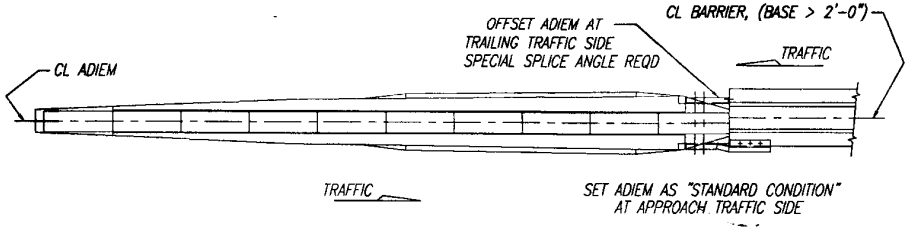
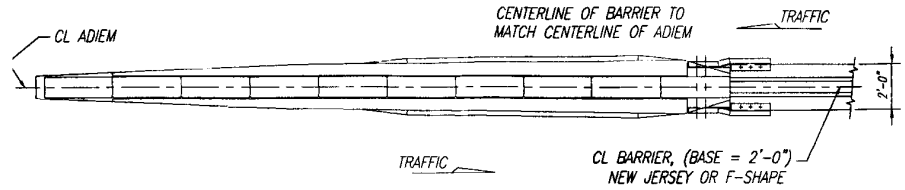
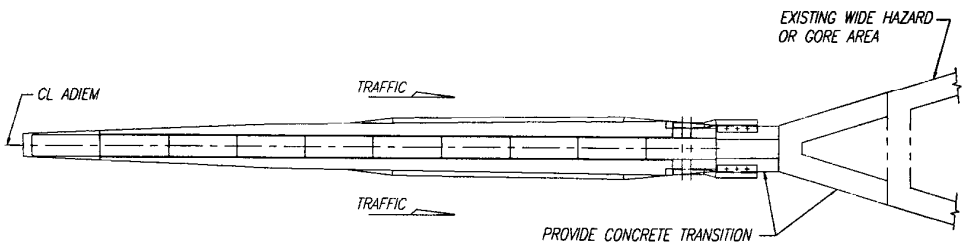


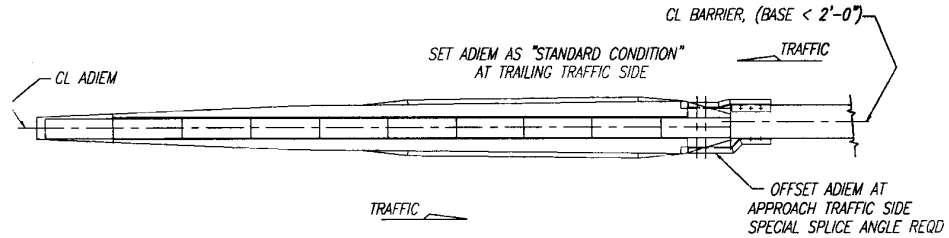
ADIEM PLACEMENT, WHEN BARRIER WIDTH > 2'-0"



"STANDARD CONDITION", WHEN BARRIER WIDTH = 2'-0"



ADIEM PLACEMENT, AT WIDE HAZARD OR GORE



ADIEM PLACEMENT, WHEN BARRIER WIDTH < 2'-0"

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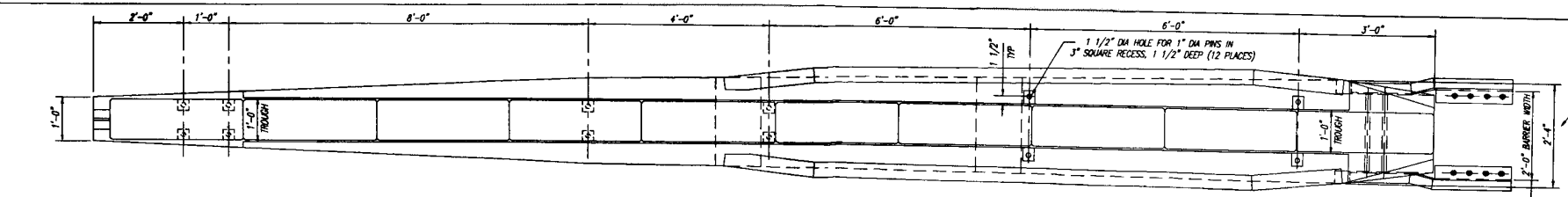
ADIEM II

ADIEM II PLACEMENT DETAILS

DRAWN	B. TAKACH
CHECKED	
APPROVED	
DATE	10-28-97
ENG. FILE #	SS350
SHT. No.	E1 OF 1
DRAWING No.	SS 350
REV.	0

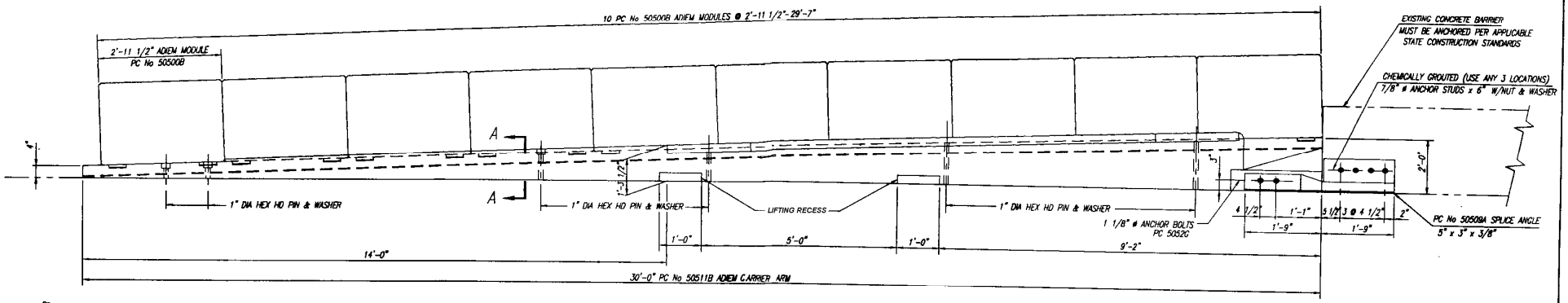
CUSTOMER | P.O. No.

TRINITY INDUSTRIES, INC.
DALLAS, TX · GRAND, OH · FORT WORTH, TX
CENTERVILLE, UT · LIMA, OH · ELIZABETHTOWN, KY

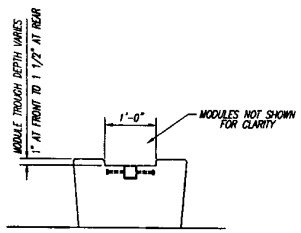


PLAN VIEW

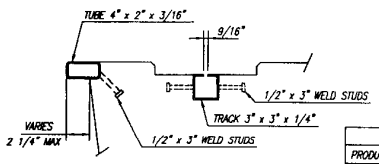
ADIEM II CAN BE USED WITH BARRIERS OF VARIOUS WIDTHS & CROSS-SECTIONS BY USE OF MODIFIED SPLICE ANGLES.



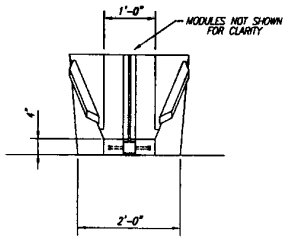
ELEVATION VIEW



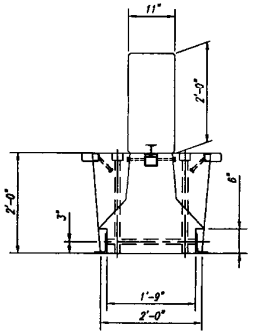
SECTION A-A



TRACK & BUMPER DETAIL



FRONT ELEVATION VIEW



REAR ELEVATION VIEW

BILL OF MATERIAL			
PRODUCT CODE	QTY	DESCRIPTION	REMARKS
50500B	10	MODULES x 2'-11 1/2"	
50511B	1	BASE x 30'-0"	
50508A	1	SPLICE ANGLE x 3'-6" RT	
50509A	1	SPLICE ANGLE x 3'-6" LT	
5906W	1	ACRYLINK COATING (1 GAL)	
5052G	2	1 1/8" ø x 25" HEX HD BOLT	
4963G	4	1 1/8" WASHER	
3976G	2	1 1/8" HEX NUT	
4616G	6	7/8"ø STUD x 6" (FULL THD)	
3725G	6	7/8" WASHER	
3735G	6	7/8" HEX NUT	
4747G	1	CHEMICAL GROUT (1 QT)	
3900G	12	1" WASHER	
5665G	SEE SCH	1" ø HEX HD PIN x 48" SEE NOTES 1-5	
5642G		1" ø HEX HD PIN x 42"	
5650G		1" ø HEX HD PIN x 36"	
5641G		1" ø HEX HD PIN x 30"	
5646G		1" ø HEX HD PIN x 24"	
5643G		1" ø HEX HD PIN x 18"	

ANCHOR PIN SCHEDULE PER SURFACE (SEE NOTES 1-5)		
PCC	ACP	BASE
		4
	4	
4		4
	4	4
4	4	
4		

NOTES:
1) ANCHOR PINS ARE 1" DIA HEX HD, POINTED, GALV RODS (A307)
2) PORTLAND CEMENT CONCRETE (PCC)
3) ASPHALTIC CONCRETE (ACP)
4) BASE AND/OR COMPACTED SOIL (BASE)
5) ADIEM INSTALLATION NOT RECOMMENDED ON LOOSE SOIL.

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ADIEM INSTALLATION INSTRUCTIONS

1. The ADIEM base is to be placed on a smooth surface (the same horizontal plane as the concrete barrier) and parallel to the mainline or ramp traveled lane(s).

2. Install anchor rods for ADIEM base by driving in soil or soft asphalt or driving in pre-drilled holes for hard asphalt or concrete (no epoxy required). The base should not be moved after the holes are drilled. The holes should be drilled using, at a minimum, a 35# hammer and minimum 36 inch long drill bit. (A 50# hammer is recommended.)

3. Attach connection brackets to base with two (2) 1 1/8" x 24" threaded rods provided. Then field drill holes into the existing barrier and attach the other end of the connection bracket to it with expansion anchor hardware provided.

4. Oil the ADIEM base track. Slide the modules onto the base. Be careful not to damage edges of the modules while sliding onto the base.

5. If the modules are scuffed or nicked, apply ACRYLINK coating to the affected area.

6. Recommended tools and equipment:
   - 35/50# air hammer/drill
   - 1 3/8" ø x 36" rock drill
   - 1 1/4" ø x 12" rock drill
   - Sledge hammer
   - Oil
   - Wrenches

7. Attach connection brackets to base with two (2) 1 1/8" X 25" hex head bolts provided. Then field drill holes in the existing barrier and attach connection brackets to it with chemically grouted hardware provided.

ALTERNATE ADIEM INSTALLATION INSTRUCTIONS

1. At a holding site, the modules are slid into the ADIEM base after oiling the base track. Be careful not to damage the edges of the modules while sliding them onto the base.

2. If the modules are scuffed or nicked, apply ACRYLINK coating to the affected area.

3. The unit is then delivered to the job site. The unit is to be placed on a smooth surface (the same horizontal slope as the concrete barrier) and parallel to the mainline or ramp traveled lane (s).

4. The front module should be removed so the remaining modules can be shifted for easy access for drilling the anchor rod holes.

5. Install anchor rods for ADIEM base by driving in soil or soft asphalt or driving in predrilled holes for hard asphalt or concrete (no epoxy required). The base should not be moved after the holes are drilled. The holes should be drilled using, at a minimum, a 35# hammer and a minimum 36 inch long drilling bit. (A 50# hammer is recommended.)

6. Attach connection brackets to base with two (2) 1 1/8" X 25" hex head bolts provided. Then field drill holes in the existing barrier and attach connection brackets to it with chemically grouted hardware provided.

REV.	CHK'D	BY	DATE	REMARKS
3		BT	3-14-97	DELETED PC 5484, ADDED PC 5052, CHG QTY PC3976
2		BT	2-14-97	GENERAL UPDATES
1		BT	1-29-97	GENERAL UPDATES

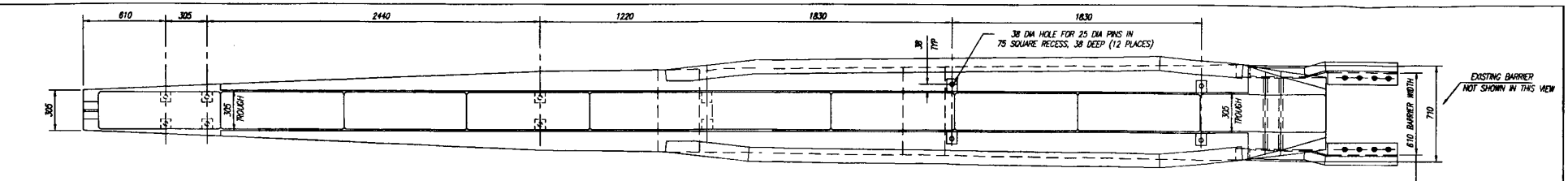
SYRO ADIEM II, 30'

30' ADIEM II ERECTION DETAILS

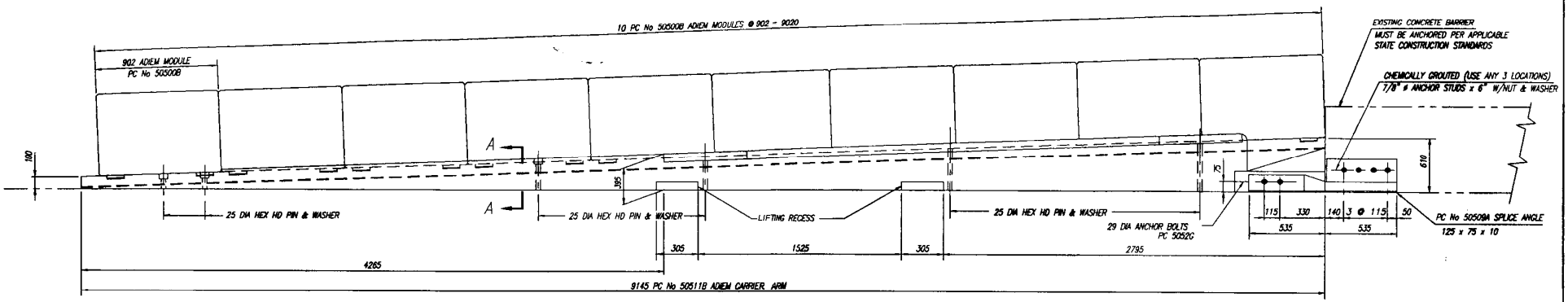
DRAWN	B. TAKACH
CHECKED	
APPROVED	
DATE	3-19-96
ENG. FILE #	SS349
SHT.No.	E1 OF 1
DRAWING No.	SS 349
REV.	3

CUSTOMER | P.O. No.

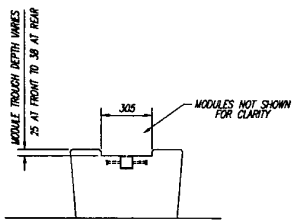
TRINITY INDUSTRIES, INC. SYRO
DALLAS, TX CENTERVILLE, UT GIRARD, OH LIMA, OH FORT WORTH, TX ELIZABETHTOWN, KY



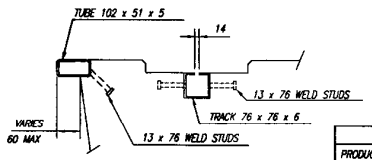
PLAN VIEW



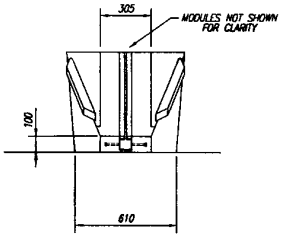
ELEVATION VIEW



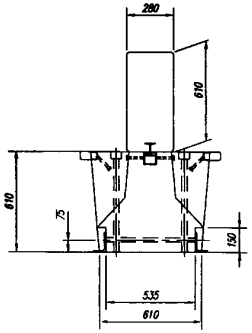
SECTION A–A



TRACK & BUMPER DETAIL



FRONT ELEVATION VIEW



REAR ELEVATION VIEW

BILL OF MATERIAL

PRODUCT CODE	QTY	DESCRIPTION	REMARKS
50500B	10	MODULES x 902	
50511B	1	BASE x 9145	
50508A	1	SPLICE ANGLE x 1065 RT	
50509A	1	SPLICE ANGLE x 1065 LT	
5906W	1	ACRYLINK COATING (3.8 LTR)	
5052C	2	29 ø x 635 HEX HD BOLT	
4963C	4	29 WASHER	
3976G	2	29 HEX NUT	
4616C	6	22 ø STUD x 150 (FULL TH)	
3725G	6	22 WASHER	
3735G	6	22 HEX NUT	
4747G	1	CHEMICAL GROUT (1 QT)	
3900G	12	25 WASHER	
5665G	SEE SCH	25 ø HEX HD PIN x 1220	SEE NOTES 1-5
5642G		25 ø HEX HD PIN x 1065	
5650G		25 ø HEX HD PIN x 915	
5641G		25 ø HEX HD PIN x 760	
5646G		25 ø HEX HD PIN x 610	
5643G		25 ø HEX HD PIN x 455	

ANCHOR PIN SCHEDULE PER SURFACE (SEE NOTES 1-5)		
PCC	ACP	BASE
		4
	4	
4		4
	4	4
4	4	
4		

NOTES:
1) ANCHOR PINS ARE 25 DIA HEX HD, POINTED, GALV RODS (A307)
2) PORTLAND CEMENT CONCRETE (PCC)
3) ASPHALTIC CONCRETE (ACP)
4) BASE AND/OR COMPACTED SOIL (BASE)
5) ADIEM INSTALLATION NOT RECOMMENDED ON LOOSE SOIL.

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ADIEM INSTALLATION INSTRUCTIONS

1. The ADIEM base is to be placed on a smooth surface (the same horizontal plane as the concrete barrier) and parallel to the mainline or ramp traveled lane(s).

2. Install anchor rods for ADIEM base by driving in soil or soft asphalt or driving in pre-drilled holes for hard asphalt or concrete (no epoxy required). The base should not be moved after the holes are drilled. The holes should be drilled using, at a minimum, a 16 kg hammer and minimum 915 mm long drill bit. (A 23 kg hammer is recommended.)

3. Attach connection brackets to base with two (2) 29 dia x 610 threaded rods provided. Then field drill holes into the existing barrier and attach the other end of the connection bracket to it with expansion anchor hardware provided.

4. Oil the ADIEM base track. Slide the modules onto the base. Be careful not to damage edges of the modules while sliding onto the base.

5. If the modules are scuffed or nicked, apply ACRYLINK coating to the affected area.

6. Recommended tools and equipment:
   - 16/23 kg air hammer/drill
   - 35 DIA x 915 rock drill
   - 32 DIA x 305 rock drill
   - Sledge hammer
   - Oil
   - Wrenches

7. Attach connection brackets to base with two (2) 29 dia X 635 hex hd bolts provided. Then field drill holes in the existing barrier and attach connection brackets to it with chemically grouted hardware provided.

ALTERNATE ADIEM INSTALLATION INSTRUCTIONS

1. At a holding site, the modules are slid into the ADIEM base after oiling the base track. Be careful not to damage the edges of the modules while sliding them onto the base.

2. If the modules are scuffed or nicked, apply ACRYLINK coating to the affected area.

3. The unit is then delivered to the job site. The unit is to be placed on a smooth surface (the same horizontal slope as the concrete barrier) and parallel to the mainline or ramp traveled lane (s).

4. The front module should be removed so the remaining modules can be shifted for easy access for drilling the anchor rod holes.

5. Install anchor rods for ADIEM base by driving in soil or soft asphalt or driving in predrilled holes for hard asphalt or concrete (no epoxy required). The base should not be moved after the holes are drilled. The holes should be drilled using, at a minimum, a 16 kg hammer and a minimum 915 mm long drilling bit. (A 23 kg hammer is recommended.)

6. Attach connection brackets to base with two (2) 29 dia X 635 hex head bolts provided. Then field drill holes in the existing barrier and attach connection brackets to it with chemically grouted anchor hardware provided.

REV.	CHK'D	BY	DATE	REMARKS
2		BT	3-14-97	DELETED PC 5484, ADDED PC 5052, CHG QTY PC 3976
1		BT	2-14-97	GENERAL UPDATES

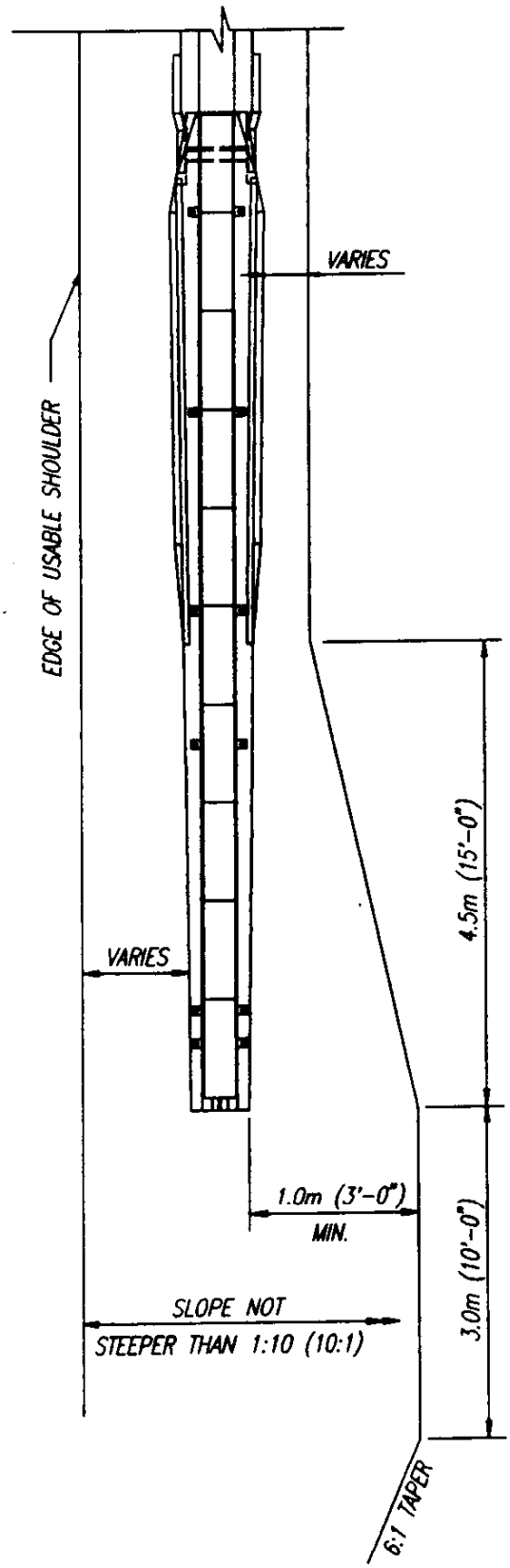
ADIEM II, 9.1M

9.1M ADIEM II ERECTION DETAILS

DRAWN	B. TAKACH
CHECKED	
APPROVED	
DATE	1-29-97
ENG. FILE #	SS349M
SHT.No.	E1 OF 1
DRAWING No.	SS 349M
REV.	2

CUSTOMER | P.O. No.

TRINITY INDUSTRIES, INC.
DALLAS, TX · GIRARD, OH · FORT WORTH, TX · CENTERVILLE, UT · LIMA, OH · ELIZABETHTOWN, KY



NOTE: THE SLOPE BEYOND THE SHOULDER PAD SHOULD BE TO THE STATES STANDARDS OR THE SLOPE REQUIRED BY THE BENEFIT COST ANALYSIS IN THE "AASHTO ROADSIDE DESIGN GUIDE " FOR SLOPES.

MK	BY	DATE	REVISION

MATERIAL:

TRINITY INDUSTRIES, INC.

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ADIEM ON MEDIAN OR SHOULDER

DRAWN: FLD	CHKD: T.P.	APP:	DATE: 12/9/94	
DRAWING NO:			REV.	SIZE A