

APPROX. LIMITS OF RIPRAP:
 58 FEET LEFT. 62 FEET RIGHT
 CARRY RIPRAP TO SECOND GUARD RAIL
 POST AT EACH WING WALL UNLESS
 OTHERWISE SHOWN.

LOAD AND RESISTANCE FACTOR DESIGN DATA

CONCRETE CLASS AA $f'_c = 4$ KSI
 CONCRETE CLASS A $f'_c = 3$ KSI
 REINF. STEEL $f_y = 60$ KSI
 STRUCTURAL STEEL
 M270 (GRADE 50W) $F_y = 50$ KSI

LFD OPERATING RATING: HS 55.0
 LOADING: HL-93
 20 P.S.F. FUTURE WEARING SURFACE.
 5 P.S.F. STAY-IN-PLACE FORMS

DESIGN: AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS,
 5TH EDITION WITH 2010 INTERIMS, EXCEPT AS MODIFIED
 BY CURRENT ODOT BRIDGE DIVISION DESIGN POLICIES.
 ANSI/AASHTO/AWS D1.5 BRIDGE WELDING CODE.

HYDRAULIC DATA

D.A. =	8.99 SQ. MI.
Q2 =	669 CFS
V2 =	2.05 FPS
CHW =	1206.65 FT
Q5 =	1,530 CFS
V5 =	2.59 FPS
CHW =	1209.47 FT
Q10 =	2,430 CFS
V10 =	3.49 FPS
CHW =	1210.59 FT
Q25 =	3,980 CFS
V25 =	5.01 FPS
CHW =	1211.80 FT
Q50 =	5,100 CFS
V50 =	6.11 FPS
CHW =	1212.39 FT
Q100 =	6,480 CFS
V100 =	7.46 FPS
CHW =	1213.04 FT
Q _{ot} =	Q39

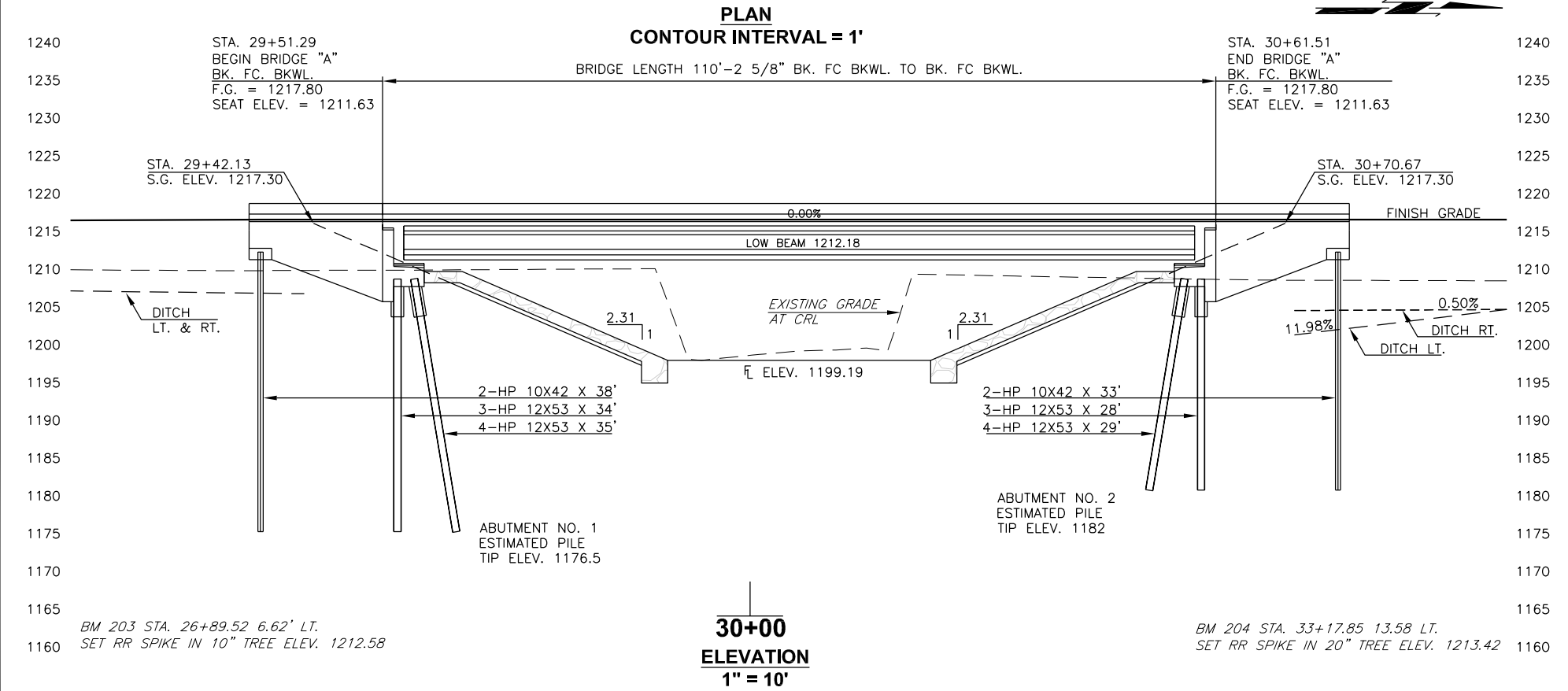
ABUTMENT FOUNDATION DATA

ABUTMENTS: HP 12X53 PILING **ABUTMENTS NO. 1 & 2**
 REQUIRED ULTIMATE PILE CAPACITY 75.2 TON/PILE

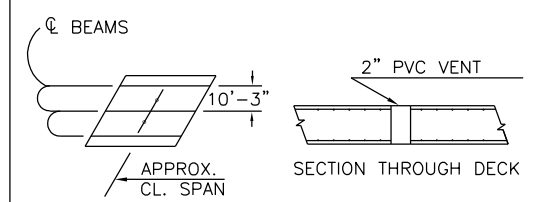
PILE CAPACITY SHALL BE VERIFIED USING THE ODOT MODIFIED
 GATES EQUATION SHOWN ON SHEET AR01. ALL ABUTMENT
 PILING SHALL BE DRIVEN THROUGH THE COMPACTED FILL TO
 POINT BEARING ON SOLID FOUNDATION MATERIAL. PILING
 SHALL BE DRIVEN TO THE APPROXIMATE ELEVATION SHOWN ON
 THE PLANS. IF THE REQUIRED ULTIMATE PILE CAPACITY IS
 NOT OBTAINED AT THIS ELEVATION, DRIVING SHALL CONTINUE
 UNTIL THE REQUIRED ULTIMATE PILE CAPACITY IS OBTAINED.
 THE LENGTH OF STEEL PILING SHOWN ON THE PLANS IS FOR
 ESTIMATING PURPOSES ONLY.

BRIDGE "A" PAY QUANTITIES

105' X 26' CLEAR ROADWAY CONVENTIONAL PCB SPAN SKEWED 30 DEGREE LEFT FORWARD					
ITEM	DESCRIPTION	UNITS	ABUTMENTS	SUPSTR.	TOTAL
501(B)	SUBSTRUCTURE EXCAVATION COMMON	CY	220.00		220.00
501(F)	GRANULAR BACKFILL	CY	102.00		102.00
503(A)	PRESTRESSED CONCRETE BEAMS (TYPE IV)	LF		314.00	314.00
504(B)	SAW-CUT GROOVING	SY		266.70	266.70
504(D)	CONCRETE RAIL (TR3)	LF	70.80	220.50	291.30
506(A)	STRUCTURAL STEEL	LB		690.00	690.00
507(A)	WEATHERING STEEL FIXED BEARING ASSEMBLY	EA		3.00	3.00
507(B)	WEATHERING STEEL EXPANSION BEARING ASSEMBLY	EA		3.00	3.00
509(A)	CLASS AA CONCRETE	CY		86.10	86.10
509(B)	CLASS A CONCRETE	CY	79.40		79.40
511(A)	REINFORCING STEEL	LB	11,460.00	22,030.00	33,490.00
514(A)	PILES, FURNISHED (HP 10X42)	LF	142.00		142.00
514(A)	PILES, FURNISHED (HP 12X53)	LF	442.00		442.00
514(B)	PILES, DRIVEN (HP 10X42)	LF	142.00		142.00
514(B)	PILES, DRIVEN (HP 12X53)	LF	442.00		442.00
514(L)	PILE SPLICE, H-PILE(NON BIDDABLE)	EA	1.00		1.00
601(B)	TYPE I-A PLAIN RIPRAP	TON	1,214.00		1,214.00
601(C)	TYPE I-A FILTER BLANKET	TON	316.00		316.00
613(H)	6" PERFORATED PIPE UNDERDRAIN ROUND	LF	60.00		60.00
613(I)	6" NON-PERF. PIPE UNDERDRAIN RND.	LF	60.00		60.00
619(D)	REMOVAL OF EXISTING BRIDGE STRUCTURE	LSUM			1.00
623(A)	BEAM GUARDRAIL W-BEAM SINGLE	LF			35.00
623(F)	GUARDRAIL ANCHOR UNIT (TYPE D-BF)	EA			4.00
623(F)	GUARDRAIL ANCHOR UNIT (TYPE A)	EA			3.00
880(J)	CONSTRUCTION TRAFFIC CONTROL	LSUM			1.00



AIR VENT DETAILS



PLACE 2" PVC PIPE VERTICALLY THROUGH THE DECK
 BETWEEN BEAMS AT APPROXIMATE CENTER OF EACH
 SPAN. DO NOT PLACE DIRECTLY ABOVE DIAPHRAGMS.

BRIDGE "A": 105' X 26' CLEAR ROADWAY
 CONVENTIONAL PCB SPAN SKEWED 30 DEGREES
 LEFT FORWARD WITH TR-3 CONCRETE RAILS.
 CENTERLINE STATION 30+06.40.

EXISTING BRIDGE: 34' I-BEAM SPAN. (REMOVE)

TRIBUTARY TO BLUE BEAVER CREEK COMANCHE COUNTY

BRIDGE "A" GENERAL PLAN AND ELEVATION

JOB PIECE NO. 30440(04) SHEET NO. B001