

RECEIVED

DEC 11 2008
Rapid City Growth Management Department

ANODE TABLE	
STATION & OFFSET	NUMBER & SIZE BAG
0+47, CL	1-18#
1+82, CL	1-18#
1+82, 3 LT	1-18#
2+12, CL	1-18#
2+15, CL	1-18#
3+18, CL	1-18#
3+18, 5' RT	1-18#
3+23, CL	1-18#
4+48, CL	1-18#
ALL ANODES SHALL BE ZINC	
TEST STATION	
3+18, CL	

WATER MAIN NOTES

STA 0+27 TO STA 5+00
F&I NEW 8" PVC WATER MAIN, 473 LF

STA 0+27, REMOVE EXISTING BEND AND CONNECT TO EXISTING CONC ENCASED 8" PVC WATER MAIN

STA 0+47
F&I NEW 8" 45° BEND

STA 1+82
F&I NEW 8" 8"x8"x4" TEE

STA 1+82, 3' LT
F&I NEW 4" GATE VALVE W/BOX AND CONNECT TO EXISTING 4" DI PIPE

STA 2+12
F&I NEW 8" 22.5° BEND

STA 2+15
F&I NEW 8" 22.5° BEND

STA 3+18
F&I NEW 8"x8"x6" TEE

STA 3+18, 5' RT
F&I NEW 6" LEAD, AUX. VALVE W/BOX & FH

STA 3+23
F&I NEW 6" GATE VALVE W/BOX

STA 4+48
F&I NEW 8" 11.25° BEND

F&I WATER MAIN ENCASUREMENT

STA 0+27 TO STA 0+37, 10 LF
STA 3+23 TO STA 3+43, 20 LF

CHECK DAMS

STA 0+35
STA 4.25

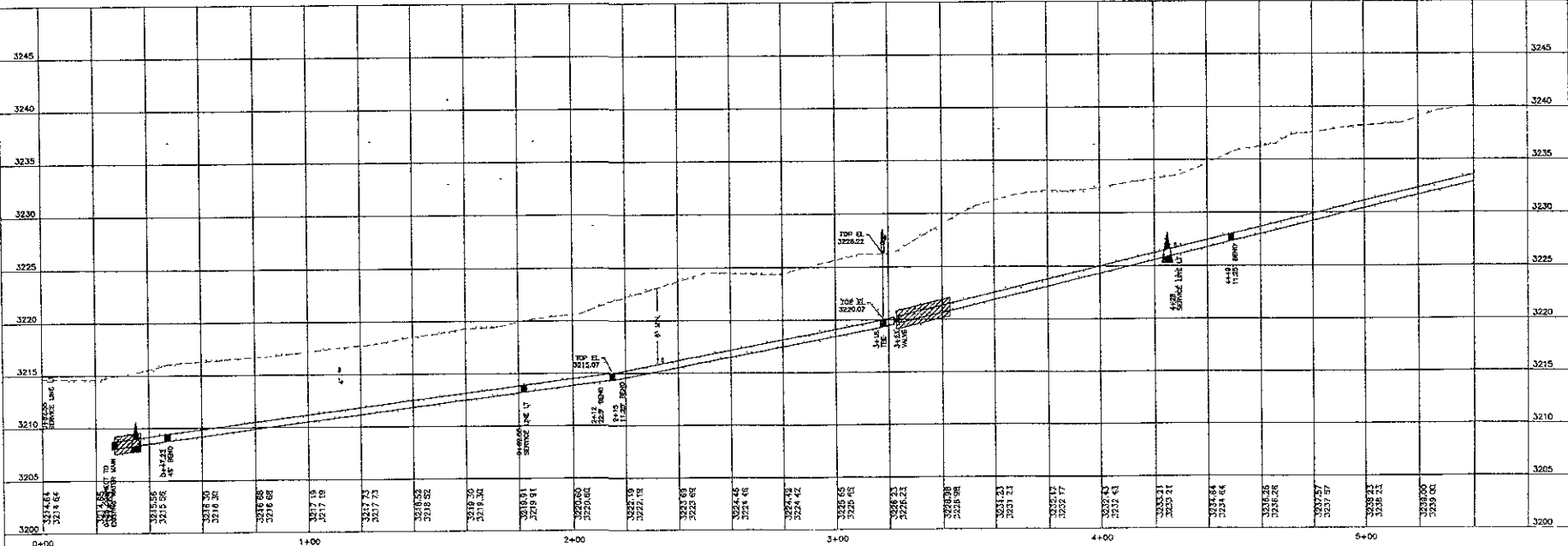
CONSTRUCT ASPHALT PATCH

STA 0+36, 7' RT TO STA 1+20, 12' LT, 152 SY
STA 2+25, 5' RT TO STA 2+35, 26' RT, 6 SY
STA 3+48, 6' RT TO STA 3+78, 6' LT, 37 SY
AGGREGATE BASE COURSE, 6" 72 FOM
CLASS 6, TYPE 1 ASPHALT, 5' 60 TON

WATER SERVICE LINE NOTES

FURNISH & INSTALL COPPER WATER SERVICE LINE & RECONNECT TO NEW MAIN

STA 2+34, RT, 2", 12 LF
STA 4+28, LT, 2", 2 LF
STA 4+28, 2' LT
F&I 2" CURB STOP W/BOX



ROBBINSDALE PARK
WATER MAIN LOOP

PLAN AND PROFILE-1



IRRIGATION SYSTEM

REMOVE, SALVAGE & REINSTALL SPRINKLER HEADS THAT INTERFERE WITH CONSTRUCTION
REMOVE & REPLACE IRRIGATION PIPE AS NECESSARY INCIDENTAL WORK

RESTORATION NOTES

STA 5+00 TO STA 10+40
HAUL, PLACE & INCORPORATE COMPOST INTO AREAS TO BE SEEDED, 50 CY

STA 5+00 TO STA 10+40
SEED DISTURBED AREAS WITH IRRIGATED LAWN MIX, 1800 SF

USE CARE AROUND TREE TRUNK ONLY BRANCHES AS NECESSARY

PROPOSED 8" PVC WATER MAIN

CHECK DAMS

STA 8+50

WATER MAIN NOTES

STA 5+00 TO STA 10+00
F&I NEW 8" PVC WATER MAIN, 500 LF

STA 6+45
F&I NEW 8" 90° BEND

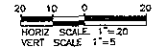
STA 7+10
F&I NEW 8" HIGH DEFLECTION COUPLING

STA 8+40
F&I NEW 8" 22.5° BEND

STA 8+44
F&I NEW 8" 11.25° BEND

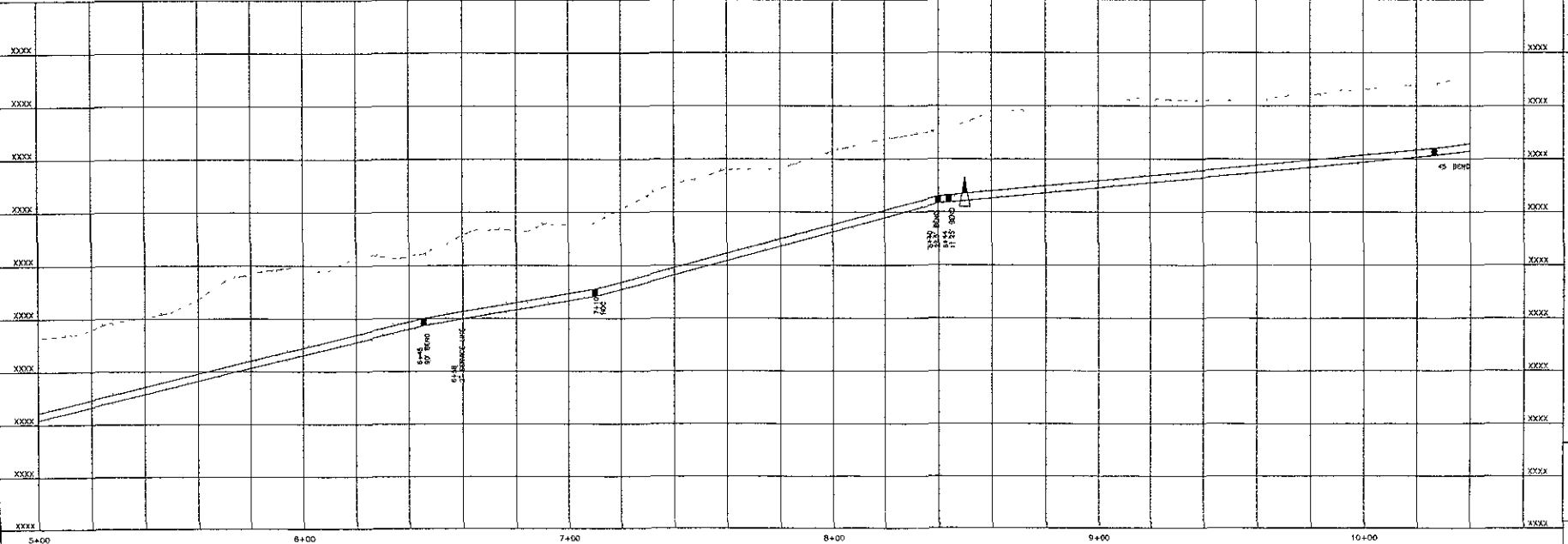
WATER SERVICE LINE NOTES

STA 6+58 CL TO STA 6+58, 117' FT
FURNISH & INSTALL COPPER WATER SERVICE LINE & RECONNECT TO NEW MAIN 117 LF



ANODE TABLE	
STATION & OFFSET	NUMBER & SIZE BAG
6+44, CL	1-18#
8+40, CL	1-18#
8+44, CL	1-18#
ALL ANODES SHALL BE ZINC	

Scale	1" = 20'
Designed by	Drawn by
Checked by	MEP
Design Date	Print Date
Project No. To	1748
Surveyed by	Survey Date
RD	
Revision	



ROBBINSDALE PARK
WATER MAIN LOOP

PLAN AND PROFILE-1

REMOVALS

STA 10+42, 8 LT
REMOVE, SALVAGE & REINSTALL SIGN
STA 10+38, 8 RT TO STA 10+78, 6 LT
REMOVE ASPHALT 50 SY
STA 11+20, 12 RT TO STA 11+30, 6 LT
REMOVE ASPHALT, 20 SY
STA 12+28, 6' RT TO STA 12+57, 6' LT
REMOVE ASPHALT 40 SY

IRRIGATION SYSTEM

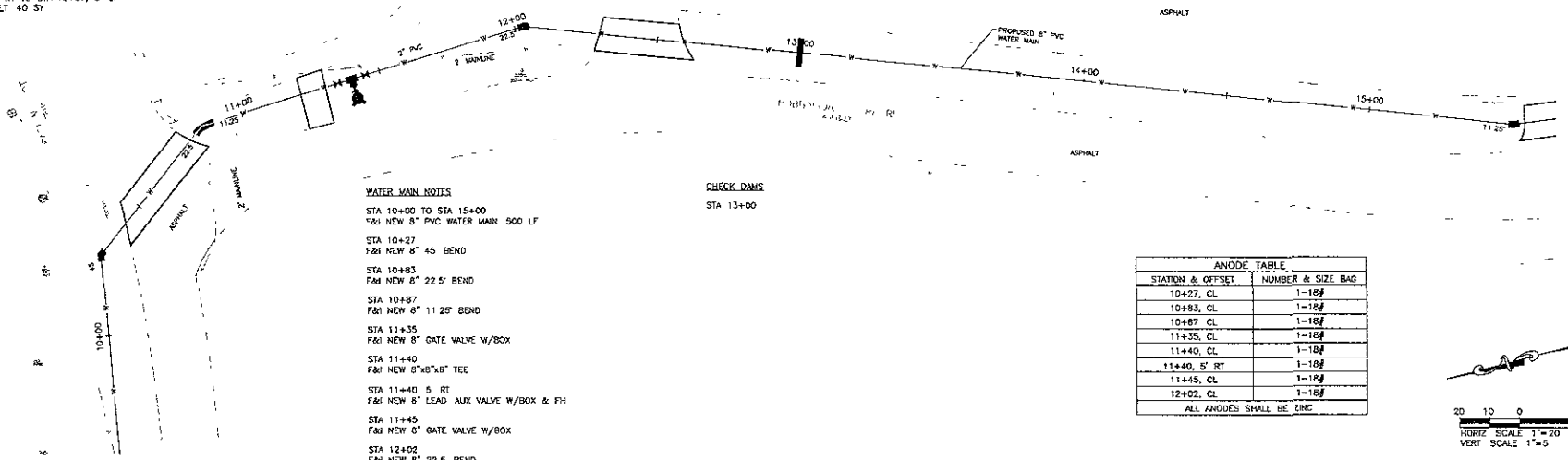
REMOVE & REPLACE IRRIGATION PIPE
AS NECESSARY INCIDENTAL WORK

CONSTRUCT ASPHALT PATCH

STA 10+36, 8 RT TO STA 10+78, 6 LT
STA 11+20, 12 RT TO STA 11+30, 6' LT
STA 12+28, 6' RT TO STA 12+57, 6 LT
APPROPRIATE BASE COURSE 8" 40 TO
CLASS G, TYPE 1 ASPHALT, 5" 34 TON

RESTORATION NOTES

STA 10+78 TO STA 10+83
HAUL, PLUCK, & INCORPORATE COMPOST
INTO AREAS TO BE SEEDED, 30 CY
STA 10+78 TO STA 15+53
SEED DISTURBED AREAS WITH
NON-IRRIGATED LAWN MIX 1050 SY



WATER MAIN NOTES

STA 10+00 TO STA 15+00
8\"/>

STA 10+27
F&I NEW 8\"/>

STA 10+83
F&I NEW 8\"/>

STA 10+87
F&I NEW 8\"/>

STA 11+35
F&I NEW 8\"/>

STA 11+40
F&I NEW 8\"/>

STA 11+40, 5 RT
F&I NEW 8\"/>

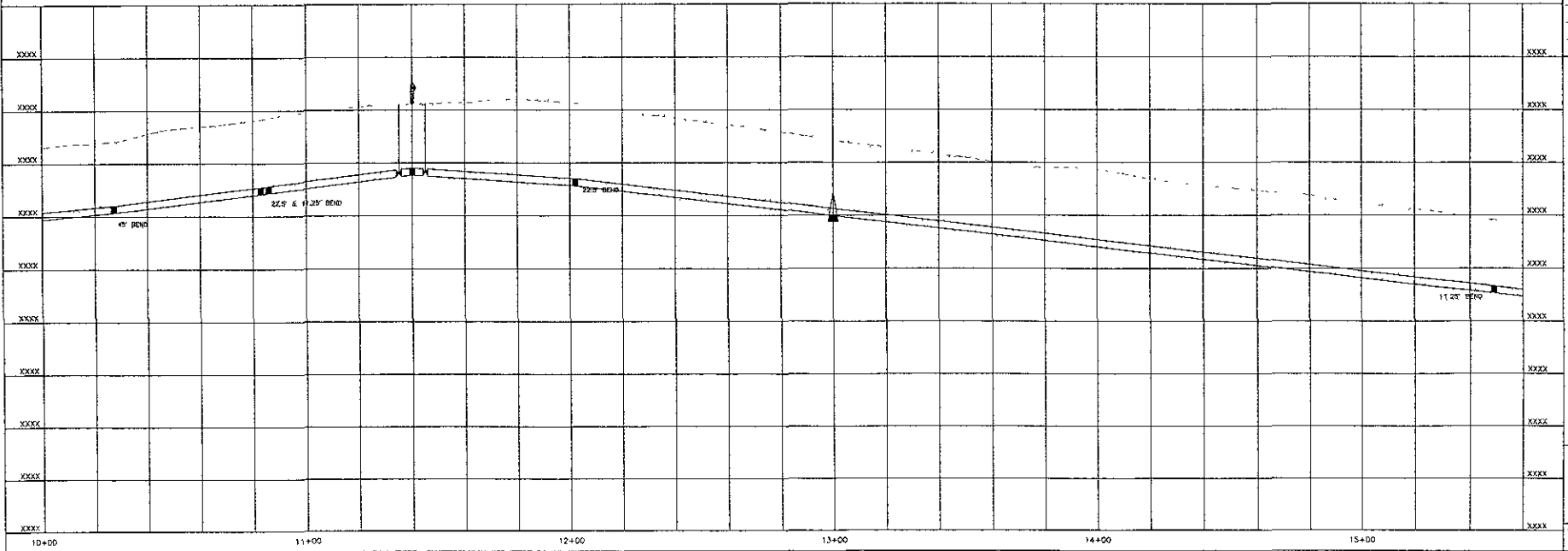
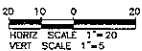
STA 11+45
F&I NEW 8\"/>


STA 12+02
F&I NEW 8\"/>

CHECK DAMS
STA 13+00

ANODE TABLE	
STATION & OFFSET	NUMBER & SIZE BAG
10+27, CL	1-18#
10+83, CL	1-18#
10+87, CL	1-18#
11+35, CL	1-18#
11+40, CL	1-18#
11+40, 5' RT	1-18#
11+45, CL	1-18#
12+02, CL	1-18#

ALL ANODES SHALL BE ZINC





CITY OF RAPID CITY

ROBBINSDALE PARK
WATER MAIN LOOP

CITY OF RAPID CITY PROJECT NO. 1748

Scale 1" = 20'

Designed by: KJ
Checked by: MJS
Design Date: 12/18/20

Internal Job No: 1748
Drawn by: RQ
Survey Date: 12/18/20

Sheet Title

PLAN
AND
PROFILE-1

Sheet No

7 of 13

STA 15+42, 7 LT
REMOVE, SALVAGE & REINSTALL SIGN

STA 15+52, 6 RT TO STA 15+92, 6 LT
REMOVE ASPHALT, 40 SY

STA 15+93, 6 RT TO STA 16+03, 6' LT
REMOVE ASPHALT, 13 SY

STA 16+26, 6 LT
REMOVE, SALVAGE & REINSTALL SIGN

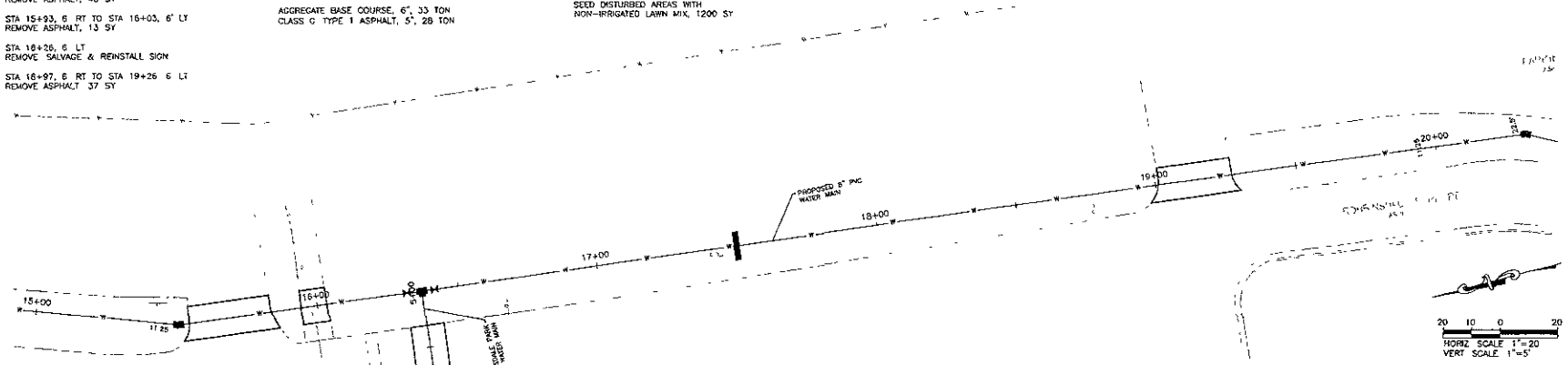
STA 16+97, 6 RT TO STA 19+26, 6 LT
REMOVE ASPHALT 37 SY

STA 15+52, 6 RT TO STA 15+82, 6 LT
STA 15+93, 6 RT TO STA 16+03, 6' LT
STA 16+97, 6 RT TO STA 19+26, 6 LT

AGGREGATE BASE COURSE, 6", 33 TON
CLASS C TYPE 1 ASPHALT, 5", 28 TON

STA 15+82 TO STA 20+00
HALE PLACE & INCORPORATE COMPOST
INTO AREAS TO BE SEEDER 32 CY

STA 15+82 TO STA 20+00
SEED DISTURBED AREAS WITH
NON-IRRIGATED LAWN MIX, 1200 SY



WATER MAIN NOTES

STA 15+00 TO STA 20+00
F&I NEW 8" PVC WATER MAIN 500 LF

STA 15+49
F&I NEW 8" 11 25 BEND

STA 16+32
F&I NEW 8" GATE VALVE W/BOX

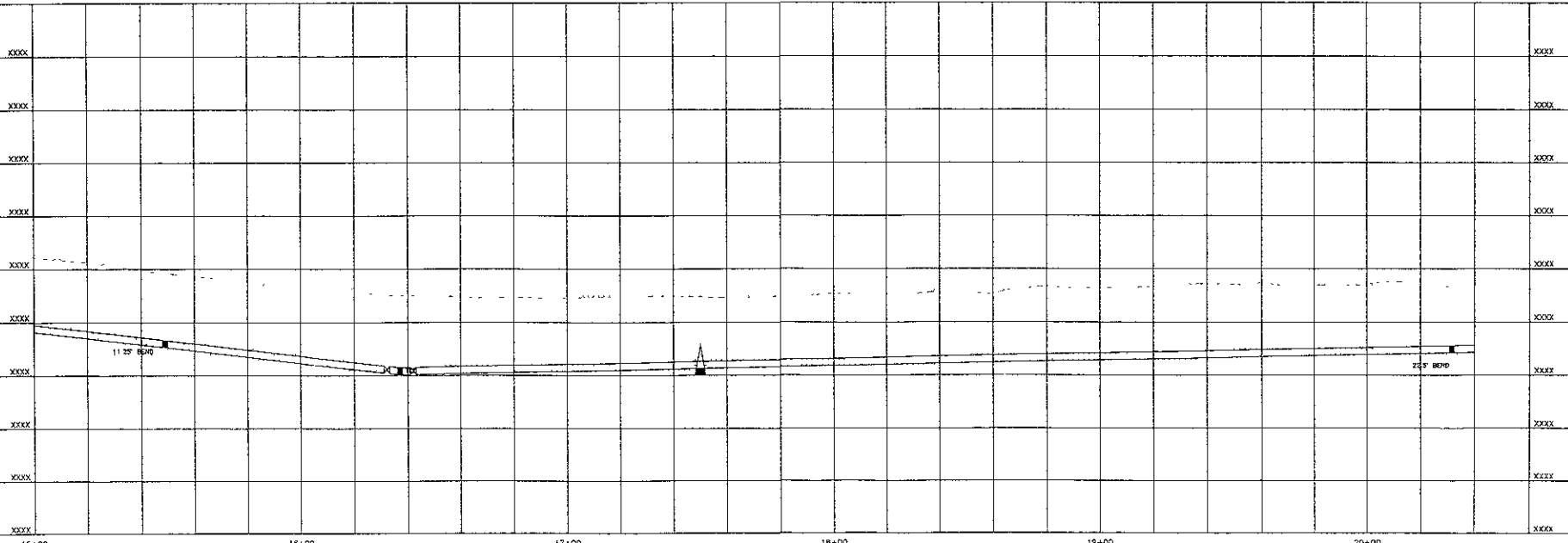
STA 16+37
F&I NEW 8"x8"x8" TEE

STA 16+42
F&I NEW 8" GATE VALVE W/BOX

CHECK DAM
STA 17+50

ANODE TABLE	
STATION & OFFSET	NUMBER & SIZE BAG
15+49 CL	1-18#
16+32 CL	1-18#
16+37 CL	1-18#
16+42, CL	1-18#

ALL ANODES SHALL BE ZINC



CITY OF RAPID CITY

Scale	1" = 20'
Designed By	Drawn By
KJ	MPP
Check Date	Print Date
Project Job No	
1748	
Surveyed By	Survey Date
RLS	
Revisions	

ROBBINSDALE PARK
WATER MAIN LOOP

CITY OF RAPID CITY PROJECT NO. 1748

REMOVALS

STA 21+44, 6' RT TO STA 21+74, 6' LT
REMOVE ASPHALT, 37 SY

STA 23+40, 6' RT TO STA 23+85, 65' LT
REMOVE ASPHALT, 85 SY

STA 23+71, 11' LT TO STA 23+85, 25' RT
REMOVE & REPLACE C&G, 45 LF

STA 23+92, 3' LT TO STA 24+07, 7' RT
REMOVE & REPLACE CONG DRAIN PAN, 9 SY

CONSTRUCT ASPHALT PATCH

STA 21+44, 6' RT TO STA 21+74, 6' LT
STA 23+40, 6' RT TO STA 23+85, 55' LT

AGGREGATE BASE COURSE, 6", 45 TON
CLASS 5 TYPE 1 ASPHALT, 5", 38 TON

RESTORATION NOTES

STA 20+00 TO STA 25+00
HAUL, PLACE & INCORPORATE COMPOST
INTO AREAS TO BE SEEDED, 35 CY

STA 20+00 TO STA 25+00
SEED DISTURBED AREA WITH
NON-IRRIGATED LAWN MIX, 1300 SY

STA 22+50, 12' RT TO STA 22+12' LT TO
STA 23+40, 12' RT TO 12' LT TO
F&I EXCLOSURE BLANKET, 250 SY

WATER MAIN NOTES

STA 0+00 TO STA 0+05
F&I NEW 8" PVC WATER MAIN, 5 LF

STA 0+05 TO STA 1+13
F&I NEW 8" PVC WATER MAIN, 108 LF

STA 0+05
F&I NEW 8"x6" REDUCER

STA 0+47
F&I NEW 6" HIGH DEFLECTION COUPLING

STA 0+70
F&I NEW 6"x6"x6" TEE

STA 0+70, 5' LT
F&I NEW 6" LEAD, AUX VALVE W/BOX & F&I

STA 0+75
F&I NEW 6" GATE VALVE W/BOX

STA 1+07
F&I NEW 5' 11 25' BEND

STA 1+13
F&I NEW 6" 90° BEND &
CONNECT TO EXISTING 6" AC
WATER LINE

REMOVALS

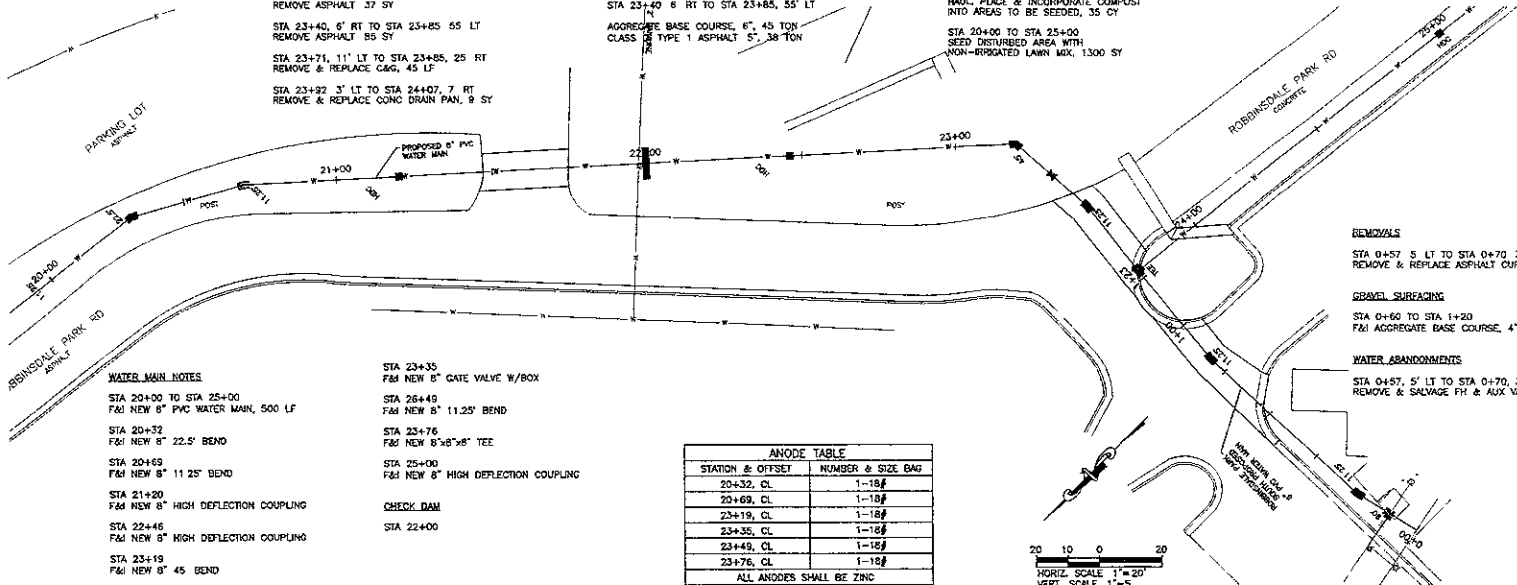
STA 0+57, 5' LT TO STA 0+70, 3' RT
REMOVE & REPLACE ASPHALT CURB, 18 LF

GRAVEL SURFACING

STA 0+60 TO STA 1+20
F&I AGGREGATE BASE COURSE, 4", 16 TON

WATER ABANDONMENTS

STA 0+57, 5' LT TO STA 0+70, 3' RT
REMOVE & SALVAGE FH & AUX VALVE



WATER MAIN NOTES

STA 20+00 TO STA 25+00
F&I NEW 8" PVC WATER MAIN, 500 LF

STA 20+32
F&I NEW 8" 22.5' BEND

STA 20+69
F&I NEW 8" 11 25' BEND

STA 21+20
F&I NEW 8" HIGH DEFLECTION COUPLING

STA 22+46
F&I NEW 8" HIGH DEFLECTION COUPLING

STA 23+19
F&I NEW 8" 45 BEND

STA 23+35
F&I NEW 8" GATE VALVE W/BOX

STA 26+49
F&I NEW 8" 11.25' BEND

STA 23+76
F&I NEW 8"x6"x6" TEE

STA 25+00
F&I NEW 8" HIGH DEFLECTION COUPLING

STA 22+00
CHECK DAM

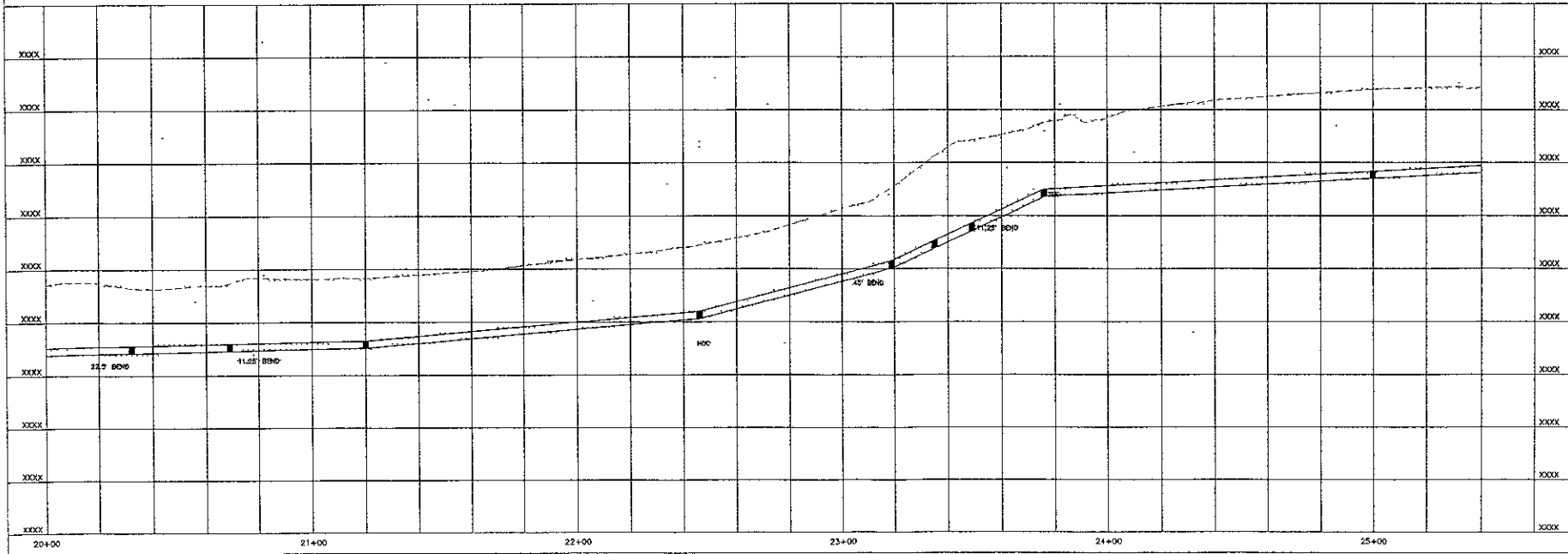
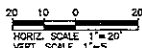
ANODE TABLE	
STATION & OFFSET	NUMBER & SIZE BAG
20+32, CL	1-18#
20+69, CL	1-18#
23+19, CL	1-18#
23+35, CL	1-18#
23+49, CL	1-18#
23+76, CL	1-18#

ALL ANODES SHALL BE ZINC

ANODE TABLE	
STATION & OFFSET	NUMBER & SIZE BAG
0+55, CL	1-18#
0+70, CL	1-18#
0+70, 5' LT	1-18#
0+75, CL	1-18#
1+07, CL	1-18#
1+13, CL	1-18#

ALL ANODES SHALL BE ZINC

TEST STATION
0+70, 5' LT



CITY OF RAPID CITY
ENGINEERING SERVICES
RICHARDSON SQUARE #2

Scale 1" = 20'
Designed by: [Signature]
Checked by: [Signature]
Design Date: [Date]
Print Date: [Date]

ROBBINSDALE PARK
WATER MAIN LOOP

PLAN
AND
PROFILE-1



CITY OF RAPID CITY
 ENGINEERING DEPARTMENT

Project No.

Scale: 1" = 20'
 Designed By: DSW/BJ
 Drawn By: MJD
 Design Date: 1/14/14
 Manual Job No: 1748
 Surveyed By: DSW
 Survey Date: 1/14/14
 Plotted:

ROBBINSDALE PARK
 WATER MAIN LOOP

CITY OF RAPID CITY PROJECT NO. 1748

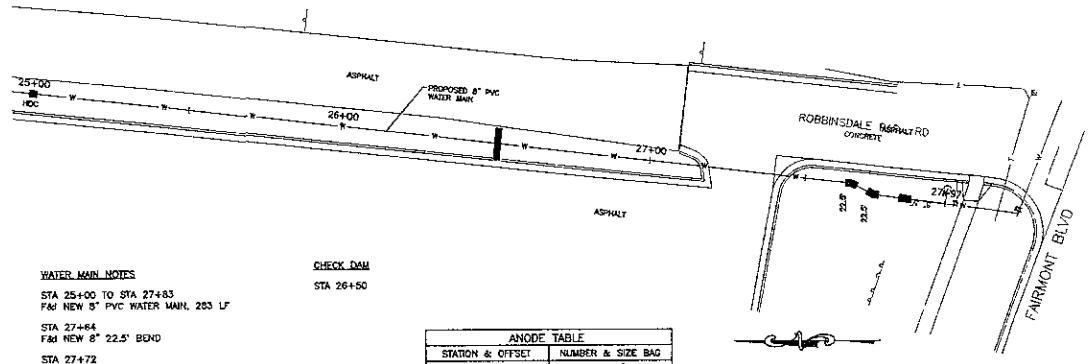
Sheet Title:
 ROBBINSDALE PARK
 WATER MAIN & SOUTH
 WATER MAINS

REMOVALS
 STA 27+08, 6' LT TO STA 27+53, 6' LT
 REMOVE & REPLACE CONC FILLETS 18 SY
 AND CONC PAVEMENT 28 SY

RESTORATION NOTES
 STA 25+00 TO STA 27+00
 HAUL, PLACE & INCORPORATE COMPOST
 INTO AREAS TO BE SEEDED 1/2 CY

 STA 25+00 TO STA 27+00
 SEED DISTURBED AREAS WITH
 NON-IRRIGATED LAWN MIX, 450 SY

08SR096



WATER MAIN NOTES
 STA 25+00 TO STA 27+83
 F&I NEW 8" PVC WATER MAIN, 283 LF

 STA 27+84
 F&I NEW 8" 22.5" BEND

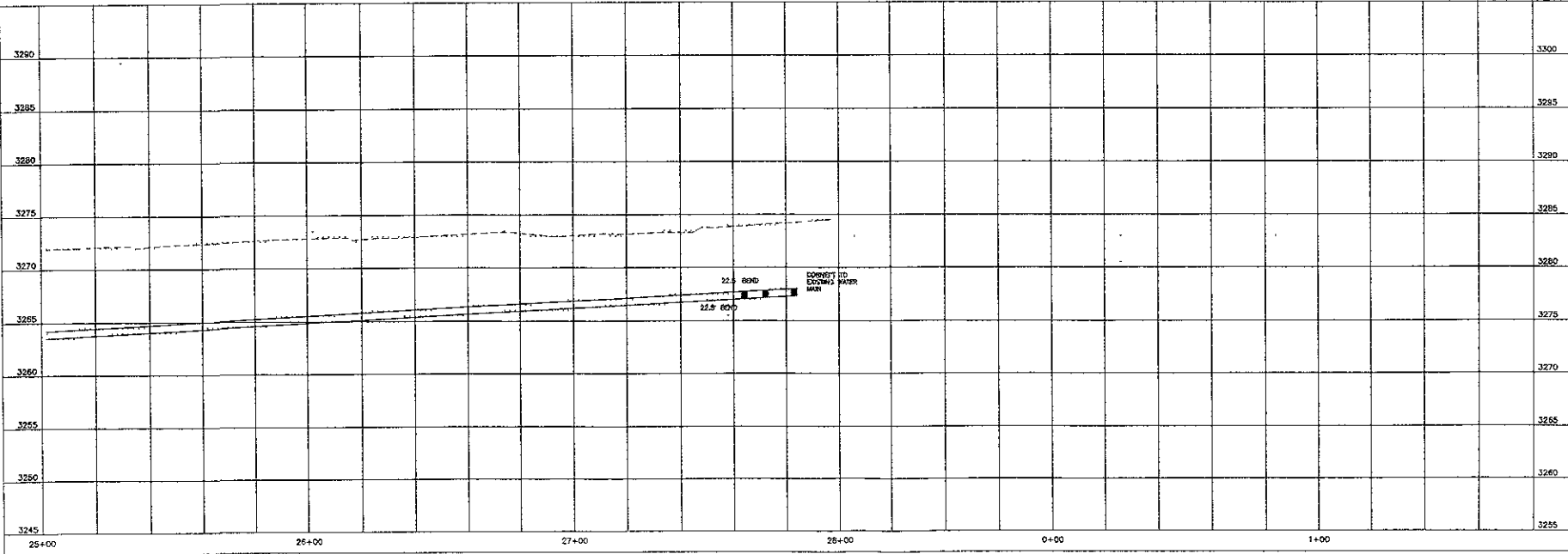
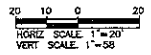
 STA 27+72
 F&I NEW 8" 22.5" BEND

 STA 27+83
 CONNECT TO EXISTING
 8" AC WATER MAIN

CHECK DAM
 STA 26+50

ANODE TABLE	
STATION & OFFSET	NUMBER & SIZE BAG
27+64, CL	1-18#
27+27, CL	1-10#
27+83, CL	1-10#

ALL ANODES SHALL BE ZINC



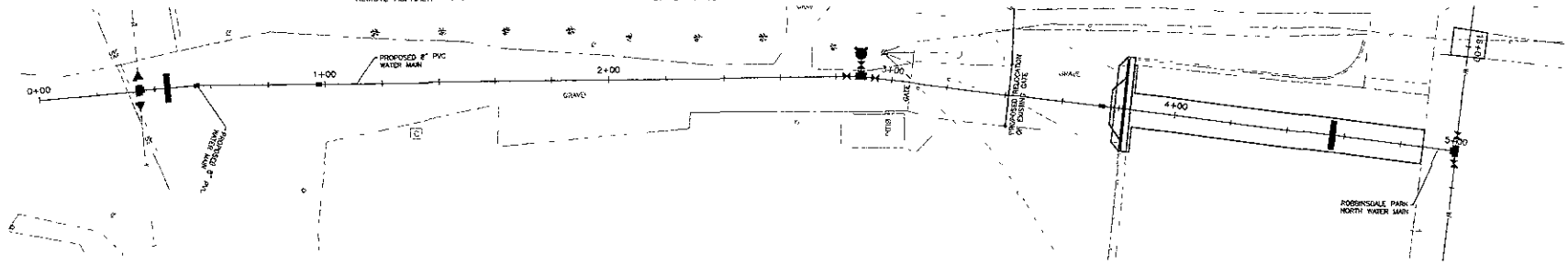


CITY OF RAPID CITY

REWORKS
 STA 3+07, 11' RT TO 10 LT
 REMOVE & SALVAGE CHAIN LINK GATE & POSTS
 STA 3+78 15 RT TO STA 3+81 18 LT
 REMOVE CONC APPROACH PAVEMENT, 10 SY
 STA 3+81 16 RT TO 18 LT
 REMOVE C&G, 34 LF
 STA 3+84, 6 RT TO STA 4+88 6 LT
 REMOVE ASPHALT, 140 SY

SHIELD SURFACING
 STA 0+24, TO STA 3+77
 F&I AGGREGATE BASE COURSE 4" 150 TON
CURB & GUTTER
 STA 3+81 18 RT TO 18' LT
 F&I C&G 34 LF
INSTALL GATE
 STA 3+41 10 RT TO 11 LT

APPROACH PAVEMENT
 STA 3+42, 4 RT TO STA 3+47 13 LT
 F&I CONC APPROACH PAVEMENT 9.5 SY
CONSTRUCT ASPHALT PATCH
 STA 3+84, 6' RT TO STA 4+88, 6' RT
 AGGREGATE BASE COURSE, 92 TON
 CLASS G, TYPE 1 ASPHALT, 43 TON

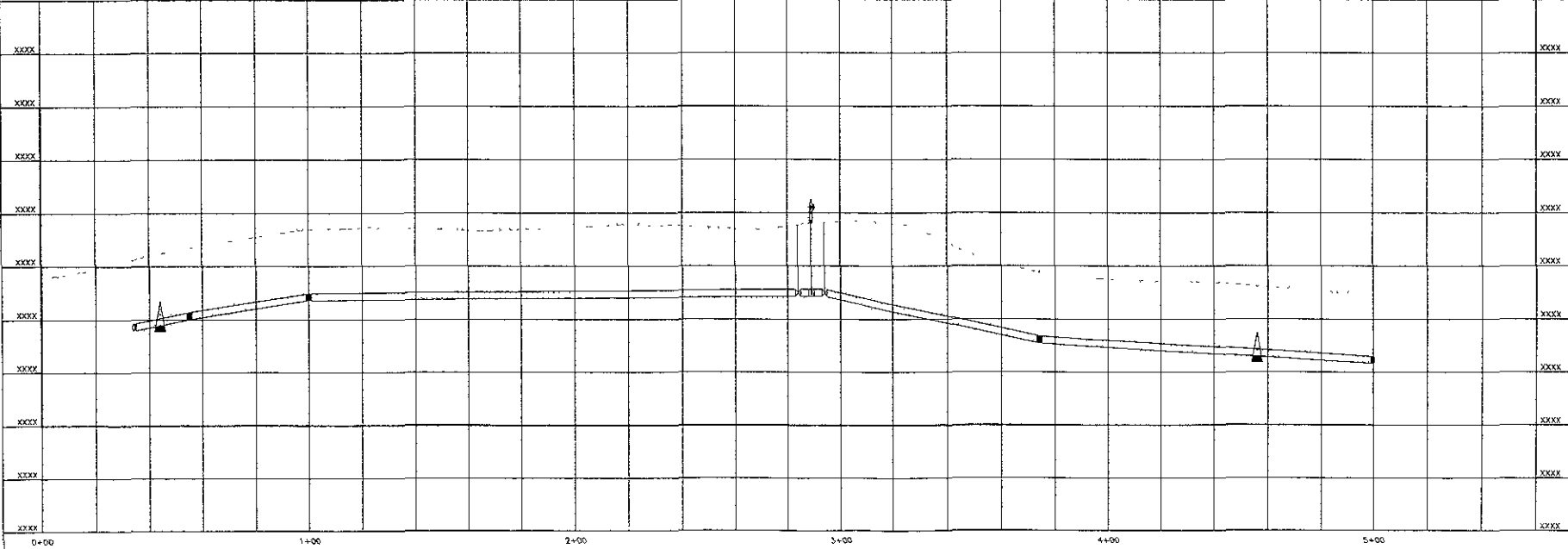
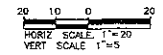


WATER MAIN NOTES
 STA 0+34 TO STA 4+88
 F&I NEW 8" PVC WATER MAIN 432 LF
 STA 0+34, CL
 F&I NEW 8"x8"x8" TEE
 STA 0+34, 3' RT
 F&I NEW 8"x4" REDUCER & CONNECT TO EXISTING 4" CI WATER LINE
 STA 0+34, 5' LT
 F&I NEW 8"x4" REDUCER & CONNECT TO EXISTING 4" CI WATER LINE
 STA 0+55
 F&I NEW 8" HIGH DEFLECTION COUPLING

STA 0+88
 F&I NEW 8" HIGH DEFLECTION COUPLING
 STA 2+84
 F&I NEW 8" GATE VALVE W/BOX
 STA 2+89
 F&I NEW 8"x8"x6" TEE
 STA 2+85, 7' R
 F&I NEW 6" LEAD AUX VALVE W/BOX & FH
 STA 2+94
 F&I NEW 8" GATE VALVE W/BOX
 STA 3+74
 F&I NEW 8" HIGH DEFLECTION COUPLING

CHECK DAM
 STA 0+44
 STA 4+58

ANODE TABLE	
STATION & OFFSET	NUMBER & SIZE BAG
0+34, CL	1-18#
0+34, 5, RT	1-18#
0+34, 5, LT	1-18#
2+84, CL	1-18#
2+85, CL	1-18#
2+89, 7, LT	1-18#
2+94, CL	1-18#
ALL ANODES SHALL BE ZINC	
TEST STATION 2+89 7' LT	



Scale: 1" = 20'
 Designed By: [Signature]
 Drawn By: [Signature]
 Design Date: [Date]
 Project No: 1745
 Surveyed By: [Signature]
 Survey Date: [Date]
 Remarks:

ROBBINSDALE PARK NORTH WATER MAIN

ROBBINSDALE PARK NORTH WATER MAIN