

DAVIS AND WEBER COUNTIES CANALS
PROFILE

MAIN TRUNK CANAL

STA. 0+00 TO STA. 500+00

DAVIS AND WEBER COUNTIES

BOSTAPH & ROCHE

OGDEN ENGINEERS UTAH

APPROVED:

BOSTAPH & ROCHE

By _____

CANAL CO.

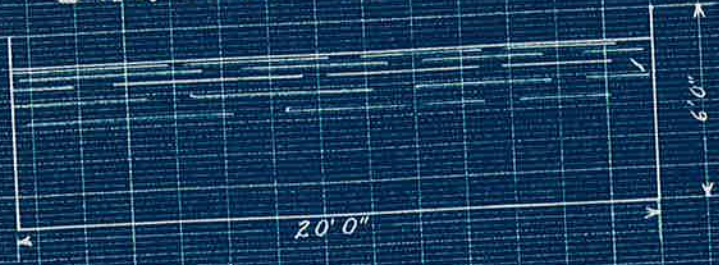
S, UTAH.



1000 Head-Gate
in Weber River



CROSS SECTION OF CANAL
STA. 5+00 TO STA. 34+00



EQUATION $26+509 \text{ POT}$
B.M. 983.34
40' L. 26+40

FOUNDATION 34+009 POT

on Central Angle
 $C=I \therefore \angle Acd = \frac{I}{I}$

long chad
=

989.66	989.12	985.46
P.C. +581.5 P.C.C. +516.3 P.C. +599.8 P.T. +535.9	P.C. +525.3 P.T. +587.7 P.C. +505.6 P.T. +500.0	P.C. +544.3 P.T. +571.7 P.C. +598.4 P.T. +591.0 P.C. +591.1 P.T. +559.5 P.C. +566.3 P.T. +558.1 P.C. +538.1 P.T. +516.9 P.C. +459.0 P.T. +408.3 P.C. +107.4 P.T. +045.0 P.C. +312.2 P.T. +291.1 P.C. +278.8 P.T. +252.3 P.C. +202.5 P.T. +175.0
P.C. +325.0 P.T. +322.0	P.C. +709.0 P.T. +625.0 P.C. +545.0 P.T. +482.0	P.C. +230.0 P.T. +322.0 P.C. +107.4 P.T. +045.0

20' Wide 6' Deep Vertical Walls

B.M. 987.09
20' L. 9+00

B.M. 983.34
40' L. 26+40

34+00

20' Wide 6' Deep
Side Wall Slope 1/2:1

980.98

P.C. +617 Δ 1450
 P.T. +4109
 P.C. +668 Δ 1020
 P.T. +2718
 P.C. +843
 P.T. +7920
 P.C. +406
 P.T. +1406
 P.C. +385 Δ 2200
 P.T. +1485
 P.C. +910
 P.T. +5540
 P.T. +2356

B.M. 993.70
60.3 E 44+00

EQUATION 45+58.3
45+53.3 POT

P.C. +569 Δ 1100
 P.T. +965
 P.C. +478 Δ 850
 P.T. +1928
 P.C. +114 Δ 3620
 P.T. +7123

1
 2
 +783
 B.M. 984.87
 50.1 E 56+00

CROSS SECTION OF CANAL STA. 34+00 TO STA. 44+00



B.M. 984.85
60.1 L 70+00

Rate = -0.0445

22' Wide 6' Deep

979.60
979.60

P.C. +630
 P.T. +3363
 P.C. +282 Δ 1200
 P.T. +1048
 P.C. +1019 Δ 1390
 P.T. +2615

P.C. +908 Δ 1200
 P.T. +2275
 P.C. +118 Δ 553
 P.T. +411
 P.C. +129 Δ 628
 P.T. +4465

EQUATION 74+27.5
75+46.3 POT

P.C. +1034 Δ 2020
 P.T. +990
 P.C. +729 Δ 1030
 P.T. +795
 P.C. +623 Δ 2100
 P.T. +1678

B.M. 983.96
50.1 L 82+50

Side Wall Slope 1:1

B.M. 985.87
60 L. 91+00

B.M. 982.23
60 L. 101+00



B.M. 985.15
60 S. 113+00

B.M. 985.41
80 S. 123+00

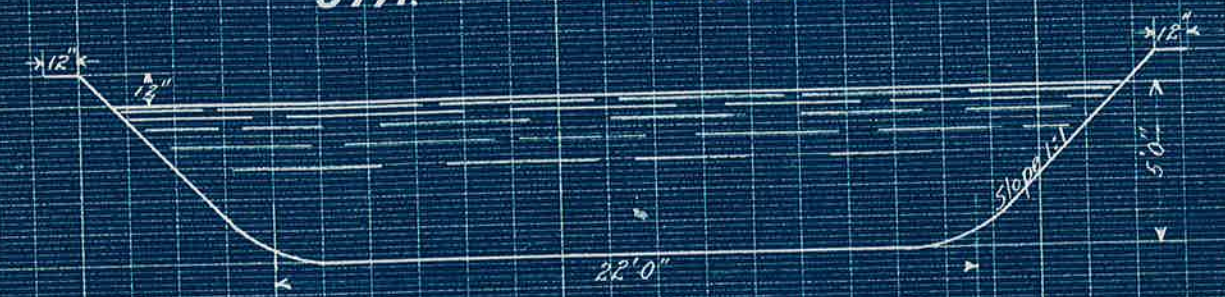
B.M. 987.93
50 S. 132+50

B.M. 982.30
40 L. 145+00

1000
990
980
Rate = -0.0445
970
960
950

EQUATION $110+00$ P.O.T.
 $110+54.3$

CROSS SECTION OF CANAL STA. 44+00 TO STA. 422+53.1



P.C. 146
P.T. 153
P.C. 147
P.T. 154

P.C. 158
P.T. 171
P.C. 148
P.T. 152

110
P.C. 190
P.T. 174

P.C. 176
P.T. 192

130
P.C. 198
P.T. 199

P.C. 178
P.T. 168

140
P.C. 178
P.T. 192

P.C. 188
P.T. 181

P.C. 191

977.42

100

3 4

EQUATION $\frac{157 + 243 \text{ DUT} + 21}{157 + 1000}$

Rate = 0.04067

150
P.T. $\Delta 14700$
P.C. $\Delta 312$
P.T. $\Delta 1803$
P.C. $\Delta 3530$

160
P.C. $\Delta 1843$
P.T. $\Delta 11700$
P.T. $\Delta 1676$
P.C. $\Delta 1451$
P.T. $\Delta 1422$
P.T. $\Delta 1088$

170
P.C. $\Delta 1312$
P.T. $\Delta 12131$
P.T. $\Delta 466$
P.C. $\Delta 1289$
P.T. $\Delta 13620$
P.T. $\Delta 1702$

180
P.C. $\Delta 275$
P.T. $\Delta 2730$
P.C. $\Delta 1993$
P.C. $\Delta 59$
P.T. $\Delta 11010$
P.T. $\Delta 2002$

190
P.C. $\Delta 161$
P.T. $\Delta 1725$
P.C. $\Delta 366$
P.T. $\Delta 1620$
P.C. $\Delta 351$
P.T. $\Delta 2370$
P.T. $\Delta 351$

200
P.C. $\Delta 1000$
P.T. $\Delta 815$
P.C. $\Delta 243$
P.T. $\Delta 1432$
P.C. $\Delta 109$
P.T. $\Delta 1646$

B.M. 982.41
100' S. 162+00

B.M. 984.74
60' S. 170+00

B.M. 975.65
40' L. 177+00

B.M. 982.24
50' L. 185+00

B.M. 983.65
25' L. 194+00

1000

990

980

970

960

950

Rate

+000

975.13

2500

4 5

B.M. 982.29
50' L. 213+40

B.M. 979.31
40' L. 217+25

B.M. 973.38
50' L. 228+00

B.M. 981.27
30' L. 239+00

B.M. 979.29
60' L. 251+50

EQUATION $227+921$
 $228+985$ POT

-0.04067

Rate = -0.04067

P.C. 178.0
P.T. 194.0

210

P.C. 168.0
P.T. 180.5

P.C. 132.5
P.T. 120.1

P.C. 176.1
P.T. 109.8

P.C. 130.8
P.T. 142.0

220

P.C. 192.1
P.T. 182.9

P.C. 150.0
P.T. 148.0

230

P.C. 169.0
P.T. 126.5

P.C. 129.1
P.T. 113.5

P.C. 133.9
P.T. 147.1

240

P.C. 154.8
P.T. 127.5

P.C. 102.5
P.T. 71.2

P.C. 121.5
P.T. 76.3

P.C. 112.4
P.T. 123.9

P.C. 138.2
P.T. 177.6

P.C. 157.1
P.T. 124.1

P.C. 170.6
P.T. 126.6

250

P.C. 191.2
P.T. 173.9

P.C. 170.5
P.T. 128.5

P.C. 128.5
P.T. 119.7

973.16

973.16

972.06

100

100

100

5
+030

6

B.M. 981.79
40 L. 265.20

Rate = -0.0417

+000

97106

B.M. 980.69
40 L. 283.50

B.M. 979.55
40 L. 292.20

Rate = -0.05

1000

990

980

970

960

950

EQUATION $\frac{310+280}{310+255}$ POT

6

7

B.M. 975.15
25 L. 313.30
+785

0

P.C. +575' Δ1.90'
P.T. +775'

P.C. +728' Δ1.186'
P.T. +831'

P.C. +663' Δ1.424'
P.T. +703'
P.C. +705' Δ1.124'
P.T. +609'

P.C. +655' Δ1.020'
P.T. +704'
P.C. +390' Δ1.433'
P.T. +696'

P.C. +344' Δ1.700'
P.T. +523'

P.C. +715' Δ2.0700'
P.T. +383'
P.C. +715' Δ2.0700'
P.T. +494'

P.C. +101' Δ4.3700'
P.T. +028'

P.C. +711' Δ4.9900'
P.T. +171'

290

P.C. +084' Δ6.500'
P.T. +584'

P.C. +404' Δ6.930'
P.T. +903'

P.C. +833' Δ1.1300'
P.T. +339'

P.C. +691' Δ4.800'
P.T. +288'

P.C. +328' Δ5.725'
P.T. +862'

P.C. +481' Δ4.930'
P.T. +129'

P.C. +280' Δ8.400'
P.T. +280'

310

P.C. +832' Δ1.0700'
P.T. +833'

P.C. +61° Δ 824
P.T. +472

320

P.C. +629 Δ 420
P.T. +079

P.C. +733 Δ 420
P.T. +572

330

P.C. +701 Δ 1200
P.T. +382

340

P.C. +431 Δ 522
P.T. +968

350

P.C. +134 Δ 2030
P.T. +559

P.C. +525 Δ 520
P.T. +220

360

P.C. +055 Δ 618
P.T. +875

P.C. +227 Δ 520
P.T. +620

P.C. +782 Δ 500
P.T. +312

370

P.C. +703 Δ 2120
P.T. +755

P.C. +948 Δ 2120
P.T. +620

B.M. 978.02
40' L. 320' 00

B.M. 971.52
42' L. 330' 00

B.M. 971.40
40' L. 357' 00

7 8

B.M. 972.77
40' L. 359' 00

Rate = 0.05

+100
966.96

B.M. 963.06

P.T. +082

P.C. +681 Δ 1310
P.T. +339

P.C. +055 Δ 3224
P.T. +128
380

P.C. +162 Δ 1250
P.T. +234

P.C. +534 Δ 1000
P.T. +732

P.C. +105 Δ 1420
P.T. +805

P.C. +668 Δ 420
P.T. +589
390

P.C. +082 Δ 2932
P.T. +820

P.C. +319 Δ 3430
P.T. +019

P.C. +852 Δ 270
P.T. +20
400

P.C. +105 Δ 2272
P.T. +680

P.C. +451 Δ 1234
P.T. +508

P.C. +408 Δ 520
P.T. +942
410

P.C. +458 Δ 900
P.T. +908
P.C. +248 Δ 1020
P.T. +198

P.C. +782 Δ 4736
P.T. +508

P.C. +326 Δ 800
P.T. +725
P.C. +457 Δ 3250
P.T. +551
420

P.C. +624 Δ 200
P.T. +070
430

B.M. 969.08

B.M. 972.21
40' L. 386 +60

965.06
950
960
970
980
990
1000

Rate = -0.05

Rate = -0.0686

EQUATION $\frac{406+000}{406+068} P_0 T$

EQUATION $\frac{429+968}{430+000} P_0 T$

ForeBay of Plant

8 9

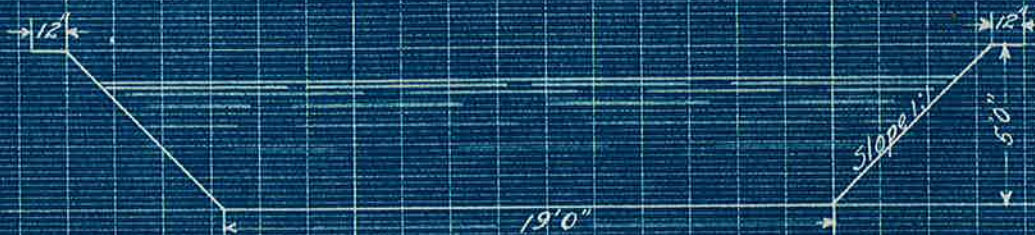
B.M. 971.29
60' L. 421 +60

B.M. 970.23

963.05

B.M. 971.22
40' L. 431 +60

CROSS SECTION OF CANAL
STA. 432+53' TO STA. 500+00



B.M. 971.11
 25' L. 44578

9 10
 +22.1
 B.M. 969.54
 40' L. 476+00

B.M. 966.84

155'

Rate = -0.0626

Rate = 0

19' Wide 5' Deep Side Wall Slope 1:1

440
 P.C. +289 Δ 795'
 P.T. +1927
 P.C. +138 Δ 1800'
 P.T. +138
 P.C. +63 Δ 900'
 P.T. +53
 P.C. +92
 P.T. +88

P.C. +264 Δ 1500'
 P.T. +775
 P.C. +67 Δ 1956'
 P.T. +2128

450
 P.C. +205 Δ 1190'
 P.T. +785
 P.C. +84 Δ 1120'
 P.T. +375

P.C. +49 Δ 1420'
 P.T. +763
 P.C. +59 Δ 1650'
 P.T. +199

P.C. +66 Δ 1970'
 P.T. +762
 P.C. +88 Δ 2126'
 P.T. +762

460
 P.C. +53 Δ 750'
 P.T. +520

P.C. +65 Δ 1256'
 P.T. +723

P.C. +48 Δ 2300'
 P.T. +405
 P.C. +30 Δ 1330'
 P.T. +655

470
 P.C. +16 Δ 900'
 P.T. +461
 P.C. +55 Δ 2150'
 P.T. +760

P.C. +31 Δ 3220'
 P.T. +399

960.50
 P.C. +919 Δ 1740'
 P.T. +527
 P.C. +90 Δ 1600'
 P.T. +967

480
 P.C. +01 Δ 1700'
 P.T. +904

P.C. +33 Δ 2030'
 P.T. +848
 P.C. +20 Δ 1220'
 P.T. +720
 P.C. +00 Δ 536'
 P.T. +005
 P.C. +00 Δ 1700'
 P.T. +005

10 11
+0.87

DAVIS

B. M. 367.34
B.C. E. 459.00

1000

990

980

970

960

950

958.80

0626

45230

4932

490

P.C. 1483

7850

P.T. 1287

42134

500

510

520

BOSTAPH & ROCHE

Civil and Hydraulic
Engineers

OGDEN - UTAH

1912

FILE No. 117