RESPONSE TO COMMENTS (PARE PEER REVIEW, TRC MTG. NOTES, & SEWER COMMENTS) 206 BAYVIEW AVENUE, BRISTOL AUGUST 8, 2025

PARE PEER REVIEW COMMENTS (JUNE 20, 2025)

General:

COMMENT #1: Update the revision date for the Preliminary Plan Submission for a Comprehensive Permit Application for "Fair Wind Village" prepared by Principe Company, Inc.

RESPONSE #1: Revision date has been updated.

COMMENT #2: Rhode Island Department of Environmental Management (RIDEM): Disturbance of greater than an acre shall require a RIDEM Stormwater Construction Permit.

Response: Yes. A RIPDES permit has been received.

Pare Response: Accepted.

RESPONSE #2: No response necessary.

COMMENT #3: Town of Bristol Subdivision and Development Review Regulations: Appendix F: Section I Drainage; Due to the project location within the Tanyard Brook Watershed, any increase in stormwater runoff volume, up to and including the 10-year storm event, shall be retained and recharged on site as close as feasible to its place of origin by means of detention ponds or basins, seepage areas, subsurface drains, porous paving, or similar low impact design techniques. Provide volume calculations for the preand post-construction conditions and Groundwater Recharge calculations.

a. Provide test pit logs to confirm soil textural class and proposed infiltration rates. National Resources Conservation Service (NRCS) Soil Survey data shows predominantly Pittstown silt loam within the footprints of the proposed Best Management Practices (BMPs).

Response: Yes, the location of the property within the Tanyard Brook watershed was known, and the project designed in accordance with the requirements of this regulation. Further, on-site test pits were excavated for both soil and ledge, and the information relative to the ledge was provided on the site plans, as the ledge was the greater constraint on the design of the stormwater controls. The site exhibits soil characteristics more in keeping with the Canton-Urban land complex, very rocky (CC) that is mapped for the northern portion of the site, rather than the Pittstown silt loam reference in the comment above and this hydrologic soil group was used in the HydroCAD modeling.

Pare Response: Provide test pit logs to confirm soil textural class, depth of soil horizons, and proposed infiltration rates.

RESPONSE #3: Additional test pit information provided in the drainage report.

Plans:

COMMENT #1: Proposed Conditions Plan: In accordance with Appendix F.2 Section F(1) of the Town of Bristol Subdivision & Development Review Regulations, sidewalks shall be required to be installed on one side of new streets in subdivisions and in multifamily developments. Review for the addition of sidewalk. **Response:** Provision of a sidewalk on this common access drive does not appear to apply, especially given the fact that there isn't a sidewalk along Bay View Avenue that any sidewalk on this private property would connect to.

Pare Response: Noted.

RESPONSE #1: No response necessary.

COMMENT #2: Proposed Conditions Plan: In accordance with Appendix F.2 Section J(3) of the Town of Bristol Subdivision & Development Review Regulations, gas service shall be provided in all subdivisions and land development projects where such service is available in accordance with the standards set forth by the Bristol and Warren Gas Company. Gas lines shall generally be located on the south or west side (opposite side from water service) of the street. Review and show gas lines on the plans.

Response: It is Principe's understanding that gas service is not available for this site.

Pare Response: Noted.

RESPONSE #2: No response necessary.

COMMENT #3: Proposed Conditions Plan: In accordance with Appendix F.2 Section J(4) of the Town of Bristol Subdivision & Development Review Regulations, all new electric, communication (telephone, fire alarm, and cable TV) and street lighting lines shall be installed underground. Review and show electric and communication lines on the plans.

a. Plans shall show the location of any proposed electrical transformer, along with associated bollards and screening.

Response: The majority of these utilities are not developed until further along in the permitting process, and are developed by the utility companies themselves (in particular RI Energy). It is understood that they will be underground.

Pare Response: Show the planned locations for utilities to confirm the available space to support the anticipated above and below ground infrastructure.

RESPONSE #3: To the greatest extent possible (given the lack of jurisdiction for the placement of these utilities), these items have been shown.

COMMENT #4: Proposed Conditions Plan: Show anticipated limits of repaving on Bayview Avenue for utility installations, including gas, water, sewer, communications and electric.

Response: The limits of repaving of Bay View Avenue is shown on the plan to the extent that Principe is aware of.

Pare Response: The proposed watermain extension shows a new 8-inch watermain within the existing grassed shoulder and Town right-of-way.

- Confirm the source and accuracy of the right-of-way information.
- The proposed watermain is shown 2 to 3 feet from the existing curb. Confirm location and anticipated restoration to the existing curb and roadway, within the limits of impacted curbline.
- Confirm type and limits for restoration of existing residential and police station driveways. Existing utility structures and signage within the police station property may be in conflict with the proposed watermain, which may result in additional trenching within the roadway. Review and confirm.

RESPONSE #4: The Town right-of-way was surveyed for the limits of this project. Limits of disturbance within the right-of-way have been included, notes added regarding restoration of pavement, curb, signs, and landscaping.

COMMENT #5: Proposed Conditions Plan: In accordance with Appendix F.2 Section J(5) of the Town of Bristol Subdivision & Development Review Regulations, fire hydrants shall be installed in subdivisions and developments as specified by the Town of Bristol Fire Chief. Review and show fire hydrants on the plans.

a. Coordinate with Town of Bristol Fire Chief and Bristol County Water Authority relative to available fire flow.

Response: Coordination with the Town of Bristol Fire Chief and Bristol County Water Authority has been initiated, with the result that the Fire Department has indicated that a new fire hydrant is not required (an

existing fire hydrant is within approved distance to the site). However, coordination with BCWA has resulted in adding a new hydrant and upgrading the water line in Bay View.

Pare Response: Noted.

RESPONSE #5: No response necessary.

COMMENT #6: Proposed Conditions Plan: Provide revised plans including typical dimensions of drive aisles, parking spaces, curb cuts and vehicle turnaround.

Response: Dimensions have been added to a new plan "Proposed Layout Plan" for clarity purposes.

Pare Response: Accepted.

RESPONSE #6: No response necessary.

COMMENT #7: Proposed Conditions Plan: Provide turning template for required fire apparatus confirming turnaround dimensions are acceptable.

Response: Fire truck turning template provided.

Pare Response: Accepted.

RESPONSE #7: No response necessary.

COMMENT #8: Proposed Conditions Plan: In accordance with Section 8.22 Permeable Paving of the RIDEM Stormwater Management, Design and Installation Rules; permeable paving shall only be used on slopes less than 5%. Review northern parking adjacent to the existing house and units 4 & 5.

Response: Spot grades have been shown on the plan in order to document compliance with this.

Pare Response: Accepted.

RESPONSE #8: No response necessary.

COMMENT #9: Proposed Conditions Plan: Review grading and drainage of the area in front of the existing Garage/Barn. Areas of stormwater runoff may be directed to the existing catch basin. Show how the existing drainage structure ties into the proposed drainage.

Response: The existing catch basin will be removed and the parking area replaced with permeable pavement.

Pare Response: Accepted.

RESPONSE #9: No response necessary.

COMMENT #10: Proposed Conditions Plan: Grading of access roadway swale conveys stormwater to the adjacent property to the west (AP 47 Lot 25). Review grading and potential impacts to adjacent properties.

Response: Contours in this area have been adjusted to ensure that no increase in stormwater flows are directed to abutters.

Pare Response: The 1-foot-deep swale is not maintained adjacent to the abutting property and stormwater flows are conveyed to the abutter (AP 47 Lot 25). Review grading and potential impacts to adjacent properties.

RESPONSE #10: Principe respectfully disagrees with PARE's opinion on this. However, a concrete curb has been added to the western edge of the access drive to further ensure that no increase in flows are directed to abutters.

COMMENT #11: Proposed Conditions Plan: The project proposes an earthen berm along the eastern property line impacting the existing flow patterns. Review impacts to abutting properties and conveyance of flow.

Response: Principe respectfully disagrees with the PARE presumption that the provision of the berm along the eastern property line will change the existing flow patterns. A review of the LIDAR provided on the RIDEM

website indicates that there is already a dividing line between what flows onto the subject site and that which continues along the eastern side of the property line. Further, there is an existing stone wall present that also acts like an existing division. Therefore, no additional impacts to the abutting properties are anticipated.

Pare Response: Accepted.

RESPONSE #11: No response necessary.

COMMENT #12: Proposed Conditions Plan: Top of earthen berm widths for the Rain Gardens are approximately 2 feet wide. Review increasing top of berm widths.

Response: There is no need for increasing the width of the tops of the berms for these small-scale residential stormwater treatments. Maintenance will be done by hand.

Pare Response: The Application proposes narrow berms and minimal freeboard, and provided no soil textural classification justifying the proposed infiltration rates within the analysis.

RESPONSE #12: To the maximum extent practicable, all of the bioretention basins have been increased in size in order to increase the freeboard for all storm events, including the 100-year storm. Principe would reiterate our previous response and also reiterate that the state reviewing agency's (RIDEM) professional engineer reviewed and approved the project as previously designed.

COMMENT #13: Layout Plan: Denote removal or maintenance of significant trees impacted (10" or greater).

Response: The limit of disturbance required for the development of the property extends to all property lines. As a result, any trees that are on the property are proposed to be removed (i.e. none will be "maintained"). The majority of the site is already cleared, although there are some trees immediately adjacent to the existing structure that currently exist but will need to be removed due to the new access drive widening. These have been specifically indicated to be removed on the revised plan.

Pare Response: Accepted.

RESPONSE #13: No response necessary.

COMMENT #14: Layout Plan: Denote the removal of the sheds and well house. **Response:** Existing structures to be removed have been noted on the revised plans.

Pare Response: Accepted.

RESPONSE #14: No response necessary.

COMMENT #15: Details-2: Dry Open Swale Typical Cross Section is not in conformance with RIDEM Standard 8.25 (D)(2) requiring a minimum of 30-inches of bioretention soil.

Response: The swale is being utilized for pre-treatment (i.e. 8.27(A) "grass channel") and therefore is not required to conform to RIDEM Standard 8.25 (D)(2). Bioretention soil mix was added to enhance treatment. Plan and detail have been relabeled to avoid confusion.

Pare Response: Accepted.

RESPONSE #15: No response necessary.

COMMENT #16: Details-5: Review top of berm and bottom of basin elevation for RG-1. Plans show top of berm elevation of 138.00 and bottom of basin of 137.00.

Response: Detail has been Corrected.

Pare Response: Accepted.

RESPONSE #16: No response necessary.

Drainage Report:

COMMENT #1: General: Provide test pit logs confirming soil textural class, depth and method for determining estimated seasonal high groundwater, and soil evaluator license information.

Response: Test pits were excavated on site by Thomas J. Principe, III, PE #9107 and also licensed soil evaluator #4075. Test pit logs are provided on the pre-watershed map provided and as indicated in the HydroCAD calculations.

Pare Response: The test pit logs provided on the pre-watershed map do not provide the soils textural class, depth of horizons, or method for determining estimated seasonal high groundwater.

RESPONSE #1: Additional test pit information has been provided in the drainage report.

COMMENT #2: General: The system is proposed over shallow bedrock and proposes a bottom elevation higher than the down gradient toe of slope. Review Infiltration Basin for groundwater mounding and seepage through adjacent slope.

Response: Out of an abundance of caution, an impermeable liner is now shown for the downslope limits of the infiltration basin to eliminate any concern with seepage.

Pare Response: Accepted.

RESPONSE #2: No response necessary.

COMMENT #3: General: The Drainage Report shall contain:

- a. Site Locus Map
- b. A graphic depicting the site soils based on NRCS Soil Survey data

Response: Site locus map is shown on the plan set and in the SESC. As indicated previously, soils per the NRCS mapping is not accurate, based upon on-site test hole excavation. Data on these test pits are included on the Pre-Watershed Map included in the Drainage Report.

Pare Response: Accepted.

RESPONSE #3: No response necessary.

COMMENT #4: Appendix A4 HydroCAD Report: Pond 10P "Permeable" assumes the permeable pavement as a flat area. The permeable pavement is sloped at 0.025 ft/ft. Update the hydrologic model accordingly.

a. Review Table 5-5 for guidance on accounting for reduction in runoff in hydrologic models.

Response: Principe utilizes a more conservative method for sizing permeable pavement (i.e. CN of 98) that has been accepted and approved by RIDEM in previous projects. This project is also currently being reviewed by RIDEM as part of a Stormwater and RIPDES application package. An additional detail has been added to the plans that documents that the bottom of the system will be "flat".

Pare Response: Pare does not consider Principe's approach to be more conservative than RIDEMs' guidance. Principes' modelling eliminates the porous pavement from the hydrologic model, while RIDEM suggests including the area but reducing the CN value based on the provided Table 5-5. Pare suggests that flow from the porous pavement be modelled as contributing to RG-3 and INFIL-1 using the CN values from the RIDEM Table 5-5.

Review Porous Asphalt Stepped Reservoir Detail.

- Earth baffle maximum spacing should be based on the longitudinal slope of the driveway. At the
 now approximately 0.032 ft/ft slope, the spacing would need to be approximately 20 to 30 feet.
 Review and revise the 100 foot maximum requirement.
- Provide details on the dimensions of the earth baffle width.
- Review and revise the detail, and confirm constructability. Pare recommends drawing a profile to scale showing the number and height of proposed baffles to confirm that the porous pavement will be constructed to function as designed.

RESPONSE #4: Detail has been reviewed and revised and constructability has been confirmed. Baffle spacing has been adjusted and additional dimensions have been provided.

COMMENT #5: Appendix A4 HydroCAD Report: NRCS Soil Survey data shows hydrologic soil group of "C" for most of the site. Update the hydrologic model accordingly.

Response: As indicated previously, the on-site test pits do not conform to a "C" hydrologic soil group, and therefore a "B" hydrologic soil group has been utilized, as per these on-site tests.

Pare Response: Provide test pit logs to confirm soil textural classification and depths of soil horizons encountered.

RESPONSE #5: Additional test pit information has been provided in the drainage report.

COMMENT #6: Appendix A4 HydroCAD Report: Review freeboard within Pond 8P (Infil-1), Pond 9P(RG-1), Pond 12P(RG-2), and Pond 13P(RG-3) for the 100-year rainfall event. A minimum of 1-foot of freeboard should be provided in each basin.

Response: For small-scale residential applications a one-foot freeboard for 100-year storm events is not a requirement and is not practicable. The goal for these types of systems is to provide for scattered, minimized treatment systems that blend into the landscape. While these buildings are not single-family, they are still small-scale residential and therefore increasing the size of these basins to provide storage for storm events that are exceedingly rare is not feasible or desirable. Therefore, no changes have been made to conform to this comment.

Pare Response: The Application proposes narrow berms and minimal freeboard, and provided no soil textural classification justifying the proposed infiltration rates within the analysis. The analysis also assumes that no runoff contributes from the porous pavement to the rain garden or infiltration system. Additionally, all systems are proposed as inline, with no diversions for larger rainfall events. Pare maintains the recommended 1-foot of freeboard be provided as indicated above.

RESPONSE #6: To the maximum extent practicable, all of the bioretention basins have been increased in size in order to increase the freeboard for all storm events, including the 100-year storm. Principe would reiterate our previous response and also reiterate that the state reviewing agency's (RIDEM) professional engineer reviewed and approved the project as previously designed.

COMMENT #7: Appendix B1 Operation and Maintenance Plan: The long-term operation and maintenance plan shall include maintenance guidance for the dry open swale that conforms to RIDEM Standard 8.25 (E).

Response: Again, the swale is being utilized for pre-treatment (i.e. 8.27(A) "grass channel") and therefore is not required to conform to RIDEM Standard 8.25 (D)(2).

Pare Response: Accepted.

RESPONSE #7: No response necessary.

COMMENT #8: Appendix B1 Operation and Maintenance Plan: Provide a copy of the required "legally binding and enforceable maintenance agreement" for review.

Response: The maintenance agreement was, and is, provided within the O&M. This sample has been provided as per RIDEM and does not get completed/signed until construction is completed.

Pare Response: Accepted.

RESPONSE #8: No response necessary.

JUNE 25, 2025 TRC MEETING NOTES

NOTE #1: Sewer Comments to be addressed (attached).

RESPONSE #1: See responses below.

NOTE #2: Fire Chief is OK.

RESPONSE #2: No response necessary.

NOTE #3: Water main in shoulder- restoration plans. Show driveway, utilities, etc. Delineate and survey existing ROW.

RESPONSE #3: Survey of the ROW was completed, and a new sheet has been added delineating driveways and existing utilities along with a profile. Detail sheet has been revised to include water main installation specific notes and details.

NOTE #4: Show benches adjacent to the corn hole area.

RESPONSE #4: Benches have been shown.

NOTE #5: Revision dates to be updated.

RESPONSE #5: All sheets that were revised have updated revision dates.

NOTE #6: Bayview is one word, and front page should be Bayview Ave (not road).

RESPONSE #6: Plans have been corrected as above.

NOTE #7: PARE ENGINEERING COMMENTS (soils logs, etc.).

RESPONSE #7: See above responses to PARE comments.

NOTE #8: Look at sidewalks, or ask for Waiver.

RESPONSE #8: A waiver from providing sidewalks is requested as there are no existing sidewalks on either side of Bayview Avenue to connect to and the site itself is not subject to high vehicular traffic volumes.

NOTE #9: Update landscape plan to accommodate new transformer pad location.

RESPONSE #9: Transformer will be enclosed by screen fencing as shown.

NOTE #10: Increase volume of basins.

RESPONSE #10: Volumes have been increased to the greatest extent feasible.

NOTE #11: Porous pavement- not a zero runoff.

RESPONSE #11: Principe would like to reiterate that the project was APPROVED BY RIDEM AS DESIGNED. However, in response to PARE/Town comments, the methodology for calculating the permeable pavement as not infiltrating in its entirety but "overflowing" into Bio-3 has been revised.

NOTE #12: Concrete curb at berm due to minimal freeboard.

RESPONSE #12: Concrete curb has been added.

NOTE #13: Increase capacity BIO-3. PARE not in agreement that the porous pavement doesn't contribute to the runoff volume - Town was very adamant about this as well.

RESPONSE #13: Principe would like to reiterate that the project was APPROVED BY RIDEM AS DESIGNED. However, in response to PARE/Town comments, the methodology for calculating the permeable pavement as not infiltrating in its entirety but "overflowing" into Bio-3 has been revised.

NOTE #14: Porous Asphalt stepped detail- Profile to scale along section of permeable pavement - maybe use a concrete curb instead of earth baffle.

RESPONSE #14: Detail has been reviewed and revised and constructability has been confirmed. Baffle spacing has been adjusted and additional dimensions have been provided.

NOTE #15: Show stop sign and stop line at Bayview coming out of development. RESPONSE #15: Stop sign and stop bar have been shown.

BRISTOL WPCF SEWER COMMENTS (APRIL 3, 2025)

COMMENT #1: Identify locations of pump systems and provide detail of pump systems, (flow estimates and head calculations, and service connection piping and valves curb stops, isolation valves, check valves). RESPONSE #1: Locations and details of pump systems added along with piping, valves, cleanouts and manholes. Flow estimates and head calculations will be provided at Final Submission.

COMMENT #2: Identify proposed size of low-pressure sewer force main. RESPONSE #2: Pipe sizing added to plans.

COMMENT #3: Replace existing sanitary service.

- a. Cut into the existing sewer main in the street (Bayview Avenue) and construct a new manhole. Provide detail for connection from existing sewer main to new manhole. Provide information on piping and proposed couplings (Strong back fernco couplings are required. Pipe penetrations into manholes shall be sealed watertight to prevent groundwater infiltration into the manhole around each connection.
- b. The existing service is only 6" and not appropriate for the multiple services. Provide 8" sewer between private property manhole and manhole in street. Provide sewer invert information.

RESPONSE #3: Doghouse manhole shown in same location as existing 6" service lateral connection at the main, with an 8" service line replacing the existing 6". Details and elevations added to plans.

COMMENT #4: Provide details of sewer construction for review. (Depth of proposed sewer, gravity and low-pressure sewer pipe) and associated manhole.

RESPONSE #4: Details added to the plans.

COMMENT #5: Provide plan and detail for permanent abandonment and or removal of existing sewer service to/for the existing property.

RESPONSE #5: Plans updated (see Response #3)

COMMENT #6: Confirm system will be private.

RESPONSE #6: Confirmed system is private and noted on plans.