

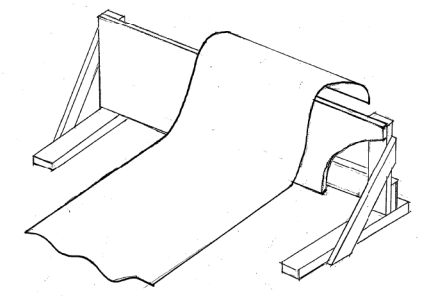
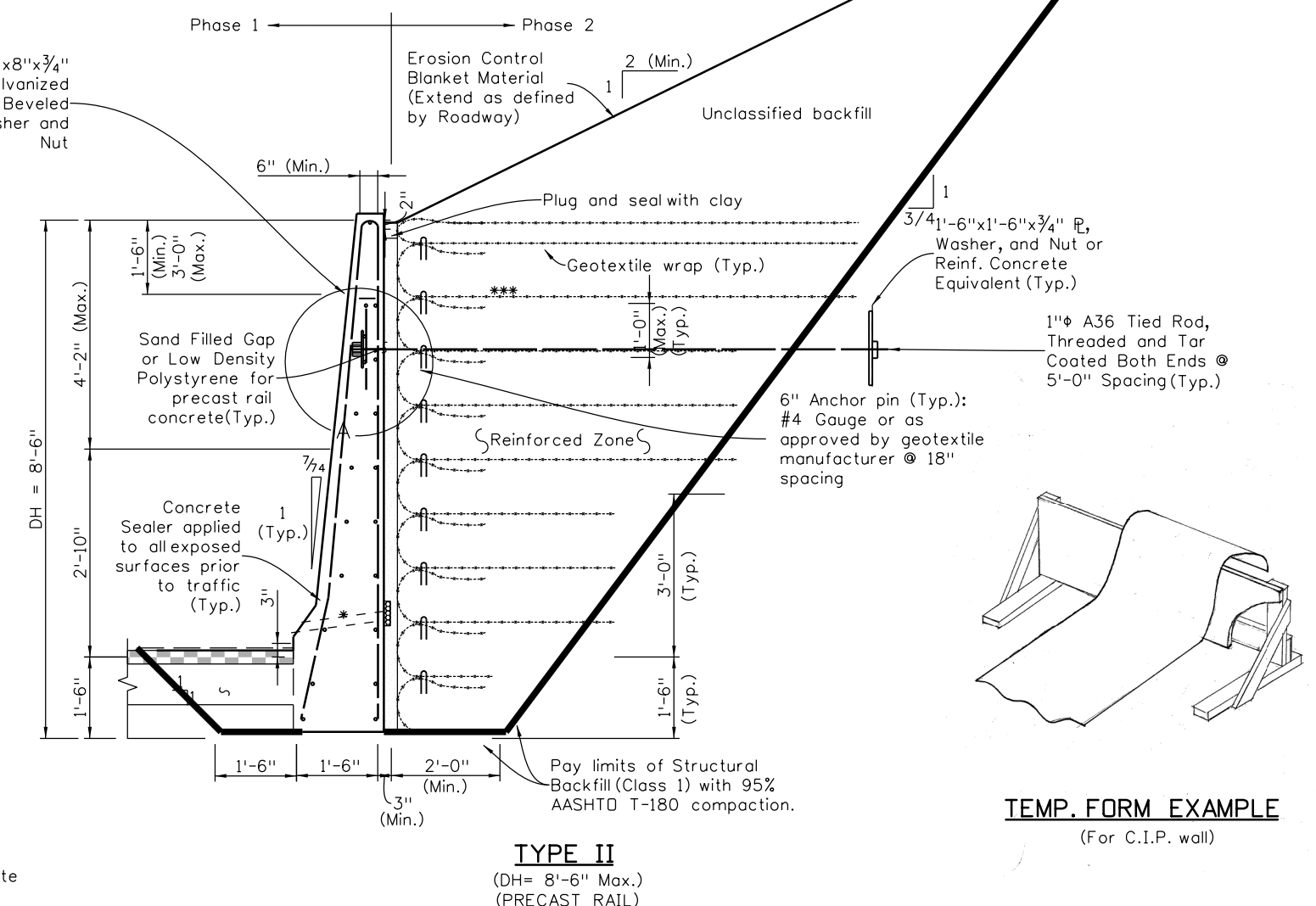
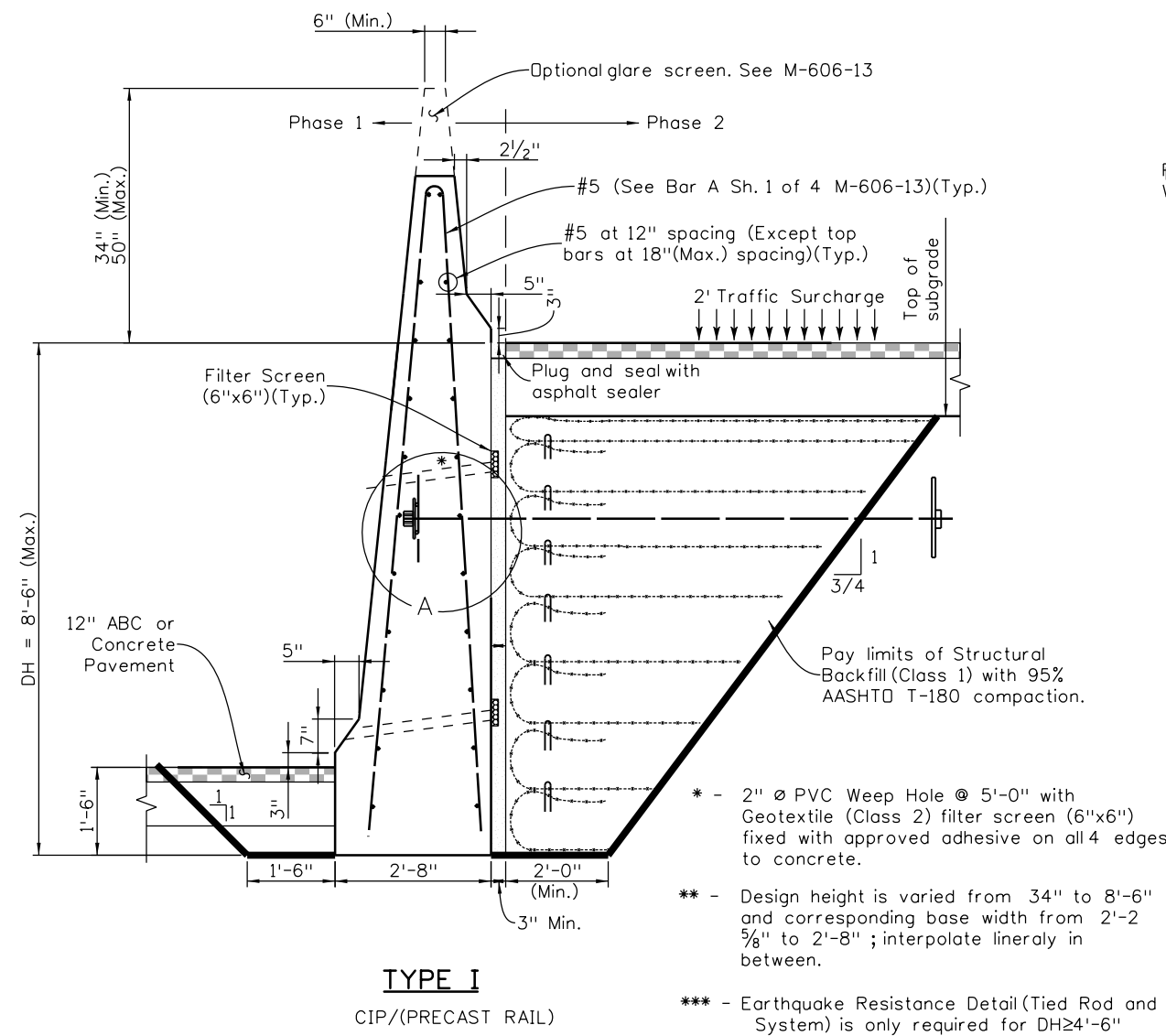
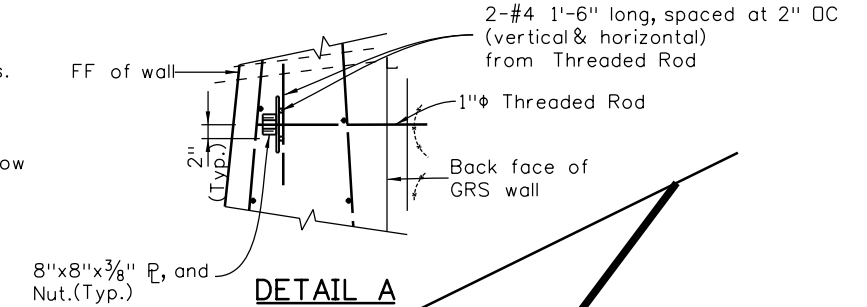
**NOTES:**

- The temporary cut slope shall be stable during entire period of wall construction and certified by a geotechnical Engineer.
- The required factored bearing at the base of the rail shall be a minimum of 1.0 TSF.
- Rail shall be installed after a minimum of 5 passes of a proof roll by a 2.5 ton double smooth drum vibratory roller at top of GRS wall. For precast rail fill the gap in between the GRS wall and rail with sand.
- Tooled vertical joints at 10'-0" (Min.) spacing are required on exposed faces.
- For precast rail segments an interlocking loop ring/pin connection is required per M-606-14 and a nailed full height 12" wide Geotextile (Class 2) behind joints.
- All geotextile reinforcement shall be biaxial woven geotextile fabric with minimum average roll value of 4800 lb./ft. based on ASTM D4595 and with a minimum 6" overlap between rolls.
- CDOT approved concrete sealer is required on all exposed surfaces.
- No negative batter and 3" minimum gap required after proof roll; 0-5% max batter allowed for GRS wrap around facing. For cast-in-place concrete (C.I.P.) option, a 3" thick nailed Low Density Polystyrene is required between the GRS wall and rail.
- Temporary removable forming board and frame shown for building geotextile wrap around without sand filled gap is required for cast-in-place single outside tied back form option.
- Both types of GRS wall with Type 7 rail shall be paid by linear foot or lump sum and include all labor and materials necessary to construct complete system.

B-504-S7

**DESIGN CRITERIA:**

- GRS wrap around phased wall is self standing and applies no (or minimum) pressure to the adjacent concrete rail.
- Earthquake details are required for stability regardless of seismic performance zone.



Revision Dates (Preliminary Stage Only)		Quantities	
09-16		INITIAL	DATE
		Checked By	Checked By
Design		Detail	
INITIAL	DATE	INITIAL	DATE
Designed By	Checked By	Detailed By	Checked By

Print Date: 9/6/2016	0000
File Name: Sheet_B-504-S7.dgn	
Horiz. Scale: NTS      Vert. Scale: As Noted	
Staff Bridge Branch-Unit OXXX      Unit Leader Initials	

Sheet Revisions		
Date:	Comments	Init.

Colorado Department of Transportation  
 4201 East Arkansas Avenue  
 Room 107  
 Denver, CO 80222  
 Phone: 303-757-9309 FAX: 303-757-9197

**Staff Bridge Branch**      **Initials**

<b>As Constructed</b>
No Revisions:
Revised:
Void:

<b>GRS WALL WITH TYPE 7 RAIL WITH 8'-6" MAX. DESIGN HEIGHT</b>			
Designer:	XXXXXXX	Structure	Wall-X-XX-XX
Detailer:	XXXXXXX	Numbers	Wall-X-XX-XX
Sheet Subset:	Wall	Subset Sheets:	WXX of XXX

<b>Project No./Code</b>
Project Number
Code
Sheet Number

nguyenh 9:18:50 AM C:\Users\nguyenh\Desktop\Worksheet.dgn and PDF\Sheet\_B-504-S7.dgn