**Details – Concrete Launching Ramp Planks**

- **Typical Assembly**
  - Scale: 1"=1'-0"'
  - Description: 4-1/2, 3-1/2, Coast Grade 8 lb. Grade Treated, Doug Fir-Larch Stringers.
  - Grain: B-12, 12" o.c.
  - Connections made with 2-1/8" washers x 1/2" bolts.

- **Typical Connecting Bar**
  - Scale: 1"=1'-0"'
  - Description: Fabricated from 1" x 1/2" Plank (galvanized).

- **Typical Ramp Section**
  - Scale: 1"=1'-0"'
  - Description: Existing concrete grade slab.
  - Details:
    - Rip rap on existing grade.
    - Existing ground line.
    - Placed rip rap on existing slope.
    - 6" concrete plank.
    - 4-1/2 stringers.

- **Ramp Profile**
  - Scale: 1"=10'
  - Existing concrete ramp.
  - Gravel or crushed stone.
  - Existing grade level.
  - Existing ground line.
  - Typical approach.
  - Concrete ramp plans.

- **Harris Harbor Launching Ramp**
  - Details:
    - Concrete launching ramp.
    - 4-1/2 stringers.
    - Coast Grade 8 lb. Grade Treated, Doug Fir-Larch Stringers.
    - Connections made with 2-1/8" washers x 1/2" bolts.
    - Fabricated from 1" x 1/2" Plank (galvanized).

- **Elevation**
  - Scale: 1"=1'-0"'
  - Description: Schematic view of the ramp.

- **Section A-A**
  - Scale: 1"=1'-0"'
  - Description: Elevations and cross-sections of the ramp.

- **Notes**
  - Cut existing concrete ramp.
  - Place rip rap on existing grade.
  - Existing ground line.
  - Placed rip rap on existing slope.
  - Concrete ramp plans.
Details - Precast Launching Ramp Planks