

Little Squalicum Estuary



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Outline

- Project Location
- Project Goals
- Process to Date
- Project Elements
- Construction and Funding
- Next Steps

Location



1856

U.S. & G. SURVEY
Permanent Library file
No. 1 Plate No. Date 1856

COAST SURVEY
J. D. BACHE, Supdt.
NAISSANCE OF
NGHAM BAY
INGTON TER.
The Hydrographic party
of Lieut. Comdg. J. ALDEN U.S.N. Asst.

Scale 40000
1856



Verified
A. P. Hall, 1st Lieut. 1st Art.
Acty. Asst. in charge U.S. Office



Note
The soundings are expressed in fathoms, or within the dotted line
them in fathoms and show the depth at the mean of the lowest low water
2 1/2 hours the plane of reference. The dotted lines beyond low water mark
the bottom within the respective depths of 6 fms. and 12 fms. for
for 12 fms. for 13 fms. The characteristic soundings only
on the map they are selected from the numerous soundings taken in the
as to represent the figure of the bottom.
Latitude of Point Francis (approx.)
Longitude of do. west from Greenwich (deg. in arc.) data to
Longitude of do. do. in time, 1856.
Variation of the Magnetic Needle in July 1856.
The Topography was executed in
The Hydrography do. in
Abbreviations used in the bottom
hd. for hard st. for soft
sh. for sticky

1954



2014





Project Goals

Goal 1

- Restore lost estuarine wetland habitat near the Nooksack River mouth that can serve as juvenile salmon rearing habitat for ESA-listed Chinook salmon. Restoration will also benefit ESA-listed Southern Resident Killer Whale.

Goal 2

- Enhance sediment supply and forage fish spawning processes.

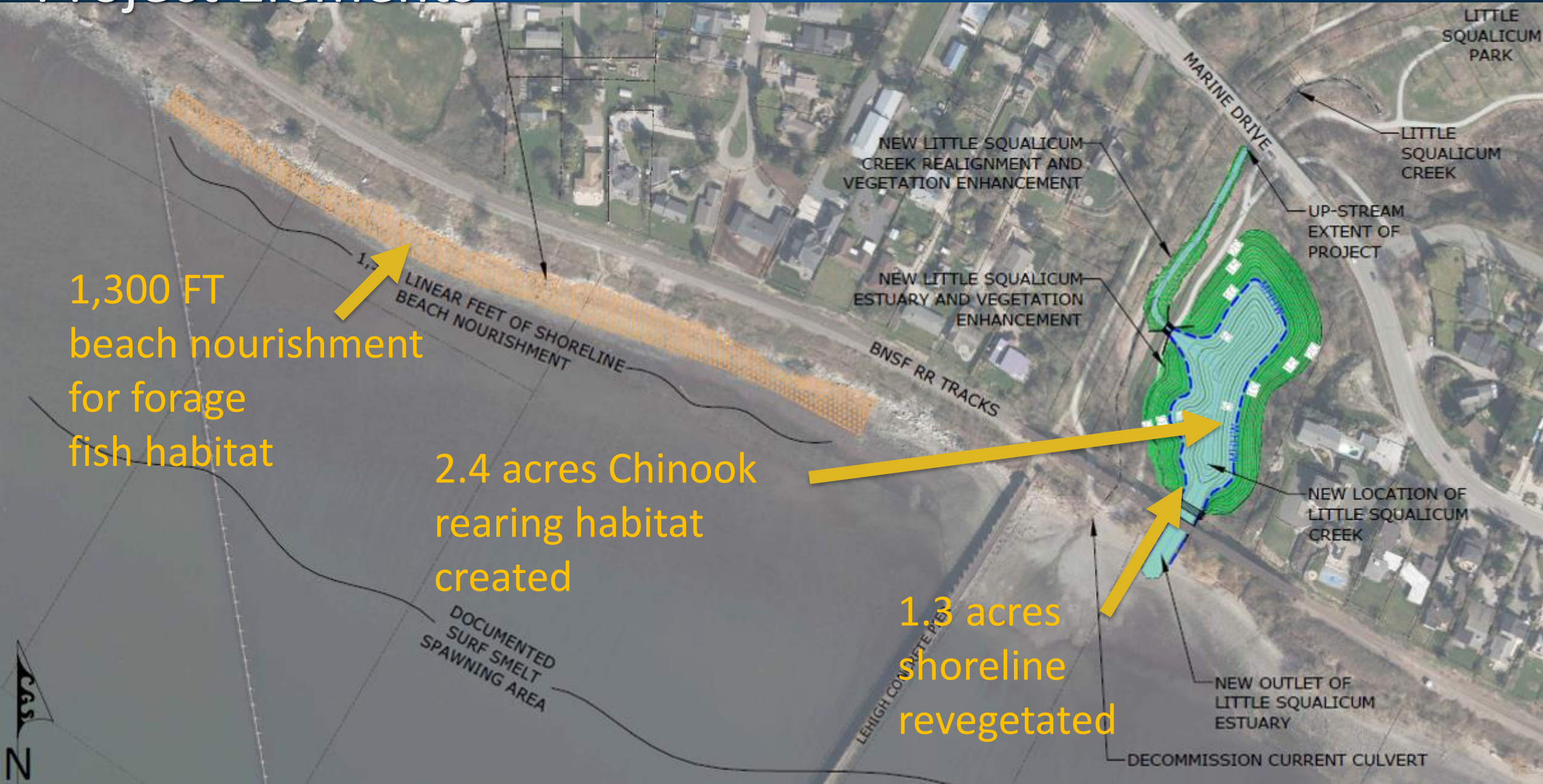
Goal 3

- Enhance wetland water quality function and remove contaminated soils.

Process To Date



Project Elements



Project Elements



Project Elements

Beach Nourishment Area



LEGEND:

SOIL REUSE

REUSE UPPER BEACH SEDIMENT

SOIL REUSE EXCLUSION

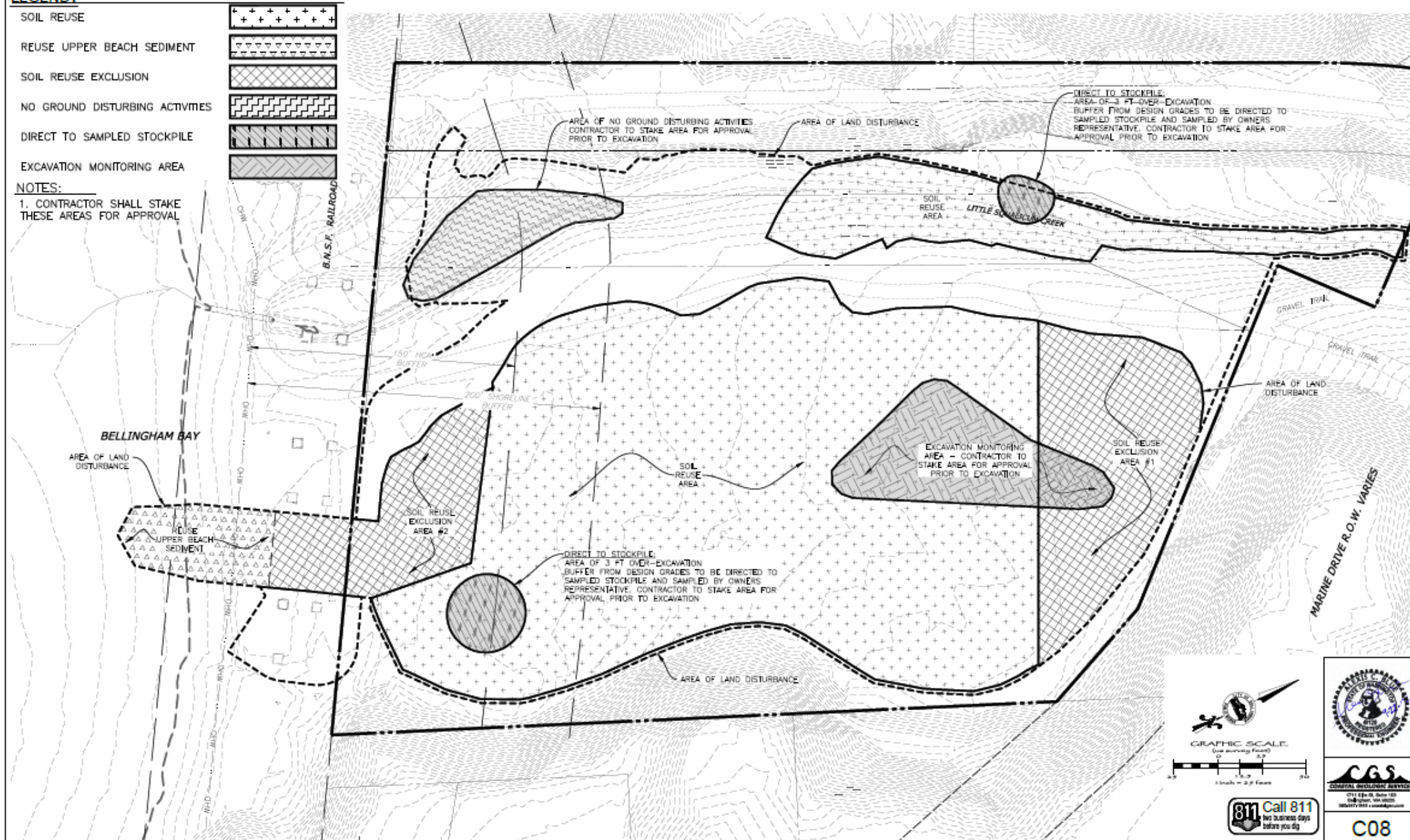
NO GROUND DISTURBING ACTIVITIES

DIRECT TO SAMPLED STOCKPILE

EXCAVATION MONITORING AREA

NOTES:

1. CONTRACTOR SHALL STAKE THESE AREAS FOR APPROVAL

**C08**

07/22/17	1. PREPARED BY	07/22/17	1. PROJECT ENGINEER
07/25/17	2. CHECKED BY	07/25/17	2. PROJECT ENGINEER
07/27/17	3. DESIGNED BY	07/27/17	3. PROJECT ENGINEER
07/27/17	4. DRAWN BY	07/27/17	4. PROJECT ENGINEER
07/27/17	5. CHECKED BY	07/27/17	5. PROJECT ENGINEER
07/27/17	6. APPROVED BY	07/27/17	6. PROJECT ENGINEER

PROJECT ENGINEER	ACE
DESIGNED BY	CHAMBERLAIN
CHECKED BY	CHAMBERLAIN
APPROVED BY	CHAMBERLAIN

DESIGNED BY	TAC
CHECKED BY	CHAMBERLAIN
APPROVED BY	CHAMBERLAIN

CITY OF BELLINGHAM, WASHINGTON
PUBLIC WORKS DEPARTMENT
 ENGINEERING DIVISION

SCALE	1" = 20'
DATE	8/3/98
DATUM	NAD 83/98
FILE NO.	NAVD88

Job No.	8/28/2017
Date	8/28/2017
File No.	

LITTLE SQUALICUM ESTUARY
SOIL HANDLING PLAN

SHEET
 11 OF 26

Construction

- \$3,474,179.48
- Glacier Environmental Services
- This project would not be possible without the partnership of landowners within the project area: Lehigh Northwest Cement Company, Port of Bellingham, Whatcom County, and BNSF.

Funding

- City of Bellingham
- Greenways Levy
- Washington Department of Ecology Centennial Clean Water Program
- Washington Department of Ecology One-Time Grant Program
- WA State Aquatic Lands Enhancement Account Grant Program (ALEA)
- WA State Estuary and Salmon Restoration Program (ESRP)
- US Fish and Wildlife Service National Coastal Wetland Conservation Grant Program
- Port of Bellingham
- Whatcom County
- Nooksack Salmon Enhancement Association (NSEA)













Before



After





Next Steps

- Community Work Party – January 16, 2023



Next Steps

- Post-construction monitoring

SCHEDULE	Y0	Y1	Y2	Y3	Y5
Monitoring Tasks					
Salinity Measurements	X	X	X	X	X
Photo monitoring	X	X	X	X	X
Snorkel Surveys		X	X	X	X
Riparian & Estuarine Vegetation		X	X	X	X
Visual Inspections	X	X	X	X	
Forage Fish Surveys *	X				
Annual Report		X	X	X	X

* Whatcom MRC may conduct additional surveys

Thank you, questions?



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