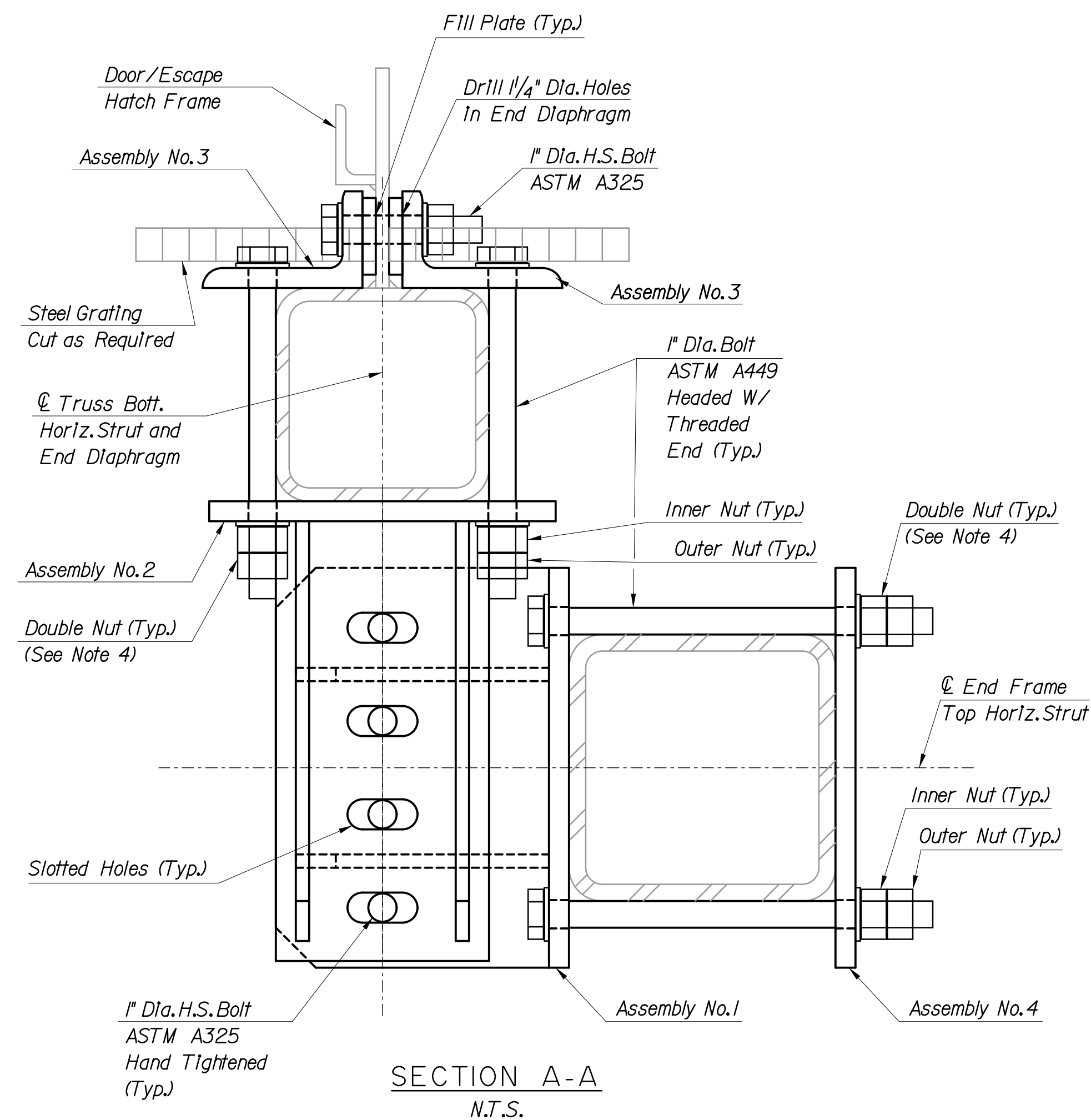
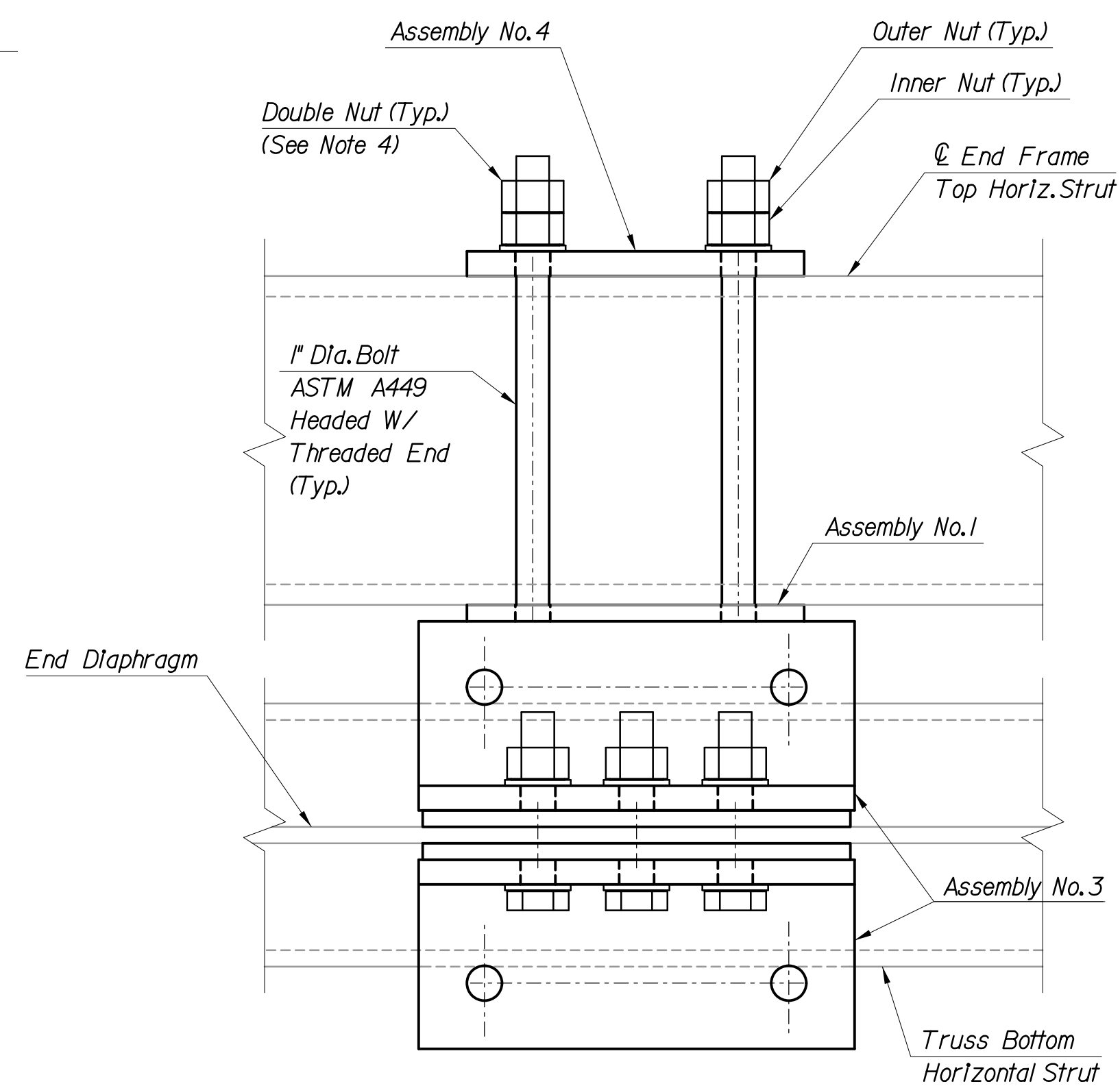


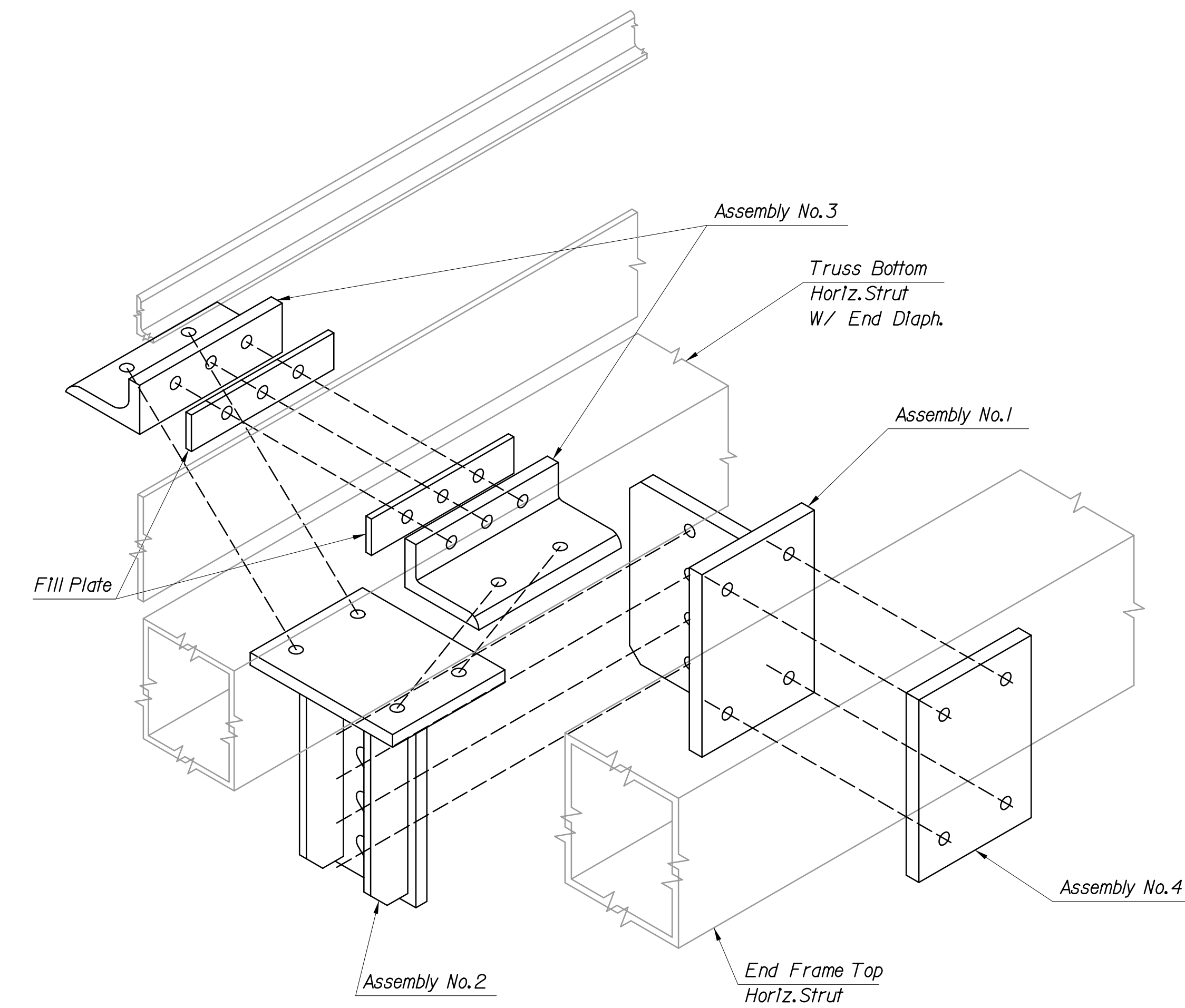
END FRAME ELEVATION  
1/2" = 1'-0"



SECTION A-A  
N.T.S.



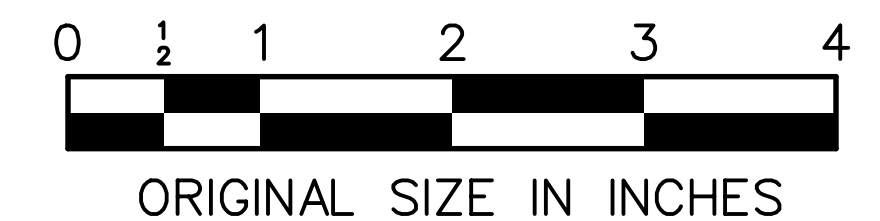
SECTION B-B  
N.T.S.



EXPLODED DETAIL OF BRACKET ASSEMBLY  
N.T.S.

NOTES:

1. All structural steel to be ASTM A709, Grade 50W (A588) (fy=50,000 psi) unless otherwise noted.
2. Nuts to be ASTM A563 and washers to be ASTM F436. Hot-dip galvanize all steel per ASTM A123 and all hardware, nuts, bolts, and washers per ASTM A153.
3. For details of Assemblies No.1 to 4 and F111 plate, see Sheet VM-24.
4. Bolts shall be snug tight with inner nuts. Outer nuts shall be fully tightened against inner nuts.
5. These Retrofit Details have been designed and sized predicated on the structures to be retrofitted have been erected to standard fabrication and erection tolerances as defined within the AASHTO LRFD Bridge Construction Specifications, 3rd Edition, 2010. Misfit or out of tolerance fabrication may be present at some structure locations. The Contractor shall field verify all relevant dimensions of the existing structure, including all sizes and offsets of members at bracket locations, and shall coordinate all findings with the fabricator prior to submission of the bracket shop drawings where field measured values differ from the As-Built Plans. The Contractor shall adjust bracket dimensions shown herein as necessary based on the field measurements.



NEW JERSEY TURNPIKE AUTHORITY <b>NEW JERSEY TURNPIKE</b>	
OVERHEAD SPAN VMS/VSLs SUPPORT STRUCTURES <b>BRACKET DETAILS - 1</b>	
OFFICE OF THE CHIEF ENGINEER NEW JERSEY TURNPIKE AUTHORITY WOODBIDGE NEW JERSEY	2016 STANDARD DRAWING <b>VM-23</b>

APP.	NO.	DATE	REVISION
	0	11/16	ORIGINAL DRAWING

CONTRACT NO.

SHEET NO. OF