

CITY OF COSTA MESA PARKS AND COMMUNITY SERVICES COMMISSION Agenda

Thursday, September 14, 2023

6:00 PM

City Council Chambers 77 Fair Drive

The Commission meetings are presented in a hybrid format, both in-person at City Hall and as a courtesy virtually via Zoom Webinar. If the Zoom feature is having system outages or experiencing other critical issues, the meeting will continue in person.

TRANSLATION SERVICES AVAILABLE / SERVICIOS DE TRADUCCIÓN DISPONIBLE Please contact the City Clerk at (714) 754-5225 to request language interpreting services for City meetings. Notification at least 48 hours prior to the meeting will enable the City to make arrangements.

Favor de comunicarse con la Secretaria Municipal al (714) 754-5225 para solicitar servicios de interpretación de idioma para las juntas de la Ciudad. Se pide notificación por lo mínimo 48 horas de anticipación, esto permite que la Ciudad haga los arreglos necesarios.

Members of the public can view the Commission meetings live on COSTA MESA TV (SPECTRUM CHANNEL 3 AND AT&T U-VERSE CHANNEL 99) or http://costamesa.granicus.com/player/camera/2?publish_id=10&redirect=true and online at youtube.com/costamesatv.

Zoom Webinar:

Please click the link below to join the webinar:

https://us06web.zoom.us/j/99993346354?pwd=ZXgrQ0xSclBLRVBlelBHN2U3TkNpdz09

Or sign into Zoom.com and "Join a Meeting"

Enter Webinar ID: 999 9334 6354 / Password: 945795

- If Zoom is not already installed on your computer, click "Download & Run Zoom" on the launch page and press "Run" when prompted by your browser. If Zoom has previously been installed on your computer, please allow a few moments for the application to launch automatically.
- Select "Join Audio via Computer."
- The virtual conference room will open. If you receive a message reading, "Please wait for the host to start this meeting," simply remain in the room until the meeting begins.
- During the Public Comment Period, use the "raise hand" feature located in the participants' window and wait for city staff to announce your name and unmute your line when it is your turn to speak. Comments are limited to 3 minutes, or as otherwise directed.

Participate via telephone:

Call: 1 669 900 6833 Enter Webinar ID: 999 9334 6354 / Password: 945795

During the Public Comment Period, press *9 to add yourself to the queue and wait for city staff to announce your name/phone number and press *6 to unmute your line when it is your turn to speak. Comments are limited to 3 minutes, or as otherwise directed.

- 4. Additionally, members of the public who wish to make a written comment on a specific agenda item, may submit a written comment via email to the pacscomments@costamesaca.gov. Comments received by 12:00 p.m. on the date of the meeting will be provided to the Commission, made available to the public, and will be part of the meeting record.
- 5. Please know that it is important for the City to allow public participation at this meeting. If you are unable to participate in the meeting via the processes set forth above, please contact the City Clerk at (714) 754-5225 or cityclerk@costamesaca.gov and staff will attempt to accommodate you. While the City does not expect there to be any changes to the above process for participating in this meeting, if there is a change, the City will post the information as soon as possible to the City's website.

Note that records submitted by the public will not be redacted in any way and will be posted online as submitted, including any personal contact information.

All pictures, PowerPoints, and videos submitted for display at a public meeting must be previously reviewed by staff to verify appropriateness for general audiences. No links to YouTube videos or other streaming services will be accepted, a direct video file will need to be emailed to staff prior to each meeting in order to minimize complications and to play the video without delay. The video must be one of the following formats, .mp4, .mov or .wmv. Only one file may be included per speaker for public comments. Please e-mail to pacscomments@costamesaca.gov NO LATER THAN 12:00 Noon on the date of the meeting.

Note regarding agenda-related documents provided to a majority of the Commission after distribution of the agenda packet (GC §54957.5): Any related documents provided to a majority of the Commission after distribution of the Agenda Packets will be made available for public inspection. Such documents will be posted on the city's website and will be available at the City Clerk's office, 77 Fair Drive, Costa Mesa, CA 92626.

All cell phones and other electronic devices are to be turned off or set to vibrate. Members of the audience are requested to step outside the Council Chambers to conduct a phone conversation.

Free Wi-Fi is available in the Council Chambers during the meetings. The network username available is: CM_Council. The password is: cmcouncil1953.

As a LEED Gold Certified City, Costa Mesa is fully committed to environmental sustainability. A minimum number of hard copies of the agenda will be available in the Council Chambers. For your convenience, a binder of the entire agenda packet will be at the table in the foyer of the Council Chambers for viewing.

In compliance with the Americans with Disabilities Act, Assistive Listening headphones are available and can be checked out from the City Clerk. If you need special assistance to participate in this meeting, please contact the City Clerk at (714) 754-5225. Notification at least 48 hours prior to the meeting will enable the City to make reasonable arrangements to ensure accessibility to this meeting. [28 CFR 35.102.35.104 ADA Title II].

En conformidad con la Ley de Estadounidenses con Discapacidades (ADA), aparatos de asistencia están disponibles y podrán ser prestados notificando a la Secretaria Municipal. Si necesita asistencia especial para participar en esta junta, comuníquese con la oficina de la Secretaria Municipal al (714) 754-5225. Se pide dar notificación a la Ciudad por lo mínimo 48 horas de anticipación para garantizar accesibilidad razonable a la junta. [28 CFR 35.102.35.104 ADA Title II].

PARKS AND COMMUNITY SERVICES COMMISSION REGULAR MEETING

September 14, 2023 – 6:00 P.M.

CASSIUS RUTHERFORD
District 2 - Chair

SCOTT GLABB

District 1 - Commissioner

ELIZABETH DORN PARKER

District 6 - Vice Chair

KELLY BROWN

District 5 - Commissioner

CRISTIAN GARCIA ARCOS

District 4 - Commissioner

TERRY WALL

District 3 - Commissioner

SHAYANNE WRIGHT

At-Large - Commissioner

CALL TO ORDER

PLEDGE OF ALLEGIANCE

ROLL CALL

PUBLIC COMMENTS – MATTERS NOT LISTED ON THE AGENDA Comments are limited to three (3) minutes, or as otherwise directed.

COMMISSIONER COMMENTS AND SUGGESTIONS

Comments are limited to three (3) minutes, or as otherwise directed.

OLD BUSINESS:

1. MINUTES 23-1372

RECOMMENDATION:

Approval of the minutes of August 10, 2023, Parks & Community Services Commission meeting.

Attachments: 081023 PACS Draft Minutes

NEW BUSINESS:

1. <u>DESIGN FOR THE IMPROVEMENTS TO THE TEWINKLE LAKE23-1365</u> SYSTEM

RECOMMENDATION:

Staff is providing an update on the project and seeking input on the final design plans of the TeWinkle Lake system.

Attachments: Agenda Report

1. TeWinkle Park Lake Renovation (REV 08-16-2023)

2. <u>COSTA MESA SENIOR CENTER</u>

23-1373

Attachments: Agenda Report

MONTHLY REPORTS

1. <u>DIRECTOR'S REPORT</u>

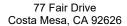
23-1374

Attachments: Director's Report - August 2023

ADDITIONAL COMMISSION MEMBER & STAFF COMMENTS

ADJOURNMENT

Next Regularly Scheduled Meeting: Thursday, October 12, 2023.





CITY OF COSTA MESA Agenda Report

File #: 23-1372 Meeting Date: 9/14/2023

TITLE:

MINUTES

DEPARTMENT: PARKS AND COMMUNITY SERVICES

RECOMMENDATION:

Approval of the minutes of August 10, 2023, Parks & Community Services Commission meeting.

THE COSTA MESA PARKS & COMMUNITY SERVICES COMMISSION

AUGUST 10, 2023 6:00 P.M. – UNOFFICIAL MINUTES

CALL TO ORDER by Chair Rutherford at 6:00pm.

PLEDGE OF ALLEGIANCE by Commissioner Wall.

ROLL CALL

□ = Present □ = Absent	
Commissioners	City Staff
⊠ Kelly Brown	☑ Alma Reyes, City Deputy Manager
☑ Cristian Garcia Arcos	☑ Monique Villasenor, Recreation Manager
☑ Scott Glabb**	☑ Raja Sethuraman, Public Works Director
⊠ Terry Wall	☑ Robert Ryan, Maintenance Services Manager
☐ Shayanne Wright	□ Laura Fautua, Executive Assistant
☑ Elizabeth Dorn Parker, Vice Chair	
☑ Cassius Rutherford, Chair	

PUBLIC COMMENTS

Jay Humphrey, resident: Spoke about electric bike use within parks and Fairview Park Capital Improvement Projects.

Jon Rittenhouse, resident: spoke about the fly field at Fairview Park.

COMMISSIONER COMMENTS AND SUGGESTIONS

Commissioner Garcia Arcos: Spoke about his recent trip to Cal Poly Pomona and purchases of future trees within the City.

Commissioner Brown: Spoke about public outreach for the Fairview Park Steering Committee booth during Concerts in the Park and the 19th Street updates.

Commissioner Wall: Commended staff who run the social media content and the creators of the Capital Improvement Project (CIP) progress chart.

Vice Chair Dorn Parker: Spoke about her recent Philadelphia park visits regarding equipment and signage, dogs off-leash along with dog owners not picking up after their pet, and the CIP chart. The philanthropy group Vice Chair Dorn Parker is a part of gave the SOY foundation a grant for the work they do in the City.

Chair Rutherford: Thanked public commenters for speaking and staff for providing tools and resources regarding CIP projects.

Ms. Alma Reyes, Deputy City Manager and acting Parks and Community Services Director, gave the commission a brief background of her time with the City of Costa Mesa.

OLD BUSINESS

1. Minutes - 05/11/2023 PACS Draft Minutes

Commissioner Brown requested adjustments to the last page of the minutes to include: Commissioner Brown and Commissioner Wright identified several key strategies around public engagement worth visiting for future activities.

MOTION: Approve the amended minutes of May 11, 2023 Commission meeting.

MOVED/SECOND: Vice Chair Dorn Parker/Chair Rutherford.

The motion carried by the following roll call vote:

Ayes: Commissioner Brown, Commissioner Garcia Arcos, Commissioner Glabb,

Commissioner Wall, Vice Chair Dorn Parker, Chair Rutherford

Nays: none

Absent: Commissioner Wright

Motion Carried: 6 - 0

2. Minutes - 06/08/2023 PACS Draft Minutes

MOTION: Approve the minutes of June 8, 2023 Commission meeting.

MOVED/SECOND: Commissioner Wall/ Commissioner Brown.

The motion carried by the following roll call vote:

Ayes: Commissioner Brown, Commissioner Garcia Arcos, Commissioner Glabb,

Commissioner Wall, Vice Chair Dorn Parker, Chair Rutherford

Nays: none

Absent: Commissioner Wright

Motion Carried: 6 - 0

NEW BUSINESS:

1. KETCHUM-LIBOLT PARK AND SHALIMAR PARK PROJECT UPDATE

Mr. Sethuraman, Public Works Director, and Mr. Ryan, Public Works Maintenance Manager presented.

Consultants from PatWest presented.

Discussion ensured about previous, current challenges, and upcoming public outreach methods, such as participation, community engagement, signage of event, timeframe of event notice, and surveys.

Public Comment:

Jay Humphrey: Spoke about public outreach and park accessibility in the Westside.

MONTHLY REPORTS

1. PARK RANGER REPORT – June 2023

Ms. Villasenor, Recreation Manager provided Ranger Report updates.

Public Comment: None.

2. PARK RANGER REPORT – July 2023

July Report will be updated to reflect the correct report.

Public Comment: None.

3. DIRECTOR'S REPORT - June.July 2023

Ms. Villasenor, Recreation Manager, presented.

Discussion ensued on about the Mobile Recreation Program, Lifeguard training, and

Public Comment: None.

ADDITIONAL COMMISSIONER MEMBER & STAFF COMMENTS

Ms. Fautua highlighted the next Parks and Community Services Commission is scheduled for September 14 and not September 7.

ADJOURNMENT by Chair Rutherford at 7:24 P.M.

NEXT REGULAR ARTS COMMISSION MEETING: THURSDAY, September 14, 2023 at 6:00 P.M.



77 Fair Drive Costa Mesa, CA 92626



CITY OF COSTA MESA Agenda Report

File #: 23-1365 Meeting Date: 9/14/2023

TITLE:

DESIGN FOR THE IMPROVEMENTS TO THE TEWINKLE LAKE SYSTEM

DEPARTMENT: PUBLIC WORKS DEPARTMENT/MAINTENANCE SERVICES DIVISION

PRESENTED BY: RAJA SETHURAMAN, PUBLIC WORKS DIRECTOR

CONTACT INFORMATION: ROBERT RYAN, MAINTENANCE SERVICES MANAGER (714)

327-7499

RECOMMENDATION:

Staff is providing an update on the project and seeking input on the final design plans of the TeWinkle Lake system.

BACKGROUND:

TeWinkle Park is a 49-acre park dedicated in 1965 in honor of the first Mayor of the City of Costa Mesa, Charles TeWinkle. The TeWinkle Park Lakes are artificial water features consisting of two (2) lakes, two (2) ponds, an intermediate pond, five (5) streams, nearly two (2) acres of water surface, and approximately 3,250 feet of shoreline. A partial renovation of the lakes was undertaken in 2004. Over the past several years, water leakage has developed in the two primary lakes, resulting in significant water loss, as well as undermining of the lake bed and surrounding soil areas.

The intermediate pond, along with dual streams, was not constructed during the prior renovation and lacked waterproofing. In addition, staff has observed excess water percolation and infiltration losses into the soil below and around the lakes. Pumps, the gravel bed, biological filter, as well as the aeration systems, have been non-functioning and are in need of repair. The water quality of the lakes has also been compromised due to excess nutrient input.

At their regularly scheduled meeting on December 7, 2021, the City Council approved an agreement between the City and Pacific Advanced Civil Engineering (PACE). PACE prepared the Assessment Report and initial concepts and presented to the Parks and Community Services Commission during their regularly scheduled meeting on July 28, 2022. Additionally, the Public Works Department solicited feedback from the community, through social media, via telephone or an email address dedicated to the project.

ANALYSIS:

PACE has completed the final design (Attachment 1). All of the key findings from the initial report have been addressed including:

File #: 23-1365 Meeting Date: 9/14/2023

- Replacement of the lake liner to minimize water loss through seepage.
- Replacement of the damaged shorelines and redesigning of the lake edges to improve water movement, shoreline access and landscape.
- Upgrades to the lake system to improve water clarity and appearance.
- Addition of landscape improvements to encourage waterfowl to designated areas to minimize waste on sidewalks and other usable park areas.

City staff has reviewed and accepted the final design. In addition, final design plans were reviewed and approved by an outside consultant who specializes in water features and lake design.

Over the next few months, staff will be soliciting construction proposals and working through the contract award process. Construction is anticipated to begin in mid to late 2024.

Staff requests the Parks and Community Services Commission to provide any further comments on the final design before the bid solicitation phase.

ALTERNATIVES:

There are no alternatives suggested for this item.

FISCAL REVIEW:

Funding for the design was included in the FY 2019-2020 and FY 2020-2021 budgets. Funding in the amount of \$2 Million for the construction phase is included in the FY 2023-24 budget. This project is one of several projects that were included in the \$10 million state grant received through Senator Dave Min.

LEGAL REVIEW:

Legal review is not required for this item.

CONCLUSION:

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77 Fair Drive Costa Mesa, CA 92626



CITY OF COSTA MESA

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LEGAL REVIEW:

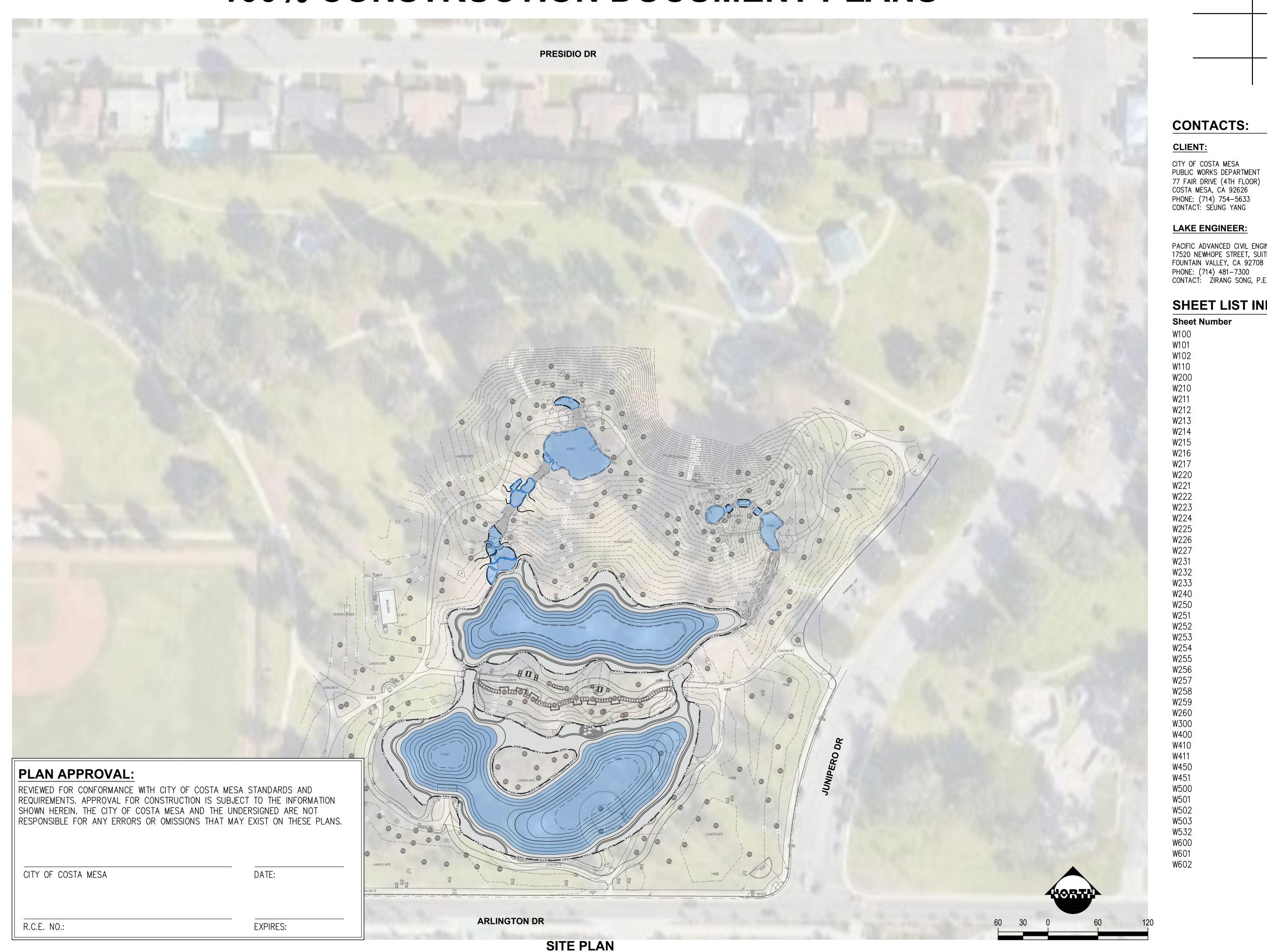
Legal review is not required for this item.

CONCLUSION:

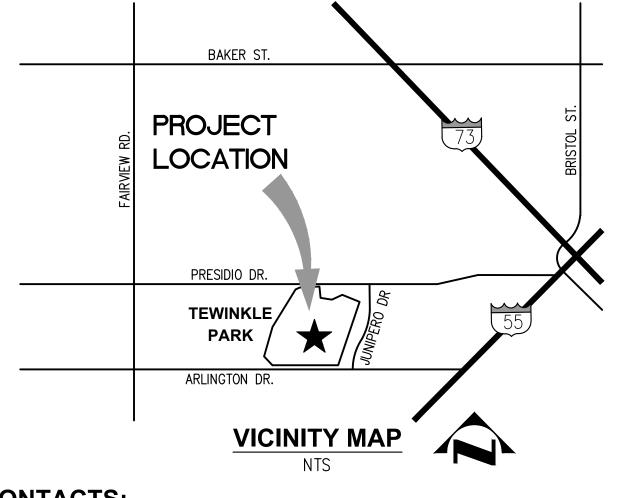
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TEWINKLE PARK

LAKE RENOVATION 100% CONSTRUCTION DOCUMENT PLANS



1"=60'



ATTACHMENT 1

ENVIRONMENT CONSULTANT:

VCS ENVIRONMENTAL 30900 RANCHO VIEJO ROAD,

SAN JUAN CAPISTRANO, CA 92675

CONTACTS:

CITY OF COSTA MESA PUBLIC WORKS DEPARTMENT

PACIFIC ADVANCED CIVIL ENGINEERING (PACE) 17520 NEWHOPE STREET, SUITE 200

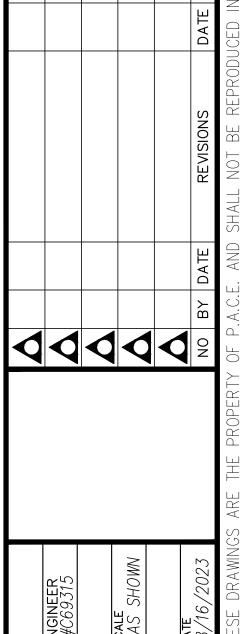
SHEET LIST INDEX

STILLT LIGHTIN	
Sheet Number	Sheet Title
W100	Title Sheet
W101	General Notes
W102	Structural Notes
W110	Erosion Control and Fencing Plan
W200	Overall Lake Plan
W210	Phase 1 — Drain Plan
W211	Phase 1 — Demolition Plan
W212	Irrigation Demolition Plan
W213	Phase 1 — Lake Piping and Utility Plan
W214	Phase 1 — Aeration Plan
W215	Phase 1 - Lake 1 Plan
W216	Irrigation Proposed Plan
W217	Planting Plan
W220	Phase 2 - Drain Plan
W221	Phase 2 — Demolition Plan
W222	Phase 2 — Lake Piping and Utility Plan
W223	
	Phase 2 — Aeration Plan
W224	Phase 2 - Lake 2 Plan
W225	Phase 2 - Stream Plan
W226	Phase 2 — Stream Plan
W227	Phase 2 — Sections
W231	Phase 3 — Demolition Plan
W232	Phase 3 — Island Piping and Utility Plan
W233	Phase 3 — Island Plan
W240	Demolition Details
W250	Lake Details
W251	Lake Details
W252	Lake Details
W253	Lake Details
W254	Lake Details
W255	Lake Details
W256	Lake Details
W257	Lake Details
W258	Lake Details
W259	Lake Details
W260	Irrigation Details
W300	Flow Schematic
W400	Pump Station Demolition Plan
W410	Pump Station Plan
W411	Pump Station Section
W450	Pump Station Details
W451	Pump Station Details
W500	Electrical General Notes
W501	Electrical Legend
W502	Electrical Single Line Diagram
W503	Electrical Power and Control Plan
W532	Electrical — Island Conduit Utility Plan
W600	CP SCHEMATIC
W601	CP SCHEMATIC
W602	CP SCHEMATIC
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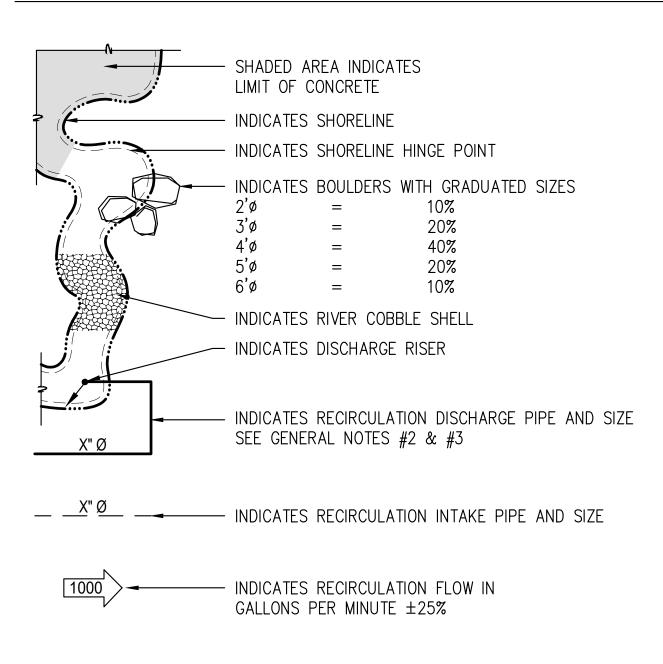
PRELIMINARY NOT FOR CONSTRUCTION

PRELIMINARY DESIGN DRAWING

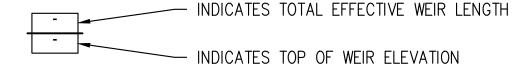
THIS DRAWING IS FOR DESIGN USE ONLY AND NOT INTENDED TO BE USED FOR CONSTRUCTION.

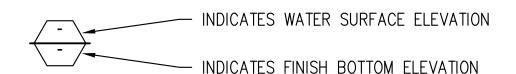


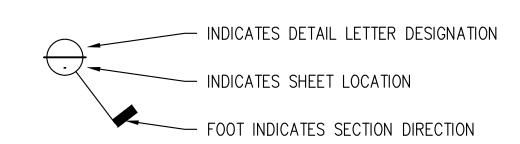
LEGEND:



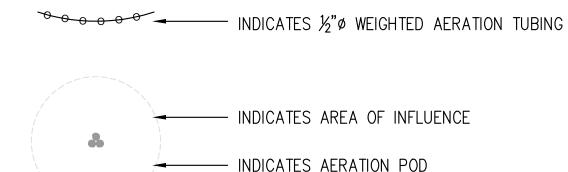
INDICATES WETLAND PLANTER







(VB)← INDICATES AERATION VALVE BOX



NOTE: NOT ALL SYMBOLS MAY BE USED.

SUGGESTED CONSTRUCTION: PHASING SEQUENCE:

- CONTRACTOR TO REVIEW ALL AS—BUILT DOCUMENTS AND DO SITE CONFIRMATION BEFORE ANY DEMOLITION OR CONSTRUCTION
- . LAKE 1 DEMOLITION PHASE 1:
- a. CONTRACTOR TO DRAIN THE LAKE AND MOVE WILDLIFE TO TEMPORARY BASIN (LAKE 2) PER SUGGESTED LAKE CONSTRUCTION PROCEDURES
- b. CONTRACTOR TO FOLLOW DEMOLITION PLAN (SHEET W211) FOR ITEMS TO BE PROTECTED IN PLACE, REMOVED AND REUSED
- c. CONTRACTOR TO CHECK QUANTITY OF THE DEMOLITION ITEMS
- 3. <u>LAKE 1 CONSTRUCTION PHASE 1:</u>
 - a. INSTALL PIPING VALVES AND FITTING (SEE SHEET W213)
 - b. REGRADING THE LAKE (FINE GRADING)
 - c. INSTALL RPE LINER PER SPECIFICATIONS
 - d. INSTALL SHORELINE, CONCRETE VENEER AND OTHER LAKE COMPONENTS (SEE SHEET W213)
 - e. FILL THE LAKE
 - f. INSTALL WALKWAY, BOULDERS, LANDSCAPE AND IRRIGATION

4. LAKE 2 DEMOLITION — PHASE 2:

- a. CONTRACTOR TO DRAIN THE LAKE AND MOVE WILDLIFE TO LAKE 1 PER SUGGESTED LAKE CONSTRUCTION PROCEDURES
- CONTRACTOR TO FOLLOW DEMOLITION PLAN (SHEET W221) FOR LAKE 2, STREAM AND PONDS ITEMS TO BE PROTECTED IN PLACE, REMOVED AND REUSED
- c. CONTRACTOR TO CHECK QUANTITY OF DEMOLITION ITEMS
- 5. <u>LAKE 2 AND PONDS CONSTRUCTION PHASE 2:</u>
 - a. INSTALL PIPING, VALVES AND FITTING (SEE SHEET W222)
 - b. REGRADING THE LAKE (FINE GRADING)
 - c. INSTALL RPE LINER PER SPECIFICATION
 - d. INSTALL SHORELINE, CONCRETE VENEER AND OTHER LAKE COMPONENTS (SEE SHEET W224)
 - e. INSTALL PONDS PIPING, FITTING AND VALVES INSIDE THE POND (SEE SHEET W224)
 - f. DEMO THE EXISTING STREAMS, PONDS AND REBUILT THEM (SEE SHEET W225 AND W226)
 - g. FILL THE LAKE
- 6. <u>ISLAND CONSTRUCTION PHASE 3:</u>
 - a. INSTALL SUMP, DRAINPIPE AND SUMP PUMP
 - b. INSTALL PIPE CONNECT TO EXISTING SEWER SYSTEM (SEE SHEET W232)
 - c. GRADING THE ISLAND PER SHEET W233
 - INSTALL WALKWAY, GABION WALLS, BOULDERS, LANDSCAPE AND IRRIGATION

SUGGESTED LAKE CONSTRUCTION PROCEDURES:

- LAKE DRAINAGE AND WILDLIFE REMOVAL:
- 1. REMOVE THE FREE STANDING WATER FROM THE POND AND DISCHARGE ON SITE INTO THE SEWER OUTLET UPON APPROVAL FROM THE LOCAL SEWER DISTRICT WHO WILL ACCEPT THE POND WATER. IN THE EVENT THAT THE SEWER DISTRICT DOES NOT ALLOW OR ACCEPT THE WATER, IT WILL HAVE TO BE HAULED OFF SITE FOR DISPOSAL. CONTRACTOR TO INCLUDE IN THEIR BID AND FEE FOR WATER REMOVAL. CONTRACTOR TO PROVIDE FEE FOR REMOVAL OF WATER THROUGH THE SANITARY SEWER. AS A BID ALTERNATE, CONTRACTOR TO PROVIDE FEE FOR TRANSPORTATION OF WATER OFF—SITE. CONTRACTOR TO PROVIDE THE UNIT COST FOR THE REMOVAL OF THE WATER IN THE BID FORMS.
- 2. FISH, TURTLES AND OTHER WILD LIFE SHALL BE REMOVED AND CARED FOR BY AN APPROVED WILDLIFE EXPERT (AQUABIO ENVIRONMENTAL TECHNOLOGIES OFFICE: 310—397—3114). LAKE 2 CAN BE USED AS TEMPORARY POND FOR WILDLIFE. EXCESSIVE WILDLIFE SHALL BE DISPOSED OFF SITE.
- 3. RINSE SIDES OF POND AS THE LEVEL OF THE POND DROPS WITH WATER PROVIDED ONSITE. CONTRACTOR TO WORK ALONGSIDE WILDLIFE COMPANY SO WORK CAN BE DONE AT THE SAME TIME AS WATER LEVEL DECREASES.
- CONTRACTOR TO REMOVE SEDIMENT FROM THE BOTTOM OF THE POND. CONTRACTOR TO PROVIDE FEE IN THE BID FORM. CONTRACTOR TO STOCKPILE THE SETTLEMENT FOR OTHER USE. CONTRACTOR TO PROVIDE NECESSARY ENZYMES (DIVERSIFIED WATERSCAPES, INC.) AS REQUIRED FOR REMOVAL OF ODORS EMANATING FROM THE SEDIMENT. ENZYMES NEED TO BE ADDED PRIOR TO COMPLETE REMOVAL OF THE WATER FROM THE LAKE AS RECOMMENDED BY THE ENZYME SUPPLIER. CONTRACTOR TO PROVIDE ENZYME LINE ITEM INCLUDING UNIT PRICE IN BID FORMS.
- 5. CONTRACTOR TO DETERMINE LIMITS OF SOIL LINER AND SEDIMENT. CONTRACTOR TO REMOVE EXISTING LINER.
- CONTRACTOR TO GRADE THE LAKE PER PLAN AND INSTALL LAKE SHORELINE AND LINER PER SPECIFICATIONS.
- 7. REMOVE AND DISPOSE OF VEGETATION THAT OCCURS FROM THE PERIMETER OF THE POND PER THE ENVIRONMENTAL REPORT.
- 8. CONTRACTOR TO FILL THE LAKE, TRANSFER WILDLIFE TO LAKE 1 (INCLUDE STOCK MOSQUITO FISH AND LAKE 2 WILDLIFE) AND START LAKE 2 CONSTRUCTION W/SIMILAR PROCEDURE.
- 9. AT CONCLUSION OF PROJECT, CONTRACTOR SHALL REMOVE ALL EQUIPMENT AND DEBRIS RESULTING FROM THEIR WORK.
- LAKE EDGE AND LINING CONSTRUCTION:
- . COMPACT THE SUBGRADE UNDER THE LAKE PER SOIL ENGINEER'S SPECIFICATIONS OR WITH A MINIMUM 90% RELATIVE DENSITY.
- . THE ELEVATIONS SHOWN ON THE LAKE PLANS IS DEPENDENT ON THE WATER SURFACE ELEVATIONS SHOWN.
- VERIFY ELEVATIONS OF TOP OF SHORELINES AND HINGE POINTS AND CONFIRM THAT THE ELEVATION IS WITHIN PLUS OR MINUS 0.10 FOOT OF THE MAXIMUM WATER SURFACE ELEVATION SHOWN ON THE LAKE PLANS. FINE GRADE AS REQUIRED.
- STAKE CRITICAL POINTS SUCH AS LAKE EDGE, PIPING PENETRATIONS, AND ALL LAKE COMPONENTS AS SHOWN ON THE PLANS.
- 5. PROVIDE LAYOUT OF LAKE SIDE OF FREEFORM LAKE EDGE ON THE GROUND FOR APPROVAL BY OWNER OR OWNER'S REPRESENTATIVE.
- CONSTRUCT THE LAKE EDGE PER THE SHORELINE CONSTRUCTION DETAILS SHOWN ON THE LAKE PLANS. PROVIDE KEYWAY AS REQUIRED. NOT ALL LAKE SHORELINES WILL REQUIRE A KEYWAY.

PIPING NOTES:

- THE PIPING PLAN IS DIAGRAMMATIC. ROUTING AND FINAL LAYOUT TO BE FIELD DETERMINED BY CONTRACTOR AND APPROVED BY ENGINEER PRIOR TO CONSTRUCTION.
- 2. PIPE TYPE, MATERIALS, AND SUPPORTS SHALL CONFORM TO THE PROJECT SPECIFICATIONS. IN ADDITION, PIPE SHALL BE IN CONFORMANCE WITH UBC, UPC, LOCAL AND NATIONAL BUILDING CODE REQUIREMENTS.
- 3. PARALLEL PIPE RUNS SHALL BE INSTALLED WITHIN COMMON TRENCHES AND OR PIPE SUPPORTS WHENEVER POSSIBLE.
- ALL PIPING SHALL BE UNIFORMLY AND CONTINUOUSLY SUPPORTED OVER ITS ENTIRE LENGTH AND ROUTE.
- CONFORMANCE WITH LOCAL AND NATIONAL BUILDING CODES.

 PRESSURE TEST ALL PIPING PER PROJECT SPECIFICATIONS. KEEP PIPING UNDER

ALL ELECTRICAL CONDUITS SHALL BE INSTALLED USING SWEEP FITTINGS IN

DURING THE INSTALLATION OF WATER FEATURE CONCRETE BASIN.

7. ALL UNDERGROUND AND EQUIPMENT PIPING SHALL BE PVC SCHEDULE 40

UNLESS OTHERWISE DESIGNATED WITHIN PLANS AND SPECIFICATIONS.

PRESSURE TESTING CONDITIONS DURING TRENCH BACKFILL/COMPACTION AND

8. ALL PIPING RUNS SHALL HAVE THRUST BLOCKS.

LAKE GENERAL NOTES:

- 1. THESE PLANS ARE INTENDED FOR LAKE/WATER FEATURE CONSTRUCTION USE ONLY. SEE DRAWINGS BY RESPECTIVE DESIGNERS FOR OTHER ASPECTS OF CONSTRUCTION.
- 2. ALL RECIRCULATION PIPE SHALL BE INSTALLED WITHOUT HIGH POINTS. PREVENT AIR TRAPS AND PROVIDE A 3'-0" (MIN) COVER OUTSIDE WATER FEATURE LIMITS AND A 1'-0" (MIN) COVER WITHIN UNLESS OTHERWISE NOTED ON THE PLANS.
- 3. ALL PVC PIPE SHALL BE PER THE FOLLOWING SCHEDULE UNLESS OTHERWISE NOTED:

30"ø AND LARGER

15"ø – 27"ø

80 PSI PVC PIPE OR AS SPECIFIED ON PLAN

80 PSI PVC IRRIGATION PIPE (P.I.P.)

10"ø – 12"ø

100 PSI PVC IRRIGATION PIPE (P.I.P.)

RING-TITE (RT) CLASS 160

6"ø AND SMALLER

SCHEDULE 40 IPS PVC PIPE

- 4. PROVIDE THRUST BLOCK ON EVERY PIPE BEND AS REQUIRED. SEE THRUST BLOCK BEARING AREA TABLE ON THE DETAIL SHEETS FOR THRUST BLOCK SCHEDULING.
- 5. PAINT ALL EXPOSED PVC PIPE WITHIN THE LAKE/WATER FEATURE AREA AND VISIBLE FROM THE SHORELINE WITH BLACK OR DARK BLUE PAINT SUITABLE FOR PIPE MATERIAL.
- 6. WATER LEVELS SHOWN INDICATE AVERAGE SURFACE ELEVATIONS DURING OPERATION. ELEVATIONS MAY DIFFER DURING SHUTDOWN CONDITIONS.
- 7. ALL MANUFACTURER PRODUCT CALL-OUTS SHOWN IN THESE PLANS SHALL BE CONSIDERED "OR APPROVED EQUAL" UNLESS OTHERWISE NOTED. CONTRACTOR TO PROVIDE SHOP DRAWINGS FOR SUBSTITUTIONS FOR APPROVAL.
- 8. THE LAKE/WATER FEATURE CONTRACTOR SHALL VERIFY THE AVAILABLE ELECTRICAL POWER PRIOR TO PURCHASING EQUIPMENT.
- 9. REFER TO SPECIFICATIONS FOR COLOR, TYPE OF BOULDERS TO BE USED, AND INSTALLATION REQUIREMENTS. THE LAKE/WATER FEATURE CONTRACTOR SHALL FURNISH AND INSTALL BOULDERS SUBJECT TO APPROVAL OF THE OWNER. NOTIFY OWNER'S REPRESENTATIVE PRIOR TO SETTING ANY BOULDERS.
- 10. TOP OF CONCRETE SHORELINE & CONTROL WEIR ELEVATIONS SHALL BE INSTALLED ± 0.05 ' OF ELEVATION AS SHOWN ON PLANS.
- 11. CONCRETE FOR LAKE CONSTRUCTION UNLESS OTHERWISE SPECIFIED ON PLANS SHALL BE 6 SACK MINIMUM PEA GRAVEL PUMP MIX AND SHALL BE ABLE TO BE PUMPED AT A 3" SLUMP WITH A TRAILER MOUNTED GROUT PUMP WITH A 2" HOSE.
- 12. THE MEMBRANE LINER SHALL BE 30MIL RPE SEE LINER SPECIFICATIONS FOR ADDITIONAL INFORMATION.

ABBREVIATIONS:

MANUFACTURER

AIR/VAC	RELIEF APPROVED EQUAL BALL VALVE BIOFILTER BUILDING BUTTERFLY VALVE CHECK VALVE CONCRETE CONTINOUS DIAMETER DUCTILE IRON PIPE EACH WAY EDGE OF PAVEMENT ELEVATION ENGINEERING EQUALIZER FINISH FLOOR	MAX MG MIN OC PH PUE PVC PSF PSI REINF RCP R/W SCH SPECS SF THK TOF TOS TOW TDH TYP V WS WP WQF	MILLION GALLON MINIMUM ON CENTER PHASE PUBLIC UTILITY EASEMENT POLYVINYL CHLORIDE POUNDS PER SQUARE FOOT POUNDS PER SQUARE INCH PUMP STATION REDUCER BUSHING REINFORCED REINFORCED CONCRETE PIPE RIGHT OF WAY SCHEDULE SPECIFICATIONS SQUARE FEET THICK TOP OF FOOTING TOP OF PAVEMENT TOP OF SHORELINE TOP OF WALL TOTAL DYNAMIC HEAD
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PRELIMINARY NOT FOR CONSTRUCTION

PRELIMINARY DESIGN DRAWING

THIS DRAWING IS FOR DESIGN USE ONLY AND NOT INTENDED TO BE USED FOR CONSTRUCTION.

PREPARED BY	ZIRANG SONG	PROJECT ENGINEER	R.C.E. NO. — #C69315	Exp. 6/30/2024
Exp. 6/30/2024	Exp. 6/30/2024			
Exp. 6/30/2024	Exp. 6/30/2024			
DRAWN	SCALE	SC		

GENERAL NOTE

GENE

PARK

TEWINKLE PARK
LAKE RENOVATION

Advanced Water Engineering
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SHEET

VV 1 0 1

02 OF 50 SHEETS

JOB NO. B836

-U/ 36xZ4v.dwg; B836-U/ - Piping Notes.dwg 24; LTscale = 1; PSItscale = 1; ACAD Ver. = 23.0s (LMS Tech

STRUCTURAL TESTS AND SPECIAL INSPECTIONS:

- . STRUCTURAL TESTS AND INSPECTIONS SHALL BE ACCORDING TO CURRENT CALIFORNIA BUILDING CODE.
- 2. THE SPECIAL INSPECTIONS IDENTIFIED ARE IN ADDITION TO THOSE REQUIRED BY SECTION 110 OF THE CODE, AS AMENDED. SPECIAL INSPECTION IS NOT A SUBSTITUTE FOR INSPECTION BY THE GOVERNING JURISDICTION.
- AN INDEPENDENT TESTING AGENCY AND SPECIAL INSPECTORS WILL BE RETAINED BY THE OWNER (NOT THE CONTRACTOR OR ANY OTHER PERSON RESPONSIBLE FOR THE WORK) TO PERFORM TESTS AND SPECIAL INSPECTIONS. THE CONTRACTOR SHALL PROVIDE ACCESS AND FURNISH SAMPLES TO THE AGENCY AS REQUIRED.
- 4. IF INITIAL TESTS OR INSPECTIONS MADE BY THE OWNER'S TESTING AGENCY REVEAL THAT ANY PORTION OF THE WORK DOES NOT COMPLY WITH THE CONTRACT DOCUMENTS, ADDITIONAL TESTS, INSPECTIONS AND NECESSARY REPAIRS WILL BE MADE AT THE CONTRACTOR'S EXPENSE.
- 5. A CERTIFICATE OF SATISFACTORY COMPLETION OF WORK REQUIRING SPECIAL INSPECTION MUST BE COMPLETED AND SUBMITTED TO THE GOVERNING JURISDICTION AND SEOR.
- PERIODIC OR CONTINUOUS PRESENCE AND INSPECTION BY THE PROJECT OR SPECIAL INSPECTOR ARE REQUIRED FOR THE FOLLOWING TYPES OF WORK WHERE OCCURS:

	REQUIRED VERIFICATION AND INSPECTION OF CONCRETE CONSTRUCTION (CBC TABLE 1705.3)	=
VERIF	FICATION AND INSPECTION	FREQUENCY
1.	INSPECTION OF REINFORCING STEEL AND PLACEMENT.	Р
3.	INSPECT BOLTS TO BE INSTALLED IN CONCRETE.	С
4.	INSPECTION OF (POST-INSTALLED) ANCHORS INSTALLED IN HARDENED CONCRETE. INSTALLERS MUST BE CERTIFIED BY MANUFACTURER IN ACCORDANCE WITH ITS ICC REPORTS.	Р
5.	VERIFYING USE OF REQUIRED DESIGN MIX.	Р
6.	AT THE TIME FRESH CONCRETE IS SAMPLED TO FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE.	С
7.	INSPECTION OF CONCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES.	С
8.	INSPECTION FOR MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES.	Р
12.	INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.	Р

	REQUIRED VERIFICATION AND SPECIAL INSPECTION OF SOILS (CBC TABLE 1705.6)					
VERIF	ICATION AND INSPECTION TASK	FREQUENCY				
1.	VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY.	Р				
2	VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL.	Р				
3	PERFORM CLASSIFICATION AND TESTING OF CONTROLLED FILL MATERIALS	Р				
4	VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESS DURING PLACEMENT AND COMPACTION OF CONTROLLED FILL.	С				
5	PRIOR TO PLACEMENT OF CONTROLLED FILL, OBSERVE SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY.	Р				

NOTE:

C = CONTINUOUS INSPECTION P = PERIODIC INSPECTION

...

EXPANSION (WEDGE) ANCHORS:

- 1. WHEN INSTALLING DRILLED—IN ANCHORS IN NON—PRESTRESSED CONCRETE, USE CARE AND CAUTION TO AVOID CUTTING OR DAMAGING THE EXISTING REINFORCING.
- 2. EXPANSION OR WEDGE ANCHORS SHALL BE:
 - A. INTO CONCRETE: HILTI KB-TZ (ICC ESR-1917)
- 3. INSTALL ANCHORS IN ACCORDANCE WITH THE ICC REPORT.
- PROVIDE STAINLESS STEEL FASTENERS FOR EXTERIOR USE OR WHEN EXPOSED TO WEATHER. PROVIDE GALVANIZED CARBON STEEL ANCHORS AT OTHER LOCATIONS UNLESS OTHERWISE NOTED.
- IF REINFORCEMENT IS ENCOUNTERED DURING DRILLING, ABANDON HOLE AND SHIFT LOCATION TO AVOID THE REINFORCEMENT. PROVIDE A MINIMUM OF 2 ANCHOR DIAMETERS OR 1", WHICHEVER IS LARGER, OF SOUND CONCRETE BETWEEN THE ANCHOR AND THE ABANDONED HOLE. FILL THE ABANDONED HOLE WITH NON—SHRINK GROUT. IF THE ANCHOR MAY NOT BE SHIFTED AS NOTED ABOVE. CONTACT THE SEOR.
- 6. LOCATE REINFORCEMENT AND CONFIRM FINAL ANCHOR LOCATIONS PRIOR TO FABRICATING PLATES, MEMBERS OR OTHER STEEL ASSEMBLIES ATTACHED WITH ANCHORS.
- 7. INSTALL ANCHORS TO THE FOLLOWING SPECIFICATIONS:

HILTI KB-TZ ANCHOR							
ANCHOR DIAMETER (IN)	3/8	3/8 1/2		5%		3/4	
EMBED (IN)	2	2	31/4	31/8	4	3¾	43/4
MIN HOLE DEPTH (IN)	25%	2%	4	3%"	4¾"	4%	5¾"
INSTALL TORQUE (LB-FT)	25	40	40	60	60	110	110
MIN THICKNESS (IN)	4	4	6	5	6	6	8

8. MAINTAIN A MINIMUM EDGE DISTANCE OF 1.5 TIMES THE ANCHOR EMBEDMENT AND MINIMUM ANCHOR SPACING OF 3 TIMES THE ANCHOR EMBEDMENT UNLESS OTHERWISE NOTED. CONTACT SEOR IF THIS CANNOT BE ACCOMPLISHED.

EPOXY DOWELS:

- 1. WHEN INSTALLING DRILLED—IN DOWELS IN EXISTING NON—PRESTRESSED REINFORCED CONCRETE, USE CARE AND CAUTION TO AVOID CUTTING OR DAMAGING THE EXISTING REINFORCING BARS.
- 2. DOWELS SHALL BE EPOXIED WITH THE FOLLOWING MATERIALS:

 A. INTO CONCRETE: HILTI HIY-HY 200 WITH SAFESET SYSTEM (ICC ESR-3187)

 HILTI HIT-RE 500-SD (ICC ESR-2322)

 SIMPSON SET-XP (ICC ESR-2508)
- 3. DOWEL SHALL CONFORM TO ASTM A615 GRADE 60 REINFORCING STEEL.
- 4. REMOVE GREASE, OIL, RUST AND OTHER LAITANCE FROM RODS AND DOWELS PRIOR TO INSTALLATION.
- 5. IF REINFORCEMENT IS ENCOUNTERED DURING DRILLING, ABANDON HOLE AND SHIFT THE ANCHOR LOCATION TO AVOID REINFORCEMENT. PROVIDE A MINIMUM OF 2 ANCHOR OR DOWEL DIAMETERS OR 1", WHICHEVER IS LARGER, OF SOUND CONCRETE BETWEEN THE ANCHOR OR DOWEL AND THE ABANDONED HOLE. FILL THE ABANDONED HOLE WITH NON-SHRINK GROUT. IF THE ANCHOR OR DOWEL MAY NOT BE SHIFTED AS NOTED ABOVE, CONTACT THE SEOR.
- 6. LOCATED REINFORCEMENT AND CONFIRM FINAL ANCHOR LOCATIONS PRIOR TO FABRICATING PLATES, MEMBERS OR OTHER STEEL ASSEMBLIES ATTACHED WITH EPOXY ANCHORS.

STRUCTURAL GENERAL NOTES:

- 1. MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE CURRENT EDITION OF THE CALIFORNIA BUILDING CODE, TITLE 24, THE ORDINANCES OF THE LOCAL BUILDING OFFICIAL, AND THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.
- REFERENCE TO CODES, RULES REGULATIONS, STANDARDS, MANUFACTURER'S INSTRUCTIONS OR REQUIREMENTS OF REGULATORY AGENCIES IS TO THE LATEST EDITION OF EACH IN EFFECT AT THE DATE OF SUBMISSION OF BID UNLESS THE DOCUMENT DATE IS SHOWN.
- 3. DRAWINGS INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION. WHERE CONDITIONS ARE NOT SPECIFICALLY INDICATED BUT ARE OF SIMILAR CHARACTER TO DETAILS SHOWN, USE SIMILAR DETAILS OF CONSTRUCTION, SUBJECT TO REVIEW BY THE STRUCTURAL ENGINEER OF RECORD (SEOR).
- 4. VERIFY ALL DIMENSIONS, ELEVATIONS AND SITE CONDITIONS BEFORE STARTING WORK. NOTIFY LANDSCAPE ARCHITECT OF DISCREPANCIES.
- 5. DO NOT SCALE THE DRAWINGS.
- 6. TOLERANCES SHALL BE ACCORDING TO THE BUILDING CODE.
- 7. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE WORK OF ALL TRADES. NOTIFY THE LANDSCAPE ARCHITECT OF ANY DISCREPANCIES AND RESOLVE BEFORE PROCEEDING WITH THE WORK.
- 8. THE CONTRACTOR SHALL SUPERVISE, DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES. THE SUPPORTING SERVICES BY THE SEOR, WHETHER PERFORMED PRIOR TO, DURING, OR AFTER CONSTRUCTION, ARE PERFORMED SOLELY FOR THE PURPOSE OF ASSISTING IN QUALITY CONTROL AND IN ACHIEVING CONFORMANCE WITH CONTRACT DRAWINGS; BUT THEY DO NOT GUARANTEE THE CONTRACTOR'S PERFORMANCE AND SHALL NOT BE CONSIDERED AS SUPERVISION OF CONSTRUCTION.
- THE CONTRACTOR IS SOLELY RESPONSIBLE FOR PROVIDING A SAFE PLACE TO WORK AND MEETING THE REQUIREMENTS OF ALL APPLICABLE JURISDICTIONS. EXECUTE WORK TO ENSURE THE SAFETY OF PERSONS AND ADJACENT PROPERTY AGAINST DAMAGE BY FALLING DEBRIS AND OTHER HAZARDS RELATED WITH THIS WORK.
- 10. CONCRETE SLAB ON GRADE HAS NOT BEEN DESIGNED FOR THE FOLLOWING:
- A. ANY CONSTRUCTION LOADS (I.E. CRANES, CONCRETE TRUCKS OR ETC.)
- B. ANY SPECIFIC OCCUPANT SERVICE LOADS (I.E. FORKLIFTS, STORAGE RACKS OR ETC.)

REINFORCING STEEL:

- 1. REINFORCING SHALL BE FABRICATED ACCORDING TO THE "MANUAL OF STANDARD PRACTICE FOR REINFORCED CONCRETE CONSTRUCTION" AND SHALL CONFORM TO ASTM A615, GRADE 60.
- 2. PROVIDE REINFORCING SHOWN OR NOTED CONTINUOUS IN LENGTHS AS LONG AS PRACTICABLE.
- 3. TERMINATE REINFORCING STEEL IN STANDARD HOOKS UNLESS OTHERWISE
- 4. ALL REINFORCING STEEL INTERRUPTED BY STRUCTURAL STEEL SHALL TERMINATE WITHIN 1" OF STEEL SURFACE WITH A 90° STANDARD HOOK UNLESS OTHERWISE NOTED.
- 5. ANCHOR BOLTS, DOWELS AND OTHER EMBEDDED ITEMS SHALL BE SECURELY TIED IN PLACE BEFORE CONCRETE IS PLACED.
- 6. ACCURATELY POSITION, SUPPORT AND SECURE REINFORCEMENT FROM DISPLACING DUE TO FORMWORK, CONSTRUCTION, OR CONCRETE PLACEMENT OPERATIONS. LOCATE AND SUPPORT REINFORCING BY METAL CHAIRS, RUNNERS, BOLSTERS, SPACERS AND HANGERS AT A MAXIMUM SPACING OF 3'-0".
- 7. SUBMITTAL OF REBAR SHOP DRAWINGS IS NOT REQUIRED BY THE SEOR FOR THIS PROJECT. REBAR SHOP DRAWINGS WILL NOT BE REVIEWED BY THE SEOR.
- 8. FIELD BENDING OF REINFORCING STEEL SHALL NOT BE ALLOWED UNLESS APPROVED BY THE SEOR.
- 9. MILL CERTIFICATIONS SHALL BE SUBMITTED FOR REVIEW.

SOILS AND FOUNDATIONS:

- 1. LOCATE AND PROTECT EXISTING UTILITIES TO REMAIN DURING AND/OR AFTER CONSTRUCTION.
- 2. REMOVE ABANDONED FOOTINGS, UTILITIES, ETC. WHICH INTERFERE WITH NEW CONSTRUCTION, UNLESS OTHERWISE INDICATED.
- 3. NOTIFY THE ENGINEER IF ANY BURIED STRUCTURES NOT INDICATED, SUCH AS CESSPOOLS, CISTERNS, FOUNDATIONS, ETC. ARE FOUND.
- 4. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR EXCAVATION PROCEDURES INCLUDING LAGGING, SHORING, UNDERPINNING AND PROTECTION OF EXISTING CONSTRUCTION.
- 5. REMOVE LOOSE SOIL AND STANDING WATER FROM EXCAVATIONS PRIOR TO PLACING CONCRETE.
- 6. EXCAVATIONS MUST BE ACCEPTED BY ENGINEER OF RECORD PRIOR TO PLACING REINFORCING AND CONCRETE. NOTIFY THE EOR WHEN EXCAVATIONS ARE READY FOR INSPECTION.
- 7. PLACE BACKFILL BEHIND RETAINING WALLS AFTER CONCRETE HAS ATTAINED FULL DESIGN STRENGTH.
- MECHANICALLY COMPACT EXCAVATION BACKFILLS IN LAYERS. PROVIDE 90% MINIMUM COMPACTION IN ACCORDANCE WITH THE ASTM D1557 TEST METHOD UON IN SOILS REPORT. PROVIDE 95% MINIMUM COMPACTION FOR FILL BENEATH FOOTINGS.
- 9. SCARIFY AND RECOMPACT TOP 6 INCHES OF SOIL BENEATH FILL PER ITEM ABOVE.

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PROJECT ENGINEER . No. —— #C69315	4	SCALE AS SHOWN		DATE 8/16/2023	THESE DRAWINGS ARE THE
PROJECT R.C.E. NO. ——	EXP. 6/30/2024	DRAWN SP/RC	DESIGNED BL	снескер ZS	

STRUCTURAL NOTES

TITLE

TEWINKLE PARK LAKE RENOVATION

LAKE RENOV

vanced Water Engineering

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PRELIMINARY NOT FOR CONSTRUCTION

PRELIMINARY DESIGN DRAWING

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SHEET **VV102**03 OF 50 SHEETS

JOB NO. B836

Xrefs: B&36-07 36xZ4v.dwg Dimscale = 24; LTscale = 1; PSltscale = 1; ACAD Ver. = 23.0s (LMS Tech); Visretc

EROSION CONTROL LEGENDS:

STABILIZED CONSTRUCTION ENTRANCE

SAND AND GRAVEL BAGS

CONSTRUCTION FENCE AND SILT FENCE

LIMIT OF WORK

STORM WATER POLLUTION PREVENTION NOTES:

- EFFECTIVE COMBINATION OF EROSION AND SEDIMENT CONTROL BMP'S SHALL BE IMPLEMENTED TO PROTECT THE EXPOSED PORTIONS OF THE SITE FROM EROSION AND TO PREVENT SEDIMENT DISCHARGES.
- SEDIMENTS AND OTHER POLLUTANTS SHALL BE RETAINED ON SITE UNTIL PROPERLY DISPOSED OF, AND MAY NOT BE TRANSPORTED FROM THE SITE VIA SHEET FLOW, SWALES, AREA DRAINS, NATURAL DRAINAGE COURSES OR WIND.
- STOCKPILES OF EARTH AND OTHER CONSTRUCTION—RELATED MATERIALS SHALL BE PROTECTED FROM BEING TRANSPORTED FROM THE SITE BY THE FORCES OF WIND AND WATER FLOW.
- FUELS, OILS, SOLVENTS, AND OTHER TOXIC MATERIALS SHALL BE STORED IN ACCORDANCE WITH THEIR LISTING AND ARE NOT TO CONTAMINATE THE SOIL AND SURFACE WATERS. ALL APPROVED STORAGE CONTAINERS ARE TO BE PROTECTED FROM THE WEATHER. SPILLS MUST BE CLEANED UP IMMEDIATELY AND DISPOSED OF IN A PROPER MANNER. SPILLS MAY NOT BE WASHED INTO THE DRAINAGE SYSTEM, NOR BE ALLOWED TO SETTLE OR INFILTRATE INTO SOIL.
- EXCESS OR WASTE CONCRETE MAY NOT BE WASHED INTO THE PUBLIC WAY OR ANY OTHER DRAINAGE SYSTEM. PROVISIONS SHALL BE MADE TO RETAIN CONCRETE WASTES ON SITE UNTIL THEY CAN BE DISPOSED OF AS SOLID
- TRASH AND CONSTRUCTION SOLID WASTES SHALL BE DEPOSITED INTO A COVERED RECEPTACLE TO PREVENT CONTAMINATION OF RAINWATER AND
- SEDIMENTS AND OTHER MATERIALS MAY NOT BE TRACKED FROM THE SITE BY VEHICULAR TRAFFIC. THE CONSTRUCTION ENTRANCE ROADWAYS MUST BE STABILIZED SO AS TO INHIBIT SEDIMENTS FROM BEING DEPOSITED INTO THE PUBLIC WAY. ACCIDENTAL DEPOSITS SHALL BE SWEPT UP IMMEDIATELY AND MAY NOT BE WASHED DOWN BY RAIN OR OTHER MEANS.
- STORM WATER POLLUTION PREVENTION DEVICES AND / OR PRACTICES SHALL BE MODIFIED AS NEEDED AS THE PROJECT PROGRESSES TO ENSURE EFFECTIVENESS.

NOTE: ANY ADDITIONAL EROSION/SEDIMENT CONTROLS MEASURES CALLED OUT BY THE SWPPP WOULD SUPERSEDE THOSE SHOWN ON THIS SHEET.

EROSION CONTROL KEYNOTES:

- 1 INSTALL GRAVEL BAG BARRIER PER CASQA BMP SE-6
- 2 INSTALL STABILIZED CONSTRUCTION ENTRANCE/EXIT PER CASQA BMP TC-1
- 3 INSTALL SILT FENCE PER CASQA BMP SE-1

44449

SION CONTROL / FENCING PLAN



PRELIMINARY DESIGN DRAWING

THIS DRAWING IS FOR DESIGN USE ONLY AND NOT INTENDED TO BE USED FOR CONSTRUCTION.

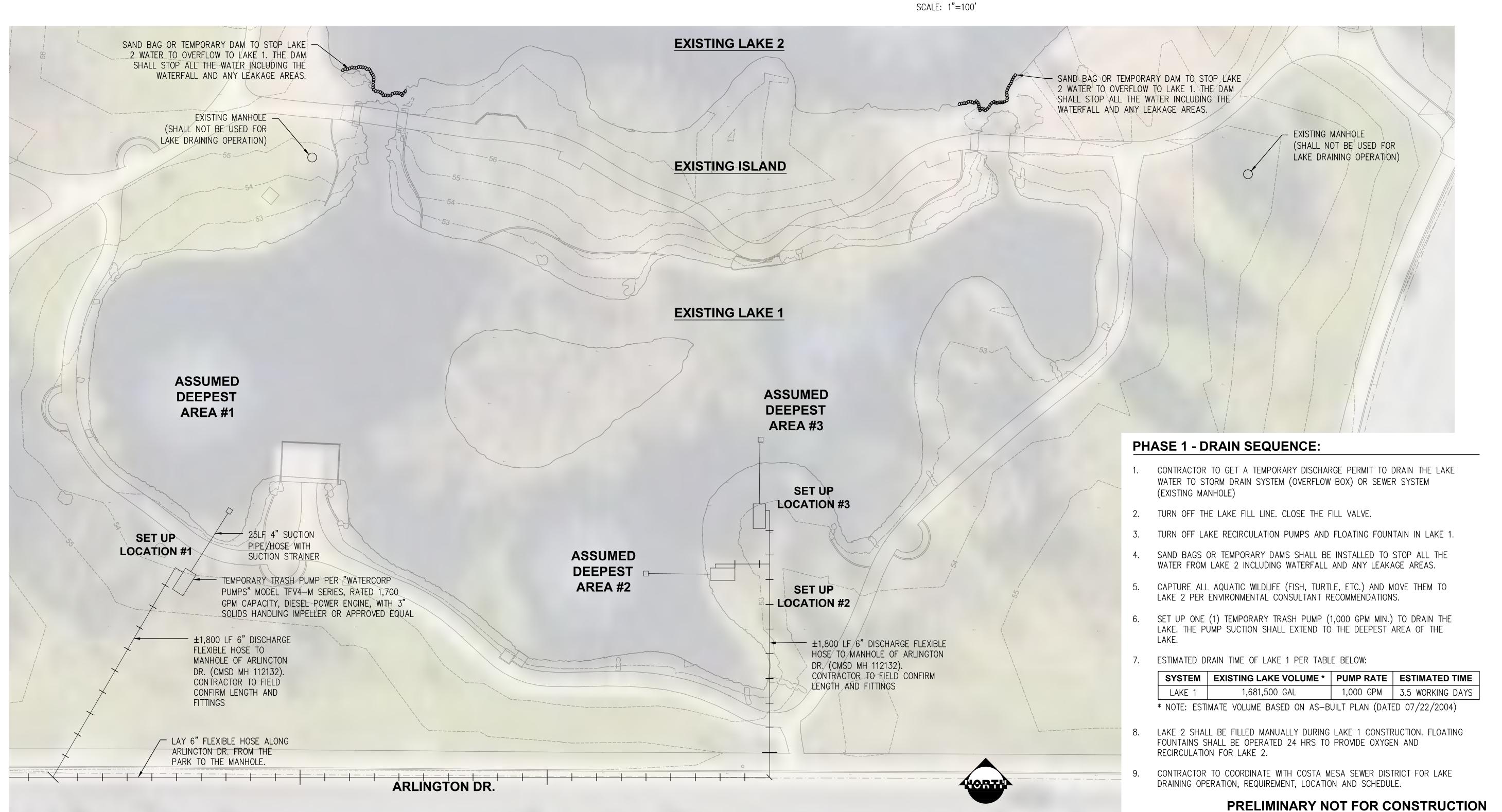
SUPPLY WATER FOR

— STABILIZED CONSTRUCTION

WHEEL WASHING

ENTRANCE/EXIT

FLEXIBLE HOSE RECOMMENDED ROUTING



PHASE 1 - DRAIN PLAN

SCALE: 1"=20'

44444

TEWINKLE PARK
LAKE RENOVATION

06 OF 50 SHEETS JOB NO.

PRELIMINARY DESIGN DRAWING

THIS DRAWING IS FOR DESIGN USE ONLY AND NOT

INTENDED TO BE USED FOR CONSTRUCTION.

DEMOLITION KEYNOTES:

REMOVE BIOFILTER AT BOTTOM OF LAKE 1

REMOVE LAKE 1 PIPES

a. 4" BIOFILTER PIPES

b. 12" BIOFILTER BACKWASH PIPE c. 14"ø INTAKE PIPE

d. RECIRCULATION PIPES (8", 6", 4", 2", $2\frac{1}{2}$ ", $1\frac{1}{2}$ ")

REMOVE EXISTING UNDERGROUND VAULT NEXT TO THE OVERFLOW BOX

REMOVE LAKE 1 PENINSULAS

REMOVE LAKE 1 EXISTING SHORELINE & LINER

REMOVE WALKWAY

REMOVE LAKE 2 AND PONDS PIPES

a. LAKE 2 RECIRCULATION PIPES (8", 6", 4", 3", 2 $\frac{1}{2}$ ", 2", 1 $\frac{1}{2}$ ")

c. INTERMEDIATE POND PIPES

REMOVE LAKE 2 SHORELINE AND LINER

REMOVE EXISTING VAULT

REMOVE $2\frac{1}{2}$ WATER LEVEL SENSOR EQUALIZER

REMOVE EXISTING FLOATING FOUNTAIN JUNCTION BOX (CONTRACTOR TO CONFIRM THE LOCATION)

D12 REMOVE EXISTING FLOATING FOUNTAIN CONDUITS (CONTRACTOR TO CONFIRM THE COUNDUIT ROUTES)

D13 REMOVE EXISTING TREES IN DEMOLITION AREA. LOCATION TO BE CONFIRM WITH CITY (5 TYP).

D14 REMOVE EXISTING WATERFALL

D15 REMOVE EXISTING OZONE BOX AND PIPES INSIDE THE LAKE

(3 PLCS. AT LAKE 1 AND 1 PLC. AT LAKE 2)

D16 REMOVE OZONE EXISTING PIPING

REMOVE EXISTING UNDERGROUND VAULT (SCREEN VAULT)

REMOVE EXISTING STREAM #3 AND POND 1

REMOVE EXISTING STREAM #4 AND POND 2

REMOVE EXISTING STREAM #5 AND INTERMEDIATE POND

REMOVE EXISTING WATERFALL FOR REBUILT

REMOVE 8" AND 4" POND 1 DISCHARGE

REMOVE 8"Ø POND 2 DISCHARGE

REMOVE VALVE AND VALVE BOX

REMOVE 4"Ø INTERMEDIATE POND DISCHARGE

D26 REMOVE EXISTING WIRING AND CONDUIT FROM WATER LEVEL SENSOR TO FILL VALVE

REMOVE EXISTING POTABLE WATER CONTROL VALVE

D28 REMOVE EXISTING OVER SHORELINE DISCHARGE

PROTECT-IN-PLACE KEYNOTES:

P1 PROTECT IN PLACE 14"Ø INTAKE PIPE

 $\boxed{\text{P2}}$ PROTECT IN PLACE $2\frac{1}{2}$ WATER LEVEL SENSOR EQUALIZER

PROTECT IN PLACE WIRING & CONDUIT FROM WATERLEVEL NOT USED SENSOR TO FILL VALVE

P4 PROTECT IN PLACE 8" & 4" POND 1 DISCHARGES NOT USED F5 PROTECT IN PLACE 8" POND 2 DISCHARGE **NOT USED**

P6 PROTECT IN PLACE VALVES IN VALVE BOX **NOT USED** PROTECT IN PLACE 4" INTERMEDIATE POND DISCHARGE NOT USED

PROTECT IN PLACE BRIDGES BETWEEN LAKE 1 & LAKE 2

PROTECT IN PLACE ALL PONDS SHORELINE, LINER, AND FEATURES

P10 PROTECT IN PLACE WOODEN BRIDGE PROTECT IN PLACE ALL EXISTING TREES IN AREA OF RENOVATION (26 TYP). NO ACTION ON TREES OUTSIDE OF RENOVATION AREA.

PROTECT IN PLACE OVERFLOW BOX

PROTECT IN PLACE IRRIGATION VALVE BOX FOR FUTURE IMPROVEMENT

P14 PROTECT IN PLACE ELECTRICAL WIRES AND CONDUITS FOR FLOATING FOUNTAIN

PROTECT IN PLACE CONCRETE PULL BOX FOR FUTURE IMPROVEMENT

P16 PROTECT IN PLACE UNDERGROUND VAULT FOR FUTURE IMPROVEMENT

PROTECT IN PLACE ELECTRICAL BOX FOR FUTURE IMPROVEMENT PROTECT IN PLACE EXISTING PIPING

PROTECT IN PLACE EXISTING SEWER MANHOLE

P20 PROTECT IN PLACE EXISTING IRRIGATION ISOLATION VALVE

CAP AND ABANDON IN PLACE EXISTING OZONE PIPE

P22 PROTECT IN PLACE EXISTING RECYCLED WATER PIPES AND VALVE BOX

PROTECT IN PLACE EXISTING IRRIGATION VALVE BOX

P24 PROTECT IN PLACE EXISTING POTABLE WATER PIPES

PROTECT IN PLACE EXISTING POTABLE WATER VALVE BOX

PROTECT IN PLACE EXISTING POTABLE WATER DISCHARGE

PROTECT IN PLACE DISCHARGE VALVE

P28 PROTECT IN PLACE LAKE 1 ISLAND

EWINKLE PARK LAKE RENOVATION

44444

JOB NO.

PRELIMINARY DESIGN DRAWING

THIS DRAWING IS FOR DESIGN USE ONLY AND NOT INTENDED TO BE USED FOR CONSTRUCTION.



LEGENDS:

DISCHARGE PIPE INTAKE PIPE RECLAIMED WATER POTABLE WATER SANITARY SEWER STORM DRAIN ELECTRICAL SERVICE POINT OF CONNECTION ALUM DISCHARGE W/ VALVE AT SHORELINE **-**DISCHARGE JET W/ VALVE AT SHORELINE XXX INDICATES RECIRCULATION FLOW (GPM) X --INDICATES UTILITY REQUIREMENT X INDICATES PIPING COMPONENTS

PIPING NOTES:

- 1. THE PIPING PLAN IS DIAGRAMMATIC. ROUTING AND FINAL LAYOUT TO BE FIELD DETERMINED BY CONTRACTOR AND APPROVED BY ENGINEER PRIOR TO CONSTRUCTION.
- PIPE TYPE, MATERIALS, AND SUPPORTS SHALL CONFORM TO THE PROJECT SPECIFICATIONS. IN ADDITION, PIPE SHALL BE IN CONFORMANCE WITH UBC, UPC, LOCAL AND NATIONAL BUILDING CODE REQUIREMENTS.
- 3. PARALLEL PIPE RUNS SHALL BE INSTALLED WITHIN COMMON TRENCHES AND OR PIPE SUPPORTS WHENEVER POSSIBLE.
- 4. ALL PIPING SHALL BE UNIFORMLY AND CONTINUOUSLY SUPPORTED OVER ITS ENTIRE LENGTH AND ROUTE.
- 5. ALL ELECTRICAL CONDUITS SHALL BE INSTALLED USING SWEEP FITTINGS IN CONFORMANCE WITH LOCAL AND NATIONAL BUILDING CODES.
- PRESSURE TEST ALL PIPING PER PROJECT SPECIFICATIONS. KEEP PIPING UNDER PRESSURE TESTING CONDITIONS DURING TRENCH BACKFILL/COMPACTION AND DURING THE INSTALLATION OF WATER FEATURE CONCRETE BASIN.
- 7. ALL UNDERGROUND AND EQUIPMENT PIPING SHALL BE PVC SCHEDULE 40 UNLESS OTHERWISE DESIGNATED WITHIN PLANS AND SPECIFICATIONS.
- 8. ALL PIPING RUNS SHALL HAVE THRUST BLOCKS.

UTILITY REQUIREMENTS:

- 1) EXISTING 4" POTABLE WATER CONNECTION. CONTROL BY EXISTING WATER LEVEL SENSOR IN VALVE BOX.
- AN EXISTING ELECTRICAL FEED @ 480V, 3Ø, 4 WIRE TO BE PROTECTED IN PLACE. PROVIDE TERMINATION AT LAKE MOTOR CONTROL PANEL IN THE PUMP STATION. VERIFY REQUIREMENTS WITH THE ELECTRICAL SHEETS. THE ELECTRICAL SHEETS OVERRIDE THIS SHEET FOR CALCULATIONS.
- 3 EXISTING SEWER CONNECTION FOR SUMP PUMP DISCHARGE
- 4 EXISTING 2" Ø RECYCLED WATER

PIPING COMPONENTS:

- 1 8"ø PHASE 1 LAKES RECIRCULATION DISCHARGE PIPE
- 2 6"ø PHASE 2 LAKES RECIRCULATION DISCHARGE PIPE
- 3 14"ø PHASE 1 LAKE INTAKE PIPE WITH SCREEN
- 4 PIPE PENETRATION
- EXISTING WATER LEVEL SENSOR IN VALVE BOX
- 6 EXISTING 2.5" PVC EQUALIZER FOR WATER LEVEL CONTROL
- 7 NEW PONDS AND STREAMS DISCHARGE PIPE
- 8 NEW WIRING AND 2" CONDUIT FOR WATER LEVEL CONTROL
- 9 EXISTING INTAKE PIPE
- 10 NEW FILL VALVE IN VALVE BOX TO MATCH THE EXISTING
- EXISTING 3"Ø VACUUM BREAKER
- 12 EXISTING MANHOLE
- 13 2" ELECTRICAL CONDUIT

HORT

0 10 0 20

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PHASE 1 PIPING & UTILITY PLAN

SCALE: 1"=20'

ARLINGTON DRIVE

4444

4444

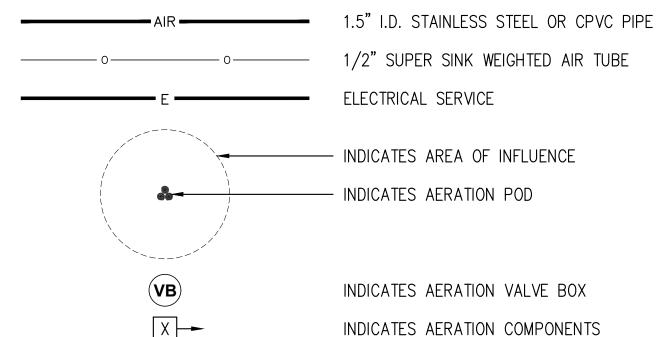
PHASE 1 -

PHASE 1 AERATION PLAN

SCALE: 1"=20'

0

LEGENDS:



PIPING NOTES:

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- 7. ALL UNDERGROUND AND EQUIPMENT PIPING SHALL BE PVC SCHEDULE 40 UNLESS OTHERWISE DESIGNATED WITHIN PLANS AND SPECIFICATIONS.
- 8. ALL PIPING RUNS SHALL HAVE THRUST BLOCKS.

LAKE AERATION COMPONENTS:

1 AERATION VALVE BOX

 $\frac{B}{W254}$ 2 AERATION DIFFUSER (4 TYP.)

3 WEIGHTED HOSE

4 AERATION FEEDLINE

FLOATING FOUNTAIN PER 'KASCO' J-SERIES MODEL# 3.3JF W/ BIRCH NOZZLE (2 TYP.)

6 FLOATING FOUNTAIN JUNCTION BOX

7 2" CONDUIT TO PUMP STATION

WEIGHTED HOSE LENGTH TABLE:

1	170 LF
2	170 LF
3	170 LF
4	170 LF



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ALUM DISCHARGE W/ VALVE AT SHORELINE DISCHARGE JET W/ VALVE AT SHORELINE

- SHALL BE INSTALLED PRIOR TO PACING. THE PIPING SHALL BE A MINIMUM OF 12"
- SUBSTITUTION OF SMALLER PIPE SIZES SHALL BE PERMITTED BUT SUBSTITUTION OF LARGER SIZES MAY BE APPROVED. ALL DAMAGES AND REJECTED PIPE SHALL
- BE PROVIDED BY THE ELECTRICAL CONTRACTOR. MAKE THE FINAL CONNECTION
- CLARIFICATION AND SHALL BE INSTALLED IN IRRIGATED PLANTING AREA WHEREVER POSSIBLE INSTALL ALL VALVES AND BOXES IN SHRUB AREAS AND NOT IN TURF
- IT IS THE RESPONSIBILITY OF THE IRRIGATION CONTACTOR TO FAMILIARIZED HIMSELF WITH ALL GRADE DIFFERENCES, LOCATION OF WALLS, RETAINING WALL, STRUCTURES, AND UTILITIES OF THE SITE. COORDINATE WORK WITH OTHER TRADES AND CONTRACTORS FOR THE LOCATION AND INSTALLATION OF ALL IRRIGATION
- DO NOT WILLFULLY INSTALL THE INSTALLATION SYSTEM WHEN IT IS OBVIOUS THAT OBSTRUCTIONS. GRADE DIFFERENCES. OR DIFFERENCES IN THE AREA DIMENSIONS EXIST THAT HAVE NOT BEEN INDICATED ON THE ENGINEERING. SUCH ITEMS SHALL BE BROUGHT TO THE ATTENTION OF THE OWNERS AUTHORIZED REPRESENTATIVE, ASSUME FULL RESPONSIBILITY FOR ANY NECESSARY REVISIONS IN THE WENT THAT HIS NOTIFICATION IS HEEDED,
- FLUSH AND ADJUST ALL SPRINKLER HEADS AND VALVES FOR THEIR OPTIMUM
- 10. VERIFY WATER PRESSURE PRIOR TO CONSTRUCTION, REPORT ANY DIFFERENCES BETWEEN THE WATER PRESSURE SHOWN IN THE PLANS AND THE PRESSURE READING IN THE FIELD TO THE OWNERS AUTHORIZED REPRESENTATIVE
- 11. ALL IRRIGATION EQUIPMENT NOT OTHERWISE DETAILED OR SPECIFIED HEREIN SHALL BE INSTALLED PER THE MANUFACTURES RECOMMENDATIONS AND SPECIFICATIONS.
- 12. REFER TO THE SPECIFICATIONS FOR ADDITIONAL DETAILED INFORMATION. 13. ALL IRRIGATION AREAS SHALL BE 100% COVERED WITHIN IRRIGATION SPRAY ZONE
- 14. CONTRACTOR TO VERIFY THE EXISTING IRRIGATION PIPE PRIOR TO INSTALLATION OR DEMOLITION.

44444

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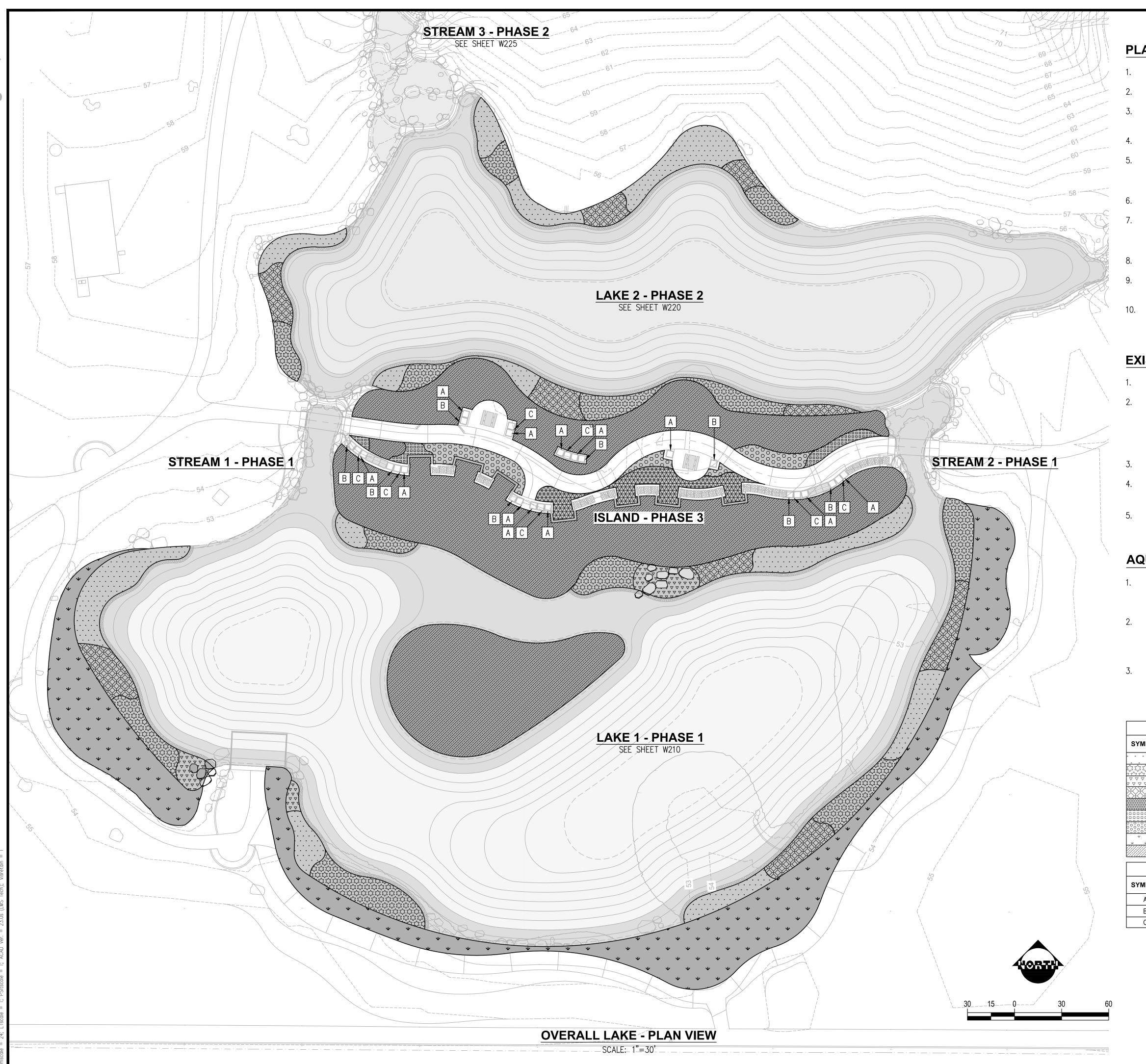
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PROPOSED IRRIGATION PLAN SCALE: 1"=20'



9

PLANTING PLAN NOTES

- CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY TO FURNISH AND INSTALL PLANT AS SHOWN ON THE PLAN.
- PLANT LIST ON THIS PLAN SHALL BE USED AS A GUIDE ONLY. CONTRACTOR TO TAKEOFF, VERIFY SIZES AND QUANTITIES.
- ALL WORK ON THE IRRIGATION SYSTEM, INCLUDING HYDROSTATIC, COVERAGE, OPERATIONAL TESTS, BACKFILL AND COMPACTION OF TRENCHES SHALL BE PERFORMED PRIOR TO PLANTING OPERATIONS.
- ALL STRUCTURAL, SHORELINE, AND HARDSCAPE SHALL BE INSTALLED PRIOR TO PLANTING OPERATIONS.
- SAMPLES OF FERTILIZERS, ORGANIC AMENDMENT, SOIL CONDITIONERS AND SEED SHALL BE SUBMITTED PRIOR TO INCORPORATION, CONTRACTOR SHALL FURNISH TO CITY REPRESENTATIVE A CERTIFICATE OF COMPLIANCE FOR SUCH FURNISHED MATERIALS.
- LOCATIONS OF PLANTS SHALL BE REVIEWED ON SITE BY ENGINEER/ CITY REPRESENTATIVE PRIOR TO INSTALLATION.
- IF DURING PLANTING OPERATIONS THERE SEEMS TO BE MINIMAL OR NO PERCOLATION IN PLANTING PITS, CONTRACTOR SHALL CEASE PLANTING OPERATIONS AND IMMEDIATELY NOTIFY THE ENGINEER/ CITY REPRESENTATIVE TO DISCUSS ALTERNATIVE TO MAINTAIN POSITIVE ROOTBALL DRAINAGE MEASURES.
- PLANTING MATERIAL SHALL BE REVIEWED AND APPROVED BY ENGINEER AND CITY REPRESENTATIVE.
- EXISTING IRRIGATION OUTSIDE OF THE SCOPE OF WORK SHALL REMAIN FULLY OPERATIONAL AND BE PROTECTED IN PLACE. SEE SHEET W212 FOR IRRIGATION DEMOLITION PLAN AND SHEET W216 FOR IRRIGATION PROPOSED PLAN.
- CONTRACTOR SHALL ADJUST IRRIGATION HEADS AND LATERAL LINES AS NECESSARY TO ACCOMMODATE MODIFICATIONS TO EXISTING PLANTERS AND PROVIDE 100% IRRIGATION COVERAGE TO PROPOSED PLANTING AREAS.

EXISTING TREE NOTES

- UNLESS OTHERWISE NOTED ON THE PLAN, ALL EXISTING TREES SHALL BE PROTECT IN PLACE.
- CONTRACTOR, PRIOR TO ANY WORK WITHIN THE PARK, SHALL MEET WITH ENGINEER/ CITY REPRESENTATIVES TO FLAG THE NUMBER OF ALL THE TREES WITH IN THE PARK. EACH TREE SHALL BE ASSIGNED A UNIQUE NUMBER AND CITY REPRESENTATIVE TO CONFIRM DISPOSITION (REMOVAL, RELOCATION, OR PROTECT IN PLACE) OF TREE PRIOR TO ANY CONTRACTOR ACTIVITY RELATED TO THE TREES. TREES SHALL BE FLAGGED WITH COMPASS ORIENTATION.
- 3. CONTRACTOR TO COORDINATE WITH CITY TO PRUNE THE EXISTING TREE PRIOR TO CONSTRUCTION.
- 4. ALL EXISTING TREES ON SHALL HAVE PROTECTED BARRIER AROUND THE TREE MINIMUM 15'-0" FROM THE TREE TRUNK. NO HEAVY EQUIPMENT OR VEHICLE TO DRIVE OVER THE TREE ROOTS.
- 5. ALL TRENCH SHALL STOP MINIMUM 15'-0" AWAY FROM THE TRUNK OF THE TREE. PIPES AND CONDUITS SHALL BE IN TUNNEL UNDER THE TREES. SEE DETAIL X/WXX

AQUATIC PLANTING NOTES

- PLANT 3 ANEMOPSIS CALIFORNICA IMMEDIATELY OUTSIDE OF LAKE SHORELINE IN DAMP OR WET SOIL. CHOOSE PROTECTED LOCATIONS IF POSSIBLE. SPREAD THE THREE PLANTS AT LEAST TWO FEET APART. THIS DETAIL TYPICALLY MORE IS USED WHERE THERE ARE OTHER PLANTS IN THE WETLAND OR NO WETLAND.
- 2. PLANT 5 ANEMOSPSIS CALIFORNICA ON MOUNDS OF SOIL BETWEEN ROCKS, SOIL MOUND SHOULD REACH 3 INCHES ABOVE THE WATER SURFACE ELEVATION. ALLOW 1 FT OF SPACE BETWEEN PLANTS. THIS NOTE IS USED WHERE THERE ARE ROCKS IN WETLAND AND NO OTHER PLANTS ARE SHOWN IN THE IMMEDIATE AREA OF THE
- 3. INSTALL 18 INCH HIGH BLACK PLASTIC WEATHER-RESISTANT FENCE ALONG WETLAND PERIMETER. ATTACH MESH TO 3 FT METAL STAKES, BLACK OR GREEN, AT 5 FT INTERVALS. SECURE WITH BLACK OR GREEN WIRE OR CABLE TIES, 3 PER STAKE. SEE DETAIL C/W259.

	PLANTING LEGEND							
SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	QTY. / DENSITY				
	JUNCUS BALTICUS	BALTIC RUSH	3 FT TALL	1.5 FT SPACING, 1 PLANT PER 9 SF				
	JUNCUS EFFUSUS	SOFT RUSH	3 FT TALL	1.5 FT SPACING, 1 PLANT PER 9 SF				
\(\frac{1}{2}\)\(\frac{1}\)\(\frac{1}{2}\)\(\frac{1}{2}\)\(\frac{1}{2}\)\(\frac{1}{2}\)\(\frac{1}{2}\)\(\frac{1}{2}\)\(\frac{1}\)\(\frac{1}\)\(\frac{1}\)\(\frac{1}\)\(\frac{1}\)\(\frac{1}\)\(\frac{1}\)\(\frac{1}\)\(\	ANEMOPSIS CALIFORNICA	YERBA MANSA	1 FT TALL	PER AQUATIC PLANTING NOTES				
	PONTEDARIA CORDATA	PICKERELWEED	3 FT TALL	1.5 FT SPACING, 1 PLANT PER 9 SF				
	VINCA MINOR	MYRTLE						
	DYMONDIA	SILVER CARPET						
	ISOTOMA FLUVIATILIS	BLUE STAR CREEPER						
*		GRASS TO MATCH	EXISTING LAI	NDSCAPE				
		STARII	IZED DG					

	ISLAND PLANTING LEGEND						
SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	QTY. / DENSITY			
Α	JUSTICIA BRANDEGEANNA	SHRIMP PLANT	_	3 PER PLANTER			
В	SALVIA MICROPHYLLA	BIG PINK	_	3 PER PLANTER			
С	MALVAVISCUS DRUMMONDI	TURK'S CAP	-	3 PER PLANTER			

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EWINKLE PARK LAKE RENOVATION



FLEXIBLE HOSE RECOMMENDED ROUTING

SCALE: 1"=100'

PHASE 2 - DRAIN SEQUENCE:

CONTRACTOR TO GET A TEMPORARY DISCHARGE PERMIT TO DRAIN THE LAKE WATER TO STORM DRAIN SYSTEM (OVERFLOW BOX) OR SEWER SYSTEM

EXISTING MANHOLE

(SHALL NOT BE USED FOR LAKE DRAINING OPERATION)

- 2. TURN OFF THE LAKE FILL LINE. CLOSE THE FILL VALVE.
- 3. TURN OFF LAKE 2 FLOATING FOUNTAINS.
- CAPTURE ALL AQUATIC WILDLIFE (FISH, TURTLE, ETC.) AND MOVE THEM TO LAKE 1 PER ENVIRONMENTAL CONSULTANT RECOMMENDATIONS.
- SET UP ONE (1) TEMPORARY TRASH PUMP (1,000 GPM MIN.) TO DRAIN THE LAKE. THE PUMP SUCTION SHALL EXTEND TO THE DEEPEST AREAS OF THE
- 6. ESTIMATED DRAIN TIME OF LAKE 2 PER TABLE BELOW:

SYSTEM	EXISTING LAKE VOLUME *	PUMP RATE	ESTIMATED TIME
LAKE 2	1,120,700 GAL	1,000 GPM	2.3 WORKING DAYS
* NOTE: FST	MATE VOLUME BASED ON AS-B	IIIT PLAN (DATE	-D 07/22/2004)

- LAKE 1 SHALL BE FILLED MANUALLY DURING LAKE 2 CONSTRUCTION. LAKE 1 RECIRCULATION, AERATION, FLOATING FOUNTAIN, CHEMICAL SYSTEM SHALL BE OPERATED TO MAINTAIN LAKE WATER QUALITY.
 - CONTRACTOR TO COORDINATE WITH COSTA MESA SEWER DISTRICT FOR LAKE DRAINING OPERATION, REQUIREMENT, LOCATION AND SCHEDULE.

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4444

TEWINKLE PARK LAKE RENOVATION

14 OF 50 SHEETS JOB NO.

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PHASE 2 - DEMOLITION PLAN

PHASE 3

SCALE: 1"=20'

CAP AND ABANDON IN PLACE EXISTING OZONE PIPE

PROTECT IN PLACE EXISTING RECYCLED WATER PIPES AND VALVE BOX

PROTECT IN PLACE EXISTING IRRIGATION VALVE BOX

PROTECT IN PLACE EXISTING POTABLE WATER PIPES

PROTECT IN PLACE EXISTING POTABLE WATER VALVE BOX

PROTECT IN PLACE EXISTING POTABLE WATER DISCHARGE PROTECT IN PLACE DISCHARGE VALVE

P28 PROTECT IN PLACE LAKE 1 ISLAND

ISLAND

LAKE 2 - PIPING & UTILITY PLAN

SCALE: 1"=20'

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NEW PONDS AND STREAMS DISCHARGE PIPE

EXISTING INTAKE PIPE

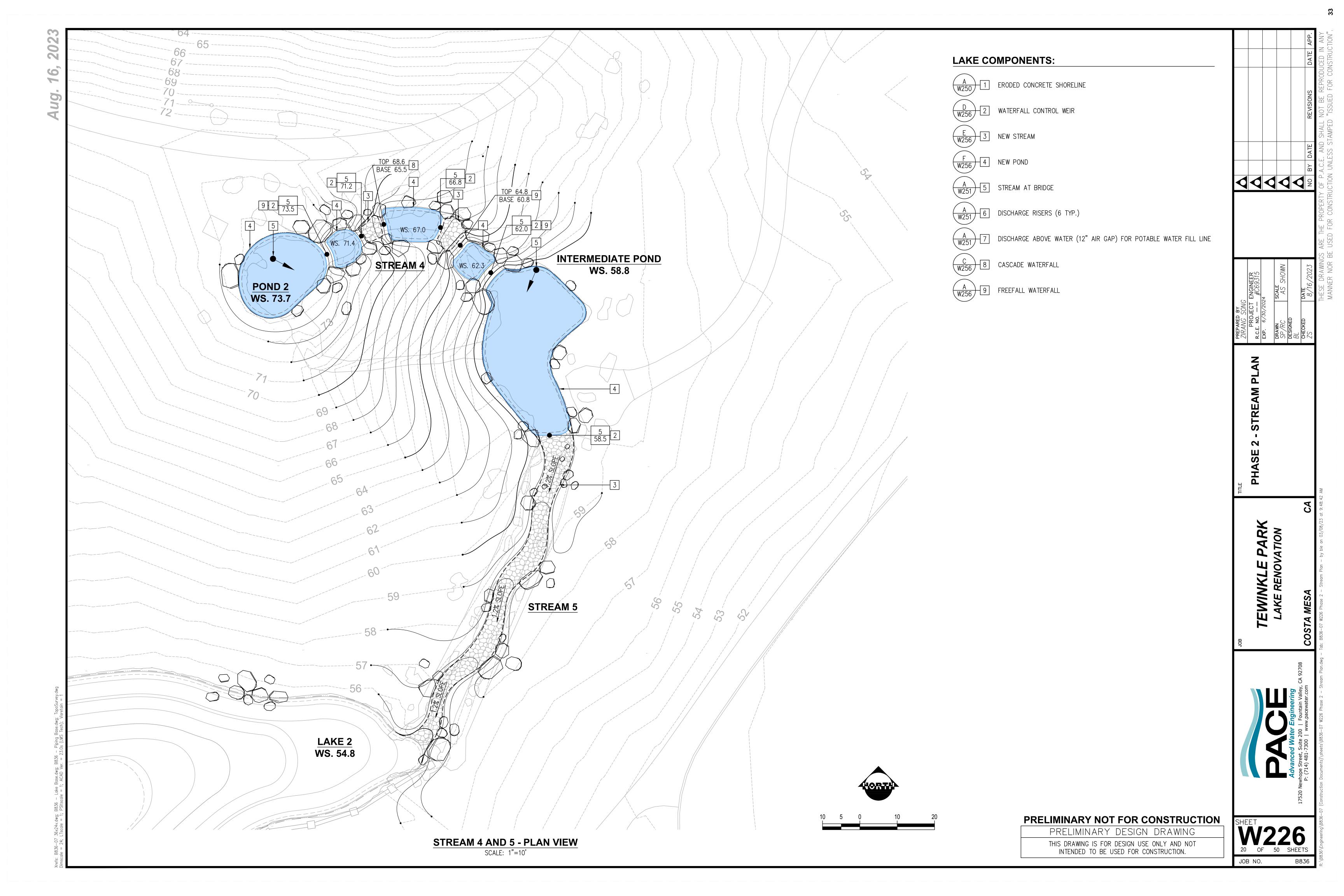
EXISTING MANHOLE

2" ELECTRICAL CONDUIT

EXISTING 3"Ø VACUUM BREAKER

NEW WIRING AND 2" CONDUIT FOR WATER LEVEL CONTROL

NEW FILL VALVE IN VALVE BOX TO MATCH THE EXISTING





ODB	300
	Advanced Water Engineering 17520 Newhope Street, Suite 200 Fountain Valley, CA 92708 P: (714) 481-7300 www.pacewater.com

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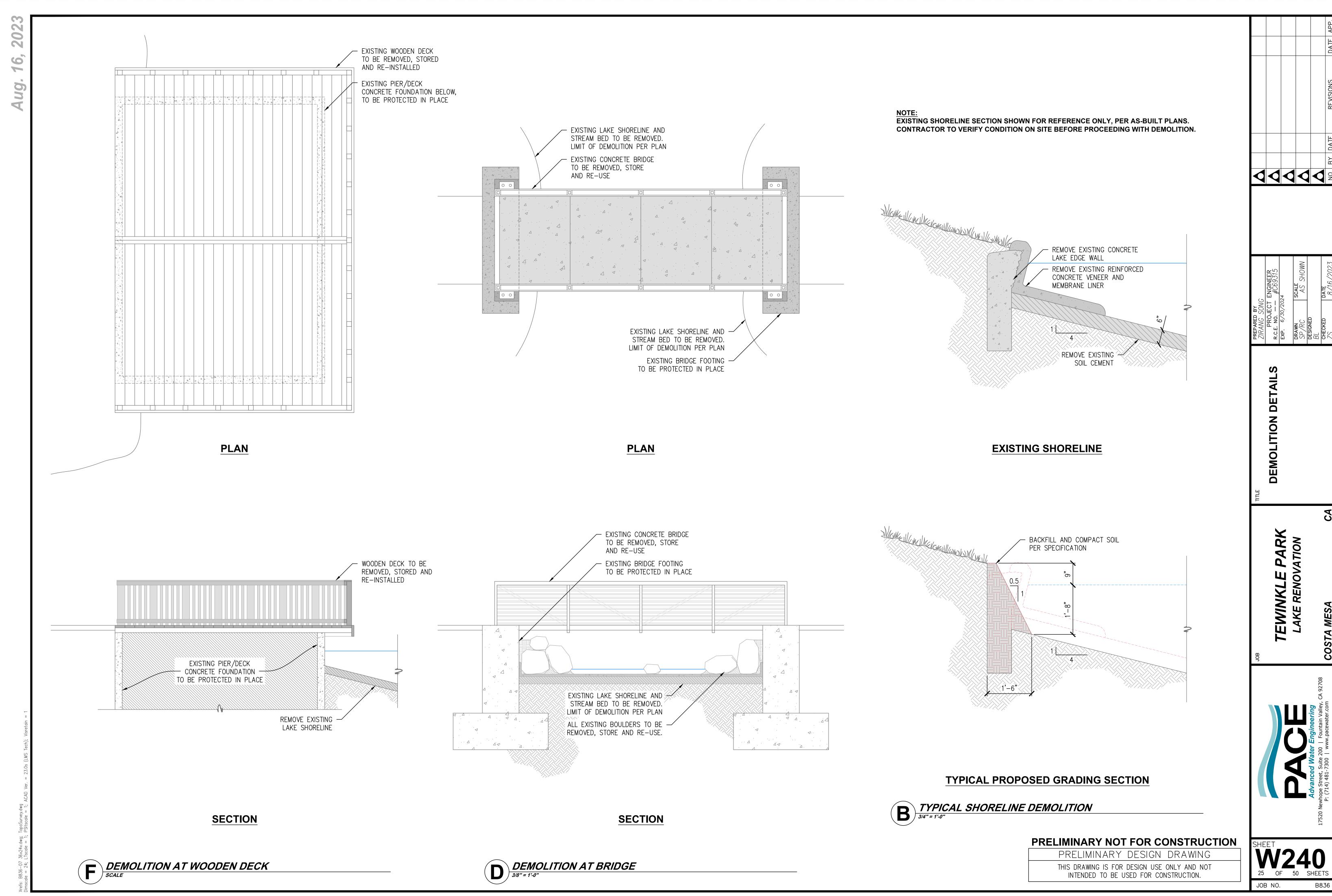
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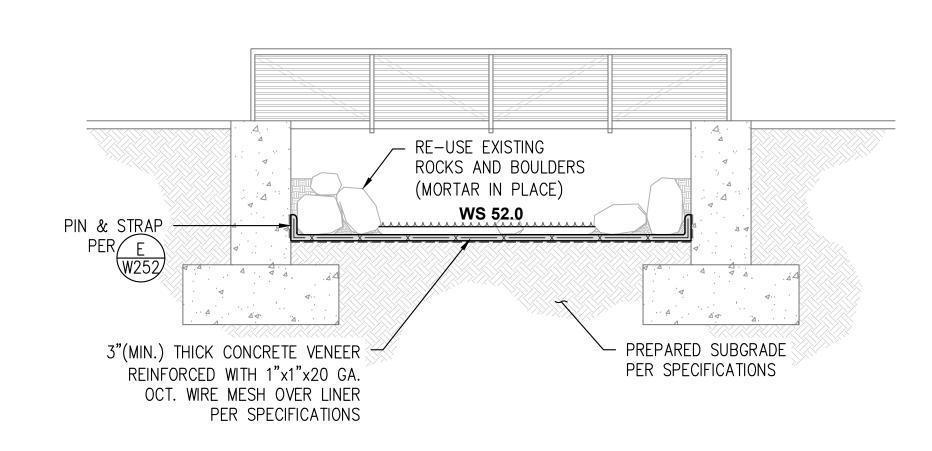
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SECTIONS

SCALE: 1"=20'



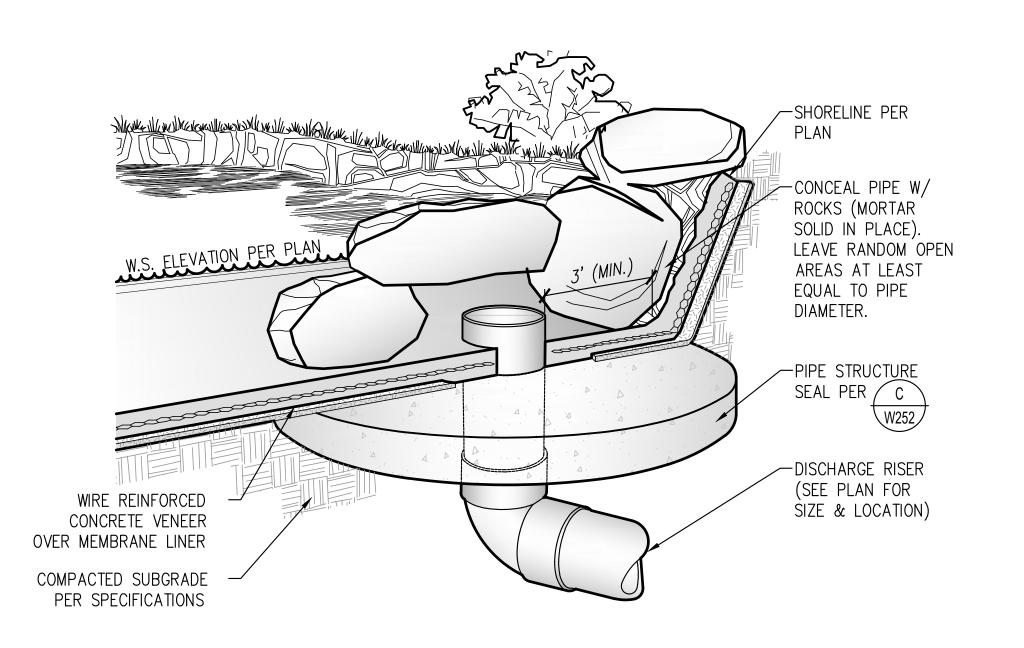
26 OF 50 SHEETS JOB NO.



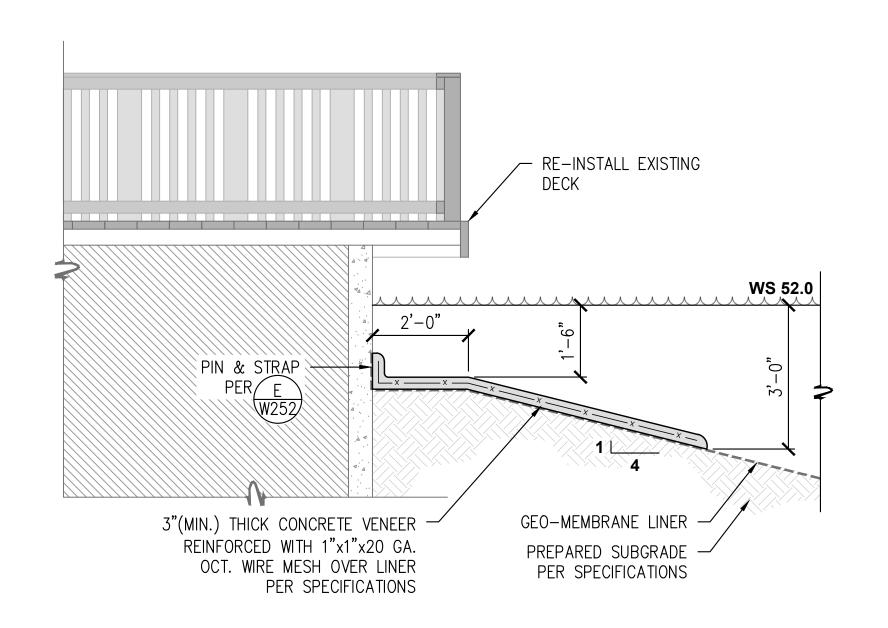
DISCHARGE ABOVE WATER (FOR POTABLE FILL LINE)

SCALE: NTS.





DISCHARGE RISER
SCALE: NTS.



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B DECK SHORELINE

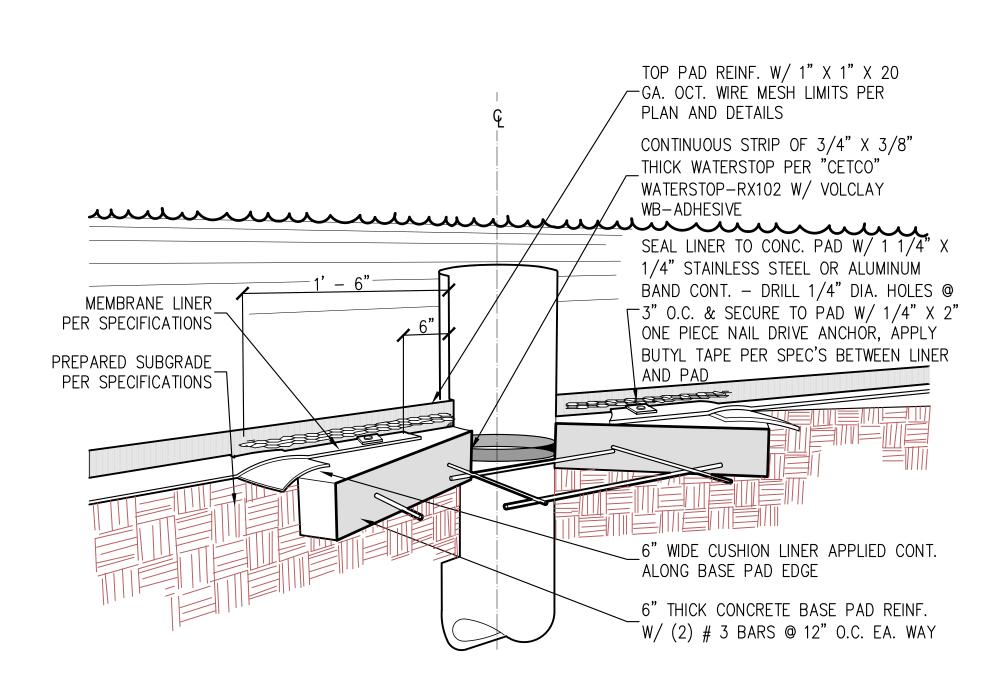
SCALE: 1/2" = 1'-0"

4444

JOB NO.

PIN & STRAP

N.T.S.



WOOD STAKES @ $\pm 3'-0"$ O.C. W/TOP @ FREEBOARD ELEV. – FREEBOARD W.S. EL. PER PLAN CUT & PREPARE SUBGRADE PER SPECIFICATIONS

1. LAY LINER

2. LAY #2 BAR

CONTINUÖUS &

EACH STAKE.

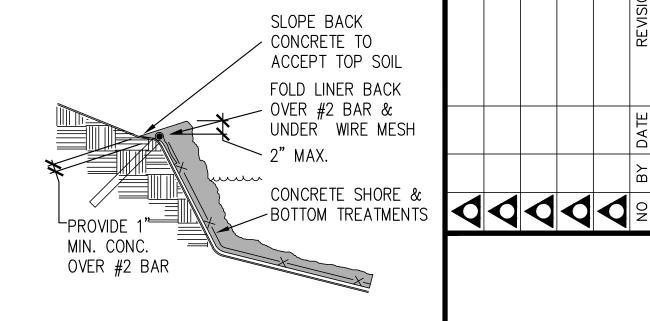
CONNECT W/ HOG

WE RING TO TOP OF

_3. LAY WIRE MESH

STEP 1

STEP 2



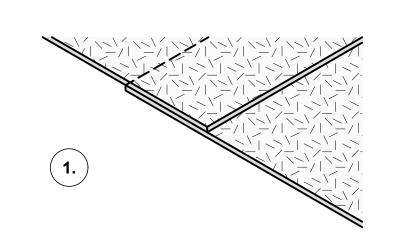
STEP 3

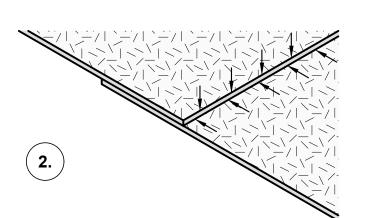
/IMPORTANT: LAND-SCAPE CONTRACTOR SHALL FILL THIS AREA W/SOIL TO TOP EDGE OF SHORE TREATMENT

STEP 4

PIPE STRUCTURE SEAL NOT TO SCALE





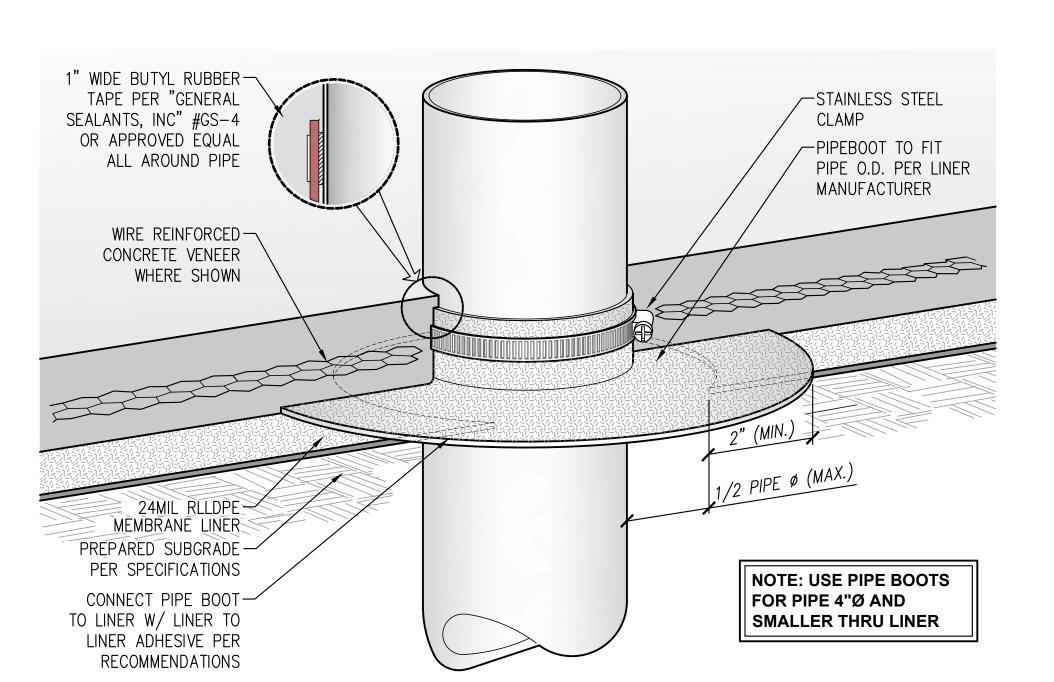


1. ALIGN PANELS & OVERLAP EDGES APPROX. 4" TO 6".

2. UTILIZE HOT AIR OR HOT WEDGE WELDING TECHNIQUES TO WELD SEAM TOGETHER IMMEDIATELY. EXTREME CARE SHOULD BE TAKEN THROUGHOUT THE WORK TO AVOID FISHMOUTHS, WRINKLES, FOLDS OR PLEATS IN THE SEAM AREA. PARTICULAR CARE SHOULD BE TAKEN TO ENSURE THAT NO STONES, SCRAP MATERIALS, TRASH, TOOLS OR OTHER UNWANTED ITEMS ARE TRAPPED BENEATH THE GEOMEMBRANE LINER.

PRELIMINARY DESIGN DRAWING







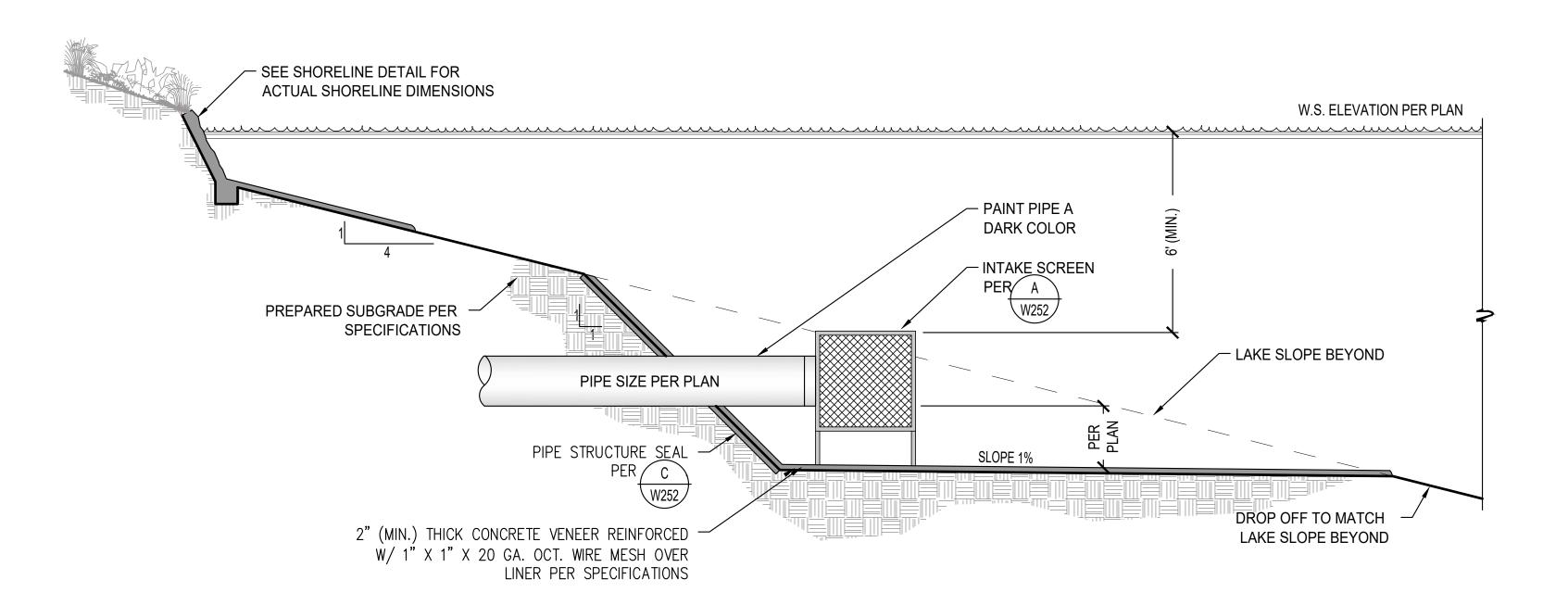
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28 OF 50 SHEETS JOB NO.

TEWINKLE PARK LAKE RENOVATION

PIPE BOOT

NOT TO SCALE



ONLY MANUFACTURED VALVE BOX EXTENSIONS SHALL BE ALLOWED.

VALVE OPERATING NUT MUST BE EXTENDED

8'(FT) FROM THE SURFACE USING A

PRECAST CONCRETE ENCASEMENT IS

5'-0" MAX

ALUM DISCHARGE

LINE VARIES PER PLAN

ALLOWED OUTSIDE OF PAVED AREA.

SO THAT THE DEPTH IS NO GREATER THAN

MÀNÚFACTURER APPROVED EXTENSION KIT.

2"ø COBBLES AROUND PIPE

SEAL PER C W252

- CONCRETE BASE

PIPE SIZE "A" 18" NO LEGS* 2'-0" 14" - 18" 3'-0" 12" 4'-0" 12**"** 21" - 24" > 30" 5'-0" 12**"** *SOLID BOTTOM & NO CONCRETE PAD

NOTE: EPOXY COAT ENTIRE ASSEMBLY

44444 STEEL PLATE (PIPE OUTER DIAMETER + 3/8") W/ 4" DEEP COLLAR 1/2"ø THRU HOLE TO ACCEPT 1/2" OR 3/8" ALL THREAD ROD W/ WASHER OR BUTTERFLY NUTS LEGS AS REQUIRED (PIPE OUTER DIAMETER -1/2") EXPANDED METAL (5)SIDES HOLE PROVIDING 1/4" PIPE STOP 1/2" OPENNING, 13 GAUGE (1/2"-13) 2" THICK CONCRETE PAD -1 1/2" ANGLE IRON ALL EDGES & LEGS

> OUTSIDE DIMENSION = PIPE I.D. $-\frac{1}{4}$ " (VERIFY PIPE I.D. W/ MANUFACTURER)

" DIA. BARS SPACED 4" O.C. - WELD AT BOTH ENDS TO

FRAME.

THICK X 3" WIDE STEEL FRAME

TO FRAME.

PRELIMINARY NOT FOR CONSTRUCTION

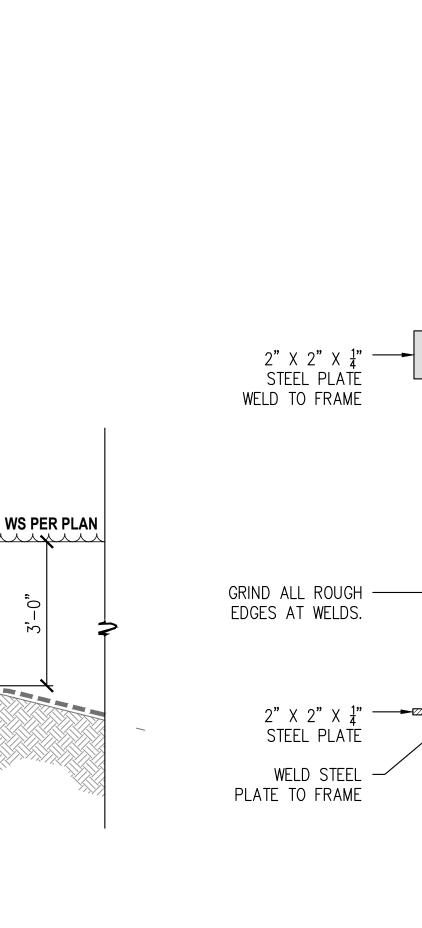
5" DIA. BARS SPACED 4" O.C. — WELD AT BOTH ENDS

STEEL FRAME

1" THICK X 3" WIDE

TEWINKLE PARK
LAKE RENOVATION

NOT TO SCALE



- REMOVABLE
PIPE GRATE PER B
W252 - PLANTER PER E W250 WS PER PLAN 24"ø PVC PIPE, ±72"LF

F ALUM DISCHARGE STANDPIPE INSIDE LAKE PLANTER

SCALE: 1/2"=1"

PIPE GRATE
3"=1'-0"

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THIS ENTIRE ASSEMBLY SHALL BE HOT-DIP

GALVANIZED AFTER ASSEMBLY.

LAKE INTAKE PIPE
NOT TO SCALE

12" THICKNESS 1-2, H OR HB

BITUMINOUS CONCRETE MAY BE USED

CONCRETE PAVEMENT AT 3000 PSI

(TO BE LABELLED "WATER"

FINISH GRADE PER LANDSCAPE

CONCRETE PAVEMENT AT 3000 PSI

(PAVED AREAS) —

(UNPAVED AREAS)

VALVE BOX COVER

OR "STORMDRAIN", AS APPROPRIATE)

ARCHITECTURE PLAN

NOTE TO CONTRACTOR: —

VALVE BOX SHOULD NOT

CONTACT MAIN OR VALVE.

WITH PIPE SIZE PER PLAN

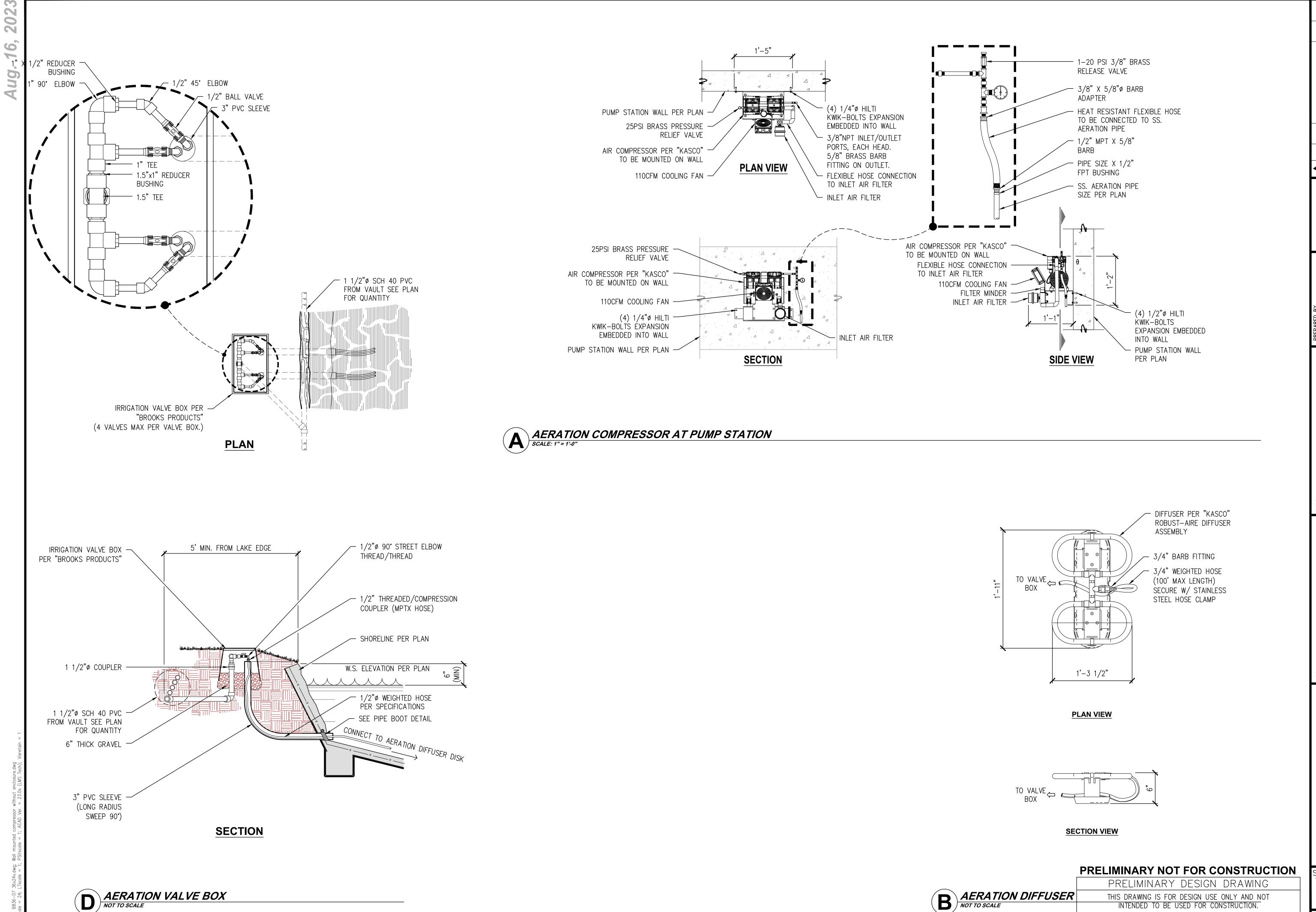
(UNPAVED AREAS)

VALVE BOX

VALVE TO MATCH —

FROM PUMP STATION

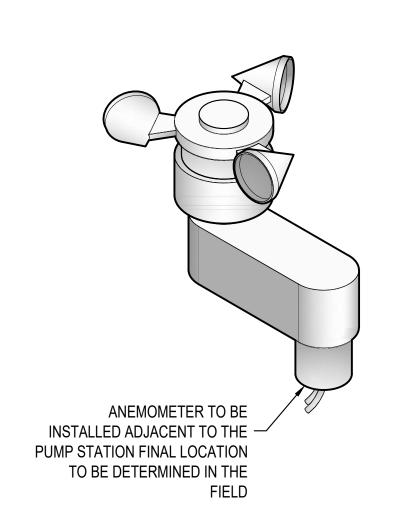
29 OF 50 SHEETS JOB NO.

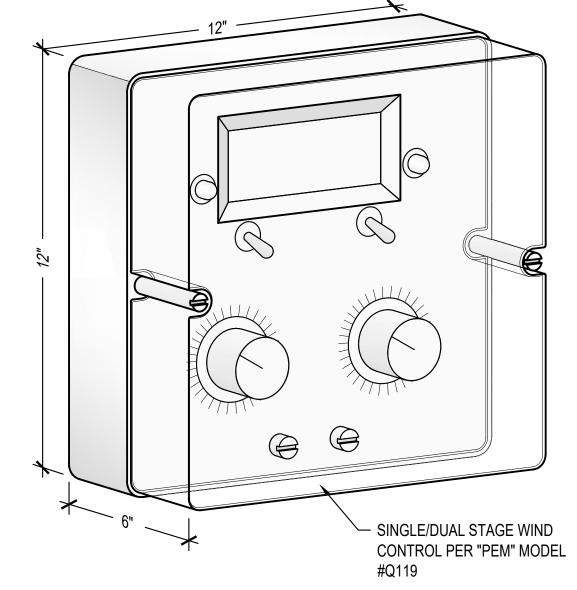


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TEWINKLE PARK LAKE RENOVATION

30 OF 50 SHEETS JOB NO.



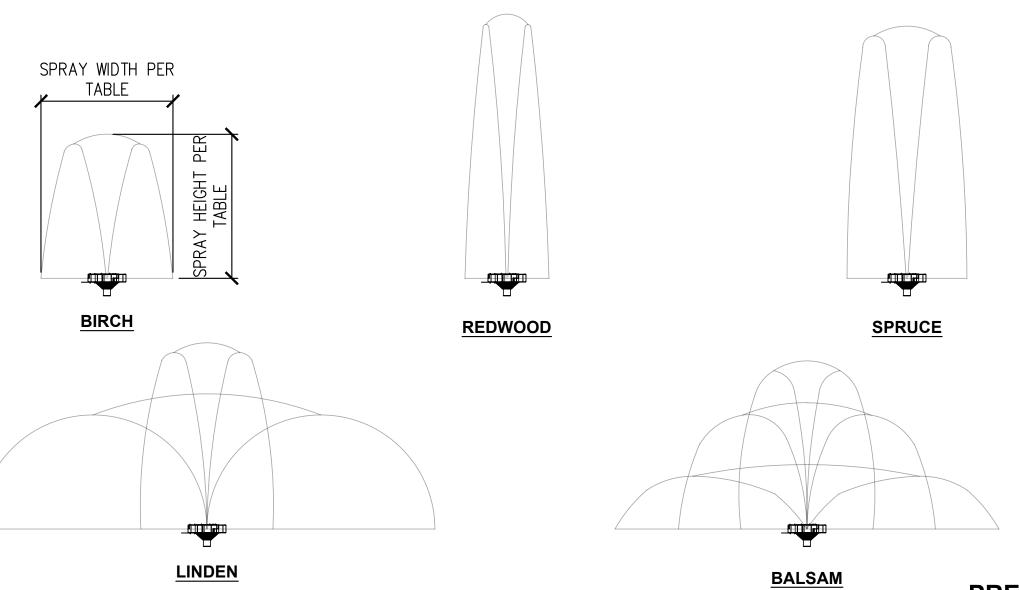


JUNCTION BOX AT SHORELINE

SCALE: 1" = 1'-0"



							UNIT SP	ECIFI	CATIO	ONS							
					FLOAT	UNIT	MIN BIRCH NOZZLE N		REDWOOD NOZZLE		SPR NOZ		LINI NOZ		BAL NOZ		
MODEL	HP	VOLTAGE	OPERATING AMPS	PHASE	WIDTH (IN)	HEIGHT (IN)	OPERATING DEPTH (IN)	SPRAY HEIGHT (FT)	SPRAY WIDTH (FT)								
8400	2	208 - 240	10	1	51	22	20	12	11	22	7	21	10	15.5	38	14	32
2.3 JF	2	208	7.5	3	51	22	20	12	11	22	7	21	10	15.5	38	14	32
3.1 JF	3	208 -240	13.4	1	51	25	24	16	12	27	8	26	12	20.5	38	19	34
3.3 JF	3	208	10.3	3	51	25	24	16	12	27	8	26	12	20.5	38	19	34
5.1 JF	5	208 -240	20	1	51	25	26	24	14	32	10	31	12	24.5	46	18	34
5.3 JF	5	208	16	3	51	25	26	24	14	32	10	31	12	24.5	46	18	34
7.3 JF	7.5	208	20	3	51	25	28	26	16	36	10	34	12	26	46	21	36



FLOATING FOUNTAIN

SCALE: NOT TO SCALE

PRELIMINARY NOT FOR CONSTRUCTION

PRELIMINARY DESIGN DRAWING

THIS DRAWING IS FOR DESIGN USE ONLY AND NOT INTENDED TO BE USED FOR CONSTRUCTION.

JOB NO.

44449

STREAM SHORELINE PER SPECIFICATIONS

4" TO 12" DIA. COBBLE IN -STREAM BED — MORTAR ALL

ROCK & COBBLE SOLID IN

STREAM

SCALE: NOT TO SCALE

WIDTH AND HEIGHT OF STREAM

- 2" (MIN) THICK WIRE REINFORCED CONCRETE

VENEER OVER LINER

- MEMBRANE LINER PER

SPECIFICATIONS

4" (MIN.) THICK COLORED AND

SEE SHORELINE

-CONSTRUCTION

DETAIL PER A

SPECIFICATIONS

2" (MIN.) THICK CONCRETE VENEER REINFORCED W/ 1"

X 1" X 20 GA. OCT. WIRE MESH OVER LINER PER

PREPARED SUBGRADE

PER SPECIFICATIONS

CONCRETE SHORELINE

PER SPECIFICATIONS

SCULPTURED

VARIES - SEE PLAN

REV. 07/10/02-

F POND DETAIL

SCALE: NOT TO SCALE



Marketh milkerenalles soll mill sand vallantantent milkerenall

CASCADE WATERFALL
SCALE: NOT TO SCALE

MANUFACTURER

2"(MIN.) THICK REINFORCED-

CONCRETE VENEER O/ MEMBRANE LINER PER

LAKE SPECIFICATIONS

MEMBRANE LINER PER-

LAKE SPECIFICATIONS

CREATE LIP TO HOLD

BACK FIRST COARSE

WATERFALL FOOTING

LINER STRIP CONT. FOLDED UP AS

SHOWN-BOND TO LINER

W/ LINER TO LINER

ADHESIVE PER LINER

2" THICK CONCRETE

VENEER REINFORCED

WITH 1" X 1" X 20 GA. —∕ OCT. WIRE MESH OVER

MORTAR SOLID IN PLACE-

WATERFALL CONTROL WEIR-



SEE PLAN FOR

CONDITION DOWN- STREAM OF WEIR

NOTE: WATER SURFACE ELEVATIONS & SIZE OF FALLS VARY — SEE PLAN

INSTALL ROCKS TO CREATE

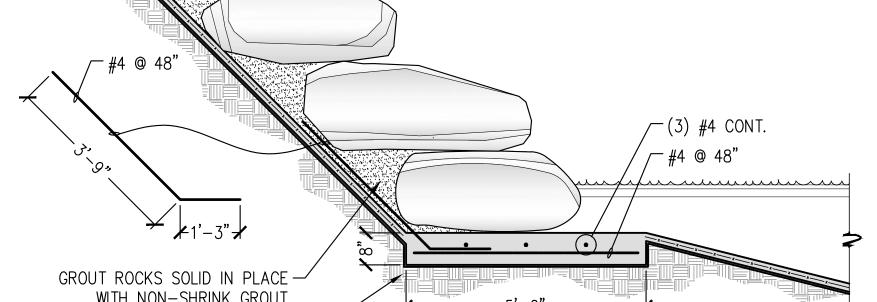
SEE PLAN FOR OVERALL LENGTH

& TOP OF WEIR

ELEVATION

"CASCADING"

WATER EFFECT



WITH NON-SHRINK GROUT CONFIRM ALLOWABLE SOIL BEARING PRESSURE WITH SOIL REPORT

PRELIMINARY NOT FOR CONSTRUCTION

PRELIMINARY DESIGN DRAWING THIS DRAWING IS FOR DESIGN USE ONLY AND NOT INTENDED TO BE USED FOR CONSTRUCTION.

B WATERFALL FOOTING
SCALE: NOT TO SCALE

4444

1. WATER SURFACE ELEVATIONS & SIZE OF FALLS VARY - SEE

PLAN.

INSTALL ROCKS

TO CREATE "FREE-FALL"

JOB NO.

FREEFALL WATERFALL
SCALE: NOT TO SCALE

VENEER REINFORCED W/ (2) LAYERS

Marke Ill my Marchand Doll M. Ill should the Ill my Marchan

2"(MIN.) THICK

LINÉR PER LAKE

SPECIFICATIONS

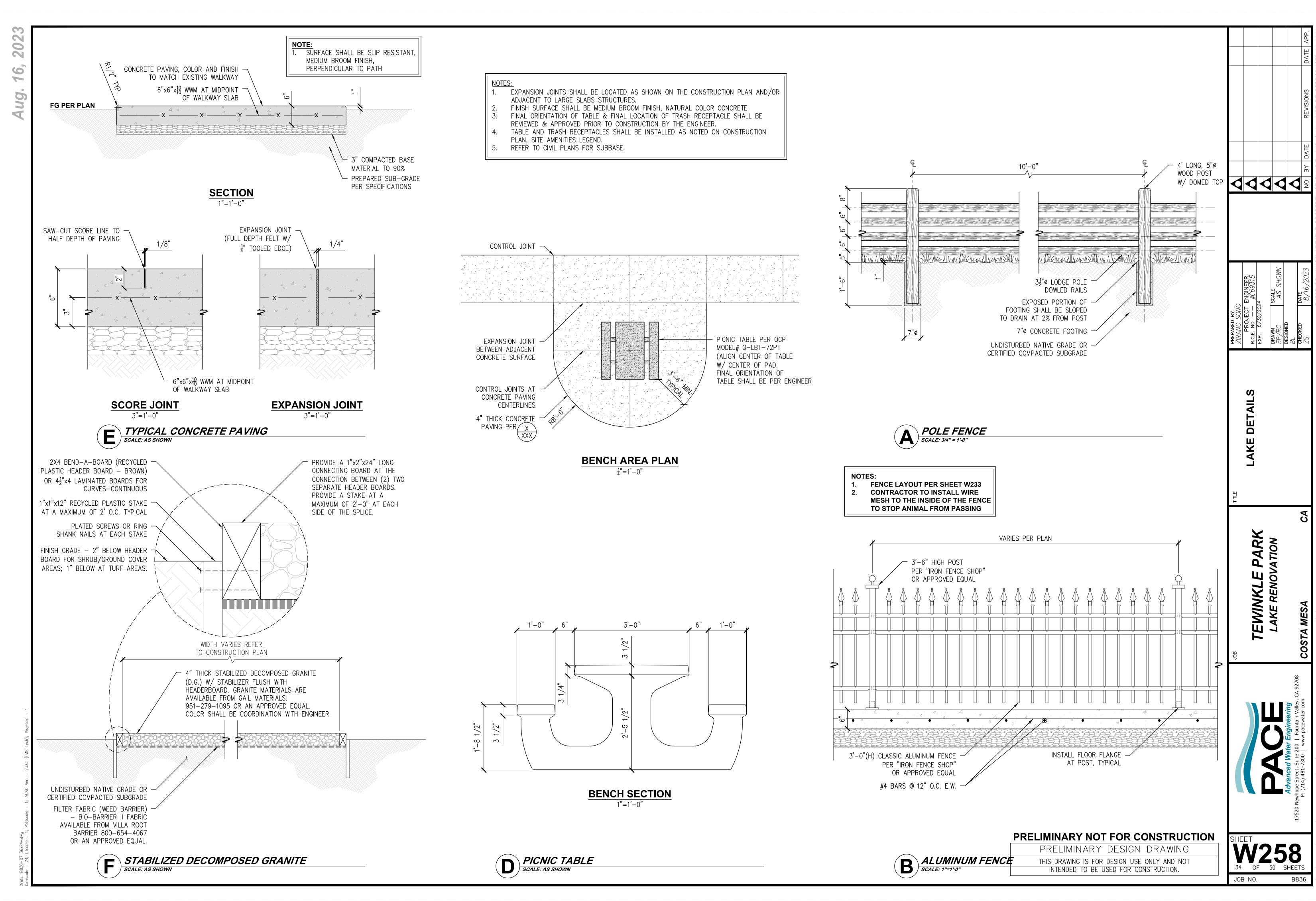
REINFORCED CONCRETE VENEER O/ MEMBRANE-

MEMBRANE LINER PER_ LAKE SPECIFICATIONS

MORTAR SOLID IN PLACE-

CREATE LIP TO HOLD_ BACK FIRST COARSE

46



EL. 46.9 SUBMERSIBLE PUMP W/ 3" NPT DISCHARGE PER "LIBERTY PUMPS" MODEL# XLE102M-2 1.0HP 230V, 1PH (PUMP AND ALL CABLES SHALL BE RATED FOR CLASS I DIV 1 GROUP C & D LOCATION)

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

PUMP ON EL. 49.15

PUMP OFF EL. 45.9

FROM DRAIN SUMP 🖈 🛚 4"ø

DRAIN SUMP W/ SUMP PUMP

SECTION

TYPICAL TO PREVENT CLOGGING

GUIDE RAIL PER "LIBERTY PUMPS"

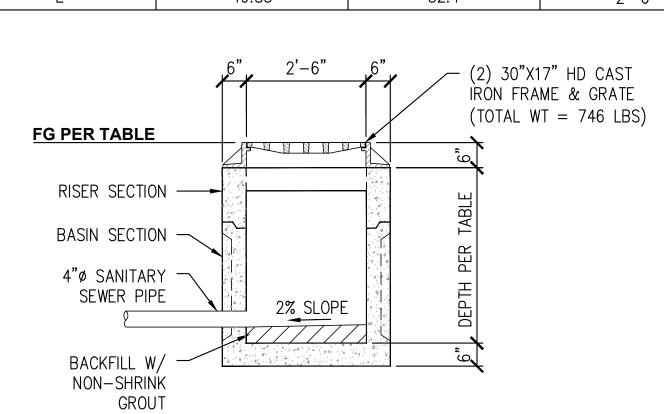
MODEL# GR30NS RAIL SYSTEM

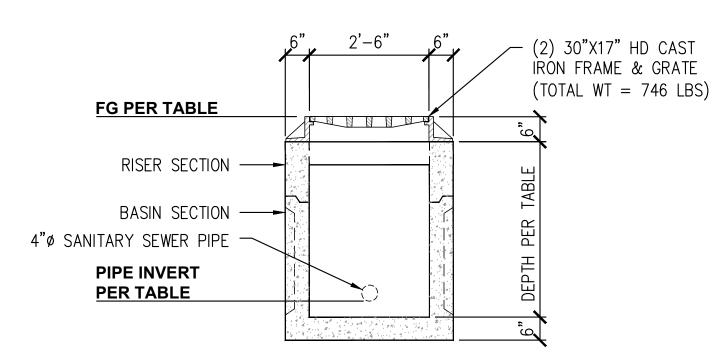
W/ 3" DISCHARGE, GUIDE RAIL

LENGTH TO BE FIELD VERIFIED

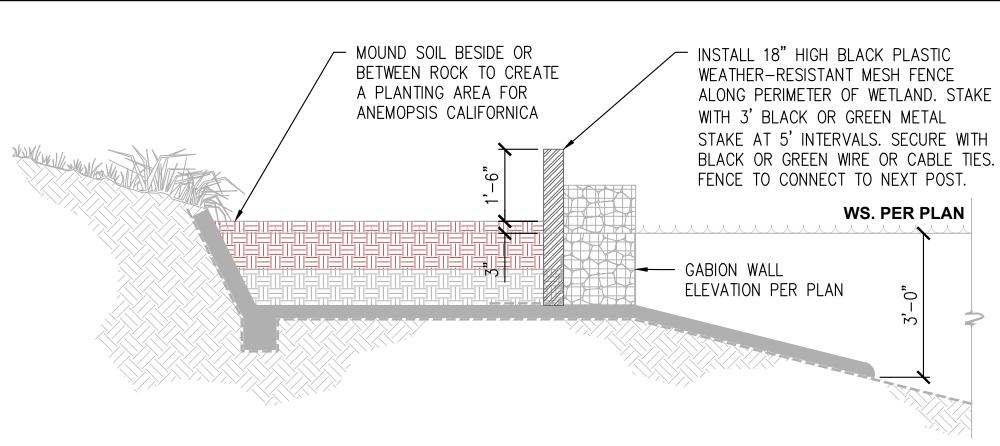
EL. 49.0

	DRAIN CO	VER DATA	
DRAIN COVER	PIPE INVERT	FINISH GRADE	DEPTH OF BOX
А	53.0	54.9	2'-0"
В	51.5	54.9	3'-6"
С	50.5	52.4	2'-0"
D	49.8	52.4	2'-6"
F	49.85	52.4	2'-6"

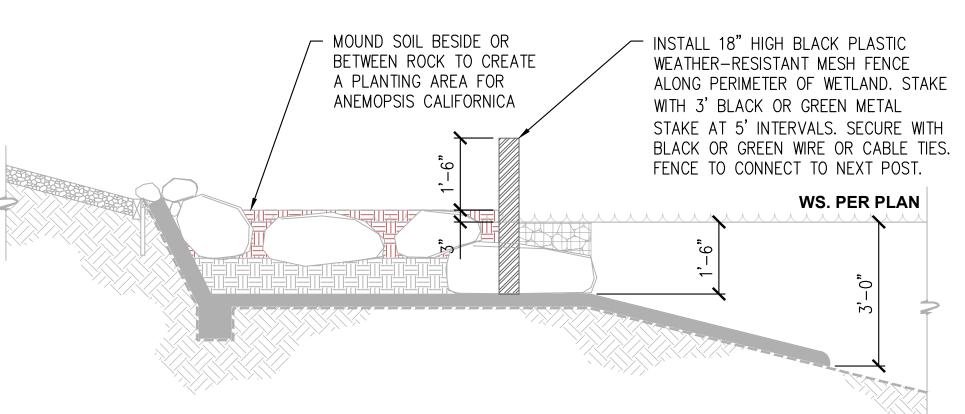






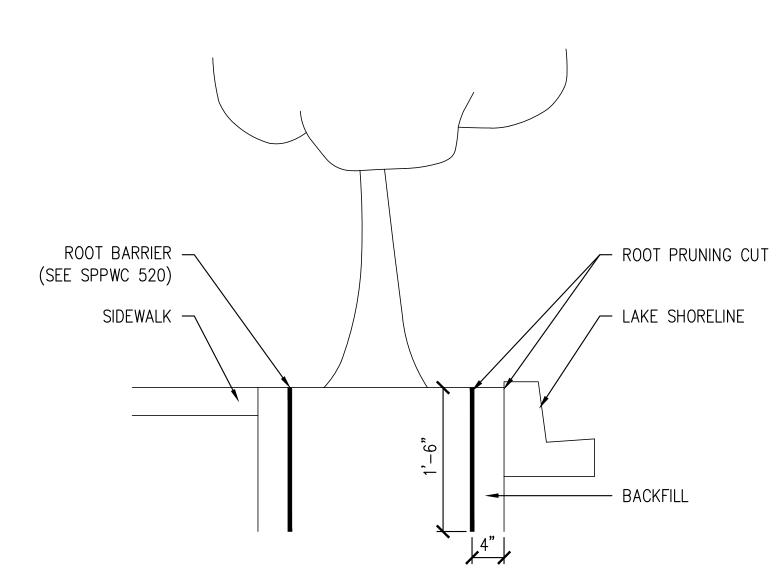


LAKE PLANTER / WETLAND SHORELINE



STEPPING STONE AT PLANTER

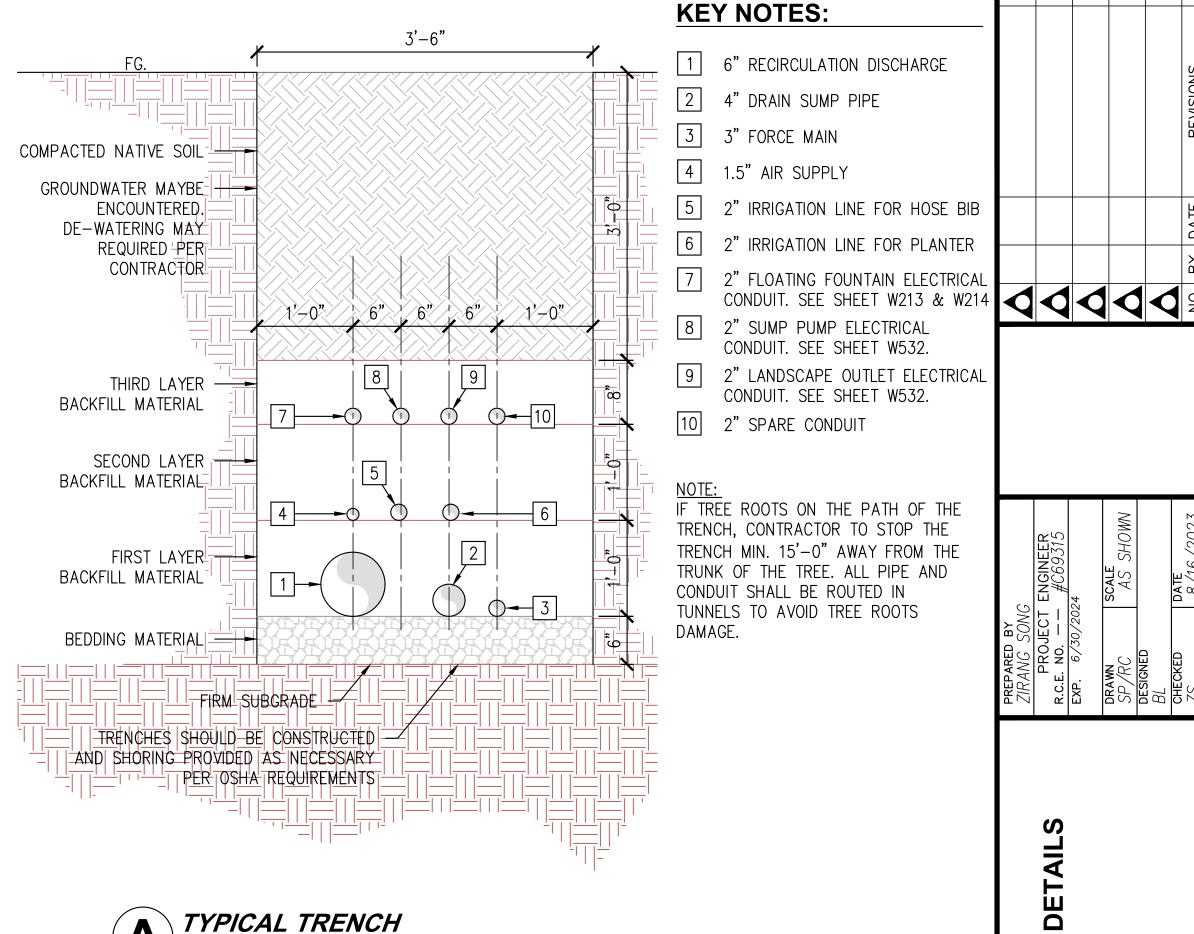


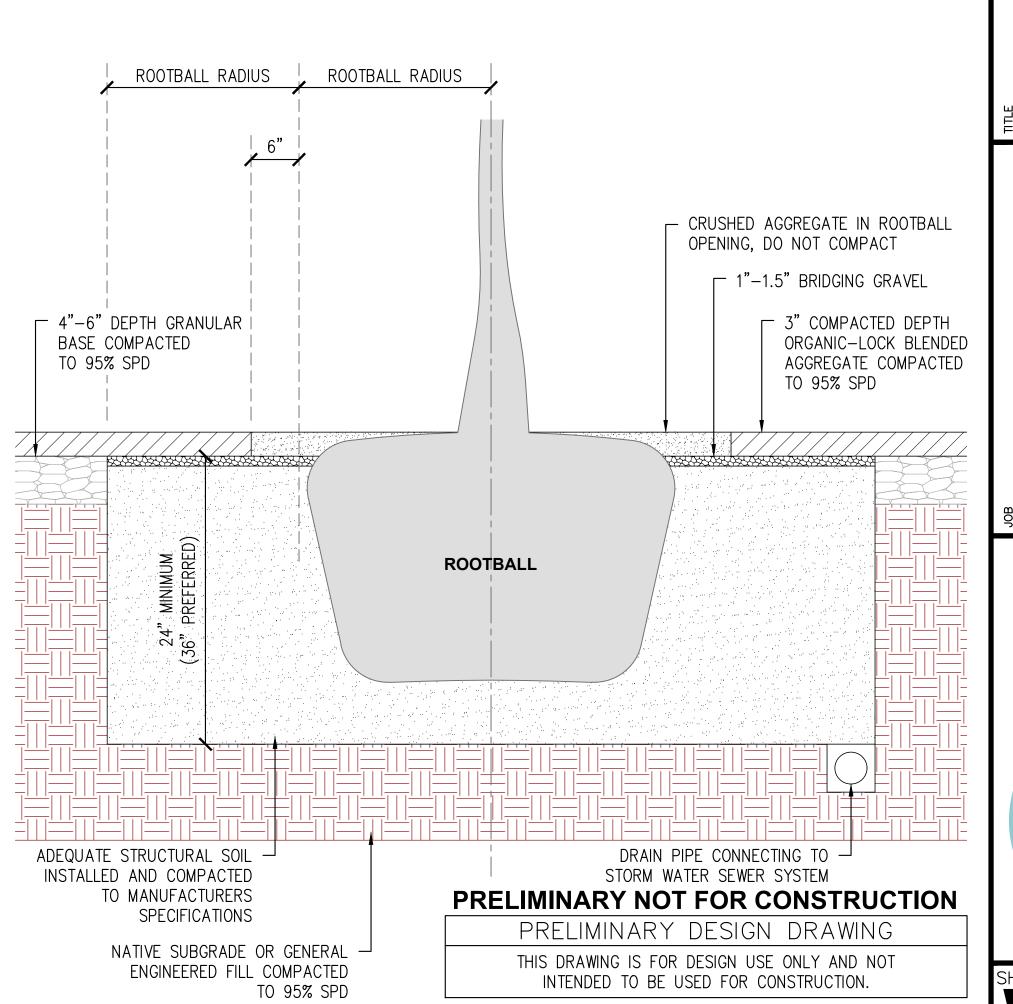


- 1. WHERE EXISTING PARKWAY TREES HAVE BEEN ROOT PRUNED, INSTALL CONTINUOUS, LINEAL ROOT BARRIER ADJACENT TO THE CURB AND/OR SIDEWALK.
- LENGTH AND LOCATION OF ROOT BARRIER SHALL BE DETERMINED BY ENGINEER.
- ROOT SEALER SHALL BE APPROVED BY THE ENGINEER AT LEAST 48 HOURS IN ADVANCE OF THE PRUNING OPERATION. IT SHALL BE APPLIED TO ALL CUT ROOT AREAS WHICH ARE LARGER THAN 2" (50 MM) IN
- DIAMETER. THE SEALER SHALL BE APPLIED AS SOON AS PRACTICAL AFTER THE CUTS HAVE BEEN MADE 4. ROOT BARRIERS SHALL BE FABRICATED FROM A HIGH DENSITY, HIGH IMPACT PLASTIC AND BE EXPRESSLY DESIGNED FOR THE PURPOSE OF ROOT DEFLECTION.
- 5. ROOT BARRIER, WHERE SHOWN, SHALL BE 80 MIL (2.0 MM) THICK

TREE ROOT PRUNING

SCALE: 1"=1'-0"





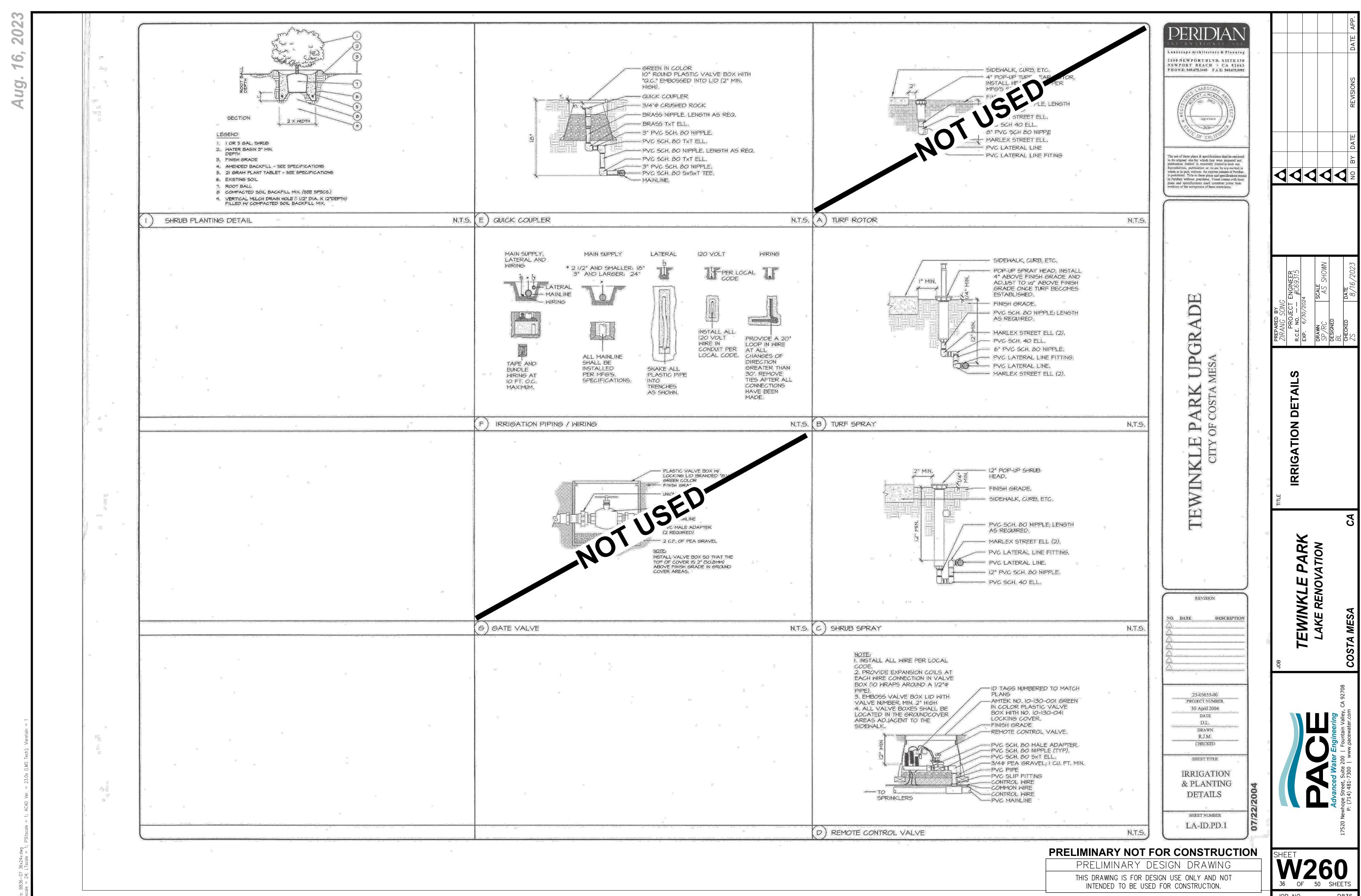
B STABILIZED DG WITH TREES

SCALE: 1"=1'-0"

SCALE: 1"=1'-0"

EWINKLE PARK LAKE RENOVATION

35 OF 50 SHEETS JOB NO.



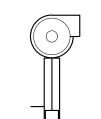
JOB NO.

— PUMP STATION — —

GENERAL NOTES:

1. FLOW SCHEMATIC INTENDED TO ILLUSTRATE ALL THE MAJOR MECHANICAL COMPONENTS OF THE VARIOUS WATER FEATURE SYSTEMS AND TO SHOW THE LOCATION OF ALL THE CONNECTIONS. CONTRACTOR TO USE FLOW SCHEMATIC AS GUIDE FOR CONSTRUCTION. REFER TO THE VARIOUS DETAILS FOR ADDITIONAL INFORMATION.

LEGEND:



AN PUMP <u>L</u>

CHEMICAL PUMP

MECHANICAL SYMBOLS:

SYMBOL	DESCRIPTION
-	FLOW DIRECTION
<u> </u>	PRESSURE TRANSMITTER
<u> </u>	PRESSURE GAUGE
<u>—————————————————————————————————————</u>	3 WAY CONTROL VALVE
	FLOW METER
	FLOW TRANSMITTER
X-	FLOAT VALVE
_ \	GATE VALVE
	GLOBE VALVE
<u></u> —Ю—	BALL VALVE
—ф	BUTTERFLY VALVE
—	CHECK VLAVE
	SOLENOID VALVE
	MOTOR OPERATED VALVE
	UNION CONNECTION
	FLANGE CONNECTION
	Y STRAINER
[PLUG OR CAP
	SIGHT GLASS
	PIPE
	ELECTRICAL WIRE
	DIAL THERMOMETER
_ _	PRESSURE SUSTAINING VALVE
—Œ—	THERMOCOUPLE
——(T)—	TEMPERATURE CONTROLLER
<u></u>	TEMPERATURE SWITCH
<u> </u>	TEMPERATURE CONTROL VALVE
	PIPE CONNECTION AS INDICATED
*	ELECTRICAL CONNECTION AS INDICATED

PREPARED BY		▼		
ZIRANG SONG		4		
PROJECT ENGINEER	ENGINEER	•		
R.C.E. NO. ——	#C69 <i>5</i> 15	1		
EXP. 6/30/2024	24	4		
		1		
DRAWN	SCALE	•		
	I AD I SHI UMIN			
DESIGNED		1		
BL		<		
CHECKED	DATE	1		
SZ	8/16/2023	9	BY DA	DA.

TEWINKLE PARK LAKE RENOVATION

COSTA MESA

Advanced Water Engineering

Advanced Water Engineering

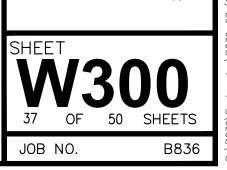
O Newhope Street, Suite 200 | Fountain Valley, CA 92708

P: (714) 481-7300 | www.pacewater.com

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DEMOLITION KEYNOTES:

SPECIFICALLY IDENTIFIED IN THIS PLAN.

ITEMS TO BE DEMOLISHED.

DEMOLITION LEGENDS:

POND AND STREAM PUMP: REMOVE AND SEND TO PUMP MANUFACTURER FOR PUMP PERFORMANCE. CONTRACTOR TO REPORT THE PUMP CONDITION TO ENGINEER FOR REUSING, RE-BUILT OR REPLACE

4. CONTRACTOR TO REPLACE ANY ITEMS DAMAGED OR REMOVED THAT WAS NOT

ITEM TO BE REMOVED

ITEM TO PROTECT IN PLACE

- EXISTING OZONE SKID TO BE REMOVED
- AERATION COMPRESSOR TO BE REMOVED AND REPLACED W/NEW COMPRESSOR. SEE EQUIPMENT LIST ON SHEET WXXX

PROTECT-IN-PLACE KEYNOTES:

- POND AND STREAM PUMP: a. PUMP CAN: PROTECT IN PLACE b. PIPE, VALVE, AND FITTING: PROTECT IN PLACE
- LAKES RECIRCULATION PUMP: a. PUMP CAN: PROTECT IN PLACE b. VALVE AND FITTING: PROTECT IN PLACE c. PIPE: TO BE PROTECTED IN PLACE FOR 10 LF FROM PUMP STATION WALL. SEE SHEET W120 FOR P.O.C.
- FLOATING FOUNTAIN CONTROL PANEL TO BE PROTECTED IN PLACE
- IRRIGATION CONTROL PANEL TO BE PROTECTED IN PLACE
- IRRIGATION SYSTEM TO BE PROJECTED IN PLACE
- WATER LEVEL SENSOR IN VALVE BOX TO BE PROTECTED IN PLACE. CONTROL WIRING & CONDUIT TO BE PROTECTED IN PLACE
- LAKE CONTROL PANEL TO BE PROTECTED IN PLACE FOR REBUILT TO WORK W/NEW SYSTEM
- EXISTING TRANSFORMER TO BE PROTECTED IN PLACE
- EXISTING ELECTRICAL DISTRIBUTION PANEL TO BE PROTECTED IN PLACE
- ROOF HATCH OPENING: TO BE PROTECTED IN PLACE
- CHAIN LINK FENCE & GATE TO BE PROTECTED IN PLACE
- EXISTING 2 1 PVC EQUALIZER PIPE TO BE PROTECTED IN PLACE
- EXISTING 14" Ø PVC INTAKE PIPE TO BE PROTECTED IN PLACE
- EXISTING WIRING AND CONDUIT TO BE PROTECTED IN PLACE
- EXISTING VERTICAL PIPE INSIDE PUMP STATION TO BE PROTECTED IN PLACE
- EXISTING IRRIGATION LINE AND PROTECTION CAGE TO BE PROTECTED IN
- EXISTING POWER PANEL B 120 / 208 V FOR NEW ELECTRICAL LOADS

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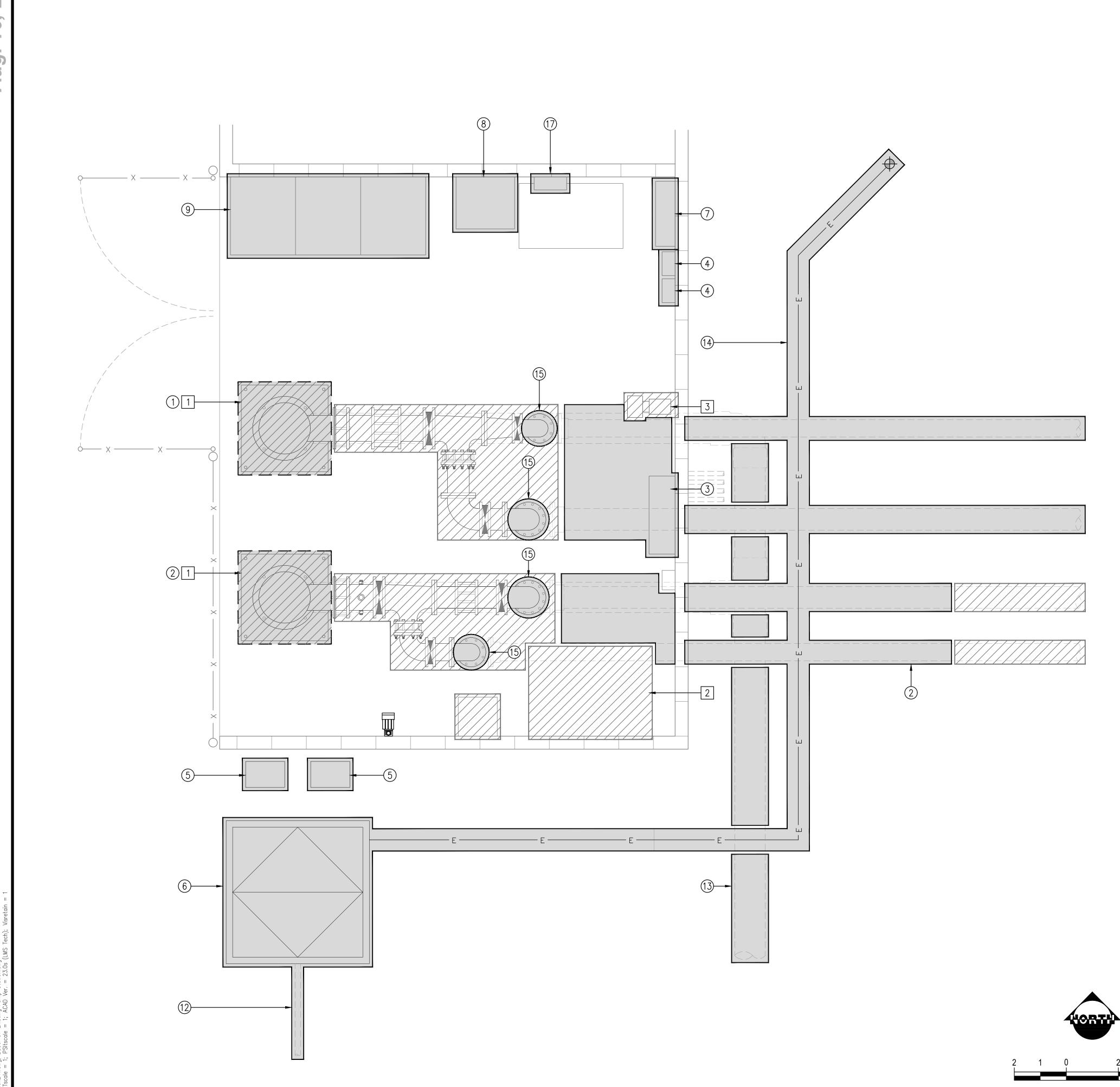
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38 OF 50 SHEETS JOB NO.

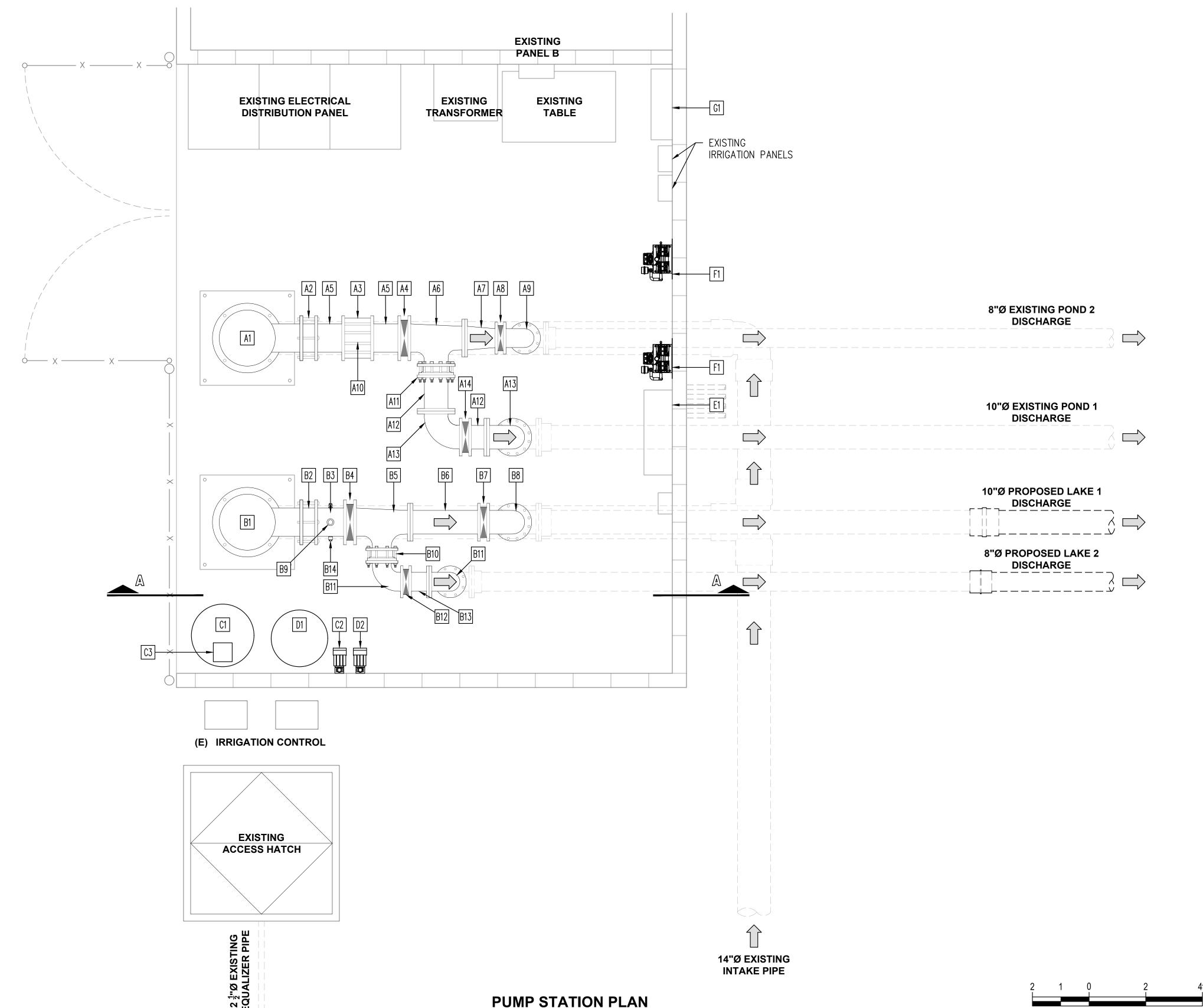
PUMP STATION EMOLITION PLAN

TEWINKLE PARK LAKE RENOVATION



PUMP STATION DEMOLITION PLAN

 $\frac{1}{2}$ "=1'-0"



 $\frac{1}{2}$ "=1'-0"

PUMP STATION PIPING NOTES:

- CONTRACTOR TO PROVIDE PIPE SUPPORTS PER EQUIPMENT MANUFACTURER'S REQUIREMENTS AND SPECIFICATIONS AND PER THE PROJECT SPECIFICATIONS.
- 2. ALL D.I.P. SHALL BE CLASS 350 UNLESS NOTED OTHERWISE.
- ALL UNDERGROUND MECHANICAL JOINT FITTINGS SHALL BE SUPPLIED WITH RESTRAINING BOLTS (RJ FITTINGS).
- 4. ALL BURIED PVC PIPE GREATER THAN 3"Ø SHOWN ON PLANS SHALL BE C900 UNLESS NOTED OTHERWISE. ALL BURIED PVC PIPE 3"Ø OR LESS SHALL BE SCH 40 PVC.
- 5. ALL PVC PIPE ABOVE GRADE SHALL BE SCH 80 PVC FOR ALL SIZES.
- 6. ALL STAINLESS STEEL PIPE SHOWN ON PLANS SHALL BE MINIMUM TYPE 304L SCH 10 UNLESS NOTED OTHERWISE.
- 7. ALL PROCESS PIPES SHALL BE COLOR COATED PER THE PROJECT SPECIFICATIONS WITH THE EXCEPTION OF STAINLESS STEEL PIPES.
- 8. ALL VALVES SHALL BE ROTATED/ORIENTED PER MANUFACTURE'S RECOMMENDATIONS.

PUMP STATION CONSTRUCTION NOTES:

- A POND AND STREAM PUMP SYSTEM:
 - 1. REMOVE, CHECK CONDITION AND REUSE EXISTING PUMP. CONTRACTOR TO REPORT TO LAKE ENGINEER (PACE) THE CONDITION OF THE PUMP FOR REVIEW PRIOR TO REUSING. SEE EQUIPMENT LIST #1.
 - 2. INSTALL 12" Ø EXPANSION JOINT COUPLING.
 - 3. INSTALL 12"ø GLOBE-STYLE CHECK VALVE (FLG X FLG).
 - 4. INSTALL 12"ø BUTTERFLY VALVE, LUG-STYLE.
 - 5. INSTALL 12"ø D.I. SPOOL (FLG X FLG).
 - 6. INSTALL 12"X10"X10" D.I. REDUCING TEE (FLG X FLG).
 - INSTALL 10"X8" CONCENTRIC REDUCER (FLG X FLG).
 - . INSTALL 8" BUTTERFLY VALVE, LUG-STYLE.
 - . INSTALL 8" 90° D.I. ELBOW (FLG X FLG).
 - 10. INSTALL AIR RELIEF VALVE AND PRESSURE GUAGE.
 - 11. INSTALL 10"Ø EXPANSION JOINT COUPLING.
 - 12. INSTALL 10" Ø D.I. SPOOL (FLG X FLG).
 - 13. INSTALL 10"ø 90° D.I. ELBOW (FLG X FLG).
 - 14. INSTALL 10" BUTTERFLY VALVE LUG-STYLE.
 - 15. CHECK CONDITION OF THE PUMP CANISTER.
- B LAKES RECIRCULATION SYSTEM:
- REMOVE, CHECK CONDITION AND REPLACE W/NEW PUMP. CONTRACTOR TO REPORT TO LAKE ENGINEER (PACE) THE CONDITION OF THE PUMP FOR REVIEW PRIOR TO REUSING. SEE EQUIPMENT LIST #2.
- 2. INSTALL 12"Ø EXPANSÏON JOINT COUPLING.
- 3. INSTALL 12"ø D.I. SPOOL (FLG X FLG).
- 4. INSTALL 12" BUTTERFLY VALVE, LUG-STYLE.
- 5. INSTALL 12"X10"X8" D.I. REDUCING TEE (FLG X FLG).
- 6. INSTALL 10"ø D.I. SPOOL (FLG X FLG).
 7. INSTALL 10"ø BUTTERFLY VALVE, LUG-STYLE.
- 8. INSTALL 10"\(\phi 90\) D.I. ELBOW (FLG X FLG).
- 9. INSTALL AIR RELIEF VLAVE AND PRESSURE GUAGE.
- 10. INSTALL 8"Ø EXPANSION JOINT COUPLING.
- 11. INSTALL 8"Ø 90° D.I. ELBOW (FLG X FLG).
- 12. INSTALL 8"ø BUTTERFLY VALVE LUG—STYLE.
- 13. INSTALL 8"ø D.I. SPOOL (FLG X FLG).14. INSTALL CHEMICAL INJECTION QUILL PER DETAIL B/W451
- ALUM ADDITION SYSTEM:
 - INSTALL 50 GAL DOUBLE WALL CONTAINMENT ALUM TANK (SEE EQUIPMENT LIST #6).
- 2. INSTALL ALUM FEED PUMP (SEE EQUIPMENT LIST #4).
- 3. INSTALL ALUM MIXER (SEE EQUIPMENT LIST #5).
- D ACID ADDITION SYSTEM:
 - INSTALL 35 GAL DOUBLE WALL CONTAINMENT CHEMICAL TANK (SEE EQUIPMENT LIST #7).
- 2. INSTALL ACID FEED PUMP (SEE EQUIPMENT LIST #4).
- E FLOATING FOUNTAIN SYSTEM:

 1. REUSE FLOATING FOUNTAIN CONTROL PANEL.
- 1. REOSE FEOMINO FOONTAIN CONTROL
- AERATION SYSTEM:

 1. INSTALL WALL MOUNTED AIR COMPRESSORS (4 TYP.). SEE EQUIPMENT LIST #3.

 COMPRESSOR CAN BE MOUNTED TOP AND BOTTOM. CONTRACTOR TO CONFIRM
- CLEARANCE FROM MANUFACTURE.

 G CONTROL PANEL:
 - 1. LAKE CONTROL PANEL PER "TOTAL CONTROL". SEE SHEET W600-W602.

PRELIMINARY NOT FOR CONSTRUCTION

PRELIMINARY DESIGN DRAWING

THIS DRAWING IS FOR DESIGN USE ONLY AND NOT INTENDED TO BE USED FOR CONSTRUCTION.

SHEET

VV410

39 OF 50 SHEETS

JOB NO. B836

TEWINKLE PARK LAKE RENOVATION

PUMP STATION PIPING NOTES:

- 1. CONTRACTOR TO PROVIDE PIPE SUPPORTS PER EQUIPMENT MANUFACTURER'S REQUIREMENTS AND SPECIFICATIONS AND PER THE PROJECT SPECIFICATIONS.
- 2. ALL D.I.P. SHALL BE CLASS 350 UNLESS NOTED OTHERWISE.
- 3. ALL UNDERGROUND MECHANICAL JOINT FITTINGS SHALL BE SUPPLIED WITH RESTRAINING BOLTS (RJ FITTINGS).
- 4. ALL BURIED PVC PIPE GREATER THAN 3"Ø SHOWN ON PLANS SHALL BE C900 UNLESS NOTED OTHERWISE. ALL BURIED PVC PIPE 3"\$\phi\$ OR LESS SHALL BE SCH 40 PVC.
- 5. ALL PVC PIPE ABOVE GRADE SHALL BE SCH 80 PVC FOR ALL SIZES.
- 6. ALL STAINLESS STEEL PIPE SHOWN ON PLANS SHALL BE MINIMUM TYPE 304L SCH 10 UNLESS NOTED OTHERWISE.
- 7. ALL PROCESS PIPES SHALL BE COLOR COATED PER THE PROJECT SPECIFICATIONS WITH THE EXCEPTION OF STAINLESS STEEL PIPES.
- 8. ALL VALVES SHALL BE ROTATED/ORIENTED PER MANUFACTURE'S RECOMMENDATIONS.

PUMP STATION CONSTRUCTION NOTES:

- A POND AND STREAM PUMP SYSTEM:
 - REMOVE, CHECK CONDITION AND REUSE EXISTING PUMP. CONTRACTOR TO REPORT TO LAKE ENGINEER (PACE) THE CONDITION OF THE PUMP FOR REVIEW PRIOR TO REUSING.
 - 2. INSTALL 12" Ø EXPANSION JOINT COUPLING.
 - 3. INSTALL 12" Ø GLOBE-STYLE CHECK VALVE (FLG X FLG).
 - 4. INSTALL 12" Ø BUTTERFLY VALVE, LUG-STYLE.
 - 5. INSTALL 12"ø D.I. SPOOL (FLG X FLG).
 - 6. INSTALL 12"X10"X10" D.I. REDUCING TEE (FLG X FLG).
 - INSTALL 10"X8" CONCENTRIC REDUCER (FLG X FLG).
 - INSTALL 8" BUTTERFLY VALVE, LUG-STYLE.
 - 9. INSTALL 8" 90° D.I. ELBOW (FLG X FLG).
 - 10. INSTALL AIR RELIEF VALVE AND PRESSURE GUAGE.
 - 11. INSTALL 10" Ø EXPANSION JOINT COUPLING.
 - 12. INSTALL 10" Ø D.I. SPOOL (FLG X FLG).
 - 13. INSTALL 10"ø 90° D.I. ELBOW (FLG X FLG).
- 14. INSTALL 10" BUTTERFLY VALVE LUG-STYLE.
- 15. CHECK CONDITION OF THE PUMP CANISTER.
- B LAKES RECIRCULATION SYSTEM:
- REMOVE, CHECK CONDITION AND REPLACE W/NEW PUMP. CONTRACTOR TO REPORT TO LAKE ENGINEER (PACE) THE CONDITION OF THE PUMP FOR REVIEW PRIOR TO REPLACING.
- 2. INSTALL 12"Ø EXPANSION JOINT COUPLING.
- 3. INSTALL 12"ø D.I. SPOOL (FLG X FLG)
- 4. INSTALL 12" BUTTERFLY VALVE, LUG-STYLE.
- 5. INSTALL 12"X10"X8" D.I. REDUCING TEE (FLG X FLG).
- INSTALL 10"ø D.I. SPOOL (FLG X FLG).
- INSTALL 10"ø BUTTERFLY VALVE, LUG-STYLE.
- INSTALL 10"ø 90° D.I. ELBOW (FLG X FLG). 9. INSTALL AIR RELIEF VLAVE AND PRESSURE GUAGE.
- 10. INSTALL 8"Ø EXPANSION JOINT COUPLING.
- 11. INSTALL 8"ø 90° D.I. ELBOW (FLG X FLG).
- 12. INSTALL 8"ø BUTTERFLY VALVE LUG—STYLE.
- 13. INSTALL 8"ø D.I. SPOOL (FLG X FLG).
- 14. INSTALL CHEMICAL INJECTION QUILL PER DETAIL B/W451
- ALUM ADDITION SYSTEM:
- 1. INSTALL 50 GAL DOUBLE WALL CONTAINMENT ALUM TANK (SEE EQUIPMENT LIST).
- 2. INSTALL ALUM FEED PUMP (SEE EQUIPMENT LIST).
- 3. INSTALL ALUM MIXER (SEE EQUIPMENT LIST).
- D ACID ADDITION SYSTEM:
 - 1. INSTALL 50 GAL DOUBLE WALL CONTAINMENT CHEMICAL TANK (SEE EQUIPMENT LIST).
 - 2. INSTALL ACID FEED PUMP (SEE EQUIPMENT LIST).
- E FLOATING FOUNTAIN SYSTEM:
- REUSE FLOATING FOUNTAIN CONTROL PANEL.
- F AERATION SYSTEM:
 - 1. INSTALL AIR COMPRESSOR / BLOWER (SEE EQUIPMENT LIST).
- G CONTROL PANEL:
 - REBUILT THE CONTROL PANEL TO WORK W / NEW SYSTEM.

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PRELIMINARY DESIGN DRAWING

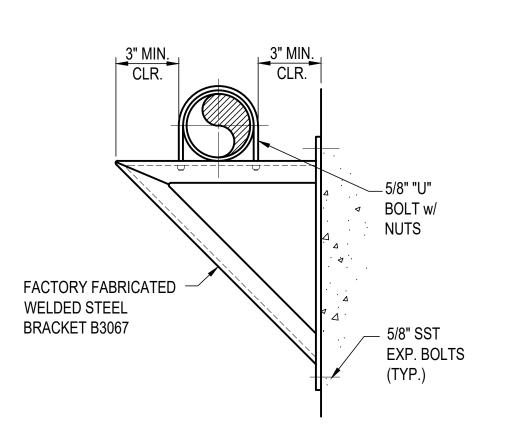
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40 OF 50 SHEETS JOB NO.

TEWINKLE PARK LAKE RENOVATION

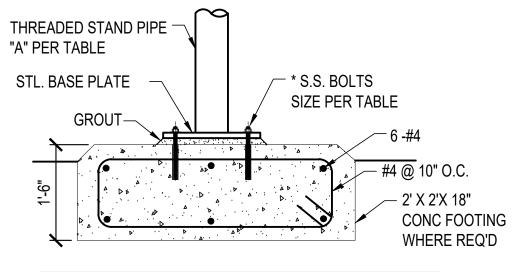
4444

PUMP STATION - SECTION A $\frac{1}{2}$ "=1'-0"



-1" WIDE X 1/4" TH'K X 4" LONG PLATE BEND @ 4" RADIUS - 1-1/4" DIA STEEL BAR NOTE: SMALL STAND 1" DIA X 1'-0" LONG SIMILAR IN **BOLT THREADED** CONSTRUCTION TO THRU-OUT STANDARD SIZE STAND 1" DIA NUT W/ EXCEPTIONS ^1" X 3" WASHER NOTED BELOW. WELD TO PIPE - 1-1/4" DIA. X -1-1/4" DIA X 2'-0" PIPE 6", 12" OR 24" LONG STEEL -1" DIA X 5" LONG BOLT PIPE THREADED THRU-OUT 1½" TYP. **─**1-1/4" DIA X 4" PIPE - №%"X8"X8" W/ 4-½"Ø HILTI KB-TZ (SS) 2" EMBED SMALL STAND STANDARD STAND **EXTENSION**

NOTE: PAINT ENTIRE ASSEMBLY WITH PRIMER PAINT



		DIME	ENSIONS	6
PIPE Ø SIZE	BOLT SIZE	STAND PIPE "A"	ADJ. PIPE "B"	FLANGE SUPPORT PLATE THK. "C"
4-12	1/2	3"	2 1/2"	1/4"
14-16	5/8	4"	3"	3/8"
18-36	7/8	6"	4"	3/8"

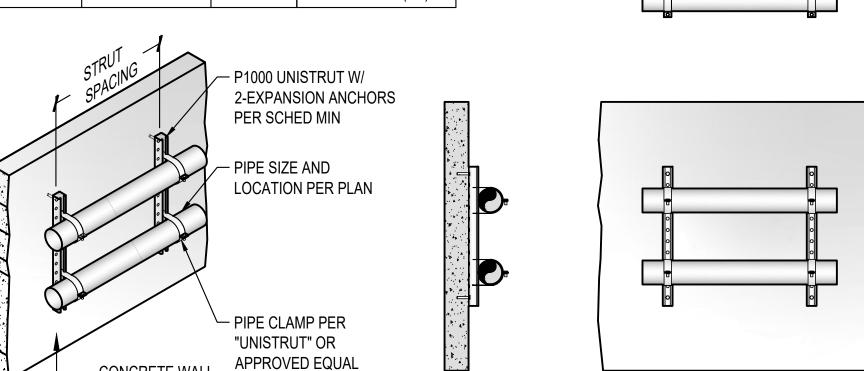
INSTALLATION NOTE:
PIPE SUPPORT SPACING, MATERIAL AND QUANTITY PER

* BOLT EMBEDMENT DEPTH PER TABLE HEREON.

WALL BRACKET SUPPORT

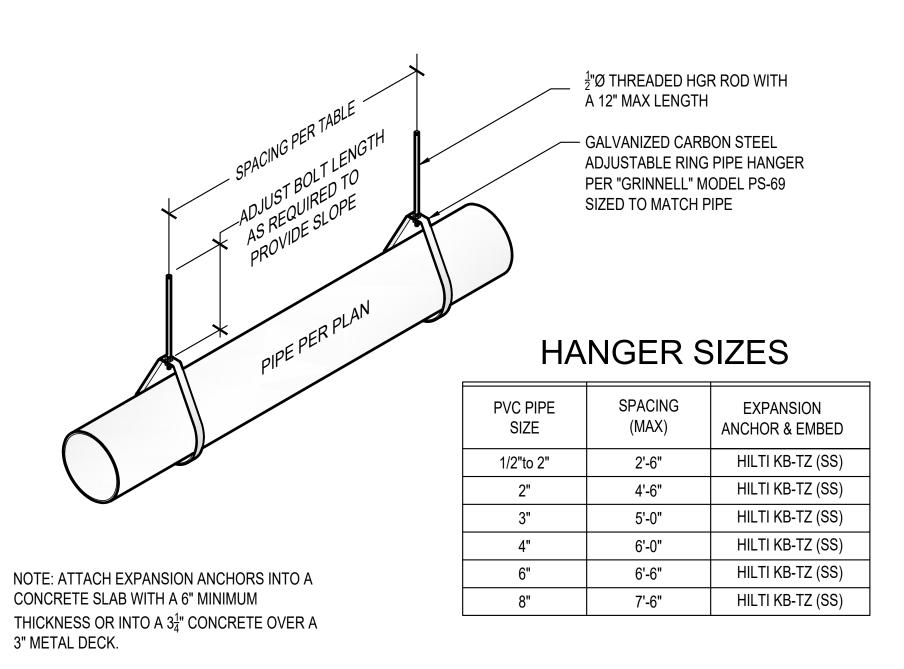
MAX. HANGING LOAD RATING (LBS)	STRUT SPACING	EXPANSION ANCHOR & EMBED
400	4'-0"	HILTI KB-TZ (SS)
600	4'-5"	HILTI KB-TZ (SS)
800	5'-3/4"	HILTI KB-TZ (SS)
1000	8'-1/4"	HILTI KB-TZ (SS)
1000	10'-0"	HILTI KB-TZ (SS)
	LOAD RATING (LBS) 400 600 800 1000	LOAD STRUT SPACING 400 4'-0" 600 4'-5" 800 5'-3/4" 1000 8'-1/4"

(6" MIN THK)

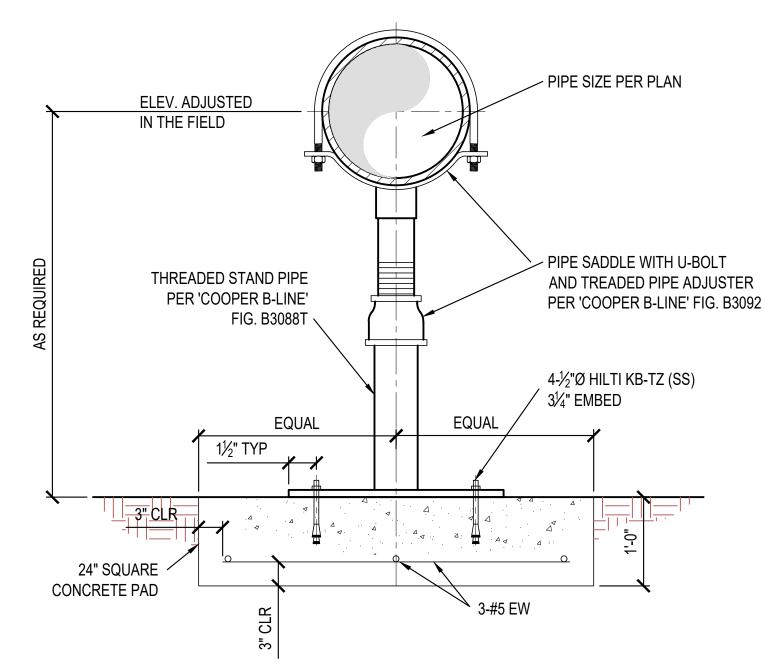


PIPE STAND 10" OR SMALLER

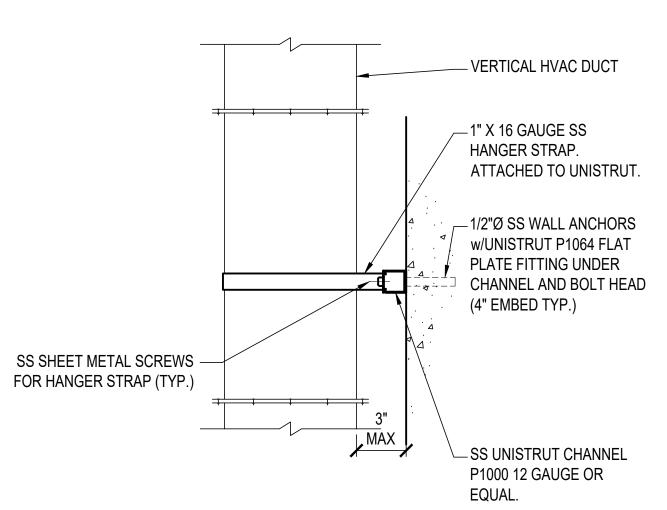
REV. 07/03/02



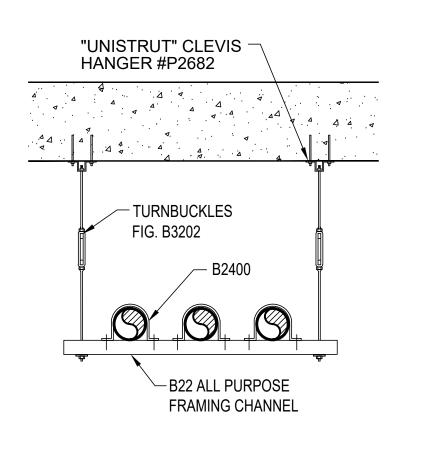
PIPE STAND FOOTING (AS NEEDED)



PIPE SUPPORT AT WALL

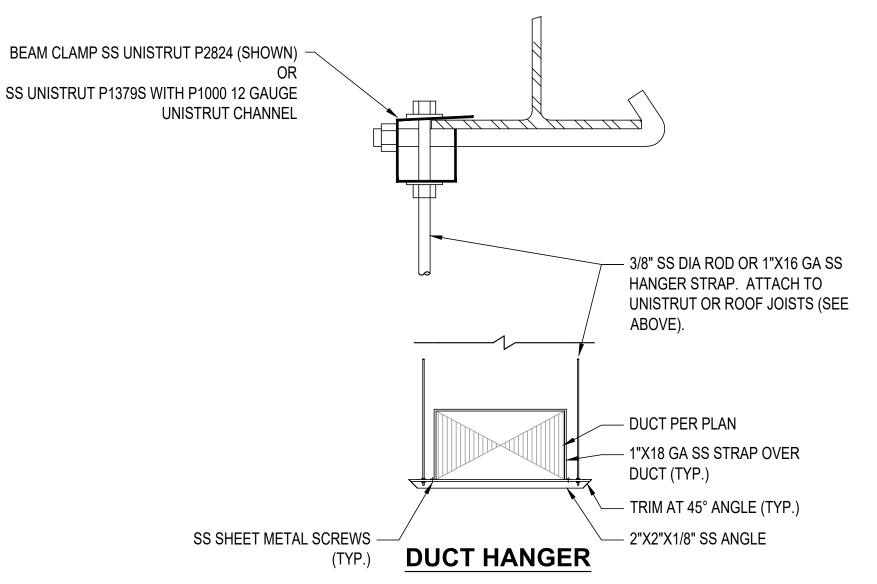


PIPE HANGER



PIPE	HANGER	
—		

PIPE SUPPORT 12" OR BIGGER



PRELIMINARY DESIGN DRAWING THIS DRAWING IS FOR DESIGN USE ONLY AND NOT

41 OF 50 SHEETS JOB NO.

44444

NOIL

TEWINKLE PARK LAKE RENOVATION

PIPE SUPPORT/ STAND
NOT TO SCALE

VERTICAL DUCT SUPPORT

PRELIMINARY NOT FOR CONSTRUCTION

INTENDED TO BE USED FOR CONSTRUCTION.

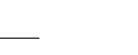
1"Ø AIR RELEASE VALVE WITH 3/16"Ø ORIFICE, VALMATIC MODEL 38 OR EQUAL. 1"Ø SS BALL VALVE 1"Ø OUTLET SADDLE TAP PIPELINE PER PLANS

KEYNOTES

- 1) CHEMICAL TANK
- ② FLEXIBLE PRESSURE RATED POLYETHYLENE TUBING SUPPLIED BY PUMP MANUFACTURER (MAX DISTANCES')
- 3 CHEMICAL FEED PUMP PER EQUIPMENT LIST
- 4 PIPE TO TUBE ADAPTER TYPICAL
 5 ISOLATION VALVE
- 6 1/2" SCH. 80 PVC FIP FEMALE ADAPTER TYPICAL

CHEMICAL FEED SYSTEM
NOT TO SCALE

- 7 1/2" SCH. 80 PVC PIPE TYPICAL
- 8 1/2" PIPE CLIP B-LINE #B3191 AT 24" O.C. MOUNTED TO WALL
- 9 POOL/SPA CIRCULATION PIPING
- (1) CHEMICAL INJECTOR PER DETAIL B ON SHEET W451
- 11) POWER OUTLET (ON/OFF CONTROL BY CONTROL PANEL)
- 12 NEEDS TO BE ACCESSIBLE FROM THE GROUND
- BY PERSONNEL WITHOUT A LADDER
- (13) CHEMICAL SUCTION FOOT VALVE
- (14) BALL VALVE
- 15) CHECK VALVE



AIR RELEASE VALVE DETAIL
NOT TO SCALE

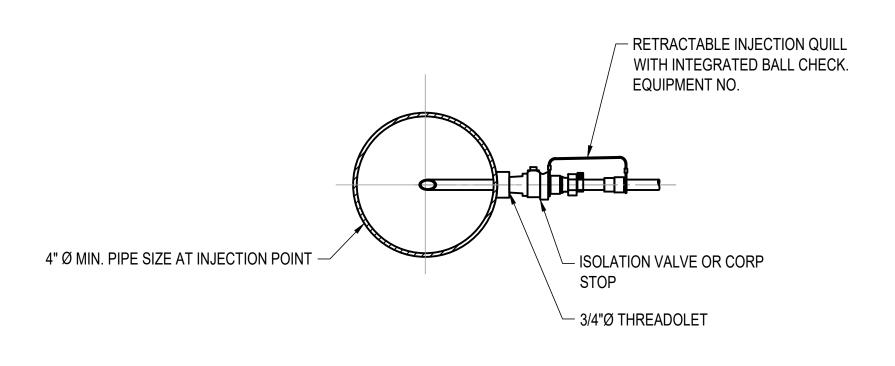
ACID FUME SCRUBBER ASSEMBLY
PER 'PROMINENT' PARTI# 7747089

WALL MOUNT KIT
(STRUT, CLAMP & BOLTS)
PER 'PROMINENT'
PART# 7747091

%" O.D. PVC TUBING
TO ADDITIONAL TANK
AS REQUIRED

%" O.D. PVC TUBING
TO ADDITIONAL TANK
AS REQUIRED

ACID TANK



B CHEMICAL INJECTION DETAIL NOT TO SCALE

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4444

STATION

SHEET **VV451**42 OF 50 SHEETS

JOB NO. B836

ACID SCRUBBER TANK
NOT TO SCALE

- 1. ELECTRICAL CODE SHALL COMPLY WITH THE NATIONAL ELECTRICAL CODE (2020 NEC) AS AMENDED BY THE CALIFORNIA ELECTRICAL CODE (2019 CEC) THE ENERGY CODE REFERENCE TO READ CALIFORNIA ENERGY CODE TITLE 24 (2019 CENC) AND ADD CALIFORNIA BUILDING CODE (2019 CBC) AND THE CITY OF COSTA MESA MUNICIPAL CODE.
- 2. ALL WORK SHALL BE DONE IN A NEAT, WORKMANLIKE, FINISHED AND SAFE MANNER, ACCORDING TO THE LATEST PUBLISHED NATIONAL ELECTRICAL CONTRACTOR'S ASSOCIATION STANDARDS OF INSTALLATION, UNDER COMPETENT SUPERVISION.
- 3. CONTRACTOR SHALL VISIT THE SITE PRIOR TO CONSTRUCTION TO BECOME FAMILIAR WITH EXISTING CONDITIONS AND ALL OTHER FACTORS WHICH MAY AFFECT THE EXECUTION OF THIS WORK.
- 4. CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO EXISTING WALKS, WALLS, DRIVEWAYS, CURBS, ETC. DAMAGES SHALL BE REPAIRED BY THE CONTRACTOR TO THE SATISFACTION OF THE CITY AT NO ADDITIONAL COST TO THE CITY.
- 5. CONTRACTOR SHALL PAY FOR LOCAL FEES, PERMITS AND INSPECTIONS AS MAY BE REQUIRED AND PROVIDE A CERTIFICATE OF INSPECTION TO THE CITY.
- 6. LEAVE THE SITE CLEAN, REMOVE ALL DEBRIS, EMPTY CARTONS, TOOLS, CONDUIT, WIRE SCRAPS AND ALL MISCELLANEOUS SPARE EQUIPMENT AND MATERIALS USED IN THE WORK DURING CONSTRUCTION.
- 7. IT IS THE OBLIGATION OF THE CONTRACTOR TO ORGANIZE HIS WORK SO THAT A COMPLETE ELECTRICAL, INSTRUMENTATION, AND/OR CONTROL SYSTEM FOR THE FACILITY WILL BE PROVIDED AND SUPPORTED BY ACCURATE SHOP AND RECORD DRAWINGS, AND ALL O&M MANUALS.
- 8. ALL CABLES SHALL BE NEW, COPPER, RATED FOR 600V AND LISTED FOR ITS LOCATION WITH A MINIMUM TEMPERATURE RATING OF 75 DEG C WET AND 90 DEG C DRY; POWER CABLES SHALL BE TYPE XHHW-2 FOR UNDERGROUND/ABOVE GROUND, UNLESS NOTED OTHERWISE.
- 9. MINIMUM SIZE CONDUIT ABOVE GROUND SHALL BE 3/4" AND MINIMUM SIZE CONDUIT BELOW GROUND SHALL BE 1" UNLESS NOTED OTHERWISE. ALL CONDUITS FOR POWER AND LIGHTING SHALL CONTAIN A GROUNDING CONDUCTOR.
- 10. MINIMUM SIZE POWER CONDUCTORS SHALL BE #12 AWG UNLESS NOTED OTHERWISE.
- 11. ALL TERMINAL RATINGS SHALL HAVE A MINIMUM TEMPERATURE RATING OF 75 DEG C. CABLES SHALL BE DE-RATED PER NEC 110.14 (C).
- 12. CONDUIT SIZE SHALL BE AS SPECIFIED IN THE PLANS OR DETAILS. UNDERGROUND CONDUIT SHALL BE SCH 40 PVC ENCASED IN CONCRETE WITH PVC COATED GALVANIZED RIGID STEEL BENDS, ELBOWS AND TURN-UPS. EXPOSED CONDUIT IN THE CHEMICAL ROOM AND OUTDOORS SHALL BE PVC COATED GRS. ALL OTHER EXPOSED ABOVE-GROUND CONDUIT SHALL BE GALVANIZED RIGID STEEL.
- 13. EQUIPMENT AND WIRING METHODS LOCATED OUTSIDE SHALL BE RATED FOR CORROSIVE LOCATIONS, ENCLOSURES SHALL BE NEMA 4X SS. EQUIPMENT IN THE ELECTRICAL ROOM SHALL BE NEMA 12 UNLESS NOTED OTHERWISE.
- 14. GROUND AND BOND ALL EQUIPMENT AND ENCLOSURES PER NEC ARTICLE 250 AND MANUFACTURER REQUIREMENTS.
- 15. CONTRACTOR SHALL PLAN AND INSTALL WORK IN SUCH A MANNER AS TO CONFORM TO THE STRUCTURE, AVOID OBSTRUCTIONS, PRESERVE HEADROOM AND KEEP OPENINGS AND PASSAGEWAYS CLEAR.
- 16. CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIAL, ETC. NECESSARY FOR A COMPLETE AND WORKABLE ELECTRICAL SYSTEM WHETHER OR NOT THESE ITEMS ARE SPECIFICALLY NOTED ON THESE DRAWINGS. INCIDENTAL ITEMS NOT INDICATED ON THE DRAWINGS, NOR MENTIONED IN SPECIFICATIONS THAT CAN BE LEGITIMATELY AND REASONABLY INFERRED TO BELONG TO THE WORK DESCRIBED OR BE NECESSARY IN GOOD PRACTICE TO PROVIDE A COMPLETE SYSTEM, SHALL BE FURNISHED AND INSTALLED AS THOUGH ITEMIZED HERE IN EVERY DETAIL.
- 17. ALL TRENCHING, CONDUITS, ETC. SHALL BE ROUTED AND INSTALLED IN SUCH A MANNER THAT WILL NOT DAMAGE EXISTING FACILITIES OR UNDERGROUND UTILITIES. SHOULD DAMAGE OCCUR, IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR DAMAGE TO THE SATISFACTION OF THE CITY OR INSPECTOR.
- 18. ALL CONDUIT RUNS SHOWN ON THIS PLAN ARE SCHEMATIC IN NATURE. THE CONTRACTOR SHALL MAKE SURE THAT ALL CONDUIT MEETS LOCAL AND STATE CODES.
- 19. WHEN CROSSING PATHWAYS OR SIDEWALKS, CONTRACTOR SHALL BORE UNDER EXISTING CONCRETE WALKS AND SAWCUT ASPHALT WALKS. ASPHALT WALKS AND CONCRETE SIDEWALKS TO BE REPLACED IN KIND.
- 20. CONTRACTOR SHALL GUARANTEE WORK INSTALLED UNDER THE CONTRACT TO BE FREE FROM DEFECTIVE WORKMANSHIP AND MATERIALS, USUAL WEAR EXPECTED, AND SHOULD ANY SUCH DEFECTS DEVELOP WITHIN A PERIOD OF ONE YEAR ACCEPTANCE OF THE PROJECT BY THE CITY, THE CONTRACTOR SHALL REPAIR AND/OR REPLACE ANY DEFECTIVE ITEMS AND DAMAGE RESULTING FROM FAILURE OF THESE ITEMS, AT NO EXPENSE WHATSOEVER TO THE CITY.
- 21. ALL CIRCUITS SHALL BE LEGIBLY IDENTIFIED AT THE PANEL, JUNCTION BOXES AND AT ALL EQUIPMENT IN A PERMANENT MANNER (I.E. ETCHED PLATES, CONDUCTOR TAG, PERMANENT MARKER, ETC.). THE LABELING SHALL INCLUDE PANEL CIRCUIT NUMBER, "TO" AND "FROM" IDENTIFICATION, AND MARKED "SPARE" WHERE APPLICABLE.
- 22. CONTRACTOR SHALL TEST ELECTRICAL SYSTEM FOR SHORT CIRCUITS AND MEGGER TEST FEEDERS AND BRANCH CIRCUIT WIRING. INSURE LOW IMPEDANCE GROUND PATH SYSTEM. PERFORM HIPOT TESTING WHEN REQUIRED BY LOCAL JURISDICTION.

- 23. CONTRACTOR SHALL COORDINATE ALL EQUIPMENT CONNECTIONS WITH EQUIPMENT SUPPLIER PRIOR TO ROUGH-IN. PROVIDE ADDITIONAL FUSED DISCONNECT SWITCHES AND CONTROLS IF OVERCURRENT PROTECTION OR CONTROLS ARE NOT INTEGRAL WITH UNITS.
- 24. FULL LOAD AMPS (FLA) SIZES, AS NOTED IN THESE DRAWINGS, ARE BASED ON SPECIFIED EQUIPMENT DATA. CONTRACTOR SHALL VERIFY NAMEPLATE FLA OF EQUIPMENT SUPPLIED AND COORDINATE ACCORDINGLY PER EQUIPMENT SUPPLIERS RECOMMENDATIONS AND CODE REQUIREMENTS.
- 25. CONDUITS OR RACEWAYS INSTALLED IN AREAS WHERE ELEVATION CHANGES MAY CAUSE WATER OR MOISTURE TO ENTER THE ELECTRICAL EQUIPMENT THROUGH THE CONDUIT SHALL BE SEALED IN ACCORDANCE WITH NEC 300.5 (G).
- 26. MATERIALS SHALL BE NEW AND OF THE BEST QUALITY WITH MANUFACTURER'S NAME PRINTED THEREON. MATERIALS SHALL BE MANUFACTURED IN ACCORDANCE WITH NEMA, ANSI, UNDERWRITER'S LABORATORY OR OTHER APPLICABLE STANDARDS AND RATED FOR HEAVY DUTY SERVICE.
- 27. SELECTION OF MATERIALS SHALL BE IN STRICT ACCORDANCE WITH THE DRAWINGS AND/OR SPECIFICATIONS.
- 28. THE SUBMITTALS SHALL BE NEATLY GROUPED AND ORGANIZED. PERTINENT INFORMATION SHALL BE HIGHLIGHTED, AND THE SPECIFIC PRODUCT SHALL BE IDENTIFIED. ALL SUBMITTALS SHALL BE COMPLETE, AND PRESENTED IN ONE PACKAGE. THE SUBMITTAL SHALL INCLUDE A COMPLETE LIST OF THE EQUIPMENT AND MATERIALS, INCLUDING THE MANUFACTURER'S NAME, PRODUCT SPECIFICATION, DESCRIPTIVE DATA, TECHNICAL LITERATURE, PERFORMANCE CHARTS, CATALOG CUTS, INSTALLATION INSTRUCTION, AND SPARE PART RECOMMENDATIONS FOR EACH DIFFERENT ITEM OF THE EQUIPMENT SPECIFIED.
- 29. VERIFY ALL CONDUIT FILL RATIOS, BOX FILLS, AND CONDUIT BENDS (MAX 360 DEGREES) ARE MET PER NEC REQUIREMENTS. INSTALL PULL BOXES AND DE-RATE CABLE AMPACITY AS NECESSARY.
- 30. CONTRACTOR TO READ ALL THE DRAWINGS IN THIS SET TO BECOME FAMILIARIZED WITH THE FULL ELECTRICAL SCOPE, INCLUDING BUT NOT LIMITED TO THE MECHANICAL, INSTRUMENTATION AND CIVIL DRAWINGS.
- 31. THESE DRAWINGS AND THE PROJECT SPECIFICATIONS ARE COMPLEMENTARY. WHERE THERE IS OVERLAP, THE MORE STRINGENT REQUIREMENT WILL TAKE PRECEDENCE.
- 32. CONTRACTOR SHALL VERIFY ALL CIRCUITS CONTAIN LESS THAN 5% VOLTAGE DROP. CONTRACTOR SHALL PROVIDE SHORT CIRCUIT ANALYSIS AND ARC FLASH STUDY, AS REQUIRED.
- 33. CONTRACTOR SHALL COORDINATE AND PERFORM WORK TO THE STANDARDS OF ALL APPLICABLE UTILITY COMPANIES, INCLUDING BUT NOT LIMITED TO UNDERGROUND ELECTRICAL LINES, GAS LINES AND WATER LINES. WHEN AN ISSUE OR DISCREPANCY ARISES, NOTIFY THE CITY AND ENGINEER IMMEDIATELY.
- 34. CONTRACTOR TO PROVIDE REQUIREMENTS FOR NFPA 70E, AS REQUIRED.
- 35. CONTRACTOR SHALL NOTIFY THE ENGINEER AND THE CITY WITH ANY DISCREPANCIES FOUND DURING INSTALLATION OR REVIEW.
- 36. LIGHTING SHALL BE INSTALLED IN THE BUILDING TO PROVIDE A MINIMUM OF 30 FOOT CANDLES IN ALL INDOOR ROOMS.
- 37. ALL POWER AND LIGHTING CONDUITS SHALL HAVE A GROUND WIRE, BE AT LEAST #12 THHN, AND SIZED FOR PROPER AMPACITY DERATING AND CONDUIT FILL.
- 38. ALL 120V RECEPTACLES SHALL BE GFCI PROTECTED, EITHER WITH A GFCI RECEPTACLE OR THROUGH A GFCI CIRCUIT BREAKER.

SCOPE OF WORK:

THE CITY OF COSTA MESA UPGRADE LAKE PUMP MOTORS
AT TEWINKLE MEMORIAL PARK:

- PROVIDE DESIGN DETAIL TO UPGRADE POWER
 CONDUIT SUPPORT CONNECTIONS TO REFURBISHED
 LAKE PUMP MOTORS PER N.E.C.
- PROVIDE DEDICATED 120V CIRCUITS TO NEW LAKE AIR COMPRESSOR AND CHEMICAL INJECTION PUMPS.

	PREPARED BY ZIRANG SON	prepared by ZIRANG SONG	V		
CTRICAL GENERAL	PROJEC R.C.E. NO. —	T ENGINEER — #C69315	⋖		
NOTES	EXP. 6/30/2024	.024	<		
	DRAWN SP/RC	SCALE AS SHOWN			
	DESIGNED BL		1<		
	CHECKED ZS	DATE 8/16/2023	ON	ВҮ DATE	E REVISIONS
		JNIMV AU JSJAL	THESE NPAWINGS ARE THE DROBERTY OF D A C F AND SHALL NOT RE REDRA	\ \ \ \	THE SHALL NOT BE REDE

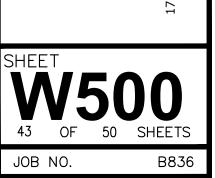
TEWINKLE PARK
LAKE RENOVATION

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refis: B836—07 36x24v.dwg imscale = 24; LTscale = 1; PStscale = 1; ACAD Ver. = 23.0s (LMS Tech); Visret

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TEWINKLE PARK LAKE RENOVATION

144444

W501 44 OF 50 SHEETS JOB NO.

						PANEL "A	۹"						
VOLTAGE:	480/277 VAC					VOLT AMBO					MAIN BKR:	200	А
SCCR:	42 KAIC					VOLT AMPS					PANEL BUS:	225	А
LOAD	DESCRIPTION	VA	СВ	BKR	PHASE A	PHASE B	PHASE C	BKR	СВ	VA	LOA	D DESCRIPTION	•
"SPACE"				1	16295			2		16295	LAKE PUMP CTRLR PAI	NEL	
"SPACE"				3		16295		4	80/3	16295	LAKE PUMP CTRLR PAI	NEL	
"SPACE"				5			16295	6		16295	LAKE PUMP CTRLR PAI	NEL	
"SPACE"				7	14000			8		14000	XFMR B 45 KVA		
"SPACE"				9		14000		10	100/3	14000	XFMR B 45 KVA		
"SPACE"				11			14000	12		14000	XFMR B 45 KVA		
"SPACE"				13	4750			14		4750	IRRIG CONTROLLER		
"SPACE"				15		4750		16	60/3	4750	IRRIG CONTROLLER		
"SPACE"				17			4750	18		4750	IRRIG CONTROLLER		
"SPACE"				19	0			20			"SPACE"		
"SPACE"				21		0		22			"SPACE"		
"SPACE"				23			0	24			"SPACE"		
"SPACE"				25	0			26			"SPACE"		
"SPACE"				27		0		28			"SPACE"		
"SPACE"				29			0	30			"SPACE"		
"SPACE"				31	0			32			"SPACE"		
"SPACE"				33		0		34			"SPACE"		
"SPACE"				35			0	36			"SPACE"		
"SPACE"				37	0			38			"SPACE"		
"SPACE"				39		0		40			"SPACE"		
"SPACE"				41			0	42			"SPACE"		
					PHASE A	PHASE B	PHASE C						
	VA/PHASE (SUB	STOTAL)			35045	35045	35045				3Ф, 4W		
	AMPS/PHASE (SU				126.5	126.5	126.5				10,000 AIC BREAKERS		
	VA (SUBTO)					105135	1			NEMA 1 INS	IDE "DPB-B" INSIDE NEMA	A 3R ENCL.	
	25% OF LARGEST INDUC	•	۹)		0	290	0						
	GRAND TOTAL	(AMPS)				126.8				* INDICA	TES LOAD CALCULATED A	AT 125%	

NOTES:

PERCENT CAPACITY

- 1. PROVIDE UPDATED, COMPLETE, AND ACCURATE TYPED PANELBOARD CIRCUIT DIRECTORIES AT THE
- COMPLETION OF WORK.

 CIRCUIT BREAKERS SHALL BE THERMAL MAGNETIC, TRIP INDICATING.

63.4%

- 3. MULTI-POLE CIRCUIT BREAKERS SHALL BE EQUIPPED WITH AN INTERNAL COMMON TRIP MECHANISM.
- CIRCUIT BREAKERS SHALL BE OF THE SAME MANUFACTURER AS THE PANELBOARD.
- PANELBOARDS SHALL BE BOLT-ON TYPE.
- BREAKER SHALL HAVE FIXED LOCKS WHEN REQUIRED BY NEC CODE.
- 7. PANELBOARDS SHALL BE PROVIDED WITH SPARE BREAKERS AS INDICATED.
- 8. "SPACE" INDICATES A LISTED CIRCUIT BREAKER COVER.9. BOTH ENDS OF CONDUCTORS SHALL BE LABELED WITH THE PANEL NAME AND CIRCUIT.

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CONST	$RU(\mathcal{A})$	$I(\mathcal{L})I\mathcal{M}$	$\mathbf{I}\mathbf{V}(\mathbf{J})\mathbf{I}$	- 2

- 1 EXISTING ELECTRCIAL EQUIPMENT AND CONDUIT TO REMAIN.
- 2 PROVIDE NEW 120V DEDICATED GFCI BREAKER FOR NEW ISLAND EVENT J-BOX ROUTE NEW WIRES TO ISLAND.
- 3 PROVIDE PUMP MOTOR CONDUIT STUB-UP PROTECTION WITH FLOOR MOUNTED

STRUT SYSTEM TO REFURBISHED MOTORS ON VERTICAL PUMP PER NEC CODE

- 4 REFER TO POWER AND CONTROL PLAN FOR ROUTING OF NEW ELECTRICAL EQUIPMENT IN LAKE PUMP STATION.
- 5 PROVIDE REPLACEMENT LAKE PUMP CONTROLLER PANEL WALL MOUNTED BY (TOTAL CONTROL MANUF) AND PANEL A 80A/3P C.B., REFURBISHED MOTORS ON VERTICAL PUMPS PER PROJECT SCOPE OF WORK.
- 6 DEMO AND LABEL "SPACE" REMOVE ALL EXISTING "OZONE" ELECTRICAL EQUIPMENT FROM THE LAKE PUMP STATION RETURN TO CITY PER PROJECT SCOPE OF WORK.

NOTES:

- 1. DRAWINGS ARE DIAGRAMMATIC AND DO NOT REFLECT ACTUAL ROUTING. CONTRACTOR SHALL INSTALL PULLPOINTS WHERE REQUIRED FOR PULLING TENSION AND MAINTAINING LESS THEN (4) 90 DEGREE BENDS.
- 2. ALL EQUIPMENT, INCLUDING INSTRUMENTATION, IS NOT SHOWN ON THIS DIAGRAM. REFERENCE MECHANICAL AND INSTRUMENTATION DIAGRAMS.
- 3. GROUND AND BOND ALL ENCLOSURES PER GROUNDING PLANS AND MANUFACTURER/CODE REQUIREMENTS.
- 4. NOT ALL EQUIPMENT AND WIRING IS SHOWN ON THIS DIAGRAM.
 REFERENCE DRAWINGS IN THE ELECTRICAL SET AND ENTIRE PROJECT
 TO COMPLETELY UNDERSTAND THE SCOPE OF ELECTRICAL WORK.

						PANEL "	3"						
VOLTAGE:	120/208 VAC					VOLT 44400					MAIN BKR:	100	А
SCCR:	22 KAIC	1				VOLT AMPS					PANEL BUS:	125	А
LOAD D	ESCRIPTION	VA	СВ	BKR	PHASE A	PHASE B	PHASE C	BKR	СВ	VA	LOAD D	ESCRIPTION	•
MAIN			100	1	0			2		0	"SPACE"		
CIRCUIT			1	3		0		4	60/	0	SPARE		
BKR			3	5			0	6	2	0	SPARE		
LIGHTS		300	20/1	7	550			8	20/1	250	SPRINKLER TIMER		
GFIC RECEPT		180	20/1	9		680		10	20/1	500	SPRINKLER TIMER		
SPARE		0	30/1	11			0	12	30/1	0	SPARE		
WIND CTRL		180	20/1	13	180			14		0	"SPACE"		
ISLAND EVENT J-E	BOX	500	20/1	15		500		16		0	"SPACE"		
ISLAND EVENT J-E	BOX	500	20/1	17			500	18		0	"SPACE"		
SPARE			20/1	19	0			20		0	"SPACE"		
		•			PHASE A	PHASE B	PHASE C				•		
	VA/PHASE (SUBTO	OTAL)			730	1180	500				3Ф, 4W		
	AMPS/PHASE (SUBT	TOTAL)			6.1	9.8	4.2				10,000 AIC BREAKERS	3	
	VA (SUBTOTAL	_)				2410					NEMA 3R ENCL.		
25%	OF LARGEST INDUCTI	VE LOAD (\	VA)		0	0	0						
	GRAND TOTAL (A	MPS)				6.7	•			* INDICAT	ES LOAD CALCULATE	D AT 125%	
	PERCENT CAPAC	CITY				6.7%							

BUS BRACING CALCULATION (WORST CASE) MAIN CIRCUIT BREAKER - 600 AMPERES

Isc = (300A) (480V) (1.73) = 249.4 KVA

1000

ASSUME 300KVA UTILITY TRANSFORMER @ 3.0% Z

SHORT-CIRCUIT CURRENT AVAILABLE (WORST CASE) BY EATON,

TABLE 1.

= 33,451 AMPS.

ADD MOTOR CONTRIBUTION

33,451 + (48) = 33,499 AMPS

MULTIPLY BY 10% FOR VOLTAGE FLUCTUATION

33,499 X 1.1 = 36,849 AMPS

BUS BRACING SHALL BE 42 KAIC

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ELECTRICAL SINGLE LINE DIAGRAM

E PARK

LAKE RENC

Advanced Water Engineering

O Newhope Street, Suite 200 | Fountain Valley, CA 92708
P: (714) 481-7300 | www.pacewater.com

SHEET **VV502**45 OF 50 SHEETS

JOB NO. B836

Xrefs: B836-07 36x24v.dwg Dimscale = 24; LTscale = 1; PSItscale = 1; ACAD Ver. = 23.0s (LMS Tech

PUMP STATION PLAN

 $\frac{1}{2}$ "=1'-0"

CONSTRUCTION NOTES:

- 1 TERMINATE TO PUMP MOTOR AS REQUIRED BY MANUFACTURER SPECIFICATIONS.
- 2 PROVIDE STRUT SUPPORT CONDUIT CONNECTION TO PUMP MOTOR AS REQUIRED BY MANUFACTURER SPECIFICATIONS.
- 3 PROVIDE CONDUIT CONNECTION TO NEW PUMP CONTROLLER FROM MIXER MOTOR AS REQUIRED BY MANUFACTURER SPECIFICATIONS.
- 4 ROUTE CONDUIT TO NEW PUMP CONTROLLER PANEL REFER TO MANUFACTERER DRAWINGS.
- 5 IRRIGATION / FOUNTAIN CONTROLLER PANEL. SEE SHEET W214.
- 6 NEW PUMP CONTROLLER PANEL TRANSFORMER WALL MOUNTED.

NOTES:

- 1. LABEL CONDUITS PER DETAIL "F" ON
- 2. CONDUCTORS FOR HOME RUN CIRCUITS FOR LIGHTING AND RECEPTACLES SHALL BE #10 AWG MINIMUM SIZE.
- 3. RECEPTACLE WIRING SHALL BE TYPE XHHW-2.
- 4. RECEPTACLE OUTLETS SHALL BE CLEARLY LABELED WITH THE CIRCUIT PROVIDING POWER. LABEL SHALL BE SUITED FOR ENVIRONMENT RECEPTACLE IS LOCATED IN.
- 5. ALL CONDUITS SHALL CONTAIN A PROPERLY SIZED GROUND CONDUCTOR.
- 6. MOUNT AND WIRE ALL EQUIPMENT PER MANUFACTURER REQUIREMENTS.

LEGEND:

- 120V, 20A GFCI DUPLEX TAMPER-WEATHER RESISTANT
 RECEPTACLE WITH METALLIC WEATHERPROOF WHILE IN
 USE COVER, EXTRA DUTY.
- 120V, 20A GFCI DUPLEX TAMPER-WEATHER RESISTANT RECEPTACLE.
- J ABOVE GROUND JUNCTION BOX
- POWER TRANSFORMER

	PREPARED BY	
	ZIRANG SONG	
	PROJECT	ENGINEER
CIRICAL FOWER AND	R.C.E. NO. $$ #C69315	#C69315
CONTROL PLAN	EXP. 6/30/2024	24
	DRAWN	SCALE
	SP/RC	AS SHOW
	DESIGNED	
	BL	
	CHECKED	DATE
	SZ	8/16/202

44449

EWINKLE PARK LAKE RENOVATION

COSTA ME



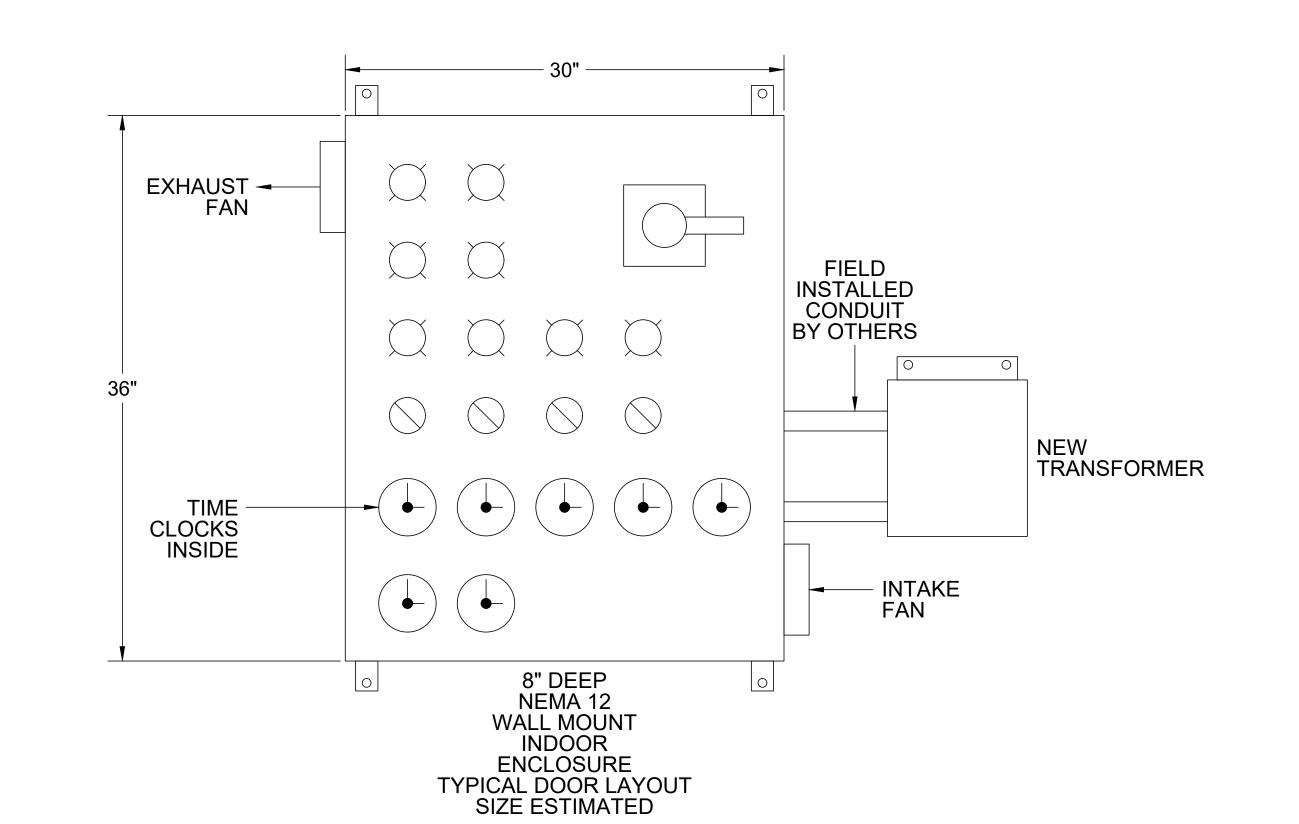
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PRELIMINARY DESIGN DRAWING

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SHEET **VV503**46 OF 50 SHEETS

JOB NO. B836



NOTES:

1) U.L. 508A LISTED INDUSTRIAL CONTROL PANEL TO BE FABRICATED & LABELED PER U.L. 508A.

2) GFI BEAKERS TO BE RATED AT 6MA GROUND FAULT FOR PERSONEL PROTECTION 3) DOOR MOUNTED INDICATING LIGHTS TO BE LED TYPE.

4) CONTROL PANEL TO BE MANUFACTURED AND PURCHASED FROM RSD-TOTAL CONTROL 26021 ATLANTIC OCEAN DRIVE LAKE FOREST, CA. 949-380-7878 apearson@rsd.net



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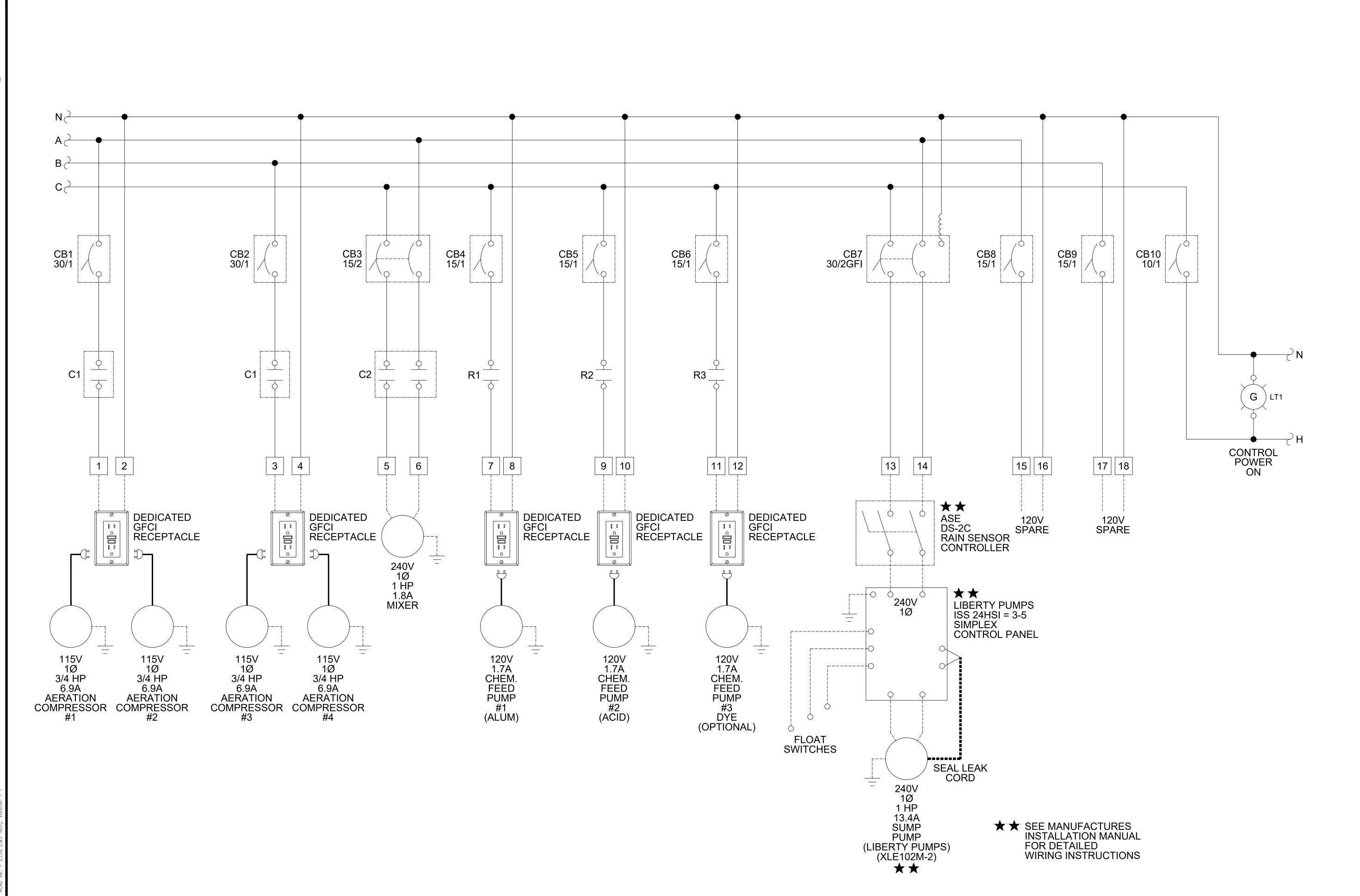
7		
Advanced Water Engineering	17520 Newhope Street, Suite 200 Fountain Valley, CA 92708 P: (714) 481-7300 www.pacewater.com	

TEWINKLE PARK LAKE RENOVATION

44449

48 OF 50 SHEETS JOB NO.

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26021 Atlantic Ocean Drive Lake Forest, CA. 92630 949-380-7878 949-380-0755 Fax

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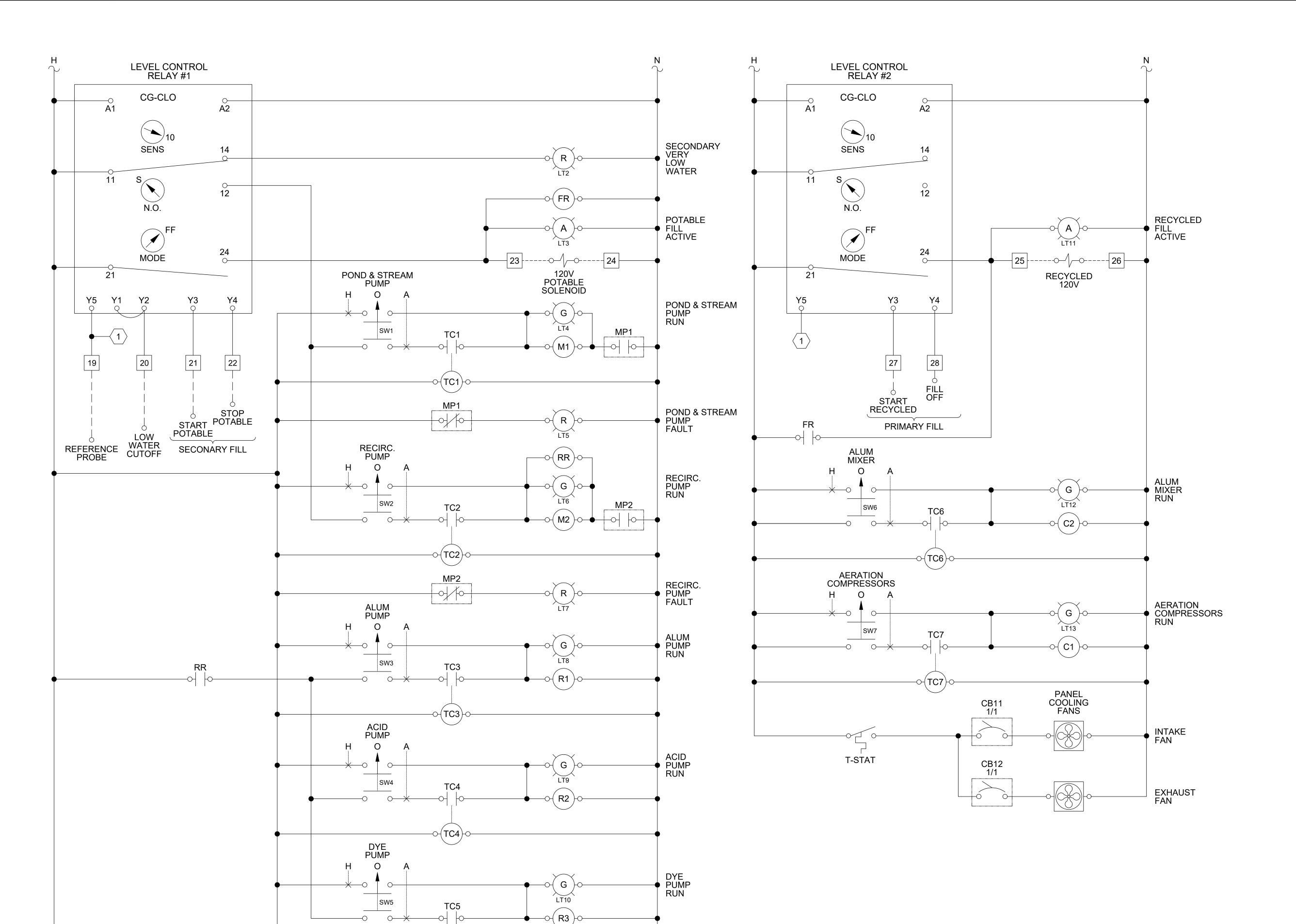
PRELIMINARY DESIGN DRAWING

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TEWIN THE TEMIN Advanced Water Engineering Whope Street, Suite 200 Fountain Valley, CA 92708	TEWINKLE PARK LAKE RENOVATION	CP SCH	CP SCHEMATIC	PREPARED BY ZIRANG SONG PROJECT ENGINEER R.C.E. NO. —— #C69315 EXP. 6/30/2024 DRAWN SCALE SP/RC AS SHOW DESIGNED BL	C ENGINEER #C69315 524 SCALE AS SHOWN	
P: (714) 481-7300 www.pacewater.com	CA			Checked 7S	8/16/2023	

4444

V601
49 OF 50 SHEETS JOB NO.



---(TC5)---



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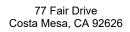
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50 OF 50 SHEETS JOB NO.

44449

SCHEMATIC

TEWINKLE PARK LAKE RENOVATION





CITY OF COSTA MESA Agenda Report

File #: 23-1373 Meeting Date: 9/14/2023



City of Costa Mesa Agenda Report

77 Fair Drive Costa Mesa, CA 92626

Parks and Community Services Commission

Item #: 23-1373 Meeting Date: 9/14/2023

TITLE: COSTA MESA SENIOR CENTER

DEPARTMENT: PARKS AND COMMUNITY SERVICES

PRESENTED BY: MONIQUE VILLASENOR, RECREATION MANAGER

CONTACT INFORMATION: MONIQUE VILLASENOR, RECREATION MANAGER

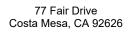
(714) 754-5679

UPDATE:

The Parks and Community Services Department prides itself on the quality programs it offers year-round, this includes programs and services offered at the Costa Mesa Senior Center. Senior Center programs include recreational and enrichment classes, special events, health expos, transportation services and meal programs. The center also offers a variety of social services through our recently approved full-time community outreach worker.

The Costa Mesa Senior Center offers free membership to adults age 50 and older is open Monday through Friday from 9:00 a.m. to 4:00 p.m. More information on the Costa Mesa Senior Center can be found online at www.costamesaca.gov/seniorcenter or by calling the center at (714) 327-7550.

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CITY OF COSTA MESA Agenda Report

File #: 23-1374 Meeting Date: 9/14/2023



PARKS & COMMUNITY SERVICES COMMISSION REPORT

MEETING DATE: SEPTEMBER 14, 2023 ITEM NUMBER: MR – 2.1

SUBJECT: DIRECTOR'S REPORT – AUGUST 2023

DATE: August 7, 2023

FROM: ALMA REYES, DEPUTY CITY MANAGER

FOR FURTHER INFORMATION CONTACT: (714) 754 - 5009

Community Gardens

Garden Location	Parcel Quantity	Parcels Rented	Waitlisted
Del Mar	57	57	93
Hamilton	42	42	29

❖ Contract Classes

	Jan.	Feb.	Mar.	April	May	June	July	Aug.
Youth & Adult Totals:	205	183	366	590	407	348	598	339

Costa Mesa Senior Center

- The August monthly newsletter was mailed to 2,785 members. This is an increase of 101 members since July 2023.
- On August 17, seniors enjoyed international food, games, and raffles at the Costa Mesa Senior Center's 2nd annual International Food Fair.

Senior Programs	Jan.	Feb.	Mar.	April	May	June	July	Aug.
Meals on Wheels OC - Meals	2,450	3,023	3,465	3,836	3,459	4014	3,196	4,929
Meals on Wheels OC - Seniors	1,085	1,405	1,724	1,879	1,682	1997	1,609	2463
Second Harvest Grocery Boxes	110	255	280	246	258	390	134	447
Wellness Calls	1,066	1,457	1,288	1,412	1,321	759	1,264	1,833
Transportation Program Trips	553	758	842	1,169	1,122	1,000	1,164	1,595

Downtown Recreation Center

August				
Gym Programs	Pickleball	Youth Open Gym	Basketball	Volleyball
Participants	154	102	48	138
Visits	809	186	94	222

Downtown Aquatic Center

2022 Aquatics Programs	Jan.	Feb.	Mar.	April	May	June	July	Aug.
Adult Lap Swim Participants	81	88	92	124	128	177	456	657
Total Lap Swim Visits	341	305	350	561	458	510	893	994
Instructional Class Participants	0	10	52	64	122	293	427	272
Instructional Class Attendance	0	33	200	442	562	688	1,667	1,257

❖ Facility Rentals

	Jan.	Feb.	Mar.	April	May	June	July	Aug.
Number of Rentals	7	9	19	13	9	15	17	16

❖ Fairview Park

- The City hosted its Second Saturday restoration day on Saturday, August 12, in partnership with the Fairview Park Alliance. The focus for the day was the vernal pool 5/6/7 watershed buffer area.
 - ~15 members of the public attended to support non-native plant removal activities. The next Second Saturday restoration day is scheduled for Saturday, September 9. In addition to volunteer support with weed removal in the buffer area, City staff and contractors continue with site maintenance and watering of the new plantings.
- The City has partnered with the Banning Ranch Conservancy in hosting additional monthly restoration days on the 3rd Saturday of each month. These 3rd Saturday Restoration days focus on the coastal sage scrub areas in the upper canyon. On Saturday, August 19, volunteers from the Banning Ranch Conservancy assisted in non-native plant removal activities.
- On August 31st, the consultant for the Master Plan update, MIG, continued the Community Outreach phase of the project by hosting a Fairview Park Master Plan Update Community Workshop. Participants had interactive discussions to share input and feedback about their visions for Fairview Park.

❖ Adult Sports

• Adult Sports – August

- Adult Softball League Operated by Major League Softball
 - Adult Softball takes a break due to the Rest and Renovation schedule for the regular field maintenance.
 - Fall 2023 Season begins September 17.
- o Adult Basketball League Operated by City Staff
 - Summer 2023 Season began July 10 September 18
 - Monday nights were enrolled with 6 teams and Wednesday nights were enrolled with 6 teams with a total 125 participants enrolled. Senior Softball League – Operated by City Staff
- Senior Softball League Operated by City Staff
 - Senior Softball takes a break due to the Rest and Renovation schedule for the regular field maintenance.
 - Fall 2023 Season begins September 23.

Fields

Field Usage	Jan.	Feb.	Mar.	April	May	June	July	Aug.
# of Organizations	45	48	48	48	48	48	48	48
Hours	7,705	14,241	24,385	26,027	77,983	26,124	11,265.75	12,601

Park Reservations

	August 2023						
Park Location	Permits Issued		Park Location	Permits Issued			
Del Mesa	5		Smallwood	2			
Estancia	8		TeWinkle	13			
Heller	2		Vista	2			
Shiffer	5		Wakeham	11			

❖ Youth Programs - Summer

• Camp Mini Explorers

- o Fee-based program from June 12, 2023-July 21, 2023
- Held at Balearic Community Center in 2 classrooms
- Registration began on May 8, 2023

Age (Days)	Capacity	Enrolled
4-5 year old (M/W/F)	40	40
3-4 year old (T/Th)	40	35

Summer Camp Costa Mesa

- Fee-based program during NMUSD's summer recess
- Held at Estancia Park
- o Registration began on May 8, 2023

Week #	Capacity	Enrolled
1 (June 12-June 16)	90	90
2 (June 19-June 23)	90	90
3 (June 26-June 30)	90	90
4 (July 3-July 7)	90	67
5 (July 10-July 14)	90	90
6 (July 17-July 21)	90	86
7 (July 24-July 28)	90	70
8 (July 31-August 4)	90	85
9 (August 7-August 11)	90	90

Summer R.O.C.K.S Program

- Free resident summer program from June 12, 2023 August 18, 2023
- Held at Balearic Community Center and Downtown Recreation Center
- Registration began on May 8, 2023

Balearic Community Center	Enrolled
Session 1 (June 12-July 14)	307
Session 2 (July 17-August 11)	310
Session 3 (August 14-August 18)	314
Downtown Recreation Center	Enrolled
Session 1 (June 12-July 14)	95
Session 2 (July 17-August 11)	109

Teen Camp

- Fee-based program during NMUSD's summer recess
- Held at Downtown Recreation Center

Week#	Capacity	Enrolled
1 (June 12-June 16)	27	18
2 (June 19-June 23)	27	15
3 (June 26-June 30)	27	21
4 (July 3-July 7)	27	22
5 (July 10-July 14)	27	21
6 (July 17-July 21)	27	25
7 (July 24-July 28)	27	27
8 (July 31-August 4)	27	26
9 (August 7-August 11)	27	26

Youth Sports – Happy Feet Running Club

- Free program teaching short and long-distance running techniques
- o Practices held at Balearic and Fairview Parks
- o Season: June14 August 5, 2023

Grade level	Capacity	Enrolled
1st - 8th Grade	60	60

- Season ended with a 5K Fun Run at Fairview Park
- 45 runners participated and received finishing medals
- Fastest time set at 22:26:80 by a 6th grade participant
- Lunch was provided by Frank's Philadelphia

❖ Youth Programs

• L.E.A.P. Program

- Fee-based program from August 21, 2023 May 24, 2024
- Held at Balearic Community Center in 2 classrooms
- Operates Monday Friday for all ages
- Registration began on July 17, 2023

Age (Days)	Capacity	Enrolled
4-5 year old (M/W/F)	20	18
3-4 year old (T/Th)	20	18

• R.O.C.K.S Afterschool Program

- o Fee-based program from August 22, 2022 June 9, 2023
- Registration open now for nine (9) NMUSD school sites
 - No enrollment capacity

School Site	Enrolled
Adams	39
California	112
College Park	49
Davis	180
Killybrooke	49
Paularino	26
Sonora	39
Victoria	53
Whittier	29

• Teen Program - June

- o Free afterschool care for 7th 12th grades from August 21, 2023 June 6, 2024
- o Teen Centers at TeWinkle Middle School and Downtown Recreation Center (DRC)

 Offers shuttle transportation from Ensign Inter./Newport Harbor High School to the DRC Teen Center and Save Our Youth (SOY)

Program Location	Students
Downtown Recreation Center (DRC)	24
TeWinkle Middle School	44
Shuttle Service	Students
Downtown Recreation Center (DRC)	28
Save Our Youth (SOY)	4

❖ Block Parties

2023 Block Party Permit		
Permits Issued for 4 th of July Holiday	9	
Permits Issued for Labor Day	1	

❖ Special Event Permits

August	
Total Permits Issued for 2023	41
Permits Issued for August	6
Permits at City Facilities	5
Permits at Private Commercial Property	1
Pending Permits on TESSA	3

❖ Film Permits

August	
Total Permits Issued for 2023	21
Permits issued for August	3
Permits at City Facilities	0
Permits at Private Commercial Property	3
Pending Permits on TESSA	1

Upcoming Events	Dates	Location
Hispanic Heritage Month Event	Saturday, September 23	Lions Park Event Lawn
Senior Center Health Fair	Wednesday, September 27	Senior Center
All Abilities Coffee and Conversation	Saturday, September 30	TeWinkle Park
Symphony on the Go!	Saturday, September 30	TeWinkle Park
Scarecrow Festival	Saturday, October 14	Lions Park Event Lawn
Art Crawl Experience #2	Saturday, October 21	City Hall
Barktoberfest	Saturday, October 21	TeWinkle Park
ARTventure Juried Art Exhibition	October 27 – November 5	Norma Hertzog Community Center (NHCC)
Free Park Performances	Saturday, October 28	Lions Park Event Lawn
Trunk or Treat	Saturday, October 28	Ikea
ARTventure – Community	Saturday, October 28	NHCC
ARTventure – Awards Ceremony	Saturday, October 28	OCMA