



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
16 STATE HOUSE STATION
AUGUSTA, MAINE
04333-0016

JOHN ELIAS BALDACCI
GOVERNOR

DAVID A. COLE
COMMISSIONER

February 23, 2007
Subject: **Statewide Guardrail
Amendment No. 1**

Dear Sir/Ms:

Please make the following changes to the Bid Documents:

ADD the attached "State Project" Bid Package eight pages total.

On the "Notice to Contractors" page, in the first paragraph, within the first sentence, CHANGE the Bid Opening Date from: **February 28, 2007** to **March 7, 2007**. Make this change in pen and ink.

REMOVE the existing "Schedule of Items" three page total and REPLACE with the attached updated "Schedule of Items" five pages total.

REMOVE the existing "Special Provision (Mobilization)" dated 1/26/07 one page total and REPLACE with the attached updated "Special Provision (Mobilization)" dated 2/23/07 one page total.

ADD the attached "Special Provision Award, Contracting and Insurance" dated January 18, 2007 two pages total.

ADD the attached "Special Provisions" containing Special Provision Sections 103 Award and Contracting, 104 General Rights and Responsibilities, 105 General Scope of Work, 107 Time, and 109 Changes dated January 18, 2007 one page total.

ADD the attached Plan Sheet titled "Slotted Rail Terminal Post Layout and Erection Details".

ADD the attached Plan Sheet titled "Flared Energy Absorbing Terminal Assembly".



PRINTED ON RECYCLED PAPER

The following questions have been received.

Question: In the Schedule of Items there is no 350 Strut & Yoke, Head or Panel items, there's a difference from the MELT items and the Schedule of Items?

Response: See changes earlier in this amendment.

Question: In the Schedule of Items on page 1 of 3 under Notes, note #2 dealing with Mobilization, is this only the cost of traveling to the job site and if required, from one spot to another in a single day? This is not the cost of a crew or equipment for the whole day?

Response: See changes earlier in this amendment.

Question: Is a Bid Bond required?

Response: No

Question: On page two of three of the Schedule of Items there are items that are listed twice?

Response: See change earlier in this amendment.

Question: There is no item for the Thrie Beam or Radius Panel?

Response: See change earlier in this amendment.

Question: The certified payroll reports should be turned into whom?

Response: The Regional Engineer.

Question: Who is required to load Department supplied materials? Will a forklift be provided or is the Contractor to provide one?

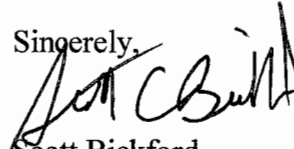
Response: The Contractor.

Question: Is it possible to postpone the Bid Opening on this project?

Response: See change earlier in this amendment.

Consider this information and changes prior to submitting your bid on March 7, 2007.

Sincerely,

A handwritten signature in black ink, appearing to read "Scott Bickford". The signature is written in a cursive style with a large initial "S" and "B".

Scott Bickford

Contracts & Specifications Engineer

Updated 01/06/06

STATE PROJECT

BIDDING INSTRUCTIONS

1. Complete the bid forms with pen and ink.
2. The following are to be completed and returned with the bid:
 - a. A copy of the Notice to Contractors
 - b. The completed Schedule of Items
 - c. Two (2) copies of the completed and signed Contract Offer, Agreement, & Award form
 - d. The completed Contractor Information Sheet
3. To quickly enter into a contract, the bidder may submit certificates of insurance for commercial general liability, automotive liability if company vehicles used, and worker compensation. The Department must be named as an additional insured. Could also include vendor form here.
4. For security and other reasons, all Bid Packages which are mailed, shall be provided in double (one envelope inside the other) envelopes. The *Inner Envelope* shall have the following information provided on it:

Bid Enclosed - Do Not Open

Title:

Town:

Date of Bid Opening:

Name of Contractor with mailing address and telephone number:

In Addition to the usual address information, the *Outer Envelope* should have written or typed on it:

Double Envelope: Bid Enclosed

Title:

Town:

Date of Bid Opening:

Name of Contractor:

Hand-carried Bids may be in one envelope, and should be marked with the following information:

Bid Enclosed: Do Not Open

Title:

Town:

Name of Contractor:

NOTICE

The Maine Department of Transportation is attempting to improve the way Bid Amendments/Addendums are handled, and allow for an electronic downloading of bid packages from our website, while continuing to maintain a planholders list.

Prospective bidders, subcontractors or suppliers who wish to download a copy of the bid package and receive a courtesy notification of project specific bid amendments, must provide an email address to Diane Barnes or Mike Babb at the MDOT Contracts mailbox at: MDOT.contracts@maine.gov. Each bid package will require a separate request.

Additionally, interested parties will be responsible for reviewing and retrieving the Bid Amendments from our web site, and acknowledging receipt and incorporating those Bid Amendments in their bids using the Acknowledgement of Bid Amendment Form.

The downloading of bid packages from the MDOT website is not the same as providing an electronic bid to the Department. Electronic bids must be submitted via <http://www.BIDX.com>. For information on electronic bidding contact Larry Childs at Larry.Childs@maine.gov.

NOTICE

Bidders:

Please use the attached “Request for Information” form when faxing questions and comments concerning specific Contracts that have been Advertised for Bid. Include additional numbered pages as required. Questions are to be faxed to the number listed in the Notice to Contractors. This is the only allowable mechanism for answering Project specific questions. Maine DOT will not be bound to any answers to Project specific questions received during the Bidding phase through other processes.

State of Maine
VENDOR FORM

For New Vendors & for Updates on Current Vendors

Special Instructions:

PLEASE PRINT CLEARLY

Return this form to:

*** = MUST BE COMPLETED TO PROCESS**

ONLY ONE NAME/VENDOR PER FORM

New Vendor	Address Change	Multi Address	Name Change	Contact Update	ID # Change
------------	----------------	---------------	-------------	----------------	-------------

Social Security Number*
Individual or Sole Proprietor

Federal Taxpayer ID Number*
Corporation

OR

Please fill in ONE.

S

Business name in "DBA" field below.

E

Business name in "Name" field below.

This form will affect all transactions with ALL state agencies.

<p>NEW:*</p> <p>Remit to Address: Individual or Business Name.</p> <table style="width: 100%; border-collapse: collapse;"> <tr><td style="border: 1px solid black; padding: 2px;">Name*</td></tr> <tr><td style="border: 1px solid black; padding: 2px;">DBA or C/O</td></tr> <tr><td style="border: 1px solid black; padding: 2px;">Address*</td></tr> <tr><td style="border: 1px solid black; padding: 2px;"> </td></tr> <tr><td style="border: 1px solid black; padding: 2px;"> </td></tr> <tr><td style="border: 1px solid black; padding: 2px;">Tel #*</td></tr> </table>	Name*	DBA or C/O	Address*			Tel #*	OR	<p>OLD:</p> <p>Old number:</p> <table style="width: 100%; border-collapse: collapse;"> <tr><td style="border: 1px solid black; padding: 2px;">Name</td></tr> <tr><td style="border: 1px solid black; padding: 2px;">DBA or C/O</td></tr> <tr><td style="border: 1px solid black; padding: 2px;">Address</td></tr> <tr><td style="border: 1px solid black; padding: 2px;"> </td></tr> <tr><td style="border: 1px solid black; padding: 2px;"> </td></tr> <tr><td style="border: 1px solid black; padding: 2px;">Tel #</td></tr> </table>	Name	DBA or C/O	Address			Tel #
Name*														
DBA or C/O														
Address*														
Tel #*														
Name														
DBA or C/O														
Address														
Tel #														

<input type="checkbox"/> Is this the same name on your Social Security card?		Acct #
<input type="checkbox"/> If not, have you told Social Security about your name change?		Provider #

Signature* _____

Contact Name _____

Print Name or Title _____

Accounts Receivable Contact Name _____

Date* _____ (within 3 months)

Phone # if Different or for Contact Info _____

Vendor Indicators: Enter Y (Yes) For All Categories Listed Below That Apply To This Vendor

Dealer: <input type="checkbox"/>	Manufacturer: <input type="checkbox"/>	Factory Rep: <input type="checkbox"/>
Jobber: <input type="checkbox"/>	Retailer: <input type="checkbox"/>	Commodity: <input type="checkbox"/>
Individual: <input type="checkbox"/>	Partnership: <input type="checkbox"/>	Incorporated: <input type="checkbox"/>
Minority: <input type="checkbox"/>	Small Business: <input type="checkbox"/>	In-State: <input type="checkbox"/>

Information on State Agency Submitting Vendor Form

State Agency* & SHS #	Contact Person Name & Title*	Telephone #*
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Send to: Maine Department of Transportation/ Contracts 16 SHS, Augusta, ME 04333-0014 Attn: Pat Brown

INSTRUCTIONS FOR COMPLETING VENDOR FORM

1. **Print Clearly**
2. **All sections marked with an * must be completed for processing**
3. **Send completed form to requesting State agency OR remit to address at bottom of form.**
4. **Do NOT send by Fax. Only originals will be accepted.**

<u>FIELDS</u>	<u>INFORMATION NEEDED FOR FIELD</u>
<i>Special Instructions</i>	<i>Instructions to Vendor from Agency requesting information.</i>
<i>Return to</i>	<i>The location of agency where the form is to be mailed back to. If none use address at bottom of form.</i>
Boxes above SSN/EIN Fields	Please check mark all that apply to the vendor. If other, please specify. If it's a new vendor only one will apply: "New Vendor"
Social Security Number	Individuals, individuals "doing business as", and individuals without a Federal Taxpayer ID #. Use if not using EIN
Federal Taxpayer ID Number*	Businesses or professionals providing services. (ID # needs to be use for REMITTANCE purposes.) Use if not using SSN
New	Current Information
Old	Old information (If another ID# had been used please put it next to "OLD")
Name	Individual's Name or Business Name. ONLY ONE name per a form.
DBA or C/O	"Doing business as" or "In Care Of"
Address	REMITTANCE ADDRESS - Street Address OR PO Box (one or the other)
Tel #	Phone Number of individual or business
Signature	Individual or authorized representative of individual or authorized representative of the business
Date	Current Date (no more than 3 months old)
Contact Name	Contact person at business
Accounts Receivable Contact Name	Contact person at business for accounts receivables.
Phone #	Phone for Act Rec Contact
Vendor Indicators	Indicate all that apply for the vendor, as needed
Agency Info	For Agency personnel submitting the form. Contact info incase of questions.

CONTRACTOR INFORMATION

(Date)

(Signature)

(Name and Title Printed)

(Contractor Name)

(Federal Taxpayer ID Number or Social Security Number)

Mailing Address:

Street/PO Box

City

State

Zip

phone

fax

email

Sole Proprietorship - Partnership - (circle one)

Corporation – Company - Association - Estate - (circle one)

MAINE DOT GUARDRAIL SERVICES
SCHEDULE OF ITEMS
BID PAGE 1 of 5

BID ITEMS	PAY UNITS	REGION 1	REGION 2	REGION 3	REGION 4	REGION 5
GUARDRAIL TYPE 3C SINGLE RAIL 0-100'	LINEAR FOOT					
GUARDRAIL TYPE 3C SINGLE RAIL 100'-250'	LINEAR FOOT					
GUARDRAIL TYPE 3C SINGLE RAIL OVER 250'	LINEAR FOOT					
GUARDRAIL TYPE 3C 15' RADIUS AND LESS	LINEAR FOOT					
GUARDRAIL TYPE 3C OVER 15' RADIUS	LINEAR FOOT					
GUARDRAIL TYPE 3C THRIE BEAM SINGLE RAIL	LINEAR FOOT					
GUARDRAIL REMOVE AND DISPOSE	LINEAR FOOT					
TERMINAL END SINGLE RAIL	EACH					
REFLECTORIZED FLEXIBLE GUARDRAIL MARKER	EACH					
REPLACE SINGLE GALVANIZED STEEL POST	EACH					
GUARDRAIL 350 TERMINAL END	EACH					
MOBILIZATION	HOUR					
NOTES:						
1. This work consists of supplying all materials, equipment and labor to install guardrail and components at locations and quantities as directed by the Regions.						
2. For each day that the contractor provides guardrail services for the Department, they will be paid hourly for mobilization for traveling to and from the job site. See Special Provision for exact intent and usage of Mobilization.						
3. The Maine DOT will provide all signs and traffic control.						

MaineDOT
SCHEDULE OF ITEMS
BID PAGE - 2 of 5

When practical, the Department will direct that existing damaged guardrail be repaired by installing new guardrail components. The repair will be accomplished by the contractor as directed by the Maine DOT. The contractor's price shall include supplying the new guardrail components, removing damaged components and installing the new components and disposing of the damaged components.

All screws, nails, nuts, bolts and washers are incidental to the work.

Radius beam shall be paid for as regular straight beam.

The contractor will be paid by the hour for mobilization (as quoted on page 1 of 5) for traveling to and from the job site each day.

The Maine DOT will provide all signs and traffic control.

GUARDRAIL PARTS

Item #	Description	REGION 1	REGION 2	REGION 3	REGION 4	REGION 5
		Price	Price	Price	Price	Price
9	POST 6'					
9A	POST 8'					
9B	POST COR-TEN					
24	BEAM					
25	TERM END					
46	BACKUP PLATE					
50	OFFSET BRACKET					
BREAK AWAY TERMINAL PARTS						
63	ANCHOR PLATE					
64	BEARING PLATE					
66	SOIL PLATE					
68	STEEL TUBE					
69	WOOD POST					
70	BCT SLEEVE					
71	CABLE ASSEMBLY					
75	BEAM-25'					
92	TERM CONNECTOR					
94	ANCHOR PLATE					

MODIFIED ECCENTRIC LOADER TERMINAL PARTS

Item #	Description	REGION 1	REGION 2	REGION 3	REGION 4	REGION 5
		Price	Price	Price	Price	Price
101	DIAPHRAGM PLATE					
102	W-BEAM END SECTION					
111	SOIL PLATE					
112	BEARING PLATE					
113	CABLE ASSEMBLY					
114	GR ANCHOR BRACKET					
115	TERMINAL CONNECTOR					
116	TIMBER POST					
117	FOUNDATION TUBE					
118	CRT POST					
119	TIMBER GR POST					
120	SHELF BRACKET					
121	POST SLEEVE					
122	TIMBER BLOCKOUT					
123	STRUT & YOKE					

**Maine DOT
SCHEDULE OF ITEMS
BID PAGE - 3 OF 5**

When practical, the Department will direct that existing damaged guardrail be repaired by installing new or used **Maine DOT owned** guardrail components. The repair will be accomplished by the contractor as directed by the Maine DOT. The contractor's price shall include supplying labor and equipment to load guardrail components, removing damaged components and installing the new or used components and disposing of the damage components.

All screws, nails, nuts, bolts and washers are incidental to the work.

Radius beam shall be paid for as regular straight beam.

The contractor will be paid by the hour for mobilization (as quoted on page 1 of 5) for traveling to and from the job site each day.

The Maine DOT will provide all signs and traffic control.

GUARDRAIL PARTS

Item #	Description	REGION 1	REGION 2	REGION 3	REGION 4	REGION 5
		Price	Price	Price	Price	Price
9	POST 6'					
9A	POST 8'					
9B	POST COR-TEN					
24	BEAM					
25	TERM END					
46	BACKUP PLATE					
50	OFFSET BRACKET					
	BREAK AWAY TERMINAL PARTS					
63	ANCHOR PLATE					
64	BEARING PLATE					
66	SOIL PLATE					
68	STEEL TUBE					
69	WOOD POST					
70	BCT SLEEVE					
71	CABLE ASSEMBLY					
75	BEAM-25'					
92	TERM CONNECTOR					
94	ANCHOR PLATE					

MODIFIED ECCENTRIC LOADER TERMINAL PARTS

Item #	Description	REGION 1	REGION 2	REGION 3	REGION 4	REGION 5
		Price	Price	Price	Price	Price
101	DIAPHRAGM PLATE					
102	DIAPHRAGM PLATE					
111	W-BEAM END SECTION					
112	BEARING PLATE					
113	CABLE ASSEMBLY					
114	GR ANCHOR BRACKET					
115	TERMINAL CONNECTOR					
116	TIMBER POST					
117	FOUNDATION TUBE					
118	CRT POST					
119	TIMBER GR POST					
120	SHELF BRACKET					
121	POST SLEEVE					
122	TIMBER BLOCKOUT					
123	STRUT & YOKE					

MaineDOT
SCHEDULE OF ITEMS
BID PAGE - 4 of 5

When practical, the Department will direct that existing damaged guardrail be repaired by installing new guardrail components. The repair will be accomplished by the contractor as directed by the Maine DOT. The contractor's price shall include supplying the new guardrail component, removing damaged component and installing the new component and disposing of the damage component.

All screws, nails, nuts, bolts and washers are incidental to the work.

The contractor will be paid by the hour for mobilization (as quoted on page 1 of 5) for traveling to and from the job site each day.

The Maine DOT will provide all signs and traffic control.

SRT 350 End Treatment

Item #	Description	REGION 1 REGION 2 REGION 3 REGION 4 REGION 5				
		Price	Price	Price	Price	Price
9G	GR BEAM					
34G	GR BEAM SRT-1					
39G	GR BEAM SRT-2					
700A	CABLE ANCHOR					
705G	2" X 5 1/2" PIPE					
742G	6" TUBE SLEEVE					
775G	5/8 X 6 X 8 BRNG PLT					
907G	BUFF/ROLL TERMINAL					
3000G	3/4 X 6'5 CABLE					
4063B	6" POST 6 X 8					
4075B	14" BLOCK 6 X 8					
6058B	39 POST 5 1/2 X 7 1/2					
9852A	STRUT ASSEMBLY					
9960G	SLOT GUARD					

FLEAT 350 End treatment

Item #	Description	REGION 1 REGION 2 REGION 3 REGION 4 REGION 5				
		Price	Price	Price	Price	Price
F3000	IMPACT HEAD					
F1303	GR BEAM END SECT					
F1304	GR BEAM CNTR SECT					
G1203	GR BEAM					
S730	FNDATION SOIL TUBE					
E740	PIPE SLEEVE					
E750	BEARING PLATE					
S760	CABLE ANCHOR BOX					
E770	BCT CABLE ACHR ASS					
E780	GROUND STRUT					
P650	WOOD POST					
P671	WOOD CRT POST					
P675	TIMBER BLOCKOUT					

**Maine DOT
SCHEDULE OF ITEMS
BID PAGE - 5 of 5**

When practical, the Department will direct that existing damaged guardrail be repaired by installing new or **used Maine DOT owned** guardrail components. The repair will be accomplished by the contractor as directed by the Maine DOT. The contractor's price shall include supplying labor and equipment to load guardrail components, removing damaged components and installing the new or used components and disposing of the damage components.

All screws, nails, nuts, bolts and washers are incidental to the work.

The contractor will be paid by the hour for mobilization (as quoted on page 1 of 5) for traveling to and from the job site each day.

The Maine DOT will provide all signs and traffic control.

SRT 350 End Treatment

Item #	Description	REGION 1 REGION 2 REGION 3 REGION 4 REGION 5				
		Price	Price	Price	Price	Price
9G	GR BEAM					
34G	GR BEAM SRT-1					
39G	GR BEAM SRT-2					
700A	CABLE ANCHOR					
705G	2" X 5 1/2" PIPE					
742G	60 TUBE SLEEVE					
775G	5/8 X 6 X 8 BRNG PLT					
907G	BUFF/ROLL TERMINAL					
3000G	3/4 X 6'5 CABLE					
4063B	6' POST 6 X 8					
4075B	14" BLOCK 6 X 8					
6058B	3'9 POST 5 1/2 X 7 1/2					
9852A	STRUT ASSEMBLY					
9960G	SLOT GUARD					

FLEAT 350 End treatment

Item #	Description	REGION 1 REGION 2 REGION 3 REGION 4 REGION 5				
		Price	Price	Price	Price	Price
F3000	IMPACT HEAD					
F1303	GR BEAM END SECT					
F1304	GR BEAM CNTR SECT					
G1203	GR BEAM					
S730	FNDATION SOIL TUBE					
E740	PIPE SLEEVE					
E750	BEARING PLATE					
S760	CABLE ANCHOR BOX					
E770	BCT CABLE ACHR ASS					
E780	GROUND STRUT					
P650	WOOD POST					
P671	WOOD CRT POST					
P675	TIMBER BLOCKOUT					

**SPECIAL PROVISION
(MOBILIZATION)**

The contractor shall be paid hourly for mobilization for each day they provide guardrail services to The Maine DOT. Mobilization shall be paid for the following:

1. Traveling from the contractor's home base to the job site.
2. Travel time between job sites if multiple sites exist.
3. Travel time required to pick up Maine DOT owned components.
4. Time while the contractor is loading Maine DOT components.

Pay Item

Pay Unit

659.12 Mobilization

Hour

Special Provision

Award, Contracting and Insurance

Award and Contracting After Bid Opening and as a condition for Award of a Contract, the Department may require an Apparent Successful Bidder to demonstrate to the Department's satisfaction that the Bidder is responsible and qualified to perform the Work."

Notice of Award and Award Conditions The Department has 30 Days following the Bid Opening to notify the Contractor of Intent to Award and request Insurance Certificates. The Apparent Successful Bidder must provide these items in a timely manner. All items must be delivered to the Department's Bureau of Maintenance and Operations. Once the Department has received the certificates of insurance, and any other pre-award items required, the Department will sign the Contract Agreement, Offer, & Award form and execute the Contract. The point of Contract execution is when the Contractor receives Notice of Award.

Insurance The Contractor shall provide signed, valid, and enforceable certificate(s) of insurance complying with this Section. All insurance must be procured from insurance companies licensed or approved to do business in the State of Maine by the State of Maine, Department of Business Regulation, Bureau of Insurance. The Contractor shall pay all premiums and take all other actions necessary to keep required insurances in effect for the duration of the Contract obligations, excluding warranty obligations.

Additional Insured **Each policy with the exception of Workers' Compensation insurance shall name the Department of Transportation as an additional insured.**

Workers' Compensation For all operations performed by the Contractor and any Subcontractor, the Contractor and each Subcontractor shall carry Workers' Compensation Insurance or shall qualify as a self-insurer with the State of Maine Workers' Compensation Board in accordance with the requirements of the laws of the State of Maine.

Commercial General Liability With respect to all operations performed by the Contractor and any Subcontractors, the Contractor and any Subcontractors shall carry commercial general liability insurance in an amount not less than \$1,000,000.00 per occurrence and \$2,000,000.00 in the Aggregate. The coverage must include products, completed operations, and Contractual liability coverages, and Insurance Services Office (ISO) form #CG25031185 or equivalent. The Contractual liability insurance shall cover the Contractor's obligations to indemnify the Department as provided in this Contract including Section 110.1 - Indemnification. The coverage shall also include protection against damage claims due to use of explosives, collapse, and underground coverage if the Work involves such exposures.

Statewide
Guardrail Services
January 18, 2007

Automobile Liability The Contractor shall carry Automobile Liability Insurance covering the operation of all motor vehicles including any that are rented, leased, borrowed, or otherwise used in connection with the Project. The minimum limit of liability under this Section shall be \$1,000,000.00 per occurrence.

SPECIAL PROVISIONS

SPECIAL PROVISION SECTION 103
AWARD AND CONTRACTING

A Bid Guaranty is not required.

Performance and Payment Bonds are not required.

SPECIAL PROVISION SECTION 104
GENERAL RIGHTS AND RESPONSIBILITIES

The State wage rates enclosed apply to this project. Federal Wage Rates do not apply to this project.

SPECIAL PROVISION SECTION 105
GENERAL SCOPE OF WORK

The Contractor shall comply with all applicable federal, State, and local laws governing safety, health, and sanitation including all applicable laws and regulations of OSHA.

The Contractor shall provide all safeguards, safety devices, and protective Equipment and take all other action that is necessary to continuously and effectively protect the safety and health of all persons from hazards related to the Work.

The Department will provide traffic control.

The Department will provide soil erosion and water pollution control.

SPECIAL PROVISION SECTION 107
TIME

The Contractor is responsible to respond in a timely manner to requests to provide services. Should the response not meet the Department's requirements, the Department will request services from another Contractor.

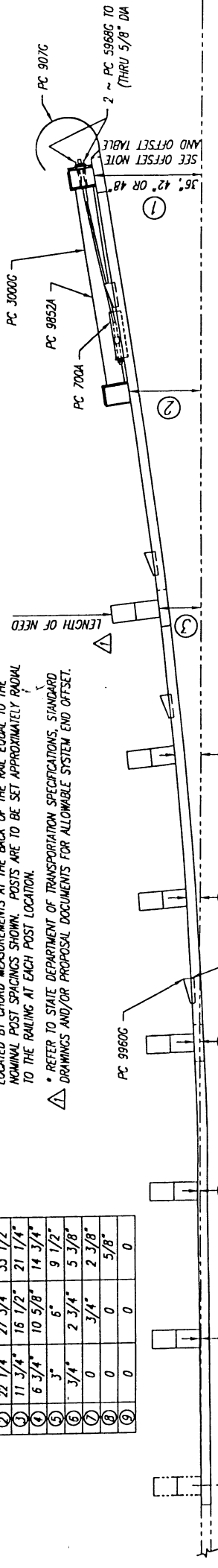
SPECIAL PROVISION SECTION 109
CHANGES

109.1.2 Substantial Changes to Major Items Delete the entire section.

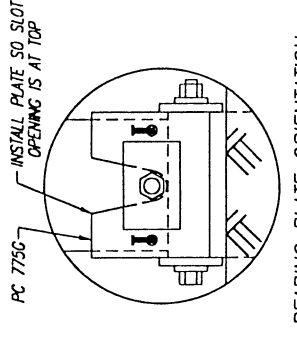
109.2 Elimination of Items Delete the entire section.

POST No	POST OFFSET DIMENSION TABLE	
	* SYSTEM END OFFSET	† END OF NEED
1	3'-0"	3'-6"
2	36"	42"
3	22 1/4"	27 3/4"
4	11 3/4"	16 1/2"
5	6 3/4"	10 5/8"
6	3"	6"
7	0	2 3/4"
8	0	3/4"
9	0	0

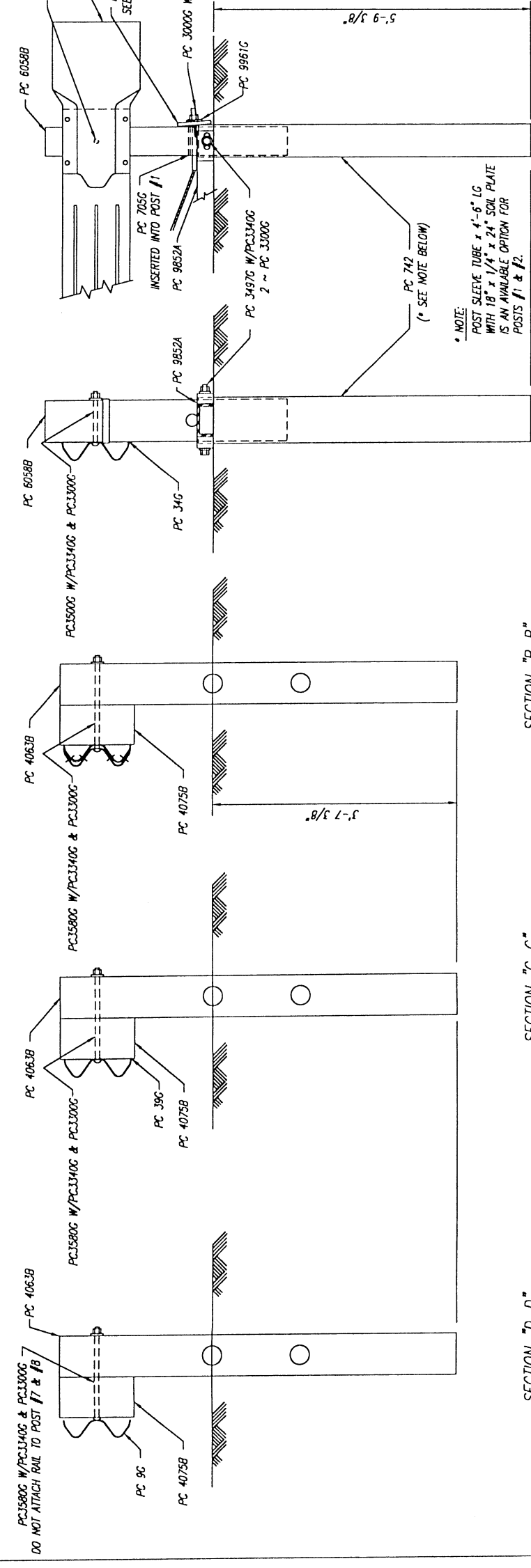
OFFSET NOTE:
 THE POST OFFSET DIMENSIONS ARE GIVEN TO THE CENTER OF THE TRAFFIC FACE OF THE BLOCKS, EXCEPT AT THE FIRST TWO POSTS, WHERE THE DIMENSION IS TO THE CENTER OF THE TRAFFIC FACE OF THE POST. OFFSET POINTS ARE TO BE LOCATED BY CHORD MEASUREMENTS AT THE BACK OF THE RAIL EQUAL TO THE NOMINAL POST SPACINGS SHOWN. POSTS ARE TO BE SET APPROXIMATELY RADIAL TO THE RAILING AT EACH POST LOCATION.
 * REFER TO STATE DEPARTMENT OF TRANSPORTATION SPECIFICATIONS, STANDARD DRAWINGS AND/OR PROPOSAL DOCUMENTS FOR ALLOWABLE SYSTEM END OFFSET.



BILL OF MATERIAL	
PC	DESCRIPTION
9C	1 12/12 6/3/5 (GUARDRAIL)
34C	1 12/12 6/3/5 SRT-1 (GUARDRAIL)
39C	1 12/12 6/3/5 SRT-2 (GUARDRAIL)
700A	1 CABLE ANCHOR BRACKET
705C	2 2" x 5 1/2" PIPE
742C	2 6" O.D. TUBE SLEEVE
775C	1 5/8" x 6" x 8" BEARING PLATE
907G	1 12/BUFFER/ROLLED (TERMINAL)
3000C	1 3/4" x 6 5/8" CABLE
3300G	20 5/8" WASHER
3340G	62 5/8" HEX NUT
3360G	44 5/8" x 1 1/4" SPLICE BOLT
3380G	8 5/8" x 9 1/2" HEX HD BOLT
3497C	2 5/8" x 9 1/2" HEX HD BOLT
3500C	2 5/8" x 10" POST BOLT
3580C	6 5/8" x 18" POST BOLT
3900C	1 1" WASHER
3910C	2 1" HEX NUT
4063B	6 6" O POST 6 x 8
4075B	6 14" BLOCK 6 x 8
6058B	2 3" O POST 5 1/2 x 7 1/2
5968G	2 16d NAIL SRT
9652A	1 STRUT ASSEMBLY
9960G	4 SLOT GUARD
9961G	1 3/8 x 3 x 4 PLATE WASHER



BEARING PLATE ORIENTATION



SECTION "D-D"
(@ POST 1 & 9)

SECTION "C-C"
(@ POSTS 4 & 5)

SECTION "B-B"
(@ POSTS 3 & 6)

SECTION "A-A"
(@ POST 2)

ENLARGED VIEW @ POST #1

* NOTE:
 POST SLEEVE TUBE x 4'-6" LG WITH 18" x 1/4" x 24" SOIL PLATE IS AN AVAILABLE OPTION FOR POSTS #1 & #2.

REMARKS	
1	BT 7-12-99 ADDED OFFSET NOTE & LENGTH OF NEED

SRT-350
SLOTTED RAIL TERMINAL
POST LAYOUT AND ERECTION DETAILS
SRT-350
 (12.5, 8 POST)

DRAWN	B. TAKACH
CHECKED	
APPROVED	
DATE	5-21-99
ENG. FILE #	SS444
SHEET No.	ET OF 1
DRAWING No.	SS 444

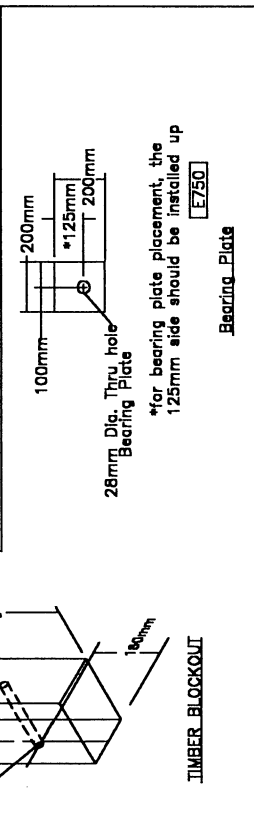
TRINITY INDUSTRIES, INC.
 HIGHWAY SAFETY PRODUCTS
 2525 STEWARTS FREEWAY, DALLAS TX 75207

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ITEM #	QTY	BILL OF MATERIALS
F3000	1	IMPACT HEAD
F1303	1	W-BEAM GUARDRAIL END SECTION, 12 GA.
F1304	1	W-BEAM GUARDRAIL CENTER SECTION, 12 GA.
G1203	1	W-BEAM GUARDRAIL, 12 GA.
S730	2	*FOUNDATION SOIL TUBE, 152mm x 203mm x 1830mm
E740	1	PIPE SLEEVE
E750	1	BEARING PLATE, 200mm x 200mm x 16mm
S760	1	CABLE ANCHOR BOX
E770	1	BCT CABLE ANCHOR ASSEMBLY
E780	1	GROUND STRUT
P650	2	140mm x 190mm x WOOD POSTS
P671	5	150mm x 200mm x WOOD CRT POST
P675	5	150mm x 200mm x TIMBER BLOCKOUT
		HARDWARE
B580122	24	16mm Dia. x 32mm SPLICE BOLT
B580754	2	16mm Dia. x 191mm HEX BOLT
B581004	2	16mm Dia. x 254mm HEX BOLT
B581002	1	16mm Dia. x 254mm H.G.R. BOLT (POST 2 ONLY)
B581802	5	16mm Dia. x 457mm H.G.R. BOLT (POST 3 THRU 7)
N050	34	16mm Dia. H.G.R. NUT (SPLICE 24, SOIL TUBES 2, STRUT 2, POST 2, POST 3 THRU 7, s.)
W050	10	H.G.R. WASHER
N100	2	25mm ANCHOR CABLE HEX NUT
W100	2	25mm ANCHOR CABLE WASHER
E350	2	10mm x 76mm LAG SCREW
SB58A	8	CABLE ANCHOR BOX SHOULDER BOLTS
N055A	8	13mm A325 STRUCTURAL NUT
W050A	16	27mm OD X 14mm ID A325 STR. WASHER

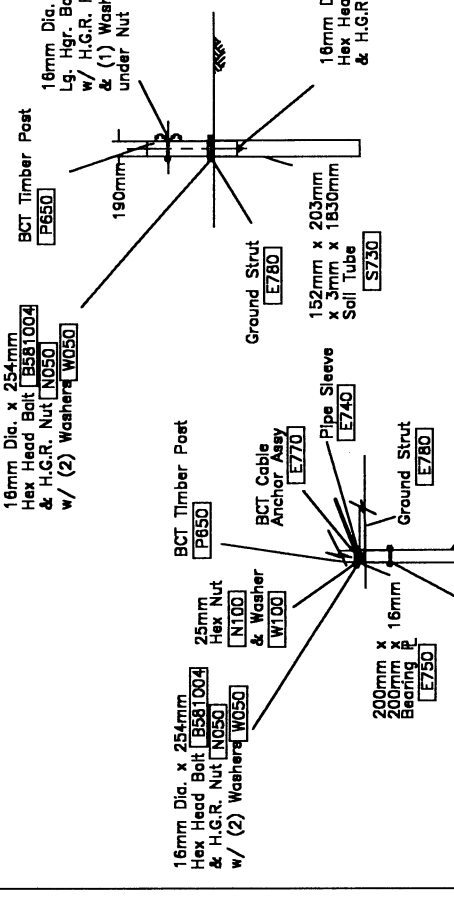
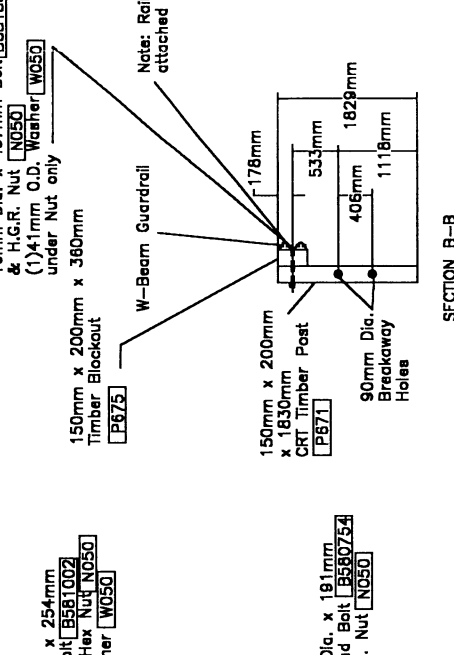
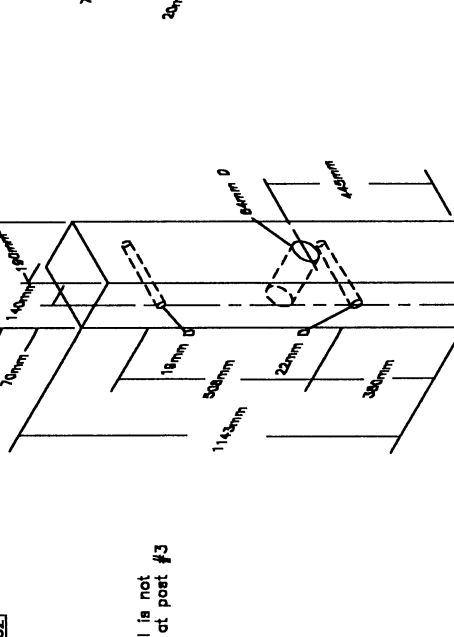
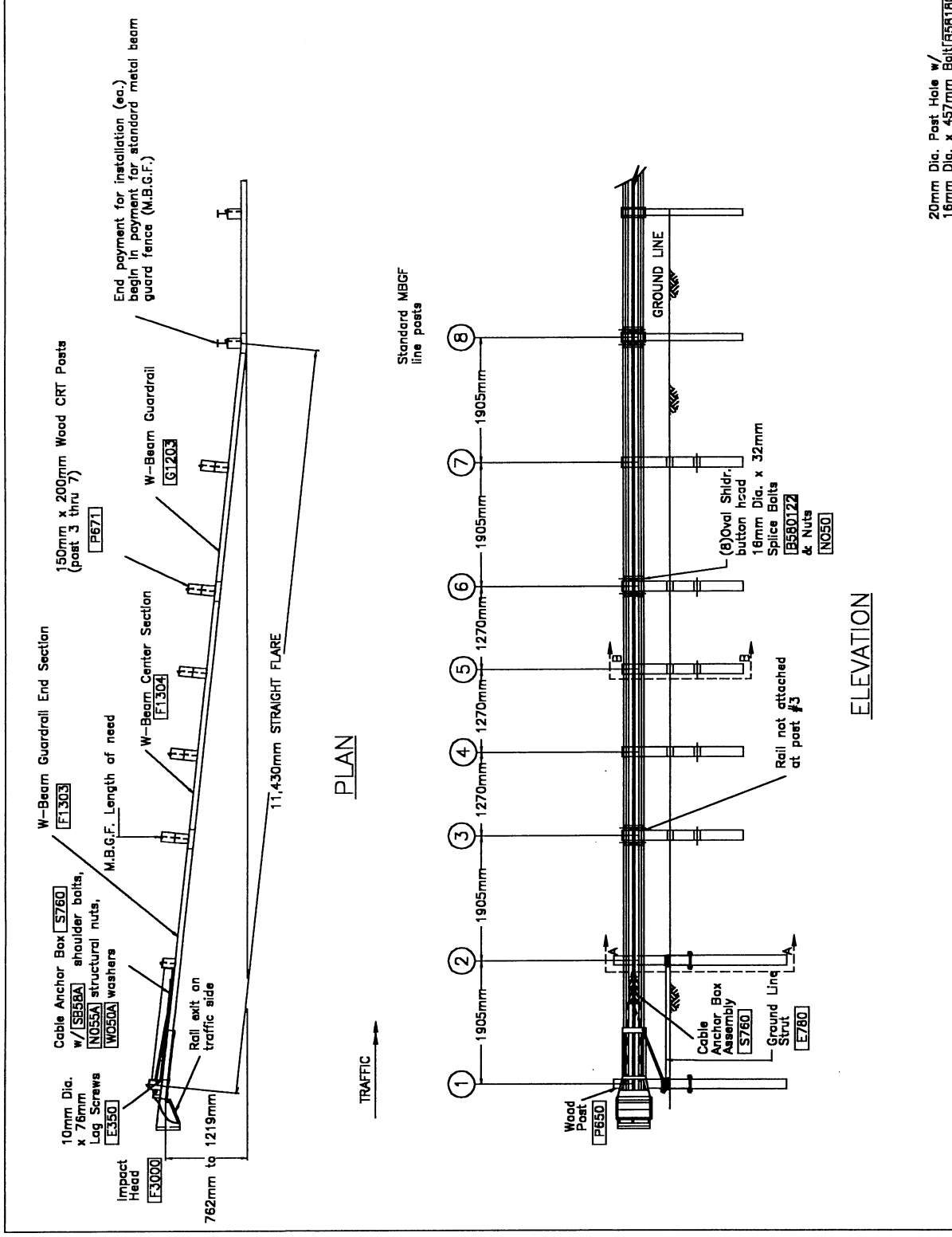
Foundation Tube Options For Posts 1 & 2

- *1829mm Split Foundation Tubes S730
- *1829mm Solid Foundation Tubes E731
- *1524mm Foundation Tubes S735 W/Soil Plates SP600
- *1372mm Foundation Tubes E735 W/Soil Plates SP600



GENERAL NOTES

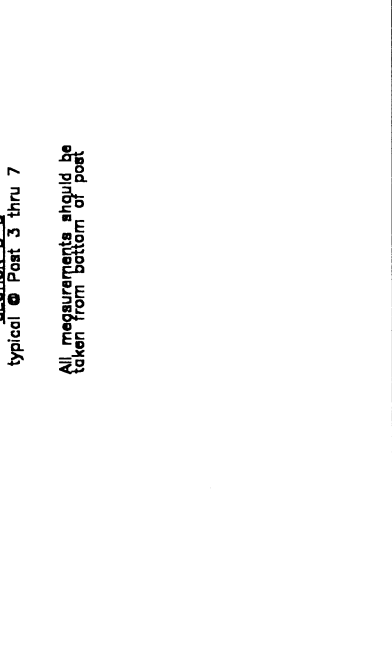
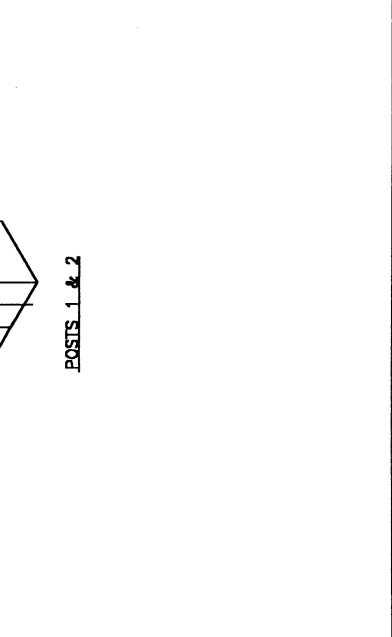
- Wood posts are required with the FLEAT.
- All bolts, nuts, cable assemblies, cable anchors and bearing plates shall be galvanized.
- The soil tubes shall not protrude more than 100mm above ground (measured along a 1500mm cord). Site grading may be necessary to meet this requirement.
- The soil tubes may be driven with an approved driving head. Soil tubes should not be driven with the wood post in the tube. If the tubes are placed in drilled holes, the backfill material must be satisfactorily compacted to prevent settlement.
- When rock is encountered during excavation, a 300mm Dia. post hole, 500mm deep may be used if approved by the engineer. Granular material will be placed in the bottom of the hole approx. 65mm deep to provide drainage. The soil tubes will be field cut to length, placed in the hole and backfilled with adequately compacted material excavated from the hole.
- The breakaway cable assembly must be taut. A locking device, (vice grips or channel lock pliers) should be used to prevent the cable from twisting when tightening nuts.
- The wood blockouts should be "toe nailed" to the rectangular wood posts to prevent them from turning when the wood shrinks.
- For curb installations, the soil tubes and posts shall be installed at the proper ground elevation behind the curb. The posts will require field drilling new holes to accommodate the rail to the post connecting bolt to maintain the proper height of the rail above the gutter pan. The excess post length above the rail will be removed if directed by the engineer.



Flared Energy Absorbing Terminal
(FLEAT - 350) Assembly
762 to 1219mm Offset

DRAWN/REVISED BY DATE REVISED DWG. NO. PG. OF
JRR/SML 9/03/98 FLT-M 1 1

ROAD SYSTEMS INC.
BIG SPRING, TX
(915)-263-2435 or (815)-464-5917



PARTIAL VIEW OF POST 1