

INDIAN ARM WATERMAIN CROSSING

PRE-DESIGN ENVIRONMENTAL ASSESSMENT

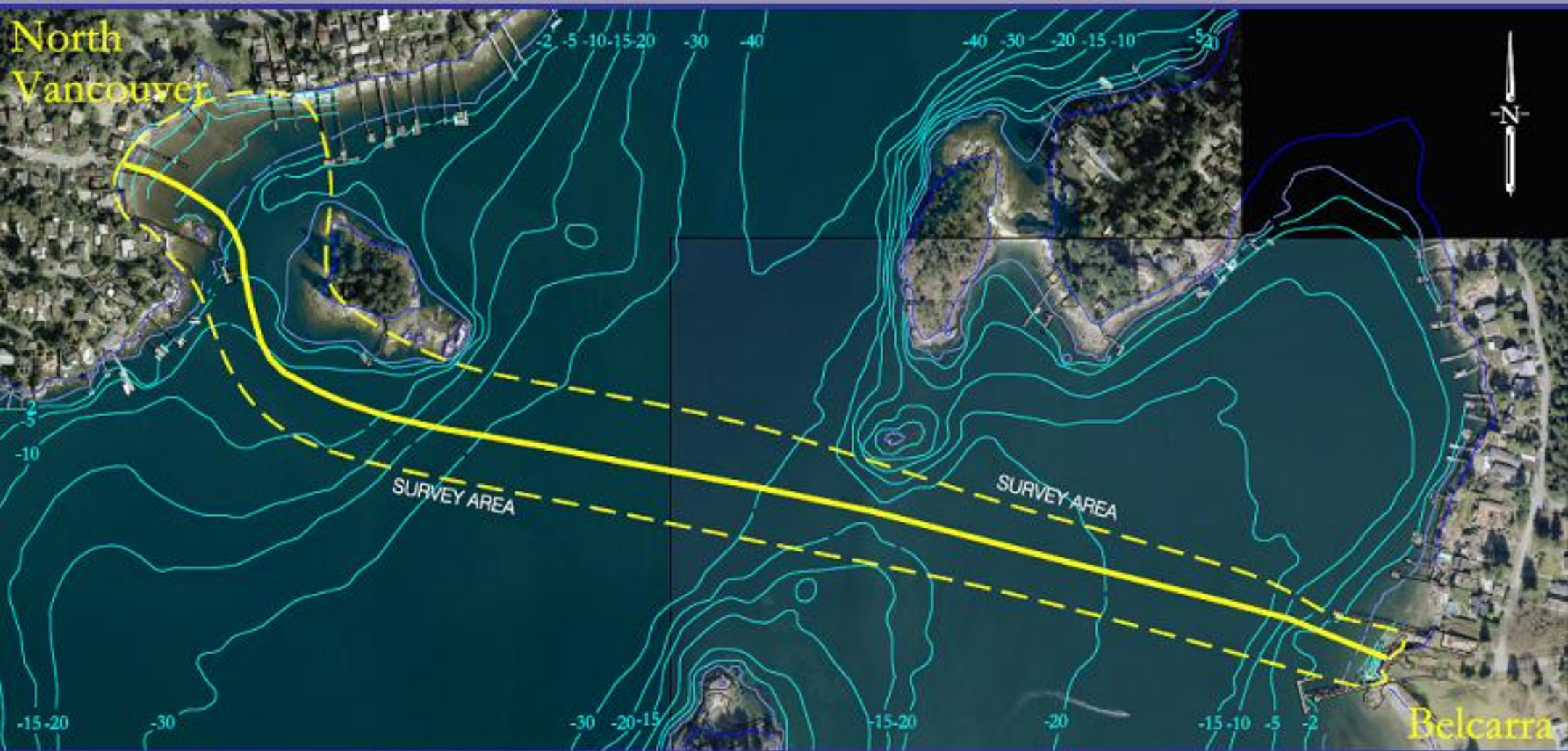
by Kurt Fehr, BSc. EM



Village of Belcarra
Between the Forest and Sea

FORESHORE
ENGINEERING & CONSULTING

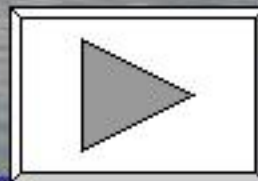
Proposed Route and Surveyed Area



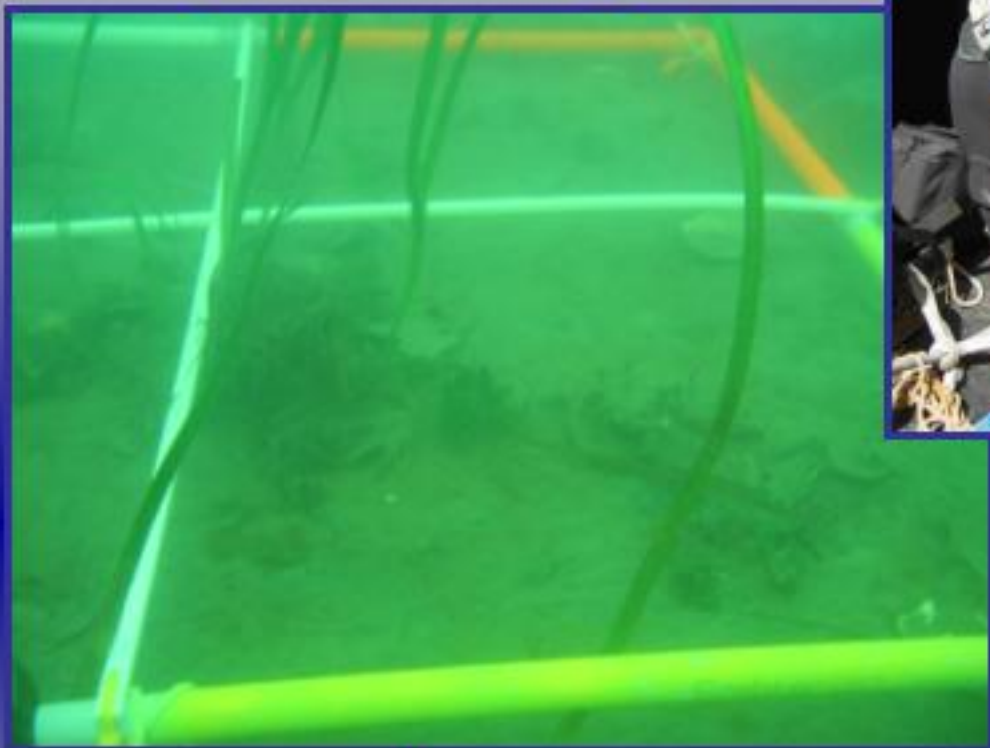
The TOAD Sled



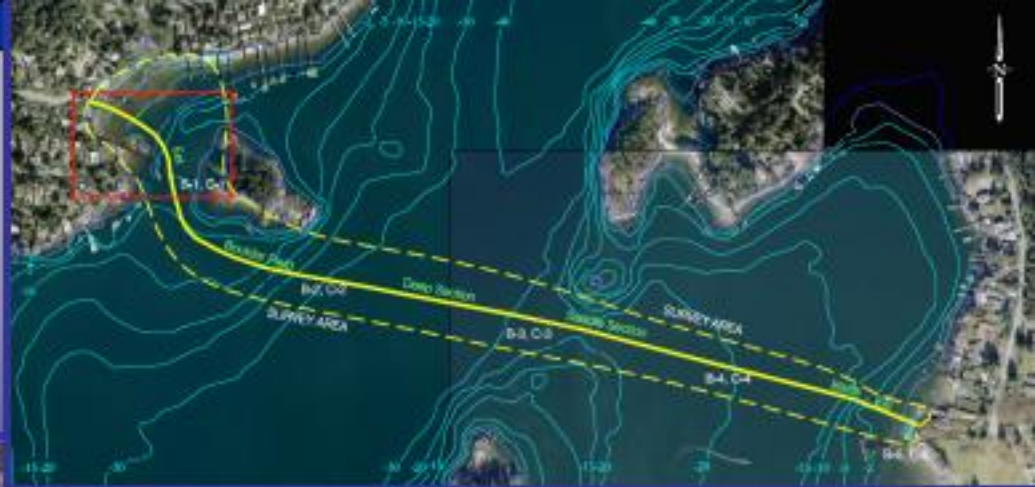
Mapping



Survey Methodologies

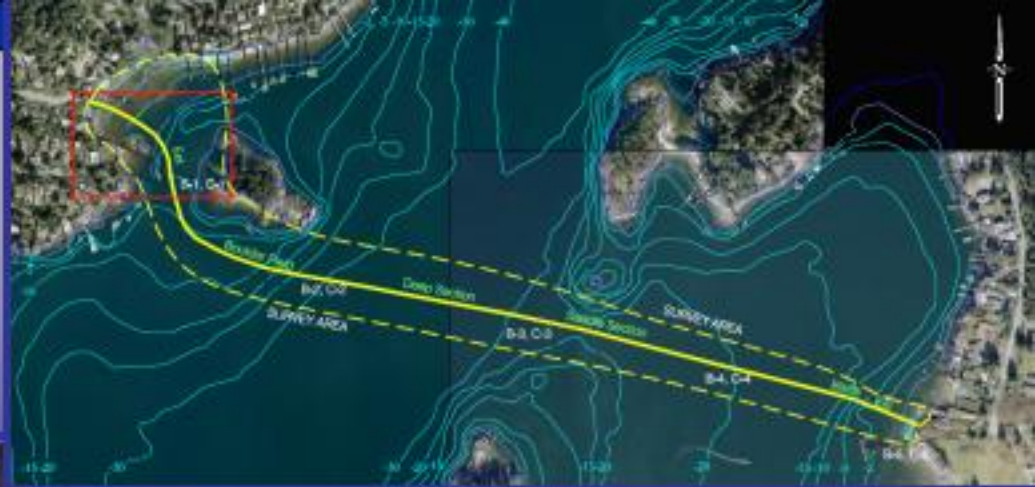


N. Vancouver Shore - Substrate



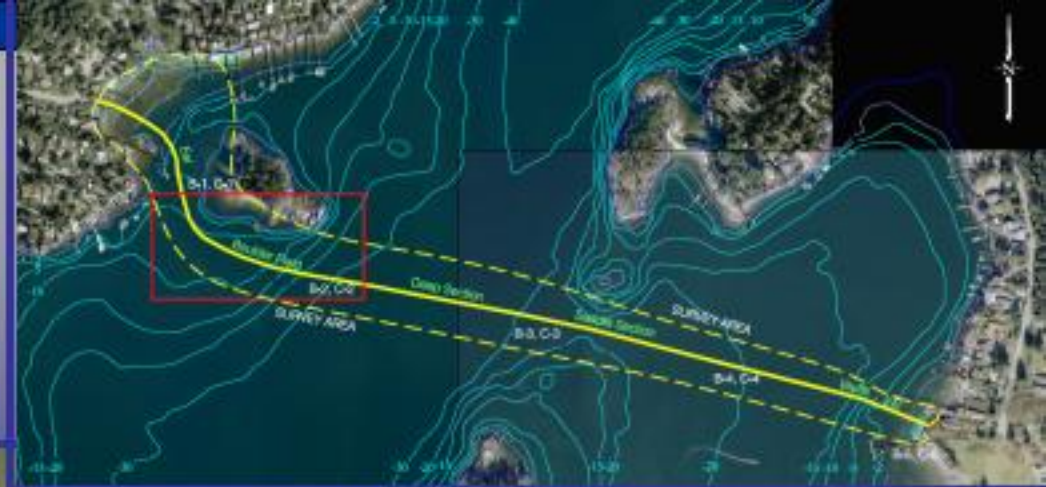
. . . pebbles, sand, mud

N. Vancouver Shore - Biota



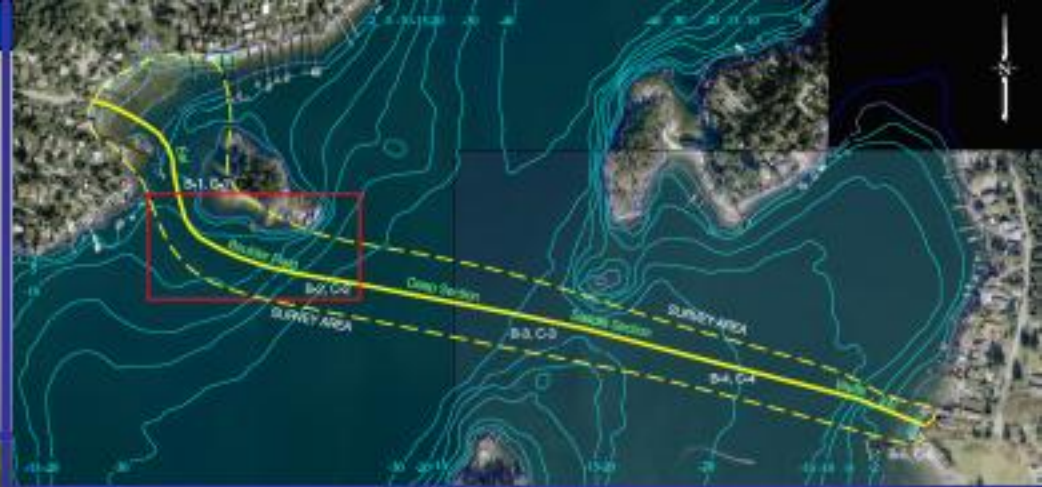
... algae, clams, eelgrass

Boulder Field - Substrate



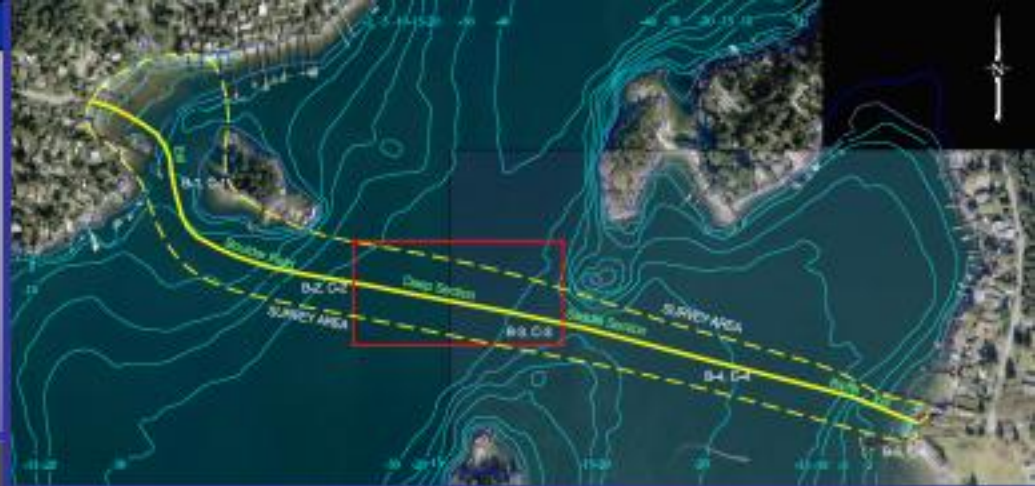
. . . sand, cobbles, boulder field

Boulder Field - Biota



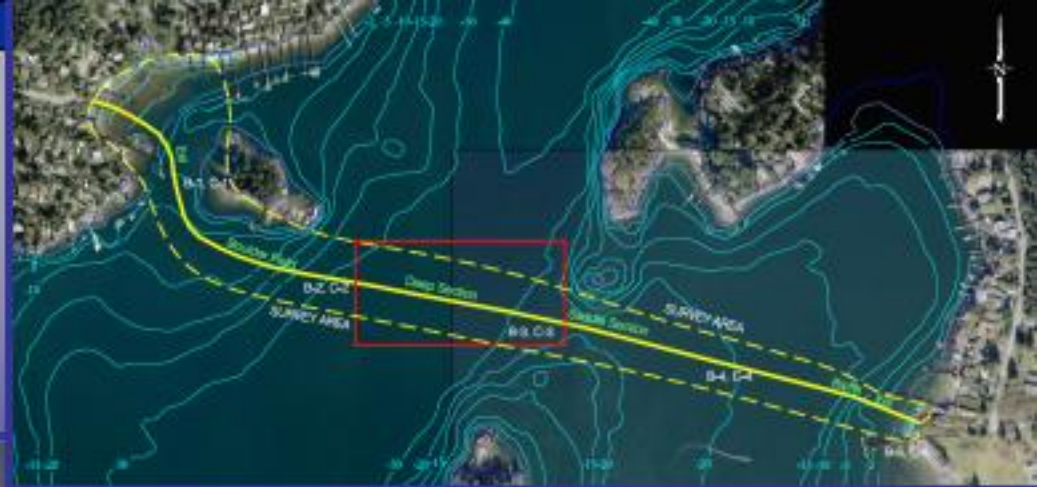
... crabs, sea pens, anemones

Deep Section - Substrate



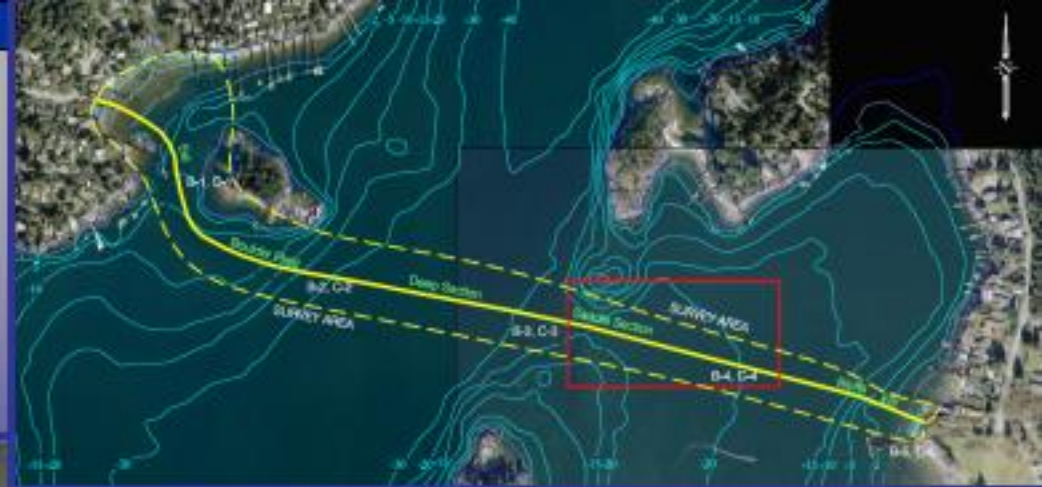
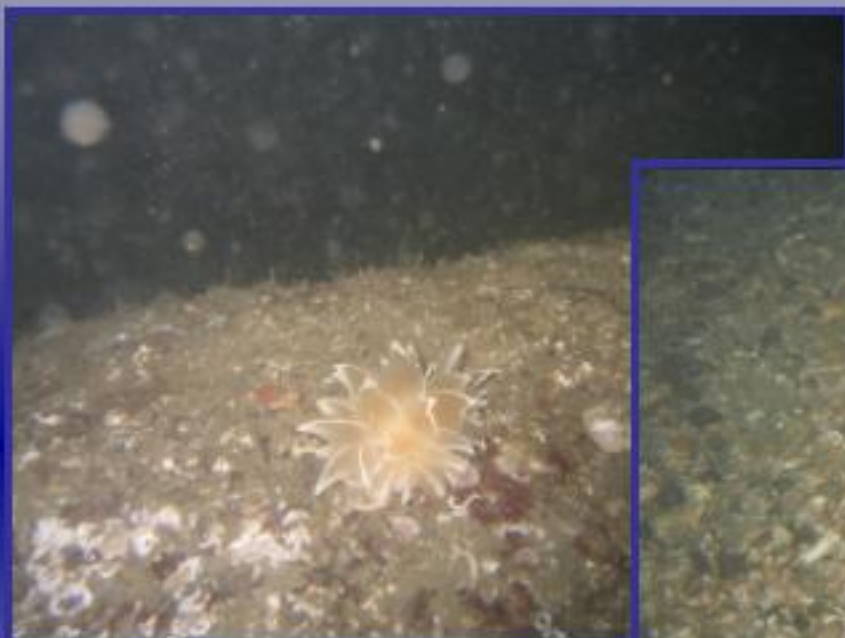
. . . sand, mud, cobble, boulders

Deep Section - Biota



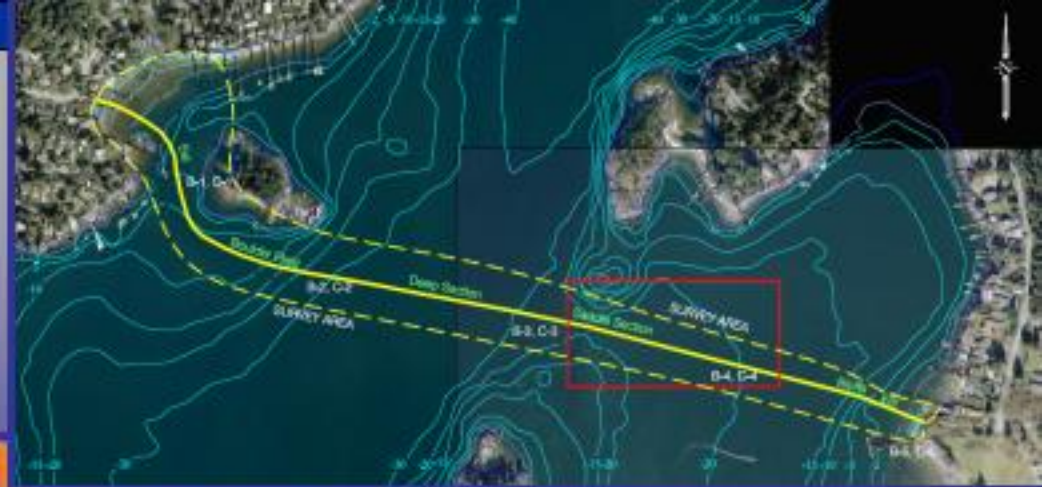
... shrimp, sea pens, anemones

Saddle Section - Substrate



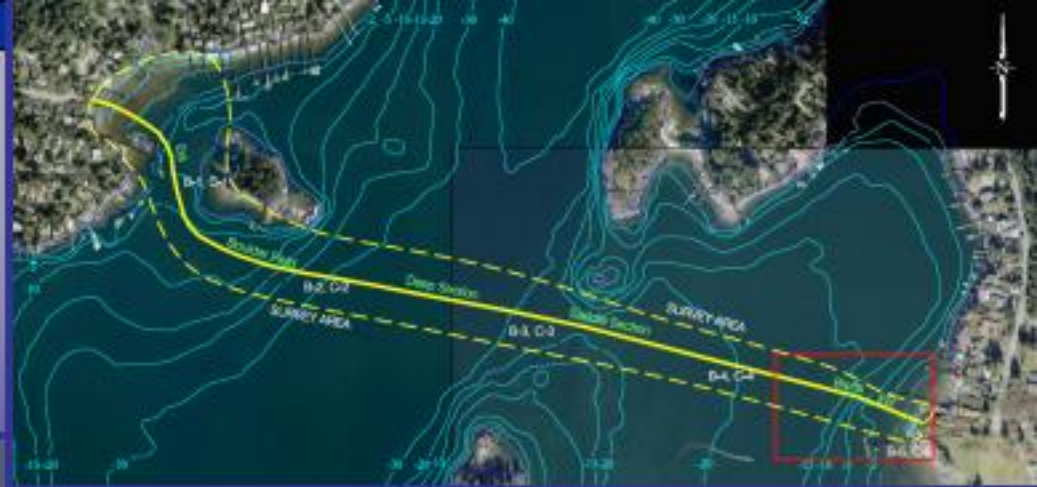
. . . bedrock, boulders, sand, mud

Saddle Section - Biota



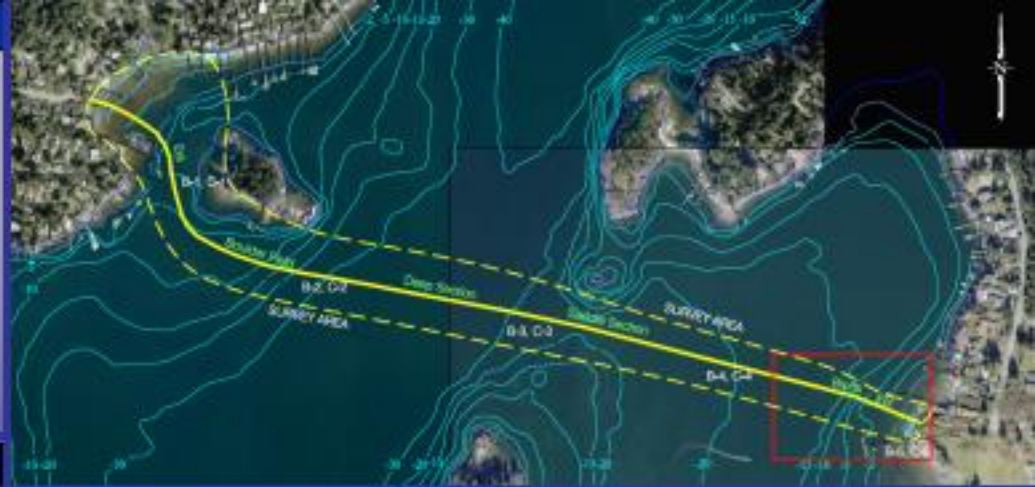
... anemones, shrimp, sea stars

Belcarra Shore - Substrate



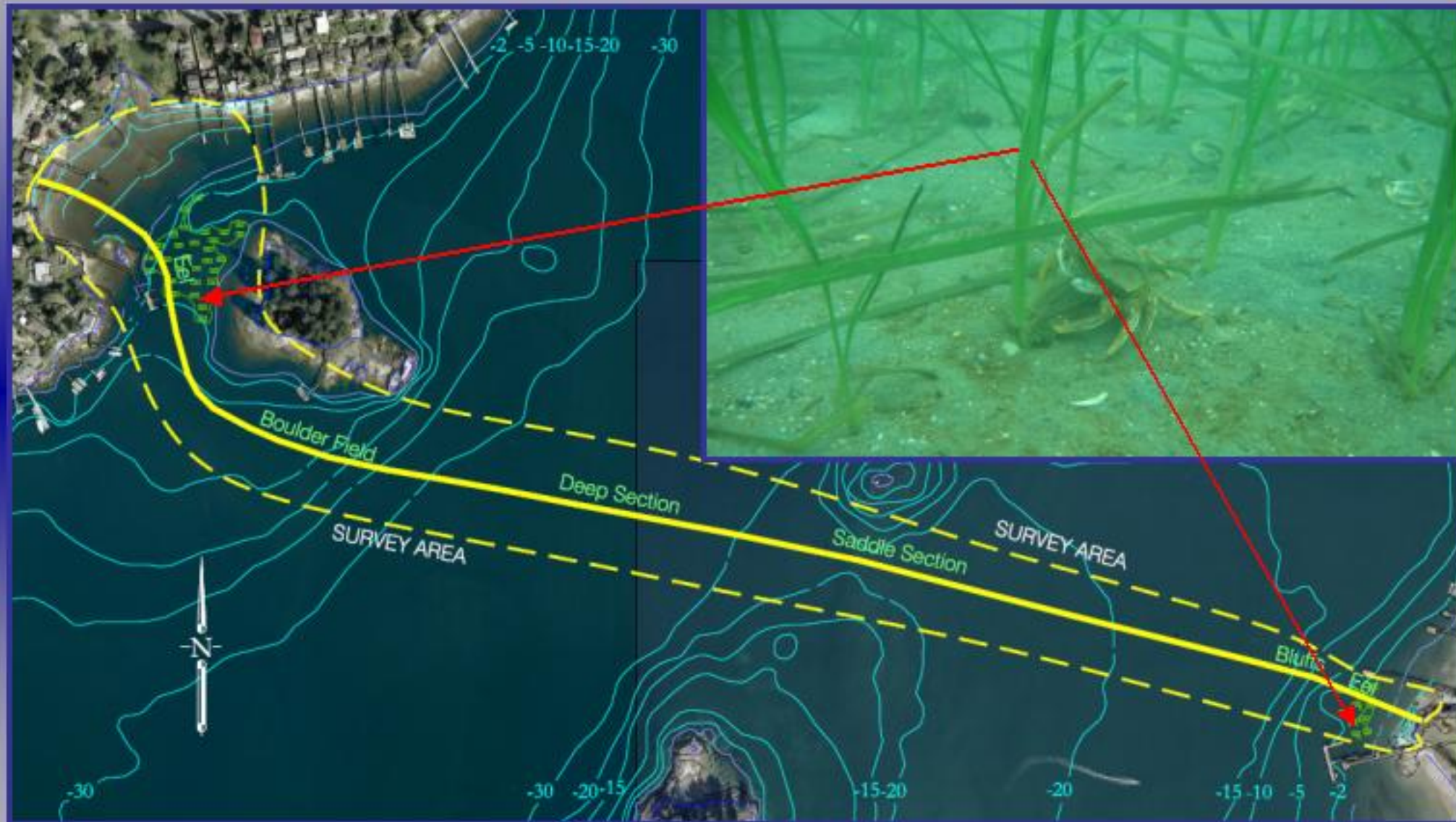
. . . bedrock, sand, mud, pebbles, boulders

Belcarra Shore - Biota



... eelgrass, algae, sea stars

Sensitive Habitat



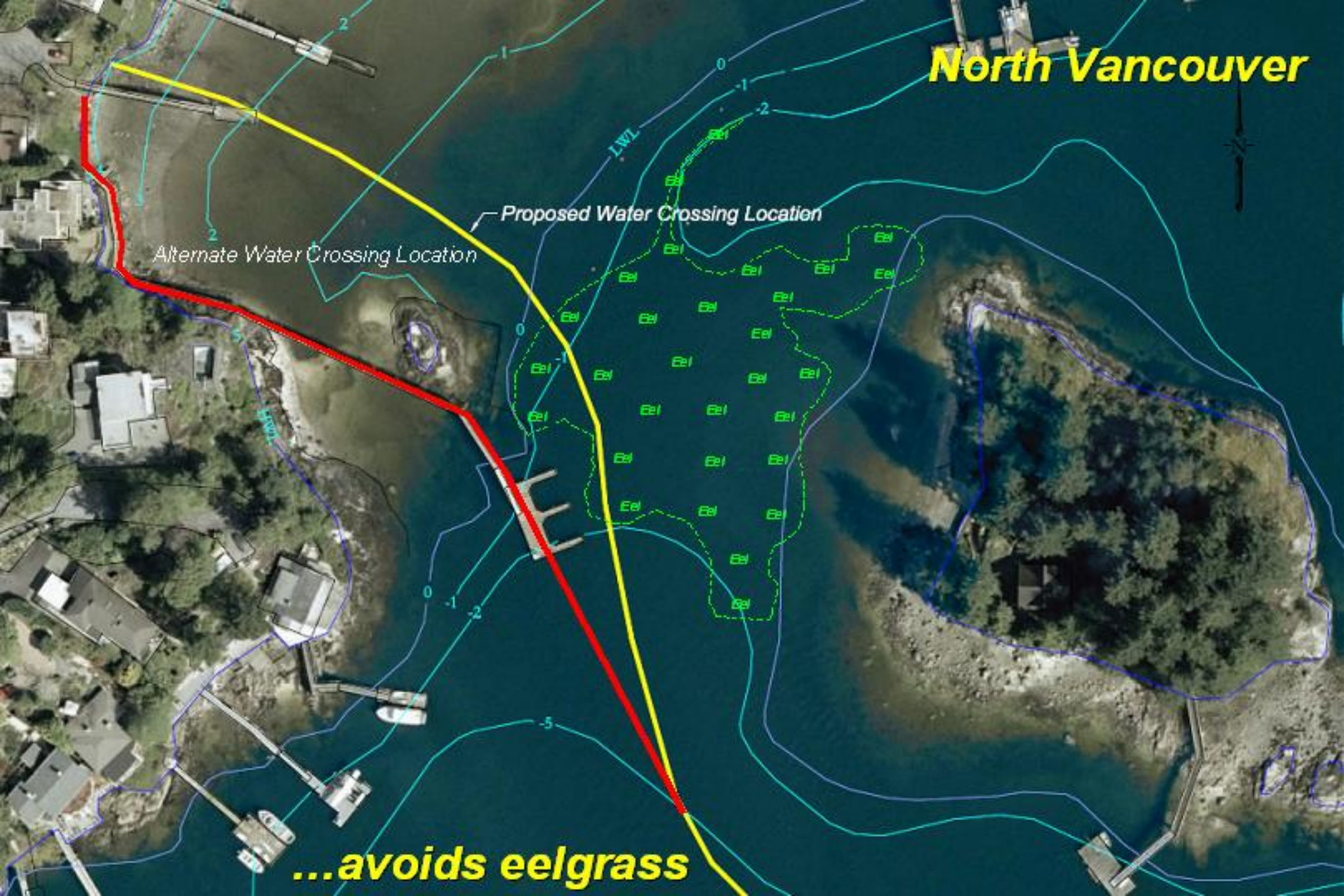
...eelgrass

Limited habitat in Indian Arm...



...avoid eelgrass if possible

North Vancouver

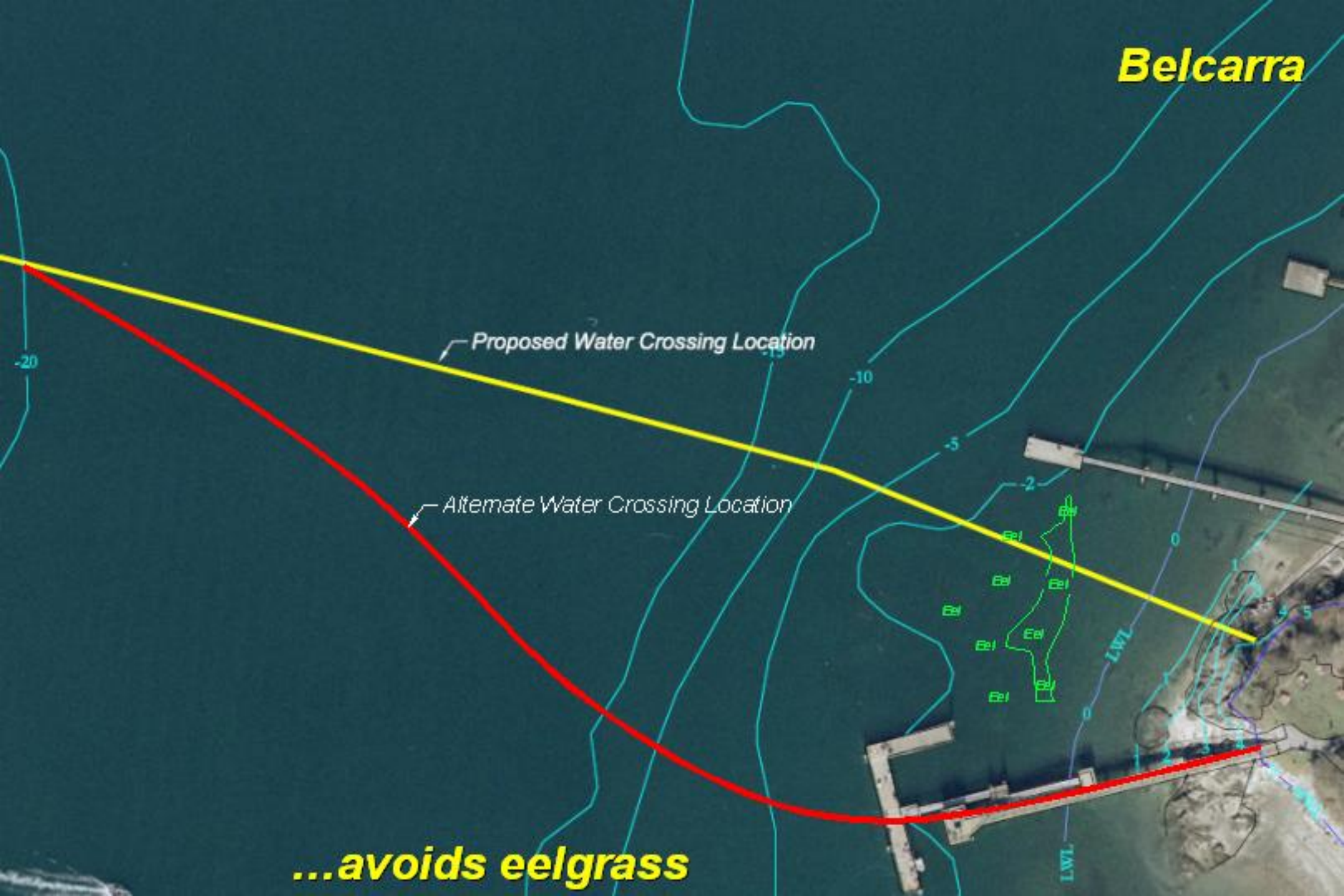


Alternate Water Crossing Location

Proposed Water Crossing Location

...avoids eelgrass

Belcarra



Proposed Water Crossing Location

Alternate Water Crossing Location

...avoids eelgrass

