

PoDI / NHS

FHWA PROJECTS OF DIVISION INTEREST (PoDI)?  NO  YES

NATIONAL HIGHWAY SYSTEM?  NO  YES

# DEPARTMENT OF TRANSPORTATION STATE OF COLORADO

**Related Projects:**

P. E. UNDER PROJECT:  
Project Number  
Project Code:

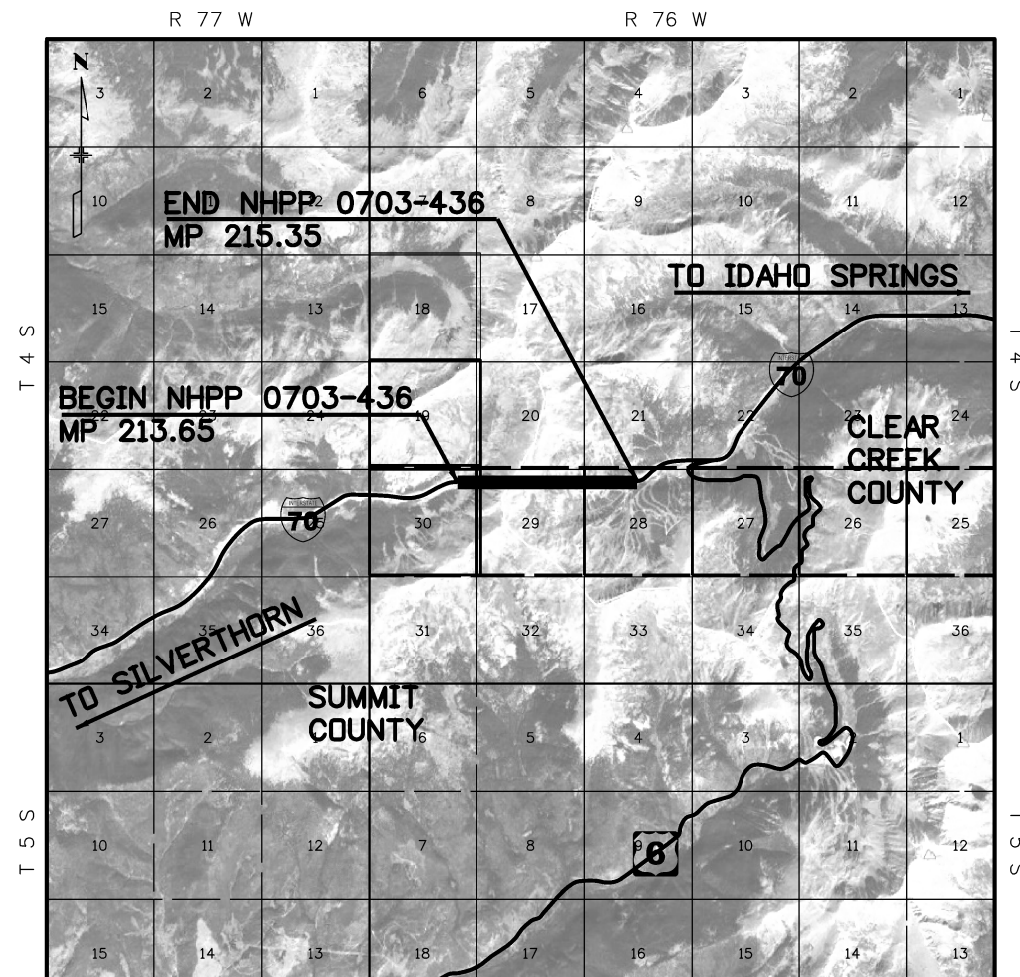
**R.O.W. Projects:**

R.O.W. Project Description

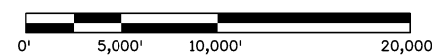
## HIGHWAY CONSTRUCTION BID PLANS OF PROPOSED FEDERAL AID PROJECT NO. NHPP 0703-436 EISENHOWER/JOHNSON MEMORIAL TUNNELS PLENUM WATERPROOFING MEMBRANE REPAIR INTERSTATE HIGHWAY NO. 70 CLEAR CREEK AND SUMMIT COUNTIES CONSTRUCTION PROJECT CODE NO. 21224

**TABULATION OF LENGTH & DESIGN DATA**

STATION	FEET		MAJOR STR.
	ROADWAY		
BEGIN PROJECT NHPP 0703-436 = M.P. 213.65 STRUCTURE F-13-X JOHNSON TUNNEL STRUCTURE F-13-Y EISENHOWER TUNNEL END PROJECT NHPP 0703-436 = M.P. 215.35	0		8,959
TOTAL	0		8,959
<b>SUMMARY OF PROJECT LENGTH</b>			
	FEET	MILES	
ROADWAY (NET LENGTH)	0	0	
MAJOR STRUCTURE	8,959	1.70	
PROJECT GROSS LENGTH	8,959	1.70	



**PROJECT LOCATION MAP**



SHEET NO.	INDEX OF SHEETS
1	TITLE SHEET
2	STANDARD PLANS LIST
3	GENERAL NOTES
4	TYPICAL PLENUM SECTION
5	SUMMARY OF APPROXIMATE QUANTITIES
6-11	TABULATION OF MEMBRANE ITEMS
12-31	PLAN SHEETS
32-34	REPAIR DETAILS
35-37	STORMWATER MANAGEMENT PLANS

**PROJECT ADVERTISEMENT  
JUNE 7, 2018**

Print Date: 6/4/2018  
File Name: 184120R\_EJMT\_Plenum\_Repair\_DES\_TitleSht.dgn  
Horiz. Scale: As Noted    Vert. Scale: As Noted  
Unit Information    Unit Leader Initials  
**WSP** 1600 Broadway, Suite 1100  
Denver, Colorado 80202-4922  
Phone: 303-832-9091 Fax: 303-832-9096

Sheet Revisions		
Date:	Comments	Init.

**Colorado Department of Transportation**  
 425 A Corporate Circle  
Golden, CO 80401  
Phone: 720-497-6918 FAX: 720-497-6901  
**Region 1** **NR**

**As Constructed**  
No Revisions:  
Revised:  
Void:

**Contract Information**

Contractor:  
Resident Engineer: NEAL RETZER  
Project Engineer: MATTHEW FINK  
PROJECT STARTED: / /    ACCEPTED: / /  
Comments:

**Project No./Code**

NHPP 0703-436  
21224  
Sheet Number **1**

PLAN NUMBER	NEW OR REVISED	M STANDARD TITLE	PAGE NUMBER
M-100-1		STANDARD SYMBOLS (3 SHEETS).....	1-3
M-100-2		ACRONYMS AND ABBREVIATIONS (4 SHEETS).....	4-7
M-203-1	<input type="checkbox"/>	APPROACH ROADS (REVISED ON JULY 08, 2013).....	<del>8</del>
M-203-2		DITCH TYPES.....	9
M-203-11		SUPERELEVATION CROWNED AND DIVIDED HIGHWAYS (3 SHEETS).....	10-12
M-203-12		SUPERELEVATION STREETS (2 SHEETS).....	13-14
M-206-1		EXCAVATION AND BACKFILL FOR STRUCTURES (2 SHEETS).....	15-16
M-206-2		EXCAVATION AND BACKFILL FOR BRIDGES (2 SHEETS).....	17-18
M-208-1	<input type="checkbox"/>	TEMPORARY EROSION CONTROL (11 SHEETS) (REVISED ON AUGUST 10, 2017).....	<del>19-30</del>
M-210-1		MAILBOX SUPPORTS (2 SHEETS).....	31-32
M-214-1		PLANTING DETAILS.....	33
M-216-1	<input type="checkbox"/>	SOIL RETENTION COVERING (2 SHEETS) (NEW ON JULY 16, 2015).....	
M-412-1	<input type="checkbox"/>	CONCRETE PAVEMENT JOINTS (5 SHEETS) (REVISED ON JANUARY 18, 2018).....	<del>34-38</del>
M-510-1		STRUCTURAL PLATE PIPE H-20 LOADING.....	39
M-601-1	<input type="checkbox"/>	SINGLE CONCRETE BOX CULVERT (2 SHEETS) (REVISED ON NOVEMBER 25, 2015).....	<del>40-41</del>
M-601-2	<input type="checkbox"/>	DOUBLE CONCRETE BOX CULVERT (2 SHEETS) (REVISED ON NOVEMBER 25, 2015).....	<del>42-43</del>
M-601-3	<input type="checkbox"/>	TRIPLE CONCRETE BOX CULVERT (2 SHEETS) (REVISED ON NOVEMBER 25, 2015).....	<del>44-45</del>
M-601-10		HEADWALL FOR PIPES.....	46
M-601-11		TYPE "S" SADDLE HEADWALLS FOR PIPE.....	47
M-601-12		HEADWALLS AND PIPE OUTLET PAVING.....	48
M-601-20		WINGWALLS FOR PIPE OR BOX CULVERTS.....	49
M-603-1	<input type="checkbox"/>	METAL PIPE (4 SHEETS) (REVISED ON OCTOBER 02, 2014).....	<del>50-53</del>
M-603-2	<input type="checkbox"/>	REINFORCED CONCRETE PIPE (REVISED ON OCTOBER 02, 2014).....	<del>54</del>
M-603-3		PRECAST CONCRETE BOX CULVERT.....	55
M-603-4	<input type="checkbox"/>	CORRUGATED POLYETHYLENE PIPE (AASHTO M294) (REVISED ON OCT. 02, 2014).....	<del>56</del>
M-603-5	<input type="checkbox"/>	POLYVINYL CHLORIDE (PVC) PIPE (AASHTO M304) (REVISED ON OCT. 02, 2014).....	<del>57</del>
M-603-6	<input type="checkbox"/>	STEEL REINFORCED POLYETHYLENE RIBBED PIPE (AASHTO MP 20) (NEW ON APRIL 30, 2015).....	
M-603-10		CONCRETE AND METAL END SECTIONS (2 SHEETS).....	58-59
M-604-10		INLET, TYPE C.....	60
M-604-11		INLET, TYPE D.....	61
M-604-12		CURB INLET TYPE R (2 SHEETS).....	62-63
M-604-13		CONCRETE INLET TYPE 13.....	64
M-604-20		MANHOLES (3 SHEETS).....	65-67
M-604-25		VANE GRATE INLET (5 SHEETS).....	68-72
M-605-1		SUBSURFACE DRAINS.....	73
M-606-1	<input type="checkbox"/>	GUARDRAIL TYPE 3 W-BEAM (20 SHEETS) (REVISED ON OCTOBER 27, 2014).....	<del>74-92</del>
M-606-1	<input type="checkbox"/>	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 3 W-BEAM 31 INCHES (20 SHEETS) (REVISED ON FEBRUARY 8, 2018).....	
M-606-13	<input type="checkbox"/>	GUARDRAIL TYPE 7 F-SHAPE BARRIER (4 SHEETS).....	<del>93-96</del>
M-606-14		PRECAST TYPE 7 CONCRETE BARRIER (3 SHEETS).....	97-99

PLAN NUMBER	NEW OR REVISED	M STANDARD TITLE	PAGE NUMBER
M-607-1		WIRE FENCES AND GATES (3 SHEETS).....	100-102
M-607-2		CHAIN LINK FENCE (3 SHEETS).....	103-105
M-607-3		BARRIER FENCE.....	106
M-607-4	<input type="checkbox"/>	DEER FENCE, GATES, AND GAME RAMPS (5 SHEETS).....	<del>107-109</del>
M-607-10		PICKET SNOW FENCE.....	110
M-607-15		ROAD CLOSURE GATE (9 SHEETS).....	111-119
M-608-1	<input type="checkbox"/>	CURB RAMPS (10 SHEETS) (REVISED ON FEBRUARY 23, 2017).....	<del>120-125</del>
M-609-1	<input type="checkbox"/>	CURBS, GUTTERS, AND SIDEWALKS (4 SHEETS) (REVISED ON JULY 24, 2012).....	<del>126-129</del>
M-611-1		CATTLE GUARD (2 SHEETS).....	130-131
M-611-2	<input type="checkbox"/>	DEER GUARD (2 SHEETS) (NEW ON APRIL 30, 2015).....	
M-613-1		ROADWAY LIGHTING (4 SHEETS).....	132-135
M-614-1		RUMBLE STRIPS (3 SHEETS).....	136-138
M-614-2		SAND BARREL ARRAYS (2 SHEETS).....	139-140
M-615-1		EMBANKMENT PROTECTOR TYPE 3.....	141
M-615-2		EMBANKMENT PROTECTOR TYPE 5.....	142
M-616-1		INVERTED SIPHON.....	143
M-620-1		FIELD LABORATORY CLASS 1.....	144
M-620-2		FIELD LABORATORY CLASS 2 (2 SHEETS).....	145-146
M-620-11		FIELD OFFICE CLASS 1.....	147
M-620-12		FIELD OFFICE CLASS 2.....	148
M-629-1		SURVEY MONUMENTS (2 SHEETS).....	149-150

PLAN NUMBER	NEW OR REVISED	S STANDARD TITLE	PAGE NUMBER
S-612-1	<input type="checkbox"/>	DELINEATOR INSTALLATIONS (8 SHEETS) (REVISED ON APRIL 12, 2018).....	<del>151-157</del>
S-614-1	<input type="checkbox"/>	GROUND SIGN PLACEMENT (2 SHEETS) (REVISED ON DECEMBER 12, 2014).....	<del>158-159</del>
S-614-2	<input type="checkbox"/>	CLASS I SIGNS (REVISED ON JUNE 24, 2016).....	<del>160</del>
S-614-3		CLASS II SIGNS.....	161
S-614-4	<input type="checkbox"/>	CLASS III SIGNS (3 SHEETS) (REVISED ON DECEMBER 17, 2014).....	<del>162-164</del>
S-614-5	<input type="checkbox"/>	BREAK-AWAY SIGN SUPPORT DETAILS (REVISED ON FEBRUARY 8, 2017).....	<del>165-166</del>
S-614-6	<input type="checkbox"/>	CONCRETE FOOTINGS AND SIGN ISLANDS.....	<del>167-168</del>
S-614-8	<input type="checkbox"/>	TUBULAR STEEL SIGN SUPPORT DETAILS (7 SHEETS).....	<del>169-173</del>
S-614-9	<input type="checkbox"/>	PEDESTRIAN PUSH BUTTON POST ASSEMBLY (REVISED ON MAY 24, 2016).....	<del>174</del>
S-614-10		MARKER ASSEMBLY INSTALLATIONS.....	175
S-614-11		MILEPOST SIGN DETAIL FOR HIGH SNOW AREAS.....	176
S-614-12		STRUCTURE NUMBER INSTALLATION.....	177
S-614-14		FLASHING BEACON AND SIGN INSTALLATIONS (3 SHEETS).....	178-180
S-614-20		TYPICAL POLE MOUNT SIGN INSTALLATIONS.....	181
S-614-21	<input type="checkbox"/>	CONCRETE BARRIER SIGN POST INSTALLATIONS.....	<del>182</del>
S-614-22		TYPICAL MULTI-SIGN INSTALLATIONS.....	183
S-614-40	<input type="checkbox"/>	TYPICAL TRAFFIC SIGNAL INSTALLATION DETAILS (5 SHEETS) (REVISED ON JUNE 17, 2016).....	<del>184-188</del>
S-614-40A	<input type="checkbox"/>	ALTERNATIVE TRAFFIC SIGNAL INSTALLATION DETAILS (4 SHEETS) (REVISED ON JUNE 17, 2016).....	<del>189-192</del>
S-614-41	<input type="checkbox"/>	TEMPORARY SPAN WIRE SIGNALS (REVISED ON APRIL 2, 2015).....	<del>193</del>
S-614-42		CABINET FOUNDATION DETAIL (4 SHEETS).....	194-197
S-614-43		TRAFFIC LOOP AND MISCELLANEOUS SIGNAL DETAILS (10 SHEETS).....	198-207
S-614-44	<input type="checkbox"/>	PEDESTAL POLE SIGNALS (2 SHEETS) (REVISED ON JUNE 17, 2016).....	
S-614-50	<input type="checkbox"/>	STATIC SIGN MONOTUBE STRUCTURES (12 SHEETS).....	<del>208-219</del>
S-614-60	<input type="checkbox"/>	DYNAMIC SIGN MONOTUBE STRUCTURES (14 SHEETS).....	<del>220-233</del>
S-627-1	<input type="checkbox"/>	PAVEMENT MARKINGS (8 SHEETS) (REVISED ON FEBRUARY 8, 2017).....	<del>234-238</del>
S-630-1	<input type="checkbox"/>	TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION (24 SHEETS) (REVISED ON JUNE 23, 2016).....	<del>239-258</del>
S-630-2	<input type="checkbox"/>	BARRICADES, DRUMS, CONCRETE BARRIERS (TEMP) AND VERTICAL PANELS (REVISED ON JUNE 23, 2016).....	<del>259</del>
S-630-3		FLASHING BEACON (PORTABLE) DETAILS.....	260
S-630-4		STEEL SIGN SUPPORT (TEMPORARY) INSTALLATION.....	261-262
S-630-5	<input type="checkbox"/>	PORTABLE RUMBLE STRIPS (TEMPORARY) (2 SHEETS).....	<del>263-264</del>
S-630-6		EMERGENCY PULL-OFF AREA (TEMPORARY).....	265
S-630-7		ROLLING ROADBLOCKS FOR TRAFFIC CONTROL.....	266-268

**COLORADO  
DEPARTMENT OF TRANSPORTATION  
M&S STANDARDS PLANS LIST**

July 04, 2012

Revised on April 12, 2018

ALL OF THE M&S STANDARD PLANS, AS SUPPLEMENTED AND REVISED, APPLY TO THIS PROJECT WHEN USED BY DESIGNATED PAY ITEM OR SUBSIDIARY ITEM.

NEW OR REVISED STANDARD PLAN SHEETS APPLICABLE TO THIS PROJECT, INDICATED BY A MARKED BOX , WILL BE ATTACHED TO THE PLANS.

Computer File Information	
Creation Date: 07/04/12	Initials: JBK
Last Modification Date: 04/12/18	Initials: LTA
Full Path: www.coloradodot.info/business/designsupport	
Drawing File Name: Standards Plans List.dgn	
CAD Ver.: MicroStation V8 Scale: Not to Scale Units: English	

Sheet Revisions	
Date:	Comments
(R-X)	
(R-X)	
(R-X)	
(R-X)	

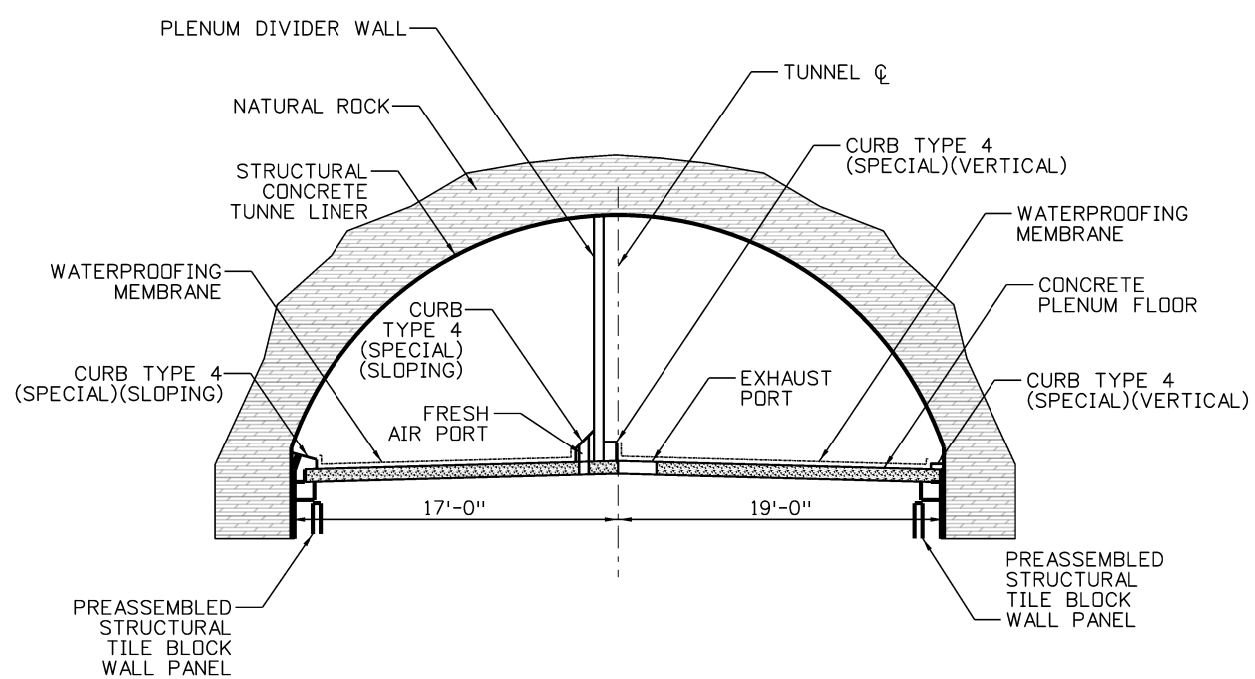

**Colorado Department of Transportation**  
 4201 East Arkansas Avenue  
 CDOT HQ, 4th Floor  
 Denver, CO 80222  
 Phone: 303-757-9021 FAX: 303-757-9868  
**Division of Project Support**      **JBK/LTA**

**STANDARDS PLANS LIST**  
 Issued By: Project Development Branch July 4, 2012

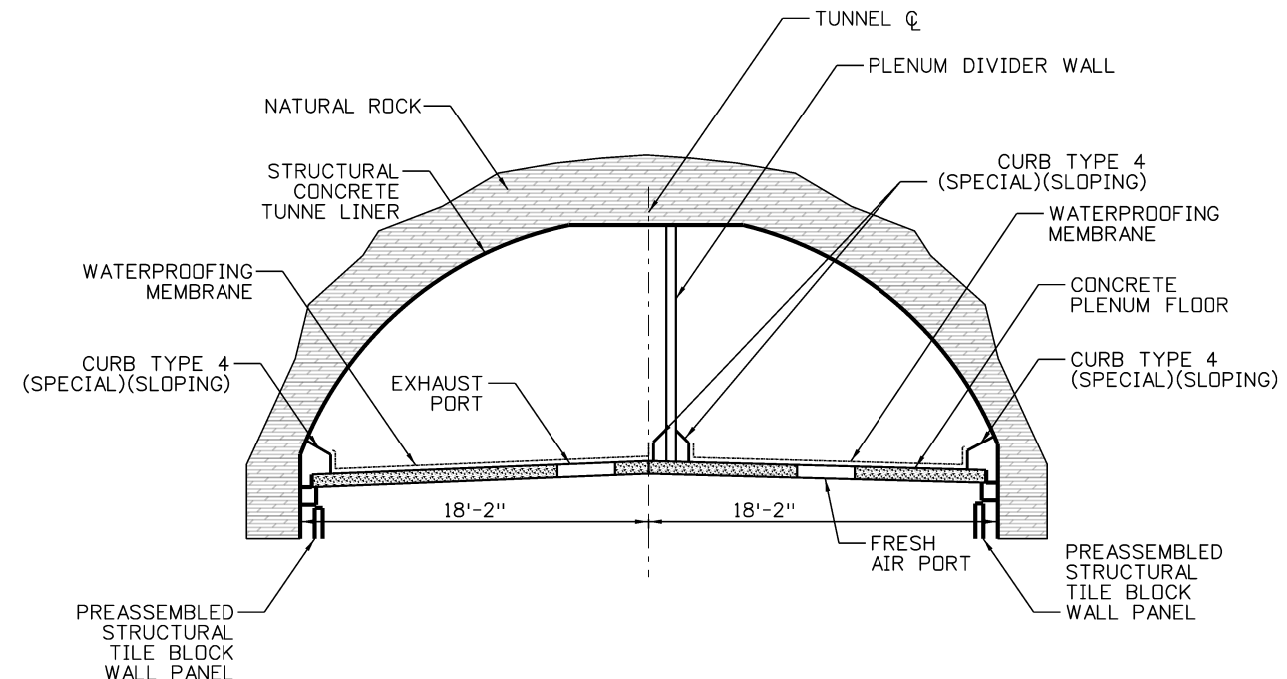
**STANDARD PLAN NO.**  
**STANDARDS PLANS LIST**  
 Sheet No. 1 of 1



DOT ENV NF560845 d201623128912001W B:\184120R\184120R\_EJMT\_Plenum\_Repair\_DES\_Typ1Sect.dgn 4/19/2018 9:16:52 AM 916572830ksc 20180414 4:20:06a terpukg7fryg- Murray Plenum Repair\062018\184120R\_EJMT\_Plenum\_Repair\_DES\_Typ1Sect.dgn



**TYPICAL EISENHOWER (NORTH) TUNNEL PLENUM SECTION LOOKING EAST**



**TYPICAL JOHNSON (SOUTH) TUNNEL PLENUM SECTION LOOKING EAST**

Print Date: 4/19/2018		<b>Sheet Revisions</b>			Colorado Department of Transportation			As Constructed		<b>PLENUM SECTIONS</b>			Project No./Code													
File Name: 184120R_EJMT_Plenum_Repair_DES_Typ1Sect.dgn		Date:	Comments	Init.	 425 A Corporate Circle Golden, CO 80401 Phone: 720-497-6918 FAX: 720-497-6901 <b>Region 1</b>			No Revisions:		<table border="1"> <tr> <td>Designer:</td> <td>RH</td> <td>Structure Numbers</td> <td>F-13-X</td> </tr> <tr> <td>Detailer:</td> <td>DD</td> <td></td> <td>F-13-Y</td> </tr> <tr> <td>Sheet Subset:</td> <td>Typicals</td> <td>Subset Sheets:</td> <td>1 of 1</td> </tr> </table>			Designer:	RH	Structure Numbers	F-13-X	Detailer:	DD		F-13-Y	Sheet Subset:	Typicals	Subset Sheets:	1 of 1	NHPP 0703-436	
Designer:	RH	Structure Numbers	F-13-X																							
Detailer:	DD		F-13-Y																							
Sheet Subset:	Typicals	Subset Sheets:	1 of 1																							
Unit Information								Revised:		21224																
Unit Leader: JF						Void:		Sheet Number																		
 1600 Broadway, Suite 1100 Denver, Colorado 80202-4922 Phone: 303-832-9091 Fax: 303-832-9096									4																	



DOT ENV NFS-184120R-EJMT-Plenum\_Repair\_DES\_Tabs\_1.dgn

### Tabulation of Removal of Waterproofing Membrane

F-13-Y Eisenhower Plenum Segment		Side	202-00506 Removal of Waterproofing	Notes
From	To		SY	
1	1	North Exhaust	4	
4	4	North Exhaust	8	
5	5	North Exhaust	3	
7	7	North Exhaust	50	
8	8	North Exhaust	25	
10	10	North Exhaust	50	
11	11	North Exhaust	25	
12	12	North Exhaust	4	
13	13	North Exhaust	3	
14	14	North Exhaust	2	
20	20	North Exhaust	50	
23	23	North Exhaust	40	
24	24	North Exhaust	14	
28	28	North Exhaust	5	
29	29	North Exhaust	23	
30	30	North Exhaust	5	
31	31	North Exhaust	6	
32	32	North Exhaust	6	
33	33	North Exhaust	7	
35	35	North Exhaust	9	
36	36	North Exhaust	12	
37	37	North Exhaust	8	
38	38	North Exhaust	4	
40	40	North Exhaust	1	
45	45	North Exhaust	2	
46	46	North Exhaust	2	
92	92	North Exhaust	2	

### Tabulation of Removal of Waterproofing Membrane

F-13-Y Eisenhower Plenum Segment		Side	202-00506 Removal of Waterproofing	Notes
From	To		SY	
100	100	North Exhaust	2	
101	101	North Exhaust	9	
102	102	North Exhaust	2	
106	106	North Exhaust	1	
107	107	North Exhaust	2	
113	113	North Exhaust	2	
120	120	North Exhaust	23	
122	122	North Exhaust	2	
123	123	North Exhaust	9	
124	124	North Exhaust	3	
126	126	North Exhaust	2	
127	127	North Exhaust	2	
128	128	North Exhaust	5	
129	129	North Exhaust	5	
130	130	North Exhaust	2	
132	132	North Exhaust	25	
133	133	North Exhaust	50	
134	134	North Exhaust	100	
135	135	North Exhaust	100	
136	136	North Exhaust	100	
137	137	North Exhaust	100	
138	138	North Exhaust	100	
139	139	North Exhaust	100	
140	140	North Exhaust	25	
141	141	North Exhaust	50	
144	144	North Exhaust	12	
145	145	North Exhaust	7	

Print Date: 4/19/2018  
 File Name: 184120R-EJMT-Plenum\_Repair\_DES\_Tabs\_1.dgn  
 Horiz. Scale: N/A Vert. Scale: N/A  
 Unit Information Unit Leader: JF  
 1600 Broadway, Suite 1100  
 Denver, Colorado 80202-4922  
 Phone: 303-832-9091 Fax: 303-832-9096

Sheet Revisions		
Date:	Comments	Init.

**Colorado Department of Transportation**

425 A Corporate Circle  
 Golden, CO 80401  
 Phone: 720-497-6918 FAX: 720-497-6901

**Region 1** **NAR**

**As Constructed**  
 No Revisions:  
 Revised:  
 Void:

**TABULATION OF WATERPROOFING  
 MEMBRANE ITEMS**

Designer: RH	Structure Numbers	F-13-X
Detailer: DD		F-13-Y
Sheet Subset: Tabulations		Subset Sheets: 1 of 6

**Project No./Code**  
 NHPP 0703-436  
 21224  
 Sheet Number **6**


DOT ENV NPS 4/23/2018 10:00 AM 184120R\_EJMT\_Plenum\_Repair\_DES\_Tabs\_2.dgn

Tabulation of Removal of Waterproofing Membrane


F-13-Y Eisenhower Plenum Segment		Side	202-00506 Removal of Waterproofing	Notes
From	To		SY	
146	146	North Exhaust	50	
147	147	North Exhaust	50	
148	148	North Exhaust	25	
149	149	North Exhaust	12	
151	151	North Exhaust	50	
152	152	North Exhaust	50	
153	153	North Exhaust	50	
162	162	North Exhaust	5	
164	164	North Exhaust	6	
2	2	North Supply	1	
4	4	North Supply	25	
7	7	North Supply	50	
8	8	North Supply	1	
9	9	North Supply	3	
10	10	North Supply	17	
11	11	North Supply	27	
14	14	North Supply	2	
15	15	North Supply	5	
16	16	North Supply	2	
17	17	North Supply	5	
18	18	North Supply	23	
19	19	North Supply	7	
20	20	North Supply	2	
21	21	North Supply	3	
23	23	North Supply	2	
24	24	North Supply	3	
26	26	North Supply	2	

Tabulation of Removal of Waterproofing Membrane

F-13-Y Eisenhower Plenum Segment		Side	202-00506 Removal of Waterproofing	Notes
From	To		SY	
28	28	North Supply	12	
32	32	North Supply	2	
38	38	North Supply	2	
42	42	North Supply	5	
44	44	North Supply	6	
47	47	North Supply	1	
51	51	North Supply	1	
58	58	North Supply	1	
91	91	North Supply	4	
102	102	North Supply	3	
110	110	North Supply	1	
112	112	North Supply	4	
116	116	North Supply	1	
118	118	North Supply	1	
124	124	North Supply	2	
125	125	North Supply	3	
126	126	North Supply	20	
127	127	North Supply	20	
128	128	North Supply	50	
130	130	North Supply	6	
131	131	North Supply	10	
132	132	North Supply	2	
134	134	North Supply	6	
135	135	North Supply	50	
136	136	North Supply	6	
138	138	North Supply	23	
140	140	North Supply	100	

Print Date: 4/23/2018  
 File Name: 184120R\_EJMT\_Plenum\_Repair\_DES\_Tabs\_2.dgn  
 Horiz. Scale: N/A Vert. Scale: N/A  
 Unit Information Unit Leader: JF  
 1600 Broadway, Suite 1100  
 Denver, Colorado 80202-4922  
 Phone: 303-832-9091 Fax: 303-832-9096

Sheet Revisions		
Date:	Comments	Init.

Colorado Department of Transportation  
  
 425 A Corporate Circle  
 Golden, CO 80401  
 Phone: 720-497-6918 FAX: 720-497-6901  
 Region 1 NAR

As Constructed  
 No Revisions:  
 Revised:  
 Void:

TABULATION OF WATERPROOFING  
 MEMBRANE ITEMS  
 Designer: RH Structure Numbers F-13-X  
 Detailer: DD F-13-Y  
 Sheet Subset: Tabulations Subset Sheets: 2 of 6

Project No./Code  
 NHPP 0703-436  
 21224  
 Sheet Number 7


DOT ENV NPS 66048 0401 05 0084 #20 RW 03 MAR 4 2018 06:00 C:\Fezaha\910SP26038\22448\NBS442\0\w\p\184120R\_EJMT\_Plenum\_Repair\_DES\_Tabs\_3.dgn

Tabulation of Removal of Waterproofing Membrane				
F-13-Y Eisenhower Plenum Segment		Side	202-00506 Removal of Waterproofing	Notes
From	To		SY	
141	141	North Supply	75	
142	142	North Supply	3	
153	153	North Supply	2	
154	154	North Supply	1	
156	156	North Supply	1	
157	157	North Supply	2	
158	158	North Supply	7	
159	159	North Supply	5	
160	160	North Supply	5	
161	161	North Supply	2	
162	162	North Supply	3	
164	164	North Supply	5	
165	165	North Supply	3	
166	166	North Supply	3	
F-13-Y Eisenhower (Subtotal)			2147	

Tabulation of Removal of Waterproofing Membrane				
F-13-Y Johnson Plenum Segment		Side	202-00506 Removal of Waterproofing	Notes
From	To		SY	
0	0	South Exhaust	34	
1	1	South Exhaust	34	
2	2	South Exhaust	48	
3	3	South Exhaust	48	
4	4	South Exhaust	48	
5	5	South Exhaust	17	
87	87	South Exhaust	12	
91	91	South Exhaust	4	
164	164	South Exhaust	48	
165	165	South Exhaust	48	
166	166	South Exhaust	71	
167	167	South Exhaust	48	
168	168	South Exhaust	2	
4	4	South Supply	23	
20	20	South Supply	2	
49	49	South Supply	1	
59	59	South Supply	1	
79	79	South Supply	1	
88	88	South Supply	4	
160	160	South Supply	3	
F-13-X Johnson (Subtotal)			497	
Project Totals			2644	

Print Date: 4/19/2018  
 File Name: 184120R\_EJMT\_Plenum\_Repair\_DES\_Tabs\_3.dgn  
 Horiz. Scale: N/A Vert. Scale: N/A  
 Unit Information Unit Leader: JF  
 1600 Broadway, Suite 1100  
 Denver, Colorado 80202-4922  
 Phone: 303-832-9091 Fax: 303-832-9096

Sheet Revisions		
Date:	Comments	Init.

**Colorado Department of Transportation**  
  
 425 A Corporate Circle  
 Golden, CO 80401  
 Phone: 720-497-6918 FAX: 720-497-6901  
**Region 1** **NAR**


As Constructed	TABULATION OF WATERPROOFING MEMBRANE ITEMS			
No Revisions:	Designer: RH	Structure Numbers	F-13-X	Project No./Code NHPP 0703-436 21224 Sheet Number 8
Revised:	Detailer: DD		F-13-Y	
Void:	Sheet Subset: Tabulations	Subset Sheets:	3 of 6	




DOT ENV NFS:4604.6r.6d8535668.020.DRW- 63.XAR 4/19/2018 09:52:20: 184120R\_EJMT\_Plenum\_Repair\_DES\_Tabs\_4.dgn

Tabulation of Repairs Waterproofing Membrane					
F-13-Y Eisenhower Plenum Segment		Side	515-00200 Waterproofing (Duct Floor)	515-00300 Waterproof Coating	Notes
From	To		SY	SY	
1	1	North Exhaust	8	4	
4	4	North Exhaust	14	8	
5	5	North Exhaust	8	3	
7	7	North Exhaust	76	50	
8	8	North Exhaust	33	25	
10	10	North Exhaust	76	50	
11	11	North Exhaust	33	25	
12	12	North Exhaust	8	4	
13	13	North Exhaust	8	3	
14	14	North Exhaust	8	2	
20	20	North Exhaust	76	50	
23	23	North Exhaust	59	40	
24	24	North Exhaust	22	14	
28	28	North Exhaust	14	5	
29	29	North Exhaust	33	23	
30	30	North Exhaust	14	5	
31	31	North Exhaust	14	6	
32	32	North Exhaust	14	6	
33	33	North Exhaust	14	7	
35	35	North Exhaust	14	9	
36	36	North Exhaust	22	12	
37	37	North Exhaust	14	8	
38	38	North Exhaust	8	4	
40	40	North Exhaust	3	1	
45	45	North Exhaust	8	2	
46	46	North Exhaust	8	2	
92	92	North Exhaust	8	2	

Tabulation of Repairs Waterproofing Membrane					
F-13-Y Eisenhower Plenum Segment		Side	515-00200 Waterproofing (Duct Floor)	515-00300 Waterproof Coating	Notes
From	To		SY	SY	
100	100	North Exhaust	8	2	
101	101	North Exhaust	14	9	
102	102	North Exhaust	8	2	
106	106	North Exhaust	3	1	
107	107	North Exhaust	8	2	
113	113	North Exhaust	8	2	
120	120	North Exhaust	33	23	
122	122	North Exhaust	8	2	
123	123	North Exhaust	14	9	
124	124	North Exhaust	8	3	
126	126	North Exhaust	8	2	
127	127	North Exhaust	8	2	
128	128	North Exhaust	14	5	
129	129	North Exhaust	14	5	
130	130	North Exhaust	8	2	
132	132	North Exhaust	33	25	
133	133	North Exhaust	76	50	
134	134	North Exhaust	114	100	
135	135	North Exhaust	114	100	
136	136	North Exhaust	114	100	
137	137	North Exhaust	114	100	
138	138	North Exhaust	114	100	
139	139	North Exhaust	114	100	
140	140	North Exhaust	33	25	
141	141	North Exhaust	76	50	
144	144	North Exhaust	22	12	
145	145	North Exhaust	14	7	

Print Date: 4/19/2018  
 File Name: 184120R\_EJMT\_Plenum\_Repair\_DES\_Tabs\_4.dgn  
 Horiz. Scale: N/A Vert. Scale: N/A  
 Unit Information Unit Leader: JF  
 1600 Broadway, Suite 1100  
 Denver, Colorado 80202-4922  
 Phone: 303-832-9091 Fax: 303-832-9096

0000	Sheet Revisions		
	Date:	Comments	Init.

**Colorado Department of Transportation**  
  
 425 A Corporate Circle  
 Golden, CO 80401  
 Phone: 720-497-6918 FAX: 720-497-6901  
**Region 1** **NAR**

As Constructed	TABULATION OF WATERPROOFING MEMBRANE ITEMS			
No Revisions:	Designer:	RH	Structure	F-13-X
Revised:	Detailer:	DD	Numbers	F-13-Y
Void:	Sheet Subset: Tabulations	Subset Sheets:	4 of 6	

Project No./Code  
 NHPP 0703-436  
 21224  
 Sheet Number **9**


ENV NPS-161616-60685125442018- 51.XMB 4/19/2018 10:42:00 AM 184120R-EJMT\_Plenum\_Repair\_DES\_Tabs\_5.dgn

Tabulation of Repairs Waterproofing Membrane

F-13-Y Eisenhower Plenum Segment		Side	515-00200 Waterproofing (Duct Floor)	515-00300 Waterproof Coating	Notes
From	To		SY	SY	
146	146	North Exhaust	76	50	
147	147	North Exhaust	76	50	
148	148	North Exhaust	33	25	
149	149	North Exhaust	22	12	
151	151	North Exhaust	76	50	
152	152	North Exhaust	76	50	
153	153	North Exhaust	76	50	
162	162	North Exhaust	14	5	
164	164	North Exhaust	14	6	
2	2	North Supply	3	1	
4	4	North Supply	33	25	
7	7	North Supply	76	50	
8	8	North Supply	3	1	
9	9	North Supply	8	3	
10	10	North Supply	33	17	
11	11	North Supply	45	27	
14	14	North Supply	8	2	
15	15	North Supply	14	5	
16	16	North Supply	8	2	
17	17	North Supply	14	5	
18	18	North Supply	33	23	
19	19	North Supply	14	7	
20	20	North Supply	8	2	
21	21	North Supply	8	3	
23	23	North Supply	8	2	
24	24	North Supply	8	3	
26	26	North Supply	8	2	

Tabulation of Repairs Waterproofing Membrane

F-13-Y Eisenhower Plenum Segment		Side	515-00200 Waterproofing (Duct Floor)	515-00300 Waterproof Coating	Notes
From	To		SY	SY	
28	28	North Supply	22	12	
32	32	North Supply	8	2	
38	38	North Supply	8	2	
42	42	North Supply	14	5	
44	44	North Supply	14	6	
47	47	North Supply	3	1	
51	51	North Supply	3	1	
58	58	North Supply	3	1	
91	91	North Supply	8	4	
102	102	North Supply	8	3	
110	110	North Supply	3	1	
112	112	North Supply	8	4	
116	116	North Supply	3	1	
118	118	North Supply	3	1	
124	124	North Supply	8	2	
125	125	North Supply	8	3	
126	126	North Supply	33	20	
127	127	North Supply	33	20	
128	128	North Supply	76	50	
130	130	North Supply	14	6	
131	131	North Supply	22	10	
132	132	North Supply	8	2	
134	134	North Supply	14	6	
135	135	North Supply	76	50	
136	136	North Supply	14	6	
138	138	North Supply	33	23	
140	140	North Supply	114	100	

Print Date: 4/19/2018  
 File Name: 184120R-EJMT\_Plenum\_Repair\_DES\_Tabs\_5.dgn  
 Horiz. Scale: N/A Vert. Scale: N/A  
 Unit Information Unit Leader: JF  
 1600 Broadway, Suite 1100  
 Denver, Colorado 80202-4922  
 Phone: 303-832-9091 Fax: 303-832-9096

Sheet Revisions		
Date:	Comments	Init.

**Colorado Department of Transportation**  
  
 425 A Corporate Circle  
 Golden, CO 80401  
 Phone: 720-497-6918 FAX: 720-497-6901  
**Region 1** **NAR**

**As Constructed**  
 No Revisions:  
 Revised:  
 Void:

**TABULATION OF WATERPROOFING MEMBRANE ITEMS**  
 Designer: RH  
 Detailer: DD  
 Sheet Subset: Tabulations  
 Structure Numbers: F-13-X, F-13-Y  
 Subset Sheets: 5 of 6



**Project No./Code**  
 NHPP 0703-436  
 21224  
 Sheet Number **10**

D:\projects\18412OR\_EJMT\_Plenum\_Repair\_DES\_Tabs\_6.dgn

Tabulation of Repairs Waterproofing Membrane					
F-13-Y Eisenhower Plenum Segment		Side	515-00200 Waterproofing (Duct Floor)	515-00300 Waterproof Coating	Notes
From	To		SY	SY	
141	141	North Supply	94	75	
142	142	North Supply	8	3	
153	153	North Supply	8	2	
154	154	North Supply	3	1	
156	156	North Supply	3	1	
157	157	North Supply	8	2	
158	158	North Supply	14	7	
159	159	North Supply	14	5	
160	160	North Supply	14	5	
161	161	North Supply	8	2	
162	162	North Supply	8	3	
164	164	North Supply	14	5	
165	165	North Supply	8	3	
166	166	North Supply	8	3	
F-13-Y Eisenhower (Subtotal)			3287	2147	


Tabulation of Repairs Waterproofing Membrane					
F-13-Y Johnson Plenum Segment		Side	515-00200 Waterproofing (Duct Floor)	515-00300 Waterproof Coating	Notes
From	To		SY	SY	
0	0	South Exhaust	45	34	
1	1	South Exhaust	45	34	
2	2	South Exhaust	59	48	
3	3	South Exhaust	59	48	
4	4	South Exhaust	59	48	
5	5	South Exhaust	33	17	
87	87	South Exhaust	22	12	
91	91	South Exhaust	8	4	
164	164	South Exhaust	59	48	
165	165	South Exhaust	59	48	
166	166	South Exhaust	94	71	
167	167	South Exhaust	59	48	
168	168	South Exhaust	8	2	
4	4	South Supply	33	23	
20	20	South Supply	8	2	
49	49	South Supply	3	1	
59	59	South Supply	3	1	
79	79	South Supply	3	1	
88	88	South Supply	8	4	
160	160	South Supply	8	3	
F-13-X Johnson (Subtotal)			675	497	
Project Totals			3962	2644	


Tabulation of Repairs Miscellaneous							
Plenum Segment		Plenum	601-06150 Concrete (Patching)	604-19000 Inlet Special	609-40041 Curb Type 4 (Special)(Sloping)	609-40042 Curb Type 4 (Special)(Vertical)	Notes
From	To		SF	EACH	LF	LF	
0	168	North, Both	812	1	250	250	To be field located
0	168	South, Both	188	1	250		To be field located
Project Totals			1000	2	500	250	


Print Date: 4/24/2018	<b>Sheet Revisions</b> Date: _____ Comments: _____ Init. _____ _____ _____ _____			<b>Colorado Department of Transportation</b>  425 A Corporate Circle Golden, CO 80401 Phone: 720-497-6918 FAX: 720-497-6901 <b>Region 1</b>	<b>As Constructed</b> No Revisions: Revised: Void:	<b>TABULATION OF WATERPROOFING MEMBRANE ITEMS</b> Designer: _____ RH Detailer: _____ DD Sheet Subset: Tabulations	Structure Numbers: F-13-X F-13-Y Subset Sheets: 6 of 6	<b>Project No./Code</b> NHPP 0703-436 21224 Sheet Number <b>11</b>
File Name: 18412OR_EJMT_Plenum_Repair_DES_Tabs_6.dgn								
Horiz. Scale: N/A	Vert. Scale: N/A							
Unit Information	Unit Leader: JF							
 1600 Broadway, Suite 1100 Denver, Colorado 80202-4922 Phone: 303-832-9091 Fax: 303-832-9096								

Heidenreich 8:41:06 AM J:\184120 CDDT ENV NPS 2015 2018\184120R - EJMT Plenum Repair\5.0 Project Data\5.14 Waterproofing Membrane\Design\Drawings\184120R-EJMT-Plenum-Repair-DES-Plan-NE-1.dgn

**LEGEND**

0-10 SY REPAIR 

11-30 SY REPAIR 

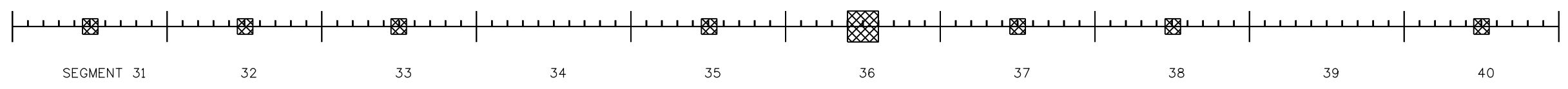
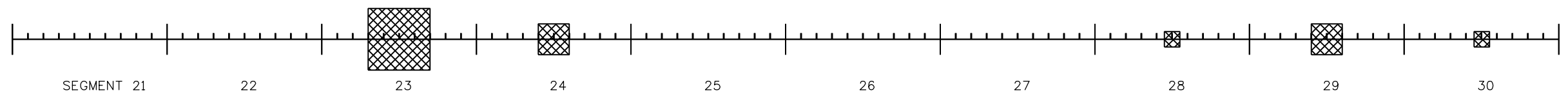
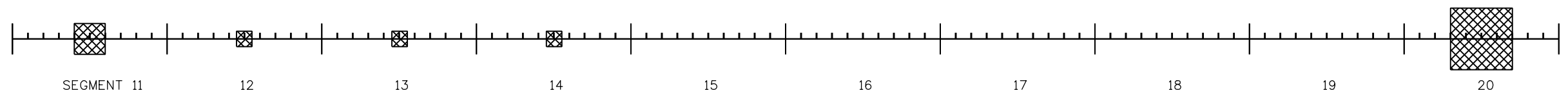
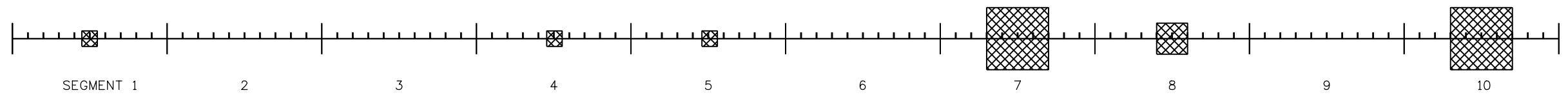
> 30 SY REPAIR 


**NOTES:**

SEGMENTS ARE APPROXIMATELY 50 FEET LONG AND ARE MARKED WITHIN THE TUNNEL.

DAMAGED AREA LOCATIONS ARE FOR SEGMENT REFERENCE ONLY. REFER TO TABULATIONS OF WATERPROOFING MEMBRANE FOR APPROXIMATE AREA, LOCATION AND DESCRIPTION.

DAMAGED AREAS TO BE REVIEWED AND CONFIRMED BY THE ENGINEER PRIOR TO REMOVAL.



Print Date: 4/20/2018  
 File Name: 184120R-EJMT-Plenum-Repair-DES-Plan-NE-1.dgn  
 Horiz. Scale: 1" = 40' Vert. Scale: N/A  
 Unit Information Unit Leader: JF  
 1600 Broadway, Suite 1100  
 Denver, Colorado 80202-4922  
 Phone: 303-832-9091 Fax: 303-832-9096

Sheet Revisions		
Date:	Comments	Init.

**Colorado Department of Transportation**

 425 A Corporate Circle  
 Golden, CO 80401  
 Phone: 720-497-6918 FAX: 720-497-6901

**Region 1 NAR**

**As Constructed**

No Revisions:

Revised:

Void:

**EISENHOWER (NORTH) TUNNEL  
 EXHAUST PLENUM REPAIR  
 PLAN SHEET**

Designer: RH Structure Numbers: F-13-X  
 Detailer: DD Structure Numbers: F-13-Y  
 Sheet Subset: Plan Subset Sheets: 1 of 20



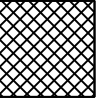
**Project No./Code**

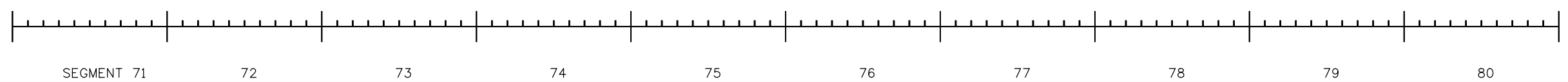
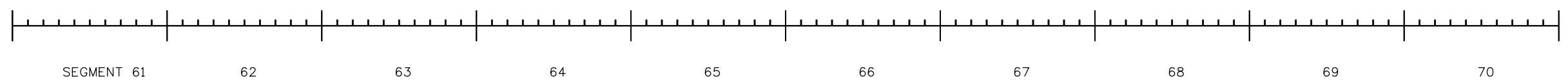
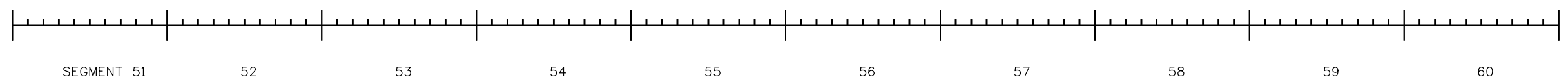
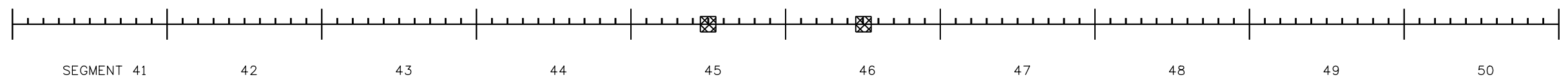
NHPP 0703-436

21224

Sheet Number **12**

Heidenreich 8:41:08 AM J:\184120 CDDT ENV NPS 2015 2018\184120R - EJMT Plenum Repair\5.0 Project Data\5.14 Waterproofing Membrane\Design\Drawings\184120R-EJMT-Plenum-Repair\_DES\_Plan\_NE\_2.dgn

LEGEND	
0-10 SY REPAIR	
11-30 SY REPAIR	
> 30 SY REPAIR	




**NOTES:**

SEGMENTS ARE APPROXIMATELY 50 FEET LONG AND ARE MARKED WITHIN THE TUNNEL.

DAMAGED AREA LOCATIONS ARE FOR SEGMENT REFERENCE ONLY. REFER TO TABULATIONS OF WATERPROOFING MEMBRANE FOR APPROXIMATE AREA, LOCATION AND DESCRIPTION.

DAMAGED AREAS TO BE REVIEWED AND CONFIRMED BY THE ENGINEER PRIOR TO REMOVAL.

Print Date: 4/20/2018	
File Name: 184120R-EJMT-Plenum-Repair_DES_Plan_NE_2.dgn	
Horiz. Scale: 1" = 40'	Vert. Scale: N/A
Unit Information	Unit Leader: JF
 1600 Broadway, Suite 1100 Denver, Colorado 80202-4922 Phone: 303-832-9091 Fax: 303-832-9096	

Sheet Revisions		
Date:	Comments	Init.

**Colorado Department of Transportation**

 425 A Corporate Circle  
 Golden, CO 80401  
 Phone: 720-497-6918 FAX: 720-497-6901

**Region 1** **NAR**

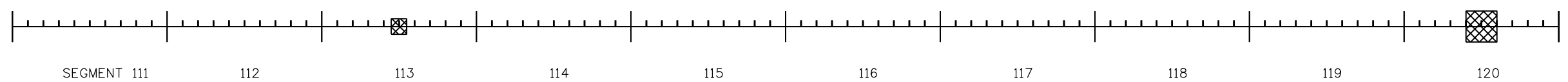
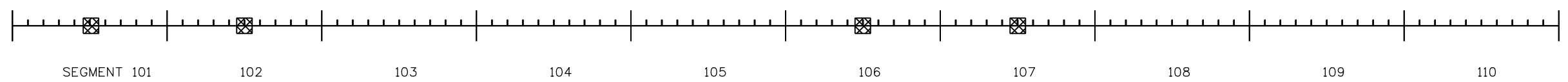
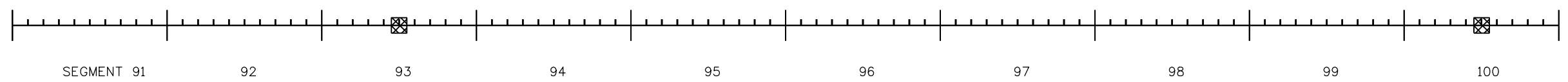
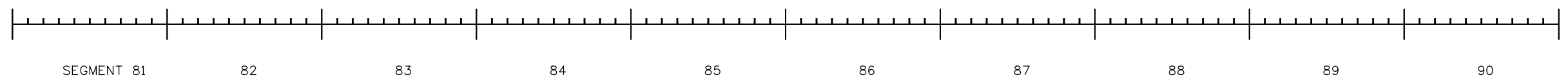
<b>As Constructed</b>
No Revisions:
Revised:
Void:

<b>EISENHOWER (NORTH) TUNNEL EXHAUST PLENUM REPAIR PLAN SHEET</b>			
Designer:	RH	Structure Numbers	F-13-X
Detailer:	DD	Structure Numbers	F-13-Y
Sheet Subset:	Plan	Subset Sheets:	2 of 20

<b>Project No./Code</b>
NHPP 0703-436
21224
Sheet Number <b>13</b>

Heidenreich 8:41:09 AM J:\184120 CDDT ENV NPS 2015 2018\184120R - EJMT Plenum Repair\5.0 Project Data\5.14 Waterproofing Membrane\Design\Drawings\184120R-EJMT-Plenum-Repair-DES-Plan-NE-3.dgn

LEGEND	
0-10 SY REPAIR	
11-30 SY REPAIR	
> 30 SY REPAIR	



**NOTES:**

SEGMENTS ARE APPROXIMATELY 50 FEET LONG AND ARE MARKED WITHIN THE TUNNEL.

DAMAGED AREA LOCATIONS ARE FOR SEGMENT REFERENCE ONLY. REFER TO TABULATIONS OF WATERPROOFING MEMBRANE FOR APPROXIMATE AREA, LOCATION AND DESCRIPTION.

DAMAGED AREAS TO BE REVIEWED AND CONFIRMED BY THE ENGINEER PRIOR TO REMOVAL.

Print Date: 4/20/2018	
File Name: 184120R-EJMT-Plenum-Repair-DES-Plan-NE-3.dgn	
Horiz. Scale: 1" = 40'	Vert. Scale: N/A
Unit Information	Unit Leader: JF
1600 Broadway, Suite 1100 Denver, Colorado 80202-4922 Phone: 303-832-9091 Fax: 303-832-9096	

Sheet Revisions		
Date:	Comments	Init.

**Colorado Department of Transportation**

425 A Corporate Circle  
 Golden, CO 80401  
 Phone: 720-497-6918 FAX: 720-497-6901

**Region 1** **NAR**


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


<b>EISENHOWER (NORTH) TUNNEL EXHAUST PLENUM REPAIR PLAN SHEET</b>			
Designer:	RH	Structure Numbers	F-13-X
Detailer:	DD	Structure Numbers	F-13-Y
Sheet Subset:	Plan	Subset Sheets:	3 of 20

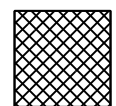
<b>Project No./Code</b>
NHPP 0703-436
21224
Sheet Number <b>14</b>

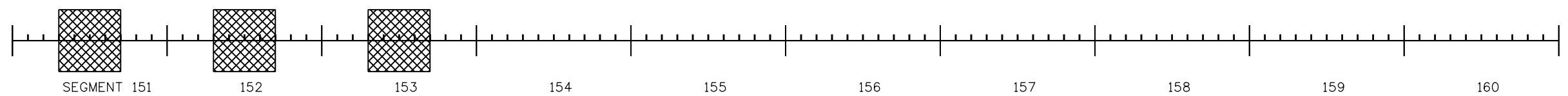
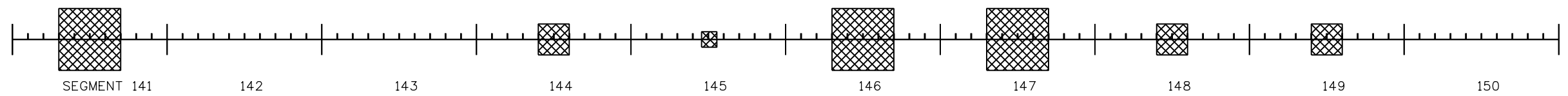
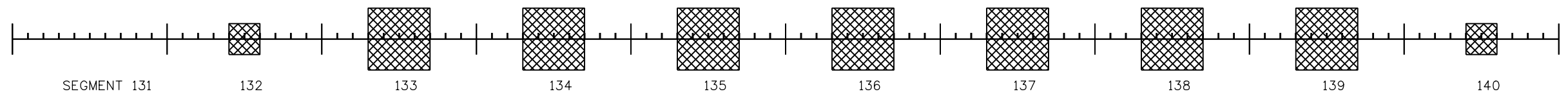
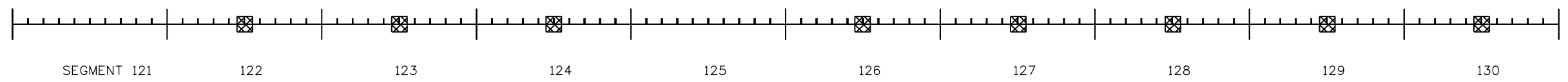
Heidenreich 8:41:10 AM J:\184120\184120R\CDOT ENV NFS 2015 2018\184120R - EJMT Plenum Repair\5.0 Project Data\5.14 Waterproofing Membrane\Design\Drawings\184120R\_EJMT\_Plenum\_Repair\_DES\_Plan\_NE\_4.dgn

**LEGEND**

0-10 SY REPAIR  


11-30 SY REPAIR  


> 30 SY REPAIR  




**NOTES:**

SEGMENTS ARE APPROXIMATELY 50 FEET LONG AND ARE MARKED WITHIN THE TUNNEL.

DAMAGED AREA LOCATIONS ARE FOR SEGMENT REFERENCE ONLY. REFER TO TABULATIONS OF WATERPROOFING MEMBRANE FOR APPROXIMATE AREA, LOCATION AND DESCRIPTION.

DAMAGED AREAS TO BE REVIEWED AND CONFIRMED BY THE ENGINEER PRIOR TO REMOVAL.

Print Date: 4/20/2018

File Name: 184120R\_EJMT\_Plenum\_Repair\_DES\_Plan\_NE\_4.dgn

Horiz. Scale: 1" = 40'      Vert. Scale: N/A

Unit Information      Unit Leader: JF

**WSP** 1600 Broadway, Suite 1100  
 Denver, Colorado 80202-4922  
 Phone: 303-832-9091 Fax: 303-832-9096

Sheet Revisions		
Date:	Comments	Init.

**Colorado Department of Transportation**

 425 A Corporate Circle  
 Golden, CO 80401  
 Phone: 720-497-6918 FAX: 720-497-6901

**Region 1**      **NAR**

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

**EISENHOWER (NORTH) TUNNEL  
 EXHAUST PLENUM REPAIR  
 PLAN SHEET**

Designer:	RH	Structure Numbers	F-13-X
Detailer:	DD	Structure Numbers	F-13-Y
Sheet Subset:	Plan	Subset Sheets:	4 of 20

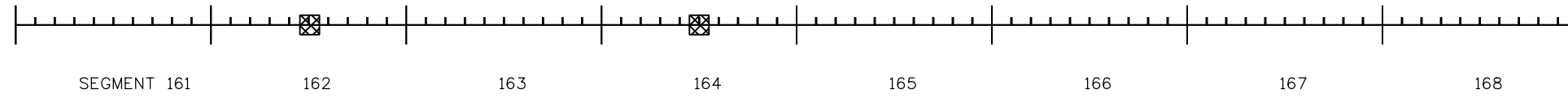
**Project No./Code**

NHPP 0703-436

21224

Sheet Number **15**

Heidenreich 8:41:11 AM J:\184120 CDDT ENV NPS 2015 2018\184120R - EJMT Plenum Repair\5.0 Project Data\5.14 Waterproofing Membrane\Design\Drawings\184120R\_EJMT\_Plenum\_Repair\_DES\_Plan\_NE\_5.dgn





LEGEND	
0-10 SY REPAIR	
11-30 SY REPAIR	
> 30 SY REPAIR	

**NOTES:**

SEGMENTS ARE APPROXIMATELY 50 FEET LONG AND ARE MARKED WITHIN THE TUNNEL.



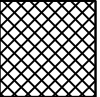
DAMAGED AREA LOCATIONS ARE FOR SEGMENT REFERENCE ONLY. REFER TO TABULATIONS OF WATERPROOFING MEMBRANE FOR APPROXIMATE AREA, LOCATION AND DESCRIPTION.

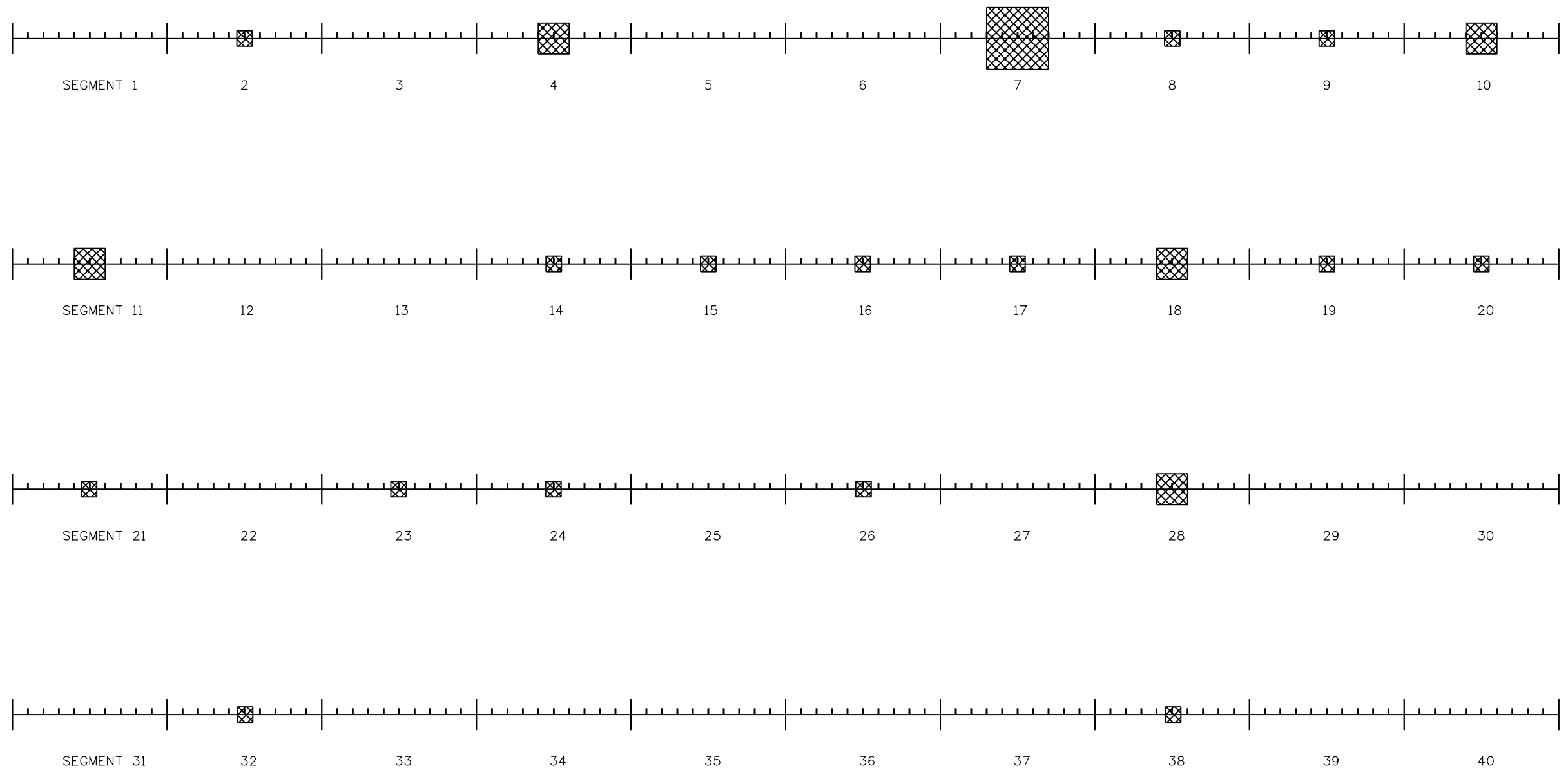
DAMAGED AREAS TO BE REVIEWED AND CONFIRMED BY THE ENGINEER PRIOR TO REMOVAL.

Print Date: 4/20/2018		<b>Sheet Revisions</b>			<b>Colorado Department of Transportation</b>		<b>As Constructed</b>		<b>EISENHOWER (NORTH) TUNNEL EXHAUST PLENUM REPAIR PLAN SHEET</b>			<b>Project No./Code</b>	
File Name: 184120R_EJMT_Plenum_Repair_DES_Plan_NE_5.dgn		Date:	Comments	Init.	 425 A Corporate Circle Golden, CO 80401 Phone: 720-497-6918 FAX: 720-497-6901 <b>Region 1</b>		No Revisions:		Designer: RH Structure Numbers F-13-X Detailer: DD Structure Numbers F-13-Y Sheet Subset: Plan Subset Sheets: 5 of 20			NHPP 0703-436	
Horiz. Scale: 1" = 40' Vert. Scale: N/A							Revised:					21224	
Unit Information Unit Leader: JF							Void:					Sheet Number <b>16</b>	
 1600 Broadway, Suite 1100 Denver, Colorado 80202-4922 Phone: 303-832-9091 Fax: 303-832-9096					<b>NAR</b>								




Heidenreich 8:41:12 AM J:\184120 CDDT ENV NFS 2015 2018\184120R - EJMT Plenum Repair\5.0 Project Data\5.14 Waterproofing Membrane\Design\Drawings\184120R-EJMT-Plenum-Repair-DES-Plan-NS-1.dgn

LEGEND	
0-10 SY REPAIR	
11-30 SY REPAIR	
> 30 SY REPAIR	



**NOTES:**  
 SEGMENTS ARE APPROXIMATELY 50 FEET LONG AND ARE MARKED WITHIN THE TUNNEL.  
 DAMAGED AREA LOCATIONS ARE FOR SEGMENT REFERENCE ONLY. REFER TO TABULATIONS OF WATERPROOFING MEMBRANE FOR APPROXIMATE AREA, LOCATION AND DESCRIPTION.  
 DAMAGED AREAS TO BE REVIEWED AND CONFIRMED BY THE ENGINEER PRIOR TO REMOVAL.

Print Date: 4/20/2018	
File Name: 184120R-EJMT-Plenum-Repair-DES-Plan-NS-1.dgn	
Horiz. Scale: 1" = 40'	Vert. Scale: N/A
Unit Information	Unit Leader: JF
 1600 Broadway, Suite 1100 Denver, Colorado 80202-4922 Phone: 303-832-9091 Fax: 303-832-9096	

Sheet Revisions		
Date:	Comments	Init.

**Colorado Department of Transportation**


 425 A Corporate Circle  
 Golden, CO 80401  
 Phone: 720-497-6918 FAX: 720-497-6901

**Region 1 NAR**


As Constructed
No Revisions:
Revised:
Void:


EISENHOWER (NORTH) TUNNEL SUPPLY PLENUM REPAIR PLAN SHEET			
Designer:	RH	Structure Numbers	F-13-X
Detailer:	DD	Structure Numbers	F-13-Y
Sheet Subset:	Plan	Subset Sheets:	6 of 20

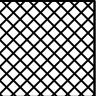
Project No./Code
NHPP 0703-436
21224
Sheet Number <b>17</b>

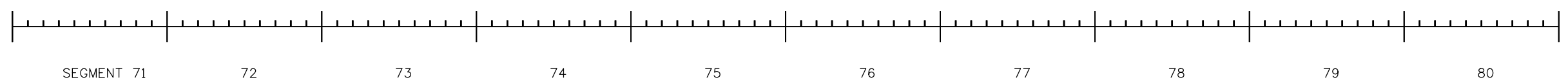
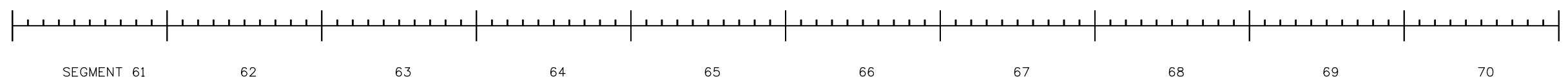
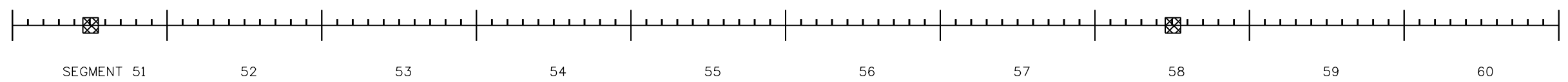
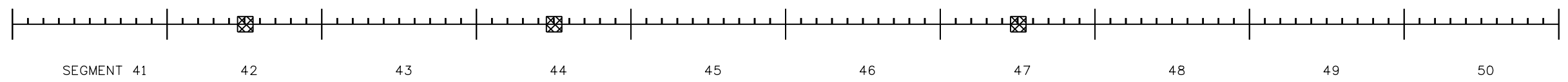
Heidenreich 8:41:13 AM J:\184120 CDDT ENV NFS 2015 2018\184120R - EJM Plenum Repair\5.0 Project Data\5.14 Waterproofing Membrane\Design\Drawings\184120R-EJMT-Plenum-Repair-DES-Plan-NS-2.dgn

**LEGEND**

0-10 SY REPAIR  


11-30 SY REPAIR  


> 30 SY REPAIR  




**NOTES:**

SEGMENTS ARE APPROXIMATELY 50 FEET LONG AND ARE MARKED WITHIN THE TUNNEL.

DAMAGED AREA LOCATIONS ARE FOR SEGMENT REFERENCE ONLY. REFER TO TABULATIONS OF WATERPROOFING MEMBRANE FOR APPROXIMATE AREA, LOCATION AND DESCRIPTION.

DAMAGED AREAS TO BE REVIEWED AND CONFIRMED BY THE ENGINEER PRIOR TO REMOVAL.

Print Date: 4/20/2018

File Name: 184120R-EJMT-Plenum-Repair-DES-Plan-NS-2.dgn

Horiz. Scale: 1" = 40'      Vert. Scale: N/A

Unit Information      Unit Leader: JF

**WSP** 1600 Broadway, Suite 1100  
 Denver, Colorado 80202-4922  
 Phone: 303-832-9091 Fax: 303-832-9096

Sheet Revisions		
Date:	Comments	Init.

**Colorado Department of Transportation**

 425 A Corporate Circle  
 Golden, CO 80401  
 Phone: 720-497-6918 FAX: 720-497-6901

**Region 1**      **NAR**

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

**EISENHOWER (NORTH) TUNNEL  
 SUPPLY PLENUM REPAIR  
 PLAN SHEET**

Designer:	RH	Structure Numbers	F-13-X
Detailer:	DD	Structure Numbers	F-13-Y
Sheet Subset:	Plan	Subset Sheets:	7 of 20

**Project No./Code**

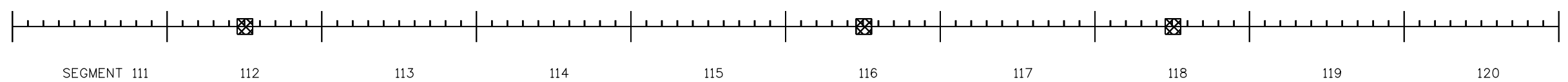
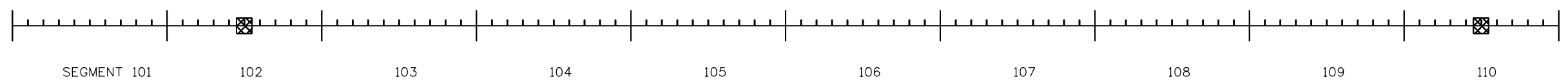
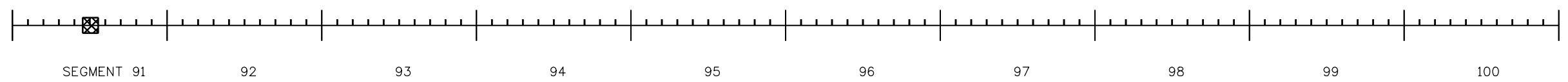
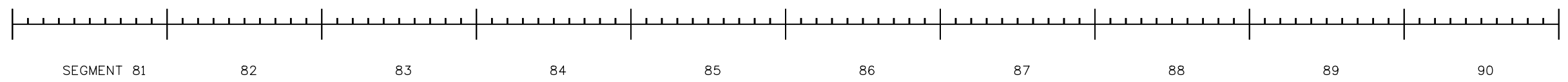
NHPP 0703-436

21224

Sheet Number **18**

Heidenreich 8:41:14 AM J:\184120 CDDT ENV NPS 2015 2018\184120R - EJMT Plenum Repair\5.0 Project Data\5.1.4 Waterproofing Membrane\Design\Drawings\184120R-EJMT-Plenum-Repair-DES-Plan-NS-3.dgn

LEGEND	
0-10 SY REPAIR	
11-30 SY REPAIR	
> 30 SY REPAIR	



**NOTES:**

SEGMENTS ARE APPROXIMATELY 50 FEET LONG AND ARE MARKED WITHIN THE TUNNEL.

DAMAGED AREA LOCATIONS ARE FOR SEGMENT REFERENCE ONLY. REFER TO TABULATIONS OF WATERPROOFING MEMBRANE FOR APPROXIMATE AREA, LOCATION AND DESCRIPTION.

DAMAGED AREAS TO BE REVIEWED AND CONFIRMED BY THE ENGINEER PRIOR TO REMOVAL.

Print Date: 4/20/2018	
File Name: 184120R-EJMT-Plenum-Repair-DES-Plan-NS-3.dgn	
Horiz. Scale: 1" = 40'	Vert. Scale: N/A
Unit Information	Unit Leader: JF
1600 Broadway, Suite 1100 Denver, Colorado 80202-4922 Phone: 303-832-9091 Fax: 303-832-9096	

Sheet Revisions		
Date:	Comments	Init.

**Colorado Department of Transportation**

425 A Corporate Circle  
Golden, CO 80401  
Phone: 720-497-6918 FAX: 720-497-6901

**Region 1** **NAR**

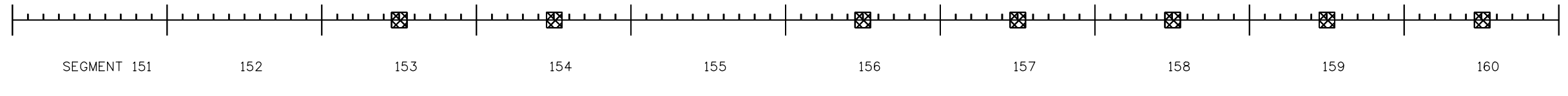
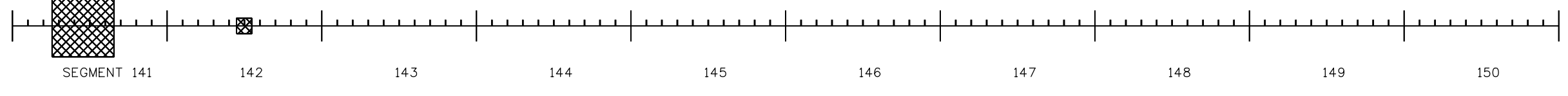
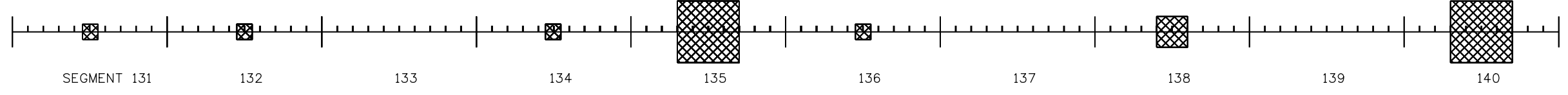
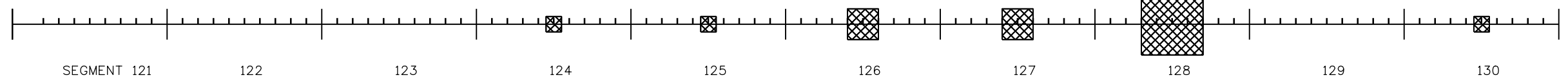
As Constructed
No Revisions:
Revised:
Void:

EISENHOWER (NORTH) TUNNEL SUPPLY PLENUM REPAIR PLAN SHEET			
Designer:	RH	Structure Numbers	F-13-X
Detailer:	DD	Structure Numbers	F-13-Y
Sheet Subset:	Plan	Subset Sheets:	8 of 20

Project No./Code
NHPP 0703-436
21224
Sheet Number <b>19</b>

Heidenreich 8:41:15 AM J:\184120 CDDT ENV NFS 2015 2018\184120R - EJM Plenum Repair\5.0 Project Data\5.14 Waterproofing Membrane\Design\Drawings\184120R-EJMT-Plenum-Repair-DES-Plan-NS-4.dgn

LEGEND	
0-10 SY REPAIR	
11-30 SY REPAIR	
> 30 SY REPAIR	



**NOTES:**

SEGMENTS ARE APPROXIMATELY 50 FEET LONG AND ARE MARKED WITHIN THE TUNNEL.

DAMAGED AREA LOCATIONS ARE FOR SEGMENT REFERENCE ONLY. REFER TO TABULATIONS OF WATERPROOFING MEMBRANE FOR APPROXIMATE AREA, LOCATION AND DESCRIPTION.

DAMAGED AREAS TO BE REVIEWED AND CONFIRMED BY THE ENGINEER PRIOR TO REMOVAL.

Print Date: 4/20/2018	
File Name: 184120R-EJMT-Plenum-Repair-DES-Plan-NS-4.dgn	
Horiz. Scale: 1" = 40'	Vert. Scale: N/A
Unit Information	Unit Leader: JF
1600 Broadway, Suite 1100 Denver, Colorado 80202-4922 Phone: 303-832-9091 Fax: 303-832-9096	

Sheet Revisions		
Date:	Comments	Init.

**Colorado Department of Transportation**

425 A Corporate Circle  
Golden, CO 80401  
Phone: 720-497-6918 FAX: 720-497-6901

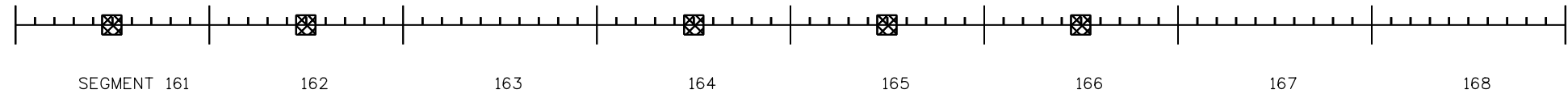
**Region 1**      **NAR**

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


<b>EISENHOWER (NORTH) TUNNEL SUPPLY PLENUM REPAIR PLAN SHEET</b>			
Designer:	RH	Structure Numbers	F-13-X
Detailer:	DD	Structure Numbers	F-13-Y
Sheet Subset:	Plan	Subset Sheets:	9 of 20


<b>Project No./Code</b>
NHPP 0703-436
21224
Sheet Number <b>20</b>

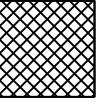
Heidenreich 8:41:17 AM J:\184120 CDDT ENV NFS 2015 2018\184120R - EJMT Plenum Repair\5.0 Project Data\5.14 Waterproofing Membrane\Design\Drawings\184120R\_EJMT\_Plenum\_Repair\_DES\_Plan\_NS\_5.dgn



**LEGEND**

0-10 SY REPAIR  


11-30 SY REPAIR  




> 30 SY REPAIR  


**NOTES:**



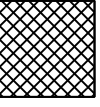
SEGMENTS ARE APPROXIMATELY 50 FEET LONG AND ARE MARKED WITHIN THE TUNNEL.

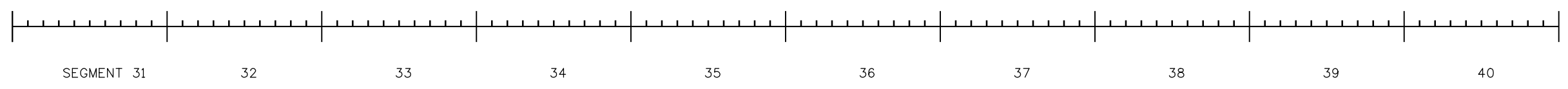
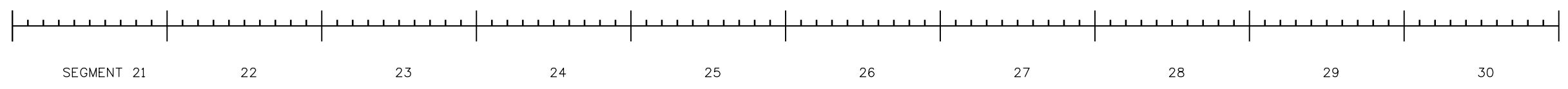
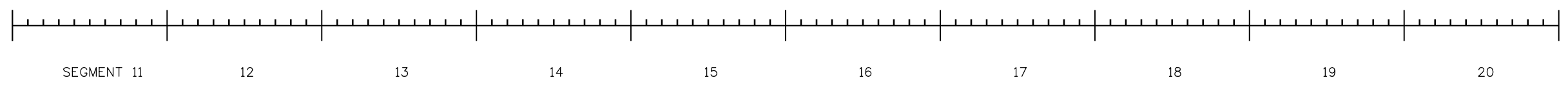
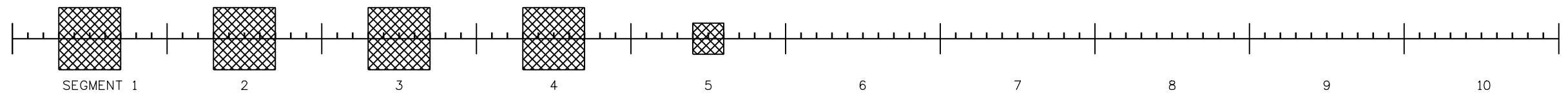
DAMAGED AREA LOCATIONS ARE FOR SEGMENT REFERENCE ONLY. REFER TO TABULATIONS OF WATERPROOFING MEMBRANE FOR APPROXIMATE AREA, LOCATION AND DESCRIPTION.

DAMAGED AREAS TO BE REVIEWED AND CONFIRMED BY THE ENGINEER PRIOR TO REMOVAL.


Print Date: 4/20/2018		<b>Sheet Revisions</b>			<b>Colorado Department of Transportation</b>				<b>As Constructed</b>		<b>EISENHOWER (NORTH) TUNNEL SUPPLY PLENUM REPAIR PLAN SHEET</b>				<b>Project No./Code</b>			
File Name: 184120R_EJMT_Plenum_Repair_DES_Plan_NS_5.dgn		0000	Date:	Comments	Init.	 425 A Corporate Circle Golden, CO 80401 Phone: 720-497-6918 FAX: 720-497-6901 <b>Region 1</b> <span style="float: right;"><b>NAR</b></span>				No Revisions:		Designer: RH		Structure Numbers		NHPP 0703-436		
Horiz. Scale: 1" = 40'      Vert. Scale: N/A										Revised:		Detailer: DD		F-13-X		21224		
Unit Information      Unit Leader: JF										Void:		Sheet Subset: Plan		Subset Sheets: 10 of 20		Sheet Number <b>21</b>		
 1600 Broadway, Suite 1100 Denver, Colorado 80202-4922 Phone: 303-832-9091 Fax: 303-832-9096																		

Heidenreich 8:41:18 AM J:\184120 CDDT ENV NFS 2015 2018\184120R - EJMT Plenum Repair\5.0 Project Data\5.14 Waterproofing Membrane\Design\Drawings\184120R-EJMT-Plenum-Repair\_DES\_Plan\_SE\_1.dgn

LEGEND	
0-10 SY REPAIR	
11-30 SY REPAIR	
> 30 SY REPAIR	



**NOTES:**  
 SEGMENTS ARE APPROXIMATELY 50 FEET LONG AND ARE MARKED WITHIN THE TUNNEL.  
 DAMAGED AREA LOCATIONS ARE FOR SEGMENT REFERENCE ONLY. REFER TO TABULATIONS OF WATERPROOFING MEMBRANE FOR APPROXIMATE AREA, LOCATION AND DESCRIPTION.  
 DAMAGED AREAS TO BE REVIEWED AND CONFIRMED BY THE ENGINEER PRIOR TO REMOVAL.

Print Date: 4/20/2018
File Name: 184120R-EJMT-Plenum-Repair_DES_Plan_SE_1.dgn
Horiz. Scale: 1" = 40'      Vert. Scale: N/A
Unit Information      Unit Leader: JF
 1600 Broadway, Suite 1100 Denver, Colorado 80202-4922 Phone: 303-832-9091 Fax: 303-832-9096

Sheet Revisions		
Date:	Comments	Init.

**Colorado Department of Transportation**



425 A Corporate Circle  
Golden, CO 80401  
Phone: 720-497-6918 FAX: 720-497-6901

**Region 1**      **NAR**


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


<b>JOHNSON (SOUTH) TUNNEL EXHAUST PLENUM REPAIR PLAN SHEET</b>			
Designer:	RH	Structure Numbers	F-13-X
Detailer:	DD	Structure Numbers	F-13-Y
Sheet Subset:	Plan	Subset Sheets:	11 of 20

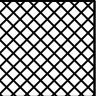
<b>Project No./Code</b>
NHPP 0703-436
21224
Sheet Number <b>22</b>

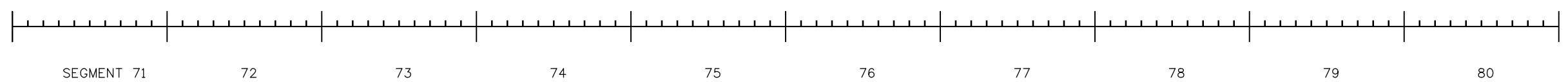
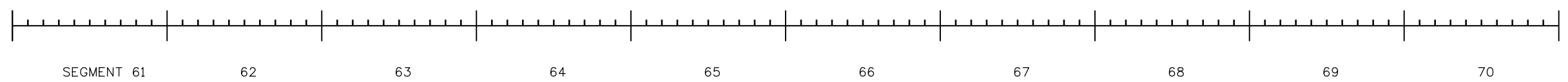
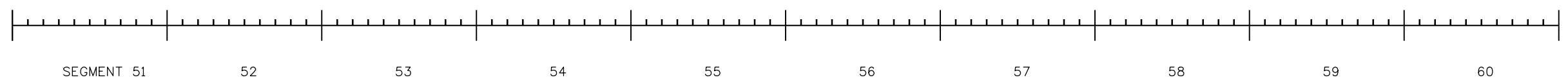
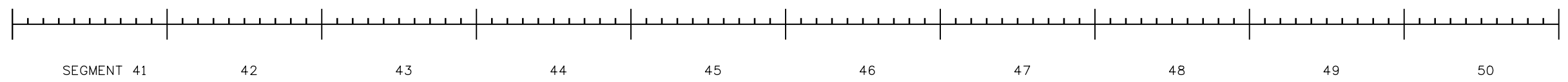
Heidenreich 8:41:19 AM J:\184120 CDDT ENV NPS 2015 2018\184120R - EJMT Plenum Repair\5.0 Project Data\5.14 Waterproofing Membrane\Design\Drawings\184120R-EJMT-Plenum-Repair\_DES\_Plan\_SE\_2.dgn

**LEGEND**

0-10 SY REPAIR  


11-30 SY REPAIR  


> 30 SY REPAIR  




**NOTES:**

SEGMENTS ARE APPROXIMATELY 50 FEET LONG AND ARE MARKED WITHIN THE TUNNEL.

DAMAGED AREA LOCATIONS ARE FOR SEGMENT REFERENCE ONLY. REFER TO TABULATIONS OF WATERPROOFING MEMBRANE FOR APPROXIMATE AREA, LOCATION AND DESCRIPTION.

DAMAGED AREAS TO BE REVIEWED AND CONFIRMED BY THE ENGINEER PRIOR TO REMOVAL.

Print Date: 4/20/2018

File Name: 184120R-EJMT-Plenum-Repair\_DES\_Plan\_SE\_2.dgn

Horiz. Scale: 1" = 40'      Vert. Scale: N/A

Unit Information      Unit Leader: JF

**WSP** 1600 Broadway, Suite 1100  
 Denver, Colorado 80202-4922  
 Phone: 303-832-9091 Fax: 303-832-9096

Sheet Revisions		
Date:	Comments	Init.

**Colorado Department of Transportation**

 425 A Corporate Circle  
 Golden, CO 80401  
 Phone: 720-497-6918 FAX: 720-497-6901

**Region 1**      **NAR**

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

**JOHNSON (SOUTH) TUNNEL  
 EXHAUST PLENUM REPAIR  
 PLAN SHEET**

Designer:	RH	Structure Numbers	F-13-X
Detailer:	DD	Structure Numbers	F-13-Y
Sheet Subset:	Plan	Subset Sheets:	12 of 20

**Project No./Code**

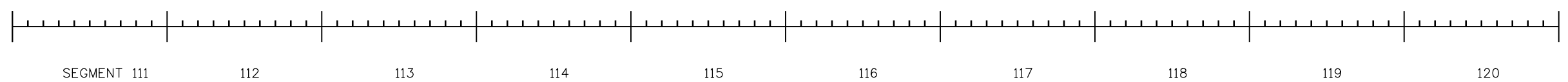
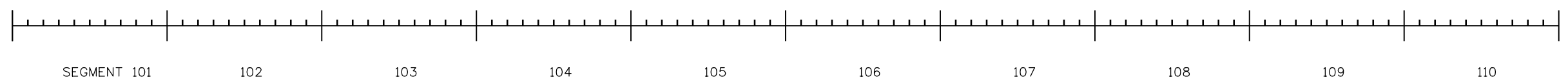
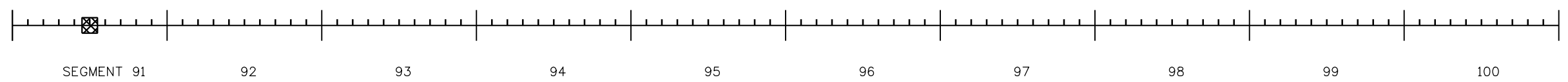
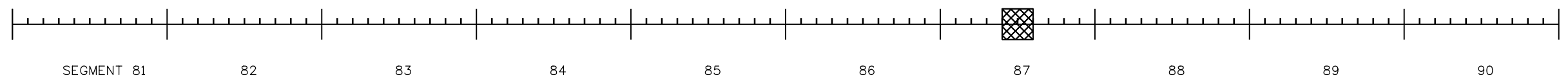
NHPP 0703-436

21224

Sheet Number **23**

Heidenreich 8:41:20 AM J:\184120\184120R\184120R - EJM Plenum Repair\5.0 Project Data\5.14 Waterproofing Membrane\Design\Drawings\184120R-EJMT-Plenum-Repair\_DES\_Plan\_SE\_3.dgn

LEGEND	
0-10 SY REPAIR	
11-30 SY REPAIR	
> 30 SY REPAIR	



**NOTES:**

SEGMENTS ARE APPROXIMATELY 50 FEET LONG AND ARE MARKED WITHIN THE TUNNEL.

DAMAGED AREA LOCATIONS ARE FOR SEGMENT REFERENCE ONLY. REFER TO TABULATIONS OF WATERPROOFING MEMBRANE FOR APPROXIMATE AREA, LOCATION AND DESCRIPTION.

DAMAGED AREAS TO BE REVIEWED AND CONFIRMED BY THE ENGINEER PRIOR TO REMOVAL.

Print Date: 4/20/2018	
File Name: 184120R-EJMT-Plenum-Repair_DES_Plan_SE_3.dgn	
Horiz. Scale: 1" = 40'	Vert. Scale: N/A
Unit Information	Unit Leader: JF
1600 Broadway, Suite 1100 Denver, Colorado 80202-4922 Phone: 303-832-9091 Fax: 303-832-9096	

Sheet Revisions		
Date:	Comments	Init.

**Colorado Department of Transportation**

425 A Corporate Circle  
 Golden, CO 80401  
 Phone: 720-497-6918 FAX: 720-497-6901

**Region 1** **NAR**



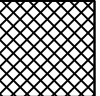
As Constructed
No Revisions:
Revised:
Void:

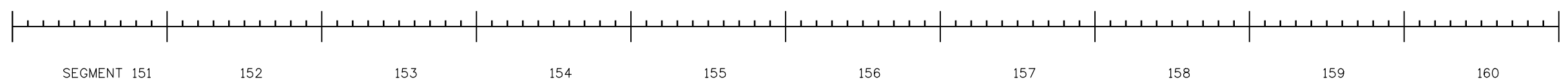
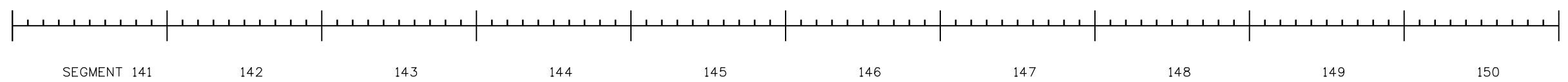
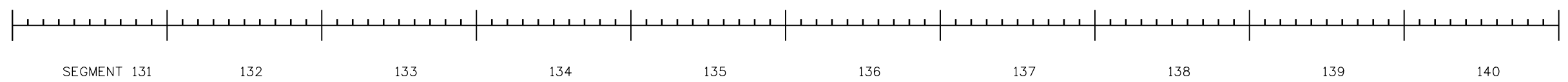
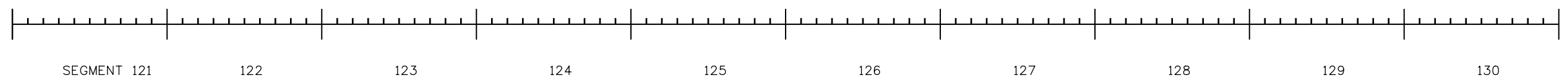
JOHNSON (SOUTH) TUNNEL EXHAUST PLENUM REPAIR PLAN SHEET			
Designer:	RH	Structure Numbers	F-13-X
Detailer:	DD	Structure Numbers	F-13-Y
Sheet Subset:	Plan	Subset Sheets:	13 of 20

Project No./Code
NHPP 0703-436
21224
Sheet Number <b>24</b>




Heidenreich 8:41:21 AM J:\184120 CDDT ENV NPS 2015 2018 184120R - EJMT Plenum Repair\5.0 Project Data\5.14 Waterproofing Membrane\Design\Drawings\184120R\_EJMT\_Plenum\_Repair\_DES\_Plan\_SE\_4.dgn

LEGEND	
0-10 SY REPAIR	
11-30 SY REPAIR	
> 30 SY REPAIR	



**NOTES:**  
 SEGMENTS ARE APPROXIMATELY 50 FEET LONG AND ARE MARKED WITHIN THE TUNNEL.  
 DAMAGED AREA LOCATIONS ARE FOR SEGMENT REFERENCE ONLY. REFER TO TABULATIONS OF WATERPROOFING MEMBRANE FOR APPROXIMATE AREA, LOCATION AND DESCRIPTION.  
 DAMAGED AREAS TO BE REVIEWED AND CONFIRMED BY THE ENGINEER PRIOR TO REMOVAL.

Print Date: 4/20/2018	
File Name: 184120R_EJMT_Plenum_Repair_DES_Plan_SE_4.dgn	
Horiz. Scale: 1" = 40'	Vert. Scale: N/A
Unit Information	Unit Leader: JF
 1600 Broadway, Suite 1100 Denver, Colorado 80202-4922 Phone: 303-832-9091 Fax: 303-832-9096	

Sheet Revisions		
Date:	Comments	Init.

**Colorado Department of Transportation**

 425 A Corporate Circle  
 Golden, CO 80401  
 Phone: 720-497-6918 FAX: 720-497-6901

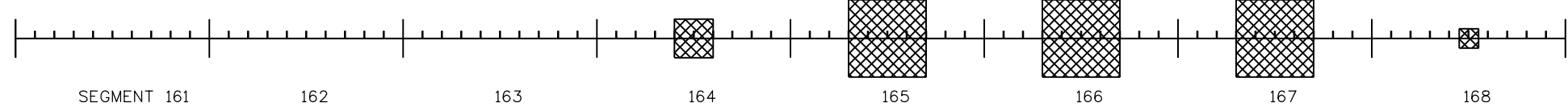
**Region 1** **NAR**

As Constructed
No Revisions:
Revised:
Void:

JOHNSON (SOUTH) TUNNEL EXHAUST PLENUM REPAIR PLAN SHEET			
Designer:	RH	Structure Numbers	F-13-X
Detailer:	DD	Structure Numbers	F-13-Y
Sheet Subset:	Plan	Subset Sheets:	14 of 20

Project No./Code
NHPP 0703-436
21224
Sheet Number <b>25</b>

Heidenreich 8:41:22 AM J:\184120\184120R\184120R - EJMT Plenum Repair\5.0 Project Data\5.14 Waterproofing Membrane\Design\Drawings\184120R-EJMT-Plenum-Repair\_DES\_Plan\_SE\_5.dgn



LEGEND	
0-10 SY REPAIR	
11-30 SY REPAIR	
> 30 SY REPAIR	

**NOTES:**



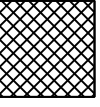
SEGMENTS ARE APPROXIMATELY 50 FEET LONG AND ARE MARKED WITHIN THE TUNNEL.

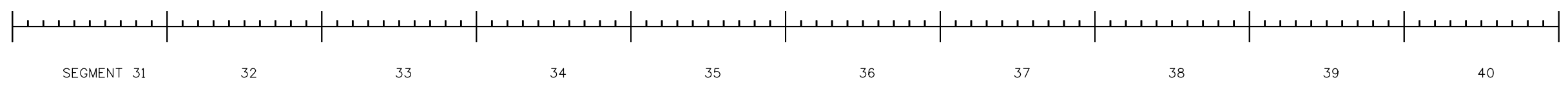
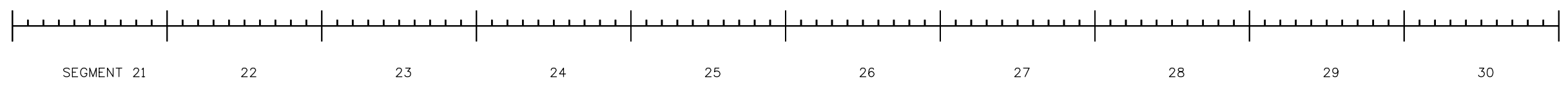
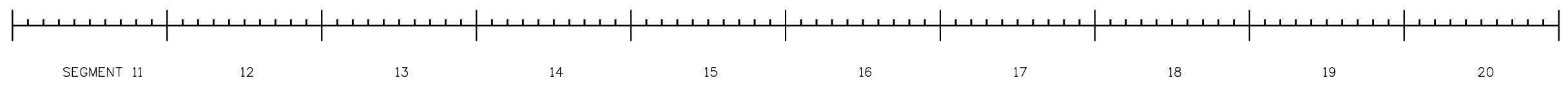
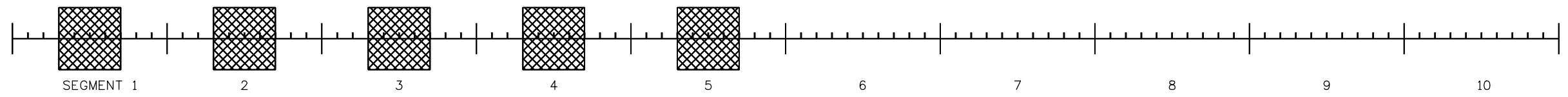
DAMAGED AREA LOCATIONS ARE FOR SEGMENT REFERENCE ONLY. REFER TO TABULATIONS OF WATERPROOFING MEMBRANE FOR APPROXIMATE AREA, LOCATION AND DESCRIPTION.

DAMAGED AREAS TO BE REVIEWED AND CONFIRMED BY THE ENGINEER PRIOR TO REMOVAL.


Print Date: 4/20/2018		<b>Sheet Revisions</b> <table border="1"> <thead> <tr> <th>Date:</th> <th>Comments</th> <th>Init.</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>			Date:	Comments	Init.													<b>As Constructed</b> No Revisions: Revised: Void:		<b>JOHNSON (SOUTH) TUNNEL EXHAUST PLENUM REPAIR PLAN SHEET</b>				Project No./Code	
Date:	Comments				Init.																						
File Name: 184120R-EJMT-Plenum-Repair_DES_Plan_SE_5.dgn		Colorado Department of Transportation 425 A Corporate Circle Golden, CO 80401 Phone: 720-497-6918 FAX: 720-497-6901 Region 1 <b>NAR</b>		NHPP 0703-436																							
Horiz. Scale: 1" = 40'      Vert. Scale: N/A		WSP 1600 Broadway, Suite 1100 Denver, Colorado 80202-4922 Phone: 303-832-9091 Fax: 303-832-9096		Designer: RH      Structure Numbers: F-13-X Detailer: DD      Structure Numbers: F-13-Y		21224																					
Unit Information      Unit Leader: JF		Sheet Subset: Plan      Subset Sheets: 15 of 20		Sheet Number		<b>26</b>																					

Heidenreich 8:41:23 AM J:\184120\184120R\184120R - EJM - Plenum Repair\5.0 Project Data\5.14 Waterproofing Membrane\Design\Drawings\184120R-EJMT-Plenum-Repair\_DES\_Plan\_SS\_1.dgn

LEGEND	
0-10 SY REPAIR	
11-30 SY REPAIR	
> 30 SY REPAIR	



**NOTES:**  
 SEGMENTS ARE APPROXIMATELY 50 FEET LONG AND ARE MARKED WITHIN THE TUNNEL.  
 DAMAGED AREA LOCATIONS ARE FOR SEGMENT REFERENCE ONLY. REFER TO TABULATIONS OF WATERPROOFING MEMBRANE FOR APPROXIMATE AREA, LOCATION AND DESCRIPTION.  
 DAMAGED AREAS TO BE REVIEWED AND CONFIRMED BY THE ENGINEER PRIOR TO REMOVAL.

Print Date: 4/20/2018
File Name: 184120R-EJMT-Plenum-Repair_DES_Plan_SS_1.dgn
Horiz. Scale: 1" = 40'      Vert. Scale: N/A
Unit Information      Unit Leader: JF
 1600 Broadway, Suite 1100 Denver, Colorado 80202-4922 Phone: 303-832-9091 Fax: 303-832-9096

Sheet Revisions		
Date:	Comments	Init.

**Colorado Department of Transportation**



425 A Corporate Circle  
Golden, CO 80401  
Phone: 720-497-6918 FAX: 720-497-6901



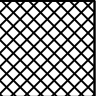
**Region 1**      **NAR**

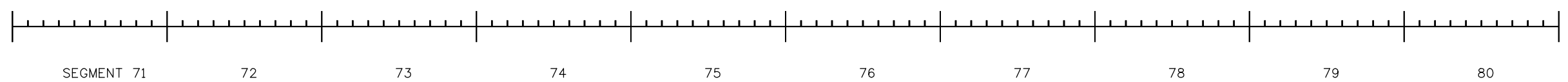
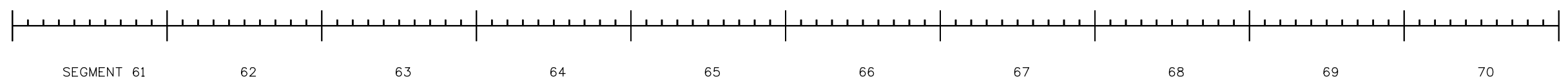
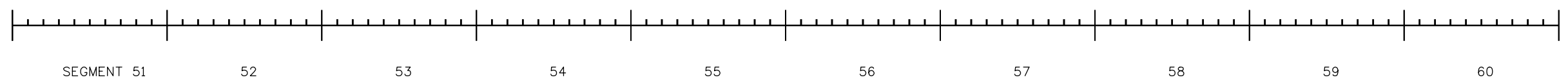
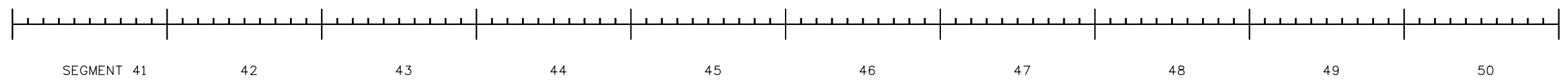
<b>As Constructed</b>
No Revisions:
Revised:
Void:

<b>JOHNSON (SOUTH) TUNNEL SUPPLY PLENUM REPAIR PLAN SHEET</b>			
Designer:	RH	Structure Numbers	F-13-X
Detailer:	DD	Structure Numbers	F-13-Y
Sheet Subset:	Plan	Subset Sheets:	16 of 20

<b>Project No./Code</b>
NHPP 0703-436
21224
Sheet Number <b>27</b>

Heidenreich 8:41:24 AM J:\184120\DOT\ENV\NPS\2015\2018\184120R - EJMT Plenum Repair\5.0 Project Data\5.14 Waterproofing Membrane\Design\Drawings\184120R-EJMT-Plenum-Repair\_DES\_Plan\_SS\_2.dgn

LEGEND	
0-10 SY REPAIR	
11-30 SY REPAIR	
> 30 SY REPAIR	




**NOTES:**

SEGMENTS ARE APPROXIMATELY 50 FEET LONG AND ARE MARKED WITHIN THE TUNNEL.

DAMAGED AREA LOCATIONS ARE FOR SEGMENT REFERENCE ONLY. REFER TO TABULATIONS OF WATERPROOFING MEMBRANE FOR APPROXIMATE AREA, LOCATION AND DESCRIPTION.

DAMAGED AREAS TO BE REVIEWED AND CONFIRMED BY THE ENGINEER PRIOR TO REMOVAL.

Print Date: 4/20/2018	
File Name: 184120R-EJMT-Plenum-Repair_DES_Plan_SS_2.dgn	
Horiz. Scale: 1" = 40'	Vert. Scale: N/A
Unit Information	Unit Leader: JF
 1600 Broadway, Suite 1100 Denver, Colorado 80202-4922 Phone: 303-832-9091 Fax: 303-832-9096	

Sheet Revisions		
Date:	Comments	Init.

**Colorado Department of Transportation**



425 A Corporate Circle  
Golden, CO 80401  
Phone: 720-497-6918 FAX: 720-497-6901



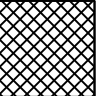
**Region 1** **NAR**

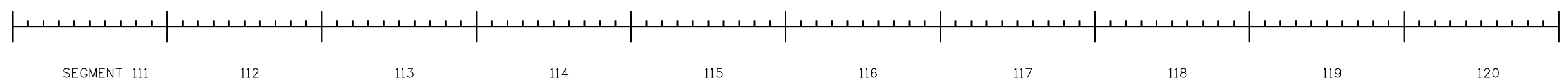
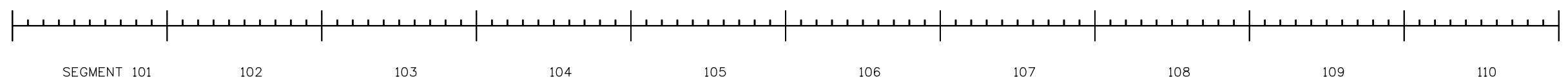
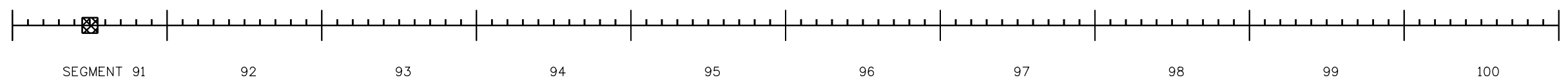
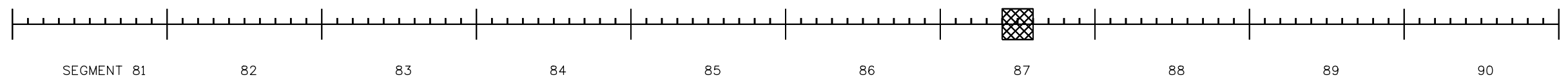
<b>As Constructed</b>
No Revisions:
Revised:
Void:

<b>JOHNSON (SOUTH) TUNNEL SUPPLY PLENUM REPAIR PLAN SHEET</b>			
Designer:	RH	Structure Numbers	F-13-X
Detailer:	DD	Structure Numbers	F-13-Y
Sheet Subset:	Plan	Subset Sheets:	17 of 20

<b>Project No./Code</b>
NHPP 0703-436
21224
Sheet Number <b>28</b>

Heidenreich 8:41:25 AM J:\184120\184120R - EJM - Plenum Repair\5.0 Project Data\5.14 Waterproofing Membrane\Design\Drawings\184120R-EJMT-Plenum-Repair-DES-Plan-SS-3.dgn

LEGEND	
0-10 SY REPAIR	
11-30 SY REPAIR	
> 30 SY REPAIR	




**NOTES:**

SEGMENTS ARE APPROXIMATELY 50 FEET LONG AND ARE MARKED WITHIN THE TUNNEL.

DAMAGED AREA LOCATIONS ARE FOR SEGMENT REFERENCE ONLY. REFER TO TABULATIONS OF WATERPROOFING MEMBRANE FOR APPROXIMATE AREA, LOCATION AND DESCRIPTION.

DAMAGED AREAS TO BE REVIEWED AND CONFIRMED BY THE ENGINEER PRIOR TO REMOVAL.

Print Date: 4/20/2018	
File Name: 184120R-EJMT-Plenum-Repair-DES-Plan-SS-3.dgn	
Horiz. Scale: 1" = 40'	Vert. Scale: N/A
Unit Information	Unit Leader: JF
 1600 Broadway, Suite 1100 Denver, Colorado 80202-4922 Phone: 303-832-9091 Fax: 303-832-9096	

Sheet Revisions		
Date:	Comments	Init.

**Colorado Department of Transportation**



425 A Corporate Circle  
 Golden, CO 80401  
 Phone: 720-497-6918 FAX: 720-497-6901



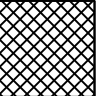
**Region 1** **NAR**

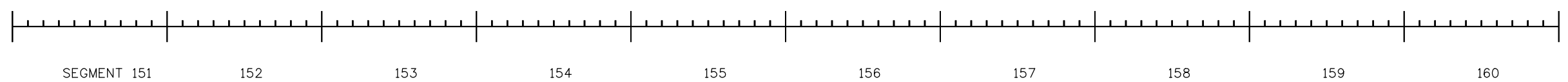
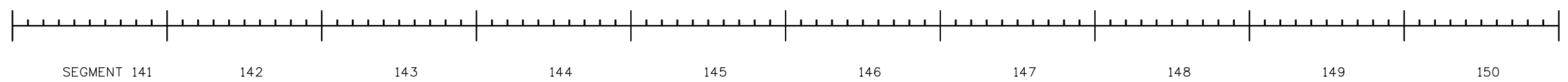
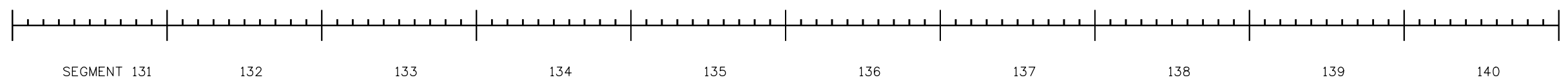
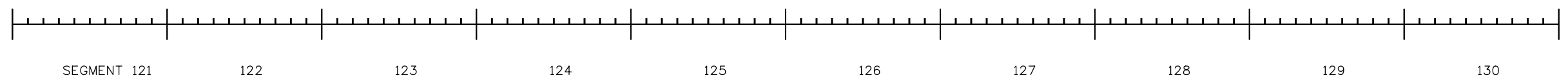
<b>As Constructed</b>
No Revisions:
Revised:
Void:

<b>JOHNSON (SOUTH) TUNNEL SUPPLY PLENUM REPAIR PLAN SHEET</b>			
Designer:	RH	Structure Numbers	F-13-X
Detailer:	DD	Structure Numbers	F-13-Y
Sheet Subset:	Plan	Subset Sheets:	18 of 20

<b>Project No./Code</b>
NHPP 0703-436
21224
Sheet Number <b>29</b>

Heidenreich 8:41:26 AM J:\184120\184120R\184120R\184120R - EJM - Plenum Repair\5.0 Project Data\5.14 Waterproofing Membrane\Design\Drawings\184120R\EJMT\_Plenum\_Repair\_DES\_Plan\_SS\_4.dgn

LEGEND	
0-10 SY REPAIR	
11-30 SY REPAIR	
> 30 SY REPAIR	




**NOTES:**

SEGMENTS ARE APPROXIMATELY 50 FEET LONG AND ARE MARKED WITHIN THE TUNNEL.

DAMAGED AREA LOCATIONS ARE FOR SEGMENT REFERENCE ONLY. REFER TO TABULATIONS OF WATERPROOFING MEMBRANE FOR APPROXIMATE AREA, LOCATION AND DESCRIPTION.

DAMAGED AREAS TO BE REVIEWED AND CONFIRMED BY THE ENGINEER PRIOR TO REMOVAL.

Print Date: 4/20/2018	
File Name: 184120R\EJMT_Plenum_Repair_DES_Plan_SS_4.dgn	
Horiz. Scale: 1" = 40'	Vert. Scale: N/A
Unit Information	Unit Leader: JF
 1600 Broadway, Suite 1100 Denver, Colorado 80202-4922 Phone: 303-832-9091 Fax: 303-832-9096	

Sheet Revisions		
Date:	Comments	Init.

**Colorado Department of Transportation**



425 A Corporate Circle  
Golden, CO 80401  
Phone: 720-497-6918 FAX: 720-497-6901

**Region 1**      **NAR**


As Constructed
No Revisions:
Revised:
Void:


JOHNSON (SOUTH) TUNNEL SUPPLY PLENUM REPAIR PLAN SHEET			
Designer:	RH	Structure Numbers	F-13-X
Detailer:	DD	Structure Numbers	F-13-Y
Sheet Subset:	Plan	Subset Sheets:	18 of 20

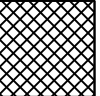
Project No./Code
NHPP 0703-436
21224
Sheet Number <b>30</b>

Heidenreich 8:41:27 AM J:\184120\184120R\184120R\184120R - EJM - Plenum Repair\5.0 Project Data\5.14 Waterproofing Membrane\Design\Drawings\184120R\EJMT\_Plenum\_Repair\_DES\_Plan\_SS\_5.dgn

**LEGEND**

0-10 SY REPAIR  


11-30 SY REPAIR  


> 30 SY REPAIR  






**NOTES:**

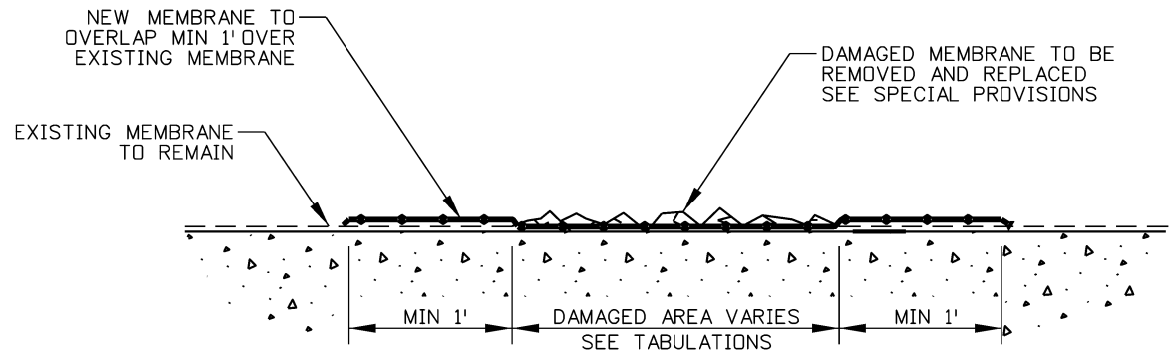
SEGMENTS ARE APPROXIMATELY 50 FEET LONG AND ARE MARKED WITHIN THE TUNNEL.

DAMAGED AREA LOCATIONS ARE FOR SEGMENT REFERENCE ONLY. REFER TO TABULATIONS OF WATERPROOFING MEMBRANE FOR APPROXIMATE AREA, LOCATION AND DESCRIPTION.

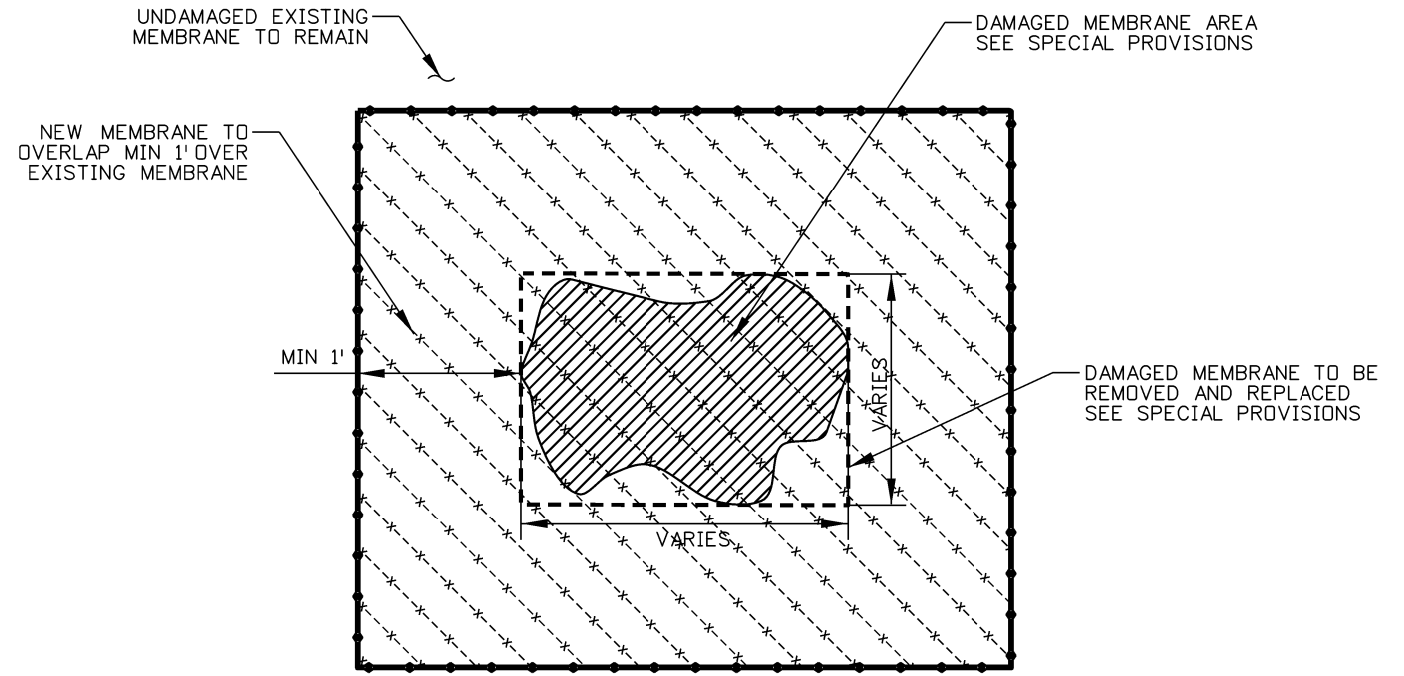
DAMAGED AREAS TO BE REVIEWED AND CONFIRMED BY THE ENGINEER PRIOR TO REMOVAL.

Print Date: 4/20/2018		<b>Sheet Revisions</b>			<b>Colorado Department of Transportation</b>		<b>As Constructed</b>		<b>JOHNSON (SOUTH) TUNNEL SUPPLY PLENUM REPAIR PLAN SHEET</b>			<b>Project No./Code</b>	
File Name: 184120R\EJMT_Plenum_Repair_DES_Plan_SS_5.dgn		Date:		Comments		Init.		No Revisions:		Designer: RH		NHPP 0703-436	
Horiz. Scale: 1" = 40'      Vert. Scale: N/A								Revised:		Structure Numbers		21224	
Unit Information      Unit Leader: JF								Void:		Detailer: DD		F-13-X	
 1600 Broadway, Suite 1100 Denver, Colorado 80202-4922 Phone: 303-832-9091 Fax: 303-832-9096						 425 A Corporate Circle Golden, CO 80401 Phone: 720-497-6918 FAX: 720-497-6901				Sheet Subset: Plan		F-13-Y	
						<b>Region 1</b>				Subset Sheets: 20 of 20		Sheet Number <b>31</b>	

DOT ENV NP612018051201 184120R\_EJMT\_Plenum\_Repair\_DES\_Detail\_1.dgn

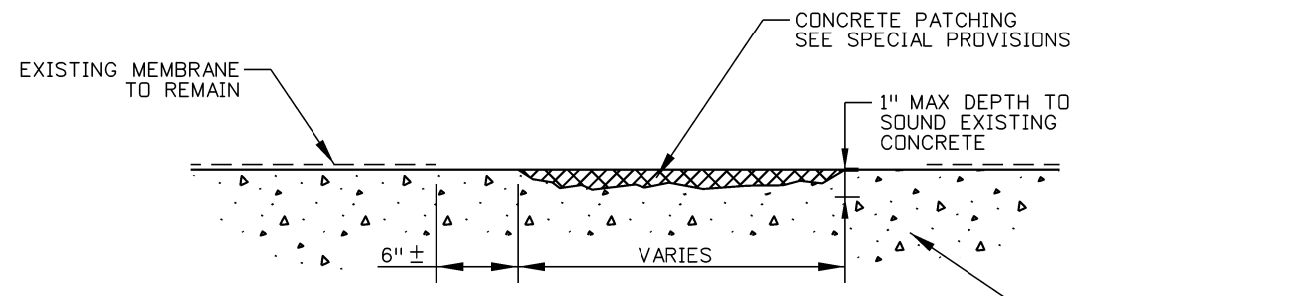


**WATERPROOFING MEMBRANE PATCH SECTION**  
N.T.S.

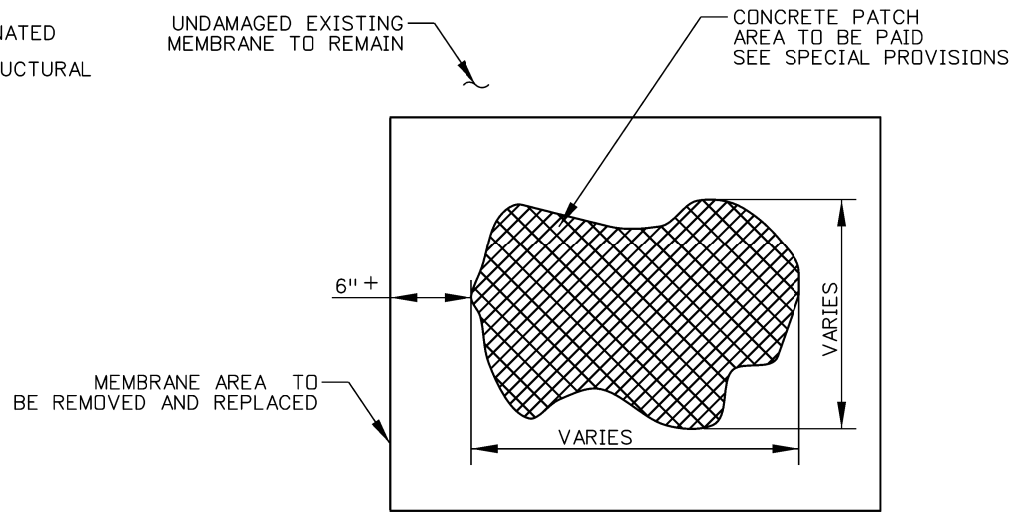


**WATERPROOFING MEMBRANE PATCH PLAN**  
N.T.S.

**NOTES**  
 1. IT IS NOT ANTICIPATED THAT ANY CONCRETE PATCHING AREA WILL BE GREATER THAN 1" IN DEPTH. NOTIFY ENGINEER IF CONCRETE PATCHING AREA IS GREATER THAN 1" DEEP PRIOR TO PROCEEDING WITH ANY IN THAT AREA.  
 2. REMOVAL OPERATIONS SHALL BE COORDINATED WITH THE ENGINEER AND PERFORMED IN A MANNER AS REQUIRED TO ENSURE THE STRUCTURAL INTEGRITY OF THE PLENUM.



**EISENHOWER TUNNEL CONCRETE PATCHING SECTION**  
N.T.S.



**CONCRETE PATCHING PLAN**  
N.T.S.

Print Date: 4/24/2018	<b>0000</b>
File Name: 184120R_EJMT_Plenum_Repair_DES_Detail_1.dgn	
Horiz. Scale: N/A      Vert. Scale: N/A	
Unit Information      Unit Leader: JF	
<b>WSP</b> 1600 Broadway, Suite 1100 Denver, Colorado 80202-4922 Phone: 303-832-9091 Fax: 303-832-9096	

Sheet Revisions		
Date:	Comments	Init.

**Colorado Department of Transportation**

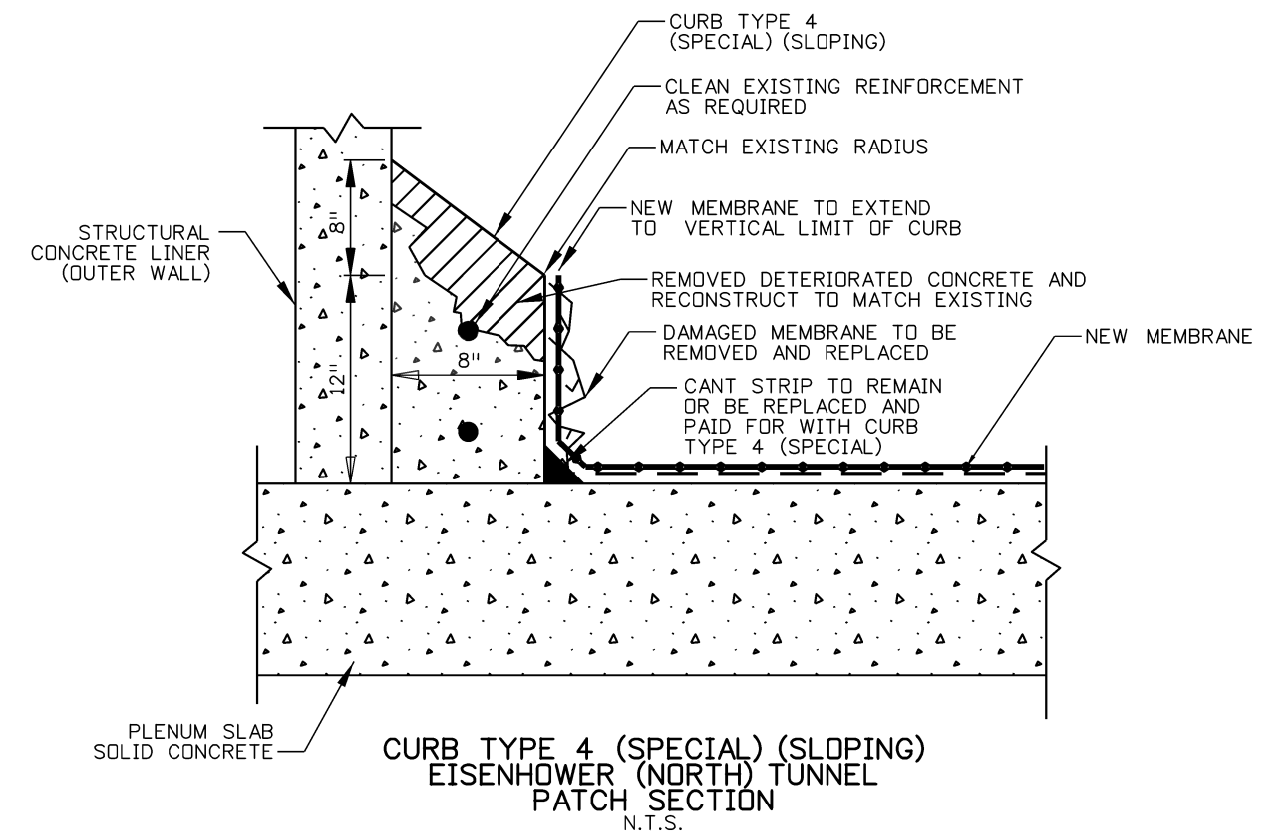
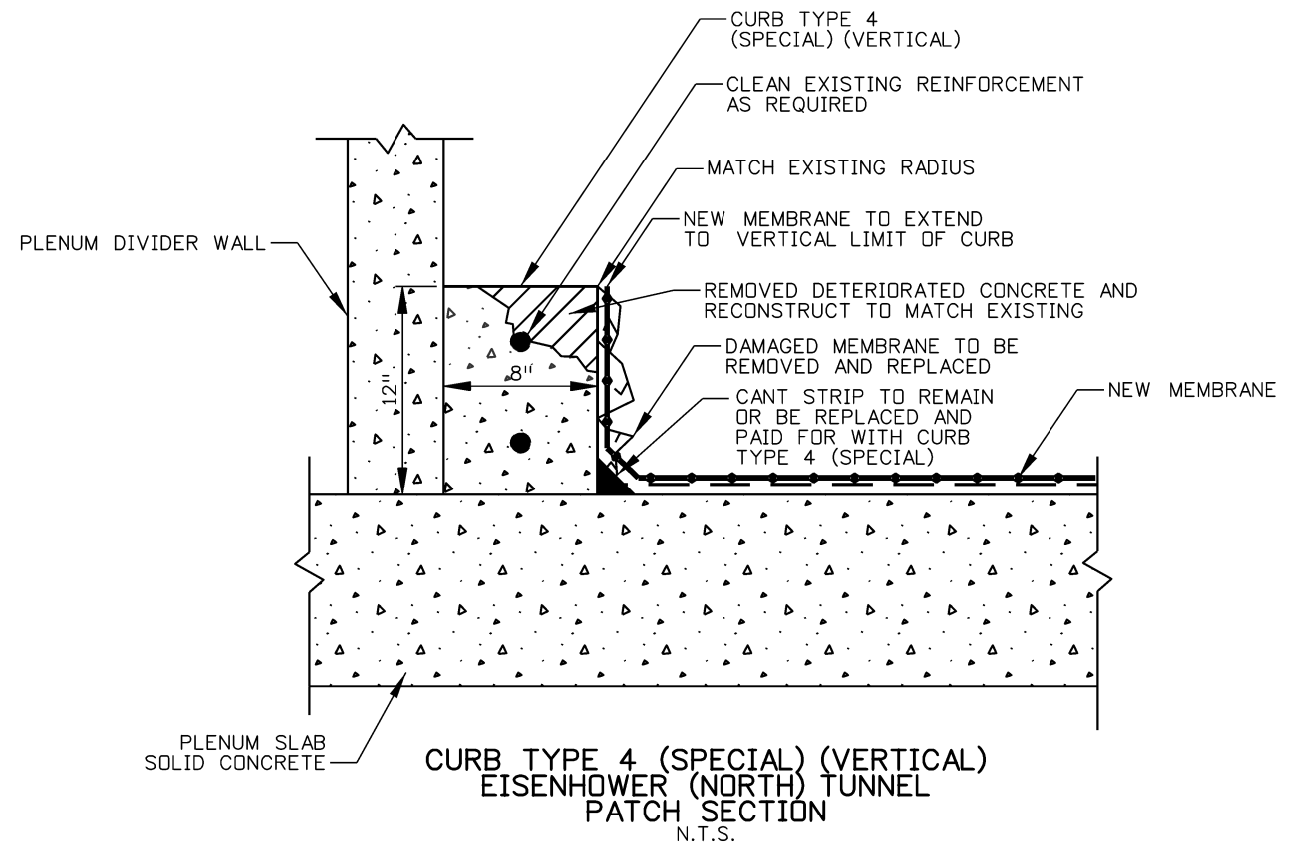
425 A Corporate Circle  
Golden, CO 80401  
Phone: 720-497-6918 FAX: 720-497-6901

**Region 1**      **NAR**

As Constructed	REPAIR DETAILS			
No Revisions:	Designer: RH	Structure Numbers	F-13-X	Project No./Code NHPP 0703-436 21224 Sheet Number <b>32</b>
Revised:	Detailer: DO	Structure Numbers	F-13-Y	
Void:	Sheet Subset: Details	Subset Sheets:	1 of 3	



DOT ENV NP820815 0261 003 002 000 TRM- E:\M\B-4\2018\184120R\EJMT\_Plenum\_Repair\_DES\_Detail\_2.dgn



- NOTES:
1. SEE SPECIAL PROVISIONS FOR REPLACEMENT CONCRETE REQUIREMENTS.
  2. APPLY BONDING ADHESIVE PRIOR TO PLACING CONCRETE.
  3. REMOVE DETERIORATED CONCRETE DOWN TO SOUND SURFACE AS APPROVED BY THE ENGINEER.

Print Date: 4/24/2018  
 File Name: 184120R\_EJMT\_Plenum\_Repair\_DES\_Detail\_2.dgn  
 Horiz. Scale: N/A Vert. Scale: N/A  
 Unit Information Unit Leader: JF  
**WSP** 1600 Broadway, Suite 1100  
 Denver, Colorado 80202-4922  
 Phone: 303-832-9091 Fax: 303-832-9096

Sheet Revisions		
Date:	Comments	Init.

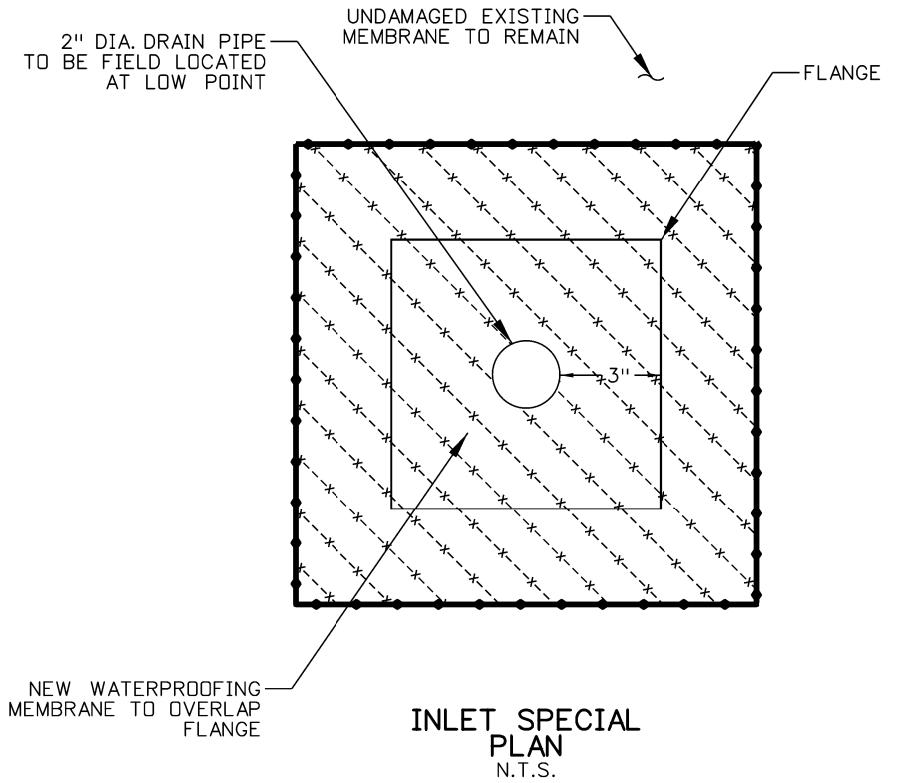
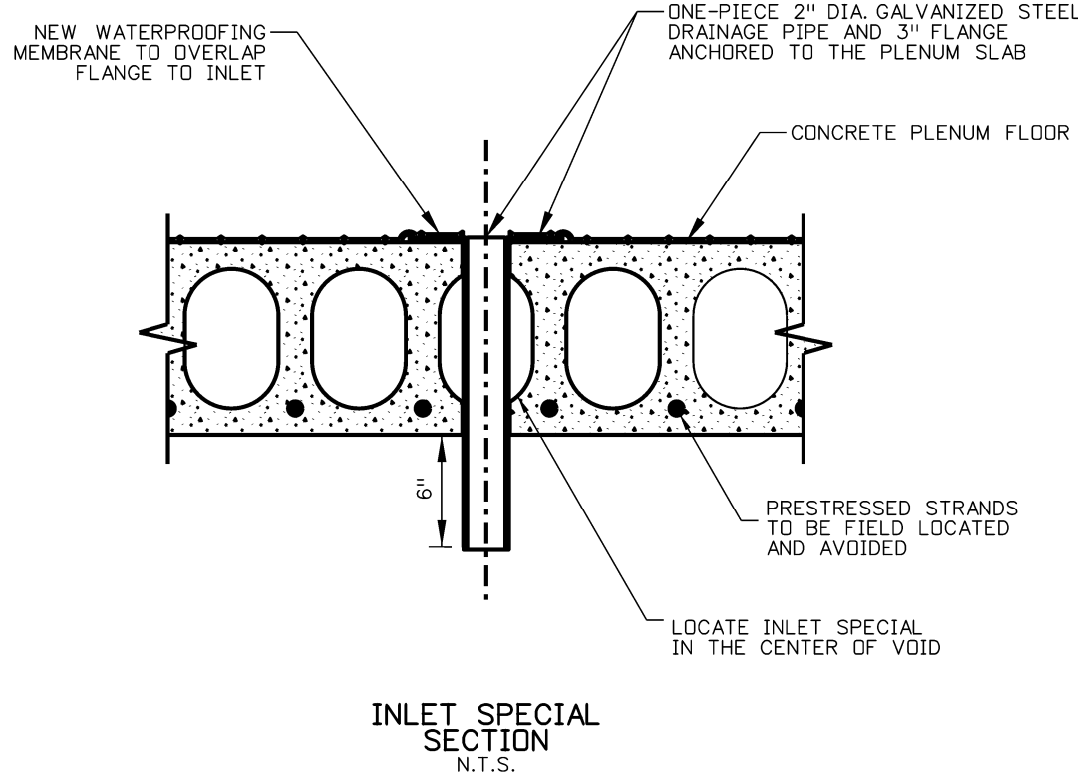
**Colorado Department of Transportation**  
  
 425 A Corporate Circle  
 Golden, CO 80401  
 Phone: 720-497-6918 FAX: 720-497-6901  
**Region 1** **NAR**

As Constructed
No Revisions:
Revised:
Void:

CURB TYPE 4 (SPECIAL)			
Designer:	RH	Structure Numbers	F-13-X
Detailer:	DD	Structure Numbers	F-13-Y
Sheet Subset:	Details	Subset Sheets:	2 of 3

Project No./Code
NHPP 0703-436
21224
Sheet Number <b>33</b>

DOT ENV N:\P\184120R\EJMT\_Plenum\_Repair\_DES\_Detail\_3.dgn



- NOTES:
1. INLET SPECIAL LOCATION SHALL BE FIELD LOCATED AND CONFIRMED BY THE ENGINEER. SEE SPECIAL PROVISIONS.
  2. CORE SAWING SHALL AVOID SLAB PRESTRESSED STRANDS AND BE CENTERED IN A VOID.

Print Date: 4/24/2018	
File Name: 184120R_EJMT_Plenum_Repair_DES_Detail_3.dgn	
Horiz. Scale: N/A	Vert. Scale: N/A
Unit Information	Unit Leader: JF
1600 Broadway, Suite 1100 Denver, Colorado 80202-4922 Phone: 303-832-9091 Fax: 303-832-9096	

Sheet Revisions		
Date:	Comments	Init.

Colorado Department of Transportation

425 A Corporate Circle  
Golden, CO 80401  
Phone: 720-497-6918 FAX: 720-497-6901

Region 1 NAR

As Constructed
No Revisions:
Revised:
Void:

INLET SPECIAL			
Designer:	RH	Structure Numbers	F-13-X
Detailer:	DD	Structure Numbers	F-13-Y
Sheet Subset:	Details	Subset Sheets:	3 of 3

Project No./Code	NHPP 0703-436
Sheet Number	21224
Sheet Number	34

**SWMP FOR EISENHOWER/JOHNSON MEMORIAL TUNNELS WATERPROOFING MEMBRANE  
REPAIR PROJECT WITH LESS THAN 1 ACRE OF DISTURBANCE**

**1. SITE DESCRIPTION**

- A. **PROJECT SITE LOCATION:** The proposed project is located in Clear Creek and Summit Counties along I-70 at the Eisenhower/Johnson Memorial Tunnel Complex. The limits of the project are confined within the plenums above the roadway in both the north bore (Eisenhower) and south bore (Johnson). The address of the construction office will be identified at the time of construction.
- B. **PROJECT SITE DESCRIPTION:** The nature of construction activities at the site are all contained above the roadway in tunnel plenums. Construction activities consist of removal of needed debris, incidental structures and obstructions, removal and replacement of portions of existing deteriorated waterproofing membrane and concrete curbs, and concrete coring/installation of two small floor drains (inlets). There is no ground disturbance or grading, utility installation, paving, or landscape activities as part of this project. All removed material and equipment deemed not to be reinstalled is the property of the contractor and must be removed from CDOT property.
- C. **ACRES OF DISTURBANCE:** Not applicable to this project.
  - 1. Total area of construction site (LOC): 14.9 acres
  - 2. Total area of disturbance (LDA): 0.0 acres
  - 3. Acreage of seeding: 0.0 acres
- D. **RECEIVING WATER:**
  - 1. Outfall locations: N/A
  - 2. Names of receiving water(s) on site: EJMT Waste Water Treatment Plant.
  - 3. Ultimate receiving water: East Portal – Clear Creek, West Portal – Straight Creek
  - 4. Horizontal distance nearest water of the state is from project: Approx. 1,000 feet
- E. **EXISTING SOIL DATA:** Not applicable to project.
- F. **EXISTING VEGETATION, INCLUDING PERCENT COVER:**  
Vegetative transects are *not required*, by permit, on projects with under an acre of disturbance.  
  
Not applicable to project. No existing vegetation is impacted or disturbed as part of this project. Project in completely contained within the tunnel plenum structures.

**2. STORMWATER MANAGEMENT CONTROLS FIRST CONSTRUCTION ACTIVITIES**

THE CONTRACTOR SHALL PERFORM THE FOLLOWING:

- A. **POTENTIAL POLLUTANT SOURCES**
  - 1. Evaluate, identify and describe all potential sources of pollutants at the site in accordance with subsection 107.25 and place any BMPs/Control Measures required to contain potential pollutants.
  - 2. Sources include potential spills during waterproofing membrane removal and installation. Contractor shall notify April Thomas (CDOT Wastewater Treatment Operator; [April.Thomas@state.co.us](mailto:April.Thomas@state.co.us) or 303-512-5744) at least two days prior to installation to discuss need for potential spill containment preventions.
- B. **OFFSITE DRAINAGE (RUN ON WATER)**
  - 1. Place BMPs/Control Measures to address run-off water in accordance with subsection 208.03.
- C. **CONSTRUCTION DEWATERING:**
  - 1. No dewatering is required.
- D. **VEHICLE TRACKING PAD**
  - 1. BMPs/Control Measures shall be implemented in accordance with subsection 208.04.

E. **PERIMETER CONTROL**

- 1. Perimeter control shall be established as the first item on the SWMP to prevent the potential for pollutants leaving the construction site boundaries, entering the stormwater drainage system, or discharging to state waters.
- 2. Perimeter control may consist of vegetation buffers, berms, silt fence, erosion logs, existing landforms, or other BMPs/Control Measures as approved.
- 3. Perimeter control shall be in accordance with subsection 208.04.

**3. SWMP ADMINISTRATOR:**

A. **SWMP ADMINISTRATOR FOR DESIGN:**

Name/Title	Contact Information
Ross Heidenreich, P.E.	303-728-3006. <a href="mailto:Ross.Heidenreich@wsp.com">Ross.Heidenreich@wsp.com</a>

B. **SWMP ADMINISTRATOR FOR CONSTRUCTION:** (See Subsection 208 Under an Acre Specification) The Contractor shall designate a SWMP Administrator for Construction upon ownership of the SWMP. The SWMP Administrator shall become the owner/operator and assume responsibility for all design changes to the SWMP implementation and maintenance in accordance to 208.03. The SWMP Administrator shall be responsible for implementing, maintaining and revising SWMP, including the title and contact information. The activities and responsibilities of the SWMP administrator shall address all aspects of the projects SWMP. (Update the information below for each new SWMP Administrator) (Copy of TECS Certification must also be included in the SWMP Notebook.) **The SWMP Administration for construction is not a separate pay item but is included in the cost of the work.**

Name/Title	Contact Information	Certification #	Start Date	Engineer Approval




**4. DURING CONSTRUCTION**

The SWMP should be considered a "living document" that is continuously reviewed and modified. During construction, the following items shall be added, updated, or amended as needed by the Contractor in accordance with Section 208

- A. **MATERIALS HANDLING AND SPILL PREVENTION:** prior to construction commencing the Contractor shall submit a Spill Prevention, Control and Countermeasure Plan, see subsection 208.06. Materials handling shall be in accordance with subsection 208.06.
- B. **STOCKPILE MANAGEMENT:** shall be done in accordance with subsection 107.25 and 208.07
- C. **CONCRETE WASHOUT:** Concrete wash out water or waste from field laboratories and paving equipment shall be contained in accordance with subsection 208.05.
- D. **SAW CUTTING/CORING:** shall be done in accordance with subsection 107.25, 208.04, 208.05
- E. **STREET SWEEPING:** shall be done in accordance with subsection 208.04

**5. BMP/CONTROL MEASURE MAINTENANCE**

- A. Maintenance shall be in accordance with subsection 208.04 (f).

Print Date: 4/23/2018		<b>Sheet Revisions</b>				<b>As Constructed</b>				<b>Project No./Code</b>	
File Name: I84120R-EJMT-Plenum-Repair-DES-SW		Date:	Comments	Init.		No Revisions:		<b>SWMP CONSTRUCTION PLAN SHEET</b>		NHPP 1211-086	
Horiz. Scale: 1:1      Vert. Scale: As Noted						Revised:	Designer: RH	Structure Numbers	F-13-X	21006	
Unit Information: Region 1      Unit Leader: JF						Void:	Detailer: DD		F-13-Y	Sheet Number <b>35</b>	
 1600 Broadway, Suite 1100 Denver, Colorado 80202-4922 Phone: 303-832-9091 Fax: 303-832-9096					Colorado Department of Transportation 425 B Corporate Circle Golden, CO 80401 Phone: 720-497-6954 FAX: 720-497-6951 <b>KPB</b>			Sheet Subset: SWMP	Subset Sheets: 1 of 3		

**6. INTERIM AND FINAL STABILIZATION**

**A. SEEDING PLAN**

Soil preparation, soil conditioning or topsoil, seeding (native), mulching (weed-free), and mulch tackifier are not expected on this project. If it is determined that seeding/revegetation/sod is necessary, the contractor shall contact Basil Ryder (CDOT Landscape Architect; [Basil.Ryder@state.co.us](mailto:Basil.Ryder@state.co.us) or 303-757-9481) to determine the types, rates, and application of seeding and soil preparation requirements, and Francesca Tordonato (CDOT Biologist; [Francesca.Tordonato@state.co.us](mailto:Francesca.Tordonato@state.co.us) or 720-497-6942) for seed mix options. Any necessary sod or seeding items shall not be paid for separately but shall be considered incidental to the work.

**8. NARRATIVES:**

**A. ADDITIONAL BMPs/CONTROL MEASURES AND NARRATIVES:**

BMP/Control Measure details and narratives not covered by the SWMP or Standard Plan M-208, M-216 shall be added to the SWMP notebook by the SWMP Administrator.

**BMP Matrix:**




1. M-Standards have been included along with standard BMP narratives. If a Non-Standard BMP will be used or the standard narrative does not apply, the SWMP Administrator shall write a Non-Standard BMP narrative, place an "X" in the column and complete a Non-Standard BMP Specification and Narrative for the SWMP notebook.
2. The SWMP Administrator shall place an "X" in the column In Use on Site when the BMP/Control Measure has been installed.
3. Place an "X" in the column BMP/Control Measure to be located by SWMP Administrator if the SWMP Administrator shall locate the BMP/Control Measure during construction. These BMP/Control Measures are not currently located on SWMP Plans but are anticipated to be used during construction (i.e. Vehicle Tracking Pad, Batch Plants, etc.). The SWMP Administrator shall locate these prior to or during construction and reflect on SWMP Map.
4. Place an "X" in the column Installation BMP/Control Measure Pre-Construction if the BMP/Control Measure is to be installed prior to construction activity.

**STRUCTURAL BMPs/Control Measures** that may be potentially used on the project for erosion and sediment control; practices may include, but are not limited to:

APPLICATION, BMP/CONTROL MEASURE	NARRATIVE	M-STANDARD/NON-STANDARD	IN USE ON SITE	BMP/CONTROL MEASURE TO BE LOCATED BY SWMP ADMINISTRATOR	INSTALLATION BMP/CONTROL MEASURE PRE-CONSTRUCTION	BMP/CONTROL MEASURE PHASING		
						FIRST/INITIAL CONSTRUCTION ACTIVITIES	INTERIM CONSTRUCTION ACTIVITIES	PERMANENT STABILIZATION
CONTAINMENT AROUND WASTE COLLECTION (ROLL-OFF OR DUMSPETER) <i>Erosion Logs or Aggregate Bags</i>	Placed around area(s) approved by CDOT for temporary collection of waste materials prior to removal from the project site by the Contractor.			X		X	X	
CONTAINMENT AROUND CONCRETE MATERIAL STOCKPILES (IF NEEDED) <i>Erosion Logs or Aggregate Bags</i>	Placed around area(s) approved by CDOT for temporary stockpile of cement, sand and aggregate materials prior to mixing concrete by the Contractor.			X		X	X	
CONCRETE WASHOUT <i>In-ground or fabricated</i>	Construction control, used for waste management of concrete and concrete equipment cleaning. Place prior to start of concrete activities.	M-208		X		X	X	
SWEEPING	Source control, used to remove sediment tracked onto paved surfaces and to prevent sediment from entering drainage system. Sweep daily and at the end of the construction shift as needed. Kick brooms shall not be permitted.					X	X	

**7. PRIOR TO FINAL ACCEPTANCE**

A. Partial Acceptance shall be in accordance with subsection 107.25 (d) and 208.10 At the Partial Acceptance of the project, it shall be determined by the SWMP Administrator and the Engineer which temporary BMPs/Control Measures shall remain or which shall be removed.

Print Date: 4/23/2018		<b>Sheet Revisions</b>				<b>As Constructed</b>		<b>SWMP CONSTRUCTION PLAN SHEET</b>			<b>Project No./Code</b>
File Name: 184120R_EJMT_Plenum_Repair_DES_SW		Date:	Comments	Init.		No Revisions:	Designer: RH Structure F-13-X			NHPP 1211-086	
Horiz. Scale: 1:1 Vert. Scale: As Noted						Revised:	Detailer: DD Structure F-13-Y			21006	
Unit Information: Region 1 Unit Leader: JF						Void:	Sheet Subset: SWMP Subset Sheets: 2 of 3			Sheet Number <b>36</b>	
 1600 Broadway, Suite 1100 Denver, Colorado 80202-4922 Phone: 303-832-9091 Fax: 303-832-9096				Colorado Department of Transportation 425 B Corporate Circle Golden, CO 80401 Phone: 720-497-6954 FAX: 720-497-6951 <b>Region 1</b>	<b>KPB</b>						

Heidenreich 4:38:01 PM J:\184120 CDDT ENV NPS 2015 2018\184120R - EJMT Plenum Repair\5.0 Project Data\5.14 Waterproofing Membrane\Design\Drawings\184120R\_EJMT\_Plenum\_Repair\_DES\_SWMP.dgn

**9. TABULATION OF STORMWATER QUANTITIES**

- A. BMP/Control Measure sediment removal and disposal shall be included in cost of work. All other BMP/Control Measure purchase, installation, and maintenance shall be included in the following pay items.
- B. It is estimated that 10 hours of labor may be required for miscellaneous erosion control work as directed by the engineer. Work shall be paid for as CDOT Pay Item 203-02330.

PSP Spec.	Pay Item	Description	Pay Unit	Initial Const.	Interim Const.	Permanent Stabilization	*Total Quantity
PSP	208-02330	Laborer	Hour	X	X		10
PSP	208-00002	Erosion Log Type 1 (12 inch)	LF	X	X		300
PSP	208-00046	Pre-Fabricated Concrete Washout Structure	Each	X	X		2
PSP	208-00207	Erosion Control Management	Day	X	X		50

\*It is anticipated that additional BMPs/Control Measures and BMP/Control Measure quantities not shown on the SWMP Site Maps shall be required on the project for unforeseen conditions and replacement of items that are beyond their useful service life, see subsection 208.03 and 208.04. **Quantities for all BMPs/Control Measures shown above are estimated, and have been increased for unforeseen conditions and normal BMP/Control Measure life expectancy.** Quantities shall be adjusted according to the conditions encountered in the field as directed and approved by the Engineer. Payment shall be for the actual work completed and material used.

**10. BIOLOGIC IMPACTS**

A. ENVIRONMENTAL IMPACTS:

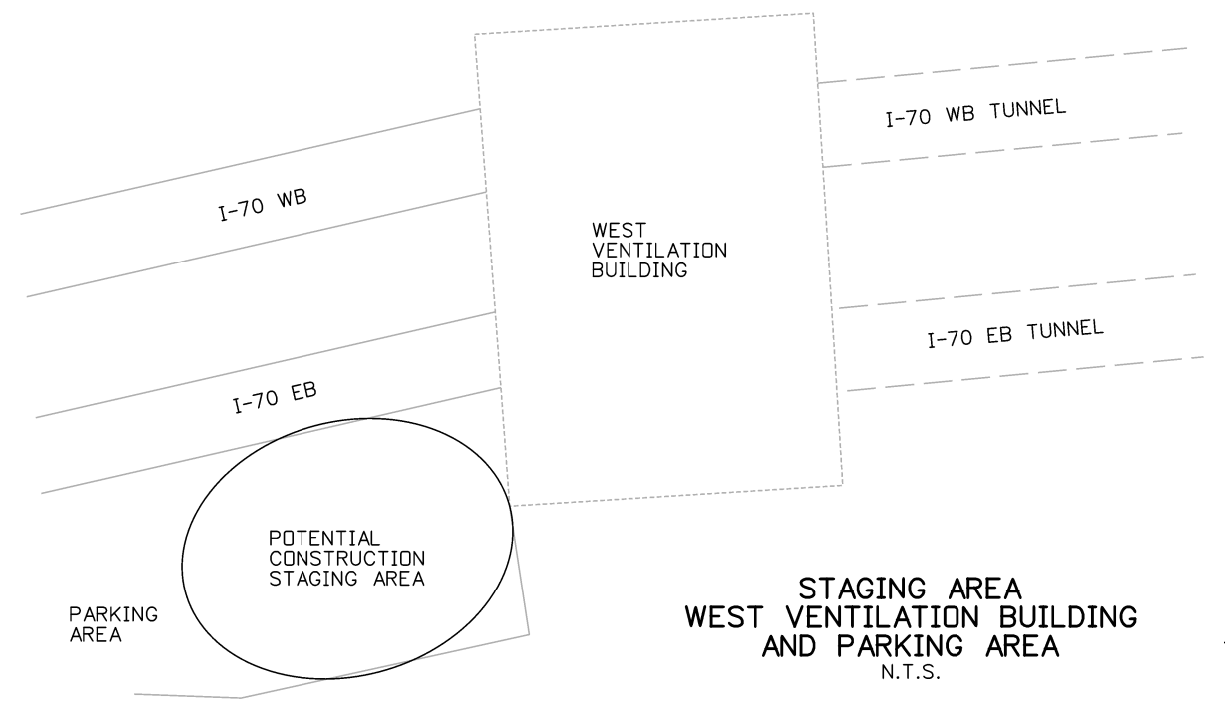
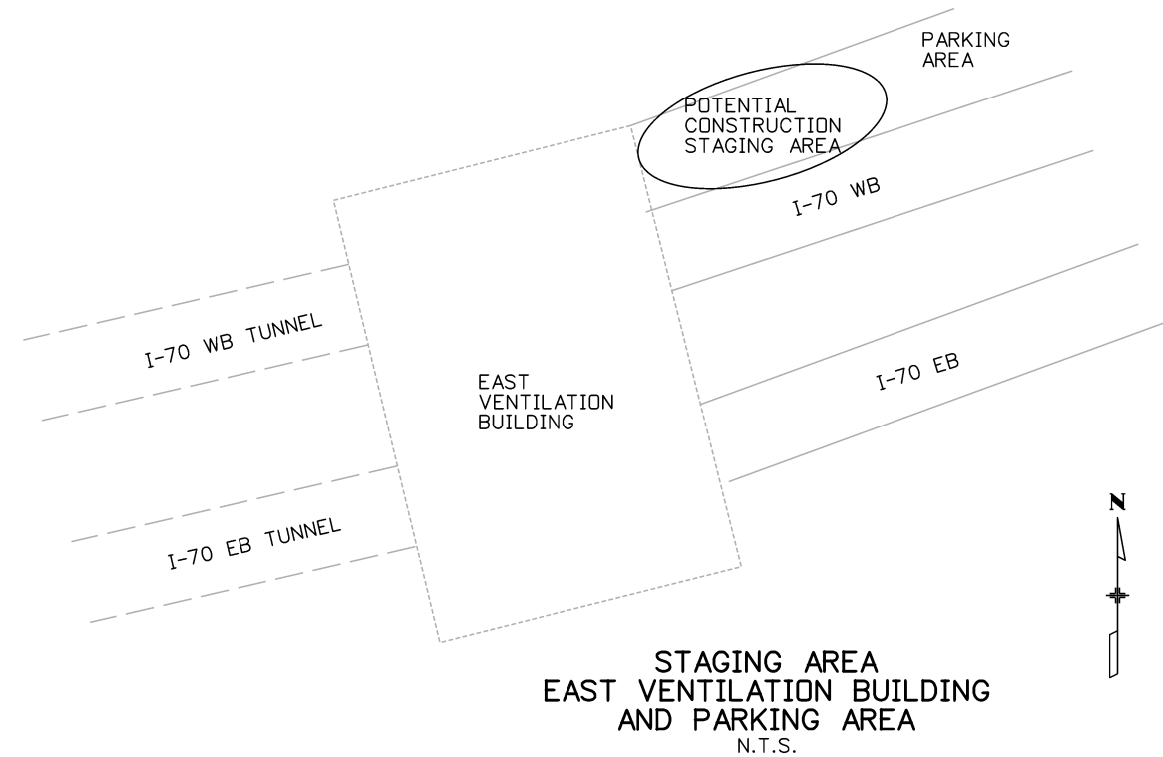
- 1. Wetland Impacts: YES **NO**
- 2. Stream Impacts: YES **NO**
- 3. Threatened and Endangered Species: Not applicable to this project.

**11. Notes**

- A. The Eisenhower/Johnson Memorial Tunnel is serviced by a Waste Water Treatment Plant. All drains within the tunnel connect to this plant. Coordination with Tom Hurst and Bob Hammond, CDOT LTC OPS, shall be constant through the life of the project to prevent an upset condition to the WWTP.
- B. All Parking and staging shall be on paved surfaces and approved by the Engineer. Gravel bags on the downhill side of the staging area shall be paid for by the Contractor.

**SCHEMATIC NOTES:**

- 1. POTENTIAL STAGING AREAS TO BE REVIEWED AND ACCEPTED BY ENGINEER PRIOR TO CONTRACTOR MOBILIZATION.
- 2. SCHEMATIC DIAGRAMS ARE NOT TO SCALE AND DO NOT INCLUDE ALL POTENTIAL STAGING OBSTRUCTIONS OR LIMITATIONS.



Print Date: 4/24/2018  
 File Name: I84120R\_EJMT\_Plenum\_Repair\_DES\_SW  
 Horiz. Scale: 1:1      Vert. Scale: As Noted  
 Unit Information: Region 1      Unit Leader: JF  
**WSP** 1600 Broadway, Suite 1100  
 Denver, Colorado 80202-4922  
 Phone: 303-832-9091 Fax: 303-832-9096

Sheet Revisions		
Date:	Comments	Init.

**Colorado Department of Transportation**  
  
 425 B Corporate Circle  
 Golden, CO 80401  
 Phone: 720-497-6954 FAX: 720-497-6951  
**Region 1**      **KPB**

As Constructed		SWMP CONSTRUCTION PLAN SHEET	
No Revisions:		Designer:	RH
Revised:		Detailer:	DD
Void:		Structure Numbers:	F-13-X F-13-Y
		Sheet Subset:	SWMP
		Subset Sheets:	3 of 3

**Project No./Code**  
 NHPP 1211-086  
 21006  
**Sheet Number 37**

Heidenreich 10:10:07 AM J:\184120 CDDT ENV NFS 2015 2018\184120R - EJMT Plenum Repair\5.0 Project Data\5.14 Waterproofing Membrane\Design\Drawings\184120R\_EJMT\_Plenum\_Repair\_DES\_SWMP.dgn