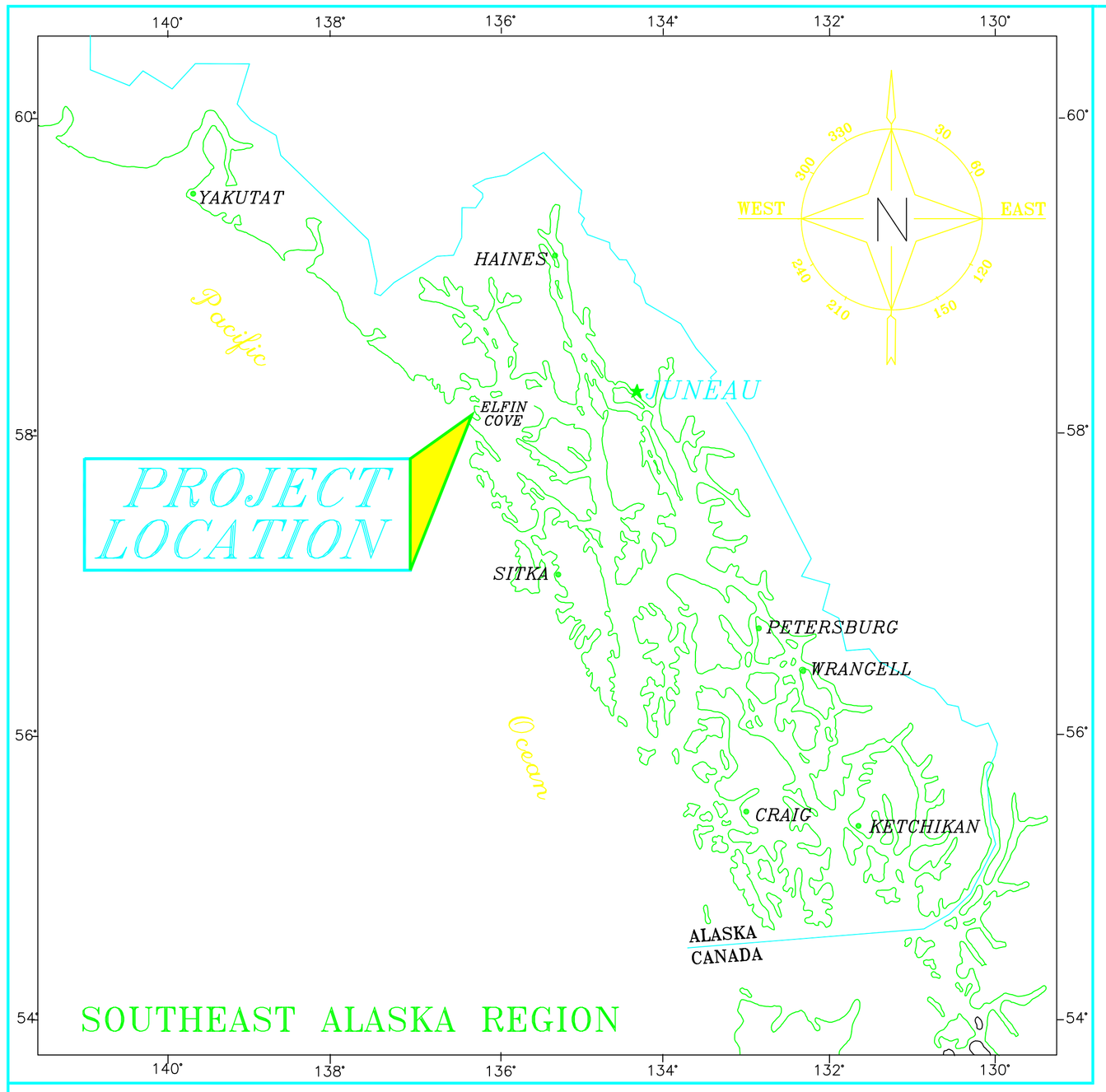


STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
SOUTHEAST REGION

ELFIN COVE, ALASKA

ELFIN COVE BOARDWALKS

PEDESTRIAN BOARDWALK AND RAILING REPAIRS

PROJECT NO. STP-0003(56) ~ 67619

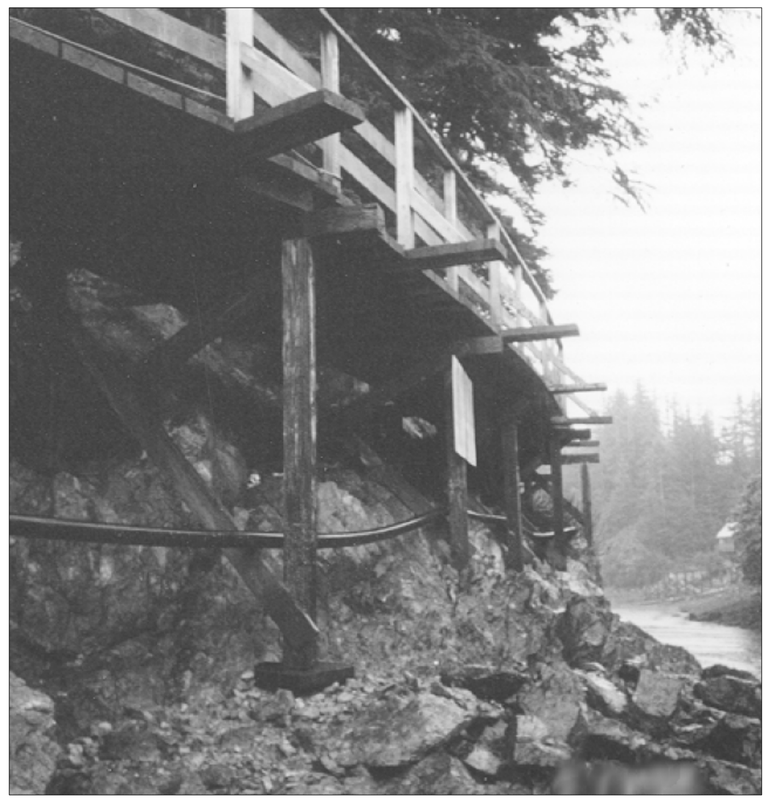
INDEX OF SHEETS

The following Standard Drawings apply to this project :

A-1

AS-BUILT PLANS

CONTRACTOR – R.A. ENVIRONMENTAL, ANCH., AK.
PROJECT ENGINEER – JIM MAYER
NOTICE TO PROCEED – 9/1/99
BEGIN WORK – 3/21/00
COMPLETION DATE – ORIGINALLY 5/15/00
EXTENDED TO 7/10/00 BY CHANGE ORDER
ACTUAL COMPLETION DATE – 7/10/00
CONTRACT AMOUNT – $213,162.53
ACTUAL FINAL AMOUNT – $235,170.15



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND
PUBLIC FACILITIES
SOUTHEAST REGION DESIGN SECTION

APPROVED

Date

Regional Preconstruction Engineer

APPROVED

Date

Director, S.E. Region Design & Construction

PROJECT NUMBER:
67619

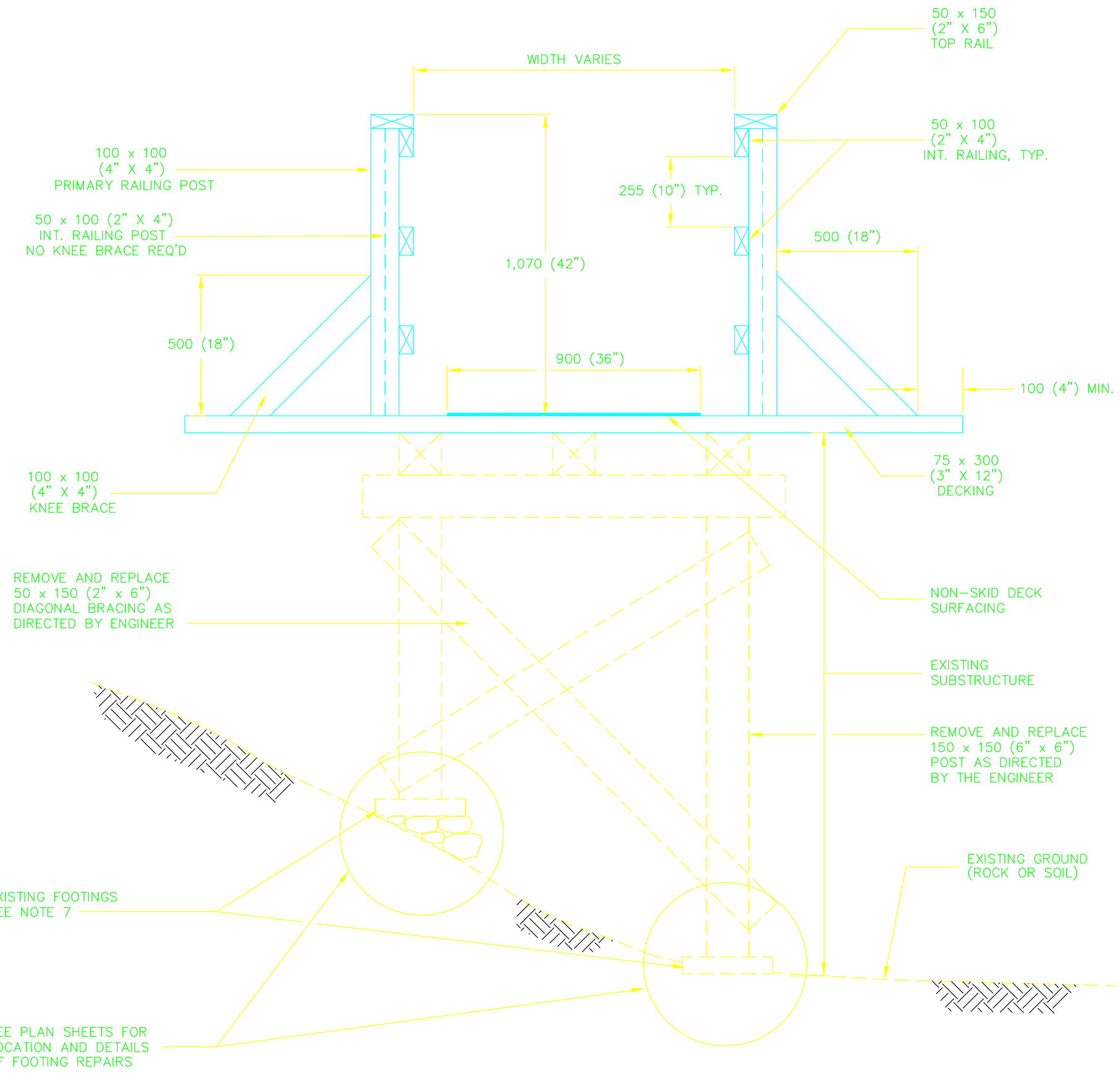
DATE:
JUNE 1999

SHEET 1 OF 12

ENGINEER'S SEAL

STATE OF ALASKA
49th
LARS R. GREGOVICH
CE-8065
REGISTERED ENGINEER

Q:\ELF\67619\Asbuilt\TSHT



TYPICAL BOARDWALK SECTION

ALL DIMENSIONS IN MILLIMETERS
(ENGLISH UNITS IN PARENTHESES)

CONSTRUCTION NOTES:

1. ALL TIMBER DIMENSIONS GIVEN ARE NOMINAL S4S.
2. ALL REMOVED MATERIALS WILL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF IN AN APPROVED MANNER.
3. THE BOARDWALK AND TRAIL SYSTEM ARE THE COMMUNITY OF ELFIN COVE'S ONLY LAND BASED TRANSPORTATION NETWORK. BOARDWALK AND TRAIL ACCESS SHALL BE MAINTAINED THROUGH WORK ZONES AT ALL TIMES.
4. THE CONTRACTOR SHALL FIELD VERIFY DIMENSIONS OF EXISTING CONSTRUCTION PRIOR TO ORDERING TIMBER MATERIALS. PRIMARY RAILING POST SPACING VARIES FROM 1650mm (5'6") TO 3800mm (12'6") WITH AN AVERAGE SPACING OF ABOUT 2600mm (8'6".)
5. ALL TIMBER SHALL BE HEM-FIR NO. 1 OR BETTER AND SHALL BE PRESSURE TREATED WITH ACZA TO A RETENTION OF 9.6 kg/m3 (0.6 pcf.) SOME MATERIALS WERE ACCEPTED AT 0.4 PCF EXCEPT 150 mm x 150 mm POSTS WHICH SHALL BE PRESSURE PRESSURE TREATED WITH CREOSOTE TO A RETENTION OF 400 Kg/CUBIC METER (25 pcf) PER AWPA C18. ALL FIELD CUTS AND HOLES SHALL BE TREATED PER AWPA STD M4 WITH CUPRINOL OR APPROVED EQUAL.
6. ALL EXISTING TIMBER TO BE REMOVED SHALL BE CONSIDERED TREATED. THE DEPARTMENT HAS TESTED WOOD FROM THE EXISTING BOARDWORK STRUCTURE FOR PRESERVATIVES AND THE RESULTS ARE CONTAINED IN APPENDIX C.
7. BURNING OF CONSTRUCTION WASTES MAY REQUIRE AN OPEN BURNING APPROVAL FROM THE STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION. REFER TO THE ENVIRONMENTAL COMMITTMENTS CONTAINED IN APPENDIX A FOR FURTHER INFORMATION ON OPEN BURNING.
8. THE CONTRACTOR SHALL MATCH EXISTING CONSTRUCTION WHERE IT DOES NOT CONFORM TO THE TYPICALS SHOWN ON THE PLANS.
9. PREDRILL 75 X 300 DECKING BOARDS WITH A 5mm (3/16") HOLE FOR 40d SPIKE TO PREVENT SPLITTING, ESPECIALLY AT ENDS OF BOARDS.

   EXISTING FOOTING CONDITIONS VARY. THE FOLLOWING FOOTING TYPES EXIST:

   a. DIRECT BEARING ON BEDROCK
   b. POST AND PAD BEARING ON SOIL OR ROCK – SOME PADS ARE CHINKED WITH ROCKS
   c. PIER BLOCKS

10. ALL BOARDWALK SHALL RECEIVE NON-SKID DECK SURFACING.

CONNECTION SCHEDULE

MEMBER	TO	MEMBER	CONNECTOR	COMMENTS
75 x 300 DECKING		EXISTING 150 X 150 STRINGER	40d GALV. SPIKE	2 SPIKES PER STRINGER PREDRILL HOLES PER NOTE 6
100 x 100 KNEE BRACE		75 x 300 DECKING & 100 x 100 PRI. POST	20d GALV. COMMON NAIL	2 EACH PER MEMBER
100 x 100 PRI. POST		75 x 300 DECKING	20d GALV. COMMON NAIL	4 EACH PER CONNECTION
50 x 150 TOP RAIL OR 50 x 100 INT. RAILING		100 x 100 PRI. POST OR 50 x 100 INT. POST	16d GALV. COMMON NAIL	2 EACH PER CONNECTION
NON-SKID DECK SURFACING		75 x 300 DECKING	25mm GALV. ROOFING NAIL (1")	3 EACH PER DECK PLANK
50 x 150 DIAGONAL BRACING		150 x 150 POST	20d GALV. SPIKE	4 EACH PER CONNECTION
150 x 150 POST		EXISTING 150 x 150 PILE CAP	SIMPSON BC6 GALV. CONNECTOR	NAIL PER MANUFACTURERS RECOMMENDATION

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

\ASBUILT\DET1

PATH: ~~Q:\ELF\67619\PLANSET\DET1~~
PLOT: 1=1(F) OR 1=2(H) METRIC SCALE: 1=10(F) OR 1=20(H)

BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
SOUTHEAST REGION

ELFIN COVE — ALASKA

ELF – ELFIN COVE BOARDWALKS
STP-0003(56) ~ PROJECT NO. 67619
TYPICAL BOARDWALK AND HANDRAIL SECTION

DESIGNED BY: *L. GREGOVICH*	PROJECT NO. *67619*
DRAWN BY: *R. SNYDER*	DATE: *JUNE 1999*
CHECKED BY: *A. STEININGER*	SHEET *2* OF *12*

STATE OF ALASKA 49th LARS R. GREGOVICH CE-8065 REGISTERED PROFESSIONAL ENGINEER

[PlotStamp Eval] 21/Jun/99 Q:\Elf\67619\Asbuilt\Det1.dwg

ESTIMATE OF QUANTITIES

ITEM NO.	ITEM	UNIT	QUANTITY
120(1)	DBE ADJUSTMENT NONE	CONTINGENT SUM	ALL REQUIRED
301(5)	AGGREGATE BASE COURSE, GRADING D-1	SQUARE METER	~~224~~ 160
501(7)	CONCRETE FOOTINGS	EACH	~~180~~ 167
501(8)	CONCRETE SLAB - CHANGE ORDER NO. 1	LUMP SUM	ALL REQUIRED
506(5)	REMOVE & REPLACE TIMBER RAILING	METER	~~1,002.50~~ 968.90
506(6)	REMOVE & REPLACE TIMBER DECKING	SQUARE METER	~~295~~ 254.10
506(7)	REMOVE & RECONSTRUCT TIMBER BOARDWALK	LUMP SUM	ALL REQUIRED
506(8)	REMOVE & RECONSTRUCT TIMBER BRIDGE AT STA. 0+506	LUMP SUM	ALL REQUIRED
506(9)	REMOVE & RECONSTRUCT TIMBER BRIDGE AT STA. 0+843	LUMP SUM	ALL REQUIRED
506(10)	150mm X 150mm TIMBER POSTS	METER	~~3~~ 2.5
506(11)	50mm X 150mm TIMBER BRACING	METER	~~212.8~~ 212.70
506(12)	FURNISH MISCELLANEOUS TIMBER	LUMP SUM	ALL REQUIRED
506(13)	PHONE BOOTH DECKING - CHANGE ORDER NO. 1	LUMP SUM	ALL REQUIRED
506(14)	PARK BENCHES - CHANGE ORDER NO. 1	LUMP SUM	ALL REQUIRED
506(15)	TIMBER RAMPS - CHANGE ORDER NO. 1	LUMP SUM	ALL REQUIRED
506(16)	BRIDGE RECONSTRUCTION - CHANGE ORDER NO. 1	LUMP SUM	ALL REQUIRED
506(17)	ADDITIONAL DECKING - CHANGE ORDER NO. 1	LUMP SUM	ALL REQUIRED
506(18)	RAISED BOARDWALK - CHANGE ORDER NO. 2	LUMP SUM	ALL REQUIRED
628(1)	HELICAL PIERS	EACH	11 OK
629(1)	UTILITY RELOCATION	CONTINGENT SUM	ALL REQUIRED
637(1)	NON-SKID DECK SURFACING	SQUARE METER	~~720~~ 811.80
640(1)	MOBILIZATION & DEMOBILIZATION	LUMP SUM	ALL REQUIRED

AGGREGATE BASE COURSE SUMMARY

STATIONING		L (m)	W (m)	SQUARE METERS	COMMENTS
~~"A" 0+394 TO 0+441.5~~	"A" 0+395 TO 0+440	~~47.5~~ 45	~~1.5~~ 1.22	~~71.25~~ 54.9	FABRIC USED
~~"A" 0+448.5 TO 0+457~~	"A" 0+450 TO 0+459	~~8.5~~ 9	~~1.5~~ 1.22	~~12.75~~ 11.0	FABRIC USED
"B" 0+401.5 ~~TO 0+450~~	TO 0+445.5	~~48.5~~ 44	~~1.5~~ 1.52	~~72.75~~ 66.9	NO FABRIC
"B" 0+564 ~~TO 0+600~~	TO 0+598	~~36.0~~ 34	~~1.4~~ 0.8	~~50.40~~ 27.2	FABRIC USED
~~"B" 0+715 TO 0+727~~		12.0	1.4	16.80	DELETED

TOTAL = ~~223.95~~ 160.0

CONCRETE FOOTING SUMMARY

LOCATION	TYPE I	TYPE II	TYPE III
"A" LINE IN VICINITY OF NARROW ENTRANCE CHANNEL FROM STA. ~~0+212 TO 0+295~~ 0+207 TO 0+368	~~57~~ 60	~~33~~ 0	10
INNER HARBOR DOCK AREA "A" LINE FROM STA. ~~0+100 TO 0+180~~ 0+103 TO 0+197			~~78~~ 45
"B" LINE FROM STA. 0+070 TO 0+250	~~10~~ 11	~~2~~ 0	13
"AB" AND "AB1" LINES IN THE AREA POST OFFICE, SCHOOL, CITY SHOP AND INNER HARBOR RAMP			28

TOTAL = ~~180~~ 167

FURNISH MISCELLANEOUS TIMBER SUMMARY

ALL REQUIRED TIMBER WAS PROVIDED

DIMENSION	LENGTH (m)	QTY
16 mm (5/8") A/C P.T. PLYWOOD	1.20m x 2.45m (4' X 8') SHEET	3 EA
50mm x 100mm (2" x 4")	2.45m (8')	20 EA
75mm x 300mm (3" x 12")	2.45m (8')	20 EA
150mm x 150mm (6" x 6") CREOSOTE	2.45m (8')	3 EA
150mm x 150mm (6" x 6") CREOSOTE	3.05m (10')	3 EA

REMOVE & REPLACE TIMBER RAILING SUMMARY

STATIONING	SIDE	METERS	LOCATION	OFFSET	LENGTH
~~"A" 0+000 TO 0+027~~	RT	~~27.0~~	"A"0+000.2 to 0+017.8	rt	17.6m
~~"A" 0+030.5 TO 0+051~~	RT	~~20.5~~	"A"0+019.3 to 0+027.0	rt	7.7m
~~"A" 0+052 TO 0+062~~	RT	~~10.0~~	"A"0+029.9 to 0+031.1	rt	1.2m
~~"A" 0+080 TO 0+099.5~~	LT	~~28.0~~	"A"0+031.9 to 0+041.2	rt	9.3m
MULTIPLE RAILING SEGMENTS			"A"0+045.4 to 0+054.9	rt	9.5m
~~"A" 0+100 TO 0+120~~	LT	~~42.5~~	"A"0+078.5 to 0+094.2	far lt	15.7
MULTIPLE RAILING SEGMENTS			"A"0+094.9 to 0+097.0	far lt	2.9 m
~~"A" 0+122 TO 0+133~~	LT	~~11.0~~	"A"0+099.05 to 0+109.05	far lt	10.9m
~~"A" 0+122 TO 0+131.5~~	RT	~~9.5~~	"A"0+097.9, stair rail	lt	1.9m
~~"A" 0+135 TO 0+157.5~~	LT	~~22.5~~	"A"0+098.7, stair rail	lt	1.8m
~~"A" 0+163.5 TO 0+185.5~~	LT	~~22.0~~	"A"0+091.1 to 0+097.9	lt	6.8m
~~"A" 0+180 TO 0+195~~	RT	~~15.0~~	"A"0+100.8 to 0+109.2	lt	8.4m
~~"A" 0+192.5 TO 0+310.5~~	LT	~~118.0~~	"AB"0+001.7 rt to "A" 0+119.2, lt		21.4m
~~"A" 0+213.5 TO 0+237.5~~	RT	~~24.0~~	"A"0+121.6 to 0+126.8	rt	5.4m
~~"A" 0+266.5 TO 0+279.5~~	RT	~~13.0~~	"A"0+122.0 to 0+133.5	lt	12.3m
~~"A" 0+289.5 TO 0+300~~	RT	~~10.5~~	"A"0+135.2 to 0+155.5	lt	20.8m
			"A"0+128.7 to 0+130.2	rt	1.4m
~~"A" 0+315 TO 0+394~~	LT	~~79.0~~	"A"0+162.5 to 0+165.2	lt	3.4
~~"A" 0+324 TO 0+354.5~~	RT	~~30.5~~	"A"0+165.2 to 0+180.5	lt	15.2m
~~"A" 0+360.5 TO 0+394~~	RT	~~33.5~~	"A"0+175.6 to 0+190.4	rt	14.8m
~~"A" 0+441.5 TO 0+448.5~~	LT & RT	~~14.0~~	"A"0+188.0 to 0+305.0	lt	117.8m
FOOT BRIDGE-NON TYPICAL RAILING REPLACE WITH TYPICAL			"A"0+208.5 to 0+232.5	rt	23.5m
			"A"0+261.3 to 0+267.4	rt	5.6m
~~INNER HBR. DOCK AREA~~	N/A	~~73.0~~	"A"0+269.5 to 0+273.5	rt	4.1m
			"A"0+280.8 to 0+281.7	rt	0.8m
~~"B" 0+000 TO 0+022~~	RT	~~22.0~~	"A"0+283.2 to 0+284.1	rt	1.2m
~~"B" 0+032 TO 0+115~~	RT	~~83.0~~	"A"0+285.1 to 0+294.5	rt	9.6m
~~"B" 0+118.5 TO 0+211~~	RT	~~92.5~~	"A"0+308.8 to 0+387.0	lt	79.2m
~~"B" 0+137.5 TO 0+176~~	LT	~~38.5~~	"A"0+318.9 to 0+332.0	rt	13.9m
~~"B" 0+184 TO 0+200~~	LT	~~16.0~~	"A"0+333.2 to 0+348.8	rt	15.4m
			"A"0+354.3 to 0+363.6	rt	9.2m
~~"B" 0+213.5 TO 0+284~~	RT	~~70.5~~	"A"0+366.6 to 0+387.0	rt	20.0m
~~"B" 0+253.5 TO 0+277~~	LT	~~23.5~~	"A" Line Bridge	lt/rt	14.0m
~~"B" 0+305 TO 0+311~~	RT	~~6.0~~	Inner Harbor Area	-	74.5m
			Inner Harbor Gate	-	1.2m
~~"B" 0+334.5 TO 0+341~~	LT		"B"0+000.0 to 0+007.5	rt	9.7m
~~"B" 0+334.5 TO 0+357.5~~	RT	~~23.0~~	"B"0+007.5 to 0+019.7	rt	12.2m
~~"B" 0+384 TO 0+386~~	RT	~~2.0~~	"B"0+029.0 to 0+075.0	rt	45.3m
SMALL FOOT BRIDGE			"B"0+075.0 to 0+112.9	rt	37.9m
~~"B" 0+465 TO 0+470~~	RT	~~5.0~~	"B"0+115.6 to 0+125.4	rt	9.8m
~~"B" 0+501 TO 0+511.5~~	RT	~~10.5~~	"B"0+130.8 to 0+208.5	rt	77.5m
	~~TOTAL = 1,002.5~~		"B"0+132.2 to 0+143.1	lt	8.2m
			"B"0+144.2 to 0+176.0	lt	30.8m
			"B"0+182.0 to 0+198.5	lt	16.5m
			"B"0+210.9 to 0+281.7	rt	70.1m
			"B"0+249.1 to 0+257.0	lt	7.8m
			"B"0+258.8 to 0+273.3	lt	14.1m
			"B"0+299.0 to 0+308.4	rt	9.4m
			"B"0+332.9 to 0+355.2	rt	22.3m
			"B"0+332.9 to 0+339.2	lt	6.3m
			"B"0+464.3 to 0+468.3	rt	4.0m
			"B"0+512.7 to 0+519.8	rt	7.1m
				TOTAL =	968.9 m

TIMBER BRACING SUMMARY

BOARD LENGTH	1.83m (6'0")	2.44m (8'0")	3.05m (10'0")	3.65m (12'0")	4.88m (16'0")
QUANTITY	~~2~~	~~66~~	~~7~~	~~2~~	~~2~~
LENGTH	~~3.7m~~	~~161.0m~~	~~21.3m~~	~~7.3m~~	~~19.5m~~

TOTAL = ~~212.8m~~ 212.7m

STATION	LENGTH	STATION	LENGTH	STATION	LENGTH	STATION	LENGTH	STATION	LENGTH
"A"0+095	3.5m	"A"0+132	4.8m	"A"0+202	2.2m	SCHOOL	4.2m	"B"0+099	3.3m
"A"0+098	3.4m	"A"0+135	4.2m	"A"0+205	1.1m	INNER HBR	20.1m	"B"0+102	3.6m
"A"0+103	3.6m	"A"0+138	4.7m	"A"0+210	1.8m	"B"0+003	3.1m	"B"0+105	3.6m
"A"0+105	3.9m	"A"0+141	3.8m	"A"0+216	2.0m	"B"0+020	3.3m	"B"0+108	3.0m
"A"0+108	3.8m	"A"0+144	4.2m	"A"0+219	3.5m	"B"0+026	1.5m	"B"0+111	3.0m
"A"0+110	3.9m	"A"0+147	4.1m	"A"0+223	3.8m	"B"0+077	2.8m	"B"0+114	3.0m
"A"0+113	3.7m	"A"0+150	4.9m	"A"0+227	2.6m	"B"0+080	3.2m	"B"0+116	3.6m
"A"0+116	3.8m	"A"0+153	4.2m	"A"0+230	2.2m	"B"0+083	3.3m	"B"0+118	3.3m
"A"0+119	4.0m	"A"0+156	3.9m	"A"0+233	1.4m	"B"0+086	3.0m	"B"0+123	3.6m
"A"0+123	3.6m	"A"0+159	3.8m	"A"0+237	2.1m	"B"0+089	3.7m	"B"0+126	3.9m
"A"0+126	3.7m	"A"0+162	3.7m	"A"0+244	1.5m	"B"0+092	2.4m	"B"0+285	4.9m
"A"0+129	4.8m	"A"0+199	2.3m	"A"0+246	1.8m	"B"0+095	3.0m		

NON-SKID DECK SURFACING SUMMARY

STATIONING	L (m)	W (m)	AREA (m2)	LOCATION	LENGTH (m)	WIDTH (m)	AREA (m2)
~~"A" 0+000 TO 0+394~~	~~394~~	~~0.9~~	~~354.6~~	"B"0+274.9 to 0+283.0	8.1	0.9	7.3
~~"A" 0+441.5 TO 0+448.5~~	~~7~~	~~0.9~~	~~6.3~~	"A"0+000.0 to 0+384.6	384.6	0.9	346.1
~~INNER HARBOR DOCK AREA~~	~~65~~	~~0.9~~	~~58.5~~	"A"0+428.8 to 0+436.1	7.3	0.9	6.6
~~"B" 0+000 TO 0+008~~	~~8~~	~~0.9~~	~~7.2~~	Inner Harbor Area	107.8	0.9	97.0
~~"B" 0+014 TO 0+311~~	~~297~~	~~0.9~~	~~267.3~~	"B"0+0+000.0 to 0+007.0	7.0	0.9	6.3
~~"B" 0+333 TO 0+357.5~~	~~24.5~~	~~0.9~~	~~22.1~~	"B"0+013.0 to 0+273.0	260.0	0.9	234.0
SMALL FOOT BRIDGE				"B"0+284.4 to 0+307.9	23.5	0.9	21.2
~~"B" 0+384 TO 0+386~~	~~2.0~~	~~0.9~~	~~1.8~~	"B"0+330.9 to 0+355.1	24.2	0.9	21.8
SMALL FOOT BRIDGE				"B"0+381.0 to 0+382.8	1.8	0.9	1.6
~~"B" 0+397~~	~~2.0~~	~~0.9~~	~~1.8~~	"B"0+395.8 to 0+399.2	3.4	0.9	3.1
				"B"0+476.7 to 0+494.4	17.7	0.9	15.9
				"B"0+509.8 to 0+561.9	52.1	0.9	46.9
	~~TOTAL = 719.6~~			"B"0+815.0 to 0+816.8	1.8	0.9	1.6
				"B"0+821.0 to 0+823.7	2.7	0.9	2.4
					TOTAL =		254.1

REMOVE & REPLACE TIMBER DECKING SUMMARY

STATIONING	%	W (m)	AREA (m2)	LOCATION	MEASURED LENGTH	AVERAGE WIDTH	AREA (m2)
~~"A" 0+210~~	~~N/A~~	~~N/A~~	~~0.93~~	"A"0+187	0.30	2.44	0.73
R & R A SINGLE DECK PLANK				"A"0+221	0.30	3.04	0.91
~~"A" 0+312~~	~~N/A~~	~~N/A~~	~~2.97~~	"A"0+244	0.30	2.44	0.73
R & R TWO SELECTED DECK PLANKS				"A"0+260	0.60	2.44	1.46
~~"B" 0+003 TO 0+008~~	~~100~~	~~2.0~~	~~10.00~~	"A"0+269	0.30	2.44	0.73
~~"B" 0+014 TO 0+032~~	~~100~~	~~2.0~~	~~36.00~~	"A"0+109	0.30	2.44	0.73
~~"B" 0+073 TO 0+130.5~~	~~100~~	~~2.0~~	~~115.00~~	"AB"0+003(Near School)	0.91	1.83	1.67
~~"B" 0+277.5 TO 0+311~~	~~100~~	~~1.7~~	~~56.95~~	"A"0+310	0.60	4.60	2.76
INCLUDES 2 SETS OF SMALL STAIRS - REPLACE STAIR TREADS ONLY				"AB" Line(Near Shop)	2.80	1.75	4.90
				"B"0+000.0 to 0+003.3	3.30	3.40	11.22
~~"B" 0+478.5 TO 0+499~~	~~90~~	~~1.4~~	~~25.83~~	"B"0+003.3 to 0+007.6	4.80	1.83	8.78
~~"B" 0+513.5 TO 0+543~~	~~100~~	~~1.4~~	~~41.30~~	"B"0+014.0 to 0+029.0	15.00	1.83	27.45
~~"B" 0+815 TO 817~~	~~100~~	~~1.2~~	~~2.40~~	"B"0+069.9 to 0+074.7	4.80	1.83	8.78
~~"B" 0+821 TO 0+824~~	~~100~~	~~1.2~~	~~3.60~~	"B"0+074.7 to 0+116.0	41.30	1.83	75.58
				"B"0+116.0 to 0+117.6	1.60	1.83	2.93
				"B"0+117.6 to 0+118.5	0.90	1.83	1.65
				"B"0+274.2 to 0+283.0	8.80	1.22	10.74
				"B"0+284.8 to 0+291.0	6.20	1.22	7.56
				"B"0+291.0 to 0+309.0	18.00	1.22	21.96
				"B"0+379.85 to 0+382.0	2.15	1.22	2.62
				"B"0+481.8 to 0+484.5	2.70	1.53	4.13
				"B"0+484.5 to 0+493.9	9.40	1.22	11.47
				"B"0+509.2 to 0+510.4	1.20	1.22	1.46
				"B"0+510.4 to 0+512.3	1.90	1.52	2.89
				"B"0+512.3 to 0+513.0	0.70	1.22	0.85
				"B"0+513.0 to 0+540.5	27.50	1.22	33.55
				"B"0+815.0 to 0+816.9	1.90	1.22	2.32
				"B"0+821.0 to 0+823.9	2.90	1.22	3.54
	~~TOTAL = 294.98~~					TOTAL =	254.10

TIMBER POST SUMMARY

STATION	LENGTH	COMMENTS
"A" 0+320 ±	~~3.0m (10'0")~~ 2.5m	EXISTING POST ROTTED OUT AT BASE
TOTAL =	~~3.0m~~ 2.5m	

METRIC CONVERSION FACTORS

25.4mm = 1.00 INCH 1.000m = 3.281 FEET 1.000 SQUARE METER = 10.76 SQUARE FEET

PATH: ~~Q:\ELF\67619\PLANSET\DWG\EST1~~ \ASBUILT\EST1
PLOT: 1=1(F) OR 1=2(H)

BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
SOUTHEAST REGION

ELFIN COVE — JNU-GLACIER HIGHWAY — ALASKA
EGAN DRIVE TO MENDENHALL LOOP ROAD
FED. NO. STP-0003(56) ~ PROJECT NO. 67619

ESTIMATE AND SUMMARY OF QUANTITIES

DESIGNED BY: L. GREGOVICH
DRAWN BY: R. SNYDER
CHECKED BY: A. STEININGER

PROJECT NO. 67619
DATE: JUNE 1999
SHEET 3 OF 12

STATE OF ALASKA — 49th — LARS R. GREGOVICH — CE-8065 — REGISTERED PROFESSIONAL ENGINEER

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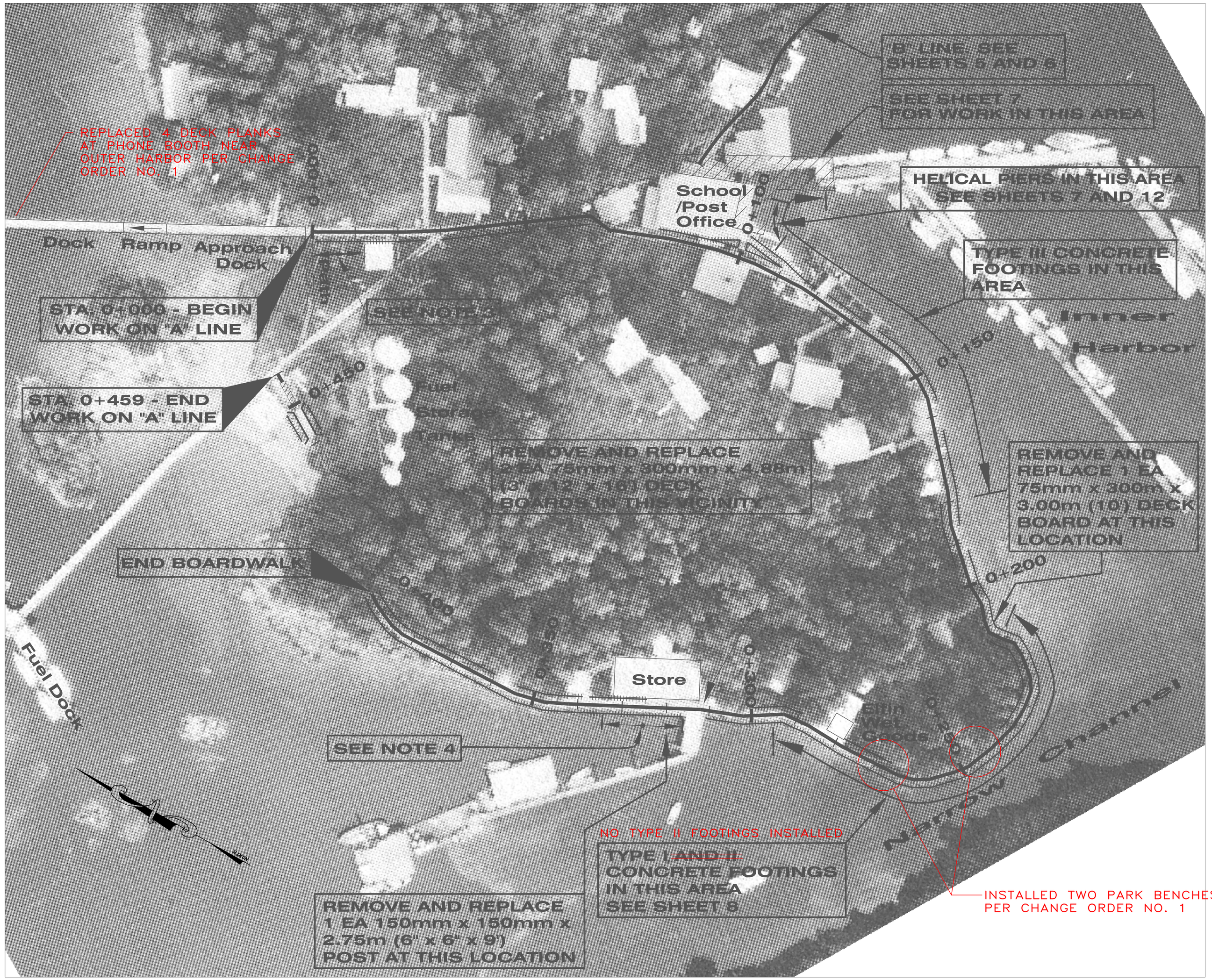

LEGEND

- BOARDWALK
- DIRT/GRAVEL PATH
- RAILING REMOVAL AND RECONSTRUCTION
- AGGREGATE SURFACING
- FOOT BRIDGE
- 0+150 STATIONING
  - METERS FROM BEGINNING POINT
  - KILOMETERS FROM BEGINNING POINT

CONSTRUCTION NOTES:

1. THE IMAGE USED ON THIS PLAN SHEET WAS TAKEN FROM AN AERIAL PHOTOGRAPH TAKEN IN 1989. THIS IMAGE UNDERLAY IS BEING USED TO PROVIDE THE CONTRACTOR WITH A REASONABLE DEPICTION OF WHERE THE WORK IS LOCATED IN RELATION TO MAJOR TOPOGRAPHICAL FEATURES AND OTHER IMPROVEMENTS. NO ATTEMPT HAS BEEN MADE TO UPDATE THIS INFORMATION.
2. THE LOCATION OF THE WORK INDICATED IS APPROXIMATE ONLY AND SHALL BE VERIFIED WITH THE ENGINEER PRIOR TO BEGINNING WORK.
3. REMOVE AND REINSTALL CHAINLINK FENCE ATTACHED TO RAILING.
4. INSTALL TEMPORARY RAILING IN THIS LOCATION. THIS WORK IS A PRIORITY ITEM.

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\ASBUILT\ELFIN-PLAN-2

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

PATH:	Q:\ELF\67619\~~PLANSET\ELFIN-PLAN-2~~	
PLOT:	METRIC SCALE: 1=1(F) OR 1=2(H)	V.P. ZOOM 0.162 XP
BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

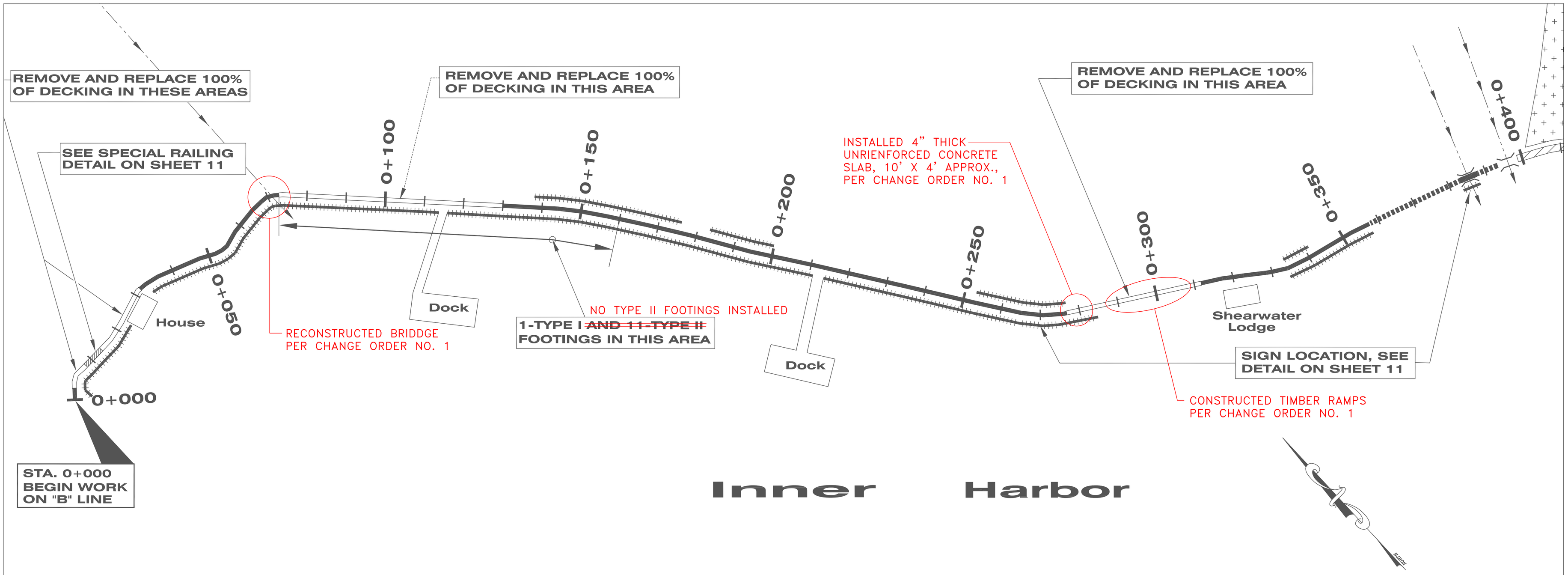
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
SOUTHEAST REGION

ELFIN COVE — ALASKA

ELF - ELFIN COVE BOARDWALKS
STP-0003(56) ~ PROJECT NO. 67619
BOARDWALK PLANS - "A" LINE

DESIGNED BY: L. GREGOVICH	PROJECT NO. 67619
DRAWN BY: R. SNYDER	DATE: JUNE 1999
CHECKED BY: A. STEININGER	SHEET 4 OF 12

STATE OF ALASKA
49th
Lars R. Gregovich
CE-8065
REGISTERED PROFESSIONAL ENGINEER



LEGEND

- REMOVE AND REPLACE BOARDWALK
- BOARDWALK
- DIRT/GRAVEL PATH
- RAILING REMOVAL AND RECONSTRUCTION
- FOOTBRIDGE
- STREAM
- AGGREGATE SURFACING
- 0+150 STATIONING
  - METERS FROM BEGINNING POINT
  - KILOMETERS FROM BEGINNING POINT

CONSTRUCTION NOTES:

1. THE IMAGE USED ON THIS PLAN SHEET WAS TAKEN FROM AN AERIAL PHOTOGRAPH TAKEN IN 1985. THIS IMAGE OVERLAY IS BEING USED TO PROVIDE THE CONTRACTOR WITH A REASONABLE DEPICTION OF WHERE THE WORK IS LOCATED IN RELATION TO MAJOR TOPOGRAPHICAL AND OTHER IMPROVEMENTS. NO ATTEMPT HAS BEEN MADE TO UPDATE THIS INFORMATION.
2. THE LOCATION OF THE WORK INDICATED IS APPROXIMATE ONLY AND SHALL BE VERIFIED WITH THE ENGINEER PRIOR TO BEGINNING WORK.
3. HANDRAIL IN THIS AREA IS NON-TYPICAL. CONTRACTOR SHALL MATCH EXISTING CONSTRUCTION.

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

\ASBUILT\ELFIN-PLAN-1

PATH: Q:\ELF\67619\~~PLANSET\ELFIN-PLAN-1~~
PLOT: METRIC SCALE: 1=1(F) OR 1=2(H) V.P. ZOOM 0.270 XP

BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
SOUTHEAST REGION

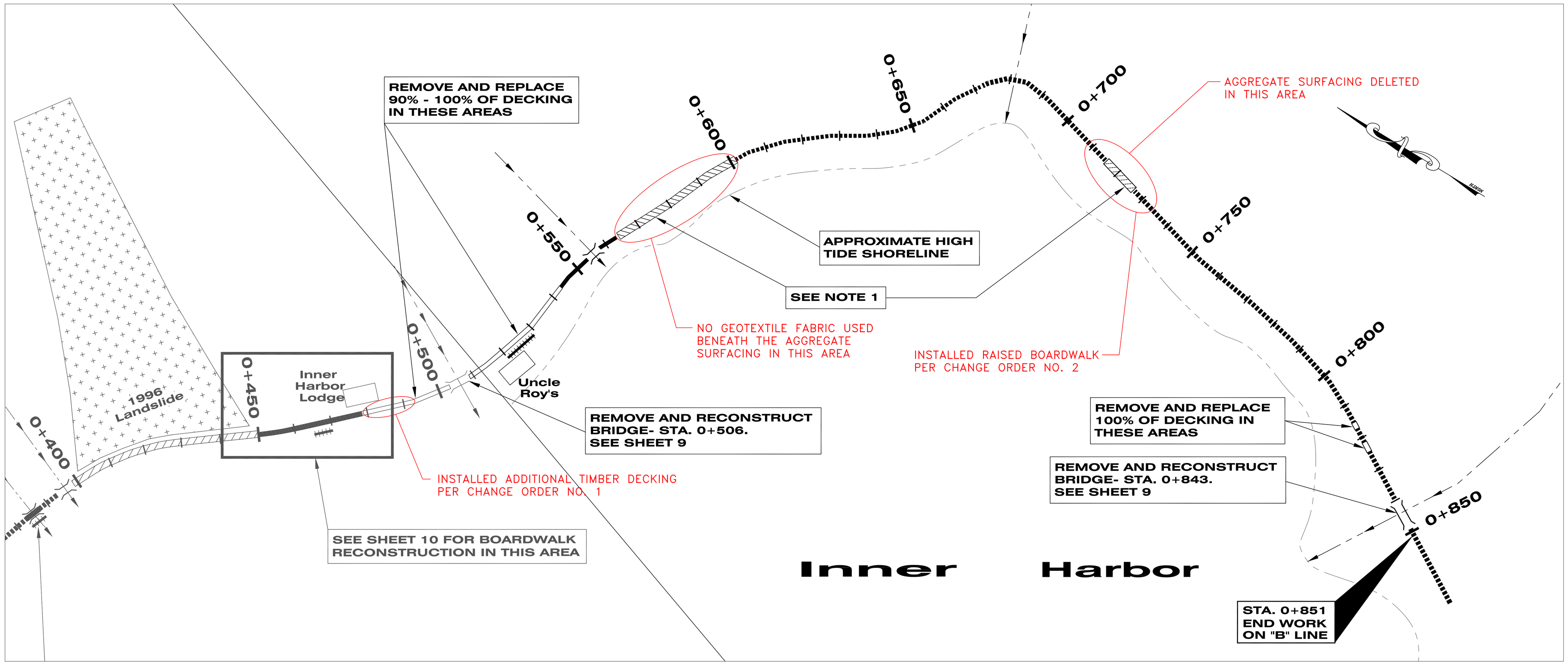
ELFIN COVE — ALASKA

ELF - ELFIN COVE BOARDWALKS
STP-0003(56) ~ PROJECT NO. 67619
BOARDWALK PLANS - "B" LINE

DESIGNED BY: L. GREGOVICH	PROJECT NO. 67619
DRAWN BY: R. SNYDER	DATE: JUNE 1999
CHECKED BY: A. STEININGER	SHEET 5 OF 12

STATE OF ALASKA 49th
Lars R. Gregovich CE-8065
REGISTERED PROFESSIONAL ENGINEER

[PlotStamp Eval] 21/Jun/99 Q:\Elf\67619\Asbuilt\Elfin-plan-1.dwg



LEGEND

- REMOVE AND REPLACE BOARDWALK
- AGGREGATE SURFACING
- BOARDWALK
- 0+150 STATIONING
- DIRT/GRAVEL PATH
  - METERS FROM BEGINNING POINT
  - KILOMETERS FROM BEGINNING POINT
- RAILING REMOVAL AND RECONSTRUCTION
- FOOTBRIDGE
- STREAM

CONSTRUCTION NOTES:

1. REMOVE LOOSE COBBLES AND BOULDERS AND CUT PROJECTING TREE ROOTS PRIOR TO PLACING AGGREGATE SURFACING IN THIS AREA.

\ASBUILT\ELFIN-PLAN-1

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

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PATH: Q:\ELF\67619\~~PLANSET\ELFIN-PLAN-1~~		
PLOT: METRIC SCALE: 1=1(F) OR 1=2(H)		V.P. ZOOM 0.270 XP
BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

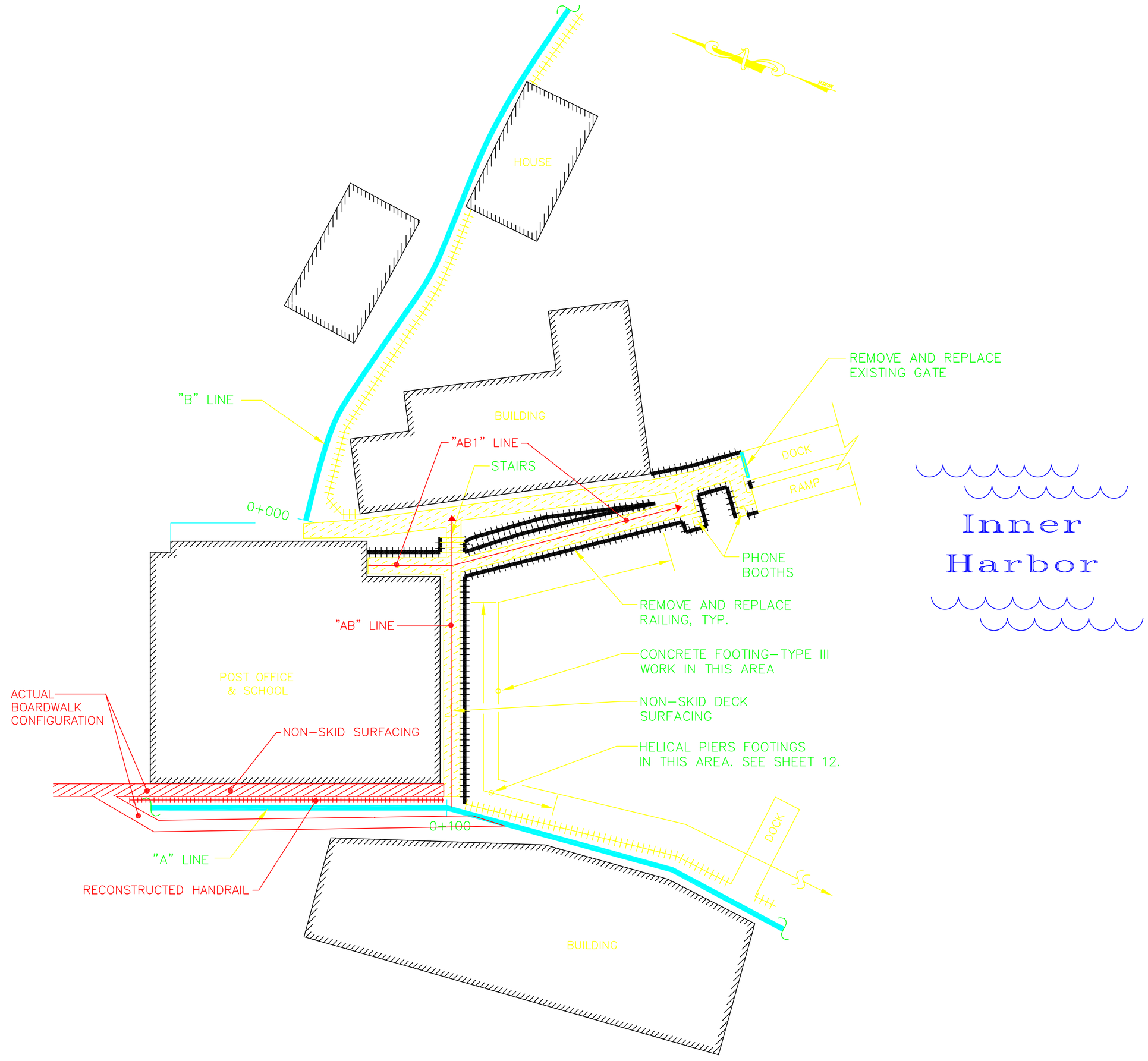
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
SOUTHEAST REGION

ELFIN COVE — ALASKA

ELF - ELFIN COVE BOARDWALKS
STP-0003(56) ~ PROJECT NO. 67619
BOARDWALK PLANS - "B" LINE

DESIGNED BY: L. GREGOVICH	PROJECT NO. 67619
DRAWN BY: R. SNYDER	DATE: JUNE 1999
CHECKED BY: A. STEININGER	SHEET 6 OF 12

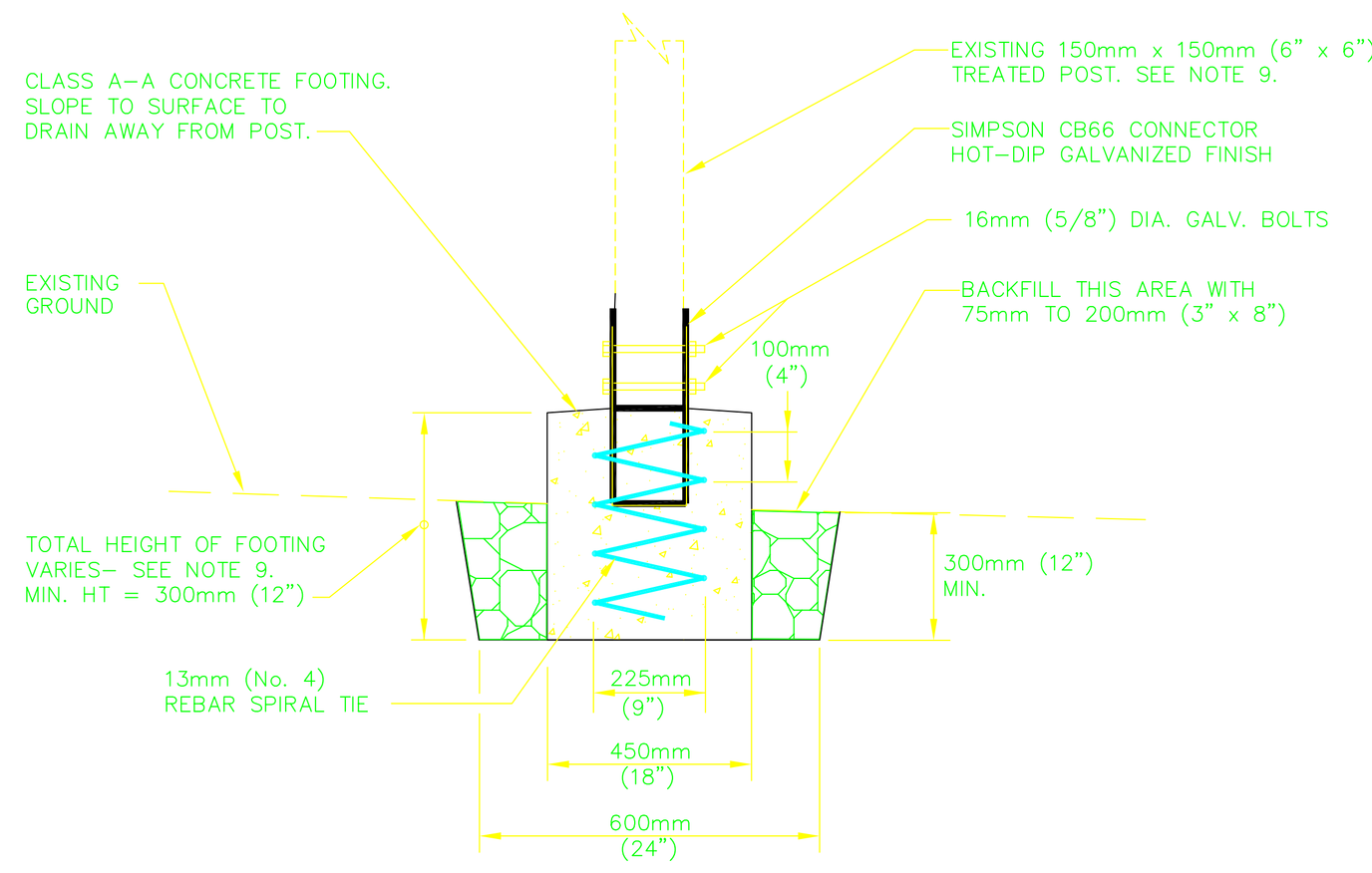
STATE OF ALASKA
49th
Lars R. Gregovich
CE-8065
REGISTERED PROFESSIONAL ENGINEER



Inner Harbor

CONSTRUCTION NOTES:

1. THIS SHEET INTENDED TO SHOW WORK IN THE INNER HARBOR DOCK AREA ONLY. SEE OTHER PLAN SHEETS FOR WORK ON "A" AND "B" LINE BOARDWALKS.
2. NON–SKID DECK SURFACING SHALL BE APPLIED IN THIS WORK AREA AS DIRECTED BY THE ENGINEER.
3. RAILING SHALL CONFORM TO THAT SHOWN ON THE TYPICAL BOARDWALK SECTION. NON–TYPICAL RECONSTRUCTION SHALL MATCH EXISTING CONSTRUCTION.
4. SEE SPECIAL PROVISIONS FOR PAYMENT METHOD FOR REMOVAL AND REPLACEMENT OF THE EXISTING GATE.
5. MOST OF THE CONCRETE FOOTING WORK IS LOCATED IN THE INTERTIDAL ZONE. THE CONTRACTOR SHALL SCHEDULE THE WORK DURING FAVORABLE TIDES AND SHALL NOT POUR CONCRETE IN SEA WATER NOR WHEN WAVE ACTION MAY DAMAGE FRESHLY POURED CONCRETE.
6. THE CONTRACTOR SHALL PROVIDE TEMPORARY SHORING OF THE BOARDWALK WHILE FOOTINGS ARE BEING CONSTRUCTED. THE BOARDWALK SHALL BE LEVELED IN AREAS WHERE THE EXISTING FOOTINGS HAVE SETTLED, OR WHERE BOARDWALK DECK IS NOT LEVEL.
7. EXISTING DIAGONAL BRACING MAY NEED TO BE REMOVED AND REATTACHED AND A SLIGHTLY DIFFERENT ANGLE TO PERFORM THE FOOTING WORK.
8. TYPE III CONCRETE FOOTINGS MAY BE CIRCULAR ~~OR SQUARE.~~ CIRCULAR USED
9. EXISTING POSTS SHALL BE CUT TO REMOVE PREVIOUSLY DRILLED HOLES. SOME POSTS ARE DIMENSIONAL AND SHALL BE TRIMMED TO FIT POST BASE CONNECTOR. ALL FIELD CUT SHALL BE TREATED PER NOTE 5 ON SHEET 2.



BOARDWALK RAILING RECONSTRUCTION PLAN
INNER HARBOR DOCK AREA

CONCRETE FOOTING – TYPE III

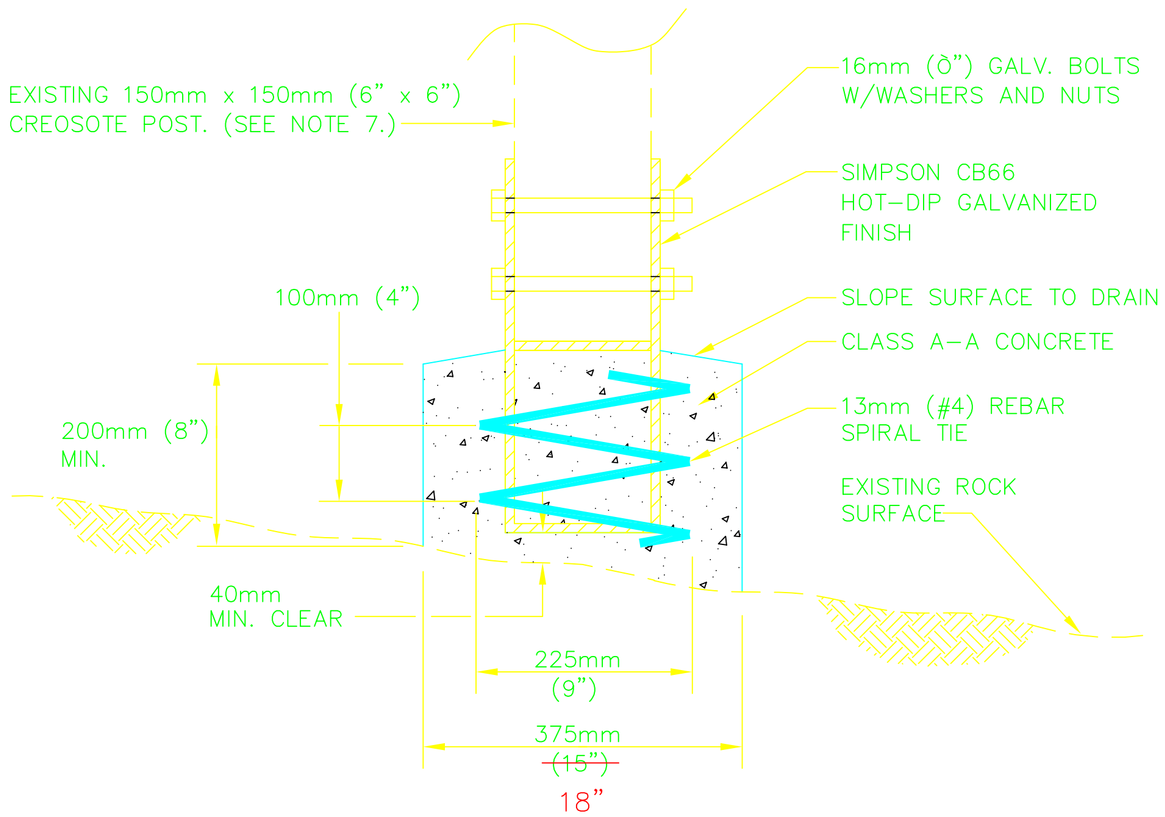
\ASBUILT\BOARDRAIL

NOTE: DO NOT SCALE FROM THESE PLANS–USE DIMENSIONS

PATH: Q:\ELF\67619\~~PLANSET\DWG\BOARDRAIL~~ VIEW: P1	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES SOUTHEAST REGION	*ELFIN COVE* *ALASKA* *ELF – ELFIN COVE BOARDWALKS* *STP–0003(56) ~ PROJECT NO. 67619* *INNER HARBOR DOCK AREA PLAN*
PLOT: 1=1(F) OR 1=2(H)		
BY: DATE: DESCRIPTION OF CHANGE:		
RECORD OF REVISIONS		

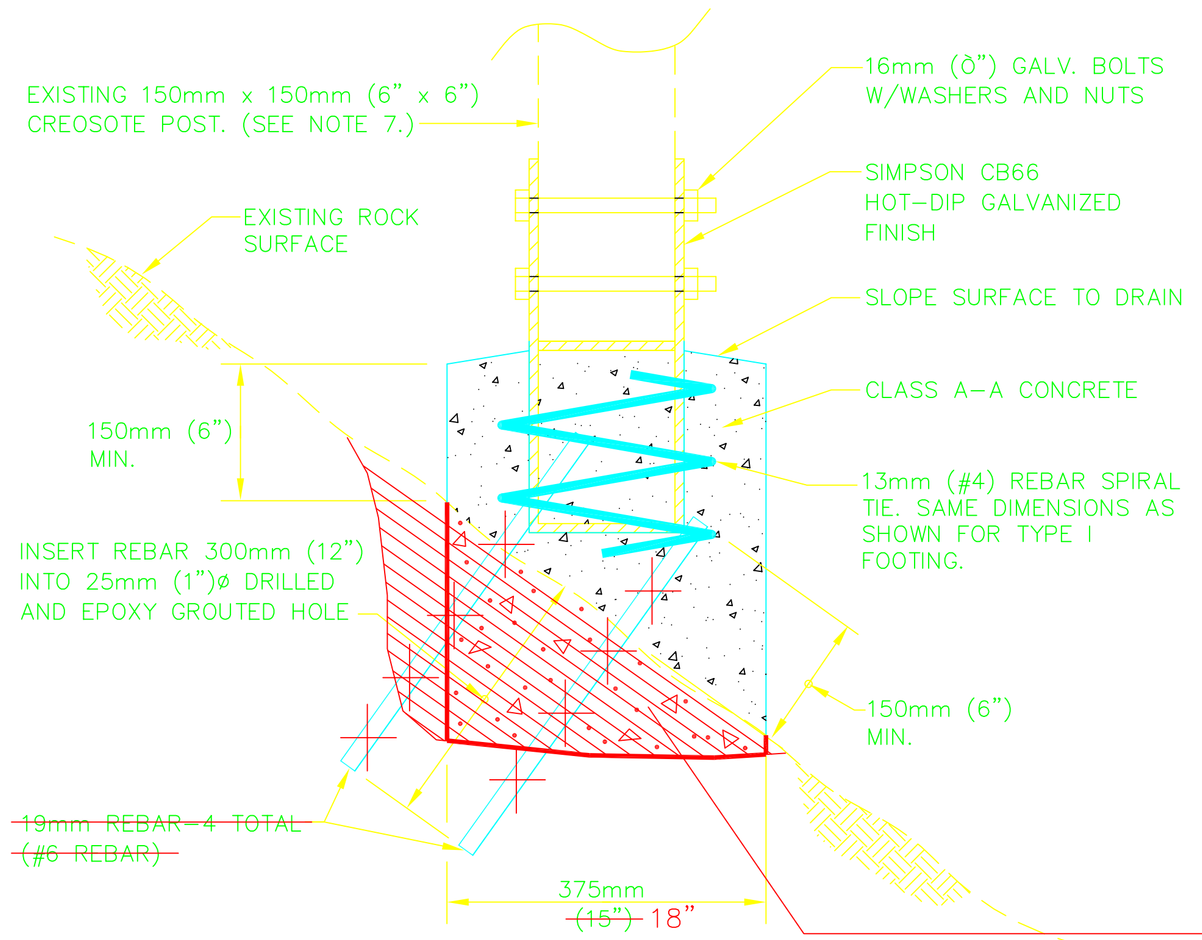
DESIGNED BY: *L. GREGOVICH*	PROJECT NO. *67619*
DRAWN BY: *R. SNYDER*	DATE: *JUNE 1999*
CHECKED BY: *A. STEININGER*	SHEET *7* OF *12*

STATE OF ALASKA 49th
LARS R. GREGOVICH
CE–8065
REGISTERED PROFESSIONAL ENGINEER



CONCRETE FOOTING – TYPE I

(TO BE USED ON SLOPES LESS THAN 30°)



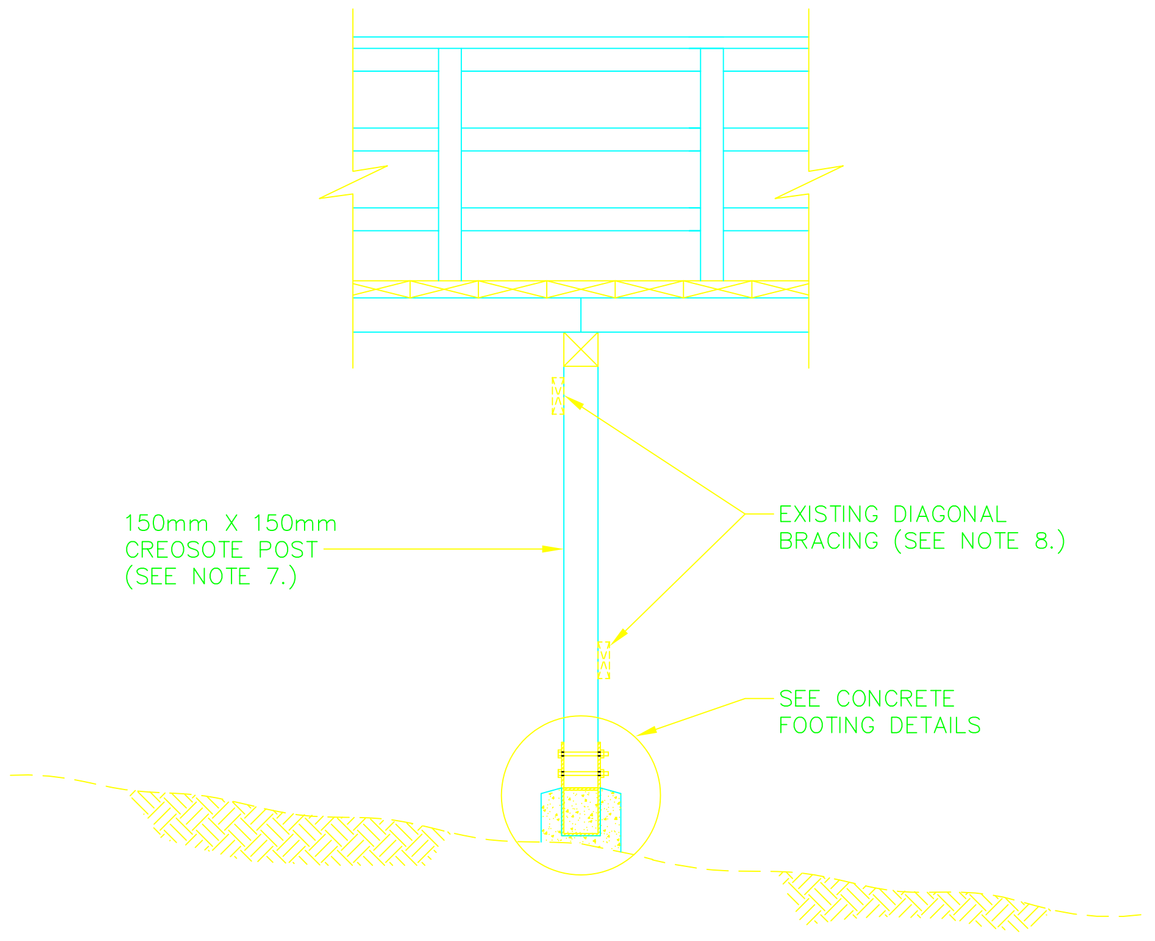
CONCRETE FOOTING – TYPE II

(TO BE USED ON SLOPES GREATER THAN 30°)

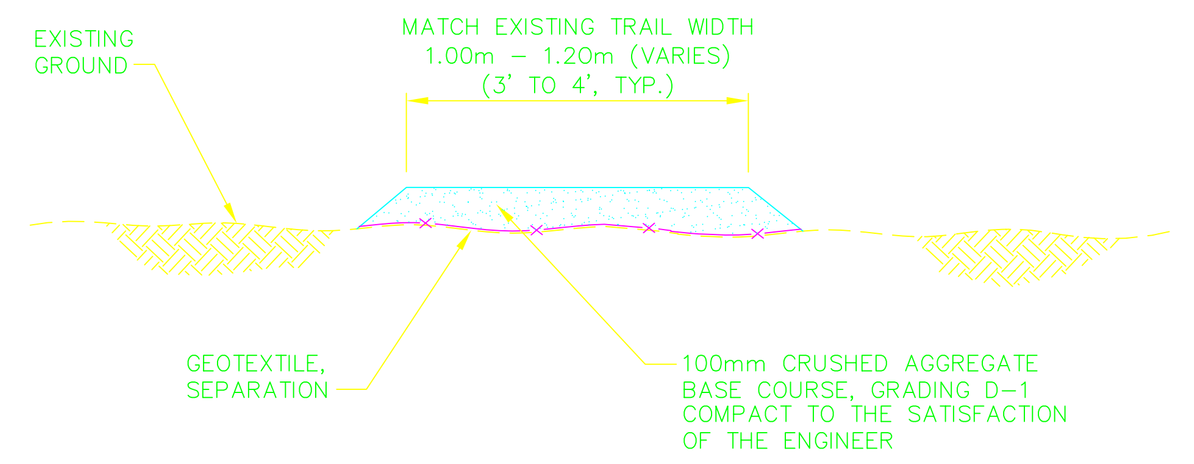
LOOSE ROCK WAS EXCAVATED, HARD ROCK WAS CHIPPED OUT. THIS ENABLED THE CONTRACTOR TO AVOID DRILLING FOR THE REBAR PINS, ELIMINATED THE REBAR PINS AND ALLOWED FOR THE INSTALLATION OF TYPE I FOOTINGS IN AREAS THAT WERE >30 DEGREES. NO TYPE II FOOTINGS WERE INSTALLED UNDER THIS PROJECT

CONSTRUCTION NOTES:

1. MOST OF THE CONCRETE FOOTING WORK IS LOCATED IN THE INTERTIDAL ZONE. THE CONTRACTOR SHALL SCHEDULE THE WORK DURING FAVORABLE TIDES AND SHALL NOT POUR CONCRETE IN SEA WATER NOR WHEN WAVE ACTION MAY DAMAGE FRESHLY POURED CONCRETE.
2. ALL LOOSE ROCK AND THIN SOILS SHALL BE REMOVED DOWN TO BEDROCK PRIOR TO FORMING TYPE I OR II FOOTINGS. IF BEDROCK IS NOT FOUND WITHIN 300mm OF THE EXISTING GROUND SURFACE, A TYPE III FOOTING SHALL BE USED.
3. THE CONTRACTOR SHALL PROVIDE TEMPORARY SHORING OF THE BOARDWALK WHILE FOOTINGS ARE BEING CONSTRUCTED. THE BOARDWALK SHALL BE LEVELED IN AREAS WHERE THE EXISTING FOOTINGS HAVE SETTLED.
4. THE CONTRACTOR SHALL ATTEMPT TO USE THE EXISTING SUPPORT POST WHEN POSSIBLE. WHEN A NEW POST IS REQUIRED, THE CONTRACTOR SHALL RECYCLE A CREOSOTE POST FROM ANOTHER AREA; OTHERWISE, A NEW CREOSOTE POST WILL BE REQUIRED AND PAID FOR. SEE SPECIAL PROVISIONS FOR PAYMENT ON RECYCLED POSTS.
5. EXISTING DIAGONAL BRACING MAY NEED TO BE REMOVED AND REATTACHED AND A SLIGHTLY DIFFERENT ANGLE TO PERFORM THE CONCRETE FOOTING WORK.
6. CIRCULAR ~~OR SQUARE~~ FORMS MAY BE USED. CIRCULAR USED
7. ~~EXISTING POSTS SHALL BE SQUARELY CUT TO REMOVE PREVIOUSLY DRILLED HOLES. FIELD CUTS SHALL BE TREATED PER NOTE 5 ON SHEET 2.~~ EXISTING POSTS WERE IN GOOD SHAPE, HOLES WERE NOT DETRIMENTAL
8. DIAGONAL BRACING SHALL BE REMOVED AND REPLACED PER THE DIRECTION OF THE ENGINEER.
9. ACTUAL HEIGHT OF CONCRETE FOOTINGS WILL DEPEND ON LENGTH OF POST CUT OFF PER NOTE 7.



TYPICAL BOARDWALK SUPPORT



AGGREGATE SURFACING DETAIL

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

\ASBUILT\DET2

PATH: Q:\ELF\67619\~~PLANSET\DWG\DET2~~ VIEWS: P1, P2, P3, P4
PLOT: 1=1(F) OR 1=2(H)

BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
SOUTHEAST REGION

ELFIN COVE — ALASKA

ELF – ELFIN COVE BOARDWALKS
STP-0003(56) ~ PROJECT NO. 67619
CONSTRUCTION DETAILS

DESIGNED BY: *L. GREGOVICH*	PROJECT NO. *67619*
DRAWN BY: *R. SNYDER*	DATE: *JUNE 1999*
CHECKED BY: *A. STEININGER*	SHEET *8* OF *12*

STATE OF ALASKA 49th
LARS R. GREGOVICH
CE-8065
REGISTERED PROFESSIONAL ENGINEER

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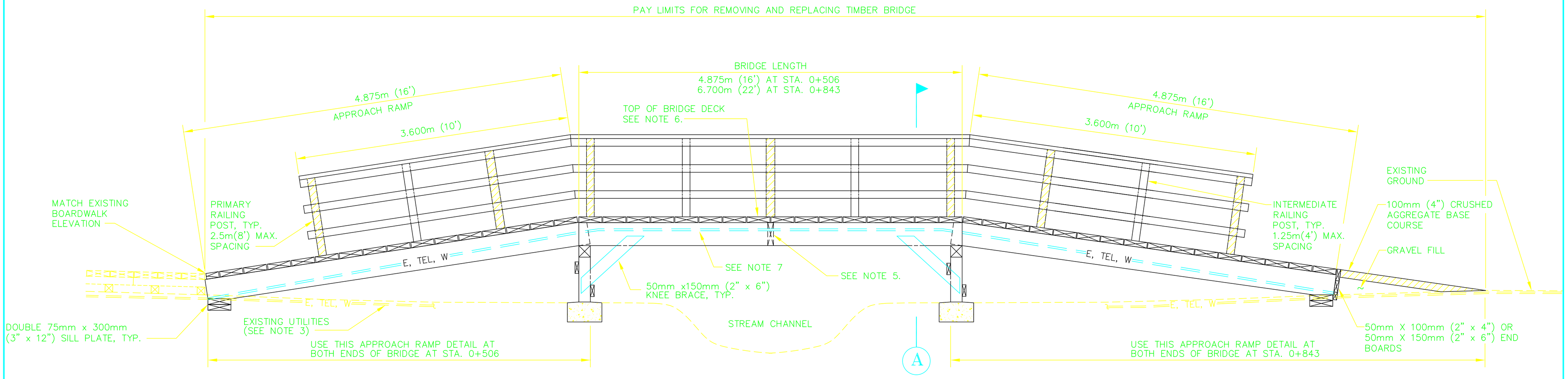
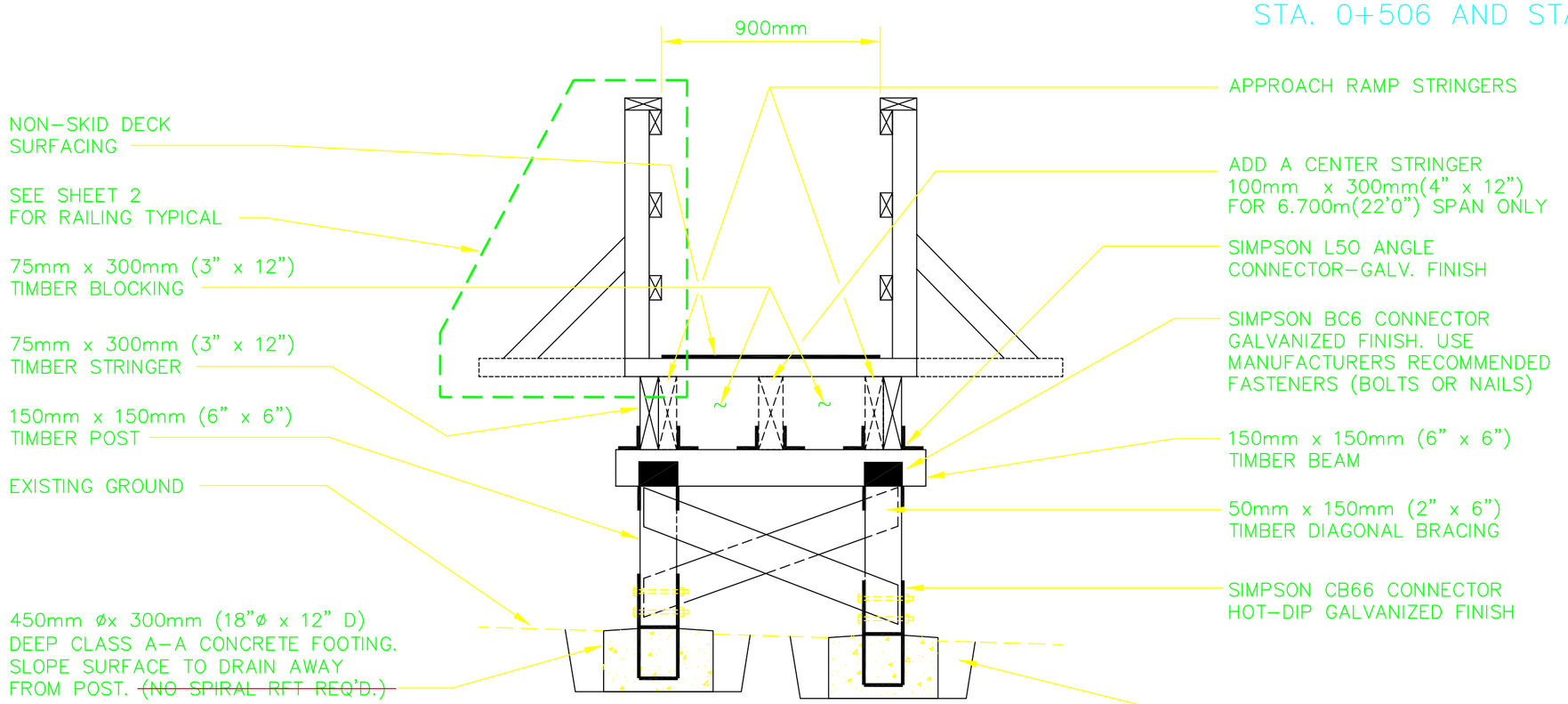


TYPICAL TIMBER BRIDGE RECONSTRUCTION

STA. 0+506 AND STA. 0+843



TYPICAL BRIDGE SECTION (A)

CONSTRUCTION NOTES:

1. THE STATIONING OF THE BRIDGES IS APPROXIMATE ONLY. THE EXACT LOCATION SHOULD BE CENTERED ON THE EXISTING STREAM CHANNEL AND SHALL BE APPROVED BY THE ENGINEER.
2. ALL TIMBER SHALL BE HEM-FIR NO. 1 OR BETTER AND SHALL BE PRESSURE TREATED WITH ACZA TO A RETENTION OF 9.6 kg/m3 (0.6 pcf.) ALL FIELD CUTS AND HOLES SHALL BE TREATED PER NOTE 5 ON SHEET 2.
3. EXISTING POWER, WATER AND TELEPHONE CONDUIT EXIST ADJACENT TO THE BOARDWALK AND ATTACHED TO BRIDGES. THE CONTRACTOR SHALL PERFORM LOCATES, IF NECESSARY, TO DETERMINE IF PLANNED OR SILL PLATE LOCATIONS WILL REQUIRE MINOR UTILITY ADJUSTMENTS.
4. FOOTINGS MAY BE ROUND ~~OR SQUARE~~ AND MAY BE PRECAST. ROUND USED
5. BLOCKING SHALL BE INSTALLED AT MID-SPAN FOR 4.875m (16') BRIDGE LENGTH AND 1/3 SPAN POINTS FOR 6.700m(22') BRIDGE LENGTH.
6. THE DESIRED BRIDGE ELEVATION RAISE MEASURED FROM TOP OF BRIDGE DECK, IS 0.45m (1'6") AT STA. 0+506 AND 0.75m(2'6") AT STA. 0+843.
7. THE EXISTING UTILITIES ARE SECURED TO THE EXISTING BRIDGES USING VARIOUS METHODS. THE UTILITIES SHALL BE ADJUSTED AND RESECURED TO THE RECONSTRUCTED BRIDGES. POWER CABLES SHALL BE DE-ENERGIZED PRIOR TO HANDLING. IF THE POWER CABLE REQUIRES A DIFFERENT METHOD OF SECURING IT TO THE BRIDGE, THEN AN ELECTRICIAN WITH A CERTIFICATE OF FITNESS SHALL PERFORM THE WORK. THE ENGINEER SHALL PROVIDE A WRITTEN DIRECTIVE IF AN ELECTRICIAN IS REQUIRED TO REATTACH THE POWER CABLE AND THE CONTRACTOR SHALL BE COMPENSATED FOR THIS WORK UNDER SECTION 629 – UTILITY RELOCATIONS.
   NO WORK WAS REQUIRED UNDER PAY ITEM 629(1), UTILITY RELOCATION

\ASBUILT\BRIDGE-1

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

PATH: Q:\ELF\67619\~~PLANSET\DWG\BRIDGE-1~~ VIEW: P1		
PLOT: 1=1(F) OR 1=2(H) METRIC SCALE: 1=10(F) OR 1=20(H)		
BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

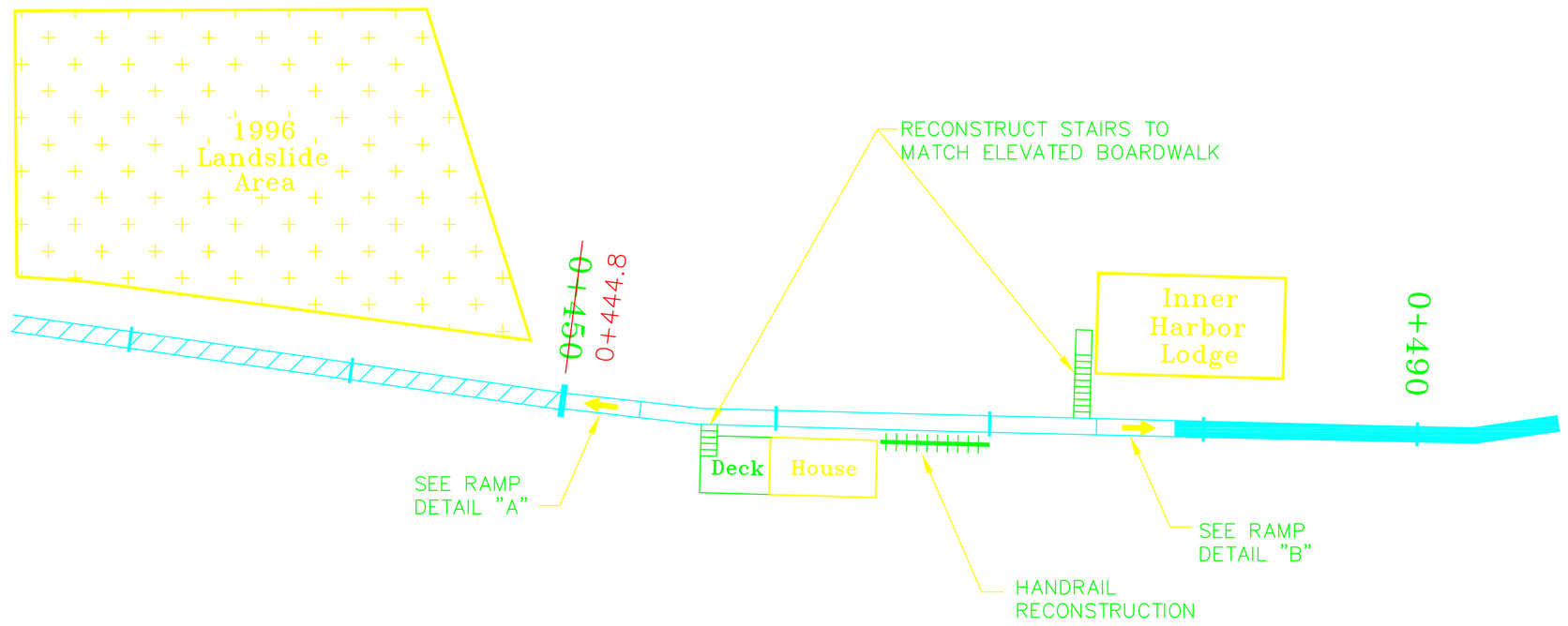
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
SOUTHEAST REGION

ELFIN COVE — *ELF – ELFIN COVE BOARDWALKS* — ALASKA
STP-0003(56) ~ PROJECT NO. 67619
TIMBER BRIDGE RECONSTRUCTION DETAILS

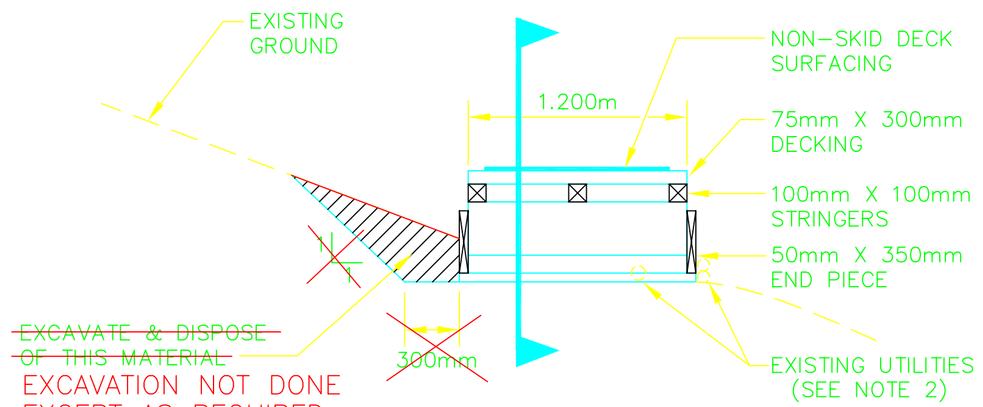
DESIGNED BY: L. GREGOVICH	PROJECT NO. 67619
DRAWN BY: R. SNYDER	DATE: JUNE 1999
CHECKED BY: A. STEININGER	SHEET 9 OF 12

STATE OF ALASKA 49th
LARS R. GREGOVICH
CE-8065
REGISTERED PROFESSIONAL ENGINEER

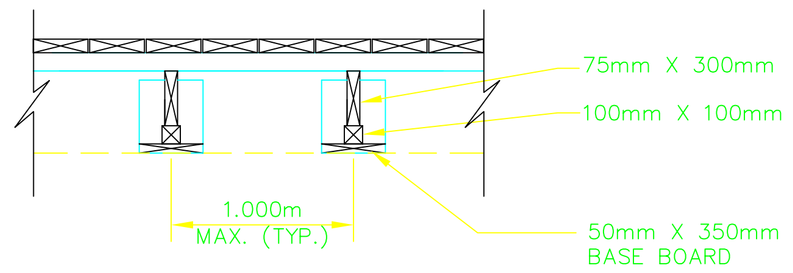
[PlotStamp Eval] 21/Jun/99 Q:\Elf\67619\Asbuilt\Bridge-1.dwg



BOARDWALK RECONSTRUCTION PLAN



TYPICAL SECTION



ELEVATION SECTION

CONSTRUCTION NOTES:

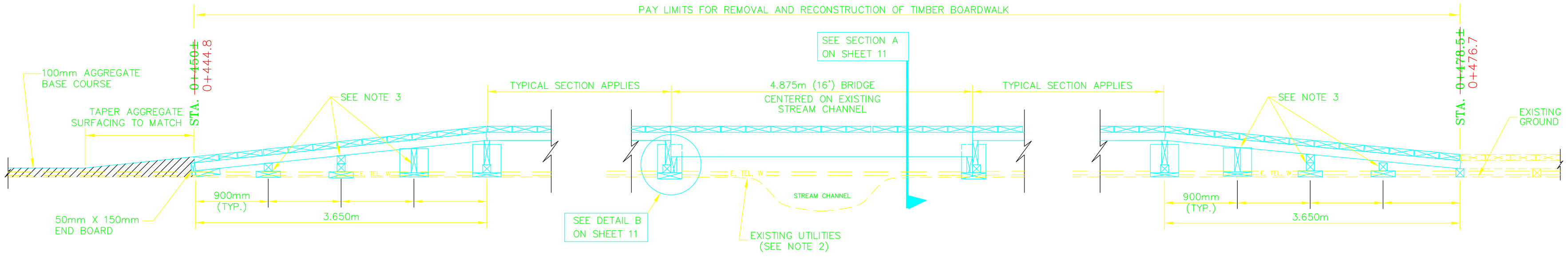
1. ALL TIMBER SHALL BE HEM-FIR NO. 1 OR BETTER AND SHALL BE PRESSURE TREATED WITH ACZA TO A RETENTION OF 9.6 kg/m3 (0.6 pcf.) ALL FIELD CUTS AND HOLES SHALL BE FIELD TREATED IN ACCORDANCE WITH NOTE 5 ON SHEET 2.

2. EXISTING POWER, TELEPHONE AND WATER CONDUITS RUN PARALLEL AND ADJACENT TO THE BOARDWALK. THE CONTRACTOR SHALL PROTECT AND PRESERVE THESE UTILITIES. THESE UTILITIES ARE SECURED TO THE HANDRAIL FROM STA. 0+465 TO 0+470 AND SHALL BE RESECURED WITH HANGERS, STRAPS OR OTHER METHODS AFTER RECONSTRUCTION OF THIS HANDRAIL. SEE NOTES 3 AND 7 ON SHEET 9.

3. BOARDWALK SUPPORTS ON THE RAMP TRANSITIONS AT EITHER END WILL VARY IN HEIGHT. THE CONTRACTOR SHALL CONSTRUCT SUITABLE SUPPORTS TO FIT THE TERRAIN AND VARIABLE HEIGHTS.

CONNECTION SCHEDULE

MEMBER	TO	MEMBER	CONNECTOR	COMMENTS
75mm X 300mm DECKING		100mm X 100mm STRINGER	40d GALVINIZED SPIKE	SEE NOTE 4 ON SHEET 2 ON PREDRILLING
100mm X 100mm STRINGER		75mm X 300mm SUPPORT	40d GALVINIZED SPIKE	PREDRILL STRINGER TO PREVENT SPLITTING
75mm X 300mm SUPPORT		50mm X 350mm SIDE BOARD	16d GALVINIZED SPIKE	3 EACH PER CONNECTION
50mm X 350mm SIDE BOARD		50mm X 350mm BASE BOARD	16d GALVINIZED SPIKE	4 EACH PER CONNECTION
50mm X 350mm BASE BOARD		100mm X 100mm BOARD	16d GALVINIZED SPIKE	4 EACH
100mm X 100mm BOARD		50mm X 350mm SIDE BOARD	16d GALVINIZED SPIKE	1 EACH
NON-SKID DECK SURFACING		75mm X 300mm DECKING	25mm GALVINIED ROOFING NAILS	



RAMP DETAIL A

RAMP DETAIL B

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

\ASBUILT\RAILDET

PATH: Q:\ELF\67619\~~PLANSET\DWG\RAILDET~~ VIEW: P1, P2, P3, P4
PLOT: 1=1(F) OR 1=2(H)

BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
SOUTHEAST REGION

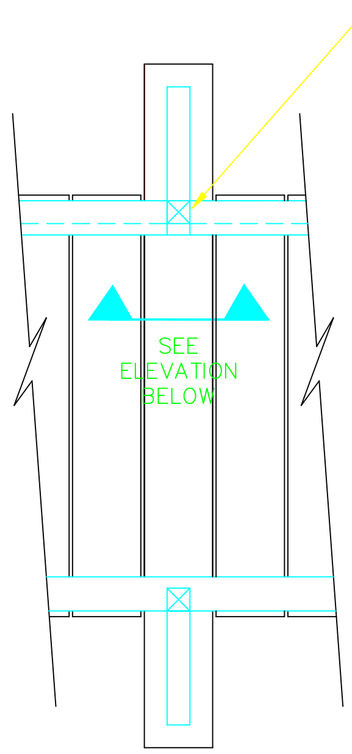
ELFIN COVE — ALASKA

ELF - ELFIN COVE BOARDWALKS
STP-0003(56) ~ PROJECT NO. 67619
BOARDWALK RECONSTRUCTION PLAN & DETAILS

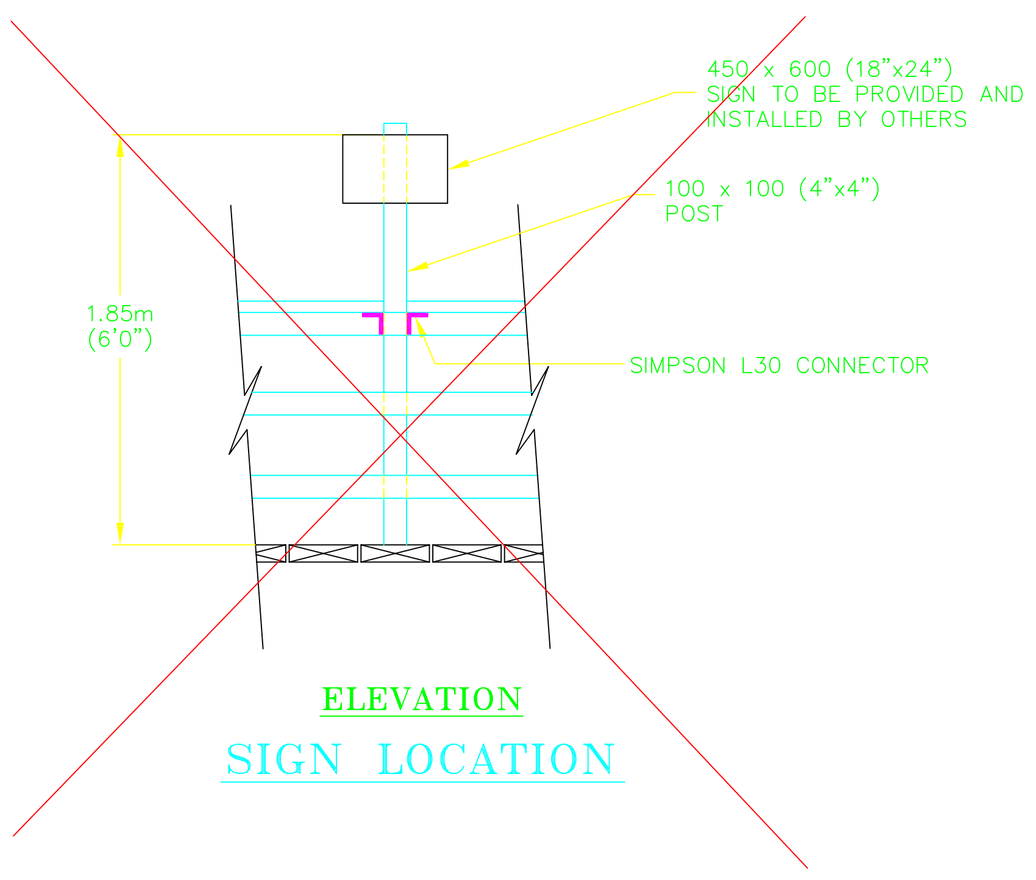
DESIGNED BY: *L. GREGOVICH*	PROJECT NO. *67619*
DRAWN BY: *R. SNYDER*	DATE: *JUNE 1999*
CHECKED BY: *A. STEININGER*	SHEET *10* OF *12*

STATE OF ALASKA 49th
CLARS R. GREGOVICH
CE-8065
REGISTERED PROFESSIONAL ENGINEER

[PlotStamp Eval] 21/Jun/99 Q:\Elf\67619\Asbuilt\RAILDET.dwg



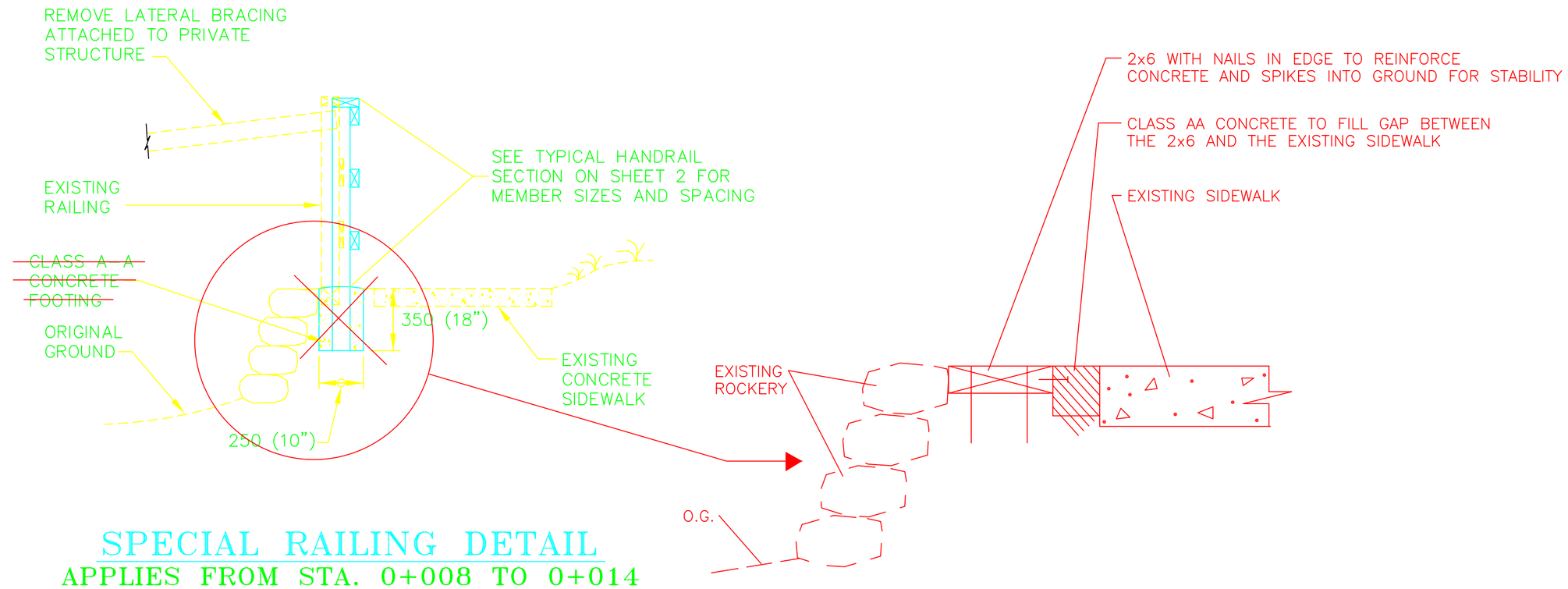
PLAN



ELEVATION

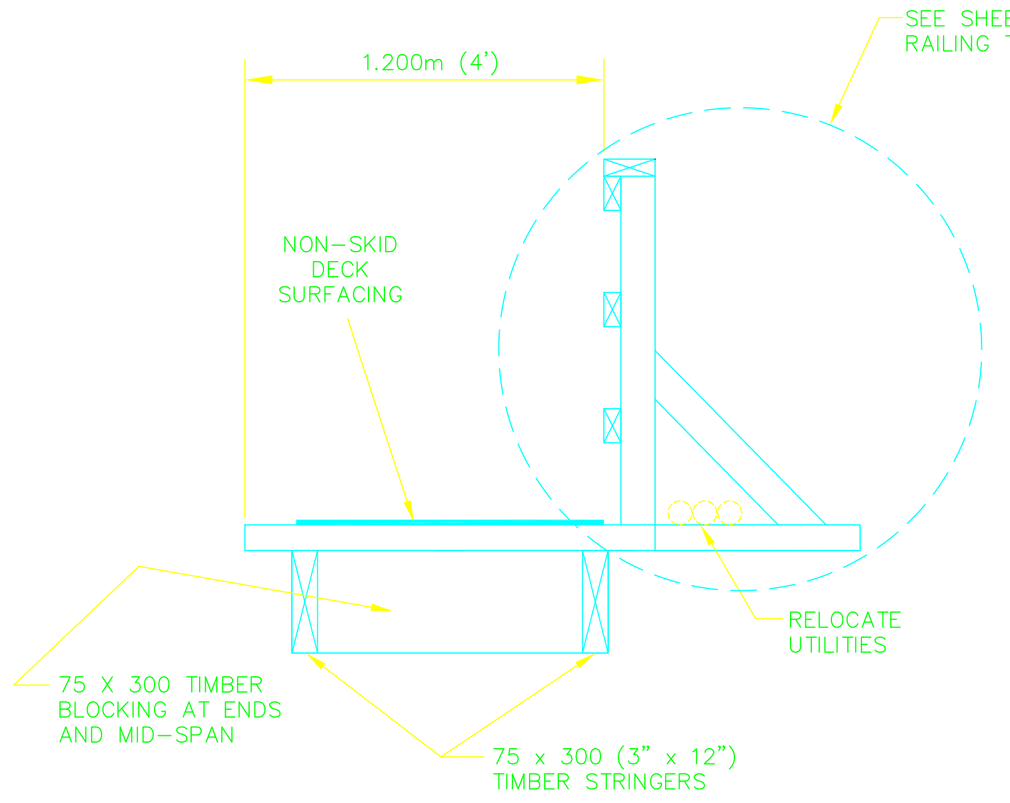
SIGN LOCATION

THE COMMUNITY OF ELFIN COVE INSTALLED THE SIGNS USING A DIFFERENT MANNER OF CONSTRUCTION THAN DETAILED HERE. THEY DID THIS WORK PRIOR TO THE CONTRACTOR'S INSTALLATION OF THESE SIGN POSTS. THE SIGNS WERE IMMEDIATELY VANDALIZED AND DESTROYED.

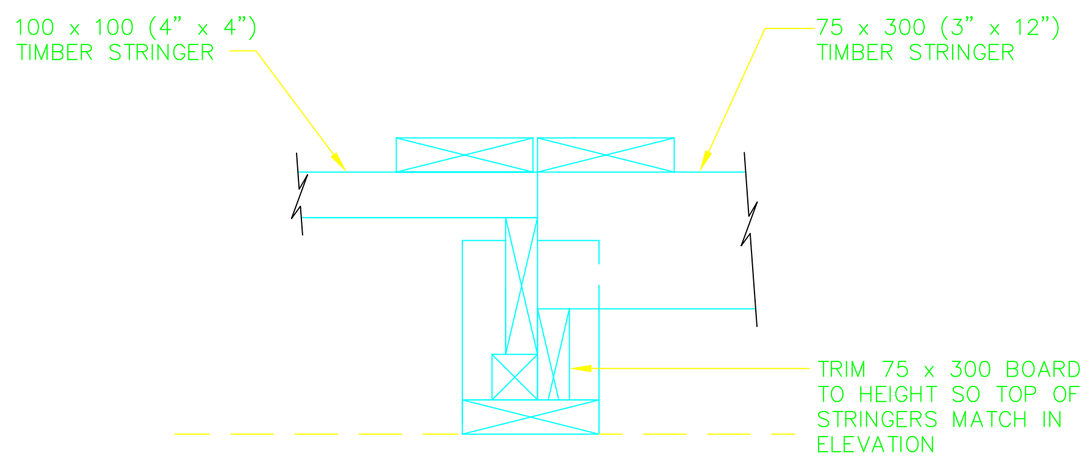


SPECIAL RAILING DETAIL

APPLIES FROM STA. 0+008 TO 0+014



A SECTION



B SPECIAL FOOTING DETAIL

NOTE:
SPECIAL FOOTING SIMILAR TO THAT SHOWN IN ELEVATED SECTION ON SHEET 10. USE CONNECTIONS LISTED ON THAT SHEET.

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\ASBUILT\DET3

PATH: Q:\ELF\67619\~~PLANSET\DWG\DET3~~

PLOT: 1=1(F) OR 1=2(H)

BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
SOUTHEAST REGION

ELFIN COVE

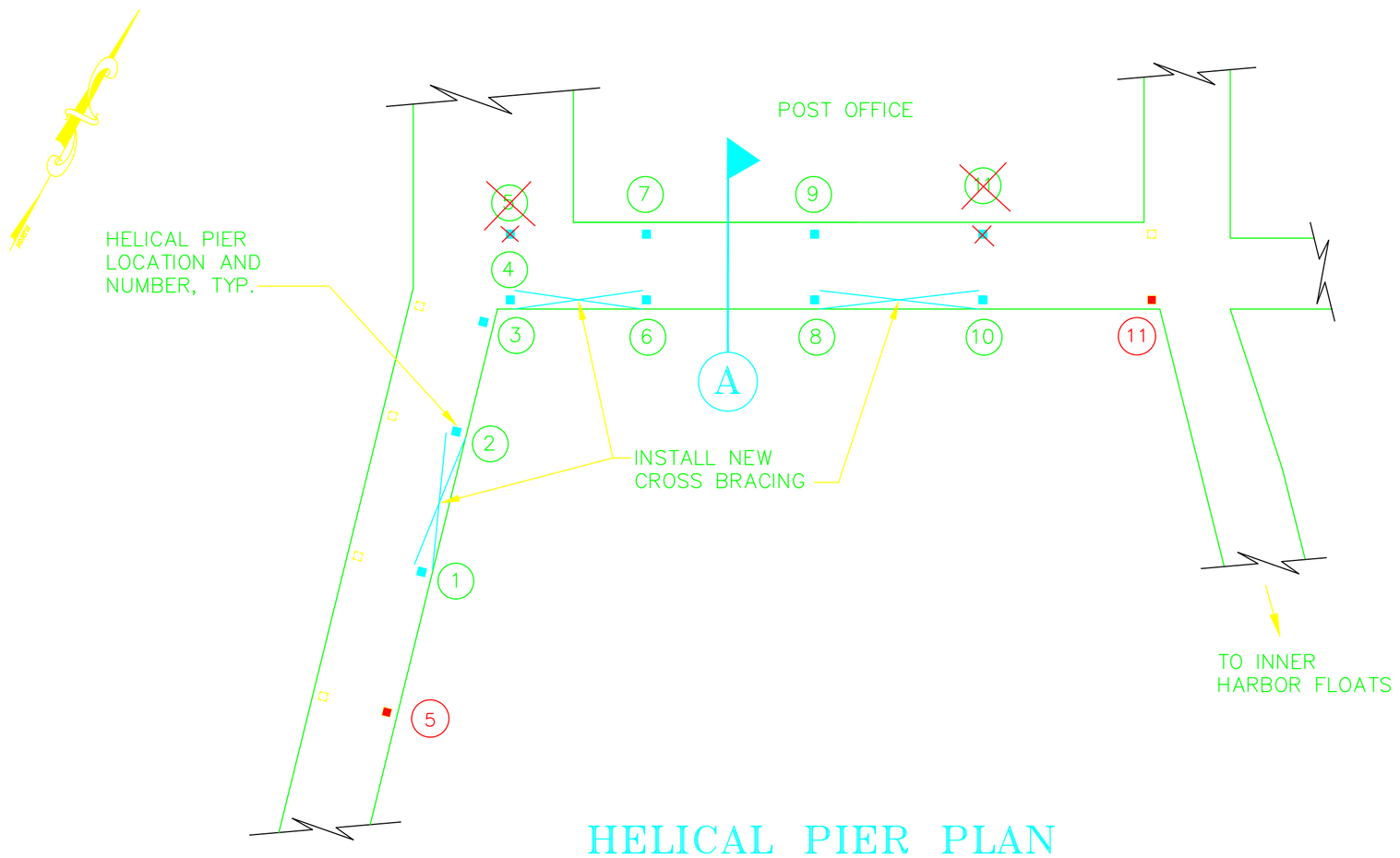
JNU-GLACIER HIGHWAY
EGAN DRIVE TO MENDENHALL LOOP ROAD
FED. NO. STP-0003(56) ~ PROJECT NO. 67619

MISCELLANEOUS DETAILS

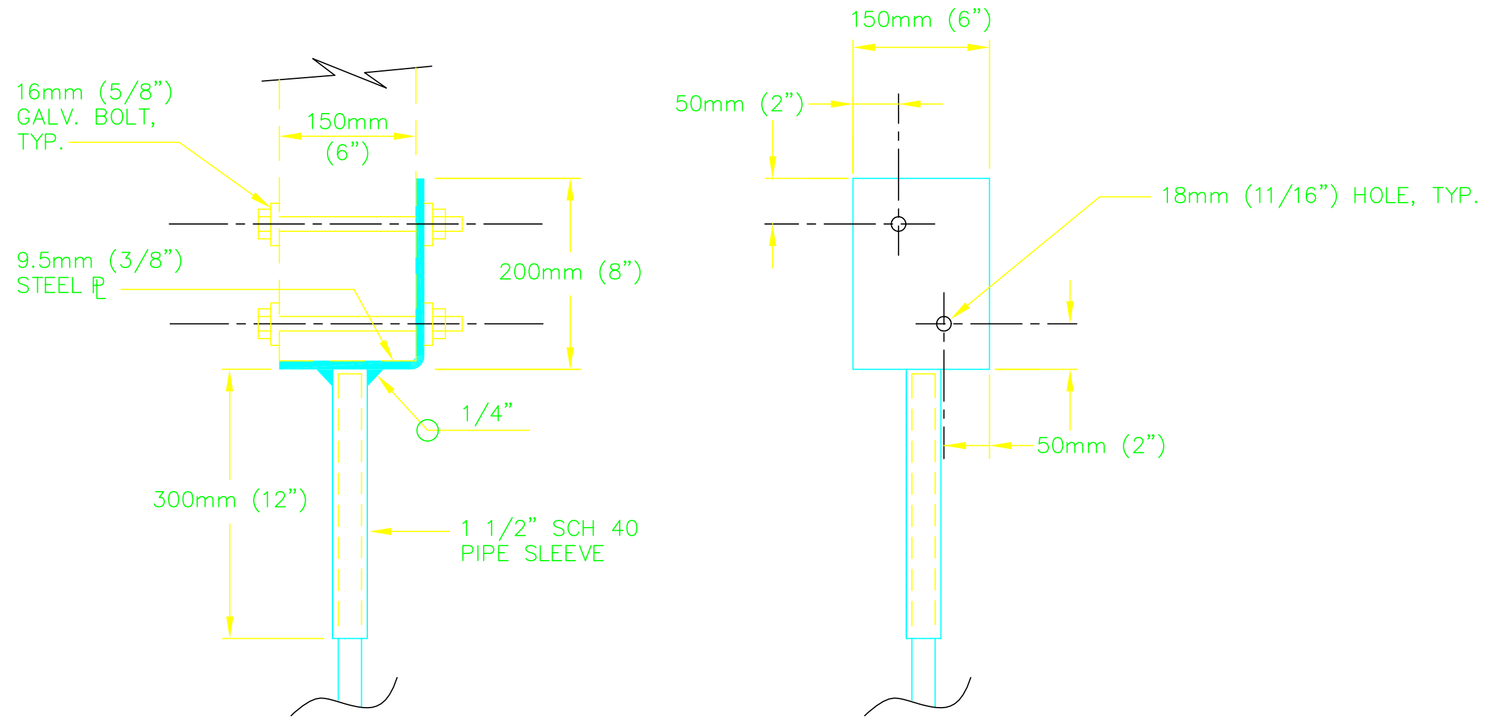
ALASKA

DESIGNED BY: L. GREGOVICH	PROJECT NO. 67619
DRAWN BY: R. SNYDER	DATE: JUNE 1999
CHECKED BY: A. STEININGER	SHEET 11 OF 12

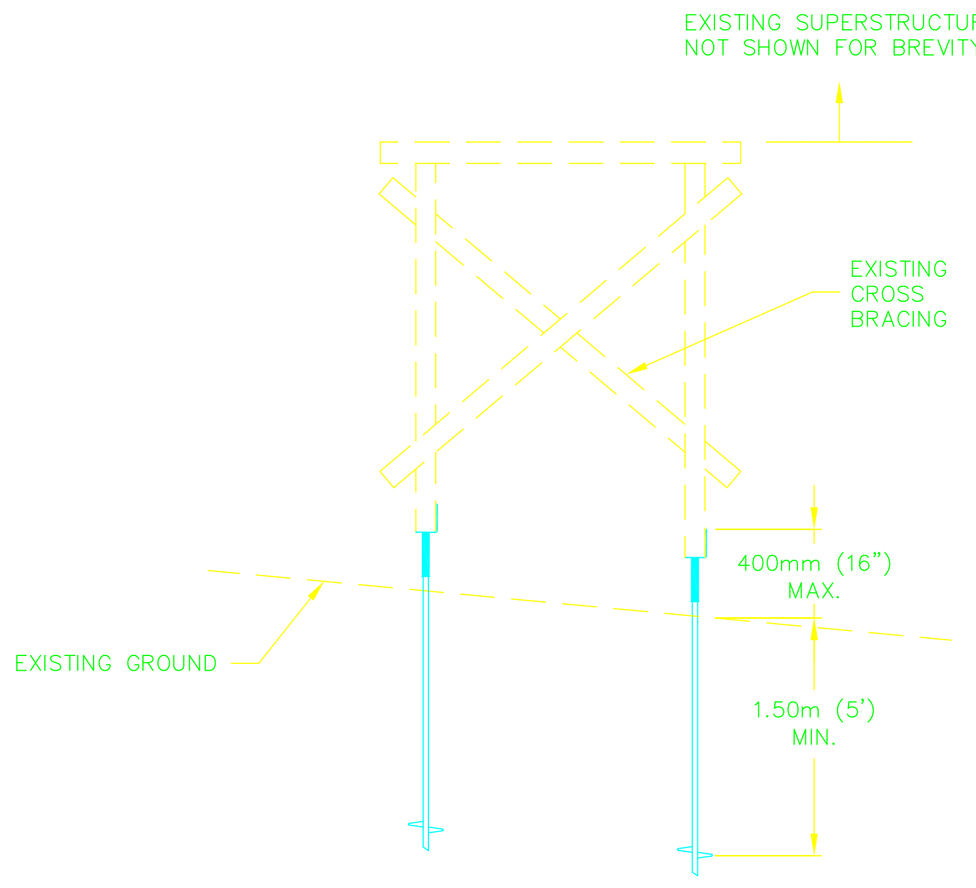
STATE OF ALASKA
49th
LARS R. GREGOVICH
CE-8065
REGISTERED PROFESSIONAL ENGINEER



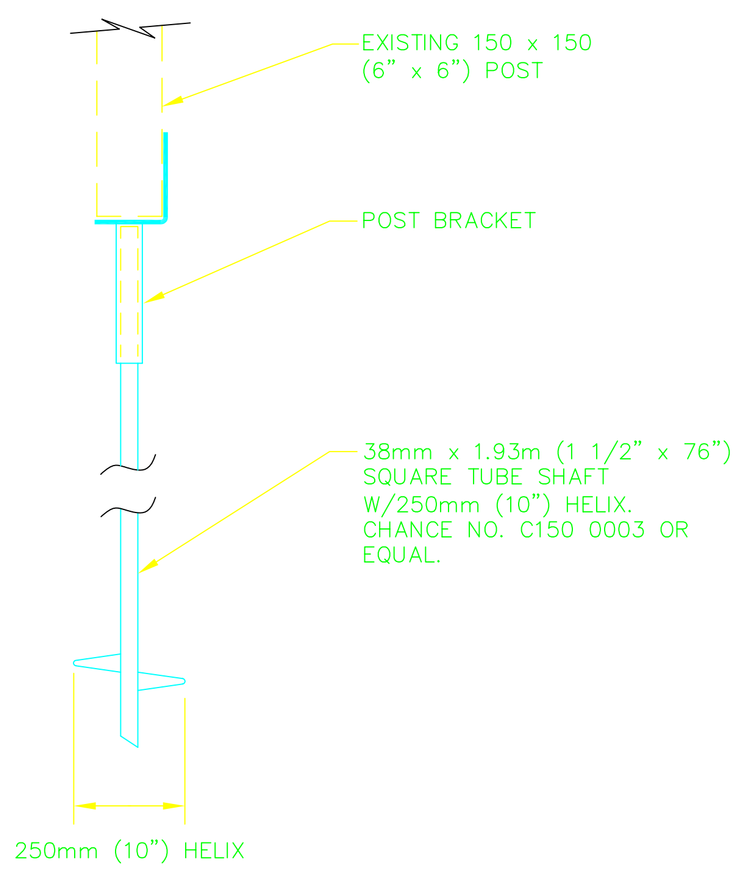
HELICAL PIER PLAN



POST BRACKET DETAIL



SECTION (A)



HELICAL PIER DETAIL

CONSTRUCTION NOTES:

1. SEE SECTION 628 IN THE SPECIAL PROVISIONS FOR FULL SPECIFICATIONS ON HELICAL PIER MATERIALS, INSTALLATION EQUIPMENT AND INSTALLATION PROCEDURES.
2. A GEOTECHNICAL INVESTIGATION WAS PERFORMED IN THE VICINITY WHERE THE HELICAL PIERS ARE TO BE INSTALLED. THIS REPORT IS CONTAINED IN APPENDIX B.

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PLOT: 1=1(F) OR 1=2(H)

BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
SOUTHEAST REGION

ELFIN COVE — JNU-GLACIER HIGHWAY — ALASKA
EGAN DRIVE TO MENDENHALL LOOP ROAD
FED. NO. STP-0003(56) ~ PROJECT NO. 67619

HELICAL PIER PLAN AND DETAILS

DESIGNED BY: L. GREGOVICH	PROJECT NO. 67619
DRAWN BY: R. SNYDER	DATE: JUNE 1999
CHECKED BY: A. STEININGER	SHEET 12 OF 12

STATE OF ALASKA 49th
LARS R. GREGOVICH CE-8065
REGISTERED PROFESSIONAL ENGINEER