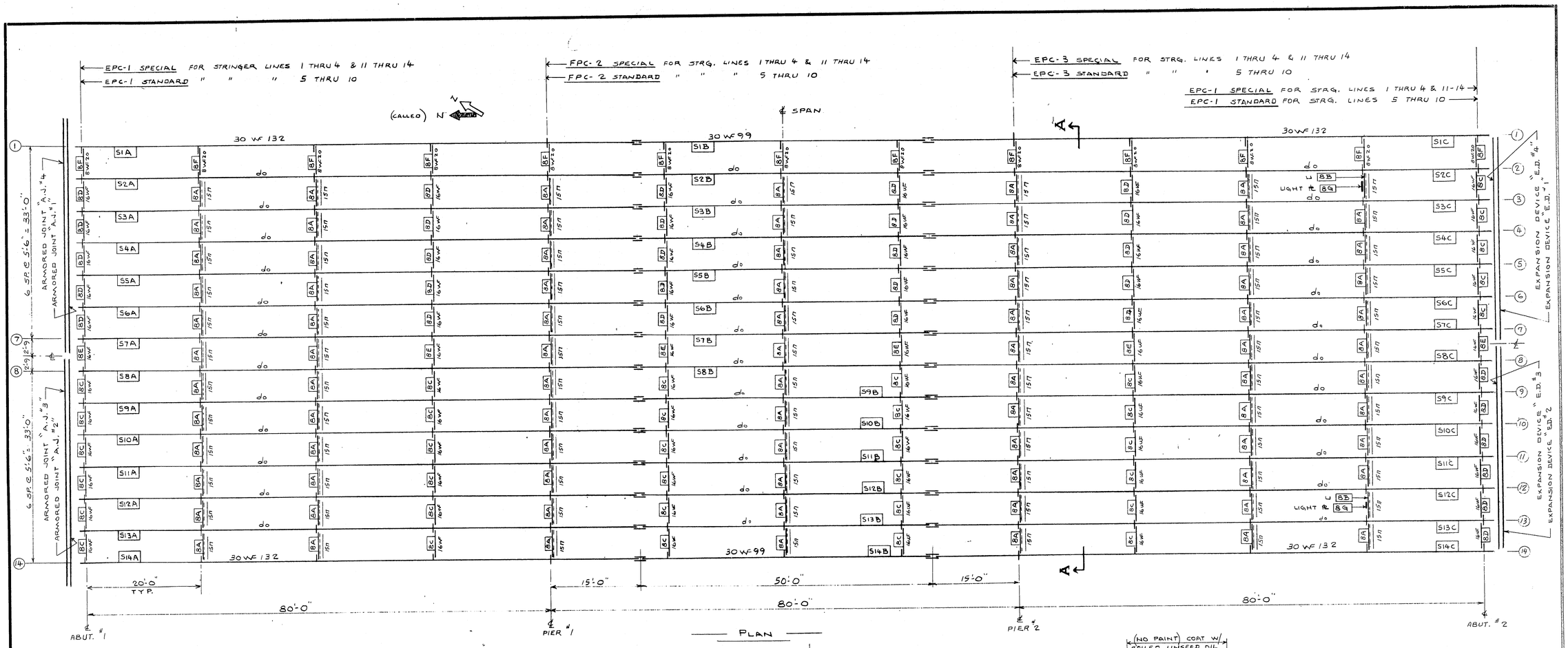
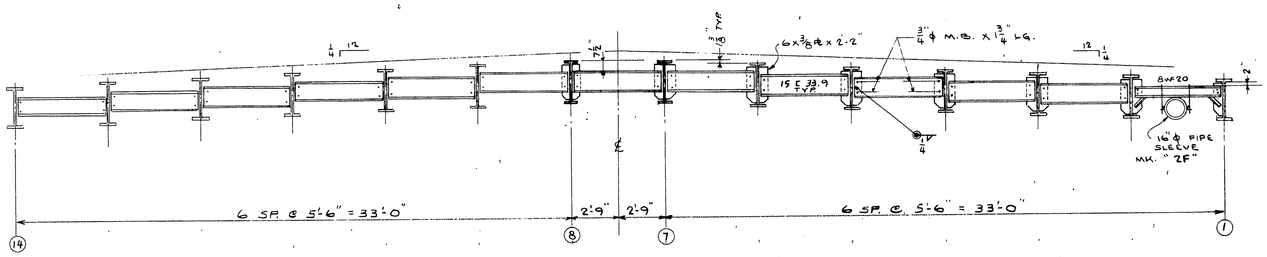
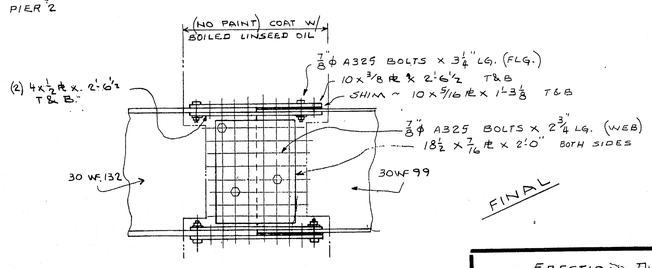


PLAN



SECTION AA



TYPICAL SPLICE

FINAL

DATE APPROVED	11-25-70	
APPR.		11-17-70
APPR.		12-10-70
SHOP		12-17-70
F. & O.	3-24-71	
DRAWN	SPH	11-16-70
CHECKED	V	12-9-70
REVISION	SPH	12-9-70
REVISION		
REVISION		

ERECTION DIAGRAM

MEGQUIER & JONES CORP.
33 PEARL STREET PORTLAND, MAINE 04112

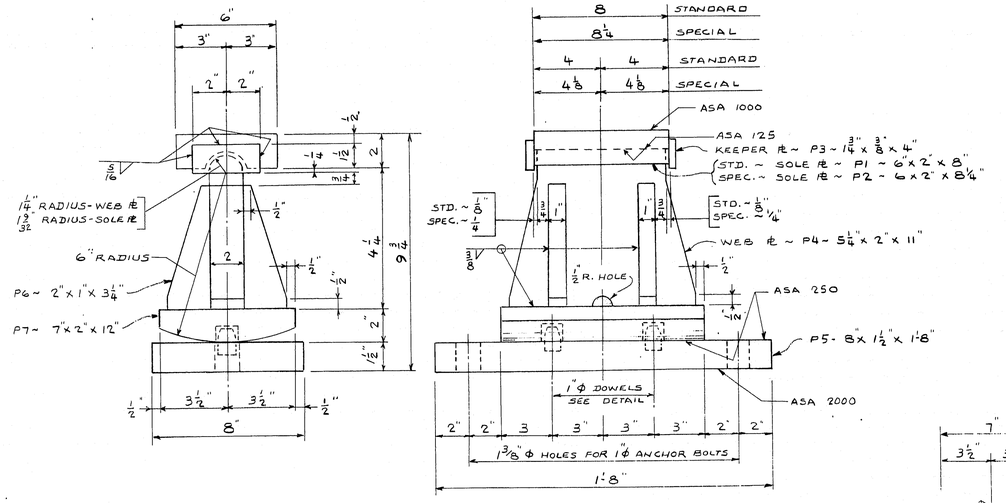
DEERING AVE. BRIDGE OVER I-295 & PORTLAND TERMINAL R.R. PORTLAND, MAINE.

CUSTOMER CIANBRO CORP.
ARCHITECT MAINE STATE HIGHWAY COMM.

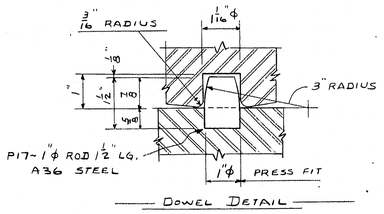
JOB NO. J-4876 DWG. NO. E1

115-17

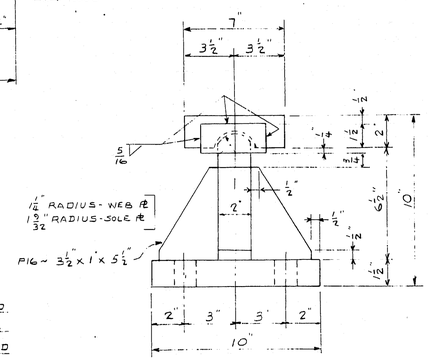
0 1 2 3 4 5 6

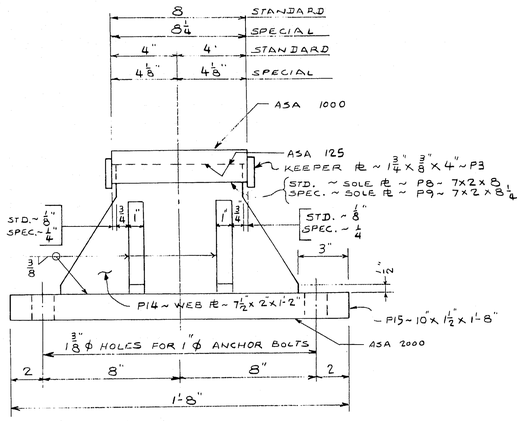


12 REQ'D. ~ MARK EPC-1 STANDARD
16 REQ'D. ~ MARK EPC-1 SPECIAL
A36 STEEL
WELD ~ E70XX LOW HYDROGEN ELECTRODES

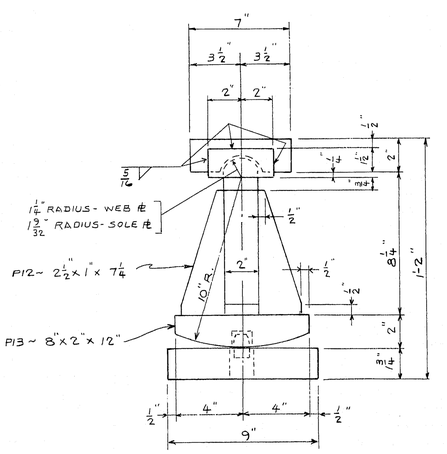


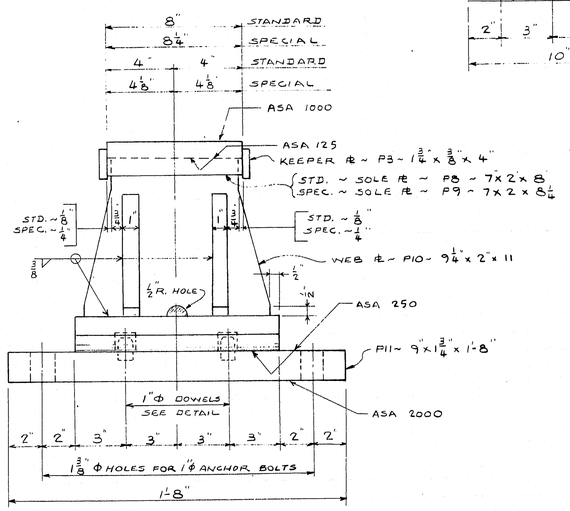
DOWEL DETAIL





6 REQ'D. ~ MARK. FPC-2 STANDARD
8 REQ'D. ~ MARK. FPC-2 SPECIAL
A36 STEEL
WELD ~ E70XX LOW HYDROGEN ELECTRODES





6 REQ'D. ~ MARK EPC-3 STANDARD
8 REQ'D. ~ MARK EPC-3 SPECIAL
A36 STEEL
WELD ~ E70XX LOW HYDROGEN ELECTRODES

SHIP MARK	NO.	MARK	SHAPE	LENGTH		WT.	REMARKS
EPC-1 STANDARD	12		BEARING PEDESTAL				
EPC-1 SPECIAL	16		do				
	12	P1	6 x 2 ℄		8		
	16	P2	do		8 1/4		
	56	P3	1 3/4 x 3/8 ℄		4		
	28	P4	5 1/4 x 2 ℄		11		
	28	P5	8 x 1 1/2 ℄	1	8		
	112	P6	2 x 1 ℄		3 1/4		
	28	P7	7 x 2 ℄	1	0		
	56	P17	1" ϕ ROD		1 1/2		
EPC-3 STANDARD	6		BEARING PEDESTAL				
EPC-3 SPECIAL	8		do				
	28	P3	1 3/4 x 3/8 ℄		4		
	6	P8	7 x 2 ℄		8		
	8	P9	do		8 1/4		
	14	P10	9 1/4 x 2 ℄		11		
	14	P11	9 x 1 3/4 ℄	1	8		
	56	P12	2 1/2 x 1 ℄		7 1/4		
	14	P13	8 x 2 ℄	1	0		
	28	P17	1" ϕ ROD		1 1/2		
FPC-2 STANDARD	6		BEARING PEDESTAL				
FPC-2 SPECIAL	8		do				
	28	P3	1 3/4 x 3/8 ℄		4		
	6	P8	7 x 2 ℄		8		
	8	P9	do		8 1/4		
	14	P14	7 1/2 x 2 ℄	1	2		
	14	P15	10 x 1 1/2 ℄	1	8		
	56	P16	3 1/2 x 1 ℄		5 1/2		
			~ NOTE: ~				
	ABOVE DIMENSIONS ARE FINISHED SIZES						
	ALLOWANCE TO BE MADE FOR MACHINING						
	ALL MATERIAL TO BE A36 STEEL						

BILL OF MATERIAL JOB NO. J-4876 DWG. NO. 1

PAINT NOTE: { ACCORDING TO S.H.C. SPECS. EXCEPT AS FOLLOWS:

SHOTBLAST AND PAINT WITH RED LEAD AS PER S.H.C. SPECS.
ALL WELDED AREAS TO BE NEUTRALIZED WITH CHEMICALS PRIOR TO PAINTING AND RINSED WITH WATER.
NO PAINT ON TOP OF SOLE ℄S AND 1" DOWN FROM TOP ON SIDES. COAT WITH BOILED LINSEED OIL.
NO PAINT ON SURFACES WITH ASA 125 FINISH, COAT WITH WHITE LEAD AND TALLOW.
SURFACES WITH ASA 250 FINISH TO RECEIVE TWO COATS OF RED LEAD.
ALL PIECE MARKS SHALL HAVE A PRIME COAT UNDER THEM.

⚠ { PAINT NOTE AT BEAM SPLICES
NO PAINT - COAT WITH BOILED LINSEED OIL.

FINAL △

CUSTOMER ORDER NO.: VERBAL
REFERENCE DRAWINGS: M.S.H. COMMISION (BD 101-70)
HOLES: AS NOTED
FIELD CONN: ANCHOR BOLTS & FIELD WELD
PAINT: SEE PAINT NOTE THIS DWG.

DATE APPROVED		11-10-70
APPR.		10-30-70
APPR.	FINAL	11-17-70 12-10-70
SHOP		11-17-70
F. & O.	3-24-71	11-17-70
DRAWN	SPH	10-30-70
CHECKED	V	
REVISION	SPH	11-17-70
REVISION	△	12-9-70
REVISION		

BEARING PEDESTALS

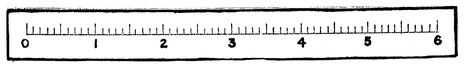
MEGQUIER & JONES CORP.
1156 BROADWAY
SOUTH PORTLAND, MAINE 04106

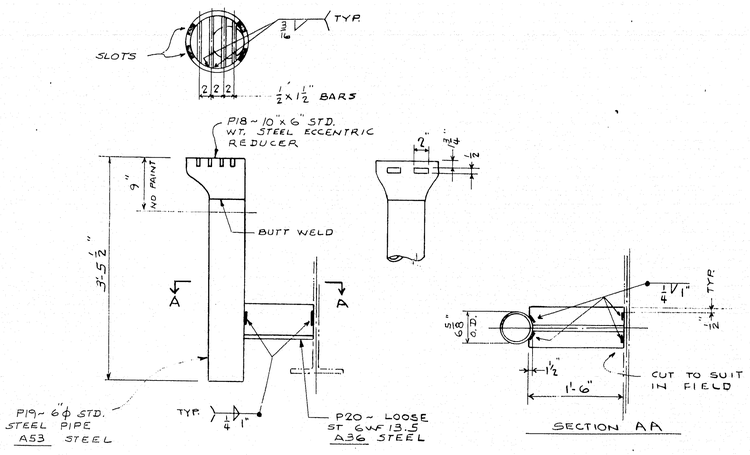
DEERING AVE. BRIDGE OVER I-295 & PORTLAND TERMINAL R.R. PORTLAND, MAINE

CUSTOMER CIANBRO CORPORATION
ARCHITECT MAINE STATE HIGHWAY COMM.

JOB NO. J-4876 DWG. NO. 1 △

115-18



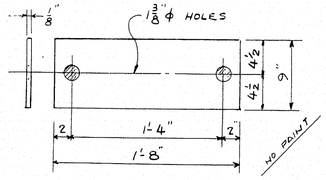


8 REQ'D. - MARK 2A

BRIDGE DRAINS

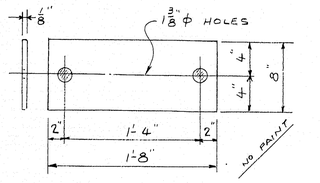
A53 & A36 STEEL

ONE SHOP COAT OF PAINT, SEE PAINT NOTE, DWG. # 1



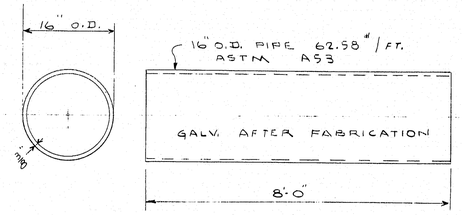
14 REQ'D. - MARK 2C (EPC-3)

FABREEKA PAD "SA47"

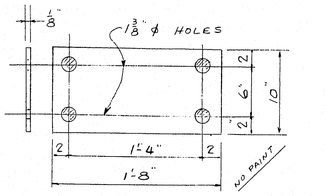


28 REQ'D. - MARK 2D (EPC-1)

FABREEKA PAD "SA47"

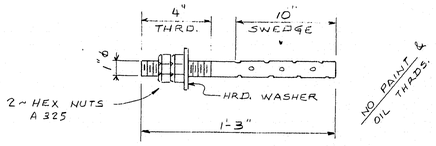


2 REQ'D. - MARK 2G



14 REQ'D. - MARK 2E (FPC-2)

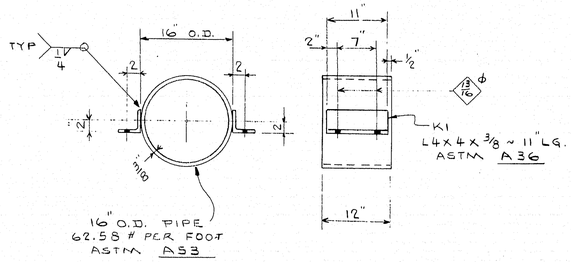
FABREEKA PAD "SA47"



140 REQ'D. - MARK 2B

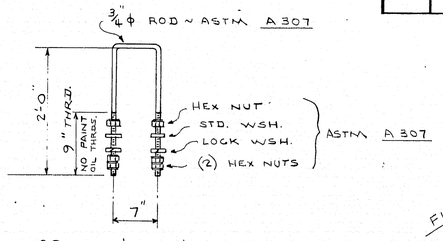
A36 STEEL ROD

BEARING PEDESTAL ANCHOR BOLTS



11 REQ'D. - MARK 2F

ONE SHOP COAT OF PAINT, SEE PAINT NOTE, DWG. # 1.



22 REQ'D. - MARK 2H

ONE SHOP COAT OF PAINT AS SHOWN ON DETAIL.

FINAL

SHIP MARK	NO.	MARK	SHAPE	LENGTH		WT.	REMARKS
2A	8		DRAINS				
	8	P18	10" x 6"				STD. WT. STEEL ECCENTRIC REDUCER A53
	8	P19	6" ϕ STD. PIPE	3	0±		A53
	32	—	1 1/2 x 1/2 BAR		10±		A36
P20	8		ST. 6WF13.5	1	6		A36
2B	140		1" ϕ ROD	1	3		SEE DETAIL A36
	280		1" ϕ HEX NUTS				A325
	140		1" ϕ HRD. WSH.				
2C	14		9" x 1/8" THK.	1	8		} FABREEKA PAD "SA47"
2D	28		8" x 1/8" THK.	1	8		
2E	14		10 x 1/8" THK.	1	8		
2F	11		16" O.D. PIPE	1	0		62.58# / FT. A53
	22	K1	L4x4x3/8		11		A36
2G	2		16" O.D. PIPE	8	0		62.58# / FT A53
							GALV. AFTER FABRICATION
2H	22		3/4 ϕ ROD	4	7 3/4 ±		SEE DETAIL A 307
	132	—	3/4 ϕ HEX NUT				A 307
	44	—	3/4 ϕ STD. WSH				A 307
	44	—	3/4 ϕ LOCK WSH				A 307

CUSTOMER ORDER NO.: VERBAL

REFERENCE DRAWINGS: M.S.H.C.

HOLES: AS NOTED

FIELD CONN: FIELD WELD

PAINT: SEE PAINT NOTE, OUR DWG. # 1

DATE APPROVED 12-7-70		
APPR.		11-3-70
APPR.		12-2-70 12-15-70
SHOP		12-17-70
F. & O.	3-24-71	
DRAWN	SPH	11-3-70
CHECKED	✓	12-9-70
REVISION	SPH	12-9-70
REVISION		
REVISION		

DRAINS, PADS, ANCHOR BOLTS, PIPE SLEEVES & HANGERS

MEGQUIER & JONES CORP.
1156 BROADWAY
SOUTH PORTLAND, MAINE 04106

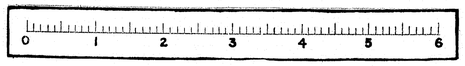
DEERING AVE. BRIDGE OVER I-295 & PORTLAND TERMINAL R.R. PORTLAND, MAINE

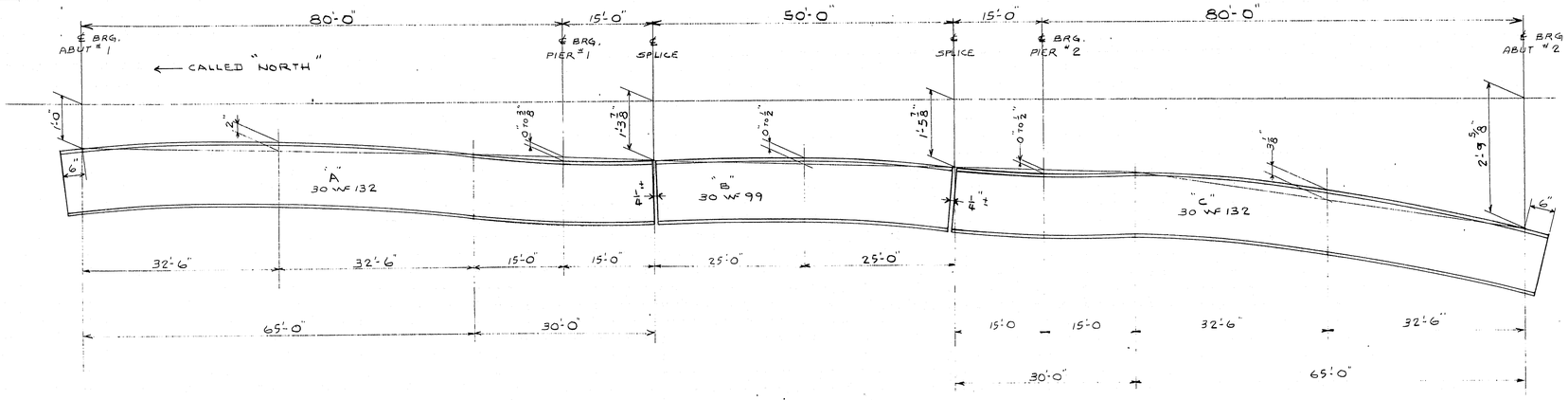
CUSTOMER CIANBRO CORPORATION

ARCHITECT MAINE STATE HIGHWAY COMM.

JOB NO. J-4876 DWG. NO. 2

115-19

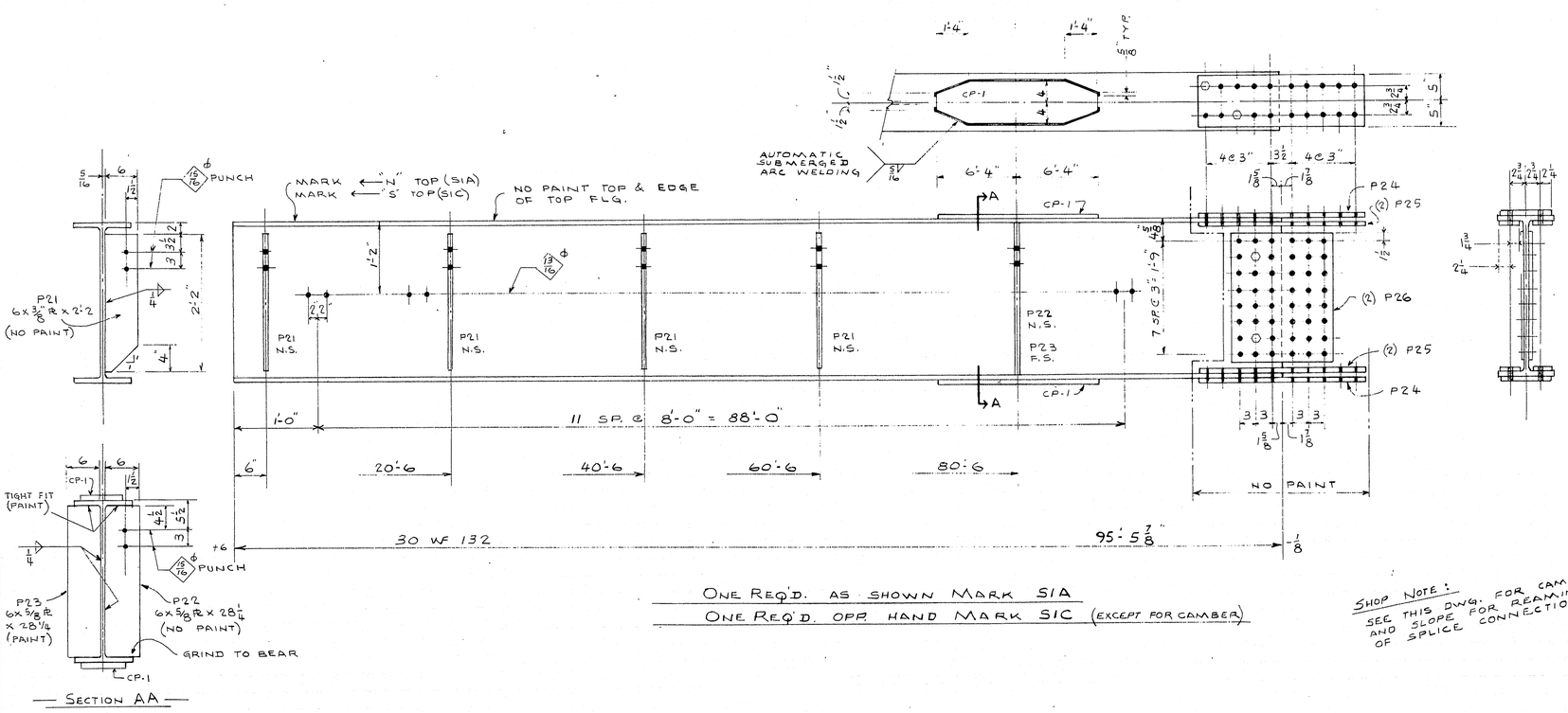




SLOPE AND CAMBER DIAGRAM
FOR ALL STRINGERS

WELDING NOTES:
CP-1 ~ PREHEAT TO MIN. OF 70° F. & USE AWS F71-EXXXX

DIAPHRAGMS ℄s & WEB STIFFENERS } AWS E7028



SECTION AA

ONE REQ'D. AS SHOWN MARK S1A
ONE REQ'D. OPP. HAND MARK S1C (EXCEPT FOR CAMBER)

SHOP NOTE:
SEE THIS DWG. FOR CAMBER AND SLOPE FOR REAMING OF SPLICE CONNECTIONS.

BILL OF MATERIAL

JOB NO. J-4876 DWG. NO. 3

SHIP MARK	NO.	MARK	SHAPE	LENGTH	WT.	REMARKS
S1A	1		30 WF 132	95 5 7/8		ASTM A572 GRADE 50
S1C	1		do	95 5 7/8		do
	4	CP-1	8 x 5/16 PL	12 8		do
	2	P22	6 x 5/8 PL	2 4 1/4		do
	2	P23	do	2 4 1/4		do
	4	P24	10 x 3/8 PL	2 6 1/2		do
	8	P25	4 x 1/2 PL	2 6 1/2		do
	4	P26	18 1/2 x 7/16 PL	2 0		do
	8	P21	6 x 3/8 PL	2 2		ASTM A36
	4	—	7/8 ϕ A325	2 3/4		WEB BOLTS (S1OR)
	8	—	do	3 1/4		FLG " "
	12	—	7/8 ϕ HRD. WSH.			"
3A	715		3/4 ϕ M.B.	1 3/4		A307 USE AT DIAPHRAGMS
3B	1315		7/8 ϕ H.S.B	2 3/4		A325 USE AT WEB, SPLICE
3C	1032		do	3 1/4		A325 USE AT FLG, SPLICE
3D	2347		7/8 ϕ HRD WSH.			
3E	130		5/8 ϕ C.B.	1 1/2		BOLTS TO BE USED IN HOLES FOR FLEMMING BRACKETS AFTER BRACKETS ARE REMOVED.

CUSTOMER ORDER NO.: VERBAL
REFERENCE DRAWINGS: M.S.H. COMMISSION
HOLES: SUBDRILL 11/16 ϕ, REAM TO 15/16 ϕ (EXCEPT — NOTE 1)
FIELD CONN: 7/8" ϕ H.S. BOLTS (A325)
PAINT: SEE OUR DWG. #1

FINAL

DATE APPROVED		11-25-70
APPR.		11-17-70
APPR.		12-10-70
SHOP		12-17-70
F. & O.	3-24-71	
DRAWN	SPH	11-5-70
CHECKED	✓	12-9-70
REVISION	SPH	12-9-70
REVISION		
REVISION		

BRIDGE BEAMS

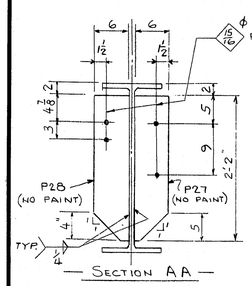
MEGQUIER & JONES CORP.
1156 BROADWAY
SOUTH PORTLAND, MAINE 04106

DEERING AVE. BRIDGE OVER I-295 & PORTLAND TERMINAL R.R. — PORTLAND, MAINE

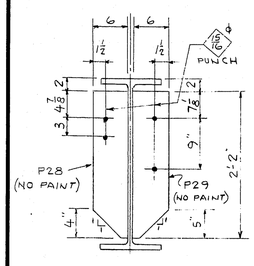
CUSTOMER CIANBRO CORP.
ARCHITECT MAINE STATE HIGHWAY COMM.

JOB NO. J-4876 DWG. NO. 3

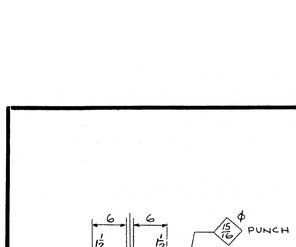
115-20



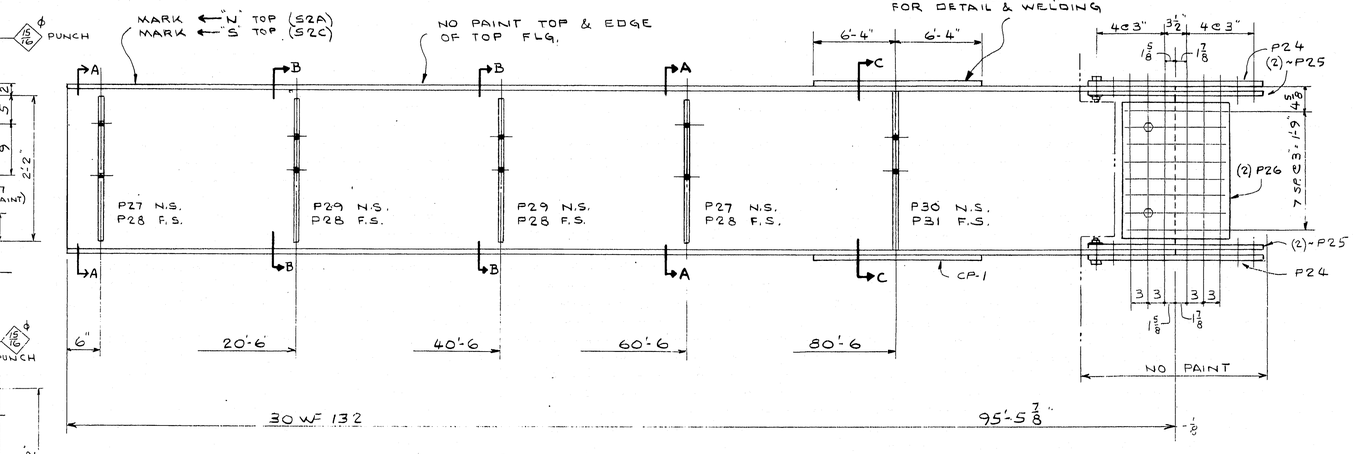
SECTION AA



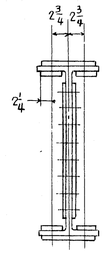
SECTION BB

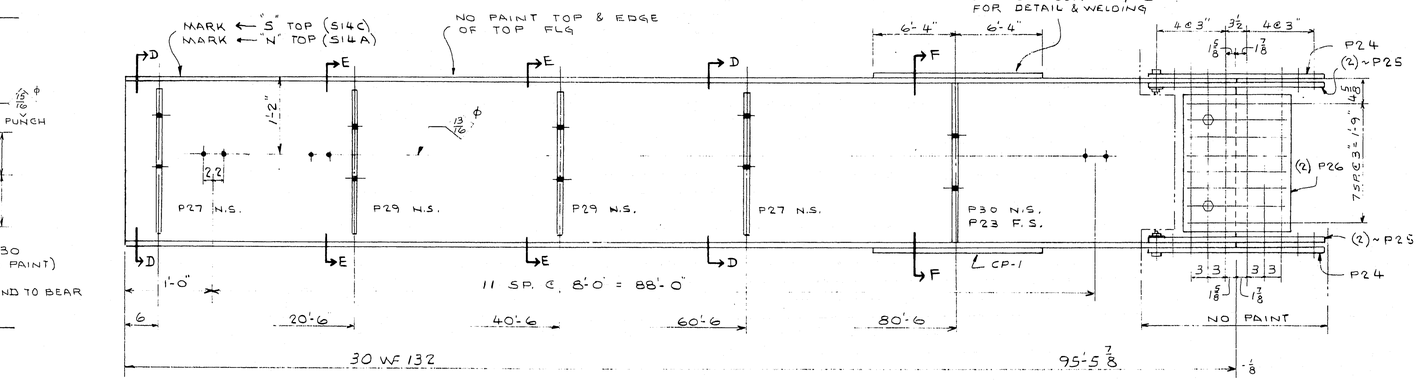


SECTION CC

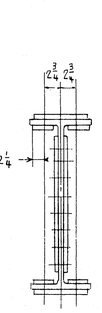


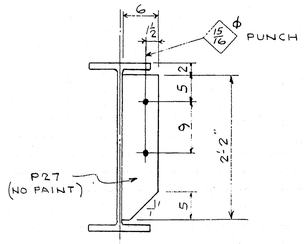
ONE REQ'D. AS SHOWN MARK S2A
ONE REQ'D. OPP. HAND MARK S2C (EXCEPT FOR CAMBER)



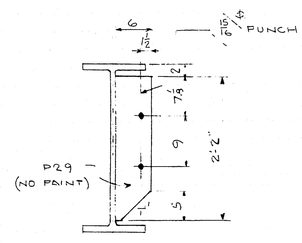


ONE REQ'D AS SHOWN MARK S14C
ONE REQ'D OPP HAND MARK S14A (EXCEPT FOR CAMBER)

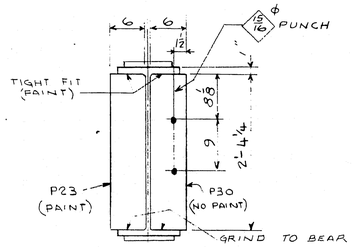




SECTION DD



SECTION EE



SECTION FF

SHOP NOTE:
SEE DWG. #3 FOR CAMBER AND SLOPE FOR REAMING OF SPLICE CONNECTIONS.

WELDING NOTES:
SEE OUR DWG. #3 FOR NOTES.

FINAL

SHIP MARK	NO.	MARK	SHAPE	LENGTH	WT.	REMARKS
S2A	1		30WF132	95 5⅞		ASTM A572 GRADE 50
S2C	1		do	95 5⅞		do
S14C	1		do	95 5⅞		do
S14A	1		do	95 5⅞		do
	8	CP-1	8 x 5/16 PL	12 8		do
	2	P23	6 x 5/8 PL	2 4¼		do
	8	P24	10 x 3/8 PL	2 6½		do
	16	P25	4 x ½ PL	2 6½		do
	8	P26	18½ x 7/16 PL	2 0		do
	4	P30	6 x 5/8 PL	2 4¼		do
	2	P31	do	2 4¼		do
	8	P27	6 x 3/8 PL	2 2		ASTM A36
	8	P28	do	2 2		do
	8	P29	do	2 2		do
	8	—	⅞ϕ A325		2¾	WEB BOLTS (SHOP)
	16	—	do		3¼	FLG BOLTS "
	24	—	⅞ϕ HRD WSH.			"

BILL OF MATERIAL JOB NO. J-4876 DWG. NO. 4

CUSTOMER ORDER NO.: VERBAL
REFERENCE DRAWINGS: M.S.H. COMMISION
HOLES: SUBDRILL 11/16" ϕ, REAM TO 15/16" ϕ (EXCEPT AS NOTED)
FIELD CONN: ⅞" ϕ H.S. BOLTS (A325)
PAINT: SEE OUR DWG. # 1

DATE APPROVED		11-25-70
APPR.		11-17-70
APPR.		12-10-70
SHOP		12-17-70
F. & O.	3-24-71	
DRAWN	SPH	11-11-70
CHECKED	✓	12-9-70
REVISION	SPH	12-9-70
REVISION		
REVISION		

BRIDGE BEAMS

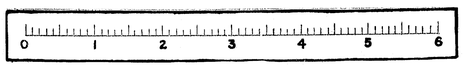
MEGQUIER & JONES CORP.
1156 BROADWAY
SOUTH PORTLAND, MAINE 04106

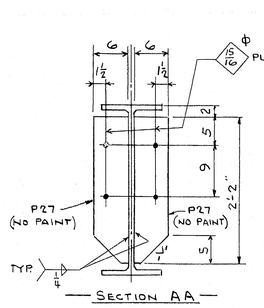
DEERING AVE BRIDGE OVER I-295 & PORTLAND TERMINAL R.R. ~ PORTLAND, MAINE

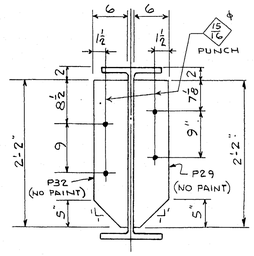
CUSTOMER CIANBRO CORP.
ARCHITECT MAINE STATE HIGHWAY COMM.

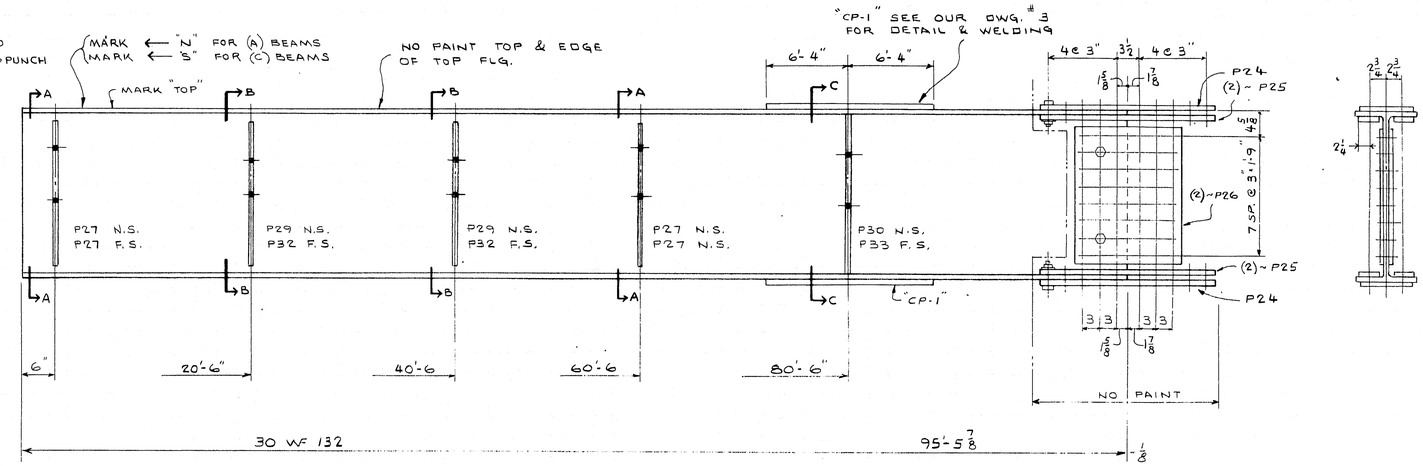
JOB NO. J-4876 DWG. NO. 4

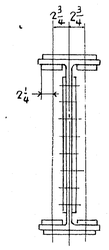
115-21





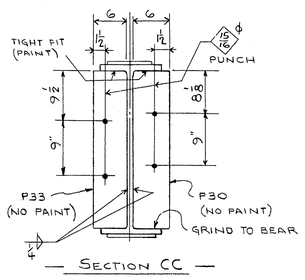


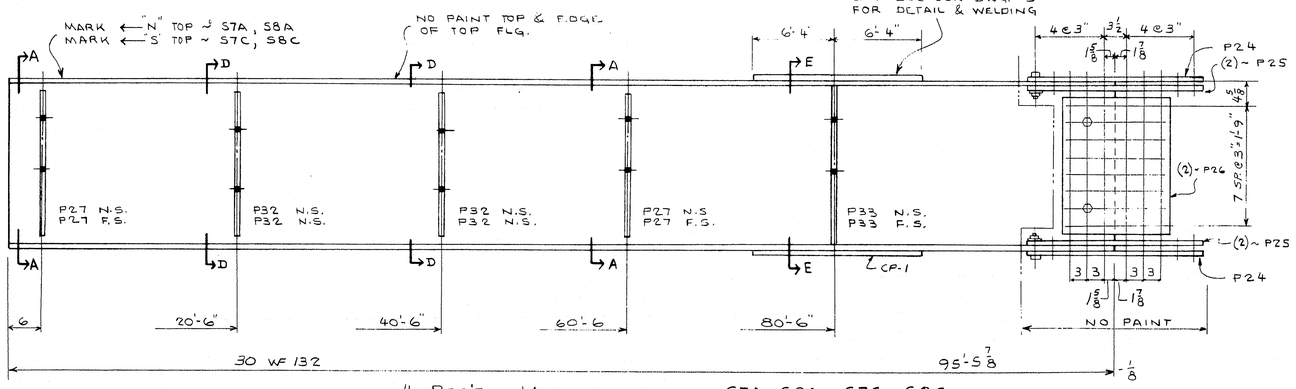


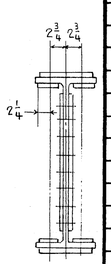


9 REQ'D. AS SHOWN MARK ONE EACH ~ S3A, S4A, S5A, S6A, S9C, S10C, S11C, S12C, S13C

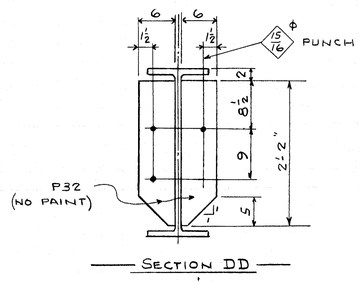
9 REQ'D. OPP. HAND. MARK ONE EACH ~ S3C, S4C, S5C, S6C, S9A, S10A, S11A, S12A, S13A (EXCEPT FOR CAMBER)

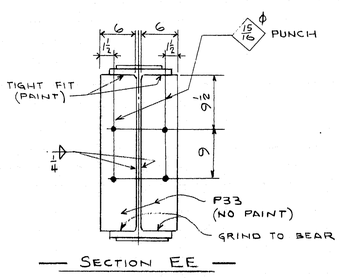






4 REQ'D. ~ MARK ONE EACH ~ S7A, S8A, S7C, S8C





Shop Note: See Dwg. # 3 for camber and slope of splice for reaming connections.

Welding Notes: See Dwg. # 3 for notes

FINAL

SHIP MARK	NO.	MARK	SHAPE	LENGTH		WT.	REMARKS
S3A	1		30 WF132	95	5 7/8		ASTM A572 GRADE 50
S4A	1		do	95	5 7/8		do
S5A	1		do	95	5 7/8		do
S6A	1		do	95	5 7/8		do
S9C	1		do	95	5 7/8		do
S10C	1		do	95	5 7/8		do
S11C	1		do	95	5 7/8		do
S12C	1		do	95	5 7/8		do
S13C	1		do	95	5 7/8		do
S3C	1		do	95	5 7/8		do
S4C	1		do	95	5 7/8		do
S5C	1		do	95	5 7/8		do
S6C	1		do	95	5 7/8		do
S9A	1		do	95	5 7/8		do
S10A	1		do	95	5 7/8		do
S11A	1		do	95	5 7/8		do
S12A	1		do	95	5 7/8		do
S13A	1		do	95	5 7/8		do
S7A	1		do	95	5 7/8		do
S8A	1		do	95	5 7/8		do
S7C	1		do	95	5 7/8		do
S8C	1		do	95	5 7/8		do
	44	CP-1	8 x 5/16 ℄	12	8		do
	44	P24	10 x 3/8 ℄	2	6 1/2		do
	88	P25	4 x 1/2 ℄	2	6 1/2		do
	44	P26	18½ x 7/16 ℄	2	0		do
	18	P30	6 x 5/8 ℄	2	4 1/4		do
	26	P33	do	2	4 1/4		do
	88	P27	6 x 3/8 ℄	2	2		ASTM A36
	36	P29	do	2	2		do
	52	P32	do	2	2		do
	44	—	7/8 ϕ A325		2 3/4		WEB BOLTS (SHOP)
	88	—	do		3 1/4		FLG BOLTS do
	132	—	7/8 ϕ STD WSH				do

CUSTOMER ORDER NO.: VERBAL

REFERENCE DRAWINGS: M.S.H. COMMISION

HOLES: SUBDRILL 11/16" ϕ, REAM TO 15/16" ϕ (EXCEPT AS NOTED)

FIELD CONN: 7/8" ϕ H.S. BOLTS (A325)

PAINT: SEE OUR DWG. # 1

BRIDGE BEAMS

MEGQUIER & JONES CORP.
1156 BROADWAY
SOUTH PORTLAND, MAINE 04106

DEERING AVE BRIDGE OVER I-295 & PORTLAND TERMINAL R.R. PORTLAND, MAINE

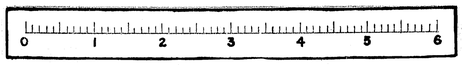
CUSTOMER CIANBRO CORP.

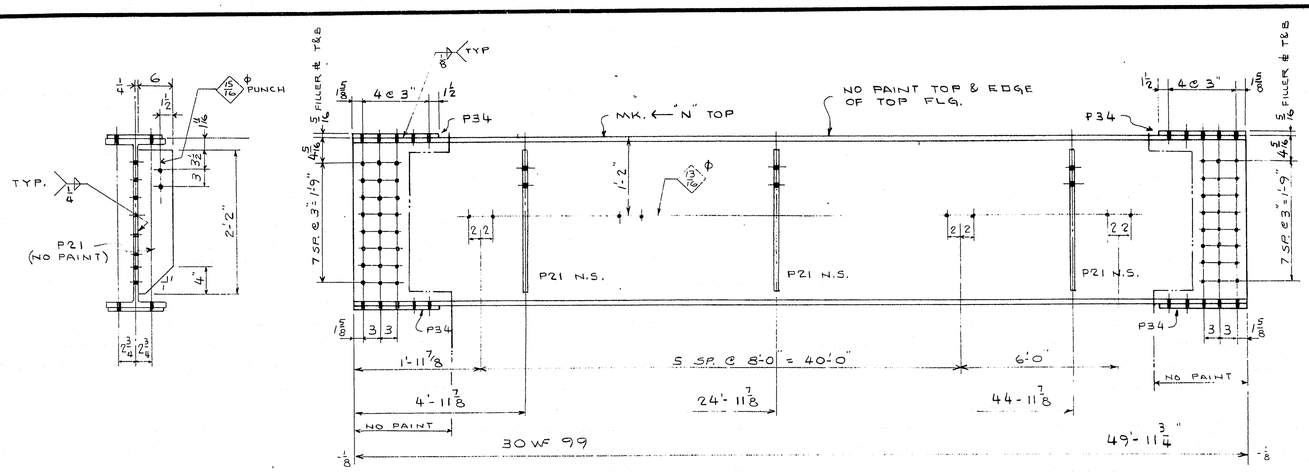
ARCHITECT MAINE STATE HIGHWAY COMM.

JOB NO. J-4876 DWG. NO. 5

DATE APPROVED		11-25-70
APPR.		11-17-70
APPR.		12-10-70
SHOP		12-17-70
F. & O.	3-24-71	
DRAWN	SPH	11-11-70
CHECKED	V	12-9-70
REVISION	SPH	12-9-70
REVISION		
REVISION		

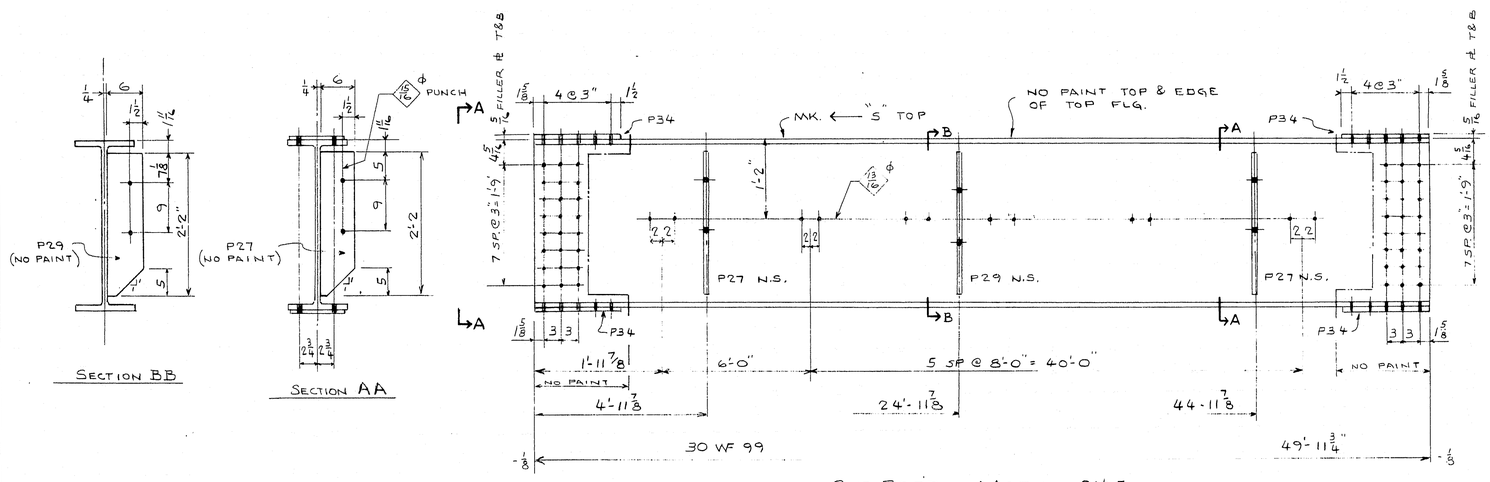
115-22





ONE REQ'D. ~ MARK S1B

FILLER # NOTE:
FILLER PLATES (P34) ARE TO BE REAMED IN ASSEMBLY AT SPLICE JOINT IN SHOP. FOR SHIPMENT TACK WELD TO TOP & BOTT. SPLICE #S (P24) BEFORE DISASSEMBLING THE SPLICE JOIST.



ONE REQ'D. ~ MARK S14B

SHOP NOTE:
SEE DWG. #3 AND SLOPE FOR CAMBER OF SPLICE FOR REAMING CONNECTIONS

WELDING NOTE:
SEE OUR DWG #3 FOR NOTES.

FINAL

DATE APPROVED 11-25-70		
APPR.		11-17-70
APPR.		12-10-70
SHOP		12-17-70
F. & O.	3-24-71	
DRAWN	SPH	11-12-70
CHECKED	✓	12-9-70
REVISION	SPH	12-9-70
REVISION		
REVISION		

BILL OF MATERIAL JOB NO. J-4876 DWG. NO. 6

SHIP MARK	NO.	MARK	SHAPE	LENGTH		WT.	REMARKS
S1B	1		30 WF 99	49	11 3/4		ASTM A572 GRADE 50
S14B	1		do	49	11 3/4		do
	8	P34	10 x 5/16 PL	1	3 1/8		do
	3	P21	6 x 3/8 PL	2	2		ASTM A36
	2	P27	do	2	2		do
	1	P29	do	2	2		do

CUSTOMER ORDER NO.: VERBAL
REFERENCE DRAWINGS: M.S.H. COMMISION
HOLES: SUBDRILL 11/16" ϕ, REAM TO 15/16" ϕ (EXCEPT AS NOTED)
FIELD CONN: 7/8" ϕ H.S. BOLTS (A325)
PAINT: SEE OUR DWG. # 1

BRIDGE BEAMS

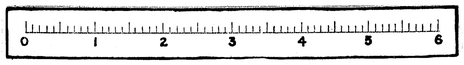
MEGQUIER & JONES CORP.
1156 BROADWAY
SOUTH PORTLAND, MAINE 04106

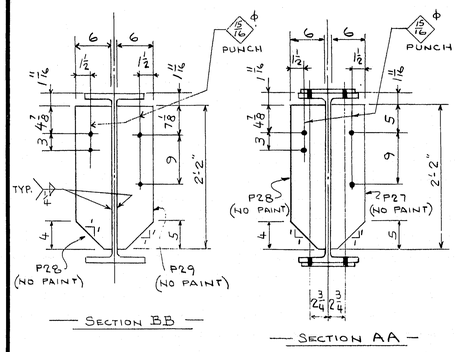
DEERING AVE BRIDGE OVER I-295 & PORTLAND TERMINAL R.R. PORTLAND, MAINE

CUSTOMER CIANBRO CORP.
ARCHITECT MAINE STATE HIGHWAY COMM.

JOB NO. J-4876 DWG. NO. 6

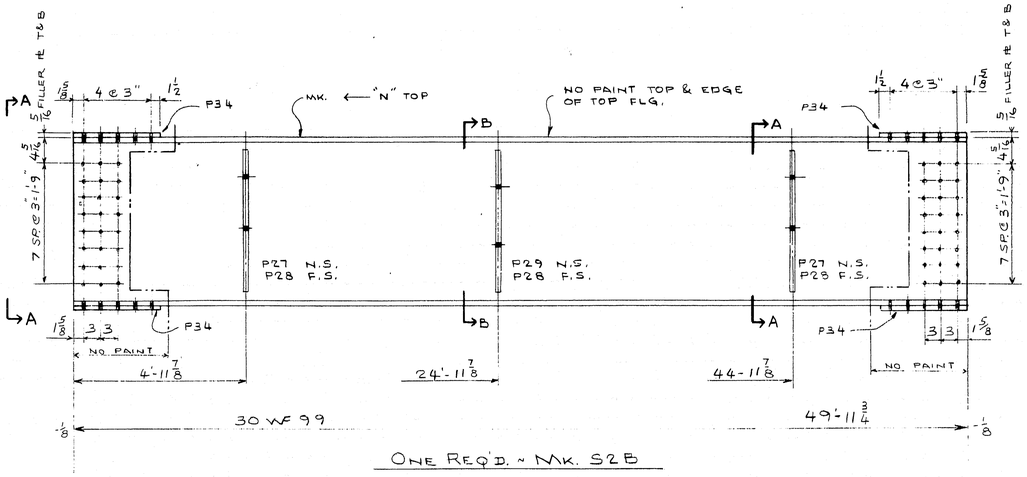
115-23





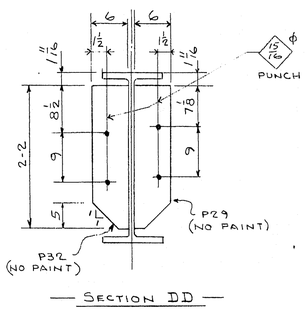
— SECTION BB —

— SECTION AA —

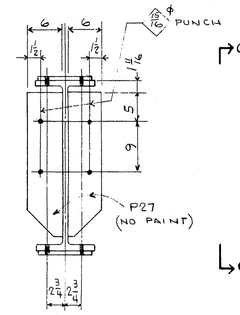


ONE REQ'D. ~ MK. S2B

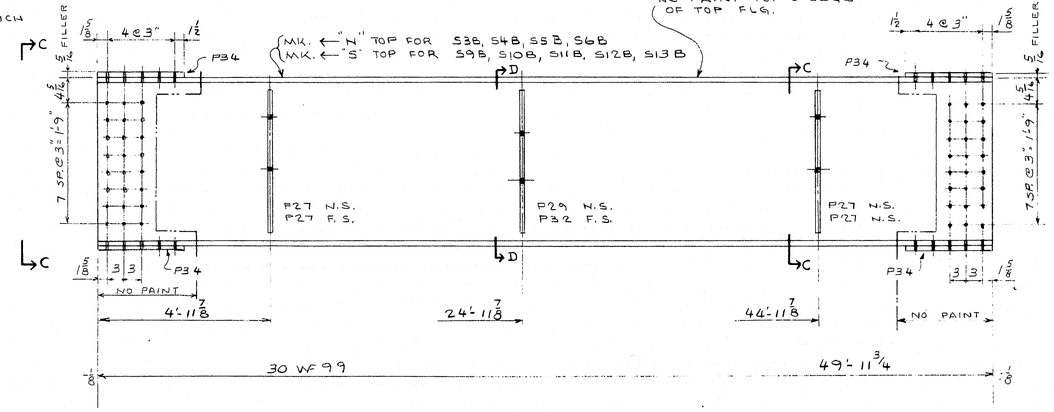
NOTE:
SEE FILLER PLATE NOTE ON DWG. # 6



— SECTION DD —



— SECTION CC —



4 REQ'D. ~ MARK ONE EACH S3B, S4B, S5B, S6B
5 REQ'D. ~ MARK ONE EACH S9B, S10B, S11B, S12B, S13B

SHOP NOTE:
SEE DWG. #3 FOR CAMBER AND SLOPE FOR REAMING OF SPLICE CONNECTIONS.

WELDING NOTES:
SEE DWG. 3 FOR NOTES

FINAL

SHIP MARK	NO.	MARK	SHAPE	LENGTH	WT.	REMARKS
S2B	1		30 WF 99	49 11 3/4		ASTM A572 GRADE 50
S3B	1		do	49 11 3/4		do
S4B	1		do	49 11 3/4		do
S5B	1		do	49 11 3/4		do
S6B	1		do	49 11 3/4		do
S9B	1		do	49 11 3/4		do
S10B	1		do	49 11 3/4		do
S11B	1		do	49 11 3/4		do
S12B	1		do	49 11 3/4		do
S13B	1		do	49 11 3/4		do
	40	P34	10 x 5/16 PL	1 3 1/8		do
	38	P27	6 x 3/8 PL	2 2		ASTM A36
	3	P28	do	2 2		do
	9	P32	do	2 2		do
	10	P29	do	2 2		do

DATE APPROVED		11-25-70
APPR.		11-17-70
APPR.		12-10-70
SHOP		12-17-70
F. & O.	3-24-71	
DRAWN	SPH	11-12-70
CHECKED	V	12-9-70
REVISION	SPH	12-9-70
REVISION		
REVISION		

CUSTOMER ORDER NO.: VERBAL
REFERENCE DRAWINGS: M.S.H. COMMISION
HOLES: SUB DRILL 11/16 ϕ, REAM TO 15/16 ϕ (EXCEPT AS NOTED)
FIELD CONN: 7/8" ϕ H.S. BOLTS (A325)
PAINT: SEE OUR DWG. # 1

BRIDGE BEAMS

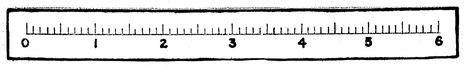
MEGQUIER & JONES CORP.
1156 BROADWAY
SOUTH PORTLAND, MAINE 04106

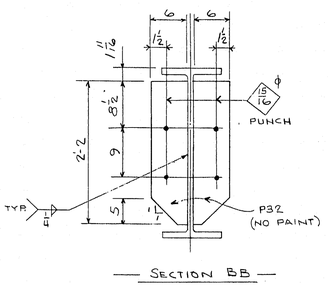
DEERING AVE BRIDGE OVER I-295 & PORTLAND TERMINAL RR PORTLAND, MAINE

CUSTOMER CIANBRO CORP
ARCHITECT MAINE STATE HIGHWAY COMMI

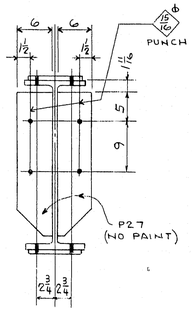
JOB NO. J-4876 DWG. NO. 7

115-24



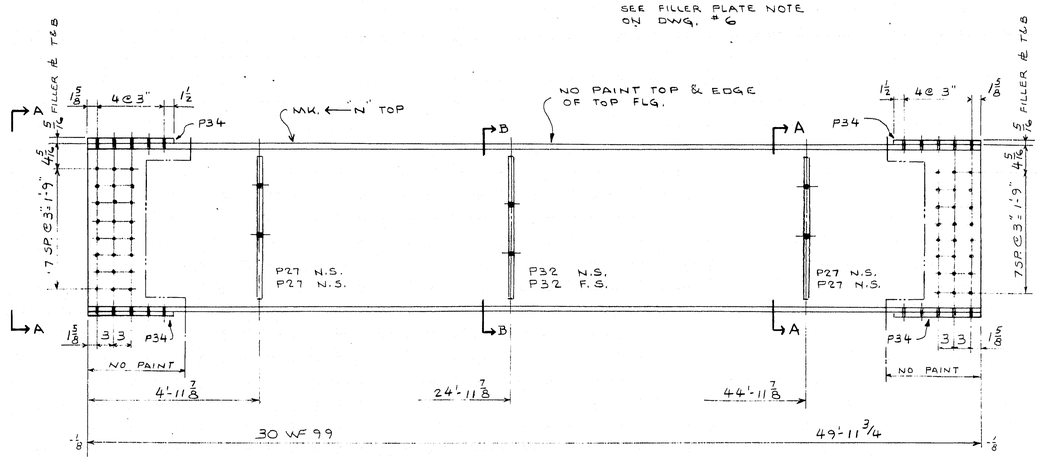


— SECTION BB —

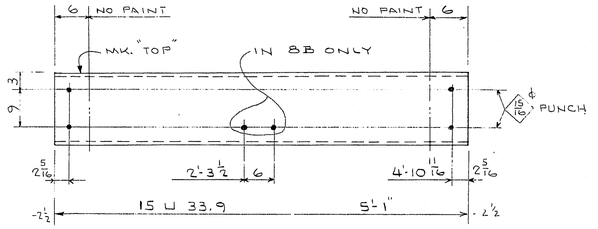


— SECTION AA —

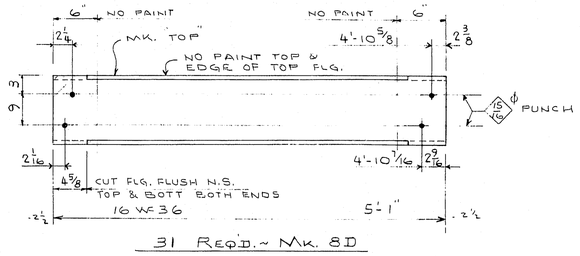
NOTE:
SEE FILLER PLATE NOTE ON DWG. #6



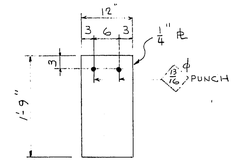
2 REQ'D. ~ MARK ONE EACH S7B, S8B



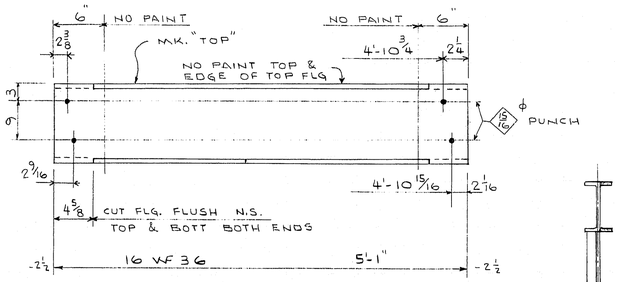
82 REQ'D. ~ MK. 8A
2 REQ'D ~ MK. 8B



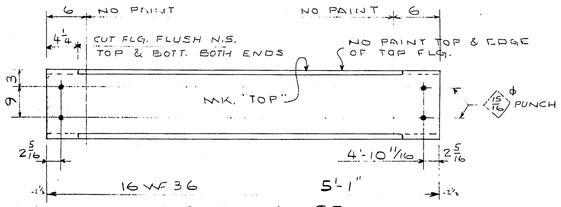
31 REQ'D. ~ MK. 8D



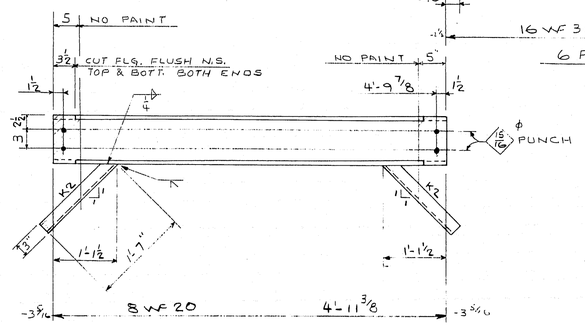
2 REQ'D. · MK. 8G
WALLPACK SUPPORT



35 REQ'D. ~ MK. 8C



6 REQ'D. ~ MK. 8E



13 REQ'D ~ MK. 8F

SHOP NOTES:
SEE DWG. # 3 FOR CAMBER AND SLOPE FOR FRAMING OF SPLICE CONNECTIONS.

WELDING NOTES:
SEE DWG. # 3 FOR NOTES.

FINAL

DATE APPROVED 11-25-70		
APPR.		11-17-70
APPR.		12-10-70
SHOP		12-17-70
F. & O.	3-24-71	
DRAWN	SPH	11-13-70
CHECKED	V	12-9-70
REVISION	SPH	12-9-70
REVISION		
REVISION		

SHIP MARK	NO.	MARK	SHAPE	LENGTH		WT.	REMARKS
S7B	1		30 WF 99	49	11¾		ASTM A572 GRADE 50
S8B	1		do	49	11¾		do
	8	P34	10 x 5/16 ℄	1	3⅛		do
	8	P27	6 x ⅜ ℄	2	2		ASTM A36
	4	P32	do	2	2		do
8A	82		15 U 33.9	5	1		ASTM A36
8B	2		do	5	1		do
8C	35		16 WF 36	5	1		do
8D	31		do	5	1		do
8E	6		do	5	1		do
8F	13		8 WF 20	4	11⅜		do
	26	K2	L 3 x 2½ x ⅜	1	7		do
8G	2		12 x ¼ ℄	1	9		do

CUSTOMER ORDER NO.: VERBAL
REFERENCE DRAWINGS: M.S.H COMMISION
HOLES: SUBDRILL 11/16" ϕ, REAM TO 15/16" ϕ (EXCEPT AS NOTED)
FIELD CONN: ⅞" ϕ A325 BOLTS, ¾" ϕ M.B., FIELD WELD
PAINT: SEE OUR DWG. # 1

BRIDGE BEAMS & DIAPHRAGMS

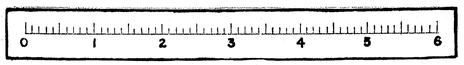
MEGQUIER & JONES CORP.
1156 BROADWAY
SOUTH PORTLAND, MAINE 04106

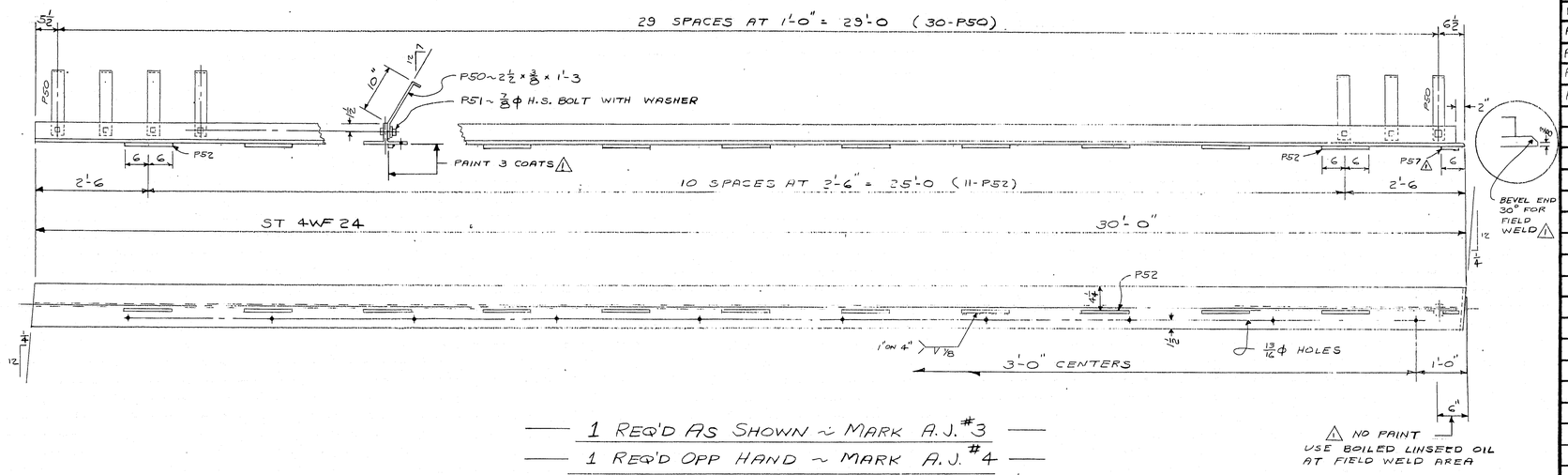
DEERING AVE. BRIDGE OVER I-295 & PORTLAND TERMINAL R.R. PORTLAND, MAINE

CUSTOMER CIANBRO CORP.
ARCHITECT MAINE STATE HIGHWAY COMM.

JOB NO. J-4876 DWG. NO. 8

115-25

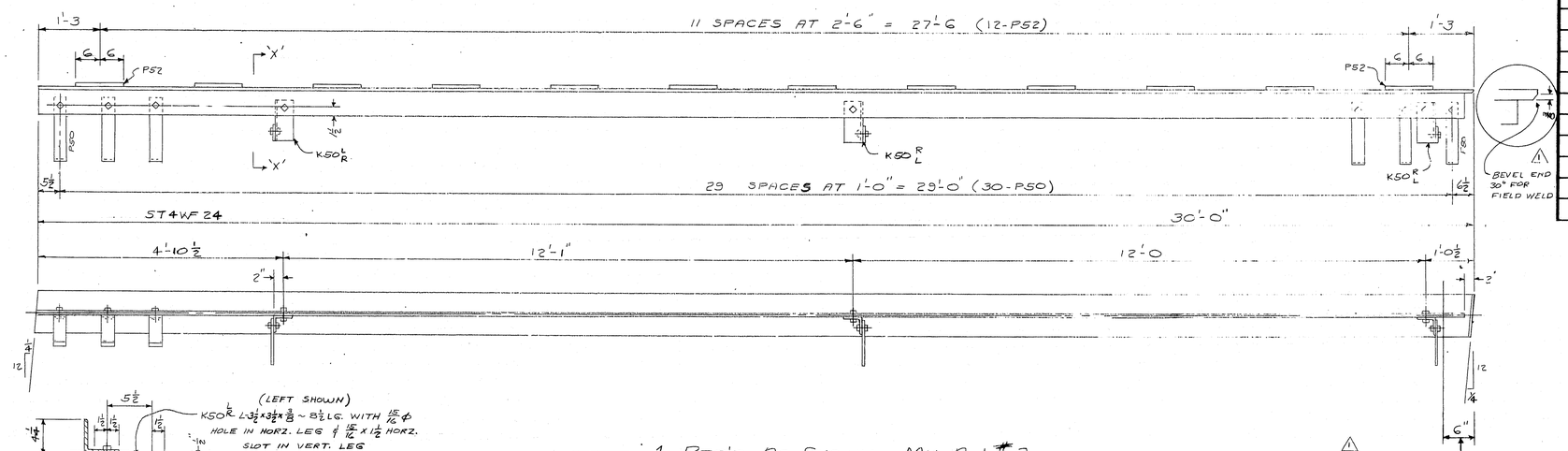


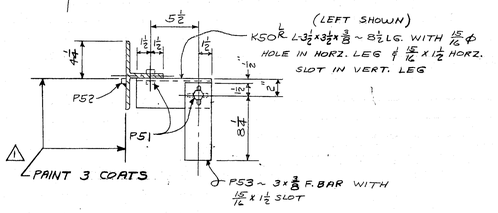


1 REQ'D AS SHOWN ~ MARK A.J.#3

1 REQ'D OPP HAND ~ MARK A.J.#4

⚠ NO PAINT USE BOILED LINSEED OIL AT FIELD WELD AREA





SECT X-X

1 REQ'D AS SHOWN ~ MK A.J.#2

1 REQ'D OPP HAND ~ MK A.J.#1

⚠ NO PAINT USE BOILED LINSEED OIL AT FIELD WELD AREA

BILL OF MATERIAL

JOB NO. 4876 DWG. NO. 9

SHIP MARK	NO.	MARK	SHAPE	LENGTH	WT.	REMARKS
A.J.#3	1		ST4WF24	30 0 3/16		
A.J.#4	1		ST4WF24	30 0 3/16		
A.J.#2	1		do	30 0 3/16		
A.J.#1	1		do	30 0 3/16		
	120	P50	2½ x ⅜ F.B	1 3		
	132	P51	⅞ ϕ H.S.B.	2¼		
	132	~	⅞ ϕ HARD WASHER	~		
	46	P52	¼ ϕ BAR	1 0		
	6	P53	3 x ⅜ PL	9¾		
	2	P57	¼ ϕ BAR	0 5		
	3	K50L	L 3½ x 3½ x ⅜	8½		
	3	K50R	do	8½		

CUSTOMER ORDER NO.: VERBAL

REFERENCE DRAWINGS: M.S.H. COMMISSION

HOLES: AS NOTED

FIELD CONN:

PAINT: SEE M & J DWG #1

FINAL

APPR.	1-26-71	
APPR.		
SHOP	3-24-71	
F. & O.	3-24-71	
DRAWN	1-20-71	CRB
CHECKED		
⚠ REVISION	3-24-71	CRB
REVISION		
REVISION		

ARMORED JOINT DETAIL
ABUTMENT #1 ~ BRIDGE

MEGQUIER & JONES CORP.
1156 BROADWAY
SOUTH PORTLAND, MAINE 04106

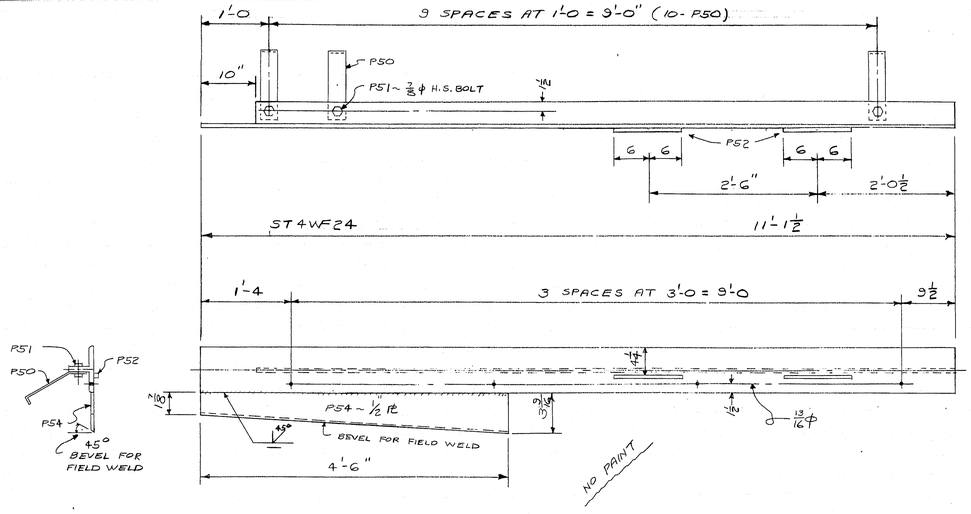
DEERING AVE. BRIDGE OVER I-295 AND PORTLAND TERMINAL R.R.
PORTLAND, MAINE

CUSTOMER CIANBRO CORP.

ARCHITECT MAINE STATE HIGHWAY COMM.

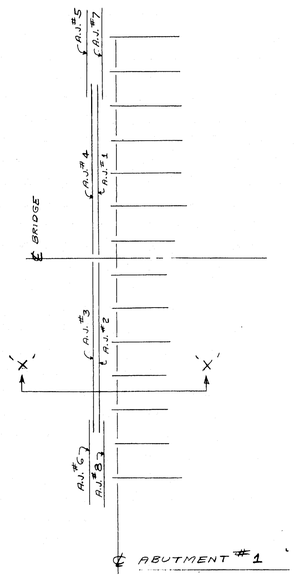
JOB NO. 4876 DWG. NO. 9

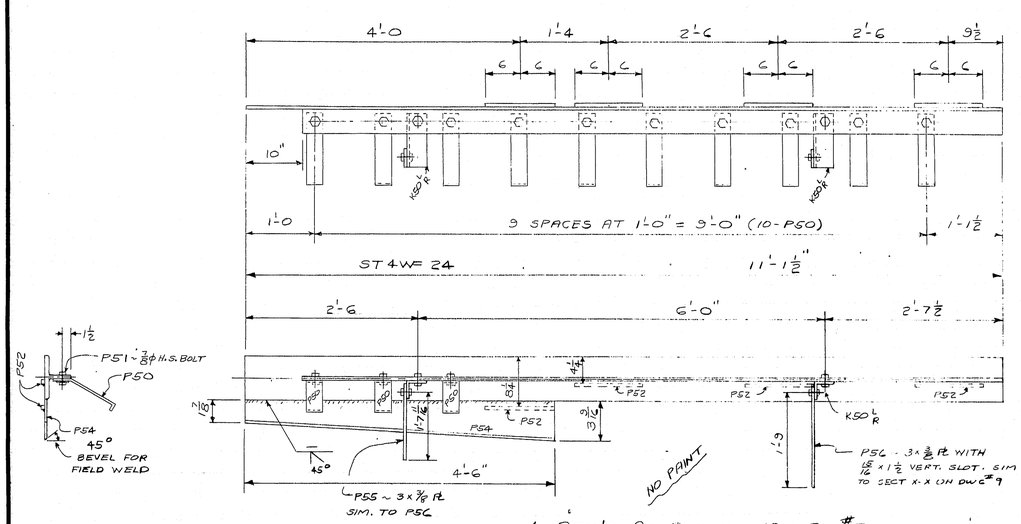
115-26



1 REQ'D AS SHOWN ~ MK A.J. #5

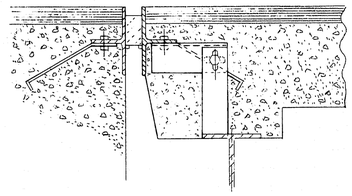
1 REQ'D OPP HAND ~ MK A.J. #6





1 REQ'D AS SHOWN ~ MK A.J. #7

1 REQ'D OPP HAND ~ MK A.J. #8



SECTION X-X

SHIP MARK	NO.	MARK	SHAPE	LENGTH		WT.	REMARKS
A.J. #5	1		ST4WF24	11	1 1/2		
A.J. #6	1		do	11	1 1/2		
A.J. #7	1		do	11	1 1/2		
A.J. #8	1		do	11	1 1/2		
	40	P50	2 1/2 x 3/8 F.B	1	3		
	48	P51	7/8 φ H.S.B.		2 1/4		
	48	~	7/8 φ HARD WASHER		~		
	12	P52	1/4 φ BAR	1	0		
	4	P54	3 3/16 x 1/2 PL	4	6		
	2	P55	3 x 3/8 F.B.	1	9 3/16		
	2	P56	do	1	10 1/2		

BILL OF MATERIAL JOB NO. 4876 DWG. NO. 10

CUSTOMER ORDER NO.: VERBAL

REFERENCE DRAWINGS:

HOLES: AS NOTED

FIELD CONN:

PAINT: NO SHOP PAINT REQ'D

FINAL

APPR.	1-24-71	
APPR.		
SHOP	3-24-71	
F. & O.	3-24-71	
DRAWN	1-21-70	CRB
CHECKED		
REVISION		
REVISION		
REVISION		

ARMORED JOINT DETAIL
ABUTMENT #1 ~ SIDEWALK

MEGQUIER & JONES CORP.
1156 BROADWAY
SOUTH PORTLAND, MAINE 04106

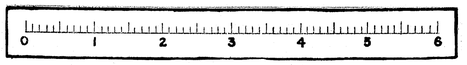
DEERING AVE. BRIDGE OVER I-295 AND PORTLAND TERMINAL R.R.
PORTLAND, MAINE

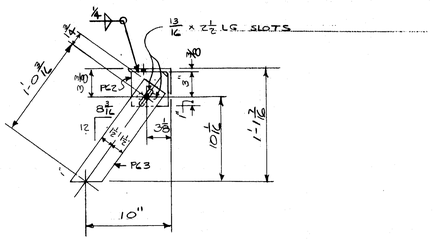
CUSTOMER CIANBRO CORP.

ARCHITECT MAINE STATE HIGHWAY COMM.

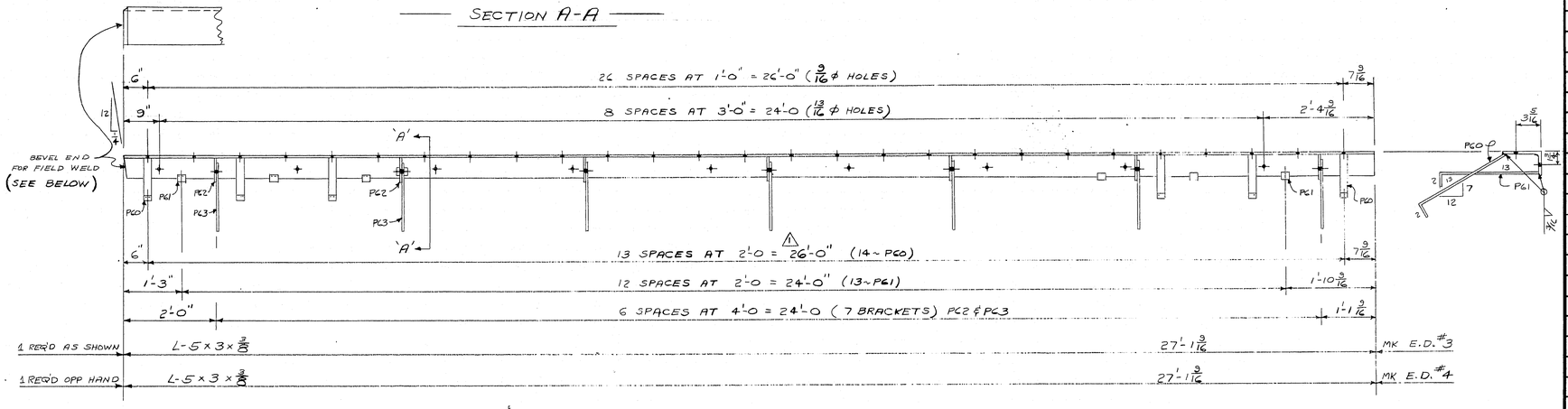
JOB NO. 4876 DWG. NO. 10

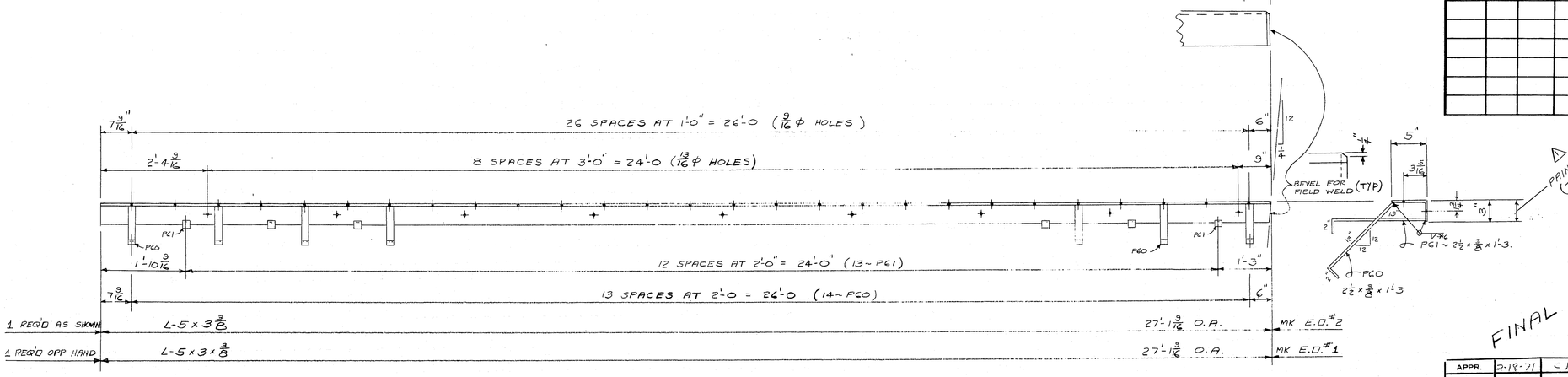
115-27





SECTION A-A





SHIP MARK	NO.	MARK	SHAPE	LENGTH	WT.	REMARKS
E.D.#1	1		L-5 x 3 x 3/8	27 1 3/16		
E.D.#2	1		do	27 1 3/16		
E.D.#3	1		do	27 1 3/16		
E.D.#4	1		do	27 1 3/16		
	56	PG0	2½ x 3/8 BNR	1 3		13/12
	52	PG1	do	1 3		13/12
	14	PG2	4 x 3/8 PL	0 4½		
	14	PG3	3 x 3/8 PL	1 2 15/16		
	14	~	3/4 ϕ M.B.	0 1 3/4		USE AT PG2 & PG3

CUSTOMER ORDER NO.: VERBAL

REFERENCE DRAWINGS:

HOLES: AS NOTED

FIELD CONN:

PAINT: SEE M&J DWG# 1

FINAL

APPR.	2-18-71	CJ
APPR.		
SHOP	3-24-71	
F. & O.	3-24-71	
DRAWN	CRB	2-18-71
CHECKED		
⚠ REVISION	CRB	3-24-71
REVISION		
REVISION		

EXPANSION DEVICE DETAIL
FOR ABUTMENT No. 2

MEGQUIER & JONES CORP.
1156 BROADWAY
SOUTH PORTLAND, MAINE 04106

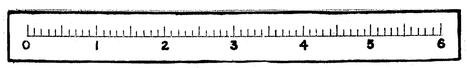
DEERING AVE. BRIDGE OVER I-295 AND PORTLAND TERMINAL R.R. PORTLAND, MAINE

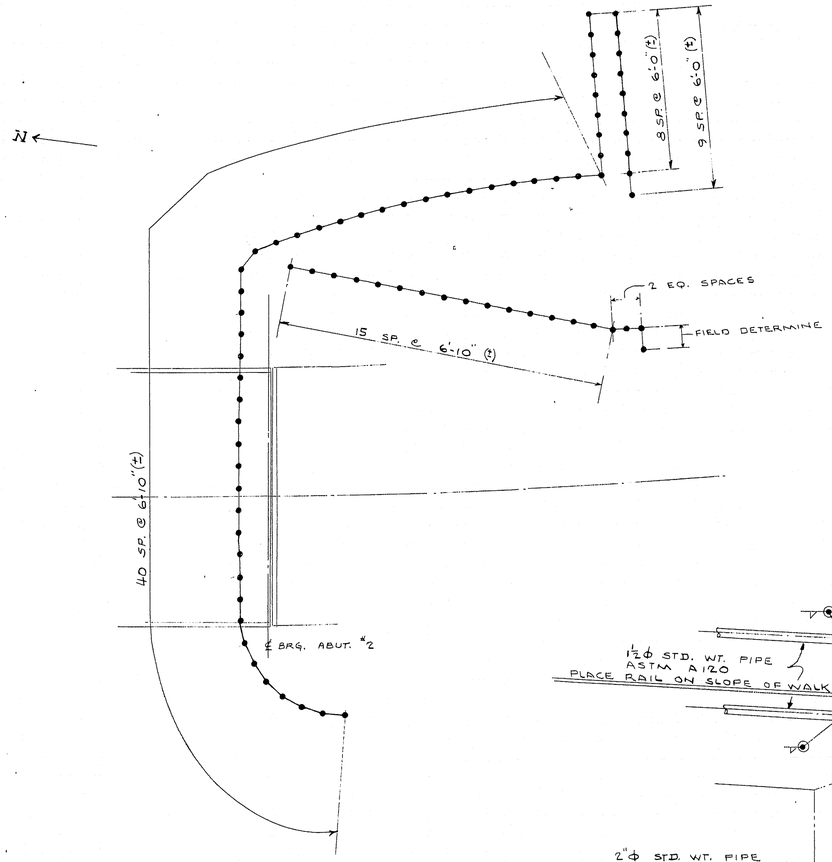
CUSTOMER CIANBRO CORP.

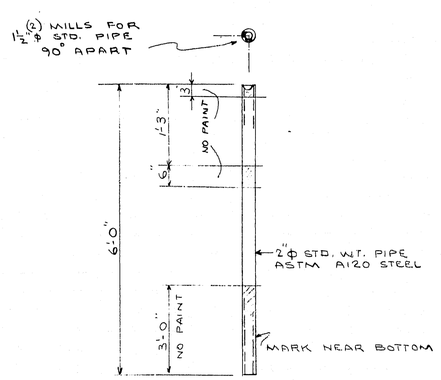
ARCHITECT MAINE STATE HIGHWAY COMM.

JOB NO. 4876 DWG. NO. 11

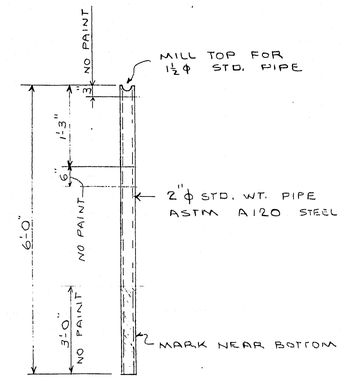
115-28



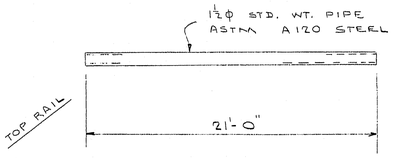




2 REQ'D. ~ MARK 12A
CORNER POSTS

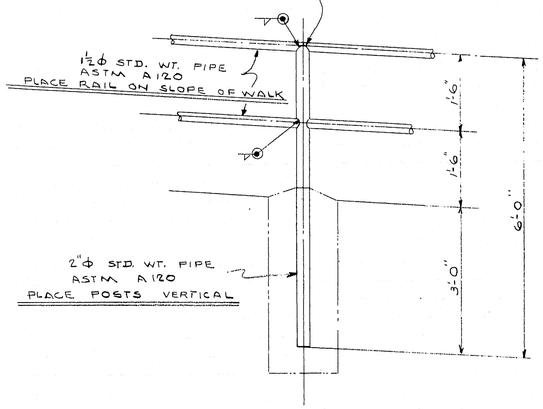


76 REQ'D. ~ MARK 12B
LINE POSTS & END POSTS

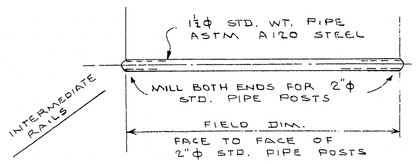


24 REQ'D. ~ MK. 12C
FIELD CUT TO SUIT ON JOB SITE

ERECTION NOTE
SET MILL @ TOP OF POSTS FOR STRAIGHT LINE SEGMENTS



TYP. POSTS & RAILS



75 REQ'D. ~ MARK ① TO ⑮
CHECK FIELD DIMS BEFORE FABRICATION APPROX. 480 LN. FT.

SHIP BILL OF MATERIAL JOB NO. J-4876 DWG. NO. 12

MARK	NO.	MARK	SHAPE	LENGTH	WT.	REMARKS
12A	2		2ϕ STD. PIPE	6 0		ASTM A120
12B	76		do	6 0		do
12C	24		1½ϕ STD. PIPE	21 0		do
① TO ⑮	~		do	~		APPROX 480 LN.FT
						CUT INTO 75 PCS.
						AND MILL BOTH
						ENDS AFTER
						FIELD DIMS.

CUSTOMER ORDER NO.: VERBAL
REFERENCE DRAWINGS: 15 OF 19 M.S.H.C.
HOLES:
FIELD CONN: FIELD WELD & GRIND SMOOTH
PAINT: SHOTBLAST & RED LEAD AS M.S.H.C.

STEEL PIPE HANDRAILING | ITEM 507.09

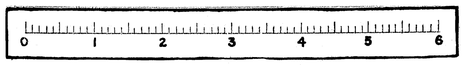
MEGQUIER & JONES CORP.
1156 BROADWAY
SOUTH PORTLAND, MAINE 04106

DEERING AVE. BRIDGE OVER I-295 & PORTLAND TERMINAL R.R. ~ PORTLAND, MAINE

CUSTOMER CIANBRO CORP.
ARCHITECT MAINE STATE HIGHWAY

JOB NO. J-4876 DWG. NO. 12

FINAL

DATE APPROVED		9-1-71
APPR.		8-11-71
APPR.		
SHOP		8-11-71
F. & O.		
DRAWN	SPH	8-10-71
CHECKED		
REVISION		
REVISION		
REVISION		

115-29