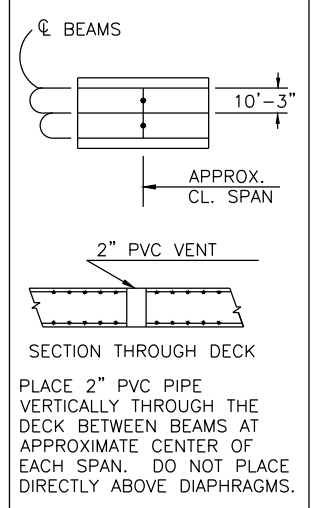


APPROX. LIMITS OF RIPRAP: 75 FEET LEFT, 72 FEET RIGHT CARRY RIPRAP TO SECOND GUARDRAIL POST AT EACH WING WALL ABUTMENT NO. 1 AND FOURTH GUARDRAIL POST AT ABUTMENT NO. 2.

DESCRIPTION	REVISIONS	DATE
CLSM BACKFILL QUANTITY UPDATED		10/11/17

**AIR VENT DETAILS**



**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 47.2  
 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.

**ABUTMENT FOUNDATION DATA**

ABUTMENTS: HP 10X42 PILING  
 REQUIRED ULTIMATE PILE CAPACITY 73.7 TON/PILE

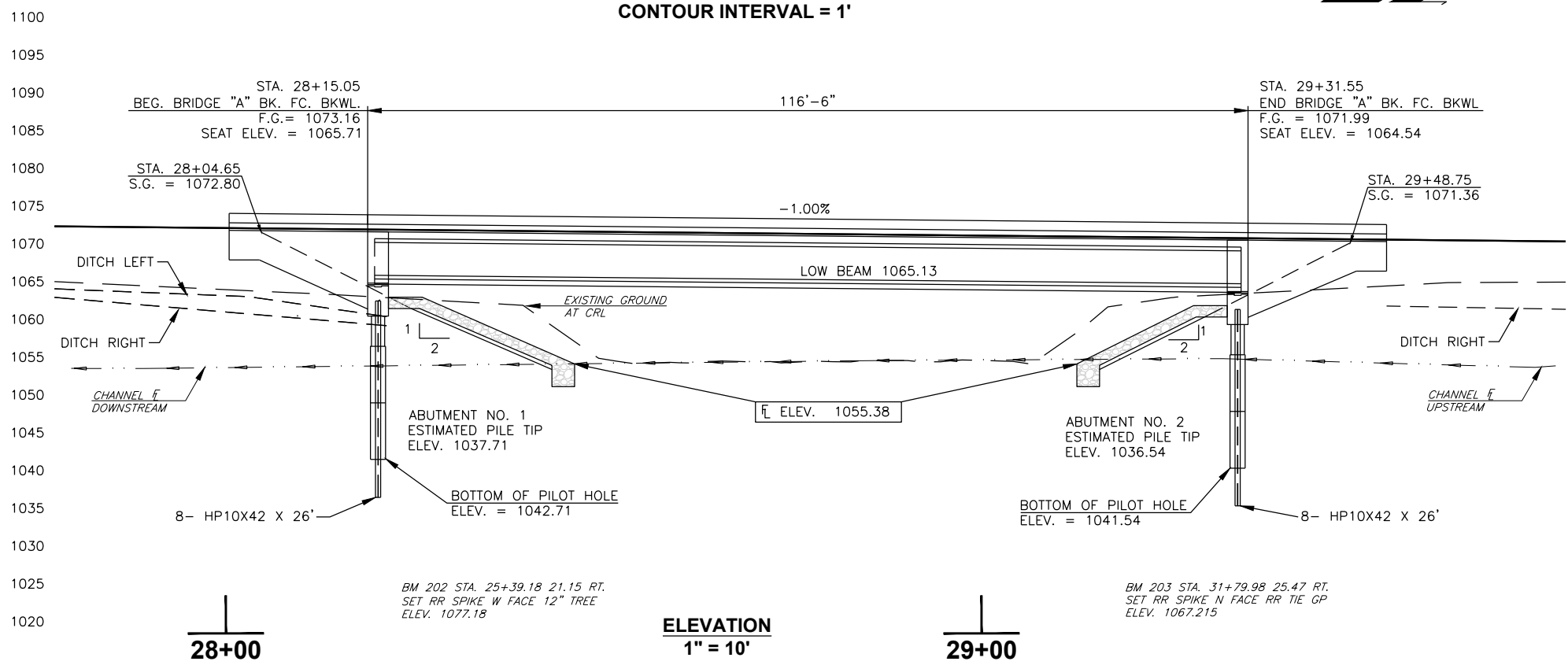
PILE CAPACITY SHALL BE VERIFIED USING THE ODOT MODIFIED GATES EQUATION SHOWN ON SHEET AR02. PILOT HOLES MUST BE DRILLED TO THE DEPTH SHOWN IN THE PLANS. ALL ABUTMENT PILING SHALL BE PLACED IN PILOT HOLES AND DRIVEN THROUGH ROCK TO POINT BEARING ON SOLID FOUNDATION MATERIAL. CONTRACTOR SHALL TEST PILING TO ENSURE THE MINIMUM REQUIRED ULTIMATE PILE CAPACITY IS OBTAINED. IF THE REQUIRED ULTIMATE PILE CAPACITY IS OBTAINED, 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.

**HYDRAULIC DATA**

D.A. = 25.9 SQ. MI.

Q2 = 2,760 CFS	Q25 = 10,900 CFS
V2 = 4.59 FPS	V25 = 10.16 FPS
CHW = 1063.02 FT	CHW = 1068.96 FT
Q5 = 5,120 CFS	Q50 = 13,100 CFS
V5 = 6.39 FPS	V50 = 11.84 FPS
CHW = 1065.11 FT	CHW = 1070.69 FT
Q10 = 7,310 CFS	Q100 = 15,600 CFS
V10 = 7.57 FPS	V100 = 13.17 FPS
CHW = 1066.68 FT	CHW = 1071.74 FT

Qot = Q39



**BRIDGE "A" PAY QUANTITIES**

115' X 26' CLEAR ROADWAY INTEGRAL PCB SPAN ZERO DEGREE SKEW						
ITEM	DESCRIPTION	UNITS	ABUTS.	SUPSTR.	APPROACH	TOTALS
501(B)	SUBSTRUCTURE EXCAVATION COMMON	CY	120.00			120.00
501(G)	CLSM BACKFILL	CY	104.00			104.00
503(A)	PRESTRESSED CONCRETE BEAMS (TYPE J BT)	LF		344.00		344.00
504(A)	APPROACH SLAB	SY			115.00	115.00
504(B)	SAW-CUT GROOVING	SY		282.40	88.80	371.20
504(D)	CONCRETE RAIL (TR3)	LF	73.60	233.00		306.60
506(A)	STRUCTURAL STEEL	LB		600.00	220.00	820.00
507(A)	WEATHERING STEEL FIXED BEARING ASSEMBLY	EA		6.00		6.00
509(A)	CLASS AA CONCRETE	CY		129.00		129.00
509(B)	CLASS A CONCRETE	CY	48.20			48.20
509(D)	CLASS C CONCRETE	CY	9.30			9.30
511(A)	REINFORCING STEEL	LB	7,600.00	21,790.00		29,390.00
* 514(A)	PILES, FURNISHED (HP 10X42)	LF	416.00			416.00
** 514(B)	PILES, DRIVEN (HP 10X42)	LF	80.00			80.00
514(K)	(PL)PILOT HOLES	LF	304.00			304.00
514(L)	PILE SPLICE, H-PILE (NON-BIDDABLE)	EA	1.00			1.00
601(B)	TYPE I-A PLAIN RIPRAP	TON	944.00			944.00
601(C)	TYPE I-A FILTER BLANKET	TON	239.00			239.00
613(H)	6" PERFORATED PIPE UNDERDRAIN ROUND	LF	52.00			52.00
613(I)	6" NON-PERF. PIPE UNDERDRAIN RND.	LF	50.00			50.00
619(D)	REMOVAL OF EXISTING BRIDGE STRUCTURE	LSUM	1.00			1.00
623(F)	GUARDRAIL ANCHOR UNIT (TYPE D-BF)	EA	4.00			4.00
623(F)	GUARDRAIL ANCHOR UNIT (TYPE A)	EA	4.00			4.00
880(J)	CONSTRUCTION TRAFFIC CONTROL	LSUM	1.00			1.00

\*PILES FURNISHED BASED ON ESTIMATED QUANTITY OF 21 L.F. PLUS ADDITIONAL 5 L.F. PER PILE THAT MAY BE REQUIRED IN ORDER TO MEET ULTIMATE PILE CAPACITY.  
 \*\*PILES DRIVEN BASED ON ESTIMATED 5 L.F. PER PILE.

BRIDGE "A" - 115' X 26' CLEAR ROADWAY INTEGRAL PCB SPAN SKEWED ZERO DEGREES WITH TR-3 CONCRETE RAILS. CENTERLINE STATION 28+73.30.  
 EXISTING STRUCTURE - 5-10' CONCRETE SLAB SPAN BRIDGE. (REMOVE)

BALLARD CREEK ADAIR COUNTY

**BRIDGE "A" GENERAL PLAN AND ELEVATION**

JOB PIECE NO. 29823(04) SHEET NO. B001