

# Trench Former<sup>®</sup>

Pre-Engineered Cast In Place  
Trench Drain Forming System

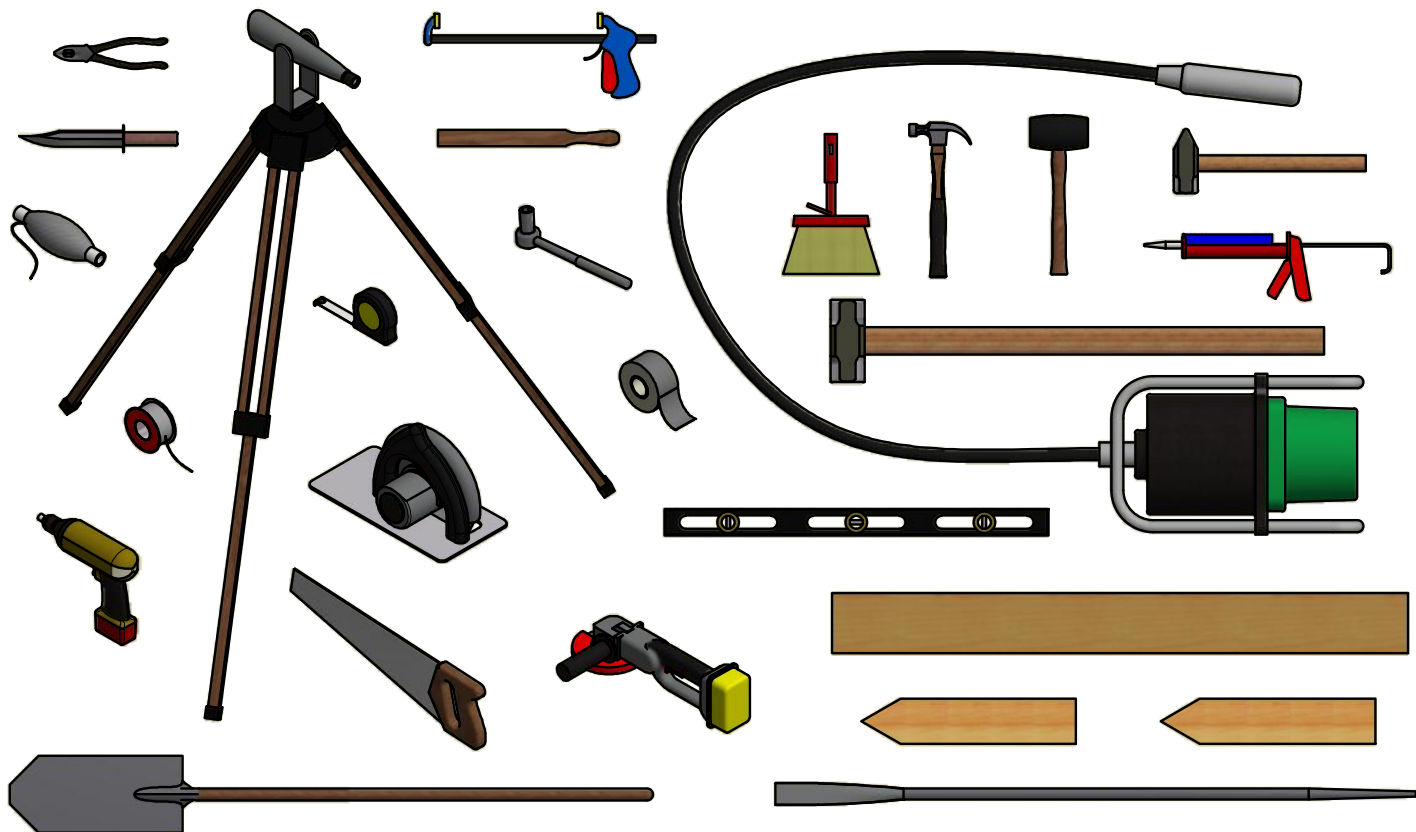


## MHD<sup>®</sup> & XHD<sup>®</sup> Installation Guide

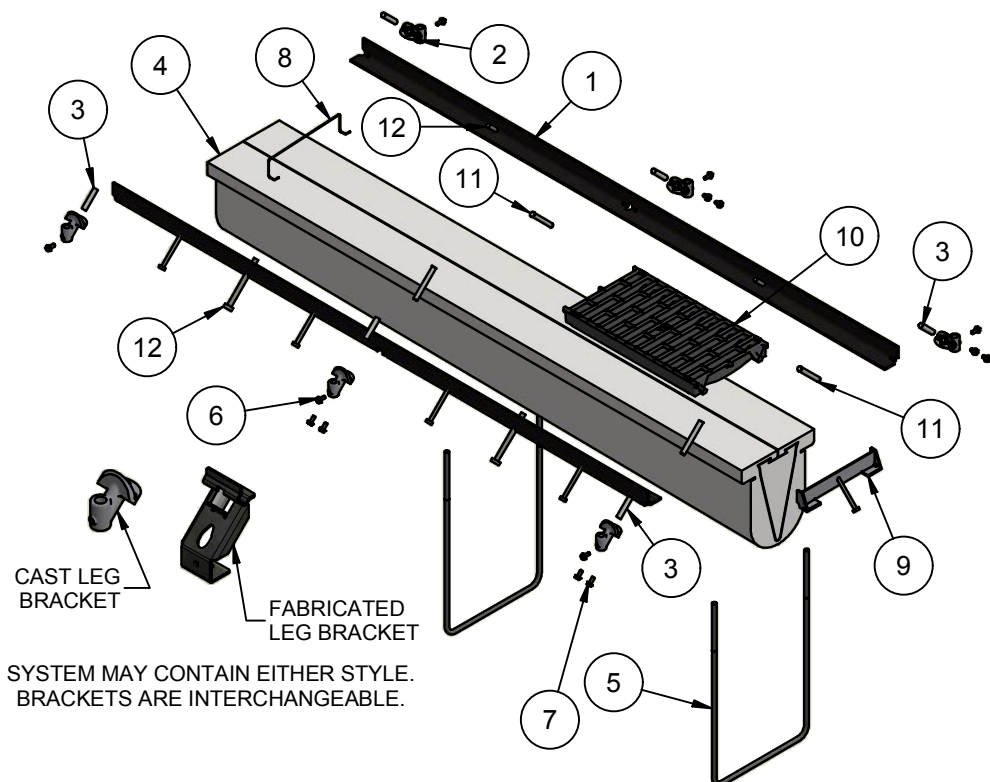


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Toll free in the USA, Canada, and Mexico (800) 438-6057

## USEFUL OR REQUIRED TOOLS



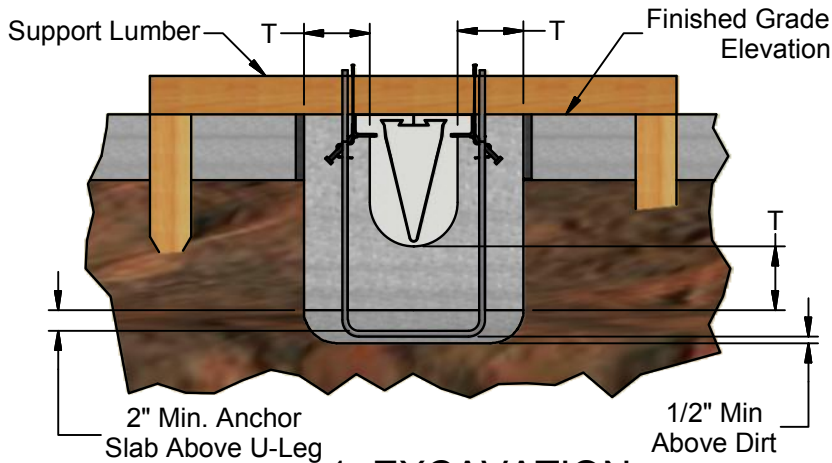
# COMPONENT IDENTIFICATION



COMPONENTS	
ITEM	DESCRIPTION
1	Angle Frames/Rail
2	1803 Cast Leg Bracket
3	1803 Leg Bracket Foam Hole Plug
4	EPS Former
5	Rebar U-Leg
6	Leg Lock Screw
7	Thread Forming Screw - Ø5/16" x 7/8"
8	Cross Tie
9	End Rail
10	Grate
11	Grate Lock Pins - Ø1/2" Clevis Pins
12	Fixed Lock Pin - Ø1/2" Concrete Anchor

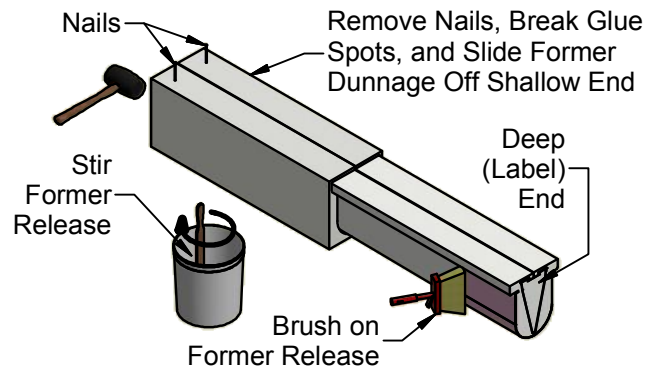
Some products sold by ABT contain chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. Products sold by ABT may contain these chemicals in a smaller amount than Proposition 65's concern, or not at all, however, we have chosen to issue this warning on all of our products as an act of caution and because our customers have the right to know.

**⚠️ WARNING:** These products can expose you to chemicals such as nickel, lead, chromium, cobalt, styrene, methylene chloride, or silica, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

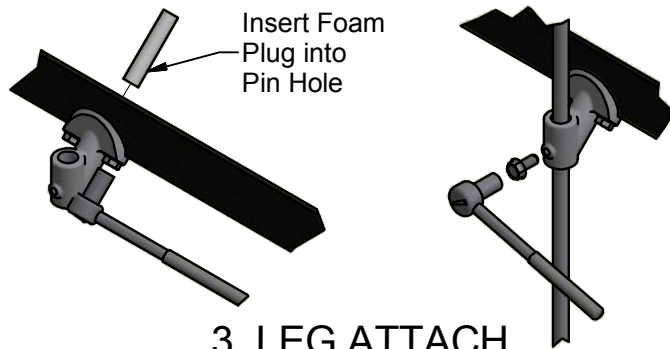


## 1. EXCAVATION

T = per Structural Specifications

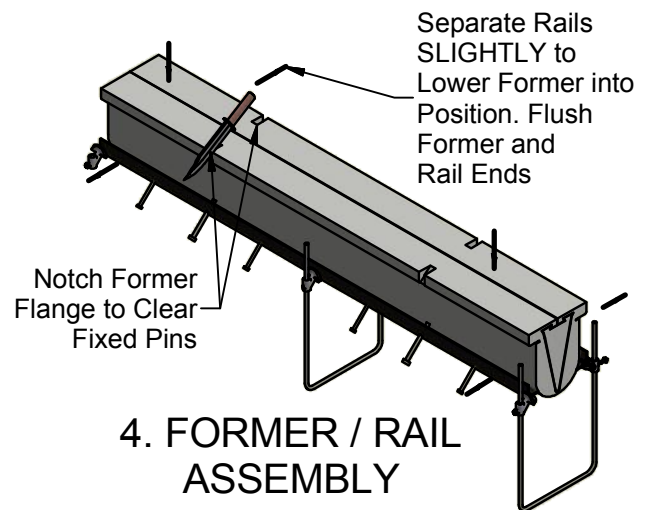


## 2. FORMER PREPARATION

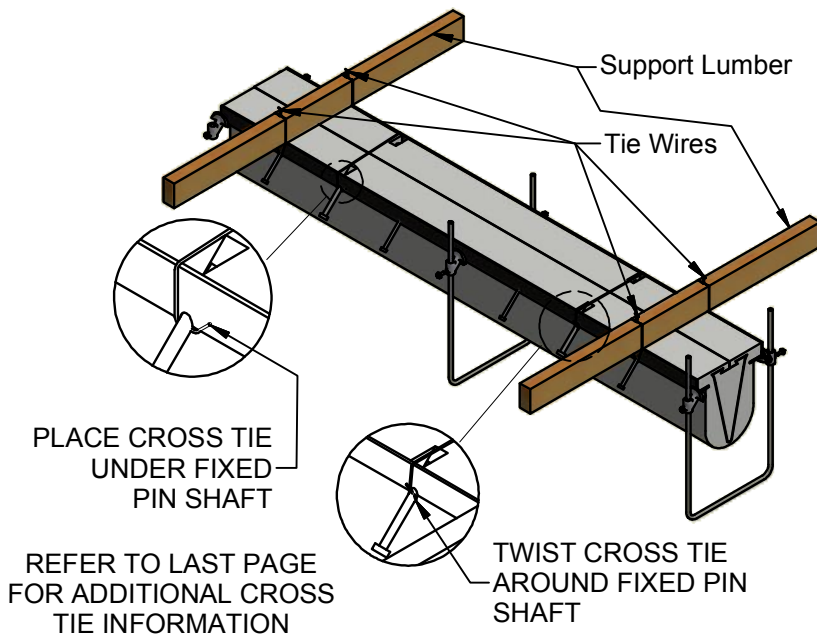


## 3. LEG ATTACH

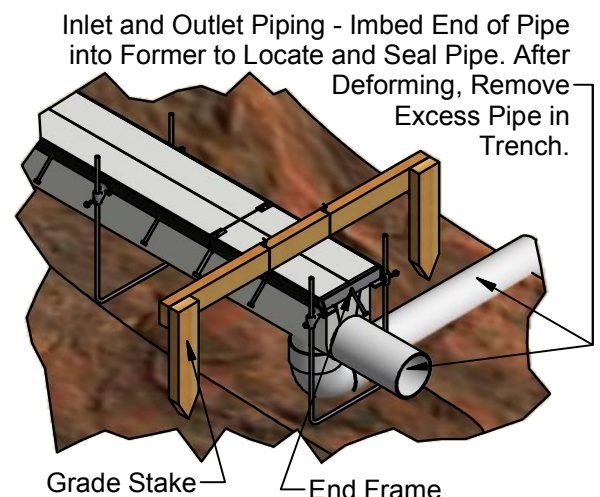
**WARNING: FAILURE TO USE CROSS TIES MAY RESULT IN IMPROPER RAIL ALIGNMENT**  
CROSS TIES TO BE INSTALLED ON EVERY OTHER STUD.



## 4. FORMER / RAIL ASSEMBLY



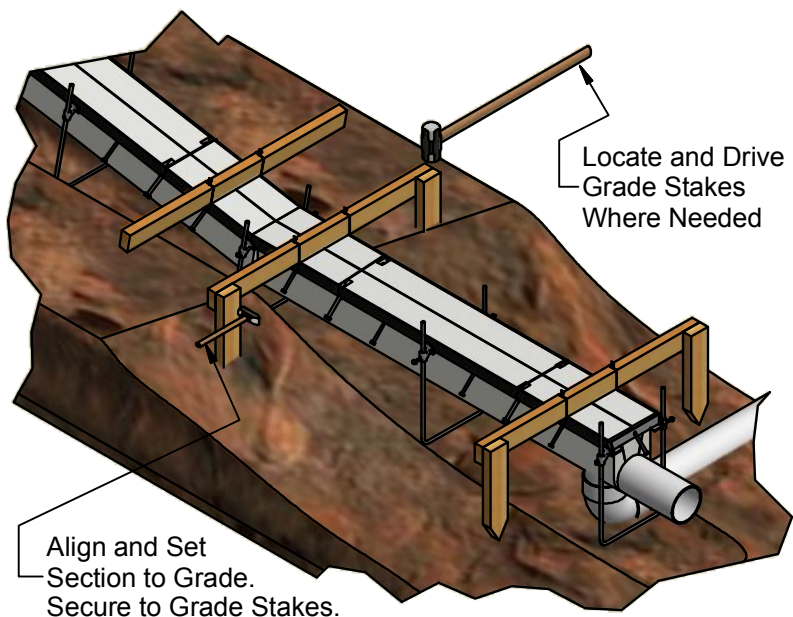
## 5. SUPPORT LUMBER ATTACH



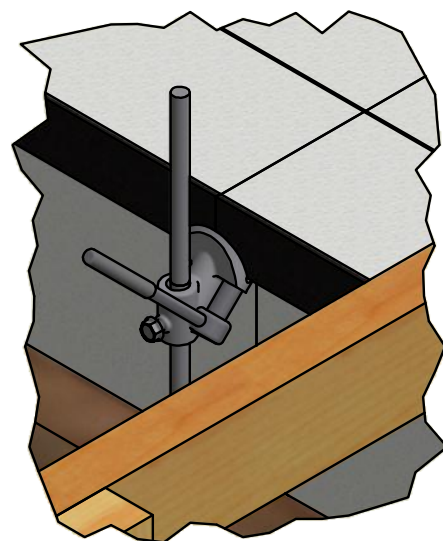
## 6. DISCHARGE PLACE & ALIGN

Locate and Align Outlet Channel First. Start at Deep End and Work to Shallow End

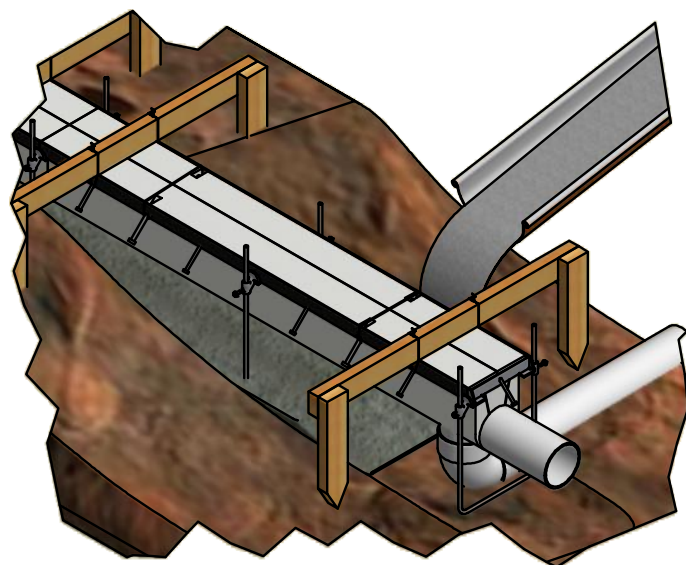




## 7. SECTION PLACE & ALIGN

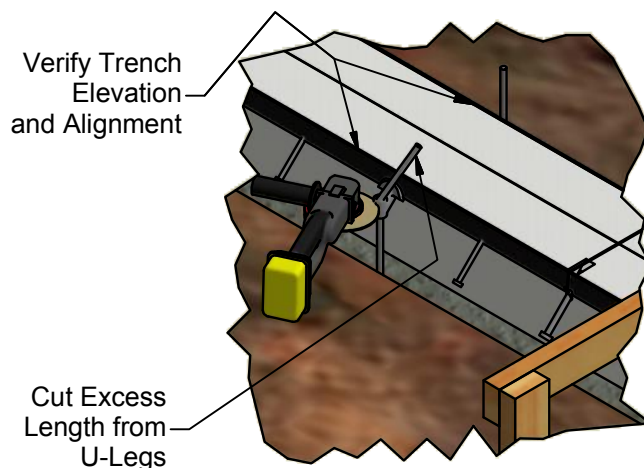


## 8. RAIL CONNECTION

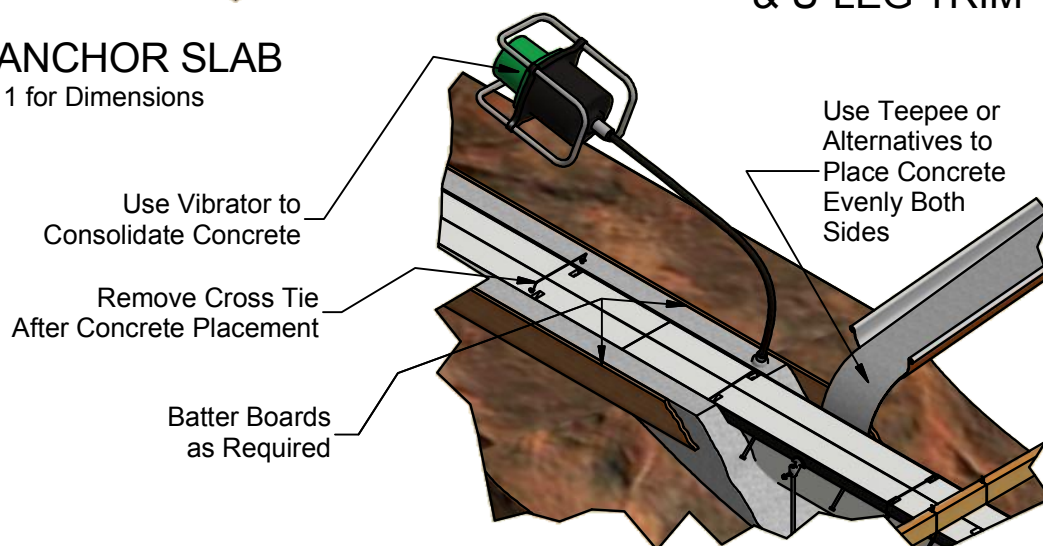


## 9. PLACE ANCHOR SLAB

See Step 1 for Dimensions



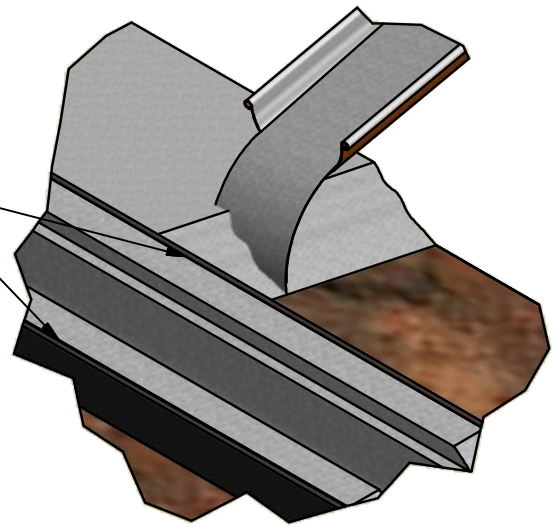
## 10. FINAL ALIGN & U-LEG TRIM



## 11. ENCAPSULATION CONCRETE PLACEMENT AND CONSOLIDATION

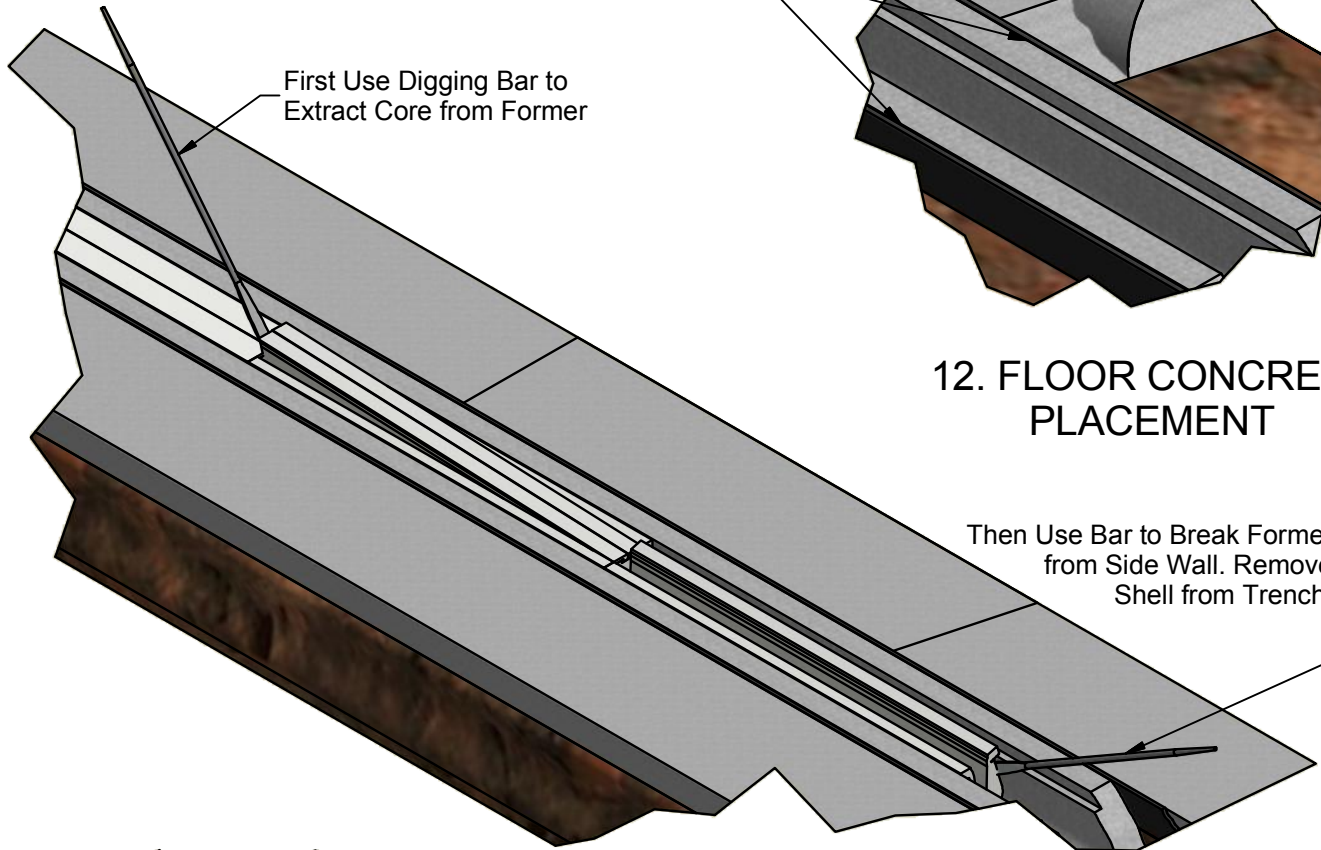
Expansion Joint Material per  
Structural Specifications

First Use Digging Bar to  
Extract Core from Former

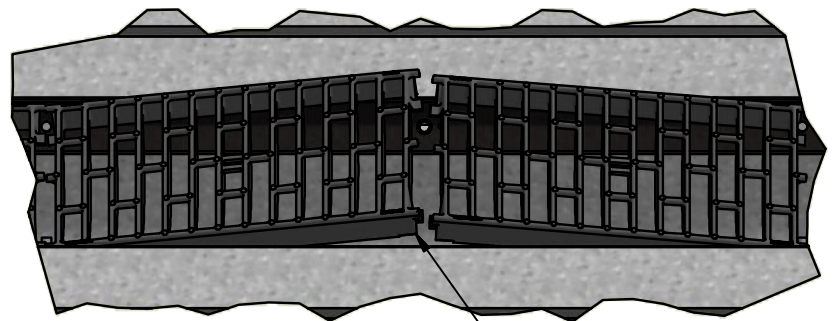


## 12. FLOOR CONCRETE PLACEMENT

Then Use Bar to Break Former  
from Side Wall. Remove  
Shell from Trench.



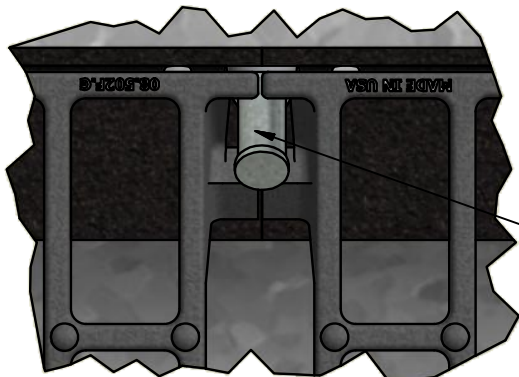
## 13. FORMER REMOVAL



Hook Grate Under Fixed Pins

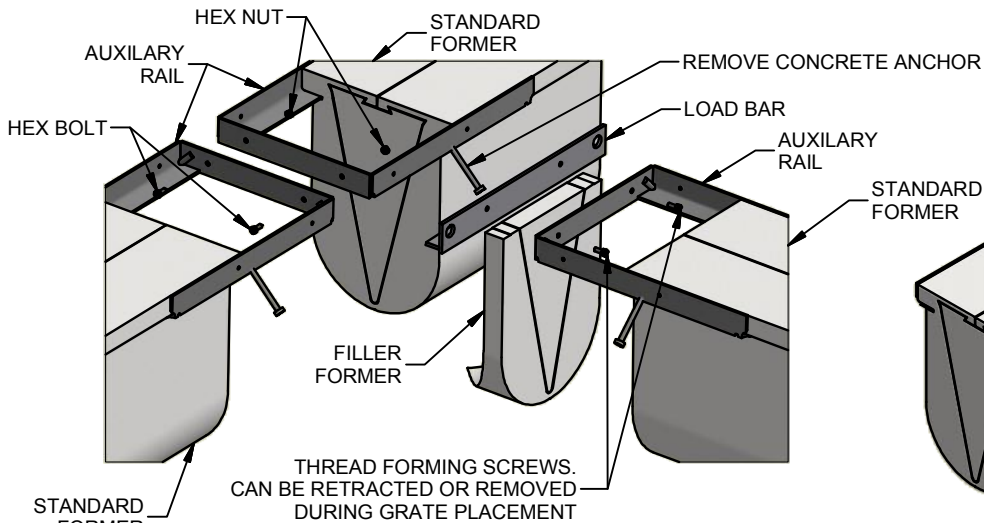
Pivot Grates to Seat on Rails

Use Cross Tie or Other Tool to Remove Foam Hole Plug  
from Pin Hole and Discard Plug. Insert Grate into Rails.  
Apply Water Proof Marine Grease (by Others) to Clevis Pins  
and Insert Clevis Pin into Leg Bracket to Retain Grates.



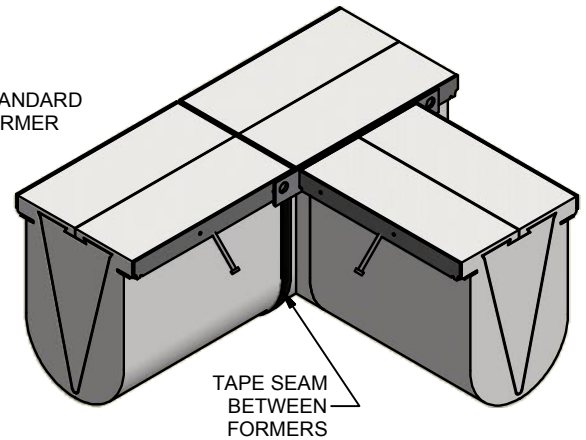
## 14. GRATE INSTALLATION

# AUXILIARY RAIL USAGE

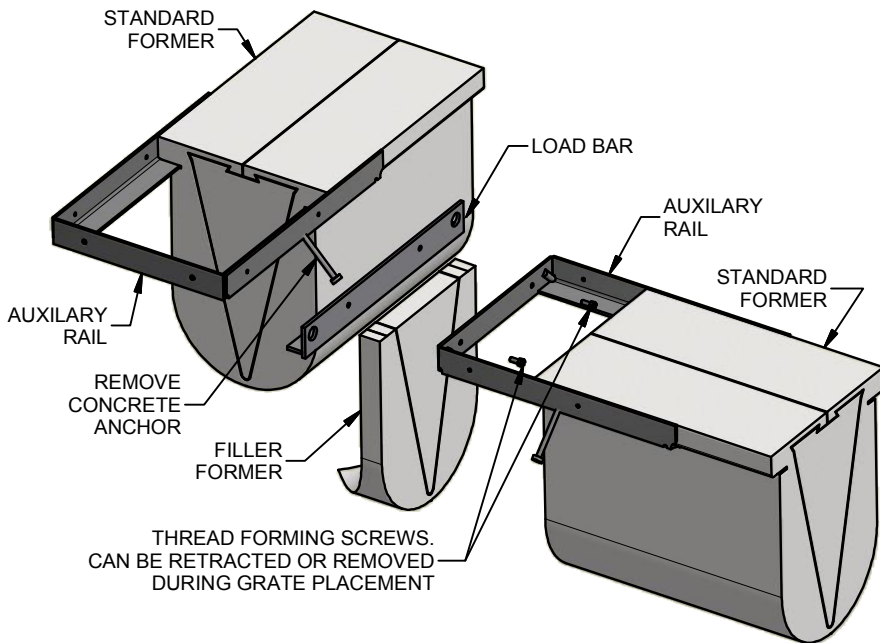


EXPLODED VIEW

## TEE DETAIL

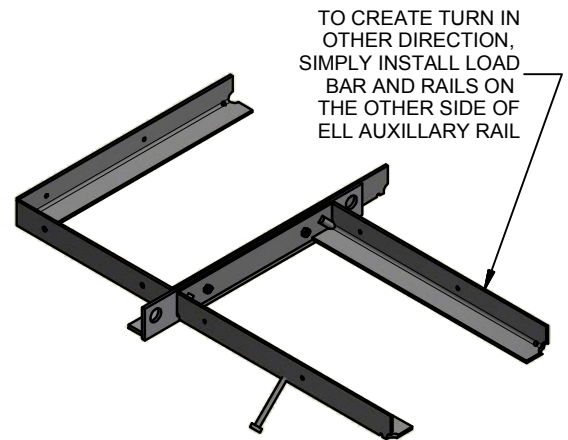


ASSEMBLED VIEW

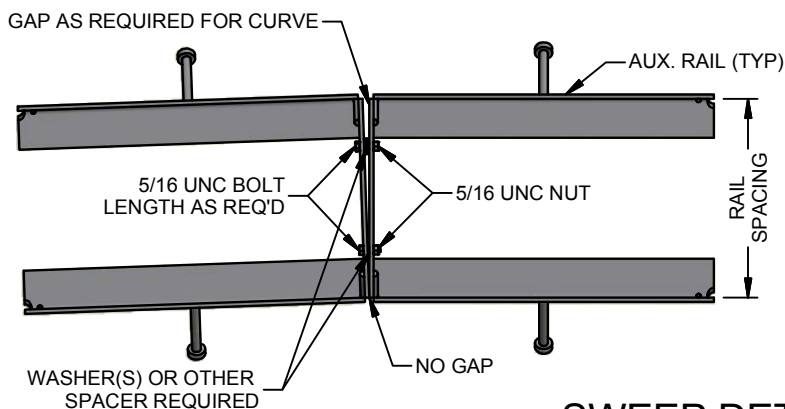


EXPLODED VIEW

## ELL DETAIL



ASSEMBLED VIEW



## SWEEP DETAIL

### NOTES:

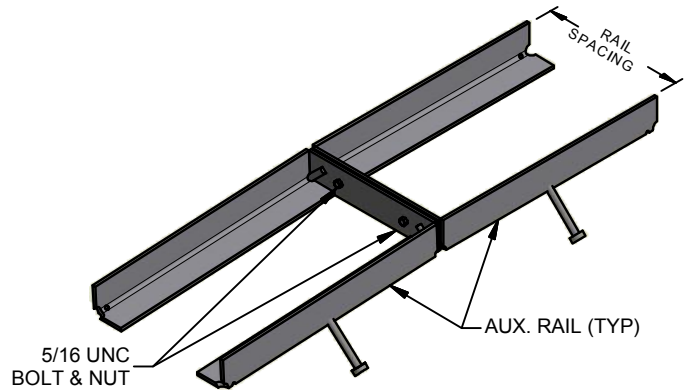
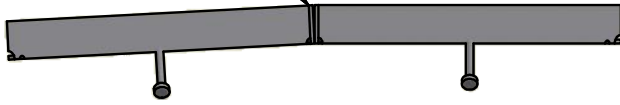
1. INSTALL ANGLE ASSEMBLIES AS OFTEN AS REQUIRED TO PREVENT TRENCH RAILS FROM DEVIATING BEYOND DESIRED AMOUNT FROM TRUE RADIUS.
2. FILL ANY GAP AT END OF FORMER WITH FOAM-IN-PLACE FOAM OR COVER GAP WITH TAPE PRIOR TO FORMER RELEASE APPLICATION.
3. CALCULATE GAP PER ASSEMBLY IS AS FOLLOWS:  

$$\text{GAP (INCH)} = \frac{\text{SPACING BETWEEN ANGLE ASSEMBLIES (INCH)} \times \text{RAIL SPACING (INCH)}}{\text{CURVE RADIUS (INCH)}}$$



# AUXILIARY RAIL USAGE

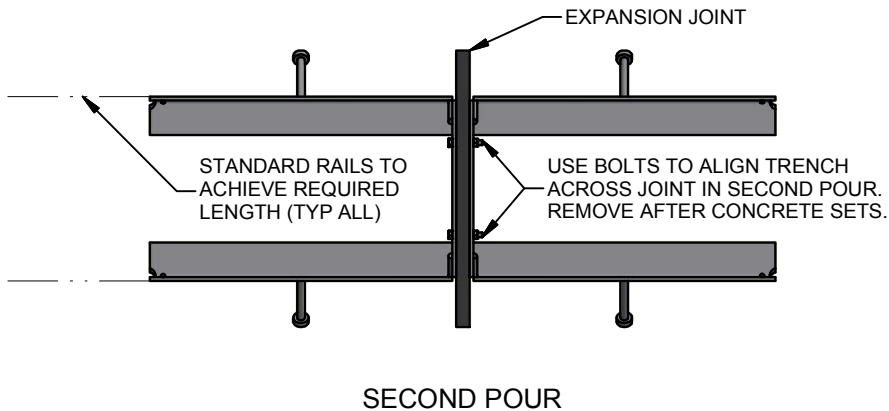
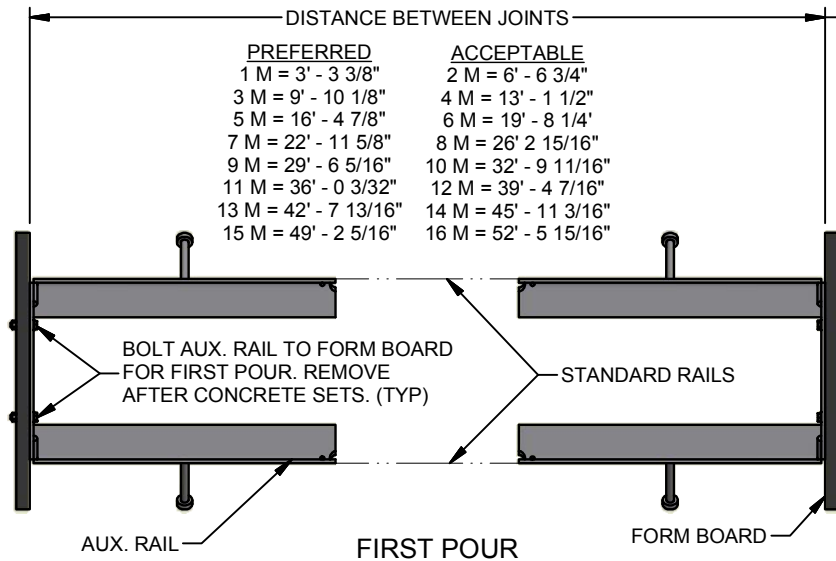
WASHER OR OTHER SHIMS  
TO CREATE GAP AS  
REQUIRED FOR SLOPE



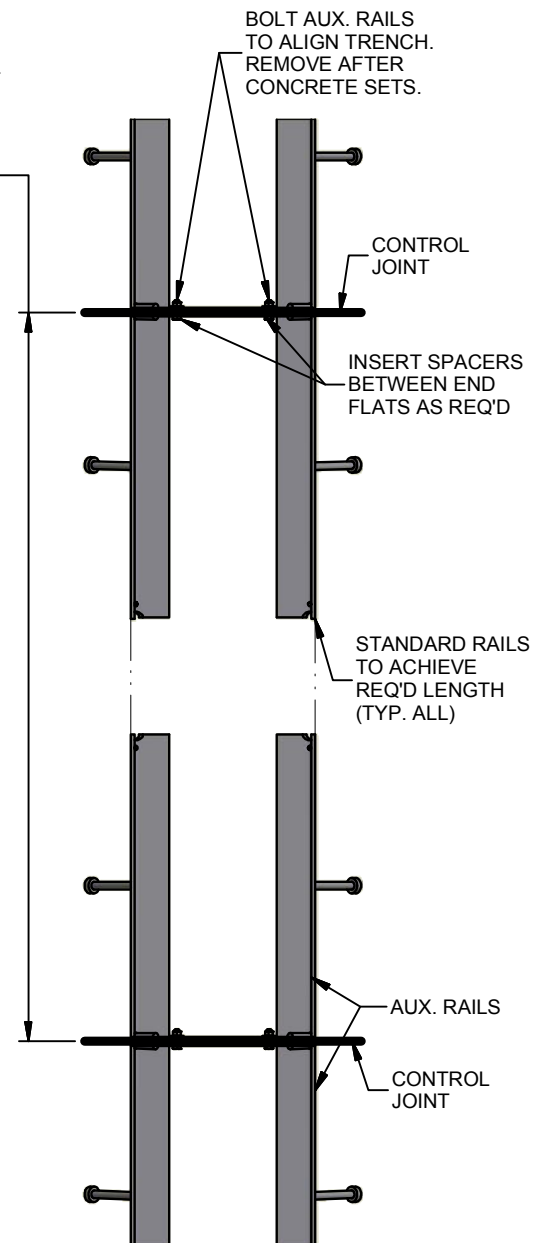
## NOTES:

1. COORDINATE BREAK POINT OF SLOPE WITH POSSIBLE LOCATIONS OF AUXILLARY RAILS IN TRENCH RUN.
2. ADD OR REMOVE ESP FOAM AT END OF SECTIONS AT SLOPE BREAK AS REQUIRED.

## SLOPE BREAK DETAIL



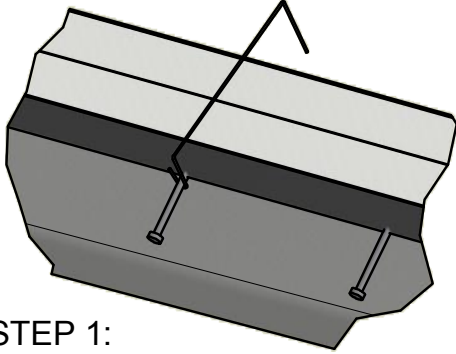
## EXPANSION JOINT DETAIL



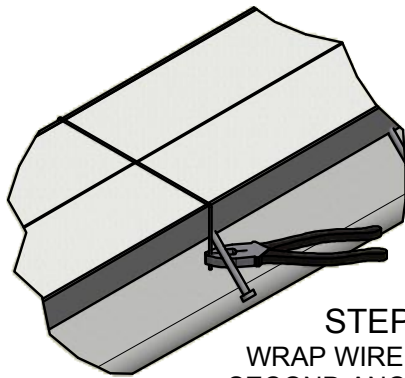
## CONTROL JOINT DETAIL

**WARNING: FAILURE TO USE CROSS TIES MAY RESULT IN IMPROPER RAIL ALIGNMENT**  
IF NO ABT PRE-FORMED CROSS TIES ARE ORDERED, INSTALLER IS RESPONSIBLE FOR  
SECURING RAILS TOGETHER USING TRADITIONAL REBAR TIE WIRES OR OTHER METHOD.  
CROSS TIES SHALL BE INSTALLED ON EVERY OTHER ANCHOR STUD.

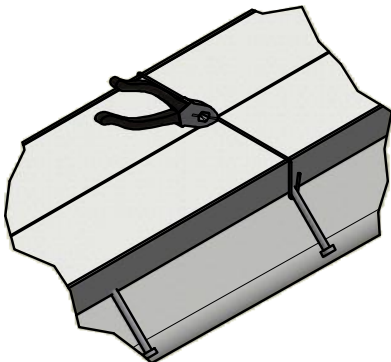
### CROSS TIE #1



**STEP 1:**  
HOOK PRE-FORMED END  
AROUND ONE ANCHOR STUD

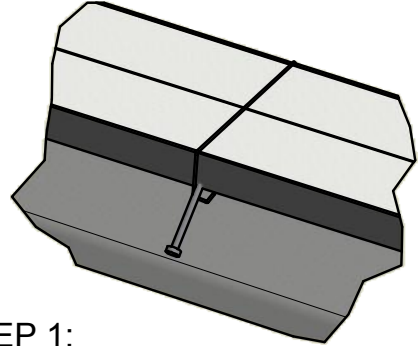


**STEP 2:**  
WRAP WIRE AROUND  
SECOND ANCHOR STUD

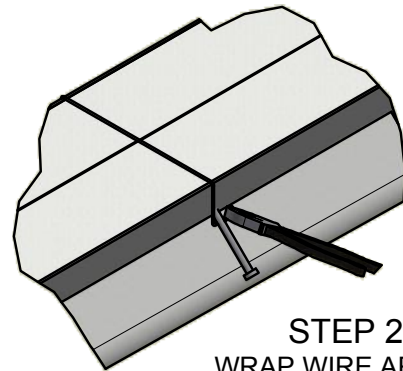


**STEP 3:**  
CUT CROSS TIE IN CENTER  
TO REMOVE WHILE  
CONCRETE IS CURING

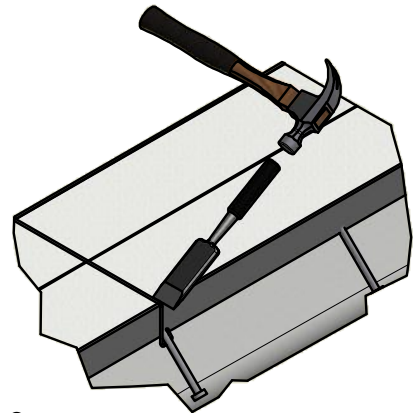
### CROSS TIE #2



**STEP 1:**  
HOOK CROSS TIE UNDER  
BOTH ANCHOR STUDS



**STEP 2:**  
WRAP WIRE AROUND  
BOTH ANCHOR STUDS



**STEP 3:**  
CUT CROSS TIE AT BOTH  
ENDS TO REMOVE AFTER  
CONCRETE HAS SET