

GENERAL NOTES

SCOPE OF WORK

PROVIDE ALL LABOR, MATERIALS, TOOLS, EQUIPMENT, AND SUPERVISION AS REQUIRED TO REINFORCE EROSION PROTECTION AREAS THAT WERE CONSTRUCTED IN THE SUMMER/FALL OF 2016 AND HAVE EXPERIENCED EROSION.

DEWATERING

ISOLATE WORK AREA FROM FLOWING WATER.

RIPRAP

THE RIPRAP ARMOR SURFACE AND SCOUR TOE SHALL CONSIST OF EVENLY GRADED STONES THAT ARE HARD, ANGULAR, AND HAVE NO MORE THAN 50% WEAR AT 500 REVOLUTIONS AS DETERMINED BY AASHTO T96. THE LEAST DIMENSION OF ANY PIECE OF STONE SHALL BE NOT LESS THAN ONE-FOURTH (1/4) ITS GREATEST DIMENSION. DO NOT USE ROUNDED BOULDERS OR COBBLES.

MEET THE FOLLOWING GRADATION FOR THE CLASS SPECIFIED. PERCENTS ARE BY TOTAL WEIGHT. WEIGHTS ARE FOR EACH STONE:

A. CLASS III RIPRAP

- 0-10% WEIGHING MORE THAN 1,400 POUNDS
- 50% OR MORE WEIGHING 700 POUNDS OR MORE
- 15% OR MORE WEIGHING 200 POUNDS OR LESS
- 0-15% WEIGHING UP TO 25 POUNDS

PROVIDE A LEVEL COMPACT AREA LARGE ENOUGH TO DUMP AND SORT TYPICAL LOADS OF RIPRAP AT APPROVED LOCATIONS. DUMP LOADS SPECIFIED IN THIS AREA AND ASSIST THE ENGINEER AS NEEDED TO SORT AND MEASURE THE STONES IN THE LOAD TO DETERMINE IF THE RIPRAP IS WITHIN SPECIFICATIONS. PROVIDE THE EQUIPMENT AND PERSONNEL NEEDED TO ASSIST IN THIS SORTING.

THE ENGINEER MUST APPROVE OF THE EXCAVATION ELEVATIONS PRIOR TO PLACEMENT OF RIPRAP. LIMIT DROP HEIGHT TO 3 FEET OR LESS. PLACEMENT BY END DUMPING OF ROCK DOWN THE EMBANKMENT OR OTHER METHODS LIKELY TO CAUSE SEGREGATION WILL NOT BE PERMITTED. AREAS COMPOSED PRIMARILY OF EITHER THE LARGER OR SMALLER SIZES OF STONE WILL NOT BE ACCEPTED. WORK LOOSE PIECES OF RIPRAP TO MINIMIZE VOIDS AND OPTIMIZE INTERLOCKING WITHIN RIPRAP LAYER.

CONSTRUCTION SURVEY

SURVEY CONTROL PROVIDED BY DOWL. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE EXACT LOCATION OF ALL SITE FEATURES. IF THE CONTRACTOR SHOULD ENCOUNTER CONDITIONS OTHER THAN THOSE SHOWN ON THE PLANS, CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER'S REPRESENTATIVE.

APPLICABLE STANDARDS AND SPECIFICATIONS

ALL FEDERAL, STATE, AND LOCAL CODES, REGULATIONS, AND STANDARDS, PLUS THE FOLLOWING LATEST VERSIONS ARE PART OF THESE PLANS AND SPECIFICATIONS.

- CITY OF VALDEZ STANDARD SPECIFICATIONS
- ASTM, AASHTO STANDARDS AND SPECIFICATIONS
- STATE OF ALASKA 18 AAC 70 WATER QUALITY REGULATIONS

ENVIRONMENTAL PROTECTION

THE CONTRACTOR SHALL PROVIDE ENVIRONMENTAL PROTECTION AND TEMPORARY EROSION AND POLLUTION CONTROL AT ALL EXCAVATION SITES. TEMPORARY STREAM DIVERSION MAY BE REQUIRED TO MINIMIZE INTRUSION OF SEDIMENT INTO THESE WATER BODIES.

PROVISIONS SHALL BE MADE TO MINIMIZE THE INTRUSION OF SEDIMENT INTO THE LOCAL WATER BODIES.

ALL VEGETATION IN THE AREAS NOT AFFECTED BY WORK SHALL BE PRESERVED AND PROTECTED BY THE CONTRACTOR. RESEED ALL DISTURBED AREAS. PROTECT EXISTING TREES IN PLACE.

CONSTRUCTION NOTES

- LOCATION OF REPAIR SHALL BE REVIEWED WITH OWNER'S REPRESENTATIVE PRIOR TO CONSTRUCTION.

20 0 20 40
SCALE IN FEET



CONSTRUCTION SAFETY

THE CONTRACTOR IS RESPONSIBLE FOR FOLLOWING OSHA EXCAVATION SAFETY STANDARDS, INCLUDING USING A TRENCH BOX AND/OR PROVIDING SHORING AND BRACING FOR CERTAIN EXCAVATION SITUATIONS.

OTHER

CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO EXISTING UTILITIES AND STRUCTURES AND SHALL EXERCISE CAUTION DURING CONSTRUCTION.

COORDINATE CONSTRUCTION STAGING AND MOBILIZATION AREAS AND ACTIVITIES, INCLUDING DAILY WORK SCHEDULES, WITH OWNER'S REPRESENTATIVE.

SURVEY CONTROL NOTES

HORIZONTAL CONTROL

COORDINATES ARE OPUS DB DERIVED NAD83(2011) ALASKA STATE PLANE ZONE 3 EXPRESSED IN US FEET AS DETERMINED AT STATION "LOWE-1".

VERTICAL CONTROL

ELEVATIONS ARE NAVD88 AS DETERMINED BY OPUS DB UTILIZING GEOID 12B AT STATION "LOWE-1". A RTK TIE WAS MADE TO NGVD BENCHMARK "E11C 1964" AS LISTED ON THE FIRM MAP FOR THE CITY OF VALDEZ PANEL NUMBER 020094 0075 C AS REVISED DECEMBER 1, 1983. STATION "E11C 1964" HAS PROJECT ELEVATION OF 150.19 AND A NGVD ELEVATION OF 145.15 FEET.

SURVEY NOTES:

- THE INFORMATION SHOWN HEREON IS BASED ON A FIELD SURVEY PERFORMED BY DOWL ON OCTOBER 13, 2016. BACKGROUND INFORMATION DEPICTED IS SHOWN FOR ORIENTATION PURPOSES ONLY AND SHOULD NOT BE USED FOR ANY OTHER PURPOSE.
- ALL DIMENSIONS AND COORDINATES SHOWN ARE IN U.S. SURVEY FEET UNLESS OTHERWISE NOTED.
- TITLE RESEARCH WAS NOT PERFORMED AS PART OF THIS SURVEY, A THOROUGH EXAMINATION OF LAND TITLE IS NEEDED TO ENSURE ALL EASEMENTS, RESTRICTIONS AND RIGHTS ARE DEPICTED.
- PROJECT CONTROL COORDINATES SHOWN ON THIS SHEET WERE ESTABLISHED BY USING GPS METHODS.

5. IT IS THE CONTRACTOR'S RESPONSIBILITY TO WORK AROUND ALL MONUMENTS WITHOUT DISTURBING THE MONUMENT OR CASE.

6. VERTICAL CONTROL NEEDS TO BE VERIFIED BEFORE CONSTRUCTION USE.

SURVEY CONTROL POINTS

POINT	NORTHING	EASTING	ELEVATION	DESCRIPTION	ID
1	2582602.31	1626445.73	116.80	ALMON	LOWE-1
2	2597473.86	1598609.95	51.02	REBAR	IP-1
3	2598100.07	1594223.24	13.11	REBAR	IP-2
701	2582497.24	1626874.56	123.55	ALMON	RICH 7.4 2014
601	2582201.14	1633255.05	150.19	BCMON	PROP COR.



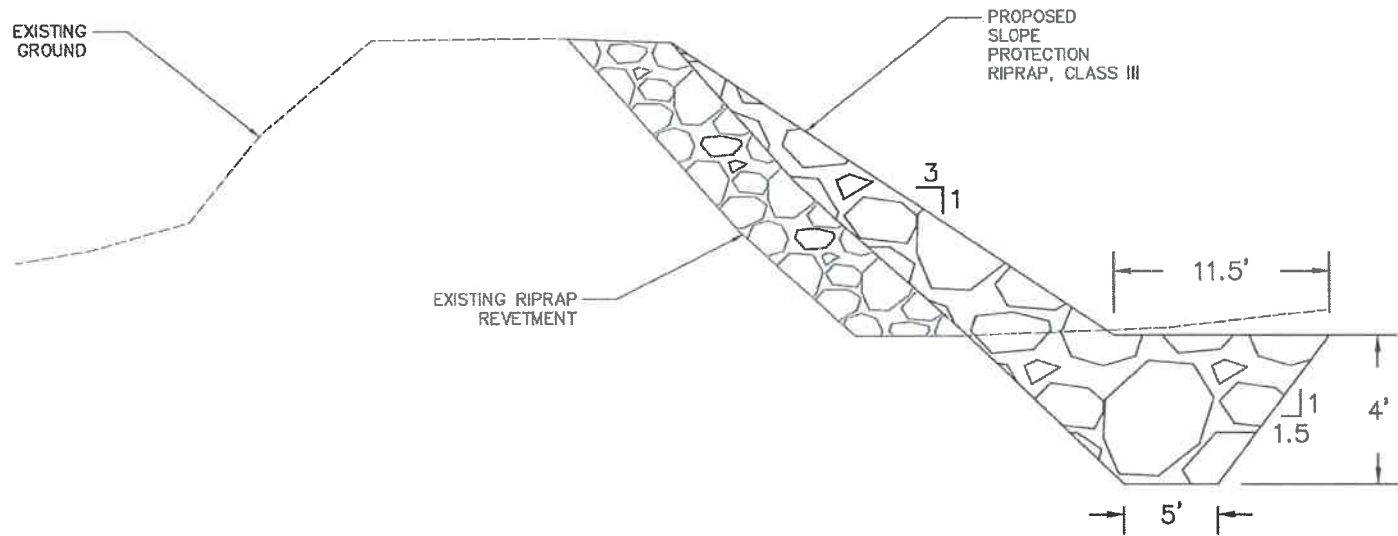
FOR SURVEY
INFORMATION
ONLY



CITY OF VALDEZ LOWE RIVER SLOPE IMPROVEMENT PROPOSED PLAN

CHECKED BY	BHM
DESIGNED BY	HCR
DRAWN BY	HCR
DATE	05/03/16
W.O. NO.	62373
F.B. NO.	
REF. DWG.	
LOCATION	VALDEZ
	ALASKA

SCALE	
HORIZ.	
VERT.	
SHEET	
	2 OF 4
FILE NO.	



REVETMENT TYPICAL SECTION
NTS

ESTIMATE OF QUANTITIES		
ITEM	PAY UNIT	QUANTITY
MOBILIZATION AND DEMOBILIZATION	LUMP SUM	ALL REQUIRED
ENVIRONMENTAL PROTECTION, SWPPP, PERMITTING	LUMP SUM	ALL REQUIRED
DIVERSION	LUMP SUM	ALL REQUIRED
CONSTRUCTION SURVEY	LUMP SUM	ALL REQUIRED
AS-BUILT SURVEY	LUMP SUM	ALL REQUIRED
RIPRAP, CLASS III	CUBIC YARD	400




CITY OF VALDEZ
LOWE RIVER SLOPE IMPROVEMENT
TYPICAL SECTION

CHECKED BY	BMM
DESIGNED BY	HCR
DRAWN BY	HCR
DATE	05/03/16
W.O. NO.	62373
F.B. NO.	
REF. DWG	
LOCATION	VALDEZ ALASKA

HORIZ.	SCALE
VERT.	

SHEET
3 OF 4

FILE NO.

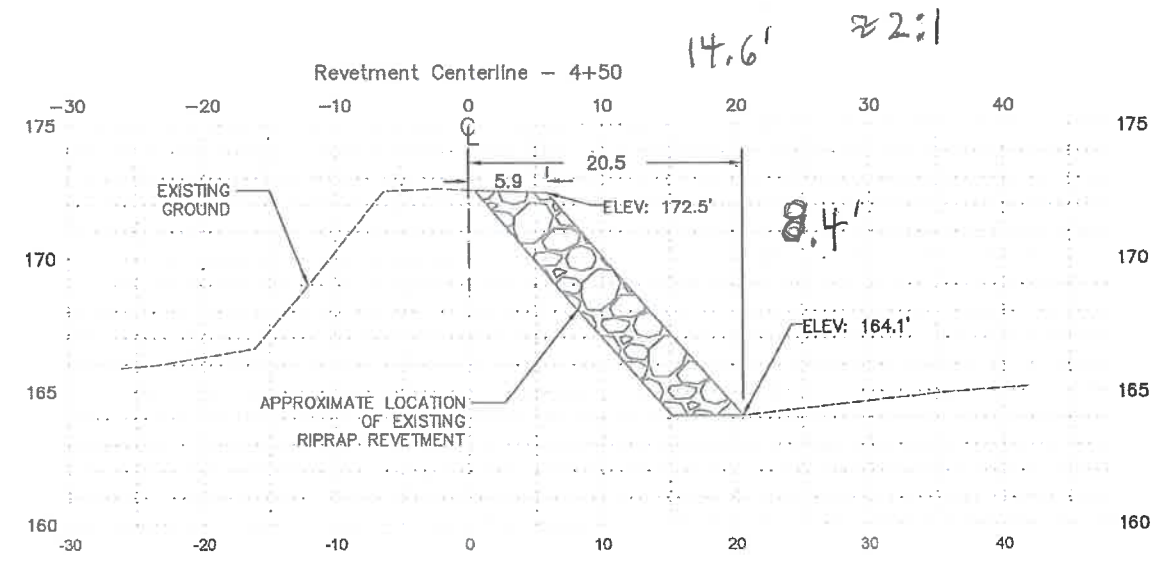
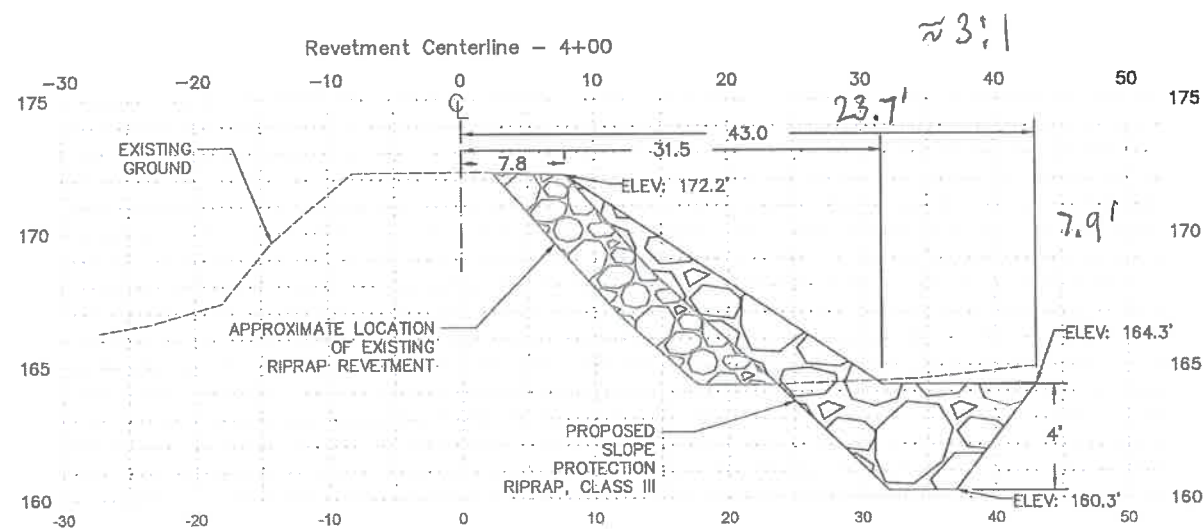
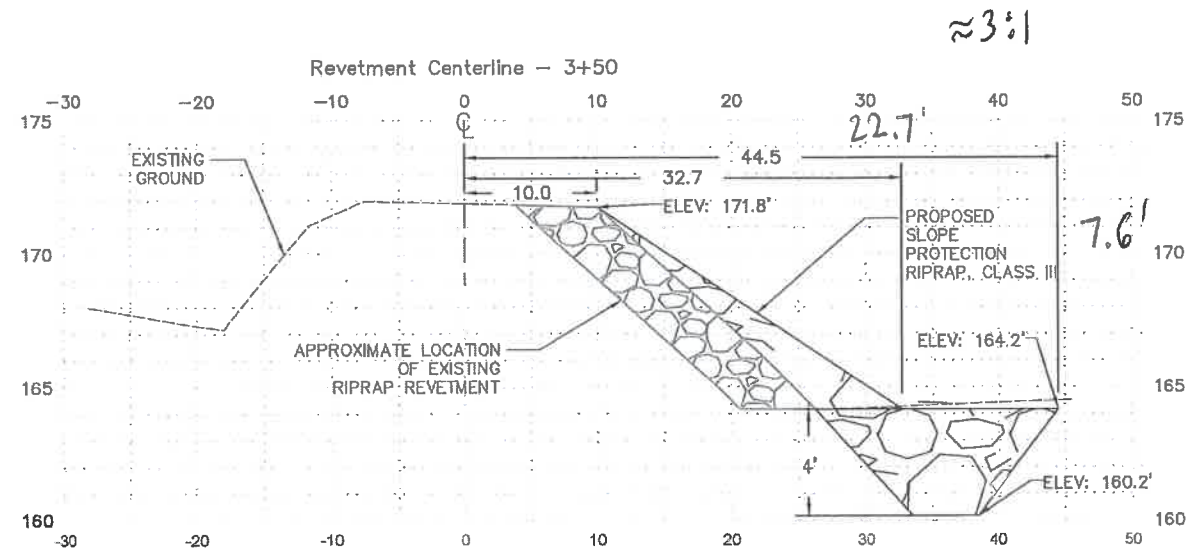
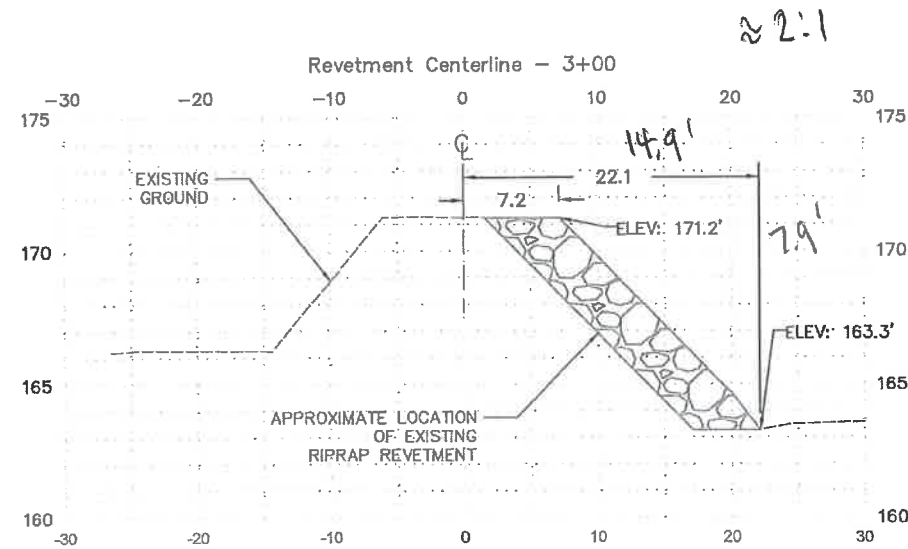


AECL848

WWW.DOWL.COM

4041 B Street
Anchorage, Alaska 99503
907-562-2000

DATA	DATE	REV	DATE	DESCRIPTION	BY
Soil. Sewer					
Storm Sewer					
Water					
Gas					
Telephone					
Electric					
Cable TV					
Fire					
Footings					
As-built					



CITY OF VALDEZ
LOWE RIVER SLOPE IMPROVEMENT
CROSS SECTIONS

CHECKED BY	BMM
DESIGNED BY	HCR
DRAWN BY	HCR
DATE	05/03/16
W.O. NO.	62373
F.B. NO.	
REF. DWG	
LOCATION	VALDEZ ALASKA

SCALE	
HORZ.	
VERT.	
SHEET	4 OF 4
FILE NO.	

DATA	JBT	REV	DATE	DESCRIPTION	BY
Sewer					
Storm Sewer					
Water					
Gas					
Telephone					
Electric					
Cable TV					
4041 B Street					
Eastside Bldg.					
Alutian					
Vertical Datum:					
907-562-2000					