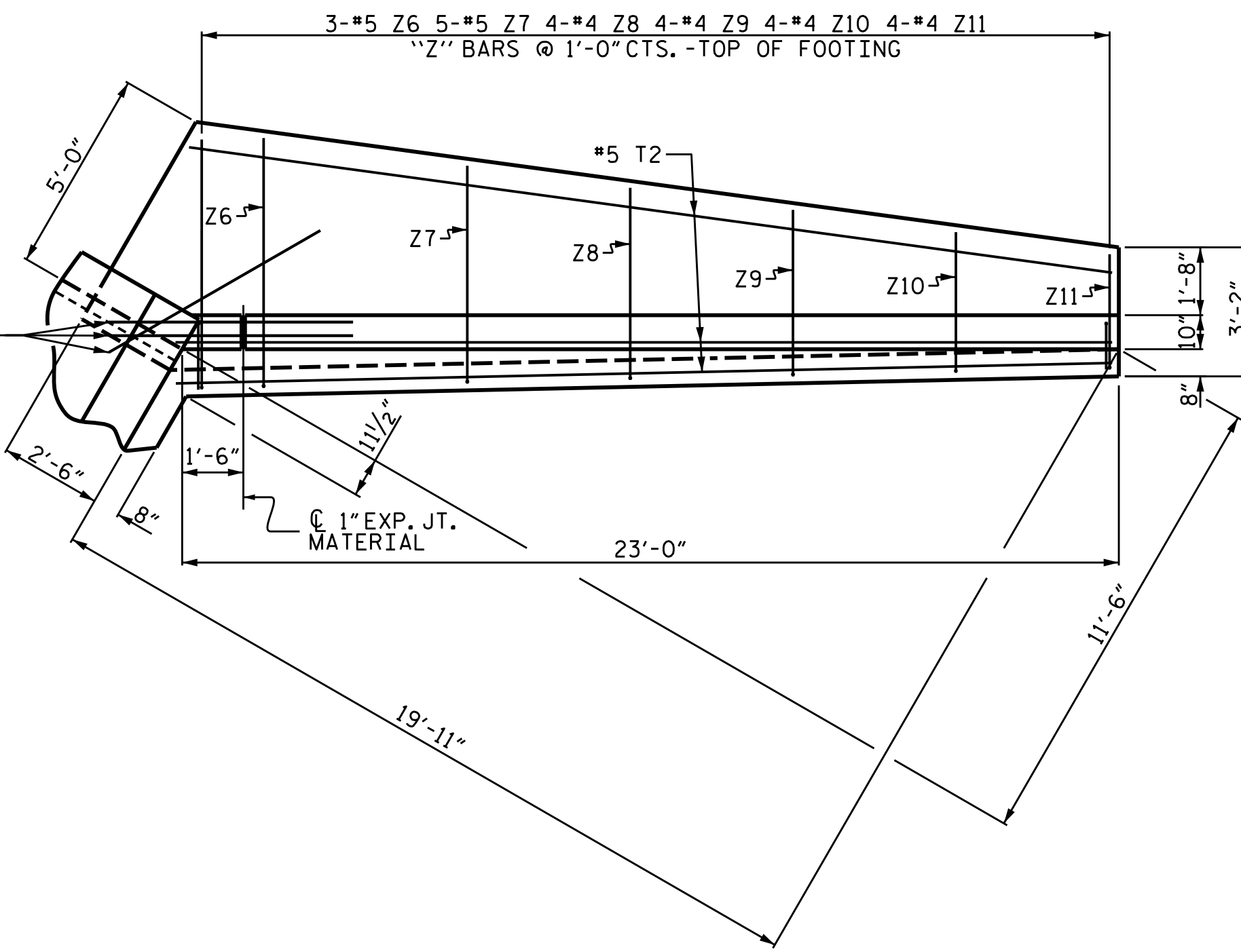
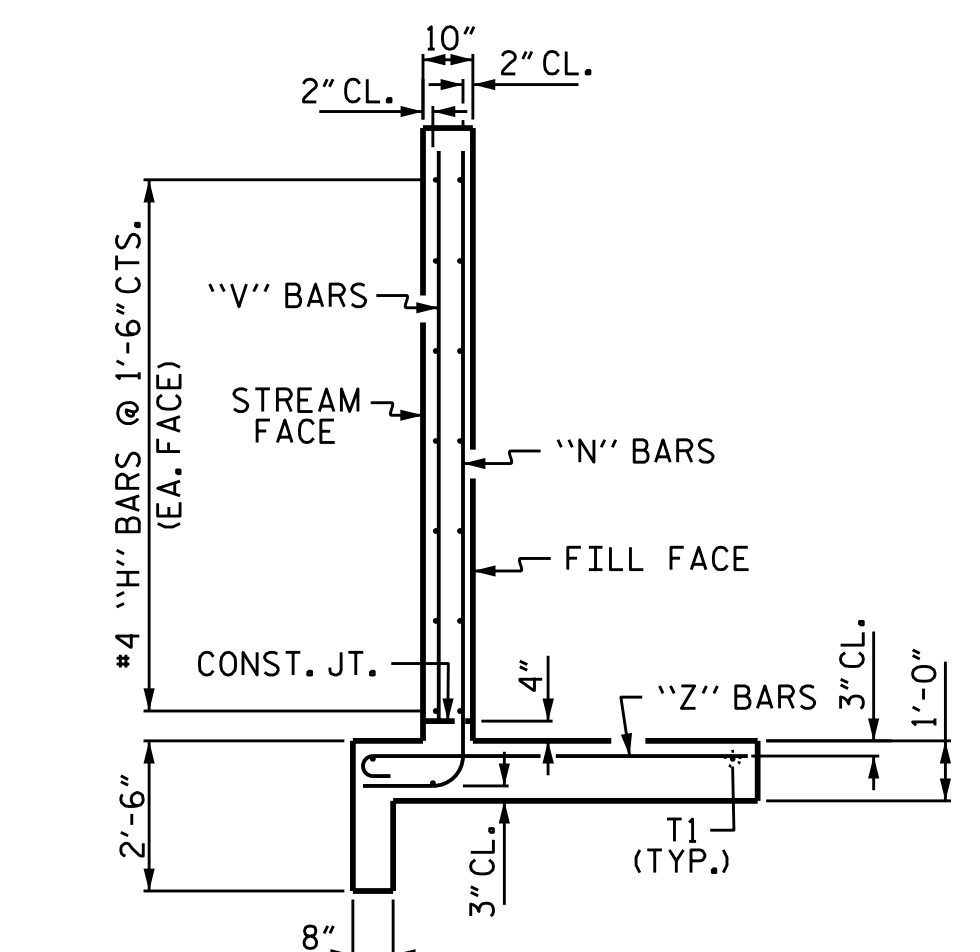


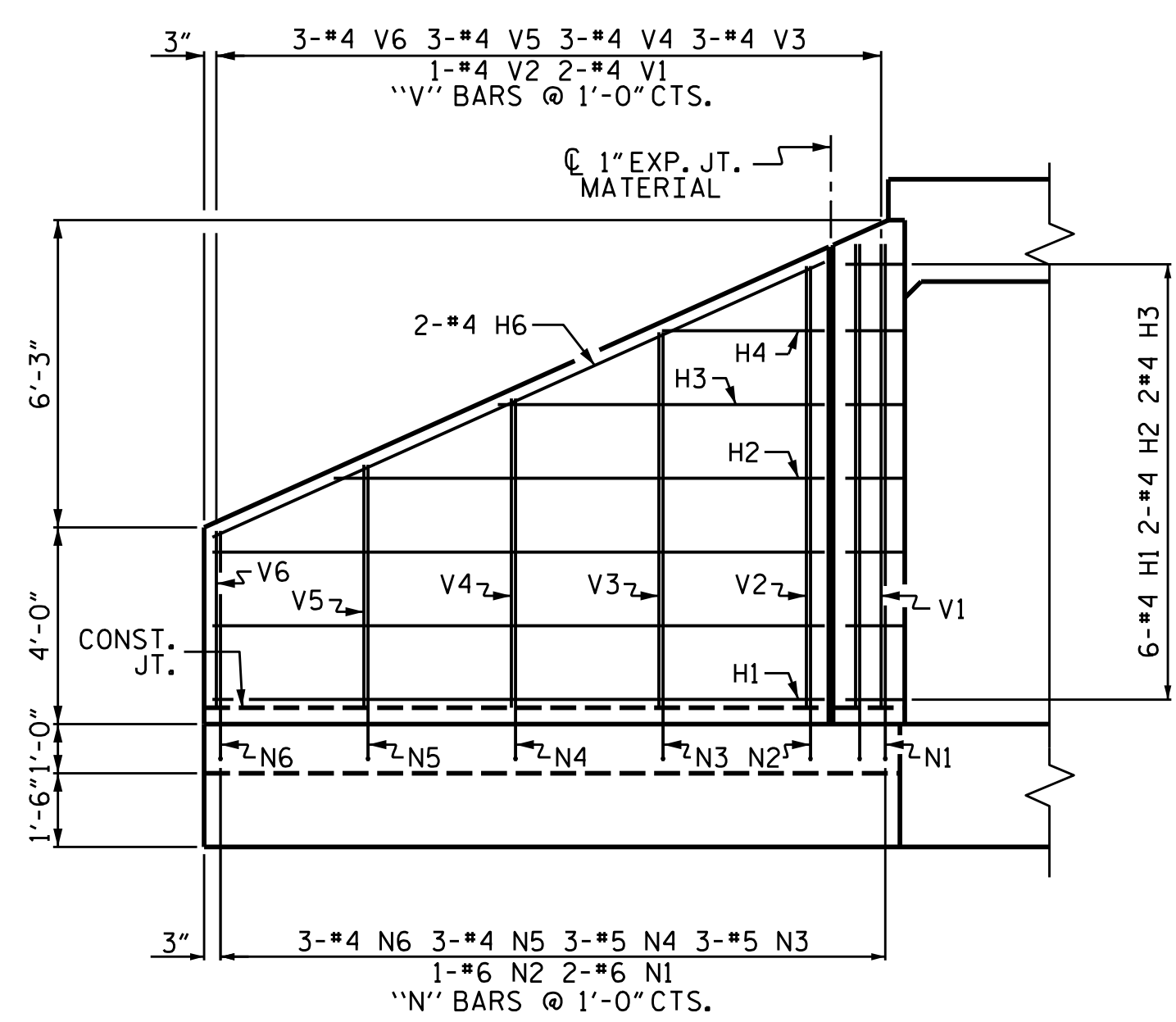
PLAN W1



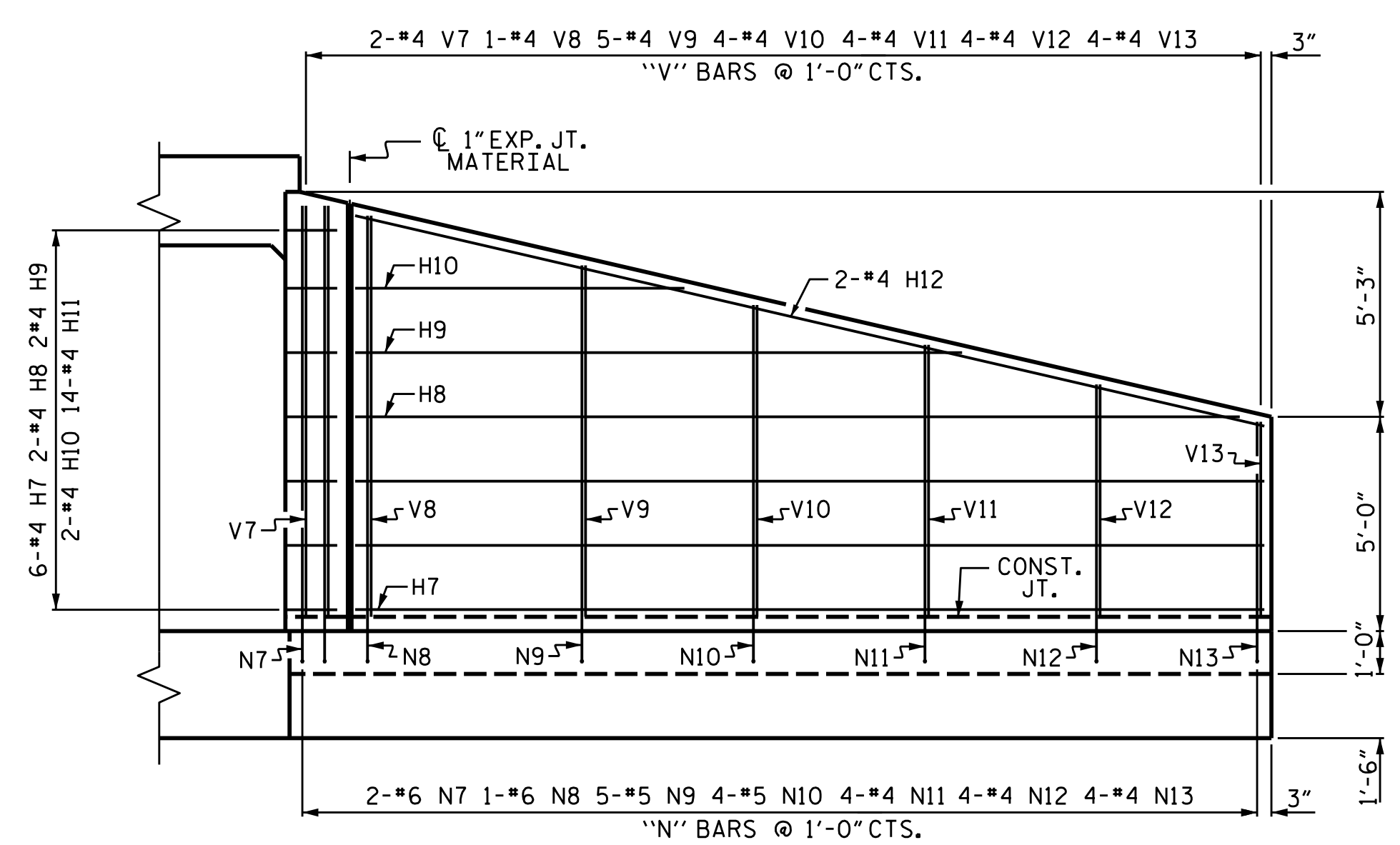
PLAN W3



TYPICAL WING SECTION



ELEVATION W1



ELEVATION W3

BAR TYPES	
①	
②	
③	

BAR NO.	SIZE	TYPE	LENGTH	WEIGHT
Z1	#5	STR	5'-11"	7"
Z2	#5	STR	5'-2"	7"
Z3	#4	STR	4'-5"	6"
Z4	#4	STR	3'-7"	6"
Z5	#4	STR	2'-10"	6"
Z6	#4	STR	6'-1"	7"
Z7	#4	STR	5'-4"	7"
Z8	#4	STR	4'-8"	6"
Z9	#4	STR	4'-1"	6"
Z10	#4	STR	3'-5"	6"
Z11	#4	STR	2'-10"	6"

ALL BAR DIMENSIONS ARE OUT TO OUT.

NOTES

A 3 FOOT STRIP OF FILTER FABRIC SHALL BE ATTACHED TO THE FILL FACE OF THE WING COVERING THE ENTIRE LENGTH OF THE EXPANSION JOINT.

G1 BARS IN HEADWALL ARE INCLUDED WITH THE BARREL REINFORCING STEEL.

OUTLET WINGS BILL OF MATERIAL					
BAR NO.	SIZE	TYPE	LENGTH	WEIGHT	
H1	#4	STR	12'-4"	49	
H2	#4	STR	9'-10"	13	
H3	#4	STR	6'-5"	9	
H4	#4	STR	3'-2"	4	
H5	#4	STR	3'-3"	30	
H6	#4	STR	13'-5"	18	
H7	#4	STR	21'-1"	85	
H8	#4	STR	20'-7"	27	
H9	#4	STR	14'-2"	19	
H10	#4	STR	7'-8"	10	
H11	#4	STR	3'-3"	30	
H12	#4	STR	21'-7"	29	
N1	#6	STR	11'-5"	34	
N2	#6	STR	10'-11"	16	
N3	#5	STR	9'-7"	30	
N4	#5	STR	8'-3"	26	
N5	#4	STR	6'-11"	14	
N6	#4	STR	5'-7"	11	
N7	#6	STR	11'-6"	35	
N8	#6	STR	11'-3"	17	
N9	#5	STR	10'-2"	53	
N10	#5	STR	9'-3"	39	
N11	#4	STR	8'-4"	22	
N12	#4	STR	7'-5"	20	
N13	#4	STR	6'-6"	17	
S1	#6	STR	6'-0"	54	
T1	#5	STR	14'-3"	45	
T2	#5	STR	23'-0"	72	
V1	#4	STR	9'-2"	12	
V2	#4	STR	8'-9"	6	
V3	#4	STR	7'-6"	15	
V4	#4	STR	6'-3"	13	
V5	#4	STR	4'-11"	10	
V6	#4	STR	3'-7"	7	
V7	#4	STR	9'-3"	12	
V8	#4	STR	9'-1"	6	
V9	#4	STR	8'-2"	27	
V10	#4	STR	7'-3"	19	
V11	#4	STR	6'-4"	17	
V12	#4	STR	5'-5"	14	
V13	#4	STR	4'-6"	12	
Z1	#5	STR	6'-6"	20	
Z2	#5	STR	5'-9"	18	
Z3	#4	STR	4'-11"	10	
Z4	#4	STR	4'-1"	8	
Z5	#4	STR	3'-4"	7	
Z6	#5	STR	6'-8"	21	
Z7	#5	STR	5'-11"	31	
Z8	#4	STR	5'-2"	14	
Z9	#4	STR	4'-7"	12	
Z10	#4	STR	3'-11"	10	
Z11	#4	STR	3'-4"	9	
REINFORCING STEEL FOR W1 & W3				1158	LBS
CLASS A CONCRETE					
2 WINGS				17.4	CY
1 HEADWALL				0.8	CY
1 END CURTAIN WALL				0.9	CY
TOTAL				19.1	CY

PROJECT NO. A-0009CA
GRAHAM COUNTY
 STATION: 10+59.00 -DR1A-
 SHEET 8 OF 8

6/1/2022

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

TGS ENGINEERS
 706 HILLSBOROUGH STREET
 SUITE 200
 RALEIGH, NC 27603
 PH (919) 773-8887
 CORP. LICENSE NO.: C-0275

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH					
OUTLET WINGS FOR CONCRETE BOX CULVERT					
H = 9'-0" SLOPE = 2:1					
90° SKEW					
REVISIONS					
NO.	BY:	DATE:	NO.	BY:	DATE:
1			3		
2			4		

SHEET NO. C8-8
TOTAL SHEETS 8

ASSEMBLED BY : STM DATE : 03/22
 CHECKED BY : MGC DATE : 03/22