Kiewit I-25 Expansion Project Discussion of Stormwater Compliance and EPA "Blue Dot" Items

Meeting with U.S. EPA
August 16, 2018

Rule 408 Settlement Communication

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Overview

- Enclosure A Overview/Explanation of Categories
  - Technical Presentation Focus– Category 2
- Responsiveness Statistics
- Discussion of Technical Examples

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Enclosure A
Summary of Corrective Actions by Category

Category 1 - Storm Event Items/Upset Defense (items with * also fall in Category 3)			
Reference Number	Page Number	Description	Days to Complete Action Item
2*	5 of 159	Upset storm event	<7 days
3*	8 of 159	Upset storm event	<7 days
4*	11 of 159	Upset storm event	<7 days
5	13 of 159	Upset storm event	<7 days
6*	18 of 159	Upset storm event	<7 days
7*	21 of 159	Upset storm event	<7 days
8	24 of 159	Upset storm event	<7 days
9	27 of 159	Upset storm event	<7 days
10	31 of 159	Upset storm event	<7 days
11*	35 of 159	Upset storm event	<7 days
12	39 of 159	Upset storm event	<7 days
13	43 of 159	Upset storm event	<7 days
14*	46 of 159	Upset storm event	<7 days
15	49 of 159	Upset storm event	<7 days
16	52 of 159	Upset storm event	<7 days
17	55 of 159	Upset storm event	<7 days
18*	60 of 159	Upset storm event	<7 days
19	63 of 159	Upset storm event	<7 days
20	66 of 159	Upset storm event	<7 days

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Enclosure A
Summary of Corrective Actions by Category

Category 2 – Alleged Timeliness Items

Reference Number	Page Number	Description	Days to Complete Action Item
1	1 of 159	BMPs installed per SWMP, no discharge	<7 days
22	71 of 159	BMP installed downstream, no discharge	<7 days
24	80 of 159	BMPs moved temporarily during active construction	<7 days
25	53 of 159	BMP placed immediately after active work was completed, no discharge	<7 days
26	86 of 159	BMPs installed downstream, photo depicts area under active construction	<7 days
27	89 of 159	Item promptly corrected, and additional BMPs installed downstream	<7 days
28	92 of 159	Spring thaw had not occurred	16 days
29	95 of 159	Spring thaw had not occurred	10 days
30	98 of 159	Spring thaw had not occurred	<7 days
31	101 of 159	Silt fence previously installed per SWMP, no discharge	<7 days
32	104 of 159	BMPs installed per SWMP, no discharge	<7 days
35	114 of 159	Maintenance performed on outlet immediately after storm. Additional BMPs installed downstream, no discharge	<7 days
36	117 of 159	Coordination needed to occur to ensure safe repair of BMP	<7 days
37	120 of 159	BMP repaired within one day of storm	<7 days
40	129 of 159	BMPs installed beyond requirements identified in SWMP	<7 days
41	133 of 159	BMPs installed beyond requirements identified in SWMP, no discharge	<7 days
43	140 of 159	The BMPs required in the SWMP were already installed. The inspection item was for an additional item above and beyond the SWMP requirements. Installation required coordinating lane closures. Vegetation was well-established, and construction was not occurring in the area.	10 days
46	149 of 159	BMPs installed as identified in SWMP	<7 days
47	152 of 159	Temporary BMPs were installed while awaiting written approval from CDOT	33 days
48	154 of 159	Temporary BMPs were installed	<7 days
49	156 of 159	BMPs installed beyond what was identified in SWMP	<7 days
50	158 of 159	The BMPs required in the SWMP were already installed. The inspection item was for an additional item above and beyond the SWMP requirements. Installation required mobilizing equipment and coordinating lane closures.	10 days

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Enclosure A
Summary of Corrective Actions by Category

Category 3--Not Compliance Issues/Good Engineering Judgment			
Reference Number	Page Number	Description	Days to Complete Action Item
21	69 of 159	Followed stockpile management protocol per SWMP	<7 days
23	76 of 159	Followed stockpile management protocol per SWMP	<7 days
33	107 of 159	BMPs installed per SWMP	<7 days
34	111 of 159	Straw wattles removed to install matting	<7 days
38	123 of 159	Temporary removal of wattle to complete activity around the pipe	<7 days
39	126 of 159	BMPs installed upstream and downstream, no discharge	<7 days
42	137 of 159	BMPs installed per SWMP	After review of SWMP, existing BMPs were deemed adequate.
44	143 of 159	The BMPs required in the SWMP were already installed. The inspection item was for an additional item above and beyond the SWMP requirements. This area was difficult to access and reach with equipment. Installation required coordinating lane closures.	9 days
45	146 of 159	BMPs installed as identified in SWMP	<7 days

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Responsiveness Statistics

- Number of blue dot items: 50
- Percent completed in 2 days or less: 70%
  - All upset storm event items were completed in 2 days or less
- Percent completed in 7 days or less: 88%
- Only 12% of blue dot items took greater than 7 days to address

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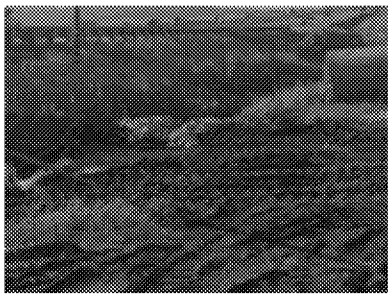
Category 2 Items

Reference No. 1

8/22/2013 Inspection: Teachout Northbound
Ditches leading into Teachout Creek has large bare areas

No Identified Photo

Correction: 8/23/2013



- BMPs installed per what was identified in SWMP.

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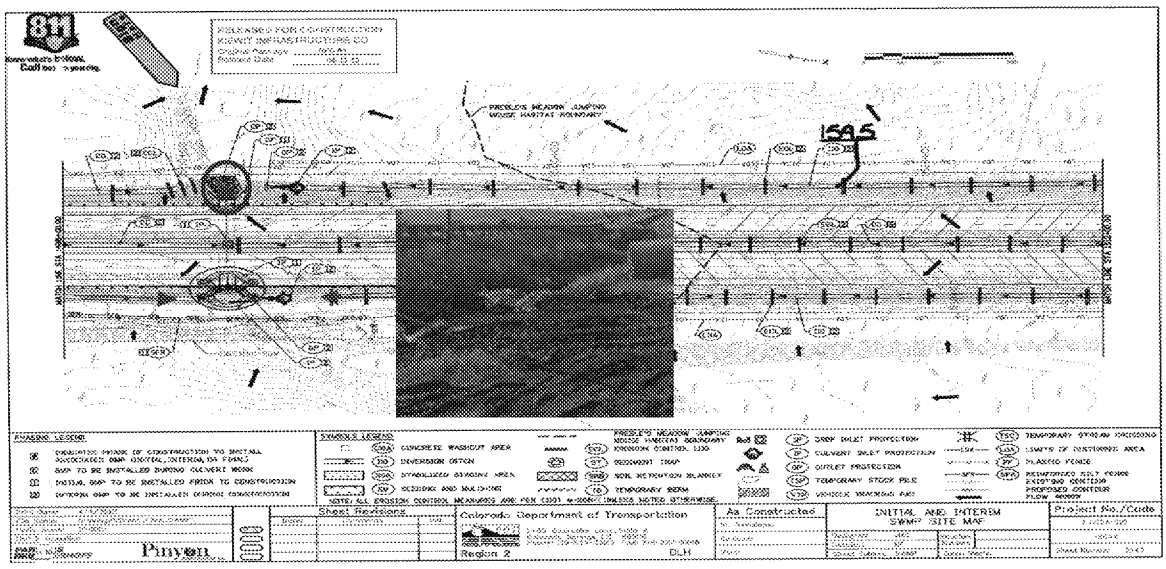
Reference No. 1



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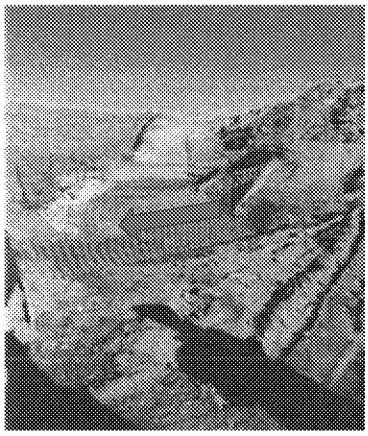
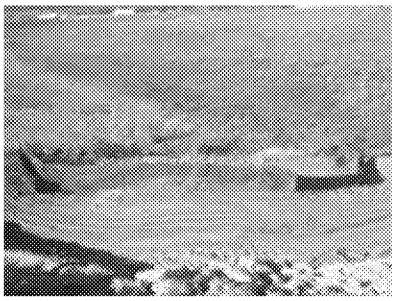
10/30/2013 Inspection: I-25 SB, South of Teachout Creek
Outlet protection BMP not implemented per SWMP

Identified Photo



Correction: 11/1/2013



- BMPs installed downstream.

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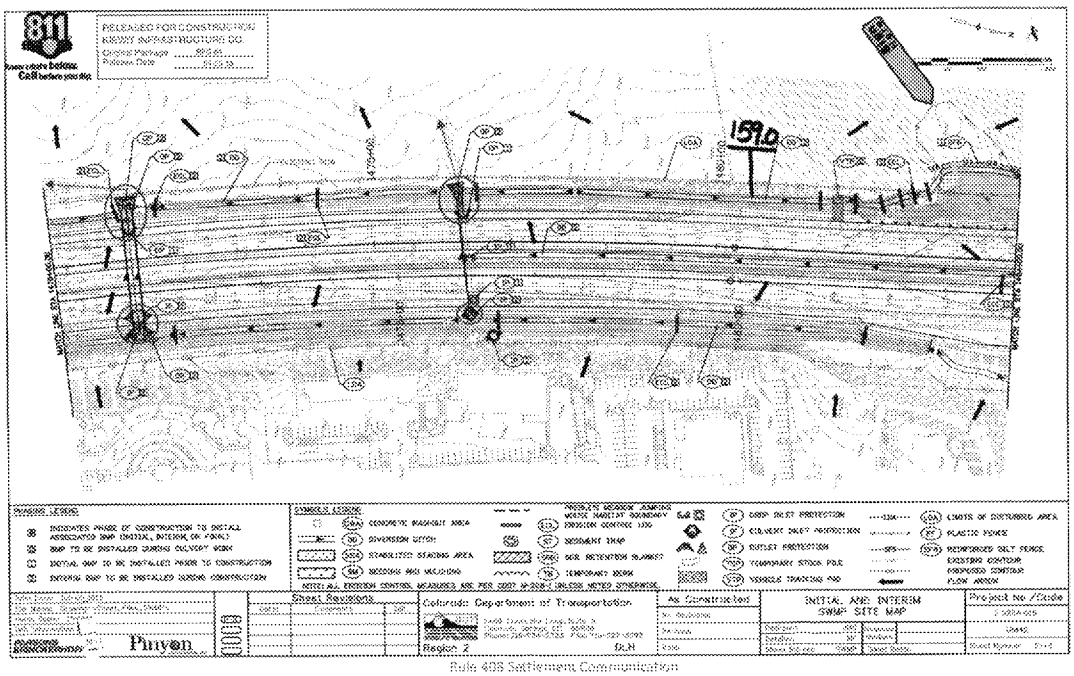
Reference No. 22



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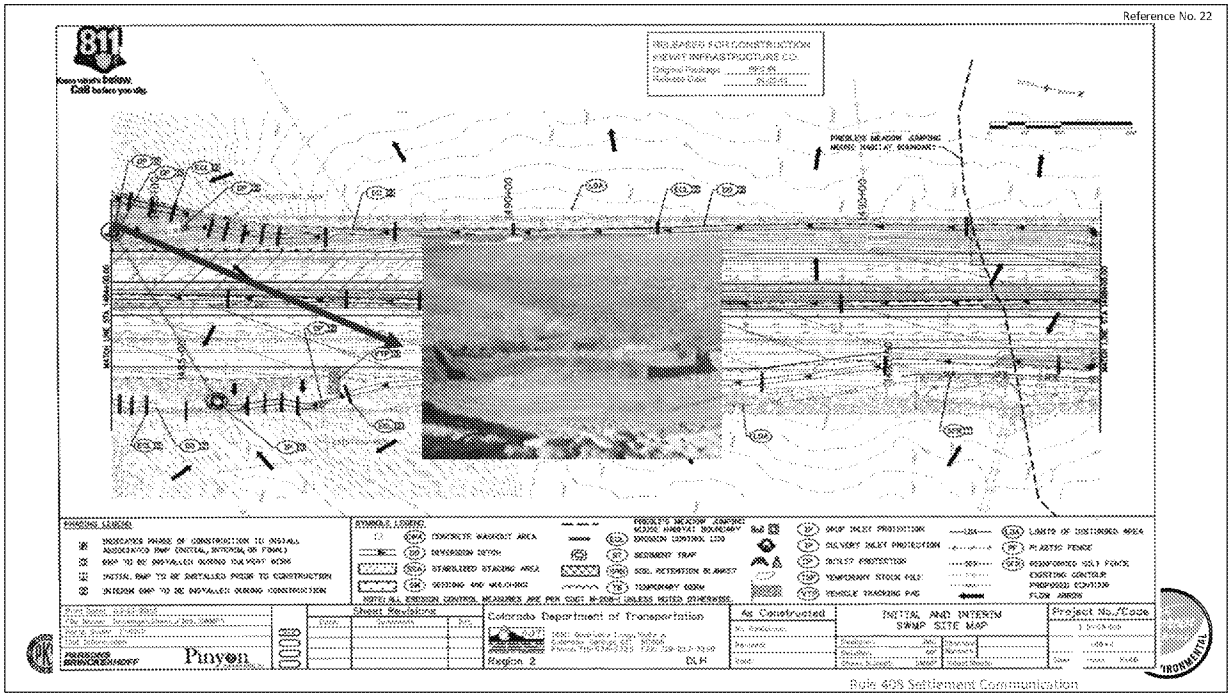
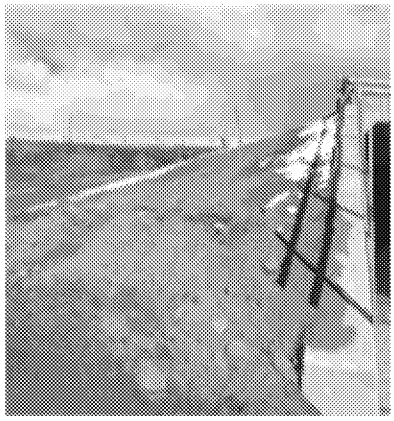

811
Know what's below.
Call before you dig.
RELEASED FOR CONSTRUCTION
Colorado Department of Transportation
Region 2
Pinyon
As Constructed
INITIAL AND INTERIM
SWMP SITE MAP
Project No./Code

11/19/2013 Inspection: I-25 SB, Jackson Creek outfall
BMP not implemented, modify perimeter controls around wing

Identified Photo

Correction: 11/25/2013



- BMPs moved temporarily during active construction.

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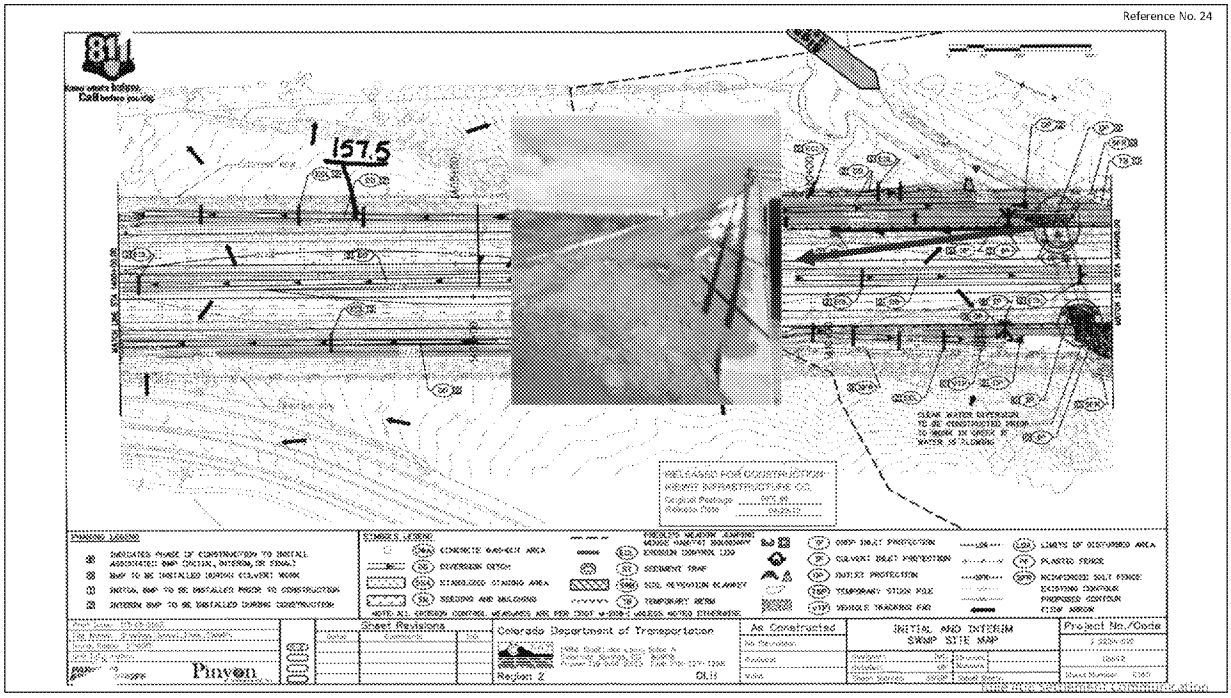
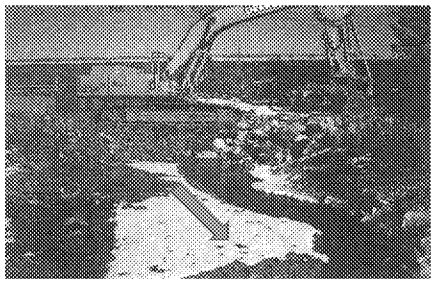
Reference No. 24



12/16/2013 Inspection: Black Forest Creek
There is no BMP downstream from active work in stream channel

Identified Photo



- Riprap was placed 11/20/13

Correction: 12/17/2013

- Straw waddle beyond SWMP requirements

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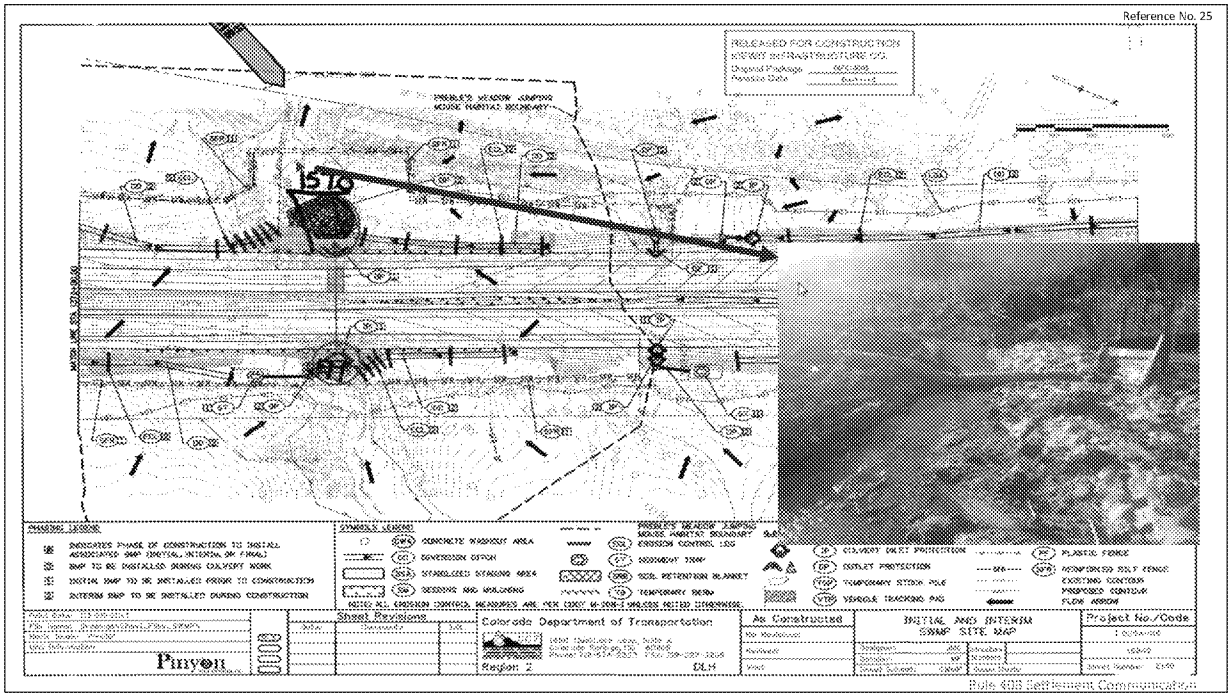
Reference No. 25



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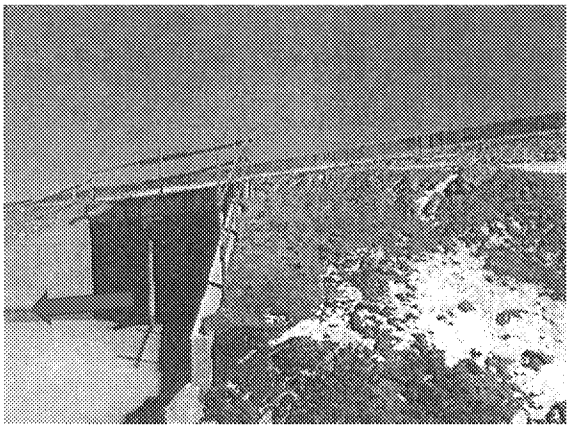
3/12/2014 Inspection: Segment 5 SB, Teachout
Place straw wattle around box culvert or pull dirt from around box to create grade differential

Identified Photo



Correction: 03/14/2014

- BMPs installed downstream, photo depicts area under active construction.

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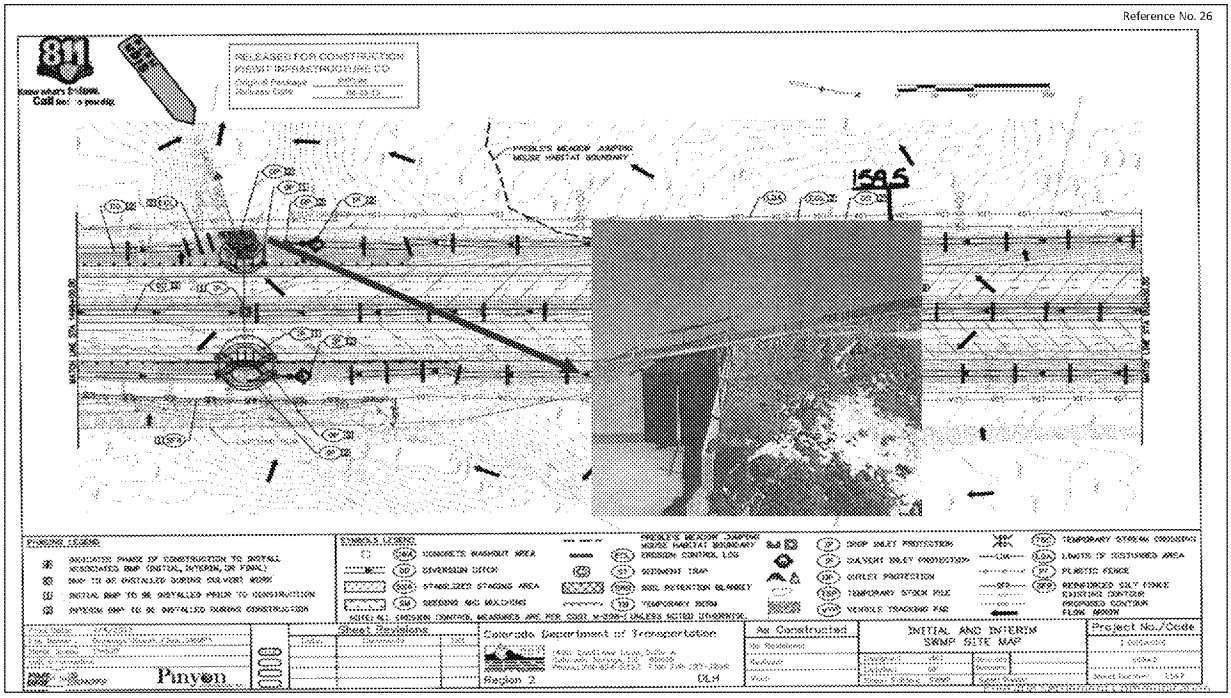
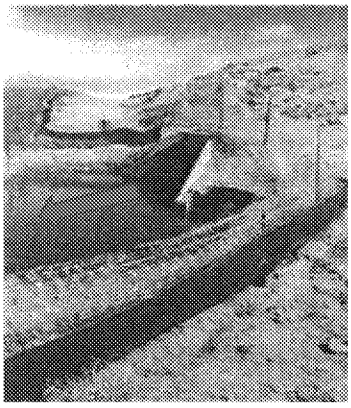
Reference No. 26

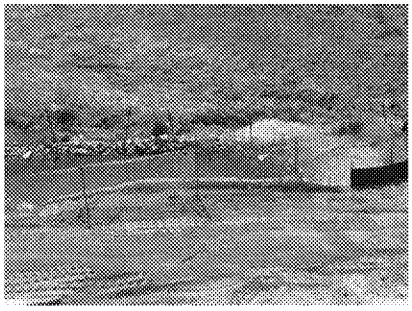


4/28/2014 Inspection: I-25 SB, Sta 1488+00
Install erosion protection at the top of the headwall

Identified Photo



Correction: 04/30/2014



- Item promptly corrected, additional BMPs installed downstream.

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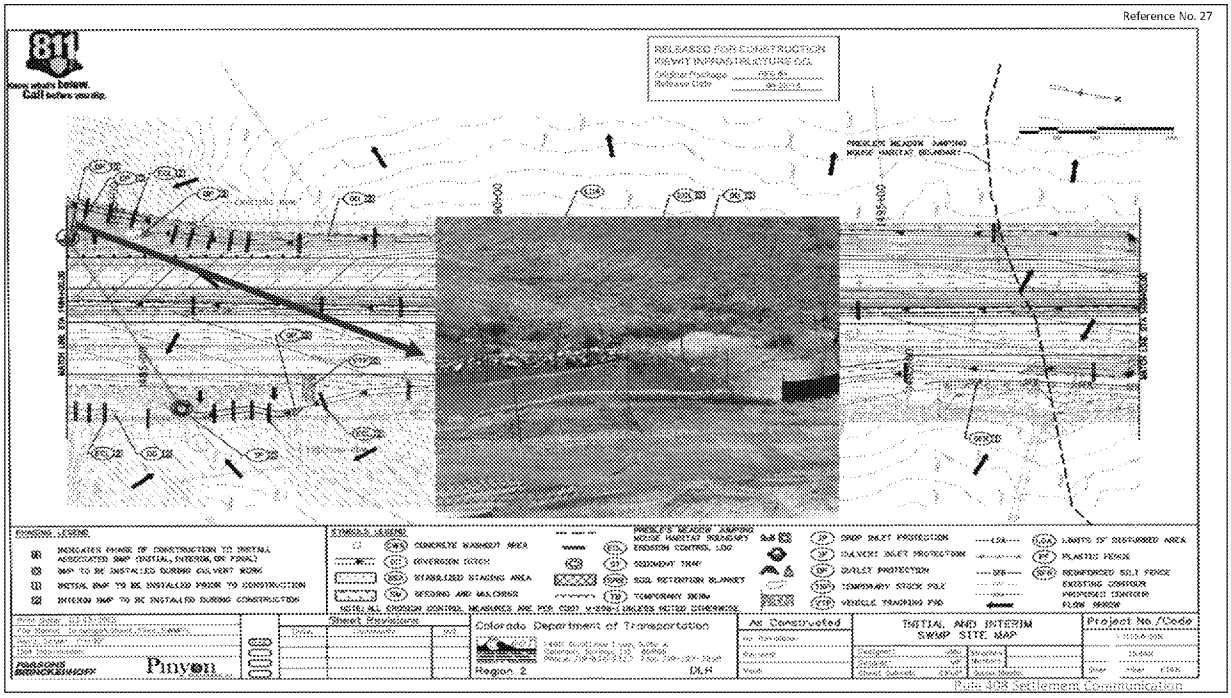
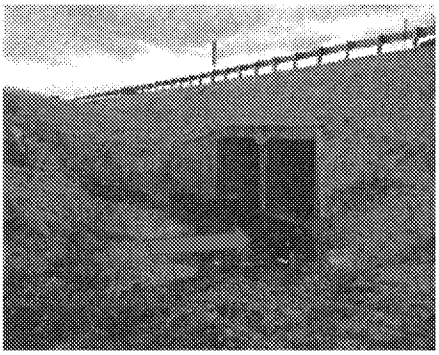
Reference No. 27



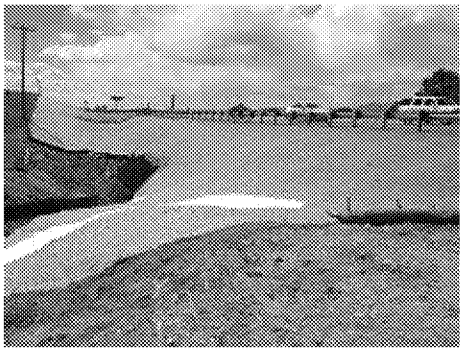
Form 308 Settlement Communication

4/28/2014 Inspection: I-25 NB, Sta 1375+00
Final stabilization has started, but not been pursued to completion

Identified Photo



Correction: 5/14/2014



- The area was blanketed and seeded.

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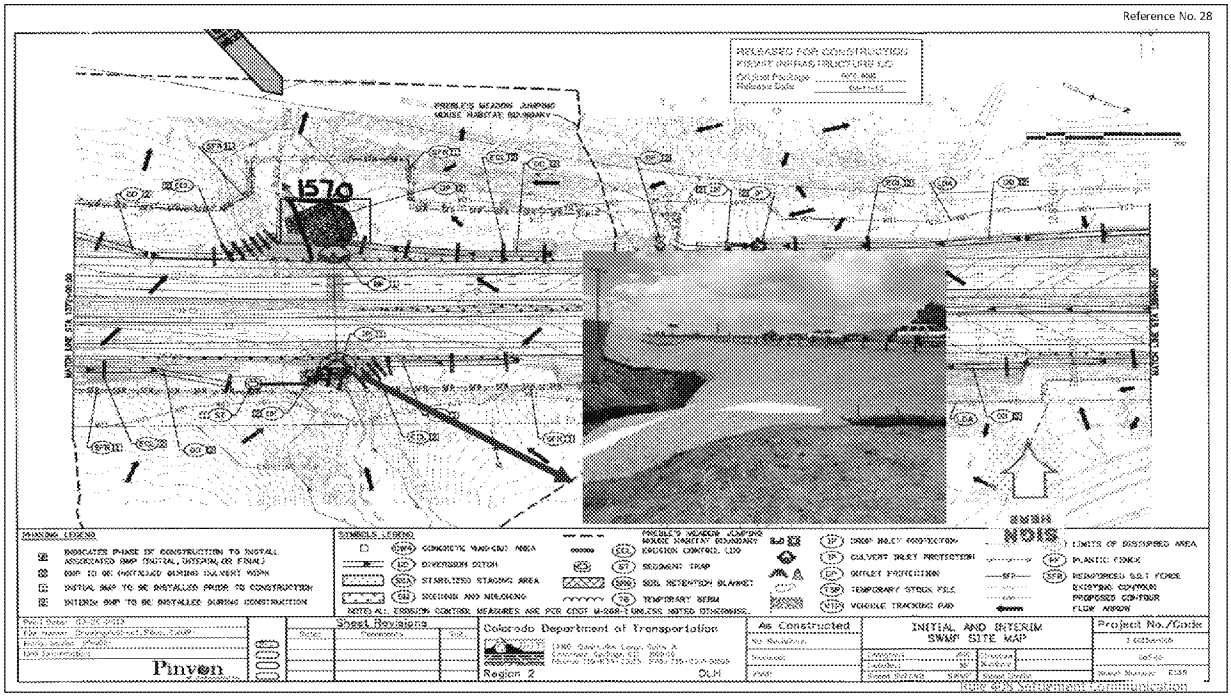
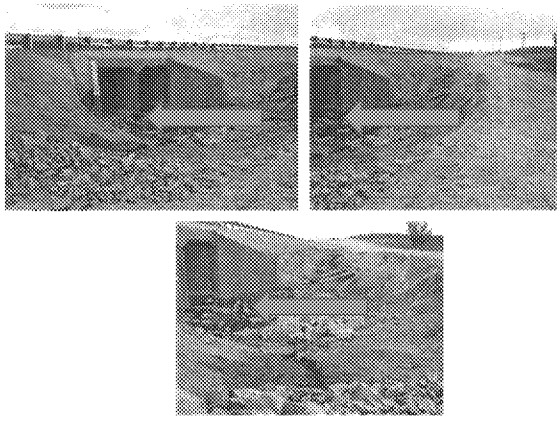
Reference No. 28

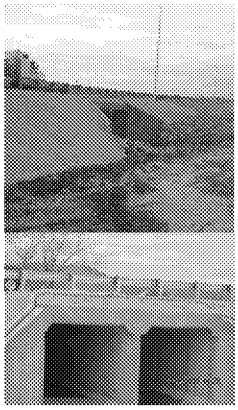


4/28/2014 Inspection
Final stabilization has been started, but not pursued to completion

Identified Photos



Correction: 5/8/2014



- Appears to have been recently blanketed.
- Rip rap already in place. Placed additional.
- Spring thaw had not occurred.

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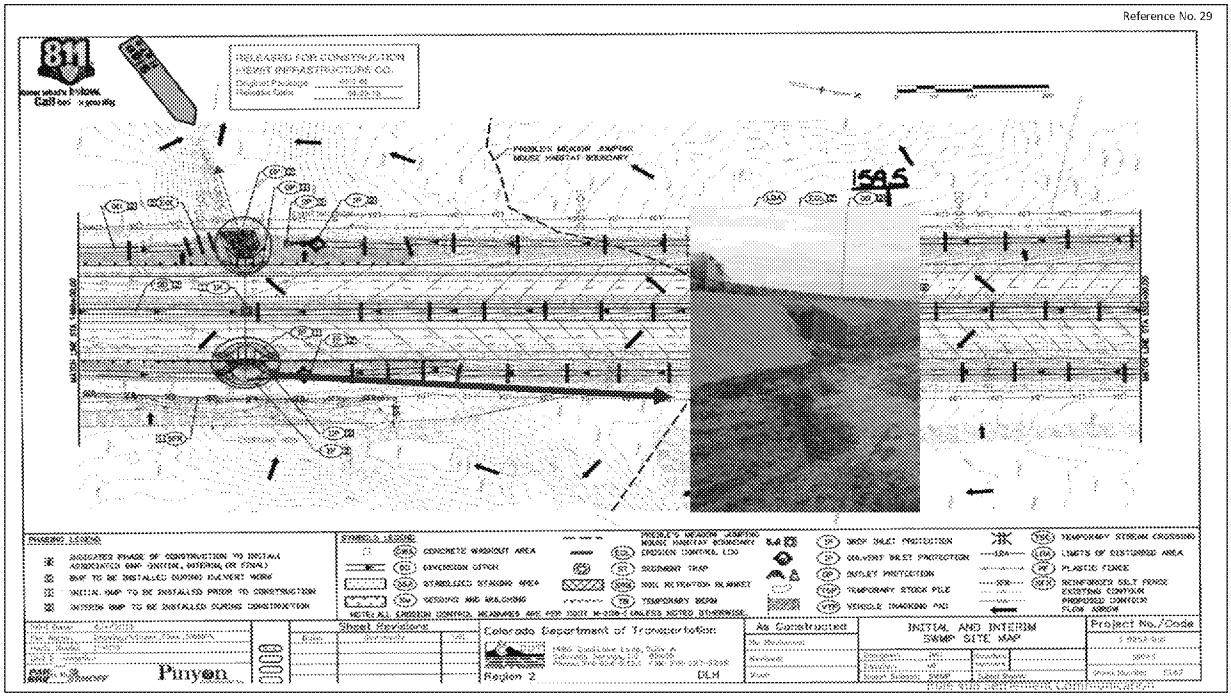
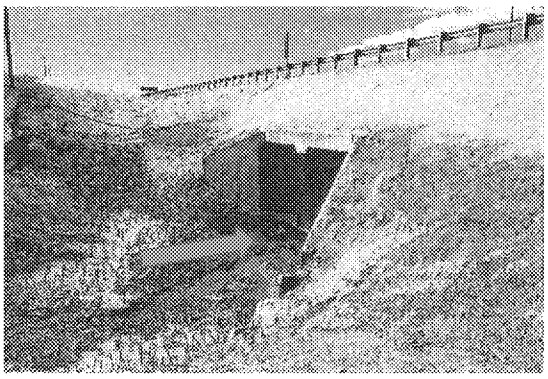
Reference No. 29



5/2/2014 Inspection: Black Forest Creek
Soil stabilization – interim solution

Identified Photo



Correction: 5/5/2014

- Spring thaw had not occurred.

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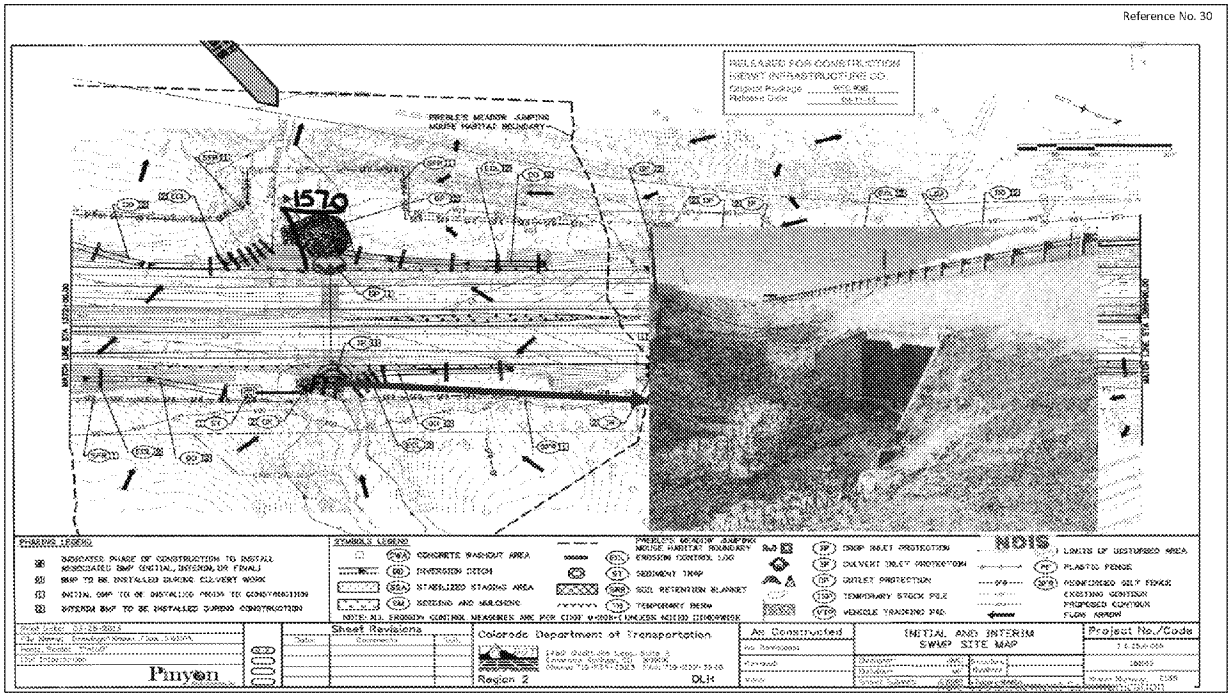
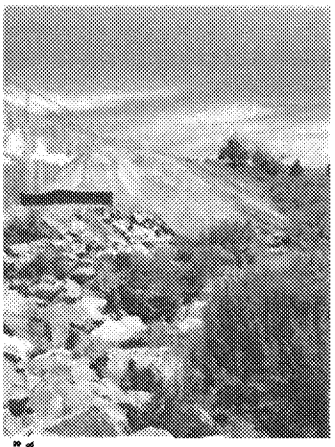
Reference No. 30



5/29/2014 Inspection: Jackson Creek outfall southbound BMPs are missing or inadequate

Identified Photo



Correction: 05/30/2014

- Silt fence previously installed per SWMP, no discharge.

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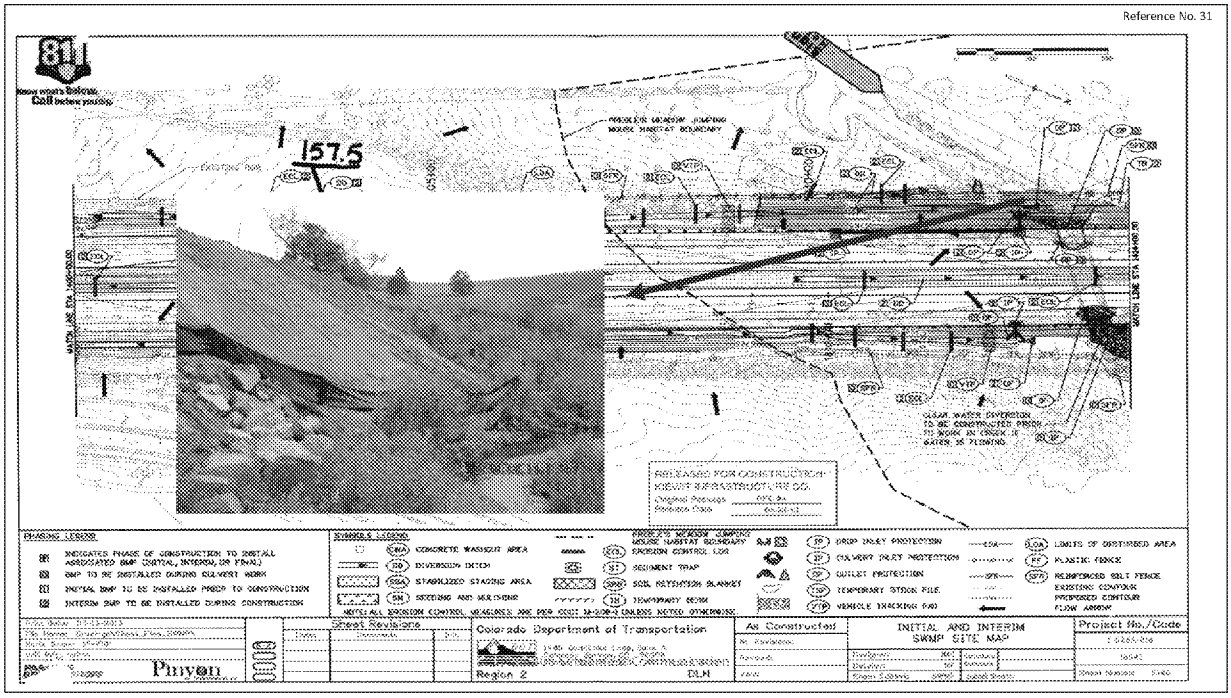
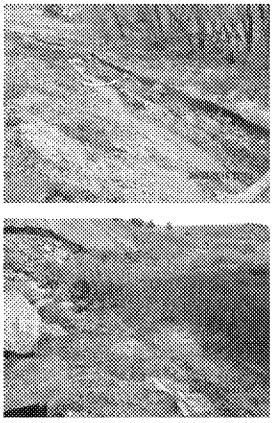
Reference No. 31



5/29/2014 Inspection: Jackson Creek outfall southbound
The sediment control BMP is not adequate for the application

Identified Photos

Correction: 5/29/2014



- BMPs installed per SWMP

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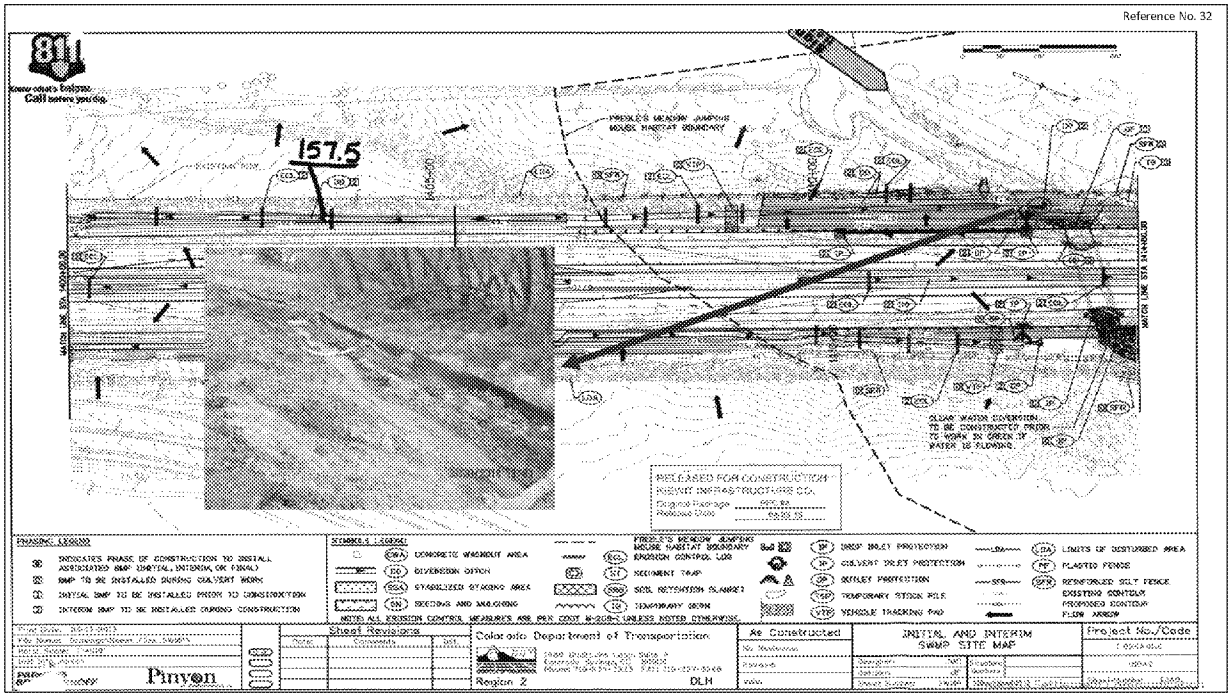
Reference No. 32

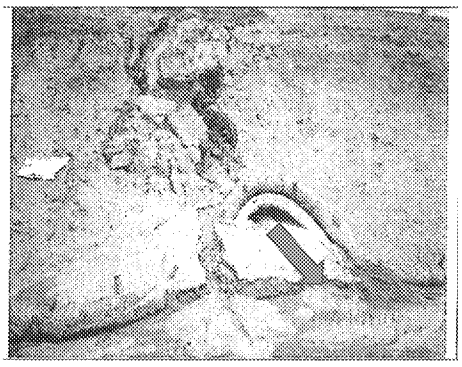


7/14/2014 Inspection: SB Station 1510, Segment 5 North of Teachout
Clean out sediment from outlet and fix erosion

Identified Photo

Before

SB Station 1510, Segment 5 North of Teachout

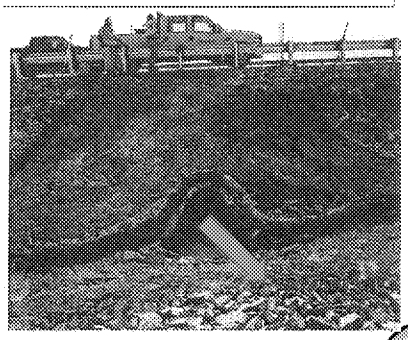


- Maintenance performed on outlet immediately after storm.
- Additional BMPs installed downstream, no discharge.

Correction: 7/15/2014

After

Date Corrected: 7.15.2014



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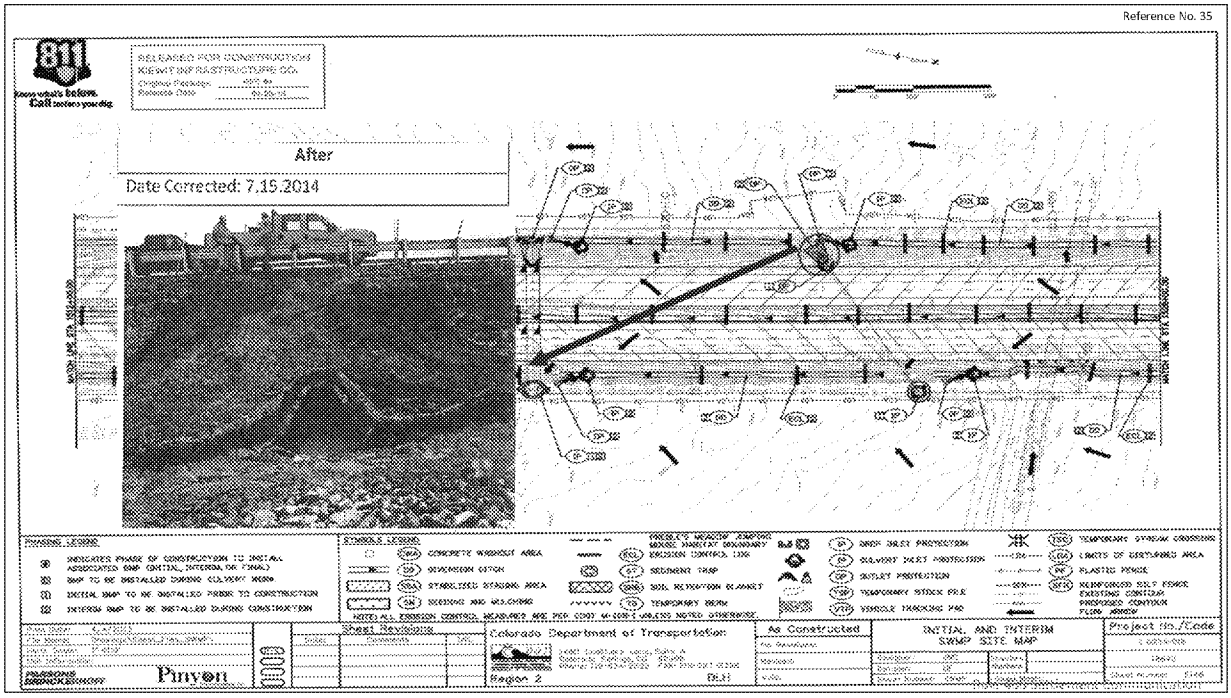
Reference No. 35

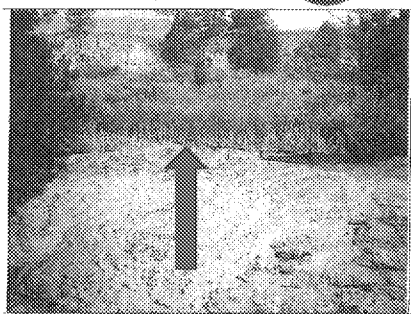


7/14/2014 Inspection: SB South of Black Squirrel
Fix erosion and pull sediment back from silt fence

Identified Photo

Before

SB South of Black Squirrel

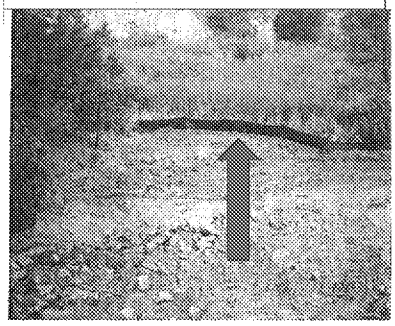


- Coordination needed to occur to ensure safe repair of BMP.

Correction: 7/15/2014

After

Date Corrected: 7.15.2014



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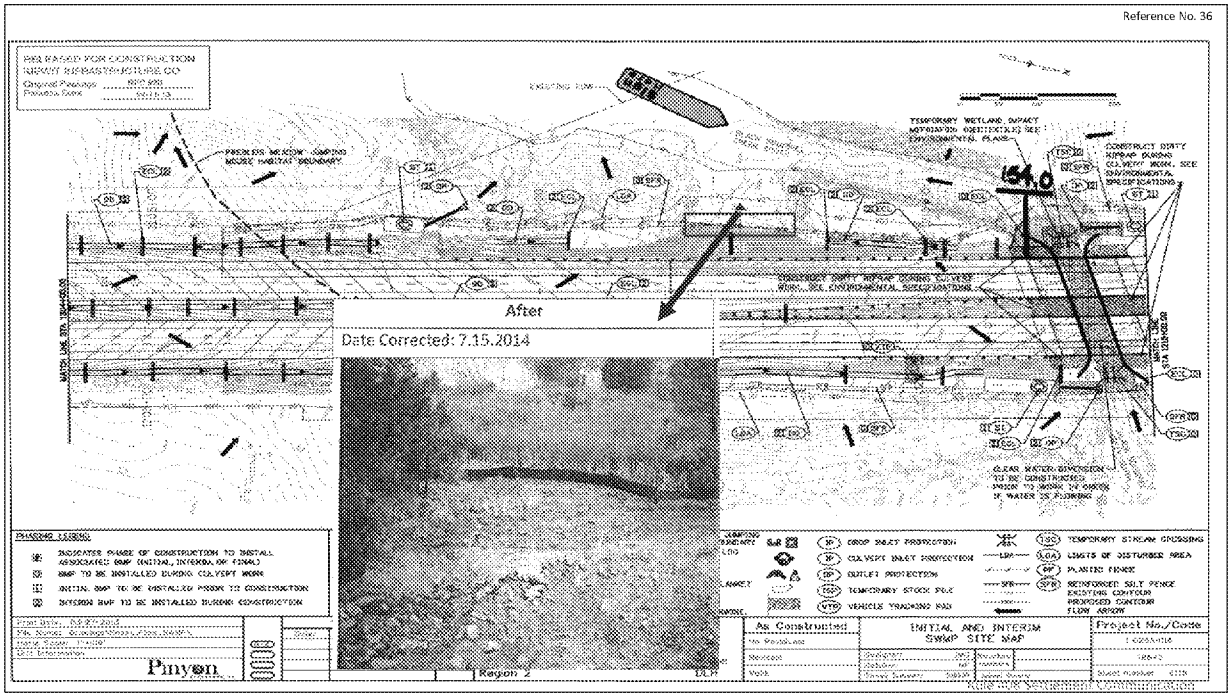
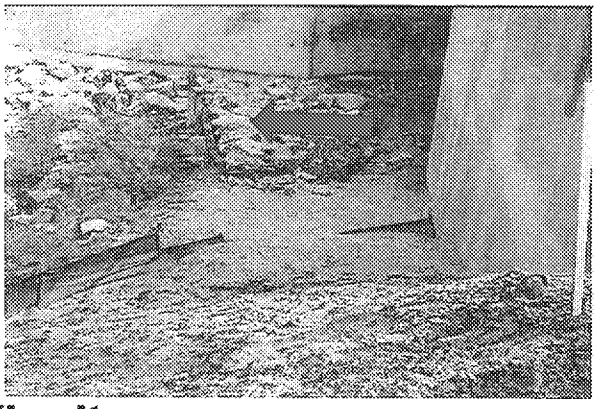
Reference No. 36



7/17/2014 Inspection: SB Jackson
Pull sediment back from silt fence and maintain silt fence

Identified Photo



Correction: 7/18/2014

- BMP repaired within one day of storm.

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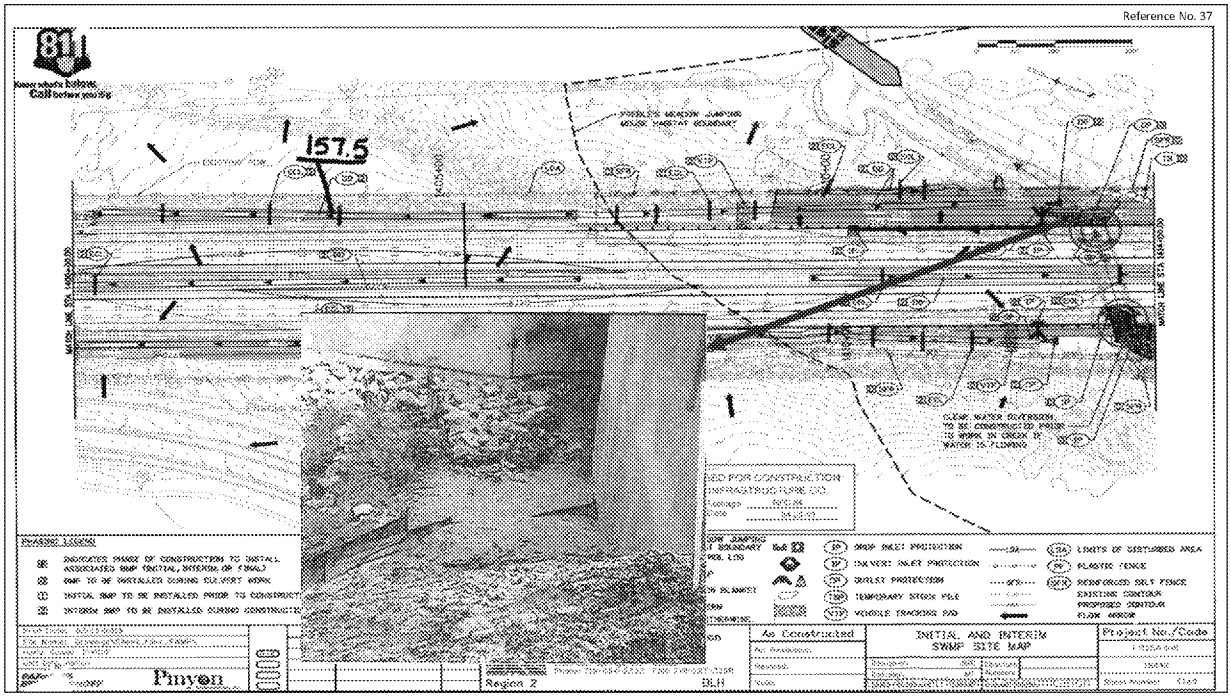
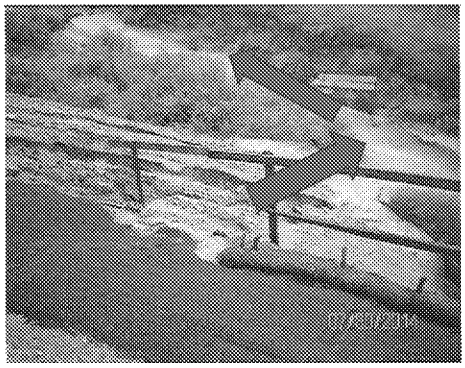
Reference No. 37



7/30/2014 Inspection: SB Jackson
Fix erosion and pull sediment back from creek

Identified Photo



Correction: 8/4/2014

- BMPs installed beyond requirements identified in SWMP.

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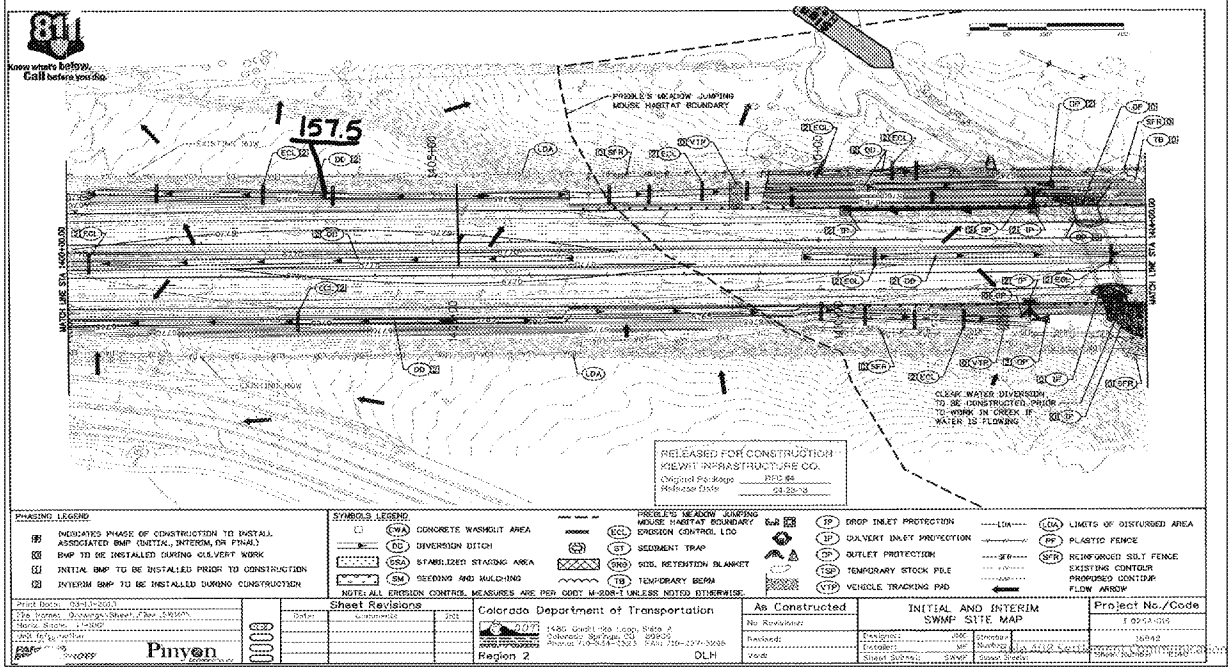
Reference No. 40



PHASING LEGEND

- (P) INDICATES PHASE OF CONSTRUCTION TO INSTALL ASSOCIATED BMP (INITIAL, INTERIM, OR FINAL)
- BMP TO BE INSTALLED DURING AGG/VERT WORK
- (I) INITIAL BMP TO BE INSTALLED PRIOR TO CONSTRUCTION
- (2) INTERIM BMP TO BE INSTALLED DURING CONSTRUCTION

SYMBOLS LEGEND

- (CWA) CONCRETE WASHOUT AREA
- (DD) DIVERSION DITCH
- (SSA) STABILIZED STAGING AREA
- (SM) SEEDING AND MULCHING
- PROBLE'S MEADOW JUMPING MOUSE HABITAT BOUNDARY
- (ECL) EROSION CONTROL LOG
- (ST) SEDIMENT TRAP
- (SRB) SOIL RETENTION BLANKET
- (TB) TEMPORARY BERM
- (DIP) DROP INLET PROTECTION
- (IP) CULVERT INLET PROTECTION
- (OP) OUTLET PROTECTION
- (TSP) TEMPORARY STOCK PILE
- (VTP) VEHICLE TRACKING PAD
- (LDA) LIMITS OF DISTURBED AREA
- (PF) PLASTIC FENCE
- (SFR) REINFORCED SILT FENCE
- EXISTING CONTOUR
- PROPOSED CONTOUR
- FLOW ARROW

NOTE: ALL EROSION CONTROL MEASURES ARE PER CDOT M-208-1 UNLESS NOTED OTHERWISE.

Print Date: 03-01-2011
File Name: Drainage Sheet.dwg
Horiz. Scale: 1"=20'
Vert. Scale: Not Applicable
PSAF: 0.9999
Pinyon

Sheet Revisions

Date	Comments	Init.

Colorado Department of Transportation
Region 2
DLH

As Constructed
No Revisions
Redlines:
Voids:

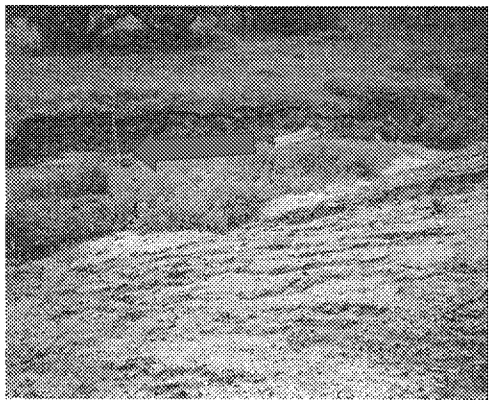
INITIAL AND INTERIM SWMP SITE MAP

Designed: JBC
Drawn: JBC
Checked: JM
Sheet Submit: SWMP
Sheet Sheet:

Project No./Code
F 0253-015
Name
Project Number: Sheet Number:

7/31/2014 Inspection: SB Jackson
Pull sediment back from silt fence and creek

Identified Photo

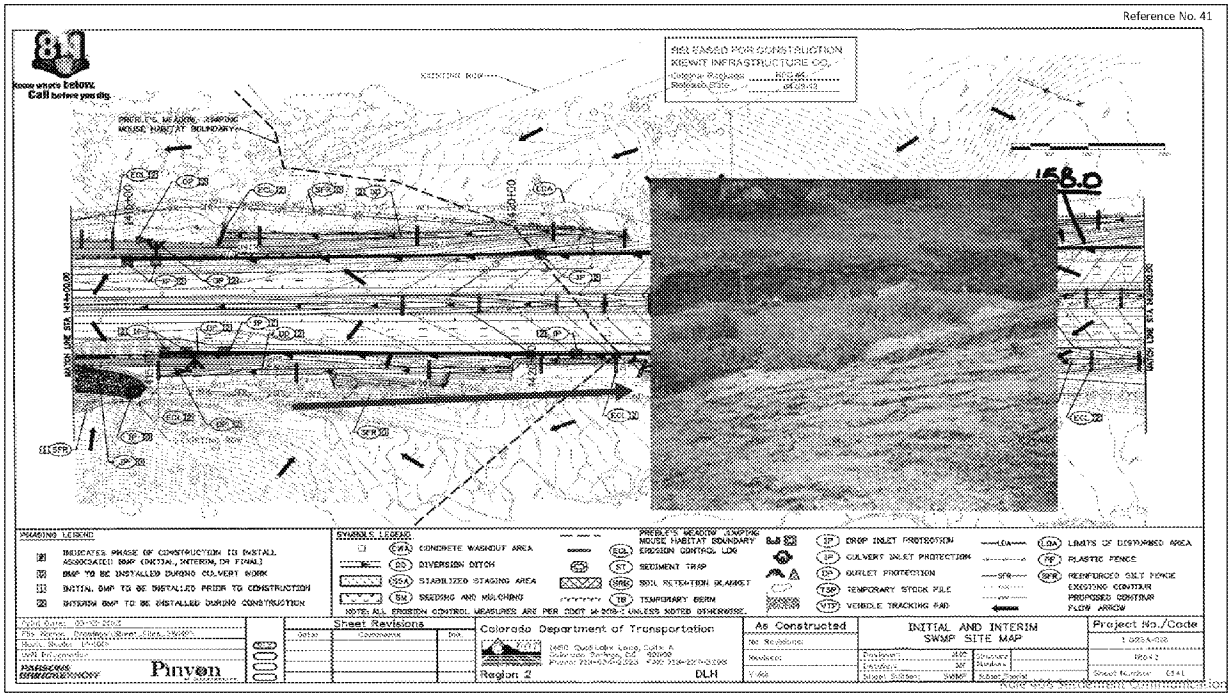


Correction: 8/4/2014

- BMPs installed beyond requirements identified in SWMP, no discharge.

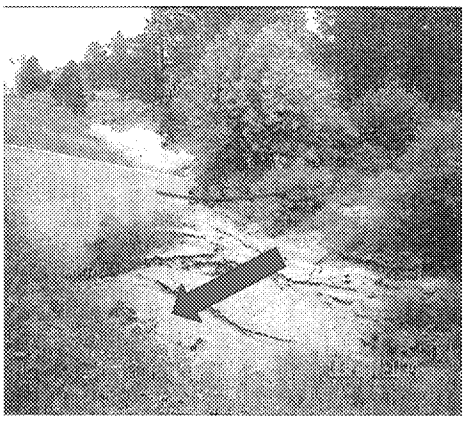
Kiewit

Reference No. 41



8/1/2014 Inspection: NB Monument Branch
Install silt fence

Identified Photo



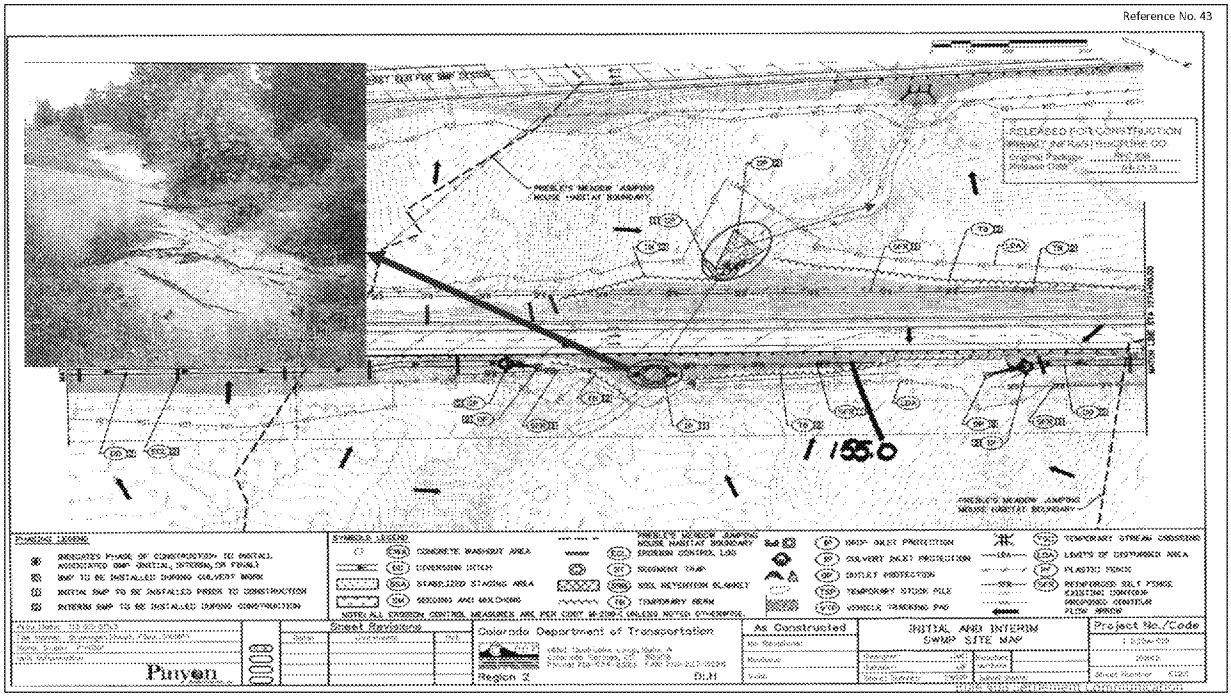
Correction: 8/11/2014

- The BMPs required in the SWMP were already installed. The inspection item was for an additional item above and beyond the SWMP requirements.
- Installation required coordinating lane closures.
- Vegetation was well-established, and construction was not occurring in the area.

Kiewit

Rule 408 Settlement Communication

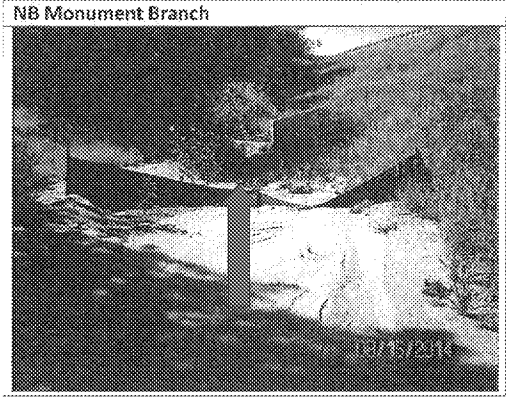
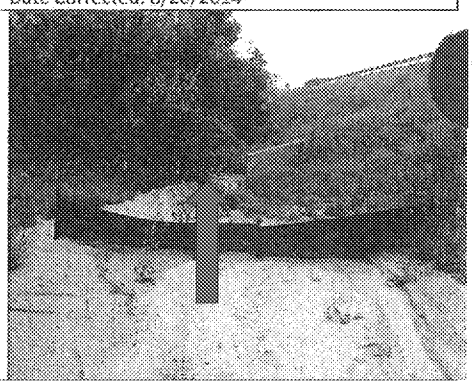
Reference No. 43



8/15/2014 Inspection: NB Monument Branch
Fix silt fence

Identified Photo

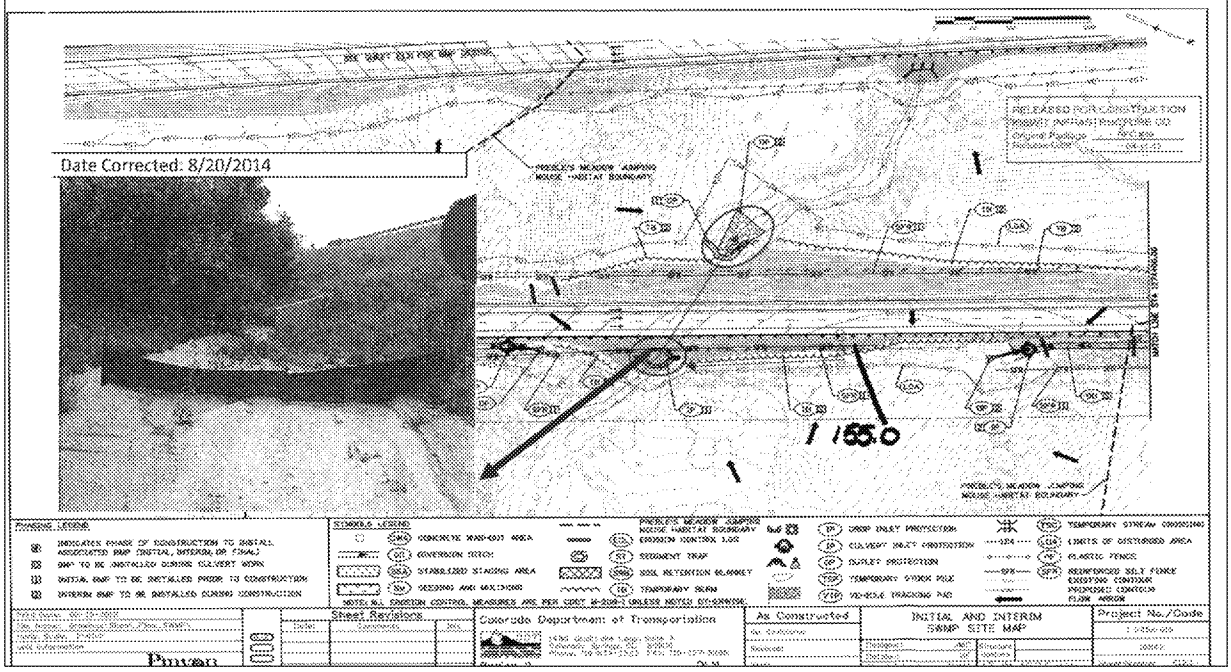
Correction: 8/20/2014

NB Monument Branch	Date Corrected: 8/20/2014
	

- BMPs installed as identified in SWMP.

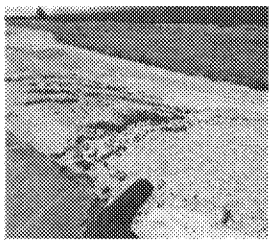
Kiewit

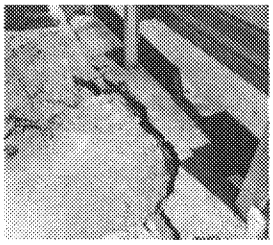
Reference No. 46

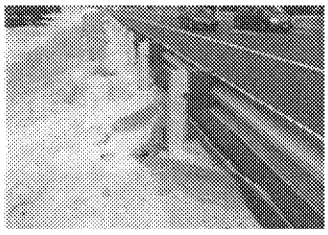


8/19/2014 Inspection: Site wide
Anywhere curbing installed or will be installed, implement temporary slope drain

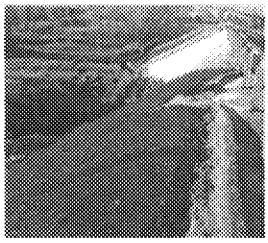
Identified Photos

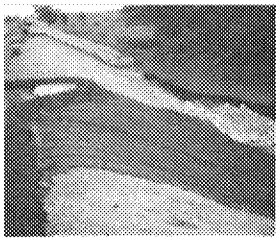


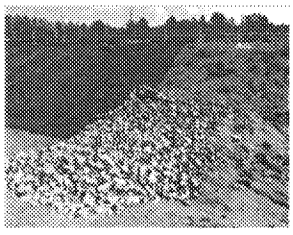




Correction: 11/21/2014







- Temporary BMPs were installed.

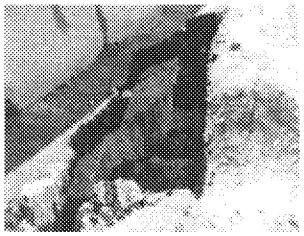
Kiewit

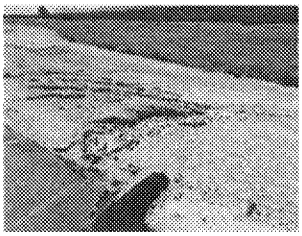
Rule 408 Settlement Communication

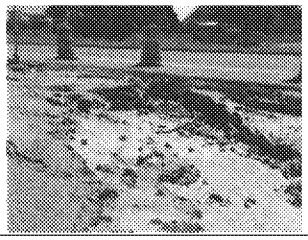
8/19/2014 Inspection: Site wide
Seed and mulch not adequate for roadway sheet flow

Correction: 8/22/2014

Identified Photos







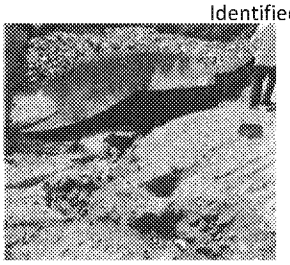
- Temporary BMPs were installed.

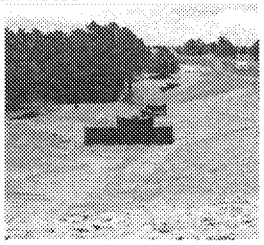
Kiewit

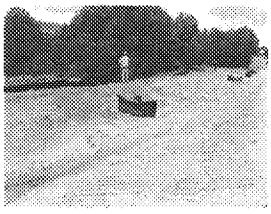
Rule 408 Settlement Communication

8/19/2014 Inspection: Site wide (concentrated flow locations) Remove silt fence and replace with BMP designed for concentrated flow

Identified Photos







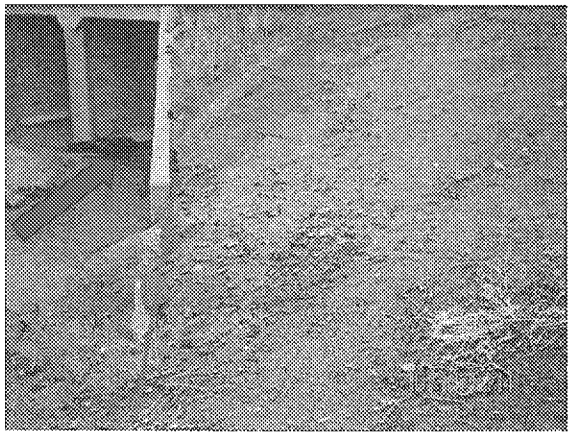
Correction: 8/21/2014

- BMPs installed beyond what was identified in SWMP.

Kiewit

10/10/2014 Inspection: NB Black Forest
Install silt fence at bottom of slope

Identified Photo

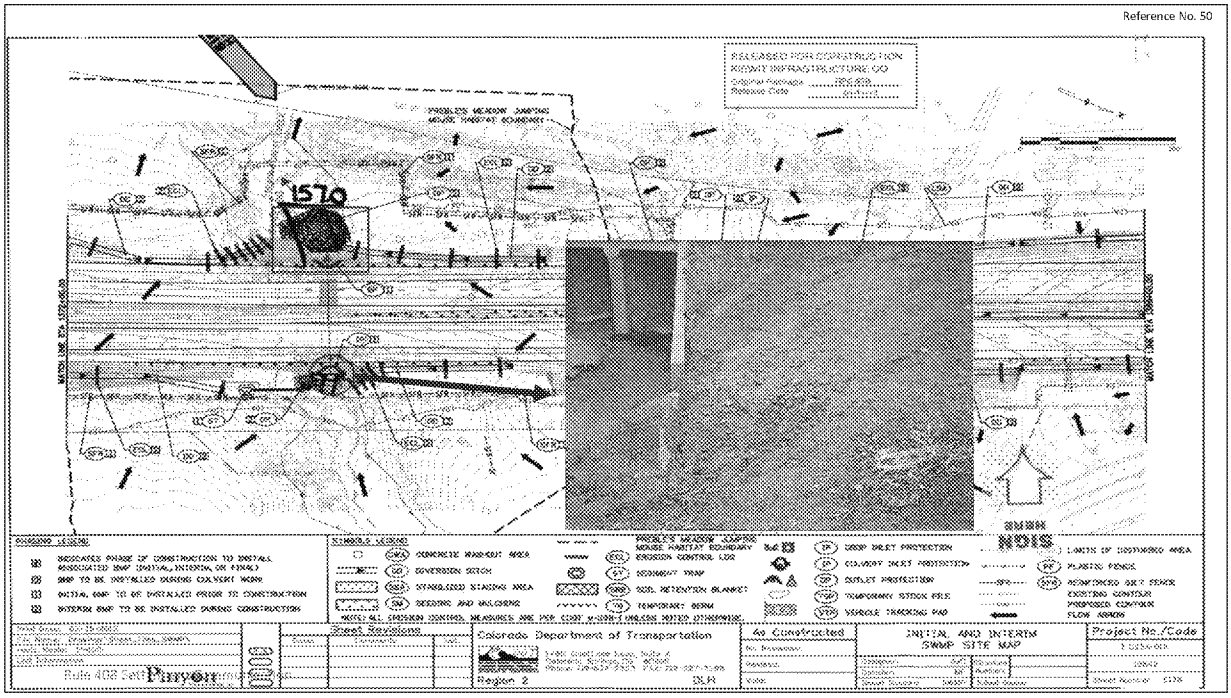


Correction: 10/20/2014

- The BMPs required in the SWMP were already installed. The inspection item was for an additional item above and beyond the SWMP requirements.
- Installation required mobilizing equipment and coordinating lane closures.

Kiewit

Reference No. 50

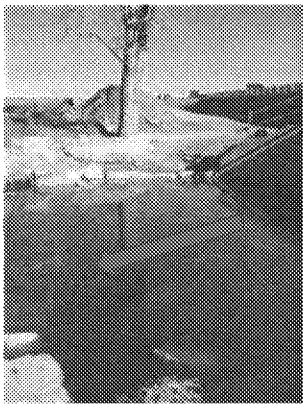


Category 3 Examples

Kiewit

10/30/2013 Inspection: I-25 SB, Teachout Creek
Stockpile management not implemented per SWMP

Identified Photo



Correction: 11/1/2013

- Followed stockpile management protocol per SWMP.

Kiewit

3. **Stockpile Management:**

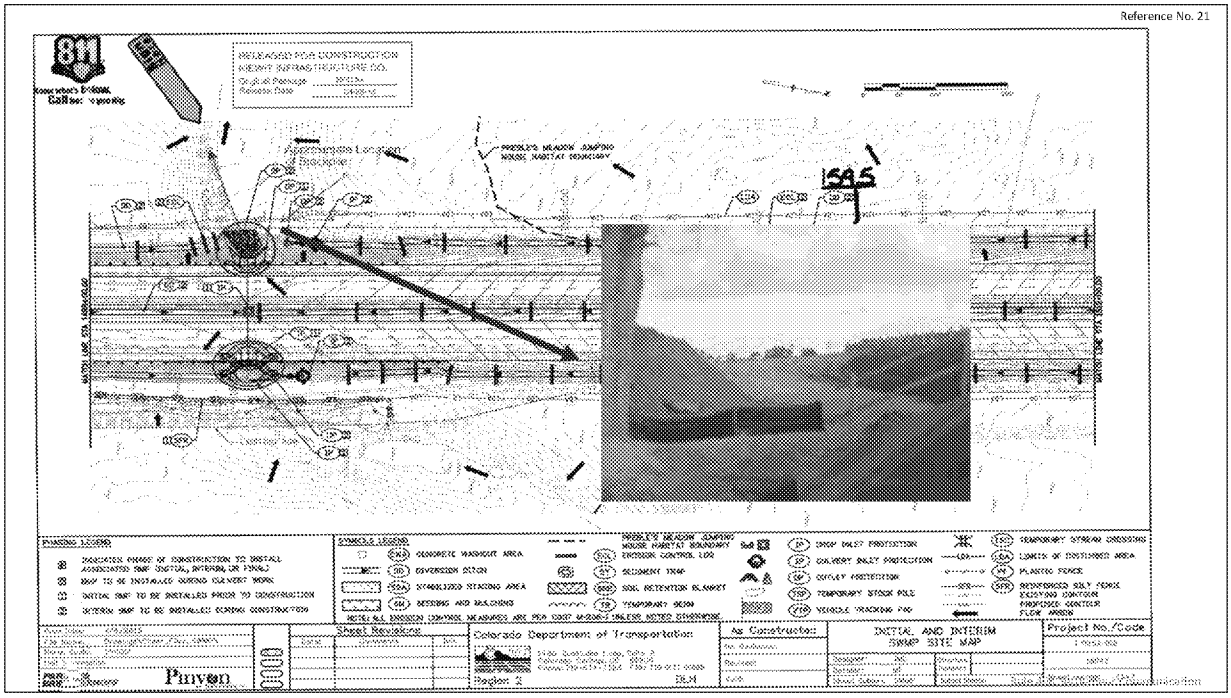
What: Includes measures to minimize erosion and sediment transport from stockpiles.

When: Stockpile locations shall be determined during construction.

Where: The stockpile locations should be placed away from areas where concentrated stormwater flow is anticipated, major drainageways, gutters, and storm sewer inlets. Stockpile locations shall be noted on the SWMP Plan.

How: *Pervious Surface* - It is recommended that stockpiles are stored on a pervious surface and are protected from any sediment transport. BMPs that can be used on pervious surfaces include, but are not limited to sediment control logs, vegetated buffer and silt fence.

Reference No. 21



10/30/2013 Inspection: I-25 SB, Black Forest Creek
Stockpile management BMP not implemented per SWMP

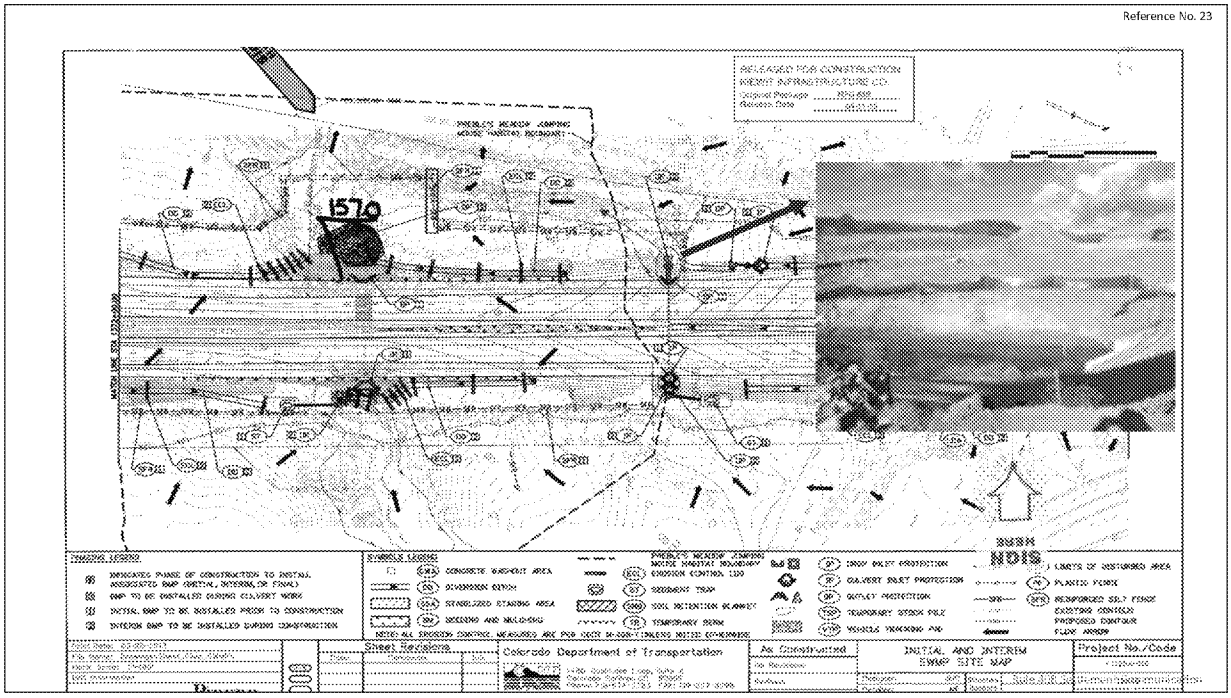
Identified Photo

Correction: 11/1/2013

- Followed stockpile management protocol per SWMP.

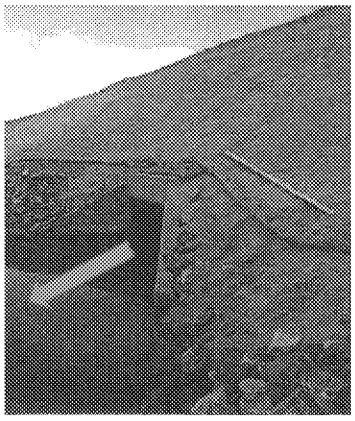
Kiewit

Reference No. 23



6/10/2014 Inspection: SB Box culvert South of Teachout
Install silt fence along straw wattle on sides of box culvert

Identified Photo

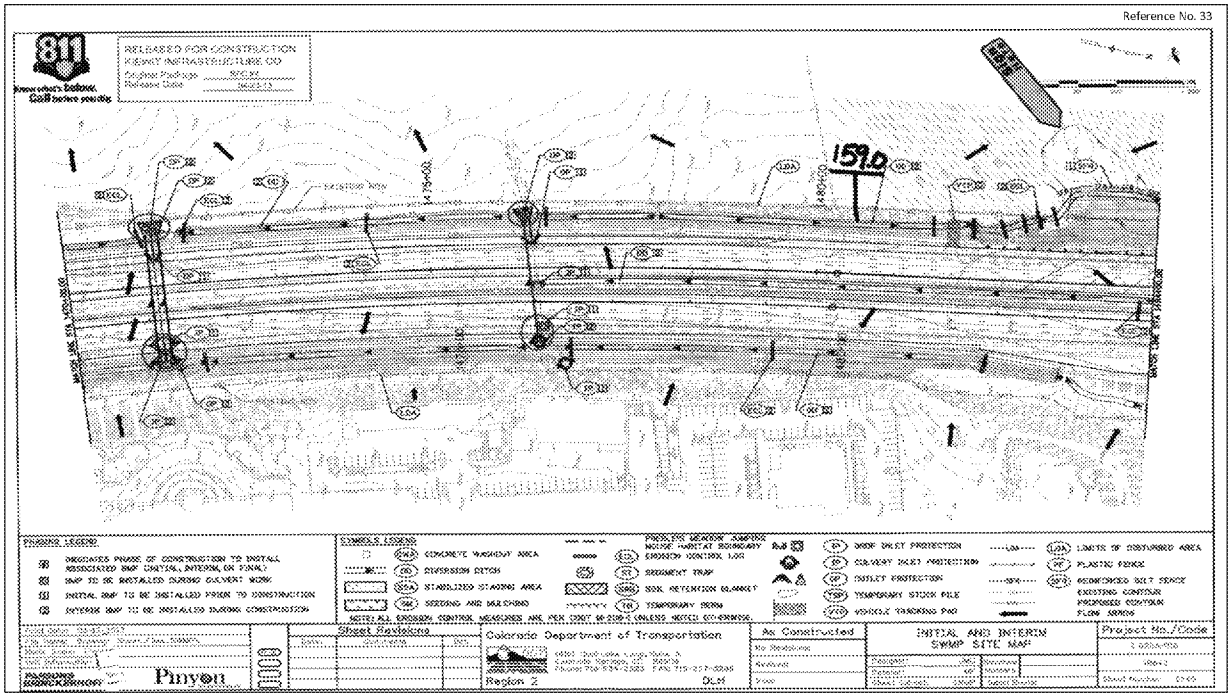


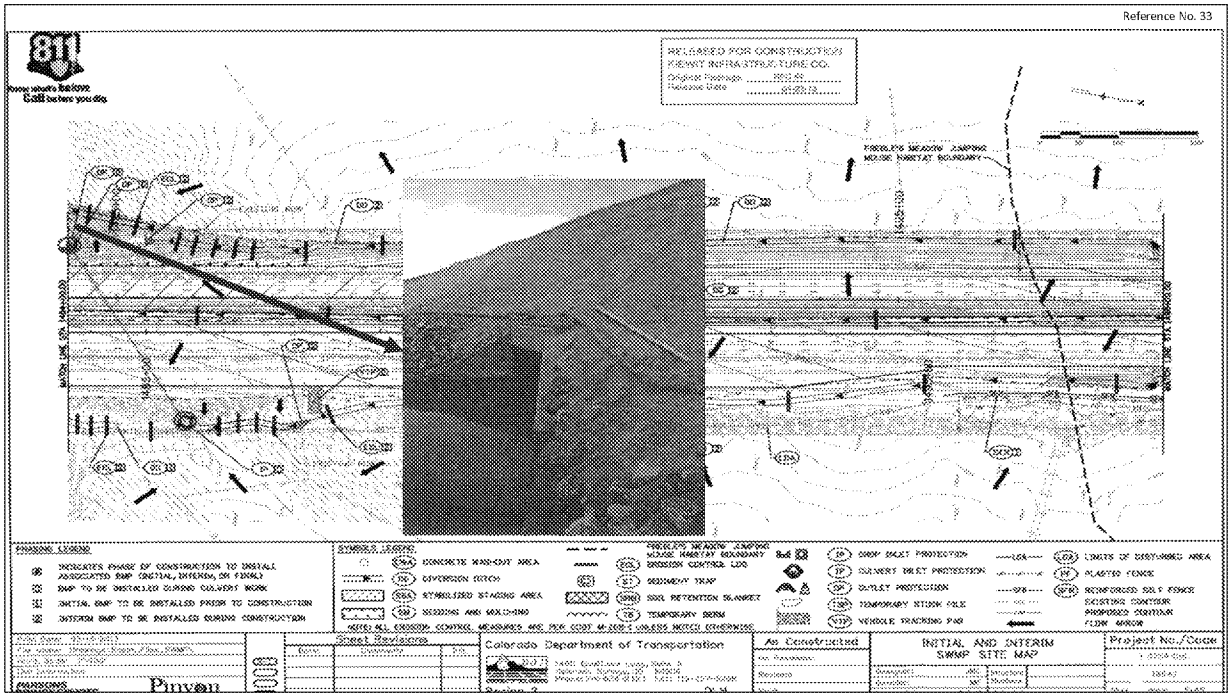
Correction: 6/13/2014

- BMPs installed per SWMP.

Kiewit

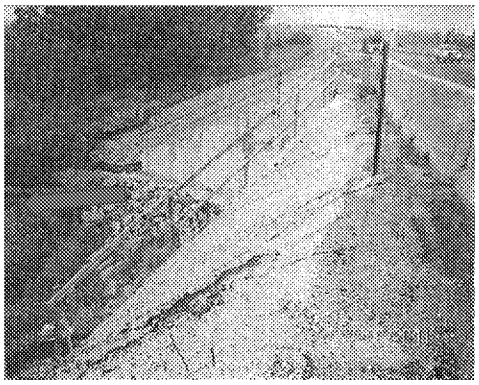
Reference No. 33



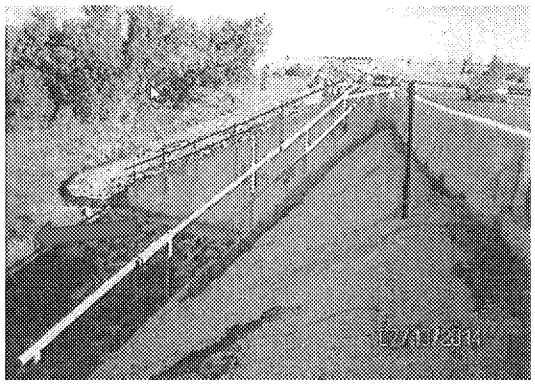

Know what's below.
Call before you dig.
RELEASED FOR CONSTRUCTION
KIEWIT INFRASTRUCTURE CO.
PHASING LEGEND
SYMBOLS LEGEND
Colorado Department of Transportation
As Constructed
INITIAL AND INTERIM
SWMP SITE MAP
Project No./Code
Pinyon

7/8/2014 Inspection: SB Jackson
Install wattles along tops of wing walls

Identified Photo



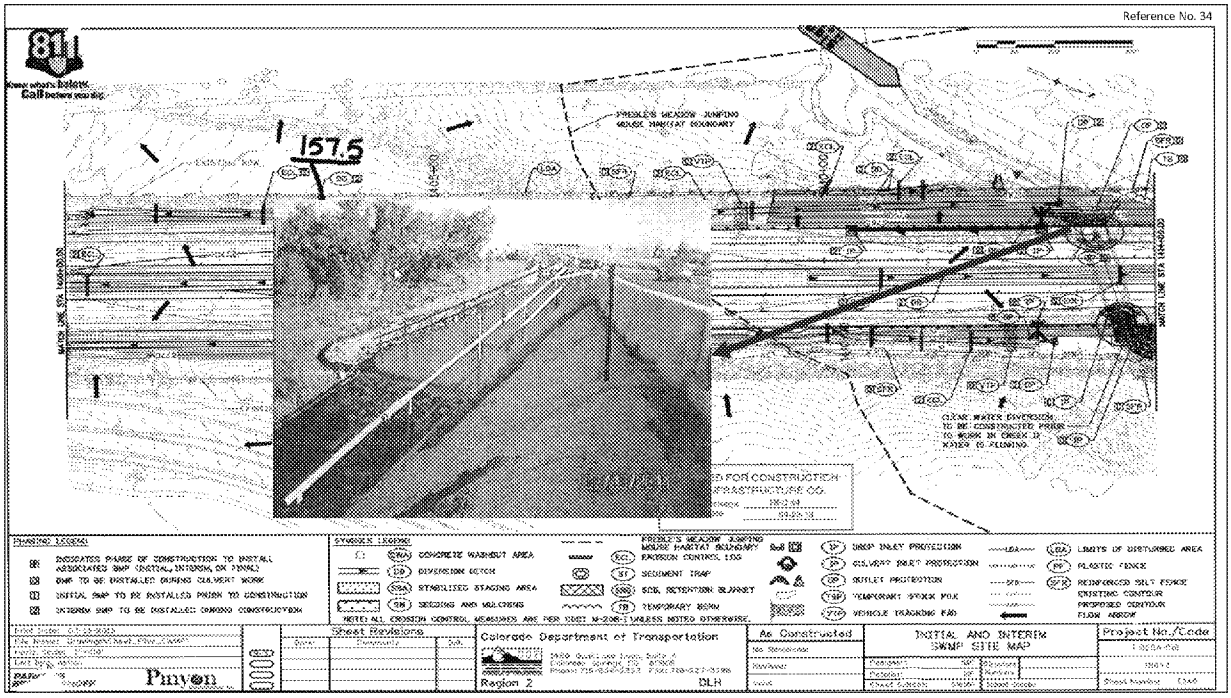
Correction: 7/10/2014



- Straw wattles removed to install matting.

Kiewit

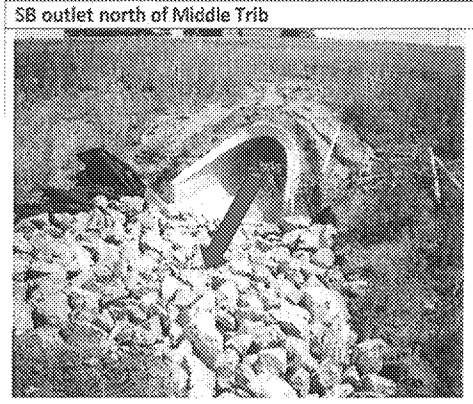
Reference No. 34



7/21/2014 Inspection: I-25 SB, north of Middle Trib
Straw wattle needs reinstalled around outlet pipe

Identified Photo

SB outlet north of Middle Trib



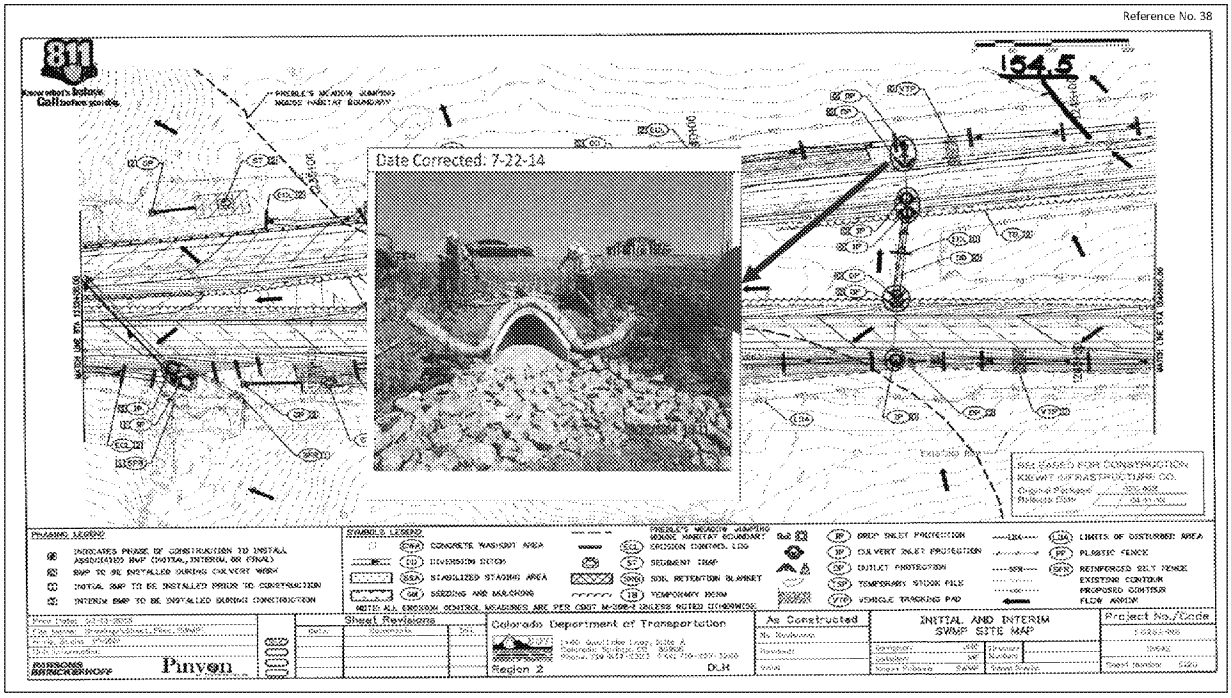
Correction: 7/22/2014

Date Corrected: 7-22-14

- Temporary removal of wattle to complete activity around the pipe

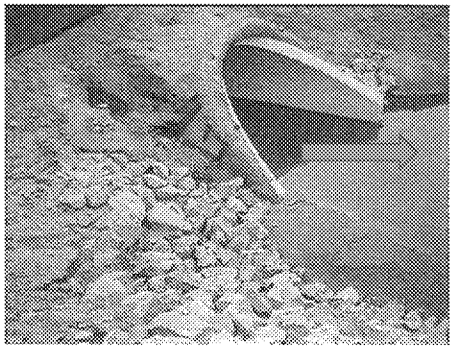
Kiewit

Reference No. 38



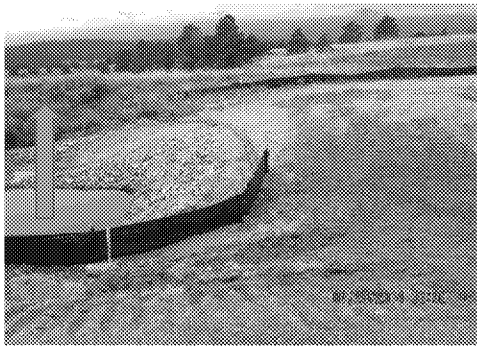
7/21/2014 Inspection: SB outlet north of Black Forest
Fix erosion and pull sediment back from water

Identified Photo



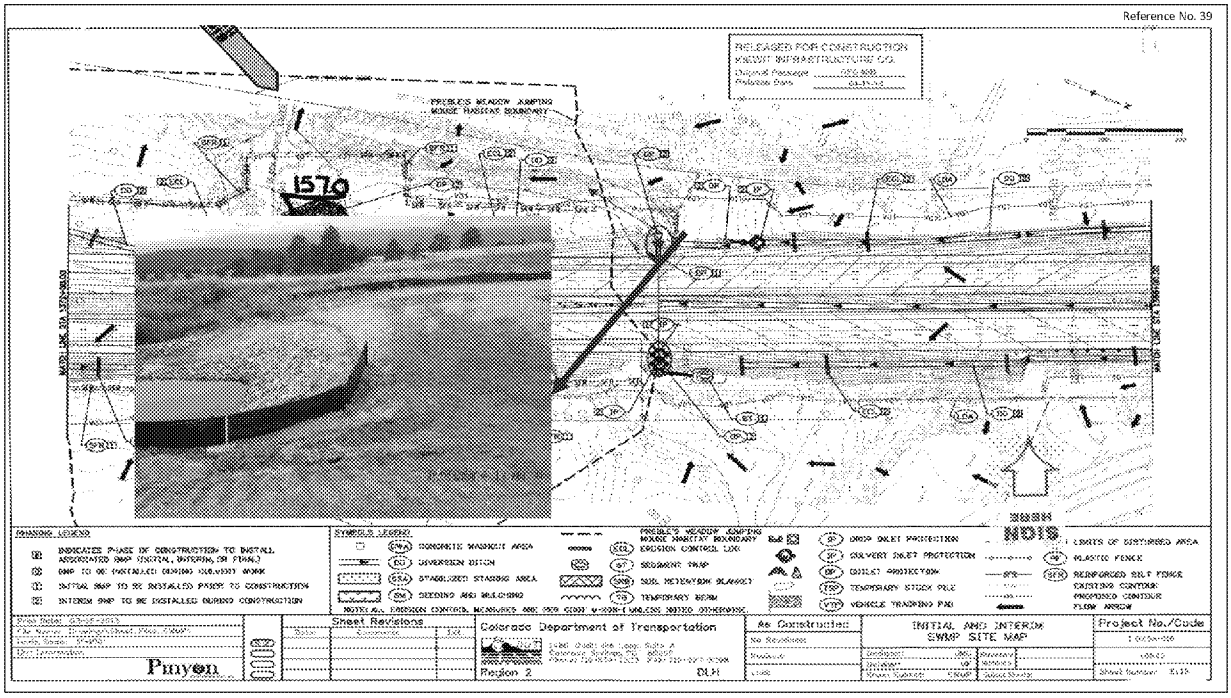
- BMPs installed upstream and downstream, no discharge.

Correction: 7/28/2014



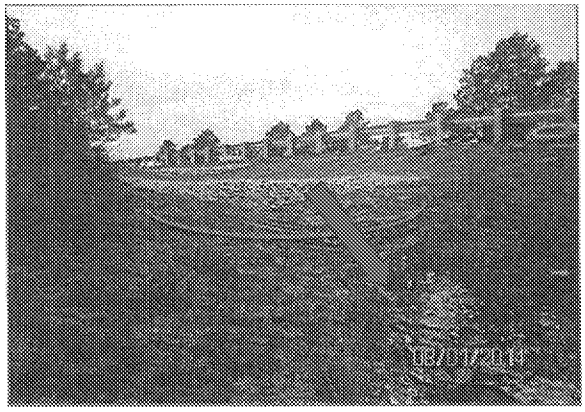
Kiewit

Reference No. 39



8/1/2014 Inspection: NB Monument Branch
Install wattle at the edge of disturbance

Identified Photo

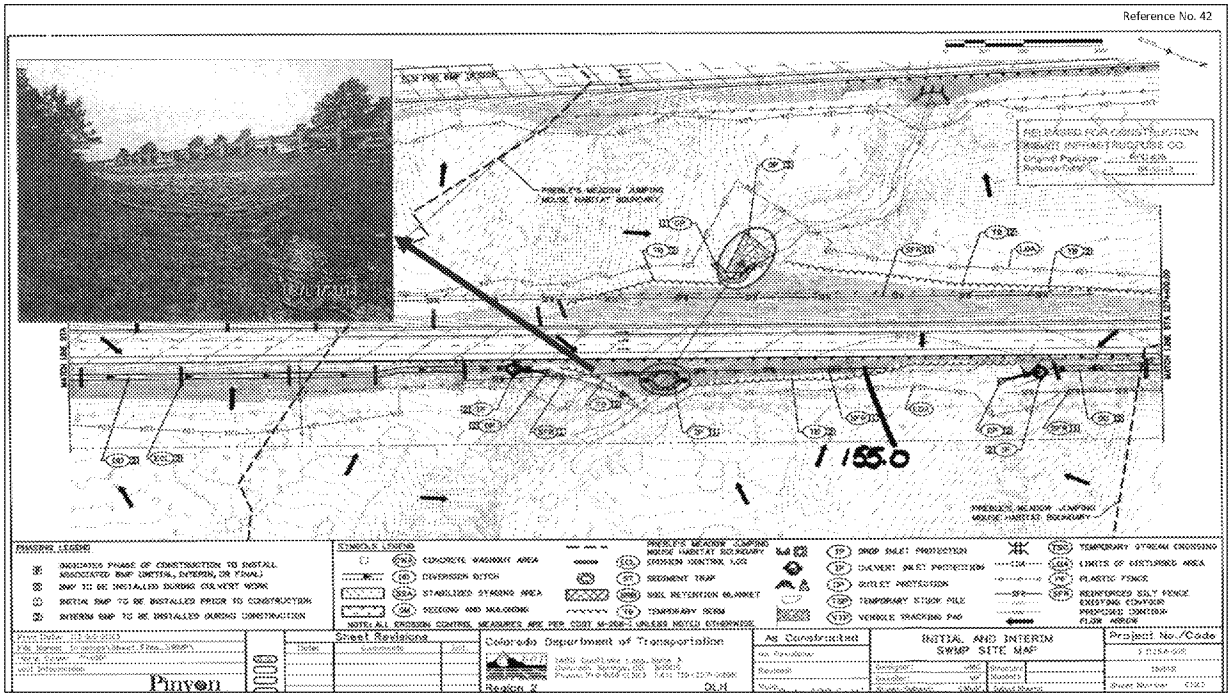


Correction: After review of SWMP, the existing BMPs were deemed adequate

- BMPs installed per requirements identified in SWMP.

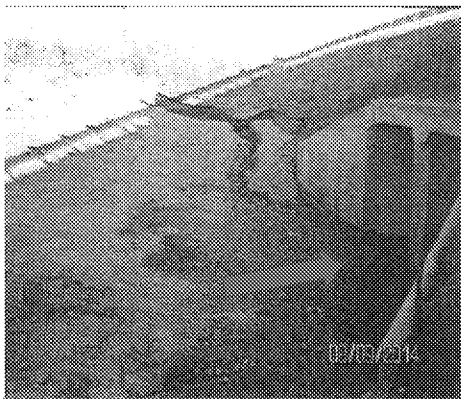
Kiewit

Reference No. 42



8/9/2014 Inspection: NB Black Forest
Fix erosion and pull sediment back from creek

Identified Photo

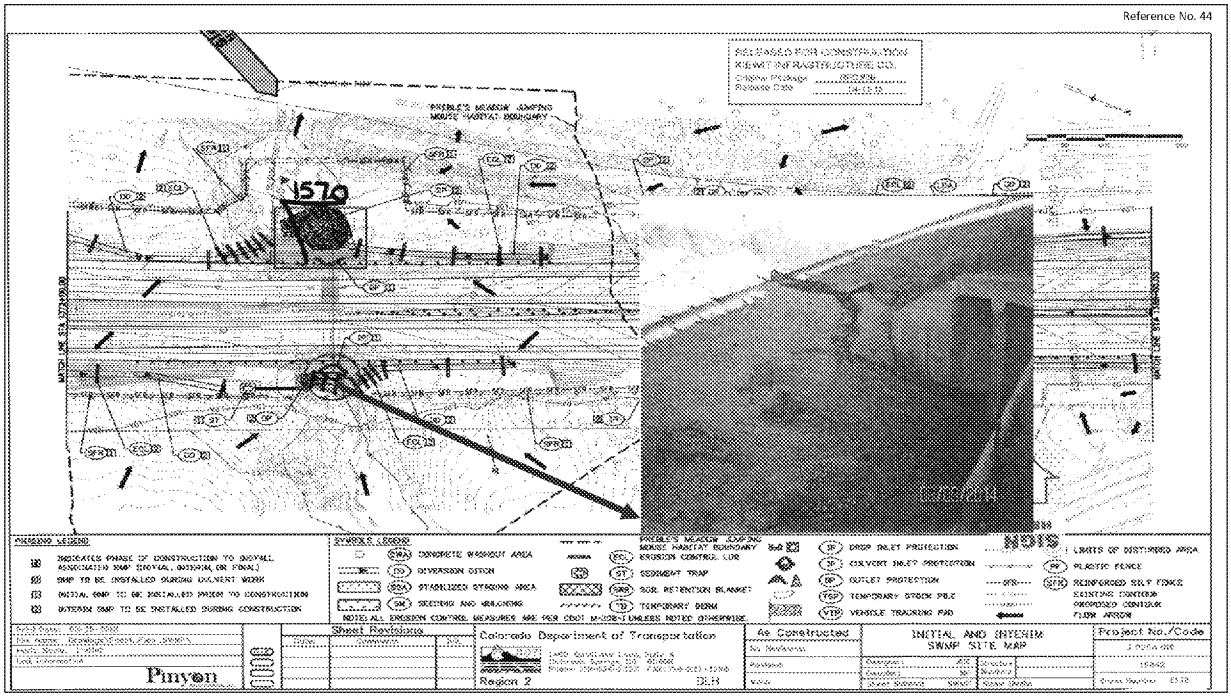


Correction: 8/18/2014

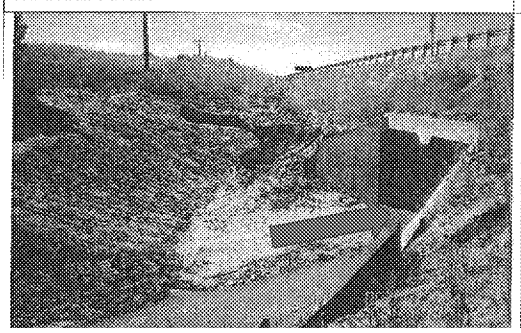
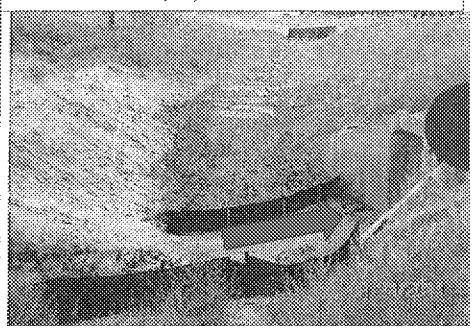
- The BMPs required in the SWMP were already installed. The inspection item was for an additional item above and beyond the SWMP requirements. This area was difficult to access and reach with equipment. Installation required coordinating lane closures.

Kiewit

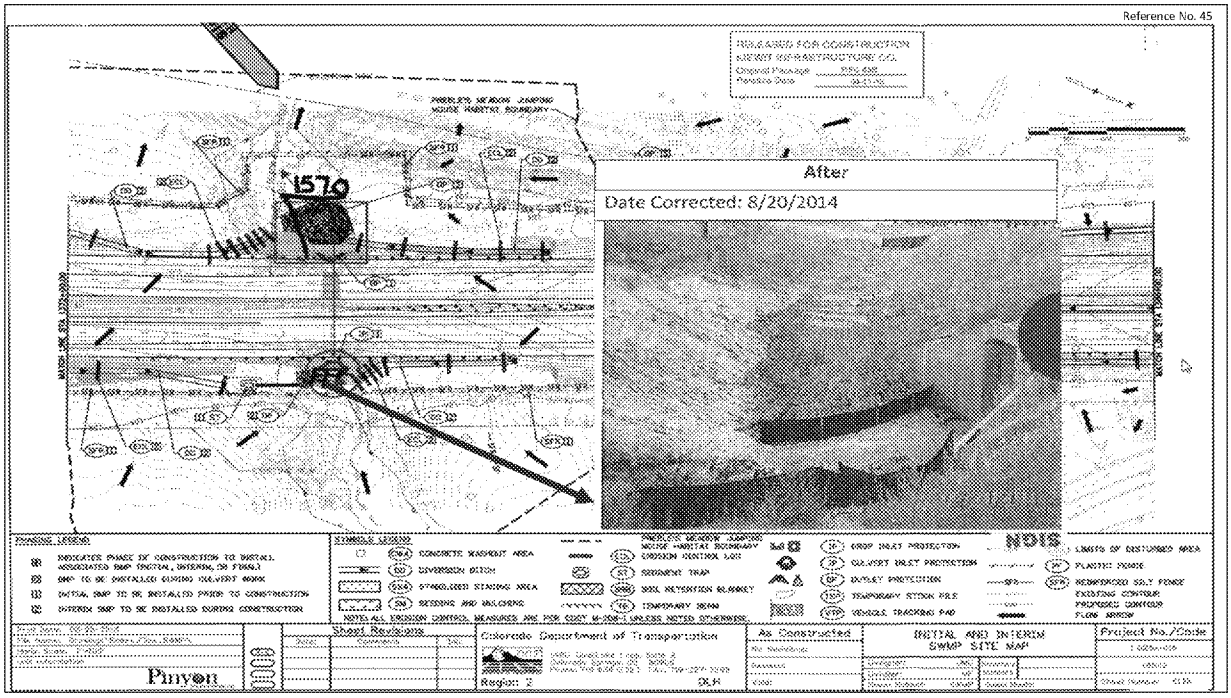
Reference No. 44



8/15/2014 Inspection: NB Black Forest
Fix erosion, fix silt fence, and pull sediment back from creek

Identified Photo	Correction: 8/20/2014
Before	**After**
NB Black Forest	Date Corrected: 8/20/2014
	

- BMPs installed as identified in SWMP.

Kiewit

Reference No. 45