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STAFF REPORT

Date: January 11, 2024

To: TRPA Hearings Officer

From: TRPA Staff

Subject: Elk Point Rehabilitation, 406 Bitlers Road, Douglas County, Nevada, Assessor's Parcel Number (APN) 1318-16-801-001, TRPA File Number ERSP2023-0365

Requested Action:

Hearings Officer action on the proposed project and related findings (Attachment A) based on this Staff Report and the Draft Permit (Attachment B).

Summary and Staff Recommendation:

The applicant is proposing a rehabilitation of the Elk Point inland harbor and associated structures. The project includes maintenance dredging, dock and boat slip replacement and reconfiguration, boat ramp replacement and modification, sheet pile wall replacement and modification, beach deck replacement and modification, and fence removal, addition, and replacement. Staff recommends that the Hearings Officer make the required findings and approve the proposed project subject to the special conditions in the draft permit.

Project Description & Background:

The applicant is proposing maintenance dredging and rehabilitation of shorezone structures in the Elk Point inland harbor, located at 406 Bitlers Road, Douglas County. The subject parcel (APN 1318-16-801-001) is currently occupied by the harbor and a community beach serving Homeowners' Association members.

Though Elk Point is not recognized by TRPA as a marina, the standards for development of marinas were applied to the review of this project because the structures at Elk Point most closely resemble a marina, especially being in close proximity. Elk Point's exception was due to it serving Homeowner Association members, not the public. The potential environmental impacts of this project are best reviewed and mitigated by applying the same standards used for marinas (TRPA Code section 84.6). TRPA Code of Ordinances outside of the marina section would not adequately address the project, as proposed by the applicant.

If approved by Hearings Officer, the permit would authorize:

1. Maintenance Dredging – The marina mouth and inner harbor were approved for new dredging in the 1990s. Per TRPA Code of Ordinance 84.9.2.C, maintenance dredging is allowable only within the footprint of previously approved dredging. The applicant is proposing to dredge to a depth of 6,220 feet Lake Tahoe Datum and within the

footprint of that approved by previous maintenance dredging permits. Maintenance dredging is necessary to allow for continued operation of the harbor as sand incursion has limited boater's access to the water by means of the existing boat ramp within the harbor. Maintenance dredging will decrease prop turbidity while improving boater safety and access. Similar maintenance dredging was approved at Elk Point in TRPA file number ERSP2018-0487.

2. Dock Replacement and Reconfiguration – The existing floating dock and boat slips at Elk Point are nearing the end of their design life. The applicant proposes to rebuild and reconfigure the docks to improve boater safety, accommodate larger vessels, and improve accessibility. The proposed design would maintain the existing 40 boat slips and approval of the permit would not include additional moorage. The proposed design would improve compliance with the Americans with Disabilities Act (ADA) by having two ADA-accessible boat slips. The proposed design meets the development standards for boats slips in marinas, TRPA Code of Ordinances 84.6.3.C.2.
3. Sheet Pile Wall Replacement and Modification – The applicant proposes the in-kind replacement of an existing corroding sheet pile wall that is situated between existing breakwater and floating docks. The current sheet pile wall is deteriorating, allowing the migration of sand into the harbor. Sheet pile replacement will reduce the need for maintenance dredging within the harbor. The applicant also proposes to reinforce the southernmost portion of the sheet pile wall with a semi-dynamic revetment on the lakeward side of the wall. This will include 76 feet and 9 inches of stacked boulder and rock located within one foot of the sheet pile wall to improve the baseline conditions of its performance. The revetment will dissipate wave energy prior to contact with the sheet pile wall, improving longevity and reducing sand incursion inside the harbor. This modification creates no additional shelter within the harbor.
4. Boat Ramp Replacement and Modification– This project includes the replacement of an existing boat ramp composed of deteriorating concrete. The proposed design would improve boater safety and improve access to ADA compliant boat slips by lowering the ramp's grade from 18% to 15% and including a section of new coverage to facilitate access from the drive/parking lot to the dock gangway. The dock and boat slips are approved structures located in the nearshore and foreshore, allowing TRPA to authorize the 120 square feet of new coverage in land capability district 1b (TRPA Code of Ordinances 85.5.4). The draft permit conditions that the 120 square feet of new coverage be mitigated at a ratio of 1.5:1 by retiring on-site banked coverage or through the transfer of off-site coverage in the same land capability district (special condition 3.B.vii).
5. Fence Replacement and Modification – The proposed design includes replacing existing cyclone (chain-link) fencing above the High-Water line of Lake Tahoe with hog-wire fencing. A portion of existing fencing below the High-Water line of Lake Tahoe is proposed to be removed. The fencing removal and replacement meets the requirements of TRPA Code of Ordinances 84.8.4—Fences.
6. Beach Deck Modification – The proposed design includes relocating a staircase access for an existing beach deck. The area of staircase will not change and includes the

relocation of 17 square feet of land coverage in land capability 1b. The relocation of coverage requires mitigation at a 1.5:1 ratio. As such, nine square feet of coverage will be retired from the project area's existing banked land coverage in land capability 1b. The staircase relocation meets the requirements of TRPA Code of Ordinances 30.4.4—Relocation of TRPA-Verified Existing Land Coverage.

Issues and Concerns:

Maintenance Dredging and Prevention of aquatic invasive species (AIS) Spread: The inner harbor of Elk Point is known to contain invasive aquatic plants. In September 2023, invasive New Zealand mudsnails were discovered in Lake Tahoe. TRPA staff recommends a number of conditions for approval to mitigate the potential spread of AIS during maintenance dredging and other elements of the proposed design that require disturbance to the Lake's substrate:

1. The proposed design includes dredged spoil materials being used for beach replenishment to the north of the harbor. TRPA staff recommends that beach replenishment not be authorized as part of this project.
2. As conditioned in the draft permit, prior to permit acknowledgment the applicant would be required to consult TRPA AIS specialist to identify an appropriate methodology for AIS surveys prior to, during, and after dredging. If at any time AIS surveys positively identify the presence of New Zealand mudsnails, all dredging spoils thereafter would be required to be kept in sealed containers until their disposal.
3. In coordination with TRPA AIS specialists, Elk Point had previously installed a bubble curtain at the harbor entrance to ensure aquatic invasive plants could not be spread outside of the harbor by boats. The bubble curtain is not currently operational, and the draft permit would require its repair and include stipulations that ensure it is operational at key times during the project—where risk of AIS spread is at its greatest. The applicant would be required to conduct daily skimming for floating plant fragments within the harbor.
4. Approval of the draft permit would require that all dredged spoil material be dewatered in a designated area with protections to ensure that return flows, plant fragments or New Zealand mudsnails could not be reintroduced to Lake Tahoe. Following dewatering, the spoil material would be disposed of at a TRPA approved location outside of the Lake Tahoe Basin. The applicant will be required to notify any agencies with jurisdiction over the disposal site that the spoils potentially contain AIS. The applicant will be required to seek all applicable approvals from said agencies.

Minor Marina Project Environmental Improvements: TRPA Code of Ordinances 84.6.2.B requires five environmental improvements be made at marinas for TRPA to approve a minor marina project. The applicant has pursued all applicable improvements, however, three improvements have yet to be finalized through no fault of the applicant. TRPA staff recommends these improvements be finalized prior to permit acknowledgment or construction commencement, as outlined in the draft permit conditions.

This includes obtaining a Clean Marina Certification recognized by TRPA. The applicant has produced a draft Clean Marina manual and requested that Clean Marina staff visit the property to certify the harbor. Weather delays and Clean Marine staff availability have delayed this process. Certification would be required prior to the applicant receiving a passing pre-grading inspection and the commencement of construction.

A second environmental improvement requires that the applicant receive approval from TRPA for an aquatic invasive species control plan. The applicant has provided an AIS control plan as part of the application. The draft permit would require that the control plan be approved by TRPA prior to permit acknowledgement.

The third, not yet finalized, environmental improvement is a permit with Nevada Division of State Lands. The applicant has applied for a permit, however, typically State Lands review of projects begins following the issuance of TRPA permits. A State Lands permit would be required prior to the applicant receiving a passing pre-grading inspection and construction commencement.

Environmental Review:

The applicant completed an Initial Environmental Checklist (IEC) to assess the potential environmental impacts of the project. No significant long-term environmental impacts were identified because the proposed project complies with the existing Code of Ordinances and incorporates required mitigation. The IEC is provided as Attachment C.

Approval of the draft permit would include authorization for the proposed construction methodology. Maintenance dredging and sheet piling replacement would be performed from an amphibious lark vehicle, barge with an excavator, or land-based excavator depending on which contractor's bid is selected for the project. Turbidity curtains are proposed to contain sediment movement within the project area and be present during all construction below the High-Water Line of Lake Tahoe. All upland construction access will include erosion control fencing and vegetation protection.

The project parcel has a BMP certificate in good standing with TRPA and no updates are needed to retrofit the parcel, outside of temporary construction best management practices. The applicant has provided an AIS control plan and will be required to coordinate with TRPA staff for its approval. A Clean Marina certification and Nevada Division of State Lands permit are being pursued. The project does not require a NPDES permit with the Lahontan Regional Water Control Board as it is located in Nevada, outside of the Agency's jurisdiction.

Approval of the draft permit would authorize updates to the previously approved baseline scenic assessment for the parcel (TRPA file # ERSP2018-0487). APN 1318-16-801-001 is split by two Shoreline Scenic Resource Units: #30—Edgewood and #29—Zephyr Cove. The entirety of the proposed project takes place within Shoreline Unit #30—Edgewood, which is not in attainment with TRPA scenic threshold standards. The Unit is categorized as visually sensitive, meaning there can be no degradation to current scenic character or value. The Lake Tahoe Basin Scenic Resource Inventory describes background views from Unit #30 as forested mountains and ridges, and conical peaks. This project will not affect background views due to the relative low elevation of the project area. Shoreline views are described by the Lake Tahoe Basin Scenic Resource Inventory as including the existing shoreline structures at Elk Point. Because existing

structures are accounted for in the inventory and the proposed design reduces the net visible mass of shoreline structures, approval of the draft permit would not result in a degradation of scenic character or value in Unit #30.

Sheet Pile Wall Repair and Modification: The proposed semi-dynamic revetment will be located one foot lakeward of the existing southern portion of sheet pile wall. The sheet pile wall's effects on littoral drift were accounted for in a 2010 study conducted by Wavezone Consulting and Analysis. The study was re-analyzed by co-author, Randy Moore, in 2022. Randy Moore states that the harbor and channel (and their protective structures) have performed as expected since the 2010 study. Because the proposed revetment would be located lakeward of and reinforce the existing sheet pile wall, it is not expected to create significant variance to the previously modeled littoral drift. The semi-dynamic revetment's effects on littoral drift in the harbor and to nearby parcels is de minimis in nature.

The existing sheet pile wall is situated landward of the proposed semi dynamic revetment and was accounted for in a scenic assessment of the project site (TRPA file # ERSP2018-0487). Because the proposed revetment adds visible mass to an area in which visible mass was already accounted for, there are no negative changes to previously analyzed scenic values. The revetment is accounted for in the scenic analysis provided by the applicant for this project. The natural coloring and material of the revetments composition (boulders) will be an improvement over the sheet pile wall which is currently visible from Lake Tahoe and a southern perspective. The semi-dynamic revetment would modify the sheet pile wall in a manner that improves baseline conditions (scenic and littoral drift) of the existing sheet pile wall.

Public Comment:

A notice of public hearing was mailed to all property owners within 300 feet of the project parcel boundaries on November 19, 2023. As of the posting of this staff report, no comments were received.

Regional Plan Compliance:

The proposed project is consistent with the Goal and Policies of the Regional Plan, Shorezone Subelement, in that it complies with the design standards and includes mitigation to ensure no negative impacts to the environmental thresholds. The proposed project is maintenance dredging, reconfiguration of mooring structures, and the replacement and modification of existing shoreline structures, which are allowed by the Regional Plan along the shoreline of Lake Tahoe.

Required Actions:

Staff recommends that the Hearings Officer take the following actions, based on the staff report:

- 1) Approve the findings contained in this staff summary, and a finding of no significant environmental effect (Attachment A); and
- 2) Approve the project, based on the staff summary, and record evidence, subject to the conditions contained in the attached Draft Permit (Attachment B).

Contact Information:

For questions regarding this agenda item, please contact Zach Davis, Assistant Environmental Specialist, at 775-589-5249 or zdavis@trpa.gov. To submit a written public comment, email publiccomment@trpa.gov with the appropriate agenda item in the subject line. Written comments received by 4 p.m. the day before a scheduled public meeting will be distributed and posted to the TRPA website before the meeting begins. TRPA does not guarantee written comments received after 4 p.m. the day before a meeting will be distributed and posted in time for the meeting.

Attachments:

- A. Required Findings
- B. Draft Permit
- C. IEC
- D. Proposed Plans

Attachment A
Required Findings

Required Findings/Rationale
Elk Point Rehabilitation and Maintenance Dredging

Required Findings: The following is a list of the required findings as set forth in Chapter 3, 4, 30, 33, 61, 66, 80, 81, 83, 84, and 85 of the TRPA Code of Ordinances. Following each finding, Agency staff has indicated if there is sufficient evidence contained in the record to make the applicable findings or has briefly summarized the evidence on which the finding can be made.

1. Chapter 3 – Required Findings:

- a) The proposed project could not have a significant effect on the environment and a finding of no significant effect shall be prepared in accordance with Rules of procedure Section 6.6.
- b) The project could have a significant effect on the environment but, due to the listed mitigation measures that have been added to the project, the project could have no significant effect on the environment and a mitigated findings of no significant effect shall be prepared in accordance with Rules of Procedure Section 6.7.
- c) The proposed project may have a significant effect on the environment and an environmental impact statement shall be prepared in accordance with this chapter and Rules of procedure, Article 6.

The applicant has completed the TRPA initial environmental checklist (IEC) and has submitted the checklist as part of the project application. Based on the information submitted in the IEC. The proposed project could not have a significant effect on the environment and a finding of no significant effect shall be prepared in accordance with TRPA's Rules of Procedure.

2. Chapter 4 – Required Findings:

- a) The project is consistent with and will not adversely affect implementation of the Regional Plan, including all applicable Goals and Policies, Plan Area Statements and maps, the Code and other TRPA plans and programs.

Based on the information provided in this staff report, the project application, the Initial Environmental Checklist (IEC), and Article V(g) Findings Checklist, there is sufficient evidence demonstrating that the proposed project is consistent with and will not adversely affect implementation of the Regional Plan, including all applicable Goals and Policies, Plan Area Statement 070B - RABE, the Code, and other TRPA plans and programs.

- b) The project will not cause the environmental threshold carrying capacities to be exceeded.

TRPA staff has completed the "Article V(g) Findings" in accordance with Chapter 4, Subsection 4.3 of the TRPA Code of Ordinances. All responses contained on said checklist indicate compliance with the environmental threshold carrying capacities. Also, the applicant has completed an IEC. No significant environmental impacts were

identified, and staff has concluded that the proposed project will not have a significant effect on the environment. A copy of the completed V(g) Findings are available at TRPA and will be made available at the Hearings Officer hearing.

- c) Wherever federal, state or local air and water quality standards applicable for the Region, whichever are strictest, must be attained and maintained pursuant to Article V(g) of the TPRA Compact, the project meets or exceeds such standards.

The project area has a BMP Certificate. Although the threat of discharge is minimal, the contractor will always have a spill containment kit onsite and equipment used will adhere to best management practices to impacts to Lake Tahoe. The applicant is also required to obtain separate approval for the project from all applicable agencies with jurisdiction to ensure the project will meet or exceed all federal, state, or local standards. As a result, upon completion of construction, the project should have no significant impact upon air or water quality standards.

3. Chapter 30 – Required Findings:

- a) The relocation is to an equal or superior portion of the parcel or project area, as determined by references to the following factors:
1. Whether the area of relocation already has been disturbed
 2. The slope of and natural vegetation on the area of relocation
 3. The fragility of the soil on the area of relocation
 4. Whether the area of relocation appropriately fits the scheme of use of the property
 5. The relocation does not further encroach into a stream environment zone, backshore, or the setbacks established in the Code for the protection of stream environment zones or backshore
 6. The project otherwise complies with the land coverage mitigation program set forth in section 30.6

Finding 30.4.4.B The area from which the land coverage was removed for relocation is restored in accordance with Subsection 30.5.3.

Finding 30.4.4.C. The relocation is not to Land Capability Districts 1a, 1b, 1c, 2, or 3 from any higher numbered land capability district.

Finding 30.4.4.D.1 If the relocation from one portion of a stream environment zone to another portion, there is a net environmental benefit to the stream environment zone.

Finding 30.4.4.D.2 Retirement of land coverage in the affected stream environment zone in the amount of 1.5:1 of the amount of land coverage being relocated within a stream environment zone; or

Finding 30.4.4.D.3 For projects involving the relocation of more than 1,000 square feet of land coverage within a stream environment zone, a finding, based on a report prepared by a qualified professional, that the relocation will improve the functioning of the stream environment zone and will not negatively affect the quality of existing habitats.

The proposed project will relocate a staircase providing access to the existing beach deck. The existing and proposed location exhibit equal soil characteristics (beach sand). The project will relocate and retire coverage as follows: The existing 17 square feet of

steps on the beach deck will be removed. New steps, also 17 SF, will be constructed on the northern side of the beach deck as shown on Sheet SP1. To mitigate this relocation in land capability 1b, 9 SF of coverage will be retired from 1b banked coverage that is available to the project area.

4. Chapter 33 – Required Findings:

- a) TRPA may approve grading after October 15 if TRPA finds either that an emergency exists and the grading is necessary for the protection of public health or safety, or that the grading is for erosion control purposes or protection of water quality.

Not applicable—no grading after 10/15 is proposed as part of the project.

5. Chapter 61 – Required Findings:

- a) Before tree-related projects and activities are approved by TRPA, TRPA shall find, based on a report from a qualified forester, that the project or activity is consistent with this chapter and the Code. TRPA may delegate permit issuance to a federal, state, or other qualified agency through a memorandum of understanding.

The project proposes removal of one existing 12” pine and one 30” pine to accommodate the sheet pile wall reconstruction. There is no feasible alternative that would avoid removing the trees. The tree’s removal (and visual screening) has been accounted for in the applicant’s submitted visible mass calculations.

6. Chapter 63 – Required Findings:

- a) The following actions are prohibited:

1. The transport or introduction of aquatic invasive species into the Lake Tahoe region.
2. The launching of any watercraft or landing of any seaplane contaminated with aquatic invasive species into the waters of the Tahoe region.
3. The launching, or attempting to launch, of any motorized watercraft into the waters of the Lake Tahoe region without an inspection by TRPA or its designee, to detect the presence, and prevent the introduction of, aquatic invasive species. Non-motorized watercraft and seaplanes are subject to inspection and are included in this provision if determined necessary by TRPA or its designee.
4. The provision of inaccurate or false information to the TRPA or persons designated to conduct inspections pursuant to subsection 63.4.2.
5. The alteration, modification or unauthorized use of any inspection seal or other device used by TRPA or its designee to indicate that a watercraft or seaplane last entered the waters of the Lake Tahoe region.

The draft permit requires that the applicant inspect and decontaminate all dredging gear/equipment prior to and after dredging. The applicant is also required to repair a AIS

prevention bubble curtain to good working order, smooth substrate following construction activities to reduce the likelihood of invasive aquatic plant growth, and submit a methodology for surveying and photographing the dredging area to TRPA for approval. TRPA facilitates a Shoreline Review Committee with agencies that have jurisdiction in the shorezone and lakezone of Lake Tahoe. Those agencies are aware of the project and provided comments have been incorporated in the draft permit's conditions for temporary BMPs concerning maintenance dredging and dewatering of spoil material.

7. Chapter 66 – Required Findings:

- a) The project shall not cause a decrease in the 1982 roadway or shoreline travel route ratings as shown in Tables 13-6 and 13-7, respectively, of the Study Report for the Establishment of Environmental Threshold Carrying Capacities, October 1982. The criteria for rating travel routes as identified in the referenced study report and as further explained in the report entitled A Scenic Analysis of Principle Travel Routes In The Lake Tahoe Region, 1970, shall be used to determine if a project will cause a decrease in the numerical rating. For projects in the shoreland, Section 66.3 shall be used to determine if it will contribute to a decrease in the numerical rating for a shoreline travel route rating.

Because the existing development at Elk Point is accounted for in the Scenic Resource Inventory and there is a net reduction of its shoreline structure's visible mass, this approval does not result in the degradation of scenic character or value in Unit #30—Edgewood. Shorezone structures within the parcel have an existing visible mass of 1,873 square feet. The project as approved by this permit will result in 1,500 square feet of visible mass—a net reduction of 373 square feet. The existing and proposed structures in the shoreland have a cumulative contrast rating of 24, meeting TRPA Code of Ordinance Level 4 scenic mitigation requirements. A portion of the rock breakwater and semi-dynamic revetment will be visible above the high-water line of Lake Tahoe and has been analyzed as part of the project's scenic assessment. The portions of fencing being replaced with hog wire railing are above the high-water line and included in the contrast ratings.

8. Chapter 80 – Required Findings:

- a) TRPA must analyze the required environmental findings pursuant to Chapter 3, Environmental Documentation. In addition, such environmental findings must demonstrate that the project will not adversely impact: (1) littoral processes; (3) fish spawning; (3) backshore stability; or (4) on-shore wildlife habitat, including wildfowl nesting areas.

A 2010 littoral drift study was conducted and a resulting reconfiguration of the harbor was designed to not adversely affect littoral drift and shorezone erosion. The study's co-author, Randy Moore, re-analyzed the structures performance since the 2010 study. The

structures and resultant effects to littoral processes performed as expected. The proposed project would not alter the design prescribed within the 2010 study. The sheet pile wall modification proposed has a negligible effect on littoral processes because the area of new semi-dynamic revetment is adjacent to the existing sheet pile wall. The sheet pile wall was analyzed as part of the 2010 study.

The project area is identified by TRPA fish habitat mapping as marginal habitat. As such, the project requires no fish habitat mitigation for substrate disturbance.

All construction activity will be accessed on existing paved surfaces, floating barges or amphibious vehicles, or on TRPA approved mats designed to limit disturbance to unpaved surfaces. No other off pavement vehicular access is authorized in the draft permit. There is no known on-shore wildlife habitat identified at the project site.

- b) TRPA must find that there are sufficient accessory facilities to accommodate the project.

The applicant proposes no expansion of use beyond that already permitted. The facilities are adequate to accommodate current uses.

- c) TRPA must find that the project is compatible with existing shorezone and lakezone uses or structures on, or in the immediate vicinity of, the littoral parcel; or that modifications of such existing uses or structures will be undertaken to assure compatibility.

The proposed project rehabilitates existing uses that are compatible with surrounding littoral parcels. The 070B RABE plan area statement recognizes the existing outdoor recreation facilities at Elk Point and states that, "existing recreation uses should continue." The plan area statement lists beach recreation as an allowed use and marinas as special use. Within the plan area statement boundaries is the Nevada Beach and Campground, which shares a beach recreation use. The existing uses in the foreshore, nearshore, and shorezone at Elk Point are by nature water-dependent.

- d) TRPA must find that measures will be taken to prevent spill or discharges of hazardous materials.

The draft permit requires that a spill kit be kept on site at all times. The contractor will be licensed and prepared for a hazardous spill, if one were to occur.

- e) Construction and access techniques will be used to minimize disturbance to the ground and vegetation.

Construction access is designed to minimize disturbance to the ground and vegetation. Turbidity curtains will be installed as shown on the attached plans during each relevant phase of the project. Equipment access will be limited to designated areas and protected

with temporary best management practices where applicable. This includes erosion control fencing, and erosion control mats for vehicle access.

- f) TRPA must find that the project will not adversely impact navigation or create a threat to public safety pursuant to the determination of agencies with jurisdiction over the navigable waters in the Basin.

The project will not result in an overall change in the harbor footprint and no navigation risk is posed. No navigation risk has been identified at the existing harbor, nor was identified by the United States Coast Guard at the Shoreline Review Committee (SRC).

- g) TRPA must find that it has solicited comments from those public agencies having applicable jurisdiction over the lakezone, shorezone, and lagoon, and that all comments received from such agencies were considered prior to taking action on the project.

TRPA facilitates a monthly Shoreline Review Committee (SRC) meeting with agencies who have jurisdiction in the shorezone and lakezone of Lake Tahoe. The project was presented to SRC on November 16, 2023. No comments received by those agencies required any additional mitigations beyond what has already been required by the draft permit. The applicant is also required to obtain all applicable authorization from those agencies.

- h) The project, and the related use, is of such a nature, scale, density, intensity, and type to be appropriate for the project area, and the surrounding area. The project, and the related use, will not injure or disturb the health, safety, environmental quality, enjoyment of property, or general welfare of the persons or property in the neighborhood, or in the Region. The project, and the related use, will not change the character or the neighborhood, detrimentally affect or alter the purpose of any applicable plan area statement, community, redevelopment, specific, or master plan.

The harbor, boat launching facilities, and breakwaters are special uses. Beach recreation, boat ramps, and floating docks and platforms are allowed uses. The uses fit the beach and recreation surroundings. The project will increase the safety of boat navigation by maintaining the water depth and decreasing sediment buildup from subsequent dredging. This will decrease propeller turbidity in the marina over time. The project will replace failing infrastructure which is currently allowing sediment to enter the harbor and will prevent possible catastrophic failures of sheet piles in the future. The proposed project is necessary to repair failing structures and provide for ongoing safe use of the marina and will not change the character of the neighborhood.

- i) The amount of land coverage is the minimum that is necessary when all Thresholds are taken into consideration to provide access to an approved or an existing structure or use located in the nearshore or foreshore.

The land coverage is the minimum necessary to provide access to an approved existing use in the nearshore/foreshore. The only net increase in coverage results from the

addition of 120 square feet of new coverage in land capability 1b from the drive/parking lot and boat ramp to the dock gangway, which is necessary to provide access to an approved structure in the nearshore and foreshore (dock and boat slips) per TRPA Code 85.5.4. The new 1b coverage is required to be restored at a rate of 1.5:1 (see finding 12.a).

9. Chapter 81 – Required Findings:

- a) The project to which the use pertains, is of such a nature scale, density, intensity, and type to be an appropriate use for the parcel on which, and surroundings area in which, it will be located.

The project area is located in Plan Area Statement 070B—RABE, which is characterized as having existing recreational uses and emphasizes the need for improvements to recreational facilities. The Elk Point harbor was built in the 1960's and it's use as a private recreational facility has been maintained. The project will increase boater safety and navigation by maintaining the water depth and decreasing sediment buildup. The project is necessary to prevent catastrophic failure of deteriorating shorezone structures. Temporary construction BMPs are proposed and required by the draft permit to protect land, water, and air resources.

10. Chapter 83 – Required Findings:

- a) Projects shall not be permitted in the backshore unless TRPA finds that such project is unlikely to require the cliff area to be mechanically stabilized or that the project will not accelerate cliff crumbling, beach loss or erosion.

The proposed project area is located in Shorezone Tolerance District 7, which exhibits comparatively level shorezone underlain by morainic and alluvial materials with slopes of zero to nine percent. The proposed project will not require the backshore to be mechanically stabilized.

- b) Vehicular access to the shoreline shall not be permitted except where TRPA finds that such access will not cause environmental harm.

Vehicular access is limited to those delineated within the site plans. This includes existing paved surfaces and one unpaved path, atop TRPA approved matting surrounded by erosion control fencing.

11. Chapter 84 – Required Findings:

- a) No Jetty or breakwater shall be a solid or nearly solid structure unless the applicant demonstrates that the structure will not interfere with littoral processes, cause shoreline erosion, or harm water quality or clarity; and the structure is a necessary part of an approved marina project; or the structure is necessary to protect the safety of persons using a public boat launching facility.

The addition of a semi-dynamic revetment to the southern existing portion of sheet pile wall helps prevent wave corrosion of the sheet pile wall proposed to be replaced as part of the project. This will benefit the safety and accessibility of boaters at the launching facility. The semi-dynamic revetment is designed in a fashion that is not solid and will be sufficient to cause no additional interference to littoral drift, shoreline erosion, or harm to underlying land, water quality and clarity.

- b) New dredging shall be permitted in association with the following facilities only where previous approved uses exist, provided all environmental impacts shall be mitigated:
1. Legally existing marinas within areas previously dredged under the non-degradation standard of Section 94.9.3.F and within areas not previously dredged only where found to be beneficial by TRPA to existing shorezone conditions, water quality, and clarity;
 2. Essential public health and safety facility; and 3. Public boat ramps, provided the applicant demonstrates that new dredging shall increase the functionality of the boat ramp.

The project does not propose new dredging. All maintenance dredging proposed is within the previously approved dredging footprint.

- c) Maintenance dredging shall be allowed according to the following provisions:
1. The maintenance dredging is located in a facility that has been previously dredged;
 2. The applicant demonstrates that dredging is necessary to maintain an existing use; and
 3. The maintenance dredging is limited to the previously dredged footprint.

All dredging will occur where dredging has been previously approved and dredging is limited to the previously dredged footprint. The dredging is necessary to maintain safe access to the harbor and boat launching facility (boat ramp).

- d) Fences
1. Fences shall be 90 percent open and shall be maintained free of debris.
 2. Fences shall not be placed lakeward of the highwater line, unless TRPA determines that such a location is necessary.
 - I. To protect the health or safety of the general public or to prevent trespass on private property from adjacent areas of public access in the shorezone, but only if a TRPA-approved signage plan has proven ineffective to prevent trespass to protect public health and safety and provided such fence is approved by agencies having jurisdiction; or
 - II. To protect sensitive species or identified cultural resources.
 3. Any fence approved below the highwater line shall be designed so that it can be retracted or telescoped landward. Such a fence must be telescoped landward whenever lake levels rise in order to prevent it from extending into the Lake.
 4. A fence extending below the highwater line that was legally existing prior to December 24, 2018 may be repaired or replaced provided the fence telescopes landward or is modified to so telescope, and is telescoped

landward whenever necessary in order to prevent the fence from extending into the Lake.

The proposed modification from cyclone (chain-link) fencing to hog-wire fencing occurs landward of the highwater line. A section of fence lakeward of the highwater line is proposed to be removed. The hog-wire fencing maintains 90 percent openings.

12. Chapter 85 – Required Findings:

- a) Land coverage and land disturbance may be permitted in the backshore to provide access to an approved or legally existing structure or use located in the nearshore or foreshore, provided TRPA finds that the amount of land coverage proposed is the minimum necessary to provide access to the structure or use and the impacts of coverage and disturbance are mitigated in the manner prescribed in subparagraph 85.5.1.E.

The area of new land coverage in land capability 1b is the width of the dock gangway in which it leads to and provides access from the boat ramp area and drive/parking lot to dock structure. The docks and boat slips are approved structures existing in the nearshore and foreshore. The coverage is the minimum necessary to provide access to the ADA compliant gangway and boat slips. The draft permit conditions that the 120 square feet of new 1b coverage will be restored at a rate of 1.5:1, as required by subparagraph 85.5.1E. The permittee will be required to mitigate 60 square feet of 1b coverage by either retiring banked coverage on the project area or by transferring in TRPA verified coverage from a separate site.

- b) In imposing special conditions of approval on projects in the backshore, TRPA shall be guided by an appraisal of the nature of the backshore, as set forth in Section 85.1 and 67.3, in relation to the unique characteristics of the project area and shall consider the following objectives:
1. The protection of significant vistas;
 2. Minimizing the visual impact of the proposed project on the shorezone and area surrounding the project;
 3. The preservation of the site and shorezone from environmental harm both during and after construction;
 4. Protection of views of adjoining development; and
 5. Providing sufficient space for proper infiltration of runoff and nutrient uptake through natural process.

The proposed project meets the goals and policies of 85.1 because risk of shorezone destabilization is minimal within Shorezone Tolerance District 7 and construction techniques include temporary best management practices to mitigate potential harm to soil stabilization and vegetation. The potential for scenic impacts is minimal as the project rehabilitates or modifies existing shorezone structures that have been accounted for in the Lake Tahoe Scenic Resource Inventory. All changes to a scenic baseline assessment of the project area have been properly analyzed and updated through the submission of contrast rating sheets and proposed mitigation measures. Surrounding

development will experience no changes to scenic views, nor will significant vistas be altered. The draft permit provides for ongoing requirements of the applicant that would ensure the preservation of the site from environmental harm during and after construction (temporary BMPs and AIS surveying and prevention). Sufficient space for proper infiltration and nutrient uptake through natural processes are accounted for in the project area's existing stormwater BMP improvements (BMP Certificate). Updates to the BMP Certificate and BMP improvements are not needed as a result of this project.

Attachment B
Draft Permit

DRAFT PERMIT

PROJECT DESCRIPTION: Harbor rehabilitation including a breakwater extension, maintenance dredging, dock reconfiguration, sheet pile replacement, boat ramp modification, beach deck modification, and fence modification.

PERMITTEE: Elk Point Country Club Inc.

APN: 1318-16-801-001

COUNTY/LOCATION: Douglas County / 406 Bitlers Rd.

FILE NUMBER: ERSP2023-0365

Having made the findings required by Agency ordinances and rules, TRPA staff approved the project on **January X, 2024**, subject to the standard conditions of approval attached hereto (Attachment S) and the special conditions found in this permit.

This permit shall expire on **January X, 2027** without further notice and the project shall be completed by the expiration date. The expiration date shall not be extended unless the project is determined by TRPA to be the subject of legal action which delayed or rendered impossible the diligent pursuit of the permit.

NO DEMOLITION, CONSTRUCTION, OR GRADING SHALL COMMENCE UNTIL:

- (1) TRPA RECEIVES A COPY OF THIS PERMIT UPON WHICH THE PERMITTEE(S) HAS ACKNOWLEDGED RECEIPT OF THE PERMIT AND ACCEPTANCE OF THE CONTENTS OF THE PERMIT;
- (2) ALL PRE-CONSTRUCTION CONDITIONS OF APPROVAL ARE SATISFIED AS EVIDENCED BY TRPA'S ACKNOWLEDGEMENT OF THIS PERMIT;
- (3) THE PERMITTEE OBTAINS APPROPRIATE COUNTY PERMIT. TRPA'S ACKNOWLEDGEMENT MAY BE NECESSARY TO OBTAIN A COUNTY PERMIT. THE COUNTY PERMIT AND THE TRPA PERMIT ARE INDEPENDENT OF EACH OTHER AND MAY HAVE DIFFERENT EXPIRATION DATES AND RULES REGARDING EXTENSIONS; AND
- (4) A TRPA PRE-GRADING INSPECTION HAS BEEN CONDUCTED WITH THE PROPERTY OWNER AND/OR THE CONTRACTOR.

NO DREDGING SHALL COMMENCE UNTIL:

- (1) A SECOND TRPA PRE-GRADING INSPECTION HAS BEEN CONDUCTED WITH THE PROPERTY OWNER AND/OR THE CONTRACTOR.
- (2) A METHODOLOGY FOR AIS SURVEYING AND PHOTOTOGRAPHY HAS BEEN APPROVED BY TRPA AIS STAFF.
- (3) TRPA APPROVES A LOCATION OUTSIDE OF THE TAHOE BASIN FOR DREDGING SPOIL MATERIAL DISPOSAL.
- (4) ALL GEAR AND EQUIPMENT USED FOR DREDGING HAS BEEN INSPECTED AND DECONTAMINATED AT A LAKE TAHOE AIS INSPECTION STATION

TRPA Executive Director/Designee

Date

PERMITTEE'S ACCEPTANCE: I have read the permit and the conditions of approval and understand and accept them. I also understand that I am responsible for compliance with all the conditions of the permit and am responsible for my agents' and employees' compliance with the permit conditions. I also understand that if the property is sold, I remain co-liable for the permit conditions until or unless the new owner acknowledges the transfer of the permit and notifies TRPA in writing of such acceptance. I also understand that certain mitigation fees associated with this permit are non-refundable once paid to TRPA. I understand that it is my sole responsibility to obtain any and all required approvals from any other state, local or federal agencies that may have jurisdiction over this project whether or not they are listed in this permit.

Signature of Permittee _____ Date _____

PERMIT CONTINUED ON NEXT PAGE

DRAFT

DRAFT PERMIT
APN: 1318-16-801-001
FILE NO. ERSP2023-0365

Security Posted (1): Amount \$ 15,000 Posted _____ Type _____ Receipt No. _____

Security Administrative Fee (2): Amount \$ 152 Paid _____ Receipt No. _____

Notes:

- (1) See special condition 3.C, below.
- (2) See special condition 3.C, below.

Required plans determined to be in conformance with approval: Date: _____

TRPA ACKNOWLEDGEMENT: The permittee has complied with all pre-construction conditions of approval as of this date:

TRPA Executive Director/Designee

Date

SPECIAL CONDITIONS

1. This permit specifically authorizes a rehabilitation of the harbor at Elk Point and includes the following elements:
 - A. Maintenance Dredging - Maintenance dredging is authorized to a depth of 6,220 Lake Tahoe Datum at Elk Point, 406 Bitlers Road, Douglas County. Approximately 1,526 cubic yards of material will be removed from the harbor channel and inner harbor. Due to the known presence of aquatic invasive plant species in the inner harbor and the recent introduction of invasive New Zealand mudsnails in Lake Tahoe, the use of dredged spoil materials for beach replenishment is not approved by this permit. Dredging, dewatering, and disposal of spoil material shall be conducted in a manner that ensures the highest level of mitigation feasible to limit the possibility of aquatic invasive species (hereinafter AIS) spread. As outlined in conditions 2.A and 2.B of this permit, the applicant shall consult TRPA staff to identify appropriate methodology for AIS surveys prior to, during, and after dredging. If at any point AIS surveys yield positive results for the presence of New Zealand mudsnails, all dredging material thereafter shall be kept within sealed containers until its disposal.

This approval includes that dredging operations can be conducted by a long reach excavator or by barge, as proposed by the applicant and depicted on Sheet C2 (TRPA file number ERSP2023-0365). Alternative methods of dredging, such as suction dredging, would further limit the potential for AIS spread. Such methods are encouraged and may be submitted to TRPA prior to permit acknowledgement for approval. All dredging shall occur landward of two 18-millimeter-thick turbidity curtains, as delineated on Sheet C2.

The applicant shall skim for and remove plant fragments within the marina and along the turbidity curtain daily during dredging and prior to removal of the turbidity curtain.

Dewatering of spoil material is authorized to occur in the area delineated on Sheet C2 and labeled as, "proposed marina dredging sand leach area." The dewatering area shall be secured so that no dredged material return flows, plant fragments, or New Zealand mudsnails can be reintroduced to Lake Tahoe.

All dredged spoil material shall be disposed of at a TRPA-approved location outside of the Lake Tahoe Basin, as outlined in special condition 2.B of this permit.

Excavator and truck access to the dredging site shall take place on 10-foot-wide plated mats, surrounded by erosion control fencing, as delineated on Sheet C2. The access plates, paved surfaces, or barge may serve as a staging area for construction equipment and material. No other off-pavement staging is authorized by this permit.

- B. Dock Replacement and Reconfiguration – Existing docks and boat slips are authorized to be replaced as they are reaching the end of their design life. This permit authorizes the reconfiguration of the docks to improve boater safety, accommodate larger vessels, and improve accessibility by installing Americans with Disabilities Act (ADA) access to the dock and two ADA-accessible boat slips. Fort (40) existing boat slips are currently authorized on-site. As proposed the reconfigured dock includes nineteen (19) double-wide boat slips capable of mooring two boats each. Two (2) of the boat slips are designed to accommodate one boat each, as delineated on Sheet C1. This permit does not authorize any additional moorings.

The reconfigured dock shall be attached to sheet piles as delineated on Sheet C6. Dock decking will be composed of non-skid, earth-tone Trex material. Main walkways shall be six feet wide and walkway extensions to the boat slip areas shall be three feet wide along the northern wall and four feet wide along the southern wall. Floating finger extensions (boat slips) shall be two feet wide.

- C. Sheet Pile Replacement and Modification – This permit authorizes the permanent, in-kind replacement of corroding sheet pile walls, which are currently allowing the migration of sand into the harbor, increasing the need for and frequency of maintenance dredging. The sheet piles will be placed approximately 4-5 feet lakeward the existing sheet piles, as there is no feasible way to replace the sheet piles in their existing footprint. This permit does not authorize an expansion to the capacity of the harbor. Construction access may occur by barge, amphibious vehicle, or by land-based vehicles and shall not disturb existing vegetation. If using an amphibious vehicle, access to construction areas shall be restricted to the boat ramp or by water; no launching of the amphibious vehicle from the backshore (other than the boat ramp) is authorized by this permit. All land-based vehicular access shall remain on existing paved or compacted dirt areas, or construction access areas delineated by the site plan.

This permit authorizes 76 feet and 9 inches of semi-dynamic revetment to added lakeward of the exposed southern section of sheet pile wall to dissipate wave energy prior to sheet pile wall contact, dissipate wave rebound, and reduce the movement of beach sands over time. The semi-dynamic revetment would extend landward from the

existing breakwater and will be composed of a central core filled with smaller cobbles and sloped. It shall have sufficient openings to avoid interference with littoral drift. Additional monitoring is not required as part of this permit as previous littoral modeling studies at Elk Point have been consistent with expectations and the extended breakwater is not expected to create changes to sediment movement. This approval allows for the existing breakwater to be re-stacked and added to with new rock or boulder material as needed during the project. Boulder material may not be sourced from the shorezone or lakezone of Lake Tahoe, should be consistent with the existing breakwater coloring, and washed and free of fine sediment prior to placement in the shorezone.

- D. Boat Ramp Replacement and Modification – This permit authorizes the replacement of an existing boat ramp that is currently deteriorating and causing reduced access and safety. This authorization includes the reduction of the boat ramp’s current grade from 18% to 15% and 120 square feet of additional coverage in land capability 1b to provide access from the drive/parking lot to the dock gangway. This permit authorizes that a section of concrete be poured on the landward portion of the boat ramp, with prefabricated sections of concrete being placed below—as shown in site plan sheet C4. The 120 square feet of additional coverage is delineated on Sheet C3, provides access to two ADA compliant boat dock slips. All stormwater BMPs for the boat ramp, delineated in the approved site plans of TRPA file number BMPP2009-0032, must be maintained or replaced to prevent stormwater from flowing down the ramp. This approval requires a conveyance at the transition between the parking lot/drive and boat ramp, directing stormwater to an infiltration facility.
- E. Fence Replacement and Modification – The permit authorizes the replacement of existing cyclone fencing with hog-wire fencing and a new section of hog-wire fencing south of the boat ramp. All new and modified fencing is above the high-water line of Lake Tahoe. Fencing to the north of the existing sheet pile wall that is below the high-water line is authorized for removal and delineated on Sheet SC3. No new fencing below the highwater line is authorized by this permit. TRPA will require the approval of hog-wire fencing material samples as outlined in special condition 3.B.xi of this permit.
- F. Beach Deck Modification – This permit authorizes the relocation of stairs and associated land coverage on an existing beach deck. The stairs will be removed from the west side of the deck and reconstructed on the north side. The modification will not result in any new coverage and includes 17 square feet of relocated coverage within land capability 1b. The relocated coverage in land capability 1b shall be mitigated at a ratio of 1.5:1 (9 square feet) through existing banked coverage on site. With the coverage changes approved by this permit, the remaining banked land coverage in land capability 1b is 143 square feet. Including the 143 square feet of banked coverage, total on site coverage in land capability 1b resulting from this approval is 56,636 square feet.
- G. Modification of Scenic Value/Baseline Assessment – Proposed construction activities are located solely within Shoreline Unit #30 – Edgewood, which is not in attainment with TRPA scenic threshold standards and has a scenic character type of visually sensitive. The proposed project results in a net reduction of the Elk Point shoreline structure’s visible

mass, this approval does not result in the degradation of scenic character or value in Unit #30.

Shorezone structures within the parcel have an existing visible mass of 1,873 square feet. The project as approved by this permit will result in 1,500 square feet of visible mass—a net reduction of 373 square feet. The existing and proposed structures in the shoreland have a cumulative contrast rating of 24, meeting TRPA Code of Ordinance Level 4 scenic mitigation requirements. A portion of the rock breakwater is visible above the high-water line of Lake Tahoe and has been analyzed as part of the project's scenic assessment. The portions of fencing being replaced with hog wire railing are above the high-water line and included in the contrast ratings.

This permit approves vegetative screening on the lakeside of the west and north boat storage building elevations with 12 foot tall native or adapted shrubs. Areas of revegetation are delineated on Sheet SC1.

Completion of this project will not result in reissuance of the BMP certificate.

2. The Standard Conditions of Approval listed in Attachments Q and S shall apply to this permit. Notifying TRPA and a passing pre-grade inspection is required prior to commencement of construction. A passing second-pre-grade inspection is required prior to commencement of dredging. The second-pre-grade inspection shall be passed if the AIS survey and photography methodology have been approved by TRPA AIS staff, and all dredging temporary BMPs are in place.
 - A. The permittee shall submit a methodology for AIS surveying and photographing the dredging area. AIS surveys shall be performed by a qualified third-party professional and be approved by TRPA AIS staff at least 30 days prior to requesting the dredging pre-grade inspection. An initial survey for the presence of AIS shall occur prior to dredging and shall be conducted within the same growing season of aquatic invasive plant species (June – October) and New Zealand mudsnails. If dredging begins prior to the growing season, an initial AIS survey must be completed in the preceding year's AIS growing season. Underwater photographs shall be taken and submitted to TRPA following all construction and dredging to ensure all TRPA requirements of this permit have been met.
 - B. The permittee shall submit a location outside of the Lake Tahoe Basin for dredging spoil disposal. The location of spoil disposal shall be approved by TRPA staff prior to receiving a passing dredging pre-grade inspection.
 - C. The AIS prevention bubble curtain shall be retrofitted with an alert system capable of notifying harbor management of any disruptions to operational ability.
3. Prior to permit acknowledgement the following conditions of approval must be satisfied:
 - A. All dredging gear, vehicles, and equipment shall be inspected, decontaminated, and sealed at a Lake Tahoe AIS inspection station prior to construction commencement and a

passing pre-grade inspection. Immediately following the completion of dredging activities equipment shall be inspected and decontaminated again to ensure that no AIS is spread within the waters of Lake Tahoe or elsewhere.

B. The site plans shall be revised to include the following:

- i. A note stating, "The turbidity curtain shall be weighted and reach the lake bottom prior to the start of work and remain in place through the duration of any activity that disturbs the lake bottom or during boat ramp, sheet pile wall, and boat slip replacement."
- ii. A note stating, "Following dredging or any activity disturbing the lake bottom, the lakebed shall be smoothed to remove channels or depressions conducive to aquatic invasive species growth."
- iii. A note stating, "Dredging spoils must be secured throughout the process of their removal from the water, dewatering, and transportation for disposal so that no plant fragments or sediment can escape."
- iv. A note stating, "Dewatering area denoted on Sheet C2 must be secured in a manner in which no dredged material return water flows, plant fragments or New Zealand mudsnails can be reintroduced to any waters of the Lake Tahoe Basin."
- v. A previously installed but not currently operational bubble curtain in the harbor channel shall be repaired and in use during the 2024 boating season. Prior to permit acknowledgment the permittee shall demonstrate to TRPA staff that the scope of work needed for repairs has been analyzed and is scheduled prior to or during the 2024 boating season. The bubble curtain shall be in good working order prior to receiving a passing pre-grade inspection. The site plans shall be updated to include the location of the bubble curtain spanning the harbor entrance and landward of the proposed turbidity curtains. Include a note stating, "The bubble curtain must be installed within the turbidity curtains, operational, and able to run at all hours, prior to removal of turbidity curtains. The bubble curtain may be temporarily demobilized or turned off during construction or maintenance dredging but must be fully operational and able to run 24 hours a day, 7 days a week, and be turned on prior to the removal of turbidity curtains."
- vi. A note stating, "Floating plant fragments must be skimmed and disposed of from the area adjacent to the turbidity curtain and within the harbor on daily basis, throughout construction."
- vii. The applicant shall update coverage tables to reflect that 60 square feet of land capability 1b coverage will be restored by either retiring available banked coverage or by transferring TRPA verified 1b coverage from another site.
- viii. The permittee shall revise the site plans to include a stormwater conveyance at the transition between the parking lot/drive and boat ramp. Site plans shall reflect that the conveyance directs stormwater to an infiltration facility.
- ix. A note stating, "All land-based vehicular access shall remain on existing paved or compacted dirt areas, or delineated construction access areas."
- x. The permittee shall revise the site plans, delineating all temporary BMPs for the boat ramp replacement, dock replacement, breakwater modification, sheet pile wall replacement, and staging areas. All construction pertaining to those project elements or work below the highwater line of Lake Tahoe must occur landward of two 18-millimeter-thick turbidity curtains. The permittee shall delineate BMPs

preventing hazardous material discharge in Lake Tahoe during the pouring of concrete and placing of prefabricated concrete slabs for the boat ramp placement.

Temporary BMPs to be addressed include:

- a) Temporary Erosion and sediment control
 - b) Vegetation protection measures
 - c) Construction boundary fencing
- xi. A note stating, "The appropriate jurisdiction in which dredging spoils are transported to and disposed of must be notified in advance that the spoil material potentially contains aquatic invasive species. All applicable approvals within said jurisdiction must be obtained."
 - xii. The final construction drawings shall have notes indicating conformance to the following design standards for fences:

Color: The color of replacement and new fences on the property, shall be compatible with the surroundings. Subdued colors in the earthtone and woodtone ranges shall be used for the primary color of the structure. Hues shall be within the range of natural colors that blend, rather than contrast, with the existing vegetation and earth hues. Earthtone colors are considered to be shades of reddish brown, brown, tan, ochre, and umber.
 - xiii. A note stating, "all wood and trex cuts shall be made in the upland and be swept up and disposed of appropriately."
 - xiv. Indicate all staging areas for construction equipment, materials, and prefabrication, whether on site or off site, within the Tahoe Region.
- C. The project security required under Standard Condition A.3 of Attachment S shall be \$15,000.00. Please see Attachment J, Security Procedures, for appropriate methods of posting the security and for calculation of the required security administration fee. This security may be released upon successful completion of the project and permit requirements listed herein.
 - D. The permittee shall submit a tentative construction completion schedule to TRPA prior to acknowledgment. Said schedule shall include completion dates for each item of construction including placement of temporary BMPs, breakwater modification, sheet pile wall replacement, dock and boat slip reconfiguration, boat ramp repair and modification, fence removal and replacement, beach deck modification, and restoration of the construction access areas. The construction completion schedule may be altered and re-submitted for TRPA approval, as needed, prior to the first and/or second pre-grade inspections.
 - E. The permittee shall have the submitted spill prevention control and countermeasure plan (SPCC) on site at all times and implemented by the contractor. In addition to other relevant agencies, TRPA shall be notified immediately of any discharge.
4. The use of wood preservatives on wood in contact with the water is prohibited and extreme care shall be taken to ensure that wood preservatives are not introduced into Lake Tahoe. Spray painting and the use of tributyltin is prohibited.
 5. Best Management Practices (BMPs) installed on the property shall be maintained in perpetuity to ensure effectiveness which may require BMPs to be periodically reinstalled or replaced.

6. Disturbance of lakebed materials shall be kept to the minimum necessary for project construction.
7. The permittee shall have a TYC inspection completed by TRPA staff, or a qualified professional botanist approved by TRPA in the same TYC growing season that construction activities are occurring. If construction begins in the months prior to a year's growing season, a TYC inspection shall be performed in the previous year's growing season. Inspections and the TYC growing season occur from June 15 to September 15 of each year. If the inspection reveals that the site contains TYC plants, the applicants shall submit a TYC Management Plan for the subject parcel. The protection plan shall include methods used during construction for protection of the species and the habitat, monitoring during construction, and also protection measures to be utilized long term. Construction methods must include vegetation fencing to prevent vehicular disturbance, pedestrian disturbance, and storage of equipment on the beach. Long-term protection measures may include a prohibition on beach raking, limiting access to the population/habitat, and/or avoiding population disturbance.
8. Exterior lighting shall be compliant with Subsection 36.8 of the TRPA Code of Ordinances and section 7 of TRPA Design Review Guidelines, which include the following:
 - i. Exterior lighting shall not be attached to trees. Parking lot, walkway, and building lights shall be directed downward.
 - ii. Fixture mounting height shall be appropriate for the purpose. The height shall not exceed the limitations set forth in TRPA Code Chapter 37.
 - iii. Illumination for aesthetic or dramatic purposes of any building or surrounding landscape utilizing exterior light fixtures projected above the horizontal is prohibited.
 - iv. The light source shall be kept as low to the ground as possible while insuring safe and functional levels of illumination. Lighting shall be directed downward with no splay of lighting directed offsite.
9. The permittee is responsible for insuring that the project, as built, does not exceed the approved land coverage figures shown on the site plan. The approved land coverage figures shall supersede scaled drawings when discrepancies occur.
10. This approval is based on the permittee's representation that all plans and information contained in the subject application are true and correct. Should any information or representation submitted in connection with the project application be incorrect or untrue, TRPA may rescind this approval, or take other appropriate action.
11. **Locate all underground and underwater utilities.** If your project might disturb underwater utilities, call the regional Underground Service Alert (USA North: 1-800-227-2600) prior to placement or construction. California and Nevada state law both require the permittee to call USA DIGS at least 48 hours prior to commencement of construction.
12. The permittee shall be responsible for contacting other regulatory agencies with potential jurisdiction over the approved project to determine the permitting requirements of those agencies.

- Agencies with permitting jurisdiction in California include but are not limited to: U.S. Army Corps of Engineers, U.S. Coast Guard, CA State Lands Commission, Lahontan Regional Water Quality Control Board, and CA Dept. of Fish and Game.
- Agencies with permitting jurisdiction in Nevada include but are not limited to: U.S. Army Corps of Engineers, U.S. Coast Guard, NV Division of State Lands, NV Division of Environmental Protection, and NV Department of Wildlife.

13. To the maximum extent allowable by law, the Permittee agrees to indemnify, defend, and hold harmless TRPA, its Governing Board (including individual members), its Planning Commission (including individual members), its agents, and its employees (collectively, TRPA) from and against any and all suits, losses, damages, injuries, liabilities, and claims by any person (a) for any injury (including death) or damage to person or property or (b) to set aside, attack, void, modify, amend, or annul any actions of TRPA. The foregoing indemnity obligation applies, without limitation, to any and all suits, losses, damages, injuries, liabilities, and claims by any person from any cause whatsoever arising out of or in connection with either directly or indirectly, and in whole or in part (1) the processing, conditioning, issuance, administrative appeal, or implementation of this permit; (2) any failure to comply with all applicable laws and regulations; or (3) the design, installation, or operation of any improvements, regardless of whether the actions or omissions are alleged to be caused by TRPA or Permittee.

Included within the Permittee's indemnity obligation set forth herein, the Permittee agrees to pay all fees of TRPA's attorneys and all other costs and expenses of defenses as they are incurred, including reimbursement of TRPA as necessary for any and all costs and/or fees incurred by TRPA for actions arising directly or indirectly from issuance or implementation of this permit. TRPA will have the sole and exclusive control (including the right to be represented by attorneys of TRPA's choosing) over the defense of any claims against TRPA and over their settlement, compromise or other disposition. Permittee shall also pay all costs, including attorneys' fees, incurred by TRPA to enforce this indemnification agreement. If any judgment is rendered against TRPA in any action subject to this indemnification, the Permittee shall, at its expense, satisfy and discharge the same.

14. Violation of any of the conditions of this permit shall be grounds for enforcement action including revocation of the permit. The process for the determination of the enforcement action, including notice and hearings, shall be pursuant to Article IX of TRPA's Rules of Procedure.

END OF PERMIT

Attachment C
IEC



Print Form

**INITIAL ENVIRONMENTAL CHECKLIST
FOR DETERMINATION OF ENVIRONMENTAL IMPACT**

1318-16-801-001

I. Assessor's Parcel Number (APN)/Project Location

Project Name **Elk Point Marina Rehabilitation and Dredging Project**
County/City **Douglas**

Brief Description of Project:

See attached Project Description and Supplemental Information.

The following questionnaire will be completed by the applicant based on evidence submitted with the application. All "Yes" and "No, With Mitigation" answers will require further written comments. Use the blank boxes to add any additional information. If more space is required for additional information, please attach separate sheets and reference the question number and letter.

II. ENVIRONMENTAL IMPACTS:

1. Land

Will the proposal result in:

a. Compaction or covering of the soil beyond the limits allowed in the land capability or Individual Parcel Evaluation System (IPES)?

- Yes No
 No, With Mitigation Data Insufficient

b. A change in the topography or ground surface relief features of site inconsistent with the natural surrounding conditions?

- Yes No
 No, With Mitigation Data Insufficient

c. Unstable soil conditions during or after completion of the proposal?

- Yes No
 No, With Mitigation Data Insufficient

d. Changes in the undisturbed soil or native geologic substructures or grading in excess of 5 feet?

Project is subject to the standard conditions for grading, Attachment Q, mitigating potential impacts. ZDAVIS, TRPA

- Yes No
 No, With Mitigation Data Insufficient

e. The continuation of or increase in wind or water erosion of soils, either on or off the site?

- Yes No
 No, With Mitigation Data Insufficient

f. Changes in deposition or erosion of beach sand, or changes in siltation, deposition or erosion, including natural littoral processes, which may modify the channel of a river or stream or the bed of a lake?

- Yes No
 No, With Mitigation Data Insufficient

g. Exposure of people or property to geologic hazards such as earthquakes, landslides, backshore erosion, avalanches, mud slides, ground failure, or similar hazards?

- Yes No
 No, With Mitigation Data Insufficient

2. Air Quality

Will the proposal result in:

a. Substantial air pollutant emissions?

- Yes No
 No, With Mitigation Data Insufficient

b. Deterioration of ambient (existing) air quality?

- Yes No
 No, With Mitigation Data Insufficient

c. The creation of objectionable odors?

- Yes No
 No, With Mitigation Data Insufficient

d. Alteration of air movement, moisture or temperature, or any change in climate, either locally or regionally?

- Yes No
 No, With Mitigation Data Insufficient

e. Increased use of diesel fuel?

- Yes No
 No, With Mitigation Data Insufficient

3. Water Quality

Will the proposal result in:

a. Changes in currents, or the course or direction of water movements?

- Yes No
 No, With Mitigation Data Insufficient

b. Changes in absorption rates, drainage patterns, or the rate and amount of surface water runoff so that a 20 yr. 1 hr. storm runoff (approximately 1 inch per hour) cannot be contained on the site?

- Yes No
 No, With Mitigation Data Insufficient

c. Alterations to the course or flow of 100-yearflood waters?

- Yes No
 No, With Mitigation Data Insufficient

d. Change in the amount of surface water in any water body?

- Yes No
 No, With Mitigation Data Insufficient

e. Discharge into surface waters, or in any alteration of surface water quality, including but not limited to temperature, dissolved oxygen or turbidity?

- Yes No
 No, With Mitigation Data Insufficient

f. Alteration of the direction or rate of flow of ground water?

- Yes No
 No, With Mitigation Data Insufficient

g. Change in the quantity of groundwater, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations?

- Yes No
 No, With Mitigation Data Insufficient

h. Substantial reduction in the amount of water otherwise available for public water supplies?

- Yes No
 No, With Mitigation Data Insufficient

i. Exposure of people or property to water related hazards such as flooding and/or wave action from 100-year storm occurrence or seiches?

- Yes No
 No, With Mitigation Data Insufficient

j. The potential discharge of contaminants to the groundwater or any alteration of groundwater quality?

- Yes No
 No, With Mitigation Data Insufficient

k. Is the project located within 600 feet of a drinking water source?

- Yes No
 No, With Mitigation Data Insufficient

4. Vegetation

Will the proposal result in:

- a. Removal of native vegetation in excess of the area utilized for the actual development permitted by the land capability/IPES system?

- Yes No
 No, With Mitigation Data Insufficient

- b. Removal of riparian vegetation or other vegetation associated with critical wildlife habitat, either through direct removal or indirect lowering of the groundwater table?

- Yes No
 No, With Mitigation Data Insufficient

- c. Introduction of new vegetation that will require excessive fertilizer or water, or will provide a barrier to the normal replenishment of existing species?

- Yes No
 No, With Mitigation Data Insufficient

- d. Change in the diversity or distribution of species, or number of any species of plants (including trees, shrubs, grass, crops, micro flora and aquatic plants)?

- Yes No
 No, With Mitigation Data Insufficient

- e. Reduction of the numbers of any unique, rare or endangered species of plants?

- Yes No
 No, With Mitigation Data Insufficient

f. Removal of stream bank and/or backshore vegetation, including woody vegetation such as willows?

- Yes No
 No, With Mitigation Data Insufficient

g. Removal of any native live, dead or dying trees 30 inches or greater in diameter at breast height (dbh) within TRPA's Conservation or Recreation land use classifications?

Project area is not within a TRPA Conservation or Recreation land use area. ZDAVIS, TRPA.

- Yes No
 No, With Mitigation Data Insufficient

h. A change in the natural functioning of an old growth ecosystem?

- Yes No
 No, With Mitigation Data Insufficient

5. Wildlife

Will the proposal result in:

a. Change in the diversity or distribution of species, or numbers of any species of animals (birds, land animals including reptiles, fish and shellfish, benthic organisms, insects, mammals, amphibians or microfauna)?

- Yes No
 No, With Mitigation Data Insufficient

b. Reduction of the number of any unique, rare or endangered species of animals?

- Yes No
 No, With Mitigation Data Insufficient

c. Introduction of new species of animals into an area, or result in a barrier to the migration or movement of animals?

- Yes No
 No, With Mitigation Data Insufficient

d. Deterioration of existing fish or wildlife habitat quantity or quality?

- Yes No
 No, With Mitigation Data Insufficient

6. Noise

Will the proposal result in:

a. Increases in existing Community Noise Equivalency Levels (CNEL) beyond those permitted in the applicable Plan Area Statement, Community Plan or Master Plan?

- Yes No
 No, With Mitigation Data Insufficient

b. Exposure of people to severe noise levels?

- Yes No
 No, With Mitigation Data Insufficient

c. Single event noise levels greater than those set forth in the TRPA Noise Environmental Threshold?

- Yes No
 No, With Mitigation Data Insufficient

d. The placement of residential or tourist accommodation uses in areas where the existing CNEL exceeds 60 dBA or is otherwise incompatible?

- Yes
- No
- No, With Mitigation
- Data Insufficient

e. The placement of uses that would generate an incompatible noise level in close proximity to existing residential or tourist accommodation uses?

- Yes
- No
- No, With Mitigation
- Data Insufficient

f. Exposure of existing structures to levels of ground vibration that could result in structural damage?

- Yes
- No
- No, With Mitigation
- Data Insufficient

7. Light and Glare

Will the proposal:

a. Include new or modified sources of exterior lighting?

- Yes No
 No, With Mitigation Data Insufficient

b. Create new illumination which is more substantial than other lighting, if any, within the surrounding area?

- Yes No
 No, With Mitigation Data Insufficient

c. Cause light from exterior sources to be cast off -site or onto public lands?

- Yes No
 No, With Mitigation Data Insufficient

d. Create new sources of glare through the siting of the improvements or through the use of reflective materials?

- Yes No
 No, With Mitigation Data Insufficient

8. Land Use

Will the proposal:

a. Include uses which are not listed as permissible uses in the applicable Plan Area Statement, adopted Community Plan, or Master Plan?

- Yes No
 No, With Mitigation Data Insufficient

b. Expand or intensify an existing non-conforming use?

- Yes No
 No, With Mitigation Data Insufficient

9. Natural Resources

Will the proposal result in:

a. A substantial increase in the rate of use of any natural resources?

- Yes No
 No, With Mitigation Data Insufficient

b. Substantial depletion of any non-renewable natural resource?

- Yes No
 No, With Mitigation Data Insufficient

10. Risk of Upset

Will the proposal:

a. Involve a risk of an explosion or the release of hazardous substances including, but not limited to, oil, pesticides, chemicals, or radiation in the event of an accident or upset conditions?

- Yes No
 No, With Mitigation Data Insufficient

b. Involve possible interference with an emergency evacuation plan?

- Yes No
 No, With Mitigation Data Insufficient

11. Population

Will the proposal:

- a. Alter the location, distribution, density, or growth rate of the human population planned for the Region?

- Yes No
 No, With Mitigation Data Insufficient

- b. Include or result in the temporary or permanent displacement of residents?

- Yes No
 No, With Mitigation Data Insufficient

12. Housing

Will the proposal:

- a. Affect existing housing, or create a demand for additional housing?

To determine if the proposal will affect existing housing or create a demand for additional housing, please answer the following questions:

- (1) Will the proposal decrease the amount of housing in the Tahoe Region?

- Yes No
 No, With Mitigation Data Insufficient

- (2) Will the proposal decrease the amount of housing in the Tahoe Region historically or currently being rented at rates affordable by lower and very-low-income households?

- Yes No
 No, With Mitigation Data Insufficient

Number of Existing Dwelling Units: _____

Number of Proposed Dwelling Units: _____

b. Will the proposal result in the loss of housing for lower-income and very-low-income households?

- Yes No
 No, With Mitigation Data Insufficient

13. Transportation/Circulation

Will the proposal result in:

a. Generation of 100 or more new Daily Vehicle Trip Ends (DVTE)?

- Yes No
 No, With Mitigation Data Insufficient

b. Changes to existing parking facilities, or demand for new parking?

- Yes No
 No, With Mitigation Data Insufficient

c. Substantial impact upon existing transportation systems, including highway, transit, bicycle or pedestrian facilities?

- Yes No
 No, With Mitigation Data Insufficient

d. Alterations to present patterns of circulation or movement of people and/or goods?

- Yes No
 No, With Mitigation Data Insufficient

e. Alterations to waterborne, rail or air traffic?

- Yes No
 No, With Mitigation Data Insufficient

f. Increase in traffic hazards to motor vehicles, bicyclists, or pedestrians?

- Yes No
 No, With Mitigation Data Insufficient

14. Public Services

Will the proposal have an unplanned effect upon, or result in a need for new or altered governmental services in any of the following areas?

a. Fire protection?

- Yes No
 No, With Mitigation Data Insufficient

b. Police protection?

- Yes No
 No, With Mitigation Data Insufficient

c. Schools?

- Yes No
 No, With Mitigation Data Insufficient

d. Parks or other recreational facilities?

- Yes No
 No, With Mitigation Data Insufficient

e. Maintenance of public facilities, including roads?

- Yes No
 No, With Mitigation Data Insufficient

f. Other governmental services?

- Yes No
 No, With Mitigation Data Insufficient

15. Energy

Will the proposal result in:

a. Use of substantial amounts of fuel or energy?

- Yes No
 No, With Mitigation Data Insufficient

b. Substantial increase in demand upon existing sources of energy, or require the development of new sources of energy?

- Yes No
 No, With Mitigation Data Insufficient

16. Utilities

Except for planned improvements, will the proposal result in a need for new systems, or substantial alterations to the following utilities:

a. Power or natural gas?

- Yes No
 No, With Mitigation Data Insufficient

b. Communication systems?

- Yes No
 No, With Mitigation Data Insufficient

c. Utilize additional water which amount will exceed the maximum permitted capacity of the service provider?

- Yes No
 No, With Mitigation Data Insufficient

d. Utilize additional sewage treatment capacity which amount will exceed the maximum permitted capacity of the sewage treatment provider?

- Yes No
 No, With Mitigation Data Insufficient

e. Storm water drainage?

- Yes No
 No, With Mitigation Data Insufficient

f. Solid waste and disposal?

- Yes No
 No, With Mitigation Data Insufficient

17. Human Health

Will the proposal result in:

a. Creation of any health hazard or potential health hazard (excluding mental health)?

- Yes No
 No, With Mitigation Data Insufficient

b. Exposure of people to potential health hazards?

- Yes No
 No, With Mitigation Data Insufficient

18. Scenic Resources/Community Design

Will the proposal:

a. Be visible from any state or federal highway, Pioneer Trail or from Lake Tahoe?

- Yes
- No, With Mitigation
- No
- Data Insufficient

b. Be visible from any public recreation area or TRPA designated bicycle trail?

- Yes
- No, With Mitigation
- No
- Data Insufficient

c. Block or modify an existing view of Lake Tahoe or other scenic vista seen from a public road or other public area?

- Yes
- No
- No, With Mitigation
- Data Insufficient

d. Be inconsistent with the height and design standards required by the applicable ordinance or Community Plan?

- Yes
- No
- No, With Mitigation
- Data Insufficient

e. Be inconsistent with the TRPA Scenic Quality Improvement Program (SQIP) or Design Review Guidelines?

- Yes
- No, With Mitigation
- No
- Data Insufficient

19. Recreation

Does the proposal:

a. Create additional demand for recreation facilities?

- Yes
- No
- No, With Mitigation
- Data Insufficient

b. Create additional recreation capacity?

- Yes
- No
- No, With Mitigation
- Data Insufficient

c. Have the potential to create conflicts between recreation uses, either existing or proposed?

- Yes
- No
- No, With Mitigation
- Data Insufficient

d. Result in a decrease or loss of public access to any lake, waterway, or public lands?

- Yes
- No
- No, With Mitigation
- Data Insufficient

20. Archaeological/Historical

a. Will the proposal result in an alteration of or adverse physical or aesthetic effect to a significant archaeological or historical site, structure, object or building?

- Yes
- No
- No, With Mitigation
- Data Insufficient

b. Is the proposed project located on a property with any known cultural, historical, and/or archaeological resources, including resources on TRPA or other regulatory official maps or records?

Areas of construction will have no effect on shorezone historical features identified to located further lakeward. ZDAVIS, TRPA

- Yes No
 No, With Mitigation Data Insufficient

c. Is the property associated with any historically significant events and/or sites or persons?

- Yes No
 No, With Mitigation Data Insufficient

d. Does the proposal have the potential to cause a physical change which would affect unique ethnic cultural values?

- Yes No
 No, With Mitigation Data Insufficient

e. Will the proposal restrict historic or pre-historic religious or sacred uses within the potential impact area?

- Yes No
 No, With Mitigation Data Insufficient

21. Findings of Significance.

a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California or Nevada history or prehistory?

- Yes No
 No, With Mitigation Data Insufficient

b. Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals? (A short-term impact on the environment is one which occurs in a relatively brief, definitive period of time, while long-term impacts will endure well into the future.)

- Yes No
 No, With Mitigation Data Insufficient

c. Does the project have impacts which are individually limited, but cumulatively considerable? (A project may impact on two or more separate resources where the impact on each resource is relatively small, but where the effect of the total of those impacts on the environmental is significant?)

- Yes No
 No, With Mitigation Data Insufficient

d. Does the project have environmental impacts which will cause substantial adverse effects on human being, either directly or indirectly?

- Yes No
 No, With Mitigation Data Insufficient

DECLARATION:

I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this initial evaluation to the best of my ability, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

Signature: **(Original signature required.)**

Jeff Quinlan At Douglas Date: 2/22/2023
Person Preparing Application County

Applicant Written Comments: (Attach additional sheets if necessary)

See Attached Supplemental Information and attachments for additional details pertaining to IEC items.

Print Form

IV. DETERMINATION:

On the basis of this evaluation:

- a. The proposed project could not have a significant effect on the environment and a finding of no significant effect shall be prepared in accordance with TRPA's Rules of Procedure YES NO
- b. The proposed project could have a significant effect on the environment, but due to the listed mitigation measures which have been added to the project, could have no significant effect on the environment and a mitigated finding of no significant effect shall be prepared in accordance with TRPA's Rules and Procedures. YES NO
- c. The proposed project may have a significant effect on the environment and an environmental impact statement shall be prepared in accordance with this chapter and TRPA's Rules of Procedures. YES NO

Signature of Evaluator

Date _____

Title of Evaluator

FINDING OF NO SIGNIFICANT EFFECT

PROJECT DESCRIPTION: Elk Point Rehabilitation – Modification and Repair of Shorezone Structures

APN: 1318-16-801-001

PERMITTEE: Elk Point Country Club Inc.

FILE: ERSP2023-0365

COUNTY/LOCATION: Douglas County / 460 Bitlers Road

Staff Analysis: In accordance with Article IV of the Tahoe Regional Planning Compact, as amended, and Section 6.3 of the TRPA Rules and Regulations of Practice and Procedure, the TRPA staff has reviewed the information submitted with the subject project. On the basis of this initial environmental evaluation, the Agency staff has found that the subject project will not have a significant effect on the environment.

Determination: Based on the above-stated finding, the subject project is conditionally exempt from the requirement to prepare an Environmental Impact Statement. The conditions of this exemption are the conditions of permit approval.



Zach Davis

TRPA Chairman or Executive Director/Designee

1/10/2024

Date

ELK POINT MARINA REHABILITATION AND DREDGING PROJECT
INITIAL ENVIRONMENTAL CHECKLIST
SUPPLEMENTAL INFORMATION

Elk Point Marina, 406 Bitler's Road, Zephyr Cove, Nevada, APN: 1318-16-801-001

This serves as a supplemental document to the Initial Environmental Checklist to provide additional information, as needed.

1. LAND:

1.
 - a) *No.* Coverage will remain within the TRPA-verified coverage per ERSP2020-1105 (56,665 SF). The project will retire 9 SF of 1b coverage for the relocation of 17 SF stairs on the beach deck. Temporary access for construction will not result in permanent compaction of soil beyond allowed limits. 120 SF of coverage will be added to accommodate the ADA-accessible ramp that leads to two ADA docks and is exempt per TRPA Code Section 30.4.6 for coverage installed to meet the Americans with Disability Act (ADA) Compliance.
 - b) *No.* Dredging will be necessary to key in the new sheet pile elements, to remove material between the existing sheet piles and new sheet piles, and to maintain access to the existing marina (to elevation 6,220'). The project does not propose any new dredging, and would not result in a change in the topography or ground surface relief features inconsistent with the natural surrounding conditions.
 - c) *No.* There will not be unstable soil conditions during or after construction. BMPs are included in the proposal to contain unstable soil onsite during project activities. A temporary erosion control fence will be placed downslope of the construction access path to limit erosion from reaching the waters of Lake Tahoe. Additional erosion control fencing will be placed where necessary around stockpiles of materials to contain unstable soil conditions.

Prior to construction, the harbor will be sealed off from the lake. Excavation will occur between the new and old sheet piling (as possible based on lake level) prior to the old sheet piling being removed.

- d) *Yes.* Soldier piles will be driven over 5' (to 6,210' - see Sheet C7) to provide adequate stability for the sheet piles. However, no new disturbance is proposed; the project is replacing existing sheet piles and there is no alternative construction method that would

avoid excavation. Dredging necessary for installation of the sheet piles will avoid potential changes in the undisturbed soil or native geologic substructures. The Project will comply with regulations pertaining to new disturbance, grading, and excavations.

- e) *No.* The proposed project will not cause the continuation of erosion of beach sands or soil within or outside the project area. Wavezne Consulting (which prepared studies in 2010¹ and 2017²), has reviewed the 2022 bathymetric survey showing existing conditions, previous surveys and studies, and the proposed marina project plans, and has determined that sand/soils in the area are moving as anticipated and the replacement sheet piles will not affect soil movement compared to existing conditions.
- f) *No.* The 2017 Wavezne Consulting and Analysis memorandum that reviewed the now existing breakwater/sheet pile configuration stated “... *the new [breakwater] configuration will not cause significant deterioration of littoral processes occurring at the project site. No backshore erosion should result ...*” The 2022 memorandum³ states: “*To date, the new channel and harbor have performed as expected. As such the current modeling studies are sufficient to evaluate the impacts of the proposed project. I believe that the changes at the channel entrance will be similar to those experienced currently at the entrance to the harbor...*” The proposed dredging will not exceed historical levels of beach sand and will restore the mouth of the marina to elevation 6,220’. Replacement of the sheet piles is also expected to reduce sediment erosion into the marina because it replaces the existing sheet piles which are corroded with holes that allow water and sediment to pass into the harbor.
- g) *No.* The Project would result in minimal to no exposure of people or property to geologic hazards such as earthquakes, landslides, backshore erosion, avalanches, mud slides, ground failure, or similar hazards. As noted in 1e above, the project would not have any effect on backshore erosion.

The Project Area contains no Earthquake Fault Zones, as defined by USGS Quaternary Fault Map⁴. Exposure of people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving the rupture of a known earthquake fault, as delineated on the most recent USGS Quaternary Fault Map for the area or based on other substantial evidence of a known fault, would be less than significant.

The Project will not result in exposure of people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving seismic-related ground

¹ *Elk Point Community Country Club Beach and Harbor. Environmental and Engineering Assessment.* Randy Moory, WAVEZNE. March 21, 2010.

² *Elk Point Community HOA Harbor Project. Littoral Drift Changes Associated with Current Project Configuration.* Randy Moory, WAVEZNE. December 15, 2017.

³ Letter to Tiffany Good, TRPA, from Randy Moory, WAVEZNE, 10/21/2022.

⁴ USGS Quaternary Fault Map:

<https://usgs.maps.arcgis.com/apps/webappviewer/index.html?id=5a6038b3a1684561a9b0aadf88412fcf>; accessed October 2022

failure, including liquefaction, because of the shallow course soils mapped in the Project Area typically have low shrink-swell potential (NRCS 2007).⁵

Because the Project Area contains no landforms that could contribute to landslide potential, the Project would have no effect towards exposure of people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides.

2. AIR QUALITY

- a) *No.* The Project will not result in any substantial air pollutant emissions. The project itself will not result in any emissions. Equipment that is proposed to be utilized for construction of the project will not result in any substantial increase in emissions within the project area.

Construction equipment emissions:

To ensure that air quality effects will be minimized, the following best management practices will be implemented to reduce emissions from construction equipment exhaust:

- Minimize idling time (e.g., 5 minute maximum).
- Maintain properly tuned equipment according to equipment manufacturer's guidelines.
- Limit the hours of operation of heavy equipment and/or the amount of equipment in use as specified for noise mitigation purposes.

Fugitive Dust Control Plan

The contractor will take the necessary steps, procedures, or means as required to prevent its operations in connection with the execution of the work from causing abnormal dust conditions.

The contractor will prevent dust from construction activities from being produced in amounts that may be harmful or cause a nuisance to persons living nearby or occupying buildings in the vicinity of the Project.

- b) *No.* The Project will not result in any long term deterioration of ambient air quality. Short term emissions will occur during normal construction activities. Construction will occur intermittently and for short time periods throughout the five year term of the project. Construction emissions during each activity will be present at the project site, however emissions are expected to be minor due to the limited equipment needed for the job and included BMP measures.
- c) *No.* No objectionable odors will be created from the proposed Project.

⁵ EPM Master Plan EA, p. 4-49

- d) *No.* The proposed Project will not result in any alteration of air movement, moisture or temperature, or any change in climate either locally or regionally.
- e) *No.* Temporary use of diesel fuel will likely be utilized for construction equipment, however the project will not result in an increased use once constructed.

3. WATER QUALITY

Best Management Practices to Protect Surface and Ground Water/Sediment and Erosion Control Plan

A pre-grading inspection attended by the Marina, TRPA and the contractor is required prior to commencement of any grading activities. Erosion control work is subject not only to the approval of the Engineer, but also to the approval of the TRPA. Erosion control measures will be installed as shown on the Plans or as otherwise directed by the Engineer, TRPA or the Marina.

- **Turbidity Curtain**

To ensure the protection of water quality in Lake Tahoe, turbidity curtains will be installed as shown on Sheet C3 as applicable to each component of the project before work commences where they will remain in place until sampling shows turbidity levels are below the necessary threshold.

- **Surface Water Protection**

To ensure that potential impacts to surface water are avoided, reduced and minimized, the following measures and BMPs will be implemented as necessary based on site conditions at the work site:

- 1) The contractor will exercise every reasonable precaution to protect Lake Tahoe and marina canals from pollution with fuels, oils, bitumens, calcium chloride, and other harmful materials and will conduct and schedule his operations so as to avoid or minimize muddying and silting of said lake and canals.
- 2) Care will be exercised to preserve vegetation beyond the limits of construction.
- 3) The contractor will comply with applicable statutes and regulations relating to the prevention and abatement of water pollution.
- 4) Filter fabric fence and/or sediment control barriers will be properly installed and conscientiously maintained during the project.
- 5) The contractor will locate material stockpiles away from drainages that flow into Lake Tahoe or the marina, upslope from excavations where practical, and generally so as to minimize erosion potential in the event of a storm. The contractor will have on hand plastic sheeting to cover small spoils piles during storms.
- 6) Grading and ground disturbance will be limited to the areas of work as shown on the Plans.
- 7) Temporary erosion control measures will include filter fabric fence and/or other approved sediment control barriers. The temporary erosion control will be by means of:
 - a. Filter fabric fences or sediment control barriers placed to completely circumvent the down slope side of the excavation and stockpiled material;
 - b. All spoils, waste material, or stockpiled material will not be placed in areas subject to washout, flooding, or natural drainage areas;

- c. All stockpiled materials on site during or after hours will be completely encircled with temporary erosion control devices as described in Item 1 above and covered with plastic sheeting during threat of inclement weather;
- d. Construction equipment and vehicles will be restricted to approved access roads only;
- e. Any dewatering of trenches will be done to avoid causing erosion or runoff from the construction site;
- f. Protected areas will be regularly inspected and maintained by the contractor during the course of the work.

- a) *No.* See response to 1f.
- b) *No.* The Project will not result in increases of land coverage beyond those allowed by the TRPA Code and will not inhibit the ability for infiltration of surface runoff from a 20-year, 1-hour storm event. BMPs will be implemented during construction for source control and to maintain absorption rates, drainage patterns and the rate and amount of surface water so that approximately 1 inch per hour would be contained on-site.
- c) *No.* The Project by its nature is located in the waters of Lake Tahoe, which are defined by the Federal Emergency Management Agency (FEMA) as a Special Flood Hazard Area. SFHAs are “as the area that will be inundated by the flood event having a 1-percent chance of being equaled or exceeded in any given year.” Lake Tahoe is labeled as Flood Zone AE. Flood Zone AE is considered an area of a base flood or 100-year flood. While the project is located within Flood Zone AE, no alterations to the course of flow of 100-year flood waters will occur.
- d) *No.* The Project will not result in changes in the amount of surface water in Lake Tahoe or any other water body.
- e) *No, with mitigation.* The project will result in the discharge of solid rock and associated material to the waters of Lake Tahoe for sheet pile replacement and addition of the jetty in front of the southern wingwall to attenuate waves and minimize erosion. An application is being submitted to the US Army Corps of Engineers and Nevada Division of Environmental Protection for approvals of the proposed discharge.
- f) *No, with mitigation.* The Project will replace existing sheet piles which currently extend below the groundwater table (estimated at 40” per TRPA’s BMP spreadsheet). During construction, the following mitigation measures will be employed:

Groundwater Protection

To avoid, reduce and minimize potential impacts to groundwater, the following measures and BMPs will be implemented:

- Store, maintain construction equipment (except fueling by truck) at designated staging areas.
- Maintain spill cleanup equipment with fuel trucks. Respond to spills and leaks immediately to contain and remove the pollutants from the site.

- Minimize the amount and duration of construction materials stored onsite. Store construction materials that could adversely affect groundwater quality (e.g. paint, solvents, and fuels) on containment pallets or similar facilities that would prevent discharges to the ground in the event of a spill or leak.
- g) *No, with mitigation.* See response to 1f. In addition, a Site Dewatering Plan will be provided to TRPA prior to construction or as otherwise requested.
- h) *No.* The project will not reduce the amount of water otherwise available for public water supplies.
- i) *No.* The Project would not increase exposure of people or property to water related hazards such as flooding and/or wave action from 100-year storm occurrence or seiches. However, the construction of the proposed jetty in front of the south wingwall would attenuate the wave action in the vicinity of the marina thereby further limiting the exposure of people and property to water related hazards.
- j) *No, with mitigation.* Implementation of groundwater protection BMPs (See 3f above) that are included in the Project proposal will reduce and minimize the potential to discharge contaminants and alter groundwater quality to a level of less than significant.
- k) *No.* The marina is located within 600 feet of a water-line intake owned by Elk's Point HOA. This water-line is not used as a drinking water source. Kingsbury General Improvement District (KGID) owns a water intake line used for drinking water that is located at the south end of Nevada Beach off Kahle Drive approximately 3,500 feet to the south. KGID will be notified prior to construction activities.

4. VEGETATION

- a) *No.* The Project will not remove native vegetation in excess of the area utilized for development.
- b) *No.* The Project will require the removal of existing riparian vegetation (e.g. Willow shrub) to accommodate replacement of the sheet piles, primarily on the south side. Measures will be taken to retain the riparian vegetation and protect the remaining vegetation to allow for future proliferation in the area. The installation of the proposed sheet piles and jetty will not result in a permanent lowering of the groundwater table and therefore will not have an impact on riparian vegetation or other vegetation associated with critical wildlife habitat from any effects on groundwater.
- c) *No.* The project does not propose any new vegetation. To prevent the spread of invasive plant species, the following measures and BMPs will be implemented:

Prevent and Control Invasive Species

- Construction vehicles, including off-road vehicles, will be cleaned when they come into the Basin or come from a known invasive plant infested area. Equipment will be considered clean when visual inspection does not reveal soil, seeds, plant material, or other such debris.

- Equipment will be staged in weed-free areas to prevent vehicles from introducing or spreading invasive species.
 - Earth-moving equipment, gravel, fills, or other materials are required to be weed-free. Onsite sand, gravel, rock, or organic matter will be used when possible or weed-free materials from gravel pits and fill sources that have been surveyed and approved will be used.
 - Minimize the amount of ground and vegetation disturbance in the construction areas. Upon completion of construction, vegetation will be reestablished in the footprint to minimize weed establishment after the removal.
- d) *No, with mitigation.* Proposed project will not change the diversity or distribution of species. Some trees and shrubs will be removed to facilitate sheet pile replacement and will be replanted/protected as required. Tahoe Yellow Cress (TYC) surveys will be completed during growing season prior to construction. If TYC is detected, measures to be determined based on location/occurrence will be taken to mitigate any impacts to TYC.
- e) *No, with mitigation.* A TYC survey was previously conducted in August 2020⁶. Two separate locations of TYC were noted within the survey area:

Northern location:

“Eleven stems of TYC were observed at the base of a large Jeffrey pine situated between large boulders and the elevated walk way that connects the stair access to the BBQ deck area. The plants were located between the tree roots and protected in this fashion from existing recreational pressures. A total of fifteen stems were located in a crack within the concrete boat ramp on the east side of the marina. No other individual stems of TYC were detected during the survey.

The proposed project will not have an impact on the [northern population of] TYC. The northern population at the base of the Jeffrey pine is approximately 300 feet from the dredging access and 200 feet from the beach replenishment area.” This finding applies to the Proposed Project as it is in the same location as the previous project referred to in the 2020 report.

If dredged material is determined to be clean and acceptable for beach replenishment, the northern TYC population will be monitored to assess whether negative impacts from beach restoration efforts or through natural causes such as changing lake level are occurring. If monitoring determines a decline, the TYC community could be moved to a more suitable location. This may include a more protected site on the beach, or to another location nearby.

Additional potential mitigation, if required, includes:

- An interpretive sign near the plants on the northern end of the project area, if located in future TYC surveys, will be established and an educational campaign will be aimed at homeowners and the marina caretaker to encourage plan protection.

⁶ TYC survey prepared by Garth Alling, Biologist, for GCI. 8/28/2020.

- Fencing or enclosing plants is not recommended. A fence would be difficult to construct among boulders and would not provide effective protection during high water years. A propagation and re-establishment program is also not recommended at the present time. The only site suitable for re-introduction on the project site is above the high water mark. Plantings in this area may require maintenance irrigation to guarantee persistence. At the same time, additional watering may encourage establishment of more competitive species.

Boat ramp:

In the past, TYC stems have been detected in cracks in the existing boat ramp. A TYC survey will be conducted prior to activities associated with the proposed project each season, as required. If TYC is found to occupy this area, the following mitigation measures will be incorporated (and additional measures, as required):

- Prior to boat ramp replacement, if the boat ramp is to be utilized by any heavy equipment during project activities, measures shall be taken to prevent impacts to the TYC individuals present. Installation of temporary boards and or metal sheets may be applied to allow for heavy vehicles to access the boat ramp area while protecting the TYC within the boat ramp.
 - The proposed project includes replacement of the boat ramp. If TYC plants are detected on the existing boat ramp, the applicant will work with TRPA to include adequate mitigation measures, which may include relocation of the affected TYC population to another suitable location on site and/or measures noted previously to better protect the northern population (which also represents the historical location of TYC).
- f) *No, with mitigation.* A few *Salix* shrubs (Willows) are growing adjacent to the sheet piles that are proposed to be replaced. The Project will require the removal of existing riparian vegetation (e.g. Willow shrub) to accommodate replacement of the sheet piles on the south side. Measures will be taken to retain the riparian vegetation and protect the remaining vegetation to allow for future proliferation in the area. In addition, native shrub species planted to provide scenic screening for ERSP2018-0487 included Western Serviceberry, Lemmon Willow, and Pacific Willow.
- g) *Yes.* In order to accommodate replacement of the northern sheet pile, one 30" pine will be removed. Impacts to scenic screening were accounted for in the scenic assessment.
- h) *No.* No old-growth forests/ecosystems are located within the Project Area, and therefore no impacts to old-growth ecosystems will occur.

5. WILDLIFE

- a) *No.* The proposed Project will not result in any change in diversity or distribution of species or the number of any species of animals as a result of implementation. According

to a previous assessment prepared by Sierra Ecotone Solutions for work in the Project Area:⁷

“Non-sensitive species that may be impacted as a result of project implementation include speckled dace (*Rhinichthys osculus robustus*), Lahontan redbreast (*Rhinichthys egregious*) and the Tahoe sucker (*Catostomus tahoensis*). Temporary impacts to these species may result due to construction... (in the form of avoidance of the project area) but will not result in long term detrimental effects to the species. As noted by Byron et al 1989, breakwaters and rock cribs (similar to breakwater construction) increase the density of littoral fish species, most notably Lahontan redbreast.”

The expanded suitable habitat provided by the additional breakwater in front of Section B would potentially increase the numbers of littoral fish species within the project area.

- b) *No.* The US Fish and Wildlife Service has been previously consulted with regarding impacts to sensitive species as a result of implementation of similar construction as the proposed Project in the same Project Area and a species list was generated from the USFWS database.⁸ Consultation will also occur with the submittal of the Proposed Project to the U.S. Army Corp. of Engineers.⁹

Threatened/endangered species:

A list of threatened species list was generated by USFWS for threatened and endangered species that may occur in the Project location that may be affected by said Project. A total of three species were included on the species list (a copy of the Species List is included in the 2020 USFWS Listed Species reference): North American wolverine (*Gulo gulo luscus*), Sierra Nevada yellow-legged frog (*Rana sierrae*) and Lahontan cutthroat trout (*Oncorhynchus clarkii henshawi*). Results indicated:

- 1) Sierra Nevada Yellow-Legged Frog (SNYLF):
The Project Area does not contain any suitable SNYLF habitat. SNYLF will not be impacted by this project.
- 2) North American Wolverine:
There are no records of detections in the Lake Tahoe Basin and this species is thought to be extirpated from the vicinity. High levels of existing human presence and activity are not suitable for wolverine. North American wolverine will not be impacted by this project.
- 3) Lahontan Cutthroat Trout (LCT):
There are no spawning gravels within the vicinity of this project. The inwater habitat is comprised of sand. Sand is not considered feeding/cover or spawning habitat for LCT. Sand is habitat for juvenile LCT. There is no known evidence of current LCT reproduction in Lake Tahoe. Therefore, LCT is not likely to be impacted by this pile replacement project.

⁷ Initial Environmental Checklist for the Elk Point Marina Breakwater Modification and Sheet Pile Repair. Pages 16-19. March 1, 2018.

⁸ Re: Elk Point Country Club Marina – Swim Pole and Platform Replacement Project, Zephyr Cove, NV – United States Fish and Wildlife Service (USFWS) Listed Species. Garth Alling, Ecologist. July 2, 2020.

⁹ USACE staff have indicated a biological report generated within the previous five years is acceptable for use with their application. (Email from Jennifer Thomason, 6.30.2021)

USFS Candidate Species:

- 1) Whitebark Pine: There is no Whitebark Pine in the Project Area and therefore this species will not be impacted by the Proposed Project.

- c) *No.* The Project will not result in the introduction of any new species of animals to the Project Area. The Project will not result in a barrier to migration or movement of any animals.

- d) *No.* The proposed Project will not result in the deterioration of fish or wildlife habitat quality or quantity due to the implementation of the proposed Project. No sensitive wildlife habitat will be disturbed as a result of project implementation, but as noted in 5a above the suitable habitat for nearshore littoral fishes may be enhanced.

6. NOISE

(a-f): No. Noise sources can be grouped into two categories: mobile and stationary. Noise generation from the Project will be related to construction activities. Construction noise for the Proposed Project will be intermittent and temporary/short-term in nature. Construction of the Project will subject adjacent residential properties to short-term noise impacts as a result of the running of heavy equipment during and construction and installation. Equipment used for sheet pile installation will likely be the loudest machinery used. Construction noise generation that is proposed is similar to standard construction and other maintenance noise. Based on standard noise levels emitted by the types of construction equipment to be used for this Project, noise levels from these activities may range up to 75 dBA Leq (dB(A) Leq denotes the time weighted average of the level of sound in decibels on scale A which is relatable to human hearing) intermittently outside the nearest receptors to the Project. TRPA has not established a standard for short-term noise disturbance, and therefore construction and activities at each site would not conflict with a TRPA short-term noise standard. Construction hours will be consistent with TRPA requirements. Project operations would not result in the generation of noise and will not have an impact on sensitive noise receptors. The proposed Project does not include any measures that would result in single noise events that would exceed those allowed in the TRPA Noise Environmental Threshold.

To reduce construction related noise, the following measures will be implemented:

- Equipment will be adequately muffled and maintained.
- Construction activities will be performed between 8:00 AM and 6:30 PM pursuant to TRPA Code of Ordinances Chapter 68, Noise Limitations.
- No piece of equipment, which generates maximum noise levels greater than 85 dBA measured at 50 feet, will be allowed on site.
- In inhabited areas, particularly residential, contractor's operations will be performed in a manner to minimize unnecessary noise.
- In residential areas, special measures will be taken to suppress noise generated by repair and service activities during the night hours.
- The more stringent of either Cal-OSHA limits or the limits established by local ordinance will be implemented.

7. LIGHT AND GLARE

(a-d): *No.* No lighting is associated with the Proposed Project. No new sources of glare will be created because the Project will only utilize non-reflective materials.

8. LAND USE

- a) *No.* The proposed project is located in Plan Area Statement 070B Rabe¹⁰ which lists marinas as a permissible recreational special use.
- b) *No.* The Project will not result in the expansion or intensification of any non-conforming use as the Marina is an existing and approved use within the Project Area.

9. NATURAL RESOURCES

- a) *No.* The Project will not result in additional commercial, tourist or residential development, and would therefore have no impact on the incremental use of natural resources.
- b) *No.* Non-renewable natural resources such as gasoline and diesel will be consumed during Project construction. However, because construction would be limited and would not require quantities of non-renewable resources beyond those of typical construction, the Project would not result in substantial depletion of any non-renewable natural resource.

10. RISK OF UPSET

- a) *No.* The transportation, use, storage, and handling of minor amounts of hazardous materials would be anticipated with refueling or equipment cleaning activities during Project construction and with the use of materials to improve infrastructure. The Marina will ensure that this risk is maintained at less than significant levels by requiring the selected contractor to comply with all federal, State, and local regulations regarding the handling and transportation, disposal, and cleanup of hazardous materials. The Project will not involve the transportation of explosives, inhalation hazards or radioactive materials. The amount of hazardous materials necessary for the Project would not be substantial enough to create a significant hazard from routine transport, use or disposal of hazardous materials during construction.

Hazard and Safety Control Plan

To ensure the protection of persons and property and to safeguard the environment the following actions, measures and BMPs will be implemented:

- Temporary supports will be designed with sufficient safety considerations to assure adequate load bearing capability.
- The contractor will minimize fire danger in the vicinity of and adjacent to the construction site.

¹⁰ Plan Area Statement 070B Rabe. <https://www.trpa.gov/wp-content/uploads/documents/archive/2/070B.pdf>

- A sufficient number of fire extinguishers of the type and capacity required to protect the work and ancillary facilities will be provided in readily accessible locations.
 - The contractor will provide labor and equipment to protect the surrounding property from fire damage resulting from construction operations.
- b) *No.* Project-related activities will not interfere with an emergency response plan or emergency evacuation plan. The Project will not result in increased density and therefore would not adversely affect emergency response described in local, regional, and state emergency response and/or evacuation plans, including but not limited to the Douglas County Emergency Management Plan and the Douglas County Hazard Mitigation Plan. Should Project construction require residential streets to be temporarily blocked for equipment access, traffic control will be provided to allow for direction of traffic and prioritization of emergency vehicles. There are no hospitals, fire, police, or sheriff stations located within the Project Area, and the Project will comply with applicable codes for emergency vehicle access and reduce to the extent feasible the interaction between construction equipment and other vehicles, bicycles and pedestrians to result in less than significant impacts.

11. POPULATION

(a-b): *No.* The Proposed Project will not affect the location, distribution, density, or growth rate of the human population, nor include or result in the displacement of residents.

12. HOUSING

(a-b): *No.* The Proposed Project will not affect housing.

13. TRANSPORTATION/CIRCULATION:

- a) *No.* The proposed Project will not result in the addition of any permanent trips. Replacement of the sheet piles, dredging, and other project activities will result in the minor increase in daily vehicle trips (approximately 10 DVTE) during construction. Upon completion of construction, no additional DVTE will be generated.
- b) *No.* No changes to existing parking facilities will occur as a result of the proposed Project. No additional parking will be required as a result of installation of the Project.
- c) *No.* The Project will not conflict with the TRPA Code of Ordinances as it relates to traffic, transportation or circulation. Installation of the breakwaters and sheet pile repair will not impede the long term use of streets, highways or intersections for pedestrians, bicycle users, mass transit or personal/commercial vehicles. All completed work will be contained within the Project Area will not impede flow of transportation users or facilities.
- d) *No.* No permanent modifications to existing patterns of circulation or movement of people and/or goods will occur as a result of installation of the breakwater and sheet pile repair.

- e) *No.* The proposed Project will not result in permanent alterations to waterborne, rail or air traffic. Short term closure of the Elks Point Marina will be required during construction. The proposed project will not result in a negative impact to waterborne traffic or navigation. It will not extend the length of the marina breakwaters or sheet piles beyond the existing locations. The proposed replacements and jetty on the south sheet piles will be placed 4-5' farther into the lake than the current structure due to construction methodology, however the existing breakwaters and shoreline structures to the south extend further into the lake than the replaced sheet piles and jetty. No impact to navigation will occur.
- f) *No.* The project will not result in any new traffic hazards to motor vehicles, bicyclists, or pedestrians.

14. PUBLIC SERVICES

(a-f): *No.* The Project will not require additional public services and thus creates no impact to acceptable service ratios, response times or other performance objectives. Existing fire, police, and other governmental services are sufficient to accommodate the service needs of the Project. The Project will not necessitate the expansion of the equipment, facilities, or manpower of responsible fire, police, health, and school services in order to maintain current service ratios and response times. The Project also will not result in substantial adverse physical impacts associated with the provision of new or altered fire, police, health, or school facilities. There will be no need for new or physically altered governmental facilities. The Project would not result in negative impacts to public services.

In addition, by improving the integrity of the sheet piles and removing the excess sediment that has built up in the marina, the Project will continue to support Fire Protection Vessels. The Elk Point HOA provides a courtesy slip for the Tahoe Douglas Fire Protection District (TDFPD) vessel. The TDFPD offers lifesaving emergency response for water emergencies. The Elk Point Marina remains a suitable launch point for their rescue boat. The TDFPD vessel also has the capability to provide fire suppression from the boat fire pump for both wildland and structural protection from the lake. Additionally, the boat has the capability to act as a fire hydrant as it can pump water from Lake Tahoe to a fire engine to suppress land fires. The Elk Point Marina is an essential response point for both fire and water emergencies to protect both life and property.

15. ENERGY

- a) *No.* The Project will not result in the use of substantial amounts of fuel or energy. Temporary use of diesel fuel will likely be utilized for construction equipment, but will not result in the increased use of diesel fuel as once the project is constructed, no fuel will be required. Repair of the sheet piles is expected to result in the decreased need for dredging (and thereby result in a decrease in future diesel fuel use) by eliminating existing corroded sheet piles that are allowing sediment to enter the marina. which will result in an overall decrease in use of diesel fuel.
- b) *No.* The Project will not result in additional commercial, tourist or residential development and would therefore create no impact to existing sources of energy. The Project would not result in

a substantial increase in demand upon existing sources of energy or require the development of new sources of energy.

16. UTILITIES

a) *No.* The project will not require new power or natural gas systems nor substantially alter existing systems. The project will remove a 30" pine tree that is used for power lines. Existing electrical service will be relocated per utility company specifications.

(b-f) *No.* The project will not result in a need for new or substantially altered utility systems.

17. HUMAN HEALTH

a) *No.* Please see analyses for Section 10, questions 10a and 10b which conclude that the Project would not create a significant health hazard to the public or to the environment.

b) *No.* The Project will not expose people to any known or potential health hazard.

18. SCENIC RESOURCES/COMMUNITY DESIGN:

a) *No, with mitigation.* The proposed Project upon completion will not be visible from US Highway 50, but will be visible from Lake Tahoe. A 2023 scenic analysis was performed for the subject project by JTC Consulting LLC for Gordon Consulting Inc. (enclosed with application). Therein, the analysis concludes that previously-planted vegetation screening will be sufficient to mitigate scenic impacts of the project as viewed from Lake Tahoe.

b) *No, with mitigation.* The proposed Project will be visible from the waters of Lake Tahoe but will be adequately screened as noted above. The project will not be visible from Nevada Beach as the existing pier, boathouse and rock cribbing blocks view of the proposed breakwater as viewed from the south.

c) *No.* Given that the Project is not located in a public area, the Project would not block or modify existing views of Lake Tahoe or other scenic vistas from public roads or public areas.

d) *No.* The Project is consistent with height and design standards.

e) *No, with mitigation.* The Project is consistent with the Scenic Quality Improvement Program as the scenic assessment found that vegetation screening planted for a previous project will provide adequate screening.

19. RECREATION

(a-d) *No.* The project will not affect recreation capacity, result in increased demand, result in user conflicts, or decrease public access to any lake or public lands.

20. ARCHAEOLOGICAL/HISTORICAL:

a) *No.* The Project will not result in the alteration of or adverse physical or aesthetic effect to archaeological or historical sites. The project area was surveyed and reviewed by Jesse

Krautkramer, MA in order to determine the presence of significant archaeological sites, structures, objects or buildings onsite.^{11,12} It has been determined that the marina was not a historic structure. No significant sites, structures or objects are located within 200 feet of the marina.

Cultural Resources Protection:

In accordance with the National Historic Preservation Act of 1966, (16 U.S.C. 470), the following procedures will be implemented to ensure historic preservation. In the event potential historical, architectural, archeological, or cultural Resources (herein after cultural resources) are discovered during subsurface excavations at the site of meter installation, the following procedures will be instituted:

- The Engineer will issue a “Stop Work Order” directing the contractor to cease all construction operations at the location of such potential cultural resources find.
 - Such “Stop Work Order” will be effective until such time as a qualified archeologist can be called to assess the value of these potential cultural resources and make recommendations to the State Office of Historic Preservation.
 - If the archeologist determines that the potential find qualifies for inclusion in the National Register of Historic Places and the California Register of Historic Resources, at the direction of the State Office of Historic Preservation, the Engineer will extend the duration of the “Stop Work Order” in writing, and the contractor will suspend work at the location of the find.
- b) *No.* The property on which the marina is located contains known archaeological resources. The known site (FS 05-19-332) is located over 200 feet from the proposed work area and will not be disturbed as a result of the Project:
- FS 05-19-332 is a prehistoric site including a submerged bedrock milling feature [BMR]. The feature contains six mortars on a boulder submerged 6 inches to greater than 1 foot below the lake surface. The BRM is located near the shoreline and may be associated with a submerged archaeological deposit. The Proposed Project does not involve work in this location and will not impact the site.
- c) *No.* The property on which the Project is to be implemented is not associated with any historically significant events and/or sites or persons.
- d) *No.* The Project does not have the potential to cause a physical change which would affect unique ethnic cultural values.
- e) *No.* There are no known historic or pre-historic religious uses within the Project Area and therefore the Project will not restrict historic or pre-historic religious or sacred uses.

21. FINDINGS OF SIGNIFICANCE

- a) *No.* The Project does not have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish population to drop below self-sustaining levels,

¹¹ *Elk Point Country Club Marina Swim Pole and Platform Replacement Project Archaeological Review 2020 and 10/5/2020 Letter to Jennifer Thomason, USACE.* Jesse Krautkramer, MA. 2020.

¹² *Elk Point Marina Dock Replacement Archaeological Review.* Jesse Krautkramer, MA. 2017.

threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California or Nevada history or prehistory.

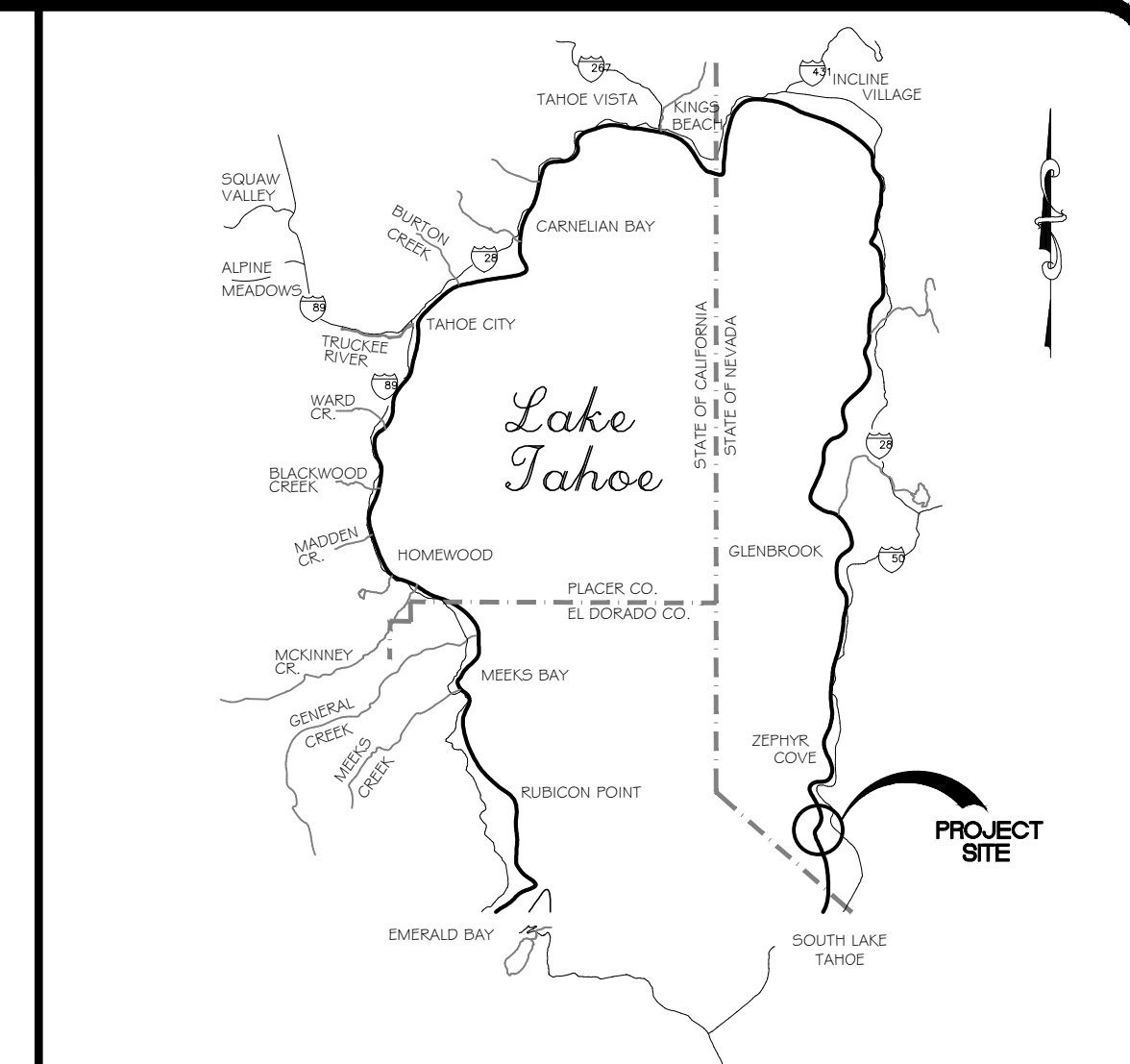
- b) *No.* The Project does not achieve short-term environmental goals to the disadvantage of long-term environmental goals. The project will result in the decreased frequency of dredging Elk's Point Marina and is expected to benefit efforts to reduce AIS infestations.
- c) *No.* The Project does not result in cumulative impacts.
- d) *No.* The Project will not have environmental impacts which will cause substantial adverse effects on human being, either directly or indirectly.

22. ATTACHMENTS:

1. *Elk Point Community Country Club Beach and Harbor. Environmental and Engineering Assessment.* Randy Moory, WAVEZNE. March 21, 2010.
2. *Elk Point Community HOA Harbor Project. Littoral Drift Changes Associated with Current Project Configuration.* Randy Moory, WAVEZNE. December 15, 2017.
3. Letter to Tiffany Good, TRPA, from Randy Moory, WAVEZNE, 10/21/2022.
4. Image from United States Geological Survey Fault Map Viewer:
<https://usgs.maps.arcgis.com/apps/webappviewer/index.html?id=5a6038b3a1684561a9b0aadf88412fcf>; accessed October 2022
5. EPM Master Plan EA, p. 4-49
6. TYC survey prepared by Garth Alling, Biologist, for GCI. 8/28/2020.
7. *Initial Environmental Checklist for the Elk Point Marina Breakwater Modification and Sheet Pile Repair. Pages 16-19.* March 1, 2018.
8. *Re: Elk Point Country Club Marina – Swim Pole and Platform Replacement Project, Zephyr Cove, NV – United States Fish and Wildlife Service (USFWS) Listed Species.* Garth Alling, Ecologist. July 2, 2020.
9. Email from Jennifer Thomason, 6.30.2021
10. Plan Area Statement 070
11. *Elk Point Country Club Marina Swim Pole and Platform Replacement Project Archaeological Review 2020 and 10/5/2020 Letter to Jennifer Thomason, USACE.* Jesse Krautkramer, MA. 2020.
12. *Elk Point Marina Dock Replacement Archaeological Review.* Jesse Krautkramer, MA. 2017.

Attachment D
Proposed Plans

ELKS POINT MARINA REHABILITATION AND DREDGING PROJECT



AREA MAP

N.T.S.

PROJECT INFORMATION:

ENGINEER: FERRELL CIVIL ENGINEERING
ATTN: TIM FERRELL
P.O. BOX 361
TAHOE VISTA, CA 96148
(530) 546-2752

PLANNER: GORDON CONSULTING INC.
ATTN: JENNIFER QUASHNICK
P.O. BOX 4470
STATELINE, NV 89449
(530) 577-4233

OWNER: ELKS POINT MARINA
406 BITLER ROAD
P.O. BOX 9
ZEPHYR COVE, NV 89448

PROJECT LOCATION: ELKS POINT MARINA
ZEPHYR COVE, NV 89448

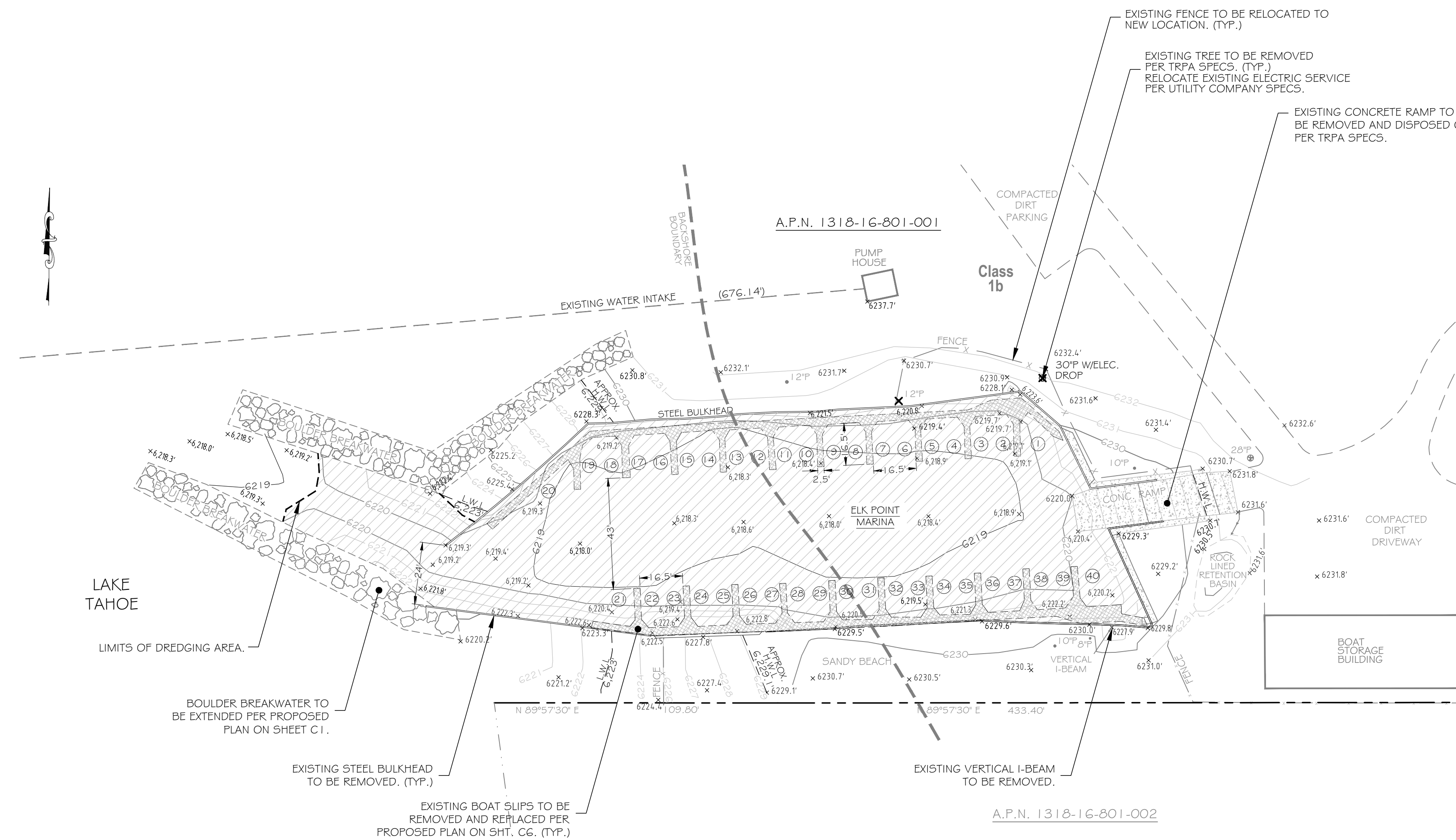
SHEET INDEX:

- T1 - TITLE SHEET/EXISTING SITE PLAN
- C1 - PROPOSED SITE PLAN
- C2 - PROPOSED DREDGING PLAN
- C3 - PROPOSED SHEET PILE PLAN
- C4 - PROPOSED BOAT RAMP PLAN
- C5 - PROPOSED BOAT RAMP ELEVATION AND SECTION
- C6 - PROPOSED BOAT SLIPS PLANS
- C7 - SECTIONS
- D1 - STRUCTURAL DETAILS
- D2 - BOAT SLIPS STRUCTURAL DETAIL
- D3 - DREDGING SECTIONS AND DETAILS

**Call Two Working Days
Before You Dig!**



**Dig Safely. Dig Safely.
CALL: 811**



(E) SITE PLAN OVERVIEW
SCALE: 1"=30'-0"

SURVEY NOTES:

- PROPOSED DESIGN BASED ON THE SURVEY PERFORMED BY TURNER AND ASSOCIATES, INC. FERRELL CIVIL ENGINEERING (F.C.E.) WILL NOT BE RESPONSIBLE FOR THE ACCURACY OF THIS SURVEY. CONTRACTOR TO VERIFY ON SITE ALL ASPECTS OF PROPOSED DESIGN PRIOR TO BEGINNING OF WORK. IF CONFLICT ARISES IMMEDIATELY CONTACT F.C.E. FOR RE-DESIGN.
- THE PROPERTY LINE INFORMATION SHOWN HEREON IS FROM RECORD DATA AND DOES NOT REPRESENT A BOUNDARY SURVEY.
- ADDITIONAL LIMITED BATHYMERTIC INFORMATION WAS INCORPORATED INTO SITE PLAN FROM SURVEY PERFORMED BY TURNER AND ASSOCIATES, INC., DATED: 1/22/01. JOB # 00038. THIS INFORMATION WAS USED FOR DREDGING PROJECT ASSOCIATED WITH THIS SITE. MARINA TOPOGRAPHY SHOWN HEREON DEPICTS CONTOURS AFTER DREDGING PROJECT. DREDGING EARTHWORK CALCULATIONS ARE ESTIMATED AND IS NOT INTENDED FOR USE IN ANY BID DOCUMENT.
- DREDGING EARTHWORK CALCULATIONS ARE ESTIMATED BASED ON AN ASSUMED EXPANSION FACTOR OF 50% AND IS NOT INTENDED FOR USE IN ANY BID DOCUMENT.
- CONTRACTOR SHALL FIELD VERIFY ALL ASPECTS OF DESIGN BEFORE BEGINNING OF WORK. IF CONFLICT ARISES IMMEDIATELY CONTACT F.C.E. FOR RE-DESIGN.

GENERAL NOTES:

- CONTRACTOR TO HAVE THE APPROVED TRPA PERMIT AND STAMPED PLANS ON SITE AT ALL TIMES DURING CONSTRUCTION.
- CONTRACTOR SHALL COMPLY WITH THE TRPA SPECIAL AND STANDARD CONDITIONS OF APPROVAL SET FORTH IN THE PERMIT.
- LOCATION OF UNDERGROUND UTILITIES WAS NOT APART OF THIS DESIGN. CONTRACTOR TO VERIFY LOCATION OF ALL UTILITIES PRIOR TO BEGINNING OF CONSTRUCTION, EVEN ON PRIVATE PROPERTY.
- ALL STEEL PILES DO BE DRIVEN 8' MINIMUM OR TO REFUSAL. IF SITE CONDITIONS DO NOT ALLOW FOR THIS THE CONTRACTOR SHALL CONTACT F.C.E. FOR RE-DESIGN.

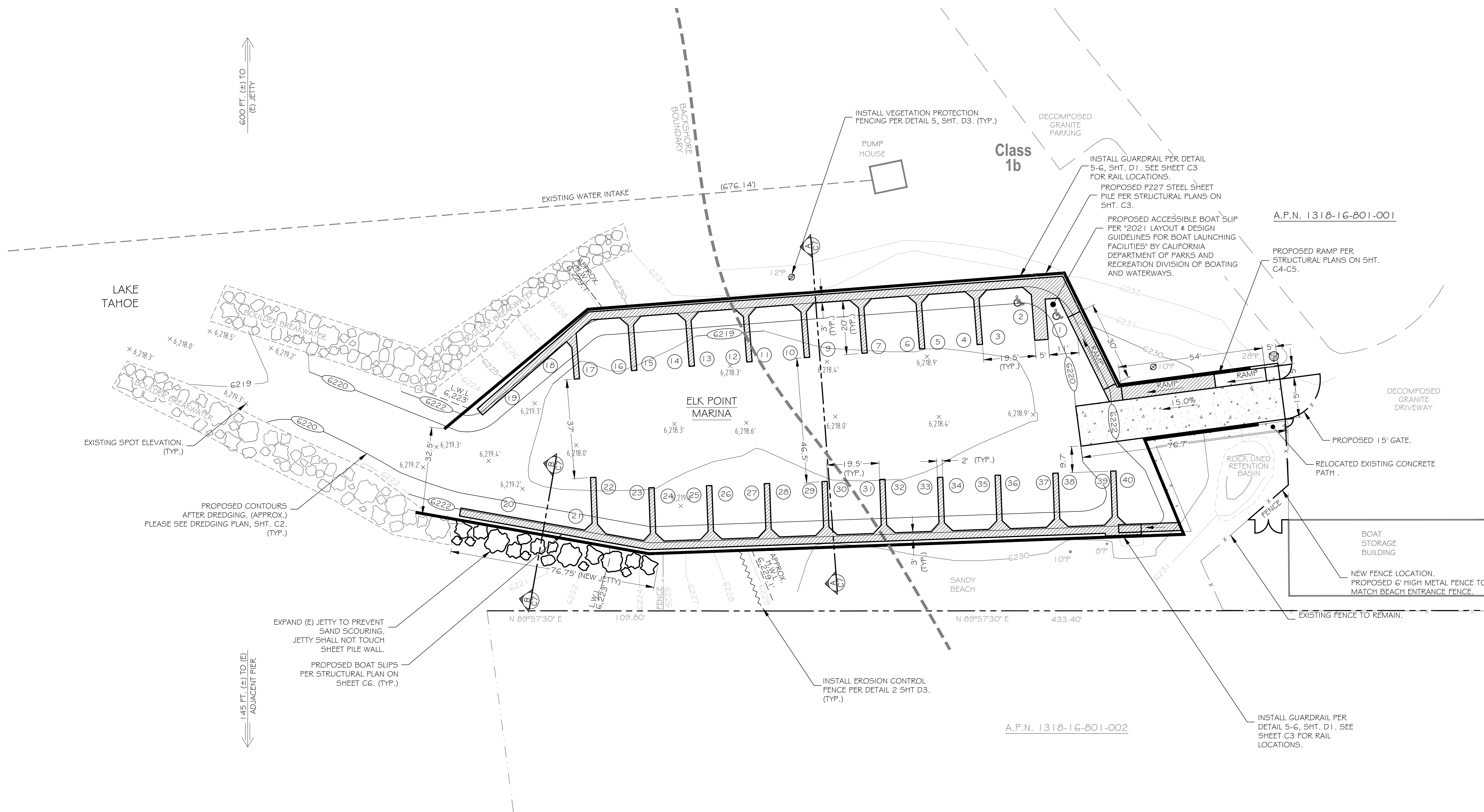
DISCLAIMER:

- FERRELL CIVIL ENGINEERING WILL NOT BE RESPONSIBLE FOR THE ACCURACY OF THIS SURVEY. CONTRACTOR TO VERIFY ON SITE ALL ASPECTS OF PROPOSED DESIGN PRIOR TO BEGINNING OF WORK. IF CONFLICT ARISES IMMEDIATELY CONTACT F.C.E. FOR RE-DESIGN.



04-07-23

DRAWN BY: HBG	DESIGN BY: HBG	REVISION	DATE	DESCRIPTION	APPROVED	DATE		ELKSPPOINT MARINA	A.P.N. 1318-16-801-001	DATE: APRIL 7, 2023	SHEET
CHECKED BY: TKF	DWG: P:\PIERS\ELKSPPOINT\dwg\FCE-.dwg							CA #C 55546 NV #12927 P.O. Box 361, Tahoe Vista, CA 96148 ferrell@fcivil.com www.ferrellcivilengineering.com	DOUGLAS COUNTY	NEVADA	SCALE: 1"=30'-0"
								TITLE SHEET	NEVADA	W.O. NO. ELKSPPOINT MARINA	11



PROPOSED SITE PLAN
SCALE: 1"=20'-0"

REV.	DATE	DESCRIPTION	APPROVED	DATE

COMP.: ECE DESIGN: HBG PROJENG.: TKF
 DRWN.: HBG
 WORK ORDER:
 SCALE: AS NOTED
 HORIZONTAL:
 VERTICAL:
 CAD:
 DATE: APRIL 7, 2023



PROPOSED SITE PLAN
ELKS POINT MARINA REHABILITATION PROJECT

C1

NOTE:
CONTRACTOR TO REVIEW ALL ASPECTS OF DREDGING PROJECT. IF
CONFLICT ARISES IMMEDIATELY CONTACT F.C.E. FOR RE-DESIGN.

DREDGING VOLUMES

NET CUT VOLUME = 1,525 C.Y (±)*

(* NOTE :
VOLUMES ARE APPROXIMATE SEE SURVEY NOTE #4
ON SHT. "T1"

PROJECT DESCRIPTION, SPECIFICATIONS & METHODOLOGY

PROJECT DESCRIPTION:
THE PROJECT IS MAINTENANCE DREDGING OPERATIONS TO REMOVE SEDIMENT FROM
THE EXISTING HARBOR TO MAINTAIN ACCESS.

THE AREA WILL BE DREDGED TO ORIGINAL ELEVATION OF 6,220 FEET LAKE TAHOE
DATUM (LTD). A TOTAL OF APPROXIMATELY 1,525 CUBIC YARDS OF SEDIMENT WILL
BE DREDGED FROM THE ENTRANCE TOTALING APPROXIMATELY 41,175 SQUARE FEET.

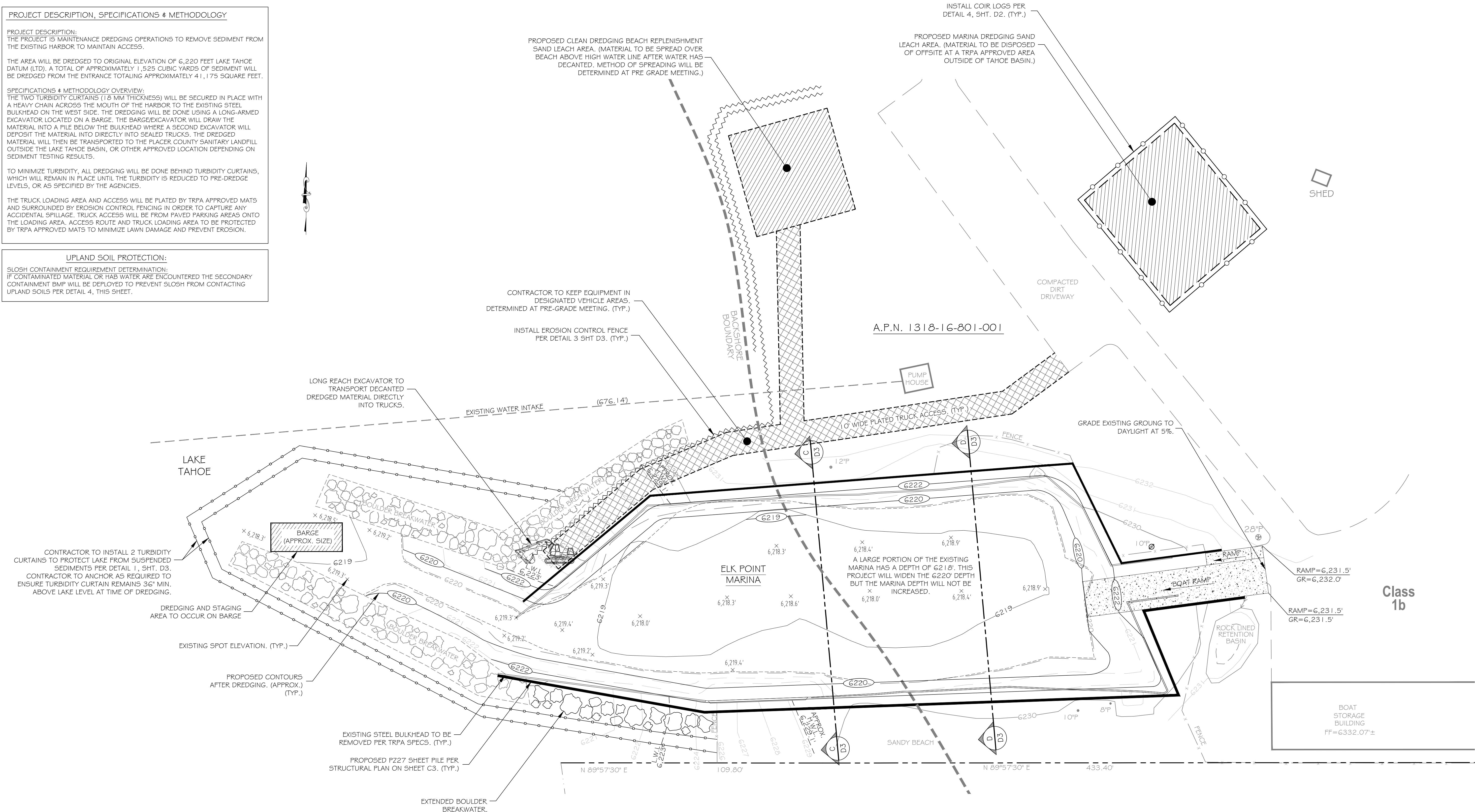
SPECIFICATIONS & METHODOLOGY OVERVIEW:
THE TWO TURBIDITY CURTAINS (10 MM THICKNESS) WILL BE SECURED IN PLACE WITH
A HEAVY CHAIN ACROSS THE MOUTH OF THE HARBOR TO THE EXISTING STEEL
BULKHEAD ON THE WEST SIDE. THE DREDGING WILL BE DONE USING A LONG-ARMED
EXCAVATOR LOCATED ON A BARGE. THE BARGE EXCAVATOR WILL DRAW THE
MATERIAL INTO A PILE BELOW THE BULKHEAD WHERE A SECOND EXCAVATOR WILL
DEPOSIT THE MATERIAL DIRECTLY INTO SEALED TRUCKS. THE DREDGED
MATERIAL WILL THEN BE TRANSPORTED TO THE PLACER COUNTY SANITARY LANDFILL
OUTSIDE THE LAKE TAHOE BASIN, OR OTHER APPROVED LOCATION DEPENDING ON
SEDIMENT TESTING RESULTS.

TO MINIMIZE TURBIDITY, ALL DREDGING WILL BE DONE BEHIND TURBIDITY CURTAINS,
WHICH WILL REMAIN IN PLACE UNTIL THE TURBIDITY IS REDUCED TO PRE-DREDGE
LEVELS, OR AS SPECIFIED BY THE AGENCIES.

THE TRUCK LOADING AREA AND ACCESS WILL BE PLATED BY TRPA APPROVED MATS
AND SURROUNDED BY EROSION CONTROL FENCING IN ORDER TO CAPTURE ANY
ACCIDENTAL SPILLAGE. TRUCK ACCESS WILL BE FROM PAVED PARKING AREAS ONTO
THE LOADING AREA. ACCESS ROUTE AND TRUCK LOADING AREA TO BE PROTECTED
BY TRPA APPROVED MATS TO MINIMIZE LAWN DAMAGE AND PREVENT EROSION.

UPLAND SOIL PROTECTION:

SLOSH CONTAINMENT REQUIREMENT DETERMINATION:
IF CONTAMINATED MATERIAL OR HAB WATER ARE ENCOUNTERED THE SECONDARY
CONTAINMENT BMP WILL BE DEPLOYED TO PREVENT SLOSH FROM CONTACTING
UPLAND SOILS PER DETAIL 4, THIS SHEET.



PROPOSED DREDGING PLAN

SCALE: 1"=20'-0"

REV.	DATE	DESCRIPTION	APPROVED	DATE

COMP.: FCE	DESIGN: HEG	
DRWN: HEG	PRJLENG.: TKF	
WORK ORDER:		
SCALE: AS NOTED		
HORIZONTAL:		
VERTICAL:		
CAD:	DATE: APRIL 7, 2023	

Ferrell Civil Engineering

CA #C 55546 NV #12927
P.O. Box 381, Tahoe Vista, CA 96148
PH: 530.548.2752
FAX: 530.548.4469
ferrell@fcivil.com

PROPOSED DREDGING PLAN

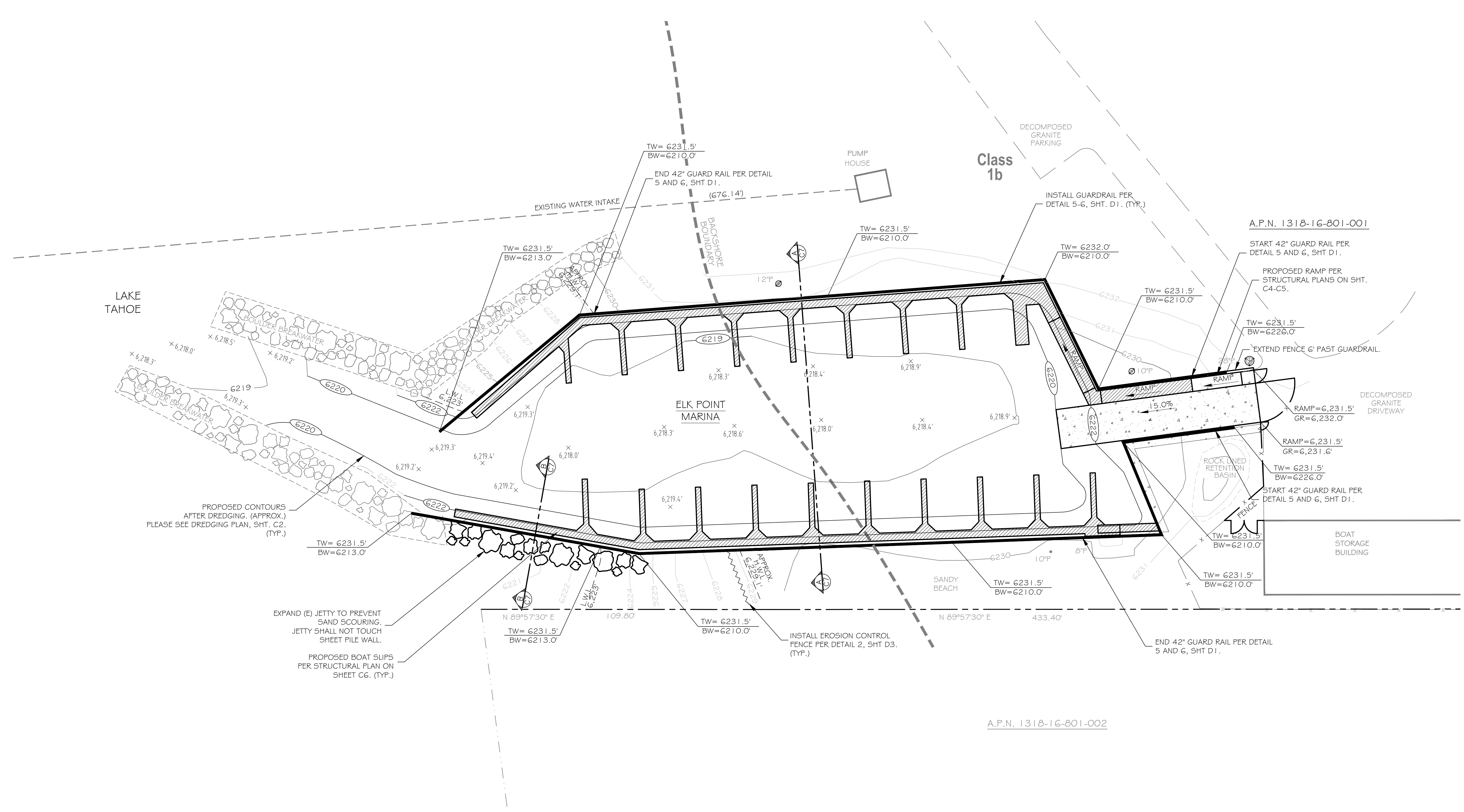
ELKS POINT MARINA REHABILITATION & DREDGING

C2

04-07-23

AGENDA ITEM NO. V. A.

ABBREVIATIONS	
GR	- EXISTING GRADE
PGR	- PROPOSED GRADE
TW	- TOP OF WALL
BW	- BOTTOM OF WALL
71.2'	
X	- PROPOSED SPOT ELEVATION



PROPOSED STEEL SHEET PILE PLAN
SCALE: 1"=20'-0"

REV.	DATE	DESCRIPTION	APPROVED	DATE

COMP.: HEG	DESIGN: HEG	DATE: NOVEMBER 7, 2023
DRWN: HEG	PRJ. ENG.: TKF	
WORK ORDER:		
SCALE: AS NOTED		
HORIZONTAL:		
VERTICAL:		
CAD:		

Ferrell Civil Engineering
 CA #C 55546 NV #12927
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PROFESSIONAL ENGINEER
 STATE OF CALIFORNIA
 LICENSE NO. 12927
 EXP. 6-30-23
 CIVIL

PROPOSED SHEET PILE PLAN
 ELKS POINT MARINA REHABILITATION PROJECT

C3

PANEL NOTES:

- PANELS SHALL BE CONSTRUCTED WITH MINIMUM 5,000 PSI CONCRETE AT 28 DAYS WITH 4 TO 6% AIR.
- CONCRETE WILL HAVE A HEAVY BROOM FINISH.
- PANELS SHALL HAVE 90° CORNERS.
- EACH PANEL WILL HAVE FOUR 2-TON GALVANIZED SWIFT-LIFT PINS, EXPOSED WITH POCKETS ON TOP FOR SETTING AND REMOVAL OF PANELS.
- STRUCTURAL DESIGN OF PANELS SHALL BE BASED ON ACI 318 AND AASHTO H-10 TRUCK LOADING, IMPACT FACTOR OF 1.0.

CONCRETE NOTES:

CONCRETE MIX SPECIFICATIONS FOR LAUNCHING RAMPS SHOULD INCLUDE THE FOLLOWING:

- 6 SACK CONCRETE
- TYPE II CEMENT
- 5% AIR ENTRAINMENT
- 5,000 PSI COMPRESSIVE STRENGTH @ 28 DAYS
- WATER/CEMENT RATIO OF 0.40
- 3 TO 4 INCH SILUMP
- 3/4 INCH MAXIMUM AGGREGATE.
- INSTALL 1/2" EXPANSION JOINT BETWEEN STEEL SHEET PILE AND CONCRETE RAMP.

ABUTMENTS ARE TYPICALLY CONSTRUCTED OF REINFORCED CONCRETE.

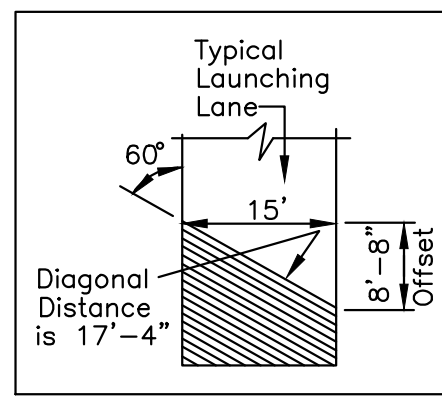
- ABUTMENT CONCRETE SHOULD HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI, AND BE REINFORCED WITH NOT LESS THAN #4 DEFORMED REINFORCING STEEL BARS.
- THE ABUTMENT SURFACE SHOULD RECEIVE A ROUGH BROOM FINISH PERPENDICULAR TO THE DIRECTION OF TRAFFIC TO PROVIDE APPROPRIATE TRACTION. IF OTHER CONSTRUCTION MATERIALS ARE USED, THE SURFACE TRACTION MUST BE NOT LESS THAN THAT PROVIDED BY A ROUGH BROOM FINISHED CONCRETE ABUTMENT.

V-GROOVE LAUNCHING RAMP FINISH NOTES:

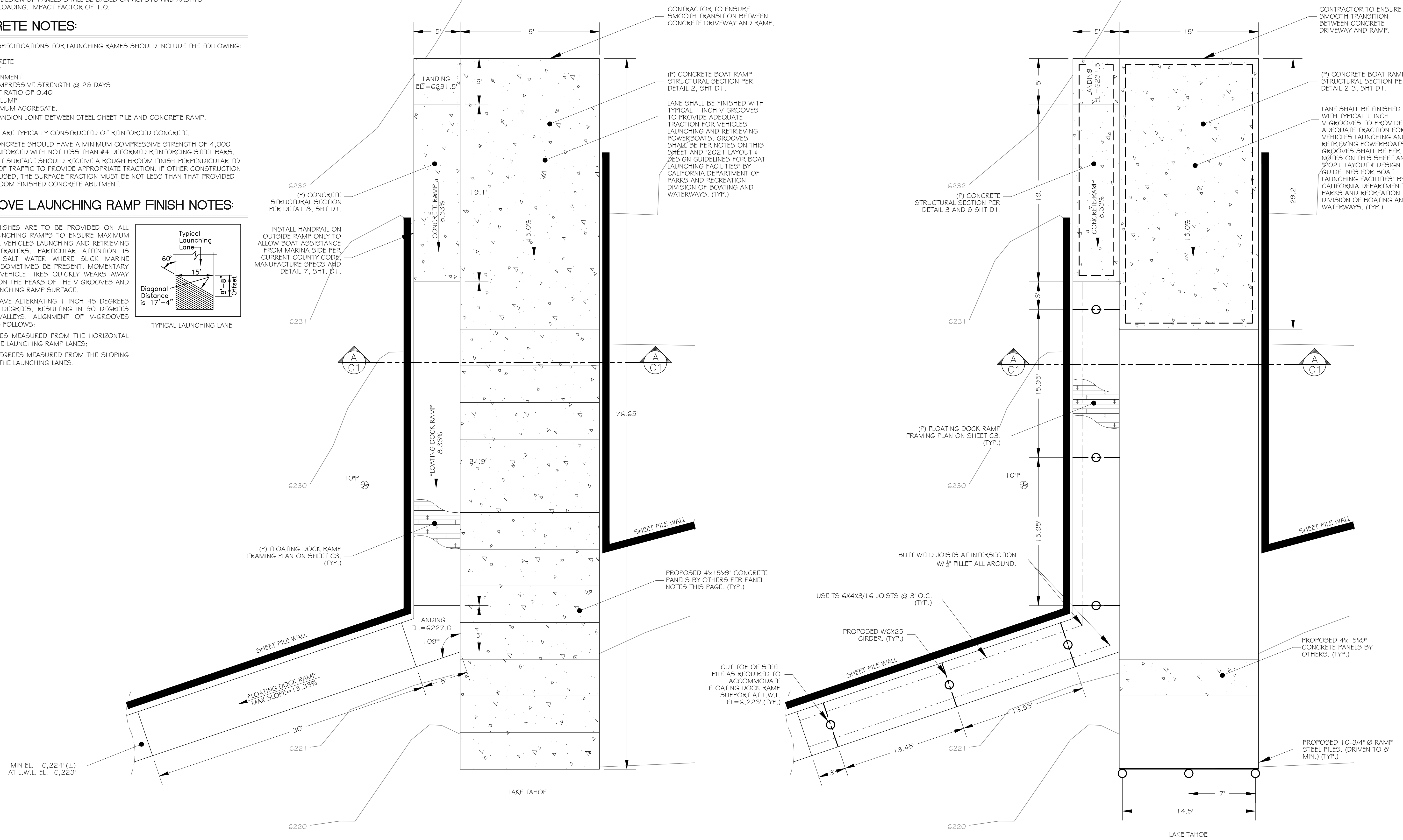
V-GROOVE FINISHES ARE TO BE PROVIDED ON ALL CONCRETE LAUNCHING RAMPS TO ENSURE MAXIMUM TRACTION FOR VEHICLES LAUNCHING AND RETRIEVING BOATS AND TRAILERS. PARTICULAR ATTENTION IS REQUIRED IN SALT WATER WHERE SLICK MARINE GROWTH WILL SOMETIMES BE PRESENT. MOMENTARY SPINNING OF VEHICLE TIRES QUICKLY WEARS AWAY THE GROWTH ON THE PEAKS OF THE V-GROOVES AND GRIPS THE LAUNCHING RAMP SURFACE.

V-GROOVES HAVE ALTERNATING 1 INCH 45 DEGREE FACES AT 45 DEGREES, RESULTING IN 90 DEGREE PEAKS AND VALLEYS. ALIGNMENT OF V-GROOVES SHOULD BE AS FOLLOWS:

- 30 DEGREES MEASURED FROM THE HORIZONTAL TOE OF THE LAUNCHING RAMP LANES;
- AND 60 DEGREES MEASURED FROM THE SLOPING SIDES OF THE LAUNCHING LANES.



TYPICAL LAUNCHING LANE



PLAN VIEW
SCALE: 1"=5'-0"

FRAMING PLAN
SCALE: 1"=5'-0"

REV.	DATE	DESCRIPTION	APPROVED	DATE

COMP.: HBG
 DESIG.: HBG
 PROJ. ENG.: TKF
 WORK. ORDER:
 SCALE: AS NOTED
 HORIZONTAL:
 VERTICAL:
 CAD:
 DATE: APRIL 7, 2023

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REGISTERED PROFESSIONAL ENGINEER
 No. 12927
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 CIVIL
 STATE OF CALIFORNIA

PROPOSED BOAT RAMP PLANS
ELKS POINT MARINA REHABILITATION PROJECT

C4

04-07-23

AGENDA ITEM NO. V. A.

PANEL NOTES:

- PANELS SHALL BE CONSTRUCTED WITH MINIMUM 5,000 PSI CONCRETE AT 28 DAYS WITH 4 TO 6% AIR.
- PANELS SHALL HAVE 90° CORNERS.
- EACH PANEL WILL HAVE FOUR 2-TON GALVANIZED SWIFT-LIFT PINS, EXPOSED WITH POCKETS ON TOP FOR SETTING AND REMOVAL OF PANELS.
- STRUCTURAL DESIGN OF PANELS SHALL BE BASED ON ACI 318 AND AASHTO H-10 TRUCK LOADING, IMPACT FACTOR OF 1.0.

CONCRETE NOTES:

CONCRETE MIX SPECIFICATIONS FOR LAUNCHING RAMP SHOULD INCLUDE THE FOLLOWING:

- 6 SACK CONCRETE
- TYPE II CEMENT
- 5% AIR ENTRAINMENT
- 5,000 PSI COMPRESSIVE STRENGTH @ 28 DAYS
- WATER/CEMENT RATIO OF 0.40
- 3 TO 4 INCH SLUMP
- 3/4 INCH MAXIMUM AGGREGATE.
- INSTALL 1/2" EXPANSION JOINT BETWEEN STEEL SHEET PILE AND CONCRETE RAMP.

ABUTMENTS ARE TYPICALLY CONSTRUCTED OF REINFORCED CONCRETE.

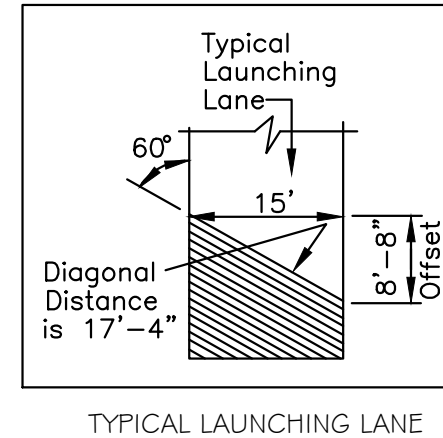
- ABUTMENT CONCRETE SHOULD HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI, AND BE REINFORCED WITH NOT LESS THAN #4 DEFORMED REINFORCING STEEL BARS.
- THE ABUTMENT SURFACE SHOULD RECEIVE A ROUGH BROOM FINISH PERPENDICULAR TO THE DIRECTION OF TRAFFIC TO PROVIDE APPROPRIATE TRACTION. IF OTHER CONSTRUCTION MATERIALS ARE USED, THE SURFACE TRACTION MUST BE NOT LESS THAN THAT PROVIDED BY A ROUGH BROOM FINISHED CONCRETE ABUTMENT.

V-GROOVE LAUNCHING RAMP FINISH NOTES:

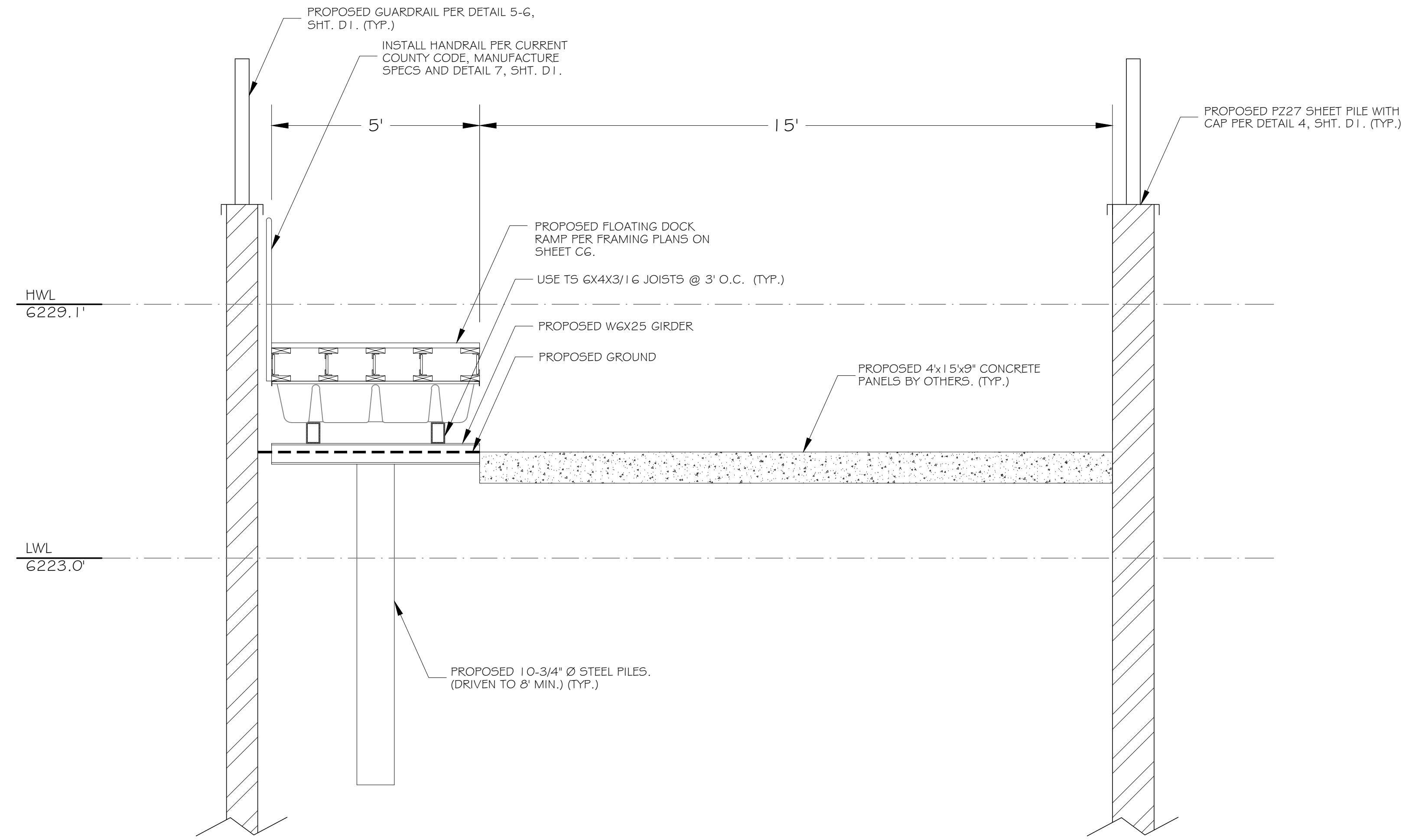
V-GROOVE FINISHES ARE TO BE PROVIDED ON ALL CONCRETE LAUNCHING RAMP TO ENSURE MAXIMUM TRACTION FOR VEHICLES LAUNCHING AND RETRIEVING BOATS AND TRAILERS. PARTICULAR ATTENTION IS REQUIRED IN SALT WATER WHERE SLICK MARINE GROWTH WILL SOMETIMES BE PRESENT. MOMENTARY SPINNING OF VEHICLE TIRES QUICKLY WEARS AWAY THE GROWTH ON THE PEAKS OF THE V-GROOVES AND GRIPS THE LAUNCHING RAMP SURFACE.

V-GROOVES HAVE ALTERNATING 1 INCH 45 DEGREE FACES AT 45 DEGREES, RESULTING IN 90 DEGREE PEAKS AND VALLEYS. ALIGNMENT OF V-GROOVES SHOULD BE AS FOLLOWS:

- 30 DEGREES MEASURED FROM THE HORIZONTAL TOE OF THE LAUNCHING RAMP LANES;
- AND 60 DEGREES MEASURED FROM THE SLOPING SIDES OF THE LAUNCHING LANES.

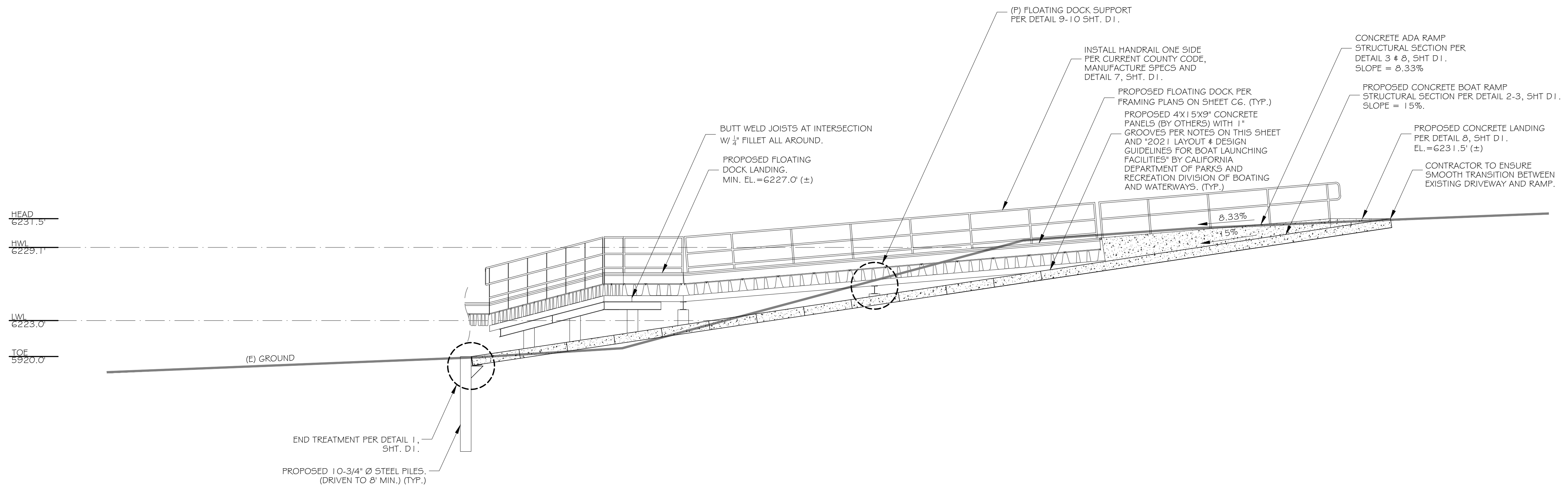


TYPICAL LAUNCHING LANE



SECTION A-A

SCALE: 1"=2'-0"



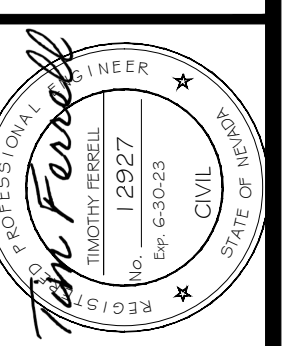
SOUTH ELEVATION VIEW

SCALE: 1"=5'-0"

REV.	DATE	DESCRIPTION	APPROVED	DATE

COMP.: ECE DESIG.: HEG HEG PROJEN.: TKF
 DRWN.: HEG PRJEN.: TKF
 WORK ORDER:
 SCALE: AS NOTED
 HORIZONTAL:
 VERTICAL:
 CAD:
 DATE: APRIL 7, 2023

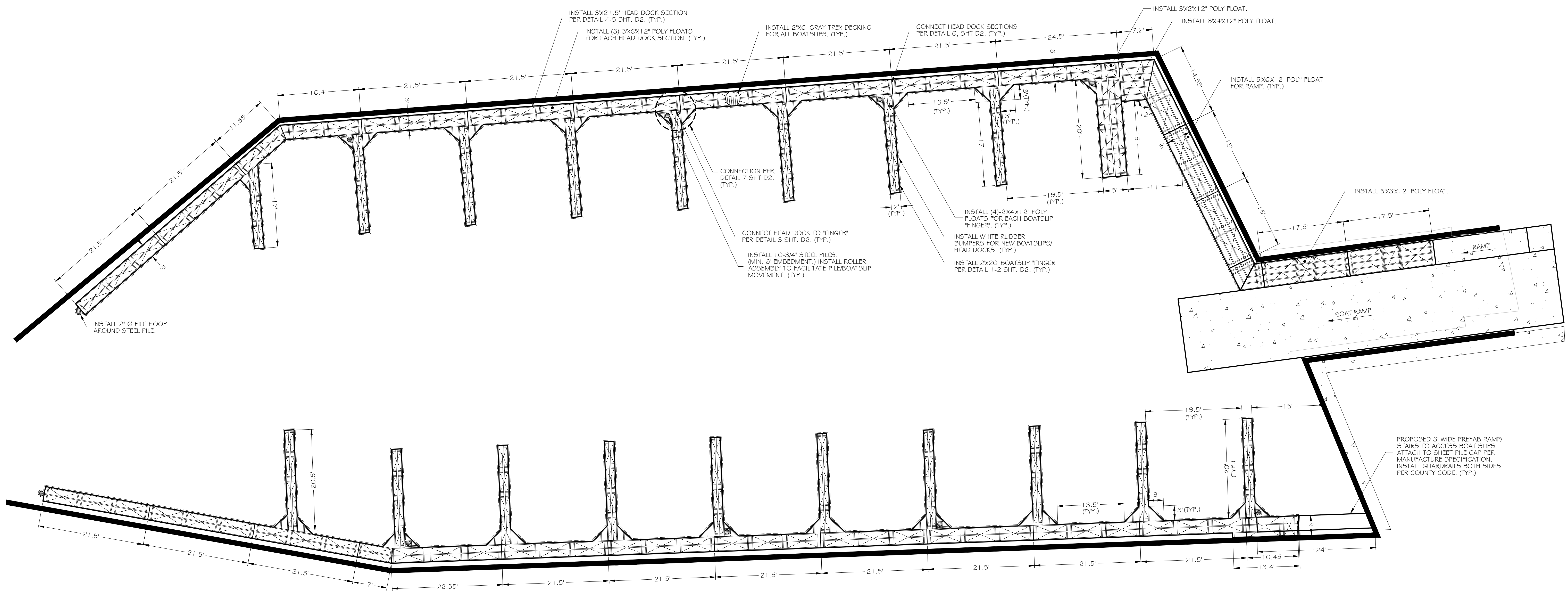
CA #C 55546 NV #12927
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 ferrell@ferrill.com
Ferrell Civil Engineering
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 fax: 530.548.4469



PROPOSED BOAT RAMP ELEVATION AND SECTION
 ELKS POINT MARINA REHABILITATION PROJECT

C5

NOTE:
PROPOSED BOAT SLIPS ARE FLOATING.
DECK ELEVATION WILL VARY WITH LAKE LEVEL. (TYP.)



(P) BOAT SLIPS FRAMING PLAN
SCALE: 1"=10'-0"

REV.	DATE	DESCRIPTION	APPROVED	DATE

COMP.: ECE DESIGN: HEG
 DRWN: MST PROJEN.: TKF
 WORK ORDER:
 SCALE: AS NOTED
 HORIZONTAL:
 VERTICAL:
 CAD:

CA #C 55546 NV #12927
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 DATE: APRIL 7, 2023

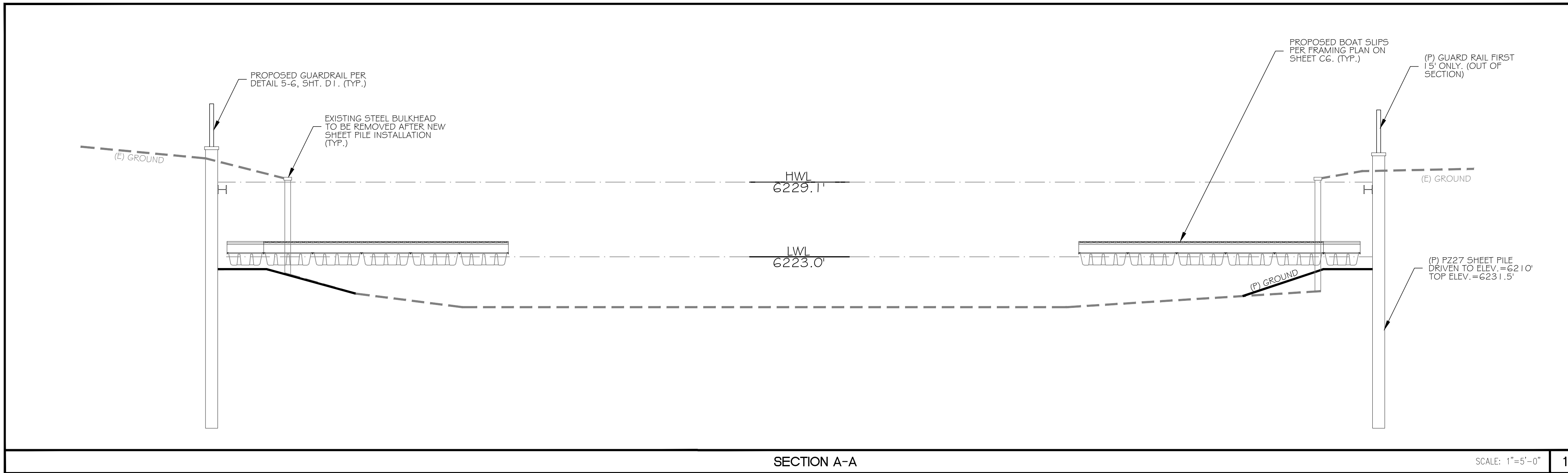
PROFESSIONAL SEAL
 REGISTERED PROFESSIONAL ENGINEER
 No. 6-19-23
 CIVIL
 STATE OF CALIFORNIA

PROPOSED BOAT SLIPS PLANS
 ELKS POINT MARINA REHABILITATION PROJECT

04-07-23

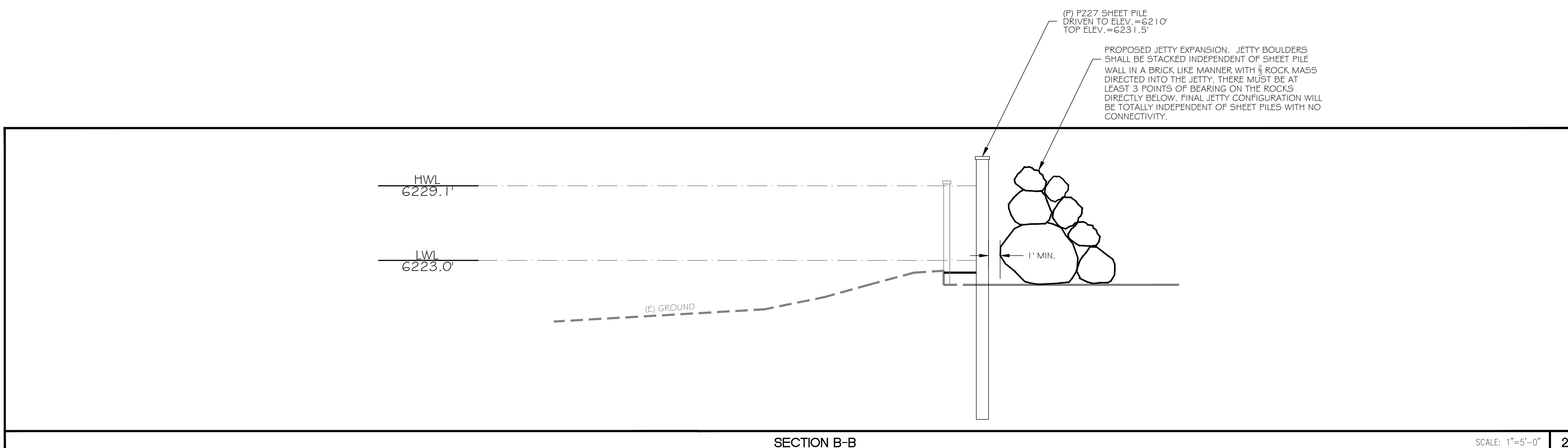
C6

AGENDA ITEM NO. V. A.



SECTION A-A

SCALE: 1"=5'-0" 1



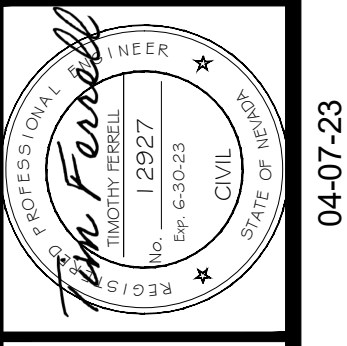
SECTION B-B

SCALE: 1"=5'-0" 2

REV.	DATE	DESCRIPTION	APPROVED	DATE
1				
2				
3				
4				
5				

COMP.: ECE DESIGN: HBG
 DRWN.: HBG PROJEN.: TKF
 WORK ORDER:
 SCALE: AS NOTED
 HORIZONTAL:
 VERTICAL:
 CAD:
 DATE: APRIL 7, 2023

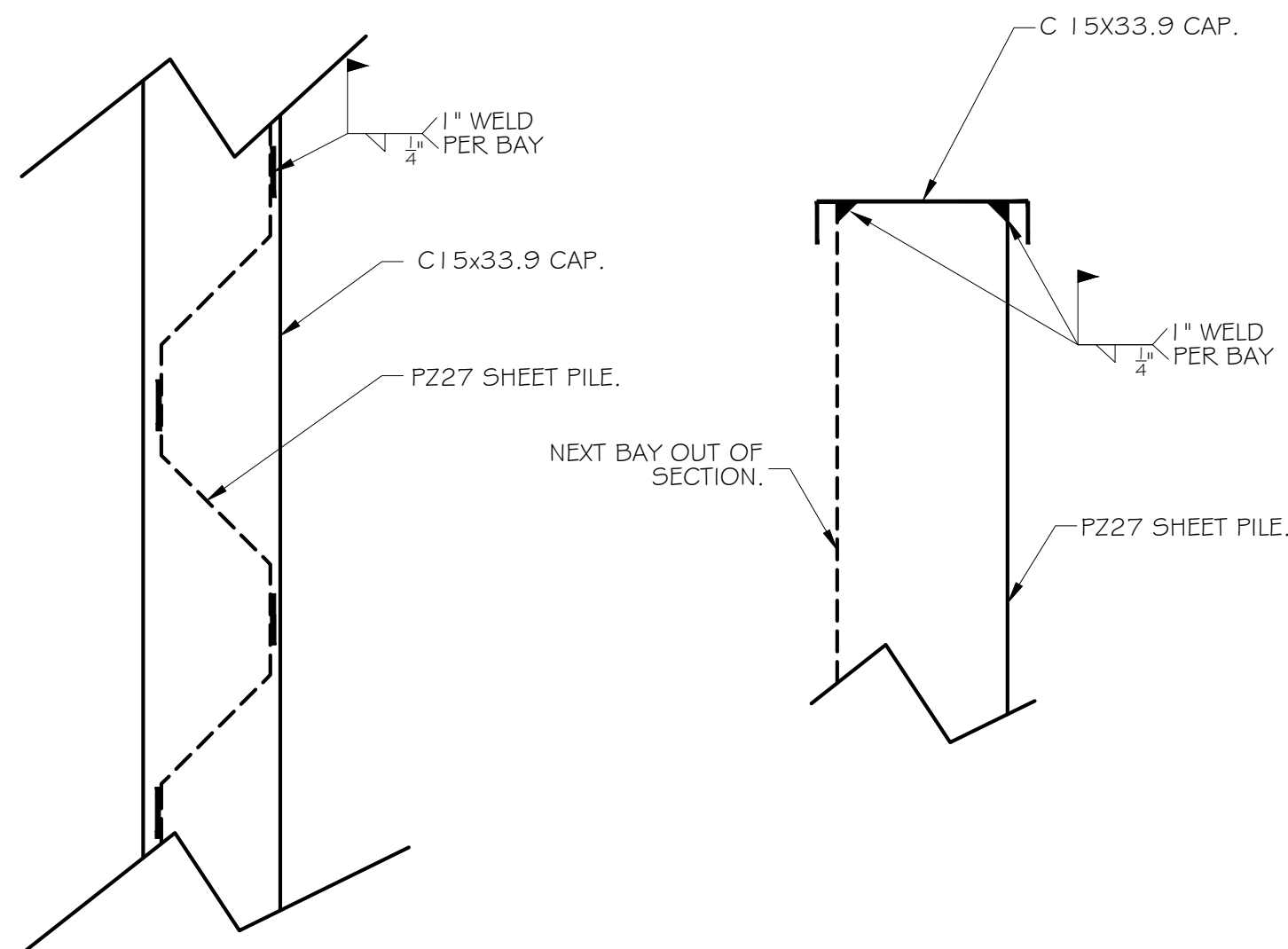
Ferrell Civil Engineering
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 ferrell@fcivil.com



SECTIONS

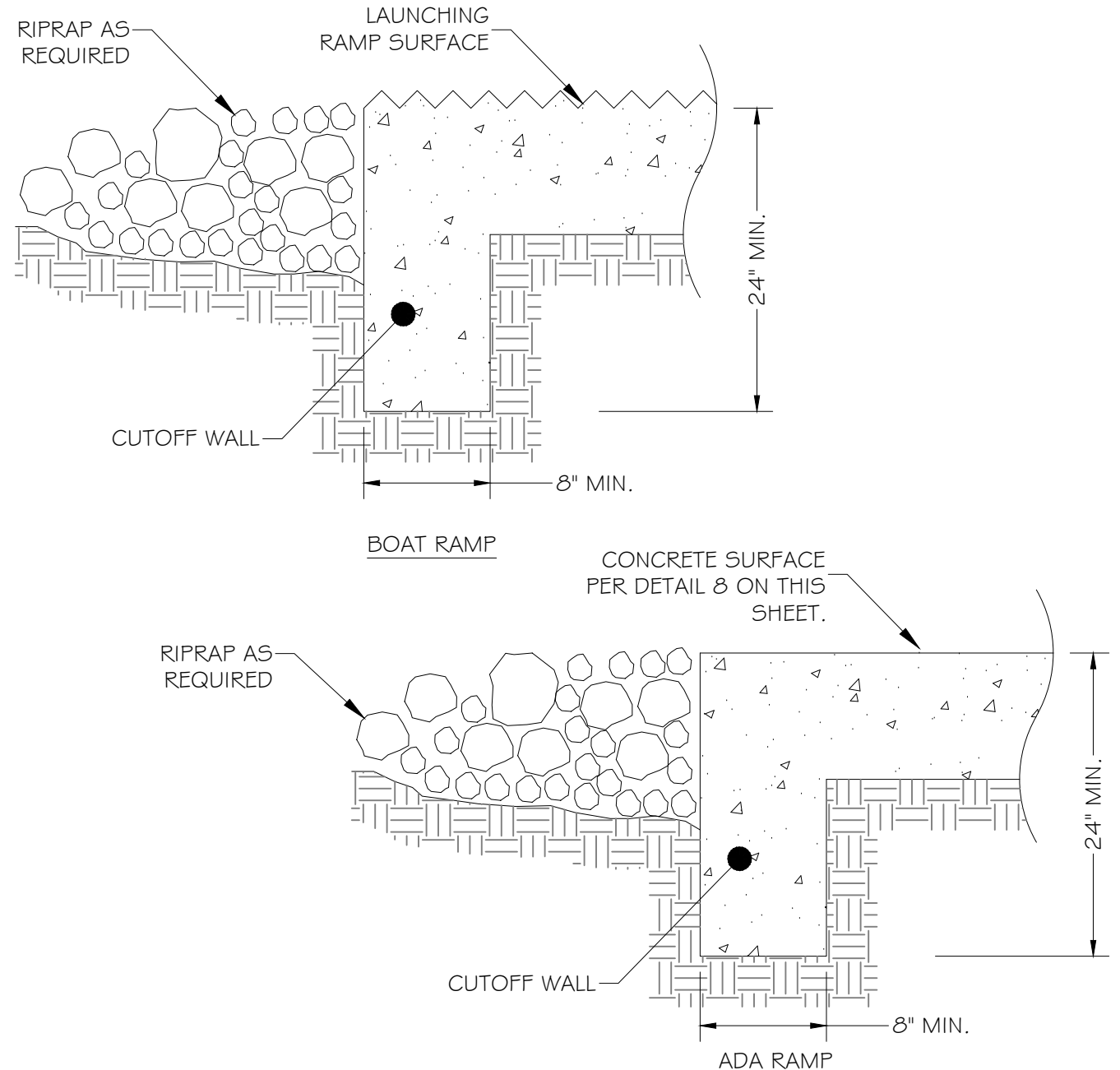
ELKS POINT MARINA REHABILITATION & DREDGING

C7



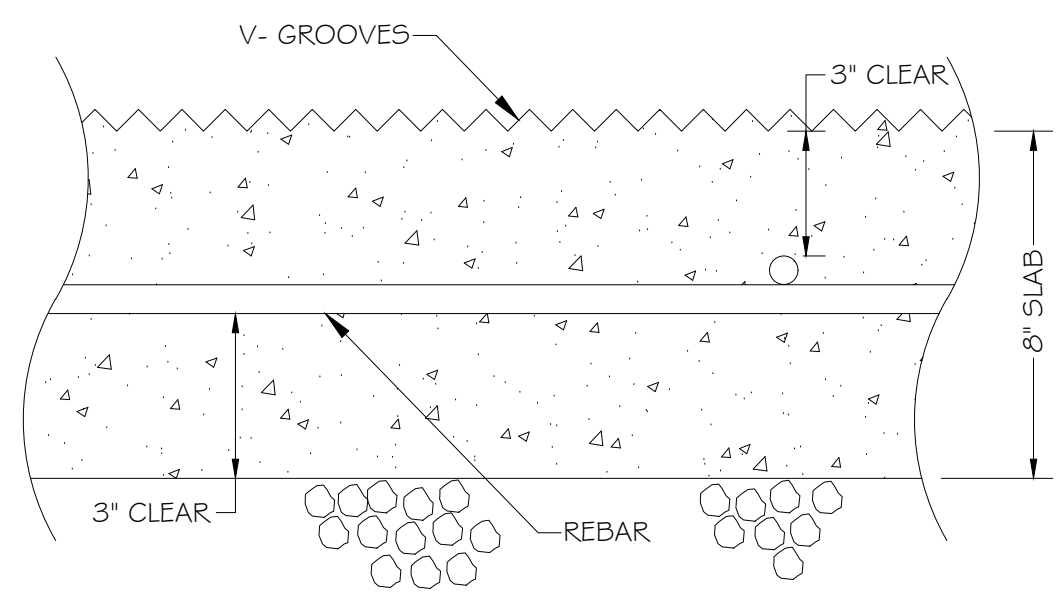
USE PZ27 STEEL SHEET PILING, MEETING ASTM A 572 GRADE 50 SPECIFICATIONS.

PILE CAP DETAIL NO SCALE 4



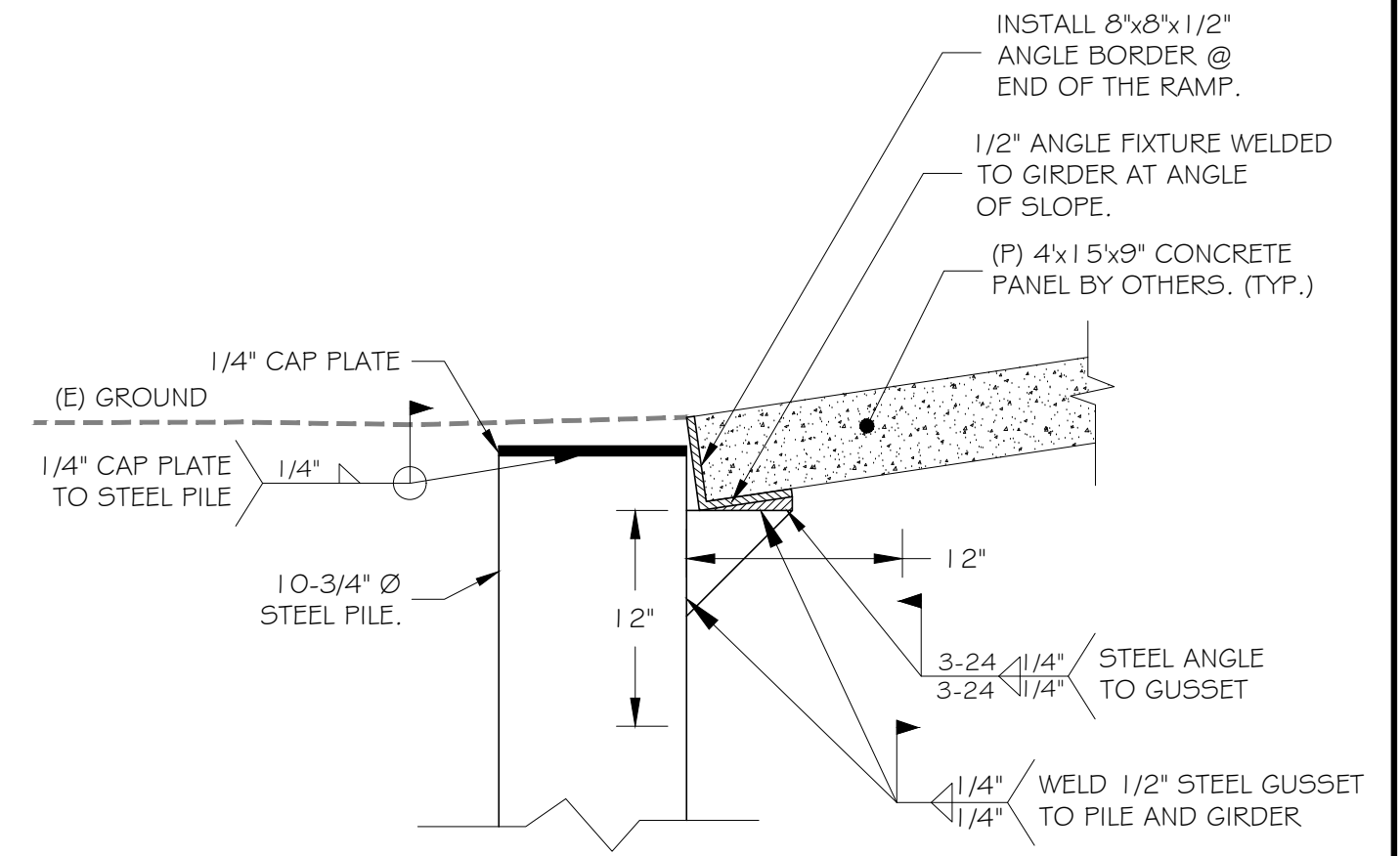
REINFORCED CUTOFF WALL NO SCALE 3

9" CONCRETE SLAB W/ #3 REBAR @ 18" O.C. EACH WAY AND FIBERMESH REINFORCEMENT OVER FABRIC OVER 8" OF 1-1/2" - 2" CLEAN COBBLE. (TYP.)



- 6 SACK CONCRETE
- TYPE II CEMENT
- 5% AIR ENTRAINMENT
- 5,000 PSI COMPRESSIVE STRENGTH @ 28 DAYS
- WATER/CEMENT RATIO OF 0.40
- 3 TO 4 INCH SLUMP
- 3/4 INCH MAXIMUM AGGREGATE.

CONC. LAUNCHING RAMP SLAB SECTION NO SCALE 2



END TREATMENT DETAIL NO SCALE 1

HANDRAIL NOTES:

- ALL HANDRAILS SHALL BE GRIPPABLE O. 120" WALL 1 - 1/2" Ø STEEL ROUND TUBING.
- HANDRAIL SHALL CONSIST OF A LENGTHWISE MEMBER MOUNTED DIRECTLY ON A WALL OR PARTITION BY MEANS OF BRACKETS ATTACHED TO THE LOWER SIDE OF THE HANDRAIL SO AS TO OFFER NO OBSTRUCTION TO A SMOOTH SURFACE ALONG THE TOP AND BOTH SIDES OF THE HANDRAIL. THE HANDRAIL SHALL BE DESIGNED TO PROVIDE A GRASPING SURFACE TO AVOID THE PERSON USING IT FROM FALLING. THE SPACING OF BRACKETS SHALL NOT EXCEED 8 FEET.
- HANDRAILS PROJECTING FROM A WALL SHALL HAVE A SPACE OF NOT LESS THAN 1/2 INCHES BETWEEN THE WALL AND THE HANDRAIL.
- THE MOUNTING OF HANDRAILS SHALL BE SUCH THAT THE COMPLETED STRUCTURE IS CAPABLE OF WITHSTANDING A LOAD OF AT LEAST 200 POUNDS APPLIED IN ANY DIRECTION AT ANY POINT ON THE RAIL.
- INSTALL HANDRAILS PER IBC.
- ALL WELDS TO BE GROUND SMOOTH AND PAINTED. (TYP.)

505 HANDRAILS

505.1 GENERAL. HANDRAILS PROVIDED ALONG WALKING SURFACES COMPLYING WITH 403, REQUIRED AT RAMPS COMPLYING WITH 405, AND REQUIRED AT STAIRS COMPLYING WITH 504 SHALL COMPLY WITH 505.

505.3 CONTINUITY. HANDRAILS SHALL BE CONTINUOUS WITHIN THE FULL LENGTH OF EACH STAIR FLIGHT OR RAMP RUN. INSIDE HANDRAILS ON SWITCHBACK OR DOGLEG STAIRS AND RAMPS SHALL BE CONTINUOUS BETWEEN FLIGHTS OR RUNS.

505.4 HEIGHT. TOP OF GRIPPING SURFACES OF HANDRAILS SHALL BE 34 INCHES (865 MM) MINIMUM AND 38 INCHES (965 MM) MAXIMUM VERTICALLY ABOVE WALKING SURFACES, STAIR NOSINGS, AND RAMP SURFACES. HANDRAILS SHALL BE AT A CONSISTENT HEIGHT ABOVE WALKING SURFACES, STAIR NOSINGS, AND RAMP SURFACES.

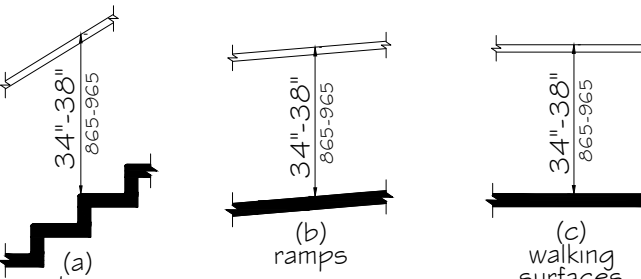


FIGURE 505.4 HANDRAIL HEIGHT

505.10.1 TOP AND BOTTOM EXTENSION AT RAMPS. RAMP HANDRAILS SHALL EXTEND HORIZONTALLY ABOVE THE LANDING FOR 12 INCHES (305 MM) MINIMUM BEYOND THE TOP AND BOTTOM OF RAMP RUNS. EXTENSIONS SHALL RETURN TO A WALL, GUARD, OR THE LANDING SURFACE, OR SHALL BE CONTINUOUS TO THE HANDRAIL OF AN ADJACENT RAMP RUN.

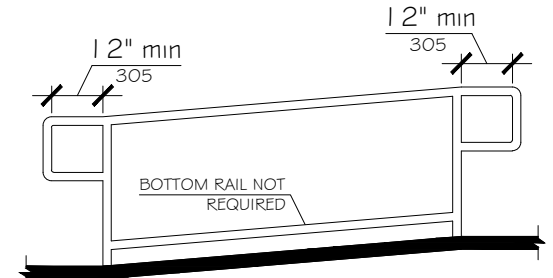
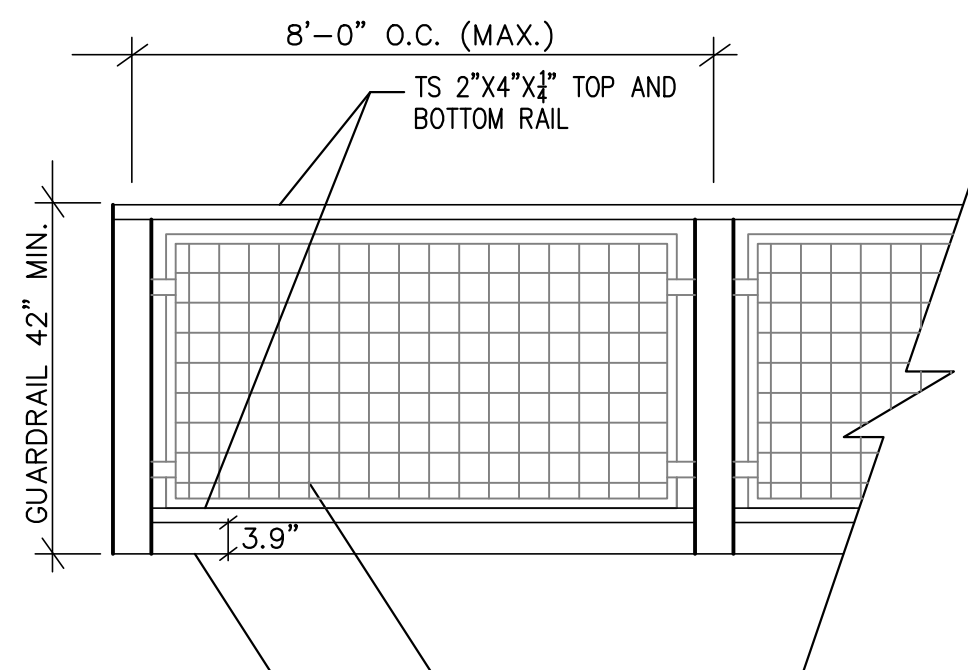


FIGURE 505.10.1 TOP AND BOTTOM HANDRAIL EXTENSION AT RAMPS

RAMP HANDRAILS AT THE TOP AND BOTTOM ARE SHOWN TO EXTEND HORIZONTALLY ABOVE LANDING 12 INCHES (305 MM) MINIMUM FROM RAMP RUN. THE EXTENSIONS RETURN TO POSTS.

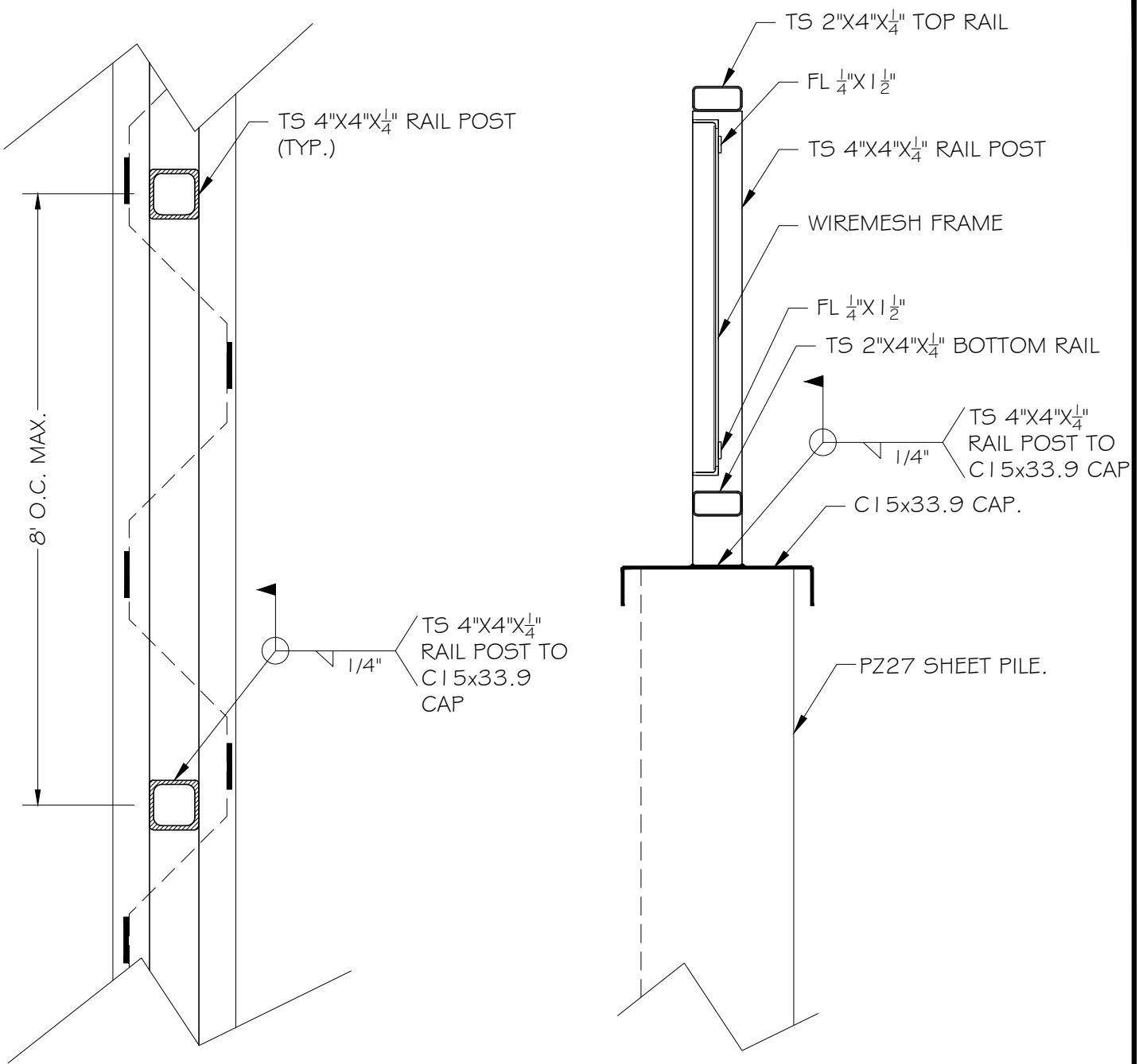
505.10.2 TOP EXTENSION AT STAIRS. AT THE TOP OF A STAIR FLIGHT, HANDRAILS SHALL EXTEND HORIZONTALLY ABOVE THE LANDING FOR 12 INCHES (305 MM) MINIMUM BEGINNING DIRECTLY ABOVE THE FIRST RISER NOSING. EXTENSIONS SHALL RETURN TO A WALL, GUARD, OR THE LANDING SURFACE, OR SHALL BE CONTINUOUS TO THE HANDRAIL OF AN ADJACENT STAIR FLIGHT.

HANDRAIL SPECIFICATIONS NO SCALE 7

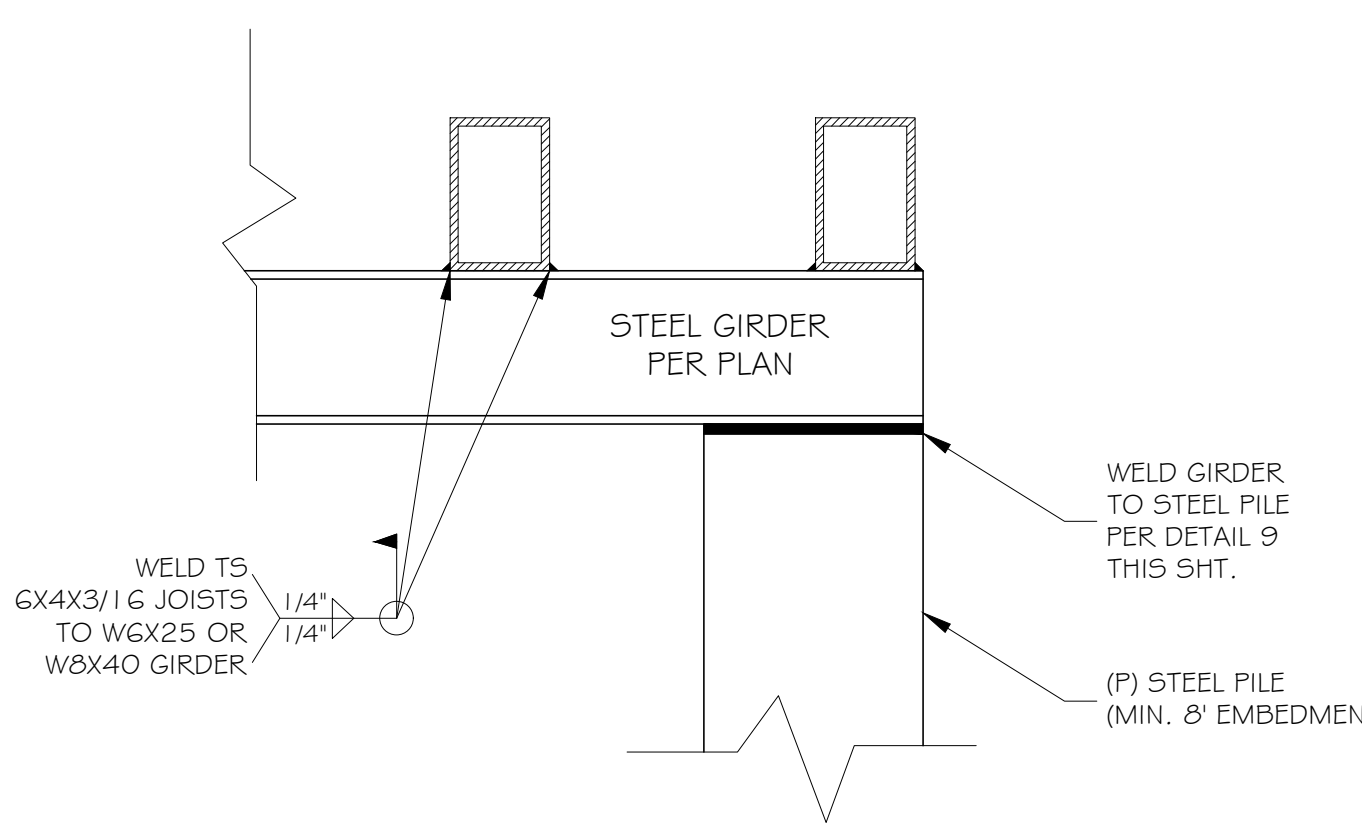


CONTRACTOR TO PROVIDE FOR SUBMITTAL PREFABRICATED WIRE MESH GUARDRAIL W/ 1/4" CORROSION RESISTANT WIRE MESH GRID AND POST CONNECTION CONFIGURATION FOR APPROVAL BY ELK POINT MARINA PERSONNEL. SUBMITTAL MUST MEET ALL IBC GUARDRAIL REQUIREMENTS.

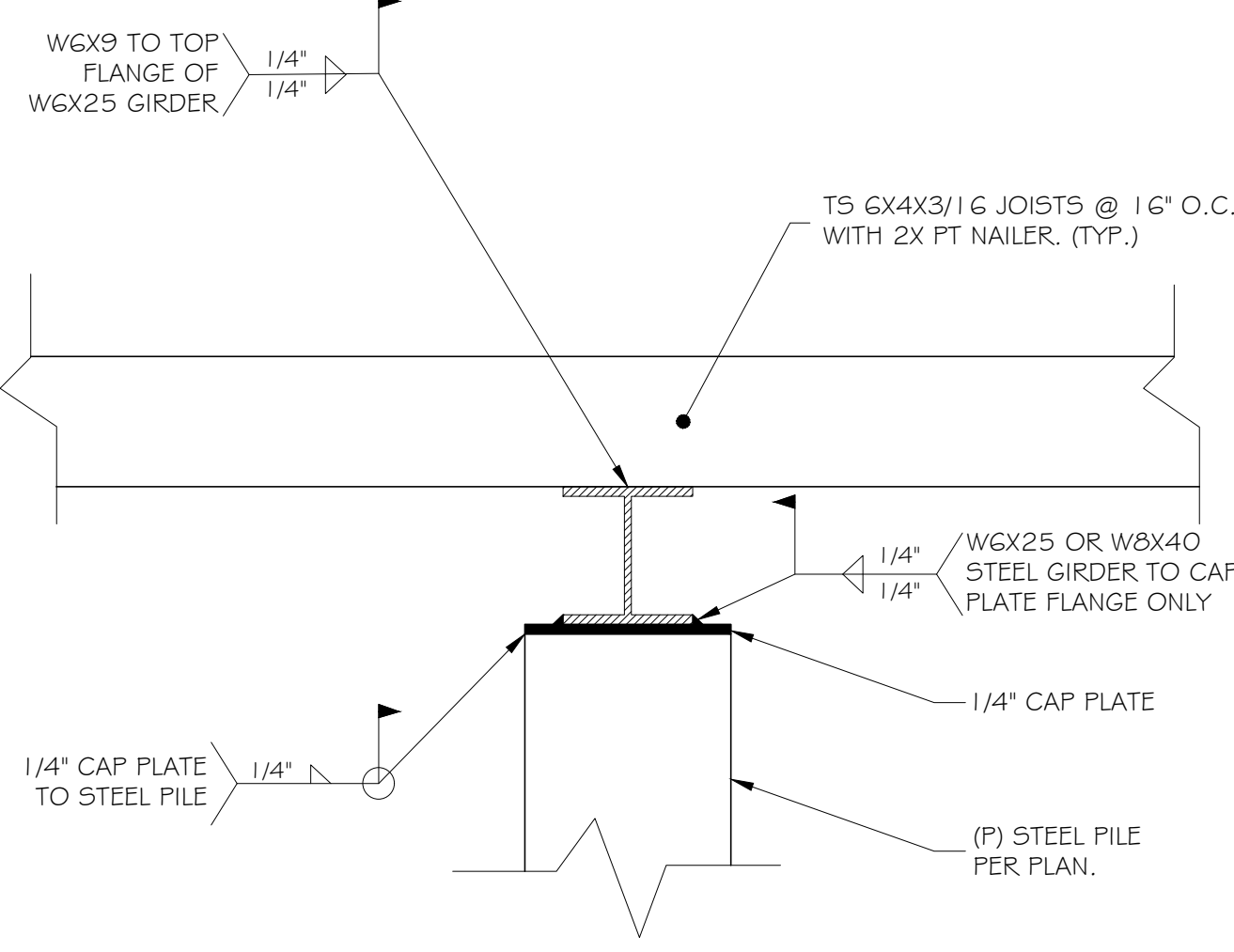
GUARDRAIL DETAIL NO SCALE 6



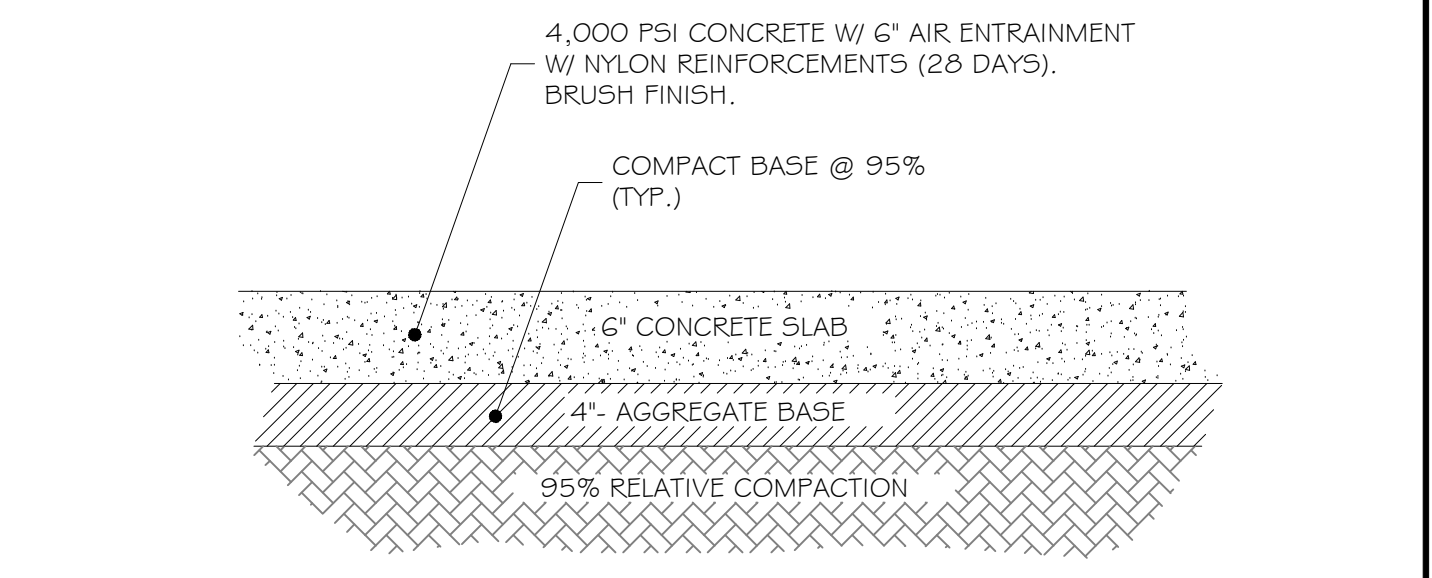
SHEET PILE GUARDRAIL DETAIL NO SCALE 5



CONNECTION DETAIL NO SCALE 10



GIRDER/JOIST CROSS SECTION NO SCALE 9



CONCRETE SECTION DETAIL NO SCALE 8

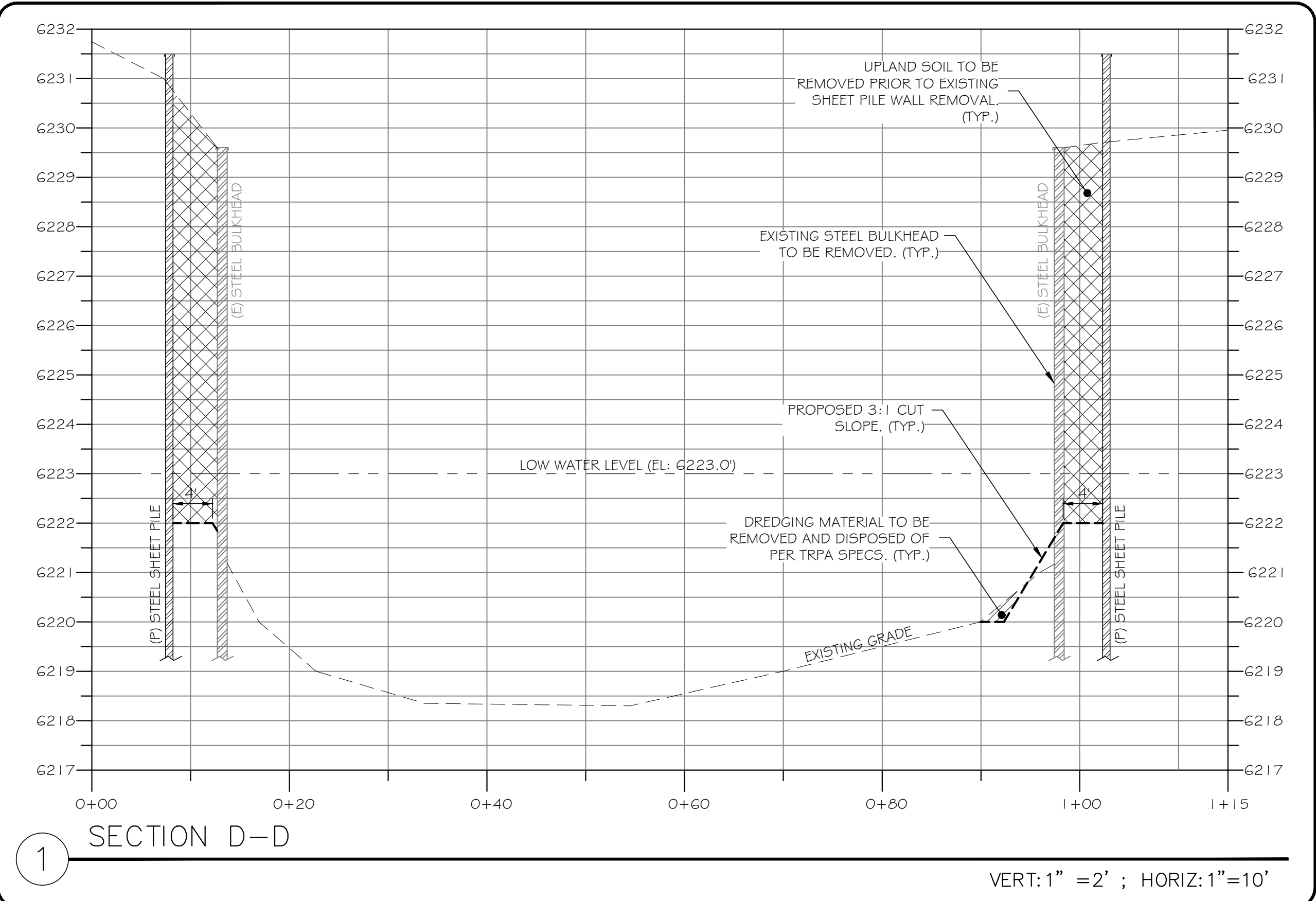
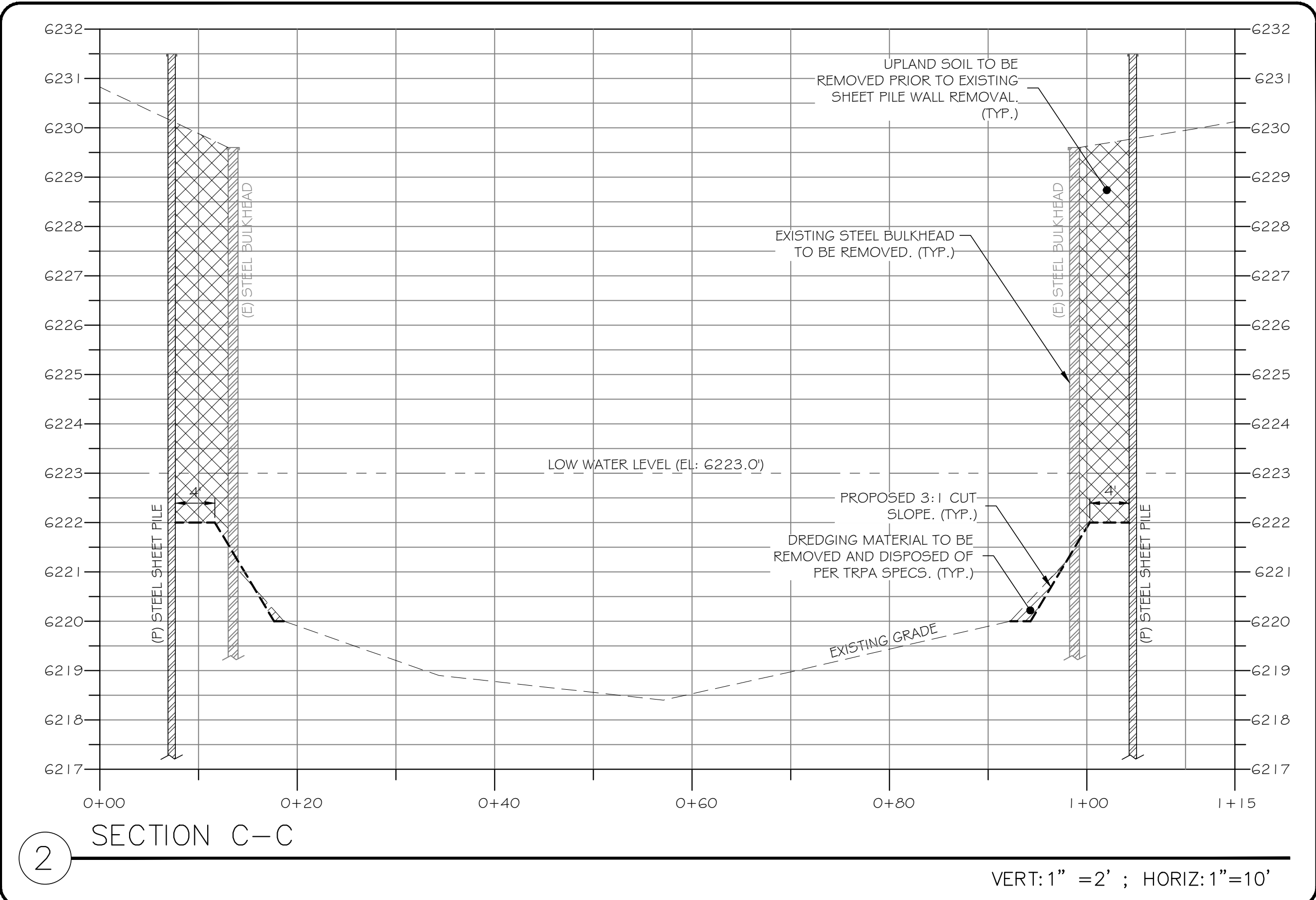
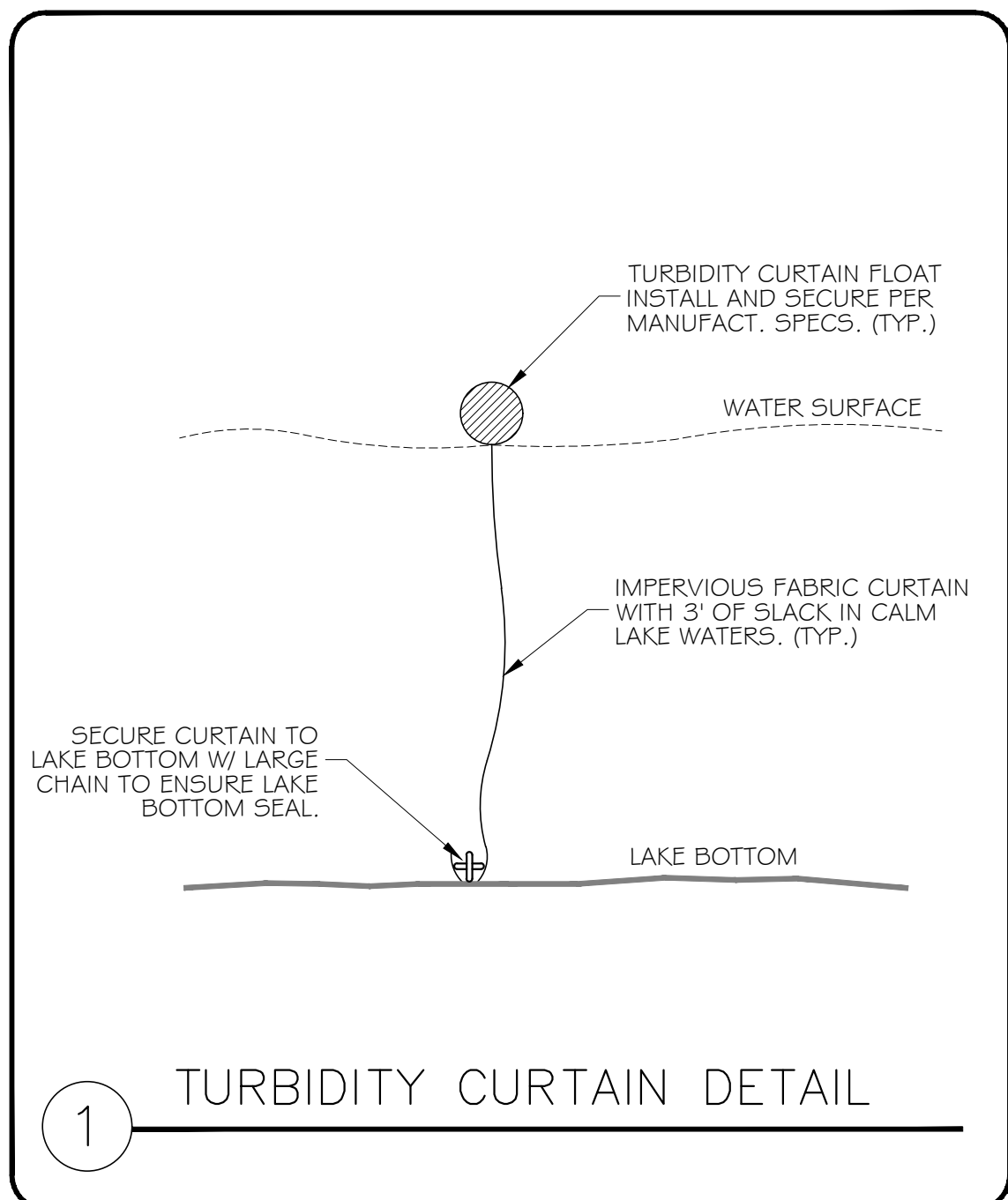
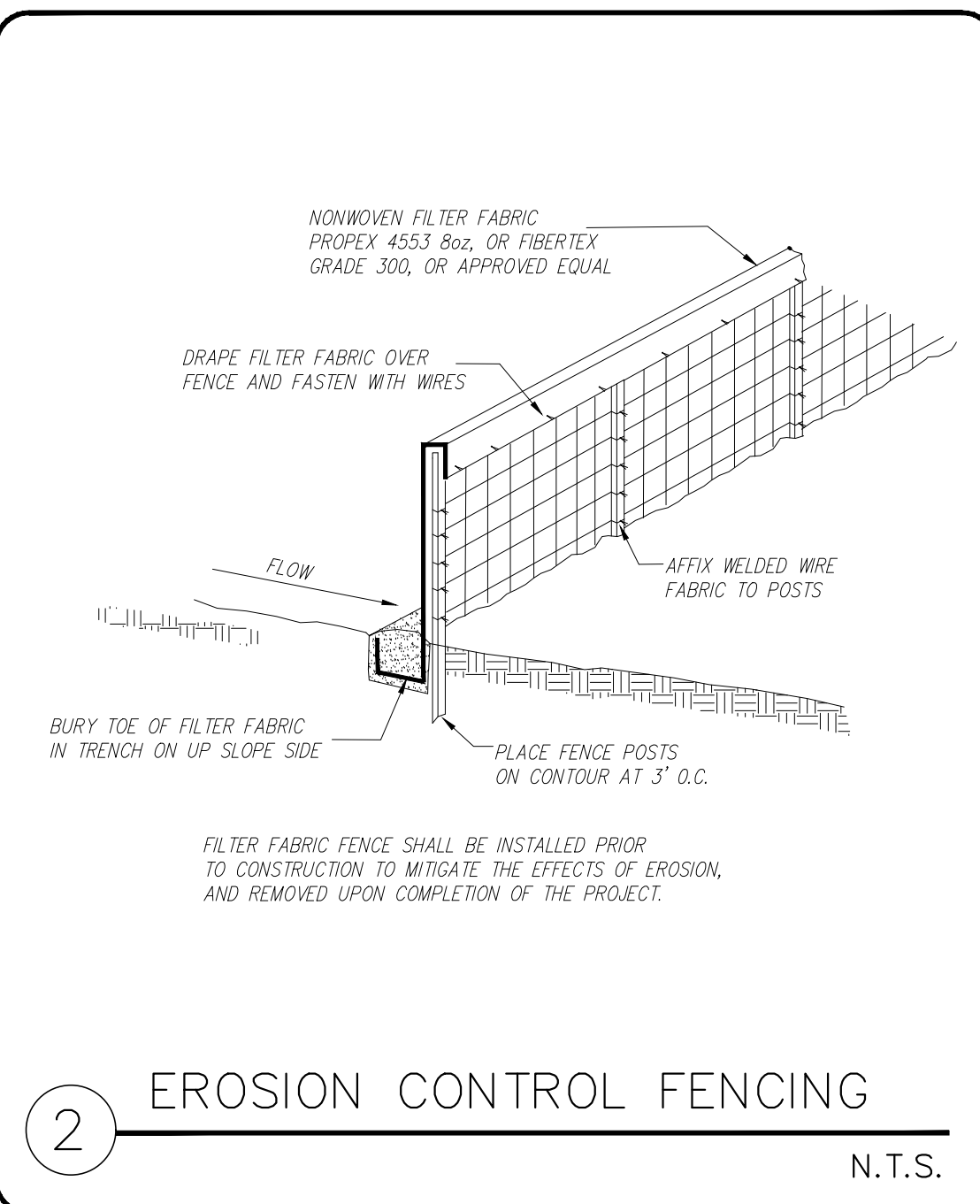
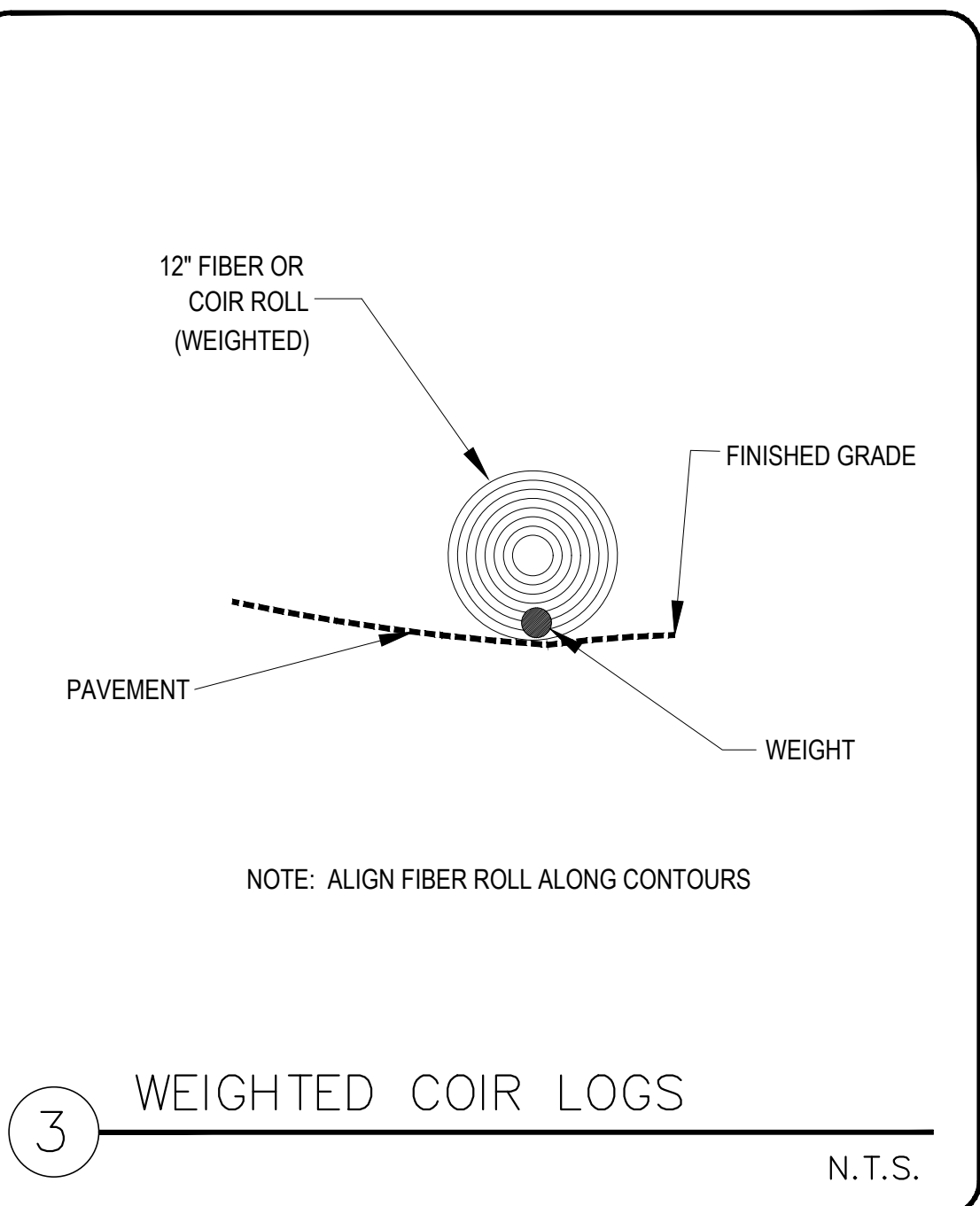
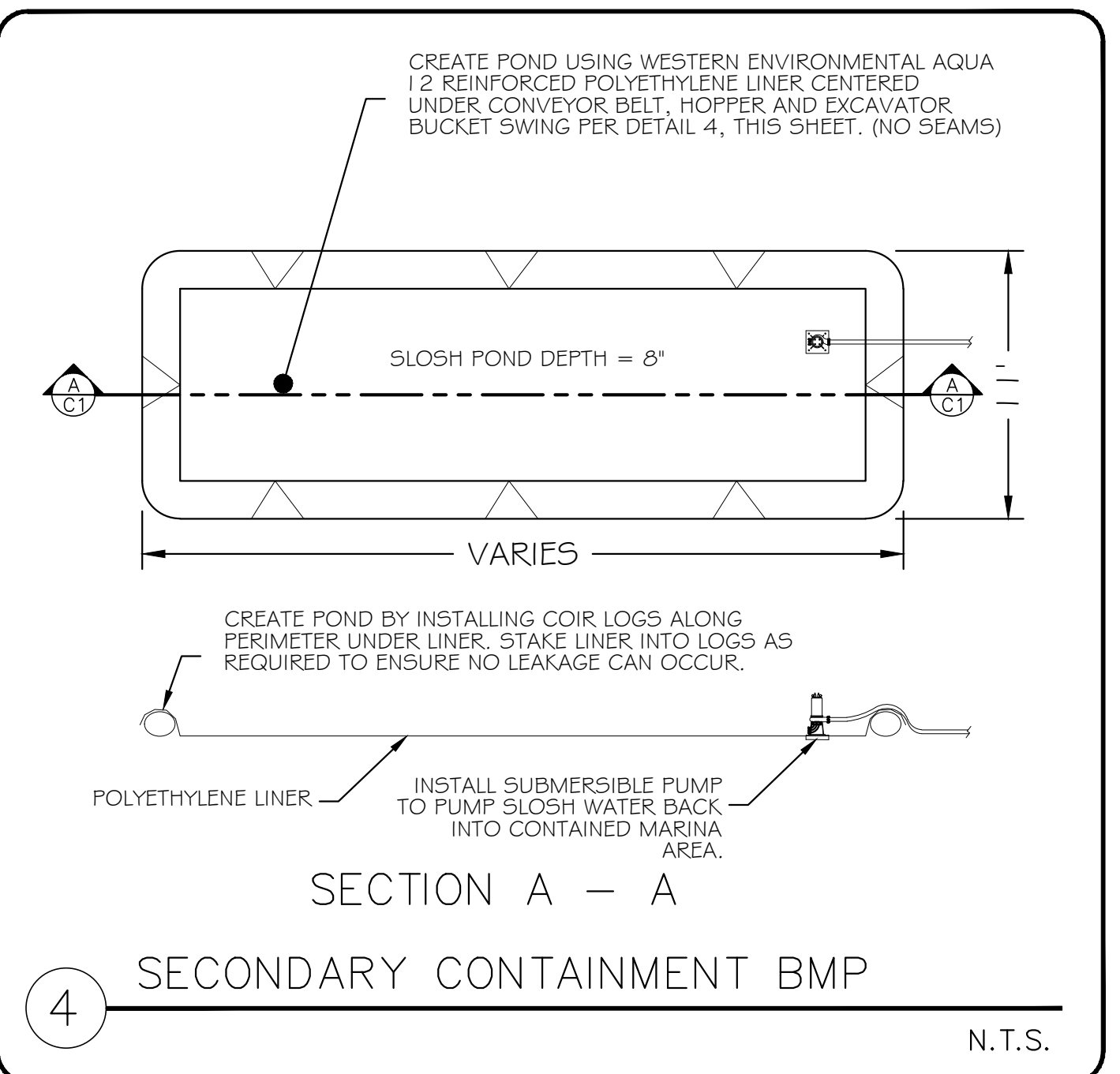
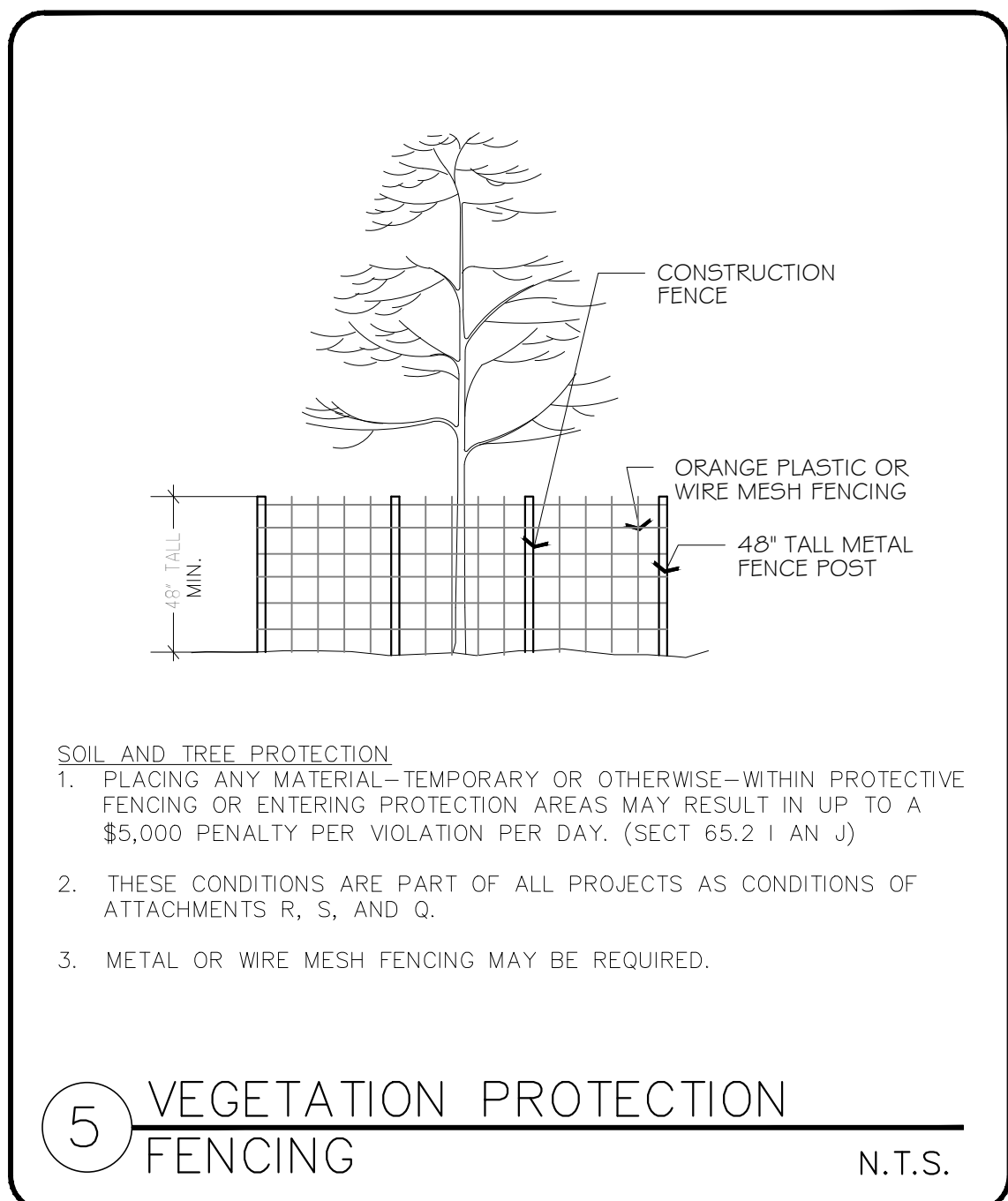
REV.	DATE	DESCRIPTION	APPROVED	DATE

COMP. DATE: HBG
 DESIGN: HBG
 PRJ. NO.: TRF
 WORK ORDER: N/A
 SCALE: HORIZONTAL: N/A
 VERTICAL: N/A
 CAD: N/A
 DATE: APRIL 7, 2023



DETAILS
 ELKS POINT MARINA REHABILITATION PROJECT

D1



REV.	DATE	DESCRIPTION	APPROVED	DATE

COMP.: ECE DESIGN: HEG PROJ ENG.: TKF
 DRAWN: HEG
 WORK ORDER:
 SCALE: AS NOTED
 HORIZONTAL:
 VERTICAL:
 CAD:
 DATE: APRIL 7, 2023

CA#C 55546 NV #12927
 P.O. Box 381, Tahoe Vista, CA 96148
 ferrell@fcivil.com

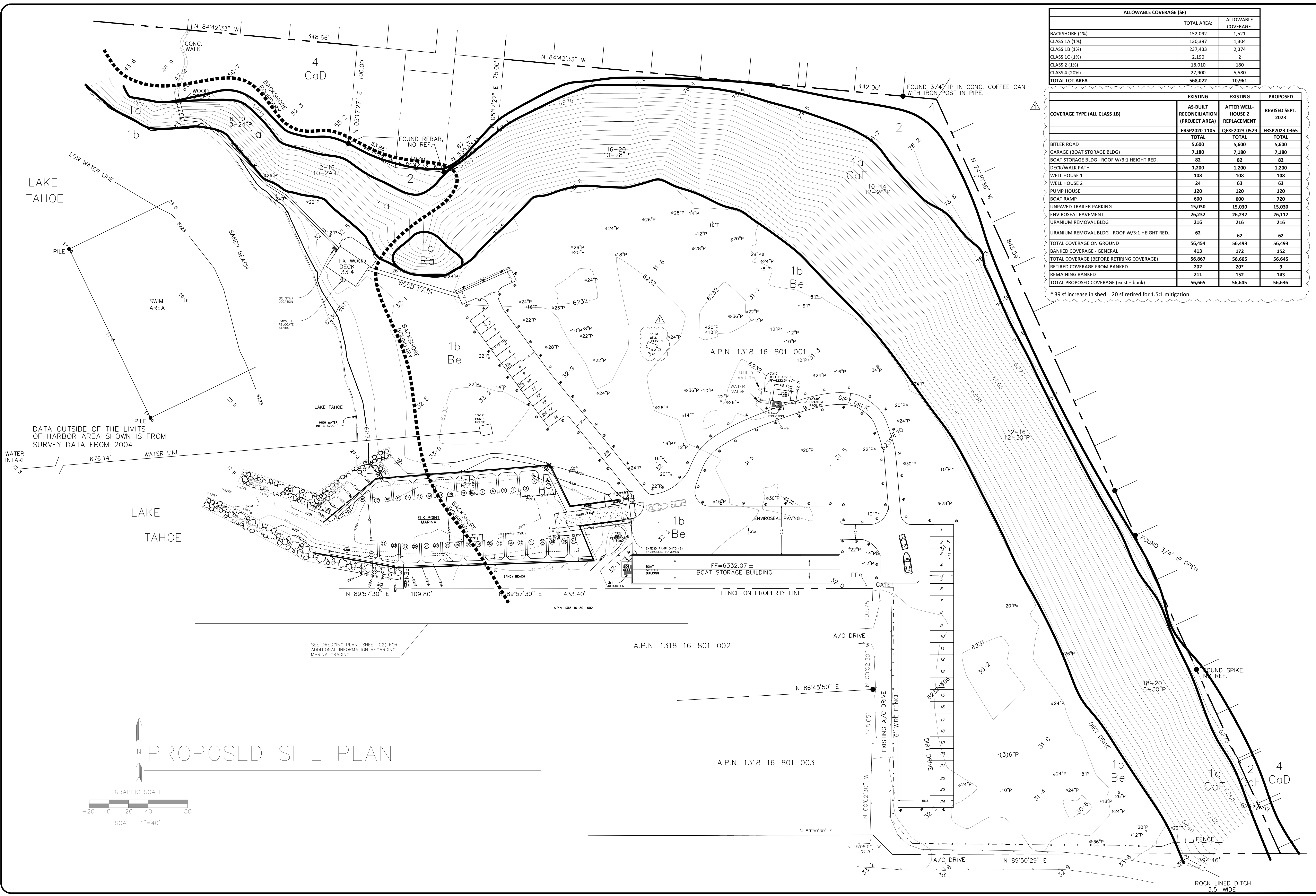
Ferrell Civil Engineering

DREDGING SECTIONS AND DETAILS
ELKS POINT MARINA REHABILITATION & DREDGING

D3

04-07-23

AGENDA ITEM NO. V. A.

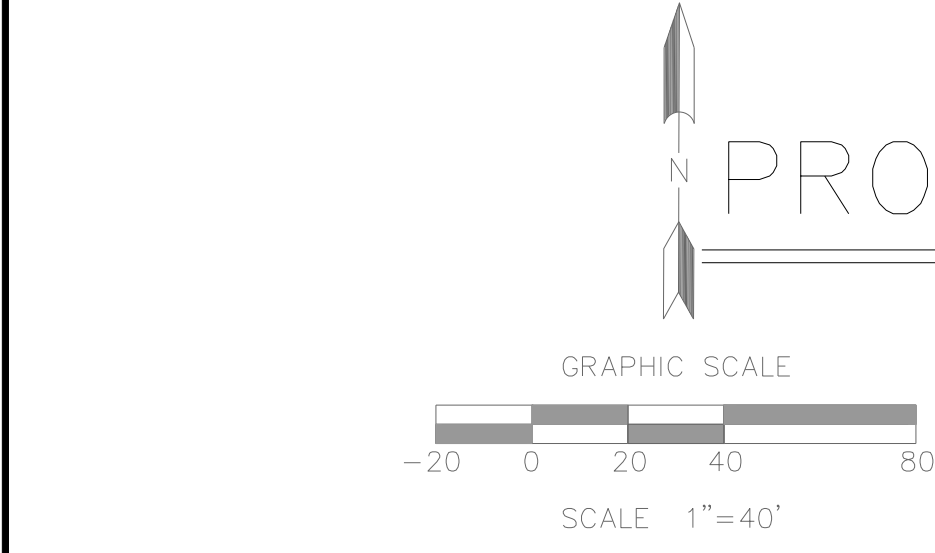


ALLOWABLE COVERAGE (SF)		
	TOTAL AREA:	ALLOWABLE COVERAGE:
BACKSHORE (1%)	152,092	1,521
CLASS 1A (1%)	130,397	1,304
CLASS 1B (1%)	237,433	2,374
CLASS 1C (1%)	2,190	2
CLASS 2 (1%)	18,010	180
CLASS 4 (20%)	27,900	5,580
TOTAL LOT AREA	568,022	10,961

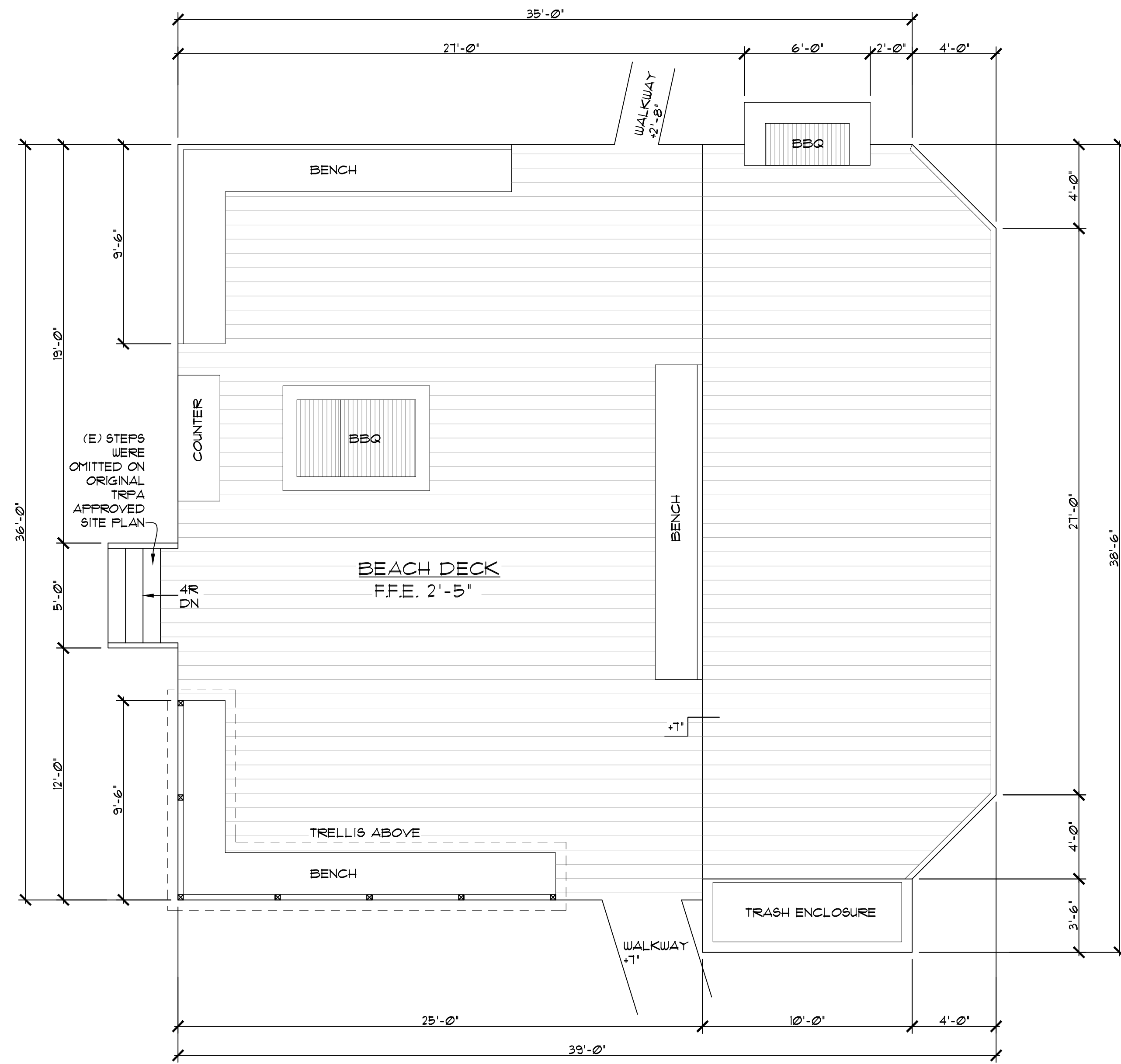
COVERAGE TYPE (ALL CLASS 1B)	EXISTING	EXISTING	PROPOSED
	AS-BUILT RECONCILIATION (PROJECT AREA)	AFTER WELL-REPLACE 2	REVISED SEPT. 2023
	ERSP2020-1105	QEXE2023-0529	ERSP2023-0365
	TOTAL	TOTAL	TOTAL
BITLER ROAD	5,600	5,600	5,600
GARAGE (BOAT STORAGE BLDG)	7,180	7,180	7,180
DECK STORAGE BLDG - ROOF W/3:1 HEIGHT RED.	82	82	82
DECK/WALK PATH	1,200	1,200	1,200
WELL HOUSE 1	108	108	108
WELL HOUSE 2	24	63	63
PUMP HOUSE	120	120	120
BOAT RAMP	600	600	720
UNPAVED TRAILER PARKING	15,030	15,030	15,030
ENVIROSEAL PAVEMENT	26,232	26,232	26,112
URANIUM REMOVAL BLDG	216	216	216
URANIUM REMOVAL BLDG - ROOF W/3:1 HEIGHT RED.	62	62	62
TOTAL COVERAGE ON GROUND	56,454	56,493	56,493
BANKED COVERAGE - GENERAL	413	172	152
TOTAL COVERAGE (BEFORE RETIRING COVERAGE)	56,867	56,665	56,645
RETIRED COVERAGE FROM BANKED	202	20*	9
REMAINING BANKED	211	152	143
TOTAL PROPOSED COVERAGE (exist + bank)	56,665	56,645	56,636

* 39 sf increase in shed = 20 sf retired for 1.5:1 mitigation

DATA OUTSIDE OF THE LIMITS OF HARBOR AREA SHOWN IS FROM SURVEY DATA FROM 2004



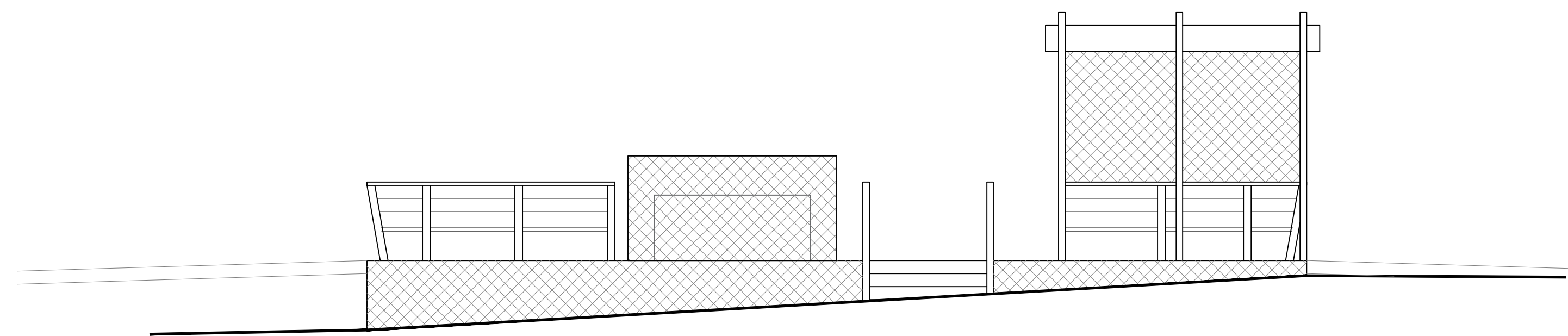
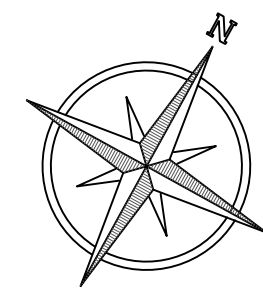
DESIGN:	DATE:	DESCRIPTION:
PRJENG.:	11/7/23	TRPA PLAN CHECK
WORK ORDER:		
HORIZONTAL:		
VERTICAL:		
CAD:		
OWNER:	ELK POINT COUNTRY CLUB INC.	
	406 BITLER'S RD.	
	DOUGLAS CO. NV	
	ZEPHYR COVE, NV 89448	
	APN: 1318-16-801-001	
	NEVADA	
	ELK POINT, NV	
	DOUGLAS COUNTY	
	SP1	



EXISTING BEACH DECK

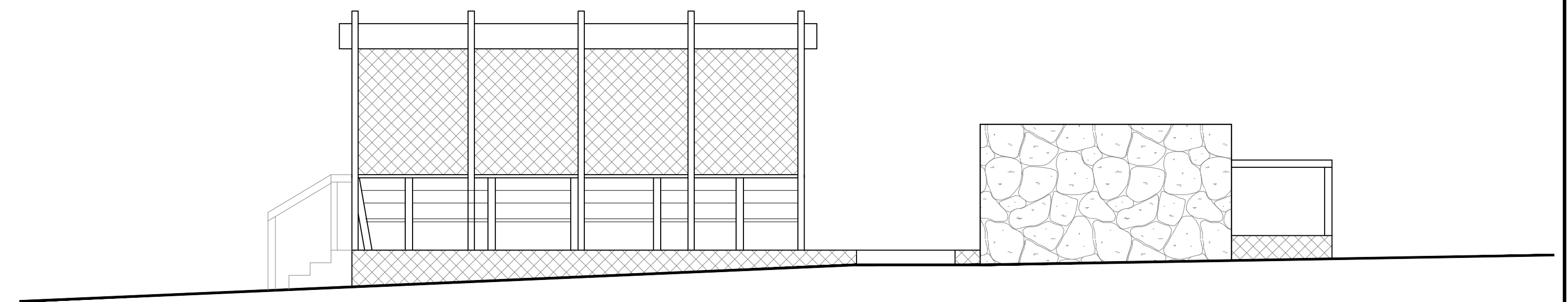
Scale: 1/4"=1'-0"

AREA = 1,434 SF



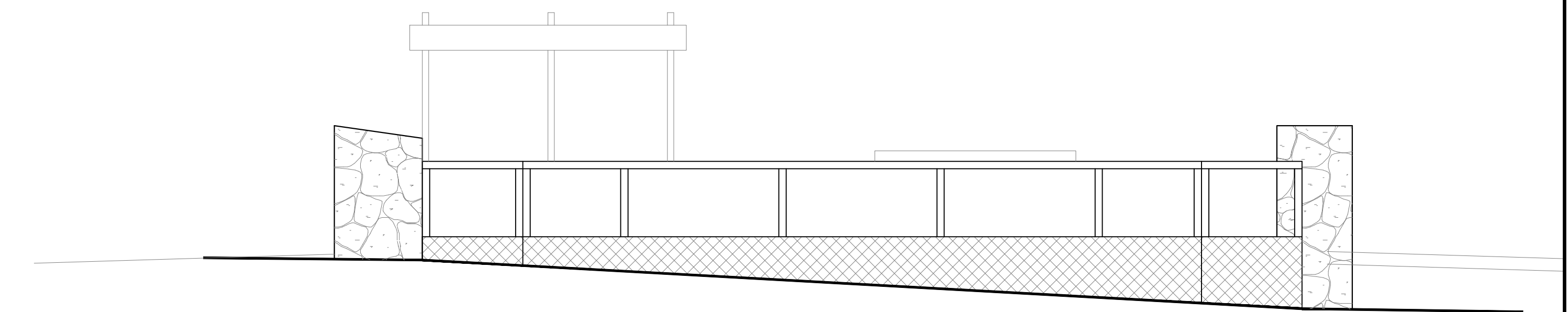
EXISTING FRONT (LAKE) ELEVATION

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



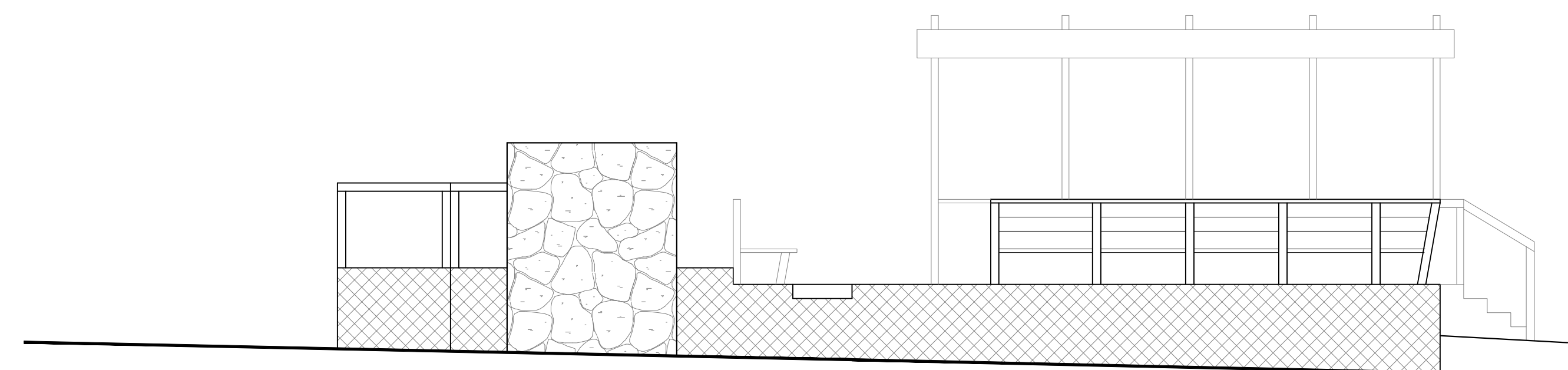
EXISTING RIGHT SIDE ELEVATION

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



EXISTING REAR ELEVATION

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



EXISTING LEFT SIDE ELEVATION

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

FLOOR PLANS & ELEVATIONS
-PROPOSED-

Project For:
ELK POINT BEACH DECK
 PO BOX 9
 ZEPHYR COVE, NV 89448
 APN: 1318-03-110-029

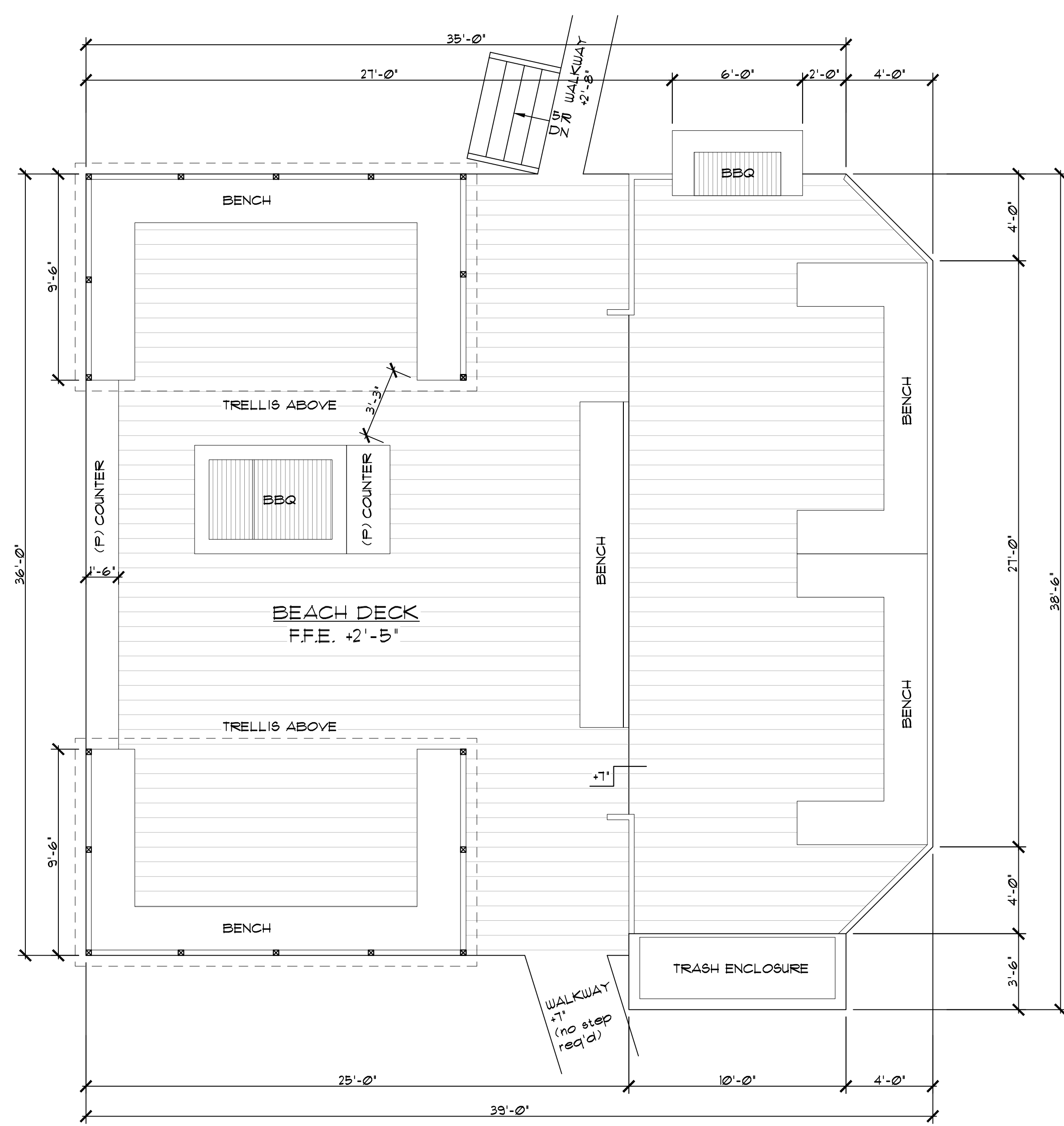
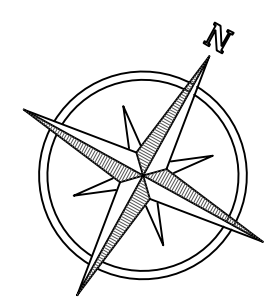
DATE:

DRAWN BY: NMW
 DATE PREPARED: 9/12/22
 SCALE: AS NOTED

DRAWING No:

A2

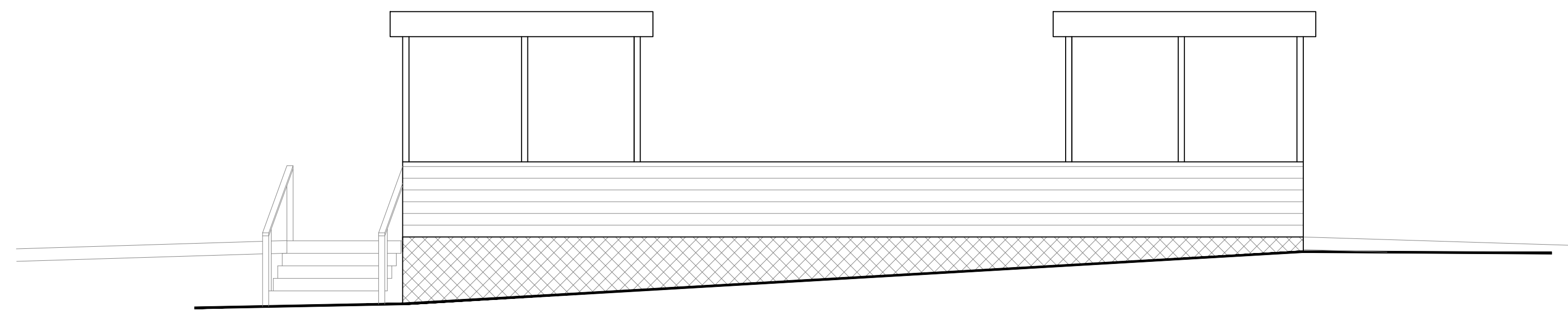
of Sheets



PROPOSED BEACH DECK

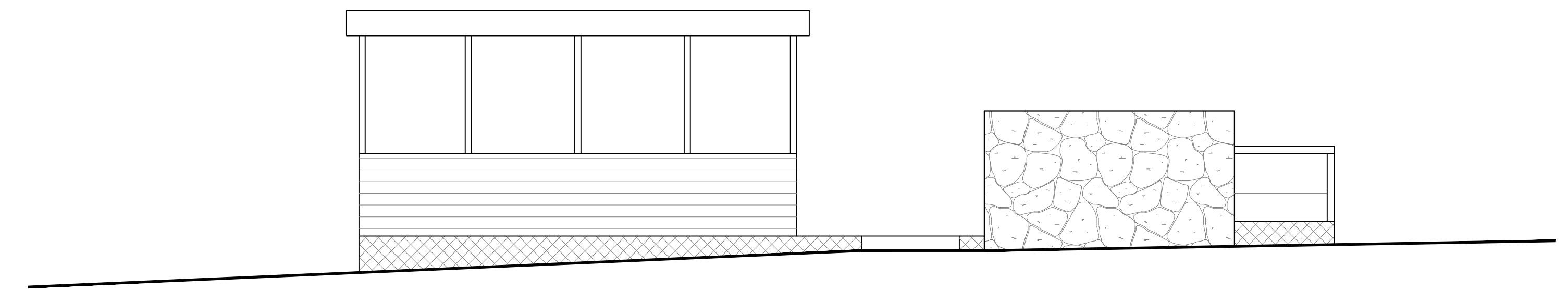
Scale: 1/4"=1'-0"

AREA = 1,434 SF



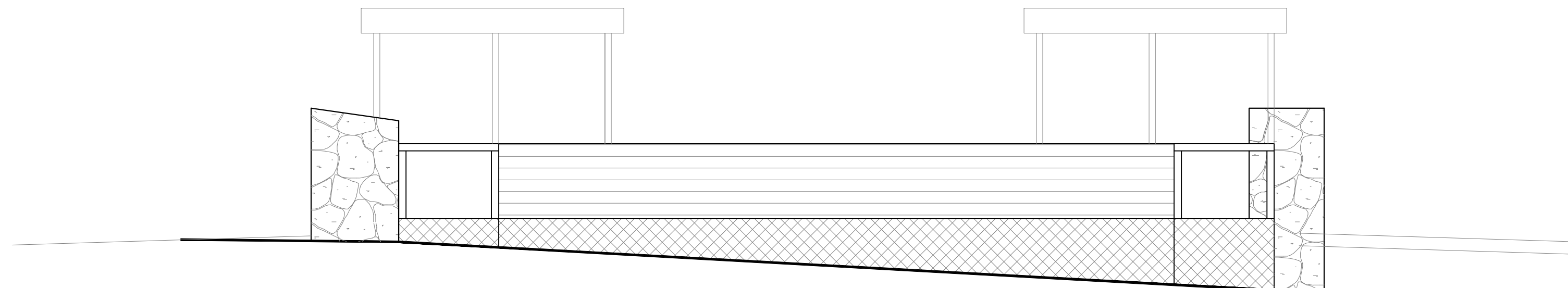
PROPOSED FRONT (LAKE) ELEVATION

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



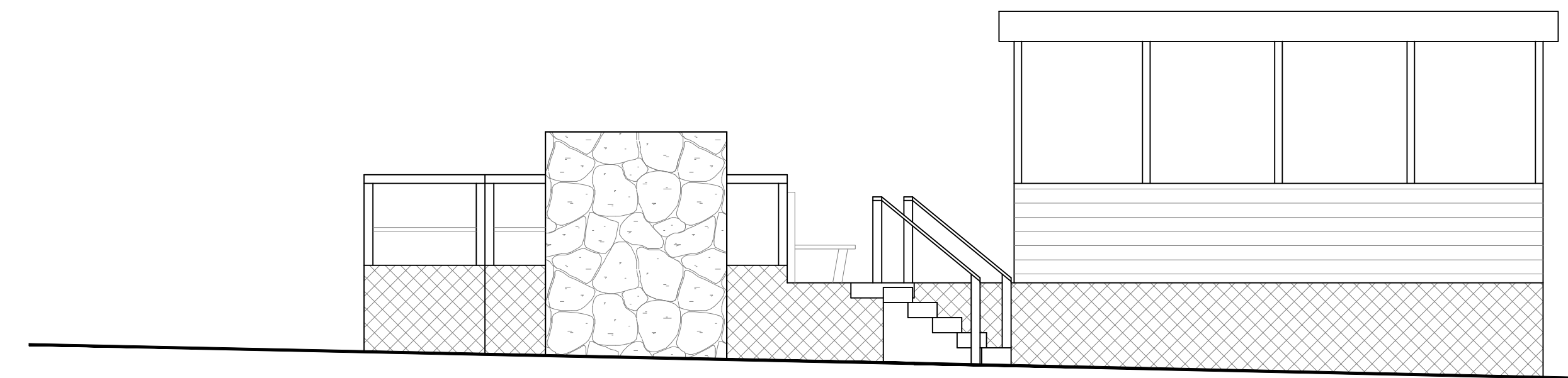
PROPOSED RIGHT SIDE ELEVATION

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



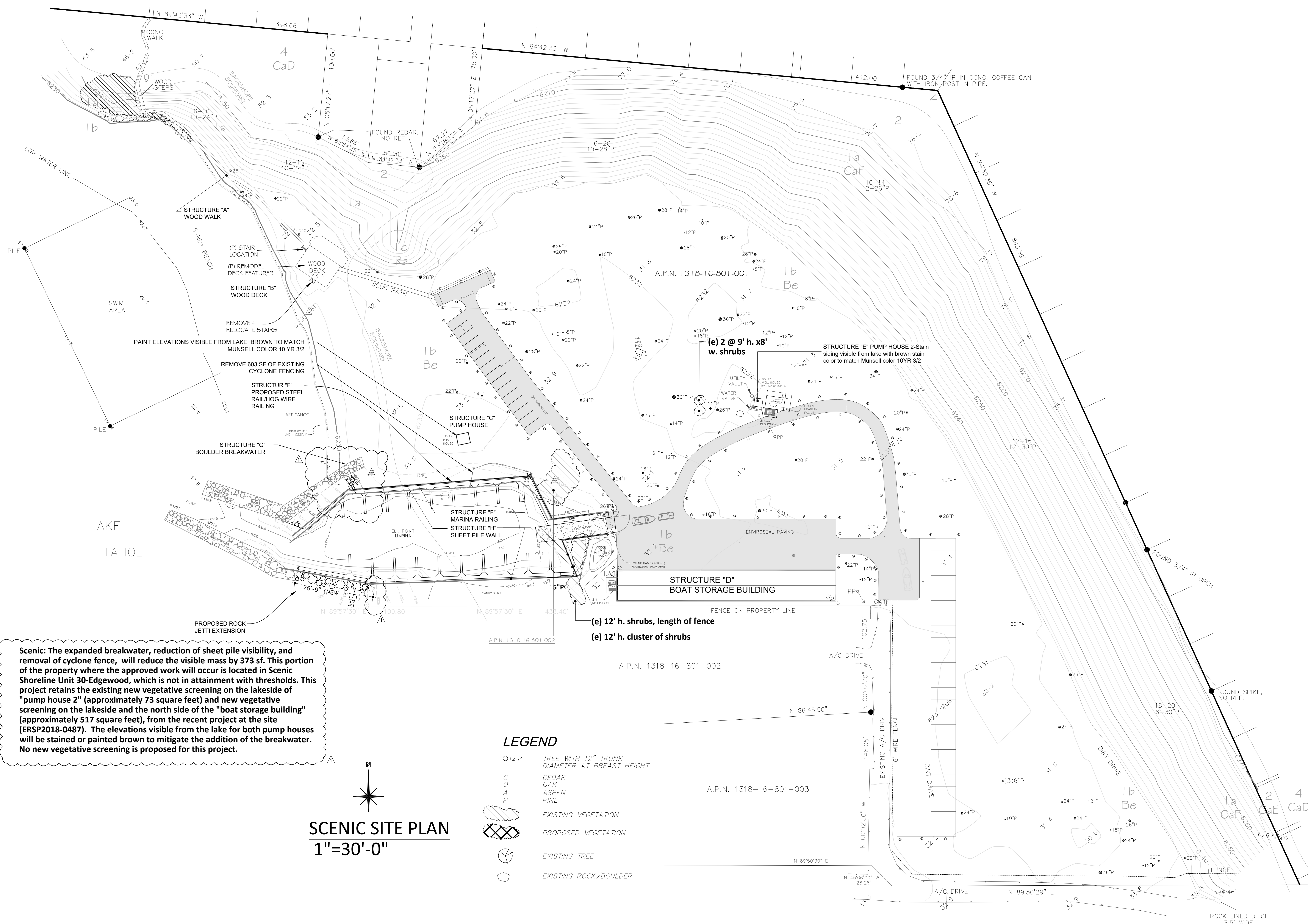
PROPOSED REAR ELEVATION

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



PROPOSED LEFT SIDE ELEVATION

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



Scenic: The expanded breakwater, reduction of sheet pile visibility, and removal of cyclone fence, will reduce the visible mass by 373 sf. This portion of the property where the approved work will occur is located in Scenic Shoreline Unit 30-Edgewood, which is not in attainment with thresholds. This project retains the existing new vegetative screening on the lakeside of "pump house 2" (approximately 73 square feet) and new vegetative screening on the lakeside and the north side of the "boat storage building" (approximately 517 square feet), from the recent project at the site (ERSP2018-0487). The elevations visible from the lake for both pump houses will be stained or painted brown to mitigate the addition of the breakwater. No new vegetative screening is proposed for this project.

SCENIC SITE PLAN
1"=30'-0"

- LEGEND**
- 12"P TREE WITH 12" TRUNK DIAMETER AT BREAST HEIGHT
 - C CEDAR
 - O OAK
 - A ASPEN
 - P PINE
 - EXISTING VEGETATION
 - PROPOSED VEGETATION
 - EXISTING TREE
 - EXISTING ROCK/BOULDER

ELK POINT MARINA
406 BITLER'S ROAD
DOUGLAS COUNTY, NEVADA
APN 1318-13-801-001

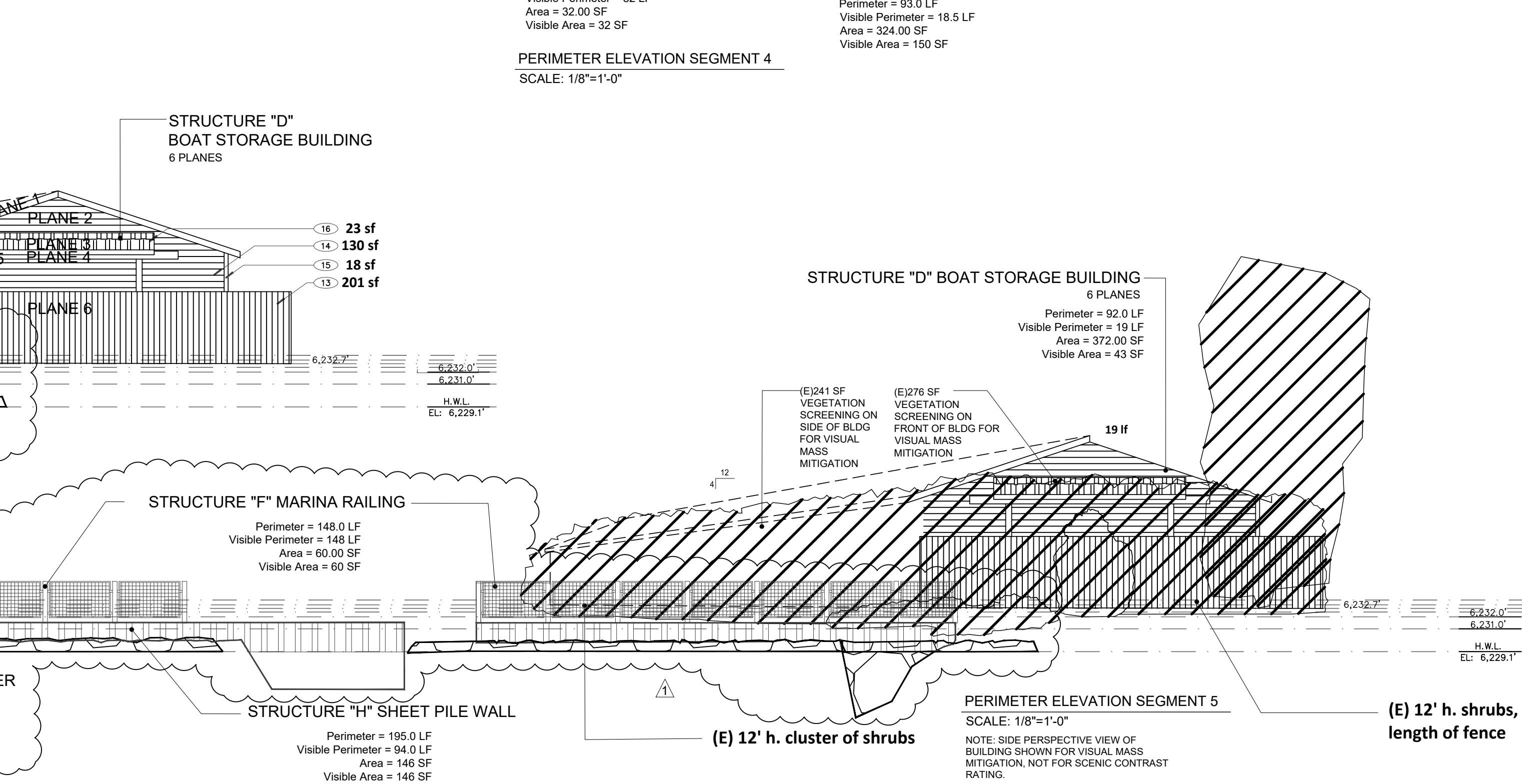
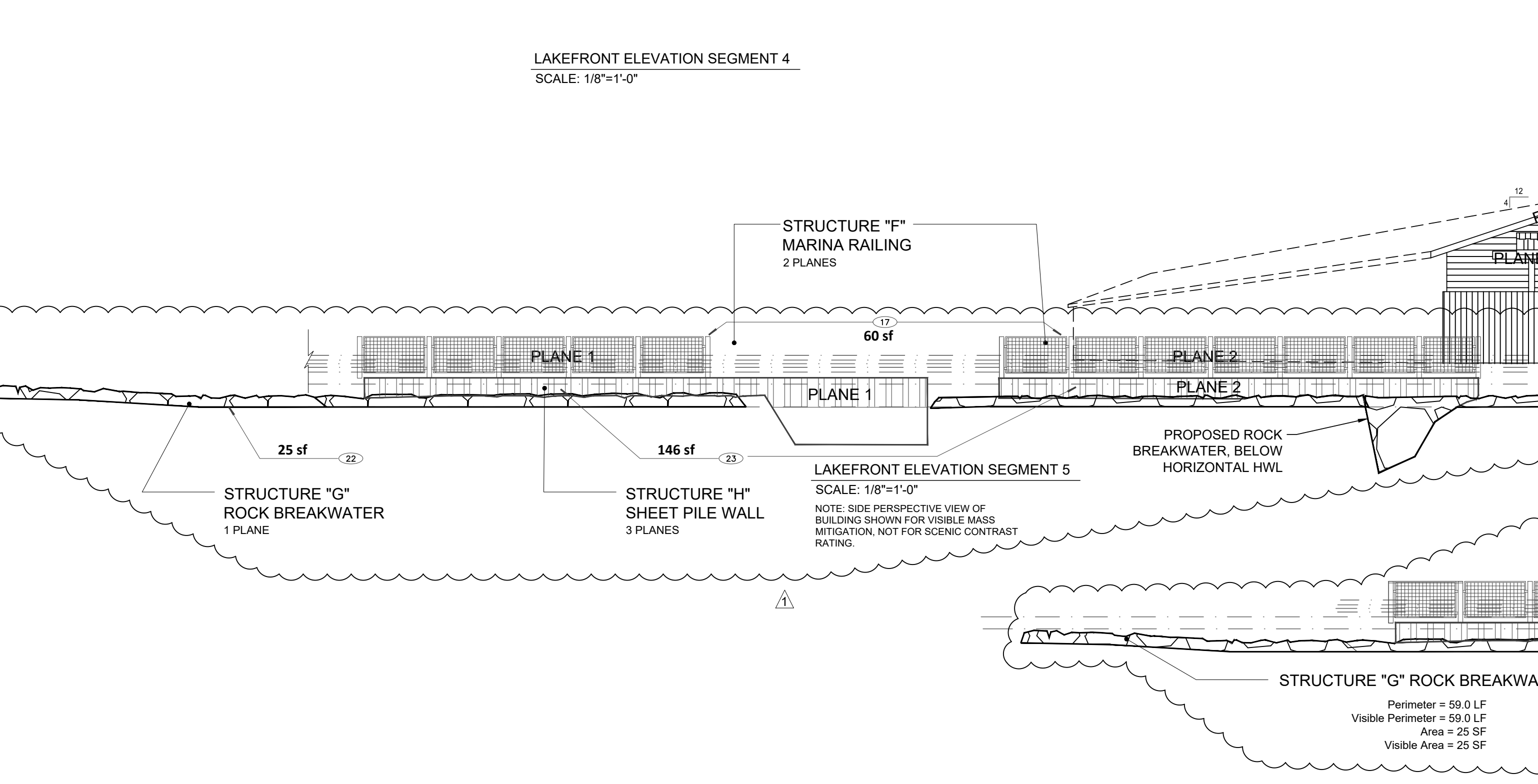
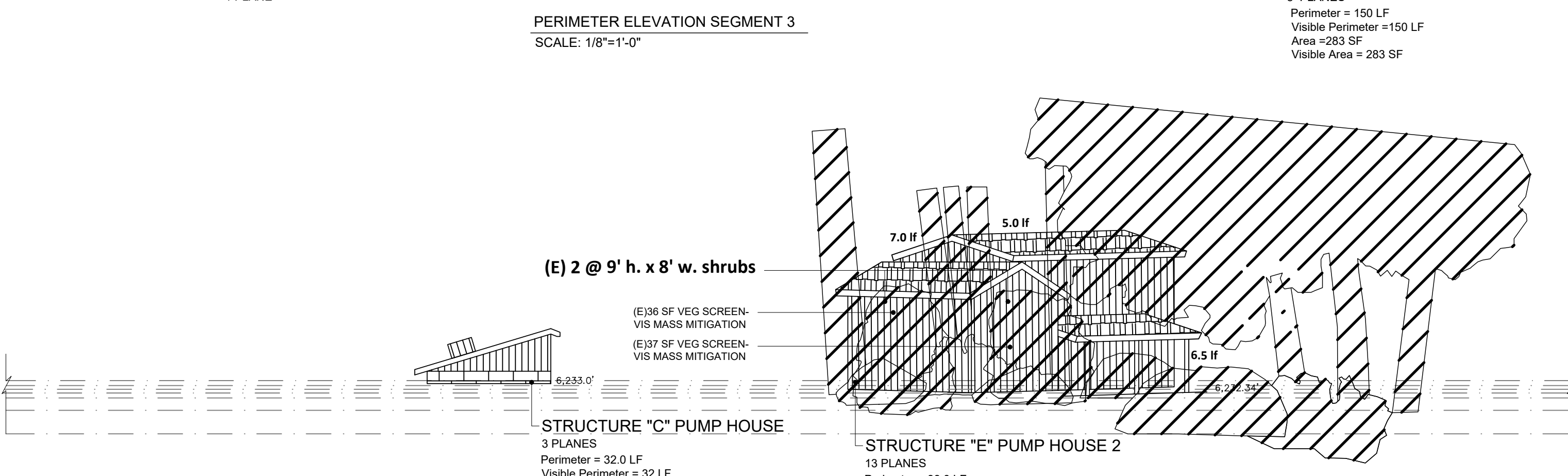
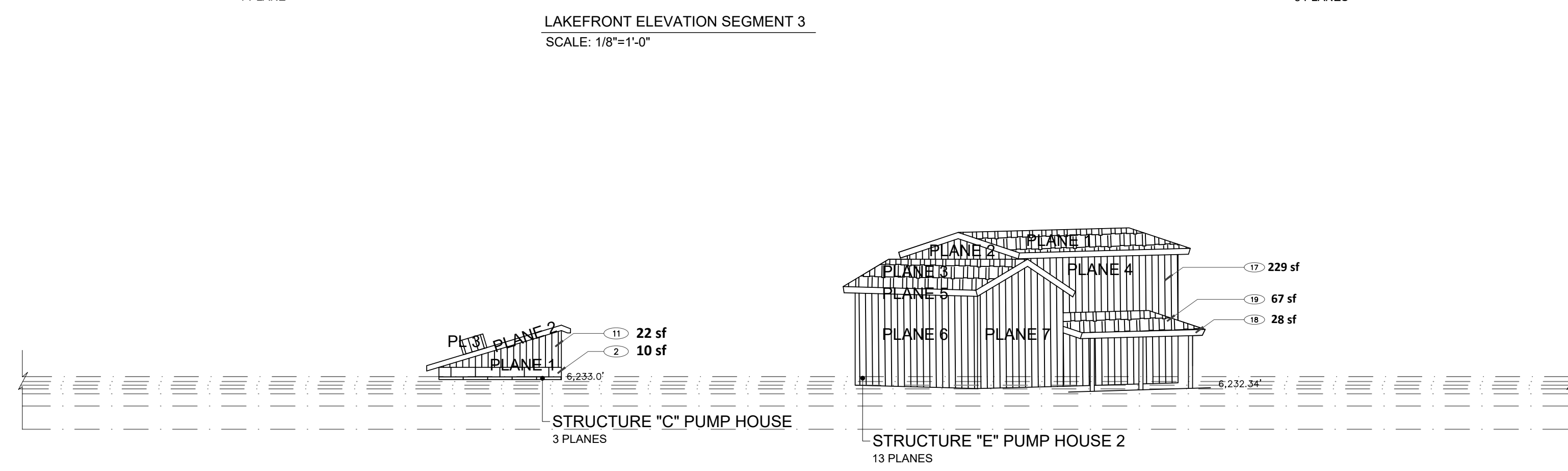
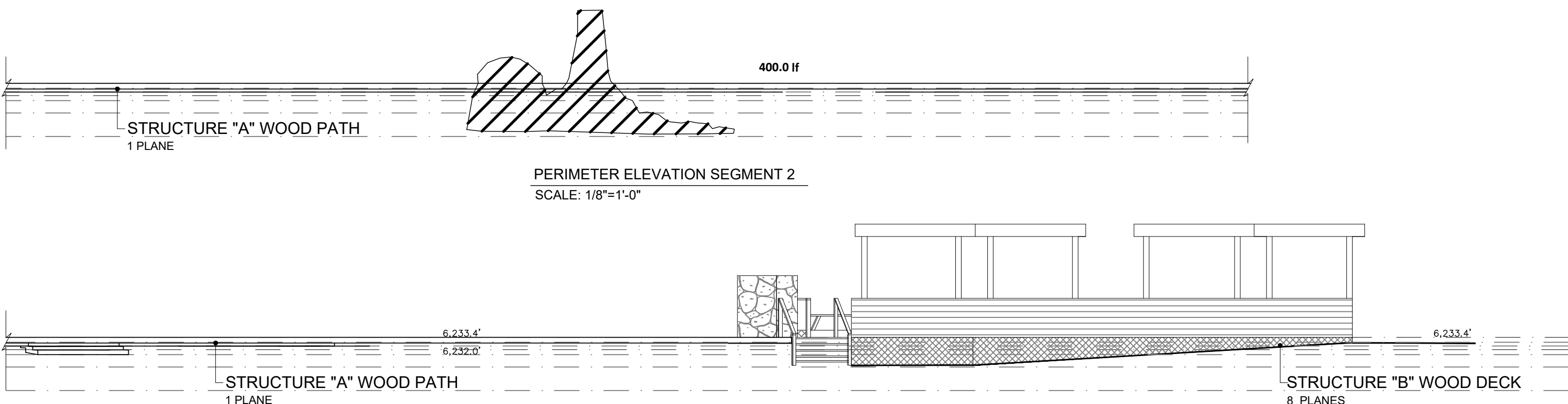
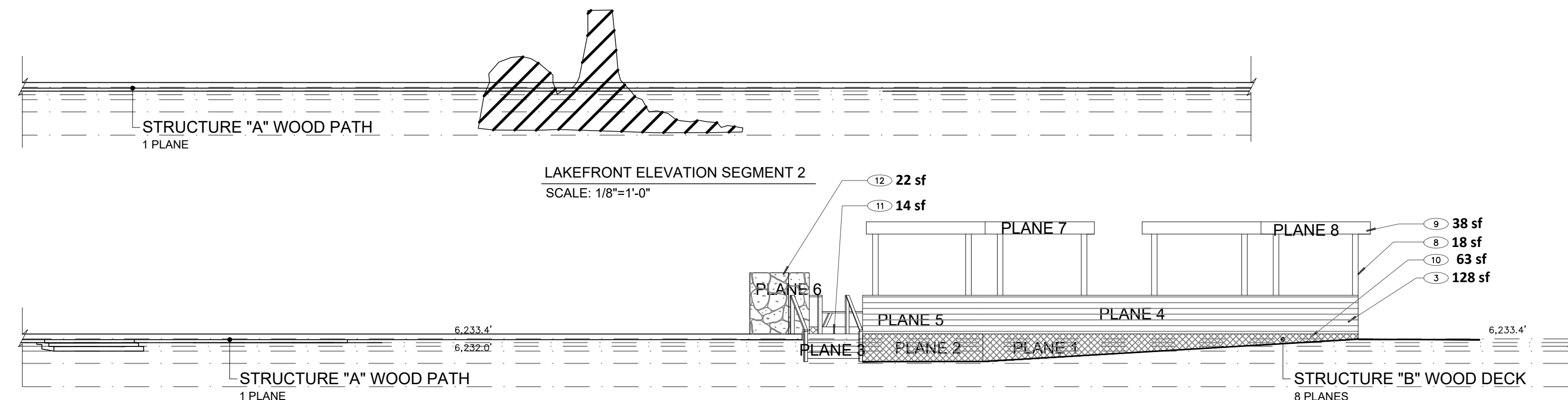
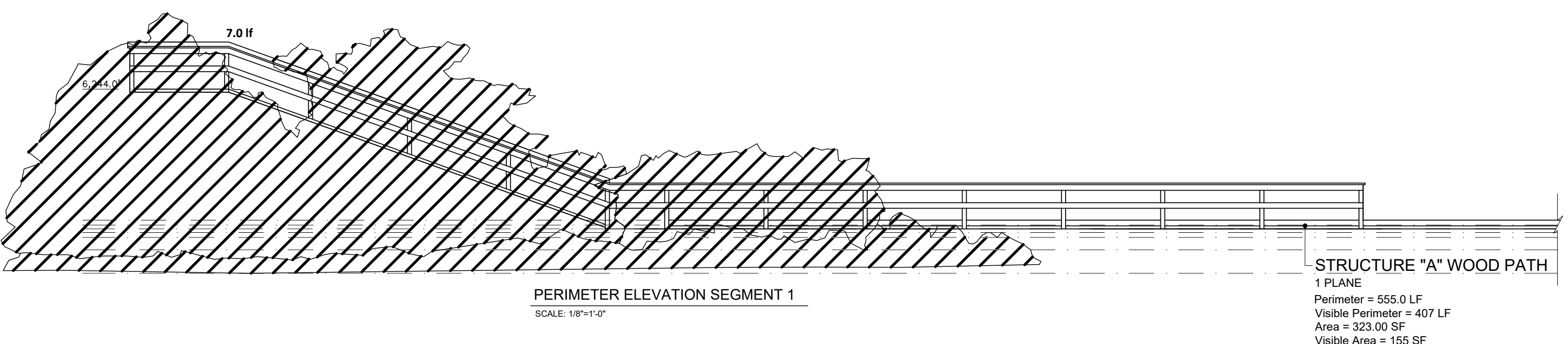
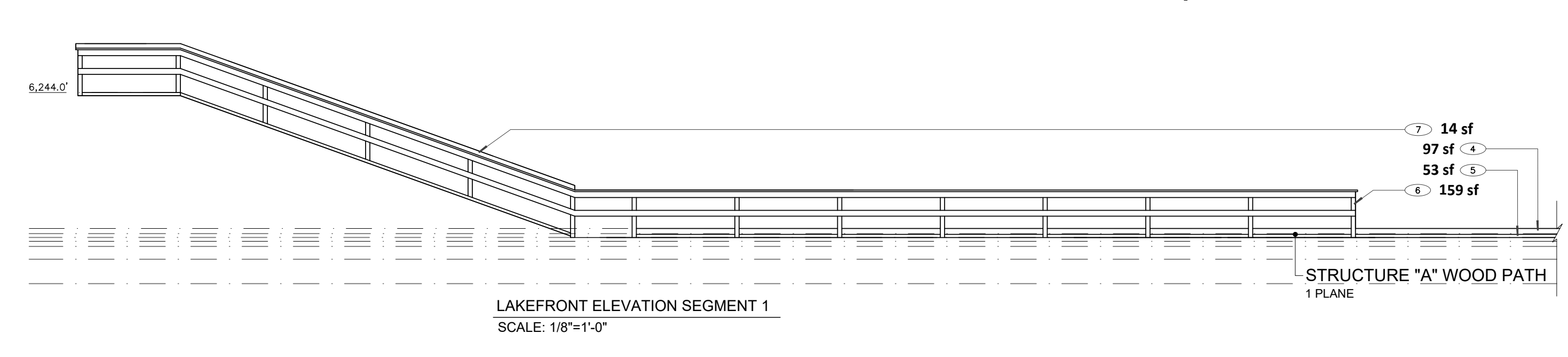
SCENIC SITE PLAN

REVISIONS:

DATE: 2/21/23
SCALE: SEE SCALE
DRAWN BY: JTC
PHONE:
EMAIL: jtcconsulting@charter.net

SHEET:
SC1

LAKEFRONT ELEVATION SEGMENT 1 SEGMENT 2 SEGMENT 3 SEGMENT 4 SEGMENT 5
 SCALE: 1/32"=1'-0"



ELK POINT MARINA
 406 BITLER'S ROAD
 DOUGLAS COUNTY, NEVADA
 APN 1318-13-801-001

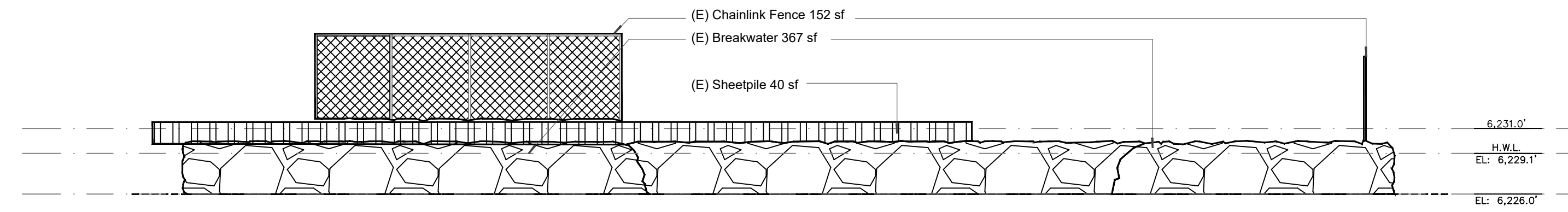
S C E N I C
 E L E V A T I O N S

REVISIONS:
 8/26/23 TRPA comments

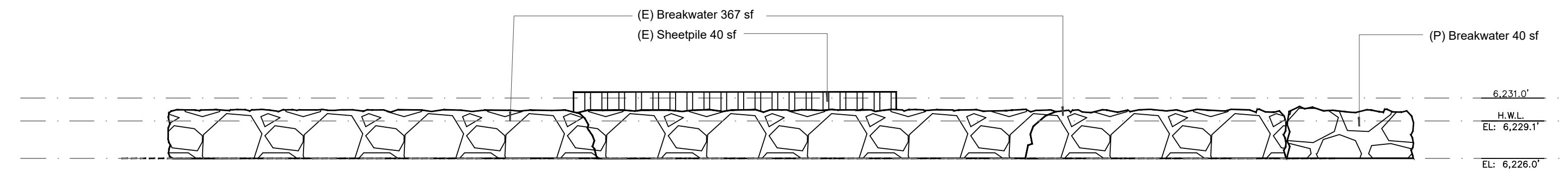
DATE: 10.30.23
 SCALE: SEE_SCALE
 DRAWN BY: JTC
 PHONE:
 EMAIL: jtcconsulting@charter.net

SHEET:
SC2

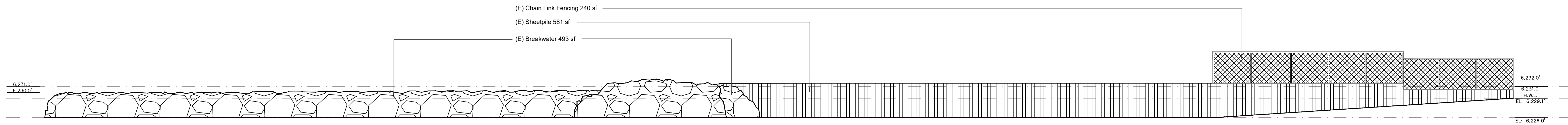
AGENDA ITEM NO. V. A.



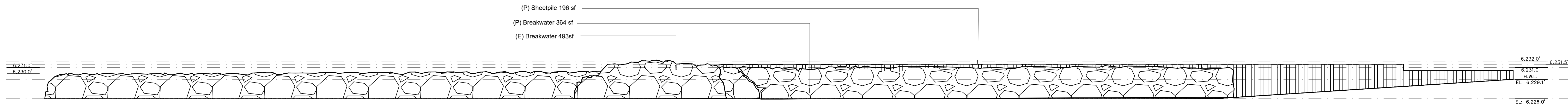
(E) WEST ELEVATION, VISIBLE MASS:
BREAKWATER
SCALE: 1/8"=1'-0"
West Elevation Total Existing Visible Mass: 559 sf



(P) WEST ELEVATION, VISUAL MASS:
BREAKWATER
SCALE: 1/8"=1'-0"
West Elevation Total Proposed Visual Mass: 447 sf



(E) SOUTH ELEVATION, VISUAL MASS:
BREAKWATER, SHEETPILE, CHAIN LINK FENCING
SCALE: 1/8"=1'-0"
South Elevation Total Existing Visual Mass: 1314 sf



(P) SOUTH ELEVATION, VISUAL MASS:
BREAKWATER, SHEETPILE, CHAIN LINK FENCING
SCALE: 1/8"=1'-0"
South Elevation Total Proposed Visual Mass: 1,053 sf

ELK POINT MARINA
406 BITLER'S ROAD
DOUGLAS COUNTY, NEVADA
APN 1318-13-801-001

**V I S U A L M A S S
E L E V A T I O N S**

REVISIONS:

DATE: 10.30.23
SCALE: SEE SCALE
DRAWN BY: JTC
PHONE:
EMAIL: jtcconsulting@charter.net

SHEET:
SC3