
MEMORANDUM

Development Application Review Comments

TO: Greg Hitchens, Hitchens Associates Architects

FROM: Jose A. Macias, Senior Planner - GIS
Development Services Department, Planning & Zoning

RE: PZ23-02-05 Rally's Site Plan Amendment

DATE: March 17, 2023

Mr. Hitchens,

Please see the comments from El Mirage Technical Advisory Committee (TAC) for the site plan amendment to a previously approved site plan zoning case PZ22-01-01.

BUILDING & SAFETY

1. No comments.

ECONOMIC DEVELOPMENT

2. No comment.

ENGINEERING

3. See the attached memorandum.

FIRE DEPARTMENT

4. No comments.

PLANNING & ZONING

5. Applicant shall address all comments mentioned in this memorandum and all applicable comments from the zoning case PZ22-01-01. (see attached)
6. The preliminary landscape plan has been reviewed and approved by the Senior Planner as part of the development site plan review. The preliminary landscape plan will be included in the zoning application staff report and presented to the Planning and Zoning Commission and City Council where additional stipulations may be imposed.
7. All required trees shall be a minimum of 15 gallons in size and at least 50% of those trees must be 24-inch box or larger size. All shrubs shall be a minimum of five gallons in size. All 15-gallon trees must be a minimum of eight feet in height, four feet in spread, and

one and one-quarter inches trunk caliper at the ground level. All 24-inch box and larger trees shall be a minimum of ten feet in height, four feet in spread and two and a half inches trunk caliper at the ground level.

8. The final landscape plan shall be in conformance with the approved preliminary plan and any stipulated changes or additions and shall be approved by the Zoning Administrator or designee prior to the issuance of a building permit.
9. All changes in landscape plans before, during, or after preliminary or final landscape plan approval and/or landscape installation shall be approved by the Zoning Administrator or his or her designee.
10. Prior to the city accepting for maintenance any reverse street frontage landscaping or other street rights-of-way landscaping the following conditions shall have to be satisfied:
 - a. The landscaping shall be inspected and approved by the city for compliance with the approved landscape plan.
 - b. The subsequent completion of a 60-day maintenance period wherein the developer shall be responsible for all watering, weeding, and replacement of all dead or dying plant materials.
 - c. A final inspection called by the developer or his or her representative at the completion of a 120-day maintenance period resulting in final approval and acceptance by the city, except for the subdivision which shall be determined when final plans are approved.
 - d. As-built drawings of the landscape and irrigation system are required prior to acceptance by the city and for projects within the city right-of-way or city-owned property. The as-built drawings shall be four mil., non-wash off photo mylar or digitized record in accordance with city CAD guidelines showing the locations of all plantings and irrigation equipment.
11. The proposed signs package is in-compliance with the City's sign regulations.
12. A separate sign permit for signs other than for the address and building numbers will be required, this includes monument, pole, wall signs and other sign types permitted.
13. A final plat will be required to record the lot combination, easements and/or dedication of land prior to issuing the Certificate of Occupancy. Separate fees will apply.

POLICE DEPARTMENT

14. No comment.

PUBLIC WORKS

15. No comments regarding the Rally's Site Plan Amendment

If you have any questions regarding these comments or would like to set-up a follow up meeting or call, please feel free to contact my office.

MEMORANDUM

Development Application Review Comments

TO: Chris Hauser, Hauser Engineering Group

FROM: Jose A. Macias, Senior Planner - GIS
Development Services Department, Planning & Zoning

RE: PZ22-01-01 ELM & Thunderbird Fast Food Restaurant

DATE: March 11, 2022

Mr. Hauser,

Please see the comments from El Mirage Technical Advisory Committee (TAC) for the development application submitted for the project mentioned above.

BUILDING & SAFETY

1. No comments.

ECONOMIC DEVELOPMENT

2. No comment.

ENGINEERING

3. Comments we be sent directly to applicant at a later time with comments for development application review and design exceptions request.

EPCOR WATER

4. N/A

FIRE DEPARTMENT

- a. No comments.

PLANNING & ZONING

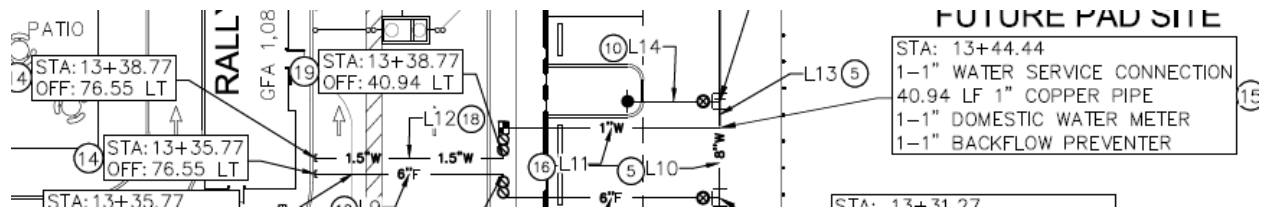
5. Site Plan: Comments from the Pre-App review have been addressed.
6. Landscape Plan: Parking Screen Wall shall be constructed with slump block or masonry with a stucco finish of a suitable color and design as approved by the City Manager or his or her designee. (§154.103.S.4.a)

POLICE DEPARTMENT

7. No comment.

PUBLIC WORKS

- 8. Landscape Preliminary Submittal: No Comments
- 9. Water Report: No comments or concerns
- 10. Wastewater Report: No comments, will need grease trap that's maintained by the property owner.
- 11. Preliminary Sewer Plan – No comments
- 12. Preliminary Water Plan – Water Plan Keynotes: 18 & 19 indicate 1.5" water service originating from a 1" service line. Either Keynotes 18 & 19 need to be changed to 1" or the 1" service line needs to be changed to a 1.5" service from the 8" main. The tapping saddle size would also need to be changed.



If you have any questions regarding these comments or would like to set-up a follow up meeting or call, please feel free to contact my office.

MEMORANDUM

TO: Jose Macias, Planner/GIS
FROM: Bryce Christo, P.E., Assistant City Engineer
SUBJECT: Rally's Restaurant Development Application Review
DATE: 03-14-22

Below are the Engineering Division's comments for the above referenced submittal provided in February 2022. **These items will have to be addressed prior to the Planning and Zoning Meeting.**

1. Exterior Elevations – Instead of labeling the views front, back, left and right, revise to north, south, east and west.
2. Context Plan – Revise the Photo Numbers at the southwest corner of the site.
3. A Phasing Plan shall be prepared per Chapter 1, Section F of the City's Design & Development Standards Manual (DDSM).
4. Site Plan – Revise Site Plan Note 2 to “Any change of use...”

The below items will have to be addressed during the Construction Plan Submittal.

Site Plan/Civil Plans

5. Label the west lot as Lot 1 on all plan sheets.
6. Requests for Design Exceptions:
 - a. DE#1 – Deceleration Lane on Thunderbird Road – The deceleration will not be required as part of Phase 1. An updated Traffic Impact Statement will be required for Phase 2 and a deceleration lane may be required at that time.
 - b. DE#2 – Driveway Throats - The Traffic Impact Statement shall be updated to discuss the 36'+/- throat for the Thunderbird Road driveway and provide justification and/or recommendations.
 - c. DE#3 – Ultimate Overflow for Drainage – The proposed basin may remain in the location shown on the Site Plan.
 - d. DE#4 – El Mirage Drainage - The project will not be required to bring the drainage from the east half of El Mirage Road on to the site, however, the proposed basin must be sized for the ½ right of way of both El Mirage Road and Thunderbird Road.
7. The east property line bearing and distance does not match the ALTA.
8. Site Data Table
 - a. Lot Coverage = 1.1%
 - b. Required Parking Spaces = 7
9. The speed limit of Thunderbird Road is 30 mph along the site frontage, not 25.

10. A turn diverter/porkchop per City of Peoria Detail PE-030-1 is required at the El Mirage Road driveway.
11. "One Way" signs or "Right Turn Only" signs shall be added to the stop sign (R1-1, 30"x30") at both driveways.
12. Revise the dimension between the Thunderbird Road driveway and the existing driveway to the east as it appears to be incorrect.
13. Label throat distance at both driveways.
14. Access shall be maintained to the Southwest Gas Regulator Station located just east of the northeast corner of the property.
15. The proposed ADA space shall be sized and signed as van accessible. Provide dimensions of the parking space and access aisle.
16. The parking space dimensions of the angled spaces shall meet City Detail EM-157.
17. 6-inch MAG type curbing is required around all driveways and parking lots.
18. Call out parking blocks. Call out parking striping which shall be a minimum of 4 inch painted lines.
19. Show how traffic flows on site. A "Do Not Enter" sign will be required, facing west, for the drive aisle north of the patio and restaurant.
20. Call out #24, a sewer line, is shown in the Online Order Delivery Lane. Is this accurate?
21. Callout #26, bike racks, is not shown on the plans.
22. Site walls, including their corresponding footer, shall be located behind/outside the Public Utility Easement (PUE).
23. The pylon sign shall not be placed within the PUE.
24. The PUE along El Mirage Road is called out as 160 feet. This easement shall be 8 feet wide and placed just east of the existing 8 foot electrical easement.
25. Show the location of any exterior lighting. A Photometric Plan will be required that addresses the following:
 - a. Any lighting used to illuminate an off-street area shall be arranged so as to deflect light away from any adjoining residential zone or from the public streets. The source of lights shall be hooded or controlled in some manner so as not to light adjacent property. The foot candles generated from the proposed site shall be 0.0 at the residential property line to the east.
 - b. Any light or combination of lights which cause light on a public street, other than lights specifically intended for that purpose, shall not exceed one foot candle as measured from the center line of the street. Show the foot candles along the centerline of El Mirage Road and Thunderbird Road to verify that the proposed lighting will not exceed the maximum limit.
26. Plans shall include applicable City Notes. Call out MAG, City, etc. details to be used. Use the City's Design & Development Standards Manual (DDSM) as a guide for the final design.

Preliminary Grading & Drainage Plans

27. Show surface water drainage arrows.
28. Verify the slope does not exceed 2% in any direction within the ADA parking space or aisle/path.
29. Side slopes adjacent to the public right of way, areas where pedestrian access is permitted and within Public Utility Easements (PUE) shall be 6:1 or flatter. There shall be at least two feet of level ground between any wall or vertical obstruction and the top of any side slope grading.

30. The finished floor elevation of the proposed building shall be a minimum of 12 inches above the 100-year base flood elevations and high-water level of any adjacent retention basin and 14 inches above the ultimate outfall of the site.
31. The proposed retention basin shall be located a minimum of 4 feet away from any structures and shall not be located within any building setbacks, easements, or fire lanes. The basin is currently shown within the side and rear setbacks.
32. Label the side slopes of the retention basin.
33. Provide the overflow elevation of the basin and the ultimate outfall elevation of the site.
34. The building elevation drawings show a downspout that leads to an underground storm drain. Is this required for this project?

Preliminary Water Plans

35. The design is set up for a public water main but all mains within the site shall be private. Each lot shall have its own domestic, landscaping and fire service with its own tap off of the existing main.
36. Water Plan Keynotes
 - a. Keynote 1 – It is assumed these will be performed via hot tap otherwise the City’s Water Shutdown Procedure must be followed.
 - b. Keynote 3 – Any hydrants within the project site will be private and painted “Safety Red” per City Detail EM-360. All hydrants require markers per MAG Detail 122.
 - c. Keynote 5 – Polywrap will be required on ductile iron pipe. Tracer wire per City Detail EM-162 shall be placed on any public main, service, etc.
 - d. Keynote 13 - Show utility horizontal and vertical clearance information per MAG Detail 404 and City Detail EM-402. Several additional crossings need to be called out.
37. A separate landscaping service, meter and backflow preventer is required.
38. Do not install utilities under any driveways or adjacent concrete aprons.
39. Any pavement replacement shall be per City Water Note #21.
40. Water valves are recommended at locations so that the maximum number of hydrants to be out of service is two.
41. Does Lot 2 require two 8 inch stubs into the property?
42. Hydrants location/spacing will be reviewed and approved by the Fire Department.

Preliminary Sewer Plans

43. All sewer main within the site will be private.
44. Sewer Plan Keynotes
 - a. Keynote 3 - Show utility horizontal and vertical clearance information per MAG Detail 404 and City Detail EM-402. Several additional crossings need to be called out.
 - b. Keynote 8 – The sewer service line for any commercial building shall be a minimum of 6 inches and shall be Schedule 40 per City Detail EM-440.
 - c. Keynote 9 – The sewer cleanout shall be per MAG Detail 441.
 - d. Keynote 12 – The grease interceptor shall be designed per Section 6-3A of the DDSM.
45. Match crowns at the tie in at the existing manhole.
46. The slope of the 8 inch sewer main shall be a minimum of 1.00%. The slope of any sewer service line shall be a minimum of ¼” per foot per City Detail EM-440.
47. A backwater valve shall be provided on service connections to major sewer lines, at manholes where there is potential for the migration of sewer gas into the service line, and

at locations where the finish floor is not 12-inches higher than the upstream manhole. Backwater valves shall be located on private property and shall be accessible for maintenance by the property owner.

48. Any pavement replacement shall be per City Sewer Note #13.

Preliminary Landscape Plans

49. The notes on Sheet L0.00 shall be labeled “COEM Landscape and Irrigation Notes”.

50. The existing tree within the sight distance line on Thunderbird Road shall be removed.

Th existing tree located within the PUE along Thunderbird Road shall be removed.

51. All plantings at maturity shall maintain a minimum of 6 feet of clearance from all fire hydrants and fire suppression devices per City Detail EM-361.

52. No walls or trees shall be placed within the proposed Public Utility Easement (PUE).

53. Trees shall not be placed within 5 feet of any City curb or sidewalk or within 6 feet of any public utility.

54. Add a note to the plans that the maintenance for all landscaping and irrigation shown on the plans will be the responsibility of the property owner.

55. Irrigation plans will be required. A separate landscaping service, meter and backflow preventer is required.

Exterior Elevations

56. No comments

Sign Package

57. These signs may not be placed in the PUE.

58. The Directional Signs are over 30” tall so they may not be within the sight distance line.

ALTA Survey

59. Surveyor Note 5 – This site lies within Zone “X” (Shaded).

60. Basis of Elevation Datum Note – The elevation is noted as 11137.17 but should be 1137.17.

61. The Legal Description on both Sheet 2 and within the Title Report shows the east property line as S00°00’04”W but the plan shows S00°00’04”E. Which is correct?

Drainage Statement

62. Section 1.0 – This Section states that the site is not “...subject to storm water storage requirements..” This statement is not accurate as the site does require retention.

63. Section 3.1 – This site was previously owned by the City but is now owned by KGR Group.

64. Section 4.2 & Table 2 – As noted in Comment 4d, the site will need to size its basin for the site itself and the adjacent half right of way of both El Mirage Road and Thunderbird Road, although it will not be required to route the offsite flows to the basin.

65. Section 4.3 – For planning purposes, a percolation rate of 0.1 cfs per drywell is recommended although not required. The contractor will need to perform a well test at the site and the resultant design disposal rate shall not exceed 50% of the rate determined by the test. It will then be determined if additional dry wells are required.

66. A Final Drainage Report will be required. The report shall discuss offsite drainage and provide a Tributary Area Map.

Water Report

67. No comments.

Sewer Report

68. Section 3 – The caption of Figure 3 refers to Water Infrastructure.
69. Section 7 – The City of Phoenix Manual is from 2017.

Traffic Impact Statement (TIS)

70. Roadway Network & Site Access – El Mirage Elementary School is a K-4 school.
71. Existing Roadway Network – Both Thunderbird Road and El Mirage Road have a center median along the entire frontage of the subject parcel.
72. As note in Comment #4b above, the Traffic Impact Statement shall be updated to discuss the 36'+/- throat for the Thunderbird Road driveway and provide justification and/or recommendations.
73. The TIS only reviews the site for Lot 1. Depending on the use and traffic generated by the future development of Lot 2, a full Traffic Impact Analysis may be required at that time. Regardless of the type of study required, the future report shall review the need for a deceleration lane on Thunderbird Road.

Title Report

74. No comments

Phase I Environmental Assessment

75. Section 5.2 – There is a water service that runs to the site. It is shown in Photo No. B-11 in the Photo Log.

Miscellaneous

76. A Final Plat or similar instrument will be required and shall reference the following:
 - a. Easements or an Agreement must be in place for cross access, parking, utilities, drainage, etc. The City does not have standard forms for this type of agreement.
 - b. An 8-foot wide Public Utility Easement (PUE) will be required along the Thunderbird Road and El Mirage Road frontages. No walls or trees shall be placed within these easements. The PUE along El Mirage Road will have to be placed east of the existing 8 foot electrical easement.
 - c. A 1-foot Vehicular Non-Access Easement (VNAE) shall be placed along the frontage of Thunderbird Road and El Mirage Road except at the driveways.
77. A Haul Permit will be required if 500 cubic yards or more of material will be brought into or out of the site. This will require a separate application, an exhibit showing the haul route and insurance from the company performing the haul. The fee is \$300.
78. An Approval to Construct (ATC) will be required from MCESD for the water and sewer line extensions. A copy shall be provided to the City prior to the release of any Engineering permit.
79. A Dust Control Permit from the County will be required prior to the release of any Engineering permit.
80. A Stormwater Pollution Prevention Plan (SWPPP) will be required per the City's SWPPP Guidelines document. A Notice of Intent (NOI) from ADEQ will be required prior to release of any Engineering permit.
81. Any cutting of the pavement in El Mirage Road or Thunderbird Road will require Pavement Cut Fees per the most current Fee Schedule.

The above comments are meant to be general in nature and are not considered to be all inclusive. Additional comments will arise during the formal permit submittal.

MEMORANDUM

TO: Jose Macias, Planner/GIS
FROM: Bryce Christo, P.E., Assistant City Engineer
SUBJECT: Rally's Restaurant Site Plan Amendment Review
DATE: 03-13-23

Below are the Engineering Division's comments for the above referenced submittal provided in February 2023. **These items will have to be addressed prior to the Planning and Zoning Meeting.**

1. None

The below items will have to be addressed during the Construction Plan Submittal.

Site Plan/Civil Plans

2. Requests for Design Exceptions (**previously approved**):
 - a. DE#1 – Deceleration Lane on Thunderbird Road – The deceleration will not be required as part of Phase 1. An updated Traffic Impact Statement will be required for Phase 2 and a deceleration lane may be required at that time.
 - b. DE#2 – Driveway Throats - The Traffic Impact Statement shall be updated to discuss the 36'+/- throat for the Thunderbird Road driveway and provide justification and/or recommendations.
 - c. DE#3 – Ultimate Overflow for Drainage – The proposed basin may remain in the location shown on the original Site Plan.
 - d. DE#4 – El Mirage Drainage - The project will not be required to bring the drainage from the east half of El Mirage Road on to the site, however, the proposed basin must be sized for the ½ right of way of both El Mirage Road and Thunderbird Road.
3. The APN of subject site is 501-36-283L.
4. Verify the area of the subject site and Lot 2.
5. Show the right of way widths of the adjacent streets.
6. The east property line bearing and distance does not match the ALTA.
7. Provide parking space calculations. A restaurant requires 1 parking space per 75 square feet of patron space and 1 parking space per 400 square feet of outdoor seating area. Does this restaurant have indoor seating?
8. A turn diverter/porkchop per City of Peoria Detail PE-030-1 is required at the El Mirage Road driveway.
9. "One Way" signs or "Right Turn Only" signs shall be added to the stop sign (R1-1, 30"x30") at both driveways. A "One Way" sign is also required in the median across from both driveways.

10. Show the dimension between the Thunderbird Road driveway and the existing driveway to the east. Show the dimension between the El Mirage Road driveway and the existing driveway to the south. Measurements shall be from nearest face of curb to nearest face of curb.
11. Label throat distance at both driveways. A minimum of 50 feet is required.
12. Access shall be maintained to the Southwest Gas Regulator Station located just east of the northeast corner of the property.
13. The proposed ADA space shall be sized and signed as van accessible.
14. The parking spaces shall be 18 feet long. Overhang cannot count towards the length of the space.
15. 6-inch MAG type curbing is required around all driveways and parking lots.
16. Call out parking striping which shall be a minimum of 4 inch painted lines.
17. Key Notes
 - a. Revise the callout of the parking lot lights to Key Note 12.
 - b. Extruded curb per Key Note 2 is only allowed for temporary curb that will be removed in future phases.
 - c. Key Note 31, bicycle parking, is not shown on the plans.
18. Site walls, including their corresponding footer, shall be located behind/outside the Public Utility Easement (PUE).
19. The PUE along El Mirage Road shall be 8 feet wide and placed just east of the existing 8 foot electrical easement.
20. Show the location of any exterior lighting. A Photometric Plan will be required that addresses the following:
 - a. Any lighting used to illuminate an off-street area shall be arranged so as to deflect light away from any adjoining residential zone or from the public streets. The source of lights shall be hooded or controlled in some manner so as not to light adjacent property. The foot candles generated from the proposed site shall be 0.0 at the residential property line to the east.
 - b. Any light or combination of lights which cause light on a public street, other than lights specifically intended for that purpose, shall not exceed one foot candle as measured from the center line of the street. Show the foot candles along the centerline of El Mirage Road and Thunderbird Road to verify that the proposed lighting will not exceed the maximum limit.
21. Plans shall include applicable City Notes. Call out MAG, City, etc. details to be used. Use the City's Design & Development Standards Manual (DDSM) as a guide for the final design.

Preliminary Grading & Drainage Plans (Updated Grading and Drainage Plans were not provided with this submittal. The below comments are from the previously approved Development Application package except for the items in red.)

22. Show topographic contours, surface water drainage arrows and the retention basin.
23. Verify the slope does not exceed 2% in any direction within the ADA parking space or aisle/path.
24. Side slopes adjacent to the public right of way, areas where pedestrian access is permitted and within Public Utility Easements (PUE) shall be 6:1 or flatter. There shall be at least two feet of level ground between any wall or vertical obstruction and the top of any side slope grading.
25. The finished floor elevation of the proposed building shall be a minimum of 12 inches above the 100-year base flood elevations and high-water level of any adjacent retention basin and 14 inches above the ultimate outfall of the site.

26. The proposed retention basin shall be located a minimum of 4 feet away from any structures and shall not be located within any building setbacks, easements, or fire lanes. The basin is currently shown within the side and rear setbacks.
27. Label the side slopes of the retention basin.
28. Provide the overflow elevation of the basin and the ultimate outfall elevation of the site.

Preliminary Water Plans (Updated Water Plans were not provided with this submittal. The below comments are from the previously approved Development Application package.)

29. The design is set up for a public water main but all mains within the site shall be private. Each lot shall have its own domestic, landscaping and fire service with its own tap off of the existing main.
30. Water Plan Keynotes
 - a. Keynote 1 – It is assumed these will be performed via hot tap otherwise the City’s Water Shutdown Procedure must be followed.
 - b. Keynote 3 – Any hydrants within the project site will be private and painted “Safety Red” per City Detail EM-360. All hydrants require markers per MAG Detail 122.
 - c. Keynote 5 – Polywrap will be required on ductile iron pipe. Tracer wire per City Detail EM-162 shall be placed on any public main, service, etc.
 - d. Keynote 13 - Show utility horizontal and vertical clearance information per MAG Detail 404 and City Detail EM-402. Several additional crossings need to be called out.
31. A separate landscaping service, meter and backflow preventer is required.
32. Do not install utilities under any driveways or adjacent concrete aprons.
33. Any pavement replacement shall be per City Water Note #21.
34. Water valves are required at locations so that the maximum number of hydrants to be out of service is two.
35. Does Lot 2 require two 8 inch stubs into the property?
36. Hydrants location/spacing will be reviewed and approved by the Fire Department.

Preliminary Sewer Plans (Updated Sewer Plans were not provided with this submittal. The below comments are from the previously approved Development Application package except for the items in red.)

37. All sewer main within the site will be private.
38. Sewer Plan Keynotes
 - a. Keynote 3 - Show utility horizontal and vertical clearance information per MAG Detail 404 and City Detail EM-402. Several additional crossings need to be called out.
 - b. Keynote 8 – The sewer service line for any commercial building shall be a minimum of 6 inches and shall be Schedule 40 per City Detail EM-440.
 - c. Keynote 9 – The sewer cleanout shall be per MAG Detail 441.
 - d. Keynote 12 – The grease interceptor shall be designed per Section 6-3A of the DDSM.
39. Match crowns at the tie in at the existing manhole.
40. The slope of the 8 inch sewer main shall be a minimum of 1.00%. The slope of any sewer service line shall be a minimum of ¼” per foot per City Detail EM-440.
41. **A backwater valve shall be provided on the sanitary sewer service connections.** Backwater valves shall be located on private property and shall be accessible for maintenance by the property owner.

42. Any pavement replacement shall be per City Sewer Note #13.

Preliminary Landscape Plans

43. Add City Landscaping and Irrigation Notes (City Detail EM-101-4) to the plan set.
44. Note 1 – shall be revised to “...vision between 2.5 feet and 7 feet as measured from the pavement surface.”
45. Label the proposed 8-foot Public Utility Easements.
46. The existing trees within the sight distance line shall be removed. The existing tree located within the PUE along Thunderbird Road shall be removed.
47. All plantings at maturity shall maintain a minimum of 6 feet of clearance from all fire hydrants and fire suppression devices per City Detail EM-361.
48. No walls or trees shall be placed within the proposed Public Utility Easement (PUE).
49. Trees shall not be placed within 5 feet of any City curb or sidewalk or within 6 feet of any public utility.
50. Add a note to the plans that the maintenance for all landscaping and irrigation shown on the plans will be the responsibility of the property owner.
51. Irrigation plans will be required. A separate landscaping service, meter and backflow preventer is required.

Exterior Elevations

52. No comments

Sign Package (Updated Signage Plans were not provided with this submittal. The below comments are from the previously approved Development Application package.)

53. These signs may not be placed in the PUE.
54. The Directional Signs are over 30” tall so they may not be within the sight distance line.

ALTA Survey (An updated ALTA Survey was not provided with this submittal. The below comments are from the previously approved Development Application package.)

55. Surveyor Note 5 – This site lies within Zone “X” (Shaded).
56. Basis of Elevation Datum Note – The elevation is noted as 11137.17 but should be 1137.17.
57. The Legal Description on both Sheet 2 and within the Title Report shows the east property line as S00°00’04”W but the plan shows S00°00’04”E. Which is correct?

Preliminary Drainage Report

58. Weighted C Calculations - Use the City Runoff Coefficients per City Code Section 155.054(B)(6)(a). Concrete = 0.95, roofs/asphalt = 0.85, grass = 0.15 and desert/rock lawn = 0.70.
59. Provide calculations for the retention basin. Provide High Water Level (HWL) and bottom elevations, volumes required and provided, basin overflow elevations and the low outfall of the lot.
60. Drywell calculations are required.
61. The 2023 version of the City’s Design and Development Standards Manual shall be used.
62. A Final Drainage Report will be required. The report shall provide the following:
 - a. A tributary area map to show the areas contributing to each basin.
 - b. Sizing calculations for any storm structure.

Preliminary Water Report

63. Fire service lines shall be a minimum of 6 inches in diameter.

64. A Final Water Report will be required using the attached Water System Design Criteria.

Preliminary Sewer Report

65. What is the anticipated demand in gallons per day or gallons per minute?
66. Sanitary sewer service lines shall be a minimum of 6 inches in diameter for commercial uses.
67. A grease interceptor will be required.
68. A Final Sewer Report will be required using the attached Wastewater System Design Criteria.

Traffic Impact Statement (TIS)

69. As noted in Comment #2b, the Traffic Impact Statement shall be updated to discuss the 36'+/- throat for the Thunderbird Road driveway and provide justification and/or recommendations.
70. The TIS only reviews the site for Lot 1. Depending on the use and traffic generated by the future development of Lot 2, a full Traffic Impact Analysis may be required at that time. Regardless of the type of study required, the future report shall review the need for a deceleration lane on Thunderbird Road.

Title Report

71. No comments

Phase I Environmental Assessment (An updated Phase I ESA was not provided with this submittal. The below comments are from the previously approved Development Application package.)

72. Section 5.2 – There is a water service that runs to the site. It is shown in Photo No. B-11 in the Photo Log.

Miscellaneous

73. A Final Plat or similar instrument will be required and shall reference the following:
 - a. Easements or an Agreement must be in place for cross access, parking, utilities, drainage, etc. The City does not have standard forms for this type of agreement.
 - b. An 8-foot wide Public Utility Easement (PUE) will be required along the Thunderbird Road and El Mirage Road frontages. No walls or trees shall be placed within these easements. The PUE along El Mirage Road will have to be placed east of the existing 8 foot electrical easement.
 - c. A 1-foot Vehicular Non-Access Easement (VNAE) shall be placed along the frontage of Thunderbird Road and El Mirage Road except at the driveways.
74. A Geotechnical Report will be required to provide asphalt/concrete pavement sections. Verify the proposed pavement sections can handle 75,000 lbs. for any fire access lane.
75. A Haul Permit will be required if 500 cubic yards or more of material will be brought into or out of the site. This will require a separate application, an exhibit showing the haul route and insurance from the company performing the haul. The fee is \$300.
76. An Approval to Construct (ATC) will be required from MCESD for the water and sewer line extensions. A copy shall be provided to the City prior to the release of any Engineering permit.
77. A Dust Control Permit from the County will be required prior to the release of any Engineering permit.

78. A Stormwater Pollution Prevention Plan (SWPPP) will be required per the City's SWPPP Guidelines document. A Notice of Intent (NOI) from ADEQ will be required prior to release of any Engineering permit.
79. Any cutting of the pavement in El Mirage Road or Thunderbird Road will require Pavement Cut Fees per the most current Fee Schedule.

The above comments are meant to be general in nature and are not considered to be all inclusive. Additional comments will arise during the formal permit submittal.

WATER SYSTEM DESIGN CRITERIA	
DESCRIPTION	CRITERIA
AVERAGE DAY DEMAND - SINGLE FAMILY RESIDENTIAL	
Gallons per capita per day (gpcd) ⁽¹⁾	117
Density (people per dwelling unit) ⁽²⁾	3.35
AVERAGE DAY DEMAND - MULTI-FAMILY/COMMERCIAL/INDUSTRIAL	
Land Use Category ⁽³⁾	Varies
PEAKING FACTORS	
Maximum Day / Average Day	1.7
Peak Hour / Maximum Day	1.7
Peak Hour / Average Day	2.9
VELOCITY CRITERIA	
Maximum Day Condition	Max Velocity < 5 fps
Peak Hour Condition	Max Velocity ≤ 7 fps
Max Day Plus Fire Flow Condition	Max Velocity < 10 fps
HEAD LOSS CRITERIA	
Maximum Day Condition	2 to 7 feet per 1,000 feet of pipe
Peak Hour Condition	< 10 feet per 1,000 feet of pipe
PRESSURE CRITERIA	
Max Day Plus Fire Flow Condition	Min Residual Pressure of 20 psi
Peak Hour Condition	Min System Pressure of 40 psi
FIRE DEMAND CRITERIA	
Single Family Residential	1,500 gpm at 2 hours
All Other Land Uses	3,500 gpm for 4 hours

NOTES:

(1) Average per capita water use per 2012 *Water and Wastewater Master Plan* provided by Wilson Engineers

(2) Persons per household per US Census Bureau (2020)

(3) Use latest version of City of Phoenix *Design Standards Manual for Water and Wastewater Systems*.

Other values may be used with prior approval from the Engineering Division

WASTEWATER SYSTEM DESIGN CRITERIA	
DESCRIPTION	CRITERIA
AVERAGE DAY DEMAND - SINGLE FAMILY RESIDENTIAL	
Gallons per capita per day (gpcd) ⁽¹⁾	58.5
Density (people per dwelling unit) ⁽²⁾	3.35
AVERAGE DAY DEMAND - MULTI-FAMILY/COMMERCIAL/INDUSTRIAL	
Land Use Category ⁽³⁾	Varies
PEAKING FACTORS	
Dry Weather Peaking Factors (Applied to Average Flows)	Per AAC R18-9-E301.D (see next page)
Wet Weather Peaking Factors (Applied to Peak Flows)	1.17
VELOCITY CRITERIA	
Gravity Mains	2 fps ≤ Velocity ≤ 8 fps
Force Mains	3 fps ≤ Velocity ≤ 7 fps
FLOW DEPTH CRITERIA (d/D) FOR DRY WEATHER PEAK HOUR FLOWS	
d/D for new sewer with diameter less than 10 inches	0.50
d/D for new sewer with diameter 12 inches and above	0.75 (AAC R18-9-E301.D.e.iii)
FLOW DEPTH CRITERIA (d/D) FOR WET WEATHER PEAK HOUR FLOWS	
d/D for designing new sewer pipe	< 0.90
d/D for evaluating existing pipe in developed areas	< 1.00
HEAD LOSS CRITERIA	
Gravity pipe	Manning's n=0.013
Pressure pipe	Hazen Williams' C=120
MANHOLES	
When smaller pipe joins larger pipe	Match Crowns
Invert drop through manhole	0.20 feet

NOTES:

(1) Average per capita water use per 2012 *Water and Wastewater Master Plan* provided by Wilson Engineers

(2) Persons per household per US Census Bureau (2020)

(3) Use latest version of City of Phoenix *Design Standards Manual for Water and Wastewater Systems*. Other values may be used with prior approval from the Engineering Division

AAC R18-9-E301.D

Upstream Population	Dry Weather Peaking Factor
100	3.62
200	3.14
300	2.90
400	2.74
500	2.64
600	2.56
700	2.50
800	2.46
900	2.42
1,000	2.38
1,001 to 10,000	$PF = (6.330 \times p^{-0.231}) + 1.094$
10,001 to 100,000	$PF = (6.177 \times p^{-0.233}) + 1.128$
More than 100,000	$PF = (4.500 \times p^{-0.174}) + 0.945$
PF = Dry Weather Peaking Factor p = Upstream Population	