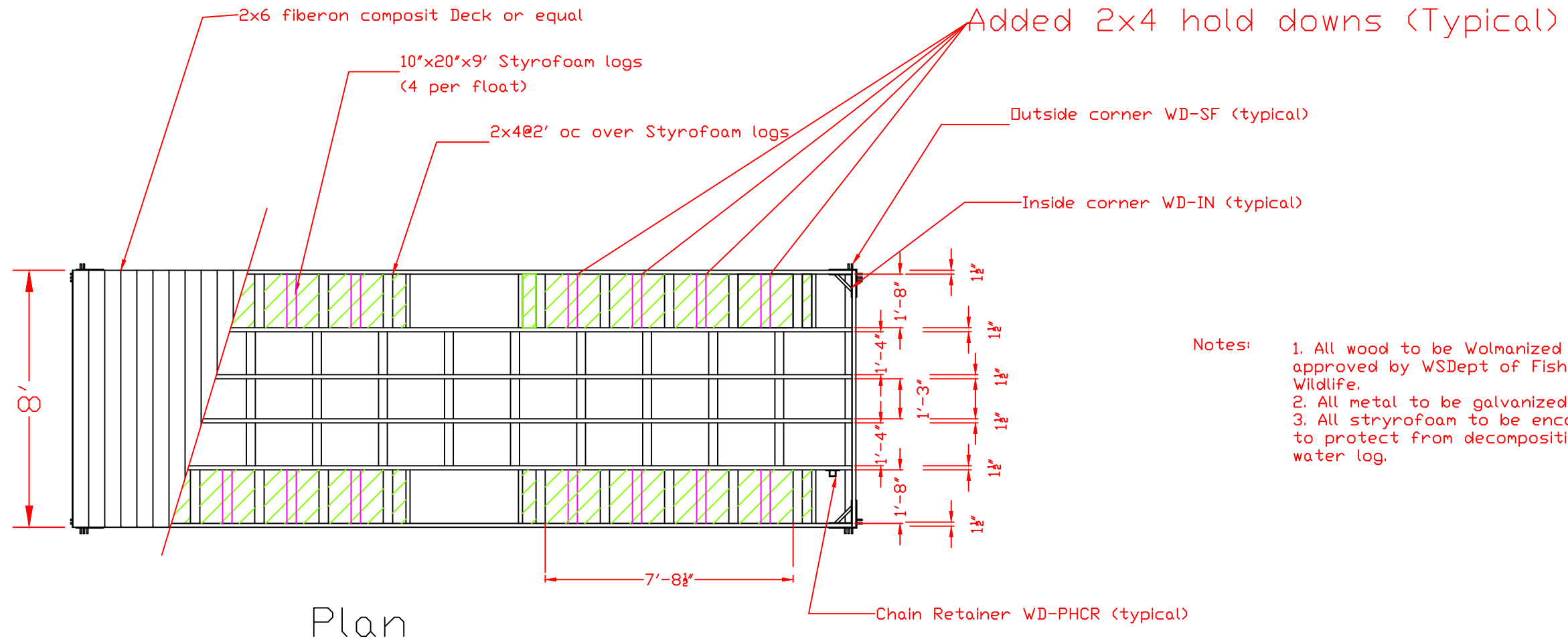
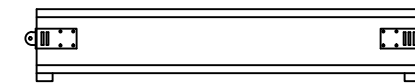
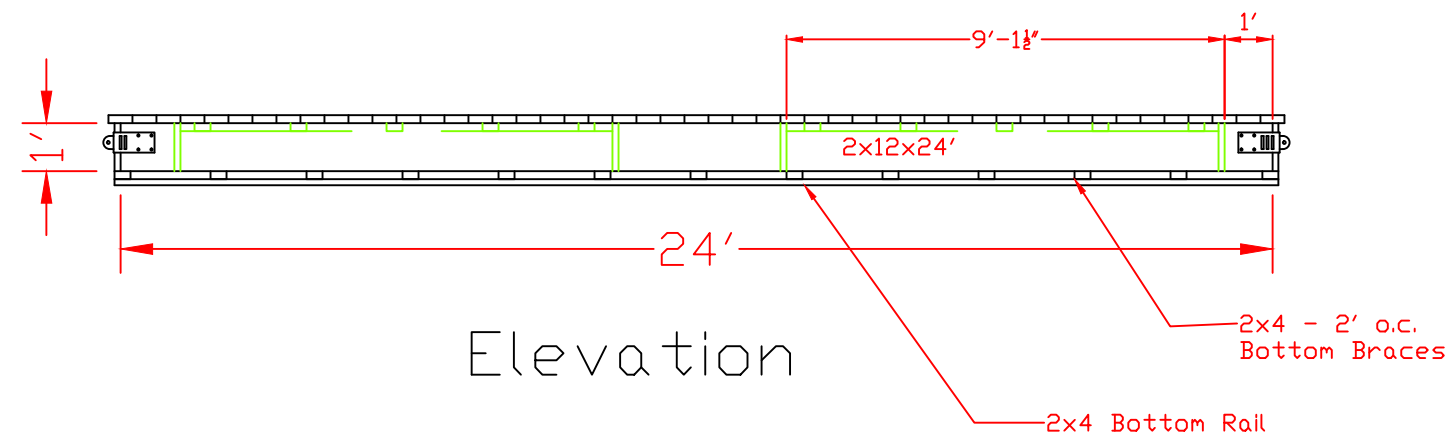




- Notes:
1. All wood to be Wolmanized treated approved by WSDept of Fish & Wildlife.
 2. All metal to be galvanized steel.
 3. All stryrofoam to be encapsulated to protect from decomposition and water log.



End View



EXPIRES: 3/17/2008

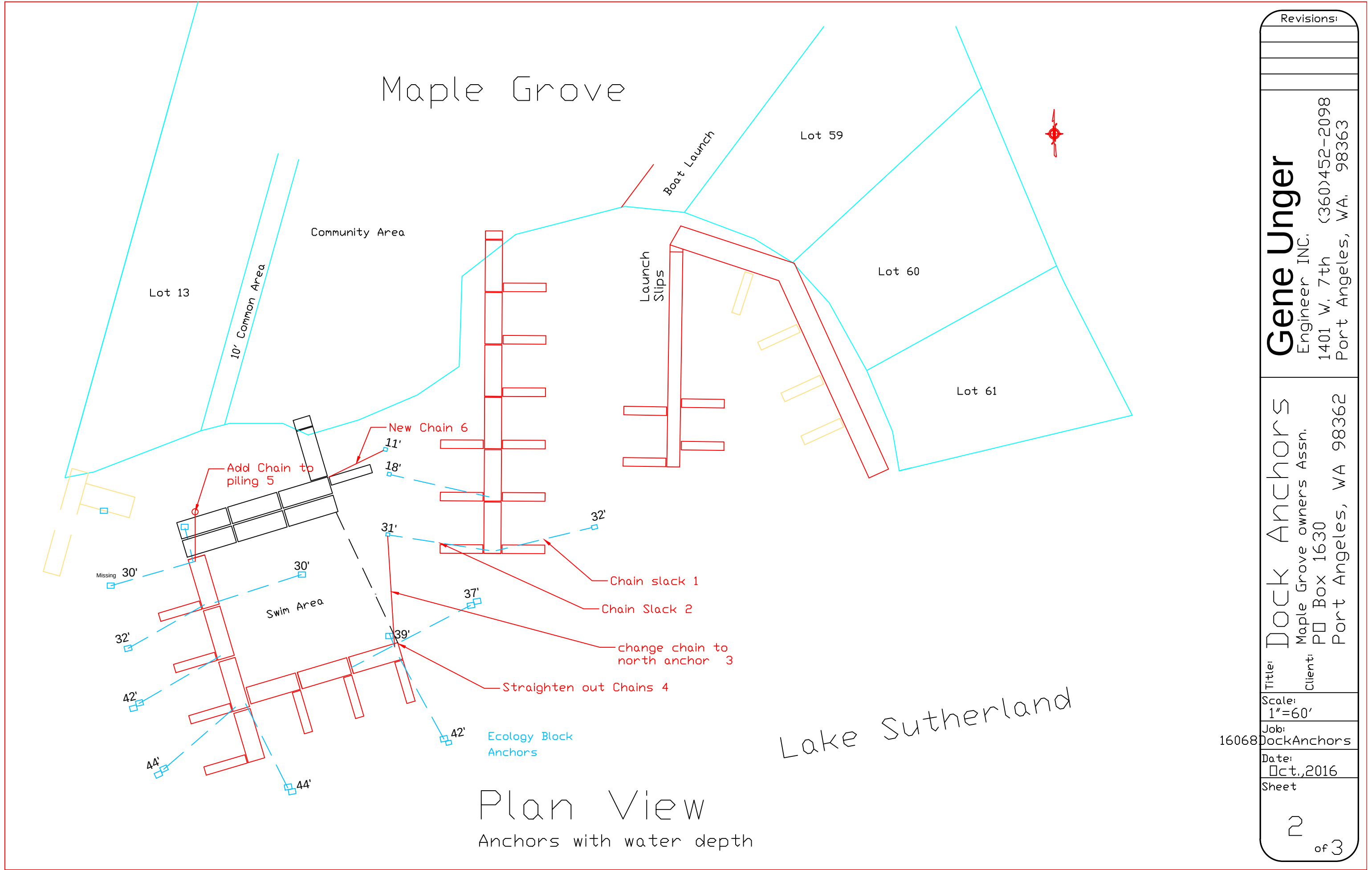
Revisions:

Gene Unger
Engineering, Inc.
1401 W. 7th (360)452-2098
Port Angeles, WA. 98363

Title: Dock unit Typical
Client: Maple Grove owners Assn.
PO Box 1630
Port Angeles, WA 98362

Scale: 1/4"=1'
Job: 06060Dock1
Date: Jan.,2007
Sheet

3
of 4



12 October, 2016

Maple Grove Board
PO Box 2621
Port Angeles, WA 98362

Subject: Dock Anchor inspection

Civil • Structural • Management

1401 West 7th Street

Port Angeles, Washington 98363

Office (360) 452-2098

Fax (360) 417-2098

E-mail: ungerpe@msn.com

Dear Board:

I hired Scuba Supplies with Kathy Lucero to dive the anchors of our dock system to determine their condition. The results are shown on the attached plan. We need to accomplish six (6) adjustments to the anchors to bring them back into position. They are as follows:

1. The chain to the east off the end of finger pier needs to be tightened.
2. The chain to the west off the end of finger pier needs to be tightened.
3. The chain at the end of the "C" pier needs to be moved to the anchor north of that position.
4. The chains under the end of the "C" pier need to be straightened out. This will happen with action "3".
5. An anchor chain needs to be added from the dock to one of the cut off piling.
6. An anchor chain needs to be added from the "C" pier launch span to anchor to the east.

Cost

With these corrections in anchorage the dock will have significantly less energy trying to bend the docks. This will significantly reduce the tension trying to tare the launch span to the "C" pier from its first dock.

When this is done it will be time to work on the six north docks of the "C" pier. They need to have the decking removed and have additional 2x4 hold downs for the floats installed. This is most essential to the northeast dock and the southwest dock of the six north docks. Presently the floats are receiving enough wave action that they have worked the present five 2x4's, holding them down, loose so that they are lifting the decking off the dock. The added hold downs shall be installed using 4"x#8 Stainless screws through the stringers. An angled screw holding the 2x4 down should also be installed at each end of the 2x4's into the stringers. The decking can then be installed as it was originally.

I expect that with this work completed on the dock they will basically back in good floating condition. At this time it will be time for the owners to consider a deck replacement program. I would suggest replacing the decking on one dock unit at a time. The existing wood is showing its age and the float logs can be cleaned as the decking is replaced. The new decking needs to be treated by WS Dept. of Fish & Wildlife treatment and installed with 3"x#8 stainless screws or greater.

Thank you for using Gene Unger Engineering LLC on this project.

Sincerely;

Gene H. Unger, PE
Inc.: Dock unit typical drawing
Dock Anchors drawing