

From: [Rob Gordon](#)
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Cc: [Tripp Engineering \(trippeng@ec.rr.com\)](mailto:trippeng@ec.rr.com); [Brian Chambers](#)
Subject: Eng Review - Fortune Place II
Date: Wednesday, January 25, 2017 11:52:00 AM
Attachments: [Calcs_Fortune II.pdf](#)
[SW App_Fortune II.pdf](#)
[image003.png](#)

Engineering has reviewed the plans for the Fortune Place II project and have the following comments:

1. The location of the 48" pipe outlet behind lot 53 is shown in two different alignments on C3 & C4. If the mulched trail is within a public easement, the pipe must be a safe distance away from the trail. The C3 alignment is more appropriate.
2. Please update the tree protection detail from the City web site.
3. Please provide an ADA ramp detail.
4. I cannot find the Pond and inlet DA map for the project. I should have asked for this on my initial review, not sure why I did not. My apologies. Please make sure the DA's are noted on the map and match calcs to avoid additional comments.
5. Regarding the shallow pipe:
 - a. The problem is not necessarily the lack of cover once the road is built, but the construction traffic between when the pipe is installed and before the road is built. Video inspection of similar projects has revealed substantial damage. Once the road is built, there is very little willingness to adequately repair damage because of cost and time implications, so we are forced into a compromise. I understand the constraints – the City does not want a series of interference structures or force excess fill that would limit tree save areas, but we cannot compromise the integrity of public infrastructure. If there is no viable way to lower the storm system and provide adequate cover, please outline a construction sequence that city inspectors can enforce with the contractor that will protect the integrity of shallow pipe during construction.
 - b. You referenced using class V pipe in shallow areas on your comment response letter. I did not see a note requiring class V pipe on the plans. Please clarify.
6. Regarding the curb transition detail:
 - a. It is not one of our standard details. Please remove the reference to City standard detail. Also, enlarge the detail – it is very small.
 - b. A 10' taper is fine, but will impact driveway placement on a few of the structures. You may wish to add a note that the taper can be reduced to 5' where necessary to allow room for driveways.
 - c. The edge of the grate is required to align with the edge of pavement. Please adjust the detail. Other projects have used an 18" grate to minimize this offset if you would like to propose
7. SRB condition #2 requires water and sewer utilities to be located under pavement to avoid utility conflicts. Water is located under sidewalk. I do not necessarily have a problem with the location of the waterline, but:
 - a. The location under the sidewalk has to be deemed consistent with the SRB condition by planning staff.

- b. The location of the street trees will almost certainly factor into this decision. I can understand why the street trees are located outside the r/w on Cloverland and the Northern stub of Trumpet Vine – there is not enough plaza width to plant a tree, but placing required street trees outside the r/w on the remaining areas would seem to be in conflict with both the SRB condition and the City technical standards.
- 8. Regarding the driveway:
 - a. We do not have a City standard detail for valley curb, but it is fairly simple to craft. 12' width is fine, but actual dimensions vary, 3 ft flares are required by tech standards, but can be reduced at the discretion of City inspector, especially on the r/w with smaller plaza. The driveway does not ramp up from the valley to the top of curb elevation as shown, it simply ties to the existing valley curb.
 - b. Please note driveways cannot tie into the transition for drainage structures.
- 9. Note Only – No new application or pond calcs were included with this submittal. See the attached application and calcs we have on file. Please make sure they are current. If any portion needs to be revised, please do so with the next submittal, otherwise we will assume the attached calcs are final.
- 10. Note Only - the new MDC's have been released as part of the state SCM manual. We will begin reviewing using them. Your spreadsheets will have to be updated to reflect the new design criteria on future projects.

Please submit one full set of plans along with any required calcs and forms to Engineering for final review. Please call or email if there are any questions. Thank you.

Robert Gordon, PE
Plan Review Engineer

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