2. Dead-end fire apparatus access road on the north side is longer than 150 feet and will require an approved area for turning fire apparatus around. [503.2.5] Examples can be found in AFPC Appendix D.
3. Knox key box needs to be installed near the front entrance in an approved location 60 - 66 inches above the ground.
4. FDC must be within 100 feet of a fire hydrant. [507.5.1.1] FDC can be building mounted or remote.

4. Hilltop Manor Subdivision - Preliminary Plat

Utilities

1. 12" water line will need to be brought up to 2015 WW specifications with DI
   Please refer to revised plans.
2. Half Street improvements on Hilltop, 12" water line will need to be relocated **with DI.** Please refer to revised plans.
3. Locate and Survey valves, emergency connections from the Salem water line. Possibly located on Tract A and Lot 15. Please refer to revised plans
4. Verify sewer capacity- Currently working with the City.
   Please label **sewer in** green and water in blue. Please refer to revised plans.

Streets

Due to the condition of the Hilltop Road half-street improvements will have to be made to the center line of the road. Please refer to revised plans.

1. A geotechnical report will be required for the subdivision and Hilltop Road.
   Owner has provided. Refer to revised submittal.
   Street light and Street Signage plan will be required including, Stop Signs, Street Placard Signs and No Parking signs. Please refer to revised plans.

Stormwater

1. Submit Stormwater Application and pay Stormwater Impact Fee.
   This will be submitted in a timely manner.
2. Large Scale ADEQ permit with approved SWPPP submitted to City of Bryant
   This will be submitted to ADEQ and City of Bryant prior to commensing grading activities.
3. Notice of Coverage
   This will be provided as soon as issued by ADEQ.
4. 78 Lots included in subdivision, Stormwater Review Fee will be $1,950.00
   Noted. The Developer will be made aware of these fees.

5. Silt Fence will require wire mesh, current detail does not call for wire mesh. Please refer to revised plans.

Engineering

1. General Comment?
    a. It is recommended that the developer/ Engineer schedule a meeting with City Staff to review this project. Meet was made and attended by staff, developer, and engineer.
    b. What is the design speed that was used on the streets? 25 mph.
    c. Pre-Construction Meeting required. After approval is received and before construction commences, schedule a meeting with Bryant Public Works. Noted.
2. Drawing 2 of 24 - Overall Street & Drainage Plan
    a. Show drainage arrows in the direction of flow. Please see revised plans.
    b. Are any new ditches planned? If so, provide details and label them on the plans. If needed, show a profile of the ditch. Please see revised plans.
    c. Only show the curb inlet or junction box name, nothing else in the notes for each structure. Detailed information is shown in the Road Plan & Profile sheets. Please see revised plans.
    d. Shade or hatch the park area and provide a bolder label. Please see revised plans.
    e. Will there be any fencing around the park? Yes
    f. Will there be any fencing around the outfall of the pond? Yes
    g. Is it the intention that this pond be a wet detention basin (see comments on drawing 10 of 24)? Wet detention basin. Please see revised plans.
3. Drawings 3 thru 7 of 24 - Road Plan & Profiles
    a. Label roads (show road names) County is currently reviewing proposed street names. These will be added as soon as verified.
    b. Move CB-15 & CB-16 to low point of vertical curve Please see revised plans.
    c. Does CB-15 & CB-16 have adequate opening length? Yes. Refer to drainage report.
    d. Make sure that CB-28 is in low point of radius. Please see revised plans.
    e. Does CB-27, CB-32, CB-31, CB-29 have an extension? Yes
    f. Will there be a barricade at the north end of Road 1? We felt the City would have a gate for access to the water tank.
    g. Show handicap ramps where sidewalks cross the streets. Please see revised plans.
    h. Label sanitary sewer on the street profile (show manhole name, reference the sanitary sewer plan & profile sheet that it is on) We always show sanitary sewer in our street/drainage profiles to prevent conflicts during construction. However, we don't add labels due to confusion between drainage slopes and sewer slopes.
    i. Do all inlets on grades have proper opening length? Yes. Please reference drainage report.
    j. Label the quantity and area of riprap, type of riprap, and reference to detail at the flared end section. Please see revised plans.
4. Drawing 8 of 24 - Hilltop Road Widening (check spelling) Plan & Profile
    a. Same comments as above. Noted.

b. Saw cut edge of existing pavement, match elevation and grade, and provide a smooth transition to the widening section. Noted.
c. Tapers at each end of the widening. Noted. Please see revised plans.
d. Rechannelize ditch where stormwater being released. Noted. Please see revised plans.
e. Specify asphalt type on typical section. Noted. Please see revised plans.
f. Place note on the typical section that says that the construction of the widening will meet City of Bryant Street Specifications. Noted. Please see revised plans.
g. See fire department comments. Noted.

5. Drawing 9 - Road 3 P&P (Shouldn't this say "Emergency Access Road Profile"?)
   a. Allowing flow over the road? Why not a culvert? Please see revised plans.
   b. Ditches to direct drainage away from the road? Please see revised plans.
   c. Road designed to meet Fire Department requirements? Yes. Designed per state fire code to 20' wide to support 80,000 lbs.
6. Drawing 10 of 24 - Detention Outflow Plan and Profile
   a. Is this a Detention Basin or a Retention Basin? Retention
   b. Basin must have a control structure, not just an outflow pipe. (Section 1000.5.6) Please see revised plans.
   c. If the basin is a detention basin then a trickle channel is to be constructed (Section 1000.5.6) Please see revised plans.
   d. Slopes in the basin must not exceed 3-ft horizontal to 1-ft vertical (Section 1000.5.3.) Please see revised plans.
   e. Label the high water elevation in the basin (must be a minimum of 2-ft below any adjacent structure, and must have a minimum of 1-ft of freeboard). Please see revised plans.
   f. Provide scour protection from the flared end sections to the bottom of the pond. Provide details of the scour protection to be provided for each discharge point into the pond. Please see revised plans.
   g. Provide detailed information regarding the maintenance plan and schedule for the pond (i.e. regular inspections, sediment removal, repairs, etc.) (Section 1000.8). Include mosquito control into the maintenance plan. Stormwater Pond Maintenance plan to be provided.
   h. Provide scour protection below the spillway (Section 1000.5.2} Please see revised plans.
   i. There appears to be a lower "pond" on the drawing. Unless all of the control for the runoff is in the upper pond then place another control structure in this pond as well. All of the control will be handled in the retention pond. There is no lower pond. Only existing grade used to channel flow.
   j. Provide cross sections of the pond(s). Please reference retention pond profile (sheet 10).

k. Provide details of the overflow spillway which meet the requirements of Section 1000.5.2. Please see revised plans.

l. Bermuda sod is required to stabilize the pond slopes (Section 1000.5.8) Noted.

m. Easement/ Right of Way to be shown on the plat for pond access by the owner and the City (Section 1000.5.9). Noted. This will be conveyed to the City with the final plat.

n. Minimize pond leakage around any penetrating pipes. Noted.

o. What landscaping is going to be used around the pond/ park area (See Section 1000.6}?

Bermuda sod with an effort not to disturb native trees. Fencing to be installed.

p. What safety measures are to be provided for the pond area (See Section 1000.7)? Since this is designated as a park area, a detailed plan showing what safety measures are planned for that area. This area will be designated part of the overall park area and green space for the subdivision, however, public use/recreation areas are planned for tract 2.

7. Drawing 11 of 24 - Overall Utility Plan

a. Reference utility comments above. Noted. Please see revised plans.

b. Provide analysis of existing sanitary sewer (EX-SSMH-1) to demonstrate it can handle the additional flow. This is always provided by the municipality's engineering department as they are most familiar with the system.

c. Provide modeling of water system. This is also typically provided by the municipality. The 78 lot development we are proposing will not exceed the volume/pressures allowed by the proposed 8" water mains. The hydraulics of the City system outside the development should be on file with the City Engineer and not the responsibility of the Developer.

d. Provide details showing adequate protection of existing 12" water main. A water line relocation project will be performed concurrently with this development.

8. Drawings 12 thru 18 of 24 - Sewer Plan & Profiles

a. How will new sewer be tied into the existing manhole. Typical industry standard doghouse manhole.

b. Show street names. Noted. Please see revised plans.

9. Drawing 19 of 24 - Erosion Control Plan

i. Label the materials to be installed for each phase. Noted. Please see revised plans.

ii. Show a schedule or sequence of construction on the plan (See Sections 1102.2 ,1104.4.9 and 1105.13) Noted. Please see revised plans.

iii. Show soil loss calculations (See Section 1103) Noted.

iv. Include an inspection and maintenance plan (Section 1104.4.7) This is included in the SWPPP per ADEQ requirements.

v. Verify proper application of silt fencing is shown on the plan. (Maximum 3 ft height) See Section 1105.2 in the Stormwater Management Manual.

1. Maximum allowable slope lengths contributing runoff to a silt fence (Table 1100-1)
2. Maximum drainage area contributing flow to a silt fence shall not exceed 0.5 acres per 100-ft of fence.
3. Place silt fences below the toe of exposed and erodible slopes
4. Show the replacement schedule for silt fences in the schedule/ sequence.
5. Show material specifications for silt fence, wire mesh, etc. All materials to meet the City of Bryant specifications.
6. Add notes on the silt fence detail which shows compliance with Section 1100.5.
7. Show materials specifications for the silt fence, posts, etc.
8. Place silt fence around the pond where runoff is contributing to the pond.

It is noted and required that all stormwater maintenance and controls are in accordance with City of Bryant and ADEQ standards and specifications.

vi. Are there any sedimentation traps planned?
Sediment traps will be installed on an "as needed" basis. This is one of the measures utilized often on our projects when needed.

vii. If it is the intent to use the pond as a sedimentation basin a proper filtration system should be installed at the basin outfall. If it is the intent to build the outfall structure the structure must be protected with silt fencing and other materials as deemed necessary to reduce the release of sediment laden water downstream. Noted.

viii. See Sections 1105.7 of the Bryant Stormwater Management Manual, including Exhibits 1100-26 thru 1100-30. Noted.

ix. What materials are planned to be utilized during construction for areas that require temporary stabilization (any areas that are not worked for more than 14 calendar days)? Vegetation and mulching. Please refer to erosion control plan/notes.

x. Show in the notes that existing vegetation that is established will be preserved.

xi. Show a list of any other erosion control structures/ materials that may be utilized during the construction phase as required to

minimize soil loss. Please refer to erosion control plan/notes.

xii. Add a note that the ECP is subject to change based on current site conditions. Additional measures may be needed to mitigate illicit discharges of sediment and/or debris from the site. See Section 1100 of the Bryant Stormwater Management Manual to see what other devices are recommended. Added note to "install supplemental measures as needed to contain runoff" but does not list specific erosion control measures. Please refer to erosion control plan/notes.

10. Drawing 20 of 24
    a. Reference these details to show which type of curb inlet is being used.
11. Drawing 21 thru 24 - Utility Details
    a. No comments
12. Drainage Calculations
    a. No comments

Planning

1. Is the 4 acre open area the park land that is to be dedicated to the City according to the Midtown Settlement agreement? The drainage plan for water headed to the pond will need to be designed so that the property can be usable as park land. There will need to be a document drawn up to quitclaim the property to the City of Bryant based on the legal description. Develper is currently working with the City regarding this matter.
2. Lots 39, 40, and 41 do not meet the minimum lot size for an R-2 lot. Must be 9,000SF in size.

   Noted. Please see revised plan.

3. The open area 4 acre tract and the tract next to the water tower need to be labeled as Tracts. Noted. Please see revised plan.
4. Cross sections for local street or the Half street improvements are not shown. Noted. Please see revised plan.
5. Sidewalks are shown with 3ft of greenspace on either side, Sidewalk should be 6ft from the back of the curb along the edge of the ROW. Noted. Please see revised plan.
6. ADA Ramps/crosswalks will be required at each of the intersections. None are shown on the plans. Noted. Please see revised plan.
7. Preliminary Plat Subdivision Review and Preliminary Plat stormwater review fees have been paid. Noted.

Fire

1. Maximum grade is 10%. Road-3 Profile shows grade as 10.41%. Road 4 Profile shows 10.90%. Road Profile 5 shows 10.465. [D103.2]
2. Fire apparatus access roads, including gravel road, must be capable of supporting the imposed load of a fire apparatus weighing up to 75,000 lbs. [D102.1]

Noted. Please see revised plans.