

DESIGNED BY: R. MICHENERSON
CHECKED BY: R. BUTERA
DRAFTED BY: S. BUCHANON
SCALE: N/A
LAYOUT: A1
DATE: 10/18/2018 8:00 AM
DRAWING LOCATION: C:\working\year01\0093778\A1.dwg

STATE OF ALASKA

DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

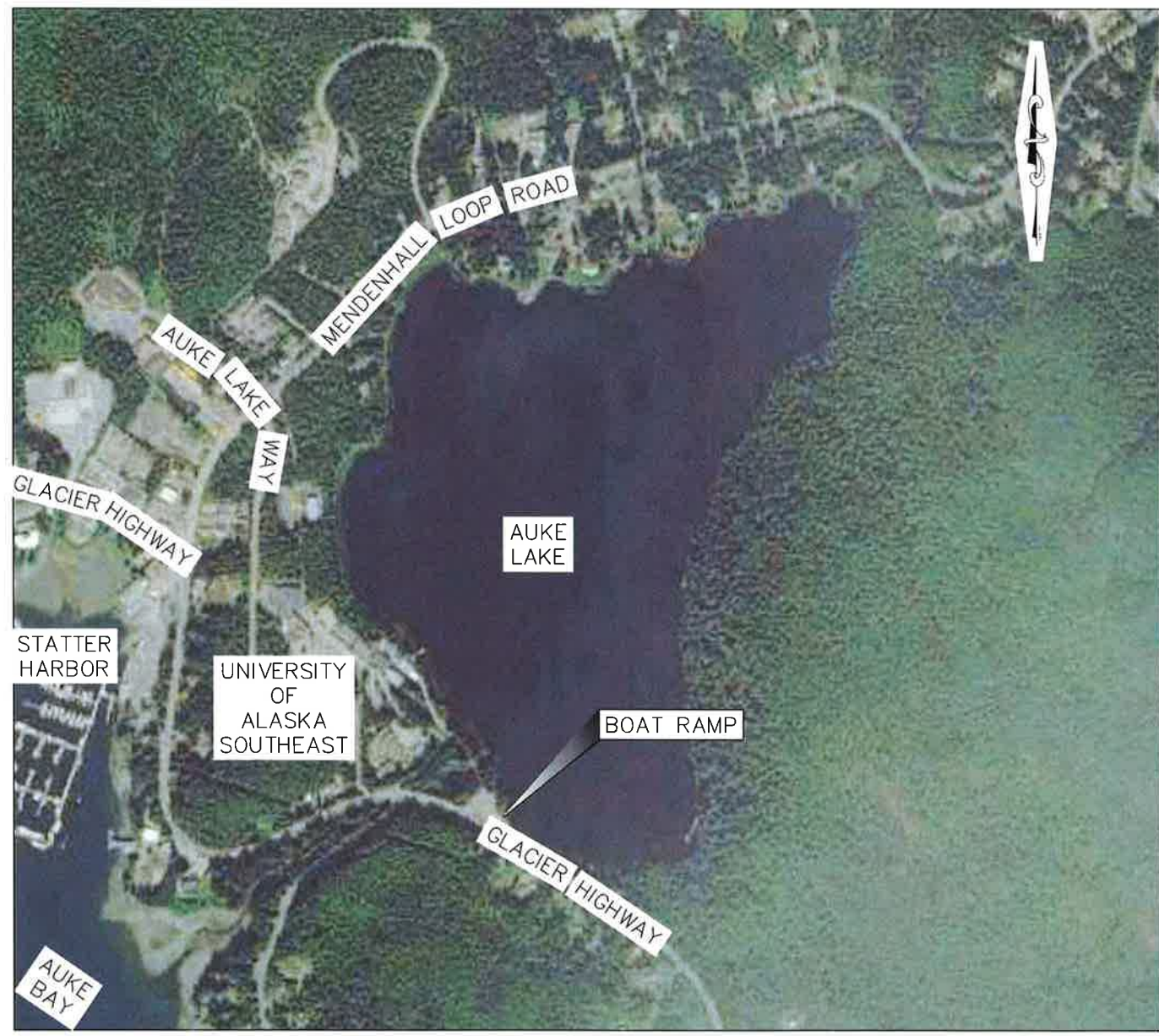


REVISIONS			STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL 'A' SHEETS
NO.	DATE	DESCRIPTION				A1	A2
			ALASKA	Z695000000/0933037	2018	PLAN SET TOTAL	5
			LATITUDE: 58.3859		LONGITUDE: 134.634		

PROJECT LOCATION
M&O STATION: AUKE LAKE

INDEX OF SHEETS	
A1	TITLE SHEET
A2	LEGENDS, ABBREVIATIONS & KEY MAP
B1	HABITAT BENCH FELLED TREE PLAN
B2	HABITAT BENCH PLANTING PLAN
C1	TYPICAL SECTIONS & DETAIL

AUKE LAKE HABITAT BENCH RESTORATION



VICINITY MAP

As Advertised:

October 22, 2018

Record Drawings have been reviewed by the
Project Engineer, and represent to the best of
my knowledge, the project as constructed.

PE Jim Bergan

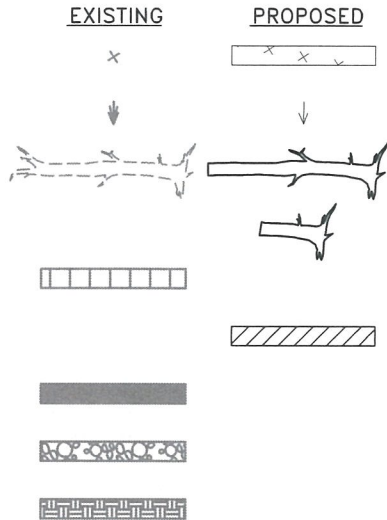
STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES 6860 GLACIER HWY, JUNEAU AK 99811 (907)465-1763	
APPROVED: <u>[Signature]</u>	10.19.18
REGIONAL PRECONSTRUCTION ENGINEER	DATE
CONCUR: <u>[Signature]</u>	19 Oct 2018
REGIONAL DIRECTOR	DATE

FILE C:\pwworking\west01\0693778\A2.dwg DATE 8/10/2018 LAYOUT A2 DESIGNED R. BUTERA CHECKED R. WOPHERSON DRAFTED S. BUCHANON

ABBREVIATIONS:

AKSPC ALASKA STATE PLANE COORDINATES
DOT/PF DEPARTMENT OF TRANSPORTATION/
PUBLIC FACILITIES
EL. ELEVATION
FM FORCE MAIN
JNU JUNEAU
OHW ORDINARY HIGH WATER LINE
R/W RIGHT OF WAY
TYP. TYPICAL
USC&GS UNITED STATES COAST AND
GEODETIC SURVEY

AQUATIC PLANT PLUGS
(PLAN)
AQUATIC PLANT PLUGS
(PROFILE)
FELLED SPRUCE TREE
WITH ROOT WAD
ROOT WAD
GEOCELL MATRIX
(PLAN)
ORGANIC FILL
MULTI-USE PATH
SHOTROCK
TOP SOIL



BOAT LAUNCH RAMP
BUILDING
CONTOURS (MAJOR)
CONTOURS (MINOR)
EDGE OF PAVEMENT (PLAN)
EXISTING GRADE
(PROFILE)
GUARDRAIL/HANDRAIL
HABITAT BENCH LIMITS
ORDINARY HIGH WATER LINE
ORDINARY HIGH WATER LINE
(PROFILE)
RIGHT OF WAY
TREE LINE



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GENERAL NOTES:

- PROJECT IS WITHIN AND ADJACENT TO ENVIRONMENTALLY SENSITIVE AREAS. CONTRACTOR SHALL BE RESPONSIBLE FOR AVOIDING/MINIMIZING IMPACTS TO THESE AREAS DURING THE COURSE OF CONSTRUCTION. ANY DAMAGE CAUSED BY THE CONTRACTOR'S ACTIVITIES SHALL BE RESTORED AT THE EXPENSE OF THE CONTRACTOR AND TO THE SATISFACTION OF THE OWNER AND RESOURCE PROTECTION AGENCIES. THE OWNER SHALL BE THE SOLE ASSESSOR AS TO WHETHER ENVIRONMENTAL IMPACTS HAVE OCCURRED AS A RESULT OF THE CONTRACTORS ACTIVITIES. THE OWNER RESERVES THE RIGHT TO SUSPEND WORK AT ANY TIME IF IMPACTS OCCUR AND UNTIL CORRECTIVE MEASURES ARE IMPLEMENTED BY THE CONTRACTOR.
- CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL EXISTING CONDITIONS PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES. DISCREPANCIES SHALL BE REPORTED IMMEDIATELY TO ENGINEER.
- CONTRACTOR MAY USE THE PORTION OF THE BOAT LAUNCH RAMP PARKING AREA WITHIN THE ADOT/PF RIGHT-OF-WAY FOR A STAGING AREA. THIS USE SHOULD NOT BLOCK ACCESS OR MANEUVERING OF TRAILERS AT PUBLIC BOAT LAUNCH.
- EXISTING STRUCTURES OR IMPROVEMENTS SUCH AS BUT NOT LIMITED TO THE MULTIUSE TRAIL, BOAT RAMP, PARKING AREA, PEDESTRIAN HANDRAIL, GLACIER HIGHWAY GUARD RAIL, AND OUTFALL PIPE DAMAGED AS A RESULT OF CONTRACTOR'S ACTIVITIES DURING WORK SHALL BE REPAIRED BY CONTRACTOR AT HIS EXPENSE.

SURVEY NOTES:

HORIZONTAL CONTROL

HORIZONTAL CONTROL FOR THIS PROJECT IS BASED ON THE DOT/PF 2000 JUNEAU GRID

THE DOT/PF JUNEAU GRID-2000 SYSTEM IS A LOCAL GROUND COORDINATE SYSTEM BASED AT USC&GS FIRST ORDER CONTROL STATION EDDIE. IT RELATES TO AKSPC ZONE 1 NAD83 (1992) THROUGH THE FOLLOWING PARAMETERS:
ZONE = NAD83 (1992) AKSPC ZONE 1
GRID SCALE = 0.999928875
CONVERGENCE = -0°45'27.26"
TRANSLATION ABOUT USC&GS POINT EDDIE AS FOLLOWS:
AKSPC NORTHING = 2383469.17310 FT US
AKSPC EASTING = 2512570.06318 FT US
LOCAL NORTHING = 500000.0000 FT US
LOCAL EASTING = 500000.0000 FT US

CONTRACTOR SHALL ESTABLISH HORIZONTAL CONTROL.

VERTICAL CONTROL

THE PROJECT SPECIFIC BASIS OF VERTICAL CONTROL IS POINT # 517 "TBM BROTHER". WHICH IS A 3.5" BRASS CAP LOCATED IN THE NORTH EAST ABUTMENT OF BROTHERHOOD BRIDGE. TBM-BROTHER HAS AN OBSERVED ELEVATION OF 39.41 FEET ABOVE MLLW.

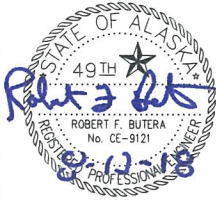
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PE Jim Bergen



KEY MAP

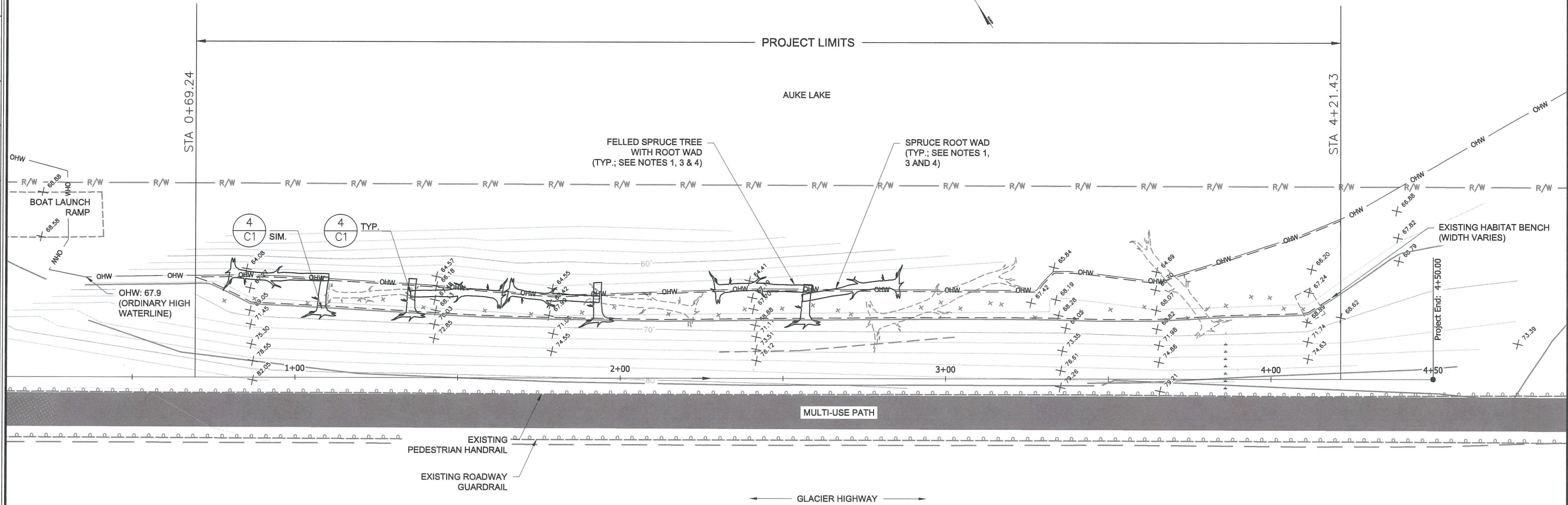
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2525 C ST STE 500
ANCHORAGE, AK 99503
(907)644-2000
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
AUKE LAKE
HABITAT BENCH RESTORATION
LEGENDS, ABBREVIATIONS &
KEY MAP

FILE C:\pwworking\west01\06093778\B1.dwg DATE 8/10/2018 LAYOUT B1 DESIGNED R. BUTERA CHECKED R. MCPHERSON DRAFTED S. BUCHANON

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CONSTRUCTION NOTES:

1. CONTRACTOR SHALL PLACE FELLED SPRUCE TREES WITH ROOT WADS AND ROOT WADS PRIOR TO INSTALLING ORGANIC FILL.
2. TO THE EXTENT POSSIBLE, CONTRACTOR SHALL MINIMIZE DISTURBANCE AND IMPACTS TO EXISTING VEGETATION ON THE HABITAT BENCH.
3. INSTALL 5 FELLED SPRUCE TREES WITH ROOT WADS, AND 4 SPRUCE ROOT WADS. PLACE AS SHOWN ON THIS SHEET OR AS DIRECTED BY ENGINEER WITH ROOT FANS ON LAKE EDGE OF HABITAT BENCH AND BOLE AT SLIGHT INLAND SKEW PARALLELING EDGE OF HABITAT BENCH.
4. BRANCHES AND ROOTS SHALL BE REMOVED ON ONE SIDE OF TREES TO ALLOW PLACEMENT OF TREES IN WHICH A MAJORITY OF THE LENGTH OF THE TREE RESTS RELATIVELY FLAT ON THE HABITAT BENCH.
5. CONSTRUCTION TOLERANCES FOR FILL SHALL BE +/- 0.2 FT.
6. CONTRACTOR SHALL REMOVE ALL EXPOSED REBAR (USED PREVIOUSLY TO STAKE DOWN GEOCELL) WITHIN THE HABITAT BENCH.
7. CONTRACTOR SHALL REMOVE ALL STRAW FILLED AND EMPTY WATTLES WITHIN THE HABITAT BENCH.
8. IF GEOCELL MATERIAL IS EXPOSED, CONTRACTOR SHALL REMOVE EXPOSED GEOCELL 0.5' BELOW FINISH GRADE THROUGH SHEARING OR OTHER METHOD THAT MINIMIZES DISTURBANCE TO BURIED GEOCELL MATERIAL.
9. CONTRACTOR SHALL TAKE MEASURES TO PREVENT PUBLIC FROM ENTERING ACTIVE CONSTRUCTION ZONES. TEMPORARY CLOSURE USING SAFETY FENCE OF THE BOAT RAMP MAY BE REQUIRED. CONTRACTOR SHALL ENDEAVOR TO MINIMIZE DURATION OF BOAT RAMP CLOSURES AND PROVIDE NOTIFICATION OF PLANNED CLOSURES TO THE OWNER A MINIMUM OF ONE WEEK IN ADVANCE. REFER TO SPECIFICATION SECTION 653 FOR TEMPORARY CLOSURE REQUIREMENTS.
10. SEE SHEET B2 FOR PLANNING NOTES.

POST-CONSTRUCTION SURVEYING NOTES:

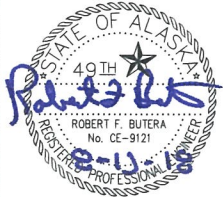
1. FOLLOWING CONSTRUCTION OF THE HABITAT BENCH RESTORATION, CONTRACTOR SHALL SURVEY HABITAT BENCH ALONG TRANSECTS PERPENDICULAR TO THE CONSTRUCTION BASELINE. TRANSECTS SHALL START AT STATION 0+00 AND OCCUR EVERY 50 FT BEGINNING AT THE CONSTRUCTION BASELINE AND EXTENDING A MINIMUM OF 5 FT BEYOND THE HABITAT BENCH LEDGE. SPOT ELEVATION SPACING SHALL BE A MAXIMUM OF 5 FT AND CAPTURE ALL GRADE CHANGES.
2. SURVEYING SHALL BE PERFORMED UNDER RESPONSIBLE CHARGE OF A REGISTERED PROFESSIONAL SURVEYOR LICENSED IN THE STATE OF ALASKA.
3. UPON COMPLETION OF SURVEY, CONTRACTOR SHALL PROVIDE A SET OF SURVEY DRAWINGS, SEALED BY A REGISTERED PROFESSIONAL SURVEYOR LICENSES IN THE STATE OF ALASKA, TO THE OWNER. SURVEY DRAWINGS SHALL INCLUDE A PLAN-VIEW, PROFILE SURVEY TRANSECTS, AND LOCATION/ORIENTATION OF ALL FELLED SPRUCE TREES ON THE HABITAT BENCH.



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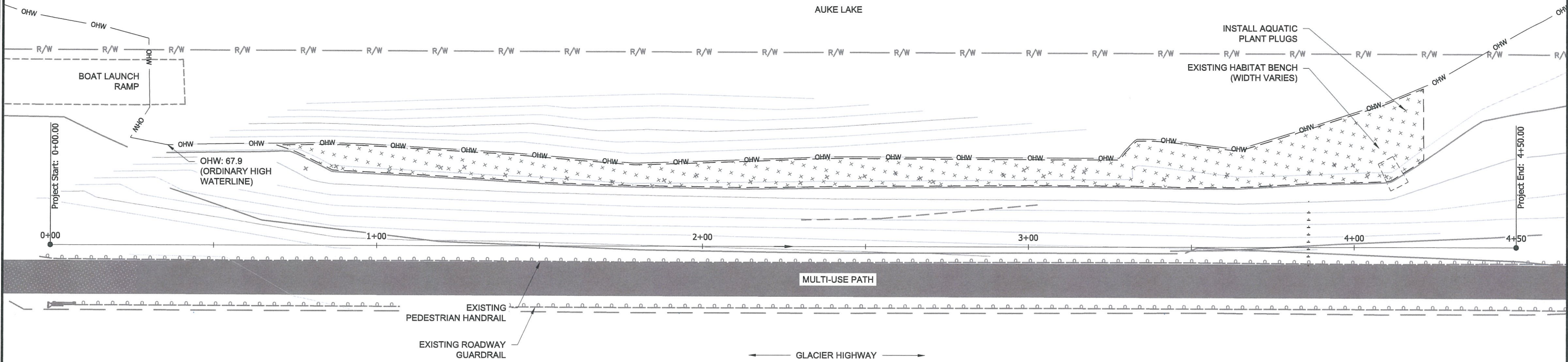
STATE OF ALASKA
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AUKE LAKE
HABITAT BENCH RESTORATION

HABITAT BENCH
FELLED TREE PLAN

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PLANTING SCHEDULE

AQUATIC PLANT PLUGS FOR BENCH			
BOTANICAL NAME	COMMON NAME	DESCRIPTION	SOURCE LOCATION
EQUISETUM FLUVIATILE	SWAMP HORSETAIL	PLUG PLANTING	ROW OR ENGINEER ACCEPTED SOURCE
CAREX SITCHENSIS	SITKA SEDGE	PLUG PLANTING	ROW OR ENGINEER ACCEPTED SOURCE
CALTHA PALUSTRIS	MARSH MARIGOLD	PLUG PLANTING	ROW OR ENGINEER ACCEPTED SOURCE
SCIRPUS MICROCARPUS	SMALL LEAVED BULLRUSH	PLUG PLANTING	ROW OR ENGINEER ACCEPTED SOURCE
INTERMIX 500 PLANTING PLUGS ALONG HABITAT BENCH AT 2' O.C. SPACING.			

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PLANTING NOTES:

- TREES NOT SHOWN ON THIS SHEET FOR CLARITY; SEE SHEET B1.
- DONOR SITE FOR AQUATIC PLANT PLUGS IS LOCATE WITHIN THE RIGHT OF WAY AT THE SOUTHEAST END OF THE HABITAT BENCH OR OTHER LOCATION AS ACCEPTED BY ENGINEER.

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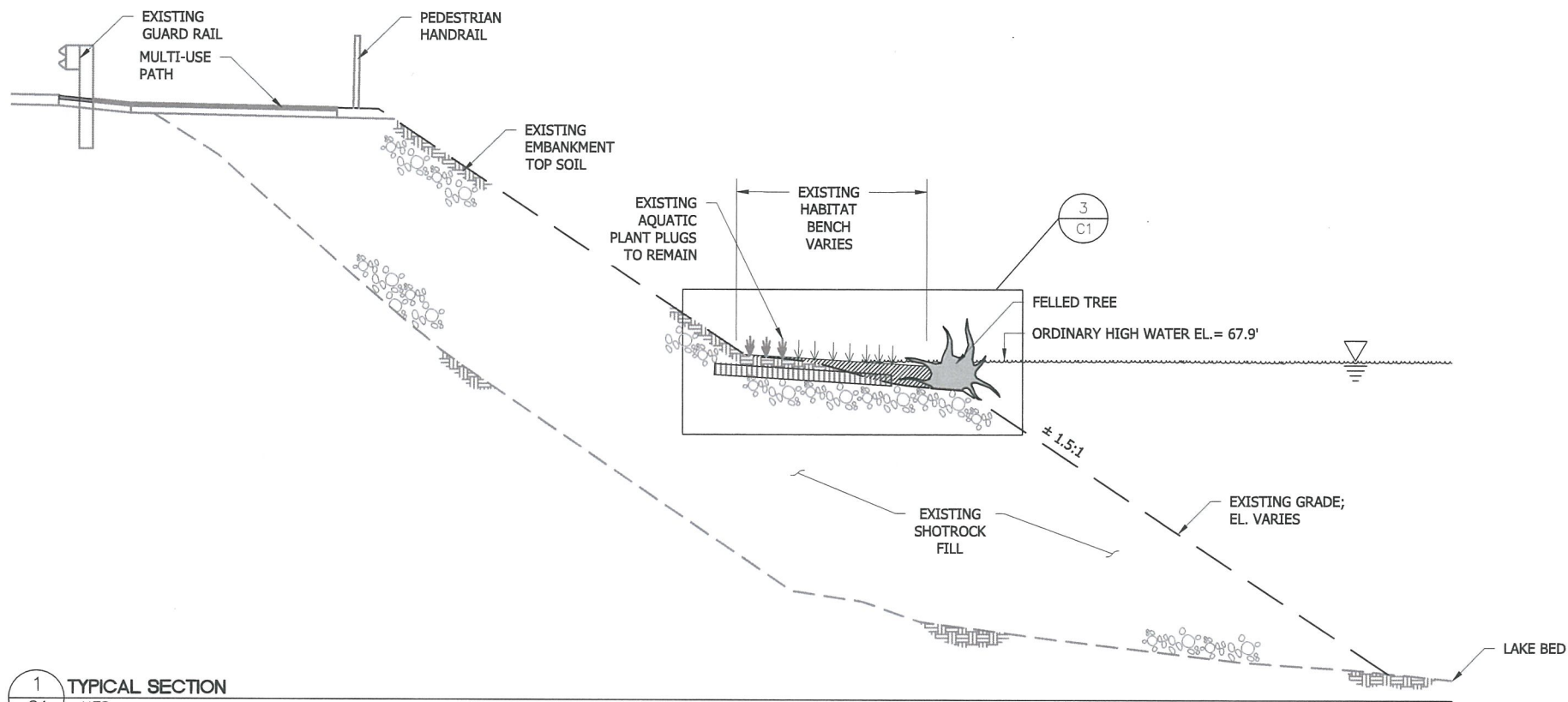
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AUKE LAKE
HABITAT BENCH RESTORATION

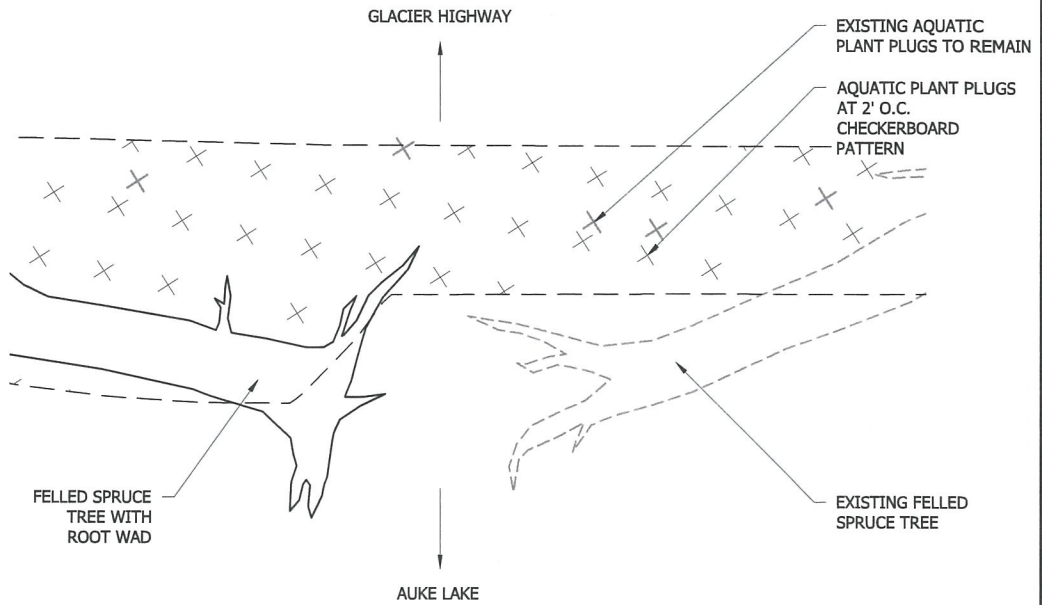
HABITAT BENCH
PLANTING PAN

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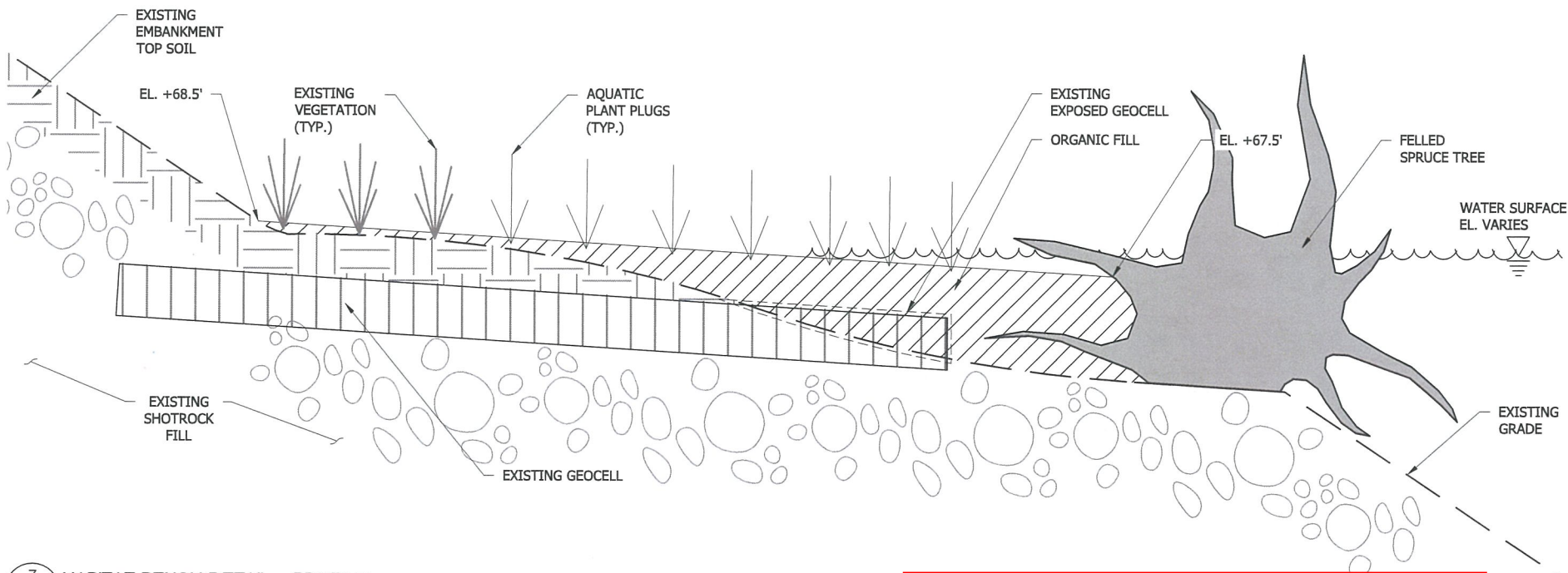
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1 TYPICAL SECTION
NTS



2 PLANTING DETAIL - PLAN
NTS



3 HABITAT BENCH DETAIL - PROFILE
NTS

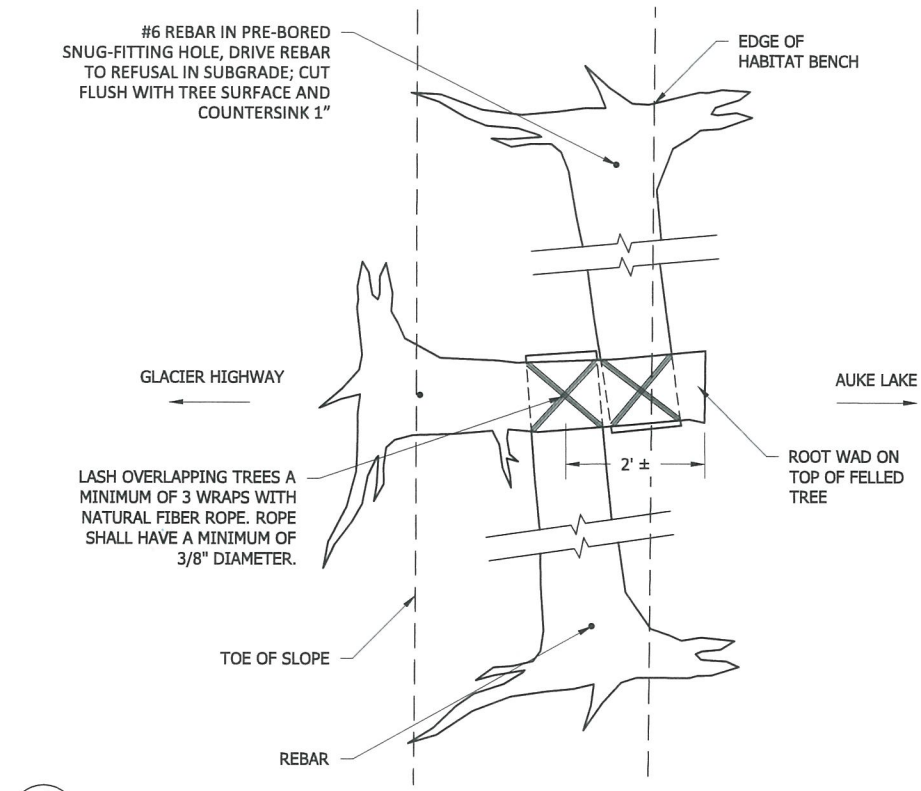
NOTES:

1. TRIM BRANCHES & ROOTS FROM BOTTOM OF TREES TO LAY FLAT ON SUBGRADE.
2. HAND EXCAVATE FOR SPAN OF ROOT WAD ON ALL FELLED TREES.

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4 SPRUCE TREE ANCHORING + PINNING DETAIL
NTS

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