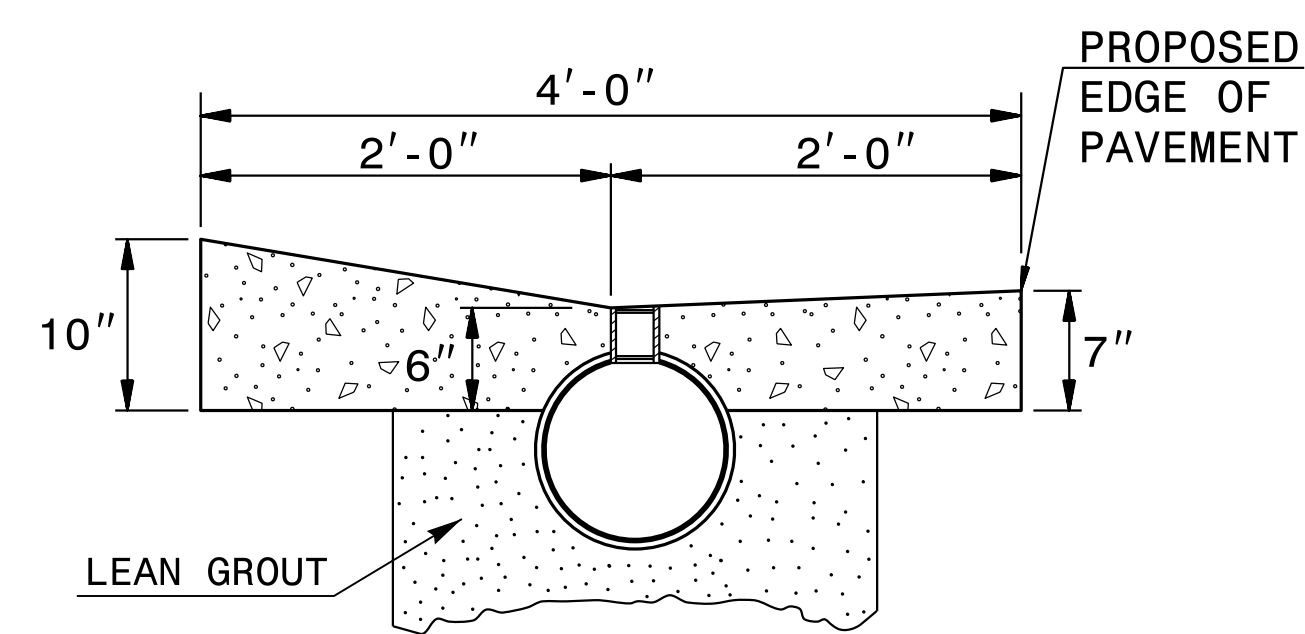
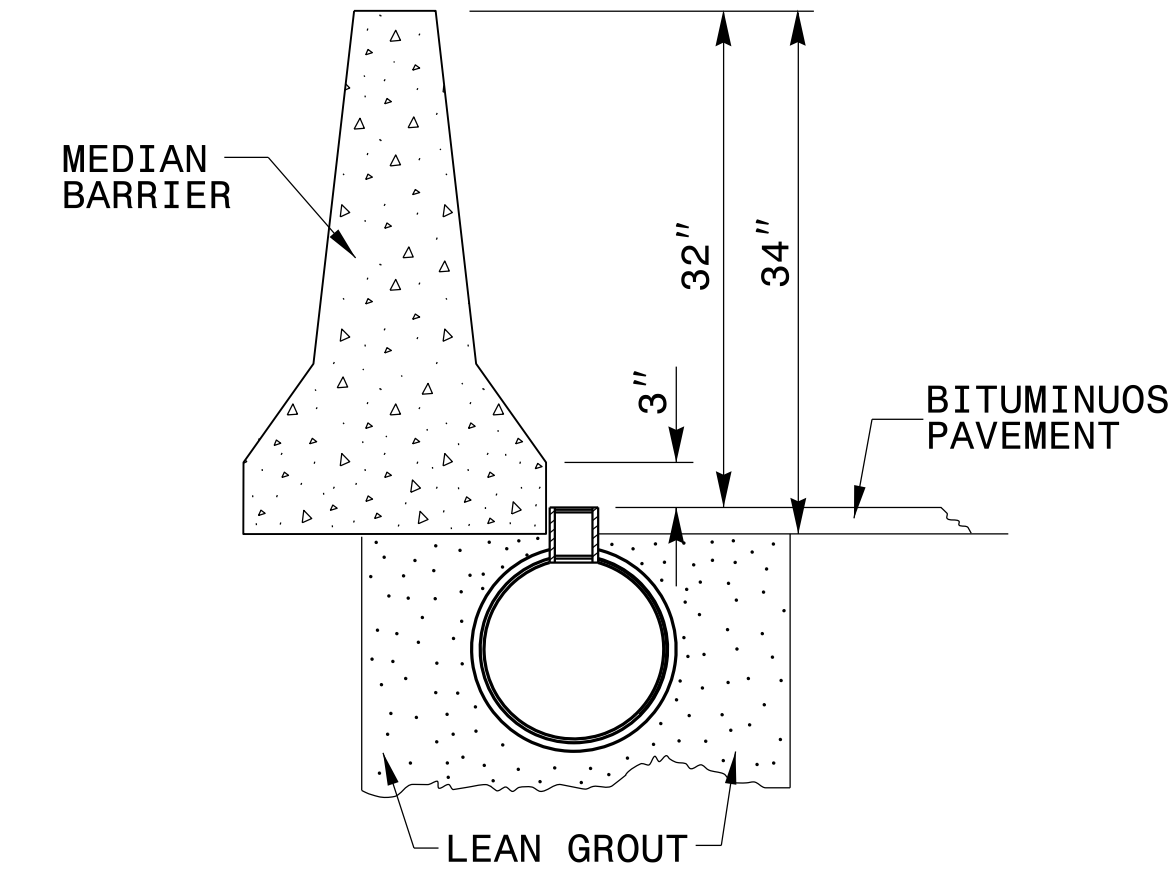


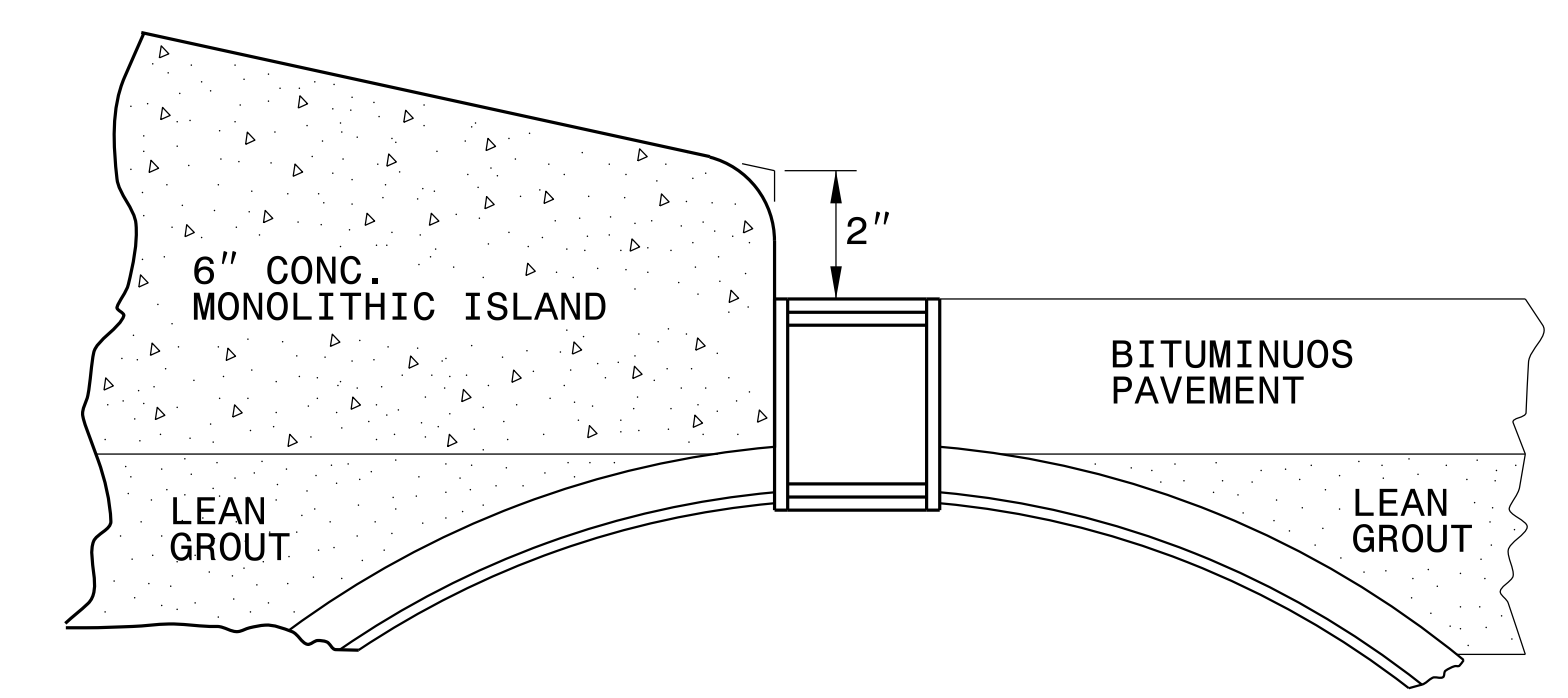
**ALTERNATE NO. 1**



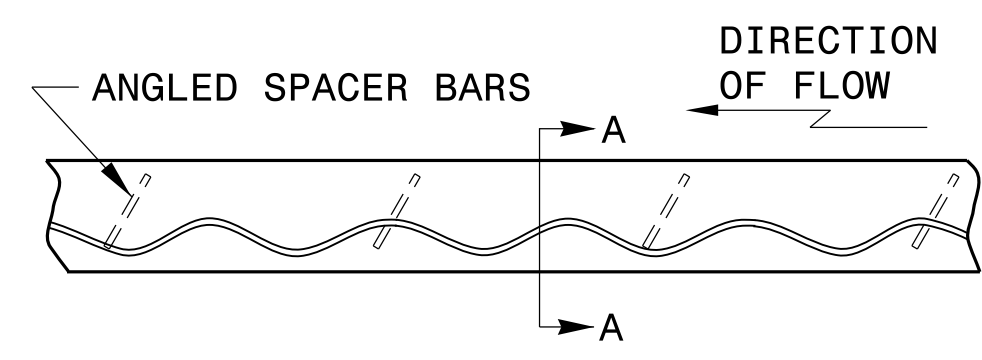
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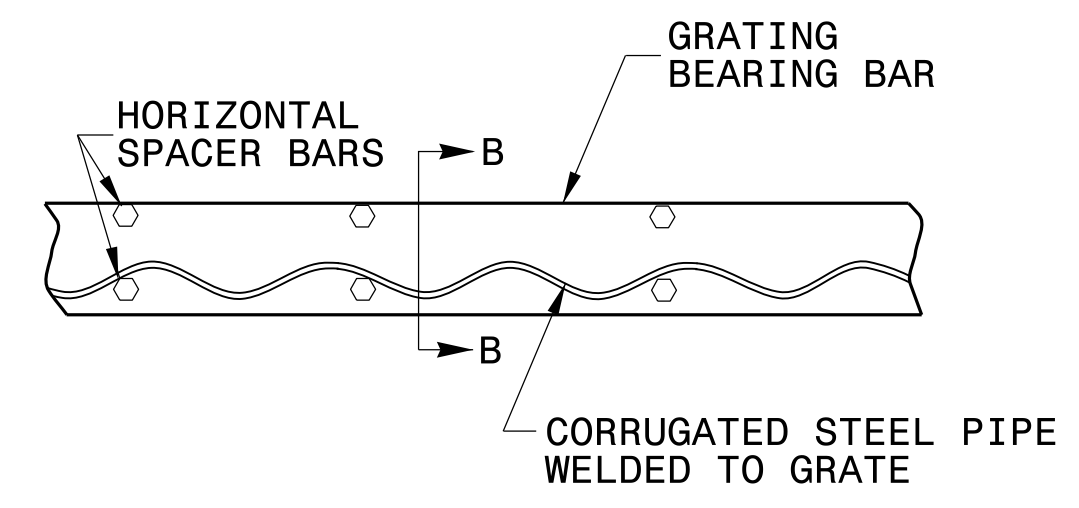
**ALTERNATE NO. 3**



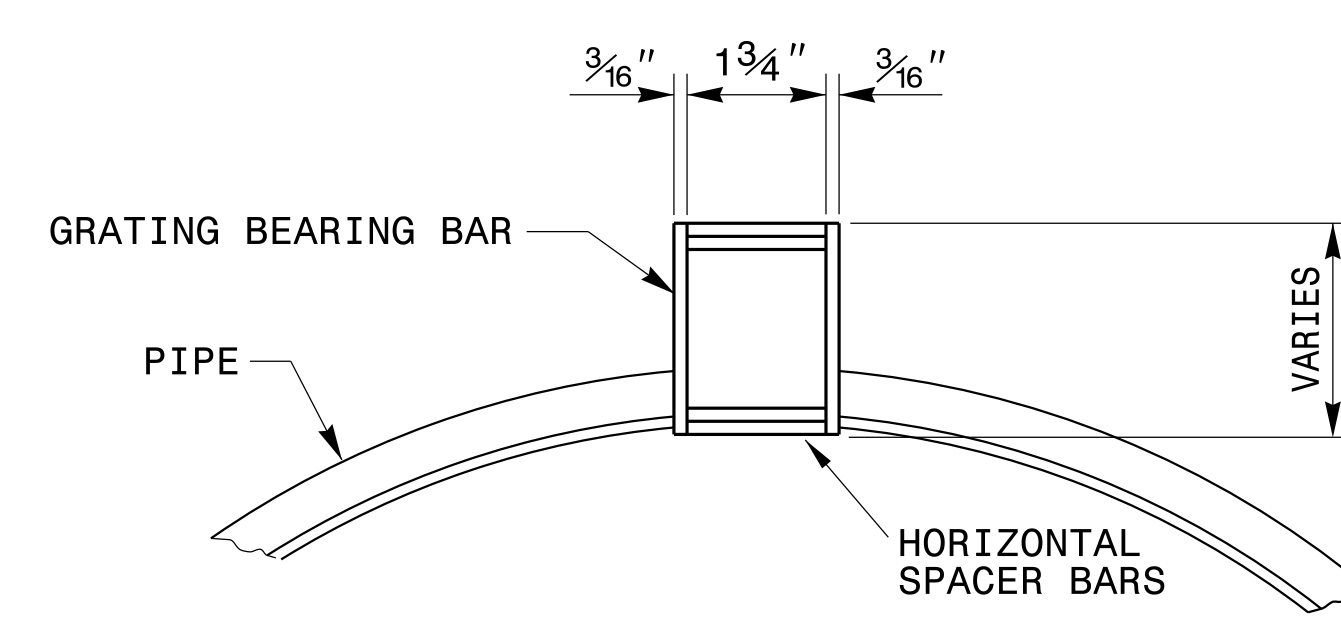
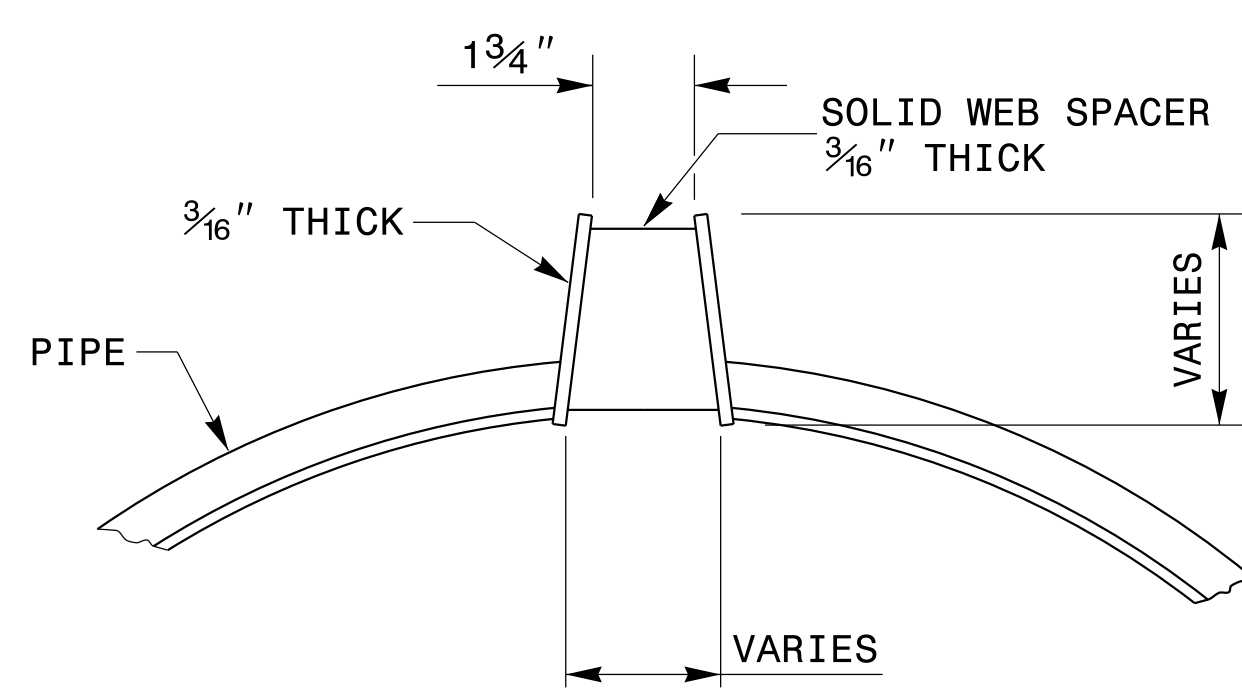
**ALTERNATE NO. 4**



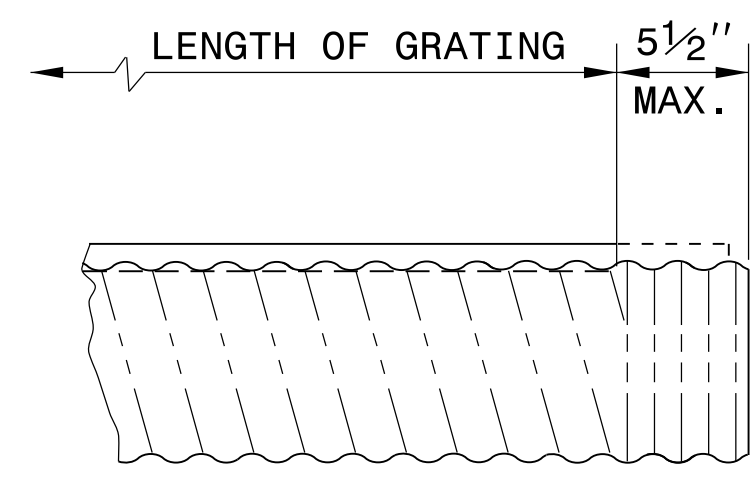
**SECTION A-A**



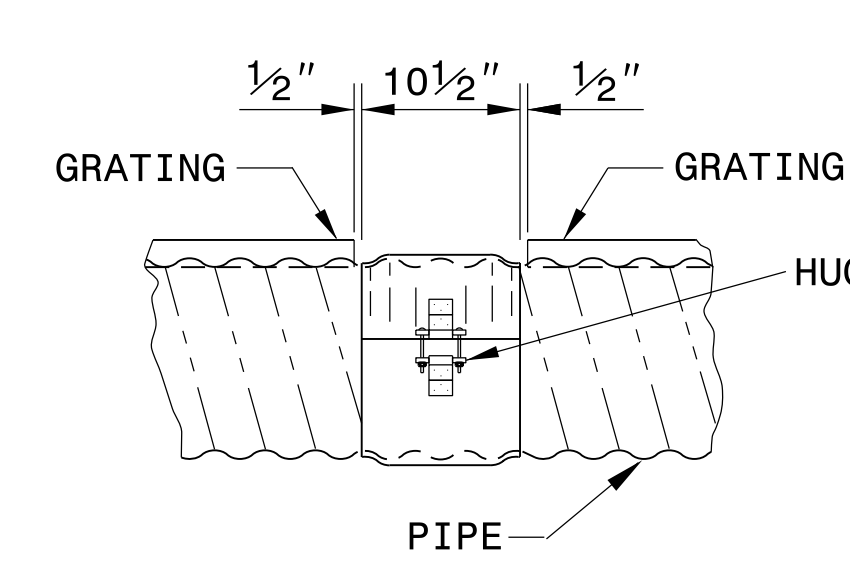
**SECTION B-B**



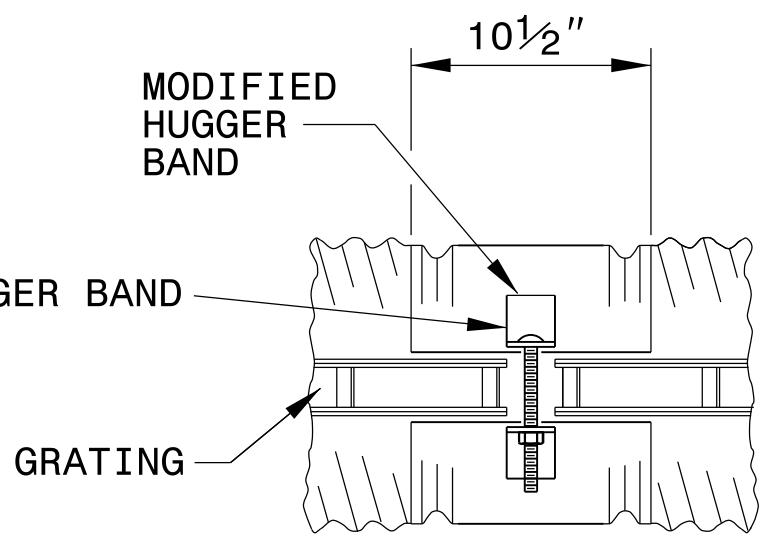
**TYPICAL GRATE DETAILS**



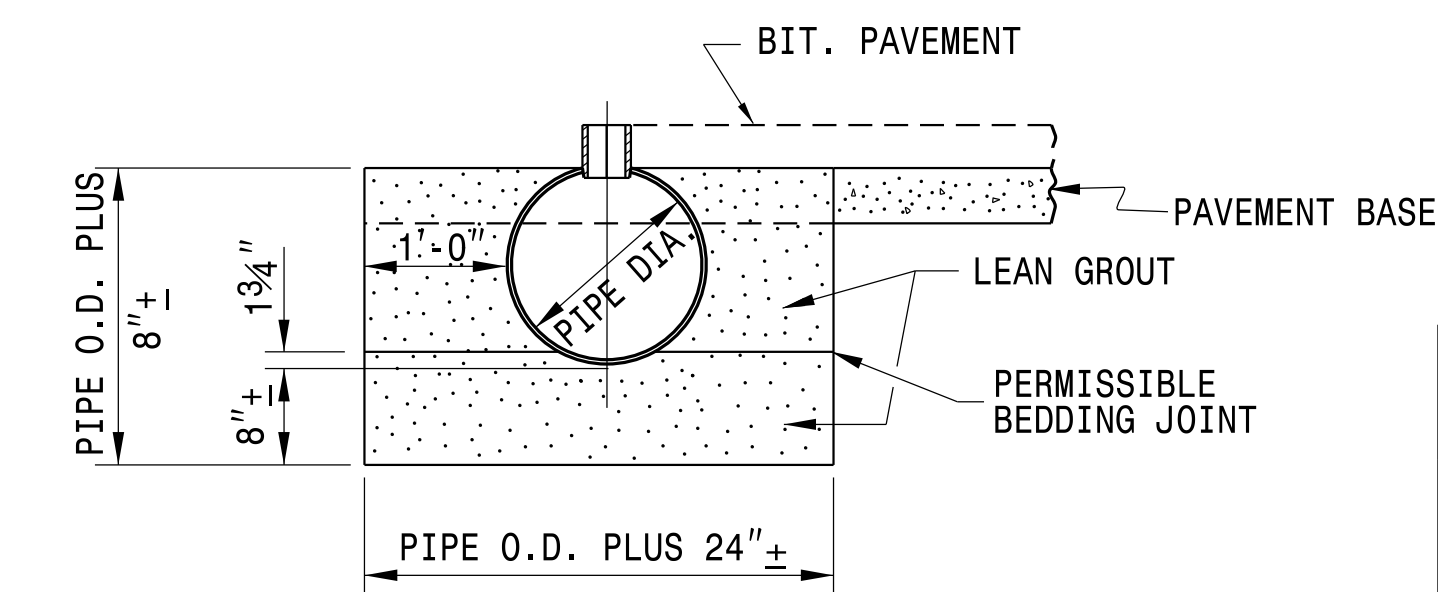
**DETAIL AT END OF PIPE**



**TYPICAL COUPLING BAND**



**MODIFIED COUPLING BAND**



**SLOTTED DRAIN PIPE INSTALLATION**

**NOTES:**

USE GRATE ASSEMBLIES FABRICATED FROM STRUCTURAL STEEL MEETING THE REQUIREMENTS OF ASTM A 570, GRADE 36 OR ASTM A 36.

HOT-DIP GALVANIZE GRATES AFTER FABRICATION TO MEET ASTM A123.

USE SLOTTED DRAIN PIPE THAT IS ADEQUATE FOR AASHTO H20 LOADING WHEN INSTALLED AS SHOWN.

USE SLOTTED DRAIN PIPE FABRICATED FROM ALUMINIZED CORRUGATED STEEL PIPE MEETING THE REQUIREMENTS OF AASHTO M274 TYPE 2.

NCDOT ALLOWS THE USE OF SIMILAR GRATE CONFIGURATIONS MEETING THE REQUIREMENTS OF THIS DETAIL, THE REQUIREMENTS OF THE SPECIAL PROVISIONS, AND THE APPROVAL OF THE ENGINEER.



DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

**CONTRACT STANDARDS AND DEVELOPMENT UNIT**  
Office 919-707-6950 FAX 919-250-4119

**DETAILS OF SLOTTED DRAIN 12" THRU 36" DIAMETER PIPE**

ORIGINAL BY: T.Spell DATE: 5-21-99  
MODIFIED BY: DATE: \_\_\_\_\_  
CHECKED BY: DATE: \_\_\_\_\_  
FILE SPEC.: s:\usr\details\stand\slottedrain.dgn

19-JUL-2018 07:40 S:\Contracts\Projects\Special Details\tspeil\stand\slottedrain.dgn J:\overton AT\_CSD-292595