

JOHN H. ALLGAIR, PE, PP, LS (1983-2001)  
DAVID J. SAMUEL, PE, PP, CME  
JOHN J. STEFANI, PE, LS, PP, CME  
JAY B. CORNELL, PE, PP, CME  
MICHAEL J. McCLELLAND, PE, PP, CME  
GREGORY R. VALES, PE, PP, CME



TIM W. GILLEN, PE, PP, CME (1991-2019)  
BRUCE M. KOCH, PE, PP, CME  
LOUIS J. PLOSKONKA, PE, CME  
TREVOR J. TAYLOR, PE, PP, CME  
BEHRAM TURAN, PE, LSRP  
LAURA J. NEUMANN, PE, PP  
DOUGLAS ROHMEYER, PE, CFM, CME  
ROBERT J. RUSSO, PE, PP, CME  
JOHN J. HESS, PE, PP, CME

MEMO TO: City of Bayonne  
Planning Board

FROM: Robert J. Russo, PE., PP, CME  
City Engineer's Office

DATE: July 8, 2022

RE: **Woodmont Bayonne Phase 2  
Urban Renewal, LLC  
Preliminary and Final Major Site Plan  
Report #1  
Block 37, Lot 1  
West 53<sup>rd</sup> Street  
Bayonne, New Jersey  
Our File: PBYP0037.01/600.01  
Application # P-21-023**

As per your request, this office has reviewed the following documents relative to the above referenced preliminary and final site plan application:

- Preliminary and Final Major Site Plan, as prepared by Bertin Engineering, date of June 22, 2021, with latest revision date of January 31, 2022;
- Architectural Plan, as prepared by Sonnenfeld and Trocchia Architects, P.A., date of June 22, 2021, with no revisions;
- Stormwater Drainage Analysis, as prepared by Bertin Engineering, date of June 22, 2021, with latest revision date of January 24, 2022;
- Stormwater Operation & Maintenance Manual, as prepared by Bertin Engineering, date of June 22, 2021, with latest revision date of January 24, 2022;
- Environmental Impact Statement, as prepared by Bertin Engineering, date of December 8, 2021, with no revisions;
- Application Forms.

The following comments are offered with regard to same:

**A. PROJECT OVERVIEW**

1. The site is located west of John F. Kennedy Boulevard between W. 52<sup>nd</sup> and W. 53<sup>rd</sup> Streets and contains one (1) lot of approximately 3.07 acres. The area of construction is generally an existing cleared grass field. The applicant is proposing to construct a four (4) story building that will consist of eighty-five (85) residential units (37- 1 bedroom units & 48 – 2 bedroom units); one hundred twenty-five (125) street level parking spaces, five (5) compact spaces and eight (8) garage spaces for a total of one hundred thirty-eight (138) spaces.



Memo to Bayonne Planning Board  
Our File: PBYP0037.01  
July 8, 2022  
Page 2 of 9

We defer the review of the zoning related issues to the Board Planning Consultant except where they may pertain to engineering issues.

**B. GENERAL SITE IMPROVEMENT REVIEW**

1. In accordance with the Redevelopment Plan, Section 1.3.2.d, the land below the bluff is wetlands and should be dedicated to the City for parks and open space. In addition, in accordance with the Redevelopment Plan, Section 1.3.2.h, an easement should be provided for the existing walkway and adjacent environmentally sensitive area at the south west corner of the property to serve as a public park. We recommend these areas be encompassed in a conservation easement dedicated to the City.
2. In accordance with the Redevelopment Plan, Section 1.3.2.g, the applicant shall provide for the installation of the necessary equipment to accomplish signal preemption for emergency vehicles at one signalized intersection in the area. Same should be noted on the plans.
3. In accordance with Section 35-17.5a of the ordinance, no driveway curb cut shall exceed ten (10') feet in width and there shall be no more than one (1) curb cut per lot. The applicant is proposing two (2) 44' depressed curbs located on both West 52<sup>nd</sup> and West 53<sup>rd</sup> Streets and will require a variance for same.
4. The applicant should present color renderings of the proposed building in addition to material samples at the board hearing.
5. The applicant should provide adequate security provisions for the parking lot, garage and building perimeter. The applicant should provide testimony to the Board regarding same and should indicate whether security cameras will be provided in these areas.
6. The proposed timber guide rail at the terminus of W 52<sup>nd</sup> Street should be revised to be a steel guide rail, in line with the existing guide rail and should be in compliance with the latest NJDOT construction details.
7. The applicant should provide a consistent width sidewalk along W. 52<sup>nd</sup> Street, matching the existing 7' wide sidewalk. In addition, the sidewalk layout should be revised so that the existing utility poles are not located within the proposed sidewalk, to the maximum extent feasible.
8. The proposed design of the 'elevated walkway' proposed at the main entrance is unclear. The applicant should provide a blow up of this area, with detailed grades, for further review.
9. The first-floor elevation of the proposed building is 31.00; various door elevations are set at 30.33. The architectural plans do not show any interior steps. The applicant's engineer should clarify how the proposed 8" step is being addressed.



Memo to Bayonne Planning Board  
Our File: PBYP0037.01  
July 8, 2022  
Page 3 of 9

10. The 15' x 50' dog run cross slope is approximately 25% at its steepest. The slope should be reduced to a maximum slope of 5%. In addition, the fence and gate height around the dog run should be increased to 6' high.
11. Label all top and bottom of wall elevations. In addition, label all top of curb and bottom of curb elevations for all pc's, pt's, corners, ridge lines and high/low points onsite and on W. 52<sup>nd</sup> Street.
12. A minimum slope of 0.50% is required in all parking lots, including porous/pervious pavement areas. Inlets should be provided at all low points. A maximum slope of 5.0% should be maintained in the parking lot. Various portions of the parking lot either do not meet the minimum slope, or exceed the maximum slope noted above and should be revised.
13. A clearly defined ridge line should be delineated between the two 33' contour lines south of the garage.
14. The ramp located in the southwest corner of the site connecting the onsite sidewalk network to the W. 52<sup>nd</sup> Street sidewalk appears to need a code compliant hand rail. A detail of same should be provided.
15. Various existing monitoring wells are shown on the site plan. It is unclear if they are to remain; however, some monitoring well castings are within curb lines, retaining wall lines and it's unclear if other monitoring wells will need to be relocated/reset to grade. The applicant should provide testimony on the need of the monitoring wells and what their post construction status will be, including who is responsible for maintenance.
16. A minimum of one (1) of the make ready/ electric charging spaces shall be accessible for people with disabilities. Same should be noted on the plans.
17. The lighting plan should be revised to provide point by point foot-candle readings on the neighboring properties; Lots 2 and 11.02 respectively.
18. The applicant should provide street trees along West 53<sup>rd</sup> Street and additional street trees along West 52<sup>nd</sup> Street to comply with the ordinance.
19. The applicant has provided a note that the trail will be connected to the existing paved walkway in the park however same should be delineate on the site plans. A gate should be provided at the end of the trail access with signage indicating the park hours.
20. The applicant should provide the typical building unit layouts.
21. The applicant should extent the existing dead-end water mains that terminate at the end of both West 52<sup>nd</sup> and West 53<sup>rd</sup> Streets. The water mains should be extended along the western side of the proposed building connecting the water mains and eliminating the dead



Memo to Bayonne Planning Board  
Our File: PBYP0037.01  
July 8, 2022  
Page 4 of 9

ends. The water main extension should be encompassed in a utility easement. In addition, the fire hydrants at the terminus of each street should be noted to be removed and replaced.

22. The applicant should revise the EIS to include the following documents in the appendix:

- a. A copy of wetlands LOI and approved NJDEP plan;
- b. A copy of the overall proposed site plan.

### **C. STORMWATER MANAGEMENT**

#### **GENERAL**

1. The Applicant proposes constructing two (2) underground detention structures and seven (7) pervious concrete pavement areas to address stormwater quantity management and water quality.
2. The reference project has been reviewed in accordance with the Stormwater Management Rules NJAC 7:8 as amended on March 2, 2020, and City of Bayonne ordinances.
3. The wetlands are shown on the plans indicating that an NJDEP Letter of Interpretation (LOI) was obtained on 1/24/2017. The LOI is generally valid for five years. Information should be provided on the validity of the existing LOI, or an updated LOI must be obtained from NJDEP. A copy of the valid/updated LOI and stamped plans must be provided to this office.
4. It appears the proposed development will disturb portions of the wetlands transition areas; therefore, an NJDEP Freshwater Wetlands permit must be obtained for the proposed disturbance. A copy of the permit must be provided to this office.
5. The Applicant must obtain a Soil Erosion and Sediment Control Plan Certification from the Hudson Soil Conservation District. A copy of the certification must be provided to this office.
6. The proposed development proposes more than 1 acre of land disturbance and must obtain a General Permit for Construction Activities from the NJDEP. A copy of the permit must be provided to this office.
7. An executed Major Development Stormwater Summary (Attachment D of the Tier A MS4 NJPDES Permit) shall be submitted to this office for review and approval.

#### **STORMWATER**

1. All references to pervious concrete pavement must be consistently labeled as pervious concrete on plans and in the drainage report to avoid confusion due to multiple names used in pavement reference labels.



Memo to Bayonne Planning Board  
Our File: PBYP0037.01  
July 8, 2022  
Page 5 of 9

2. Water quality calculations must be updated to account for the porosity of the storage bed. A typically recommended void ratio for this type of stone is 40%.
3. The construction detail for the pervious concrete must be updated to include specifications for the choker material, porous surface, storage bed aggregate, and post-construction testing requirements per the BMP manual.
4. The stormwater report should be updated to include a summary table of design parameters for the pervious concrete area, such as inflow area, water quality volume, drainage area ratio, design infiltration rate (if any), and separation from seasonal high groundwater table. It must demonstrate compliance with BMP design standards per the NJDEP BMP Manual Chapter 9.6.
5. A Pervious concrete pavement detail must note the maximum water elevation for the water quality, 2-yr, 10-yr, and 100-yr storm events, and drain times for proposed pervious concrete pavement areas.
6. Each pervious concrete pavement area must include at least two (2) inspection ports, with a removable cap, in the storage bed with its location shown on the plan. The inspection ports must be placed at least three feet from any edge and extend down 4 – 6 inches into the subsoil, and the depth of runoff for the water quality designed storm must be marked upon each structure and its level included in the drainage report and the maintenance manual.
7. Details of pervious concrete pavement inspection ports must be provided on construction plans, and they must be traffic-rated.
8. Pervious concrete pavement detail and cross-sections must be updated to show underdrains. All perforated underdrains must have a minimum of 0.25% slope towards the outlet.
9. One (1) foot separation between the bottom of the porous pavement and the seasonal high water table is required. Please provide a geotechnical investigation to confirm that the pervious concrete areas meet this requirement.
10. In accordance with stormwater management regulations, trash racks should be provided in all outlet devices of the outlet structures. The trash racks must meet requirements in N.J.A.C. 7:8-5.7 and 6.2. The trash racks should be installed in the upstream chamber to be able to provide maintenance without having to access the underground basin.
11. Inspection ports should be provided at the end of each row of pipes for maintenance. In addition, a construction detail of the inspection ports should be provided.
12. A site-specific cross-section of the Underground Detention System must be provided on plans. It should indicate the top and bottom of the stone, top of Cultec Chamber, maximum water surface elevation for the 2-yr, 10-yr, & 100-yr storm event, and seasonal high groundwater.



Memo to Bayonne Planning Board  
Our File: PBYP0037.01  
July 8, 2022  
Page 6 of 9

13. In accordance with NJ BMP Manual, a minimum of 1-foot vertical separation between the bottom of the detention system (stone pocket) and the seasonal high groundwater elevation is required.
14. The underground detention basin must have at least 0.25% slopes towards the outfall to completely drain the chamber after a rain event.
15. The plan shows two (2) fields of Cultec chambers connected by two (2) 10" pipes. The drainage calculations model the two (2) fields as a single underground detention unit. An analysis should be provided that shows that the two (2) 10" pipes can adequately act as equalization pipes between the two (2) underground detention basin or the two (2) Cultec fields should be modeled as two (2) separate underground detention basins.
16. Underground detention basin routing must include the effect of tailwater from a 15" pipe in the street.
17. The outflow pipe must include a backflow prevention device to prevent backflow from a combined sewer into the underground detention basin.
18. As per BMP Manual requirements, geotechnical investigations must be performed for each area of the proposed BMP to determine soil suitability and establish seasonal high water in the area of the proposed BMP. The Applicant should perform the required testing in accordance with Chapter 12 of the BMP Manual.
19. A geotechnical investigations location map overlaid with proposed improvements must be provided for review.
20. The drainage report should be updated to include a summary table listing the following for each BMP: area of BMP, depth of BMP; the number of test pits/boring/soils profiles performed for the BMP; depth of soil investigation, no of infiltration tests performed, minimum tested permeability rates, seasonal high-water table established; and the number of soil investigations required per Chapter 12 of BMP Manual.
21. All stormwater conveyance pipes must have adequate capacity to convey the 100-yr storm event unless the Applicant's engineer demonstrates that runoff from the 100-yr storm event will reach the underground detention basins via an alternate path. Revise drainage report accordingly.
22. The drainage report should be revised to include a capacity analysis of the existing conveyance system on West 52nd Street (to verify adequate capacity for the proposed discharge into the system). The analysis should include at least two pipe reaches below the point of discharge.



Memo to Bayonne Planning Board  
Our File: PBYP0037.01  
July 8, 2022  
Page 7 of 9

23. In accordance with RSIS standards, NJAC 5:21-7.3.(e), no pipe size in the storm drainage system shall be less than 15 inches. The pipe sizes should be revised to meet this requirement.
24. The standard construction detail of the typical service lateral and cleanout detail for new construction should be added to the plans. The detail shown on the plans is not in accordance with City standards and should be revised.
25. The standard construction detail for municipal road pavement restoration should be added to the plans. The detail shown on the plans is not in accordance with City standards and should be revised.
26. The applicant should replace existing inlet castings along West 52<sup>nd</sup> Street to Type "N-Eco" heads including any associated repairs. Same should be noted on the plans.
27. We defer further review of the water and sanitary sewer systems to the Bayonne Utility Department and Suez.

#### **O&M MANUAL**

1. In accordance with NJAC 7:8-5.8(d), the maintenance plan and any future revisions shall be recorded upon the deed of record for the property. The Operation and Maintenance Manual (O&MM) should be revised to include Deed Book#, Page#, and the date the deed was filed with County Clerk.
2. In accordance with NJAC 7:8-5.8(d), the maintenance of stormwater management facilities and any future revisions to the manual shall be recorded upon the deed of record for the property. O&MM should be updated to include this requirement.
3. The O&MM should be revised to include the name and telephone number of the person or persons responsible for preventative and corrective maintenance.
4. In accordance with NJAC 7:8-5.8(g), O&MM shall be evaluated by the person responsible for maintenance for updates and effectiveness at least once per year. The O&M manual shall be updated and recorded in the deed as needed at that time. O&MM should be updated to include this requirement.
5. In accordance with NJAC 7:8-5.8(h), the person responsible for maintenance shall retain and make available, upon request by any public entity with administrative, health, environmental, or safety authority over the site, this maintenance plan. O&MM should be updated to include this requirement.
6. The O&MM should be revised to include a Location Map showing the location of all BMPs. Please refer to the link below for an NJDEP template:



Memo to Bayonne Planning Board  
Our File: PBYP0037.01  
July 8, 2022  
Page 8 of 9

[https://www.nj.gov/dep/stormwater/maintenance\\_guidance.htm](https://www.nj.gov/dep/stormwater/maintenance_guidance.htm)

7. The O&MM should be revised to include a summary of design parameters for the underground detention basin and pervious concrete areas. The information should include design detention time, drain time, and elevation of the seasonal high water table. In addition, provide the type, size, and invert elevation for each outflow device in the outlet structure. Please refer to the link below for the NJDEP template:

[https://www.nj.gov/dep/stormwater/maintenance\\_guidance.htm](https://www.nj.gov/dep/stormwater/maintenance_guidance.htm)

8. The O&MM must be updated to include a schedule of regular inspections for all BMPS in one summary table form.
9. The backflow prevention valve should be added to the list of structures that require inspection and maintenance.
10. In accordance with NJAC 7:8-5.8(d), the maintenance of stormwater management facilities and any future revisions to it shall be recorded upon the deed of record for the property. O&MM should be updated to include this requirement.
11. As per NJDEP BMP Manual Ch. 8, the maintenance plan should include approved disposal and recycling sites and procedures for sediment, trash, debris, and other material removed from stormwater management measures during maintenance operations. This information should be added to the plan.
12. As per NJDEP BMP Manual Ch. 8, maintenance plans should include procedures and equipment required to protect the safety of inspection and maintenance personnel. This information should be added to the O&MM plan.
13. In accordance with BMP Manual, De-icers containing magnesium chloride, calcium magnesium acetate, or potassium acetate should not be used on Pervious Concrete. O&MM should be updated to include this requirement.

#### **D. MISCELLANEOUS**

1. The size of the 'Van Accessible' plaque, R7-8p should be revised to be in conformance with the MUTCD. The Penalty schedule language should be revised to be in accordance with NJAC 5:23-7.9.g. In addition, all post mounted signs should contain a break-a-way post.
2. The Typical Gravity Wall Detail should be revised to note, "Structural drawings and calculations, signed and sealed by a licensed New Jersey Professional Engineer, should be provided to the Building Department, for review and approval."





Memo to Bayonne Planning Board  
Our File: PBYP0037.01  
July 8, 2022  
Page 9 of 9

3. The Applicant's Engineer should design the proposed curb ramps, sidewalks, cast-in-place detectable warning surfaces, signing, striping, and crosswalks, to meet the latest ADA and MUTCD requirements.
4. The applicant should provide Stop signs and stop bar markings at both driveway exits.
5. The applicant shall install "No Parking" striping at the proposed driveway entrance.
6. If the Board acts favorable on this application, the applicant shall post the required performance bonds and engineering and inspection fees.
7. Other Agency Approvals:
  - Hudson County Planning Board
  - Bayonne Utility Department and Suez
  - Soil Conservation District
  - NJDEP
  - All other agencies having jurisdiction

Should you have any questions regarding this matter, please do not hesitate to contact this office.

RJR/DM

cc: Land Use Administrator  
Board Attorney  
Board Planner  
City Planner  
Zoning Officer  
Woodmont Bayonne Phase 2 Urban Renewal, LLC, Applicant  
Stephen Santola, Esq., Applicant's Attorney  
Bertin Engineering, Applicant's Engineer