

Olson, Greg

From: Olson, Greg
Sent: Friday, March 21, 2014 4:49 PM
To: Rodriguez, Jason T.; Silva, David; 'David Soule'
Cc: Olson, Greg; 'Carlos@SundanceMech.com'
Subject: L23-D022: 4-Hills Channel repairs for Beehive Homes Drainage Connection (SO-19)
Attachments: SubmittalNo46-QuickreteRapidRoadRepair.pdf; 4Hills Channel-Wall Repair Suggestion.jpg

David, David and Jason,

Here is my best effort at documenting the discussion and agreement in the meeting on site this afternoon.

Attending: David Soule, Rio Grande Engineering
 Roy _____, Sundance
 Mundo _____, Sundance
 Jason Rodriguez, COA Storm Maintenance
 Greg Olson, COA Hydrology

Remaining

Issue: **Long Term durability of the patch on the inside of the 4-Hills channel wall**

- Agreed: - Concrete bedding and encasement on the back side of the wall is ok (*Provide As-Built with Certified G&D*)
- Spalled areas and patches as well as old concrete chunks used in wall patch **are not acceptable**.
 - Loose concrete areas are detectible around the top and right sides of the patch inside the channel
 - Sundance will saw cut 1-1/2" deep around the perimeter of the patch, beyond the spalled areas
 - Sundance will carefully chip out the patch material, including old concrete chunks to behind the first layer of rebar (\pm 3") in penetration area and around the pipe, plus spalled and fractured areas at least to the 1-1/2" depth.
 - Sundance will coordinate inspection of the work with Jason Rodriguez, Storm Maint. at (505) 857-8607.
 - Sundance will use "**Quickrete 1242 – Rapid Road Repair**" material in accordance with the manufacturers recommendations, to replace concrete material in all of the areas removed per above. Special attention shall be given to surface preparation prior to placement. If the material is to be poured, forms must be used.
- If material is to be "Dry Packed" water content shall be per manufacturer directions.
 ** Caution Guys – This IS a quick setting material, with high-early strength **
- The new patch shall be cured in accordance with Quickrete recommendations.
 For reference, I am attaching a copy of a past submittal for use of the Quickrete 1242 on a City project.

Please review and advise if I've missed or misstated anything.

Thanks,

Greg Olson, PE
 Senior Engineer
 Planning - Hydrology
 505-924-3994

From: Olson, Greg

3/28/2014

Sent: Friday, March 21, 2014 10:59 AM
To: 'David Soule'
Cc: Olson, Greg
Subject: 4-Hills Channel repairs

David,

I agree that the ball should be in the contractor's court right now.
I would like to hear what they suggest to make it right.

Concerns that I have are:

1. Strength of the retaining wall following all this action
2. Water tight seal of the penetration.
3. Long term durability of the patch work around the spalled opening.

In the mean time, I wanted to be thinking of what we would be willing to accept, short of complete removal of the wall section.

What are your thoughts and recommendations on repairs.

Attached is some sketching on one of Jason's photos, with some of my ideas.

Please review and let's discuss before going to meet with the contractor.

Thanks,
Greg Olson

505-924-3994
(cell: 307-0580)

- Saw cut Perimeter of spalled areas, 1-1/4" Deep and remove loose concrete (1-1/4" min thk) back to main opening.
- Remove new conc. in opening to back side of wall, including all of those chunks of old conc.
- Clean rebar and exposed conc. surfaces.
- Prime all exposed conc. with latex bonding agent.
- Form Channel face of patch with staged formwork to ensure fill at all levels of pour
- Pour, vibrate and finish conc. 3/8" max. aggregate, 4,000 psi, air-entrained.
- After forms are removed, patch any voids, and grout rub surface to match surrounding wall.
- Protect with membrane curing compound.

*Poured multiple
lifts of Quikrete
1242 - Road Repair
Right Strong the Great
to Patched*

20.03.2014 11:58

- Remove at least 1-1/2" of conc. beneath pipe to ensure a water tight seal between the old conc. and the pipe barrel.







