From: robertfierro@fierrocompany.com
To: Abiel X. Carrillo
Subject: RE: Calvary Gym G&D Indian School & Constitution
Date: Friday, July 08, 2016 9:23:12 AM

Awesome! Appreciate the long winded explanation ☺ I was wondering about that. Yes. I was double dipping the first flush volume on the proposed pond. Now I know better.

Thanks again.

Robert J. Fierro

From: Abiel X. Carrillo [mailto:acarrillo@cabq.gov]
Sent: Friday, July 08, 2016 9:02 AM
To: robertfierro@fierrocompany.com
Subject: RE: Calvary Gym G&D Indian School & Constitution

Understood, it's a straightforward project we can get you approved by today.

So, just to be clear, you are saying that the northern roof half's first flush is stored in the pond, and the southern half is treated by the landscaping areas in front of the building.

If that is the case that will work, and yes just send me an updated plan when it is available (it can be when you are certifying for CO), and I'll send you an approval today.

Also, just so you know for future projects, when setting up your calculations you cannot rely on the first flush volume to also address flood control, according to the ordinance they are compartmentalized volumes. For example, in a detention pond where you lower the bottom to store the first flush, in your AHYMO model you would not assume that the pond retains anything. It doesn't affect your site because the masterplan appears to allow the release of discharge south, but just to be clear for larger more complex projects. In reality we know it does help, but the idea is that the first flush volume is assumed to be occupied by a minor storm prior to the design storm, so you 'block it out' from your model. Just like if you had spread out the first flush into tiny median islands you would not model them. Long winded explanation but hopefully that makes sense.

Abiel Carrillo, PE, CFM

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From: robertfierro@fierrocompany.com [mailto:robertfierro@fierrocompany.com]

Sent: Friday, July 08, 2016 8:22 AM
To: Abiel X. Carrillo
Subject: RE: Calvary Gym G&D Indian School & Constitution

Good morning Abiel,

Below are my responses in red. I will update the drainage report and exhibits to clarify and the first flush and the site's outlet. That be great if you could issue an approval letter contingent of addressing your comments below. The owner is behind schedule like a year, but it's not our fault ☺. They had other problems like moving the electrical line.

Thank you.

Robert J. Fierro

From: Abiel X. Carrillo [mailto:acarrillo@cabq.gov]
Sent: Thursday, July 07, 2016 4:06 PM
To: robertfierro@fierrocompany.com
Subject: RE: Calvary Gym G&D Indian School & Constitution

Robert,

See below my comments, but if we can agree on my proposed solutions then I can give you an approval and follow up with an updated plan as a condition of CO approval, since I know your owner has a deadline to start work:

1. The report mentions that basin 201 has a first flush pond, but it seems like that is only because the outlet pvc pipes are clogged or are not functioning properly. If they are cleaned out would the first flush be lost?
    a. Solution: The management of first flush volume only applies to new construction, so really the volume that you need to retain is the area of the building and the new sidewalk (about 14,300 SF x .34" = about 405 CF). The volume of your pond 320 CF will be enough given the fact that you are working with a developed site. I noticed yesterday morning that my report didn't clearly show how Basin 101 was going to store the first flush. But, on Sheet C4 in the legend there is a hatch pattern to represent the area storing the first flush. The first flush will be stored in the landscaping south of the building and accept the southern half of the roof plus the sidewalk along the east and south side of the building. The 1,280 sq.ft. area will store the first flush for the new improvements only within Basin 201. See 90th Percentile Storm, page 3.

    The new impervious area within Basin 202 discharges to the proposed Retention Pond. The first flush will be stored in this pond. This pond will serve dual purpose: 1) store first flush for the new impervious area within Basin 202, and 2) reduce the peak discharge from Basin 202 from 1.21 cfs to 0 cfs during the 100-year, 6-hour storm.

2. The location of the roof drains needs to be shown to ensure that you are not discharging directly to the sidewalk surface. If you are, you will need sidewalk culverts or piping under the sidewalk.
    a. Solution: With my previous comment in mind, you could gutter the southern half of the roof west to the swale/pond and address both 1 and 2. Ok. I will update the sheets to show the roof drains and private storm drain(s) that will enter the landscaping area.

3. Does the junction box accept surface flows? Although it appears that the downstream site will now see less amount of runoff, I wanted to understand how the surface flows will enter the adjacent site, or it needs to be conveyed to the 12" pipe network. The junction box only receives flow from the 3-4" diameter pipes which penetrates into the junction box. The junction box outlets via the 12" CMP, which drains to the Bella Vista property which is south of our site.

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From: robertfierro@fierrocompany.com [mailto:robertfierro@fierrocompany.com]
Sent: Thursday, July 07, 2016 2:26 PM
To: Abiel X. Carrillo
Subject: RE: Calvary Gym G&D Indian School & Constitution

Hi Abiel,

The area of disturbance is approximately 0.25 acres. The building for the most part is over approx.. 50 paved parking spaces. There will be a lot of fill due to the F.F. being on average 4-6 feet higher than the adjacent grade.

Robert J. Fierro

From: Abiel X. Carrillo [mailto:acarrillo@cabq.gov]
Sent: Thursday, July 07, 2016 2:15 PM
To: robertfierro@fierrocompany.com
Subject: RE: Calvary Gym G&D Indian School & Constitution

Hey Robert, I am looking at the Calvary Church project right now, but I noticed that you don't yet have an approved ESC Plan, I think you're leaving the asphalt alone (I just started looking at it), but if you're disturbing more than an acre you'll need one before your client can start excavating, just fyi.

Abiel Carrillo, PE, CFM

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From: robertfierro@fierrocompany.com [mailto:robertfierro@fierrocompany.com]
Sent: Wednesday, July 06, 2016 4:29 PM
To: Abiel X. Carrillo
Cc: peppermax@earthlink.net
Subject: RE: Calvary Gym G&D Indian School & Constitution

I know you guys been busy this summer. If you or your staff will like to meet to go over any questions/comments prior to providing comments/approval, I'll be glad to meet.

Thank you.

Robert J. Fierro

From: Abiel X. Carrillo [mailto:acarrillo@cabq.gov]
Sent: Wednesday, July 06, 2016 4:24 PM
To: robertfierro@fierrocompany.com
Cc: peppermax@earthlink.net
Subject: RE: Calvary Gym G&D Indian School & Constitution

There are two small sites and one very large subdivision that we just got through, so it should be reviewed before the end of the week.

Abiel Carrillo, PE, CFM

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From: robertfierro@fierrocompany.com [mailto:robertfierro@fierrocompany.com]
Sent: Wednesday, July 06, 2016 4:03 PM
To: Abiel X. Carrillo
Cc: peppermax@earthlink.net
Subject: Calvary Gym G&D Indian School & Constitution

Hi Abiel,

Can you find out the status on the Calvary Gym G&D comments/approval for me? The site is located at the SW corner of Indian School & Constitution. I submitted the G&D late May/ Early June. The client is wanting to start excavation ASAP. If anything can my client get a rough grading permit?

Robert J. Fierro, PE, PS
Principal Engineer and Surveyor
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