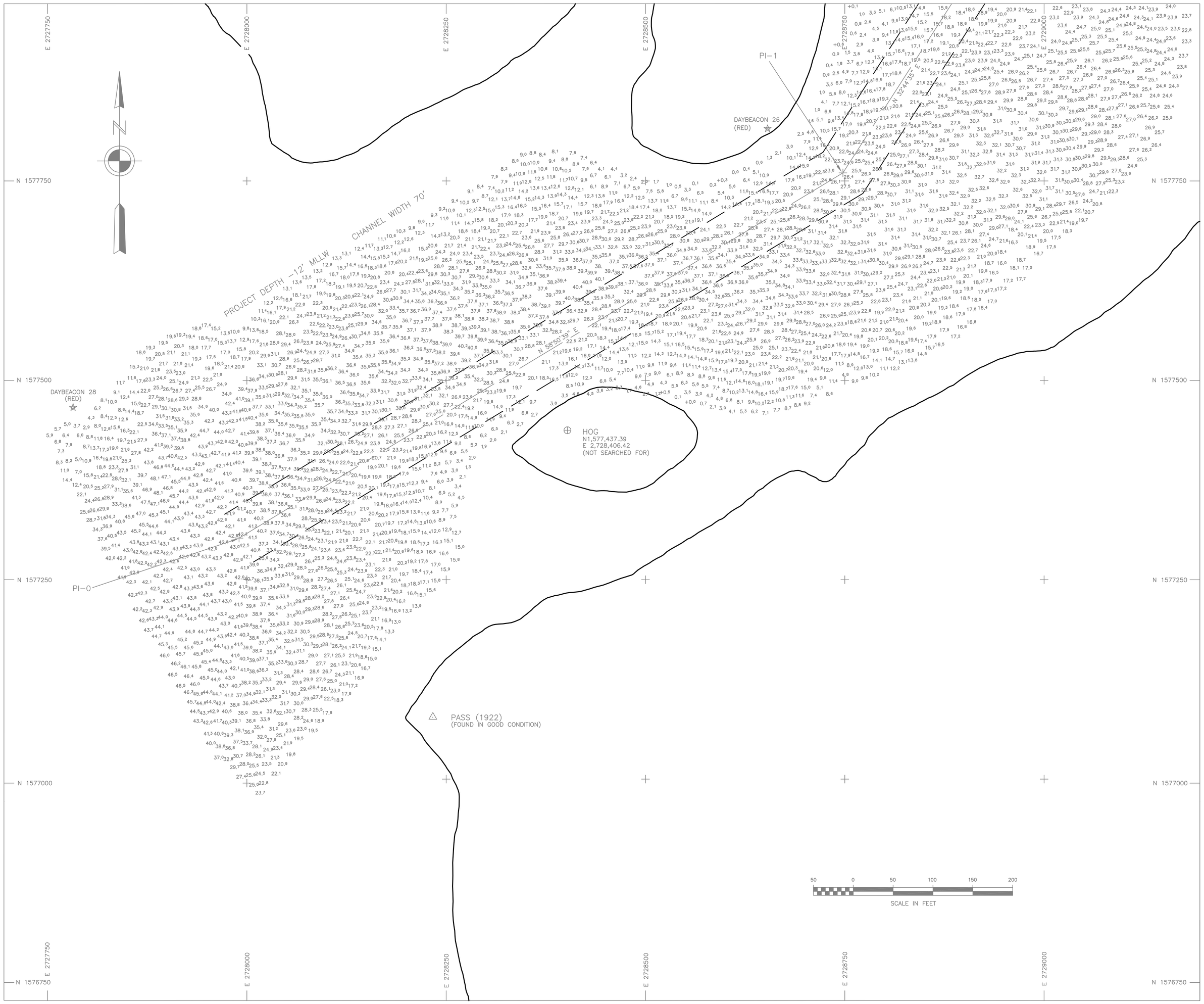

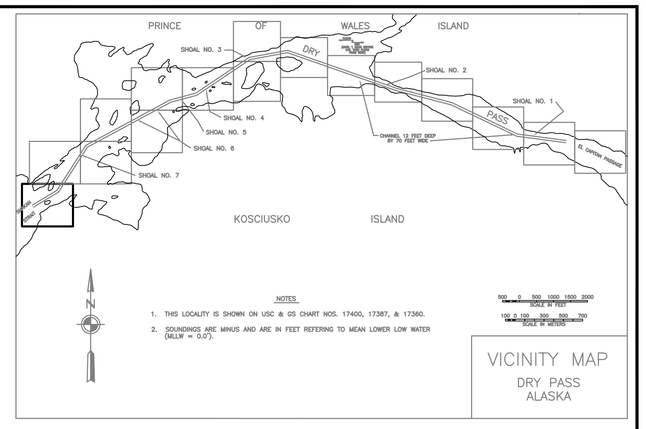

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2. VERTICAL CONTROL IS IN FEET, REFERING TO MEAN LOWER LOW WATER (MLLW=0.0'), HOLDING USCGS "BENCH MARK 3, 1922" AS 13.48 MLLW.
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5. BATHYMETRY WAS COLLECTED ON MAY 11–13, 2000 USING A MULTIBEAM SYSTEM. SOUNDINGS WERE COLLECTED WITH A RESON 8101 SEABAT. DGPS POSITION AND ATTITUDE OF THE VESSEL WERE MEASURED WITH A SEATEX SEAPATH 200 SYSTEM OPERATING ON CORRECTIONS BROADCAST BY A TRIMBLE 4000SSE BASE STATION INSTALLED AT "BETSY, 1996". SOUND VELOCITY WAS COLLECTED WITH AN AML SVPLUS VELOCITY PROFILER. WATER LEVEL WAS COLLECTED AND TELEMETERED WITH A VYNER LOW POWER TIDE GAGE. DATA WAS COLLECTED AND PROCESSED USING RESON 6042 VERSION 7.1 SOFTWARE.
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LEGEND

☆ NAVIGATION AIDS
⊕ USACE NON–MONUMENTED CONTROL POINTS
△ CONTROL MONUMENTS

CONTROL DATA

STATION	NORTHING	EASTING	ELEV.	DESCRIPTION
DP–30 TG1 2000	1,579,498.60	2,730,783.52	13.07	DOMED BC
DP–31 2000	1,580,893.14	2,738,894.86	13.37	DOMED BC
PASS 20	1,579,737.60	2,742,932.97	12.12	USACE SBC
LCMF–4	1,581,000.91	2,738,968.15	12.26	BOLT IN ROCK
TERRA–1	1,579,338.76	2,743,655.13	11.75	BOLT IN ROCK
PASS 1922	1,577,077.56	2,728,233.06	13.68	
DP–23 1977	1,578,261.22	2,728,514.83		USACE SBC
DP–22 1977	1,579,437.08	2,729,748.00	13.84	USACE SBC
DP–4 1977	1,581,434.04	2,733,343.31		USACE SBC
DP–5 1977	1,581,485.48	2,732,508.27		USACE SBC
DP–3	1,581,698.80	2,734,721.16		
PASS 11	1,581,774.50	2,734,855.37	9.00	
DP–TG2 2000	1,582,142.60	2,735,443.03	12.99	USACE SBC PREVIOUSLY UNMARKED
DP–24 1977	1,579,670.00	2,732,158.22		USACE SBC
DP–25 1977	1,579,491.43	2,730,845.82		USACE SBC
BETSY 1996	1,580,863.12	2,732,945.98	14.66	3.5" BRASS CAP IN ROCK
PTC	1,580,384.51	2,742,000.09	12.06	PIPE WITH TACK IN CRACK
BENCH MARK 3	1,581,001.30	2,737,113.05	13.48	USCGS BRASS CAP IN ROCK
JO 1996	1,581,013.32	2,738,952.25	13.74	3.5" BRASS CAP IN ROCK

CHANNEL CENTER POSITIONS

CORNER	NORTHING	EASTING	CORNER	NORTHING	EASTING
PI 0	1,577,302.17	2,727,990.18	PI 6	1,582,013.12	2,735,743.96
PI 1	1,577,760.13	2,728,747.65	PI 7	1,580,909.56	2,739,084.66
PI 2	1,579,124.63	2,729,625.06	PI 8	1,580,502.23	2,740,770.21
PI 3	1,580,499.83	2,732,171.49	PI 9	1,579,579.97	2,742,779.60
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☆ NAVIGATION AIDS ☆

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DAYBEACON 11	24825	1,581,757	2,734,937
DAYBEACON 13	24830	1,581,562	2,734,481
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DAYBEACON 15	24840	1,581,011	2,733,508
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DAYBEACON 18	24855	1,580,613	2,732,138
DAYBEACON 19	24857	1,580,161	2,731,813
DAYBEACON 20	24860	1,580,036	2,731,091
DAYBEACON 21	24865	1,579,360	2,730,360
DAYBEACON 22	24870	1,579,267	2,729,567
DAYBEACON 23	24875	1,578,987	2,729,769
DAYBEACON 24	24877	1,578,660	2,729,019
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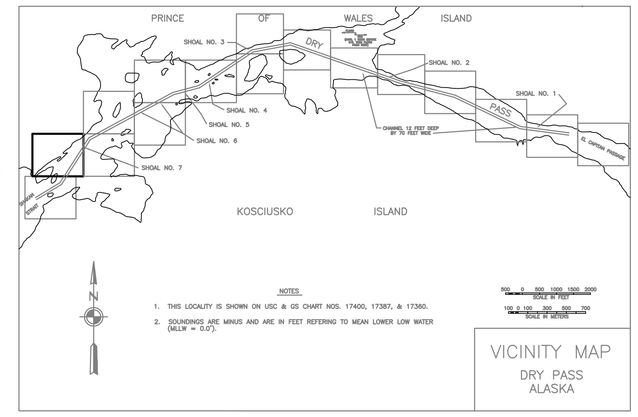
CORPS OF ENGINEERS
ANCHORAGE, ALASKA

SURVEYED: K.D.W./T.J.H.
DRAWN: D.J.B./D.M.B.
CHECKED: T.S.N.
SUBMITTED:

DRY PASS, ALASKA
DRY PASS
PROJECT CONDITION SURVEY
May 11–13, 2000

RECOMMENDED: PROJECT MANAGER
APPROVED: CHIEF OPERATIONS–READINESS BRANCH
DATE:

SURVEY NO. 1856–00
SCALE: 1" = 50'
SHEET 1 OF 16



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LEGEND

- ☆ NAVIGATION AIDS
- ⊕ USACE NON-MONUMENTED CONTROL POINTS
- △ CONTROL MONUMENTS

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DP-TG2 2000	1,582,142.60	2,735,443.03	12.99	USACE SBC PREVIOUSLY UNMARKED
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DRY PASS
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MAY 11-13, 2000

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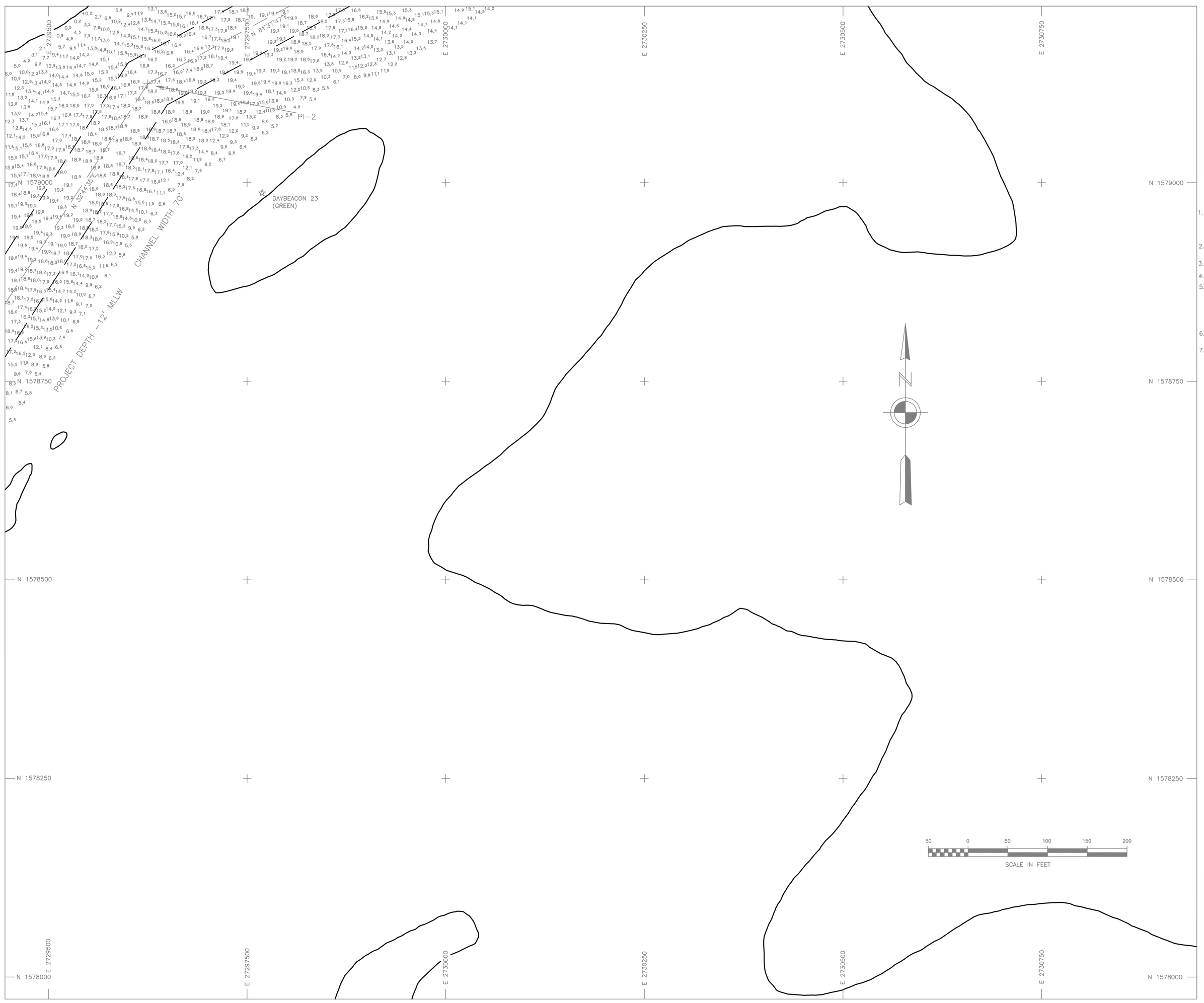

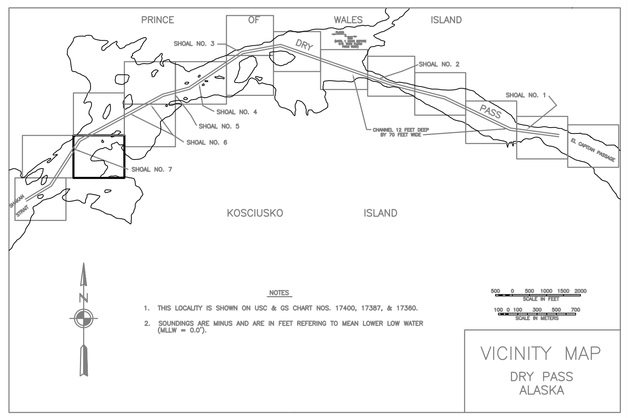

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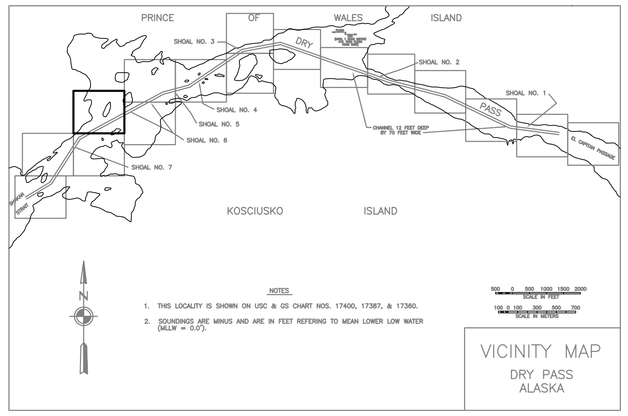

VICINITY MAP
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ALASKA

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DP-22 1977	1,579,437.08	2,729,748.00	13.84	USACE SBC
DP-4 1977	1,581,434.04	2,733,343.31		USACE SBC
DP-5 1977	1,581,485.48	2,732,508.27		USACE SBC
DP-3	1,581,698.80	2,734,721.16		
PASS 11	1,581,774.50	2,734,855.37	9.00	
DP-TG2 2000	1,582,142.60	2,735,443.03	12.99	USACE SBC PREVIOUSLY UNMARKED
DP-24 1977	1,579,670.00	2,732,158.22		USACE SBC
DP-25 1977	1,579,491.43	2,730,845.82		USACE SBC
BETSY 1996	1,580,863.12	2,732,945.98	14.66	3.5" BRASS CAP IN ROCK
PTC	1,580,384.51	2,742,000.09	12.06	PIPE WITH TACK IN CRACK
BENCH MARK 3	1,581,001.30	2,737,113.05	13.48	USCGS BRASS CAP IN ROCK
JO 1996	1,581,013.32	2,738,952.25	13.74	3.5" BRASS CAP IN ROCK

CHANNEL CENTER POSITIONS

CORNER	NORTHING	EASTING	CORNER	NORTHING	EASTING
PI 0	1,577,302.17	2,727,990.18	PI 6	1,582,013.12	2,735,743.96
PI 1	1,577,760.13	2,728,747.65	PI 7	1,580,909.56	2,739,084.66
PI 2	1,579,124.63	2,729,625.06	PI 8	1,580,502.23	2,740,770.21
PI 3	1,580,499.83	2,732,171.49	PI 9	1,579,579.97	2,742,779.60
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PI 5	1,581,798.91	2,734,585.78			

☆ NAVIGATION AIDS ☆

DESCRIPTION	USGC No.	NORTHING	EASTING
DAYBEACON 2	24785	1,579,527	2,744,280
DAYBEACON 3	24790	1,579,292	2,744,022
DAYBEACON 4	24795	1,579,794	2,742,570
DAYBEACON 5	24800	1,579,646	2,742,357
DAYBEACON 5A	24805	1,580,592	2,739,856
DAYBEACON 6	24810	1,581,446	2,737,843
DAYBEACON 7	24815	1,581,231	2,737,726
DAYBEACON 9	24820	1,581,890	2,735,976
DAYBEACON 11	24825	1,581,757	2,734,937
DAYBEACON 13	24830	1,581,562	2,734,481
DAYBEACON 14	24835	1,581,409	2,733,790
DAYBEACON 15	24840	1,581,011	2,733,508
DAYBEACON 16	24845	1,580,872	2,732,991
DAYBEACON 17	24850	1,580,541	2,732,779
DAYBEACON 18	24855	1,580,613	2,732,138
DAYBEACON 19	24857	1,580,161	2,731,813
DAYBEACON 20	24860	1,580,036	2,731,091
DAYBEACON 21	24865	1,579,360	2,730,360
DAYBEACON 22	24870	1,579,267	2,729,567
DAYBEACON 23	24875	1,578,987	2,729,769
DAYBEACON 24	24877	1,578,660	2,729,019
DAYBEACON 25	24880	1,578,460	2,729,314
DAYBEACON 26	24885	1,577,816	2,728,653
DAYBEACON 28	24890	1,577,466	2,727,782

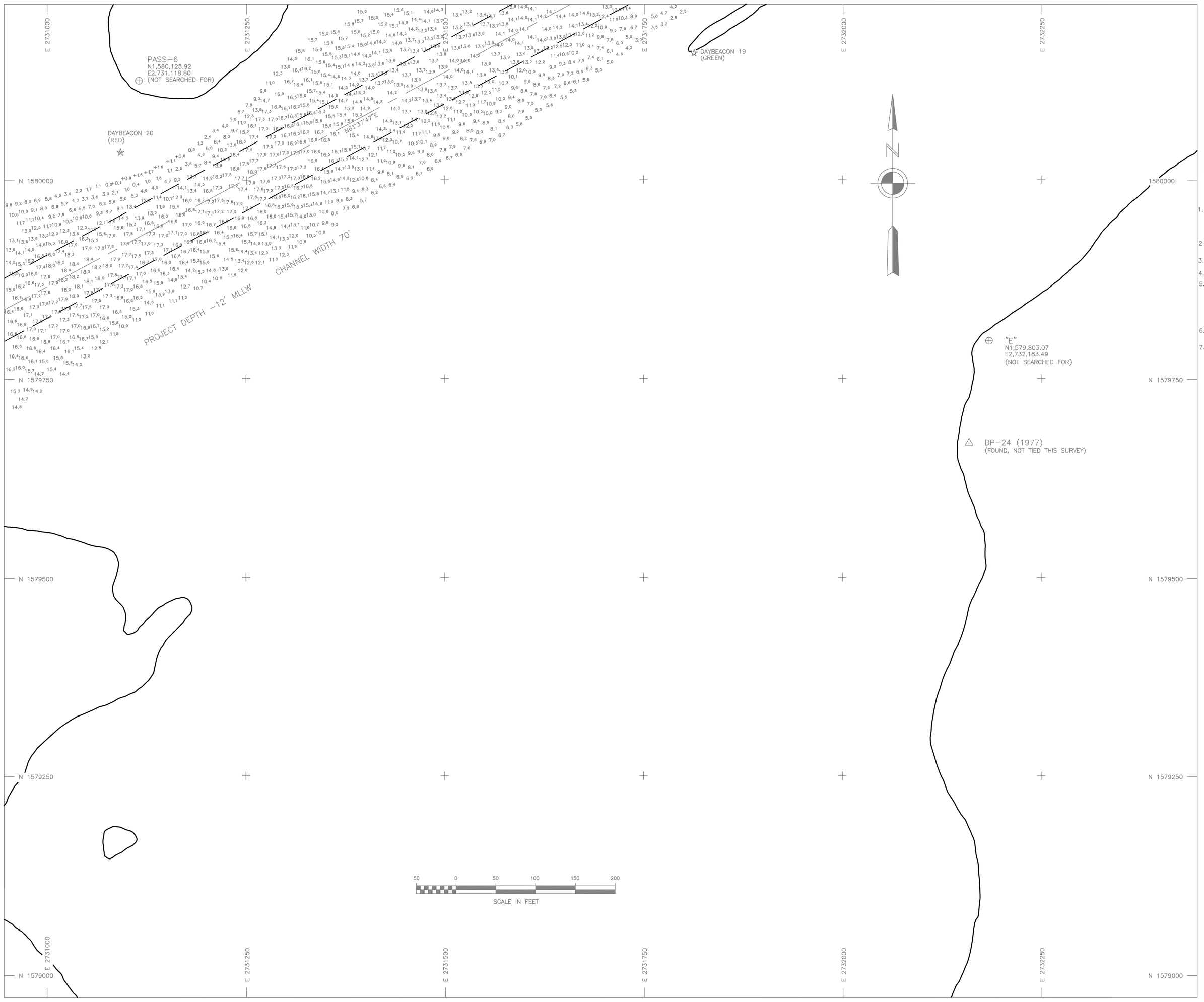
ALASKA DISTRICT
CORPS OF ENGINEERS
ANCHORAGE, ALASKA

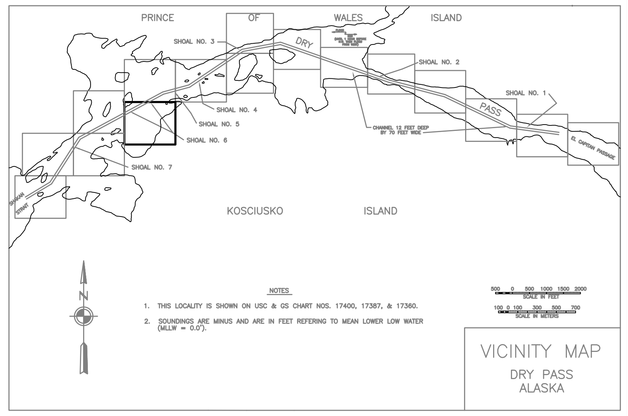
SURVEYED: K.D.W./T.J.H.
DRAWN: D.J.B./D.M.B.
CHECKED: T.S.N.
SUBMITTED:

DRY PASS, ALASKA
DRY PASS
PROJECT CONDITION SURVEY
MAY 11-13, 2000

RECOMMENDED: PROJECT MANAGER
APPROVED: CHIEF OPERATIONS-READINESS BRANCH
DATE:

SURVEY NO. 1856-00
SCALE: 1" = 50'
SHEET 4 OF 16





NOTES

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3. SOUNDINGS ARE IN FEET AND ARE MINUS UNLESS OTHERWISE INDICATED.
4. THIS DRAWING INDICATES GENERAL CONDITIONS AT THE TIME OF THE SURVEY.
5. BATHYMETRY WAS COLLECTED ON MAY 11-13, 2000 USING A MULTIBEAM SYSTEM. SOUNDINGS WERE COLLECTED WITH A RESON 8101 SEABAT. DGPS POSITION AND ATTITUDE OF THE VESSEL WERE MEASURED WITH A SEATEX SEAPATH 200 SYSTEM OPERATING ON CORRECTIONS BROADCAST BY A TRIMBLE 4000SSE BASE STATION INSTALLED AT "BETSY, 1996". SOUND VELOCITY WAS COLLECTED WITH AN AML SVPLUS VELOCITY PROFILER. WATER LEVEL WAS COLLECTED AND TELEMETERED WITH A VYNER LOW POWER TIDE GAGE. DATA WAS COLLECTED AND PROCESSED USING RESON 6042 VERSION 7.1 SOFTWARE.
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7. SURVEY CONTROL, PROJECT LIMITS AND NAVIGATIONAL AIDS COORDINATES WERE CONVERTED FROM NAD 27 IN US SURVEY FEET TO NAD 83 IN US SURVEY FEET USING CORPSCON 5.11.01.

LEGEND

☆ NAVIGATION AIDS
⊕ USACE NON-MONUMENTED CONTROL POINTS
△ CONTROL MONUMENTS

CONTROL DATA

STATION	NORTHING	EASTING	ELEV.	DESCRIPTION
DP-30 TG1 2000	1,579,498.60	2,730,783.52	13.07	DOMED BC
DP-31 2000	1,580,893.14	2,738,894.86	13.37	DOMED BC
PASS 20	1,579,737.60	2,742,932.97	12.12	USACE SBC
LCMF-4	1,581,000.91	2,738,968.15	12.26	BOLT IN ROCK
TERRA-1	1,579,338.76	2,743,655.13	11.75	BOLT IN ROCK
PASS 1922	1,577,077.56	2,728,233.06	13.68	
DP-23 1977	1,578,261.22	2,728,514.83		USACE SBC
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DP-5 1977	1,581,485.48	2,732,508.27		USACE SBC
DP-3	1,581,698.80	2,734,721.16		
PASS 11	1,581,774.50	2,734,855.37	9.00	
DP-TG2 2000	1,582,142.60	2,735,443.03	12.99	USACE SBC PREVIOUSLY UNMARKED
DP-14 1977	1,579,670.00	2,732,158.22		USACE SBC
DP-25 1977	1,579,491.43	2,730,845.82		USACE SBC
BETSY 1996	1,580,863.12	2,732,945.98	14.66	3.5" BRASS CAP IN ROCK
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CHANNEL CENTER POSITIONS

CORNER	NORTHING	EASTING	CORNER	NORTHING	EASTING
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☆ NAVIGATION AIDS ☆

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DAYBEACON 13	24830	1,581,562	2,734,481
DAYBEACON 14	24835	1,581,409	2,733,790
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DAYBEACON 18	24855	1,580,613	2,732,138
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DAYBEACON 20	24860	1,580,036	2,731,091
DAYBEACON 21	24865	1,579,360	2,730,360
DAYBEACON 22	24870	1,579,267	2,729,567
DAYBEACON 23	24875	1,578,987	2,729,769
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ANCHORAGE, ALASKA

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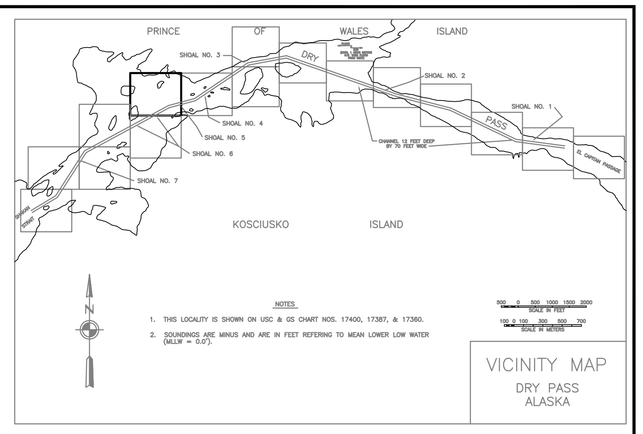
DRAWN: D.J.B./D.M.B.
CHECKED: T.S.N.
SUBMITTED:

DRY PASS, ALASKA
DRY PASS
PROJECT CONDITION SURVEY
May 11-13, 2000

RECOMMENDED: PROJECT MANAGER
APPROVED: CHIEF OPERATIONS-READINESS BRANCH
DATE:

SURVEY NO. 1856-00
SCALE: 1" = 50'
SHEET 5 OF 16



VICINITY MAP
DRY PASS
ALASKA

NOTES

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LEGEND

☆ NAVIGATION AIDS

⊕ USACE NON-MONUMENTED CONTROL POINTS

△ CONTROL MONUMENTS

CONTROL DATA

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DP-31 2000	1,580,893.14	2,738,894.86	13.37	DOMED BC
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DP-3	1,581,698.80	2,734,721.16		
PASS 11	1,581,774.50	2,734,855.37	9.00	
DP-TG2 2000	1,582,142.60	2,735,443.03	12.99	USACE SBC PREVIOUSLY UNMARKED
DP-24 1977	1,579,670.00	2,732,158.22		USACE SBC
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CHANNEL CENTER POSITIONS

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☆ NAVIGATION AIDS ☆

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DAYBEACON 7	24815	1,581,231	2,737,726
DAYBEACON 9	24820	1,581,890	2,735,976
DAYBEACON 11	24825	1,581,757	2,734,937
DAYBEACON 13	24830	1,581,562	2,734,481
DAYBEACON 14	24835	1,581,409	2,733,790
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DAYBEACON 21	24865	1,579,360	2,730,360
DAYBEACON 22	24870	1,579,267	2,729,567
DAYBEACON 23	24875	1,578,987	2,729,769
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DATE:

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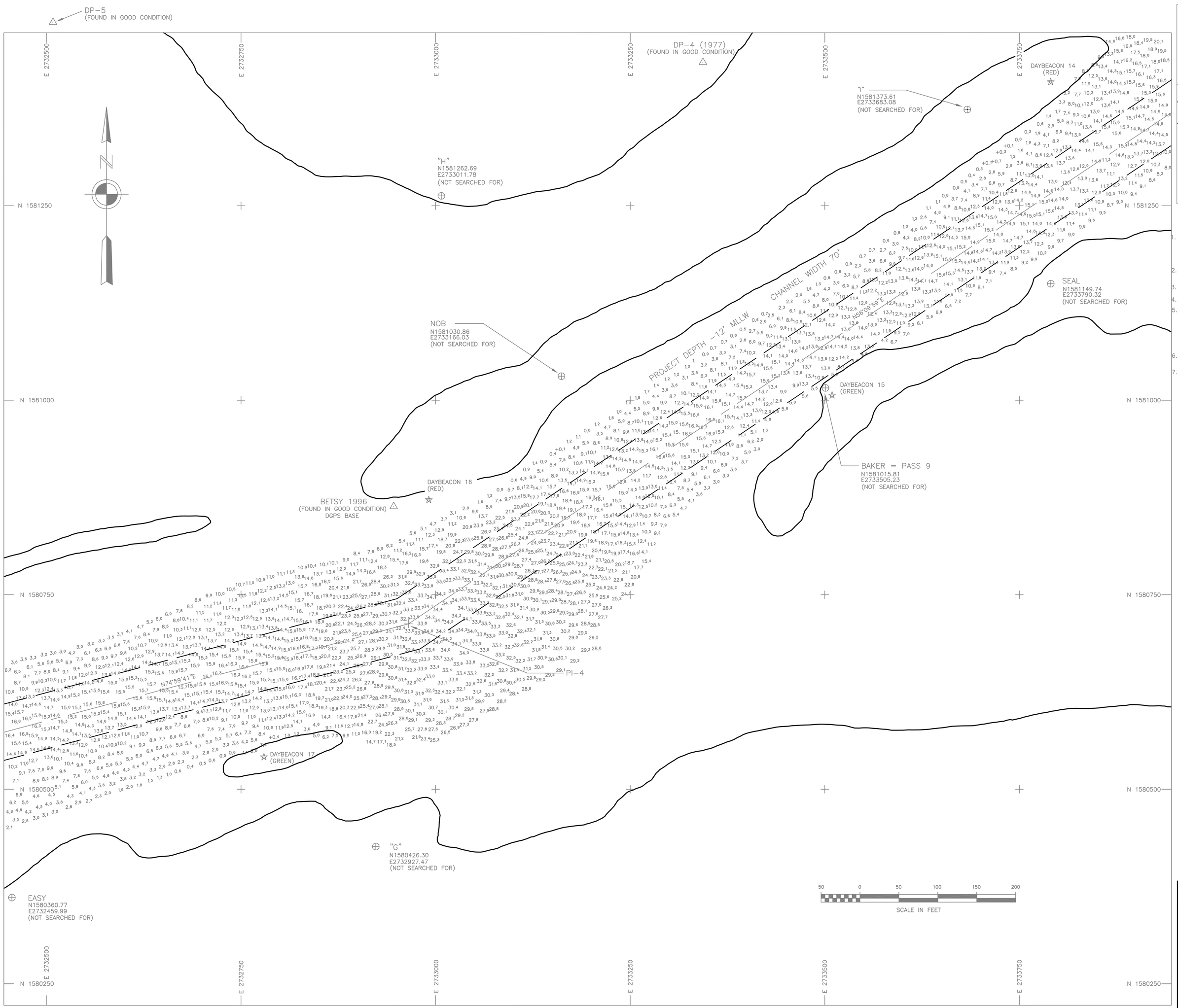
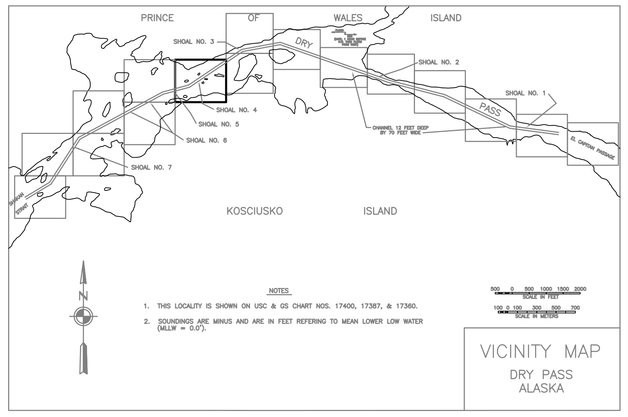
SCALE: 1" = 50'

SHEET 6 OF 16

CORPS OF ENGINEERS





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LEGEND

☆ NAVIGATION AIDS

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DAYBEACON 11	24825	1,581,757	2,734,937
DAYBEACON 13	24830	1,581,562	2,734,481
DAYBEACON 14	24835	1,581,409	2,733,790
DAYBEACON 15	24840	1,581,011	2,733,508
DAYBEACON 16	24845	1,580,872	2,732,991
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DAYBEACON 18	24855	1,580,613	2,732,138
DAYBEACON 19	24857	1,580,161	2,731,813
DAYBEACON 20	24860	1,580,036	2,731,091
DAYBEACON 21	24865	1,579,360	2,730,360
DAYBEACON 22	24870	1,579,267	2,729,567
DAYBEACON 23	24875	1,578,987	2,729,769
DAYBEACON 24	24877	1,578,660	2,729,019
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DAYBEACON 26	24885	1,577,816	2,728,653
DAYBEACON 28	24890	1,577,466	2,727,782

ALASKA DISTRICT
CORPS OF ENGINEERS
ANCHORAGE, ALASKA

SURVEYED: K.D.W./T.J.H.
DRAWN: D.J.B./D.M.B.
CHECKED: T.S.N.
SUBMITTED:

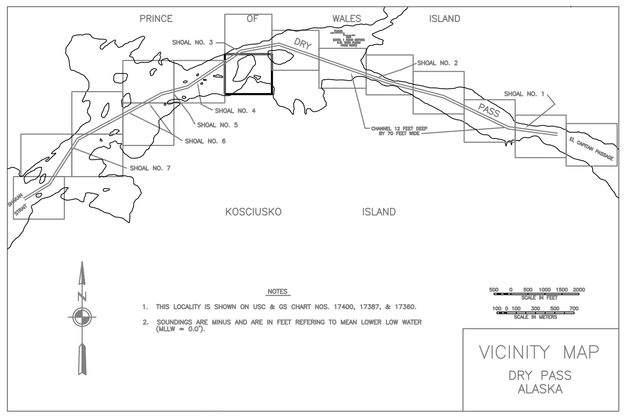
DRY PASS, ALASKA
DRY PASS
PROJECT CONDITION SURVEY
May 11–13, 2000

RECOMMENDED: PROJECT MANAGER
APPROVED: CHIEF OPERATIONS–READINESS BRANCH
DATE:

SURVEY NO. 1856-00

SCALE: 1" = 50'

SHEET 7 OF 16



NOTES

1. HORIZONTAL CONTROL IS ALASKA STATE PLANE, ZONE 1, NAD83, IN FEET. USACE "PTC" N 1,580,384.51, E 2,742,000.09 WAS HELD AS THE BASIS OF COORDINATES. USACE "DP-22, 1977" N 1,579,437.08, E 2,729,748.00, AND USACE "PTC" WERE HELD AS THE BASIS OF BEARING.
2. VERTICAL CONTROL IS IN FEET, REFERING TO MEAN LOWER LOW WATER (MLLW=0.0'), HOLDING USCGS "BENCH MARK 3, 1922" AS 13.48 MLLW.
3. SOUNDINGS ARE IN FEET AND ARE MINUS UNLESS OTHERWISE INDICATED.
4. THIS DRAWING INDICATES GENERAL CONDITIONS AT THE TIME OF THE SURVEY.
5. BATHYMETRY WAS COLLECTED ON MAY 11-13, 2000 USING A MULTIBEAM SYSTEM. SOUNDINGS WERE COLLECTED WITH A RESON 8101 SEABAT. DGPS POSITION AND ATTITUDE OF THE VESSEL WERE MEASURED WITH A SEATEX SEAPATH 200 SYSTEM OPERATING ON CORRECTIONS BROADCAST BY A TRIMBLE 4000SSE BASE STATION INSTALLED AT "BETSY, 1996". SOUND VELOCITY WAS COLLECTED WITH AN AML SVPLUS VELOCITY PROFILER. WATER LEVEL WAS COLLECTED AND TELEMETERED WITH A VYNER LOW POWER TIDE GAGE. DATA WAS COLLECTED AND PROCESSED USING RESON 6042 VERSION 7.1 SOFTWARE.
6. CONTROL WAS SURVEYED ON APRIL 12-15, 2000, USING CONVENTIONAL TRAVERSE METHODS AND DIFFERENTIAL LEVELS.
7. SURVEY CONTROL, PROJECT LIMITS AND NAVIGATIONAL AIDS COORDINATES WERE CONVERTED FROM NAD 27 IN US SURVEY FEET TO NAD 83 IN US SURVEY FEET USING CORPSCON 5.11.01.

LEGEND

- ☆ NAVIGATION AIDS
- ⊕ USACE NON-MONUMENTED CONTROL POINTS
- △ CONTROL MONUMENTS

CONTROL DATA

STATION	NORTHING	EASTING	ELEV.	DESCRIPTION
DP-30 TG1 2000	1,579,498.60	2,730,783.52	13.07	DOMED BC
DP-31 2000	1,580,893.14	2,738,894.86	13.37	DOMED BC
PASS 20	1,579,737.60	2,742,932.97	12.12	USACE SBC
LCMF-4	1,581,000.91	2,738,968.15	12.26	BOLT IN ROCK
TERRA-1	1,579,338.76	2,743,655.13	11.75	BOLT IN ROCK
PASS 1922	1,577,077.56	2,728,233.06	13.68	
DP-23 1977	1,578,261.22	2,728,514.83		USACE SBC
DP-22 1977	1,579,437.08	2,729,748.00	13.84	USACE SBC
DP-4 1977	1,581,434.04	2,733,343.31		USACE SBC
DP-5 1977	1,581,485.48	2,732,508.27		USACE SBC
DP-3	1,581,698.80	2,734,721.16		
PASS 11	1,581,774.50	2,734,855.37	9.00	
DP-TG2 2000	1,582,142.60	2,735,443.03	12.99	USACE SBC PREVIOUSLY UNMARKED
DP-24 1977	1,579,670.00	2,732,158.22		USACE SBC
DP-25 1977	1,579,491.43	2,730,845.82		USACE SBC
BETSY 1996	1,580,863.12	2,732,945.98	14.66	3.5" BRASS CAP IN ROCK
PTC	1,580,384.51	2,742,000.09	12.06	PIPE WITH TACK IN CRACK
BENCH MARK 3	1,581,001.30	2,737,113.05	13.48	USCGS BRASS CAP IN ROCK
JO 1996	1,581,013.32	2,738,952.25	13.74	3.5" BRASS CAP IN ROCK

CHANNEL CENTER POSITIONS

CORNER	NORTHING	EASTING	CORNER	NORTHING	EASTING
PI 0	1,577,302.17	2,727,990.18	PI 6	1,582,013.12	2,735,743.96
PI 1	1,577,760.13	2,728,747.65	PI 7	1,580,909.56	2,739,084.66
PI 2	1,579,124.63	2,729,625.06	PI 8	1,580,502.23	2,740,770.21
PI 3	1,580,499.83	2,732,171.49	PI 9	1,579,579.97	2,742,779.60
PI 4	1,580,712.58	2,732,965.17	PI 10	1,579,407.64	2,744,265.08
PI 5	1,581,798.91	2,734,585.78			

☆ NAVIGATION AIDS ☆

DESCRIPTION	USGC No.	NORTHING	EASTING
DAYBEACON 2	24785	1,579,527	2,744,280
DAYBEACON 3	24790	1,579,292	2,744,022
DAYBEACON 4	24795	1,579,794	2,742,570
DAYBEACON 5	24800	1,579,646	2,742,357
DAYBEACON 5A	24805	1,580,592	2,739,856
DAYBEACON 6	24810	1,581,446	2,737,843
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DAYBEACON 23	24875	1,578,987	2,729,769
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ANCHORAGE, ALASKA

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DRAWN: D.J.B./D.M.B.
CHECKED: T.S.N.
SUBMITTED:

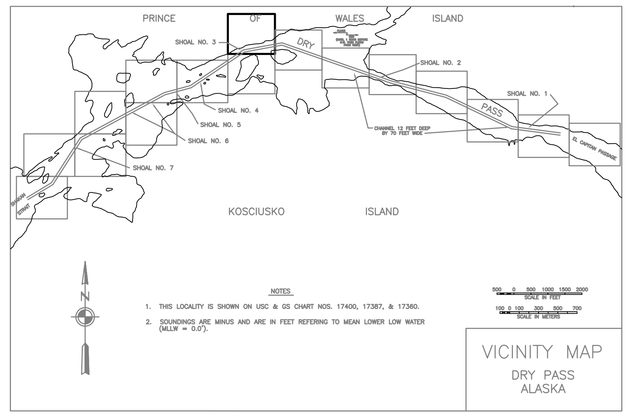
DRY PASS, ALASKA
DRY PASS
PROJECT CONDITION SURVEY
May 11-13, 2000

RECOMMENDED: PROJECT MANAGER
APPROVED: CHIEF OPERATIONS-READINESS BRANCH
DATE:

SURVEY NO. 1856-00

SCALE: 1" = 50'

SHEET 8 OF 16



VICINITY MAP
DRY PASS
ALASKA

NOTES

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LEGEND

☆ NAVIGATION AIDS

⊕ USACE NON-MONUMENTED CONTROL POINTS

△ CONTROL MONUMENTS

CONTROL DATA

STATION	NORTHING	EASTING	ELEV.	DESCRIPTION
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DP-31 2000	1,580,893.14	2,738,894.86	13.37	DOMED BC
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LCMF-4	1,581,000.91	2,738,968.15	12.26	BOLT IN ROCK
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DP-5 1977	1,581,485.48	2,732,508.27		USACE SBC
DP-3	1,581,698.80	2,734,721.16		
PASS 11	1,581,774.50	2,734,855.37	9.00	
DP-TG2 2000	1,582,142.60	2,735,443.03	12.99	USACE SBC PREVIOUSLY UNMARKED
DP-24 1977	1,579,670.00	2,732,158.22		USACE SBC
DP-25 1977	1,579,491.43	2,730,845.82		USACE SBC
BETSY 1996	1,580,863.12	2,732,945.98	14.66	3.5" BRASS CAP IN ROCK
PTC	1,580,384.51	2,742,000.09	12.06	PIPE WITH TACK IN CRACK
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JO 1996	1,581,013.32	2,738,952.25	13.74	3.5" BRASS CAP IN ROCK

CHANNEL CENTER POSITIONS

CORNER	NORTHING	EASTING	CORNER	NORTHING	EASTING
PI 0	1,577,302.17	2,727,990.18	PI 6	1,582,013.12	2,735,743.96
PI 1	1,577,760.13	2,728,747.65	PI 7	1,580,909.56	2,739,084.66
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PI 3	1,580,499.83	2,732,171.49	PI 9	1,579,579.97	2,742,779.60
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☆ NAVIGATION AIDS ☆

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DAYBEACON 3	24790	1,579,292	2,744,022
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DAYBEACON 13	24830	1,581,562	2,734,481
DAYBEACON 14	24835	1,581,409	2,733,790
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ANCHORAGE, ALASKA

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DRY PASS, ALASKA
DRY PASS
PROJECT CONDITION SURVEY
May 11-13, 2000

RECOMMENDED: PROJECT MANAGER
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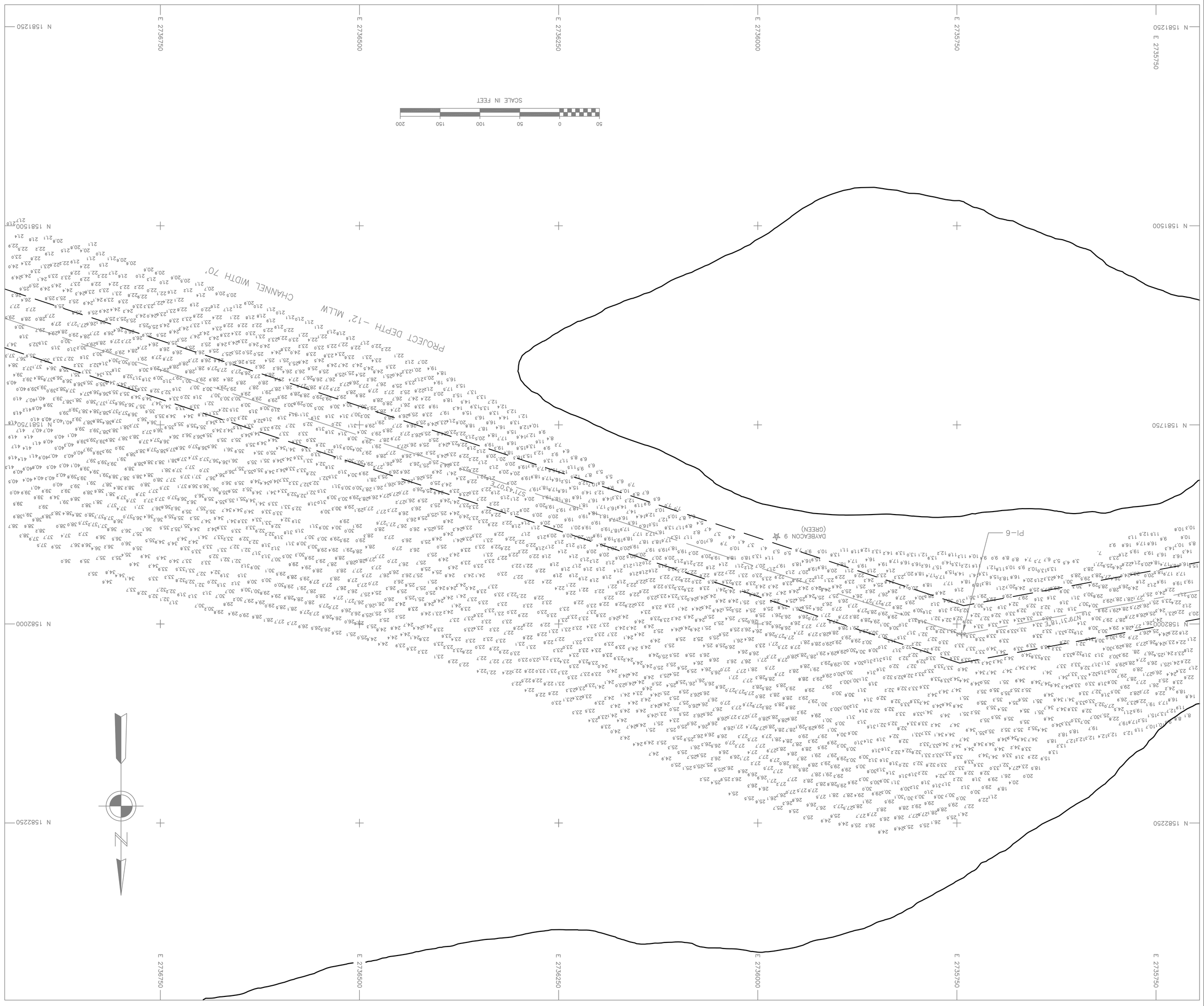
DATE:

SURVEY NO. 1856-00

SCALE: 1" = 50'

SHEET 9 OF 16



NOTES

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LEGEND

- NAVIGATION AIDS
- USACE NON-MONUMENTED CONTROL POINTS
- CONTROL MONUMENTS

CONTROL DATA

STATION	NORTHING	EASTING	ELEV.	DESCRIPTION
DP-10 T01 2000	1,579,498.60	2,730,783.52	13.07	DOWED BC
DP-31 2000	1,580,893.14	2,738,894.86	13.37	DOWED BC
PASS 20	1,579,737.60	2,742,932.97	12.12	USACE SBC
LCMF-4	1,581,000.31	2,738,968.13	12.26	BOLT IN ROCK
IERA-1	1,579,338.76	2,743,655.13	11.75	BOLT IN ROCK
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DP-22 1977	1,579,437.08	2,729,748.00	13.84	USACE SBC
DP-4 1977	1,581,434.08	2,733,343.31		USACE SBC
DP-5 1977	1,581,485.48	2,732,508.27		USACE SBC
DP-24 1977	1,579,670.00	2,732,158.22	9.00	USACE SBC
DP-T02 2000	1,582,142.60	2,735,443.03	12.99	USACE SBC PREVIOUSLY UNMARKED
PASS 11	1,581,774.50	2,734,855.37	9.00	
DP-3	1,581,698.78	2,734,721.16		USACE SBC
DP-25 1977	1,579,491.43	2,730,845.82		USACE SBC
DP-T02 2000	1,582,142.60	2,735,443.03	12.99	USACE SBC PREVIOUSLY UNMARKED
PFC	1,580,384.51	2,742,000.09	12.06	PIPE WITH TACK IN CRACK
BETSY 1996	1,580,863.12	2,732,945.98	14.66	3.5" BRASS CAP IN ROCK
BENCH MARK 3	1,581,001.30	2,737,113.05	13.48	USCGS BRASS CAP IN ROCK
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CHANNEL CENTER POSITIONS

COORER	NORTHING	EASTING	CORRER	NORTHING	EASTING
PI 0	1,577,302.17	2,727,990.18	PI 6	1,582,013.12	2,735,743.96
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NAVIGATION AIDS

DESCRIPTION	USGC No.	NORTHING	EASTING
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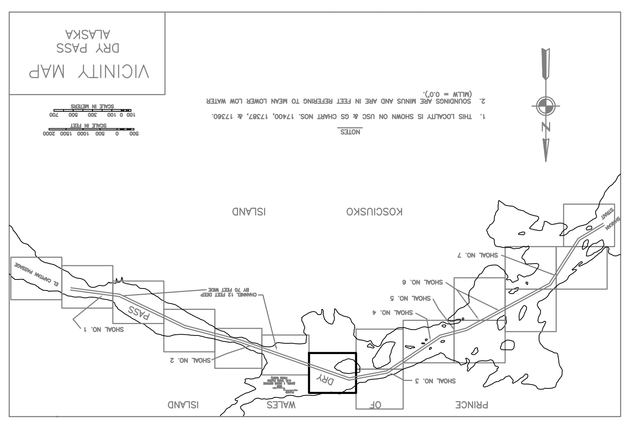
PROJECT MANAGER	CHIEF OPERATIONS-REAL ESTATE BRANCH
DATE:	

DRY PASS, ALASKA
DRY PASS
PROJECT CONDITION SURVEY
May 11-13, 2000

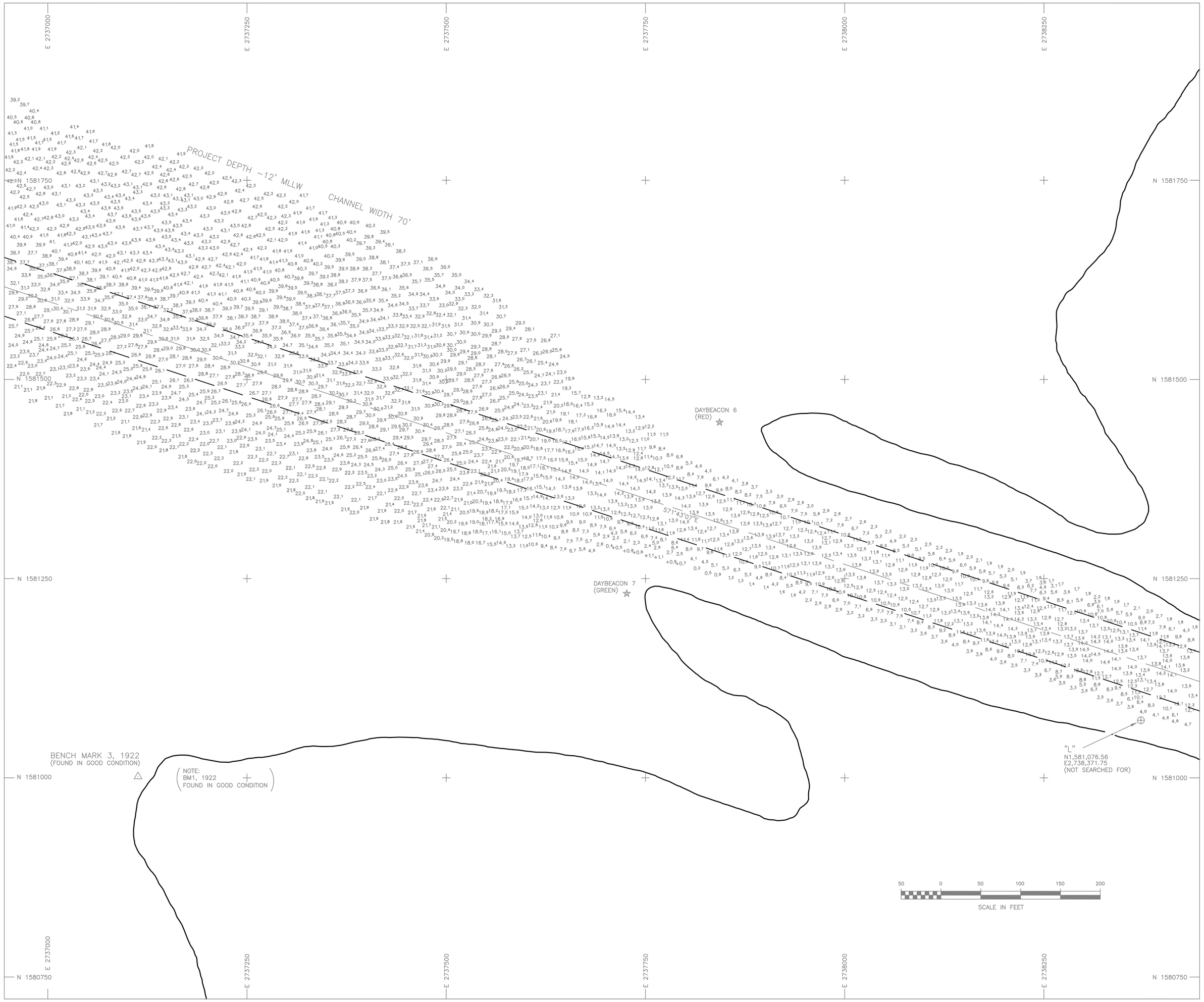
SCALE: 1" = 50'

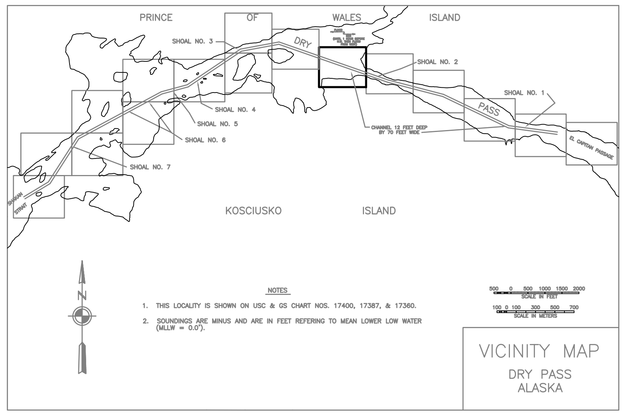
SURVEY NO. 1856-00

SHEET 10 OF 16



VICINITY MAP
DRY PASS
ALASKA





VICINITY MAP
DRY PASS
ALASKA

NOTES

1. HORIZONTAL CONTROL IS ALASKA STATE PLANE, ZONE 1, NAD83, IN FEET. USACE "PTC" N 1,580,384.51, E 2,742,000.09 WAS HELD AS THE BASIS OF COORDINATES. USACE "DP-22, 1977" N 1,579,437.08, E 2,729,748.00, AND USACE "PTC" WERE HELD AS THE BASIS OF BEARING.
2. VERTICAL CONTROL IS IN FEET, REFERING TO MEAN LOWER LOW WATER (MLLW=0.0'), HOLDING USCGS "BENCH MARK 3, 1922" AS 13.48 MLLW.
3. SOUNDINGS ARE IN FEET AND ARE MINUS UNLESS OTHERWISE INDICATED.
4. THIS DRAWING INDICATES GENERAL CONDITIONS AT THE TIME OF THE SURVEY.
5. BATHYMETRY WAS COLLECTED ON MAY 11-13, 2000 USING A MULTIBEAM SYSTEM. SOUNDINGS WERE COLLECTED WITH A RESON 8101 SEABAT. DGPS POSITION AND ATTITUDE OF THE VESSEL WERE MEASURED WITH A SEATEX SEAPATH 200 SYSTEM OPERATING ON CORRECTIONS BROADCAST BY A TRIMBLE 4000SSE BASE STATION INSTALLED AT "BETSY, 1996". SOUND VELOCITY WAS COLLECTED WITH AN AML SVPLUS VELOCITY PROFILER. WATER LEVEL WAS COLLECTED AND TELEMETERED WITH A VYNER LOW POWER TIDE GAGE. DATA WAS COLLECTED AND PROCESSED USING RESON 6042 VERSION 7.1 SOFTWARE.
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7. SURVEY CONTROL, PROJECT LIMITS AND NAVIGATIONAL AIDS COORDINATES WERE CONVERTED FROM NAD 27 IN US SURVEY FEET TO NAD 83 IN US SURVEY FEET USING CORPSCON 5.11.01.

LEGEND

☆ NAVIGATION AIDS

⊕ USACE NON-MONUMENTED CONTROL POINTS

△ CONTROL MONUMENTS

CONTROL DATA

STATION	NORTHING	EASTING	ELEV.	DESCRIPTION
DP-30 TG1 2000	1,579,498.60	2,730,783.52	13.07	DOMED BC
DP-31 2000	1,580,893.14	2,738,894.86	13.37	DOMED BC
PASS 20	1,579,737.60	2,742,932.97	12.12	USACE SBC
LCMF-4	1,581,000.91	2,738,968.15	12.26	BOLT IN ROCK
TERRA-1	1,579,338.76	2,743,655.13	11.75	BOLT IN ROCK
PASS 1922	1,577,077.56	2,728,233.06	13.68	
DP-23 1977	1,578,261.22	2,728,514.83		USACE SBC
DP-22 1977	1,579,437.08	2,729,748.00	13.84	USACE SBC
DP-4 1977	1,581,434.04	2,733,343.31		USACE SBC
DP-5 1977	1,581,485.48	2,732,508.27		USACE SBC
DP-3	1,581,698.80	2,734,721.16		
PASS 11	1,581,774.50	2,734,855.37	9.00	
DP-TG2 2000	1,582,142.60	2,735,443.03	12.99	USACE SBC PREVIOUSLY UNMARKED
DP-24 1977	1,579,670.00	2,732,158.22		USACE SBC
DP-25 1977	1,579,491.43	2,730,845.82		USACE SBC
BETSY 1996	1,580,863.12	2,732,945.98	14.66	3.5" BRASS CAP IN ROCK
PTC	1,580,384.51	2,742,000.09	12.06	PIPE WITH TACK IN CRACK
BENCH MARK 3	1,581,001.30	2,737,113.05	13.48	USCGS BRASS CAP IN ROCK
JO 1996	1,581,013.32	2,738,952.25	13.74	3.5" BRASS CAP IN ROCK

CHANNEL CENTER POSITIONS

CORNER	NORTHING	EASTING	CORNER	NORTHING	EASTING
PI 0	1,577,302.17	2,727,990.18	PI 6	1,582,013.12	2,735,743.96
PI 1	1,577,760.13	2,728,747.65	PI 7	1,580,909.56	2,739,084.66
PI 2	1,579,124.63	2,729,625.06	PI 8	1,580,502.23	2,740,770.21
PI 3	1,580,499.83	2,732,171.49	PI 9	1,579,579.97	2,742,779.60
PI 4	1,580,712.58	2,732,965.17	PI 10	1,579,407.64	2,744,265.08
PI 5	1,581,798.91	2,734,585.78			

☆ NAVIGATION AIDS ☆

DESCRIPTION	USGC No.	NORTHING	EASTING
DAYBEACON 2	24785	1,579,527	2,744,280
DAYBEACON 3	24790	1,579,292	2,744,022
DAYBEACON 4	24795	1,579,794	2,742,570
DAYBEACON 5	24800	1,579,646	2,742,357
DAYBEACON 5A	24805	1,580,592	2,739,856
DAYBEACON 6	24810	1,581,446	2,737,843
DAYBEACON 7	24815	1,581,231	2,737,726
DAYBEACON 9	24820	1,581,890	2,735,976
DAYBEACON 11	24825	1,581,757	2,734,937
DAYBEACON 13	24830	1,581,562	2,734,481
DAYBEACON 14	24835	1,581,409	2,733,790
DAYBEACON 15	24840	1,581,011	2,733,508
DAYBEACON 16	24845	1,580,872	2,732,991
DAYBEACON 17	24850	1,580,541	2,732,779
DAYBEACON 18	24855	1,580,613	2,732,138
DAYBEACON 19	24857	1,580,161	2,731,813
DAYBEACON 20	24860	1,580,036	2,731,091
DAYBEACON 21	24865	1,579,360	2,730,360
DAYBEACON 22	24870	1,579,267	2,729,567
DAYBEACON 23	24875	1,578,987	2,729,769
DAYBEACON 24	24877	1,578,660	2,729,019
DAYBEACON 25	24880	1,578,460	2,729,314
DAYBEACON 26	24885	1,577,816	2,728,653
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ALASKA DISTRICT
CORPS OF ENGINEERS
ANCHORAGE, ALASKA

SURVEYED: K.D.W./T.J.H.
DRAWN: D.J.B./D.M.B.
CHECKED: T.S.N.
SUBMITTED:

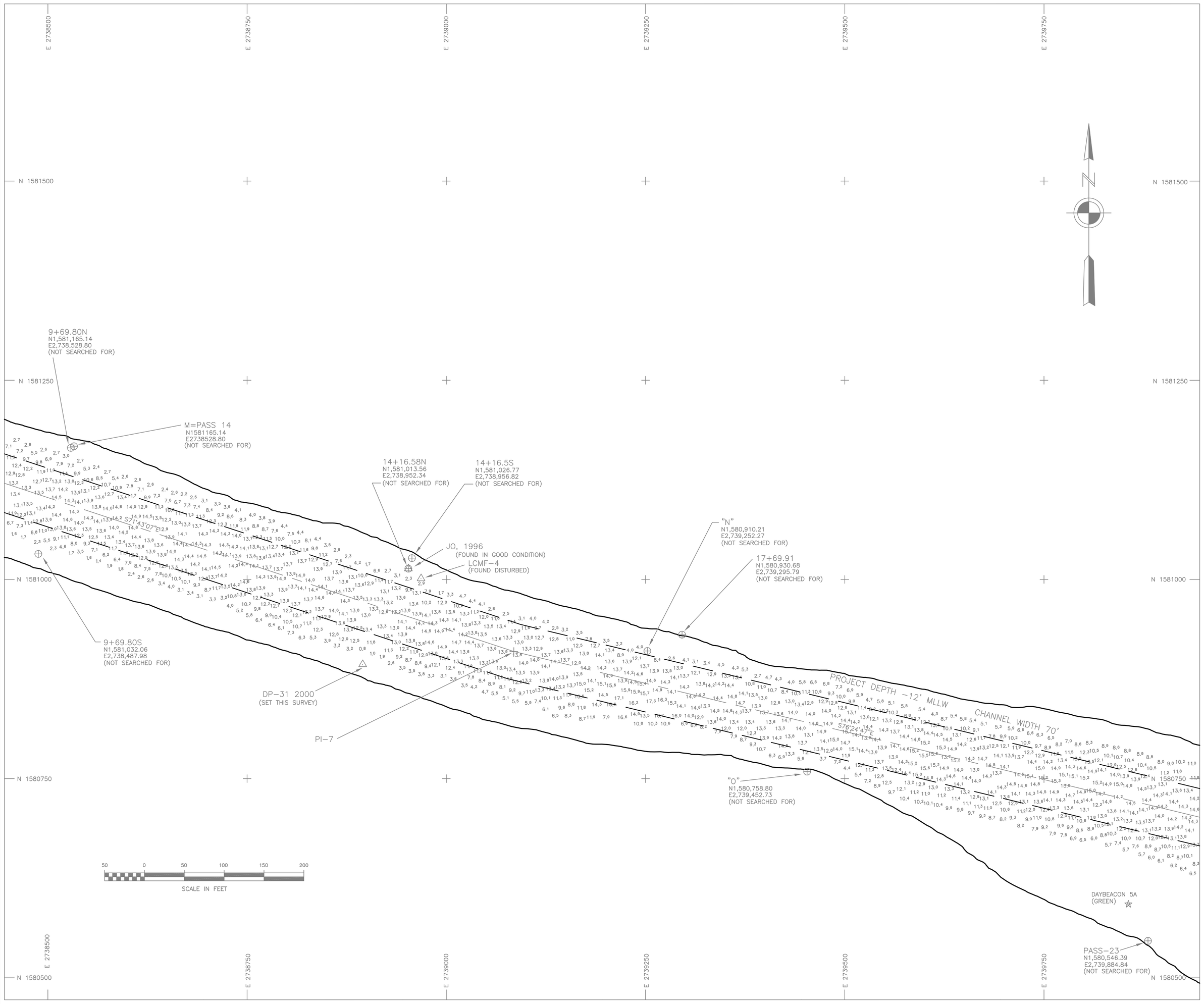
DRY PASS, ALASKA
DRY PASS
PROJECT CONDITION SURVEY
May 11-13, 2000

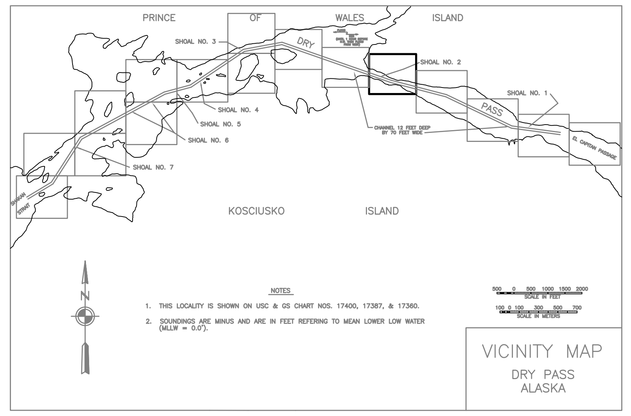
RECOMMENDED: PROJECT MANAGER
APPROVED: CHIEF OPERATIONS-READINESS BRANCH
DATE:

SURVEY NO. 1856-00

SCALE: 1" = 50'

SHEET 11 OF 16





VICINITY MAP
DRY PASS
ALASKA

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LEGEND

- ☆ NAVIGATION AIDS
- ⊕ USACE NON-MONUMENTED CONTROL POINTS
- △ CONTROL MONUMENTS

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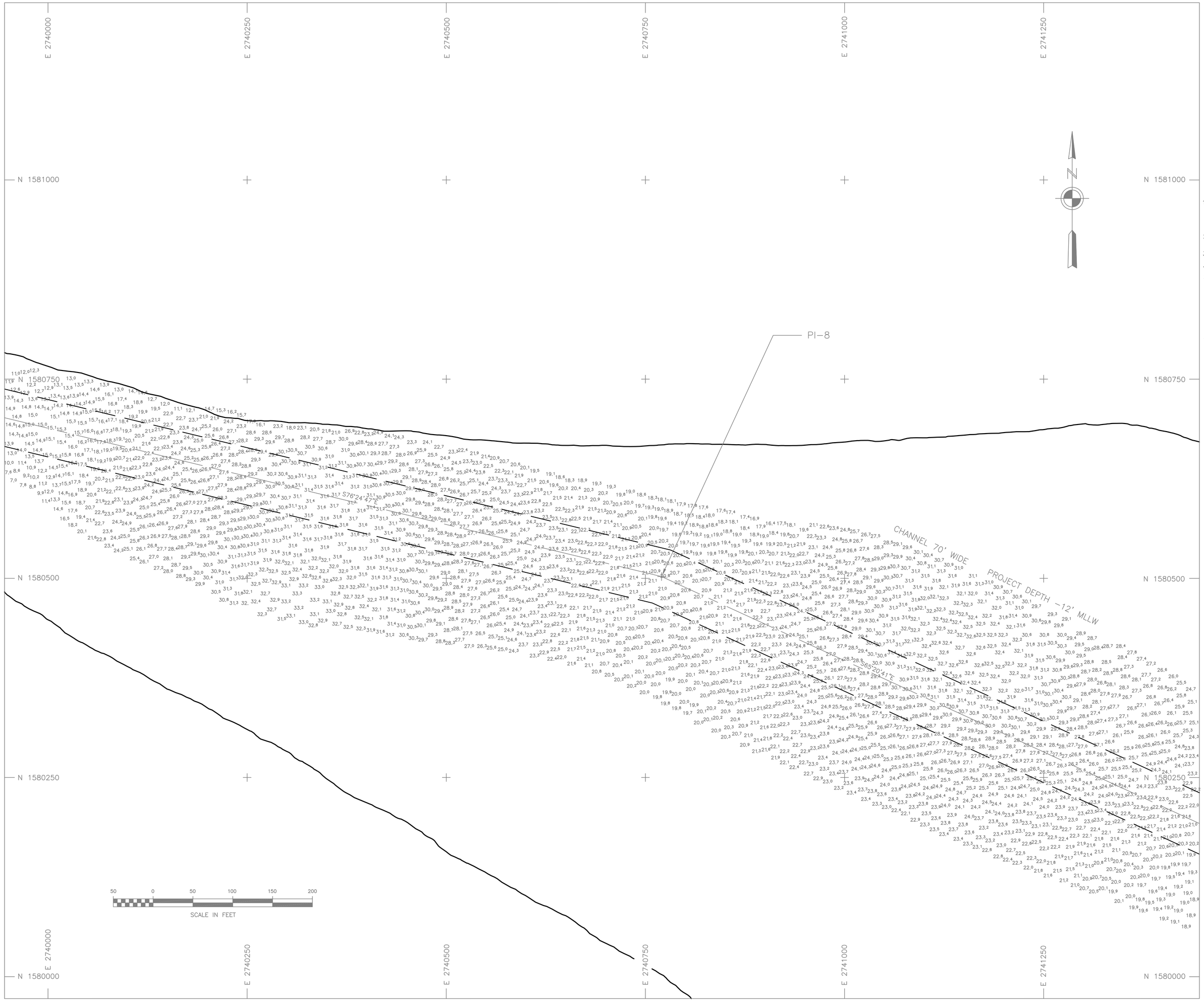

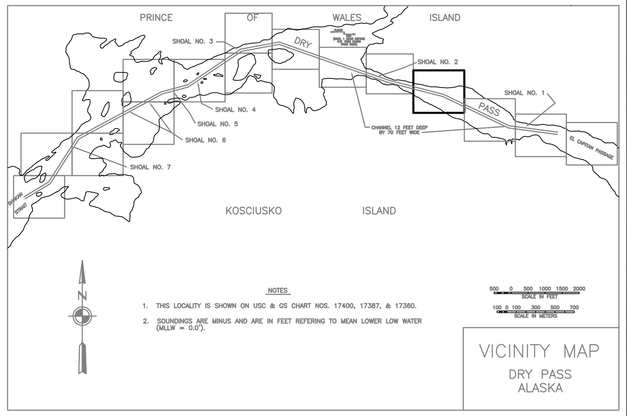

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- △ CONTROL MONUMENTS

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CHECKED: T.S.N.
SUBMITTED:

DRY PASS, ALASKA
DRY PASS
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May 11-13, 2000

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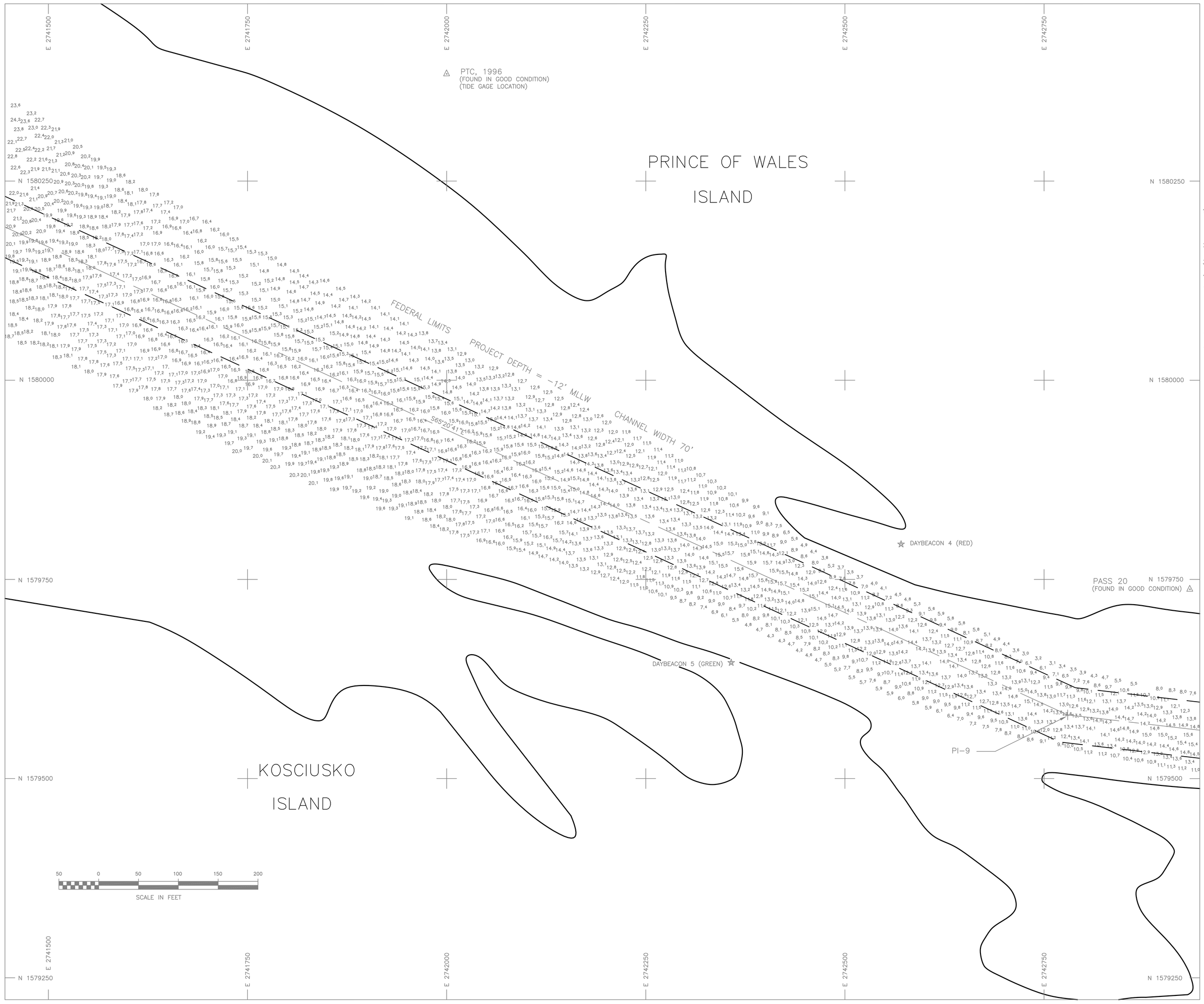
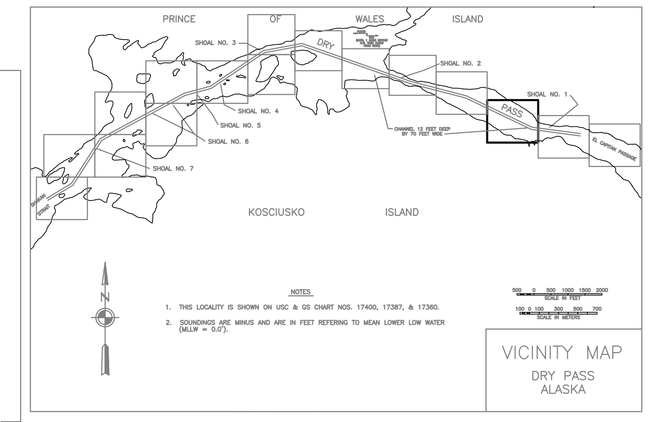
APPROVED: CHIEF OPERATIONS-READINESS BRANCH
DATE:

SURVEY NO. 1856-00

SCALE: 1" = 50'

SHEET 13 OF 16





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DP-22 1977	1,579,437.08	2,729,748.00	13.84	USACE SBC
DP-4 1977	1,581,434.04	2,733,343.31		USACE SBC
DP-5 1977	1,581,485.48	2,732,508.27		USACE SBC
DP-3	1,581,698.80	2,734,721.16		
PASS 11	1,581,774.50	2,734,855.37	9.00	
DP-TG2 2000	1,582,142.60	2,735,443.03	12.99	USACE SBC PREVIOUSLY UNMARKED
DP-24 1977	1,579,670.00	2,732,158.22		USACE SBC
DP-25 1977	1,579,491.43	2,730,845.82		USACE SBC
BETSY 1996	1,580,863.12	2,732,945.98	14.66	3.5" BRASS CAP IN ROCK
PTC	1,580,384.51	2,742,000.09	12.06	PIPE WITH TACK IN CRACK
BENCH MARK 3	1,581,001.30	2,737,113.05	13.48	USCGS BRASS CAP IN ROCK
JO 1996	1,581,013.32	2,738,952.25	13.74	3.5" BRASS CAP IN ROCK

CHANNEL CENTER POSITIONS

CORNER	NORTHING	EASTING	CORNER	NORTHING	EASTING
PI 0	1,577,302.17	2,727,990.18	PI 6	1,582,013.12	2,735,743.96
PI 1	1,577,760.13	2,728,747.65	PI 7	1,580,909.56	2,739,084.66
PI 2	1,579,124.63	2,729,625.06	PI 8	1,580,502.23	2,740,770.21
PI 3	1,580,499.83	2,732,171.49	PI 9	1,579,579.97	2,742,779.60
PI 4	1,580,712.58	2,732,965.17	PI 10	1,579,407.64	2,744,265.08
PI 5	1,581,798.91	2,734,585.78			

☆ NAVIGATION AIDS ☆

DESCRIPTION	USGC No.	NORTHING	EASTING
DAYBEACON 2	24785	1,579,527	2,744,280
DAYBEACON 3	24790	1,579,292	2,744,022
DAYBEACON 4	24795	1,579,794	2,742,570
DAYBEACON 5	24800	1,579,646	2,742,357
DAYBEACON 5A	24805	1,580,592	2,739,856
DAYBEACON 6	24810	1,581,446	2,737,843
DAYBEACON 7	24815	1,581,231	2,737,726
DAYBEACON 9	24820	1,581,890	2,735,976
DAYBEACON 11	24825	1,581,757	2,734,937
DAYBEACON 13	24830	1,581,562	2,734,481
DAYBEACON 14	24835	1,581,409	2,733,790
DAYBEACON 15	24840	1,581,011	2,733,508
DAYBEACON 16	24845	1,580,872	2,732,991
DAYBEACON 17	24850	1,580,541	2,732,779
DAYBEACON 18	24855	1,580,613	2,732,138
DAYBEACON 19	24857	1,580,161	2,731,813
DAYBEACON 20	24860	1,580,036	2,731,091
DAYBEACON 21	24865	1,579,360	2,730,360
DAYBEACON 22	24870	1,579,267	2,729,567
DAYBEACON 23	24875	1,578,987	2,729,769
DAYBEACON 24	24877	1,578,660	2,729,019
DAYBEACON 25	24880	1,578,460	2,729,314
DAYBEACON 26	24885	1,577,816	2,728,653
DAYBEACON 28	24890	1,577,466	2,727,782

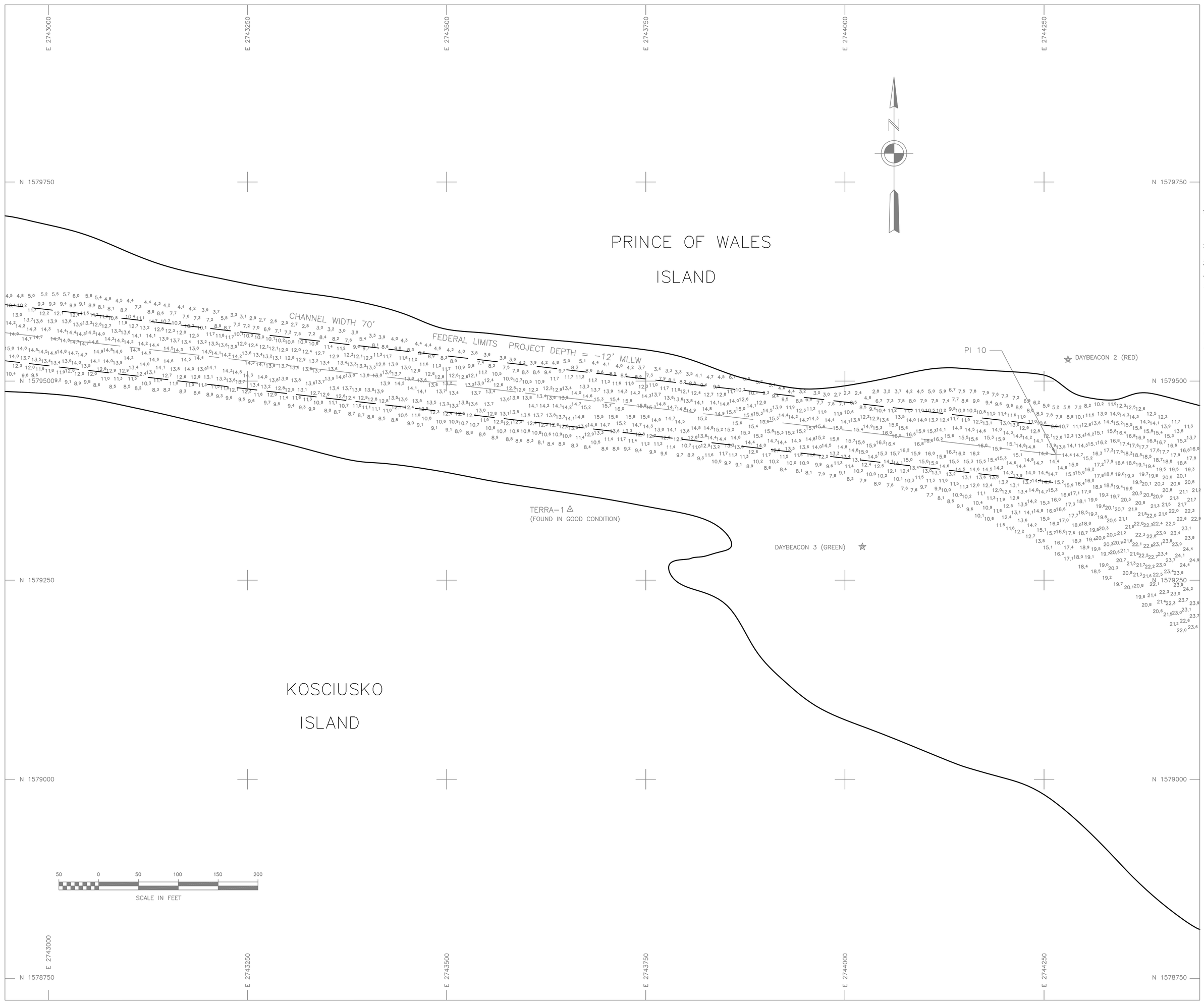
ALASKA DISTRICT
CORPS OF ENGINEERS
ANCHORAGE, ALASKA

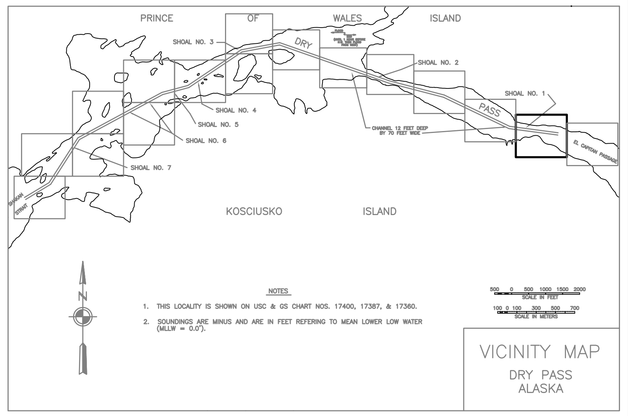
SURVEYED: K.D.W./T.J.H.
DRAWN: D.J.B./D.M.B.
CHECKED: T.S.N.
SUBMITTED:

DRY PASS, ALASKA
DRY PASS
PROJECT CONDITION SURVEY
May 11-13, 2000

RECOMMENDED: PROJECT MANAGER
APPROVED: CHIEF OPERATIONS-READINESS BRANCH
DATE:

SURVEY NO. 1856-00
SCALE: 1" = 50'
SHEET 14 OF 16





NOTES

1. HORIZONTAL CONTROL IS ALASKA STATE PLANE, ZONE 1, NAD83, IN FEET. USACE "PTC" N 1,580,384.51, E 2,742,000.09 WAS HELD AS THE BASIS OF COORDINATES. USACE "DP-22, 1977" N 1,579,437.08, E 2,729,748.00, AND USACE "PTC" WERE HELD AS THE BASIS OF BEARING.
2. VERTICAL CONTROL IS IN FEET, REFERING TO MEAN LOWER LOW WATER (MLLW=0.0'), HOLDING USCGS "BENCH MARK 3, 1922" AS 13.48 MLLW.
3. SOUNDINGS ARE IN FEET AND ARE MINUS UNLESS OTHERWISE INDICATED.
4. THIS DRAWING INDICATES GENERAL CONDITIONS AT THE TIME OF THE SURVEY.
5. BATHYMETRY WAS COLLECTED ON MAY 11-13, 2000 USING A MULTIBEAM SYSTEM. SOUNDINGS WERE COLLECTED WITH A RESON 8101 SEABAT. DGPS POSITION AND ATTITUDE OF THE VESSEL WERE MEASURED WITH A SEATEX SEAPATH 200 SYSTEM OPERATING ON CORRECTIONS BROADCAST BY A TRIMBLE 4000SSE BASE STATION INSTALLED AT "BETSY, 1996". SOUND VELOCITY WAS COLLECTED WITH AN AML SVPLUS VELOCITY PROFILER. WATER LEVEL WAS COLLECTED AND TELEMETERED WITH A VYNER LOW POWER TIDE GAGE. DATA WAS COLLECTED AND PROCESSED USING RESON 6042 VERSION 7.1 SOFTWARE.
6. CONTROL WAS SURVEYED ON APRIL 12-15, 2000, USING CONVENTIONAL TRAVERSE METHODS AND DIFFERENTIAL LEVELS.
7. SURVEY CONTROL, PROJECT LIMITS AND NAVIGATIONAL AIDS COORDINATES WERE CONVERTED FROM NAD 27 IN US SURVEY FEET TO NAD 83 IN US SURVEY FEET USING CORPSCON 5.11.01.

LEGEND

- ☆ NAVIGATION AIDS
- ⊕ USACE NON-MONUMENTED CONTROL POINTS
- △ CONTROL MONUMENTS

CONTROL DATA

STATION	NORTHING	EASTING	ELEV.	DESCRIPTION
DP-30 TG1 2000	1,579,498.60	2,730,783.52	13.07	DOMED BC
DP-31 2000	1,580,893.14	2,738,894.86	13.37	DOMED BC
PASS 20	1,579,737.60	2,742,932.97	12.12	USACE SBC
LCMF-4	1,581,000.91	2,738,968.15	12.26	BOLT IN ROCK
TERRA-1	1,579,338.76	2,743,655.13	11.75	BOLT IN ROCK
PASS 1922	1,577,077.56	2,728,233.06	13.68	
DP-23 1977	1,578,261.22	2,728,514.83		USACE SBC
DP-22 1977	1,579,437.08	2,729,748.00	13.84	USACE SBC
DP-4 1977	1,581,434.04	2,733,343.31		USACE SBC
DP-5 1977	1,581,485.48	2,732,508.27		USACE SBC
DP-3	1,581,698.80	2,734,721.16		
PASS 11	1,581,774.50	2,734,855.37	9.00	
DP-TG2 2000	1,582,142.60	2,735,443.03	12.99	USACE SBC PREVIOUSLY UNMARKED
DP-24 1977	1,579,670.00	2,732,158.22		USACE SBC
DP-25 1977	1,579,491.43	2,730,845.82		USACE SBC
BETSY 1996	1,580,863.12	2,732,945.98	14.66	3.5" BRASS CAP IN ROCK
PTC	1,580,384.51	2,742,000.09	12.06	PIPE WITH TACK IN CRACK
BENCH MARK 3	1,581,001.30	2,737,113.05	13.48	USCGS BRASS CAP IN ROCK
JO 1996	1,581,013.32	2,738,952.25	13.74	3.5" BRASS CAP IN ROCK

CHANNEL CENTER POSITIONS

CORNER	NORTHING	EASTING	CORNER	NORTHING	EASTING
PI 0	1,577,302.17	2,727,990.18	PI 6	1,582,013.12	2,735,743.96
PI 1	1,577,760.13	2,728,747.65	PI 7	1,580,909.56	2,739,084.66
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PI 3	1,580,499.83	2,732,171.49	PI 9	1,579,579.97	2,742,779.60
PI 4	1,580,712.58	2,732,985.17	PI 10	1,579,407.64	2,744,265.08
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☆ NAVIGATION AIDS ☆

DESCRIPTION	USGC No.	NORTHING	EASTING
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DAYBEACON 7	24815	1,581,231	2,737,726
DAYBEACON 9	24820	1,581,890	2,735,976
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DAYBEACON 13	24830	1,581,562	2,734,481
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DRAWN: D.J.B./D.M.B.
CHECKED: T.S.N.
SUBMITTED:

DRY PASS, ALASKA
DRY PASS
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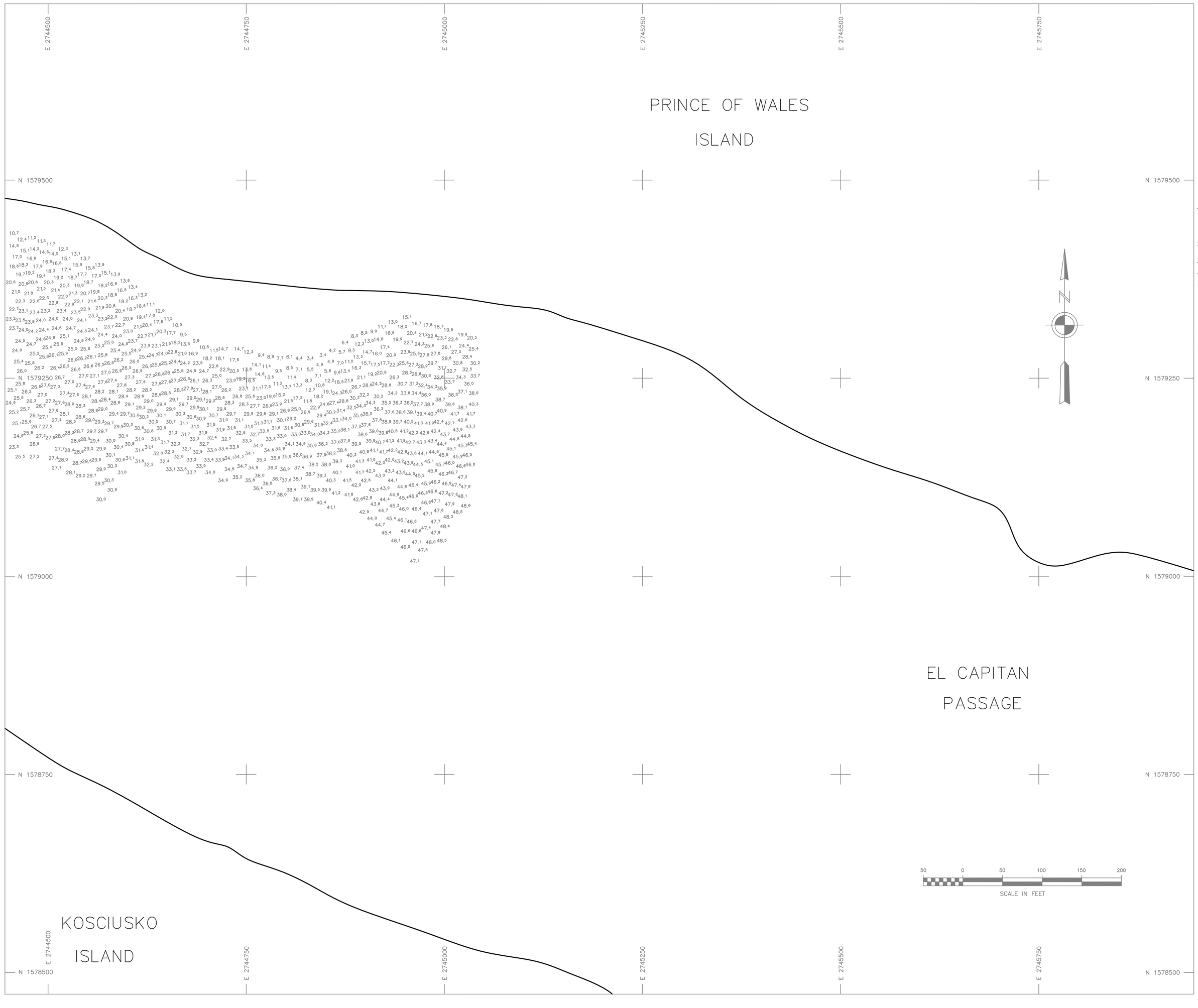
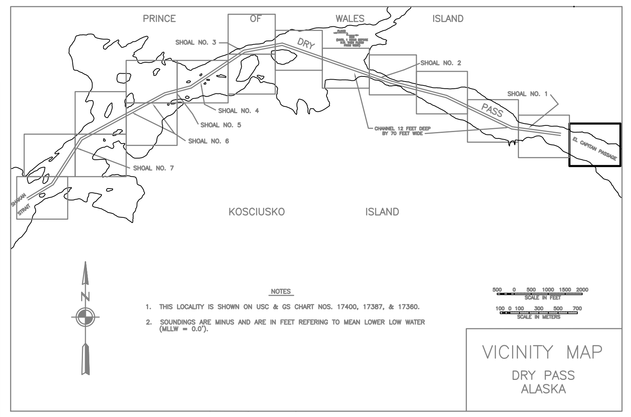
May 11-13, 2000

RECOMMENDED: PROJECT MANAGER
APPROVED: CHIEF OPERATIONS-READINESS BRANCH
DATE:

SURVEY NO. 1856-00
SCALE: 1" = 50'
SHEET 15 OF 16





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