

CHEMKA POOL STORM DAMAGE 2021 RECOVERY

CHEMKA POOL PARK

MARCH 2022

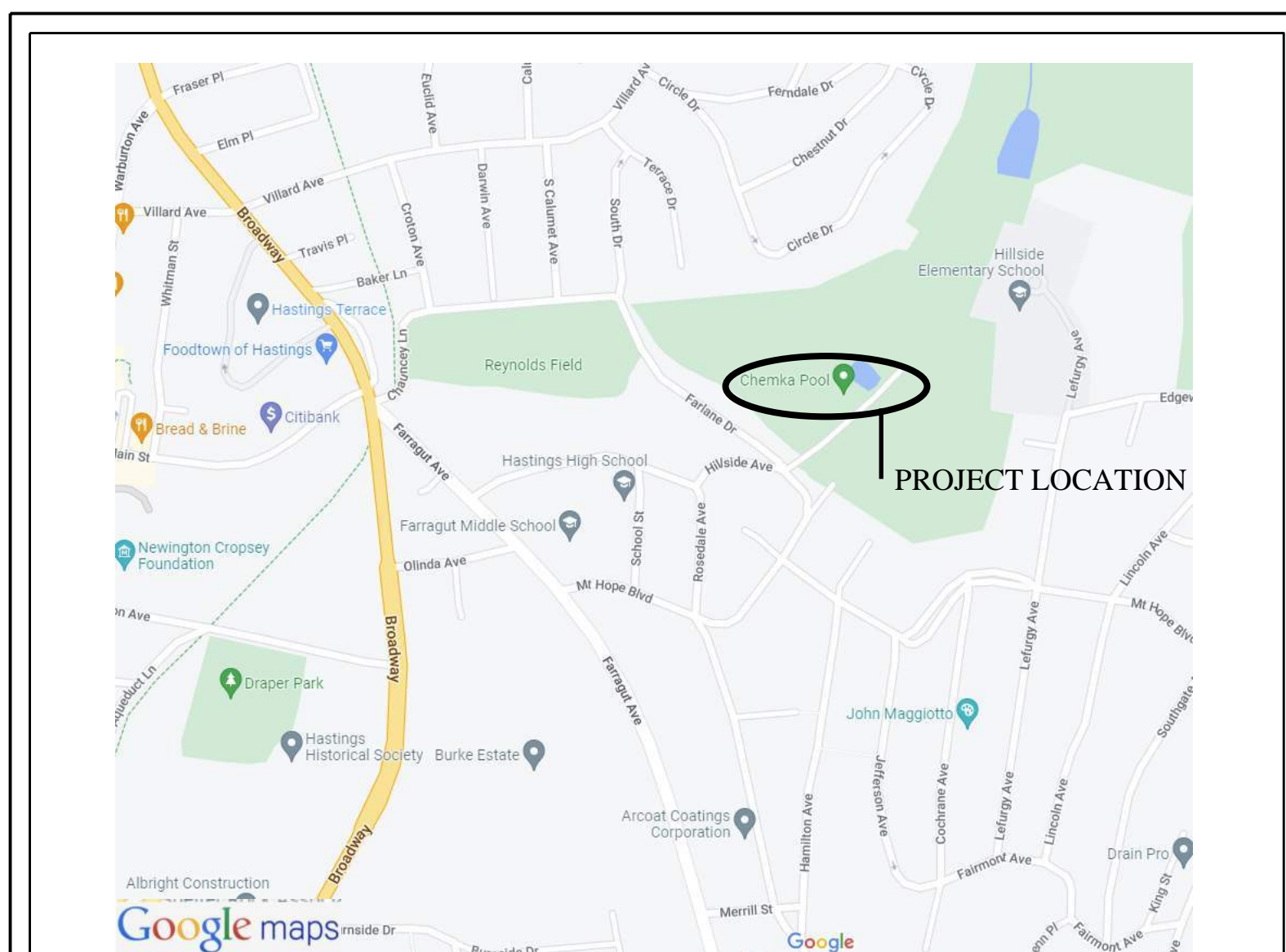
OWNER

VILLAGE ON HASTINGS
DEPARTMENT OF PARKS AND RECREATION
HASTINGS ON HUDSON, NEW YORK 10706

ENGINEER

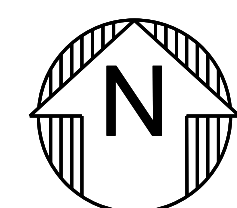
RIMKUNAS ENGINEERING, P.L.L.C.
AQUATIC ENGINEERING AND CONSTRUCTION MANAGEMENT
44 ELM STREET, SUITE 10
HUNTINGTON, NY 11743
631-470-6115

D.O.H. APPROVAL



PROJECT LOCATION: CHEMKA POOL PARK
HILLSIDE AVENUE
HASTINGS ON HUDSON, NY 10706

LOCATION PLAN
N.T.S.

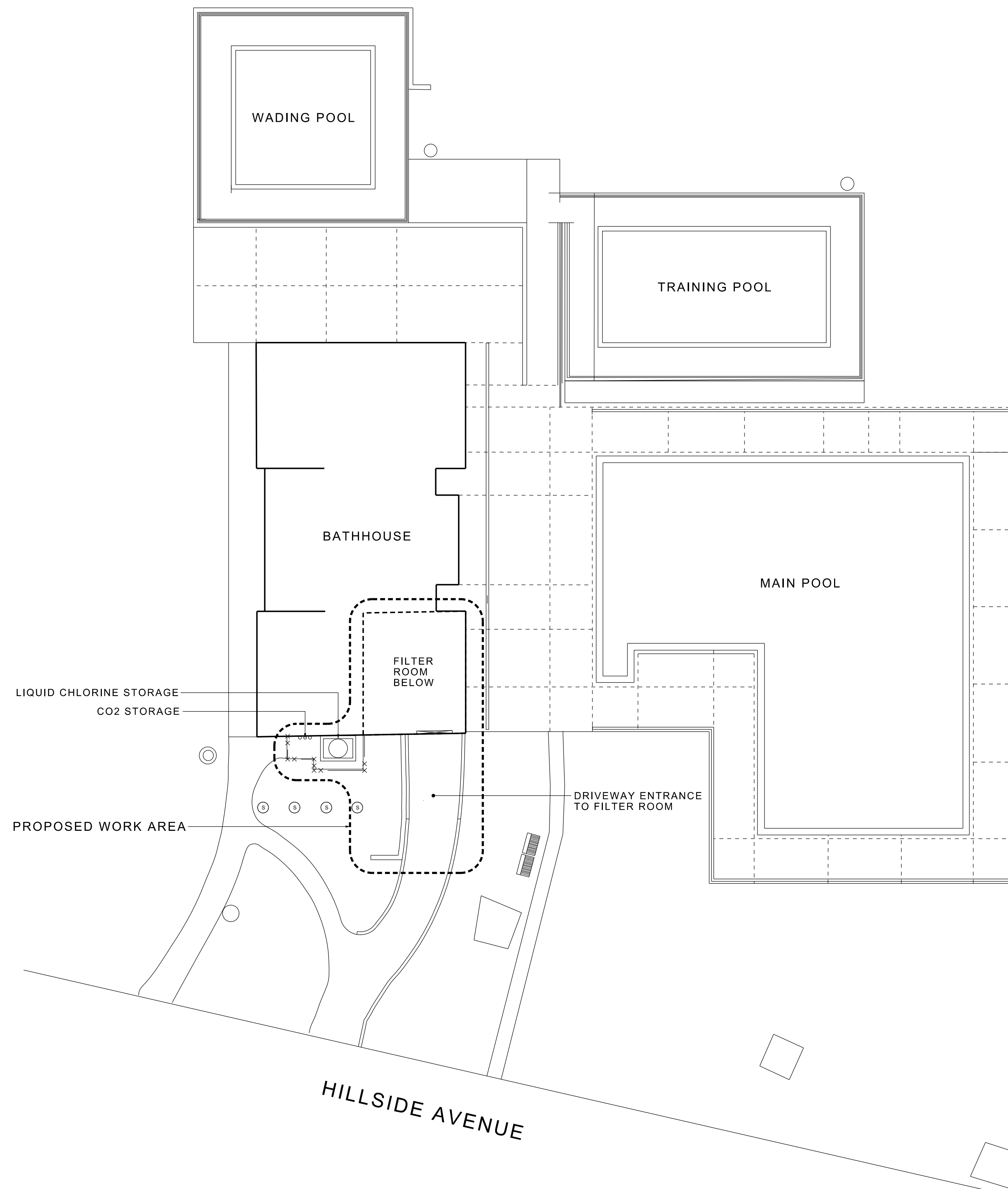


NOTE:
AUTHORIZED PROFESSIONAL ENGINEER
WILL CERTIFY THAT CONSTRUCTION
IS COMPLETED IN ACCORDANCE
WITH APPROVED DRAWINGS.

It is a violation of Section 7209 of the New York State Education Law for any person, unless he is acting under the direction of a licensed professional engineer, to alter any item on this drawing in any way. If the drawing is altered under the direction of a professional engineer, the altering engineer shall affix his seal to the drawing with the notation "altered by" followed by his signature, the date of alteration, and a specific description of the alteration.

SHEET INDEX

| SERIES | DWG. NO. | CONTENTS |
|-----------------------|----------|---|
| GENERAL | - | TITLE SHEET |
| | G-01 | SITE LOCATION |
| SWIMMING POOL | SP-01 | FILTER ROOM EQUIPMENT DEMOLITION PLAN |
| | SP-02 | FILTER ROOM EQUIPMENT PROPOSED PLAN |
| | SP-03 | RECIRCULATION EQUIPMENT DETAILS |
| | SP-04 | SWIMMING POOL NOTES AND CALCULATIONS |
| | SP-05 | SWIMMING POOL EQUIPMENT LIST |
| ELECTRIC | E-01 | ELECTRICAL SPECIFICATIONS |
| | E-02 | ELECTRICAL DEMOLITION AND PROPOSED PLAN |
| | E-03 | ELECTRICAL ONE LINE DIAGRAM, PANELS, LIGHTING |
| | E-04 | POOL CHEMICAL CONTROL DIAGRAMS |
| | E-05 | CHEMICAL BULK STORAGE ALARM SYSTEM |
| CHEMICAL BULK STORAGE | CBS-1 | TRANSFER PAD SITE DEMOLITION |
| | CBS-2 | TRANSFER PAD SITE PROPOSED |
| REFERENCE DRAWINGS | SP-1 | EXISTING MAIN POOL HYDRAULIC SCHEMATIC |
| | SP-2 | EXISTING WADING POOL HYDRAULIC SCHEMATIC |
| | SP-3 | EXISTING TRAINING POOL HYDRAULIC SCHEMATIC |
| | ES-1 | ELECTRICAL SITE PLAN POWER AND LIGHTING |




PROJECT ENGINEER:
Rimkunas Engineering, P.L.L.C.
 Aquatic Engineering & Construction Management
 Rimkunas Engineering, P.L.L.C.
 44 Elm Street, 10th Huntington • New York • 11743
 631.470.6115

It is a violation of Section 7209 of the New York State Education Law for any person, unless he is acting under the direction of a licensed professional engineer, to alter any item on this drawing in any way. If the drawing is altered under the direction of a professional engineer, the altering engineer shall affix his seal to the drawing with the notation "altered by" followed by his signature, the date of alteration, and a specific description of the alteration.

| NO. | REVISIONS | DATE |
|-----|-----------|------|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

OWNER:
VILLAGE OF HASTINGS-ON-HUDSON



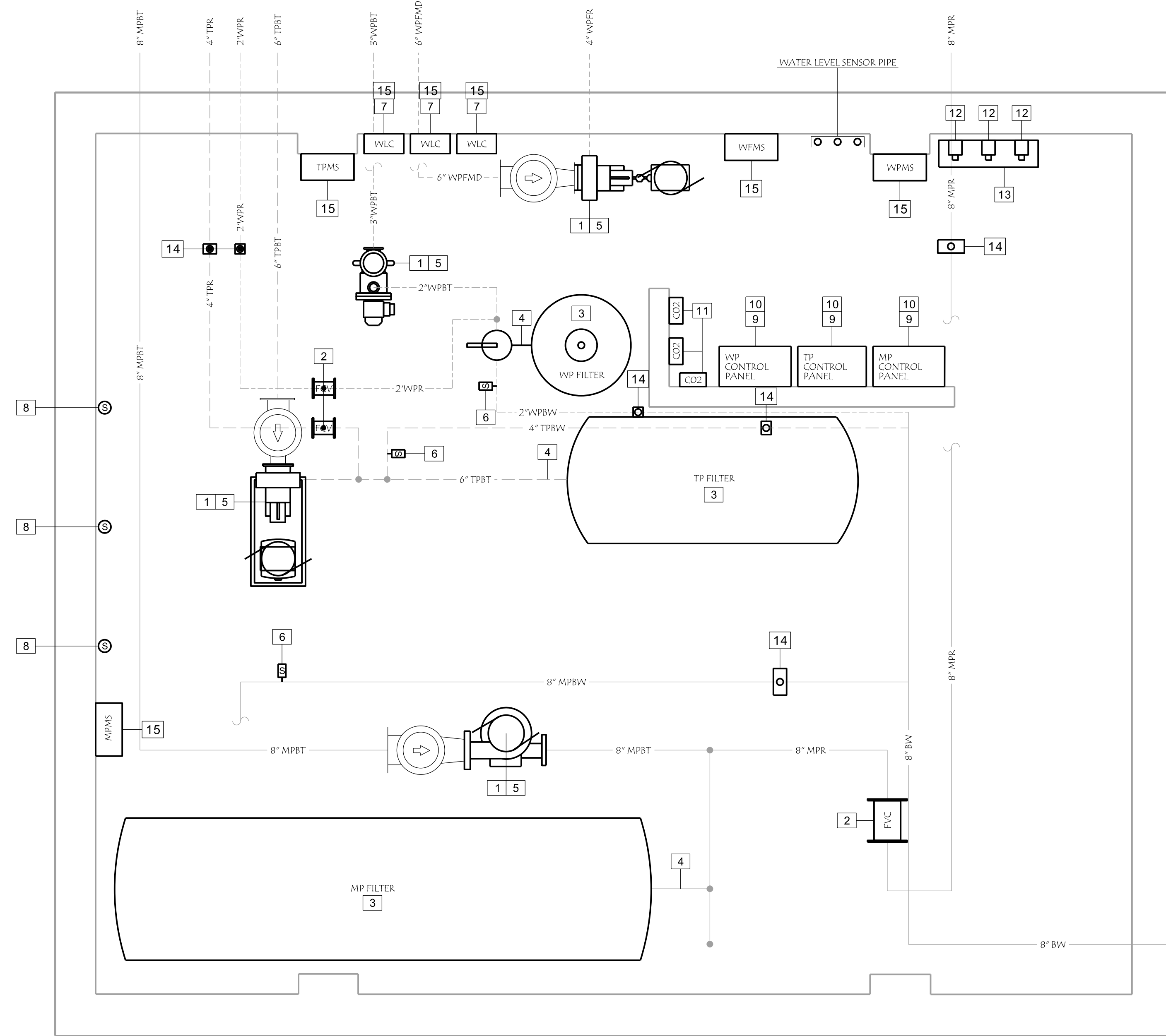
DEPARTMENT OF PARKS AND RECREATIONS

PROJECT:
CHEMKA POOL STORM DAMAGE 2021 RECOVERY

DRAWING TITLE:
SITE LOCATION PLAN

SCALE:
SCALE: 1" = 16'-0"

| | |
|---------------------|----------------------------|
| DRAWN BY: BC | |
| CHECKED BY: SR | |
| FILE NO. - | DRAWING NO. G-01 |
| PROJECT NO. 1148 | |
| DATE: 03/23/2022 | |



LEGEND

| | | |
|-------|-------------------------|---------------|
| — | MP | MAIN POOL |
| - - - | TP | TRAINING POOL |
| ----- | WP | WADING POOL |
| ----- | WF | WATER FEATURE |
| LLC | LIQUID LEVEL CONTROL | |
| WL | WATER LEVEL | |
| BT | BALANCE TANK | |
| BW | BACKWASH | |
| FMD | FEATURE MAIN DRAIN PIPE | |
| FR | FEATURE RETURN PIPE | |
| R | FILTER RETURN | |
| ST | SURGE TRENCH | |
| CO2 | CO2 FEEDER | |
| CC | CHEMICAL CONTROLLER | |
| FM | FLOW METER | |
| | FLOW CONTROL VALVE | |
| | FLOW SENSOR | |
| | LIQUID CHEMICAL FEEDER | |
| | SIGHT GLASS | |
| | SOLENOID VALVE | |

GENERAL NOTES:

NOT ALL POOL PIPING AND ACCESSORIES SHOWN FOR CLARITY.
 PRESERVE BONDING WIRE DURING DEMOLITION.
 STRUCTURAL STEEL FRAMING NOT SHOWN.
 THE DRAWINGS SHOW THE GENERAL ARRANGEMENT OF ALL PIPING AND EQUIPMENT AND INDICATE THE REQUIRED SIZE AND POINTS OF TERMINATION OF THE PIPING AND SUGGEST PROPER ROUTING OF SAME. HOWEVER IT IS NOT THE INTENTION OF THE DRAWINGS TO SHOW ALL NECESSARY OFFSETS, OBSTRUCTIONS, OR STRUCTURAL CONDITIONS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL HIS WORK IN SUCH A MANNER THAT IT WILL CONFORM TO THE STRUCTURE, AVOID OBSTRUCTIONS, PRESERVE HEADROOM AND KEEP OPENINGS AND PASSAGEWAYS CLEAR WITHOUT FURTHER CONSTRUCTION OR COST WHILE MEETING MANUFACTURER'S RECOMMENDED INSTALLATIONS AND PRESERVING THE INTENT OF THE DESIGN.

| TAG | NOTE | MP | TP | WP | WF |
|-----|--|----|----|----|----|
| G | ELECTRICAL DEMOLITION TO BE COMPLETED PRIOR TO FILTRATION EQUIPMENT DEMOLITION AND FILTER ROOM CLEAN OUT. | | | | |
| G | NO ELECTRICAL NEW WORK TO BE COMPLETED PRIOR TO FILTRATION EQUIPMENT DEMOLITION AND FILTER ROOM CLEAN OUT. | | | | |
| G | REMOVE RECIRCULATION PUMPS AND OPEN HAIR AND LINT STRAINERS, PRIOR TO START OF FILTER ROOM CLEAN OUT. | | | | |
| G | POWER WASH INTERIOR OF FILTER ROOM TO REMOVE MUD AND DEBRIS FROM SURFACES OF WALLS, CEILING, FLOOR, PIPES, FILTERS AND REMAINING CONTROL BOXES. FILTER ROOM AND EQUIPMENT TO BE CLEANED OF ALL MUD AND DEBRIS. | | | | |
| G | ALL POOL PIPING SYSTEMS (TYP. 4) ARE TO BE FLUSHED CLEAR INTO THE FILTER ROOM. MUD AND DEBRIS TO BE REMOVED FROM FILTER ROOM. FILTER ROOM TO BE CLEANED OF ALL MUD AND DEBRIS. | | | | |
| G | ALL EQUIPMENT MARKED TO BE REMOVED SHALL BE REMOVED AND DISPOSED OF OFFSITE IN A LEGAL MANNER. | | | | |
| 1 | REMOVE RECIRCULATION PUMP. | X | X | X | X |
| 2 | REMOVE GRISWOLD FLOW CONTROL VALVE FROM RECIRCULATION SYSTEM (TYP. 3) SEE PROPOSED PLAN FOR PIPING SPOOL REPLACEMENT. | X | X | X | |
| 3 | REMOVE FILTER MEDIA FROM HRS FILTER (TYP. 3) | X | X | X | |
| 4 | REMOVE 2 - PRESSURE GAUGES AT EACH FILTER FACE PANEL. | X | X | X | |
| 5 | REMOVE VACUUM AND PRESSURE GAUGE AT EACH RECIRCULATION PUMP. | X | X | X | X |
| 6 | REMOVE SIGHT GLASS FROM BACKWASH PIPE. | | | | |
| 7 | REMOVE MAKE UP WATER CONTROLLER AND WIRING. ENCLOSURE TO REMAIN. (TYP. 3) | X | X | X | |
| 8 | REMOVE SOLENOID VALVE FROM AUTOMATIC MAKE-UP WATER SYSTEM LOOP. (TYP. 3) | X | X | X | |
| 9 | REMOVE EXISTING CONTROL PANEL INCLUDING ENCLOSURE, AND ALL CONTROLS. (TYP. 3) | X | X | X | |
| 10 | REMOVE CHEMICAL CONTROLLER AND FLOW CELL. (TYP. 3) | X | X | X | |
| 11 | REMOVE CO2 FEEDER. (TYP. 3) | X | X | X | |
| 12 | REMOVE LIQUID CHLORINE FEEDER AND FLEXIBLE FEED TUBING SUPPLY AND DISCHARGE. (TYP. 3) | X | X | X | |
| 13 | REMOVE SHELF FOR CHORINE FEEDER | X | X | X | |
| 14 | REMOVE ROTORY PADDLE WHEEL FLOW SENSOR AND WIRING | X | X | X | |
| 15 | SEE ELECTRICAL DEMOLITION DRAWING | X | X | X | |

1 FILTER ROOM DEMOLITION PLAN
 SCALE: 1" = 2'

PROJECT ENGINEER:
Rimkunas Engineering, P.L.L.C.
Aquatic Engineering & Construction Management
 Rimkunas Engineering, P.L.L.C.
 44 Elm Street, 10-Huntington • New York • 11743
 631.470.6115

It is a violation of Section 7209 of the New York State Education Law for any person, unless he is acting under the direction of a licensed professional engineer, to alter any item on this drawing in any way. If the drawing is altered under the direction of a professional engineer, the altering engineer shall affix his seal to the drawing with the notation "altered by" followed by his signature, the date of alteration, and a specific description of the alteration.

| NO. | REVISIONS | DATE |
|-----|-----------|------|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

OWNER:
VILLAGE OF HASTINGS-ON-HUDSON

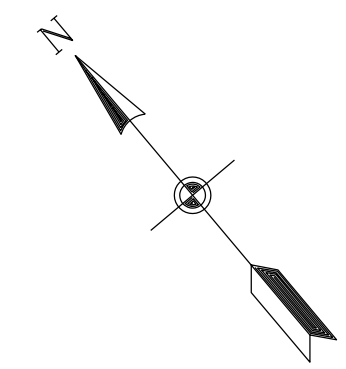
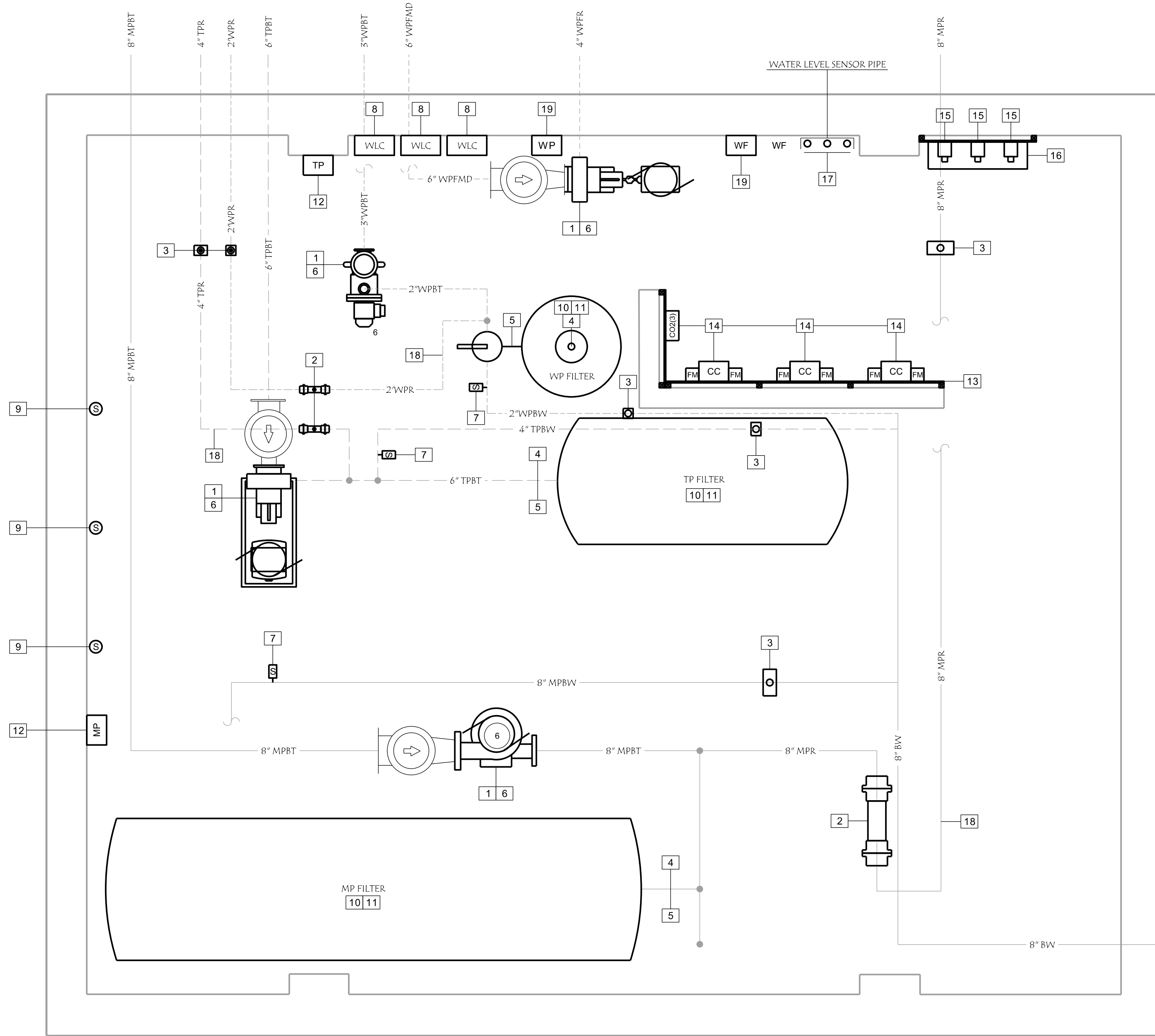
DEPARTMENT OF PARKS AND RECREATIONS

PROJECT:
CHEMKA POOL STORM DAMAGE 2021 RECOVERY

DRAWING TITLE:
FILTER ROOM EQUIPMENT DEMOLITION PLAN

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

| | |
|---------------------|---------------------------------|
| DRAWN BY: BC | DRAWING NO. SP-01 |
| CHECKED BY: SR | |
| FILE NO. - | |
| PROJECT NO. 1148 | DATE: 03/23/2022 |



| LEGEND | |
|--------|-------------------------|
| MP | MAIN POOL |
| TP | TRAINING POOL |
| WP | WADING POOL |
| WF | WATER FEATURE |
| LLC | LIQUID LEVEL CONTROL |
| WL | WATER LEVEL |
| BT | BALANCE TANK |
| BW | BACKWASH |
| FMD | FEATURE MAIN DRAIN PIPE |
| FR | FEATURE RETURN PIPE |
| R | FILTER RETURN |
| ST | SURGE TRENCH |
| CO2 | CO2 FEEDER |
| CC | CHEMICAL CONTROLLER |
| FM | FLOW METER |
| | FLOW CONTROL VALVE |
| | FLOW SENSOR |
| | LIQUID CHEMICAL FEEDER |
| | SIGHT GLASS |
| | SOLENOID VALVE |
| | FLANGED PIPE SPOOL |

GENERAL NOTES:

NOT ALL POOL PIPING AND ACCESSORIES SHOWN FOR CLARITY. STRUCTURAL STEEL FRAMING NOT SHOWN.

THE DRAWINGS SHOW THE GENERAL ARRANGEMENT OF ALL PIPING AND EQUIPMENT AND INDICATE THE REQUIRED SIZE AND POINTS OF TERMINATION OF THE PIPING AND SUGGEST PROPER ROUTING OF SAME. HOWEVER IT IS NOT THE INTENTION OF THE DRAWINGS TO SHOW ALL NECESSARY OFFSETS, OBSTRUCTIONS, OR STRUCTURAL CONDITIONS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL HIS WORK IN SUCH A MANNER THAT IT WILL CONFORM TO THE STRUCTURE. AVOID OBSTRUCTIONS, PRESERVE HEADROOM AND KEEP OPENINGS AND PASSAGeways CLEAR WITHOUT FURTHER CONSTRUCTION OR COST WHILE MEETING MANUFACTURER'S RECOMMENDED INSTALLATIONS AND PRESERVING THE INTENT OF THE DESIGN.

NOTE:
AN AUTOMATIC DEVICE SHALL BE PROVIDED TO DEACTIVATE THE FOLLOWING EQUIPMENT WHEN THERE IS NO FLOW IN THE SYSTEM.
1. CHLORINE FEEDER
2. ACID FEEDER

INSTALL FLOW SENSOR IN UNOBSTRUCTED LENGTH OF PIPE AS RECOMMENDED BY THE MANUFACTURER.

EXISTING CO2 STORAGE TANK LOCATED OUTSIDE OF BUILDING.

EXISTING STILLING WELL AND WATER LEVEL SENSOR LOCATED WOMENS LOCKERROOM TO REMAIN. NOT SHOWN FOR CLARITY.

- ALL PIPING TO BE FULLY SUPPORTED AS PER MANUFACTURERS RECOMMENDATION. PROVIDE STEEL STRUT SUPPORTS AS NEEDED.
- PIPE SUPPORTS AND UNISTRUTTO BE 304L STAINLESS STEEL.
- CONTRACTOR TO LAYOUT EQUIPMENT AND RECIEVE FINAL APPROVAL FROM ENGINEER AND OWNER PRIOR TO INSTALLATION.
- ALL PIPING TO BE PVC SCH. 80 UNLESS OTHERWISE NOTED.
- FLOW SENSORS TO BE INSTALLED IN UNDISTURBED LENGTH OF PIPE AS SPECIFIED BY MANUFACTURER.
- PIPES SHALL BE LABELED AND SHALL HAVE FLOW ARROWS. LABELS AND FLOW ARROWS TO BE WRAP-AROUND TYPE.
- PROVIDE DRAIN VALVES AT LOW POINTS IN SYSTEM AND AUTOMATIC AIR RELIEF VALVES AT HIGH POINTS.
- INSTALL EXPOSED PIPE PARALLEL AND PERPENDICULAR TO WALLS WITH ADEQUATE SUPPORTS AND ADEQUATE CLEARANCE FOR ACCESS TO ALL OPERABLE VALVES, FLOW METERS AND ANCILLARY EQUIPMENT.
- PROVIDE UNIONS OR FLANGED CONNECTIONS ON EITHER SIDE OF EQUIPMENT TO PERMIT ITS REMOVAL.
- ALL VALVES SHALL BE TAGGED WITH 2" DIAMETER NON-CORROSIVE TAGS LABELED WITH THE VALVE NUMBER THAT CORRESPONDS TO THE OPERATING CHART ON THE OPERATIONS CHART.
- THE HYDRAULIC SCHEMATIC AND VALVE CHART SHALL BE POSTED BEHIND PLASTIC OR GLASS IN THE EQUIPMENT ROOM.

- CHLORINE AND pH CONTROL FLEXIBLE TUBING TO BE RUN WITHIN RIGID CONDUIT COLOR CODED AS PER DOH REQUIREMENTS.
- THE PROGRAMMABLE VFD SHALL BE PROGRAMMED FOR MULTIPLE OPERATING CONDITIONS:

RECIRCULATION RATE: THE PUMP SHALL NORMALLY OPERATE AT THE DESIGN FLOW RATE AS INDICATED IN THE POOL CALCULATIONS CHART

POOL DRAIN RATE: THE PUMP SHALL OPERATE AT AN ACCEPTABLE FLOW RATE SO AS NOT TO OVERWHELM THE POOL DRAIN SYSTEM.

SHUT DOWN AND START UP: THE PUMP SHALL RAMP UP/DOWN AT A SLOW RATE.

| TAG | NOTE | MP | TP | WP | WF |
|-----|---|----|----|----|----|
| G | SEE EQUIPMENT LIST FOR ALL MAKE, MODEL AND SIZES. | | | | |
| G | SEE DETAILS FOR PROPER INSTALLATION OF PROPOSED EQUIPMENT. | | | | |
| G | COORDINATE INSTALLATIONS OF ALL EQUIPMENT WITH OTHER TRADES. | | | | |
| G | IDENTIFY DAMAGED VALVES TO THE ENGINEER. VALVES TO BE REPLACED AS DIRECTED BY ENGINEER AS UNIT PRICE BID. | | | | |
| 1 | INSTALL NEW RECIRCULATION PUMP AND VFD AS PER EQUIPMENT LIST. | X | X | X | X |
| 2 | INSTALL FLANGED PIPE SPOOL AS PER DETAIL AT LOCATIONS OF REMOVED FLOW VALVE. | X | X | X | |
| 3 | INSTALL NEW PADDLE WHEEL FLOW SENSOR (TYP. 6) | X | X | X | |
| 4 | INSTALL AUTOMATIC AIR RELIEF VALVE AT EACH FILTER. (TYP. 3) | X | X | X | |
| 5 | INSTALL INFLUENT AND EFFLUENT PRESSURE GAUGE AT FILTER PANEL. CONNECT TO EXISTING TUBING AND CONFIM PROPER PERFORMANCE. | X | X | X | |
| 6 | INSTALL VACUUM AND PRESSURE GAUGES AT RECIRCULATION PUMPS. (TYP. 3 PUMPS) | X | X | X | X |
| 7 | INSTALL NEW SIGHT GLASS. | X | X | X | |
| 8 | COORDINATE MAKE UP WATER CONTROLLER AND POWER WIRING WITH ELECTRICIAN. (TYP. 3) | X | X | X | |
| 9 | INSTALL NEW SOLENOID VALVE IN AUTOMATIC WATER SUPPLY LOOP. CONNECT TO NEW WIRING. (TYP. 3) | X | X | X | |
| 10 | INSPECT INTERIOR OF FILTER AND IDENTIFY ANY DAMAGE INCLUDING BROKEN LATERAL TO ENGINEER. | X | X | X | |
| 11 | INSTALL FILTER MEDIA. (TYP. 3) | X | X | X | |
| 12 | INSTALL VFD FOR RECIRCULATION PUMP | X | X | X | |
| 13 | INSTALL PVC BOARD ON KINDORF TO MOUNT CHEMICAL CONTROLLER AND CO2 FEEDER. | X | X | X | |
| 14 | INSTALL CHEMICAL CONTROLLER, FLOWCELL, FLOW METER FOR FR & BW, AND CO2 FEEDER. SEE DETAIL. | X | X | X | |
| 15 | INSTALL PERISTALTIC PUMP WITH NEW FLEXIBLE SUPPLY AND DISCHARGE PIPING FOR LIQUID CHLORINE INJECTION. (TYP. 3) | X | X | X | |
| 16 | INSTALL CONTAINMENT SHELF FOR CHLORINE PUMPS ON KINDORF SUPPORT STRUCTURE. | X | X | X | |
| 17 | CLEAN OUT WATER LEVEL SENSOR STILLING WELL PIPES AND RESET PROBES TO PROPER LEVELS. | X | X | X | |
| 18 | INSTALL FLOW SWITCH FOR CHEMICAL INTERLOCK SYSTEM. INSTALL RELAY AT CHEMICAL CONTROLLER. | X | X | X | |
| 19 | INSTALL MOTOR STARTER. | | | X | X |

PROJECT ENGINEER:
Rimkunas Engineering, P.L.L.C.
Aquatic Engineering & Construction Management
Rimkunas Engineering, P.L.L.C.
44 Elm Street, 10th Huntington • New York • 11743
631.470.6115

It is a violation of Section 7209 of the New York State Education Law for any person, unless he is acting under the direction of a licensed professional engineer, to alter any item on this drawing in any way. If the drawing is altered under the direction of a professional engineer, the altering engineer shall affix his seal to the drawing with the notation "altered by" followed by his signature, the date of alteration, and a specific description of the alteration.

| NO. | REVISIONS | DATE |
|-----|-----------|------|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

OWNER:
VILLAGE OF HASTINGS-ON-HUDSON

DEPARTMENT OF PARKS AND RECREATIONS

PROJECT:
CHEMKA POOL STORM DAMAGE 2021 RECOVERY

DRAWING TITLE:
FILTER ROOM EQUIPMENT PROPOSED PLAN

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

| | |
|---------------------|----------------------|
| DRAWN BY: BC | DRAWING NO. SP-02 |
| CHECKED BY: SR | |
| FILE NO. - | |
| PROJECT NO. 1148 | |
| DATE: 03/23/2022 | |

It is a violation of Section 7209 of the New York State Education Law for any person, unless he is acting under the direction of a licensed professional engineer, to alter any item on this drawing in any way. If the drawing is altered under the direction of a professional engineer, the altering engineer shall affix his seal to the drawing with the notation "altered by" followed by his signature, the date of alteration, and a specific description of the alteration.

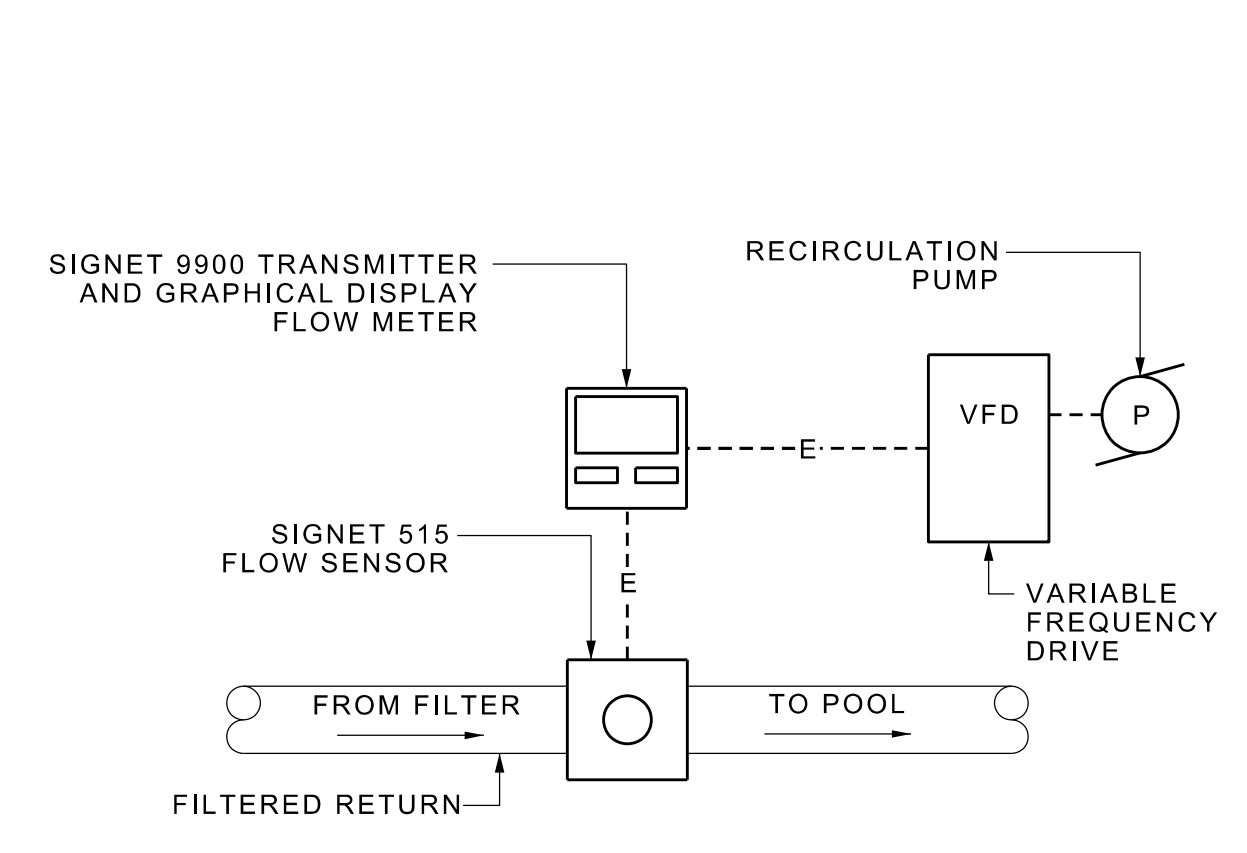
| NO. | REVISIONS | DATE |
|-----|-----------|------|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

PROJECT:
CHEMKA POOL STORM DAMAGE 2021 RECOVERY

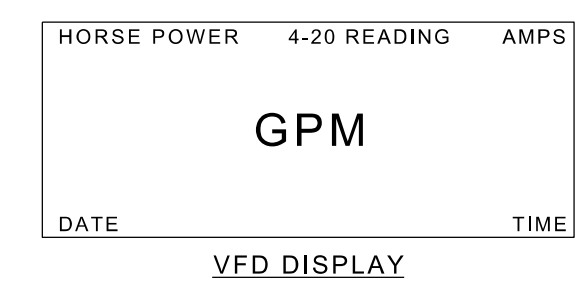
DRAWING TITLE:
RECIRCULATION EQUIPMENT DETAILS

SCALE:
 NOT TO SCALE

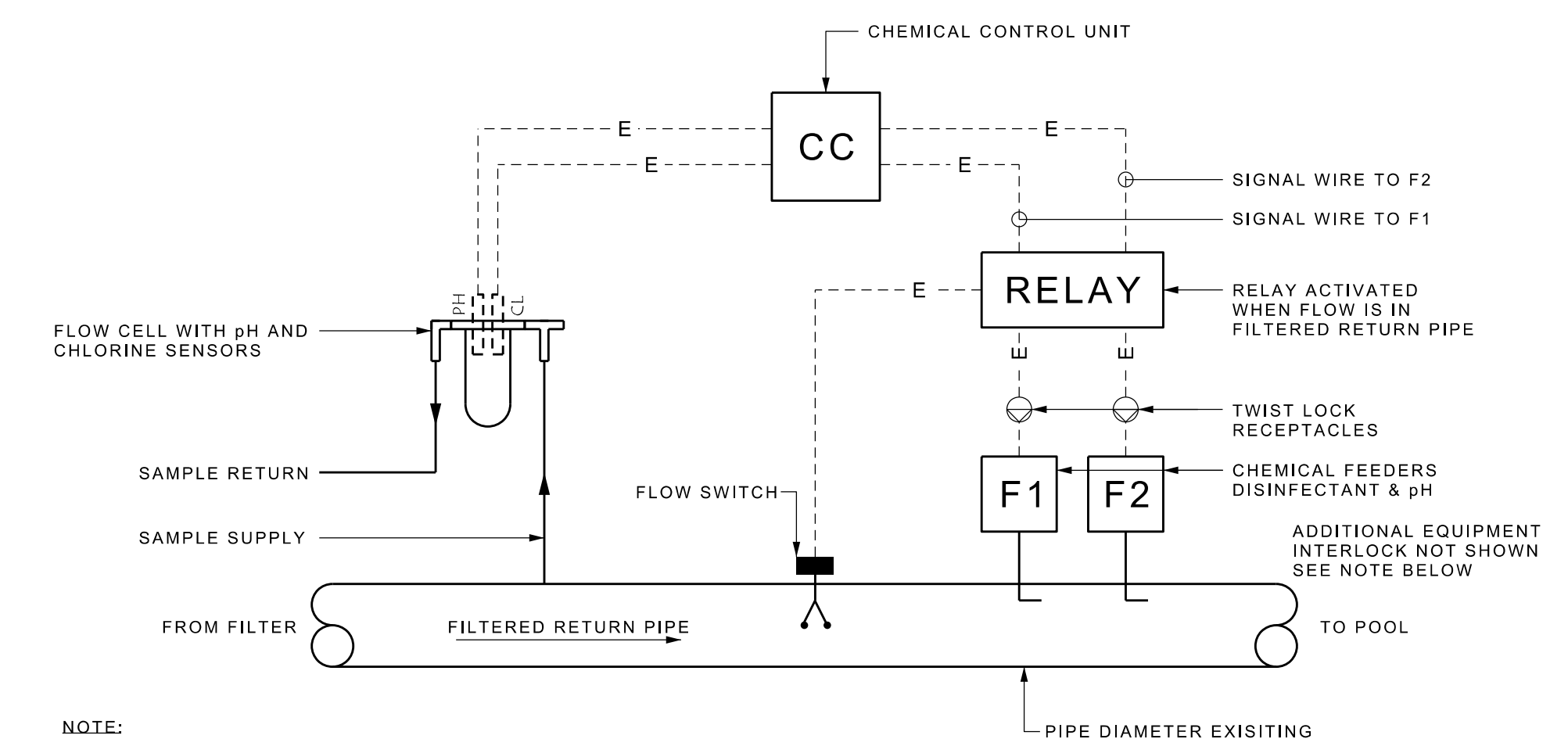
| | |
|-----------------------------|------------------------------|
| DRAWN BY: BC | |
| CHECKED BY: SR | |
| FILE NO.: - | |
| PROJECT NO.: 1148 | DRAWING NO.: SP-03 |
| DATE: 03/23/2022 | |



NOTES:
 1. SIGNET 9900 TO BE MOUNTED AT POOL CONTROL PANEL.

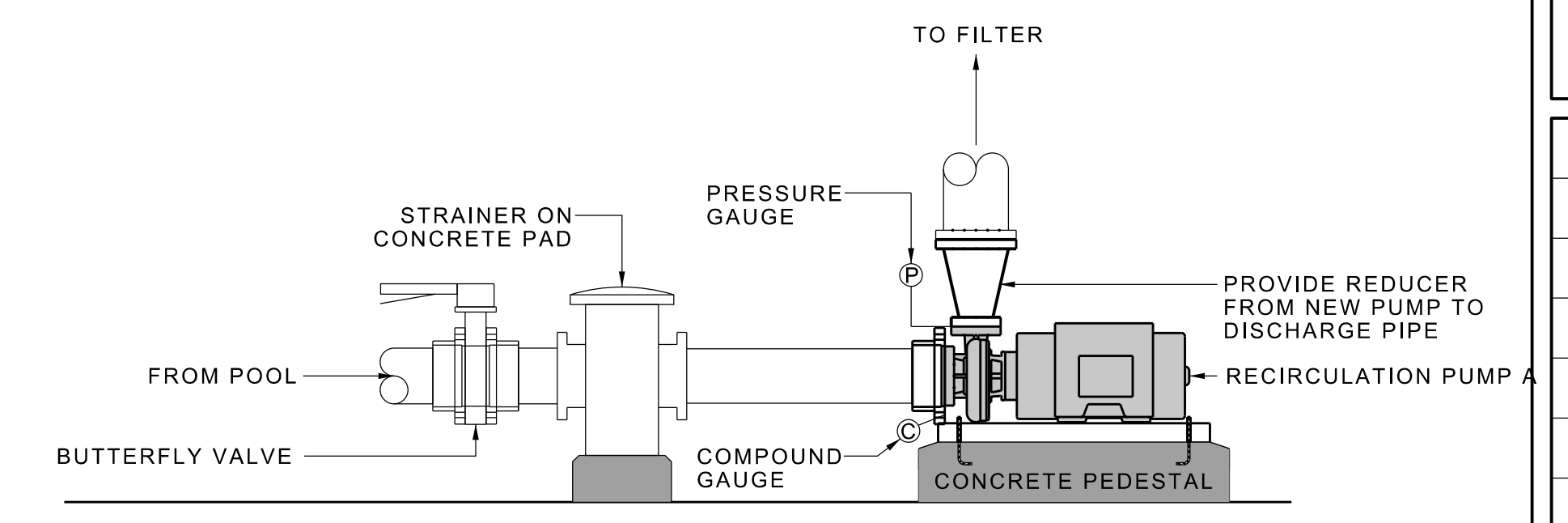


1 TYPICAL FLOW CONTROL SCHEMATIC
 NOT TO SCALE



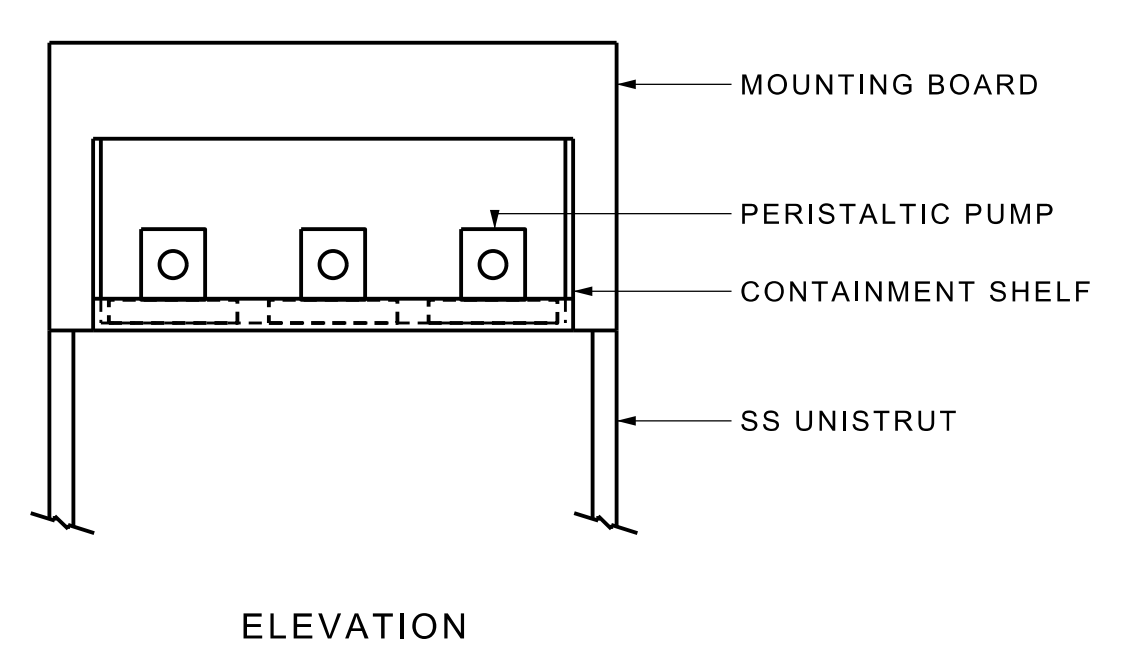
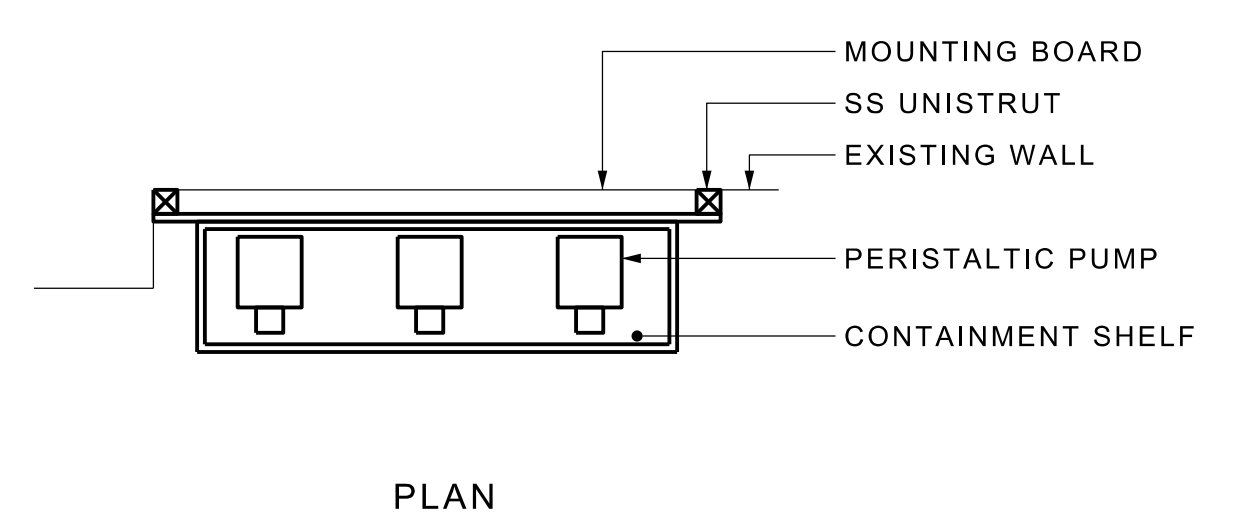
NOTE:
 AN AUTOMATIC DEVICE SHALL BE PROVIDED TO DEACTIVATE THE FOLLOWING EQUIPMENT WHEN THERE IS NO FLOW IN THE SYSTEM.
 1. CHLORINE FEEDER
 2. pH FEEDER

2 TYPICAL CHEMICAL INTERLOCK SCHEMATIC
 NOT TO SCALE



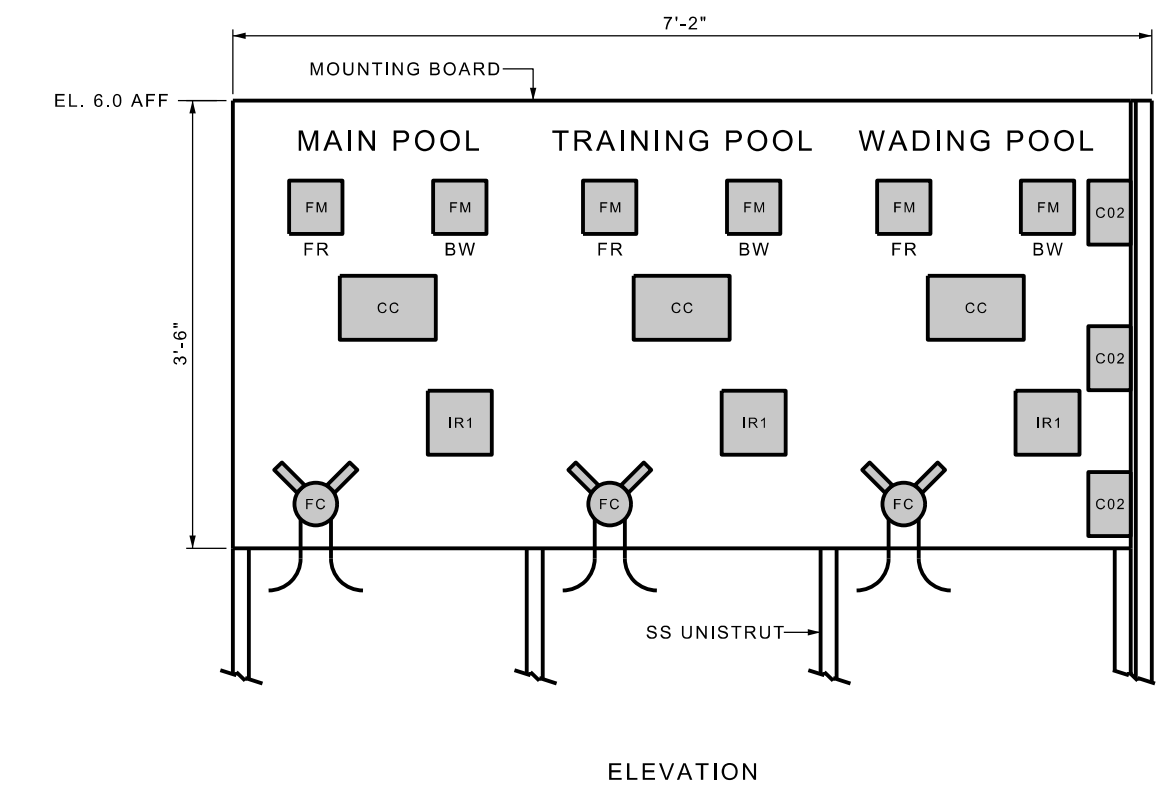
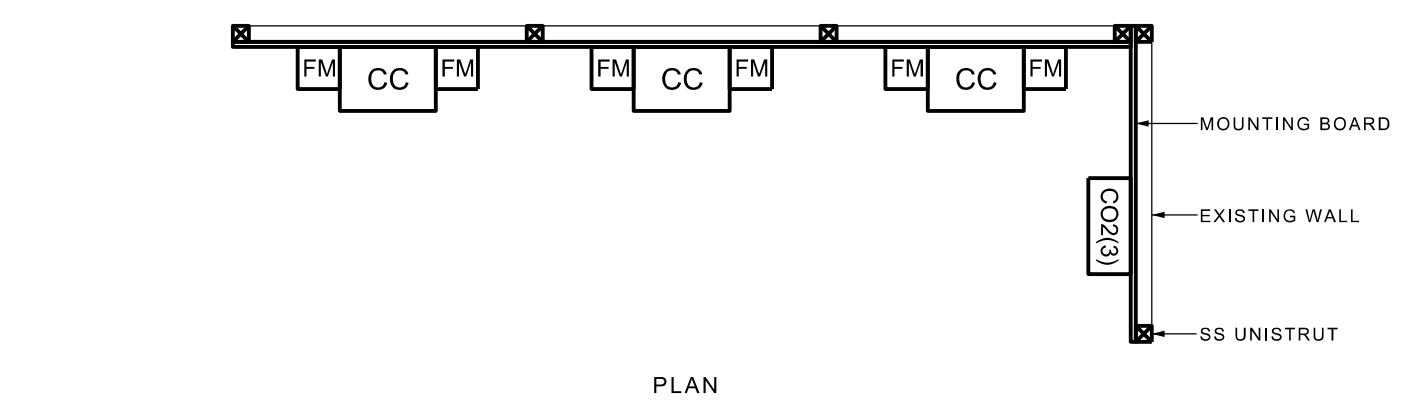
NOTES:
 1. MODIFY EXISTING PIPING AND CONCRETE PEDESTAL AS NEEDED TO INSTALL NEW PUMP.

3 TYPICAL PUMP INSTALLATION
 NOT TO SCALE



NOTES:
 MOUNTING BOARD TO BE PVC SHEET OR EQUAL.
 BOARD TO BE MOUNTED ON WALL AT EYE LEVEL. MOUNT BOARD OFF WALL WITH SS UNISTRUT SUPPORT TO ALLOW ROOM FOR WIRING.
 ALL MOUNTING FASTENERS FOR UNISTRUT AND PANEL BOARD TO BE STAINLESS STEEL.
 LABEL ALL EQUIPMENT.
 SEE ELECTRICAL DRAWINGS FOR ALL WIRING, INTERLOCKS AND CONNECTIONS.
 CONTAINMENT SHELF DESIGN BASIS: ASSMAN CORPORATION: FEED STATION CONTAINMENT SHELF

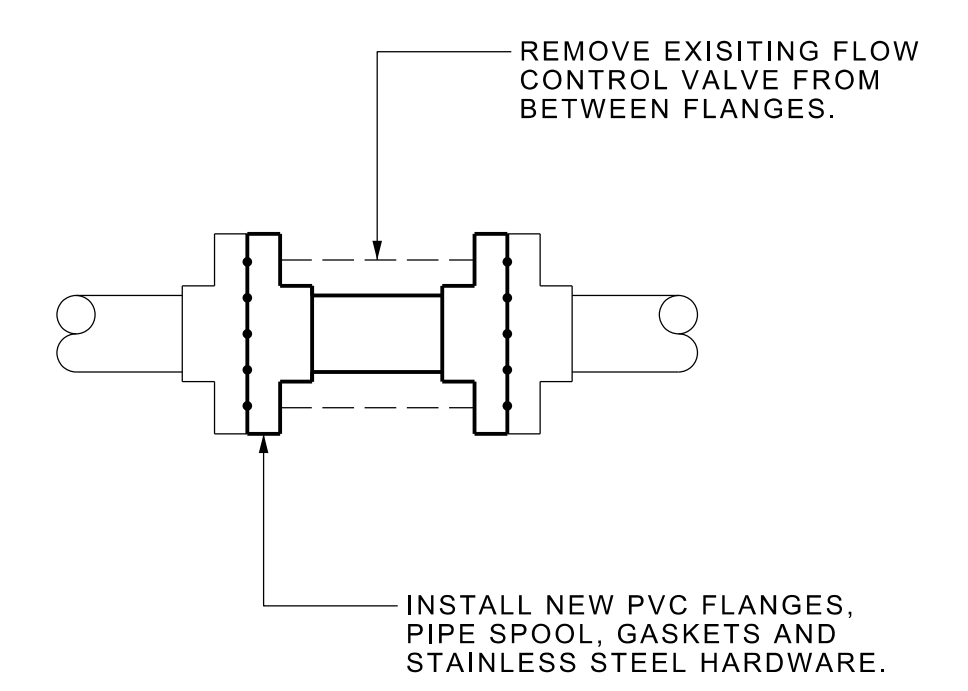
5 CHLORINE FEEDER PUMP CONTAINMENT SHELF
 NOT TO SCALE



NOTES:
 CONTROL PANEL MOUNTING BOARD TO BE PVC SHEET OR EQUAL.
 CONTROL PANEL TO BE MOUNTED ON WALL AT EYE LEVEL. MOUNT PANEL OFF WALL WITH SS UNISTRUT SUPPORT TO ALLOW ROOM FOR WIRING.
 ALL MOUNTING FASTENERS FOR UNISTRUT AND PANEL BOARD TO BE STAINLESS STEEL.
 LABEL ALL EQUIPMENT AND PANEL SECTIONS.
 SEE ELECTRICAL DRAWINGS FOR ALL WIRING, INTERLOCKS AND CONNECTIONS.

EQUIPMENT TO BE MOUNTED ON PANEL:
 CC CHEMICAL CONTROLLER
 FM FLOW METER
 FC FLOW CELL FOR CHEMICAL CONTROLLER
 IR INTERLOCK RELAY
 CO2 CO2 FEEDER

6 POOL CONTROL PANEL
 NOT TO SCALE



4 FLOW CONTROL VALVE REMOVAL
 NOT TO SCALE

ELECTRICAL SPECIFICATION

WORK INCLUDED

1.Work under the electrical contract shall include all labor, materials, equipment, plant services and administrative tasks required to complete and make operable the electrical work shown on the pool electric drawings and specified herein, including but not limited to the following:

- a.Prepare and submit shop drawings, diagrams and illustrations to the owner.
b.Procure necessary permits and approvals and paying required fees and charges in connection with the work.
c.Protect, test, balance, clean adjust and guarantee all of the work to safely, properly and continuously operate.
d.Submit as-built drawings, operating and maintenance instructions and manuals.
e.Provide identification labels, tags, charts and diagrams.
f.Execute all cutting, drilling, rough and finish patching of existing or newly installed construction required for the work.
g.Excavation and back filling for the electrical work.
h.Provide hangers, supports, foundations, structural framing supports and bases for conduit and equipment provided or installed.
i.Provide counter flashing, sleeves and seals for roof, floor and wall penetrations.
j.Temporary light and power for construction purposes.
k. Electrical demolition as indicated
l. Complete wiring systems for power installations and branch circuits to equipment including connections to existing wiring to remain
m. Install and Connect variable frequency drives furnished by others.
n. Panel boards and service equipment
o. Motor starters, control wiring and contactors, relays and control panels as described in control sequence.
p. Leak detection and overflow alarm panels
q. Branch circuits extending to all equipment and receptacles.
r. Receptacles, local switches and miscellaneous wiring devices as indicated.
s. Lighting fixtures and controls.
t. Grounding of electrical systems and equipment and pool equipment per Articles 250 and 680 of the NATIONAL ELECTRIC CODES.
u. Balance all loads on panelboards.

GENERAL REQUIREMENTS

1.GENERAL
a.After carefully studying the drawings and specifications, and before submitting the proposal, visit the site to ascertain conditions of the site, and the nature and exact quantity of work to be performed. No extra will be allowed for failure to notify the owner in writing of any discrepancies noted between the existing conditions and drawings and specifications.

b.Verify all measurements at the site, and be responsible for correctness of same.

2.CODES, REGULATIONS AND STANDARDS

- a. Work shall comply with the requirements of the following codes:
1.Federal, State and Local codes having jurisdiction.
2.National Fire Protection Association.
3.National Electrical Code (NEC).

3.FEES

a.Include in bid the cost of all required permits, fees, inspections, tests and certificates of approval.

4.QUALITY, WORKMANSHIP, MATERIALS AND SAFETY

a.Work shall be first-class in every respect and shall be neatly performed in a practical and workmanlike manner by sufficient electricians skilled in the work they are to do using the best practices of their trade, and under continuous, competent supervision. The work shall be organized in advance of operation and carried out efficiently without delays which would impede progress or the quality of the work of other trades and the work as a whole.

b.Materials and equipment provided shall be new and approved for the application and shall conform to the specified codes and standards. Defective or damaged materials shall be replaced or repaired in a manner approved by the owner.

c.Equipment shall bear the UL label and shall meet or exceed NEMA standards.

5.GUARANTEE

a.Furnish in writing, a complete guarantee against defective materials and improper workmanship, satisfactory to owner, for all parts, components and operation for a period of one year from the date of acceptance of the complete installation by the owner.

b.Guarantee shall include complete maintenance of the system, including replacement parts, all labor and materials to maintain the system in proper operating condition for the guarantee period.

6.CLEANING

a.Remove all construction debris resulting from the work.

b.Clean equipment and systems following the detailed procedures specified herein, or as directed.

7.COORDINATION AND SUPERVISION

a.The work shall be carefully laid out in advance to avoid unnecessary cutting, channeling, chasing or drilling of floor, walls, partitions, ceilings or other surfaces. Where such work is necessary, however, the work shall be patched and/or repaired in an approved manner by skilled mechanics at no additional cost to the owner.

SPECIAL REQUIREMENTS

1.SUBMITTALS

a.SHOP DRAWINGS

- 1.Shop drawings submittals shall consist of one reproducible and three prints, or six photocopies.
2.Submit shop drawings of the following:
1)Controls
2)Wiring Devices
3)Panel boards, lighting fixtures, control devices
4)Conduit, boxes and fittings
5)Name plates and legends.
6)Motor Starter
3.AS-BUILT DRAWINGS
1)Upon completion of the work, furnish to the owner in AutoCAD, "AS-BUILT" drawings on CD-ROM media and one set of Mylar reproduces. Drawings shall include all field changes and dimensions to accurately locate all outlets, devices, equipment and the like.

4.SERVICE MANUALS

1)Provide three complete sets of instructions for all electrical equipment installed.

5.CUTTING AND PATCHING

- 1)Provide all cutting, drilling, rough and finish patching required for the work.
2)Provide all drilling and patching for expansion bolts, hangers and other supports for proper and safe installation of work.

6.PHASE ROTATION TESTS

1)Properly test the phase rotation of feeder and branch circuits, and make such changes and alterations necessary to ensure the correct rotation of all motor driven equipment throughout the new installation.

7.ELECTRICAL SERVICE CHARACTERISTICS

1)The characteristics of the secondary electric service and distribution system are 120/208 volts, three phase, four wire plus ground.

8.TESTS, INSPECTIONS AND APPROVAL

- 1)Inspect all equipment, components and materials installed or connected to ensure:
(a)Proper conditions.
(b)Components are in place aligned and secure.
(c)Proper internal connections.
2)The complete electrical system shall be free of grounds and short circuits.

RACEWAYS

1.All wiring shall be installed in conduit systems in accordance with the following:

- a.Interior wiring shall be installed in rigid schedule 40 PVC conduit with solvent welded fittings.
b.All underground wiring shall be installed in rigid schedule 80 PVC conduit with solvent welded fittings.
c.All work installed in the filter room shall be run exposed: Conduits shall not be embedded slabs.
d.Minimum size conduit shall be 3/4 inch trade size unless otherwise indicated.
e.Final connections to motors and vibrating equipment shall be installed in liquid-tight flexible metal conduit. Minimum length 12-inches.
f.The routing of conduits indicated on the drawings is diagrammatic. Before installing any work examine the working layouts and shop drawings of the other trades to determine the exact locations and clearance.
1. Where circuit make-up is not indicated on plans refer to one-line diagram for circuit make-up.
g.Conduit fittings, connectors, coupling, ells, nipples and the like shall be of material and construction suitable for the conduit system used.

WIRES AND CABLES

- 1.Wire and cable shall be 600 volt, copper, with THHN/THWN-2 90 degrees C. insulation except as noted or otherwise specified herein.
2.Underground wiring shall be copper. Use - XHHW insulated.
2.Wire shall be not less than No. 12 AWG. Wire No. 8 and larger shall be stranded.
3.Wires shall be color-coded as follows for 208 volt system:
Black, Red and Blue
Neutral - White
Equipment Ground - Green
Provide a green insulated ground conductor with all feeders and branch circuits.

JUNCTION BOXES

- 1.Boxes for wiring devices, junction points, switching relays, and the like in the Filter Area shall be of proper size and type as required by the building and circuit conditions and shall be fabricated of fiberglass reinforced polyester or PVC with stainless steel screws and shall be UL listed for outdoor use.
2.Conduit fittings, connectors, couplings and the like in the Pool Building shall be of material and construction suitable for the conduit system uses.

WIRING DEVICES

- 1.RECEPTACLES
a. Straight balde receptacles shall be termination type duplex ground fault circuit interrupter. Receptacle device rated 20 ampere, 125 volts, Arrow Hart No. GF8300 or approved equal.
b. Twist lock receptacles shall be yellow, corrosion resistant, NEMA L5-201R rated 20A, 125 volt. Mounted in fiberglass reinforced polyester or PVC outlet box with cover. Hubbell HBL 23CM10 or equal.
c. Twist lock plugs shall be yellow corrosion resistant, NEMA L5-20P, Attachment cord mounted, Hubbell HBL2311VY or equal.

DEVICE PLATES

- 1.In general, plates for all wiring devices, except as specified otherwise, shall be .040 inch satin finished stainless steel. A common plate shall cover all devices which are indicated at the same location.
2.On the inside of each device plate, write the panelboard designation and circuit number of the circuit serving the device.
3.Device plates for outdoor receptacles shall be weatherproof with "in-use" covers.
4.Device plates shall be secured with stainless steel screws.

PANELBOARDS

- 1. Panels shall consist of an assembly of molded case circuit breakers and bus assembly installed in a stainless steel NEMA 4X cabinet, surface mounted as indicated on the drawings.
2. The panel sections shall be mounted away from the back of the cabinet trim and framed.
a. The gutter space on sides, top and bottom shall be of sufficient size to prevent overcrowding of wires and cables, and overheating of the circuit breakers.
b. Cabinets shall be complete with door in door, hinged doors with cylinder lock, directory frame and neatly typed directory charts.
c. Provide an angle piece on the inside of the bottom of each trim for ease of installation.
3. The branch circuit breakers, in general, shall be molded case, bolt-on type, thermal magnetic trip, single, two or three pole as indicated on the drawings.
a. Multiple pole breakers shall be single handle, common trip.
b. Where breakers of larger capacity are required, they shall have circuit characteristics as indicated.
c. Breakers shall be 22,000 A.I.C. for 120/208 volt service, unless otherwise indicated.
d. Main buswork shall be high conductivity copper, and shall as a minimum, be designed to carry the full rating of the feeder breaker or switch supplying the panel without perceptible heating.
e. Branch circuit breakers shall be arranged so that each breaker is readily removable from the panel without disturbing adjacent breakers.
f. Phase legs shall be alternately bussed to each circuit breaker in a manner to effect balancing the branch circuit connections as nearly as possible over each phase.
f. Panels shall be equipped with a key-lockable door.
4. Panels by Square D/Schneider Electric, Eaton/Cutler-Hammer or Siemens, and meeting these specifications shall be acceptable.

MOTOR STARTERS AND CONTROLS

- 1.Motor Starters, auxiliary contacts, interlock wiring, selector switches, pilot lights, pushbuttons, control relays and other control devices, provided under this division, shall be in accordance with the drawings and as specified herein, to provide a complete operating system.
2.Starters for motors shall be of the combination magnetic type, size as indicated. Non-reversing, full voltage, as required for the motor served. Starters shall be furnished with the following:
a.Front operated motor circuit protector mechanically-interlocked with the starter enclosure cover to prevent opening the starter unless the protector is in the open position, and lockable in the open position.
b.Magnetic, across-the-line contactor with overload protection and under-voltage protection or release.
c.Control transformer, fused secondary, for 120 volt control.
d.Start-Stop push buttons shall be door mounted. Provide manufacturer's standard legend.
e.Running pilot lights of the oil-light push-to-test neon-type with lamp and red lens shall be door mounted. Provide manufacturer's standard legend.
f.Three phase motor starters shall be furnished with auxiliary contacts as follows:
1) Provide the correct number of contacts required by the control system.
g.Starters shall be wall mounted in NEMA 4X enclosures unless otherwise indicated. Enclosures shall be constructed of stainless steel per NEMA and UL standards and shall bear UL listing.
h. Provision to automatically disconnect any separate source control voltage.
i. Starters shall be equipped with front-operated reset pushbutton providing class 20 operation.

3.MOTOR STARTERS AND CONTROLS SHALL BE MANUFACTURED BY:

- a.Eaton
b.Square D / Schneider Electric
c.Siemans Corp.

IDENTIFICATION AND TAGGING

- 1.Panels, cabinets, etc. shall be properly identified with permanent nameplates securely fastened with screws to the front of equipment. "Stick-on" type letters or plates shall not be used.
a.Identify equipment and key equipment components with nameplates of black laminated phenolic material.
b.Coordinate nameplates with actual equipment installed.
c.Submit cut sheet of nameplates for approval prior to purchase and installation.
d.Minimum size nameplates shall be three inches long with 1/4 inch lettering.

2.Conductors in troughs, pull boxes, gutters, etc. shall be identified by means of tags indicating both terminating points.

GROUNDING AND BONDING

- 1.General
a.Provide all grounding and bonding conductors and connections as indicated, and in accordance with the requirements of the NEC and all local authorities having jurisdiction.
b.All major parts not carrying current, including the following items, shall be properly grounded with a green insulated grounding conductor:
i.Metallic junction boxes and disconnect switches.
ii.All metallic raceways, conduits and outlet boxes.
iii.Motor and equipment housings and metallic control panels.
c.Provide a "green" wire grounding conductor for all equipment and as indicated on the Drawings.

2.Products

- a.Conductors and Connections:
i.Hard-drawn, stranded (ASTM B8) copper.
ii.Accessible grounding conductors shall be annealed copper with 600 volt, green type THW insulation. Conductors shall be stranded except pool bonding conductors which shall be solid.
iii.Accessible connections shall be made with multiple bolt silicon bronze connectors specifically designed and approved for the connection to be made. Grounding connectors shall be individually selected for each application, as recommended by the conductor manufacturer.
iv.Where connections involve dissimilar metals contributing to corrosion, interpose a third, compatible conductive material. Exothermic welds of copper to steel are acceptable.
v.Inaccessible connections shall be made with exothermic welds (Cadweld or equal).
b.Grounding connectors shall be manufactured by:
i.Burndy Corp.
ii.Dossert Corp.
iii.OZ/Gedney Co.

3.Execution

- a. Maintain all existing grounding. Replace missing ground conductors and connectors.
b. Neutral connections to building steel or other ground source shall be made and sized so that ground fault currents do not result in damage to materials or connections.
c. Panelboards and feeder pull boxes shall be grounded by means of insulated grounding bushings on all incoming and outgoing conduits 1-1/4 inches and larger.
d. Wherever plastic or flexible conduit without internal ground conductor is used for part of a conduit run, a grounding conductor shall be provided in or external to the conduit and connected to grounding connectors at each end of run.
e. The resistance to ground of any part or system specified to be grounded shall not exceed 25 Ohms. Contractor shall test ground resistance with a megger ohmmeter and submit results in report form to the Engineer for approval.
f. Contractor shall megger the bonded equipment and submit results in report format to the Engineer for approval.

PROJECT ENGINEER:
Rimkunas Engineering, P.L.L.C.
Aquatic Engineering & Construction Management
Rimkunas Engineering, P.L.L.C.
44 Elm Street, 10th Huntington • New York • 11743
631.470.6115

It is a violation of Section 7209 of the New York State Education Law for any person, unless he is acting under the direction of a licensed professional engineer, to alter any item on this drawing in any way. If the drawing is altered under the direction of a professional engineer, the altering engineer shall affix his seal to the drawing with the notation "altered by" followed by his signature, the date of alteration, and a specific description of the alteration.

Table with 3 columns: NO., REVISIONS, DATE

OWNER:
VILLAGE OF HASTINGS-ON-HUDSON
DEPARTMENT OF PARKS AND RECREATIONS

PROJECT:
CHEMKA POOL STORM DAMAGE 2021 RECOVERY

DRAWING TITLE:
ELECTRICAL SPECIFICATIONS


SCALE:
NOT TO SCALE

DRAWN BY: BC
CHECKED BY: SR
FILE NO. -
PROJECT NO. 1148
DRAWING NO. E-01
DATE: 03/23/2022

It is a violation of Section 7209 of the New York State Education Law for any person, unless he is acting under the direction of a licensed professional engineer, to alter any item on this drawing in any way. If the drawing is altered under the direction of a professional engineer, the altering engineer shall affix his seal to the drawing with the notation "altered by" followed by his signature, the date of alteration, and a specific description of the alteration.

| NO. | REVISIONS | DATE |
|-----|-----------|------|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

OWNER:
VILLAGE OF HASTINGS-ON-HUDSON



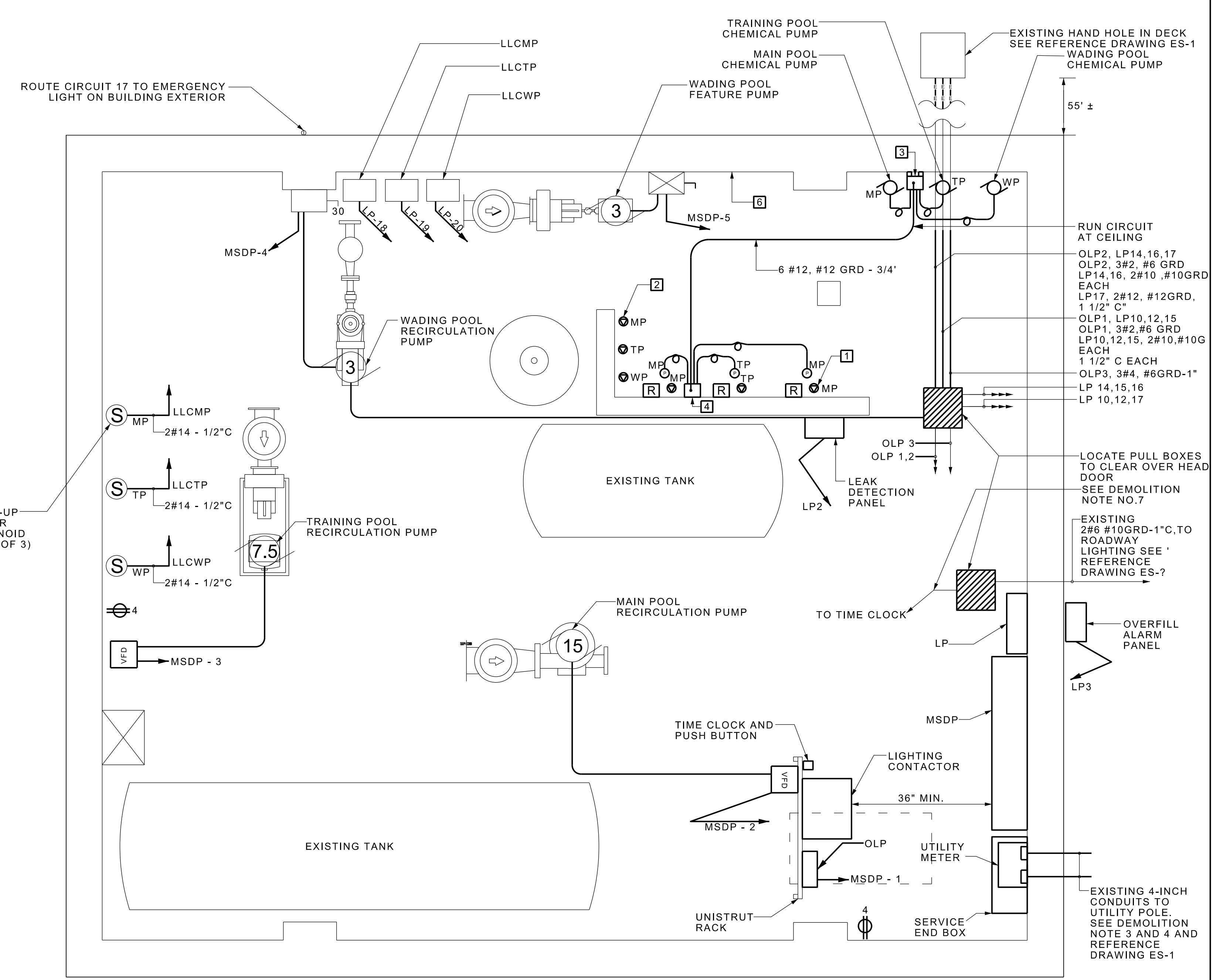
DEPARTMENT OF PARKS AND RECREATIONS

PROJECT:
CHEMKA POOL STORM DAMAGE 2021 RECOVERY

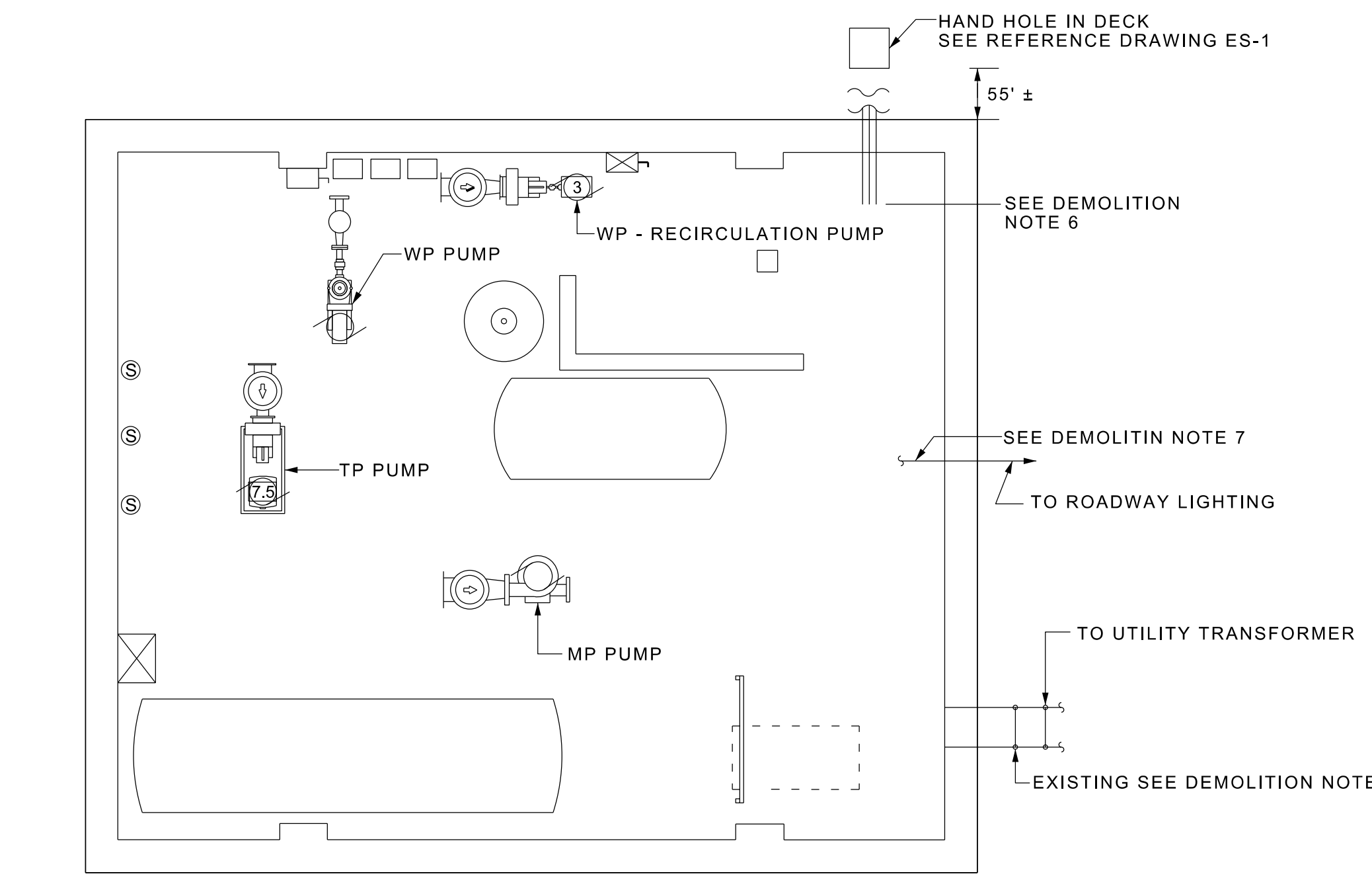
DRAWING TITLE:
ELECTRICAL DEMOLITION AND PROPOSED PLAN

SCALE:
SCALE AS SHOWN

| | |
|---------------------|----------------------------|
| DRAWN BY: BC | |
| CHECKED BY: SR | |
| FILE NO. - | DRAWING NO. E-02 |
| PROJECT NO. 1148 | |
| DATE: 03/23/2022 | |



- NOTES**
- RECEPTACLE (15A, 125VOLT, TWIST LOCK, GROUNDING) FOR CHEMICAL CONTROLLERS. CHANGE CHEMICAL CONTROLLER PLUG TO MATCHING TWIST-LOCK PLUG. TYPICAL OF THREE.
 - RECEPTACLE (15A, 125VOLT, TWIST LOCK, GROUNDING) FOR CO2 PUMPS CHANGE PLUGS ON CO2 PUMPS TO MATCHING TWIST-LOCK PLUG. TYPICAL OF THREE.
 - PROVIDE 6"x6"x4" DEEP DAMP LOCATION POLYCARBONATE JUNCTION BOX WITH GASKET, SCREW COVER. MOUNT ON VERTICAL FIBERGLASS UNISTRUT SO THE BOX IS NOT IN CONTACT WITH THE WALL. CUT THE PLUGS FROM CHEMICAL PUMP CORDS AND SPLICE THE CORDS CONDUCTORS IN THE JUNCTION BOX TO THE CONDUCTORS RUNNING OVERHEAD IN CONDUIT. THE OVERHEAD CONDUCTORS ARE RUN TO THE SECOND JUNCTION BOX WHERE THEY SHALL BE SPLICED TO CORDS FOR CONNECTION TO THE CHEMICAL CONTROLLERS. PROVIDE CORD GRIPS AT EACH JUNCTION BOX FOR CORDS ENTERING THE JUNCTION BOX.
 - PROVIDE JUNCTION BOX, SAME AS NOTE 3 AND MOUNT OFF WALL. SPLICE INCOMING #12 CONDUCTORS TO SJ CORDS. PROVIDE NEW 15AMP, 125 VOLT TWIST LOCK PLUGS ON SJ CORDS. CHANGE RECEPCTS ON CHEMICAL CONTROLLER CORDS TO MATCHING TWIST LOCK 15A, 125VOLT TYPE.
 - SEE CONTROL DIAGRAM ON DRAWING E-04 FOR [1] [2] [3] [4] AND RELAY [5]
 - MOUNT ALL EQUIPMENT ON NORTH WALL, INCLUDING RECEPTACLES ON FIBERGLASS UNISTRUT SO THEY ARE NOT IN CONTACT WITH THE WALL.



- DEMOLITION NOTES**
- IT IS THE INTENT OF THIS PROJECT TO DISCONNECT AND REMOVE ALL EXISTING ELECTRICAL MATERIALS AND DEVICES INCLUDING CONDUITS, CONDUCTORS, LIGHTING FIXTURES, RECEPTACLES, SWITCHES, PANELBOARDS, MOTOR CONTROLLERS, CONTROL PANELS AND THE LIKE AND TO REPLACE THEM WITH NEW AS SHOWN ON THE DRAWINGS. THE DEMOLITION DRAWING DOES NOT SHOW EACH ITEM TO BE REMOVED. THE CONTRACTOR MUST VISIT THE SITE DURING THE BIDDING STAGE TO ASCERTAIN THE EXTENT OF THE DEMOLITION WORK.
 - THE ELECTRICAL CONTRACTOR SHALL DISCONNECT THE POOL RECIRCULATION PUMPS FOR REMOVAL BY OTHERS.
 - THE ELECTRICAL CONTRACTOR SHALL DISCONNECT AND REMOVE THE TWO SETS OF 500MCM SERVICE CONDUCTORS FROM THE SERVICE END BOX IN THE FILTER ROOM UP TO THE CONNECTION AT THE UTILITY TRANSFORMER. THE CONTRACTOR SHALL ARRANGE WITH CON EDISON FOR ANY SHUTDOWNS AND DISCONNECTION OF THE SERVICE CONDUCTORS AT THE UTILITY TRANSFORMER.
 - UPON REMOVAL OF THE SERVICE CONDUCTORS FROM THE SERVICE CONDUITS THE ELECTRICAL CONTRACTOR SHALL PULL A MANDRILL AND WIRE BRUSH THROUGH EACH SERVICE CONDUIT AND SHALL NOTIFY THE OWNER IF THE CONDUITS ARE NOT USEABLE OR ARE OTHERWISE DAMAGED.
 - THE ELECTRICAL CONTRACTOR SHALL REMOVE FROM THE SITE ALL ELECTRICAL MATERIALS AND EQUIPMENT FROM THE SITE AND DISPOSE OF PROPERLY.
 - THE ELECTRICAL CONTRACTOR SHALL REMOVE ALL WIRING BETWEEN THE HANDHOLE LOCATED APPROXIMATELY 55' NORTH OF THE BATHHOUSE AND THE FILTER ROOM. SEE REFERENCE DRAWINGS ES-1. THE CONTRACTOR SHALL REPLACE THE WIRING FROM THE HANDHOLE INTO THE FILTER ROOM AND THE CONDUIT WITHIN THE FILTER ROOM PER THE DRAWINGS.
 - THE ELECTRICAL CONTRACTOR SHALL CUT BACK THE CONDUIT AND CONDUCTORS WHICH SERVE THE ROADWAY LIGHTING AND PARKING LOT LIGHTING FROM THE EXISTING OUTDOOR LIGHTING PANEL (OLP). THE EXISTING OUTDOOR WIRING AND CONDUIT SHALL BE EXTENDED IN THE FILTER ROOM TO A NEW TIME SWITCH AS SHOWN ON DRAWING E-02.

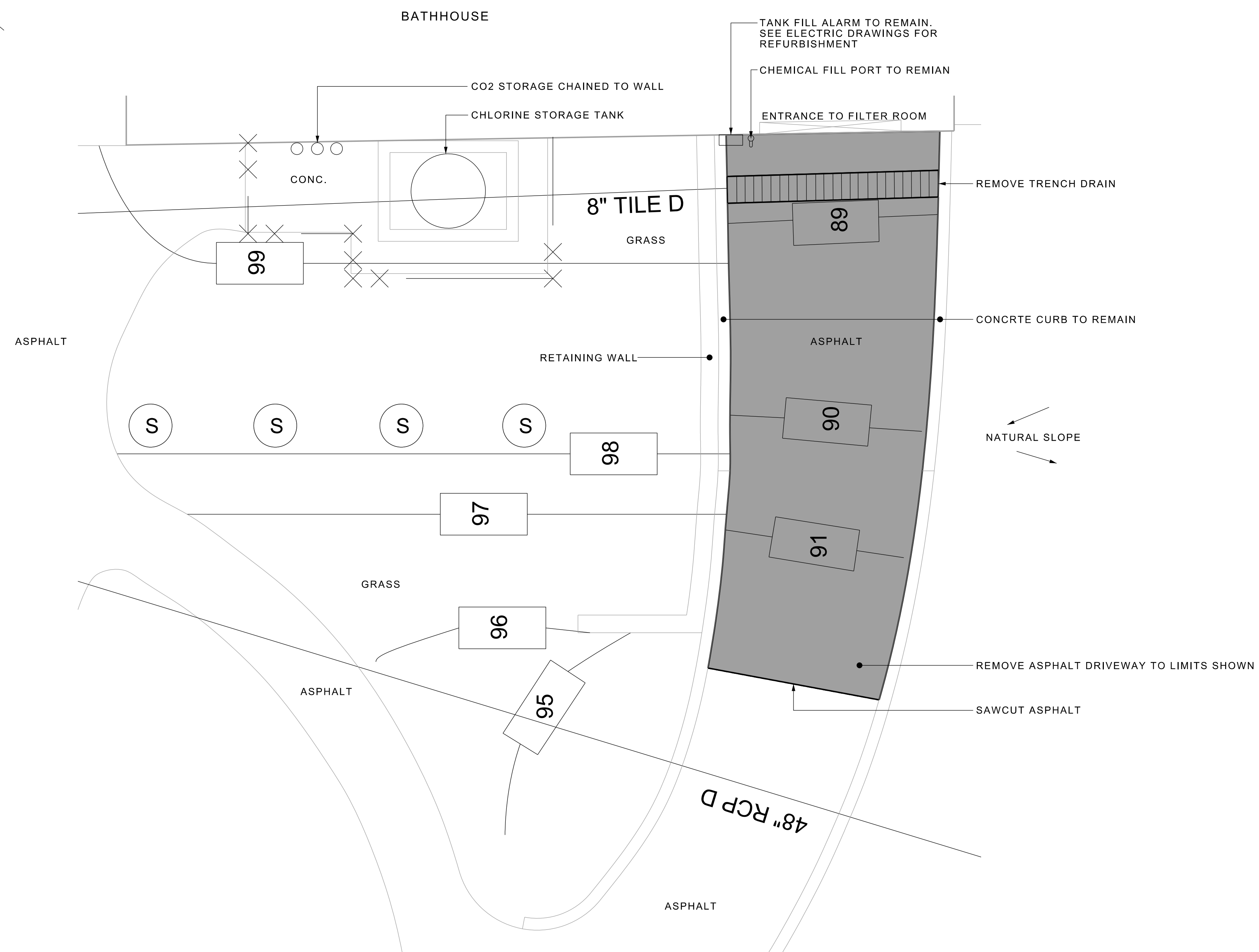
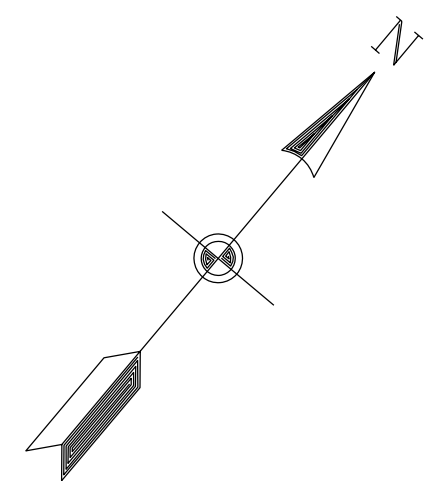
1 FILTER ROOM PLAN - DEMOLITION
 SCALE: 1/4"=1'-0"

| LEGEND | | | |
|--------|---|--------|--|
| SYMBOL | DESCRIPTION | SYMBOL | DESCRIPTION |
| | RECEPTACLE, 20A, 125 V, GFI, UON, NUMERICAL INDICATES CIRCUIT NO IN PANEL LP. | | RELAY |
| | TOGGLE SWITCH 20A, 125V, UON. | | CHAIN OR STEM HUNG LED LIGHTING FIXTURE. |
| | COMBINATION MOTOR STARTER, I INDICATES NEMA SIZE. | | UNDERGROUND ELECTRIC CIRCUIT(S) |
| | VARIABLE FREQUENCY DRIVE | | BRANCH CIRCUIT WIRING |
| | UNFUSED DISCONNECT SWITCH, 30 INDICATES SWITCH SIZE. | | FLEXIBLE CORD |
| | PULLBOX | | 15A, 125VOLT TWIST LOCK RECEPTACLE |
| | HOMERUN SHOWN, TO PANEL MSDP CIRCUIT 2 #12, @12 GRD - 3/4" C, NUMBER OF ARROWS INDICATE NUMBER CIRCUITS | | 15A, 125VOLT TWIST LOCK PLUG |

- ABBREVIATIONS**
- MP MAIN POOL
 - TP TRAINING POOL
 - WP WADING POOL
 - FP FEATURE PUMP
 - RC RECIRCULATION PUMP
 - UON UNLESS OTHERWISE NOTED
 - VFD VARIABLE FREQUENCY DRIVE
 - LLC LEVEL CONTROL PANEL

2 ELECTRICAL LEGEND
 SCALE: N.T.S.

3 FILTER ROOM PLAN - NEW WORK
 SCALE: 1/2"= 1'-0"



DEMOLITION NOTES:

1. SAWCUT TOP OF DRIVEWAY AT LOCATION SHOWN.
2. REMOVE EXISTING ASPHALT DRIVEWAY FROM SAWCUT DOWN TO CONCRETE FLOOR OF FILTER ROOM.
3. REMOVE TRENCH DRAIN. PROTECT EXISTING PIPE EXITING TRENCH FOR NEW CONNECTION.
4. PROTECT EXISTING CONCRETE CURB AND RETAINING WALL.
5. CHLORINE TANK OVERFILL ALARM TO REMAIN IN PLACE. SEE ELECTRICAL DRAWINGS FOR RECONSTRUCTION OF ALARM PANEL.
6. TANK FILL PORT TO REMAIN IN PLACE.
7. REMOVE EXISTING CHAINLINK FENCE GATES TO FILTER ROOM. INSTALL TEMPORARY FENCING TO PREVENT ENTRY INTO FILTER ROOM DURING CONSTRUCTION.

1 TRANSFER PAD DEMOLITION PLAN
SCALE: 1" = 4'

PROJECT ENGINEER:
Rimkunas Engineering, P.L.L.C.
Aquatic Engineering & Construction Management
Rimkunas Engineering, P.L.L.C.
44 Elm Street, 10th Huntington • New York • 11743
631.470.6115

It is a violation of Section 7209 of the New York State Education Law for any person, unless he is acting under the direction of a licensed professional engineer, to alter any item on this drawing in any way. If the drawing is altered under the direction of a professional engineer, the altering engineer shall affix his seal to the drawing with the notation "altered by" followed by his signature, the date of alteration, and a specific description of the alteration.

| NO. | REVISIONS | DATE |
|-----|-----------|------|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

OWNER:
VILLAGE OF HASTINGS-ON-HUDSON

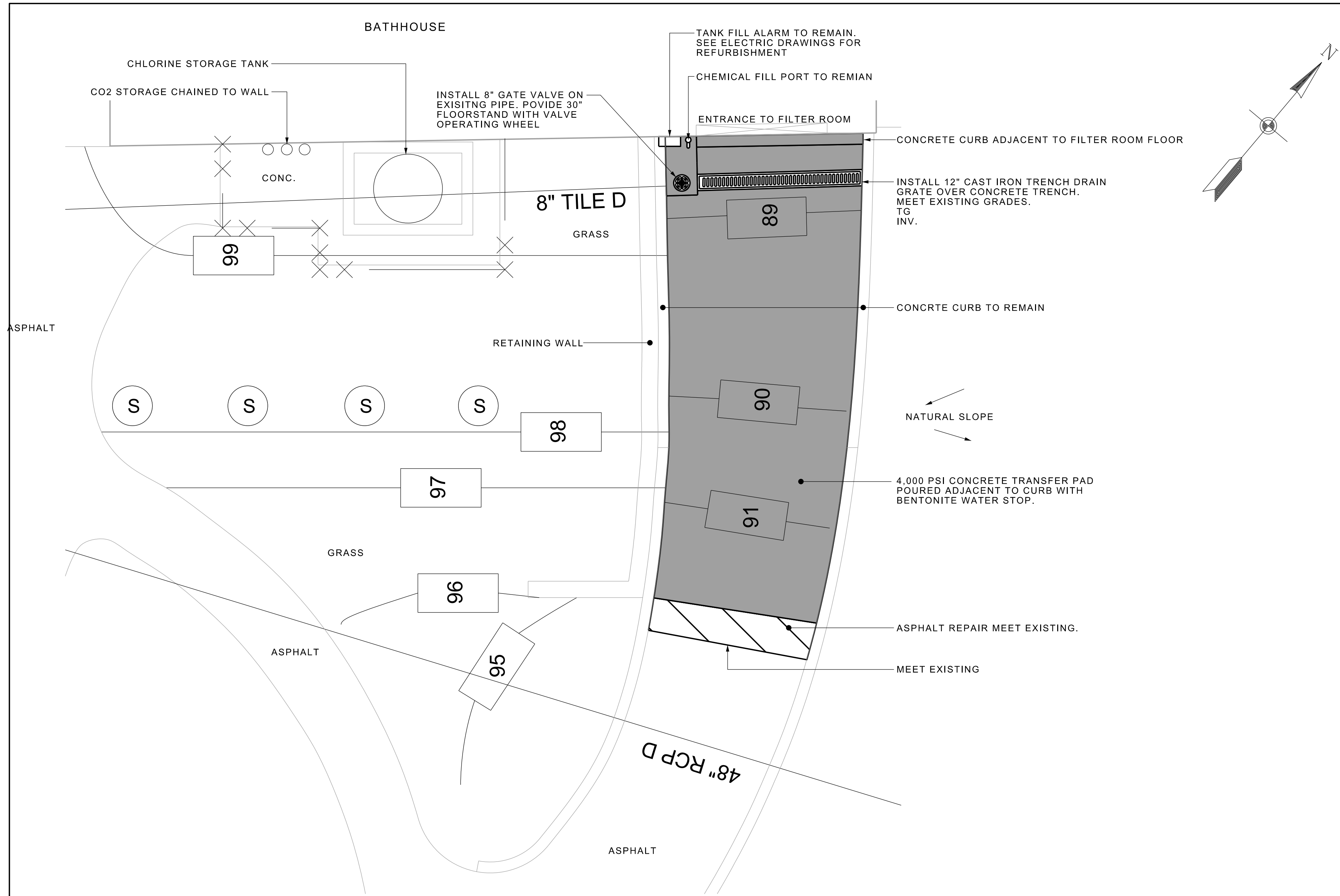
DEPARTMENT OF PARKS AND RECREATIONS

PROJECT:
CHEMKA POOL STORM DAMAGE 2021 RECOVERY

DRAWING TITLE:
TRANSFER PAD SITE DEMOLITION

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

| | |
|---------------------|-----------------------|
| DRAWN BY: BC | |
| CHECKED BY: SR | |
| FILE NO. - | |
| PROJECT NO. 1148 | DRAWING NO. CBS-01 |
| DATE: 03/23/2022 | |

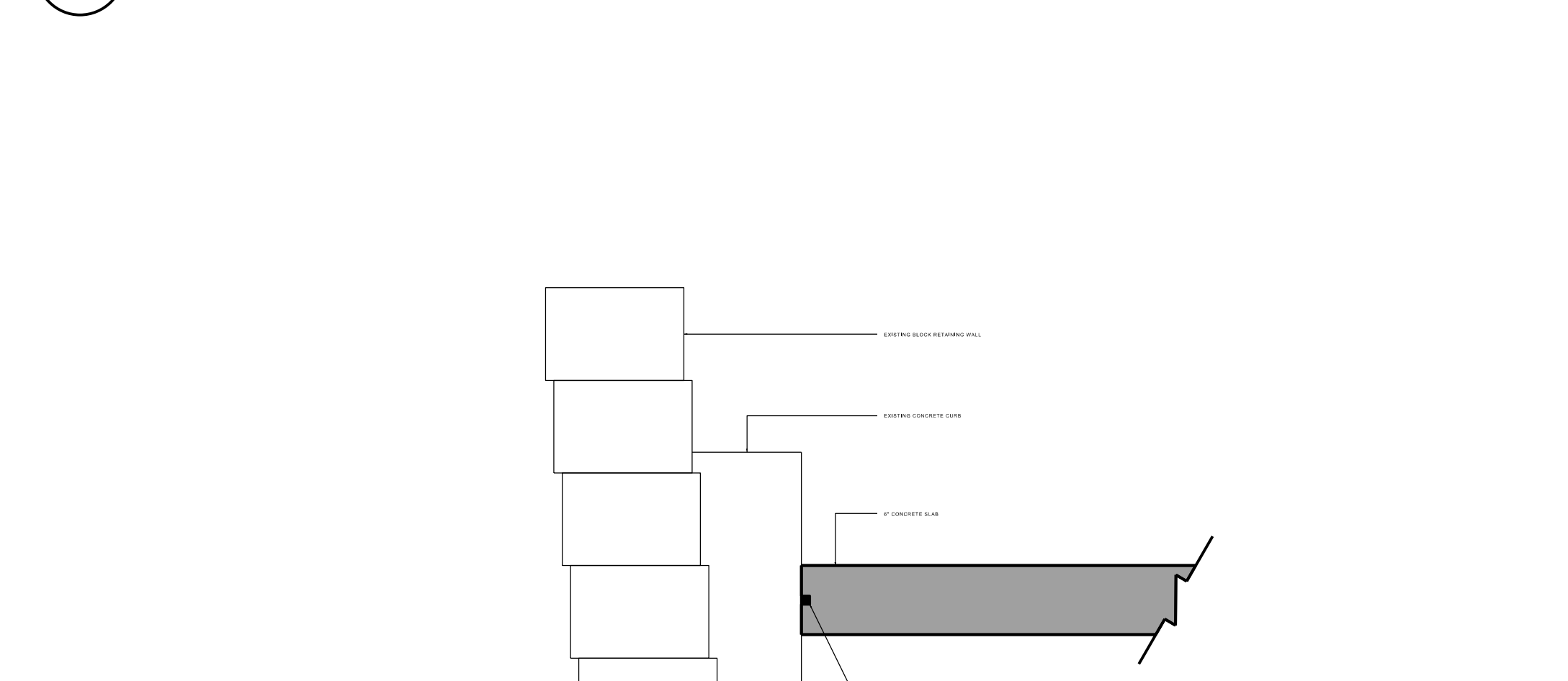
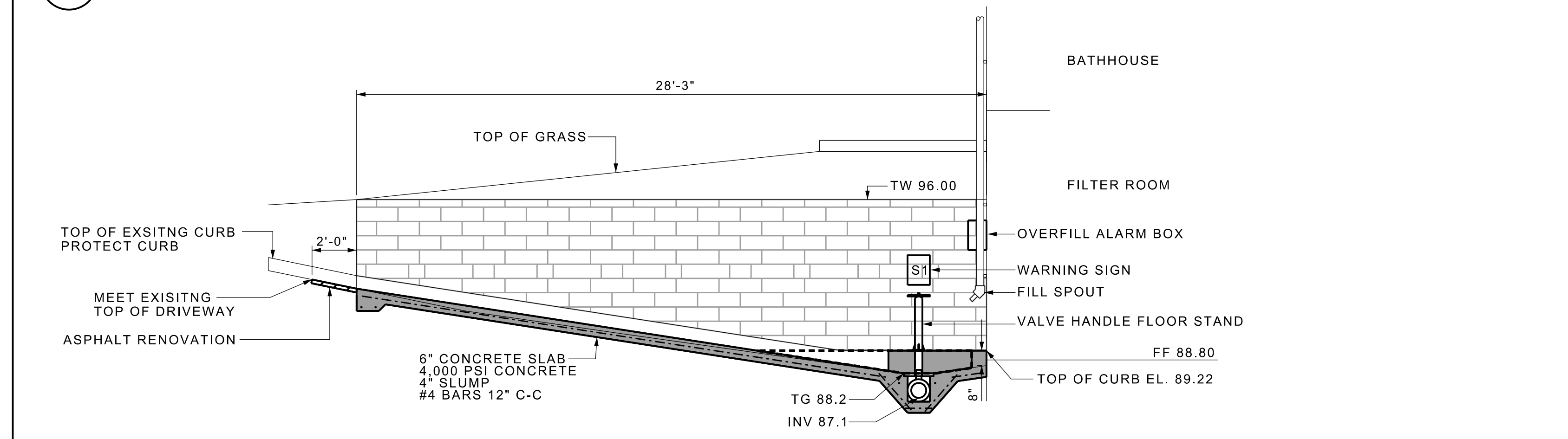


- PROPOSED NOTES:**
1. POUR NEW CONCRETE TRANSFER PAD TO MATCH EXISTING GRADES.
 2. PROVIDE BENTONITE WATERSTOP BETWEEN NEW CONCRETE AND EXISTING CONCRETE CURB
 3. FURNISH AND INSTALL NEW TRENCH DRAIN GRATE OVER CONCRETE TRENCH. POUR CONCRETE INVERT TO MATCH PIPE INVERT.
 4. FURNISH AND INSTALL 8" BURIED GATE VALVE AT END OF EXISTING TRENCH DRAIN DISCHARGE PIPE.
 5. FURNISH AND INSTALL FLOOR STAND FOR WHEEL VALVE OPERATOR.
 6. CHLORINE TANK OVERFILL ALARM TO REMAIN IN PLACE. SEE ELECTRICAL DRAWINGS FOR RECONSTRUCTION OF ALARM PANEL.
 6. TANK FILL PORT TO REMAIN IN PLACE.
 7. INSTALL NEW CHAINLINK FENCE GATES TO FILTER ROOM.
 8. PROVIDE NEW WARNING SIGN DIRECTING VALVE TO BE CLOSED DURING CHEMICAL TRANSFER.
 9. PROVIDE NEW WARNING SIGN DIRECTING FILTER ROOM EJECTOR TO BE TURNED OFF DURING CHEMICAL TRANSFER.

BEFORE TRANSFERRING ANY CHEMICAL PRODUCT
CLOSE CHEMICAL TRANSFER STATION DRAIN VALVE
TURN OFF FILTER ROOM EJECTOR PIT

1 TRANSFER PAD PROPOSED PLAN
SCALE: 1" = 4'

1 CONSTRUCTION NOTES AND WARNING SIGN
SCALE: N.T.S.



1 TRANSFER PAD PROPOSED SECTION
SCALE: 1" = 4'

1 CURB / CONCRETE SLAB JOINT
SCALE: N.T.S.

PROJECT ENGINEER:
Rimkunas Engineering, P.L.L.C.
Aquatic Engineering & Construction Management
Rimkunas Engineering, P.L.L.C.
44 Elm Street, 10-Huntington • New York • 11743
631.470.6115

It is a violation of Section 7209 of the New York State Education Law for any person, unless he is acting under the direction of a licensed professional engineer, to alter any item on this drawing in any way. If the drawing is altered under the direction of a professional engineer, the altering engineer shall affix his seal to the drawing with the notation "altered by" followed by his signature, the date of alteration, and a specific description of the alteration.

| NO. | REVISIONS | DATE |
|-----|-----------|------|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

OWNER:
VILLAGE OF HASTINGS-ON-HUDSON

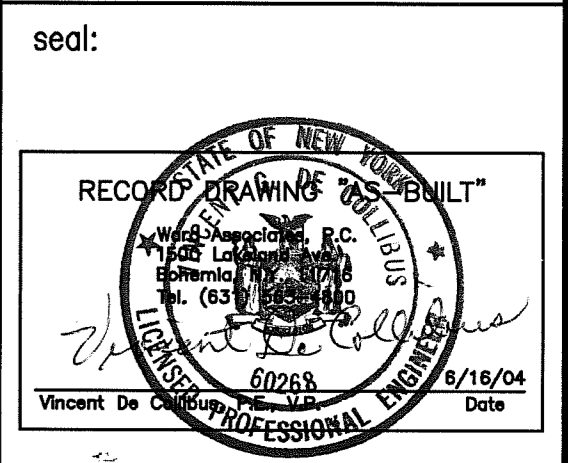
DEPARTMENT OF PARKS AND RECREATIONS

PROJECT:
CHEMKA POOL STORM DAMAGE 2021 RECOVERY

DRAWING TITLE:
TRANSFER PAD SITE PROPOSED

SCALE:
SCALE AS SHOWN

| | |
|---------------------|------------------------------|
| DRAWN BY: BC | DRAWING NO. CBS-02 |
| CHECKED BY: SR | |
| FILE NO. - | |
| PROJECT NO. 1148 | DATE: 03/23/2022 |



AS BUILT 6/16/04
 REVISED PER WCHD 7/24/03
 REVISED PER WCHD 8/02/03

WARD ASSOCIATES
 Landscape Architects,
 Architects, Engineers

1500 Lakeland Avenue
 Bohemia, N.Y. 11716
 (631) 563-4800
 45 West Main Street
 Little Falls, New York 13365
 (315) 823-4384

ACCEPTED AS FINAL PLANS
 JUN 4 5 2004
 WESTCHESTER COUNTY HEALTH DEPARTMENT

WESTCHESTER COUNTY HEALTH DEPARTMENT

project title:

MODERNIZATION OF SWIMMING POOLS

JULIUS M. CHEMKA POOL FACILITY

VILLAGE OF HASTINGS-ON-HUDSON TOWN OF GREENBURGH, NEW YORK

drawing title:

EXISTING MAIN POOL

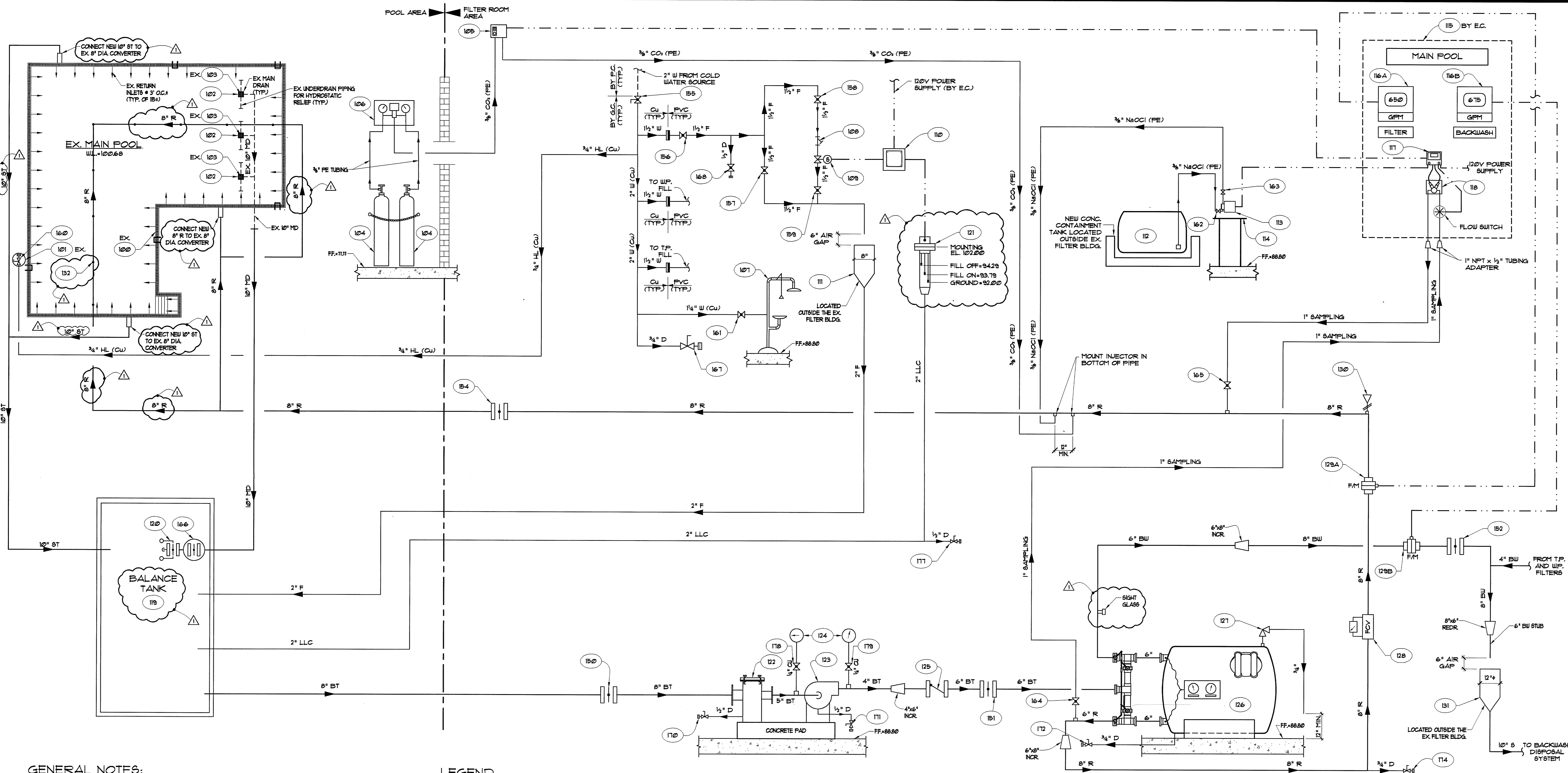
HYDRAULIC SCHEMATIC

drawn by: V.G.D.
 checked by: V.G.D.
 date: 12/20/02
 scale: AS NOTED
 drawing number:

SP-1 of 14

STATE LAW PROHIBITS ANY PERSON FROM ALTERING ANYTHING ON THIS DRAWING AND/OR THE ACCOMPANYING SPECIFICATION UNLESS IT IS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER. WHERE SUCH ALTERATIONS ARE MADE, THE LICENSED PROFESSIONAL ENGINEER MUST SIGN, SEAL, DATE AND DESCRIBE THE FULL EXTENT OF THE ALTERATION ON THE DRAWING AND/OR IN THE SPECIFICATION.

ref. no.: 200124.00



GENERAL NOTES:
 1. UNLESS OTHERWISE NOTED, ALL ITEMS SHOWN HEREIN SHALL BE NEW.
 2. THE EXISTING MAIN POOL PUMP AND FILTER SYSTEMS HAVE AN APPROVED DESIGN FLOW OF 650 GPM. PROPOSED RENOVATIONS WILL MAINTAIN THE DESIGN FLOW OF 650 GPM.

ABBREVIATIONS

- BLDG. BUILDING
- BT BALANCE TANK
- BU BACKWASH
- CO2 CARBON DIOXIDE
- D DRAIN
- EX EXISTING
- F FILL
- FT/SEC. FEET PER SECOND
- GAL. GALLON
- GPD GALLONS PER DAY
- GPM GALLONS PER MINUTE
- HL HANDICAPPED LIFT
- HR HOUR
- NCR INCREASE
- LONG LONG
- LF LINEAR FEET
- LLC LIQUID LEVEL CONTROL
- MAX MAXIMUM
- MD MAIN DRAIN
- MP MAIN POOL
- NaOCl SODIUM HYPOCHLORITE
- OD OUTSIDE DIAMETER
- OF OVER FLOW
- PE POLYETHYLENE
- POOL RETURN
- R REDUCER
- S SANITARY SEWER
- SF SQUARE FEET
- ST SURGE TRENCH
- TF TRAINING POOL
- W WATER LEVEL
- WP WADING POOL

DESIGN DATA

| | | |
|--------------------------|--------|------------------|
| POOL SIZE | LF | 40'-0" x 80'-10" |
| SURFACE AREA | SF | 5200 |
| PERIMETER | LF | 340 |
| POOL VOLUME | GAL | 216,000 |
| TURNOVER | HR | 5.43 |
| FLOW RATE | GPM | 650 |
| FILTER AREA | SF | 45.1 |
| APPLICATION RATE | GPM/SF | 14.41 |
| MAIN DRAIN OPEN AREA | SF | 2.10 |
| VELOCITY THRU MD | FT/SEC | 0.54 |
| 15% NaOCl REQ'D @ 10 PPM | GPD | 252 |

COLOR CODING

| | |
|----------------------------|------------------------------|
| ACID | PINK |
| ALUM | ORANGE |
| BACKWASH | DARK BROWN |
| CARBON DIOXIDE (CO2) | PINK |
| CHLORINE (GAS OR SOLUTION) | YELLOW |
| COMPRESSED AIR | DARK GREEN |
| DRAIN | LIGHT GREEN |
| FILTER TANKS | AQUA |
| GUTTER | OLIVE GREEN |
| LIQUID LEVEL CONTROL | OLIVE GREEN |
| MAIN DRAIN | BLACK |
| NATURAL GAS | RED |
| OVERFLOW | LIGHT BROWN |
| POOL FILL | DARK BLUE |
| POOL RETURN | AQUA |
| PUMP SUCTION | OLIVE GREEN W/ BLACK STRIPES |
| PUMP DISCHARGE | OLIVE GREEN W/ BLACK STRIPES |
| POTABLE WATER | DARK BLUE |
| SANITARY SEWER (WASTE) | DARK GRAY |
| SKIPPERS | OLIVE GREEN |
| SODA ASH | WHITE |

LEGEND

- PVC BUTTERFLY VALVE
- CHECK VALVE, WAFER TYPE
- GATE VALVE
- PVC BALL VALVE
- GATE VALVE IN VALVE BOX
- BALL VALVE W/ HOSE BIBB CONN.
- BRASS BALL VALVE
- SOLENOID VALVE
- BUTTERFLY VALVE + STEM EXTENSION
- CONDUIT & WIRE (BY E.C.)

VALVE OPERATION CHART

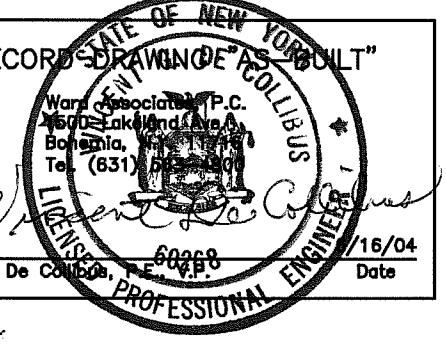
| VALVE No. | DESCRIPTION | SIZE | FUNCTION | FILTERING | | BACKWASH | | WINTER | |
|-----------|---------------------|--------|-----------|-----------|--------|----------|----------|--------|--------|
| | | | | OPEN | CLOSED | OPEN | CLOSED | OPEN | CLOSED |
| 150 | POOL PUMP SUCTION | 8" | ISOLATION | X | | | | | X |
| 151 | POOL PUMP DISCHARGE | 6" | ISOLATION | X | | | | | X |
| 152 | BACKWASH | 8" | ISOLATION | | X | | THROTTLE | | X |
| 153 | NOT USED | | | | | | | | |
| 154 | POOL RETURN | 8" | ISOLATION | X | | X | | | X |
| 155 | CW SUPPLY | 2" | ISOLATION | X | | X | | | X |
| 156 | POOL FILL | 1 1/2" | ISOLATION | X | | X | | | X |
| 157 | POOL FILL (MANUAL) | 1 1/2" | BYPASS | | X | | X | X | |
| 158 | POOL FILL (AUTO) | 1 1/2" | ISOLATION | X | | X | | | X |
| 159 | POOL FILL (AUTO) | 1 1/2" | ISOLATION | X | | X | | | X |
| 160 | HANDICAPPED LIFT | 3/4" | ISOLATION | | X | | X | X | |
| 161 | EYEWASH/SHOWER | 1 1/4" | ISOLATION | X | | X | | | X |
| 162 | NaOCl | 1/2" | ISOLATION | X | | X | | | X |
| 163 | NaOCl | 1/2" | ISOLATION | X | | X | | | X |
| 164 | CHEMICAL SAMPLING | 1" | ISOLATION | X | | X | | | X |
| 165 | CHEMICAL SAMPLING | 1" | ISOLATION | X | | X | | | X |
| 166 | MAIN DRAIN | 10" | ISOLATION | X | | X | | | X |
| 167 | EYEWASH/SHOWER | 3/4" | DRAIN | | X | | X | X | |
| 168 | POOL FILL (DRAIN) | 1/2" | DRAIN | | X | | X | X | |
| 170 | POOL PUMP STRAINER | 1/2" | DRAIN | | X | | X | X | |
| 171 | POOL PUMP | 1/2" | DRAIN | | X | | X | X | |
| 172 | FILTER TANK | 3/4" | DRAIN | | X | | X | X | |
| 173 | NOT USED | | | | | | | | |
| 174 | POOL RETURN | 3/4" | DRAIN | | X | | X | X | |
| 176 | NOT USED | | | | | | | | |
| 177 | LL ASSEMBLY | 1/2" | DRAIN | | X | | X | X | |
| 178 | PUMP GAUGE | 1/2" | ISOLATION | X | | X | | | X |
| 179 | PUMP GAUGE | 1/2" | ISOLATION | X | | X | | | X |

LIST OF EQUIPMENT

| ITEM No. | QTY. | DESCRIPTION | MANUFACTURER | MODEL No. | NOTES |
|----------|-----------|---------------------------------|-----------------------|-------------------------|--|
| 120 | 340 LF | EX. DECK LEVEL GUTTER | | | EX. GUTTER TO BE MAINTAINED. |
| 121 | 1 | HANDICAPPED LIFT | SPECTRUM AQUATICS | PINTLAR | INSTALL LIFT AND SUPPLY VALVE BOX W/ QUICK CONNECTING HOSE BIBB. |
| 122 | 3 | MAIN DRAIN FRAME & GRATE | DURADEK | 1-4020-11 1/2" | FRP, MAX. CLEAR OPEN. 40% FOA, 0.5 HDUE, WHITE (MD, 1'-6" W/ 6'-EA) |
| 123 | 3 | EX. HYDROSTATIC RELIEF VALVE | | | ENSURE OPERATION OF VALVES. |
| 124 | 6 | CO2 CYLINDER | AUISCO NEW YORK CORP. | | 2-50 LB. TANKS. CONTRACTOR SHALL PROVIDE LOCKS & CHAINS TO SECURE TANKS. PROVIDE (4) SPARE'S. |
| 125 | 1 | CO2 FEED LIT | TREATMENT SPECIALTIES | CO2 FEED SYSTEM | |
| 126 | 1 | PRESS. RED. & CHANGE OVER VALVE | TREATMENT SPECIALTIES | PDS 500 BRASS | WALL MOUNTED CO2 FEED UNIT. FIBERGLASS PANEL CONTAINS 10-120 SCFH FLOWMETER AND 120 VOLT SOLENOID VALVE (19-CO2-4) |
| 127 | 1 | EYEWASH/SHOWER | HAYS | 8320 | 1 1/2" PVC BODY WITH TYPE 316, 0.5, 420 MESH SCREEN |
| 128 | 1 | STRAINER | HAYWARD | 1" - TYPE 8221G11 | 1 1/2" BRASS, 50/60 GPM |
| 129 | 1 | SOLENOID VALVE | ASCO | | NEMA 4X NON-METALLIC ENCLOSURE. FIELD ADJUSTABLE CONTROLLER. INVERSE ACTING W/ 5 SECOND TIME DELAY |
| 130 | 1 | LIQUID LEVEL CONTROLLER | WARRICK CONTROLS | 16V7110-22 | 12" 0.5. BODY W/ 2-0.5. FLOATS & ADJUSTABLE FLOAT ARMS |
| 131 | 1 | FILL FUNNEL | FABRICATED | | 2 1/4" CLEAR POLYCARBONATE GAUGE (3) TYPE 316 0.5. PROBES, CONTRACTOR SHALL FIELD CUT RES. LENGTH. |
| 132 | 1 | NaOCl TANK | CHEM-TAINER | TC64601A | VERTICAL 100 GAL. HDPE, IN NEW CONC. CONTAINMENT TANK |
| 133 | 1 | NaOCl FEEDER PUMP | LMI | B31-46051 | W/ 4 FUNCTION VALVE & ACCESSORIES |
| 134 | 1 | NaOCl PUMP SUPPORT SHELVES | FABRICATED | | FRP CONSTRUCTION W/ CONTAINMENT |
| 135 | 1 | CONTROL PANEL | FABRICATED | | 0.5. CONSTRUCTION BY E.C. SEE ELECTRICAL DWG'S. |
| 136A | 1 | SIGNAL | SIEMENS | 3-5100 | BATTERY OPERATED |
| 136B | 1 | FLOW MONITOR | SIEMENS | 3-5122 | 3-5122 |
| 137 | 1 | CHEMICAL CONTROLLER | LINK AUTOMATION | POOL LINK 1000 SERIES | NaOCl AND pH MONITORING |
| 138 | 1 | SAMPLE STREAM ASSEMBLY | LINK AUTOMATION | BUI PROBE CHAMBER SYS. | W/ BALL VALVES, FLOW SWITCH, & ACCESSORIES |
| 139 | 1 | BALANCE TANK | FABRICATED | | 17" DIA. PVC CONSTRUCTION. INSTALLED BY G.C. |
| 140 | 1 | FLOAT VALVE | MEER MADE | 12" FV-D | 12" 0.5. BODY W/ 2-0.5. FLOATS & ADJUSTABLE FLOAT ARMS |
| 141 | 1 | LIQUID LEVEL GAUGE/SENSORS | WARRICK CONTROLS | 3F3E | 2 1/4" CLEAR POLYCARBONATE GAUGE (3) TYPE 316 0.5. PROBES, CONTRACTOR SHALL FIELD CUT RES. LENGTH. |
| 142 | 1 | STRAINER | MEER MADE | T STYLE BASKET STRAINER | 8"0.5" FRP BODY CLEAR LID AND (3) 0.5. BASKETS |
| 143 | 1 | RECIRCULATION PUMP | PACO | KPV-4215-1 | 650 GPM @ 60' TDH W/ 20 HP 150 RPM MOTOR (NSF APPROVED) |
| 144 | 1 | DUAL PRESSURE/ SUCTION GAUGE | WEKSLER | AA-14-41 1/2" | PRESSURE GAUGE (0-60 PSI) & COMPOUND GAUGE (30-0-60 PSI), 1/2" CONNECTIONS, & ISOLATION VALVES |
| 145 | 1 | CHECK VALVE | KEYSTONE | FRNCE #812 | 6" WAFER CHECK, ALL 0.5. CONSTRUCTION |
| 146 | 1 | FILTER TANK | NEPTUNE BENSON | 421448FFG | 42" DIA. HORIZONTAL FIBERGLASS TANK W/ 6" PIPE MANIFOLD, ACCESS HATCH GAUGE PANEL, & SIGHT GLASS |
| 147 | 1 | AIR RELIEF VALVE | NEPTUNE BENSON | | 3/4" VALVE |
| 148 | 1 | FLOW CONTROL VALVE | GRISWOLD | 1513BTE | 8" EPOXY COATED C.I. BODY W/ 0.5. CARTRIDGES |
| 149A | 1 | FLOW METER SENSOR | SIEMENS | FB530-PI | W/ PV8080 FITTING (RANGE = 0-3000 GPM) |
| 149B | 1 | FLOW METER SENSOR | SIEMENS | FB530-FI | W/ PV8080 FITTING (RANGE = 0-3000 GPM) |
| 150 | AS REQ'D. | AUTOMATIC AIR VENT | HORRYAN TACO | 410 "HY-VENT" | 3/4" LOCATE AT ALL HIGH POINTS IN SYSTEM |
| 151 | 1 | BACKWASH FUNNEL | FABRICATED | | 17" DIA. PVC CONSTRUCTION. INSTALLED BY G.C. |
| 152 | 3 | FLOOR INLET | UN SMITH INC | 48-66102 | 2" FIP CHROME PLATED, ADJUSTABLE W/ SPANNER WRENCH |

* ADJUST VALVE TO FLOW 30% OF THE TOTAL FLOW (630 X 650) = 125 GPM

seal:



AS BUILT 6/16/24
 REVISED PER WCHD 1/24/23
 REVISED PER WCHD 5/27/23

WARD ASSOCIATES
 Landscape Architects,
 Architects, Engineers

1500 Lakeland Avenue
 Bohemia, N.Y. 11716
 (631) 563-4800

45 West Main Street
 Little Falls, New York 13365
 (315) 823-4384

ACCEPTED
 AS FINAL PLANS

JUN 4 5 2024
 WEST. CO. DEPT. OF HEALTH
 BY: [Signature]

WESTCHESTER COUNTY
 HEALTH DEPARTMENT

project title:

**MODERNIZATION OF
 SWIMMING POOLS**

**JULIUS M. CHEMKA
 POOL FACILITY**

VILLAGE OF HASTINGS-ON-HUDSON
 TOWN OF GREENBURGH, NEW YORK

drawing title:

WADING POOL

**HYDRAULIC
 SCHEMATIC**

drawn by: D.F.

checked by: V.G.D.

date: 12/20/02

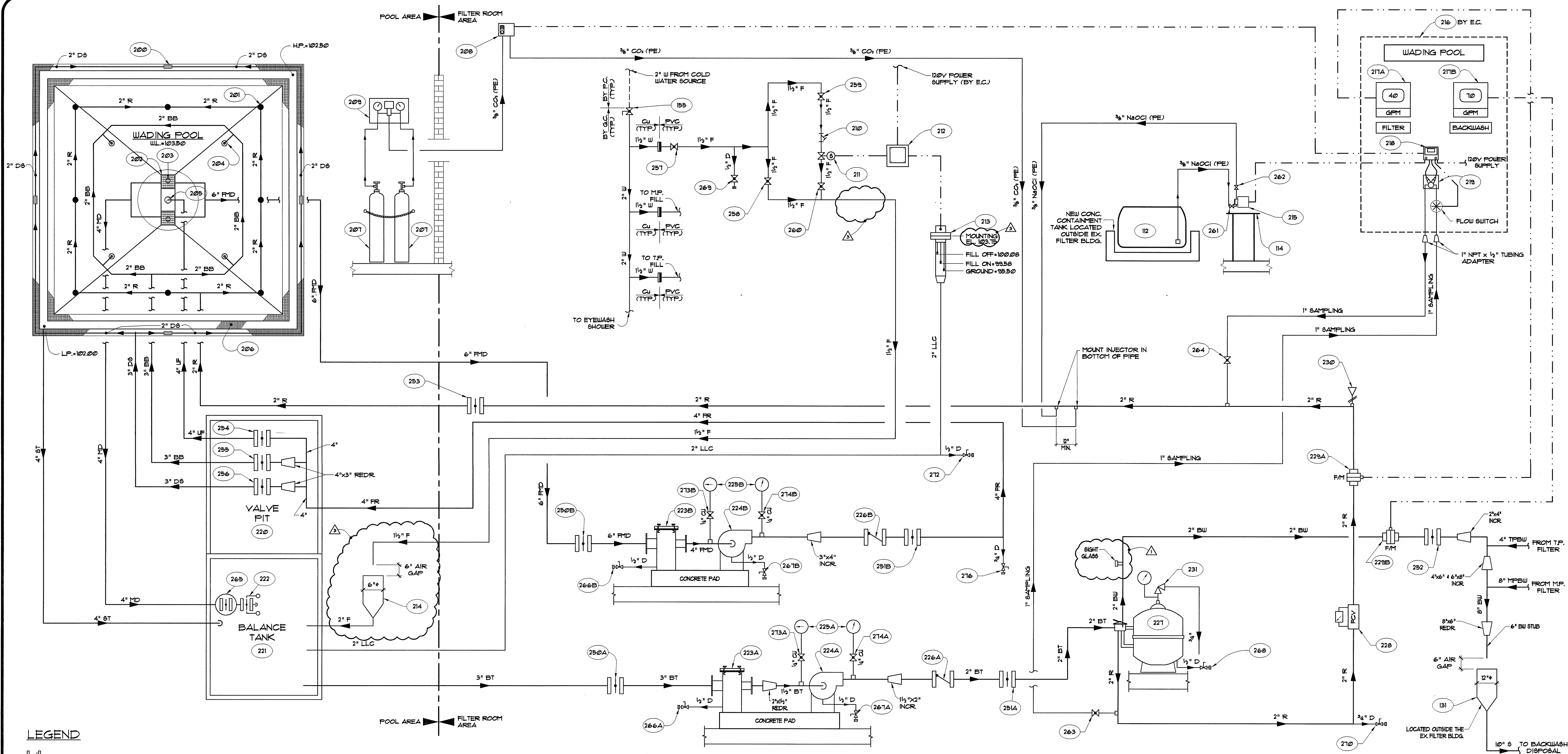
scale: AS NOTED

drawing number:

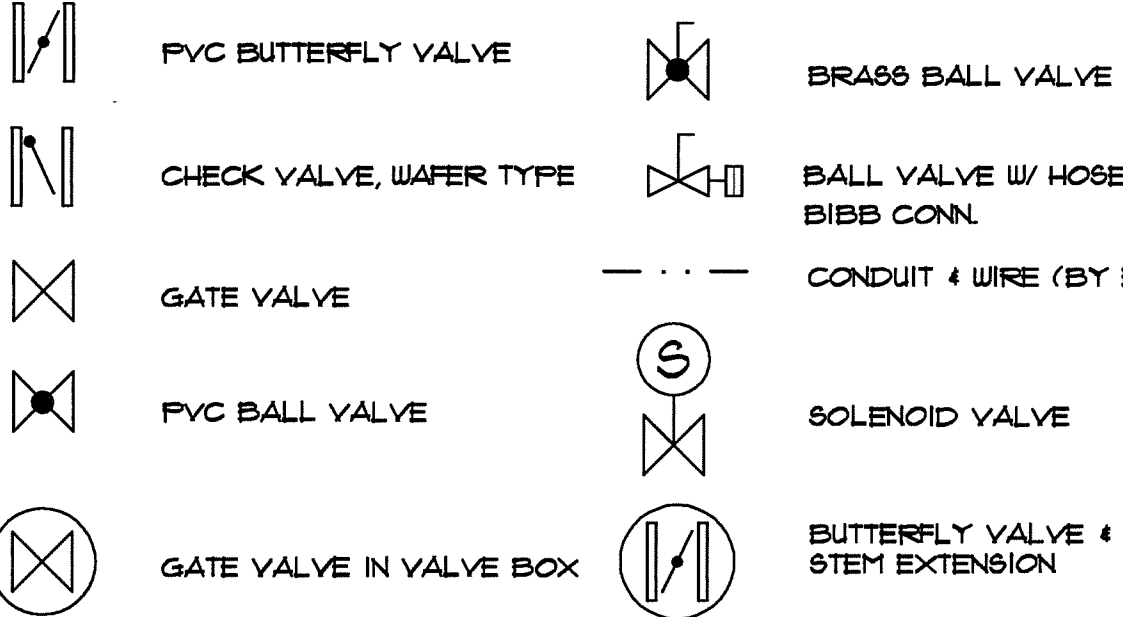
SP-2 of 14

STATE LAW PROHIBITS ANY PERSON FROM ALTERING ANYTHING ON THIS DRAWING AND/OR THE ACCOMPANYING SPECIFICATION, UNLESS IT IS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER. WHERE SUCH ALTERATIONS ARE MADE, THE LICENSED PROFESSIONAL ENGINEER'S SIGN, SEAL, DATE AND DESCRIPTION OF THE FULL EXTENT OF THE ALTERATION ON THE DRAWING AND/OR IN THE SPECIFICATION.

ref. no.: 200124.00



LEGEND



DESIGN DATA

| | | |
|--------------------------|--------|-----------------|
| POOL SIZE | LF | 30'-0" x 30'-0" |
| SURFACE AREA | SF | 900 |
| PERIMETER | LF | 120 |
| POOL VOLUME | GAL | 2295 |
| TURNOVER | HR | 0.36 |
| FILTER FLOW RATE | GPM | 40 |
| FEATURE FLOW RATE | GPM | 200 |
| FILTER AREA | SF | 4.9 |
| MAIN DRAIN OPEN AREA | GPM/SF | 8.16 |
| VELOCITY THRU M.D. | FT/SEC | 0.30 |
| 15% NaOCl REQ'D @ 10 PPM | GPD | 4 |

COLOR CODING

| | |
|----------------------------|------------------------------|
| ACID | PINK |
| ALUM | ORANGE |
| BACKWASH | DARK BROWN |
| CARBON DIOXIDE (CO2) | PINK |
| CHLORINE (GAS OR SOLUTION) | YELLOW |
| COMPRESSED AIR | DARK GREEN |
| DRAIN | LIGHT BROWN |
| FILTER TANKS | AQUA |
| GUTTER | OLIVE GREEN |
| LIQUID LEVEL CONTROL | OLIVE GREEN |
| MAIN DRAIN | BLACK |
| NATURAL GAS | RED |
| OVERFLOW | LIGHT BROWN |
| POOL FILL | DARK BLUE |
| POOL RETURN | AQUA |
| PUMP SUCTION | OLIVE GREEN W/ BLACK STRIPES |
| PUMP DISCHARGE | OLIVE GREEN W/ BLACK STRIPES |
| POTABLE WATER | DARK BLUE |
| SANITARY SEWER (WASTE) | DARK GRAY |
| SKIMMERS | OLIVE GREEN |
| SODA ASH | WHITE |

ABBREVIATIONS

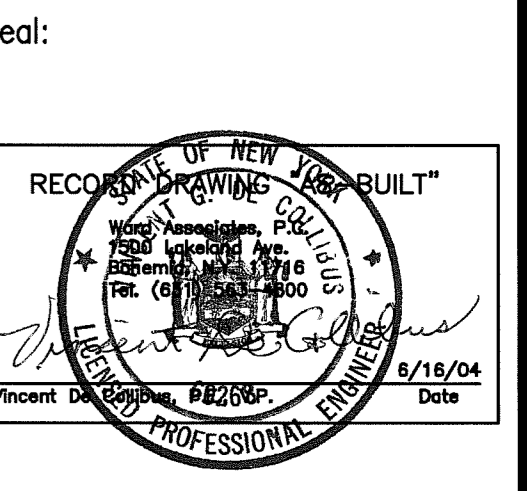
| | | | |
|---------|--------------------|-------|----------------------|
| BLDG. | BUILDING | LLC | LIQUID LEVEL CONTROL |
| BT | BALANCE TANK | MAX. | MAXIMUM |
| BW | BACKWASH | MD | MAIN DRAIN |
| CO | CARBON DIOXIDE | MP | MAIN POOL |
| D | DRAIN | NaOCl | SODIUM HYPOCHLORITE |
| EX. | EXISTING | OD | OUTSIDE DIAMETER |
| FILL | FILL | OV | OVERFLOW |
| FMD | FEATURE MAIN DRAIN | FE | FOLYETHYLENE |
| FR | FEATURE RETURN | R | POOL RETURN |
| FT/SEC. | FEET PER SECOND | REDR. | REDUCER |
| GAL. | GALLON | S | SANITARY SEWER |
| GPD | GALLONS PER DAY | SF | SQUARE FEET |
| GPM | GALLONS PER MINUTE | ST | SURGE TRENCH |
| HL | HANDICAPPED LIFT | TP | TRAINING POOL |
| HR | HOUR | W | WATER |
| NCR | INCREASER | WLL | WATER LEVEL |
| L | LONG | WP | WADING POOL |
| LF | LINEAR FEET | | |

VALVE OPERATION CHART

| VALVE No. | DESCRIPTION | SIZE | FUNCTION | FILTERING | | BACKWASH | | WINTER | |
|-----------|---------------------|--------|-----------|-----------|--------|----------|----------|--------|--------|
| | | | | OPEN | CLOSED | OPEN | CLOSED | OPEN | CLOSED |
| 155 | CU SUPPLY | 2" | ISOLATION | X | | X | | | X |
| 250A | POOL PUMP SUCTION | 3" | ISOLATION | X | | X | | | X |
| 250B | FEATURE SUCTION | 6" | ISOLATION | X | | X | | | X |
| 251A | POOL PUMP DISCHARGE | 2" | ISOLATION | X | | X | | | X |
| 251B | FEATURE DISCHARGE | 4" | ISOLATION | X | | X | | | X |
| 252 | BACKWASH | 2" | ISOLATION | | X | | THROTTLE | | X |
| 253 | POOL RETURN | 2" | ISOLATION | X | | X | | | X |
| 254 | UMBRELLA FEATURE | 4" | ISOLATION | X | | X | | | X |
| 255 | BOTTOM BUBBLERS | 3" | ISOLATION | X | | X | | | X |
| 256 | DECK SPRAYS | 3" | ISOLATION | X | | X | | | X |
| 257 | POOL FILL | 1 1/2" | ISOLATION | X | | X | | | X |
| 258 | POOL FILL (MANUAL) | 1 1/2" | BYPASS | | X | | X | | X |
| 259 | POOL FILL (AUTO) | 1 1/2" | ISOLATION | X | | X | | | X |
| 260 | POOL FILL (AUTO) | 1 1/2" | ISOLATION | X | | X | | | X |
| 261 | NaOCl | 3/8" | ISOLATION | X | | X | | | X |
| 262 | NaOCl | 1" | ISOLATION | X | | X | | | X |
| 263 | CHEMICAL SAMPLING | 1" | ISOLATION | X | | X | | | X |
| 264 | CHEMICAL SAMPLING | 1" | ISOLATION | X | | X | | | X |
| 265 | MAIN DRAIN | 4" | ISOLATION | X | | X | | | X |
| 266A | POOL PUMP STRAINER | 1/2" | DRAIN | | X | | X | | X |
| 266B | FEATURE STRAINER | 1/2" | DRAIN | | X | | X | | X |
| 267A | FEATURE PUMP | 1/2" | DRAIN | | X | | X | | X |
| 267B | FEATURE PUMP | 1/2" | DRAIN | | X | | X | | X |
| 268 | FILTER TANK | 1/2" | DRAIN | | X | | X | | X |
| 269 | POOL FILL | 1 1/2" | DRAIN | | X | | X | | X |
| 270 | POOL RETURN | 3/4" | DRAIN | | X | | X | | X |
| 272 | LL ASSEMBLY | 1/2" | DRAIN | | X | | X | | X |
| 273A | PUMP GAUGE | 1/4" | ISOLATION | X | | X | | | X |
| 273B | PUMP GAUGE | 1/4" | ISOLATION | X | | X | | | X |
| 274A | PUMP GAUGE | 1/4" | ISOLATION | X | | X | | | X |
| 274B | PUMP GAUGE | 1/4" | ISOLATION | X | | X | | | X |
| 276 | FEATURE RETURN | 3/4" | DRAIN | | X | | X | | X |

LIST OF EQUIPMENT

| ITEM No. | QTY. | DESCRIPTION | MANUFACTURER | MODEL No. | NOTES |
|----------|--------|-------------------------------|-----------------------|-------------------------|---|
| 112 | 1 | NaOCl TANK | | | SEE DUG. 9F-1 |
| 114 | 1 | NaOCl PUMP SUPPORT SHELVES | | | SEE DUG. 9F-1 |
| 131 | 1 | BACKWASH FUNNEL | | | SEE DUG. 9F-1 |
| 200 | 4 | DECK SPRAYS | STANDARD BRONZE | 6630 | 1 1/2" FPT. CHROME PLATED BRASS, 60 DEG. ANGLE SPRAY |
| 201 | 8 | BOTTOM INLETS | UM SMITH INC. | 46-66102 | 2" FIP CHROME PLATED, ADJUSTABLE, W/ SPANNER WRENCH |
| 202 | 2 | MAIN DRAIN FRAME & GRATE | DURADEK | 1-40200-1/2" | FRP, MAX 3/4" CLEAR OPENING, 40% FOA, 5.5. HDPE, WHITE (MD. - 1'-6" W/ 6" EA) |
| 203 | 2 | HYDROSTATIC RELIEF VALVE | STANDARD BRONZE | 4393/6/13T | 2" BRONZE VALVE BODY & SPANNER WRENCH |
| 204 | 4 | BOTTOM BUBBLERS | HAYWARD | 8P-1418-D | 1 1/2" PVC HYDROSTREAM |
| 205 | 1 | UMBRELLA PLAY FEATURE | SONAR INTERNATIONAL | RAIN DROP | FRP CONSTRUCTED W/ 5.5. ANCHORS, GASKET, BASE SKIRT |
| 206 | 124 LF | SURGE TRENCH GRATING | DURADEK | T-1802-1" | FRP, MAX 3/4" CLEAR OPENING, 10% FOA, 5.5. HOLD DOWN CLIPS, WHITE |
| 207 | 4 | CO2 CYLINDER | AUUSCO NEW YORK CORP. | | 2 - 50 LB. TANKS. CONTRACTOR SHALL PROVIDE LOCKS & CHAINS TO SECURE TANKS. PROVIDE 2 SPARES. |
| 208 | 1 | CO2 FEED UNIT | TREATMENT SPECIALTIES | CO2 FEED SYSTEM | WALL MOUNTED CO2 FEED UNIT. FIBERGLASS PANEL CONTAINS 10 - 100 SCFH FLOWMETER AND 120 VOLT SOLENOID VALVE (15-CO-4) |
| 209 | - | PRESS. RED. & CHANGEVER VALVE | TREATMENT SPECIALTIES | FD5 5000 BRASS | PROVIDE FLEXIBLE TUBING. MOUNT IN CO2 AREA OUTSIDE EX. BUILDING. |
| 210 | - | STRAINER | HAYWARD | 1"Y - TYPE | 1 1/2" PVC BODY WITH TYPE 316, 5.5., 3/4" MESH SCREEN |
| 211 | - | SOLENOID VALVE | ASCO | 822131 | 1 1/2" BRASS, SLOW CLOSING |
| 212 | - | LIQUID LEVEL CONTROLLER | WARRICK CONTROLS | 16V11A4-05-05 | NEMA 4X NON-METALLIC ENCLOSURE, FIELD ADJUSTABLE CONTROLLER, INVERSE ACTING W/ 5 SECOND TIME DELAY |
| 213 | - | LIQUID LEVEL GAUGE/SENSORS | WARRICK CONTROLS | 3F3E | 2" CLEAR POLYCARBONATE GAUGE, (3) TYPE 316 5.5. PROBES, CONTRACTOR SHALL FIELD CUT REQ. LENGTH. |
| 214 | - | FILL FUNNEL | | | 6" DIA. PVC |
| 215 | - | NaOCl FEEDER PUMP | LMI | AL61-4609 | WITH 4 FUNCTION VALVE AND ACCESSORIES |
| 216 | - | CONTROL PANEL | FABRICATED | | 5.5. CONSTRUCTION BY E.C. SEE ELECTRICAL DUG'S. |
| 217A | - | FLOW MONITOR | SIGNET | 3-5100 | BATTERY OPERATED |
| 217B | - | FLOW MONITOR | SIGNET | 3-5100 | BATTERY OPERATED |
| 218 | - | CHEMICAL CONTROLLER | LINK AUTOMATION | POOL LINK 1100 SERIES | NaOCl AND pH MONITORING |
| 219 | - | SAMPLE STREAM ASSEMBLY | LINK AUTOMATION | BUII PROBE CHAMBER SYS. | W/ BALL VALVES, FLOW SWITCH, & ACCESSORIES |
| 220 | - | VALVE FE | FABRICATED | | FOUNDED CONCRETE W/ 2"-0" x 2"-0" ALUMINUM HATCH |
| 221 | - | BALANCE TANK | FABRICATED | | FOUNDED CONCRETE W/ 21"-0" x 21"-0" ALUMINUM HATCH |
| 222 | - | FLOAT VALVE | MER MADE | 4" PVC-D | 4" 5.5. BODY W/ 2 - 5.5. FLOATS & ADJUSTABLE FLOAT ARM'S |
| 223A | - | STRAINER | MER MADE | T STYLE BASKET STRAINER | 3" x 2" FRP BODY CLEAR LID AND (2) 5.5. BASKETS |
| 223B | - | STRAINER | MER MADE | T STYLE BASKET STRAINER | 6" x 4" FRP BODY CLEAR LID AND (2) 5.5. BASKETS |
| 224A | - | RECIRCULATION PUMP | HAYWARD | 5P-28021E | 50 GPM @ 60' TDH, 1 1/2" HP, 200V, 3PH, 60HZ MOTOR (NIP APPROVED) |
| 224B | - | FEATURE RETURN PUMP | FACO | LF-3010-1 | 200 GPM @ 26' TDH W/ 1/2" HP TEC MOTOR, BASE MOUNTED, END SUCTION (NIP APPROVED) |
| 225A | - | PRESSURE & COMPOUND GAUGES | WEKSLER | AA-14-412 | 1" CONNECTIONS, & ISOLATION VALVES |
| 225B | - | PRESSURE & COMPOUND GAUGES | WEKSLER | AA-14-412 | PRESSURE GAUGE (0-60 PSI) & COMPOUND GAUGE (30-0-60 PSI), 1/4" CONNECTIONS, & ISOLATION VALVES |
| 226A | - | CHECK VALVE | KEYSTONE | FRINCE #810 | 2" WAFER CHECK, ALL 5.5. CONSTRUCTION |
| 226B | - | CHECK VALVE | KEYSTONE | FRINCE #820 | 2" WAFER CHECK, ALL 5.5. CONSTRUCTION |
| 227 | - | FILTER TANK | BAKER HYDRO | HRV 140212 | FRP TANK W/ 2" MULTI-PORT, 2" FACE PIPING, PRESSURE GAUGE, AIR RELIEF VALVE, & SIGHT GLASS |

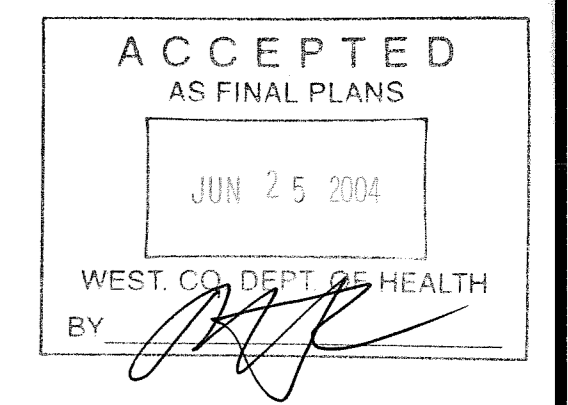


AS BUILT 6/16/04
 REVISED PER WCHD 1/24/03
 REVISED PER WCHD 5/02/03

WARD ASSOCIATES
 Landscape Architects,
 Architects, Engineers

1500 Lakeland Avenue
 Bohemia, N.Y. 11716
 (631) 563-4800

45 West Main Street
 Little Falls, New York 13365
 (315) 823-4384



WESTCHESTER COUNTY
 HEALTH DEPARTMENT

project title:

**MODERNIZATION OF
 SWIMMING POOLS**

**JULIUS M. CHEMKA
 POOL FACILITY**

VILLAGE OF HASTINGS-ON-HUDSON
 TOWN OF GREENBURGH, NEW YORK

drawing title:

TRAINING POOL

**HYDRAULIC
 SCHEMATIC**

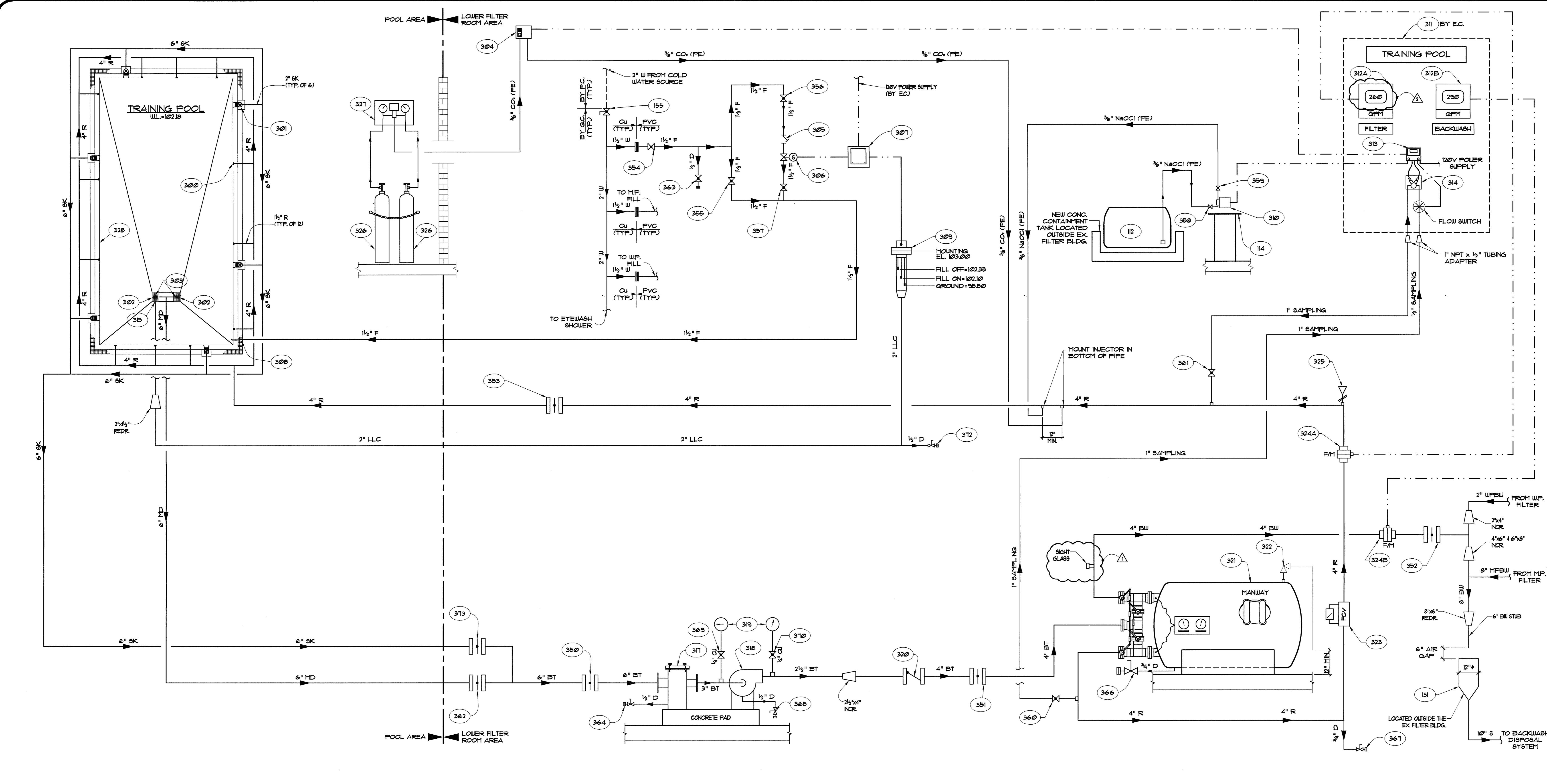
drawn by: D.F.
 checked by: V.G.D.
 date: 12/20/02
 scale: AS NOTED

drawing number:

SP-3 of 14

STATE LAW PROHIBITS ANY PERSON FROM ALTERING ANYTHING ON THIS DRAWING AND/OR THE ACCOMPANYING SPECIFICATION, UNLESS IT IS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER. WHERE SUCH ALTERATIONS ARE MADE THE LICENSED PROFESSIONAL ENGINEER MUST SEAL, DATE AND DESCRIBE THE FULL EXTENT OF THE ALTERATION ON THE DRAWING AND/OR IN THE SPECIFICATION.

ref. no.: 200124.00



DESIGN DATA

| | | |
|-------------------------|--------|-----------------|
| POOL SIZE | LF | 50'-0" x 25'-0" |
| SURFACE AREA | SF | 1250 |
| PERIMETER | LF | 150 |
| POOL VOLUME | GAL | 23,375 |
| TURNOVER | HR | 15.0 |
| FLOW RATE | GPM | 260 |
| FILTER AREA | SF | 20.3 |
| APPLICATION RATE | GPM/SF | 12.81 |
| MAIN DRAIN OPEN AREA | SF | 120 |
| VELOCITY THRU MD. | FT/SEC | 0.48 |
| 5% NaOCl REQ'D @ 10 FPM | GPD | 20 |

COLOR CODING

| | |
|-----------------------------------|------------------------------|
| ACID | PINK |
| ALUM | ORANGE |
| BACKWASH | DARK BROWN |
| CARBON DIOXIDE (CO ₂) | PINK |
| CHLORINE (GAS OR SOLUTION) | YELLOW |
| COMPRESSED AIR | DARK GREEN |
| DRAIN | LIGHT BROWN |
| FILTER TANKS | AQUA |
| GUTTER | OLIVE GREEN |
| LIQUID LEVEL CONTROL | OLIVE GREEN |
| MAIN DRAIN | BLACK |
| NATURAL GAS | RED |
| OVERFLOW | LIGHT BROWN |
| POOL FILL | DARK BLUE |
| POOL RETURN | AQUA |
| PUMP SUCTION | OLIVE GREEN W/ BLACK STRIPES |
| PUMP DISCHARGE | OLIVE GREEN W/ BLACK STRIPES |
| POTABLE WATER | DARK BLUE |
| SANITARY BEWER (WASTE) | DARK GRAY |
| SKIMMER | OLIVE GREEN |
| SODA ASH | WHITE |

ABBREVIATIONS

| | | | |
|---------|--------------------|-------|----------------------|
| BLDG. | BUILDING | LLC | LIQUID LEVEL CONTROL |
| BT | BALANCE TANK | MAX. | MAXIMUM |
| BU | BACKWASH | MD | MAIN DRAIN |
| CO | CARBON DIOXIDE | MP | MAIN POOL |
| D | DRAIN | NaOCl | SODIUM HYPOCHLORITE |
| EX | EXISTING | OD | OUTSIDE DIAMETER |
| F | FILL | O/F | OVER FLOW |
| FMD | FEATURE MAIN DRAIN | PE | POLYETHYLENE |
| FR | FEATURE RETURN | R | POOL RETURN |
| FT/SEC. | FEET PER SECOND | REDR. | REDUCER |
| GAL. | GALLON | S | SANITARY BEWER |
| GPD | GALLONS PER DAY | SF | SQUARE FEET |
| GPM | GALLONS PER MINUTE | ST | SURGE TRENCH |
| HL | HANDICAPPED LIFT | TP | TRAINING POOL |
| HR | HOUR | W | WATER |
| INCR. | INCREASER | WL | WATER LEVEL |
| L | LONG | WP | WADING POOL |
| LF | LINEAR FEET | | |

LEGEND

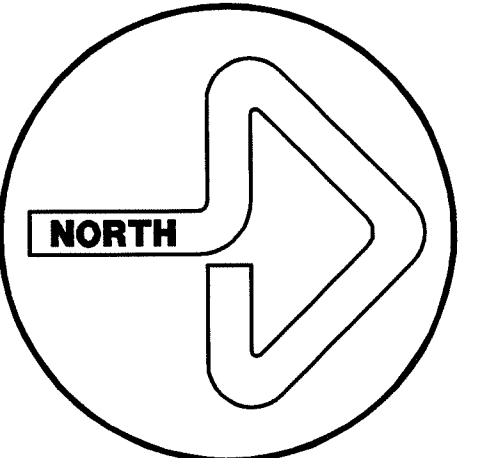
| | | | | | |
|--|-------------------------|--|-------------------------------|--|----------------------------------|
| | PVC BUTTERFLY VALVE | | GATE VALVE IN VALVE BOX | | CONDUIT & WIRE (BY EC.) |
| | CHECK VALVE, WAFER TYPE | | BALL VALVE W/ HOSE BIBB CONN. | | SOLENOID VALVE |
| | GATE VALVE | | BRAESS BALL VALVE | | BUTTERFLY VALVE & STEM EXTENSION |
| | PVC BALL VALVE | | | | |

VALVE OPERATION CHART

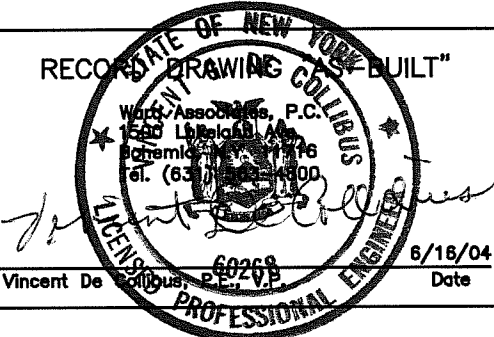
| VALVE No. | DESCRIPTION | SIZE | FUNCTION | FILTERING | | BACKWASH | | WINTER | |
|-----------|---------------------|--------|-----------|-----------|--------|----------|----------|--------|--------|
| | | | | OPEN | CLOSED | OPEN | CLOSED | OPEN | CLOSED |
| 155 | CU SUPPLY | 2" | ISOLATION | X | | X | | | X |
| 350 | POOL PUMP SUCTION | 6" | ISOLATION | X | | X | | | X |
| 351 | POOL PUMP DISCHARGE | 4" | ISOLATION | X | | X | | | X |
| 352 | BACKWASH | 4" | ISOLATION | | X | | THROTTLE | | X |
| 353 | POOL RETURN | 4" | ISOLATION | X | | X | | | X |
| 354 | POOL FILL | 1 1/2" | ISOLATION | X | | X | | | X |
| 355 | POOL FILL (MANUAL) | 1 1/2" | BYPASS | | X | | X | X | |
| 356 | POOL FILL (AUTO) | 1 1/2" | ISOLATION | X | | X | | | X |
| 357 | POOL FILL (AUTO) | 1 1/2" | ISOLATION | X | | X | | | X |
| 358 | NaOCl | 3/8" | ISOLATION | X | | X | | | X |
| 359 | NaOCl | 3/8" | ISOLATION | X | | X | | | X |
| 360 | CHEMICAL SAMPLING | 1" | ISOLATION | X | | X | | | X |
| 361 | CHEMICAL SAMPLING | 1" | ISOLATION | X | | X | | | X |
| 362 | MAIN DRAIN | 6" | ISOLATION | X | | X | | | X |
| 363 | POOL FILL | 1 1/2" | DRAIN | | X | | X | X | |
| 364 | POOL PUMP STRAINER | 1 1/2" | DRAIN | | X | | X | X | |
| 365 | POOL PUMP | 1 1/2" | DRAIN | | X | | X | X | |
| 366 | FILTER TANK | 3/4" | DRAIN | | X | | X | X | |
| 367 | POOL RETURN | 3/4" | DRAIN | | X | | X | X | |
| 368 | PUMP GAUGE | 1/4" | ISOLATION | X | | X | | | X |
| 370 | PUMP GAUGE | 1/4" | ISOLATION | X | | X | | | X |
| 371 | LL ASSEMBLY | 2" | ISOLATION | X | | X | | | X |
| 372 | LL ASSEMBLY | 1 1/2" | DRAIN | | X | | X | X | |
| 373 | SKIMMER | 6" | ISOLATION | X | | X | | | X |

LIST OF EQUIPMENT

| ITEM No. | QTY. | DESCRIPTION | MANUFACTURER | MODEL No. | NOTES |
|----------|-----------|---------------------------------|-----------------------|--------------------------|---|
| 112 | 1 | NaOCl TANK | - | - | SEE DWG. SP-1 |
| 114 | 1 | NaOCl PUMP SUPPORT SHELVES | - | - | SEE DWG. SP-1 |
| 131 | 1 | FILL FUNNEL | - | - | SEE DWG. SP-1 |
| 302 | 12 | SIDE WALL INLETS | STA-RITE | 08429-0200 | 1 1/2" CYCLOC BODY, SOLVENT WELD, ADJUSTABLE |
| 301 | 6 | SURFACE SKIMMERS | HAYWARD | SP-1070-2 | ABS BODY W/ ADJUSTABLE COVER, DECK COLLAR & EQUALIZER PIPES LOCATED 18" BELOW LOWEST WATER LEVEL. INSTALL WITH EQUALIZER VALVE MODEL # SP-10718 |
| 302 | 2 | MAIN DRAIN FRAME & GRATE | DURADEK | 1-4202-11 1/2" | FRP MAX. CLEAR OPEN. 40% FOA. 5.5 HDUE. WHITE (RD. = 1'-6" W/ 0" EA) |
| 303 | 2 | HYDROSTATIC RELIEF VALVE | STANDARD BRONZE | 4353/6131 | 2" BRONZE VALVE BODY & SPANNER WRENCH |
| 304 | 1 | CO ₂ FEED UNIT | TREATMENT SPECIALTIES | CO FEED SYSTEM | WALL MOUNTED CO ₂ FEED UNIT. FIBERGLASS PANEL CONTAINS 10 - 100 SCFH FLOWMETER AND 120 VOLT SOLENOID VALVE (18-CO-4) |
| 305 | 1 | STRAINER | HAYWARD | "Y" - TYPE | 1 1/2" PVC BODY WITH TYPE 316, 5.5, 1/2" MESH SCREEN |
| 306 | 1 | SOLENOID VALVE | ASCO | 8221G1 | 1 1/2" BRASS, SLOW CLOSING |
| 307 | 1 | LIQUID LEVEL CONTROLLER | WARRICK CONTROLS | 16VMT1A4-05-05 | NEMA 4X NON-METALLIC ENCLOSURE. FIELD ADJUSTABLE CONTROLLER. INVERSE ACTING W/ 5 SECOND TIME DELAY. |
| 308 | 1 | FILL SPOUT | STANDARD BRONZE | 1256 | 1 1/2" NPT. STAINLESS STEEL. INSTALL TO ALLOW 6" AIR GAP ABOVE WATER LEVEL AND NEAR A HANDRAIL. |
| 309 | 1 | LIQUID LEVEL GAUGE/SENSORS | WARRICK CONTROLS | 3F3E | 2" CLEAR POLYCARBONATE GAUGE. (3) TYPE 316 5.5 PROBES, CONTRACTOR SHALL FIELD CUT REQ. LENGTH. |
| 310 | 1 | NaOCl FEEDER PUMP | LMI | 2161-2608 | W/ 4 FUNCTION VALVE AND ACCESSORIES |
| 311 | 1 | PUMP DISPLAY PANEL | FABRICATED | - | 5.5. CONSTRUCTION BY EC. SEE ELECTRICAL DWG'S. |
| 312A | 1 | FLOW MONITOR | SIENET | 3-5100 | BATTERY OPERATED |
| 312B | 1 | FLOW MONITOR | SIENET | 3-5100 | BATTERY OPERATED |
| 313 | 1 | CHEMICAL CONTROLLER | LINK AUTOMATION | POOL LINK 1100 SERIES | CaOCl and pH MONITORING |
| 314 | 1 | SAMPLE STREAM ASSEMBLY | LINK AUTOMATION | 311 PROBE CHAMBERS | W/ BALL VALVES, FLOW SWITCH, & ACCESSORIES |
| 315 | 1 | OUTLET FITTING | HAYWARD | SP-1022 | 1 1/2" IP. WHITE. INSTALL W/ 1 1/2" OUTLET GRATE INSERT MODEL NO. SP-1026 |
| 316 | 1 | NOT USED | - | - | - |
| 317 | 1 | STRAINER | HEIR MADE | 1" STYLE BASKET STRAINER | 5/8" FRP BODY CLEAR LID AND (2) 5.5. BASKETS |
| 318 | 1 | RECIRCULATION PUMP | PACO | LP-2595-1 | 200 GPM @ 20' TDH W/ 1 1/2" LINE. 1/2" SHFT TFRG MOTOR. BASE MOUNTED. END SUCTION. (NEE APPROVED) |
| 319 | 1 | PRESSURE & COMPOUND GAUGES | WEISLER | AA-14-4 1/2" | PRESSURE GAUGE (0-60 PSI) & COMPOUND GAUGE (30-0-60 PSI), 1/4" CONNECTIONS, & ISOLATION VALVES |
| 320 | 1 | CHECK VALVE | KEYSTONE | FRINCE 1910 | 4" WAFER CHECK. ALL 5.5. CONSTRUCTION |
| 321 | 1 | FILTER TANK | NEPTUNE BENSON | 36128FFG | 36" DIA. HORIZONTAL FIBERGLASS TANK. GAUGE PANEL, SIGHT GLASS, AND 4" MANIFOLD |
| 322 | 1 | AIR RELIEF VALVE | NEPTUNE BENSON | 1325BTE | 4" WAFER CHECK. ALL 5.5. CONSTRUCTION |
| 323 | 1 | FLOW CONTROL VALVE | GRIBWOLD | - | 4" EPOXY COATED WAFER TYPE W/ 3/4" METER KIT |
| 324A | 1 | FLOW METER SENSOR | SIENET | FB1530-FP2 | W/ PV8040 FITTING (RANGE = 0-180 GPM) |
| 324B | 1 | FLOW METER SENSOR | SIENET | FB1530-FP2 | W/ PV8040 FITTING (RANGE = 0-180 GPM) |
| 325 | AS REQ'D. | AUTOMATIC AIR VENT | HORRYAN-TACO | 418 | LOCATE AT ALL HIGH POINTS IN SYSTEM |
| 326 | 4 | CO ₂ CYLINDER | AWISCO NEW YORK CORP. | - | 2-50 LB. TANKS. CONTRACTOR SHALL PROVIDE LOCKS & CHAINS TO SECURE TANKS. PROVIDE (2) SPARES. |
| 327 | 1 | PRESS. RED. & CHANGE-OVER VALVE | TREATMENT SPECIALTIES | PDS 5000 BRASS | PROVIDE FLEXIBLE TUBING. MOUNT IN CO ₂ AREA OUTSIDE THE EX. BLDG. |
| 328 | 160 LF | PRECAST COPING STONE | BARRASSO | - | REINFORCED, 5000 PSI CONCRETE, WITH BULLNOSE |



seal:



| | |
|------------------|---------|
| AS BUILT | 6/16/04 |
| REVISED PER WCHD | 1/24/03 |
| REVISED PER WCHD | 5/02/03 |

WARD ASSOCIATES
Landscape Architects,
Architects, Engineers

1500 Lakeland Avenue
Bohemia, N.Y. 11716
(631) 565-4800

45 West Main Street
Little Falls, New York 13365
(315) 823-4384

ACCEPTED
AS FINAL PLANS

JUN 25 2004

WEST. CO. DEPT. OF HEALTH

WESTCHESTER COUNTY
HEALTH DEPARTMENT

project title:

**MODERNIZATION OF
SWIMMING POOLS**

**JULIUS M. CHEMKA
POOL FACILITY**

VILLAGE OF HASTINGS-ON-HUDSON
TOWN OF GREENBURGH, NEW YORK

drawing title:

**ELECTRICAL
SITE PLAN**

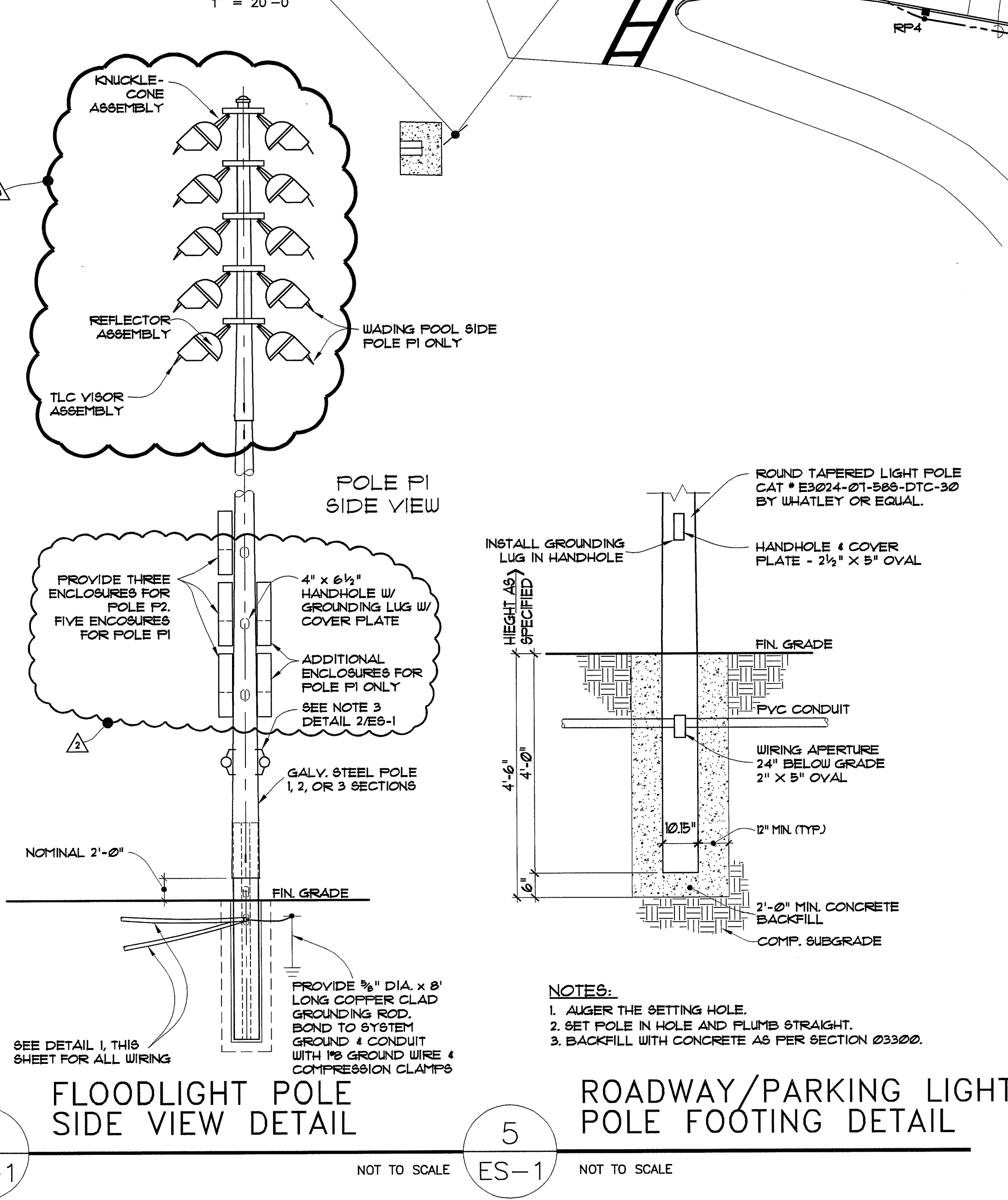
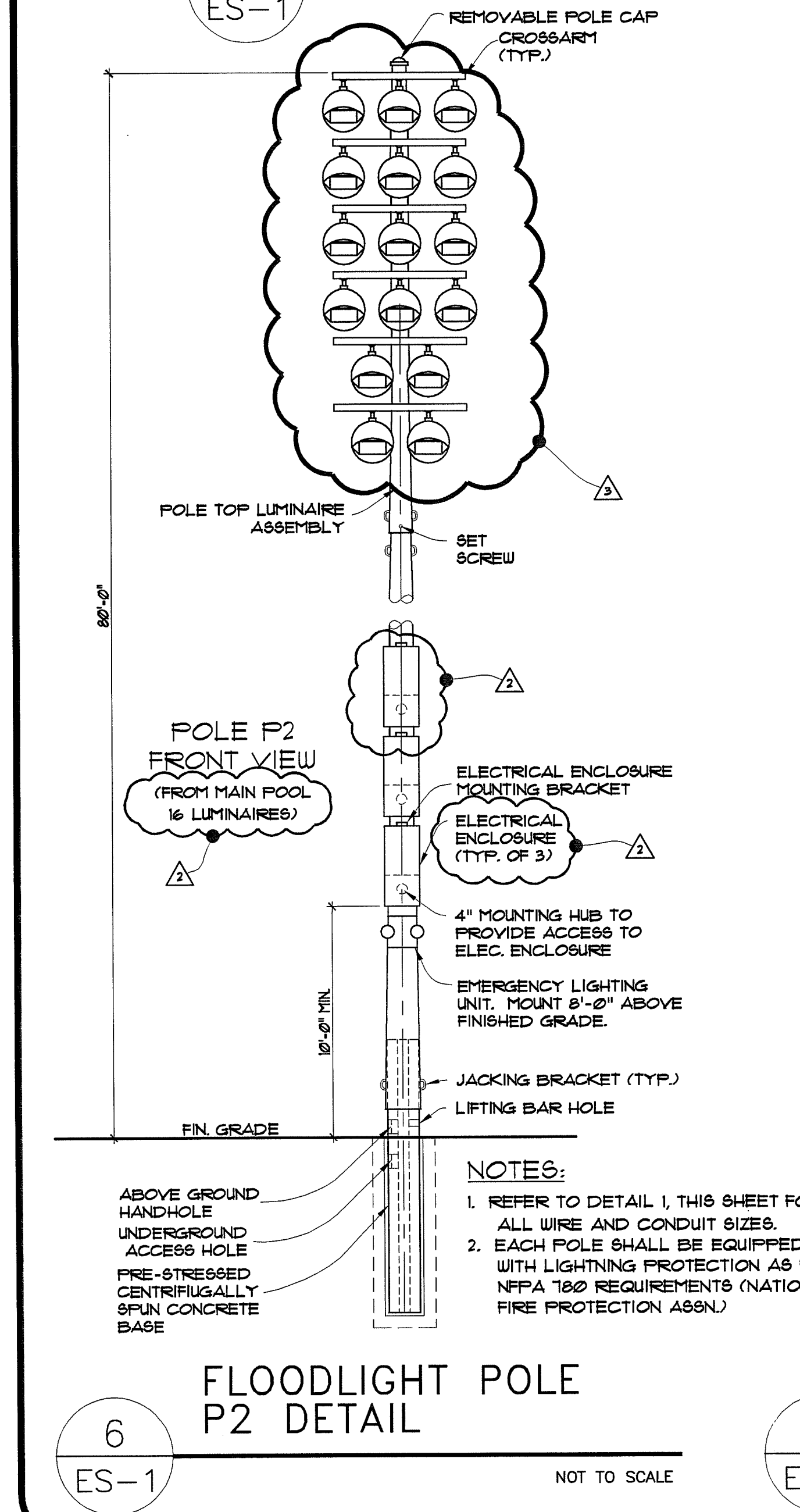
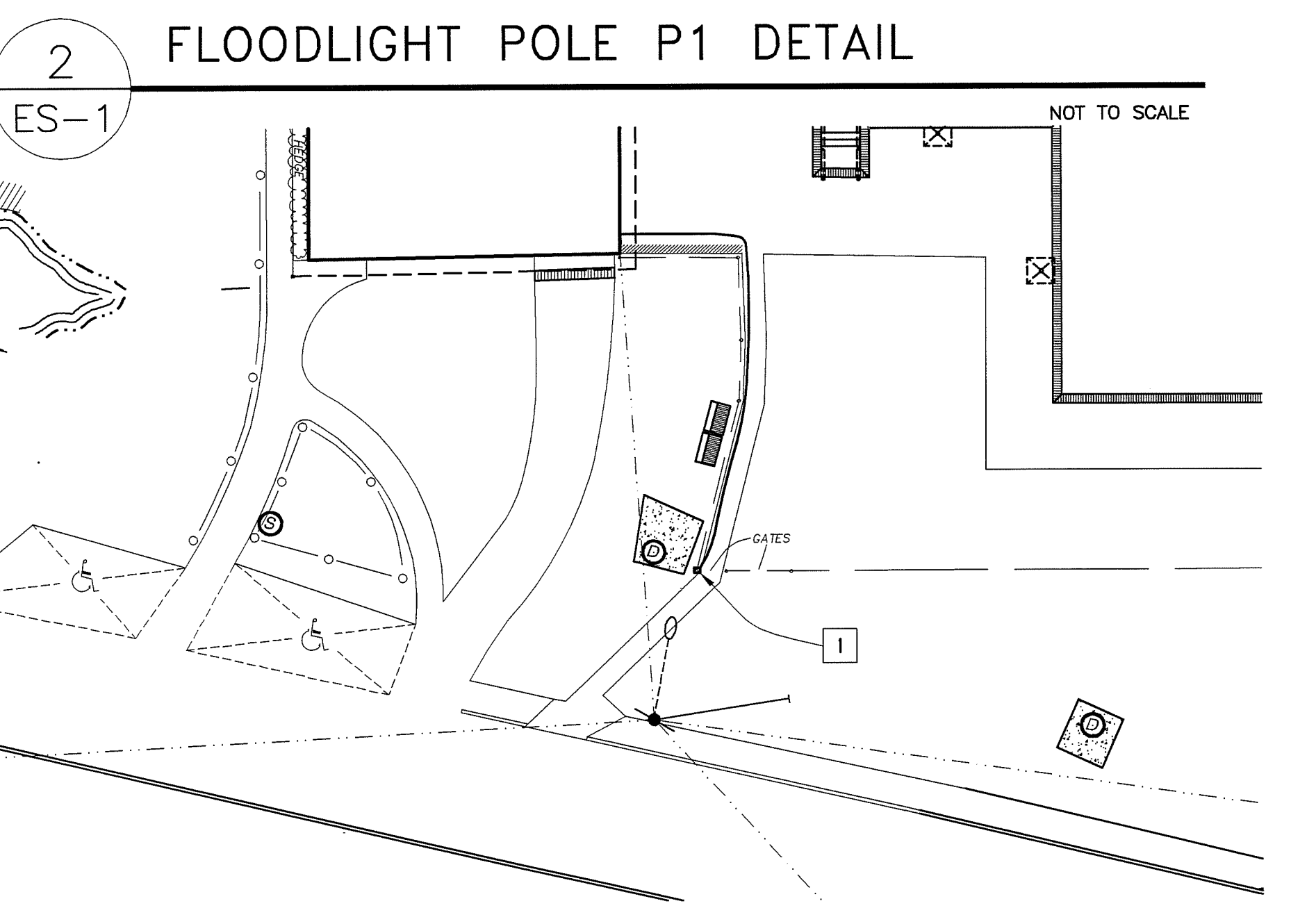
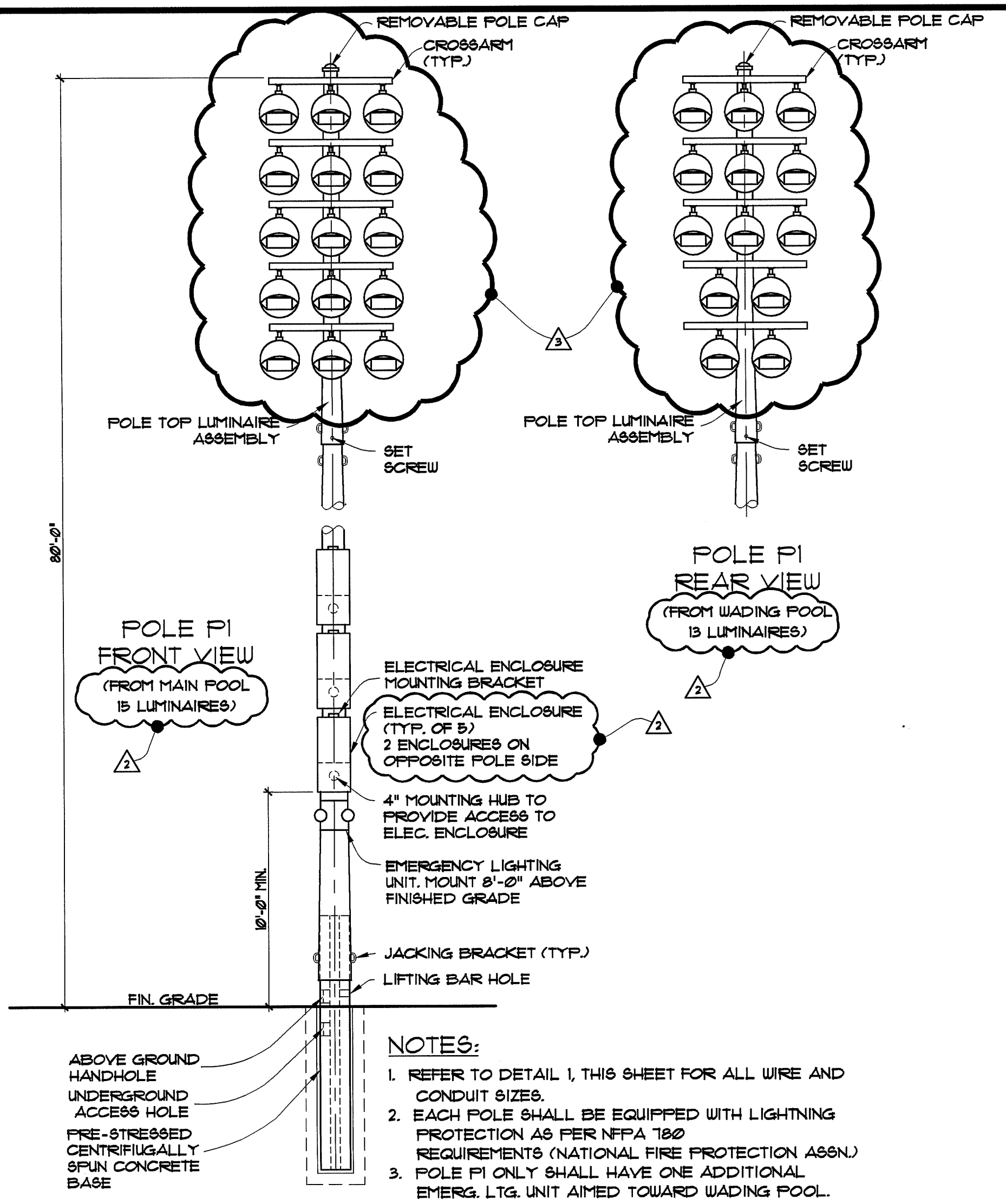
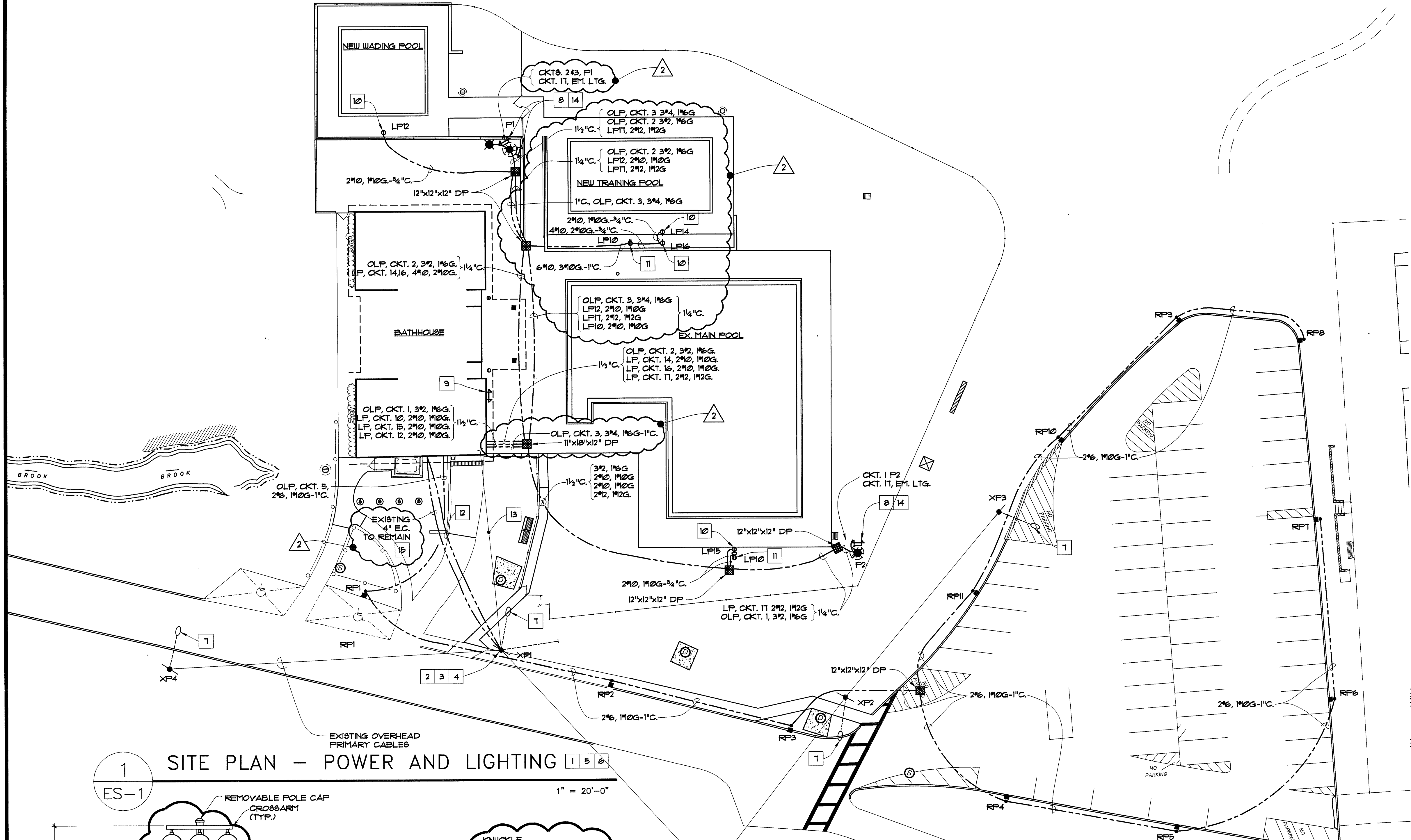
**POWER AND
LIGHTING**

| | |
|-------------------|---------------------|
| drawn by: D.F. | checked by: S.K. |
| date: 12/20/02 | scale: AS NOTED |
| drawing number: | |

ES-1 of 2

STATE LAW PROHIBITS ANY PERSON FROM ALTERING ANYTHING ON THIS DRAWING AND/OR THE ACCOMPANYING SPECIFICATION, UNLESS IT IS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER. WHERE SUCH ALTERATIONS ARE MADE, THE LICENSED PROFESSIONAL ENGINEER MUST SIGN, SEAL, DATE AND DESCRIBE THE FULL EXTENT OF THE ALTERATION ON THE DRAWING AND/OR IN THE SPECIFICATION.

ref. no.: 200124.00



- CONSTRUCTION NOTES:**
- ELECTRICAL CONTRACTOR (E.C.) SHALL COORDINATE ALL SITE SERVICE WORK WITH THE UTILITY COMPANY BEFORE MAKING ANY DISCONNECTIONS.
 - E.C. SHALL DISCONNECT ALL WIRING FROM THE EXISTING TRANSFORMER, INCLUDING PRIMARY, SECONDARY, GROUNDING CABLES AND ANY OTHER WIRING CONNECTED TO ADJACENT UTILITY POLES.
 - DISMOUNT EXISTING TRANSFORMER AND TURN OVER TO THE UTILITY COMPANY AT THE PROPERTY LINE.
 - E.C. SHALL ACCEPT NEW SERVICE TRANSFORMER AT PROPERTY LINE, FURNISHED BY THE UTILITY COMPANY. E.C. SHALL MOUNT AND RECONNECT ALL WIRING, PREVIOUSLY DISCONNECTED TO THE NEW TRANSFORMER. ANY NEW WIRING, CONDUIT RISERS AND/OR HARDWARE REQUIRED TO MAKE RECONNECTIONS SHALL BE AS SPECIFIED AND APPROVED BY THE UTILITY COMPANY. THE POLE AND POLE SUPPORTS SHALL BE TESTED FOR ADEQUATE SUPPORT STRENGTH FOR THE NEW TRANSFORMER. THE POLE MOUNTED TRANSFORMER SHALL BE INSTALLED IN ACCORDANCE WITH UTILITY CO. SPECIFICATIONS E2-166-42.
 - ALL SERVICE MATERIALS AND LABOR SHALL BE IN ACCORDANCE WITH UTILITY COMPANY SERVICE LAYOUT # 807-24356-10CY.
 - ELECTRICAL CONTRACTOR SHALL OBTAIN AN UNDERWRITER'S CERTIFICATE FOR ALL WORK COMPLETED ON THE LOAD SIDE OF THE POLE MOUNTED TRANSFORMER.
 - REMOVE EXISTING POLES XP2 AND XP3 AND ASSOCIATED LUMINAIRES. REMOVE EXISTING LUMINAIRE AT POLE XP1 AND REMOVE OVERHEAD WIRING BETWEEN XP1, XP2 AND XP3. POLE XP4 AND ASSOCIATED LUMINAIRE SHALL REMAIN IN USE.
 - EMERGENCY LIGHTING UNIT, LITHONIA LIGHTING *IND1202BH0205DCUI20. MOUNT ON FLOODLIGHT POLE. SEE DETAILS 1 & 2 THIS SHEET.
 - EMERGENCY LIGHTING UNIT, LITHONIA LIGHTING *IND1202BH0205DCUI20. MOUNT ON BATHHOUSE EXTERIOR.
 - HUBBELL * 5361. MOUNT IN CAST ALUMINUM FS BOX, VERTICAL ORIENTATION, WITH A WEATHERPROOF PLATE, THERMOPLASTIC, UET LOCATION LISTED WITH COVER OPEN. HUBBELL * 14012BUO. MOUNT 3'-0" ABOVE GRADE ON FENCE. MOUNTING ARRANGEMENT SHALL BE SIMILAR TO GFI RECEPTACLE, MOUNTING DETAIL 4 ON DWG. ES-1.
 - HUBBELL * GF362. MOUNT IN CAST ALUMINUM FS BOX, VERTICAL ORIENTATION, WITH A WEATHERPROOF PLATE, DIE-CAST ALUMINUM, UET LOCATION LISTED WITH COVER OPEN. HUBBELL * 14012BUO. SEE DETAIL 4 ON DWG. ES-1.
 - EXISTING SECONDARY CABLES FROM POLE TO FILTER ROOM SHALL REMAIN IN USE.
 - EXISTING TELEPHONE SERVICE CABLES FROM POLE TO BATHHOUSE SHALL REMAIN IN USE.
 - SEE DETAIL 2/E-2 FOR A SITE LIGHTING ILLUMINATION GRID. ALL POOL WATER AND DECK SURFACES SHALL BE PROVIDED WITH A MINIMUM ILLUMINATION OF 50 FOOT CANDLES, TO PERMIT NIGHT SWIMMING AT THE FACILITY.
 - PROVIDE NEW 4-500 Kcmil CU # 12/0G IN EXISTING EMPTY 4" C. FROM UTILITY POLE TO NEW MAIN SERVICE DISTRIBUTION PANEL.

