL BE PROVIDED FOR IDENTIFICATION OF ALL POWER DISTRIBUTION EQUIPMENT AND SHALL BE ENGRAVED PHENOLIC WITH WHITE LETTERING AND BLACK BACKGROUND, UNLESS DIRECTED OTHERWISE BY THE OWNER'S REPRESENTATIVE. PANELBOARD BRANCH CIRCUITS SHALL BE IDENTIFIED WITH TYPEWRITTEN DIRECTORIES.

A. SPARE CIRCUIT BREAKERS SHALL BE IDENTIFIED AS SUCH AND SHALL BE LEFT IN THE "OFF" POSITION AT THE CONCLUSION OF THE WORK.

2.9 MOTOR STARTERS SHALL BE COMBINATION TYPE WITH MOTOR CIRCUIT PROTECTOR, RUNNING PILOT LIGHT, H-O-A SELECTOR SWITCH, ELECTRONIC OVERLOAD RELAYS, 120 VOLT FUSED CONTROL TRANSFORMER, NEMA 1 ENCLOSURE AND OTHER AUXILIARY CONTACTS AND COMPONENTS NEEDED FOR PROPER MOTOR CONTROL. THE DIVISION 23 SPECIFICATIONS WILL INDICATE THE REQUIREMENTS OF EACH MOTOR STARTER BASED UPON THE CONTROL SEQUENCE – FRANKLIN CONTROL SYSTEMS, MODEL BAS OR EQUAL BY SQUARE D, ABB, OR EATON.

2.10 SINGLE PHASE MANUAL MOTOR STARTERS SHALL BE SURFACE MOUNTED, ELECTRONIC TYPE WITH HAND-OFF-AUTO SWITCH, LOCKING HARDWARE, PILOT LIGHT AND (1) AUXILIARY CONTACT FOR BAS OR INTERLOCK CONTROL – FRANKLIN CONTROL SYSTEMS, MODEL BAS-1P OR EQUAL BY SQUARE D, ABB, OR EATON.

2.11 THE OWNER'S TELECOMMUNICATIONS SYSTEM FACEPLATES, WIRING, EQUIPMENT RACKS AND "HEAD-END" EQUIPMENT IS FURNISHED AND INSTALLED UNDER ANOTHER CONTRACT WITH THE OWNER. THE ELECTRICAL CONTRACTOR SHALL PROVIDE:

A. 120- OR 208-VOLT POWER CIRCUITS AND ASSOCIATED RECEPTACLES AS SHOWN ON THE PLANS.
B. 4 11/16" SQUARE FLUSH OUTLET BOXES WITH SINGLE-GANG PLASTER RING AT DEVICE LOCATIONS, AND A BLANK COVER PLATE FOR ALL BOXES WITHOUT FACEPLATES. PROVIDE EACH BOX WITH A 1" EMT CONDUIT, STUBBED UP TO AN ACCESSIBLE LOCATION: 12" MINIMUM ABOVE LAY-IN GRID CEILINGS OR UP TO THE STRUCTURAL DECK IN EXPOSED CEILING AREAS.
C. PROVIDE 3/4" THICK FIRE RETARDANT PAINTED PLYWOOD BACKBOARDS AS LOCATED ON THE PLANS.
D. PROVIDE A 12"L X 2"H COPPER GROUND BAR AT EACH PLYWOOD BACKBOARD, AND A #6 COPPER GROUND CONDUCTOR CONNECTED TO THE BUILDING GROUNDING ELECTRODE SYSTEM.
E. CONDUITS, BOXES AND OTHER RACEWAYS SHALL BE INSTALLED TO SUPPORT THE OWNERS' TELECOMMUNICATIONS CABLING SYSTEM. IT IS THE RESPONSIBILITY OF THE OWNERS' REPRESENTATIVE TO PROVIDE THE CONTRACTOR WITH THE EXACT CONDUIT REQUIREMENTS FOR THESE SYSTEMS BEFORE ROUGH-IN WORK BEGINS.

PART 3 EXECUTION

3.1 COORDINATE THE ELECTRICAL WORK WITH ALL OTHER TRADES ON SITE, INCLUDING CORE DRILL LOCATIONS AND FEEDER ROUTINGS. PROVIDE LAYOUT DRAWINGS FOR ELECTRICAL DISTRIBUTION ROOMS AND CLOSETS AND SUBMIT COPIES TO THE OWNER'S REPRESENTATIVE FOR REVIEW AND APPROVAL BEFORE ROUGHING-IN CONDUITS AND EQUIPMENT.

3.2 CUTTING AND PATCHING OF WALLS, FLOORS AND CEILINGS SHALL BE PROVIDED BY SKILLED MECHANICS IN THE TRADE. FINAL FINISHING AND PAINTING IS BY THE GENERAL TRADES CONTRACTOR.

3.3 IT IS THE PURPOSE OF THE CONTRACT DOCUMENTS TO INDICATE THE APPROXIMATE LOCATIONS OF ALL EQUIPMENT, OUTLETS, ETC. THE EXACT LOCATION OF EQUIPMENT AND OUTLETS MAY BE ADJUSTED FROM TIME TO TIME AS THE WORK PROGRESSES. THIS CONTRACTOR SHALL CONFIRM THE EXACT LOCATIONS AND ARRANGE THE WORK ACCORDINGLY. THE OWNER'S REPRESENTATIVE RESERVES THE RIGHT TO EFFECT REASONABLE CHANGES IN THE LOCATION OF OUTLETS UP TO THE TIME OF ROUGH-IN WITHOUT ADDITIONAL COST. ALL GFCI RECEPTACLES SHALL BE INSTALLED IN A READILY ACCESSIBLE LOCATION, VISIBLE FOR TESTING AND INSPECTION.

3.4 SERVE AND CONNECT ALL ELECTRICAL EQUIPMENT FURNISHED BY OTHER DIVISIONS OR OWNER. COORDINATE ALL OUTLET LOCATIONS AND CONNECTION REQUIREMENTS WITH THE CONTRACTOR FURNISHING THE EQUIPMENT. BEFORE CONNECTING ANY PIECE OF EQUIPMENT, CHECK THE NAMEPLATE RATING AGAINST THE INFORMATION SHOWN ON THE CONTRACT DOCUMENTS AND CALL ANY DISCREPANCIES TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE. CAREFULLY STUDY ALL MANUFACTURERS' EQUIPMENT WIRING DIAGRAMS AND MAKE CONNECTIONS ACCORDINGLY.

3.5 LOCATE AND PROVIDE ALL OPENINGS IN FLOORS, CEILINGS, AND WALLS TO ALLOW FOR CONDUIT PENETRATIONS.

A. SUBMIT TO THE OWNER'S REPRESENTATIVE ALL LOCATIONS AND SIZES OF OPENINGS WHICH MUST BE PROVIDED FOR THE WORK BEFORE DRILLING OR SETTING ANY SLEEVES.
B. FINAL LOCATIONS AND SIZES OF ALL OPENINGS SHALL BE SUBJECT TO THE OWNER'S REPRESENTATIVE FINAL APPROVAL.
C. PROVIDE ALL FIRE STOPS AND SMOKE AND FIRE BARRIERS AROUND ALL CONDUIT PENETRATIONS PROVIDED UNDER THIS WORK. ALL FIRE BARRIERS SHALL BE UL LISTED AND RECOGNIZED SUITABLE BY FACTORY MUTUAL AND NFPA. FIRE BARRIERS SHALL RESTORE ALL PENETRATIONS TO BE AT LEAST THE MINIMUM FIRE RATING OF THE SURFACE PENETRATED. BARRIERS SHALL COMPLETELY FILL THE OPENINGS AND SHALL BE SECURELY ANCHORED TO PREVENT ACCIDENTAL REMOVAL. ALL SMOKE AND FIRE BARRIERS SHALL BE MADE USING ONLY RECOGNIZED MATERIALS AND WILL BE ACCEPTABLE SUBJECT TO THE OWNER'S REPRESENTATIVE FINAL APPROVAL. SMOKE AND FIRE BARRIERS MAY BE STI FIRE SEAL, DUPONT, OR US GYPSUM.
D. SEAL EXTERNAL WALL PENETRATIONS WHERE CONDUIT PASSES FROM A COLDER AREA TO A WARMER AREA.

3.6 MOUNTING HEIGHTS OF DEVICES ARE AS INDICATED ON THE PLANS, OR AS SHOWN ON THE ARCHITECTURAL INTERIOR ELEVATIONS. OUTLET BOXES FOR DEVICES SHALL NOT BE MOUNTED BACK-TO-BACK IN STUD WALL CONSTRUCTION. ADJACENT DEVICES SHALL BE INSTALLED IN GANGED BOXES WITH COMMON COVER PLATES WHEREVER POSSIBLE. UNLESS OTHERWISE NOTED, RECEPTACLES SHALL BE MOUNTED VERTICALLY, WITH THE GROUND PIN ABOVE THE PHASE AND NEUTRAL PIN.

3.7 ALL BOXES AND CONDUITS SHALL BE CONCEALED IN FINISHED AREAS OF NEW CONSTRUCTION. CONDUIT SYSTEMS SHALL BE SUPPORTED FROM THE STRUCTURE, INDEPENDENT OF DUCTWORK AND OTHER TRADES. HANGERS, STRAPS AND CLAMPS SHALL BE APPROVED FOR THE PURPOSE. JUNCTION BOXES, OUTLET BOXES AND PULL BOXES SHALL BE LOCATED IN ACCESSIBLE AREAS AND SHALL BE PERMANENTLY MARKED ACCORDING TO THE CIRCUIT OR SYSTEM SERVED.

3.8 SUSPENDED CEILING SYSTEMS, INCLUDING THE ASSOCIATED SUPPORT WIRES, SHALL NOT BE USED FOR CONDUIT SUPPORT. CONDUITS SHALL NOT INTERFERE WITH CEILING TILE INSTALLATION OR REMOVAL AND SHALL NOT REST ON OR BE ATTACHED TO THE T-BARS OF THE SYSTEM.

3.9 RENOVATION WORK MAY REQUIRE THE INSTALLATION OF SURFACE MOUNTED CONDUIT OR SURFACE RACEWAYS WHERE CONCEALING CONDUIT IS NOT POSSIBLE. THE ROUTING AND LOCATION OF SUCH RACEWAYS SHALL BE APPROVED BY THE OWNERS' REPRESENTATIVE.

3.10 PROVIDE THE PROPER CONNECTION AND/OR DISCONNECT AND OVER-CURRENT PROTECTION FOR OWNER AND DIVISION 15 EQUIPMENT, BASED UPON THE CONTRACT DOCUMENTS. VERIFY THIS INFORMATION WITH THE UNIT NAMEPLATE OR FIELD WIRING SCHEMATIC BEFORE ROUGH IN.

3.11 ELECTRICAL EQUIPMENT SHALL BE STORED IN A HEATED AND VENTILATED SPACE UNTIL READY FOR DELIVERY TO THE FINISHED EQUIPMENT SPACE ON THE SITE.

3.12 FOR FEEDERS AND EQUIPMENT CIRCUITS 40 AMPERE RATED AND ABOVE, THE INTENT OF THE DESIGN IS TO INSTALL A MAXIMUM OF THREE (3) CURRENT-CARRYING CONDUCTORS IN A SINGLE CONDUIT (RACEWAY), UTILIZING THE FULL CONDUCTOR AMPACITIES ALLOWED AND DEFINED IN THE NATIONAL ELECTRICAL CODE ARTICLE 310. COMBINING OF FOUR (4) OR MORE CURRENT-CARRYING CONDUCTORS IN A SINGLE RACEWAY MUST BE REVIEWED AND APPROVED BY THE OWNER'S REPRESENTATIVE.

3.13 UNLESS SPECIFICALLY REQUESTED BY THE OWNER'S REPRESENTATIVE, CEILING AND WALL MOUNTED OCCUPANCY SENSORS SHALL BE SET WITH DEFAULT TIMES, AS FOLLOWS:
A. PRIVATE OFFICES – 10 MINUTES
B. STORAGE AREAS – 5 MINUTES
C. MULTIPLE PERSON WORK AREAS – 30 MINUTES
D. PUBLIC RESTROOMS – 30 MINUTES
E. HALLWAYS, CORRIDORS – 30 MINUTES
F. ALL OTHER SPACES – 10 MINUTES

3.14 CEILING MOUNTED OCCUPANCY SENSORS SHALL BE POSITIONED AND ADJUSTED BY THE CONTRACTOR TO ELIMINATE NUISANCE OPERATION OF THE CIRCUIT FROM HVAC DIFFUSERS OR MOVEMENT OUTSIDE THE CONTROLLED AREA OR ROOM.

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CITY OF NORTH TONAWANDA, N.Y.

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Revisions:
Issue Date: 12-16-2025 ISSUED FOR BID

PAYNE PARK
AQUATIC FACILITY

830 PAYNE AVENUE
NORTH TONAWANDA, NY 14120

ELECTRICAL
SPECIFICATIONS

City Project No.
2023-01

BCI Project No.
23065

E-003

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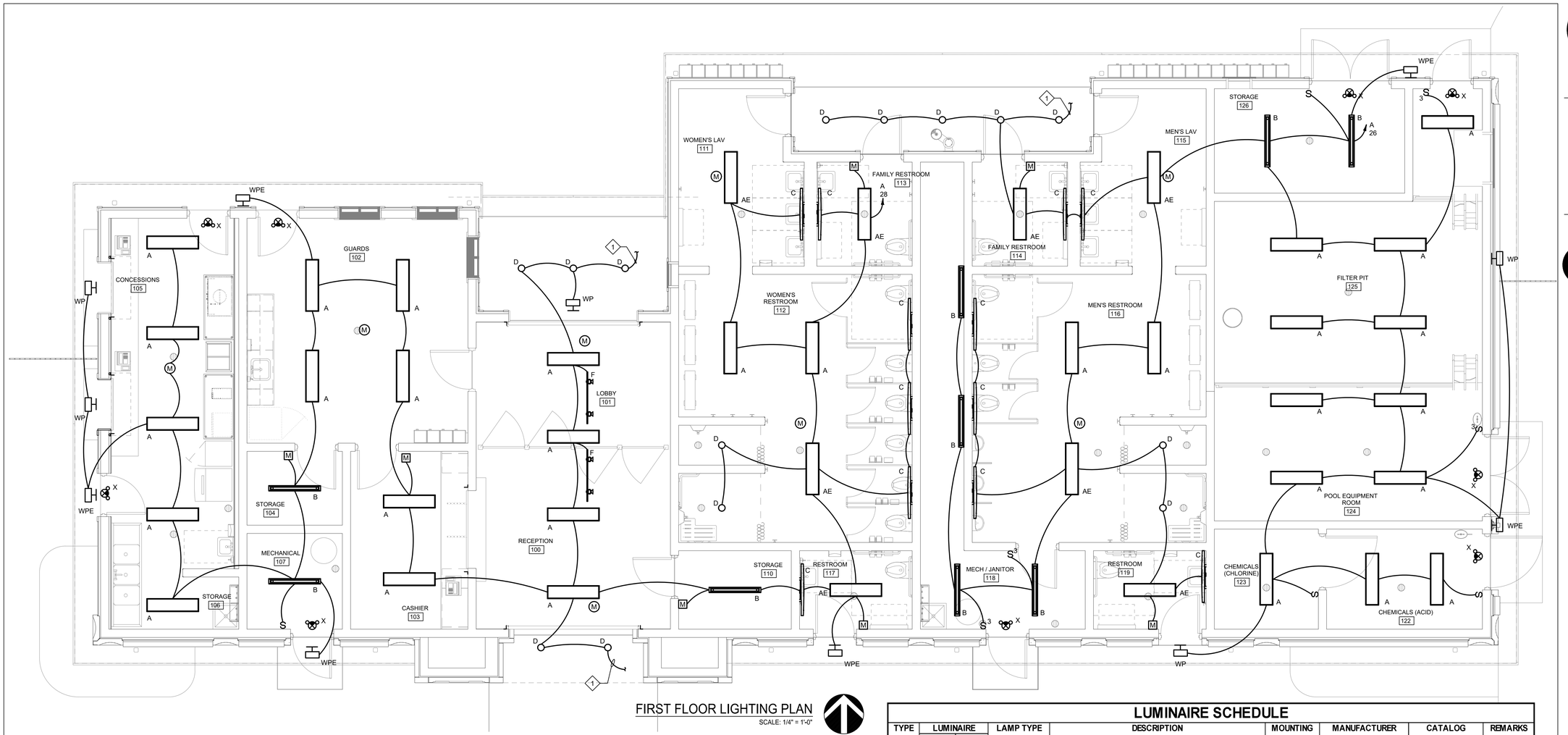

FIRST FLOOR LIGHTING PLAN

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

PLAN NOTES

1. PROVIDE AND WIRE THRU A COMMON (2) CIRCUIT ASTRONOMICAL TIMECLOCK FOR CONTROL OF ALL TYPE D FIXTURES.

LUMINAIRE SCHEDULE

TYPE	LUMINAIRE WATTS	LUMINAIRE VOLTS	LAMP TYPE	DESCRIPTION	MOUNTING	MANUFACTURER	CATALOG NUMBER	REMARKS
A	53	120	3500K LED 4,800 LUMENS	1' X 4' ENCLOSED, VANDAL RESISTANT, AND NATATORIUM RATED	SURFACE / CEILING	CERTOLUX	VRSE-3556-48-LED8-35K-048L-UNV-O64	
AE	53	120	3500K LED 4,200 LUMENS	SAME AS TYPE A, BUT WITH EMERGENCY BATTERY BACKUP	SURFACE / CEILING	CERTOLUX	VRSE-3556-48-LED8-35K-048L-UNV-O64-N39	
B	31	120	3500K LED 3,850 LUMENS	4' STRIP LIGHT WITH SWITCHABLE WATTAGE AND COLOR TEMPERATURE	SURFACE / CEILING	DAY-BRITE	SDS-4-2448L-8CST-UNV-DIM	
C	26	120	3500K LED 2,700 LUMENS	4' LINEAR LED WITH OPAL POLYCARBONATE LENS AND WHITE FINISH	WALL MOUNTED AT 6' 10" A.F.F.	LCD	VSB4-1W27-35/80-VARDM-OP-WH-PH	
D	15	120	3500K LED 1,000 LUMENS	7" ROUND DOWNLIGHT WITH WET LOCATION LISTING	SURFACE	LIGHTOLIER	S7R-8-35K-10-W-Z10U	
F	18	120	3500K LED 860 LUMENS PER HEAD	4' LONG WET LOCATION LISTED TRACK WITH (2) HEADS	SURFACE	BOVER	OUTRACK -4'-120V WITH (2) SPOTLIGHT TRACK HEADS	
WP	25	120	4000K LED 3,000 LUMENS	LED WALL PACK	SURFACE / WALL	STONCO	ASW25-SC2-G1-8-PCB-BW	
WPE	25	120	4000K LED 3,000 LUMENS	SAME AS TYPE WP BUT PROVIDE WITH REMOTE EMERGENCY BATTERY PACK MOUNTED INSIDE BUILDING	SURFACE / WALL	STONCO	ASW25-SC2-G1-8-PCB-BW	
SA	91	120	4000K LED 15,000 LUMENS	TYPE 4 WIDE AREA LIGHT ON 20' TALL SQUARE POLE	POLE	GARDCO	OPF-S-A04-740-T4W-AR1-UNV-BL50-L2-BZ	
SA2	182	120	4000K LED 15,000 LUMENS	SAME AS TYPE SA WITH (2) HEADS	POLE	GARDCO	(2) OPF-S-A04-740-T4W-AR1-UNV-BL50-L2-BZ	
X	3	120	LED	EXIT SIGN WITH RED LETTERS, INTEGRAL HEADS, AND BATTERY BACKUP	SURFACE	NICOR	ECL1-10-UNV-WH-R-2	

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FIRST FLOOR LIGHTING PLAN

City Project No.
2023-01

BCI Project No.
23065

E-101

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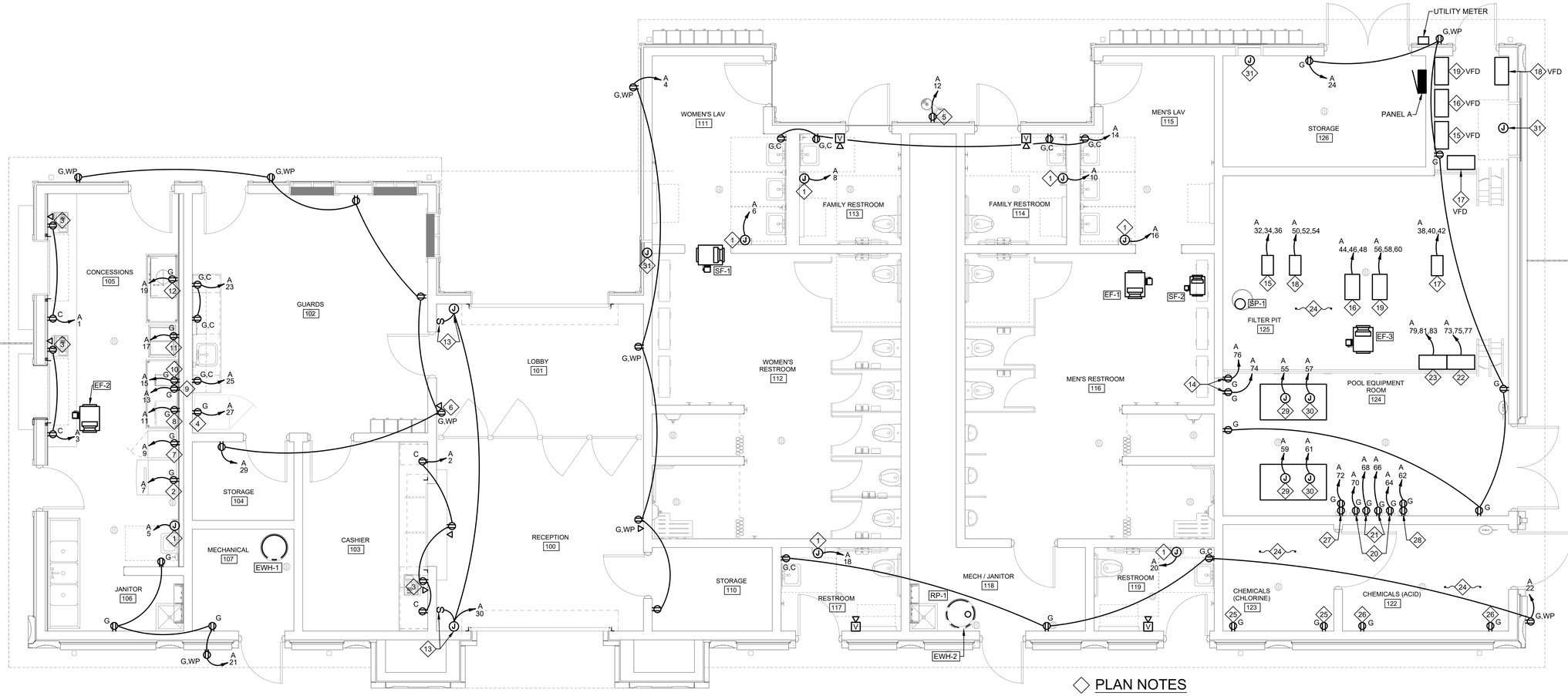

PLAN NOTES

1. HAND DRYER - 120V, 1.5KW ASSUMED.
2. ICE MACHINE - 120V, 0.5KW ASSUMED. WIRE TO DEDICATED GFCI RATED CIRCUIT BREAKER INDICATED. MOUNT AT 48" A.F.F.
3. POINT-OF-SALE STATION - 120V, 0.5KW ASSUMED. MOUNT DEVICES 6" ABOVE COUNTER.
4. REFRIGERATOR - 120V, 1.0KW ASSUMED. WIRE TO DEDICATED GFCI RATED CIRCUIT BREAKER INDICATED. MOUNT AT 48" A.F.F.
5. ELECTRIC WATER COOLER - 120V, 0.5KW ASSUMED. WIRE TO DEDICATED GFCI RATED CIRCUIT BREAKER INDICATED.
6. TV - 120 V, 0.3 KW MOUNT AT 84" A.F.F.
7. GLASS–DOOR COOLER - 120V, 1.0KW ASSUMED. WIRE TO DEDICATED GFCI CIRCUIT BREAKER AS INDICATED. MOUNT AT 48" A.F.F.
8. MICROWAVE -120V, 1.5KW ASSUMED. WIRE TO DEDICATED GFCI RATED CIRCUIT BREAKER AS INDICATED. MOUNT AT 6" ABOVE COUNTER.
9. NACHO CHEESE WARMER - 120V, 1.0KW ASSUMED. WIRE TO DEDICATED GFCI RATED CIRCUIT BREAKER AS INDICATED. MOUNT AT 6" ABOVE COUNTER.
10. NACHO CHIP WARMER - 120V, 1.0 KW ASSUMED. WIRE TO DEDICATED GFCI RATED CIRCUIT BREAKER AS INDICATED. MOUNT AT 6" ABOVE COUNTER.
11. ICE CREAM MACHINE - 120 V, 1.5 KW ASSUMED. WIRE TO DEDICATED GFCI RATED CIRCUIT BREAKER AS INDICATED. MOUNT AT 48" A.F.F.
12. POPCORN MACHINE - 120 V, 1.0KW ASSUMED. WIRE TO DEDICATED GFCI RATED CIRCUIT BREAKER AS INDICATED. MOUNT AT 6" ABOVE COUNTER.
13. ROLLING DOOR - 120V, 0.3KW. WIRE TO SWITCH PROVIDED WITH EQUIPMENT IN LOCATION AS SHOWN.
14. FILTER CONTROLLER - 120V, 1.2KW.
15. LAP POOL RECIRCULATION PUMP - 208V, 3PH, 15HP. E.C. TO WIRE THRU VFD PROVIDED WITH EQUIPMENT. WIRING TO BE 3-2 AWG & 1-8 AWG GND – 1 1/4" C.
16. ACTIVITY POOL RECIRCULATION PUMP - 208V, 3PH, 20HP. E.C. TO WIRE THRU VFD PROVIDED WITH EQUIPMENT. WIRING TO BE 3-2 AWG & 1-8 AWG GND – 1 1/4" C.
17. ACTIVITY POOL FEATURE PUMP - 208V, 3PH, 5HP. E.C. TO WIRE THRU VFD PROVIDED WITH EQUIPMENT. WIRING TO BE 3-8 AWG & 1-10 AWG GND – 3/4" C.
18. FAMILY SLIDE PUMP - 208V, 3PH, 7.5HP. E.C. TO WIRE THRU VFD PROVIDED WITH EQUIPMENT. WIRING TO BE 3-6 AWG & 1-10 AWG GND – 3/4" C.
19. WATER SLIDE PUMP - 208V, 3PH, 20HP. E.C. TO WIRE THRU VFD PROVIDED WITH EQUIPMENT. WIRING TO BE 3-2 AWG & 1-8 AWG GND – 1 1/4" C.
20. CHLORINE ROOM CONTROL PANEL - 120V, 1.8KW.
21. ACID ROOM CONTROL PANEL - 120V, 1.8KW.
22. ACTIVITY POOL UV SYSTEM – 208V, 3PH, 8.6KW. WIRING TO BE 3-8 AWG & 1-10 AWG GND – 3/4" C.
23. LAP POOL UV SYSTEM - 208V, 3PH, 5.4KW. WIRING TO BE 3-10 AWG & 1-10 AWG GND – 3/4" C.
24. ALL RECEPTACLES IN POOL EQUIPMENT ROOMS TO BE GFCI. CONFIRM LOCATIONS OF ALL POOL EQUIPMENT WITH MANUFACTURER BEFORE ROUGH-IN. PROVIDE BONDING AND GROUNDING FOR NEW POOLS AND ASSOCIATED EQUIPMENT. REFER TO THE POOL BONDING AND GROUND DETAILS.
25. WIRE RECEPTACLE TO ASSOCIATED ACID ROOM CONTROL PANEL.
26. WIRE RECEPTACLE TO ASSOCIATED CHLORINE CONTROL PANEL.
27. ACTIVITY POOL CONTROL PANEL - 120V, 1.2KW.
28. LAP POOL CONTROL PANEL - 120V, 1.2KW.
29. POOL HEATER - 120V, 2.2KW.
30. POOL HEATER RECIRC PUMP - 120V, 2.0KW.
31. MOTOR OPERATED DAMPER - 120V, 0.1KW. PROVIDE AND WIRE THRU SWITCH WITH PILOT LIGHT AND CIRCUIT TO PANEL A / 63.

FIRST FLOOR POWER AND COMMUNICATIONS PLAN

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

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CITY OF NORTH TONAWANDA, N.Y.

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Revisions:
Issue Date: 12-16-2025 ISSUED FOR BID

PAYNE PARK AQUATIC FACILITY

830 PAYNE AVENUE
NORTH TONAWANDA, NY 14120

FIRST FLOOR POWER AND COMM PLAN

City Project No. 2023-01
BCI Project No. 23065

E-102

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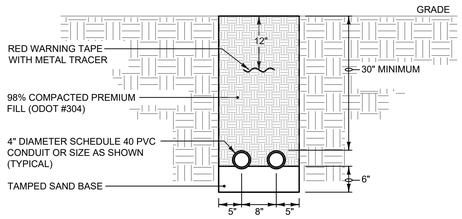
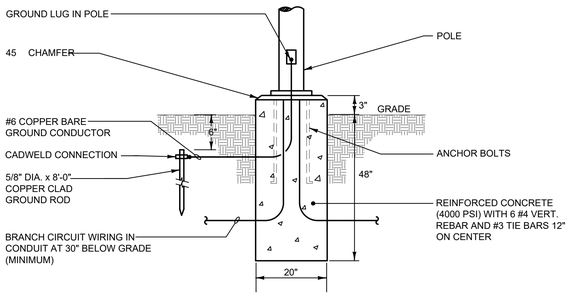
Plotted



UNDERGROUND CONDUIT DETAIL - NON ENCASED

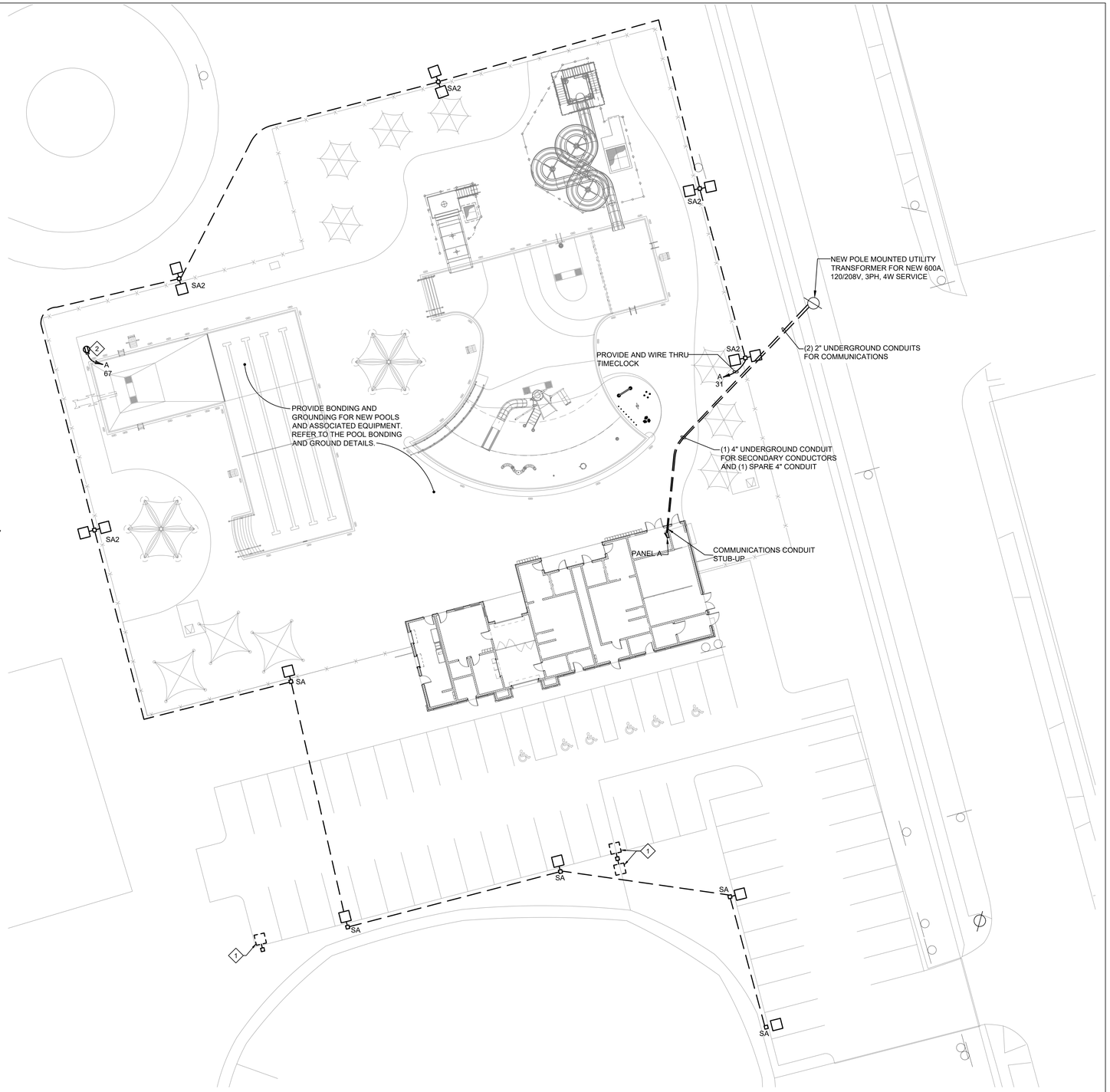
NO SCALE



LIGHTING POLE BASE DETAIL

NO SCALE

NOTE: POSITION EDGE OF BASE AT 12" MINIMUM FROM ADJACENT SIDEWALK.



ELECTRICAL SITE PLAN

SCALE: 1" = 20'-0"

NOTE : ALL SITE LIGHTING WILL BE ALTERNATE C

PLAN NOTES

1. REMOVE EXISTING COBRA HEAD LIGHTS. COORDINATE WITH UTILITY COMPANY.
2. SUMP PUMP - 120V, 3/10 HP. WIRE TO 20A GFCI RATED CIRCUIT BREAKER INDICATED. CONFIRM POWER REQUIREMENTS AND CONNECTION TYPE WITH PUMP BEFORE ROUGH-IN.

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ELECTRICAL SITE PLAN

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E-103

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