



Ormond Beach Site Plan Review Committee (SPRC) Request for Additional Information

Project Name:	Ormond Crossing, Phase B Preliminary Plat
Project Number:	2015-042
Site Address:	North US1 – across Destination Daytona
Review:	1 st Review
Review Date:	January 23, 2015
Project Description:	Preliminary plat for Phase B.
Project Contacts:	Csmith@allete.com ; brw@saiengineers.com

Please find below the Site Plan Review Committee (SPRC) comments for your project below. The SPRC meets every Wednesday, beginning at 9:00 am, with sign-up beginning at 8:00 am. There are twenty minute time slots available for discussion of projects. There will be no time slots between 11:40am and 1:00pm. Once there are no individuals left on the sign-up sheet, the SPRC will adjourn. The applicant may utilize the time slot to address major issues and discuss design solutions for projects.

General Comments (no response required)

1. When responding to the SPRC comments, a response letter (one copy per each plan submitted) addressing each comment in writing is required, indicating sheet numbers where revisions were made.
2. For resubmittal, the following is required:
 - a. 9 sets of all plans (1 signed and sealed, the others may be copies).
 - b. 1 set (11" by 17") of all plans.
 - c. 1 CD of all plan pages in a PDF Format

For final sign-off, the above is required, with all plan sets required to be signed and sealed by the appropriate design professional.

3. Prior to construction, the project will need to provide cost estimates, including landscaping, that will be the basis of the engineering inspection fee as follows 1.5% of the first \$100,000 of site improvements and 0.5% over \$100,000; minimum of \$250 (Section 8-10 of the City Code of Ordinances).

4. Section 4-05(b)(3) of the Land Development Code states: Applicants shall respond to SPRC written comments within one hundred (180) calendar days of the issuance date or the project shall be considered withdrawn. All projects that do not respond within the allotted time shall be required to submit a new application and SPRC review fees. Applicants may request a maximum of two (2) ninety (90) calendar-day extensions with a written request to the planning director detailing the reason for the delay in responding to the SPRC comments.
5. SPRC reviewers reserve the right to make additional comments based upon the re-submittal for this project.

Steven Spraker, AICP, Senior Planner, 386.676.3341

Plat

6. Note: Preliminary plats are reviewed by an advisory board (Planning Board) and heard twice by the City Commission. There are no advertising requirements for Preliminary Plats.
7. Prior to construction, the project will need to provide subdivision cost estimates, including landscaping, that will be the basis of the engineering inspection fee prior to the start of each phase. The Performance Bond, if required, will be based on 125% of this cost.
8. Remove City Planning Manager as a title block.
9. Add signature block for City Attorney.
10. Dedication and reservation. As stated in our meeting on September 3, 2014, the stormwater facilities need to be in tracts with the entity responsible for maintenance identified on the plat. The language on the plat states that the stormwater drainage systems and stormwater drainage are dedicated to the City of Ormond Beach. The maintenance needs to be clearly defined on the plat and provide the City the right to access and maintain only if the responsible entity fails in maintenance and there is a public safety issue.
11. The plat has the lots (as defined in the plan set) as tracts. Please change these tracts to lots.
12. Add a note that lots 1 and 2 are not part of the Ormond Crossings Planned Mixed Use Development and that all development is regulated by the Ormond Beach Land Development Code.

Other Comments

13. How/where is Lot 2 proposed to be accessed?
14. Lot grading plan: Be aware that the first 36' along US1 is the Greenbelt buffer. Also be aware that lots 1 and 2 were not part of the Master Development Plan and will need to follow the Land Development Code regulations for site development.

Ric Goss, AICP, Planning Director, 386.676.3343

15. The sidewalk depth is proposed at 4". Staff would recommend considering 6" in depth since the 4" sidewalks on SR40 have crack under the weight of vehicles. Replacement sidewalks have gone in at 6".
16. The roundabout proposed is multilane. Really, a single lane roundabout would work up to 20K vpd. Please confirm that these roundabouts are being modeled using Roundabout software. If so, please provide a copy of the results.
17. The splinter islands on the approaches into the roundabout – What will be in them?
18. The slope on the roundabout is 1%. Should the slope be 2% so we have more of a negative super elevation to ensure vehicles are slowing down through the roundabout? Otherwise, they will cheat or try to take a straight line through the roundabout rather than staying in their lane. Horizontal deflection should be maximized also to keep speeds down.
19. The cross walks for the roundabout should be designed so that the pedestrian crossing the street is looking towards the vehicles that are approaching the roundabout. It should not be straight across.
20. Please explain "the bulge" in the outside travel lane of the roundabout?
21. Are truck aprons proposed which keeps the roadway narrower or is this going to be all planted?
22. The roundabout should have the lanes striped to discourage cheating by the driver. Since these are construction plans, they need to be on the drawings.
23. Signing should also be included as part of the roundabout design to assist drivers in choosing the correct lane.

Paul MacDonald, City Landscape Architect, 386.676.3269

24. The plat must include notes that a CDD will be established to handle all landscape and irrigation maintenance activities. Please provide the City with minimum maintenance specifications/ frequency of events to review. If you would like we will provide you with our current specification/ frequency to adopt as your standards.
25. Show pedestrian crosswalks at the US1 intersection and Ormond Crossing Blvd. roundabout.
26. Include a note that all proposed oaks within the roundabout must be pruned to 7' CT.
27. Please review the proposed rotary planting design to ensure vehicular visibility will not be impacted by limiting lines of sight. Include a note that

- the proposed plantings must be maintained below 30" to provide vehicular visibility while negotiating the roundabout.
28. The proposed street trees must extend along the outside of the roundabout. Please prepare an overall exhibit on 11" x 17" that shows the planting design, sidewalks, trails, crosswalks, hardscape etc to provide a snap shot of the proposed improvements for each phase.
 29. Please turn all the proposed blowup designs so they all face north. Showing them in different direction gets confusing.
 30. Review the notes on sheet LA3 to make sure they all apply to this project. Example: Street trees must be planted 9' from BOC will end be within the proposed 10' sidewalk.
 31. Provide entry feature design.
 32. Upsize all proposed trees to achieve a minimum height of 10' (Elaeocarpus and Taxodium).
 33. Stormwater retention/detention ponds shall be naturally shaped (without geometric straight sides). Please the proposed shapes to meet this requirement.
 34. How will the proposed Taxodiums around the storm water ponds be irrigated during the critical grow-in period? Do the proposed Taxodiums meet SJRWMD littoral planting requirements?
 35. Show all proposed streetlight locations and adjust planting design if they are inside a future tree canopy.
 36. Please indicate sod species. If more than one, clearly define locations.
 37. An irrigation plan is required that must meet County design guidelines and include the following
 - a. Sleeving, mainline and laterals sized
 - b. Zones labeled
 - c. Water source, valve, controller, rain sensor locations
 - d. Head location with nozzle size
 - e. Specifications and details
 - f. Rain sensor device is required

David Allen, P.E., Civil Engineer, 386.615.7047

General Comments

38. Based on the Agreement/ Developer Commitments, there are several portions of the project that should be added to the current submittal:

- a. Construction of 16" potable water main extension along Tymber Creek Road from Southern Pines PUD to Durrance Lane. **As required when west side is developed. Currently estimated in 2017.**
- b. Construct 16" potable water main along Tymber Creek Road from Durrance Lane to Ormond Crossings. **As required when west side is developed. Currently estimated in 2017.**

Consider adding the required development commitments to the cover page.

39. Provide documentation of review by FDOT for improvements adjacent to and within the right of way of US1.

Construction Plans

40. Sheet 4 of 43 – In the cross-sections it appears that the water main and reuse main will be placed in the side slope for the approach to the bridge. Why are these utilities not placed in the Multi-purpose Easement?
41. Sheet 6 of 43 – It appears that the discharge from the West Big Box Pond, (4.7 ac) will flow through the East Big Box Pond, (1.8 ac). How will the pollution abatement volume be affected with this additional flow?
42. Sheet 6 of 43 – It appears that the discharge from Pond 38, (3.69 ac), will flow through Pond 26, (3.26 ac). How will the pollution abatement volume be affected with this additional flow?
43. Sheet 7 of 43 – It appears that this sheet delineates all of the pipes and structures for the stormwater secondary collection system. Provide the appropriate information for the structure inverts, pipe slope, lengths and areas of sub-basins, and the peak stage for the ponds.
44. Sheet 9 of 43 – Call out existing 12" water main in US1. Call out wet tap for connection to 12" water main.
45. Sheet 9 of 43 – Add note to the Railroad Directional Bore Profile. The contractor shall provide details for alignment and elevations of pipe, boring Log and As-built), in accordance with FDOT requirements.
46. Sheet 10 of 43 - This appears to be a portion of a larger master plan. Provide the overall plan for utilities for the full development to give a more complete view.
47. Sheet 10-43 - When compared to the Hydraulic design report, the lift station numbers on the plans do not match those in the report. Label the lift stations for correlation to the report.
48. Why do the two lift stations discharge in opposite directions?

49. It appears that the 4" force main from LS 040 runs for approximately 3400 feet, and then increases to a 12" force main. The velocity change within this pipe is a significant decrease. Provide reason for this change.
50. Show existing 6" force main in US1 right of way.
51. Sheet 12 of 43 – Show utilities within the right of way of US1, (water and force main).
52. Sheet 12 of 43- Show wet tap connection for force main.
53. Provide documentation on the existing conveyance system under US1. Will the 10'X7'CBC have sufficient volume to handle the flow?
54. Sheet 12 of 43 – Label sanitary sewer pipe lengths and slopes.
55. Sheet 12 of 43 – Provide station and connection elevation for bridge plans, (use bridge approach slab if included in bridge plans).
56. Sheet 12 of 43 – Provide invert information for sanitary sewer manholes.
57. Sheet 12 of 43 – Provide air release valve for 16" water main.
58. Sheet 12 of 43 – Provide invert information for existing conveyance system under railroad to be cleaned.
59. Provide profile and cross sections of proposed by-pass swale.
60. Sheet 13 of 43 – Why is the gravity sanitary sewer system so deep?
61. The drainage structure #34 south side of roadway appears to collect the surface drainage from approximately 500 feet of roadway. This seems to be excessive for a slope this steep.
62. Sheet 14 of 43 – Drainage structure #122, south side of roadway appears to collect the surface drainage from approximately 500 feet of roadway. This seems to be excessive for a slope this steep.
63. In the cross section for Ormond Crossing Blvd., it appears that in the future this will be a four lane divided roadway. If so the drainage system does not lend itself to future inlets or connections for the proposed lanes. Provide documentation of how this system will function in the future.
64. Sheet 15 of 43 – the sanitary sewer collection system is shown as being 15-16 feet deep. Why is this system so deep? It appears that there will be significant additional pipe to be added for this system to function. How is this to function with this phase?

65. Sheet 16-19 of 43 – Add the location of the force main provide a cross section of this corridor to show the relationship of the water main to the force main.
66. Sheets 16-19 of 43 There are several locations where the 3foot minimum depth is not apparent. Will this area be filled to ensure the cover is adequate?
67. Sheet 16 of 43 – Should an air release valve be installed at the high point before the line is placed under the canal?

Cross-Sections for Ormond Crossing Blvd and US1 – Sheets 20 – 25

68. Provide elevations for PGL in sections for roadways.
69. The location of utilities appears to be within the right of way at a significant depth while the Multi-purpose easement is much lower. Why not install these utilities within the easement for ease of maintenance.
70. Show existing utilities and proposed utilities in sections for US1.
71. Sheets 26 – 28 of 43 Provide cross section of individual ponds with appropriate elevation information as noted in Standard Detail ST-5. Include soils report data that determines normal water level.
72. Sheet 27 of 43 – The existing topography for the area of the proposed pond indicates that the roadside swale for US1 Discharged into the site, various areas where elevation is lower than the roadside swale. Provide documentation that the surface flow that is to be blocked will travel parallel to US1 to the culvert.
73. Sheet 28 – Provide profile and cross-section of proposed canal. Profile should begin at conveyance system under US1.
74. Sheet 30 of 43 – Provide proposed grades throughout the intersection to ensure that there will be no dips or humps in the travel lanes.
75. Sheet 30 of 43 - Provide inverts for proposed pipe under Ormond Crossings Blvd.
76. Sheet 31 of 43 – As there is no stormwater collection system shown for the roundabout; slots should be placed within the curb with roadside swales to allow the surface drainage some path off the asphalt.
77. Sheet 37 of 43 – Based on the detail from Florida East Coast Railroad, since the water, force main and reuse mains will all be under pressure, casing pipes should be used. Provide details of the carrier pipes, casing and support systems within the pipe.

78. Sheets 39 and 40 – Provide actual lift station data for evaluation.
79. Sheet 41 of 43 – Provide location of construction entrance as indicated in Standard Detail M-13.
80. Add Standard Details on Erosion Control Plan, M-14A, 14B, 15, 16A, and M-16B.
81. Sheet 42 of 43 – Provide location of the areas detailed on this page as Phases.
82. The City reserves the right to provide additional comments on these construction plans

Bridge Plans

83. The bridge plans are preliminary. The actual design of the bridge/structure should be completed. The bridge plans will be evaluated by a consultant chosen by the City of Ormond Beach.

Design Considerations Stormwater Management

84. Provide hydraulic grade line calculations for all storm drainage pipe system and outfall systems in accordance with the LDC. Also include calculation for spread within the outer lane.
85. Provide calculations that provide assurance that the volume for the surface runoff for the post developed site will not exceed the surface runoff for the pre-developed site in both rate and volume.
86. The stormwater report is extremely confusing as there appears significant amount of information not directly related to the ponds within this phase. Please provide a stormwater report that has the information for the basins, nodes, reaches for the stormwater ponds highlighted.
87. Provide calculations for the capacity and anticipated flow from the conveyance system under US1 and the by-pass swale.

Design Considerations – Utilities.

88. Provide a true master plan for the entire Ormond Crossing project; we are unable to determine if additional flows for future phases will adversely affect the design of the individual portions of this phase.
89. The lift stations shown in the report do not match the numbering system of the plans.

Michael Dunn, P.E., Utilities Engineering Manager-386.676.3583

General Comments

90. Provide a master utility plan for all phases of the Ormond Crossings project. This plan should show how all of the phases fit together and include recent projections for flow/demand computations for justifying pipe sizes and main sizes.
91. The second phase (Phase B) proposed for construction appears to be sized and configured to receive wastewater flows and provide water demands to future phases. Many pipes are deep and sized well above Phase B needs. Consider re-engineering based on future phase construction schedule.
92. Sheet 4 – Typical Sections & Details
 - a. The end of the Ormond Boulevard Cross Section ((Sta. 13+71 to 16+99.95 and Sta. 18+73.95 to 22+24) appears to end at Station 25+00 instead of Station 22+24 using the information shown on sheet 15. Revise the sheets to match.
93. Sheet 5 – Typical Sections & Details
 - a. Show the existing 12-inch PVC water main and 6-inch PVC force main in the cross sections where construction activity is proposed between the centerline and the south right-of-way line.
94. Sheet 9 – Potable Water System Master Plan
 - a. Show valves at the railroad right of way on each side of the railroad crossing. Valves shown further north and south on Ormond Crossings Boulevard can be relocated to accomplish this item.
 - b. Identify the existing water main as 12-inch PVC.
 - c. Reconfigure the piping at the roundabout such that both crossings are directly connected to the main line. The crossings could be valved at the main line with a cap where the future connection will occur.
 - d. Revise the Railroad Directional Bore Profile to match the FEC Miscellaneous Detail on Sheet 37.
 - e. Show the water main in the easement on Ormond Crossings Boulevard where the roadway is planned to be elevated.
95. Sheet 10 – Wastewater System Master Plan
 - a. The 4-inch force main shown in the FEC Railroad easement limits any future expansion to the east. If future expansion is proposed, the force main should be extended to Ormond Crossings Boulevard and capped. The 4-inch force main can be connected using a tee fitting on the end.

- b. Show the existing 6-inch PVC force main on US-1.
- c. Show the force main in the easement on Ormond Crossings Boulevard where the roadway is planned to be elevated.

96. Sheet 11 – Reuse Water System Master Plan

- a. Show a flushing hydrant at the north end of Ormond Crossing Boulevard.
- b. Show the force main in the easement on Ormond Crossings Boulevard where the roadway is planned to be elevated.
- c. Revise the Railroad Directional Bore Profile to match the FEC Miscellaneous Detail on Sheet 37.

97. Sheet 12 – Plan Layout Ormond Crossings Boulevard

- a. Provide a detail of the proposed 16-inch connection to the existing 12-inch water main.
- b. Show all mains in the easement.
- c. Show an air release valve and gate valve at each side of the railroad right-of-way for the water and reclaimed water mains. The valves near the proposed service connections can be relocated for this purpose.
- d. Add a poly pig launching vault on the force main adjacent to the lift station and US-1 right-of-way.
- e. Identify the existing force main on US 1 as 6-inch PVC
- f. Locate the force main approximately 10 feet from the railroad right-of-way line.
- g. Sanitary sewer inverts are very deep. Consider revising the storm sewer layout and inverts so the elevation can be raised approximately 3 feet.

98. Sheet 13 – Profile - Ormond Crossings Boulevard

- a. Show the force main connection on US 1.
- b. Show the crossings of the water, reclaimed water, storm sewers, force main and sanitary sewer between Station 12+23 and 12+52.
- c. Show the water main and storm sewer crossing near station 14+90.
- d. Show the crossings of the water, reclaimed water, storm sewers, force main and sanitary sewer between Station 12+23 and 12+52.
- e. Show the reclaimed water main and storm sewer crossing near stations 17+30 and 19+13.
- f. Show the water main and force main crossing near station 18+50..

- g. Revise directional bore profile to conform to the FEC Miscellaneous Detail on sheet 37.
99. Sheet 14 – Plan Layout Ormond Crossings Boulevard
- a. Show all mains north of Station 25+00 in the easement.
 - b. Water and reclaimed water service stub outs are shown on the east and west sides of the street near Station 23+60. Show how sanitary sewer service is to be provided if applicable.
 - c. Additional fittings are required for the piping at the roundabout since the pipe cannot be deflected enough to match the proposed radii. Call out the fittings for the water, force main and reclaimed water mains at the roundabout.
 - d. Add a poly pig launching vault on the force main adjacent to the lift station.
 - e. Sanitary sewer inverts are very deep. Please consider adding additional pump stations to reduce the maximum depth to around 12 feet.
100. Sheet 15 - Profile - Ormond Crossings Boulevard
- a. Show the crossings of the reclaimed water, storm sewers and force main near Station 22+40.
 - b. Show the crossings of the water, reclaimed water, sanitary sewer, storm sewers and force main between Station 23+60 and 23+65.
 - c. Show the crossings of the water, reclaimed water, sanitary sewer and force main between Stations 27+00 and 30+00 in the roundabout area.
 - d. Show the crossings of the reclaimed water, sanitary sewer and force main near manhole 10.
101. Sheet 16 - Plan & Profile Utility Corridor
- a. Show all mains in the easement.
 - b. Show an air release valve and gate valve at each side of the railroad right-of-way for the water and reclaimed water mains.
 - c. Add a poly pig launching vault on the force main adjacent to the lift station.
 - d. Sheet 9 indicates that the top of the water main is near elevation 27.5. Revise the profile accordingly and show the water main and force main crossing.
 - e. Locate the force main approximately 10 feet from the railroad right-of-way line.
102. Sheets 16 and 17 - Plan & Profile Utility Corridor

- a. The 4-inch force main shown in the FEC Railroad easement limits any future expansion to the east. If future expansion is proposed, the force main should be extended to Ormond Crossings Boulevard and capped. The 4-inch force main can be connected using a tee fitting on the end
103. Sheet 18 - Plan & Profile Utility Corridor
- a. Add a poly pig launching vault on each side of the 4 x 12 increaser.
 - b. Add gate valves to the force main and water mains where the PVC piping connects to the directional bore crossings on the west side of I-95.
 - c. The 4-inch force main shown in the FEC Railroad easement limits any future expansion to the east. If future expansion is proposed, the force main should be extended to Ormond Crossings Boulevard and capped. The 4-inch force main can be connected using a tee fitting on the end.
104. Sheets 18 and 19 - Plan & Profile Utility Corridor
- a. Identify the sizes and material of the directional bore crossings.
 - b. The deflection shown in the plan for the directional drill of the water main does not seem feasible. The directional drill should be a straight run with fittings added at the east termination point to connect to the water main.
 - c. If reclaimed water is to be provided to the west side of I-95, consider directional drilling the reclaimed water main at the same time the water and force main directional drills are proposed.
105. Sheets 24 and 25 – Cross Sections US 1
- a. Show the existing 12-inch PVC water main and 6-inch PVC force main in the cross sections where construction activity is proposed between the centerline and the south right-of-way line.
106. Sheet 30 – Special Details Intersection of US1 & Ormond Crossings Boulevard
- a. Show the 12-inch water main and 6-inch force main in the vicinity of the proposed drainage improvements..
 - b. Water main call out points to the force main. Revise the call out to point to the water main.
107. Sheets 34 - Utility Details 3
- a. Add the Poly Pig Launching Vault Detail Index S-11.
108. Sheets 38 and 39 – Sanitary Lift Station Details

- a. Change valve to wave in City of Ormond Beach Lift Station Requirements note 16.
- b. Change fiberglass to concrete and City to Contractor in City of Ormond Beach Lift Station Requirements note 17.
- c. Change note 23 on City of Ormond Beach Lift Station Requirements to read, "Back up float system shall be installed and connected to the SCADA system.
- d. Complete the pump data and design characteristics table.
- e. Provide design flow and head loss computations for the proposed lift stations.