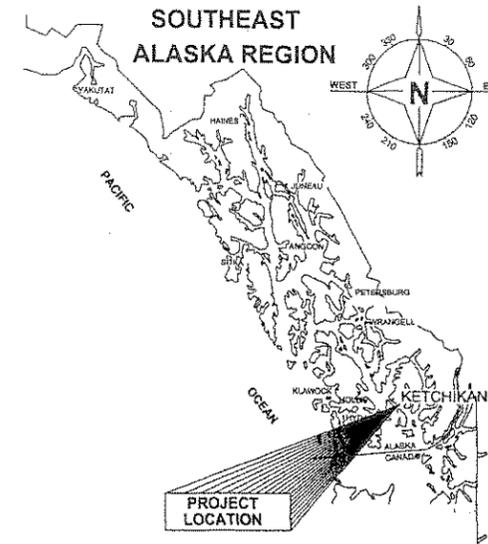
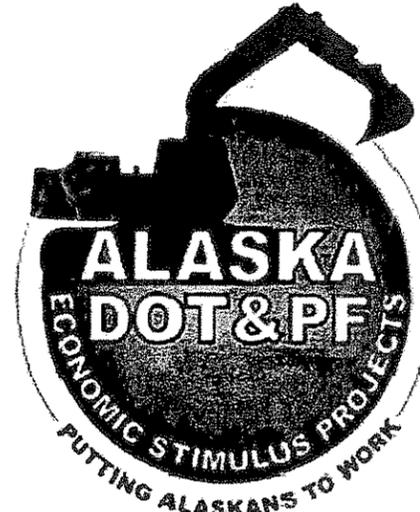


# State of Alaska

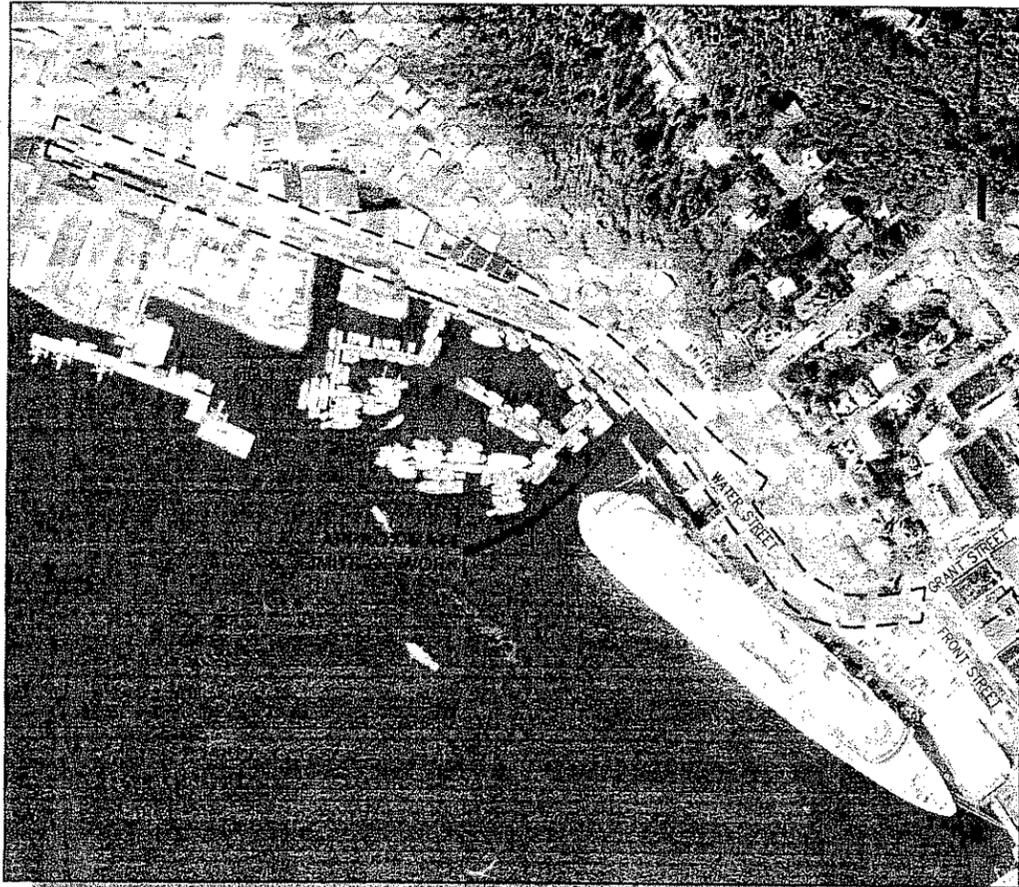
## Department of Transportation and Public Facilities

Design and Engineering Services Division-Southeast Region



# Ketchikan: Water Street Sidewalk Improvements

**PROJECT No. 69345**  
**FEDERAL No. ARA-TEA-0902(35)**



**LOCATION MAP**  
(EXISTING CONDITIONS)

**PROJECT SCOPE:**

WIDEN AND MODIFY EXISTING SIDEWALKS FROM CHAPMAN ST TO EXISTING VIADUCT TUNNEL TO IMPROVE PEDESTRIAN CAPACITY, SAFETY AND ADA COMPLIANCE.

DESIGN DESIGNATIONS			
ITEM	2008	2011	2031
A.D.T.	17,880	18,150	20,050
D.H.V. 10.6%	1900	1920	2130
V. (MPH)	20	20	20
P.H.F.	0.9	0.9	0.9
Direction Distribute	55/45	55/45	55/45
%T.	5.2%	5.2%	5.2%
E.A.L. (20yr.)	—	—	1,850,000

PROJECT SUMMARY
B.O.P. 120+27.0 TO
E.O.P. 139+24.6
CDS ROUTE NO. 291400
CDS MILEPOINT 1.625 TO 1.985
LENGTH OF PROJECT = 1900'

**THE FOLLOWING STANDARD DRAWINGS APPLY TO THESE PROJECTS:**

C-03.10	I-20.13	M-13.01	S-00.10	T-20.02
D-22.01	I-21.01	M-16.01	S-05.01	T-21.02
D-25.00	I-22.01		S-30.03	T-22.03
	I-30.01			

### PROJECT INDEX

SHEET NO.	DESCRIPTION
A1	COVER SHEET
A2	ESTIMATE OF QUANTITIES AND BASIS OF ESTIMATE
A3-A7	SURVEY, PROJECT CONTROL/ PROPERTY MAP
B1-B7	SIDEWALK DETAILS
F1-F6	SIDEWALK PLAN
G1-G4	INTERSECTION DRIVEWAYS
H1-H9	DRAINAGE, EROSION AND SEDIMENT CONTROL
M1-M6	BRIDGE RAIL INSTALLATION
P1-P7	SIGNING AND STRIPING PLAN
S1-S7	TRAFFIC CONTROL & CONSTRUCTION PHASING

Project Engineer: Allen Shepard

Start Date: June 3, 2010  
End Date: January 13, 2011

CONTRACTOR: BAM LLC

PATH: K:\2006\064032.01 KETCHIKAN WATER STREET IMPROVEMENTS\FOR CONSTRUCTION\064032.01-A1.DWG TAB:A1  
Tuesday, January 05, 2010 4:00:49 PM  
PLOT: PSPACE OR MSPACE: 1=1(F)

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION



2-22-10

RECOMMENDED FOR APPROVAL:  
*Victor Winters* 2/22/10  
VICTOR WINTERS, P.E. DATE  
REGIONAL P.E.-CONSTRUCTION ENGINEER

APPROVED:  
*Gary L. Davis* 2.22.2010  
GARY L. DAVIS DATE  
SOUTHEAST REGION DIRECTOR

CERTIFIED TRUE & CORRECT AS-BUILT OF ACTUAL FIELD CONDITION:  
*[Signature]*  
CONSTRUCTION PROJECT MANAGER DATE

STATE	PROJECT DESIGNATION	YEAR
ALASKA	ARA-TEA-0902(35)	2011

2/5/10 Drawings 2006\064032.01 Ketchikan Water Street Improvements For Construction\064032.01-A1.dwg

**GENERAL NOTES**

THIS PROJECT CONSISTS OF THE DEMOLITION OF EXISTING SIDEWALKS AND INSTALLATION OF NEW WIDER SIDEWALKS. MOST OF THE WORK WILL BE PERFORMED ON TOP OF THE EXISTING WATER STREET VIADUCT.

THE WATER STREET VIADUCT WAS CONSTRUCTED IN 1955, WITH CONSTRUCTION OF TONGASS AVENUE FOLLOWING IN 1956. THE ROADWAYS ARE APPROXIMATELY 60 FEET WIDE, INCLUDING SIDEWALKS. THE VIADUCT CARRIES ESSENTIALLY ALL NORTH/SOUTH TRAFFIC THROUGH KETCHIKAN. THEREFORE, PRESERVATION OF THE TRAFFIC CARRYING CAPACITY IS ESSENTIAL FOR LOCAL TRANSPORTATION AND IS A CRITICAL COMPONENT OF THIS CONSTRUCTION WORK.

**MARINE TRAFFIC**

THE WATERWAY ADJACENT TO THE PROJECT IS A VERY HIGH TRAFFIC VOLUME MARINE AREA. CONTRACTOR'S SCHEDULE SHALL CONSIDER MARINE ACTIVITIES SUCH AS ARRIVAL AND DEPARTURES, PROP WASH BOW THRUSTERS AND OTHER POTENTIAL HAZARDS FROM MARINE TRAFFIC.

**CITY OF KETCHIKAN UTILITY CONTACTS**

KETCHIKAN PUBLIC UTILITIES ELECTRIC DEPARTMENT	JEFF HARRISON	(907) 228-5442
KETCHIKAN PUBLIC UTILITIES TELECOMMUNICATIONS DEPARTMENT	TODD RENTON	(907) 228-6030
KETCHIKAN PUBLIC UTILITIES WATER DEPARTMENT	JOHN KLEINEGGER	(907) 228-5499
CITY OF KETCHIKAN SEWER DEPARTMENT	CHARLES MACKY	(907) 225-8750
GCI COMMUNICATIONS	BUZZ HASSON	(907) 220-7111

THERE ARE VARIOUS UNDERGROUND UTILITIES LOCATED THROUGHOUT THE PROJECT. THE LOCATIONS INDICATED ON THE PLANS ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL REQUEST LOCATES FROM ALL UTILITIES HAVING FACILITIES IN THE AREA. THEIR TELEPHONE NUMBERS FOR COORDINATION ARE AS LISTED IN THE TABLE ABOVE.

THE CONTRACTOR IS REQUIRED TO WORK AROUND ALL UTILITY FACILITIES THROUGHOUT THE PROJECT. ALL EXISTING UTILITIES SHALL REMAIN IN SERVICE. THE CONTRACTOR WILL COORDINATE HIS/HER WORK SO THAT THE UTILITIES AND/OR THE CONTRACTORS HAVE ACCESS TO THE WORK AREAS.

ESTIMATE OF QUANTITIES				Quantity to date
Item No	Description	Units	Quantity	
202 (1)	Removal of Structures and Obstructions	Lump Sum	All Required	
202 (3)	Removal of Sidewalk	Square Yard	-350	556.136
408 (1)	Pavement Cold Planing	Square Yard	-350	324.55
501 (9)	Core Holes	Each	175	181
501 (10)	Install Scupper	Each	175	180
507 (1)A	Steel Bridge Rolling	Linear Foot	525	
507 (6)A	Remove and Dispose Bridge Rolling	Linear Foot	525	
507 (7)	Replace Roll Bolts	Lump Sum	All Required	
510 (2)	Removal of Sidewalk on Bridge Deck	Square Yard	1,000	986.27
510 (3)	Asbestos Removal and Disposal	Linear Foot	900	1008.0
604 (8)	Curb Inlet Assembly	Each	9	
604 (9)	Strip Drain	Linear Foot	1,800	1746.9
604 (10)	Frame and Solid Lid	Each	12	
604 (11)	High Capacity Inlet Frame	Each	1	
608 (4)	Bed Course Material, Grading D-1	Ton	30	294.37
608 (6)	Curb Ramp	Each	22	23
608 (7)	Concrete Sidewalk	Square Yard	2,700	2547.75
615 (1)	Standard Sign	Square Foot	30	47.0
615 (2)	Remove and Relocate Existing Sign	Each	23	33
627 (8)	Water Service Connection	Each	1	
627 (10)	Adjustment of Valve Box	Each	50	60
640 (1)	Mobilization and Demobilization	Lump Sum	All Required	
640 (4)	Worker Meals and Lodging, or per Diem	Lump Sum	All Required	
641 (1)	Erosion and Pollution Control Administration	Lump Sum	All Required	
641 (3)	Temporary Erosion and Pollution Control	Lump Sum	All Required	
641 (4)	Temporary Erosion and Pollution Control Amendments	Contingent Sum	All Required	
642 (1)	Construction Surveying	Lump Sum	All Required	
642 (8)	Adjust Existing Monument	Each	7	9
642 (13)	Bridge Survey	Lump Sum	All Required	
643 (2)	Traffic Maintenance	Lump Sum	All Required	
643 (23)	Traffic Price Adjustment	Contingent Sum	All Required	
643 (25)	Traffic Control	Contingent Sum	All Required	
644 (6)	Vehicle	Lump Sum	All Required	
670 (1)	Painted Traffic Markings	Lump Sum	All Required	
670 (13)	Thermoplastic Markings	Square Foot	450	414.8
684 (2)	Establish Continuity	Each	175	181
507(8)	Refurbish Bridge Rail (CO#2)	All Required		
608(8)	Misc. Sidewalk Work (CO#3)	All Required		
608(9)	Concrete Curb Ramp (CO#4)	All Required		
643(29)	Public Meeting (CO#1)	Each		6

REVISIONS	DESCRIPTION	DATE	REV

DESIGNED BY: SR

2-8-10



CHECKED BY: GW  
DRAWN BY: GRD

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
DESIGN & ENGINEERING SERVICES  
DIVISION-SOUTHEAST REGION

**KETCHIKAN:  
WATER STREET  
SIDEWALK  
IMPROVEMENTS  
PROJECT No. 69345**

**ESTIMATE OF QUANTITIES AND BASIS OF ESTIMATE**

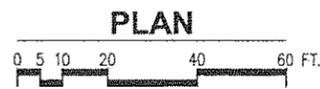
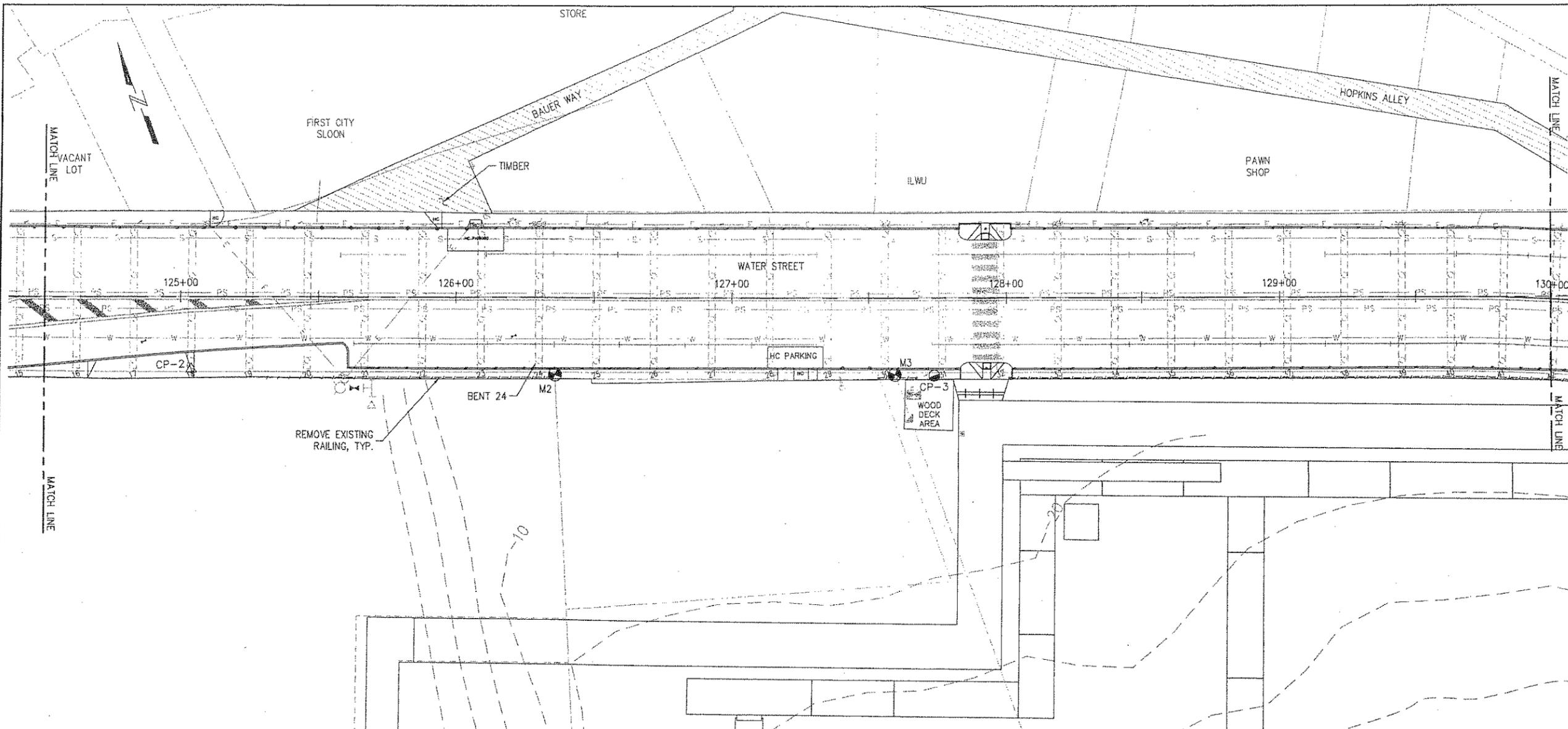
PROJECT DESIGNATION	
ARA-TEA-0902(35)	
STATE	YEAR
ALASKA	2010
SHEET NUMBER	TOTAL SHEETS
A2	53

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.  
PE  Date 11-8-11





1/13/10 Drawings\2006\064032.01 Ketchikan Water Street Improvements\For Construction\064032.01-A3-A7.dwg



**LEGEND**

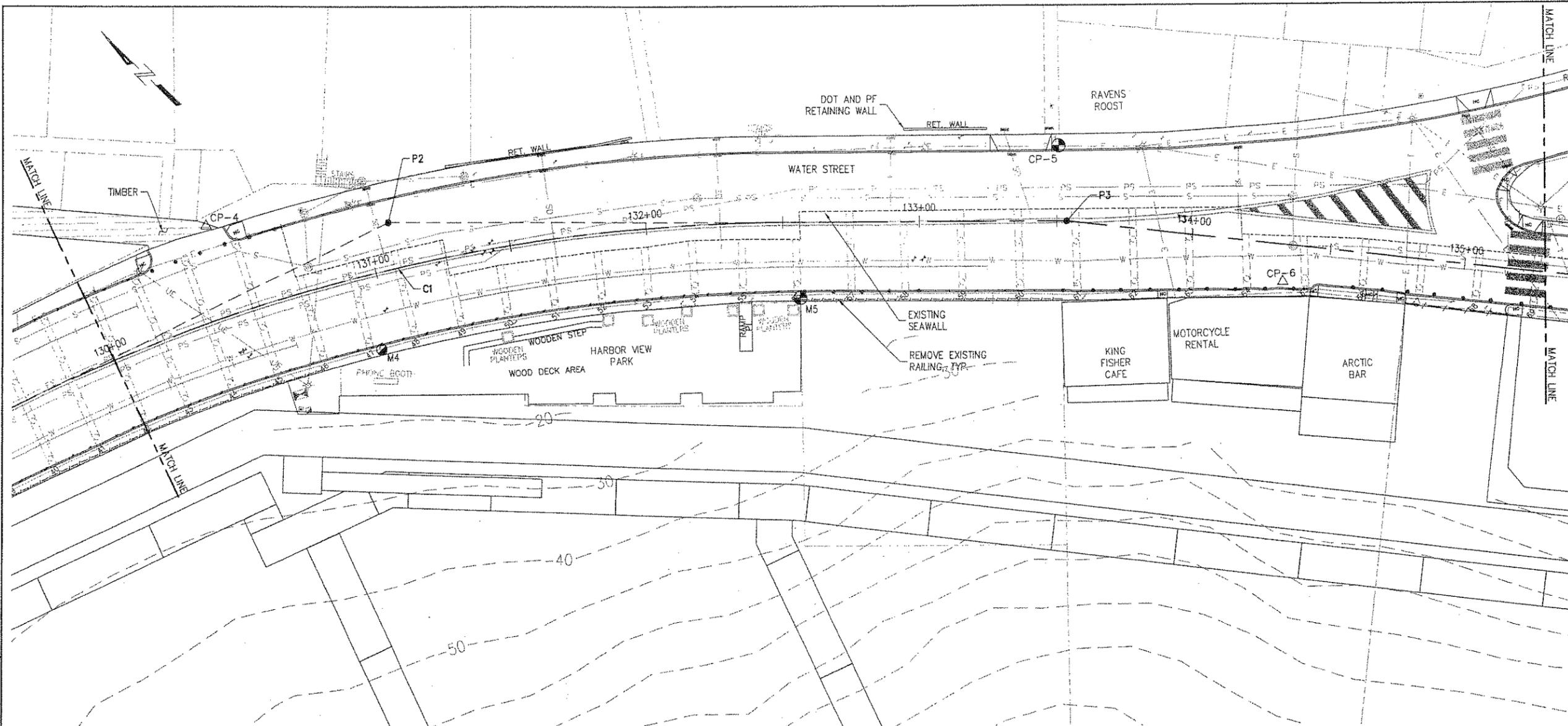
	FOUND MONUMENT		STREET SIGN
	FOUND ALUMINUM CAP		HANDICAP ACCESS
	SET NAIL W/ PND SHINER		HANDICAP PARKING SIGN
	LIGHT POLE		GRAVITY SEWER LINE
	POWER POLE		STORM DRAIN
	POWER POLE TRANSFORMER		PRESSURE SEWER LINE
	ELECTRIC PEDESTAL		WATER LINE
	ELECTRIC TRANSFORMER		UNDERGROUND ELECTRIC
	UTILITY VAULT		OVERHEAD ELECTRIC
	TELEPHONE MANHOLE		TELEPHONE
	STORM DRAIN MANHOLE		CHAIN LINK FENCE
	STORM DRAIN CATCH BASIN		RAIL FENCE
	4" STORM DRAIN HOLE		BUILDING LINE
	3" STORM DRAIN HOLE		SEAWALL
	SANITARY SEWER MANHOLE		ROW
	WATER VAULT		EXISTING TIMBER
	WATER VALVE		EXISTING CURB CUT
	WATER VALVE KEY BOX		LAYOUT POINT
	FIRE HYDRANT		

**NOTE**  
 WHETHER LISTED OR NOT, ALL MONUMENTS, PROPERTY MARKERS OR ACCESSORIES WHICH WILL BE DISTURBED OR BURIED SHALL BE REFERENCED PRIOR TO BEING DISTURBED AND RE-ESTABLISHED IN THEIR ORIGINAL POSITION AND A RECORD OF MONUMENT FORM SHALL BE KEPT IN ACCORDANCE WITH AS34.65.040 AND SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO RECORDING.

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.  
 PE Date 11-8-11

REVISIONS	DESCRIPTION
DESIGNED BY: SR	DATE: 2/8/10
CHECKED BY: GW	DRAWN BY: GRD
STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION	
<b>KETCHIKAN:          WATER STREET          SIDEWALK          IMPROVEMENTS          PROJECT No. 69345</b>	
<b>SURVEY,          PROJECT          CONTROL/          PROPERTY MAP</b>	
PROJECT DESIGNATION	
ARA-TEA-0902(35)	
STATE	YEAR
ALASKA	2010
SHEET NUMBER	TOTAL SHEETS
A5	53

1/7/10 Drawings\2006\064032.01 Ketchikan Water Street Improvements For Construction\064032.01-A3-A7.dwg



**PLAN**



**LEGEND**

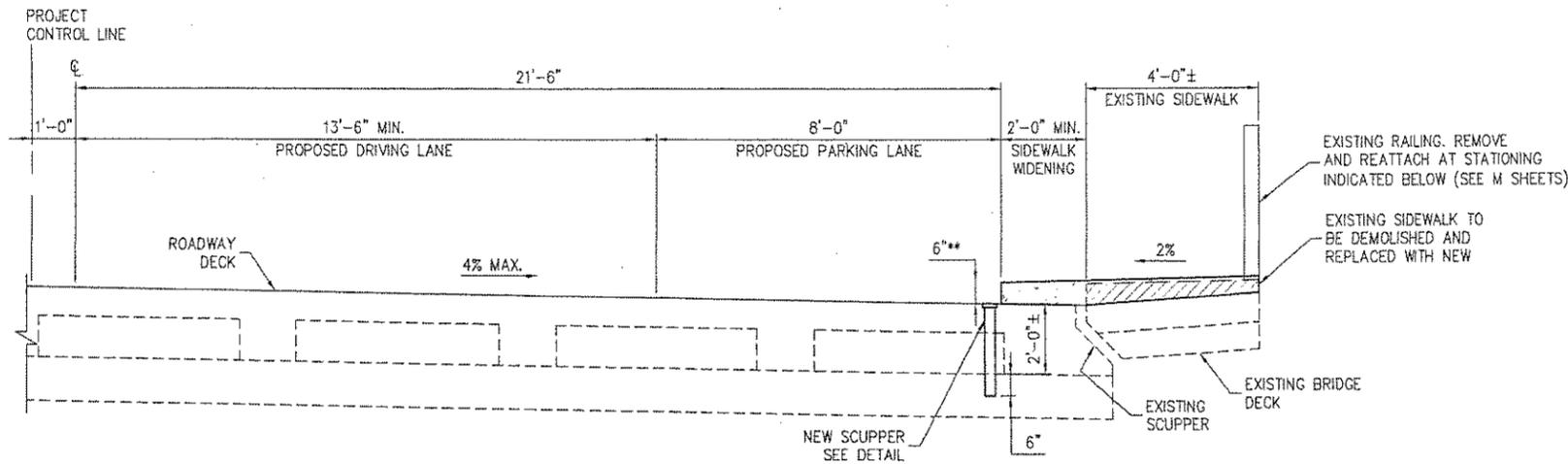
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	FOUND ALUMINUM CAP		HC HANDICAP ACCESS
	SET NAIL W/ PND SHINER		HP HANDICAP PARKING SIGN
	LIGHT POLE		GS GRAVITY SEWER LINE
	POWER POLE		SD STORM DRAIN
	POWER POLE TRANSFORMER		PS PRESSURE SEWER LINE
	ELECTRIC PEDESTAL		W WATER LINE
	ELECTRIC TRANSFORMER		UE UNDERGROUND ELECTRIC
	UTILITY VAULT		OE OVERHEAD ELECTRIC
	TELEPHONE MANHOLE		T TELEPHONE
	STORM DRAIN MANHOLE		CLF CHAIN LINK FENCE
	STORM DRAIN CATCH BASIN		Rail FENCE
	4" STORM DRAIN HOLE		BL BUILDING LINE
	3" STORM DRAIN HOLE		SW SEAWALL
	SANITARY SEWER MANHOLE		ROW
	WATER VAULT		EXISTING TIMBER
	WATER VALVE		EXISTING CURB CUT
	WATER VALVE KEY BOX		LAYOUT POINT
	FIRE HYDRANT		

**NOTE**  
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Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.  
 PE Date 11-8-11

DESIGNED BY: SR	2/9/10
CHECKED BY: GW	
DRAWN BY: GRD	
STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION	
<b>KETCHIKAN:                  WATER STREET                  SIDEWALK                  IMPROVEMENTS                  PROJECT No. 69345</b>	
<b>SURVEY,                  PROJECT                  CONTROL/                  PROPERTY MAP</b>	
PROJECT DESIGNATION	
ARA-TEA-0902(35)	
STATE	YEAR
ALASKA	2010
SHEET NUMBER	TOTAL SHEETS
A6	53

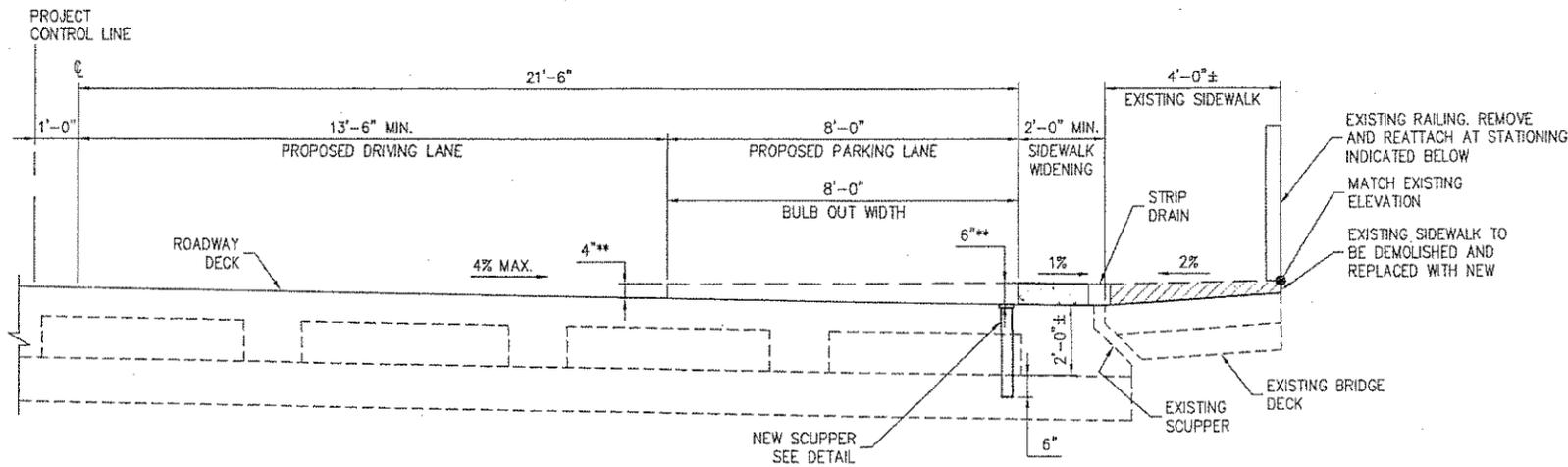




**TYPICAL SECTION  
TYPE A**

EXTENT OF RAIL  
 START: STA 125+28.3 - END: STA 126+34.7  
 START: STA 127+53.2 - END: STA 127+67.9  
 START: STA 128+00.9 - END: STA 130+50.1

- \* MIN. 1.0% DRAINAGE MUST BE ACHIEVED FROM EXISTING BUILDINGS. ADJUST AS REQUIRED AND AS APPROVED BY THE ENGINEER.
- \*\* THICKNESS OF FINISHED CURB, SIDEWALK THICKNESS VARIES
- \*\*\* FROM STA 133+50 TO STA 134+50 PROJECT CONTROL LINE VARIES. OFFSETS ARE DEFINED BY CONTROL POINTS ON SHEET G2.



**TYPICAL SECTION  
TYPE A1**

EXTENT OF RAIL  
 START: STA 130+50.1 - END: STA 130+71.8  
 START: STA 132+56.4 - END: STA 133+49.2

- NOTES:**
- 1) IT IS PROBABLE THAT ASBESTOS MATERIALS ARE PRESENT IN THE EXISTING FULL DEPTH SIDEWALK JOINTS. THIS MATERIAL MUST BE HANDLED AND DISPOSED OF ACCORDING TO THE SPECIAL PROVISIONS SECTION 510.
  - 2) EXISTING RAILING IS TO BE REMOVED AND REATTACHED PER DETAIL 1 ON SHEET M1. IF ADDITIVE ALTERNATIVE IS ACCEPTED ALL RAIL IS TO BE DEALT WITH PER THE ADDITIVE ALTERNATIVE.
  - 3) NEW SCUPPER LOCATIONS ARE PROVIDED IN THE TABLE ON SHEET H6. A NEW SCUPPER DETAIL IS PROVIDED ON SHEET H8.

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.  
 PE *[Signature]* Date 11-8-11

REV	DATE	DESCRIPTION

DESIGNED BY: SR

CHECKED BY: GW

DRAWN BY: GRD

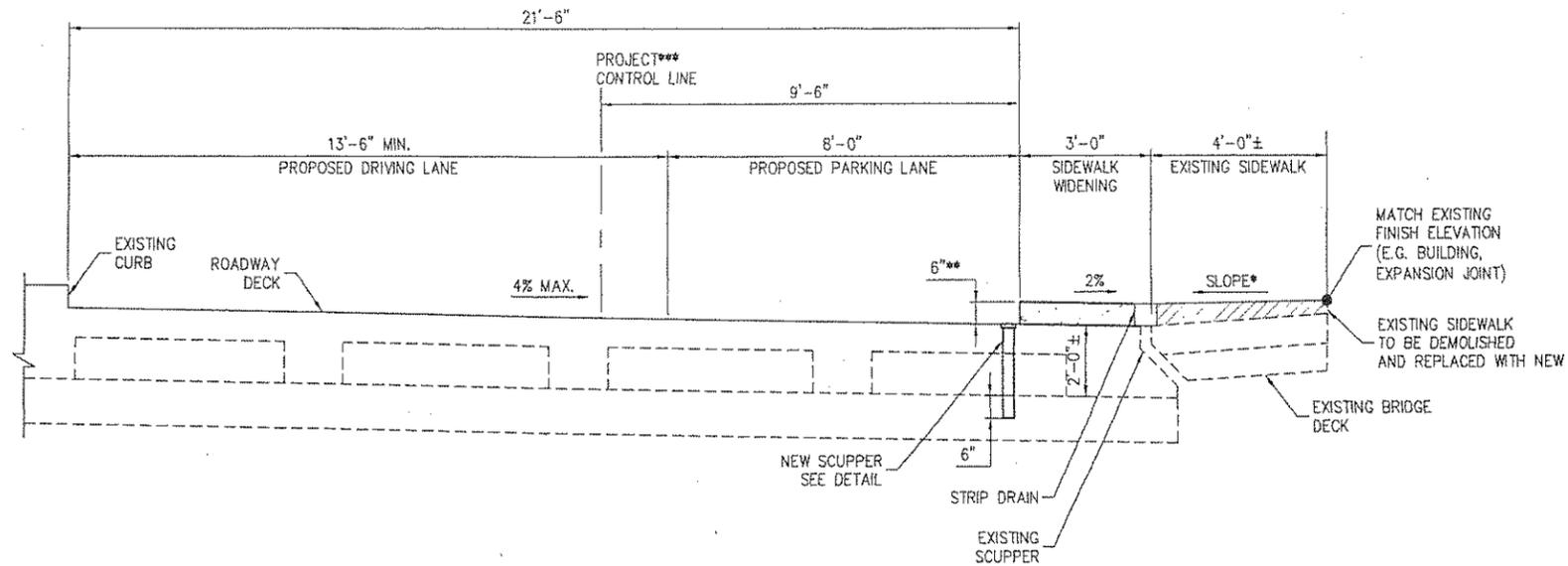
STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
 DESIGN & ENGINEERING SERVICES  
 DIVISION-SOUTHEAST REGION

**KETCHIKAN:  
 WATER STREET  
 SIDEWALK  
 IMPROVEMENTS  
 PROJECT No. 69345**

**SIDEWALK  
 DETAILS**

PROJECT DESIGNATION	
ARA-TEA-0902(35)	
STATE	YEAR
ALASKA	2010
SHEET NUMBER	TOTAL SHEETS
B1	53

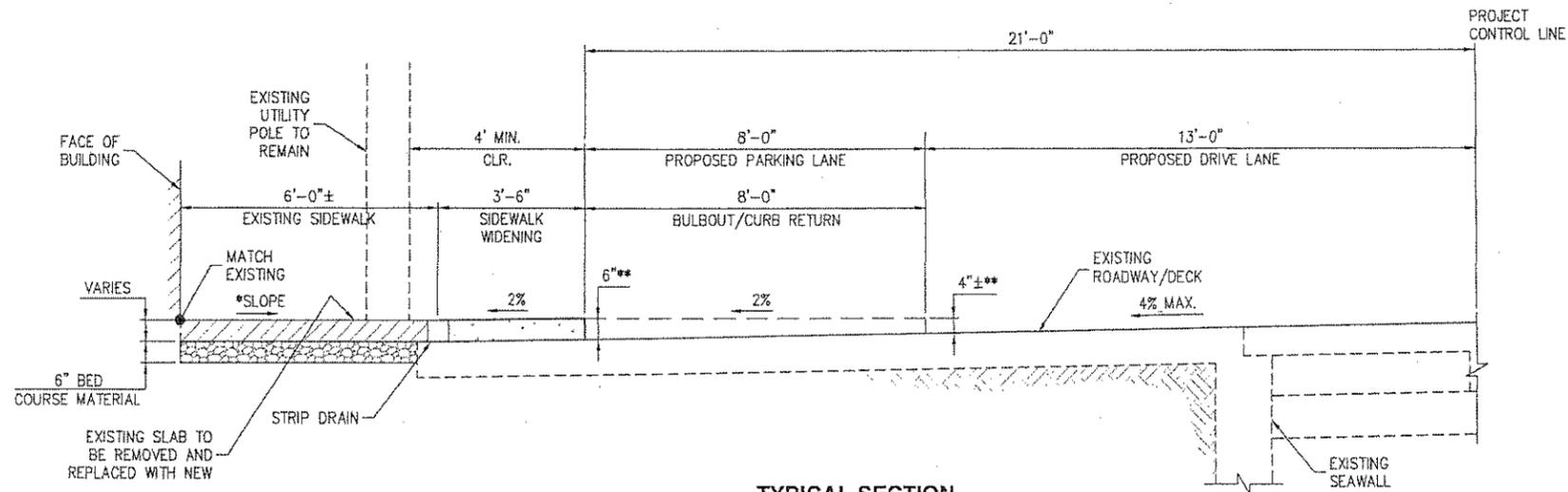
1/8/10 Drawings\2006\064032\01 Ketchikan Water Street Improvements\For Construction\064032-01-B1.dwg



**TYPICAL SECTION  
TYPE B**

EXTENT OF RAIL  
 START: STA 133+49.2 - END: STA 133+51.7  
 START: STA 134+79.3 - END: STA 135+16.9

\* MIN. 1.0% DRAINAGE MUST BE ACHIEVED FROM EXISTING BUILDINGS. ADJUST AS REQUIRED AND AS APPROVED BY THE ENGINEER.  
 \*\* THICKNESS OF FINISHED CURB, SIDEWALK THICKNESS VARIES  
 \*\*\* FROM STA 133+50 TO STA 134+50 PROJECT CONTROL LINE VARIES. OFFSETS ARE DEFINED BY CONTROL POINTS ON SHEET G2.



**TYPICAL SECTION  
TYPE C**

- NOTES:**
- 1) IT IS PROBABLE THAT ASBESTOS MATERIALS ARE PRESENT IN THE EXISTING FULL DEPTH SIDEWALK JOINTS. THIS MATERIAL MUST BE HANDLED AND DISPOSED OF ACCORDING TO THE SPECIAL PROVISIONS SECTION 510.
  - 2) EXISTING RAILING IS TO BE REMOVED AND REATTACHED PER DETAIL 1 ON SHEET M1. IF ADDITIVE ALTERNATIVE IS ACCEPTED ALL RAIL IS TO BE DEALT WITH PER THE ADDITIVE ALTERNATIVE.
  - 3) NEW SCUPPER LOCATIONS ARE PROVIDED IN THE TABLE ON SHEET H6. A NEW SCUPPER DETAIL IS PROVIDED ON SHEET H8.

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.  
 PE *[Signature]* Date 11-8-11

REVISIONS	DESCRIPTION	DATE	REV

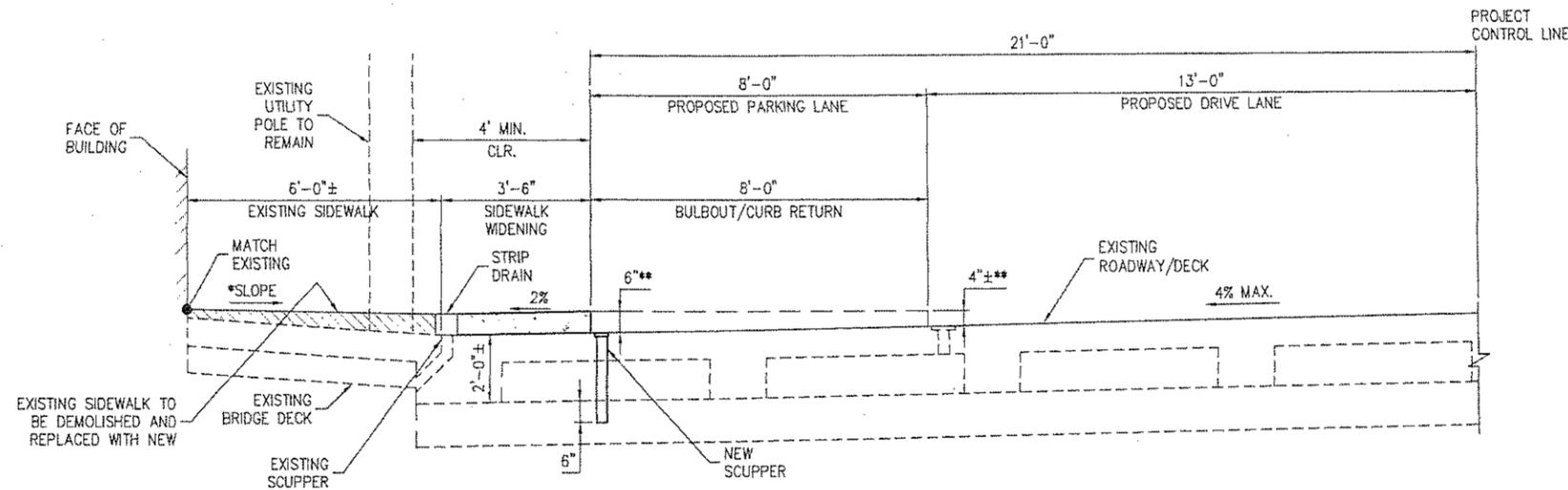


CHECKED BY: CW  
 DRAWN BY: GRD  
 STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
 DESIGN & ENGINEERING SERVICES  
 DIVISION-SOUTHEAST REGION  
**KETCHIKAN:  
 WATER STREET  
 SIDEWALK  
 IMPROVEMENTS  
 PROJECT No. 69345**

**SIDEWALK  
DETAILS**

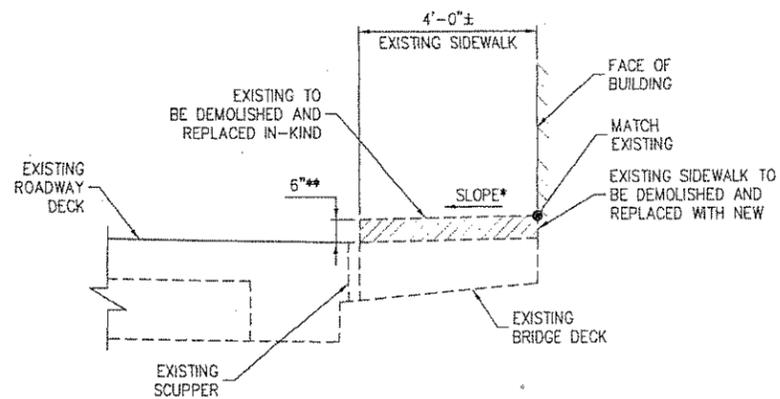
PROJECT DESIGNATION	
ARA-TEA-0902(35)	
STATE	YEAR
ALASKA	2010
SHEET NUMBER	TOTAL SHEETS
B2	53

1/13/10 Drawings 2006 064032.01 Ketchikan Water Street Improvements For Construction 064032.01-B2.dwg



TYPICAL SECTION  
TYPE D

\* MIN. 1.0% DRAINAGE MUST BE ACHIEVED FROM EXISTING BUILDINGS. ADJUST AS REQUIRED AND AS APPROVED BY THE ENGINEER.  
 \*\* THICKNESS OF FINISHED CURB, SIDEWALK THICKNESS VARIES  
 \*\*\* FROM STA 133+50 TO STA 134+50 PROJECT CONTROL LINE VARIES. OFFSETS ARE DEFINED BY CONTROL POINTS ON SHEET G2.



TYPICAL SECTION  
TYPE E

- NOTES:**
- 1) IT IS PROBABLE THAT ASBESTOS MATERIALS ARE PRESENT IN THE EXISTING FULL DEPTH SIDEWALK JOINTS. THIS MATERIAL MUST BE HANDLED AND DISPOSED OF ACCORDING TO THE SPECIAL PROVISIONS SECTION 510.
  - 2) EXISTING RAILING IS TO BE REMOVED AND REATTACHED PER DETAIL 1 ON SHEET M1. IF ADDITIVE ALTERNATIVE IS ACCEPTED ALL RAIL IS TO BE DEALT WITH PER THE ADDITIVE ALTERNATIVE.
  - 3) NEW SCUPPER LOCATIONS ARE PROVIDED IN THE TABLE ON SHEET H6. A NEW SCUPPER DETAIL IS PROVIDED ON SHEET H8.

REVISIONS	DESCRIPTION	REV	DATE

DESIGNED BY: SR

CHECKED BY: GW

DRAWN BY: GRD

2/3/10

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 & PUBLIC FACILITIES  
 DESIGN & ENGINEERING SERVICES  
 DIVISION-SOUTHEAST REGION

**KETCHIKAN:  
 WATER STREET  
 SIDEWALK  
 IMPROVEMENTS  
 PROJECT No. 69345**

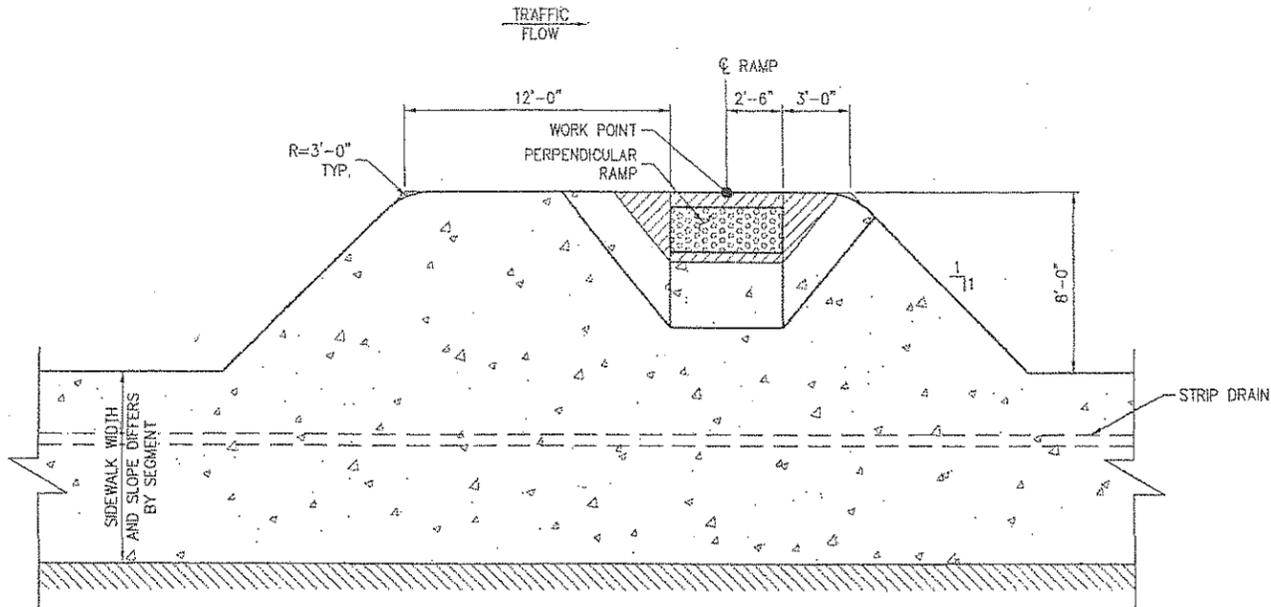
**SIDEWALK  
 DETAILS**

PROJECT DESIGNATION	
ARA-TEA-0902(35)	
STATE	YEAR
ALASKA	2010
SHEET NUMBER	TOTAL SHEETS
B3	53

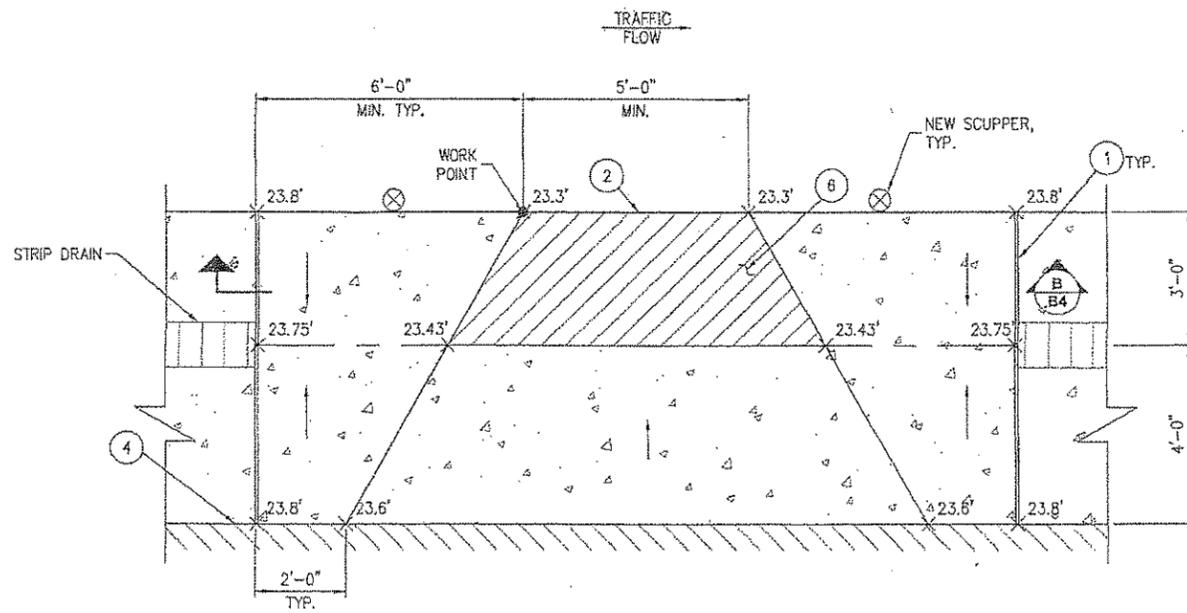
Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.

PE Date 11-8-11

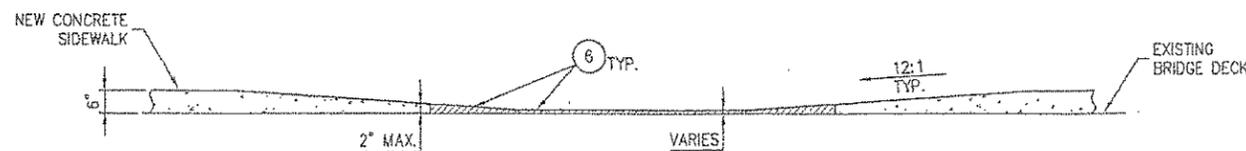
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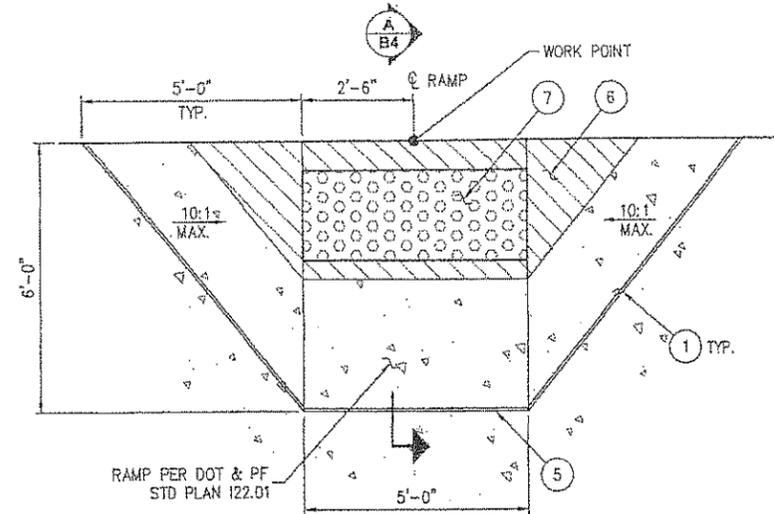
**1**  
B4 **BULB OUT**  
SEE TYPES 'A' AND 'D' DETAILS FOR SECTIONS AND GRADES.



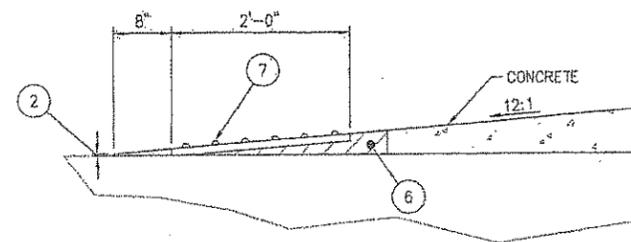
**3**  
B4 **ARCTIC BAR ENTRANCE**



**B**  
B4 **SECTION**



**2**  
B4 **TYPICAL PERPENDICULAR RAMP**



**A**  
B4 **SECTION**

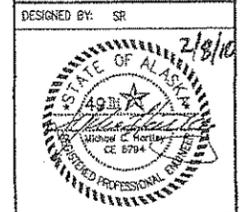
Typical Section Applies to  
R1, R2, R5, R6, R14, R16, R17  
R18, R20, R21, R22

**CONSTRUCTION NOTES:**

- ① 1-INCH THICK, FULL DEPTH EXPANSION JOINT.
- ② 1/4-INCH THICK MAX EASE END ON ALL RAMP SECTIONS.
- ③ SAWCUT INTO OVERLAY ONLY.
- ④ INSTALL EDGE JOINTS PER DETAIL 8.
- ⑤ MATCH EXISTING BRIDGE JOINTS.
- ⑥ REPAIR MORTAR.
- ⑦ TEXTURED PATTERN PER ADOT STD DWG I-21.01.
- ⑧ V-GROOVE, 1/4-INCH DEEP.
- ⑨ STRIP DRAIN.
- ⑩ NEW BRIDGE SCUPPER.
- ⑪ ALL CONCRETE SURFACES SHALL BE COMPLETED WITH A BROOM FINISH PER ADOT 501-3.09.
- ⑫ EXISTING BRIDGE SCUPPER.
- ⑬ BRIDGE RAILING.

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.  
PE *NSA* Date *4-8-11*

REVISIONS	DATE	DESCRIPTION



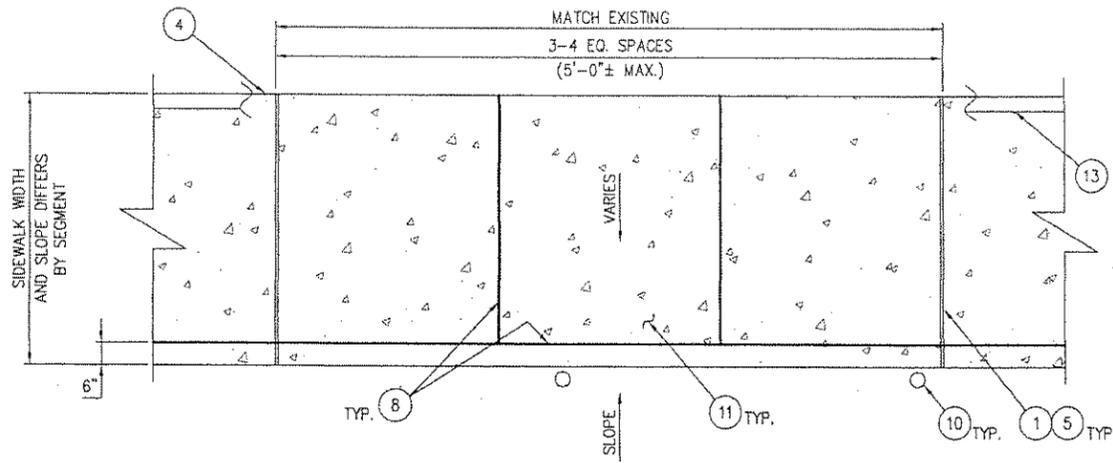
DESIGNED BY: SR  
CHECKED BY: GW  
DRAWN BY: GRD

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
DESIGN & ENGINEERING SERVICES  
DIVISION-SOUTHEAST REGION  
**KETCHIKAN:  
WATER STREET  
SIDEWALK  
IMPROVEMENTS  
PROJECT No. 69345**

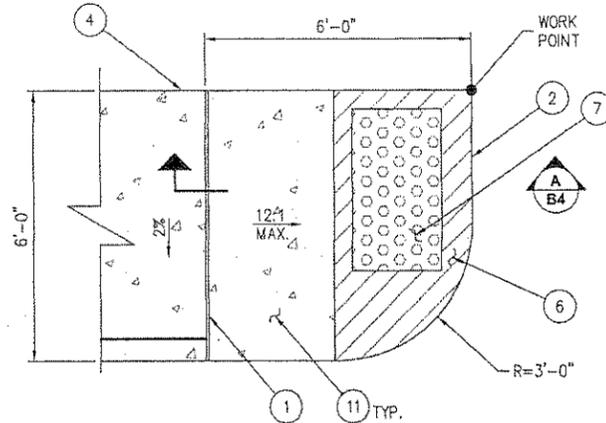
**SIDEWALK  
DETAILS**

PROJECT DESIGNATION	
ARA-TEA-0902(35)	
STATE	YEAR
ALASKA	2010
SHEET NUMBER	TOTAL SHEETS
B4	53





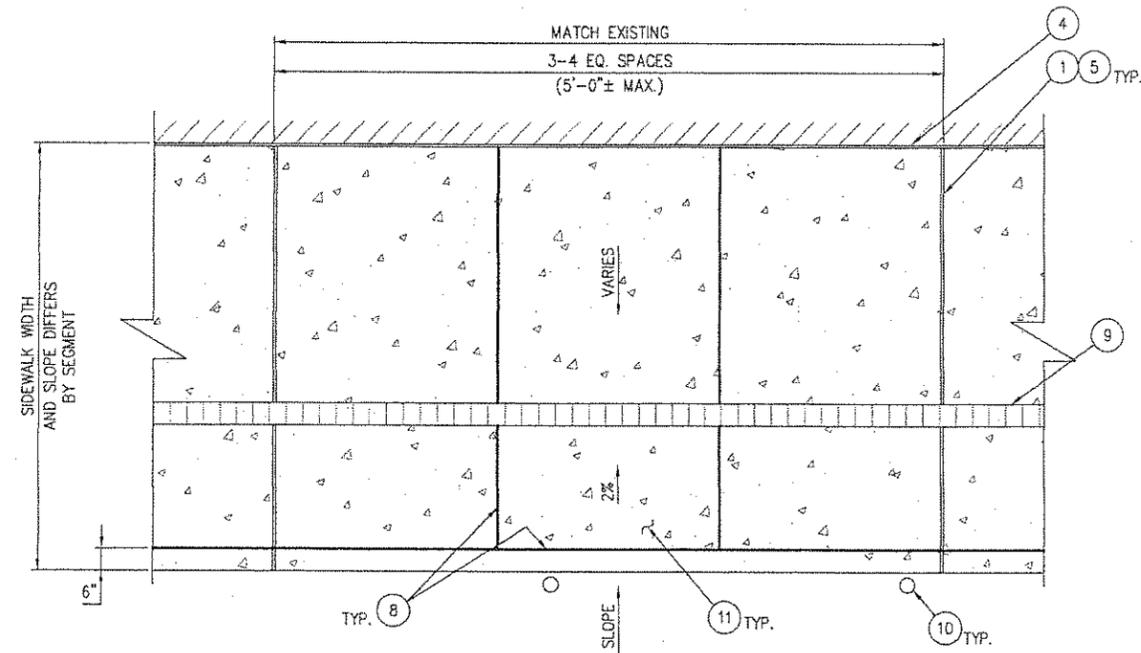
**TYPE A & E SIDEWALK JOINT LAYOUT**



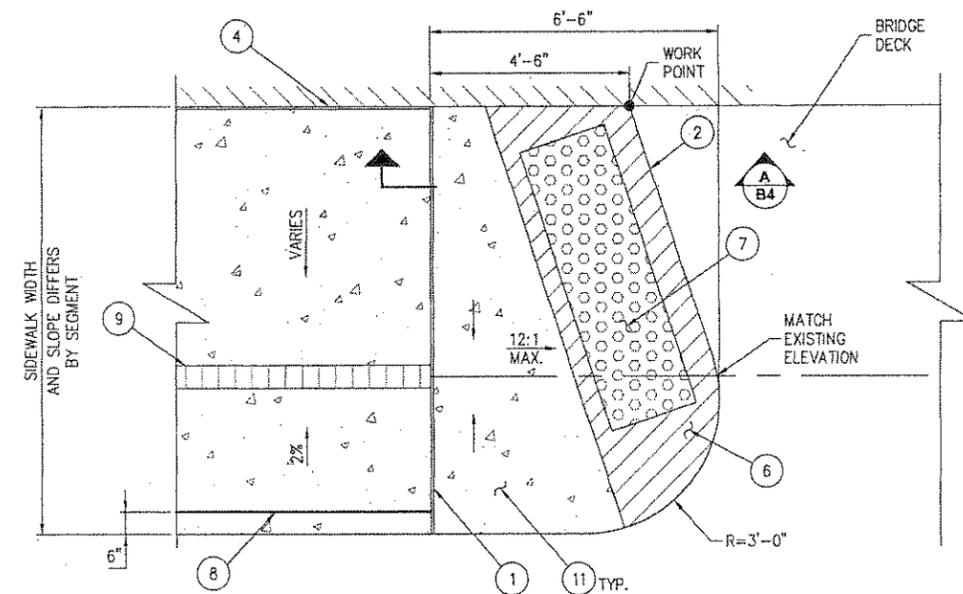
**TYPE E SIDEWALK CURB CUT RAMP**

**CONSTRUCTION NOTES:**

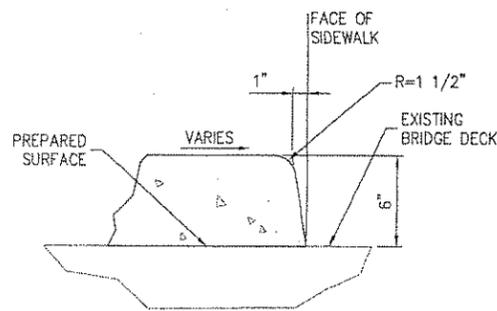
- ① 1-INCH THICK, FULL DEPTH EXPANSION JOINT.
- ② 1/4-INCH THICK MAX EASE END ON ALL RAMP SECTIONS.
- ③ SAWCUT INTO OVERLAY ONLY.
- ④ INSTALL EDGE JOINTS PER DETAIL 8.
- ⑤ MATCH EXISTING BRIDGE JOINTS.
- ⑥ REPAIR MORTAR.
- ⑦ TEXTURED PATTERN PER ADOT STD DWG I-21.01.
- ⑧ V-GROOVE, 1/4-INCH DEEP.
- ⑨ STRIP DRAIN.
- ⑩ NEW BRIDGE SCUPPER.
- ⑪ ALL CONCRETE SURFACES SHALL BE COMPLETED WITH A BROOM FINISH PER ADOT 501-3.09.
- ⑫ EXISTING BRIDGE SCUPPER.
- ⑬ BRIDGE RAILING.



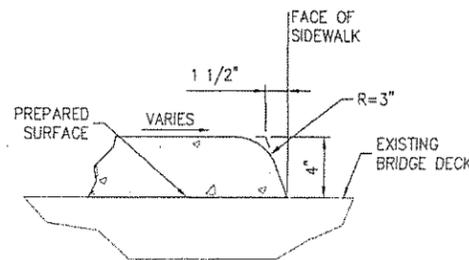
**TYPE B, C & D SIDEWALK JOINT LAYOUT**



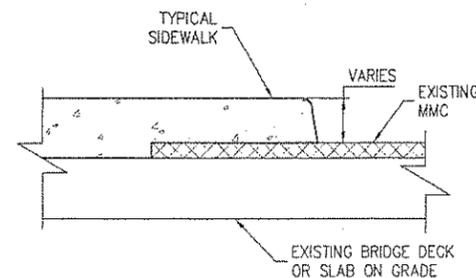
**TYPE B, C & D SIDEWALK CURB CUT RAMP**



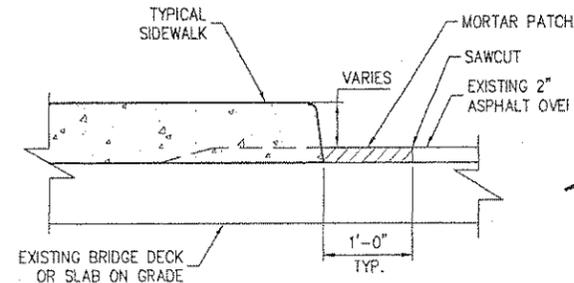
**TYPICAL SIDEWALK EDGE DETAIL**



**TYPICAL BULBOUT EDGE DETAIL**



**TYPICAL MICROSILICA MODIFIED CONCRETE SECTION SURFACING DETAIL**  
FROM STA 126+10.0 TO STA 136+72.0 BOTH SIDES OF STREET  
NOT TO SCALE

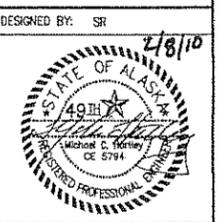


**TYPICAL ASPHALT SECTION SURFACING DETAIL**  
FROM BEGINNING TO STA 126+10.0 AND STA 136+72.0 TO END BOTH SIDES OF STREET  
NOT TO SCALE

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.  
PE [Signature]  
Date 11-2-10

REV	DATE	DESCRIPTION

DESIGNED BY: SR
CHECKED BY: GW
DRAWN BY: GRD



STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
DESIGN & ENGINEERING SERVICES  
DIVISION-SOUTHEAST REGION

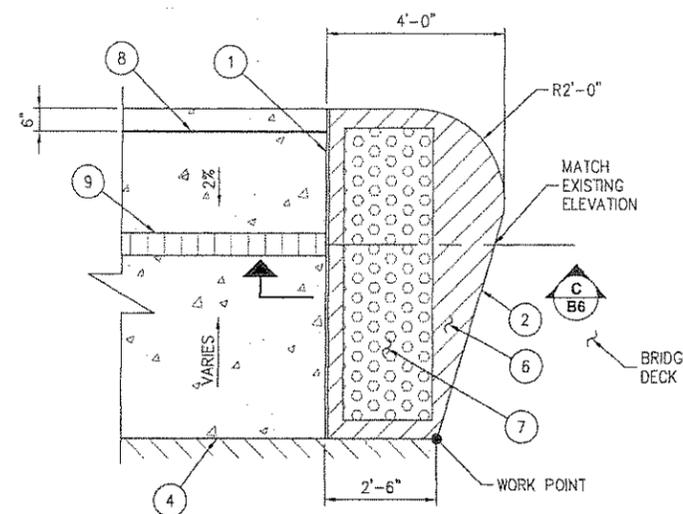
**KETCHIKAN: WATER STREET SIDEWALK IMPROVEMENTS PROJECT No. 69345**

**SIDEWALK DETAILS**

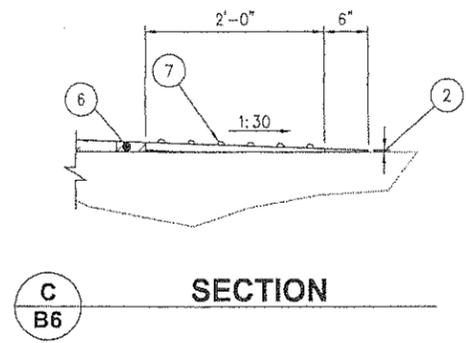
PROJECT DESIGNATION	
ARA-TEA-0902(35)	
STATE	YEAR
ALASKA	2010
SHEET NUMBER	TOTAL SHEETS
B5	53

1/15/10 Drawings 2006\054032.01 Ketchikan Water Street Improvements\For Construction\064032.01-B5.dwg

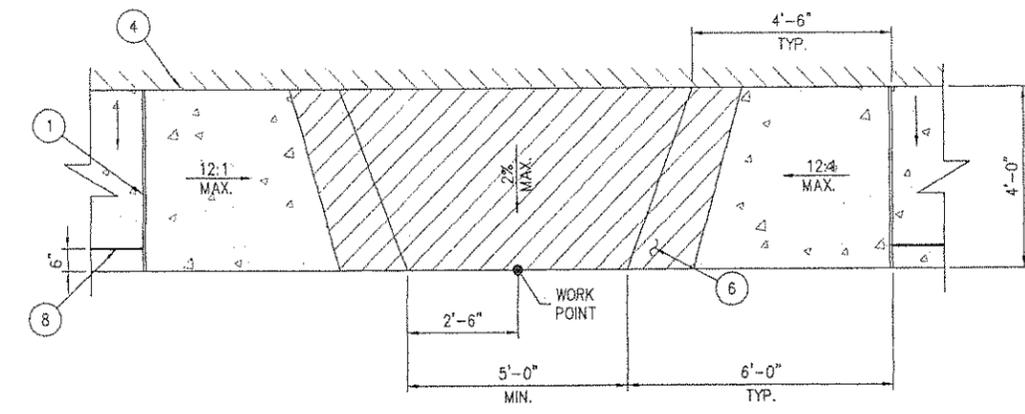
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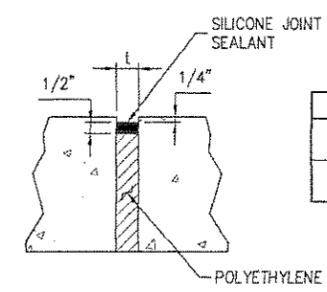
**6 SOCKEYE SAM'S CURB CUT RAMP**  
B6



**C SECTION**  
B6

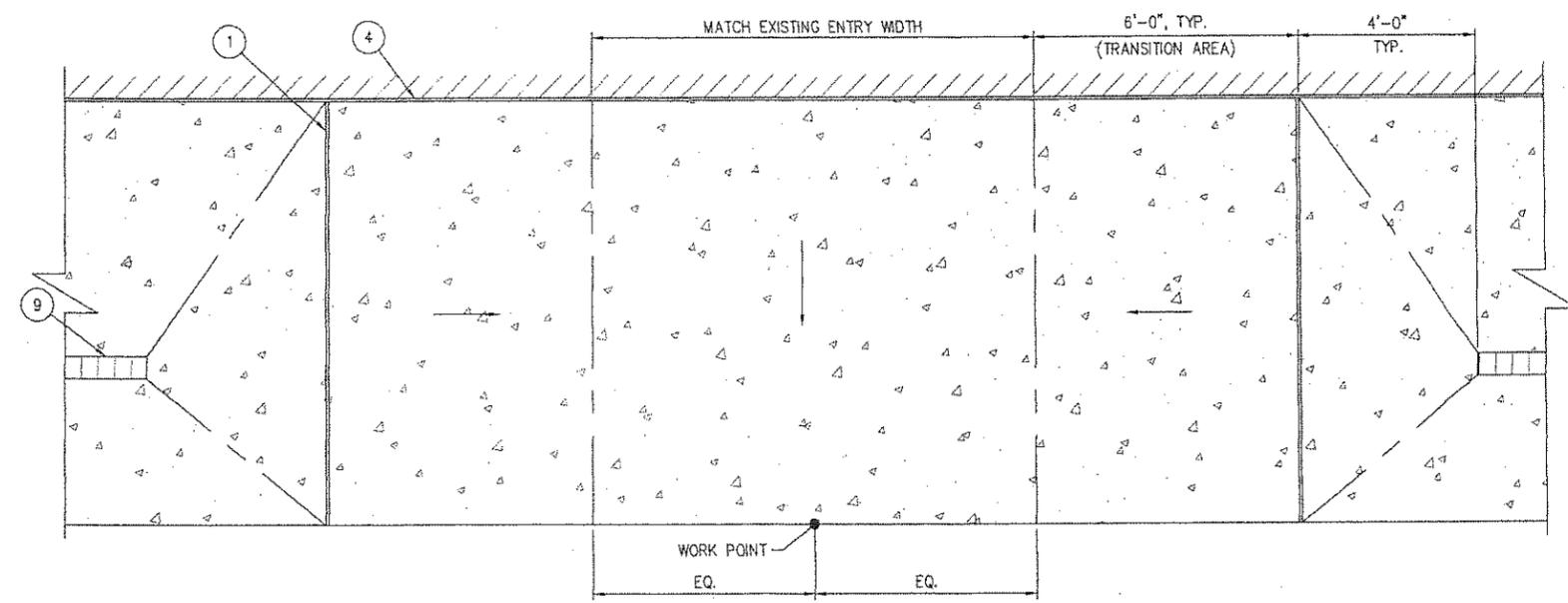


**8 ADA PARKING ACCESS**  
B6

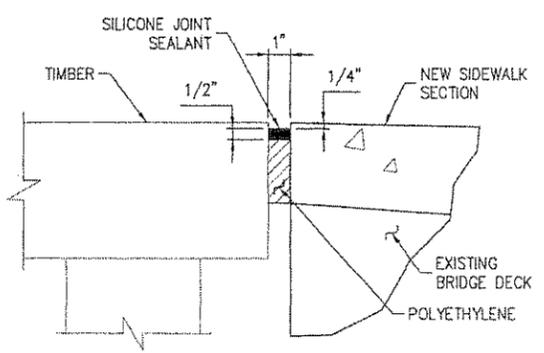


t	LOCATION
1"	ALL SIDEWALK PERPENDICULAR EXPANSION JOINTS
2"	BRIDGE CONTROL JOINT, SHEET G2

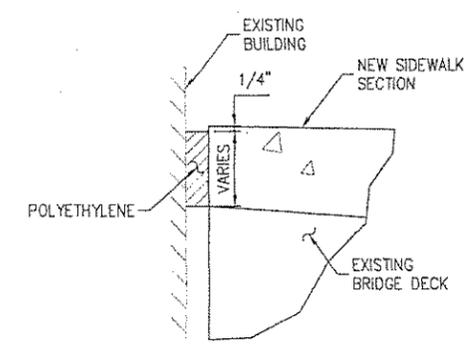
**7 FULL DEPTH EXPANSION JOINT**  
B6



**9 VEHICULAR CURB CUT**  
B6



**TIMBER**



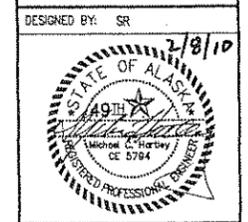
**BUILDING**

**8 EDGE JOINTS**  
B6 INSTALL SMOOTH TOWELED PERIMETER JOINTS WHERE MEETING EXISTING CONCRETE.

**CONSTRUCTION NOTES:**

- ① 1-INCH THICK, FULL DEPTH EXPANSION JOINT.
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- ⑪ ALL CONCRETE SURFACES SHALL BE COMPLETED WITH A BROOM FINISH PER ADOT 501-3.09.
- ⑫ EXISTING BRIDGE SCUPPER.
- ⑬ BRIDGE RAILING.

REVISIONS	DESCRIPTION	DATE	REV



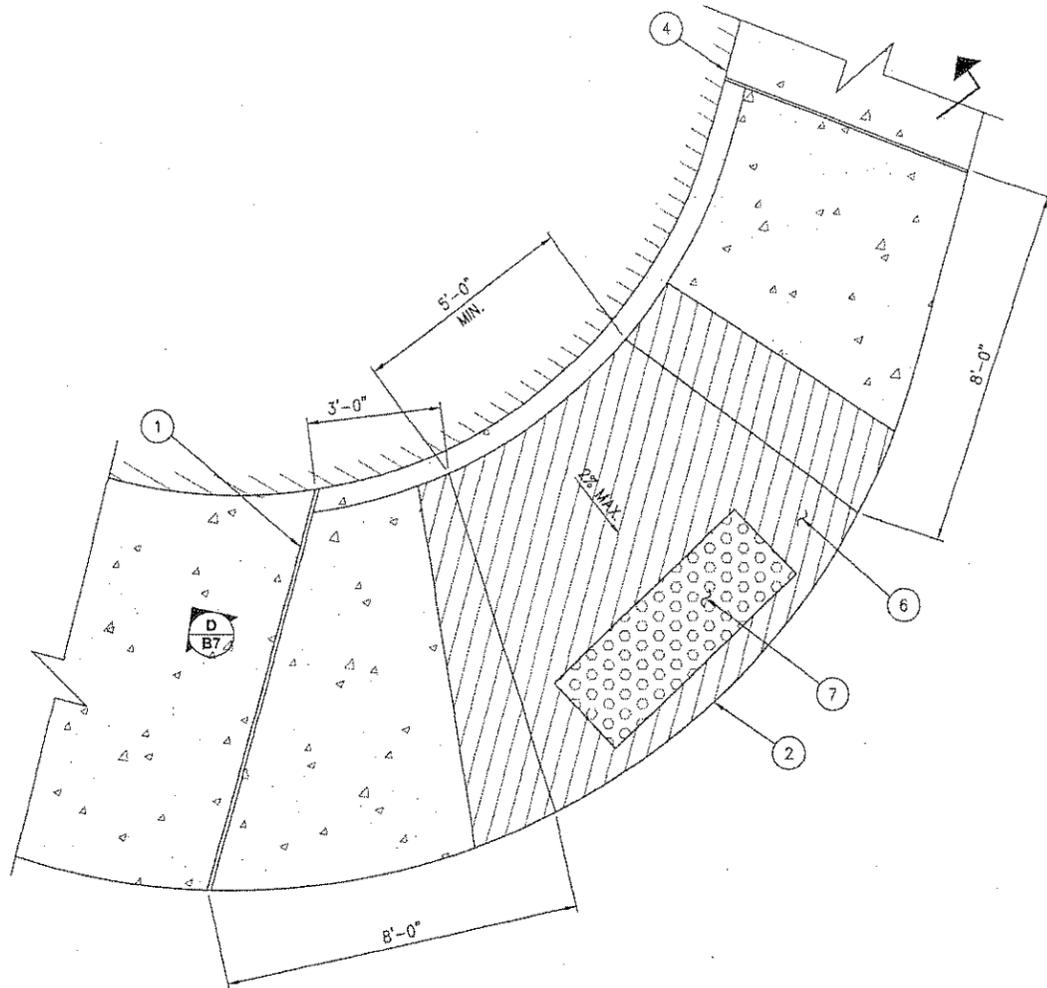
DESIGNED BY: SR  
 CHECKED BY: GW  
 DRAWN BY: GRD  
 STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
 DESIGN & ENGINEERING SERVICES  
 DIVISION-SOUTHEAST REGION  
**KETCHIKAN: WATER STREET SIDEWALK IMPROVEMENTS PROJECT No. 69345**

**SIDEWALK DETAILS**

PROJECT DESIGNATION	
ARA-TEA-0902(35)	
STATE	YEAR
ALASKA	2010
SHEET NUMBER	TOTAL SHEETS
B6	53

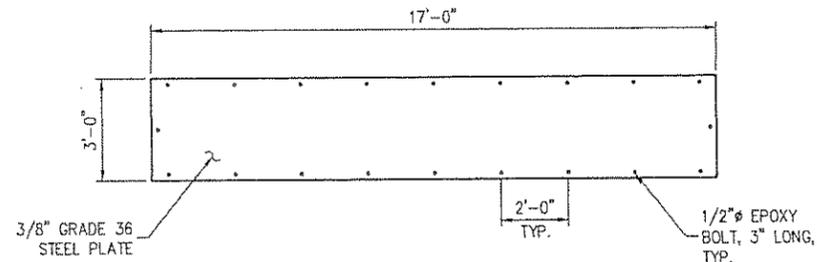
Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.  
 PE *[Signature]* Date 11-8-11

1/15/10 Drawings 2006\064032.01 Ketchikan Water Street Improvements\For Construction\064032.01-B7.dwg



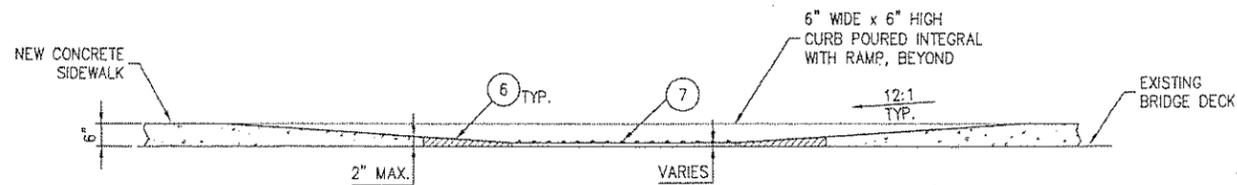
11  
B7

**SCHOENBAR ROAD  
PARALLEL RAMP**



10  
B7

**STEEL PLATE**



D  
B7

**SECTION**

**CONSTRUCTION NOTES:**

- ① 1-INCH THICK, FULL DEPTH EXPANSION JOINT.
- ② 1/4-INCH THICK MAX EASE END ON ALL RAMP SECTIONS.
- ③ SAWCUT INTO OVERLAY ONLY.
- ④ INSTALL EDGE JOINTS PER DETAIL B.
- ⑤ MATCH EXISTING BRIDGE JOINTS.
- ⑥ REPAIR MORTAR.
- ⑦ TEXTURED PATTERN PER ADOT STD DWG I-21.01.
- ⑧ V-GROOVE, 1/4-INCH DEEP.
- ⑨ STRIP DRAIN.
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- ⑪ ALL CONCRETE SURFACES SHALL BE COMPLETED WITH A BROOM FINISH PER ADOT 501-3.09.
- ⑫ EXISTING BRIDGE SCUPPER.
- ⑬ BRIDGE RAILING.

REVISIONS		DESCRIPTION
REV	DATE	

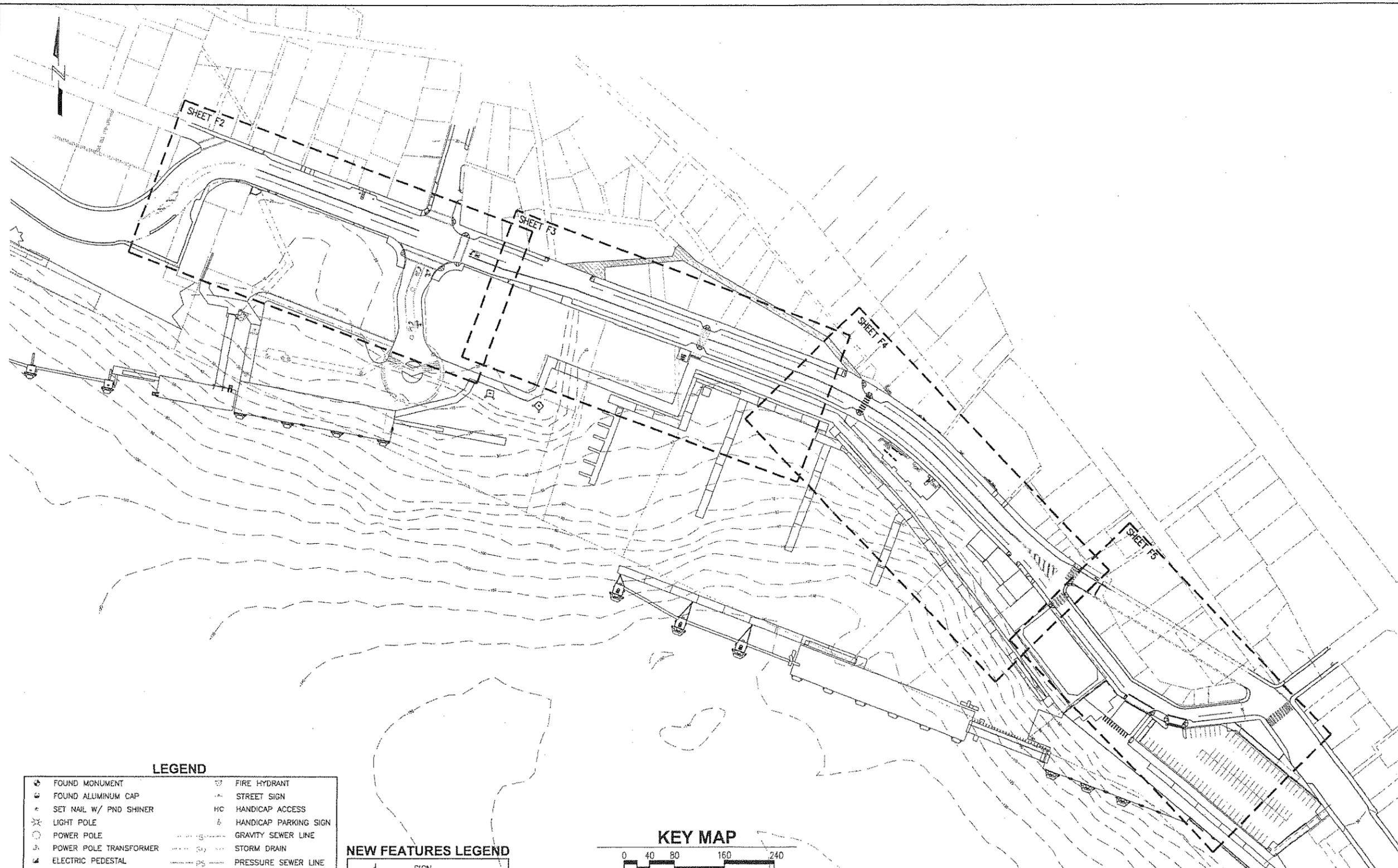
DESIGNED BY:	SR
CHECKED BY:	GW
DRAWN BY:	GRD

STATE OF ALASKA 49th MICHAEL C. HERVEY REGISTERED PROFESSIONAL ENGINEER 2/8/10	
STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION	
KETCHIKAN: WATER STREET SIDEWALK IMPROVEMENTS PROJECT No. 69345	
SIDEWALK DETAILS	
PROJECT DESIGNATION ARA-TEA-0902(35)	
STATE	YEAR
ALASKA	2010
SHEET NUMBER	TOTAL SHEETS
B7	53

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.  
 PE *[Signature]* Date 11-8-11

1/6/10 Drawings 2006\064032.01 Ketchikan Water Street Improvements For Construction\064032.01-F1-F5.dwg



**LEGEND**

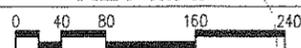
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⊕	FOUND ALUMINUM CAP	⊕	STREET SIGN
⊕	SET NAIL W/ PND SHINER	HC	HANDICAP ACCESS
⊕	LIGHT POLE	⊕	HANDICAP PARKING SIGN
⊕	POWER POLE	---	GRAVITY SEWER LINE
⊕	POWER POLE TRANSFORMER	---	STORM DRAIN
⊕	ELECTRIC PEDESTAL	PS	PRESSURE SEWER LINE
⊕	ELECTRIC TRANSFORMER	---	WATER LINE
⊕	UTILITY VAULT	---	UNDERGROUND ELECTRIC
⊕	TELEPHONE MANHOLE	---	OVERHEAD ELECTRIC
⊕	STORM DRAIN MANHOLE	---	TELEPHONE
⊕	STORM DRAIN CATCH BASIN	---	CHAIN LINK FENCE
⊕	4" STORM DRAIN HOLE	---	RAIL FENCE
⊕	3" STORM DRAIN HOLE	---	BUILDING LINE
⊕	SANITARY SEWER MANHOLE	---	SEAWALL
⊕	WATER VAULT	---	ROW
FF	FINISH FLOOR ELEVATION	▨	EXISTING TIMBER
1	WATER VALVE	△	EXISTING CURB CUT
1	WATER VALVE KEY BOX		

**NEW FEATURES LEGEND**

+	SIGN
⊕	NEW SCUPPER
⊕	NEW CURB INLET
---	NEW STRIP DRAIN
---	CONCRETE SIDEWALK
P#	LAYOUT POINT
-/-	NEW RAILING**
R#	WORK POINT

\*\* REBOLT EXISTING RAILING PER DETAIL 1 ON SHEET M1.

**KEY MAP**



REV#	DATE	DESCRIPTION

DESIGNED BY: SR



CHECKED BY: GW  
DRAWN BY: GRD

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
& PUBLIC FACILITIES  
DESIGN & ENGINEERING SERVICES  
DIVISION-SOUTHEAST REGION

**KETCHIKAN:  
WATER STREET  
SIDEWALK  
IMPROVEMENTS  
PROJECT No. 69345**

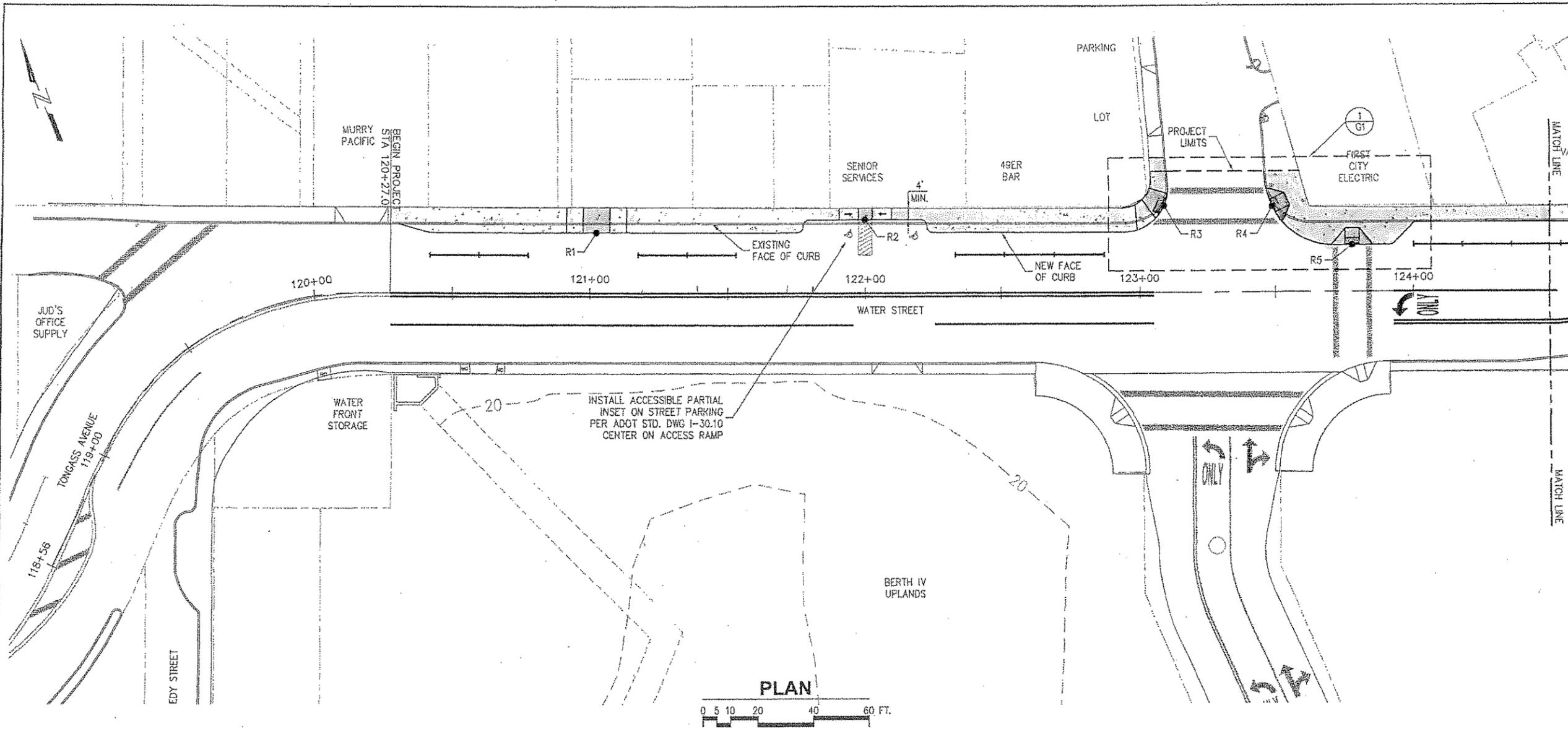
**SIDEWALK  
PLAN**

PROJECT DESIGNATION  
**ARA-TEA-0902(35)**

STATE	YEAR
<b>ALASKA</b>	<b>2010</b>
SHEET NUMBER	TOTAL SHEETS
<b>F1</b>	<b>53</b>

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.  
PE *[Signature]* Date *11-8-11*

1/6/10 Drawings\2006\064032.01 Ketchikan Water Street Improvements\For Construction\064032.01-F1-F5.dwg

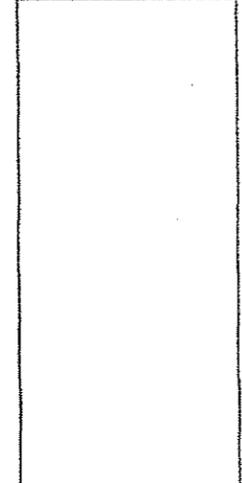


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⊕	FOUND ALUMINUM CAP	⊕	STREET SIGN
⊕	SET NAIL W/ PND SHINER	HC	HANDICAP ACCESS
⊕	LIGHT POLE	⊕	HANDICAP PARKING SIGN
⊕	POWER POLE	---	GRAVITY SEWER LINE
⊕	POWER POLE TRANSFORMER	---	STORM DRAIN
⊕	ELECTRIC PEDESTAL	---	PRESSURE SEWER LINE
⊕	ELECTRIC TRANSFORMER	---	WATER LINE
⊕	UTILITY VAULT	---	UNDERGROUND ELECTRIC
⊕	TELEPHONE MANHOLE	---	OVERHEAD ELECTRIC
⊕	STORM DRAIN MANHOLE	---	TELEPHONE
⊕	STORM DRAIN CATCH BASIN	---	CHAIN LINK FENCE
⊕	4" STORM DRAIN HOLE	---	RAIL FENCE
⊕	3" STORM DRAIN HOLE	---	BUILDING LINE
⊕	SANITARY SEWER MANHOLE	---	SEAWALL
⊕	WATER VAULT	---	ROW
⊕	FINISH FLOOR ELEVATION	▨	EXISTING TIMBER
⊕	WATER VALVE	⊕	EXISTING CURB CUT
⊕	WATER VALVE KEY BOX		

NEW FEATURES LEGEND	
⊕	SIGN
⊕	NEW SCUPPER
⊕	NEW CURB INLET
---	NEW STRIP DRAIN
⊕	CONCRETE SIDEWALK
P#	LAYOUT POINT
---	NEW RAILING**
R#	WORK POINT

\*\* REBOLT EXISTING RAILING PER DETAIL 1 ON SHEET M1.

REVISIONS	DESCRIPTION	DATE	REV



DESIGNED BY: SR

CHECKED BY: OR

DRAWN BY: DRD

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
DESIGN & ENGINEERING SERVICES  
DIVISION-SOUTHEAST REGION

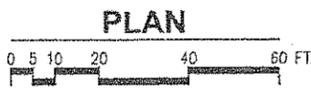
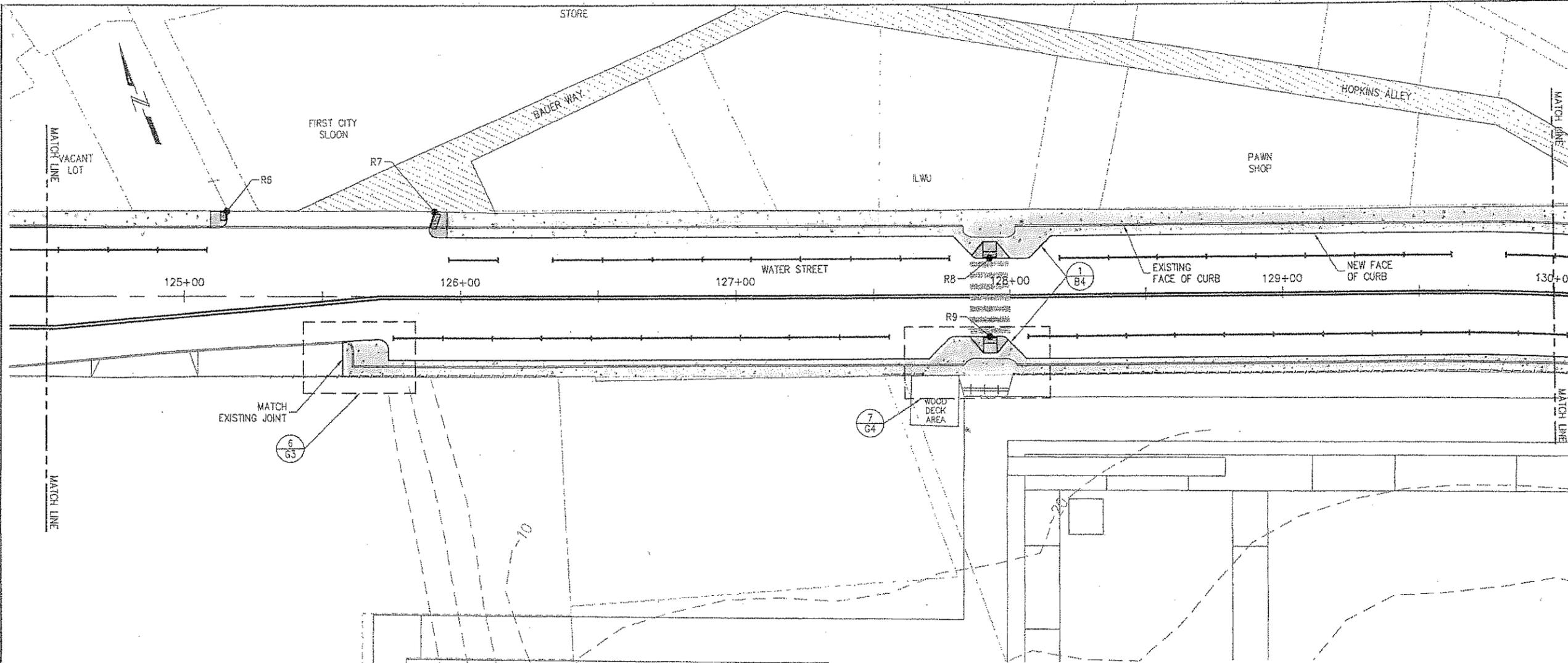
**KETCHIKAN:  
WATER STREET  
SIDEWALK  
IMPROVEMENTS  
PROJECT No. 69345**

PROJECT DESIGNATION	
ARA-TEA-0902(35)	
STATE	YEAR
ALASKA	2010
SHEET NUMBER	TOTAL SHEETS
F2	53

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

PE *[Signature]* Date 11-9-11

1/13/10 Drawings 2006\064032.01 Ketchikan Water Street Improvements\For Construction\064032.01-F1-F5.dwg



**LEGEND**

⊗	FOUND MONUMENT	⊗	FIRE HYDRANT
⊙	FOUND ALUMINUM CAP	⊙	STREET SIGN
*	SET NAIL W/ PND SHINER	HC	HANDICAP ACCESS
⊕	LIGHT POLE	⊕	HANDICAP, PARKING SIGN
⊙	POWER POLE	---	GRAVITY SEWER LINE
⊙	POWER POLE TRANSFORMER	---	STORM DRAIN
⊙	ELECTRIC PEDESTAL	---	PRESSURE SEWER LINE
⊙	ELECTRIC TRANSFORMER	---	WATER LINE
⊙	UTILITY VAULT	---	UNDERGROUND ELECTRIC
⊙	TELEPHONE MANHOLE	---	OVERHEAD ELECTRIC
⊙	STORM DRAIN MANHOLE	---	TELEPHONE
⊙	STORM DRAIN CATCH BASIN	---	CHAIN LINK FENCE
⊙	4" STORM DRAIN HOLE	---	RAIL FENCE
⊙	3" STORM DRAIN HOLE	---	BUILDING LINE
⊙	SANITARY SEWER MANHOLE	---	SEAWALL
⊙	WATER VAULT	---	ROW
FF	FINISH FLOOR ELEVATION	▨	EXISTING TIMBER
+	WATER VALVE	△	EXISTING CURB CUT
+	WATER VALVE KEY BOX		

**NEW FEATURES LEGEND**

⊕	SIGN
⊙	NEW SCUPPER
⊙	NEW CURB INLET
---	NEW STRIP DRAIN
---	CONCRETE SIDEWALK
P#	LAYOUT POINT
---	NEW RAILING**
R#	WORK POINT

\*\* REBOLT EXISTING RAILING PER DETAIL 1 ON SHEET M1.

REVISIONS	DESCRIPTION	DATE	REV

DESIGNED BY: SR

CHECKED BY: GW  
 DRAWN BY: GRD

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 & PUBLIC FACILITIES  
 DESIGN & ENGINEERING SERVICES  
 DIVISION-SOUTHEAST REGION

**KETCHIKAN:  
 WATER STREET  
 SIDEWALK  
 IMPROVEMENTS  
 PROJECT No. 69345**

**SIDEWALK  
 PLAN**

PROJECT DESIGNATION	
ARA-TEA-0902(35)	
STATE	YEAR
ALASKA	2010
SHEET NUMBER	TOTAL SHEETS
F3	53

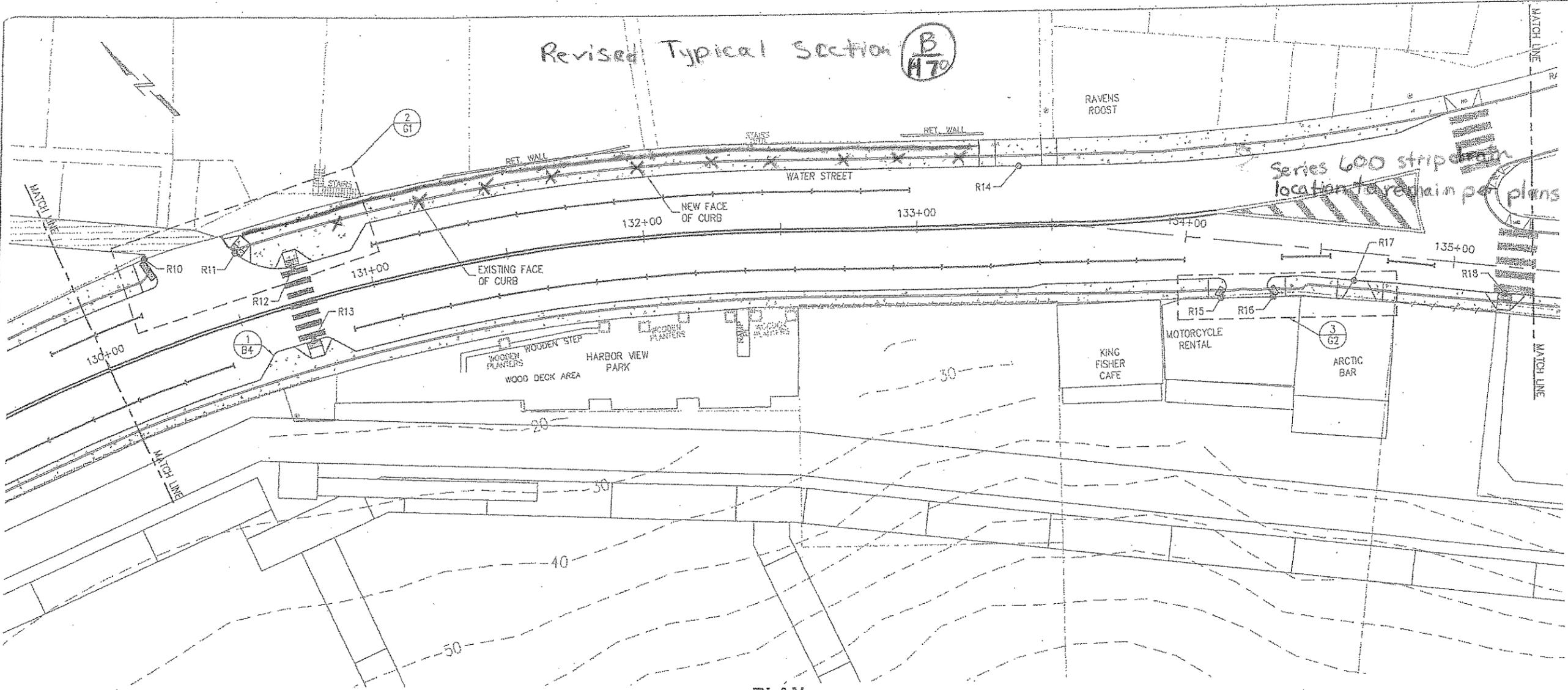
Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.

PE Date 11-8-11

1/7/10 Drawings 2006\064032.01 Ketchikan Water Street Improvements For Construction\064032.01-F1-F5.dwg

Revised Typical Section **(B)**  
170

Sheet 3  
of 6



PLAN

LEGEND

⊗	FOUND MONUMENT	⊗	FIRE HYDRANT
⊕	FOUND ALUMINUM CAP	—	STREET SIGN
+	SET NAIL W/ PND SHINER	HC	HANDICAP ACCESS
⊙	LIGHT POLE	⊗	HANDICAP PARKING SIGN
⊙	POWER POLE	—	GRAVITY SEWER LINE
⊕	POWER POLE TRANSFORMER	—	STORM DRAIN
⊕	ELECTRIC PEDESTAL	—	PRESSURE SEWER LINE
⊕	ELECTRIC TRANSFORMER	—	WATER LINE
⊕	UTILITY VAULT	—	UNDERGROUND ELECTRIC
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⊕	WATER VAULT	—	ROW
F.F.	FINISH FLOOR ELEVATION	▨	EXISTING TIMBER
⊕	WATER VALVE	⊕	EXISTING CURB CUT
⊕	WATER VALVE KEY BOX		

NEW FEATURES LEGEND

⊕	SIGN
⊕	NEW SCUPPER
⊕	NEW CURB INLET
⊕	NEW STRIP DRAIN
⊕	CONCRETE SIDEWALK
P#	LAYOUT POINT
—	NEW RAILING**
R#	WORK POINT

\*\* REBOLT EXISTING RAILING PER DETAIL 1 ON SHEET #1.

REVISIONS	DESCRIPTION	DATE	REV

DESIGNED BY: SR



CHECKED BY: GW

DRAWN BY: GRID

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
& PUBLIC FACILITIES  
DESIGN & ENGINEERING SERVICES  
DIVISION-SOUTHEAST REGION

KETCHIKAN:  
WATER STREET  
SIDEWALK  
IMPROVEMENTS  
PROJECT No. 69345

SIDEWALK  
PLAN

PROJECT DESIGNATION  
ARA-TEA-0902(35)

STATE	YEAR
ALASKA	2010
SHEET NUMBER	TOTAL SHEETS
F4	53

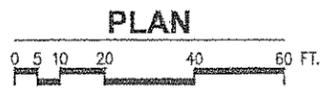
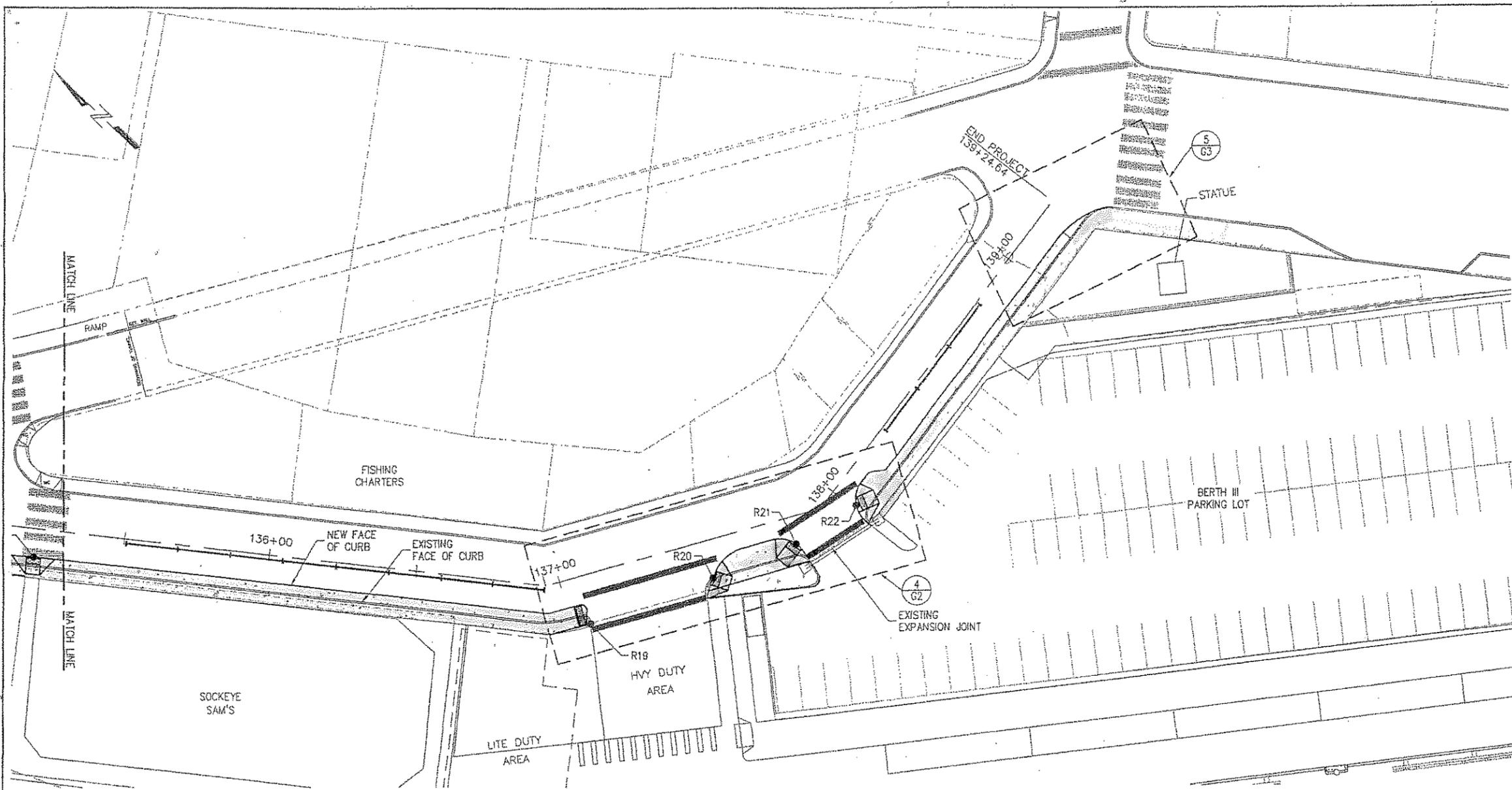
Rev 8-3-10  
7-30-10

Rev Sheet 2 by [signature]

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

PE [signature] Date 11-8-11

1/7/10 Drawings 2006\064032.01 Ketchikan Water Street Improvements For Construction\064032.01-F1-F5.dwg



LEGEND			
⊕	FOUND MONUMENT	⊕	FIRE HYDRANT
⊙	FOUND ALUMINUM CAP	—	STREET SIGN
*	SET NAIL W/ PND SHINER	HC	HANDICAP ACCESS
⊙	LIGHT POLE	⊕	HANDICAP PARKING SIGN
⊙	POWER POLE	—S—	GRAVITY SEWER LINE
⊙	POWER POLE TRANSFORMER	—SD—	STORM DRAIN
⊙	ELECTRIC PEDESTAL	—PS—	PRESSURE SEWER LINE
⊙	ELECTRIC TRANSFORMER	—W—	WATER LINE
⊙	UTILITY VAULT	—UE—	UNDERGROUND ELECTRIC
⊙	TELEPHONE MANHOLE	—OE—	OVERHEAD ELECTRIC
⊙	STORM DRAIN MANHOLE	—T—	TELEPHONE
⊙	STORM DRAIN CATCH BASIN	—X—	CHAIN LINK FENCE
⊙	4" STORM DRAIN HOLE	—R—	RAIL FENCE
⊙	3" STORM DRAIN HOLE	—BL—	BUILDING LINE
⊙	SANITARY SEWER MANHOLE	—S—	SEAWALL
⊙	WATER VAULT	—R—	ROW
F.F.	FINISH FLOOR ELEVATION	▨	EXISTING TIMBER
+	WATER VALVE	Δ	EXISTING CURB CUT
—	WATER VALVE KEY BOX		

NEW FEATURES LEGEND	
⊕	SIGN
⊕	NEW SCUPPER
⊕	NEW CURB INLET
⊕	NEW STRIP DRAIN
⊕	CONCRETE SIDEWALK
P#	LAYOUT POINT
R#	NEW RAILING**
R#	WORK POINT

\*\* REBOLT EXISTING RAILING PER DETAIL 1 ON SHEET M1.

REV	DATE	DESCRIPTION

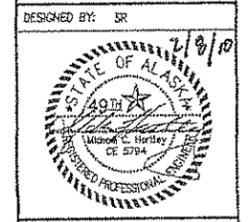
DESIGNED BY: SR

CHECKED BY: CR

DRAWN BY: CRD

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
 DESIGN & ENGINEERING SERVICES  
 DIVISION-SOUTHEAST REGION

**KETCHIKAN:  
 WATER STREET  
 SIDEWALK  
 IMPROVEMENTS  
 PROJECT No. 69345**



PROJECT DESIGNATION  
**ARA-TEA-0902(35)**

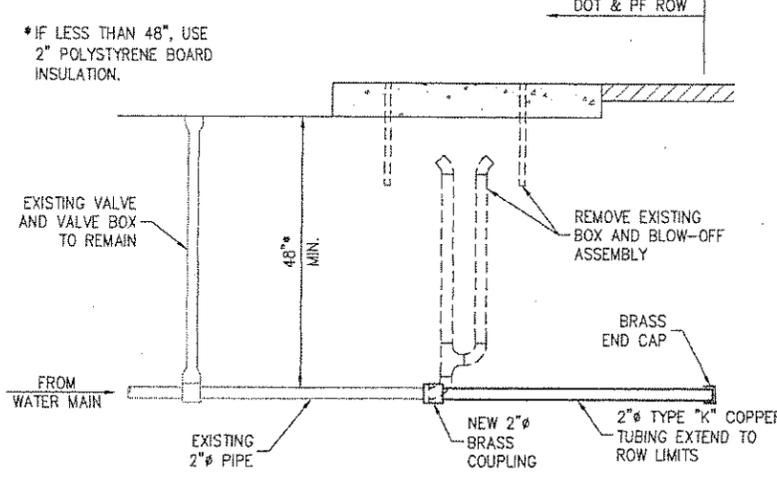
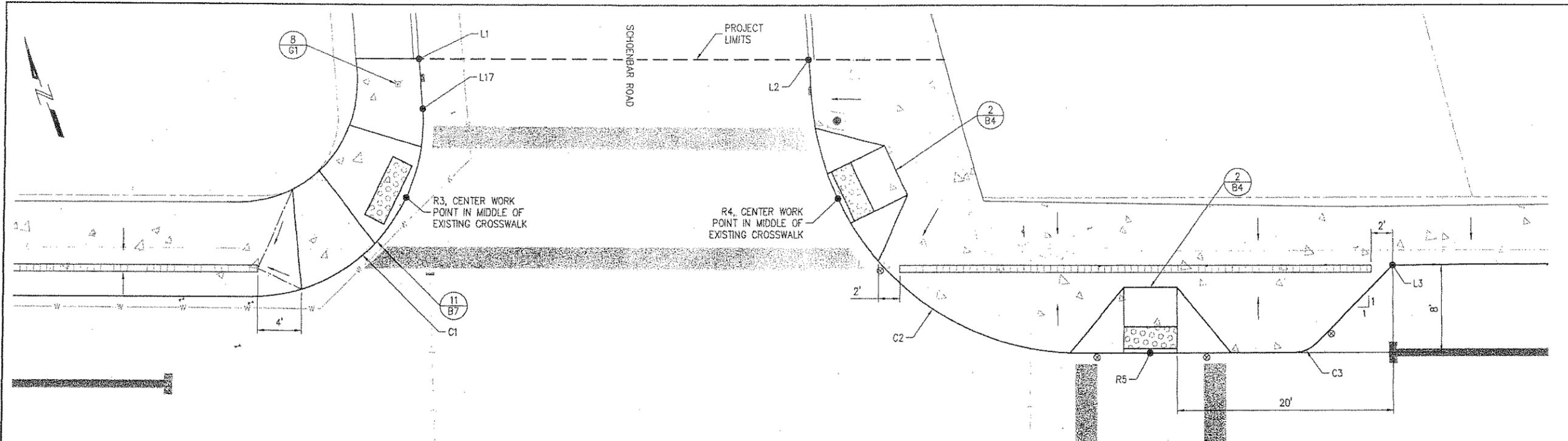
STATE	YEAR
ALASKA	2010
SHEET NUMBER	TOTAL SHEETS
F5	53

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PE Date 11-8-11



1/15/10 Drawings 2006\064032.01 Ketchikan Water Street Improvements For Construction\064032.01-G1-G4.dwg



**8 WATER SERVICE CONNECTION**

G1

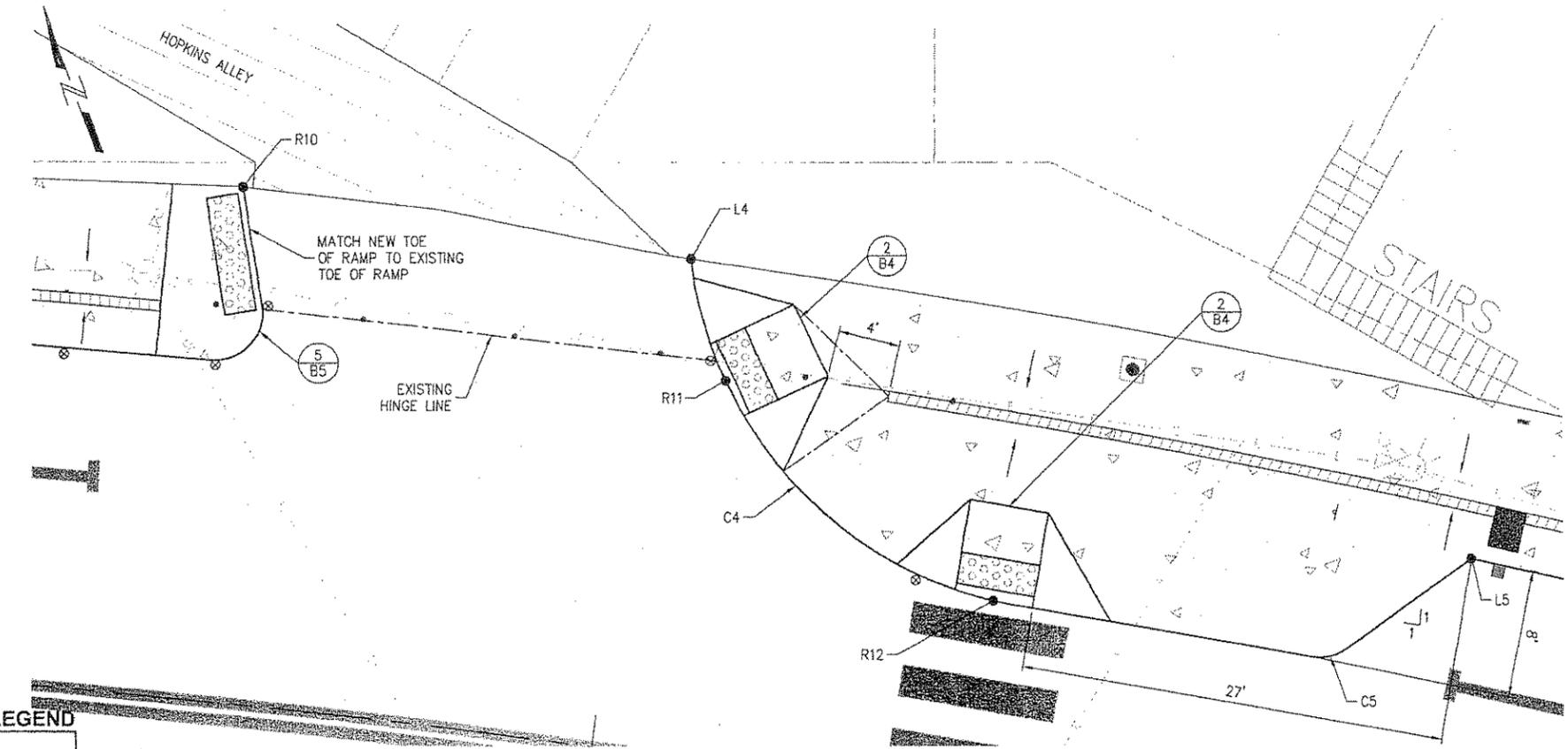
LEGEND			
⊕	FOUND MONUMENT	⊕	FIRE HYDRANT
⊙	FOUND ALUMINUM CAP	⊙	STREET SIGN
⊖	SET NAIL W/ PND SHINER	HC	HANDICAP ACCESS
⊙	LIGHT POLE	⊙	HANDICAP PARKING SIGN
⊙	POWER POLE	—S—	GRAVITY SEWER LINE
⊙	POWER POLE TRANSFORMER	—SD—	STORM DRAIN
⊙	ELECTRIC PEDESTAL	—PS—	PRESSURE SEWER LINE
⊙	ELECTRIC TRANSFORMER	—W—	WATER LINE
⊙	UTILITY VAULT	—UE—	UNDERGROUND ELECTRIC
⊙	TELEPHONE MANHOLE	—OE—	OVERHEAD ELECTRIC
⊙	STORM DRAIN MANHOLE	—T—	TELEPHONE
⊙	STORM DRAIN CATCH BASIN	—X—	CHAIN LINK FENCE
⊙	4" STORM DRAIN HOLE	—R—	RAIL FENCE
⊙	3" STORM DRAIN HOLE	—BL—	BUILDING LINE
⊙	SANITARY SEWER MANHOLE	—SW—	SEAWALL
⊙	WATER VAULT	—ROW—	ROW
FF	FINISH FLOOR ELEVATION	▨	EXISTING TIMBER
+	WATER VALVE	⊔	EXISTING CURB CUT
+	WATER VALVE KEY BOX		

**NEW FEATURES LEGEND**

⊕	SIGN
⊕	NEW 6" SCUPPER
⊕	NEW CURB INLET
⊕	NEW STRIP DRAIN
⊕	CONCRETE SIDEWALK

**1 SCHOENBAR ROAD**

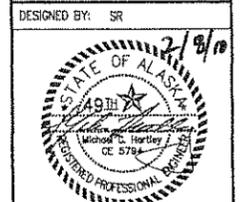
G1 0 2.5 5 10 15 FT.



**2 HOPKINS ALLEY**

G1 0 2.5 5 10 15 FT.

REV	DATE	DESCRIPTION

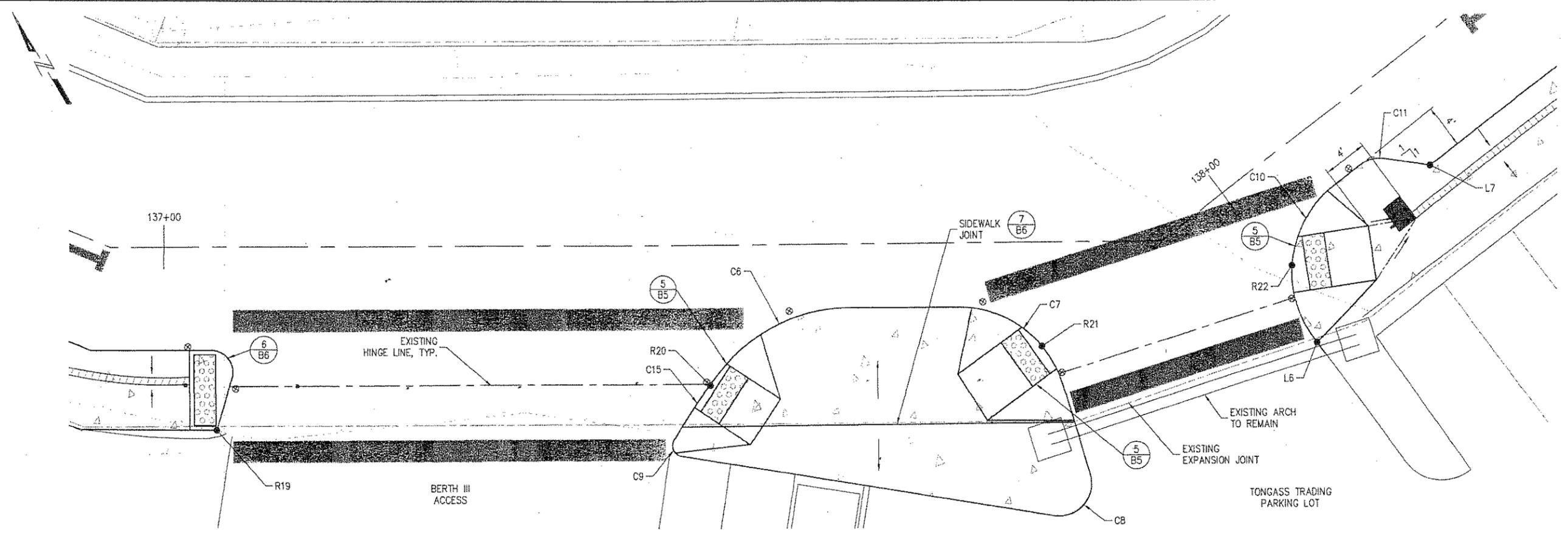


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 CHECKED BY: GW  
 DRAWN BY: GRD  
 STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
 DESIGN & ENGINEERING SERVICES  
 DIVISION-SOUTHEAST REGION  
**KETCHIKAN: WATER STREET SIDEWALK IMPROVEMENTS**  
 PROJECT No. 69345

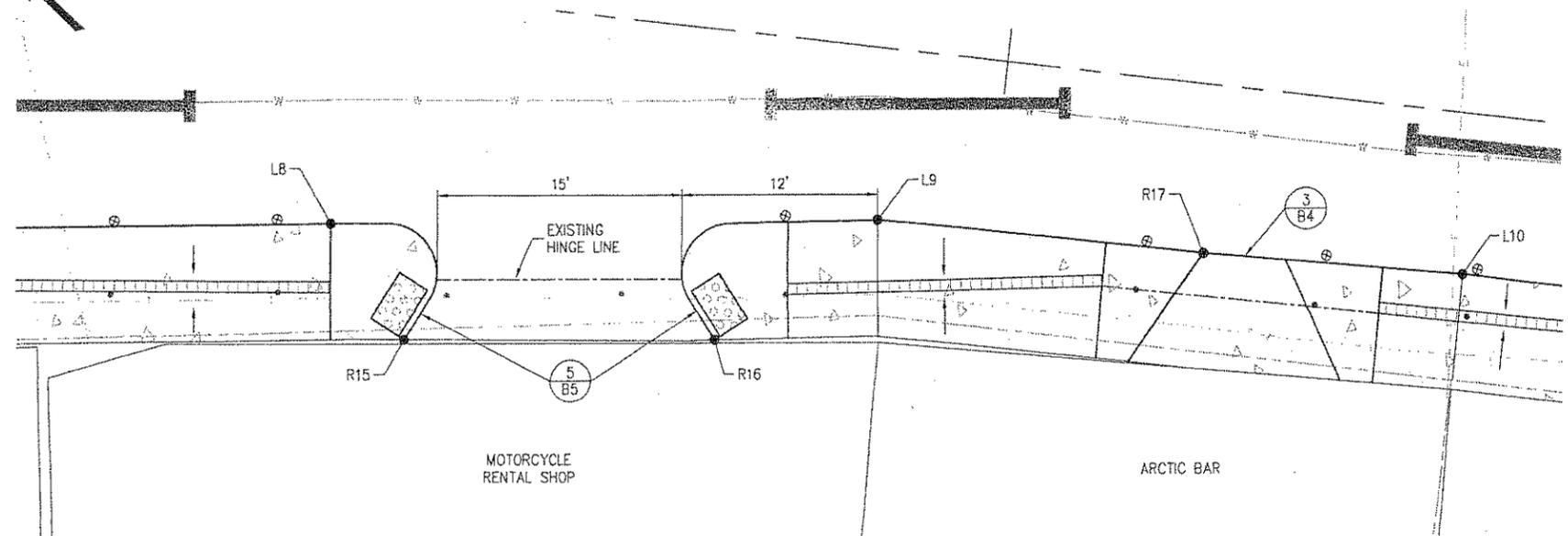
PROJECT DESIGNATION	
ARA-TEA-0902(35)	
STATE	YEAR
ALASKA	2010
SHEET NUMBER	TOTAL SHEETS
G1	53

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1/15/10 Drawings\2005\064032.01 Ketchikan Water Street Improvements For Construction\064032.01-G1-C4.dwg



**4**  
G2  
BERTH III PARKING LOT  
0 2.5 5 10 15 FT.



**3**  
G2  
BUILDING ACCESS  
0 2.5 5 10 15 FT.

**LEGEND**

⊕	FOUND MONUMENT	⊕	FIRE HYDRANT
⊙	FOUND ALUMINUM CAP	—	STREET SIGN
+	SET NAIL W/ PND SHINER	HC	HANDICAP ACCESS
⊙	LIGHT POLE	⊕	HANDICAP PARKING SIGN
⊙	POWER POLE	—	GRAVITY SEWER LINE
⊙	POWER POLE TRANSFORMER	SD	STORM DRAIN
⊙	ELECTRIC PEDESTAL	—	PRESSURE SEWER LINE
⊙	ELECTRIC TRANSFORMER	—	WATER LINE
⊙	UTILITY VAULT	—	UNDERGROUND ELECTRIC
⊙	TELEPHONE MANHOLE	—	OVERHEAD ELECTRIC
⊙	STORM DRAIN MANHOLE	—	TELEPHONE
⊙	STORM DRAIN CATCH BASIN	—	CHAIN LINK FENCE
⊙	4" STORM DRAIN HOLE	—	RAIL FENCE
⊙	3" STORM DRAIN HOLE	—	BUILDING LINE
⊙	SANITARY SEWER MANHOLE	—	SEAWALL
⊙	WATER VAULT	—	ROW
⊙	FINISH FLOOR ELEVATION	▨	EXISTING TIMBER
⊙	WATER VALVE	⊕	EXISTING CURB CUT
⊙	WATER VALVE KEY BOX		

**NEW FEATURES LEGEND**

⊕	SIGN
⊕	NEW 6" SCUPPER
⊕	NEW CURB INLET
▨	NEW STRIP DRAIN
⊕	CONCRETE SIDEWALK

REV	DATE	DESCRIPTION



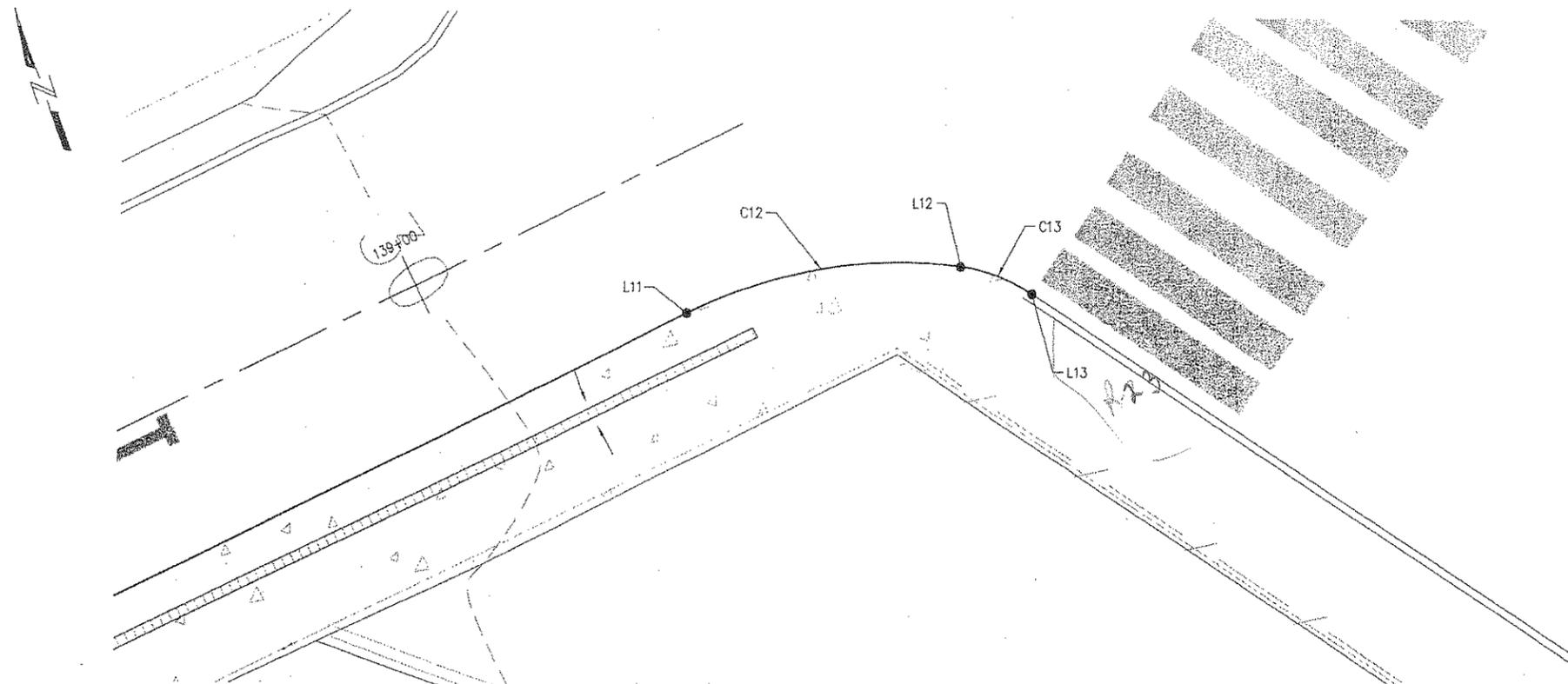
DESIGNED BY: SR  
 CHECKED BY: GW  
 DRAWN BY: GRD  
 STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
 DESIGN & ENGINEERING SERVICES  
 DIVISION-SOUTHEAST REGION  
**KETCHIKAN: WATER STREET SIDEWALK IMPROVEMENTS**  
 PROJECT No. 69345

**INTERSECTION DRIVEWAYS**

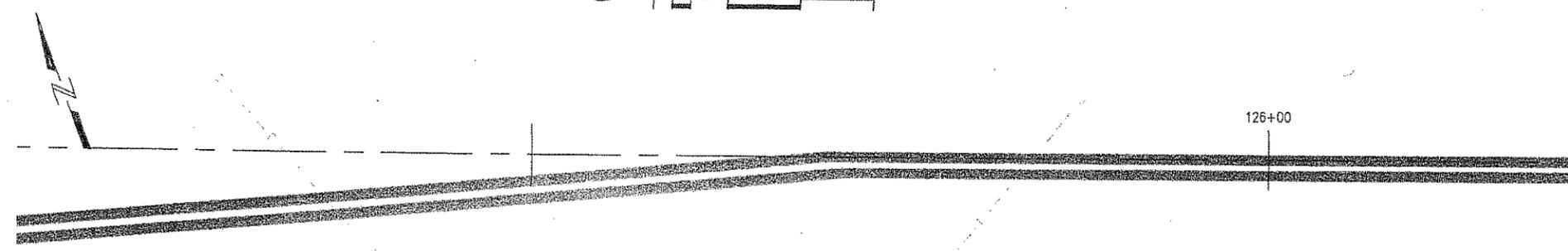
PROJECT DESIGNATION	
ARA-TEA-0902(35)	
STATE	YEAR
ALASKA	2010
SHEET NUMBER	TOTAL SHEETS
G2	53

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.  
 PE *[Signature]* Date 11-5-11

1/13/10 Drawings\2006\064032.01 Ketchikan Water Street Improvements For Construction\064032.01-G1-G4.dwg



5 EAGLE PARK  
G3 0 2.5 5 10 15 FT.



6 START WATER SIDE WORK  
G3 0 2.5 5 10 15 FT.

**LEGEND**

⊙	FOUND MONUMENT	⊕	FIRE HYDRANT
⊙	FOUND ALUMINUM CAP	⬆	STREET SIGN
+	SET NAIL W/ PND SHINER	HC	HANDICAP ACCESS
⊙	LIGHT POLE	⊕	HANDICAP PARKING SIGN
⊙	POWER POLE	---	GRAVITY SEWER LINE
⊕	POWER POLE TRANSFORMER	---	STORM DRAIN
⊕	ELECTRIC PEDESTAL	---	PRESSURE SEWER LINE
⊕	ELECTRIC TRANSFORMER	---	WATER LINE
⊕	UTILITY VAULT	---	UNDERGROUND ELECTRIC
⊕	TELEPHONE MANHOLE	---	OVERHEAD ELECTRIC
⊕	STORM DRAIN MANHOLE	---	TELEPHONE
⊕	STORM DRAIN CATCH BASIN	---	CHAIN LINK FENCE
⊕	4" STORM DRAIN HOLE	---	RAIL FENCE
⊕	3" STORM DRAIN HOLE	---	BUILDING LINE
⊕	SANITARY SEWER MANHOLE	---	SEAWALL
⊕	WATER VAULT	---	ROW
FF	FINISH FLOOR ELEVATION	▨	EXISTING TIMBER
⊕	WATER VALVE	▨	EXISTING CURB CUT
⊕	WATER VALVE KEY BOX		

**NEW FEATURES LEGEND**

⊕	SIGN
⊕	NEW 6" SCUPPER
▨	NEW CURB INLET
▨	NEW STRIP DRAIN
▨	CONCRETE SIDEWALK

REV	DATE	DESCRIPTION

DESIGNED BY: SR



CHECKED BY: GW  
DRAWN BY: GRD

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
& PUBLIC FACILITIES  
DESIGN & ENGINEERING SERVICES  
DIVISION-SOUTHEAST REGION  
**KETCHIKAN:  
WATER STREET  
SIDEWALK  
IMPROVEMENTS  
PROJECT No. 69345**

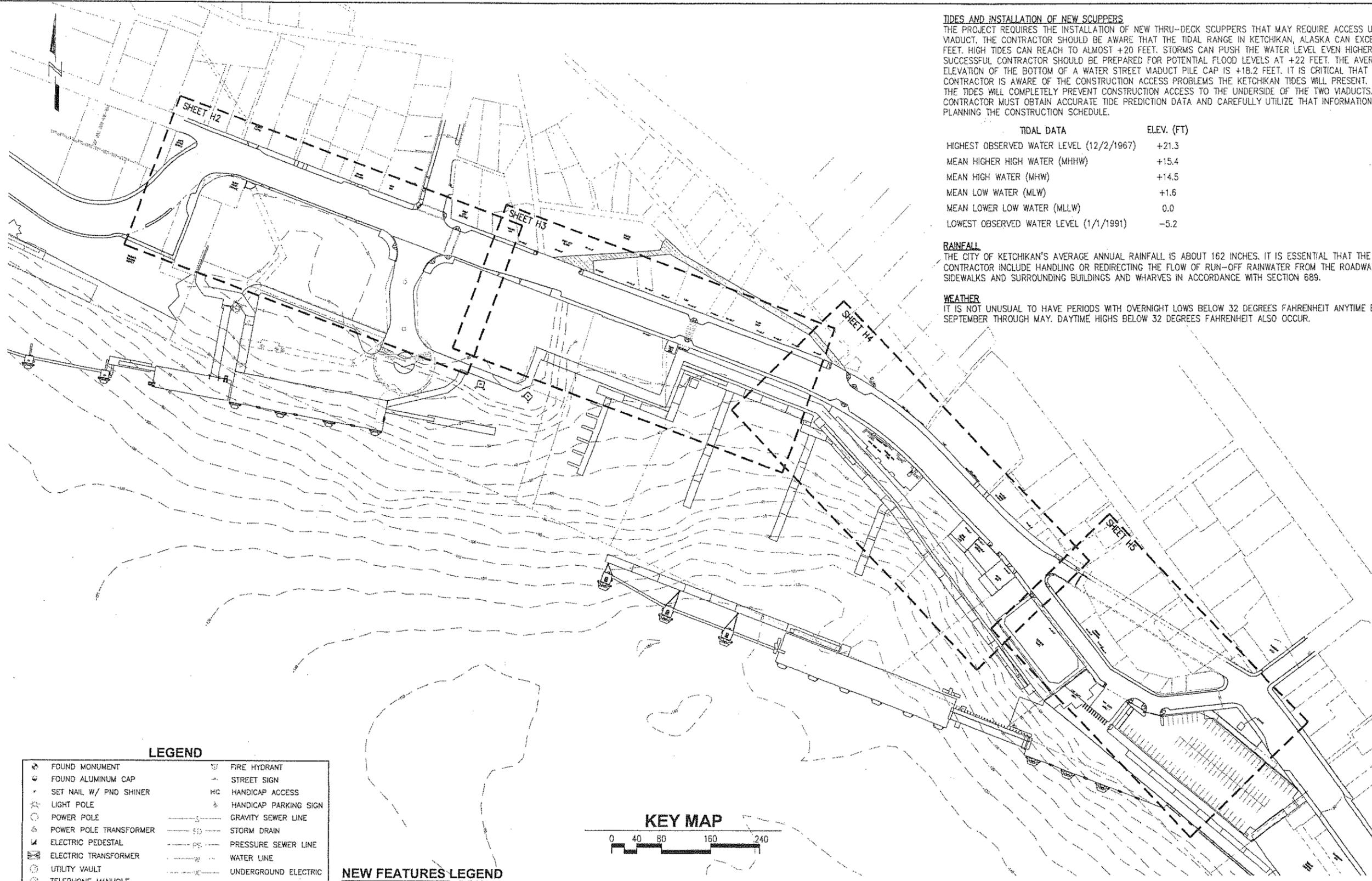
**INTERSECTION  
DRIVEWAYS**

PROJECT DESIGNATION	
ARA-TEA-0902(35)	
STATE	YEAR
ALASKA	2010
SHEET NUMBER	TOTAL SHEETS
G3	53

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PE *[Signature]* Date 11-5-11



1/8/10 Drawings 2006\064032.01 Ketchikan Water Street Improvements\For Construction\064032.01-H1-H5.dwg



**TIDES AND INSTALLATION OF NEW SCUPPERS**  
 THE PROJECT REQUIRES THE INSTALLATION OF NEW THRU-DECK SCUPPERS THAT MAY REQUIRE ACCESS UNDER THE VIADUCT. THE CONTRACTOR SHOULD BE AWARE THAT THE TIDAL RANGE IN KETCHIKAN, ALASKA CAN EXCEED 24 FEET. HIGH TIDES CAN REACH TO ALMOST +20 FEET. STORMS CAN PUSH THE WATER LEVEL EVEN HIGHER. THE SUCCESSFUL CONTRACTOR SHOULD BE PREPARED FOR POTENTIAL FLOOD LEVELS AT +22 FEET. THE AVERAGE ELEVATION OF THE BOTTOM OF A WATER STREET VIADUCT PILE CAP IS +18.2 FEET. IT IS CRITICAL THAT THE CONTRACTOR IS AWARE OF THE CONSTRUCTION ACCESS PROBLEMS THE KETCHIKAN TIDES WILL PRESENT. AT TIMES THE TIDES WILL COMPLETELY PREVENT CONSTRUCTION ACCESS TO THE UNDERSIDE OF THE TWO VIADUCTS. THE CONTRACTOR MUST OBTAIN ACCURATE TIDE PREDICTION DATA AND CAREFULLY UTILIZE THAT INFORMATION IN PLANNING THE CONSTRUCTION SCHEDULE.

TIDAL DATA	ELEV. (FT)
HIGHEST OBSERVED WATER LEVEL (12/2/1967)	+21.3
MEAN HIGHER HIGH WATER (MHHW)	+15.4
MEAN HIGH WATER (MHW)	+14.5
MEAN LOW WATER (MLW)	+1.6
MEAN LOWER LOW WATER (MLLW)	0.0
LOWEST OBSERVED WATER LEVEL (1/1/1991)	-5.2

**RAINFALL**  
 THE CITY OF KETCHIKAN'S AVERAGE ANNUAL RAINFALL IS ABOUT 162 INCHES. IT IS ESSENTIAL THAT THE CONTRACTOR INCLUDE HANDLING OR REDIRECTING THE FLOW OF RUN-OFF RAINWATER FROM THE ROADWAY, SIDEWALKS AND SURROUNDING BUILDINGS AND WHARVES IN ACCORDANCE WITH SECTION 689.

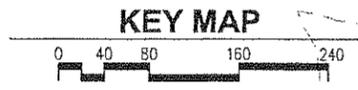
**WEATHER**  
 IT IS NOT UNUSUAL TO HAVE PERIODS WITH OVERNIGHT LOWS BELOW 32 DEGREES FAHRENHEIT ANYTIME BETWEEN SEPTEMBER THROUGH MAY. DAYTIME HIGHS BELOW 32 DEGREES FAHRENHEIT ALSO OCCUR.

**LEGEND**

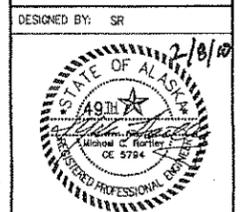
FOUND MONUMENT	FIRE HYDRANT
FOUND ALUMINUM CAP	STREET SIGN
SET NAIL W/ PND SHINER	H/C HANDICAP ACCESS
LIGHT POLE	HANDICAP PARKING SIGN
POWER POLE	GRAVITY SEWER LINE
POWER POLE TRANSFORMER	STORM DRAIN
ELECTRIC PEDESTAL	PRESSURE SEWER LINE
ELECTRIC TRANSFORMER	WATER LINE
UTILITY VAULT	UNDERGROUND ELECTRIC
TELEPHONE MANHOLE	OVERHEAD ELECTRIC
STORM DRAIN MANHOLE	TELEPHONE
STORM DRAIN CATCH BASIN	CHAIN LINK FENCE
4" STORM DRAIN HOLE	RAIL FENCE
3" STORM DRAIN HOLE	BUILDING LINE
SANITARY SEWER MANHOLE	SEAWALL
WATER VAULT	ROW
FINISH FLOOR ELEVATION	PAVED AREA
WATER VALVE	CONCRETE AREA
WATER VALVE KEY BOX	EXISTING CURB CUT

**NEW FEATURES LEGEND**

SIGN
NEW 6" SCUPPER
NEW CURB INLET
NEW STRIP DRAIN
GRADE BRAKE
CONCRETE SIDEWALK
GRIND MMC PER SPECIAL PROVISIONS TO PROVIDE ADEQUATE FLOW



REVISIONS	DESCRIPTION	DATE	REV



CHECKED BY: GW  
 DRAWN BY: GRD

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
 DESIGN & ENGINEERING SERVICES  
 DIVISION-SOUTHEAST REGION

**KETCHIKAN:  
 WATER STREET  
 SIDEWALK  
 IMPROVEMENTS  
 PROJECT No. 69345**

**DRAINAGE,  
 EROSION AND  
 SEDIMENT  
 CONTROL MAP**

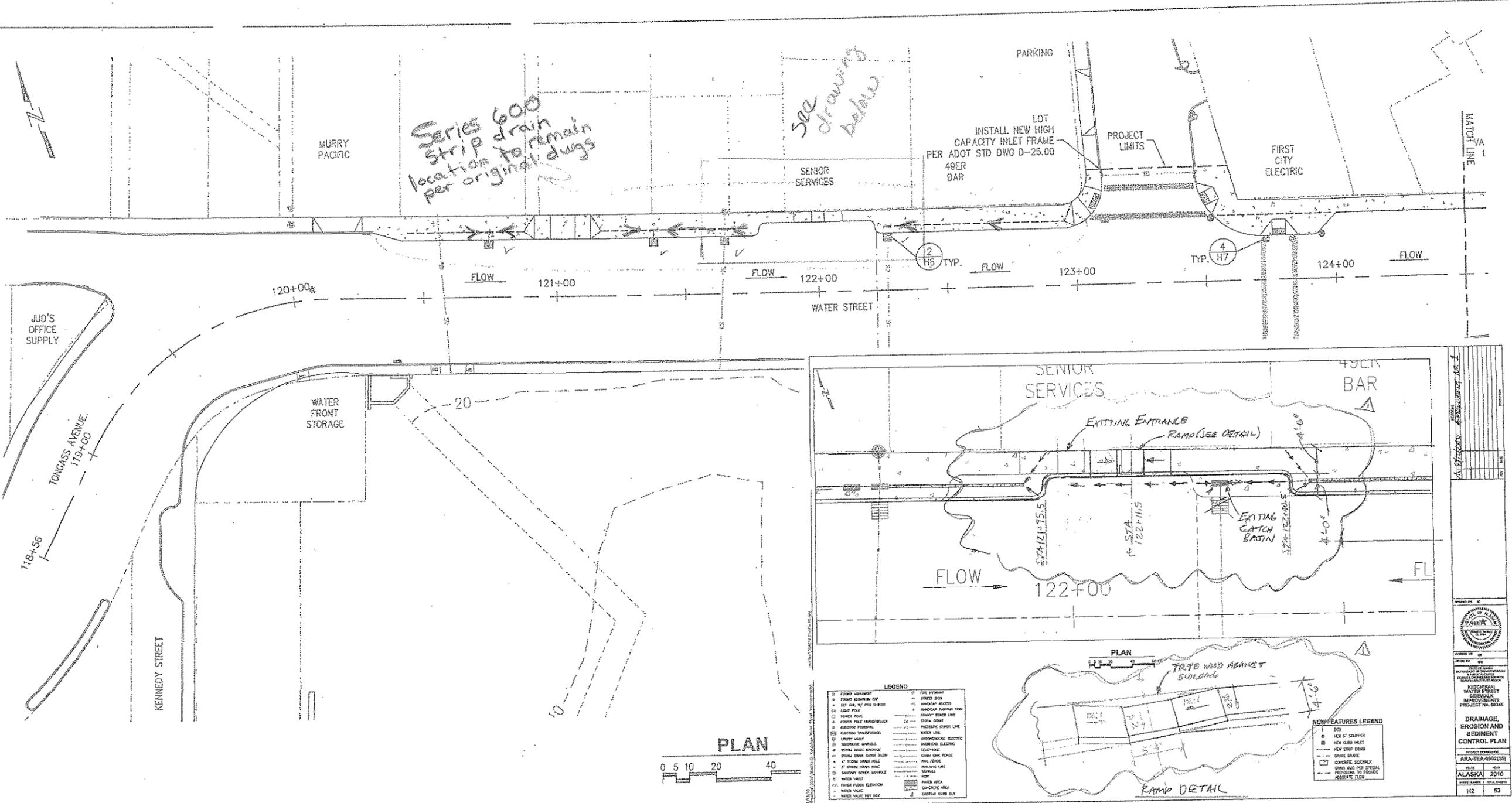
PROJECT DESIGNATION  
**ARA-TEA-0902(35)**

STATE	YEAR
ALASKA	2010

SHEET NUMBER	TOTAL SHEETS
H1	53

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.  
 PE [Signature] Date 11-5-11

7/0 1/25/2008 06:40:32.01 Ketchikan Water Street Improvements For Construction 064032.01-H1-H5.dwg



*Series 600 strip drain location to remain per original dwgs*

*See drawings below*

*Note 1 Strip Drain Connection to existing storm Drain per Detail B/H7*

LEGEND			
⊕	FOUND MONUMENT	⊕	FIRE HYDRANT
⊕	FOUND ALUMINUM CAP	—	STREET SIGN
⊕	SET NAIL W/ PND SHINER	HC	HANDICAP ACCESS
⊕	LIGHT POLE	⊕	HANDICAP PARKING SIGN
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⊕	ELECTRIC PEDESTAL	—PS—	PRESSURE SEWER LINE
⊕	ELECTRIC TRANSFORMER	—W—	WATER LINE
⊕	UTILITY VAULT	—UE—	UNDERGROUND ELECTRIC
⊕	TELEPHONE MANHOLE	—OE—	OVERHEAD ELECTRIC
⊕	STORM DRAIN MANHOLE	—T—	TELEPHONE
⊕	STORM DRAIN CATCH BASIN	—CL—	CHAIN LINK FENCE
⊕	4" STORM DRAIN HOLE	—RF—	RAIL FENCE
⊕	3" STORM DRAIN HOLE	—BL—	BUILDING LINE
⊕	SANITARY SEWER MANHOLE	—SW—	SEAWALL
⊕	WATER VAULT	—R—	ROW
⊕	FINISH FLOOR ELEVATION	▨	PAVED AREA
⊕	WATER VALVE	▩	CONCRETE AREA
⊕	WATER VALVE KEY BOX	△	EXISTING CURB CUT

LEGEND			
⊕	FOUND MONUMENT	⊕	FIRE HYDRANT
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⊕	ELECTRIC TRANSFORMER	—W—	WATER LINE
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⊕	WATER VALVE	▩	CONCRETE AREA
⊕	WATER VALVE KEY BOX	△	EXISTING CURB CUT

NEW FEATURES LEGEND	
⊕	SIGN
⊕	NEW 6" SCUPPER
⊕	NEW CURB INLET
⊕	NEW STRIP DRAIN
⊕	GRADE BRAKE
⊕	CONCRETE SIDEWALK
⊕	GRIND M/MC PER SPECIAL PROVISIONS TO PROVIDE ADEQUATE FLOW

*Rev 8-3-10  
7/30/10  
Rev sht 4 by [Signature]*

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

PE [Signature] Date 11-8-11

REV	DATE	DESCRIPTION

DESIGNED BY: SR

CHECKED BY: GW

DRAWN BY: GRD

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
DESIGN & ENGINEERING SERVICES  
DIVISION-SOUTHEAST REGION

KETCHIKAN:  
WATER STREET  
SIDEWALK  
IMPROVEMENTS  
PROJECT No. 69345

DRAINAGE,  
EROSION AND  
SEDIMENT  
CONTROL PLAN

PROJECT DESIGNATION  
ARA-TEA-0902(35)

STATE	YEAR
ALASKA	2010

SHEET NUMBER	TOTAL SHEETS
H2	53







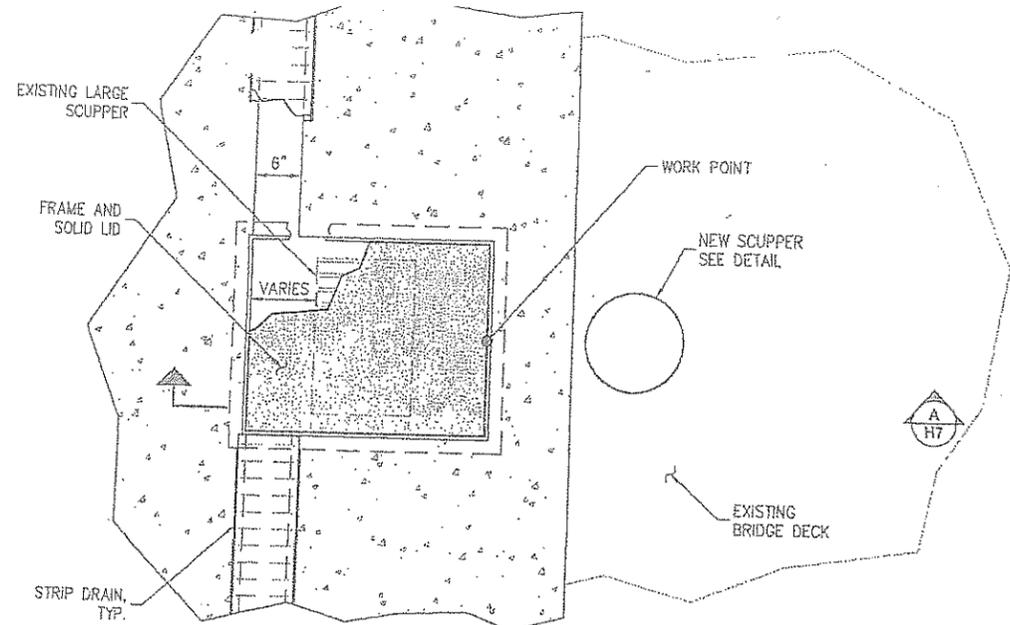
PERMANENT SCUPPER LOCATION TABLE					
STATION	OFFSET	NEW	EXISTING	ABANDON*	TO REMAIN
120+67.87	25.17 R		X		X
120+78.47	25.12 R		X		X
120+88.90	25.12 R		X		X
120+99.42	25.13 R		X		X
121+10.01	25.16 R		X		X
121+20.16	25.50 R		X		X
121+30.94	25.18 R		X		X
121+41.23	25.25 R		X		X
121+62.38	25.23 R		X		X
123+19.94	25.40 R		X		X
123+30.15	25.08 R		X		X
123+41.19	25.12 R		X		X
123+51.43	25.18 R		X		X
123+52.56	24.18 L	X			
123+72.70	16.26 L	X			
123+72.97	24.62 L		X		X
123+82.94	16.26 L	X			
123+82.98	24.64 L		X		X
123+93.32	25.30 R		X		X
123+93.92	24.71 L		X		X
123+94.43	18.41 L	X			
124+04.03	24.72 L		X		X
124+04.20	25.25 R		X		X
124+14.56	25.24 R		X		X
124+14.68	24.69 L		X		X
124+24.88	24.67 L		X		X
124+25.34	25.30 R		X		X
124+35.55	25.24 R		X		X
124+35.95	24.70 L		X		X
124+46.02	24.76 L		X		X
124+56.93	24.69 L		X		X
124+67.21	24.71 L		X		X
124+77.76	24.66 L		X		X
124+88.14	24.68 L		X		X
124+98.77	24.68 L		X		X
125+08.14	24.72 L		X		X
125+15.8	24.9 L	X			
125+19.71	24.90 L		X		X
125+30.18	24.84 L		X		X
125+41.13	24.89 L		X		X
125+51.13	24.92 L		X		X
125+61.57	25.16 R		X		X
125+61.58	15.56 R	X			
125+61.81	24.98 L		X		X
125+72.12	24.89 L		X		X
125+72.22	25.08 R		X		X
125+75.03	22.61 R	X			
125+82.47	22.61 R	X			
125+82.49	25.19 R		X		X
125+82.70	24.92 L		X		X
125+87.3	24.5 L	X			
125+93.15	24.80 L		X		X
125+93.18	22.61 R	X			
125+93.26	20.72 L	X			
125+93.28	25.14 R		X		X
126+03.52	22.61 R	X			
126+03.56	25.11 R		X		X
126+03.78	24.87 L		X		X
126+03.90	20.83 L	X			
126+14.16	24.82 L		X		X
126+14.19	22.60 R	X			
126+14.26	25.14 R		X		X
126+14.59	20.72 L	X			
126+24.47	25.01 R		X		X
126+24.51	22.60 R	X			
126+24.68	24.84 L		X		X
126+24.69	20.83 L	X			
126+34.97	20.84 L	X			
126+35.11	24.80 L		X		X
126+35.24	22.60 R	X			
126+35.27	25.06 R		X		X
126+45.33	22.59 R	X			
126+45.52	24.78 L		X		X
126+45.55	20.84 L	X			
126+45.56	25.06 R		X		X
126+56.13	22.59 R	X			
126+56.16	20.95 L	X			
126+56.16	25.02 R		X		X
126+56.23	24.85 L		X		X
126+66.36	22.59 R	X			

PERMANENT SCUPPER LOCATION TABLE					
STATION	OFFSET	NEW	EXISTING	ABANDON*	TO REMAIN
126+66.40	24.91 R		X		X
126+66.53	20.80 L	X			
126+66.55	24.81 L		X		X
126+76.91	24.88 L		X		X
126+77.06	20.85 L	X			
126+77.11	24.87 R		X		X
126+77.19	22.58 R	X			
126+87.42	24.85 R		X		X
126+87.45	22.58 R	X			
126+87.48	21.02 L	X			
126+87.33	24.91 R		X		X
126+97.62	22.58 R	X			
126+98.14	20.97 L	X			
126+98.18	24.90 L		X		X
127+08.40	24.91 L		X		X
127+08.46	20.92 L	X			
127+08.50	22.57 R	X			
127+08.63	25.01 R		X		X
127+18.91	24.96 L		X		X
127+18.94	20.92 L	X			
127+19.10	22.57 R	X			
127+19.14	24.97 R		X		X
127+26.54	24.90 L		X		X
127+29.33	20.71 L	X			
127+29.42	22.57 R	X			
127+29.49	24.94 R		X		X
127+39.70	20.98 L	X			
127+39.76	24.90 L		X		X
127+40.12	22.56 R	X			
127+40.21	24.86 R		X		X
127+50.12	20.87 L	X			
127+50.29	24.95 L		X		X
127+50.35	22.56 R	X			
127+50.45	24.92 R		X		X
127+60.60	24.97 R		X		X
127+60.62	22.56 R	X			
127+61.10	24.94 L		X		X
127+61.24	20.98 L	X			
127+71.53	24.69 R		X		X
127+71.62	22.55 R	X			
127+71.77	24.96 L		X		X
127+71.85	20.98 L	X			
127+78.51	20.96 L	X			
127+82.14	24.95 R		X		
127+82.23	24.92 L		X		X
127+82.25	18.39 R	X			
127+87.66	13.13 L	X			
127+92.51	24.94 L		X		
127+92.54	24.98 R		X		
127+92.74	18.51 R	X			
128+02.58	24.96 L		X		X
128+02.89	12.92 L	X			
128+03.04	22.51 R	X			
128+03.17	24.96 R		X		X
128+13.32	22.50 R	X			
128+13.38	24.97 R		X		X
128+13.83	24.95 L		X		X
128+15.31	20.93 L	X			
128+24.02	21.03 L	X			
128+24.16	24.96 L		X		X
128+24.25	22.50 R	X			
128+27.27	24.93 R		X		X
128+34.39	22.50 R	X			
128+34.44	24.95 R		X		X
128+34.54	24.95 L		X		X
128+34.67	21.05 L	X			
128+44.96	21.04 L	X			
128+45.00	24.97 L		X		X
128+45.12	22.49 R	X			
128+45.23	24.93 R		X		X
128+55.17	24.93 R		X		X
128+55.18	22.49 R	X			
128+55.65	25.01 L		X		X
128+59.73	21.02 L	X			
128+65.69	24.97 L		X		X
128+65.83	20.98 L	X			
128+65.87	22.49 R	X			
128+66.05	24.88 R		X		X
128+76.39	22.48 R	X			

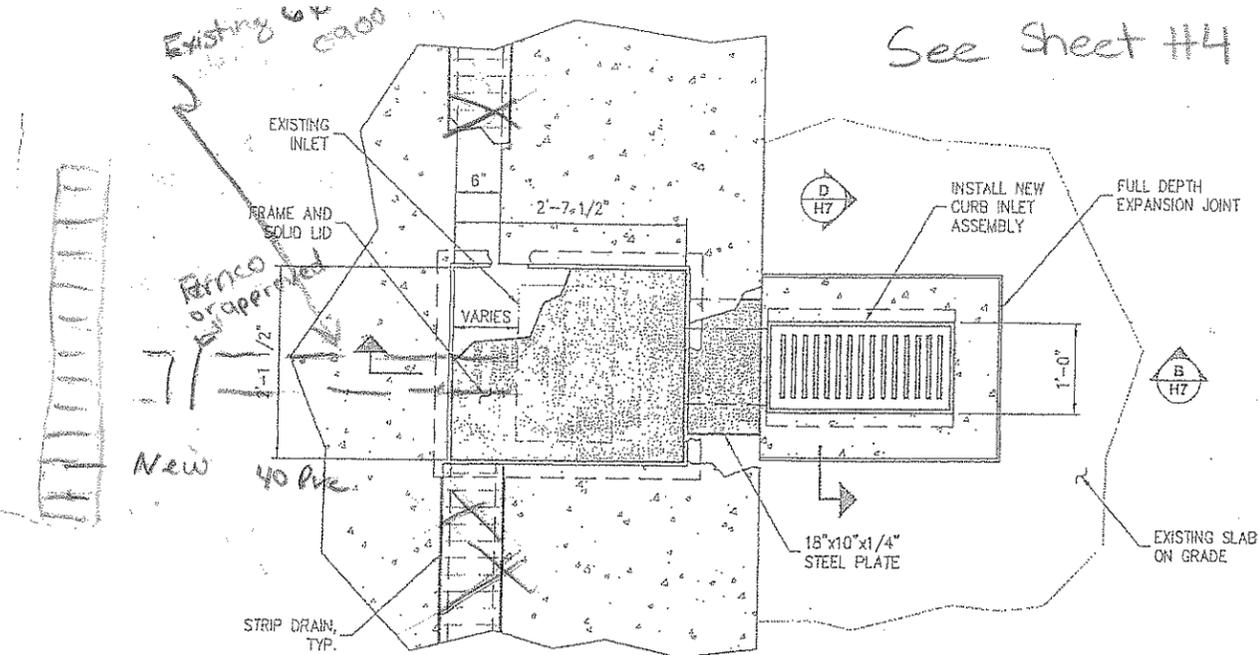
PERMANENT SCUPPER LOCATION TABLE					
STATION	OFFSET	NEW	EXISTING	ABANDON*	TO REMAIN
128+76.50	24.85 R		X		X
128+76.61	24.93 L		X		X
128+76.66	21.03 L	X			
128+86.83	21.03 L	X			
128+86.83	22.48 R	X			
128+86.95	25.04 L		X		X
128+86.99	24.91 R		X		X
128+97.38	22.48 R	X			
128+97.45	24.93 R		X		X
128+97.75	24.92 L		X		X
128+97.83	20.99 L	X			
129+08.05	24.85 R		X		X
129+08.12	25.00 L		X		X
129+08.15	22.47 R	X			
129+08.28	21.01 L	X			
129+18.15	22.47 R	X			
129+18.44	21.08 L	X			
129+18.47	24.86 R		X		X
129+18.50	25.06 L		X		X
129+29.02	24.99 L		X		X
129+29.10	21.06 L	X			
129+29.13	22.47 R	X			
129+29.23	24.89 R		X		X
129+39.32	22.46 R	X			
129+39.35	24.95 R		X		X
129+39.59	20.94 L	X			
129+39.63	25.04 L		X		X
129+50.01	22.46 R	X			
129+50.24	25.04 L		X		X
129+50.25	24.91 R		X		X
129+50.26	21.03 L	X			
129+60.29	21.01 L	X			
129+60.40	24.97 R		X		X
129+60.62	22.46 R	X			
129+60.66	25.02 L		X		X
129+69.97	20.98 L	X			
129+70.18	25.01 L		X		X
129+71.23	22.43 R	X			
129+71.57	24.94 R		X		X
129+78.45	25.21 L		X		X
129+78.65	21.22 L	X			
129+79.15	22.35 R	X			
129+79.29	24.81 R		X		X
129+87.80	25.34 L		X		X
129+87.92	21.41 L	X			
129+89.74	24.60 R		X		X
129+89.76	22.19 R	X			
129+96.51	22.02 R	X			
129+96.55	24.46 R		X		X
129+96.71	21.49 L	X			
129+96.86	25.42 L		X		X
130+05.76	22.11 R	X			
130+05.99	24.52 R		X		X
130+06.06	25.27 L		X		X
130+06.18	21.48 L	X			
130+14.42	22.25 R	X			
130+14.67	24.68 R		X		X
130+14.88	25.24 L		X		X
130+15.03	21.30 L	X			
130+23.69	22.32 R	X			
130+23.69	24.70 R		X		X
130+24.05	25.21 L		X		X
130+24.32	21.39 L	X			
130+27.19	25.38 L	X			
130+32.36	22.35 R	X			
130+32.55	24.73 R		X		X
130+32.93	25.11 L		X		X
130+41.82	24.85 R		X		X
130+42.03	22.43 R	X			
130+42.14	25.08 L		X		X
130+50.32	24.92 R		X		X
130+50.71	21.59 R	X			
130+51.12	25.12 L		X		X
130+54.19	25.06 L	X			
130+59.33	24.96 R		X		X
130+59.78	14.52 R	X			
130+60.07	24.87 L		X		X
130+67.57	14.63 R	X			
130+68.46	25.05 R		X		X
130+68.56	13.37 L	X			

PERMANENT SCUPPER LOCATION TABLE					
STATION	OFFSET	NEW	EXISTING	ABANDON*	TO REMAIN
130+69.17	24.78 L		X		X
130+77.62	24.99 R		X		X
130+77.76	14.67 R	X			
130+86.36	25.02 R		X		X
130+86.56	21.45 R	X			
130+95.38	22.81 R	X			
130+95.49	25.08 R		X		X
131+04.33	25.15 R		X		X
131+04.59	22.54 R	X			
131+13.60	25.22 R		X		X
131+13.86	22.88				

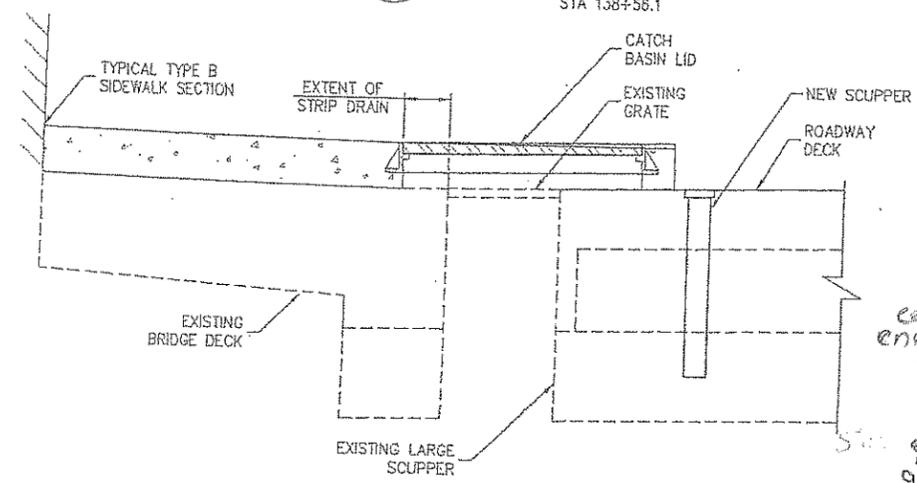




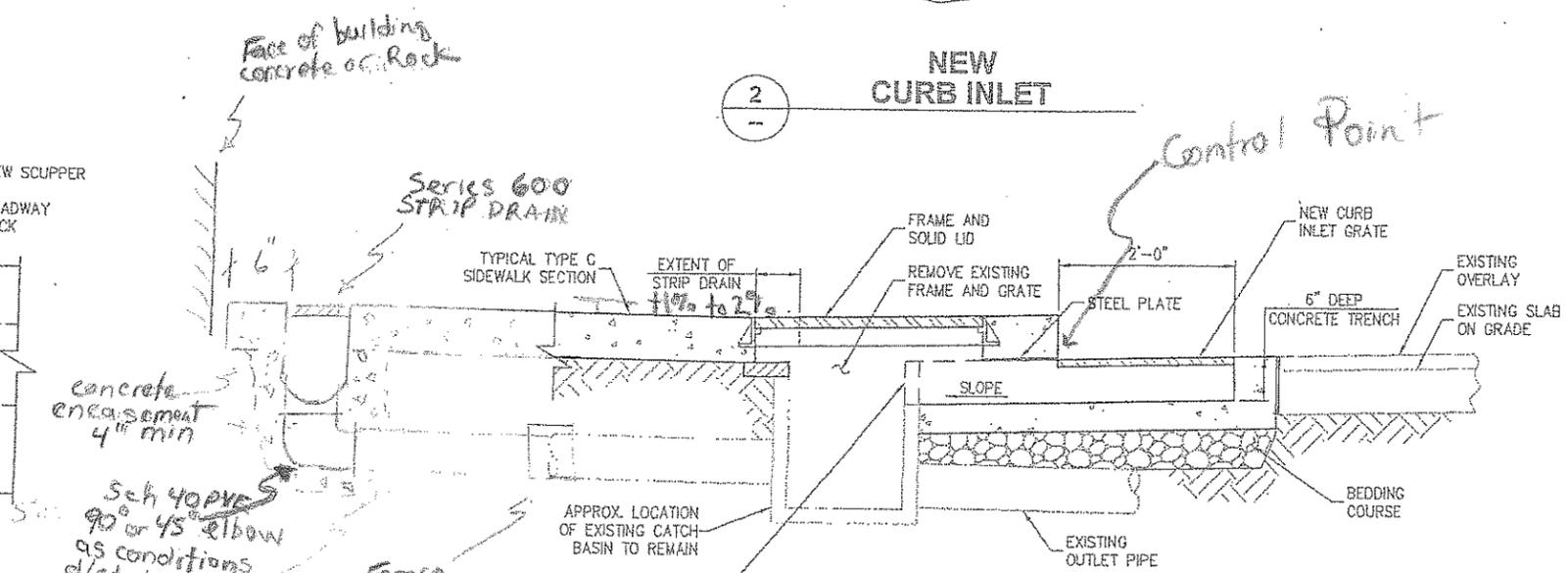
**3**  
H7  
**FRAME AND SOLID LID**  
LOCATED AT STA 138+10.4 AND STA 138+56.1



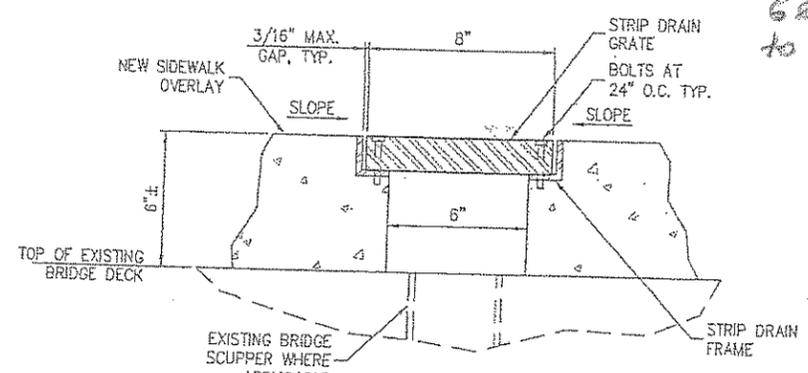
**2**  
H7  
**NEW CURB INLET**



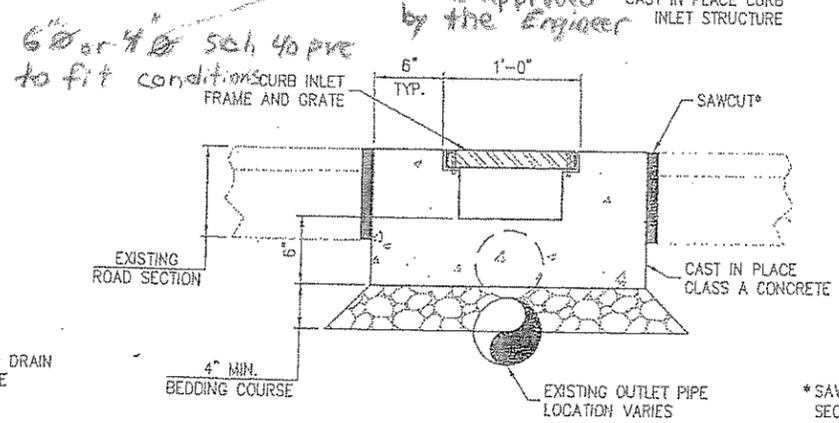
**A**  
H7  
**SECTION**



**B**  
H7  
**SECTION**



**1**  
H7  
**TYPICAL STRIP DRAIN**



**D**  
H7  
**SECTION**

*Notes:* 1) Control Point for face of curb/sw is 6" up from road surface. Then sidewalk would slope 1% to 2% to back of sidewalk (sidewalk would slope/drain towards street).  
2) This section only applicable between approximate stations 130+50 thru 133+30 LT.

\*SAWCUT EXISTING ROAD SECTION AND INSTALL 1" THICK FULL DEPTH EXPANSION JOINT PER DETAIL 7 ON SHEET B6.

3. All other details in Typical Section remain as shown.

Rev 8/3/10  
1/30/10

Rev Sheet 1 by *dw*

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.  
PE *[Signature]* Date 11-2-11

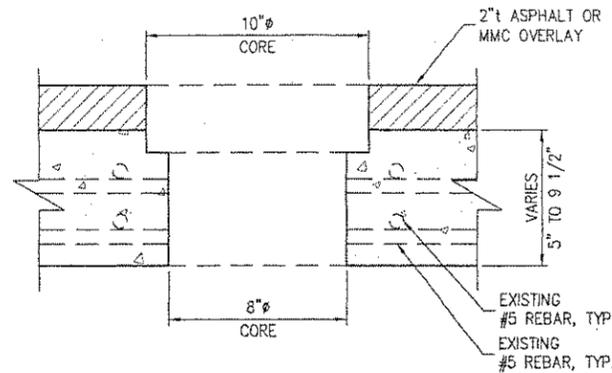
REVISIONS	DESCRIPTION	DATE	REV

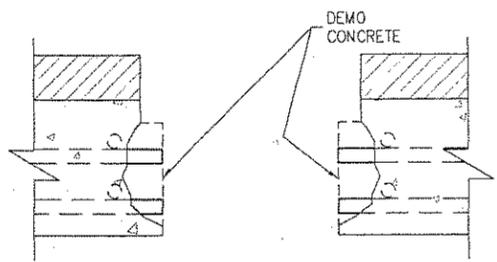
DESIGNED BY: SR	CEC 21810
CHECKED BY: GW	Professional Engineer
DRAWN BY: GRD	Professional Engineer
STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES DESIGN & ENGINEERING SERVICES DIVISION - SOUTHEAST REGION	
KETCHIKAN: WATER STREET SIDEWALK IMPROVEMENTS PROJECT No. 69345	
<b>DRAINAGE DETAILS</b>	
PROJECT DESIGNATION ARA-TEA-0902(35)	
STATE ALASKA	YEAR 2010
SHEET NUMBER H7A	TOTAL SHEETS 53

Drawings 2006 10-13-01 Ketchikan Water Street Improvements For Construction 06-4032.01-H7.dwg

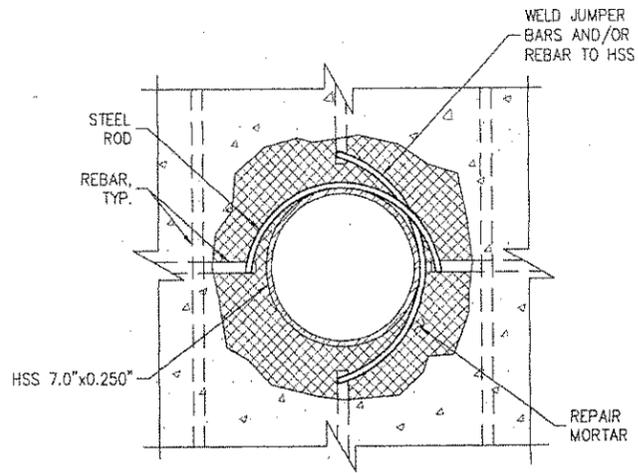
1/13/10, Drawings 2005-06-4032.01 Ketchikan, Water, Street Improvements For Construction 06-4032.01-HB.dwg



**STEP 1**  
DRILL 10" AND 8" DIAMETER CORES.

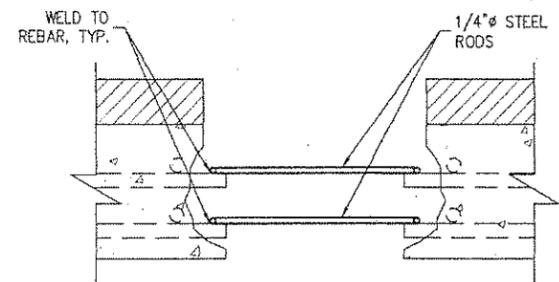


**STEP 2**  
REMOVE CONCRETE TO EXPOSE 3-INCHES OF THE ENDS OF EACH SEVERED REBAR.

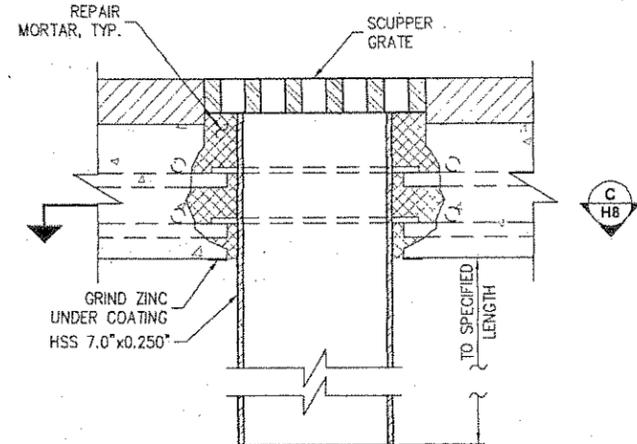


**C H8 SECTION**  
WELD STEEL RODS TO HSS PER SPECIAL PROVISIONS SECTION 684.

- NOTES**
- 1) TAKE CARE THAT NO DAMAGE OCCURS TO THE EXISTING BRIDGE DECK.
  - 2) CAPTURE ALL DEBRIS CREATED DURING CORING. DISPOSE ACCORDING TO THE SPECIAL PROVISIONS.
  - 3) REMOVE ZINC MATERIALS FROM THE UNDERSIDE OF THE BRIDGE DECK BEFORE CORING IN ACCORDANCE WITH SPECIAL PROVISIONS.
  - 4) PERFORM A CONTINUITY CHECK AFTER WELDS ARE COMPLETED IN ACCORDANCE WITH SPECIAL PROVISIONS.



**STEP 3**  
WELD ENDS OF ALL REBAR IN ANY DIRECTION TOGETHER WITH STEEL ROD.

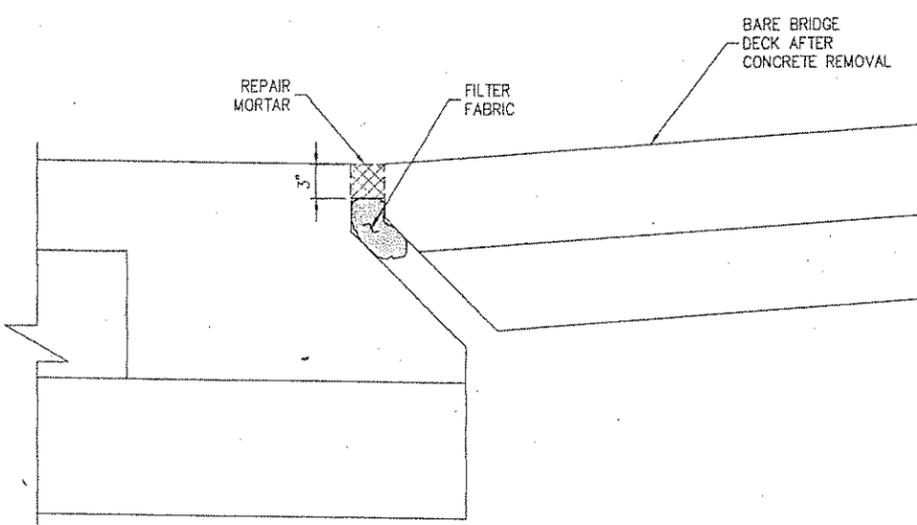


**STEP 4**  
INSERT HSS AND INSTALL REPAIR MORTAR.

**4 H8 NEW SCUPPER**

EXISTING CATCH BASIN TABLE			
STATION	OFFSET	NO MODIFICATIONS	MODIFY WITH DETAIL 2, SHEET H7
120+27.72	24.51 L	X	
120+39.92	23.98 R	X	
120+74.76	24.37 L		X
121+44.64	24.29 L		X
121+59.64	24.29 L		FRAME AND SOLID LID
121+64.81	24.39 L		X
122+27.39	24.02 L		X
122+39.22	22.53 R	X	
123+11.06	23.71 L	X	
123+10.26	41.61 L		HIGH CAPACITY INLET FRAME
123+45.99	40.54 L	X	
131+03.61	30.14 L	X	
131+03.75	24.24 L		X
131+65.37	30.14 L	X	
131+65.56	24.42 L		X

EXISTING CATCH BASIN TABLE			
STATION	OFFSET	NO MODIFICATIONS	MODIFY WITH DETAIL 2, SHEET H7
131+94.89	31.32 L	X	
132+27.10	30.31 L	X	
132+27.23	24.48 L		X
132+89.73	29.94 L	X	
132+89.90	24.49 L		X
133+31.52	32.51 L	X	
133+34.09	23.64 L	X	
133+46.28	33.09 L	X	
134+13.27	32.69 L		X
134+94.74	52.61 L	X	
135+11.27	36.01 L	X	
135+14.46	14.58 L	X	
137+75.02	12.34 L	X	
137+81.74	18.11 L	X	
133+40	24.3		



**5 H8 ABANDON EXISTING SCUPPER**

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.  
 PE *[Signature]* Date 11-8-11

REVISIONS	DESCRIPTION	DATE	REV

DESIGNED BY: SR

2/8/10  
 STATE OF ALASKA  
 49th  
 Wilson C. Coffey, Jr.  
 REGISTERED PROFESSIONAL ENGINEER

CHECKED BY: GW  
 DRAWN BY: GRD

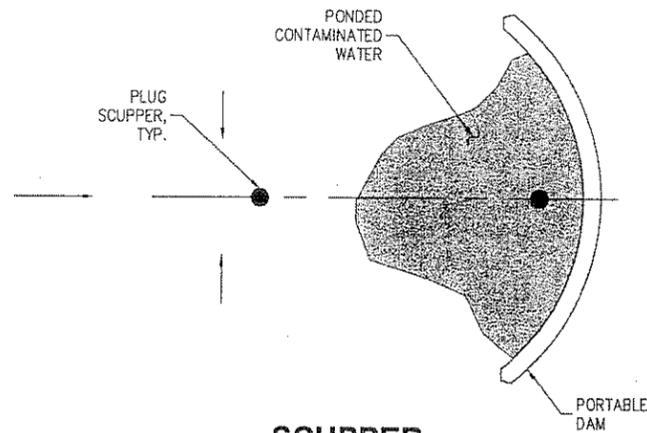
STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
 DESIGN & ENGINEERING SERVICES  
 DIVISION-SOUTHEAST REGION

**KETCHIKAN:  
 WATER STREET  
 SIDEWALK  
 IMPROVEMENTS  
 PROJECT No. 69345**

**DRAINAGE  
 DETAILS**

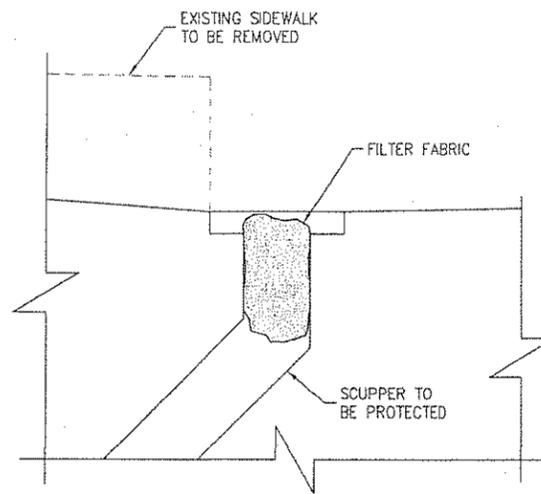
PROJECT DESIGNATION  
**ARA-TEA-0902(35)**

STATE	YEAR
ALASKA	2010
SHEET NUMBER	TOTAL SHEETS
H8	53

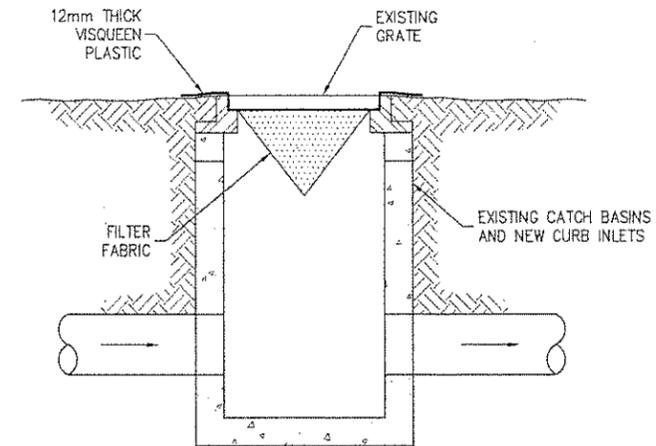


**6**  
**H9**  
**SCUPPER PROTECTION**  
NOT TO SCALE

- 1) SEQUENCE CONSTRUCTION SUCH THAT ALL CONTAMINATED STORM WATER AND WASH WATER IS PONDED BEHIND A PORTABLE DAM.
- 2) PUMP, VACUUM OR OTHER MEANS THE CONTAMINATED WATER FOR DISPOSAL.
- 3) ALL STORM WATER AND WASH WATER TO BE CONTAINED AND DISPOSED OF IN ACCORDANCE WITH THE SPECIAL PROVISIONS SECTION 689.



**PLUG SCUPPERS**



**7**  
**H9**  
**TYPICAL INLET PLUG**  
NOT TO SCALE

**GENERAL EROSION AND SEDIMENT CONTROL NOTES**

- 1) THE IMPLEMENTATION OF THESE ESCP PLANS AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THESE ESCP FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR UNTIL ALL CONSTRUCTION IS APPROVED.
- 2) THE ESCP FACILITIES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE ESCP FACILITIES SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS AND MODIFIED TO ACCOUNT FOR CHANGING SITE CONDITIONS
- 3) THE ESCP FACILITIES SHALL BE INSPECTED DAILY BY THE CONTRACTOR AND MAINTAINED TO ENSURE CONTINUED PROPER FUNCTIONING. WRITTEN RECORDS SHALL BE KEPT OF WEEKLY REVIEWS OF THE ESCP FACILITIES DURING THE WET SEASON.

REV	DATE	DESCRIPTION

DESIGNED BY: SR



CHECKED BY: GW

DRAWN BY: GRD

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
& PUBLIC FACILITIES  
DESIGN & ENGINEERING SERVICES  
DIVISION-SOUTHEAST REGION

**KETCHIKAN:  
WATER STREET  
SIDEWALK  
IMPROVEMENTS  
PROJECT No. 69345**

**EROSION AND  
SEDIMENT  
CONTROL  
DETAILS**

PROJECT DESIGNATION  
**ARA-TEA-0902(35)**

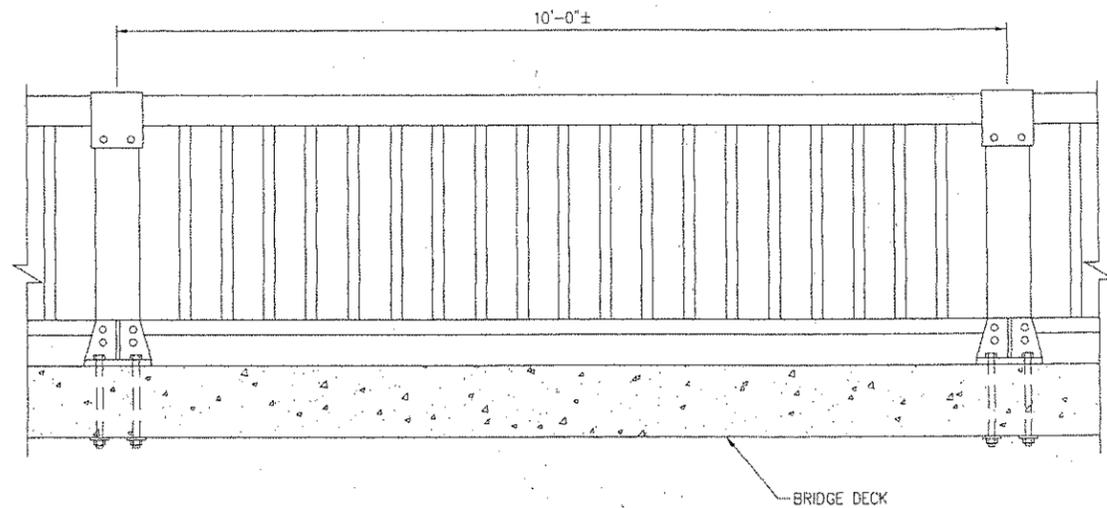
STATE	YEAR
<b>ALASKA</b>	<b>2010</b>

SHEET NUMBER	TOTAL SHEETS
<b>H9</b>	<b>53</b>

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

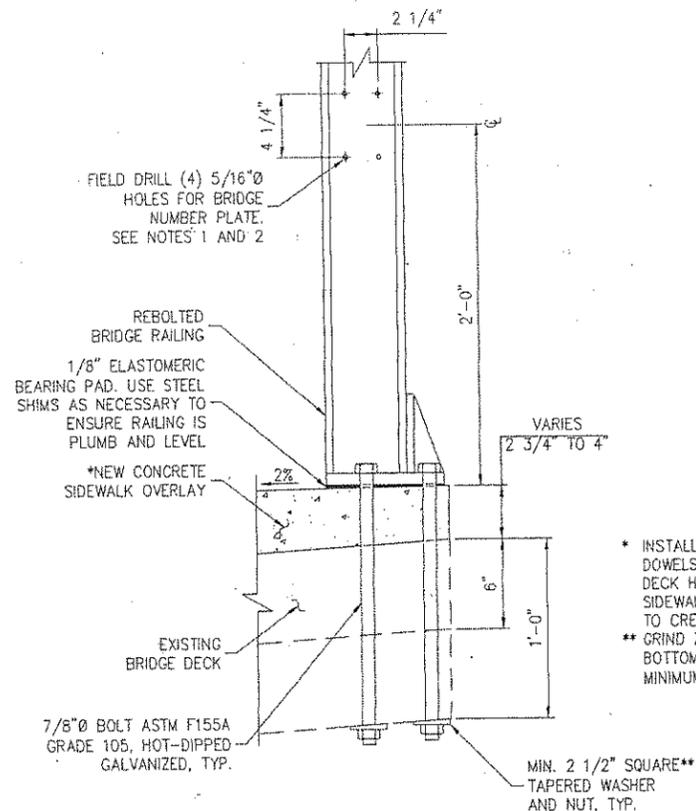
PE KSA Date 11-11

1/13/10 Drawings 2006\064032.01 Ketchikan Water Street Improvements\For Construction\064032.01-H9.dwg



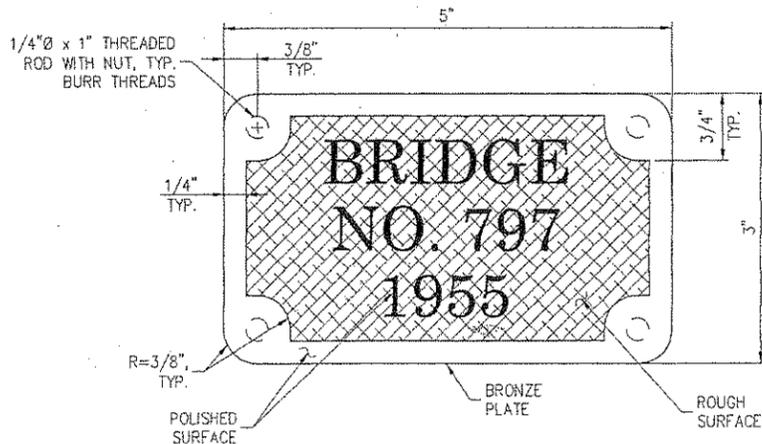
**EXISTING BRIDGE RAILING ELEVATION**

EXISTING BRIDGE RAILING TO BE REMOVED AND REPLACED WITH NEW BOLTS PER DETAIL.



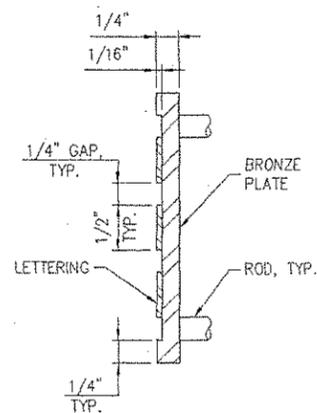
**RAILING REBOLTING DETAIL**

- CONSTRUCTION NOTES:**
- 1) LOCATE BRIDGE NUMBER PLATE AT END POST ON RIGHT SIDE OF APPROACHING TRAFFIC AT THE TONGASS AVE., END, STA 125+28.30.
  - 2) FURNISH ONE BRIDGE NUMBER PLATE. USE BRONZE THAT CONFORMS TO ASTM B98-90, ALLOY "A" OR "B". USE "CENTURY" TYPE STYLE LETTERING. USE STUDS AND NUTS THAT CONFORM TO UNS C62100 OR C65500. BRAZE 1/4" Ø THREADED ROD TO BACK OF PLATE WITH NUT (4 REQ'D.). USE LOCKING NUTS OR LOCK WASHERS ON ALL MACHINE BOLTS.
  - 3) SEE SHEETS B1 AND B2 FOR RAILING LOCATIONS.

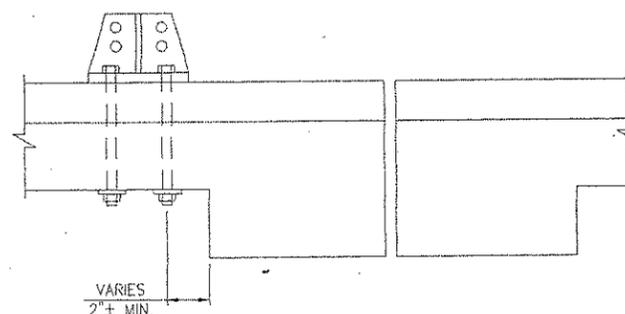


**PLAN**

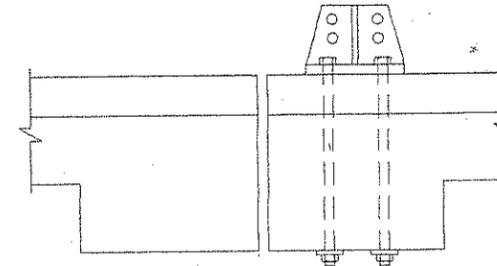
**BRIDGE NO. PLATE**



**SECTION**



**TYPICAL RAILING ATTACHMENT DETAIL**



**RAILING ATTACHMENT AT BENT**

REVISIONS	DESCRIPTION	DATE	REV

DESIGNED BY: SR

CHECKED BY: GW  
 DRAWN BY: GRD

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
 DESIGN & ENGINEERING SERVICES  
 DIVISION-SOUTH EAST REGION

**KETCHIKAN: WATER STREET SIDEWALK IMPROVEMENTS PROJECT No. 69345**

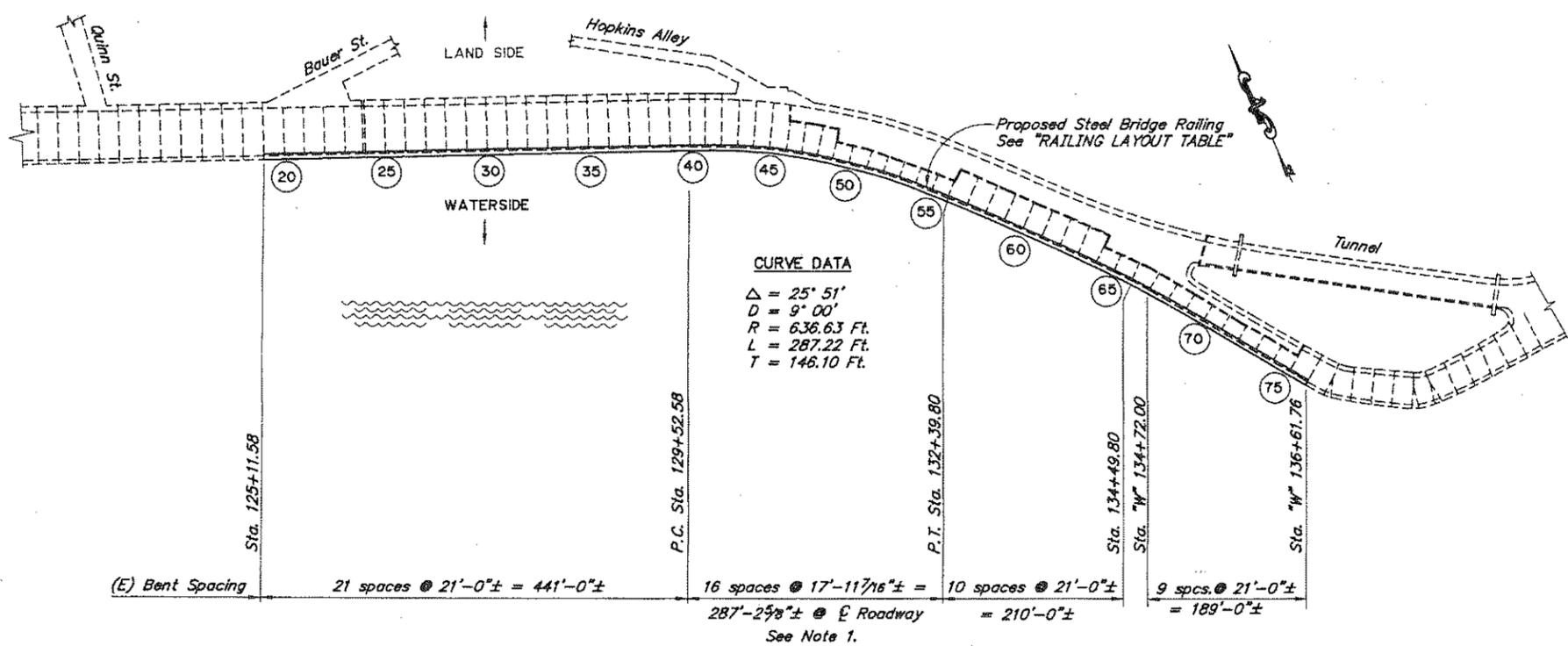
**BRIDGE RAIL INSTALLATION**

PROJECT DESIGNATION	
ARA-TEA-0902(35)	
STATE	YEAR
ALASKA	2010
SHEET NUMBER	TOTAL SHEETS
M1	53

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

PE *(Signature)* Date 11-8-11

2/9/10 Drawings 2006 064032.01 Ketchikan Water Street Improvements For Construction 064032.01-M1.dwg

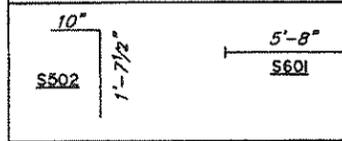


**CURVE DATA**  
 $\Delta = 25^\circ 51'$   
 $D = 9^\circ 00'$   
 $R = 636.63 \text{ Ft.}$   
 $L = 287.22 \text{ Ft.}$   
 $T = 146.10 \text{ Ft.}$

**PLAN**  
 No Scale

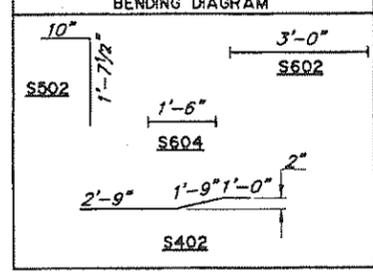
**REINFORCING STEEL TYPE A SIDEWALK**

MARK	SIZE	NO.	LENGTH	TYPE
S401	4	7	Varies	-
S501	5	3	Varies	-
S502	5	742	2'-5 1/2"	Bent
S601	6	742	5'-8"	Headed



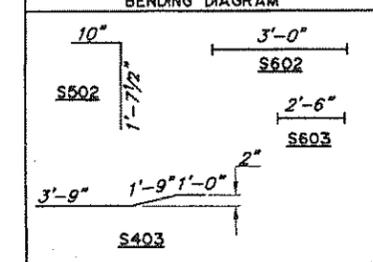
**REINFORCING STEEL TYPE A1 SIDEWALK**

MARK	SIZE	NO.	LENGTH	TYPE
S401	4	7	Varies	-
S402	4	79	5'-6"	Bent
S501	5	3	Varies	-
S502	5	234	2'-5 1/2"	Bent
S602	6	230	3'-0"	Headed
S604	6	230	1'-6"	Headed



**REINFORCING STEEL TYPE B SIDEWALK**

MARK	SIZE	NO.	LENGTH	TYPE
S401	4	8	Varies	-
S403	4	29	6'-6"	Bent
S501	5	3	Varies	-
S502	5	86	2'-5 1/2"	Bent
S602	6	82	3'-0"	Headed
S603	6	82	2'-6"	Headed



a - Epoxy Coated  
 Lap Splice Length: S401 = 2'-1"  
 S501 = 2'-7"

RAILING LAYOUT TABLE				
SECTION NO.	FROM STA.	TO STA.	APPROXIMATE RAILPOST SPACING	SIDEWALK TYPE
1	125+28.30	126+34.70	2'-7 1/2", 7 spaces @ 6'-3 1/2"±=44'-2", 9 spaces @ 6'-4"±=57'-0", 2'-7 1/2"	A
2	127+53.20	127+67.90	2'-7 1/2", 2 spaces @ 4'-9"±=9'-5 1/2", 2'-7 1/2"	A
3	128+00.90	130+71.80	1 space @ 2'-7 1/2", 7 spaces @ 6'-6"±=45'-7", 3 spaces @ 6'-4"±=18'-11 1/2"	A/A1
			10 spaces @ 6'-6"±=65'-0 1/2", 3 spaces @ 6'-4"±=18'-11 1/2", 3 spaces @ 6'-8"±=20'-0"	
			8 spaces @ 6'-6"±=51'-10", 3 spaces @ 6'-4"±=18'-11 1/2", 4 spaces @ 6'-7"±=26'-4"	
4	132+56.40	133+51.70	1 space @ 2'-7 1/2"	A1/B
5	134+79.30	135+17.13	2'-7 1/2", 7 spaces @ 6'-5 1/2"±=45'-4", 3 spaces @ 6'-4"±=18'-11 1/2", 4 spaces @ 6'-5"±=25'-0 1/2", 2'-7 1/2"	B
			2'-7 1/2", 5 spaces @ 6'-6"±=32'-7", 2'-7 1/2"	

BRIDGE DRAWING INDEX	
TITLE	DWG. NO.
STEEL BRIDGE RAILING LAYOUT	1
STEEL BRIDGE RAILING	2
STEEL BRIDGE RAILING DETAILS 1	3
STEEL BRIDGE RAILING DETAILS 2	4
EXISTING ALUMINUM BRIDGE RAILING	5

- NOTES:**
- Offset from E Roadway to traffic face of post = 29'-0 9/8".
  - Verify railing layout after bridge survey prior to fabricating bridge railing.
  - Railposts offset 0.50 ft. ahead from E Bents 22, 45, & 69, and offset 0.50 ft. back from E Bents 36, 40, 44 & 60.
  - Railposts offset 1.54 ft. ahead from E Bents 39, 41 & 59, and offset 1.54 ft. back from E Bent 23.

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.  
 PE *[Signature]* Date 11-8-11

- LEGEND**
- (E) = Existing
  - ± = Existing
  - = Existing
  - = Proposed
  - (XX) = Bent Number

Elevations, Bearings and Dimensions are based on "AS-BUILT" plans. Verify all controlling field dimensions before ordering or fabricating any material.

DESIGNED BY: Steve Lee	CHECKED: Leslie Daugherty
DRAWN BY: Cathy Anderson	CHECKED: Steve Lee
QUANTITIES BY: Steve Lee	CHECKED: Leslie Daugherty

**STATE OF ALASKA**  
**DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES**  
**BRIDGE SECTION**

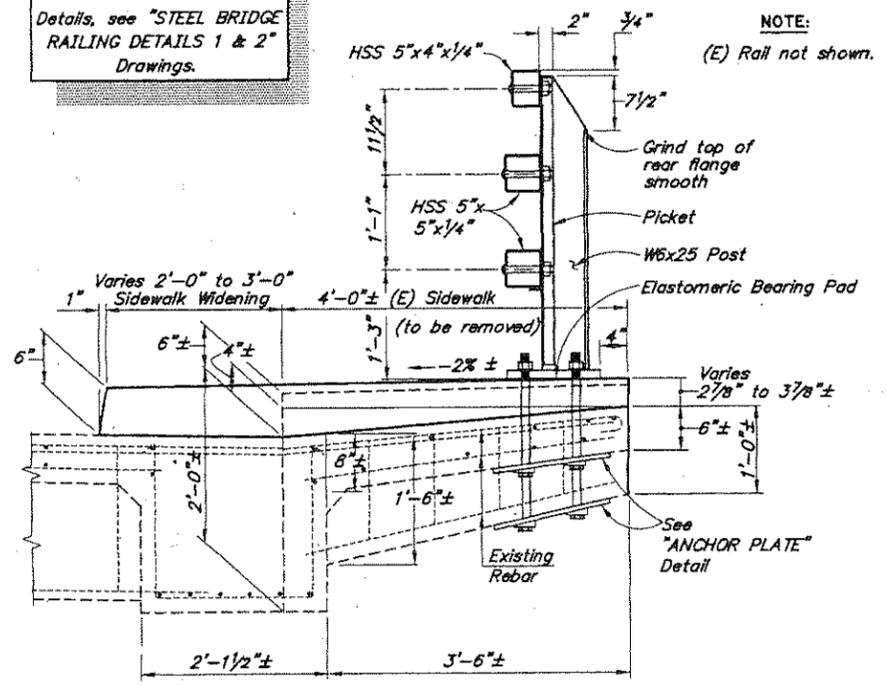
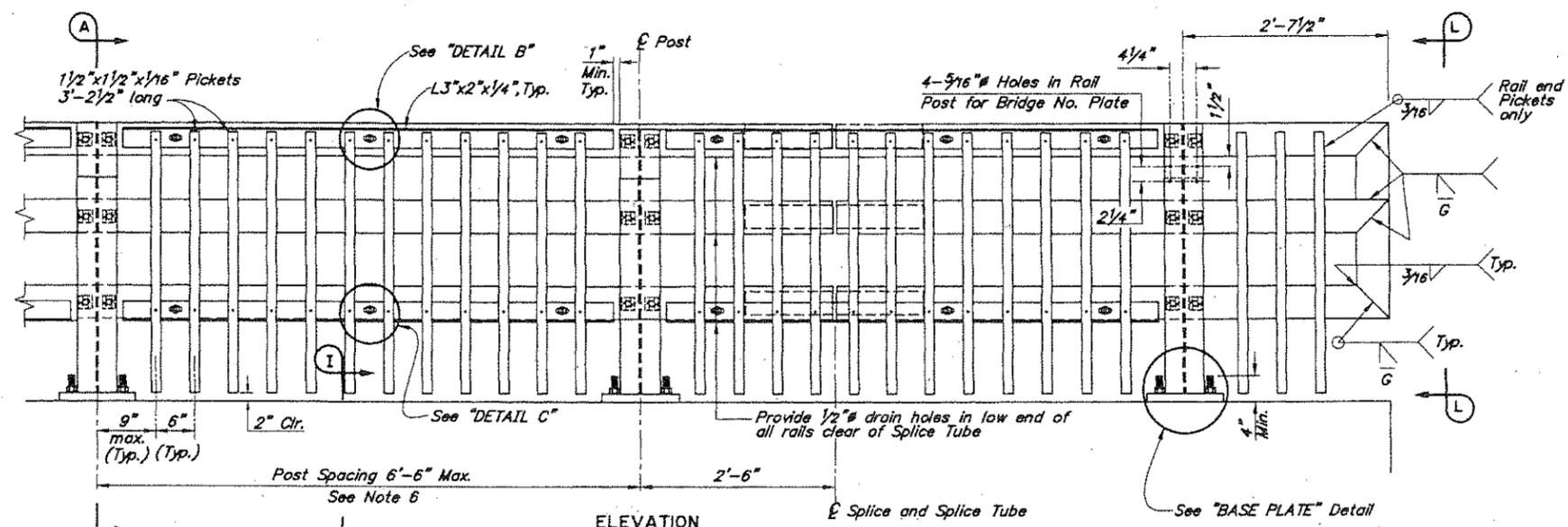
**ADDITIVE ALTERNATE A**

**WATER STREET VIADUCT**  
**SOUTH TONGASS HIGHWAY**  
**STEEL BRIDGE RAILING LAYOUT**

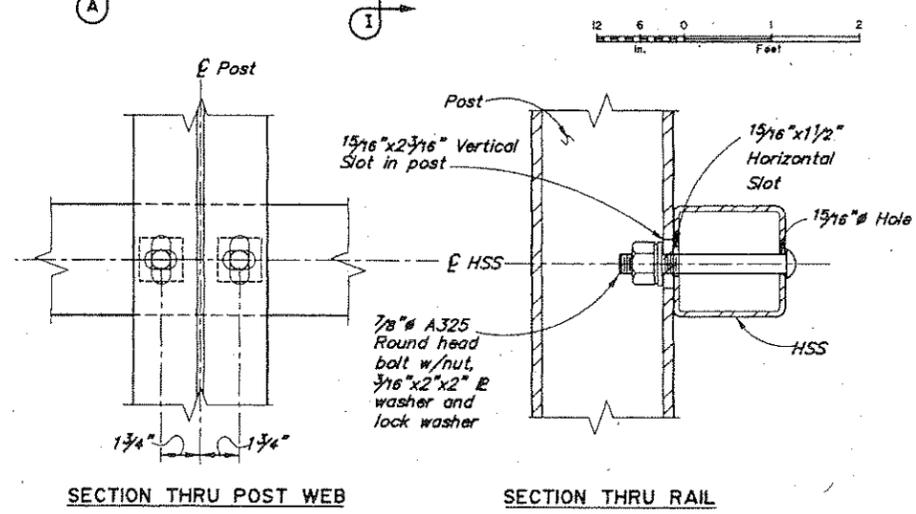
BRIDGE NO. 797  
 DWG. NO. 1

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	ARA-TEA-0902(35)/69345	2010	M3	53

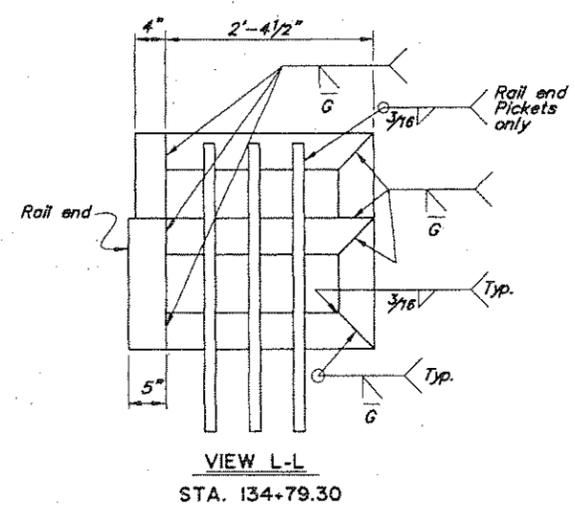
**NOTE:**  
For SECTIONS and other Details, see "STEEL BRIDGE RAILING DETAILS 1 & 2" Drawings.



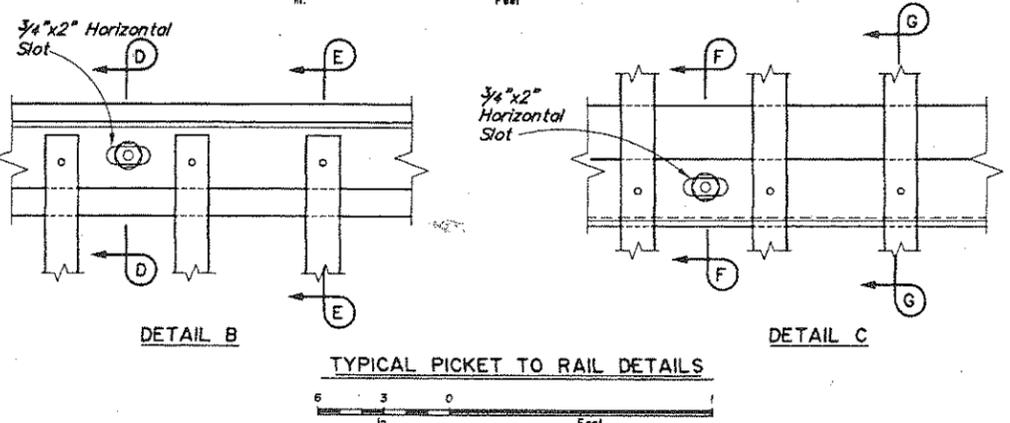
**SECTION A-A**  
TYPICAL SECTION



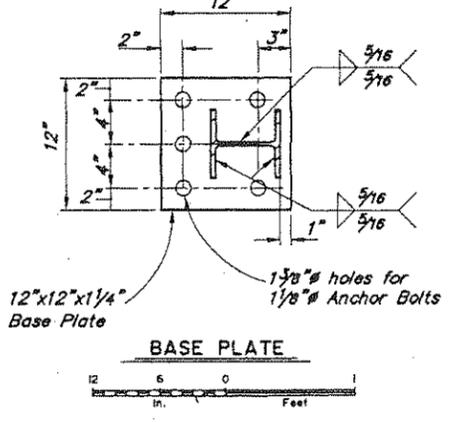
TYPICAL RAIL TO POST CONNECTIONS



VIEW L-L  
STA. 134+79.30



TYPICAL PICKET TO RAIL DETAILS



BASE PLATE

**RAILING NOTES**

1. Core 1'-1" holes through the existing deck.
2. Provide railing expansion joints at 50'-0" maximum intervals. Provide a minimum of 4 rail posts between railing expansion joints. Railing expansion joints are required in rail panels that span bridge expansion joints.
3. Install all posts plumb.
4. Locate bridge number plate on right side of approaching traffic at the Tongass Ave. end, Sta. 125+30.93.
5. Furnish one bridge number plate. Use bronze that conforms to A.S.T.M. B98-90, Alloy "A" or "B". Use "Century" type style lettering. Use studs and nuts that conform to UNS C65100 or C65500. Braze 1/4" threaded rod to back of plate with nut (4 req'd). Use locking nuts or lock washers on all machine bolts.
6. See "STEEL BRIDGE RAILING LAYOUT" Dwg. for railpost spacing.
7. Remove & Dispose (E) Rail and Anchor Bolts.
8. Provide Class A-A Concrete, f'c=5,000 psi.
9. Provide reinforcing steel that meets ASTM A706, Fy=60 ksi.
10. Provide rail posts & base plates that meet ASTM A709, Fy=50 ksi. HSS Tubing shall meet ASTM A500, Grade C, Fy=50 ksi. Provide pickets that meet ASTM A500, Grade B, Fy=46 ksi. Other structural steel shall meet ASTM A36, Fy=36 ksi.
11. Provide galvanized anchor bolts that meet ASTM A449.

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.  
PE *[Signature]* Date 11-8-11

**LEGEND**

(E)	= Existing
±	= Existing
---	= Existing
---	= Proposed

Elevations, Bearings and Dimensions are based on "AS-BUILT" plans. Verify all controlling field dimensions before ordering or fabricating any material.

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DRAWN BY: <i>Cathy Anderson</i>	CHECKED: <i>Steve Lee</i>
QUANTITIES BY: <i>Steve Lee</i>	CHECKED: <i>Leslie Daugherty</i>

**ADDITIVE ALTERNATE A**

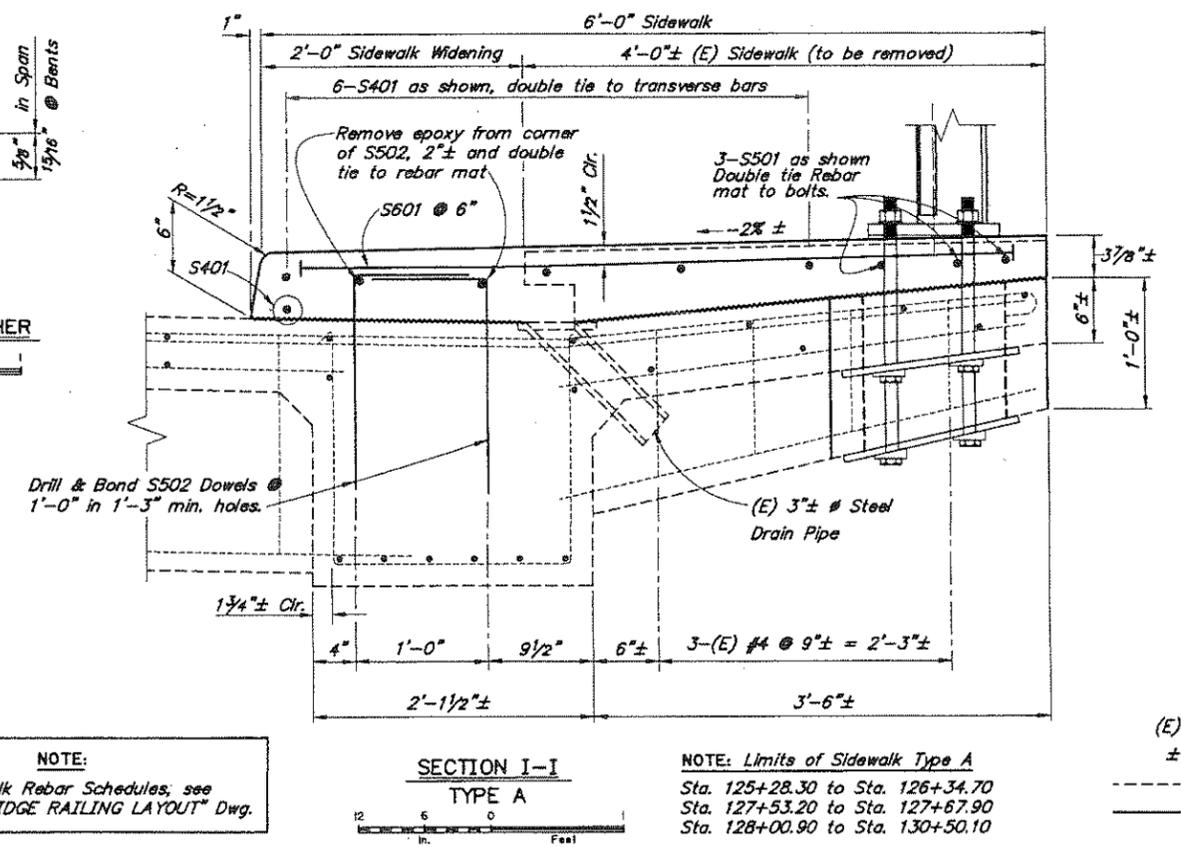
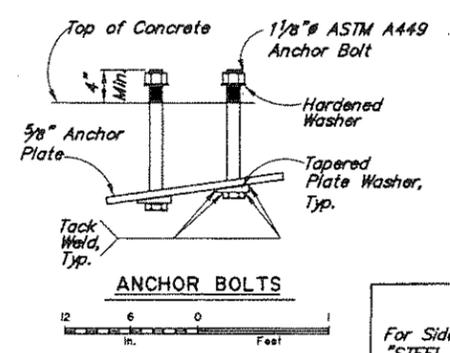
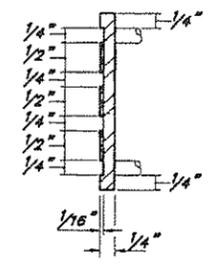
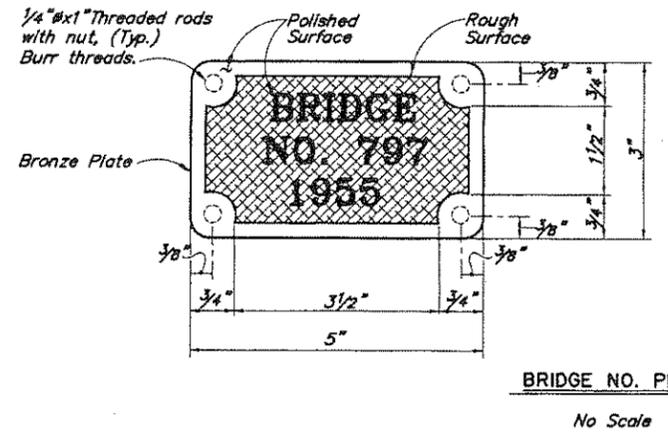
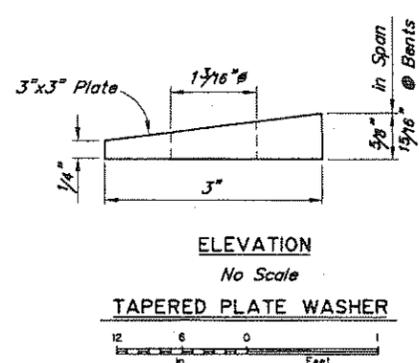
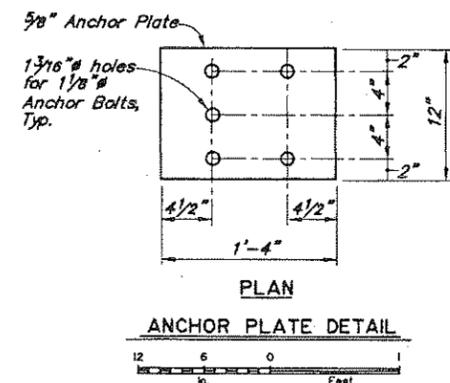
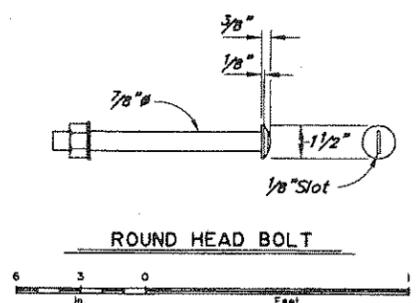
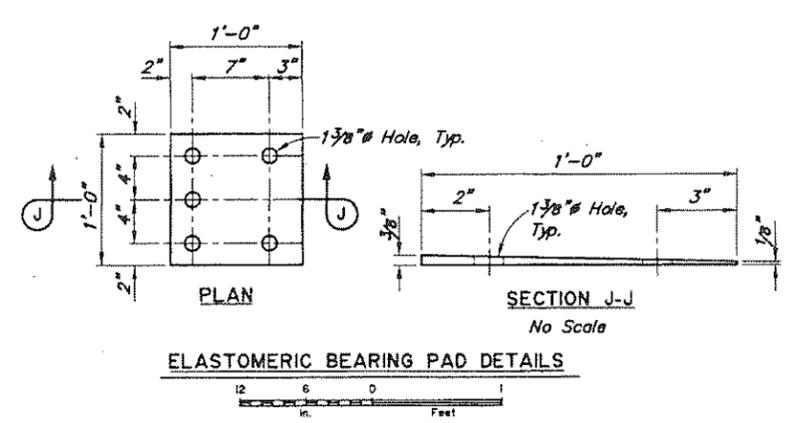
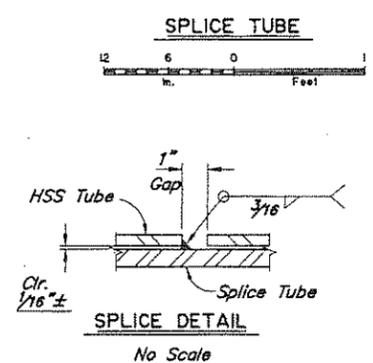
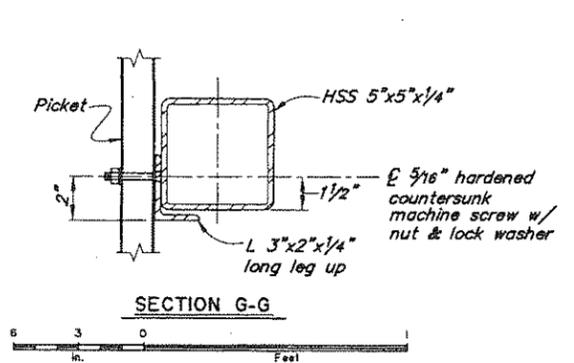
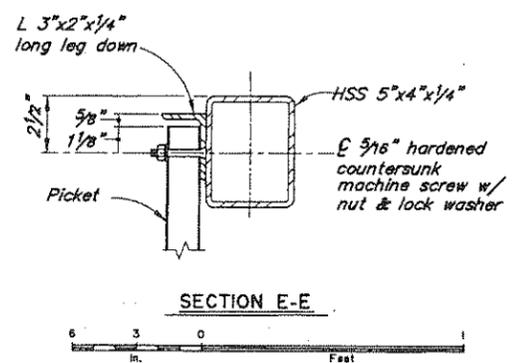
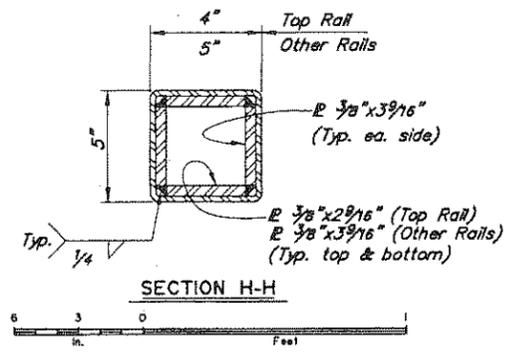
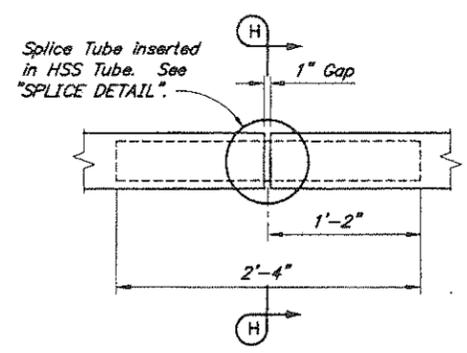
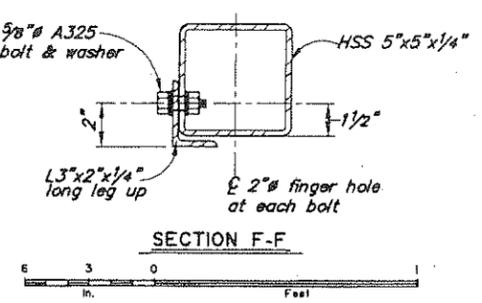
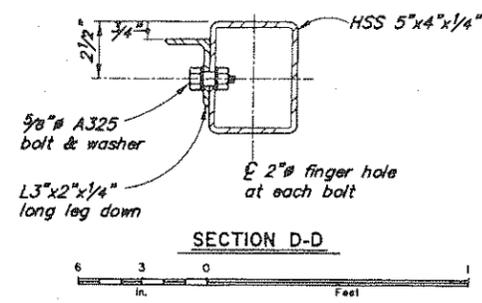
STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
BRIDGE SECTION



**WATER STREET VIADUCT**  
SOUTH TONGASS HIGHWAY  
**STEEL BRIDGE RAILING**

BRIDGE NO. 797  
DWG. NO. 2

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	ARA-TEA-0902(35)/69345	2010	M4	53



NOTE:  
For Sidewalk Rebar Schedules, see  
"STEEL BRIDGE RAILING LAYOUT" Dwg.

NOTE: Limits of Sidewalk Type A  
Sta. 125+28.30 to Sta. 126+34.70  
Sta. 127+53.20 to Sta. 127+67.90  
Sta. 128+00.90 to Sta. 130+50.10

Project As-Built Drawings have been reviewed by the Project Engineer and represent the best of my knowledge, the project as constructed.  
Date: 10/20/10  
PE: [Signature]

LEGEND  
(E) = Existing  
± = Existing  
--- = Existing  
— = Proposed

DESIGNED BY: Steve Lee	CHECKED: Leslie Dougherty
DRAWN BY: Cathy Anderson	CHECKED: Steve Lee
QUANTITIES BY: Steve Lee	CHECKED: Leslie Dougherty

**ADDITIVE ALTERNATE A**

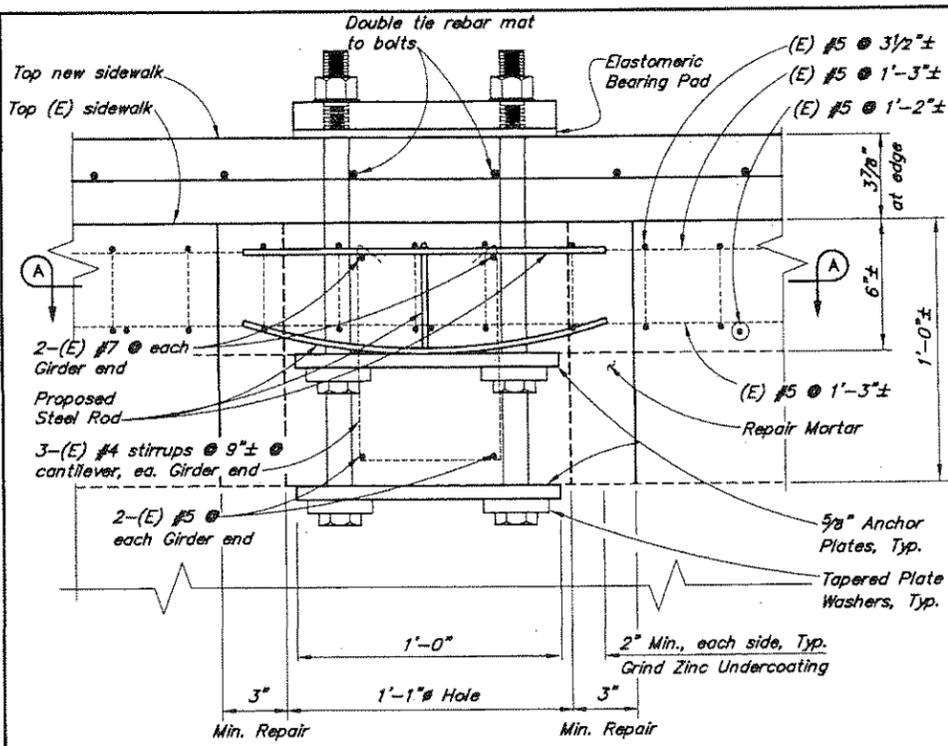
STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
BRIDGE SECTION



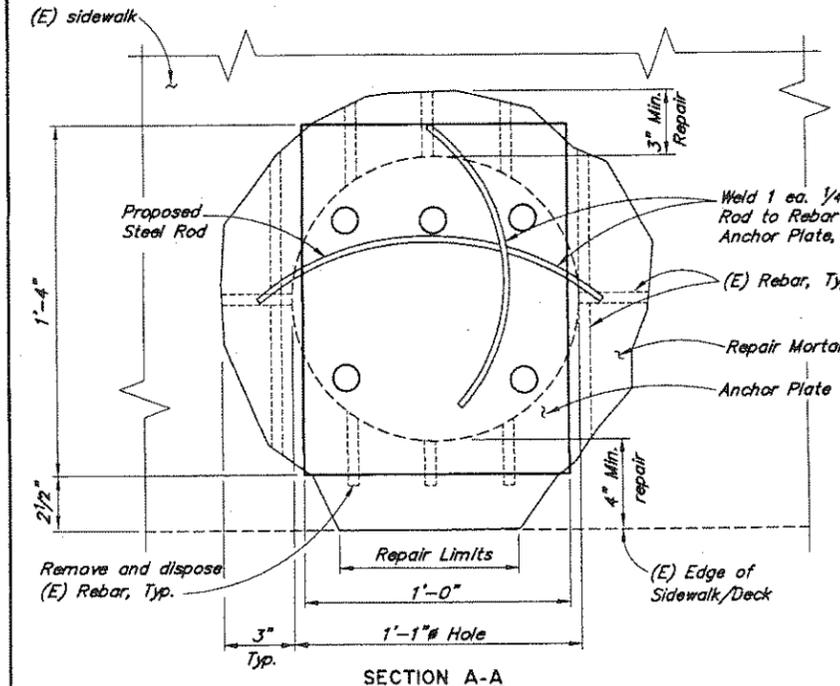
**WATER STREET VIADUCT**  
SOUTH TONGASS HIGHWAY  
**STEEL BRIDGE RAILING DETAILS 1**

BRIDGE NO. 797  
DWG. NO. 3

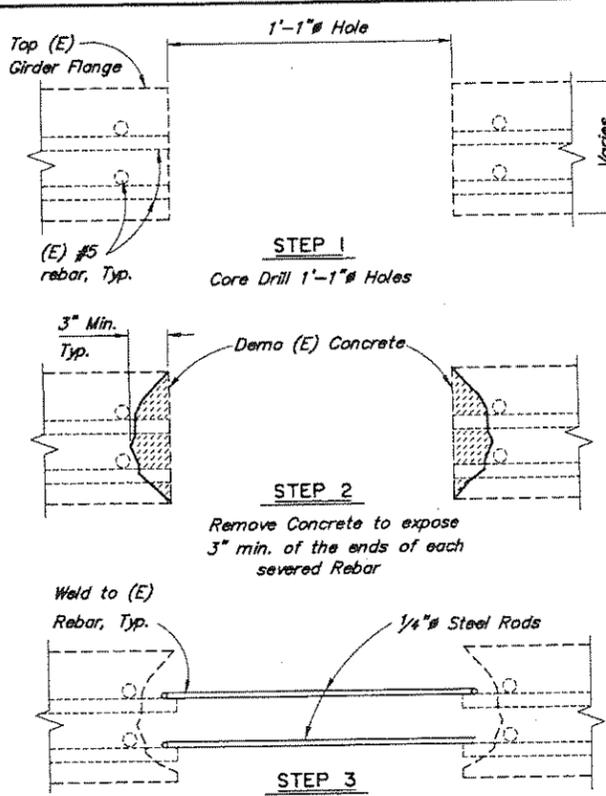
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	ARA-TEA-0902(35)/89345	2010	M5	53



**RAILPOST ANCHOR**



**SECTION A-A**

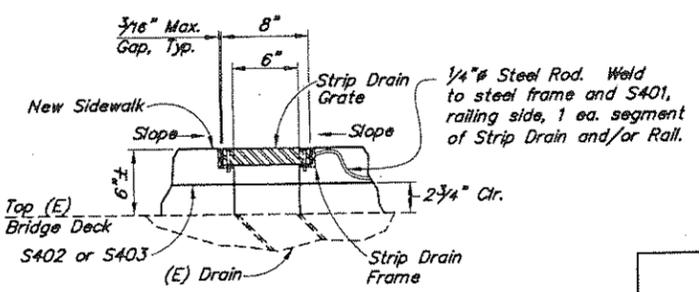


Weld ends of all Rebar, in any direction, together with Steel Rod and perform continuity check, according to Section 684.

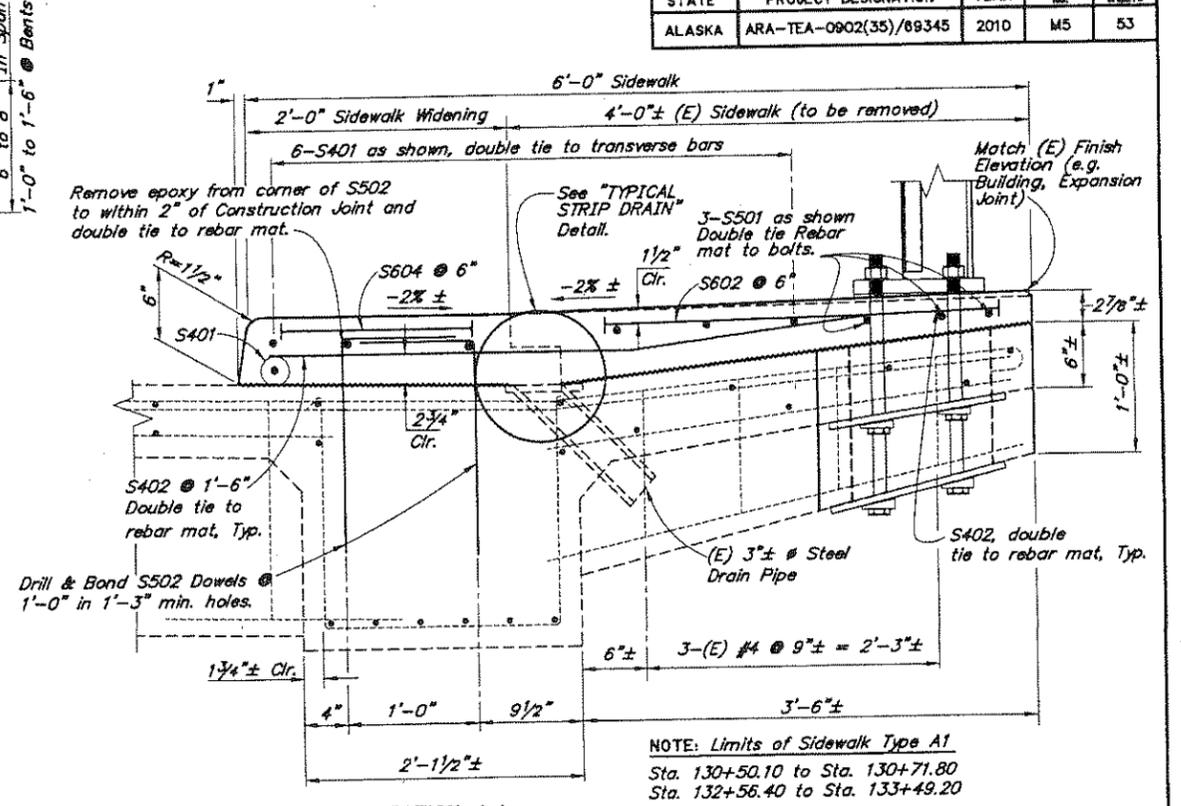
See "RAILPOST ANCHOR" Detail



**NOTE:**  
See Sht. H7 for additional details.



**TYPICAL STRIP DRAIN**



**NOTE: Limits of Sidewalk Type A1**  
Sta. 130+50.10 to Sta. 130+71.80  
Sta. 132+56.40 to Sta. 133+49.20

**NOTE: Limits of Sidewalk Type B**  
Sta. 133+49.20 to Sta. 133+51.70  
Sta. 134+79.30 to Sta. 135+17.13

**NOTE:**  
For Sidewalk Rebar Schedules, see "STEEL BRIDGE RAILING LAYOUT" Dwg.

**LEGEND**  
(E) = Existing  
± = Existing  
--- = Existing  
--- = Proposed

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QUANTITIES BY: Steve Lee	CHECKED: Leslie Daugherty

**ADDITIVE ALTERNATE A**

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC  
BRIDGE

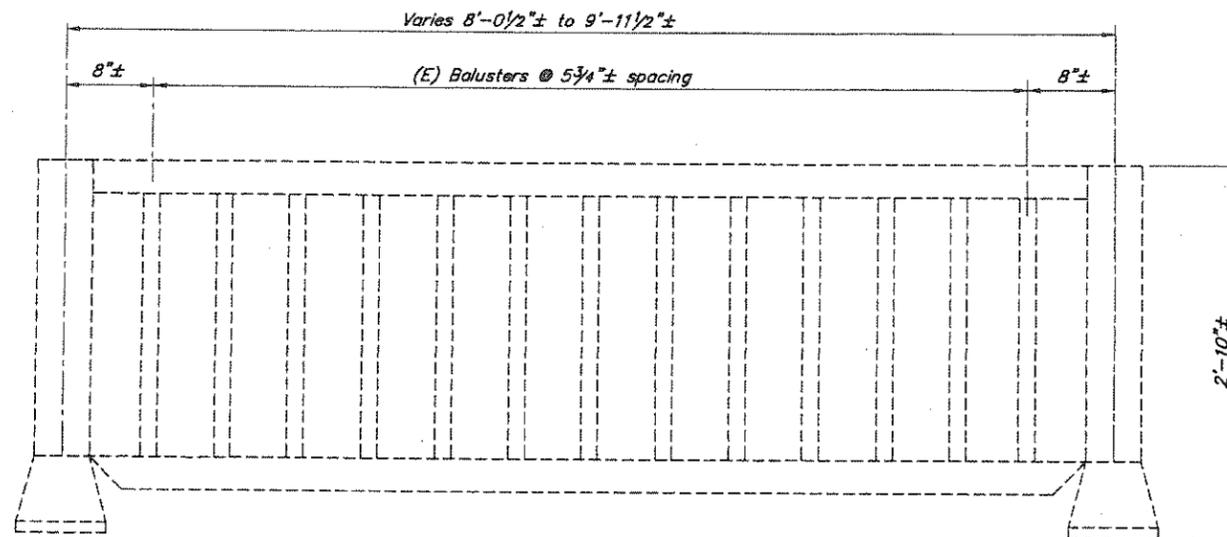


Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.  
PE [Signature] Date 11-8-11

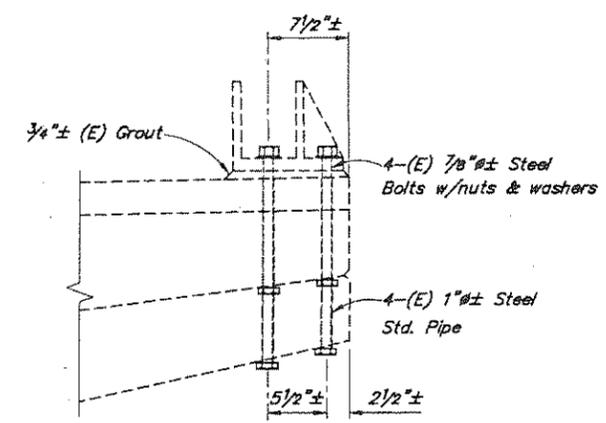
**WATER STREET VIADUCT**  
**SOUTH TONGASS HIGHWAY**  
**STEEL BRIDGE RAILING DETAILS 2**

BRIDGE NO. 797  
DWG. NO. 4

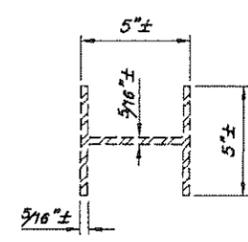
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	ARA-TEA-D902(35)/89345	2010	M8	53



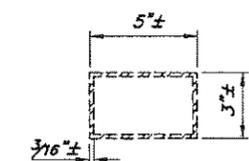
**EXISTING RAIL PANEL**  
8'-0 1/2" PANEL SHOWN.



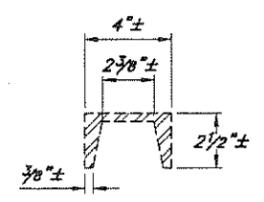
**TYPICAL SECTION**  
**(E) RAIL POST ANCHORAGE**



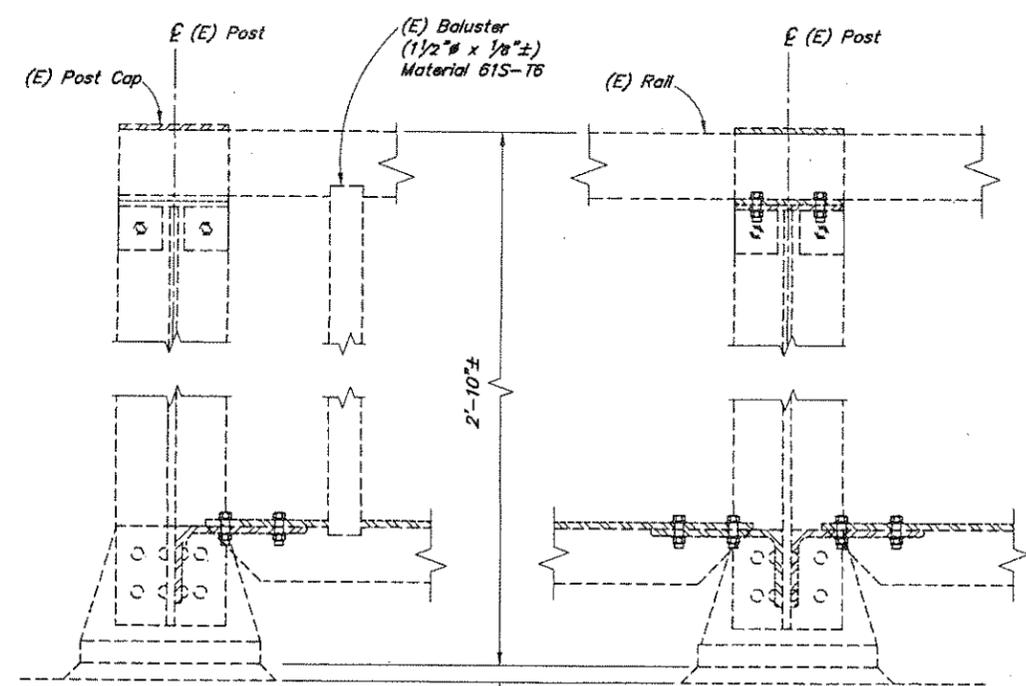
**(E) RAIL POST SECTION**  
MATERIAL 6IS-T6



**(E) TOP RAIL SECTION**  
MATERIAL 6IS-T6



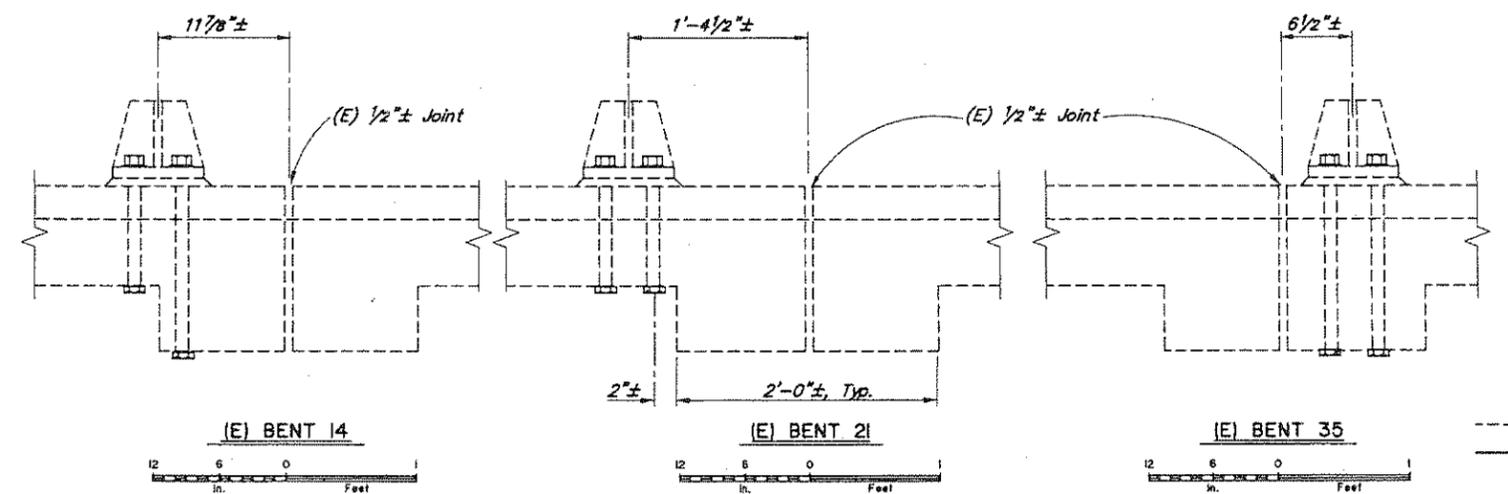
**(E) BOTTOM RAIL SECTION**  
MATERIAL 6IS-T6



**(E) END POST**

**(E) INTERMEDIATE POST**

**NOTE:**  
Rail Post Anchors shown for Bents 14, 21 & 35. Rail Post Anchors in span or at other bents are similar.



**(E) BENT 14**

**(E) BENT 21**

**(E) BENT 35**

**LEGEND**  
(E) = Existing  
± = Existing  
--- = Existing  
--- = Proposed

DESIGNED BY: Steve Lee	CHECKED: Leslie Daugherty
DRAWN BY: Cathy Anderson	CHECKED: Steve Lee
QUANTITIES BY: Steve Lee	CHECKED: Leslie Daugherty

**ADDITIVE ALTERNATE A**

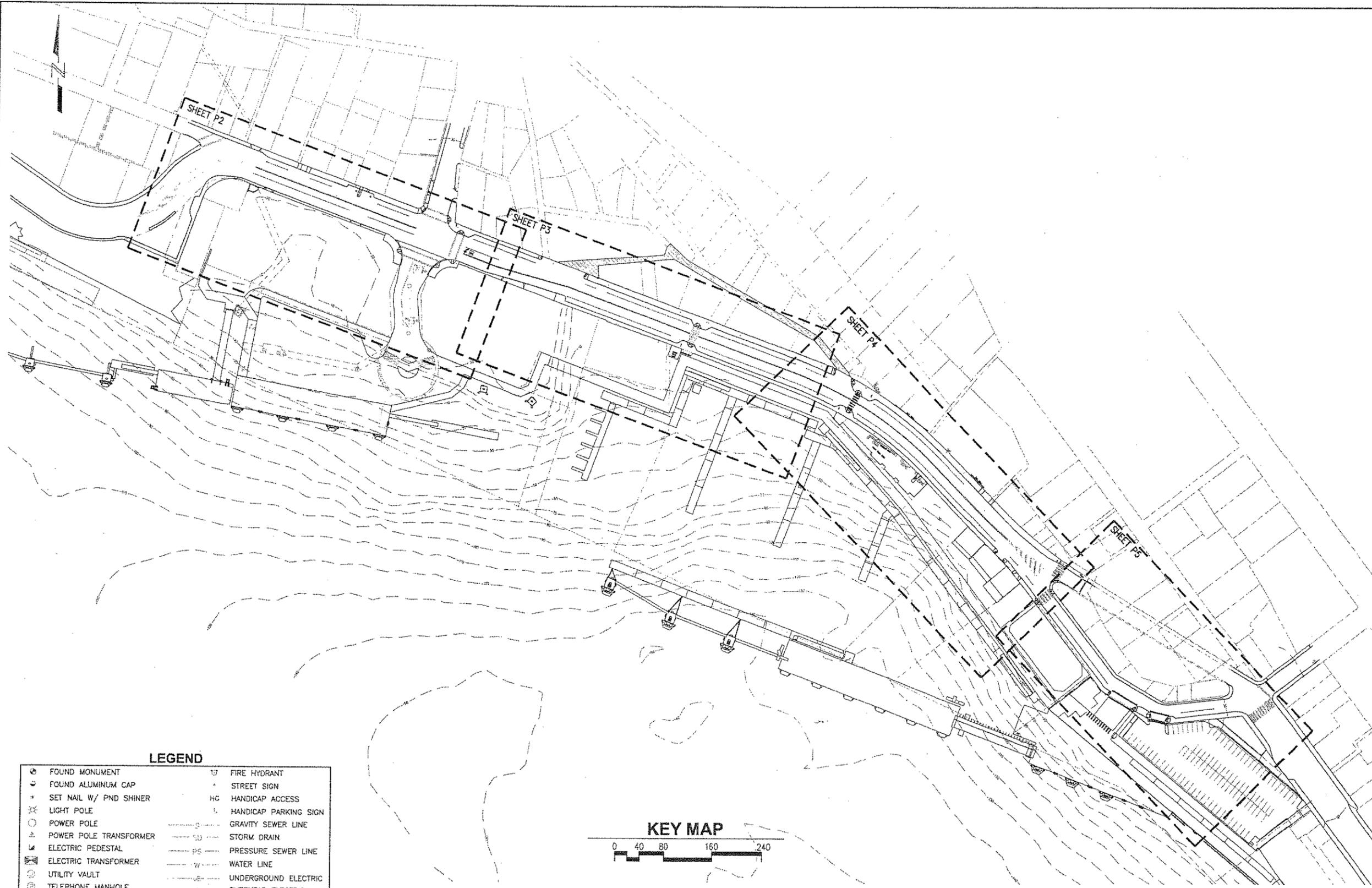
STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
BRIDGE SECTION



**WATER STREET VIADUCT**  
SOUTH TONGASS HIGHWAY  
**EXISTING ALUMINUM BRIDGE RAILING**

BRIDGE NO. 797  
DWG. NO. 5

1/8/10 Drawings\2006\064032.01 Ketchikan Water Street Improvements\Far Construction\064032.01-P1-P5.dwg



**LEGEND**

○	FOUND MONUMENT	⊙	FIRE HYDRANT
⊙	FOUND ALUMINUM CAP	▲	STREET SIGN
+	SET NAIL W/ PND SHINER	HC	HANDICAP ACCESS
⊙	LIGHT POLE	⊙	HANDICAP PARKING SIGN
⊙	POWER POLE	---	GRAVITY SEWER LINE
⊙	POWER POLE TRANSFORMER	---	STORM DRAIN
⊙	ELECTRIC PEDESTAL	---	PRESSURE SEWER LINE
⊙	ELECTRIC TRANSFORMER	---	WATER LINE
⊙	UTILITY VAULT	---	UNDERGROUND ELECTRIC
⊙	TELEPHONE MANHOLE	---	OVERHEAD ELECTRIC
⊙	STORM DRAIN MANHOLE	---	TELEPHONE
⊙	STORM DRAIN CATCH BASIN	---	CHAIN LINK FENCE
⊙	4" STORM DRAIN HOLE	---	RAIL FENCE
⊙	3" STORM DRAIN HOLE	---	BUILDING LINE
⊙	SANITARY SEWER MANHOLE	---	SEAWALL
⊙	WATER VAULT	---	ROW
⊙	FINISH FLOOR ELEVATION	▨	PAVED AREA
⊙	WATER VALVE	▨	CONCRETE AREA
⊙	WATER VALVE KEY BOX	▨	EXISTING CURB CUT

**NEW FEATURES LEGEND**

⊙	SIGN
⊙	NEW 6" SCUPPER
⊙	NEW CURB INLET
---	NEW STRIP DRAIN
▨	CONCRETE SIDEWALK

**KEY MAP**



REV	DATE	DESCRIPTION

DESIGNED BY: SR

2/8/10

CHECKED BY: GW

DRAWN BY: GRD

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 & PUBLIC FACILITIES  
 DESIGN & ENGINEERING SERVICES  
 DIVISION-SOUTHEAST REGION

**KETCHIKAN:  
 WATER STREET  
 SIDEWALK  
 IMPROVEMENTS  
 PROJECT No. 69345**

**SIGNING AND STRIPING PLAN**

PROJECT DESIGNATION  
**ARA-TEA-0902(35)**

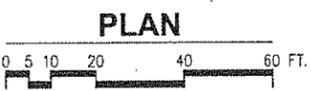
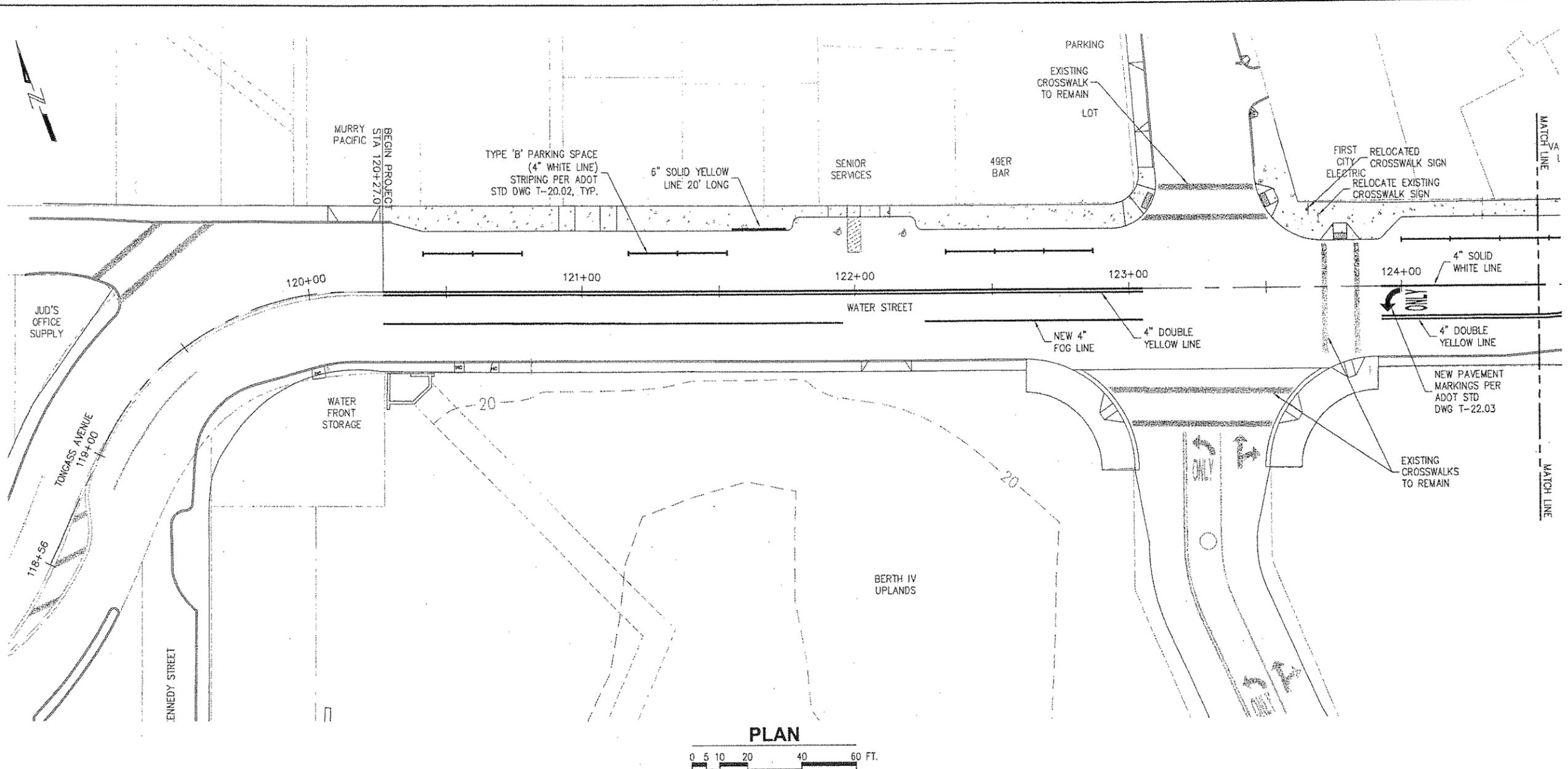
STATE	YEAR
ALASKA	2010

SHEET NUMBER	TOTAL SHEETS
P1	53

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

PE Date 11-8-11

1/8/10 Drawings 2006\064032.01 Ketchikan Water Street Improvements For Construction\064032.01-P1-P5.dwg



**LEGEND**

FOUND MONUMENT	FIRE HYDRANT
FOUND ALUMINUM CAP	STREET SIGN
SET NAIL W/ PND SHINER	HC HANDICAP ACCESS
LIGHT POLE	HANDICAP PARKING SIGN
POWER POLE	GRAVITY SEWER LINE
POWER POLE TRANSFORMER	STORM DRAIN
ELECTRIC PEDESTAL	PRESSURE SEWER LINE
ELECTRIC TRANSFORMER	WATER LINE
UTILITY VAULT	UNDERGROUND ELECTRIC
TELEPHONE MANHOLE	OVERHEAD ELECTRIC
STORM DRAIN MANHOLE	TELEPHONE
STORM DRAIN CATCH BASIN	CHAIN LINK FENCE
4" STORM DRAIN HOLE	RAIL FENCE
3" STORM DRAIN HOLE	BUILDING LINE
SANITARY SEWER MANHOLE	SEAWALL
WATER VAULT	ROW
FINISH FLOOR ELEVATION	PAVED AREA
WATER VALVE	CONCRETE AREA
WATER VALVE KEY BOX	EXISTING CURB CUT

**NEW FEATURES LEGEND**

SIGN
NEW 6" SCUPPER
NEW CURB INLET
NEW STRIP DRAIN
CONCRETE SIDEWALK

REVISIONS	DESCRIPTION	DATE	REV

DESIGNED BY: SR

CHECKED BY: GW  
DRAWN BY: GRD

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
DESIGN & ENGINEERING SERVICES  
DIVISION-SOUTHEAST REGION

**KETCHIKAN:  
WATER STREET  
SIDEWALK  
IMPROVEMENTS  
PROJECT No. 69345**

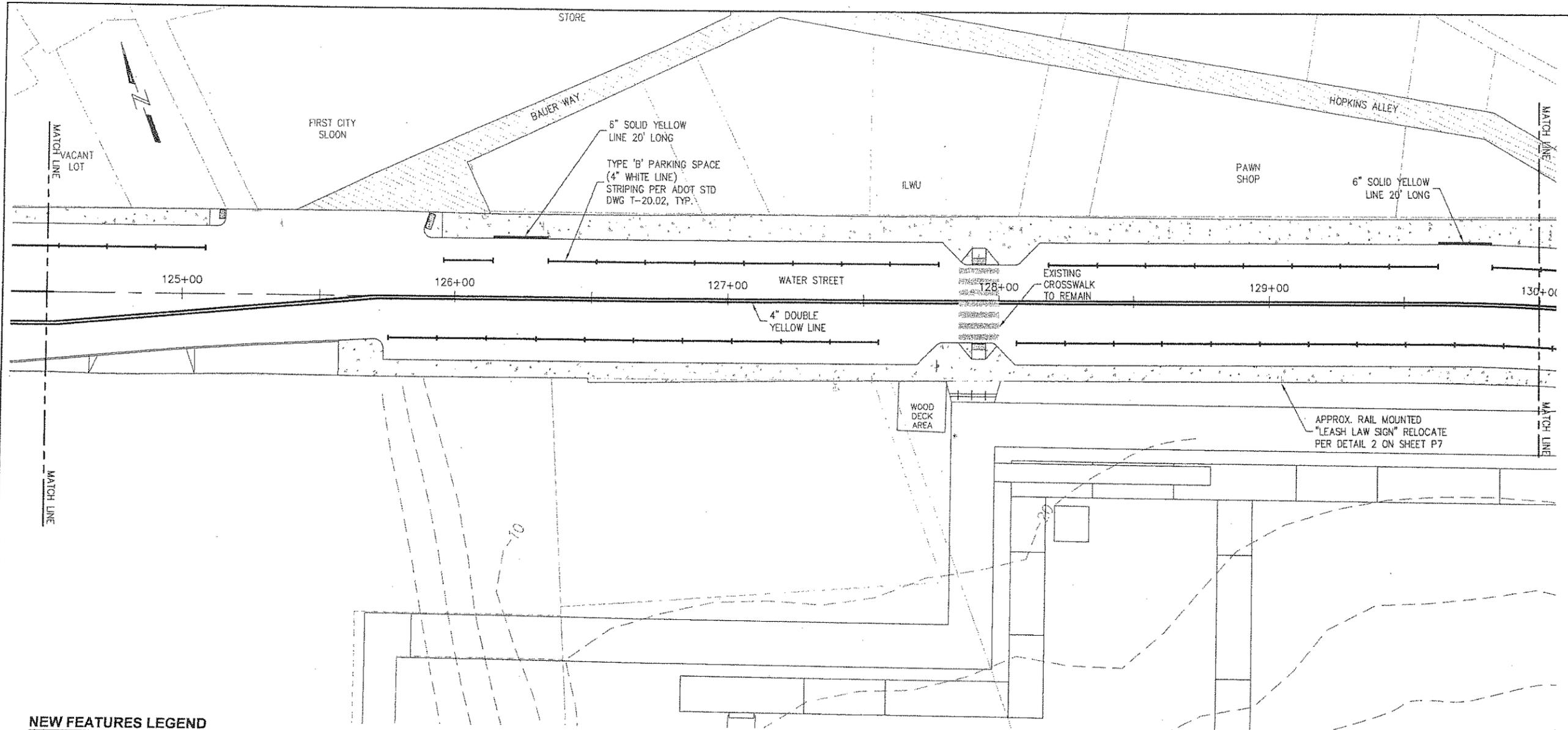
**SIGNING AND STRIPING PLAN**

PROJECT DESIGNATION	
ARA-TEA-0902(35)	
STATE	YEAR
ALASKA	2010
SHEET NUMBER	TOTAL SHEETS
P2	53

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

PE Date 11-8-11

13/10 Drawings\2006\064032.01 Ketchikan Water Street Improvements\For Construction\064032.01-P1-P5.dwg



**NEW FEATURES LEGEND**

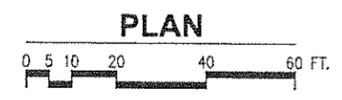
- ↑ SIGN
- ⊙ NEW 6" SCUPPER
- NEW CURB INLET
- - - NEW STRIP DRAIN
- CONCRETE SIDEWALK

**LEGEND**

⊙ FOUND MONUMENT	⊙ FIRE HYDRANT
⊙ FOUND ALUMINUM CAP	⊙ STREET SIGN
+ SET NAIL W/ PND SHINER	HC HANDICAP ACCESS
⊙ LIGHT POLE	⊙ HANDICAP PARKING SIGN
⊙ POWER POLE	⊙ GRAVITY SEWER LINE
⊙ POWER POLE TRANSFORMER	⊙ STORM DRAIN
⊙ ELECTRIC PEDESTAL	⊙ PRESSURE SEWER LINE
⊙ ELECTRIC TRANSFORMER	⊙ WATER LINE
⊙ UTILITY VAULT	⊙ UNDERGROUND ELECTRIC
⊙ TELEPHONE MANHOLE	⊙ OVERHEAD ELECTRIC
⊙ STORM DRAIN MANHOLE	⊙ TELEPHONE
⊙ STORM DRAIN CATCH BASIN	⊙ CHAIN LINK FENCE
⊙ 4" STORM DRAIN HOLE	⊙ RAIL FENCE
⊙ 3" STORM DRAIN HOLE	⊙ BUILDING LINE
⊙ SANITARY SEWER MANHOLE	⊙ SEAWALL
⊙ WATER VAULT	⊙ ROW
⊙ FINISH FLOOR ELEVATION	⊙ PAVED AREA
⊙ WATER VALVE	⊙ CONCRETE AREA
⊙ WATER VALVE KEY BOX	⊙ EXISTING CURB CUT

**NEW FEATURES LEGEND**

- ↑ SIGN
- ⊙ NEW 6" SCUPPER
- NEW CURB INLET
- - - NEW STRIP DRAIN
- CONCRETE SIDEWALK



REVISIONS	DESCRIPTION	DATE	REV

DESIGNED BY: SR

CHECKED BY: GW

DRAWN BY: GRD

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 & PUBLIC FACILITIES  
 DESIGN & ENGINEERING SERVICES  
 DIVISION-SOUTHEAST REGION

**KETCHIKAN:  
 WATER STREET  
 SIDEWALK  
 IMPROVEMENTS  
 PROJECT No. 69345**

**SIGNING AND STRIPING PLAN**

PROJECT DESIGNATION  
**ARA-TEA-0902(35)**

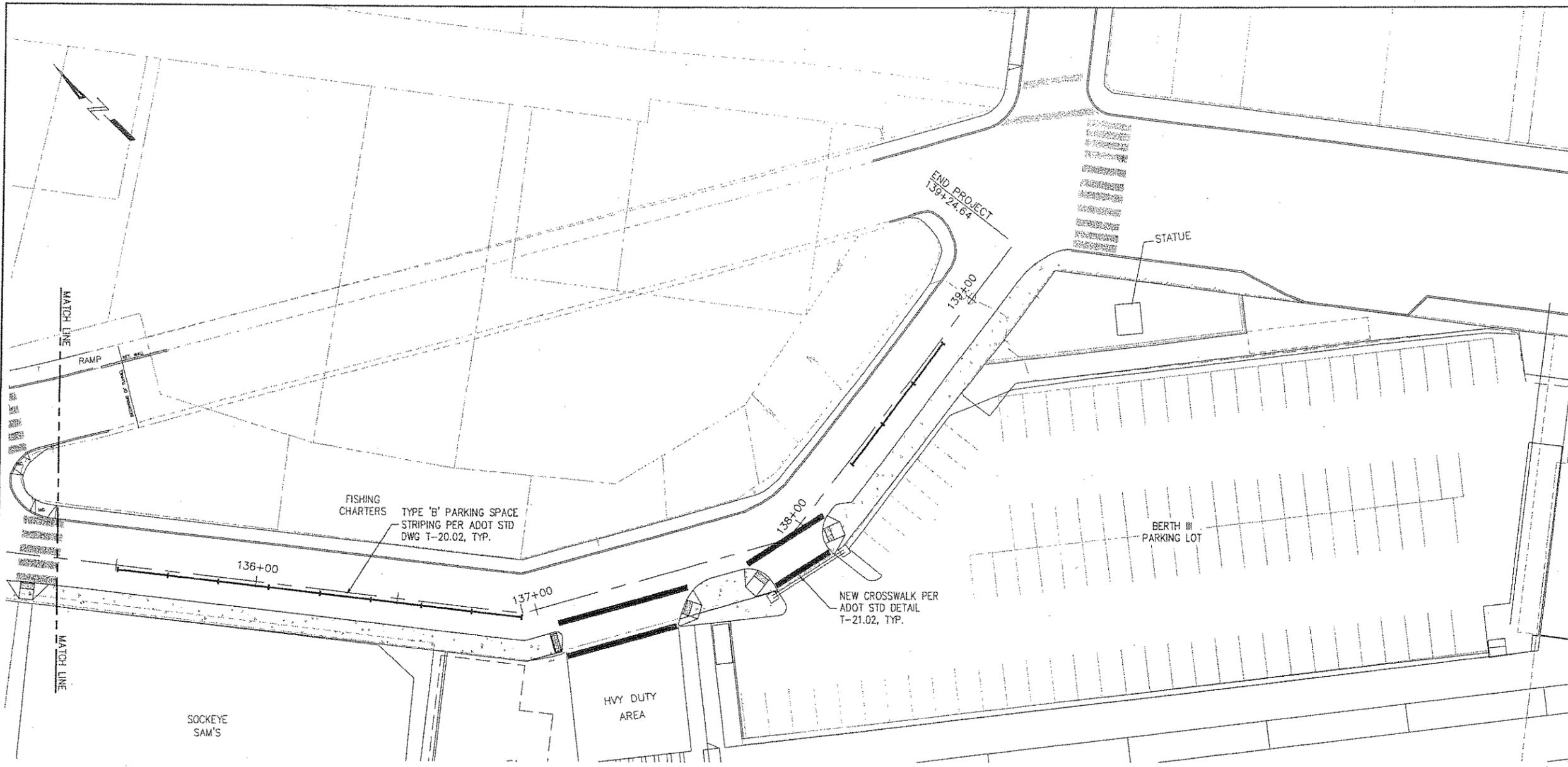
STATE	YEAR
ALASKA	2010

SHEET NUMBER	TOTAL SHEETS
P3	53

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, (the project as constructed).  
 PE *[Signature]* Date 11-5-11



1/8/10 Drawings 2005\064032.01 Ketchikan Water Street Improvements\For Construction\064032.01-P1-P5.dwg



**PLAN**



**LEGEND**

○	FOUND MONUMENT	▽	FIRE HYDRANT
○	FOUND ALUMINUM CAP	—	STREET SIGN
+	SET NAIL W/ PND SHINER	HC	HANDICAP ACCESS
⊙	LIGHT POLE	⊙	HANDICAP PARKING SIGN
⊙	POWER POLE	—	GRAVITY SEWER LINE
⊙	POWER POLE TRANSFORMER	—	STORM DRAIN
⊙	ELECTRIC PEDESTAL	—	PRESSURE SEWER LINE
⊙	ELECTRIC TRANSFORMER	—	WATER LINE
⊙	UTILITY VAULT	—	UNDERGROUND ELECTRIC
⊙	TELEPHONE MANHOLE	—	OVERHEAD ELECTRIC
⊙	STORM DRAIN MANHOLE	—	TELEPHONE
⊙	STORM DRAIN CATCH BASIN	—	CHAIN LINK FENCE
⊙	4" STORM DRAIN HOLE	—	RAIL FENCE
⊙	3" STORM DRAIN HOLE	—	BUILDING LINE
⊙	SANITARY SEWER MANHOLE	—	SEAWALL
⊙	WATER VAULT	—	ROW
⊙	FINISH FLOOR ELEVATION	▨	PAVED AREA
⊙	WATER VALVE	▨	CONCRETE AREA
⊙	WATER VALVE KEY BOX	△	EXISTING CURB CUT

**NEW FEATURES LEGEND**

⊙	SIGN
⊙	NEW 6" SCUPPER
⊙	NEW CURB INLET
—	NEW STRIP DRAIN
⊙	CONCRETE SIDEWALK

REVISIONS	REV	DATE	DESCRIPTION

DESIGNED BY: SR

CHECKED BY: GR  
DRAWN BY: GRD

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
& PUBLIC FACILITIES  
DESIGN & ENGINEERING SERVICES  
DIVISION-SOUTHEAST REGION

**KETCHIKAN:  
WATER STREET  
SIDEWALK  
IMPROVEMENTS  
PROJECT No. 69345**

**SIGNING AND STRIPING PLAN**

PROJECT DESIGNATION  
**ARA-TEA-0902(35)**

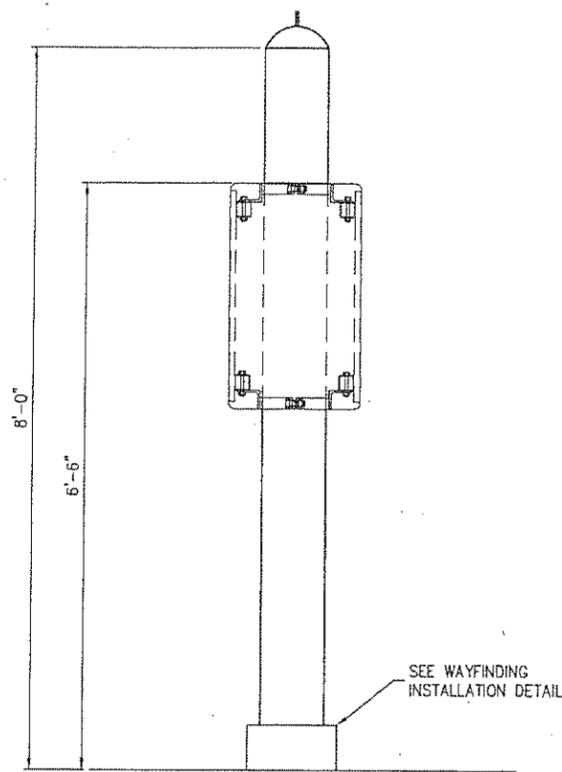
STATE	YEAR
<b>ALASKA</b>	<b>2010</b>

SHEET NUMBER	TOTAL SHEETS
<b>P5</b>	<b>53</b>

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

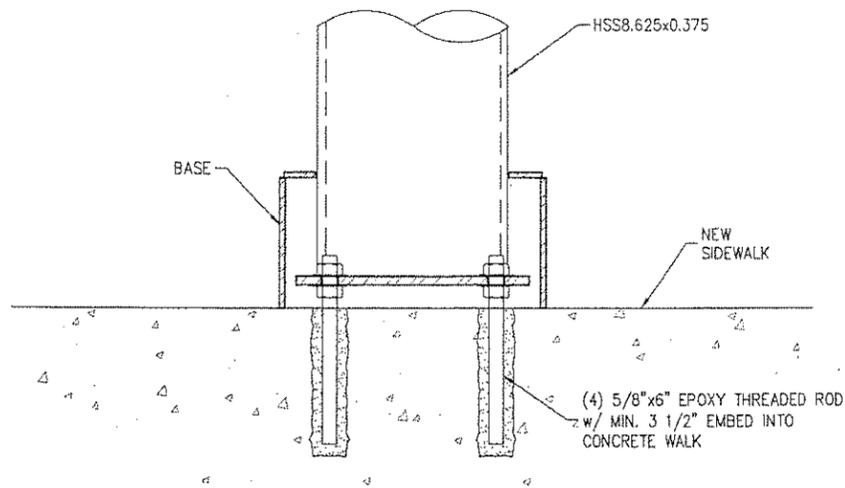
PE *[Signature]* Date 11-8-11



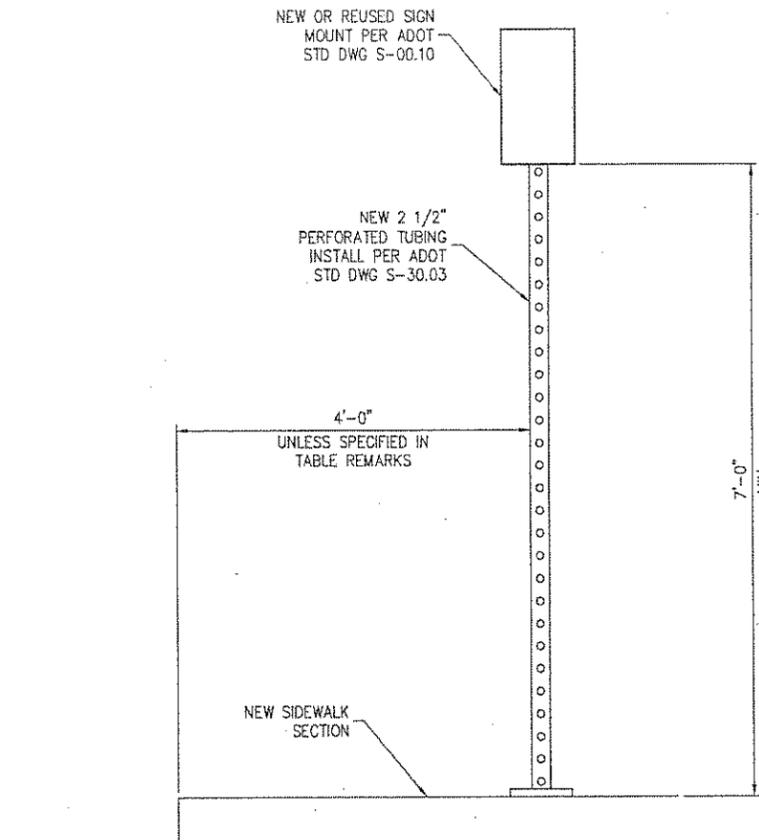


1  
P7

**INSTALL WAYFINDING SIGN**  
(PROVIDED BY CITY)



**WAYFINDING INSTALLATION DETAIL**



2  
P7

**TYPICAL DOT AND CITY SIGNS**

SIGNS MAY CONFLICT WITH RAILING OR OTHER FEATURES. RESOLVE WITH PROJECT ENGINEER.

REVISIONS	DATE	DESCRIPTION

DESIGNED BY: SR

2/3/10

CHECKED BY: GW  
DRAWN BY: GRD

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
& PUBLIC FACILITIES  
DESIGN & ENGINEERING SERVICES  
DIVISION-SOUTHEAST REGION

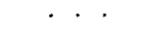
**KETCHIKAN:  
WATER STREET  
SIDEWALK  
IMPROVEMENTS**  
PROJECT No. 69345

**SIGNING AND STRIPING DETAILS**

PROJECT DESIGNATION	
ARA-TEA-0902(35)	
STATE	YEAR
ALASKA	2010
SHEET NUMBER	TOTAL SHEETS
P7	53

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.  
PE *[Signature]* Date 11-3-11

**LEGEND**

-  UNDER CONSTRUCTION
-  TEMPORARY PEDESTRIAN PATH
-  28" TUBULAR MARKERS @ 25' MAX. SPACING ON TANGENT  
10' MAX. SPACING ON RADIUS  
5' MAX. SPACING NEXT TO PEDESTRIAN PATH
-  TEMP. PLASTIC DRUMS AT 25' MAX SPACING
-  TYPE III BARRICADE
-  PORTABLE SIGN SUPPORT
-  POST MOUNTED CONSTRUCTION SIGN
-  DIRECTION OF TRAFFIC

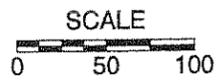
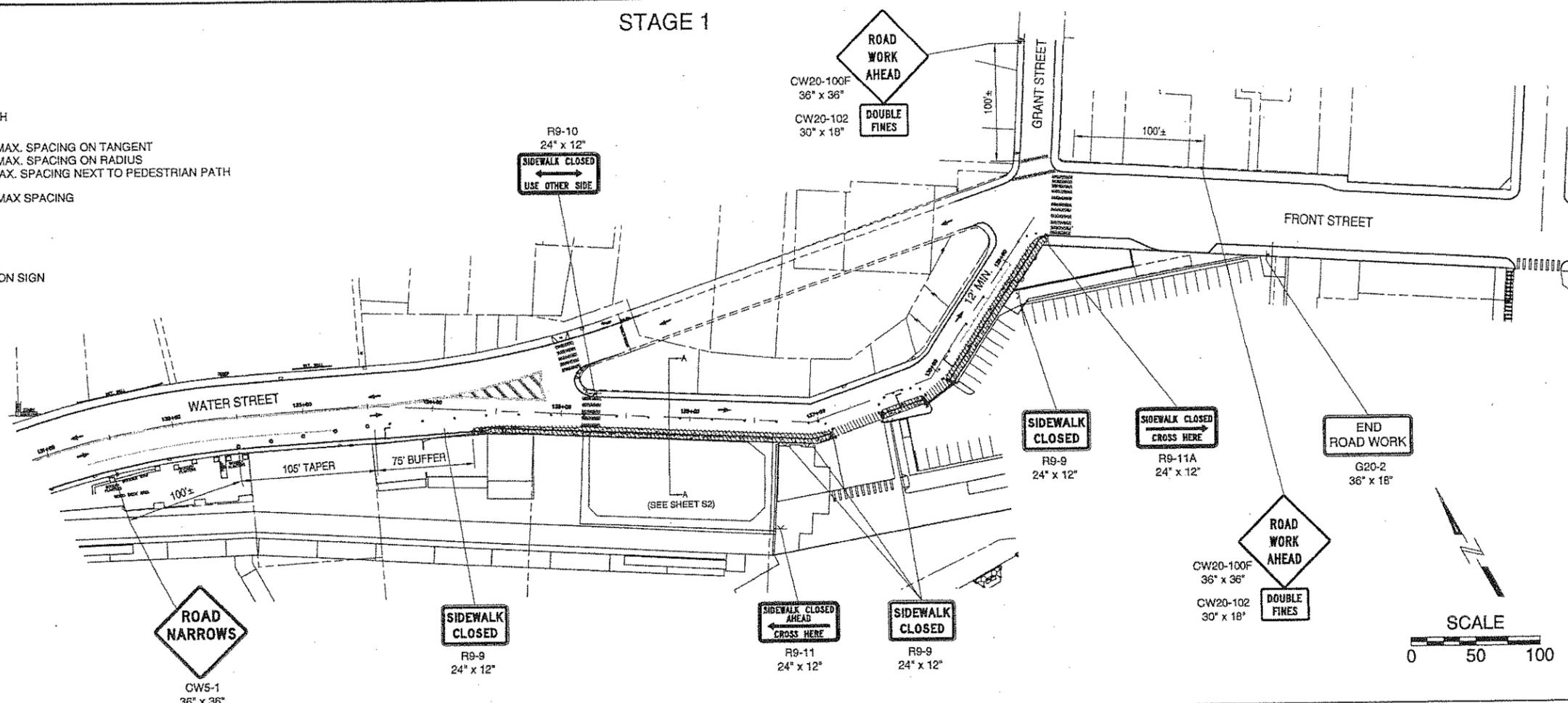
**GENERAL NOTES:**

1. ALL WORK SHALL CONFORM TO THE ALASKA TRAFFIC MANUAL AND THE ALASKA SIGN DESIGN SPECIFICATIONS.
2. REMOVE EXISTING STRIPING THAT CONFLICTS WITH TEMPORARY STAGING.
3. MAINTAIN ACCESS TO BUSINESSES AND RESIDENCES AS NECESSARY THROUGH THE CONSTRUCTION SITE IN ACCORDANCE WITH ADA REQUIREMENTS. (SEE SPECIAL PROVISIONS SECTION G43-3.01 GENERAL CONSTRUCTION REQUIREMENTS)

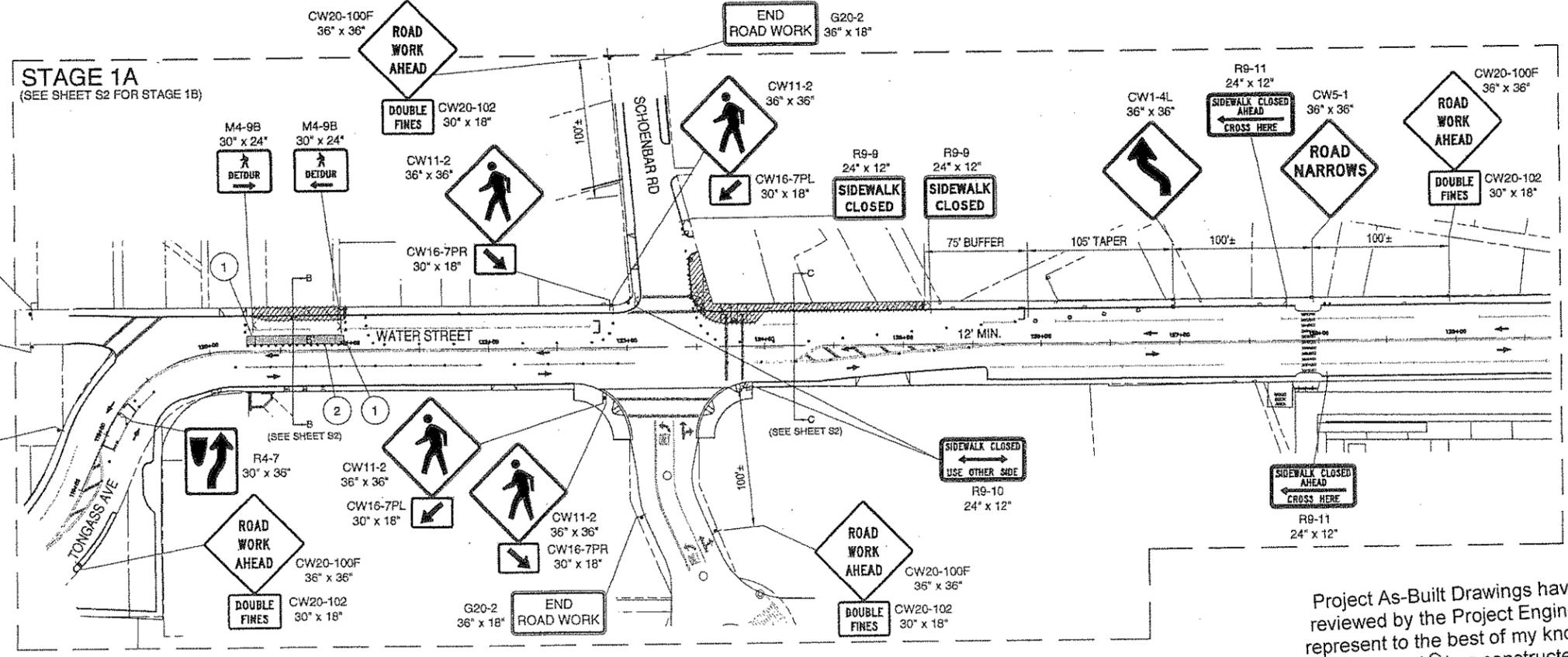
**CONSTRUCTION NOTES:**

1. TEMPORARY RAMP SHALL HAVE MINIMUM WIDTH OF 6 FEET AND NOT EXCEED A 12:1 SLOPE. (SEE SPECIAL PROVISIONS)
2. TEMPORARY BOARDWALK PER SPECIAL PROVISIONS.

**STAGE 1**



REV	DATE	DESCRIPTION



DESIGNED BY: ASY



CHECKED BY: LAR  
DRAWN BY: JCH

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
DESIGN & ENGINEERING SERVICES  
DIVISION-SOUTHEAST REGION

**KETCHIKAN:  
WATER STREET  
SIDEWALK  
IMPROVEMENTS  
PROJECT No. 69345**

**TRAFFIC  
CONTROL &  
CONSTRUCTION  
PHASING**

PROJECT DESIGNATION  
ARA-TEA-0902(35)

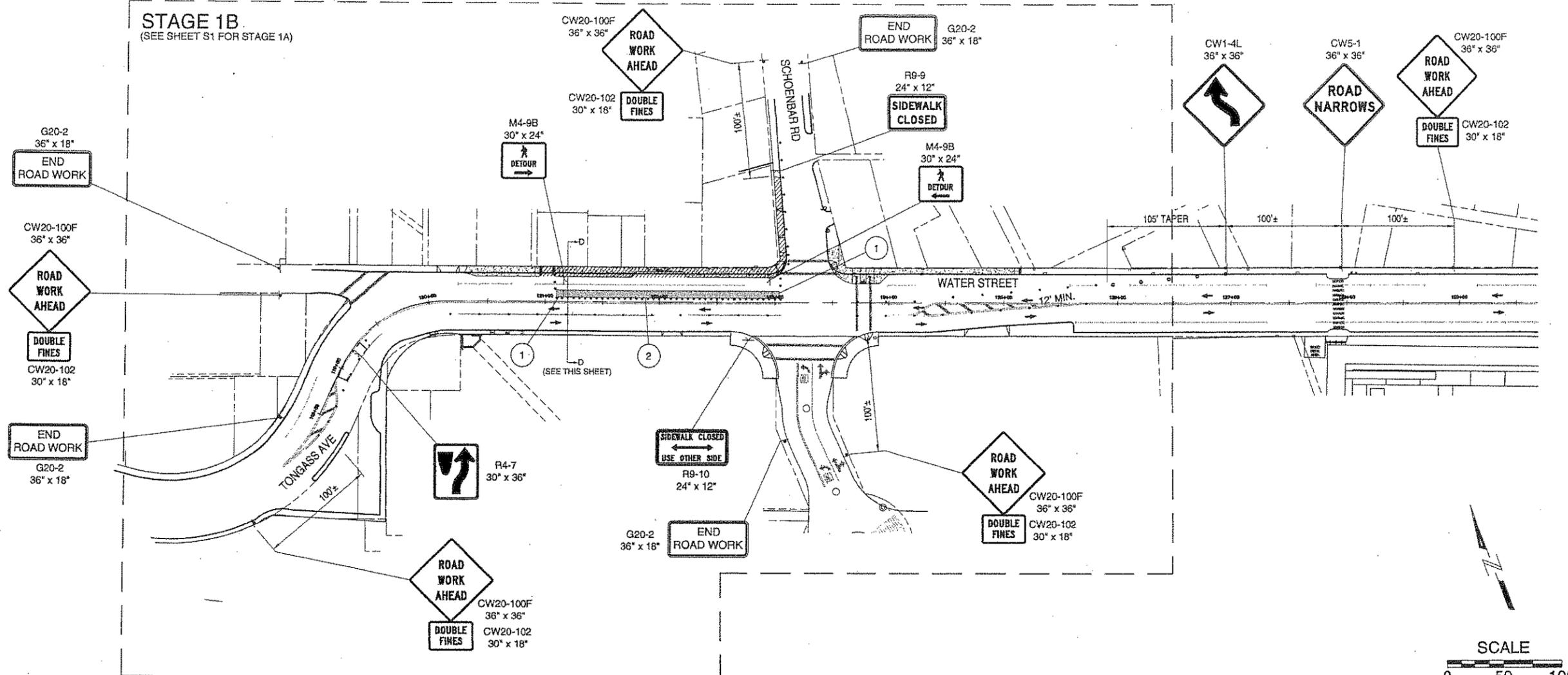
STATE	YEAR
ALASKA	2010
SHEET NUMBER	TOTAL SHEETS
S1	53

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.  
PE *[Signature]* Date 11-8-11

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**STAGE 1B**  
(SEE SHEET S1 FOR STAGE 1A)



**LEGEND**

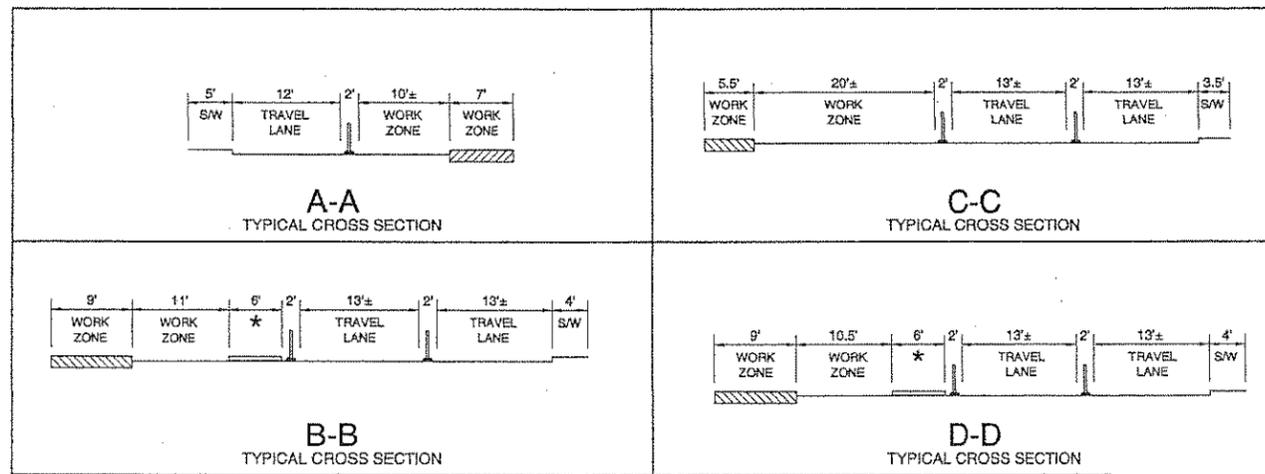
- UNDER CONSTRUCTION
- TEMPORARY PEDESTRIAN PATH
- 28" TUBULAR MARKERS @ 25' MAX. SPACING ON TANGENT  
10' MAX. SPACING ON RADIUS  
5' MAX. SPACING NEXT TO PEDESTRIAN PATH
- TEMP. PLASTIC DRUMS AT 25' MAX SPACING
- TYPE III BARRICADE
- PORTABLE SIGN SUPPORT
- POST MOUNTED CONSTRUCTION SIGN
- DIRECTION OF TRAFFIC

**CONSTRUCTION NOTES:**

- 1 TEMPORARY RAMP SHALL HAVE MINIMUM WIDTH OF 6 FEET AND NOT EXCEED A 12:1 SLOPE. (SEE SPECIAL PROVISIONS)
- 2 TEMPORARY BOARDWALK PER SPECIAL PROVISIONS.

**GENERAL NOTES:**

1. SEE SHEET S1



\* TEMPORARY BOARDWALK

REV	DATE	DESCRIPTION

DESIGNED BY: ASY

CHECKED BY: LAR  
DRAWN BY: JCH

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
& PUBLIC FACILITIES  
DESIGN & ENGINEERING SERVICES  
DIVISION-SOUTHEAST REGION

**KETCHIKAN:  
WATER STREET  
SIDEWALK  
IMPROVEMENTS  
PROJECT No. 69345**

**TRAFFIC CONTROL & CONSTRUCTION PHASING**

PROJECT DESIGNATION  
ARA-TEA-0902(35)

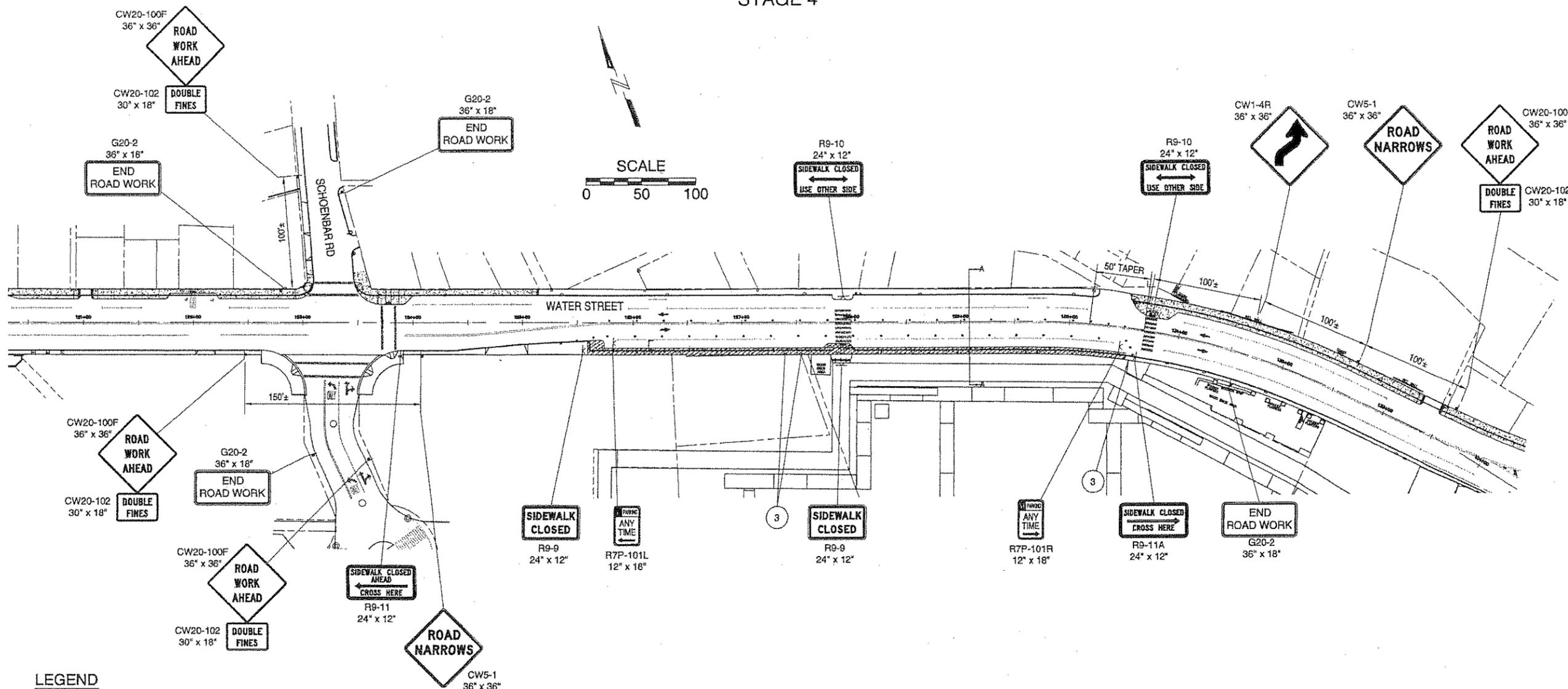
STATE	YEAR
ALASKA	2010
SHEET NUMBER	TOTAL SHEETS
S2	53

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.  
PE Date 11/8/11





STAGE 4



LEGEND

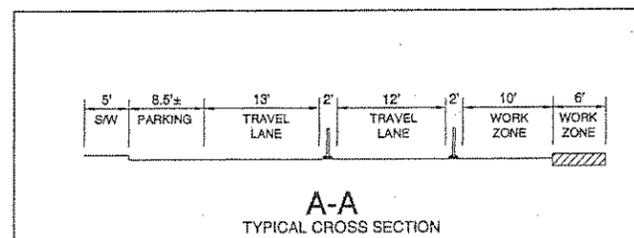
- UNDER CONSTRUCTION
- 28" TUBULAR MARKERS @ 25' MAX. SPACING ON TANGENT
- TEMP. PLASTIC DRUMS AT 25' MAX SPACING  
10' MAX. SPACING ON RADIUS  
5' MAX. SPACING NEXT TO PEDESTRIAN PATH
- TYPE III BARRICADE
- PORTABLE SIGN SUPPORT
- POST MOUNTED CONSTRUCTION SIGN
- DIRECTION OF TRAFFIC

CONSTRUCTION NOTES:

1. TEMPORARY RAMP SHALL HAVE MINIMUM WIDTH OF 6 FEET AND NOT EXCEED A 12:1 SLOPE. (SEE SPECIAL PROVISIONS)
2. TEMPORARY BOARDWALK PER SPECIAL PROVISIONS.
3. COVER EXISTING PARKING SIGN.

GENERAL NOTES:

1. SEE SHEET S1



REV	DATE	DESCRIPTION

DESIGNED BY: ASY

CHECKED BY: LAR  
 DRAWN BY: JCH

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
 DESIGN & ENGINEERING SERVICES  
 DIVISION-SOUTHEAST REGION

KETCHIKAN:  
 WATER STREET  
 SIDEWALK  
 IMPROVEMENTS  
 PROJECT No. 69345

TRAFFIC CONTROL & CONSTRUCTION PHASING

PROJECT DESIGNATION	
ARA-TEA-0902(35)	
STATE	YEAR
ALASKA	2010
SHEET NUMBER	TOTAL SHEETS
S5	53

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.  
 PE Date 11-8-11

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