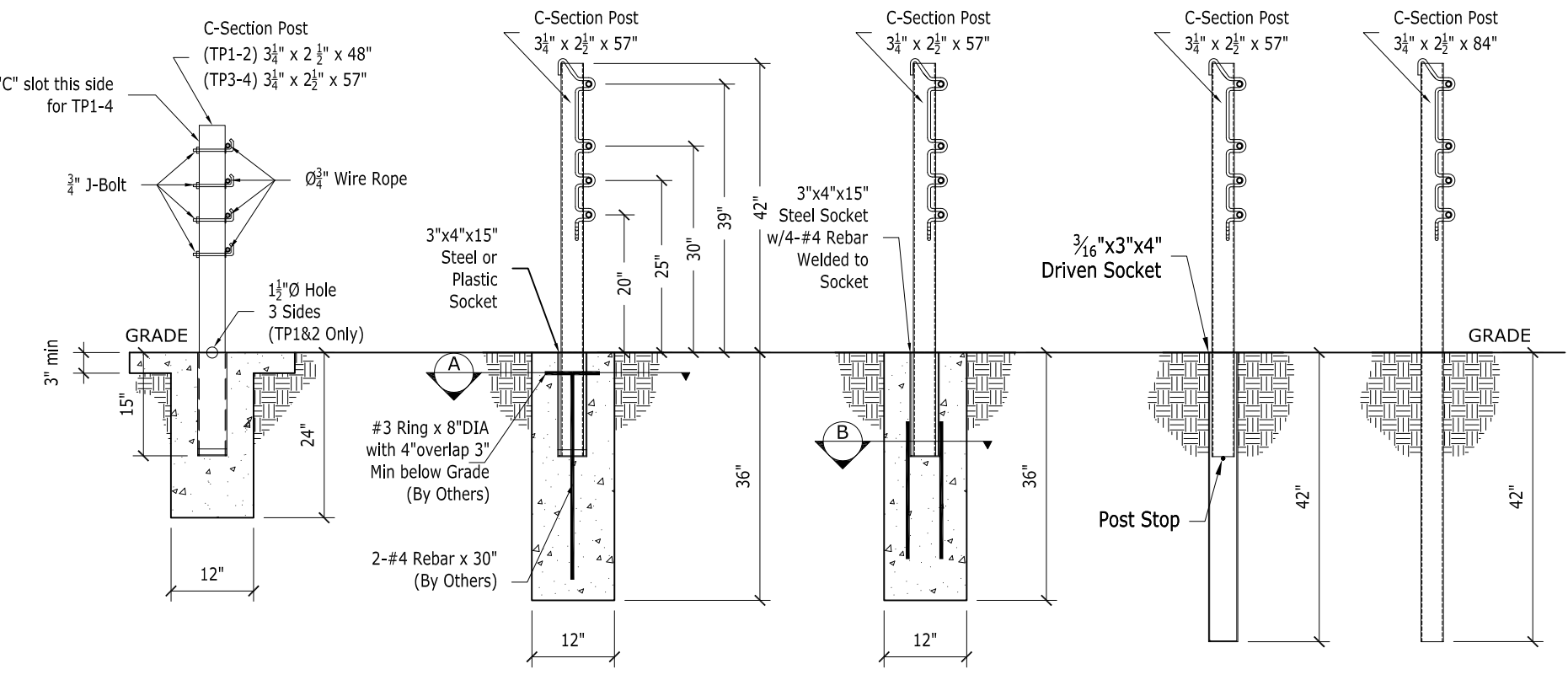
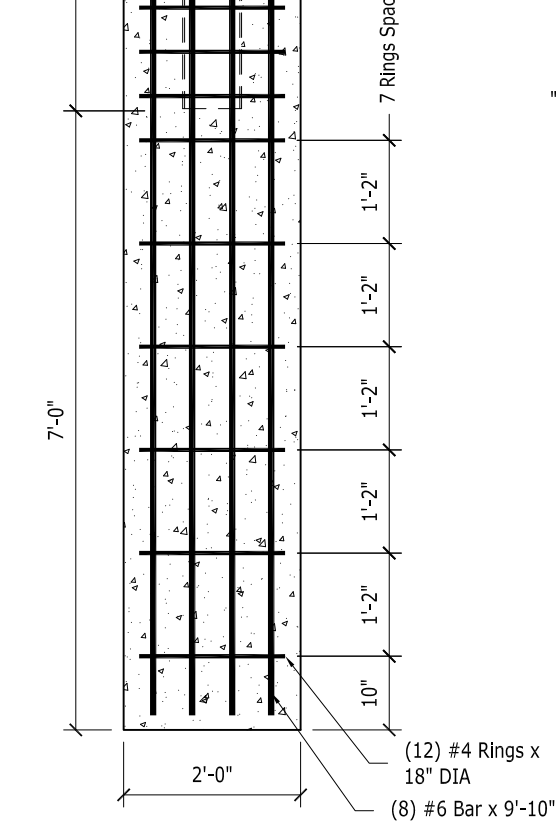
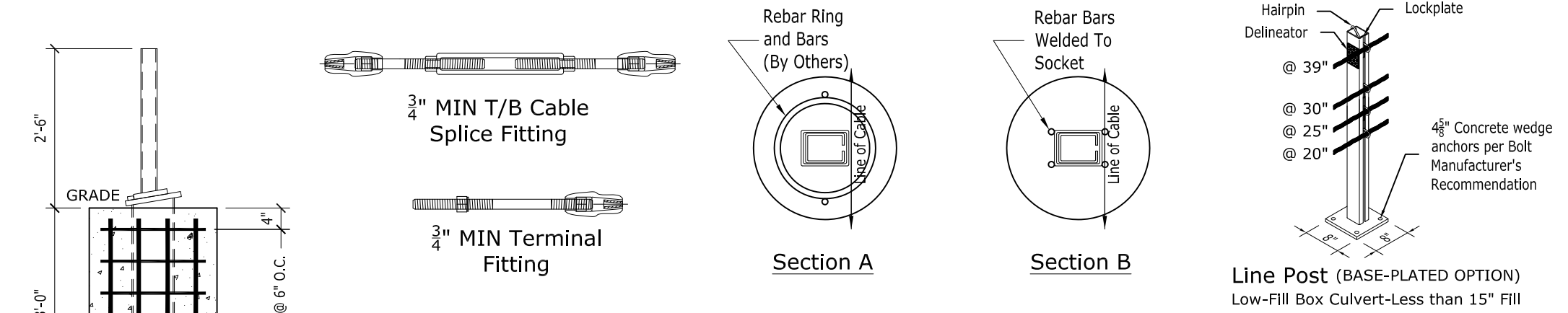


- ### GENERAL NOTES:
- For additional information contact Gibraltar, Inc. at 1-833-715-0810 or see the manufacturer's product manual.
  - All concrete shall be per specification; minimum 2500 PSI.
  - The Cable Barrier System shall be installed on shoulders or on medians with slopes of 6:1 or flatter. If installed on slopes steeper than 6:1 up to 4:1 the TL-4 system performs as a TL-3 and Gibraltar must be contacted for various guidelines related to placement.
  - The Cable Barrier System is accepted by the FHWA Test Level - 4.
  - See the specification for delineation.
  - Rock Clause: Where solid rock is encountered:
    - For socketed post, continue digging 12" diameter, 15" deep into rock or the required plan depth, whichever comes first.
    - For driven post, core drill a 4" diameter hole 18" deep into rock or the required plan depth, whichever comes first.
    - For Anchor post, continue digging 24" diameter, 30" deep into rock or the required plan depth, whichever comes first.
  - Tolerances:
    - Linepost = 3" (max) out of plumb, at top
    - Cable height = ±1"
    - Anchor Post ± 5" off of Cable Reference Line
  - The Gibraltar cable barrier system shall be installed in NCHRP Report 350 standard compacted soil. Soil must be well drained.
  - All non-welded rebar by others.
  - Minimum recommended line post foundation.
    - Without mowstrip, 36" Deep x 12" diameter foundations with #3 rebar ring x 8" diameter with two #4 rebar vertical bars 30" long or 30" welded rebar socket.
    - With 4" minimum depth hot mix asphalt, 30" deep x 12" diameter foundations with #3 rebar ring x 8" diameter with two #4 rebar vertical bars 30" long or 30" welded rebar socket.
    - With 3" minimum depth concrete mowstrip, 24" deep x 12" diameter foundations. (No rebar required).
    - Direct drive driven post and driven socket 42" deep.



### Cable Tension Chart\*

-10 °F	8000
0 °F	7600
10 °F	7200
20 °F	6800
30 °F	6400
40 °F	6000
50 °F	5600
60 °F	5200
70 °F	4800
80 °F	4400
90 °F	4000
100 °F	3600
110 °F	3200

### C-Section Post

Deflection	
Deflection	Post Spacing
9'-3"	30 FT
9'-0"	28 FT
8'-0"	20 FT
7'-0"	12 FT
6'-8"	10 FT

\*Allowable Deviation from Chart +/- 10%

**Cable Release & Anchor Post**      **Terminal Post** (Shown with Concrete Mowstrip)      **Line Post** (Rebar Ring/Bars Socket Option)      **Line Post** (Welded Rebar Socket Option)      **Line Post** (Driven Socket Option)      **Line Post** (Driven Post Option)

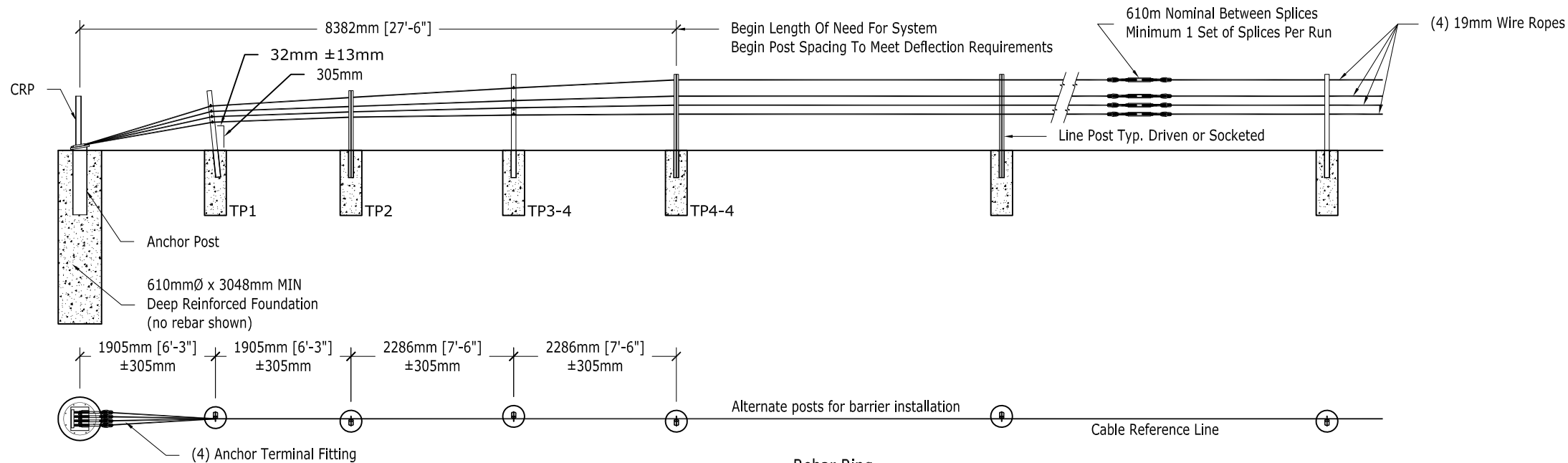
**PROPRIETARY TO GIBRALTAR**

**TL-4 4 Cable System Layout**

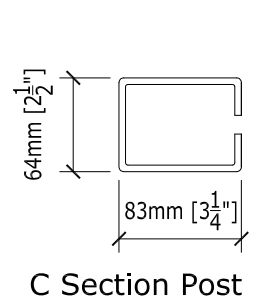
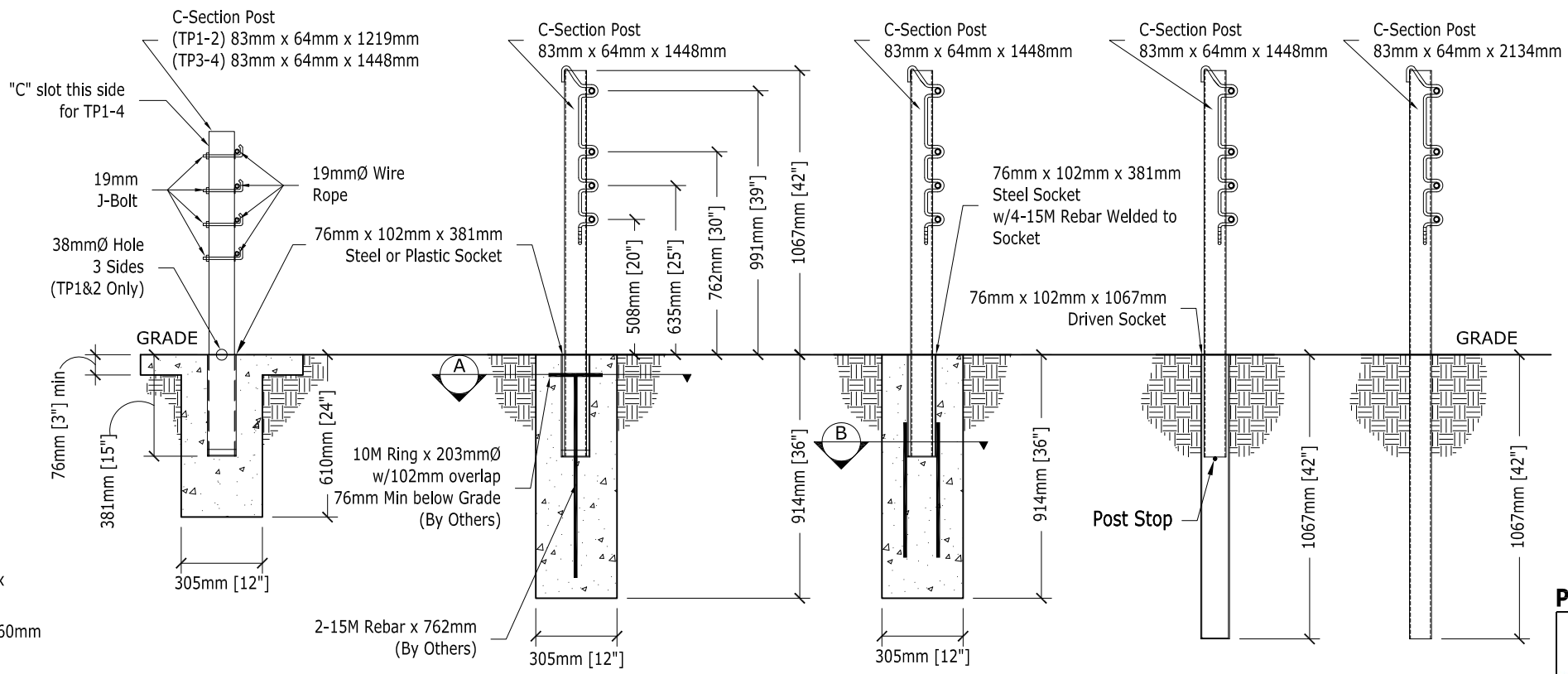
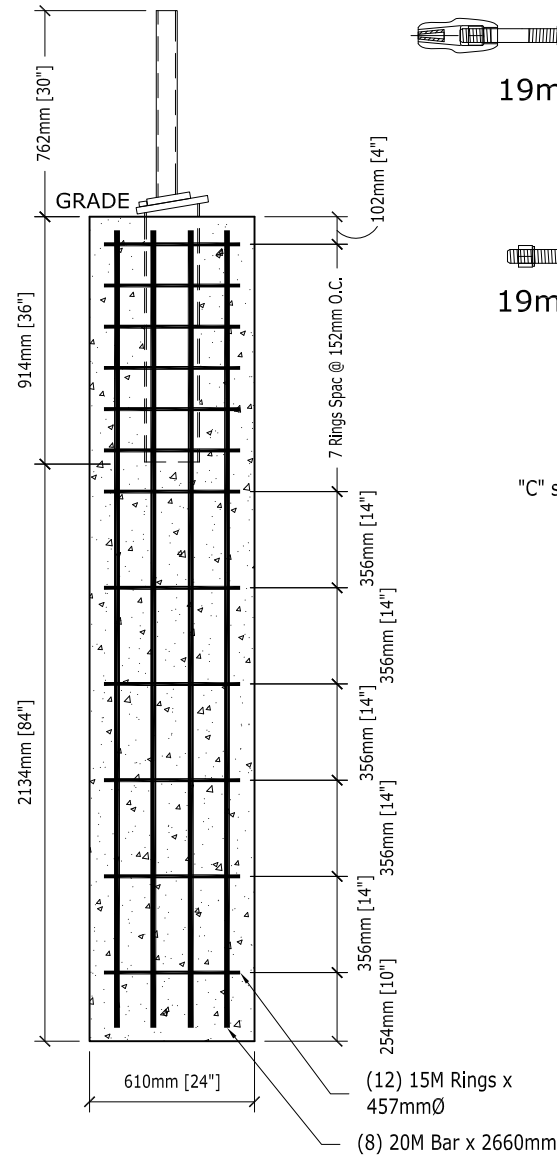
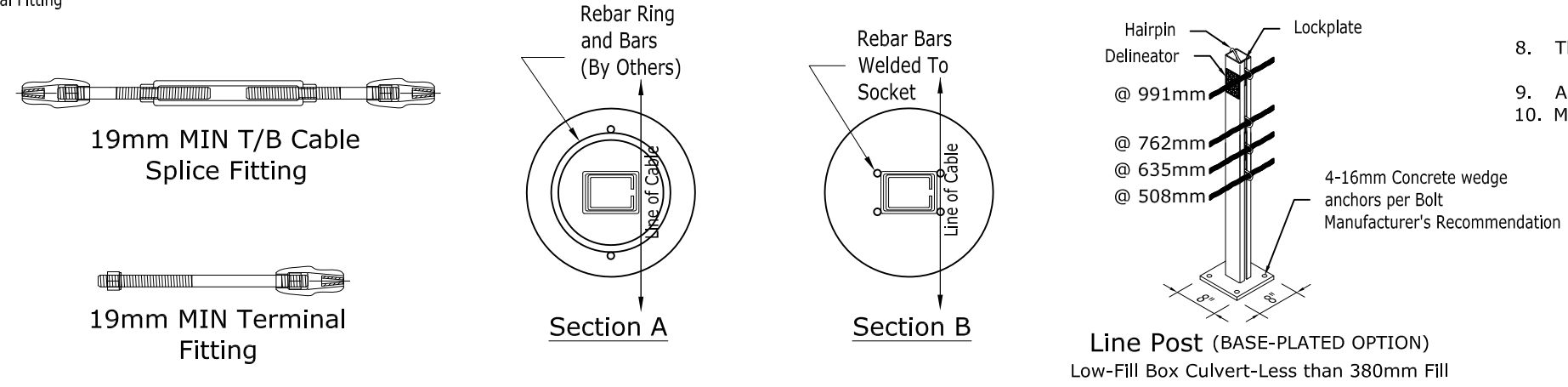
Gibraltar Cable Barrier Systems

Scale: <b>NTS</b>	Date: <b>10-18-17</b>
Layout: <b>ANSI B</b>	Drafter: <b>BH</b>

Sheet: <b>01 OF 01</b>	Rev: <b>11</b>	Rev Date: <b>10-18-17</b>	Approver: <b>BH</b>
Job # <b>XXX</b>	Gibraltar Job # <b>XXX</b>	County: <b>XXX</b>	
##/##/## -			



- ### GENERAL NOTES:
- For additional information contact Gibraltar, Inc. at 1-833-715-0810 or see the manufacturer's product manual.
  - All concrete shall be per specification; minimum 17.2MPa (2500psi).
  - The Cable Barrier System shall be installed on shoulders or on medians with slopes of 6:1 or flatter. If installed on slopes steeper than 6:1 up to 4:1 the TL-4 system performs as a TL-3 and Gibraltar must be contacted for various guidelines related to placement.
  - The Cable Barrier System is accepted by the FHWA Test Level - 4.
  - See the specification for delineation.
  - Rock Clause: Where solid rock is encountered:
    - For socketed post, continue digging 305mmØ, 381mm deep into rock or the required plan depth, whichever comes first.
    - For driven post, core drill a 102mmØ hole 457mm deep into rock or the required plan depth, whichever comes first.
    - For Anchor post, continue digging 610mmØ, 762mm deep into rock or the required plan depth, whichever comes first.
  - Tolerances:
    - Linepost = 76mm(max) out of plumb, at top
    - Cable height = ±25.4mm
    - Anchor Post ± 127mm off of Cable Reference Line
  - The Gibraltar cable barrier system shall be installed in NCHRP Report 350 standard compacted soil. Soil must be well drained.
  - All non-welded rebar by others.
  - Minimum recommended line post foundation.
    - Without mowstrip, 914mm deep x 305mmØ foundations with 10M rebar ring x 203mmØ with 2-15M rebar vertical bars 762mm long or 762mm welded rebar socket.
    - With 102mm minimum depth hot mix asphalt, 762mm deep x 305mmØ foundations with 10M rebar ring x 203mmØ with 2-15M rebar vertical bars 762mm long or 762mm welded rebar socket.
    - With 76mm minimum depth concrete mowstrip, 610mm deep x 305mmØ foundations. (No rebar required).
    - Direct drive driven post and driven socket 1067mm deep.



°C	kg of Force
-23.3 °C	3629
-17.8 °C	3447
-12.2 °C	3266
-6.6 °C	3084
-1.1 °C	2903
4.4 °C	2722
10 °C	2540
15.6 °C	2359
21.1 °C	2177
26.7 °C	1996
32.2 °C	1814
37.7 °C	1633
43.3°C	1452

Deflection	Post Spacing
2.82M	9.14M
2.44M	6.10M
2.03M	3.05M

Cable Release & Anchor Post

Terminal Post  
(Shown with Concrete Mowstrip)

Line Post  
(Rebar Ring/Bars Socket Option)

Line Post  
(Welded Rebar Socket Option)

Line Post  
(Driven Socket Option)

Line Post  
(Driven Post Option)

**PROPRIETARY TO GIBRALTAR**

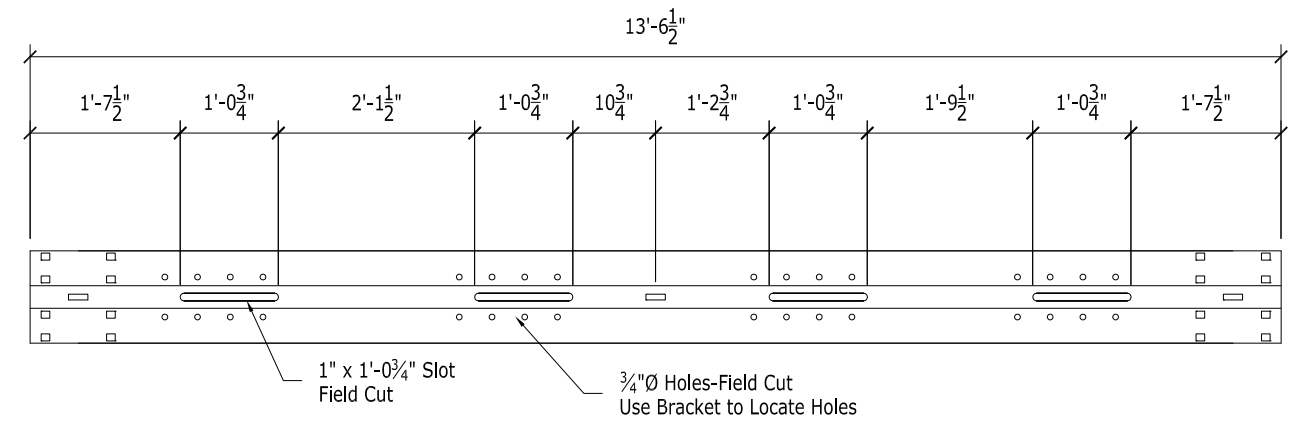
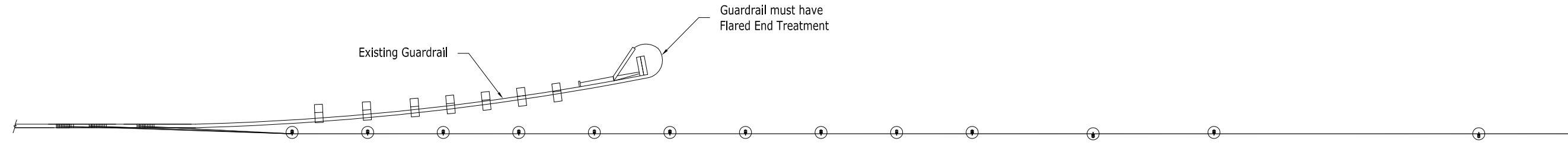
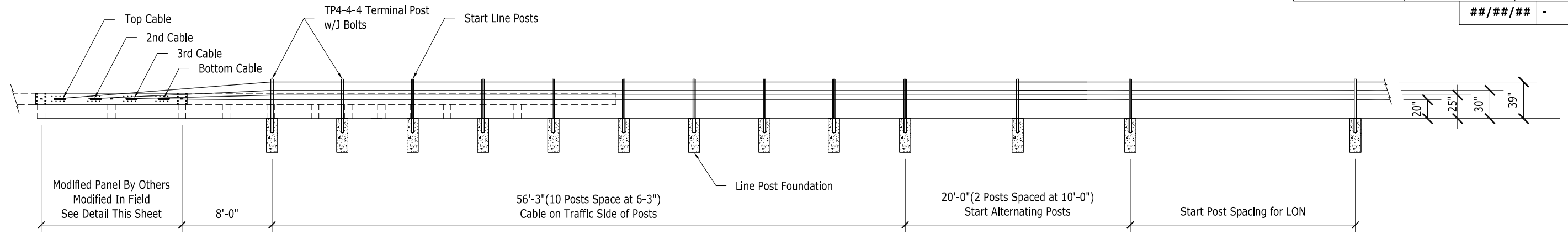
**GIBRALTAR CABLE BARRIER**

**TL-4 4 Cable System Layout**

Gibraltar Cable Barrier Systems

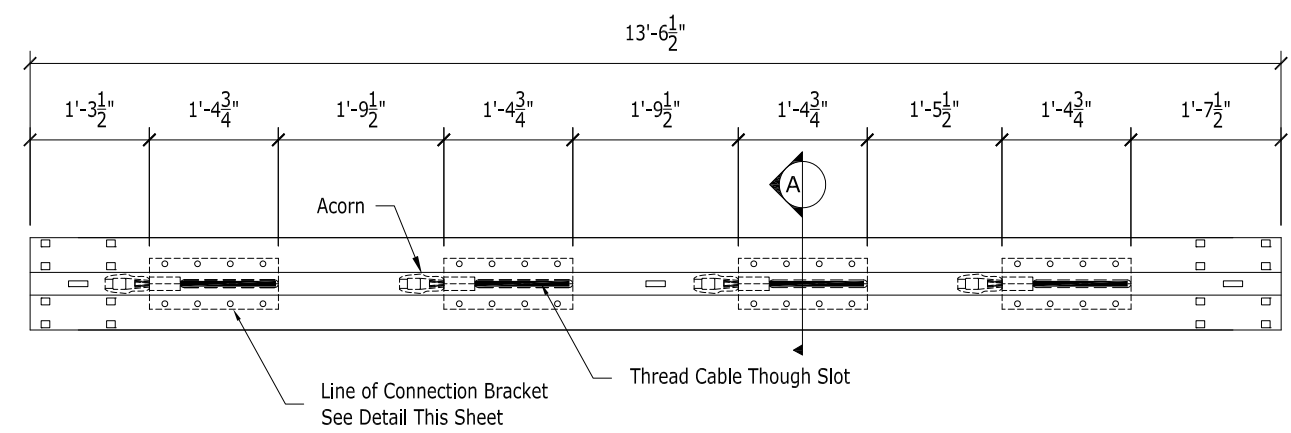
Scale: **NTS** Date: **10-18-17**

Layout: **ANSI B** Drafter: **BH**



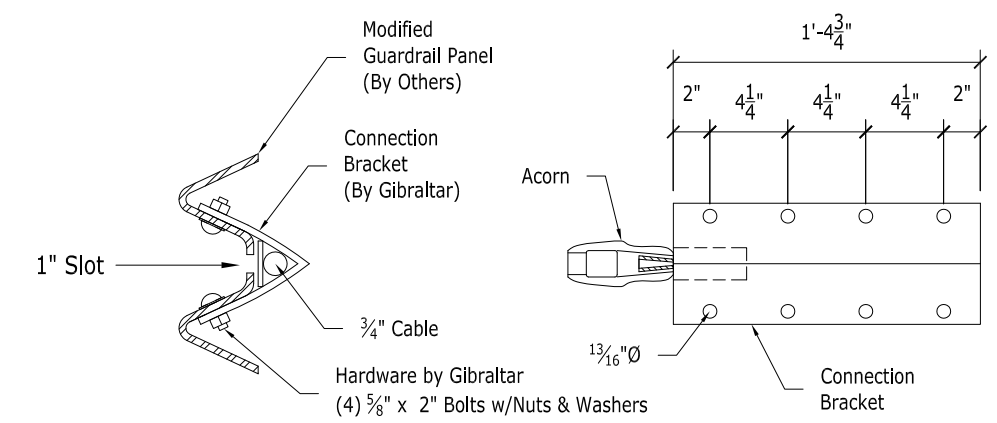
End View

Modified Guardrail Panel



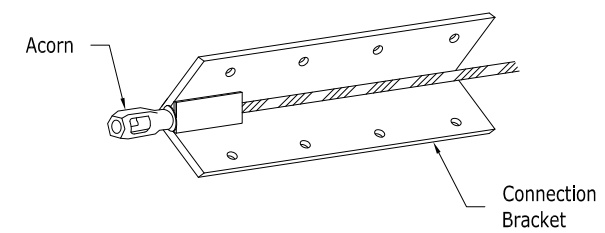
End View

Modified Guardrail Panel  
w/Connection Bracket Shown




Section A

Connection Bracket



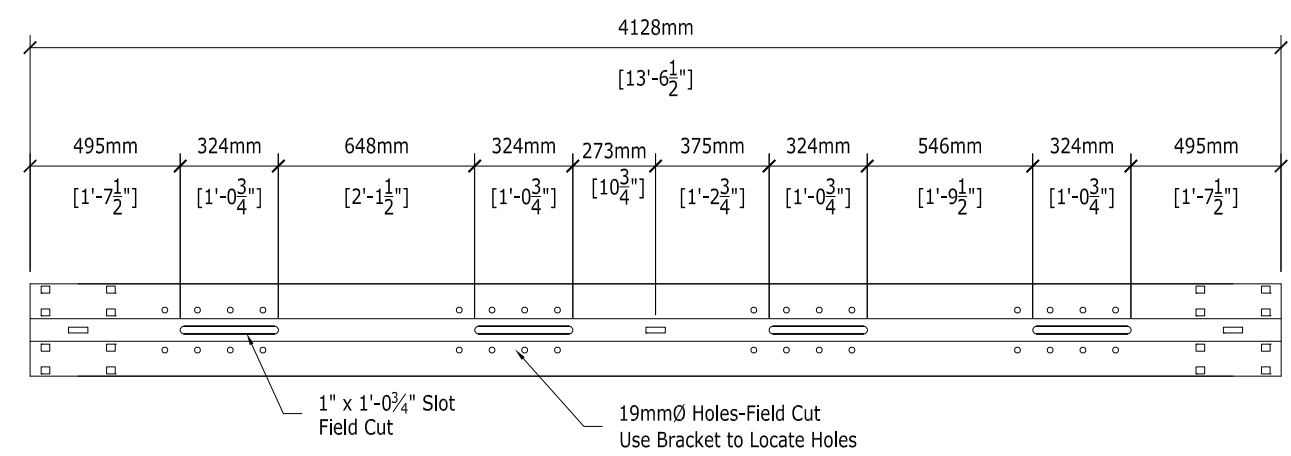
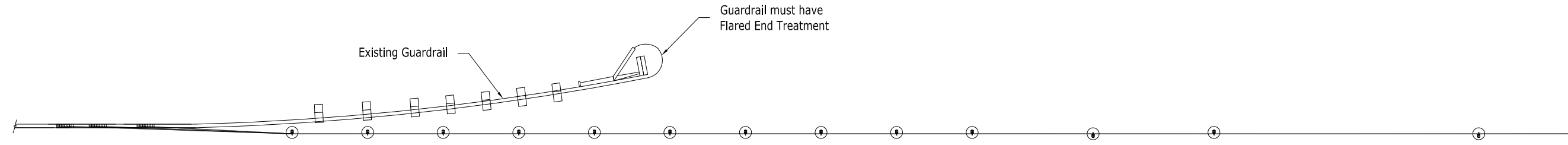
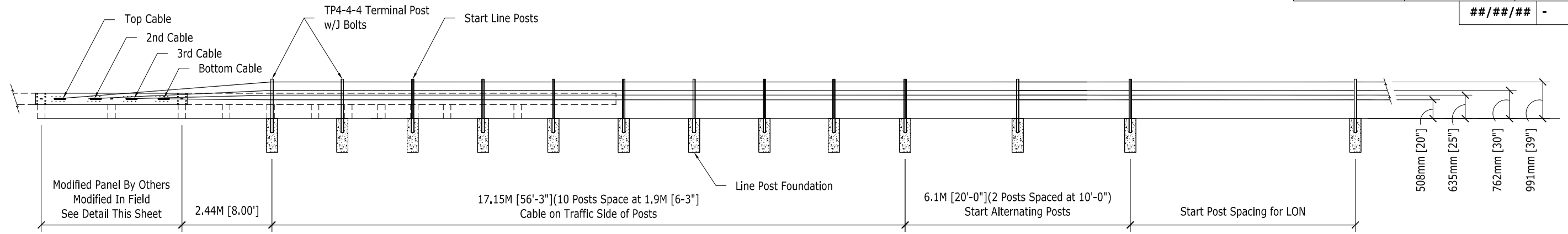
Connection Bracket

**PROPRIETARY TO GIBRALTAR**



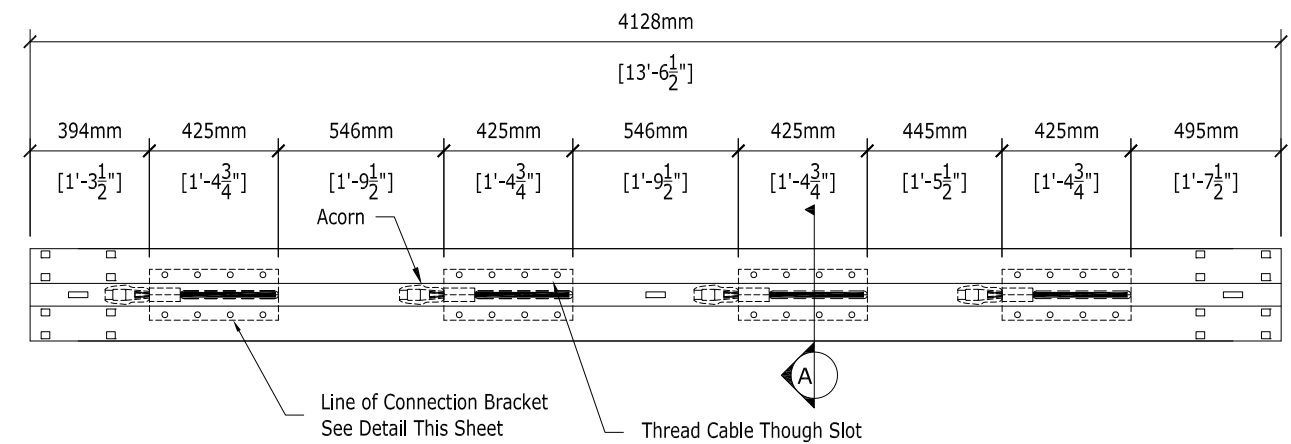
<b>TL4 4 Cable Guardrail Transition</b>	
Gibraltar Cable Barrier Systems	
Scale: <b>NTS</b>	Date: <b>XX-XX-XX</b>
Layout: <b>ANSI B</b>	Drafter: <b>BH</b>

Job #	Sheet: <b>01 OF 01</b>	Rev: <b>11</b>	Rev Date: <b>10-18-17</b>	Approver: <b>BH</b>
<b>XXX</b>	Gibraltar Job #	<b>XXX</b>	County: <b>XXX</b>	
		<b>##/##/##</b>	<b>-</b>	



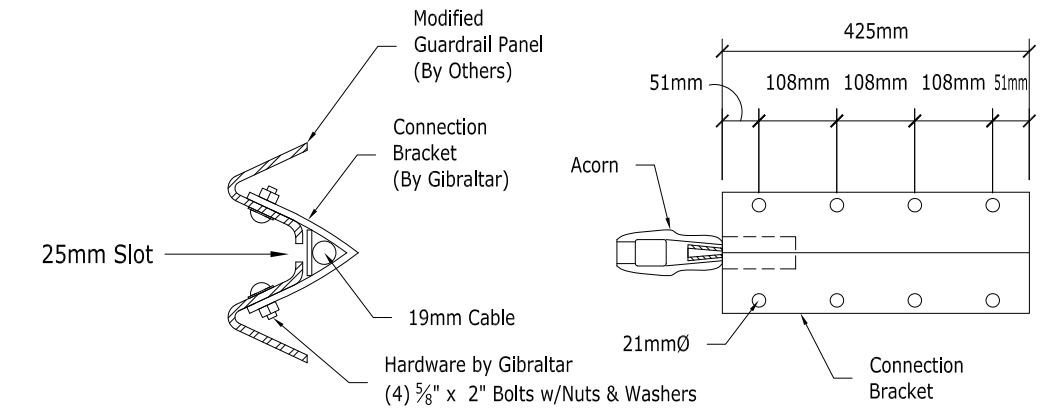
End View

Modified Guardrail Panel



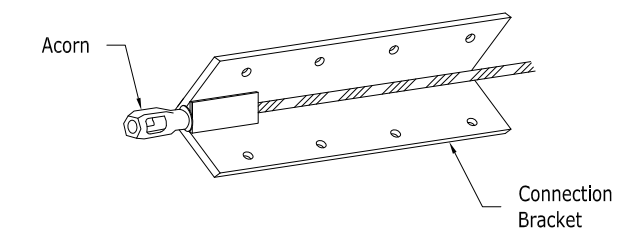
End View

Modified Guardrail Panel w/Connection Bracket Shown



Section A

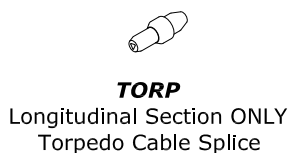
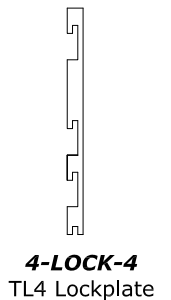
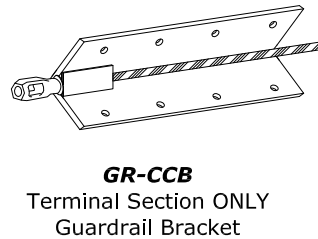
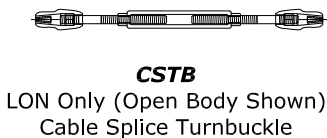
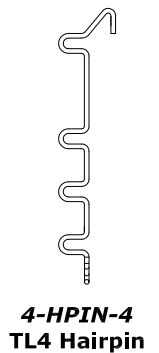
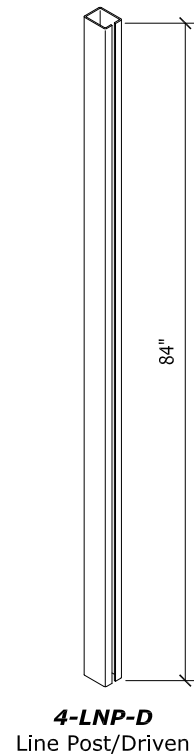
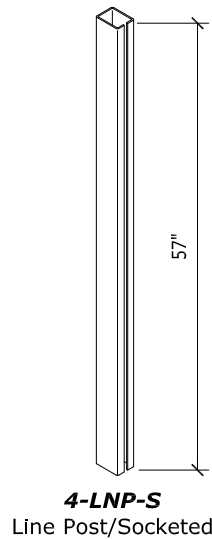
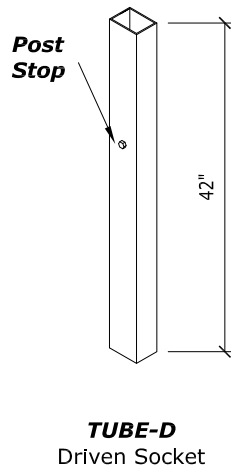
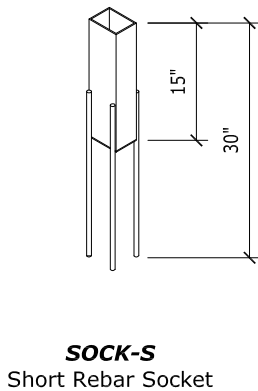
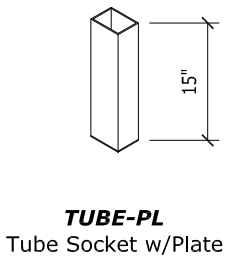
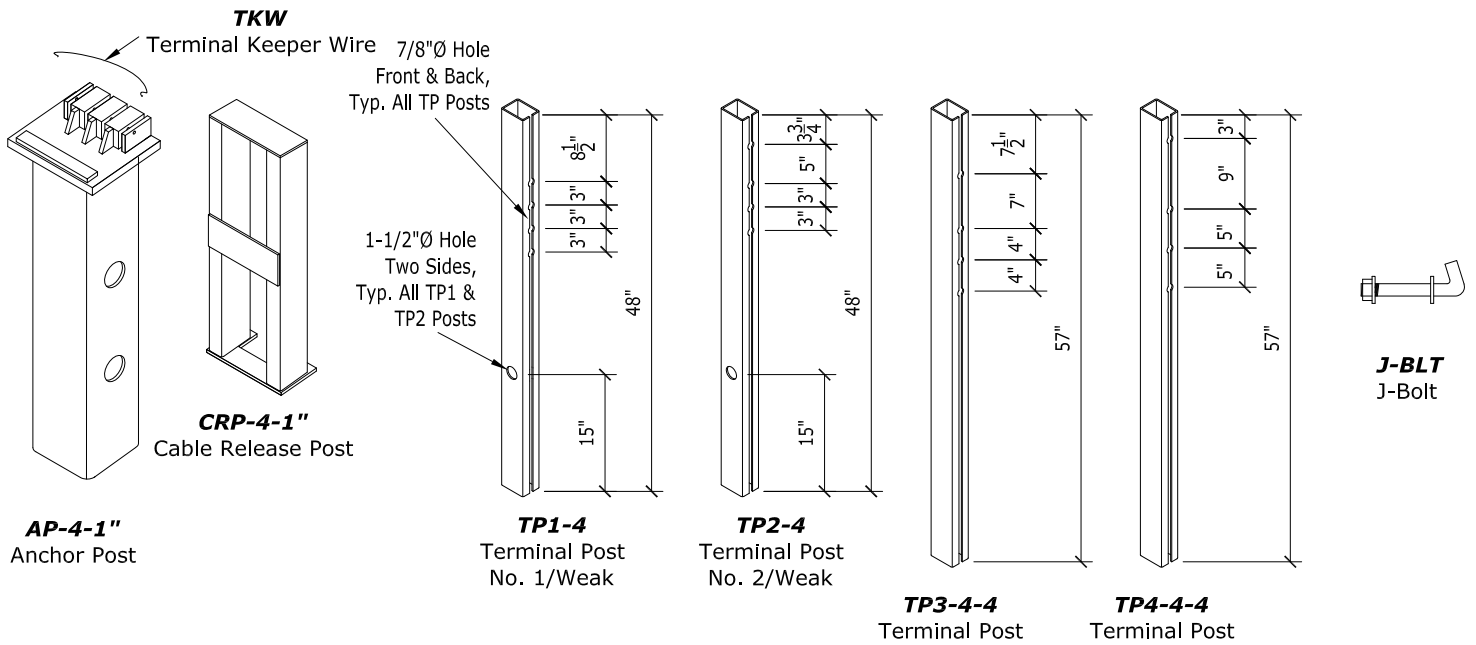
Connection Bracket



Connection Bracket

PROPRIETARY TO GIBRALTAR

	<b>TL4 4 Cable Guardrail Transition</b>	
	Gibraltar Cable Barrier Systems	
	Scale: <b>NTS</b>	Date: <b>XX-XX-XX</b>
	Layout: <b>ANSI B</b>	Drafter: <b>BH</b>



**PROPRIETARY TO GIBRALTAR**



**TL4-4 Cable System Parts**

Gibraltar Cable Barrier Systems

Scale:	NTS	Date:	10-18-17
Layout:	ANSI B	Drafter:	BH